



# ONE SAFE SOURCE

FAST MOVING  
PARTS CATALOG





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## Total Support from One Source and Your Cat® Dealer

Welcome to the newest edition of the One Safe Source catalog. Inside you'll find part numbers, descriptions, specifications and more for thousands of genuine Cat® parts — all manufactured to strict, original equipment specifications.

You can count on these reliable, durable Cat parts to deliver top performance and long life in your applications — and you can count on us to provide the right parts and service solutions, when and where you need them.

We carry most of the parts featured in this catalog for your immediate, off-the-shelf convenience. And thanks to Caterpillar's worldwide distribution system, we can deliver most other parts you need within 24 hours. If you can't find what you're looking for, just ask. Our highly trained experts understand the complete lineup of Cat parts, — original, Yellowmark™ and Reman — and can answer any questions, and make recommendations for your needs.

**This catalog contains only high-volume parts. If you are looking for something different, we may have what you need in stock or can order it for you quickly.**

Whether you're maintaining one Cat machine or many, you can turn to us for the parts, comprehensive service options and total support that will keep you up and running and maximizing your equipment investments.

Part numbers and specifications are subject to change without notice. To ensure you receive the correct parts, please provide the model and serial numbers of the machines or engines on which they will be used.

Some of the products listed in this catalog are not available in certain parts of the world. Please check with us for more information.







**BATTERIES AND ELECTRICAL PARTS**

# Cat Battery Specifications

## General Information

### Premium High Output - Maximum Vibration Resistance

- Vibration Resistance-five times the Industry Standard
- Exclusive “flat top” BCI group 4D & 8D batteries are Maintenance Free and have the industry’s highest cold cranking amps (CCA)
- Popular BCI group 31 Maintenance Free batteries with industry leading cold cranking amps...up to 1000 (CCA), for electric power, machine or on-highway truck and bus applications. Deep cycle models are available for truck, marine and recreational usage

## Specifications for Cat Premium High Output Batteries-Available Worldwide

BCI Group Size	Part No.	CCA ≈	RC Mins †	Volts	Amp Hr. Capacity @ 20 Hrs.	Construction Notes	Accessibility - Fluid Level Check Hours	BCI Overall Dimensions			Nominal Weight		Nominal Acid to Fill Qt (liter)
								Length In (mm)	Width In (mm)	Height In (mm)	Wet Lb (kg)	Dry Lb(kg)	
8D	153-5720	1500	465	12	210	C/MFA	A - 1000	20.5 (520)	10.8 (275)	9.8 (248)	132 (59.9)	-	-
8D	101-4000	1400	400	12	190	LAC+	A - 1000	20.8 (527)	11.0 (278)	9.8 (248)	132 (59.9)	86 (39.0)	18.0 (17.0)
4D	153-5710	1400	425	12	200	C/MFA	A - 1000	20.5 (520)	8.6 (218)	9.8 (248)	119 (54.0)	-	-
4D	9X-9730	1300	400	12	190	LAC+	A - 1000	20.8 (527)	8.6 (218)	9.8 (248)	120 (54.0)	81 (36.8)	14.8 (14.0)
4D	153-5700	1125	305	12	145	C/MFA	A - 1000	20.5 (520)	8.6 (218)	9.8 (248)	101 (45.8)	-	-
4D	9X-9720	1000	275	12	140	LAC+	A - 1000	20.8 (527)	8.6 (218)	9.8 (248)	102 (45.8)	59 (26.8)	15.9 (15.0)
31	175-4390	1000	180	12	90	C/MFA/S	A - 1000	12.9 (329)	6.8 (172)	9.3 (236)	60 (27.2)	-	-
31	175-4370	825	190	12	100	C/MFA/S**	A - 1000	12.9 (329)	6.8 (172)	9.3 (236)	61 (27.2)	-	-
31	175-4360	710	185	12	100	C/MFA/S***	A - 1000	12.9 (329)	6.8 (172)	9.3 (236)	62 (28.1)	-	-
31/30H	115-2422	1000	170	12	90	C/MFA	A - 1000	12.9 (329)	6.8 (172)	9.5 (241)	63 (28.6)	-	-
31/30H	115-2421	950	170	12	90	C/MFA+	A - 1000	12.9 (329)	6.8 (172)	9.5 (241)	64 (29.1)	44 (20.0)	6.6 (6.2)
31/30H	9X-3404 <sup>(1)</sup>	950	165	12	95/100	C/MF	NA	13.0 (331)	6.8 (172)	9.5 (241)	58 (26.3)	-	-
31/30H	3T-5760	750	165	12	95/100	C/MF	AV - 1000	13.0 (331)	6.8 (172)	9.5 (241)	56 (25.4)	-	-
65	230-6368	880	140	12	70	C/MF	NA	11.9 (304)	7.5 (191)	7.5 (191)	46 (20.9)	-	-
24	153-5656	650	110	12	52	C/MF	NA	11.0 (279)	6.9 (174)	9.0 (229)	39 (17.7)	-	-

### Construction Notes:

Batteries use SAE taper post design and are shipped wet except as:

LAC = Low Maintenance - Hybrid Construction

C = Calcium Lead Alloy Grid Design

MF = Maintenance Free Non-Accessible

MFA = Maintenance Free Accessible

A = Accessible

NA = Non-Accessible

AV = Accessibility Varies - Accessibility varies depending on supplier used. If it has caps, it is accessible and fluid levels should be checked.

S = Stud Terminals

+ = Shipped Dry Only

\* = Side Terminals Only

\*\* = Starting and Deep Cycle Battery

\*\*\* = Deep Cycle and Starting Battery

≈ = Cold Cranking Amps for 30 seconds at 0° F (-18° C)

† = Reserve Capacity Minutes minimum of 25 amp output at 80° F (27° C)

SDT = Dual, Top mounted Terminals - Stud and SAE Post. Marine Deep Cycle/ Starting Battery

### Rugged Design-Built Tough-Reliable Starting

- Positive and negative plates are anchored to container bottom and locked at the top of element for maximum vibration resistance.
- Heavy-duty forged terminal post bushings provide maximum strength and resistance to acid seepage.
- Hefty full-frame grids, no sharp edges, optimum acid/paste combination provides better charge acceptance after deep discharge.
- Manifold vented cover with built-in Flame Arrestor...a safety feature that directs corrosive gases away from the battery and holddowns.
- Thick, robust container resists rugged treatment typical of heavy-duty commercial use. Embossed part number & descriptors for easy serviceability.

1 not available in US

# Cat Battery Specifications

## Cat General Service Batteries - Available Worldwide (Except Brazil)

### Quality Batteries for a Wide Range of Applications

**Ideal for Automotive, Light Truck, Bus, Marine, Industrial, Agricultural, Stationary Power and Recreational Usage.**

- Maintenance Free and low maintenance... accessible or sealed
- Deep Cycle and Valve Regulated (VRLA) Gelled or Absorbed Glass Mat (AGM) batteries
- Hefty full frame grids, no sharp edges. Optimum acid/paste combination provides better charge acceptance after deep discharge
- Commercial batteries have Anchor Lock elements for vibration resistance
- Flame Arrestor Safety Vents to direct corrosive gases away from the battery and holddowns

### Wet Batteries

BCI Group Size	Part No.	CCA $\approx$	RC Mins †	Volts	Amp Hr. Capacity @ 20 Hrs.	Construction Notes	BCI Overall Dimensions			Nominal Weight
							Length In (mm)	Width In (mm)	Height In (mm)	Wet Lb (kg)
<b>Truck/Agricultural/Industrial</b>										
1	8C-3617	640	130	6	100	C/MF	9.0 (229)	6.9 (175)	8.8 (222)	30.0 (13.6)
2	8C-3629	675	185	6	90	LA	10.4 (264)	6.9 (175)	8.8 (222)	37.0 (16.8)
3EE	8C-3620	400	95	12	54	LA	19.3 (489)	4.3 (108)	9.0 (229)	42.0 (19.1)
3EH	8C-3632	875	250	6	115	LA	19.3 (489)	4.3 (108)	10.0 (254)	47.0 (21.3)
4	8C-3633	975	250	6	125	C/MF	12.5 (318)	6.9 (175)	9.5 (241)	48.0 (21.8)
4DLT	8C-3622	850	240	12	100	LA	20.0 (508)	8.1 (206)	8.1 (206)	78.5 (35.6)
8D	8C-3624	1400	430	12	190	LA	20.8 (527)	11.0 (279)	10.0 (254)	130.0 (59.0)
24F	3T-5858	650	115	12	55	C/MF	10.8 (273)	6.8 (171)	9.0 (229)	41.0 (18.6)
27	8C-3601	710	120	12	65	C/MF	12.0 (305)	6.8 (171)	9.0 (229)	48.5 (22)
27F	8C-3602	710	120	12	65	C/MF	12.4 (314)	6.8 (171)	9.0 (229)	48.5 (22)
31	8C-3628	760	170	12	80	C/MF/S	13.0 (330)	6.8 (171)	9.5 (241)	53.5 (24.3)
31	430-5996	1000	185	12	100	C/MF	13.0 (330)	6.8 (171)	9.5 (241)	60.0 (27.2)
C11(DIN)	369-9955	270	43	12	30	C	7.36 (187)	5.04 (128)	6.50 (165)	17.86 (8.1)
T4 (DIN)	356-6211	380	66	12	44	C	8.27 (210)	6.89 (175)	6.89 (175)	16.09 (7.3)
<b>Bus - Special Terminal</b>										
8D	250-0473	1400	430	12	190	C/MFA/TB	20.8 (527)	11.0 (279)	10.0 (254)	130.0 (59.0)
<b>Automotive/Light Truck &amp; SUV</b>										
22F	3T-5859	425	65	12	35	C/MF	9.4 (238)	6.8 (171)	8.3 (210)	31.5 (14.3)
24	3T-5857	650	115	12	55	C/MF	10.8 (273)	6.8 (171)	9.0 (229)	41.0 (18.6)
25	250-0488	625	95	12	45	C/MF	9.8 (248)	6.9 (175)	8.9 (225)	37.0 (16.8)
26	8C-3600	540	80	12	45	C/MF	8.8 (222)	6.8 (171)	8.0 (203)	31.0 (14.1)
26R	369-9958	540	80	12	45	C/MF	8.8 (222)	6.8 (171)	8.0 (203)	31.0 (14.1)
34/78	250-0486	690	110	12	60	C/MF/DT	10.8 (273)	6.8 (171)	8.0 (203) !	39.0 (17.7)
35	250-0487	640	95	12	45	C/MF	9.8 (248)	6.9 (175)	8.9 (225)	37.0 (16.8)
41	8C-3605	650	100	12	64	C/MF	11.6 (293)	6.9 (175)	6.9 (175)	38.0 (17.2)
42	250-0490	475	70	12	40	C/MF	9.6 (242)	6.9 (175)	6.9 (175)	30.0 (13.6)
48	430-5993	730	120	12	65	C/MF	11.0 (278)	6.9 (175)	7.5 (190)	43.0 (19.5)
49	307-0751	900	185	12	100	C/MF	13.9 (353)	6.9 (175)	7.5 (190)	52.5 (23.8)
55/56/62	8C-3611	540	75	12	52	C/MF/DT	8.8 (222)	6.0 (152)	8.50 (216)	32.5 (14.7)
58	8C-3612	580	85	12	53	C/MF	10.0 (254)	7.3 (184)	7.0 (178)	32.5 (14.7)
65	250-0484	675	130	12	55	C/MF	12.0 (305)	7.4 (187)	7.7 (194)	41.5 (18.8)
75	7X-6100	690	95	12	60	C/MF *	9.8 (248)	7.0 (178)	7.3 (184)	36.0 (16.3)
75/86	250-0489	540	85	12	47	C/MF/DT	9.75 (247.65)	7.0 (178)	8.1 (206) !	32.0 (14.5)
78	369-9957	690	110	12	58	C	10.8 (273)	6.9 (175)	7.3 (184)	37.5 (17.0)

# Cat Battery Specifications

## Cat General Service Batteries - Available Worldwide (Except Brazil) (Cont'd.)

### Wet Batteries (Cont'd.)

BCI Group Size	Part No.	CCA ≈	RC Mins †	Volts	Amp Hr. Capacity @ 20 Hrs.	Construction Notes	BCI Overall Dimensions			Nominal Weight	
							Length In (mm)	Width In (mm)	Height In (mm)	Wet Lb (kg)	
90	430-6000	600	90	12	40	C/MF	9.5 (242)	6.9 (175)	6.9 (175)	34.0 (15.4)	
91	430-6001	700	100	12	50	C/MF	11.0 (278)	6.9 (175)	6.9 (175)	39.0 (18.0)	
92	430-6002	650	130	12	70	C/MF	12.5 (317)	6.9 (175)	6.9 (175)	43.0 (19.5)	
93	430-6003	800	130	12	80	C/MF	13.9 (353)	6.9 (175)	6.9 (175)	47.5 (22.1)	
94R	430-6005	790	140	12	80	C/MF	12.4 (315)	6.9 (175)	7.5 (190)	47.0 (21.0)	
95R	430-6006	850	190	12	100	C/MF	15.5 (394)	6.9 (175)	7.5 (190)	61.5 (27.4)	
96R	430-6007	600	90	12	40	C/MF	9.6 (242)	6.9 (175)	6.9 (175)	34.0 (15.4)	
97R	430-6008	600	95	12	60	C/MF	9.6 (242)	6.9 (175)	7.5 (190)	37.0 (16.7)	
101	430-6009	650	110	12	-	C/MF/ *	10.3 (260)	7.1 (179)	6.7 (170)	36.0 (16.3)	
121R	430-6010	550	80	12	50	C/MF	8.3 (210)	7.0 (177)	8.1 (206)	32.5 (14.7)	
124R	430-6011	700	100	12	60	C/MF	10.3 (260)	6.9 (175)	8.4 (212)	39.5 (17.9)	
151R	430-6012	340	55	12	-	C/MF	7.24 (184)	5.0 (125)	8.8 (222)	23.5 (10.7)	
<b>Marine-Deep Cycle Capability</b>											
24M	8C-3638	650	115	12	55	C/MF/DT/~#	10.8 (273)	6.8 (171)	9.4 (238)	41.0 (18.6)	
24DC	430-5992	500	130	12	75	LA/DT/@	10.8 (273)	6.8 (171)	9.4 (238)	45.5 (20.6)	
24DP	430-5991	550	120	12	65	LAC/DT	10.8 (273)	6.8 (171)	9.4 (238)	44.0 (20.0)	
27M	8C-3639	650	150	12	80	@/S/DT#	12.5 (318)	6.8 (171)	9.4 (238)	51.0 (23.1)	
<b>Lawn &amp; Garden</b>											
U1	8C-3636	230	-	12	25	C/MF	7.8 (197)	5.2 (130)	7.3 (184)	10.5 (4.8)	
<b>Golf Cart/Scissor &amp; High Lifts</b>											
GC2	8C-3641	235	-	6	235	@ OP	10.3 (260)	7.2 (181)	10.9 (276)	68.0 (30.8)	
<b>Dual Terminal Batteries</b>											
34/78	127-0826	800	115	12	66	C/MF/DT	10.8 (273)	6.8 (175)	8.0 (203) !	42.0 (19.1)	
34/78	250-0486	690	110	12	60	ST/MF/DT	10.8 (273)	6.8 (175)	8.0 (203) !	39.0 (17.7)	
75/86	250-0489	540	85	12	47	C/MF/DT	9.8 (248)	7.0 (178)	8.1 (206) !	33.0 (15.0)	

#### Construction Notes:

Batteries use SAE taper post design and are shipped wet except as:

LA = Low Maintenance - Low Antimony Grids

LAC = Low Maintenance - Hybrid Construction

C = Calcium Lead Alloy Grid Design

ST = Silver (AG) Calcium alloy grids- severe service-high temperature

MF = Maintenance Free Non-Accessible

MFA = Maintenance Free Accessible

S = Stud Terminals

DT = Dual Terminal

TB = Transit Bus one piece end terminal. Right end of battery. Positive Stud:

1/2"-13 steel, Negative Stud: 3/8" -16 steel

OP = Offset Post with Horizontal Hole Stainless Steel 5/16" Bolt & Hex Nut

\* = Side Terminals

≈ = Cold Cranking Amps for 30 seconds at 0° F (-18° C)

† = Reserve Capacity Minutes minimum of 25 amp output at 80° F (27° C)

! = For height with removable adapter, add 7/8" (22mm)

@ = Deep Cycle - Antimony Grids

~ = Marine Starting

+ = Shipped Dry Only

§ = 75 amps @ 80° F

# = Wing nut for 8C-3638 & 8C-3639 is part number 3B-0723

### Dry Batteries

BCI Group Size	Part No.	CCA ≈	RC Mins †	Volts	Amp Hr. Capacity @ 20 Hrs.	Const. Notes	BCI Overall Dimensions			Nominal Weight		Nominal Acid to Fill Qt (liter)
							Length In (mm)	Width In (mm)	Height in (mm)	Wet Lb (kg)	Dry Lb (kg)	
<b>Marine / Recreational</b>												
8V	8C-3640	980	350	8	175	LA +	20.8 (527)	7.3 (184)	10.7 (270)	90.5 (41.1)	59.5 (27.0)	12.0 (10.9)

# Cat Battery Specifications

## Cat General Service Batteries - Available Worldwide (Except Brazil) (Cont'd.)

### Construction Notes:

Batteries use SAE taper post design and are shipped wet except as:

LA = Low Maintenance - Low Antimony Grids  
 LAC = Low Maintenance - Hybrid Construction  
 C = Calcium Lead Alloy Grid Design  
 MF = Maintenance Free Non-Accessible  
 MFA = Maintenance Free Accessible  
 S = Stud Terminals  
 DT = Dual Terminal  
 TB = Transit Bus one piece end terminal. Right end of battery. Positive Stud:  
 1/2"-13 steel, Negative Stud: 3/8" -16 steel  
 OP = Offset Post with Horizontal Hole Stainless Steel 5/16" Bolt & Hex Nut

\* = Side Terminals  
 ≈ = Cold Cranking Amps for 30 seconds at 0° F (-18° C)  
 † = Reserve Capacity Minutes minimum of 25 amp output at 80° F (27° C)  
 ! = For height with removable adapter, add 7/8" (22mm)  
 @ = Deep Cycle - Antimony Grids  
 ~ = Marine Starting  
 + = Shipped Dry Only  
 § = Rating to 5.25 volts at 75 amps @ 80° F  
 # = Wing nut for 8C-3638 & 8C-3639 is part number 3B-0723

## Valve Regulated Lead Acid (VRLA) Batteries

BCI Group Size	Part No.	CCA ≈	RC Mins †	Volts	Amp Hr. Capacity @ 20 Hrs.	Construction Notes	BCI Overall Dimensions			Nominal Weight Wet Lb (kg)
							Length In (mm)	Width In (mm)	Height In (mm)	
<b>Gelled (GEL) Electrolyte, Marine/Recreational, Deep Cycle Capability</b>										
4D	152-8006	970	375	12	183	MF-G/VRLA	20.8 (527)	8.5 (216)	10.0 (254)	127.5 (57.8)
8D	152-7242	1150	475	12	225	MF-G/VRLA	20.8 (527)	11.0 (279)	10.0 (254)	157.0 (71.2)

### Construction Notes:

MF-G/VRLA = Maintenance Free Non-Accessible -Gel Battery. Valve-Regulated Lead Acid (VRLA) battery with gelled electrolyte  
 ≈ = Cold Cranking Amps for 30 seconds at 0° F (-18° C)  
 † = Reserve Capacity Minutes minimum of 25 amp output at 80° F (27° C)

## Absorbed Glass Mat (AGM) Batteries

BCI Group Size	Part No.	CCA ≈	RC Mins †	Volts	Amp Hr. Capacity @ 20 Hrs.	Construction Notes	BCI Overall Dimensions			Nominal Weight Wet Lb (kg)
							Length In (mm)	Width In (mm)	Height In (mm)	
<b>Truck/Agricultural/Industrial</b>										
31	430-5994	800	200	12	105	MF-AGM/VRLA/S	13.0 (330)	6.8 (171)	9.5 (241)	67.5 (30.6)
31	430-5995	925	190	12	100	MF-AGM/VRLA/S	13.0 (330)	6.8 (171)	9.5 (241)	66.5 (30.2)
<b>Automotive/Light Truck &amp; SUV</b>										
34/78	430-5997	775	120	12	55	MF-AGM/VRLA/DT	10.8 (273)	6.9 (175)	8.0 (203)	43.0 (19.5)
34M	430-5999	775	120	12	55	MF-AGM/VRLA/DT	10.8 (273)	6.9 (175)	8.0 (203)	42.5 (19.3)
65	430-5998	750	150	12	75	MF-AGM/VRLA	12.0 (305)	7.4 (187)	7.7 (194)	47.5 (21.5)
94R	430-6004	800	140	12	80	MF-AGM/VRLA	12.4 (315)	6.9 (175)	7.5 (190)	52.0 (23.6)

# Cat Battery Specifications

## Absorbed Glass Mat (AGM) Batteries (Cont'd.)

BCI Group Size	Part No.	A	B	Volts	Const. Notes	TERM.	BCI Overall Dimensions				Nominal Weight Wet Lb (kg)	
							Length In (mm)	Width In (mm)	Terminal Height In (mm)	Container Height In (mm)		
<b>High-rate Uninterruptible Power Supplies (UPS) or Standby Applications</b>												
4D	250-0483	624	318	12	MF-AGM/VRLA	TA/2/ρ	21.8 (552)	8.3 (210)	9.4 (237)	8.8 (222)	130.0 (59.0)	
24	250-0476	253	127	12	MF-AGM/VRLA	TA/1/ρ	10.2 (259)	6.8 (173)	9.2 (232)	8.2 (206)	53.0 (24.0)	
27	250-0477	314	156	12	MF-AGM/VRLA	TA/1/ρ	12.8 (323)	6.8 (173)	8.7 (220)	8.2 (206)	64.0 (29.0)	
31	250-0478	377	192	12	MF-AGM/VRLA	TA/1/ρ	13.0 (329)	6.7 (171)	8.8 (222)	8.6 (218)	68.5 (31.1)	
31	250-0479	475	238	12	MF-AGM/VRLA	TA/1/ρ	13.5 (342)	6.8 (172)	11.3 (286)	11.1 (281)	99.0 (44.9)	
31	369-9959 <sup>(2)</sup>	550	271	12	MF-AGM/VRLA	TA/1/ρ	13.5 (342)	6.8 (172)	11.2 (285)	11.1 (281)	107.0 (48.5)	
45	250-0475	168	85.4	12	MF-AGM/VRLA	TA/1/ρ	8.9 (225)	5.3 (135)	8.7 (221)	8.2 (207)	40.0 (18.1)	
U1	250-0474	119	60	12	MF-AGM/VRLA	TA/1/α	7.8 (196)	5.2 (132)	7.2 (182)	6.2 (157)	24.0 (10.9)	
∞	369-9960 <sup>(2)</sup>	370	187	12	MF-AGM/VRLA	FA/3/ρ	19.5 (494)	4.4 (110)	8.9 (227)	9.1 (231)	80.0 (36.3)	
∞	369-9961 <sup>(2)</sup>	550	274	12	MF-AGM/VRLA	FA/3/ρ	21.9 (555)	5.0 (127)	11.2 (283)	11.7 (297)	120.0 (54.4)	
∞	369-9962 <sup>(2)</sup>	750	367	12	MF-AGM/VRLA	FA/3/ρ	24.0 (610)	4.9 (125)	12.3 (311)	12.8 (324)	150.0 (68.1)	

### Construction Notes:

A = Power Watts per Cell for 15 minutes to 1.67 Volts Per Cell @ 77° F (25° C)  
 B = Discharge Rating in Amperes for 15 minutes to end voltage of 1.75 V.P.C. @ 77°F (25°C)  
 MF-AGM/VRLA = Maintenance Free Non-Accessible - Absorbed Glass Mat (AGM) Battery.  
 ∞ = Unique container size. Does not use a standard BCI grouping  
 ≈ = Cold Cranking Amps for 30 seconds at 0° F (-18° C)  
 † = Reserve Capacity Minutes minimum of 25 amp output at 80° F (27° C)

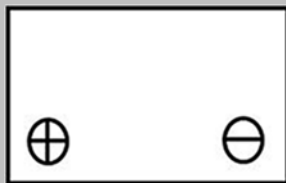
S = Stud Terminals  
 DT = Dual Terminal  
 TA - Top Access  
 FA - Front Access  
 α = In line lead terminal with brass female inserts .490" diameter head with a 1/4-20unc x .700 deep thread  
 ρ = In line lead terminal with brass female inserts .625" diameter head with a 1/4-20unc x .750 deep thread

**AGM batteries have a longer production lead time than regular lead-acid type batteries**

**Important: Alternator and charger instructions: for 12-volt AGM Batteries charge to 14.4 volts but no more than 14.6 volts at 68° F (20° C)**

### Valve Regulated AGM Batteries-Terminal Locations

Location Type - 1



Location Type - 2



Location Type - 3



VRLA batteries are a UL Recognized Component and are I.C.C.O., I.M.D.E., I.A.T.A., and D.O.T. Air Transportable Approved

# Cat Battery Specifications

## Cat General Service Batteries - Limited Availability

### Europe, Africa, Middle East, Asia

DIN Group Size	Part No.	Amp Hr Capacity @ 20 Hrs	RC Mins †	BCI CCA ≈	DIN CCA ^	EN CCA ±	Volts	Const. Notes	BCI Overall Dimensions			Nominal Weight Wet Lb (kg)
									Length In (mm)	Width In (mm)	Height In (mm)	
78	369-9957	58	110	690	-	-	12	-	10.75 (273)	6.89 (175)	7.24 (184)	37.5 (17.0)
C11	369-9955	30	43	270	150	250	12	C	7.36 (187)	5.04 (128)	6.50 (165)	17.86 (8.1)
T4	369-9956	44	66	400	225	-	12	C	8.27 (210)	6.89 (175)	6.89 (175)	16.09 (7.3)
T4	356-6211	44	66	380	250	350	12	C	8.27 (210)	6.89 (175)	6.89 (175)	16.09 (7.3)
T5	356-6212	55	85	450	290	420	12	C	9.49 (241)	6.89 (175)	6.89 (175)	18.52 (8.4)
T6	356-6213	66	105	550	315	520	12	C	10.94 (278)	6.89 (175)	6.89 (175)	21.83 (9.9)
T7	356-6214	80	133	625	420	570	12	C	12.40 (315)	6.89 (175)	6.89 (175)	26.68 (12.1)
T8	356-6215	88	150	770	420	715	12	C	13.58 (345)	6.89 (175)	6.89 (175)	30.20 (13.7)

#### Construction Notes:

Batteries have taper post design and are shipped wet except as:

≈ = Cold Cranking Amps at 0° F (-18° C), discharge rate of 30 seconds, meeting 7.2V or above cut-off

^ = Cold Cranking Amps at 0° F (-18° C), discharge rate of 30 seconds, meeting 9V or above cut-off

± = Cold Cranking Amps at 0° F (-18° C), discharge rate of 90 seconds, meeting 6V or above cut-off

† = Reserve Capacity Minutes minimum of 25 amp output at 80° F (27° C)

C = Calcium Lead Alloy Grid Design

### Brazil Only

DIN Group Size	Part No.	Amp Hr Capacity @ 20 Hrs	RC Mins †	BCI CCA ≈	DIN CCA ^	EN CCA ±	Volts	Const. Notes	BCI Overall Dimensions			Nominal Weight Wet Lb (kg)
									Length In (mm)	Width In (mm)	Height In (mm)	
4D	102-0400	150	270	950	535	-	12	SC	20.08 (510)	8.39 (213)	9.06 (230)	95.68 (43.4)
4D	242-0824	135	240	750	420	-	12	C	20.08 (510)	8.39 (213)	9.06 (230)	87.74 (39.8)
4D	242-0825	170	330	1000	560	-	12	C	20.08 (510)	8.39 (213)	9.06 (230)	101.85 (46.2)
4D	242-0829	330	170	700	395	-	12	C	20.08 (510)	8.39 (213)	9.06 (230)	101.41 (46)
31	242-0831	165	100	600	335	-	12	C	12.99 (330)	6.77 (172)	9.41 (239)	60.19 (27.3)
H7	242-0828	170	90	725	380	-	12	C	12.32 (313)	6.89 (175)	6.89 (175)	51.93 (23.1)
T5	242-0827	55	90	425	250	-	12	C	9.53 (242)	6.89 (175)	6.89 (175)	30.64 (13.9)
T5	242-0826	55	90	425	250	-	12	C	9.53 (242)	6.89 (175)	6.89 (175)	30.64 (13.9)
T6	112-9564	65	110	620	345	-	12	SC	10.94 (278)	6.89 (175)	6.89 (175)	39.24 (17.8)

#### Construction Notes:

Batteries have taper post design and are shipped wet except as:

≈ = Cold Cranking Amps for 30 seconds at 0° F (-18° C)

^ = Cold Cranking Amps at 0° F (-18° C), discharge rate of 30 seconds, meeting 9V or above cut-off

† = Reserve Capacity Minutes minimum of 25 amp output at 80° F (27° C)

C = Calcium Lead Alloy Grid Design

SC = Silver (Ag) Calcium Alloy Grids for resistance to high under hood temperatures.

#### Terminals:

- Lead terminal. L Shaped. Terminals have square holes.
  - Lead terminal and brass inserts. 1/4 - 20 x .25 Deep Female Thread.
  - Lead terminal with brass inserts. 1/4 - 20 x .25 Deep Female Thread
  - Lead terminal with brass inserts. 1/4 - 20 x Female Thread.
- Ratings conform to IEEE-485 Standards.



1 - BCI Group U1



2 - BCI Groups 45, 24, 27



3 - BCI Group 31



4 - BCI Group 4D

# Cat Battery Specifications

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## Cat General Service Batteries - Limited Availability (Cont'd.)

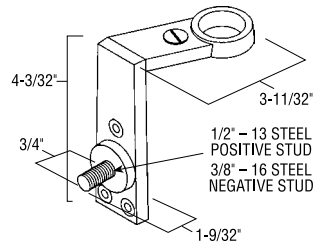
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### Terminal layout for 250-0473 8D Transit Bus Battery <sup>(3)</sup>

One piece end terminal. Right end of Battery.

1/2" - 13 Steel Positive Stud

3/8" - 16 Steel Negative Stud



### Battery Accessories:

- Group 31 – Charging Posts for Stud Terminals - Part # 4C-5637
- Screw-in Charging Posts for Side Terminals - Part # 4C-5638
- Wing Nut for Part # 175-4390/175-4370/175-4360/8C-3628 - Part #2B-9498
- Wing Nut for Part #8C-3638 & 8C-3639 Marine Batteries - Part #3B-0723
- Battery Voltmeter - Part # 4C-6600
- Battery Load Tester - Part # 4C-4911
- Booster Cable 12' (3.66 m) - Part # 4C-4933
- Booster Cable 20' (6.00 m) - Part # 4C-4937

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## NOTE

***Ratings and Part Numbers are subject to change without notice.***

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3 Terminal strip not available for sale.



## Assembly Numbers Cell and Terminal Layouts

### 6-VOLT ASSEMBLIES – TERMINAL POSITIONS & CELL LAYOUTS

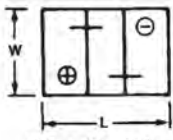


FIG. 1 (2L, 2N)

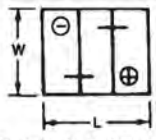


FIG. 2 (1, 2, 3, 3D, 4, 5D, 7D, 9D, 19L, GC2, GC2H)

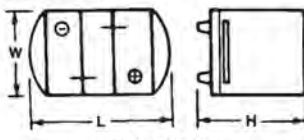


FIG. 2B (17HF)

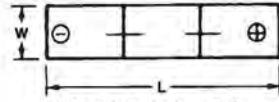


FIG. 5 (2E, 3EH, 4EH)

### 12-VOLT ASSEMBLIES – TERMINAL POSITIONS & CELL LAYOUTS

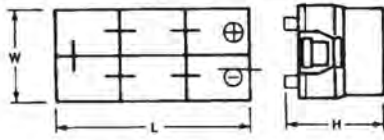


FIG. 8 (4B³, 4D, 6D, 8D³)

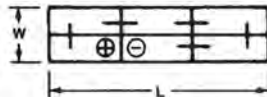


FIG. 9 (3EE, 3ET)

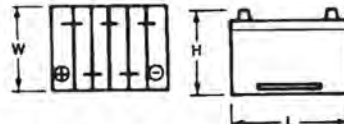


FIG. 10 (12T, 20H, 21, 24, 24H, 24T, 25, 26, 27, 27H, 29H, 30H, 34, 50, 51, 52, 86, U1⁴, U2⁴)

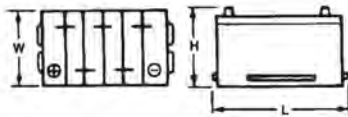


FIG. 10F (16TF, 45, 46)

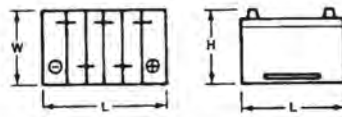


FIG. 11 (21R, 22NL¹, 22R, 24/24F, 24R, 26R, 27R, 29HR, 30HR, 32N, 34R, 35, 51R, 85, LM, U1R⁴)

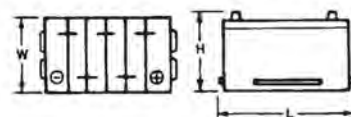


FIG. 11F (22F, 22HF, 22NF, 24F, 27F, 27HF, 29NF, 33)

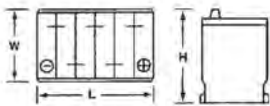


FIG. 11H (121R, 124R)

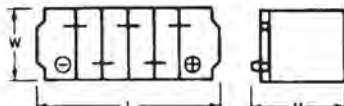


FIG. 11L (17TF, 23)

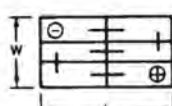


FIG. 12 (60)

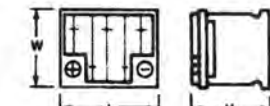


FIG. 13 (66)



FIG. 14 (53)

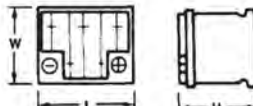


FIG. 15 (39, 40R, 41, 42, 43, 44, 96R, 97R, 98R)

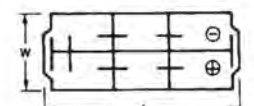


FIG. 16L (4DLT)

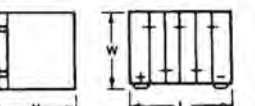


FIG. 17 (70, 71, 72, 73, 74, 75, 76, 77, 78, 101)

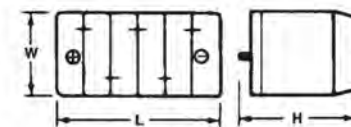


FIG. 18 (28, 31²)

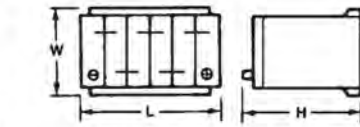


FIG. 19 (36R, 54, 55, 56, 58R)

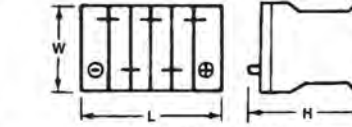


FIG. 20 (61, 62, 63, 64)

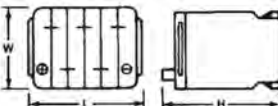


FIG. 21 (59, 65)

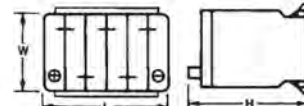


FIG. 22 (57)

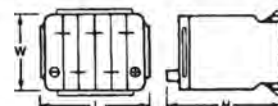


FIG. 23 (58R)

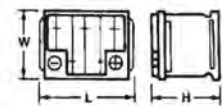


FIG. 24 (47, 48, 49, 90, 91, 92, 93, 94R, 95R, 99R)

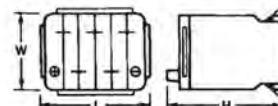


FIG. 25 (58)

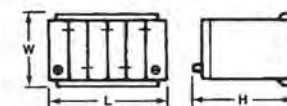


FIG. 26 (58)

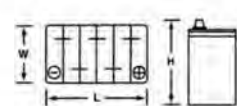


FIG. 28 (151R)

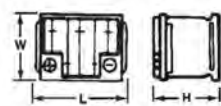


FIG. 34 (99)

**Footnotes for Cell Layout Section**

<sup>1</sup> Pencil posts supplied as O.E.  
<sup>2</sup> SAE or 3/8" stud posts.

<sup>3</sup> SAE or special "bus" side terminals  
<sup>4</sup> Special lawn mower "L" terminals.

\* Source: Battery Council Int'l







FIG. 35 (79, 100)



FIG. 39 (67R)

# Cat Battery Specifications

## Cast Lead Battery Terminals

Cast Lead (Preferred)			
			
<b>Straight</b>	<b>Inline</b>	<b>Flag</b>	<b>Vertical</b>

Cast Lead Battery Terminals				
Part Number	Size	Polarity	Comments	Boot/Cover
<b>Straight</b>				
304-5664	2	Positive	Nut Right	-
363-4083	2	Negative	Nut Right	-
7X-1593	4	Negative	Nut Right	-
7X-1594	4	Positive	Nut Right	-
9W-3962	0	Negative	Nut Right	7N-5274
9W-3961	0	Positive	Nut Right	8N-1725
363-8981	00	Positive	Straight - Stud Bolt (Right)	352-4708
288-6202	00	Negative	Nut Left	7T-9988
9W-3459	00	Negative	Nut Right	7T-9988
350-8702	00	Negative	Straight - Stud Bolt (Right)	352-4707
352-4705	00	Negative	Straight - Stud Bolt (Left)	352-4709
288-6201	00	Positive	Nut Left	7T-9987
9W-3460	00	Positive	Nut Right	7T-9987
141-6647	00	Positive	Straight - Stud Bolt (Left)	7T-9987
352-4704	00	Positive	Straight - Stud Bolt (Right)	352-4709
235-1300	000	Negative	Nut Right	7T-9988
345-9746	000	Negative	Straight - Stud Bolt (Left)	221-3352
235-1298	000	Positive	Nut Right	7T-9987
187-8911	0000	Negative	Nut Right	7T-9988
187-8910	0000	Positive	Nut Right	7T-9987
235-8106	00 & 12	Negative	Straight & Straight (Nut Right)	7N-5274
235-8105	00 & 12	Positive	Straight & Straight (Nut Right)	8N-1725
221-3351	0000 & 2	Negative	Straight & Straight (Nut Right)	221-3352
141-2640	0000 & 2	Positive	Straight & Straight (Nut Right)	141-2316
<b>Inline</b>				
Part Number	Size	Polarity	Comments	Boot/Cover
6T-7420	00	Negative	Nut Left	7T-4925
6T-7418	00	Positive	Nut Left	7T-4924
8C-4282	000	Negative	Nut Right	7T-4925
8C-4281	000	Positive	Nut Right	7T-4924
9X-6765	0000	Negative	Nut Left	7T-4925
9X-6765	0000	Positive	Nut Left	7T-4924
<b>Flag</b>				
Part Number	Size	Polarity	Comments	Boot/Cover
9W-3417	00	Negative	RH (Nut Left)	9G-0005
9W-3723	00	Negative	LH (Nut Right)	9G-0003
9W-3416	00	Positive	RH (Nut Left)	9G-0004
9W-3722	00	Positive	LH (Nut Right)	9G-0002
364-3765	00 & 00	Positive	LH & LH (Nut Left)	206-6395
295-9787	00 & 00	Positive	RH & RH (Nut Left)	295-9838
226-1935	000	Negative	LH (Nut Left)	9G-0003

# Cat Battery Specifications

## Cast Lead Battery Terminals (Cont'd.)

Cast Lead Battery Terminals				
Part Number	Size	Polarity	Comments	Boot/Cover
8C-4601	000	Negative	RH (Nut Right)	9G-0005
8C-4600	000	Positive	LH (Nut Left)	9G-0002
9X-0415	000	Positive	RH (Nut Left)	9G-0004
167-1275	0000	Negative	LH (Nut Right)	9G-0003
9X-6759	0000	Negative	RH (Nut Left)	9X-5583
9X-1369	0000	Positive	RH (Nut Left)	9X-5632
Vertical				
Part Number	Size	Polarity	Comments	Boot/Cover
249-9042	00	Negative	Nut Left	249-9066
371-2583	00	Negative	Stud Bolt (Left)	-
290-1219	00	Positive	Nut Left	290-2077
Specialized				
Part Number	Size	Polarity	Comments	Boot/Cover
197-9044	00 & 00	Negative	LH & Vertical (Nut Right)	197-9045
352-4706	00 & 00	Negative	LH & Vertical - Stud Bolt (Left)	352-4710
311-2835	00 & 00	Positive	RH & Vertical (Nut Right)	311-2736
373-4028	00 & 00	Positive	RH & Vertical - Stud Bolt (Right)	373-4029
197-7800	00, 00 & 2	Positive	RH, Vertical & Vertical (Nut Right)	197-7801
245-6038	0000 & 2	Negative	LH & LH (Nut Left)	249-9056
206-6394	0000 & 2	Positive	LH & LH (Nut Right)	206-6395
364-2510	Various	Negative	See Drawing (Nut Right)	363-9054
229-9855	00	Negative	Straight - Vertical Stud (Nut Right)	229-9856
247-1337	00	Positive	Straight - Vertical Stud (Nut Right)	247-1336
235-8634	00	Positive	LH - Studs Top & LH (Nut Right)	235-8636
152-6566	0000	Negative	Inline-Vertical Stud (Nut Left)	-
152-6565	0000	Positive	Inline-Vertical Stud (Nut Left)	-




# Cat Battery Specifications

## Crimp Battery Terminals

Straight				
Part Number	Size	Polarity	Boot/Cover	
264-6151	2	Positive	-	
264-6153	2	Negative	-	
158-4610	4	Negative	-	
7X-1591	4	Positive	-	
7X-1169	0	Negative	7N-5274	
8T-9758	0	Positive	8N-1725	
3S-6050	00	Negative	7T-9988	
3S-6049	00	Positive	7T-9987	
9S-6333	000	Negative	7T-9988	
3S-6051	000	Positive	7T-9987	
189-0158	0000	Negative	7T-9988	
188-0157	0000	Positive	7T-9987	
Inline				
Part Number	Size	Polarity	Boot/Cover	
9S-5752	0	Positive	-	
9S-5753	0	Negative	-	
9S-5755	00	Negative	7T-4925	
9S-5754	00	Positive	7T-4924	
5M-9205	00	Negative	7T-4925	
5M-9204	00	Positive	7T-4924	
8C-4660	000	Negative	7T-4925	
8C-4659	000	Positive	7T-4924	
9X-6763	0000	Negative	7T-4925	
9X-6766	0000	Positive	7T-4924	
Flag				
Part Number	Size	Polarity	Comments	Boot/Cover
8C-5918	00	Negative	RH	9G-0005
8T-9757	00	Negative	LH	9G-0003
8C-5917	00	Positive	RH	9G-0004
8T-9756	00	Positive	LH	9G-0002
226-3826	000	Negative	LH	9G-0003
8C-4603	000	Negative	RH	9G-0005
8C-4613	000	Positive	LH	9G-0002
9X-1402	000	Positive	RH	9G-0004
167-1276	0000	Negative	LH	9X-5583
9X-6760	0000	Negative	RH	9X-5583
9X-4504	0000	Positive	RH	9X-5632

# Cat Battery Specifications

## Cable Ring Terminals

Cable Rings		
		
<b>Straight</b>	<b>90 Degree</b>	<b>Flag</b>

## 1/0 AWG

STUD OR BOLT SIZE		Angle of Inclination	PREFERRED		BOOTS/COVER	
English Stud	Metric Stud		Base	Heat Shrink Sealed	Red	Black
1/4	M6	–	030-1709		301-0091	9G-8909
1/4	M6	FLAG	240-1615		229-2698	260-2998
1/4	M6	90°	197-6800		276-1786	299-9092
5/16	M8	–	030-1708		301-0091	9G-8909
5/16	M8	FLAG	375-2144		229-2698	260-2998
5/16	M8	45°	451-4528		299-6082	299-6083
5/16	M8	90°	195-3253		276-1786	299-9092
3/8	M10	–	317-3356		317-3357	6T-0465
1/2	M12	–	1M-4986		301-0091	9G-8909
1/2	M12	90°	189-1899		276-1786	299-9092

## 2/0 AWG

STUD OR BOLT SIZE			PREFERRED			BOOTS/COVER	
English Stud	Metric Stud	Angle of Inclination	Base	Heat Shrink Sealed	Heat Shrink	Red	Black
1/4	M6	–	030-1709	348-2309		301-0091	9G-8909
1/4	M6	FLAG	276-4118	–		–	–
1/4	M6	45°	348-4169	348-8932		299-6082	299-6083
1/4	M6	90°	283-8657			9X-5699	9X-9120
5/16	M8	–	030-1705		301-0091	9G-8909	
5/16	M8	–	275-8665		229-2698	260-2998	
5/16	M8	45°	384-1357		299-6082	299-6083	
5/16	M8	90°	311-3475		311-3476	276-1786	299-9092
3/8	M10	–	1S-7252			301-0091	9G-8909
3/8	M10	FLAG	4D-1248			229-2698	260-2998
3/8	M10	45°	276-7278			348-2315	299-6082
3/8	M10	90°	315-0180	315-0181		276-1786	299-9092
1/2	M12	–	1S-7251		301-0091	9G-8909	
1/2	M12	FLAG	229-2696		229-2698	260-2998	
1/2	M12	45°	274-9183		299-6082	299-6083	
1/2	M12	90°	208-4617		276-1786	299-9092	

# Cat Battery Specifications

## Cable Ring Terminals (Cont'd.)

### 3/0 AWG

STUD OR BOLT SIZE		Angle of Inclination	PREFERRED		BOOTS/COVER	
English Stud	Metric Stud		Base	Heat Shrink Sealed	Red	Black
5/16	M8		031-9292		9X-4519	294-2319
3/8	M10		035-0425		9X-4519	294-2319
3/8	M10	45°	441-0393		198-9562	330-4419
3/8	M10	90°	239-0634		194-4046	299-9092
1/2	M12		5P-2600		9X-4519	294-2319
1/2	M12	45°	390-0853		198-9562	330-4419
1/2	M12	90°	262-9668		194-4046	299-9092

### 4/0 AWG

STUD OR BOLT SIZE		Angle of Inclination	PREFERRED		BOOTS/COVER	
English Stud	Metric Stud		Base	Heat Shrink Sealed	Red	Black
5/16	M8	–	031-9294		9X-4519	294-2319
5/16	M8	45°	363-8980		198-9562	330-4419
3/8	M10	–	031-9295	348-2310	9X-4519	249-2319
3/8	M10	45°	197-5874	348-2312	198-9562	330-4419
3/8	M10	90°	288-4232	348-2316	348-7341	348-9152
1/2	M12	–	3L-7634	348-2317	9X-4519	294-2319
1/2	M12	FLAG	321-1010	–	229-2698	–
1/2	M12	45°	189-6464	348-2311	198-9562	330-4419
1/2	M12	90°	261-1730	348-2314	348-7341	299-9092

## BCI Group Sizes and Overall Dimensions

BCI GRP. NO.	BCI FIG. NO.	Volts	Maximum Overall Dimensions Inches and (mm)			BCI GRP. NO.	BCI FIG. NO.	Volts	Maximum Overall Dimensions Inches and (mm)		
			L	W	H				L	W	H
1	2	6	9 1/8 (232)	7 1/8 (181)	9 3/8 (238)	17HF	2B	6	7 3/8 (187)	6 7/8 (175)	9 (229)
2	2	6	10 3/8 (264)	7 1/8 (181)	9 3/8 (238)	17TF	11L	12	17 1/16 (433)	6 15/16 (177)	7 15/16 (202)
2E	5	6	19 3/8 (492)	4 1/8 (105)	9 1/8 (232)	19L	2	6	8 1/2 (216)	7 (178)	7 1/2 (191)
2N	1	6	10 (254)	5 9/16 (141)	8 15/16 (227)	21	10	12	8 3/16 (208)	6 13/16 (173)	8 3/4 (222)
3	2	6	11 3/4 (298)	7 1/8 (181)	9 3/8 (238)	21R	11	12	8 3/16 (208)	6 13/16 (173)	8 3/4 (222)
3D	2	6	20 3/8 (518)	8 3/4 (222)	10 (254)	22F	11F	12	9 1/2 (241)	6 7/8 (175)	8 5/16 (211)
3EE	9	12	19 5/16 (491)	4 3/8 (111)	8 7/8 (225)	22HF	11F	12	9 1/2 (241)	6 7/8 (175)	9 (229)
3EH	5	6	19 5/16 (491)	4 3/8 (111)	9 13/16 (249)	22NF	11F	12	9 7/16 (240)	5 1/2 (140)	8 15/16 (227)
3ET	9	12	19 5/16 (491)	4 3/8 (111)	9 13/16 (249)	22R	11	12	9 (229)	6 7/8 (175)	8 5/16 (211)
4	2	6	13 1/8 (334)	7 1/8 (181)	9 3/8 (238)	24	10	12	10 1/4 (260)	6 13/16 (173)	8 7/8 (225)
4B	8	12	21 1/4 (540)	11 1/8 (283)	10 7/8 (276)	24F	11F	12	10 3/4 (273)	6 13/16 (173)	9 (229)
4D	8	12	20 3/4 (527)	8 3/4 (222)	9 13/16 (249)	24H	10	12	10 1/4 (260)	6 13/16 (173)	9 3/8 (238)
4DLT	16L	12	20 (508)	8 3/16 (208)	7 15/16 (202)	24R	11	12	10 1/4 (260)	6 13/16 (173)	9 3/8 (238)
4EH	5	6	19 5/16 (491)	5 (127)	9 13/16 (249)	24T	10	12	10 1/4 (260)	6 13/16 (173)	9 3/4 (248)
5D	2	6	13 3/4 (349)	7 1/8 (181)	9 3/8 (238)	25	10	12	9 1/16 (230)	6 7/8 (175)	8 7/8 (225)
6D	8	12	20 3/4 (527)	10 (254)	10 1/4 (260)	26	10	12	8 3/16 (208)	6 13/16 (173)	7 3/4 (197)
7D	2	6	16 1/4 (413)	7 1/8 (181)	9 3/8 (238)	26R	11	12	8 3/16 (208)	6 13/16 (173)	7 3/4 (197)
8D	8	12	20 3/4 (527)	11 1/8 (283)	9 13/16 (249)	27	10	12	12 1/16 (306)	6 13/16 (173)	8 7/8 (225)
12T	10	12	7 1/16 (179)	6 15/16 (177)	7 15/16 (202)	27F	11F	12	12 1/2 (318)	6 13/16 (173)	8 15/16 (227)
16TF	10F	12	16 9/16 (421)	7 1/8 (181)	11 1/8 (283)	27H	10	12	11 3/4 (298)	6 13/16 (173)	9 1/4 (235)

# Cat Battery Specifications

## BCI Group Sizes and Overall Dimensions (Cont'd.)

BCI GRP. NO.	BCI FIG. NO.	Volts	Maximum Overall Dimensions Inches and (mm)			BCI GRP. NO.	BCI FIG. NO.	Volts	Maximum Overall Dimensions Inches and (mm)		
			L	W	H				L	W	H
27R	11	12	12 1/16 (306)	6 13/16 (173)	8 7/8 (225)	63	20	12	10 3/16 (258)	6 3/8 (162)	8 7/8 (225)
28	18	12	10 1/4 (260)	6 13/16 (173)	9 7/16 (240)	64	20	12	11 5/8 (296)	6 3/8 (162)	8 7/8 (225)
29H	10	12	13 1/8 (334)	6 11/16 (170)	9 1/8 (232)	65	21	12	12 1/16 (306)	7 9/16 (192)	7 9/16 (192)
29NF	11F	12	13 (330)	5 1/2 (140)	8 15/16 (227)	66	13	12	12 1/16 (306)	7 9/16 (192)	7 5/8 (194)
30H	10	12	13 1/2 (343)	6 13/16 (173)	9 1/4 (235)	67R	39	12	9 1/8 (231)	6 15/16 (175)	6 15/16 (175)
31	18	12	13 (330)	6 13/16 (173)	9 7/18 (240)	70	17	12	8 3/16 (208)	7 1/16 (180)	7 11/16 (196) <sup>(4)</sup>
33	11F	12	13 5/16 (338)	6 13/16 (173)	9 3/8 (238)	71	17	12	8 3/16 (208)	7 1/16 (179)	8 1/2 (216)
34	10	12	10 1/4 (260)	6 13/16 (173)	7 7/8 (200)	72	17	12	9 1/16 (230)	7 1/16 (179)	8 1/4 (210)
34R	11	12	10 1/4 (260)	6 13/16 (173)	7 7/8 (200)	73	17	12	9 1/16 (230)	7 1/16 (179)	8 1/2 (216)
35	11	12	9 1/16 (230)	6 7/8 (175)	8 7/8 (225)	74	17	12	10 1/4 (260)	7 1/4 (184)	8 3/4 (222)
36R	19	12	10 3/8 (263)	7 3/16 (183)	8 1/8 (206)	75	17	12	9 1/16 (230)	7 1/16 (180)	7 11/16 (196) <sup>(4)</sup>
39	15	12	8 1/8 (206)	6 7/8 (175)	7 (178)	76	17	12	13 1/8 (334)	7 1/16 (180)	8 1/2 (216) <sup>(4)</sup>
40R	15	12	10 15/16 (278)	6 7/8 (175)	6 7/8 (175)	78	17	12	10 1/4 (260)	7 1/16 (180)	7 11/16 (196) <sup>(4)</sup>
41	15	12	11 9/16 (293)	6 7/8 (175)	6 7/8 (175)	79	35	12	12 1/16 (307)	7 1/16 (180)	7 3/8 (188)
42	15	12	9 1/2 (241)	6 7/8 (175)	6 7/8 (175)	85	11	12	9 1/16 (230)	6 13/16 (173)	8 (203)
43	15	12	13 1/8 (334)	6 7/8 (175)	8 1/16 (205)	86	10	12	9 1/16 (230)	6 13/16 (173)	8 (203)
45	10F	12	9 7/16 (240)	5 1/2 (140)	8 15/16 (227)	90	24	12	9 1/2 (242)	6 7/8 (175)	6 7/8 (175)
46	40F	12	10 3/4 (273)	6 13/16 (173)	9 (229)	91	24	12	10 15/18 (278)	6 7/8 (175)	6 7/8 (175)
47	24	12	9 1/2 (242)	6 7/8 (175)	7 1/2 (190)	92	24	12	12 3/8 (315)	6 7/8 (175)	6 7/8 (175)
48	24	12	10 15/16 (278)	6 7/8 (175)	7 1/2 (190)	93	24	12	13 7/8 (353)	6 7/9 (175)	6 7/8 (175)
49	24	12	13 7/8 (353)	6 7/8 (175)	7 1/2 (190)	94R	24	12	12 3/8 (315)	6 7/8 (175)	7 1/2 (190)
50	10	12	13 1/2 (343)	5 (127)	10 (254)	95R	24	12	15 1/2 (394)	6 7/8 (175)	7 1/2 (190)
51	10	12	9 3/8 (238)	5 1/16 (129)	8 3/4 (223)	96R	15	12	9 1/2 (242)	6 13/16 (252)	6 7/8 (175)
51R	11	12	9 3/8 (238)	5 1/16 (129)	8 3/4 (223)	97R	15	12	9 15/18 (252)	6 7/8 (175)	7 1/2 (190)
52	10	12	7 5/16 (186)	5 13/16 (147)	8 1/4 (210)	98R	15	12	11 1/8 (283)	6 7/8 (175)	7 1/2 (190)
53	14	12	13 (330)	4 11/16 (119)	8 1/4 (210)	99R	24	12	8 5/16 (210)	6 7/8 (175)	6 7/8 (175)
54	19	12	7 5/16 (186)	6 1/16 (154)	8 3/8 (212)	100	35	12	10 1/4 (260)	7 1/16 (179)	7 3/8 (188)
55	19	12	8 9/16 (218)	6 1/16 (154)	8 3/8 (212)	101	17	12	10 1/4 (260)	7 1/16 (179)	6 11/16 (170)
56	19	12	10 (254)	6 1/16 (154)	8 3/8 (212)	121R	11H	12	8 1/4 (222)	7 (178)	8 1/2 (216)
57	22	12	8 1/16 (205)	7 3/16 (183)	6 15/16 (177)	124R	11H	12	10 3/4 (274)	7 (178)	8 5/8 (194)
58	26	12	10 1/16 (255)	7 3/16 (183)	6 15/16 (177)	151R	28	12	7 7/16 (188)	4 15/16 (125)	8 7/8 (225)
58R	19	12	10 1/16 (255)	7 3/16 (183)	6 15/16 (177)	GC2	2	6	10 3/8 (264)	7 3/16 (183)	10 5/8 (270) <sup>(5)</sup>
59	21	12	10 1/16 (255)	7 11/16 (195)	7 3/4 (196)	U1	10	12	7 3/4 (197)	5 3/16 (132)	7 5/16 (186)
60	12	12	13 1/16 (332)	6 5/16 (160)	8 7/8 (225)	U1R	11	12	7 3/4 (197)	5 3/16 (132)	7 5/16 (186)
61	20	12	7 9/16 (192)	6 3/8 (162)	8 7/8 (225)	U2	10	12	6 5/16 (160)	5 3/16 (160)	7 1/8 (181)
62	20	12	8 7/8 (225)	6 3/8 (162)	8 7/8 (225)						

- 4 Maximum height dimensions shown includes batteries with raised quarter cover design. Flat-top design model height (minus quarter covers) reduced approximately 3/8 inch (10 mm).
- 5 Height may vary with different terminal types.

# Cat Battery Specifications

## BCI / JIS Reference Chart

### Best Fit Estimate – BCI Group Size

BCI Group No.	BCI Assembly Figure	Maximum JIS Dimensions (mm)			JIS Reference Size Number Information	
		Length	Width	Height	JIS Type Description	Conventional
21	10	202	173	225	50D20R	N50S
21R	11	202	173	225	50D20L	N50SL
24	10	260	173	225	48D26R, 55D26R, 65D26R, 75D26R, 80D26R	N50, N50Z, NS70
24R	11	260	173	225	48D26L, 55D26L, 65D26L, 75D26L, 80D26L	N50L, N50ZL, NS70L
25	10	232	173	225	55D23R, 65D23R, 70D23L, 75D23R	
27	10	306	173	225	65D31R, 75D31R, 95D23R	N70, N70B, NX120
27R	11	306	173	225	65D31L, 75D31L, 95D31L	N70L, N70ZL, NX120-7L
29H <sup>(6)</sup>	10	410	176	234	95E41R, 105E41R, 115E41R, 130E41R, 95E41L, 105E41L, 115E41L, 130E41L	N100
35	11	232	173	225	55D23L, 65D23L, 70D23L, 75D23L	
51 <sup>(7)</sup>	10	238	135	227	46B24R, 50B24R, 55B24R, 32C24R	N40, NS60
51R <sup>(7)</sup>	11	238	129	227	46B24L, 50B24L, 55B24L, 32C24L	N40L, NS60L
151R	28	188	125	225	44B19L (S)	
4D	8	505 508	182 222	257 257	15F51, <sup>(8)</sup> 145F51, <sup>(8)</sup> 150F51, <sup>(8)</sup> 170F51, <sup>(8)</sup> 14G51, 165G51, 180G51, 195G51	N120, <sup>(8)</sup> NS150, <sup>(8)</sup>
8D	8	521	278	270	180H52, 245H52	N200
N/A <sup>(7)</sup>	11	194	126	224	S34B20L – Toyota Prius: Remote Venting	
N/A	10	165	124	218	S34B24R – Honda Insight	
N/A	11	248	127	190	46A24L – Mazda Miata: Remote Venting	
N/A	—	167	127	227	28B17L, 34B17L, 28B17R, 34B17R	
N/A	—	187	127	227	34B19L, 34B19R	
N/A	—	197	129	227	38B20L, 38B20R	
N/A	—	187	127	184	26A19L, 26A19R	
N/A	—	187	127	187	26A19L, 26A19R, 28A19R, 32A19R	
N/A	—	167	127	227	26B17L, 26B17R	
N/A	—	187	127	227	28B19L, 28B19R	
N/A	—	197	129	227	36B20L, 36B20R	

#### JIS Number Interpretation:

Example – 55D23R

- 55 – Performance
- D – Classification by battery width x container height
- 23 – Approximate battery length in mm when multiplied by 10.
- R – Last letter designated polarity: R = standard (LHF), L= Reversed (RHF)- Left Hand Positive Termination

The information contained in this chart is deemed accurate and appropriate at the time of its publication. It represents our “best fit estimate” of the BCI group size to the JIS dimensional reference size. BCI provides this information as a service to the subscribers of the Data Book. While BCI strives for accuracy, it makes no promises or warranties regarding the accuracy or usefulness of this information and expressly disclaims any liability related to the use or reliability of the information contained in this chart. BCI, its officer, directors, employees, agents and its member affiliates cannot be held liable for the accuracy or use of this data.

- 6 BCI Group 29H is 76 mm shorter in length than JIS designated part.  
 7 OEM post may be small diameter  
 8 BCI designated Group 4D is 38 mm wider than JIS part. 4D will fit most JIS applications.



## BCI / DIN / EN Reference Chart European Reference Information

BCI Group Number	BCI Assembly Figure	Maximum Dimensions (mm)			Holddown	Lifting Ledge	Positive Terminal Location	DIN Code		EN Codes
		Length	Width	Height						
40R	15	278	175	175	B1	No	Right	T6	LB3	66LB
41	15	293	175	175	B4	No	Right	T65	N/A	54LB
42	15	242	175	175	B4	No	Right	T5	LB2	45LB
47	24	242	175	190	B3	Yes	Right	H5	L2	55L2
48	24	278	175	190	B3	Yes	Right	H6	L3	66L3
49	24	354	175	190	B3	Yes	Right	H8	L5	99L5
90	24	242	175	175	B3	Yes	Right	T5	LB2	45LB
91	24	278	175	175	B3	Yes	Right	T6	LB3	66LB
92	24	315	175	175	B3	Yes	Right	T7	LB4	77LB
93	24	354	175	175	B3	Yes	Right	T8	LB5	88LB
94R	24	315	175	190	B3	Yes	Right	H7	LS	77L4
95R	24	394	175	190	B3	Yes	Right	H9	L6	-
97R	15	252	175	190	B4	No	Right	H5	L2	55L2
98R	15	283	175	190	B4	No	Right	H6	L3	66L3
99	34	207	175	175	B1	Yes	Left	T4	LB1	36LB
99R	24	210	175	175	B3	Yes	Right	T4	LB1	36LR
N/A	N/A	175	175	190	B3	Yes	Right	H3	Lo	32L0
N/A	N/A	207	175	190	B3	Yes	Right	H4	L1	45L1

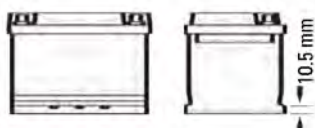
### CAUTION

These are common holddown types but others may be used.

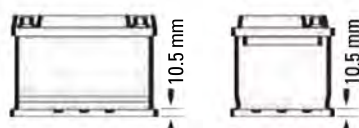
Holddown descriptions:

B1 = 10.5 mm high with 3 or 5 notches.

B3 = 10.5 mm high on sides with 3 or 4 notches on sides and 3 notches on side only.



**B1**  
Base holddown 10.5 mm  
(on long sides)



**B3**  
Base holddown 10.5 mm  
(on long and short sides)



**B4**  
Base holddown 19 mm  
(on long sides)

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# Cat Battery Specifications

## Conversion Chart

SAE	EN	IEC	DIN
155	145	100	90
200	180	130	110
250	230	160	140
300	280	195	170
350	330	225	200
400	360	260	225
450	420	290	255
500	480	325	280
550	520	355	310
600	540	390	335
650	600	420	365
700	640	450	395
750	680	485	420
800	760	515	450
850	790	550	480
900	860	580	505
950	900	615	535
1000	940	645	560
1050	1000	680	590
1100	1040	710	620
1150	1080	745	645
1200	1150	775	675
1250	1170	810	700
1300	1220	840	730
1350	1270	870	760
1400	1320	905	790
1450	1360	935	815
1500	1410	975	820
1540	1450	1000	870

JIS	SAE
26A17	225
26A19	201
28A19	248
32A19	294
26B17	225
28B17	246
34B17	279
28B19	247
34B19	272
36B20	274
38B20	332
46B24	325
50B24	390
55B24	433
32C24	238
50D20	306
55D23	356
65D23	420
70D23	490
75D23	520
48D26	278

JIS	SAE
55D26	348
65D26	413
75D26	490
80D26	582
65D31	389
75D31	447
95D31	622
95E41	512
105E41	577
115E41	651
130E41	799
115F51	638
145F51	780
150F51	916
170F51	1045
145G51	754
165G51	933
180G51	1090
195G51	1146
190H52	624
245H52	1532

## Battery Safety

DANGER/POISON



**SHIELD EYES.**  
EXPLOSIVE GASES CAN CAUSE BLINDNESS OR INJURY.



**NO**  
• SPARKS  
• FLAMES  
• SMOKING



**SULFURIC ACID**  
CAN CAUSE BLINDNESS OR SEVERE BURNS.

**FLUSH EYES IMMEDIATELY WITH WATER.**



**GET MEDICAL HELP FAST.**

KEEP OUT OF THE REACH OF CHILDREN.  
DO NOT TIP. KEEP VENT CAPS TIGHT AND LEVEL.  
DO NOT OPEN FLUSH COVER BATTERIES.

DANGER

EXPLOSIVE GASES

Cigarettes, flames or sparks could cause battery to explode. Always shield eyes and face from battery. Do not charge or use booster cables or adjust post connections without proper instruction and training.

**KEEP VENT CAPS TIGHT AND LEVEL.**

POISON

CAUSES SEVERE BURNS

Contains sulfuric acid. Avoid contact with skin, eyes or clothing. In event of accident, flush with water and call a physician immediately.

**KEEP OUT OF REACH OF CHILDREN.**

## CALIFORNIA PROPOSITION 65 WARNING

Batteries, battery posts, terminals and related accessories contain lead and lead compounds, and other chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

**Wash hands after handling.**

**DO NOT INHALE SULFURIC ACID MIST**

## Battery Safety (Cont'd.)

### DANGER OF EXPLODING BATTERIES

Batteries contain sulfuric acid and produce explosive mixtures of hydrogen and oxygen. Because self-discharge action generates hydrogen gas even when the battery is not in operation, make sure batteries are stored and worked on in a well-ventilated area. **ALWAYS wear safety glasses and a face shield** when working on or near batteries.

When working with batteries:

- **Always wear proper eye, face and hand protection.**
- Keep all sparks, flames and cigarettes away from the battery.
- Do not attempt to open a flush cover battery.
- **Never lean over battery** while boosting, testing or charging.
- Cover vent caps with a damp cloth and hand protection to minimize gas seepage.
- Make sure work area is well ventilated.
- **Do not remove or damage vent caps**
- **Do not breathe acid mist.**

### SAFE BATTERY INSTALLATION

To assure safe installation and proper operation, follow these installation procedures:

- **Always wear proper eye, face and hand protection.**
- **Disconnect ground cable first** (this is usually the negative cable; however, older vehicles may have a positive ground).
- Remove old battery – note position of positive (+) terminal and negative (–) terminal.  
**Mark the cables for correct connection to new battery.**
- Clean terminals and cable connections with a wire brush.  
Broken connections or frayed or cut cables should be replaced.
- Install the new battery in the same position as the old one.  
**Be sure to secure it with the holddown assembly.**
- Make sure the terminals do not touch any metal mounting, engine or body parts.
- Connect cables tightly. **Connect ground cable last to avoid sparks and explosion.**

### SAFE CHARGING

Before beginning the charging operation, read and follow the instructions that come with the charger. **Never attempt to charge a battery without first reviewing the instructions for the charger being used.** In addition to the charger manufacturer's instructions, these general precautions should be followed:

- Always charge batteries in a well-ventilated area and **wear proper eye protection.**
- Turn the charger and timer "OFF" before connecting the leads to the battery **to avoid dangerous sparks.**
- To avoid an explosion, never try to charge a visibly damaged or frozen battery.
- Connect the charger leads to the battery; red positive (+) lead to the positive (+) terminal and black negative (–) lead to the negative (–) terminal. If the battery is still in the vehicle, connect the negative lead to the engine block, away from the battery, to serve as a ground (If the vehicle is positive grounded, connect the positive lead to the engine block).
- Make sure that the leads to the connections are tight.
- Set the timer, turn the charger on and slowly increase the charging rate until the desired ampere value is reached.
- If the battery becomes hot or if violent gassing or spewing of electrolyte occurs, reduce the charging rate or temporarily halt the charger.
- Always turn the charger "OFF" before removing charger leads from the battery **to avoid dangerous sparks.**

# Cat Battery Specifications

## Battery Safety (Cont'd.)

### HANDLING BATTERY ACID

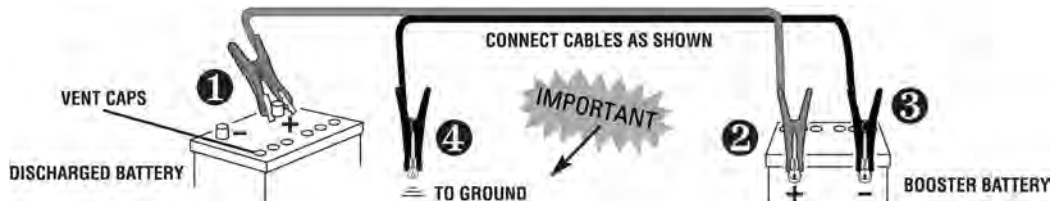
Battery acid, or electrolyte, is a solution of sulfuric acid and water that can destroy clothing and burn the skin. Use extreme caution when handling electrolyte and keep an acid neutralizing solution - such as baking soda or household ammonia mixed with water - readily available when handling batteries.

- **Always wear proper eye, face and hand protection.**
- If the electrolyte is splashed into eyes, immediately force the eye open and flood it with clean, cool water for at least 15 minutes. Get prompt medical attention.
- If electrolyte is taken internally, drink large quantities of water or milk. **DO NOT** induce vomiting. Call a physician immediately.
- Neutralize with baking soda any electrolyte that spills on a vehicle or in the work area. After neutralizing, rinse contaminated area clean with water.

Mixing acid can be very dangerous! Do not attempt without proper training. To prepare electrolyte of a specific gravity, always pour the concentrated acid slowly into the water; **DO NOT pour water into the acid.** Always stir the water while adding small amounts of acid. If noticeable heat develops, allow the solution to cool before continuing to add acid.

### SAFE BOOSTER CABLE OPERATION

When jump starting, **always wear proper eye protection and never lean over battery.** Do not jump start a damaged battery, inspect both batteries before connecting booster cable. **Be sure vent caps are tight and level,** place a damp cloth over the vent caps of both batteries. Make certain that the vehicles and cable ends are not touching and both ignition switches are turned to the "OFF" position:



**Jump Starting Diagram**  
**PROTECT YOUR EYES!**  
**IMPORTANT! Connect to a ground,**  
**away from the battery...away from**  
**moving fan and gas lines.**

1. Connect positive (+) booster cable to positive (+) terminal of discharged battery.
2. Connect other end of positive (+) cable to positive (+) terminal of assisting battery.
3. Connect negative (-) cable to negative (-) terminal of assisting battery.
4. **MAKE FINAL CONNECTION OF NEGATIVE (-) CABLE TO ENGINE BLOCK OF STALLED VEHICLE, AWAY FROM BATTERY.**
5. Start vehicle and remove cables in REVERSE order of connections.

# Battery Care and Maintenance

**Always Wear Eye Protection When Working Around Batteries!**

## Basic Rules for Battery Care & Maintenance

### Safety Precautions



**California Proposition 65 Warning:** Batteries, battery posts, terminals and related accessories contain lead and lead compounds, and other chemicals known to the state of California to cause cancer, birth defects or other reproductive harm. **Wash hands after handling!**

**Warning:** Follow all safety instructions when handling batteries! Always wear safety glasses and a face shield when working on or near batteries.

All batteries generate explosive hydrogen gas. Keep sparks, flames and cigarettes away from batteries at all times. Do not connect or disconnect “live” circuits. To avoid creating sparks, always turn charging and testing equipment off before attaching or removing clamps.

**ALWAYS DISCONNECT GROUNDED CABLE FIRST AND CONNECT IT LAST TO PREVENT DANGEROUS SPARKS.**

Perform all work in a well ventilated area. Never lean directly over a battery while boosting, testing or charging it. **PROTECT YOUR EYES!**

Batteries contain corrosive sulfuric acid that can destroy clothing and burn the skin. Neutralize acid spills with a paste made of baking soda and water or large quantities of water. **BE CAREFUL!**

### In-Vehicle Service and Testing

Follow safety precautions:

**Wear Proper Eye Protection!**

Prior to any testing, visually inspect the battery. Look for:

- Cracked or broken case or cover
- Loose cable connections
- Leaking case-to-cover seal
- Corrosion
- Damaged or leaking terminals

Neutralize any corrosion with a baking soda/water paste or battery cleaner spray. Scrape or brush off the residue and wash the area with clean water. Following your visual inspection, check the battery’s state of charge with a voltmeter.

You must boost charge a weak battery before load testing (see charging chart under “Charging Tips” section). If fully charged, perform a load test. **PROTECT YOUR EYES!**

# Battery Care and Maintenance

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(Cont'd.)

## Dry Charge Activation

Important... **WEAR PROPER EYE PROTECTION!**

1. Fill each cell to proper level with battery-grade sulfuric acid of 1.265 specific gravity. Battery and acid must be at a temperature of 60°F to 100°F (16°C to 38°C) at time of filling.
2. Boost charge 12V batteries at 15 amps until specific gravity is 1.250 or higher and the electrolyte temperature is at least 60°F (15.5°C). BOTH CONDITIONS MUST BE MET (boost charge 6V and 12V heavy-duty batteries at 30 amps). If violent gassing or spewing occurs, reduce charge rate.
3. After charging, check electrolyte levels. If required, add additional electrolyte to bring all levels to the bottom of the vent wells. DO NOT OVERFILL. If the battery requires top-off while in service, add distilled water...DO NOT ADD ACID.

## Safe Installation

Follow safety precautions:

**Wear Proper Eye Protection!**

1. Before removing old battery, mark the positive (+) and negative (–) cables for proper connection to the new battery.
2. Always disconnect the ground cable first [usually negative (–)] to avoid any sparking around battery. Then disconnect the positive (+) cable and carefully remove the old battery.
3. Clean and inspect. If necessary, repaint or replace the tray, holddown and/or battery cables. Cable ends must be clean and corrosion free. Cable must not be frayed or bare.
4. Put corrosion protection washers on battery terminals. Install new battery in same position as old one and tighten holddown. Be sure terminals will clear hood, fender, box lid, etc. to avoid vehicle damage and/or explosion.
5. Connect positive (+) cable first. Connect ground cable last. If side terminal connection, use a special side terminal torque tool to tighten side terminal cables to avoid damage. Never overtighten or hammer cables onto terminals.
6. Coat terminals and cable connection with a corrosion protection spray.

## Check the Charging System

The voltage regulator should be checked every 10,000 miles or every time you change oil. It should be checked immediately if the battery is hot to the touch, if electrolyte is bubbling or spewing from the vents, if your hydrometer reading is below 1.225 or above 1.300, or if the open circuit voltage is below 12.4 volts or above 12.9 volts. Overcharging is evident by excessive water consumption and/or spewing or bubbling of electrolyte out of the vents. Undercharging is evident by slow cranking or lights dimming at idle.

## Load Testing

Follow safety precautions:

**Wear Proper Eye Protection!**

First perform an open circuit voltage test, then an adjustable load test. A load test is the best way to determine if the battery is delivering adequate electrical performance. Make sure your variable load tester is working properly.

1. **You can't load test a discharged battery.** If the voltage is below 12.4, be sure to completely charge it before continuing. Refer to the charging chart under "Charging Tips" section for important information.
2. To avoid sparking and explosive gasses, be sure load tester is OFF and battery is disconnected before hook-up. Use computer memory saver to retain the vehicle's electronic memory while the battery is disconnected.

# Battery Care and Maintenance

## (Cont'd.)

3. Connect the positive (+) tester clamp to the positive (+) battery terminal. Then connect the negative (–) tester clamp to the negative (–) battery terminal. Always protect your eyes.
4. Set the tester for one-half the battery's 0°F cold crank rating and apply the load for 15 seconds. If the CCA rating is unknown, use 1/2 of the minimum O.E. battery CCA requirement of the vehicle.
5. Estimate the internal temperature of the battery to the nearest 10°F. Apply the load for 15 seconds. Note the voltage at 15 seconds with the load on and immediately shut the load off. A reading at least equal to the value from the chart below indicates a good battery.
6. If the battery did not meet the required voltage and if it was not charged in Step 1, completely recharge the battery and repeat the test. If it still fails to meet requirements, replace the battery.

Battery Temperature	12-Volt Battery	6-Volt Battery
70°F (21°C) or above	9.60	4.80
60°F (16°C)	9.50	4.75
50°F (10°C)	9.40	4.70
40°F (4°C)	9.30	4.65
30°F (1°C)	9.10	4.55
20°F (6°C)	8.90	4.45
10°F (12°C)	8.70	4.35
0°F (18°C)	8.50	4.25

## Conductance Testing

Follow safety precautions:

### **Wear Proper Eye Protection!**

Conductance uses the battery's response to a very small signal in an attempt to predict the effects of a much larger current. Conductance testing is ineffective on a discharged battery. If the battery is known to be discharged or if the tester tells the operator to charge before testing again, the battery must be completely recharged.

1. It may not be required to turn a conductance tester off or on. If off, you must turn on immediately when connected to a battery. Most will turn off automatically if ignored long enough. Some have no battery of their own and get all their power from the battery being tested.
2. Connect the positive (+) tester clamp to the positive (+) battery terminal. Then connect the negative (–) tester clamp to the negative (–) battery terminal. If the battery has more than one pair of terminals (e.g. top posts and side terminals) always perform the testing on the terminals that are used in the vehicle. Use the proper charging adapters for stud or side terminal batteries. Never connect tester to a bolt or stud.
3. Turn on if needed. Enter the requested information. Be sure to distinguish between a CCA rating and a CA or MCA rating. If no rating is available, use the minimum O.E. battery CCA requirement of the vehicle.
4. If the tester says to replace a battery that was tested in the vehicle, repeat the testing after removing the cables and cleaning the posts.

## Check the State of Charge

There are two styles of battery - **Non-Accessible Maintenance-free types and Accessible Maintainable types with removable vent caps.**

Before adding water to a **maintainable battery**, take an open circuit voltage reading and/or hydrometer reading of one cell. Use a different cell each time. If the readings are below 75%, charge the battery. If the electrolyte level is too low to read with a hydrometer, add water and take the hydrometer reading the following day, after the vehicle

# Battery Care and Maintenance

## (Cont'd.)

has been driven and the water has had an opportunity to mix. Check electrolyte levels in all cells. If necessary, add only clear, odorless drinking water to bring the liquid level to the level indicator or to 1/2" (13 mm) above the top of the separators. Distilled water is preferred, especially if the water in your area has high iron. **Do not overfill any cells.** Excess electrolyte may be forced from an overfilled cell and cause corrosion on adjacent metal parts, reduce performance, and shorten life. In cold weather, do not fill cells with water and let stand without running engine or driving the vehicle long enough to allow water to mix with acid. Otherwise, freezing might occur and the battery may crack or explode.

Maintenance-free, **non-accessible batteries** are designed to eliminate the need to add water. Yet the volume of electrolyte above plates may eventually become depleted due to abnormal conditions such as high heat or improper regulator setting. Use a voltmeter to check the state of charge. See chart under "CHARGING TIPS" to determine if charging is necessary. **DO NOT OPEN FLUSH COVER BATTERIES! If opened, serious personal injury can result and warranty will be voided.**

## Charging Tips

Follow safety precautions:

### Wear Proper Eye Protection!

- To avoid a battery explosion, never attempt to charge a frozen battery. Allow it to warm up to room temperature before placing on charge.
- **Warning:** Gel and AGM (Absorbed Glass Mat) batteries require a voltage-limited charger. Charging a Gel or AGM battery on a typical shop charger – even one time– may greatly shorten its life.
- **Important:** Never overcharge batteries. Excessive charging will shorten battery life.
- Prior to charging, read the manufacturer's instructions for proper charger hook-up and use.
- Turn charger off prior to hook-up to avoid dangerous sparks. **PROTECT YOUR EYES!**
- **Warning:** If the electrolyte is accessible, verify that plates are covered before beginning to charge. At the end of charge, add distilled water as needed to bring levels to the proper height. If water is added, charge for an additional 30 minutes to mix. If electrolyte levels are low, but battery is not accessible, remove battery from service.
- The maximum charge rate in amperes should be no more than 1/3 of the battery's reserve capacity minute rating. If the terminal voltage exceeds 16.0 volts while charging, reduce the charge rate.
- Continue charging and reduce the rate as needed until a two-hour period results in no increase in voltage or decrease in current.
- If violent gassing or spewing of electrolyte occurs, or the battery case feels hot to the touch, temporarily reduce or halt charging.

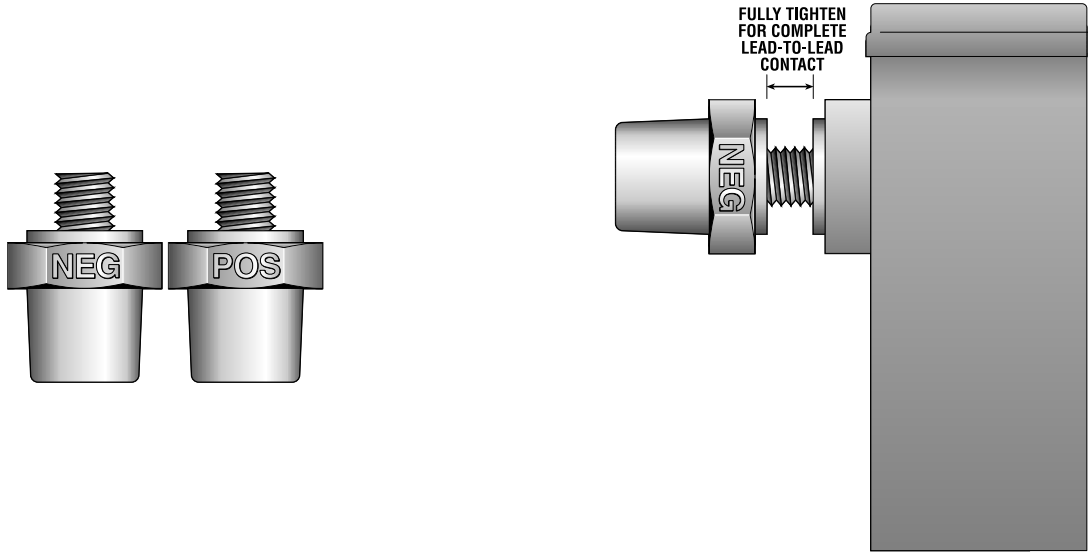
Voltage		State of Charge	Approx. Battery Charging Time <sup>(1)</sup> to Full Charge at 80°F / 27°C			
Standard Battery			Maximum Rate At			
6 V	12 V		50 Amps	30 Amps	20 Amps	10 Amps
6.3	12.6	100%	— Full Charge —			
6.2	12.4	75%	20 min.	35 min.	48 min.	90 min.
6.1	12.2	50%	45 min.	75 min.	95 min.	180 min.
6.0	12.0	25%	65 min.	115 min.	145 min.	280 min.
5.9	11.8	0%	85 min.	150 min.	195 min.	370 min.

<sup>1</sup> Charging time depends upon battery capacity, condition, age, temperature and efficiency of charger.



# Battery Care and Maintenance

(Cont'd.)



### Side Terminal Charging Posts

Side Terminal Charging Posts should be used to ensure the best testing and charging results for side terminal batteries. The charging posts will provide a flush lead-to-lead contact. Be sure to tighten the charging post until it is snug and secure. This will allow a strong current to pass from the charging post to the battery terminal.



**Battery Bolts**



**Bolt Extenders**

DO NOT USE Battery Bolt Extenders or Battery Bolts for testing or charging batteries. They do not provide the necessary lead-to-lead contact, and can reduce your cold cranking amperage (CCA) and state of charge readings. Batteries should be boost charged if the open circuit volt-age (voltmeter) reading is below 12.4 volts. See charging chart below.

### Rotate Battery Stock

Use oldest batteries first. Batteries require periodic stock rotation and routine charging. Always rotate stock using the FIFO (First In, First Out) method...NOT FISH (First In, Still Here).

Shipping Date Code	
Month	Year
A – January	2 – 2012
B – February	3 – 2013
C – March	4 – 2014
D – April	5 – 2015
E – May	6 – 2016

# Battery Care and Maintenance

(Cont'd.)

Shipping Date Code	
Month	Year
F – June	7 – 2017
G – July	8 – 2018
H – August	9 – 2019
J – September	0 – 2020
K – October	1 – 2021
L – November	2 – 2022
M – December	3 – 2023

Example: L0 – Battery shipped November 2010

Always use oldest batteries first.

**REMEMBER...WET OR DRY, ALWAYS ROTATE YOUR STOCK!**

## Battery Storage Tips

Batteries should be stored in a cool, dry area in an upright position. Never stack batteries directly on top of each other unless they're in cartons. Do not stack more than 3 high (2 high if battery type is heavy commercial).

Test wet batteries every 4–6 months and recharge if necessary. Always test and charge if necessary before installation.

(See "Charging Tips" sections.)

## Sell Plenty of Power

Sell cranking amps...Not months of warranty!

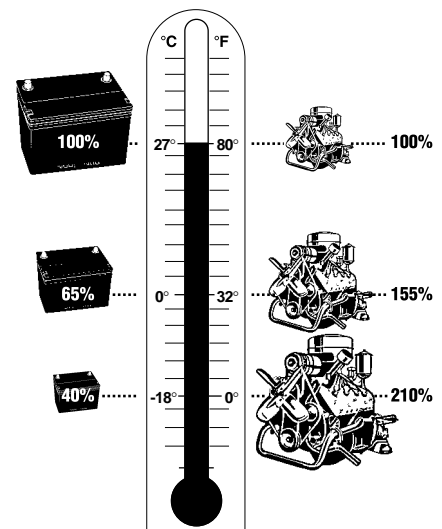
Always sell your customers a battery that has enough cranking power and reserve capacity to get the job done. Consider the vehicle manufacturer's recommended capacity to be a minimum-capacity guideline. A vehicle that has a lot of electrical accessories such as on-board computers, air conditioning, two way radios, etc. will need a more powerful battery for optimum performance.

Along with electrical accessories, temperature also has an effect on battery performance. Vehicles operated in extremely cold climates will need a battery rated well above the O.E. recommendation. Likewise, vehicles operated in hot climates will not need extremely high CCA ratings.

Point these facts out to your customers and sell up to the higher grade levels if necessary.

**Remember, you can't sell a battery with too much power in colder climates!**

Temperature has a dramatic effect on a battery's ability to crank an engine. Not only does cold rob batteries of power, it also stiffens motor oil making engines harder to start. Additionally, heat can damage batteries by causing internal components to wear out quickly while also making engines difficult to start.



(Cont'd.)

## Jump Starting

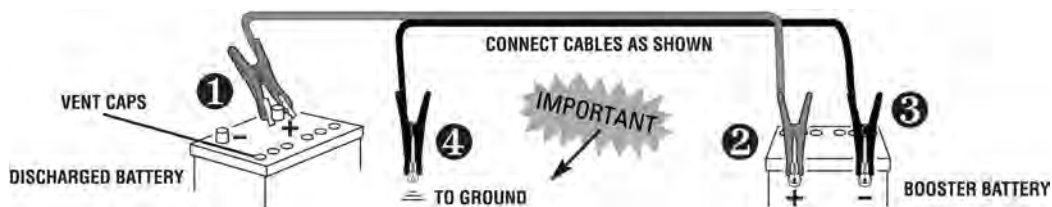
Refer to owner's manual for manufacturer's recommended procedure.

Shield eyes and face at all times. Never lean directly over battery when testing, jump starting or performing other maintenance.

Be sure vent caps are tight and level. Place a damp rag over the vent caps of both batteries. Be sure vehicles do not touch each other.

1. Connect one end of positive (+) booster cable to positive (+) terminal of **discharged battery**, wired to starter or solenoid.
2. Connect other end of positive (+) booster cable to positive (+) terminal of **booster battery**.
3. Connect one end of negative (-) booster cable to negative (-) terminal of **booster battery**, wired to ground.
4. Complete hook-up by connecting other end of negative (-) booster cable to engine block of stalled vehicle — **as far away from battery as possible...AWAY FROM MOVING FAN AND GAS LINES.**
5. Start both vehicles and remove cables in reverse order of connection. Discard the rags.

See diagram below for proper hookup.



### **Jump Starting Diagram** **PROTECT YOUR EYES!**

**IMPORTANT! Connect to a ground, away from battery...away from moving fan and gas lines.**

*\* Source: Battery Council International*

# Electrical Parts

## Battery Accessories

Note: Ratings and Part Numbers are subject to change without notice

Part Number	Description
295-2618	Pocket Multimeter

## Wing Nuts

Part Number	Description	Where Used
2B-9498	Wing Nut	For use with 175-4390, 175-4370, 175-4360, and 8C-3628
3B-0723	Wing Nut	For use with 8C-3638, 8C-3639 and Marine Batteries

## 177-2330 Digital Battery Analyzer

SMCS Code: 1401-081, 0785

Models: All

Warranty: One Year

- Replaces 127-8078 Battery Analyzer
- Used to quickly and accurately test condition of 6 and 12 volt batteries (even discharged to as low as 4 volt)
- Check for full state charge, condition of battery, and battery voltage in 20 seconds
- Test batteries in machine or vehicle without disconnecting battery cables
- Battery does not have to be fully charged at time of testing
- Saves time and money by allowing dealers to test condition of a battery while customer is present (works great for warranty claims)
- Eliminates need to charge and discharge a battery to test its condition
- Compensates for cold temperatures when testing batteries in extreme conditions
- Power-down feature prolongs battery life in analyzer- Analyzer has reverse polarity and is protected to 17 volts maximum

### References

NEHS0764, Tool Operating Manual, Using the 177-2330 Battery Analyzer

Battery rating range:	
Cold cranking amps (CCA)	50 - 4000
Cranking amps (CA)	65 - 5000
Ampere hours (A h)	6 - 500
DC voltmeter range	1.0 - 14 V
Voltmeter accuracy	±0.1 V
Power source	9 V battery or test battery
Test time	20 seconds
Analyzer cable length	815 mm (32 in)
Overall size	210 x 140 x 38 mm (8.25 x 5.5 x 1.5 in)
Weight	0.68 kg (1.5 lb)
Operating temperature range	0° to 50° C (32° to 120° F)

## 177-2330 Digital Battery Analyzer (Cont'd.)

Battery rating range:	
Storage temperature range	-20° to 70° C (0° to 160° F)
Over voltage protection	Up to 18 V
Part Number	Description
177-2330	Digital Battery Analyzer

## 4C-4911 Battery Load Tester



SMCS Code: 1401-081, 0785

Model: All Models

Warranty: One Year

- Used to test 6, 8 and 12 volt heavy equipment and automotive batteries
- Has built-in LCD digital voltmeter and ammeter
- Load adjustment knob for current drawn from battery to be adjusted up to maximum of 1000 amperes
- Cooled by internal fan automatically activated when load applied to prevent carbon pile overheating
- Large, 15 mm (0.59 in) high display digits are easier to read

### Reference

SEHS9249, Special Instruction

Load test	6, 8 and 12 V batteries
Load current	0 - 1000 A (carbon pile)
Duty cycle	Continuous, limited only by cable and clamp heating
Operating temperature	0° - 50° C (32° ± 122° F)
Voltmeter accuracy	0.1% of full scale ± 1 digit
Ammeter accuracy	±3% of reading ± 1 digit
Size	33 x 33 x 30 cm (13 x 13 x 12 in)
Weight	12.428 kg (27.375 lb)

Part Number	Description
4C-4911	Battery Load Tester

# Electrical Parts

## 271-8590 24-Volt Analyzer Group

Model: All

Warranty: Manufacturer's

European Union compliant, CE marked

- Used to perform battery, electrical system, and diode tests
- Used with 225-8266 Amp Probe and 271-8585 Printer
- Used on 12 and 24 volt electrical systems (digital circuitry accurately controls testing — requires minimal interaction)
- Hand-held
- Large, backlit display requires less scrolling, provides more information
- Long 4.6 m (15.0 ft) cables allow operator to perform tests from cab of machine
- Step-by-step instructions quickly and easily guide technician through tests
- Tests flooded lead acid and absorbed glass mat (AGM) batteries with 50 to 4000 Cold Cranking Amp (CCA), Cranking Amp (CA), Amp Hours (A-HR), Japanese Industrial Standard (JIS), or German-Deutsche Industry Norm (DIN) capacity ratings
- Tests battery pack configurations, through algorithm design: - single battery, 6- or 12-volt - 2 batteries in series, 24-volt - 2, 3, or 4 batteries in parallel, 12-volt - 2 banks in parallel, each bank with batteries in series, 24-volt
- Internal resistance loads are applied for all configurations
- Amp clamp connections allow use of optional amp clamp cables for current drain and starting/charging tests
- Features infrared communications compatibility for optional wireless printer with user defined header and footer for custom printouts
- PC interface port allows unit updates as new software is released — download software for new battery types, system updates, and features
- Ergonomically designed over-molded surround with soft-touch keys for easy operation while wearing gloves during cold weather
- Security cable connection tethers tool in order to prevent drops or for security purposes
- Includes 24-volt analyzer, test cables, battery terminal adapters, manual, and case with foam insert

### Reference

NEHS0973, Tool Operating Manual, 271-8590 Analyzer Group (24 Volt)

### Repair Information

The unit is warrantied by the manufacturer for 3 years from the date of receipt. Cables are warrantied for 90 days from the date of receipt. If the unit needs servicing, contact the manufacturer's repair facility.

SPX Service Repair

755 Eisenhower Drive

Owatonna, MN 55060

Attn: Repair Department

Phone: 800-344-4013

Visit the SPX Repair Track web link to complete and submit the form for proper authorization: <https://repairtrack.spx.com>

Item	Description
Battery tests	Flooded lead acid (FLA) absorbed glass mat (AGM)
Cold cranking amp range	50 - 4000 CCA / 24 V
Battery voltage	Single, series, or parallel to 24 V
Electrical system tests	12 and 24 V, starting/charging/diode test
Scales	CCA, CA, AHR, MCA, JIS, DIN
PC interface	For field software updates

## 271-8590 24-Volt Analyzer Group (Cont'd.)

Item	Description
IR compatible	For optional infrared wireless printer
Amp clamp ports	For optional amp clamp connections
Display	Backlit 4 x 20 character display



Part Number	Description
271-8590	24-Volt Analyzer Group
<b>Replacement Parts</b>	
271-8587	Test cables, 4.6 m (15 ft)
271-8589	Analyzer Only
281-1947	Rechargeable Battery
281-1950	Carrying Case with Foam Insert
<b>Optional Accessories</b>	
184-7679	Paper - Roll
225-8266	Clamp On Ammeter (400, 1200 A ranges)
271-8585	Optional Printer Group
281-1948	Printer Serial Cable

## 245-5829 Battery and Coolant Refractometer



- Used to measure freezing point of coolants plus battery charge condition.
- Refractometer uses a prism and lens with simple focus adjustment to provide accurate and repeatable measurements on easy to read scales.
- Easy to operate.
- Automatic temperature compensation (ATC).
- Requires only 2 to 3 drops of solution.
- Carrying case and calibration screwdriver included.
- Reads degrees Centigrade and Fahrenheit.

Range	Resolution
-60 to 32°F propylene glycol freeze point	10°F
-50 to 0°C ethylene glycol freeze point	5°C
1.15 to 1.30 specific gravity of battery acid	0.01

Product	Part Number
Battery and Coolant Refractometer	245-5829

# Electrical Parts

## Battery Post Set



4C-5637



4C-5638

Part Number	Description
4C-5637	10 mm (3/8 in) Female for Stud Type Batteries
4C-5638	10 mm (3/8 in) Male for Side Terminal Batteries

## Booster Cables



- Professional quality
- Ensure quick and efficient connections
- Designed for convenience and safety
- Replacement clamps available

Part Number	Length	Gauge	Gauge (circular mil)	Jacket	Clamp Rating	Side Terminal Adapters	Approx. Individual Weight
<b>Heavy Duty and Super Heavy Duty Cables</b>							
4C-4934 <sup>(1)</sup>	4 m (12 ft)	5 AWG	32,900	T-94 <sup>(2)</sup>	500 A	Yes	3.6 kg (7.94 lb)
4C-4938	5 m (15 ft)	1/0 AWG	106,400	T-94 <sup>(2)</sup>	800 A	No	7.3 kg (16.09 lb)
<b>Booster Cables</b>							
300-5899	6 m (20 ft)	2 AWG	62,450	T-94 <sup>(2)</sup>	600P	No	6.4 kg (14.11 lb)
4C-4933	4 m (12 ft)	4 AWG	37,360	T-94 <sup>(2)</sup>	500E	No	2.7 kg (5.95 lb)
4C-4935	5 m (16 ft)	4 AWG	37,360	T-94 <sup>(2)</sup>	500E	No	3.6 kg (7.94 lb)
4C-4936	6 m (20 ft)	4 AWG	37,360	T-94 <sup>(2)</sup>	500E	No	4.1 kg (9.04 lb)

<sup>1</sup> Equipped with stop/go light — red L.E.D.s warn operator if polarity is reversed

<sup>2</sup> T-94: fl exible to 4° C (-40° F)



## Portable Chargers



Warranty: Manufacturer, Mixed<sup>(3)</sup>

### 4C-4924<sup>(3)</sup>

- Chargers all standard and maintenance free 6/12 Volt Batteries with 4 charging positions
- Fully portable
- Fan cooling mechanism prevents overheating enhancing unit's life span significantly
- Certified for outdoor use in any weather
- Cautions against incorrect polarity with patented "stop-go-light" technology
- 500 Amp clamps are covered with vinyl insulation; will not arc or spark

### 200-6319

- Analyzes battery condition and automatically selects proper charging technique
- Voltage controlled charging
- Suitable for flooded batteries including GEL and AGM
- Utilizes three color LEDS to monitor charging status
- Program for deep discharge recovery of flooded batteries
- Capable of charging both small and large batteries
- Switch for selecting battery type
- Maintains battery charge, can be left connected to battery

Part Number	Battery Voltage	AC Input	Continuous Rating	Amps Boost Rating	Cranking Assist Rating	Timer	Weight	AC Cord	DC Leads	Clamp Rating	Shipping Dimensions (H x W x D)
<b>4C-4924 Specifications</b>											
4C-4924	6/12 Volt	120VAC, 12.9A, 60Hz	70/60 Amp	420 Amp	230 Amp	90 min Auto	17 kg (38 lb)	(6 1/2 ft) 2 m	7 ft 4/AWG	500 Amp	–
<b>200-6319 Specifications</b>											
200-6319	12 Volt	120VAC, 2.2A, 60Hz	10 Amp	–	–	–	5 kg (11 lb)	(6 ft) 1.8 m	6 ft 16/AWG	50 Amp	10 in x 9 in x 9 in

# Electrical Parts

## Cat Advanced Battery Charging Station: Now available in 120v and 220v

Model Usage: All Models  
 Warranty: Manufacturer's One Year



European Union Compliant, UL, RoHs, CE

- Fully automatic 80 amp charger
- All-Lead Acid Batteries
- Charges 6v, 12v and 24v
- Temperature sensor runs before and during charge cycle
- Cstom Cat Input Menus as well as non Cat battery compatible
- Presets come loaded for all Cat battery part numbers which automatically set up correct charge
- Optional setting for regular manual input
- Displays charging status and time remaining
- Fully charges most batteries in < 30 minutes
- Deep discharge recovery
- USB ports for easy upgrade and data log download
- Bite Rite Clamps™
- Uses standard 15-amp outlet
- Series or parallel charging options
- Field-replaceable leads in four minutes
- Language Capabilities: English, Spanish, French, Portuguese, German, Italian

**Specifications**

- Dimensions: 508 x 508 x 508 mm (20 x 20 x 20 in)
- Weight: 16.8 kg (37 lb)

**Repair**

*Manufacturer guarantees these products to be free of workmanship and material defects prior to purchase for 12 months. For warranty and repair needs, contact :Auto Meter at: 866-248-6356*

Part Number	Description	Power
485-9464	Battery Charging Station	60 Hz, 110 VAC
485-9465	Battery Charging Station	50 Hz, 220 VAC
Replacement Parts		
485-9466	Cable Set, 8' (includes clamps)	
485-9467	Cable Set, 20' (includes clamps)	
485-9472	USB Cable	
485-9744	Temperature Sensor and Stand Kit	

## Battery Post Brush

Warranty: Caterpillar Standard Warranty, 6 Months



- Stiff wire bristles thoroughly clean posts

Part Number	Description
1U-9921	Battery Post Brush

## 140-9944 Terminal Kit



SMCS Code: 1400-023, 0700

Model: All Cat Engines

Warranty: Six Months

- Replaces discontinued 1P-2305 Terminal Kit
- Used to repair wiring harness terminal ends which have become damaged or unserviceable
- Hand crimping tool has built-in dies for crimping insulated and non-insulated terminals, cutting edges for cutting wire, notches for stripping 10 to 22 gauge wire, shears for cutting up to 4.7 mm (0.18 in) diameter bolts, 2-thread chasers for screws with 24 and 32 threads-per-inch screws, and a scale for measuring screw length
- Splice connectors have hot-melt adhesive and shrink ends that when heated will provide an environmental seal around wire

Qty. Shipped	Part No.	Description	Replacement Qty.
1	140-9944	Terminal Kit	1
<b>Terminal and Wire Splice Service/Repair Parts</b>			
1	9S-9150	Terminal Crimp Tool	1
10	2L-8058	Terminal (8 Gauge 1/4 in Stud)	10
10	2L-8066	Terminal (12 - 10 Gauge No. 10 Stud)	10
10	2L-8067	Terminal (12 - 10 Gauge 1/4 in Stud)	10
10	2L-8069	Terminal (12 - 10 Gauge 3/8 in Stud)	10
10	2L-8071	Terminal (12 - 10 Gauge 1/2 in Stud)	10
10	4S-1988	Terminal (Blade, Crimp Type)	50
15	136-4876	Wire Splice (12 - 10 Gauge)	1
15	136-4877	Wire Splice (16 - 14 Gauge)	1
15	136-4878	Wire Splice (22 - 18 Gauge)	1
15	2L-8077	Terminal (16 - 14 Gauge 1/4 in Stud)	15
15	2L-8079	Terminal (16 - 14 Gauge 3/8 in Stud)	15
20	2L-8075	Terminal (16 - 14 Gauge No. 8 Stud)	20
20	2L-8076	Terminal (16 - 14 Gauge No. 10 Stud)	20
30	5P-4571	Terminal (16 - 14 Gauge)	20

# Electrical Parts

## 175-3700 DT Connector Service Kit, 147-6456 Wedge Removal Tool



SMCS Code: 1408-023

Model: All Models with Electronic Controls

Warranty: One Year

- Used to maintain and repair Deutsch "DT" style connectors on electronic engine control harnesses
- 175-3700 DT Connector Service Kit — connector/contact assortment for owners of discontinued 4C-3406 Connector Service Kits which have 1U-5804 Crimp Tool
- 147-6456 Wedge Removal Tool included in kits — also available separately

### Reference

SEHS9615, Special Instruction — A black plug and connector body has been released to improve sealing. Please refer to SEHS9615 for a more detailed explanation of interchangeability.

### NOTE:

1U-5804 Crimp Tool is not included but can be ordered separately.

Item	Part Number	Description
1	175-3700	Connector Service Kit (less crimp tool)
2	147-6456	Wedge Removal Tool (included in kit)
3	152-7997	Utility Box

## 9U-7560 Field Soldering Iron Group

SMCS Code: 0709

Model: All Models

Warranty: One Year

- Used to solder electrical connections in the field — light-weight and easy to use
- Used with 4C-9024 Battery Pack Group
- Tip is temperature regulated (provides better control for outdoor usage)
- In-line fuse prevents damage and/or overload
- Plugs into any 12V vehicle cigarette lighter plug

### Reference

NEHS0601, Tool Operating Manual

Voltage requirement	12 VDC
Wattage	42 Watts
Tip temperature	370° C (700° F)
Length	190 mm (7.5 in)
Cord length	3.5 m (11.50 ft)
NEEG2588	Soldering Iron Label
NEEG2587	Case Label

## 9U-7560 Field Soldering Iron Group (Cont'd.)

Part Number	Description
9U-7560	Field Soldering Iron Group
9U-7562	Solder, 0.5 kg (1 lb) Spool
6V-3073	Case - Plastic
Service/Repair Part (Sold Separately)	
2S-6024	Fuse or 333672 Fuse, 5 amp

## 5P-7277 Voltage Tester



SMCS Code: 1400-038, 1400-081, 1450-081, 1700-081, 1800-081, 3168-035, 5050-081, 7300-081, 7400-081, 7451-038

Model: 215, 428, 621E, 627E, 768C, 769C, 793 All models

Warranty: One Year

- Used to make quick checks for presence of voltage
- Indispensable for checking out circuits, relays, bulbs, wires, and switches
- Designed for voltage range from 12 to 36 volts
- Bulb lights brightly when connected to 36 volts and gets progressively dimmer with lower voltages
- Encased in rugged, high-impact plastic housing which is grease and chemical resistant
- Standard 8D-1429 Bulb required for replacement

Part Number	Description
5P-7277	Voltage Tester

# Electrical Parts

## 8T-0500 Continuity Testing Light



SMCS Code: 1000-017, 1000-025, 1250-025, 1250-036, 1355-081, 1400-038, 3071-017, 3100-017, 3156-010, 3156-012, 3200-038, 3224-025, 4208-010, 5050-038, 7400-036, 7451-038, 7401-045

Model: All Models

Warranty: One Year

- Used to test non-energized circuits; lamp comes on brightly when connected across low resistance circuit; no light appears if resistance of circuit exceeds 10 ohms
- Designed for rugged field use
- Comes with light bulb and 2 "N" size batteries (1.5 volts) and instruction decals

### Reference

NEHS0543, Special Instruction, Checking Diodes

Part Number	Description
8T-0500	Light - Continuity Testing
Service/Repair Parts	
4C-8363	Battery, Size N, 1.5 V
6V-3061	Bulb

# Cat Alternators Section

Cat Starters and Alternators ensure your equipment starts fast and finishes strong. Everyday. In any environment. Built to best-in-class Caterpillar OEM specs, and available in the largest selection on the market today, Cat Starters and Alternators optimize machine performance for the full equipment lifecycle.

Count on them to start your Cat machine in the most extreme conditions and keep it operating in the harshest climates—bitter cold to blazing heat—resulting in lower costs and higher productivity.

This gives you a head start on the competition.

## Articulated Truck Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
725	AFX	22	Brushless	110	12	266-7224	OR-9939
725	B1L	0	Brushless	75	24	200-2232	OR-9940
725	B1L	22	Brushless	95	24	226-7683	—
725C	LFB	22	Brushless	80	24	235-7133	—
725C	LFB	22	Brush	115	24	344-5081	—
725C	TFB	22	Brushless	150	24	272-1889	20R-0053
725C 2	2L6	22	Brushless	80	24	235-7133	—
725C 2	2L6	22	Brush	115	24	344-5081	—
725C 2	2T3	22	Brushless	150	24	272-1889	20R-0053
725C 2 OEM	TA7	22	Brushless	150	24	272-1889	20R-0053
725C 2 OEM	TA7	22	Brush	115	24	344-5081	—
725C OEM	T26	22	Brushless	150	24	272-1889	20R-0053
725C OEM	T26	22	Brush	115	24	344-5081	—
730	AGF	22	Brushless	110	12	266-7224	OR-9939
730	AGF	0	Brushless	50	24	112-5041	OR-5206
730	AGF	0	Brushless	50	24	169-3345	10R-9791
730	AGF	22	Brushless	35	24	6N-9294	OR-5217
730	B1M	0	Brushless	75	24	200-2232	OR-9940
730	B1M	22	Brushless	95	24	226-7683	—
730	B1M	22	Brushless	80	24	235-7133	—
730	B1M	22	Brush	115	24	344-5081	—
730 OEM	WWB	0	Brushless	75	24	200-2232	OR-9940
730 OEM	WWB	22	Brushless	95	24	226-7683	—
730 OEM	WWB	22	Brushless	80	24	235-7133	—
730 OEM	WWB	22	Brush	115	24	344-5081	—
730C	LFF	22	Brushless	80	24	235-7133	—
730C	TFF	22	Brushless	150	24	272-1889	20R-0053
730C	TFF	22	Brush	115	24	344-5081	—
730C 2	2L7	22	Brushless	80	24	235-7133	—
730C 2	2T4	22	Brushless	150	24	272-1889	20R-0053
730C 2	2T4	22	Brush	115	24	344-5081	—
730C 2 EJ	2L8	22	Brushless	80	24	235-7133	—
730C 2 EJ	2L8	22	Brush	115	24	344-5081	—
730C 2 EJ	2T5	22	Brushless	150	24	272-1889	20R-0053
730C EJ	LFH	22	Brushless	80	24	235-7133	—
730C EJ	TFH	22	Brushless	150	24	272-1889	20R-0053
730C EJ	TFH	22	Brush	115	24	344-5081	—
730C OEM	T28	22	Brushless	150	24	272-1889	20R-0053
730EJ	B1W	0	Brushless	75	24	200-2232	OR-9940
730EJ	B1W	22	Brushless	95	24	226-7683	—
730EJ	B1W	22	Brushless	80	24	235-7133	—
730EJ	B1W	22	Brush	115	24	344-5081	—

# Cat Alternators Section

## Articulated Truck Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
735	AWR	0	Brushless	95	24	197-8820	10R-9789
735	AWR	22	Brushless	105	24	316-7251	—
735	B1N	0	Brushless	80	24	177-9953	10R-9790
735	B1N	0	Brushless	65	24	185-5294	10R-9788
735	B1N	0	Brushless	75	24	200-8281	0R-9938
735 OEM	WWC	0	Brushless	80	24	177-9953	10R9790
735 OEM	WWC	0	Brushless	65	24	185-5294	10R-9788
735 OEM	WWC	0	Brushless	75	24	200-8281	0R-9938
735B	L4D	0	Brushless	80	24	177-9953	10R-9790
735B	L4D	0	Brushless	65	24	185-5294	10R-9788
735B	L4D	0	Brushless	75	24	200-2232	0R-9940
735B	L4D	0	Brushless	75	24	200-8281	0R-9938
735B	T4P	22	Brushless	150	24	272-1889	20R-0053
735B	T4P	22	Brush	115	24	344-5081	—
735B OEM	E4R	22	Brushless	150	24	272-1889	20R-0053
735C	LFJ	22	Brush	115	24	344-5081	—
735C	TFJ	22	Brushless	150	24	272-1889	20R-0053
740	AXM	0	Brushless	80	24	177-9953	10R-9790
740	AXM	0	Brushless	65	24	185-5294	10R-9788
740	AXM	0	Brushless	95	24	197-8820	10R-9789
740	AXM	0	Brushless	75	24	200-8281	0R-9938
740	AXM	22	Brushless	105	24	316-7251	—
740 OEM	DTX	0	Brushless	95	24	197-8820	10R-9789
740 OEM	VWD	0	Brushless	80	24	177-9953	10R-9790
740 OEM	VWD	0	Brushless	65	24	185-5294	10R-9788
740 OEM	VWD	0	Brushless	75	24	200-8281	0R-9938
740B	L4E	0	Brushless	75	24	200-2232	0R-9940
740B	L4E	22	Brush	115	24	344-5081	—
740B	T4R	22	Brushless	150	24	272-1889	20R-0053
740B EJ	L4F	0	Brushless	75	24	200-2232	0R-9940
740B EJ	T4S	22	Brushless	150	24	272-1889	20R-0053
740B EJ	T4S	22	Brush	115	24	344-5081	—
740B OEM	E4S	22	Brushless	150	24	272-1889	20R-0053
740B OEM	E4S	22	Brush	115	24	344-5081	—
740B OEM	GLH	0	Brushless	75	24	200-2232	0R-9940
740C EJ	LFN	22	Brushless	80	24	235-7133	—
740C EJ	LFN	22	Brush	115	24	344-5081	—
740C EJ	TFN	22	Brushless	150	24	272-1889	20R-0053
740EJ	AZZ	0	Brushless	95	24	197-8820	10R-9789
740EJ	AZZ	22	Brushless	105	24	316-7251	—
745C	LFK	22	Brushless	80	24	235-7133	—
745C	TFK	22	Brushless	150	24	272-1889	20R-0053
745C	TFK	22	Brush	115	24	344-5081	—
745C OEM	JE8	22	Brushless	150	24	272-1889	20R-0053
745C OEM	JE9	22	Brushless	80	24	235-7133	—
745C OEM	JE9	22	Brush	115	24	344-5081	—
745D	3F6	22	Brushless	80	24	235-7133	—
745D	3F6	22	Brush	115	24	344-5081	—
745D	3T6	22	Brushless	150	24	272-1889	20R-0053
D20D	9MG	0	Brushless	50	24	112-5041	0R-5206
D20D	9MG	0	Brushless	50	24	169-3345	10R-9791
D20D	9MG	22	Brushless	45	24	5N-5692	0R-2698
D20D	9MG	22	Brushless	35	24	6N-9294	0R-5217



# Cat Alternators Section

## Articulated Truck Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
D250D	6NG	0	Brushless	50	24	112-5041	OR-5206
D250D	6NG	0	Brushless	50	24	169-3345	10R-9791
D250D	6NG	22	Brushless	45	24	5N-5692	OR-2698
D250D	6NG	22	Brushless	35	24	6N-9294	OR-5217
D250E	5TN	0	Brushless	50	24	112-5041	OR-5206
D250E	5TN	0	Brushless	50	24	169-3345	10R-9791
D250E	5TN	22	Brushless	45	24	5N-5692	OR-2698
D250E	5TN	22	Brushless	35	24	6N-9294	OR-5217
D250E II	4PS	0	Brushless	50	24	112-5041	OR-5206
D250E II	4PS	0	Brushless	50	24	169-3345	10R-9791
D250E II	4PS	22	Brushless	75	24	3E-7577	OR-3615
D250E II	4PS	22	Brushless	45	24	5N-5692	OR-2698
D250E II	4PS	22	Brushless	35	24	6N-9294	OR-5217
D25D	1HK	0	Brushless	50	24	112-5041	OR-5206
D25D	1HK	0	Brushless	50	24	169-3345	10R-9791
D25D	1HK	0	Brushless	95	24	197-8820	10R-9789
D25D	1HK	22	Brushless	60	24	266-7227	10R-8877
D25D	1HK	22	Brushless	105	24	316-7251	-
D25D	1HK	22	Brushless	105	24	331-5717	-
D25D	1HK	22	Brushless	60	24	333-1184	-
D25D	1HK	22	Brushless	45	24	5N-5692	OR-2698
D25D	1HK	22	Brushless	35	24	6N-9294	OR-5217
D300D	5MG	0	Brushless	50	24	112-5041	OR-5206
D300D	5MG	0	Brushless	50	24	169-3345	10R-9791
D300D	5MG	22	Brushless	60	24	266-7227	10R-8877
D300D	5MG	22	Brushless	105	24	331-5717	-
D300D	5MG	22	Brushless	60	24	333-1184	-
D300D	5MG	22	Brushless	45	24	5N-5692	OR-2698
D300D	5MG	22	Brushless	35	24	6N-9294	OR-5217
D300E	7FN	0	Brushless	50	24	112-5041	OR-5206
D300E	7FN	0	Brushless	50	24	169-3345	10R-9791
D300E	7FN	22	Brushless	45	24	5N-5692	OR-2698
D300E	7FN	22	Brushless	35	24	6N-9294	OR-5217
D300E II	5KS	0	Brushless	50	24	112-5041	OR-5206
D300E II	5KS	0	Brushless	50	24	169-3345	10R-9791
D300E II	5KS	22	Brushless	75	24	3E-7577	OR-3615
D300E II	5KS	22	Brushless	45	24	5N-5692	OR-2698
D300E II	5KS	22	Brushless	35	24	6N-9294	OR-5217
D30D	3AJ	0	Brushless	50	24	112-5041	OR-5206
D30D	3AJ	0	Brushless	50	24	169-3345	10R-9791
D30D	3AJ	22	Brushless	60	24	266-7227	10R-8877
D30D	3AJ	22	Brushless	105	24	331-5717	-
D30D	3AJ	22	Brushless	60	24	333-1184	-
D30D	3AJ	22	Brushless	45	24	5N-5692	OR-2698
D30D	3AJ	22	Brushless	35	24	6N-9294	OR-5217
D350D	9RF	0	Brushless	50	24	112-5041	OR-5206
D350D	9RF	0	Brushless	50	24	169-3345	10R-9791
D350D	9RF	22	Brushless	60	24	266-7227	10R-8877
D350D	9RF	22	Brushless	105	24	331-5717	-
D350D	9RF	22	Brushless	60	24	333-1184	10R-8877
D350D	9RF	22	Brushless	45	24	5N-5692	OR-2698
D350D	9RF	22	Brushless	35	24	6N-9294	OR-5217
D350E	9LR	0	Brushless	50	24	112-5041	OR-5206

# Cat Alternators Section

## Articulated Truck Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
D350E	9LR	0	Brushless	50	24	169-3345	10R-9791
D350E	9LR	22	Brushless	45	24	5N-5692	OR-2698
D350E	9LR	22	Brushless	35	24	6N-9294	OR-5217
D350E II	2XW	0	Brushless	50	24	112-5041	OR-5206
D350E II	2XW	0	Brushless	50	24	169-3345	10R-9791
D350E II	2XW	22	Brushless	35	24	6N-9294	OR-5217
D400D	8TF	0	Brushless	50	24	112-5041	OR-5206
D400D	8TF	0	Brushless	50	24	169-3345	10R-9791
D400D	8TF	22	Brushless	60	24	266-7227	10R-8877
D400D	8TF	22	Brushless	105	24	331-5717	—
D400D	8TF	22	Brushless	60	24	333-1184	—
D400D	8TF	22	Brushless	45	24	5N-5692	OR-2698
D400D	8TF	22	Brushless	35	24	6N-9294	OR-5217
D400E	2YR	0	Brushless	50	24	112-5041	OR-5206
D400E	2YR	0	Brushless	50	24	169-3345	10R-9791
D400E	2YR	22	Brushless	45	24	5N-5692	OR-2698
D400E	2YR	22	Brushless	35	24	6N-9294	OR-5217
D400E II	APF	0	Brushless	50	24	112-5041	OR-5206
D400E II	APF	0	Brushless	50	24	169-3345	10R-9791
D400E II	APF	22	Brushless	35	24	6N-9294	OR-5217

## Backhoe Loader Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
416B	8ZK	0	Brush	55	12	105-2812	OR-9273
416B	8ZK	0	Brush	65	12	149-2061	10R-9605
416B	8ZK	17	Brush	90	12	9X-0341	—
416C	1WR	0	Brush	110	12	217-1589	—
416D	CKN	0	Brush	55	12	105-2812	OR-9273
416D	CKN	0	Brush	110	12	217-1589	—
416E	SHA	0	Brush	90	12	105-2813	OR-9274
416E	SHA	0	Brush	110	12	217-1589	—
416E ST	MFG	0	Brush	110	12	217-1589	—
420D	BKC	0	Brush	55	12	105-2812	OR-9273
420D IT	BMC	0	Brush	55	12	105-2812	OR-9273
420D IT	BMC	0	Brush	90	12	105-2813	OR-9274
420D IT	BMC	0	Brush	110	12	217-1589	—
420E	HLS	0	Brush	110	12	217-1589	—
420E	KMW	0	Brush	90	12	105-2813	—
420E PL	PHC	0	Brush	110	12	217-1589	—
420E ST	PRA	0	Brush	110	12	217-1589	—
426B	5YJ	17	Brush	90	12	9X-0341	—
426C	1ZR	0	Brush	110	12	217-1589	—
428D	S9D	0	Brush	110	12	217-1589	—
428E	SNL	0	Brush	110	12	217-1589	—
430D	BNK	0	Brush	55	12	105-2812	OR-9273
430D	BNK	0	Brush	90	12	105-2813	OR-9274
430D	C3J	0	Brush	110	12	217-1589	—
430D IT	BML	0	Brush	55	12	105-2812	OR-9273
430D IT	BML	0	Brush	90	12	105-2813	OR-9274
430D IT	BML	0	Brush	110	12	217-1589	—
430E	DDT	0	Brush	110	12	217-1589	—
430E	EAT	0	Brush	90	12	105-2813	OR-9274

# Cat Alternators Section

## Backhoe Loader Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
430E IT	MXB	0	Brush	110	12	217-1589	-
430E ST	SWC	0	Brush	110	12	217-1589	-
432D	S6B	0	Brush	110	12	217-1589	-
432E	BXE	0	Brush	110	12	217-1589	-
434E	FSH	0	Brush	110	12	217-1589	-
434F	FLY	0	Brushless	65	24	165-8857	10R-9788
434F	FLY	0	Brushless	65	24	185-5294	10R-9788
434F	FLY	22	Brush	115	24	366-2756	-
436B	6MJ	0	Brush	90	12	105-2813	OR-9274
436B	6MJ	17	Brush	90	12	9X-0341	-
436C	1FR	0	Brush	55	12	105-2812	OR-9273
436C	1FR	0	Brush	90	12	105-2813	OR-9274
436C	2AR	0	Brush	110	12	217-1589	-
436C	8TN	0	Brush	65	12	149-2061	10R-9605
436C	8TN	0	Brush	90	12	149-2064	OR-9410
438D	S8J	0	Brush	90	12	105-2813	OR-9274
438D	S8M	0	Brush	55	12	105-2812	OR-9273
438D	S8M	0	Brush	110	12	217-1589	-
442D	S4T	0	Brush	90	12	105-2813	OR-9274
442D	S4T	0	Brush	110	12	217-1589	-
442E	GKZ	0	Brush	110	12	217-1589	-
444E	LBE	0	Brush	110	12	217-1589	-
444F	FBN	0	Brushless	65	24	165-8857	10R-9788
444F	FBN	0	Brushless	65	24	185-5294	10R-9788
444F	FBN	22	Brush	115	24	366-2756	-
446B	5BL	0	Brush	55	12	105-2812	OR-9273
446B	5BL	0	Brush	90	12	105-2813	OR-9274
446B	5BL	0	Brush	65	12	149-2061	10R-9605
446B	5BL	0	Brush	90	12	149-2064	OR-9410
446B	5BL	22	Brush	55	12	8T-9700	OR-5201
446B	5BL	17	Brush	90	12	9X-0341	-
446D	DBL	0	Brush	65	12	149-2061	10R-9605
446D	DBL	0	Brush	90	12	149-2064	OR-9410
450	553	0	Brush	130	12	117-1379	OR-9480
450	553	0	Brush	115	12	121-4134	OR-3527
450	553	22	Brush	70	24	107-7977	OR-8279
460	654	22	Brush	70	24	107-7977	OR-8279
460	9FW	0	Brush	130	12	117-1379	OR-9480
460	9FW	0	Brush	115	12	121-4134	OR-3527
465	3HZ	0	Brush	130	12	117-1379	OR-9480
465	3HZ	0	Brush	115	12	121-4134	OR-3527
465	3HZ	22	Brush	70	24	107-7977	OR-8279
470	765	22	Brush	70	24	107-7977	OR-8279
470	9TW	0	Brush	130	12	117-1379	OR-9480
470	9TW	0	Brush	115	12	121-4134	OR-3527
475	767	0	Brush	130	12	117-1379	OR-9480
475	767	0	Brush	115	12	121-4134	OR-3527
475	767	22	Brush	70	24	107-7977	OR-8279
480	866	0	Brush	130	12	117-1379	OR-9480
480	866	22	Brush	70	24	107-7977	OR-8279
485	868	0	Brush	130	12	117-1379	OR-9480
485	868	22	Brush	70	24	107-7977	OR-8279
CH35	9DF	0	Brush	115	12	121-4134	OR-3527

# Cat Alternators Section

## Backhoe Loader Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
CH35	9DF	0	Brush	145	12	125-9597	OR-8332
CH35-CCE-N	3HS	0	Brush	145	12	125-9597	OR-8332
CH35-N	8RD	0	Brush	145	12	125-9597	OR-8332
CH35-W	ADK	0	Brush	145	12	125-9597	OR-8332
CH45	4DZ	0	Brush	115	12	121-4134	OR-3527
CH45	4DZ	0	Brush	145	12	125-9597	OR-8332
CH45-CCE-N	4KW	0	Brush	145	12	125-9597	OR-8332
CH45-N	ABF	0	Brush	145	12	125-9597	OR-8332
CH45-W	3BK	0	Brush	145	12	125-9597	OR-8332
CH55	3SM	0	Brush	145	12	125-9597	OR-8332
CH55	5DK	0	Brush	115	12	121-4134	OR-3527
CH55-CCE-N	7TZ	0	Brush	145	12	125-9597	OR-8332
CH55-N	6NN	0	Brush	145	12	125-9597	OR-8332
CH55-W	AEN	0	Brush	145	12	125-9597	OR-8332
CH65E	1GM	0	Brush	145	12	125-9597	OR-8332
CH70C	2YL	0	Brush	130	12	117-1379	OR-9480
CH70C	2YL	0	Brush	115	12	121-4134	OR-3527
CH70C	2YL	0	Brush	145	12	125-9597	OR-8332
CH70C	2YL	22	Brush	70	24	107-7977	OR-8279
CH75E	1HM	0	Brush	145	12	125-9597	OR-8332
CH85C	9TK	0	Brush	130	12	117-1379	OR-9480
CH85C	9TK	0	Brush	115	12	121-4134	OR-3527
CH85C	9TK	0	Brush	145	12	125-9597	OR-8332
CH85C	9TK	22	Brush	70	24	107-7977	OR-8279
CH85D	4GR	0	Brush	145	12	125-9597	OR-8332
CH85E	1NM	0	Brush	145	12	125-9597	OR-8332
CH95E	1SM	0	Brush	145	12	125-9597	OR-8332
DV87 MTS	9AM	0	Brush	145	12	125-9597	OR-8332
LEXION 460	665	0	Brush	130	12	117-1379	OR-9480
LEXION 460	665	0	Brush	115	12	121-4134	OR-3527
LEXION 460	665	22	Brush	70	24	107-7977	OR-8279
MT735	AKN	0	Brush	145	12	125-9597	OR-8332
MT735	AKN	0	0	160	12	306-2172	-
MT745	ALA	0	Brush	145	12	125-9597	OR-8332
MT745	ALA	0	0	160	12	306-2172	-
MT755	ALM	0	Brush	130	12	117-1379	OR-9480
MT755	ALM	0	Brush	115	12	121-4134	OR-3527
MT755	ALM	0	Brush	145	12	125-9597	OR-8332
MT755	ALM	0	0	160	12	306-2172	-
MT755	ALM	22	Brush	70	24	107-7977	OR-8279
MT765	AMS	0	Brush	145	12	125-9597	OR-8332
MT765	AMS	0	0	160	12	306-2172	-
MT835	BAM	0	0	160	12	306-2172	-
MT845	BBP	0	0	160	12	306-2172	-
MT855	BCC	0	0	160	12	306-2172	10R-7701
MT865	BDS	0	0	160	12	306-2172	10R-7701
MTC735	812	0	0	160	12	306-2172	10R-7701
MTC755	814	0	0	160	12	306-2172	-
MTC765	815	0	0	160	12	306-2172	10R-7701
MTC845	817	0	0	160	12	306-2172	-
MTC855	818	0	0	160	12	306-2172	-
MTC865	819	0	0	160	12	306-2172	@

# Cat Alternators Section

## Cat Work Tool Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
QC - LOADER & IT	ELX	0	Brushless	50	24	112-5041	OR-5206
QC - LOADER & IT	ELX	0	Brushless	50	24	169-3345	10R-9791
QC - LOADER & IT	ELX	22	Brushless	35	24	6N-9294	OR-5217

## Compact Wheel Loader Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
906	MER	0	Brush	110	12	203-5492	10R-9098
906H	TPE	0	Brush	110	12	203-5492	10R-9098
907H	SJM	0	Brush	110	12	203-5492	10R-9098
908	TAR	0	Brush	110	12	203-5492	10R-9098
908H	LMD	0	Brush	110	12	203-5492	10R-9098
908H OEM	L5T	0	Brush	110	12	203-5492	10R-9098
910G II	B9X	0	Brushless	80	24	177-9953	10R-9790
918F	5DL	17	Brush	52	12	9W-3043	OR-3652

## Compactor & Wheel Dozer Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
814	16Z	0	Brush	130	12	117-1379	OR-9480
814	16Z	22	Brush	70	24	107-7977	OR-8279
814	16Z	0	Brushless	50	24	112-5041	OR-5206
814	16Z	0	Brushless	50	24	169-3345	10R-9791
814	16Z	22	0	15	24	2P-1204	OR-5217
814	16Z	22	Brushless	35	24	6N-9294	OR-5217
814F	9DM	0	Brushless	50	24	112-5041	OR-5206
814F	9DM	0	Brushless	50	24	169-3345	10R-9791
814F	9DM	22	Brushless	75	24	3E-7577	OR-3615
814F	9DM	22	Brushless	35	24	6N-9294	OR-5217
814F	BGF	0	Brush	130	12	117-1379	OR-9480
814F	BGF	22	Brush	70	24	107-7977	OR-8279
814F	BXG	0	Brushless	80	24	177-9953	10R-9790
815	17Z	0	Brush	130	12	117-1379	OR-9480
815	17Z	22	Brush	70	24	107-7977	OR-8279
815	17Z	0	Brushless	50	24	112-5041	OR-5206
815	17Z	0	Brushless	50	24	169-3345	10R-9791
815	17Z	0	Brushless	80	24	177-9953	10R-9790
815	17Z	22	Brushless	35	24	6N-9294	OR-5217
815F	1GN	0	Brushless	50	24	112-5041	OR-5206
815F	1GN	0	Brushless	50	24	169-3345	10R-9791
815F	1GN	22	Brushless	75	24	3E-7577	OR-3615
815F	1GN	22	Brushless	35	24	6N-9294	OR-5217
815F	BKL	0	Brush	130	12	117-1379	OR-9480
815F	BKL	22	Brush	70	24	107-7977	OR-8279
815F 2	BYN	0	Brushless	80	24	177-9953	10R-9790
815K	MBB	22	Brushless	150	24	272-1889	20R-0053
815K	MBB	22	0	105	24	321-8940	-
816	15Z	0	Brush	130	12	117-1379	OR-9480
816	15Z	22	Brush	70	24	107-7977	OR-8279
816	15Z	0	Brushless	50	24	112-5041	OR-5206
816	15Z	0	Brushless	50	24	169-3345	10R-9791
816	15Z	22	0	15	24	2P-1204	OR-5217

# Cat Alternators Section

## Compactor & Wheel Dozer Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
816	15Z	22	Brushless	35	24	6N-9294	OR-5217
816F	5FN	0	Brushless	50	24	112-5041	OR-5206
816F	5FN	0	Brushless	50	24	169-3345	10R-9791
816F	5FN	22	Brushless	75	24	3E-7577	OR-3615
816F	5FN	22	Brushless	35	24	6N-9294	OR-5217
816F	BMR	0	Brush	130	12	117-1379	OR-9480
816F	BMR	22	Brush	70	24	107-7977	OR-8279
816F	BZR	0	Brushless	80	24	177-9953	10R-9790
816K	WCS	22	Brushless	150	24	272-1889	20R-0053
816K	WNB	22	0	105	24	321-8940	-
824C	85X	0	Brush	130	12	117-1379	OR-9480
824C	85X	22	Brush	70	24	107-7977	OR-8279
824C	85X	0	Brushless	50	24	112-5041	OR-5206
824C	85X	0	Brushless	50	24	169-3345	10R-9791
824C	85X	0	Brushless	80	24	177-9953	10R-9790
824C	85X	22	Brushless	75	24	3E-7577	OR-3615
824C	85X	22	Brushless	35	24	6N-9294	OR-5217
824G	4SN	0	Brush	130	12	117-1379	OR-9480
824G	4SN	22	Brush	70	24	107-7977	OR-8279
824G	4SN	0	Brushless	50	24	112-5041	OR-5206
824G	4SN	0	Brushless	50	24	169-3345	10R-9791
824G	4SN	22	Brushless	75	24	3E-7577	OR-3615
824G	4SN	22	Brushless	35	24	6N-9294	OR-5217
824G II	AWW	0	Brush	130	12	117-1379	OR-9480
824G II	AWW	22	Brush	70	24	107-7977	OR-8279
824G II	AWW	0	Brushless	65	24	185-5294	10R-9788
824H	ASX	0	Brushless	80	24	177-9953	10R-9790
824H	ASX	0	Brushless	95	24	197-8820	10R-9789
824K	RWB	22	Brushless	150	24	272-1889	20R-0053
825C	86X	0	Brush	130	12	117-1379	OR-9480
825C	86X	22	Brush	70	24	107-7977	OR-8279
825C	86X	0	Brushless	50	24	112-5041	OR-5206
825C	86X	0	Brushless	50	24	169-3345	10R-9791
825C	86X	0	Brushless	80	24	177-9953	10R-9790
825C	86X	22	Brushless	35	24	6N-9294	OR-5217
825G	6RN	0	Brush	130	12	117-1379	OR-9480
825G	6RN	22	Brush	70	24	107-7977	OR-8279
825G	6RN	0	Brushless	50	24	112-5041	OR-5206
825G	6RN	0	Brushless	50	24	169-3345	10R-9791
825G	6RN	22	Brushless	75	24	3E-7577	OR-3615
825G	6RN	22	Brushless	35	24	6N-9294	OR-5217
825G II	AXB	0	Brush	130	12	117-1379	OR-9480
825G II	AXB	22	Brush	70	24	107-7977	OR-8279
825G II	AXB	0	Brushless	65	24	185-5294	10R-9788
825H	AZW	0	Brushless	80	24	177-9953	10R-9790
825H	AZW	0	Brushless	95	24	197-8820	10R-9789
825K	233	22	Brushless	150	24	272-1889	20R-0053
826C	87X	0	Brush	130	12	117-1379	OR-9480
826C	87X	22	Brush	70	24	107-7977	OR-8279
826C	87X	0	Brushless	50	24	112-5041	OR-5206
826C	87X	0	Brushless	50	24	169-3345	10R-9791
826C	87X	0	Brushless	80	24	177-9953	10R-9790
826C	87X	0	Brushless	95	24	197-8820	10R-9789

# Cat Alternators Section

## Compactor & Wheel Dozer Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
826C	87X	22	Brushless	105	24	316-7251	-
826C	87X	22	Brushless	75	24	3E-7577	0R-3615
826C	87X	22	Brushless	35	24	6N-9294	0R-5217
826G	7LN	0	Brushless	50	24	112-5041	0R-5206
826G	7LN	0	Brushless	50	24	169-3345	10R-9791
826G	7LN	22	Brushless	75	24	3E-7577	0R-3615
826G	7LN	22	Brushless	35	24	6N-9294	0R-5217
826G II	AYH	0	0	160	12	306-2172	10R-7701
826G II	AYH	0	Brushless	80	24	177-9953	10R-9790
826G II	AYH	0	Brushless	75	24	200-8281	0R-9938
826G II	AYH	0	Brushless	75	24	234-4906	-
826G II	AYH	22	Brushless	75	24	3E-7577	0R-3615
826H	AWF	0	Brushless	95	24	197-8820	10R-9789
826K	232	22	Brushless	150	24	272-1889	20R-0053
836	3RL	0	Brushless	50	24	112-5041	0R-5206
836	3RL	0	Brushless	50	24	169-3345	10R-9791
836	3RL	22	Brushless	35	24	6N-9294	0R-5217
836	7FR	22	Brushless	75	24	3E-7577	0R-3615
836G	7MZ	0	Brushless	95	24	197-8820	10R-9789
836G	BRL	0	0	160	12	306-2172	10R-7701
836G	BRL	0	Brushless	80	24	177-9953	10R-9790
836G	BRL	0	Brushless	75	24	200-8281	0R-9938
836G	BRL	0	Brushless	100	24	204-7449	0R-9937
836G	BRL	0	Brushless	100	24	229-2348	-
836G	BRL	0	Brushless	75	24	234-4906	-
836G	BRL	22	Brushless	105	24	316-7251	-
836G	BRL	22	Brushless	105	24	331-5717	20R-0541
836G	BRL	22	Brushless	75	24	3E-7577	0R-3615
836H	BXD	0	Brushless	80	24	177-9953	10R-9790
836H	BXD	0	Brushless	95	24	197-8820	10R-9789

## Forest Machine Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
1090	BZJ	0	Brushless	95	24	197-8820	10R-9789
1190	BZK	0	Brushless	95	24	197-8820	10R-9789
1190T	BZL	0	Brushless	95	24	197-8820	10R-9789
1290T	BZM	0	Brushless	95	24	197-8820	10R-9789
1390	B3F	0	Brushless	95	24	197-8820	10R-9789
2384C	KAW	22	Brushless	95	24	226-7683	-
2384C	KB6	22	Brush	115	24	344-5081	-
2390	P3H	0	Brushless	95	24	197-8820	10R-9789
2470C	W47	22	Brushless	95	24	226-7683	-
2484C	KAZ	22	Brushless	95	24	226-7683	-
2484C	KB7	22	Brush	115	24	344-5081	-
2491	P5J	0	Brushless	95	24	197-8820	10R-9789
2570C	F1B	22	Brushless	95	24	226-7683	-
2570D	D25	22	Brush	115	24	344-5081	-
2670C	B3E	22	Brushless	95	24	226-7683	-
2670D	D26	22	Brush	115	24	344-5081	-
2864C	SP4	22	Brushless	95	24	226-7683	-
320D FM	BW2	0	Brushless	80	24	177-9953	10R-9790
320D FM	BW2	22	Brushless	150	24	249-0313	10R-9097

# Cat Alternators Section

## Forest Machine Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
320D FM	BW2	22	Brush	115	24	344-5081	-
322C FM HW	C3R	0	Brushless	80	24	177-9953	10R-9790
322C FM HW	CAM	17	Brush	52	12	9W-3043	0R-3652
322C FM LGP	BYL	0	Brushless	80	24	177-9953	10R-9790
322C FM ST	BPH	17	Brush	52	12	9W-3043	0R-3652
322C FM ST	M2H	0	Brushless	80	24	177-9953	10R-9790
324D FM	JKR	0	Brushless	80	24	177-9953	10R-9790
324D FM	JKR	22	Brush	115	24	366-2756	-
325C FM HW	Y4P	0	Brushless	65	24	165-8857	10R-9788
325C FM HW	Y4P	0	Brushless	80	24	177-9953	10R-9790
325C FM HW	Y4P	0	Brushless	65	24	185-5294	10R-9788
325C FM ST	G1L	0	Brushless	65	24	165-8857	10R-9788
325C FM ST	G1L	0	Brushless	80	24	177-9953	10R-9790
325C FM ST	G1L	0	Brushless	65	24	185-5294	10R-9788
330C FM HW	B2L	0	Brushless	80	24	177-9953	10R-9790
330C FM ST	B3M	0	Brushless	80	24	177-9953	10R-9790
345C FM HEEL	A3L	0	Brushless	75	24	200-2232	0R-9940
345C FM HEEL	A3L	22	Brushless	95	24	226-7683	-
345C FM HEEL	A3L	22	Brushless	80	24	235-7133	-
511	511	0	Brushless	95	24	197-8820	10R-9789
518C	1CL	0	Brushless	50	24	112-5041	0R-5206
518C	1CL	0	Brushless	50	24	169-3345	10R-9791
518C	9HJ	22	0	15	24	2P-1204	0R-5217
518C	9HJ	22	Brushless	35	24	6N-9294	0R-5217
521	521	0	Brushless	95	24	197-8820	10R-9789
521B	F7B	0	Brushless	95	24	197-8820	10R-9789
522	522	0	Brushless	95	24	197-8820	10R-9789
522B	F7C	0	Brushless	95	24	197-8820	10R-9789
525B	3KZ	0	Brushless	80	24	177-9953	10R-9790
525B	3KZ	0	Brushless	95	24	197-8820	10R-9789
525B	3KZ	0	Brushless	75	24	200-8281	0R-9938
525B	3KZ	22	Brushless	105	24	316-7251	-
525C	525	0	Brushless	80	24	177-9953	10R-9790
525C	525	0	Brushless	95	24	197-8820	10R-9789
525C	525	0	Brushless	75	24	200-8281	0R-9938
525C	525	22	Brushless	80	24	235-7133	-
525C	525	22	Brushless	105	24	316-7251	-
525C OEM	M3B	0	Brushless	80	24	177-9953	10R-9790
525C OEM	M3B	22	Brushless	80	24	235-7133	-
525D	GKP	22	0	105	24	321-8940	-
525D	GKP	22	Brush	115	24	344-5081	-
527	JSR	0	Brushless	75	24	200-8281	0R-9938
527	PTR	0	Brushless	50	24	112-5041	0R-5206
527	PTR	0	Brushless	50	24	169-3345	10R-9791
527	PTR	0	Brushless	80	24	177-9953	10R-9790
527	PTR	22	Brushless	35	24	6N-9294	0R-5217
528B	8SJ	0	Brushless	50	24	112-5041	0R-5206
528B	8SJ	0	Brushless	50	24	169-3345	10R-9791
528B	8SJ	22	0	15	24	2P-1204	0R-5217
528B	8SJ	22	Brushless	35	24	6N-9294	0R-5217
530B	5BK	0	Brushless	50	24	112-5041	0R-5206
530B	5BK	0	Brushless	50	24	169-3345	10R-9791
530B	5BK	22	0	15	24	2P-1204	0R-5217



# Cat Alternators Section

## Forest Machine Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
530B	5BK	22	Brushless	35	24	6N-9294	0R-5217
532	532	0	Brushless	95	24	197-8820	10R-9789
533	CDR	0	Brushless	80	24	177-9953	10R-9790
533	CDR	0	Brushless	75	24	200-8281	0R-9938
535B	AAE	0	Brushless	80	24	177-9953	10R-9790
535B	AAE	0	Brushless	95	24	197-8820	10R-9789
535B	AAE	0	Brushless	75	24	200-8281	0R-9938
535B	AAE	22	Brushless	105	24	316-7251	-
535C	535	0	Brushless	80	24	177-9953	10R-9790
535C	535	0	Brushless	95	24	197-8820	10R-9789
535C	535	0	Brushless	75	24	200-8281	0R-9938
535C	535	22	Brushless	105	24	316-7251	-
535D	3L5	22	Brush	115	24	344-5081	-
535D	MTP	22	0	105	24	321-8940	-
539	1PZ	0	Brush	130	12	117-1379	0R-9480
539	1PZ	22	Brush	70	24	107-7977	0R-8279
541	541	0	Brushless	95	24	197-8820	10R-9789
541 SERIES 2	F7D	0	Brushless	95	24	197-8820	10R-9789
543	ASJ	0	Brushless	80	24	177-9953	10R-9790
543	ASJ	0	Brushless	75	24	200-8281	0R-9938
545	2FZ	0	Brushless	80	24	177-9953	10R-9790
545	2FZ	0	Brushless	95	24	197-8820	10R-9789
545	2FZ	0	Brushless	75	24	200-8281	0R-9938
545	2FZ	22	Brushless	105	24	316-7251	-
545C	545	0	Brushless	80	24	177-9953	10R-9790
545C	545	0	Brushless	95	24	197-8820	10R-9789
545C	545	0	Brushless	75	24	200-8281	0R-9938
545C	545	22	Brushless	105	24	316-7251	-
545C OEM	M5M	0	Brushless	80	24	177-9953	10R-9790
545D	KGP	22	0	105	24	321-8940	-
545D	KGP	22	Brush	115	24	344-5081	-
545D OEM	H23	0	Brushless	95	24	197-8820	10R-9789
545D OEM	H23	22	Brush	115	24	344-5081	-
552	552	0	Brushless	95	24	197-8820	10R-9789
552 SERIES 2	F7G	0	Brushless	95	24	197-8820	10R-9789
553C	W53	22	Brushless	95	24	226-7683	-
555D	5L5	22	Brush	115	24	344-5081	-
555D	PGY	22	0	105	24	321-8940	-
558 LL	LRT	22	Brush	115	24	344-5081	-
559C	KAS	22	Brushless	95	24	226-7683	-
559C	KB4	22	Brush	115	24	344-5081	-
563C	W63	22	Brushless	95	24	226-7683	-
563D	D63	22	Brush	115	24	344-5081	-
568 GF	YJX	22	Brushless	80	24	235-7133	-
568 LL	BRB	22	Brushless	80	24	235-7133	-
573C	RJT	22	Brushless	95	24	226-7683	-
573D	D73	22	Brush	115	24	344-5081	-
579C	KAX	22	Brushless	95	24	226-7683	-
579C	KB5	22	Brush	115	24	344-5081	-
584	109	22	Brush	145	24	352-4700	-
584	PAK	22	Brushless	150	24	272-1889	20R-0053
586C	SP5	22	Brushless	95	24	226-7683	-
586C	SP5	22	Brush	115	24	344-5081	-

# Cat Alternators Section

## Forest Machine Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
TK1051	9HZ	0	Brushless	95	24	197-8820	10R-9789
TK1051	9HZ	22	Brushless	105	24	316-7251	-
TK370	WBD	0	Brushless	80	24	177-9953	10R-9790
TK370	WBD	0	Brushless	75	24	200-8281	0R-9938
TK371	WBG	0	Brushless	80	24	177-9953	10R-9790
TK371	WBG	0	Brushless	75	24	200-8281	0R-9938
TK380	WBE	0	Brushless	80	24	177-9953	10R-9790
TK380	WBE	0	Brushless	75	24	200-8281	0R-9938
TK381	WBH	0	Brushless	80	24	177-9953	10R-9790
TK381	WBH	0	Brushless	75	24	200-8281	0R-9938
TK711	101	0	Brushless	95	24	197-8820	10R-9789
TK711	TKA	17	Brush	52	12	9W-3043	0R-3652
TK711	TKA	0	Brushless	50	24	112-5041	0R-5206
TK711	TKA	0	Brushless	50	24	169-3345	10R-9791
TK711	TKA	22	Brushless	35	24	6N-9294	0R-5217
TK721	102	0	Brushless	95	24	197-8820	10R-9789
TK721	TKB	17	Brush	52	12	9W-3043	0R-3652
TK721	TKB	0	Brushless	50	24	112-5041	0R-5206
TK721	TKB	0	Brushless	50	24	169-3345	10R-9791
TK721	TKB	22	Brushless	35	24	6N-9294	0R-5217
TK722	103	0	Brushless	95	24	197-8820	10R-9789
TK722	TKC	17	Brush	52	12	9W-3043	0R-3652
TK722	TKC	0	Brushless	50	24	112-5041	0R-5206
TK722	TKC	0	Brushless	50	24	169-3345	10R-9791
TK722	TKC	22	Brushless	35	24	6N-9294	0R-5217
TK732	104	0	Brushless	95	24	197-8820	10R-9789
TK741	202	0	Brushless	95	24	197-8820	10R-9789
TK751	301	0	Brushless	95	24	197-8820	10R-9789
TK752	302	0	Brushless	95	24	197-8820	10R-9789

## Generators/Captive Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
3116	3AF	17	Brush	52	12	9W-3043	0R-3652
3306B	LSA	0	Brushless	50	24	112-5041	0R-5206
3306B	LSA	0	Brushless	50	24	169-3345	10R-9791
3306B	LSA	22	Brushless	60	24	266-7227	10R-8877
3306B	LSA	22	Brushless	105	24	331-5717	-
3306B	LSA	22	Brushless	60	24	333-1184	10R-8877
3306B	LSA	22	Brushless	35	24	6N-9294	0R-5217
3508B	BTB	0	Brushless	95	24	197-8820	10R-9789
3512C	RSR	0	Brushless	95	24	197-8820	10R-9789
3512C	RSR	22	Brushless	105	24	316-7251	-
3516B	CPW	22	Brushless	105	24	316-7251	-
C32	KCM	22	Brushless	95	24	226-7683	-
C32	KCM	22	Brushless	150	24	272-1889	20R-0053

## Hydraulic Shovel Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
6015	DHB	22	Brushless	150	24	272-1889	20R-0053
6015 FS	DHF	22	Brushless	150	24	272-1889	20R-0053

# Cat Alternators Section

## Hydraulic Shovel Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
6018	DHT	22	Brushless	150	24	272-1889	20R-0053
6018 FS	DHD	22	Brushless	150	24	272-1889	20R-0053
6030	DHL	22	Brushless	150	24	272-1889	20R-0053
6030 FS	DHG	22	Brushless	150	24	272-1889	20R-0053
6040	DHJ	22	Brushless	150	24	272-1889	20R-0053
6040 FS	DHX	22	Brushless	150	24	272-1889	20R-0053
6060	DHN	22	Brushless	150	24	272-1889	20R-0053
6060 FS	DH3	22	Brushless	150	24	272-1889	20R-0053

## Hydraulic Track Drill Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
MD5050	DR8	22	Brushless	60	24	333-1184	-
MD5050 T	DR9	22	Brushless	60	24	333-1184	-
MD5075	SER	22	Brushless	60	24	333-1184	-
MD5075C	SXR	22	Brushless	60	24	333-1184	-
MD5090	SEW	22	Brushless	60	24	333-1184	-
MD5125	SEZ	0	Brushless	80	24	177-9953	10R-9790
MD5125	SEZ	22	Brushless	80	24	235-7133	-
MD5125	SEZ	22	Brushless	60	24	333-1184	-
MD5150	SEY	22	Brushless	80	24	235-7133	-
MD5150	SEY	22	Brushless	60	24	333-1184	-
MD6290	DR3	0	Brushless	95	24	197-8820	10R-9789
MD6420C	DN6	0	Brushless	95	24	197-8820	10R-9789
MD6420C	DW9	22	Brushless	150	24	272-1889	20R-0053
MD6540	DR5	22	Brushless	225	24	421-7193	-
MD6540C	DS4	22	Brushless	225	24	421-7193	-

## Large Hydraulic Excavator Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
330	5YM	0	Brushless	50	24	112-5041	0R-5206
330	6SK	22	Brushless	75	24	3E-7577	0R-3615
330	8RL	17	Brush	52	12	9W-3043	0R-3652
330C OEM	MSD	0	Brushless	65	24	165-8857	10R-9788
330C OEM	MSD	0	Brushless	65	24	185-5294	10R-9788
330D L	MWP	0	Brushless	65	24	185-5294	10R-9788
330D L OEM	H3D	0	Brushless	65	24	165-8857	10R-9788
330D L OEM	H3D	0	Brushless	80	24	177-9953	10R-9790
330D L OEM	H3D	0	Brushless	65	24	185-5294	10R-9788
330D LN OEM	GMN	0	Brushless	65	24	165-8857	10R-9788
330D LN OEM	GMN	0	Brushless	80	24	177-9953	10R-9790
330D LN OEM	GMN	0	Brushless	65	24	185-5294	10R-9788
330D OEM	H3D	0	Brushless	65	24	165-8857	10R-9788
330D OEM	H3D	0	Brushless	80	24	177-9953	10R-9790
330D OEM	H3D	0	Brushless	65	24	185-5294	10R-9788
336D LN OEM	L5K	0	Brushless	65	24	165-8857	10R-9788
336D LN OEM	L5K	0	Brushless	80	24	177-9953	10R-9790
336D LN OEM	L5K	0	Brushless	65	24	185-5294	10R-9788
336D LN OEM	L5K	22	Brushless	80	24	235-7133	-
336D LN OEM	L5K	22	Brush	115	24	366-2756	-
336D 2	WDC	0	Brushless	65	24	185-5294	10R-9788

# Cat Alternators Section

## Large Hydraulic Excavator Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
336D 2 L OEM	MZE	0	Brushless	65	24	185-5294	10R-9788
336D 2 OEM	SM3	0	Brushless	65	24	185-5294	10R-9788
336D 2GC	NBN	0	Brushless	65	24	185-5294	10R-9788
336D 2GC OEM	MGE	0	Brushless	65	24	185-5294	10R-9788
336D 2H	MFA	0	Brushless	65	24	185-5294	10R-9788
336D 2L	HBH	0	Brushless	65	24	185-5294	10R-9788
336D 2L	XBH	0	Brushless	65	24	165-8857	10R-9788
336D 2L	XBH	0	Brushless	80	24	177-9953	10R-9790
336D 2LH	NAH	0	Brushless	65	24	185-5294	10R-9788
336D 2LOEM	GGH	0	Brushless	65	24	185-5294	10R-9788
336D 2LOEM	HBZ	0	Brushless	65	24	165-8857	10R-9788
336D 2XE	LBX	0	Brushless	65	24	185-5294	10R-9788
336D L	JWR	0	Brushless	80	24	177-9953	10R-9790
336D L	PRF	0	Brushless	65	24	165-8857	10R-9788
336D L OEM	JRX	0	Brushless	65	24	165-8857	10R-9788
336D L OEM	JRX	0	Brushless	65	24	185-5294	10R-9788
336D L OEM	NBZ	0	Brushless	80	24	177-9953	10R-9790
336D L SB OEM	NBZ	0	Brushless	65	24	165-8857	10R-9788
336D L SB OEM	NBZ	0	Brushless	80	24	177-9953	10R-9790
336D L SB OEM	NBZ	0	Brushless	65	24	185-5294	10R-9788
336D LN	MYG	0	Brushless	65	24	165-8857	10R-9788
336D LN	MYG	0	Brushless	80	24	177-9953	10R-9790
336D LN	MYG	0	Brushless	65	24	185-5294	10R-9788
336E H	HDW	22	Brushless	80	24	235-7133	-
336E L	DPX	22	Brushless	80	24	235-7133	-
336E L H	JEA	22	Brushless	80	24	235-7133	-
336E L OEM	T3Z	22	Brushless	80	24	235-7133	-
336E LN H	SSL	22	Brushless	80	24	235-7133	-
336E OEM	T3Z	22	Brushless	80	24	235-7133	-
336F	YFD	22	Brushless	80	24	235-7133	-
336F H	NAJ	22	Brushless	80	24	235-7133	-
336F L	TJE	22	Brushless	80	24	235-7133	-
336F L H	LTP	22	Brushless	80	24	235-7133	-
336F L OEM	B39	22	Brushless	80	24	235-7133	-
336F LN	LJY	22	Brushless	80	24	235-7133	-
336F LN H	MTW	22	Brushless	80	24	235-7133	-
336F LNXE	YBH	22	Brushless	80	24	235-7133	-
336F LXE	DFY	22	Brushless	80	24	235-7133	-
336F OEM	B34	22	Brushless	80	24	235-7133	-
340D 2L	JEE	0	Brushless	65	24	185-5294	10R-9788
340D L	JTN	0	Brushless	65	24	165-8857	10R-9788
340D L	JTN	0	Brushless	65	24	185-5294	10R-9788
340F	YBF	22	Brushless	80	24	235-7133	-
345B	2NW	0	Brush	130	12	117-1379	OR-9480
345B	2NW	0	Brushless	50	24	112-5041	OR-5206
345B	5WS	22	Brush	70	24	107-7977	OR-8279
345B	5WS	0	Brushless	50	24	169-3345	10R-9791
345B	7KS	0	Brushless	80	24	177-9953	10R-9790
345B	7KS	22	Brushless	75	24	3E-7577	OR-3615
345B II	DCW	0	Brushless	70	24	155-7434	OR-8279
345B II	DCW	0	Brushless	80	24	177-9953	10R-9790
345B II	DCW	22	Brushless	75	24	3E-7577	OR-3615
345B II LC-FIX	AKX	0	Brushless	70	24	155-7434	OR-8279

## Large Hydraulic Excavator Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
345B L II	CDJ	0	Brushless	70	24	155-7434	OR-8279
345C	DHP	22	Brushless	80	24	235-7133	-
345C	ESD	22	Brushless	95	24	226-7683	-
345C OEM	B6N	0	Brushless	75	24	200-2232	OR-9940
345C OEM	B6N	22	Brushless	95	24	226-7683	-
345C OEM	NRF	22	Brushless	80	24	235-7133	-
345D LC-VG	LKY	22	Brushless	80	24	235-7133	-
345D OEM	P5D	22	Brushless	80	24	235-7133	-
349D	GKF	22	Brushless	80	24	235-7133	-
349D 2	YAG	22	Brushless	80	24	235-7133	-
349D 2 OEM	FE5	22	Brushless	80	24	235-7133	-
349D 2L	TAH	22	Brushless	80	24	235-7133	-
349D 2OEM	FH3	22	Brushless	80	24	235-7133	-
349D L	JGB	22	Brushless	80	24	235-7133	-
349D L OEM	MCX	22	Brushless	80	24	235-7133	-
349D L-VG	KHS	22	Brushless	80	24	235-7133	-
349E LC-VG	KCN	22	Brushless	80	24	235-7133	-
349E OEM	FKF	22	Brushless	80	24	235-7133	-
349E OEM	S3P	0	Brushless	65	24	165-8857	10R-9788
349E OEM	S3P	0	Brushless	65	24	185-5294	10R-9788
349E OEM	S3P	22	Brush	115	24	366-2756	-
349F	HLB	22	Brushless	80	24	235-7133	-
349F L	FH2	22	Brushless	80	24	235-7133	-
349F LXE	RAX	22	Brushless	80	24	235-7133	-
349F V-VG	WNA	22	Brushless	80	24	235-7133	-
350	ZZL	22	Brush	70	24	107-7977	OR-8279
350	ZZL	0	Brushless	50	24	112-5041	OR-5206
350	ZZL	22	Brushless	35	24	6N-9294	OR-5217
350 L	9DK	0	Brush	130	12	117-1379	OR-9480
350 L	9DK	22	Brush	70	24	107-7977	OR-8279
350 L	9DK	0	Brushless	50	24	169-3345	10R-9791
352F	XAL	22	Brushless	80	24	235-7133	-
352F (VG)	NDC	22	Brushless	80	24	235-7133	-
352F MH OEM	B38	22	Brushless	80	24	235-7133	-
352F OEM	B36	22	Brushless	80	24	235-7133	-
352F VG	TS2	22	Brushless	80	24	235-7133	-
352F XE-VG	SD2	22	Brushless	80	24	235-7133	-
365C L OEM	GSZ	0	Brushless	80	24	177-9953	10R-9790
365C L OEM	GSZ	0	Brushless	75	24	200-2232	OR-9940
365C L OEM	GSZ	0	Brushless	75	24	200-8281	OR-9938
374D OEM	JNZ	0	Brushless	80	24	177-9953	10R-9790
374E L OEM	JKC	22	Brushless	95	24	226-7683	-
374F	AT2	22	Brushless	95	24	226-7683	-
374F L	P4L	22	Brushless	95	24	226-7683	-
374F OEM	H25	22	Brushless	95	24	226-7683	-
375 L	6RL	0	Brushless	50	24	112-5041	OR-5206
375 L	6RL	22	Brushless	75	24	3E-7577	OR-3615
385C OEM	MSF	0	Brushless	80	24	177-9953	10R-9790
385C OEM	MSF	0	Brushless	75	24	200-2232	OR-9940
385C OEM	MSF	0	Brushless	75	24	200-8281	OR-9938
385C OEM	MSF	22	Brushless	95	24	226-7683	-
390D L OEM	M1M	0	Brushless	80	24	177-9953	10R-9790
390D L OEM	M1M	0	Brushless	75	24	200-2232	OR-9940

# Cat Alternators Section

## Large Hydraulic Excavator Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
390D L OEM	M1M	0	Brushless	75	24	200-8281	OR-9938
390D L OEM	M1M	22	Brushless	95	24	226-7683	-
390F	HJD	22	Brushless	95	24	226-7683	-
390F L	MGF	22	Brushless	95	24	226-7683	-
390F L OEM	N64	22	Brushless	95	24	226-7683	-
390F MH OEM	H27	22	Brushless	95	24	226-7683	-
390F OEM	PT7	22	Brushless	95	24	226-7683	-

## Large Mining Excavator Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
5110B	AAK	22	Brushless	150	24	249-0313	10R-9097
5110B	AAK	22	Brushless	105	24	316-7251	-
5110B	AAT	0	Brushless	95	24	197-8820	10R-9789
5130B	4CS	0	Brushless	95	24	197-8820	10R-9789
5130B	4CS	22	Brushless	105	24	316-7251	-
5230	7LL	0	Brushless	95	24	197-8820	10R-9789
5230	7LL	22	Brushless	105	24	316-7251	-
5230B	4HZ	0	Brushless	95	24	197-8820	10R-9789
5230B	4HZ	22	Brushless	105	24	316-7251	-

## Large Mining Truck Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
784B	5RK	0	Brushless	95	24	197-8820	10R-9789
784B	5RK	22	Brushless	105	24	316-7251	-
784B	5RK	22	Brushless	75	24	3E-7577	OR-3615
784C	2PZ	0	Brushless	95	24	197-8820	10R-9789
784C	2PZ	22	Brushless	105	24	316-7251	-
785B	6HK	0	Brushless	95	24	197-8820	10R-9789
785B	6HK	22	Brushless	105	24	316-7251	-
785B	6HK	22	Brushless	75	24	3E-7577	OR-3615
785C	APX	0	Brushless	95	24	197-8820	10R-9789
785C	APX	22	Brushless	105	24	316-7251	-
785C HA	5AZ	0	Brushless	95	24	197-8820	10R-9789
785C HA	5AZ	22	Brushless	105	24	316-7251	-
785D	MSY	0	Brushless	95	24	197-8820	10R-9789
785D	MSY	0	Brushless	75	24	200-2232	OR-9940
785D	MSY	22	Brushless	105	24	316-7251	-
785D OEM	DMC	0	Brushless	95	24	197-8820	10R-9789
785D OEM	DMC	22	Brushless	105	24	316-7251	-
785G	RTL	22	Brushless	270	24	322-9743	-
785G	RTL	22	Brushless	225	24	421-7193	-
789B	7EK	0	Brushless	95	24	197-8820	10R-9789
789B	7EK	22	Brushless	105	24	316-7251	-
789B	7EK	22	Brushless	75	24	3E-7577	OR-3615
789C	2BW	0	Brushless	95	24	197-8820	10R-9789
789C	2BW	22	Brushless	105	24	316-7251	-
789D	SPD	0	Brushless	95	24	197-8820	10R-9789
789D	SPD	0	Brushless	75	24	200-2232	OR-9940
789D	SPD	22	Brushless	105	24	316-7251	-
789D OEM	TWP	22	Brushless	105	24	316-7251	-

# Cat Alternators Section

## Large Mining Truck Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
789D XQ	SHH	22	Brushless	105	24	316-7251	-
793C	CBR	0	Brushless	95	24	197-8820	10R-9789
793C	CBR	22	Brushless	105	24	316-7251	-
793D	FDB	0	Brushless	95	24	197-8820	10R-9789
793D	FDB	22	Brushless	75	24	276-8899	-
793D	FDB	22	Brushless	105	24	316-7251	-
793D	FDB	22	Brushless	270	24	322-9743	-
793D	FDB	22	Brushless	150	24	437-0125	-
793F	D3T	22	Brushless	225	24	421-7193	-
793F	SSP	0	Brushless	95	24	197-8820	10R-9789
793F	SSP	22	Brushless	150	24	272-1889	20R-0053
793F	SSP	22	Brushless	75	24	276-8899	-
793F	SSP	22	Brushless	105	24	316-7251	-
793F	SSP	22	Brushless	270	24	322-9743	-
793F	SSP	22	Brushless	150	24	437-0125	-
793F AC	EMD	22	Brushless	150	24	272-1889	20R-0053
793F AC	EMD	22	Brushless	75	24	276-8899	-
793F AC	EMD	22	Brushless	150	24	437-0125	-
793F CMD	RBT	22	Brushless	150	24	272-1889	20R-0053
793F CMD	RBT	22	Brushless	75	24	276-8899	-
793F CMD	RBT	22	Brushless	105	24	316-7251	-
793F CMD	RBT	22	Brushless	270	24	322-9743	-
793F CMD	RBT	22	Brushless	150	24	437-0125	-
793F OEM	SXP	22	Brushless	150	24	272-1889	20R-0053
793F OEM	SXP	22	Brushless	75	24	276-8899	-
793F OEM	SXP	22	Brushless	105	24	316-7251	-
793F OEM	SXP	22	Brushless	150	24	437-0125	-
793F XQ	SND	22	Brushless	150	24	272-1889	20R-0053
793F XQ	SND	22	Brushless	75	24	276-8899	-
793F XQ	SND	22	Brushless	150	24	437-0125	-
794 AC	MT5	22	Brushless	150	24	272-1889	20R-0053
794 AC	MT5	22	Brushless	270	24	322-9743	-
794 AC	MT5	22	Brushless	150	24	437-0125	-
795F AC	ERM	22	Brushless	150	24	272-1889	20R-0053
795F AC	ERM	22	Brushless	75	24	276-8899	-
795F AC	ERM	22	Brushless	150	24	437-0125	-
795F XQ	SNT	22	Brushless	150	24	272-1889	20R-0053
795F XQ	SNT	22	Brushless	150	24	437-0125	-
797	5YW	0	Brushless	80	24	177-9953	10R-9790
797	5YW	0	Brushless	95	24	197-8820	10R-9789
797	5YW	22	Brushless	150	24	272-1889	20R-0053
797	5YW	22	Brushless	105	24	316-7251	-
797	5YW	22	Brushless	150	24	437-0125	-
797	5YW	22	Brushless	75	24	3E-7577	0R-3615
797B	JSM	0	Brushless	80	24	177-9953	10R-9790
797B	JSM	0	Brushless	95	24	197-8820	10R-9789
797B	JSM	22	Brushless	150	24	272-1889	20R-0053
797B	JSM	22	Brushless	105	24	316-7251	-
797B	JSM	22	Brushless	150	24	437-0125	-
797B	JSM	22	Brushless	75	24	3E-7577	0R-3615
797F	LAJ	22	Brushless	150	24	272-1889	20-R0053
797F	LAJ	22	Brushless	270	24	322-9743	-
797F	LAJ	22	Brushless	150	24	437-0125	-

# Cat Alternators Section

## Large Mining Truck Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
797F XQ	WSP	22	Brushless	150	24	272-1889	20R-0053
797F XQ	WSP	22	Brushless	150	24	437-0125	-

## Large Track-Type Tractor Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
D10N	2YD	0	Brushless	50	24	112-5041	OR-5206
D10N	2YD	0	Brushless	50	24	169-3345	10R-9791
D10N	2YD	0	Brushless	95	24	197-8820	10R-9789
D10N	2YD	0	Brushless	75	24	200-8281	OR-9938
D10N	2YD	22	Brushless	105	24	316-7251	-
D10N	2YD	22	Brushless	35	24	6N-9294	OR-5217
D10N	3SK	0	Brushless	80	24	177-9953	10R-9790
D10N	3SK	22	Brushless	80	24	235-7133	-
D10N	3SK	22	Brushless	105	24	331-5717	-
D10N	3SK	22	Brushless	75	24	3E-7577	OR-3615
D10R	3KR	0	Brushless	80	24	177-9953	10R-9790
D10R	3KR	0	Brushless	75	24	200-8281	OR-9938
D10R	3KR	22	Brushless	75	24	3E-7577	OR-3615
D10R	AKT	0	Brushless	95	24	197-8820	10R-9789
D10R	AKT	0	Brushless	100	24	204-7449	OR-9937
D10R	AKT	22	Brushless	105	24	316-7251	10R-8755
D10R	AKT	22	Brushless	105	24	331-5717	20R-0541
D10T	JJW	22	Brushless	150	24	272-1889	20R-0053
D10T	RJG	0	Brushless	95	24	197-8820	10R-9789
D11N	4HK	22	Brushless	105	24	316-7251	10R-8755
D11N	4HK	22	Brushless	105	24	331-5717	-
D11N	74Z	0	Brushless	50	24	112-5041	OR-5206
D11N	74Z	0	Brushless	50	24	169-3345	10R-9791
D11N	74Z	0	Brushless	95	24	197-8820	10R-9789
D11N	74Z	22	Brushless	75	24	3E-7577	OR-3615
D11N	74Z	22	Brushless	35	24	6N-9294	OR-5217
D11R	7PZ	0	Brushless	95	24	197-8820	10R-9789
D11R	7PZ	22	Brushless	95	24	226-7683	-
D11R	7PZ	22	Brushless	105	24	316-7251	-
D11R	7PZ	22	Brushless	105	24	331-5717	-
D11R CD	AAF	0	Brushless	95	24	197-8820	10R-9789
D11R CD	AAF	22	Brushless	95	24	226-7683	-
D11R CD	AAF	22	Brushless	105	24	316-7251	-
D11R CD	AAF	22	Brushless	105	24	331-5717	20R-0541
D11T	DDD	0	Brushless	95	24	197-8820	10R-9789
D11T	GEB	22	Brushless	95	24	226-7683	-
D11T	JEL	22	Brushless	150	24	272-1889	20R-0053
D11T	JNS	0	Brush	110	12	203-5492	10R-9098
D11T CD	TPB	22	Brushless	95	24	226-7683	-
D11T CD	TPB	22	Brushless	150	24	272-1889	20R-0053
D9L	14Y	0	Brushless	50	24	112-5041	OR-5206
D9L	14Y	0	Brushless	50	24	169-3345	10R-9791
D9L	14Y	0	Brushless	80	24	177-9953	10R-9790
D9L	14Y	0	Brushless	75	24	200-8281	OR-9938
D9L	14Y	22	Brushless	75	24	266-7226	10R-8907
D9L	14Y	22	Brushless	75	24	3E-7577	OR-3615
D9L	14Y	22	Brushless	35	24	6N-9294	OR-5217



# Cat Alternators Section

## Large Track-Type Tractor Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
D9N	1JD	0	Brushless	50	24	112-5041	0R-5206
D9N	1JD	0	Brushless	80	24	177-9953	10R-9790
D9N	1JD	0	Brushless	75	24	200-8281	0R-9938
D9N	6XJ	0	Brushless	70	24	155-7434	0R-8279
D9N	6XJ	0	Brushless	65	24	165-8857	10R-9788
D9N	6XJ	0	Brushless	50	24	169-3345	10R-9791
D9N	6XJ	0	Brushless	65	24	185-5294	10R-9788
D9N	6XJ	0	Brushless	95	24	197-8820	10R-9789
D9N	6XJ	22	Brushless	75	24	266-7226	10R-8907
D9N	6XJ	22	Brushless	105	24	316-7251	-
D9N	6XJ	22	Brushless	75	24	3E-7577	0R-3615
D9N	6XJ	22	Brushless	35	24	6N-9294	0R-5217
D9R	ABK	0	Brushless	80	24	177-9953	10R-9790
D9R	ABK	0	Brushless	65	24	185-5294	10R-9788
D9R	ABK	0	0	150	24	306-2174	-
D9R	ABK	22	Brushless	105	24	316-7251	10R-8755
D9R	ABK	22	Brushless	105	24	331-5717	-
D9R	ABK	22	Brushless	75	24	3E-7577	0R-3615
D9R	ACL	0	Brushless	95	24	197-8820	10R-9789
D9R	JJB	22	Brushless	270	24	322-9743	-
D9R	WDM	0	Brushless	75	24	200-8281	0R-9938
D9R	WDM	0	Brushless	100	24	204-7449	0R-9937
D9R	WDM	22	Brushless	75	24	266-7226	10R-8907
D9T	REX	22	Brushless	150	24	272-1889	20R-0053
D9T	RJS	0	Brushless	80	24	177-9953	10R-9790
D9T	RJS	0	Brushless	95	24	197-8820	10R-9789
D9T	RJS	0	Brushless	75	24	200-8281	0R-9938
D9T	RJS	0	Brushless	100	24	204-7449	0R-9937
D9T	RJS	22	Brushless	75	24	266-7226	10R-8907
D9T	RJS	0	0	150	24	306-2174	10R-7946
D9T	RJS	22	Brushless	105	24	316-7251	-
D9T	RJS	22	Brushless	105	24	331-5717	20R-0541
D9T	TWG	0	Brush	110	12	203-5492	10R-9098
D9T	TWG	22	Brushless	95	24	226-7683	-

## Large Wheel Loader Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
834	92Z	0	Brushless	50	24	112-5041	0R-5206
834	92Z	22	Brushless	75	24	3E-7577	0R-3615
834B	7BR	0	Brushless	50	24	112-5041	0R-5206
834B	7BR	0	Brushless	50	24	169-3345	10R-9791
834B	7BR	22	Brushless	75	24	3E-7577	0R-3615
834B	7BR	22	Brushless	35	24	6N-9294	0R-5217
834G	BPC	0	Brushless	95	24	197-8820	10R-9789
834G	BPC	0	Brushless	100	24	229-2348	-
834G	BPC	22	Brushless	105	24	316-7251	10R-8755
834G	BPC	22	Brushless	105	24	331-5717	-
834H	BTX	0	Brushless	95	24	197-8820	10R-9789
834H	BTX	22	Brushless	95	24	257-9466	10R-9789
834H	BTX	22	Brushless	105	24	331-5717	20R-0541
834K	LWY	22	Brushless	150	24	272-1889	20R-0053
844	2KZ	22	Brushless	105	24	316-7251	-

# Cat Alternators Section

## Large Wheel Loader Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
844	BBN	0	Brushless	95	24	197-8820	10R-9789
844H	BTW	0	Brushless	75	24	200-2232	OR-9940
844H	BTW	22	Brushless	95	24	226-7683	-
844K	KLS	22	Brushless	150	24	272-1889	20R-0053
854G	1JW	0	Brushless	95	24	197-8820	10R-9789
854G	A4W	22	Brushless	105	24	316-7251	-
854K	221	22	Brushless	95	24	226-7683	-
854K	KK3	22	Brushless	150	24	272-1889	20R-0053
854K	KK3	22	Brushless	270	24	322-9743	-
854K 2	H9K	22	Brushless	150	24	272-1889	20R-0053
854K 2	H9K	22	Brushless	270	24	322-9743	-
986H	L8S	22	Brush	115	24	344-5081	-
986H	L8S	22	Brush	115	24	366-2756	-
988B	50W	0	Brushless	50	24	112-5041	OR-5206
988B	50W	0	Brushless	50	24	169-3345	10R-9791
988B	50W	22	Brushless	75	24	3E-7577	OR-3615
988B	50W	22	Brushless	35	24	6N-9294	OR-5217
988F	2ZR	0	Brushless	95	24	197-8820	10R-9789
988F	2ZR	22	Brushless	105	24	316-7251	-
988F	2ZR	22	Brushless	75	24	3E-7577	OR-3615
988G	BNH	0	Brushless	95	24	197-8820	10R-9789
988G	BNH	0	Brushless	100	24	229-2348	-
988G	BNH	22	Brushless	105	24	316-7251	10R-8755
988G	BNH	22	Brushless	105	24	331-5717	20R-0541
988H	BXY	0	Brushless	80	24	177-9953	10R-9790
988H	BXY	0	Brushless	95	24	197-8820	10R9789
988H	BXY	22	Brushless	95	24	257-9466	10R9789
988H	BXY	22	Brushless	105	24	316-7251	10R8755
988H	BXY	22	Brushless	105	24	331-5717	20R-0541
988K	LWX	22	Brushless	150	24	272-1889	20R-0053
988K XE	EWX	22	Brushless	150	24	272-1889	20R-0053
990	7HK	0	Brushless	95	24	197-8820	10R-9789
990	7HK	22	Brushless	105	24	316-7251	-
990 II	4FR	0	Brushless	50	24	169-3345	10R-9791
990 II	4FR	22	Brushless	35	24	6N-9294	OR-5217
990 II	BCR	0	Brushless	95	24	197-8820	10R-9789
990 II	BCR	22	Brushless	105	24	316-7251	-
990H	BWX	0	Brushless	75	24	200-2232	OR-9940
990H	BWX	22	Brushless	95	24	226-7683	-
990K	A9P	22	Brushless	150	24	272-1889	20R-0053
991K	530	22	Brushless	95	24	226-7683	-
991K	530	22	Brushless	150	24	272-1889	20R-0053
992C	42X	0	Brushless	50	24	112-5041	OR-5206
992C	42X	0	Brushless	50	24	169-3345	10R-9791
992C	49Z	22	Brushless	75	24	3E-7577	OR-3615
992C	49Z	22	Brushless	35	24	6N-9294	OR-5217
992D	7MJ	0	Brushless	50	24	112-5041	OR-5206
992D	7MJ	0	Brushless	50	24	169-3345	10R-9791
992D	7MJ	22	Brushless	75	24	3E-7577	OR-3615
992D	7MJ	22	Brushless	35	24	6N-9294	OR-5217
992G	ADZ	0	Brushless	95	24	197-8820	10R-9789
992G	ADZ	22	Brushless	105	24	316-7251	-
992K	H4C	22	Brushless	95	24	226-7683	-

# Cat Alternators Section

## Large Wheel Loader Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
992K	H4C	22	Brushless	150	24	272-1889	20R-0053
992K	RM2	22	Brushless	270	24	322-9743	-
992K 2	ZMX	22	Brushless	150	24	272-1889	20R-0053
992K 2	ZMX	22	Brushless	270	24	322-9743	-
992X	Z4X	22	Brushless	150	24	272-1889	20R-0053
993K	Z4D	22	Brushless	150	24	272-1889	20R-0053
993K 2	Z4Z	22	Brushless	150	24	272-1889	20R-0053
994D	3TZ	0	Brushless	95	24	197-8820	10R-9789
994D	3TZ	22	Brushless	105	24	316-7251	-
994D	3TZ	22	Brushless	75	24	3E-7577	0R-3615
994F	442	0	Brushless	80	24	177-9953	10R-9790
994H	DWC	0	Brushless	80	24	177-9953	10R-9790

## Material Handler Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
325C MH	S2C	0	Brushless	65	24	165-8857	10R-9788
325C MH	S2C	0	Brushless	80	24	177-9953	10R-9790
325C MH	S2C	0	Brushless	65	24	185-5294	10R-9788
325D MH FCR	RJK	0	Brushless	80	24	177-9953	10R-9790
325D MH FCR	RJK	22	Brush	115	24	366-2756	-
325D MH HCR	C4H	0	Brushless	80	24	177-9953	10R-9790
325D MH HCR	C4H	22	Brush	115	24	366-2756	-
329D L SB OEM	L5H	0	Brushless	65	24	165-8857	10R-9788
329D L SB OEM	L5H	0	Brushless	80	24	177-9953	10R-9790
329D L SB OEM	L5H	0	Brushless	65	24	185-5294	10R-9788
329D L SB OEM	L5H	22	Brush	115	24	366-2756	-
330C MH	D3C	0	Brushless	65	24	165-8857	10R-9788
330C MH	D3C	0	Brushless	65	24	185-5294	10R-9788
330D MH FCR	LEM	0	Brushless	80	24	177-9953	10R-9790
330D MH HCR	C5K	0	Brushless	65	24	165-8857	10R-9788
330D MH HCR	C5K	0	Brushless	80	24	177-9953	10R-9790
330D MH HCR	C5K	0	Brushless	65	24	185-5294	10R-9788
330D WH	JJM	0	Brushless	80	24	177-9953	10R-9790
336D HVG UHD OEM	M3N	0	Brushless	65	24	165-8857	10R-9788
336D HVG UHD OEM	M3N	0	Brushless	80	24	177-9953	10R-9790
336D HVG UHD OEM	M3N	0	Brushless	65	24	185-5294	10R-9788
336D L UHD OEM	M3M	0	Brushless	65	24	165-8857	10R-9788
336D L UHD OEM	M3M	0	Brushless	80	24	177-9953	10R-9790
336D L UHD OEM	M3M	0	Brushless	65	24	185-5294	10R-9788
336D LN SB OEM	M3S	0	Brushless	65	24	165-8857	10R-9788
336D LN SB OEM	M3S	0	Brushless	80	24	177-9953	10R-9790
336D LN SB OEM	M3S	0	Brushless	65	24	185-5294	10R-9788
336E HVG UHD OEM	RBS	22	Brushless	80	24	235-7133	-
336E L UHD OEM	PCE	22	Brushless	80	24	235-7133	-
340D 2L OEM	DC8	0	Brushless	65	24	165-8857	10R-9788
345B II MH	APB	0	Brushless	70	24	155-7434	0R-8279
345B II MH	APB	0	Brushless	80	24	177-9953	10R-9790
345B II MH	APB	22	Brushless	75	24	3E-7577	0R-3615
345C HVG UHD OEM	M3F	22	Brushless	80	24	235-7133	-
345C L UHD OEM	L5B	22	Brushless	80	24	235-7133	-
345C LVG UHD OEM	M3E	22	Brushless	80	24	235-7133	-
345C MH FCR	M2R	0	Brushless	75	24	200-2232	0R-9940

# Cat Alternators Section

## Material Handler Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
345C MH FCR	M2R	22	Brushless	95	24	226-7683	-
345C MH FCR	M2R	22	Brushless	80	24	235-7133	-
345C MH HCR	D3S	22	Brushless	95	24	226-7683	-
349E HVG UHD OEM	JAE	22	Brushless	80	24	235-7133	-
385C L MH OEM	M3P	0	Brushless	80	24	177-9953	10R-9790
385C L MH OEM	M3P	0	Brushless	75	24	200-2232	0R-9940
385C L MH OEM	M3P	0	Brushless	75	24	200-8281	0R-9938
385C L MH OEM	M3P	22	Brushless	95	24	226-7683	-
385C LVG UHD OEM	M3W	0	Brushless	80	24	177-9953	10R-9790
385C LVG UHD OEM	M3W	0	Brushless	75	24	200-2232	0R-9940
385C LVG UHD OEM	M3W	0	Brushless	75	24	200-8281	0R-9938
385C LVG UHD OEM	M3W	22	Brushless	95	24	226-7683	-
385C MH OEM	E1Y	0	Brushless	80	24	177-9953	10R-9790
385C MH OEM	E1Y	0	Brushless	75	24	200-2232	0R-9940
385C MH OEM	E1Y	0	Brushless	75	24	200-8281	0R-9938
385C MH OEM	E1Y	22	Brushless	95	24	226-7683	-
M325B MH	BGN	17	Brush	52	12	9W-3043	0R-3652
MH3037	JLH	22	Brushless	95	24	226-7683	-
MH3049	HPB	0	Brushless	95	24	197-8820	10R-9789
MH3059	RBR	0	Brushless	95	24	197-8820	10R-9789
MH3295	PA9	22	Brushless	95	24	226-7683	-
W330B MH	AME	0	Brushless	50	24	112-5041	0R-5206
W330B MH	AME	0	Brushless	50	24	169-3345	10R-9791
W330B MH	AME	22	Brushless	35	24	6N-9294	0R-5217
W345B II MH	ANJ	0	Brushless	70	24	155-7434	0R-8279
W345B II MH	ANJ	0	Brushless	80	24	177-9953	10R-9790
W345B II MH	ANJ	22	Brushless	75	24	3E-7577	0R-3615
W345C MH FCR	R5K	0	Brushless	75	24	200-2232	0R-9940
W345C MH FCR	R5K	22	Brushless	95	24	226-7683	-
W345C MH FCR	R5K	22	Brushless	80	24	235-7133	-

## Medium Hydraulic Excavator Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
320	HEX	22	Brush	115	24	344-5081	-
320	HEX	22	Brush	145	24	352-4700	-
320 GC	KTN	22	Brush	115	24	344-5081	-
320 GC	KTN	22	Brush	145	24	352-4700	-
320D	MZD	22	Brushless	80	24	235-7133	-
320D 2	WDJ	22	Brush	115	24	344-5081	-
320D 2GC	JFM	22	Brush	115	24	344-5081	-
320D 2L	STN	22	Brush	115	24	344-5081	-
320D 2L OEM	K22	22	Brush	115	24	344-5081	-
320D GC	JZA	22	Brushless	80	24	235-7133	-
320D GC OEM	A23	22	Brushless	80	24	235-7133	-
320D GC OEM	A23	22	Brush	115	24	344-5081	-
320D L	KZF	22	Brushless	80	24	235-7133	-
320D OEM	BK8	22	Brush	115	24	344-5081	-
320E	AWS	22	Brushless	80	24	235-7133	-
320E	AWS	22	Brush	115	24	344-5081	-
320E L	LAK	22	Brush	115	24	344-5081	-
320E L	NAZ	22	Brushless	80	24	235-7133	-
320E L OEM	FH8	22	Brushless	80	24	235-7133	-

# Cat Alternators Section

## Medium Hydraulic Excavator Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
320E L OEM	FH8	22	Brush	115	24	344-5081	-
320E LN	DFG	22	Brushless	80	24	235-7133	-
320E LN	DFG	22	Brush	115	24	344-5081	-
320E LRR	TFX	22	Brushless	80	24	235-7133	-
320E LRR	TFX	22	Brush	115	24	344-5081	-
320E OEM	EGX	22	Brushless	80	24	235-7133	-
320E OEM	EGX	22	Brush	115	24	344-5081	-
320E RR	LHN	22	Brushless	80	24	235-7133	-
320E RR	LHN	22	Brush	115	24	344-5081	-
320E RR OEM	S7A	22	Brushless	80	24	235-7133	-
320E RR OEM	S7A	22	Brush	115	24	344-5081	-
320F L	NHD	22	Brush	115	24	344-5081	-
322	8ML	0	Brushless	50	24	112-5041	OR-5206
322	8ML	0	Brushless	50	24	169-3345	10R-9791
322	8ML	22	Brushless	35	24	6N-9294	OR-5217
323	RAZ	22	Brush	115	24	344-5081	-
323	RAZ	22	Brush	145	24	352-4700	-
323D 2L	KBX	22	Brush	115	24	344-5081	-
323D 2L OEM	FEF	22	Brush	115	24	344-5081	-
323D 2LOEM	FH4	22	Brush	115	24	344-5081	-
323D L	NZF	22	Brushless	80	24	235-7133	-
323D L OEM	L5Z	22	Brushless	80	24	235-7133	-
323D OEM	FAW	0	Brushless	65	24	185-5294	10R-9788
323D OEM	FAW	22	Brush	115	24	366-2756	-
323D OEM	GRN	0	Brushless	65	24	165-8857	10R-9788
323E L	RAP	22	Brushless	80	24	235-7133	-
323E L	RAP	22	Brush	115	24	344-5081	-
323E L OEM	FH7	22	Brushless	80	24	235-7133	-
323E L OEM	FH7	22	Brush	115	24	344-5081	-
323E LN	TDW	22	Brushless	80	24	235-7133	-
323E LN	TDW	22	Brush	115	24	344-5081	-
323E SA	YRP	22	Brushless	80	24	235-7133	-
323E SA	YRP	22	Brush	115	24	344-5081	-
323F L	KBY	22	Brush	115	24	344-5081	-
323F OEM	P39	22	Brush	115	24	344-5081	-
324D L	JJG	22	Brush	115	24	366-2756	-
324D LN	TRH	0	Brushless	65	24	165-8857	10R-9788
324D LN	TRH	22	Brush	115	24	366-2756	-
324D LN OEM	KJR	0	Brushless	65	24	165-8857	10R-9788
324D LN OEM	KJR	0	Brushless	80	24	177-9953	10R-9790
324D LN OEM	KJR	0	Brushless	65	24	185-5294	10R-9788
324D LN OEM	KJR	22	Brush	115	24	366-2756	-
324D OEM	LBW	0	Brushless	80	24	177-9953	10R-9790
324D OEM	LBW	22	Brush	115	24	366-2756	-
324E L OEM	K32	22	Brushless	80	24	235-7133	-
324E L OEM	K32	22	Brush	115	24	344-5081	-
324F L	WGL	22	Brush	115	24	344-5081	-
325	7LM	0	Brushless	50	24	112-5041	OR-5206
325	7LM	0	Brushless	50	24	169-3345	10R-9791
325	7LM	22	Brushless	35	24	6N-9294	OR-5217
325B	6DN	0	Brushless	50	24	112-5041	OR-5206
325B	6DN	0	Brushless	50	24	169-3345	10R-9791
325B	6DN	22	Brushless	35	24	6N-9294	OR-5217

# Cat Alternators Section

## Medium Hydraulic Excavator Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
325C	BFE	0	Brushless	80	24	177-9953	10R-9790
325C OEM	MSG	0	Brushless	65	24	165-8857	10R-9788
325C OEM	MSG	0	Brushless	65	24	185-5294	10R-9788
325D L	AZP	0	Brushless	65	24	185-5294	10R-9788
325D L OEM	X3N	0	Brushless	65	24	165-8857	10R-9788
325D L OEM	X3N	0	Brushless	80	24	177-9953	10R-9790
325D L OEM	X3N	0	Brushless	65	24	185-5294	10R-9788
325D L OEM	X3N	22	Brush	115	24	366-2756	-
325D OEM	X3N	0	Brushless	65	24	165-8857	10R-9788
325D OEM	X3N	0	Brushless	80	24	177-9953	10R-9790
325D OEM	X3N	0	Brushless	65	24	185-5294	10R-9788
325D OEM	X3N	22	Brush	115	24	366-2756	-
326D 2	REC	22	Brush	115	24	344-5081	-
326D 2L	XAM	22	Brush	115	24	344-5081	-
326D 2L OEM	HM4	22	Brush	115	24	344-5081	-
326D 2OEM	F3Y	22	Brush	115	24	344-5081	-
326D L	PJM	0	Brushless	65	24	165-8857	10R-9788
326D L	PJM	0	Brushless	65	24	185-5294	10R-9788
326D L	PJM	22	Brush	115	24	366-2756	-
326F	SGK	22	Brush	115	24	344-5081	-
326F L	WGL	22	Brush	115	24	344-5081	-
326F L OEM	CJ8	22	Brush	115	24	344-5081	-
328D LCR	RMX	22	Brush	115	24	366-2756	-
328D LCR	SWF	0	Brushless	65	24	165-8857	10R-9788
328D LCR	SWF	0	Brushless	65	24	185-5294	10R-9788
328D LCR OEM	JTC	0	Brushless	65	24	165-8857	10R-9788
328D LCR OEM	JTC	0	Brushless	65	24	185-5294	10R-9788
328D LCR OEM	JTC	22	Brush	115	24	366-2756	-
329D 2	TMJ	22	Brush	115	24	344-5081	-
329D 2L	THW	22	Brush	115	24	344-5081	-
329D 2L OEM	HER	22	Brush	115	24	344-5081	-
329D L	JHJ	22	Brush	115	24	366-2756	-
329D L	TZL	0	Brushless	80	24	177-9953	10R-9790
329D L	TZL	0	Brushless	65	24	185-5294	10R-9788
329D L	YFW	0	Brushless	65	24	165-8857	10R-9788
329D L OEM	J8D	0	Brushless	65	24	165-8857	10R-9788
329D L OEM	J8D	0	Brushless	80	24	177-9953	10R-9790
329D L OEM	J8D	0	Brushless	65	24	185-5294	10R-9788
329D L OEM	J8D	22	Brush	115	24	366-2756	-
329D LN	EBM	0	Brushless	65	24	165-8857	10R-9788
329D LN	EBM	0	Brushless	65	24	185-5294	10R-9788
329E OEM	KNR	22	Brushless	80	24	235-7133	-
329E OEM	KNR	22	Brush	115	24	344-5081	-
329F	YHA	22	Brush	115	24	344-5081	-
329F L	RCN	22	Brush	115	24	344-5081	-
329F L OEM	B33	22	Brush	115	24	344-5081	-
330D 2L	RCK	22	Brush	115	24	344-5081	-
330D 2L OEM	HSP	22	Brush	115	24	344-5081	-
330F L	LCG	22	Brush	115	24	344-5081	-
330F L OEM	B33	22	Brush	115	24	344-5081	-
330F LN	LBN	22	Brush	115	24	344-5081	-
330F LN OEM	LNK	22	Brush	115	24	344-5081	-
330F OEM	B32	22	Brush	115	24	344-5081	-

# Cat Alternators Section

## Medium Hydraulic Excavator Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
335F	KNE	22	Brush	115	24	344-5081	-
335F LCR OEM	KHM	22	Brush	115	24	344-5081	-

## Medium Wheel Loader Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
936F	9MK	17	Brush	52	12	9W-3043	OR-3652
950 GC	M5K	22	Brush	115	24	344-5081	-
950 GC	M5T	22	Brush	145	24	352-4700	-
950F II	6LL	22	Brush	70	24	107-7977	OR-8279
950G	2JS	0	Brush	130	12	117-1379	OR-9480
950G	2JS	22	Brush	70	24	107-7977	OR-8279
950G II	AYB	0	Brushless	65	24	185-5294	10R-9788
950H	JLX	22	Brush	115	24	366-2756	-
950H	JLX	22	Brushless	75	24	3E-7577	OR-3615
950H	M1G	0	Brushless	80	24	177-9953	10R-9790
950K	R4A	22	Brushless	150	24	272-1889	20R-0053
950K	R4A	22	Brush	115	24	344-5081	-
950L	LXX	22	Brushless	150	24	272-1889	20R-0053
950L	LXX	22	Brush	115	24	344-5081	-
950M	EMB	22	Brushless	150	24	272-1889	20R-0053
950M	EMB	22	Brush	145	24	352-4700	-
950M	ENE	22	Brush	115	24	344-5081	-
950M	HE8	22	Brushless	270	24	322-9743	-
960F	6XL	0	Brushless	95	24	197-8820	10R-9789
960F	6XL	22	Brushless	105	24	316-7251	-
960F	6XL	22	Brushless	75	24	3E-7577	OR-3615
962G II	AYE	22	Brush	70	24	107-7977	OR-8279
962H	K6K	0	Brushless	80	24	177-9953	10R-9790
962H	PCW	22	Brush	115	24	366-2756	-
962H	PCW	22	Brushless	75	24	3E-7577	OR-3615
962H OEM	L5S	0	Brushless	80	24	177-9953	10R-9790
962K	FLL	22	Brushless	150	24	272-1889	20R-0053
962K	FLL	22	Brush	115	24	344-5081	-
962L	MTN	22	Brushless	150	24	272-1889	20R-0053
962L	MTN	22	Brush	115	24	344-5081	-
962M	F2T	22	Brushless	150	24	272-1889	20R-0053
962M	F2T	22	Brush	145	24	352-4700	-
962M	LSE	22	Brush	115	24	344-5081	-
966E	6ZC	0	Brush	130	12	117-1379	OR-9480
966E	6ZC	0	Brushless	80	24	177-9953	10R-9790
966F II	4YG	22	Brush	70	24	107-7977	OR-8279
966F II	4YG	0	Brushless	50	24	112-5041	OR-5206
966F II	4YG	0	Brushless	80	24	177-9953	10R-9790
966G	AAH	0	Brushless	95	24	197-8820	10R-9789
966G	AAH	22	Brushless	105	24	331-5717	20R-0541
966G II	ANT	0	Brush	130	12	117-1379	OR-9480
966H	A6D	22	Brushless	80	24	235-7133	-
966H	A6D	22	Brush	115	24	344-5081	-
966H	BS6	22	Brushless	150	24	272-1889	20R-0053
966H OEM	CYR	22	Brushless	80	24	235-7133	-
966K	TFS	22	Brushless	95	24	226-7683	-
966K	TFS	22	Brushless	150	24	272-1889	20R-0053

# Cat Alternators Section

## Medium Wheel Loader Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
966K XE	NGX	22	Brushless	150	24	272-1889	20R-0053
966L	FRS	0	Brushless	80	24	177-9953	10R-9790
966L	FRS	22	Brushless	150	24	272-1889	20R-0053
966L	FRS	22	Brush	115	24	344-5081	-
966L	FRS	22	Brush	145	24	352-4700	-
966M	LMM	22	Brushless	150	24	272-1889	20R-0053
966M	LMM	22	Brush	145	24	352-4700	-
966M	R8D	0	Brushless	80	24	177-9953	10R-9790
966M XE	P6C	0	Brushless	80	24	177-9953	10R-9790
966M XE	P6C	22	Brushless	150	24	272-1889	20R-0053
966M XE	P6C	22	Brush	145	24	352-4700	-
970F	9JK	0	Brush	130	12	117-1379	0R-9480
970F	9JK	0	Brushless	50	24	112-5041	0R-5206
970F	9JK	22	Brushless	75	24	3E-7577	0R-3615
972G	1EW	0	Brush	130	12	117-1379	0R-9480
972G	6AW	22	Brush	70	24	107-7977	0R-8279
972G	6AW	0	Brushless	50	24	112-5041	0R-5206
972H	A7J	22	Brushless	95	24	226-7683	-
972H	A7J	22	Brushless	80	24	235-7133	-
972H	A7J	22	Brush	115	24	344-5081	-
972K	Z4W	22	Brushless	95	24	226-7683	-
972K	Z4W	22	Brushless	150	24	272-1889	20R-0053
972L	RFB	0	Brushless	80	24	177-9953	10R-9790
972L	RFB	22	Brushless	150	24	272-1889	20R-0053
972L	RFB	22	Brush	115	24	344-5081	-
972L	RFB	22	Brush	145	24	352-4700	-
972M	GGN	0	Brushless	80	24	177-9953	10R-9790
972M	GGN	22	Brushless	150	24	272-1889	20R-0053
972M	GGN	22	Brush	145	24	352-4700	-
972M XE	EDW	0	Brushless	80	24	177-9953	10R-9790
972M XE	EDW	22	Brushless	150	24	272-1889	20R-0053
972M XE	EDW	22	Brush	145	24	352-4700	-
980C	2XD	22	Brush	70	24	107-7977	0R-8279
980C	2XD	22	Brushless	80	24	235-7133	-
980C	2XD	22	Brushless	75	24	3E-7577	0R-3615
980C	2XD	22	Brushless	35	24	6N-9294	0R-5217
980F	3HK	22	Brush	70	24	107-7977	0R-8279
980F	3HK	22	Brushless	80	24	235-7133	-
980F	3HK	22	Brushless	35	24	6N-9294	0R-5217
980F	4RN	22	Brushless	75	24	3E-7577	0R-3615
980G	2KR	0	Brushless	50	24	112-5041	0R-5206
980G	2KR	0	Brushless	80	24	177-9953	10R-9790
980G	2KR	0	Brushless	95	24	197-8820	10R-9789
980G	2KR	22	Brushless	35	24	6N-9294	0R-5217
980H	JMS	0	Brushless	80	24	177-9953	10R-9790
980H	JMS	0	Brushless	65	24	185-5294	10R-9788
980H	PF8	0	Brushless	95	24	197-8820	10R-9789
980H	PF8	22	Brush	115	24	366-2756	-
980H II	MKP	0	Brushless	80	24	177-9953	10R-9790
980H II	MKP	0	Brushless	65	24	185-5294	10R-9788
980H II	MKP	0	Brushless	95	24	197-8820	10R-9789
980H OEM	P8B	0	Brushless	80	24	177-9953	10R-9790
980H OEM	P8B	0	Brushless	95	24	197-8820	10R-9789



# Cat Alternators Section

## Medium Wheel Loader Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
980K	W7K	22	Brushless	95	24	226-7683	-
980K	W7K	22	Brushless	150	24	272-1889	20R-0053
980K OEM	NEP	22	Brushless	95	24	226-7683	-
980K OEM	NEP	22	Brushless	150	24	272-1889	20R-0053
980L	D8Z	0	Brushless	80	24	177-9953	10R-9790
980L	D8Z	22	Brush	115	24	344-5081	-
980L	D8Z	22	Brush	145	24	352-4700	-
980M	MGD	0	Brushless	80	24	177-9953	10R-9790
980M	MGD	22	Brush	145	24	352-4700	-
980M	N8T	22	Brushless	150	24	272-1889	20R-0053
982M	K1Y	0	Brushless	80	24	177-9953	10R-9790
982M	K1Y	22	Brushless	150	24	272-1889	20R-0053
982M	LRS	22	Brush	145	24	352-4700	-
IT62H	M5G	0	Brushless	80	24	177-9953	10R-9790
IT62H	M5G	22	Brushless	75	24	3E-7577	0R-3615
LH85	TLA	0	Brush	130	12	117-1379	0R-9480
LH85	TLA	22	Brush	70	24	107-7977	0R-8279
LH85	TLA	0	Brushless	65	24	185-5294	10R-9788
LH90	TLB	0	Brush	130	12	117-1379	0R-9480
LH90	TLB	22	Brush	70	24	107-7977	0R-8279
LH90	TLB	0	Brushless	65	24	185-5294	10R-9788

## Motor Grader Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
112E	24H	0	Brushless	50	24	169-3345	10R-9791
112E	24H	22	Brushless	35	24	6N-9294	0R-5217
120 AWD	E95	22	Brush	115	24	344-5081	-
120 AWD	Y9B	22	Brushless	150	24	272-1889	20R-0053
120 AWD	Y9B	22	Brush	145	24	352-4700	-
120G	4HD	0	Brushless	50	24	112-5041	0R-5206
120G	4HD	0	Brushless	50	24	169-3345	10R-9791
120G	4HD	22	0	15	24	2P-1204	0R-5217
120G	4HD	22	Brushless	75	24	3E-7577	0R-3615
120G	4HD	22	Brushless	35	24	6N-9294	0R-5217
120H	2AN	0	Brushless	95	24	197-8820	10R-9789
120H	2AN	22	Brushless	105	24	316-7251	-
120H	CAF	0	Brushless	80	24	177-9953	10R-9790
120H	CAF	0	Brushless	75	24	200-2232	0R-9940
120H	CAF	0	Brushless	75	24	200-8281	0R-9938
120H	CAF	22	Brushless	75	24	3E-7577	0R-3615
120K	JAP	0	Brushless	50	24	169-3345	10R-9791
120K	JAP	0	Brushless	80	24	177-9953	10R-9790
120K	JAP	0	Brushless	95	24	197-8820	10R-9789
120K	JAP	22	Brush	115	24	366-2756	-
120K	JAP	22	Brushless	35	24	6N-9294	0R-5217
120K 2 OEM	SZZ	0	Brushless	95	24	197-8820	10R-9789
120K 2 OEM	SZZ	22	Brush	115	24	366-2756	-
120K 3	E9H	22	Brush	115	24	344-5081	-
120K Series 2	SZS	0	Brushless	95	24	197-8820	10R-9789
120K Series 2	SZS	22	Brush	115	24	366-2756	-
120M	B9C	22	Brushless	95	24	226-7683	-
120M	B9C	22	Brushless	150	24	272-1889	20R-0053

# Cat Alternators Section

## Motor Grader Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
120M	R9C	0	Brushless	80	24	177-9953	10R-9790
120M	R9C	0	Brushless	95	24	197-8820	10R-9789
120M	R9C	0	Brushless	75	24	200-8281	0R-9938
120M	R9C	22	Brushless	80	24	235-7133	-
120M	R9C	22	Brushless	150	24	249-0313	10R-9097
120M 2	M9C	22	Brushless	150	24	272-1889	20R-0053
120M 2	M9C	22	Brushless	270	24	322-9743	-
120M 2 OEM	M92	22	Brushless	150	24	272-1889	20R-0053
12G	3WC	0	Brushless	50	24	112-5041	0R-5206
12G	3WC	0	Brushless	50	24	169-3345	10R-9791
12G	3WC	22	0	15	24	2P-1204	0R-5217
12G	3WC	22	Brushless	75	24	3E-7577	0R-3615
12G	3WC	22	Brushless	35	24	6N-9294	0R-5217
12H	2GS	0	Brushless	50	24	112-5041	0R-5206
12H	2GS	0	Brushless	80	24	177-9953	10R-9790
12H	2GS	0	Brushless	95	24	197-8820	10R-9789
12H	2GS	0	Brushless	75	24	200-8281	0R-9938
12H	2GS	22	Brushless	105	24	316-7251	-
12H	4ER	22	Brushless	35	24	6N-9294	0R-5217
12H	CBK	0	Brushless	50	24	169-3345	10R-9791
12H	CBK	0	Brushless	75	24	200-2232	0R-9940
12H	CBK	22	Brushless	75	24	3E-7577	0R-3615
12K	JJA	0	Brushless	50	24	169-3345	10R-9791
12K	JJA	0	Brushless	80	24	177-9953	10R-9790
12K	JJA	0	Brushless	95	24	197-8820	10R-9789
12K	JJA	22	Brush	115	24	366-2756	-
12K	JJA	22	Brushless	35	24	6N-9294	0R-5217
12M	B92	0	Brushless	80	24	177-9953	10R-9790
12M	B92	0	Brushless	95	24	197-8820	10R-9789
12M	B92	22	Brushless	150	24	249-0313	10R-9097
12M	B9R	22	Brushless	95	24	226-7683	-
12M	B9R	22	Brushless	80	24	235-7133	-
12M	B9R	22	Brushless	150	24	272-1889	20R-0053
12M 2	F9B	22	Brushless	150	24	272-1889	20R-0053
12M 2	F9B	22	Brushless	270	24	322-9743	-
12M 3	N9F	22	Brushless	150	24	272-1889	20R-0053
12M 3	N9F	22	Brushless	270	24	322-9743	-
130G	74V	0	Brushless	50	24	112-5041	0R-5206
130G	74V	0	Brushless	50	24	169-3345	10R-9791
130G	74V	22	Brushless	60	24	266-7227	10R-8877
130G	74V	22	Brushless	105	24	331-5717	-
130G	74V	22	Brushless	60	24	333-1184	10R-8877
130G	74V	22	0	15	24	2P-1204	0R-5217
130G	74V	22	Brushless	75	24	3E-7577	0R-3615
130G	74V	22	Brushless	35	24	6N-9294	0R-5217
135H	3YK	0	Brushless	95	24	197-8820	10R-9789
135H	3YK	22	Brushless	105	24	316-7251	-
135H	AMX	0	Brushless	50	24	169-3345	10R-9791
135H	AMX	0	Brushless	80	24	177-9953	10R-9790
135H	AMX	0	Brushless	75	24	200-2232	0R-9940
135H	AMX	0	Brushless	75	24	200-8281	0R-9938
135H	AMX	22	Brushless	75	24	3E-7577	0R-3615
140G	50H	0	Brushless	50	24	112-5041	0R-5206

# Cat Alternators Section

## Motor Grader Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
140G	50H	0	Brushless	50	24	169-3345	10R-9791
140G	50H	0	Brushless	80	24	177-9953	10R-9790
140G	50H	22	0	15	24	2P-1204	0R-5217
140G	50H	22	Brushless	75	24	3E-7577	0R-3615
140G	50H	22	Brushless	35	24	6N-9294	0R-5217
140H	5HM	0	Brushless	80	24	177-9953	10R-9790
140H	8KM	0	Brushless	50	24	112-5041	0R-5206
140H	8KM	0	Brushless	50	24	169-3345	10R-9791
140H	9ZN	0	Brushless	95	24	197-8820	10R-9789
140H	9ZN	0	Brushless	75	24	200-8281	0R-9938
140H	9ZN	22	Brushless	105	24	316-7251	-
140H	9ZN	22	Brushless	75	24	3E-7577	0R-3615
140H	9ZN	22	Brushless	35	24	6N-9294	0R-5217
140H	CCA	22	Brushless	110	12	266-7224	0R-9939
140H	CCA	0	Brushless	75	24	200-2232	0R-9940
140H	CCA	22	Brushless	95	24	226-7683	-
140K	JPA	0	Brushless	50	24	169-3345	10R-9791
140K	JPA	0	Brushless	80	24	177-9953	10R-9790
140K	JPA	0	Brushless	95	24	197-8820	10R-9789
140K	JPA	22	Brush	115	24	366-2756	-
140K	JPA	22	Brushless	35	24	6N-9294	0R-5217
140K 2	SZW	0	Brushless	50	24	169-3345	10R-9791
140K 2	SZW	0	Brushless	80	24	177-9953	10R-9790
140K 2	SZW	0	Brushless	95	24	197-8820	10R-9789
140K 2	SZW	22	Brush	115	24	366-2756	-
140K 2	SZW	22	Brushless	35	24	6N-9294	0R-5217
140M	B9D	0	Brushless	95	24	197-8820	10R-9789
140M	B9D	0	Brushless	75	24	200-8281	0R-9938
140M	D9G	0	Brushless	80	24	177-9953	10R-9790
140M	D9G	22	Brushless	150	24	249-0313	10R-9097
140M 2	M9D	0	Brushless	80	24	177-9953	10R-9790
140M 2	M9D	0	Brushless	95	24	197-8820	10R-9789
140M 2	M9D	22	Brushless	150	24	249-0313	10R-9097
140M 2	M9D	22	Brushless	150	24	272-1889	20R-0053
140M 2	M9G	22	Brushless	270	24	322-9743	-
140M 3	N9D	22	Brushless	150	24	272-1889	20R-0053
140M 3	N9D	22	Brushless	270	24	322-9743	-
143H	1AL	0	Brushless	50	24	112-5041	0R-5206
143H	1AL	0	Brushless	50	24	169-3345	10R-9791
143H	1AL	0	Brushless	80	24	177-9953	10R-9790
143H	1AL	0	Brushless	95	24	197-8820	10R-9789
143H	1AL	0	Brushless	75	24	200-8281	0R-9938
143H	1AL	22	Brushless	105	24	316-7251	-
143H	1AL	22	Brushless	75	24	3E-7577	0R-3615
143H	1AL	22	Brushless	35	24	6N-9294	0R-5217
143H	APN	22	Brushless	110	12	266-7224	0R-9939
143H	APN	0	Brushless	75	24	200-2232	0R-9940
143H	APN	22	Brushless	95	24	226-7683	-
14G	96U	0	Brushless	50	24	112-5041	0R-5206
14G	96U	0	Brushless	50	24	169-3345	10R-9791
14G	96U	22	0	15	24	2P-1204	0R-5217
14G	96U	22	Brushless	75	24	3E-7577	0R-3615
14G	96U	22	Brushless	35	24	6N-9294	0R-5217

# Cat Alternators Section

## Motor Grader Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
14H	7WJ	0	Brushless	50	24	112-5041	OR-5206
14H	7WJ	0	Brushless	50	24	169-3345	10R-9791
14H	7WJ	0	Brushless	80	24	177-9953	10R-9790
14H	7WJ	0	Brushless	95	24	197-8820	10R-9789
14H	7WJ	0	Brushless	75	24	200-8281	OR-9938
14H	7WJ	22	Brushless	105	24	316-7251	-
14H	7WJ	22	Brushless	75	24	3E-7577	OR-3615
14H	7WJ	22	Brushless	35	24	6N-9294	OR-5217
14H	ASE	22	Brushless	110	12	266-7224	OR-9939
14H	ASE	0	Brushless	75	24	200-2232	OR-9940
14H	ASE	22	Brushless	95	24	226-7683	-
14L	B94	0	Brushless	80	24	177-9953	10R-9790
14L	B94	0	Brushless	95	24	197-8820	10R-9789
14L	B94	0	Brushless	75	24	200-8281	OR-9938
14L	B94	22	Brushless	150	24	249-0313	10R-9097
14M	R9J	0	0	160	12	306-2173	20R-4037
14M	R9J	0	Brushless	80	24	177-9953	10R-9790
14M	R9J	22	Brushless	95	24	226-7683	-
14M	R9J	22	Brushless	80	24	235-7133	-
14M	R9J	22	Brushless	150	24	272-1889	20R-0053
14M 3	E9S	22	Brushless	150	24	272-1889	20R-0053
14M 3	E9S	22	Brushless	270	24	322-9743	-
160H	2HS	0	Brushless	50	24	112-5041	OR-5206
160H	2HS	0	Brushless	80	24	177-9953	10R-9790
160H	2HS	22	Brushless	105	24	316-7251	-
160H	2HS	22	Brushless	75	24	3E-7577	OR-3615
160H	2HS	22	Brushless	35	24	6N-9294	OR-5217
160H	9EJ	0	Brushless	95	24	197-8820	10R-9789
160H	9EJ	0	Brushless	75	24	200-8281	OR-9938
160H	ASD	22	Brushless	110	12	266-7224	OR-9939
160H	ASD	0	Brushless	75	24	200-2232	OR-9940
160H	ASD	22	Brushless	95	24	226-7683	-
160H	XZK	0	Brushless	50	24	169-3345	10R-9791
160K	JBP	0	Brushless	50	24	169-3345	10R-9791
160K	JBP	0	Brushless	80	24	177-9953	10R-9790
160K	JBP	0	Brushless	95	24	197-8820	10R-9789
160K	JBP	22	Brush	115	24	366-2756	-
160K	JBP	22	Brushless	35	24	6N-9294	OR-5217
160M	D9T	0	Brushless	80	24	177-9953	10R-9790
160M	D9T	0	Brushless	95	24	197-8820	10R-9789
160M	D9T	0	Brushless	75	24	200-8281	OR-9938
160M	D9T	22	Brushless	150	24	249-0313	10R-9097
160M 2	R9L	22	Brushless	95	24	226-7683	-
160M 2	R9L	22	Brushless	150	24	272-1889	20R-0053
160M 2	R9T	22	Brushless	270	24	322-9743	-
160M 3	N9T	22	Brushless	150	24	272-1889	20R-0053
160M 3	N9T	22	Brushless	270	24	322-9743	-
163H	5AK	0	Brushless	50	24	112-5041	OR-5206
163H	5AK	0	Brushless	50	24	169-3345	10R-9791
163H	5AK	0	Brushless	80	24	177-9953	10R-9790
163H	5AK	0	Brushless	95	24	197-8820	10R-9789
163H	5AK	0	Brushless	75	24	200-8281	OR-9938
163H	5AK	22	Brushless	105	24	316-7251	-

# Cat Alternators Section

## Motor Grader Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
163H	5AK	22	Brushless	75	24	3E-7577	OR-3615
163H	5AK	22	Brushless	35	24	6N-9294	OR-5217
163H	ARL	22	Brushless	110	12	266-7224	OR-9939
163H	ARL	0	Brushless	75	24	200-2232	OR-9940
163H	ARL	22	Brushless	95	24	226-7683	-
16G	93U	0	Brushless	50	24	112-5041	OR-5206
16G	93U	0	Brushless	50	24	169-3345	10R-9791
16G	93U	22	Brushless	75	24	3E-7577	OR3615
16G	93U	22	Brushless	35	24	6N-9294	OR-5217
16H	6ZJ	0	Brushless	50	24	112-5041	OR-5206
16H	6ZJ	0	Brushless	50	24	169-3345	10R-9791
16H	6ZJ	0	Brushless	80	24	177-9953	10R-9790
16H	6ZJ	0	Brushless	95	24	197-8820	10R-9789
16H	6ZJ	0	Brushless	75	24	200-8281	OR-9938
16H	6ZJ	22	Brushless	105	24	316-7251	-
16H	6ZJ	22	Brushless	75	24	3E-7577	OR-3615
16H	6ZJ	22	Brushless	35	24	6N-9294	OR-5217
16H	ATS	22	Brushless	110	12	266-7224	OR-9939
16H	ATS	0	Brushless	75	24	200-2232	OR-9940
16H	ATS	22	Brushless	95	24	226-7683	-
16M	B9H	0	0	160	12	306-2173	20R-4037
16M	B9H	22	Brushless	95	24	226-7683	-
16M	B9H	22	Brushless	150	24	272-1889	20R-0053
16M 3	N9Y	22	Brushless	150	24	272-1889	20R-0053
16M 3	N9Y	22	Brushless	270	24	322-9743	-
18M 3	N9A	22	Brushless	150	24	272-1889	20R-0053
18M 3	N9A	22	Brushless	270	24	322-9743	-
24H	7KK	0	Brushless	95	24	197-8820	10R-9789
24H	7KK	22	Brushless	150	24	249-0313	10R-9097
24H	7KK	22	Brushless	105	24	316-7251	-
24M	B9K	0	Brushless	95	24	197-8820	10R-9789
24M	B9K	22	Brushless	150	24	249-0313	10R-9097
24M	B9K	22	Brushless	150	24	437-0124	-
24N	N9Z	22	Brushless	150	24	272-1889	20R-0053

## Paving Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
30/30	9XW	0	Brushless	95	24	197-8820	10R-9789
30/30	9XW	22	Brushless	105	24	316-7251	-
AP-1000	1HD	0	Brush	115	12	121-4134	OR-3527
AP-1000	1HD	0	Brush	130	12	121-4135	OR-9480
AP-1000B	AGP	17	Brush	52	12	9W-3043	OR-3652
AP-1000D	EAD	0	Brushless	95	24	197-8820	10R-9789
AP-1000D	EAD	22	Brushless	105	24	316-7251	-
AP1000E	T1F	22	0	105	24	321-8940	-
AP1000F	AC4	22	Brush	115	24	344-5081	-
AP-1050B	6ZN	17	Brush	52	12	9W-3043	OR-3652
AP-1055D	FAC	0	Brushless	95	24	197-8820	10R-9789
AP-1055D	FAC	22	Brushless	105	24	316-7251	-
AP1055E	TJF	22	0	105	24	321-8940	-
AP1055F	RLM	22	Brush	115	24	344-5081	-
AP600F	LR6	22	Brush	115	24	344-5081	-

# Cat Alternators Section

## Paving Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
AP-650B	9DN	17	Brush	52	12	9W-3043	OR-3652
AP-650B	9DN	0	0	55	24	109-2362	-
AP-655C	CDG	0	Brushless	80	24	177-9953	10R-9790
AP-655C	CDG	0	Brushless	75	24	200-8281	OR-9938
AP655F	ML6	22	Brush	115	24	344-5081	-
AP-755	B2T	0	Brush	130	12	117-1379	OR-9480
AP-755	B2T	22	Brush	70	24	107-7977	OR-8279
AP-755	B3T	0	Brushless	80	24	177-9953	10R-9790
AP-755	B3T	0	Brushless	95	24	197-8820	10R-9789
AP-755	B3T	22	Brushless	105	24	316-7251	10R-8755
AP-800C	1PM	17	Brush	52	12	9W-3043	OR-3652
AP-900B	AGJ	17	Brush	52	12	9W-3043	OR-3652
BB-781	B2F	0	Brush	130	12	117-1379	OR-9480
BB-781	B2F	22	Brush	70	24	107-7977	OR-8279
BG1000E	RTT	22	0	105	24	321-8940	-
BG-210B/C	9XJ	0	Brush	115	12	121-4134	OR-3527
BG-2255C	CKR	0	Brushless	80	24	177-9953	10R-9790
BG-2255C	CKR	0	Brushless	75	24	200-8281	OR-9938
BG-225C	5GN	17	Brush	52	12	9W-3043	OR-3652
BG-225C	5GN	0	0	55	24	109-2362	-
BG-230	9AL	17	Brush	52	12	9W-3043	OR-3652
BG-240C	AGL	17	Brush	52	12	9W-3043	OR-3652
BG-2455C	B2G	17	Brush	52	12	9W-3043	OR-3652
BG-2455D	BNW	0	Brushless	95	24	197-8820	10R-9789
BG-2455D	BNW	22	Brushless	105	24	316-7251	10R-8755
BG-245C/C	4XN	17	Brush	52	12	9W-3043	OR-3652
BG-260C/C	8GN	17	Brush	52	12	9W-3043	OR-3652
BG-260D	BPW	0	Brushless	95	24	197-8820	10R-9789
BG-260D	BPW	22	Brushless	105	24	316-7251	-
BG-650/C	9EK	0	Brush	115	12	121-4134	OR3527
BG-730/C	1XL	0	Brush	115	12	121-4134	OR3527
BG-730/C	1XL	0	Brush	130	12	121-4135	OR-9480
CB-434B	6AL	17	Brush	52	12	9W-3043	OR-3652
CB-434C	4DN	17	Brush	52	12	9W-3043	OR-3652
CB-434D	CNH	0	Brush	90	12	105-2813	OR-9274
CB-444D	C6B	0	Brush	90	12	105-2813	OR-9274
CB-534	2EG	0	Brushless	50	24	169-3345	10R-9791
CB-534	2EG	22	Brushless	35	24	6N-9294	OR-5217
CB-534B	5RN	17	Brush	52	12	9W-3043	OR-3652
CB-534C	1WS	17	Brush	52	12	9W-3043	OR-3652
CB-534D	C8M	0	Brush	90	12	105-2813	OR-9274
CB-534D XW	FEA	0	Brush	90	12	105-2813	OR-9274
CB-535B	3AR	17	Brush	52	12	9W-3043	OR-3652
CB-544	8FM	17	Brush	52	12	9W-3043	OR-3652
CB-544D	C3B	0	Brush	90	12	105-2813	OR9274
CB-545	2FS	17	Brush	52	12	9W-3043	OR-3652
CB-564D	D4M	0	Brush	90	12	105-2813	OR-9274
CB-634	5CL	17	Brush	52	12	9W-3043	OR-3652
CB-634C	3BR	17	Brush	52	12	9W-3043	OR-3652
CB-634D	CDF	0	Brush	90	12	105-2813	OR-9274
CD54	J5R	0	Brush	90	12	105-2813	OR-9274
CP-433C	1ZN	17	Brush	52	12	9W-3043	OR-3652
CP-433E	CFK	17	Brush	52	12	9W-3043	OR-3652

# Cat Alternators Section

## Paving Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
CP44	M4P	17	Brush	85	24	328-2885	-
CP-533	5AL	17	Brush	52	12	9W-3043	OR-3652
CP-533C	3XN	17	Brush	52	12	9W-3043	OR-3652
CP-533D	AFC	17	Brush	52	12	9W-3043	OR-3652
CP-563	5AJ	16	Brush	51	12	6T-1396	OR-3654
CP-563	5AJ	17	Brush	52	12	9W-3043	OR-3652
CP-563C	5JN	17	Brush	52	12	9W-3043	OR-3652
CP-563D	5LZ	17	Brush	52	12	9W-3043	OR-3652
CP-563E	CNT	17	Brush	52	12	9W-3043	OR-3652
CP-573E	ASZ	17	Brush	52	12	9W-3043	OR-3652
CP-663E	AFL	17	Brush	52	12	9W-3043	OR-3652
CS-423E	DCL	17	Brush	52	12	9W-3043	OR-3652
CS-431C	9XL	17	Brush	52	12	9W-3043	OR-3652
CS-433C	5BZ	17	Brush	52	12	9W-3043	OR-3652
CS-433E	CFP	17	Brush	52	12	9W-3043	OR-3652
CS44	M4C	17	Brush	85	24	328-2885	-
CS-531	4KM	17	Brush	52	12	9W-3043	OR-3652
CS-531C	5ZN	0	Brush	130	12	117-1379	OR-9480
CS-531C	5ZN	17	Brush	52	12	9W-3043	OR-3652
CS-531C	5ZN	22	Brush	70	24	107-7977	OR-8279
CS-531D	4MZ	17	Brush	52	12	9W-3043	OR-3652
CS-533	4HL	17	Brush	52	12	9W-3043	OR-3652
CS-533C	2XN	17	Brush	52	12	9W3043	OR-3652
CS-533D	AET	17	Brush	52	12	9W-3043	OR-3652
CS-563	7GG	16	Brush	51	12	6T-1396	OR-3654
CS-563	7GG	17	Brush	52	12	9W-3043	OR-3652
CS-563C	4LN	17	Brush	52	12	9W-3043	OR-3652
CS-563D	2RZ	17	Brush	52	12	9W-3043	OR-3652
CS-563E	ASA	17	Brush	52	12	9W-3043	OR-3652
CS-563E OEM	PAH	17	Brush	52	12	9W-3043	OR-3652
CS-573	8PK	17	Brush	52	12	9W-3043	OR-3652
CS-573C	6LN	17	Brush	52	12	9W3043	OR-3652
CS-573D	CMK	17	Brush	52	12	9W-3043	OR-3652
CS-573E	CNN	17	Brush	52	12	9W-3043	OR-3652
CS-583	8YJ	16	Brush	51	12	6T-1396	OR-3654
CS-583	8YJ	17	Brush	52	12	9W-3043	OR-3652
CS-583C	7MN	17	Brush	52	12	9W-3043	OR-3652
CS-583D	2CZ	17	Brush	52	12	9W-3043	OR-3652
CS-583E	CNX	17	Brush	52	12	9W-3043	OR3652
CS-663E	DAG	17	Brush	52	12	9W-3043	OR-3652
CS-683E	AGR	17	Brush	52	12	9W-3043	OR-3652
DEUCE	7RR	0	Brushless	95	24	197-8820	10R-9789
DEUCE	7RR	0	0	150	24	306-2174	10R-7946
DEUCE	7RR	22	Brushless	105	24	316-7251	-
PF-300B	6HM	17	Brush	52	12	9W-3043	OR-3652
PM-102	Z2X	0	Brushless	80	24	177-9953	10R-9790
PM102	Z1X	0	Brush	130	12	117-1379	OR-9480
PM102	Z1X	22	Brush	70	24	107-7977	OR-8279
PM-200	P1C	0	Brushless	95	24	197-8820	10R-9789
PM-200	P1C	22	Brushless	95	24	226-7683	-
PM-200	P1C	22	Brushless	105	24	316-7251	-
PM-200	P1C	22	Brushless	105	24	331-5717	-
PM-201	PNM	0	Brushless	95	24	197-8820	10R-9789

# Cat Alternators Section

## Paving Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
PM-201	PNM	22	Brushless	95	24	226-7683	-
PM-201	PNM	22	Brushless	105	24	316-7251	10R-8755
PM-201	PNM	22	Brushless	105	24	331-5717	20R-0541
PM310 HRC	NMA	22	Brush	115	24	344-5081	-
PM310 LRC	KWA	22	Brush	115	24	344-5081	-
PM312 HRC	NJ9	22	Brush	115	24	344-5081	-
PM313 HRC	JH9	22	Brush	115	24	344-5081	-
PM-465	5ZS	0	Brushless	95	24	197-8820	10R-9789
PM-465	5ZS	22	Brushless	105	24	316-7251	-
PM-565	3TK	0	Brushless	95	24	197-8820	10R9789
PM-565	3TK	22	Brushless	105	24	316-7251	-
PM-565	3TK	22	Brushless	75	24	3E-7577	0R-3615
PM-565B	8GS	0	Brushless	95	24	197-8820	10R-9789
PM-565B	8GS	22	Brushless	105	24	316-7251	-
PM620 HRC	JB9	22	Brushless	150	24	272-1889	20R-0053
PM620 LRC	LH9	22	Brushless	150	24	272-1889	20R-0053
PM622 HRC	JFC	22	Brushless	150	24	272-1889	20R-0053
PM622 LRC	JCF	22	Brushless	150	24	272-1889	20R-0053
PM820	TLZ	22	Brushless	150	24	272-1889	20R-0053
PM822 HRC	SL8	22	Brushless	150	24	272-1889	20R-0053
PR-1000	5XC	22	Brushless	60	24	266-7227	10R-8877
PR-1000	5XC	22	Brushless	105	24	331-5717	-
PR-1000	5XC	22	Brushless	60	24	333-1184	10R-8877
PR-450C	7PJ	0	Brushless	80	24	177-9953	10R-9790
PR-450C	7PJ	0	Brushless	75	24	200-8281	0R-9938
PR-450C	7PJ	22	Brushless	60	24	266-7227	10R-8877
PR-450C	7PJ	22	Brushless	105	24	331-5717	-
PR-450C	7PJ	22	Brushless	60	24	333-1184	10R-8877
PR-750C	7CK	22	Brushless	60	24	333-1184	10R-8877
PS-300B	4PN	17	Brush	52	12	9W-3043	0R-3652
PS-500	7XD	17	Brush	52	12	9W-3043	0R-3652
RM-250C	AWG	0	Brushless	50	24	112-5041	0R-5206
RM-250C	AWG	0	Brushless	50	24	169-3345	10R-9791
RM-250C	AWG	22	Brushless	35	24	6N-9294	0R-5217
RM-300	BWR	0	Brushless	75	24	200-2232	0R-9940
RM-300	BWR	22	Brushless	95	24	226-7683	-
RM-350	5FK	0	Brushless	50	24	112-5041	0R5206
RM-350	5FK	0	Brushless	50	24	169-3345	10R-9791
RM-350	5FK	22	Brushless	35	24	6N-9294	0R-5217
RM-350B	AXW	0	Brushless	50	24	112-5041	0R-5206
RM-350B	AXW	0	Brushless	50	24	169-3345	10R-9791
RM-350B	AXW	0	Brushless	80	24	177-9953	10R-9790
RM-350B	AXW	22	Brushless	35	24	6N-9294	0R-5217
RM-500	ASW	0	Brushless	95	24	197-8820	10R-9789
RM-500	ASW	22	Brushless	95	24	226-7683	-
RM-500	ASW	22	Brushless	105	24	316-7251	-
RM-500	ASW	22	Brushless	105	24	331-5717	-
RM500B	MB9	22	Brushless	150	24	272-1889	20R-0053
RR-250	6ED	0	Brushless	50	24	112-5041	0R-5206
RR-250	6ED	0	Brushless	50	24	169-3345	10R-9791
RR-250	6ED	22	Brushless	35	24	6N-9294	0R-5217
RR-250B	3RR	0	Brushless	50	24	112-5041	0R-5206
RR-250B	3RR	0	Brushless	50	24	169-3345	10R-9791



# Cat Alternators Section

## Paving Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
RR-250B	3RR	22	Brushless	35	24	6N-9294	OR-5217
SM-350	1RM	0	Brushless	50	24	112-5041	OR-5206
SM-350	1RM	0	Brushless	50	24	169-3345	10R-9791
SM-350	1RM	22	Brushless	35	24	6N-9294	OR-5217
SS-250	6DD	0	Brushless	50	24	112-5041	OR-5206
SS-250	6DD	0	Brushless	50	24	169-3345	10R-9791
SS-250	6DD	22	Brushless	35	24	6N-9294	OR-5217
SS-250B	5GR	0	Brushless	50	24	112-5041	OR-5206
SS-250B	5GR	0	Brushless	50	24	169-3345	10R-9791
SS-250B	5GR	22	Brushless	35	24	6N-9294	OR-5217

## Pipelayer Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
561N	TAD	0	Brush	130	12	117-1379	OR-9480
561N	TAD	22	Brush	70	24	107-7977	OR-8279
561N	TAD	0	Brushless	65	24	185-5294	10R-9788
572G	8PC	0	Brushless	50	24	112-5041	OR-5206
572G	8PC	22	0	15	24	2P-1204	OR-5217
572G	8PC	22	Brushless	35	24	6N-9294	OR-5217
572R	AAC	0	Brush	130	12	117-1379	OR-9480
572R	AAC	22	Brush	70	24	107-7977	OR-8279
572R	AAC	0	Brushless	65	24	165-8857	10R-9788
572R	AAC	0	Brushless	65	24	185-5294	10R-9788
572R II	DSC	0	Brushless	80	24	177-9953	10R-9790
572R II	DSC	0	Brushless	65	24	185-5294	10R-9788
572R II	DSC	0	Brushless	95	24	197-8820	10R-9789
572R II	DSC	0	Brushless	75	24	200-8281	OR-9938
572R II	DSC	22	Brushless	105	24	316-7251	10R-8755
572R II	DSC	22	Brushless	105	24	331-5717	20R-0541
572R II	DSC	22	Brushless	75	24	3E-7577	OR-3615
578	8HB	0	Brushless	50	24	112-5041	OR-5206
578	8HB	0	Brushless	50	24	169-3345	10R-9791
578	8HB	22	Brushless	35	24	6N-9294	OR-5217
583R	2XS	0	Brushless	50	24	112-5041	OR-5206
583R	2XS	0	Brushless	50	24	169-3345	10R-9791
583R	2XS	22	Brushless	35	24	6N-9294	OR-5217
583T	CMX	0	Brushless	95	24	197-8820	10R-9789
583T	CMX	22	Brushless	150	24	249-0313	10R-9097
583T	CMX	0	0	150	24	306-2174	10R-7946
583T	CMX	22	Brushless	105	24	316-7251	10R-8755
587R	BXL	0	Brushless	50	24	112-5041	OR-5206
587R	BXL	0	Brushless	50	24	169-3345	10R-9791
587R	BXL	0	Brushless	95	24	197-8820	10R-9789
587R	BXL	22	Brushless	35	24	6N-9294	OR-5217
587T	FAT	0	Brushless	95	24	197-8820	10R-9789
587T	FAT	22	Brushless	150	24	249-0313	10R-9097
587T	FAT	0	0	150	24	306-2174	10R-7946
587T	FAT	22	Brushless	105	24	316-7251	10R-8755
589	31Z	0	Brushless	50	24	112-5041	OR-5206
589	31Z	0	Brushless	50	24	169-3345	10R-9791
589	31Z	0	Brushless	95	24	197-8820	10R-9789
589	31Z	22	Brushless	35	24	6N-9294	OR-5217

# Cat Alternators Section

## Pipelayer Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
PL61	6P2	22	Brush	115	24	344-5081	-
PL61	WGS	22	Brushless	95	24	226-7683	-
PL72	P72	22	Brushless	95	24	226-7683	-
PL72	P72	22	Brushless	150	24	272-1889	20R-0053
PL72	P73	0	Brushless	95	24	197-8820	10R-9789
PL72	P73	22	Brushless	150	24	249-0313	10R-9097
PL72	P73	22	Brushless	105	24	316-7251	10R-8755
PL83	CB2	22	Brushless	150	24	272-1889	20R-0053
PL83	DLW	0	Brushless	95	24	197-8820	10R-9789
PL83	DLW	22	Brushless	150	24	249-0313	10R-9097
PL83	DLW	22	Brushless	105	24	316-7251	-
PL87	KKJ	22	Brushless	105	24	316-7251	10R-8755
PL87	TEC	22	Brushless	150	24	272-1889	20R-0053
PL87	ZAC	0	Brushless	95	24	197-8820	10R-9789
PL87	ZAC	22	Brushless	150	24	249-0313	10R-9097

## Quarry Truck Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
769C	01X	0	Brushless	50	24	112-5041	0R-5206
769C	01X	0	Brushless	50	24	169-3345	10R-9791
769C	01X	0	Brushless	95	24	197-8820	10R-9789
769C	01X	22	Brushless	105	24	316-7251	-
769C	01X	22	Brushless	35	24	6N-9294	0R-5217
769D	5SS	0	Brushless	50	24	169-3345	10R-9791
769D	5TR	0	Brushless	95	24	197-8820	10R-9789
769D	5TR	22	Brushless	105	24	316-7251	-
769D	BBB	0	Brushless	50	24	112-5041	0R-5206
769D	BBB	22	Brushless	35	24	6N-9294	0R-5217
770	BZZ	0	Brushless	80	24	177-9953	10R-9790
770	BZZ	0	Brushless	95	24	197-8820	10R-9789
770G	ECM	0	Brushless	95	24	197-8820	10R-9789
770G	ECM	22	Brushless	95	24	226-7683	-
770G	ECM	22	Brush	115	24	344-5081	-
770G OEM	RMA	22	Brushless	95	24	226-7683	-
770G OEM	TWA	22	Brush	115	24	344-5081	-
771C	3BJ	0	Brushless	50	24	112-5041	0R-5206
771C	3BJ	0	Brushless	50	24	169-3345	10R-9791
771C	3BJ	0	Brushless	95	24	197-8820	10R-9789
771C	3BJ	22	Brushless	105	24	316-7251	-
771C	3BJ	22	Brushless	35	24	6N-9294	0R-5217
771D	6JR	0	Brushless	95	24	197-8820	10R-9789
771D	6JR	22	Brushless	105	24	316-7251	-
771D	6YS	0	Brushless	50	24	112-5041	0R-5206
771D	6YS	0	Brushless	50	24	169-3345	10R-9791
771D	6YS	22	Brushless	35	24	6N-9294	0R-5217
772	RLB	0	Brushless	50	24	169-3345	10R-9791
772	RLB	0	Brushless	80	24	177-9953	10R-9790
772	RLB	0	Brushless	95	24	197-8820	10R-9789
772	RLB	22	Brushless	95	24	226-7683	-
772	RLB	22	Brushless	80	24	235-7133	-
772B	64W	0	Brushless	50	24	112-5041	0R-5206
772B	64W	0	Brushless	50	24	169-3345	10R-9791

# Cat Alternators Section

## Quarry Truck Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
772B	64W	22	Brushless	35	24	6N-9294	OR-5217
772G	LTX	0	Brushless	95	24	197-8820	10R-9789
772G	LTX	22	Brushless	95	24	226-7683	-
772G	LTX	22	Brush	115	24	344-5081	-
772G OEM	RME	22	Brush	115	24	344-5081	-
773	63G	0	Brushless	50	24	112-5041	OR-5206
773	63G	0	Brushless	50	24	169-3345	10R-9791
773	63G	22	Brushless	35	24	6N-9294	OR-5217
773B	63W	0	Brushless	50	24	112-5041	OR-5206
773B	63W	0	Brushless	50	24	169-3345	10R-9791
773B	63W	22	Brushless	35	24	6N-9294	OR-5217
773D	7CS	0	Brushless	50	24	112-5041	OR-5206
773D	7CS	22	Brushless	35	24	6N-9294	OR-5217
773D	NBJ	0	Brushless	50	24	169-3345	10R-9791
773E	KEG	0	Brushless	50	24	112-5041	OR-5206
773E	KEG	0	Brushless	50	24	169-3345	10R-9791
773E	KEG	22	Brushless	35	24	6N-9294	OR-5217
773E	PRB	22	Brush	115	24	366-2756	-
773F	EED	0	Brushless	50	24	169-3345	10R-9791
773F	EED	0	Brushless	80	24	177-9953	10R-9790
773F	EED	22	Brushless	95	24	226-7683	-
773F	EED	22	Brushless	80	24	235-7133	-
773F OEM	EXD	0	Brushless	50	24	169-3345	10R-9791
773F OEM	EXD	22	Brushless	95	24	226-7683	-
773F OEM	EXD	22	Brushless	80	24	235-7133	-
773G OEM	T5S	22	Brushless	95	24	226-7683	-
773G OEM	T5S	22	Brushless	150	24	272-1889	20R-0053
773G OEM	T5S	22	Brush	115	24	344-5081	-
775B	7XJ	0	Brushless	50	24	112-5041	OR-5206
775B	7XJ	0	Brushless	50	24	169-3345	10R-9791
775B	7XJ	22	Brushless	35	24	6N-9294	OR-5217
775D	8AS	0	Brushless	50	24	112-5041	OR-5206
775D	8AS	0	Brushless	50	24	169-3345	10R-9791
775D	8AS	22	Brushless	35	24	6N-9294	OR-5217
775E	BEC	0	Brushless	50	24	112-5041	OR-5206
775E	BEC	0	Brushless	50	24	169-3345	10R-9791
775E	BEC	22	Brushless	35	24	6N-9294	OR-5217
775E OEM	DTE	0	Brushless	50	24	112-5041	OR-5206
775E OEM	DTE	0	Brushless	50	24	169-3345	10R-9791
775E OEM	DTE	22	Brushless	95	24	226-7683	-
775E OEM	DTE	22	Brushless	80	24	235-7133	-
775E OEM	DTE	22	Brushless	35	24	6N-9294	OR-5217
775F	DLS	0	Brushless	50	24	169-3345	10R-9791
775F	DLS	22	Brushless	95	24	226-7683	-
775F	DLS	22	Brushless	80	24	235-7133	-
775F OEM	EYG	0	Brushless	50	24	169-3345	10R-9791
775F OEM	EYG	22	Brushless	95	24	226-7683	-
775F OEM	EYG	22	Brushless	80	24	235-7133	-
775G	MJS	22	Brushless	150	24	272-1889	20R-0053
775G	RFM	22	Brushless	95	24	226-7683	-
775G	RFM	22	Brush	115	24	344-5081	-
775G OEM	T5F	22	Brushless	95	24	226-7683	-
775G OEM	T5F	22	Brushless	150	24	272-1889	20R-0053

# Cat Alternators Section

## Quarry Truck Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
775G OEM	T5F	22	Brush	115	24	344-5081	-
776C	2TK	0	Brushless	50	24	112-5041	OR-5206
776C	2TK	0	Brushless	50	24	169-3345	10R-9791
776C	2TK	0	Brushless	95	24	197-8820	10R-9789
776C	2TK	22	Brushless	105	24	316-7251	-
776C	2TK	22	Brushless	35	24	6N-9294	OR-5217
776D	5ER	22	Brushless	105	24	316-7251	-
776D	AFS	0	Brushless	95	24	197-8820	10R-9789
777	84A	0	Brushless	50	24	112-5041	OR-5206
777	84A	0	Brushless	50	24	169-3345	10R-9791
777	84A	0	Brushless	95	24	197-8820	10R-9789
777	84A	22	Brushless	105	24	316-7251	-
777	84A	22	Brushless	35	24	6N-9294	OR-5217
777B	4YC	0	Brushless	50	24	112-5041	OR-5206
777B	4YC	0	Brushless	50	24	169-3345	10R-9791
777B	4YC	0	Brushless	95	24	197-8820	10R-9789
777B	4YC	22	Brushless	95	24	226-7683	-
777B	4YC	22	Brushless	105	24	316-7251	-
777B	4YC	22	Brushless	35	24	6N-9294	OR-5217
777C	4XJ	0	Brushless	50	24	112-5041	OR-5206
777C	4XJ	0	Brushless	50	24	169-3345	10R-9791
777C	4XJ	0	Brushless	95	24	197-8820	10R-9789
777C	4XJ	22	Brushless	95	24	226-7683	-
777C	4XJ	22	Brushless	105	24	316-7251	-
777C	4XJ	22	Brushless	35	24	6N-9294	OR-5217
777D	3PR	0	Brushless	50	24	112-5041	OR-5206
777D	3PR	0	Brushless	50	24	169-3345	10R-9791
777D	3PR	0	Brushless	95	24	197-8820	10R-9789
777D	3PR	22	Brushless	35	24	6N-9294	OR-5217
777D	AGC	22	Brushless	105	24	316-7251	-
777D	FKR	22	Brushless	95	24	226-7683	-
777D	FKR	22	Brush	145	24	352-4700	-
777DHA	2YW	0	Brushless	95	24	197-8820	10R-9789
777DHA	2YW	22	Brushless	105	24	316-7251	-
777E	KDP	22	Brushless	95	24	226-7683	-
777E	KDP	22	Brushless	150	24	272-1889	20R-0053
777E	KDP	22	Brush	115	24	344-5081	-
777E	KDP	22	Brush	145	24	352-4700	-
777F	JRP	22	Brushless	95	24	226-7683	-
777F OEM	JXP	22	Brushless	95	24	226-7683	-
777G OEM	T4Y	22	Brushless	95	24	226-7683	-
777G OEM	T4Y	22	Brushless	150	24	272-1889	20R-0053
777G OEM	T4Y	22	Brush	115	24	344-5081	-

## Skid Steer Loader Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
216	4NZ	0	0	55	12	144-9952	OR-9698
216	4NZ	0	0	55	12	144-9954	OR-9700
216	4NZ	0	Brush	110	12	203-5492	10R-9098
216B	RLL	0	0	55	12	144-9952	OR-9698
226	5FZ	0	0	55	12	144-9954	OR-9700
226	5FZ	0	Brush	110	12	203-5492	10R-9098

# Cat Alternators Section

## Skid Steer Loader Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
226B	MJH	0	Brush	110	12	203-5492	10R-9098
228	6BZ	0	0	55	12	144-9954	0R-9700
232	CAB	0	0	55	12	144-9952	10R-9098
232	CAB	0	0	55	12	144-9954	0R-9700
232B	SCH	0	0	55	12	144-9952	10R-9098
236	4YZ	0	0	55	12	144-9954	0R-9700
236	4YZ	0	Brush	110	12	203-5492	10R-9098
236B	HEN	0	Brush	110	12	203-5492	10R-9098
236B 3	A9H	0	Brush	110	12	203-5492	10R-9098
242	CMB	0	0	55	12	144-9954	0R-9700
242	CMB	0	Brush	110	12	203-5492	10R-9098
242B	BXM	0	Brush	110	12	203-5492	10R-9098
242B 3	SRS	0	Brush	110	12	203-5492	10R-9098
246	5SZ	0	0	55	12	144-9954	0R-9700
246	5SZ	0	Brush	110	12	203-5492	10R-9098
246B	PAT	0	Brush	110	12	203-5492	10R-9098
246C	JAY	0	Brush	110	12	203-5492	10R-9098
247	CML	0	0	55	12	144-9954	0R-9700
247	CML	0	Brush	110	12	203-5492	10R-9098
247B	MTL	0	Brush	110	12	203-5492	10R-9098
248	6LZ	0	0	55	12	144-9954	0R-9700
248B	SCL	0	Brush	110	12	203-5492	10R-9098
252	FDG	0	0	55	12	144-9954	0R-9700
252	FDG	0	Brush	110	12	203-5492	10R-9098
252B	SCP	0	Brush	110	12	203-5492	10R-9098
252B 3	TNK	0	Brush	110	12	203-5492	10R-9098
256C	DWS	0	Brush	110	12	203-5492	10R-9098
257	CMM	0	0	55	12	144-9954	0R-9700
257	CMM	0	Brush	110	12	203-5492	10R-9098
257B	SLK	0	Brush	110	12	203-5492	10R-9098
257B 3	B7H	0	Brush	110	12	203-5492	10R-9098
259B 3	YYZ	0	Brush	110	12	203-5492	10R-9098
262	CED	0	0	55	12	144-9954	0R-9700
262	CED	0	Brush	110	12	203-5492	10R-9098
262B	PDT	0	Brush	110	12	203-5492	10R-9098
262C	MST	0	Brush	110	12	203-5492	10R-9098
262C 2	TMW	0	Brush	110	12	203-5492	10R-9098
267	CMP	0	0	55	12	144-9954	0R-9700
267	CMP	0	Brush	110	12	203-5492	10R-9098
267B	CYC	0	Brush	110	12	203-5492	10R-9098
268B	LBA	0	Brush	110	12	203-5492	10R-9098
272C	RED	0	Brush	110	12	203-5492	10R-9098
277	CNC	0	0	55	12	144-9954	0R-9700
277	CNC	0	Brush	110	12	203-5492	10R-9098
277B	MDH	0	Brush	110	12	203-5492	10R-9098
277C	JWF	0	Brush	110	12	203-5492	10R-9098
277C	KCC	0	Brushless	95	24	197-8820	10R-9789
277C 2	MET	0	Brush	110	12	203-5492	10R-9098
277C 2 OEM	A22	0	Brush	110	12	203-5492	10R-9098
277C OEM	L5Y	0	Brush	110	12	203-5492	10R-9098
279C	MBT	0	Brush	110	12	203-5492	10R-9098
279C 2	KWB	0	Brush	110	12	203-5492	10R-9098
287	CNY	0	0	55	12	144-9954	0R-9700

# Cat Alternators Section

## Skid Steer Loader Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
287	CNY	0	Brush	110	12	203-5492	10R-9098
287B	ZSA	0	Brush	110	12	203-5492	10R-9098
287B OEM	MSH	0	Brush	110	12	203-5492	10R-9098
287C	MAS	0	Brush	110	12	203-5492	10R-9098
287C 2	SSB	0	Brush	110	12	203-5492	10R-9098
289C	JMP	0	Brush	110	12	203-5492	10R-9098
289C 2	RTD	0	Brush	110	12	203-5492	10R-9098
297C	GCP	0	Brush	110	12	203-5492	10R-9098
297C OEM	LMB	0	Brush	110	12	203-5492	10R-9098
299C	JSP	0	Brush	110	12	203-5492	10R-9098

## Small Hydraulic Excavator Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
212B	3PJ	17	Brush	52	12	9W3043	0R3652
214B	4CF	17	Brush	52	12	9W3043	0R3652
214B-FT	9MF	17	Brush	52	12	9W3043	0R3652
224B	7WF	17	Brush	52	12	9W3043	0R3652
M318F	FB8	22	Brush	115	24	344-5081	
M318F OEM	MH9	22	Brush	115	24	344-5081	
M320F	F2W	22	Brush	115	24	344-5081	
M322F	FBW	22	Brush	115	24	344-5081	
MH3022	FM2	22	Brush	115	24	344-5081	

## Small Track-Type Tractor Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
D3G LGPJ	CXT	0	Brush	110	12	203-5492	10R-9098
D3G XL	JMH	0	Brush	110	12	203-5492	10R-9098
D4G LGP	TLX	0	Brush	110	12	203-5492	10R-9098
D5B	25X	0	Brushless	50	24	169-3345	10R-9791
D5G LGP OEM	D5G	0	Brush	115	12	121-4134	0R-3527
D5G LGP OEM	D5G	0	0	160	12	306-2172	-
D5G LGPJ	RSC	0	Brush	110	12	203-5492	10R-9098
D5G XL	CLF	0	Brush	110	12	203-5492	10R-9098

## Small Wheel Loader Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
924G	6YW	0	Brushless	50	24	112-5041	0R-5206
924G	6YW	0	Brushless	50	24	169-3345	10R-9791
924G	6YW	22	Brushless	35	24	6N-9294	0R-5217
924G	WGX	0	Brushless	95	24	197-8820	10R-9789
924G OEM	KTC	0	Brushless	95	24	197-8820	10R-9789
924H	HXC	0	Brushless	95	24	197-8820	10R-9789
924H	HXC	22	Brushless	150	24	249-0313	10R-9097
924H Z	RCB	22	Brushless	150	24	249-0313	10R-9097
924H Z	WLB	0	Brushless	95	24	197-8820	10R-9789
924K	ENC	22	Brushless	150	24	272-1889	20R-0053
924K	PWR	22	Brush	115	24	344-5081	-
924K	PWR	22	Brush	115	24	385-1812	20R-1726

# Cat Alternators Section

## Small Wheel Loader Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
926M	LTE	22	Brushless	150	24	272-1889	20R-0053
926M	LTE	22	Brush	115	24	344-5081	-
928G	7SR	0	Brushless	70	24	155-7434	0R-8279
928G	DJD	0	Brushless	95	24	197-8820	10R-9789
928G OEM	GMB	0	Brushless	65	24	185-5294	10R-9788
928G OEM	GMB	0	Brushless	95	24	197-8820	10R-9789
928H	CXK	0	Brushless	95	24	197-8820	10R-9789
928H	CXK	22	Brushless	150	24	249-0313	10R-9097
930G	TWR	0	Brushless	80	24	177-9953	10R-9790
930G	TWR	0	Brushless	95	24	197-8820	10R-9789
930H	DHC	16	Brush	51	12	6T-1396	0R-3654
930H	DHC	0	Brushless	95	24	197-8820	10R-9789
930H	DHC	22	Brushless	150	24	249-0313	10R-9097
930K	EYE	22	Brush	115	24	344-5081	-
930K	EYE	22	Brush	115	24	385-1812	20R-1726
930K	RHN	22	Brushless	150	24	272-1889	20R-0053
930K OEM	T68	22	Brush	115	24	344-5081	-
930K OEM	T68	22	Brush	115	24	385-1812	20R-1726
930M	KTG	22	Brushless	150	24	272-1889	20R-0053
930M	KTG	22	Brush	115	24	344-5081	-
938G	9HS	0	Brush	130	12	117-1379	0R-9480
938G II	PHN	0	Brush	130	12	117-1379	0R-9480
938G II	PHN	17	Brush	52	12	9W-3043	0R-3652
938G II	PHN	22	Brush	70	24	107-7977	0R-8279
938G II	PHN	0	Brushless	80	24	177-9953	10R-9790
938G II	PHN	0	Brushless	65	24	185-5294	10R-9788
938G II	PHN	0	Brushless	95	24	197-8820	10R-9789
938G II	PHN	22	Brushless	75	24	3E-7577	0R-3615
938G II OEM	MSC	0	Brush	130	12	117-1379	0R-9480
938G II OEM	MSC	17	Brush	52	12	9W-3043	0R-3652
938G II OEM	MSC	22	Brush	70	24	107-7977	0R-8279
938G II OEM	MSC	0	Brushless	65	24	185-5294	10R-9788
938G II OEM	MSC	0	Brushless	95	24	197-8820	10R-9789
938H	JKM	22	Brushless	65	24	235-7132	-
938H	JKM	22	Brushless	80	24	235-7133	-
938K	REP	22	Brushless	150	24	272-1889	20R-0053
938K	SWL	22	Brush	115	24	385-1812	20R-1726
938K	XXT	22	Brush	115	24	344-5081	-
938M	J3R	22	Brushless	150	24	272-1889	20R-0053
938M	J3R	22	Brush	115	24	344-5081	-
IT24F	4NN	17	Brush	52	12	9W-3043	0R-3652
IT28G	8CR	17	Brush	52	12	9W-3043	0R-3652
IT28G	8CR	0	Brushless	70	24	155-7434	0R-8279
IT28G	WAC	0	Brushless	95	24	197-8820	10R-9789
IT38F	6FN	17	Brush	52	12	9W-3043	0R-3652
IT38G	JAN	0	Brush	130	12	117-1379	0R-9480
IT38G	JAN	17	Brush	52	12	9W-3043	0R-3652
IT38G	JAN	22	Brush	70	24	107-7977	0R-8279
IT38G	JAN	0	Brushless	65	24	185-5294	10R-9788
IT38G II	JAN	0	Brush	130	12	117-1379	0R-9480
IT38G II	JAN	17	Brush	52	12	9W-3043	0R-3652
IT38G II	JAN	22	Brush	70	24	107-7977	0R-8279
IT38G II	JAN	0	Brushless	65	24	185-5294	10R-9788

# Cat Alternators Section

## Small Wheel Loader Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
IT38H	JNJ	22	Brushless	65	24	235-7132	-
IT38H	JNJ	22	Brushless	80	24	235-7133	-

## Telehandler Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
PM OEM	MLS	0	0	105	12	207-6036	-
RT80-RT100	1GJ	17	Brush	60	12	8C-5510	-
TH103	3PN	17	Brush	55	12	100-8223	OR-1905
TH103	3PN	0	Brush	55	12	105-2812	OR-9273
TH103	3PN	0	Brush	90	12	105-2813	OR-9274
TH210	MHT	0	0	105	12	207-6036	-
TH215	MHS	0	0	105	12	207-6036	-
TH220B	SLA	0	0	90	12	207-6035	-
TH220B	SLA	0	0	105	12	207-6036	-
TH220B	SLA	0	Brushless	75	24	200-2232	OR-9940
TH220B	SLA	22	Brushless	95	24	226-7683	-
TH220B	SLA	22	Brushless	80	24	235-7133	-
TH330B	SLB	0	0	90	12	207-6035	-
TH330B	SLB	0	0	105	12	207-6036	-
TH340B	SLC	0	0	90	12	207-6035	-
TH340B	SLC	0	0	105	12	207-6036	20R-3854
TH350B	SLD	0	0	90	12	207-6035	-
TH350B	SLD	0	0	105	12	207-6036	20R-3854
TH355B	JRK	0	0	90	12	207-6035	-
TH355B	JRK	0	0	105	12	207-6036	-
TH360B	SLE	0	0	90	12	207-6035	-
TH360B	SLE	0	0	105	12	207-6036	-
TH460B	SLF	0	0	90	12	207-6035	-
TH460B	SLF	0	0	105	12	207-6036	20R-3854
TH560B	SLG	0	0	90	12	207-6035	-
TH560B	SLG	0	0	105	12	207-6036	20R-3854
TH580B	SLH	0	0	90	12	207-6035	-
TH580B	SLH	0	0	105	12	207-6036	-
TH62	3LN	17	Brush	55	12	100-8223	OR-1905
TH62	3LN	0	Brush	55	12	105-2812	OR-9273
TH62	4TM	0	Brush	90	12	105-2813	OR-9274
TH63	5WM	17	Brush	55	12	100-8223	OR-1905
TH63	5WM	0	Brush	55	12	105-2812	OR-9273
TH63	5WM	0	Brush	90	12	105-2813	OR-9274
TH82	3JN	17	Brush	55	12	100-8223	OR-1905
TH82	3KN	0	Brush	55	12	105-2812	OR-9273
TH82	3KN	0	Brush	90	12	105-2813	OR-9274
TH83	3RN	17	Brush	55	12	100-8223	OR-1905
TH83	3RN	0	Brush	55	12	105-2812	OR-9273
TH83	3RN	0	Brush	90	12	105-2813	OR-9274

## Track Loader Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
953	78Y	0	Brushless	50	24	112-5041	OR-5206
953 LGP	44Z	0	Brushless	50	24	112-5041	OR-5206



## Track Loader Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
953 LGP	44Z	0	Brushless	50	24	169-3345	10R-9791
953 LGP	44Z	22	Brushless	35	24	6N-9294	0R-5217
953D	LBP	22	Brushless	95	24	226-7683	-
953K	LJT	22	0	105	24	321-8940	-
963	48Z	22	Brushless	35	24	6N-9294	0R-5217
963D	LCS	22	Brushless	95	24	226-7683	-
963K	LBL	22	0	105	24	321-8940	-
973	86G	22	Brushless	35	24	6N-9294	0R-5217
973C	LDX	0	Brushless	65	24	185-5294	10R-9788
973D	LCP	0	Brushless	95	24	197-8820	10R-9789
973T	MKL	22	Brushless	95	24	226-7683	-

## Undercarriage Arrangement Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
C18 OEM	MMB	22	Brushless	150	24	249-0313	10R-9097
UNDERCARRIAGE OE	HED	0	Brushless	65	24	165-8857	10R-9788
UNDERCARRIAGE OE	L5E	22	Brushless	35	24	6N-9294	0R-5217
UNDERCARRIAGE OE	L5M	0	Brushless	80	24	177-9953	10R-9790
UNDERCARRIAGE OE	L5M	0	Brushless	75	24	200-2232	0R-9940
UNDERCARRIAGE OE	L5M	0	Brushless	75	24	200-8281	0R-9938
UNDERCARRIAGE OE	L5M	22	Brushless	95	24	226-7683	-
UNDERCARRIAGE OE	L5N	17	Brush	52	12	9VW-3043	0R-3652
UNDERCARRIAGE OE	L5N	0	Brushless	50	24	169-3345	10R-9791
UNDERCARRIAGE OE	L5N	0	Brushless	95	24	197-8820	10R-9789
UNDERCARRIAGE OE	L5N	0	0	150	24	306-2174	-
UNDERCARRIAGE OE	L5N	22	Brushless	105	24	316-7251	-

## Underground Mining Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
120H	ADG	0	Brushless	50	24	112-5041	0R-5206
120H	ADG	0	Brushless	50	24	169-3345	10R-9791
120H	ADG	22	Brushless	35	24	6N-9294	0R-5217
69D	9XS	0	Brushless	50	24	112-5041	0R-5206
AD22	MW5	0	Brushless	95	24	197-8820	10R-9789
AD22	MW5	22	Brushless	150	24	249-0313	10R-9097
AD30	CXR	22	Brushless	105	24	316-7251	10R-8755
AD30	CXR	22	Brushless	105	24	331-5717	20R-0541
AD30	GXR	0	Brushless	95	24	197-8820	10R-9789
AD30	GXR	22	Brushless	75	24	3E-7577	0R-3615
AD40 II	1YZ	22	Brushless	75	24	3E-7577	0R-3615
AD45	BKZ	22	Brushless	75	24	3E-7577	0R-3615
AD45B	GXM	0	Brushless	95	24	197-8820	10R-9789
AD55	ANW	22	Brushless	105	24	331-5717	-
AD55	DNW	0	Brushless	95	24	197-8820	10R-9789
AD55	DNW	22	Brushless	105	24	316-7251	-
AD55B	JNW	22	Brushless	95	24	226-7683	-
AD60	KNW	22	Brushless	95	24	226-7683	-
AE40 II	1ZZ	22	Brushless	75	24	3E-7577	0R-3615
R1300	6QW	0	Brushless	95	24	197-8820	10R-9789
R1300	6QW	22	Brushless	75	24	3E-7577	0R-3615

# Cat Alternators Section

## Underground Mining Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
R1300G	LJB	0	Brushless	95	24	197-8820	10R-9789
R1300G	LJB	22	Brushless	75	24	3E-7577	OR-3615
R1300G II	RSL	0	Brushless	95	24	197-8820	10R-9789
R1300G II	RSL	22	Brushless	95	24	226-7683	-
R1300G II	RSL	22	Brushless	75	24	3E-7577	OR-3615
R1600	9XP	22	Brushless	75	24	3E-7577	OR-3615
R1600G	9PP	0	Brushless	95	24	197-8820	10R-9789
R1600G	9PP	22	Brushless	75	24	3E-7577	OR-3615
R1600H	9SD	0	Brushless	95	24	197-8820	10R-9789
R1700	4LZ	22	Brushless	75	24	3E-7577	OR-3615
R1700G	XBR	0	Brushless	95	24	197-8820	10R-9789
R1700G	XBR	22	Brushless	75	24	3E-7577	OR-3615
R1700K	KT4	22	Brushless	150	24	272-1889	20R-0053
R1700K	KT4	22	Brushless	150	24	437-0124	-
R2900G	GLK	22	Brushless	75	24	3E-7577	OR-3615
R2900G	JLK	0	Brushless	95	24	197-8820	10R-9789
R3000H	RCM	0	Brushless	95	24	197-8820	10R-9789
UD245	DCX	22	Brushless	95	24	226-7683	-

## Unit Rig Truck Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
MT4400 AC	SE4	22	Brushless	105	24	316-7251	-
MT4400D AC	MT4	22	Brushless	105	24	316-7251	-

## Wheel Tractor Scraper Alternators

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
613C	93X	0	Brushless	50	24	169-3345	10R-9791
613C	9FM	22	Brushless	35	24	6N-9294	OR-5217
613C II	8LJ	0	Brushless	50	24	112-5041	OR-5206
613C II	8LJ	0	Brushless	50	24	169-3345	10R-9791
613C II	8LJ	22	Brushless	75	24	3E-7577	OR-3615
613C II	8LJ	22	Brushless	35	24	6N-9294	OR-5217
613C II OEM	B6J	0	Brushless	50	24	112-5041	OR-5206
613C II OEM	B6J	0	Brushless	50	24	169-3345	10R-9791
613C II OEM	B6J	22	Brushless	35	24	6N-9294	OR-5217
613C SERIES II	KEH	0	Brushless	50	24	169-3345	10R-9791
613G	DBE	22	Brushless	80	24	235-7133	-
613G OEM	DXA	22	Brushless	80	24	235-7133	-
613G OEM	WT2	22	Brushless	95	24	226-7683	-
615C	2XG	0	Brushless	50	24	169-3345	10R-9791
615C II	9XG	0	Brushless	50	24	112-5041	OR-5206
615C II	9XG	0	Brushless	50	24	169-3345	10R-9791
615C II	9XG	22	Brushless	35	24	6N-9294	OR-5217
615C II OEM	B6M	0	Brushless	50	24	112-5041	OR-5206
615C II OEM	B6M	0	Brushless	50	24	169-3345	10R-9791
615C II OEM	B6M	22	Brushless	35	24	6N-9294	OR-5217
615D	BAE	0	Brushless	50	24	112-5041	OR-5206
615D	BAE	0	Brushless	50	24	169-3345	10R-9791
615D	BAE	22	Brushless	35	24	6N-9294	OR-5217
621B	45P	0	Brushless	50	24	112-5041	OR-5206

# Cat Alternators Section

## Wheel Tractor Scraper Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
621B	45P	0	Brushless	80	24	177-9953	10R-9790
621B	45P	0	Brushless	75	24	200-2232	0R-9940
621B	45P	0	Brushless	75	24	200-8281	0R-9938
621B	45P	22	Brushless	80	24	235-7133	-
621B	45P	22	0	15	24	2P-1204	0R-5217
621B	45P	22	Brushless	75	24	3E-7577	0R-3615
621F	4SK	0	Brushless	50	24	112-5041	0R-5206
621F	4SK	0	Brushless	50	24	169-3345	10R-9791
621F	4SK	0	Brushless	80	24	177-9953	10R-9790
621F	4SK	0	Brushless	95	24	197-8820	10R-9789
621F	4SK	0	Brushless	75	24	200-2232	0R-9940
621F	4SK	0	Brushless	75	24	200-8281	0R-9938
621F	4SK	22	Brushless	80	24	235-7133	-
621F	4SK	22	Brushless	105	24	316-7251	-
621F	4SK	22	Brushless	75	24	3E-7577	0R-3615
621F	4SK	22	Brushless	35	24	6N-9294	0R-5217
621G	CEN	0	Brushless	80	24	177-9953	10R-9790
621G	CEN	22	Brushless	75	24	3E-7577	0R-3615
621G	CEP	0	Brushless	75	24	200-8281	0R-9938
621G	DBB	0	Brushless	75	24	200-2232	0R-9940
621G	DBB	22	Brushless	80	24	235-7133	-
621G OEM	DXB	0	Brushless	80	24	177-9953	10R-9790
621G OEM	DXB	0	Brushless	75	24	200-2232	0R-9940
621G OEM	DXB	0	Brushless	75	24	200-8281	0R-9938
621G OEM	DXB	22	Brushless	80	24	235-7133	-
621G OEM	DXB	22	Brushless	75	24	3E-7577	0R-3615
621H	DBK	0	Brushless	75	24	200-2232	0R-9940
621H	DBK	22	Brushless	80	24	235-7133	-
621H	DBK	22	Brushless	150	24	272-1889	20R-0053
621H	EAZ	22	Brush	145	24	352-4700	-
621H OEM	HKK	22	Brushless	150	24	272-1889	20R-0053
621H OEM	NYY	22	Brush	145	24	352-4700	-
621K	WTL	22	Brush	145	24	352-4700	-
621K OEM	WTP	22	Brush	145	24	352-4700	-
623E	6DB	0	Brushless	50	24	112-5041	0R-5206
623E	6DB	0	Brushless	50	24	169-3345	10R-9791
623E	6DB	22	Brushless	75	24	3E-7577	0R-3615
623F	5EW	0	Brushless	50	24	112-5041	0R-5206
623F	5EW	0	Brushless	50	24	169-3345	10R-9791
623F	5EW	0	Brushless	75	24	200-2232	0R-9940
623F	5EW	22	Brushless	80	24	235-7133	-
623F	5EW	22	Brushless	75	24	3E-7577	0R-3615
623F	5EW	22	Brushless	35	24	6N-9294	0R-5217
623G	ARW	22	Brushless	75	24	3E-7577	0R-3615
623G	CES	0	Brushless	80	24	177-9953	10R-9790
623G	CES	0	Brushless	75	24	200-8281	0R-9938
623G	DBC	0	Brushless	75	24	200-2232	0R-9940
623G	DBY	22	Brushless	80	24	235-7133	-
623H	DBF	0	Brushless	75	24	200-2232	0R-9940
623H	DBF	22	Brushless	80	24	235-7133	-
623H	DBF	22	Brushless	150	24	272-1889	20R-0053
623H	DBF	22	Brush	145	24	352-4700	-
623K	WTM	22	Brush	145	24	352-4700	-

# Cat Alternators Section

## Wheel Tractor Scraper Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
627F	1DL	0	Brushless	50	24	112-5041	OR-5206
627F	1DL	0	Brushless	50	24	169-3345	10R-9791
627F	1DL	0	Brushless	75	24	200-2232	OR-9940
627F	1DL	0	Brushless	75	24	200-8281	OR-9938
627F	1DL	22	Brushless	80	24	235-7133	-
627F	1DL	22	Brushless	75	24	3E-7577	OR-3615
627G	CEX	0	Brushless	75	24	200-8281	OR-9938
627G	CEX	22	Brushless	35	24	6N-9294	OR-5217
627G	CEZ	0	Brushless	80	24	177-9953	10R-9790
627G	CEZ	0	Brushless	95	24	197-8820	10R-9789
627G	DBD	0	Brushless	75	24	200-2232	OR-9940
627G	DBD	22	Brushless	80	24	235-7133	-
627G	DBZ	22	Brushless	105	24	316-7251	-
627H	DBW	0	Brushless	75	24	200-2232	OR-9940
627H	DBW	22	Brushless	80	24	235-7133	-
627H	LCT	22	Brushless	65	24	235-7132	-
627H	LCT	22	Brushless	150	24	272-1889	20R-0053
627H	LCT	22	Brush	145	24	352-4700	-
627K	WTC	22	Brushless	65	24	235-7132	-
627K	WTN	22	Brush	145	24	352-4700	-
631D	24W	0	Brushless	50	24	112-5041	OR-5206
631D	24W	0	Brushless	50	24	169-3345	10R-9791
631D	24W	0	Brushless	75	24	200-2232	OR-9940
631D	24W	22	Brushless	80	24	235-7133	-
631D	24W	22	0	15	24	2P-1204	OR-5217
631D	24W	22	Brushless	35	24	6N-9294	OR-5217
631E	1AB	0	Brushless	50	24	169-3345	10R-9791
631E	1AB	0	Brushless	80	24	177-9953	10R-9790
631E	1AB	0	Brushless	75	24	200-2232	OR-9940
631E	1AB	0	Brushless	75	24	200-8281	OR-9938
631E	1AB	22	Brushless	80	24	235-7133	-
631E	1AB	22	Brushless	75	24	3E-7577	OR-3615
631E	1AB	22	Brushless	35	24	6N-9294	OR-5217
631E	6PC	0	Brushless	50	24	112-5041	OR-5206
631G	AWK	0	Brushless	75	24	200-8281	OR-9938
631G	CLR	0	Brushless	80	24	177-9953	10R-9790
631G	CLR	22	Brushless	75	24	3E-7577	OR-3615
631G	DFA	0	Brushless	75	24	200-2232	OR-9940
631G OEM	DXE	0	Brushless	75	24	200-2232	OR-9940
631G OEM	DXE	22	Brushless	80	24	235-7133	-
631K	WTR	22	Brush	115	24	344-5081	-
631K	WTR	22	Brush	145	24	352-4700	-
631K OEM	WT4	22	Brush	115	24	344-5081	-
631K OEM	WT4	22	Brush	145	24	352-4700	-
633E	2PS	0	Brushless	50	24	112-5041	OR-5206
633E	2PS	0	Brushless	50	24	169-3345	10R-9791
633E	2PS	0	Brushless	80	24	177-9953	10R-9790
633E	2PS	0	Brushless	75	24	200-2232	OR-9940
633E	2PS	0	Brushless	75	24	200-8281	OR-9938
633E	2PS	22	Brushless	80	24	235-7133	-
633E	2PS	22	Brushless	75	24	3E-7577	OR-3615
633E	2PS	22	Brushless	35	24	6N-9294	OR-5217
637	65M	22	Brushless	35	24	6N-9294	OR-5217

# Cat Alternators Section

## Wheel Tractor Scraper Alternators (Cont'd.)

Sales Model	S/N Prefix	Shaft Diam. MM	Brush/Brushless	Amp	Volts	Service Part Number	Reman
637E	1FB	0	Brushless	75	24	200-2232	OR-9940
637E	1FB	0	Brushless	75	24	200-8281	OR-9938
637E	1FB	22	Brushless	80	24	235-7133	-
637E	1HB	0	Brushless	50	24	169-3345	10R-9791
637E	1HB	0	Brushless	80	24	177-9953	10R-9790
637E	1HB	0	Brushless	95	24	197-8820	10R-9789
637E	1HB	22	Brushless	105	24	316-7251	-
637E	7CB	0	Brushless	50	24	112-5041	OR-5206
637E	7CB	22	Brushless	75	24	3E-7577	OR-3615
637G	CEH	0	Brushless	80	24	177-9953	10R-9790
637G	CEH	0	Brushless	75	24	200-8281	OR-9938
637G	CEH	22	Brushless	35	24	6N-9294	OR-5217
637G	DFJ	22	Brushless	80	24	235-7133	-
637K	WTS	22	Brush	145	24	352-4700	-
651	33G	0.874	0	55	12	1S-2585	-
651	33G	22	Brushless	85	12	3E-7892	OR-3616
651	33G	22	Brushless	60	12	7G-7889	10R-1919
651	33G	0	Brushless	50	24	112-5041	OR-5206
651	33G	0	Brushless	50	24	169-3345	10R-9791
651	33G	22	Brushless	35	24	6N-9294	OR-5217
651E	4YR	0	Brushless	50	24	112-5041	OR-5206
651E	4YR	0	Brushless	50	24	169-3345	10R-9791
651E	4YR	22	Brushless	75	24	3E-7577	OR-3615
651E	4YR	22	Brushless	35	24	6N-9294	OR-5217
651E	5XR	0	Brushless	80	24	177-9953	10R-9790
651E	5XR	0	Brushless	75	24	200-8281	OR-9938
657E	5YR	0	Brushless	50	24	169-3345	10R-9791
657E	5YR	0	Brushless	75	24	200-2232	OR-9940
657E	6PR	0	Brushless	75	24	200-8281	OR-9938
657E	6PR	22	Brushless	75	24	3E-7577	OR-3615
657E	6TR	0	Brushless	50	24	112-5041	OR-5206
657E	6TR	0	Brushless	80	24	177-9953	10R-9790
657E	6TR	22	Brushless	80	24	235-7133	-
657E	7KR	0	Brushless	95	24	197-8820	10R-9789
657E	7KR	22	Brushless	105	24	316-7251	-
657E	7KR	22	Brushless	35	24	6N-9294	OR-5217
657G	GER	0	Brushless	75	24	200-2232	OR-9940
657G	W1B	22	Brushless	80	24	235-7133	-
657G	W1C	0	Brushless	50	24	169-3345	10R-9791
657G	W1E	22	Brushless	35	24	6N-9294	OR-5217
657G OEM	DXG	0	Brushless	75	24	200-2232	OR-9940
657G OEM	DXG	22	Brushless	80	24	235-7133	-

# Cat Starters Section

## Articulated Truck Starters

Sales Model	S/N Prefix	Attributes <sup>(1)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
725	AFX	HD,OS,WS,3K	CW	11 teeth	24v	197-0986	0R-5209
725	B1L	30K	CW	11 teeth	24v	357-7354	10R-9815
725C	LFB	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
725C	TFB	HD,OS,WS,30K	CW	11 teeth	12V	207-1524	10R-0401
725C 2	2L6	–	–	–	–	10R-9815	10R-9815
725C 2	2T3	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
725C 2 OEM	TA7	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
725C OEM	T26	HD,OS,WS,30K	CW	11 teeth	12V	207-1524	10R-0401
730	AGF	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209
730	B1M	30K	CW	11 teeth	24v	357-7354	10R-9815
730 OEM	WWB	30K	CW	11 teeth	24v	357-7354	10R-9815
730C	TFF	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
730C 2	2L7	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
730C 2 EJ	2L8	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
730C EJ	LFH	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
730EJ	B1W	30K	CW	11 teeth	24v	357-7354	10R-9815
735	AWR	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
735	B1N	–	–	–	–	10R-9815	10R-9815
735 OEM	WWC	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
735B	L4D	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209
735B	T4P	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
735C	LFJ	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
740	AXM	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209
740	B1P	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
740 OEM	DTX	HD, OS, WS, 30K	CW	11 teeth	24v	352-9766	–
740 OEM	WWD	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
740B	T4R	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
740B EJ	L4F	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
740B EJ	T4S	–	–	–	–	10R-9815	10R-9815
740B OEM	E4S	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
740B OEM	GLH	–	–	–	–	10R-9815	10R-9815
740C EJ	TFN	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
740EJ	AZZ	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
745C	LFK	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
745C OEM	JE8	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
745D	3F6	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D20D	9MG	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
D250D	6NG	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
D250E	5TN	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D250E II	4PS	–	–	–	24v	6V-5538	10R-0399
D25D	1HK	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D300D	5MG	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D300E	7FN	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D300E II	5KS	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D30D	3AJ	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D350D	9RF	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D350E	9LR	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232

1 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

## Articulated Truck Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(2)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
D350E II	2XW	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D400D	8TF	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D400E	2YR	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D400E II	8PS	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
D400E II	APF	HD,OS,WS,3K	CW	11 teeth	24v	207-1556	0R-5209

## Backhoe Loader Starters

Sales Model	S/N Prefix	Attributes <sup>(2)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
414E IL	TMS	–	–	–	–	303-5795	0R-4316
416B	8ZK	MD,2K	CW	–	12v	143-0538	0R-4319
416C	1WR	MD,2K	CW	–	12v	6V-0492	0R-4316
416C	4ZN	MD,2K	CW	–	12v	6V-0492	0R-4316
416E	SHA	MD,2K	CW	–	12v	112-1767	0R-4316
416E OEM	B6P	MD,2K	CW	–	12v	143-0539	0R-4316
416E OEM	NBE	–	–	–	–	303-5795	0R-4316
416E ST	MFG	–	–	–	–	303-5795	0R-4316
416F	HSS	–	–	10 teeth	12v	331-7010	20R-4762
416F 2	HWB	–	–	10 teeth	12v	331-7010	20R-4762
416F 2	LYA	–	–	–	–	303-5795	0R-4316
416F OEM	PHD	–	–	10 teeth	12v	331-7010	20R-4762
416F ST	KSF	–	–	10 teeth	12v	331-7010	20R-4762
420D	BKC	MD,2K	CW	–	12v	6V-0492	0R-4316
420D	MBH	–	–	–	24v	225-3150	10R-9101
420D IT	BMC	MD,2K	CW	–	12v	6V-0492	0R-4316
420D OEM	HLT	MD,2K	CW	–	12v	143-0539	0R-4316
420E	GEK	–	–	–	24v	225-3150	10R-9101
420E	KMW	MD,2K	CW	–	12v	6V-0492	0R-4316
420E PL	PHC	–	–	–	–	303-5795	0R-4316
420E ST	PRA	–	–	–	–	303-5795	0R-4316
420F	HTG	–	–	10 teeth	12v	331-7010	20R-4762
420F 2	HWC	–	–	10 teeth	12v	331-7010	20R-4762
420F 2	LBS	–	–	–	–	303-5795	0R-4316
420F 2 IT	HWD	–	–	10 teeth	12v	331-7010	20R-4762
420F 2 IT	LYC	–	–	–	–	303-5795	0R-4316
420F 2 OEM	NMB	–	–	10 teeth	12v	331-7010	20R-4762
420F IT	JWJ	–	–	10 teeth	12v	331-7010	20R-4762
420F ST	SKR	–	–	10 teeth	12v	331-7010	20R-4762
422E	MAV	–	–	–	–	303-5795	0R-4316
422F	LHB	MD,2K	CW	–	12v	143-0539	0R-4316
422F	LRH	–	–	–	–	303-5795	0R-4316
422F 2	LYF	MD,2K	CW	–	12v	143-0539	0R-4316
424	JRB	MD,2K	CW	–	12v	6V-0492	0R-4316
424 I	H4K	MD,2K	CW	–	12v	143-0539	0R-4316
426C	1ZR	MD,2K	CW	–	12v	6V-0492	0R-4316
426C	7WN	MD,2K	CW	–	12v	143-0539	0R-4316
428E	DXC	–	–	–	–	303-5795	0R-4316
428E	SNL	MD,2K	CW	–	12v	143-0539	0R-4316

2 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Backhoe Loader Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(3)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
428F	LBH	–	–	–	–	303-5795	0R-4316
428F	RAK	–	–	10 teeth	12v	331-7010	20R-4762
428F 2	HWN	–	–	10 teeth	12v	331-7010	20R-4762
428F 2	LYG	–	–	–	–	303-5795	0R-4316
430D	C3J	MD,2K	CW	–	12v	6V-0492	0R-4316
430D IT	BML	MD,2K	CW	–	12v	6V-0492	0R-4316
430E	DDT	MD,2K	CW	–	12v	143-0539	0R-4316
430E	EAT	MD,2K	CW	–	12v	112-1767	0R-4316
430E IT	MXB	–	–	–	–	303-5795	0R-4316
430E ST	SWC	–	–	–	–	303-5795	0R-4316
430F	HMS	–	–	10 teeth	12v	331-7010	20R-4762
430F	LNH	–	–	–	–	303-5795	0R-4316
430F 2	HWE	–	–	10 teeth	12v	331-7010	20R-4762
430F 2	LYD	–	–	–	–	303-5795	0R-4316
430F 2 IT	HWG	–	–	10 teeth	12v	331-7010	20R-4762
430F 2 IT	LYE	–	–	–	–	303-5795	0R-4316
430F IT	RGS	–	–	10 teeth	12v	331-7010	20R-4762
430F ST	RDF	–	–	10 teeth	12v	331-7010	20R-4762
432D	S6H	MD,2K	CW	–	12v	6V-0492	0R-4316
432E	JBA	–	–	–	–	303-5795	0R-4316
432E	RXS	MD,2K	CW	–	12v	143-0539	0R-4316
432F	HRH	–	–	10 teeth	12v	331-7010	20R-4762
432F	LNH	–	–	–	–	303-5795	0R-4316
432F 2	HWP	–	–	10 teeth	12v	331-7010	20R-4762
432F 2	LYJ	–	–	–	–	303-5795	0R-4316
434E	SJL	–	–	–	–	303-5795	0R-4316
434E	SXB	MD,2K	CW	–	12v	143-0539	0R-4316
434F	FLY	–	–	–	–	394-9674	20R-4880
434F	LHF	–	–	–	–	303-5795	0R-4316
434F	MTR	–	–	10 teeth	12v	331-7010	20R-4762
434F 2	HWR	–	–	10 teeth	12v	331-7010	20R-4762
434F 2	LYK	–	–	–	–	303-5795	0R-4316
436B	6MJ	MD,2K	CW	–	12v	143-0538	0R-4319
436C	1FR	MD,2K	CW	–	12v	112-1767	0R-4316
436C	1PR	MD,2K	CW	–	12v	143-0539	0R-4316
436C	2AR	MD,2K	CW	–	12v	112-1767	0R-4316
436C	8TN	MD,OS,2K	CW	–	12v	111-9860	10R-9212
438D	S8J	MD,2K	CW	–	12v	6V-0492	0R-4316
442E	EME	MD,2K	CW	–	12v	143-0539	0R-4316
442E	PCR	–	–	–	–	303-5795	0R-4316
444E	NBA	–	–	–	–	303-5795	0R-4316
444F	FBN	–	–	–	–	394-9674	20R-4880
444F	HCR	–	–	10 teeth	12v	331-7010	20R-4762
444F	LJJ	MD,2K	CW	–	12v	143-0539	0R-4316
444F 2	HWS	–	–	10 teeth	12v	331-7010	20R-4762
444F 2	LYL	–	–	–	–	303-5795	0R-4316
446B	5BL	MD,OS,2K	CW	–	12v	111-9860	10R-9212
446D	DBL	MD,OS,2K	CW	–	12v	111-9860	10R-9212
450	8YW	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392

3 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life



## Backhoe Loader Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(4)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
450E	RBA	–	–	–	–	303-5795	0R-4316
450F	HJR	–	–	10 teeth	12v	331-7010	20R-4762
460	9FW	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392
465	3HZ	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392
470	765	HD,OS,WS,30K	CW	11 teeth	12V	3E-7863	10R-0401
470	9TW	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392
475	767	HD,OS,WS,30K	CW	11 teeth	12V	3E-7863	10R-0401
480	2BZ	HD,OS,WS,30K	CW	11 teeth	12V	3E-7863	10R-0401
480	866	HD,OS,WS,3K	CW	11 teeth	12V	146-3503	10R-7703
485	868	HD,OS,WS,30K	CW	11 teeth	12V	3E-7863	10R-0401
CH35	9DF	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392
CH35-CCE-N	3HS	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392
CH35-N	8RD	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392
CH35-W	ADK	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392
CH45	4DZ	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392
CH45-CCE-N	4KW	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392
CH45-N	ABF	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392
CH45-W	3BK	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392
CH55	3SM	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392
CH55-CCE-N	7TZ	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392
CH55-N	6NN	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392
CH55-W	AEN	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392
CH65E	1GM	HD,OS,WS,30K	CW	11 teeth	12V	3E-7863	10R-0401
CH70C	2YL	HD,OS,WS,30K	CW	12 teeth	12V	6V-3948	10R-0875
CH75E	1HM	HD,OS,WS,30K	CW	11 teeth	12V	3E-7863	10R-0401
CH85C	9TK	HD,OS,WS,30K	CW	11 teeth	12V	3E-7863	10R-0401
CH85D	4GR	HD,OS,WS,30K	CW	11 teeth	12V	3E-7863	10R-0401
CH85E	1NM	HD,OS,WS,30K	CW	11 teeth	12V	3E-7863	10R-0401
CH95E	1SM	HD,OS,WS,30K	CW	11 teeth	12V	3E-7863	10R-0401
DV87 MTS	9AM	HD,OS,WS,30K	CW	12 teeth	12V	6V-3948	10R-0875
LEXION 460	665	MD, WS, 2K	CW	10 teeth	12v	207-1510	10R-0392
MT735	AKN	HD,OS,WS,3K	CW	12 teeth	12v	207-1539	10R-7704
MT745	ALA	HD,OS,WS,3K	CW	12 teeth	12v	207-1539	10R-7704
MT755	ALM	HD,OS,WS,3K	CW	12 teeth	12v	207-1539	10R-7704
MT765	AMS	HD,OS,WS,3K	CW	12 teeth	12v	207-1539	10R-7704
MT835	BAM	HD,OS,WS,3K	CW	11 teeth	12V	146-3503	10R-7703
MT845	BBP	HD,OS,WS,3K	CW	11 teeth	12V	207-1521	10R-7703
MT855	BCC	HD,OS,WS,3K	CW	11 teeth	12v	205-7687	10R-7703
MT865	BDS	HD,OS,WS,3K	CW	11 teeth	12v	205-7687	10R-7703
MTC735	812	HD,OS,WS,3K	CW	12 teeth	12v	207-1539	10R-7704
MTC755	814	HD,OS,WS,3K	CW	12 teeth	12v	207-1539	10R-7704
MTC765	815	HD,OS,WS,3K	CW	12 teeth	12v	207-1539	10R-7704
MTC845	817	HD,OS,WS,3K	CW	11 teeth	12V	207-1521	10R-7703
MTC855	818	HD,OS,WS,3K	CW	11 teeth	12v	205-7687	10R-7703
MTC865	819	HD,OS,WS,3K	CW	11 teeth	12v	205-7687	10R-7703

4 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Cat Work Tool Starters

Sales Model	S/N Prefix	Attributes <sup>(5)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
QC - LOADER & IT	ELX	HD,OS,WS,3K	CW	–	24v	6V-5539	20R-2232

## Compactor & Wheel Dozer Starters

Sales Model	S/N Prefix	Attributes <sup>(5)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
814	16Z	HD, OS, WS, 30K	CW	12 teeth	24v	3T-2776	10R-9817
814F	9DM	–	–	–	24v	6V-5538	10R-0399
814F	BGF	HD,OS,WS,3K	CW	13	24v	165-4619	0R-7757
814F	BXG	HD, OS, WD,30K	CW	12 teeth	24v	343-6505	10R-9817
815	17Z	HD, OS, WS, 30K	CW	12 teeth	24v	6V-0512	10R-9817
815F	1GN	–	–	–	24v	6V-5227	10R-0399
815F	2BS	HD, OS, WS, 30K	CW	12 teeth	24v	6V-0512	10R-9817
815F	BKL	HD,OS,WS,3K	CW	13	24v	165-4619	0R-7757
815F 2	BYN	HD, OS, WD,30K	CW	12 teeth	24v	343-6505	10R-9817
815K	MBB	Os,40K	CW	12 teeth	24v	436-9104	–
816	15Z	HD, OS, WS, 30K	CW	12 teeth	24v	363-9838	10R-9817
816F	5FN	–	–	–	24v	6V-5538	10R-0399
816F	BMR	HD,OS,WS,3K	CW	13	24v	165-4619	0R-7757
816F	BZR	HD, OS, WD,30K	CW	12 teeth	24v	343-6505	10R-9817
816K	WCL	Os,40K	CW	12 teeth	24v	436-9104	–
824C	85X	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
824G	4SN	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
824G II	AWVW	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
824H	ASX	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
824K	234	40K	CW	11 teeth	24v	420-1992	–
824K	RWB	40K	CW	11 teeth	24v	436-9106	–
825C	86X	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
825G	6RN	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
825G II	AXB	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
825H	AZW	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
825K	233	40K	CW	11 teeth	24v	436-9106	–
825K	SEE	40K	CW	11 teeth	24v	420-1992	–
826C	87X	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
826G	7LN	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
826G II	AYH	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
826H	AWF	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
826K	SET	40K	CW	11 teeth	24v	436-9106	–
836	3RL	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
836	7FR	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
836G	7MZ	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
836G	BRL	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
836H	BXD	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
836K	TWZ	HD,OS,WS,3K	CW	11 teeth	24v	349-6601	20R-1312

5 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

## Compact Wheel Loader Starters

Sales Model	S/N Prefix	Attributes <sup>(6)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
901B	W7A	-	-	-	-	199-2334	-
901B	W7B	-	-	-	NA	270-6296	-
902B	W8A	-	-	-	-	199-2334	-
902B	W8C	-	-	-	NA	270-6296	-
903B	W8B	-	-	-	-	199-2334	-
903B	W8D	-	-	-	NA	270-6296	-
904B	B4L	-	-	-	NA	270-6296	-
904H	H4T	-	-	-	NA	270-6296	-
906	MER	MD,2K	CW	-	12v	143-0539	0R-4316
906H	TPE	MD,2K	CW	-	12v	143-0539	0R-4316
907H	SJM	MD,2K	CW	-	12v	143-0539	0R-4316
908	TAR	MD,2K	CW	-	12v	143-0539	0R-4316
908H	LMD	MD,2K	CW	-	12v	143-0539	0R-4316
908H 2 OEM	BP7	-	-	10 teeth	12v	312-7536	-
908H OEM	L5T	-	-	-	12v	364-4130	20R-3882
908M OEM	L23	-	-	10 teeth	12v	312-7536	-
910G II	B9X	-	-	-	-	125-2988	10R-7586
910H	SAT	-	-	-	24v	225-3150	10R-9101
910K	AY4	-	-	-	12v	377-6967	20R-3859
910K	L22	-	-	-	12v	364-4130	20R-3882
910M (T4F HRC)	H22	-	-	10 teeth	12v	364-4127	-
914G	PDF	-	-	-	24v	225-3150	10R-9101
914G 2	KNP	-	-	-	24v	225-3150	10R-9101
914K	CD2	-	-	-	12v	377-6967	20R-3859
914K	L24	-	-	-	12v	364-4130	20R-3882
914M (T4F HRC)	H24	-	-	10 teeth	12v	364-4127	-
918M (T4F HRC)	H26	-	-	10 teeth	12v	364-4127	-
IT14G	FWL	-	-	-	24v	225-3150	10R-9101

## Electronic Rope Shovel Starters

Sales Model	S/N Prefix	Attributes <sup>(6)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
7295	ER3	-	-	-	-	441-8892	10R-9815
7495	ER6	-	-	-	-	490-9973	10R-9815

## Forestry Machine Starters

Sales Model	S/N Prefix	Attributes <sup>(6)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
1090	BZJ	HD,OS,WS,3K	CW	-	24v	338-3454	20R-2232
1190	BZK	HD,OS,WS,30K	CW	-	24v	6V-0590	20R-2232
1190T	BZL	HD,OS,WS,30K	CW	-	24v	6V-0590	20R-2232
1290T	BZM	HD,OS,WS,3K	CW	-	24v	338-3454	20R-2232
1390	B3F	HD,OS,WS,30K	CW	-	24v	6V-0590	20R-2232
2384C	KAW	HD,OS,WS,3K	CW	12 teeth	24v	349-9075	-
2384C	KB6	-	-	-	-	354-5671	20R-4877
2390	P3H	HD,OS,WS,30K	CW	-	24v	6V-0590	20R-2232
2470C	W47	-	-	-	na	277-1833	20R-3886

6 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Forestry Machine Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(7)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
2484C	KAZ	HD,OS,WS,3K	CW	12 teeth	24v	349-9075	-
2484C	KB7	-	-	-	-	354-5671	20R-4877
2491	P5J	HD,OS,WS,30K	CW	-	24v	6V-0590	20R-2232
2510	WHA	HD,OS,WS,3K	CW	12 teeth	24v	207-1551	10R-0405
2570	WFB	HD,OS,WS,3K	CW	12 teeth	24v	207-1551	10R-0405
2570C	F1B	-	-	10 teeth	24v	387-9639	20R-4878
2570D	D25	-	-	10 teeth	24v	387-9639	20R-4878
2670C	B3E	-	-	10 teeth	24v	387-9639	20R-4878
2670D	D26	-	-	10 teeth	24v	387-9639	20R-4878
2748	PCL	HD,OS,WS,3K	CW	12 teeth	24v	207-1551	10R-0405
2864C	SP4	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
320D FM	BW2	-	-	-	-	354-5671	20R-4877
322C FM HW	CBY	HD,OS,WS,3K	CW	12 teeth	24v	207-1511	10R-0397
322C FM HW	LAR	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
322C FM LGP	SLX	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
322C FM ST	BPH	HD,OS,WS,3K	CW	-	24v	106-8558	10R-0397
322C FM ST	M2H	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
324D FM	JKR	-	-	-	-	394-9674	20R-4880
325C FM HW	M2K	HD,OS,WS,3K	CW	-	24v	106-8559	10R-0397
325C FM HW	Y4P	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
325C FM ST	G1L	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
330C FM HW	B1K	HD,OS,WS,3K	CW	11 teeth	24v	197-0986	0R-5209
330C FM HW	B2L	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209
330C FM HW	B4N	HD,OS,WS,3K	CW	-	24v	338-3454	20R-2232
330C FM ST	B3M	HD,OS,WS,3K	CW	-	24v	338-3454	20R-2232
345C FM HEEL	A3L	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
511	511	HD,OS,WS,30K	CW	-	24v	6V0590	20R-2232
518C	1CL	-	-	-	24v	1W3851	10R-0399
518C	9HJ	HD,OS,WS,3K	CW	-	24v	338-3454	20R-2232
521	521	HD,OS,WS,30K	CW	-	24v	6V0590	20R-2232
521B	F7B	HD, OS,3K	CW	12 teeth	24v	338-3457	20R-2232
522	522	HD,OS,WS,30K	CW	-	24v	6V0590	20R-2232
522B	F7C	HD, OS,3K	CW	12 teeth	24v	338-3457	20R-2232
525B	3KZ	-	-	-	24v	6V5538	10R-0399
525C	525	-	-	-	24v	6V5538	10R-0399
525C OEM	M3B	-	-	-	24v	6V5538	10R-0399
525D	2L5	HD,OS,WS,3K	CW	12 teeth	24v	349-9075	-
525D	GKP	Os,40K	CW	12 teeth	24v	436-9104	-
527	J68	-	-	10 teeth	24v	387-9639	20R-4878
527	JSR	-	-	-	24v	6V5538	10R-0399
527	PTR	HD,OS,WS,3K	CW	-	24v	338-3454	20R-2232
528B	8SJ	HD,OS,WS,3K	CW	-	24v	338-3454	20R-2232
530B	5BK	HD,OS,WS,3K	CW	-	24v	338-3454	20R-2232
532	532	HD,OS,WS,30K	CW	-	24v	6V-0590	20R-2232
533	CDR	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
535B	AAE	-	-	-	24v	6V-5538	10R-0399
535C	535	-	-	-	24v	6V-5538	10R-0399

7 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

## Forestry Machine Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(8)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
535D	3L5	–	–	–	–	389-5833	–
535D	MTP	Os,40K	CW	12 teeth	24v	436-9104	–
538 LL	KBJ	–	–	–	–	354-5671	20R-4877
539	1PZ	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
541	541	HD,OS,WS,30K	CW	–	24v	6V-0590	20R-2232
541 SERIES 2	F7D	HD,OS,WS,30K	CW	–	24v	6V-0590	20R-2232
543	ASJ	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
545	2FZ	–	–	–	24v	6V-5538	10R-0399
545C	545	–	–	–	24v	6V-5538	10R-0399
545C OEM	M5M	–	–	–	24v	6V-5538	10R-0399
545D	4L5	Os,40K	CW	12 teeth	24v	436-9104	–
545D	KGP	–	–	–	–	288-6976	20R-3857
545D OEM	H23	Os,40K	CW	12 teeth	24v	436-9104	–
550B	SAW	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
552	552	HD,OS,WS,30K	CW	–	24v	6V-0590	20R-2232
552 SERIES 2	F7G	HD,OS,WS,30K	CW	–	24v	6V-0590	20R-2232
553C	W53	–	–	–	na	277-1833	20R-3886
555D	5L5	Os,40K	CW	12 teeth	24v	436-9104	–
555D	PGY	–	–	–	–	288-6976	20R-3857
558 LL	LRT	–	–	–	–	354-5671	20R-4877
559C	KAS	HD,OS,WS,3K	CW	12 teeth	24v	349-9075	–
559C	KB4	–	–	–	–	354-5671	20R-4877
560B	TRA	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
563C	W63	–	–	10 teeth	24v	387-9639	20R-4878
563D	D63	–	–	10 teeth	24v	387-9639	20R-4878
570B	CKG	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
573C	RJT	–	–	10 teeth	24v	387-9639	20R-4878
573D	D73	–	–	10 teeth	24v	387-9639	20R-4878
574B	CZZ	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
579C	KAX	HD,OS,WS,3K	CW	12 teeth	24v	349-9075	–
579C	KB5	–	–	–	–	354-5671	20R-4877
580B	CLT	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
584	109	HD,OS,WS,3K	CW	12 teeth	24v	207-1551	10R-0405
586C	SL5	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
TK1051	9HZ	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
TK370	WBD	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
TK371	WBG	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
TK380	WBE	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
TK381	WBH	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
TK711	101	HD,OS,WS,30K	CW	–	24v	6V-0590	20R-2232
TK711	TKA	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
TK721	102	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
TK721	TKB	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
TK722	103	HD,OS,WS,30K	CW	–	24v	6V-0590	20R-2232
TK722	TKC	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
TK732	104	HD,OS,WS,30K	CW	–	24v	6V-0590	20R-2232
TK741	202	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232

8 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Forestry Machine Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(9)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
TK751	301	HD,OS,WS,30K	CW	–	24v	6V-0590	20R-2232
TK752	302	HD,OS,WS,30K	CW	–	24v	6V-0590	20R-2232

## Generators/Captive Starters

Sales Model	S/N Prefix	Attributes <sup>(9)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
3013C	KEE	–	–	–	12v	339-2900	20R-4256
3024C	KRD	–	–	–	12v	339-2900	20R-4256
3116	3AF	HD,OS,WS,3K	CW	–	24v	106-8559	10R-0397
3116	7TM	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
3176C	LSD	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
3196	LSG	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
3306	BME	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
3306B	LSA	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
3406E	4AS	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209
3406E	KEM	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
3406E	RET	HD,OS,WS,3K	CW	11 teeth	24v	207-1556	0R-5209
3512C	SHL	HD,OS,WS,30K	CW	–	24v	3T-2787	20R-2232
3516	7CL	–	CCW	–	Air	455-7682	–
3516B	ZPR	HD,OS,WS,30K	CW	–	24v	6T-0647	20R-2232
C12	R1D	HD,OS,WS,3K	CW	11 teeth	12v	6V-4213	10R-0401
C12	RTW	HD,OS,WS,3K	CW	11 teeth	12v	207-1521	10R-7703
C15	C2A	HD,OS,WS,30K	CW	11 teeth	12v	3E-7863	10R-0401
C27	LET	HD,OS,WS,30K	CW	–	24v	3T-2780	20R-2232
C32	KCM	HD, OS, WS, 30K	CCW	11 teeth	24v	363-9837	20R-5069

## Hydraulic Shovel Starters

Sales Model	S/N Prefix	Attributes <sup>(9)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
6015	DHB	HD,OS,WS,3K	CW	11 teeth	24v	349-6530	20R-1312
6015 FS	DHF	HD,OS,WS,3K	CW	11 teeth	24v	349-6530	20R-1312
6018	DHT	HD,OS,WS,3K	CW	11 teeth	24v	349-6530	20R-1312
6018 FS	DHD	HD,OS,WS,3K	CW	11 teeth	24v	349-6530	20R-1312
6020B	DNR	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
6030	DHL	HD, OS, WS, 30K	CW	11 teeth	24v	352-9766	–
6030 FS	DHG	HD, OS, WS, 30K	CW	11 teeth	24v	352-9766	–
6040	DHJ	HD, OS, WS, 30K	CW	11 teeth	24v	352-9766	–
6040 FS	DHX	HD, OS, WS, 30K	CW	11 teeth	24v	352-9766	–
6060	DHN	HD, OS, WS, 30K	CW	11 teeth	24v	352-9766	–
6060 FS	DH3	HD, OS, WS, 30K	CW	11 teeth	24v	352-9766	–

9 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

## Hydraulic Track Drill Starters

Sales Model	S/N Prefix	Attributes <sup>(10)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
MD5050	DR8	–	–	–	24v	6V-5538	10R-0399
MD5050 T	DR9	–	–	–	24v	6V-5538	10R-0399
MD5075	SER	–	–	–	24v	6V-5538	10R-0399
MD5075C	SXR	–	–	–	24v	6V-5538	10R-0399
MD5090	SEW	–	–	–	24v	6V-5538	10R-0399
MD5125	SEZ	–	–	–	–	389-5796	–
MD5150	SEY	–	–	–	–	389-5796	–
MD6290	DR3	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
MD6290	DT8	HD,OS,WS,3K	CW	11 teeth	24v	207-1556	0R-5209
MD6420C	DN6	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
MD6420C	DS9	HD, OS, WS, 30K	CW	11 teeth	24v	352-9766	–
MD6420C	DW9	HD,OS,WS,3K	CW	11 teeth	24v	349-6523	20R-1312
MD6540	DR5	HD, OS, WS, 30K	CW	11 teeth	24v	352-9766	–
MD6540C	DS4	HD, OS, WS, 30K	CW	11 teeth	24v	352-9766	–

## Large Mining Excavator Starters

Sales Model	S/N Prefix	Attributes <sup>(10)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
5110B	AAA	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
5110B	AAK	HD,OS,WS,30K	CW	–	24v	3T-2787	20R-2232
5110B	AAT	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
5130B	4CS	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0889	10R-9816
5230	7LL	–	CCW	–	Air	455-7682	–
5230B	4HZ	–	CCW	–	Air	455-7682	–

## Large Mining Truck Starters

Sales Model	S/N Prefix	Attributes <sup>(10)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
784B	5RK	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0889	10R-9816
784C	2PZ	–	–	–	Air	111-7087	–
785B	6HK	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0889	10R-9816
785C	1HW	–	–	–	Air	4Q-5612	0R-9857
785C	APX	–	CCW	–	Air	455-7682	–
785C HA	5AZ	–	CCW	–	Air	455-7682	–
785D	MSY	–	CCW	–	Air	455-7682	–
785D OEM	DMC	–	CCW	–	Air	455-7682	–
785G	RTL	OS, WS, 30K	CW	11 teeth	24v	423-4163	–
789B	7EK	–	CCW	–	Air	455-7682	–
789C	2BW	–	CCW	–	Air	455-7682	–
789D	SPD	–	Standard	11 teeth	Air	380-2339	10R-9657
789D XQ	SHH	–	Standard	11 teeth	Air	380-2339	10R-9657
793C	4GZ	–	CCW	–	Air	455-7682	–
793C	ATY	–	–	–	Air	111-7087	–
793C	CBR	–	–	–	Air	380-2368	10R-9656
793D	FDB	–	CCW	–	Air	455-7682	–
793F	D3T	–	–	12 teeth	Air	461-7416	–
793F	SSP	–	Standard	11 teeth	Air	380-2339	10R-9657

10 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Large Mining Truck Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(11)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
793F AC	EMD	–	–	12 teeth	Air	461-7416	–
793F CMD	RBT	–	–	12 teeth	Air	461-7416	–
793F OEM	SXP	–	–	12 teeth	Air	461-7416	–
793F XQ	SND	HD, OS, WS, 30K	CW	11 teeth	24v	352-9766	–
794 AC	MT5	HD, OS, WS, 30K	CW	11 teeth	24v	352-9766	–
795F AC	ERM	OS, 50K	CW	11 teeth	24v	496-4960	–
795F XQ	SNT	OS, 50K	CW	11 teeth	24v	496-4960	–
797	5YW	–	CCW	–	Air	455-7682	–
797B	JSM	–	CCW	–	Air	455-7682	–
797F	LAJ	–	–	–	Air	275-6387	–
797F XQ	WSP	–	Standard	–	Air	378-3236	20R-0465

## Large Track-Type Tractor Starters

Sales Model	S/N Prefix	Attributes <sup>(11)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
D10N	2YD	–	–	–	–	352-9848	20R-3250
D10N	3SK	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
D10R	AKT	–	–	–	–	352-9848	20R-3250
D10T	JJW	HD,OS,WS,3K	CW	11 teeth	24v	349-6571	20R-1312
D10T	RJG	–	–	–	–	352-9848	20R-3250
D11N	4HK	HD, OS, WS, 3K	CW	11 teeth	24v	338-3456	10R-9816
D11N	74Z	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0889	10R-9816
D11R	7PZ	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0889	10R-9816
D11R CD	AAF	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0889	10R-9816
D11T	DDD	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0889	10R-9816
D11T	GEB	HD,OS,WS,30K	CW	–	24v	6V-0590	20R-2232
D11T	JNS	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
D11T	MDG	HD,OS,WS,3K	CW	11 teeth	24v	349-6530	20R-1312
D11T	RAL	HD, OS, WS, 3K	CW	11 teeth	24v	338-3456	10R-9816
D11T CD	TPB	HD,OS,WS,30K	CW	–	24v	6V-0590	20R-2232
D9L	14Y	–	–	–	–	352-9848	20R-3250
D9N	1JD	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0513	10R-9816
D9N	6XJ	HD, OS, WS, 3K	CW	11 teeth	24v	338-3456	10R-9816
D9R	ABK	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D9R	ACL	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0513	10R-9816
D9R	HWH	–	–	–	–	352-9848	20R-3250
D9T	REX	HD,OS,WS,3K	CW	11 teeth	24v	349-6530	20R-1312
D9T	RJS	–	–	–	–	352-9848	20R-3250
D9T	TWG	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312

## Large Wheel Loader Starters

Sales Model	S/N Prefix	Attributes <sup>(11)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
834	92Z	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
834B	7BR	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
834G	6GZ	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232

11 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life



## Large Wheel Loader Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(12)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
834G	BPC	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
834H	BTX	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
834K	LWY	HD,OS,WS,3K	CW	11 teeth	24v	349-6601	20R-1312
844	2KZ	HD,OS,WS,30K	CW	–	24v	3T2787	20R-2232
844	BBN	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
844H	BTW	30K	cw	11 teeth	24v	357-7354	10R-9815
844K	KLS	HD,OS,WS,3K	CW	11 teeth	24v	349-6571	20R-1312
854G	1JW	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0513	10R-9816
854G	A4W	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0889	10R-9816
854K	221	HD, OS, WS, 30K	CCW	11 teeth	24v	363-9837	20R-5069
854K	KK3	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
854K	RM3	HD,OS,WS,3K	CW	11 teeth	24v	349-6571	20R-1312
854K 2	H9K	HD,OS,WS,3K	CW	11 teeth	24v	349-6571	20R-1312
986H	L8S	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
986K	MH8	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
988B	50W	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
988B	62Y	HD,OS,WS,30K	CW	–	24v	3T-8957	20R-2232
988F	2ZR	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
988F	8YG	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
988G	1NZ	HD,OS,WS,3K	CW	–	24v	6V-5539	20R-2232
988G	2TW	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209
988G	BNH	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
988H	BXY	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
988K	LWX	HD,OS,WS,3K	CW	11 teeth	24v	349-6601	20R-1312
988K XE	EWX	HD,OS,WS,3K	CW	11 teeth	24v	349-6601	20R-1312
990	7HK	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
990 II	4FR	–	–	–	24v	6V-5538	10R-0399
990 II	BCR	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
990H	BWX	30K	cw	11 teeth	24v	357-7354	10R-9815
990K	A9P	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
990K	DJK	HD,OS,WS,3K	CW	11 teeth	24v	349-6571	20R-1312
991K	530	HD, OS, WS, 30K	CCW	11 teeth	24v	363-9837	20R-5069
992C	42X	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
992C	49Z	HD,OS,WS,30K	CW	–	24v	3T-2787	20R-2232
992D	7MJ	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
992G	ADZ	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0889	10R-9816
992G	AZX	HD, OS, WS, 3K	CW	11 teeth	24v	338-3456	10R-9816
992K	880	HD,OS,WS,3K	CW	11 teeth	24v	349-6571	20R-1312
992K	H4C	HD, OS, WS, 30K	CCW	11 teeth	24v	363-9837	20R-5069
992K	RM2	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
992K 2	ZMX	HD,OS,WS,3K	CW	11 teeth	24v	349-6571	20R-1312
992X	Z4X	HD, OS, WS, 30K	CCW	11 teeth	24v	363-9837	20R-5069
993K	LWA	–	–	–	–	10R-9815	10R-9815
993K	Z4D	HD,OS,WS,3K	CW	11 teeth	24v	349-6571	20R-1312
993K	Z9K	HD, OS, WS, 30K	CCW	11 teeth	24v	363-9837	20R-5069
993K 2	Z4Z	HD,OS,WS,3K	CW	11 teeth	24v	349-6571	20R-1312

12 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Large Wheel Loader Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(13)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
994D	3TZ	–	CCW	–	Air	455-7682	–
994F	442	–	CCW	–	Air	455-7682	–
994H	DWC	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0889	10R-9816

## Large Hydraulic Excavator Starters

Sales Model	S/N Prefix	Attributes <sup>(13)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
330	5YM	HD, OS, WS, 30K	CW	12 teeth	24v	6V-0512	10R-9817
330	6SK	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
330	8RL	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
330	9PJ	–	–	–	–	207-1545	0R-5207
330B	3YR	HD,OS,WS,3K	CW	12 teeth	24v	207-1511	10R-0397
330C L	GKX	HD,OS,WS,3K	CW	11 teeth	24v	197-0986	0R-5209
330C OEM	MSD	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
330D L	MWP	HD,OS,WS,3K	CW	11 teeth	24v	197-0986	0R-5209
330D LN OEM	GMN	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
330D OEM	H3D	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336D	PGW	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336D LN OEM	L5K	–	–	–	–	394-9674	20R-4880
336D 2	EFT	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336D 2 L OEM	EF3	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336D 2 L OEM	MZE	–	–	–	–	10R-9815	10R-9815
336D 2 OEM	SM3	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336D 2GC	FBT	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336D 2GC	NBN	–	–	–	–	10R-9815	10R-9815
336D 2GC OEM	MGE	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336D 2H	MFA	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336D 2L	HBK	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336D 2L	XBH	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209
336D 2L	ZCT	HD,OS,WS,3K	CW	11 teeth	24v	207-1556	0R-5209
336D 2LH	NAH	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336D 2LOEM	GGH	–	–	–	–	10R-9815	10R-9815
336D 2LOEM	HBZ	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336D 2XE	LBX	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336D L	J2F	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209
336D L	KDJ	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336D L OEM	JRX	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336D L SB OEM	NBZ	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336D LN	MYG	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209
336E H	HDW	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R1312
336E L	JRJ	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336E L H	JEA	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
336E L OEM	DSZ	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
336E L OEM	G42	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
336E LN H	SSL	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
336E OEM	T3Z	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312

13 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

## Large Hydraulic Excavator Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(14)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
336F	YFD	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
336F H	NAJ	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
336F L	ZBJ	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
336F L H	PFL	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
336F L OEM	B39	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
336F LN	LJY	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
336F LN H	MTW	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
336F LNxE	YBH	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
336F LXE	DFY	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
336F OEM	B34	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
340D 2L	JEE	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
340D L	JTN	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
340F	WBX	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
345B	5WS	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
345B II	DCW	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
345B II LC-FIX	AKX	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
345B L II	CDJ	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
345C	TDG	HD,OS,WS,3K	CW	11 teeth	24v	269-2757	20R-3250
345C OEM	B6N	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
345C OEM	NRF	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
345D LC-VG	LKY	HD,OS,WS,3K	CW	11 teeth	24v	269-2757	20R-3250
345D LC-VG	NLM	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
345D OEM	L5R	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
345D OEM	P5D	HD,OS,WS,3K	CW	11 teeth	24v	269-2757	20R-3250
349D	GKF	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
349D 2	YAG	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
349D 2 OEM	CE4	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
349D 2 OEM	P27	HD,OS,WS,3K	CW	11 teeth	24v	269-2757	20R-3250
349D 2L	TAH	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
349D 2OEM	FH3	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
349D L	FLA	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
349D L OEM	MCX	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
349D L-VG	KHS	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
349E L	TFG	HD,OS,WS,3K	CW	11 teeth	24v	349-6530	20R-1312
349E LC-VG	DGE	OS,WS,30K	CW	11 teeth	24v	494-6414	20R-6753
349E OEM	FKF	OS,WS,30K	CW	11 teeth	24v	494-6414	20R-6753
349E OEM	S3P	–	–	–	–	394-9674	20R-4880
349F	HLB	OS,WS,30K	CW	11 teeth	24v	494-6414	20R-6753
349F L	HPD	OS,WS,30K	CW	11 teeth	24v	494-6414	20R-6753
349F LXE	RAX	OS,WS,30K	CW	11 teeth	24v	494-6414	20R-6753
349F LXE	SFG	HD,OS,WS,3K	CW	11 teeth	24v	349-6530	20R-1312
349F V-VG	WNA	OS,WS,30K	CW	11 teeth	24v	494-6414	20R-6753
350	2ZL	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
350 L	9DK	–	–	–	24v	6V-5538	10R-0399
352F	XAL	OS,WS,30K	CW	11 teeth	24v	494-6414	20R-6753
352F (VG)	YEG	OS,WS,30K	CW	11 teeth	24v	494-6414	20R-6753

14 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Large Hydraulic Excavator Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(15)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
352F MH OEM	B38	OS,WS,30K	CW	11 teeth	24v	494-6414	20R-6753
352F OEM	B36	OS,WS,30K	CW	11 teeth	24v	494-6414	20R-6753
352F VG	A9J	OS,WS,30K	CW	11 teeth	24v	494-6414	20R-6753
352F XE-VG	SD2	OS,WS,30K	CW	11 teeth	24v	494-6414	20R-6753
365C L OEM	GSZ	OS, WS,30K	CW	11 teeth	24v	478-9866	20R-6752
374D OEM	JNZ	OS, WS,30K	CW	11 teeth	24v	478-9866	20R-6752
374E L OEM	JKC	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
374F	AT2	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
374F	MFL	HD, OS,WS,30K	CW	11 teeth	24v	478-9867	20R-6753
374F L	DNM	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
374F L	P4L	HD, OS,WS,30K	CW	11 teeth	24v	478-9867	20R-6753
374F OEM	H25	HD, OS,WS,30K	CW	11 teeth	24v	478-9867	20R-6753
375	8WJ	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209
375 L	6RL	HD,OS,WS,30K	CW	-	24v	3T-8949	20R-2232
385C OEM	MSF	OS, WS,30K	CW	11 teeth	24v	478-9866	20R-6752
390D L OEM	M1M	OS, WS,30K	CW	11 teeth	24v	478-9866	20R-6752
390F	HSM	HD, OS,WS,30K	CW	11 teeth	24v	478-9867	20R-6753
390F L	P4J	HD, OS,WS,30K	CW	11 teeth	24v	478-9867	20R-6753
390F L OEM	N64	HD, OS,WS,30K	CW	11 teeth	24v	478-9867	20R-6753
390F MH OEM	H27	HD, OS,WS,30K	CW	11 teeth	24v	478-9867	20R-6753
5080	6XK	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209

## Material Handler Starters

Sales Model	S/N Prefix	Attributes <sup>(15)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
325C MH	S2C	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
325D MH FCR	RJK	-	-	-	-	394-9674	20R-4880
325D MH HCR	C4H	-	-	-	-	394-9674	20R-4880
329D L SB OEM	L5H	-	-	-	-	394-9674	20R-4880
330C MH	D3C	HD,OS,WS,3K	CW	-	24v	338-3454	20R-2232
330D MH FCR	LEM	HD,OS,WS,3K	CW	-	24v	338-3454	20R-2232
330D MH HCR	C5K	HD,OS,WS,3K	CW	-	24v	338-3454	20R-2232
330D WH	JJM	HD,OS,WS,3K	CW	-	24v	338-3454	20R-2232
336D HVG UHD OEM	M3N	HD,OS,WS,3K	CW	-	24v	338-3454	20R-2232
336D L UHD OEM	M3M	HD,OS,WS,3K	CW	-	24v	338-3454	20R-2232
336D LN SB OEM	M3S	HD,OS,WS,3K	CW	-	24v	338-3454	20R-2232
336E HVG UHD OEM	RBS	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
336E L UHD OEM	PCE	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
345B II MH	APB	HD,OS,WS,30K	CW	-	24v	3T-8949	20R-2232
345C HVG UHD OEM	M3F	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
345C L UHD OEM	L5B	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
345C LVG UHD OEM	M3E	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
345C MH FCR	M2R	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250

15 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

## Material Handler Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(16)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
345C MH HCR	D3S	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
349E HVG UHD OEM	JAE	OS,WS,30K	CW	11 teeth	24v	494-6414	20R-6753
385C L MH OEM	M3P	OS, WS,30K	CW	11 teeth	24v	478-9866	20R-6752
385C LVG UHD OEM	M3W	OS, WS,30K	CW	11 teeth	24v	478-9866	20R-6752
385C MH OEM	E1Y	OS, WS,30K	CW	11 teeth	24v	478-9866	20R-6752
385C MH OEM	M4E	30K	CW	11 teeth	24v	357-7354	10R-9815
390F MH OEM	B37	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
M325B MH	BGN	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
MH3027	MYR	–	CW	10 teeth	24v	341-7602	–
MH3037	JLH	OS	CW	10	24v	482-3187	–
MH3037	JPB	–	CW	10 teeth	24v	341-7602	–
MH3049	HPB	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
MH3059	RBR	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
MH3295	PA9	HD, OS,WS,30K	CW	11 teeth	24v	478-9867	20R-6753
W330B MH	AME	HD, OS, WS, 30K	CW	12 teeth	24v	6V-0512	10R-9817
W345B II MH	ANJ	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
W345B II MH	CDY	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
W345C MH FCR	R5K	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250

## Medium Hydraulic Excavator Starters

Sales Model	S/N Prefix	Attributes <sup>(16)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
320	HEX	50K	CW	10 teeth	24v	432-1691	20R-4881
320 GC	KTN	50K	CW	10 teeth	24v	432-1691	20R-4881
320C OEM	MSN	–	–	–	–	125-2988	10R-7586
320D	MZD	–	–	–	–	354-5671	20R-4877
320D 2	WDJ	–	–	–	–	354-5671	20R-4877
320D 2 GC OEM	EG1	–	CW	10 teeth	24v	357-5205	–
320D 2GC	JFM	–	–	–	–	354-5671	20R-4877
320D 2GC	NBH	–	–	–	24v	225-3150	10R-9101
320D 2GC	ZBH	–	CW	10 teeth	24v	357-5205	–
320D 2L	ESG	–	–	–	–	354-5671	20R-4877
320D 2L OEM	K22	–	–	–	–	354-5671	20R-4877
320D GC	JZA	–	–	–	–	354-5671	20R-4877
320D GC OEM	A23	–	–	–	–	354-5671	20R-4877
320D L	KZF	–	–	–	–	354-5671	20R-4877
320D OEM	BK8	–	–	–	–	354-5671	20R-4877
320E	AWS	–	–	–	–	354-5671	20R-4877
320E	SHX	HD,OS,WS,3K	CW	12 teeth	24v	349-9075	–
320E	SXE	–	–	–	–	288-6976	20R-3857
320E L	NAZ	–	–	–	–	288-6976	20R-3857
320E L	WBK	–	–	–	–	354-5671	20R-4877
320E L OEM	FH8	–	–	–	–	354-5671	20R-4877
320E LN	DFG	–	–	–	–	354-5671	20R-4877
320E LRR	MEW	–	–	–	–	354-5671	20R-4877
320E LRR	PNL	HD,OS,WS,3K	CW	12 teeth	24v	349-9075	–

16 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Medium Hydraulic Excavator Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(17)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
320E OEM	EGX	–	–	–	–	354-5671	20R-4877
320E RR	LHN	–	–	–	–	354-5671	20R-4877
320E RR OEM	S7A	–	–	–	–	354-5671	20R-4877
320F L	NHD	–	–	10	24v	382-6587	20R-4881
322	8ML	HD,OS,WS,3K	CW	12 teeth	24v	207-1511	10R-0397
322C	HEK	HD,OS,WS,3K	CW	–	24v	106-8559	10R-0397
323D 2L	YCR	–	–	–	–	354-5671	20R-4877
323D 2L OEM	FEF	–	–	–	–	354-5671	20R-4877
323D 2LOEM	FH4	–	–	–	–	354-5671	20R-4877
323D L	NZF	–	–	–	–	354-5671	20R-4877
323D L OEM	L5Z	–	–	–	–	354-5671	20R-4877
323D OEM	FAW	–	–	–	–	394-9674	20R-4880
323D OEM	GRL	–	–	–	–	125-2988	10R-7586
323D OEM	GRN	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
323E L	RAP	–	–	–	–	354-5671	20R-4877
323E L OEM	FH7	–	–	–	–	354-5671	20R-4877
323E LN	TDW	–	–	–	–	354-5671	20R-4877
323E SA	YRP	–	–	–	–	354-5671	20R-4877
323F L	NCW	–	–	–	–	354-5671	20R-4877
323F LN	YEC	–	–	10	24v	382-6587	20R4881
323F OEM	P39	–	–	–	–	354-5671	20R-4877
323F SA OEM	P7P	50K	CW	10 teeth	24v	432-1691	20R-4881
324D	MND	HD,OS,WS,3K	CW	–	24v	106-8559	10R-0397
324D L	BTK	–	–	–	–	394-9674	20R-4880
324D L	PYT	HD,OS,WS,3K	CW	–	24v	106-8557	10R-0397
324D LN	TRH	–	–	–	–	394-9674	20R-4880
324D LN OEM	KJR	–	–	–	–	394-9674	20R-4880
324D OEM	LBW	–	–	–	–	394-9674	20R-4880
324E L OEM	K32	–	–	–	–	354-5671	20R-4877
324F L	WGL	–	–	–	–	354-5671	20R-4877
325	5WK	MD OS 20K	CW	10 teeth	24v	3E-5381	0R-4317
325	6KK	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
325B	6DN	HD, OS, WS, 30K	CW	12 teeth	24v	6V-0512	10R-9817
325C OEM	MSG	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
325D L	T2S	–	–	–	–	394-9674	20R-4880
325D L OEM	X3N	–	–	–	–	394-9674	20R-4880
325D OEM	SRC	–	–	–	–	394-9674	20R-4880
325F	XAA	50K	CW	10teeth	24v	432-1691	20R-4881
325F LCR	YCA	50K	CW	10teeth	24v	432-1691	20R-4881
326D 2	KGY	–	–	–	–	354-5671	20R-4877
326D 2L	JFL	–	–	–	–	354-5671	20R-4877
326D 2L OEM	HM4	–	–	–	–	354-5671	20R-4877
326D 2OEM	F3Y	–	–	–	–	354-5671	20R-4877
326D L	PJM	–	–	–	–	394-9674	20R-4880
326F	SGK	–	–	–	–	354-5671	20R-4877
326F L	XFK	–	–	–	–	354-5671	20R-4877
326F L OEM	CJ8	–	–	–	–	354-5671	20R-4877
328D LCR	RMX	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
328D LCR	SWF	–	–	–	–	394-9674	20R-4880

17 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

## Medium Hydraulic Excavator Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(18)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
328D LCR OEM	JTC	–	–	–	–	394-9674	20R-4880
329D	DTZ	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
329D 2	SHJ	–	–	–	–	354-5671	20R-4877
329D 2L	THW	–	–	–	–	354-5671	20R-4877
329D 2L OEM	HER	–	–	–	–	354-5671	20R-4877
329D L	WLT	HD,OS,WS,3K	CW	–	24v	106-8559	10R-0397
329D L	XDB	HD,OS,WS,3K	CW	12 teeth	24v	207-1511	10R-0397
329D L OEM	J8D	–	–	–	–	394-9674	20R-4880
329D L OEM	L5G	HD,OS,WS,3K	CW	–	24v	106-8559	10R-0397
329D LN	EBM	–	–	–	–	394-9674	20R-4880
329E OEM	KNR	–	–	–	–	354-5671	20R-4877
329F	YHA	–	–	–	–	354-5671	20R-4877
329F L OEM	B33	–	–	–	–	354-5671	20R-4877
330D 2L OEM	EX7	–	–	–	–	354-5671	20R-4877
330F L	WBA	–	–	–	–	354-5671	20R-4877
330F L OEM	H5R	–	–	–	–	354-5671	20R-4877
330F LN	LBN	–	–	–	–	354-5671	20R-4877
330F LN OEM	LNK	–	–	–	–	354-5671	20R-4877
330F OEM	HA3	–	–	–	–	354-5671	20R-4877
335F	KNE	–	–	–	–	354-5671	20R-4877
335F LCR OEM	KHM	–	–	–	–	354-5671	20R-4877

## Medium Track-Type Tractor Starters

Sales Model	S/N Prefix	Attributes <sup>(18)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
D5R LGP	D5L	Os,40K	CW	12 teeth	24v	436-9104	–
D5R XL	D5X	Os,40K	CW	12 teeth	24v	436-9104	–
D5R XL	R5A	–	–	10 teeth	24v	387-9639	20R-4878
D5R XL	WRE	HD,OS,35K	CW	12 teeth	24V	424-6652	–
D5T	P5T	HD,OS,35K	CW	12 teeth	24V	424-6652	–
D6D	31X	HD, OS, WS, 30K	CW	12 teeth	24v	3T-2776	10R-9817
D6G	P6G	HD, OS, WS, 30K	CW	12 teeth	24v	6V-0512	10R-9817
D6G II LGP	C6X	HD, OS, WS, 30K	CW	12 teeth	24v	6V-0512	10R-9817
D6H	1FJ	–	–	–	24v	6V-5227	10R-0399
D6H	4LG	–	–	–	24v	207-1560	10R-0399
D6H	4YF	HD,OS,WS,3K	ccw	12 teeth	24v	207-1547	10R-0398
D6H LGP	2TG	–	–	–	24v	207-1555	10R-0399
D6H LGP	3YG	HD, OS, WS, 30K	CW	12 teeth	24v	3T-2776	10R-9817
D6H XL	9LK	–	–	–	24v	207-1561	10R-0399
D6H XL	9RK	–	–	–	24v	6V-5538	10R-0399
D6H XR	2BL	HD,OS,WS,3K	CW	11 teeth	24v	207-1556	0R-5209
D6H XR	2TL	–	–	–	24v	1W-3851	10R-0399
D6K 2	MXK	–	–	–	–	354-5671	20R-4877
D6K 2 LGP	JTR	–	–	–	24v	475-7412	–
D6K 2 LPG	RST	–	–	–	–	354-5671	20R-4877
D6K 2 XL	DFR	–	–	–	24v	475-7412	–
D6K 2 XL	WMR	–	–	–	–	354-5671	20R-4877
D6K 2XL	6S6	–	–	–	–	354-5671	20R-4877

18 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Medium Track-Type Tractor Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(19)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
D6K LGP	DHA	–	–	10 teeth	24v	387-9639	20R-4878
D6K XL	FBH	–	–	10 teeth	24v	387-9639	20R-4878
D6N LGP	DJY	HD,OS,WS,3K	CW	13 teeth	24v	330-3123	20R-3884
D6N LGP	MG5	Os,40K	CW	12 teeth	24v	436-9104	–
D6N LGP	PBA	–	–	–	–	389-5833	–
D6N LGP OEM	SC6	Os,40K	CW	12 teeth	24v	436-9104	–
D6N XL	DJA	HD,OS,WS,3K	CW	13 teeth	24v	301-2744	20R-3884
D6N XL	GB6	Os,40K	CW	12 teeth	24v	436-9104	–
D6N XL	PER	–	–	–	–	389-5833	–
D6R	DMP	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6R	EMM	HD,OS,WS,3K	CW	11 teeth	24v	207-1556	0R-5209
D6R	SSS	–	–	–	–	390-0788	–
D6R II XL	AAX	HD,OS,WS,3K	CW	11 teeth	24v	207-1556	0R-5209
D6R II XL	AGM	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209
D6R II XW	DAE	–	–	–	–	10R-9815	10R-9815
D6R III	TBC	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6R III LGP	DMK	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6R III XL	EXL	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6R III XW	MRT	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6R IIIP LGP	DLM	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6R IIIP XL	HKE	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6R IIIP XW	MTJ	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6R LGP	8LN	–	–	–	24v	6V-5538	10R-0399
D6R LGP	9PN	–	–	–	24v	6V-5227	10R-0399
D6R LGP	PPP	–	–	–	–	390-0788	–
D6R LGP X	S6Y	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6R X	C6Z	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6R XL	4JR	–	–	–	24v	6V-5226	10R-0399
D6R XL	7GR	HD,OS,WS,3K	CW	–	24v	128-3172	10R-0938
D6R XL	JEN	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6R XL	TTT	–	–	–	–	390-0788	–
D6R XL X	S6T	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6R XR	6HR	–	–	–	–	6V-4940	0R-5207
D6R XR	7DR	–	–	–	24v	207-1555	10R-0399
D6T	SMC	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6T LGP	JML	40K	CW	11 teeth	24v	436-9106	–
D6T LGP	KJL	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6T LGP	SGT	–	–	–	–	389-5799	–
D6T LGP	ZJB	–	–	–	24v	461-6550	–
D6T LGP OEM	PLR	–	–	–	24v	461-6550	–
D6T LGP PAT	KSB	–	–	–	24v	461-6550	–
D6T LGP PAT	RAD	–	–	–	–	389-5799	–
D6T LGP VPAT	K1R	40K	CW	11 teeth	24v	436-9106	–
D6T P LGP	JWD	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6T P XL	WFH	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6T P XW	RLW	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6T XL	2B3	–	–	–	–	389-5799	–
D6T XL	GCT	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232

<sup>19</sup> MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life



## Medium Track-Type Tractor Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(20)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
D6T XL	GMK	–	–	–	24v	461-6550	–
D6T XL PAT	JZC	–	–	–	24v	461-6550	–
D6T XL PAT	SGA	–	–	–	–	389-5799	–
D6T XL VPAT	HYT	40K	CW	11 teeth	24v	436-9106	–
D6T XW	MB5	–	–	–	–	389-5796	–
D6T XW	SKL	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D6T XW	TMY	–	–	–	–	389-5799	–
D6T XW	WLM	–	–	–	24v	461-6550	–
D6T XW PAT	RCW	–	–	–	24v	461-6550	–
D6T XW PAT	STE	–	–	–	–	389-5799	–
D6T XW VPAT	JNM	40K	CW	11 teeth	24v	436-9106	–
D7E	MDB	HD,OS,30K	CW	11 teeth	24v	345-1354	–
D7E	TAN	HD, OS, WS, 30K	CW	11 teeth	24v	348-3303	–
D7E LGP	SCG	HD,OS,30K	CW	11 teeth	24v	345-1354	–
D7E LGP	TJA	HD,OS,WS,3K	CW	11 teeth	24v	349-6530	20R-1312
D7G	C7G	HD, OS, WS, 30K	CW	12 teeth	24v	3T-2776	10R-9817
D7H	2RG	–	–	–	24v	207-1561	10R-0399
D7H	4AB	HD, OS, WS, 30K	CW	12 teeth	24v	363-9838	10R-9817
D7H LGP	4FG	–	–	–	–	6V-4940	0R-5207
D7H LGP	80Z	HD, OS, WS, 30K	CW	12 teeth	24v	363-9838	10R-9817
D7R	2HR	–	–	–	24v	6V-5538	10R-0399
D7R	5KZ	HD,OS,WS,3K	CW	–	24v	6V-5539	20R-2232
D7R	5MR	–	–	–	24v	6V-5227	10R-0399
D7R	CBZ	HD, OS, WS, 30K	CW	12 teeth	24v	6V-0512	10R-9817
D7R	R7B	–	–	–	–	10R-9815	10R-9815
D7R II	ACS	HD,OS,WS,3K	CW	–	24v	128-3172	10R-0938
D7R II	BRM	–	–	–	–	10R-9815	10R-9815
D7R II	KNA	HD,OS,WS,3K	CW	–	24v	6V-5539	20R-2232
D7R II LGP	ABJ	HD,OS,WS,3K	CW	11 teeth	24v	207-1556	0R-5209
D7R II LGP	AFG	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
D7R II XR	AGN	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
D7R II XR	EEA	HD,OS,WS,3K	CW	–	24v	6V-5539	20R-2232
D7R LGP	3DN	–	–	–	24v	207-1554	10R-0399
D7R LGP	4SR	–	–	–	24v	4N-3181	10R-0399
D7R LGP	DLN	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D7R XR	DJR	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D8L	53Y	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0513	10R-9816
D8N	7TK	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D8R	JR8	HD,OS,WS,3K	CW	11 teeth	24v	349-6530	20R-1312
D8R	MEJ	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209
D8R	T5X	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
D8R II	AKA	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
D8T	FMC	HD,OS,WS,3K	CW	11 teeth	24v	349-6530	20R-1312
D8T	KPZ	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
D8T	MLN	–	–	–	–	10R-9815	10R-9815

20 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Medium Wheel Loader Starters

Sales Model	S/N Prefix	Attributes <sup>(21)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
936F	9MK	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
950 GC	M5K	–	–	–	–	354-5671	20R-4877
950 GC	M5T	HD,OS,35K	CW	12 teeth	24V	424-6652	–
950E	22Z	–	–	–	24v	6V-5226	10R-0399
950F II	6LL	HD,OS,WS,3K	CW	12 teeth	24v	207-1511	10R-0397
950G	2JS	HD,OS,WS,3K	CW	–	24v	106-8558	10R-0397
950G	3JW	HD,OS,WS,3K	CW	–	24v	106-8557	10R-0397
950G II	AYB	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
950G II	BAA	HD,OS,WS,3K	CW	–	24v	106-8557	10R-0397
950H	JLX	–	–	–	–	390-0787	–
950H	M1G	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
950K	R4A	–	–	–	–	354-5671	20R-4877
950L	LXX	OS,40K	CW	12 teeth	24v	436-9104	–
950M	EMB	OS,40K	CW	12 teeth	24v	436-9104	–
950M	ENE	HD,OS,35K	CW	12 teeth	24V	424-6652	–
960F	6XL	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
962G II	AXY	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
962H	K6K	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
962H	PCW	–	–	–	–	390-0787	–
962H OEM	L5S	–	–	–	–	390-0787	–
962K	FLL	–	–	–	–	354-5671	20R-4877
962L	MTN	OS,40K	CW	12 teeth	24v	436-9104	–
962M	F2T	–	–	–	–	389-5833	–
962M	LSE	HD,OS,35K	CW	12 teeth	24V	424-6652	–
962M	SA8	OS,40K	CW	12 teeth	24v	436-9104	–
966E	6ZC	HD, OS, WS, 30K	CW	12 teeth	24v	6V-0512	10R-9817
966F II	4YG	–	–	–	–	354-5671	20R-4877
966G	AAH	–	–	–	24v	6V-5538	10R-0399
966G II	ANT	HD,OS,WS,3K	CW	13	24v	165-4619	0R-7757
966G II	AXL	–	–	–	24v	6V-5226	10R-0399
966H	A6D	HD,OS,WS,3K	CW	13	24v	165-4619	0R-7757
966H	BS6	HD, OS, WS, 30K	CW	13 teeth	24v	363-9839	10R-8909
966H OEM	CYR	HD, OS, WS, 30K	CW	13 teeth	24v	363-9839	10R-8909
966K	TFS	–	–	–	–	350-8694	10R-9815
966K XE	NGX	–	–	–	–	350-8694	10R-9815
966L	FRS	–	–	–	–	350-8694	10R-9815
966M	LMM	–	–	–	–	350-8694	10R-9815
966M	R8D	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
966M XE	P6C	–	–	–	–	350-8694	10R-9815
970F	9JK	–	–	–	24v	6V-5227	10R-0399
972G	1EW	–	–	–	24v	6V-5538	10R-0399
972G	8TS	HD, OS, WS, 30K	CW	12 teeth	24v	6V-0512	10R-9817
972G II	AWP	–	–	–	24v	207-1561	10R-0399
972H	A7J	HD, OS, WS, 30K	CW	13 teeth	24v	363-9839	10R-8909
972H	WXZ	HD,OS,WS,3K	CW	13	24v	165-4619	0R-7757
972K	Z4W	–	–	–	–	350-8694	10R-9815
972L	RFB	–	–	–	–	350-8694	10R-9815
972M	GGN	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209

21 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

## Medium Wheel Loader Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(22)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
972M	M8W	–	–	–	–	350-8694	10R-9815
972M XE	EDW	–	–	–	–	350-8694	10R-9815
980C	2XD	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
980F	3HK	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
980F	4RN	HD,OS,WS,3K	CW	–	24v	124-9780	10R-0936
980G	2KR	HD,OS,WS,3K	CW	–	24v	124-9780	10R-0936
980G II	AWH	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
980H	JMS	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
980H	PF8	–	–	–	–	10R-9815	10R-9815
980H II	MKP	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
980H OEM	P8B	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
980K	W7K	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
980K OEM	NEP	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
980L	D8Z	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
980M	N8T	–	–	–	–	350-8694	10R-9815
982M	K1Y	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
982M	LRS	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
IT62H	M5G	–	–	–	–	390-0787	–
LH85	TLA	–	–	–	24v	6V-5538	10R-0399
LH90	TLB	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232

## Mini Hydraulic Excavator Starters

Sales Model	S/N Prefix	Attributes <sup>(22)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
300.9D	LJM	–	CW	9 teeth	12v	373-9707	–
300.9D VPS	DW2	–	CW	9 teeth	12v	373-9707	–
301.4C	LJK	–	CW	9 teeth	12v	373-9707	–
301.7D	LJH	–	CW	9 teeth	12v	373-9707	–
301.7D CR	LJD	–	CW	9 teeth	12v	373-9707	–
302.4D	LJ6	–	CW	9 teeth	12v	373-9707	–
302.7D	LJ7	–	CW	9 teeth	12v	373-9707	–
306	MXH	–	–	–	–	185-9157	–

## Motor Grader Starters

Sales Model	S/N Prefix	Attributes <sup>(22)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
112E	24H	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
120 AWD	Y9D	Os,40K	CW	12 teeth	24v	436-9104	–
120G	4HD	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
120H	CAF	HD,OS,WS,3K	CW	–	24v	106-8558	10R-0397
120K	JAP	HD,Os, 30K	CW	12 teeth	24v	339-5406	20R-3759
120K 2 OEM	SZZ	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
120K Series 2	SZS	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
120M	B9C	HD, OS, WS, 40K	CW	11 teeth	24v	389-5799	–
120M	RMY	HD,OS,WS,3K	CW	–	24v	6V-5539	20R-2232
120M 2	M9C	HD,OS,WS,3K	CW	11 teeth	24v	349-9076	–

22 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Motor Grader Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(23)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
120M 2	M9H	HD, OS, WS, 40K	CW	11 teeth	24v	465-6932	-
120M 2 OEM	M92	40K	CW	11 teeth	24v	465-6932	-
12G	3WC	HD, OS, WS, 3K	CW	-	24v	338-3454	20R-2232
12H	2GS	HD, OS, WS, 3K	CW	-	24v	338-3454	20R-2232
12H	4ER	-	-	-	24v	207-1552	10R-0399
12H	CBK	-	-	-	24v	6V-5227	10R-0399
12K	JJA	HD, Os, 30K	CW	12 teeth	24v	339-5406	20R-3759
12M	B92	-	-	-	-	389-5796	-
12M	B9R	-	-	-	-	389-5799	-
12M 2	F9B	-	-	-	24v	461-6550	-
12M 2	F9M	HD, OS, WS, 3K	CW	11 teeth	24v	349-6530	20R-1312
12M 2	R9R	40K	CW	11 teeth	24v	465-6932	-
12M 3	N9B	-	-	-	24v	461-6550	-
12M 3	N9F	-	-	-	24v	327-2771	-
130G	74V	HD, OS, WS, 3K	CW	11 teeth	24v	338-3454	20R-2232
130G	7GB	HD, OS, WS, 3K	CW	-	24v	6V-5539	20R-2232
135H	3YK	HD, OS, WS, 3K	CW	12 teeth	24v	207-1511	10R-0397
135H	AMX	HD, OS, WS, 3K	CW	-	24v	106-8559	10R-0397
140G	50H	HD, OS, WS, 3K	CW	-	24v	338-3454	20R-2232
140H	5HM	HD, OS, WS, 3K	CW	-	24v	106-8558	10R-0397
140H	8KM	-	-	-	24v	207-1561	10R-0399
140H	9ZN	HD, OS, WS, 3K	CW	-	24v	338-3454	20R-2232
140H	CCA	HD, OS, WS, 3K	CW	13	24v	165-4619	0R-7757
140K	JPA	HD, Os, 30K	CW	12 teeth	24v	339-5406	20R-3759
140K 2	SZW	HD, Os, 30K	CW	12 teeth	24v	339-5406	20R-3759
140M	B9D	HD, OS, WS, 3K	CW	11 teeth	24v	207-1557	0R-5209
140M	D9G	-	-	-	-	389-5796	-
140M 2	M9D	-	-	-	-	389-5796	-
140M 2	M9G	-	-	-	24v	461-6550	-
140M 3	N9D	-	-	-	-	389-5796	-
140M 3	N9J	-	-	-	24v	461-6550	-
143H	1AL	HD, OS, WS, 3K	CW	-	24v	338-3454	20R-2232
143H	APN	HD, OS, WS, 3K	CW	13	24v	165-4619	0R-7757
14G	96U	HD, OS, WS, 3K	CW	-	24v	338-3454	20R-2232
14H	7WJ	-	-	-	24v	6V-5226	10R-0399
14H	ASE	HD, OS, WS, 3K	CW	-	24v	338-3454	20R-2232
14L	B94	-	-	-	-	389-5796	-
14M	R9J	-	-	-	-	389-5799	-
14M 3	E9S	40K	CW	11 teeth	24v	436-9106	-
14M 3	N9S	40K	CW	11 teeth	24v	420-1992	-
160H	2HS	-	-	-	24v	207-1555	10R-0399
160H	9EJ	HD, OS, WS, 3K	CW	-	24v	338-3454	20R-2232
160H	ASD	HD, OS, WS, 3K	CW	13	24v	165-4619	0R-7757
160H	XZK	-	-	-	24v	6V-5226	10R-0399
160K	JBP	HD, Os, 30K	CW	12 teeth	24v	339-5406	20R-3759
160M	B9E	-	-	-	-	389-5796	-
160M	D9T	HD, OS, WS, 3K	CW	-	24v	338-3454	20R-2232
160M 2	R9L	-	-	-	24v	461-6550	-

23 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

## Motor Grader Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(24)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
160M 2	R9T	–	–	–	24v	327-2771	–
160M 3	N9L	–	–	–	24v	461-6550	–
160M 3	N9T	–	–	–	24v	327-2771	–
163H	5AK	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
163H	ARL	HD,OS,WS,3K	CW	13	24v	165-4619	0R-7757
16G	93U	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
16H	6ZJ	HD,OS,WS,3K	CW	–	24v	124-9780	10R-0936
16H	ATS	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
16M	B9H	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
16M 3	E9Y	40K	CW	11 teeth	24v	436-9106	–
16M 3	N9Y	40K	CW	11 teeth	24v	420-1992	–
18M 3	E9W	40K	CW	11 teeth	24v	436-9106	–
18M 3	N9A	40K	CW	11 teeth	24v	420-1992	–
24H	7KK	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
24M	B9K	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
24N	N9Z	40K	CW	11 teeth	24v	420-1992	–

## Paving Starters

Sales Model	S/N Prefix	Attributes <sup>(24)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
30/30	9XW	HD,OS,WS,3K	–	–	24v	145-2413	20R-4254
AP-1000	1HD	MD,OS,20K	CW	10 teeth	12v	3E-5382	0R-4318
AP-1000B	7HN	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
AP-1000D	EAD	HD,OS,WS,3K	CW	12 teeth	24v	207-1551	10R-0405
AP1000E	DKH	–	–	–	–	288-6976	20R-3857
AP1000E	T1F	–	–	–	–	354-5671	20R-4877
AP1000F	AC4	–	–	–	–	354-5671	20R-4877
AP-1050B	6ZN	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
AP-1055B	A3P	HD,OS,WS,3K	CW	–	24v	106-8557	10R-0397
AP-1055B	ABB	HD,OS,WS,3K	CW	–	24v	106-8559	10R-0397
AP-1055D	A6P	HD,OS,WS,3K	CW	12 teeth	24v	207-1551	10R-0405
AP1055E	TJF	–	–	–	–	354-5671	20R-4877
AP1055F	RLM	–	–	–	–	354-5671	20R-4877
AP1055F	TJ5	HD,OS,WS,3K	CW	12 teeth	24v	349-9075	–
AP255E	D8A	–	–	–	12v	339-2900	20R-4256
AP-300	B2Y	–	–	–	12v	364-4130	20R-3882
AP300D	TEN	–	–	–	12v	364-4130	20R-3882
AP-500E	JWK	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
AP500F	503	50K	CW	10 teeth	24v	432-1691	20R-4881
AP-555E	A5D	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
AP555F	5F5	50K	CW	10 teeth	24v	432-1691	20R-4881
AP-600	B2S	–	–	–	24v	225-3150	10R-9101
AP-600D	TFZ	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
AP600F	AP6	50K	CW	10 teeth	24v	432-1691	20R-4881
AP600F	LR6	–	–	–	–	354-5671	20R-4877
AP-650B	9DN	MD,2K	CW	–	24v	143-0541	0R-4321
AP-650B	A7P	–	–	–	24v	225-3150	10R-9101

24 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Paving Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(25)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
AP-655C	AYP	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
AP-655C	CDG	HD,OS,WS,3K	CW	–	24v	106-8558	10R-0397
AP-655D	GNZ	–	–	–	–	292-7759	–
AP-655D	MAT	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
AP655F	479	–	–	–	–	354-5671	20R-4877
AP655F	655	50K	CW	10 teeth	24v	432-1691	20R-4881
AP-755	B3T	HD,OS,WS,3K	CW	12 teeth	24v	207-1551	10R-0405
AP-800C	1PM	MD,2K	CW	–	24v	143-0541	0R-4321
AP-800D	A5P	–	–	–	24v	225-3150	10R-9101
AP-900B	AGJ	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
BB-621C	B3Y	–	–	–	12v	339-2900	20R-4256
BB621E	B8Z	–	–	–	12v	339-2900	20R-4256
BB-740	B2J	–	–	–	12v	364-4130	20R-3882
BB-760	B2B	–	–	–	24v	225-3150	10R-9101
BB-781	B2F	HD,OS,WS,3K	CW	12 teeth	24v	207-1551	10R-0405
BG1000E	RTT	–	–	–	–	354-5671	20R-4877
BG-210B/C	9XJ	MD,2K	CW	–	12v	100-8224	20R-3881
BG-2255C	CKR	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
BG-225C	5GN	MD,2K	CW	–	24v	143-0541	0R-4321
BG-225C	B6G	–	–	–	24v	225-3150	10R-9101
BG-230	9AL	MD,2K	CW	–	24v	143-0541	0R-4321
BG-230D	B4G	–	–	–	24v	225-3150	10R-9101
BG-240C	AGL	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
BG-2455C	ACM	HD,OS,WS,3K	CW	12 teeth	24v	207-1511	10R-0397
BG-2455D	BXW	HD,OS,WS,3K	CW	12 teeth	24v	207-1551	10R-0405
BG-245C/C	4XN	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
BG-260C/C	8GN	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
BG-260C/C	BYG	HD,OS,WS,3K	CW	–	24v	106-8558	10R-0397
BG-260D	BPW	HD,OS,WS,3K	CW	12 teeth	24v	207-1551	10R-0405
BG555E	B5P	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
BG600D	B6K	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
BG-650/C	9EK	MD,2K	CW	–	12v	100-8224	20R-3881
BG-730/C	1XL	MD, OS, 20K	CW	10 teeth	12v	3E5382	0R-4318
CB10	P8P	–	–	10 teeth	12v	331-7010	20R-4762
CB14	DTT	–	–	–	12v	340-8308	20R-3887
CB-214D	1TZ	–	–	–	–	163-3361	20R-4256
CB-214E	214	–	–	–	–	163-3361	20R-4256
CB22	220	–	–	–	12v	339-2900	20R-4256
CB-224D	8RZ	–	–	–	12v	339-2900	20R-4256
CB-224E	224	–	–	–	12v	339-2900	20R-4256
CB-225D	9FZ	–	–	–	12v	339-2900	20R-4256
CB-225E	225	–	–	–	12v	339-2900	20R-4256
CB22B	2B2	–	–	–	12v	339-2900	20R-4256
CB22B LRC	466	–	–	–	12v	339-2900	20R-4256
CB24 XT	240	–	–	–	–	163-3361	20R-4256
CB24B	420	–	–	–	–	163-3361	20R-4256
CB24B	J2T	–	–	–	12v	339-2900	20R-4256
CB32	320	–	–	–	12v	339-2900	20R-4256

25 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

## Paving Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(26)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
CB32B	422	–	–	–	12v	339-2900	20R-4256
CB32B LRC	469	–	–	–	12v	339-2900	20R-4256
CB-334D	3JZ	–	–	–	12v	339-2900	20R-4256
CB-334D	4CZ	–	–	–	–	163-3361	20R-4256
CB-334E	C4F	–	–	–	12v	339-2900	20R-4256
CB-334E XW	C4X	–	–	–	12v	339-2900	20R-4256
CB-334EII	C3A	–	–	–	–	163-3361	20R-4256
CB-334EII	C3D	–	–	–	12v	339-2900	20R-4256
CB-335D	5PZ	–	–	–	12v	339-2900	20R-4256
CB-335D	BBW	–	–	–	–	163-3361	20R-4256
CB-335E	C5F	–	–	–	12v	339-2900	20R-4256
CB-335EII	C3C	–	–	–	12v	339-2900	20R-4256
CB-335EII	C3F	–	–	–	–	163-3361	20R-4256
CB34	345	–	–	–	12v	339-2900	20R-4256
CB34	347	–	–	–	–	163-3361	20R-4256
CB34B	XB4	–	–	–	12v	339-2900	20R-4256
CB34B LRC	470	–	–	–	12v	339-2900	20R-4256
CB34B XW	425	–	–	–	12v	339-2900	20R-4256
CB36B	XSB	–	–	–	12v	339-2900	20R-4256
CB-434B	6AL	MD,2K	CW	–	24v	143-0541	0R-4321
CB-434C	4DN	MD,2K	CW	–	24v	143-0541	0R-4321
CB-434D	CNH	–	–	–	12v	364-4130	20R-3882
CB-444D	C6B	–	–	–	12v	364-4130	20R-3882
CB44B	JXL	–	–	–	–	390-3144	–
CB44B	TWC	–	–	10 teeth	12v	331-7010	20R-4762
CB46B HRC	JC4	–	–	–	–	390-3144	–
CB-534	2EG	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
CB-534B	5RN	MD,2K	CW	–	24v	143-0541	0R-4321
CB-534C	1WS	MD,2K	CW	–	24v	143-0541	0R-4321
CB-534D	C8M	MD,2K	CW	–	12v	143-0539	0R-4316
CB-534D XW	FEA	MD,2K	CW	–	12v	143-0539	0R-4316
CB-535B	3AR	MD,2K	CW	–	24v	143-0541	0R-4321
CB54	JLM	–	–	10 teeth	12v	364-4127	–
CB-544	8FM	MD,2K	CW	–	24v	143-0541	0R-4321
CB-544D	C3B	–	–	–	12v	364-4130	20R-3882
CB-545	2FS	MD,2K	CW	–	24v	143-0541	0R-4321
CB54B	RJN	–	–	10 teeth	12v	331-7010	20R-4762
CB-564D	D4M	MD,2K	CW	–	12v	143-0539	0R-4316
CB-634	5CL	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CB-634C	3BR	HD,OS,WS,3K	CW	–	24v	106-8559	10R-0397
CB-634D	CDF	HD,OS,WS,3K	CW	12 teeth	12v	151-8090	10R-8909
CB64	DJM	–	–	10 teeth	12v	364-4127	–
CB64B	476	–	–	10 teeth	12v	331-7010	20R-4762
CB66B	475	–	–	10 teeth	12v	331-7010	20R-4762
CB68B	496	–	–	10 teeth	12v	331-7010	20R-4762
CB7	EL5	–	–	–	–	390-3144	–
CBR2.6	R2B	–	–	–	12v	339-2900	20R-4762
CBR2.7	R52	–	–	–	12v	339-2900	20R-4762
CC24	241	–	–	–	–	163-3361	20R-4762

26 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Paving Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(27)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
CC24B	C24	–	–	–	12v	339-2900	20R-4762
CC34	346	–	–	–	–	163-3361	20R-4762
CC34B	CC3	–	–	–	12v	339-2900	20R-4762
CC34B LRC	471	–	–	–	12v	339-2900	20R-4762
CCS9	C52	–	–	10 teeth	24v/12	451-0011	20R-6113
CD10	J6B	–	–	–	–	390-3144	–
CD44B	398	–	–	–	–	390-3144	–
CD54	J5R	–	–	–	12v	364-4130	20R-3882
CD54B	GRT	–	–	–	–	390-3144	–
CP-323	6JD	LD,2k	CW	–	12v	143-0537	20R-4040
CP-323C	6DM	MD,2K	CW	–	24v	143-0541	0R-4321
CP-323C	EAS	–	–	–	24v	225-3150	10R-9101
CP-433C	1ZN	MD,2K	CW	–	24v	143-0541	0R-4321
CP-433E	ASN	–	–	–	24v	225-3150	10R-9101
CP-433E	CFK	MD,2K	CW	–	24v	143-0541	0R-4321
CP44	M4P	–	–	–	24v	225-3150	10R-9101
CP44B	GTT	–	–	10 teeth	12v	357-5204	–
CP-533	5AL	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CP-533C	3XN	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CP-533D	AFC	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CP-533E	TLH	–	–	–	24v	225-3150	10R-9101
CP54	C5Y	–	–	–	24v	225-3150	10R-9101
CP54B	ALL	–	–	10	24v	382-6587	20R-4881
CP54B	P54	–	–	10 teeth	24v/12	451-0011	20R-6113
CP54B	P5F	–	–	–	24v	225-3150	10R-9101
CP56	FCP	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CP-563	5AJ	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CP-563C	5JN	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CP-563D	5LZ	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CP-563E	CNT	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CP56B	LHC	–	–	10 teeth	24v/12	451-0011	20R-6113
CP56B	M5P	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CP56B	P56	50K	CW	10 teeth	24v	432-1691	20R-4881
CP-573E	ASZ	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CP64	C6P	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CP-663E	AFL	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CP-663E	DAF	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CP68B	LCF	50K	CW	10 teeth	24v	432-1691	20R-4881
CP68B	P68	–	–	10 teeth	24v/12	451-0011	20R-6113
CP74	P8F	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CP74B	L7B	50K	CW	10 teeth	24v	432-1691	20R-4881
CP74B	M7B	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CP74B	P74	–	–	10 teeth	24v/12	451-0011	20R-6113
CP76	JCP	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS-323	1TM	LD,2k	CW	–	12v	143-0537	20R-4040
CS-323C	1EN	MD,2K	CW	–	24v	143-0541	0R-4321
CS-323C	DAR	–	–	–	24v	225-3150	10R-9101
CS-423E	DCL	MD,2K	CW	–	24v	143-0541	0R-4321

27 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life



## Paving Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(28)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
CS-423E	EAE	–	–	–	24v	225-3150	10R-9101
CS-431C	9XL	MD,2K	CW	–	24v	143-0541	0R-4321
CS-433C	1FS	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CS-433C	5BZ	MD,2K	CW	–	24v	143-0541	0R-4321
CS-433E	ASR	–	–	–	24v	225-3150	10R-9101
CS-433E	CFP	MD,2K	CW	–	24v	143-0541	0R-4321
CS-433E OEM	DCP	–	–	–	24v	225-3150	10R-9101
CS44	M4C	–	–	–	24v	225-3150	10R-9101
CS44B	RGE	–	–	10 teeth	12v	357-5204	–
CS-531	4KM	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CS-531C	5ZN	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CS-531D	4MZ	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CS-533	4HL	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CS-533C	2XN	HD,OS,WS,3K	CW	–	24v	106-8559	10R-0397
CS-533D	AET	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CS-533E	DAK	–	–	–	24v	225-3150	10R-9101
CS54	C5R	–	–	–	24v	225-3150	10R-9101
CS54B	G54	–	CW	10 teeth	24v	357-5205	–
CS54B	L4H	–	–	10 teeth	24v/12	451-0011	20R-6113
CS54B	M5B	–	–	–	24v	225-3150	10R-9101
CS54B OEM	MJ5	–	–	10 teeth	24v/12	451-0011	20R-6113
CS56	FCS	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS-563	7GG	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CS-563C	4LN	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CS-563D	1SZ	HD,OS,WS,3K	CW	12 teeth	24v	207-1551	10R-0405
CS-563D	2RZ	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CS-563E	ASA	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS-563E OEM	PAH	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS56B	L8H	50K	CW	10 teeth	24v	432-1691	20R-4881
CS56B	M4M	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS56B	S56	–	–	10 teeth	24v/12	451-0011	20R-6113
CS-573	8PK	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CS-573C	6LN	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CS-573D	CMK	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CS-573E	CNN	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS-583	8YJ	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CS-583C	7MN	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CS-583D	2CZ	HD,OS,WS,3K	CW	12 teeth	24v	207-1511	10R-0397
CS-583E	CNX	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS64	C7F	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS64 OEM	WSW	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS64B	486	–	–	10	24v	382-6587	20R-4881
CS64B	C64	–	–	10 teeth	24v/12	451-0011	20R-6113
CS64B	DH6	–	–	–	24v	225-3150	10R-9101
CS64B	TF6	–	CW	10 teeth	24v	357-5205	–
CS-663E	DAG	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS66B	487	–	–	10 teeth	24v/12	451-0011	20R-6113

28 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Paving Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(29)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
CS-683E	AGR	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
CS-683E	DAD	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS68B	CS8	–	–	10 teeth	24v/12	451-0011	20R-6113
CS68B	MBF	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS74	C8F	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS74B	E7E	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS74B	LCB	–	–	10 teeth	24v/12	451-0011	20R-6113
CS76	JCS	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS76B	492	–	–	10 teeth	24v/12	451-0011	20R-6113
CS76B	L9H	50K	CW	10 teeth	24v	432-1691	20R-4881
CS78B	493	–	–	10 teeth	24v/12	451-0011	20R-6113
CS78B	M78	–	CW	10 teeth	24v	357-5205	–
CS78B	M8M	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS79B	C79	MD,3K	CW	11 teeth	24v	300-6868	20R-4041
CS79B	CM7	–	CW	10 teeth	24v	357-5205	–
CW14	LTJ	–	–	–	–	390-3144	–
CW16	N6J	–	–	10 teeth	12v	331-7010	20R-4762
CW16	TL5	–	–	–	–	390-3144	–
CW34	B7L	–	CW	10 teeth	24v	357-5205	–
CW34	TLJ	–	CW	10 teeth	24v	347-2163	–
CW34 LRC	J3H	–	–	–	24v	225-3150	10R-9101
DEUCE	7RR	HD,OS,WS,3K	–	–	24v	145-2413	20R-4254
PF-290	1XW	MD,2K	CW	–	24v	143-0541	0R-4321
PF-300B	6HM	MD,2K	CW	–	24v	143-0541	0R-4321
PF-300C	PFB	–	–	–	24v	225-3150	10R-9101
PM-102	Z2X	HD,OS,WS,3K	CW	12 teeth	24v	207-1551	10R-0405
PM102	Z1X	HD,OS,WS,3K	CW	12 teeth	24v	207-1551	10R-0405
PM-200	P1C	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
PM-201	PNM	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
PM310 HRC	NMA	–	–	–	–	389-5796	–
PM310 LRC	KWA	–	–	–	–	389-5796	–
PM312 HRC	NJ9	–	–	–	–	389-5796	–
PM313 HRC	JH9	–	–	–	–	389-5796	–
PM-465	5ZS	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
PM-565	3TK	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
PM-565B	8GS	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
PM620 HRC	JB9	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
PM620 LRC	LH9	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
PM622 HRC	JFC	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
PM622 LRC	JCF	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
PR-1000	5XC	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
PR-450C	7PJ	HD,OS,WS,30K	CW	–	24v	6T-0647	20R-2232
PR-750C	7CK	HD,OS,WS,3K	CW	11 teeth	24v	207-1556	0R5209
PS-130	7ND	LD,2k	CW	–	12v	143-0537	20R-4040
PS-150B	3XR	MD,2K	CW	–	24v	143-0541	0R-4321
PS-150C	FPS	–	–	–	24v	225-3150	10R-9101
PS-180	7PD	LD,2k	CW	–	12v	143-0537	20R-4040

29 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

## Paving Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(30)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
PS-200B	5JR	MD,2K	CW	–	24v	143-0541	0R-4321
PS-300B	4PN	MD,2K	CW	–	24v	143-0541	0R-4321
PS-300C	PFS	–	–	–	24v	225-3150	10R-9101
PS-360B	9LS	MD,2K	CW	–	24v	143-0541	0R-4321
PS-360C	PJF	–	–	–	24v	225-3150	10R-9101
PS-500	7XD	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
RM-250C	AWG	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
RM-300	BWR	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
RM-350	5FK	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
RM-350B	7FS	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
RM-350B	AXW	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209
RM-500	ASW	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
RM500B	MB9	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
RR-250	6ED	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
RR-250B	3RR	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
SM-350	1RM	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
SS-250	6DD	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
SS-250B	5GR	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232

## Pipelayer Starters

Sales Model	S/N Prefix	Attributes <sup>(30)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
561N	TAD	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
572G	8PC	HD, OS, WS, 30K	CW	12 teeth	24v	363-9838	10R-9817
572R	AAC	–	–	–	24v	6V-5227	10R-0399
572R II	DSC	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
578	8HB	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
583R	2XS	HD,OS,WS,30K	CW	–	24v	3T-2780	20R-2232
583T	CMX	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
587R	BXL	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
587T	FAT	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
589	31Z	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0513	10R-9816
PL61	6P2	–	–	–	–	354-5671	20R-4877
PL61	S3H	–	–	–	24v	475-7412	–
PL61	WGS	HD,OS,WS,3K	CW	13 teeth	24v	330-3123	20R-3884
PL72	P72	–	–	–	–	389-5799	–
PL72	P73	HD,OS,WS,3K	CW	11 teeth	24v	349-6530	20R-1312
PL83	DLW	HD,OS,WS,3K	CW	11 teeth	24v	349-6530	20R-1312
PL83	KSD	HD,OS,WS,3K	CW	–	24v	338-3454	20R-1312
PL87	KKJ	HD,OS,WS,3K	CW	–	24v	338-3454	20R-1312
PL87	TEC	HD,OS,WS,3K	CW	11 teeth	24v	349-6530	20R-1312

30 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Quarry Truck Starters

Sales Model	S/N Prefix	Attributes <sup>(31)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
769C	01X	HD,OS,WS,30K	CW	–	24v	4Q-5203	20R-1312
769D	5SS	HD,OS,WS,3K	CW	–	24v	338-3454	20R-1312
769D	BBB	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-1312
770	BZZ	HD,OS,WS,3K	CW	–	24v	338-3454	20R-1312
770G	KDH	HD,OS,WS,3K	CW	–	24v	338-3454	20R-1312
770G OEM	TWA	HD,OS,WS,3K	CW	–	24v	338-3454	20R-1312
771C	3BJ	HD,OS,WS,3K	CW	–	24v	338-3454	20R-1312
771D	6YS	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-1312
771D	BCA	HD,OS,WS,30K	CW	11 teeth	24v	4N-1062	0R-5209
772	RLB	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
772B	64W	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
772G	LTX	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
773	63G	HD, OS, WS, 30K	CW	11 teeth	24v	352-9766	–
773B	63W	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
773D	7CS	HD,OS,WS,30K	CW	–	24v	3T-2787	20R-2232
773D	NBJ	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
773E	BDA	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
773E	KEG	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
773E	PRB	OS,WS,30K	CW	11 teeth	24v	494-6414	20R-2232
773F	EED	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
773F OEM	EXD	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
773G OEM	T5S	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
775B	7XJ	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
775D	8AS	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
775E	BEC	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
775E OEM	DTE	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
775F	DLS	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
775F OEM	EYG	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
775G	RFM	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
775G OEM	T5F	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
776C	2TK	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0889	10R-9816
776D	5ER	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0889	10R-9816
776D	AFS	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0513	10R-9816
777	84A	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0889	10R-9816
777B	4YC	–	CCW	–	Air	455-7682	–
777C	4XJ	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0889	10R-9816
777D	3PR	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0513	10R-9816
777D	AGC	HD, OS, WS, 3K	CW	11 teeth	24v	338-3456	10R-9816
777D	FKR	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0889	10R-9816
777DHA	2YW	HD, OS, WS, 30K	CW	11 teeth	24v	3T-5831	10R-9816
777DHA	AGY	HD, OS, WS, 3K	CW	11 teeth	24v	6V-0889	10R-9816
777E	KDP	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
777F	JRP	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
777F OEM	JXP	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
777G OEM	T5A	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232

31 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

## Scoop Starters

Sales Model	S/N Prefix	Attributes <sup>(32)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
SU488	LAX	–	–	–	12v	493-8661	–

## Skid Steel Loaders Starters

Sales Model	S/N Prefix	Attributes <sup>(32)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
216	4NZ	–	–	–	–	333-5930	–
216B	RLL	–	–	–	–	333-5930	–
216B 3	CD3	–	–	–	12v	323-6614	OR-9704
216B 3	JXM	–	–	–	–	163-3361	20R-4256
216B 3	PWK	–	–	–	12v	339-2900	20R-4256
226	5FZ	MD,2K	CW	–	12v	144-9955	OR-9702
226B	MJH	–	–	–	12v	339-2900	20R-4256
226B 3	AS2	–	–	–	–	333-5930	–
226B 3	DXZ	–	–	–	–	322-5728	–
226B 3	MWD	–	–	–	–	163-3361	20R-4256
228	6BZ	MD,2K	CW	–	12v	144-9955	OR-9702
232	CAB	–	–	–	12v	339-2900	20R-4256
232B	SCH	–	–	–	12v	339-2900	20R-4256
232D	KXC	–	–	–	–	163-3361	20R-4256
236	4YZ	MD,2K	CW	–	12v	144-9955	OR-9702
236B	HEN	MD,2K	CW	–	12v	143-0539	OR-4316
236B 3	A9H	MD,2K	CW	–	12v	143-0539	OR-4316
239D	CD4	–	–	–	–	163-3361	20R-4256
242	CMB	MD,2K	CW	–	12v	144-9955	OR-9702
242B	BXM	–	–	–	12v	339-2900	20R-4256
242B 3	SRS	MD,2K	CW	–	12v	143-0539	OR-4316
246	5SZ	MD,2K	CW	–	12v	144-9955	OR-9702
246B	PAT	MD,2K	CW	–	12v	143-0539	OR-4316
246C	JAY	MD,2K	CW	–	12v	143-0539	OR-4316
247	CML	MD,2K	CW	–	12v	144-9955	OR-9702
247B	MTL	–	–	–	12v	339-2900	20R-4256
247B 3	TSL	–	–	–	–	163-3361	20R-4256
248	6LZ	MD,2K	CW	–	12v	144-9955	OR-9702
248B	SCL	MD,2K	CW	–	12v	143-0539	OR-4316
249D	AH9	–	–	–	–	163-3361	20R-4256
252	FDG	MD,2K	CW	–	12v	144-9955	OR-9702
252B	SCP	MD,2K	CW	–	12v	143-0539	OR-4316
252B 3	TNK	MD,2K	CW	–	12v	143-0539	OR-4316
256C	DWS	MD,2K	CW	–	12v	143-0539	OR-4316
257	CMM	MD,2K	CW	–	12v	144-9955	OR-9702
257B	SLK	–	–	–	12v	339-2900	20R-4256
257B 3	B7H	MD,2K	CW	–	12v	143-0539	OR-4316
259B 3	YYZ	MD,2K	CW	–	12v	143-0539	OR-4316
262	CED	MD,2K	CW	–	12v	144-9955	OR-9702
262B	PDT	MD,2K	CW	–	12v	143-0539	OR-4316
262C	MST	MD,2K	CW	–	12v	143-0539	OR-4316
262C 2	TMW	MD,2K	CW	–	12v	143-0539	OR-4316

32 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Skid Steel Loaders Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(33)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
267	CMP	MD,2K	CW	–	12v	144-9955	OR-9702
267B	CYC	MD,2K	CW	–	12v	143-0539	OR-4316
268B	LBA	MD,2K	CW	–	12v	143-0539	OR-4316
272C	RED	MD,2K	CW	–	12v	143-0539	OR-4316
272D	GSL	–	–	–	12v	377-6967	20R-3859
272D 2	BL2	–	–	–	12v	377-6967	20R-3859
272D 2 XHP	MD2	–	–	–	12v	377-6967	20R-3859
272D XHP	ETL	–	–	–	12v	377-6967	20R-3859
277	CNC	MD,2K	CW	–	12v	144-9955	OR-9702
277B	MDH	MD,2K	CW	–	12v	143-0539	OR-4316
277C	KCC	MD, 3K	CW	11 teeth	24v	300-6868	20R-4041
277C 2	MET	MD,2K	CW	–	12v	143-0539	OR-4316
277C 2 OEM	A22	MD,2K	CW	–	12v	143-0539	OR-4316
277C OEM	L5Y	MD,2K	CW	–	12v	143-0539	OR-4316
279C	MBT	MD,2K	CW	–	12v	143-0539	OR-4316
279C 2	KWB	MD,2K	CW	–	12v	143-0539	OR-4316
287	CNY	MD,2K	CW	–	12v	144-9955	OR-9702
287B	ZSA	MD,2K	CW	–	12v	143-0539	OR-4316
287C	MAS	MD,2K	CW	–	12v	143-0539	OR-4316
287C 2	SSB	MD,2K	CW	–	12v	143-0539	OR-4316
289C	JMP	MD,2K	CW	–	12v	143-0539	OR-4316
289C 2	RTD	MD,2K	CW	–	12v	143-0539	OR-4316
297C	GCP	MD,2K	CW	–	12v	143-0539	OR-4316
297C OEM	LMB	–	–	–	12v	364-4130	20R-3882
297D	BE7	–	–	–	12v	377-6967	20R-3859
297D 2	BL7	–	–	–	12v	377-6967	20R-3859
297D 2 XHP	HP2	–	–	–	12v	377-6967	20R-3859
297D XHP	HP7	–	–	–	12v	377-6967	20R-3859
299C	JSP	MD,2K	CW	–	12v	143-0539	OR-4316
299C OEM	NMP	–	–	–	12v	364-4130	20R-3882
299D	HCL	–	–	–	12v	377-6967	20R-3859
299D 2	FD2	–	–	–	12v	377-6967	20R-3859
299D 2 XHP	DX2	–	–	–	12v	377-6967	20R-3859
299D XHP	JST	–	–	–	12v	377-6967	20R-3859

## Small Track-Type Tractor Starters

Sales Model	S/N Prefix	Attributes <sup>(33)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
D3G LGPJ	CLB	MD,OS,2K	CW	–	12v	105-3133	10R-0754
D3G XL	ZDN	MD,OS,2K	CW	–	12v	105-3133	10R-0754
D3K 2 LGP	GAE	–	–	10 teeth	12v	357-5204	–
D3K 2 LGP	JPJ	–	–	10 teeth	12v	364-4127	–
D3K 2 XL	KFF	–	–	10 teeth	12v	364-4127	–
D3K LGP	LLL	–	–	10 teeth	12v	321-8965	20R-4255
D3K XL	FFF	–	–	10 teeth	12v	321-8965	20R-4255
D4G LGP	TLX	MD,OS,2K	CW	–	12v	105-3133	10R-0754
D4G XL	HYD	MD,OS,2K	CW	–	12v	105-3133	10R-0754

33 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

## Small Track-Type Tractor Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(34)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
D4K 2 LGP	KR2	–	–	10 teeth	12v	312-7536	–
D4K 2 LGP	KRR	–	–	10 teeth	12v	364-4127	–
D4K 2 XL	KM2	–	–	10 teeth	12v	364-4127	–
D4K 2 XL	KMM	–	–	10 teeth	12v	312-7536	–
D4K LGP	RRR	–	–	10 teeth	12v	321-8965	20R-4255
D4K XL	MMM	–	–	10 teeth	12v	321-8965	20R-4255
D5B	25X	HD, OS, WS, 30K	CW	12 teeth	24v	363-9838	10R-9817
D5G LGP OEM	D5G	MD, WS, 2K	CW	12 teeth	12v	6V-4212	10R-0393
D5G LGPJ	RSC	MD,OS,2K	CW	–	12v	105-3133	10R-0754
D5K 2 LGP	RRE	–	–	10 teeth	12v	312-7536	–
D5K 2 LGP	TRF	–	–	10 teeth	12v	364-4127	–
D5K 2 XL	KW2	–	–	10 teeth	12v	312-7536	–
D5K 2 XL	KWW	–	–	10 teeth	12v	321-8965	20R-4255
D5K LGP	JLF	–	–	10 teeth	12v	321-8965	20R-4255
D5K XL	WWW	–	–	10 teeth	12v	321-8965	20R-4255

## Small Wheel Loader Starters

Sales Model	S/N Prefix	Attributes <sup>(34)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
924F	6MN	MD OS 20K	CW	10 teeth	24v	3E-5381	0R-4317
924G	6YW	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
924G	EEB	MD, 3K	CW	11 teeth	24v	300-6868	20R-4041
924G OEM	KTC	MD,2K	CW	–	24v	143-0541	0R-4321
924H	HXC	MD, 3K	CW	11 teeth	24v	300-6868	20R-4041
924H	RRS	–	–	–	24v	225-3150	10R-9101
924H Z	WLB	MD, 3K	CW	11 teeth	24v	300-6868	20R-4041
924K	SNZ	–	–	–	–	354-5671	20R-4877
926M	LTE	–	–	–	–	354-5671	20R-4877
928G	7SR	HD,OS,WS,3K	CW	–	24v	106-8559	10R-0397
928G	DJD	MD,2K	CW	–	24v	143-0541	0R-4321
928G OEM	GMB	MD,2K	CW	–	24v	143-0541	0R-4321
928H	CXK	MD, 3K	CW	11 teeth	24v	300-6868	20R-4041
930G	TWR	MD,2K	CW	–	24v	143-0541	0R-4321
930H	DHC	MD, 3K	CW	11 teeth	24v	300-6868	20R-4041
930K	RHN	–	–	–	–	354-5671	20R-4877
930K OEM	T68	–	–	–	–	354-5671	20R-4877
930M	HEY	HD,OS,WS,3K	CW	12 teeth	24v	349-9075	
930M	KTG	–	–	–	–	354-5671	20R-4877
938F	2RM	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
938G	9HS	HD,OS,WS,3K	CW	–	24v	106-8558	10R-0397
938G II	PHN	HD,OS,WS,3K	CW	–	24v	106-8559	10R-0397
938G II OEM	MSC	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
938H	JKM	–	–	–	–	288-6976	20R-3857
938K	SWL	HD,OS,WS,3K	CW	12 teeth	24v	349-9075	
938K	XXT	–	–	–	–	354-5671	20R-4877
938M	J3R	–	–	–	–	354-5671	20R-4877
IT28F	1JL	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397

34 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Small Wheel Loader Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(35)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
IT28G	8CR	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
IT28G	EWF	MD, 3K	CW	11 teeth	24v	300-6868	20R-4041
IT38F	6FN	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
IT38G II	JAN	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
IT38H	JNJ	–	–	–	–	288-6976	20R-3857

## Small Hydraulic Excavator Starters

Sales Model	S/N Prefix	Attributes <sup>(35)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
212B	3PJ	MD,OS,20K	CW	10 teeth	24v	3E-5381	0R-4317
214B	4CF	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
214B-FT	9MF	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
224B	7WF	HD,OS,WS,3K	CW	–	24v	106-8557	10R-0397
312C L OEM	CXX	–	–	–	–	125-2988	10R-7586
312D	KLE	–	–	–	24v	225-3150	10R-9101
312D 2	DGF	–	CW	10 teeth	24v	357-5205	–
312D 2	TJY	–	–	–	24v	225-3150	10R-9101
312D 2 GC OEM	F4F	–	CW	10 teeth	24v	357-5205	–
312D 2GC	BRW	–	CW	10 teeth	24v	357-5205	–
312D 2L	EAB	–	CW	10 teeth	24v	357-5205	–
312D 2L	WHJ	–	–	–	24v	225-3150	10R-9101
312D GC	RXZ	–	–	–	24v	225-3150	10R-9101
312D L OEM	L44	–	–	–	24v	225-3150	10R-9101
312D LC	MGJ	–	–	–	24v	225-3150	10R-9101
312E	PZL	OS	CW	10 teeth	24v	482-3187	–
312E L	MJD	OS	CW	10 teeth	24v	482-3187	–
312E L	WEY	–	–	10 teeth	24v	382-6587	20R-4881
312E L OEM	EGR	OS	CW	10 teeth	24v	482-3187	–
312F	KMK	50K	CW	10 teeth	24v	432-1691	20R-4881
313D 2	PLD	–	–	–	24v	225-3150	10R-9101
313D 2	ZAA	–	CW	10 teeth	24v	357-5205	–
313D 2 L OEM	KFP	–	CW	10 teeth	24v	357-5205	–
313D 2 LGP	GAJ	–	CW	10 teeth	24v	357-5205	–
313D 2GC	GAP	–	CW	10 teeth	24v	357-5205	–
313D 2GC OEM	GCY	–	CW	10 teeth	24v	357-5205	–
313D 2L	LCY	–	CW	10 teeth	24v	357-5205	–
313F	NLG	50K	CW	10 teeth	24v	432-1691	20R-4881
313F L	DJE	–	–	10 teeth	24v	382-6587	20R-4881
313F L OEM	DH8	50K	CW	10 teeth	24v	432-1691	20R-4881
314E CR	ECN	OS	CW	10 teeth	24v	482-3187	–
314E LCR	YCW	OS	CW	10 teeth	24v	482-3187	–
314F L	LFC	50K	CW	10 teeth	24v	432-1691	20R-4881
315F LCR OEM	FTC	50K	CW	10 teeth	24v	432-1691	20R-4881
315FL	TDY	50K	CW	10 teeth	24v	432-1691	20R-4881
316E L	DZW	OS	CW	10 teeth	24v	482-3187	–
316E L	WZY	50K	CW	10 teeth	24v	432-1691	20R-4881
316E L OEM	F32	50K	CW	10 teeth	24v	432-1691	20R-4881
316F OEM	HS3	50K	CW	10 teeth	24v	432-1691	20R-4881

35 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life



## Small Hydraulic Excavator Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(36)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
318D 2L	TZS	–	–	–	24v	225-3150	10R-9101
318D 2L	XAH	–	CW	10 teeth	24v	357-5205	–
318D 2L OEM	M8R	–	CW	10 teeth	24v	357-5205	–
318E L	DZF	OS	CW	10 teeth	24v	482-3187	–
318E L	WZS	50K	CW	10 teeth	24v	432-1691	20R-4881
318E OEM	ERR	50K	CW	10 teeth	24v	432-1691	20R-4881
318F L	FFT	–	–	10 teeth	24v	382-6587	20R-4881
318F L	HCP	50K	CW	10 teeth	24v	432-1691	20R-4881
M314F	FB4	OS	CW	10 teeth	24v	482-3187	–
M315D 2	CA4	–	CW	10 teeth	24v	341-7601	–
M315D 2	CH3	–	–	–	24v	225-3150	10R-9101
M315D OEM	H9A	–	–	–	24v	225-3150	10R-9101
M316D	P6K	–	–	–	24v	225-3150	10R-9101
M316D OEM	KMA	–	–	–	24v	225-3150	10R-9101
M316F	FB6	OS	CW	10 teeth	24v	482-3187	–
M316F OEM	CP5	OS	CW	10 teeth	24v	482-3187	–
M317D 2	CA6	–	CW	10 teeth	24v	341-7601	–
M317D 2	CH5	–	–	–	24v	225-3150	10R-9101
M317F	F6P	OS	CW	10 teeth	24v	482-3187	–
M318D	P8L	–	–	–	24v	225-3150	10R-9101
M318D MH	P9M	–	–	–	24v	225-3150	10R-9101
M318F	F8B	OS	CW	10 teeth	24v	382-5901	–
M318F	FB8	OS	CW	10 teeth	24v	482-3187	–
M318F OEM	MH9	OS	CW	10 teeth	24v	482-3187	–
M320D 2	EN8	–	–	–	24v	225-3150	10R-9101
M320F	F2W	OS	CW	10 teeth	24v	482-3187	–
M320F	FB2	–	CW	10 teeth	24v	341-7602	–
M322D	P2T	–	–	–	24v	225-3150	10R-9101
M322D 2	EN2	–	–	–	24v	225-3150	10R-9101
M322D 2 MH	EN9	–	–	–	24v	225-3150	10R-9101
M322D MH	D3X	–	–	–	24v	225-3150	10R-9101
M322D OEM	J4M	–	–	–	24v	225-3150	10R-9101
M322F	FBW	OS	CW	10 teeth	24v	482-3187	–
M324D 2 MH	EN3	–	–	–	24v	225-3150	10R-9101
MH3022	FM2	OS	CW	10 teeth	24v	482-3187	–
MH3024	FB5	OS	CW	10 teeth	24v	382-5901	–
MH3024	FM4	OS	CW	10 teeth	24v	482-3187	–

## Telehandler Starters

Sales Model	S/N Prefix	Attributes <sup>(36)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
C40	C4D	–	–	–	12v	364-4131	20R-3883
C50	C5D	–	–	–	12v	364-4131	20R-3883
PM OEM	MLS	MD,2K	CW	–	12v	144-9955	0R-9702
RT80-RT100	1GJ	MD,OS,20K	CW	10 teeth	12v	3E-5382	0R-4318
TH103	3PN	MD,2K	CW	–	12v	6V-0492	0R-4316
TH210	CEC	–	–	–	12v	357-5202	20R-3882
TH210	MHT	–	–	–	12v	364-4131	20R-3883
TH215	CEG	–	–	–	12v	357-5203	20R-3883

36 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Telehandler Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(37)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
TH215	MHS	–	–	–	12v	364-4131	20R-3883
TH220B	SLA	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
TH255	TBS	–	–	–	12v	365-3422	20R-3883
TH330B	SLB	MD,2K	CW	–	12v	144-9955	OR-9702
TH336	TDE	MD,2K	CW	–	12v	144-9955	OR-9702
TH336C	MJR	–	–	–	–	390-3144	–
TH336C	THM	–	–	10 teeth	12v	331-7010	20R-4762
TH337	TDF	MD,2K	CW	–	12v	144-9955	OR-9702
TH337C	DJB	–	–	–	–	390-3144	–
TH340B	SLC	MD,2K	CW	–	12v	144-9955	OR-9702
TH350B	SLD	MD,2K	CW	–	12v	144-9955	OR-9702
TH3510D HRC	TH2	–	–	10 teeth	12v	331-7010	20R-4762
TH355B	JRK	MD,2K	CW	–	12v	144-9955	OR-9702
TH360B	SLE	MD,2K	CW	–	12v	144-9955	OR-9702
TH406	TBX	MD,2K	CW	–	12v	144-9955	OR-9702
TH406C	GAT	–	–	–	–	390-3144	–
TH407	TBY	MD,2K	CW	–	12v	144-9955	OR-9702
TH407C	MLH	–	–	–	–	390-3144	–
TH417	TBT	MD,2K	CW	–	12v	144-9955	OR-9702
TH417C	RRJ	–	–	–	–	390-3144	–
TH460B	SLF	MD,2K	CW	–	12v	144-9955	OR-9702
TH514	TBW	MD,2K	CW	–	12v	144-9955	OR-9702
TH514D	MWG	–	–	–	–	390-3144	–
TH580B	SLH	MD,2K	CW	–	12v	144-9955	OR-9702
TH62	4TM	MD,2K	CW	–	12v	6V-0492	OR-4316
TH63	3NN	MD,2K	CW	–	12v	100-8224	20R-3881
TH63	5WM	MD,2K	CW	–	12v	6V-0492	OR-4316
TH82	3KN	MD,2K	CW	–	12v	6V-0492	OR-4316
TH83	3RN	MD,2K	CW	–	12v	6V-0492	OR-4316
TL1055	TBM	–	–	–	12v	365-3422	20R-3883
TL1055D	ML5	–	–	10 teeth	12v	331-7010	20R-4762
TL1255	TBN	–	–	–	12v	365-3422	20R-3883
TL1255C	DHW	–	–	10 teeth	12v	331-7010	20R-4762
TL1255D HRC	ML7	–	–	10 teeth	12v	331-7010	20R-4762
TL1255D LRC	MYW	–	–	10 teeth	12v	331-7010	20R-4762
TL642	TBK	–	–	–	12v	365-3422	20R-3883
TL642D	MLG	–	–	10 teeth	12v	331-7010	20R-4762
TL943	TBL	–	–	–	12v	365-3422	20R-3883
TL943C	SXH	–	–	–	12v	329-0290	20R-3883
TL943C	THH	–	–	–	–	390-3144	–
TL943D	MLD	–	–	10 teeth	12v	331-7010	20R-4762
TL943D	MLJ	–	–	–	–	390-3144	–

## Track Loader Starters

Sales Model	S/N Prefix	Attributes <sup>(37)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
953	78Y	–	–	–	–	6V-4940	OR-5207
953 LGP	44Z	–	–	–	–	6V-4940	OR-5207

37 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

## Track Loader Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(38)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
953D	LBP	–	–	10 teeth	24v	387-9639	20R-4878
953K	LJT	–	–	10 teeth	24v	387-9639	20R-4878
963	48Z	–	–	–	–	6V-4940	0R-5207
963D	LCS	–	–	10 teeth	24v	387-9639	20R-4878
963K	LBL	–	–	10 teeth	24v	387-9639	20R-4878
973	86G	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
973C	LDX	–	–	–	24v	6V-5227	10R-0399
973D	LCP	HD,OS,WS,3K	CW	12 teeth	24v	6V-0512	10R-9817
973T	MKL	HD,OS,WS,3K	CW	11 teeth	24v	349-6530	20R-1312

## Undercarriage Arrangement Starters

Sales Model	S/N Prefix	Attributes <sup>(38)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
C18 OEM	MMB	WS, 30K	CW	11 teeth	24v	435-1240	20R-3250
C4.4 OEM	M4D	–	–	–	12v	364-4130	20R-3882
UNDERCARRIAGE OE	HED	HD, OS, WS, 30K	CW	12 teeth	24v	6V-0512	10R-9817
UNDERCARRIAGE OE	L5J	HD,OS,WS,3K	CW	12 teeth	24v	207-1511	10R-0397
UNDERCARRIAGE OE	L5M	OS, WS,30K	CW	11 teeth	24v	478-9866	20R-6752
UNDERCARRIAGE OE	L5N	HD, OS, WS, 30K	CW	11 teeth	24v	352-9766	–

## Underground Mining Starters

Sales Model	S/N Prefix	Attributes <sup>(38)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
120H	ADG	MD OS 20K	CW	10 teeth	24v	3E-5381	0R-4317
69D	9XS	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209
AD22	MW5	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
AD30	CXR	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
AD30	GXR	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
AD40 II	1YZ	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
AD45	BKZ	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
AD45B	GXM	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
AD55	ANW	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
AD55	DNW	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
AD55B	JNW	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
AD60	KNW	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
AE40 II	1ZZ	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
AE40 II	BLW	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
R1300	6QW	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
R1300G	LJB	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
R1300G II	RSL	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
R1600	9EW	HD,OS,WS,3K	CW	11 teeth	24v	207-1556	0R-5209
R1600	9XP	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
R1600G	9PP	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
R1600H	9SD	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250
R1700	4LZ	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
R1700G	XBR	HD,OS,WS,3K	CW	11 teeth	24v	348-7651	20R-3250

38 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

# Cat Starters Section

## Underground Mining Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(39)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
R1700K	KT4	40K	CW	11 teeth	24v	436-9106	–
R2900G	GLK	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209
R2900G	JLK	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
R3000H	RCM	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232

## Unit Rig Truck Starters

Sales Model	S/N Prefix	Attributes <sup>(39)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
MT4400 AC	SE4	HD, OS, WS, 30K	CW	11 teeth	24v	352-9766	–
MT4400D AC	MT4	HD, OS, WS, 30K	CW	11 teeth	24v	352-9766	–

## Wheel Tractor Scraper Starters

Sales Model	S/N Prefix	Attributes <sup>(39)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
613C	93X	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
613C	9FM	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
613C II	8LJ	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R-0397
613C II OEM	B6J	HD,OS,WS,3K	CW	12 teeth	24v	207-1517	10R0397
613C SERIES II	KEH	HD,OS,WS,3K	CW	12 teeth	24v	207-1511	10R-0397
613G	DBE	–	–	–	–	277-1833	20R-3886
613G OEM	DXA	–	–	–	–	277-1833	20R-3886
613G OEM	WT2	–	–	10 teeth	24v	387-9639	20R-4878
615C	2XG	–	–	–	24v	207-1555	10R-0399
615C II	9XG	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
615C II OEM	B6M	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
615D	BAE	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
621B	45P	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
621F	4SK	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
621G	CEN	HD,OS,WS,3K	CW	11 teeth	24v	207-1556	0R-5209
621G	CEP	–	–	–	–	10R-9815	10R-9815
621G	DBX	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
621G	MEX	HD,OS,WS,30K	CW	11 teeth	24v	348-0264	–
621G	NEL	HD,OS,WS,3k	CW	11 teeth	24v	293-4853	–
621G OEM	DXB	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
621H	DBK	HD,OS,WS,3K	CW	11 teeth	24v	349-6523	20R-1312
621H	EAZ	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
621H OEM	HKK	HD,OS,WS,3K	CW	11 teeth	24v	330-0034	20R-1312
621H OEM	NYN	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
621K	WTA	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
621K	WTL	HD,OS,WS,3K	CW	11 teeth	24v	330-0034	20R-1312
621K OEM	WTE	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
621K OEM	WTP	HD,OS,WS,3K	CW	11 teeth	24v	349-6523	20R-1312
623E	6DB	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
623F	5EW	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
623G	ARW	–	–	–	–	10R-9815	10R-9815

39 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life

## Wheel Tractor Scraper Starters (Cont'd.)

Sales Model	S/N Prefix	Attributes <sup>(40)</sup>	Rotation from Pinion End	Teeth	Voltage	Service Part Number	Reman
623G	CES	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
623G	DBC	HD,OS,WS,3K	CW	11 teeth	24v	207-1557	0R-5209
623G	DBY	HD,OS,WS,3K	CW	11 teeth	24v	207-1556	0R-5209
623H	DBF	HD,OS,WS,3K	CW	11 teeth	24v	349-6523	20R-1312
623H	EJD	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
623K	WTM	HD,OS,WS,3K	CW	11 teeth	24v	349-6536	20R-1312
627F	1DL	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
627G	AXF	HD,OS,WS,3K	CW	–	24v	106-8553	20R-2232
627G	CEX	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
627G	CEZ	–	–	–	24v	6V-5538	10R-0399
627G	DBZ	HD,OS,WS,3K	CW	12 teeth	24v	207-1516	10R-0397
627H	DBW	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
627H	LCT	OS	CW	10 teeth	24v	396-4770	20R-4879
627K	WTC	OS	CW	10 teeth	24v	349-9077	20R-4879
627K	WTN	OS	CW	10 teeth	24v	396-4770	20R-4879
631D	24W	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
631E	1AB	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
631E	6PC	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
631G	AWK	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
631G	CLR	HD,OS,WS,30K	CW	11 teeth	24v	4N-1062	0R-5209
631G	DFA	HD,OS,WS,30K	CW	–	24v	3T-2780	20R-2232
631G OEM	DXE	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
631K	WTR	40K	CW	11 teeth	24v	436-9106	–
633E	2PS	HD,OS,WS,30K	CW	–	24v	3T-2780	20R-2232
637	65M	HD,OS,WS,30K	CW	12 teeth	24v	363-9838	10R-9817
637E	1FB	–	–	–	24v	6V-5227	10R-0399
637E	1HB	HD,OS,WS,30K	CW	12 teeth	24v	363-9838	10R-9817
637E	7CB	–	–	–	24v	1W-3851	10R-0399
637G	AXT	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
637G	CEH	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
637K	WTS	OS	CW	10 teeth	24v	396-4770	20R-4879
651E	4YR	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
651E	5XR	HD,OS,WS,3K	CW	–	24v	338-3454	20R-2232
657E	6PR	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
657E	6TR	HD,OS,WS,3K	CW	11 teeth	24v	207-1556	0R-5209
657E	7KR	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
657G	A4G	HD,OS,WS,30K	CW	–	24v	3T-8949	20R-2232
657G	W1B	HD,OS,WS,30K	CW	–	24v	3T-2780	20R-2232
657G	W1C	HD,OS,WS,3K	CW	11 teeth	24v	207-1564	0R-5209
657G	W1E	HD,OS,WS,3K	CW	–	24v	106-8553	20R-2232
657G	W1F	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232
657G OEM	DXG	HD,OS,WS,30K	CW	–	24v	4N-1061	20R-2232

40 MD=Medium Duty, HD=Heavy Duty, WS=Water Sealed, OS=Oil Sealed (wet Flywheel housing), 20K=20,000 cycle life, 30K=30,000 cycle life





**BEARINGS**

# Cat Bearings

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Cat bearings are designed for specific applications based on load, operating speed, temperature range, size, and past performance. They're also "matched" to last as long as other Cat drive train components, reducing the number of repairs required, downtime occurrences and operating costs.

## Some Cat bearings have key quality differences most other bearings do not, including:

- **Special material technology**
  - Caterpillar spends significant amounts of time and money on research and development to ensure every Cat bearing meets specific design and application requirements. This commitment has led to new technologies like Cat debris resistant and textured bearings available exclusively through Cat Dealers.
- **Cat specifications**
  - Cat bearings are designed for specific applications and functions based on the loads, operating speeds, temperature ranges, and sizes of the Cat machines in which they operate information other bearing manufacturers don't have. Cat bearings designed and manufactured for Cat machines perform better and last longer.
- **Case-hardened heat treatment**
  - Cat bearings are manufactured using proprietary heat treat processes to ensure maximum life. Cat roller element bearings, for example, are case carburized a highly specialized process that puts a hard shell around the bearing material, provides a tough bearing core, and extends wear life.
- **Optimum surface finish**
  - Cat bearings feature appropriate surface finishes to reduce rolling resistance and ensure proper oil film thickness. The result is longer bearing life matched to the life of other drive train components, reducing repair costs and downtime.
- **Precise tolerances**
  - Cat bearings are designed to ensure proper alignment and precise fit, eliminating the chance of premature gear failure due to inexact tolerance's resulting in increased machine availability and lower costs.



## Ball Bearing Parts List

Part	Part Description	OD Dia	ID	Height
8T-0231	Bearing-Spl Ball	215	120	80
154-3032	Bearing-Ball	280	130	58
296-6220	Bearing-Spl Ball	310	240	33
6Y-3484	Bearing-Spl Ball	159	114	22
8H-9789	Bearing-Ball	72	35	17
3L-1824	Bearing-Ball	200	110	38
333-2914	Bearing-Spl Ball	330	260	35
196-4873	Bearing-Spl Ball	380	290	40
108-1761	Bearing-Ball	240	110	50
3L-1425	Bearing-Ball	80	35	21
4F-2129	Bearing-Ball	178	127	25
304-9651	Bearing-Spl Ball	145	95	24
5P-5045	Bearing-Spl Ball	178	127	25
148-6559	Bearing-Spl Ball	191	140	25
1B-3867	Bearing-Ball	62	30	16
6B-1124	Bearing-Ball	52	25	15
142-8260	Bearing-Spl Ball	250	140	84
7T-8816	Bearing-Spl Ball	121	83	19
119-5727	Bearing-Spl Ball	140	65	33
212-5023	Bearing-Spl Ball	159	114	22
105-2036	Bearing-Spl Ball	215	100	47
106-7799	Bearing-Ball	127	89	19
8E-5247	Bearing-Ball	130	60	31
6V-9191	Bearing-Ball	130	75	25
1T-0210	Bearing-Ball	110	50	27

## Cylindrical Roller Bearings

Part	Part Description	OD Dia	ID	Height
436-2594	Bearing-Roller	–	–	–
436-2593	Bearing-Roller	–	–	–
436-2595	Bearing-Roller	–	–	–
8E-7945	Bearing-Inner	161	102	60
436-2596	Bearing-Roller	–	–	–
7T-1664	Cage Roller	151	–	64
126-9340	Bearing-Roller	215	100	73
6Y-9885	Bearing-Rlr As.	112	78	36
6Y-4119	Bearing-Rlr As.	129	89	40
5P-6408	Bearing-Inner	215	170	28
096-4339	Bearing As.	200	110	38
131-3919	Bearing-Roller	98	60	22
5P-3488	Race&Roller As.	180	140	24
4D-3151	Bearing As.-Rlr	86	59	34

# Tapered Roller Bearings

Part	Part Description	OD Dia	ID	Height	Part	Part Description	OD Dia	ID	Height
212-5030	Bearing-Cone	–	416	127	9W-1547	Bearing-Cup	422	–	64
196-0423	Cone-Spl Tapered	–	425	149	177-4143	Cone-Spl Tapered	–	318	86
216-3507	Cone-Spl Tapered	–	560	156	8H-0902	Cone-Roller Brg	–	165	40
175-3770	Cup	591	–	102	124-0503	Cone-Spl Tapered	–	89	56
196-2774	Brg As..-Spl Tp R	–	–	–	289-2131	Bearing-Cone	–	270	75
9W-7095	Bearing-Cone	–	232	71	289-2131	Bearing-Cone	–	270	75
175-3769	Cone	–	416	127	148-1546	Bearing-Cone	–	210	64
170-0497	Cup-Spl Tapered	813	–	121	6B-4852	Cone-Roller Brg	–	140	57
196-0424	Cup-Spl Tapered	641	–	126	5P-1370	Bearing As.	137	83	70
201-7718	Brg As..-Spl Tr	679	479	129	6I-8849	Cone-Rlr Bearing	–	67	38
198-3173	Bearing As.	149	78	98	282-3848	Bearing-Cup	622	–	94
212-5027	Bearing-Cone	–	318	102	111-0898	Cup-Rlr Brg	514	–	64
5P-1948	Cone-Spl Tapered	–	235	113	290-3830	Cup-Spl Tapered	448	–	68
212-5026	Bearing-Cone	–	346	102	126-5859	Cone-Spl Tapered	–	330	48
174-3040	Bearing As..	137	78	97	126-0588	Cone-Spl Tapered	–	235	49
174-4504	Bearing-Cup	508	–	83	143-4512	Cone-Tapered	–	237	65
196-7795	Brg As.. Sp Tr	635	489	84	8S-9075	Bearing-Cone	–	110	35
212-5024	Cone-Spl Tapered	–	289	78	7M-5334	Cone-Roller Brg	–	175	48
434-5017	Bearing-Cone	–	457	121	1P-9593	Cone-Rlr Brg	–	190	44
5P-1949	Cup-Rlr Bearing	384	–	90	2R-0524	Cone-Bearing	–	330	48
290-3829	Bearing-Cone	–	318	86	138-8636	Bearing-Cone	–	235	113
174-5296	Cup-Spl Tapered	591	–	83	183-9520	Cone- Sp T R Brg	–	260	80
5D-6298	Cup-Spl Tapered	318	–	46	5P-9769	Cone-Rlr Bearing	–	108	67
174-3045	Bearing As..	197	102	136	5P-4540	Bearing-Cup	337	–	73
4D-7534	Bearing As.-Rlr	105	54	71	1J-4757	Cone-Bearing	–	89	55
279-0344	Bearing As.	380	290	40	174-5297	Bearing As.-Spl	–	–	–
5D-6297	Cone-Spl Tapered	–	210	64	5P-2525	Bearing-Cup	213	–	54
5D-6296	Cone-Spl Tapered	–	203	64	126-0587	Bearing-Cone	–	232	65
111-0897	Cone - Rlr Brg	–	386	83	173-0593	Cone	–	178	30
212-5028	Cone-Spl Tapered	–	384	105	3D-0294	Cone-Roller Brg	–	203	58
4D-4324	Cone-Spl Tapered	–	248	64	6V-8281	Cup-Rlr Brg	337	–	51
9W-7096	Cup-Roller Brg	359	–	54	5P-3723	Cone-Rlr Bearing	–	90	40
212-5029	Cone-Spl Tapered	–	381	105	4D-4325	Cup-Spl Tapered	346	–	51
2P-8988	Cone-Rlr Brg	–	200	62	5F-2465	Cup-Roller Brg	248	–	38
9M-2744	Cone-Spl Tapered	–	140	48	171-8706	Cone-Tapered Rlr	–	432	60
9D-0994	Cup-Spl Tapered	381	–	57	119-4132	Bearing As..-Spl	260	178	108
139-6871	Bearing-Cone	–	290	83	1M-6573	Cup-Roller Brg	216	–	35
5P-0505	Cone-Spl Tapered	–	248	75	1J-2860	Cup-Spl Tapered	162	–	43
6V-2702	Cone-Rlr Bearing	–	152	75	2J-2152	Cup-Roller Brg	254	–	48
120-0295	Cup-Roller Brg	406	–	60	2P-8989	Cup-Rlr Bearing	300	–	51
139-6870	Bearing-Cone	–	300	83	2P-1824	Cone-Rlr Brg	–	170	45
1B-6577	Cone-Spl Tapered	–	152	67	165-2135	Cone-Spl Tapered	–	140	67
2J-7137	Cup-Spl Tapered	268	–	57	106-9823	Cone-Roller Brg	–	235	113
2P-8353	Cone-Spl Tapered	–	206	46	2D-6511	Cup-Roller Brg	283	–	37
436-4013	Bearing-Cone	–	191	95	124-0504	Cup-Spl Tapered	168	–	41

# Tapered Roller Bearings

(Cont'd.)

Part	Part Description	OD Dia	ID	Height	Part	Part Description	OD Dia	ID	Height
6V-0664	Cone-Rlr Brg	–	175	48	7T-9526	Cone-Rlr Brg	–	49	44
6V-0327	Cup-Spl Tap Roll	225	–	33	126-5860	Cup-Spl Tapered	416	–	37
2N-2189	Cone-Roller Brg	–	152	47	1P-7835	Cone-Bearing	–	90	44
209-4232	Bearing-Cone	–	–	–	5F-1248	Cone-Roller Brg	–	133	46
436-4013	Cone-Rlr Brg	–	191	95	290-3829	Bearing-Cone	–	318	86
132-6597	Cone-Spl	–	102	58	2R-0525	Cup-Roller Brg	416	–	35
343-6237	Bearing	93	51	30	6Y-2546	Cone-Roller Brg	–	121	46
126-8181	Cone-Spl Tapered	–	152	67	8T-0072	Bearing-Cone	–	146	29
3N-4968	Cone-Rlr Bearing	–	35	29	5M-6592	Cup-Roller Brg	229	–	44
215-8200	Bearing As.	–	–	–	423-1989	Bearing-Cone	–	89	55
1B-4043	Cone-Roller Brg	–	105	48	177-4147	Cone-Spl Tapered	–	384	105
107-7088	Cone-Rlr Bearing	–	200	58	6V-0460	Cup-Rlr Brg	311	–	64
107-7089	Cup-Roller Brg	292	–	46	163-6082	Cone-Tapered Rlr	–	432	46
2D-9457	Cone-Spl Tapered	–	133	40	6Y-2538	Cone-Roller Brg	–	110	46
126-8182	Cup-Spl Tapered	254	–	48	245-3907	Cone-Spl Tapered	–	457	84
3P-8681	Cone-Spl Tapered	–	25	15	112-7317	Bearing As.	213	114	121
177-4144	Cup-Spl Tapered	448	–	68	124-9537	Cone-Spl Tapered	–	121	83
240-8240	Bearing As.	318	210	67	6Y-7651	Cone-Spl Rlr Brg	–	64	22
124-9539	Cup-Spl Tapered	273	–	54	6D-1734	Cup-Roller Brg	76	–	23
6V-0459	Cone-Rlr Brg	–	175	83	6B-3223	Cup-Bearing	152	–	30
1L-7518	Cone-Spl Tapered	–	121	48	8S-9076	Cup-Bearing	165	–	27
2K-5066	Cone-Roller Brg	–	146	29	177-4149	Cup-Spl Tapered	546	–	83
6V-1882	Cone-Rlr Brg	–	137	40	9K-1172	Cone-Rlr Bearing	–	124	38
251-6482	Bearing As.-Spl	206	121	48	6V-7423	Bearing As.-Rlr	130	85	66
8E-7926	Cone-Spl Tapered	–	102	58	164-9920	Cone-Spl Tapered	–	85	29
183-9519	Cup-Spl Tapered	422	–	67	5P-9344	Bearing As.-Rlr	200	143	88
362-5414	Bearing-Cone	–	67	41	030-0060	Bearing-Cup	130	–	24
3D-9133	Cup-Roller Brg	314	–	37	1P-4693	Bearing-Cup	150	–	27
4B-9373	Cone-Roller Brg	–	114	41	9U-9662	Bearing-Cone	–	356	60
124-0501	Cone-Spl Tapered	–	133	46	6M-1637	Cone-Roller Brg	–	102	49
1P-9594	Bearing-Cup	260	–	37	2P-1823	Cup-Rlr Brg	240	–	37
2J-7138	Cone-Roller Brg	–	146	75	7D-8636	Cone-Bearing	–	75	30
030-0061	Bearing-Cone	–	85	29	106-9822	Cone-Roller Brg	–	270	75
178-4640	Cone-Spl Tapered	–	90	44	177-4145	Cone-Spl Tapered	–	346	95
6V-0663	Cone-Rlr Brg	–	178	30	5P-8043	Bearing-Cone	–	146	75
133-5098	Cone-Spl Tapered	–	114	67	6Y-7652	Cup-Rlr Brg	110	–	19
4F-2041	Cup-Roller Brg	191	–	33	2K-5065	Cone-Roller Brg	–	117	32
124-9536	Cone-Spl Tapered	–	114	49	7T-9527	Cup-Rlr Brg	95	–	37
212-5024	Cone-Roller Brg	–	289	78	6V-7725	Bearing As.-Rlr	130	80	78
166-6930	Cone-Spl Tapered	–	51	30	6D-7690	Cup-Roller Brg	147	–	33
4W-1204	Cone-Spl Rlr Brg	–	35	18	173-0594	Cup	227	–	23
4B-7270	Cone-Bearing	–	95	36	132-6598	Cup-Spl	191	–	46

## Needle Roller Bearings

Part	Part Description	OD Dia	ID	Height
111-8922	Bearing - Needle	202	128	19
310-6158	Bearing	66	47	48
310-6157	Bearing	76	54	48
1P-3958	Bearing-Needle	66	47	38
5M-7925	Bearing-Needle	58	42	32
1T-1566	Bearing-Thrust	174	115	13
1T-0786	Bearing-Thrust	140	105	10
115-8398	Bearing - Needle	192	153	10
199-4583	Bearing As.	86	66	28
5M-6126	Bearing-Needle	43	35	32
6I-8575	Race-Thrust	203	129	13
1T-0655	Bearing-Thrust	432	89	10
224-2323	Bearing-Needle	249	190	10
5P-6254	Bearing	58	42	38
5M-0578	Bearing-Needle	52	42	25
1T-1754	Roller-Freewheel	13	–	64
274-5106	Bearing-Spl Cage	96	69	61
142-8262	Bearing-Needle	260	150	29
6I-9809	Bearing-Needle	66	47	38
1S-9110	Bearing-Needle	66	47	27
274-7469	Bearing-Needle	66	47	38
192-9969	Bearing	80	57	61
219-8783	Kit-Roller Brg	–	–	–
9U-8242	Bearing-Spl	52	39	32

# Self-Aligning Bearings

Part	Part Description	OD Dia	ID	Height
188-8697	Bearing-Align	203	127	127
7J-3297	Bearing-Aligning	130	70	86
8J-8906	Bearing	159	83	102
6V-0444	Bearing-Spher	203	127	127
6V-7959	Race-Self Align	111	92	52
299-3203	Bearing-Special	222	140	134
191-4427	Bearing-Align	279	171	146
6V-3249	Bearing-Aligning	159	102	89
150-1889	Bearing	260	180	130
8J-3783	Bearing-Align	168	102	108
152-7554	Bearing	159	102	89
9U-9558	Bearing	187	114	119
197-6440	Bearing-Align	159	76	102
296-4301	Bearing As.	–	–	–
117-4013	Bearing-Align	111	70	61
6Y-9380	Bearing-Align	210	140	90
106-9343	Bearing-Spher	222	140	134
380-7677	Bearing-Aligning	159	89	92
159-3945	Bearing	160	75	55
7J-1309	Bearing-Aligning	100	64	56
6Y-9379	Bearing-Aligning	178	114	100
5J-9451	Bearing	130	83	72
4D-4431	Bearing-Aligning	71	44	39
380-7675	Bearing-Aligning	130	82	69
154-8546	Bearing	260	160	135
107-8126	Brg-Self Align	121	76	67
095-1806	Bearing	215	120	76
9M-1328	Bearing-Aligning	81	51	44
301-6946	Bearing-Align	149	100	72
8G-4189	Bearing-Aligning	90	60	44
7I-7619	Brg-Spher Roller	300	140	102
6G-8209	Race-Self Align	187	159	90
136-2940	Bearing	260	120	86
6J-1144	Bearing	111	57	70
066-5815	Bearing-Aligning	90	57	50

Part	Part Description	OD Dia	ID	Height
158-7749	Bearing-Aligning	–	–	–
164-9309	Bearing-Spl Self	105	70	49
296-4292	Bearing Gp -A	–	–	–
155-3537	Bearing	120	70	70
6V-5002	Bearing-Aligning	81	51	44
6I-8531	Bearing-Ball	–	–	64
9D-2319	Race-Self Align	149	125	36
150-1890	Bearing	230	160	105
116-8052	Brg-Spher Sleeve	177	128	90
4D-0298	Bearing-Aligning	62	38	33
095-1022	Bearing	200	95	67
5J-1446	Bearing-Aligning	90	57	50
197-6439	Bearing-Spl Self	140	76	83
343-7794	Bearing-Aligning	149	89	90
117-3006	Bearing	149	95	83
332-1648	Bearing-Align	121	76	67
237-4156	Bearing-Aligning	100	64	56
322-5876	Bearing-Aligning	260	160	100
9J-9812	Bearing	71	38	38
344-6089	Bearing	130	60	42
274-9256	Race	71	58	32
199-4221	Race	149	126	71
341-0966	Bearing-Spher	140	78	82
8F-3170	Bearing-Roller	120	65	46
9U-8693	Brg-Spher Roller	230	130	64
7J-3216	Bearing	111	70	61
6Y-4689	Bearing-Aligning	159	102	89
134-3250	Bearing	197	127	111
2D-8652	Bearing-Aligning	51	32	28
101-9030	Bearing-Flange	–	–	–
380-7673	Bearing-Aligning	111	70	62
136-2904	Bearing	180	110	56
160-0305	Bearing-Aligning	105	60	63
6V-5003	Bearing-Aligning	90	57	50
7D-3182	Race-Self Align	121	–	52



**CYLINDER SEALS**

# Identification

## Seal Identification

### What is a Seal?

A seal is a device which prevents the escape or passage of a fluid (liquid or gas). A hydraulic cylinder seal is used to seal two surfaces under fluctuating pressure conditions.

### Hydraulic Cylinders:

Hydraulic cylinders convert fluid pressure into motion that helps equipment perform different tasks. Caterpillar manufactures three cylinder designs: bolt-on head, threaded cylinder and threaded gland. Because these designs are very similar in the way they are sealed and repaired, this book makes no further attempt to address the different designs.

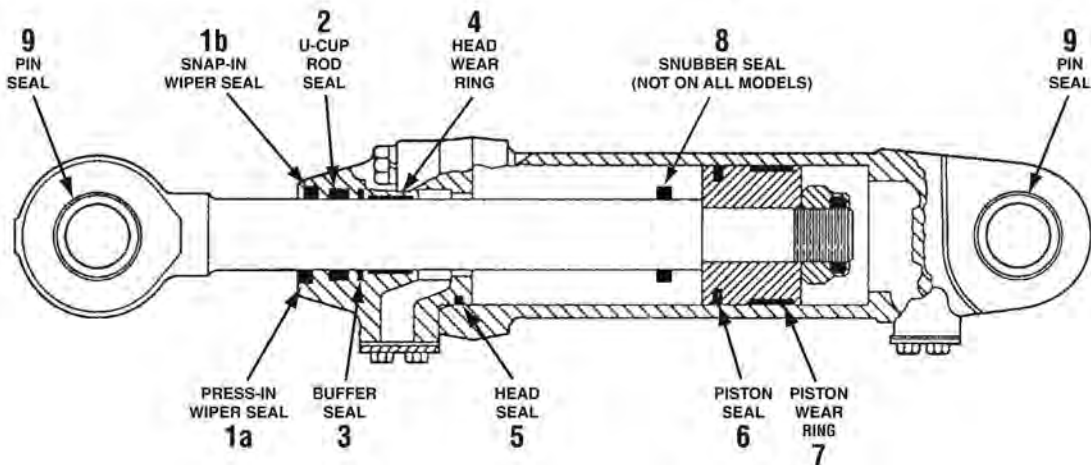
### Hydraulic Cylinder Seals:

Cat seals are available as either individual pieces or kits. Kits offer a convenience as well as a cost-savings, priced substantially below the sum of the individual pieces.

Cat hydraulic seals can be used on other makes of cylinders. See the "Seal Selection for Other Than Cat Equipment" section for more details.

## Identifying Hydraulic Cylinder Seals

Refer to the hydraulic cylinder illustration below. The seals in this Cat cylinder are those typically found in hydraulic cylinders.



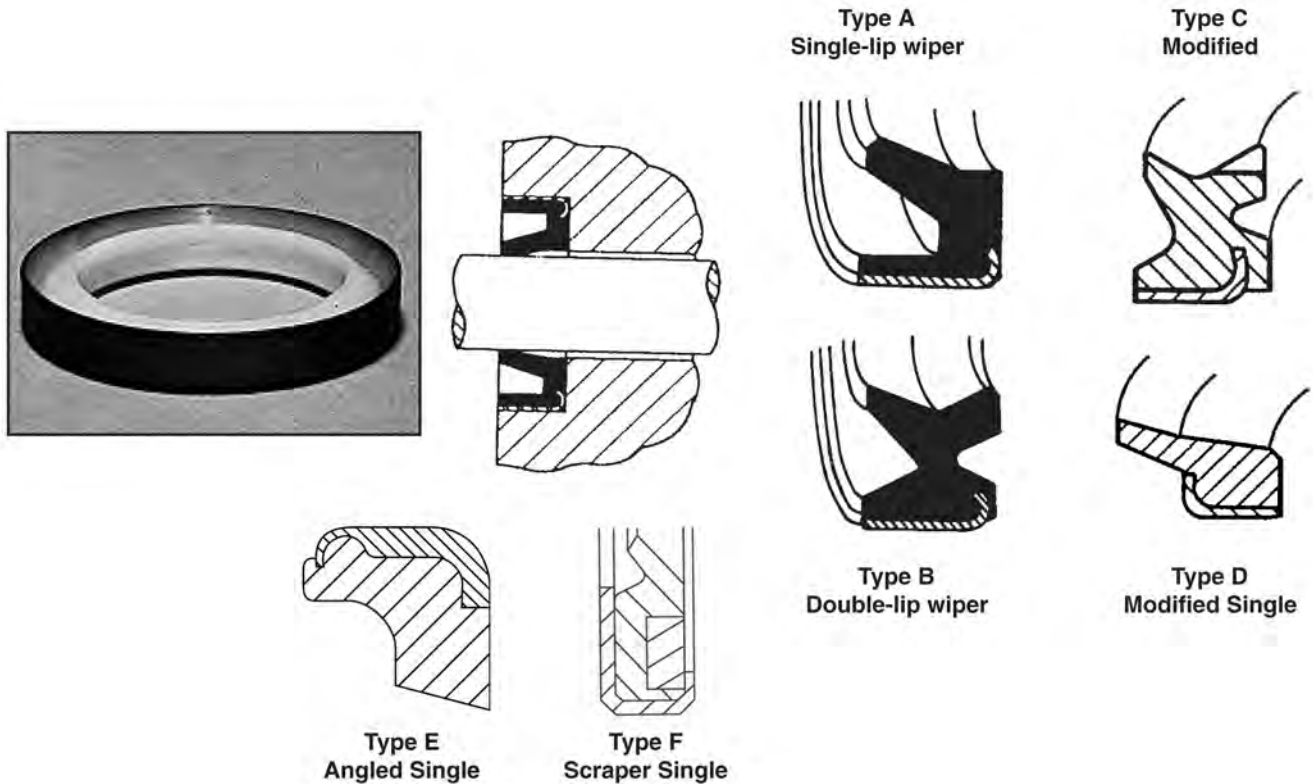
### Usage

Use the seal pictures, cross-sections, cutaway illustrations and descriptions on the following pages to help you identify the different types of hydraulic cylinder seals.

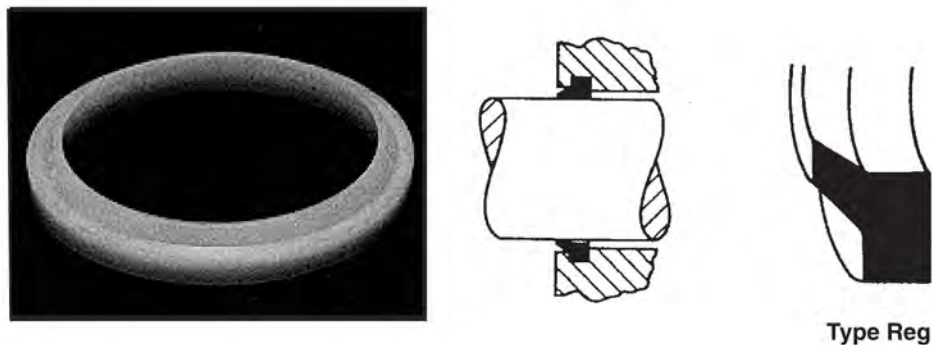


## Identifying Hydraulic Cylinder Seals (Cont'd.)

- 1a. Press-in Wiper Seal** – prevents external contaminants from entering the system. Single-lip (the lip is the projecting rim or edge of the seal) wipers clean the rod as it retracts. Double-lip wipers clean the rod as it retract sand seals oil, eliminating “weeping” (cosmetic leakage). The double-lip wipers are secured in place with a bearing mount. These urethane wipers are metal-encased for added strength. They are often referred to as “canned” wipers (metal-encased) or “J” wipers (the metal often forms a “J” shape when viewed in the cross-section).



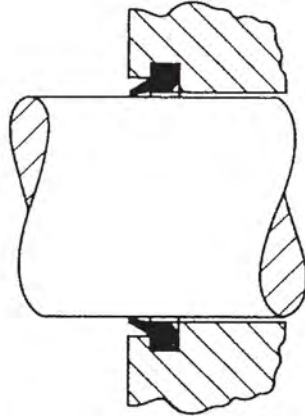
- 1b. Snap-in Wiper Seal** – prevents external contaminants from entering the system, but used in less severe environmental conditions and lighter duty hydraulic applications than its press-in counterpart.



# Identification

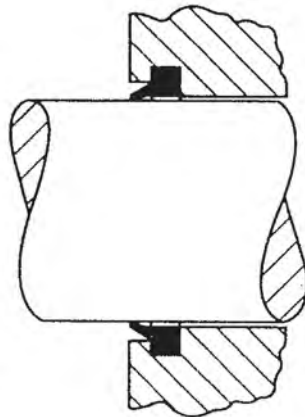
## Identifying Hydraulic Cylinder Seals (Cont'd.)

The following various types of snap-in wipers are available for use on other makes of hydraulic cylinders. "Type SHU" wipers are slotted heel, universal style urethane wipers. The slotted heel acts as a relief slot to prevent a pressure trap occurring between the rod seal and the wiper. A pressure trap is excessive fluid pressure "trapped" between two seals.



Type SHU

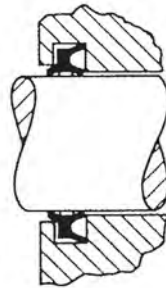
"Type AN" wipers are a non-current design, originally made for the military (AN refers to Army/Navy). This single-lip wiper is made of urethane.



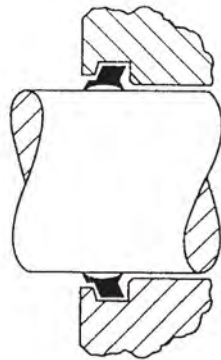
Type AN

## Identifying Hydraulic Cylinder Seals (Cont'd.)

"Type H" and "Type K" wipers are double-lip, urethane wipers.



Type H

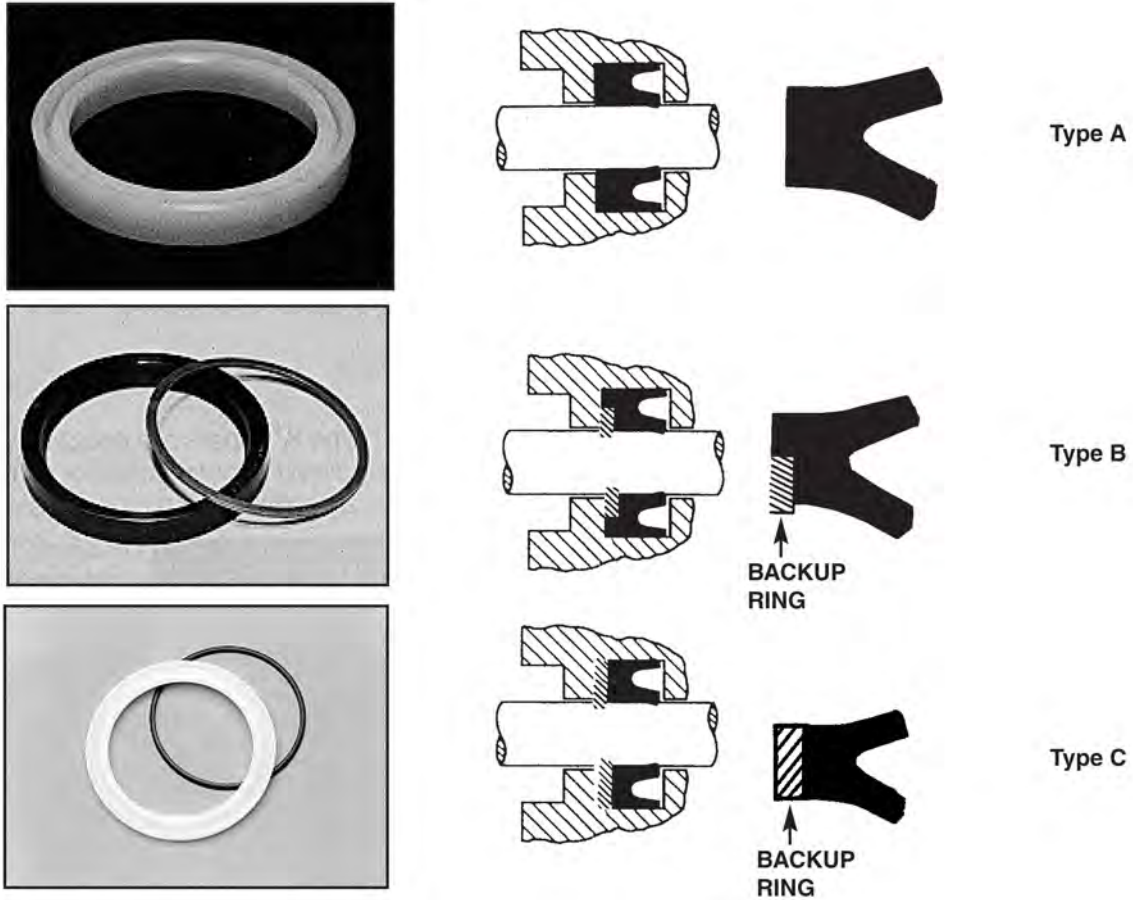


Type K

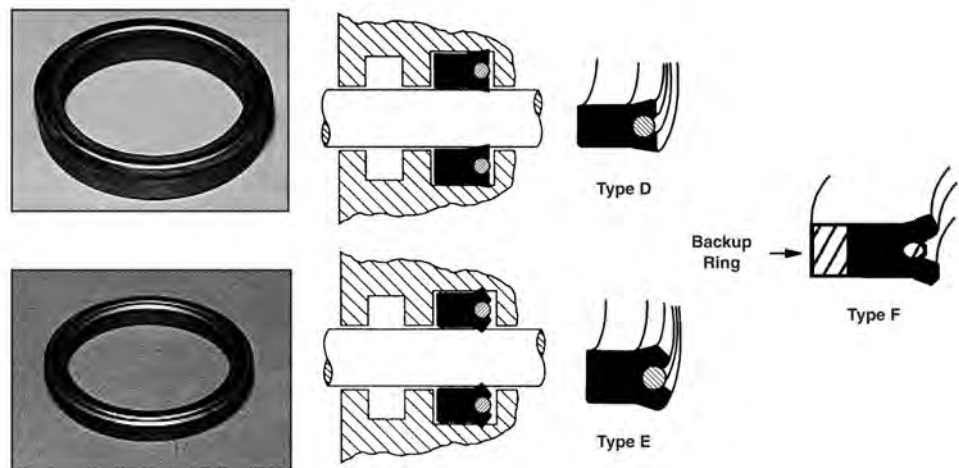
# Identification

## Identifying Hydraulic Cylinder Seals (Cont'd.)

2. **U-Cup Rod Seal** – performs as the primary rod seal. The U-Cup is made of urethane or nitrile. The nitrile U-Cup is used with a backup ring in water-glycol hydraulic systems. The backup ring prevents the seal from extruding (forced movement of a seal under pressure into the clearance between the metal parts being sealed).

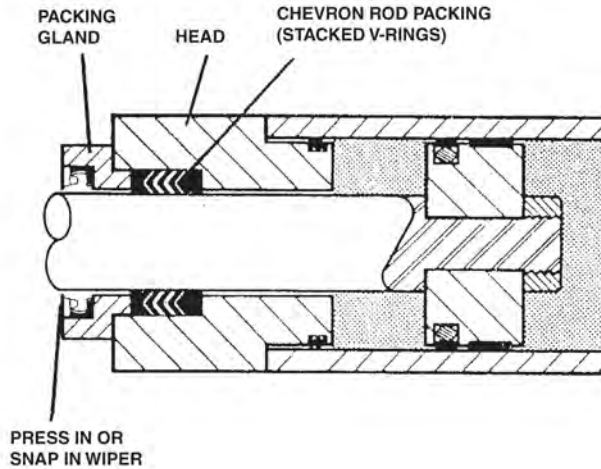


Loaded U-Cups are also available for use on other makes of cylinders. The "Type E" loaded U-Cup has a back-bevel lip for increased sealability.

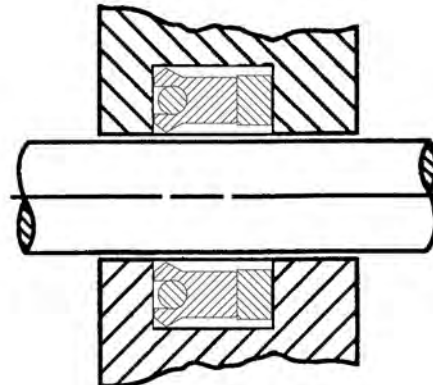


## Identifying Hydraulic Cylinder Seals (Cont'd.)

- 2a. **Chevron Packing** – used as gland packing prior to the use of U-Cup seals. Made with a multi-compound material (usually cotton duck cloth and nitrile), it is often referred to as V-Packing, the shape formed by its cross-section. The end adapters can be tightened down, making the seal adjustable. Caterpillar no longer uses this seal design.



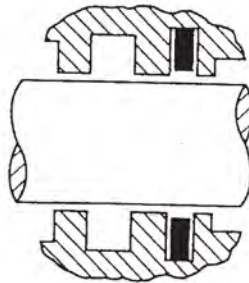
- 2b. **U-Cup Seal Assembly** – designed to replace Chevron Packing. These assemblies combine U-Cup Rod Seals with spacers to fill the original Chevron Packing grooves. Both U-Cup Seal Assemblies and Chevron Packing meet the same functional sealing specifications.



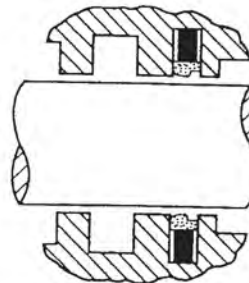
# Identification

## Identifying Hydraulic Cylinder Seals (Cont'd.)

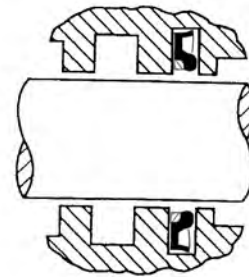
3. **Buffer Seal** – acts as a secondary rod seal and protects the rod from sudden increases in system pressure. There are currently three types of buffer seals. Type A is a one-piece seal made of urethane. Type B is a two-piece bronze filled PTFE seal with a nitrile expander. The notched view in the cross section must face the pressure side for maximum seal performance. Type C is a two-piece urethane seal with a thermoplastic backup ring. This design allows the seal to withstand higher pressures. Type B and Type C buffer seals are designed to prevent seal extrusion and pressure trapping.



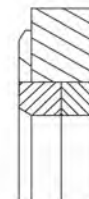
Type A



Type B



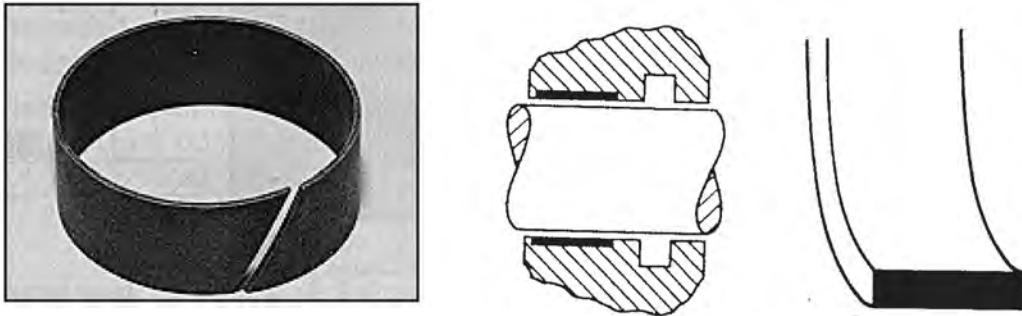
Type C



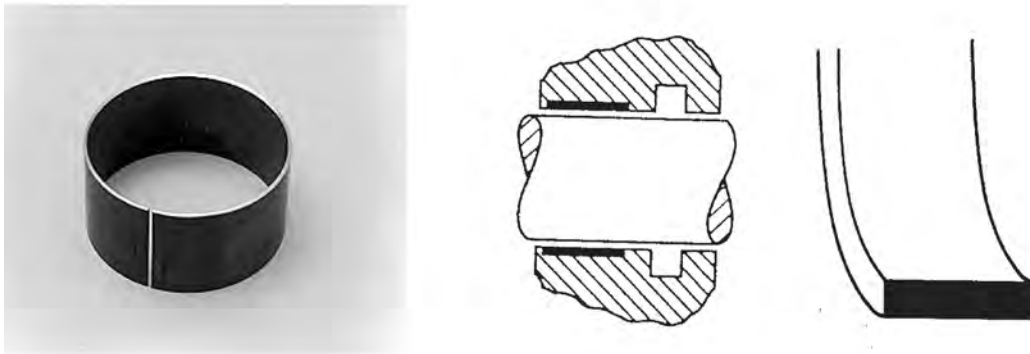
Type D

## Identifying Hydraulic Cylinder Seals (Cont'd.)

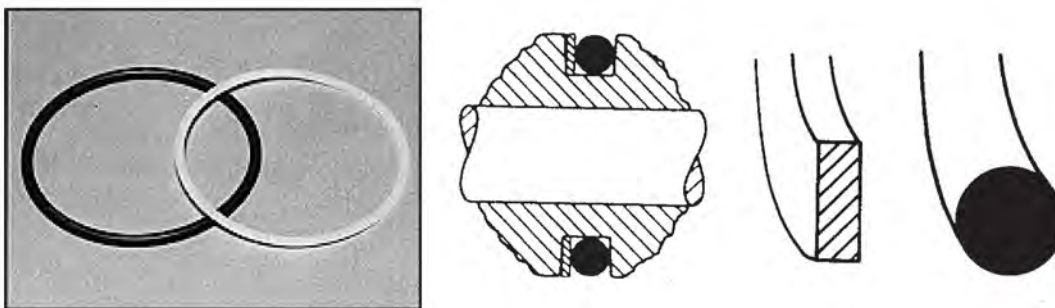
4. **Head Wear Ring** – eliminates metal-to-metal contact between the head and rod and prevents scoring (scratching) of the rod by the head.



- 4a. **Metal Bearing Head Wear Ring** – used instead of plastic head wear ring for some applications. The coated bearing is pressed into the cylinder group head and held in place with a split metal retaining ring. This bearing supports the hydraulic cylinder rod and prevents metal-to-metal contact between the head and the cylinder rod. This bearing can be reused as long as the coating on the ring remains intact.



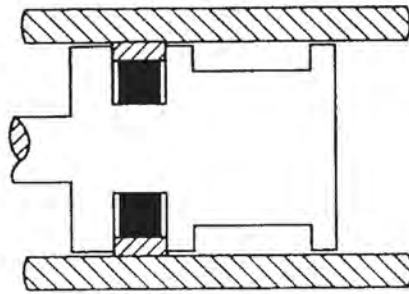
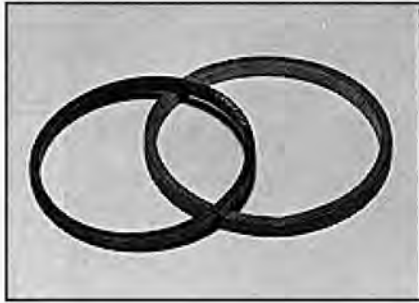
5. **Head Seal** – a two-piece seal, consisting of a nitrile O-ring and a backup ring, which seals the head to the cylinder wall.



# Identification

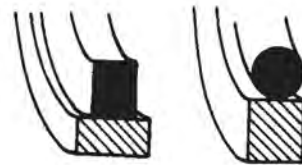
## Identifying Hydraulic Cylinder Seals (Cont'd.)

6. **Piston Seal** – a two-piece seal, consisting of a piston ring and an expander, which prevents oil transfer between the rod end of the cylinder and the cap end. The piston seal is usually made of Teflon, with nylon available for pressures greater than 3000 psi (20,670 kpa). The various shaped expanders are nitrile. Type 4 consists of a Teflon piston ring with a nitrile rubber expander. Type 5 consists of a rubber expander surrounded by bronze filled Teflon on both sides. Type 6 is a urethane U-Cup seal used in single acting cylinders.



Type 1

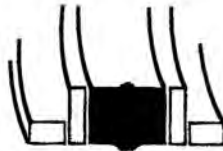
Type 2



Type 3



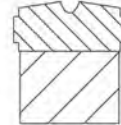
Type 4



Type 5

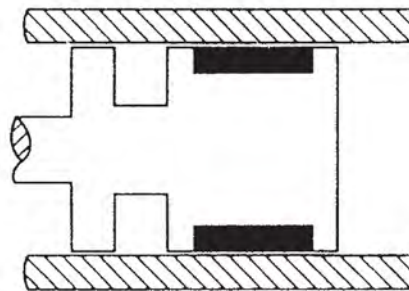
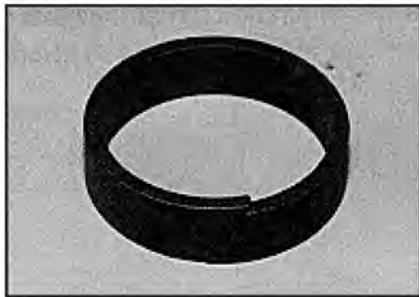


Type 6



Type 7

7. **Piston Wear Ring** – supports and centers the piston to prevent metal-to-metal contact between the piston and the cylinder wall.





### Identifying Hydraulic Cylinder Seals (Cont'd.)

8. **Snubber Seals** – used in some cylinder designs, in conjunction with a stop, to cushion the extension and/or retraction of the rod. The snubber seal is located between the stop and the rod.



9. **Pin Seals** – used on either side of the rod eye and cap eye to seal the linkage pins in place. Information on pin seal part numbers is not included in this guide. Please refer to SIS or the machines' parts book for pin seal information.



# Oversize Cylinders

## Oversize Threaded-Gland Cylinder

The head seal for the oversize threaded-gland cylinder is the standard O-ring and back-up ring. See Illustration 1.

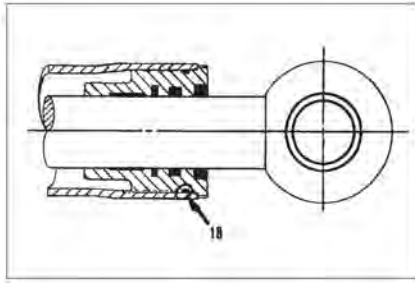


Illustration 1. Threaded gland with standard head seal.

18 = Head seal.

## Oversize Threaded-Crown Cylinder

The head seal for the oversize threaded-crown cylinder is an oval cross-section seal that locates in the lead-in chamfer at the open end of the cylinder. The O-ring and back-up ring groove in the head is left empty.

See Chart 2 for part numbers.

**Chart 2 – Oversize Seals**

Standard Bore Size	Oversize Head Seal
2.50	8C-4889
2.75	8C-4890
3.00	8T-8367
3.25	8C-4891
3.50	8T-8368
3.75	8T-8369
4.00	8T-8370
4.25	8T-8371
4.50	8T-8372
4.75	8T-8373
5.00	8T-8374
5.25	8T-8375
5.50	8T-8376
6.00	8T-8377
6.25	8T-8378
6.50	8T-8379
7.00	8T-8380
7.25	8T-8381
7.50	8C-0553
7.75	8C-4892
8.25	8T-8392
8.50	8C-4893
9.25	8T-8383
10.00	8C-4895
10.25	8C-4896
10.50	8C-4897
11.50	8C-4898

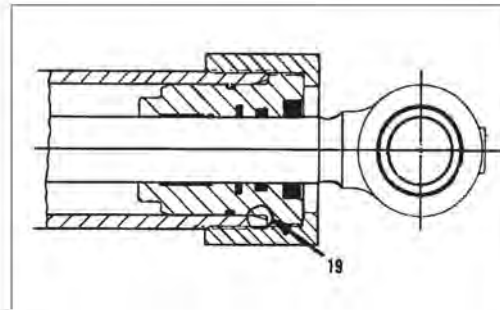


Illustration 2. Threaded crown with oval seal.

19 = Oval seal.

## Cylinder Assembly Chamfer Dimensions

Oversize threaded crown cylinders are sealed by using an oval head seal that locates in the lead-in chamfer of the cylinder bore. After the cylinder has been honed, compare the chamfer to the specifications in Illustration 3.

Note: Chamfers that do not meet specifications will cause leaks.

If the chamfer is too deep, it can be shortened by machining a maximum of 3.0 mm (.12 in) from the end of cylinder tube (2). If the end of the cylinder is machined, during assembly, check to make sure the crown can be fully threaded onto the cylinder and the threads do not bottom before the head is seated against the cylinder. If the chamfer is not concentric with the cylinder bore, the chamfer must be re-machined so that it is concentric and perpendicular to the bore.

### Chamfer Dimensions for Oval Head Seals

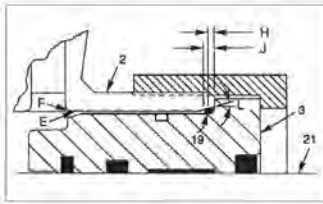


Illustration 3.

Chamfer Dimensions	
Item	Dimension
E	Standard bore
F	0.76 (.030) oversize
H	9.7 (.38) max. on standard size bore
J	8.1 (.32) max. on 0.76 (.030) oversize bore
L	15
Item	Description
2	Tube
3	Head
19	Oval Head Seal
21	Rod

## Oversize Bolted-Head Cylinder

Formerly, the head seal for the oversize bolted-head cylinder was the same oval seal that is used in an oversize threaded-crown cylinder. The oversize bolted-head cylinder is now sealed at the head joint by an O-ring which provides a more effective seal than the oval head seal. An oversize bolted-head cylinder that has successfully operated with the oval seal may be resealed without machining the O-ring groove into the flange face. However, it is recommended that the oval seal be replaced by the flange face O-ring seal. Most oversize seal kits include both the oval seal and the O-ring seal in order to accommodate reseal requirements of both former and current designed cylinders. The current Cat remanufactured oversize cylinders (bolted-head type) have the O-ring groove machined into the flange face of the cylinder assembly.

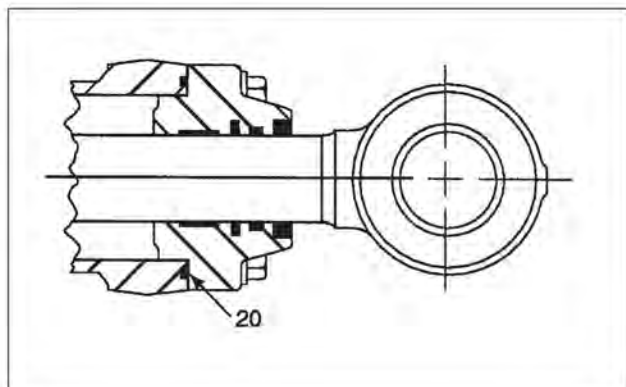


Illustration 4. Bolted head with face O-ring seal.  
20 = Face O-ring seal.

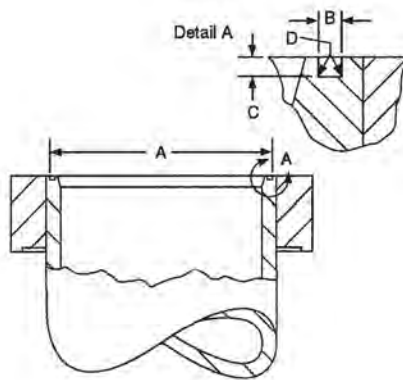
# Oversize Cylinders

## New Groove Dimensions for O-ring Part Numbers

Oversize bolted-head cylinders that lack the flange face O-ring groove can be reworked to add the groove. Recommended dimensions for the cylinder O-ring face seal grooves have been modified to increase the nominal compression of the O-ring face seal. Recommended groove widths have increased and groove depths have decreased. Recommended groove diameters have not changed. O-ring face seal part numbers also have not changed. The recommended O-ring face seal part numbers and O-ring face seal groove dimensions are listed in Chart 3. Refer to Illustration 5 for clarification.

Dealers who salvage cylinder assemblies of bolted-head cylinder groups by honing the bore oversize will need to use the new dimension recommendations to machine grooves for O-ring face seals. Bolted head cylinder assemblies already having O-ring face seal grooves should not be re-worked to the new groove dimensions.

**Note:** Some cylinder assemblies have been dealer re-worked to add an O-ring groove to the flange face of the head rather than the cylinder. Do not assemble a cylinder that would mate a cylinder and head both having an O-ring groove.



- A. Groove Diameter
- B. Groove Width
- C. Groove Depth
- D. Radius

Illustration 5. Seal Groove Width Dimensions  
See Chart 3 for item reference and dimensions.

Chart 3 – Seal Part Numbers and Groove Dimensions

Cyl. Nominal Bore Dia.	O-ring Face Seal Part No.	Groove Dia. (A)	Groove Width (B)	Groove Depth (C)	Radius (D)
76.20 (3.000)	5P-2931	87.12 ± 0.50 (3.430 ± .020)	2.40 ± 0.05 (.094 ± .002)	1.33 ± 0.05 (.052 ± .002)	0.4 ± 0.05 (.016 ± .002)
88.90 (3.500)	4F-4097	101.96 ± 0.05 (4.014 ± .020)	3.53 ± 0.08 (.139 ± .003)	1.95 ± 0.08 (.077 ± .003)	0.4 ± 0.10 (.016 ± .004)
95.25 (3.750)	7X-5494	106.30 ± 0.50 (4.185 ± .020)	2.40 ± 0.05 (.094 ± .002)	1.33 ± 0.05 (.052 ± .002)	0.4 ± 0.05 (.016 ± .002)
101.60 (4.000)	9X-7357	112.52 ± 0.50 (4.430 ± .020)	2.40 ± 0.05 (.094 ± .002)	1.33 ± 0.05 (.052 ± .002)	0.4 ± 0.05 (.016 ± .002)
107.95 (4.250)	6S-3002	121.00 ± 0.50 (4.764 ± .020)	3.53 ± 0.08 (.139 ± .003)	1.95 ± 0.08 (.077 ± .003)	0.4 ± 0.10 (.016 ± .004)
114.30 (4.500)	9X-7566	127.36 ± 0.50 (5.014 ± .020)	3.53 ± 0.08 (.139 ± .003)	1.95 ± 0.08 (.077 ± .003)	0.4 ± 0.10 (.016 ± .004)
120.00 (4.720)	133-0128	136.00 ± 0.50 (5.354 ± .020)	3.53 ± 0.08 (.139 ± .003)	1.95 ± 0.08 (.077 ± .003)	0.4 ± 0.10 (.016 ± .004)
120.65 (4.750)	3F-5792	136.45 ± 0.50 (5.372 ± .020)	4.75 ± 0.13 (.187 ± .005)	2.64 ± 0.13 (.104 ± .005)	0.8 ± 0.20 (.031 ± .008)
120.65 (4.750)	3F-5792	136.45 ± 0.50 (5.372 ± .020)	4.75 ± 0.13 (.187 ± .005)	2.64 ± 0.13 (.104 ± .005)	0.8 ± 0.20 (.031 ± .008)
127.00 (5.000)	131-3716	137.92 ± 0.50 (5.430 ± .020)	2.40 ± 0.05 (.094 ± .002)	1.33 ± 0.05 (.052 ± .002)	0.4 ± 0.05 (.016 ± .002)
133.35 (5.250)	2D-8009	149.15 ± 0.50 (5.872 ± .020)	4.75 ± 0.13 (.187 ± .005)	2.64 ± 0.13 (.104 ± .005)	0.8 ± 0.20 (.031 ± .008)
139.70 (5.500)	9X-7358	152.76 ± 0.50 (6.014 ± .020)	3.53 ± 0.08 (.139 ± .003)	1.95 ± 0.08 (.077 ± .003)	0.4 ± 0.10 (.016 ± .004)
140.00 (5.510)	2K-8257	155.50 ± 0.50 (6.122 ± .020)	4.75 ± 0.13 (.187 ± .005)	2.64 ± 0.13 (.104 ± .005)	0.8 ± 0.20 (.020 ± .008)

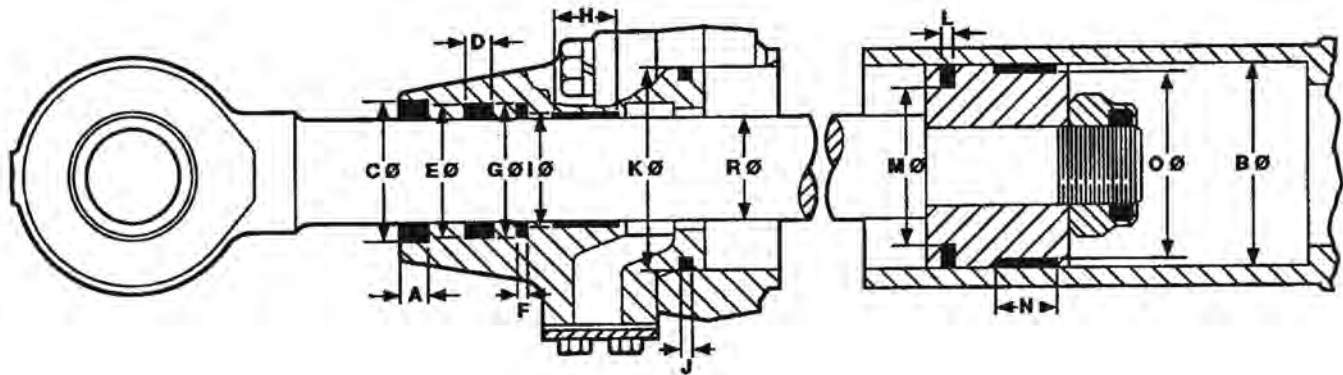
## New Groove Dimensions for O-ring Part Numbers (Cont'd.)

Cyl. Nominal Bore Dia.	O-ring Face Seal Part No.	Groove Dia. (A)	Groove Width (B)	Groove Depth (C)	Radius (D)
152.40 (6.000)	8T-6404	165.46 ± 0.50 (6.514 ± .020)	3.53 ± 0.08 (.139 ± .003)	1.95 ± 0.08 (.077 ± .003)	0.4 ± 0.10 (.016 ± .004)
158.75 (6.250)	9X-7391	171.81 ± 0.50 (6.764 ± .020)	3.53 ± 0.08 (.139 ± .003)	1.95 ± 0.08 (.077 ± .003)	0.4 ± 0.10 (.016 ± .004)
160.00 (6.300)	9D-8042	176.15 ± 0.50 (6.935 ± .020)	3.53 ± 0.08 (.139 ± .003)	1.95 ± 0.08 (.077 ± .003)	0.4 ± 0.10 (.016 ± .004)
165.10 (6.500)	9D-8042	179.17 ± 0.50 (7.054 ± .020)	3.53 ± 0.08 (.139 ± .003)	1.95 ± 0.08 (.077 ± .003)	0.4 ± 0.10 (.016 ± .004)
170.00 (6.690)	9X-7725	187.50 ± 0.50 (7.382 ± .020)	3.53 ± 0.08 (.139 ± .003)	1.95 ± 0.08 (.077 ± .003)	0.4 ± 0.10 (.016 ± .004)
177.80 (7.000)	5J-2383	198.98 ± 0.50 (7.834 ± .020)	4.75 ± 0.13 (.187 ± .005)	2.64 ± 0.13 (.104 ± .005)	0.8 ± 0.20 (.031 ± .008)
180.00 (7.090)	5J-2383	196.50 ± 0.50 (7.736 ± .020)	4.75 ± 0.13 (.187 ± .005)	2.64 ± 0.13 (.104 ± .005)	0.8 ± 0.20 (.031 ± .008)
184.15 (7.250)	5J-2383	198.98 ± 0.50 (7.834 ± .020)	4.75 ± 0.13 (.187 ± .005)	2.64 ± 0.13 (.104 ± .005)	0.8 ± 0.20 (.031 ± .008)
190.50 (7.500)	3J-0634	211.68 ± 0.50 (8.334 ± .020)	4.75 ± 0.13 (.187 ± .005)	2.64 ± 0.13 (.104 ± .005)	0.8 ± 0.20 (.031 ± .008)
196.85 (7.750)	3J-0634	209.47 ± 0.50 (8.247 ± .020)	4.75 ± 0.13 (.187 ± .005)	2.64 ± 0.13 (.104 ± .005)	0.8 ± 0.20 (.031 ± .008)
200.00 (7.87)	5P-3092	225.00 ± 0.50 (8.858 ± .020)	7.40 ± 0.20 (.291 ± .008)	3.95 ± 0.20 (.155 ± .008)	1.6 ± 0.40 (.063 ± .016)
209.55 (8.250)	4K-6804	224.38 ± 0.50 (8.834 ± .020)	4.75 ± 0.13 (.187 ± .005)	2.64 ± 0.13 (.104 ± .005)	0.8 ± 0.20 (.031 ± .008)
215.90 (8.500)	1T-0132	241.22 ± 0.50 (9.496 ± .020)	4.75 ± 0.13 (.187 ± .005)	2.64 ± 0.13 (.104 ± .005)	0.8 ± 0.20 (.031 ± .008)
220.00 (8.66)	1M-9015	253.92 ± 0.50 (9.997 ± .020)	9.35 ± 0.25 (.368 ± .010)	5.20 ± 0.25 (.207 ± .006)	1.6 ± 0.40 (.063 ± .016)
234.95 (9.250)	5S-3676	253.92 ± 0.50 (9.997 ± .020)	4.75 ± 0.13 (.187 ± .005)	2.64 ± 0.13 (.104 ± .005)	0.8 ± 0.20 (.031 ± .008)
254.00 (10.000)	3S-3074	276.15 ± 0.50 (10.872 ± .020)	7.40 ± 0.20 (.291 ± .008)	3.95 ± 0.20 (.155 ± .008)	1.6 ± 0.40 (.063 ± .016)
266.70 (10.500)	5P-2236	288.85 ± 0.50 (11.372 ± .020)	7.40 ± 0.20 (.291 ± .008)	3.95 ± 0.20 (.155 ± .008)	1.6 ± 0.40 (.063 ± .016)
279.40 (11.00)	130-9108	310.50 ± 0.50 (12.224 ± .020)	7.40 ± 0.20 (.291 ± .008)	3.95 ± 0.20 (.155 ± .008)	1.6 ± 0.40 (.063 ± .016)
292.10 (11.50)	6V-3263	314.25 ± 0.50 (12.372 ± .020)	7.40 ± 0.20 (.291 ± .008)	3.95 ± 0.20 (.155 ± .008)	1.6 ± 0.40 (.063 ± .016)
317.50 (12.50)	130-9109	360.50 ± 0.50 (14.193 ± .020)	7.40 ± 0.20 (.291 ± .008)	3.95 ± 0.20 (.155 ± .008)	1.6 ± 0.40 (.063 ± .016)
330.20 (13.00)	130-9110	381.50 ± 0.50 (15.020 ± .020)	7.40 ± 0.20 (.291 ± .008)	3.95 ± 0.20 (.155 ± .008)	1.6 ± 0.40 (.063 ± .016)
342.90 (13.50)	130-9110	381.50 ± 0.50 (15.020 ± .020)	7.40 ± 0.20 (.291 ± .008)	3.95 ± 0.20 (.155 ± .008)	1.6 ± 0.40 (.063 ± .016)

# Seal Selection for Other Than Cat Equipment

## Seal Selection

Cat seals can be used on other-than Cat equipment. The following section will help you identify which seal is necessary for your repair.



### How to Select the Correct Seals:

- For cylinders used on other-than Cat equipment, measure the components using the following procedure. To find the correct replacement seal size, the seal groove dimensions in the iron itself should always be measured whenever possible. Measuring a used seal can give false dimensions due to distortion in size from wear. The hydraulic cylinder illustration below calls out the iron dimensions required to identify the proper size replacement seal.

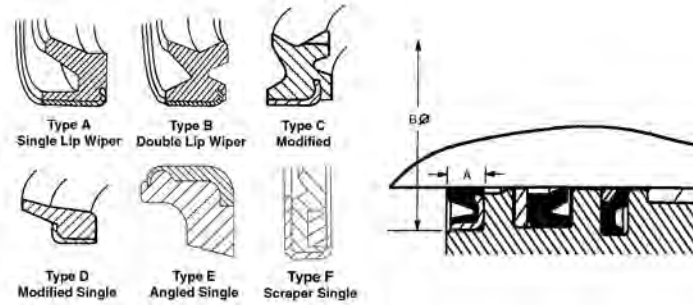
Seal Type	Diameter of Rod (R) or Cylinder Bore (B)	Groove Width	Groove Diameter
Rod Wiper:	R	A	C
Rod Seal:	R	D	E
Buffer Seal:	R	F	G
Head Wear Ring:	R	H	I
Head Seal:	B	J	K
Piston Seal:	B	L	M
Piston Wear Ring:	B	N	O

Should seal replacement be requested by a customer over-the-counter rather than through the service shop, measure the seal's outside diameter at four equally-spaced areas around the seal. Take the average of these measurements to determine the seal's outside diameter. Repeat this procedure with the seal's inside diameter and width (height) to determine seal replacement size. Seal dimensions equivalent to iron dimensions are shown in the following table.

Type of Seal	Iron Dimension	Equivalent Seal Dimension
Wiper Seal, U-Cup Seal, Buffer Seal, Head Wear Ring	Rod Diameter	Inside Diameter
	Groove Width	Width
	Groove Diameter	Outside Diameter
Snap-in Wiper Seal	Seal Bore Diameter	Base Thickness
Head Seal, Piston Seal, Piston Wear Ring	Bore Diameter	Outside Diameter
	Groove Width	Width
	Groove Diameter	Inside Diameter

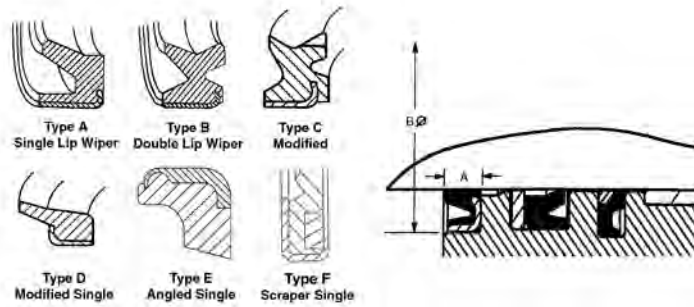
Use the tables in the following sections to find the right seal for your customer's repair. Note that the Hydraulic Information System (HIS – <https://his.cat.com>) also has seal search capabilities.

# Press-In Wiper Seals



I.D.		PART NUMBER	SEAL TYPE	A WIDTH (± .02 in)		B O.D.	
(in)	(mm)			(in)	(mm)	(in)	(mm)
0.98	25.00	167-3100	URE A	0.28	7.00	1.38	35.02
1.00	25.40	7K-1864	URE	0.31	7.92	1.50	38.20
1.18	30.00	144-9480	URE D	0.39	10.00	1.58	40.02
1.25	31.75	167-2447	URE E	0.34	8.60	1.75	44.50
1.25	31.75	2H-1746	NIT A	0.28	7.00	1.75	44.50
1.25	31.75	4J-8982	URE A	0.34	8.60	1.75	44.50
1.25	31.75	3E-4160	URE A	0.31	7.92	1.75	44.45
1.26	32.00	167-3102	URE A	0.28	7.00	1.65	42.02
1.37	34.92	3E-4159	URE A	0.31	7.92	1.88	47.63
1.38	35.00	140-2392	URE D	0.39	10.00	1.77	45.02
1.50	38.10	167-2450	URE E	0.43	11.00	2.25	57.15
1.50	38.10	226-8202	URE B	0.43	11.00	2.25	57.15
1.50	38.10	3E-4161	URE A	0.31	7.92	2.00	50.80
1.50	38.10	4J-8979	URE A	0.43	11.00	2.25	57.15
1.50	38.10	8C-9131	URE B	0.43	11.00	2.25	57.15
1.50	38.10	9J-4037	NIT A	0.43	11.00	2.25	57.15
1.57	40.00	167-2446	URE E	0.33	8.50	2.13	54.05
1.57	40.00	167-3104	URE D	0.28	7.00	1.97	50.02
1.57	40.00	144-9492	URE D	0.39	10.00	1.97	50.02
1.63	41.28	4T-0486	URE A	0.33	8.50	2.13	53.98
1.75	44.40	150-6739	URE C	0.43	11.00	2.44	62.07
1.75	44.45	167-2452	URE E	0.43	11.00	2.44	61.90
1.75	44.45	4J-8980	URE A	0.43	11.00	2.44	61.90
1.75	44.45	5P-0092	NIT A	0.25	6.35	2.25	57.25
1.75	44.45	3E-4162	URE A	0.31	7.92	2.25	57.15
1.75	44.45	231-3539	URE B	0.43	11.00	2.44	61.90
1.75	44.45	8C-9132	URE B	0.43	11.00	2.44	61.90
1.75	44.45	8J-5817	NIT A	0.43	11.00	2.44	61.90
1.75	44.45	7J-6932	URE	0.31	7.94	2.25	57.25
1.77	45.00	233-0617	URE B	0.33	8.50	2.32	59.05
1.77	45.00	167-2448	URE E	0.33	8.50	2.32	59.05
1.77	45.00	141-0713	URE D	0.28	7.00	2.16	54.97
1.83	46.50	099-3929	URE A	0.33	8.35	2.52	64.02
1.87	47.62	167-2455	URE E	0.43	11.00	2.56	65.07
1.87	47.62	4T-6777	URE A	0.43	11.00	2.56	65.07
1.87	47.62	9X-3565	URE B	0.43	11.00	2.56	65.07
1.88	47.63	227-1143	URE B	0.43	11.00	2.56	65.07
1.89	47.90	116-3393	URE A	0.33	8.35	2.52	64.02
1.97	50.00	167-2456	URE E	0.43	11.00	2.66	67.45
1.97	50.00	233-0619	URE B	0.43	11.00	2.66	67.45
2.00	50.75	143-3670	URE C	0.43	11.00	2.69	68.42
2.00	50.80	167-2457	URE E	0.43	11.00	2.69	68.23

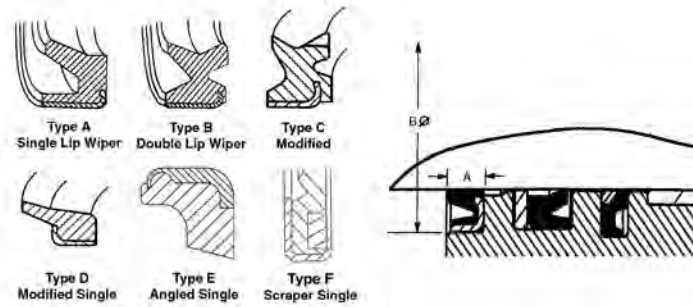
# Press-In Wiper Seals



I.D.		PART NUMBER	SEAL TYPE	A WIDTH (± .02 in)		B O.D.	
(in)	(mm)			(in)	(mm)	(in)	(mm)
2.00	50.80	229-9382	URE B	0.43	11.00	2.69	68.23
2.00	50.80	1K-6981	URE A	0.43	11.00	2.69	68.23
2.00	50.80	3E-4164	URE A	0.31	7.92	2.50	63.50
2.00	50.80	7J-8277	NIT A	0.43	11.00	2.69	68.23
2.00	50.80	8C-9133	URE B	0.43	11.00	2.69	68.23
2.03	51.50	099-6995	URE A	0.33	8.35	2.72	69.02
2.12	53.93	150-6745	URE C	0.43	11.00	2.88	73.20
2.13	53.98	167-2458	URE E	0.43	11.00	2.88	73.03
2.13	53.98	9X-3567	URE B	0.43	11.00	2.88	73.03
2.13	53.98	4T-6125	URE A	0.43	11.00	2.88	73.03
2.13	53.98	227-1145	URE B	0.43	11.00	2.88	73.03
2.17	55.00	116-3392	URE A	0.33	8.35	2.72	69.02
2.22	56.50	096-1884	URE A	0.33	8.35	2.91	74.02
2.25	57.15	167-2459	URE E	0.43	11.00	3.00	76.13
2.25	57.15	167-2460	URE E	0.41	10.50	3.00	76.13
2.25	57.15	231-3538	URE B	0.43	11.00	3.00	76.13
2.25	57.15	5J-3937	URE A	0.29	7.35	3.13	79.38
2.25	57.15	5H-1513	URE A	0.51	12.83	3.25	82.55
2.25	57.15	4J-3515	URE A	0.43	11.00	3.00	76.13
2.25	57.15	3E-4165	URE A	0.31	7.92	2.75	69.85
2.25	57.15	8C-9134	URE B	0.43	11.00	3.00	76.13
2.25	57.15	7J-8278	NIT A	0.43	11.00	3.00	76.13
2.36	59.85	093-1433	URE F	0.16	4.15	2.96	75.12
2.36	60.00	233-0618	URE B	0.33	8.50	2.92	74.05
2.36	60.00	167-2454	URE E	0.33	8.50	2.92	74.05
2.36	60.00	116-3391	URE A	0.33	8.35	2.91	74.02
2.37	60.32	167-2461	URE E	0.43	11.00	3.12	79.35
2.37	60.32	231-3540	URE B	0.43	11.00	3.12	79.35
2.37	60.32	6J-3892	URE A	0.43	11.00	3.12	79.35
2.37	60.32	9X-7259	URE B	0.43	11.00	3.12	79.35
2.37	60.32	9J-1319	NIT A	0.43	11.00	3.12	79.35
2.42	61.50	095-7102	URE D	0.44	11.30	3.12	79.21
2.50	63.45	150-6751	URE C	0.43	11.00	3.26	82.75
2.50	63.50	167-2463	URE E	0.43	11.00	3.25	82.55
2.50	63.50	225-3281	URE B	0.43	11.00	3.25	82.55
2.50	63.50	7J-8273	NIT A	0.43	11.00	3.25	82.55
2.50	63.50	8C-3840	URE B	0.43	11.00	3.25	82.55
2.50	63.50	3E-4166	URE A	0.31	7.92	3.00	76.20
2.50	63.50	1K-6982	URE A	0.43	11.00	3.25	82.55
2.56	65.00	227-1148	URE B	0.43	11.00	3.31	84.02
2.56	65.00	167-2466	URE E	0.43	11.00	3.31	84.02
2.56	65.00	116-3390	URE A	0.33	8.35	3.11	79.02

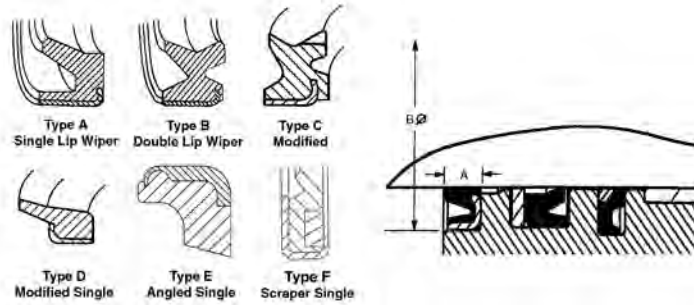


# Press-In Wiper Seals



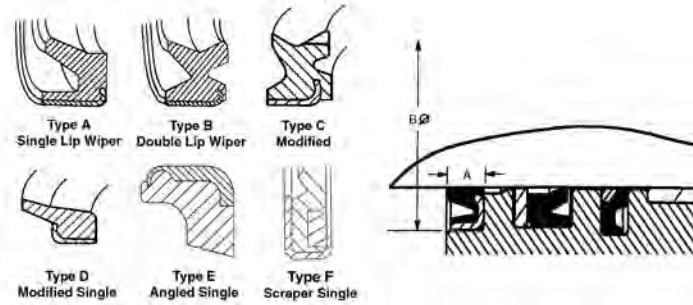
I.D.		PART NUMBER	SEAL TYPE	A WIDTH (± .02 in)		B O.D.	
(in)	(mm)			(in)	(mm)	(in)	(mm)
2.63	66.68	167-2464	URE E	0.43	11.00	3.37	85.72
2.63	66.68	227-1146	URE B	0.43	11.00	3.37	85.72
2.63	66.68	1U-4021	URE D	0.43	11.00	3.37	85.72
2.63	66.68	9X-3569	URE D	0.43	11.00	3.37	85.72
2.75	69.80	149-1488	URE C	0.55	14.00	3.76	95.49
2.75	69.85	167-2467	URE E	0.55	14.00	3.75	95.27
2.75	69.85	8C-3842	URE B	0.55	14.00	3.75	95.27
2.75	69.85	7J-8274	NIT A	0.55	14.00	3.75	95.27
2.75	69.85	1J-3540	URE A	0.55	14.00	3.75	95.27
2.75	69.85	225-3283	URE B	0.55	14.00	3.75	95.27
2.75	69.85	3E-4168	URE A	0.31	7.92	3.25	82.55
2.76	70.00	233-0630	URE B	0.31	8.00	3.31	84.02
2.76	70.00	167-2451	URE E	0.31	8.00	3.31	84.02
2.76	70.00	116-3389	URE A	0.33	8.35	3.31	84.02
2.88	73.15	167-2472	URE E	0.43	11.00	3.63	92.19
2.95	75.00	167-2468	URE E	0.32	8.20	3.50	89.02
2.95	75.00	116-3388	URE A	0.33	8.35	3.50	89.02
2.95	75.00	233-0621	URE B	0.32	8.20	3.50	89.02
3.00	76.15	143-3671	URE C	0.55	14.00	4.01	101.92
3.00	76.20	167-2469	URE E	0.55	14.00	4.00	101.67
3.00	76.20	2J-1411	URE A	0.55	14.00	4.00	101.67
3.00	76.20	225-3284	URE B	0.55	14.00	4.00	101.67
3.00	76.20	3E-4170	URE A	0.31	7.92	3.50	88.90
3.00	76.20	8C-5218	URE B	0.55	14.00	4.00	101.67
3.00	76.20	8J-0249	NIT A	0.55	14.00	4.00	101.67
3.06	77.70	165-9285	URE B	0.43	11.00	3.71	94.23
3.14	79.85	096-0854	URE F	0.16	4.15	3.75	95.15
3.15	80.00	116-3387	URE A	0.33	8.35	3.70	94.02
3.15	80.00	167-2506	URE E	0.33	8.50	3.70	94.05
3.15	80.00	167-2481	URE E	0.55	14.00	4.15	105.47
3.15	80.00	233-0637	URE B	0.33	8.50	3.70	94.05
3.21	81.50	7Y-5115	URE A	0.33	8.35	3.90	99.02
3.25	82.50	153-7558	URE C	0.55	14.00	4.26	108.16
3.25	82.55	167-2471	URE E	0.55	14.00	4.25	107.95
3.25	82.55	7J-7732	NIT A	0.55	14.00	4.25	107.95
3.25	82.55	6J-4169	URE A	0.55	14.00	4.25	107.95
3.25	82.55	8T-8389	URE B	0.55	14.00	4.25	107.95
3.25	82.55	225-3285	URE B	0.55	14.00	4.25	107.95
3.25	82.55	3E-4173	URE A	0.31	7.92	3.88	98.43
3.26	82.70	165-9286	URE B	0.43	11.00	3.91	99.23
3.35	85.00	121-1611	URE B	0.51	13.00	3.90	99.00
3.35	85.00	114-0644	URE A	0.33	8.50	3.90	99.02

# Press-In Wiper Seals



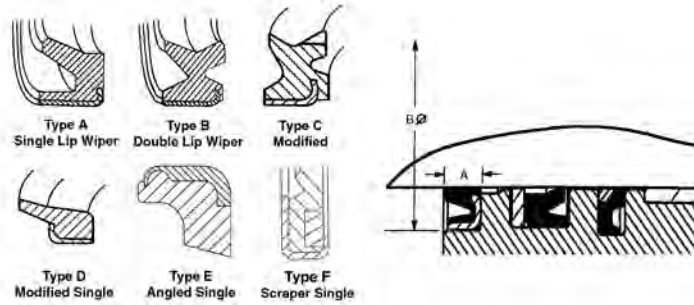
I.D.		PART NUMBER	SEAL TYPE	A WIDTH (± .02 in)		B O.D.		
(in)	(mm)			(in)	(mm)	(in)	(mm)	
3.35	85.00	167-2470	URE	E	0.33	8.50	3.90	99.03
3.35	85.00	233-0622	URE	B	0.33	8.50	3.90	99.03
3.41	86.50	093-1441	URE	A	0.33	8.35	4.10	104.02
3.50	88.85	143-3672	URE	C	0.55	14.00	4.51	114.57
3.50	88.90	167-2474	URE	E	0.55	14.00	4.50	114.32
3.50	88.90	225-3286	URE	B	0.55	14.00	4.50	114.32
3.50	88.90	3E-4176	URE	A	0.31	7.92	4.13	104.78
3.50	88.90	4J-8981	URE	A	0.55	14.00	4.50	114.32
3.50	88.90	7J-8276	NIT	A	0.55	14.00	4.50	114.32
3.50	88.90	8C-5219	URE	A	0.55	14.00	4.50	114.32
3.54	90.00	233-0623	URE	B	0.43	11.00	4.10	104.02
3.54	90.00	167-2473	URE	E	0.43	11.00	4.10	104.02
3.54	90.00	126-1885	URE	B	0.51	13.00	4.09	104.00
3.54	90.00	094-0723	URE	D	0.53	13.50	4.09	104.00
3.54	90.00	116-3386	URE	A	0.33	8.35	4.10	104.02
3.65	92.70	114-0645	URE	A	0.33	8.50	4.29	109.03
3.65	92.70	165-9288	URE	B	0.43	11.00	4.30	109.23
3.74	95.00	167-2476	URE	E	0.33	8.50	4.29	109.03
3.74	95.00	167-2477	URE	E	0.32	8.20	4.29	109.03
3.74	95.00	233-0624	URE	B	0.33	8.50	4.29	109.03
3.75	95.20	227-1149	URE	B	0.55	14.00	4.75	120.65
3.75	95.25	8C-9135	URE	B	0.55	14.00	4.75	120.65
3.75	95.25	8J-6069	URE	A	0.55	14.00	4.75	120.65
3.75	95.25	9J-1325	NIT	A	0.55	14.00	4.75	120.65
3.75	95.25	167-2478	URE	E	0.55	14.00	4.75	120.65
3.80	96.50	096-0059	URE	A	0.33	8.35	4.49	114.02
3.94	100.00	094-4057	URE	D	0.53	13.50	4.49	114.00
3.94	100.00	107-6254	URE	D	0.31	8.00	4.49	114.00
3.94	100.00	114-0646	URE	A	0.33	8.35	4.49	114.02
3.94	100.00	133-6904	URE	B	0.51	13.00	4.49	114.00
3.94	100.00	167-2480	URE	E	0.31	8.00	4.49	114.00
3.94	100.00	233-0626	URE	B	0.31	8.00	4.49	114.00
4.00	101.55	138-9740	URE	A	0.31	8.00	4.50	114.24
4.00	101.55	143-3673	URE	C	0.55	14.00	5.01	127.23
4.00	101.60	167-2482	URE	E	0.55	14.00	5.00	127.00
4.00	101.60	2D-8540	NIT	A	0.50	12.70	5.00	127.10
4.00	101.60	225-3287	URE	B	0.55	14.00	5.00	127.00
4.00	101.60	3E-4177	URE	A	0.31	7.92	4.63	117.48
4.00	101.60	3G-2650	NIT	A	0.55	14.00	5.00	127.00
4.00	101.60	8C-5220	URE	B	0.55	14.00	5.00	127.00
4.00	101.60	7J-5673	URE	A	0.55	14.00	5.00	127.00
4.00	101.60	7Y-4667	URE	A	0.39	10.00	4.76	121.02

# Press-In Wiper Seals



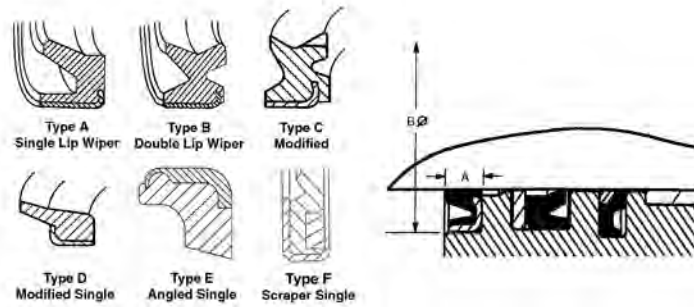
I.D.		PART NUMBER	SEAL TYPE	A WIDTH (± .02 in)		B O.D.	
(in)	(mm)			(in)	(mm)	(in)	(mm)
4.04	102.50	133-6813	URE B	0.37	9.30	4.77	121.26
4.13	105.00	165-9290	URE B	0.47	12.00	4.77	121.26
4.13	105.00	114-0647	URE A	0.37	9.50	4.76	121.02
4.13	105.00	114-0705	URE D	0.59	15.00	4.76	121.00
4.13	105.00	167-2483	URE E	0.37	9.50	4.76	121.03
4.13	105.00	2U-5368	A	0.47	12.00	5.12	130.00
4.13	105.00	233-0627	URE B	0.37	9.50	4.76	121.03
4.19	106.50	7Y-4940	URE A	0.37	9.35	4.96	126.02
4.23	107.50	133-6814	URE B	0.47	12.00	4.97	126.26
4.25	107.95	167-2484	URE E	0.55	14.00	5.25	133.35
4.25	107.95	7J-8942	URE A	0.55	14.00	5.25	133.35
4.25	107.95	9J-1333	NIT A	0.55	14.00	5.25	133.35
4.25	107.95	225-3288	URE B	0.55	14.00	5.25	133.35
4.25	107.95	6E-0426	URE B	0.55	14.00	5.25	133.35
4.33	110.00	233-0628	URE B	0.37	9.35	4.96	126.02
4.33	110.00	167-2485	URE E	0.37	9.35	4.96	126.02
4.33	110.00	165-9291	URE B	0.47	12.00	4.97	126.26
4.33	110.00	111-9957	URE A	0.37	9.35	4.96	126.02
4.50	114.30	143-3674	URE C	0.55	14.00	5.51	139.93
4.50	114.30	167-2487	URE E	0.55	14.00	5.50	139.70
4.50	114.30	225-3289	URE B	0.55	14.00	5.50	139.70
4.50	114.30	3J-4458	URE A	0.55	14.00	5.50	139.70
4.50	114.30	3E-4178	URE A	0.31	7.92	5.13	130.18
4.50	114.30	9J-1337	NIT A	0.55	14.00	5.50	139.70
4.50	114.30	9X-3580	URE D	0.55	14.00	5.50	139.70
4.53	115.00	167-2453	URE E	0.35	9.00	5.16	131.02
4.75	120.60	227-1150	URE B	0.55	14.00	5.75	146.13
4.75	120.65	9X-7262	URE B	0.55	14.00	5.75	146.05
4.75	120.65	9J-1341	NIT A	0.55	14.00	5.75	146.05
4.75	120.65	7J-9256	URE A	0.55	14.00	5.75	146.05
4.75	120.65	167-2488	URE E	0.55	14.00	5.75	146.13
4.82	122.50	165-9292	URE B	0.47	12.00	5.56	141.26
4.82	122.50	155-9194	URE A	0.35	9.00	5.56	141.26
4.90	124.50	121-1596	URE A	0.39	10.02	5.64	143.14
5.00	126.95	150-6263	URE C	0.55	14.00	6.01	152.70
5.00	127.00	167-2489	URE E	0.55	14.00	6.00	152.40
5.00	127.00	8J-4520	URE D	0.55	14.00	6.00	152.40
5.00	127.00	9J-1681	NIT A	0.55	14.00	6.00	152.40
5.00	127.00	9X-3582	URE B	0.55	14.00	6.00	152.40
5.00	127.00	225-3290	URE B	0.55	14.00	6.00	152.40
5.12	130.00	233-0631	URE B	0.37	9.35	5.75	146.02
5.12	130.00	167-2490	URE E	0.36	9.20	5.75	146.05

# Press-In Wiper Seals



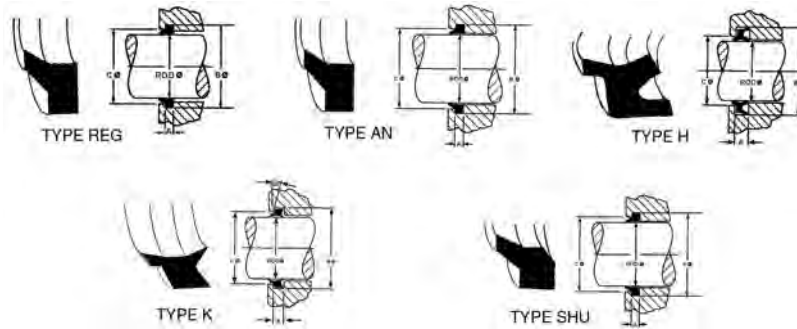
I.D.		PART NUMBER	SEAL TYPE	A WIDTH (± .02 in)		B O.D.		
(in)	(mm)			(in)	(mm)	(in)	(mm)	
5.12	130.00	167-2491	URE	E	0.37	9.35	5.75	146.02
5.12	130.00	165-9293	URE	B	0.47	12.00	5.76	146.26
5.12	130.00	111-9958	URE	A	0.37	9.35	5.75	146.02
5.25	133.30	233-0632	URE	B	0.55	14.00	6.25	158.75
5.25	133.35	9X-7268	URE	B	0.55	14.00	6.25	158.75
5.25	133.35	167-2492	URE	E	0.55	14.00	6.25	158.75
5.50	139.65	152-5063	URE	D	0.55	14.00	6.51	165.41
5.50	139.70	167-2493	URE	E	0.55	14.00	6.50	165.10
5.50	139.70	167-2993		E	0.55	14.00	6.50	165.10
5.50	139.70	9X-3573	URE	D	0.55	14.00	6.50	165.10
5.50	139.70	225-3291	URE	B	0.55	14.00	6.50	165.10
5.51	140.00	233-0633	URE	B	0.41	10.35	6.30	160.02
5.51	140.00	167-2494	URE	E	0.41	10.35	6.30	160.02
5.51	140.00	165-9294	URE	B	0.51	13.00	6.31	160.26
5.51	140.00	107-6615	URE	A	0.41	10.35	6.30	160.02
5.71	145.00	167-2505	URE	E	0.39	10.00	6.50	165.02
5.71	145.00	233-0636	URE	B	0.39	10.00	6.50	165.02
5.75	146.05	225-3293	URE	B	0.54	13.70	6.75	171.45
5.75	146.05	9J-5473	NIT	A	0.55	14.00	6.75	171.45
5.75	146.05	9J-5469	URE	A	0.55	14.00	6.75	171.45
5.75	146.05	9X-3574	URE	B	0.55	14.00	6.75	171.45
5.75	146.05	167-2495	URE	E	0.54	13.70	6.75	171.45
5.91	150.00	167-2496	URE	E	0.41	10.50	6.69	170.02
5.91	150.00	165-9296	URE	B	0.51	13.00	6.70	170.26
5.91	150.00	107-6616	URE	A	0.41	10.35	6.69	170.02
5.91	150.00	233-0634	URE	B	0.41	10.50	6.69	170.02
6.00	152.40	225-3294	URE	B	0.54	13.70	7.00	177.80
6.00	152.40	3J-7622	URE	A	0.54	13.70	7.00	177.80
6.00	152.40	9J-1697	NIT	A	0.55	14.00	7.00	177.80
6.00	152.40	161-5789	URE	D	0.55	14.00	7.01	178.11
6.00	152.40	167-2497	URE	E	0.54	13.70	7.00	177.80
6.50	165.10	167-2498	URE	E	0.54	13.70	7.50	190.50
6.50	165.10	9X-7323	URE	B	0.55	14.00	7.50	190.50
6.50	165.10	8J-1877	NIT	A	0.65	16.50	7.50	190.50
6.50	165.10	7J-2806	URE	A	0.65	16.50	7.50	190.50
6.50	165.10	225-3295	URE	B	0.54	13.70	7.50	190.50
6.75	171.40	227-1147	URE	B	0.55	14.00	7.75	196.85
6.75	171.45	3J-4460		A	0.55	14.00	7.75	196.85
6.75	171.45	8C-9146	URE	B	0.55	14.00	7.75	196.85
6.75	171.45	167-2499	URE	E	0.55	14.00	7.75	196.85
7.00	177.80	167-2500	URE	E	0.59	15.00	8.00	203.20
7.00	177.80	8C-9136	URE	D	0.55	14.00	8.00	203.20

# Press-In Wiper Seals



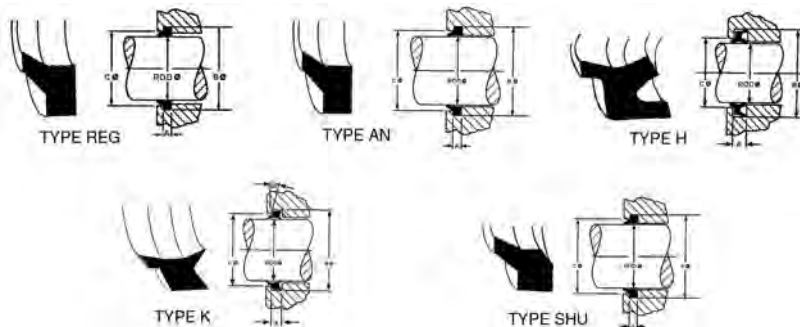
I.D.		PART NUMBER	SEAL TYPE	A WIDTH (± .02 in)		B O.D.		
(in)	(mm)			(in)	(mm)	(in)	(mm)	
7.00	177.80	9X-7333	URE	A	0.55	14.00	8.00	203.20
7.00	177.80	3G-2646	NIT	A	0.55	14.00	8.00	203.20
7.00	177.80	225-3296	URE	B	0.59	15.00	8.00	203.20
7.25	184.15	225-3297	URE	B	0.54	13.70	8.25	209.45
7.25	184.15	3J-7761	URE	A	0.55	14.00	8.25	209.55
7.25	184.15	167-2501	URE	E	0.54	13.70	8.25	209.45
7.25	184.15	108-0134	URE	D	0.55	14.00	8.25	209.55
7.25	184.15	108-0133			0.32	8.25	8.08	205.30
7.50	190.50	108-0132	URE	B	0.55	14.00	8.50	215.90
7.50	190.50	167-2502	URE	E	0.54	13.70	8.50	215.90
7.50	190.50	225-3298	URE	B	0.54	13.70	8.50	215.90
8.00	203.20	225-3299	URE	B	0.54	13.70	9.00	228.60
8.00	203.20	6E-0036	URE	B	0.55	14.00	9.00	228.60
8.00	203.20	167-2503	URE	E	0.54	13.70	9.00	228.60
8.00	203.25	152-5064	URE	D	0.55	14.00	9.01	228.91
8.25	209.55	9X-7329	NIT	B	0.55	14.00	9.25	234.95
8.75	222.25	062-3943	URE	B	0.55	14.00	9.75	247.65
8.75	222.25	225-3300	URE	B	0.54	13.70	9.75	247.65
8.75	222.25	108-6214	URE	B	0.55	14.00	9.75	247.65
8.75	222.25	167-2504	URE	E	0.54	13.70	9.75	247.65
9.00	228.60	9X-7354	URE	A	0.59	15.00	9.75	247.70
9.50	241.30	167-2508	URE	E	0.59	15.00	10.50	266.77
11.00	279.40	9X-7353	URE	A	0.59	15.00	12.00	304.85
12.50	317.50	9X-7352	URE	A	0.59	15.00	13.50	342.95
13.50	342.90	9X-7350	URE	A	0.59	15.00	14.50	368.35
15.75	400.05	149-2697	URE	B	0.55	14.00	16.76	425.82
18.45	468.60	9X-7355	NIT	A	0.55	14.00	19.45	494.12

# Snap-In Wiper Seals



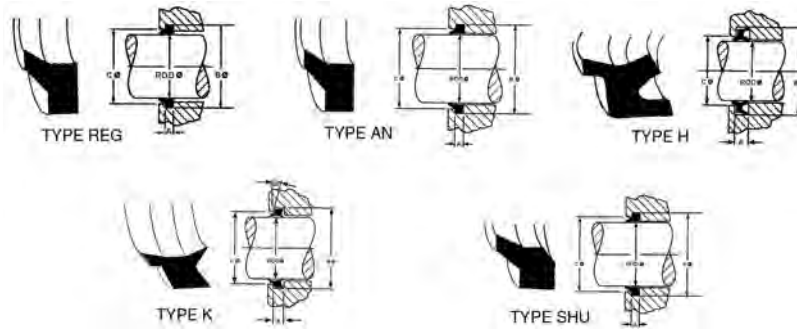
I.D.		PART NUMBER	SEAL TYPE	A WIDTH (± .002 in)		B O.D. (± .003 in)		C Base Thickness (± .010 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)	(in)	(mm)
0.63	15.88	6J-2274	REG	0.13	3.20	0.88	22.28	0.79	20.10
0.63	15.88	5J-2274	REG	0.13	3.20	0.88	22.28	0.79	20.10
0.75	19.05	6J-1879	REG	0.19	4.80	1.13	28.63	1.00	25.40
1.00	25.40	6J-1890	REG	0.19	4.80	1.38	34.98	1.25	31.75
1.00	25.40	3E-4124	K	0.19	4.95	1.39	35.18	1.08	27.48
1.13	28.58	3E-4138	SHU	0.19	4.75	1.50	38.02	1.37	34.80
1.25	31.75	3E-4139	SHU	0.19	4.75	1.62	41.20	1.49	37.97
1.25	31.75	3E-4125	K	0.19	4.95	1.64	41.53	1.33	33.83
1.38	34.93	3E-4140	SHU	0.19	4.75	1.75	44.37	1.62	41.15
1.50	38.10	3E-4141	SHU	0.19	4.75	1.87	47.55	1.74	44.32
1.50	38.10	3E-4126	K	0.19	4.95	1.89	47.88	1.58	40.18
1.50	38.10	5J-6795	REG	0.19	4.80	1.88	47.68	1.75	44.45
1.50	38.10	141-7451	H	0.34	8.76	0.00	0.00	2.00	50.80
1.50	38.10	3E-4103	AN	0.11	2.72	1.80	45.77	1.67	42.37
1.63	41.28	3E-4104	AN	0.11	2.72	1.93	48.95	1.79	45.54
1.63	41.28	3E-4163	SHU	0.19	4.75	2.00	50.72	1.74	44.32
1.75	44.40	8T-5431	REG	0.19	4.80	0.00	0.00	2.13	54.03
1.75	44.40	7U-7648	REG	0.00	0.00	2.13	54.00	0.00	0.00
1.75	44.45	3E-4105	AN	0.11	2.72	2.05	52.12	1.92	48.72
1.75	44.45	3E-4150	H	0.22	5.54	2.11	53.72	1.89	47.88
1.75	44.45	3E-4127	K	0.19	4.95	2.14	54.23	1.83	46.53
1.75	44.45	3E-4142	SHU	0.19	4.75	2.12	53.90	1.99	50.67
1.87	47.62	3G-4721	REG	0.19	4.80	2.25	57.20	2.13	53.98
1.97	50.00	3E-4151	H	0.22	5.54	2.36	60.07	2.14	54.23
1.97	50.00	3E-4143	SHU	0.25	6.32	2.50	63.42	2.33	59.11
1.97	50.00	5U-3693	REG	0.25	6.35	0.00	0.00	2.50	63.50
2.00	50.80	3E-4106	AN	0.11	2.72	2.30	58.47	2.18	55.32
2.00	50.80	3E-4128	K	0.19	4.95	2.39	60.58	2.08	52.88
2.00	50.80	4T-0415	REG	0.25	6.38	2.50	63.55	2.33	59.25
2.01	50.96	1K-5354	REG	0.18	4.68	0.00	0.00	2.37	60.25
2.25	57.15	3E-4107	AN	0.11	2.72	2.55	64.82	2.43	61.67
2.25	57.15	6J-0217	REG	0.25	6.38	2.75	69.90	2.58	65.60
2.25	57.15	3E-4152	H	0.28	7.14	2.74	69.72	2.39	60.58
2.25	57.15	3E-4129	K	0.26	6.48	2.76	70.10	2.41	61.14
2.25	57.15	3E-4144	SHU	0.25	6.32	2.75	69.77	2.58	65.46
2.37	60.32	5J-8016	REG	0.25	6.38	2.88	73.08	2.71	68.78
2.38	60.33	3E-4167	SHU	0.25	6.32	2.87	72.95	2.70	68.63
2.50	63.50	3E-4153	H	0.28	7.14	2.99	76.07	2.64	66.93
2.50	63.50	3E-4145	SHU	0.25	6.32	3.00	76.12	2.83	71.81

# Snap-In Wiper Seals



I.D.		PART NUMBER	SEAL TYPE	A WIDTH (± .002 in)		B O.D. (± .003 in)		C Base Thickness (± .010 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)	(in)	(mm)
2.50	63.50	3E-4130	K	0.26	6.48	3.01	76.45	2.66	67.49
2.50	63.50	5J-8156	REG	0.25	6.38	3.00	76.25	2.83	71.95
2.50	63.50	3E-4108	AN	0.11	2.72	2.80	71.17	2.68	68.02
2.63	66.68	3E-4131	K	0.26	6.48	3.14	79.63	2.78	70.66
2.63	66.68	3G-4719	REG	0.25	6.38	3.13	79.43	2.96	75.13
2.75	69.85	3E-4169	SHU	0.25	6.32	3.25	82.47	3.08	78.16
2.75	69.85	3E-4132	K	0.26	6.48	3.26	82.80	2.91	73.84
2.75	69.85	3E-4109	AN	0.12	3.10	3.11	79.10	2.96	75.16
2.75	69.85	5J-7036	REG	0.25	6.38	3.25	82.60	3.08	78.30
3.00	76.20	5J-7030	REG	0.25	6.38	3.50	88.95	3.33	84.65
3.00	76.20	5U-2818	REG	0.25	6.40	3.50	88.90	0.00	0.00
3.00	76.20	3E-4110	AN	0.12	3.10	3.36	85.45	3.21	81.51
3.00	76.20	3E-4133	K	0.26	6.48	3.51	89.15	3.16	80.19
3.00	76.20	3E-4146	SHU	0.25	6.32	3.50	88.82	3.33	84.51
3.00	76.20	3E-4154	H	0.28	7.14	3.49	88.77	3.13	79.53
3.25	82.55	5J-7034	REG	0.25	6.38	3.75	95.30	3.58	91.00
3.38	85.73	3E-4171	SHU	0.25	6.32	3.87	98.35	3.70	94.03
3.38	85.85	3E-4111	AN	0.12	3.10	3.74	94.97	3.58	91.03
3.50	88.90	3E-4112	AN	0.12	3.10	3.86	98.15	3.71	94.21
3.50	88.90	5J-7032	REG	0.25	6.38	4.00	101.65	3.83	97.35
3.50	88.90	5U-3529	REG	0.25	6.30	4.00	101.60	0.00	0.00
3.50	88.90	3E-4155	H	0.28	7.14	3.99	101.47	3.64	92.33
3.50	88.90	3E-4147	SHU	0.25	6.32	4.00	101.52	3.83	97.21
3.50	88.90	3E-4134	K	0.26	6.48	4.01	101.85	3.66	92.89
3.75	95.25	3E-4172	SHU	0.25	6.32	4.25	107.87	4.08	103.56
3.75	95.25	4T-5540	REG	0.25	6.38	4.25	108.00	4.08	103.70
3.75	95.25	3E-4113	AN	0.12	3.10	4.11	104.50	3.96	100.56
4.00	101.55	138-9739	REG	0.25	6.37	0.00	0.00	4.50	114.30
4.00	101.60	3E-4114	AN	0.14	3.51	4.43	112.45	4.24	107.70
4.00	101.60	5J-2221	REG	0.25	6.38	4.50	114.35	4.33	110.05
4.00	101.60	3E-4148	SHU	0.25	6.32	4.50	114.22	4.33	109.91
4.00	101.60	3E-4156	H	0.28	7.14	4.49	114.17	4.14	105.03
4.00	101.60	3E-4135	K	0.26	6.48	4.51	114.55	4.16	105.59
4.25	107.95	3E-4115	AN	0.14	3.51	4.68	118.80	4.49	114.05
4.25	107.95	4T-1637	REG	0.25	6.38	4.75	120.70	4.61	117.05
4.25	107.95	7U-4138	REG	0.25	6.30	4.75	120.65	0.00	0.00
4.50	114.30	3G-8505	REG	0.38	9.55	5.25	133.40	5.00	127.00
4.50	114.30	3E-4157	H	0.28	7.14	4.99	126.87	4.64	117.73
4.50	114.30	3E-4116	AN	0.14	3.51	4.93	125.15	4.74	120.40

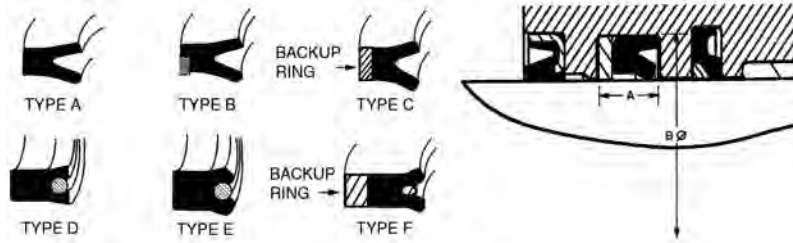
# Snap-In Wiper Seals



I.D.		PART NUMBER	SEAL TYPE	A WIDTH (± .002 in)		B O.D. (± .003 in)		C Base Thickness (± .010 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)	(in)	(mm)
4.50	114.30	3E-4136	K	0.26	6.48	5.01	127.25	4.66	118.29
4.75	120.65	3E-4117	AN	0.14	3.51	5.18	131.50	4.99	126.75
5.00	127.00	3E-4118	AN	0.14	3.51	5.43	137.85	5.24	133.10
5.00	127.00	3E-4137	K	0.26	6.48	5.51	139.95	5.16	130.99
5.00	127.00	3E-4158	H	0.28	7.14	5.49	139.57	5.14	130.43
5.00	127.00	3E-4149	SHU	0.37	9.50	5.75	145.97	5.49	139.52
5.00	127.00	9J-2547	REG	0.38	9.55	5.75	146.10	5.50	139.70
5.25	133.35	4T-5663	REG	0.38	9.55	6.00	152.45	5.75	146.05
5.25	133.35	3E-4119	AN	0.14	3.51	5.68	144.20	5.49	139.45
5.50	139.70	3E-4174	SHU	0.37	9.50	6.25	158.67	5.99	152.22
5.75	146.05	3E-4120	AN	0.15	3.91	6.24	158.47	6.02	152.96
5.75	146.05	6J-3073	REG	0.38	9.55	6.13	155.63	5.87	149.20
6.00	152.40	1U-2708	REG	0.38	9.55	6.75	171.50	6.50	165.10
6.00	152.40	3E-4121	AN	0.15	3.91	6.49	164.82	6.27	159.31
6.13	155.58	7J-3319	REG	0.38	9.55	6.88	174.68	6.63	168.28
6.25	158.70	121-4174	SHU	0.38	9.55	7.41	188.30	7.00	177.85
6.50	165.10	6J-0542	REG	0.40	10.20	7.50	190.55	7.17	182.00
6.50	165.10	3E-4122	AN	0.15	3.91	6.99	177.52	6.77	172.01
6.75	171.45	3E-4123	AN	0.15	3.91	7.24	183.87	7.02	178.36
7.00	177.80	5J-2682	REG	0.40	10.20	8.00	203.25	7.67	194.70
7.00	177.80	9X-7366	REG	0.40	10.19	0.00	0.00	8.00	203.20
7.25	184.15	4T-4802	REG	0.38	9.55	8.00	203.25	7.75	196.85
7.50	190.50	7J-3320	REG	0.40	10.20	8.50	215.95	8.17	207.40
7.75	196.80	121-4172	SHU	0.40	10.20	8.50	215.95	8.25	209.55
8.50	215.90	8J-9934	REG	0.40	10.20	9.25	235.00	9.00	228.60
8.75	222.25	6E-0252	REG	0.38	9.55	9.50	241.35	9.25	234.95
9.00	228.60	6J-7694	REG	0.40	10.20	9.75	247.70	9.50	241.35
9.00	228.60	9X-7367	SHU	0.40	10.20	9.75	247.70	9.50	241.30
9.50	241.25	121-4173	SHU	0.50	12.75	10.50	266.75	9.84	250.00
10.50	266.70	4T-4805	REG	0.50	12.75	11.50	292.15	11.17	283.60
11.00	279.40	9X-7368	SHU	0.50	12.75	12.00	304.85	11.67	296.30
11.00	279.40	1U-4625	REG	0.50	12.75	12.00	304.85	11.67	296.30
11.50	292.05	121-4171	SHU	0.50	12.75	12.50	317.55	12.17	309.00
12.50	317.50	9X-7369	SHU	0.50	12.75	13.50	342.95	13.17	334.40
12.50	317.50	4T-4130	REG	0.50	12.75	13.50	342.95	13.17	334.40

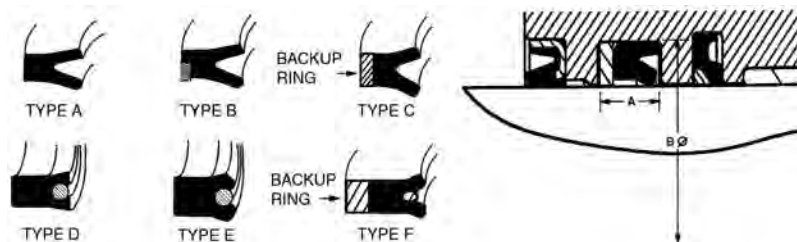


# U-Cup Rod Seals



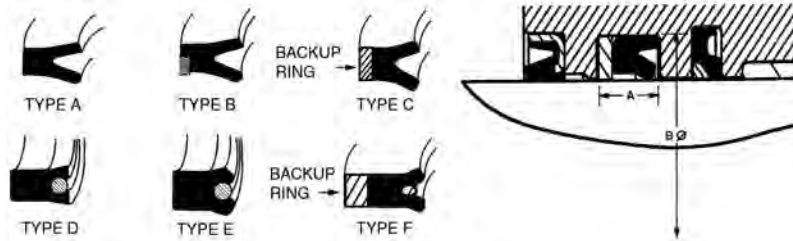
I.D. (in)	I.D. (mm)	PART NUMBER	SEAL TYPE		A WIDTH (+0.015, -0.000 in)		B O.D. (+0.002, -0.000 in)		CROSS SECTION		BACK-UP RING
					(in)	(mm)	(in)	(mm)	(in)	(mm)	
0.37	9.52	1U-3147	URE	A	0.16	4.10	0.63	16.00			
0.63	15.88	7J-0375	URE	A	0.29	7.26	0.88	22.28			
0.75	19.05	6J-1878	URE	A	0.29	7.26	1.00	25.45			
0.98	25.00	167-2362	URE	A	0.29	7.26	1.36	34.58			
1.00	25.40	6J-1889	URE	A	0.29	7.26	1.25	31.80			
1.13	28.58	3E-4284	URE	E	0.41	10.49	1.63	41.28	0.25	6.35	
1.13	28.58	3E-4175	URE	E	0.34	8.74	1.50	38.10	0.19	4.76	
1.18	30.00	144-9481	URE	A	0.43	11.00	1.57	40.00	0.20	5.00	
1.25	31.75	167-2295	URE	A	0.29	7.26	1.63	41.33			
1.25	31.75	3E-4180	URE	D	0.34	8.74	1.63	41.28	0.19	4.76	
1.25	31.75	3E-4181	URE	E	0.34	8.74	1.63	41.28	0.19	4.76	
1.25	31.75	3E-4193	URE	E	0.41	10.49	1.75	44.45	0.25	6.35	
1.25	31.75	5J-8125	URE	A	0.29	7.26	1.63	41.33			
1.25	31.75	4T-0959		E	0.29	7.26	1.63	41.33			
1.26	32.00	167-2364	URE	A	0.29	7.26	1.64	41.58			
1.38	34.93	3E-4182	URE	E	0.34	8.74	1.75	44.45	0.19	4.76	
1.38	34.93	3E-4194	URE	E	0.41	10.49	1.88	47.63	0.25	6.35	
1.38	34.93	3E-4283	URE	D	0.34	8.74	1.75	44.45	0.19	4.76	
1.38	35.00	140-2377	URE	A	0.43	11.00	1.77	45.05			
1.50	38.10	167-2294	URE	A	0.29	7.26	1.88	47.68			
1.50	38.10	9J-4038	NIT	B	0.29	7.26	1.88	47.68			
1.50	38.10	5J-8150	URE	A	0.29	7.26	1.88	47.68			
1.50	38.10	3E-4195	URE	E	0.41	10.49	2.00	50.80	0.25	6.35	
1.50	38.10	3E-4215	URE	E	0.55	13.97	2.13	53.98	0.31	7.94	
1.50	38.10	3E-4183	URE	E	0.41	10.49	1.88	47.63	0.19	4.76	
1.57	40.00	167-2298	URE	A	0.29	7.26	1.95	49.58			
1.63	41.28	3E-4184	URE	E	0.41	10.49	2.00	50.80	0.19	4.76	
1.63	41.28	3E-4201	URE	D	0.41	10.49	2.00	50.80	0.19	4.76	
1.63	41.28	4T-0488	URE	A	0.35	8.85	2.00	50.85			
1.75	44.45	5J-8175	URE	A	0.29	7.26	2.13	54.03			
1.75	44.45	3E-4287	URE	E	0.41	10.49	2.25	57.15	0.25	6.35	
1.75	44.45	3E-4216	URE	E	0.55	13.97	2.38	60.33	0.31	7.94	
1.75	44.45	3E-4185	URE	E	0.41	10.49	2.13	53.98	0.19	4.76	
1.75	44.45	167-2443	URE	E	0.29	7.26	2.13	54.03			
1.75	44.45	167-2300	URE	A	0.29	7.26	2.13	54.03			
1.75	44.45	8J-5816	NIT	B	0.29	7.26	2.13	54.03			
1.77	44.95	143-8914	URE	A	0.43	11.00	2.36	60.00			
1.77	45.00	167-2297	URE	A	0.29	7.26	2.15	54.58			
1.87	47.62	4T-6898	URE	A	0.35	8.85	2.25	57.20			
1.88	47.63	167-2302	URE	A	0.35	8.85	2.25	57.20			
1.97	50.00	167-2303	URE	A	0.35	8.85	2.35	59.58			

# U-Cup Rod Seals



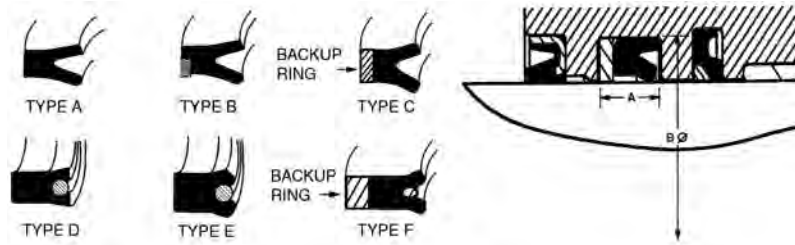
I.D. (in)	I.D. (mm)	PART NUMBER	SEAL TYPE	A WIDTH (+.015, -.000 in)		B O.D. (+.002, -.000 in)		CROSS SECTION		BACK-UP RING
				(in)	(mm)	(in)	(mm)	(in)	(mm)	
2.00	50.80	167-2304	URE	A	0.41	10.49	2.50	63.55		
2.00	50.80	9J-1318	NIT	B	0.41	10.49	2.50	63.55		
2.00	50.80	5J-8200	URE	A	0.41	10.49	2.50	63.55		
2.00	50.80	5U-3644	URE	D	0.38	9.53	2.50	63.50	0.25	6.40
2.00	50.80	3G-3259	URE	A	0.41	10.50	2.50	63.55		
2.00	50.80	3E-4227	URE	E	0.69	17.48	2.75	69.85	0.38	9.53
2.00	50.80	3E-4186	URE	E	0.41	10.49	2.38	60.33	0.19	4.76
2.00	50.80	3E-4217	URE	E	0.55	13.97	2.63	66.68	0.31	7.94
2.00	50.80	3E-4196	URE	E	0.41	10.49	2.50	63.50	0.25	6.35
2.13	53.98	3P-1344	URE	A	0.41	10.49	2.63	66.73		
2.13	53.98	4T-6126	URE	A	0.41	10.49	2.63	66.73		
2.13	53.98	167-2305	URE	A	0.41	10.49	2.63	66.73		
2.17	55.00	167-2306	URE	A	0.56	14.10	2.68	68.03		
2.17	55.00	099-6996	URE	C	0.56	14.10	2.68	68.02		099-6999
2.25	57.15	7J-4820	NIT	B	0.41	10.49	2.75	69.90		
2.25	57.15	167-2307	URE	A	0.41	10.49	2.75	69.90		
2.25	57.15	5J-8225	URE	A	0.41	10.49	2.75	69.90		
2.25	57.15	3E-4228	URE	E	0.69	17.48	3.00	76.20	0.38	9.53
2.25	57.15	3E-4197	URE	E	0.41	10.49	2.75	69.85	0.25	6.35
2.25	57.15	3E-4218	URE	E	0.55	13.97	2.88	73.03	0.31	7.94
2.25	57.15	3E-4187	URE	E	0.41	10.49	2.63	66.68	0.19	4.76
2.25	57.15	167-2423	URE	E	0.41	10.49	2.75	69.90		
2.36	60.00	167-2301	URE	A	0.35	8.85	2.74	69.58		
2.36	60.00	093-1475	URE	C	0.56	14.10	2.87	73.02		093-1518
2.37	60.28	5J-8238	URE	A	0.41	10.49	2.88	73.08		
2.37	60.32	167-2310	URE	A	0.41	10.49	2.88	73.08		
2.38	60.33	3G-2911	URE	A	0.41	10.50	2.88	73.08		
2.38	60.33	3E-4188	URE	E	0.41	10.49	2.75	69.86	0.19	4.76
2.38	60.33	3E-4204	URE	D	0.41	10.49	2.75	69.85	0.19	4.76
2.50	63.50	3E-4198	URE	E	0.41	10.49	3.00	76.20	0.25	6.35
2.50	63.50	3E-4219	URE	E	0.55	13.97	3.13	79.38	0.31	7.94
2.50	63.50	3E-4189	URE	E	0.41	10.49	2.88	73.03	0.19	4.76
2.50	63.50	167-2438	URE	E	0.41	10.49	3.00	76.25		
2.50	63.50	3G-3752	URE	A	0.41	10.49	3.00	76.25		
2.50	63.50	3E-4285	URE	D	0.55	13.97	3.13	79.38	0.31	7.94
2.50	63.50	3E-4229	URE	E	0.69	17.48	3.25	82.55	0.38	9.53
2.50	63.50	5J-0964	URE	A	0.41	10.49	3.00	76.25		
2.50	63.50	167-2312	URE	A	0.41	10.50	3.00	76.25		
2.50	63.50	167-2311	URE	A	0.35	8.92	2.88	73.13		
2.50	63.50	167-2313	URE	A	0.54	13.70	3.13	79.50		
2.50	63.50	7J-4824	NIT	B	0.41	10.49	3.00	76.25		

# U-Cup Rod Seals



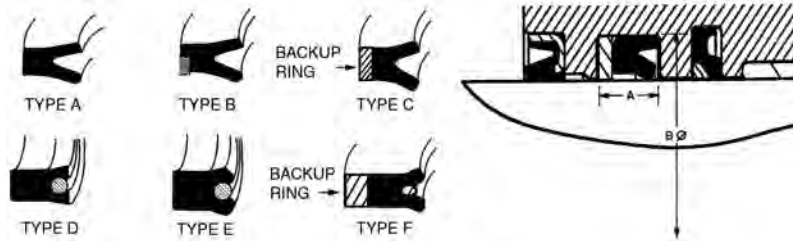
I.D. (in)	I.D. (mm)	PART NUMBER	SEAL TYPE	A WIDTH (+0.015, -0.000 in)		B O.D. (+0.002, -0.000 in)		CROSS SECTION		BACK-UP RING
				(in)	(mm)	(in)	(mm)	(in)	(mm)	
2.56	65.00	093-1476	URE	C	0.56	14.10	3.07	78.02		096-1055
2.56	65.00	167-2314	URE	A	0.41	10.49	3.06	77.75		
2.63	66.68	167-2315	URE	A	0.41	10.49	3.13	79.43		
2.63	66.68	3G-4718	URE	A	0.41	10.49	3.13	79.43		
2.75	69.85	3E-4230	URE	E	0.69	17.48	3.50	88.90	0.38	9.53
2.75	69.85	5J-8275	URE	A	0.41	10.49	3.25	82.60		
2.75	69.85	6E-1459	URE	E	0.41	10.49	3.25	82.60	0.38	9.65
2.75	69.85	167-2439	URE	E	0.41	10.49	3.25	82.60		
2.75	69.85	3E-4220	URE	E	0.55	13.97	3.38	85.73	0.31	7.94
2.75	69.85	3E-4199	URE	E	0.41	10.49	3.25	82.55	0.25	6.35
2.75	69.85	167-2317	URE	A	0.41	10.49	3.25	82.60		
2.75	69.85	9J-2944	NIT	B	0.41	10.49	3.25	82.60		
2.76	70.00	093-1477	URE	C	0.56	14.10	3.27	83.03		093-1519
2.76	70.00	167-2299	URE	A	0.56	14.10	3.27	83.03		
2.95	75.00	167-2318	URE	A	0.52	13.15	3.55	90.05		
2.95	75.00	096-3468	URE	C	0.56	14.10	3.47	88.03		096-3467
3.00	76.20	8J-0248	NIT	B	0.41	10.49	3.50	88.95		
3.00	76.20	167-2319	URE	A	0.41	10.49	3.50	88.95		
3.00	76.20	3E-4200	URE	E	0.41	10.49	3.50	88.90	0.25	6.35
3.00	76.20	3E-4221	URE	E	0.55	13.97	3.63	92.08	0.31	7.94
3.00	76.20	3E-4190	URE	E	0.41	10.49	3.38	85.73	0.19	4.76
3.00	76.20	5J-8300	URE	A	0.41	10.49	3.50	88.95		
3.00	76.20	3E-4231	URE	E	0.69	17.48	3.75	95.25	0.38	9.53
3.15	80.00	167-2343	URE	A	0.35	8.85	3.53	89.58		
3.15	80.00	167-2309	URE	A	0.41	10.49	3.74	95.05		
3.15	80.00	093-1479	URE	C	0.56	14.10	3.66	93.03		096-1054
3.25	82.55	7J-2145	NIT	B	0.41	10.49	3.75	95.30		
3.25	82.55	167-2320	URE	A	0.41	10.49	3.75	95.30		
3.25	82.55	5J-8325	URE	A	0.41	10.49	3.75	95.30		
3.35	85.00	167-2322	URE	A	0.56	14.10	3.94	100.03		
3.35	85.00	137-3656	URE	A	0.35	9.00	3.94	100.00		
3.35	85.00	7Y-5117	URE	C	0.56	14.10	3.94	100.03		7Y-5116
3.35	85.00	096-1567	URE	A						
3.38	85.73	3E-4286	URE	D	0.55	13.97	4.00	101.60	0.31	7.94
3.38	85.73	3E-4222	URE	E	0.55	13.97	4.00	101.60	0.31	7.94
3.38	85.75	3G-5051	URE	A	0.41	10.49	3.88	98.48		
3.50	88.90	3E-4232	URE	E	0.69	17.48	4.25	107.95	0.38	9.53
3.50	88.90	5J-8350	URE	A	0.41	10.49	4.00	101.65		
3.50	88.90	3E-4223	URE	E	0.55	13.97	4.13	104.78	0.31	7.94
3.50	88.90	3E-4202	URE	E	0.41	10.49	4.00	101.60	0.25	6.35
3.50	88.90	3E-4191	URE	E	0.41	10.49	3.88	98.43	0.19	4.76

# U-Cup Rod Seals



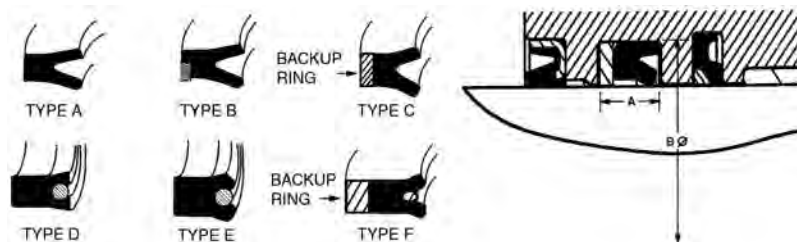
I.D. (in)	I.D. (mm)	PART NUMBER	SEAL TYPE	A WIDTH (+0.015, -0.000 in)		B O.D. (+0.002, -0.000 in)		CROSS SECTION		BACK-UP RING	
				(in)	(mm)	(in)	(mm)	(in)	(mm)		
3.50	88.90	104-9658	URE	A	0.39	10.00	4.29	108.90	0.39	10.00	
3.50	88.90	7J-2150		B	0.41	10.49	4.00	101.65			
3.50	88.90	167-2324	URE	A	0.41	10.49	4.00	101.65			
3.50	88.90	167-2323	URE	A	0.82	20.77	4.13	104.78			
3.54	90.00	167-2325	URE	A	0.44	11.10	4.14	105.03			
3.54	90.00	105-2577	URE	A							
3.54	90.00	133-6913	URE	A	0.35	9.00	4.13	105.00			
3.54	90.00	096-1587	URE	C	0.56	14.10	4.14	105.03			096-1588
3.74	95.00	7Y-4629	URE	A	0.56	14.10	4.33	110.03			
3.74	95.00	167-2326	URE	A	0.64	16.15	4.53	115.03			
3.74	95.00	167-2327	URE	A	0.56	14.10	4.33	110.03			
3.74	95.00	150-5826	URE	C	0.35	9.00	4.33	110.00			150-5827
3.75	95.25	167-2328	URE	A	0.41	10.49	4.25	108.00			
3.75	95.25	9J-1328		B	0.41	10.49	4.25	108.00			
3.75	95.25	3E-4192	URE	E	0.41	10.49	4.13	104.78	0.19	4.76	
3.75	95.25	3E-4203	URE	E	0.41	10.49	4.25	107.95	0.25	6.35	
3.75	95.25	3E-4224	URE	E	0.55	13.97	4.38	111.13	0.31	7.94	
3.75	95.25	5J-8375	URE	A	0.41	10.49	4.25	108.00			
3.94	100.00	8U-6849	URE	A	0.51	13.00	4.53	115.00	0.30	7.50	
3.94	100.00	096-2664	URE	C	0.56	14.10	4.53	115.03			096-2655
3.94	100.00	096-1572	URE	A							
3.94	100.00	133-6902	URE	A	0.47	12.00	4.72	120.00			
3.94	100.00	107-6256	URE	C	0.63	16.00	4.72	120.00	0.38	9.75	107-6255
3.94	100.00	121-1371	URE	A	0.35	9.00	4.53	115.00			
3.94	100.00	167-2330	URE	A	0.56	14.10	4.53	115.03			
3.94	100.00	167-2329	URE	A	0.51	13.00	4.72	120.00			
3.94	100.00	137-3659	URE	C	0.35	9.00	4.53	115.00			137-3660
4.00	101.60	167-2331	URE	A	0.41	10.49	4.63	117.53			
4.00	101.60	5J-8400	URE	A	0.41	10.49	4.63	117.53			
4.00	101.60	3E-4225	URE	E	0.62	15.72	4.63	117.48	0.31	7.94	
4.00	101.60	3E-4233	URE	E	0.69	17.48	4.75	120.65	0.38	9.53	
4.00	101.60	3G-2655		B	0.41	10.50	4.63	117.52			
4.00	101.60	2U-9113	URE	A	0.39	10.00	4.72	120.00	0.36	9.20	
4.13	105.00	167-2332	URE	A	0.56	14.10	4.73	120.03			
4.13	105.00	128-9269	URE	A	0.56	14.10	4.73	120.03			
4.13	105.00	7Y-4670	URE	C	0.56	14.10	4.73	120.03			7Y-4669
4.25	107.95	9J-1336		B	0.66	16.84	5.00	127.05			
4.25	107.95	167-2333	URE	A	0.66	16.84	5.00	127.05			
4.25	107.95	3E-4205	URE	E	0.62	15.72	4.75	120.65	0.25	6.35	
4.25	107.95	6J-1425	URE	A	0.66	16.84	5.00	127.05			
4.33	110.00	167-2334	URE	A	0.56	14.10	4.92	125.03			

# U-Cup Rod Seals



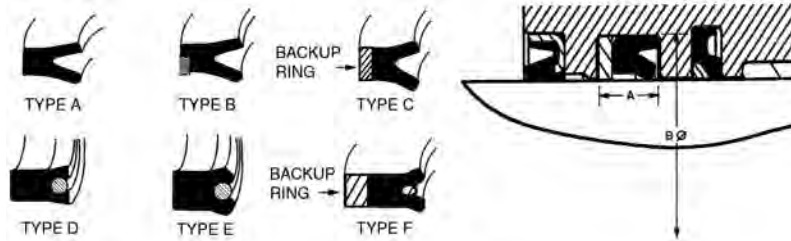
I.D. (in)	I.D. (mm)	PART NUMBER	SEAL TYPE	A WIDTH (+.015, -.000 in)		B O.D. (+.002, -.000 in)		CROSS SECTION		BACK-UP RING
				(in)	(mm)	(in)	(mm)	(in)	(mm)	
4.33	110.00	167-2338	URE	A	0.61	15.50	5.12	130.05		
4.33	110.00	7Y-4942	URE	C	0.56	14.10	4.92	125.03		7Y-4941
4.33	110.00	128-9270	URE	C	0.56	14.10	4.92	125.03		7Y-4941
4.37	111.12	3G-5054	URE	A	0.54	13.61	5.13	130.23		
4.37	111.12	1U-3363	URE	B	0.54	13.61	5.13	130.23		
4.50	114.25	6J-1450	URE	A	0.41	10.49	5.13	130.23		
4.50	114.30	3E-4234	URE	E	0.69	17.48	5.25	133.35	0.38	9.53
4.50	114.30	167-2440	URE	E	0.41	10.49	5.13	130.23		
4.50	114.30	3E-4206	URE	D	0.62	15.72	5.00	127.00	0.25	6.35
4.50	114.30	6U-9505		B	0.42	10.62	4.00	101.57	0.50	12.76
4.50	114.30	9J-1340		B	0.41	10.50	5.13	130.22		
4.50	114.30	167-2336	URE	A	0.41	10.49	5.13	130.23		
4.53	115.00	167-2360	URE	A	0.56	14.10	5.12	130.03		
4.75	120.65	3E-4207	URE	D	0.62	15.72	5.25	133.35	0.25	6.35
4.75	120.65	6J-1475	URE	A	0.66	16.84	5.50	139.75		
4.75	120.65	167-2337	URE	A	0.66	16.84	5.50	139.75		
4.75	120.65	9J-1344		B	0.66	16.84	5.50	139.75		
4.76	121.00	155-9192	URE	C	0.56	14.10	5.51	140.03		155-9193
4.87	123.82	4T-5664	URE	A	0.54	13.61	5.62	142.87		
5.00	126.95	121-1594	URE	C	0.38	9.53	5.60	142.13		121-1595
5.00	127.00	9J-1684	URE	B	0.66	16.84	5.75	146.10		
5.00	127.00	8J-4524	URE	A	0.66	16.84	5.75	146.10		
5.00	127.00	167-2339	URE	A	0.66	16.84	5.75	146.10		
5.00	127.00	3E-4235	URE	E	0.69	17.48	5.75	146.05	0.38	9.53
5.00	127.00	3E-4226	URE	E	0.69	17.48	5.63	142.88	0.31	7.94
5.00	127.00	3E-4208	URE	D	0.62	15.72	5.50	139.70	0.25	6.35
5.00	127.00	167-2441	URE	E	0.66	16.84	5.75	146.10		
5.12	130.00	167-2341	URE	A	0.56	14.10	5.71	145.03		
5.12	130.00	167-2340	URE	A	0.64	16.15	5.91	150.05		
5.12	130.00	087-5396	URE	C	0.56	14.10	5.71	145.03		087-5397
5.25	133.30	167-2342	URE	A	0.66	16.84	6.00	152.45		
5.25	133.35	3E-4209	URE	D	0.62	15.72	5.75	146.05	0.25	6.35
5.25	133.35	4T-5699	URE	A	0.66	16.84	6.00	152.45		
5.35	136.00	147-5770	URE	C	0.56	14.10	6.10	155.03		147-5771
5.50	139.70	139-9325	URE	C	0.41	10.49	6.13	155.63		
5.50	139.70	167-2344	URE	A	0.41	10.49	6.13	155.63		
5.50	139.70	9J-1692	URE	B	0.41	10.49	6.13	155.63		
5.50	139.70	6J-1550	URE	A	0.41	10.49	6.13	155.63		
5.50	139.70	3E-4236	URE	E	0.69	17.48	6.25	158.75	0.38	9.53
5.50	139.70	3E-4210	URE	D	0.62	15.72	6.00	152.40	0.25	6.35
5.50	139.70	167-2442	URE	E	0.41	10.49	6.13	155.63		

# U-Cup Rod Seals



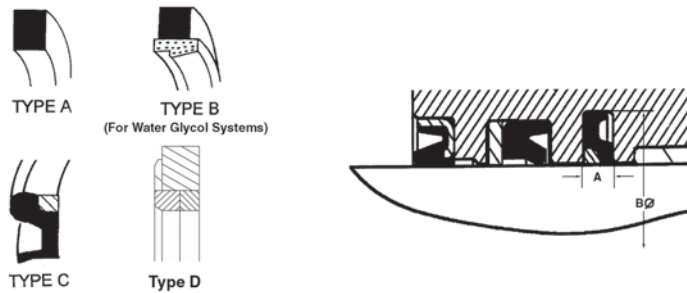
I.D. (in)	I.D. (mm)	PART NUMBER	SEAL TYPE	A WIDTH (+.015, -.000 in)		B O.D. (+.002, -.000 in)		CROSS SECTION		BACK-UP RING	
				(in)	(mm)	(in)	(mm)	(in)	(mm)		
5.50	139.70	167-2938	URE	E	0.41	10.49	6.13	155.63			
5.50	139.70	167-2414	URE	B	0.41	10.49	6.13	155.63			
5.51	140.00	167-2428	URE	E	0.55	14.00	6.10	155.00			
5.51	140.00	8C-9187	URE	F	0.06	1.42	6.10	155.05	0.03	0.73	8C-9188
5.71	145.00	167-2347	URE	A	0.55	14.00	6.30	160.03			
5.75	146.00	167-2345	URE	A	0.66	16.84	6.50	165.15			
5.75	146.00	9J-5470		B	0.66	16.84	6.50	165.15			
5.75	146.00	9J-5467	URE	A	0.66	16.84	6.50	165.15			
5.75	146.00	121-1602	URE	D	0.56	14.10	6.34	161.16			
5.75	146.00	3G-2286	URE	A	0.66	16.84	6.50	165.15			
5.91	150.00	167-2429	URE	E	0.55	14.00	6.50	165.00			
5.91	150.00	8C-9191	URE	F	0.06	1.42	6.50	165.05	0.03	0.73	8C-9192
6.00	152.40	136-7394	URE	C	0.54	13.65	6.75	171.50			
6.00	152.40	167-2346	URE	A	0.54	13.65	6.75	171.50			
6.00	152.40	167-2421	URE	B	0.54	13.65	6.75	171.50			
6.00	152.40	3E-4211	URE	D	0.62	15.72	6.50	165.10	0.25	6.35	
6.00	152.40	3E-4237	URE	E	0.69	17.48	6.75	171.45	0.38	9.53	
6.00	152.40	4T-9901	URE	A	0.54	13.65	6.75	171.50			
6.25	158.70	8J-4394	URE	A	0.54	13.61	6.75	171.50			
6.25	158.75	167-2348	URE	A	0.54	13.61	6.75	171.50			
6.50	165.10	167-2349	URE	A	0.66	16.80	7.25	184.20			
6.50	165.10	8J-4387	URE	A	0.66	16.84	7.25	184.20			
6.50	165.10	8J-1880	NIT	B	0.54	13.61	7.25	184.20			
6.50	165.10	6J-1650	URE	A	0.54	13.61	7.25	184.20			
6.50	165.10	3E-4238	URE	E	0.69	17.48	7.25	184.15	0.38	9.53	
6.50	165.10	3E-4212	URE	D	0.62	15.72	7.00	177.80	0.25	6.35	
6.50	165.10	167-2415	URE	B	0.54	13.61	7.25	184.20			
6.75	171.45	3G-4627	URE	A	0.41	10.49	7.25	184.20			
6.75	171.45	167-2351	URE	A	0.41	10.49	7.25	184.20			
7.00	177.80	167-2352	URE	A	0.54	13.61	7.75	196.90			
7.00	177.80	136-7397	URE	C	0.54	13.61	7.75	196.90			
7.00	177.80	9X-7450	URE	D	0.41	10.50	7.68	195.02			
7.00	177.80	3G-2649	URE	B	0.54	13.61	7.75	196.90			
7.00	177.80	3E-4239	URE	D	0.69	17.48	7.75	196.85	0.38	9.53	
7.00	177.80	6J-1700	URE	A	0.54	13.61	7.75	196.90			
7.00	177.80	167-2416	URE	B	0.54	13.61	7.75	196.90			
7.00	177.80	3E-4213	URE	D	0.62	15.72	7.50	190.50	0.25	6.35	
7.25	184.15	167-2417	URE	B	0.54	13.65	8.00	203.25			
7.25	184.15	167-2353	URE	A	0.54	13.65	8.00	203.25			
7.25	184.15	6E-0172	URE	A	0.54	13.65	8.00	203.25			
7.25	184.15	136-7398	URE	C	0.54	13.65	8.00	203.25			

# U-Cup Rod Seals



I.D. (in)	I.D. (mm)	PART NUMBER	SEAL TYPE	A WIDTH (+.015, -.000 in)		B O.D. (+.002, -.000 in)		CROSS SECTION		BACK-UP RING
				(in)	(mm)	(in)	(mm)	(in)	(mm)	
7.50	190.50	136-7399	URE	C	0.54	13.61	8.25	209.60		
7.50	190.50	7J-3322	URE	A	0.54	13.61	8.25	209.60		
7.50	190.50	3E-4240	URE	E	0.69	17.48	8.25	209.55	0.38	9.53
7.50	190.50	167-2355	URE	A	0.54	13.61	8.25	209.60		
7.50	190.50	167-2418	URE	B	0.54	13.61	8.25	209.60		
8.00	203.20	167-2354	URE	E	0.54	13.65	8.75	222.30		
8.00	203.20	3E-4214	URE	E	0.62	15.72	8.50	215.90	0.25	6.35
8.00	203.20	6E-0039	URE	A	0.54	13.65	8.75	222.30		
8.25	209.55	9X-7328	URE	A	0.54	13.65	9.00	228.65		
8.75	222.20	162-3943	URE		0.55	14.00	9.76	247.96		
8.75	222.25	136-7400	URE	C	0.54	13.65	9.50	241.35		
8.75	222.25	108-6219	URE	A	0.54	13.65	9.50	241.35		
8.75	222.25	167-2356	URE	A	0.54	13.65	9.50	241.35		
8.75	222.25	167-2419	URE	B	0.54	13.65	9.50	241.35		
9.00	228.50	9X-7334	URE	D	0.41	10.50	9.68	245.82		
9.50	241.30	167-2361	URE	A	0.41	10.50	10.18	258.52		
11.00	279.30	167-2432	URE	E	0.41	10.50	11.68	296.62		
11.00	279.30	9X-7389	URE	D	0.41	10.50	0.41	10.50		
11.04	280.31	8C-9157	NIT	B	0.64	16.13	11.81	300.10		
12.50	317.40	9X-7388	URE	D	0.41	10.50	13.18	334.72		
12.50	317.50	167-2433	URE	E	0.41	10.50	13.18	334.72		
13.50	342.90	167-2435	URE	E	0.41	10.50	14.18	360.12		
15.00	381.00	167-2434	URE	E	0.41	10.50	15.68	398.22		
15.75	399.98	149-0814	URE	A	0.41	10.50	16.43	417.27	0.34	8.65
15.75	400.05	167-2436	URE	E	0.41	10.50	16.43	417.27		

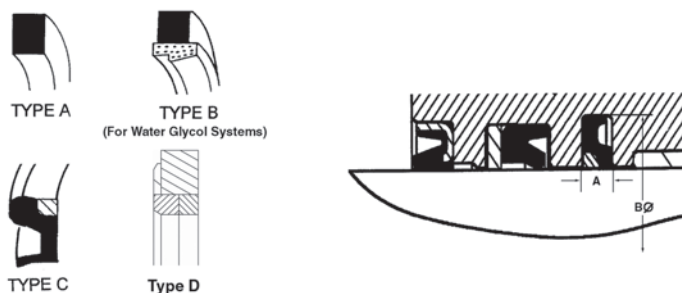
# Buffer Seals



ROD DIAMETER		PART NUMBER	SEAL TYPE	A GROOVE WIDTH (± .005 in)		B GROOVE DIA. (± .005 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)
1.25	31.75	135-3251	B	0.14	3.56	1.78	45.29
1.25	31.75	9J-3497	A	0.14	3.56	1.78	45.29
1.38	34.95	141-0706	C	0.25	6.40	1.99	50.50
1.38	34.95	140-2310	C	0.25	6.40	1.99	50.50
1.50	38.10	167-2186	D	0.14	3.56	2.03	51.64
1.50	38.10	6J-9733	A	0.14	3.56	2.03	51.64
1.50	38.10	8C-9122	B	0.14	3.56	2.03	51.64
1.63	41.28	8C-9117	B	0.14	3.56	2.16	54.81
1.63	41.28	4T-0487	A	0.14	3.56	2.16	54.81
1.63	41.28	167-2188	D	0.14	3.56	2.16	54.81
1.75	44.40	150-6738	C	0.22	5.60	2.39	60.73
1.75	44.40	6J-9178	A	0.14	3.56	2.28	57.99
1.75	44.40	8C-9123	B	0.14	3.56	2.28	57.99
1.75	44.45	167-2191	D	0.22	5.60	2.39	60.73
1.75	44.45	167-2190	D	0.14	3.56	2.28	57.99
1.77	44.95	143-8915	C	0.27	6.75	2.38	60.50
1.87	47.62	4T-6778	A	0.14	3.56	2.25	57.20
1.87	47.62	9X-3566	B	0.14	3.56	2.25	57.20
1.88	47.63	167-2192	D	0.14	3.56	2.25	57.20
1.97	50.00	167-2183	D	0.14	3.56	2.47	62.75
2.00	50.80	167-2195	D	0.14	3.56	2.53	64.34
2.00	50.80	144-4055	C	0.14	3.56	2.53	64.34
2.00	50.80	6J-6917	A	0.14	3.56	2.53	64.34
2.00	50.80	8C-9124	B	0.14	3.56	2.53	64.34
2.12	53.93	150-6744	C	0.22	5.60	2.77	70.26
2.13	53.98	167-2197	D	0.22	5.60	2.77	70.26
2.13	53.98	167-2198	D	0.14	3.56	2.63	66.73
2.13	53.98	4T-6127	A	0.14	3.56	2.63	66.73
2.13	53.98	9X-3568	B	0.14	3.56	2.63	66.73
2.17	55.00	099-6997	C	0.25	6.40	2.78	70.52
2.17	55.00	167-2199	D	0.25	6.40	2.78	70.52
2.17	55.00	133-6785	C	0.25	6.40	2.78	70.52
2.25	57.15	167-2200	D	0.22	5.59	2.89	73.43
2.25	57.15	5J-3616	A	0.22	5.59	2.89	73.43
2.25	57.15	8C-9125	B	0.22	5.59	2.89	73.43
2.36	60.00	093-1481	C	0.25	6.40	2.97	75.52
2.36	60.00	167-2185	D	0.14	3.56	2.86	72.75
2.36	60.00	133-6784	C	0.25	6.40	2.97	75.52
2.37	60.32	167-2202	D	0.22	5.59	3.02	76.61

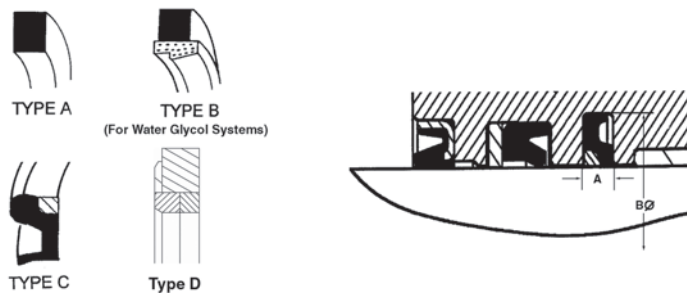


# Buffer Seals



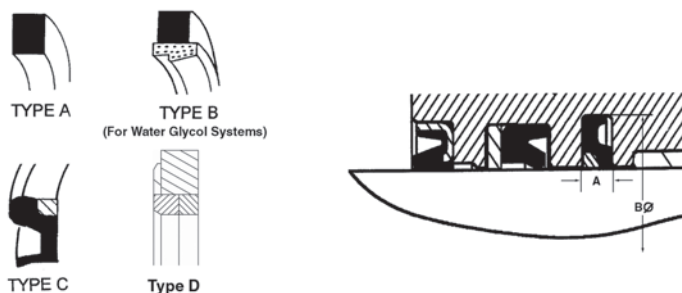
ROD DIAMETER		PART NUMBER	SEAL TYPE	A GROOVE WIDTH (± .005 in)		B GROOVE DIA. (± .005 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)
2.37	60.32	6J-6916	A	0.22	5.59	3.02	76.61
2.37	60.32	8C-9138	B	0.22	5.59	3.02	76.61
2.50	63.50	8C-3839	B	0.22	5.59	3.14	79.78
2.50	63.50	5J-3620	A	0.22	5.59	3.14	79.78
2.50	63.50	167-2203	D	0.23	5.94	3.18	80.70
2.50	63.50	167-2201	D	0.22	5.59	3.14	79.78
2.50	63.50	150-6750	C	0.22	5.60	3.14	79.78
2.56	65.00	167-2204	D	0.22	5.59	3.20	81.28
2.56	65.00	126-2149	C	0.25	6.40	3.17	80.53
2.63	66.68	9T-9363	B	0.22	5.59	3.27	82.96
2.63	66.68	1U-4020	A	0.22	5.59	3.27	82.96
2.72	69.00	126-2150	C	0.25	6.40	3.37	85.53
2.75	69.85	8C-3841	B	0.22	5.59	3.39	86.13
2.75	69.85	6J-6553	A	0.22	5.59	3.39	86.13
2.75	69.85	167-2207	D	0.22	5.59	3.39	86.13
2.75	69.85	148-5674	C	0.22	5.59	3.39	86.13
2.76	70.00	093-1483	C	0.25	6.40	3.37	85.53
2.91	74.00	126-2151	C	0.25	6.40	3.56	90.53
2.95	75.00	096-3469	C	0.25	6.40	3.56	90.53
3.00	76.20	8C-9126	B	0.22	5.59	3.64	92.48
3.00	76.20	152-9022	C	0.22	5.58	3.64	92.48
3.00	76.20	167-2208	D	0.22	5.59	3.64	92.48
3.00	76.20	6J-6915	A	0.22	5.59	3.64	92.48
3.11	79.00	126-2152	C	0.25	6.40	3.76	95.53
3.15	80.00	093-1484	C	0.25	6.40	3.76	95.53
3.25	82.55	8C-9121	B	0.22	5.59	3.89	98.83
3.25	82.55	6J-7167	A	0.22	5.59	3.89	98.83
3.25	82.55	167-2209	D	0.22	5.59	3.89	98.83
3.25	82.55	140-0234	C	0.22	5.59	3.89	98.83
3.31	84.00	123-1943	C	0.25	6.40	3.96	100.53
3.35	85.00	7Y-5118	C	0.25	6.40	3.96	100.54
3.35	85.00	167-2210	D	0.25	6.40	3.96	100.53
3.50	88.90	167-2211	D	0.22	5.59	4.14	105.18
3.50	88.90	142-2633	C	0.22	5.59	4.14	105.18
3.50	88.90	6J-6736	A	0.22	5.59	4.14	105.18
3.50	88.90	8C-9127	B	0.22	5.59	4.14	105.18
3.54	90.00	123-2048	C	0.25	6.40	4.16	105.54
3.54	90.00	096-1585	C	0.25	6.40	4.16	105.54
3.54	90.00	167-2212	D	0.25	6.40	4.16	105.54

# Buffer Seals



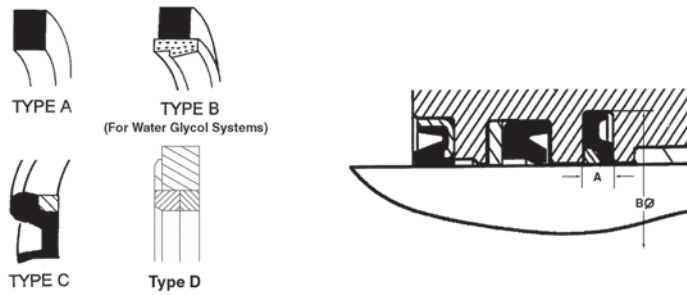
ROD DIAMETER		PART NUMBER	SEAL TYPE	A GROOVE WIDTH (± .005 in)		B GROOVE DIA. (± .005 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)
3.63	92.08	3G-1259	A	0.22	5.59	4.27	108.36
3.70	94.00	7Y-4630	C	0.25	6.40	4.35	110.54
3.74	95.00	093-1482	C	0.25	6.40	3.17	80.52
3.74	95.00	167-2213	D	0.25	6.40	4.35	110.54
3.74	95.00	150-5885	C	0.25	6.40	4.35	110.54
3.75	95.25	167-2214	D	0.22	5.59	4.39	111.53
3.75	95.25	8C-9128	B	0.22	5.59	4.39	111.53
3.75	95.25	8J-6070	A	0.22	5.59	4.39	111.53
3.94	100.00	096-2663	C	0.25	6.40	4.55	115.53
3.94	100.00	123-1983	C	0.25	6.40	4.55	115.53
3.94	100.00	107-6257	D	0.25	6.40	4.55	115.53
3.94	100.00	167-2215	D	0.25	6.40	4.55	115.53
4.00	101.60	167-2216	D	0.22	5.59	4.64	117.88
4.00	101.60	130-6056	C	0.22	5.59	4.64	117.88
4.00	101.60	8J-4627	A	0.22	5.59	4.64	117.88
4.00	101.60	8C-9129	B	0.22	5.59	4.64	117.88
4.13	105.00	7Y-4671	C	0.25	6.40	4.75	120.54
4.13	105.00	123-1942	C	0.25	6.40	4.75	120.53
4.13	105.00	128-9265	C	0.25	6.40	4.75	120.53
4.13	105.00	167-2217	D	0.25	6.40	4.75	120.53
4.25	107.95	167-2218	D	0.25	6.35	5.23	132.72
4.25	107.95	6E-0425	B	0.25	6.35	5.23	132.72
4.25	107.95	7J-8943	A	0.25	6.35	5.23	132.72
4.29	109.00	123-2031	C	0.25	6.40	4.94	125.53
4.33	110.00	7Y-4943	C	0.25	6.40	4.94	125.54
4.33	110.00	167-2219	D	0.25	6.40	4.94	125.54
4.33	110.00	128-9266	C	0.25	6.40	4.94	125.53
4.37	111.12	3G-5055	A	0.25	6.35	5.23	132.72
4.50	114.30	3G-8507	A	0.25	6.35	5.48	139.07
4.50	114.30	142-2634	C	0.25	6.35	5.48	139.07
4.50	114.30	167-2220	D	0.25	6.35	5.48	139.07
4.50	114.30	8C-9144	B	0.25	6.35	5.48	139.07
4.53	115.00	167-2189	D	0.25	6.40	5.14	130.53
4.75	120.65	167-2221	D	0.25	6.35	5.73	145.42
4.75	120.65	7J-9257	A	0.25	6.35	5.73	145.42
4.75	120.65	9X-7261	B	0.25	6.35	5.73	145.42
4.88	124.00	155-9191	C	0.25	6.40	5.53	140.53
5.00	127.00	150-6262	C	0.25	6.35	5.96	151.38
5.00	127.00	167-2222	D	0.25	6.35	5.96	151.38

# Buffer Seals



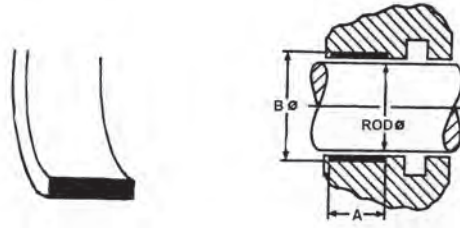
ROD DIAMETER		PART NUMBER	SEAL TYPE	A GROOVE WIDTH (± .005 in)		B GROOVE DIA. (± .005 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)
5.00	127.00	9X-3581	B	0.25	6.35	5.96	151.38
5.00	127.00	121-1593	C	0.25	6.40	5.63	142.88
5.00	127.00	8J-4509	A	0.25	6.35	5.96	151.38
5.12	130.00	126-2108	C	0.25	6.40	5.73	145.53
5.12	130.00	096-5169	C	0.25	6.40	5.73	145.53
5.12	130.00	167-2223	D	0.25	6.40	5.73	145.53
5.25	133.35	167-2224	D	0.25	6.35	6.21	157.73
5.25	133.35	4T-5717	A	0.25	6.35	6.21	157.73
5.25	133.35	9X-7267	B	0.25	6.35	6.21	157.73
5.47	139.00	147-5769	C	0.25	6.40	6.12	155.53
5.50	139.70	133-9572	C	0.25	6.35	6.12	155.35
5.50	139.70	167-2725	D	0.25	6.35	6.12	155.35
5.50	139.70	167-2225	D	0.25	6.35	6.12	155.35
5.50	139.70	9X-3572	B	0.25	6.35	6.12	155.35
5.51	140.00	8C-9189	C	0.25	6.40	6.12	155.53
5.51	140.00	167-2226	D	0.25	6.30	6.12	155.50
5.71	145.00	167-2231	D	0.25	6.40	6.32	160.53
5.75	146.05	167-2227	D	0.25	6.35	6.73	170.82
5.75	146.05	9J-5468	A	0.25	6.35	6.73	170.82
5.75	146.05	9X-3575	B	0.25	6.35	6.73	170.82
5.91	150.00	8C-9193	C	0.25	6.40	6.52	165.53
5.91	150.00	167-2229	D	0.25	6.30	6.52	165.50
6.00	152.40	167-2228	D	0.25	6.35	6.62	168.10
6.00	152.40	161-5788	C	0.54	13.65	6.75	171.50
6.00	152.40	161-5787	C	0.25	6.35	6.62	168.10
6.00	152.40	9X-3614	B	0.25	6.35	6.62	168.11
6.50	165.10	9X-7322	B	0.25	6.35	7.50	190.55
6.50	165.10	136-7396	C	0.54	13.61	7.25	184.20
6.50	165.10	136-7358	C	0.25	6.35	7.50	190.55
6.50	165.10	167-2230	D	0.25	6.35	7.50	190.55
6.50	165.10	6J-8631	A	0.25	6.35	7.50	190.55
6.75	171.45	167-2232	D	0.25	6.35	7.69	195.45
6.75	171.45	3G-8506	A	0.25	6.35	7.69	195.45
6.75	171.45	8C-9145	B	0.25	6.35	7.69	195.45
7.00	177.80	8C-9130	B	0.25	6.35	7.94	201.80
7.00	177.80	9J-2495	A	0.25	6.35	7.94	201.80
7.00	177.80	167-2233	D	0.25	6.35	7.94	201.80
7.00	177.80	135-1995	C	0.25	6.35	7.94	201.80
7.25	184.10	136-7359	C	0.25	6.35	8.08	205.30

# Buffer Seals



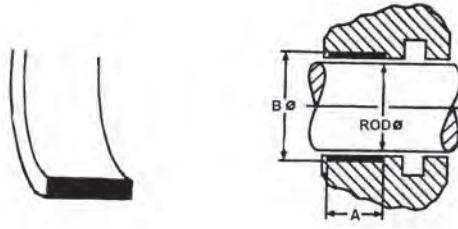
ROD DIAMETER		PART NUMBER	SEAL TYPE	A GROOVE WIDTH (± .005 in)		B GROOVE DIA. (± .005 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)
7.25	184.10	108-0133	B	0.25	6.35	8.08	205.30
7.25	184.15	167-2234	D	0.32	8.25	8.08	205.30
7.50	190.50	167-2236	D	0.32	8.25	8.33	211.65
7.50	190.50	135-1997	C	0.32	8.25	8.33	211.65
7.50	190.50	108-0131	B	0.32	8.25	8.33	211.65
8.00	203.20	149-3256	C	0.32	8.25	8.83	224.28
8.00	203.20	167-2239	D	0.32	8.25	8.83	224.35
8.00	203.20	6E-0246	B	0.32	8.25	8.83	224.35
8.25	209.55	9X-7327	B	0.32	8.25	9.08	230.70
8.75	222.25	108-6212	B	0.32	8.25	9.58	243.40
8.75	222.25	167-2240	D	0.32	8.25	9.58	243.40
8.75	222.25	135-1999	C	0.32	8.25	9.58	243.40
9.50	241.30	167-2241	D	0.32	8.25	10.33	262.45

# Head Wear Rings



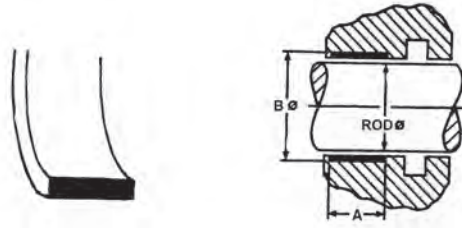
ROD DIAMETER		PART NUMBER	A GROOVE WIDTH (± .003 in)		B GROOVE DIA. (± .001 in)	
(in)	(mm)		(in)	(mm)	(in)	(mm)
1.50	38.10	8T-5443	1.25	31.75	1.62	41.18
1.50	38.10	8C-9120	0.83	21.00	1.62	41.18
1.50	38.10	8C-3853	1.62	41.18	2.09	53.00
1.50	38.10	4T-6780	0.98	25.00	1.62	41.18
1.75	44.45	4T-6907	0.98	25.00	1.87	47.53
1.87	47.62	4T-6779	0.98	25.00	2.00	50.70
1.87	47.62	8T-6441	0.26	6.50	2.00	50.70
1.87	47.62	8T-6442	0.73	18.50	2.00	50.70
2.00	50.80	8T-7030	1.25	31.75	2.12	53.88
2.00	50.80	8T-8205	0.79	20.00	2.12	53.88
2.00	50.80	4T-5613	0.98	25.00	2.12	53.88
2.00	50.80	8C-3836	1.57	40.00	2.12	53.88
2.00	50.80	7J-2171	1.06	27.00	2.51	63.63
2.13	53.98	4T-6128	0.98	25.00	2.25	57.06
2.13	53.98	8T-6681	0.73	18.50	2.25	57.06
2.13	53.98	8T-6682	0.37	9.50	2.25	57.06
2.25	57.15	8T-4958	0.98	25.00	2.37	60.23
2.25	57.15	8J-1585	1.43	36.31	3.35	85.09
2.25	57.15	8T-8204	1.18	30.00	2.37	60.23
2.37	60.32	9X-7260	1.26	32.00	2.50	63.45
2.50	63.50	8T-8394	1.69	43.00	2.62	66.58
2.50	63.50	8T-8365	2.28	58.00	2.62	66.58
2.50	63.50	8T-0785	0.98	25.00	2.62	66.58
2.50	63.50	8T-5668	1.25	31.75	2.62	66.58
2.63	66.68	8T-7372	0.98	25.00	2.75	69.76
2.75	69.85	8T-7849	1.57	40.00	2.87	72.93
2.75	69.85	8T-6743	1.97	50.00	2.95	74.93
2.75	69.85	8T-7020	1.81	46.00	2.87	72.93
2.75	69.85	8C-9200	1.00	25.50	2.87	72.93
2.75	69.85	4T-7283	1.25	31.75	3.01	76.33
2.75	69.85	6C-2385	1.26	32.00	2.87	72.93
2.75	69.85	8C-9114	1.00	25.50	2.87	72.93
3.00	76.20	8C-9161	0.98	25.00	3.12	79.28
3.00	76.20	8C-9153	1.18	30.00	3.20	81.28
3.00	76.20	8T-1714	1.57	40.00	3.12	79.28
3.00	76.20	8T-7584	1.65	42.00	3.12	79.28
3.00	76.20	9T-0094	1.26	32.00	3.12	79.28
3.25	82.55	8T-4813	1.61	41.00	3.45	87.63
3.25	82.55	8T-0777	1.73	44.00	3.37	85.63
3.25	82.55	8T-6745	1.97	50.00	3.45	87.63
3.25	82.55	8T-6744	2.76	70.00	3.45	87.63
3.25	82.55	8C-9101	1.12	28.50	3.37	85.63

# Head Wear Rings



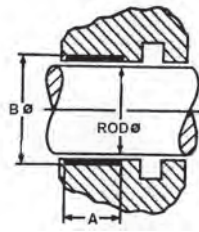
ROD DIAMETER		PART NUMBER	A GROOVE WIDTH (± .003 in)		B GROOVE DIA. (± .001 in)	
(in)	(mm)		(in)	(mm)	(in)	(mm)
3.50	88.90	8C-5245	1.06	27.00	3.62	91.98
3.50	88.90	6J-3075	2.00	50.70	3.76	95.40
3.50	88.90	8C-3829	1.77	45.00	3.70	93.98
3.50	88.90	8T-6746	2.36	60.00	3.70	93.98
3.50	88.90	8T-3329	1.89	48.00	3.62	91.98
3.50	88.90	8T-3000	1.65	42.00	3.74	94.98
3.50	88.90	119-4761	0.98	25.00	3.76	95.42
3.75	95.25	8T-7848	1.57	40.00	3.87	98.33
3.75	95.25	8T-3330	2.44	62.00	3.95	100.33
4.00	101.60	8T-6747	2.56	65.00	4.20	106.68
4.00	101.60	8T-7538	1.57	40.00	4.20	106.68
4.00	101.60	119-4760	1.00	25.40	4.26	108.12
4.00	101.60	7J-3300	2.50	63.50	4.26	108.15
4.00	101.60	4T-4753	1.89	48.00	4.26	108.08
4.25	107.95	8T-6748	2.36	60.00	4.45	113.03
4.50	114.30	9X-3579	1.97	50.00	4.70	119.38
4.50	114.30	9J-9792	3.50	88.90	4.75	120.74
4.50	114.30	4T-6929	3.50	88.90	4.75	120.74
4.75	120.65	8T-7850	1.97	50.00	4.95	125.73
5.00	127.00	9J-3054	3.62	92.07	5.25	133.45
5.00	127.00	8T-3331	2.52	64.00	5.20	132.08
5.25	133.35	4T-5718	2.50	63.50	5.45	138.43
5.50	139.70	8J-9917	2.37	60.30	5.75	146.09
5.50	139.70	9X-7429	1.97	50.00	5.70	144.78
5.50	139.70	9X-7420	2.37	60.32	5.76	146.30
5.51	140.00	9X-3571	1.97	50.00	5.71	145.08
5.75	146.05	8T-7851	1.97	50.00	5.95	151.13
5.75	146.05	8T-3332	3.62	92.00	5.95	151.13
5.91	150.00	6E-0499	2.36	60.00	6.10	155.06
6.00	152.40	4T-9319	2.76	70.00	6.26	158.88
6.00	152.40	9X-3613	1.97	50.00	6.20	157.48
6.13	155.58	7J-3299	2.50	63.50	6.38	162.13
6.38	161.93	096-5606	0.35	8.90	6.69	169.83
6.50	165.10	8C-3848	2.60	66.00	6.70	170.18
6.50	165.10	8C-9102	2.27	57.75	6.70	170.18
6.75	171.45	4T-6931	3.50	88.90	7.01	177.96
6.77	171.93	096-5157	0.35	8.90	7.08	179.83
7.00	177.80	8T-7693	7.14	181.36	7.26	184.28
7.00	177.80	8T-6749	3.15	80.00	7.20	182.88
7.25	184.15	6E-0173	2.36	60.00	7.45	189.24
7.25	184.15	4T-4811	2.95	75.00	7.50	190.60
7.50	190.45	108-0130	3.15	80.00	7.70	195.58

# Head Wear Rings



ROD DIAMETER		PART NUMBER	A GROOVE WIDTH (± .003 in)		B GROOVE DIA. (± .001 in)	
(in)	(mm)		(in)	(mm)	(in)	(mm)
8.00	203.20	6E-0245	2.95	75.00	8.20	208.28
8.25	209.55	9X-7330	2.95	75.00	8.45	214.63
8.34	211.93	4I-6443	0.35	8.90	8.65	219.83
8.75	222.25	6E-0248	2.95	75.00	9.01	228.80
8.75	222.25	108-6216	2.95	75.00	8.95	227.33
9.00	228.52	8C-3846	8.98	228.00	9.38	238.25
11.00	279.32	8C-9156	5.04	127.97	11.18	284.09
13.13	333.38	8C-9155	5.03	127.71	12.93	328.52
13.50	342.90	9X-7439	2.37	60.25	13.88	352.61
13.50	342.90	9X-3563	10.02	254.41	13.88	352.61
15.75	400.05	149-0813	10.02	254.41	16.13	409.76
15.75	400.05	149-0812	2.37	60.25	16.13	409.76

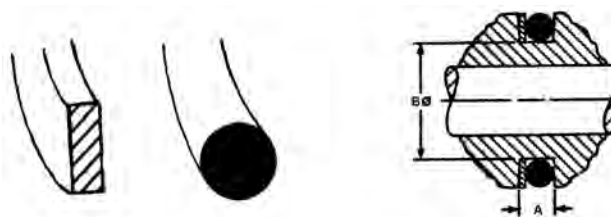
# Metal Bearing Head Wear Rings



Rod Diameter		Bearing Sleeve Part Number	A Groove Width		B Groove Outside Dia.		Ring Retaining Part Number
(in)	(mm)		(in)	(mm)	(in)	(mm)	
1.77	45.00	198-0664	0.79	20.00	1.97	50.00	NA -
2.17	55.00	114-0752	1.19	30.30	2.36	60.00	099-7001
2.36	60.00	114-0751	1.59	40.30	2.56	65.00	099-6975
2.56	65.00	194-8330	1.38	35.00	2.76	70.00	NA -
2.56	65.00	114-0754	1.59	40.30	2.76	70.00	099-0700
2.76	70.00	114-0753	1.59	40.30	2.95	75.00	099-5400
2.95	75.00	114-8836	1.98	50.30	3.23	82.00	099-0661
2.95	75.00	114-0750	1.59	40.30	3.15	80.00	099-0661
3.15	80.00	114-0755	1.59	40.30	3.35	85.00	096-8139
3.15	80.00	150-5839	1.18	30.00	3.35	85.00	099-3205
3.35	85.00	114-0756	1.59	40.30	3.54	90.00	7Y-5119
3.35	85.00	096-4402	1.18	30.00	3.54	90.00	094-0747
3.54	90.00	114-0758	1.59	40.30	3.74	95.00	093-1571
3.54	90.00	105-2575	1.18	30.00	3.74	95.00	093-1571
3.54	90.00	121-1574	1.98	50.30	3.74	95.00	093-1571
3.74	95.00	096-4430	1.18	30.00	3.94	100.00	7Y-4631
3.74	95.00	6C-6093	1.98	50.30	3.94	100.00	7Y-4361
3.74	95.00	128-9260	1.59	40.30	3.94	100.00	7Y-4631
3.94	100.00	114-0757	1.59	40.30	4.13	105.00	093-1572
3.94	100.00	096-5625	1.38	35.00	4.13	105.00	094-1931
4.13	105.00	114-0760	1.98	50.30	4.33	110.00	7Y-4672
4.13	105.00	099-5572	1.38	35.00	4.33	110.00	099-5573
4.33	110.00	114-0761	2.37	60.30	4.53	115.00	7Y-4944
4.33	110.00	114-0762	1.98	50.30	4.53	115.00	7Y-4944
4.53	115.00	191-5644	2.37	60.30	4.72	120.00	191-5643
4.92	125.00	155-9190	2.37	60.30	5.12	130.00	155-9189
5.00	127.00	121-1599	2.37	60.30	5.20	132.02	121-1598
5.12	130.00	114-0763	2.37	60.30	5.31	135.00	087-5393
5.51	140.00	128-9261	2.18	55.30	5.71	145.00	102-0786
5.71	145.00	155-9100	2.37	60.30	5.91	150.00	155-9099
5.75	146.00	121-1607	1.98	50.30	5.95	151.07	121-1606
5.91	150.00	128-9262	2.37	60.30	6.10	155.00	103-8364
9.00	228.52	8C-3849	5.04	127.97	9.19	233.32	NA -
10.55	268.00	8C-3850	5.03	127.71	10.75	273.05	NA -



# Head Seals



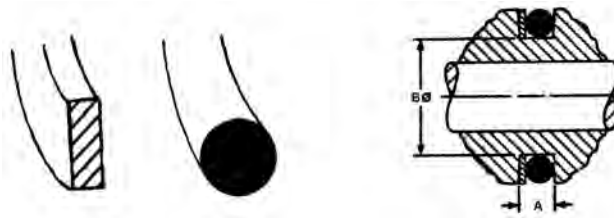
BORE DIAMETER		PART NUMBER	DASH SIZE	A GROOVE WIDTH (± .004 in)		B GROOVE DIA. (± .005 in)		CROSS SECTION		BACK-UP RING
(in)	(mm)			(in)	(mm)	(in)	(mm)	(in)	(mm)	
2.50	63.50	8F-6711	-228	0.22	5.61	2.28	57.80	0.14	3.53	3C-3239
2.75	69.85	1H-5728	-230	0.22	5.61	2.54	64.45	0.14	3.53	4J-9225
3.00	76.20	5H-8848	-232	0.22	5.61	2.79	70.80	0.14	3.53	6J-5731
3.15	80.00	095-1710		0.25	6.43	3.15	79.95	0.12	3.10	099-7000
3.25	82.55	5P-6302	-240	0.22	5.61	3.95	100.21	0.14	3.53	2K-6830
3.25	82.55	1H-7339	-234	0.22	5.61	3.04	77.15	0.14	3.53	8J-2574
3.50	88.90	2H-3931	-236	0.22	5.61	3.29	83.50	0.14	3.53	4J-9224
3.54	90.00	095-1711		0.16	4.00	3.46	88.00	0.12	3.10	
3.54	90.00	095-1671		0.20	5.00	3.78	95.95	0.12	3.10	
3.75	95.25	2H-4145	-238	0.22	5.61	3.54	89.85	0.14	3.53	1S-0669
3.94	100.00	199-8394		0.14	3.53	4.54	115.21	0.10	2.62	
3.94	100.00	095-1673		0.20	5.00	4.17	105.95	0.12	3.10	
3.94	100.00	095-1626		0.36	9.13	3.74	94.95	0.22	5.70	105-7393
3.94	100.00	095-1625		0.35	8.93	3.54	89.95	0.22	5.70	099-0699
3.94	100.00	095-1713		0.25	6.43	3.74	94.95	0.12	3.10	099-5399
4.00	101.60	1H-8128	-240	0.22	5.61	3.79	96.20	0.14	3.53	2K-6830
4.13	104.78	9X-4611	-241	0.22	5.61	3.91	99.38	0.14	3.53	1K-7098
4.25	107.95	1H-6227	-242	0.22	5.61	4.04	102.55	0.14	3.53	5J-7865
4.33	110.00	199-8393		0.14	3.53	5.11	129.76	0.10	2.62	
4.33	110.00	095-1627		0.43	10.93	3.94	99.95	0.22	5.70	099-0660
4.33	110.00	095-1674		0.20	5.00	4.37	110.95	0.12	3.10	
4.33	110.00	095-1675		0.20	5.00	4.56	115.95	0.12	3.10	
4.33	110.00	095-1716		0.23	5.73	4.33	109.95	0.12	3.10	105-7360
4.33	110.00	112-6920		0.26	6.70	4.08	103.60	0.16	4.00	
4.50	114.30	2H-3928	-244	0.22	5.61	4.29	108.90	0.14	3.53	1K-7095
4.50	114.30	1J-2859		0.32	8.22	4.18	106.06	0.21	5.33	8J-3752
4.72	120.00	133-0128		0.13	3.23	5.35	136.00	0.10	2.62	
4.72	120.00	123-7724		0.32	8.20	4.41	112.00	0.20	5.00	123-8614
4.72	120.00	095-1718		0.23	5.73	4.72	119.95	0.12	3.10	105-7375
4.72	120.00	095-1717		0.23	5.73	4.53	114.95	0.12	3.10	087-5510
4.72	120.00	095-1676		0.20	5.00	4.76	120.95	0.12	3.10	
4.75	120.65	5H-6734	-246	0.22	5.61	4.54	115.25	0.14	3.53	2J-3961
4.75	120.65	1S-7408		0.32	8.22	4.43	112.41	0.21	5.33	9X-7278
5.00	127.00	5F-3144	-248	0.22	5.61	4.79	121.60	0.14	3.53	2K-4096
5.00	127.00	5P-4326		0.32	8.22	4.68	118.76	0.21	5.33	9X-7279
5.00	127.00	131-3716		0.09	2.16	5.43	137.92	0.07	1.78	
5.12	130.00	095-1719		0.23	5.73	4.92	125.00	0.12	3.10	095-1719
5.12	130.00	095-1631		0.36	9.13	4.72	119.95	0.22	5.70	7Y-4633
5.12	130.00	199-8392		0.09	2.40	5.70	144.80	0.07	1.78	
5.25	133.35	5F-3106	-250	0.22	5.61	5.04	127.95	0.14	3.53	2J-7767
5.50	139.70	8J-1688	-354	0.32	8.22	5.18	131.46	0.21	5.33	8J-1689
5.50	139.70	8F-4469	-429	0.48	12.13	5.05	128.25	0.27	6.98	6U-3042

# Head Seals



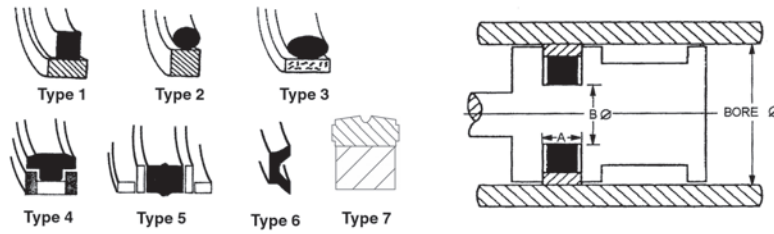
BORE DIAMETER		PART NUMBER	DASH SIZE	A GROOVE WIDTH (± .004 in)		B GROOVE DIA. (± .005 in)		CROSS SECTION		BACK-UP RING
(in)	(mm)			(in)	(mm)	(in)	(mm)	(in)	(mm)	
5.50	139.70	2H-9247	-252	0.22	5.61	5.29	134.30	0.14	3.53	2K-2961
5.51	140.00	095-1632		0.36	9.13	5.12	129.95	0.22	5.70	087-5436
5.51	140.00	095-1721		0.23	5.73	5.31	135.00	0.12	3.10	4I-3627
5.91	150.00	095-1633		0.36	9.13	5.51	139.95	0.22	5.70	7Y-4673
5.91	150.00	199-8391		0.14	3.53	6.61	167.94	0.10	2.62	
6.00	152.40	5H-3252	-256	0.22	5.61	5.79	147.00	0.14	3.53	2K-3258
6.00	152.40	6J-5541	-256	0.22	5.61	5.79	147.00	0.14	3.53	7X-4807
6.00	152.40	6D-9157	-358	0.32	8.22	5.68	144.16	0.21	5.33	8J-1717
6.25	158.75	8F-8733	-258	0.22	5.61	6.04	153.35	0.14	3.53	4J-9223
6.30	160.00	095-1635		0.36	9.13	5.90	149.95	0.22	5.70	087-5550
6.50	165.10	7J-8956	-361	0.32	8.22	6.18	156.86	0.21	5.33	7J-8955
6.50	165.10	2K-4472	-259	0.22	5.61	6.29	159.70	0.14	3.53	2K-4473
6.69	170.00	095-1726		0.36	9.13	6.30	159.95	0.22	5.70	7Y-4945
7.00	177.80	9F-1399	-261	0.22	5.61	6.79	172.40	0.14	3.53	4J-9218
7.00	177.80	8J-1665	-363	0.32	8.22	6.68	169.56	0.21	5.33	9X-7273
7.09	180.00	095-1728		0.36	9.13	6.69	169.95	0.22	5.70	087-5391
7.09	180.00	095-1731		0.36	9.13	7.48	189.95	0.22	5.70	4I-6330
7.25	184.10	4T-4803		0.19	4.72	8.00	203.14			
7.25	184.15	2K-2939	-262	0.22	5.61	7.04	178.75	0.14	3.53	2K-2940
7.25	184.15	5P-7593	-364	0.32	8.22	6.93	175.91	0.21	5.33	1U-1738
7.50	190.50	4H-6520	-263	0.22	5.61	7.29	185.10	0.14	3.53	4T-3107
7.75	196.85	3J-0634	-264	0.22	5.61	7.54	191.45	0.14	3.53	3J-9742
7.75	196.85	5K-1787	-366	0.32	8.22	7.43	188.61	0.21	5.33	8J-0548
7.99	203.00	1H-8278	-265	0.22	5.61	7.79	197.80	0.14	3.53	5J-6444
8.25	209.55	1J-2176	-266	0.22	5.61	8.04	204.15	0.14	3.53	2J-0744
8.25	209.55	8J-4386		0.32	8.22	7.93	201.31	0.21	5.33	3G-3747
8.50	215.90	9M-5024	-267	0.22	5.61	8.29	210.50	0.14	3.53	4J-6557
8.66	220.00	095-1733		0.36	9.13	8.27	209.95	0.22	5.70	4I-6442
9.25	234.95	8F-8230	-270	0.22	5.61	9.04	229.55	0.14	3.53	3J-8466
9.25	234.95	8F-6230	-429	0.22	5.61	9.04	229.55	0.14	3.53	3J-8466
9.25	234.95	1U-3174		0.32	8.22	8.93	226.71	0.21	5.33	1U-3173
9.50	241.30	1T-0132	-271	0.22	5.61	9.29	235.90	0.14	3.53	3J-2688
10.00	254.00	5P-2235	-375	0.32	8.22	9.68	245.76	0.21	5.33	1U-3307
10.25	260.35	5H-4909	-274	0.22	5.61	10.04	254.95	0.14	3.53	4J-1151
10.50	266.70	8L-9241	-377	0.32	8.22	10.18	258.46	0.14	3.53	1U-1770
10.75	273.05	8J-8879	-275	0.22	5.61	10.54	267.65	0.14	3.53	8J-8880
10.98	279.00	095-5702		0.32	8.22	10.68	271.16	0.21	5.33	108-0129
11.50	292.10	5P-2236	-379	0.32	8.22	11.18	283.86	0.21	5.33	1U-1626
12.50	317.50	6V-3263	-381	0.32	8.22	12.18	309.26	0.21	5.33	1U-3383
13.13	333.38	4M-0737		0.43	10.93	12.70	322.62	0.28	6.99	6V-3580
13.50	342.90	4D-4508	-454	0.43	10.93	13.02	330.80	0.27	6.98	122-0440
13.75	349.25	7S-8554	-382	0.32	8.22	13.43	341.01	0.21	5.33	9X-4595

# Head Seals



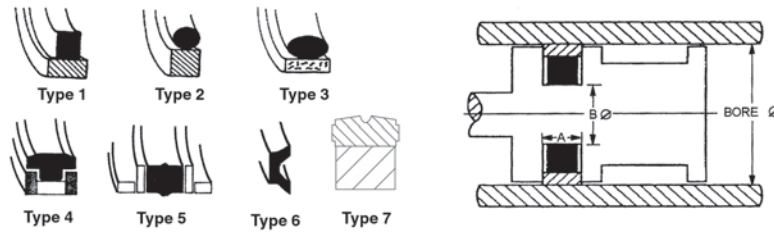
BORE DIAMETER		PART NUMBER	DASH SIZE	A GROOVE WIDTH (± .004 in)		B GROOVE DIA. (± .005 in)		CROSS SECTION		BACK-UP RING
(in)	(mm)			(in)	(mm)	(in)	(mm)	(in)	(mm)	
14.25	361.95	2M-3818		0.32	8.22	13.93	353.71	0.21	5.33	4T-4127
15.13	384.18	4J-1253	-457	0.43	10.93	14.70	373.43	0.28	6.99	4T-5929

# Piston Seals



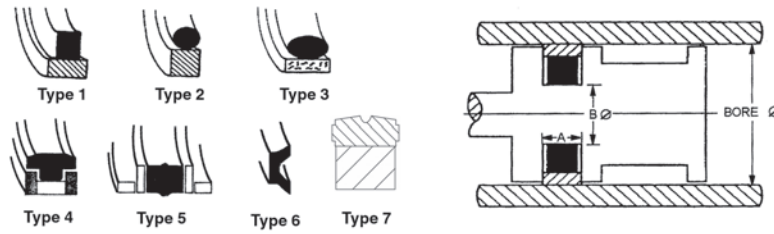
BORE DIAMETER		PART NUMBER	SEAL TYPE	OVERSIZE DIM	A GROOVE WIDTH (± .002 in)		B GROOVE DIA. (± .003 in)	
(in)	(mm)				(in)	(mm)	(in)	(mm)
0.04	1.00	1A-1111	2		0.12	3.00	0.16	4.00
0.20	5.12	197-8073	3	3	0.32	8.10	4.29	109.00
0.50	12.70	3E-4241	2		0.08	2.11	0.24	6.10
0.63	15.88	3E-4242	2		0.08	2.11	0.36	9.27
0.75	19.05	3E-4243	2		0.08	2.11	0.49	12.45
1.00	25.40	3E-4244	2		0.08	2.11	0.74	18.80
1.00	25.40	3E-4277	1		0.13	3.28	0.69	17.55
1.13	28.58	3E-4245	2		0.08	2.11	0.86	21.97
1.25	31.75	3E-4246	2		0.08	2.11	0.99	25.15
1.25	31.75	3E-4278	1		0.13	3.28	0.94	23.90
1.25	31.75	4W-2186	6		0.16	3.96	0.99	25.02
1.50	38.10	3E-4247	2		0.08	2.11	1.24	31.50
1.50	38.10	8C-9185	3		0.12	3.00	1.11	28.09
1.50	38.10	5J-9822	1		0.12	3.00	1.11	28.09
1.63	41.28	3E-4248	2		0.12	3.10	1.24	31.40
1.75	44.45	3E-4249	2		0.12	3.10	1.36	34.54
1.75	44.45	3E-4279	1		0.13	3.28	1.44	36.60
1.77	45.00	8Q-5993			0.08	2.00	2.17	55.00
1.97	50.00	8Q-6123			1.18	30.00	2.20	56.00
1.97	50.00	8Q-6121			0.08	2.00	2.56	65.00
2.00	50.80	8C-9170	3		0.19	4.88	1.63	41.28
2.00	50.80	5J-7004	1		0.19	4.88	1.63	41.28
2.00	50.80	3E-4250	2		0.13	3.30	1.61	40.79
2.01	50.96	1K-5354			0.18	4.68	2.37	60.25
2.17	55.00	144-9483	7		0.25	6.40	1.55	39.46
2.25	57.15	1U-3998	1		0.19	4.88	1.88	47.63
2.25	57.15	3E-4251	2		0.13	3.30	1.86	47.14
2.25	57.15	8C-4908	3	6	0.19	4.88	1.88	47.63
2.25	57.15	8C-4905	3	3	0.19	4.88	1.88	47.63
2.25	57.15	8J-1587	6		0.53	13.49	3.00	76.20
2.36	60.00	144-9485			0.25	6.40	1.75	44.46
2.36	60.00	118-3129			0.06	1.40	2.56	65.00
2.48	63.00	125-5707			2.72	69.00	1.18	30.00
2.48	63.00	125-0776			0.10	2.65	3.27	83.00
2.50	63.50	9X-7451			0.60	15.18	3.14	79.78
2.50	63.50	3E-4252	2		0.13	3.30	2.11	53.49
2.50	63.50	8J-6213	1		0.19	4.88	2.13	53.98
2.50	63.50	8C-9167	3		0.19	4.88	2.13	53.98
2.50	63.50	8C-4911	3	3	0.19	4.88	2.13	53.98
2.50	63.50	8C-4914	3	6	0.19	4.88	2.13	53.98
2.75	69.85	8C-4917	3	3	0.19	4.88	2.38	60.33

# Piston Seals



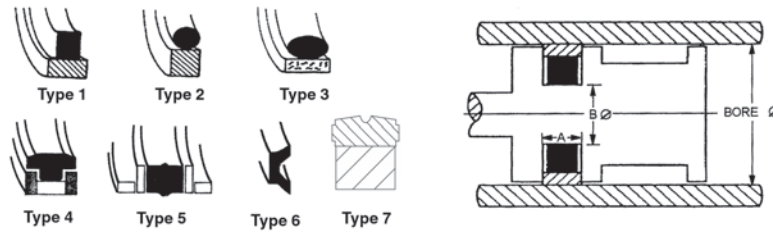
BORE DIAMETER		PART NUMBER	SEAL TYPE	OVERSIZE DIM	A GROOVE WIDTH (± .002 in)		B GROOVE DIA. (± .003 in)	
(in)	(mm)				(in)	(mm)	(in)	(mm)
2.75	69.85	8C-4920	3	6	0.19	4.88	2.38	60.33
2.75	69.85	5J-7010	1		0.19	4.88	2.38	60.33
2.75	69.85	3E-4253	2		0.13	3.30	2.36	59.84
2.75	69.88	4U-8768			0.24	6.00	4.33	110.00
2.76	70.00	118-2727			0.06	1.40	2.95	75.00
2.76	70.00	161-7145	7		0.25	6.40	2.14	54.46
2.76	70.00	8Q-5885			0.12	3.00	3.35	85.00
2.76	70.00	8Q-5888			2.99	76.00	1.57	40.00
2.95	75.00	8Q-6032			0.04	1.00	3.15	80.00
2.95	75.00	8Q-6012			3.54	90.00	0.59	15.00
2.95	75.00	8Q-6010			3.19	81.00	1.18	30.00
2.95	75.04	161-7146	7		0.25	6.40	2.34	59.46
3.00	76.20	9X-7445	4		0.19	4.88	2.46	62.48
3.00	76.20	9X-7337	3		0.19	4.88	2.46	62.48
3.00	76.20	3E-4254	2		0.13	3.30	2.61	66.19
3.00	76.20	8T-8212	3	6	0.19	4.88	2.46	62.48
3.00	76.20	8T-8209	3	3	0.19	4.88	2.46	62.48
3.00	76.20	6J-1972	1		0.19	4.88	2.46	62.48
3.07	78.00	2U-8421			0.18	4.65	5.67	144.00
3.15	80.00	099-6998	4		0.44	11.10	2.56	64.96
3.15	80.00	6U-0849			0.71	18.00	5.51	140.00
3.25	82.55	8C-4923	3	3	0.19	4.88	2.71	68.83
3.25	82.55	8C-4926	3	6	0.19	4.88	2.71	68.83
3.25	82.55	6J-0793	1		0.19	4.88	2.71	68.83
3.25	82.55	9J-1797			0.41	10.49	2.75	69.85
3.25	82.55	3E-4255	1		0.13	3.30	2.86	72.54
3.35	85.00	197-8065	3	3	0.44	11.10	2.75	69.96
3.35	85.00	7Y-5116			0.12	3.00	3.92	99.60
3.50	88.90	5J-7013	1		0.19	4.88	2.96	75.18
3.50	88.90	8T-8218	3	6	0.19	4.88	2.96	75.18
3.50	88.90	8T-8215	3	3	0.19	4.88	2.96	75.18
3.50	88.90	3E-4256	2		0.13	3.30	3.11	78.89
3.50	88.90	4T-8054	3		0.19	4.88	2.96	75.18
3.54	90.00	099-6973	4		0.44	11.10	2.95	74.96
3.54	90.00	096-1588			0.12	3.00	4.12	104.60
3.54	90.00	093-1488	5		1.52	38.70	2.99	75.96
3.54	90.00	144-5287	7		0.25	6.40	2.93	74.45
3.54	90.00	8Q-5984			0.16	4.00	4.13	105.00
3.54	90.00	8Q-5976			1.57	40.00	3.78	96.00
3.73	94.80	118-3123			0.07	1.70	3.98	101.00
3.74	95.00	118-3126			0.37	9.50	3.94	100.00

# Piston Seals



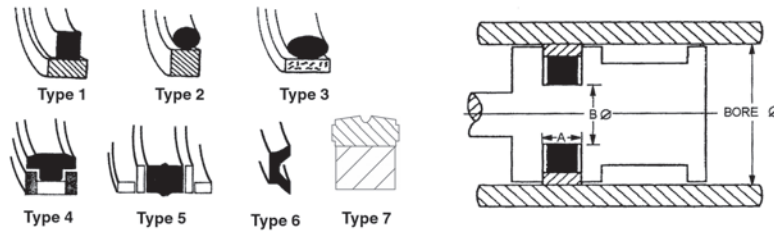
BORE DIAMETER		PART NUMBER	SEAL TYPE	OVERSIZE DIM	A GROOVE WIDTH (± .002 in)		B GROOVE DIA. (± .003 in)	
(in)	(mm)				(in)	(mm)	(in)	(mm)
3.74	95.00	8Q-5887			0.04	1.00	3.94	100.00
3.75	95.25	5J-8011	1		0.19	4.88	3.21	81.53
3.75	95.25	9X-7274	3		0.19	4.88	3.21	81.53
3.75	95.25	8T-8224	3	6	0.19	4.88	3.21	81.53
3.75	95.25	8T-8221	3	3	0.19	4.88	3.21	81.53
3.75	95.25	3E-4257	2		0.13	3.30	3.21	81.53
3.94	100.00	195-0392	3	3	0.50	12.60	3.34	84.90
3.94	100.00	8U-6849			4.53	115.00	0.51	13.00
3.94	100.00	8U-2918			0.28	7.00	4.33	110.00
3.94	100.00	9X-7298	3		0.29	7.24	3.38	85.75
3.94	100.00	133-3094	3	3	0.29	7.24	3.38	85.75
3.94	100.00	5I-5928	4		0.50	12.60	3.34	84.96
3.94	100.00	8Q-6109			4.17	106.00	1.18	30.00
4.00	101.50	5W-2860			0.10	2.50	4.26	108.30
4.00	101.60	5J-5402	1		0.19	4.88	3.21	81.53
4.00	101.60	8C-9160	3		0.19	4.88	3.21	81.53
4.00	101.60	165-6880	6		0.42	10.59	3.50	88.90
4.00	101.60	9J-9872	4		0.19	4.88	3.21	81.53
4.00	101.60	8T-8230	3	6	0.25	6.40	3.34	84.71
4.00	101.60	8T-8227	3	3	0.25	6.40	3.34	84.71
4.00	101.60	3E-4258	2		0.13	3.30	3.61	91.59
4.02	102.00	2U-6397			0.22	5.50	6.50	165.00
4.13	104.78	4T-0529	1		0.25	6.40	3.46	87.88
4.13	104.80	125-9695			0.07	1.70	4.37	111.00
4.13	105.00	125-9698			0.37	9.50	4.33	110.00
4.13	105.00	9X-3586	3		0.29	7.24	3.57	90.75
4.25	107.95	8T-8236	3	6	0.25	6.40	3.59	91.06
4.25	107.95	8T-8233	3	3	0.25	6.40	3.59	91.06
4.25	107.95	3E-4259	2		0.13	3.30	3.86	97.94
4.25	107.95	8C-9164	3		0.25	6.40	3.59	91.06
4.25	107.95	5J-7854	1		0.25	6.40	3.59	91.06
4.33	110.00	8Q-5974			0.04	1.00	4.53	115.00
4.33	110.00	195-0388	3	3	0.50	12.60	3.74	94.90
4.33	110.00	9X-7301	3		0.29	7.24	3.77	95.75
4.33	110.00	133-3098	3	3	0.29	7.24	3.77	95.75
4.33	110.00	099-6922	4		0.50	12.60	3.74	94.96
4.41	112.00	123-8614			0.08	2.00	4.72	120.00
4.49	114.00	118-2719			0.07	1.70	4.76	121.00
4.49	114.00	6U-9270			0.06	1.50	5.00	127.00
4.50	114.30	5J-4986	1		0.25	6.40	3.84	97.41
4.50	114.30	8J-3747	4		0.50	12.75	3.84	97.41

# Piston Seals



BORE DIAMETER		PART NUMBER	SEAL TYPE	OVERSIZE DIM	A GROOVE WIDTH (± .002 in)		B GROOVE DIA. (± .003 in)	
(in)	(mm)				(in)	(mm)	(in)	(mm)
4.50	114.30	165-6882			0.42	10.62	4.50	114.31
4.50	114.30	9X-7269	3		0.25	6.40	3.84	97.41
4.50	114.30	9X-4551	3	3	0.50	12.75	3.84	97.41
4.50	114.30	8T-8242	3	6	0.25	6.40	3.84	97.41
4.50	114.30	8T-8239	3	3	0.25	6.40	3.84	97.41
4.50	114.30	3E-4260	2		0.13	3.30	4.11	104.29
4.50	114.30	4T-5172	3		0.50	12.75	3.84	97.41
4.53	115.00	9X-3589	3		0.29	7.24	3.97	100.76
4.53	115.00	118-2723			0.37	9.50	4.72	120.00
4.53	115.00	8Q-5971			0.98	25.00	4.29	109.00
4.53	115.00	8Q-6125			0.04	1.00	4.92	125.00
4.72	120.00	108-2870	3	3	0.29	7.24	4.16	105.74
4.72	120.00	137-5042			1.97	50.00	4.96	126.00
4.72	120.00	9X-3592	3		0.29	7.24	4.16	105.74
4.72	120.00	197-8070	3	3	0.32	8.10	3.90	99.00
4.75	120.65	3E-4261	2		0.13	3.30	4.36	110.64
4.75	120.65	4T-8588	3		0.25	6.40	4.09	103.76
4.75	120.65	9X-7542	4		0.25	6.40	4.09	103.76
4.75	120.65	8T-8248	3	6	0.25	6.40	4.09	103.76
4.75	120.65	8T-8245	3	3	0.25	6.40	4.09	103.76
4.75	120.65	8C-5215	3		0.63	15.98	4.09	103.76
4.75	120.65	5J-4987	1		0.25	6.40	4.09	103.76
4.84	123.00	135-7934			0.07	1.70	5.16	131.00
4.84	123.00	2U-8920			0.03	0.76	5.00	127.00
4.92	125.00	135-7938			0.59	14.90	5.12	130.00
5.00	127.00	121-1595			0.13	3.18	5.58	141.68
5.00	127.00	8T-8254	3	6	0.38	9.63	4.23	107.32
5.00	127.00	8T-8251	3	3	0.38	9.63	4.23	107.32
5.00	127.00	9X-7264	3		0.38	9.63	4.23	107.32
5.00	127.00	9J-7868	4		0.63	15.98	4.23	107.32
5.00	127.00	3E-4262	2		0.13	3.30	4.61	116.99
5.00	127.00	5J-5020	1		0.38	9.63	4.23	107.32
5.00	127.00	6J-9176	4		0.63	15.98	4.23	107.32
5.00	127.00	6J-9354	4		0.38	9.63	4.23	107.32
5.00	127.00	7J-2032	1		0.25	6.35	3.48	88.44
5.00	127.00	8T-1787	3		0.63	15.98	4.23	107.32
5.05	128.27	6U-3042			0.12	3.00	5.52	140.27
5.12	130.00	9X-3595	3		0.29	7.24	4.56	115.74
5.12	130.00	108-2869	3	3	0.29	7.24	4.56	115.74
5.14	130.63	103-5754			0.04	1.10	5.38	136.63
5.25	133.35	191-2364	3	3	0.38	9.63	4.60	116.85

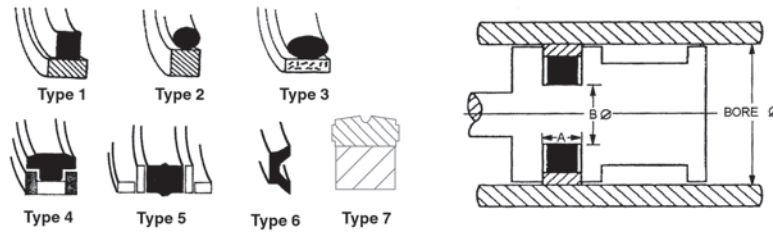
# Piston Seals



BORE DIAMETER		PART NUMBER	SEAL TYPE	OVERSIZE DIM	A GROOVE WIDTH (± .002 in)		B GROOVE DIA. (± .003 in)	
(in)	(mm)				(in)	(mm)	(in)	(mm)
5.25	133.35	8T-8260	3	6	0.38	9.63	4.48	113.67
5.25	133.35	8T-8257	3	3	0.38	9.63	4.48	113.76
5.25	133.35	3E-4263	2		0.13	3.30	4.86	123.34
5.25	133.35	5J-7234	1		0.38	9.63	4.48	113.67
5.25	133.35	8T-0763	3		0.38	9.63	4.48	113.67
5.25	133.40	5U-4278			0.75	19.05	5.50	139.70
5.28	134.06	140-0233			0.18	4.65	5.40	137.10
5.50	139.70	8T-8266	3	6	0.38	9.63	4.73	120.02
5.50	139.70	8T-8263	3	3	0.38	9.63	4.73	120.02
5.50	139.70	9X-4563	3	3	0.63	15.98	4.73	120.02
5.50	139.70	4T-5173	3		0.63	15.98	4.73	120.02
5.50	139.70	3E-4264	2		0.13	3.30	5.11	129.69
5.50	139.70	6E-0465	3		0.38	9.63	4.73	120.02
5.50	139.70	5J-4988	1		0.38	9.63	4.73	120.02
5.50	139.70	8J-8767	4		0.63	15.98	4.73	120.02
5.51	140.00	8C-9188			0.12	3.00	6.09	154.60
5.51	140.00	8Q-5982			0.98	25.00	5.28	134.00
5.51	140.00	9X-3598	3		0.38	9.63	4.75	120.62
5.51	140.00	191-4568	3	3	0.32	8.10	4.29	109.00
5.51	140.00	133-3102	3	3	0.38	9.63	4.75	120.62
5.51	140.00	123-3135	3		0.32	8.20	4.69	119.00
5.75	146.05	121-1603			0.13	3.18	6.33	160.73
5.75	146.05	9J-4981	1		0.38	9.63	4.98	126.37
5.75	146.05	3E-4265	2		0.16	4.06	5.23	132.89
5.91	150.00	197-8076	3	3	0.32	8.10	5.08	129.00
5.91	150.00	9X-3601	3		0.38	9.63	5.14	130.63
5.91	150.00	108-2871	3	3	0.38	9.63	5.14	130.63
5.91	150.00	137-5046			0.07	1.70	6.30	160.00
5.91	150.00	8C-9192			0.12	3.00	6.56	166.60
6.00	152.40	8C-9173	3		0.38	9.63	5.09	129.41
6.00	152.40	5J-4989	1		0.38	9.63	5.09	129.41
6.00	152.40	8C-4929	3	3	0.63	15.98	5.09	129.41
6.00	152.40	8C-4932	3	6	0.63	15.98	5.09	129.41
6.00	152.40	9J-1242	4		0.63	15.98	5.09	129.41
6.00	152.40	8T-8272	3	6	0.38	9.63	5.09	129.41
6.00	152.40	8T-8269	3	3	0.38	9.63	5.09	129.41
6.00	152.40	3E-4266	2		0.16	4.06	5.48	139.24
6.00	152.40	4T-4144	3		0.63	15.98	5.09	129.41
6.25	158.75	3E-4267	2		0.16	4.06	5.73	145.59
6.25	158.75	8T-8278	3	6	0.38	9.63	5.34	135.76
6.25	158.75	8T-8275	3	3	0.38	9.63	5.34	135.76

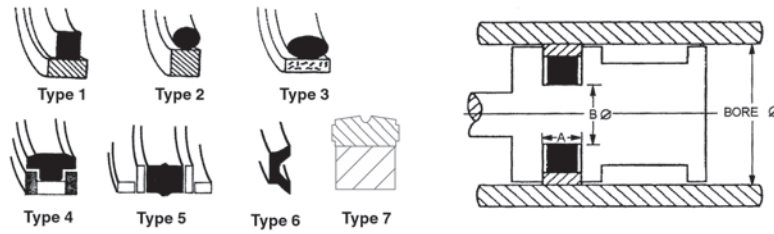


# Piston Seals



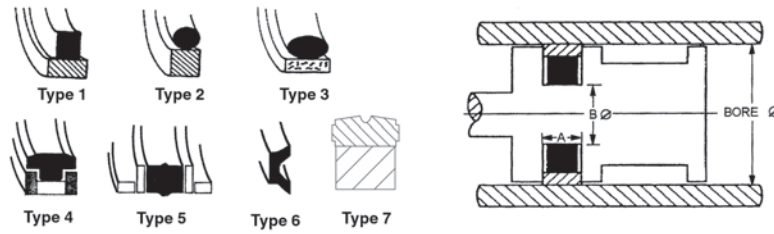
BORE DIAMETER		PART NUMBER	SEAL TYPE	OVERSIZE DIM	A GROOVE WIDTH (± .002 in)		B GROOVE DIA. (± .003 in)	
(in)	(mm)				(in)	(mm)	(in)	(mm)
6.25	158.75	9J-5558	4		0.63	15.98	5.34	135.76
6.25	158.75	8C-4935	3	3	0.63	15.98	5.34	135.76
6.25	158.75	8C-4938	3	6	0.63	15.98	5.34	135.76
6.25	158.75	5J-4990	1		0.38	9.63	5.34	135.76
6.25	158.75	8T-1788	3		0.63	15.98	5.34	135.76
6.30	160.00	9X-3604	3		0.38	9.63	5.54	140.61
6.30	160.00	133-3106	3	3	0.38	9.63	5.54	140.61
6.38	161.93	096-5609			0.35	8.90	6.69	169.83
6.50	165.10	8T-8284	3	6	0.38	9.63	5.59	142.11
6.50	165.10	8T-8281	3	3	0.38	9.63	5.59	142.11
6.50	165.10	3E-4268	2		0.16	4.06	5.98	151.94
6.50	165.10	4T-8695	3		0.63	15.98	5.59	142.11
6.50	165.10	8J-8703	4		0.63	15.98	5.59	142.11
6.50	165.10	5J-4991	1		0.38	9.63	5.59	142.11
6.50	165.10	8C-4941	3	3	0.63	15.98	5.59	142.11
6.50	165.10	8C-4944	3	6	0.63	15.98	5.59	142.11
6.69	170.00	9X-3607	3		0.38	9.63	5.93	150.62
6.69	170.00	133-3110	3	3	0.38	9.63	5.93	150.62
6.75	171.45	3E-4269	2		0.16	4.06	6.23	158.29
6.77	171.93	096-5167			0.35	8.90	7.08	179.83
7.00	177.80	124-8364	6		0.79	20.00	6.00	152.30
7.00	177.80	8T-8290	3	6	0.38	9.63	6.09	154.81
7.00	177.80	8T-8287	3	3	0.38	9.63	6.09	154.81
7.00	177.80	3E-4270	2		0.16	4.06	6.48	164.64
7.00	177.80	8C-5100	3	3	0.63	15.98	6.09	154.81
7.00	177.80	8C-5103	3	6	0.63	15.98	6.09	154.81
7.00	177.80	5J-4997	1		0.38	9.63	6.09	154.81
7.00	177.80	8J-3749	4		0.63	15.98	6.09	154.81
7.00	177.80	8T-1789	3		0.63	15.98	6.09	154.81
7.09	180.00	9X-3610	3		0.38	9.63	6.32	160.62
7.09	180.00	133-3114	3	3	0.38	9.63	6.32	160.62
7.25	184.15	8T-8296	3	6	0.38	9.63	6.34	161.16
7.25	184.15	8T-8293	3	3	0.38	9.63	6.34	161.16
7.25	184.15	3E-4271	2		0.16	4.06	6.73	170.99
7.25	184.15	8T-1790	3		0.63	15.98	6.34	161.16
7.25	184.15	8J-4510	4		0.63	15.98	6.34	161.16
7.25	184.15	5J-4993	1		0.38	9.63	6.34	161.16
7.25	184.15	8C-5112	3	3	0.63	15.98	6.34	161.16
7.25	184.15	8C-5115	3	6	0.63	15.98	6.34	161.16
7.43	188.60	158-3029			0.08	2.00	7.75	196.85
7.48	190.00	191-2362	3	3	0.38	9.63	6.72	170.62

# Piston Seals



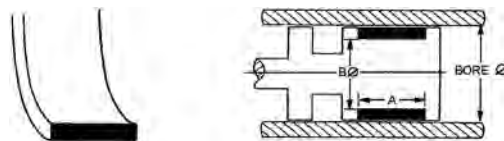
BORE DIAMETER		PART NUMBER	SEAL TYPE	OVERSIZE DIM	A GROOVE WIDTH (± .002 in)		B GROOVE DIA. (± .003 in)	
(in)	(mm)				(in)	(mm)	(in)	(mm)
7.48	190.00	125-1286	3		0.38	9.63	6.72	170.62
7.50	190.50	9J-5567	4		0.63	15.98	6.59	167.51
7.50	190.50	9J-7117	1		0.38	9.63	6.59	167.51
7.50	190.50	3E-4272	2		0.16	4.06	6.98	177.34
7.50	190.50	8C-5118	3	3	0.63	15.98	6.59	167.51
7.50	190.50	8C-5121	3	6	0.63	15.98	6.59	167.51
7.50	190.50	8C-0558	3	3	0.38	9.63	6.59	167.51
7.50	190.50	8C-0561	3	6	0.38	9.63	6.59	167.51
7.50	190.50	8T-1791	3		0.63	15.98	6.59	167.51
7.75	196.85	8T-1792	3		0.63	15.98	6.84	173.86
7.75	196.85	8J-5644	4		0.63	15.98	6.84	173.86
7.75	196.85	8C-5124	3	3	0.63	15.98	6.84	173.86
7.75	196.85	8C-5127	3	6	0.63	15.98	6.84	173.86
7.75	196.85	5J-7016	1		0.38	9.63	6.84	173.86
7.75	196.85	3E-4273	2		0.16	4.06	7.23	183.69
7.75	196.85	191-4563	3	3	0.38	9.63	6.84	173.86
7.87	200.00	133-3118	3	3	0.38	9.63	6.88	174.73
7.87	200.00	8C-9179	3		0.38	9.63	6.88	174.73
7.93	201.30	158-3030			0.08	2.00	8.25	209.54
8.00	203.20	3E-4274	2		0.16	4.06	7.48	190.04
8.00	203.20	3E-4280	1		0.38	9.60	7.25	184.25
8.25	209.55	3E-4275	2		0.16	4.06	7.73	196.39
8.25	209.55	8T-8302	3	6	0.38	9.63	7.26	184.28
8.25	209.55	8T-8299	3	3	0.38	9.63	7.26	184.28
8.25	209.55	8J-4390	4		0.63	15.98	7.26	184.28
8.25	209.55	8T-1793	3		0.63	15.98	7.26	184.28
8.25	209.55	5J-5559	1		0.38	9.63	7.26	184.28
8.25	209.55	8C-5130	3	3	0.63	15.98	7.26	184.28
8.25	209.55	8C-5133	3	6	0.63	15.98	7.26	184.28
8.34	211.93	4I-6443			0.35	8.90	8.50	215.88
8.50	215.90	3G-4762	4		0.63	15.98	7.51	190.63
8.50	215.90	3E-4276	2		0.16	4.06	7.98	202.74
8.50	215.90	9T-0119	3		0.63	15.98	7.51	190.63
8.50	215.90	8C-5136	3	3	0.63	15.98	7.51	190.63
8.50	215.90	6J-9385	1		0.38	9.63	7.51	190.63
8.50	215.90	8C-5139	3	6	0.63	15.98	7.51	190.63
8.66	220.00	8C-9182	3		0.38	9.63	7.67	194.74
8.75	222.25	108-6212			0.32	8.25	9.58	243.40
9.00	228.60	3E-4281	1		0.38	9.60	8.14	206.68
9.25	234.95	4T-4143	3		0.38	9.63	8.26	209.68
9.25	234.95	108-6198			0.47	11.99	9.26	235.25

# Piston Seals



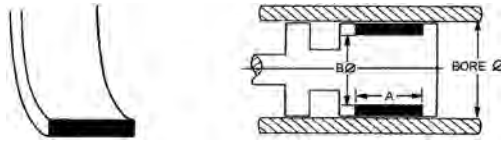
BORE DIAMETER		PART NUMBER	SEAL TYPE	OVERSIZE DIM	A GROOVE WIDTH (± .002 in)		B GROOVE DIA. (± .003 in)	
(in)	(mm)				(in)	(mm)	(in)	(mm)
9.25	234.95	8T-8384	3	6	0.38	9.63	8.26	209.68
9.25	234.95	5J-7019	1		0.38	9.63	8.26	209.68
9.28	235.71	8T-8305	3	3	0.38	9.63	8.26	209.68
9.50	241.30	9X-7321	3		0.38	9.63	8.51	216.04
9.50	241.30	123-3129			0.79	20.00	8.49	215.76
9.50	241.30	3E-4282	1		0.38	9.60	8.64	219.38
10.00	254.00	121-4179	1		0.44	11.18	8.88	225.55
10.00	254.00	9J-3406	2		0.69	17.53	8.88	225.55
10.00	254.00	8C-5142	3	3	0.69	17.53	8.88	225.55
10.00	254.00	8C-5145	3	6	0.69	17.53	8.88	225.55
10.00	254.00	8T-1794	3		0.69	17.53	8.88	225.55
10.25	260.35	8T-1795	3		0.69	17.53	9.13	231.90
10.25	260.35	8C-5148	3	3	0.69	17.53	9.13	231.90
10.25	260.35	8C-5151	3	6	0.69	17.53	9.13	231.90
10.50	266.70	8C-5154	3	3	0.69	17.53	9.38	238.25
10.50	266.70	8C-5157	3	6	0.69	17.53	9.38	238.25
10.50	266.70	8T-1796	3		0.69	17.53	9.38	238.25
10.50	266.70	5J-6762	1		0.44	11.18	9.38	238.25
10.50	266.70	3G-4765	2		0.69	17.53	9.38	238.25
11.00	279.32	8C-9156			5.04	127.97	11.18	284.09
11.00	279.40	6E-0253	1		0.69	17.53	9.88	250.95
11.00	279.40	108-0125	3		0.69	17.53	9.88	250.95
11.00	279.40	129-3706	3	3	0.69	17.53	9.88	250.95
11.50	292.10	8C-5163	3	6	0.69	17.53	10.38	263.65
11.50	292.10	8C-5160	3	3	0.69	17.53	10.38	263.65
11.50	292.10	8T-1797	3		0.69	17.53	10.38	263.65
12.00	304.80	9X-7326	3		0.69	17.53	10.88	276.35
12.25	311.15	8T-6923	1		0.44	11.18	8.38	212.85
12.50	317.50	6E-0307	3		0.69	17.53	11.38	289.05
12.50	317.50	129-3712	3	3	0.69	17.53	11.38	289.05
13.00	330.20	129-3709	3	3	0.69	17.53	11.88	301.75
13.00	330.20	108-6211	3		0.69	17.53	11.88	301.75
13.13	333.38	8C-9155			5.03	127.71	12.93	328.52
13.50	342.90	121-4185	3		0.69	17.53	12.40	314.95
13.50	342.90	130-1857	3	3	0.69	17.53	12.40	314.95
14.25	361.95	174-9634	3		0.69	17.53	13.13	333.50

# Piston Wear Rings



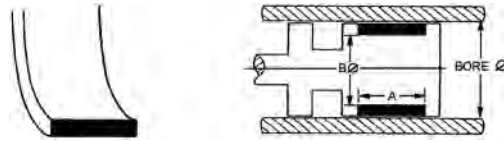
O.D.		PART NUMBER	OVERSIZE DIM	A WIDTH (± .03 in)		B I.D. (± .08 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)
1.50	38.10	5J-9073		0.50	12.60	1.24	31.53
2.00	50.80	5J-7942		0.50	12.60	1.74	44.22
2.25	57.15	7H-2423		0.89	22.50	1.99	50.57
2.25	57.15	8C-4803	6	0.89	22.50	1.99	50.57
2.25	57.15	8C-4802	3	0.89	22.50	1.99	50.57
2.50	63.50	8C-4804	3	0.75	19.05	2.24	56.92
2.50	63.50	8C-4805	6	0.75	19.05	2.24	56.92
2.50	63.50	8J-6212		0.75	19.05	2.24	56.92
2.68	68.10	118-2716		0.21	5.40	3.63	92.10
2.75	69.85	8J-0112		0.94	23.82	2.49	63.27
2.75	69.85	8C-4806	3	0.94	23.82	2.49	63.27
2.75	69.85	8C-4807	6	0.94	23.82	2.49	63.27
2.76	70.00	118-2717		0.58	14.80	2.95	75.00
2.76	70.00	118-2727		0.06	1.40	2.95	75.00
3.00	76.20	8T-8362	6	1.00	25.40	2.74	69.62
3.00	76.20	8T-8361	3	1.00	25.40	2.74	69.62
3.00	76.20	8C-4948	6	1.00	25.40	2.80	71.06
3.00	76.20	8C-4947	3	1.00	25.40	2.80	71.06
3.00	76.20	8T-6443		1.00	25.40	2.80	71.06
3.00	76.20	6J-5733		1.00	25.40	2.74	69.62
3.15	80.00	195-0402	3	0.23	5.90	2.83	71.98
3.15	80.00	105-7252		0.24	6.15	2.83	71.98
3.15	80.00	099-7002		1.19	30.10	2.91	73.98
3.25	82.55	8T-6683		1.13	28.70	3.05	77.41
3.25	82.55	8J-2577		0.75	19.05	2.99	75.97
3.25	82.55	8J-6371		1.13	28.70	2.99	75.97
3.25	82.55	8C-4808	3	1.13	28.70	2.99	75.97
3.25	82.55	8C-4809	6	1.13	28.70	2.99	75.97
3.25	82.55	7U-7647		0.75	19.05	3.50	88.90
3.35	85.00	197-7983	3	0.24	6.00	3.03	76.98
3.35	85.00	197-7982	3	1.17	29.80	3.11	78.98
3.50	88.90	4J-3236		1.50	38.00	3.24	82.32
3.50	88.90	7J-9885		1.12	28.57	3.24	82.32
3.50	88.90	8T-8318	6	1.12	28.57	3.24	82.32
3.50	88.90	8T-8317	3	1.12	28.57	3.24	82.32
3.50	88.90	8T-8332	6	1.50	38.00	3.24	82.32
3.50	88.90	8T-8331	3	1.50	38.00	3.24	82.32
3.54	90.00	105-2630		0.24	6.15	3.23	81.98
3.54	90.00	099-6976		1.19	30.10	3.31	83.98
3.54	90.00	195-0399	3	1.17	29.80	3.57	90.76
3.54	90.00	195-0400	3	0.23	5.90	3.23	81.98
3.75	95.25	8C-0548	6	1.25	31.65	3.49	88.67
3.75	95.25	8C-0547	3	1.25	31.65	3.49	88.67
3.75	95.25	5J-8019		1.25	31.65	3.49	88.67

# Piston Wear Rings



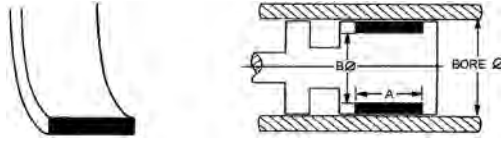
O.D.		PART NUMBER	OVERSIZE DIM	A WIDTH (± .03 in)		B I.D. (± .08 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)
3.75	95.25	8T-8338	6	1.00	25.40	3.49	88.67
3.75	95.25	8T-8337	3	1.00	25.40	3.49	88.67
3.75	95.25	8J-6245		1.00	25.40	3.49	88.67
3.94	100.00	195-0396	3	0.23	5.90	3.62	91.93
3.94	100.00	133-3097	3	1.19	30.30	3.70	93.87
3.94	100.00	133-3096	3	0.25	6.25	3.62	91.93
3.94	100.00	093-1628		0.25	6.25	3.62	91.93
3.94	100.00	093-1605		1.19	30.30	3.70	93.87
3.94	100.00	197-7981	3	0.23	5.90	3.70	93.87
3.94	100.00	197-7980	3	0.23	5.90	3.62	91.93
3.94	100.00	197-7979	3	0.88	22.30	3.70	93.87
3.98	101.10	125-9696		0.30	7.60	4.33	110.00
4.00	101.60	8T-8312	6	1.00	25.30	3.74	95.02
4.00	101.60	8T-8311	3	1.00	25.30	3.74	95.02
4.00	101.60	8T-8336	6	1.25	31.65	3.74	95.02
4.00	101.60	8T-8335	3	1.25	31.65	3.74	95.02
4.00	101.60	3D-4522		0.71	18.13	3.74	94.99
4.00	101.60	1M-1571		1.25	31.65	3.74	95.02
4.00	101.60	5J-7154		0.62	15.75	3.74	95.02
4.00	101.60	6J-2797		1.00	25.30	3.74	95.02
4.00	101.60	8C-0539	3	0.62	15.77	3.74	95.02
4.13	105.00	125-9699		0.58	14.80	4.33	110.00
4.25	107.95	8T-8330	6	1.50	38.00	3.99	101.37
4.25	107.95	8T-8329	3	1.50	38.00	3.99	101.37
4.25	107.95	8T-8326	6	1.25	31.75	3.99	101.37
4.25	107.95	8T-8325	3	1.25	31.75	3.99	101.37
4.25	107.95	8C-0542	6	1.00	25.32	3.99	101.37
4.25	107.95	8C-0541	3	1.00	25.32	3.99	101.37
4.25	107.95	5J-8157		1.50	38.00	3.99	101.37
4.25	107.95	6J-4003		1.25	31.75	3.99	101.37
4.25	107.95	6J-7264		1.00	25.32	3.99	101.37
4.33	110.00	197-7976	3	0.88	22.30	4.09	103.87
4.33	110.00	197-7975	3	1.37	34.80	4.09	103.87
4.33	110.00	197-7974	3	1.17	29.80	4.09	103.87
4.33	110.00	197-7973	3	1.37	34.80	4.09	103.87
4.33	110.00	197-7965	3	0.23	5.90	4.01	101.93
4.33	110.00	197-7964	3	0.23	5.90	4.09	103.87
4.33	110.00	197-7963	3	1.07	27.30	4.09	103.87
4.33	110.00	133-3100	3	0.25	6.25	4.01	101.98
4.33	110.00	133-3101	3	1.19	30.30	4.09	103.87
4.33	110.00	195-0391	3	0.23	5.90	4.01	101.93
4.33	110.00	093-1603		1.19	30.30	4.09	103.87
4.33	110.00	093-1629		0.25	6.25	4.01	101.98
4.37	111.10	118-2721		0.30	7.60	4.72	120.00

# Piston Wear Rings



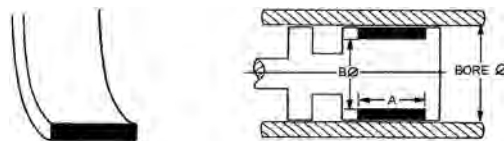
O.D.		PART NUMBER	OVERSIZE DIM	A WIDTH (± .03 in)		B I.D. (± .08 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)
4.50	114.30	8T-8356	6	1.50	38.00	4.24	107.72
4.50	114.30	8T-8355	3	1.50	38.00	4.24	107.72
4.50	114.30	8T-8328	6	1.00	25.32	4.24	107.72
4.50	114.30	8T-8327	3	1.00	25.32	4.24	107.72
4.50	114.30	8C-4810	3	1.87	47.52	4.24	107.72
4.50	114.30	2D-0829		0.79	19.95	4.24	107.72
4.50	114.30	4J-2620		1.50	38.00	4.24	107.72
4.50	114.30	4J-3745		1.00	25.32	4.24	107.72
4.50	114.30	4T-8758		1.87	47.52	4.24	107.72
4.50	114.30	4J-4605		0.93	23.72	4.24	107.72
4.50	114.30	6J-4175		1.87	47.52	4.24	107.72
4.53	115.00	118-2724		0.58	14.80	4.72	120.00
4.72	120.00	123-3153	3	1.19	30.30	4.48	113.87
4.72	120.00	108-2888	3	0.25	6.25	4.41	111.93
4.72	120.00	108-2885	3	1.39	35.30	4.48	113.87
4.72	120.00	191-2181	3	0.23	5.90	4.48	113.87
4.72	120.00	191-2180	3	0.23	5.90	4.41	111.93
4.72	120.00	191-1883	3	1.07	27.30	4.48	113.87
4.72	120.00	093-1630		0.25	6.25	4.41	111.93
4.72	120.00	093-1604		1.19	30.30	4.48	113.87
4.72	120.00	087-5505		1.39	35.30	4.48	113.87
4.72	120.00	197-7969	3	0.31	7.90	4.53	115.00
4.72	120.00	197-7968	3	0.88	22.30	4.48	113.87
4.72	120.00	197-7971	3	0.12	3.00	4.75	120.76
4.72	120.00	197-7970	3	0.31	7.90	4.41	112.00
4.75	120.65	4T-9248		1.25	31.75	4.49	114.07
4.75	120.65	4J-3342		1.25	31.65	4.49	114.07
4.75	120.65	7J-8879		0.39	9.97	3.99	101.24
4.75	120.65	8T-8390		1.00	25.40	4.49	114.07
4.75	120.65	191-1882	3	0.99	25.15	4.49	114.07
4.75	120.65	8T-8346	6	1.25	31.75	4.49	114.07
4.75	120.65	8T-8345	3	1.25	31.75	4.49	114.07
4.92	125.00	135-7939		0.58	14.80	5.12	130.00
5.00	127.00	8T-8340	6	1.56	39.67	4.74	120.42
5.00	127.00	8T-8339	3	1.56	39.67	4.74	120.42
5.00	127.00	8M-4226		1.25	31.65	4.74	120.42
5.00	127.00	8C-4813	3	1.12	28.57	4.74	120.42
5.00	127.00	8C-4812	3	1.12	28.57	4.74	120.42
5.00	127.00	7J-1627		0.86	21.80	4.74	120.42
5.00	127.00	4J-3420		1.56	39.67	4.74	120.42
5.00	127.00	4J-4630		1.12	28.57	4.74	120.42
5.12	130.00	197-7966	3	0.31	7.90	4.92	125.00
5.12	130.00	197-7962	3	0.31	7.90	4.80	122.00
5.12	130.00	197-7961	3	0.12	3.00	5.15	130.76

# Piston Wear Rings



O.D.		PART NUMBER	OVERSIZE DIM	A WIDTH (± .03 in)		B I.D. (± .08 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)
5.12	130.00	197-7959	3	0.31	7.90	4.92	125.00
5.12	130.00	7Y-4636		1.59	40.30	4.84	122.87
5.12	130.00	7Y-4632		0.32	8.25	4.80	121.93
5.12	130.00	108-2884	3	1.59	40.30	4.84	122.87
5.12	130.00	108-2890	3	0.32	8.25	4.80	121.93
5.25	133.35	191-1881	3	1.02	25.83	4.99	126.77
5.25	133.35	191-1880	3	1.02	25.83	5.12	129.95
5.25	133.35	8T-8360	6	1.50	38.10	4.99	126.77
5.25	133.35	8T-8359	3	1.50	38.10	4.99	126.77
5.25	133.35	9J-7978		1.50	38.10	4.99	126.77
5.25	133.35	7J-8878		3.92	99.69	4.50	114.25
5.25	133.35	2D-0714		1.03	26.08	4.99	126.77
5.25	133.35	4J-3887		1.32	33.60	4.99	126.77
5.50	139.70	4J-3518		2.00	50.70	5.24	133.12
5.50	139.70	3J-9026		1.37	34.82	5.24	133.12
5.50	139.70	4J-4606		1.25	31.65	5.24	133.12
5.50	139.70	7J-1731		1.75	44.45	5.24	133.12
5.50	139.70	7J-3303		1.62	41.27	5.24	133.12
5.50	139.70	9J-7191		1.75	44.45	5.12	129.96
5.50	139.70	8C-4817	3	1.37	34.80	5.24	133.10
5.50	139.70	8C-4816	3	1.37	34.82	5.24	133.12
5.50	139.70	8C-4815	3	1.75	44.45	5.24	133.12
5.50	139.70	8C-4814	3	1.75	44.45	5.24	133.12
5.50	139.70	8C-4822	3	2.25	57.15	5.24	133.12
5.50	139.70	8C-4821	6	2.00	50.70	5.24	133.12
5.50	139.70	8C-4820	3	2.00	50.70	5.24	133.12
5.50	139.70	8C-4818	3	1.75	44.45	5.12	129.96
5.50	139.70	8T-8316	6	1.25	31.65	5.24	133.12
5.50	139.70	8T-8315	3	1.25	31.65	5.24	133.12
5.50	139.70	8C-9112		2.00	50.70	5.24	133.12
5.50	139.70	8J-1690		2.25	57.15	5.24	133.12
5.51	140.00	087-5429		1.78	45.30	5.23	132.87
5.51	140.00	096-1800		0.32	8.25	5.19	131.93
5.51	140.00	107-6263		0.38	9.70	5.31	134.87
5.51	140.00	107-6264		0.32	8.25	5.19	131.93
5.51	140.00	191-4578	3	0.31	7.90	5.19	131.93
5.51	140.00	191-4577	3	0.31	7.90	5.20	132.00
5.51	140.00	191-4576	3	0.37	9.50	5.31	135.00
5.51	140.00	191-4575	3	0.12	3.00	5.28	134.00
5.51	140.00	135-6988	3	1.78	45.30	5.23	132.87
5.51	140.00	118-3955		1.78	45.30	5.23	132.87
5.51	140.00	133-3104	3	0.32	8.25	5.19	131.93
5.51	140.00	133-3105	3	0.38	9.70	5.31	134.87
5.51	140.00	5U-4278		0.75	19.05	5.25	133.30

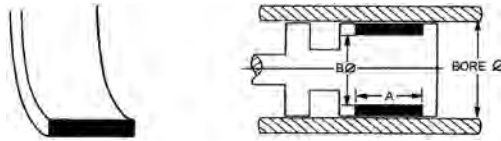
# Piston Wear Rings



O.D.		PART NUMBER	OVERSIZE DIM	A WIDTH (± .03 in)		B I.D. (± .08 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)
5.51	140.00	197-7957	3	0.31	7.90	5.20	132.00
5.51	140.00	197-7984	3	0.12	3.00	5.54	140.76
5.67	144.00	099-0695		0.15	3.76	5.97	151.52
5.67	144.00	099-0674		0.15	3.76	5.97	151.52
5.75	146.05	9J-4164		1.62	41.27	5.49	139.47
5.75	146.05	6J-3074		2.00	50.70	5.49	139.47
5.91	150.00	7Y-4697		1.78	45.30	5.62	142.87
5.91	150.00	197-7955	3	0.31	7.90	5.59	142.00
5.91	150.00	197-7954	3	0.12	3.00	4.16	105.76
5.91	150.00	197-7953	3	0.37	9.50	5.71	145.04
5.91	150.00	096-1581		0.32	8.25	5.59	141.93
5.91	150.00	108-2889	3	0.32	8.25	5.59	141.93
5.91	150.00	108-2886	3	1.78	45.30	5.62	142.87
6.00	152.40	9J-5860		1.50	38.10	5.74	145.82
6.00	152.40	8J-1746		2.75	69.85	5.62	142.66
6.00	152.40	8T-8344	6	1.32	33.60	5.74	145.82
6.00	152.40	8T-8343	3	1.32	33.60	5.74	145.82
6.00	152.40	8T-8350	6	1.75	44.45	5.74	145.82
6.00	152.40	8T-8349	3	1.75	44.45	5.74	145.82
6.00	152.40	8T-8348	6	1.50	38.10	5.74	145.82
6.00	152.40	8T-8347	3	1.50	38.10	5.74	145.82
6.00	152.40	8C-4827	6	2.75	69.85	5.62	142.67
6.00	152.40	8C-4826	3	2.75	69.85	5.62	142.67
6.00	152.40	8C-4825	6	1.07	27.25	5.74	145.82
6.00	152.40	8C-4824	3	1.07	27.25	5.74	145.82
6.00	152.40	1J-0708		1.32	33.60	5.74	145.82
6.00	152.40	4J-7503		1.00	25.30	5.62	142.66
6.00	152.40	4T-6930		2.75	69.85	5.62	142.67
6.00	152.40	3G-6537		1.07	27.25	5.74	145.82
6.00	152.40	8C-0544	6	1.25	31.65	5.74	145.82
6.00	152.40	8C-0543	3	1.25	31.65	5.74	145.82
6.00	152.40	7J-8877		0.39	9.97	5.25	133.30
6.00	152.40	7J-5326		1.75	44.45	5.74	145.82
6.00	152.40	5J-0014		1.25	31.65	5.74	145.82
6.25	158.75	5J-3326		1.50	38.00	5.99	152.17
6.25	158.75	8C-4829	6	1.75	44.45	5.99	152.17
6.25	158.75	8C-4828	3	1.75	44.45	5.99	152.17
6.25	158.75	9J-5550		1.75	44.45	5.99	152.17
6.25	158.75	8T-8358	6	1.50	38.00	5.99	152.17
6.25	158.75	8T-8357	3	1.50	38.00	5.99	152.17
6.30	160.00	087-5539		1.78	45.30	6.02	152.87
6.30	160.00	096-3201		0.36	9.25	5.98	151.93
6.30	160.00	133-3108	3	0.36	9.25	5.98	151.93
6.30	160.00	133-3109	3	1.78	45.30	6.02	152.87

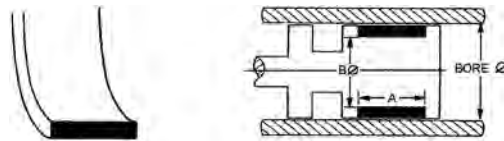


# Piston Wear Rings



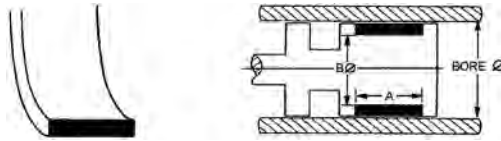
O.D.		PART NUMBER	OVERSIZE DIM	A WIDTH (± .03 in)		B I.D. (± .08 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)
6.50	165.10	9X-7554	3	2.86	72.64	6.24	158.50
6.50	165.10	9X-7553	3	2.74	69.70	6.24	158.50
6.50	165.10	8T-8354	6	1.50	38.00	6.24	158.52
6.50	165.10	8T-8353	3	1.50	38.00	6.24	158.52
6.50	165.10	9J-0811		3.50	88.90	6.24	158.52
6.50	165.10	9J-3055		2.88	73.03	6.24	158.52
6.50	165.10	9J-9806		1.75	44.45	6.24	158.52
6.50	165.10	9T-0096		1.50	38.00	6.24	158.52
6.50	165.10	8C-4831	6	1.75	44.45	6.24	158.52
6.50	165.10	8C-4830	3	1.75	44.45	6.24	158.52
6.50	165.10	8C-4835	6	3.50	88.90	5.99	152.22
6.50	165.10	8C-4834	3	3.50	88.90	5.99	152.22
6.50	165.10	8C-4833	6	2.00	50.80	6.24	158.52
6.50	165.10	8C-4832	3	2.00	50.80	6.24	158.52
6.50	165.10	8C-4837	6	1.37	34.82	6.24	158.52
6.50	165.10	8C-4836	3	1.37	34.82	6.24	158.52
6.50	165.10	8C-9111		2.00	50.80	6.24	158.52
6.50	165.10	5J-0058		1.25	31.65	6.24	158.52
6.50	165.10	7J-1938		2.00	50.80	6.24	158.52
6.50	165.10	7J-8881		3.50	88.90	5.99	152.22
6.50	165.10	7J-8880		0.25	6.25	5.99	152.15
6.50	165.10	7J-9232		2.88	73.03	6.50	165.10
6.50	165.10	8C-0546	6	1.25	31.65	6.24	158.52
6.50	165.10	8C-0545	3	1.25	31.65	6.24	158.52
6.50	165.10	3J-9703		1.50	38.00	6.24	158.52
6.50	165.10	3J-9027		1.37	34.82	6.24	158.52
6.50	165.10	4J-7532		1.00	25.30	6.12	155.36
6.68	169.77	5I-8589		0.35	8.90	6.99	177.67
6.69	170.00	096-5609		0.36	9.25	6.38	161.93
6.69	170.00	105-7262		1.98	50.30	6.37	161.87
6.69	170.00	133-3112	3	0.36	9.25	6.38	161.93
6.69	170.00	133-3113	3	1.98	50.30	6.37	161.87
6.88	174.63	7J-3302		2.00	50.80	6.62	168.05
7.00	177.80	3G-5098		2.00	50.80	6.74	171.22
7.00	177.80	3G-4641		3.50	88.90	6.74	171.22
7.00	177.80	3G-3470		2.37	60.30	6.74	171.22
7.00	177.80	9J-0711		3.12	79.35	6.74	171.22
7.00	177.80	8T-8364	6	2.00	50.80	6.74	171.22
7.00	177.80	8T-8363	3	2.00	50.80	6.74	171.22
7.00	177.80	8M-4228		1.75	44.45	6.74	171.22
7.00	177.80	8C-4839	6	1.75	44.45	6.74	171.22
7.00	177.80	8C-4838	3	1.75	44.45	6.74	171.22
7.00	177.80	8C-4840	3	3.12	79.37	6.74	171.22
7.09	180.00	105-2653		2.18	55.30	6.77	171.86

# Piston Wear Rings



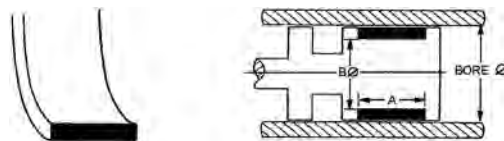
O.D.		PART NUMBER	OVERSIZE DIM	A WIDTH (± .03 in)		B I.D. (± .08 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)
7.09	180.00	096-5167		0.36	9.25	6.77	171.93
7.09	180.00	133-3116	3	0.36	9.25	6.77	171.93
7.09	180.00	133-3117	3	2.18	55.30	6.77	171.86
7.09	180.00	191-1879	3	1.11	28.20	6.77	171.86
7.09	180.00	191-2182	3	0.35	8.90	6.77	171.93
7.25	184.15	8C-4846	3	3.07	78.00	6.87	174.41
7.25	184.15	8J-1662		1.40	35.60	6.99	177.57
7.25	184.15	8T-8342	6	2.00	50.70	6.99	177.57
7.25	184.15	8T-8341	3	2.00	50.70	6.99	177.57
7.25	184.15	8T-8320	6	1.40	35.60	6.99	177.57
7.25	184.15	8T-8319	3	1.40	35.60	6.99	177.57
7.25	184.15	1U-1734		3.07	78.00	6.87	174.41
7.25	184.15	1J-2674		2.00	50.70	6.99	177.57
7.25	184.15	3J-7848		2.00	50.70	6.99	177.57
7.48	190.00	191-4574	3	0.35	8.90	7.16	181.93
7.48	190.00	191-1878	3	2.16	54.80	7.16	181.86
7.50	190.50	9J-5562		2.50	63.50	7.24	183.92
7.50	190.50	8J-9936		2.37	60.32	7.24	183.92
7.50	190.50	8C-4849	6	2.50	63.50	7.24	183.92
7.50	190.50	8C-4848	3	2.50	63.50	7.24	183.92
7.50	190.50	1U-2218		1.50	38.00	7.24	183.92
7.50	190.50	8C-0550	6	1.50	38.00	7.24	183.92
7.50	190.50	8C-0549	3	1.50	38.00	7.24	183.92
7.75	196.85	7J-9247		3.50	88.90	7.49	190.27
7.75	196.85	7J-8886		0.25	6.25	7.37	187.12
7.75	196.85	3G-4625		4.50	114.30	7.37	187.12
7.75	196.85	4T-6932		4.50	114.30	7.37	187.17
7.75	196.85	8C-4854	3	3.50	88.90	7.49	190.27
7.75	196.85	8C-4853	6	4.50	114.30	7.37	187.17
7.75	196.85	8C-4852	3	4.50	114.30	7.37	187.17
7.75	196.85	8C-4851	6	2.00	50.80	7.49	190.27
7.75	196.85	8C-4850	3	2.00	50.80	7.49	190.27
7.75	196.85	9J-5037		1.62	41.27	7.49	190.27
7.75	196.85	9J-3624		2.00	50.80	7.49	190.27
7.75	196.85	108-2880	3	1.62	41.27	7.49	190.27
7.87	200.00	9X-3570		1.77	45.00	7.61	193.37
7.87	200.00	085-7248		0.36	9.25	7.56	191.93
7.87	200.00	133-4884	3	0.36	9.25	7.56	191.93
7.87	200.00	133-4885	3	2.36	60.00	7.61	193.42
7.87	200.00	197-7952	3	1.11	28.20	7.55	191.86
8.00	203.15	1J-2100		1.75	44.36	8.25	209.55
8.00	203.15	8T-7695		5.00	126.90	7.74	196.62
8.25	209.55	8J-8826		2.75	69.85	7.99	202.97
8.25	209.55	8J-8375		2.12	53.97	7.99	202.97

# Piston Wear Rings



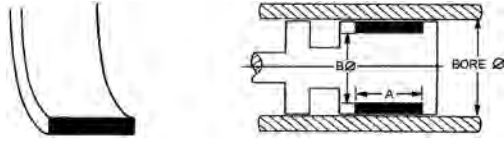
O.D.		PART NUMBER	OVERSIZE DIM	A WIDTH (± .03 in)		B I.D. (± .08 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)
8.25	209.55	8T-8324	6	1.75	44.35	7.99	202.97
8.25	209.55	8T-8323	3	1.75	44.35	7.99	202.97
8.25	209.55	8T-8334	6	1.50	38.00	7.99	202.97
8.25	209.55	8T-8333	3	1.50	38.00	7.99	202.97
8.25	209.55	8C-4856	3	2.12	53.97	7.99	202.97
8.25	209.55	8C-4858	3	2.25	57.15	7.99	202.97
8.25	209.55	8C-4857	6	2.12	53.97	7.99	202.97
8.25	209.55	8C-4867	6	3.50	88.90	7.74	196.57
8.25	209.55	8C-4866	3	3.50	88.90	7.74	196.57
8.25	209.55	8C-4864	3	2.00	50.80	7.87	199.81
8.25	209.55	8C-4859	6	2.25	57.15	7.99	202.97
8.25	209.55	9J-3056		4.13	104.78	7.99	202.97
8.25	209.55	2J-0745		1.50	38.00	7.99	202.97
8.25	209.55	3G-1315		4.00	101.60	7.87	199.80
8.25	209.55	4J-7376		1.50	38.00	7.99	202.97
8.25	209.55	3J-7632		2.25	57.05	7.99	202.97
8.25	209.55	3G-9882		2.00	50.80	7.87	199.81
8.25	209.55	3J-8683		1.75	44.35	7.99	202.97
8.25	209.55	7J-8887		0.50	12.75	7.74	196.60
8.25	209.55	7J-3301		2.50	63.50	7.99	202.97
8.25	209.55	4T-9320		3.50	88.90	7.74	196.57
8.50	215.90	6J-9365		2.00	50.70	8.24	209.32
8.50	215.90	7J-8064		2.37	60.30	8.24	209.32
8.50	215.90	8C-4869	6	2.37	60.30	8.24	209.32
8.50	215.90	8C-4868	3	2.37	60.30	8.24	209.32
8.50	215.90	8T-7694		3.01	76.45	8.24	209.32
8.66	220.00	191-1877	3	2.35	59.70	8.40	213.37
8.66	220.00	191-1876	3	1.49	37.75	8.40	213.42
8.66	220.00	191-4573	3	0.35	8.90	8.34	211.93
8.66	220.00	125-1204		1.50	38.00	8.40	213.42
8.66	220.00	6E-0496		1.18	30.00	8.40	213.37
8.66	220.00	4I-6443		0.36	9.25	8.34	211.93
9.00	228.60	108-0120		5.00	126.92	8.75	222.23
9.25	209.55	9J-8102		0.11	2.75	0.31	7.87
9.25	234.95	8T-8322	6	1.75	44.35	8.99	228.37
9.25	234.95	8T-8321	3	1.75	44.35	8.99	228.37
9.25	234.95	4T-5949		1.97	50.00	8.99	228.37
9.25	234.95	1J-5281		1.75	44.35	8.99	228.37
9.25	234.95	7J-2087		2.25	57.15	8.99	228.37
9.25	234.95	8C-0552	6	2.25	57.15	8.99	228.37
9.25	234.95	8C-0551	3	2.25	57.15	8.99	228.37
9.50	241.30	7J-8884		3.50	88.90	8.99	228.42
9.50	241.30	7J-8883		0.50	12.78	9.25	234.95
9.50	241.30	4T-6097		1.97	50.00	9.12	231.56

# Piston Wear Rings



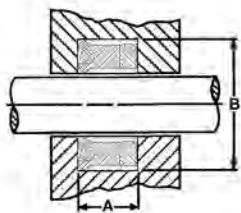
O.D.		PART NUMBER	OVERSIZE DIM	A WIDTH (± .03 in)		B I.D. (± .08 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)
9.50	241.30	8J-9932		3.08	78.20	9.24	234.72
10.00	254.00	8C-4875	6	3.25	82.55	9.74	247.42
10.00	254.00	8C-4874	3	3.25	82.55	9.74	247.42
10.00	254.00	8C-3843		2.76	70.00	9.74	247.42
10.00	254.00	9J-3369		3.25	82.55	9.74	247.42
10.00	254.00	117-8865		1.50	38.00	9.74	247.42
10.00	254.00	191-1874	3	1.49	37.75	9.74	247.42
10.03	254.81	129-3701		1.50	38.00	9.74	247.42
10.12	257.00	191-1875	3	2.74	69.70	9.74	247.42
10.25	260.35	8C-4877	6	3.50	88.90	9.74	247.47
10.25	260.35	8C-4876	3	3.50	88.90	9.74	247.47
10.25	260.35	7J-8891		3.50	88.90	9.74	247.47
10.25	260.35	7J-8890		0.25	6.25	9.74	247.40
10.50	266.70	7J-1065		3.50	88.93	10.24	260.12
10.50	266.70	8C-4879	6	2.75	69.85	10.24	260.12
10.50	266.70	8C-4878	3	2.75	69.85	10.24	260.12
10.50	266.70	8C-4881	6	4.00	101.60	10.24	260.12
10.50	266.70	8C-4880	3	4.00	101.60	10.24	260.12
10.50	266.70	8J-8900		3.75	95.25	10.24	260.12
10.50	266.70	8J-5980		4.00	101.60	10.24	260.12
10.50	266.70	9J-1159		2.75	69.85	10.24	260.12
10.75	273.05	8T-6637		6.50	165.10	10.37	263.31
11.00	279.40	108-0124		3.25	82.55	10.74	272.82
11.00	279.40	129-3703	3	1.93	49.00	10.74	272.82
11.00	279.40	129-3702	3	3.25	82.55	10.74	272.82
11.00	279.40	6E-0249		1.93	49.00	10.74	272.82
11.50	292.10	4T-4815		1.97	50.00	8.99	228.37
11.50	292.10	9J-2991		3.87	98.42	11.24	285.52
11.50	292.10	8C-4883	6	3.87	98.42	11.24	285.52
11.50	292.10	8C-4882	3	3.87	98.42	11.24	285.52
12.00	304.80	9X-7331		1.46	37.00	11.74	298.22
12.25	311.15	4T-6096		4.00	101.60	11.87	301.41
12.50	317.50	1U-2694		4.00	101.60	12.24	310.92
12.50	317.50	6E-0308		1.46	37.00	12.24	310.92
12.50	317.50	129-3705	3	1.46	37.00	12.24	310.92
13.00	330.20	129-3704	3	1.46	37.00	12.74	323.62
13.00	330.20	108-6215		1.46	37.00	12.74	323.62
13.13	333.38	8C-9155		5.03	127.71	12.93	328.52
13.13	333.38	1U-4627		7.87	200.00	12.74	323.64
13.50	342.90	121-4188		1.46	37.00	13.24	336.32
13.50	342.90	130-1859	3	1.46	37.00	13.24	336.32
13.75	349.25	6E-0247		4.02	102.00	13.49	342.67
14.25	361.95	4T-4129		4.00	101.60	13.99	355.37
15.13	384.18	4T-4825		7.72	196.00	14.74	374.44

# Piston Wear Rings



O.D.		PART NUMBER	OVERSIZE DIM	A WIDTH (± .03 in)		B I.D. (± .08 in)	
(in)	(mm)			(in)	(mm)	(in)	(mm)
16.13	409.60	9X-3564		7.72	196.00	15.71	399.00
18.38	466.78	149-0811		7.72	196.00	17.99	456.98

# U-Cup Seal Assemblies / Chevron Packing Replacement



**Note: Caterpillar is replacing Chevron Packing Seals with U-Cup Seals and spacers. Orders will be filled with the Chevron Packing Seals until the seals are completely exhausted from stock. Both Chevron Packing Seals and U-Cup Seals and spacers meet Caterpillar functional sealing requirements.**

Rod Diameter		PART NUMBER	A BORE DEPTH (± .005 in)		B BORE DIAMETER (± .012 in)	
(in)	(mm)		(in)	(mm)	(in)	(mm)
1.25	31.75	1K-7110	0.75	18.95	1.75	44.45
1.50	38.05	5F-6308	0.75	19.05	2.13	53.98
1.50	38.10	3D-1123	1.06	26.87	2.13	53.98
1.75	44.40	2K-0248	1.06	26.87	2.38	60.33
2.00	50.80	3F-9609	0.98	24.84	2.75	69.85
2.00	50.80	1K-7112	1.06	26.87	2.63	66.68
2.25	57.15	1H-4492	1.22	30.94	3.00	76.20
2.25	57.15	2K-4434	1.06	26.87	2.88	73.03
2.50	63.45	4J-5830	1.20	30.53	3.25	82.55
2.50	63.50	4F-8420	1.00	25.35	3.25	82.55
2.50	63.50	1K-7114	1.06	26.87	3.13	79.43
2.75	69.85	5F-3498	0.98	24.84	3.50	88.90
3.00	76.20	2J-1408	0.98	24.84	3.75	95.25
3.00	76.30	2K-1516	1.50	38.00	4.00	101.57
3.25	82.55	4J-6897	1.20	30.53	4.00	101.60
3.50	88.85	8M-3912	0.83	21.18	4.00	101.60
3.50	88.90	1J-2148	1.19	30.23	4.25	107.95
3.50	88.98	2K-4010	1.50	38.00	4.50	114.30
3.53	89.55	1K-7104	1.50	38.00	4.52	114.85
4.00	101.55	2K-0050	1.50	38.00	5.00	127.00
4.00	101.68	2J-6382	1.50	38.00	4.50	114.29
4.00	101.68	3K-8340	0.84	21.34	4.50	114.29
4.50	114.25	3J-9740	0.83	21.18	5.00	127.00
4.50	114.38	2K-1335	1.50	38.00	5.50	139.70
5.00	127.00	3J-7759	0.83	21.18	5.50	139.70
5.00	127.08	3K-8330	0.84	21.34	5.50	139.69
5.50	139.80	2J-3723	1.64	41.78	5.99	152.27
5.53	140.34	2K-0029	1.50	38.00	6.52	165.65
6.00	152.35	3K-8350	0.83	21.18	6.50	165.10
6.00	152.48	2J-9325	1.64	41.78	6.50	165.07
6.25	158.75	2K-1888	1.50	38.00	7.25	184.15
6.50	165.05	8M-3910	0.83	21.18	7.00	177.80
6.50	165.18	2J-6401	2.39	60.83	7.25	184.12
6.75	171.40	3J-9741	0.83	21.18	7.25	184.15
7.00	177.80	4J-1195	1.11	28.07	7.75	196.85
7.25	184.10	4J-1150	1.11	28.07	8.00	203.20
7.25	184.15	3J-7768	0.83	21.18	7.75	196.85
7.87	200.02	6V-0638	1.29	32.76	8.87	225.42
10.50	266.70	5P-9488	1.29	32.77	11.50	292.13

# Snubber Seals

PART NUMBER	GROOVE WIDTH		GROOVE DIA.	
	(mm)	(in)	(mm)	(in)
6J-1972	0.19	4.88	2.46	62.48
105-7265	0.28	7.00	1.77	44.95
6I-6921	0.28	7.00	2.64	66.95
185-9050	0.28	7.00	2.52	63.90
6I-6911	0.28	7.00	2.44	61.95
103-8341	0.28	7.00	2.44	61.90
185-9051	0.28	7.00	2.32	58.95
6I-6910	0.28	7.00	2.32	58.95
6I-6922	0.28	7.00	2.24	56.95
185-9084	0.28	7.00	2.12	53.95
121-1997	0.28	7.00	2.09	53.00
283-5995	0.35	9.00	2.05	52.00
266-7859	0.35	9.00	2.28	58.00
283-5971	0.35	9.00	2.24	57.00
6I-6784	0.35	9.00	2.95	74.90
7I-1352	0.35	9.00	2.75	69.90
6I-6786	0.35	9.00	2.56	64.92
283-5972	0.35	9.00	2.44	62.00
087-5389	0.35	9.00	4.13	104.90
155-9187	0.35	9.00	3.93	99.90
6I-6785	0.35	9.00	3.50	88.90
5I-8516	0.35	9.00	3.34	84.90
6I-6787	0.35	9.00	3.15	79.90
8T-0763	0.38	9.64	4.46	113.40
167-2304	0.41	10.49	2.50	63.55
5J-8200	0.41	10.49	2.50	63.55
6J-1450	0.41	10.49	5.13	130.23
5J-8350	0.41	10.49	4.00	101.65
9J-2944	0.41	10.49	3.25	82.60
9J-7257	0.41	10.49	3.00	76.25
3G-3752	0.41	10.49	3.00	76.25
3G-2911	0.41	10.50	2.88	73.08
289-7921	0.43	11.00	2.63	66.85
247-8789	0.43	11.00	2.44	62.00
216-3418	0.43	11.00	5.75	145.96
116-3519	0.43	11.00	4.74	120.40
116-3520	0.43	11.00	4.66	118.40
155-9096	0.43	11.00	4.42	112.18
6I-6790	0.43	11.00	4.37	110.90
200-3620	0.43	11.00	4.02	102.13
231-6843	0.43	11.00	3.61	91.60
191-3128	0.43	11.00	3.45	87.67
191-3198	0.43	11.00	3.41	86.67
242-6833	0.43	11.00	3.22	81.85
247-8791	0.43	11.00	3.03	76.85
247-8829	0.43	11.00	2.83	71.85

# Troubleshooting

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## Seal Failures

When seal failure occurs, it is important to determine the cause of failure in order to provide maximum replacement seal performance and life.

The most common causes of seal failures, other than normal wear, are improper installation, incorrect seal application and seal damage resulting from the condition of the cylinder assembly components. Other contributing factors to seal failure are contamination in the hydraulic system, seal extrusion and excessive heat. As seal failure may occur from more than one factor, it is critical to examine all aspects of the hydraulic system. These steps will assist you in analyzing seal failures. Also provided are questions to ask or clues to look for when performing each step. These steps will assist you in analyzing seal failures. Also provided are questions to ask or clues to look for when performing each step.

1. Investigate the worn seal's previous performance
2. Visually examine the worn seal for damage
3. Inspect the cylinder assembly component

### Step 1: Investigate Previous Performance

- Find out if there has been a history of failures. Repeated failures may indicate the seal itself is not the problem.
- Determine when a leak started. Can it be related to a change in maintenance or operating procedures?

### Step 2: Visual Examination

- Look for physical damage such as surface tears, scratches, extruded material, foreign particles, etc.
- Look for wear patterns on the seal lip(s).
  - Normal wear will flatten the sharp edge of the lip at its contact point.
  - Excessive lip wear can be caused by too little lubrication.
  - Rapid lip wear, often evidenced by the lip being totally blown off, can be caused by too much pressure.
  - Cracked and hardened lips can result from excessive heat.
- Measure the seal's inside and outside diameters to determine changes in the seal's dimensions.
- Look at the markings on the outside diameter of piston seals.
  - Marks should be straight and uniform if the seal was properly installed.
  - Deep scratches can be caused by a damaged bore.
  - Alternating pattern of smooth and marked areas can be a sign of an out-of-round bore.
- Has the seal's material softened or hardened?
  - Check for incompatibility between the seal's material and the system's fluid, excessive heat, and/or too little lubrication.
- Match the seal type and material to the application.

### Step 3: Inspect Cylinder Assembly Components

- Inspect the cylinder bore and rod for damage. Look for:
  - burrs, nicks, cuts, scratches or sharp edges
  - corrosion
  - flaking of rod chrome
  - bent rod

If the cause of premature seal failure cannot be determined after completing the above three steps, investigate the operating conditions of the entire hydraulic system. Investigate the system's operating pressure and hydraulic fluid and look for changes in service or operating conditions.



## Seal Installation

Improper seal installation is one of the major causes of seal failures. To provide maximum seal performance and life, the use of proper seal installation procedures is critical.

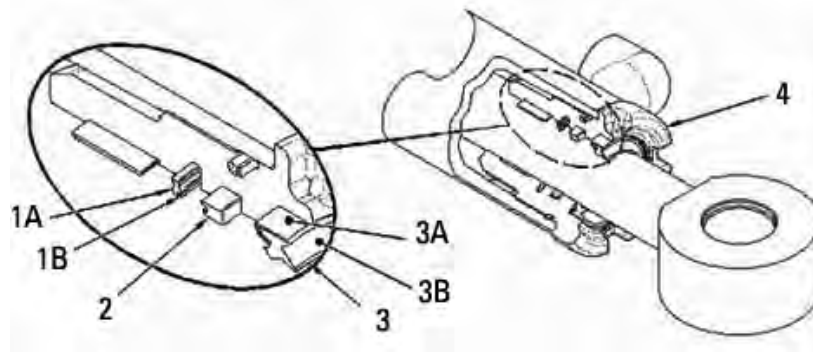
When disassembling the cylinder, place the used seals on a clean, flat work surface in the order in which they were removed. Identify the seals, making sure that none of the required seals are missing. Inspect the seals to help you determine the cause of seal failure. Look for signs of normal wear or damage caused by the condition of the cylinder components or problems related to the system's pressure or fluid (temperature or seal material compatibility).

If wear appears to be normal, replace the used seals with new Cat seals of the same type and size. If seal failure appears to be from other than normal wear, determine the corrective action to be taken in terms of: seal replacement, cylinder component repair, or adjustments to the hydraulic system's fluid or operating pressure.

### Installation of Vented Buffer Seal Assembly, U-Cup Seal, and Wiper Seal for Hydraulic Cylinders

#### Introduction

This instruction gives the procedure for installing seals in the head of hydraulic cylinders. There are three seals in this kit. The three seals are one vented buffer seal assembly, one U-Cup seal, and one double lip wiper seal.



1. Install vented buffer seal assembly (1). The seal assembly consists of one seal (1A) and one backup ring (1B).
  - a. Install vented buffer seal (1A) in the correct groove of cylinder head (4). Seal (1) has a groove for backup ring (1B). The groove must face the rod end of the cylinder. Refer to Illustration 1 for the correct assembly position.
  - b. Install backup ring (1B) in seal (1A). Refer to Illustration 1 for the correct assembly position.
2. Install the U-Cup seal (2) in head (4). Install the seal with the open end of the "U" facing toward the piston end of the cylinder. Refer to Illustration 1 for the correct assembly position.
3. Use sandpaper or emery cloth to scuff the surfaces of the counterbore in the cylinder head and the outside diameter (3A) of the wiper seal's metal shell, if applicable.
4. Clean the counterbore in the head and the outside diameter (3A) of the wiper seal's metal shell with 222-3124 Component Cleaner or 169-5464 Acetone Primer. Clean the counterbore and the metal shell until neither of the components discolor a clean white towel.

**Note:** The metal shell of the wiper seal is coated with a corrosion inhibitor. This may prevent proper bonding of the wiper seal to the cylinder head if the inhibitor is not removed. After cleaning, do not touch the counterbore or the metal shell because the oil from your fingers may prevent a good bond. Handle the seal by the lip only.
5. Apply 169-5464 Acetone Primer on the counterbore and the metal shell. Allow the primer to dry. The primer will dry in approximately 30 seconds.
6. Apply 7M-7456 Bearing Mount Compound evenly but do not apply the compound excessively. Apply the compound to the counterbore and to the metal shell. Do NOT allow the compound to contact the sealing lip.
7. Install double lip wiper seal (3) into the cylinder head. Refer to Illustration in this section for the correct assembly position. The seal should be firmly seated against the bottom of the counterbore. Wipe away any excess bearing mount compound. Allow the compound to dry for 15 minutes before assembling the hydraulic cylinder.
8. Lightly lubricate the seals with clean hydraulic fluid before installing the head on the cylinder rod.

# Installation

## Seal Installation (Cont'd.)

### General Installation Procedures:

Keep seals packaged until needed for assembly.

Double-check seal part number for accuracy.

Double-check part number dimensions with iron dimensions.

Clean and inspect all surfaces before installation.

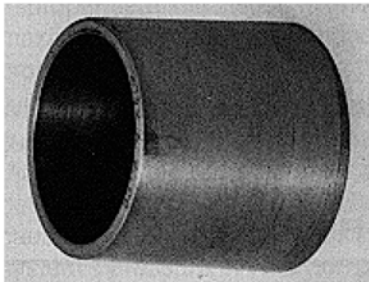
Protect the seal from any sharp edges it may come into contact with during installation.

Prelubricate the surfaces the seal will contact during installation (usually with system fluid).

Use only clean, recommended installation tools.

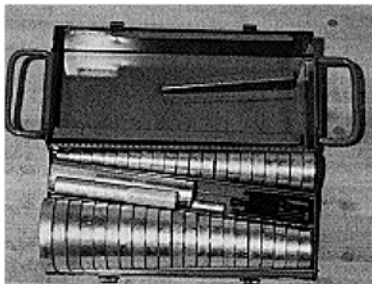
### Installation Tools:

Many of the hydraulic cylinder seals can be pressed or snapped into place by hand. The more flexible seals can be formed by hand into a kidney shape and then "popped" into the groove. Never use steel hammers, chisels, screwdrivers, or any item with a sharp surface which can damage the seal during installation. Caterpillar offers the following tools to aid in hydraulic cylinder seal installation. These tools are also listed in the Tools and Shop Products Guide (NENG2500)



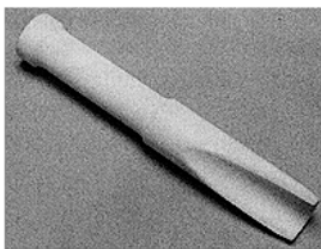
#### Rod Seal Guide

Used for guiding the head (with rod seals already installed) on rods with square shoulders. The rod shoulder can be sharp and cut the seal. This tool will guide the seal over the rod without cutting or damaging the seal



#### 1P-0510 Driver Group

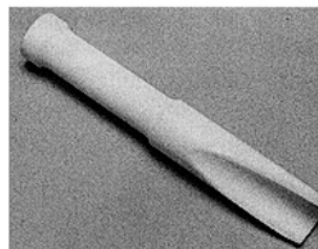
Used for installing press-in wipers flush with a housing or some distance below a housing surface. Contains a set of drive plates from 7/16" (11.1 mm) to 3.00" (76.2 mm) diameter. Drive plates are in 1/16" (1.59 mm) increments.



#### Buffer Installer

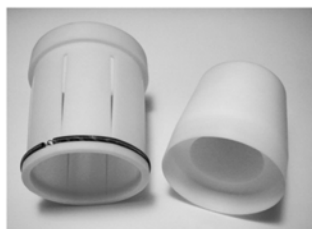
##### 4C-4069 1.5" Installer

Used to install the 8C-9122 Step Buffer Seal Assembly in hydraulic cylinders on the 910 and 910E Wheel Loader, 508 Skidders, and the D3B Track-Type Tractor.



#### 4C-4070 1.75" Installer

Used to install the 8C-9123 Step Buffer Seal Assembly in hydraulic cylinders on the 416, 426, 428, 436 and 438 Backhoe Loaders.



#### 162-7704 Seal Installer Group

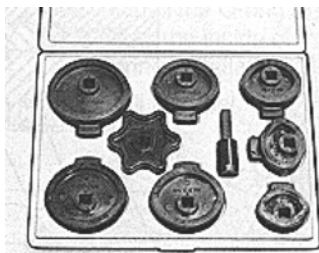
Used to install 096-7308 Seal onto 4I-3614 Cylinder Piston for 318B, 320, 320B, 322, 322B and 325 excavators. Helps prevent seal damage during installation.

## Seal Installation (Cont'd.)



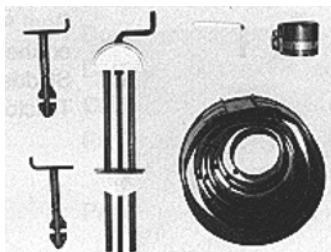
### 5P-1720 Seal Pick

Used for removal and installation of all types of oil seals. One end of the pick is pointed for prying out flexible seals. The blunt, hook end is used to align seals for installation and to eliminate the twist that occurs when installing O-ring seals. Both ends of the pick are hardened and provide much greater strength than would normally be expected from a tool of this size.



### 5P-5263 Tool Group

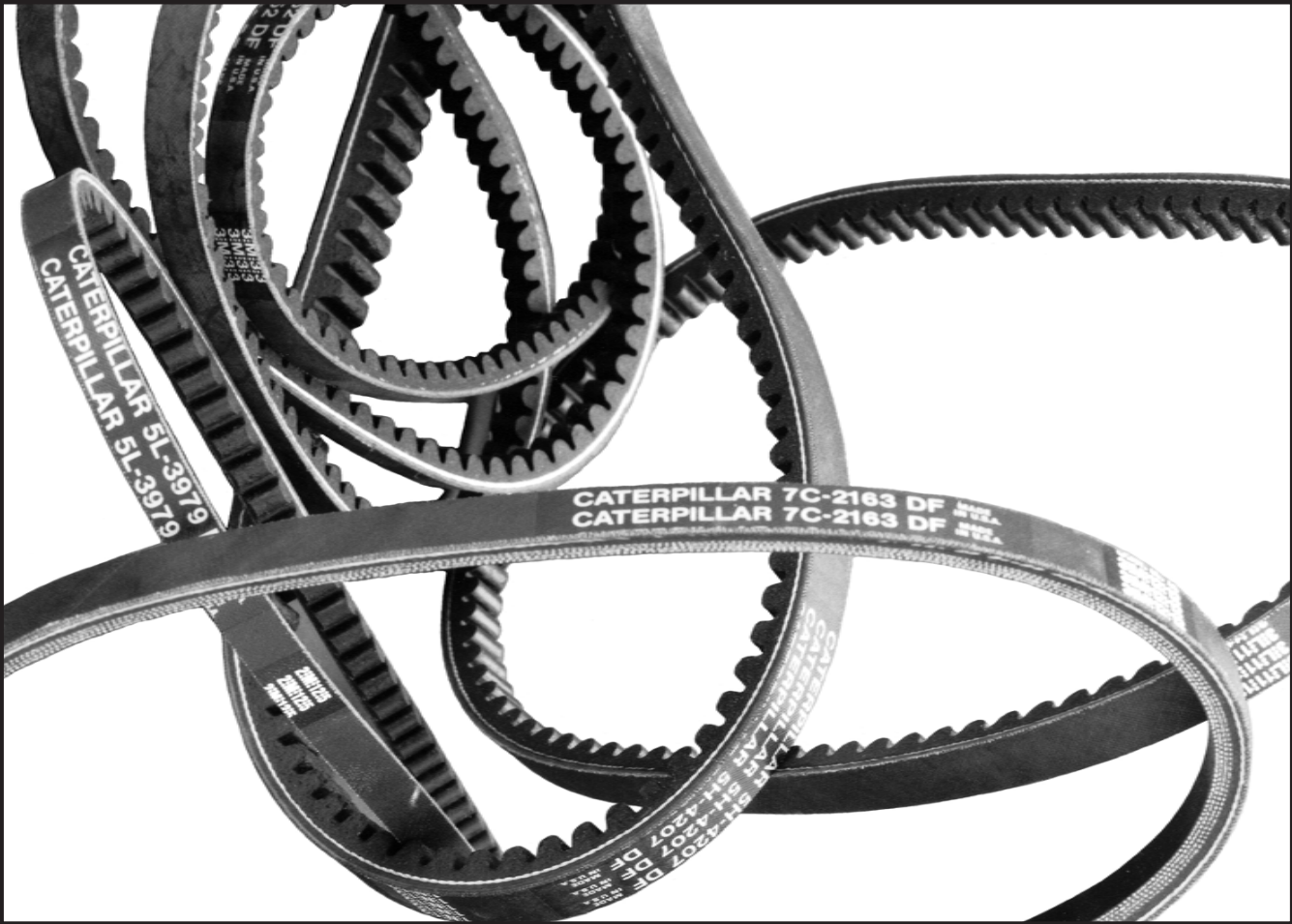
Used to install Teflon piston seals on the pistons of threaded crown hydraulic cylinders with bore sizes ranging from 2.50" (63.50 mm) to 4.00" (101.60 mm). Installation by hand can cause too much distortion, and the seal can be cut when the piston is assembled into its cylinder.



### Teflon Seal Tools

The following tools are available to install cylinder pistons and to reassemble the piston into the cylinder bore: Various size compressor assemblies 4S-9447, 4S-9448, 4S-9449, 4S-9450, 9S-9451, 9S-9452, 9S-9453, 9S-9454, 9S-9455 and 9S-9456; expander assembly 4S-9181; and clamp assembly 4S-9446. See the Numerical Parts Record for individual part details.





**ENGINE PARTS**

# Spark Plugs

## Introduction

Your Cat dealer offers engine parts that are designed by Caterpillar engineers to work and wear as a system to deliver the product and efficiency you expect from your Cat equipment. This section contains some of the most commonly purchased maintenance parts. If you don't find what you are looking for, contact your Cat dealer. We can help you choose the right parts for your machine arrangement and application.

## Engine Spark Plugs

Spark plugs enable the ignition of compressed fuel/air. Cat spark plugs are designed to provide easy removal and installation, limiting the amount of downtime required during each maintenance interval so that your engine is back up and running as soon as possible.

Part Number	Recommended Application	Engine	Engine Serial Number Prefix	For Shipping Purposes			
				Length	Width	Height	Weight
104-3170	G3408 Std plug for 11.4:1	G3400	6RJ, BAZ, 3WR, 6FW, 3NK, 6ZM, 8LW, CTP	81.28 mm	22.86 mm	22.86 mm	3.30 mm
	G3408C Std plug for 11.4:1						
	G3412 Std plug for 11.4:1						
	G3412C Std plug for 11.4:1						
128-6238	G3408C Std plug for 8.5:1	G3400	BAZ, 3WR, 6FW, 6ZM, 8LW, CTP	81.28 mm	22.86 mm	20.32 mm	3.30 mm
	G3412C Std plug for 8.5:1						
194-8518	G3500 Std plug for all Magento, EIS, and ADEM III	G3500	2JF, 4KC, 3RC, 4WD, 5JD, 8LD, 9TG, 7NJ, 4EK, 5PN, 9AW, 6JW, 8PW, 2TJ, 9FP, 5ZZ, 8JZ, 7SZ, 8BZ, GET	115.01 mm	23.01 mm	23.01 mm	5.82 mm
	All G3600 Natural Gas	G3600	3XF, 4WF, 1YG, 4CG, 4ZS, BEN, BKE, BLB				
243-4291	All G3600 Natural Gas	G3600	3XF, 4WF, 1YG, 4CG, 4ZS, BEN, BKE, BLB	116.84 mm	30.48 mm	30.48 mm	6.35 mm
	G3500 and All G3600 Bio-Gas (Landfill Gas and Digester Gas)	G3500 and G3600	3XF, 4WF, 1YG, 4CG, 4ZS, BEN, BKE, BLB, MAD, HAT, GZK, GZJ, LGS				
2N-2839	G3304 and G3306 Std plug	G3300	37Y, 07Y	75.95 mm	20.07 mm	20.07 mm	3.81 mm
	G3406 Std plug for 9.4:1 and 10.3:1	G3400	4FD, 1RK, 5NW, CTS, 6NB, 7DB, CTP				
	G3408 Std plug for 9.4:1 and 10.3:1						
	G3412 Std plug for 8.5:1, 9.7:1, and 11.4:1						
301-6663	G3500 EIS	G3500	4WD, 5JD, 8LD, 9TG, 7NJ, 4EK, 5PN, 9AW, 6JW, 8PW, 2TJ, 9FP, 5ZZ, 8JZ, 7SZ, 8BZ	114.30 mm	25.40 mm	25.40 mm	5.97 mm
346-5123	G3500B and G3500C	G3500	7EZ, CEY, CTW, CSC, CME, CFD, CTK, BGW, GAS, GSB, GWD, GZA, GZB, GZC, GZG, GZH, GZL, GZM, GZN, GZP, GZZ, CWD, CWW, CWY, B9P, GHC, GHE, HEB, ZBB, ZBC, TJB, TJC, SLY, RLP, HAL, SXY	103.96 mm	22.00 mm	22.00 mm	6.45 mm
4W-2256	G3304 and G3306 Canadian Standard Association (CSA)	G3300	37Y, 07Y	90.17 mm	25.40 mm	22.86 mm	6.10 mm
	G3406 CSA for 9.4:1 and 10.3:1	G3400	4FD, 1RK, 5NW, CTS, 6NB, 7DB, CTP				
	G3408 CSA for 9.4:1 and 10.3:1						
	G3412 CSA for 8.5:1, 9.7:1, and 11.4:1						
359-7744	G3500C and G3500E	G3500	GAS, GSB, GZA, GZB, GZC, GZE, GZH, GZL, GZM, GZN, GZZ, NGS, RLP, SSR	119.99 mm	24.99 mm	24.99 mm	7.57 mm
430-4521	G3500H	G3500	GFP, GLM, GLN, GZC	119.99 mm	24.99 mm	24.99 mm	7.29 mm

Note: Regarding Electrode Gap Setting. Refer to Operation Maintenance Manual for your engine or contact your local Cat dealer.

Exhaust includes four parts: bellows, manifold gaskets, manifold sleeves, and mufflers. The exhaust bellows connect the exhaust gas pipes and series turbochargers. The exhaust manifold gaskets seal the exhaust manifold to the cylinder head. The exhaust manifold sleeves are inserted into the exhaust ports for sealing the cylinder head. And the mufflers reduce the amount of noise emitted by the exhaust of an internal combustion engine. Cat<sup>®</sup> parts are manufactured to precise specifications and are built for durability, reliability, productivity, and less environmental impact.

## Exhaust Bellows

Part Number	For Shipping Purposes			
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
223-5664	86.36	11.02	67.31	0.20
223-5665	104.14	17.15	66.04	0.31
227-6720	139.70	21.97	101.60	0.39
227-6721	215.90	28.55	101.60	0.51
233-8004	86.36	9.02	64.77	0.16
233-8005	104.14	13.46	68.58	0.24
243-2531	88.90	12.83	83.82	0.23
243-3566	93.98	10.16	63.50	0.18
267-6666	101.60	20.57	88.90	0.37
155-1067	406.40	904.24	406.40	16.18
150-1982	330.20	525.78	116.84	9.41
222-4717	156.21	160.02	149.86	2.86
232-3756	157.48	261.62	154.94	4.68
232-3757	154.94	257.56	154.94	4.61
288-9046	154.94	218.85	154.94	3.92
301-3073	182.88	112.01	162.56	2.00
308-4493	182.88	116.84	165.10	2.09
314-9617	281.94	328.80	170.18	5.88
322-8956	274.32	57.28	73.66	1.03
336-9259	152.40	164.01	152.40	2.94
359-4330	228.60	288.93	218.44	5.17
359-9170	228.60	320.55	215.90	5.74
389-9659	203.20	69.09	172.72	1.24
433-8272	558.80	685.80	355.60	12.27
7E-5580	124.46	21.84	95.25	0.39
130-1571	294.64	270.97	205.74	4.85
149-2274	220.98	335.28	191.77	6.00
169-3501	406.40	73.53	93.98	1.32
200-6554	180.34	117.20	109.22	2.10
221-6861	312.42	691.26	160.02	12.37
297-5506	371.30	309.40	171.20	5.54
328-3350	159.99	67.31	156.01	1.20
354-3510	190.50	91.69	190.50	1.64
378-8915	160.02	66.04	96.52	1.18
380-3133	165.10	124.46	325.12	2.23
439-2065	710.01	441.20	165.00	7.90
443-5914	541.02	1295.40	330.20	23.18
443-5915	548.64	939.80	342.90	16.82
263-9105	838.20	2033.83	584.20	36.40
377-4299	1955.80	889.00	304.80	15.91
207-1355	236.22	227.08	55.88	4.06

Part Number	For Shipping Purposes			
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
344-2461	167.64	196.85	153.67	3.52
7C-2018	142.24	6.30	134.62	0.11
211-1010	355.60	83.72	154.94	1.50
260-4639	175.01	21.56	100.00	0.39
307-5472	127.00	39.65	88.90	0.71
336-8526	228.60	72.26	170.18	1.29
365-9704	177.80	25.65	121.92	0.46
258-8016	226.06	82.04	124.46	1.47
7L-8055	93.98	6.35	76.20	0.11
7L-8240	129.54	15.24	92.71	0.27
9Y-1558	238.00	52.07	105.00	0.93
168-3383	356.87	648.97	250.19	11.61
201-5885	523.24	111.76	208.28	2.00
247-3379	170.18	51.69	110.49	0.93
260-4637	151.99	6.60	70.00	0.12
264-3088	120.65	20.57	86.36	0.37
274-7696	157.99	40.77	78.59	0.73
282-6664	342.90	1001.29	149.86	17.92
291-5165	156.21	45.97	114.30	0.82
302-6504	157.48	47.78	109.22	0.86
360-5850	148.01	60.99	180.01	1.09
394-3709	223.52	25.40	96.52	0.45
122-0782	259.08	412.24	111.76	7.38
190-6622	297.18	727.08	182.88	13.01
141-7161	218.44	298.20	157.48	5.34
142-2837	218.44	145.42	109.22	2.60
144-9533	322.58	276.35	120.65	4.95
145-1309	259.08	241.30	139.70	4.32
183-7232	271.78	461.52	104.14	8.26
194-8110	259.08	490.35	109.22	8.78
199-3836	160.02	182.32	149.86	3.26
203-7120	243.84	225.30	198.12	4.03
206-0406	259.08	455.17	106.68	8.15
207-1364	147.32	190.91	139.70	3.42
207-1388	127.00	41.53	106.68	0.74
210-2532	165.10	254.51	142.24	4.55
210-2543	154.94	227.97	139.70	4.08
218-7106	256.54	356.26	106.68	6.38
222-4705	299.72	470.94	114.30	8.43
222-4707	325.12	587.12	116.84	10.51

# Exhaust

## Exhaust Bellows (Cont'd.)

Part Number	For Shipping Purposes				Part Number	For Shipping Purposes			
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)		Length (mm)	Width (mm)	Height (mm)	Weight (kg)
222-4710	256.54	212.60	144.78	3.80	371-7982	323.85	141.10	152.40	2.53
222-4711	312.42	576.05	114.30	10.31	374-8135	127.00	31.50	86.36	0.56
222-4714	294.64	457.45	111.76	8.19	381-5707	342.01	143.13	150.01	2.56
222-4715	299.72	267.61	190.50	4.79	381-7231	520.70	111.89	114.30	2.00
222-4716	297.18	508.00	116.84	9.09	384-0506	154.00	246.84	141.00	4.42
230-5021	129.54	67.59	83.82	1.21	384-0516	165.10	36.07	127.00	0.65
262-5054	144.78	193.04	139.70	3.45	389-1918	378.00	180.37	124.00	3.23
262-5055	165.10	259.11	139.70	4.64	399-0115	465.00	227.03	151.99	4.06
265-5219	121.92	26.16	81.28	0.47	437-3038	159.99	75.18	115.01	1.35
272-2498	269.24	69.34	68.58	1.24	304-9595	127.00	30.96	83.82	0.55
306-0297	334.80	325.12	306.30	5.82	304-9600	138.00	41.78	122.00	0.75
309-8951	192.00	195.83	161.90	3.50	333-1230	660.40	375.54	173.99	6.72
311-3385	292.10	323.11	111.76	5.78	343-9012	312.42	136.91	139.70	2.45
315-7909	177.80	50.67	111.76	0.91	155-6115	241.30	244.73	217.17	4.38
325-3656	176.53	104.55	156.21	1.87	207-1332	401.32	799.21	312.42	14.30
328-8798	222.25	332.05	155.58	5.94	207-1385	172.72	97.16	91.44	1.74
328-8799	325.12	602.97	175.26	10.79	209-1818	154.94	182.78	152.40	3.27
330-7325	144.78	143.00	109.22	2.56	209-1819	251.46	374.40	180.34	6.70
338-9266	354.99	655.73	259.99	11.73	214-6045	304.80	411.58	279.40	7.37
343-9010	266.70	117.35	139.70	2.10	217-6998	215.90	466.09	172.72	8.34
343-9015	289.99	115.06	119.99	2.06	218-7105	203.20	243.31	106.68	4.35
343-9018	313.00	162.43	159.99	2.91	218-7107	203.20	200.30	109.22	3.58
344-8305	271.78	123.57	135.89	2.21	221-7133	189.99	200.20	110.01	3.58
345-9531	316.99	609.60	289.99	10.91	222-4701	144.78	200.53	139.70	3.59
347-9308	154.99	217.42	154.99	3.89	222-4708	129.54	84.94	99.06	1.52
348-4793	337.82	688.47	259.08	12.32	222-4709	299.72	506.50	182.88	9.06
348-9252	165.10	42.93	129.54	0.77	222-4718	203.20	265.05	162.56	4.74
353-0188	322.58	175.13	170.18	3.13	227-4667	218.44	267.08	121.92	4.78
353-0189	317.50	149.86	149.86	2.68	236-4309	167.64	108.18	144.78	1.94
354-6778	279.40	162.61	127.00	2.91	239-3114	546.10	495.30	370.84	8.86
357-6065	231.14	118.11	152.40	2.11	239-3921	182.88	266.95	180.34	4.78
357-6066	264.16	118.62	152.40	2.12	239-3922	105.41	40.64	100.33	0.73
357-6067	287.02	127.00	152.40	2.27	242-0799	335.28	274.70	309.88	4.92
357-6068	326.39	137.92	152.40	2.47	262-1623	154.00	103.12	145.01	1.85
357-6069	342.90	143.00	152.40	2.56	288-3775	127.00	54.48	105.41	0.98
357-6070	441.96	168.40	152.40	3.01	310-7552	143.00	48.95	96.01	0.88
357-6761	190.50	62.71	127.00	1.12	311-3548	220.98	191.11	101.60	3.42
357-6762	157.48	78.36	135.89	1.40	322-5617	157.99	79.76	152.40	1.43
357-6768	514.35	184.79	152.40	3.31	330-7326	165.15	273.43	159.99	4.89
357-6769	513.08	186.69	160.02	3.34	330-7327	144.78	143.00	139.70	2.56
357-6770	457.20	175.13	152.40	3.13	335-3398	146.99	188.82	145.01	3.38
359-1392	248.01	123.19	124.99	2.20	339-5742	242.57	131.57	165.10	2.35
359-6702	99.06	17.78	86.36	0.32	340-2663	250.19	424.43	104.78	7.60
363-0394	273.05	110.62	97.79	1.98	341-2977	165.10	257.02	139.70	4.60
363-2095	86.00	17.91	100.00	0.32	343-9016	258.45	139.70	158.75	2.50
370-9171	446.00	220.62	130.99	3.95	344-0079	177.80	56.39	156.21	1.01
370-9173	446.61	220.62	131.75	3.95	345-0878	115.01	34.80	142.01	0.62
371-7981	406.40	178.56	165.10	3.20	347-2251	208.28	124.46	157.48	2.23



## Exhaust Bellows (Cont'd.)

Part Number	For Shipping Purposes				Part Number	For Shipping Purposes			
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)		Length (mm)	Width (mm)	Height (mm)	Weight (kg)
347-7060	144.78	47.50	109.22	0.85	438-7217	299.72	274.96	254.00	4.92
354-6789	165.10	152.40	292.10	2.73	440-4378	157.48	77.60	152.40	1.39
355-1036	419.10	675.89	203.20	12.10	443-5940	163.83	52.07	119.38	0.93
364-5416	157.48	61.34	139.70	1.10	180-8010	294.64	527.51	160.02	9.44
365-6532	215.90	78.74	203.20	1.41	207-1331	447.04	1384.30	317.50	24.77
374-8085	157.48	71.12	152.40	1.27	208-9471	558.80	1676.40	474.98	30.00
374-8098	157.48	59.94	152.40	1.07	362-9401	281.94	83.44	109.22	1.49
374-8146	220.98	84.33	129.54	1.51	363-1699	324.99	89.31	119.99	1.60
375-2132	157.48	52.58	114.30	0.94	210-2531	127.00	32.64	81.28	0.58
378-8925	256.54	416.05	165.10	7.45	207-1390	139.70	44.83	93.98	0.80
380-5671	317.50	127.00	152.40	2.27	370-6162	219.99	70.00	119.99	1.25
380-9647	231.14	211.33	111.76	3.78	324-9290	76.20	21.21	101.60	0.38
384-0515	156.01	52.71	111.00	0.94	342-6333	508.00	82.30	104.14	1.47
386-9660	157.48	40.13	114.30	0.72	330-8954	139.70	196.09	170.18	3.51
418-9323	389.99	102.74	115.01	1.84	357-6763	165.10	46.71	101.60	0.84
422-8011	180.34	55.25	156.21	0.99	168-3617	1016.00	2641.63	584.20	47.27
436-7495	155.58	56.77	111.13	1.02	168-3618	635.00	3708.37	1028.70	66.36
438-2037	279.40	370.46	210.82	6.63					

## Exhaust Manifold Gasket

Part Number	For Shipping Purposes			
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
272-1956	96.52	1.02	1.52	0.02
7W-8145	124.99	1.02	1.60	0.02
161-3411	118.11	0.79	1.78	0.01

## Exhaust Manifold Sleeve

Part Number	For Shipping Purposes			
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
107-8719	144.78	52.30	29.21	0.94
2W-9067	259.08	40.64	58.42	0.73
7E-9153	270.51	34.04	58.42	0.61
194-8124	68.58	7.26	57.15	0.13
281-8261	101.60	11.07	63.50	0.20
188-7774	99.06	9.53	60.96	0.17
239-7894	134.62	12.60	63.50	0.23
154-6393	144.78	46.74	57.15	0.84
203-2143	144.78	50.39	22.86	0.90
204-5455	139.70	97.38	40.64	1.74

# Exhaust

## Muffler

Part Number	For Shipping Purposes			
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
103-0632	1353.82	363.22	287.02	22.41
143-5996	1054.10	254.00	254.00	16.91
143-5998	1295.40	256.54	256.54	18.23
214-4928	838.20	434.34	243.84	33.20
228-4850	1041.40	281.94	281.94	19.09
228-4853	1117.60	284.48	284.48	20.14
228-4855	1033.78	254.00	254.00	15.93
228-4857	1270.00	304.80	304.80	22.27
228-4858	1219.20	439.42	439.42	22.41
228-4859	1158.24	368.30	279.40	22.09
228-4860	1143.00	292.10	292.10	20.46
228-4863	412.75	285.75	1016.00	20.23
228-4864	914.40	381.99	360.20	22.68
228-4865	266.70	266.70	1193.80	20.68
228-4867	1244.60	355.60	266.70	24.77
228-4873	863.60	279.40	279.40	19.75
228-4876	1013.46	350.52	297.18	25.11
228-4877	990.60	368.30	342.90	21.59
228-4880	1168.40	241.30	241.30	17.02
228-4881	901.70	381.00	431.80	20.46
228-4882	990.60	406.40	279.40	22.64
228-4883	1016.00	355.60	266.70	21.73
228-4886	1219.20	281.94	281.94	20.00
228-4887	977.90	368.30	284.48	19.55
228-4890	990.60	381.00	279.40	22.05
228-4891	990.60	330.20	406.40	22.64
228-4892	998.22	355.60	266.70	22.64
228-4893	990.60	355.60	342.90	22.64
228-4894	660.40	406.40	279.40	17.50
228-4897	1270.00	381.00	279.40	22.05
228-4900	1016.00	241.30	241.30	16.27
228-4901	901.70	279.40	279.40	17.32
228-4902	939.80	304.80	304.80	20.14
228-4904	990.60	355.60	279.40	17.14
228-4905	1397.00	254.00	254.00	17.64
228-4906	1409.70	279.40	279.40	19.77
228-4907	1206.50	609.60	284.48	19.50
228-4911	1193.80	1092.20	279.40	21.59
228-4914	1066.80	279.40	279.40	17.73
228-4915	1254.76	292.10	292.10	19.75
228-4916	1231.90	469.90	279.40	23.64
228-4917	965.20	406.40	393.70	24.09
228-4918	1219.20	457.20	279.40	22.27
228-6569	990.60	368.30	355.60	21.59
228-6570	406.40	279.40	1066.80	21.82
250-1179	833.12	381.00	360.68	36.34
254-7250	1346.20	254.00	254.00	23.59
254-7251	1301.75	260.35	247.65	24.66

Part Number	For Shipping Purposes			
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
254-7252	1301.75	266.70	234.95	24.18
254-7253	1049.02	360.68	279.40	24.36
254-7254	1295.40	281.41	281.41	27.68
254-7255	1295.40	279.40	279.40	27.48
254-7256	1130.30	279.40	279.40	24.84
254-7257	1117.60	279.40	279.40	25.75
254-7258	1046.48	355.60	279.40	25.09
254-7259	1352.55	304.80	292.10	27.82
254-7260	1300.48	266.70	254.00	20.68
254-7262	1219.20	342.90	254.00	20.23
254-7263	1295.40	266.70	254.00	20.68
254-7265	1066.80	266.70	266.70	16.77
254-7266	1308.10	279.40	254.00	21.09
254-7267	1295.40	254.00	254.00	20.64
255-4418	939.80	368.30	279.40	22.86
255-4419	944.88	368.30	279.40	22.36
257-0059	1358.90	209.55	209.55	19.52
257-0060	1358.90	203.20	203.20	32.36
257-7188	990.60	381.00	330.20	28.11
257-7189	990.60	406.40	330.20	33.36
257-7190	1079.50	330.20	342.90	29.05
257-9007	1437.64	508.00	254.00	26.27
257-9008	1422.40	431.80	317.50	25.18
257-9009	1212.85	546.10	482.60	29.30
257-9010	1219.20	1104.90	533.40	31.09
257-9011	997.00	406.40	292.10	23.61
257-9012	1041.40	330.20	431.80	23.36
257-9013	1143.00	279.40	279.40	21.36
257-9014	1117.60	279.40	279.40	22.82
257-9015	1041.40	406.40	279.40	22.66
257-9016	990.60	355.60	292.10	22.30
257-9017	762.00	355.60	279.40	21.30
257-9018	1219.20	520.70	482.60	28.64
257-9019	1200.91	1168.40	469.90	31.82
257-9020	1066.80	279.40	279.40	22.00
257-9021	1117.60	273.05	279.40	23.34
257-9022	1219.20	393.70	330.20	29.00
257-9023	1200.15	406.40	330.20	28.18
257-9024	1193.80	406.40	317.50	29.00
257-9025	1168.40	355.60	330.20	31.77
257-9026	965.20	533.40	406.40	28.18
257-9027	965.20	609.60	393.70	28.86
257-9028	927.10	361.95	279.40	22.25
257-9029	914.40	374.65	279.40	22.73
257-9030	889.00	317.50	279.40	21.59
257-9031	889.00	355.60	279.40	29.86
257-9032	914.40	292.10	292.10	20.18
257-9033	920.75	279.40	266.70	21.43

## Muffler (Cont'd.)

Part Number	For Shipping Purposes				Part Number	For Shipping Purposes			
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)		Length (mm)	Width (mm)	Height (mm)	Weight (kg)
257-9034	946.15	361.95	361.95	22.61	159-8467	2540.00	718.82	698.50	110.45
257-9035	939.80	368.30	368.30	29.86	159-9917	2489.20	889.00	787.40	327.27
257-9036	977.90	546.10	419.10	28.86	159-9919	2997.20	1295.40	1181.10	300.00
257-9037	660.40	330.20	330.20	20.95	159-9921	1739.90	812.80	965.20	194.09
257-9038	990.60	355.60	279.40	23.02	159-9922	1930.40	1143.00	939.80	315.91
257-9039	990.60	368.30	279.40	23.09	160-1063	2489.20	889.00	774.70	239.55
257-9040	1092.20	279.40	279.40	23.77	160-9612	1333.50	330.20	330.20	69.55
257-9041	1104.90	406.40	330.20	23.86	160-9631	1671.32	635.00	604.52	123.27
257-9042	1107.44	467.36	335.28	32.05	166-0933	1676.40	406.40	368.30	26.36
262-2972	660.40	482.60	279.40	20.68	166-1242	889.00	177.80	177.80	8.64
280-9023	723.90	368.30	342.90	29.86	166-8718	3048.00	1384.30	1574.80	585.00
444-7823	1117.60	431.80	342.90	30.00	169-2157	1518.92	749.30	635.00	79.55
104-4821	1066.80	381.00	363.22	19.23	180-9425	1538.00	662.00	581.99	93.18
104-4823	1059.18	381.00	360.68	18.18	180-9426	1816.99	665.00	805.31	230.48
117-3160	1117.60	368.30	292.10	21.50	183-7641	1757.68	673.10	673.10	158.64
226-8231	736.60	530.86	190.50	30.77	183-7643	1752.60	685.80	685.80	143.18
109-2729	609.60	241.30	165.10	4.22	183-7644	1651.00	787.40	685.80	143.50
110-8066	2209.80	939.80	939.80	410.00	183-7645	2463.80	660.40	660.40	204.55
112-5040	782.32	279.40	228.60	11.21	183-7646	2438.40	787.40	685.80	1009.09
112-5284	2565.40	812.80	762.00	238.64	187-8246	533.40	523.24	254.00	9.73
113-9491	774.70	279.40	228.60	11.82	195-4724	3225.80	482.60	533.40	300.00
114-1172	1854.20	673.10	584.20	115.55	197-7911	599.44	276.86	276.86	8.19
114-5414	886.46	304.80	266.70	13.86	197-9717	1419.86	238.76	127.00	6.86
115-1360	2159.00	762.00	685.80	177.27	202-4229	3059.99	730.00	689.99	330.69
116-2439	1600.20	584.20	457.20	86.36	205-5729	1371.60	393.70	368.30	39.27
116-7949	723.90	228.60	190.50	7.32	2W-4073	1574.80	508.00	508.00	58.01
117-2362	609.60	266.70	198.12	6.36	3K-3124	431.80	203.20	203.20	4.00
124-8534	685.80	386.08	299.72	25.45	6N-5437	896.62	454.66	299.72	20.00
129-3024	576.58	228.60	170.18	4.09	7S-8443	680.72	228.60	228.60	6.20
130-6276	1117.60	558.80	469.90	68.64	8S-2809	680.72	256.54	154.94	6.82
130-6277	1887.22	647.70	553.72	90.91	8S-4996	508.00	266.70	160.02	4.23
132-7188	1828.80	533.40	482.60	80.00	1W-2489	952.50	381.00	254.00	17.50
134-1945	596.90	231.14	180.34	6.68	2C-9500	1066.80	406.40	279.40	24.59
136-6312	561.34	375.92	198.12	8.16	9S-9328	647.70	177.80	177.80	5.68
140-2345	381.00	304.80	266.70	8.51	207-0986	2899.99	1400.00	1300.00	350.74
140-2439	990.60	469.90	312.42	37.07	210-0540	719.99	510.01	510.01	34.07
141-7047	1752.60	685.80	685.80	145.46	212-8491	624.99	406.40	406.40	9.02
141-7048	2133.60	863.60	914.40	213.81	212-8507	571.50	520.70	302.26	9.80
142-9460	1130.30	533.40	508.00	30.23	212-8633	617.22	558.80	289.56	10.02
143-3897	1422.40	558.80	457.20	67.73	2W-6603	736.60	304.80	304.80	15.45
143-5875	1498.60	787.40	622.30	13.86	8I-0725	482.60	185.42	152.40	4.98
144-7187	2260.60	779.78	660.40	215.00	214-4326	426.72	370.84	370.84	13.80
145-5572	2057.40	584.20	513.08	154.55	215-9487	452.12	279.40	266.70	7.19
149-2752	901.70	182.88	182.88	7.02	216-7325	596.90	241.30	228.60	9.55
150-3416	457.20	139.70	139.70	4.50	8U-0801	558.80	220.98	220.98	7.01
151-4878	2641.60	787.40	596.90	180.00	1W-3055	939.80	381.00	254.00	18.18
152-1900	2438.40	762.00	762.00	200.00	217-2728	547.37	222.25	659.77	10.55
155-0913	1754.99	584.99	575.01	52.11	217-8512	971.55	243.84	243.84	7.41

# Exhaust

## Muffler (Cont'd.)

Part Number	For Shipping Purposes				Part Number	For Shipping Purposes			
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)		Length (mm)	Width (mm)	Height (mm)	Weight (kg)
217-8513	990.60	279.40	177.80	8.05	320-9160	1088.01	500.00	354.99	49.00
1R-6954	645.16	304.80	304.80	9.81	324-4156	645.16	445.01	780.01	23.05
2W-4072	1244.60	482.60	457.20	60.91	324-4157	810.01	650.01	430.00	22.05
1W-6048	604.52	368.30	304.80	19.54	332-4011	559.00	168.00	168.00	4.01
2W-4070	862.33	355.60	355.60	36.36	335-6122	536.58	330.20	292.10	14.55
2W-4071	990.60	406.40	406.40	22.73	338-3063	1447.80	254.00	254.00	14.71
2W-4075	1574.80	609.60	609.60	90.00	340-9283	545.01	330.00	330.00	17.90
3B-6216	406.40	220.98	220.98	5.00	371-6450	863.60	412.75	330.20	20.45
3B-6218	495.30	220.98	220.98	4.77	372-4991	542.70	330.20	330.20	18.84
5H-2656	518.16	220.98	220.98	5.45	375-3873	1473.20	571.50	571.50	56.82
5I-4661	685.80	360.68	241.30	12.05	375-9898	596.90	279.40	228.60	11.09
5I-6923	787.40	431.80	330.20	22.73	379-2679	330.00	200.00	189.99	5.39
3B-6217	419.10	228.60	228.60	3.82	383-1509	592.00	440.00	300.00	24.05
225-6007	1460.50	698.50	520.70	139.55	395-7947	825.50	381.00	254.00	13.88
227-9405	543.56	215.90	518.16	11.09	417-9601	1849.12	660.40	622.30	130.17
228-4656	3022.60	1022.40	1022.40	340.71	419-1015	2451.00	1324.99	813.00	638.64
229-0709	2565.40	698.50	914.40	152.27	431-5814	2120.90	444.50	444.50	71.33
232-4725	570.00	370.00	210.01	9.40	438-4598	826.00	381.00	254.00	14.83
238-9987	495.30	406.40	406.40	20.27	087-1467	601.98	220.98	170.18	5.49
239-6659	624.99	735.00	330.00	12.03	100-4594	1137.92	228.60	228.60	17.57
244-6593	1092.20	279.40	279.40	18.73	101-0349	528.32	480.06	177.80	12.03
246-1131	467.36	421.64	304.80	9.74	101-8740	627.38	381.00	254.00	14.09
258-5394	909.32	408.94	408.94	27.27	106-6699	1719.58	195.58	165.10	17.68
258-5395	1070.00	270.00	270.00	13.03	107-7473	571.50	273.05	261.62	6.82
260-3534	571.50	520.70	302.26	13.73	111-4352	889.00	463.30	666.50	51.11
262-6876	965.20	508.00	406.40	49.86	112-1665	614.68	401.32	284.48	10.09
262-6877	1435.10	711.20	685.80	104.27	112-2986	960.12	457.20	312.42	29.91
266-6197	754.99	624.99	324.99	12.03	112-3249	685.80	254.00	157.48	7.27
266-6250	698.50	683.26	414.02	19.00	112-6590	1892.30	520.70	406.40	98.18
266-6251	693.42	647.70	439.42	19.00	116-0680	749.30	393.70	368.30	5.70
267-5313	670.00	670.00	550.01	47.10	122-0174	566.50	477.70	241.40	7.80
272-4802	702.01	624.99	324.99	12.03	130-7963	683.26	375.92	228.60	10.91
273-5466	723.90	406.40	406.40	24.91	142-8811	533.40	463.55	187.96	8.96
275-3651	645.01	637.01	42.01	12.03	149-3509	1102.36	139.70	121.92	5.00
275-4926	540.00	340.00	330.00	11.42	163-0451	1505.00	442.60	374.60	25.85
278-9014	2667.00	673.10	558.80	177.27	7N-1659	1023.62	167.64	167.64	9.55
281-2263	939.80	431.80	406.40	23.86	1N-2936	642.62	495.30	345.44	30.45
287-0108	627.00	381.99	381.99	11.02	1N-3452	988.06	381.00	254.00	17.27
291-0139	500.00	500.00	419.00	39.08	1W-0370	1079.50	304.80	304.80	14.55
292-1873	2667.00	838.20	622.30	180.00	1W-1766	749.30	264.16	162.56	12.73
296-5054	1739.90	647.70	609.60	74.90	1W-2572	548.64	393.70	254.00	13.18
301-6865	812.80	368.30	292.10	10.14	1W-4623	655.32	393.70	165.10	8.18
302-0335	497.84	401.32	401.32	18.17	1W-9229	635.00	330.20	330.20	11.68
303-1454	659.00	243.99	180.01	7.29	1W-9519	1122.68	299.72	299.72	16.14
303-1455	659.99	270.00	180.01	7.27	1W-9832	1127.76	297.18	297.18	14.24
305-1256	1342.90	813.21	792.99	186.36	2P-5609	939.80	396.24	269.24	22.73
305-4925	845.01	794.00	395.00	21.04	2W-8437	787.40	660.40	533.40	37.73
320-0775	1104.90	508.00	381.00	38.13	2W-9626	863.60	635.00	469.90	41.82

## Muffler (Cont'd.)

Part Number	For Shipping Purposes				Part Number	For Shipping Purposes			
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)		Length (mm)	Width (mm)	Height (mm)	Weight (kg)
4N-4577	838.20	292.10	208.28	13.40	7N-2187	1079.50	381.00	254.00	18.64
4N-6638	767.08	279.40	266.70	9.05	7N-4674	449.58	266.70	264.16	5.45
4P-0660	538.48	203.20	203.20	4.73	7N-6905	1137.92	434.34	307.34	38.64
4P-4010	647.70	330.20	304.80	15.00	7N-8117	795.02	256.54	154.94	7.73
4W-0532	896.62	675.64	462.28	60.45	7N-8923	977.90	457.20	317.50	36.16
4W-5053	660.40	393.70	266.70	16.25	7N-9647	1115.06	693.42	396.24	31.36
4Y-4951	782.80	310.20	338.20	11.90	7W-3659	734.06	678.18	408.94	38.18
6I-0137	1513.84	375.92	304.80	25.45	7W-5867	810.26	490.22	601.98	48.64
6I-1715	1127.76	302.26	302.26	16.47	7W-8445	1117.60	381.00	254.00	21.36
7C-6398	746.76	746.76	274.32	20.91	8N-5388	528.32	381.00	259.08	21.06
7C-7344	647.70	178.05	178.05	4.85	8S-5438	952.50	381.00	254.00	19.09
7E-6811	1371.60	609.60	431.80	62.73	9Y-1403	688.85	367.79	273.05	12.73
7N-3235	845.82	307.34	226.06	22.27	2P-2728	1099.82	381.00	254.00	21.36
7N-9674	728.98	695.96	274.32	23.18	2P-2744	883.92	299.72	226.06	18.64
7W-3660	734.06	678.18	408.94	38.18	2W-3428	1097.28	396.24	312.42	31.05
7W-7181	1648.46	480.06	266.70	39.55	4N-1565	1137.92	459.74	307.34	37.73
7W-7182	1645.92	589.28	261.62	40.91	4N-5184	1049.02	464.82	304.80	31.82
7W-7439	736.60	304.80	304.80	13.20	4P-6199	1600.20	596.90	254.00	43.18
7W-9707	1079.50	457.20	457.20	54.55	4P-6515	1612.90	355.60	274.32	41.36
7Y-1978	876.30	444.50	419.10	16.00	6I-3015	1739.90	482.60	406.40	76.36
7Y-2040	736.60	419.10	368.30	11.82	6N-1878	1036.32	396.24	269.24	29.09
8N-4975	1099.82	355.60	248.92	19.55	6N-3964	609.60	403.86	274.32	22.73
8N-9463	563.88	304.80	215.90	7.82	7E-6061	1473.20	622.30	622.30	56.82
8S-0905	1181.10	165.10	165.10	8.18	7E-6691	749.30	436.88	393.70	27.27
8S-6443	965.20	368.30	254.00	16.36	7N-0061	571.50	317.50	317.50	17.27
8S-6558	845.82	292.10	210.82	12.73	7N-5539	1122.68	177.80	177.80	8.18
8S-6559	1099.82	381.00	254.00	18.64	8N-3172	1409.70	360.68	284.48	38.18
9S-7079	833.12	284.48	210.82	12.27	8N-3281	1409.70	381.00	284.48	38.18
9S-7786	1143.00	381.00	254.00	21.36	7C-3693	652.78	546.10	264.16	17.77
9Y-0254	563.88	375.92	266.70	7.73	7C-6444	891.54	383.54	297.18	26.82
9Y-4668	612.14	482.60	220.98	17.68	7Y-1508	784.86	391.16	304.01	11.82
1W-4187	703.58	571.50	317.50	30.00	4N-8307	1295.40	609.60	444.50	41.82
2W-3597	607.06	355.60	299.72	14.55	4W-6206	628.65	381.00	330.20	19.09
4N-8942	949.96	388.62	266.70	22.27	7E-2944	762.00	558.80	261.62	22.73
4P-2496	789.94	670.56	368.30	17.00	2N-1572	584.20	152.40	152.40	3.95
4P-4757	467.36	431.80	203.20	7.79	2P-5081	883.92	256.54	157.48	7.45
4W-0969	980.44	614.68	411.48	36.36	8S-9473	617.22	589.28	248.92	14.09
4W-3632	728.98	424.18	396.24	25.18	1R-7158	685.80	365.76	330.20	10.23
4W-8485	762.00	647.70	419.10	38.18	7E-7296	444.50	279.40	266.70	4.84
6I-2408	736.60	584.20	355.60	20.92	8S-8167	1117.60	393.70	266.70	19.24
6I-2518	596.90	444.50	246.38	11.36	2W-3773	1137.92	381.00	254.00	20.04
6I-3662	800.10	558.80	254.00	17.68	2W-6737	1143.00	419.10	281.94	37.27
6N-0731	590.55	434.34	254.00	10.48	4Y-5062	607.06	421.64	256.54	9.09
6N-4183	1143.00	396.24	269.24	30.00	4W-0456	939.80	292.10	210.82	14.55
6N-4184	929.64	553.72	375.92	49.55	1N-3450	939.80	292.10	210.82	15.91
7C-5851	627.00	381.00	254.00	13.86	1N-3530	962.66	459.74	307.34	30.68
7E-0853	762.00	304.80	304.80	20.23	1W-2491	1099.82	381.00	254.00	24.09
7N-1393	731.52	622.30	254.00	15.91	1W-2492	1099.82	381.00	254.00	19.55

# Exhaust

## Muffler (Cont'd.)

Part Number	For Shipping Purposes				Part Number	For Shipping Purposes			
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)		Length (mm)	Width (mm)	Height (mm)	Weight (kg)
1W-8940	1150.62	381.00	254.00	23.18	146-9733	800.10	292.10	226.06	15.92
2P-5224	1188.72	307.34	226.06	25.00	150-7147	668.02	635.00	271.78	23.66
2W-9141	939.80	304.80	304.80	15.00	151-9498	1104.90	673.10	609.60	46.00
4N-6640	774.70	274.32	274.32	13.64	152-9716	642.62	495.30	469.90	43.59
4W-3875	609.60	377.95	225.81	12.27	154-3627	2768.60	838.20	711.20	165.91
4W-9073	584.20	406.40	304.80	14.64	154-3628	2768.60	838.20	711.20	165.91
7E-3577	535.94	198.12	198.12	4.32	157-2828	800.10	647.70	426.72	38.00
7W-7786	675.64	406.40	254.00	13.64	158-2318	1536.70	624.84	426.72	53.86
8N-6958	596.90	401.32	264.16	12.73	159-3263	645.16	510.54	279.40	11.16
9Y-1402	668.02	378.46	292.10	12.73	159-7441	876.30	477.52	375.92	28.39
9Y-5947	1092.20	406.40	266.70	27.61	160-7012	3218.18	457.20	457.20	127.73
4P-0614	474.98	330.20	241.30	8.02	160-7013	3218.18	457.20	457.20	127.73
081-5671	825.50	170.18	170.18	6.93	160-8583	1079.50	1003.30	393.70	29.09
152-1681	594.36	388.62	302.26	19.49	163-6559	876.30	449.58	396.24	28.75
102-3927	927.10	647.70	368.30	20.82	164-7351	624.84	330.20	254.00	9.09
109-9323	889.00	414.02	342.90	18.62	166-6670	693.42	673.10	297.18	27.95
109-9463	876.30	431.80	431.80	19.03	170-3309	900.00	659.99	330.00	22.05
112-5088	563.88	342.90	281.94	10.44	171-0475	513.08	322.58	152.40	3.93
112-5089	563.12	278.38	215.90	9.09	171-0696	508.00	330.20	152.40	3.91
112-5090	563.12	278.38	203.20	10.23	173-7129	762.00	581.66	254.00	9.83
112-5091	566.42	271.78	215.90	6.98	175-2931	640.08	609.60	350.52	29.48
112-7670	863.60	317.50	304.80	15.55	176-1368	838.20	657.86	431.80	48.57
118-9906	797.56	393.70	325.12	14.47	190-4758	584.20	266.70	152.40	10.20
119-8411	685.80	635.00	215.90	11.36	191-7556	401.32	299.72	208.28	5.63
122-3169	805.18	558.80	381.00	42.73	191-9779	596.90	500.38	139.70	7.89
122-4990	1625.60	383.54	259.08	37.27	192-2614	528.32	502.92	205.74	9.50
122-7044	609.60	589.28	431.80	33.70	192-4241	571.50	381.00	368.30	18.27
123-1322	1358.90	431.80	355.60	32.73	193-8598	901.70	711.20	558.80	60.91
123-1323	1447.80	558.80	457.20	39.55	193-8599	863.60	469.90	406.40	54.55
127-8592	469.90	261.62	254.00	7.27	194-7246	566.42	533.40	381.00	13.39
127-8594	469.90	304.80	256.54	7.66	194-7554	401.32	287.02	266.70	5.20
128-1009	792.48	543.56	259.08	16.89	196-8203	949.96	518.16	457.20	24.30
129-4048	1700.30	263.10	203.20	12.00	198-1786	655.32	508.00	279.40	17.25
129-9459	868.68	553.72	535.94	38.18	198-1939	662.94	647.70	287.02	28.64
131-8259	1397.00	241.30	152.40	7.73	198-2382	673.10	317.50	317.50	18.45
133-5927	868.68	553.72	533.40	38.18	199-3003	660.40	431.80	317.50	20.17
133-9285	474.98	254.00	251.46	10.53	199-5067	762.00	762.00	254.00	10.31
133-9478	787.40	340.36	289.56	10.46	199-5068	678.18	596.90	266.70	27.34
134-5423	685.80	685.80	284.48	30.91	200-3199	711.20	635.00	259.08	18.34
134-7900	1219.20	243.84	116.84	12.71	201-0346	487.68	388.62	335.28	13.43
136-5108	1505.00	442.60	374.60	25.85	202-0755	635.00	299.72	287.02	19.45
137-4097	1143.00	254.00	254.00	11.82	202-9716	495.30	457.20	170.18	9.30
137-6995	718.82	668.02	226.06	17.77	203-9753	698.50	617.22	210.82	11.80
139-8723	922.02	505.46	457.20	23.64	204-5071	645.00	216.00	455.70	7.60
139-8888	965.20	685.80	381.00	40.91	205-6642	952.50	508.00	406.40	32.11
142-8820	584.20	508.00	127.00	8.30	205-6785	624.99	315.01	216.99	11.65
142-8845	513.08	467.36	198.12	9.18	205-9880	929.01	457.00	300.00	29.55
145-4585	617.22	472.44	208.28	10.84	208-5440	1016.00	635.00	355.60	32.07

## Muffler (Cont'd.)

Part Number	For Shipping Purposes				Part Number	For Shipping Purposes			
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)		Length (mm)	Width (mm)	Height (mm)	Weight (kg)
208-8088	1092.20	635.00	355.60	31.82	289-3233	825.50	596.90	317.50	22.89
209-3449	375.92	274.32	317.50	5.70	290-6090	673.10	292.10	203.20	10.86
211-1311	838.20	533.40	292.10	27.73	291-0140	685.80	508.00	508.00	48.10
214-3232	508.00	487.68	177.80	9.05	291-3943	1028.70	546.10	355.60	240.91
216-1678	762.00	533.40	381.00	26.50	292-8536	965.20	457.20	304.80	14.36
222-0458	1193.80	260.35	260.35	22.52	293-4824	609.60	431.80	426.72	6.41
223-3646	939.80	635.00	482.60	42.73	295-8281	812.80	584.20	406.40	28.91
224-2687	1028.70	774.70	622.30	37.50	295-8282	609.60	431.80	622.30	28.91
224-3156	838.20	660.40	508.00	60.00	297-1711	685.80	609.60	406.40	22.14
2T-3814	952.50	393.70	266.70	21.72	298-6551	591.82	261.62	431.80	15.00
4P-6649	685.80	609.60	254.00	21.64	299-7985	502.01	457.20	304.80	12.09
7W-5194	500.38	350.52	255.27	8.18	303-2578	400.00	259.99	240.00	8.77
224-3157	863.60	508.00	660.40	23.05	303-2579	388.01	250.01	157.99	8.52
6I-6425	876.30	457.20	406.40	16.44	303-2580	340.00	259.99	154.99	7.63
228-1770	609.60	393.70	167.64	7.00	303-2581	335.28	236.22	160.02	8.06
231-7081	965.20	584.20	558.80	48.64	305-3795	576.58	330.20	685.80	28.18
231-7952	355.00	165.00	205.00	5.80	305-4672	1054.10	571.50	393.70	34.09
233-1254	876.30	381.00	342.90	18.64	306-1429	665.00	462.00	453.01	20.04
236-8761	685.80	584.20	279.40	31.36	310-7296	1828.80	1143.00	939.80	358.18
237-7873	774.70	452.12	452.12	27.11	310-9618	1050.01	540.00	389.99	33.07
4Y-9542	782.20	310.20	338.20	11.90	317-2731	1104.90	533.40	368.30	36.89
239-6580	1050.01	540.00	389.99	33.07	324-4082	1040.00	640.00	459.99	33.07
239-7897	1092.20	762.00	508.00	40.32	324-4083	1150.01	630.00	619.99	71.45
243-1675	900.00	570.00	500.00	36.08	327-7233	1040.00	750.01	419.99	33.07
243-6273	1340.00	389.99	359.99	65.14	333-3400	900.00	350.01	400.00	27.06
243-6276	1676.40	495.30	406.40	52.73	342-4460	1008.38	520.70	533.40	45.70
243-6277	1676.40	685.80	635.00	57.27	342-5926	812.80	357.81	678.00	33.91
243-6278	2260.60	787.40	685.80	76.36	347-8589	724.00	501.60	336.80	24.61
247-3408	889.00	355.60	304.80	21.82	348-6741	685.80	330.20	286.99	6.82
250-2220	965.20	508.00	596.90	37.58	350-2273	2590.80	1016.00	919.99	405.15
252-1152	680.01	640.00	230.00	20.04	352-1486	508.00	294.64	454.99	19.55
252-1153	670.00	659.99	280.01	22.55	353-4850	1028.70	558.80	558.80	68.76
252-7173	659.99	643.99	289.99	22.89	354-3378	891.01	529.49	362.20	36.78
255-3052	900.00	419.99	340.00	24.05	354-3383	980.11	642.01	362.20	34.07
261-9709	464.70	183.00	420.00	9.30	354-6193	2200.00	1300.00	780.01	304.64
262-1684	1070.00	589.99	400.00	34.07	354-8437	1244.60	603.25	678.18	95.20
262-2757	482.60	304.80	622.30	16.64	355-0792	1181.10	584.20	482.60	84.09
266-6173	780.01	659.99	350.01	19.04	355-7761	510.01	219.99	219.99	15.03
266-6213	1016.00	584.20	381.00	33.00	355-9070	248.92	259.08	403.86	7.56
267-1034	383.54	162.56	154.94	6.12	358-0503	1120.00	460.00	560.00	82.60
276-5053	670.00	219.99	219.99	19.04	358-0504	1120.00	460.00	560.00	82.60
276-5055	350.01	289.99	289.99	13.03	359-1059	845.00	405.00	485.00	45.00
277-4927	384.81	213.36	152.40	6.15	359-3633	860.00	590.00	495.00	52.00
277-8722	723.90	261.62	261.62	36.36	359-3634	1040.00	580.00	580.00	56.00
283-8256	1828.80	685.80	419.10	91.36	359-6596	770.00	455.00	275.00	24.10
285-4494	952.50	558.80	546.10	51.82	360-2691	1030.00	660.00	470.00	51.00
287-2446	2921.00	1168.40	1282.70	557.20	360-2692	770.00	455.00	275.00	24.10
288-5312	1016.00	476.25	533.40	44.09	360-2693	855.00	725.00	575.00	54.00

# Exhaust

## Muffler (Cont'd.)

Part Number	For Shipping Purposes				Part Number	For Shipping Purposes			
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)		Length (mm)	Width (mm)	Height (mm)	Weight (kg)
360-2695	640.00	365.00	260.00	13.50	229-9601	570.00	380.01	359.99	22.55
360-2697	1000.00	659.99	500.00	50.11	230-6994	750.01	570.00	370.00	21.04
366-3821	560.71	560.71	767.31	56.36	231-1591	660.40	469.90	228.60	16.45
371-1287	840.00	770.00	319.99	23.20	242-1737	430.00	389.99	245.01	6.82
372-5951	431.80	431.80	203.20	4.15	242-2208	470.00	280.01	210.01	7.22
374-6040	756.01	440.99	261.01	40.08	257-3189	480.01	370.00	370.00	16.74
377-7710	1159.69	310.01	259.99	30.06	258-2419	685.80	279.40	317.50	9.14
377-7714	1389.99	350.01	300.00	16.23	261-6639	863.60	660.40	508.00	30.36
378-1265	384.99	235.00	230.00	7.25	264-3332	1676.40	762.00	609.60	177.27
378-6752	495.30	342.90	317.50	15.00	268-1168	1100.00	330.00	250.01	10.02
379-9919	643.89	408.31	408.31	34.16	269-6296	1219.20	254.00	254.00	12.14
380-0109	1358.90	812.80	889.00	250.53	269-8126	535.00	275.01	224.99	10.06
380-9964	843.00	715.01	554.99	58.12	275-0568	952.50	762.00	647.70	73.15
383-1510	1370.00	613.00	403.00	56.12	285-8552	939.80	457.20	558.80	19.09
383-4124	497.84	370.84	294.64	10.24	290-5638	731.52	299.72	292.10	18.24
387-5268	1841.50	927.10	1104.90	345.29	290-5642	759.99	289.99	289.99	18.34
389-8796	475.01	450.01	330.00	12.43	291-5505	635.00	266.70	228.60	6.36
390-0274	1028.70	457.20	508.00	42.79	299-5420	762.00	635.00	381.00	15.23
390-0303	1028.70	508.00	469.90	42.79	300-4485	520.70	228.60	228.60	5.82
391-2952	605.99	241.30	241.30	5.91	302-0633	838.20	609.60	431.80	25.15
391-2953	673.10	342.90	304.80	23.64	307-1303	1092.20	381.00	254.00	29.91
391-7200	459.99	230.00	230.00	12.53	312-5900	1066.80	558.80	381.00	33.27
392-0198	889.00	584.20	533.40	43.09	312-5901	1066.80	558.80	381.00	33.27
392-0245	500.00	359.99	359.99	20.04	317-8143	1030.91	728.98	444.50	76.47
415-2790	495.30	342.90	330.20	12.75	318-3667	1210.01	310.01	259.99	16.03
415-2802	378.00	510.01	159.99	8.50	200-3200	647.70	622.30	304.80	32.95
415-2806	502.92	449.58	187.96	8.30	122-4989	1625.60	571.50	259.08	37.23
415-2809	668.02	317.50	248.92	9.83	211-8768	812.80	322.58	259.08	26.52
417-9639	1735.00	665.00	835.00	89.93	213-6732	825.50	431.80	304.80	26.41
419-0042	592.00	517.50	300.00	32.07	269-7114	792.48	457.20	406.40	31.18
422-5192	1562.10	571.50	368.30	60.13	325-7106	883.01	419.99	300.00	31.82
431-4400	775.89	768.50	320.04	23.05	442-0050	939.80	444.50	292.10	32.27
437-0392	1030.00	719.99	611.00	72.65	211-8767	825.50	469.90	292.10	26.61
235-5364	571.50	254.00	228.60	5.23	213-6733	965.20	431.80	279.40	22.27
359-3496	554.99	545.01	219.99	7.74	269-7115	787.40	431.80	381.00	31.64
161-0695	726.44	398.78	200.66	23.30	325-7107	965.20	431.80	304.80	32.05
175-6542	452.12	254.00	208.28	7.11	442-0049	939.80	444.50	292.10	32.27
180-3269	524.99	415.01	304.80	13.38	235-5363	559.99	240.00	230.00	6.87
195-7858	812.80	495.30	330.20	21.36	269-8174	508.00	292.10	241.30	6.41
199-9700	533.40	444.50	342.90	13.26	273-2596	558.80	266.70	266.70	6.50
200-5024	736.60	591.82	302.26	18.18	325-3495	670.00	400.00	310.01	5.81
202-8135	655.32	317.50	317.50	16.26	359-3495	550.01	315.01	240.00	7.38
203-9931	624.84	350.52	297.18	10.12	384-8804	559.99	304.80	224.99	6.50
208-0421	914.40	381.00	330.20	30.45	276-2245	1080.01	480.01	210.01	24.05
216-9040	655.32	482.60	220.98	17.16	142-1857	1155.70	457.20	419.10	32.00
224-7519	650.24	441.96	233.68	13.52	152-0596	1549.40	685.80	1092.20	200.91
226-5611	546.10	330.20	279.40	10.80	165-6557	1186.18	609.60	457.20	62.27
226-5612	855.98	358.14	307.34	16.02	313-9418	2514.60	762.00	635.00	450.95



**Muffler (Cont'd.)**

Part Number	For Shipping Purposes			
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
315-4154	1879.60	660.40	736.60	113.64
370-1066	459.99	400.00	400.00	15.93
382-2773	990.60	787.40	558.80	89.69
437-0390	1066.80	711.20	571.50	88.19
264-0023	1752.60	889.00	787.40	259.09
264-0025	1955.80	939.80	1016.00	338.64
264-0026	2392.68	1221.74	1371.60	377.27
205-2940	3225.80	609.60	609.60	261.36
142-1576	474.98	247.65	247.65	6.89
144-1651	1178.56	401.32	266.70	24.84
231-7645	1000.00	400.00	200.00	24.05
260-0516	500.00	250.01	210.01	6.11
187-8247	533.40	520.70	226.06	9.77
287-0206	641.35	671.96	342.90	12.03
266-6252	647.70	894.05	408.94	16.00
517-7914	279.40	512.04	279.40	9.16
272-4674	645.01	754.38	609.60	13.50
7S8-8443	680.72	346.71	228.60	6.20
7E6-6811	1371.60	3505.20	431.80	62.73
7W5-5867	812.80	2718.05	482.60	48.64
1W4-4187	703.58	1676.40	317.50	30.00
8N4-4975	1099.82	1092.17	248.92	19.55
2W9-9626	863.60	2336.77	469.90	41.82

Part Number	For Shipping Purposes			
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
7W3-3659	734.06	2133.63	408.94	38.18
2W3-3773	1137.92	1119.94	254.00	20.04
7N6-6905	1137.92	2158.97	307.34	38.64
4W0-0532	896.62	3378.20	462.28	60.45
2W8-8437	787.40	2108.20	533.40	37.73
4W8-8485	762.00	2133.63	419.10	38.18
7W7-7182	1645.92	2286.00	261.62	40.91
7N3-3235	845.82	1244.60	226.06	22.27
7W8-8445	1117.60	1193.80	254.00	21.36
4W0-0969	980.44	2032.00	411.48	36.36
4P2-2496	789.94	949.93	368.30	17.00
7W7-7439	736.60	737.36	304.80	13.20
4N4-4577	838.20	748.51	208.28	13.40
7W3-3660	734.06	2133.63	408.94	38.18
7N1-1393	731.52	889.03	254.00	15.91
7Y1-1508	784.86	660.40	304.01	11.82
7W7-7181	1648.46	2209.80	266.70	39.55
1N3-3452	988.06	965.23	254.00	17.27
7C3-3693	652.78	993.14	264.16	17.77
9Y4-4668	612.14	988.09	220.98	17.68
1W9-9229	635.00	652.78	330.20	11.68
6I6-6425	876.30	918.92	406.40	16.44

# Belts

## V-Belt Sizing Guide



- Belt size refers to the pulley groove width (B) for belts under and equal to 1/2 in.
- Belt size refers to the belt top width (A) for belts over 1/2 in.

Belt Size	A	B
	Belt Top Width	Pulley Groove Width
9.6 mm (3/8 in)	10.72 mm (0.422 in)	9.65 mm (0.380 in)
12.7 mm (1/2 in)	13.89 mm (0.547 in)	12.70 mm (0.500 in)
17.5 mm (11/16 in)	17.48 mm (0.688 in)	15.88 mm (0.625 in)
19.1 mm (3/4 in)	19.05 mm (0.750 in)	17.53 mm (0.690 in)
22.2 mm (7/8 in)	21.51 mm (0.847 in)	19.94 mm (0.785 in)
23.8 mm (15/16 in)	23.83 mm (0.938 in)	22.30 mm (0.878 in)
27.0 mm (1 1/16 in)	26.97 mm (1.062 in)	25.48 mm (1.003 in)
31.8 mm (1 1/4 in)	32.94 mm (1.297 in)	31.83 mm (1.253 in)

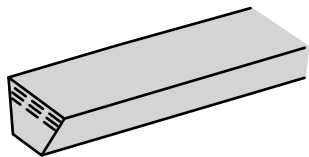
## SAE effective length for COG and NON-COG belts equals:

Outer circumference minus 9.65 mm (0.38 in) for 3/8 inch and 1/2 inch belt sizes. Outer circumference minus 14.48 mm (0.57 in) for 11/16 in and larger belt sizes.

## V-Belt Maintenance Tips

- Check for cracked, worn, or frayed belts. On matched belt sets, always replace the complete set. If just one belt is bad, uneven load on belts, pulleys, bearings, and shafts can occur.
- Check pulley grooves to make sure they are not worn, damaged, or aligned incorrectly. Poor belt to pulley contact will result in rapid wear and short life.

## V-Belts - Non-Cogged



Size	Length	Part Number	Set Part Number	Set Quantity
10.7 mm (0.42 in)	895 mm (35.24 in)	286-1041	—	—
12.7 mm (0.50 in)	641 mm (25.24 in)	220-8129	—	—
12.7 mm (0.50 in)	787 mm (30.98 in)	7C-2163	—	—
12.7 mm (0.50 in)	800 mm (31.50 in)	190-0369	—	—
12.7 mm (0.50 in)	850 mm (33.46 in)	156-7124	156-7121	2
12.7 mm (0.50 in)	885 mm (34.84 in)	248-3100	—	—
12.7 mm (0.50 in)	965.2 mm (38 in)	258-3539	—	—
12.7 mm (0.50 in)	985 mm (38.78 in)	241-2894	—	—
12.7 mm (0.50 in)	1016 mm (40 in)	7C-8236	—	—
12.7 mm (0.50 in)	1054 mm (41.50 in)	1P-9744	—	—
12.7 mm (0.50 in)	1080 mm (42.52 in)	228-9937	—	—

**V-Belts - Non-Cogged (cont'd.)**

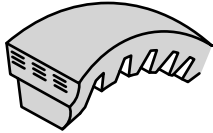
Size	Length	Part Number	Set Part Number	Set Quantity
12.7 mm (0.50 in)	1085.9 mm (42.75 in)	229-3540	—	—
12.7 mm (0.50 in)	1092 mm (42.99 in)	4N-7335	—	—
12.7 mm (0.50 in)	1105 mm (43.50 in)	9N-1329	9N-1330	2
12.7 mm (0.50 in)	1118 mm (44.02 in)	1N-3743	—	—
12.7 mm (0.50 in)	1143 mm (45 in)	2P-6820	9N-1322	2
12.7 mm (0.50 in)	1148 mm (45.20 in)	112-6055	—	—
12.7 mm (0.50 in)	1168 mm (45.98 in)	2P-6819	—	—
12.7 mm (0.50 in)	1181 mm (46.50 in)	4N-9891	—	—
12.7 mm (0.50 in)	1194 mm (47.01 in)	2P-6818	—	—
12.7 mm (0.50 in)	1206 mm (47.48 in)	1W-2934	—	—
12.7 mm (0.50 in)	1232 mm (48.50 in)	1P-3085	9N-1323	2
12.7 mm (0.50 in)	1245 mm (49.02 in)	7E-1362	—	—
12.7 mm (0.50 in)	1257 mm (49.49 in)	1P-4334	4N-8580	2
12.7 mm (0.50 in)	1270 mm (50 in)	3P-0130	9L-6128	2
12.7 mm (0.50 in)	1283 mm (50.51 in)	2P-6212	209-8749	2
12.7 mm (0.50 in)	1295 mm (50.98 in)	9Y-6117	—	—
12.7 mm (0.50 in)	1308 mm (51.50 in)	4N-6130	4N-8597	2
12.7 mm (0.50 in)	1334 mm (52.52 in)	2P-4191	7W-3896	2
12.7 mm (0.50 in)	1346 mm (52.99 in)	068-0610	—	—
12.7 mm (0.50 in)	1372 mm (54.02 in)	9L-6125	9L-6126	3
12.7 mm (0.50 in)	1384 mm (54.49 in)	4P-2405	—	—
12.7 mm (0.50 in)	1397 mm (55 in)	8N-0503	—	—
12.7 mm (0.50 in)	1410 mm (55.51 in)	2P-4685	—	—
12.7 mm (0.50 in)	1435 mm (56.50 in)	4N-7610	—	—
12.7 mm (0.50 in)	1460 mm (57.48 in)	2P-4230	7N-8518	2
12.7 mm (0.50 in)	1473 mm (57.99 in)	159-9261	—	—
12.7 mm (0.50 in)	1549 mm (60.98 in)	1P-6868	9N-3483	2
12.7 mm (0.50 in)	1588 mm (62.52 in)	1P-4313	6N-0724	2
12.7 mm (0.50 in)	1600 mm (62.99 in)	2P-6161	—	—
12.7 mm (0.50 in)	1613 mm (63.50 in)	174-9030	—	—
12.7 mm (0.50 in)	1626 mm (64.02 in)	216-0349	—	—
12.7 mm (0.50 in)	1638 mm (64.49 in)	2P-7333	053-3453	2
12.7 mm (0.50 in)	1664 mm (65.51 in)	2P-8720	9L-6130	3
12.7 mm (0.50 in)	1689 mm (66.50 in)	1N-4556	—	—
12.7 mm (0.50 in)	1714 mm (67.48 in)	2P-6532	—	—
12.7 mm (0.50 in)	1727 mm (67.99 in)	199-6602	—	—
12.7 mm (0.50 in)	1803 mm (70.98 in)	1W-6039	9Y-8312	2
12.7 mm (0.50 in)	1829 mm (72.01 in)	7W-5207	—	—
12.7 mm (0.50 in)	1842 mm (72.52 in)	127-4766	127-4767	2
12.7 mm (0.50 in)	1854 mm (72.99 in)	1N-3795	—	—
12.7 mm (0.50 in)	1880 mm (74.02 in)	1W-9693	—	—

# Belts

## V-Belts - Non-Cogged (cont'd.)

Size	Length	Part Number	Set Part Number	Set Quantity
12.7 mm (0.50 in)	1905 mm (75 in)	160-1821	–	–
12.7 mm (0.50 in)	1918 mm (75.51 in)	147-8910	147-8908	2
12.7 mm (0.50 in)	2083 mm (82.01 in)	9Y-1954	–	–
12.7 mm (0.50 in)	2108 mm (82.99 in)	6I-1758	–	–
12.7 mm (0.50 in)	2159 mm (85 in)	103-1612	–	–
12.7 mm (0.50 in)	2184 mm (85.98 in)	1W-8908	–	–
12.7 mm (0.50 in)	2235 mm (87.99 in)	2W-3906	–	–
12.7 mm (0.50 in)	2286 mm (90 in)	4W-5825	–	–
13 mm (0.51 in)	1219 mm (47.99 in)	255-2927	–	–
15.9 mm (0.63 in)	1435 mm (56.50 in)	156-7126	156-7123	3
15.9 mm (0.63 in)	1524 mm (60 in)	9N-1321	9N-1326	3
15.9 mm (0.63 in)	1664 mm (65.51 in)	9N-1320	9N-2802	2
15.9 mm (0.63 in)	1740 mm (68.50 in)	6N-7721	–	–

## V-Belts - Cogged



Size	Length	Part Number	Set Part Number	Set Qty.
9.6 mm (0.38 in)	673 mm (26.50 in)	6L-6212	6L-6213	2
9.6 mm (0.38 in)	813 mm (32.01 in)	7N-0510	–	–
9.6 mm (0.38 in)	914 mm (35.98 in)	1N-8404	1N-8405	2
9.6 mm (0.38 in)	1016 mm (40 in)	030-2630	7L-4528	2
9.6 mm (0.38 in)	1105 mm (43.50 in)	2W-2531	9Y-7159	2
9.6 mm (0.38 in)	1257 mm (49.49 in)	1N-9310	2N-0159	2
9.6 mm (0.38 in)	1283 mm (50.51 in)	7N-3160	7N-3157	2
9.6 mm (0.38 in)	1308 mm (51.50 in)	7L-5090	7L-5091	2
9.6 mm (0.38 in)	1410 mm (55.51 in)	7N-3159	7N-3158	2
12.7 mm (0.50 in)	711 mm (27.99 in)	4H-0552	–	–
12.7 mm (0.50 in)	737 mm (29.02 in)	2L-1478	–	–
12.7 mm (0.50 in)	800 mm (31.50 in)	9L-2266	9L-2267	2
12.7 mm (0.50 in)	838 mm (32.99 in)	004-0909	–	–
12.7 mm (0.50 in)	851 mm (33.50 in)	061-8384	–	–
12.7 mm (0.50 in)	864 mm (34.02 in)	036-6775	–	–
12.7 mm (0.50 in)	876 mm (34.49 in)	7E-0744	–	–
12.7 mm (0.50 in)	889 mm (35 in)	030-3289	–	–
12.7 mm (0.50 in)	902 mm (35.51 in)	037-2448	–	–
12.7 mm (0.50 in)	914 mm (35.98 in)	036-2176	–	–
12.7 mm (0.50 in)	940 mm (37.01 in)	030-3291	–	–
12.7 mm (0.50 in)	952 mm (37.48 in)	5L-3979	5L-3980	2

## V-Belts - Cogged (cont'd.)

Size	Length	Part Number	Set Part Number	Set Qty.
12.7 mm (0.50 in)	975 mm (38.39 in)	304-4010	–	–
12.7 mm (0.50 in)	991 mm (39.02 in)	1N-4635	2W-0237	2
12.7 mm (0.50 in)	1003 mm (39.49 in)	8N-3504	–	–
12.7 mm (0.50 in)	1016 mm (40 in)	9L-4896	9L-6177	2
12.7 mm (0.50 in)	1029 mm (40.51 in)	001-5645	–	–
12.7 mm (0.50 in)	1041 mm (40.98 in)	9L-1126	9L-1125	2
12.7 mm (0.50 in)	1054 mm (41.50 in)	4M-6291	9L-4226	2
12.7 mm (0.50 in)	1080 mm (42.52 in)	061-7139	2N-1493	2
12.7 mm (0.50 in)	1092 mm (42.99 in)	9L-4012	9L-4013	2
12.7 mm (0.50 in)	1105 mm (43.50 in)	1W-5555	1N-4223	2
12.7 mm (0.50 in)	1118 mm (44.02 in)	068-5590	061-9508	2
12.7 mm (0.50 in)	1130 mm (44.49 in)	5L-3834	5L-3826	2
12.7 mm (0.50 in)	1143 mm (45 in)	4L-6060	3N-4658	2
12.7 mm (0.50 in)	1168 mm (45.98 in)	9M-1091	6L-7954	2
12.7 mm (0.50 in)	1181 mm (46.50 in)	9Y-1131	–	–
12.7 mm (0.50 in)	1194 mm (47.01 in)	8L-8646	–	–
12.7 mm (0.50 in)	1206 mm (47.48 in)	6L-3408	6L-8161	2
12.7 mm (0.50 in)	1219 mm (47.99 in)	9L-2248	9L-0619	2
12.7 mm (0.50 in)	1232 mm (48.50 in)	6N-3113	111-0575	2
12.7 mm (0.50 in)	1245 mm (49.02 in)	3K-3408	5N-6350	2
12.7 mm (0.50 in)	1257 mm (49.49 in)	6F-1992	1S-1193	2
12.7 mm (0.50 in)	1270 mm (50 in)	5M-8137	8L-8984	3
12.7 mm (0.50 in)	1283 mm (50.51 in)	5L-4996	5L-4995	2
12.7 mm (0.50 in)	1308 mm (51.50 in)	5M-8135	3N-1491	2
12.7 mm (0.50 in)	1321 mm (52.01 in)	9L-0894	9L-0895	2
12.7 mm (0.50 in)	1334 mm (52.52 in)	3S-8448	3S-8447	3
12.7 mm (0.50 in)	1346 mm (52.99 in)	5L-3307	5L-3308	2
12.7 mm (0.50 in)	1359 mm (53.50 in)	3S-6272	8L-4526	2
12.7 mm (0.50 in)	1372 mm (54.02 in)	061-7140	130-3216	2
12.7 mm (0.50 in)	1397 mm (55 in)	9L-1553	9L-1557	2
12.7 mm (0.50 in)	1410 mm (55.51 in)	2S-2743	2S-2756	3
12.7 mm (0.50 in)	1422 mm (55.98 in)	3S-3964	5N-9303	2
12.7 mm (0.50 in)	1448 mm (57.01 in)	9L-1128	9L-1127	4
12.7 mm (0.50 in)	1460 mm (57.48 in)	3S-3961	4W-6025	2
12.7 mm (0.50 in)	1473 mm (57.99 in)	7L-5001	9L-1226	3
12.7 mm (0.50 in)	1486 mm (58.50 in)	2S-5218	2S-9779	2
12.7 mm (0.50 in)	1499 mm (59.02 in)	6L-5115	2N-2297	2
12.7 mm (0.50 in)	1511 mm (59.49 in)	7E-5798	7E-5799	3
12.7 mm (0.50 in)	1524 mm (60 in)	2S-9506	9L-1106	2
12.7 mm (0.50 in)	1524 mm (60 in)	4N-2745	–	–
12.7 mm (0.50 in)	1549 mm (60.98 in)	5N-4692	6L-4100	3

# Belts

## V-Belts - Cogged (cont'd.)

Size	Length	Part Number	Set Part Number	Set Qty.
12.7 mm (0.50 in)	1575 mm (62.01 in)	8M-8336	8M-8341	2
12.7 mm (0.50 in)	1600 mm (62.99 in)	9L-4479	068-8546	2
12.7 mm (0.50 in)	1626 mm (64.02 in)	8M-8335	8M-8340	2
12.7 mm (0.50 in)	1651 mm (65 in)	4S-6209	8S-5154	3
12.7 mm (0.50 in)	1664 mm (65.51 in)	1S-4699	1S-4700	2
12.7 mm (0.50 in)	1689 mm (66.50 in)	5S-5249	4W-8729	2
12.7 mm (0.50 in)	1702 mm (67.01 in)	9L-1130	9L-1129	2
12.7 mm (0.50 in)	1727 mm (67.99 in)	166-3354	–	–
12.7 mm (0.50 in)	1727 mm (67.99 in)	3S-9652	1S-1187	2
12.7 mm (0.50 in)	1740 mm (68.50 in)	4W-8654	4W-8655	2
12.7 mm (0.50 in)	1753 mm (69.02 in)	166-3352	166-3360	3
12.7 mm (0.50 in)	1753 mm (69.02 in)	5S-5052	9L-2526	2
12.7 mm (0.50 in)	1778 mm (70 in)	4S-8353	2S-2481	2
12.7 mm (0.50 in)	1782 mm (70.16 in)	364-7251	–	–
12.7 mm (0.50 in)	1791 mm (70.51 in)	2P-5617	2P-5618	2
12.7 mm (0.50 in)	1803 mm (70.98 in)	166-3351	166-3359	3
12.7 mm (0.50 in)	1803 mm (70.98 in)	6F-2590	1S-1208	3
12.7 mm (0.50 in)	1816 mm (71.50 in)	7E-6158	319-6293	3
12.7 mm (0.50 in)	1829 mm (72.01 in)	9L-2519	6L-6557	2
12.7 mm (0.50 in)	1842 mm (72.52 in)	166-3355	166-3363	3
12.7 mm (0.50 in)	1842 mm (72.52 in)	1S-4761	1S-4760	2
12.7 mm (0.50 in)	1854 mm (72.99 in)	8N-2814	139-9011	2
12.7 mm (0.50 in)	1880 mm (74.02 in)	9L-1629	9L-1630	4
12.7 mm (0.50 in)	1905 mm (75 in)	166-3353	166-3361	3
12.7 mm (0.50 in)	1905 mm (75 in)	5M-0923	7E-3372	3
12.7 mm (0.50 in)	1918 mm (75.51 in)	1N-4555	6N-3843	2
12.7 mm (0.50 in)	1943 mm (76.50 in)	9L-2349	9L-2350	3
12.7 mm (0.50 in)	1956 mm (77.01 in)	8M-3092	136-3646	2
12.7 mm (0.50 in)	1968 mm (77.48 in)	9L-4265	7E-6441	2
12.7 mm (0.50 in)	1981 mm (77.99 in)	8M-0760	7C-7204	2
12.7 mm (0.50 in)	2007 mm (79.02 in)	7E-6191	7E-6192	2
12.7 mm (0.50 in)	2032 mm (80 in)	7E-1365	7E-1364	3
12.7 mm (0.50 in)	2057 mm (80.98 in)	4P-4998	4P-4997	2
12.7 mm (0.50 in)	2187 mm (86.10 in)	117-0036	–	–
12.7 mm (0.50 in)	2235 mm (87.99 in)	213-6558	–	–
12.7 mm (0.50 in)	2288 mm (90.08 in)	117-0030	–	–
13 mm (0.51 in)	1845 mm (72.64 in)	304-9792	304-9807	2
15.9 mm (0.63 in)	2591 mm (102.01 in)	7N-3117	7N-3118	5
15.9 mm (0.63 in)	2616 mm (102.99 in)	1N-4092	1N-4480	6
15.9 mm (0.63 in)	2667 mm (105 in)	8N-6698	8N-6716	6
15.9 mm (0.63 in)	2692 mm (105.98 in)	1N-4090	8N-6720	6

## V-Belts - Cogged (cont'd.)

Size	Length	Part Number	Set Part Number	Set Qty.
15.9 mm (0.63 in)	2718 mm (107.01 in)	7N-3119	7N-3120	6
15.9 mm (0.63 in)	2794 mm (110 in)	1N-4093	8N-6694	6
15.9 mm (0.63 in)	2819 mm (110.98 in)	1N-4089	1N-4098	6
15.9 mm (0.63 in)	2850 mm (112.20 in)	270-2637	270-2638	6
15.9 mm (0.63 in)	2921 mm (115 in)	256-2712	256-3246	6
15.9 mm (0.63 in)	2997.2 mm (118 in)	256-3244	256-3609	6
15.9 mm (0.63 in)	889 mm (35 in)	1L-6557	—	—
15.9 mm (0.63 in)	1080 mm (42.52 in)	6B-5653	—	—
15.9 mm (0.63 in)	1156 mm (45.51 in)	8P-3064	—	—
15.9 mm (0.63 in)	1232 mm (48.50 in)	6B-2746	—	—
15.9 mm (0.63 in)	1245 mm (49.02 in)	9L-6653	9L-6654	2
15.9 mm (0.63 in)	1270 mm (50 in)	147-7178	147-7177	2
15.9 mm (0.63 in)	1270 mm (50 in)	202-0131	—	—
15.9 mm (0.63 in)	1295 mm (50.98 in)	5B-8473	9L-0361	6
15.9 mm (0.63 in)	1308 mm (51.50 in)	6N-0341	205-1029	3
15.9 mm (0.63 in)	1359 mm (53.50 in)	7N-3948	7N-3949	3
15.9 mm (0.63 in)	1372 mm (54.02 in)	8L-5136	8L-5137	3
15.9 mm (0.63 in)	1390 mm (54.72 in)	204-1334	344-2738	6
15.9 mm (0.63 in)	1410 mm (55.51 in)	4L-4648	5L-5012	2
15.9 mm (0.63 in)	1422 mm (55.98 in)	4N-8216	4N-8217	2
15.9 mm (0.63 in)	1448 mm (57.01 in)	9L-6639	9N-1324	3
15.9 mm (0.63 in)	1460 mm (57.48 in)	6N-7135	9Y-4047	2
15.9 mm (0.63 in)	1473 mm (57.99 in)	130-7477	—	—
15.9 mm (0.63 in)	1486 mm (58.50 in)	4N-8220	4N-6373	4
15.9 mm (0.63 in)	1499 mm (59.02 in)	9L-6641	284-8095	3
15.9 mm (0.63 in)	1524 mm (60 in)	4P-1666	4P-1667	3
15.9 mm (0.63 in)	1549 mm (60.98 in)	9L-6643	6N-9159	3
15.9 mm (0.63 in)	1557 mm (61.30 in)	189-9826	205-2922	5
15.9 mm (0.63 in)	1562 mm (61.50 in)	4N-2531	4N-2532	3
15.9 mm (0.63 in)	1588 mm (62.52 in)	133-6443	—	—
15.9 mm (0.63 in)	1588 mm (62.52 in)	9L-6645	9L-6646	3
15.9 mm (0.63 in)	1613 mm (63.50 in)	125-8025	—	—
15.9 mm (0.63 in)	1613 mm (63.50 in)	6N-6657	6N-6656	4
15.9 mm (0.63 in)	1639 mm (64.53 in)	4N-8218	6N-0388	3
15.9 mm (0.63 in)	1664 mm (65.51 in)	4P-8398	4P-8397	3
15.9 mm (0.63 in)	1664 mm (65.51 in)	7C-9001	—	—
15.9 mm (0.63 in)	1689 mm (66.50 in)	9L-6647	6N-6652	4
15.9 mm (0.63 in)	1740 mm (68.50 in)	9L-6649	9L-6650	4
15.9 mm (0.63 in)	1752 mm (68.98 in)	7E-7645	7E-7646	4
15.9 mm (0.63 in)	1778 mm (70 in)	6N-6654	6N-6655	2
15.9 mm (0.63 in)	1803 mm (70.98 in)	3R-5603	3N-8848	3

# Belts

## V-Belts - Cogged (cont'd.)

Size	Length	Part Number	Set Part Number	Set Qty.
15.9 mm (0.63 in)	1803 mm (70.98 in)	4N-8221	180-9571	4
15.9 mm (0.63 in)	1803 mm (70.98 in)	9Y-9702	—	—
15.9 mm (0.63 in)	1816 mm (71.50 in)	9L-6651	164-3780	3
15.9 mm (0.63 in)	1829 mm (72.01 in)	6N-0073	5N-4751	4
15.9 mm (0.63 in)	1854 mm (72.99 in)	4N-8277	4N-8278	3
15.9 mm (0.63 in)	1892 mm (74.49 in)	166-3357	166-3365	3
15.9 mm (0.63 in)	1892 mm (74.49 in)	6N-6650	6N-6651	2
15.9 mm (0.63 in)	1905 mm (75 in)	3R-9089	3R-9090	4
15.9 mm (0.63 in)	1918 mm (75.51 in)	4N-8219	4N-6302	3
15.9 mm (0.63 in)	1956 mm (77.01 in)	166-3358	166-3366	3
15.9 mm (0.63 in)	1956 mm (77.01 in)	4P-8088	4P-8087	4
15.9 mm (0.63 in)	1981 mm (77.99 in)	6N-7054	1W-0422	4
15.9 mm (0.63 in)	2007 mm (79.02 in)	4W-6256	216-7877	3
15.9 mm (0.63 in)	2032 mm (80 in)	4Q-5034	—	—
15.9 mm (0.63 in)	2032 mm (80 in)	5L-7422	5L-7423	4
15.9 mm (0.63 in)	2032 mm (80 in)	7W-6129	7C-2500	2
15.9 mm (0.63 in)	2055 mm (80.91 in)	244-0536	244-0537	2
15.9 mm (0.63 in)	2057 mm (80.98 in)	166-3356	166-3364	3
15.9 mm (0.63 in)	2057 mm (80.98 in)	6N-5338	6N-5337	3
15.9 mm (0.63 in)	2083 mm (82.01 in)	7N-7056	7N-7055	2
15.9 mm (0.63 in)	2108 mm (82.99 in)	7W-8132	118-2018	3
15.9 mm (0.63 in)	2134 mm (84.02 in)	4N-8197	8N-6710	2
15.9 mm (0.63 in)	2135 mm (84.05 in)	266-2372	—	—
15.9 mm (0.63 in)	2159 mm (85 in)	1N-9382	1N-9383	5
15.9 mm (0.63 in)	2159 mm (85 in)	7N-8538	270-2639	3
15.9 mm (0.63 in)	2184 mm (85.98 in)	1N-3464	129-2416	3
15.9 mm (0.63 in)	2210 mm (87.01 in)	7N-4828	7N-4829	2
15.9 mm (0.63 in)	2235 mm (87.99 in)	7N-2143	1W-0530	2
15.9 mm (0.63 in)	2261 mm (89.02 in)	8N-6693	7N-9417	2
15.9 mm (0.63 in)	2286 mm (90 in)	1W-8044	7W-5228	2
15.9 mm (0.63 in)	2337 mm (92.01 in)	1N-3714	1N-3713	6
15.9 mm (0.63 in)	2362 mm (92.99 in)	2L-9492	254-3526	6
15.9 mm (0.63 in)	2388 mm (94.02 in)	8N-6717	8N-6700	6
15.9 mm (0.63 in)	2413 mm (95 in)	5L-7425	5L-7426	4
15.9 mm (0.63 in)	2413 mm (95 in)	7W-5259	254-3527	6
15.9 mm (0.63 in)	2438 mm (95.98 in)	8N-6709	8N-6705	6
15.9 mm (0.63 in)	2464 mm (97.01 in)	8N-6719	8N-6711	6
15.9 mm (0.63 in)	2489 mm (97.99 in)	7N-3121	7N-3122	6
15.9 mm (0.63 in)	2515 mm (99.02 in)	2W-5092	4W-0752	3
15.9 mm (0.63 in)	2515 mm (99.02 in)	9Y-9700	9Y-9699	3
15.9 mm (0.63 in)	2921 mm (115 in)	291-1476	294-2593	5



## V-Belts - Cogged (cont'd.)

Size	Length	Part Number	Set Part Number	Set Qty.
16.7 mm (0.66 in)	1520 mm (59.84 in)	247-5895	—	—
17.5 mm (0.69 in)	2642 mm (104.02 in)	115-2459	115-2460	4
17.5 mm (0.69 in)	2642 mm (104.02 in)	125-6515	125-6516	4
17.5 mm (0.69 in)	2692 mm (105.98 in)	127-5564	127-5563	4
17.5 mm (0.69 in)	2769 mm (109.02 in)	169-0146	169-0147	4
17.5 mm (0.69 in)	1054 mm (41.50 in)	5M-5344	—	—
17.5 mm (0.69 in)	1143 mm (45 in)	5L-1584	—	—
17.5 mm (0.69 in)	1156 mm (45.51 in)	9S-9010	—	—
17.5 mm (0.69 in)	1181 mm (46.50 in)	1S-5138	—	—
17.5 mm (0.69 in)	1206 mm (47.48 in)	5M-5345	—	—
17.5 mm (0.69 in)	1232 mm (48.50 in)	3L-9717	5L-4660	2
17.5 mm (0.69 in)	1257 mm (49.49 in)	8F-2434	—	—
17.5 mm (0.69 in)	1334 mm (52.52 in)	7M-0169	—	—
17.5 mm (0.69 in)	1372 mm (54.02 in)	3S-8402	—	—
17.5 mm (0.69 in)	1397 mm (55 in)	5M-0924	7M-4691	2
17.5 mm (0.69 in)	1435 mm (56.50 in)	7M-0297	7M-0298	2
17.5 mm (0.69 in)	1448 mm (57.01 in)	8M-3646	—	—
17.5 mm (0.69 in)	1473 mm (57.99 in)	4M-9678	—	—
17.5 mm (0.69 in)	1486 mm (58.50 in)	3R-2689	—	—
17.5 mm (0.69 in)	1511 mm (59.49 in)	7M-3921	—	—
17.5 mm (0.69 in)	1524 mm (60 in)	8S-1574	8S-3199	2
17.5 mm (0.69 in)	1562 mm (61.50 in)	3P-0025	7M-6104	2
17.5 mm (0.69 in)	1575 mm (62.01 in)	4M-6292	7S-9807	2
17.5 mm (0.69 in)	1588 mm (62.52 in)	2P-6141	2P-6142	2
17.5 mm (0.69 in)	1600 mm (62.99 in)	8H-9832	7M-6105	2
17.5 mm (0.69 in)	1613 mm (63.50 in)	1P-2421	1P-2423	2
17.5 mm (0.69 in)	1626 mm (64.02 in)	2M-8502	7M-6100	2
17.5 mm (0.69 in)	1638 mm (64.49 in)	4S-7755	4S-7754	2
17.5 mm (0.69 in)	1651 mm (65 in)	5M-2733	7S-9811	2
17.5 mm (0.69 in)	1676 mm (65.98 in)	7S-9859	7S-9860	2
17.5 mm (0.69 in)	1689 mm (66.50 in)	8M-1715	8M-1714	3
17.5 mm (0.69 in)	1702 mm (67.01 in)	2L-2991	1S-1126	2
17.5 mm (0.69 in)	1727 mm (67.99 in)	5S-9505	5S-9078	2
17.5 mm (0.69 in)	1753 mm (69.02 in)	5S-9506	5S-9079	2
17.5 mm (0.69 in)	1765 mm (69.49 in)	7S-1691	7S-1690	2
17.5 mm (0.69 in)	1778 mm (70 in)	7S-9809	7S-9810	2
17.5 mm (0.69 in)	1791 mm (70.51 in)	5M-6096	5M-5343	2
17.5 mm (0.69 in)	1803 mm (70.98 in)	4M-9386	7M-5535	4
17.5 mm (0.69 in)	1842 mm (72.52 in)	9M-6934	9M-6933	2
17.5 mm (0.69 in)	1854 mm (72.99 in)	2P-6139	2P-6140	2
17.5 mm (0.69 in)	1880 mm (74.02 in)	2P-2356	2P-2357	2

# Belts

## V-Belts - Cogged (cont'd.)

Size	Length	Part Number	Set Part Number	Set Qty.
17.5 mm (0.69 in)	1892 mm (74.49 in)	6N-2349	6N-2348	2
17.5 mm (0.69 in)	1930 mm (75.98 in)	7S-8349	7S-8350	2
17.5 mm (0.69 in)	1943 mm (76.50 in)	9M-5146	8S-6178	2
17.5 mm (0.69 in)	1956 mm (77.01 in)	9M-3633	—	—
17.5 mm (0.69 in)	2007 mm (79.02 in)	4M-9072	5R-2455	2
17.5 mm (0.69 in)	2019 mm (79.49 in)	4N-4789	4N-4773	4
17.5 mm (0.69 in)	2032 mm (80 in)	5S-0290	5S-0291	3
17.5 mm (0.69 in)	2057 mm (80.98 in)	2S-9911	2S-8268	3
17.5 mm (0.69 in)	2083 mm (82.01 in)	7M-7373	4N-1745	3
17.5 mm (0.69 in)	2108 mm (82.99 in)	2S-5279	3S-9646	3
17.5 mm (0.69 in)	2184 mm (85.98 in)	5S-1762	7N-7502	2
22.3 mm (0.88 in)	2565 mm (100.98 in)	251-7492	251-7493	2
22.3 mm (0.88 in)	2591 mm (102.01 in)	4Q-5035	4Q-5036	4
22.3 mm (0.88 in)	2591 mm (102.01 in)	7W-1664	7W-1665	4
22.3 mm (0.88 in)	2688 mm (105.83 in)	313-3709	313-3710	5
22.3 mm (0.88 in)	2718 mm (107.01 in)	4W-5092	4W-5091	6
22.3 mm (0.88 in)	2768.6 mm (109 in)	123-5890	123-5889	4
22.3 mm (0.88 in)	2768.6 mm (109 in)	133-6444	133-6445	4
22.3 mm (0.88 in)	2780 mm (109.45 in)	6I-1757	6I-1973	6
22.3 mm (0.88 in)	2869 mm (112.95 in)	9Y-8466	9Y-8467	4
22.3 mm (0.88 in)	2895 mm (113.98 in)	119-6373	119-6374	6
22.3 mm (0.88 in)	1232 mm (48.50 in)	5F-7676	—	—
22.3 mm (0.88 in)	1270 mm (50 in)	5H-2896	—	—
22.3 mm (0.88 in)	1308 mm (51.50 in)	5H-9857	—	—
22.3 mm (0.88 in)	1372 mm (54.02 in)	7E-5096	7E-5097	2
22.3 mm (0.88 in)	1384 mm (54.49 in)	9Y-8865	9Y-8864	2
22.3 mm (0.88 in)	1397 mm (55 in)	7E-5114	7E-5113	2
22.3 mm (0.88 in)	1410 mm (55.51 in)	9F-1899	7M-4711	2
22.3 mm (0.88 in)	1422 mm (55.98 in)	1L-5514	1S-1127	2
22.3 mm (0.88 in)	1435 mm (56.50 in)	139-5170	139-5171	2
22.3 mm (0.88 in)	1448 mm (57.01 in)	5L-9902	4N-6529	2
22.3 mm (0.88 in)	1460 mm (57.48 in)	9Y-0290	9Y-0291	2
22.3 mm (0.88 in)	1486 mm (58.50 in)	8F-5164	7M-4715	2
22.3 mm (0.88 in)	1499 mm (59.02 in)	8M-9708	—	—
22.3 mm (0.88 in)	1511 mm (59.49 in)	4M-8218	4P-4905	2
22.3 mm (0.88 in)	1549 mm (60.98 in)	3S-2347	2P-2369	2
22.3 mm (0.88 in)	1575 mm (62.01 in)	5M-5347	8N-4128	2
22.3 mm (0.88 in)	1588 mm (62.52 in)	5M-5965	2P-2696	2
22.3 mm (0.88 in)	1600 mm (62.99 in)	4F-6390	7M-4716	2
22.3 mm (0.88 in)	1613 mm (63.50 in)	6B-8536	—	—
22.3 mm (0.88 in)	1626 mm (64.02 in)	2P-1272	2P-1388	2

## V-Belts - Cogged (cont'd.)

Size	Length	Part Number	Set Part Number	Set Qty.
22.3 mm (0.88 in)	1638 mm (64.49 in)	6N-3636	6N-3637	2
22.3 mm (0.88 in)	1651 mm (65 in)	1L-5681	7M-0981	2
22.3 mm (0.88 in)	1676 mm (65.98 in)	7M-7477	4N-3587	2
22.3 mm (0.88 in)	1689 mm (66.50 in)	3L-7540	7L-7099	2
22.3 mm (0.88 in)	1702 mm (67.01 in)	2H-1383	7M-7864	2
22.3 mm (0.88 in)	1714 mm (67.48 in)	2M-8183	5L-5015	2
22.3 mm (0.88 in)	1753 mm (69.02 in)	9M-7220	9M-7221	3
22.3 mm (0.88 in)	1765 mm (69.49 in)	5H-4207	3P-0071	2
22.3 mm (0.88 in)	1778 mm (70 in)	4M-5429	7M-4706	2
22.3 mm (0.88 in)	1803 mm (70.98 in)	4M-5413	7M-4707	3
22.3 mm (0.88 in)	1816 mm (71.50 in)	7B-0344	7M-4719	2
22.3 mm (0.88 in)	1854 mm (72.99 in)	5H-7448	7M-4702	2
22.3 mm (0.88 in)	1867 mm (73.50 in)	3P-0099	3P-0098	2
22.3 mm (0.88 in)	1880 mm (74.02 in)	6H-5705	7M-0185	2
22.3 mm (0.88 in)	1918 mm (75.51 in)	2M-8255	8S-1475	3
22.3 mm (0.88 in)	1930 mm (75.98 in)	7H-9806	7M-4717	2
22.3 mm (0.88 in)	1943 mm (76.50 in)	2M-7863	7M-4703	2
22.3 mm (0.88 in)	1956 mm (77.01 in)	1H-6929	7M-4718	2
22.3 mm (0.88 in)	1968 mm (77.48 in)	3L-7539	5L-5014	3
22.3 mm (0.88 in)	1994 mm (78.50 in)	8B-3546	7M-4721	2
22.3 mm (0.88 in)	2007 mm (79.02 in)	8M-0959	8M-0934	2
22.3 mm (0.88 in)	2019 mm (79.49 in)	7M-0304	5R-7276	2
22.3 mm (0.88 in)	2032 mm (80 in)	9M-7800	9M-7801	3
22.3 mm (0.88 in)	2057 mm (80.98 in)	3L-6052	8M-8681	3
22.3 mm (0.88 in)	2083 mm (82.01 in)	3L-9489	6L-1987	2
22.3 mm (0.88 in)	2083 mm (82.01 in)	4R-9240	5R-9996	2
22.3 mm (0.88 in)	2108 mm (82.99 in)	4S-7796	4S-9791	2
22.3 mm (0.88 in)	2159 mm (85 in)	5H-7371	7M-4710	3
22.3 mm (0.88 in)	2184 mm (85.98 in)	7C-3560	7C-3559	2
22.3 mm (0.88 in)	2210 mm (87.01 in)	1M-7303	2W-8951	4
22.3 mm (0.88 in)	2235 mm (87.99 in)	2W-6765	2W-6766	4
22.3 mm (0.88 in)	2261 mm (89.02 in)	7N-3966	2W-8952	2
22.3 mm (0.88 in)	2286 mm (90 in)	5B-9790	6N-7575	2
22.3 mm (0.88 in)	2311 mm (90.98 in)	110-0375	124-5113	2
22.3 mm (0.88 in)	2337 mm (92.01 in)	4W-7507	4W-7508	2
22.3 mm (0.88 in)	2388 mm (94.02 in)	110-0376	123-3995	2
22.3 mm (0.88 in)	2460 mm (96.85 in)	167-7547	167-7549	2
22.3 mm (0.88 in)	2464 mm (97.01 in)	251-7494	251-7495	2
22.3 mm (0.88 in)	2489 mm (97.99 in)	110-0377	123-3996	2
22.3 mm (0.88 in)	2540 mm (100 in)	6B-9737	7M-4720	2
25.5 mm (1 in)	1156 mm (45.51 in)	6B-1039	—	—

# Belts

## V-Belts - Cogged (cont'd.)

Size	Length	Part Number	Set Part Number	Set Qty.
25.5 mm (1 in)	1245 mm (49.02 in)	7B-4032	—	—
25.5 mm (1 in)	1270 mm (50 in)	4F-7956	—	—
25.5 mm (1 in)	1334 mm (52.52 in)	5H-4239	—	—
31.8 mm (1.25 in)	1537 mm (60.51 in)	7B-2774	—	—
31.8 mm (1.25 in)	1562 mm (61.50 in)	8H-7180	—	—
31.8 mm (1.25 in)	1588 mm (62.52 in)	3B-8904	5L-6672	2
31.8 mm (1.25 in)	1651 mm (65 in)	1H-3592	6L-6552	2
31.8 mm (1.25 in)	1753 mm (69.02 in)	1H-5899	7M-4948	2
31.8 mm (1.25 in)	1880 mm (74.02 in)	5H-4462	7M-4953	2

## Serpentine Belts



Size	Length	No. of Peaks	Part Number
2 mm (0.08 in)	1626 mm (64.02 in)	2	288-7195
3.6 mm (0.14 in)	1787 mm (70.35 in)	8	336-4436
3.6 mm (0.14 in)	1813 mm (71.38 in)	8	349-3353
8 mm (0.31 in)	2385 mm (93.90 in)	8	330-0663
14 mm (0.55 in)	1547 mm (60.91 in)	14	330-0662
19 mm (0.75 in)	1664 mm (65.51 in)	2	299-0179
20.8 mm (0.82 in)	917 mm (36.10 in)	6	179-7078
20.8 mm (0.82 in)	1510 mm (59.45 in)	6	285-2943
20.8 mm (0.82 in)	1700 mm (66.93 in)	6	310-7127
20.8 mm (0.82 in)	1750 mm (68.90 in)	6	318-6151
20.8 mm (0.82 in)	2170 mm (85.43 in)	6	304-4511
20.9 mm (0.82 in)	1392 mm (54.80 in)	6	8Q-1508
20.9 mm (0.82 in)	1420 mm (55.91 in)	6	101-4910
20.9 mm (0.82 in)	1455 mm (57.28 in)	6	129-3574
20.9 mm (0.82 in)	1511 mm (59.49 in)	6	133-4871
24.4 mm (0.96 in)	1404 mm (55.28 in)	7	155-4769
24.4 mm (0.96 in)	1790 mm (70.47 in)	7	135-9505
25.4 mm (1 in)	1778 mm (70 in)	2	198-6890
25.4 mm (1 in)	1829 mm (72.01 in)	2	198-6827

Size	Length	No. of Peaks	Part Number
25.4 mm (1 in)	1912 mm (75.28 in)	2	211-6557
25.4 mm (1 in)	2108 mm (82.99 in)	2	205-2201
25.4 mm (1 in)	2159 mm (85 in)	2	201-9911
27.9 mm (1.10 in)	2900 mm (114.17 in)	8	249-8740
27.9 mm (1.10 in)	2958 mm (116.46 in)	8	211-5406
27.9 mm (1.10 in)	917 mm (36.10 in)	8	218-9823
27.9 mm (1.10 in)	1341 mm (52.80 in)	8	312-4712
27.9 mm (1.10 in)	1361 mm (53.58 in)	8	312-4710
27.9 mm (1.10 in)	1900 mm (74.80 in)	8	337-3023
27.9 mm (1.10 in)	1930 mm (75.98 in)	8	277-8724
27.9 mm (1.10 in)	2005 mm (78.94 in)	8	260-1527
27.9 mm (1.10 in)	2005 mm (78.94 in)	8	334-1624
27.9 mm (1.10 in)	2050 mm (80.71 in)	8	260-1528
27.9 mm (1.10 in)	2050 mm (80.71 in)	8	334-1623
27.9 mm (1.10 in)	2658 mm (104.65 in)	8	239-5944
27.9 mm (1.10 in)	1054 mm (41.50 in)	8	100-3725
27.9 mm (1.10 in)	1075 mm (42.32 in)	8	178-6402
27.9 mm (1.10 in)	1093 mm (43.03 in)	8	141-7116
27.9 mm (1.10 in)	1170 mm (46.06 in)	8	186-4195

## Serpentine Belts (cont'd.)

Size	Length	No. of Peaks	Part Number	Size	Length	No. of Peaks	Part Number
27.9 mm (1.10 in)	1181 mm (46.50 in)	8	7E-8244	27.9 mm (1.10 in)	1361 mm (53.58 in)	8	353-3976
27.9 mm (1.10 in)	1314 mm (51.73 in)	8	131-0762	27.9 mm (1.10 in)	1385 mm (54.53 in)	8	359-7476
27.9 mm (1.10 in)	1350 mm (53.15 in)	8	324-3408	27.9 mm (1.10 in)	1395 mm (54.92 in)	8	241-4982
27.9 mm (1.10 in)	1480 mm (58.27 in)	8	226-0443	27.9 mm (1.10 in)	1450 mm (57.09 in)	8	190-8143
27.9 mm (1.10 in)	1515 mm (59.65 in)	8	190-6560	27.9 mm (1.10 in)	1509 mm (59.41 in)	8	362-3039
27.9 mm (1.10 in)	1520 mm (59.84 in)	8	253-4794	27.9 mm (1.10 in)	1516 mm (59.68 in)	8	351-6508
27.9 mm (1.10 in)	1530 mm (60.24 in)	8	262-4995	27.9 mm (1.10 in)	1518 mm (59.76 in)	8	348-7891
27.9 mm (1.10 in)	1830 mm (72.05 in)	8	230-7207	27.9 mm (1.10 in)	1563 mm (61.54 in)	8	331-9604
27.9 mm (1.10 in)	1897 mm (74.68 in)	8	142-0861	27.9 mm (1.10 in)	1585 mm (62.40 in)	8	374-8476
27.9 mm (1.10 in)	1990 mm (78.35 in)	3	250-0678	27.9 mm (1.10 in)	1606 mm (63.23 in)	8	277-8713
27.9 mm (1.10 in)	2130 mm (83.86 in)	8	230-7198	27.9 mm (1.10 in)	1610 mm (63.39 in)	8	243-2143
27.9 mm (1.10 in)	2200 mm (86.61 in)	8	243-1559	27.9 mm (1.10 in)	1610 mm (63.39 in)	8	348-7036
27.9 mm (1.10 in)	2223 mm (87.52 in)	8	221-3775	27.9 mm (1.10 in)	1627 mm (64.05 in)	8	357-0492
27.9 mm (1.10 in)	2365 mm (93.11 in)	8	277-4586	27.9 mm (1.10 in)	1645 mm (64.76 in)	8	275-9346
27.9 mm (1.10 in)	2555 mm (100.59 in)	8	219-8689	27.9 mm (1.10 in)	1650 mm (64.96 in)	8	291-4051
27.9 mm (1.10 in)	2594 mm (102.13 in)	8	217-3031	27.9 mm (1.10 in)	1715 mm (67.52 in)	8	292-0678
27.9 mm (1.10 in)	2600 mm (102.36 in)	8	350-5810	27.9 mm (1.10 in)	1730 mm (68.11 in)	3	266-1464
27.9 mm (1.10 in)	2620 mm (103.15 in)	8	263-1862	27.9 mm (1.10 in)	1740 mm (68.50 in)	8	313-4537
27.9 mm (1.10 in)	2622 mm (103.23 in)	8	352-6441	27.9 mm (1.10 in)	1753 mm (69.02 in)	8	363-7389
27.9 mm (1.10 in)	2630 mm (103.54 in)	8	275-9345	27.9 mm (1.10 in)	1755 mm (69.09 in)	8	273-7533
27.9 mm (1.10 in)	2635 mm (103.74 in)	8	350-5391	27.9 mm (1.10 in)	1760 mm (69.29 in)	8	357-2890
27.9 mm (1.10 in)	2690 mm (105.91 in)	8	273-7531	27.9 mm (1.10 in)	1787 mm (70.35 in)	8	374-8480
27.9 mm (1.10 in)	2730 mm (107.48 in)	8	204-6587	27.9 mm (1.10 in)	1824 mm (71.81 in)	8	185-1911
27.9 mm (1.10 in)	2740 mm (107.87 in)	8	348-5783	27.9 mm (1.10 in)	1854 mm (72.99 in)	8	263-9079
27.9 mm (1.10 in)	2768 mm (108.98 in)	8	352-6437	27.9 mm (1.10 in)	1855 mm (73.03 in)	8	226-4020
27.9 mm (1.10 in)	2780 mm (109.45 in)	8	206-7824	27.9 mm (1.10 in)	1860 mm (73.23 in)	8	203-7765
27.9 mm (1.10 in)	2790 mm (109.84 in)	8	240-3374	27.9 mm (1.10 in)	1860 mm (73.23 in)	8	219-3303
27.9 mm (1.10 in)	2798 mm (110.16 in)	8	189-2214	27.9 mm (1.10 in)	1900 mm (74.80 in)	8	246-6296
27.9 mm (1.10 in)	2808 mm (110.55 in)	8	202-3197	27.9 mm (1.10 in)	1950 mm (76.77 in)	8	313-9120
27.9 mm (1.10 in)	2820 mm (111.02 in)	8	260-6106	27.9 mm (1.10 in)	1970 mm (77.56 in)	8	206-4229
27.9 mm (1.10 in)	2827 mm (111.30 in)	8	215-3015	27.9 mm (1.10 in)	1979 mm (77.91 in)	8	222-5511
27.9 mm (1.10 in)	2835 mm (111.61 in)	8	189-2213	27.9 mm (1.10 in)	1980 mm (77.95 in)	8	267-2949
27.9 mm (1.10 in)	2840 mm (111.81 in)	8	226-9381	27.9 mm (1.10 in)	1990 mm (78.35 in)	8	348-7890
27.9 mm (1.10 in)	2890 mm (113.78 in)	8	224-2636	27.9 mm (1.10 in)	2010 mm (79.13 in)	8	348-7888
27.9 mm (1.10 in)	2933 mm (115.47 in)	8	352-4863	27.9 mm (1.10 in)	2040 mm (80.31 in)	8	206-6497
27.9 mm (1.10 in)	3000 mm (118.11 in)	8	241-4231	27.9 mm (1.10 in)	2041 mm (80.35 in)	8	220-1856
27.9 mm (1.10 in)	3058 mm (120.39 in)	8	337-4339	27.9 mm (1.10 in)	2050 mm (80.71 in)	8	320-0788
27.9 mm (1.10 in)	3230 mm (127.16 in)	8	310-2103	27.9 mm (1.10 in)	2050 mm (80.71 in)	8	364-6417
27.9 mm (1.10 in)	1054 mm (41.50 in)	8	350-7106	27.9 mm (1.10 in)	2060 mm (81.10 in)	8	254-0298
27.9 mm (1.10 in)	1072 mm (42.20 in)	8	357-7153	27.9 mm (1.10 in)	2115 mm (83.27 in)	8	260-6641
27.9 mm (1.10 in)	1158.9 mm (45.63 in)	8	352-6439	27.9 mm (1.10 in)	2117 mm (83.35 in)	8	351-0497
27.9 mm (1.10 in)	1220 mm (48.03 in)	8	190-8142	27.9 mm (1.10 in)	2127 mm (83.74 in)	6	374-8478
27.9 mm (1.10 in)	1230 mm (48.43 in)	8	236-3842	27.9 mm (1.10 in)	2160 mm (85.04 in)	8	374-8479
27.9 mm (1.10 in)	1245 mm (49.02 in)	8	236-3839	27.9 mm (1.10 in)	2165 mm (85.24 in)	8	348-7885
27.9 mm (1.10 in)	1310 mm (51.57 in)	8	257-5523	27.9 mm (1.10 in)	2245 mm (88.39 in)	8	348-7886
27.9 mm (1.10 in)	1345 mm (52.95 in)	8	241-4981	27.9 mm (1.10 in)	2250 mm (88.58 in)	8	208-2827

# Belts

## Serpentine Belts (cont'd.)

Size	Length	No. of Peaks	Part Number
27.9 mm (1.10 in)	2255 mm (88.78 in)	8	260-6107
27.9 mm (1.10 in)	2260 mm (88.98 in)	8	212-3176
27.9 mm (1.10 in)	2274 mm (89.53 in)	8	226-9380
27.9 mm (1.10 in)	2275 mm (89.57 in)	8	348-7889
27.9 mm (1.10 in)	2285 mm (89.96 in)	8	357-0490
27.9 mm (1.10 in)	2296 mm (90.39 in)	8	189-2216
27.9 mm (1.10 in)	2315 mm (91.14 in)	8	211-3576
27.9 mm (1.10 in)	2335 mm (91.93 in)	8	206-7825
27.9 mm (1.10 in)	2360 mm (92.91 in)	8	359-0185
27.9 mm (1.10 in)	2376 mm (93.54 in)	8	189-2218
27.9 mm (1.10 in)	2410 mm (94.88 in)	8	202-3198
27.9 mm (1.10 in)	2430 mm (95.67 in)	8	350-2822
27.9 mm (1.10 in)	2445 mm (96.26 in)	8	191-5215
27.9 mm (1.10 in)	2450 mm (96.46 in)	8	240-3373
27.9 mm (1.10 in)	2481 mm (97.68 in)	8	219-3304
27.9 mm (1.10 in)	2485 mm (97.83 in)	8	243-1324
27.9 mm (1.10 in)	2485 mm (97.83 in)	8	345-0409
27.9 mm (1.10 in)	2495 mm (98.23 in)	8	298-4466
27.9 mm (1.10 in)	2520 mm (99.21 in)	8	224-2638
27.9 mm (1.10 in)	2521 mm (99.25 in)	8	253-4531
27.9 mm (1.10 in)	2533 mm (99.72 in)	8	216-6935
28 mm (1.10 in)	1610 mm (63.39 in)	8	348-7884
28 mm (1.10 in)	1624 mm (63.94 in)	8	328-0811
28.1 mm (1.11 in)	1413 mm (55.63 in)	8	330-0661
28.1 mm (1.11 in)	2125 mm (83.66 in)	8	341-4938
28.3 mm (1.11 in)	1491 mm (58.70 in)	8	350-8741
28.3 mm (1.11 in)	1684 mm (66.30 in)	8	350-8742
28.4 mm (1.12 in)	2460 mm (96.85 in)	3	288-1607
28.4 mm (1.12 in)	2555 mm (100.59 in)	8	243-1276
28.4 mm (1.12 in)	2586 mm (101.81 in)	8	192-5479
28.4 mm (1.12 in)	2720 mm (107.09 in)	8	291-1025
28.4 mm (1.12 in)	2855 mm (112.40 in)	8	312-8933
28.4 mm (1.12 in)	2860 mm (112.60 in)	8	174-9690
28.4 mm (1.12 in)	3335 mm (131.30 in)	8	166-1324
28.4 mm (1.12 in)	1365 mm (53.74 in)	8	228-9100
28.4 mm (1.12 in)	1430 mm (56.30 in)	8	267-9281
28.4 mm (1.12 in)	1445 mm (56.89 in)	8	336-2178
28.4 mm (1.12 in)	1585 mm (62.40 in)	8	220-2945
28.4 mm (1.12 in)	1600 mm (62.99 in)	8	157-2830
28.4 mm (1.12 in)	1640 mm (64.57 in)	8	275-6653
28.4 mm (1.12 in)	1790 mm (70.47 in)	8	212-9353
28.4 mm (1.12 in)	1840 mm (72.44 in)	8	288-4641
28.4 mm (1.12 in)	1970 mm (77.56 in)	8	239-0238
28.4 mm (1.12 in)	2030 mm (79.92 in)	8	285-6217
28.4 mm (1.12 in)	2095 mm (82.48 in)	8	185-5872
28.4 mm (1.12 in)	2110 mm (83.07 in)	8	263-1830

Size	Length	No. of Peaks	Part Number
28.4 mm (1.12 in)	2140 mm (84.25 in)	8	263-1849
28.4 mm (1.12 in)	2145 mm (84.45 in)	8	211-5021
28.4 mm (1.12 in)	2160 mm (85.04 in)	8	241-2896
28.4 mm (1.12 in)	2165 mm (85.24 in)	8	293-3908
28.4 mm (1.12 in)	2180 mm (85.83 in)	8	183-4494
28.4 mm (1.12 in)	2210 mm (87.01 in)	8	211-5022
28.4 mm (1.12 in)	2230 mm (87.80 in)	8	172-2245
28.4 mm (1.12 in)	2246 mm (88.42 in)	8	190-4155
28.4 mm (1.12 in)	2275 mm (89.57 in)	8	178-8481
28.4 mm (1.12 in)	2275 mm (89.57 in)	8	208-2832
28.4 mm (1.12 in)	2275 mm (89.57 in)	8	312-8934
28.4 mm (1.12 in)	2290 mm (90.16 in)	8	289-2980
28.4 mm (1.12 in)	2295 mm (90.35 in)	8	208-2833
28.4 mm (1.12 in)	2325 mm (91.54 in)	8	211-7878
28.4 mm (1.12 in)	2370 mm (93.31 in)	8	162-2742
28.5 mm (1.12 in)	2545 mm (100.20 in)	8	197-4567
28.5 mm (1.12 in)	2645.5 mm (104.15 in)	8	173-7178
28.5 mm (1.12 in)	2758 mm (108.58 in)	8	219-7450
28.5 mm (1.12 in)	1320 mm (51.97 in)	8	171-2321
28.5 mm (1.12 in)	1332 mm (52.44 in)	8	198-1118
28.5 mm (1.12 in)	1465 mm (57.68 in)	8	202-0951
28.5 mm (1.12 in)	1523 mm (59.96 in)	8	164-4599
28.5 mm (1.12 in)	1672 mm (65.83 in)	8	192-2169
28.5 mm (1.12 in)	1816 mm (71.50 in)	8	198-3611
28.5 mm (1.12 in)	1825 mm (71.85 in)	8	154-6036
28.5 mm (1.12 in)	2021 mm (79.57 in)	8	191-6635
28.5 mm (1.12 in)	2127 mm (83.74 in)	8	230-2190
28.5 mm (1.12 in)	1845 mm (72.64 in)	8	245-4628
28.5 mm (1.12 in)	2010 mm (79.13 in)	8	248-6195
29.5 mm (1.16 in)	1727 mm (67.99 in)	2	199-6601
29.5 mm (1.16 in)	1943 mm (76.50 in)	2	350-1223
32 mm (1.26 in)	1245 mm (49.02 in)	9	310-9543
32 mm (1.26 in)	1485 mm (58.46 in)	9	296-4737
32 mm (1.26 in)	1540 mm (60.63 in)	9	310-9592
32 mm (1.26 in)	1550 mm (61.02 in)	9	310-9778
32 mm (1.26 in)	1625 mm (63.98 in)	9	219-2324
35 mm (1.38 in)	1705 mm (67.13 in)	10	318-2528
35 mm (1.38 in)	1715 mm (67.52 in)	3	294-7665
35 mm (1.38 in)	1730 mm (68.11 in)	10	318-2530
35 mm (1.38 in)	1745 mm (68.70 in)	10	292-2187
35 mm (1.38 in)	2345 mm (92.32 in)	10	307-4643
35 mm (1.38 in)	2440 mm (96.06 in)	10	304-4510
35 mm (1.38 in)	2080 mm (81.89 in)	10	318-4830
35 mm (1.38 in)	2125 mm (83.66 in)	10	313-4400
35 mm (1.38 in)	2395 mm (94.29 in)	10	318-6086
35.6 mm (1.40 in)	1455 mm (57.28 in)	10	114-3552

## Serpentine Belts (cont'd.)

Size	Length	No. of Peaks	Part Number
35.6 mm (1.40 in)	1477.5 mm (58.17 in)	10	147-5440
35.6 mm (1.40 in)	1506 mm (59.29 in)	10	114-6414
42.2 mm (1.66 in)	1740 mm (68.50 in)	12	357-0493
42.2 mm (1.66 in)	1505 mm (59.25 in)	12	348-2705
42.2 mm (1.66 in)	1595 mm (62.80 in)	12	348-3785
42.2 mm (1.66 in)	1733 mm (68.23 in)	12	349-7267
42.4 mm (1.67 in)	2098 mm (82.60 in)	12	361-3339
42.7 mm (1.68 in)	2335 mm (91.93 in)	3	296-1503
42.8 mm (1.69 in)	2755 mm (108.46 in)	12	310-7128
42.8 mm (1.69 in)	2240 mm (88.19 in)	12	253-4011
42.8 mm (1.69 in)	2335 mm (91.93 in)	12	310-7131
42.8 mm (1.69 in)	2475 mm (97.44 in)	12	253-4012
49.3 mm (1.94 in)	1438 mm (56.61 in)	14	149-3417
49.3 mm (1.94 in)	1515 mm (59.65 in)	14	359-0188
49.3 mm (1.94 in)	1585 mm (62.40 in)	14	357-0494
49.3 mm (1.94 in)	1657 mm (65.24 in)	14	149-3416
49.3 mm (1.94 in)	1680 mm (66.14 in)	14	316-7714
49.3 mm (1.94 in)	1855 mm (73.03 in)	14	284-1215
49.8 mm (1.96 in)	1170 mm (46.06 in)	14	172-2246
49.8 mm (1.96 in)	1454 mm (57.24 in)	14	197-6292
49.8 mm (1.96 in)	1695 mm (66.73 in)	14	230-2188
49.8 mm (1.96 in)	2050 mm (80.71 in)	14	311-0338
49.8 mm (1.96 in)	1720 mm (67.72 in)	14	321-5169
49.8 mm (1.96 in)	1762 mm (69.37 in)	14	330-0659

Size	Length	No. of Peaks	Part Number
49.8 mm (1.96 in)	2090 mm (82.28 in)	14	321-5168
51.9 mm (2.04 in)	2565 mm (100.98 in)	2	252-9028
51.9 mm (2.04 in)	1892 mm (74.49 in)	2	236-4190
51.9 mm (2.04 in)	1969 mm (77.52 in)	2	206-7870
51.9 mm (2.04 in)	2210 mm (87.01 in)	2	135-8652
51.9 mm (2.04 in)	2362 mm (92.99 in)	2	135-8653
51.9 mm (2.04 in)	2438 mm (95.98 in)	2	198-6750
51.9 mm (2.04 in)	2464 mm (97.01 in)	2	251-7496
54.5 mm (2.15 in)	2032 mm (80 in)	3	9Q-3669
54.5 mm (2.15 in)	2057 mm (80.98 in)	3	8Q-1499
54.5 mm (2.15 in)	2083 mm (82.01 in)	3	216-9993
54.5 mm (2.15 in)	2108 mm (82.99 in)	3	9Q-3668
54.5 mm (2.15 in)	2159 mm (85 in)	3	216-4326
54.5 mm (2.15 in)	2184 mm (85.98 in)	3	9Q-3670
54.5 mm (2.15 in)	2210 mm (87.01 in)	3	129-5119
54.5 mm (2.15 in)	2489 mm (97.99 in)	3	7W-0833
55.6 mm (2.19 in)	1969 mm (77.52 in)	3	269-1974
61 mm (2.40 in)	2121 mm (83.50 in)	3	4W-9341
83 mm (3.27 in)	2642 mm (104.02 in)	4	126-7587
83 mm (3.27 in)	2692 mm (105.98 in)	4	127-8398
83 mm (3.27 in)	2769 mm (109.02 in)	4	204-8034
106.6 mm (4.20 in)	2591 mm (102.01 in)	4	8Q-1500
106.6 mm (4.20 in)	2718 mm (107.01 in)	4	135-8654







**EQUIPMENT FLUIDS**

# Oils - Diesel Engine Oil

## Health and Safety

Under normal conditions of intended use, these products do not pose a risk to health. Excessive exposure may result in eye, skin or respiratory irritation. Always observe good hygiene measures. Read and understand the Material Safety Data Sheet (MSDS) before using this product. For a copy of the MSDS, visit us on the web at [www.catmsds.com](http://www.catmsds.com).

## Cat DEO™



### Recommended Use

- Heavy-duty diesel made by other manufacturers that recommend API CI-4, CI-4 Plus, and CH4. See “Typical Characteristics” for more information.
- Automotive gasoline engines that require API SL or SJ category oils. See “Typical Characteristics” for more information.
- Cat earth moving, commercial, marine and on-highway truck diesel engines, excluding 3600, C280, 3126 and 3116 MUI Marine and MaK™ diesel engines. The 3116 and 3126 MUI Marine diesel engines with closed crankcase ventilation systems should use Cat SAEO™

### Discover the Difference

- Cat DEO is developed, tested and approved by Caterpillar to meet the same high standards as all genuine Cat parts.
- Factory-Fill - Used as standard factory-fill for Cat machines.
- Increased Engine Life - Resists oxidation and prevents build-up on deposits on pistons and rings.
- Extended Drain Intervals - Extends oil drain intervals while providing excellent engine protection and performance when used in conjunction with out S•O•S<sup>SM</sup> Services oil analysis program.
- Proven Performance - Tested thoroughly in Cat diesel engines including Cat engines with ACERT™ Technology to ensure excellent engine life and performance.
- Long-Lasting Protection - Improved soot control and enhanced shear stability enable oil to maintain proper viscosity for longer operating periods in Cat engines with ACERT Technology, especially those equipped with HEUI™ systems.

Typical Characteristics <sup>(1)</sup>							
Location	Worldwide	Worldwide	Canada, Mexico and United States	Canada, Mexico and United States	Brazil	Brazil	Egypt and Saudi Arabia
SAE Viscosity Grade	SAE 15W-40	SAE 10W-30	SAE 15W-40	SAE 10W-30	SAE 15W-40	SAE 10W-30	SAE 15W-40
API Service Classifications	CI-4, CH-4	CI-4, CH-4	CI-4 PLUS, CI-4, CH-4	CI-4, CH-4	CI-4, CH-4	CI-4, CH-4	CI-4, CH-4
API Service Classifications -Gasoline	SL	SL	SL	SL	SL	SL	SL
ACEA Classifications	B3/A2/ E7	E7	E7	E7	E5		
Volvo Performance Level	VDS-3	VDS-2	VDS-3	VDS-3	VDS-3	VDS-2	
MB Performance Level	MB228.3				MB228.3		
Cummins Performance Level	CES 20071/72/76/77	CES 20071/76	CES 20071/76	CES 20071/76/78	CES20071/72/76/77	CES 20071/76	CES 20071/72/76/77
Mack Performance Level	EO-M Plus	EO-M Plus	EO-NPP, EO-M Plus	EO-M Plus	EO-M Plus	EO-M Plus	EO-M Plus

<sup>1</sup> The values shown are typical values and should not be used a quality control parameters to either accept or reject product. Specifications are subject to change without notice.

## Cat DEO™ (Cont'd.)

Typical Characteristics <sup>(2)</sup>							
Location	Worldwide	Worldwide	Canada, Mexico and United States	Canada, Mexico and United States	Brazil	Brazil	Egypt and Saudi Arabia
MAN Performance Level	M3275				M 3275		
RVI Performance Level	RLD				RLD		

Location	Worldwide 15W - 40	Worldwide 10W-30	Canada, Mexico and United States 15W - 40	Canada, Mexico and United States 10W-30	Brazil 15W - 40	Egypt and Saudi Arabia 15W - 40
Flash Point, C (ASTM D92)	230	222	224	220	220	240
Pour Point, (ASTM D97)	-30	-36	-30	-33	-33	-33
SAE Viscosity Grade	SAE 15W-40	SAE 10W-30	SAE 15W-40	SAE 10W-30	SAE 15W-40	SAE 15W-40
Viscosity cSt @ 40C (ASTM D445)	103	76	120.5	76	105	105
Viscosity cSt @ 100C (ASTM D445)	14.2	11.5	15.5	11.5	14.4	14.0
Viscosity Index (ASTM D2270)	135	144	135	145	141	135
Sulfated Ash, wt. (ASTM D874)	1.3	1.3	1.3	1.3	1.1	1.2
TBN (ASTM D2896)	11.3	10.4	10.4	10.4	10.6	10.3
Zinc, wt. (ASTM D4951)	0.146	0.146	0.146	0.146	0.133	0.123
Gravity 16C API (ASTM D287)	29.3	31.3	30	31.7	28.7	29
Gravity 16C Specific	0.88	0.87	0.88	0.87	0.88	0.88

English Volume (gal)	Metric Volume (L)	Qty.	Part Number <sup>(3)</sup>
<b>DEO 10W-30</b>			
5	—	—	3E-9709
55	—	—	3E-9708
Bulk	—	—	155-6198
—	5	—	335-9830
—	18	—	283-1709
—	20	—	3E-9844
—	200	—	130-7055
—	208	—	3E-9707
—	1,000	—	148-3539
—	1,100	—	384-8146
<b>DEO 15W-40</b>			
1 QT	—	4	3E-9715
1	—	—	248-7518
5	—	—	3E-9713
55	—	—	3E-9712
Bulk 1G	—	—	155-6199

English Volume (gal)	Metric Volume (L)	Qty.	Part Number <sup>(3)</sup>
—	1	—	123-4077
—	4	—	3E-9902
—	5	—	3E-9901
—	18	—	3E-9900
—	19	—	3E-9849
—	20	—	3E-9848
—	60	—	121-4038
—	200	—	3E-9842
—	205	—	3E-9841
—	208	—	3E-9840
—	900	—	381-7213
—	1,000	—	3E-9838
—	1,040	—	201-0775
—	1,100	—	384-8147
—	2,000	—	120-5285
—	10,000	—	119-5131

2 The values shown are typical values and should not be used a quality control parameters to either accept or reject product. Specifications are subject to change without notice.

3 Part numbers listed below are not available in all regions. See your Cat dealer for part numbers appropriate for your region.

# Oils - Diesel Engine Oil

## Cat DEO Monograde

For Cat 3600 Series Diesel Engines

### Recommended Use

- Cat DEO Monograde is recommended for use in 3600 series diesel engines operating on distillate diesel fuels.
- Cat DEO Monograde is recommended for older Cat engines equipped with precombustion fuel injection systems that permit the use of American Petroleum Institute CD or CF oil.
- Cat DEO Monograde can be used with low-sulfur diesel fuel and protects Cat engines operating on higher sulfur diesel fuels (3600 Series engines operating on fuel containing up to 1.30% sulfur, and precombustion engines operating on fuel containing up to 0.065% sulfur fuel.)

### Discover the Difference

- Cat DEO Monograde is developed, tested and approved by Caterpillar to meet the same high standards as all Genuine Cat Parts.
- Increased Engine Life — Resists oxidation and prevents build-up of deposits on pistons and rings.
- Extended Drain Intervals — Extends oil drain intervals while providing excellent engine protection and performance when used in conjunction with our S•O•S Services oil analysis program.
- Proven Performance — Tested in Cat 3600 Series diesel engines worldwide.

Typical Characteristics <sup>(4)</sup>	
SAE Viscosity Grade	SAE 40 <sup>(5)</sup>
API Service Classification	CF <sup>(6)</sup>
CCMC	D3
Caterpillar Performance Level (engine)	1M-PC
Flash Point, °C (ASTM D92)	215 min
Pour Point, °C (ASTM D97)	-18 max
Viscosity cSt @ 40° C (ASTM D445)	132
Viscosity cSt @ 100° C (ASTM D445)	14.7
Viscosity Index (ASTM D2270)	112
Sulfated Ash, % wt. (ASTM D874)	1.4
TBN (ASTM D2896)	12.0
Zinc, % wt. (ASTM D4951)	0.10
Gravity @ 16° C API (ASTM D287)	25.5
Phosphorus, % wt. (ASTM D1091)	0.09

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 40</b>		
5	—	416-9247
55	—	416-9246
Bulk 1G	—	155-6202
—	20	7X-7843

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 40</b>		
—	200	9X-8528
—	208	9X-6463
—	1000	9X-6272
—	Bulk 1L	8C-3703

4 The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

5 Passes FZG DIN 51354-2 A/8, 3/90 FLS 12.

6 Can be used in applications where the obsolete API CD classification oil is recommended.

## Cat DEO Cold Weather



### Best Performance and Protection for Cold Weather Applications

Cat DEO Cold Weather is a synthetic diesel engine oil designed with an extremely stable formula tailored to provide long-lasting engine protection over a wide temperature range, -40°F (-40°C) to 104°F (40°C). The backwards compatibility of Cat DEO Cold Weather makes it well suited for mixed fleets of new and old machines. When used in engines equipped with emissions reduction technologies, Cat DEO Cold Weather delivers the full life and performance of after treatment components. Cat DEO Cold Weather exceeds the performance requirements of Cat ECF-3 (Engine Crankcase Fluid Specification) and the API CJ-4 and API SM categories.

Cat DEO Cold Weather takes the trouble out of starting your engine when temperatures are very low. The special formulation flows readily at low temperatures, reducing startup wear and improving fuel economy in some applications. The outstanding thermal stability and oxidation resistance of Cat DEO Cold Weather keeps engine components cleaner, further reducing wear. In testing, Cat DEO Cold Weather was shown to reduce piston deposits by more than 30% and to have more than 80% better viscosity control than ECF-3 standards. These results demonstrate that Cat DEO Cold Weather will help lower your owning and operating costs through fewer oil changes and repairs.

### Benefits

- Easier Engine Starts - Excellent low temperature performance eliminates hard starts
- Reduced Engine Wear - Improved detergents keep engine components cleaner
- Minimized Deposits - Reduced oxidation breakdown and thermal degradation improves stability which minimizes the formation of deposits, sludge, and varnish
- Full Component Life - Specially designed additives deliver superior engine protection while supporting consistent emissions performance and extending the life of after treatment system components.
- Extended Drain Intervals - When regular S•O•S Oil Analysis is utilized, long oil life is possible

### Applications

Cat DEO Cold Weather is the preferred diesel engine oil for low temperature applications.<sup>(7)</sup> Cat DEO Cold Weather supports consistent emissions performance in engines equipped with after treatment devices designed to meet.<sup>(8)</sup>

- 2007/ 2010 On-Highway exhaust emissions standards (US)
- Tier 4 (US)
- Stage IIIB/IV (EU)
- Step 4 (Japan)

7 Oil recommendations for 3116 and 3126 MUI Marine and MaK diesel engines can be found in the Operations & Maintenance Manual (OMM).

8 Aftertreatment devices can include Diesel Particulate Filters (DPF), Diesel Oxidation Catalyst (DOC), Selective Catalytic Reduction (SCR) and/or Lean NOx Trap (LNT).

# Oils - Diesel Engine Oil

## Cat DEO Cold Weather (Cont'd.)

Typical Characteristics <sup>(9)</sup>	
SAE Viscosity Grade	0W-40
API Service Classification	Diesel: CJ-4, CI-4 PLUS/CI-4, CH-4; Gasoline: SM
OEM Performance	Cummins CES 20081, Mack EO-N PP'03
Viscosity cST @ 40°C (ASTM D445)	87
Viscosity cST @ 100°C (ASTM D445)	15.2
Viscosity Index (ASTM 2270)	186
Phosphorous, % wt (ATM D4951)	0.111
Sulfated Ash, % wt. (ASTM D874)	0.99
Sulfur, % wt. (ASTM D2622)	0.4
TBN (ASTM D2896)	7.8
Zinc, % wt (ASTM D4951)	0.121
Gravity @16°C API (ASTM D287)	36.2
Specific Gravity 16°C	0.844

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 0W-40</b>		
1.1	4	361-0923
—	5	347-8468
5.3	20	347-8469
54.2	205	347-8470

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 0W-40</b>		
—	1000	444-3551
—	Bulk	347-8471

<sup>9</sup> The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

## Cat DEO-ULS



(For the United States, Canada, and Mexico only)

### Recommended Use

- Cat DEO-ULS exceeds the performance requirements of Cat ECF-3 (Engine Crankcase Fluid Specification) and API CJ-4.
- Preferred for all 2007 on-highway and non-road Tier 4 U.S. EPA engines and Euro Stage IIIB engines equipped with after treatment systems using 15-ppm sulfur fuel
- May also be used with engines not equipped with aftertreatment systems using 2000-ppm (or less) sulfur fuel without affecting the oil change interval.

### Discover the Difference

- Cat DEO-ULS is developed and tested to provide superior protection and life for Cat engines.
- Better Detergents – Protect against piston and ring groove deposits.
- Advanced Additive Package - Improves protection of the engine and the Diesel Particulate Filter (DPF).
- Enhanced Dispersants - Provide better soot-related viscosity control, prevents viscosity loss from shearing and reduce oil consumption.
- Improved Protection from Thermal and Oxidative Breakdown - Withstands higher sump temperatures while offering low-temperature pumpability.

Typical Characteristics <sup>(10)</sup>		
SAE Viscosity Grade	SAE 15W-40	SAE 10W-30
API Service Classification - Diesel	CJ-4, CI-4 PLUS/CI-4, CH-4	
API Service Classification - Gasoline	SM/SL	
Volvo Performance Level	VDS-4/VDS-3	VDS-4/VDS-3
ACEA Performance Level	E9/E7	E9/E7
Cummins Performance Level	CES 20081	
Mack Performance Level	EO-o Premium Plus	
DDC Performance Level	Powerguard 93K218	
Mercedes Benz Performance Level	MB 228.31	
Flash Point, °C (ASTM D92)	236	230
Pour Point, °C (ASTM D97)	-30	-27
Viscosity cSt @ 40°C (ASTM D445)	114	79
Viscosity cSt @ 100°C (ASTM D445)	15.0	11.9
Viscosity Index (ASTM D2270)	137	145
Sulfated Ash, % wt. (ASTM D874)	0.98	0.97 (ASTM D4739)
TBN (ASTM D2896)	10.4	10.4
Phosphorous, %wt. (ASTM D4951)	0.100	0.100
Sulfur, % wt. (ASTM D2622)	0.3	0.3
Gravity @16°C API (ASTM D287)	30.2	
Gravity @16°C Specific	0.876	

<sup>10</sup> The values shown are typical values and should be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

# Oils - Diesel Engine Oil

## Cat DEO-ULS (Cont'd.)

English Volume (gal)	Metric Volume (L)	Part Number
<b>Cat DEO-ULS 15W-40</b>		
1	—	291-3866
2.5	—	462-7705
5	—	291-3868
55	—	291-3869
Bulk	—	300-7013
—	4	378-6535
—	5	368-4791
—	20	300-7915
—	208	301-2233
—	1000	381-7214
—	Bulk	349-2581
<b>Cat DEO-ULS 10W-30</b>		
1	—	317-3081
2.5	—	462-7704
5	—	317-3083
55	—	317-3084
Bulk	—	319-2260
—	1	341-0729
—	4	378-8296
—	5	368-4792
—	20	308-1476
—	208	317-3085
—	1000	444-3549
—	Bulk	346-0465



## Cat SAEO



### Recommended Use

- Cat Special Application Engine oil is the only oil approved by Caterpillar for use in the 3116 and 3126 Marine Diesel Engine with mechanical unit injection and a closed crankcase ventilation system. This system circulates blowby gases from the engine crankcase to the turbocharger inlet. These blowby gases can form harmful deposits in the turbocharger and the aftercooler. Cat Special Application Engine Oil is designed to reduce or eliminate the formation of these harmful deposits.<sup>(11)</sup>

### Discover the Difference

- Stops the buildup of deposits in the turbocharger compressor and the aftercooler that can reduce power and cause an increase in smoke.
- Maintains stable oil consumption within the specified oil change interval and from one interval to the next.
- Stabilizes functional chemistry throughout each service interval.
- Stops the buildup of deposits on pistons and rings that can increase oil consumption.
- Helps to eliminate the formation of deposits on pistons that are abrasive enough to polish the hone pattern from the surface of the lines.
- Prevents the clumping of soot particles that can cause an abnormal increase in viscosity, piston deposits, or sludge.

Typical Characteristics <sup>(12)</sup>		
SAE Viscosity Grade	SAE 30	SAE 40
Manufacturer	Cat 1K	Cat 1K
Flash Point, °C (ASTM D92)	228	239
Pour Point, °C (ASTM D97)	-30	-18
Viscosity cSt @100°C (ASTM D445)	10.7	13.9 (min)
Sulfated ASH, % wt. (ASTM D874)	0.9	0.9
TBN (ASTM D2896)	6.5	6.5
Zinc, % wt. (ASTM D1549)	0.103 max	0.112 max
Phosphorous, % wt. (ASTM D1091)	0.102 max	0.102 max

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 30</b>		
1	—	170-5262
5	—	198-7368
Bulk	—	161-5824

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 40</b>		
1	—	170-5261
5	—	198-7369

11 Cat SAEO should not be used in 3406, 3126, C-10, C-12, or 3116 low emission on-highway truck engines. Use Cat DEO multi-grade oils.

12 The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

# Oils - Natural Gas Engine Oil

## Cat NGEO™



### Recommend Use

- Designed for engines using gaseous fuels.
- Compatible with exhaust catalyst applications that require a low-phosphorus oil.
- Provides optimum engine and oil life with low-sulfur gaseous fuels that contain less than 0.43 mg hydrogen sulfide per mega Joule (0.35 mg hydrogen sulfide per BTU).

### Discover the Difference

- Cat NGEO is formulated from select base stocks blended with special additives to provide an economical engine oil for natural gas applications. Cat NGEO is developed, tested and approved by Caterpillar to meet the same high standards as all Genuine Cat Parts.
- High-Endurance Lubrication - Performs throughout the long oil change intervals common for gaseous fuel engines.
- Reduced Piston and Cylinder Wear - Anti-oxidation and anti-nitration properties prevent carbon deposit buildup to minimize scuffing, scoring and wear.
- Increased Valve Life - Protects against damage to guide faces and seals.
- Corrosion Protection - Neutralizes acids to prevent rust and copper corrosion.
- High-Temperature Performance - Provides excellent thermal stability and resists foaming and sludge formation.

Typical Characteristics <sup>(1)</sup>	
SAE Viscosity Grade	SAE 40
Gravity, API	27.5
Flash Point, °C (ASTM D92)	265
Pour Point, °C (ASTM D97)	-12 max
Viscosity cSt @ 40°C (ASTM D445)	130
Viscosity cSt @100°C (ASTM D455)	13.5
Viscosity Index (ASTM D567)	99
Sulfated Ash, % wt. (ASTM D874)	0.48
TBN, mg KoH/g (ASTM D2896)	6.2
Phosphorus, % wt. (Spectro or AA)	0.030
Calcium, % wt. (Spectro or AA)	0.125

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 40</b>		
—	19	121-0327
—	200	197-6911
—	205	9X-8527

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 40</b>		
—	208	105-3336
—	1000	159-8156

<sup>1</sup> The values shown are typical values and should not be used as quality control parameters to either accept or reject products. Specifications are subject to change without notice.

## Cat NGE0 EL250

### Applications

- For natural gas engines and other engines requiring low ash oil.

### Features

- Increased detergent concentration and acid neutralizing capability to assure less lacquer and deposits on pistons and valves.
- Control of sludge formulation.
- Outstanding resistance to oil nitration and oxidation.

### Benefits

- Improves ring and liner service life.
- Increased soot-handling capability.
- Protection against valve guide face and seat damage, piston scuffing, scoring and piston/cylinder wear, foam and corrosion damage, and piston carbon deposits.

Typical Characteristics	
SAE Visc Grade	SAE 40
Gravity, API	27.5
Flash Point, °C (ASTM D92)	262
Pour Point, °C (ASTM D97)	-12 min
Viscosity @ 40°C, cSt (AST D445)	130
Viscosity @ 100°C, cSt (ASTM D445)	13.5
Viscosity Index (ASTM D567)	99
Sulfated Ash, %wt (ASTM D874)	0.57
TBN, mg KOH/g (ASTM D2896)	6.5
Phosphorous, %wt (Spectro or AA)	0.030
Calcium, %wt (Spectro or AA)	0.14

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 40</b>		
—	20	216-9221
—	208	216-9224
—	Bulk	7X-2426

# Oils - Natural Gas Engine Oil

## Cat NGE0 EL350™



### Recommended Use

- Provides superior lubrication in high-horsepower gaseous-fueled engines.
- Compatible with exhaust catalyst applications that require a low-phosphorus oil.
- Compatible with “learn burn” engines requiring low-ash oil.
- Provides optimum engine and oil life with low-sulfur gaseous fuels that contain less than 0.43 mg hydrogen per mega Joule (0.35 mg hydrogen sulfide per BTU).
- May be used in engines that use high-sulfur gas or bio-gas, provided that shorts drain intervals are employed.

### Discover the Difference

- Cat NGE0 EL350 is developed, tested, and approved by Caterpillar to meet the same high standards as all genuine Cat parts.
- Factory-Fill - Used as standard factory-fill for Cat natural gas engines.
- Reduced Piston and Cylinder Wear - Anti-oxidation and anti-nitration properties prevent deposit buildup to minimize scuffing, scoring and wear.
- Increased Spark Plug and Valve Life - Excellent detergent and dispersant additives protect against deposits and damage.
- Corrosion Protection - Acid neutralizers protect parts from rust and copper corrosion.
- Extended Drain Intervals - Provide extended oil drain capabilities when used in conjunction with our S•O•S<sup>SM</sup> Services oil analysis program.

Typical Characteristics <sup>(2)</sup>	
SAE Viscosity Grade	SAE 40
Gravity @ 16°C, API (ASTM D287)	29.3
Gravity @ 16°C Specific	0.882
Flash Point, °C (ASTM D92)	247
Pour Point, °C (ASTM D97)	-21
Viscosity cSt @ 40°C (ASTM D445)	125
Viscosity cSt @ 100°C (ASTM D445)	13
Viscosity Index (ASTM 2270)	97
Sulfated Ash, % wt. (ASTM D874)	0.54
TBN, mg KoH/g (ASTM D2696)	6.2
Phosphorus, % wt. (Spectro or AA)	0.03
Calcium, % wt. (Spectro or AA)	0.13

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE40</b>		
—	20	225-5084
—	205	269-1971
—	208	225-5085

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE40</b>		
—	1000	249-2309
—	Bulk	283-0781

<sup>2</sup> The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

## Cat NGEO Advanced 40

Cat NGEO Advanced 40 is an SAE 40 viscosity grade. The oil is designed to specifications that provide superior lubrication performance in Cat natural gas engines. Cat NGEO Advanced 40 is formulated from select base stocks blended with special additives to provide:

- Excellent oxidation stability and nitration control properties
- Good thermal stability for high temperatures deposit control
- Reduced carbon and sludge formation

### Reduced Piston and Cylinder Liner Wear

- High temperatures deposit control properties prevent deposit buildup on pistons and piston rings to minimize scuffing, scoring, and wear.

### Increased Spark Plug and Valve Life

- Excellent detergent and dispersant additives protect against deposits and damage.

### Corrosion Protection

- Acid neutralizers protect parts from rust and copper corrosion.

NGEO Advanced 40 provides optimum engine and oil life with low-sulfur gaseous fuels that contain less than 0.43 mg hydrogen per mega joule (0.35 mg hydrogen sulfide per BTU) NGEO Advanced 40 may be used in engines that use high-sulfur gas, provided that shorter drain intervals are employed.

Typical Characteristics <sup>(3)</sup>	
Viscosity Grade	SAE 40
Flash Point, °C, ASATM D92	252
Pour Point, °C ASTM D97	-30
Viscosity cSt, D445	
40°C	115
100°C	12.7
Viscosity Index, ASTM D2270	103
Sulfated Ash. wt %, ASTM D874	0.5
Total Base Number, mg KOH/G, ASTM D2896	6
Phosphorous, wt %, spectro	0.03
Calcium, wt % spectro	0.15

English Volume (gal)	Metric Volume (L)	Part Number
<b>Cat NGEO Advanced 40</b>		
5	—	381-2364
55	—	381-2365
—	20	331-7030

English Volume (gal)	Metric Volume (L)	Part Number
<b>Cat NGEO Advanced 40</b>		
—	208	331-7031
—	1000	381-2367
—	Bulk	331-7032

<sup>3</sup> The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

# Oils - Natural Gas Engine Oil

## NGEO Ultra 40

### Recommended Uses

- Compatible with exhaust catalyst applications that require low-phosphorous oil
- Compatible with “lean burn” engines requiring low-ash oil
- May be used in engines that use high-sulfur gas, provided that shorter drain intervals are employed

Typical Characteristics	
SAE Viscosity Grade	40
Flash Point °C (ASTM D92)	220 min
Pour Point °C (ASTM D97)	-21
Viscosity	
cST @ 40°C (ASTM D445)	125
cST @ 100°C (ASTM D445)	13.0
Viscosity Index (ASTM D2270)	95 min.
TBN, mg KOH/g (ASTM D2896)	6.0
Sulfated Ash, % wt (ASTM D874)	0.54
Phosphorous, % wt (Spectro or AA)	0.030
Calcium, % wt (Spectro or AA)	0.130

English Volume (gal)	Metric Volume (L)	Part Number
<b>Cat NGEO Ultra 40</b>		
5	20	331-7382
55	208	331-7383
—	Bulk	331-7384

## Cat Bio HYDO™ Advanced

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### High Performing, Environmentally Friendly

Cat Bio HYDO Advanced is an environmentally friendly hydraulic fluid that has the drain interval of premium mineral-based oil. Developed for use in any environment, Cat BIO HYDO Advanced provides superior performance across a wide temperature range and many applications, including: Construction, Forestry, Dredging, Ports, and Tunnel Boring.

#### Benefits:

##### Environmentally Friendly

- Non-toxic formula
- Readily biodegradable
- EU Flower eco-label certified

##### Extended Drain Intervals

- Excellent oxidation stability
- Comparable to premium mineral-based hydraulic oils

##### Exceptional System Protection

- Superior wear protection
- Corrosion resistance
- Fast air release

#### Features:

- Long Life - Cat Bio HYDO Advanced out performs the previously recommended Cat Bio HYDO and competitive brands. In fact, Cat Bio HYDO Advanced performance is comparable to premium mineral-based hydraulic oils. Like Cat HYDO Advanced, Cat Bio HYDO Advanced can be taken up to 6,000 hour drain interval with Cat S•O•S<sup>SM</sup> Fluid Analysis.
- Biodegradable - readily biodegradable and non-toxic, so that it can be used in environmentally sensitive areas without concern.
- Wide temperature Range Protection - maintains consistent wear protection throughout the entire temperature range, - 22°F (-30°C)-113°F (45°C). From cold start through to operating temperature, Cat Bio HYDO Advanced gives you best system protection.
- Improved Flow Through Filters - retains its ability to flow through filters even when water is present.
- Seal Compatibility - Cat Bio HYDO Advanced is highly compatible with the seals used in Cat Hydraulic systems. This means fewer leaks and lower maintenance costs.
- Component Protection - specially developed additives form a perspective layer on wear surfaces, reducing wear in hydraulic pumps and other components. Cat BIO HYDO Advanced provides excellent corrosion protection to steel and bronze components, even at high temperatures.

# Oils - Hydraulic Oil

## Cat Bio HYDO™ Advanced (Cont'd.)

Cat Bio HYDO Advanced Typical Characteristics <sup>(1)</sup>		
Characteristics	Cat Bio HYDO Advanced (HEES)	Benefits of Cat Bio HYDO Advanced
Oxidation Stability Test, ASTM D493 (Longer is better)	More than 3,000 hrs (Dry)	Long Drain Interval Results in Reduced Owning & Operating Cost
Long Drain Interval Capability	Yes	–
Suitable for use in Environmentally Sensitive Areas	Yes	Low Environmental Impact
Renewable Content, ASTM D6866	>80%	–
Viscosity at 100°C, ASTM D445	9.0 cSt	Excellent Wear Protection and wide Operating Temperature Range
Viscosity at 40°C ASTM D445	46.0 cSt	Cat Bio HYDO Advanced is Recommended For Ambient Temperatures from -30°C to 45°C
Viscosity Index, ASTM D2270 (Higher is Better) <sup>(2)</sup>	180	–
Viscosity at 100°C, ASTM D445 During Use After Shear <sup>(2)</sup>	9.0 cSt	–
Pour Point, ASTM D 97	-48°C	–
Brookfield Viscosity at -20°C ASTM D2983	1,380 cP	–
FZG Gear Test DIN 51534, Fail Stage (Higher is better) <sup>(3)</sup>	>12	Excellent Wear Protection and Wide Operating Temperature Range
4-Ball Wear Test, ASTM D4172	0.35 mm	Cat Bio HYDO Advanced is Recommended for Ambient Temperatures from -30°C to 45°C
35VQ25 Total Wear, mg (Lower is better)	25 mg	–
Air Release at 50°C (ASTM D3427) (Lower is better)	1 minute	Faster Air Release Reduces Cavitation Damage
Copper Strip Corrosion ASTM D130, 3 Hours (1A is better than 1B. 1A at 150°C is better than 1A at 100°C)	1A at 150°C	Best in Class Corrosion Protection
Corrosion Protection, ASTM D665B	Pass	–

English Volume (gal)	Metric Volume (L)	Part Number
<b>Cat Bio HYDO Advanced</b>		
5	—	339-3249
55	—	339-3250
—	5	142-3218

English Volume (gal)	Metric Volume (L)	Part Number
<b>Cat Bio HYDO Advanced</b>		
—	20	341-3442
—	208	341-2443

## Cat HYDO Advanced 10, 20, 30



### 6,000 Hour Extended Drain Intervals

Cat is introducing a new hydraulic oil to fluid product line, Cat HYDO Advanced 10. This new oil is a combination of premium additives and specially selected and controlled higher quality base oils designed to provide extended drain intervals and extra protection to hydraulic system components.

Cat HYDO Advanced 10 represents a significant performance breakthrough in hydraulic oil technology. The oil has been developed with an optimized formulation that has been subjected to severe qualification testing in the field and laboratory for thousands of hours. The result is the best product available for Cat hydraulic systems.

- 1 The values shown here are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.
- 2 High Viscosity Index oils containing viscosity modifier additives will become thinner during use, this will reduce the level of protection.
- 3 In addition to high FZG rating, the oil must demonstrate excellent protection to hydraulic pumps and motors, excellent corrosion protection and compatibility with metal and seals.



## Cat HYDO Advanced 10, 20, 30 (Cont'd.)

### Features & Benefits

- 6,000 hour extended drain intervals - up to the hours of Cat HYDO 10W when monitored with Cat S•O•S Services oil analysis program-every 500 hours. Reduced owning and operating costs and increases uptime.
- Improved corrosion protection - protects metal surfaces from rust. Better corrosion protection than most oils in the Cat line-up.
- Enhances long lasting anti-wear protection - specially developed additives form a protective layer on the wear surfaces, reducing component wear in high-pressure piston, vane and gear hydraulic pumps.
- Holds water in dispersion-contains emulsifiers specially designed to dispense water. Cat does not recommend oils that “separate,” “shed,” or “release” water. Separated water drawn through the hydraulic system can damage pumps and other components. If this water freezes, it can cause serious damage.
- Backward compatibility - the only hydraulic oil you need to stock for your maintenance operations. Preferred fill for Cat equipment.
- Improved filtration properties - special detergent dispersants keep components clean and improve transport of contaminants through the filters. Compatible with Cat Ultra High Efficiency filters.
- Faster air release –rapid air separation reduces air release time, preventing cavitation, Cat HYDO Advanced 10 air release of less than 4 minutes is far superior compared to Cat HYDO 10W at 7-10 minutes air release time (per ASTM D3427 testing).
- Wide temperature range protection - maintains consistent wear protection at both cold and hot temperatures. Designed to flow readily at cold temperature start up, and maintains excellent wear protection at operating temperatures.
- Improved oil stability - 250% increase in oxidation stability per ASTM D943. Improved oil stability and wear protection make Cat HYDO Advanced 10 last longer.

Cat HYDO Advanced 10 Typical Characteristics <sup>(4)</sup>			
Characteristics	HYDO Advanced 10	HYDO Advanced 20	HYDO Advanced 30
SAE Viscosity	10W	20	30
cST @ 40°C (ASTM D445)	42	68	90
cSt @ 100°C (ASTM D445)	6.7	9.0	10.6
Viscosity Index (ASTM d2270)	114	110	100
Viscosity after Shear (cSt, during use) <sup>(5)</sup>	6.7	9.0	10.6
FZG Gear Test DIN 51534, Fail Stage <sup>(6)</sup>	12	12	12
35VQ25 Vickers Total Wear Test	33 mg	33	33 mg
4 Ball	0.37 mm		0.30 mm
Pour Point, °C (ASTM D97)	-24	-33	-24
Pumping @ -30°C mPaS (ASTM D4684)	55,400		
Brookefeld Viscosity @ -20°C (ASTM D2983) mPaS		7,438	13,600
Zinc, % wt. (ASTM D4951) typical	0.090	0.094	0.090
Copper Strip Corrosion (3 hr, ASTM D130) <sup>(7)</sup>	1A @150°C	1A @150°C	1A @ 150°C
Rust Protection (ASTM D665B) <sup>(8)</sup>	Pass	Pass	Pass
Oxidation stability, hours (ASTM D943)	> 5,000	> 5,000	> 5,000
Long Drain Interval, confirmed by field testing	Yes	Yes	Yes
Filterability, Wet, E DIN ISO 13357-1	Pass	Pass	Pass
Air Release @ 50°C (ASTM D3427)	4 minutes	7 minutes	

- 4 The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.
- 5 Oils that contain viscosity modifier additives will become thinner during use in this machine. This will reduce protection level.
- 6 Higher is typically better, but too much active antiwear additives may lead to reduced component life.
- 7 1A is better than 1B, 1A at 150°C is better than 1A at 100° C.5
- 8 May be difficult to pass with 10W engine oils.

# Oils - Hydraulic Oil

## Cat HYDO Advanced 10, 20, 30 (Cont'd.)

Cat HYDO Advanced 10 Typical Characteristics <sup>(9)</sup>			
Characteristics	HYDO Advanced 10	HYDO Advanced 20	HYDO Advanced 30
Foam Test <sup>(10)</sup>			
Seq.1 ml. (ASTM D892)	0/0	0/0	0/0
Seq.2 ml. (ASTM D892)	5/0	0/0	0/0
Seq.3 ml. (ASTM D892)	0/0	0/0	0/0
Cleanliness	No interference with optical particle counters	No interference with optical particle counters	No interference with optical particle counters
Ability to keep water in emulsion	Yes	Yes	Yes

English Volume (gal)	Metric Volume (L)	Part Number
<b>Cat HYDO Advanced 10</b>		
1	—	309-6932
2.5	—	462-7710
5	—	309-6931
55	—	309-6930
Bulk	—	314-5168
Bulk Rail	—	309-6929
—	5	309-6945
—	18	309-6944
—	19	309-6943
—	20	309-6942
—	60	309-6941
—	200	309-6940
—	205	309-6939
—	208	309-6938
—	1,000	309-6937
—	2,000	309-6936
—	10,000	309-6935

English Volume (gal)	Metric Volume (L)	Part Number
—	15,000	309-6934
<b>Cat HYDO Advanced 20</b>		
1	—	422-6704
5	—	422-6705
55	—	422-6706
Bulk	—	422-6703
—	4	422-6709
—	5	422-6711
—	20	422-6712
—	208	422-6714
—	1000	422-6715
—	Bulk	422-6708
<b>Cat HYDO Advanced 30</b>		
—	18	319-5920
—	20	319-5921
—	200	319-5922
—	208	319-5923
—	Bulk	319-5919

9 The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

10 New oil, as received, with 0.1% water by volume added.

## Cat TDTO™



### Recommended Use

- Preferred lubricant for Cat power shift transmissions, most final drives and wet brake compartments.
- Cat machine compartments where TO-4 and TO-4M specification oils are recommended.
- Other manufacturers' machines that recommend TO-4 or TO-4M or specifications oils for their transmissions, final drives and wet brake compartments.

### Discover the Difference

- Cat TDTO is developed, tested and approved by Caterpillar to meet the same high standards as all genuine Cat parts.
- Factory-Fill - Used as standard factory-fill for Cat machine compartments where TO-4 oils are specified.
- Longer Clutch Life - Prolongs clutch disc life up to 45%.
- Optimum Wear Life – Ensures long life and excellent performance for gears, bearings and friction disc material.
- System-Matched Formula - Engineered as an integral part of Cat power shift transmissions, most wet brake compartments, and Hydrostatic Systems.

Typical Characteristics <sup>(1)</sup>			
SAE Viscosity Grade	SAE10W	SAE 30	SAE 50
Caterpillar Test	TO-4	TO-4	TO-4
Allison Test	C-4	C-4	C-4
ISO Viscosity	42	100	220
Flash Point, °C (°F) (ASTM D92)	202 (395)	224 (435)	240 (464)
Pour Point, °C (°F) (ASTM D97)	-33 (-27)	-18 (0)	-15 (5)
CCS Viscosity cP @ -25°C (ASTM D5293)	6840		
Kinematic Viscosity cSt @ 40°C (ASTM D445)	42.0	100	195
Kinematic Viscosity cSt @ 100°C (ASTM D445)	6.3	11.2	18.0
Viscosity Index (ASTM D2270)	97	97	96
TBN (ASTM D2896)	7.9	7.9	7.9
Zinc, % wt. (ASTM D4951)	0.127	0.127	0.127
Gravity API (ASTM D287)	27.9	27.0	24.7
Phosphorus, % wt. (ASTM D4951)	0.110	0.110	0.110

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 10W</b>		
5	—	8T-9568
55	—	8T-9569
Bulk	—	155-6212
—	5	100-7019
—	19	145-0995
—	20	7X-7852
—	25	9X-8525
—	200	112-2866

English Volume (gal)	Metric Volume (L)	Part Number
—	205	7X-7851
—	208	103-2528
—	209	123-3104
—	1000	166-0393
—	Bulk	3P-0659
<b>SAE 30</b>		
1	—	248-7521
2.5	—	452-7708
5	—	8T-9572

<sup>1</sup> The values shown are typical values and should not be used as a quality control parameters to either accept or reject product. Specifications are subject to change without notice.

# Oils - Transmission and Drive Train Oil

## Cat TDTO™ (Cont'd.)

English Volume (gal)	Metric Volume (L)	Part Number	English Volume (gal)	Metric Volume (L)	Part Number
55	—	8T-9573	5	—	8T-9576
Bulk	—	155-6213	55	—	8T-9577
—	4	452-6113	Bulk	—	155-6214
—	5	9X-6467	—	4	452-6114
—	18	9X-2010	—	5	9X-8443
—	20	7X-7855	—	18	9X-2012
—	200	7X-2888	—	20	7X-7858
—	205	7X-7854	—	200	9X-8520
—	208	9X-6466	—	205	7X-7857
—	1000	7X-7611	—	208	3E-9478
—	Bulk	2P-9869	—	1000	7X-7612
<b>SAE 50</b>			—	Bulk	5P-1228
2.5	—	462-7709			

## Cat TDTO-TMS™



### Recommended Use

- Cat transmissions, wet brakes and hydraulic compartments that must operate in wide temperature ranges.
- Cat machine compartments where TO-4 and TO-4M specification oils are recommended.
- Other manufacturers machines that recommend TO-4 or TO-4M specification oils for their transmissions, final drives and wet brake compartments.

### Discover the Difference

- Cat TDTO-TMS is a proprietary formulation that was specifically developed, tested and approved by Caterpillar to ensure peak performance in your transmission and to meet the same high standards as all genuine Cat parts.
- Longer Component Life-Reduces wear on transmission gears.
- Improved Cold-Weather Performance - Improves performance and efficiency of transmissions in cold weather, especially for machines with electronic controls.
- Optimum Wear Life - Ensures long life and excellent performance for gears, bearings and friction disc material.
- Fewer Oils, Fewer Changes -Can be used in multiple compartments with extended drain intervals over multiple seasons.

Typical Characteristics <sup>(2)</sup>	
SAE viscosity Grade	Multi Viscosity
Caterpillar Test	TO-4M, TO-4
Allison Test	C-4
Gravity , API (ASTM D287)	29.2
Flash Point, °C (°F) (ASTM D92)	222 (432)

<sup>2</sup> The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

# Oils - Transmission and Drive Train Oil

## Cat TDTO-TMS™ (Cont'd.)

Typical Characteristics <sup>(3)</sup>	
Pour Point, °C (°F) (ASTM D97)	-39 (-38)
Viscosity cSt @40°C (ASTM D445)	107
Viscosity cSt @100°C (ASTM D445)	14.2
Viscosity Index (ASTM D2270)	134
TBN (ASTM D2896)	8.4
Zinc, % wt. (ASTM D4951)	0.127
Phosphorus, % wt. (ASTM D4951)	0.110
KRL Shear Stability	10.0%

English Volume (gal)	Metric Volume (L)	Part Number
<b>Multi-Viscosity</b>		
2.5	—	469-0584
5	—	154-0195
55	—	154-0194
Bulk	—	154-0192

English Volume (gal)	Metric Volume (L)	Part Number
<b>Multi-Viscosity</b>		
—	20	154-0196
—	208	154-0197
—	1000	444-3553
—	Bulk	154-0193

## Cat TDTO Cold Weather



### Best Performance and Protection for Cold Weather Applications

Cat TDTO Cold Weather is a synthetic blend lubricant that provides superior performance and protection in transmissions, torque converters, final drives, hydraulics and/or wet brakes at temperatures down to -40°F (-40°C). The special formulation creates optimal friction performance and controls transmission slippage while eliminating clutch glazing. Cat TDTO Cold Weather has excellent compatibility with all materials used in Cat machines, including friction materials, seals and elastomers. The outstanding thermal stability and oxidation resistance gives Cat TDTO Cold Weather long drain intervals.

#### Benefits:

##### Performance

- Easier Engine Starts
- Greater Machine Rim Pull and Breakout Force
- Long Drain Intervals

##### Protection

- Promotes Transmission Durability
- Increased Clutch, Gears and Bearing Life
- Optimal Cold Weather Friction Performance

#### Applications

Cat TDTO Cold Weather is the preferred transmission and drive train oil for low temperature operation in certain applications and can be used in wet brakes and hydraulics. Refer to SE-BU6250 for more information.

<sup>3</sup> The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

# Oils - Transmission and Drive Train Oil

## Cat TDTO Cold Weather (Cont'd.)

### Long Drain Intervals

Cat TDTO Cold Weather is also recommended for applications with the following original equipment manufacturer requirements:

- Cat T0-4
- Allison C-4
- Komatsu Micro-Clutch
- Vickers 35VQ25

With the use of Cat S•O•S<sup>SM</sup> Oil Analysis and Cat Filters, Cat TDTO Cold Weather is capable of long change intervals.

Typical Characteristics <sup>(4)</sup>	
SAE Viscosity	0W-20
Gravity @ 16°C (60°F)	
Gravity @ API (ASTM D287)	30.8
Specific Gravity	.872
Flash Point @ °C (ASTM D92)	190
Pour Point @ °C (ASTM D97)	-48
Kinematic Viscosity (ASTM D445)	
CSt @ 40°C	30.7
cSt @100°C	7.4
Brookfield Viscosity (ASTM D2983)	
cP @ -40°C	8000 max
Phosphorus, ppm	1040
Zinc, % wt	0.129
Calcium, % wt	0.310

English Volume (gal)	Metric Volume (L)	Part Number
1	—	341-1949
5	—	228-6069
55	—	228-6070
Bulk	—	301-4523
—	4	332-8851

English Volume (gal)	Metric Volume (L)	Part Number
—	20	228-6069
—	205	228-6070
—	208	466-5027
—	1000	444-3552
—	Bulk	343-7108

<sup>4</sup> The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

# Oils - Transmission and Drive Train Oil

## SATO

SATO will be the primary factory fill oil for the machine models listed previously. Top-off with other products from the Cat TDTO family should be limited to less than 10% maximum of sump capacity, and the use of higher viscosity fluids for top-off can adversely impact cold start performance

At the time of an oil change switching from Cat SATO to Cat TDTO or from Cat TDTO to Cat SATO, no special compartment flushing or alternative procedures are required. Follow Standard oil change procedures for the machine.

Typical Characteristics	
Flash Point, °C (ASTM D92)	236
Pour Point, °C (ASTM D97)	-42
Viscosity cP @ -30°C (ASTM D5293)	13,500
Viscosity @ 40°C, cSt (ASTM D445)	73
Viscosity @ 100°C, cSt (ASTM D445)	11.4
Viscosity Index (ASTMD2270)	149
Zinc, % wt (ASTM D4951)	0.138
Phosphorous, % wt ASTM D4951()	0.110
Calcium, % wt (ASTM D4951)	0.312
Temperature Range (ambient)	-30 to 50°C / -22 to 50°F

English Volume (gal)	Metric Volume (L)	Part Number
5	–	427-0401
55	–	427-0443
–	20	427-0375

English Volume (gal)	Metric Volume (L)	Part Number
–	208	427-0388
–	Bulk	427-0372

### Contact Information:

Global Dealer Solutions Network

Parts Technical Support Team

Tool Free - North America: 1-877-228-2420

International: +1-309-266-4421

Electronic Requests:

Send via Microsoft Customer Relationship Management (MSCRM)

# Oils - Final Drive and Axle Oil

## Cat FDAO™



### Recommended Use

- Preferred lubricant for Cat Off-Highway Truck front wheels, differentials and final drives.
- Preferred lubricant for Cat Large Track-Type Tractor, Pipelayer, and Track Skidder final drives (steel-tracked machines with elevated final drives except the D5M, D6M, and 561M).
- Compatible with Cat final drives and axles that previously specified TO-4 lubricants and do not contain friction material.

### Discover the Difference

- Cat FDAO is developed, tested and approved by Caterpillar to meet the same high standards as all genuine Cat parts.
- Factory-Fill - Used as standard factory-fill Cat Off-Highway Trucks and Large Track-Type Tractors.
- Extended Drain intervals - Allows for double-length drain intervals in off-highway truck final drives, as compared to TO-4 commercial oils.
- Minimal Foaming - Formulated to protect against the damaging effects of air.

Typical Characteristics <sup>(1)</sup>	
SAE Viscosity Grade	SAE 60
ISO Viscosity Grade	320
Gravity, 16°C API (ASTM D287)	25.9
Gravity, 16°C Specific	.899
Flash Point, °C (°F) (ASTM D92)	255 (491)
Pour Point, °C (°F) (ASTM D97)	-15 (5)
Viscosity cSt @ 40°C (ASTM D445)	334
Viscosity cSt @ 100°C (ASTM D445)	25.2
Viscosity cSt @ -10°C (ASTM D2983)	75,000
Viscosity Index (ASTM D2270)	97
Copper Strip (ASTM D130, 2 hrs @100°C)	1A

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 60</b>		
5	—	184-6022
55	—	184-6021
Bulk	—	184-6020
—	18	206-5210
—	20	184-8055
—	200	198-7672

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 60</b>		
—	205	201-9855
—	208	184-8056
—	1000	221-3445
—	1200	202-9753
—	Bulk	184-8054

<sup>1</sup> The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.



## Cat FDAO SYN™



### Recommended Use

- Preferred lubricant for Cat Off-Highway truck and D11R carrydozer front wheels, differentials and final drives operating under high load factors.
- Compatible with Cat final drives and axles that previously specified Cat FDAO or TO-4 lubricants and do not contain friction material.

### Discover the Difference

- Cat FDAO SYN is developed, tested and approved by Caterpillar to meet the same high standards as all genuine Cat parts.
- Extended Drain Intervals - Extend drain intervals up to a factor of three in off-highway truck final drives, as compared to Cat TDTO and TO-4 oils.
- Mining Foaming - Formulated to protect against the damaging effects of the air.
- Longer Bearing and Gear Life – Has demonstrated the capability to double bearing life and quadruple gear life when compared to TDTO and TO-4 oils used off-highway truck final drives.

Typical Characteristics <sup>(2)</sup>	
SAE Viscosity Grade	Multigrade
ISO Viscosity Grade	320
Caterpillar Test	FD-1
Gravity, 16°C API (ASTM D287)	33.4
Flash Point, °C (°F) (ASTM D92)	246 (474) min.
Pour Point, °C (°F) (ASTM D97)	-36 (-38)
Kinematic Viscosity cSt @ 40°C (ASTM D445)	320
Kinematic Viscosity cSt @ 100°C (ASTM D445)	31.6
Brookfield Viscosity cP @ -20°C (ASTM D2983)	34,000
Brookfield Viscosity cP @ -30°C (ASTM D2983)	131,200
Viscosity Index (ASTM D2270)	138
Copper Strip (ASTM D130, 2 hrs @100°C)	1A

English Volume (gal)	Metric Volume (L)	Part Number
<b>Multi-Viscosity</b>		
5	—	208-2390
55	—	198-7450
—	18	206-5211

English Volume (gal)	Metric Volume (L)	Part Number
<b>Multi-Viscosity</b>		
—	208	206-5212
—	1000	454-9064

<sup>2</sup> The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

# Oils - Gear Oil

## Cat GO



### Recommended Use

- Cat GO does not meet Cat TO-4 specifications and should not be used when TO-4 is recommend
- Cat GO is a multi-viscosity API GL-5 classification gear oil intended for extreme-pressure applications, such as the following:
- Differentials and final drives on Cat Wheel Tractor-Scrapers, specific Articulated Trucks, Wheel Excavators, and Backhoe Loaders.
- Cold Planer direct drive transmissions, differentials and final drives.
- Drum bearings on Vibratory Soil Compactors

### Discover the Difference

- Cat GO is tested and approved by Caterpillar to meet the same high standards as all genuine Cat parts.
- Longer Gear and Bearing Life - Superior thermal stability and oxidation resistance reduce deposits and wear.
- Extreme-Pressure Performance - Provides extra protection for improved performance and life in extreme-load conditions.
- Simplified Maintenance - Multi-purpose capability reduces number of gears lubricants needed for maintenance.
- Wide Temperature Range - Provides excellent stability at high temperatures and superior performance at low temperatures for easier start-ups.

Typical Characteristics <sup>(1)</sup>		
SAE Viscosity Grade	SAE 80W-90	SAE 85W-140
Gravity @ 16°C API (ASTM D287)	26.6	25.1
Flash Point, °C (°F) (ASTM D92)	174°C	226°C
Pour Point, °C (°F) (ASTM D97)	-27 (-17)	-24°C
Viscosity cSt @ 40°C (ASTM D445)	130	377
Viscosity cSt @100°C (ASTM D445)	14.5	27.4
Viscosity cP @ -26°C (ASTM D2983)	107,000	75,200
Viscosity Index (ASTM D2270)	110	98
Phosphorous, % wt. (ASTM D1091)	0.088	0.088
Density @ 160°C	0.897	0.910

<sup>1</sup> The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

## Cat GO (Cont'd.)

English Volume (gal)	Metric Volume (L)	Part Number	English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 80W-90</b>			<b>SAE 85W-140</b>		
—	—	—	—	Bulk	2P-9863
2.5	—	462-7781	2.5	—	462-7784
5	—	8T-9582	5	—	9X-6185
30	—	8T-9583	—	4	7X-7618
55	—	8T-9584	—	18	133-9643
Bulk	—	155-6220	—	20	7X-7617
—	5	9X-6470	—	200	205-4312
—	20	7X-7867	—	205	7X-7616
—	60	7X-7887	—	208	161-1246
—	200	424-2169	—	1000	7X-7615
—	208	9X-6469	—	Bulk	7X-7614
—	1000	119-5129	—	—	—
—	1200	8C-9927	—	—	—

## Cat Synthetic GO



### Recommended Use

- Cat GO does not meet Cat TO-4 specifications and should not be used when TO-4 is recommended.
- Cat Synthetic GO is a full synthetic multi-viscosity API GL-5 classification multi-purpose gear oil for the following applications:
  - Sealed-and-lubricated track pins on Cat Track-Type Tractors and Track-Type Loaders.
  - Track Type Tractor equalizer bar ends.
  - Differentials and final drives on Cat Wheel Tractor-Scrapers, specific Articulated trucks, Wheel and Mini Excavators, and Backhoe Loaders.
  - Specific Articulated Trucks as recommended in your Operation and Maintenance Manual.
  - Motor Grader circle drives.
  - Cold Planer direct drive transmissions, differentials and final drives.
  - Drum bearings on Vibratory Soil Compactors.
  - Speed reducers on augers and elevators.

### Discover the Difference

- Cat Synthetic GO is tested and approved by Caterpillar to meet the same high standards as all genuine Cat parts.
- Maximum Gear and Bearing Life – Provides ultimate protection against scoring of gear teeth, as well as pitting in gear teeth and rolling-element bearings.
- Extended Track Life - Improves galling resistance, reduces seal wear and minimizes bushing end grooving in sealed-and-lubricated track joints.
- Wide Temperature Range - Offers superior stability at high temperatures and superior performance at low, even arctic temperatures.
- Reduced Wear - Provides excellent oxidation resistance which reduces buildup of harmful deposits.
- Extreme-Pressure Performance - Offers powerful protection under extreme duty conditions.
- Factory-Fill - Used as standard factory-fill for Cat machines.

# Oils - Gear Oil

## Cat Synthetic GO (Cont'd.)

Typical Characteristics <sup>(2)</sup>	
SAE Viscosity Grade	SAE 75W-140
API Service Classification	GL-5, MT-1
Gravity API (ASTM D287)	31.7
Gravity Specific	867
Flash Point, °C (°F) (ASTM D92)	220 (428)
Pour Point, °C (°F) (ASTM D97)	-46 (-51)
Channel Point, °C (°F, max (FMTS 791A-3456)	-45 (-49)
Viscosity cSt @ 40°C (ASTM D445)	185
Viscosity cSt @ 100°C (ASTM D445)	25
Viscosity Index (ASTM D2270)	172
Phosphorus, % wt. (ASTM D1091)	0.141

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 75W-140</b>		
1 qt	—	350-9510
1	—	350-9509
5	—	242-3466
55	—	242-3467

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 75W-140</b>		
—	4	350-9509
—	19	242-3466
—	208	242-3467
—	Bulk	8C-3400

<sup>2</sup> The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

# Oils - Special Application Oils

## Compactor Oil



- Special synthetic oil used in vibrator drum of Compactors
- Packaged in 20 L (5 gal) pails
- Large machines take 20 L (5 gal) per drum
- Small machines take 10 L (2 1/2 gal) per drum

Part Number	Size
558-0201	1 gal
4C-6767	5 gal
417-9262	55 gal
456-5476	20 L
456-5477	208 L
507-0649	900 L

## Cat Gear Oil 220



- High quality mineral gear oil used for industrial gear boxes

Part Number	Size
546-0276	20 L
546-0275	200 L
546-0274	5 gal
546-0273	55 gal

# Oils - Special Application Oils

## Cat MTO



### Recommended Use

- Recommended for older Car Backhoe Loader rear axles and Cat Challenger Tractors.
- Cat Components and systems recommending multipurpose tractor fluid that meet Ford/New Holland M2C134D specification.
- Most Cat Hydraulic Systems

### Discover the Difference

- Cat MTO is developed, tested and approved by Caterpillar to meet the same high standards as all genuine Cat parts.
- Improved Braking and Clutching – Where approved for use, enhances control and extends life in clutches and wet brakes.
- Lower Maintenance Costs - Exceptional anti-wear properties extend equipment and component lives.
- Cold-Weather Operation - Can be used in temperatures as low as -13°F (-25°C).
- Simplified Maintenance - Can be used in multiple compartments, reducing inventory and the chance of using the wrong oil.
- Long-Lasting Performance - Offers high thermal stability and oxidation resistance for long service life in severe applications.

<b>OEM Compatibility</b>	
Cat MTO meets the following OEM specifications <sup>(1)</sup>	
API	GL-4
CNH	MAT3525
For New Holland	FNHA-2-C-201
Kubota	UDT
Volvo	WB 101/BM
Cat MTO can be substituted in applications that require the following:	
AGCO Powerfluid	821 XL
Allison	C4 (Agriculture Applications Only)
Denison	HF-0/HF-1/HF-2 (T5D & P46)
Ford	ESN-M2C 134D
JI Case	MS 1204-07/09
John Deere	JMD J20C
Massey Ferguson	MF 1135/1141
Vickers	35VQ25
Typical Characteristics <sup>(2)</sup>	
Gravity API (ASTM D287)	28.6
Flash Point, °C (°F) (ASTM D92)	214 (417)
Pour Point, °C (°F) (ASTM D97)	-42 (-44)
Viscosity Brookfield, cP at -20°C	4300

1 Cat MTO does not meet Cat TO-4 or FD-1 and should not be used in compartments that specify TO-4 or FD-1 oil.

2 The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

## Cat MTO (Cont'd.)

OEM Compatibility	
Viscosity cSt @ 40°C (ASTM D445)	58
Viscosity cSt @ 100°C (ASTM D445)	9.3
Viscosity Index (ASTM D2270)	140
Zinc, % wt.	0.15 min.

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 10W-30</b>		
2.5	—	462-7711
5	—	105-3335
55	—	105-3334
Bulk	—	155-6218
—	5	172-6894
—	18	135-3189

English Volume (gal)	Metric Volume (L)	Part Number
<b>SAE 10W-30</b>		
—	20	109-4395
—	200	126-2700
—	205	138-4271
—	208	120-5286
—	Bulk	105-3333

## Brake Fluid



- Makes DOT and SAE requirements

### DOT 3

- Use where DOT 3 brake fluid is specified by service manual or operators guide
- Loaders, lift trucks, and service trucks

### DOT5

- DOT 5 is for extreme service conditions where higher than normal temperatures will be encountered or where moisture absorption is a problem.
- High performance cars and off-road vehicles

Part Number	Qty.	Size
<b>DOT 3</b>		
4C-5585	12	0.94 L (1 qt)
4C-5586	4	3.78 L (1 gal)
<b>DOT 5</b>		
4C-5588	12	0.94 L (1 qt)

## Governor Oil



- For 3600 Engine Woodward Governor

Part Number	Qty.	Size
136-9642	1	0.95 L

# Oils - Additives

## Cat Axle and Brake Oil Additive



English Volume (qt)	Metric Volume (L)	Part Number
1 qt	—	197-0017

## Oil Stabilizer



- Reduces oil consumption
- Reduces engine wear
- Helps keep vital engine parts clean
- Reduces thermal oil and viscosity breakdown

Part Number	Qty	Size
143-3655	12	0.94 L

**This product should only be used as needed in the following engines:**

Engine Model	Engine Serial No.
3406E	5EK1-Up, 5DS1-Up, 6TS1-Up, 1LW1-Up, 2WS1-Up, 1MM1-Up, 4AS1-Up
C-15	6NZ1-82494
C-16	7CZ1-Up

## Hydraulic Oil Additive



- Low friction additive for some hydraulic systems
- Relieves "stick-slip" on noisy hydraulic cylinders
- Not for use on machines which have a common sump for hydraulics, brake, and transmissions

Part Number	Size	Qty.
1U-9891	0.946 L (1 qt) bottle	12



## Health and Safety

Under normal conditions of intended use, these products do not pose a risk to health. Excessive exposure may result in eye, skin or respiratory irritation. Always observe good hygiene measures. Read and understand that Material Safety Data Sheet (MSDS) before using this product. For a copy of the MSDS, visit us on the web at [www.catmds.com](http://www.catmds.com).

## Cat ELC™



### Recommended Use

- Cat ELC meets or exceeds the requirements of the following specifications and guidelines:
  - Cat EC-1
  - ASTM D-3306
  - ASTM-6210
  - TMC RP-329
  - TMC RP-338
  - SAE J1034

## Discover the Difference

- Cat ELC is developed, tested and approved by Caterpillar to meet the same high standards as all genuine Cat parts.
- Factory-Fill - Used as standard
- Lower Maintenance Costs-Reduces engine coolant. Cat ELC eliminates the need for supplemental coolant additives, extends coolant change-out intervals and reduces disposal requirements.
- Advanced Metal Protection - Incorporates an advanced formula technology with organic acid additive corrosion inhibitors, such as a combination of mono and dicarboxylates for maximum protection of copper, solder, brass, steel, cast iron and aluminum.

Typical Characteristics <sup>(1)</sup>	
Color	Strawberry Red
Boiling protection with 15 psi (1 bar) radiator cap	
50% Cat ELC/50% water	129°C (265°F)
60% Cat ELC/40% water (ELC concentrate added)	132°C (270°F)
Freezing protection	
50% Cat ELC/50% water	-37°C
60% Cat ELC/40% water (ELC concentrate added)	-52°C (°62F)
Nitrite (50% solution)	500 ppm
Molybdate (50% solution)	530 ppm

<sup>1</sup> The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

# Coolants

## Cat ELC™ (Cont'd.)

English Volume (gal)	Metric Volume (L)	Part Number	Distribution Region
<b>Cat ELC Concentrate (with embitterment)</b>			
—	4	365-8394	Asia Pacific
—	5	205-6615	Europe, Africa, Middle East
1	—	238-8647	North America and Latin America excluding Brazil
<b>Cat ELC Premix 50/50 (with embitterment)</b>			
—	4	365-8395	Asia Pacific
—	18	365-8396	Asia Pacific
—	200	365-8397	Asia Pacific
—	1000	365-8398	Asia Pacific
275	—	361-1024	North America and Latin America excluding Brazil
—	200	215-4242	Brazil
—	4	215-4245	Brazil
—	20	215-4246	Brazil
1	—	238-8648	North America and Latin America excluding Brazil
5	—	238-8649	North America and Latin America excluding Brazil
55	—	238-8650	North America and Latin America excluding Brazil
—	5	205-6611	Europe, Africa, Middle East
—	20	205-6612	Europe, Africa, Middle East
—	210	205-6613	Europe, Africa, Middle East
—	1000	205-6614	Europe, Africa, Middle East

## Cat ELI

### Recommended Use

- Inhibitor concentrate based on Cat
- For use in generator sets, industrial engines and marine engines that do not require freeze protection

### Discover the Difference

- Corrosion protection, like Cat ELC, only without glycol
- Extended drain interval and little maintenance makes an excellent alternative to conventional supplement coolant additives with water.
- Lower total owning and operating costs compared to water and SCA because of the extended drain interval and limited maintenance of Cat ELC

English Volume (gal)	Metric Volume (L)	Part Number	Distribution Region
<b>Cat ELI Concentrate</b>			
1	—	351-9431	Worldwide except Europe, Africa, Middle East
—	1000	366-2753	Latin America, Australia and North America
—	20	351-9432	Worldwide except Europe, Africa, Middle East
—	208	351-9433	Worldwide except Europe, Africa, Middle East

## Cat ELI (Cont'd.)

English Volume (gal)	Metric Volume (L)	Part Number	Distribution Region
<b>Cat ELI Premix Brazil Only</b>			
52.8	200L	375-8009	Brazil
264.2	1000L	375-8010	Brazil

## Cat DEAC™



### Recommended Use

- Cat DEAC is approved for use in all Cat machines, commercial engine and truck engine applications and most diesel, gas or natural gas engines made by other manufacturers.
- Cat DEAC meets the following ASTM standards:
- ASTM D6210 (Heavy-duty antifreeze/coolants)
- ASTM D3306 (Automotive applications)
- ASTM D1384 (Glassware corrosion test)

### Discover the Difference

- Cat DEAC is developed, tested and approved by Caterpillar to meet the same high standards as all genuine Cat parts.
- Excellent Performance - Contains organic and inorganic corrosion inhibiting and antifoam additives, and provides superior protection against pitting, corrosion and freezing down to -37°C (-34°F)
- Convenience - Fully formulated, no pre-mixing with supplemental coolant additive required at initial fill. Concentrate available in 1 gallon, 20 liter, and 55 gallon containers for top off.

Typical Characteristics <sup>(2)</sup>	
Color	Magenta
Boiling protection °C (°F) 15 psi pressure cap (ASTM D1177)	
50% Cat DEAC/50% water	129 (265)
60% Cat DEAC/40% water (maximum)	132 (270)
Freezing protection °C (°F)	
50% Cat DEAC/50% water	-37 (-34)
60% Cat DEAC/40% water (maximum)	-52 (-62)
Silicon concentrate (in the form of Silicates)	240 ppm
Ethylene Glycol (% volume)	95.2% min.

<sup>2</sup> The values shown are typical values and should not be used as quality control parameters to either accept or reject product. Specifications are subject to change without notice.

# Coolants

## Cat DEAC™ (Cont'd.)

English Volume (gal)	Metric Volume (L)	Part Number	Distribution Region
<b>Cat DEAC - Concentrate with Embitterment</b>			
1	3.79	339-3768	North America and Latin America
5	20	339-3770	North America and Latin America excluding Brazil
55	—	339-3769	North America and Latin America excluding Brazil
—	210	362-2181	Europe, Africa, Middle East
—	200	365-2713	Asia Pacific
—	4	365-8399	Asia Pacific
—	5	362-2180	Europe, Africa, Middle East

## Cat NGEC™



### Recommended Use

- Cat NGEC Premix 50/50 is a heavy-duty cooling system fluid especially designed to provide superior protection against pitting, freezing, and corrosion in Cat natural gas engines or natural engines made by other manufacturers.
- Cat NGEC meets the following ASTM standards:
- ASTM D6210 (Heavy-duty antifreeze/coolants)
- ASTM D3306 (Automotive applications)
- ASTM D1384 (Glassware corrosion test)

### Discover the Difference

- Cat NGEC is developed, tested and approved by Caterpillar to meet the same high standards as all genuine Cat parts.
- Fully Formulated - Does not require an initial supplemental cooling additive.
- Quick, easy servicing
- Superior Protection – Contains both organic and inorganic corrosion inhibitors as well as antifoam additives. It provides superior protection against pitting, corrosion and freezing down to -37°C (-34°F)

Typical Characteristics <sup>(3)</sup>	
Color	Purple
Boiling protection with 15 psi pressure cap °C (°F) (ASTM D1177)	°C (°F) ASTM D1177)
50% Cat NGE/50% water	265 (129)
60% Cat NGEC/40% water (concentrate added)	270 (132)
Freezing protection °C (°F)	
50% Cat NGEC/50% water	-34 (-37)
60% Cat NGEC/40% water (maximum)	-62 (-52)
Ash content, % wt. (ASTM D1119)	0.60

<sup>3</sup> The values shown are typical values and should not be used as a quality control parameters to either accept or reject product. Specifications are subject to change without notice.

**Cat NGEC™ (Cont'd.)**

Silicon concentrate (in the form of Silicates)	120 ppm
Ethylene Glycol (% volume)	45.3

English Volume (gal)	Metric Volume (L)	Part Number	Distribution Region
—	210	362-2182	Europe, Africa, Middle East
<b>Cat NGEC Premix 50/50 with Embitterment</b>			
—	4	366-2714	Asia Pacific
—	18	366-2715	Asia Pacific
—	200	366-2716	Asia Pacific
—	1000	339-3766	Australia
1	—	339-3776	North America and Latin America excluding Brazil
5	—	339-3777	North America and Latin America excluding Brazil
55	—	339-3778	North America and Latin America excluding Brazil
275	—	339-3779	North America and Latin America excluding Brazil

# Cooling System Cleaners

## Cooling System Cleaner - Standard



### Applications

- Cooling system cleaner, full effect after several weeks in the cooling system.
- Not for use in removing large amounts of oil from cooling systems.

### Features

- Removes scale or lime deposits.

### Benefits

- Cleans cooling system while the machine works.

English Volume (gal)	Metric Volume (L)	Part Number	Distribution Region
0.500 (2 qt.)	1.893	6V-4511	North America

## Cooling System Cleaner - Quick Flush



### Applications

- For use as preventative maintenance or as a short-time flush at the time of coolant change.
- Not for use in removing large amounts of oil from cooling systems.

### Features

- Removes lime deposits, scale and solder bloom.

### Benefits

- Allows for one-step cleaning in just 90 minutes.

English Volume (gal)	Metric Volume (L)	Part Number
0.125 (1 pt)	0.473	4C-4609
0.250 (1 qt)	0.946	4C-4610
1	3.785	4C-4611
5	18.92	4C-4612
55	208.45	4C-4613

## Cooling Conditioner for Aluminum Components



- Passivates reactive aluminum components within the cooling system
- For use with Cat Extended Life Coolant (ELC) in applications with aluminum radiators
- Inhibits the reaction that can cause depletion in nitrites in the Extended Life Coolant
- 1-Time treatment, on-going use is not required

English Volume (gal)	Metric Volume (L)	Part Number
0.5 fl oz	15.0 ml	461-2417
1.5 fl oz	44.4 ml	369-0804
2.5 fl oz	73.9 ml	369-0805

# Coolant Tools

## 275 Gallon Tote Ball Valve Dispensing Tool



To dispense coolant from 275-gallon totes, a new ball valve dispensing tool has been added to the Cat product line-up. It was designed specifically to dispense coolant from disposable totes.

The tote dispensing tool is easy to use, and instructions are included with each tool group. Also included are toll-free 800 numbers to receive assistance from an experienced professional on the ball valve tool, plus other accessories that may be useful per your specific installation.

The valve group should last for several years, but the cutting tool may dull, necessitating the replacement of the cutting tool only.

Part Number	Description
232-4452	Ball Valve Group
<b>Group Consists of:</b>	
232-4451	Ball Valve Assembly
232-4450	Cutting Tool
239-5289	Buttress Nipple

## Cooling Conditioner Test Kit



### Applications

- Simple dip test just minutes to perform. Measures coolant nitrite levels.
- Use on coolants containing nitrites (for measuring nitrite levels)

### Features

- Does not require dilution, titration or drops to count.

### Benefits

- Includes a color density change for people with color blindness.

Part Number	Product
4C-9301	Coolant Conditioner Test Kit (100 test strips, sample, bottle, pipette)
4C-9297	Refill test strips



## Battery and Coolant Refractometer



- Used to measure freezing point of coolants plus battery charge condition.
- Refractometer uses a prism and lens with simple focus adjustment to provide.
- Easy to operate
- Automatic temperature compensation (ATC)
- Requires only 2 to 3 drops of solution.
- Carrying case and calibration screwdriver included.
- Reads degrees Centigrade and Fahrenheit.

Range	Resolution
-60 to 32° propylene glycol freeze point	10°F
-50 to 0°C ethylene glycol freeze point	5°C
1.15 to 1.30 specific gravity of battery acid	0.01

Product	Part Number
Battery and Coolant Refractometer	245-5829

## Battery, Coolant and Diesel Exhaust Fluid Refractometer



- Digital refractometer is simple to use and to read
- Used for measuring concentration levels for multiple fluids including ethylene glycol-based coolants such as Cat ELC ad Cat DEAC, propylene glycol-based coolants, Cat ELI and battery charge condition.
- Tool operating manual provides conversion for concentration of coolant glycol level to corresponding freeze protection level.
- Automatic temperature compensation
- Requires only a few drops of fluid
- Case and cleaning cloth included

Product	Part Number
Test Kit, Brix Refractometer	360-0774

# Additives

## Cat<sup>®</sup> ELC Extender



### Recommended Use

- Protects against cylinder liner/block pitting and cavitation erosion.
- Should be added to Cat ELC at 500,000 km (300,000 miles) for Cat powered on highway trucks and 6,000 hours for commercial engines.
- Extender is typically necessary only once during the life of the coolant
- Ensures CAT ELC performance to 1,000,000 km (600,000 miles) or 12,000 hours

### ELC Extender and Flush Intervals

Cat ELC Extender should be added after 6,000 hours or 300,000 miles (500,000 km) of operation, and the system should be drained and flushed with clean water after 12,000 hours or 600,000 miles (1,000,000 km). No cleaning agents are needed.

English Volume (gal)	Metric Volume (L)	Part Number	Distribution Region
<b>Cat ELC Extender</b>			
>0.250 (1 Qt.)	.946	119-5152	—
1	3.79	210-0786	—
—	1	215-4241	Brazil

## Cat<sup>®</sup> SCA



### Application

- For regular maintenance use with Cat DEAC and other heavy duty diesel engine coolants requiring maintenance with SCA.
- For use in water-based cooling systems, such as marine applications that do not require glycol for antifreeze protection.
- Use for initial does in non-fully formulated (ASTM D4985) engine coolants

### Features

- Helps stop rust and material deposits from forming in the cooling system.

### Benefits

- Protects all metals.
- Protects against cylinder liner cavitation and corrosion.
- Will not affect gaskets or hoses.

English Volume (gal)	Metric Volume (L)	Part Number
<b>Cat SCA</b>		
.063 (1/2 pint)	—	6V-3542
.125 (1 pint)	—	8T-1589
.250 (1 qt)	—	3P-2044 <sup>(1)</sup>
5	—	8C-3680 <sup>(1)</sup>

English Volume (gal)	Metric Volume (L)	Part Number
<b>Cat SCA</b>		
55	—	5P-2907 <sup>(1)</sup>
—	1	217-0616 <sup>(2)</sup>
—	20	217-0617 <sup>(2)</sup>
—	208	217-0618 <sup>(2)</sup>

1 North and South Americas only

2 EAME and APD only

## Health and Safety

Cat Grease is developed, tested and approved by Caterpillar to meet the same high standards as all genuine Cat parts. Under normal conditions of intended use, these products do not pose a risk to health. Excessive exposure may result in eye, skin or respiratory irritation. Always observe good hygiene measures. Read and understand the Material Safety Data Sheet (MSDS) before using this product. For a copy of the MSDS, visit us on the web at [www.catmsds.com](http://www.catmsds.com).

## Cat Grease

### Lithium Complex Thickener



#### Cat Utility grease

- NLGI 2
- General Purpose Product – where solid additives are not required
- Corrosion Protection – resists oxidation and protects metal against rust
- For low speed and low load applications where operating temperatures are between (-20°C to +140°C (-4°F to +284°F))



#### Cat Prime Application Grease

- NLGI 2
- Reduced Component Wear – resists softening and protects parts for optimal life
- Extreme Pressure – enhanced with 3% Moly for moderate loads
- Long life – for applications where speed, loads and temperature are moderate
- Performs and protects where operating temperatures are between -20°C to +140°C (-4°F to +284°F)



#### Cat Extreme Application Grease – Arctic

- NLGI 0.5
- Extreme-Cold Operation – pumps and protects where operating temperatures are between -50°C to +130°C (-58°F to +266°F)
- Extreme Pressure - 5% Moly for exceptional heavy duty performance
- Semi-synthetic base oil

### Calcium Sulfonate Thickener



#### Cat Extreme Application Grease 1

- NLGI 1
- Extreme Pressure - 5% Moly added for extreme impact and wear resistance
- Moisture Resistance – resists washout from fresh and salt water
- Performs and protects where operating temperatures are between -20°C to +140°C (-4°F to +284°F)



#### Cat Extreme Application Grease 2

- NLGI 2
- Extreme Pressure – 5% Moly added for extreme impact and wear resistance
- Moisture Resistance – resists washout from fresh and salt water
- Performs and protects where operating temperatures are between -15°C to +140°C (+5°F to +284°F)



#### Cat Extreme Application Grease – Desert

- NLGI 2
- Extreme-Heat Operation – performs and protects where operating temperatures are between -10°C to +140°C (+14°F to +284°F)
- Extreme Pressure - 5% Moly for exceptional heavy duty performance
- Mineral base oil

# Greases

## Specialty Greases



### Cat Ball Bearing Grease

- Provides outstanding protection at high speeds and high temperatures associated with ball, needle and sealed bearing applications

### Cat Hammer Paste <sup>(1)</sup>

- Formulated for extreme temperatures and applications. Prevents seizing and significantly slows wear in applications with repetitive impact and vibration

### Cat High Vacuum Grease <sup>(1)</sup>

- Stiff silicone resists high temperatures while maintaining a seal under vacuum or pressure

### Cat White Assembly Grease <sup>(1)</sup>

- Ideal for holding bearings, seals, gaskets and other parts during assembly

### Cat Petro Gel Amber <sup>(1)</sup>

- Compound aiding in assembly of components

## Reference Table

Previous Cat Product Name		Lithium Complex			Calcium Sulfonate Complex			Polyurea
		Cat Multipurpose	Cat Advanced Moly	Cat Arctic Platinum	Cat Ultra5 Moly #1	Cat Ultra5 Moly #2	Cat Desert Gold	Cat High Speed Ball Bearing
Package Description <sup>(2)</sup>	Size	Cat Utility Grease	Cat Prime Application Grease	Cat Extreme Application Grease - Arctic	Cat Extreme Application Grease 1	Cat Extreme Application Grease 2	Cat Extreme Application Grease - Desert	Cat Ball Bearing Grease
Cartridge <sup>(3)</sup>	450 g, 15.9 oz. <sup>(3)</sup>	452-6015	452-6010		452-6000	452-6005	452-7458	454-0292
Cartridge	390 g, 14 oz.	452-6011	452-6006	508-2184	452-5996	452-6001	452-6016	454-0291
Plastic Pail	16 kg, 35 lb.	452-6014	452-6009	508-2187	452-5999	452-6004	452-6019	
Keg	55 kg, 120 lb.	452-6013	452-6008	508-2186	452-5998	452-6003	452-6018	
Drum	180 kg, 400 lb.	452-6012	452-6007	508-2185	452-5997	452-6002	452-6017	

Package Description <sup>(2)</sup>	Size	Specialty			
		Al Complex	Silicone	Lithium Complex	Does Not Contain a Thickener
		Cat Hammer Paste	Cat High Vacuum Grease	Cat White Assembly Grease	Petro Gel Amber
Cartridge	390 g, 14 oz.	130-6951		129-1966	
Cartridge-AutoLube	390 g, 14 oz.	317-8491			
12 pack of 317-8491	390 g, 14 oz.	317-8492			
Tube	283 g, 10 oz.			266-9682	369-9451
Tube	150 g, 5.3 oz.		6V-2055		
Plastic Pail	2.72 kg, 6 lb.				
Plastic Pail	5 kg, 11 lb.	133-8807			369-9450
Plastic Pail	16 kg, 35 lb.			129-1969	

1 Order through Antares

2 Not all products and package sizes will be available in your area.

3 Only available in Australia & New Zealand

## White Assembly Grease

### Applications

- For use in general assembly and other light-duty applications.

### Features

- Added tackifiers, making it ideal for holding gears, bearings, gaskets and other parts during assembly.
- Contains no molybdenum disulfide.

### Benefits

- Exceptional general purpose Lithium Complex grease.

English Volume (gal)	Metric Volume (L)	Part Number
<b>NLGI #0</b>		
10 oz (tube)	254 g (tube)	266-9682
<b>NLGI #2</b>		
14 oz (cartridge)	397 g (cartridge)	129-1966
35 (plastic pail)	16 (plastic pail)	129-1969

## Cat Hammer Paste



Cat Hydraulic Hammer Paste (Grease) is formulated to lower friction and improve tool and bushing life in the harsh environments encountered with hydraulic impact hammer applications. These work tools generate high heat, severe shock, and heavy friction loads, which can fuse parts together. Cat Hydraulic Hammer Paste is made from copper and graphite to provide excellent wear protection even at temperatures higher than 2,000°F (1,093°C).

### Performance

- Formulated for extreme temperatures and applications
- Strong adhesion, even in the presence of water

### Protection

- Significantly slows wear
- Prevents seizing
- Extremely stable and corrosion resistant

Typical Characteristics <sup>(4)</sup>	
Color	Copper
NLGI Class	2
Thicker Type	Aluminum Complex
Base Oil Type	Mineral
Operating Range	-20 to 1,100°C (-4 to 2,012°F)
Worked Penetration (mm)	265-295
Viscosity @ 40°C, cSt	350
4 Ball E.P. Weld Point (kg)	400
Dropping Point	260°C (500°F)

<sup>4</sup> The values shown are typical values and should not be used as quality control parameters

## Greases

### Cat Hammer Paste (Cont'd.)

English Volume (gal)	Metric Volume (L)	Part Number
<b>NLGI #2</b>		
–	12 pack (auto lube cartridge)	317-8492
–	400 g (auto lube cartridge)	317-8491
11 lbs (tub)	5 kg (tub)	133-8807
14 oz (cartridge)	397 g (cartridge)	130-6951

### High Vacuum Grease

- Applications where maintaining a seal under vacuum or pressure is required.

English Volume (gal)	Metric Volume (L)	Part Number
4 oz (cartridge)	113 g (cartridge)	186-1530

### Petro Gel Amber

- Provides overall compatibility in most application utilizing retention compounds
- High quality, meeting customer needs
- For use in the following applications
  - Engine Seals
  - Transmission Seals
  - Machine Seals
  - Hydraulic Cylinder Seals
- Should not be used on gaskets or piston seals

English Volume	Metric	Part Number
6 lb	2.72 kg	369-9450
10 oz	283 g	369-9451

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**Cat Open Gear Lubricant – High Viscosity/Semi-Synthetic Compound**


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- For use in Electric Rope Shovels and Draglines Open Gears
- Formulated for high load/low speed applications
- Available in both Cold Weather and Warm Weather formulations

<b>Cat OGL - Cold Weather</b>			
<b>English Volume</b>	<b>Metric</b>	<b>Part Number</b>	<b>Distribution</b>
120 lb	54 kg	557-5707	Worldwide except Brazil
120 lb	54 kg	557-5770	Brazil Only
400 lb	181.4 kg	511-4464	Worldwide except Brazil
400 lb	181.4 kg	511-4468	Brazil Only
2100 lb	952.5 kg	511-4465	Worldwide except Brazil
2100 lb	952.5 kg	511-4469	Brazil Only

<b>Cat OGL - Warm Weather</b>			
<b>English Volume</b>	<b>Metric</b>	<b>Part Number</b>	<b>Distribution</b>
120 lb	54 kg	557-5706	Worldwide except Brazil
120 lb	54 kg	557-5769	Brazil Only
400 lb	181.4 kg	511-4462	Worldwide except Brazil
400 lb	181.4 kg	511-4466	Brazil Only
2100 lb	952.5 kg	511-4463	Worldwide except Brazil
2100 lb	952.5 kg	511-4467	Brazil Only







**FILTERS**

# Cat Filter Features

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## **Aluminum Top Plate**

- Non-Ferrous metal
- Reduces harmful contaminants
- More thread engagement

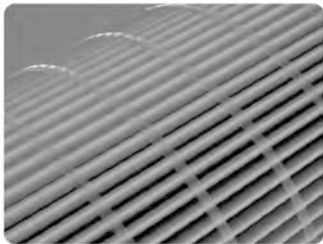
## **Canister**

- Thickest can in the industry
- One piece can design
- Maximizes structural strength
- Minimizes potential leaks

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# Cat Element Features

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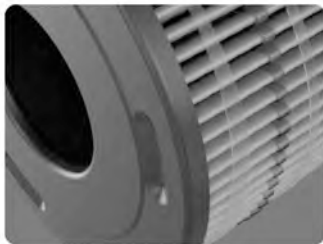
## **Spiral Roving**

- Reduces pleat flex and fatigue
- Maximizes media surface utilization
- Increases contaminate retention



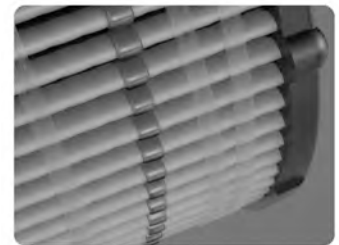
## **Non-Metallic Center Tube**

- Stronger than metal
- Maximum cleanliness



## **Acrylic Beading**

- Prevents Bunching
- Maximizes media surface area utilization



## **Urethane End Caps**

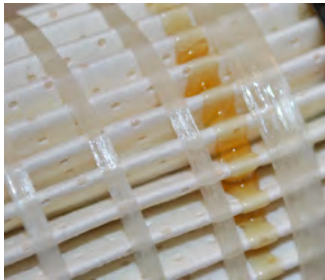
- One-piece design
- Media molded into urethane
- Eliminates possible leak paths

## New Cat Filter Products

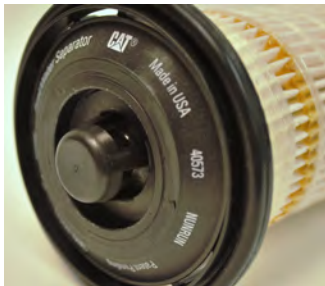


- Unique cartridge elements ... install the right filter
- Improved media... optimal performance and protection
- No-metallica elements... less waste and disposal cost
- Reusable housing.... lower O&O cpsts
- Compact design ....commonality between many machines
- Easy and clean filter changes ....integrated seals, drains, etc.

## Unique Fit Features



- Multi-layered media
- Improved efficiency
- Increased capacity



- Pre-fill deterrent (Fuel Only)
- Provides clean fuel system
- Integrated seal
- Easy installation



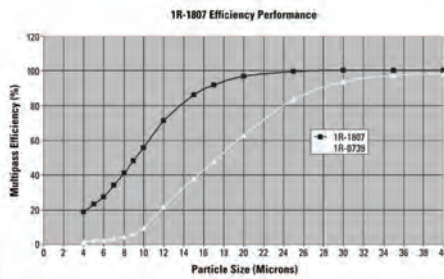
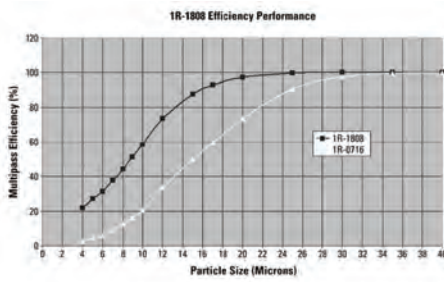
- Housing drain
- Promotes clean change
- Ensures correct filter used



- External positive stop
- Correct installation torque

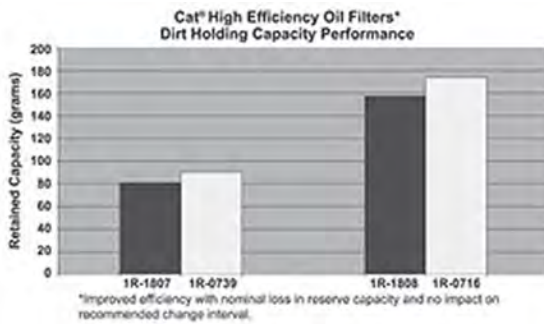
# Engine Oil Filters

## Improved Filtering Media



Cat Advanced Efficiency Oil Filters contain an improved filtering media which captures more contaminants, reducing wear on critical oil-lubricated engine components. This results in extended life and improved performance. The graphs below illustrate the efficiency of the 1R-1807 and 1R-1808 filters as compared to their Standard Efficiency Counterparts.

## Reserve Dirt-Holding Capacity



Although higher-efficiency filters accumulate dirt more quickly than Standard Efficiency filters, Cat Advanced Efficiency Engine Oil filters do not require a shortened change interval. They feature a reserve dirt-holding capacity, which compensates for the majority of dirt accumulation increase, letting customers maintain standard oil change intervals. The relative dirt-holding capacity of Advanced and Standard Efficiency filters are illustrated in the graph.

## Cat Filters... Engineered protection for every application



### The consistent quality of Cat Filters is your best protection.

When you see inside a Cat Filter, the difference is clear. The advanced design features found in Cat Filters combine to deliver maximum filtration efficiency and the protection you need to get the most out of your equipment.

- Genuine parts optimized for Cat Equipment.
- Manufactured worldwide to Caterpillar specifications for global quality assurance.
- Complete line of products and services to meet your business needs.

## Cat Liquid Engine Filters

- Fuel
  - Primary
  - Secondary
- Fuel Water Separator
- Engine Oil



### Standard Efficiency

- Features standard elements for normal duty filtration.
- Designed to maintain system cleanliness.
- Removes contaminants before the fluid reaches critical components.
- Available for most Cat equipment models.



### Advanced Efficiency

- Provide increased contamination control over Standard Efficiency Filters.
- Engineered for maximum protection, performance, and fuel economy.
- Removes more contaminants maximizing protection of other components.
- Engineered for today's diesel engines with higher injection pressures and closer tolerances.
- Best choice to meet today's fuel contamination challenges, especially in applications with dirty fuel.
- More economically priced than Ultra High Efficiency Filters.



### Ultra High Efficiency

- Offers unsurpassed component protection by capturing the smallest particles which cause damage to the new high performing systems
- Benefits engine life and reduces engine wear.
- Maximizes engine performance and component life.
- The best way to keep your system clean.

# Filter Efficiency Options

## Fuel

Standard Efficiency	Advanced Efficiency	Ultra High Efficiency	Notes
	1R-0755	422-7587	
1R-1740	1R-0750		
121-9868	1R-0751	306-9199	306-9199 less capacity than 364-5287
121-9868	1R-0751	364-5287	364-5287 more capacity than 306-9199
1R-1712	1R-0749	416-1225	
1R-1725	1R-0766		

## Fuel/Water Separator

Standard Efficiency	Advanced Efficiency	Ultra High Efficiency	Notes
—	438-5385	438-5386	

## New Advanced Efficiency Fuel/Water Separators - Bowl-less

New Part Number	Equivalent Part Number
423-8521	326-1641
423-8522	326-1642
423-8524	326-1643
423-8525	326-1644

## Marine "White" Options

Marine Part Number	Description	Existing Part Number
389-0432	Advanced - Secondary Fuel Filter	1R-0749
389-0433	Advanced - Secondary Fuel Filter	1R-0755
389-0434	Advanced - Engine Lube Oil Filter	1R-1808
389-0435	Advanced - Engine Lube Oil Filter	249-2347
432-4245	Advanced - Fuel/Water Separator	423-8521 or 326-1641
432-4247	Advanced - Fuel/Water Separator	423-8522 or 326-1642
432-4248	Advanced - Fuel/Water Separator	423-8524 or 326-1643
432-4249	Advanced - Fuel/Water Separator	423-8525 or 326-1644
441-4342	Advanced - Secondary Fuel Filter	1R-0751
441-4348	Advanced - Engine Lube Oil Filter	1R-1807

## Engine Lube Oil

Standard Efficiency	Advanced Efficiency	Ultra High Efficiency	Notes
1R-0726	276-5403	284-9054	
1R-0739	1R-1807		
1R-0716	1R-1808	244-4484	1R-0716/1R-1808...not for use on 3500 Engines
272-1788	275-2604	244-4484	272-1788/275-2604...used on 3500 Engines

# Cat PrimeTime Priming Pumps



Cat PrimeTime Priming Pumps are easily installed on the frame or engine as retrofits. They prime the filter and fuel system with a flip of the switch.

- No need to pre-fill filter and risk debris reaching injectors
- Primes fuel filter in two to six minutes
- No time-consuming, difficult manual pumping

Engine	Prime Time Full Flow Configuration	Hand Priming Configuration	Fuel Water <sup>(1)</sup> Separator Basic Configuration
Small Engines C12 & smaller	Kit 206-5756 <sup>(2)</sup>	- Base 128-8557 with 423-8522 (axial seal) or - Base 202-9871 with 423-8525 (radial seal)	- Base 195-1068 with 423-8522 (axial seal) FWS or - Base 177-9778 with 423-8525 (radial seal) FWS <sup>(1)</sup>
Medium Engines C15-C16, 3408	Kit 206-5756 <sup>(2)</sup> The 423-8525, included in the kit, can be replaced with the 423-8524	- Base 128-8557 with 423-8521 (axial seal) or - Base 202-9871 with 423-8524 (radial seal)	- Base 195-1068 with 423-8521 (axial seal) FWS or - Base 177-9778 with 423-8524 (radial seal) FWS <sup>(1)</sup>

Engine	Prime Time Pump Prime Only Configuration	Fuel Water <sup>(1)</sup> Separator Basic Configuration
3508	Kit 206-5756 <sup>(2)</sup> (for priming only)	- Base 175-7060 with 438-5385 (10 micron) or 438-5386 (4 micron)
3512-3516	Kit 206-5756 <sup>(2)</sup> (for priming only)	232-5263 group, each include (2) base 225-6404 with (2) 438-5385 (10 micron) or 438-5386 (4 micron)
3524	Kit 206-5756 <sup>(2)</sup> (for priming only)	232-5263 group, each include (3) base 225-6404 with (3) 438-5385 (10 micron) or 438-5386 (4 micron)

1 Install the kit 206-5756 per Special Instruction media# REHS1037-01  
 2 270-5320 Water Collection Bowl—220-8678 Bowl/Can Seal

# Hydraulic and Transmission Filters

## Cat Hydraulic and Transmission Filters



### Selection Guidelines

In order to choose the right filter for your machine, always begin by consulting the maintenance manual for proper change interval and recommended filter part numbers. It is usually safe to substitute a higher-efficiency filter, but NEVER substitute a lower-efficiency filter than the one recommended.

If your transmission or hydraulic system has a filter bypass dash indicator and a Standard filter is recommended, you can use an Advanced Efficiency or UHE. If you do not have a bypass indicator, consult your Cat Dealer before upgrading.

## Cat Hydraulic and Transmission Filters



A line of Cat Transmission Filters has been introduced to better meet the specific needs of transmission applications. The new Cat Transmission Filters feature a synthetic media designed to deliver a high level of filtration performance and to reduce pressure drops across the media. This gives the new filters a significantly higher dirt holding capacity and better cold weather performance.



### Cat Standard Efficiency

- Features standard elements for normal duty filtration.
- Designed to maintain system cleanliness.
- Available for most Cat equipment models.



### Advanced High Efficiency

- Special media provides advanced protection against contaminant introduction during maintenance and repair.
- Engineered for effective contamination control.
- Protects hydraulic and drive train systems against accelerated wear.



### Ultra High Efficiency

- Super-fine synthetic media removes a higher proportion of very small particles and an even higher proportion of larger particles.
- Specially engineered to aid in optimum contamination control efforts.
- Increases system efficiency, eliminate system failures and extend oil life.
- Reduces exposure of abrasives to critical components - extending component wear life.
- Use to clean up systems following repairs and rebuilds.



# Filter Efficiency Options

## Hydraulic

Standard Efficiency	Advanced Efficiency	Ultra High Efficiency	Fire Resistance	Notes
4I-3948	184-3931	126-1813		
090-2900	144-6691	126-1815	121-9868	
094-3229		139-1539		
094-4412		139-1540		
9U-6985	9U-5870	9U-6983	198-3188	9U-5870 higher efficiency than 9U-6984
9U-6985	9U-6984	9U-6983	198-3188	9U-6984 more capacity than 9U-5870
123-8999		117-9900		
1R-0719	1R-0773	132-8875	4T-3131	
1R-0728		139-1532	4T-3130	
1R-0735	1R-0777	139-1537	104-6931	
1R-0741		132-8876	4T-3132	
1R-0746		126-1810		
1R-0722	1R-0774	139-1536	4T-2134	
	4T-6788	223-7809		
	9T-8578	144-0832		
	9T-6636	126-1816		
119-4740		221-1026		
126-2081	179-9806	126-2131		179-9806 lower efficiency than 342-1823
126-2081	342-1823	126-2131		342-1823 higher efficiency than 179-9806
1R-0732	1R-0792	167-2009	4T-3133	
	201-0875	223-7810		
	1G-8878	102-2828	156-0214	
9T-9054		9T-7656		
	130-3212	126-1814		130-3212 higher efficiency & capacity than 185-0337
	185-0337	126-1814		185-0337 lower efficiency & capacity than 130-3212
	4I-3950	126-1814		4I-3950 lower efficiency than 185-0337
	109-7287	132-7249		
	134-0964	4C-6860		
185-1379		185-1278		
	108-1153	126-1817	134-3014	108-1153 higher efficiency & capacity than 9T-0973
	9T-0973	126-1817	134-3014	9T-0973 lower efficiency & capacity than 108-1153
	6E-6408	126-1818		
	152-6902	207-5035		
185-1375	192-1560			
	198-7397	139-1533		
	436-3443	295-6257		
	435-6036	371-5170		

# Filter Efficiency Options

## Transmission

Standard Efficiency	Advanced Efficiency	Notes
4I-3948	184-3931	
090-2900	144-6691	
9U-6985	9U-5870	9U-5870 higher efficiency than 9U-6984
9U-6985	9U-6984	9U-6984 more capacity than 9U-5870
1R-0735	1R-0777	
1R-0722	1R-0774	
126-2081	179-9806	179-9806 lower efficiency than 342-1823
126-2081	342-1823	342-1823 higher efficiency than 179-9806
1R-0732	417-8416	
185-1375	192-1560	

## Transmission Filters

Recommended*	Replaces
328-3655	338-3540
341-6643	1G-8878
	102-2828
343-4464	1R-0773
	132-8875
343-4465	1R-0778
	132-8876
417-8416	1R-0792
	167-2009

\*Recommended only for Transmission Applications as a replacement to the former Hydraulic UHE filter. See PEHJ0251 for details.

## Cat Engine Air Filters



Air filters, also called air cleaners, are responsible for continuously cleaning the air coming into the engine or machine cab. Air filters are designed to effectively remove contaminants such as dust, dirt, soot and other air-borne particulates. Cat Filters are available in Standard Efficiency and Ultra High Efficiency, providing the best protection for your machine.

## Standard Efficiency Air Filters



- Available for all Cat equipment models.
- Recommended for normal duty filtration
- Equipped with media designed to prevent dirt, soot, sand, and other contaminants from entering the engine under normal operating conditions.

## Ultra High Efficiency (UHE) filters



- Available for some Cat equipment models.
- Recommended when extremely fine dust or soot make up a high percentage of the contaminants in the atmosphere.
- Higher initial and overall efficiency for improved engine performance and dirt holding capacity, which extends filter element service life.

## Air - Engine

Standard Efficiency	Ultra High Efficiency	Notes	Standard Efficiency	Ultra High Efficiency	Notes
6I-2499	132-7164		142-1340	220-0454	
6I-2501	128-2686		165-1689	220-0455	
6I-2503	132-7165		4W-5716	132-7170	
6I-0273	122-1674		4W-5228	132-7171	
6I-2505	122-1675		8N-6309	185-8786	
6I-2507	132-7166		251-5885	292-5862	
6I-2509	132-7167		251-5886	292-5863	
106-3969	132-7168		386-2097	422-1089	
123-6855	132-7169		386-2099	456-9847	
131-8822	134-0685		396-2122	420-5282	
142-1339	220-0453		396-2123	467-2012	

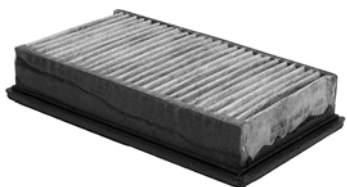
# Air Filters

## Axial Seal Air Filter to Radial Air Seal Filter Adapter Kit Cross Reference

Axial Seal Type - Standard Primary	Axial Seal Type - Secondary	Optional Radial Seal Retrofit Kits - Axial to radial seal adapter kit	Radial Seal Type - Standard Primary	Radial Seal Type - Standard Primary Radial Seal Type - UHE Primary	Radial Seal Type - Secondary
7W-5389	2S-1285	6I-3828	6I-2499	132-7164	6I-2500
7W-5389	8N-4901	6I-3829	6I-2499	132-7164	6I-2500
7W-5317	2S-1286	6I-3830	6I-2501	128-2686	6I-2502
7W-5317	9S-9972	6I-3831	6I-2501	128-2686	6I-2502
7W-5316	8N-6883	6I-3831	6I-2503	132-7165	6I-2504
7W-5316	2S-1287	6I-3830	6I-2503	132-7165	6I-2504
7W-5495	1P-7360	6I-3832	6I-0273	132-1674	6I-0274
7W-5313	1P-8482	6I-3833	6I-2505	132-1675	6I-2506
7W-5313	6N-6444	6I-3833	6I-2507	132-7166	6I-2508
7W-5216	7N-1308	6I-3833	6I-2509	132-7167	6I-2510
7W-9853	7W-9567	106-7120	106-3969	132-7168	106-3973
4W-5716	6N-6067	106-7120 / 222-4376	106-3969	132-7168	106-3973
8N-6309	8N-2556	–	123-6855	132-7169	123-6856
9Y-7662	9Y-7663	–	131-8822	132-0685	131-8821

## Cat Cabin Air Filters

Caterpillar offers optional cabin air filters for use in all applications and environments. All cabin air filters meet Caterpillar's stringent specifications for performance and quality construction. Advanced filtration technology reduces airborne irritants, creating a cleaner and more comfortable working environment for the operator. No equipment modification is needed for installation. Note: Cabin air filters are not for use in filtering hazardous materials.



### High Efficiency

- Recommended for extremely dusty environments
- Improved dirt holding capacity, which may extend service life depending on the operating conditions
- Higher initial and overall efficiency for improved performance
- Easier to clean

### Activated Carbon

- Recommended in situations where odor is a problem
- High performance activated carbon ensures fast rate of absorption
- Superior particle removal efficiency reduces eye, nose and throat irritants
- Higher capacity extends life and reduces maintenance costs
- No adverse effect on air flow, heat or air conditioning performance

### Lower Restriction

- Recommended in situations where there is poor cab air flow
- Allows for more air flow into the cab
- Similar capacity to standard option
- Standard efficiency

### Standard

- Recommended for most applications
- Designed to prevent dirt, soot, sand and other contaminants from entering the cab under normal operating conditions
- Standard efficiency

## Dust and Odor Reduction Cabin Air Filter Options

Standard	Upgrade Option	Type
105-4968	139-3204	Dust & Odor Reduction
107-0266	175-2841	High Efficiency
107-0266	282-5339	Dust & Odor Reduction
112-7448	175-2838	Dust & Odor Reduction
113-0305	196-3161	Dust & Odor Reduction
116-5796	142-7069	Dust & Odor Reduction
119-3355	233-8359	Dust & Odor Reduction
119-3355	268-6704	Lower Restriction
149-1912	220-8800	Dust & Odor Reduction
180-7487	282-5340	Dust & Odor Reduction
209-8217	307-4442	Dust & Odor Reduction
209-8217	268-6705	Lower Restriction
209-8217	318-7190	High Efficiency
238-0479	319-7944	High Efficiency
238-0479	291-3928	Dust & Odor Reduction
259-3222	266-7765	Lower Restriction

Standard	Upgrade Option	Type
2V-0036	175-2837	Dust & Odor Reduction
6T-0988	175-2831	Dust & Odor Reduction
7G-8116	141-7903	Dust & Odor Reduction
7T-1889	175-2836	Dust & Odor Reduction
7T-1890	175-2839	High Efficiency
7T-1890	175-2832	Dust & Odor Reduction
7X-6012	200-8460	Dust & Odor Reduction
7X-6041	175-2834	Dust & Odor Reduction
8P-5343	175-2835	Dust & Odor Reduction
9G-1518	175-2833	Dust & Odor Reduction
9X-8216	175-2840	High Efficiency
231-0167	326-7963	Dust & Odor Reduction
290-2287	348-3432	Dust & Odor Reduction
304-8631	333-2112	HEPA, cabin precleaner
341-8392	450-3029	HEPA, cabin precleaner
457-2836	457-3049	HEPA, cabin precleaner

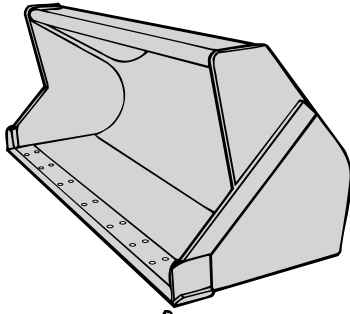




**GROUND ENGAGING TOOLS**

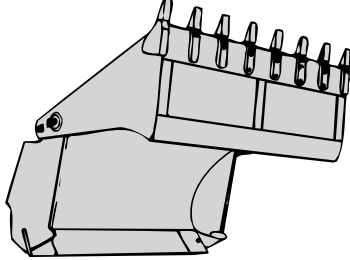
# Backhoe Loaders

## Backhoe Loaders — Front Buckets



### General Purpose Bucket

- For use in handling bank and stockpile materials.



### Multi-Purpose Bucket

- Provides more dump clearance and grabbing capabilities due to its movable clam.
- For use in general loading.

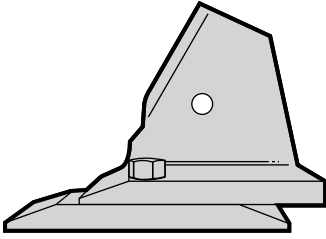
Model <sup>(1)</sup>	Base Edge Width	Base Edge	Bucket Corner	
			LH	RH
416, 416B, 416C, 416C IT, 416D, 420, 420D, 426, 426B, 426C, 426C IT, 428, 428B, 428C IT, 430D, 436B, 436C, 436C IT, 446, 446B, 446D	2240 mm (88.0 in)	9R-0316	—	—
	2262 mm (89.0 in)	9R-4672	9R-4674	9R-4674
	2262 mm (89.0 in)	9R-4672	9R-5205	9R-5206
	2388 mm (94.0 in)	9R-5313	9R-4674	9R-4674
	2395 mm (94.3 in)	9R-5313	9R-5205	9R-5206
	2408 mm (94.8 in)	9R-4101	9R-5748	9R-5747
	2408 mm (94.8 in)	6Q-2193	6Q-2196	6Q-2197
	2413 mm (95.0 in)	9R-4672	—	—

<sup>1</sup> J225 Tip Size for Machine Models 446, 446B and 446D.  
J200 for all other Bucket Types and Machine Models.



# Backhoe Loader Edges and Adapters

## Front Bucket Bolt-On Edges



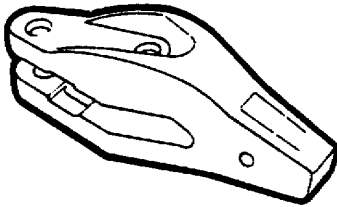
When penetration is not a problem, use bolt-on cutting edges.

Bolt-on cutting edges:

- Increase base edge life up to five times over an unprotected base edge.
- Are quick and easy to replace.
- Increase bucket capacity.
- Provide smooth floor maintenance capability.
- Are made of DH-2 steel alloy and are hardened to 430-520 Brinell.

Model	Base Edge Width	Base Edge <sup>(1)</sup>	Bucket Corner		Bolt-on Edge	Bolt	Nut
			LH	RH			
416, 416B, 416C, 416C IT, 416D, 420, 420D, 426, 426B, 426C, 426C IT, 428, 428B, 428C IT, 430D, 436B, 436C, 436C IT, 446, 446B, 446D	2240 mm (88.0 in)	9R-0316	—	—	—	—	—
	2262 mm (89.0 in)	9R-4672	9R-4674	9R-4674	9W-8215 (2)	3F-5108 (8)	4K-0367 (8)
	2262 mm (89.0 in)	9R-4672 <sup>(2)</sup>	9R-5205	9R-5206	9W-8215 (2)	3F-5108 (8)	4K-0367 (8)
	2388 mm (94.0 in)	9R-5313	9R-4674	9R-4674	118-7110 (2)	3F-5108 (8)	4K-0367 (8)
	2395 mm (94.3 in)	9R-5313	9R-5205	9R-5206	118-7110 (2)	3F-5108 (8)	4K-0367 (8)
	2408 mm (94.8 in)	9R-4101	9R-5748	9R-5747	9U-9665 (2)	3F-5188 (12)	4K-0367 (12)
	2408 mm (94.8 in)	6Q-2193	6Q-2196	6Q-2197	9U-9665 (2)	3F-5188 (12)	4K-0367 (12)
	2413 mm (95.0 in)	9R-4672	—	—	9W-8215 (2)	3F-5108 (8)	4K-0367 (8)

## Front Bucket Bolt-On Adapters



- Provide excellent impact resistance.
- Provide excellent penetration ability.
- For use with larger backhoe loaders that work in abrasive conditions.

Model	Base Edge Width	Base Edge <sup>(1)</sup>	Bucket Corner		Bolt-on Edge	Bolt	Nut
			LH	RH			
416, 416B, 416C, 416C IT, 416D, 420, 420D, 426, 426B, 426C, 426C IT, 428, 428B, 428C IT, 430D, 436B, 436C, 436C IT, 446, 446B, 446D	2240 mm (88.0 in)	9R-0316	—	—	—	—	—
	2262 mm (89.0 in)	9R-4672	9R-4674	9R-4674	8E-2184 (8)	4F-3656 (16)	4K-0367 (16)
	2262 mm (89.0 in)	9R-4672 <sup>(2)</sup>	9R-5205	9R-5206	8E-2184 (8)	4F-3656 (16)	4K-0367 (16)
	2388 mm (94.0 in)	9R-5313	9R-4674	9R-4674	8E-2184 (8)	4F-3656 (16)	4K-0367 (16)
	2395 mm (94.3 in)	9R-5313	9R-5205	9R-5206	8E-2184 (8)	4F-3656 (16)	4K-0367 (16)
	2408 mm (94.8 in)	9R-4101	9R-5748	9R-5747	—	—	—
	2408 mm (94.8 in)	6Q-2193	6Q-2196	6Q-2197	—	—	—
	2413 mm (95.0 in)	9R-4672	—	—	8E-2184 (8)	4F-3656 (16)	4K-0367 (16)

1 Eight teeth for all bucket types and machine models except for 9R-0316, 9R-4101 and 6Q-2193 base edges that have no teeth.

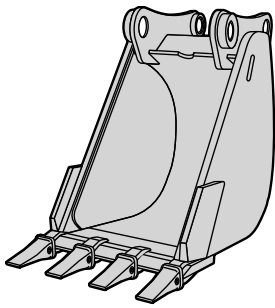
2 This base edge does not include teeth when used on 9R-5988 bucket. The base edge is drilled for bolt-on unitooth tips. Number in parentheses ( ) after the part number indicates the quantity required.

# Backhoe Loader Buckets

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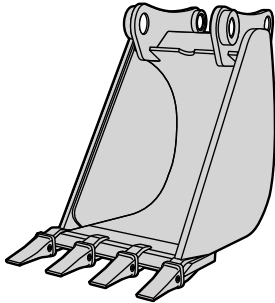
## Rear Buckets

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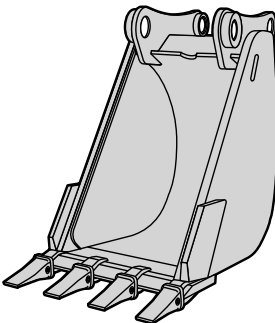
### Standard Duty Bucket

- For use in handling bank and stockpile materials.



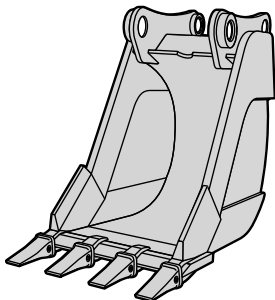
### Heavy Duty Bucket

- Provides longer life in abrasive materials due to replaceable corners, a thicker base edge, and bottom wear strips.



### High Capacity Bucket

- Provides more capacity and a longer tip radius.
- Contains the same construction as the heavy duty bucket.
- For use in abrasive materials that are easily penetrated.



### Extreme Service Bucket

- Contains heavy duty side plates, base edges, and corner adapters in addition to side-bar protectors and bottom wear strips.
- For use in prying out rock and concrete.

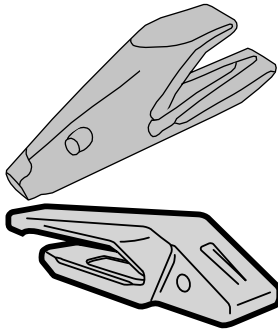
# Backhoe Loader Base Edge and Corners

Model <sup>(1)</sup>	Base Edge Width	Base Edge	Bucket Corner		Weld-On Adapter	Weld-On Double Strap Adapter	Bolt-On Adapter	Bolt	Nut
			LH	RH					
416, 416B, 416C, 416C IT, 420, 426, 426B, 426C, 426C IT, 428, 428B, 428C IT, 436B, 436C IT, 446, 446B, 446D	296 mm (12 in)	100-6002	9R-8987	9R-8988	—	—	8E-2184 (3)	4F-3656 (6)	4K-0367 (6)
	335 mm (12 in)	134-5877	134-5884	134-5885	—	119-3204/119-3205 (3)	8E-2184 (3)	4F-3656 (6)	4K-0367 (6)
	339 mm (12 in)	136-6886	136-7150	136-7150	—	119-3204/119-3205 (3)	8E-2184 (3)	4F-3656 (6)	4K-0367 (6)
	413 mm (16 in)	134-5878	134-5884	134-5885	—	119-3204 (3)	—	—	—
	457 mm (18 in)	136-7046	136-7051	136-7049	6Y-3224 (3)	119-3204/119-3205 (4 or 5)	8E-2184 (3)	4F-3656 (6)	4K-0367 (6)
	451 mm (18 in)	136-6887	136-6885	136-6885	6Y-3224 (3)	119-3204/119-3205 (4 or 5)	8E-2184 (3)	4F-3656 (6)	4K-0367 (6)
	413 mm (16 in)	9R-8983 (2)	9R-8987	9R-8988	6Y-3224 (3)	—	8E-2184 (3)	4F-3656 (6)	4K-0367 (6)
	419 mm (16 in)	9R-9459	9R-9456	9R-9454	6Y-3224 (3)	119-3204/119-3205 (4 or 5)	8E-2184 (3)	4F-3656 (6)	4K-0367 (6)
	603 mm (24 in)	134-5880	134-5884	134-5885	—	119-3204 (5)	—	—	—
	609 mm (24 in)	136-7047	136-7051	136-7049	6Y-3224 (4)	119-3204/119-3205 (4 or 5)	8E-2184 (4 or 5)	4F-3656 (8 or 10)	4K-0367 (8 or 10)
	603 mm (24 in)	136-6888	136-6885	136-6885	6Y-3224 (4)	119-3204/119-3205 (4 or 5)	8E-2184 (4 or 5)	4F-3656 (8 or 10)	4K-0367 (8 or 10)
	570 mm (22 in)	9R-9241	9R-9819	9R-9820	6Y-3224 (4)	119-3204/119-3205 (4 or 5)	8E-2184 (4 or 5)	4F-3656 (8 or 10)	4K-0367 (8 or 10)
	572 mm (23 in)	9R-9458	9R-9456	9R-9454	—	119-3204/119-3205 (4 or 5)	8E-2184 (4 or 5)	4F-3656 (8 or 10)	4K-0367 (8 or 10)
	566 mm (22 in)	9R-8984 (2)	9R-8987	9R-8988	6Y-3224 (4)	—	8E-2184 (5 or 6)	4F-3656 (8 or 10)	4K-0367 (8 or 10)
	718 mm (28 in)	9R-8985 (2)	9R-8987	9R-8988	6Y-3224 (5)	—	8E-2184 (5 or 6)	4F-3656 (10 or 12)	4K-0367 (10 or 12)
	722 mm (28 in)	9R-9833	9R-9819	9R-9820	6Y-3224 (5)	119-3204/119-3205 (5)	8E-2184 (5 or 6)	4F-3656 (10 or 12)	4K-0367 (10 or 12)
	755 mm (30 in)	136-6889	136-6885	136-6885	6Y-3224 (5)	119-3204/119-3205 (5)	8E-2184 (5 or 6)	4F-3656 (10 or 12)	4K-0367 (10 or 12)
	724 mm (29 in)	9R-9457	9R-9456	9R-9454	6Y-3224 (5)	119-3204/119-3205 (5)	8E-2184 (5 or 6)	4F-3656 (10 or 12)	4K-0367 (10 or 12)
	908 mm (36 in)	136-6890	136-6885	136-6885	6Y-3224 (6)	119-3204/119-3205 (6)	8E-2184 (6)	4F-3656 (12)	4K-0367 (12)
	871 mm (34 in)	9R-8986 (2)	9R-8987	9R-8988	6Y-3224 (6)	—	8E-2184 (6)	4F-3656 (12)	4K-0367 (12)
876 mm (34 in)	9R-9455	9R-9456	9R-9454	6Y-3224 (6)	—	—	—	—	

- 1 Bucket does not include teeth. The base edge is drilled for Bolt-On Unitooth tips. J225 for 446, 446B, and 446D. J200 for all other machine models.
- 2 Bucket does not include teeth. The base edge is drilled for Bolt-On Unitooth tips. J225 for 446, 446B, and 446D. J200 for all other machine models.

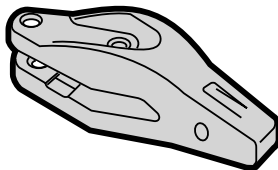
# Backhoe Loader Adapters

## Rear Bucket Adapters



### Weld-On Double Strap Adapters

- Provides good retention in high-impact conditions.
- Protects the base edge well.
- For use in general loading applications where adapter retention is important.



### Bolt-On Adapters

- Provides excellent impact resistance.
- Provides excellent penetration ability.
- For use with larger backhoe loaders that work in abrasive conditions.

Model	Base Edge Width	Base Edge <sup>(1)</sup>	Bucket Corner		Weld-on Double Strap Adapter
			LH	RH	
416D/420D/430D	305 mm (12 in)	174-3951			168-1204/195-9204 (3)
		154-5254	134-5884	134-5885	168-1204/195-9204 (3)
		154-5268			168-1204/195-9204 (3)
		219-9494			201-1235 (3)
		219-9493			201-1234 (3)
		219-9496			201-1234 (4)
	406 mm (16 in)	134-5878	134-5884	134-5885	195-9204 (3)
		219-9482			201-1234 (3)
		136-7046			168-1204/195-9204 (4)
	457 mm (18 in)	134-5879	134-5884	134-5885	168-1204/195-9204 (4)
		136-6887			168-1204/195-9204 (4)
		219-9487			201-1234 (4)
		219-9483			201-1234 (4)
		219-9491			201-1234 (4)
		136-7047			168-1204/195-9204 (5)
	610 mm (24 in)	134-5880	134-5884	134-5885	168-1204/195-9204 (5)
		136-6888			168-1204/195-9204 (5)
		219-9488			201-1234 (5)
		219-9484			201-1234 (5)
		219-9492			201-1234 (8)
		172-8270			195-9204 (10)
	762 mm (30 in)	134-5881	134-5884	134-5885	168-1204/195-9204 (5)
		136-6889			168-1204/195-9204 (5)

<sup>1</sup> Base Edge Part Numbers that start with 174-XXXX, 154-XXXX, 136-XXXX, 134-XXXX, 172-XXXX use DRS200.  
Base Edge Part Numbers that start with 219-XXXX use DRS230.

# Backhoe Loader Adapters

## Rear Bucket Adapters (Cont'd.)

Model	Base Edge Width	Base Edge <sup>(2)</sup>	Bucket Corner		Weld-on Double Strap Adapter
			LH	RH	
		219-9489			201-1235 (5)
		219-9485			201-1234 (5)
		219-9495			201-1234 (10)
	914 mm (36 in)	134-5882	134-5884	134-5885	168-1204/195-9204 (6)
		136-6890			168-1204/195-9204 (6)
		219-9490			201-1235 (6)
		219-9486			201-1234 (6)

<sup>2</sup> Base Edge Part Numbers that start with 174-XXXX, 154-XXXX, 136-XXXX, 134-XXXX, 172-XXXX use DRS200.  
Base Edge Part Numbers that start with 219-XXXX use DRS230.

# Backhoe Loader Tips

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## Tips

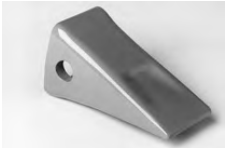
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Cat backhoe loader bucket tips are side pinned for excellent tip retention and quick, easy tip changing. The pin hole is located through the tip sides which are the areas of least wear.



### Long Tip

- The best choice for most applications.



### Short Tip

- Provides more strength.
- Contains less wear material.



### Utility Tip

- For use in general purpose excavator and loader bucket applications.



### Wide Tip

- Contains less wear material.
- Provides less penetration.
- Provides a cleaner floor and less spillage.



### Penetration Tip

- Provides better penetration.
- Contains less wear material.



### Bolt-On Unitooth

- Improves penetration where breakage is not a problem.
- Tip and adapter are one integrated piece for easy installation and lower initial costs.
- For use in nonabrasive materials.



### Sharp Corner Tip/Sharp Center Tip

- Provides the best penetration.
- Contains the least wear material.

## Tips (Cont'd.)



### Twin Sharp Tip

- For use for severe digging in rock and frost.



### Heavy Duty Long Tip

- Contains more wear material than Abrasion Tip.
- Provides greater strength than Long Tip.
- Provides better penetration due to a streamlined-profile.



### Heavy Duty Abrasion Tip

- Contains the greatest amount of wear material.
- Provides good strength.
- Provides good penetration.

## Tips — Diagonal Retention System



### DRS200 and DRS230

The new system for all rear Backhoe Loader buckets except for the 446 model, provides good retention that is not affected by surface wear and easier installation since no clearance is needed between tips.

- Proprietary (RH Drive).
- 20-30% more wear material vs. J200.
- Easy access for pin installation & removal (40°).

## Tips

### Front Bucket Tips

	J200	J225
Heavy Duty Abrasion		6Y-6223
Heavy Duty Long		8E-4222
Long	1U-3202	6Y-3222
Penetration	1U-3209	6Y-8229
Short		6Y-6221
Utility	7T-8202	
Unitooth Center Tip	8J-6207	
Unitooth Center Tip — Bolt	5J-4771	
Unitooth Corner Tip (lh)	1U-1868	
Unitooth Corner Tip (rh)	1U-1869	
Unitooth Corner Tip — Bolt	6F-0196	

# Backhoe Loader Tips

## Tips (Cont'd.)

### Front Bucket Tips (Cont'd.)

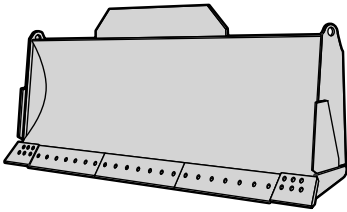
	J200	J225
Standard Pin	8E-6208	6Y-3228
Standard Retainer	8E-6209	8E-6259
Heavy Duty Pin		132-4762
Heavy Duty Retainer		149-5733

### Rear Bucket Tips

	J200	J225	DRS200	DRS230
Chisel			195-7202	208-5232
Heavy Duty Abrasion		6Y-6223		
Heavy Duty Long		8E-4222		
Impact			195-7205	
Long	1U-3202	6Y-3222	195-7206	208-5236
Penetration	1U-3209	6Y-8229		208-5235
Sharp			195-7209	208-5239
Sharp Center	9W-8209	6Y-7229		
Sharp Center	9W-8208	6Y-7228		
Short		6Y-6221		
Twin Sharp	135-8208		195-7207	208-5237
Utility	7T-8202			
Wide	109-9200	186-3010	195-7210	208-5240
Standard Pin	8E-6208	6Y-3228		201-1238
Standard Retainer	8E-6209	8E-6259		201-1239
Heavy Duty Pin		132-4762		
Heavy Duty Retainer		149-5733		
Flex Pin			195-7200	

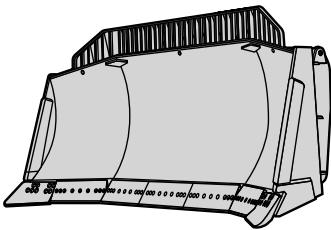


## Bulldozer Cutting Edges



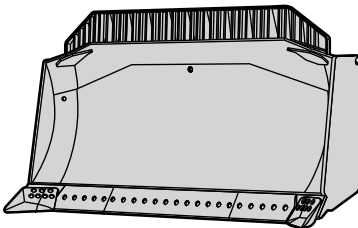
### Straight Blade (S)

- A good general purpose blade for most dozing applications. Available for most machines.



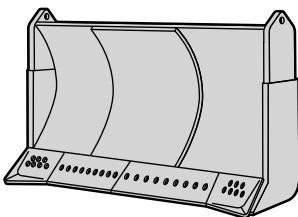
### Universal Blade (U)

- A straight blade with large "wings" to carry large loads more efficiently over long distances. Available only for larger models.



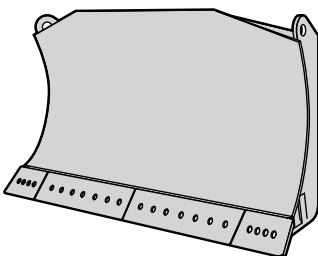
### Semi-U Blade (SU)

- A straight blade with small "wings" to provide better load carrying characteristics for mid-sized and large machines.



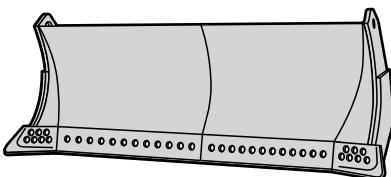
### Cushion Blade (C)

- A relatively narrow blade, primarily for pushing scrapers.



### Power Angle and Tilt Blade (P)

- A very versatile blade for smaller machines.



### Angle Blade (A)

- An economical, light to medium duty blade designed for use on D8 and smaller machines where the ability to side-cast is desired.

# Bulldozers/Compactors

## Bulldozer Blades

Model	Serial Number	Blade Model	Edge Thickness	Edge Type	Edge Part Number <sup>1</sup>	Bolts Per Edge <sup>1</sup>	Nuts Per Edge <sup>1</sup>	Washers Per Edge <sup>1</sup>	
3S	6EH, 15W, 86U	Straight	16 mm (0.62 in)	Center Edge	4T-6230 (2)	3F-5108 (6)	4K-0367 (6)		
			18 mm (0.70 in) Precision	Center Edge	467-8024 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)	
			21 mm (0.83 in) Precision	Center Edge	472-4114 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)	
	31M, 40 V	Straight	16 mm (0.62 in)	Center Edge	4T-6231 (2)	3F-5108 (7)	4K-0367 (7)		
3P	8SU, 1GP, 2JP, 9RH	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	4T-6230 (2)	3F-5108 (6)	4K-0367 (6)		
			18 mm (0.70 in) Precision	Center Edge	467-8024 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)	
			21 mm (0.83 in) Precision	Center Edge	472-4114 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)	
	96X, 5WH, 8JP	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	4T-6232 (2)	3F-5108 (8)	4K-0367 (8)		
			18 mm (0.70 in) Precision	Center Edge	479-7956 (2)	3F-5108 (8)	4K-0367 (8)	5P-8247 (8)	
			21 mm (0.83 in) Precision	Center Edge	472-4122 (2)	3F-5108 (8)	4K-0367 (8)	5P-8247 (8)	
	8HP, 8KP	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	6Y-5841 (2)	3F-5108 (6)	4K-0367 (6)		
			18 mm (0.70 in) Precision	Center Edge	476-8025 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)	
			21 mm (0.83 in) Precision	Center Edge	472-4115 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)	
	8XP	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	141-0413 (2)	3F-5108 (8)	4K-0367 (8)		
	Super LGP	5LH		16 mm (0.62 in)	Center Edge	4T-6230 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)
					Center Edge	4T-6231	3F-5108 (7)	4K-0367 (7)	5P-8247 (7)
Narrow PLGP			16 mm (0.62 in)	Center Edge	157-7338 (2)	3F-5108 (7)	4K-0367 (7)		
4A	12D, 78D, 05F1-2850	Angle	16 mm (0.62 in)	Center Edge	4T-2977	4F-3654 (18)	4K-0367 (18)		
	05F, 97E, 24F, 65F	Angle	16 mm (0.62 in)	Center Edge	4T-2979	4F-3654 (13)	4K-0367 (13)		
	10D, 79D, 06F1 -11299	Angle	16 mm (0.62 in)	Center Edge	4T-2981	4F-3654 (23)	4K-0367 (23)		
	52E, 96E, 26F, 06F11300-UP, 95G, 33R	Angle	16 mm (0.62 in)	Center Edge	4T-2974	4F-3654 (5)	4K-0367 (5)		
				End Edge	4T-2973 (2)	4F-3654 (6)	4K-0367 (6)		
	6AC, 2GC	Angle	16 mm (0.62 in)	Center Edge	4T-8940 (2)	5J-4773 (8)	2J-3506 (8)	5P-8248 (8)	
4S	2A, 25F, 67F	Straight	16 mm (0.62 in)	Center Edge	4T-2980	4F-3654 (15)	4K-0367 (15)		
	2TC, 3CH, 3DC	Straight	16 mm (0.62 in)	Center Edge	4T-3720 (2)	5J-4773 (6)	2J-3506 (6)	5P-8248 (6)	
	4A, 40D	Straight	16 mm (0.62 in)	Center Edge	4T-2977	4F-3654 (18)	4K-0367 (18)		
			19 mm (0.75 in)	Center Edge	4T-3021	4F-3654 (18)	4K-0367 (18)		
	27F, 67E, 94G	Straight	16 mm (0.62 in)	Left End/Right End	4T-2972	4F-3654 (4)	4K-0367 (4)		
				Center Edge	4T-2983	4F-3654 (3)	4K-0367 (3)		
			19 mm (0.75 in)	Left End/Right End	4T-3028	4F-3654 (4)	4K-0367 (4)		
				Center Edge	4T-3027	4F-3654 (3)	4K-0367 (3)		
	93C	Straight	16 mm (0.62 in)	Left End/Right End	8A-8581	4F-3654 (7)	4K-0367 (7)		
				Center Edge	8A-8580	4F-3654 (7)	4K-0367 (7)		
	4S-LGP	4HC	Straight	16 mm (0.62 in)	Center Edge	4T-8940 (2)	5J-4773 (8)	2J-3506 (8)	5P-8248 (8)
84E, 19J, 45J		Straight	19 mm (0.77 in)	Center Edge	4T-3028 (2)	4F-3654 (4)	4K-0367 (4)		
				Center Edge	4T-3029	4F-3654 (7)	4K-0367 (7)		
			16 mm (0.62 in)	Center Edge	4T-2972 (2)	4F-3654 (4)	4K-0367 (4)		
Center Edge		4T-2982		4F-3654 (7)	4K-0367 (7)				
4P	2YH	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	4T-6230 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)	

## Bulldozer Blades (Cont'd.)

Model	Serial Number	Blade Model	Edge Thickness	Edge Type	Edge Part Number <sup>1</sup>	Bolts Per Edge <sup>1</sup>	Nuts Per Edge <sup>1</sup>	Washers Per Edge <sup>1</sup>	
			18 mm (0.70 in) Precision	Center Edge	467-8024 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)	
			21 mm (0.83 in) Precision	Center Edge	472-4114 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)	
	4AC, 9ZB, 5NH, 7EH	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	3G-9306 (2)	5J-4773 (6)	2J-3506 (6)	5P-8248 (6)	
	6CH	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	6Y-5841 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)	
			18 mm (0.70 in) Precision	Center Edge	467-8025 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)	
			21 mm (0.83 in) Precision	Center Edge	472-4115 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)	
	8LP	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	140-2187 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)	
	9SH	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	104-9634 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)	
			18 mm (0.70 in) Precision	Center Edge	467-8026 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)	
			21 mm (0.83 in) Precision	Center Edge	472-4117 (2)	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)	
4P-LGP	4GH, 8ZH, 9YH	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	4T-6232 (2)	3F-5108 (8)	4K-0367 (8)	5P-8247 (8)	
			18 mm (0.70 in)	Center Edge	457-7956 (2)	3F-5108 (8)	4K-0367 (8)	5P-8247 (8)	
			21 mm (0.83 in)	Center Edge	472-4122 (2)	3F-5108 (8)	4K-0367 (8)	5P-8247 (8)	
	5EC, 5RH, 7CH	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	4T-8940 (2)	5J-4773 (8)	2J-3506 (8)	5P-8248 (8)	
	6DH, 9TH, 8MP	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	6Y-5842 (2)	3F-5108 (8)	4K-0367 (8)	5P-8247 (8)	
	8YP	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	141-2238 (2)	3F-5108 (8)	4K-0367 (8)	5P-8247 (8)	
4P-XL	6XH	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	8E-9377 (2)	5J-4773 (7)	2J-3506 (7)	5P-8248 (7)	
			19 mm (0.77 in)	Center Edge	4T-6659 (2)	5J-4773 (7)	2J-3506 (7)	5P-8248 (7)	
5A	91H, 96H, 42K	Angle	16 mm (0.62 in)	Center Edge	4T-2978	3F-5108 (24)	4K-0367 (24)		
			19 mm (0.75 in)	Center Edge	4T-3030 (2)	3F-5108 (12)	4K-0367 (12)		
	93H1-3846 98H, 11J, 13J	Angle	19 mm (0.75 in)	Center Edge	4T-3008	3F-5108 (24)	4K-0367 (24)		
				Left End /Right End	4T-3020	3F-5108 (12)	4K-0367 (12)		
	3AH, 2FH, 2TH	Angle	19 mm (0.75 in)	Center Edge	4T-3013	5J-4773	2J-3506	5P-8248	
				Left End /Right End	1U-2207	5J-4773	2J-3506	5P-8248	
6AC, 2GC	Angle	16 mm (0.62 in)	Center Edge	4T-8940 (2)	5J-4773 (8)	2J-3506 (8)	5P-8248 (8)		
5S	2BH, 4FH	Straight	19 mm (0.75 in)	Center Edge	3G-6062 (2)	5J-4773 (7)	2J-3506 (7)	5P-8248 (7)	
	10J, 12J, 92H, 97H	Straight	19 mm (0.75 in)	Left End /Right End	4T-3026	3F-5108 (4)	4K-0367 (4)	5P-8247 (4)	
				Center Edge	4T-3025	3F-5108 (7)	4K-0367 (7)	5P-8247 (7)	
	19R, 16K	Straight	19 mm (0.75 in)	Center Edge	4T-3024	3F-5108 (28)	4K-0367 (28)	5P-8247 (28)	
	90H	Straight	16 mm (0.62 in)	Left End /Right End	4T-2972	3F-5108 (4)	4K-0367 (4)	5P-8247 (4)	
				Center Edge	4T-2983	3F-5108 (3)	4K-0367 (3)	5P-8247 (3)	
				19 mm (0.75 in)	Left End/Right End	4T-3028	3F-5108 (4)	4K-0367 (4)	5P-8247 (4)
					Center Edge	4T-3027	3F-5108 (3)	4K-0367 (3)	5P-8247 (3)
5S-LGP	1ZH, 3KH	Straight	19 mm (0.75 in)	Center Edge	1U-2211 (2)	5J-4773 (9)	2J-3506 (9)	5P-8248 (9)	
5S Pet.	4AH	Straight	19 mm (0.75 in)	Center Edge	4T-0731 (2)	5J-4773 (5)	2J-3506 (5)	5P-8248 (5)	
5SU	7BH	Semi-U	19 mm (0.75 in)	Left End Edge/ Right End	9U-8057	5 J-4773 (4)	2J-3506 (4)	5P-8248 (4)	
				Center Edge	4T-6659	5J-4773 (7)	2J-3506 (7)	5P-8248 (7)	

# Bulldozers/Compactors

## Bulldozer Blades (Cont'd.)

Model	Serial Number	Blade Model	Edge Thickness	Edge Type	Edge Part Number <sup>1</sup>	Bolts Per Edge <sup>1</sup>	Nuts Per Edge <sup>1</sup>	Washers Per Edge <sup>1</sup>
5P	2AH, 2MH, 7AH	Power Angle & Tilt	19 mm (0.75 in)	Center Edge	3G-4282 (2)	5J-4773 (7)	2J-3506 (7)	5P-8248 (7)
	4GP, 6JP	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	8E-9377 (2)	5J-4773 (7)	2J-3506 (7)	5P-8248 (7)
			19 mm (0.75 in)	Center Edge	4T-6659 (2)	5J-4773 (7)	2J-3506 (7)	5P-8248 (7)
	6MH, 9WH	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	3G-9306 (2)	5 J-4771 (6)	2J-3506 (6)	5P-8248 (6)
	8GP	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	140-0983 (2)	5 J-4771 (6)	2J-3506 (6)	5P-8248 (6)
5P-LPG	1YH, 2SH	Power Angle & Tilt	19 mm (0.75 in)	Center Edge	4T-2315 (2)	5 J-4773 (10)	2J-3506 (10)	5P-8248 (10)
	4FP, BHY	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	4T-8940 (2)	5J-4773 (8)	2J-3506 (8)	5P-8248 (8)
	6PH, 9XH, 8NP	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	6Y-5842 (2)	3F-5108 (8)	4K-0367 (8)	5P-8247 (8)
			18 mm (0.70 in) Precision	Center Edge	467-8029 (2)	3F-5108 (8)	4K-0367 (8)	5P-8247 (8)
			21 mm (0.83 in) Precision	Center Edge	472-4121 (2)	3F-5108 (8)	4K-0367 (8)	5P-8247 (8)
8ZP	Power Angle & Tilt	16 mm (0.62 in)	Center Edge	142-4914 (2)	3F-5108 (8)	4K-0367 (8)	5P-8247 (8)	
6A	16C5001-UP, 37D, 81 D, 16E, 03F, 04F, 40H	Angle	19 mm (0.75 in)	Center Edge	4T-3008	3F-5108 (11)	4K-0367 (11)	
				End Edge	4T-3020 (2)	3F-5108 (9)	4K-0367 (9)	
	15C5001-UP, 39D, 82D, 08E, 09E	Angle	16 mm (0.62 in)	Center Edge	4T-2978	3F-5108 (24)	4K-0367 (24)	
				Center Edge	4T-3030 (2)	3F-5108 (12)	4K-0367 (12)	
	54U, 44E, 47G, 58G, 18H	Angle	19 mm (0.75 in)	Center Edge	4T-3009 (2)	4F-7827 (10)	2J-3506 (10)	5P-8248 (10)
	1B H1 -0569, 4D H, 4LH, 3EH	Angle	19 mm (0.75 in)	Center Edge	4T-6262 (3)	5J-4773 (7)	2J-3506 (7)	5P-8248 (7)
				Center Edge	7T-9977 (3)	5J-4773 (7)	2J-3506 (7)	5P-8248 (7)
	1BH0570-UP	Angle	19 mm (0.75 in)	Center Edge	4T-2952 (4)	5J-4773 (5)	2J-3506 (5)	5P-8248 (5)
				Center Edge	4T-2985 (4)	5J-4773 (5)	2J-3506 (5)	5P-8248 (5)
	1XP, 3GP, 1ZP, 1YP, 3PP, 4BP, 8TP	Angle	19 mm (0.75 in)	Center Edge	4T-2952 (4)	5J-4773 (5)	2J-3506 (5)	5P-8248 (5)
				Center Edge	4T-2985 (4)	5J-4773 (5)	2J-3506 (5)	5P-8248 (5)
	6A Custom Wide	6HP, A6B	Angle	19 mm (0.75 in)	Center Edge	109-9093 (4)	5J-4773 (6)	2J-3506 (6)
6S	1DH1-599, 2HH, 3JH, 4BH	Straight	19 mm (0.75 in)	Left End/Right End	4T-3010	5 J-4773 (4)	2J-3506 (4)	5P-8248 (4)
				Center Edge	4T-6659	5J-4773 (7)	2J-3506 (7)	5P-8248 (7)
				Left End/Right End	7T-9978	5 J-4773 (4)	2J-3506 (4)	5P-8248 (4)
				Center Edge	7T-9976 <sup>2</sup>	5J-4773 (7)	2J-3506 (7)	5P-8248 (7)
	1DH600-Up, 1RP, 3EP, CLH, BHM	Straight	25 mm (1.00 in)	Center Edge	4T-2985 (3)	5J-4773 (5)	2J-3506 (5)	5P-8248 (5)
	2G, 3G, 15E, 36D, 38D, 39H, 80D, 85C	Straight	19 mm (0.75 in)	Center Edge	4T-3023	3F-5108 (22)	4K-0367 (22)	5P-8247 (22)
	15C1-5000	Straight	19 mm (0.75 in)	Center Edge	4T-3021	3F-5108 (18)	4K-0367 (18)	5P-8247 (18)
	17H, 46G, 55G, 63S, 95E	Straight	19 mm (0.75 in)	Left End/Right End	4T-3010	4F-7827 (4)	2J-3506 (4)	5P-8248 (4)
				Center Edge	4T-3013	4F-7827 (7)	2J-3506 (7)	5P-8248 (7)
	21H, 41H	Straight	19 mm (0.75 in)	Left End/Right End	4T-3010	4F-7827 (4)	2J-3506 (4)	5P-8248 (4)
				Center Edge	4T-3011	4F-7827 (11)	2J-3506 (11)	5P-8248 (11)
	16C1-5000	Straight	16 mm (0.62 in)	Center Edge	4T-2976	3F-5108 (22)	4K-0367 (22)	
	09A, 01C, 06C	Straight	16 mm (0.62 in)	Center Edge	4T-2977	3F-5108 (18)	4K-0367 (18)	
6S-LPG	1AH, 2LH, 3FH, 1SP, 3HP, BHG	Straight	19 mm (0.75 in)	Center Edge	4T-6659 (3)	5J-4773 (7)	2J-3506 (7)	5P-8248 (7)

## Bulldozer Blades (Cont'd.)

Model	Serial Number	Blade Model	Edge Thickness	Edge Type	Edge Part Number <sup>1</sup>	Bolts Per Edge <sup>1</sup>	Nuts Per Edge <sup>1</sup>	Washers Per Edge <sup>1</sup>
			25 mm (1.00 in)	Center Edge	7T-9976 (3)	5J-4773 (7)	2J-3506 (7)	5P-8248 (7)
6SU	1CH, 2NH, 4PH, 8AH, 8BH	Semi-U	19 mm (0.75 in)	Center Edge	9W-1878 (8)	5J-4773 (8)	2J-3506 (8)	5P-8248 (8)
	1CH, 2NH, 4PH, 1TP, 3FP, 1WP, 3RP	Semi-U	25 mm (1.00 in)	Center Edge	6Y-3840 (2)	5J-4773 (8)	2J-3506 (8)	5P-8248 (8)
	8AH, 8BH	Semi-U	25 mm (1.00 in)	Center Edge	6Y-3840 (2)	5J-4773 (8)	2J-3506 (8)	5P-8248 (8)
	2SP, 6GP, ECA, SGD	Semi-U	19 mm (0.75 in)	Center Edge	4T-6659	5 J-4773 (4)	2J-3506 (4)	5P-8248 (4)
		Semi-U		End	9U-8057 (2)	5J-4773 (7)	2J-3506 (7)	5P-8248 (7)
	1 TP, 3FP, 1 WP, 3R P, 4AP, 8SP, B H M, D6C, D6A, D2S, M6H	Semi-U	19 mm (0.75 in)	Center Edge	9W-1878 (2)	5J-4773 (8)	2J-3506 (8)	5P-8248 (8)
25 mm (1.00 in) Performance	Center Edge		479-8141	5J-4773 (6)	2J-3506 (6)	5P-8248 (6)		
	Intermediate RH		479-8139	5J-4773 (5)	2J-3506 (5)	5P-8248 (5)		
			Intermediate LH	479-8140	5J-4773 (5)	2J-3506 (5)	5P-8248 (5)	
6SU Custom Wide	1WP, 9BP, B8B	Semi-U	19 mm (0.75 in)	Center Edge	106-0956 (2)	5J-4773 (9)	2J-3506 (9)	5P-8248 (9)
			25 mm (1.00 in) Performance	Intermediate RH	479-8139	5J-4773 (5)	2J-3506 (5)	5P-8248 (5)
				Intermediate LH	479-8140	5J-4773 (5)	2J-3506 (5)	5P-8248 (5)
				Center Edge	479-8182	5J-4773 (8)	2J-3506 (8)	5P-8248 (6)
6PXL	B6X, G6M, G6N	Power Angle & Tilt	19 mm (0.75 in)	Center Edge	3G-4282 (2)	5J-4773 (7)	2J-3506 (7)	5P-8248 (7)
6P-LGP	4MP, B6L, G6G	Power Angle & Tilt	19 mm (0.75 in)	Center Edge	4T-2315 (2)	5 J-4773 (10)	2J-3506 (10)	5P-8248 (10)
	4TP, 4WP	Power Angle & Tilt	19 mm (0.75 in)	Center Edge	127-3050 (2)	5 J-4773 (10)	2J-3506 (10)	5P-8248 (10)
	G6M	Power Angle & Tilt	19 mm (0.75 in)	Center Edge	3G-4282 (2)	5J-4773 (7)	2J-3506 (7)	5P-8248 (7)
6P-LGP Foldable	F6W, F6Y	Power Angle & Tilt	19 mm (0.75 in)	Center Edge	177-4550 (2)	5J-4773 (9)	2J-3508 (9)	5P-8248 (9)
7S	2E, 5A, 17C1 -5000, 17E, 34D, 83D, 84C	Straight	19 mm (0.75 in)	Center Edge	4T-2954	5 J-4771 (23)	2J-3506 (23)	
			25 mm (1.00 in)	Center Edge	4T-2864	5 J-4771 (23)	2J-3506 (23)	
	6KB, 8ZB, 4XC, 8NH, J8L, CDC, 8GH	Straight	19 mm (0.75 in)	Center Edge	4T-5318 (3)	6F-0196 (6)	2J-3505 (6)	5P-8248 (6)
			25 mm (1.00 in)	Center Edge	7T-6678 <sup>3</sup>	6F-0196 (6)	2J-3505 (6)	5P-8248 (6)
			35 mm (1.38 in)	Center Edge	107-3363(3)	6F-0196 (6)	2J-3505 (6)	5P-8249 (6)
	23F, 31F, 59F, 14H	Straight	19 mm (0.75 in)	Center Edge	4T-2946	5J-4773 (7)	2J-3506 (7)	
				Left End/Right End	4T-2945 (2)	5J-4773 (5)	2J-3506 (5)	
			25 mm (1.00 in)	Left End/Right End	4T-2991	5J-4773 (5)	2J-3506 (5)	
				Center Edge	4T-2990	5J-4773 (7)	2J-3506 (7)	
	49K, 53J, 60K, 64K, S7G	Straight	19 mm (0.75 in)	Center Edge	4T-2921	5J-4772 (7)	2J-3505 (7)	5P-8249 (7)
				Left End/Right End	4T-2922 (2)	5J-4772 (5)	2J-3505 (5)	5P-8249 (5)
				Center Edge	4T-2993	5J-4772 (7)	2J-3505 (7)	5P-8249 (7)
			25 mm (1.00 in)	Left End/Right End	4T-2992	5J-4772 (5)	2J-3505 (5)	5P-8249 (5)
				Center Edge	9W-9794	5J-4772 (5)	2J-3505 (5)	5P-8249 (5)
	Center Edge	9W-9795 <sup>3</sup>	5J-4772 (7)	2J-3505 (7)	5P-8249 (7)			
7S-LGP	6JB, 3GH, 4FG, 4XH, 5GH	Straight	19 mm (0.75 in)	Center Edge	4T-3901 (3)	6F-0196 (7)	2J-3505 (7)	
			35 mm (1.38 in)	Center Edge	135-9778 <sup>3</sup>	6F-0196 (7)	2J-3505 (7)	
	2RP, 8RH, 5SP, 9KP, J4L, CDN, 8JH	Straight	19 mm (0.75 in)	Center Edge	128-5883(3)	6F-0196 (7)	2J-3505 (7)	

# Bulldozers/Compactors

## Bulldozer Blades (Cont'd.)

Model	Serial Number	Blade Model	Edge Thickness	Edge Type	Edge Part Number <sup>1</sup>	Bolts Per Edge <sup>1</sup>	Nuts Per Edge <sup>1</sup>	Washers Per Edge <sup>1</sup>	
			25 mm (1.00 in)	Center Edge	135-6537 <sup>3</sup>	6F-0196 (9)	2J-3505 (9)		
			35 mm (1.38 in)	Center Edge	145-7846 (3)	6F-0196 (7)	2J-3505 (7)		
			3GH, 4FG, 6JB, 4XH, 56H	Straight	25 mm (1.00 in)	Left End/Right End	7T-6537 <sup>3</sup>	6F-0196 (5)	2J-3505 (5)
7U	5SB, 7AC, 9JB, 8M H, JI L, CD L	Universal	25 mm (1.00 in)	Left End/Right End	7T-6592	6F-0196 (4)	2J-3505 (4)	5P-8249 (4)	
				Center Edge	7T-6591 <sup>3</sup> (2)	6F-0196 (6)	2J-3505 (6)	5P-8249 (6)	
	42G	Universal	19 mm (0.75 in)	Center Edge	4T-2955	5J-4773 (9)	2J-3506 (9)		
				Left End/Right End	4T-2952 (2)	5J-4773(5)	2J-3506 (5)		
				25 mm (1.00 in)	Left End/Right End	4T-2985	5J-4773 (5)	2J-3506 (5)	
					Center Edge	4T-2890	5J-4773 (9)	2J-3506 (9)	
	85D, 61K, 94R	Universal	19 mm (0.75 in)	Center Edge	4T-2917	5J-4772 (9)	2J-3505 (9)	5P-8249 (9)	
				Left End/Right End	4T-2916 (2)	5J-4772 (5)	2J-3505 (5)	5P-8249 (5)	
			25 mm (1.00 in)	Center Edge	4T-3421	5J-4772 (9)	2J-3505 (9)	5P-8249 (9)	
				Left End/Right End	4T-3420 (2)	5J-4772 (5)	2J-3505 (5)	5P-8249 (5)	
				Center Edge	9W-9793 <sup>3</sup>	5J-4772 (9)	2J-3505 (9)	5P-8249 (9)	
				Left End/Right End	9W-9792 <sup>3</sup> (2)	5J-4772 (5)	2J-3505 (5)	5P-8249 (5)	
7SU	2FC, 2JH, 4DB, 1JP, 8LH, CDT, J6L, BHT	Semi-U	25 mm (1.00 in)	Left End/Right End	7T-6936	6F-0196 (4)	2J-3505 (4)		
				Center Edge	7T-6678 <sup>3</sup>	6F-0196 (6)	2J-3505 (6)		
			35 mm (1.38 in)	Left End/Right End	107-3362	6F-0196 (4)	2J-3505 (4)		
	Center Edge	107-3363		6F-0196 (6)	2J-3505 (6)				
	4DB, 2FC, 2JH, 1JP, 8LH, CDT, J6L, BHT, 8EH	Semi-U	19 mm (0.75 in)	Center Edge	4T-5318	6F-0196 (6)	2J-3505 (6)		
				Left End/Right End	1U-1192 (2)	6F-0196 (6)	2J-3505 (6)	5P-8249 (6)	
				25 mm (1.00 in) Performance	Intermediate RH	479-8135	6F-0196 (6)	2J-3505 (6)	5P-8249 (6)
			Intermediate LH		479-8136	6F-0196 (6)	2J-3505 (6)	5P-8249 (6)	
			Center Edge		107-3363	6F-0196 (6)	2J-3505 (6)	5P-8249 (6)	
7A			3CC, 4EB, 4ZC, 3CC, 42C, 22F, 30F, 72F, 13F, 13H, 4EB	Angle	19 mm (0.75 in)	Center Edge	4T-3901 (3)	6F-0196 (7)	2J-3505 (7)
	25 mm (1.00 in)	Center Edge			7T-6589 <sup>3</sup> (3)	6F-0196 (7)	2J-3505 (7)	5P-8249 (7)	
	3CC, 4EB, 4ZC	Angle	35 mm (1.38 in)	Center Edge	135-9778 <sup>3</sup>	6F-0196 (7)	2J-3505 (7)	5P-8248 (8)	
	6A, 17C5001-Up, 35D, 84D, 6E, 18E	Angle	19 mm (0.75 in)	Center Edge	4T-2949 (2)	5J-4771 (15)	2J-3506 (15)	5P-8248 (15)	
			25 mm (1.00 in)	Center Edge	4T-2863 (2)	5 J-4771 (15)	2J-3506 (15)	5P-8248 (15)	
	13F, 13H, 22F, 30F, 72F	Angle	19 mm (0.75 in)	Center Edge	4T-2948 (3)	5 J-4771 (7)	2J-3506 (7)	5P-8248 (7)	
				25 mm (1.00 in)	Center Edge	4T-2989 (3)	5 J-4771 (7)	2J-3506 (7)	5P-8248 (7)
			25 mm (1.00 in)	Center Edge	9W-9796 <sup>3</sup> (3)	5 J-4771 (7)	2J-3506 (7)	5P-8248 (7)	
				Center Edge	112-2473	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)	
	8U	1JH, 2WP, 6AH, 9CH, 9WP, CXB, A5G, DZB	Universal	28 mm (1.12 in)	Center Edge	9W-5232 (2)	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)
Left End/Right End					4T-6378 (2)	4J-9058 (6)	2J-3507 (6)	5P-8250 (6)	
35 mm (1.38 in)				Left End/Right End	7T-9127	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)	
				Center Edge	9W-6092 (2)	4J-9058 (6)	2J-3507 (6)	5P-8250 (6)	
45 mm (1.77 in)				Left End/Right End	112-2473	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)	
				Center Edge	112-2475 <sup>2</sup> (2)	4J-9058 (6)	2J-3507 (6)	5P-8250 (6)	

## Bulldozer Blades (Cont'd.)

Model	Serial Number	Blade Model	Edge Thickness	Edge Type	Edge Part Number <sup>1</sup>	Bolts Per Edge <sup>1</sup>	Nuts Per Edge <sup>1</sup>	Washers Per Edge <sup>1</sup>		
	6Y1-1395	Universal	25 mm (1.00 in)	Center Edge	4T-3422 (2)	4J-9208 (7)	2J-3507 (7)	5P-8250 (7)		
				Left End/Right End	4T-3417 (2)	4J-9208 (5)	2J-3507 (5)	5P-8250 (5)		
			35 mm (1.38 in)	Left End/Right End	1U-4929	4J-9208 (5)	2J-3507 (5)	5P-8250 (5)		
				Center Edge	1U-4931 (2)	4J-9208 (7)	2J-3507 (7)	5P-8250 (7)		
			35 mm (1.38 in)	Left End/Right End	6Y-6359 <sup>3</sup>	4J-9208 (5)	2J-3507 (5)	5P-8250 (5)		
				Center Edge	6Y-6360 <sup>3</sup> (2)	4J-9208 (7)	2J-3507 (7)	5P-8250 (7)		
			40 mm (1.57 in)	Left End Edge/Right End	7T-4346 <sup>3</sup> /45	4J-9208 (5)	2J-3507 (5)	5P-8250 (5)		
				Center Edge	7T-4347 <sup>3</sup> (2)	4J-9208 (7)	2J-3507 (7)	5P-8250 (7)		
			45 mm (1.77 in)	Left End/Right End	107-3480	4J-9208 (5)	2J-3507 (5)	5P-8250 (5)		
				Center Edge	107-3483 (2)	4J-9208 (7)	2J-3507 (7)	5P-8250 (7)		
			6Y1396-Up, 42Z, 82M	Universal	28 mm (1.12 in)	Center Edge	4T-9590	4J-9058 (14)	2J-3507 (14)	
						Left End/Right End	4T-9587 (2)	4J-9058 (5)	2J-3507 (5)	
					35 mm (1.38 in)	Left End/Right End	9W-4398	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)
						Center Edge	9W-4397	4J-9058 (14)	2J-3507 (14)	5P-8250 (14)
45 mm (1.77 in)	Left End/Right End	9W-3927			4J-9058 (5)	2J-3507 (5)	5P-8250 (5)			
	Center Edge	9W-3926 <sup>3</sup>			4J-9058 (14)	2J-3507 (14)	5P-8250 (14)			
11C, 74D, 88D, 24E	Universal	25 mm (1.00 in)	Center Edge	4T-3419	1J-6762 (12)	2J-3506 (12)				
			Left End/Right End	4T-2861 (2)	1J-6762 (9)	2J-3506 (9)				
20F, 45K, 48K	Universal	25 mm (1.00 in)	Center Edge	4T-6513	5 J-2409 (10)	2J-3505 (10)				
			Left End/Right End	4T-6512 (2)	5J-2409 (6)	2J-3505 (6)				
		35 mm (1.38 in)	Left End/Right End	6Y-6762	5J-2409 (6)	2J-3505 (6)				
			Center Edge	6Y-6765	5 J-2409 (10)	2J-3505 (10)				
		40 mm (1.57 in)	Center Edge	7T-4355 <sup>2</sup>	4J-9058 (10)	2J-3507 (10)				
		45 mm (1.77 in)	Left End/Right End	107-3475	5J-2409 (6)	2J-3505 (6)				
Center Edge	107-3478		5 J-2409 (10)	2J-3505 (10)						
29J, 30E, 73E	Universal	45 mm (1.77 in)	Left End/Right End	107-3474	5J-2409 (6)	2J-3505 (6)				
29J, 30E, 73E	Universal	45 mm (1.77 in)	Center Edge	107-3478	5 J-2409 (10)	2J-3505 (10)				
30V, 34W, 65X, 69V	Universal	25 mm (1.00 in)	Center Edge	4T-2986	4J-9058 (5)	2J-3507 (5)				
			Left End/Right End	4T-2987 (2)	4J-9058 (6)	2J-3507 (6)				
		35 mm (1.38 in)	Left End/Right End	9W-8656	4J-9058 (5)	2J-3507 (5)				
			Center Edge	9W-8655 (2)	4J-9058 (6)	2J-3507 (6)				
			Center Edge	7T-4352 <sup>3</sup> (2)	4J-9208 (6)	2J-3507 (6)				
		45 mm (1.77 in)	Left End/Right End	107-3481	4J-9058 (6)	2J-3507 (6)				
Center Edge	107-3473 (2)		4J-9058 (5)	2J-3507 (5)						
8SU	1KH, 2PP, 2TP, 3MP, 3WH, 1HP, 6LH, 9BH, 9PH, 2NP 05A, 9TP, BHW, B8S, DZA, DZX	Semi-U	28 mm (1.12 in)	Center Edge	4T-6381	4J-9058 (9)	2J-3507 (9)	5P-8250 (9)		
				Left End/Right End	6Y-5540 (2)	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)		
			35 mm (1.38 in)	Center Edge	7T-9126	4J-9058 (9)	2J-3507 (9)	5P-8250 (9)		

# Bulldozers/Compactors

## Bulldozer Blades (Cont'd.)

Model	Serial Number	Blade Model	Edge Thickness	Edge Type	Edge Part Number <sup>1</sup>	Bolts Per Edge <sup>1</sup>	Nuts Per Edge <sup>1</sup>	Washers Per Edge <sup>1</sup>			
			45 mm (1.77 in)	Left End/Right End	7T-9125 (2)	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)			
				Center Edge	112-2472	4J-9058 (9)	2J-3507 (9)	5P-8250 (9)			
				Left End/Right End	112-2471 (2)	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)			
			35 mm (1.38 in) Performance	Intermediate RH	479-8131	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)			
				Intermediate LH	479-8132	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)			
				Center Edge	7T-9126	4J-9058 (9)	2J-3507 (9)	5P-8250 (9)			
			3E, 8A, 12C, 18C, 32D, 44C1-1192, 86D	Semi-U		19 mm (0.75 in)	Center Edge	4T-2944 (2)	1J-6762 (13)	2J-3506 (13)	5P-8248 (13)
						25 mm (1.00 in)	Center Edge	4T-2860 (2)	1J-6762 (13)	2J-3506 (13)	5P-8248 (13)
			4Y1-1939	Semi-U	28 mm (1.12 in)	Left End/Right End	4T-3417	4J-9208 (5)	2J-3507 (5)	5P-8250 (5)	
	Center Edge	4T-3423 (2)				4J-9208 (6)	2J-3507 (6)	5P-8250 (6)			
	35 mm (1.38 in)	Left End/Right End			1U-4929	4J-9208 (5)	2J-3507 (5)	5P-8250 (5)			
		Center Edge			1U-4930 (2)	4J-9208 (6)	2J-3507 (6)	5P-8250 (6)			
		Left End/Right End			6Y-6359 <sup>2</sup>	4J-9208 (5)	2J-3507 (5)	5P-8250 (5)			
		Center Edge			6Y-6358 <sup>2</sup> (2)	4J-9208 (6)	2J-3507 (6)	5P-8250 (6)			
	40 mm (1.57 in)	Left End/Right End			7T-4346 <sup>2</sup> /45	4J-9208 (5)	2J-3507 (5)	5P-8250 (5)			
		Center Edge			7T-5235 <sup>2</sup>	4J-9208 (6)	2J-3507 (6)	5P-8250 (6)			
	45 mm (1.77 in)	Left End/Right End			107-3482	4J-9208 (5)	2J-3507 (5)	5P-8250 (5)			
		Center Edge			107-3480 (2)	4J-9208 (6)	2J-3507 (6)	5P-8250 (6)			
	4Y1940-Up	Semi-U			28 mm (1.12 in)	Center Edge	4T-9586	4J-9058 (11)	2J-3507 (11)	5P-8250 (11)	
						Left End/Right End	6Y-5540 (2)	4J-9058(5)	2J-3507 (5)	5P-8250 (5)	
			35 mm (1.38 in)	Left End/Right End	9W-4398	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)			
				Center Edge	9W-4396	4J-9058 (11)	2J-3507 (11)	5P-8250 (11)			
			45 mm (1.77 in)	Left End/Right End	9W-3927	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)			
				Center Edge	9W-3925	4J-9058 (11)	2J-3507 (11)	5P-8250 (11)			
	14J, 44K, 47K, 69E, 80V, 95S	Semi-U	25 mm (1.00 in)	Center Edge	4T-3418 (2)	5 J-2409 (10)	2J-3505 (10)	5P-8249 (10)			
			35 mm (1.38 in)	Center Edge	6Y-6763 (2)	5 J-2409 (10)	2J-3505 (10)	5P-8249 (10)			
			40 mm (1.57 in)	Center Edge	6Y-5777 <sup>2</sup> (2)	5 J-2409 (10)	2J-3505 (10)	5P-8249 (10)			
45 mm (1.77 in)			Center Edge	107-3476 (2)	5 J-2409 (10)	2J-3505 (10)	5P-8249 (10)				
29E, 78C, 94E	Semi-U	25 mm (1.00 in)	Center Edge	4T-6531 (2)	5 J-2409 (10)	2J-3505 (10)	5P-8249 (10)				
		35 mm (1.38 in)	Center Edge	6Y-6764 (2)	5 J-2409 (14)	2J-3505 (14)	5P-8249 (14)				
29E, 78C, 94E	Semi-U	40 mm (1.57 in)	Center Edge	6Y-5776 <sup>3</sup> (2)	5J-2409 (14)	2J-3505 (14)	5P-8249 (14)				
		45 mm (1.77 in)	Center Edge	107-3477 (2)	5J-2409 (14)	2J-3505 (14)	5P-8249 (14)				
44C1193-Up, 73D	Semi-U		25 mm (1.00 in)	Center Edge	4T-2862 (2)	1J-6762 (14)	2J-3506 (14)	5P-8248 (14)			
8SU LGP	KMB, LAA, DZC	Semi-U	28 mm (1.12 in)	Center Edge	4Z-9058	4J-9058 (13)	2J-3507 (13)	5P-8250 (13)			
				Left End/Right End	6Y-5540 (2)	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)			
8A	1HH, 2XP, 6NH, 9AH, 4ZP	Angle	28 mm (1.12 in)	Center Edge	9W-5432 <sup>3</sup>	4F-4042 (9)	2J-3505 (9)	5P-8250 (9)			
			35 mm (1.38 in)	Center Edge	9W-9098	4F-4042 (7)	2J-3505 (7)	5P-8250 (7)			
			45 mm (1.77 in)	Center Edge	112-2474 (3)	4F-4042 (8)	2J-3507 (8)	5P-8250 (8)			
	5Y, 27B, 41Z	Angle		25 mm (1.00 in)	Left End/Right End	4T-2987	4J-9208 (6)	2J-3507 (6)	3K-5234 (6)		



## Bulldozer Blades (Cont'd.)

Model	Serial Number	Blade Model	Edge Thickness	Edge Type	Edge Part Number <sup>1</sup>	Bolts Per Edge <sup>1</sup>	Nuts Per Edge <sup>1</sup>	Washers Per Edge <sup>1</sup>		
			35 mm (1.38 in)	Center Edge	4T-2988 (2)	4J-9208 (7)	2J-3507 (7)	3K-5234 (7)		
				Left End Edge/Right End	9W-8657	4J-9208 (6)	2J-3507 (6)	3K-5234 (6)		
				Center Edge	9W-8655 <sup>3</sup> (2)	4J-9208 (7)	2J-3507 (7)	3K-5234 (7)		
				Left End/Right End	1U-4932	4J-9208 (6)	2J-3507 (6)	3K-5234 (6)		
			40 mm (1.57 in)	Center Edge	1U-4933 (2)	4J-9208 (7)	2J-3507 (7)	3K-5234 (7)		
				Left End/Right End	7T-4352	4J-9208 (6)	2J-3507 (6)	3K-5234 (6)		
				Center Edge	7T-4353 <sup>2</sup> (2)	4J-9208 (7)	2J-3507 (7)	3K-5234 (7)		
				Left End/Right End	107-3481	4J-9208 (6)	2J-3507 (6)	3K-5234 (6)		
			45 mm (1.77 in)	Center Edge	107-3479 (2)	4J-9208 (7)	2J-3507 (7)	3K-5234 (7)		
				Left End/Right End	7T-4352	4J-9208 (6)	2J-3507 (6)	3K-5234 (6)		
				Center Edge	7T-4353 <sup>2</sup> (2)	4J-9208 (7)	2J-3507 (7)	3K-5234 (7)		
				Left End/Right End	107-3481	4J-9208 (6)	2J-3507 (6)	3K-5234 (6)		
	07A, 18C, 33D, 99D, 87D, 07E, 22E, 72D	Angle	19 mm (0.75 in)	Center Edge	4T-2943 (2)	1J-6762 (16)	2J-3506 (16)			
				Center Edge	4T-2888 (2)	1J-6762 (16)	2J-3506 (16)			
				Center Edge	9W-8657 (2)	1J-6762 (16)	2J-3506 (16)			
	28E1-11125	Angle	25 mm (1.00 in)	Center Edge	4T-6532 (4)	5J-2409 (6)	2J-3505 (6)			
				Center Edge	6Y-6761 (4)	5J-2409 (6)	2J-3505 (6)			
				Center Edge	107-3474 <sup>2</sup> (4)	5J-2409 (6)	2J-3505 (6)			
				Left End/Right End	7T-4348 <sup>2</sup> (4)	5J-2409 (6)	2J-3505 (6)			
	28E11126-UP, 93E, 14F, 77C	Angle	25 mm (1.00 in)	Center Edge	4T-2994 (3)	4J-9058 (8)	2J-3507 (8)			
				Center Edge	9W-8658 (3)	4J-9058 (8)	2J-3507 (8)			
				Center Edge	107-3484 <sup>2</sup> (3)	4J-9058 (8)	2J-3507 (8)			
				Left End/Right End	7T-4351 <sup>2</sup> (3)	4J-9058 (8)	2J-3507 (8)			
	BHR, 9ZP, DZD, D1E, D1F	Angle	28 mm (1.12 in)	Center Edge	135-9373 (3)	4F-4042 (8)	2J-3507 (8)	5P-8250 (8)		
Center Edge				136-9628 (3)	4F-4042 (8)	2J-3507 (8)	5P-8250 (8)			
Center Edge				135-9629 (3)	4F-4042 (8)	2J-3507 (8)	5P-8250 (8)			
8C	71F, 77G	Cushion	25 mm (1.00 in)	Center Edge	4T-2867 (1)	5 J-2409 (13)	2J-3505 (13)			
8R	43 K	Rip Dozer	25 mm (1.00 in)	Center Edge	4T-3418 (2)	5 J-2409 (10)	2J-3505 (10)			
9U	1LH, 1MP, 2ZH, 7PH, 9MP, CMH, CMN, CMS, CMW, CMZ, T9H	Universal	28 mm (1.12 in)	Center Edge	6Y-5538	4J-9208 (15)	2J-3507 (15)	5P-8250 (15)		
				End	6Y-5540 (2)	4J-9208 (5)	2J-3507 (5)	5P-8250 (5)		
			35 mm (1.38 in)	Left End/Right End	7T-9125	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)		
				Center Edge	7T-5701	4J-9058 (15)	2J-3507 (15)	5P-8250 (15)		
			45 mm (1.77 in)	Left End/Right End	112-2471	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)		
				Center Edge	9W-7044 <sup>2</sup>	4J-9058 (15)	2J-3507 (15)	5P-8250 (15)		
			1LH, 1MP, 2ZH, 7PH, 9MP, CMH, CMNCMS, CMW, CMZ	Universal	45 mm (1.77 in)	Center Edge	9W-7044 <sup>2</sup>	4J-9058 (15)	2J-3507 (15)	5P-8250 (15)
						Center Edge	9W-7044 <sup>2</sup>	4J-9058 (15)	2J-3507 (15)	5P-8250 (15)
	Center Edge	9W-7044 <sup>2</sup>				4J-9058 (15)	2J-3507 (15)	5P-8250 (15)		
	Center Edge	9W-7044 <sup>2</sup>				4J-9058 (15)	2J-3507 (15)	5P-8250 (15)		
	14C, 19K, 78X	Universal	28 mm (1.12 in)	Center Edge	4T-6378 (3)	4J-9058 (6)	2J-3507 (6)	5P-8250 (6)		
				End Edge	4T-6378 (3)	4J-9058 (6)	2J-3507 (6)	5P-8250 (6)		
Intermediate Edge				4T-6379 (2)	4J-9058 (4)	2J-3507 (4)	5P-8250 (4)			
35 mm (1.38 in)			Right/Left End Edge	9W-6092	4J-9058 (6)	2J-3507 (6)	5P-8250 (6)			
			Intermediate Edge	9W-9197	4J-9058 (4)	2J-3507 (4)	5P-8250 (4)			
			Center Edge	9W-6092	4J-9058 (6)	2J-3507 (6)	5P-8250 (6)			
40 mm (1.57 in)			Left End/Right End	7T-4341 <sup>3</sup>	4J-9058 (6)	2J-3507 (6)	5P-8250 (6)			
			Center Edge	9W-6092	4J-9058 (6)	2J-3507 (6)	5P-8250 (6)			

# Bulldozers/Compactors

## Bulldozer Blades (Cont'd.)

Model	Serial Number	Blade Model	Edge Thickness	Edge Type	Edge Part Number <sup>1</sup>	Bolts Per Edge <sup>1</sup>	Nuts Per Edge <sup>1</sup>	Washers Per Edge <sup>1</sup>		
				Left Intermediate	7T-4336	4J-9058 (4)	2J-3507 (4)	5P-8250 (4)		
				Center Edge	7T-4341 <sup>3</sup>	4J-9058 (6)	2J-3507 (6)	5P-8250 (6)		
				Right Intermediate	7T-4337 <sup>3</sup>	4J-9058 (4)	2J-3507 (4)	5P-8250 (4)		
			40 mm (1.57 in)	Right/Left End Edge	7J-2959	4J-9208 (6)	2J-3507 (6)	5P-8250 (6)		
				Intermediate Edge	7J-2979	4J-9208 (4)	2J-3507 (4)	5P-8250 (4)		
				Center Edge	7J-2959	4J-9208 (6)	2J-3507 (6)	5P-8250 (6)		
	19Y1-1474, 78S	Universal	28 mm (1.12 in)	Left End/Right End	4T-6382	4J-9208 (6)	2J-3507 (6)	5P-8250 (6)		
				Center Edge	4T-6381	4J-9208 (9)	2J-3507 (9)	5P-8250 (9)		
			35 mm (1.38 in)	Left End/Right End	9W-4503	4J-9208 (6)	2J-3507 (6)	5P-8250 (6)		
				Center Edge	7T-9126 (2)	4J-9208 (9)	2J-3507 (9)	5P-8250 (9)		
			35 mm (1.38 in)	Left End/Right End	6Y-0315 <sup>3</sup>	1J-4948 (6)	2J-3507 (6)	5P-8250 (6)		
				Center Edge	6Y-0313 <sup>2</sup> (2)	1J-4948 (9)	2J-3507 (9)	5P-8250 (9)		
				Right End Edge	6Y-0314 <sup>3</sup>	1J-4948 (6)	2J-3507 (6)	5P-8250 (6)		
			40 mm (1.57 in)	Left End/Right End	9W-4506	1J-4948 (6)	2J-3507 (6)	5P-8250 (6)		
				Center Edge	9W-4507 (2)	1J-4948 (9)	2J-3507 (9)	5P-8250 (9)		
			45 mm (1.77 in)	Left End Edge/Right End	6Y-0481 <sup>3</sup> /80	1J-4948 (6)	2J-3507 (6)	5P-8250 (6)		
				Center Edge	6Y-0479 <sup>2</sup> (2)	1J-4948 (9)	2J-3507 (9)	5P-8250 (9)		
			19Y1475-Up	Universal	35 mm (1.38 in)	Left End/Right End	7T-9781	6V-8360 (5)	3K-9770 (5)	4K-0684 (5)
	Center Edge	9W-0775 (3)				6V-8360 (5)	3K-9770 (5)	4K-0684 (5)		
	45 mm (1.77 in)	Left End/Right End			9W-3929	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)		
		Center Edge			9W-3931 (3)	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)		
	55C	Universal	28 mm (1.12 in)	Center Edge	4T-6453 (1)	4J-9058(13)	2J-3507 (13)	5P-8250 (13)		
				End Edge	4T-6457 (2)	4J-9058 (6)	2J-3507 (6)	5P-8250 (6)		
	55C	Universal	40 mm (1.57 in)	Left End/Right End	7J-2964	4J-9058 (6)	2J-3507 (6)	5P-8250 (6)		
Center Edge				7J-2963	4J-9058 (13)	2J-3507 (13)	5P-8250 (13)			
9SU	1LP, 1MH, 2LP, 5BH, 7NH, 2ZP, 2B, 9LH, 9RP CLC, CLN, CLY, CMA, T9J	Semi-U	28 mm (1.10 in)	Center Edge	6Y-5539 (1)	4J-9208 (12)	2J-3507 (12)	5P-8250 (12)		
				End	6Y-5540 (2)	4J-9208 (5)	2J-3507 (5)	5P-8250 (5)		
			35 mm (1.38 in)	Left End/Right End	7T-9125	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)		
				Center Edge	7T-5702	4J-9058 (12)	2J-3507 (12)	5P-8250 (12)		
			45 mm (1.77 in)	Left End/Right End	112-2471	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)		
				Center Edge	9W-7043	4J-9058 (12)	2J-3507 (12)	5P-8250 (12)		
	1LP, 1MH, 2LP, 5BH, 7NH, 2ZP, 2B, 9LH, 9RP CLC, CLN, CLY, CMA, T9J	Semi-U	45 mm (1.77 in)	Center Edge	9W-7043	4J-9058 (12)	2J-3507 (12)	5P-8250 (12)		
				5A, 18K, 46K, 61U, 73R	28 mm (1.12 in)	Center Edge	4T-6386 (3)	4J-9208 (7)	2J-3507 (7)	5P-8250 (7)
					35 mm (1.38 in)	Center Edge	9W-4500 (3)	4J-9058 (7)	2J-3507 (7)	5P-8250 (7)
					40 mm (1.57 in)	Center Edge	7T-4342 <sup>3</sup> (3)	4J-9058 (7)	2J-3507 (7)	5P-8250 (7)
	18Y1-1875, 42S, 52Y	Semi-U	28 mm (1.12 in)	Center Edge	7J-2980 (3)	8J-2928 (7)	2J-3507 (7)	5P-8250 (7)		
				Center Edge	4T-6386	4J-9208 (7)	2J-3507 (7)	5P-8250 (7)		

## Bulldozer Blades (Cont'd.)

Model	Serial Number	Blade Model	Edge Thickness	Edge Type	Edge Part Number <sup>1</sup>	Bolts Per Edge <sup>1</sup>	Nuts Per Edge <sup>1</sup>	Washers Per Edge <sup>1</sup>		
			35 mm (1.38 in)	End Edge	4T-6385 (2)	4J-9208 (8)	2J-3507 (8)	5P-8250 (8)		
				Left End/Right End	9W-4502	1J-4948 (8)	2J-3507 (8)	5P-8250 (8)		
				Center Edge	9W-4500	1J-4948 (7)	2J-3507 (7)	5P-8250 (7)		
				Left End Edge	6Y-0311 <sup>3</sup>	4J-9208 (8)	2J-3507 (8)	5P-8250 (8)		
				Center Edge	6Y-0310 <sup>2</sup>	4J-9208 (7)	2J-3507 (7)	5P-8250 (7)		
				Right End Edge	6Y-0312 <sup>3</sup>	4J-9208 (8)	2J-3507 (8)	5P-8250 (8)		
			40 mm (1.57 in)	Left End/Right End	9W-4508	4J-9208 (8)	2J-3507 (8)	5P-8250 (8)		
				Center Edge	7J-2980	4J-9208 (7)	2J-3507 (7)	5P-8250 (7)		
			45 mm (1.77 in)	Left End Edge	6Y-0477 <sup>3</sup>	4J-9208 (8)	2J-3507 (8)	5P-8250 (8)		
				Center Edge	6Y-0476 <sup>2</sup>	4J-9208 (7)	2J-3507 (7)	5P-8250 (7)		
				Right End Edge	6Y-0478 <sup>3</sup>	4J-9208 (8)	2J-3507 (8)	5P-8250 (8)		
			21E1-831, 25E, 06A	Semi-U	28 mm (1.12 in)	Center Edge	4T-6459 (1)	8J-2928 (9)	2J-3507 (9)	5P-8250 (9)
						End Edge	4T-6456 (2)	8J-2928 (6)	2J-3507 (6)	5P-8250 (6)
					40 mm (1.57 in)	Center Edge	7J-2961 (1)	4J-9208 (9)	2J-3507 (9)	5P-8250 (9)
						End Edge	7J-2960 (2)	4J-9208 (6)	2J-3507 (6)	5P-8250 (6)
18Y1876-Up	Semi-U	35 mm (1.38 in)	Left End/Right End	7T-9779	6V-8360 (5)	3K-9770 (5)	4K-0684 (5)			
			Center Edge	7T-9782 (2)	6V-8360 (6)	3K-9770 (6)	4K-0684 (6)			
		45 mm (1.77 in)	Left End/Right End	9W-3930	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)			
			Center Edge	9W-3928 (2)	5P-8823 (6)	3K-9770 (6)	4K-0684 (6)			
21E832-Up, 53C, 89D	Semi-U	28 mm (1.12 in)	Center Edge	4T-6448	4J-9208 (10)	2J-3507 (10)	5P-8250 (10)			
		40 mm (1.57 in)	Center Edge	7J-2962 (2)	4J-9208 (10)	2J-3507 (10)	5P-8250 (10)			
9U SXS	20H	Universal	28 mm (1.12 in)	Center Edge	4T-6378 (4)	4J-9058 (6)	2J-3507 (6)	5P-8250 (6)		
				Center Edge	4T-6377 (3)	4J-9058 (4)	2J-3507 (4)	5P-8250 (4)		
				Center Edge	4T-6379 (2)	4J-9058 (4)	2J-3507 (4)	5P-8250 (4)		
9A	55C, 52C, 90D, 11E, 26E	Angle	28 mm (1.12 in)	Center Edge	4T-6388 (1)	8J-2928 (7)	2J-3507 (7)	5P-8250 (7)		
				End Edge	4T-6387 (2)	8J-2928 (9)	2J-3507 (9)	5P-8250 (9)		
			40 mm (1.57 in)	Center Edge	7J-2966 (1)	8J-2928 (7)	2J-3507 (7)	5P-8250 (7)		
				End Edge	7J-2965 (2)	8J-2928 (9)	2J-3507 (9)	5P-8250 (9)		
9C	70F, 45G, 20Y	Cushion	28 mm (1.12 in)	Center Edge	4T-6450 (1)	8J-2928 (15)	2J-3507 (15)	5P-8250 (15)		
				End Edge	4T-6388 (2)	8J-2928 (7)	2J-3507 (7)	5P-8250 (7)		
9R	39 K	Rip Dozer	28 mm (1.12 in)	Center Edge	4T-6386 (3)	8J-2928 (7)	2J-3507 (7)	5P-8250 (7)		
			40 mm (1.57 in)	Center Edge	7J-2980 (3)	8J-2928 (7)	2J-3507 (7)	5P-8250 (7)		
10U	80W	Universal	35 mm (1.38 in)	Left End/Right End	1U-4457 (2)	5P-8823 (7)	3K-9770 (7)	4K-0684 (7)		
				Center Edge	1U-4458 (3)	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)		
			40 mm (1.57 in)	Left End/Right End	4T-0084 (2)	5P-8823 (7)	3K-9770 (7)	4K-0684 (7)		
				Center Edge	4T-0083 (3)	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)		
			45 mm (1.77 in)	Left End/Right End	6Y-0019 (2)	5P-8823 (7)	3K-9770 (7)	4K-0684 (7)		
				Center Edge	6Y-0018 (3)	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)		
			50 mm (2.00 in)	Left End/Right End	4T-0608 (2)	5P-8823 (7)	3K-9770 (7)	4K-0684 (7)		
				Center Edge	4T-0609 (3)	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)		
			60 mm (2.36 in)	Left End/Right End	6Y-0022 (2)	5P-8823 (7)	3K-9770 (7)	4K-0684 (7)		

# Bulldozers/Compactors

## Bulldozer Blades (Cont'd.)

Model	Serial Number	Blade Model	Edge Thickness	Edge Type	Edge Part Number <sup>1</sup>	Bolts Per Edge <sup>1</sup>	Nuts Per Edge <sup>1</sup>	Washers Per Edge <sup>1</sup>
	1SH, 7WH, 4LP, 6FP, BHF, BHP	Universal	35 mm (1.38 in)	Center Edge	6Y-0023 (3)	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
				End	9W-6615 (3)	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)
			45 mm (1.77 in)	Center Edge	9W-6658 (3)	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)
				End	9W-6657 (2)	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)
			60 mm (2.36 in)	Center Edge	8E-2087 <sup>2</sup> (3)	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)
				End	8E-2086 <sup>2</sup> (2)	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)
			60 mm (2.36 in)	Center Edge (ARM)	223-8149 <sup>2</sup> (3)	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)
				End Edge (ARM)	195-9170 <sup>2</sup> (1)	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)
				End Edge (ARM)	201-1230 <sup>2</sup> (1)	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)
			10SU	79W	Semi-U	35 mm (1.38 in)	Center Edge	1U-4459 (2)
End	1U-4455 (2)	5P-8823 (9)					3K-9770 (9)	4K-0684 (9)
40 mm (1.57 in)	Center Edge	4T-0081 (2)				5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
	End	4T-0082 (2)				5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
45 mm (1.77 in)	Left End/Right End	6Y-0017 (2)				5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
	Center Edge	6Y-0016 (2)				5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
50 mm (2.00 in)	Center Edge	4T-0607 (2)				5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
	End	4T-0604 (2)				5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
60 mm (2.36 in)	Left End/Right End	6Y-0021 (2)				5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
	Center Edge	6Y-0020 (2)				5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
1RH, 7RH, 4KP, 6EP, BHJ, BHA	Semi-U	35 mm (1.38 in)		Center Edge	9W-6609 (2)	5P-8823 (6)	3K-9770 (6)	4K-0684 (6)
				End	9W-6608 (2)	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)
		45 mm (1.77 in)		Center Edge	9W-6656 (2)	5P-8823 (6)	3K-9770 (6)	4K-0684 (6)
				End	9W-6657 (2)	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)
		60 mm (2.36 in)		Center Edge (ARM)	195-9171 (2)	5P-8823 (6)	3K-9770 (6)	4K-0684 (6)
				End	195-9170	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)
				End	201-1230	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)
		60 mm (2.36 in)		Center Edge	8E-2085 <sup>2</sup> (2)	5P-8823 (6)	3K-9770 (6)	4K-0684 (6)
				End Edge	8E-2086 <sup>2</sup> (2)	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)
		75 mm (2.95 in)		Center Edge	135-9580 <sup>2</sup> (2)	5P-8823 (6)	3K-9770 (6)	4K-0684 (6)
1RH, 7RH, 4KP, 6EP, BHJ, BHA	Semi-U	75 mm (2.95 in)	End Edge	135-9579 <sup>2</sup> (2)	5P-8823 (5)	3K-9770 (5)	4K-0684 (5)	
10C	83W	Cushion	35 mm (1.38 in)	Right/Left End Edge	9J-3751	8J-2928 (10)	2J-3507 (10)	5P-8250 (10)
11U	4CB, 5TB, 9MH, 9ZH, 4YP, 8RP	Universal	45 mm (1.77 in)	Right/Left End Edge	9W-2425	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
				Right/Left Center Edge	9W-2424	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
				Center Edge	9W-2426	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
			45 mm (1.77 in)	Center Edge	138-6483 <sup>4</sup> (2)	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
				Center Edge	138-6484	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
				Center Edge	138-6485	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
				Center Edge	138-6486	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
			60 mm (2.36 in)	Right/Left End Edge	9W-4494	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)

## Bulldozer Blades (Cont'd.)

Model	Serial Number	Blade Model	Edge Thickness	Edge Type	Edge Part Number <sup>1</sup>	Bolts Per Edge <sup>1</sup>	Nuts Per Edge <sup>1</sup>	Washers Per Edge <sup>1</sup>	
				Right/Left Center Edge	9W-4493	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)	
				Center Edge	9W-4495	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)	
			60 mm (2.36 in)	Center Edge (ARM)	195-9173 <sup>2</sup> (2)	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)	
				Center Edge (ARM)	195-9174 <sup>2</sup> (1)	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)	
				Center Edge (ARM)	195-9175 <sup>2</sup> (1)	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)	
				Center Edge (ARM)	201-1231 <sup>2</sup> (1)	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)	
				75 mm (3.00 in)	Center Edge	195-7187 <sup>2</sup> (2)	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
					Center Edge	135-9577 <sup>2</sup> (2)	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
			Center Edge		135-9578 <sup>2</sup>	5P-8823 (9)	3K-9770 (9)	4K-0684 (9)	
			11SU	1AP, 4BB, 4KB, 9NH, 4XP, 8PP	Semi-U	45 mm (1.77 in)	Left End/Right End	9W-2425	5P-8823 (9)
Center Edge	9W-2426 (2)	5P-8823 (9)					3K-9770 (9)	4K-0684 (9)	
60 mm (2.36 in)	Left End/Right End	9W-4494				5P-8823 (9)	3K-9770 (9)	4K-0684 (9)	
	Center Edge	9W-4495 (2)				5P-8823 (9)	3K-9770 (9)	4K-0684 (9)	
75 mm (3.00 in)	Center Edge	135-9578 <sup>2</sup> (2)				5P-8823 (9)	3K-9770 (9)	4K-0684 (9)	
	End Edge	135-9577 <sup>2</sup> (2)				5P-8823 (9)	3K-9770 (9)	4K-0684 (9)	
11 Carry-dozer	5JP, BHZ	General Duty	45 mm (1.77 in)	Reversible Edge	238-3171 (5)	5P-8361 (8)	3K-9770 (8)	4K-0684 (8)	
				One-Way Edge	229-7052 (5)	5P-8361 (8)	3K-9770 (8)	4K-0684 (8)	
			60 mm (2.36 in)	Reversible Edge	238-3177 (5)	5P-8361 (8)	3K-9770 (8)	4K-0684 (8)	
				One-Way Edge	267-8654 (5)	5P-8361 (8)	3K-9770 (8)	4K-0684 (8)	
		Extended Wear Life	60 mm (2.36 in)	Reversible Edge	268-8751 (5)	5P-8361 (8)	3K-9770 (8)	4K-0684 (8)	
				One-Way Edge	268-8750 (5)	5P-8361 (8)	3K-9770 (8)	4K-0684 (8)	
			(ARM)	Reversible Edge	268-8751 (5)	5P-8361 (8)	3K-9770 (8)	4K-0684 (8)	
				One-Way Edge	268-8750 (5)	5P-8361 (8)	3K-9770 (8)	4K-0684 (8)	

<sup>1</sup> Number in parenthesis ( ) after the part number indicates the quantity required.

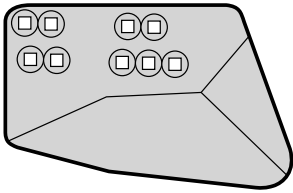
<sup>2</sup> Extended Wear Life edge. Edge is wider and contains offset bolt holes. Use only Extended Wear Life end bits.

<sup>3</sup> Edges are 280 mm (11" wide).

<sup>4</sup> 195-5118 - Same as 136-6153/4 with one sharp edge.

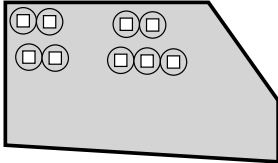
# Bulldozers/Compactors

## Bulldozer End Bits



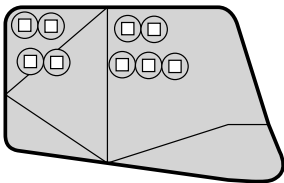
### General Duty End Bits

- Provides a thicker wear area than the cutting edge.
- Made from DH-2 steel in the D3 through D6 sizes.
- Made from DH-3 steel in the D7 through D11 sizes.
- For use in most dozing applications.



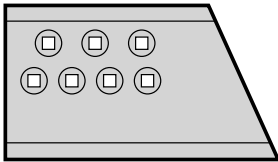
### Utility End Bits

- Provides good corner protection in high impact, high abrasion materials.
- Made from through-hardened DH-2 steel.
- For use in applications where face wear is a problem.



### Extended Wear Life End Bits

- Provides an excellent cutting edge to end bit wear ratio in abrasive conditions.
- Provides a maximum depth of cut relative to the cutting edge.
- Provides a thicker wear area than the cutting edge.
- Made from DH-2 steel in the D4 through D6 sizes.
- Made from DH-3 steel in the D7 through D11 sizes.



### Finish Dozing End Bits

- Provides a depth of cut equal to the cutting edge.
- Protects the blade corner in low impact, low abrasion materials.
- Made from through-hardened DH-2 steel.
- For use in finish and semi-finish dozing.



### Performance End Bits

- Forward profile for penetration in tough soil.
- Excellent blade control in tough production dozing applications.
- Superior finish grading capabilities.
- Match with EWL cutting edges for long wear life.



### Precision End Bits

- Designed to provide the lowest cost per hour with 20% more wear material.
- Built in wear indicator.
- Superior finish grading capabilities.
- Designed to reduce your throw away weight with optimized wear material placement.

## Bulldozer End Bits (Cont'd.)

Model	Serial Number	Blade Model	Thickness	General End Bits		Utility End Bits		Extended Wear Life End Bits		Finish Dozing End Bits		Bolts <sup>(1)</sup>	Nuts <sup>(1)</sup>	Washers <sup>(1)</sup>			
				(lh)	(rh)	(lh)	(rh)	(lh)	(rh)	(lh)	(rh)						
D3	5WH, 6EH, 85U, 96X, 8XP, 8HP, 8KP, 2JP, 9RH, 1GP, 8JP	Power Angle & Tilt	16 mm (0.62 in)							4T-6229	4T-6229	3F-5108(3)	4K-0367 (3)	5P-8247 (3)			
			18 mm (0.70 in) Precision								491-3754		3F-5108 (3)	4K-0367 (3)	5P-8247 (3)		
			21 mm (0.83 in) Precision								491-3755		3F-5108 (3)	4K-0367 (3)	5P-8247 (3)		
			25 mm (1.00 in) Performance								480-8940	480-8939	3F-5108 (3)	4K-0367 (3)	5P-8247 (3)		
			16 mm (0.62 in)								4T-6229	4T-6229	3F-5108(3)	4K-0367 (3)	5P-8247 (3)		
D4	15W, 31M, 40V, 86U, 5LH	Straight	18 mm (0.70 in) Precision							491-3754		3F-5108 (3)	4K-0367 (3)	5P-8247 (3)			
			21 mm (0.83 in) Precision							491-3755		3F-5108 (3)	4K-0367 (3)	5P-8247 (3)			
			19 mm (0.75 in)	9F-7074	9F-7073						4T-3052	4T-3051	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)		
			22 mm (0.86 in)	3G-8322	3G-8321						4T-3052	4T-3051	3F-5108(6)	4K-0367 (6)	5P-8247 (6)		
			22 mm (0.88 in)	140-6788	140-6787					4T-5408	4T-5407						
			25 mm (1.00 in) Performance														
			16 mm (0.62 in)								4T-6229	4T-6229	3F-5108(3)	4K-0367 (3)	5P-8247 (3)		
			18 mm (0.70 in) Precision								491-3754		3F-5108 (3)	4K-0367 (3)	5P-8247 (3)		
			21 mm (0.83 in) Precision								491-3755		3F-5108 (3)	4K-0367 (3)	5P-8247 (3)		
			16 mm (0.62 in)								6Y-5840 (2)	6Y-5839 (2)	3F-5108(3)	4K-0367 (3)	5P-8247 (3)		
D4 LGP	5EC, 5NH, 5RH, 6XH, 9ZB, 7CH, 7EH	Power Angle & Tilt	18 mm (0.70 in) Precision							462-8033	462-8032	3F-5108 (3)	4K-0367 (3)	5P-8247 (3)			
			21 mm (0.83 in) Precision							472-4113	472-4112	3F-5108 (3)	4K-0367 (3)	5P-8247 (3)			
			25 mm (1.00 in) Performance								480-8940	480-8939	3F-5108 (3)	4K-0367 (3)	5P-8247 (3)		
			22 mm (0.88 in)								8E-9378	8E-9379	5J-4773(4)	2J-3506 (4)	5P-8248 (4)		
			25 mm (1.00 in) Performance							4T-5408	4T-5407	462-4829	462-4828	5J-4773 (4)	2J-3506 (4)	5P-8248 (4)	
			19 mm (0.75 in)	9F-7074	9F-7073						4T-3052	4T-3051	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)		
			22 mm (0.88 in)	3G-8322	3G-8321						4T-3052	4T-3051	3F-5108(6)	4K-0367 (6)	5P-8247 (6)		

1 Number in parentheses ( ) after the part number indicates the quantity required.  
2 Angled.

# Bulldozers/Compactors

## Bulldozer End Bits (Cont'd.)

Model	Serial Number	Blade Model	Thickness	General End Bits		Utility End Bits		Extended Wear Life End Bits		Finish Dozing End Bits		Bolts <sup>(3)</sup>	Nuts <sup>(3)</sup>	Washers <sup>(3)</sup>	
				(lh)	(rh)	(lh)	(rh)	(lh)	(rh)	(lh)	(rh)				
D5	2TC, 3CH, 3DC, 4HC	Straight	22 mm (0.88 in)					4T-5408	4T-5407	8E-9378	8E-9379	5J-4773(4)	2J-3506 (4)	5P-8248 (4)	
	2YH, 4AC, 4GH, 6CH, 6DH, 8ZH, 9SH, 9TH, 9YH, 8MP, 8YP, 8LP	Power Angle & Tilt	16 mm (0.62 in) 18 mm (0.70 in) Precision 21 mm (0.83 in) Precision								4T-6229 491-3754 491-3755	4T-6229	3F-5108(3) 3F-5108 (3) 3F-5108 (3)	4K-0367 (3) 4K-0367 (3) 4K-0367 (3)	5P-8247 (3) 5P-8247 (3)
	5NH, 7CH, 5EC, 5RH, 9ZB	Power Angle & Tilt	22 mm (0.88 in) 25 mm (1.00 in) Performance 22 mm (0.88 in) 25 mm (1.00 in) Performance					4T-5408	4T-5407		8E-9378 462-4829	8E-9379 462-4828	5J-4773(4) 3F-5108 (3)	2J-3506 (4) 4K-0367 (3)	5P-8248 (4) 5P-8247 (3)
	2AH, 2MH, 7AH, 6JP, 4GP, HGP, W5C	Power Angle & Tilt	22 mm (0.88 in)	140-6788 (3)				4T-5408	4T-5407		8E-9378	8E-9379	5J-4773(4)	2J-3506(4)	5P-8248 (4)
	2BH, 4FH, 4AH	Straight	22 mm (0.88 in)	140-6788 (3)				4T-5408	4T-5407		8E-9378	8E-9379	5J-4773(4)	2J-3506 (4)	5P-8248 (4)
	6MH, 9WH, 8GP	Power Angle & Tilt	25 mm (1.00 in) Performance								8E-7078 462-4829	8E-7079 462-4828	5J-4771(4) 5J-4773 (4)	2J-3506(4) 2J-3506 (4)	5P-8248 (4) 5P-8248 (4)
	7BH	Semi-U	22 mm (0.88 in) 25 mm (1.00 in) Performance	140-6788 (3)				4T-5408	4T-5407		8E-9378 462-4829	8E-9379 462-4828	5J-4773(4) 5J-4773 (4)	2J-3506 (4) 2J-3506 (4)	5P-8248 (4) 5P-8248 (4)
	10J, 12J, 16K	Straight	19 mm (0.75 in)	9F-7074							4T-3052	4T-3051	3F-5108 (6)	4K-0367 (6)	5P-8247 (6)
	10J, 12J, 16K, 19R, 90H, 92H, 97H	Straight	22 mm (0.88 in)	3G-8322							4T-3052	4T-3051	3F-5108(6)	4K-0367 (6)	5P-8247 (6)
	91H, 96H, 42K, 11J, 13J, 98H	Angle	19 mm (0.75 in)	9F-7076							4T-3050	4T-3049	3F-5108 (6)	4K-0367 (6)	
	93H1-3846		22 mm (0.88 in)	3G-8296							4T-3050	4T-3049	3F-5108 (6)	4K-0367 (6)	
	93H-3847-UP, 6FH		19 mm (0.75 in)	4J-8262							4T-3042	4T-3041	4F-7827 (6)	2J-3506 (6)	
	3AH, 2FH, 2TH	Angle	22 mm (0.88 in)	3G-8298 140-6788 (3)				4T-5408	4T-5407		4T-3042	4T-3041	4F-7827 (6)	2J-3506 (6)	5P-8248 (4)
	1YH, 2SH, 8HY	Power Angle & Tilt	25 mm (1.00) Performance 22 mm (0.88 in)	140-6788 (3)				4T-5408	4T-5407		462-4829	462-4828	5J-4773 (4)	2J-3506 (4)	5P-8248 (4)
	D5 LGP		22 mm (0.88 in)	140-6788 (3)				4T-5408	4T-5407		8E-9378	8E-9379	5J-4773(4)	2J-3506(4)	5P-8248 (4)

3 Number in parentheses ( ) after the part number indicates the quantity required.

3 Hot cupped end bits.

4 Angled.



## Bulldozer End Bits (Cont'd.)

Model	Serial Number	Blade Model	Thickness	General End Bits		Utility End Bits		Extended Wear Life End Bits		Finish Dozing End Bits		Bolts <sup>(5)</sup>	Nuts <sup>(5)</sup>	Washers <sup>(5)</sup>	
				(lh)	(rh)	(lh)	(rh)	(lh)	(rh)	(lh)	(rh)				
D6			25 mm (1.00 in) Performance							462-4829	412-4828	5J-4773 (4)	2J-3506 (4)	5P-8248 (4)	
	1ZH, 3KH	Straight	22 mm (0.88 in)	140-6788 (5)	140-6787 (5)			4T-5408	4T-5407	8E-9378	8E-9379	5J-4773(4)	2J-3506 (4)	5P-8248 (4)	
	8NP, 8ZP, 6PH, 9XH	Power Angle & Tilt	25 mm (1.00 in) Performance								6Y-5840 (6)	6Y-5839 (6)	4K-0367 (3)	4K-0367 (3)	5P-8247 (3)
											485-7966	485-7965	4K-0367 (3)	4K-0367 (3)	5P-8247 (3)
	1BH570-Up, 3PP, 4BP, 1XP, 3GP, 1ZP, 6HP, 1YP	Angle	30 mm (1.18 in) 35 mm (1.38 in)	6Y-4410	6Y-4411	122-8617	122-8618	9W-1876	9W-1875	9W-8875	9W-8874	5J-4773 (6) 5J-4773(6)	2J-3506 (6) 2J-3506 (6)	5P-8248 (6)	
	01C, 02G, 03G, 6C, 9A, 800, 15C1-5000, 15E, 02G, 16C1-5000, 36D, 03G, 38D 39H, 85C	Straight	22 mm (0.88 in)	3G-8322	3G-8321							4F-0391 (3)	4K-0367 (3)	5P-8248 (6)	
	1CH, 2NH, 4PH	Semi-U	30 mm (1.18 in)	6Y-4410	6Y-4411	122-8617	122-8618	9W-1876	9W-1875	9W-8875	9W-8874	5J-4773 (6)	2J-3506 (6)	5P-8248 (6)	
	8BH, 8AH		35 mm (1.38 in)									5J-4773(6)	2J-3506 (6)	5P-8248 (6)	
	2SP, 6GP, ECA, S6D	Semi-U	25 mm (1.00 in) Performance					4T-5408	4T-5407	8E-9378	8E-9379	5J-4773(4)	2J-3506 (4)	5P-8248 (4)	
	1TP, 3FP, 1WP, 3RP, 4AP, 8SP, 9BP, BHM	Semi-U	30 mm (1.18 in) 25 mm (1.00 in) Performance	6Y-4410	6Y-4411	122-8617	122-8618	9W-1876	9W-1875	9W-8875	9W-8874	5J-4773(6)	2J-3506 (6)	5P-8248 (6)	
	1D H1 -599, 1AH 2HH, 3JH, 4BH	Straight						4T-4454	4T-4455	4T-4436	4T-4435	5J-4773 (6)	2J-3506 (6)	5P-8248 (6)	
	1D H600-Up, 1RP, 3EP, CLH, BHN	Straight	30 mm (1.18 in)	6Y-4410	6Y-4411	122-8617	122-8618	9W-1876	9W-1875	9W-8875	9W-8874	5J-4773(6)	2J-3506 (6)	5P-8248 (6)	
3EH, 4DH, 4LH, 1B H1 -569	Angle						4T-4454	4T-4455	4T-4436	4T-4435	5J-4773 (6)	2J-3506 (6)	5P-8248 (6)		
3F, 4F, 8E, 9E, 15C5001-Up	Angle	22 mm (0.88 in) 22 mm (0.88 in)	3G-8296 9F-7076	3G-8295 9F-7075					4T-3050	4T-3049	3F-5108 (6) 3F-5108 (6)	4K-0367 (6) 4K-0367 (6)			

- 5 Number in parentheses ( ) after the part number indicates the quantity required.
- 5 Hot cupped end bits.
- 6 Angled.

# Bulldozers/Compactors

## Bulldozer End Bits (Cont'd.)

Model	Serial Number	Blade Model	Thickness	General End Bits		Utility End Bits		Extended Wear Life End Bits		Finish Dozing End Bits		Bolts <sup>(7)</sup>	Nuts <sup>(7)</sup>	Washers <sup>(7)</sup>	
				(lh)	(rh)	(lh)	(rh)	(lh)	(rh)	(lh)	(rh)				
D6 LGP	16C5001- Up, 16E, 37D, 39D, 40H, 81D, 82D	Straight	22 mm (0.88 in)	5J-1419						4T-3046	4T-3045	4F-7827 (6)	2J-3506 (6)		
			22 mm (0.88 in)	3G-8320									4F-7827 (6)	2J-3506 (6)	
	17H, 21 H, 46G	Angle	22 mm (0.88 in)	3G-8298						4T-3042	4T-3041	4F-7827 (6)	2J-3506 (6)		
			25 mm (1.00 in)	8E-9900					4T-4454	4T-4455	4T-4436	4T-4435	4F-7827 (6)	2J-3506 (6)	
	55G, 63S, 95E	Straight													
	18H, 44E, 47G	Power Angle & Tilt	22 mm (0.88 in)	140-6788 (7)	140-6787 (7)				4T-5408	4T-5407	8E-9378 (8)	8E-9379 (8)	5J-4773(4)	2J-3506 (4)	5P-8248 (4)
			25 mm (1.00 in) Performance								462-4829	462-4828	5J-4773 (4)	2J-3506 (4)	5P-8248 (4)
	54U, 58G	Power Angle & Tilt				177-4552	177-4551								
1AH, 2LH, 3FH, 1SP, 3HP, BHN	Power Angle & Tilt														
4WP, 66L, 66G, 66M	Power Angle & Tilt														
F6W, F6Y	Power Angle & Tilt														
D6, D6XL	3WP, 3XP, B6X, 66M, 66N	Power Angle & Tilt	22 mm (0.88 in)	140-6788 (7)	140-6787 (7)			4T-5408	4T-5407	8E-9378 (8)	8E-9379 (8)	5J-4773(4)	2J-3506 (4)	5P-8248 (4)	
			30 mm (1.18 in)	6Y-4410	6Y-4411					9W-1875	9W-1876	9W-8875	9W-8874	5J-4773(4)	2J-3506(4)
D7	2E, 5A 17C1-5000, 17E, 34D, 83D, 84C	Straight	35 mm (1.38 in)												
	4DB, 1JP, 8LH, 2FC, 2JH, BHT, J6L, CDT, 8EH	Semi- Universal	25 mm (1.00 in) Performance												
			35 mm (1.38 in)	9W-6198	9W-6199										
	4EB, 13H, 22F, 30F, 72F, 13F, 3CC, 4ZC	Angle	22 mm (0.88 in)	3G-8294	3G-8293						4T-6506	4T-6505	5J-2409 (7)	2J-3505 (7)	
			25 mm (1.00 in)	3G-8316	3G-8315						4T-6506	4T-6505	5J-2409(7)	2J-3505 (7)	5P-8249 (7)
	55B, 42G, 61K, 85D, 94R, 8MH, 7AC, 9JB, J1L, CDL	Universal	28 mm (1.12 in)	4J-8844	4J-8843										
			35 mm (1.38 in)	9W-6198	9W-6199										
			45 mm (1.75 in)			105-0574	105-0575								
			22 mm (0.88 in)	3G-8294	3G-8293										
		25 mm (1.00 in)	3G-8316	3G-8315						4T-6506	4T-6505	6F-0196 (7)	2J-3505 (7)		
		35 mm (1.38 in)			105-0574	105-0575									
		45 mm (1.75 in)			105-0576	105-0577									

7 Number in parentheses ( ) after the part number indicates the quantity required.

7 Hot cupped end bits.

8 Angled.

## Bulldozer End Bits (Cont'd.)

Model	Serial Number	Blade Model	Thickness	General End Bits		Utility End Bits		Extended Wear Life End Bits		Finish Dozing End Bits		Bolts <sup>(9)</sup>	Nuts <sup>(9)</sup>	Washers <sup>(9)</sup>	
				(lh)	(rh)	(lh)	(rh)	(lh)	(rh)	(lh)	(rh)				
D7 LGP	6A, 6E 17C5001- Up, 18E, 35D, 84D	Angle	22 mm (0.88 in)	3J-2465								5J-4771(4)	2J-3506 (4)		
			28 mm (1.12 in)	3J-2466									1J-6761(3)	2J-3506(3)	
	6KB, 14H, 82B, 23F, 31F, 49K, 53J, 59F, 60K, 64K, 4XC, 82B, 8NH, CDC, J8L, 576	Straight	22 mm (0.88 in)	3G-8294									6F-0196 (7)	2J-3505 (7)	
			25 mm (1.00 in)	3G-8316									6F-0196 (7)	2J-3505 (7)	
			28 mm (1.12 in)	4J-8844									6F-0196 (7)	2J-3505 (7)	
			35 mm (1.37 in)		105-0574	105-0575							6F-0196 (7)	2J-3505 (7)	
			35 mm (1.38 in)	9W-6198									6F-0196 (7)	2J-3505 (7)	
			45 mm (1.75 in)			105-0576	105-0577						6F-0196 (7)	2J-3505 (7)	
	42G, 61K, 85D, 55B, 8MH, CDL, J1L, 9J8, 7AC, 94R	Universal	45 mm (1.75 in)			105-0576	105-0577						6F-0196 (7)	2J-3505 (7)	5P-8249 (7)
			28 mm (1.12 in)	4J-8844									6F-0196 (7)	2J-3505 (7)	
35 mm (1.38 in)			9W-6198									6F-0196 (7)	2J-3505 (7)		
40 mm (1.57 in)			8E-4194									4F-4042 (7)	2J-3507 (7)	5P-8250 (7)	
D8	1HH, 2XP, 6NH, 9AH, 4ZP, DZD, BHR, 92P	Angle	50 mm (1.97 in)		100-3140	100-3139						6Y-4278	4T-6506		
			60 mm (2.36 in)		136-8756	136-8757							6Y-4277	4F-4042 (7)	5P-8250 (7)
	1JH, 6AH, 2WP, 9CH, 9WP, CXB, A5G, DZB	Universal	40 mm (1.57 in)	8E-4194									6Y-4278	6Y-4277	5P-8250 (7)
			50 mm (1.97 in)		100-3140	100-3139							6Y-4277	4J-9058(7)	5P-8250 (7)
			60 mm (2.36 in)		136-8756	136-8757							4J-9058(7)	2J-3507 (7)	5P-8250 (7)
			35 mm (1.38 in)										4J-9058 (7)	2J-3507 (7)	5P-8250 (7)
			40 mm (1.58 in)	8E-4194									8E-4538	4J-9058(7)	5P-8250 (7)
			50 mm (1.97 in)		100-3140	100-3139							8E-4538	4J-9058(7)	5P-8250 (7)
	3E, 8A, 12C, 18C, 32D, 44C, 73D, 86D 07A, 18C, 33D, 72D, 87D, 99D, 07E, 22E	Semi-U	25 mm (1.00 in)										479-8130	479-8129	5P-8250 (7)
			Performance										6Y-4278	6Y-4277	5P-8250 (7)
40 mm (1.58 in)			8E-4194									6Y-4278	6Y-4277	5P-8250 (7)	
50 mm (1.97 in)				100-3140	100-3139								4J-9058(7)	5P-8250 (7)	
60 mm (2.36 in)				136-8756	136-8757								4J-9058(7)	5P-8250 (7)	
25 mm (1.00 in)													1J-6761(7)	2J-3506 (7)	
25 mm (1.00 in)			3J-2465										1J-6761(7)	2J-3506 (7)	
25 mm (1.00 in)			3J-2466										1J-6761(7)	2J-3506 (7)	

9 Number in parentheses ( ) after the part number indicates the quantity required.

# Bulldozers/Compactors

## Bulldozer End Bits (Cont'd.)

Model	Serial Number	Blade Model	Thickness	General End Bits		Utility End Bits		Extended Wear Life End Bits		Finish Dozing End Bits		Bolts <sup>(9)</sup>	Nuts <sup>(9)</sup>	Washers <sup>(9)</sup>	
				(lh)	(rh)	(lh)	(rh)	(lh)	(rh)	(lh)	(rh)				
	28E1-1125, 99E, 14F, 77C	Angle	28 mm (1.12 in)	4J-8844	4J-8843					4T-6506	4T-6505	5J-2409 (7)	2J-3505 (7)		
			28 mm (1.12 in)	3G-8316	3G-8315								5J-2409(7)	2J-3505 (7)	
			40 mm (1.57 in)	3G-8286	3G-8285								5J-2409 (7)	2J-3505 (7)	
	28E1126-UP	Angle	30 mm (1.18 in)	3G-8318	3G-8317							4J-9058(7)	2J-3507 (7)	5P-8250 (7)	
			40 mm (1.57 in)	3G-8288	3G-8287								4J-9058(7)	2J-3507 (7)	5P-8250 (7)
			30 mm (1.18 in)	3G-8318	3G-8317						4T-8090	4T-8089	4J-9208(7)	2J-3507 (7)	5P-8250 (7)
	4Y1-1939	Semi-U	40 mm (1.58 in)	3G-8288	3G-8287							4J-9208(7)	2J-3507 (7)	5P-8250 (7)	
			28 mm (1.12 in)	4J-8724	4J-8723	100-3136	100-3135	8E-4540	8E-4539				4J-9208(7)	2J-3507 (7)	5P-8250 (7)
			35 mm (1.38 in)	3G-8292	3G-8291			8E-4540	8E-4539				4J-9208(7)	2J-3507 (7)	5P-8250 (7)
	4Y1940-Up	Semi-U	40 mm (1.58 in)	3G-8284	3G-8283							4J-9208(7)	2J-3507 (7)	5P-8250 (7)	
			50 mm (1.97 in)	8E-4196	8E-4197								4J-9208(7)	2J-3507 (7)	5P-8250 (7)
			60 mm (2.36 in)			100-3138	100-3137						4J-9208(7)	2J-3507 (7)	5P-8250 (7)
	5Y, 27B, 41Z	Angle	30 mm (1.18 in)	3G-8318	3G-8317										
			40 mm (1.58 in)	3G-8288	3G-8287										
			28 mm (1.12 in)	9J-1478	9J-1477						4T-6240	4T-6239			
	6Y1-1395, 30V, 34W, 65X, 69V	Universal	40 mm (1.58 in)	3G-8288	3G-8287										
			28 mm (1.12 in)	3G-8288	3G-8287										
			40 mm (1.58 in)	3G-8292	3G-8291	100-3136	100-3135				4T-6240	4T-6239	4J-9058(7)	2J-3507 (7)	5P-8250 (7)
	6Y1396-Up, 82M, 42Z	Universal	35 mm (1.38 in)	3G-8292	3G-8291										
			45 mm (1.75 in)			100-3136	100-3135								
			50 mm (1.97 in)	8E-4196	8E-4197										
	11C, 74D, 88D 24 E	Universal	60 mm (2.36 in)			100-3138	100-3137								
			28 mm (1.12 in)	3J-2466	3J-2465					4T-6667	4T-6668	1J-6762(7)	2J-3506 (7)		
			28 mm (1.12 in)	3G-8300	3G-8299								5J-2409 (7)	2J-3505 (7)	
	14J, 29E, 44K, 47K, 69E, 78C 94 E	Semi-U	40 mm (1.58 in)	3G-8278	3G-8277										
			28 mm (1.12 in)	4J-8844	4J-8843										
			40 mm (1.58 in)	3G-8286	3G-8285										
	29V, 30W, 60V, 68V	Semi-U	28 mm (1.12 in)	3G-8302	3G-8301										
			40 mm (1.58 in)	3G-8280	3G-8279										
			28 mm (1.12 in)	4J-8844	4J-8843						4T-6506	4T-6505	5J-2409 (7)	2J-3505 (7)	
	71F, 77G	Cushioned	28 mm (1.12 in)	3G-8316	3G-8315										
			40 mm (1.57 in)	3G-8286	3G-8285										
			28 mm (1.12 in)	3G-8316	3G-8315						4T-6669	4T-6670	5J-2409 (7)	2J-3505 (7)	
	43 K	Rip Dozer	40 mm (1.57 in)												
			40 mm (1.57 in)												
			45 mm (1.75 in)			100-3136	100-3135				7J-2976	7J-2975	5J-2409(7)	2J-3505 (7)	
D9	1LH, 1MP, 2ZH, 7PH,	Universal	45 mm (1.75 in)												

9 Number in parentheses ( ) after the part number indicates the quantity required.

## Bulldozer End Bits (Cont'd.)

Model	Serial Number	Blade Model	Thickness	General End Bits		Utility End Bits		Extended Wear Life End Bits		Finish Dozing End Bits		Bolts <sup>(9)</sup>	Nuts <sup>(9)</sup>	Washers <sup>(9)</sup>		
				(lh)	(rh)	(lh)	(rh)	(lh)	(rh)	(lh)	(rh)					
D10	CMS, CMI, WCMZ, 9MP, T9H		50 mm (1.97 in)	8E-4196	8E-4197			8E-4540	8E-4539	6Y-4277	6Y-4278	4J-9208(7)	2J-3507 (7)	5P-8250 (7)		
			50 mm (1.97 in)										4J-9208(7)	2J-3507 (7)	5P-8250 (7)	
			60 mm (2.36 in)			100-3138	100-3137							4J-9208(7)	2J-3507 (7)	5P-8250 (7)
	1MH, 5BH, 2BP, 2ZP, 1LP, 2LP, 7NH, 9LH, 9RP, CLC, CLN, CLY, CMA, CMN	Semi-U		45 mm (1.75 in)			100-3136	100-3135					4J-9208(7)	2J-3507 (7)	5P-8250 (7)	
				50 mm (1.97 in)	8E-4196	8E-4197			8E-4540	8E-4539	6Y-4277	6Y-4278	4J-9208(7)	2J-3507 (7)	5P-8250 (7)	
				60 mm (2.36 in)			100-3138	100-3137							4J-9208(7)	2J-3507 (7)
	5A, 18K, 21E, 25E, 53C, 61U, 73R, 89D	Semi-U		35 mm (1.38 in)	3G-8290	3G-8289							8J-2928(7)	2J-3507 (7)	5P-8250 (7)	
				40 mm (1.58 in)	3G-8282	3G-8281								8J-2928 (7)	2J-3507 (7)	5P-8250 (7)
				32 mm (1.25 in)	4J-8724	4J-8723			7T-4094	7T-4095				8J-2928 (7)	2J-3507 (7)	5P-8250 (7)
	14C, 19K, 20H, 55C, 78X, CMH	Universal		35 mm (1.38 in)	3G-8292	3G-8291							8J-2928(7)	2J-3507 (7)	5P-8250 (7)	
				40 mm (1.58 in)	3G-8284	3G-8283								8J-2928 (7)	2J-3507 (7)	5P-8250 (7)
				50 mm (1.97 in)	8E-4196	8E-4197								8J-2928(7)	2J-3507 (7)	5P-8250 (7)
	18Y, 42S, 52Y	Semi-U		40 mm (1.58 in)	1U-1546	1U-1545			8E-4542	8E-4541	3G-7764	3G-7763	5P-8823 (7)	3K-9770 (7)	4K-0684 (7)	
				45 mm (1.75 in)			100-3132	100-3131						5P-8823 (7)	3K-9770 (7)	4K-0684 (7)
				55 mm (2.16 in)	8E-4198	8E-4199								5P-8823 (7)	3K-9770 (7)	4K-0684 (7)
19Y, 78S	Universal		60 mm (2.36 in)			100-3134	100-3133					5P-8823 (7)	3K-9770 (7)	4K-0684 (7)		
			60 mm (2.38 in)	7T-4688	7T-4689								5P-8823 (7)	3K-9770 (7)	4K-0684 (7)	
			40 mm (1.58 in)	1U-1546	1U-1545			8E-4542	8E-4541	3G-7764	3G-7763	5P-8823 (7)	3K-9770 (7)	4K-0684 (7)		
52C, 90D, 11E, 26E, 70F, 45G, 20Y, 39 K	Universal		45 mm (1.75 in)			100-3132	100-3131					5P-8823 (7)	3K-9770 (7)	4K-0684 (7)		
			55 mm (2.16 in)	8E-4198	8E-4199								5P-8823 (7)	3K-9770 (7)	4K-0684 (7)	
			60 mm (2.36 in)	7T-4688	7T-4689	100-3134	100-3133						5P-8823 (7)	3K-9770 (7)	4K-0684 (7)	
52C, 90D, 11E, 26E, 70F, 45G, 20Y, 39 K	Angle		32 mm (1.25 in)	4J-8724	4J-8723							8J-2928 (7)	2J-3507 (7)	5P-8250 (7)		
			35 mm (1.38 in)	3G-8291	3G-8292								8J-2928(7)	2J-3507 (7)	5P-8250 (7)	
			40 mm (1.57 in)	3G-8283	3G-8284								4J-9208(7)	2J-3507 (7)	5P-8250 (7)	
1RH, 1SH, 4LP, 6FP, BHF, BHP, 1RH, 4KP, 6EP, 7RH, BHJ, BHA	Cushioned									4T-6389	4T-6389	4J-9058(5)				
1RH, 1SH, 4LP, 6FP, BHF, BHP, 1RH, 4KP, 6EP, 7RH, BHJ, BHA	R	Universal	45 mm (1.75 in)	8E-4198	8E-4199	100-3132	100-3131	8E-4542	8E-4541	4T-6392	4T-6391	8J-2928 (7)	2J-3507 (7)	5P-8250 (7)		
			60 mm (2.36 in)			100-3134	100-3133							3K-9770 (7)	4K-0684 (7)	
			45 mm (1.75 in)	8E-4198	8E-4199	100-3132	100-3131	8E-4542	8E-4541					3K-9770 (7)	4K-0684 (7)	

9 Number in parentheses ( ) after the part number indicates the quantity required.

# Bulldozers/Compactors

## Bulldozer End Bits (Cont'd.)

Model	Serial Number	Blade Model	Thickness	General End Bits		Utility End Bits		Extended Wear Life End Bits		Finish Dozing End Bits		Bolts <sup>(9)</sup>	Nuts <sup>(9)</sup>	Washers <sup>(9)</sup>		
				(lh)	(rh)	(lh)	(rh)	(lh)	(rh)	(lh)	(rh)					
D11	1RH, 4KP, 6EP, 7RH, BHJ, BHA	Semi-U	120 mm (4.72 in)	107-3516 <sup>(9)</sup>	107-3515 <sup>(9)</sup>							5P-8823 (9)	3K-9770 (9)	4K-0684 (9)		
				113-0338 <sup>(9)</sup>	113-0338 <sup>(9)</sup>									5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
				8E-4544	8E-4543	8E-9786	8E-9785	8E-4546	8E-4545					5P-8361 (9)	3K-9770 (9)	4K-0684 (9)
	79W, 80W	Semi-U	60 mm (2.36 in)			8E-9748	8E-9749						5P-8361 (9)	3K-9770 (9)	4K-0684 (9)	
				8E-4544	8E-4543	8E-9786	8E-9785	8E-4546	8E-4545					5P-8361 (9)	3K-9770 (9)	4K-0684 (9)
						8E-9748	8E-9749								5P-8361 (9)	3K-9770 (9)
	83W	Cushioned	75 mm (2.95 in)									4T-6538	2J-3507 (6)	2J-3507 (6)	5P-8250 (6)	
				8E-4544	8E-4543	8E-9786	8E-9785	8E-4546	8E-4545					5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
														5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
	4BB, 4KB, 9NH	Semi-U	60 mm (2.36 in)			8E-9748	8E-9749							3K-9770 (9)	4K-0684 (9)	
				8E-4544	8E-4543	8E-9786	8E-9785	8E-4546	8E-4545					5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
														5P-8823 (9)	3K-9770 (9)	4K-0684 (9)
19P, 8PP, 1AP	Universal	75 mm (2.95 in)			8E-9748	8E-9749							3K-9770 (9)	4K-0684 (9)		
			8E-4544	8E-4543	8E-9786	8E-9785	8E-4546	8E-4545					5P-8823 (9)	3K-9770 (9)	4K-0684 (9)	
													5P-8823 (9)	3K-9770 (9)	4K-0684 (9)	
4CB, 5TB, 9MH	Universal	60 mm (2.36 in)			8E-9748	8E-9749							3K-9770 (9)	4K-0684 (9)		
			8E-4544	8E-4543	8E-9786	8E-9785	8E-4546	8E-4545					5P-8823 (9)	3K-9770 (9)	4K-0684 (9)	
													5P-8823 (9)	3K-9770 (9)	4K-0684 (9)	
9ZH, 4YP, 8DP, 8RP		75 mm (2.95 in)			8E-9748	8E-9749							3K-9770 (9)	4K-0684 (9)		
			109-9047 <sup>(9)</sup>	109-9047 <sup>(9)</sup>									5P-8823 (9)	3K-9770 (9)	4K-0684 (9)	
			120 mm (4.72 in)													

<sup>9</sup> Number in parentheses ( ) after the part number indicates the quantity required.  
<sup>9</sup> Heavy Duty Mining end bit.

## Bulldozer End Bits (Cont'd.)

### Part I

Model	Serial Number	Edge Thickness	Penetration End Bits		Standard End Bits		Extended Wear Life (EWL) End Bits		Short End Bits	
			(lh)	(rh)	(lh)	(rh)	(lh)	(rh)	(lh)	(rh)
11 Carrydozer	5JP, BHZ	60 mm (2.36 in)	273-7224	273-7223	273-7226	273-7225			273-7229	273-7228
		75 mm (3 in)					273-7231	273-7230		

### Part II

Model	EWL - Short End Bits		ARM - EWL End Bits		ARM - Penetration End Bits		Bolts Per Edge <sup>(10)</sup>	Nuts Per Edge <sup>(10)</sup>	Washers Per Edge <sup>(10)</sup>
	(lh)	(rh)	(lh)	(rh)	(lh)	(rh)			
11 Carrydozer							5P-8361 (9)	3K-9770 (9)	4K-0684 (9)
	273-7233	273-7232	273-7235	273-7234	223-8128	223-8127	5P-8361 (9)	3K-9770 (9)	4K-0684 (9)

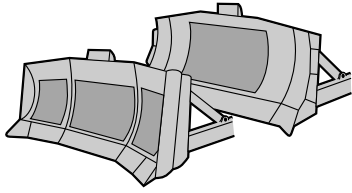
<sup>10</sup> Number in parentheses ( ) after the part number indicates the quantity required.

# Bulldozer Wear Bars and Plates

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## Bulldozer Wear Bars

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- Offers additional wear resistance and strength to the dozer blade in high wear/high impact applications.
- Made of DH-2 through-hardened alloy steel.
- For use over the blade liner or wear plate on a dozer blade.

Item	Length	Part Number
Wear Bar	2.438 m (8 ft)	107-3386
Wear Bar	2.743 m (9 ft)	107-3387
Wear Bar	3.353 m (11 ft)	107-3388

Item	Length	Part Number
Wear Bar	3.658 m (12 ft)	107-3389
Wear Bar	3.962 m (13 ft)	107-3390
Wear Bar	4.572 m (15 ft)	107-3391

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## Bulldozer Plates

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### Reinforcing Wear Plates:

- Provides extended blade life in highly abrasive or extreme impact conditions.
- Provides a repair or resurface option for worn or damaged moldboards.
- Are formed to fit the curve of the blade so that they are easily installed.

### Pusher Plates:

- Are made of heat treated steel.
- Are formed to fit the curve of the blade so that they are easily installed.
- For use on bulldozer blades that are used to push loading scrapers.

## Bulldozer Wear Plates



# Bulldozer Wear Bars and Plates

## Bulldozer Wear Plates (Cont'd.)

Model	Serial Number	Blade Model	Item	Plate Height	Plate Width	Plate Thickness	Reinforcing Wear Plate <sup>(1)</sup>
D3	85U8376-Up	Power Angle & Tilt	Wear Plates			8 mm (0.31 in)	3J-3117
			Wear Plates			8 mm (0.31 in)	3J-3116 (2)
			Wear Plates			8 mm (0.31 in)	1J-3108(5)
D3 LGP	85U1-8375	Power Angle & Tilt	Wear Plates			8 mm (0.31 in)	3J-3114 (3)
			Wear Plates			8 mm (0.31 in)	3J-3114 (2)
D4	2A,29F67F	Straight	Wear Plates			8 mm (0.31 in)	3J-3116 (2)
			Wear Plates			8 mm (0.31 in)	3J-3116 (4)
D5	10D,52E,79D,96E,06F,26F,95G,33R 67 E 9WH 2AH,4GP,6JP 2BH 10J,12J,19R,92H,97H 11J,13J,93H,98H 42K,91H,96H 90H 1CH,2NH,3TH,4JH,4PH 1RP,3EP 1DH,2HH,30H,50H 3FP,1TP,8SP,4AP,1CH,2NH,1WP,3- RP,9BP 2SPECA,S6D,JCE,S6S	Angle	Wear Plates	940 mm (37.0 in)	702 mm (27.6 in)	8 mm (0.31 in)	3J-3115
			Wear Plates	1302 mm (51.3 in)	546 mm (21.5 in)	8 mm (0.31 in)	3J-3117
			Wear Plates				3J-3740(4)
			Wear Plates			10 mm (0.38 in)	3J-3740(5)
			Wear Plates			10 mm (0.38 in)	2J-8526 (4)
			Wear Plates			10 mm (0.38 in)	1J-3108 (6)
			Wear Plates			10 mm (0.38 in)	1J-3106(6)
			Wear Plates			10 mm (0.38 in)	1J-3106 (5)
			Wear Plates			10 mm (0.38 in)	1J-3108(5)
			Wear Plates			10 mm (0.38 in)	2J-8526 (4)
			Wear Plates			8 mm (0.31 in)	3J-3142(3)
			Wear Plates			10 mm (0.38 in)	2J-8526 (4)
D6	3WP,3XP,B6X,G6N 54U,44E,18H,476 01C,06C,15C,37D,16C,5001-Up,39- D,81D,82D,08E,09E,16E,03F,04- F,40H 09A,16C- 5000,85C,80D,15E,02G,03G,39H 95E 1AH,2LH,3FH,1SP,3HP,55H 4MP,B6L 21H 6A,17C,5001-Up,35- D,84D,6E,18E,13F,22F,30F,72F,13- H,4EB,3CC	Power Angle & Tilt	Right End Wear Plate			14 mm (0.55 in)	9W-2757
			Center Wear Plate			14 mm (0.55 in)	9J-1659(3)
			Left End Wear Plate			14 mm (0.55 in)	9W-2760
			Wear Plates			8 mm (0.31 in)	3J-3142(3)
			Wear Plates			610 mm (24.0 in)	3J-3740(6)
			Wear Plates			10 mm (0.38 in)	1J-3106(5)
			Wear Plates				1J-3108(5)
			Wear Plates			10 mm (0.38 in)	2J-8526(5)
			Wear Plates			10 mm (0.38 in)	3J-3380(4)
			Wear Plates			8 mm (0.31 in)	3J-3142(4)
			Wear Plates			10 mm (0.38 in)	1J-3108
			Wear Plates			8 mm (0.31 in)	3J-3141 (3)
D6 LGP	85U1-8375	Power Angle & Tilt	Wear Plates			8 mm (0.31 in)	3J-3114 (3)
			Wear Plates			8 mm (0.31 in)	3J-3114 (2)
D7	85U1-8375	Power Angle & Tilt	Wear Plates			8 mm (0.31 in)	3J-3114 (3)
			Wear Plates			8 mm (0.31 in)	3J-3114 (2)

1 Number in parentheses ( ) after the part number indicates the quantity required.

# Bulldozer Wear Bars and Plates

## Bulldozer Wear Plates (Cont'd.)

Model	Serial Number	Blade Model	Item	Plate Height	Plate Width	Plate Thickness	Reinforcing Wear Plate <sup>(2)</sup>
D7 LGP	23F,31F,59F,14H,58J,49K,60K,64K,05A,1701-5000,84C,340,83D,02E,6KB,8NH,8-ZB,4XC	Straight	Wear Plates	1077 mm (42.4 in)	1076 mm (42.4 in)	8 mm (0.31 in)	3J-3142(3)
			Pusher Plate	1054 mm (41.5 in)	1054 mm (41.5 in)	16 mm (0.63 in)	4J-3699
	85D,42G,61K,94R,5SB,8MH,9J-B,7AC	Universal	Wear Plates	1077 mm (42.4 in)	1076 mm (42.4 in)	8 mm (0.31 in)	3J-3142(4)
			Pusher Plate	1054 mm (41.5 in)	1054 mm (41.5 in)	16 mm (0.63 in)	4J-3699
			Push Plate			16 mm (0.63 in)	4J-3699
			Wear Plates			8 mm (0.31 in)	3J-3142(4)
	4DB,1 JP,8L11,CDT	Semi-U	Right End Wear Plate			12 mm (0.5 in)	4Z-9148
			Center Wear Plate			12 mm (0.5 in)	4Z-9151
			Left End Wear Plate			12 mm (0.5 in)	4Z-9150
			Wear Plates			12 mm (0.5 in)	2J-8523 (5)
D8	6JB,2RP, BRH,3GH,4XH,5GH,5SP,9K9	Straight	Left End Wear Plate			16 mm (0.63 in)	6Y-7246
			Center Wear Plate			16 mm (0.63 in)	6Y-7244
	1JH,6AH,2WP,A5G, DZB,9CH,6AH	Universal	Right End Wear Plate			16 mm (0.63 in)	6Y-7245
			Left End Wear Plate			16 mm (0.63 in)	9W-2760
			Left End Wear Plate			16 mm (0.63 in)	9W-2760
			Left Center Wear Plate			16 mm (0.63 in)	9W-2759
	1KH,2PP,2TP,3MP,DZA, B8S,2NP,9BH,9PH,1HP,6LH	Semi-U	Center Wear Plate			16 mm (0.63 in)	9W-2756
			Center Wear Plate			16 mm (0.63 in)	9W-1771
			Right Center Wear Plate			16 mm (0.63 in)	9W-2758
			Right End Wear Plate			16 mm (0.63 in)	9W-2757
1LH,2ZH, 4Y1-1939	Angle	Right End Pusher Plate			16 mm (0.63 in)	9W-2757	
		Pusher Plate			16 mm (0.63 in)	9W-2756	
		Wear Plates			10 mm (0.40 in)	2J-8526(5)	
		Wear Plates			13 mm (0.50 in)	1U-4417 (5)	
		Pusher Plate			16 mm (0.63 in)	6J-9248	
		Left Center Wear Plate			16 mm (0.63 in)	9T-0252	
4Y1940-Up,74M,402,9TB,26B	Semi-U	Left Center Wear Plate			16 mm (0.63 in)	9T-0250	
		Center Wear Plate			16 mm (0.63 in)	4T-9592	
		Right End Wear Plate			16 mm (0.63 in)	9T-0249	
		Right Center Pusher Plate			16 mm (0.63 in)	9T-0251	
6Y1-1395,4SZ,82M	Universal	Wear Plates			13 mm (0.50 in)	1U-4417 (6)	

2 Number in parentheses ( ) after the part number indicates the quantity required.

# Bulldozer Wear Bars and Plates

## Bulldozer Wear Plates (Cont'd.)

Model	Serial Number	Blade Model	Item	Plate Height	Plate Width	Plate Thickness	Reinforcing Wear Plate <sup>(2)</sup>	
D9	6Y1396-Up	Universal	Left End Wear Plate			16 mm (0.63 in)	9T-0254	
			Left Center Wear Plate			16 mm (0.63 in)	9T-0256	
			Universal	Right Center Wear Plate			16 mm (0.63 in)	9T-0255
				Right End Wear Plate			16 mm (0.63 in)	9T-0253
			Universal	Center Pusher Plate			16 mm (0.63 in)	4T-9592
				Wear Plates			13 mm (0.50 in)	6J-9286 (4)
		20F,45K,48K	Universal	Wear Plates			12 mm (0.47 in)	9J-1659(5)
				Pusher Plate			16 mm (0.63 in)	9J-6870
		29V,30W,68V,60V	Semi-U	Wear Plates			12 mm (0.47 in)	4J-4205 (4)
				Pusher Plate			20 mm (0.79 in)	4J-4129
		30E,73E,29J	Universal	Left End Wear Plate			12 mm (0.47 in)	9J-7540
				Right End Wear Plate			12 mm (0.47 in)	9J-7539
		30V,65X,69V,34W	Universal	Wear Plates			12 mm (0.47 in)	9J-1659 (4)
				Pusher Plate			16 mm (0.63 in)	9J-6870
		43K	Rip Dozer	Wear Plates			16 mm (0.63 in)	6J-9285
				Pusher Plate			16 mm (0.63 in)	9J-6870
		60V,68V,29V,30W	Semi-U	Wear Plates			12 mm (0.47 in)	9J-1659
				Pusher Plate			13 mm (0.50 in)	6J-9286 (4)
		68E,80V,95S,14J,44K,47K	Semi-U	Wear Plates			12 mm (0.47 in)	4J-4205 (4)
				Pusher Plate			20 mm (0.79 in)	4J-4129
	78C,29E,94E	Semi-U	Push Plate			16 mm (0.63 in)	2J-9418	
			Wear Plates			10 mm (0.4 in)	2J-8526(5)	
	71F,77G	Cushioned	Wear Plates			16 mm (0.63 in)	217-7157	
			Center Wear Plate			16 mm (0.63 in)	217-7156	
	28E,93E,14F,77C,2XP,4Z-P,054,412Z7B,9AH,6NH	Angle	Right End Wear Plate			16 mm (0.63 in)	217-7155	
			Left End Wear Plate			16 mm (0.63 in)	218-3887	
	1LH,2ZH,7PH,1MP,9MP,CMS,CMZ,19H	Universal	Left Center Wear Plate			16 mm (0.63 in)	9T-0252	
			Center Wear Plate			16 mm (0.63 in)	7T-5803	
	1MH,5BH,CLY,CMA,7NH,1LP,2LP,2ZPT9J	Semi-U	Center Wear Plate			16 mm (0.63 in)	218-3888	
			Right Center Wear Plate			16 mm (0.63 in)	9T-0251	
	All	Universal	Right End Wear Plate			16 mm (0.63 in)	218-3885	
			Pusher Plate			16 mm (0.63 in)	7T-5803	
			Wear Plates			13 mm (0.50 in)	6J-9269 (4)	

2 Number in parentheses ( ) after the part number indicates the quantity required.

# Bulldozer Wear Bars and Plates

## Bulldozer Wear Plates (Cont'd.)

Model	Serial Number	Blade Model	Item	Plate Height	Plate Width	Plate Thickness	Reinforcing Wear Plate <sup>(2)</sup>
			Center Wear Plate			16 mm (0.63 in)	6J-9248
			Wear Plates			13 mm (0.50 in)	6J-9249 (4)
		Angle	Wear Plates			13 mm (0.50 in)	3J-3380 (5)
	18Y1876-Up	Semi-U	Left End Wear Plate			16 mm (0.63 in)	9W-1261
			Left Center Wear Plate			16 mm (0.63 in)	9W-1260
			Center Wear Plate			16 mm (0.63 in)	9W-0810
			Right Center Wear Plate			16 mm (0.63 in)	9W-1259
			Right End Wear Plate			16 mm (0.63 in)	9W-1258
	19Y1-1474,78S1-1474	Universal	Left End Wear Plate			16 mm (0.63 in)	4T-3735
			Left Center Wear Plate			16 mm (0.63 in)	4T-3737
			Center Wear Plate			16 mm (0.63 in)	1U-0902
			Right Center Wear Plate			16 mm (0.63 in)	4T-3736
			Right End Wear Plate			16 mm (0.63 in)	4T-3734
	19Y1475-Up	Universal	Left End Wear Plate			16 mm (0.63 in)	9W-0808
			Left Center Wear Plate			16 mm (0.63 in)	9W-0811
			Center Wear Plate			16 mm (0.63 in)	9W-0810
			Right Center Wear Plate			16 mm (0.63 in)	9W-0809
	19Y1475-Up	Universal	Right End Wear Plate			16 mm (0.63 in)	9W-0812
	52Y	Semi-U	Left End Wear Plate			16 mm (0.63 in)	4T-3731
			Right Center Wear Plate			16 mm (0.63 in)	4T-3732
			Left Center Pusher Plate			16 mm (0.63 in)	4T-3733
			Center Pusher Plate			16 mm (0.63 in)	1U-0902
	55C	Universal	Wear Plates			12 mm (0.47 in)	2J-8525 (4)
	14C, 19K, 78X	Universal	Wear Plates			12 mm (0.47 in)	6J-9269 (4)
	18K, 46K, 73R, 61U, 05A	Semi-U	Wear Plates			12 mm (0.47 in)	6J-9249 (4)
			Push Plate			16 mm (0.63 in)	6J-9248
	9RP, CLC	Semi-U	Right End Wear Plate			14 mm (0.55 in)	218-3885
			Center Wear Plate			14 mm (0.55 in)	218-3888
			Left End Wear Plate			14 mm (0.55 in)	218-3887
	All Push-Plates		Push Plate			12 mm (0.47 in)	1U-0903
			Push Plate			16 mm (0.63 in)	1U-0902
	53C, 89D, 21E, 25E, 06A	Semi-U	Wear Plates			12 mm (0.47 in)	2J-8523 (4)

2 Number in parentheses ( ) after the part number indicates the quantity required.

# Bulldozer Wear Bars and Plates

## Bulldozer Wear Plates (Cont'd.)

Model	Serial Number	Blade Model	Item	Plate Height	Plate Width	Plate Thickness	Reinforcing Wear Plate <sup>(2)</sup>	
D10	18Y1-1875,52Y1-1875,425	Semi-U	Push Plate			20 mm (0.79 in)	2J-8524	
			Right End Wear Plate			16 mm (0.63 in)	4T-3730	
			Right Center Wear Plate			16 mm (0.63 in)	4T-3732	
	70F-45G,20Y1-533,20Y543	Cushioned	Center Wear Plate			16 mm (0.63 in)	1U-0902	
			Left Center Wear Plate			16 mm (0.63 in)	4T-3733	
			Left End Wear Plate			16 mm (0.63 in)	4T-3731	
			Push Plate			16 mm (0.63 in)	4J-3868	
			Push Plate			20 mm (0.79 in)	9J-4567	
	CMH,CMN 52C,90D,11E,26E 63E,39K	Angle	Push Plate			20 mm (0.79 in)	4T-9534	
			Push Plate			16 mm (0.63 in)	7T-5803	
			All			12 mm (0.47 in)	3J-3380 (5)	
	1SH,7WH 79W1-536 79W537-Up 79W537-Up 80W1-467 80W468-Up	Rip Dozer	Sides			12 mm (0.47 in)	6J-9249 (4)	
			Center			16 mm (0.63 in)	6J-9248	
		Universal	Left End Wear Plate				16 mm (0.63 in)	9W-7265
			Left Center Wear Plate				16 mm (0.63 in)	9W-7264
			Center Wear Plate				16 mm (0.63 in)	9W-2409
			Center Wear Plate				16 mm (0.63 in)	6 Y-1080
			Right Center Wear Plate				16 mm (0.63 in)	9W-7262
			Right End Wear Plate				16 mm (0.63 in)	9W-7263
			Wear Plates	2005 mm (78.9 in)	710 mm (28 in)	13 mm (0.50 in)	3G-6344 (8)	
Pusher Plate			1679 mm (66.1 in)	1524 mm (60 in)	16 mm (0.63 in)	3G-6343		
Semi-U	Left End Wear Plate				16 mm (0.63 in)	4T-3723		
	Left Center Wear Plate				16 mm (0.63 in)	4T-3724		
Semi-U	Right Center Wear Plate	1570 mm (61.8 in)	1074 mm (42.3 in)	16 mm (0.63 in)	4T-3725			
	Right End Wear Plate	1430 mm (56.3 in)	524 mm (20.6 in)	16 mm (0.63 in)	4T-3722			
Universal	Center Pusher Plate	1905 mm (75.0 in)	2000 mm (78.7 in)	1 mm (0.63 in)	1U-3697			
	Wear Plates	2005 mm (78.9 in)	710 mm (28.0 in)	13 mm (0.50 in)	3G-6344 (9)			
Universal	Left End Wear Plate				16 mm (0.63 in)	4T-3727		
	Left Center Wear Plate				16 mm (0.63 in)	4T-3728		
	Center Wear Plate				16 mm (0.63 in)	1U-3697		
	Right Center Wear Plate				16 mm (0.63 in)	4T-3729		
	Right End Wear Plate				16 mm (0.63 in)	4T-3726		

2 Number in parentheses ( ) after the part number indicates the quantity required.

# Bulldozer Wear Bars and Plates

## Bulldozer Wear Plates (Cont'd.)

Model	Serial Number	Blade Model	Item	Plate Height	Plate Width	Plate Thickness	Reinforcing Wear Plate <sup>(2)</sup>
D11	83W	Cushion	Pusher Plate	922 mm (36.3 in)	1900 mm (74.8 in)	20 mm (0.80 in)	9J-4567
			Right End Wear Plate			14 mm (0.55 in)	218-3939
	4LP6FP,BHF,BHP	Universal	Center Wear Plate			14 mm (0.55 in)	218-3941
			Left End Wear Plate			14 mm (0.55 in)	218-3940
	1RH,7RH,4KP,6EP,BHA,BHJ	Semi-U	Right End Wear Plate			14 mm (0.55 in)	218-3922
			Right Center Wear Plate			16 mm (0.63 in)	9W-7260
			Center Wear Plate			16 mm (0.63 in)	9W-2409
			Left Center Wear Plate			16 mm (0.63 in)	9W-7261
			Left End Wear Plate			14 mm (0.55 in)	218-3923
			Right End Wear Plate			14 mm (0.55 in)	218-3922
			Center Wear Plate			14 mm (0.55 in)	218-3924
			Left End Wear Plate			14 mm (0.55 in)	218-3923
			Push Plate			16 mm (0.63 in)	9W-2409
			Left End Wear Plate			16 mm (0.63 in)	4T-8144
D11	4BB,4KB,9NH,1AP	Semi-U	Left End Wear Plate			16 mm (0.63 in)	4T-8144
			Left Center Wear Plate			16 mm (0.63 in)	4T-8144
	8PP	Semi-U	Left Center Wear Plate			16 mm (0.63 in)	4T-8146
			Center Wear Plate	1994 mm (78.5 in)	2050 mm (80.7 in)	16 mm (0.63 in)	4T-5308
			Center Wear Plate			16 mm (0.63 in)	6Y-1100
			Right Center Wear Plate	1783 mm (70.2 in)	1220 mm (48.0 in)	16 mm (0.63 in)	4T-8145
			Right End Wear Plate			16 mm (0.63 in)	4T-8143
			Pusher Plate			16 mm (0.63 in)	4T-5308
			Right End Wear Plate			14 mm (0.55 in)	136-3984
			Center Wear Plate			14 mm (0.55 in)	136-3986
			Left End Wear Plate			14 mm (0.55 in)	139-3985
			Left End Wear Plate			16 mm (0.63 in)	4T-7630
	4CB,5TB,4CB-Up to 00787	Universal	Left End Wear Plate			16 mm (0.63 in)	4T-7630
			Left Center Wear Plate			16 mm (0.63 in)	4T-7631
Center Wear Plate			1994 mm (78.5 in)	2050 mm (80.7 in)	16 mm (0.63 in)	4T-5308	
Center Wear Plate					16 mm (0.63 in)	6Y-1319	
4CB for 00788 and Up, 9MH,9ZH	Universal	Right Center Wear Plate	1783 mm (70.2 in)	693 mm (27.3 in)	16 mm (0.63 in)	4T-7632	
		Right End Wear Plate			16 mm (0.63 in)	4T-7629	
4CB for 00788 and Up, 9MH,9ZH	Universal	Right End Wear Plate			16 mm (0.63 in)	122-2320	
		Center Wear Plate			16 mm (0.63 in)	122-2322	

2 Number in parentheses ( ) after the part number indicates the quantity required.

## Bulldozer Wear Plates (Cont'd.)

Model	Serial Number	Blade Model	Item	Plate Height	Plate Width	Plate Thickness	Reinforcing Wear Plate <sup>(2)</sup>
			Left End Wear Plate			16 mm (0.63 in)	122-2321
	8RP	Universal	Right End Wear Plate			14 mm (0.55 in)	126-8341
			Center Wear Plate			14 mm (0.55 in)	126-8343
			Left End Wear Plate			14 mm (0.55 in)	126-8342

2 Number in parentheses ( ) after the part number indicates the quantity required.

# Rippers/Scarifiers - Ripper/Scarifier Tips

## Large Rippers

For large rippers, there are two types of tips available — centerline and penetration. Both types of tips have a center rib for strength and sharpness, in addition to being forged from DH-3 steel for added strength and wear resistance. Available in several lengths to meet various applications.



### Centerline Ripper Tips

- Offers good penetration and more wear material.
- Can be flipped for maximum performance.



### Penetration Ripper Tips

- Offer better initial penetration.
- Penetration tips should be installed with the rib up.



### ARM Ripper Tips

- Offers increased wear life, and enhanced penetration and productivity.
- ARM Ripper Tips should not be used in severe impact conditions.



### Sharp Tips

- Enhanced initial penetration in hard to penetrate materials like limestone and caliche applications.

Ripper Tips													
Model	Ripper Style	Centerline			ARM Center-line Intermediate	Penetration			ARM Penetration Intermediate	Sharp Limestone	ARM Sharp Center line	Tip Pin	Retainer
		Long	Inter-mediate	Short		Long	Inter-mediate	Short					
D3, D3B, D3C, D4B, D4C, D5C	Pin-On		1U-3202			1U-3209			9W-8209		8E-6208	6E-6209	
	J200												
D3G, D3K, D4G, D4K, D5G, D5K,	Pin-On					9J-4259			9W-8259		132-4763	149-5733	
	J250												
D5M, D5N, D6M, D6N, D6R, D6M, D6N, D7R	Pin-On		6Y-0352		159-0355	6Y-0359		159-0356			114-0358	114-0359	
	CapSure		672-0824			477-0825					473-3816		
	R350												
D8L, D8, D8N D8R, D8K, D8T, D9L, D9R MS, D9T MS	Pin-On	114-0453	9W-2452	9W-2451	8E-5770	4T-5452	4T-5451	8E-5771			6Y-3394	8E-4743	
	R450												
	CapSure		380-1209	380-1218	380-1225	380-1216		380-1220			380-1211		
D9L, D9R SS*, D9T SS, D10, D10N,	Pin-On	8E-8503	4T-4502	4T-4501	8E-5774	4T-5503	4T-5502	4T-5501	8E-5772	159-0377	201-3502	6Y-1204	6Y-1202
	R500												
	CapSure		356-6430	380-1207	445-2041	331-3506	331-3505		331-3508			416-0246	



# Rippers/Scarifiers - Ripper/Scarifier Tips

## Large Rippers (Cont'd.)

Ripper Tips													
Model	Ripper Style	Centerline			ARM Center-line Intermediate	Penetration			ARM Penetration Intermediate	Sharp Limestone	ARM Sharp Center line	Tip Pin	Retainer
		Long	Intermediate	Short		Long	Intermediate	Short					
D10R, D10T, D11 MS	CR500												
D11 SS	Pin-On		9W-4552	9W-4551	122-2552		6Y-3552		135-9552			9N-4245	6Y-1205
	R550												
	CapSure		356-6428	357-2712	445-2039		331-3553		421-5417			353-2546	
	CR550												

### Ripper Tip Features Maximize Productivity and Reduce Wear

Your ripper tips increase the processing of surface material and help prepare work areas for loaders, trucks and other machinery. Cat ripper tips are built to last and designed to increase your productivity.

- **DH-3™ Steel** resists the damaging effects of high-tip temperatures created during ripping, which can reduce the hardness of non-DH3 steel alloys and shorten life.
- **Cat Center-Rib Design** ensures tips stay sharper longer, providing more effective penetration, longer wear life and better ripping.
- Abrasion Resistant Materials (ARM) can extend wear life up to five-times longer than that of a standard tip. It maintains a sharp tip profile, resulting in greater productivity.
- **Side-Pinned** for better retention

#### Tips for increased productivity:

To get the most productivity from your ripping equipment and ripper tips:

- Use the longest tip possible that does not break
- Select the tip that best matches the application
- Replace your tips as needed — not too soon, not too late
- Inspect retention pins and retainers at each change. In less severe applications, and if no pins are lost, they may be reused two or three times.

**Note:** For additional ripper information, please refer to the Handbook of Ripping, AEDK0752

# Ripper/Scarifier Shanks

## Shanks

**One-piece shanks** made from DH-2 steel are available for rippers D8 size and larger. This design provides more strength and improves heel clearance because there is no weld joint. Surfaces and corners are fully machined and rounded for a tighter fit between the shank, tip and protector, which results in less movement for longer adapter and tip life.

Model	Shank Width Tip Size	Single Shank	Deep Ripper	Multi Shank	Adapter - Field Repair	Adapter Nose - Field Repair
D8K, D8, D8L, D8N, D8R, D8T, D9H, D9N, D9R	depth x length 75mm CR450/R450	332 x 1899 8E-5342	332 x 2449 8E-5340	332 x 1488 8E-5341	8E-8418	9U-9694
		332 x 2010 8E-5347		332 x 1600 8E-5346		
		332 x 2322 8E-5339		332 x 1753 8E-5345		
		332 x 2750 8E-5348				
D9L, D9R, D9T, D10N, D10R, D10T	depth x length 90mm CR500/R500	355 x 2305 8E-8414	355 x 2805 8E-8416	355 x 1799 8E-8415	103-8115, 1U- 3630 <sup>(1)</sup>	107-3361, 103- 8114 <sup>(1)</sup>
		355 x 2305 114-4503	355 x 2805 109-9114			
		380 x 2490 8E-8411	380 x 2977 8E-8417			
D10, D10R, D10T, D11N, D11R, D11T	depth x length 100mm CR500/R500	400 x 2490 118-2140	400 x 2977 109-3135	400 x 1958 8E-8413		
		400 x 2792 8E-8412	400 x 3035 4Z-8849			
D11N, D11R, D11T	depth x length 110mm CR550/R550	450 x 2707 104-9277	450 x 3267 104-9275		104-9279	
			450 x 4166 4Z-8814			

## STTT Shanks

Curved and straight shanks are available for D6 size rippers or smaller. Straight shanks are stronger and reach farther, while curves shanks provide better penetration by exerting more pressure. Curved shanks also lift and break material ahead of the shank and can be stored out of the way when not in use.

Model	Shank Width Tip Size	Straight	Curved
D3, D3B, D3C, D4B, D4C, D5C	depth x length; 35 mm	75 x 175 8J-5299	
	J200		
D3G, D4G, D5G, D3K, D3K2, D4K, D4K2, D5K, D5K2	depth x length; 50 mm		109 x 186 1U-1257
	J250		
D5M, D5N	depth x length; 59 mm	138 x 498 9J-6586	138 x 472 9J-8913
	R350		
D6R, D6M, D6N	depth x length; 75 mm	176 x 210 9J-3139	176 x 183 9J-8923
	R350		
D7R	depth x length; 75 mm	228 x 712 9W-7382	332 x 720 8E-1853
	R350		

1 for 1-pin shank protectors

## Shank Protectors

Sharpened and standard protectors are recommended for all applications with D8 or larger rippers. They protect the lower portion of the shank and the adapter. They provide additional strength and wear resistance, and they are easy to replace.

**Sharp protectors** are designed for tough-to-rip applications. They reduce resistance to ripping and drawbar horsepower loss.

CapSure Technology: Hammerless Ripper Tip & Shank Protector System

### Better protection. Better performance.

- Eliminates hammering of traditional pins
- Use standard 3/4" ratchet for installation / removal
- Cast lift eyes for safer handling
- Optimizes wear life of shank protector
- Retainer is integral part of the tip & protector

Shank Width	Shank Protector Style	Shank Protectors					Pins			
		Standard		Sharp		Extended	Upper Pin	Retainer	Lower Pin	Retainer
		1 pin	2 pin	1 pin	2 pin	2 pin				
75mm	Pin-on		6J-8814		8E-1848	132-4716	6Y-3394	8E-4743	6Y-3394	8E-4743
	CapSure				380-1214	380-1223	380-1211		380-1222	
90mm	Pin-on			6Y-9704	9W-8365	132-1014	6Y-1204	6Y-1202	6Y-1204	6Y-1202
	CapSure				444-9711	357-2702	416-0246		353-2548	
100mm	Pin-on	3G-9594		6Y-9704	6Y-8960	132-1015	6Y-1204	6Y-1202	6Y-1204	6Y-1202
	CapSure				331-3510	357-2704	416-0246		353-2548	
110mm	Pin-on				9N-4621	132-1016	9N-4245	6Y-1205	9N-4245	6Y-1205
	CapSure				331-3560	357-2701	353-2546		353-2600	

## Shank Protectors and Pin/Retainers

Model	Shank Protector			Counterbored Ripper Shank				Non Counterbored Pin Assy.
	Standard	Sharp	Extended	Non-reusable		Reusable		
				Pin	Ret. Assy.	Pin	Retainer	
D8, D8N, D8R, D8L	6J-8814	8E-1848	132-4716	—	—	6Y-3394	8E-4743	4T-2479 <sup>(2)</sup> 6J-8814 <sup>(3)</sup>
D9, D9N, D9R, D9H	6J-8814	8E-1848	132-4716	—	—	6Y-3394	8E-4743	4T-2479 <sup>(2)</sup> 6J-8814 <sup>(3)</sup>
D9L (1 pin protector)	—	6Y-9704	—	—	—	—	—	102-9062
D9L (2 pin protector) D9R SS <sup>(4)</sup> <sup>(5)</sup> , D9T SS <sup>(5)</sup>	—	9W-8365	132-1014	6Y-1204	6Y-1202	6Y-3909	4T-4707	102-9062
D10, D10R SS <sup>(5)</sup> , D10T SS <sup>(5)</sup> , D10T MS <sup>(6)</sup>	—	6Y-8960	132-1015	6Y-1204	6Y-1202	6Y-3909	4T-4707	102-9062
D10R MS <sup>(6)</sup> , D10N	—	9W-8365	132-1014	6Y-1204	6Y-1202	6Y-3909	4T-4707	102-9062
D11 MS <sup>(6)</sup>	—	6Y-8960	132-1015	6Y-1204	6Y-1202	6Y-3909	4T-4707	102-9062

- 2 Top protector hole.
- 3 Lower protector hole.
- 4 Applicable for serial numbers 8BL1000-UP and 7TL753-UP.
- 5 Single Shank
- 6 Multi-Shank

# Ripper/Scarifier Shanks

## Shank Protectors and Pin/Retainers (Cont'd.)

Model	Shank Protector			Counterbored Ripper Shank				Non Counterbored Pin Assy.
				Non-reusable		Reusable		
	Standard	Sharp	Extended	Pin	Ret. Assy.	Pin	Retainer	
D11 SS <sup>(7)</sup>	—	9N-4621	132-1016	9N-4245	6Y-1205	8E-2229	8E-2230	6Y-2443
D10 (1 pin protector)	3G-9514	6Y-9704	—	—	—	—	—	102-9062

## Shank Repair/Conversion Parts

Model	Adapter	Nose
D8L, D8, D8N, D8R, D8K	8E-8418	9U-9694
D9, D9N, D9R, D9H	8E-8418	9U-9694
D9L (1 pin protector)	1U-3630	103-8114
D9L, D9R HD (2 pin protector)	103-8115	107-3361
D10 (1 pin protector)	1U-3630	103-8114

Model	Adapter	Nose
D10 (2 pin protector)	103-8115	107-3361
D11 MS <sup>(8)</sup> (1 pin protector)	1U-3630	103-8114
D11 MS <sup>(8)</sup> (2 pin protector)	103-8115	107-3361
D11 SS <sup>(7)</sup>	104-9279	—

7 Single Shank  
8 Multi-Shank

## Small Rippers and Scarifiers

For small rippers and scarifiers, there are two types of tips available — centerline and penetration. Both types of tips have a center rib for strength and sharpness, in addition to being forged from DH-3 steel for added strength and wear resistance. Available in several lengths to meet various applications.



### Centerline Ripper Tips

- Offers good penetration and more wear material.
- Can be flipped for maximum performance.



### Penetration Ripper Tips

- Offers better initial penetration.
- Penetration tips should be installed with the rib up.

## Sharp Ripper Tips

Model	Centerline Long	Penetration Long	Sharp	Arm	Pin	Retainer
No. 3, 931, 933, 939, D4C, D5C 135H,120H	1U-3202 <sup>(1)</sup>	1U-3209 <sup>(1)</sup>	9W-8209	—	8E-6208	8E-6209
No. 4, 963, 955, 951, 941, 12, 14, 130, 140, 143H, 160H, 163, D5M,D5N	6Y-0352	6Y-0309	9W-7309	168-1309	136-8308	114-0359
943, 953, D3G, D4G, D5G	—	9J-4259 <sup>(1)</sup>	9W-8259	—	132-4763	149-5733
No. 5, No. 6, 963, 973, 977, 983, No. 7, 16, 24H, D6M, D6N, D6R, D7R	6Y-0352	6Y-0359	—	159-0355 Centerline 159-0356 Penetration	114-0358	114-0359

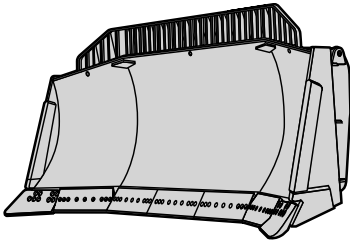
## Replacement Parts for Scarifiers

Components	V-Block (Rear Notched)	V-Block (Front Notched)	Straight Block (Rear Notched)	No. 6 (Non-Current)
<b>Shank</b>				
Standard	5B-0947	195-7218	195-7219	6K-5704 <sup>(2)</sup>
Long	—	7D-4501	—	—
<b>Tips</b>				
General Purpose (DH-2)	195-7234 <sup>(2)</sup>	195-7234 <sup>(2)</sup>	195-7234 <sup>(2)</sup>	—
High Temperature (DH-3)	6Y-5230 <sup>(3)</sup>	6Y-5230 <sup>(3)</sup>	6Y-5230 <sup>(3)</sup>	5K-0450 <sup>(2)</sup>
High Abrasion (ARM)	143-3074 <sup>(3)</sup>	143-3074 <sup>(3)</sup>	143-3074 <sup>(3)</sup>	143-3074 <sup>(3)</sup>

- 1 DH-2 Steel.
- 2 Uses DH-2 Steel.
- 3 Use 6B-3260 tool for driving scarifier tips off shanks.

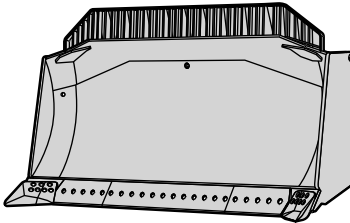
# Compact Construction Equipment

## Compactor Cutting Edges



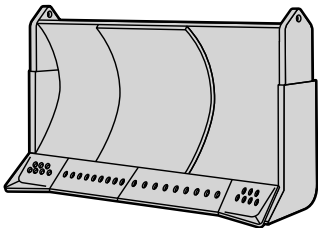
### Universal Blade

- A straight blade with large “wings” to carry large loads more efficiently over long distances. Available only for larger models.



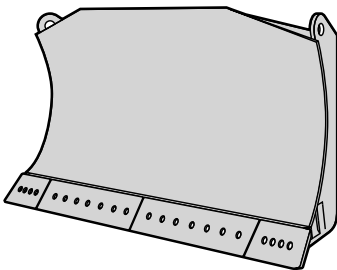
### Semi-U Blade

- A straight blade with small “wings” to provide better load carrying characteristics for mid-sized and large machines.



### Cushion Blade

- A relatively narrow blade, primarily for pushing scrapers.



### Power Angle and Tilt Blade

- A very versatile blade for smaller machines.

Caterpillar compactor cutting edges are made of through-hardened alloy steel for excellent abrasion resistance and strength, and all Caterpillar compactor cutting edges are guaranteed against breakage. Caterpillar compactor cutting edges are available in various thicknesses to match your machine size and application, and they are available in shorter lengths for ease of storage, handling, installation, and maintenance.

Caterpillar compactor cutting edges are made of DH-2 steel.

- DH-2 steel provides increased hardness and toughness for excellent wear and impact resistance.

## Compactor Blades

Model	Serial Number	Blade Model	Edge Thickness	Edge Type	Edge Part Number <sup>(1)</sup>	Bolts Per Edge	Nuts Per Edge	Washers Per Edge
814	36S, 16Z, 3YP		19 mm (0.75 in)	Right/Left End Edges	4T-2923	5J-2409	2J-3505	5P-8249
				Center Edge	4T-2922	5J-2409	2J-3505	5P-8249
	56D, 23K		19 mm (0.75 in)	Right/Left End Edges	4T-2922	6F-0196	2J-3505	
				Center Edge	4T-2993	6F-0196	2J-3505	

<sup>1</sup> Number in parentheses ( ) after the part number indicates the quantity required.

## Compactor Blades (Cont'd.)

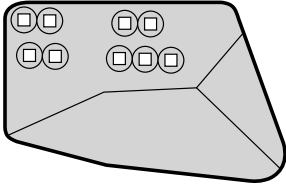
Model	Serial Number	Blade Model	Edge Thickness	Edge Type	Edge Part Number <sup>(2)</sup>	Bolts Per Edge	Nuts Per Edge	Washers Per Edge
815	24K1 -1044, 59E1-341		19 mm (0.75 in)	Left/Right End Edges	4T-2922	6F-0196	2J-3505	
				Left/Right End Edges	4T-3020	3F-5108	4K-0567	
	24K1045-UP, 59E342-UP		19 mm (0.75 in)	Center Edge	4T-3008	3F-5108	4K-0567	
				Center Edge	4T-3004	4F-7827	2J-3506	
816	41S, 15Z, 3ZP		19 mm (0.75 in)	Center Edge	4T-3012	5J-4773	2J-3506	
				Left/Right End Edges	4T-2923	5J-2409	2J-3505	
	51K		25 mm (1.00 in)	Center Edge	4T-2922	5J-2409	2J-3505	
				Left/Right End Edges	4T-6532	6F-0196	2J-3505	
824	2HP		25 mm (1.00 in)	Center Edge	4T-6531	6F-0196	2J-3505	
				Left End Edge	122-9227(2)	6F-0196	2J-3505	
	35G	Straight	25 mm (1.00 in)	Right/Center End Edges	4T-3420	6F-0196	2J-3505	
				Center Edge	4T-6514 (2)	5J-2409	2J-3505	
	35G, 64G, 93G	Straight	60 mm (2.36 in)	Left/Right End Edges	107-3524 <sup>(2)</sup>	5J-2409	2J-3505	
				Center Edge	109-9014(2) <sup>(2)</sup>	5J-2409	2J-3505	
88H		29 mm (1.13 in)	Center Edge	4T-6448 (2)	4J-9058	2J-3507		
825	4JP		25 mm (1.00 in)	Center Edge	4T-6532	6F-0196	2J-3505	
	89X		25 mm (1.00 in)	Center Edge	4T-6238	4F-4042	2J-3507	
826	97X, 90K, 2GP		25 mm (1.00 in)	Center Edge	4T-6515 (2)	5J-2409	2J-3505	
834	14B	Universal	25 mm (1.00 in)	Left/Right End Edges	4T-8798	6F-0196	2J-3505	
				Center Edge	4T-8797 (2)	6F-0196	2J-3505	
	64G 93G, 93GB	Cushion	25 mm (1.00 in)	Center Edge	4T-2889 (2)	6F-0196	2J-3505	
				Left/Right Edges	4T-6532	6F-0196	2J-3505	
				Center Edge	4T-6531	6F-0196	2J-3505	
834G	27K, 14B, 36G, 96G		60 mm (2.36 in)	Left End Edge	123-3756 <sup>(2)</sup>	5J-2409	2J-3505	
				Center Edge	123-3754(2) <sup>(2)</sup>	5J-2409	2J-3505	
				Right End Edge	123-3755 <sup>(2)</sup>	5J-2409	2J-3505	
835	27K, 36G, 96G		25 mm (1.00 in)	Center Edge	4T-6515 (2)	5J-2409	2J-3505	

<sup>2</sup> Number in parentheses ( ) after the part number indicates the quantity required.  
<sup>2</sup> G930 Heavy Duty Mining Edge.

# Compactor End Bits

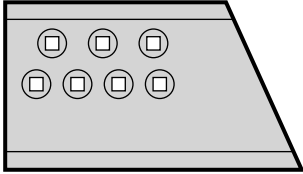
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## Compactor End Bits



### General Duty End Bits

- Provides a thicker wear area than the cutting edge.
- Made from DH-2 or DH-3 steel, depending on the application.
- For use in most dozing applications.



### Finish Dozing End Bits

- Provides a depth of cut equal to the cutting edge.
- Protects the blade corner in low impact, low abrasion materials.
- Made from through-hardened DH-2 steel.
- For use in finish and semi-finish dozing.

## Compactor End Bits

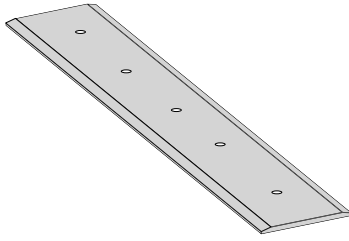


## Compactor End Bits (Cont'd.)

Model	Serial Number	Blade Model	Thickness	General Duty End Bits		Finish Dozing End Bits		Bolts	Nuts	Washers
				(lh)	(rh)	(lh)	(rh)			
814	36S, 41S, 32P 56D, 51K, 23K		28 mm (1.12 in)			4T-6242	4T-6241	5J-2409	2J-3505	5P-8249
				3G-8294	3G-9283	4T-6506	4T-6505	6F-0196	2J-3505	
				4J-8844	4J-8843	4T-6506	4T-6505	6F-0196	2J-3505	
				3G-8316	3G-8315	4T-6506	4T-6505	6F-0196	2J-3505	
				9F-7076	9F-7075	4T-3050	4T-3049	3F-5108	4K-0367	
815	24K1-1044 24K1045-UP 59E1-341 59E342-UP		22 mm (0.88 in)	3G-8296	3G-8295	4T-3050	4T-3049	3F-5108	4K-0367	
				4J-8262	4J-8261	4T-3042	4T-3041	4F-7827	2J-3506	
				3G-8298	3G-8297	4T-3042	4T-3041	4F-7827	2J-3506	
				5J-1420	5J-1419	4T-3046	4T-3045	5J-4773	2J-3506	
				3G-8298	3G-8297	4T-3046	4T-3045	5J-4773	2J-3506	
815S	39S, 95E 36S, 41S, 32P, 3YP	Straight	22 mm (0.88 in)			4T-6242	4T-6241	5J-2409	2J-3505	5P-8249
				3G-8294	3G-8293	3G-8294	3G-8293	6F-0196	2J-3505	
				3G-8316	3G-8315	4T-6506	4T-6505	6F-0196	2J-3505	
				4J-8844	4J-8843	4T-6506	4T-6505	6F-0196	2J-3505	
				3G-8316	3G-8315	4T-6506	4T-6505	6F-0196	2J-3505	
816	2HP, 35G, 64G, 93G 88H	Straight	60 mm (2.36 in)	109-9025*	109-9024*					
				3G-8290	3G-8289			4J-9208	2J-3507	
				3G-8282	3G-8281			4J-9208	2J-3507	
				109-9025*	109-9024*			5J-2406	2J-3505	
				3G-8316	3G-8315	4T-6506	4T-6505	6F-0196	2J-3505	
824	4JP, 93G	Straight	28 mm (1.12 in)	3G-8288	3G-8287	4T-6240	4T-6239	4F-4042	2J-3505	
				9J-1478	9J-1477	4T-6240	4T-6239	4F-4042	2J-3505	
				3G-8318	3G-8317	4T-6240	4T-6239	4F-4042	2J-3505	
				3G-8294	3G-8293	4T-6506	4T-6505	6F-0196	2J-3505	
				3G-8316	3G-8315	4T-6506	4T-6505	6F-0196	2J-3505	
825	27K, 14B, 36G 97X, 90K, 2GP, 93G		28 mm (1.12 in)	4J-8844	4J-8843	4T-6506	4T-6505	6F-0196	2J-3505	
				3G-8316	3G-8315	4T-6506	4T-6505	6F-0196	2J-3505	
				3G-8316	3G-8315	4T-6506	4T-6505	6F-0196	2J-3505	
				3G-8294	3G-8293	4T-6506	4T-6505	6F-0196	2J-3505	
				4J-8844	4J-8843	4T-6506	4T-6505	6F-0196	2J-3505	
826	27K, 14B, 36G		28 mm (1.12 in)	3G-8316	3G-8315	4T-6506	4T-6505	6F-0196	2J-3505	
				3G-8316	3G-8315	4T-6506	4T-6505	6F-0196	2J-3505	
				3G-8294	3G-8293	4T-6506	4T-6505	6F-0196	2J-3505	
				4J-8844	4J-8843	4T-6506	4T-6505	6F-0196	2J-3505	
				3G-8316	3G-8315	4T-6506	4T-6505	6F-0196	2J-3505	
834	64G, 93G, 96G 27K, 14B, 36G		22 mm (0.88 in)	3G-8294	3G-8293	4T-6506	4T-6505	6F-0196	2J-3505	
				4J-8844	4J-8843	4T-6506	4T-6505	6F-0196	2J-3505	
				3G-8316	3G-8315	4T-6506	4T-6505	6F-0196	2J-3505	
				124-7285*	124-7284*			6F-0196	2J-3505	
				3G-8294	3G-8293	4T-6506	4T-6505	6F-0196	2J-3505	
834G	27K, 14B, 36G, 64G		28 mm (1.12 in)	4J-8844	4J-8843	4T-6506	4T-6505	6F-0196	2J-3505	
				3G-8316	3G-8315	4T-6506	4T-6505	6F-0196	2J-3505	
				3G-8294	3G-8293	4T-6506	4T-6505	6F-0196	2J-3505	
				4J-8844	4J-8843	4T-6506	4T-6505	6F-0196	2J-3505	
				3G-8316	3G-8315	4T-6506	4T-6505	6F-0196	2J-3505	
835	93G, 96G		28 mm (1.12 in)	3G-8294	3G-8293	4T-6506	4T-6505	6F-0196	2J-3505	
				4J-8844	4J-8843	4T-6506	4T-6505	6F-0196	2J-3505	
				3G-8316	3G-8315	4T-6506	4T-6505	6F-0196	2J-3505	
				3G-8294	3G-8293	4T-6506	4T-6505	6F-0196	2J-3505	
				4J-8844	4J-8843	4T-6506	4T-6505	6F-0196	2J-3505	

# Compactor Plates/Tips

## Compactor Sole Plates



Model	Serial Number	Blade Model	Sole Plate	Bolts Per Plate	Nuts Per Plate
814	23K, 56D	Straight	4T-3019 (2)	5J-4773 (5)	2J-3506 (5)
814	36S, 3YP	Straight	4T-3018 (2)	5J-4773 (4)	2J-3506(4)
824	2HP	Cushion	4T-8799 (3)	5J-4772 (5)	2J-3505(5)
824	35G1-222	Straight	7T-3491 (3)	5J-4773 (7)	2J-3506 (7)
824	35G223-Up	Straight	7T-3492 (3)	5J-4773 (7)	2J-3506(7)
834	14B	Universal	4T-8799 (2)	6F-0196 (7)	2J-3505(7)
834	36G, 96G	Straight	4T-6650 (2)	5J-4772 (8)	2J-3505 (8)
834	36G, 96G	Straight	4T-6651 (1)	5J-4772 (9)	2J-3505 (9)
834	64G	Cushion	4T-6645 (2)	5J-4772 (6)	2J-3505 (6)

## Landfill Compactor Tip/Blades



### Landfill Compactor Traction Tips:

- Forged for maximum strength and equipped with ARM for critical wear areas.
- For use in applications where maximum traction is required, such as frozen or difficult to penetrate materials.



### Landfill Compactor Weld-On Plus Tips:

- Provide superior compaction densities, excellent traction, and excellent side hill stability.
- Provides less plugging and lower replacement costs because fewer teeth are required in its widely spaced distribution pattern.
- Lasts longer than chopper blades in high wear conditions.



### ARM Chopper Blades:

- Provides good traction and aggressive chopping action in all types of trash.
- Manufactured from heat-treated, DH-2 steel.
- For use in sanitary landfill applications.

Model	Wheel Diameter	Weld-On Plus Tips	ARM Chopper Blade	ARM Chopper Blade Support	
816B, 816C		232-0160 (20)	6Y-6766 (20)	2V-6400 (10)	2V-6401 (10)
816B, 816C		232-0160 (20)	6Y-6766 (20)	2V-6400 (10)	2V-6401 (10)
826B, 826C	40 in	232-0160 (25)	6Y-4321 (24)	2V-6400 (12)	2V-6401 (12)
826B, 826C	48 in	232-0160 (25)	6Y-4321 (24)	2V-6400 (12)	2V-6401 (12)
826B, 826C	40 in	232-0160 (25)	6Y-4321 (24)	2V-6400 (12)	2V-6401 (12)
826B, 826C	48 in	232-0160 (25)	6Y-4321 (24)	2V-6400 (12)	2V-6401 (12)

## Landfill Compactor Tip/Blades (Cont'd.)

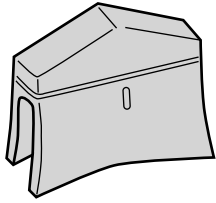
<b>Model</b>	<b>Wheel Diameter</b>	<b>Weld-On Plus Tips</b>	<b>ARM Chopper Blade</b>	<b>ARM Chopper Blade Support</b>	
836		232-0160 (35)	107-3374 (28)	2V-6400 (14)	2V-6401 (14)
836G		232-0160 (35)	107-3374 (28)	2V-6400 (14)	2V-6401 (14)

# Compactor Feet

## Landfill Compactor Wheel Assemblies

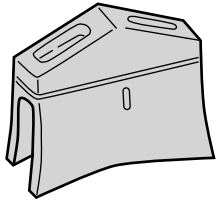
Model	Rim Thickness	Weld-On Plus Tip	Narrow Weld-On Plus Tip	ARM Chopper Blade	
				(lh front and rh rear)	(rh front and lh rear)
816	16 mm (0.625 in)	2Q-1498 (4)		4E-3523 (2)	4E-3524 (2)
826	25 mm (1.000 in)	128-8113 (4)	2Z-9142 (4) <sup>(1)</sup>	128-8116 (2)	128-8117(2)
836	25 mm (1.000 in)	129-2405 (4)		111-8237 (2)	111-8238(2)
836G	25 mm (1.000 in)	143-5952		189-1584	189-1585
836G	25 mm (1.000 in)	165-4970 <sup>(2)</sup>			

## Weld-On Soil Compactor Feet



Model	Blade Serial Number	Tamping Foot	Rock Tamping Foot	Base
815	91P		4V-3851	7K-6908
815B	17Z	2V-7053		7K-6908
825C	86X	2V-6628	4V-0668	7K-7071

## Bolt-On Soil Compactor Feet



Model	Blade Serial Number	Tamping Foot	Base	Bolts	Nuts	Washers
815	91P	8K-9189	7K-6908	0S-0484 (2)	6B-6684 (2)	5P-8245 (4)
825C	86X	8K-9171	7K-7071	0T-0856 (2)	6B-6682 (2)	5H-1504 (4)
835	44N333-UP	8K-9171	7K-7071	0T-0856 (2)	6B-6682 (2)	5H-1504 (4)

1 Applicable for a narrow wheel width (40"). Only available for machine orders.  
 2 Includes wheel extension.

# Compactor Feet/Cleaner Bars

## Pin-On Soil Compactor Feet



Model	Blade Serial Number	Tamping Foot	Rock Tamping Foot	Sheepsfoot	Base	Pin	Spring Assembly	Snap Ring
824B	36H	7K-2939	7K-2939		9S-1645	7K-9535	9S-1644	5S-1522
824B, C, G	36H, 85X, 45N			3S-3992		7K-9937	9S-1644	5S-1522
825B	43N	7K-2939			9S-1645	7K-9535	9S-1644	5S-1522
825C, G	86X,6RN			3S-3992		7K-9937	9S-1644	5S-1522
834	43E	7K-2939		3S-3992	9S-1645	7K-9535	9S-1644	5S-1522
835	44N1-332	7K-2939		3S-3992	9S-1645	7K-9535	9S-1644	5S-1522

## Compactor Cleaner Bars

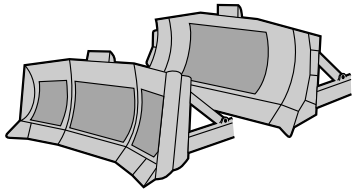
Model	Blade Serial Number	Tamping Foot Cleaner Bar	Rock Tamping Foot Cleaner Bar	Sheepsfoot Cleaner Bar	Landfill Cleaner Bar
815	91P	4S-7928			
815B, F	17Z, 1GN	106-204,141-7407, 3G-8250 <sup>(1)</sup>			
816B, F	15Z, 5FN				71-3968
824B	36H	3S-3228	3S-3228	4S-7928	
825B	36H, 43N	3S-3228 <sup>(2)</sup>	3S-3228	4S-7928	
825C, 825G	86X, 6RN	3S-3228 <sup>(2)</sup>	3G-8250 <sup>(1)</sup>		
826B	58U				71-3968
826C	87X				71-3968
826G	7LH				71-3968
834	43E	4S-7928	4S-7928	3S-3228	
835	44N	4S-7928	4S-7928	3S-3228	
836					71-3968

1 Replaceable Tip — use 8E-6258 Pin and 8E-6259 Retainer.

2 Optional one-way cleaner bar available: front wheel — 9V-5074; rear wheel — 9V-5073.

# Compactor Wear Plates

## Compactor Reinforcing Wear Plates



- Provides extended blade life in highly abrasive or extreme impact conditions.
- Provides a repair or resurface option for worn or damaged moldboards.
- Formed to fit the curve of the blade so they are easily installed.

Model	Serial Number	Item	Plate Thickness	Reinforcing Wear Plate
816	41S, 51K	Wear Plate	8 mm (0.31 in)	3J-3141
824	88H	Wear Plate	12 mm (0.47 in)	6J-0164 (2)
		Wear Plate	12 mm (0.47 in)	2J-8523 (4)
824C	2HP, 64G	Wear Plate	20 mm (0.79 in)	5J-2663
		Pusher Plate	20 mm (0.79 in)	4J-5622
		Wear Plate	20 mm (0.79 in)	4J-5622
824F	93G	Wear Plate	8 mm (0.31 in)	3J-3141
824G		Wear Plate	20 mm (0.79 in)	5J-2663
825	89X,, 93G	Wear Plate	8 mm (0.31 in)	3J-3141
826	97X,, 90K	Wear Plate	8 mm (0.31 in)	3J-3141
834C	64G	Pusher Plate	20 mm (0.79 in)	4J-5622
		Wear Plate	20 mm (0.79 in)	4J-5622
	96G	Wear Plate	8 mm (0.31 in)	3J-3142
835	27K	Wear Plate	8 mm (0.31 in)	3J-3141

# Compact Wheel Loader – Compact Construction Equipment

Model	Bucket Type	Bucket Width	Bolt-on Teeth	Bolt-on Edge	Bucket Assembly	Rated Capacity	Base Edge	LH	RH	Rear Wear Plate
902	General Purpose	1770 mm (70 in)	150-8368	150-8369	138-8941	0.2 m <sup>3</sup> (0.8 yd <sup>3</sup> )	138-8938	9R-5205	9R-5206	152-1096
	Multi-Purpose	1770 mm (70 in)	150-8370	150-8371	138-8912	0.2 m <sup>3</sup> (0.8 yd <sup>3</sup> )	138-8938	9R-5205	9R-5206	
	Light Materials	1880 mm (74 in)		152-2005	149-9261	0.3 m <sup>3</sup> (1.3 yd <sup>3</sup> )	138-8932	9R-5205	9R-5206	151-5131
	Stone Sieve	1770 mm (70 in)	152-2008	152-2009	148-8412	0.2 m <sup>3</sup> (0.8 yd <sup>3</sup> )	160-5334	9R-5205	9R-5206	
	High Dump	1770 mm (70 in)	152-5214	152-1998	150-1917	0.2 m <sup>3</sup> (0.8 yd <sup>3</sup> )	138-8938	9R-5205	9R-5206	
	Material Handling Grapple	1880 mm (74 in)		186-0152	184-3268		138-8932			151-5131
	General Purpose	1880 mm (74 in)	150-8385	150-8386	138-8931	0.25 m <sup>3</sup> (1.0 yd <sup>3</sup> )	138-8932	9R-5205	9R-5206	151-5131
	Multi-Purpose	1880 mm (74 in)	150-8387	150-8388	138-8914	0.23 m <sup>3</sup> (0.9 yd <sup>3</sup> )	138-8932	9R-5205	9R-5206	
	Light Materials	1940 mm (76 in)		152-2006	147-3152	0.41 m <sup>3</sup> (1.6 yd <sup>3</sup> )	152-1051	9R-5205	9R-5206	152-1097
	Stone Sieve	1880 mm (74 in)	152-2010	152-2011	148-5385	0.23 m <sup>3</sup> (0.9 yd <sup>3</sup> )	160-5335	9R-5205	9R-5206	
906	High Dump	1880 mm (74 in)	152-5215	152-1999	141-4990	0.23 m <sup>3</sup> (0.9 yd <sup>3</sup> )	138-8932	9R-5205	9R-5206	
	Side Dump	1880 mm (74 in)	152-2001	152-2002	141-7263	0.23 m <sup>3</sup> (0.9 yd <sup>3</sup> )	138-8932	9R-5205	9R-5206	
	Material Handling Grapple	1880 mm (74 in)		186-0152	184-3268		138-8932			151-5131
	General Purpose	2060 mm (81 in)	150-8389	150-8390	138-8905	0.33 m <sup>3</sup> (1.3 yd <sup>3</sup> )	138-8937	9R-5205	9R-5206	152-1098
	Multi-Purpose	2060 mm (81 in)	150-8391	150-8392	138-8916	0.31 m <sup>3</sup> (1.2 yd <sup>3</sup> )	147-1040	9R-5205	9R-5206	
	Light Materials	2060 mm (81 in)		152-2007	147-3153	0.51 m <sup>3</sup> (2.0 yd <sup>3</sup> )	138-8937	9R-5205	9R-5206	152-1098
	Stone Sieve	2060= mm (81 in)	152-2012	152-2013	148-5386	0.31 m <sup>3</sup> (1.2 yd <sup>3</sup> )	138-8937	9R-5205	9R-5206	
	High Dump	2060 mm (81 in)	152-5216	152-2000	141-4992	0.31 m <sup>3</sup> (1.2 yd <sup>3</sup> )	138-8937	9R-5205	9R-5206	
	Side Dump	2060 mm (81 in)	152-2003	152-2004	141-7265	0.31 m <sup>3</sup> (1.2 yd <sup>3</sup> )	138-8937	9R-5205	9R-5206	
	Material Handling Grapple	2060 mm (81 in)		186-0154	186-0153		138-8937			152-1098
908	General Purpose	2060 mm (81 in)	150-8389	150-8390	138-8905	0.33 m <sup>3</sup> (1.3 yd <sup>3</sup> )	138-8937	9R-5205	9R-5206	152-1098
	Multi-Purpose	2060 mm (81 in)	150-8391	150-8392	138-8916	0.31 m <sup>3</sup> (1.2 yd <sup>3</sup> )	147-1040	9R-5205	9R-5206	
	Light Materials	2060 mm (81 in)		152-2007	147-3153	0.51 m <sup>3</sup> (2.0 yd <sup>3</sup> )	138-8937	9R-5205	9R-5206	152-1098
	Stone Sieve	2060= mm (81 in)	152-2012	152-2013	148-5386	0.31 m <sup>3</sup> (1.2 yd <sup>3</sup> )	138-8937	9R-5205	9R-5206	
	High Dump	2060 mm (81 in)	152-5216	152-2000	141-4992	0.31 m <sup>3</sup> (1.2 yd <sup>3</sup> )	138-8937	9R-5205	9R-5206	
	Side Dump	2060 mm (81 in)	152-2003	152-2004	141-7265	0.31 m <sup>3</sup> (1.2 yd <sup>3</sup> )	138-8937	9R-5205	9R-5206	
	Material Handling Grapple	2060 mm (81 in)		186-0154	186-0153		138-8937			152-1098

# Compact Wheel Loader

## Compact Wheel Loader Tips & Edges



### Bolt-On Unitooth

- Improves penetration where breakage is not a problem.
- Tip and adapter are one integrated piece for easy installation and lower initial costs.
- For use in nonabrasive materials.

Model	Unitooth	Bolts	Nuts
902, 906, 908	132-4720 (7)	159-2953 (14)	8T-4778 (14)

### Bolt-On Edges

Model	Edges	Bolts	Nuts
902	132-4723	159-2953 (13)	8T-4778 (13)
906	132-4724	159-2953 (13)	8T-4778 (13)
908	132-4725	159-2953 (13)	8T-4778 (13)



## Mini-Hex Buckets

Model	Bucket Type	Bucket Width	Bucket Group	Bucket Assembly	Rated Capacity	Base Edge <sup>(1)</sup>	Number of Teeth	Bolt-on Uniteeth	Bolts	Nuts	Sidecutters <sup>(2)</sup>	
											LH	RH
302.5 303.5	Digging	260 mm (10 in)	176-7283 (3)	179-6704 (3)	0.035 m <sup>3</sup> (0.046 yd <sup>3</sup> )	153-7873	3	135-9390 (3)	159-8839 (6)	8T-4778 (6)	135-9376	135-9377
		260 mm (10 in)	153-7848	153-7849	0.035 m <sup>3</sup> (0.046 yd <sup>3</sup> )	153-7873	3	135-9390 (3)	159-8839 (6)	8T-4778 (6)	135-9376	135-9377
301.6 301.8	Digging	300 mm (12 in)	153-7851	153-7852	0.041 m <sup>3</sup> (0.053 yd <sup>3</sup> )	153-7874	3	135-9390 (3)	159-8839 (6)	8T-4778 (6)	135-9376	135-9377
		400 mm (16 in)	153-7854	153-7855	0.064 m <sup>3</sup> (0.070 yd <sup>3</sup> )	153-7875	3	135-9390 (3)	159-8839 (6)	8T-4778 (6)	135-9376	135-9377
304.5	Digging	457 mm (18 in)	190-7390	190-7392	0.065 m <sup>3</sup> (0.085 yd <sup>3</sup> )	190-7394	3	135-9390 (3)	159-8839 (6)	8T-4778 (6)	135-9376	135-9377
		500 mm (20 in)	153-7857	153-7858	0.073 m <sup>3</sup> (0.095 yd <sup>3</sup> )	153-7876	4	135-9390 (4)	159-8839 (8)	8T-4778 (8)	135-9376	135-9377
301.5 301.6 301.8	Digging	600 mm (24 in)	153-7860	153-7861	0.092 m <sup>3</sup> (0.120 yd <sup>3</sup> )	153-7877	4	135-9390 (4)	159-8839 (8)	8T-4778 (8)	135-9376	135-9377
		800 mm (32 in)		153-7863	0.080 m <sup>3</sup> (0.105 yd <sup>3</sup> )	153-7878 (N/ S)						
301.5 301.6 301.8	Digging	1000 mm (40 in)		153-7865	0.102 m <sup>3</sup> (0.133 yd <sup>3</sup> )	153-7879 (N/ S)						
		1200 mm (47 in)		153-7867	0.116 m <sup>3</sup> (0.152 yd <sup>3</sup> )	153-7880 (N/ S)						
301.5 301.6 301.8	Digging	230 mm (9 in)	147-1014	147-1015	0.018 m <sup>3</sup> (0.023 yd <sup>3</sup> )	147-1033 (N/ S)	3	135-9380 (4) (3)	8T-4183 (6)	8T-4244 (6)	135-9378	135-9379
		300 mm (12 in)	147-1018	147-1017	0.018 m <sup>3</sup> (0.029 yd <sup>3</sup> )	147-1034 (N/ S)	3	135-9380 (4) (3)	8T-4183 (6)	8T-4244 (6)	135-9378	135-9379
301.5 301.6 301.8	Digging	400 mm (16 in)	147-1020	147-1021	0.033 m <sup>3</sup> (0.043 yd <sup>3</sup> )	147-1035 (N/ S)	3	135-9380 (4) (3)	8T-4183 (6)	8T-4244 (6)	135-9378	135-9379
		457 mm (18 in)	190-7387	190-7388	0.040 m <sup>3</sup> (0.052 yd <sup>3</sup> )	190-7389 (N/ S)	3	135-9380 (4) (3)	8T-4183 (6)	8T-4244 (6)	135-9378	135-9379
301.5 301.6 301.8	Digging	500 mm (20 in)	147-1023	147-1024	0.045 m <sup>3</sup> (0.059 yd <sup>3</sup> )	147-1036 (N/ S)	4	135-9380 (4) (4)	8T-4183 (8)	8T-4244 (8)	135-9378	135-9379
		600 mm (24 in)	147-1026	147-1027	0.056 m <sup>3</sup> (0.073 yd <sup>3</sup> )	147-1037 (N/ S)	4	135-9380 (4) (4)	8T-4183 (8)	8T-4244 (8)	135-9378	135-9379
304.5	Ditch Cleaning	800 mm (32 in)		147-1029	0.044 m <sup>3</sup> (0.057 yd <sup>3</sup> )	147-1038 (N/ S)						
		1000 mm (40 in)		147-1031	0.056 m <sup>3</sup> (0.073 yd <sup>3</sup> )	147-1039 (N/ S)						
304.5	Digging	300 mm (12 in)	188-4369 (3)	180-3627 (3)	0.058 m <sup>3</sup> (0.076 yd <sup>3</sup> )	180-3638 (N/ S)	3	135-8203 (3)	4F-3656 (6)	4K-0367 (6)	180-3639	180-3640
		300 mm (12 in)	180-3622	180-3627	0.058 m <sup>3</sup> (0.076 yd <sup>3</sup> )	180-3638 (N/ S)	3	135-8203 (3)	4F-3656 (6)	4K-0367 (6)	180-3639	180-3640
304.5	Digging	400 mm (16 in)	180-3623	180-3628	0.076 m <sup>3</sup> (0.099 yd <sup>3</sup> )	180-3647 (N/ S)	4	135-8203 (4)	4F-3656 (8)	4K-0367 (8)	180-3639	180-3640

- (N/S) — Non serviceable
- Please reference Information Release Memo (PELJ0617) (GET 0603 infocast) for bolt-on options.
- Includes 2 bucket mounting pins, 2 hydraulic fittings, and 4 retaining rings.
- Service replacement for 135-9380 factory tooth is 138-6410. Use 160-0018 flat head screw.

# Compact Construction Equipment

## Mini-Hex Buckets (Cont'd.)

Model	Bucket Type	Bucket Width	Bucket Group	Bucket Assembly	Rated Capacity	Base Edge <sup>(5)</sup>	Number of Teeth	Bolt-on Uniteeth	Bolts	Nuts	Sidecutters <sup>(6)</sup>	
											LH	RH
303.5	Digging	500 mm (20 in)	180-3624	180-3629	0.104 m <sup>3</sup> (0.136 yd <sup>3</sup> )	180-3648 (N/ S)	4	135-8203 (4)	4F-3656 (8)	4K-0367 (8)	180-3639	180-3640
	Digging	600 mm (24 in)	180-3625	180-3630	0.133 m <sup>3</sup> (0.174 yd <sup>3</sup> )	180-3649 (N/ S)	4	135-8203 (4)	4F-3656 (8)	4K-0367 (8)	180-3639	180-3640
	Digging	700 mm (28 in)	180-3626	180-3631	0.162 m <sup>3</sup> (0.212 yd <sup>3</sup> )	180-3650 (N/ S)	4	135-8203 (4)	4F-3656 (8)	4K-0367 (8)	180-3639	180-3640
	Ditch Cleaning	1000 mm (40 in)		180-1355	0.139 m <sup>3</sup> (0.182 yd <sup>3</sup> )	180-1365 (N/ S)						
	Ditch Cleaning	1300 mm (51 in)		180-1356	0.184 m <sup>3</sup> (0.241 yd <sup>3</sup> )	180-1366 (N/ S)						
	Ditch Cleaning	1600 mm (63 in)		180-1357	0.229 m <sup>3</sup> (0.299 yd <sup>3</sup> )	180-1367 (N/ S)						
	Digging	300 mm (12 in)	171-2759	171-2760	0.049 m <sup>3</sup> (0.065 yd <sup>3</sup> )	174-2141 (N/ S)	3	135-9390 (3)	159-8839 (6)	8T-4778 (6)	174-2133	174-2134
	Digging	400 mm (16 in)	171-2761	171-2762	0.065 m <sup>3</sup> (0.085 yd <sup>3</sup> )	174-2152 (N/ S)	3	135-9390 (3)	159-8839 (6)	8T-4778 (6)	174-2133	174-2134
	Digging	500 mm (20 in)	171-2763	171-2764	0.089 m <sup>3</sup> (0.116 yd <sup>3</sup> )	174-2154 (N/ S)	4	135-9390 (4)	159-8839 (8)	8T-4778 (8)	174-2133	174-2134
	Digging	600 mm (24 in)	171-2767	171-2768	0.113 m <sup>3</sup> (0.148 yd <sup>3</sup> )	174-2154 (N/ S)	4	135-9390 (4)	159-8839 (8)	8T-4778 (8)	174-2133	174-2134
	Ditch Cleaning	650 mm (26 in)	171-2769	171-2770	0.126 m <sup>3</sup> (0.165 yd <sup>3</sup> )	174-2155 (N/ S)	4	135-9390 (4)	159-8839 (8)	8T-4778 (8)	174-2133	174-2134
	Ditch Cleaning	1000 mm (40 in)		174-2460	0.111 m <sup>3</sup> (0.145 yd <sup>3</sup> )	153-7879 (N/ S)						
	Ditch Cleaning	1200 mm (47 in)		174-2461	0.135 m <sup>3</sup> (0.177 yd <sup>3</sup> )	153-7880 (N/ S)						
Ditch Cleaning	1400 mm (55 in)		174-1811	0.159 m <sup>3</sup> (0.208 yd <sup>3</sup> )	173-9770 (N/ S)							

5 (N/S) — Non serviceable

6 Please reference Information Release Memo (PELJ0617) (GET 0603 infocast) for bolt-on options.

# Skid Steer Loaders - Compact Construction Equipment

## Skid Steer Loaders/Work Tools



Size	Toothbar	Bucket Assembly	Bucket Arrangement	Bolts	Nuts	Fasteners	
		(GP) <sup>(1)</sup>	(MP) <sup>(2)</sup>			Lockwashers	Washers
1525 mm (60 in)	136-8734	165-6152	154-5004	8S-9093 (2)	2J-3507(2)	3B-4516 (2)	5P-8250 (2)
1675 mm (66 in)	136-8735	165-6153	154-5008	8S-9093 (2)	2J-3507(2)	3B-4516 (2)	5P-8250 (2)
1830 mm (72 in)	136-8736	165-6154	154-5010	8S-9093 (2)	2J-3507(2)	3B-4516 (2)	5P-8250 (2)
1980 mm (78 in)	217-4878	199-7721	199-8321	8S-9093 (2)	2J-3507(2)	3B-4516 (2)	5P-8250 (2)
2135 mm (84 in)	275-5427	292-9270	293-0139	8S-9093 (2)	2J-3507(2)	3B-4516 (2)	5P-8250 (2)



Bucket	Edge Type	Size	Bucket Assembly	Bucket Arrangement	Bulldozer Assembly	Clam Assembly	Tooth	Base Edge	Cutting Edge	Cutting Edge Thickness	Bolt	Nut	Screw	Locknut	
Multi-Purpose	Base Edge	1525 mm (60 in)	154-5004		159-5345 (3)			154-5037							
	Base Edge	1525 mm (60 in)	154-5004	154-5045		149-4232		149-5435							
	Bolt-on Edge	1525 mm (60 in)	154-5004	154-5045					135-9394	16 mm (0.63 in)			159-2953 (8)	8T-4778 (8)	
	Bolt-on Teeth	1525 mm (60 in)	154-5004	154-5045			132-4720		174-7966	16 mm (0.63 in)	4F-3654 (8)	4K-0367 (8)	159-2953 (2)	8T-4778 (2)	
	Bolt-on Teeth	1525 mm (60 in)	154-5004	154-5045			132-4720		174-7972	19 mm (0.73 in)	4F-3654 (8)	4K-0367 (8)	159-2953 (2)	8T-4778 (2)	
	Base Edge	1675 mm (66 in)	154-5008			159-5346 (4)			154-5059						
	Base Edge	1675 mm (66 in)	154-5008	154-5047			154-5053		149-5436						
	Bolt-on Edge	1675 mm (66 in)	154-5008	154-5048						135-9395	16 mm (0.63 in)			159-2953 (8)	8T-4778 (8)
	Bolt-on Teeth	1675 mm (66 in)	154-5008	154-5048				132-4720		174-7967	16 mm (0.63 in)	4F-3654 (8)	4K-0367 (8)	159-2953 (2)	8T-4778 (2)
	Bolt-on Teeth	1675 mm (66 in)	154-5008	154-5048				132-4720		174-7973	19 mm (0.75 in)	4F-3654 (8)	4K-0367 (8)	159-2953 (2)	8T-4778 (2)

- 1 (GP) – General Purpose
- 2 (MP) – Multi-Purpose
- 3 Discontinued, replaced by: 149-3477
- 4 Discontinued, replaced by: 154-5063

# Skid Steer Loaders - Compact Construction Equipment

## Skid Steer Loaders/Work Tools (Cont'd.)

Bucket	Edge Type	Size	Bucket Assembly	Bucket Arrangement	Bulldozer Assembly	Clam Assembly	Tooth	Base Edge	Cutting Edge	Cutting Edge Thickness	Bolt	Nut	Screw	Locknut
	Base Edge	1830 mm (72 in)	154-5010		154-5080			154-5077						
	Base Edge	1830 mm (72 in)	154-5010	154-5049		154-5070		149-5437						
	Bolt-on Edge	1830 mm (72 in)	154-5010	154-5050					135-9394	16 mm (0.63 in)			159-2953 (11)	8T-4778 (11)
	Bolt-on Teeth	1830 mm (72 in)	154-5010	154-5050			132-4720		174-7968	16 mm (0.63 in)	4F-3654 (11)	4K-0367 (11)	159-2953 (2)	8T-4778 (2)
	Bolt-on Teeth	1830 mm (72 in)	154-5010	154-5050			132-4720		174-7974	19 mm (0.73 in)	4F-3654 (11)	4K-0367 (11)	159-2953 (2)	8T-4778 (2)

## Skid Steer Loaders/Work Tools

Bucket	Edge Type	Size	Bucket Assembly	Bucket Arrangement	Tooth	Base Edge	Cutting Edge	Cutting Edge Thickness	Bolt	Nut	Screw	Locknut
General Purpose	Base Edge	1525 mm (60 in)	165-6152			149-5435						
	Bolt-on Edge	1525 mm (60 in)	165-6152	152-0224			135-9394	16.0 mm (0.63 in)			159-2953 (8)	8T-4778 (8)
	Bolt-on Teeth	1525 mm (60 in)	165-6152	152-0223	132-4720		174-7966	16.0 mm (0.63 in)	4F-3654 (8)	4K-0367 (8)	159-2953 (2)	8T-4778 (2)
	Bolt-on Teeth	1525 mm (60 in)	165-6152	152-0223	132-4720		174-7972	19.0 mm (0.75 in)	4F-3654 (8)	4K-0367 (8)	159-2953 (2)	8T-4778 (2)
	Base Edge	1675 mm (66 in)	165-6153			149-5436						
	Bolt-on Edge	1675 mm (66 in)	165-6153	152-0226			135-9395	16.0 mm (0.63 in)			159-2953 (8)	8T-4778 (8)
	Bolt-on Teeth	1675 mm (66 in)	165-6153	152-0225	132-4720		174-7967	16.0 mm (0.63 in)	4F-3654 (8)	4K-0367 (8)	159-2953 (2)	8T-4778 (2)
	Bolt-on Teeth	1675 mm (66 in)	165-6153	152-0225	132-4720		174-7973	19.0 mm (0.75 in)	4F-3654 (8)	4K-0367 (8)	159-2953 (2)	8T-4778 (2)
	Base Edge	1830 mm (72 in)	165-6154				149-5437					
	Bolt-on Edge	1830 mm (72 in)	165-6154	152-0229			135-9396	16.0 mm (0.63 in)			159-2953 (11)	8T-4778 (11)
	Bolt-on Teeth	1830 mm (72 in)	165-6154	152-0228	132-4720		174-7968	16.0 mm (0.63 in)	4F-3654 (11)	4K-0367 (11)	159-2953 (2)	8T-4778 (2)
	Bolt-on Teeth	1830 mm (72 in)	165-6154	152-0228	132-4720		174-7974	19.0 mm (0.75 in)	4F-3654 (11)	4K-0367 (11)	159-2953 (2)	8T-4778 (2)
Dirt	Base Edge	1370 mm (54 in)	165-6155			149-5434						
	Bolt-on Edge	1370 mm (54 in)	165-6155	152-0230			135-9393	12.7 mm (0.50 in)			159-2953 (8)	8T-4778 (8)
	Bolt-on Edge	1370 mm (54 in)	165-6155	152-0230			174-7965	16.0 mm (0.63 in)	4F-3654 (6)	4K-0367 (6)		
	Bolt-on Edge	1370 mm (54 in)	165-6155	152-0230			174-7971	19.0 mm (0.75 in)	4F-3654 (6)	4K-0367 (6)		
	Base Edge	1525 mm (60 in)	165-6156			149-5435						
	Bolt-on Edge	1525 mm (60 in)	165-6156	152-0231			135-9394	16.0 mm (0.63 in)			159-2953 (8)	8T-4778 (8)
	Bolt-on Edge	1525 mm (60 in)	165-6156	152-0231			174-7966	16.0 mm (0.63 in)	4F-3654 (6)	4K-0367 (6)		

# Skid Steer Loaders - Compact Construction Equipment

## Skid Steer Loaders/Work Tools (Cont'd.)

Bucket	Edge Type	Size	Bucket Assembly	Bucket Arrangement	Tooth	Base Edge	Cutting Edge	Cutting Edge Thickness	Bolt	Nut	Screw	Locknut
	Bolt-on Edge	1525 mm (60 in)	165-6156	152-0231			174-7972	19.0 mm (0.75 in)	4F-3654 (6)	4K-0367 (6)		
	Base Edge	1675 mm (66 in)	165-6157			149-5436						
	Bolt-on Edge	1675 mm (66 in)	165-6157	152-0232			135-9395	16.0 mm (0.63 in)			159-2953 (8)	8T-4778 (8)
	Bolt-on Edge	1675 mm (66 in)	165-6157	152-0232			174-7967	16.0 mm (0.63 in)	4F-3654 (6)	4K-0367 (6)		
	Bolt-on Edge	1675 mm (66 in)	165-6157	152-0232			174-7973	19.0 mm (0.75 in)	4F-3654 (6)	4K-0367 (6)		
Utility	Base Edge	1525 mm (60 in)	165-8835			149-5435						
	Bolt-on Edge	1525 mm (60 in)	165-8835	165-8836			135-9394	16.0 mm (0.63 in)			159-2953 (8)	8T-4778 (8)
	Bolt-on Edge	1525 mm (60 in)	165-8835	165-8836			174-7966	16.0 mm (0.63 in)	4F-3654 (6)	4K-0367 (6)		
	Bolt-on Edge	1525 mm (60 in)	165-8835	165-8836			174-7972	19.0 mm (0.75 in)	4F-3654 (6)	4K-0367 (6)		
	Base Edge	1675 mm (66 in)	165-8746			149-5436						
	Bolt-on Edge	1675 mm (66 in)	165-8746	165-8747			135-9395	16.0 mm (0.63 in)			159-2953 (8)	8T-4778 (8)
	Bolt-on Edge	1675 mm (66 in)	165-8746	165-8747			174-7967	16.0 mm (0.63 in)	4F-3654 (6)	4K-0367 (6)		
	Bolt-on Edge	1675 mm (66 in)	165-8746	165-8747			174-7973	19.0 mm (0.75 in)	4F-3654 (6)	4K-0367 (6)		
	Base Edge	1830 mm (72 in)	165-8747			149-5437						
	Bolt-on Edge	1830 mm (72 in)	165-8747	165-8778			135-9396	16.0 mm (0.63 in)			159-2953 (8)	8T-4778 (8)
	Bolt-on Edge	1830 mm (72 in)	165-8747	165-8778			174-7968	16.0 mm (0.63 in)	4F-3654 (6)	4K-0367 (6)		
	Bolt-on Edge	1830 mm (72 in)	165-8747	165-8778			174-7974	19.0 mm (0.75 in)	4F-3654 (6)	4K-0367 (6)		
	Light Material	Base Edge	1830 mm (72 in)	164-7414			149-5437					
Bolt-on Edge		1830 mm (72 in)	164-7414	164-7412			135-9396	16.0 mm (0.63 in)			159-2953 (11)	8T-4778 (11)
Bolt-on Edge		1830 mm (72 in)	164-7414	164-7412			174-7968	16.0 mm (0.63 in)	4F-3654 (11)	4K-0367 (11)		
Bolt-on Edge		1830 mm (72 in)	164-7414	164-7412			174-7974	19.0 mm (0.75 in)	4F-3654 (11)	4K-0367 (11)		
Base Edge		1980 mm (78 in)	164-7415			167-7433 (5)						
Bolt-on Edge		1980 mm (78 in)	164-7415	164-7413			135-9397	16.0 mm (0.63 in)			159-2953 (11)	8T-4778 (11)
Bolt-on Edge		1980 mm (78 in)	164-7415	164-7413			174-7969	16.0 mm (0.63 in)	4F-3654 (11)	4K-0367 (11)		
Bolt-on Edge		1980 mm (78 in)	164-7415	164-7413			174-7975	19.0 mm (0.75 in)	4F-3654 (11)	4K-0367 (11)		

# Skid Steer Loaders - Compact Construction Equipment

## Skid Steer Loaders/Work Tools (Cont'd.)

Size	Toothbar	Bucket Assembly	Bucket Arrangement	Cutting Edge	Bolts	Nuts	Fasteners	
		(GP) <sup>(6)</sup>	(MP) <sup>(7)</sup>				Lockwashers	Washers
1525 mm (60 in)	159-0330	165-6152	154-5004	135-9394	8S-9093 (2)	2J-3507(2)	3B-4516 (2)	5P-8250 (2)
1675 mm (66 in)	159-0340	165-6153	154-5008	135-9395	8S-9093 (2)	2J-3507 (2)	3B-4516 (2)	5P-8250 (2)
1830 mm (72 in)	159-0350	165-6154	154-5010	135-9396	8S-9093 (2)	2J-3507(2)	3B-4516 (2)	5P-8250 (2)
1980 mm (78 in)	195-9160	199-7721	199-8321	135-9387	8S-9093 (2)	2J-3507 (2)	3B-4516 (2)	5P-8250 (2)
2135 mm (84 in)	264-2084	296-8192	296-8057	195-7124	8S-9093 (2)	2J-3507(2)	3B-4516 (2)	5P-8250 (2)

Bucket	Edge Type	Size	Bucket Assembly	Bucket Arrangement	Base Edge	Cutting Edge	Cutting Edge Thickness	Bolt	Nut	Screw	Locknut
Industrial Grapple	Base Edge	1525 mm (60 in)	169-8941	157-7223	149-5435						
	Bolt-on Edge	1525 mm (60 in)	157-7223	157-7226		135-9394	16 mm (0.63 in)			159-2953 (8)	8T-4778 (8)
	Bolt-on Edge	1525 mm (60 in)	157-7223	157-7226		174-7966	16 mm (0.63 in)	4F-3654 (8)	4K-0367 (8)		
	Bolt-on Edge	1525 mm (60 in)	157-7223	157-7226		174-7972	19 mm (0.75 in)	4F-3654 (8)	4K-0367 (8)		
	Base Edge	1675 mm (66 in)	169-8942	157-7224	149-5436						
	Bolt-on Edge	1675 mm (66 in)	157-7224	157-7227		135-9395	16 mm (0.63 in)			159-2953 (8)	8T-4778 (8)
	Bolt-on Edge	1675 mm (66 in)	157-7224	157-7227		174-7967	16 mm (0.63 in)	4F-3654 (8)	4K-0367 (8)		
	Bolt-on Edge	1675 mm (66 in)	157-7224	157-7227		174-7973	19 mm (0.75 in)	4F-3654 (8)	4K-0367 (8)		
	Base Edge	1830 mm (72 in)	169-8943	157-7225	149-5437						
	Bolt-on Edge	1830 mm (72 in)	157-7225	157-7226		135-9396	16 mm (0.63 in)			159-2953 (11)	8T-4778 (11)
	Bolt-on Edge	1830 mm (72 in)	157-7225	157-7226		174-7968		4F-3654 (11)	4K-0367 (11)		
	Bolt-on Edge	1830 mm (72 in)	157-7225	157-7226		174-7974		4F-3654 (11)	4K-0367 (11)		

Bucket Type	Edge Type	Size	Blade GP	Blade Arrangement	Blade Assembly	Cutting Edge	Cutting Edge Length	Bolt	Nut	Screw	Locknut	Washer	End Plate
Angle Dozer	Cutting Edge	1830 mm (72.0 in)		177-1989		135-9396	1893 mm (74.5 in)			159-2953(6)	8T-4778 (6)		
	Non-metallic Cutting Edge	1830 mm (72.0 in)		177-1989		165-8477		8T-4140 (6)			8T-4778 (6)	165-7095 (6)	
	Cutting Edge	2070 mm (81.5 in)		177-1990		149-5740 (8)	2134 mm (84.0 in)			159-2953(6)	8T-4778 (6)		
	Non-metallic Cutting Edge	2070 mm (81.5 in)		177-1990		165-8478		8T-4140 (6)			8T-4778 (6)	165-7095 (6)	
	Cutting Edge	2320 mm (90.5 in)	186-5671	208-3331 <sup>(9)</sup>	166-1686 (10)	143-3088	1630 mm (64.1 in)	3F-5108 (17)	4K-0367 (17)			5P-8247 (17)	159-0372 (2)

6 (GP) – General Purpose

7 (MP) – Multi-Purpose

8 Discontinued, replaced by: 195-5124

9 Discontinued, replaced by: Non serviceable

10 Discontinued, replaced by: 235-3852

# Skid Steer Loaders - Compact Construction Equipment

## Skid Steer Loaders/Work Tools (Cont'd.)

Bucket Type	Edge Type	Size	Blade GP	Blade Arrangement	Blade Assembly	Cutting Edge	Cutting Edge Length	Bolt	Nut	Screw	Locknut	Washer	End Plate
	Cutting Edge	2320 mm (90.5 in)	186-5671	183-1769 <sup>(11)</sup>	166-1686 (12)	143-3088	1630 mm (64.1 in)	3F-5108 (17)	4K-0367 (17)			5P-8247 (17)	159-0372 (2)
	Cutting Edge	2320 mm (90.5 in)	186-5671	169-7646	166-1686 (12)	143-3088	1630 mm (64.1 in)	3F-5108 (17)	4K-0367 (17)			5P-8247 (17)	159-0372 (2)
	Cutting Edge	2320 mm (90.5 in)	186-5671	208-3297 <sup>(11)</sup>	166-1686 (12)	143-3088	1630 mm (64.1 in)	3F-5108 (17)	4K-0367 (17)			5P-8247 (17)	159-0372 (2)
	Cutting Edge	2470 mm (94.4 in)	208-2038	208-3277 <sup>(11)</sup>	166-1687 (13)	143-3089	1730 mm (68.0 in)	3F-5108 (17)	4K-0367 (17)			5P-8247 (17)	195-7193(2)

11 Discontinued, replaced by: Non serviceable

12 Discontinued, replaced by: 235-3852

13 Discontinued, replaced by: 235-3856

# Excavators

## Excavators Bucket Base Edge Assemblies

Base Edge Thickness	Bucket Width	Base Edge Assembly <sup>(1)</sup>	No. of Teeth	Adapters (qty)			Tip Size
				(LH)	(CTR)	(RH)	
22 mm (0.87 in)	305 mm (12 in)	121-9162	3	6Y-3224	6Y-3224	6Y-3224	J225
22 mm (0.87 in)	330 mm (13 in)	231-2988	3	6Y-3224	6Y-3224	6Y-3224	J225
22 mm (0.87 in)	457 mm (18 in)	158-3958	3	6Y-3224	6Y-3224	6Y-3224	J225
22 mm (0.87 in)	610 mm (24 in)	153-1558	4	6Y-3224	6Y-3224 (2)	6Y-3224	J225
22 mm (0.87 in)	762 mm (30 in)	153-1583	5	6Y-3224	6Y-3224 (3)	6Y-3224	J225
22 mm (0.87 in)	914 mm (36 in)	153-1585	6	6Y-3224	6Y-3224 (4)	6Y-3224	J225
32 mm (1.25 in)	457 mm (18 in)	226-1311	3	119-3253	119-3253	119-3253	J250
32 mm (1.25 in)	610 mm (24 in)	229-7650	4	119-3253	119-3253 (2)	119-3253	J250
32 mm (1.25 in)	635 mm (25 in)	241-0283	4	119-3253	119-3253 (2)	119-3253	J250
32 mm (1.25 in)	686 mm (27 in)	127-6104	4	119-3253	119-3253 (2)	119-3253	J250
32 mm (1.25 in)	762 mm (30 in)	193-4786	4	119-3253	119-3253 (2)	119-3253	J250
32 mm (1.25 in)	762 mm (30 in)	229-7653	5	119-3253	119-3253 (3)	119-3253	J250
32 mm (1.25 in)	800 mm (31.5 in)	241-0282	5	119-3253	119-3253 (3)	119-3253	J250
32 mm (1.25 in)	813 mm (32 in)	7Y-6664 <sup>(2)</sup>	5	119-3253	119-3253 (3)	119-3253	J250
32 mm (1.25 in)	840 mm (33 in)	127-6106	4	119-3253	119-3253 (2)	119-3253	J250
32 mm (1.25 in)	914 mm (36 in)	106-6857 <sup>(2)</sup>	5	119-3253	119-3253 (3)	119-3253	J250
32 mm (1.25 in)	914 mm (36 in)	190-3332	5	119-3253	119-3253 (3)	119-3253	J250
32 mm (1.25 in)	914 mm (36 in)	229-7656	6	119-3253	119-3253 (4)	119-3253	J250
32 mm (1.25 in)	990 mm (39 in)	127-6108	5	119-3253	119-3253 (3)	119-3253	J250
32 mm (1.25 in)	1067 mm (42 in)	229-7659	7	119-3253	119-3253 (5)	119-3253	J250
32 mm (1.25 in)	1145 mm (45 in)	127-6110	6	119-3253	119-3253 (4)	119-3253	J250
32 mm (1.25 in)	1219 mm (48 in)	229-7662	7	119-3253	119-3253 (5)	119-3253	J250
32 mm (1.25 in)	1295 mm (51 in)	127-6112	6	119-3253	119-3253 (4)	119-3253	J250
35 mm (1.37 in)	559 mm (22 in)	276-5880 <sup>(2)</sup>	3	229-7086	220-9084	229-7085	K80
35 mm (1.37 in)	610 mm (24 in)	279-3909 <sup>(2)</sup>	3	229-7086	220-9084	229-7085	K80
35 mm (1.37 in)	610 mm (24 in)	239-2810	3	220-9086	220-9084	220-9085	K80
35 mm (1.37 in)	610 mm (24 in)	240-9602	3	220-9086	220-9084	220-9085	K80
35 mm (1.37 in)	610 mm (24 in)	279-4080	3	232-2086	220-9084	232-2085	K80
35 mm (1.37 in)	610 mm (24 in)	232-0022 <sup>(3)</sup>	1		220-9084		K80
35 mm (1.37 in)	610 mm (24 in)	253-0132 <sup>(3)</sup>	2		220-9084 (2)		K80
35 mm (1.37 in)	711 mm (28 in)	276-5881 <sup>(2)</sup>	4	229-7086	220-9084 (2)	229-7085	K80
35 mm (1.37 in)	762 mm (30 in)	279-3910 <sup>(2)</sup>	3	229-7086	220-9084	229-7085	K80
35 mm (1.37 in)	762 mm (30 in)	239-2774	4	220-9086	220-9084 (2)	220-9085	K80
35 mm (1.37 in)	762 mm (30 in)	240-9603	4	220-9086	220-9084 (2)	220-9085	K80
35 mm (1.37 in)	762 mm (30 in)	279-4081	4	232-2086	220-9084 (2)	232-2085	K80
35 mm (1.37 in)	762 mm (30 in)	232-0023 <sup>(3)</sup>	2		220-9084 (2)		K80
35 mm (1.37 in)	813 mm (32 in)	279-3911 <sup>(2)</sup>	3	229-7086	220-9084	229-7085	K80
35 mm (1.37 in)	864 mm (34 in)	276-5882 <sup>(2)</sup>	5	229-7086	220-9084 (3)	229-7085	K80
35 mm (1.37 in)	914 mm (36 in)	279-3912 <sup>(2)</sup>	4	229-7086	220-9084 (2)	229-7085	K80
35 mm (1.37 in)	914 mm (36 in)	239-2615	5	220-9086	220-9084 (3)	220-9085	K80
35 mm (1.37 in)	914 mm (36 in)	239-2619	5	220-9086	220-9084 (3)	220-9085	K80
35 mm (1.37 in)	914 mm (36 in)	240-9604	5	220-9086	220-9084 (3)	220-9085	K80
35 mm (1.37 in)	914 mm (36 in)	279-4082	5	232-2086	220-9084 (3)	232-2085	K80
35 mm (1.37 in)	914 mm (36 in)	232-0024 <sup>(3)</sup>	3		220-9084 (3)		K80

- 1 Consists of base edge and adapters
- 2 Straight corner adapters
- 3 Upgrade/conversion – no corner adapters



## Excavators Bucket Base Edge Assemblies (Cont'd.)

Base Edge Thickness	Bucket Width	Base Edge Assembly <sup>(4)</sup>	No. of Teeth	Adapters (qty)			Tip Size
				(LH)	(CTR)	(RH)	
35 mm (1.37 in)	1016 mm (40 in)	271-5409 <sup>(5)</sup>	4	229-7086	220-9084 (2)	229-7085	K80
35 mm (1.37 in)	1016 mm (40 in)	276-5883 <sup>(5)</sup>	6	229-7086	220-9084 (4)	229-7085	K80
35 mm (1.37 in)	1067 mm (42 in)	239-2764	5	220-9086	220-9084 (3)	220-9085	K80
35 mm (1.37 in)	1067 mm (42 in)	240-9605	5	220-9086	220-9084 (3)	220-9085	K80
35 mm (1.37 in)	1067 mm (42 in)	279-4083	5	232-2086	220-9084 (3)	232-2085	K80
35 mm (1.37 in)	1067 mm (42 in)	232-0025 <sup>(6)</sup>	3		220-9084 (3)		K80
35 mm (1.37 in)	1118 mm (44 in)	279-3913 <sup>(5)</sup>	4	229-7086	220-9084 (2)	229-7085	K80
35 mm (1.37 in)	1168 mm (46 in)	276-5884 <sup>(5)</sup>	7	229-7086	220-9084(5)	229-7085	K80
35 mm (1.37 in)	1219 mm (48 in)	271-5410 <sup>(5)</sup>	5	229-7086	220-9084(3)	229-7085	K80
35 mm (1.37 in)	1219 mm (48 in)	239-2784	6	220-9086	220-9084 (4)	220-9085	K80
35 mm (1.37 in)	1219 mm (48 in)	240-9606	6	220-9086	220-9084(4)	220-9085	K80
35 mm (1.37 in)	1219 mm (48 in)	279-4084	6	232-2086	220-9084 (4)	232-2085	K80
35 mm (1.37 in)	1219 mm (48 in)	232-0026 <sup>(6)</sup>	4		220-9084(4)		K80
35 mm (1.37 in)	1321 mm (52 in)	276-5885 <sup>(5)</sup>	8	229-7086	220-9084 (6)	229-7085	K80
35 mm (1.37 in)	1321 mm (52 in)	279-3914 <sup>(5)</sup>	5	229-7086	220-9084(3)	229-7085	K80
35 mm (1.37 in)	1372 mm (54 in)	240-9607	6	220-9086	220-9084 (4)	220-9085	K80
35 mm (1.37 in)	1372 mm (54 in)	279-4085	7	232-2086	220-9084(5)	232-2085	K80
35 mm (1.37 in)	1422 mm (56 in)	279-3915 <sup>(5)</sup>	5	229-7086	220-9084(3)	229-7085	K80
35 mm (1.37 in)	1524 mm (60 in)	292-8978 <sup>(5)</sup>	5	229-7086	220-9084(3)	229-7085	K80
40 mm (1.57 in)	559 mm (22 in)	276-5890 <sup>(5)</sup>	3	223-8096	220-9094	223-8095	K90
40 mm (1.57 in)	610 mm (24 in)	239-2819	3	220-9096	220-9094	220-9095	K90
40 mm (1.57 in)	610 mm (24 in)	239-2676	3	220-9096	220-9094	220-9095	K90
40 mm (1.57 in)	610 mm (24 in)	227-8740	3	220-9096	220-9094	220-9095	K90
40 mm (1.57 in)	610 mm (24 in)	279-4090	3	232-2096	220-9094	232-2095	K90
40 mm (1.57 in)	610 mm (24 in)	232-0027 <sup>(6)</sup>	1		220-9094		K90
40 mm (1.57 in)	711 mm (28 in)	276-5891 <sup>(5)</sup>	4	223-8096	220-9094 (2)	223-8095	K90
40 mm (1.57 in)	762 mm (30 in)	239-2818	4	220-9096	220-9094(2)	220-9095	K90
40 mm (1.57 in)	762 mm (30 in)	239-2634	4	220-9096	220-9094 (2)	220-9095	K90
40 mm (1.57 in)	762 mm (30 in)	228-6951	4	220-9096	220-9094(2)	220-9095	K90
40 mm (1.57 in)	762 mm (30 in)	279-4091	4	232-2096	220-9094 (2)	232-2095	K90
40 mm (1.57 in)	762 mm (30 in)	232-0028 <sup>(6)</sup>	2		220-9094(2)		K90
40 mm (1.57 in)	864 mm (34 in)	276-5892 <sup>(5)</sup>	5	223-8096	220-9094(3)	223-8095	K90
40 mm (1.57 in)	914 mm (36 in)	239-2716	5	220-9096	220-9094(3)	220-9095	K90
40 mm (1.57 in)	914 mm (36 in)	239-2545	5	220-9096	220-9094(3)	220-9095	K90
40 mm (1.57 in)	914 mm (36 in)	228-6952	5	220-9096	220-9094(3)	220-9095	K90
40 mm (1.57 in)	914 mm (36 in)	279-4092	5	232-2096	220-9094(3)	232-2095	K90
40 mm (1.57 in)	914 mm (36 in)	232-0029 <sup>(6)</sup>	3		220-9094(3)		K90
40 mm (1.57 in)	1016 mm (40 in)	276-5893 <sup>(5)</sup>	5	223-8096	220-9094(3)	223-8095	K90
40 mm (1.57 in)	1067 mm (42 in)	239-2792	5	220-9096	220-9094(3)	220-9095	K90
40 mm (1.57 in)	1067 mm (42 in)	239-2642	5	220-9096	220-9094(3)	220-9095	K90
40 mm (1.57 in)	1067 mm (42 in)	228-6953	5	220-9096	220-9094(3)	220-9095	K90
40 mm (1.57 in)	1067 mm (42 in)	279-4093	5	232-2096	220-9094(3)	232-2095	K90
40 mm (1.57 in)	1067 mm (42 in)	232-0030 <sup>(6)</sup>	3		220-9094(3)		K90
40 mm (1.57 in)	1168 mm (46 in)	276-5894 <sup>(5)</sup>	6	223-8096	220-9094 (4)	223-8095	K90

- 4 Consists of base edge and adapters
- 5 Straight corner adapters
- 6 Upgrade/conversion – no corner adapters

# Excavators

## Excavators Bucket Base Edge Assemblies (Cont'd.)

Base Edge Thickness	Bucket Width	Base Edge Assembly <sup>(7)</sup>	No. of Teeth	Adapters (qty)			Tip Size
				(LH)	(CTR)	(RH)	
40 mm (1.57 in)	1219 mm (48 in)	279-3916 <sup>(8)</sup>	4	223-8096	220-9094(2)	223-8095	K90
40 mm (1.57 in)	1219 mm (48 in)	239-2801	6	220-9096	220-9094 (4)	220-9095	K90
40 mm (1.57 in)	1219 mm (48 in)	239-2650	6	220-9096	220-9094(4)	220-9095	K90
40 mm (1.57 in)	1219 mm (48 in)	225-6813	6	220-9096	220-9094 (4)	220-9095	K90
40 mm (1.57 in)	1219 mm (48 in)	279-4094	6	232-2096	220-9094(4)	232-2095	K90
40 mm (1.57 in)	1219 mm (48 in)	238-3199 <sup>(9)</sup>	3		220-9094(3)		K90
40 mm (1.57 in)	1219 mm (48 in)	232-0031 <sup>(9)</sup>	4		220-9094 (4)		K90
40 mm (1.57 in)	1321 mm (52 in)	276-5895 <sup>(8)</sup>	7	223-8096	220-9094(5)	223-8095	K90
40 mm (1.57 in)	1372 mm (54 in)	235-2498	6	220-9096	220-9094 (4)	220-9095	K90
40 mm (1.57 in)	1372 mm (54 in)	279-4095	7	232-2096	220-9094(5)	232-2095	K90
40 mm (1.57 in)	1372 mm (54 in)	232-0032 <sup>(9)</sup>	5		220-9094(5)		K90
45 mm (1.77 in)	610 mm (24 in)	241-6724	3	220-9106	220-9104	220-9105	K100
45 mm (1.77 in)	610 mm (24 in)	279-4100	3	232-2106	220-9104	232-2105	K100
45 mm (1.77 in)	724 mm (28.5 in)	279-4121 <sup>(8)</sup>	3	232-0106	220-9104	232-0105	K100
45 mm (1.77 in)	762 mm (30 in)	241-6725	3	220-9106	220-9104	220-9105	K100
45 mm (1.77 in)	762 mm (30 in)	279-4101	3	232-2106	220-9104	232-2105	K100
45 mm (1.77 in)	762 mm (30 in)	232-0033 <sup>(9)</sup>	1		220-9104		K100
45 mm (1.77 in)	876 mm (34.5 in)	279-4122 <sup>(8)</sup>	4	232-0106	220-9104 (2)	232-0105	K100
45 mm (1.77 in)	914 mm (36 in)	241-6726	4	220-9106	220-9104 (2)	220-9105	K100
45 mm (1.77 in)	914 mm (36 in)	279-4102	4	232-2106	220-9104 (2)	232-2105	K100
45 mm (1.77 in)	914 mm (36 in)	232-0034 <sup>(9)</sup>	2		220-9104 (2)		K100
45 mm (1.77 in)	1029 mm (40.5 in)	279-4123 <sup>(8)</sup>	5	232-0106	220-9104 (3)	232-0105	K100
45 mm (1.77 in)	1067 mm (42 in)	241-6727	5	220-9106	220-9104 (3)	220-9105	K100
45 mm (1.77 in)	1067 mm (42 in)	279-4103	5	232-2106	220-9104 (3)	232-2105	K100
45 mm (1.77 in)	1067 mm (42 in)	232-0039 <sup>(9)</sup>	3		220-9104 (3)		K100
45 mm (1.77 in)	1181 mm (46.5 in)	279-4124 <sup>(8)</sup>	5	232-0106	220-9104 (3)	232-0105	K100
45 mm (1.77 in)	1219 mm (48 in)	241-6728	5	220-9106	220-9104 (3)	220-9105	K100
45 mm (1.77 in)	1219 mm (48 in)	279-4104	5	232-2106	220-9104 (3)	232-2105	K100
45 mm (1.77 in)	1219 mm (48 in)	232-0035 <sup>(9)</sup>	3		220-9104 (3)		K100
45 mm (1.77 in)	1334 mm (52.5 in)	279-4125 <sup>(8)</sup>	6	232-0106	220-9104 (4)	232-0105	K100
45 mm (1.77 in)	1372 mm (54 in)	241-6729	6	220-9106	220-9104 (4)	220-9105	K100
45 mm (1.77 in)	1372 mm (54 in)	279-4105	6	232-2106	220-9104 (4)	232-2105	K100
45 mm (1.77 in)	1372 mm (54 in)	232-0036 <sup>(9)</sup>	4		220-9104 (4)		K100
45 mm (1.77 in)	1486 mm (58.5 in)	279-4126 <sup>(8)</sup>	7	232-0106	220-9104 (5)	232-0105	K100
45 mm (1.77 in)	1524 mm (60 in)	241-6730	7	220-9106	220-9104 (5)	220-9105	K100
45 mm (1.77 in)	1524 mm (60 in)	279-4106	7	232-2106	220-9104 (5)	232-2105	K100
45 mm (1.77 in)	1524 mm (60 in)	232-0037 <sup>(9)</sup>	5		220-9104 (5)		K100
45 mm (1.77 in)	1676 mm (66 in)	242-1794	7	220-9106	220-9104 (5)	220-9105	K100
45 mm (1.77 in)	1676 mm (66 in)	279-4107	7	232-2106	220-9104 (5)	232-2105	K100
45 mm (1.77 in)	1676 mm (66 in)	232-0038 <sup>(9)</sup>	5		220-9104 (5)		K100
60 mm (2.36 in)	762 mm (30 in)	258-4571	3	232-0116	232-0114	232-0115	K110
60 mm (2.36 in)	762 mm (30 in)	241-6717	3	232-0116	232-0114	232-0115	K110
60 mm (2.36 in)	762 mm (30 in)	279-4110	3	264-2116	232-0114	264-2115	K110
60 mm (2.36 in)	762 mm (30 in)	253-0103 <sup>(9)</sup>	1		232-0114		K110

- 7 Consists of base edge and adapters
- 8 Straight corner adapters
- 9 Upgrade/conversion – no corner adapters

## Excavators Bucket Base Edge Assemblies (Cont'd.)

Base Edge Thickness	Bucket Width	Base Edge Assembly <sup>(10)</sup>	No. of Teeth	Adapters (qty)			Tip Size
				(LH)	(CTR)	(RH)	
60 mm (2.36 in)	813 mm (32 in)	279-9956	3	264-2116	232-0114	264-2115	K110
60 mm (2.36 in)	914 mm (36 in)	260-9411 <sup>(11)</sup>	4	232-0114	232-0114 (2)	232-0114	K110
60 mm (2.36 in)	914 mm (36 in)	258-4572	4	232-0116	232-0114 (2)	232-0115	K110
60 mm (2.36 in)	914 mm (36 in)	244-3895	4	232-0116	232-0114 (2)	232-0115	K110
60 mm (2.36 in)	914 mm (36 in)	279-4111	4	264-2116	232-0114 (2)	264-2115	K110
60 mm (2.36 in)	914 mm (36 in)	279-9957	4	264-2116	232-0114 (2)	264-2115	K110
60 mm (2.36 in)	914 mm (36 in)	253-0104 <sup>(12)</sup>	1		232-0114		K110
60 mm (2.36 in)	1054 mm (41.5 in)	260-9413 <sup>(11)</sup>	4	232-0114	232-0114 (2)	232-0114	K110
60 mm (2.36 in)	1067 mm (42 in)	258-4573	4	232-0116	232-0114 (2)	232-0115	K110
60 mm (2.36 in)	1067 mm (42 in)	241-6719	4	232-0116	232-0114 (2)	232-0115	K110
60 mm (2.36 in)	1067 mm (42 in)	279-4112	4	264-2116	232-0114 (2)	264-2115	K110
60 mm (2.36 in)	1067 mm (42 in)	279-9958	4	264-2116	232-0114 (2)	264-2115	K110
60 mm (2.36 in)	1067 mm (42 in)	253-0105 <sup>(12)</sup>	2		232-0114 (2)		K110
60 mm (2.36 in)	1219 mm (48 in)	260-9414 <sup>(11)</sup>	5	232-0114	232-0114 (3)	232-0114	K110
60 mm (2.36 in)	1219 mm (48 in)	258-4574	5	232-0116	232-0114 (3)	232-0115	K110
60 mm (2.36 in)	1219 mm (48 in)	241-6720	5	232-0116	232-0114 (3)	232-0115	K110
60 mm (2.36 in)	1219 mm (48 in)	279-4113	5	264-2116	232-0114 (3)	264-2115	K110
60 mm (2.36 in)	1219 mm (48 in)	279-9959	5	264-2116	232-0114 (3)	264-2115	K110
60 mm (2.36 in)	1219 mm (48 in)	253-0106 <sup>(12)</sup>	3		232-0114(3)		K110
60 mm (2.36 in)	1219 mm (48 in)	257-1771 <sup>(12)</sup>	3		232-0114(3)		K110
60 mm (2.36 in)	1372 mm (54 in)	260-9415 <sup>(11)</sup>	6	232-0114	232-0114 (4)	232-0114	K110
60 mm (2.36 in)	1372 mm (54 in)	258-4575	5	232-0116	232-0114(3)	232-0115	K110
60 mm (2.36 in)	1372 mm (54 in)	241-6721	5	232-0116	232-0114(3)	232-0115	K110
60 mm (2.36 in)	1372 mm (54 in)	279-4114	5	264-2116	232-0114(3)	264-2115	K110
60 mm (2.36 in)	1372 mm (54 in)	279-9960	5	264-2116	232-0114(3)	264-2115	K110
60 mm (2.36 in)	1372 mm (54 in)	253-0107 <sup>(12)</sup>	3		232-0114(3)		K110
60 mm (2.36 in)	1372 mm (54 in)	253-0108 <sup>(12)</sup>	3		232-0114(3)		K110
60 mm (2.36 in)	1524 mm (60 in)	260-9416 <sup>(11)</sup>	6	232-0114	232-0114 (4)	232-0114	K110
60 mm (2.36 in)	1524 mm (60 in)	258-4576	6	232-0116	232-0114(4)	232-0115	K110
60 mm (2.36 in)	1524 mm (60 in)	241-6722	6	232-0116	232-0114 (4)	232-0115	K110
60 mm (2.36 in)	1524 mm (60 in)	279-4115	6	264-2116	232-0114(4)	264-2115	K110
60 mm (2.36 in)	1524 mm (60 in)	279-9961	6	264-2116	232-0114 (4)	264-2115	K110
60 mm (2.36 in)	1524 mm (60 in)	253-0109 <sup>(12)</sup>	4		232-0114(4)		K110
60 mm (2.36 in)	1524 mm (60 in)	253-0110 <sup>(12)</sup>	4		232-0114 (4)		K110
60 mm (2.36 in)	1600 mm (63 in)	253-0111 <sup>(12)</sup>	4		232-0114(4)		K110
60 mm (2.36 in)	1676 mm (66 in)	260-9417 <sup>(11)</sup>	7	232-0114	232-0114(5)	232-0114	K110
60 mm (2.36 in)	1676 mm (66 in)	258-4577	7	232-0116	232-0114(5)	232-0115	K110
60 mm (2.36 in)	1676 mm (66 in)	241-6723	7	232-0116	232-0114(5)	232-0115	K110
60 mm (2.36 in)	1676 mm (66 in)	279-4116	7	264-2116	232-0114(5)	264-2115	K110
60 mm (2.36 in)	1676 mm (66 in)	253-0112 <sup>(12)</sup>	3		232-0114(3)		K110
60 mm (2.36 in)	1676 mm (66 in)	253-0113 <sup>(12)</sup>	4		232-0114 (4)		K110
60 mm (2.36 in)	1676 mm (66 in)	253-0114 <sup>(12)</sup>	4		232-0114(4)		K110
60 mm (2.36 in)	1727 mm (68 in)	304-3114	7	264-2116	232-0114(5)	264-2115	K110
60 mm (2.36 in)	1727 mm (68 in)	253-0115 <sup>(12)</sup>	4		232-0114 (4)		K110

- 10 Consists of base edge and adapters
- 11 Straight corner adapters
- 12 Upgrade/conversion – no corner adapters

# Excavators

## Excavators Bucket Base Edge Assemblies (Cont'd.)

Base Edge Thickness	Bucket Width	Base Edge Assembly <sup>(13)</sup>	No. of Teeth	Adapters (qty)			Tip Size
				(LH)	(CTR)	(RH)	
60 mm (2.36 in)	1727 mm (68 in)	253-0116 <sup>(14)</sup>	4		232-0114(4)		K110
60 mm (2.36 in)	1829 mm (72 in)	260-9418 <sup>(15)</sup>	7	232-0114	232-0114(5)	232-0114	K110
60 mm (2.36 in)	1829 mm (72 in)	258-4578	7	232-0116	232-0114(5)	232-0115	K110
60 mm (2.36 in)	1829 mm (72 in)	244-3889	7	232-0116	232-0114(5)	232-0115	K110
60 mm (2.36 in)	1829 mm (72 in)	279-4117	7	264-2116	232-0114(5)	264-2115	K110
60 mm (2.36 in)	1829 mm (72 in)	253-0117 <sup>(14)</sup>	5		232-0114(5)		K110
60 mm (2.36 in)	1880 mm (74 in)	279-9963	7	264-2116	232-0114(5)	264-2115	K110
60 mm (2.36 in)	1980 mm (78 in)	260-9419 <sup>(15)</sup>	8	232-0114	232-0114 (6)	232-0114	K110
70 mm (2.76 in)	991 mm (39 in)	279-9971	3	264-2136	232-0130	264-2135	K130
70 mm (2.76 in)	1040 mm (41 in)	253-0126 <sup>(14)</sup>	1		232-0130		K130
70 mm (2.76 in)	1219 mm (48 in)	253-9075	4	232-0132	232-0130 (2)	232-0131	K130
70 mm (2.76 in)	1219 mm (48 in)	279-9972	4	264-2136	232-0130(2)	264-2135	K130
70 mm (2.76 in)	1219 mm (48 in)	253-0127 <sup>(14)</sup>	2		232-0130 (2)		K130
70 mm (2.76 in)	1372 mm (54 in)	253-9076	4	232-0132	232-0130(2)	232-0131	K130
70 mm (2.76 in)	1372 mm (54 in)	279-9973	4	264-2136	232-0130 (2)	264-2135	K130
70 mm (2.76 in)	1372 mm (54 in)	253-0128 <sup>(14)</sup>	3		232-0130(3)		K130
70 mm (2.76 in)	1524 mm (60 in)	253-9077	5	232-0132	232-0130(3)	232-0131	K130
70 mm (2.76 in)	1524 mm (60 in)	279-9974	5	264-2136	232-0130(3)	264-2135	K130
70 mm (2.76 in)	1524 mm (60 in)	265-3398*	4	232-0130	232-0130 (2)	232-0130	K130
70 mm (2.76 in)	1550 mm (61 in)	257-1752 <sup>(14)</sup>	3		232-0130(3)		K130
70 mm (2.76 in)	1676 mm (66 in)	279-9975	5	264-2136	232-0130(3)	264-2135	K130
70 mm (2.76 in)	1905 mm (75 in)	257-1753 <sup>(14)</sup>	4		232-0130 (4)		K130
70 mm (2.76 in)	1930 mm (76 in)	265-3400 <sup>(16)</sup>	6	232-0130	232-0130(4)	232-0130	K130
70 mm (2.76 in)	1981 mm (78 in)	279-9976	6	264-2136	232-0130 (4)	264-2135	K130
70 mm (2.76 in)	1981 mm (78 in)	257-1755 <sup>(14)</sup>	4		232-0130 (4)		K130
80 mm (3.15 in)	1067 mm (42 in)	293-6380	3	264-2156	195-9154	264-2155	K150
80 mm (3.15 in)	1372 mm (54 in)	293-6381	4	264-2156	195-9154 (2)	264-2155	K150
80 mm (3.15 in)	1676 mm (66 in)	293-6382	4	264-2156	195-9154 (2)	264-2155	K150
80 mm (3.15 in)	1778 mm (70 in)	264-2027 <sup>(14)</sup>	3		195-9154 (3)		K150
80 mm (3.15 in)	1981 mm (78 in)	293-6383	5	264-2156	195-9154 (3)	264-2155	K150
80 mm (3.15 in)	2007 mm (79 in)	260-1244	4	195-9156	195-9154 (2)	195-9155	K150
80 mm (3.15 in)	2007 mm (79 in)	260-1158 <sup>(17)</sup>	4	195-9156	195-9154 (2)	195-9155	K150
80 mm (3.15 in)	2083 mm (82 in)	264-2035 <sup>(18)</sup>	2		195-9154 (2)		K150
80 mm (3.15 in)	2108 mm (83 in)	260-1241	4	195-9156	195-9154 (2)	195-9155	K150
80 mm (3.15 in)	2108 mm (83 in)	264-2031 <sup>(14)</sup>	4		195-9154 (4)		K150
80 mm (3.15 in)	2261 mm (89 in)	264-2043 <sup>(18)</sup>	4		195-9154 (4)		K150
80 mm (3.15 in)	2286 mm (90 in)	264-2039 <sup>(18)</sup>	3		195-9154 (3)		K150
80 mm (3.15 in)	2438 mm (96 in)	264-2033 <sup>(14)</sup>	5		195-9154 (5)		K150
80 mm (3.15 in)	2464 mm (97 in)	264-2029 <sup>(14)</sup>	3		195-9154 (3)		K150
80 mm (3.15 in)	2464 mm (97 in)	264-2037 <sup>(18)</sup>	2		195-9154 (2)		K150
80 mm (3.15 in)	2489 mm (98 in)	264-2041 <sup>(18)</sup>	3		195-9154 (3)		K150
80 mm (3.15 in)	2540 mm (100 in)	264-2045 <sup>(18)</sup>	4		195-9154 (4)		K150

- 13 Consists of base edge and adapters
- 14 Upgrade/conversion – no corner adapters
- 15 Straight corner adapters
- 16 Spade w/straight corner adapters
- 17 Spade w/angled corner adapters
- 18 Spade upgrade/conversion – no corner adapters

## Excavators Bucket Base Edge Assemblies (Cont'd.)

Base Edge Thickness	Bucket Width	Base Edge Assembly <sup>(19)</sup>	No. of Teeth	Adapters (qty)			Tip Size
				(LH)	(CTR)	(RH)	
90 mm (3.54 in)	2311 mm (91 in)	293-6388	6	264-2176	232-2170 (4)	264-2175	K170
90 mm (3.54 in)	2311 mm (91 in)	293-6392*	5	232-2170	232-2170 (3)	232-2170	K170
90 mm (3.54 in)	2388 mm (94 in)	264-2051 <sup>(20)</sup>	4		232-2170 (4)		K170
90 mm (3.54 in)	2438 mm (96 in)	293-6389	6	264-2176	232-2170 (4)	264-2175	K170
90 mm (3.54 in)	2489 mm (98 in)	264-2047 <sup>(20)</sup>	3		232-2170 (3)		K170
90 mm (3.54 in)	2489 mm (98 in)	264-2049 <sup>(20)</sup>	3		232-2170 (3)		K170

## Excavator Bucket Base Edges

Thickness	Length at Front	Width	Bevel Angle	Part Number
80 mm (3.15 in)	2363 mm (93.0 in)	500 mm (19.7 in)	22.5	119-3174
70 mm (2.76 in)	1999 mm (78.7 in)	380 mm (15.0 in)	22.5	6I-5303
70 mm (2.76 in)	1185 mm (46.7 in)	380 mm (15.0 in)	22.5	100-6198
60 mm (2.36 in)	1954 mm (76.9 in)	380 mm (15.0 in)	22.5	108-1066
50 mm (1.97 in)	1784 mm (70.2 in)	400 mm (15.75 in)	22.5	137-4104
50 mm (1.97 in)	1369 mm (53.9 in)	400 mm (15.75 in)	22.5	137-4101
50 mm (1.97 in)	1646 mm (64.8 in)	325 mm (12.8 in)	22.5	9C-3955
45 mm (1.77 in)	1829 mm (72.0 in)	305 mm (12.0 in)	22.5	135-3164
45 mm (1.77 in)	1829 mm (72.0 in)	305 mm (12.0 in)	22.5	232-2924
45 mm (1.77 in)	1689 mm (66.5 in)	305 mm (12.0 in)	22.5	135-3163
45 mm (1.77 in)	1658 mm (65.3 in)	305 mm (12.0 in)	22.5	127-2317
45 mm (1.77 in)	1226 mm (48.3 in)	305 mm (12.0 in)	22.5	127-2290
40 mm (1.57 in)	1830 mm (72.0 in)	300 mm (11.8 in)	22.5	232-2923
40 mm (1.57 in)	1524 mm (60.0 in)	300 mm (11.8 in)	22.5	227-8203
40 mm (1.57 in)	1484 mm (58.4 in)	300 mm (11.8 in)	22.5	129-1540
40 mm (1.57 in)	1442 mm (56.8 in)	306 mm (12.0 in)	22.5	135-8636
40 mm (1.57 in)	1207 mm (47.5 in)	300 mm (11.8 in)	22.5	129-5715
38 mm (1.50 in)	1727 mm (68.0 in)	306 mm (12.0 in)	22.5	135-8637
38 mm (1.50 in)	1575 mm (62.0 in)	254 mm (10.0 in)	35	5V-0166
38 mm (1.50 in)	1045 mm (41.1 in)	254 mm (10.0 in)	35	8K-0668
36 mm (1.42 in)	1349 mm (53.1 in)	290 mm (11.4 in)	22.5	7I-6713
36 mm (1.42 in)	1054 mm (41.5 in)	290 mm (11.4 in)	22.5	100-4150
32 mm (1.25 in)	1725 mm (67.9 in)	282 mm (11.1 in)	22.5	8R-2662
32 mm (1.25 in)	1676 mm (66.0 in)	305 mm (12.0 in)	22.5	135-3165
32 mm (1.25 in)	1829 mm (72.0 in)	305 mm (12.0 in)	22.5	135-3167
32 mm (1.25 in)	1090 mm (42.9 in)	200 mm (7.88 in)	22.5	086-0814
32 mm (1.25 in)	1000 mm (39.4 in)	200 mm (7.88 in)	22.5	086-0813
32 mm (1.25 in)	920 mm (36.2 in)	200 mm (7.88 in)	22.5	085-9510

19 Consists of base edge and adapters

20 Spade upgrade/conversion – no corner adapters

# Excavators

## Excavator Bucket Base Edges (Cont'd.)

Thickness	Length at Front	Width	Bevel Angle	Part Number
32 mm (1.25 in)	821 mm (32.3 in)	200 mm (7.88 in)	22.5	086-0809
32 mm (1.25 in)	700 mm (27.6 in)	200 mm (7.88 in)	22.5	086-0812
32 mm (1.25 in)	600 mm (23.6 in)	200 mm (7.88 in)	22.5	086-0811
25 mm (1.00 in)	1960 mm (77.2 in)	230 mm (9.10 in)	22.5	5W-7957
20 mm (0.79 in)	2269 mm (89.3 in)	200 mm (8.66 in)	22.5	8U-2639
20 mm (0.79 in)	1110 mm (43.7 in)	220 mm (8.66 in)	22.5	7Y-6601

## K Series Tips

Cat K Series excavator bucket tips use a new vertical retention system that allows quick and easy tip changes. Providing a new locking interface at every tip change to improve retention reliability. Lower profile improves penetration and wear life.



### General Duty Tip

- General excavation and loading in moderate impact/abrasion.
- Moderate penetration.
- Symmetric, top and bottom self-sharpening cavities.



### Extra Duty Tip

- General excavation and loading w/more wear material.
- Moderate impact, moderate penetration.
- Top self-sharpening cavity.



### Penetration Tip

- For harder-to-penetrate, moderate impact, lower abrasion.
- Very good penetration.
- Top rib, bottom cavity to stay sharp.



### Penetration Plus Tip

- High impact trenching, excavation and loading.
- Good penetration, stays sharp.
- Symmetric, ribbed top and bottom.



### Spike Tip

- For maximum penetration, especially in cohesive material.
- Stays sharp for enhanced wear life.
- Top and bottom rib design.



### Double Spike Tip

- For harder-to-penetrate, fracturable materials.
- Very good penetration, stays sharp.
- Use in corner positions with Spike Centers.
- Length matches spike.

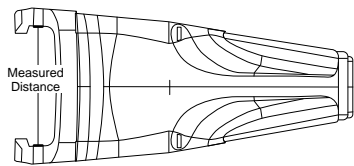


### Wide Tip

- For easy-to-penetrate trenching applications.
- Low impact.
- Smooth floor trenches.

# Excavator Tips - K Series™

## K Family Identification



To identify tip or adapter family simply measure the distance between the "ears" of the tip in millimeters and round to the nearest 5 mm.

Ex: 80 mm (3.15") = K80

87.4 mm (3.44") = K90

96.1 mm (3.78") = K100

## Tip Chart

	K80	K90	K100	K110	K130	K150	K170
General Duty	220-9089	220-9099	220-9109	286-2117	220-9139	229-7159	232-0179
Extra Duty	220-9081	220-9091	220-9101	286-2112	264-2131	264-2151	264-2171
Penetration	220-9082	220-9092	220-9102	286-2113	220-9132	229-7152	232-0172
Penetration Plus	220-9083	220-9093	220-9103	286-2114	220-9133	229-7153	232-0173
Spike	220-9087	220-9097	220-9107	286-2115	220-9137	229-7157	232-0177
Double Spike	220-9088	220-9098	220-9108	286-2116	220-9138	229-7158	232-0178
Wide	222-1080	222-1090	223-8100	286-2111	223-8130	195-5151	223-8170
Retainer	220-9090	220-9090	220-9090	286-2110	220-9130	233-7150	232-0170
SLAG Retainer				309-1119	232-2139	232-2159	232-2179



**K Family Identification (Cont'd.)**

**Tips or Points**

Description	J300	K80	J350	K90	J400	K100	J460	K110	J550	K130	J600	K150	J700	K170
J Wide = K Wide	107-3300	222-1080	107-3350	222-1090	107-3400	223-8100	107-3450	286-2111	107-3550	223-8130	N/A	195-5151	N/A	223-8170
J Heavy Duty Long = K Extra Duty	9N-4302	220-9081	9N-4352	220-9091	8E-4402	220-9101	9N-4452	286-2112	9N-4552	264-2131	7Y-0602	264-2151	9U-9702	264-2171
J Penetration = K Penetration	9J-4309	220-9082	9J-4359	220-9092	6Y-7409	220-9102	9W-8459	286-2113	9W-8559	220-9132	7I-7609	229-7152	4T-4709	232-0172
J Penetration Plus = K Penetration Plus	183-5300	220-9083	168-1359	220-9093	168-1409	220-9103	159-0459	286-2114	159-0559	220-9133	159-0607	229-7153	171-1709	232-0173
J Long Sharp = K Spike	168-1300	220-9087	168-1350	220-9097	159-0400	220-9107	159-0450	286-2115	159-0550	220-9137	159-0600	229-7157	136-8700	232-0177
J Twin Sharp = K Double Spike	135-9308	220-9088	135-9357	309-1098	135-9408	220-9108	138-6458	286-2116	138-6558	220-9138	135-9608	229-7158	N/A	232-0178
J Long = K General Duty	1U-3302	220-9089	1U-3352	220-9099	7T-3402	220-9109	9W-8452	286-2117	9W-8552	220-9139	6I-6602	229-7159	4T-4702	232-0179
J HDP = K Heavy Penetration	135-9300	222-1081	144-1358	222-1091	135-9400	223-8101	138-6451	286-2118	138-6552	264-2132	135-9600	264-2152	135-9700	264-2172
J HD Abrasion = K Heavy Abrasion	9N-4303	222-1082	9N-4353	222-1092	7T-3403	223-8102	9N-4453	286-2119	6Y-2553	223-8132	6I-66036I-6603	229-7156	9U-9703	232-2178
Extra Duty Long Life (ARM)	125-8302	229-7080	135-9352	232-0090	116-7402	232-0100	101-9054	315-0110	101-9055	232-2130	107-8602	232-0150	107-2001	233-7170
Penetration Long Life (ARM)	125-8309	229-7081	119-9359	232-0091	124-7409	232-0101	116-7459	315-0115	113-0559	232-2131	119-9609	232-0151	N/A	233-7171
Short									9W-8551	232-2137	6I-6601	232-2157		
Rock Chisel Tip							317-4456		338-0550		338-0600			
Retainer		220-9090		220-9090		220-9090		286-2110		220-9130		233-7150		232-0170
SLAG Retainer								309-1119		232-2139		232-2159		232-2179

# Excavator Tips - K Series™

## K Family Identification (Cont'd.)

### Adapters or Shanks

Description	J300	K80		J350	K90		J400	K100		J460	K110	
HEX Two Strap Center (Edge Thickness)	8E-9490	220-9084	(36 mm)	6I-6354	220-9094	(40 mm)	6I-6404	220-9104	(45 mm)	159-0464	309-1114	(60 mm)
HEX Two Strap Corner RH			(36 mm)	6I-6355	220-9095	(40 mm)	6I-6405	220-9105	(45 mm)	159-0465	309-1115	(60 mm)
HEX Two Strap Corner LH			(36 mm)	6I-6356	220-9096	(40 mm)	6I-5406	220-9106	(45 mm)	159-0466	309-1116	(60 mm)

Description	J550	K130		J600	K150		J700	K170	
HEX Two Strap Center (Edge Thickness)	153-1696	232-0130	(70 mm)	113-9604	195-9154	(80 mm)	222-7700	232-2170	(90 mm)
HEX Two Strap Corner RH	N/A	232-0131	(70 mm)	113-9605	195-9155	(80 mm)	N/A	232-2171	(90 mm)
HEX Two Strap Corner LH	N/A	232-0132	(70 mm)	113-9606	195-9156	(80 mm)	N/A	232-2172	(90 mm)

## Tips

Cat excavator bucket tips are side pinned for excellent tip retention and quick, easy tip changing. The pin hole is located through the tip sides which are the areas of least wear.



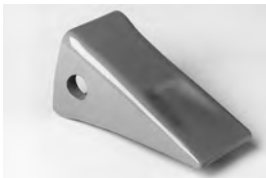
### Penetration Long Life Tip

- Increases wear life.
- Enhances penetration due to self-sharpening tip.
- Includes ARM strips.



### Long Tip

- General duty in low-abrasion applications.



### Short Tip

- Provides more strength.
- Use to prevent breakage.



### Wide Tip

- Provides less penetration.
- Provides a cleaner floor and less spillage.



### Penetration Tip

- Provides better penetration.
- Contains less wear material



### Penetration Plus Tip

- Provides a good combination of strength and wear life.
- For use where penetration and increased wear life are desired.
- For use in most jobs.



### Sharp Corner Tip/Sharp Center Tip

- Provides the best penetration.
- Contains the least wear material.

# Excavator Tips - Side Pin Style

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## Tips (Cont'd.)

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### **Twin Sharp Tip**

- For use for severe digging in rock and frost.
- Use in combination with sharp tips.



### **Long Sharp Tip**

- Provides more wear material than standard sharp tip.
- For use when penetration is the primary concern.



### **Heavy Duty Long Life Tip**

- Contains ARM which is positioned to increase wear life and penetration.
- Not for use in extreme impact applications.



### **Heavy Duty Long Tip**

- Provides more wear material and greater strength than long tip.
- Has a streamlined-profile for better penetration.



### **Heavy Duty Abrasion Tip**

- Contains greater wear material.
- Not for use in high impact applications.

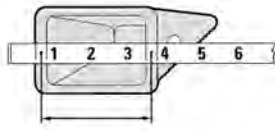


### **Light Duty Long Tip**

- For use in low impact with low to medium abrasiveness.
- Self-sharpening design and symmetrical shape.

# Excavator Tips - Side Pin Style

## J Family Identification



To identify the tip or adapter family, place a tape measure across the back of the tip at the midpoint of the side walls. For example:

76.20 mm (3.0") measurement = J300 Family

88.90 mm (3.5") measurement = J350 Family

139.70 mm (5.5") measurement = J550 Family

In addition, the second and third to last locations in the part number often times refer to the J size.

Example: 9W-8551 = J550 Family

	J200	J225	J250	J300	J350	J400	J450/J460	J550	J600	J700	J800
Long	1U-3202	6Y-3222	1U-3252	1U-3302	1U-3352	7T-3402	9W-8452	9W-8552	6I-6602	4T-4702	6I-8802
Short		6Y-6221	1U-3251	1U-3301	1U-3351	7T-3401	9W-8451	9W-8551	6I-6601		
Light Duty Long	195-9209		168-1253	168-1301	168-1351	168-1401	168-1451				
Wide	109-9200	186-3010	208-5254	107-3300	107-3350	107-3400	107-3450	107-3550			
Penetration	1U-3209	6Y-8229	9J-4259	9J-4309	9J-4359	6Y-7409	9W-8459	9W-8559	7I-7609	4T-4709	117-6809
Penetration Long Life				125-8309	119-9359	124-7409	116-7459	113-0559	119-9609		
Penetration Plus				183-5300	168-1359	168-1409	159-0459	159-0559	159-0607	171-1709	
Sharp Corner	9W-8208	6Y-7228	9W-8258	9W-8308	9W-2358	6Y-5408	6I-8458	6I-8558	107-8608		
Sharp Center	9W-8209	6Y-7229	9W-8259	9W-8309	9W-2359	6Y-5409	7T-8459	9W-6559	107-8609		
Twin Sharp	135-8208	135-8228	135-8258	135-9308	135-9357	135-9408	138-6458	222-7553	222-7603		
Long Sharp				168-1300	168-1350	159-0400	159-0450	159-0550	159-0600	136-8700	
Heavy Duty Long		8E-4222	9N-4252	9N-4302	9N-4352	8E-4402	9N-4452	9N-4552	7Y-0602	9U-9702	
Heavy Duty Long Life			135-8252	125-8302	135-9352	116-7402	101-9054	101-9055	107-8602	107-2001	117-6802
Heavy Duty Abrasion		6Y-6223	9N-4253	9N-4303	9N-4353	7T-3403	9N-4453	6Y-2553	6I-6603	9U-9703	6I-8803
Heavy Duty Penetration				135-9300	144-1358	135-9400	138-6451	138-6552	135-9600	135-9700	135-9800
Standard Pin	8E-6208										
Standard Retainer	8E-6209										
Heavy Duty Pin		132-4762	132-4763	132-4766	114-0358	116-7408	114-0468 (1)	107-3378	113-9608	113-4708	134-1808
Heavy Duty Retainer Assembly		149-5733	149-5733	149-5733	114-0359	116-7409	107-3469 (1)	107-8559	113-9609	113-4709	134-1809
Rock Chisel Tip							317-4456	338-0550	338-0600		

1 Some older adapters have a 19 mm (0.75") pin diameter, instead of the current 22 mm (0.875") pin diameter. For those older adapters which have the 19 mm (0.75") pin diameter, use a 6Y-2527 pin and a 8E-6359 retainer.

# Excavator Sidecutters

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## Sidecutters

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- Increases bucket width and capacity.
- Protects bucket sides.
- Improves sidebar penetration.



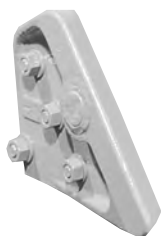
### **Blade Type 1 Sidecutter**

- For use in most conditions.



### **One Piece Sidecutter**

- For use in most soil conditions.
- Widens bite width.
- Provides good protection to bucket sides.



### **Heavy Duty Sidecutter**

- For use in tough digging conditions.
- Contains more wear material and covers more of the sidebar for enhanced protection.
- Profile enhances digging performance.



### **Combination Blade Sidecutter**

- For use in light to moderate conditions.



### **Tooth Type Sidecutter**

- For use in tough conditions.
- Uses the same tips as the cutting edge.



### **Strike-Off Sidecutter**

- For use in all conditions.
- Does not add width to bucket.

# Excavator Sidecutters

## Sidecutters

Type	LH Cutter	RH Cutter	Bolt	Nut	Washer
<b>307, 308</b>					
Sidecutters	153-1647	153-1646	096-7074	093-7676	
<b>312, 314</b>					
Sidecutters	7Y-0203	7Y-0204	096-7074	093-7676	
<b>315</b>					
Sidecutters	096-4747	096-4748	8T-0380	7X-0851	
<b>318</b>					
Sidecutters	7Y-0358	7Y-0357	6I-6371	2J-3507	
Sidecutters	357-2697	357-2696	1D-4635	2J-3507	3K-5234
<b>B, S, C, CB, D, DB</b>					
Sidecutters	7Y-0358	7Y-0357	6I-6371	2J-3507	
Sidecutters	357-2697	357-2696	1D-4635	2J-3507	3K-5234
<b>F, TB, VB, HB</b>					
Sidecutters	326-3406	326-3405	1D-4637	2J-3507	3K-5234
<b>J, JB</b>					
Sidecutters	326-3406	326-3405	7X-0410	2J-3507	3K-5234
<b>JC</b>					
Sidecutters	326-3406	326-3405	7X-0410	2J-3507	3K-5234

**Note:** These new style sidecutters will fit on older style HEX buckets, but the old style sidecutters and sidebar protectors will not fit on new D and E Series buckets.

Type	LH	RH	Blade	LH Upper	RH Upper	Bolt	Nut	Washer
<b>Later B Linkage, C, CB, D, DB, S Linkages</b>								
One Piece	7Y-0358	7Y-0357				1D-4635 (6)	2J-3507 (6)	3K-5234 (6)
Strike-off	174-8044	232-2140		232-2140	174-8044	1D-4635 (10)	2J-3507 (10)	3K-5234 (10)
Blade	8J-9614	8J-9615				7Y-2146 (6)	2J-3507 (6)	3K-5234 (6)
Combination	8J-9614	8J-9615	4T-2886 (2)			7Y-2146 (6)	2J-3507 (6)	3K-5234 (6)
Blade Hardware						1J-6762 (8)	2J-3506 (8)	
Heavy Duty	232-2148	232-2147				1D-4635 (8)	2J-3507 (8)	3K-5234 (8)
Tooth	8J-4952 <sup>(1)</sup>	8J-4951 <sup>(1)</sup>				7Y-2146 (6)	2J-3507 (6)	3K-5234 (6)
Use J350 Tip (i.e. 1U-3352) + 114-0358 Pin + 114-0359 Retainer with Tooth Sidecutter								
<b>Early E, F, G, H Linkages</b>								
Strike-off	8J-5188	8J-5188				1D-4635 (4)	2J-3507 (4)	3K-5234 (4)
Blade	8J-9826	8J-9825				7Y-1136 (10)	2J-3507 (10)	3K-5234 (10)
Combination	8J-9826	8J-9825	4T-6664 (2)			7Y-1136 (10)	2J-3507 (10)	3K-5234 (10)
Blade Hardware						4J-9208 (8)	2J-3507 (8)	
Tooth	8J-4948	8J-4947				7Y-1136 (10)	2J-3507 (10)	3K-5234 (10)
Use J550 Tip (i.e. 9W-8552) + 107-3378 Pin + 107-8554 Retainer with Tooth Sidecutter								
<b>Early J Linkage</b>								
Strike-off	8J-5188	8J-5188				7Y-2146 (4)	2J-3507 (4)	3K-5234 (4)
Blade	8J-9826	8J-9825				1D-4637 (10)	2J-3507 (10)	3K-5234 (10)
Combination	8J-9826	8J-9825	4T-6664 (2)			1D-4637 (10)	2J-3507 (10)	3K-5234 (10)

<sup>1</sup> For D/DB buckets, use 8E-1468/69 plus J450 Tip (i.e. 9W-8452) + 114-0468 Pin + 114-3469 Retainer

# Excavator Sidecutters

## Sidecutters (Cont'd.)

Type	LH	RH	Blade	LH Upper	RH Upper	Bolt	Nut	Washer
Blade Hardware						4J-9208 (8)	2J-3507 (8)	
Tooth	8J-4948	8J-4947				1D-4637 (10)	2J-3507 (10)	3K-5234 (10)
Use J550 Tip (i.e. 9W-8552) + 107-3378 Pin + 107-8554 Retainer with Tooth Sidecutter								
<b>Later F, G, HB, TB, UB, V, VB Linkages</b>								
Strike-off	275-5999	275-5998		195-5136	195-5136	7Y-2146 (12)	2J-3507 (12)	3K-5234 (12)
Heavy Duty	256-8691	256-8690				1D-4637 (10)	2J-3507 (10)	3K-5234 (10)
<b>Later J, JB Linkages</b>								
Heavy Duty	238-3170	238-3169				9X-8896 (12)	2J-3507 (12)	3K-5234 (12)

## Hex Sidebar Protectors

- Use in rock loading applications.
- Protects bucket sidebar.

Type	Retainer	Pin	Protector	Shim Kit	Shear Block
<b>318</b>					
Sidebar Protector	132-0999	275-5962	329-5958	286-2140	330-2174
<b>B, S, C, CB, D, DB</b>					
Sidebar Protector	132-0999	275-5962	329-5958	286-2140	330-2174
Sidebar Protector	132-0999	275-5982	329-5958	286-2140	
<b>F, TB, VB, HB</b>					
Sidebar Protector	132-0999	132-0998	326-3407	286-2140	330-2174
	132-0999	132-0998	326-3407	286-2140	
<b>J, JB</b>					
Sidebar Protector	132-0999	132-1008	329-5955	286-2140	329-8805
<b>JC</b>					
Sidebar Protector	132-0999	357-2689	329-5957	286-2140	329-8805

**NOTE:** These new style sidebar protectors will fit on older style HEX buckets, but the old style sidecutters and sidebar protectors will not fit on new D and E Series buckets.



Part No.	Description	Length (mm)	Width (mm)	Thickness (mm)
280-4088	1.5 inch Chocky	241	38	25
280-4089	2.0 inch Chocky	241	51	25
280-4090	2.5 inch Chocky	241	64	25
280-4091	4.0 inch Chocky	241	102	25

Part No.	Description	Diameter (mm)	Thickness (mm)
280-4092	2.5 inch Button	64	22
280-4093	3.5 inch Button	89	29
280-4094	4.5 inch Button	114	33
280-4095	6.0 inch Button	152	35

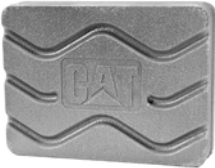


# Excavator Sidecutters

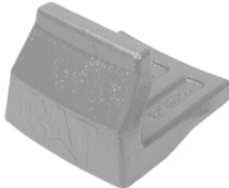
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Part No.	Description	Length (mm)	Width (mm)	Diameter (mm)
280-4096	1.25 inch Roll Bar	229	38	32
280-4097	2.0 inch Roll Bar	305	52	51
280-4098	3.0 inch Roll Bar	305	69	76



Part No.	Description	Length (mm)	Width (mm)	Diameter (mm)
280-4099	6.0 inch x 8.0 inch Wear Block	200	150	37



Description	Straight Heel Shroud Part Number	Curved Heel Shroud Part Number	Width (mm)	Height (mm)
Small Heel Shroud	280-4078	280-4079	120	108
Medium Heel Shroud	138-6529	138-6551	175	150
Large Heel Shroud	157-1019	157-1027	250	200

# Loaders

## 992 Base Edge/Base Edge Assembly

	Type	Thickness	Length	Width @ Corner	Adapters	Adapter Qty	Segments
<b>992G</b>							
218-3418 <sup>(1)</sup>	Spade	76.2 mm (3.00 in)	4824 mm (189.92 in)	335 mm (13.19 in)	J700	8	Yes
146-8955 <sup>(1)</sup>	Spade	76.2 mm (3.00 in)	4824 mm (189.92 in)	335 mm (13.19 in)	J700	8	Yes
146-8966	Spade	76.2 mm (3.00 in)	4824 mm (189.92 in)	335 mm (13.19 in)			Yes
247-7241 <sup>(1)</sup>	Spade	76.2 mm (3.00 in)	4824 mm (189.92 in)	335 mm (13.19 in)	K170	8	Yes
153-5621 <sup>(1)</sup>	Spade	70 mm (2.76 in)	4824 mm (189.92 in)	335 mm (13.19 in)	J700	8	Yes
142-5790 <sup>(1)</sup>	Spade	70 mm (2.76 in)	4824 mm (189.92 in)	335 mm (13.19 in)	J600	8	Yes
112-9032 <sup>(1)</sup>	Spade	70 mm (2.76 in)	4824 mm (189.92 in)	335 mm (13.19 in)	J600	8	Yes
132-7091 <sup>(1)</sup>	Spade	70 mm (2.76 in)	4824 mm (189.92 in)	335 mm (13.19 in)	J550	8	Yes
112-9033	Spade	70 mm (2.76 in)	4824 mm (189.92 in)	335 mm (13.19 in)			Yes
170-1748	Spade	70 mm (2.76 in)	4824 mm (189.92 in)	335 mm (13.19 in)	BOCE		No
138-4386 <sup>(1)</sup>	Straight	70 mm (2.76 in)	4824 mm (189.92 in)	541 mm (21.30 in)	J600	8	No
235-1090 <sup>(1)</sup>	Spade	70 mm (2.76 in)	4824 mm (189.92 in)	335 mm (13.19 in)	K150	8	Yes
247-7232 <sup>(1)</sup>	Spade	70 mm (2.76 in)	4824 mm (189.92 in)	335 mm (13.19 in)	K170	8	Yes
132-7091 <sup>(1)</sup>	Spade	63.5 mm (2.50 in)	4824 mm (189.92 in)	335 mm (13.19 in)	J550	8	Yes
107-6763 <sup>(1) (2)</sup>	Spade	70 mm (2.76 in)	4840 mm (190.55 in)	378 mm (14.88 in)	J600	8	Lugs
247-7247 <sup>(1) (2)</sup>	Spade	70 mm (2.76 in)	4840 mm (190.55 in)	380 mm (14.96 in)	K150	8	Yes
278-8205 <sup>(1) (2)</sup>	Spade	70 mm (2.76 in)	4840 mm (190.55 in)	405 mm (15.94 in)	K150	9	Yes
<b>992C/D</b>							
134-8333 <sup>(1)</sup>	Spade	76.2 mm (3.00 in)	4824 mm (189.92 in)	430 mm (16.93 in)	J700	8	Yes
257-8870 <sup>(1)</sup>	Spade	70 mm (2.76 in)	4750 mm (187.01 in)	438 mm (17.24 in)	K150	8	Yes
109-9094 <sup>(1)</sup>	Spade	70 mm (2.76 in)	4750 mm (187.01 in)	438 mm (17.24 in)	J600	8	Yes
107-8570	Spade	70 mm (2.76 in)	4750 mm (187.01 in)	438 mm (17.24 in)			Yes
257-8859 <sup>(1)</sup>	Spade	63.5 mm (2.50 in)	4750 mm (187.01 in)	438 mm (17.24 in)	K130	8	Yes
257-8857 <sup>(1)</sup>	Spade	63.5 mm (2.50 in)	4597 mm (180.98 in)	438 mm (17.24 in)	K130	8	No
2Q-0318 <sup>(1)</sup>	Spade	63.5 mm (2.50 in)	4750 mm (187.01 in)	438 mm (17.24 in)	J700	8	Yes
179-7379 <sup>(1)</sup>	Spade	63.5 mm (2.50 in)	4750 mm (187.01 in)	438 mm (17.24 in)	J600	8	Yes
4E-6462	Spade	63.5 mm (2.50 in)	4750 mm (187.01 in)	438 mm (17.24 in)	BOCE		Yes
112-2122 <sup>(1)</sup>	Spade	63.5 mm (2.50 in)	4750 mm (187.01 in)	438 mm (17.24 in)	J550	8	Yes
4E-6464 <sup>(1)</sup>	Spade	63.5 mm (2.50 in)	4750 mm (187.01 in)	438 mm (17.24 in)	J550	8	Yes
9V-0014 <sup>(1)</sup>	Spade	63.5 mm (2.50 in)	4750 mm (187.01 in)	438 mm (17.24 in)	J550	8	No
9V-0005	Spade	63.5 mm (2.50 in)	4750 mm (187.01 in)	438 mm (17.24 in)			No
112-2121 <sup>(1) (3)</sup>	Spade	63.5 mm (2.50 in)	4750 mm (187.01 in)	332 mm (13.07 in)	J550	8	Yes
9V-3566 <sup>(3)</sup>	Spade	63.5 mm (2.50 in)	4750 mm (187.01 in)	332 mm (13.07 in)			Yes
257-1836 <sup>(1)</sup>	Spade	63.5 mm (2.50 in)	4750 mm (187.01 in)	332 mm (13.07 in)	K130	8	Yes
9V-0013 <sup>(1) (3)</sup>	Spade	63.5 mm (2.50 in)	4750 mm (187.01 in)	332 mm (13.07 in)	J550	8	No
9V-0006 <sup>(3)</sup>	Spade	63.5 mm (2.50 in)	4750 mm (187.01 in)	332 mm (13.07 in)			No
142-1416	Straight	63.5 mm (2.50 in)	4750 mm (187.01 in)	695 mm (27.36 in)	BOCE		No
112-2123 <sup>(1)</sup>	Straight	63.5 mm (2.50 in)	4750 mm (187.01 in)	541 mm (21.30 in)	J550	8	Yes
9U-3846	Straight	63.5 mm (2.50 in)	4750 mm (187.01 in)	541 mm (21.30 in)			Yes
9V-0010 <sup>(1)</sup>	Straight <sup>(4)</sup>	63.5 mm (2.50 in)	4750 mm (187.01 in)	541 mm (21.30 in)	J550	8	No
9V-0007	Straight	63.5 mm (2.50 in)	4750 mm (187.01 in)	541 mm (21.30 in)			No

- 1 Base edge assembly
- 2 High abrasion bucket edge
- 3 High-lift bucket edge
- 4 Designates Flushmount adapters

# Loaders - Base Edge/Base Edge Assembly

## 992 Base Edge/Base Edge Assembly (Cont'd.)

	Type	Thickness	Length	Width @ Corner	Adapters	Adapter Qty	Segments
275-2477 <sup>(5)</sup>	Straight <sup>(6)</sup>	63.5 mm (2.50 in)	4750 mm (187.01 in)	541 mm (21.30 in)	K130	8	No
208-5326 <sup>(5)</sup> <sup>(7)</sup>	Spade	70 mm (2.76 in)	4840 mm (190.55 in)	454 mm (17.87 in)	J600	8	Yes
250-7577 <sup>(5)</sup> <sup>(7)</sup>	Spade	70 mm (2.76 in)	4840 mm (190.55 in)	454 mm (17.87 in)	K150	8	Yes

## 990 Base Edge/Base Edge Assembly

	Type	Thickness	Length	Width @ Corner	Adapters	Adapter Qty	Segments
<b>990</b>							
145-0795	Spade	76.2 mm (3.00 in)	4610 mm (181.50 in)	533 mm (20.98 in)			No
112-2118 <sup>(5)</sup>	Spade	63.5 mm (2.50 in)	4450 mm (175.20 in)	355 mm (13.98 in)	J550	8	No
101-9188	Spade	63.5 mm (2.50 in)	4450 mm (175.20 in)	355 mm (13.98 in)			No
151-5980	Spade	63.5 mm (2.50 in)	4450 mm (175.20 in)	355 mm (13.98 in)	BOCE		No
112-2119 <sup>(5)</sup>	Spade	63.5 mm (2.50 in)	4450 mm (175.20 in)	355 mm (13.98 in)	J550	8	Yes
4E-9915	Spade	63.5 mm (2.50 in)	4450 mm (175.20 in)	355 mm (13.98 in)			Yes
112-2120 <sup>(5)</sup>	Straight	63.5 mm (2.50 in)	4450 mm (175.20 in)	441 mm (17.36 in)	J550	8	Yes
101-9186	Straight	63.5 mm (2.50 in)	4450 mm (175.20 in)	441 mm (17.36 in)			Yes
111-9048 <sup>(5)</sup>	Straight	63.5 mm (2.50 in)	4450 mm (175.20 in)	506 mm (19.92 in)	J550	8	No
111-9049	Straight	63.5 mm (2.50 in)	4450 mm (175.20 in)	506 mm (19.92 in)			No
2Q-4246 <sup>(5)</sup>	Spade	63.5 mm (2.50 in)	4610 mm (181.50 in)	414 mm (16.30 in)	J550	8	Yes
2Q-4247	Spade	63.5 mm (2.50 in)	4610 mm (181.50 in)	414 mm (16.30 in)			Yes
2Q-7059 <sup>(5)</sup>	Spade	63.5 mm (2.50 in)	4450 mm (175.20 in)	355 mm (13.98 in)	J550	8	Yes
195-5088 <sup>(5)</sup>	Spade <sup>(8)</sup>	63.5 mm (2.50 in)	4574 mm (180.08 in)	355 mm (13.98 in)	J550	7	Lugs
255-3759 <sup>(5)</sup>	Spade	63.5 mm (2.50 in)	4450 mm (175.20 in)	355 mm (13.98 in)	K130	8	Yes
255-3756 <sup>(5)</sup>	Spade	63.5 mm (2.50 in)	4610 mm (181.50 in)	414 mm (16.30 in)	K130	8	Yes
255-3765 <sup>(5)</sup> <sup>(9)</sup>	Spade <sup>(8)</sup>	70 mm (2.76 in)	4574 mm (180.08 in)	477 mm (18.78 in)	K150	7	Yes
251-7776 <sup>(5)</sup> <sup>(9)</sup>	Spade <sup>(8)</sup>	70 mm (2.76 in)	4574 mm (180.08 in)	477 mm (18.78 in)	K150	7	Yes
(w/9 MAWPS bases — no base edge wear plates)							

## 988 Base Edge/Base Edge Assembly

	Type	Thickness	Length	Width @ Corner	Adapters	Adapter Qty	Segments	BOCE
<b>988B</b>								
3V-0187	Straight	45 mm (1.77 in)	3645 mm (143.50 in)	305 mm (12.01 in)			No	Yes
9V-0232	Straight	50.8 mm (2.00 in)	3645 mm (143.50 in)	330 mm (12.99 in)			No	No
9C-2932	Straight	50.8 mm (2.00 in)	3645 mm (143.50 in)	330 mm (12.99 in)			Yes	Yes
8V-9585	Spade	50.8 mm (2.00 in)	3645 mm (143.50 in)	311 mm (12.24 in)			No	No
8R-4649	Spade	50.8 mm (2.00 in)	3645 mm (143.50 in)	311 mm (12.24 in)			Yes	Yes
4E-0056 <sup>(5)</sup>	Straight	50.8 mm (2.00 in)	3645 mm (143.50 in)	330 mm (12.99 in)	J460	8	No	N/A
116-7201 <sup>(5)</sup>	Spade	50.8 mm (2.00 in)	3645 mm (143.50 in)	311 mm (12.24 in)	J460	8	Yes	N/A

- 5 Base edge assembly
- 6 Designates Flushmount adapters
- 7 High abrasion bucket edge
- 8 Stepped spade edge (all center adapters)
- 9 High Abrasion bucket edge

# Loaders - Base Edge/Base Edge Assembly

## 988 Base Edge/Base Edge Assembly (Cont'd.)

	Type	Thickness	Length	Width @ Corner	Adapters	Adapter Qty	Segments	BOCE
116-7206 <sup>(10)</sup>	Spade	50.8 mm (2.00 in)	3645 mm (143.50 in)	311 mm (12.24 in)	J460	8	No	N/A
256-2934 <sup>(10)</sup>	Spade	50.8 mm (2.00 in)	3645 mm (143.50 in)	311 mm (12.24 in)	K110	8	Yes	N/A
256-2931 <sup>(10)</sup>	Straight <sup>(11)</sup>	50.8 mm (2.00 in)	3645 mm (143.50 in)	330 mm (12.99 in)	K110	8	No	N/A
<b>988F</b>								
4E-8112	Straight	50.8 mm (2.00 in)	3772 mm (148.50 in)	349 mm (13.74 in)			Yes	Yes
2Q-3133	Straight	50.8 mm (2.00 in)	3772 mm (148.50 in)	349 mm (13.74 in)			No	No
4E-7616	Spade <sup>(12)</sup>	50.8 mm (2.00 in)	3772 mm (148.50 in)	311 mm (12.24 in)			Yes	Yes
9U-4713	Spade	50.8 mm (2.00 in)	3772 mm (148.50 in)	311 mm (12.24 in)			No	No
132-3117	Spade	50.8 mm (2.00 in)	3772 mm (148.50 in)	311 mm (12.24 in)			Yes	Yes
2Q-4344	Spade <sup>(13)</sup>	50.8 mm (2.00 in)	3980 mm (156.69 in)	354 mm (13.94 in)			Yes	No
116-7204 <sup>(10)</sup>	Straight	50.8 mm (2.00 in)	3772 mm (148.50 in)	349 mm (13.74 in)	J460	8	Yes	N/A
2Q-3132 <sup>(10)</sup>	Straight <sup>(11)</sup>	50.8 mm (2.00 in)	3772 mm (148.50 in)	349 mm (13.74 in)	J460	8	No	N/A
257-1829 <sup>(10)</sup>	Straight <sup>(11)</sup>	50.8 mm (2.00 in)	3772 mm (148.50 in)	349 mm (13.74 in)	K110	8	No	N/A
253-0163 <sup>(10)</sup>	Straight <sup>(11)</sup>	50.8 mm (2.00 in)	3772 mm (148.50 in)	349 mm (13.74 in)	J460	10	No	N/A
257-1830 <sup>(10)</sup>	Straight <sup>(11)</sup>	50.8 mm (2.00 in)	3772 mm (148.50 in)	349 mm (13.74 in)	K110	10	No	N/A
132-3116 <sup>(10)</sup>	Spade	50.8 mm (2.00 in)	3772 mm (148.50 in)	311 mm (12.24 in)	J460	8	Yes	N/A
133-0820 <sup>(10)</sup>	Spade	50.8 mm (2.00 in)	3772 mm (148.50 in)	311 mm (12.24 in)	J460	8	No	N/A
133-0818 <sup>(10)</sup>	Spade	50.8 mm (2.00 in)	3772 mm (148.50 in)	311 mm (12.24 in)	J550	8	Yes	N/A
2Q-7060 <sup>(10)</sup>	Spade <sup>(12)</sup>	50.8 mm (2.00 in)	3772 mm (148.50 in)	311 mm (12.24 in)	J460	8	Yes	N/A
256-2938 <sup>(10)</sup>	Spade	50.8 mm (2.00 in)	3772 mm (148.50 in)	311 mm (12.24 in)	K130	8	Yes	N/A
144-0106 <sup>(10)</sup>	Spade	50.8 mm (2.00 in)	3822 mm (150.47 in)	304 mm (11.97 in)	J550	8	Yes	N/A
257-1834 <sup>(10)</sup>	Spade	50.8 mm (2.00 in)	3822 mm (150.47 in)	304 mm (11.97 in)	K130	8	Yes	N/A
2Q-4342 <sup>(10)</sup>	Spade <sup>(13)</sup>	50.8 mm (2.00 in)	3980 mm (156.69 in)	354 mm (13.94 in)	J460	8	Yes	N/A
257-1835 <sup>(10)</sup>	Spade <sup>(13)</sup>	50.8 mm (2.00 in)	3980 mm (156.69 in)	354 mm (13.94 in)	K130	8	Yes	N/A
2Q-7019 <sup>(10)</sup>	Spade	63.5 mm (2.50 in)	3862 mm (152.05 in)	314 mm (12.36 in)	J550	7	Yes	N/A
257-1833 <sup>(10)</sup>	Spade	63.5 mm (2.50 in)	3862 mm (152.05 in)	314 mm (12.36 in)	K130	7	Yes	N/A
<b>988G</b>								
149-5915	Spade	50.8 mm (2.00 in)	3964 mm (156.06 in)	311 mm (12.24 in)			No	Yes
246-2743 <sup>(10)</sup>	Spade	50.8 mm (2.00 in)	3800 mm (149.61 in)	310 mm (12.20 in)	K110	8	Yes	N/A
156-1040 <sup>(10)</sup>	Straight	50.8 mm (2.00 in)	3800 mm (149.61 in)	418 mm (16.46 in)	J460	8	Yes	N/A
136-6175 <sup>(10)</sup>	Spade	50.8 mm (2.00 in)	3800 mm (149.61 in)	310 mm (12.20 in)	J460	8	Yes	N/A
195-0410 <sup>(10)</sup>	Spade <sup>(13)</sup>	50.8 mm (2.00 in)	3900 mm (153.54 in)	368 mm (14.49 in)	J460	8	Yes	N/A
257-1831 <sup>(10)</sup>	Spade <sup>(13)</sup>	50.8 mm (2.00 in)	3900 mm (153.54 in)	368 mm (14.49 in)	K110	8	Yes	N/A
204-0721 <sup>(10)</sup>	Straight <sup>(11)</sup>	50.8 mm (2.00 in)	3900 mm (153.54 in)	510 mm (20.08 in)	J460	8	No	N/A
257-1832 <sup>(10)</sup>	Straight <sup>(11)</sup>	50.8 mm (2.00 in)	3900 mm (153.54 in)	510 mm (20.08 in)	K110	8	No	N/A
151-1213 <sup>(10)</sup>	Spade <sup>(13)</sup>	50.8 mm (2.00 in)	3980 mm (156.69 in)	354 mm (13.94 in)	J460	8	Yes	N/A
156-6391 <sup>(10)</sup>	Spade <sup>(13)</sup>	50.8 mm (2.00 in)	3980 mm (156.69 in)	359 mm (14.13 in)	J460	8	Yes	N/A
186-3282 <sup>(10)</sup> <sup>(14)</sup>	Spade <sup>(13)</sup>	63.5 mm (2.50 in)	3926 mm (154.57 in)	310 mm (12.20 in)	J550	6	Lugs	N/A
253-9582 <sup>(10)</sup> <sup>(14)</sup>	Spade <sup>(13)</sup>	63.5 mm (2.50 in)	3926 mm (154.57 in)	390 mm (15.35 in)	K130	7	Yes	N/A
<b>988H</b>								
257-3667	CGS	50 mm (1.97 in)	3695 mm (145.47 in)	400 mm (15.75 in)			Yes	Yes

- 10 Base edge assembly
- 11 Flushmount adapters
- 12 Wide nose spade (3 center segments)
- 13 Stepped spade edge (all center adapters)
- 14 High Abrasion bucket edge

# Loaders - Base Edge/Base Edge Assembly

## 988 Base Edge/Base Edge Assembly (Cont'd.)

	Type	Thickness	Length	Width @ Corner	Adapters	Adapter Qty	Segments	BOCE
257-3649 <sup>(15)</sup>	Straight	50.8 mm (2.00 in)	3800 mm (149.61 in)	318 mm (12.52 in)	K110	8	Yes	N/A
246-2766 <sup>(15)</sup>	Spade <sup>(16)</sup>	50.8 mm (2.00 in)	3810 mm (150.00 in)	275 mm (10.83 in)	K110	8	Yes	N/A
246-2746 <sup>(15)</sup>	Spade <sup>(16)</sup>	50.8 mm (2.00 in)	3980 mm (156.69 in)	359 mm (14.13 in)	K110	8	Yes	N/A
246-2764 <sup>(15)</sup>	Spade <sup>(16)</sup>	50.8 mm (2.00 in)	3980 mm (156.69 in)	360 mm (14.17 in)	K110	8	Yes	N/A
246-2768 <sup>(15)</sup>	Spade <sup>(16)</sup>	63.5 mm (2.50 in)	3862 mm (152.05 in)	375 mm (14.76 in)	K130	7	Yes	N/A
257-3695 <sup>(15)</sup> <sup>(17)</sup>	Spade <sup>(16)</sup>	63.5 mm (2.50 in)	3926 mm (154.57 in)	390 mm (15.35 in)	K130	7	Yes	N/A
253-9582 <sup>(15)</sup> <sup>(17)</sup>	Spade <sup>(16)</sup>	63.5 mm (2.50 in)	3926 mm (154.57 in)	390 mm (15.35 in)	K130	7	Yes	N/A
(w/5 MAWPS bases — no base edge wear plates)								

Spade = 1 center, 3 RH, 3 LH segments

- 15 Base edge assembly
- 16 Stepped spade edge (all center adapters)
- 17 High Abrasion bucket edge

# Loader Buckets

## 910-980 Loader Bucket Base Edges & Assemblies (Weld-On System)

Length at Front	Width at End	Thickness	Part Number	Edge Type	Adapters	Adapter Type	Qty	Segments	BOCE <sup>(1)</sup>
2218.5 mm (87.3 in)	190.5 mm (7.5 in)	19 mm (0.7 in)	5G-5764	Straight				No	No
2328 mm (91.7 in)	190.5 mm (7.5 in)	19 mm (0.7 in)	5G-8526	Straight				No	No
2434 mm (95.8 in)	190.5 mm (7.5 in)	19 mm (0.7 in)	5G-8911 <sup>(2)</sup>	Straight	J200	F <sup>(3)</sup>	8	No	No
2434 mm (95.8 in)	190.5 mm (7.5 in)	19 mm (0.7 in)	5G-8912	Straight				No	No
2454 mm (96.6 in)	190.5 mm (7.5 in)	19 mm (0.7 in)	128-1489	Straight				No	No
2076.5 mm (81.8 in)	228.6 mm (9.0 in)	25 mm (1.0 in)	1V-0074 <sup>(2)</sup>	Straight	J250	F <sup>(3)</sup>	6 <sup>(4)</sup>	No	No
2076.5 mm (81.8 in)	228.6 mm (9.0 in)	25 mm (1.0 in)	9K-8471	Straight				No	No
2156 mm (84.9 in)	228.5 mm (9.0 in)	25 mm (1.0 in)	9V-5110	Straight				No	No
2248 mm (88.5 in)	228.6 mm (9.0 in)	25 mm (1.0 in)	9K-8461	Straight				No	No
2286 mm (90.0 in)	228.6 mm (9.0 in)	25 mm (1.0 in)	1V-9077	Straight				No	No
2436.5 mm (95.9 in)	245 mm (9.6 in)	25 mm (1.0 in)	9V-9755 <sup>(2)</sup>	Straight	J250	F <sup>(3)</sup>	8	No	No
2438.5 mm (96.0 in)	228.6 mm (9.0 in)	25 mm (1.0 in)	1V-3916	Straight				No	No
2477 mm (97.5 in)	245 mm (9.6 in)	25 mm (1.0 in)	106-3192 <sup>(2)</sup>	Straight	J250	F <sup>(3)</sup>	8	No	No
2594 mm (102.1 in)	245 mm (9.6 in)	25 mm (1.0 in)	4E-2482 <sup>(2)</sup>	Straight				No	No
2594 mm (102.1 in)	245 mm (9.6 in)	25 mm (1.0 in)	4E-2483	St-F <sup>(5)</sup>	J250	F <sup>(3)</sup>	8	No	No
2686 mm (105.7 in)	228.6 mm (9.0 in)	25 mm (1.0 in)	1V-3915	Straight				No	No
2731 mm (107.5 in)	245 mm (9.6 in)	25 mm (1.0 in)	9V-9072	St-F <sup>(5)</sup>				No	No
2731 mm (107.5 in)	245 mm (9.6 in)	25 mm (1.0 in)	9V-9521 <sup>(2)</sup>	Straight	J250	F <sup>(3)</sup>	8	No	No
3090 mm (121.7 in)	245 mm (9.6 in)	25 mm (1.0 in)	5V-7416	Straight				No	No
2346 mm (92.4 in)	266.7 mm (10.5 in)	32 mm (1.3 in)	9V-5340	Straight				No	No
2489 mm (98.0 in)	266.7 mm (10.5 in)	32 mm (1.3 in)	9K-8472	Straight				No	No
2498 mm (98.3 in)	282 mm (11.1 in)	32 mm (1.3 in)	256-4723 <sup>(2)</sup>	Straight	K90	F <sup>(3)</sup>	8	No	No
2552 mm (100.5 in)	266.7 mm (10.5 in)	32 mm (1.3 in)	9V-5327 <sup>(2)</sup>	Straight	J300	F <sup>(3)</sup>	8	No	No
2552 mm (100.5 in)	266.7 mm (10.5 in)	32 mm (1.3 in)	9V-5328	Straight				No	No
2583 mm (101.7 in)	282 mm (11.1 in)	32 mm (1.3 in)	8Y-9405 <sup>(2)</sup>	Straight	J350	F <sup>(3)</sup>	8	No	No
2825 mm (111.2 in)	282 mm (11.1 in)	32 mm (1.3 in)	6W-4598	St-F <sup>(5)</sup>				No	No
2825 mm (111.2 in)	282 mm (11.1 in)	32 mm (1.3 in)	6W-4599 <sup>(2)</sup>	Straight	J300	F <sup>(3)</sup>	8	No	No
2825 mm (111.2 in)	282 mm (11.1 in)	32 mm (1.3 in)	257-1826 <sup>(2)</sup>	Straight	K80	F <sup>(3)</sup>	8	No	No
2921 mm (115.0 in)	266.7 mm (10.5 in)	32 mm (1.3 in)	1V-3917	Straight				No	No
2815 mm (110.8 in)	205 mm (8.1 in)	35 mm (1.4 in)	6W-2973	Spade				No	Yes
2815 mm (110.8 in)	205 mm (8.1 in)	35 mm (1.4 in)	9C-0967	Spade				No	No
2815 mm (110.8 in)	205 mm (8.1 in)	35 mm (1.4 in)	9W-9879 <sup>(2)</sup>	Spade	J350	B st <sup>(6)</sup>	8	No	No
2815 mm (110.8 in)	205 mm (8.1 in)	35 mm (1.4 in)	257-1827 <sup>(2)</sup>	Spade	K90	2 st <sup>(7)</sup>	8	No	No
2969 mm (116.9 in)	188.6 mm (7.4 in)	35 mm (1.4 in)	141-8823	Spade				No	Yes
2969 mm (116.9 in)	188.6 mm (7.4 in)	35 mm (1.4 in)	141-8824 <sup>(2)</sup>	Spade	J350	B st <sup>(6)</sup>	8	No	No
2969 mm (116.9 in)	188.6 mm (7.4 in)	35 mm (1.4 in)	142-9406	Spade				No	No
2969 mm (116.9 in)	188.6 mm (7.4 in)	35 mm (1.4 in)	154-7375 <sup>(2)</sup>	Spade	J350	2 st <sup>(7)</sup>	8	Yes	No
2969 mm (116.9 in)	188.6 mm (7.4 in)	35 mm (1.4 in)	257-1828 <sup>(2)</sup>	Spade	K90	2 st <sup>(7)</sup>	8	Yes	No
2583 mm (101.7 in)	300 mm (11.8 in)	40 mm (1.6 in)	219-3171	Straight				No	No

- 1 Bolt-on cutting edge(s)
- 2 Base edge assembly
- 3 Flushmount
- 4 No end adapters
- 5 Edge notched for Flushmount adapters
- 6 Bottom strap
- 7 Double strap

## 910-980 Loader Bucket Base Edges & Assemblies (Weld-On System) (Cont'd.)

Length at Front	Width at End	Thickness	Part Number	Edge Type	Adapters	Adapter Type	Qty	Segments	BOCE <sup>(8)</sup>
2690 mm (105.9 in)	290 mm (11.4 in)	40 mm (1.6 in)	9V-5287	Straight				No	No
2705 mm (106.5 in)	287 mm (11.3 in)	40 mm (1.6 in)	9V-0171	Spade				No	No
2705 mm (106.5 in)	287 mm (11.3 in)	40 mm (1.6 in)	9V-0178 <sup>(9)</sup>	Spade	J350	B st <sup>(10)</sup>	7	No	No
2934 mm (115.5 in)	290 mm (11.4 in)	40 mm (1.6 in)	9V-5283	Straight				No	No
2934 mm (115.5 in)	290 mm (11.4 in)	40 mm (1.6 in)	9V-5284 <sup>(9)</sup>	Straight	J350	F <sup>(11)</sup>	8	No	No
3085 mm (121.5 in)	262 mm (10.3 in)	40 mm (1.6 in)	9V-0170	Spade				No	No
3085 mm (121.5 in)	262 mm (10.3 in)	40 mm (1.6 in)	9V-0176 <sup>(9)</sup>	Spade	J350	B st <sup>(10)</sup>	8	No	No
3085 mm (121.5 in)	262 mm (10.3 in)	40 mm (1.6 in)	257-1825 <sup>(9)</sup>	Spade	K90	2 st <sup>(12)</sup>	8	No	No
3128 mm (123.1 in)	300 mm (11.8 in)	40 mm (1.6 in)	6W-5520 <sup>(9)</sup>	Straight	J350	F <sup>(11)</sup>	8	No	No
3252 mm (128.0 in)	260.5 mm (10.3 in)	40 mm (1.6 in)	148-6915	Spade				Yes	No
3252 mm (128.0 in)	260.5 mm (10.3 in)	40 mm (1.6 in)	148-6914 <sup>(9)</sup>	Spade	J350	2 st <sup>(12)</sup>	8	Yes	No
3252 mm (128.0 in)	260.5 mm (10.3 in)	40 mm (1.6 in)	254-4505 <sup>(9)</sup>	Spade	K90	2 st <sup>(12)</sup>	8	Yes	No
3252 mm (128.0 in)	260.5 mm (10.3 in)	40 mm (1.6 in)	154-1604	Spade				No	Yes
2705 mm (106.5 in)	287 mm (11.3 in)	45 mm (1.8 in)	6W-2994	Spade				Yes	Yes
2705 mm (106.5 in)	287 mm (11.3 in)	45 mm (1.8 in)	292-3263 <sup>(9)</sup>	Spade	J460	2 st <sup>(12)</sup>	7	Yes	No
3085 mm (121.5 in)	262 mm (10.3 in)	45 mm (1.8 in)	6W-2993	Spade				Yes	Yes
3370 mm (132.7 in)	302 mm (11.9 in)	45 mm (1.8 in)	4E-6806 <sup>(9)</sup>	Spade	J460	2 st <sup>(12)</sup>	8	Yes	No
3370 mm (132.7 in)	302 mm (11.9 in)	45 mm (1.8 in)	4E-6807 <sup>(9)</sup>	Spade	J350	B st <sup>(10)</sup>	8	Yes	No
3370 mm (132.7 in)	302 mm (11.9 in)	45 mm (1.8 in)	8V-9581	Spade				No	No
3370 mm (132.7 in)	302 mm (11.9 in)	45 mm (1.8 in)	9V-0233 <sup>(9)</sup>	Spade	J350	B st <sup>(10)</sup>	8	No	No
3370 mm (132.7 in)	302 mm (11.9 in)	45 mm (1.8 in)	257-1824 <sup>(9)</sup>	Spade	K100	2 st <sup>(12)</sup>	8	Yes	No
3370 mm (132.7 in)	302 mm (11.9 in)	45 mm (1.8 in)	9V-3561	Spade				Yes	Yes
3410 mm (134.3 in)	305 mm (12.0 in)	45 mm (1.8 in)	8V-6274	Straight				No	No
3492 mm (137.5 in)	264 mm (10.4 in)	45 mm (1.8 in)	113-9942	Spade				Yes	Yes
3492 mm (137.5 in)	264 mm (10.4 in)	45 mm (1.8 in)	123-1396	Spade				No	No
3492 mm (137.5 in)	264 mm (10.4 in)	45 mm (1.8 in)	126-6539 <sup>(9)</sup>	Spade	J400	2 st <sup>(12)</sup>	8	Yes	No
3492 mm (137.5 in)	264 mm (10.4 in)	45 mm (1.8 in)	126-6540 <sup>(9)</sup>	Spade	J400	2 st <sup>(12)</sup>	8	No	No
3492 mm (137.5 in)	305 mm (12.0 in)	45 mm (1.8 in)	130-4606 <sup>(9)</sup>	Straight	J400	F <sup>(11)</sup>	8	No	No
3492 mm (137.5 in)	305 mm (12.0 in)	45 mm (1.8 in)	136-0878	Straight				No	No
3492 mm (137.5 in)	305 mm (12.0 in)	45 mm (1.8 in)	261-8713 <sup>(9)</sup>	Straight	K100	F <sup>(11)</sup>	8	No	No
3492 mm (137.5 in)	264 mm (10.4 in)	45 mm (1.8 in)	261-8714 <sup>(9)</sup>	Spade	K100	2 st <sup>(12)</sup>	8	No	No
3492 mm (137.5 in)	264 mm (10.4 in)	45 mm (1.8 in)	261-8715 <sup>(9)</sup>	Spade	K100	2 st <sup>(12)</sup>	8	Yes	No
2714 mm (106.9 in)	330 mm (13.0 in)	50 mm (2.0 in)	9V-0255	Straight				No	No
2714 mm (106.9 in)	330 mm (13.0 in)	50 mm (2.0 in)	137-6264 <sup>(9)</sup>	Straight	J460	2 st <sup>(12)</sup>	6	No	No
3492 mm (137.5 in)	264 mm (10.4 in)	50 mm (2.0 in)	134-1747 <sup>(9)</sup>	Spade	J460	2 st <sup>(12)</sup>	8	Yes	No
3492 mm (137.5 in)	264 mm (10.4 in)	50 mm (2.0 in)	134-1748	Spade				Yes	No
3492 mm (137.5 in)	264 mm (10.4 in)	50 mm (2.0 in)	260-1385 <sup>(9)</sup>	Spade	K110	2 st <sup>(12)</sup>	8	Yes	No
3568 mm (140.5 in)	280 mm (11.0 in)	50 mm (2.0 in)	135-7114 <sup>(9)</sup>	Straight	J460	2 st <sup>(12)</sup>	8	Yes	No
3568 mm (140.5 in)	280 mm (11.0 in)	50 mm (2.0 in)	260-1384 <sup>(9)</sup>	Straight	K110	2 st <sup>(12)</sup>	8	Yes	No
3252 mm (128.0 in)	260.5 mm (10.3 in)	40 mm (1.6 in)	148-6915	Spade				Yes	No
3252 mm (128.0 in)	260.5 mm (10.3 in)	40 mm (1.6 in)	148-6914 <sup>(9)</sup>	Spade	J350	2 st <sup>(12)</sup>	8	Yes	No

- 8 Bolt-on cutting edge(s)
- 9 Base edge assembly
- 10 Bottom strap
- 11 Flushmount
- 12 Double strap

# Loader Buckets

## 910-980 Loader Bucket Base Edges & Assemblies (Weld-On System) (Cont'd.)

Length at Front	Width at End	Thickness	Part Number	Edge Type	Adapters	Adapter Type	Qty	Segments	BOCE <sup>(13)</sup>
3252 mm (128.0 in)	260.5 mm (10.3 in)	40 mm (1.6 in)	254-4505 <sup>(14)</sup>	Spade	K90	2 st <sup>(15)</sup>	8	Yes	No
3252 mm (128.0 in)	260.5 mm (10.3 in)	40 mm (1.6 in)	154-1604	Spade				No	Yes
2705 mm (106.5 in)	287 mm (11.3 in)	45 mm (1.8 in)	6W-2994	Spade				Yes	Yes
2705 mm (106.5 in)	287 mm (11.3 in)	45 mm (1.8 in)	292-3263 <sup>(14)</sup>	Spade	J460	2 st <sup>(15)</sup>	7	Yes	No
3085 mm (121.5 in)	262 mm (10.3 in)	45 mm (1.8 in)	6W-2993	Spade				Yes	Yes
3370 mm (132.7 in)	302 mm (11.9 in)	45 mm (1.8 in)	4E-6806 <sup>(14)</sup>	Spade	J460	2 st <sup>(15)</sup>	8	Yes	No
3370 mm (132.7 in)	302 mm (11.9 in)	45 mm (1.8 in)	4E-6807 <sup>(14)</sup>	Spade	J350	B st <sup>(16)</sup>	8	Yes	No
3370 mm (132.7 in)	302 mm (11.9 in)	45 mm (1.8 in)	8V-9581	Spade				No	No
3370 mm (132.7 in)	302 mm (11.9 in)	45 mm (1.8 in)	9V-0233 <sup>(14)</sup>	Spade	J350	B st <sup>(16)</sup>	8	No	No
3370 mm (132.7 in)	302 mm (11.9 in)	45 mm (1.8 in)	257-1824 <sup>(14)</sup>	Spade	K100	2 st <sup>(15)</sup>	8	Yes	No
3370 mm (132.7 in)	302 mm (11.9 in)	45 mm (1.8 in)	9V-3561	Spade				Yes	Yes
3410 mm (134.3 in)	305 mm (12.0 in)	45 mm (1.8 in)	8V-6274	Straight				No	No
3492 mm (137.5 in)	264 mm (10.4 in)	45 mm (1.8 in)	113-9942	Spade				Yes	Yes
3492 mm (137.5 in)	264 mm (10.4 in)	45 mm (1.8 in)	123-1396	Spade				No	No
3492 mm (137.5 in)	264 mm (10.4 in)	45 mm (1.8 in)	126-6539 <sup>(14)</sup>	Spade	J400	2 st <sup>(15)</sup>	8	Yes	No
3492 mm (137.5 in)	264 mm (10.4 in)	45 mm (1.8 in)	126-6540 <sup>(14)</sup>	Spade	J400	2 st <sup>(15)</sup>	8	No	No
3492 mm (137.5 in)	305 mm (12.0 in)	45 mm (1.8 in)	130-4606 <sup>(14)</sup>	Straight	J400	F <sup>(17)</sup>	8	No	No
3492 mm (137.5 in)	305 mm (12.0 in)	45 mm (1.8 in)	136-0878	Straight				No	No
3492 mm (137.5 in)	305 mm (12.0 in)	45 mm (1.8 in)	261-8713 <sup>(14)</sup>	Straight	K100	F <sup>(17)</sup>	8	No	No
3492 mm (137.5 in)	264 mm (10.4 in)	45 mm (1.8 in)	261-8714 <sup>(14)</sup>	Spade	K100	2 st <sup>(15)</sup>	8	No	No
3492 mm (137.5 in)	264 mm (10.4 in)	45 mm (1.8 in)	261-8715 <sup>(14)</sup>	Spade	K100	2 st <sup>(15)</sup>	8	Yes	No
2714 mm (106.9 in)	330 mm (13.0 in)	50 mm (2.0 in)	9V-0255	Straight				No	No
2714 mm (106.9 in)	330 mm (13.0 in)	50 mm (2.0 in)	137-6264 <sup>(14)</sup>	Straight	J460	2 st <sup>(15)</sup>	6	No	No
3492 mm (137.5 in)	264 mm (10.4 in)	50 mm (2.0 in)	134-1747 <sup>(14)</sup>	Spade	J460	2 st <sup>(15)</sup>	8	Yes	No
3492 mm (137.5 in)	264 mm (10.4 in)	50 mm (2.0 in)	134-1748	Spade				Yes	No
3492 mm (137.5 in)	264 mm (10.4 in)	50 mm (2.0 in)	260-1385 <sup>(14)</sup>	Spade	K110	2 st <sup>(15)</sup>	8	Yes	No
3568 mm (140.5 in)	280 mm (11.0 in)	50 mm (2.0 in)	135-7114 <sup>(14)</sup>	Straight	J460	2 st <sup>(15)</sup>	8	Yes	No
3568 mm (140.5 in)	280 mm (11.0 in)	50 mm (2.0 in)	260-1384 <sup>(14)</sup>	Straight	K110	2 st <sup>(15)</sup>	8	Yes	No

## Loader Bucket Straight Base Edges (Bolt-On System)

Length at Front	Width at End	Thickness	Part Number	One Bolt Bucket Corner		Two Bolt Bucket Corner		Adapters (qty)	Segments (y/n)	Cutting Edges (y/n)
				(lh)	(rh)	(lh)	(rh)			
1823 mm (71.8 in)	190.5 mm (7.5 in)	19 mm (0.75 in)	5G-2808	5G-2806	5G-2807			8	n	y
1898 mm (74.7 in)	190.5 mm (7.5 in)	19 mm (0.75 in)	6S-6501	5G-2806	5G-2807			6	n	y
1950 mm (76.8 in)	190.5 mm (7.5 in)	19 mm (0.75 in)	8Y-4738	5G-2806	5G-2807			8	y	y
1950 mm (76.8 in)	190.5 mm (7.5 in)	19 mm (0.75 in)	5G-8467	5G-2806	5G-2807			8	n	y
2075 mm (81.7 in)	190.5 mm (7.5 in)	19 mm (0.75 in)	5G-2809	5G-2806	5G-2807			7	n	y
2150 mm (84.6 in)	190.5 mm (7.5 in)	19 mm (0.75 in)	5G-6133	5G-2806	5G-2807			7	y	y
2264 mm (89.1 in)	190.5 mm (7.5 in)	19 mm (0.75 in)	5G-8763	5G-2806	5G-2807			7	y	y

- 13 Bolt-on cutting edge(s)
- 14 Base edge assembly
- 15 Double strap
- 16 Bottom strap
- 17 Flushmount



## Loader Bucket Straight Base Edges (Bolt-On System) (Cont'd.)

Length at Front	Width at End	Thickness	Part Number	One Bolt Bucket Corner		Two Bolt Bucket Corner		Adapters (qty)	Segments (y/n)	Cutting Edges (y/n)
				(lh)	(rh)	(lh)	(rh)			
2330 mm (91.7 in)	190.5 mm (7.5 in)	19 mm (0.75 in)	5G-3477	5G-2806	5G-2807			7	n	y
2366 mm (93.1 in)	190.5 mm (7.5 in)	19 mm (0.75 in)	5G-8342	5G-2806	5G-2807			8	y	y
2406 mm (94.7 in)	190.5 mm (7.5 in)	19 mm (0.75 in)	6S-7291	5G-2806	5G-2807			7	n	n
2018 mm (79.4 in)	245 mm (9.6 in)	25 mm (1.0 in)	6W-2977	4V-1545	4V-1544	6I-8310	6I-8311	8	y	y
2079 mm (81.9 in)	245 mm (9.6 in)	25 mm (1.0 in)	9V-6571	4V-1545	4V-1544	6I-8310	6I-8311	8	y	y
2079 mm (81.9 in)	245 mm (9.6 in)	25 mm (1.0 in)	4V-8335	4V-1545	4V-1544	6I-8310	6I-8311	8	n	y
2152 mm (84.7 in)	245 mm (9.6 in)	25 mm (1.0 in)	8Y-8763	4V-1545	4V-1544	6I-8310	6I-8311	8	y	y
2210 mm (87.0 in)	245 mm (9.6 in)	25 mm (1.0 in)	4V-8850	4V-1545	4V-1544	6I-8310	6I-8311	8	n	y
2210 mm (87.0 in)	245 mm (9.6 in)	25 mm (1.0 in)	9V-6570	4V-1545	4V-1544	6I-8310	6I-8311	8	y	y
2248 mm (88.5 in)	245 mm (9.6 in)	25 mm (1.0 in)	5V-7437			6I-8310	6I-8311	8	n	y
2248 mm (88.5 in)	245 mm (9.6 in)	25 mm (1.0 in)	8V-7453	4V-1545	4V-1544	6I-8310	6I-8311	8	n	y
2248 mm (88.5 in)	245 mm (9.6 in)	25 mm (1.0 in)	6W-2976	4V-1545	4V-1544	6I-8310	6I-8311	8	y	y
2370 mm (93.3 in)	245 mm (9.6 in)	25 mm (1.0 in)	5V-4670	4V-1545	4V-1544	6I-8310	6I-8311	8	n	y
2370 mm (93.3 in)	245 mm (9.6 in)	25 mm (1.0 in)	9V-6572	4V-1545	4V-1544	6I-8310	6I-8311	8	y	y
2408 mm (94.8 in)	245 mm (9.6 in)	25 mm (1.0 in)	6W-2984	4V-1545	4V-1544	6I-8310	6I-8311	8	y	y
2435 mm (95.9 in)	245 mm (9.6 in)	25 mm (1.0 in)	110-4781	4V-1545	4V-1544	6I-8310	6I-8311	8	y	y
2524 mm (99.4 in)	245 mm (9.6 in)	25 mm (1.0 in)	4E-0659	4V-1545	4V-1544	6I-8310	6I-8311	8	y	y
2639 mm (103.9 in)	245 mm (9.6 in)	25 mm (1.0 in)	8V-1825	4V-1545	4V-1544	6I-8310	6I-8311	8	n	y
2639 mm (103.9 in)	245 mm (9.6 in)	25 mm (1.0 in)	6W-2985	4V-1545	4V-1544	6I-8310	6I-8311	8	y	y
2690 mm (105.9 in)	245 mm (9.6 in)	25 mm (1.0 in)	105-2345	4V-1545	4V-1544	6I-8310	6I-8311	8	y	y
2723 mm (107.2 in)	245 mm (9.6 in)	25 mm (1.0 in)	110-4712	4V-1545	4V-1544	6I-8310	6I-8311	8	y	y
2412 mm (95.0 in)	245 mm (9.6 in)	25 mm (1.0 in)	6W-2986	4V-1545	4V-1544	6I-8310	6I-8311	8	y	y
2615 mm (103.0 in)	245 mm (9.6 in)	25 mm (1.0 in)	6W-2987	4V-1545	4V-1544	6I-8310	6I-8311	8	y	y
Note: All the above 245 mm wide x 25 mm thick base edges can be equipped with the following bucket corners for upsized adapters. On narrower edges check for segment-tip interference.										
				5V-7395	5V-7396	8E-5302	8E-5303			
2744 mm (108.0 in)	245 mm (9.6 in)	25 mm (1.0 in)	5V-7410			6I-8310	6I-8311	0	n	y
2237 mm (88.1 in)	282 mm (11.1 in)	32 mm (1.3 in)	6W-2978	5V-1784	5V-1783	8E-5301	8E-5300	8	y	y
2268 mm (89.3 in)	282 mm (11.1 in)	32 mm (1.3 in)	4V-4958	5V-1784	5V-1783	8E-5301	8E-5300	8	n	y
2268 mm (89.3 in)	282 mm (11.1 in)	32 mm (1.3 in)	6W-2979	5V-1784	5V-1783	8E-5301	8E-5300	8	y	y
2430 mm (95.7 in)	282 mm (11.1 in)	32 mm (1.3 in)	5V-7263	5V-1784	5V-1783	8E-5301	8E-5300	8	n	y
2474 mm (97.4 in)	282 mm (11.1 in)	32 mm (1.3 in)	4V-3174	5V-1784	5V-1783	8E-5301	8E-5300	8	n	y
2474 mm (97.4 in)	282 mm (11.1 in)	32 mm (1.3 in)	6W-2980	5V-1784	5V-1783	8E-5301	8E-5300	8	y	y
2736 mm (107.7 in)	282 mm (11.1 in)	32 mm (1.3 in)	5V-4696	5V-1784	5V-1783	8E-5301	8E-5300	8	n	y
2736 mm (107.7 in)	282 mm (11.1 in)	32 mm (1.3 in)	9V-6573	5V-1784	5V-1783	8E-5301	8E-5300	8	y	y
2840 mm (111.8 in)	282 mm (11.1 in)	32 mm (1.3 in)	6W-2989	5V-1784	5V-1783	8E-5301	8E-5300	8	y	y
2856 mm (112.4 in)	282 mm (11.1 in)	32 mm (1.3 in)	6W-2990	5V-1784	5V-1783	8E-5301	8E-5300	8	y	y
2886 mm (113.6 in)	282 mm (11.1 in)	32 mm (1.3 in)	141-4847	5V-1784	5V-1783	8E-5301	8E-5300	8	y	y
Note: All the above 282 mm wide x 32 mm thick base edges can be equipped with the following bucket corners for upsized adapters. On narrower edges check for segment-tip interference. (Corners are not dimensionally equal.)										
				5V-2773	5V-2772	8E-5321	8E-5320			
2498 mm (98.3 in)	282 mm (11.1 in)	32 mm (1.3 in)	8Y-6263			8E-5321	8E-5320	8	y	y
3040 mm (119.7 in)	282 mm (11.1 in)	32 mm (1.3 in)	7V-0912	5V-2773	5V-2772	8E-5321	8E-5320	0	n	y
2430 mm (95.7 in)	300 mm (11.8 in)	40 mm (1.6 in)	6W-2983	4V-7174	4V-7175	8E-5310	8E-5311	8	y	y
2602 mm (102.4 in)	300 mm (11.8 in)	40 mm (1.6 in)	5V-0600	4V-7174	4V-7175	8E-5310	8E-5311	8	n	y
2602 mm (102.4 in)	300 mm (11.8 in)	40 mm (1.6 in)	6W-2982	4V-7174	4V-7175	8E-5310	8E-5311	8	y	y
2702 mm (106.4 in)	300 mm (11.8 in)	40 mm (1.6 in)	5G-7303	4V-7174	4V-7175	8E-5310	8E-5311	8	n	y

# Loader Buckets

## Loader Bucket Straight Base Edges (Bolt-On System) (Cont'd.)

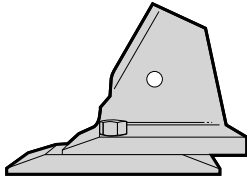
Length at Front	Width at End	Thickness	Part Number	One Bolt Bucket Corner		Two Bolt Bucket Corner		Adapters (qty)	Segments (y/n)	Cutting Edges (y/n)
				(lh)	(rh)	(lh)	(rh)			
2702 mm (106.4 in)	300 mm (11.8 in)	40 mm (1.6 in)	5G-7304	4V-7174	4V-7175	8E-5310	8E-5311	8	y	y
2846 mm (112.0 in)	300 mm (11.8 in)	40 mm (1.6 in)	4V-9714	4V-7174	4V-7175	8E-5310	8E-5311	8	n	y
2846 mm (112.0 in)	300 mm (11.8 in)	40 mm (1.6 in)	6W-2981	4V-7174	4V-7175	8E-5310	8E-5311	8	y	y
2912 mm (114.6 in)	300 mm (11.8 in)	40 mm (1.6 in)	7V-6844	4V-7174	4V-7175	8E-5310	8E-5311	8	n	y
2925 mm (115.2 in)	300 mm (11.8 in)	40 mm (1.6 in)	7I-3631	4V-7174	4V-7175	8E-5310	8E-5311	8	y	y
3032 mm (119.4 in)	300 mm (11.8 in)	40 mm (1.6 in)	7V-1490	4V-7174	4V-7175	8E-5310	8E-5311	8	n	y
3032 mm (119.4 in)	300 mm (11.8 in)	40 mm (1.6 in)	9V-6575	4V-7174	4V-7175	8E-5310	8E-5311	8	y	y
3200 mm (126.0 in)	300 mm (11.8 in)	40 mm (1.6 in)	7I-3015	4V-7174	4V-7175	8E-5310	8E-5311	8	y	y
3323 mm (130.8 in)	300 mm (11.8 in)	40 mm (1.6 in)	7V-0909	4V-7174	4V-7175	8E-5310	8E-5311	0	n	y
3179 mm (125.2 in)	305 mm (12.0 in)	45 mm (1.8 in)	6W-2991	7V-4180	7V-4181	6I-8250	6I-8249	8	y	y
3315 mm (130.5 in)	305 mm (12.0 in)	45 mm (1.8 in)	7V-4188	7V-4180	7V-4181	6I-8250	6I-8249	8	n	y
3315 mm (130.5 in)	305 mm (12.0 in)	45 mm (1.8 in)	9V-6574	7V-4180	7V-4181	6I-8250	6I-8249	8	y	y
3405 mm (134.1 in)	305 mm (12.0 in)	45 mm (1.8 in)	111-9770	7V-4180	7V-4181	6I-8250	6I-8249	8	y	y
3560 mm (140.2 in)	305 mm (12.0 in)	45 mm (1.8 in)	4E-6085	7V-4180	7V-4181	6I-8250	6I-8249	8	y	y
3607 mm (142.0 in)	305 mm (12.0 in)	45 mm (1.8 in)	193-9015	7V-4180	7V-4181	6I-8250	6I-8249	0	n	y
3687 mm (145.2 in)	305 mm (12.0 in)	45 mm (1.8 in)	9U-3748	7V-4180	7V-4181	6I-8250	6I-8249	8	y	y
3810 mm (150.0 in)	305 mm (12.0 in)	45 mm (1.8 in)	194-0659	7V-4180	7V-4181	6I-8250	6I-8249	0	n	y
3687 mm (145.2 in)	325 mm (12.8 in)	50 mm (2.0 in)	183-5190			6I-8250	6I-8249	8	y	y
3695 mm (145.5 in)	400 mm (15.7 in)	50 mm (2.0 in)	257-3667			6I-8250	6I-8249	8	y	y

## Bolt-On Edges

When penetration is not a problem, use bolt-on cutting edges.

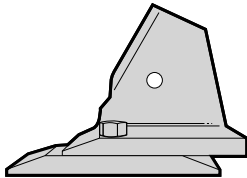
Bolt-on cutting edges:

- Increases base edge life up to five times over an unprotected base edge.
- Are quick and easy to replace.
- Increases bucket capacity.
- Provides smooth floor maintenance capability.
- Are made of DH-2 steel alloy and are hardened to 430-520 Brinell.



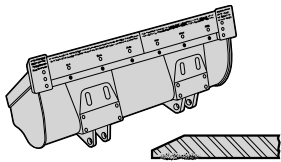
### Standard Bolt-On Edges

- Reversible for a second wear life.



### Heavy Duty Bolt-On Edges

- Provides at least 50% more wear material than standard bolt-on edges.
- Reversible for a second wear life.



### ARM Bolt-On Edges

- Provides three to five times the wear life of standard bolt-on edges.
- For use in low to moderate impact applications where wear rates are high — such as in abrasive materials.

# Loader Rock Buckets

## Loader Rock Bucket Bolt-On Cutting Edges

Note: All quantities are (1) unless indicated otherwise

Base Edge Part Number	BOCE Type	LH End (qty)	LH Center (qty)	Center (qty)	RH Center (qty)	RH End (qty)	Hardware		
							Bolt (qty)	Nut (qty)	Washer
4E-6462	Standard	6I-8368	6I-8367	6I-8364	6I-8365	6I-8366	5P-8823 (28)	3K-9770 (28)	4K-0684 (28)
	Heavy Duty	127-7430	127-7432	127-7429	127-7433	127-7431	5P-8823 (28)	3K-9770 (28)	4K-0684 (28)
4E-7616	Standard	101-9032		101-9350		101-9351	6V-6535 (21)	3K-9770 (21)	4K-0684 (21)
	Heavy Duty	107-3544		107-3540		107-3543	6V-6535 (21)	3K-9770 (21)	4K-0684 (21)
	ARM	136-6794		136-6790		136-6793	6V-6535 (21)	3K-9770 (21)	4K-0684 (21)
4E-8112	Standard	102-2184		102-9350		102-2184	6V-6535 (21)	3K-9770 (21)	4K-0684 (21)
	Heavy Duty	107-3541		107-3540		107-3541	6V-6535 (21)	3K-9770 (21)	4K-0684 (21)
	ARM	132-1067		132-1068		132-1067	6V-6535 (21)	3K-9770 (21)	4K-0684 (21)
4E-9915	Standard	162-3296	106-6423	106-6420	106-6421	162-3297	5P-8823 (32)	3K-9770 (32)	4K-0684 (32)
6W-2973	Standard	7T-5964	7T-5961	7T-5962	7T-5963	7T-5960	8T-9079 (18)	3K-9770 (18)	4K-0684 (18)
6W-2993	Standard	4T-9127	4T-9125	4T-9185	4T-9128	4T-9126	6V-6535 (16)	3K-9770 (16)	4K-0684 (16)
6W-2994	Standard	9W-3678		9W-3676		9W-3677	6V-6535 (12)	3K-9770 (12)	4K-0684 (12)
8R-4649	Standard	9W-5732	9W-5731	9W-5733	9W-5736	9W-5735	6V-6535 (25)	3K-9770 (25)	4K-0684 (25)
	Heavy Duty	106-1095	106-1094	106-1096	106-1098	106-1097	6V-6535 (25)	3K-9770 (25)	4K-0684 (25)
	ARM	208-5282	208-5281	208-5283	208-5286	208-5285	6V-6535 (25)	3K-9770 (25)	4K-0684 (25)
9C-2932	Standard	9W-8249		9W-8250		9W-8249	6V-6535 (11)	3K-9770 (11)	4K-0684 (11)
9V-3561	Standard	4T-7143	4T-7145	4T-7141	4T-7144	4T-7142	6V-6535 (18)	3K-9770 (18)	4K-0684 (18)
	Heavy Duty	107-8588	107-8590	107-8586	107-8589	107-8587	6V-6535 (18)	3K-9770 (18)	4K-0684 (18)
101-9186	Standard	106-6378		106-6377(2)		106-6378	5P-8823 (26)	3K-9770 (26)	4K-0684 (26)
113-9942	Standard	109-9125	109-9124	109-9123	109-9122	109-9121	6V-6535 (25)	3K-9770 (25)	4K-0684 (25)
132-3117	Standard	101-9352		144-1331		101-9351	6V-6535 (21)	3K-9770 (21)	4K-0684 (21)
141-8823	Standard	109-9016	7T-5961	132-1089	7T-5963	109-9017	8T-9079 (18)	3K-9770 (18)	4K-0684 (18)
149-5915	Standard	9W-5732	9W-5731	9W-5733	9W-5736	9W-5735	6V-6535 (28)	3K-9770 (28)	4K-0684 (28)
				+9W-5734					
	Heavy Duty	106-1095	106-1094	106-1096	106-1098	106-1097	6V-6535 (28)	3K-9770 (28)	4K-0684 (28)
				+107-3490					
154-1604	Standard	135-8242	135-8244	135-8240	135-8243	135-8241	8T-9079 (18)	3K-9770 (18)	4K-0684 (18)
151-5980	Standard	162-3296	106-6423	106-6420	106-6421	162-3297	5P-8823 (32)	3K-9770 (32)	4K-0684 (32)
170-1748	Standard	6I-8368	6I-8367	6I-8364	6I-8365	6I-8366	5P-8823 (28)	3K-9770 (28)	4K-0684 (28)
	Heavy Duty	127-7430	127-7432	127-7429	127-7433	127-7431	5P-8823 (28)	3K-9770 (28)	4K-0684 (28)

## Loader GP Bucket Bolt-On Cutting Edges & Top Wear Plates

Note: All quantities are (1) unless indicated otherwise

Base Edge Part Number	BOCE Type	Center (qty)	Straight Endbit/End		Angled Endbit		Hardware	
			LH (qty)	RH (qty)	LH (qty)	RH (qty)	Bolt (qty)	Nut (qty)
3V-0187	Standard	4T-6588	4T-6588	4T-6588			4J-9058 (18)	2J-3507 (18)
4E-0659	Standard	8E-4567 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607 (10)	2J-3507 (10)
	ARM	135-6728/9	9W-3482	9W-3481			1J-5607 (10)	2J-3507 (10)
4E-6085	Standard	9W-1375 (2)	1U-0761	1U-0761	1U-0764	1U-0764	5P-8823 (12)	3K-9770 (12)
	ARM	109-2697 (2)	123-0335	123-0334			5P-8823 (12)	3K-9770 (12)
4V-3174	Standard	1U-0600 (2)	4T-8101	4T-8101	1U-1898	1U-1898	4F-4042 (12)	2J-3507 (12)
4V-4958	Standard	1U-0599 (2)	4T-8101	4T-8101	1U-1898	1U-1898	4F-4042 (12)	2J-3507 (12)
4V-8335	Standard	1U-0294 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607 (10)	2J-3507 (10)
4V-8850	Standard	1U-0293 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607 (10)	2J-3507 (10)
4V-9714	Standard	1U-2406 (2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)	3K-9770 (12)
5G-2808	Standard	4T-2911	4T-2910	4T-2910			4F-7827 (8)	2J-3506 (8)
	Heavy Duty		195-7130	195-7130			4F-7827 (8)	2J-3506 (8)
5G-2809	Standard	4T-8796	4T-2914	4T-2914			4F-7827 (7)	2J-3506 (7)
	Heavy Duty		195-7131	195-7132			4F-7827 (7)	2J-3506 (7)
5G-2395 <sup>(1)</sup>	Standard		4T-2912	4T-2912			4F-7827 (8)	2J-3506 (8)
5G-3477	Standard	4T-2915	4T-2914	4T-2914			4F-7827 (7)	2J-3506 (7)
	Heavy Duty		195-7135	195-7136			4F-7827 (7)	2J-3506 (7)
5G-6133	Standard	4T-2913	4T-2914	4T-2914			4F-7827 (7)	2J-3506 (7)
	Heavy Duty		195-7133	195-7134			4F-7827 (7)	2J-3506 (7)
5G-7303	Standard	9W-8334 (2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)	3K-9770 (12)
5G-7304	Standard	9W-8334 (2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)	3K-9770 (12)
5G-8342	Standard	9W-8620	4T-2914	4T-2914			4F-7827 (8)	2J-3506 (8)
	Heavy Duty		195-7137	195-7137			4F-7827 (8)	2J-3506 (8)
5G-8467	Standard	9W-9943	9W-9944	9W-9944			4F-7827 (8)	2J-3506 (8)
5G-8763	Standard	9W-8694	4T-2914	4T-2914			4F-7827 (7)	2J-3506 (7)
	Heavy Duty		195-7139	195-7140			4F-7827 (7)	2J-3506 (7)
5V-0600	Standard	1U-0591 (2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)	3K-9770 (12)
5V-4670	Standard	1U-0295 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607 (10)	2J-3507 (10)
	ARM	9W-3486/7	9W-3482	9W-3481			1J-5607 (10)	2J-3507 (10)
5V-4696	Standard	1U-0601 (2)	4T-8101	4T-8101	1U-1898	1U-1898	4F-4042 (12)	2J-3507 (12)
	Heavy Duty	132-1034(2)	132-1033	132-1033			4F-4042 (12)	2J-3507 (12)
	ARM	9W-3492/3	9W-3488	9W-3489			4F-4042 (12)	2J-3507 (12)
5V-7263	Standard	1U-2411 (2)	4T-8101	4T-8101	1U-1898	1U-1898	4F-4042 (12)	2J-3507 (12)
5V-7410	Standard	1U-0601 (2)	4T-8101	4T-8101	1U-1898	1U-1898	4F-4042 (12)	2J-3507 (12)
	Heavy Duty	132-1034(2)	132-1033	132-1033			4F-4042 (12)	2J-3507 (12)
	ARM	9W3492/3	9W-3488	9W-3489			4F-4042 (12)	2J-3507 (12)
5V-7437	Standard		1U-1471	1U-1471			1J-5607 (8)	2J-3507 (8)
6S-6500 <sup>(1)</sup>	Standard	4T-2920	4T-2910	4T-2910			4F-7827 (7)	2J-3506 (7)
6S-6501	Standard		4T-2919	4T-2919			4F-7827 (6)	2J-3506 (6)
6W-2976	Standard	4T-9563 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607 (10)	2J-3507 (10)
6W-2977	Standard	1U-0605 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607 (10)	2J-3507 (10)
6W-2978	Standard	1U-2410 (2)	4T-8101	4T-8101	1U-1898	1U-1898	4F-4042 (12)	2J-3507 (12)
6W-2979	Standard	1U-0599 (2)	4T-8101	4T-8101	1U-1898	1U-1898	4F-4042 (12)	2J-3507 (12)
6W-2980	Standard	1U-0600 (2)	4T-8101	4T-8101	1U-1898	1U-1898	4F-4042 (12)	2J-3507 (12)

<sup>1</sup> Base edge not serviced

# Loader GP Buckets

## Loader GP Bucket Bolt-On Cutting Edges & Top Wear Plates (Cont'd.)

Base Edge Part Number	BOCE Type	Center (qty)	Straight Endbit/End		Angled Endbit		Hardware	
			LH (qty)	RH (qty)	LH (qty)	RH (qty)	Bolt (qty)	Nut (qty)
6W-2981	Standard	1U-2406 (2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)	3K-9770 (12)
6W-2982	Standard	1U-0591 (2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)	3K-9770 (12)
6W-2983	Standard	1U-2408 (2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)	3K-9770 (12)
6W-2984	Standard	1U-0607 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607 (10)	2J-3507 (10)
	ARM	9W-3483 (2)	9W-3482	9W-3481			1J-5607 (10)	2J-3507 (10)
6W-2985	Standard	1U-0292 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607 (10)	2J-3507(10)
	ARM	9W-3484/5	9W-3482	9W-3481			1J-5607 (10)	2J-3507(10)
6W-2986	Standard	1U-2414 (2)	4T-8101	4T-8101	1U-1898	1U-1898	4F-4042 (12)	2J-3507(12)
	Heavy Duty	132-1030(2)	132-1033	132-1033			4F-4042 (12)	2J-3507(12)
6W-2987	Standard	1U-2412 (2)	4T-8101	4T-8101	1U-1898	1U-1898	4F-4042 (12)	2J-3507(12)
	Heavy Duty	132-1031(2)	132-1033	132-1033			4F-4042 (12)	2J-3507(12)
	ARM	9W-3490/1	9W-3488	9W-3489			4F-4042 (12)	2J-3507(12)
	6W-2988 (2)	Standard	1U-2413 (2)	4T-8101	4T-8101	1U-1898	1U-1898	4F-4042 (12)
	Heavy Duty	132-1032(2)	132-1033	132-1033			4F-4042 (12)	2J-3507(12)
	6W-2989	Standard	1U-2407 (2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)
Heavy Duty		135-9532(2)	100-4044	100-4044			5P-8823 (12)	3K-9770 (12)
6W-2990	Standard	1U-2406 (2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)	3K-9770 (12)
	Heavy Duty	100-4045(2)	100-4044	100-4044			5P-8823 (12)	3K-9770 (12)
	ARM	9W-3479/80	123-0336	123-0337			5P-8823 (12)	3K-9770 (12)
	6W-2991	Standard	4T-5273 (2)	1U-0761	1U-0761	1U-0764	1U-0764	5P-8823 (12)
7I-3015	Standard	100-6668(2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)	3K-9770 (12)
	Heavy Duty	140-6823(2)	167-7430	167-7430			5P-8823 (12)	3K-9770 (12)
	ARM	107-3287/8	123-0336	123-0337			5P-8823 (12)	3K-9770 (12)
	ARM (rev)	229-6944 (2)	208-5343	208-5343			5P-8823 (12)	3K-9770 (12)
	Half Arrow	253-0071(3)	253-0069	253-0070			5P-8823 (18)	3K-9770 (18)
	HA (arm)	253-0075(3)	253-0073	253-0074			5P-8823 (18)	3K-9770 (18)
Top Wear Plate for HA Edge		286-1981(2)	286-1980	286-1979			5P-8361 (8)	
7I-3631	Standard	1U-1909 (2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)	3K-9770 (12)
	Heavy Duty	135-9533(2)	100-4044	100-4044			5P-8823 (12)	3K-9770 (12)
	ARM	107-3282/3	123-0336	123-0337			5P-8823 (12)	3K-9770 (12)
7V-0898 (2)	Standard	1U-2409 (2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)	3K-9770 (12)
7V-0909	Standard	1U-0762 (2)	1U-0761	1U-0761	1U-0764	1U-0764	5P-8823 (12)	3K-9770 (12)
	Heavy Duty	100-4047(2)	100-4043	100-4043			5P-8823 (12)	3K-9770 (12)
	ARM	6Y-3271 (2)	123-0335	123-0334			5P-8823 (12)	3K-9770 (12)
	ARM (rev)	208-5344(2)	208-5177	208-5177			5P-8823 (12)	3K-9770 (12)
7V-0912	Standard	1U-0593 (2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)	3K-9770 (12)
7V-1490	Standard	1U-0593 (2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)	3K-9770 (12)
	Heavy Duty	100-4046(2)	100-4044	100-4044			5P-8823 (12)	3K-9770 (12)
	ARM	9W-3477/8	123-0336	123-0337			5P-8823 (12)	3K-9770 (12)
	ARM (rev)	208-5345(2)	208-5343	208-5343			5P-8823 (12)	3K-9770 (12)
	Half Arrow	253-0079(3)	253-0077	253-0078			5P-8823 (18)	3K-9770 (18)
	HA (arm)	253-0083(3)	253-0081	253-0082			5P-8823 (18)	3K-9770 (18)
Top Wear Plate for HA Edge		286-1984 (2)	286-1983	286-1982			5P-8361 (8)	
7V-4188	Standard	1U-0762 (2)	1U-0761	1U-0761	1U-0764	1U-0764	5P-8823 (12)	3K-9770 (12)
	Heavy Duty	100-4047(2)	100-4043	100-4043			5P-8823 (12)	3K-9770 (12)

2 Base edge not serviced

## Loader GP Bucket Bolt-On Cutting Edges & Top Wear Plates (Cont'd.)

Base Edge Part Number	BOCE Type	Center (qty)	Straight Endbit/End		Angled Endbit		Hardware	
			LH (qty)	RH (qty)	LH (qty)	RH (qty)	Bolt (qty)	Nut (qty)
	ARM	6Y-3271 (2)	123-0335	123-0334			5P-8823 (12)	3K-9770 (12)
	ARM (rev)	208-5344(2)	208-5177	208-5177			5P-8823 (12)	3K-9770 (12)
	Half Arrow	217-4725(3)	217-4726	217-4726			5P-8823 (18)	3K-9770 (18)
	HA (arm)	236-7033(3)	229-6526	229-6526			5P-8823 (18)	3K-9770 (18)
7V-6844	Standard	1U-1909 (2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)	3K-9770 (12)
	Heavy Duty	135-9533(2)	100-4044	100-4044			5P-8823 (12)	3K-9770 (12)
	ARM	107-3282/3	123-0336	123-0337			5P-8823 (12)	3K-9770 (12)
8K-8161 <sup>(3)</sup>	Standard	1U-1465	1U-1464	1U-1464			1J-5607(9)	2J-3507 (9)
	Heavy Duty	132-1026	132-1027	132-1027			1J-5607(9)	2J-3507 (9)
	ARM	9W-3469	9W-3470	9W-3471			1J-5607(9)	2J-3507 (9)
8V-1825	Standard	1U-0292 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607(10)	2J-3507(10)
	ARM	9W-3484/5	9W-3482	9W-3481			1J-5607(10)	2J-3507(10)
8V-7453	Standard	4T-9563 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607(10)	2J-3507(10)
8Y-4738	Standard	9W-9943	9W-9944	9W-9944			4F-7827 (8)	2J-3506 (8)
8Y-6263	Standard	8E-5793 (2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)	3K-9770 (12)
8Y-8763	Standard	100-6359 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607(10)	2J-3507 (10)
9U-3748	Standard	104-5841 (2)	1U-0761	1U-0761	1U-0764	1U-0764	5P-8823 (12)	3K-9770 (12)
	Heavy Duty	183-5325 (2)	1U-0761	1U-0761			5P-8823 (12)	3K-9770 (12)
	ARM	132-1069/70	123-0335	123-0334			5P-8823 (12)	3K-9770 (12)
9V-6570	Standard	1U-0293 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607(10)	2J-3507 (10)
9V-6571	Standard	1U-0294 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607(10)	2J-3507 (10)
9V-6572	Standard	1U-0295 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607(10)	2J-3507 (10)
	ARM	9W-3486/7	9W-3482	9W-3481			1J-5607(10)	2J-3507 (10)
9V-6573	Standard	1U-0601 (2)	4T-8101	4T-8101	1U-1898	1U-1898	4F-4042 (12)	2J-3507 (12)
	Heavy Duty	132-1034(2)	132-1033	132-1033			4F-4042 (12)	2J-3507 (12)
	ARM	9W-3492/3	9W-3488	9W-3489			4F-4042 (12)	2J-3507 (12)
9V-6574	Standard	1U-0762 (2)	1U-0761	1U-0761	1U-0764	1U-0764	5P-8823 (12)	3K-9770 (12)
	Heavy Duty	100-4047 (2)	100-4043	100-4043			5P-8823 (12)	3K-9770 (12)
	ARM	6Y-3271 (2)	123-0335	123-0334			5P-8823 (12)	3K-9770 (12)
	ARM (rev)	208-5344 (2)	208-5177	208-5177			5P-8823 (12)	3K-9770 (12)
	Half Arrow	217-4725 (3)	217-4726	217-4726			5P-8823 (18)	3K-9770 (18)
	HA (arm)	236-7033(3)	229-6526	229-6526			5P-8823 (18)	3K-9770 (18)
	Top Wear Plate for HA Edge		309-6120 (2)	309-6119	309-6118			5P-8361 (8)
9V-6575	Standard	1U-0593 (2)	3G-6395	3G-6395	1U-1897	1U-1897	5P-8823 (12)	3K-9770 (12)
	Heavy Duty	100-4046 (2)	100-4044	100-4044			5P-8823 (12)	3K-9770 (12)
	ARM	9W-3477/8	123-0336	123-0337			5P-8823 (12)	3K-9770 (12)
	ARM (rev)	208-5345 (2)	208-5343	208-5343			5P-8823 (12)	3K-9770 (12)
	Half Arrow	253-0079 (3)	253-0077	253-0078			5P-8823 (18)	3K-9770 (18)
	HA (arm)	253-0083 (3)	253-0081	253-0082			5P-8823 (18)	3K-9770 (18)
Top Wear Plate for HA Edge		286-1984(2)	286-1983	286-1982			5P-8361 (8)	
105-2345	Standard	107-3746 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607(10)	2J-3507 (10)
	Heavy Duty	138-6425 (2)	138-6560	138-6560			1J-5607(10)	2J-3507 (10)
	ARM	107-3298/9	9W-3482	9W-3481			1J-5607(10)	2J-3507 (10)
110-4712	Standard	110-4711 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607(10)	2J-3507 (10)
	ARM	123-9195/6	9W-3482	9W-3481			1J-5607(10)	2J-3507 (10)

3 Base edge not serviced

# Loader GP Buckets

## Loader GP Bucket Bolt-On Cutting Edges & Top Wear Plates (Cont'd.)

Base Edge Part Number	BOCE Type	Center (qty)	Straight Endbit/End		Angled Endbit		Hardware	
			LH (qty)	RH (qty)	LH (qty)	RH (qty)	Bolt (qty)	Nut (qty)
110-4781	Standard	110-4782 (2)	4T-8091	4T-8091	1U-1896	1U-1896	1J-5607(10)	2J-3507 (10)
111-9770	Standard	109-9212 (2)	1U-0761	1U-0761	1U-0764	1U-0764	5P-8823 (12)	3K-9770 (12)
	Heavy Duty	109-9230 (2)	100-4043	100-4043			5P-8823 (12)	3K-9770 (12)
	ARM	109-9214 (2)	123-0335	123-0334			5P-8823 (12)	3K-9770 (12)
	ARM (rev)	208-5178 (2)	208-5177	208-5177			5P-8823 (12)	3K-9770 (12)
	Half Arrow	217-4727 (3)	217-4726	217-4726			5P-8823 (18)	3K-9770 (18)
	HA (arm)	236-7034(3)	229-6526	229-6526			5P-8823 (18)	3K-9770 (18)
Top Wear Plate for HA Edge		253-0184 (2)	253-0183	253-0182			5P-8361 (8)	
141-4847	Standard	139-9230 (2)	4T-8101	4T-8101	1U-1898	1U-1898	4F-4042 (12)	2J-3507 (12)
	Heavy Duty	135-9666 (2)	132-1033	132-1033			4F-4042 (12)	2J-3507 (12)
	ARM	138-0672/3	9W-3488	9W-3489			4F-4042 (12)	2J-3507 (12)
183-5190	Standard	104-5841 (2)	1U-0761	1U-0761	1U-0764	1U-0764	5P-8823 (12)	3K-9770 (12)
	Heavy Duty	183-5325 (2)	1U-0761	1U-0761			5P-8823 (12)	3K-9770 (12)
	ARM	132-1069/70	123-0335	123-0334			5P-8823 (12)	3K-9770 (12)
193-9015	Standard	4T-6588	4T-6588	4T-6588			8J-2928 (18)	2J-3507 (18)
194-0659	Standard	4T-6589 (2)	1U-0761	1U-0761	1U-0764	1U-0764	8J-2928 (16)	2J-3507 (16)
					End bit hardware		5P-8823 (6)	3K-9770 (6)
257-3667	Standard	104-5841 (2)	1U-0761	1U-0761	1U-0764	1U-0764	5P-8823 (12)	3K-9770 (12)
	Heavy Duty	183-5325 (2)	1U-0761	1U-0761			5P-8823 (12)	3K-9770 (12)
	ARM	132-1069/70	123-0335	123-0334			5P-8823 (12)	3K-9770 (12)



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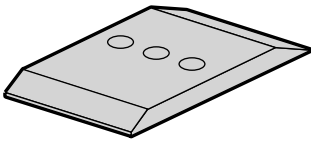
## Bolt-On Segments

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Bolt-on segments bolt directly to the bottom of the base edge between adapters.

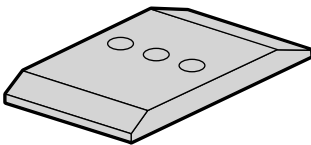
**Bolt-on segments:**

- Increase bucket capacity.
- Maintain a smoother work surface.
- Protect the base edge between teeth, eliminating scalloping.
- Increase base edge life up to five times.
- Hardened to 430-520 Brinell.



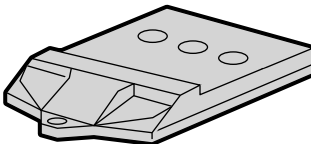
**Standard Bolt-On Segments**

- Reversible for a second wear life.



**Heavy Duty Bolt-On Segments**

- Provides at least 50% more wear material than standard bolt-on segments.
- Reversible for a second wear life.



**Half-Arrow Bolt-On Segments**

- Stay sharper and enhance protection of the base edge front and bevel.
- Protects against scalloping of the base edge between adapters.
- Protects against scalloping of the segment.
- Match bottom strap thickness of the shouldered adapters.

# Segments & Top Wear Plates

## 992 Segments & Top Wear Plates

Standard (40 mm)	Center	1	4T-6760
	RH	3	4T-6761
	LH	3	4T-6762
Heavy Duty (50 mm)	Center	1	107-3530
	RH	3	107-3531
	LH	3	107-3532
Heavy Duty (60 mm)	Center	1	107-6294
	RH	3	107-6295
	LH	3	107-6296
Half Arrow (60 mm)	Center	1	275-5460
	RH	3	275-5461
	LH	3	275-5462
Half Arrow (75 mm)	Center	1	275-5470
	RH	3	275-5471
	LH	3	275-5472
ARM (40 mm)	Center	1	138-0861
	RH	3	138-0862
	LH	3	138-0863
	Bolts	28	5P-8823
	Nuts	28	3K-9770
Top Plates <sup>(1)</sup>	Center	1	195-7096
	RH	3	195-7097
	LH	3	195-7098
	ARM Center	1	195-7246
	ARM RH	3	195-7247
	ARM LH	3	195-7248

## High Abrasion Bucket Top Plates

8 Tip Edge	Center	1	208-5327
	RH	3	208-5328
	LH	3	208-5329
9 Tip Edge	RH	4	235-8777
	LH	4	235-8778
	Long Bolts	14 or 18	198-1092
	Lug Nuts	14 or 18	5P-8362

<sup>1</sup> Top Plates used with Half Arrow segments.

# General Purpose and Material Handling Buckets

## 924H & G/924Hz & Gz – General Purpose and Material Handling Buckets (2540 mm/100 in)

- Commonly used GET
- Not compatible with all buckets

Bolt-on Cutting Edges			
8E-4566 (25 mm)	Edge - End	2	4T-8091
	Edge - Cutting	2	8E-4567
	Bolt	10	1J-5607
	Nut	10	2J-3507

Corner Protectors			
174-7947	Corner Guard	1	253-0060
	Corner Guard	1	253-0061
	Nut	4	2J-3507
	Bolt	4	4F-4042

Bolt-on Adapters (Set of 8)			
116-9713 (J250)	Adapter - Center	6	1U-0257
	Adapter - LH	1	6I-9250
	Adapter - RH	1	6I-9251
	Nut	4	2J-3507
	Bolt	2	4F-4042
	Bolt	2	4J-9058
	Bolt	12	8J-2928
	Nut	12	8J-2933

Bolt-on Segments (Set of 7)			
8E-4569 (25 mm)	Bolt	14	1J-5607
	Nut	14	2J-3507

## 938H & GII/IT38H & GII – General Purpose and Material Handling Buckets

- Commonly used GET
- Not compatible with all buckets

Bolt-on Cutting Edges			
107-3747 (25 mm)	Edge - End	2	4T-8091
	Edge - Cutting	2	107-3746
	Bolt	10	1J-5607
	Nut	10	2J-3507
138-6426 (HD - 35 mm)	Edge - End	2	138-6560
	Edge - Cutting	2	138-6425
	Bolt	10	1J-5607
	Nut	10	2J-3507
107-3297 (ARM - 25 mm)	Edge End - RH	1	9W-3481
	Edge End - LH	1	9W-3482

# General Purpose and Material Handling Buckets

## 938H & GII/IT38H & GII – General Purpose and Material Handling Buckets (Cont'd.)

<b>Bolt-on Cutting Edges</b>			
	Edge - ARM	1	107-3298
	Edge - ARM	1	107-3299
	Bolt	10	1J-5607
	Nut	10	2J-3507

<b>Bolt-on Cutting Edge and Corner Protectors</b>			
275-5481 (25 mm)	Edge - End	2	4T-8091
	Edge - Cutting	2	107-3746
	Corner Guard	1	253-0060
	Corner Guard	1	253-0061
	Bolt	10	1J-5607
	Nut	14	2J-3507
	Bolt	4	4F-4042
275-5482 (HD - 38 mm)	Edge - End	2	138-6560
	Edge - Cutting	2	138-6425
	Corner Guard	1	253-0060
	Corner Guard	1	253-0061
	Bolt	10	1J-5607
	Nut	14	2J-3507
	Bolt	4	4F-4042

<b>Corner Protectors</b>			
174-7947	Corner Guard	1	253-0060
	Corner Guard	1	253-0061
	Nut	4	2J-3507
	Bolt	4	4F-4042

<b>Bolt-on Adapters (Set of 8)</b>			
116-9713 (J250)	Adapter - Center	6	1U-0257
	Adapter - LH	1	6I-9250
	Adapter - RH	1	6I-9251
	Nut	4	2J-3507
	Bolt	2	4F-4042
	Bolt	2	4J-9058
	Bolt	12	8J-2928
	Nut	12	8J-2933

<b>Bolt-on Segments (Set of 7)</b>			
7T-9326 (25 mm)	Edge Segment	7	4T-6695
	Nut	14	2J-3507
	Bolt	14	1J-5607
132-1062 (HD - 35 mm)	Edge Segment	7	132-1037
	Nut	14	2J-3507
	Bolt	14	1J-5607

# General Purpose and Material Handling Buckets

## 950H & G/962H & G – General Purpose and Material Handling Buckets

- Commonly used GET
- Not compatible with all buckets

<b>Bolt-on Cutting Edges</b>			
139-9229 (30 mm)	Edge - End	2	4T-8101
	Edge - Cutting	2	139-9230
	Bolt	12	4F-4042
	Nut	12	2J-3507
132-1052 (HD - 35 mm)	Edge - End	2	132-1033
	Edge - Cutting	2	135-9666
	Bolt	12	4F-4042
	Nut	12	2J-3507
138-0674 (ARM - 25 mm)	Edge End - RH	1	9W-3488
	Edge End - LH	1	9W-3489
	Edge - ARM	1	138-0672
	Edge - ARM	1	138-0673
	Bolt	12	4F-4042
	Nut	12	2J-3507

<b>Bolt-on Cutting Edge and Corner Protectors</b>			
275-5483 (25 mm)	Edge - End	2	4T-8101
	Edge - Cutting	2	139-9230
	Corner Guard RH	1	253-0062
	Corner Guard LH	1	253-0063
	Nut	12	2J-3507
	Nut	4	3K-9770
	Bolt	12	4F-4042
	Bolt	4	8T-9079
275-5484 (HD - 38 mm)	Edge - End	2	132-1033
	Edge - Cutting	2	135-9666
	Corner Guard RH	1	253-0062
	Corner Guard LH	1	253-0063
	Nut	12	2J-3507
	Nut	4	3K-9770
	Bolt	12	4F-4042
	Bolt	4	8T-9079

<b>Corner Protectors</b>			
174-7948	Corner Guard RH	1	253-0062
	Corner Guard LH	1	253-0063
	Nut	4	3K-9770
	Bolt	4	8T-9079

<b>Bolt-on Adapters (Set of 8)</b>			
257-1766 (K80)	Adapter - Center	6	222-1087

# General Purpose and Material Handling Buckets

## 950H & G/962H & G – General Purpose and Material Handling Buckets (Cont'd.)

<b>Bolt-on Adapters (Set of 8)</b>			
	Adapter - RH	1	222-1088
	Adapter - LH	1	222-1089
	Nut	4	2J-5997
	Bolt	2	6V-6535
	Bolt	2	8T-9079
	Bolt	12	5P-8136
	Nut	12	8J-2933
<b>Bolt-on Segments (Set of 7)</b>			
139-9279 (30 mm)	Edge Segment	5	140-7601
	Edge - Cutting	2	263-7545
	Nut	14	2J-3507
	Bolt	14	4F-4042
107-3394 (HD - 35 mm)	Edge Segment	5	132-4715
	Edge - Cutting	2	257-1762
	Nut	14	2J-3507
	Bolt	14	4F-4042

## 966K & H/972K & H – General Purpose and Material Handling (3226 mm/127 in)

- Commonly used GET
- Not compatible with all buckets

<b>Bolt-on Cutting Edges</b>			
100-6669 (30 mm)	Edge - End	2	3G-6395
	Edge - Cutting	2	100-6668
	Bolt	12	5P-8823
	Nut	12	3K-9770
140-6824 (HD - 35 mm)	Edge - End	2	167-7430
	Edge - Cutting	2	140-6823
	Bolt	12	5P-8823
	Nut	12	3K-9770
253-0072 (Half Arrow)	Edge End - RH	1	253-0070
	Edge End - LH	1	253-0070
	Edge - Center	3	253-0071
	Bolt	18	6V-8360
	Nut	18	3K-9770
<b>Bolt-on Cutting Edge and Corner Protectors</b>			
275-5407 (30 mm)	Edge - End	2	3G-6395
	Edge - Cutting	2	100-6668
	Corner Guard RH	1	253-0064

# General Purpose and Material Handling Buckets

## 966K & H/972K & H – General Purpose and Material Handling (3226 mm/127 in) (Cont'd.)

<b>Bolt-on Cutting Edge and Corner Protectors</b>			
	Corner Guard LH	1	253-0065
	Nut	16	3K-9770
	Bolt	12	5P-8823
	Bolt	4	6V-6535
275-5406 (HD - 35 mm)	Edge - End	2	167-7430
	Edge - Cutting	2	140-6823
	Corner Guard RH	1	253-0064
	Corner Guard LH	1	253-0065
	Nut	16	3K-9770
	Bolt	12	5P-8823
	Bolt	4	6V-6535
275-5405 (Half Arrow)	Edge - End LH	1	253-0069
	Edge - End RH	1	253-0070
	Edge Segment - Center	3	253-0071
	Corner Guard RH	1	253-0064
	Corner Guard LH	1	253-0065
	Nut	22	3K-9770
	Bolt	18	6V-8360
	Bolt	4	6V-6535
<b>Corner Protectors</b>			
174-7949	Corner Guard RH	1	253-0064
	Corner Guard LH	1	253-0065
	Nut	4	3K-9770
	Bolt	4	6V-6535
<b>Bolt-on Adapters (Set of 8)</b>			
229-6942 (K90)	Adapter - Center	6	222-1097
	Adapter - RH	1	229-7098
	Adapter - LH	1	229-7099
	Nut	4	2J-5997
	Bolt	2	5P-8823
	Bolt	2	6V-6535
	Bolt	12	5P-8361
	Nut	12	5P-8362
<b>Bolt-on Segments (Set of 7)</b>			
100-6667 (30 mm)	Edge Segment	5	100-6666
	Edge - Cutting	2	308-4322
	Nut	14	3K-9770
	Bolt	14	5P-8823
143-3062 (HD - 35 mm)	Edge Segment	5	140-6870
	Edge - Cutting	2	310-4067
	Nut	14	3K-9770

## General Purpose and Material Handling Buckets

### 966K & H/972K & H – General Purpose and Material Handling (3226 mm/127 in) (Cont'd.)

Bolt-on Segments (Set of 7)			
	Bolt	14	5P-8823
174-4169 (Half Arrow)	Half Arrow	7	313-5550
	Nut	14	3K-9770
	Bolt	14	5P-8823

### 966K & H/972K & H – Rock and HD Rock Buckets

- Commonly used GET
- Not compatible with all buckets

Bolt-on Segments (Set of 7)			
135-9293 (40 mm)	Segment - Center	1	135-9294
	Segment - RH	3	135-9295
	Segment - LH	3	135-9296
	Nut	14	3K-9770
	Bolt	14	8T-9079
135-9543 (Half Arrow)	Segment - Center	1	135-9544
	Segment - RH	3	135-9545
	Segment - LH	3	135-9546
	Nut	14	3K-9770
	Bolt	14	6V-6535

Sidebar Protectors			
135-8245	Retainer	4	114-0359
	Sidebar Protector	2	135-8246
	Pin	4	135-9292
	Shear Blocks	4	331-7418

### 980 G & H – General Purpose and Material Handling

- Commonly used GET
- Not compatible with all buckets

Bolt-on Cutting Edges			
109-9213 (35 mm)	Edge - End	2	280-4068
	Edge - Cutting	2	109-9212
	Bolt	12	5P-8823
	Nut	12	3K-9770
127-0718 (HD - 40 mm)	Edge - End	2	100-4043
	Edge - Cutting	2	109-9230
	Bolt	12	5P-8823
	Nut	12	3K-9770
109-3129 (ARM 1-Way)	Edge - Cutting	2	109-9214



# General Purpose and Material Handling Buckets

## 980 G & H – General Purpose and Material Handling (Cont'd.)

<b>Bolt-on Cutting Edges</b>			
	Edge - End RH	1	123-0334
	Edge - End LH	1	123-0335
	Bolt	12	5P-8823
	Nut	12	3K-9770
287-1901 (Reversible ARM)	Edge - End	2	291-9126
	Edge - Cutting	2	315-5761
	Bolt	12	5P-8361
	Nut	12	3K-9770
229-6959 (Half Arrow)	Edge - End	2	217-4726
	Edge - Cutting	3	217-4727
	Bolt	18	6V-8360
	Nut	18	3K-9770
257-1791 (ARM Half Arrow)	Edge - End ARM	2	229-6526
	Edge - Center ARM	3	236-7034
	Bolt	18	6V-8360
	Nut	18	3K-9770
<b>Bolt-on Cutting Edge and Corner Protectors</b>			
264-2105 (35 mm)	Edge - End	2	1U-0761
	Edge - Cutting	2	109-9212
	Corner Guard RH	1	253-0066
	Corner Guard LH	1	253-0067
	Nut	16	3K-9770
	Bolt	16	5P-8823
264-2104 (HD - 40 mm)	Edge - End	2	100-4043
	Edge - Cutting	2	109-9230
	Corner Guard RH	1	253-0066
	Corner Guard LH	1	253-0067
	Nut	16	3K-9770
	Bolt	16	5P-8823
264-2103 (Half Arrow)	Edge - End	1	217-4726
	Edge - Center	1	217-4727
	Corner Guard RH	1	253-0066
	Corner Guard LH	1	253-0067
	Nut	22	3K-9770
	Bolt	18	6V-8360
	Bolt	4	5P-8823
<b>Corner Protectors</b>			
174-7950	Corner Guard RH	1	253-0066
	Corner Guard LH	1	253-0067
	Nut	4	3K-9770
	Bolt	4	5P-8823

# General Purpose and Material Handling Buckets

## 980 G & H – General Purpose and Material Handling (Cont'd.)

<b>Bolt-on Adapters (Set of 8)</b>			
257-1770 (K100)	Adapter - Center	6	223-8107
	Adapter - LH	1	223-8108
	Adapter - RH	1	223-8109
	Nut	4	3K-9770
	Bolt	14	5P-8361
	Bolt	2	6V-6535
	Nut	12	5P-8362

<b>Bolt-on Half Arrow Cutting Edge</b>			
264-2085 (Half Arrow with TMWP)	Nut	22	3K-9770
	Bolt	8	5P-8361
	Half Arrow - End	2	217-4726
	Half Arrow - Center	3	217-4727
	Corner Guard RH	1	253-0066
	Corner Guard LH	1	253-0067
	Top Wear Plate - RH	1	253-0182
	Top Wear Plate - LH	1	253-0183
	Top Wear Plate - Center	2	253-0184
	Bolt	4	5P-8823
	Bolt	10	6V-8360

<b>Bolt-on Segments (Set of 7)</b>			
109-9059 (30 mm)	Edge Segment	7	109-9019
	Nut	14	3K-9770
	Bolt	14	5P-8823
135-9667 (HD - 45 mm)	Edge Segment	2	135-8219
	Nut	14	3K-9770
	Bolt	14	5P-8823

<b>Sidebar Protectors</b>			
135-8245	Retainer	4	114-0359
	Sidebar Protector	2	135-8246
	Pin	4	135-9292
	Shear Blocks	4	331-7418

## 980 G & H – Rock Spade Nose

- Commonly used GET
- Not compatible with all buckets

<b>Bolt-on Cutting Edges</b>			
109-9120 (35 mm)	Washer	25	4K-0684
	Bolt	25	6V-6535
	Cutting Edge - RH	1	109-9121
	Cutting Edge - RH	1	109-9122
	Cutting Edge - Center	1	109-9123
	Cutting Edge - LH	1	109-9124
	Cutting Edge - LH	1	109-9125
	Nut	25	3K-9770
<b>Bolt-on Segments (Set of 7)</b>			
119-3230 (30 mm)	Segment - Center	1	9W-5734
	Segment - LH	3	9W-5730
	Segment - RH	3	9W-5737
	Nut	21	3K-9770
	Bolt	21	8T-9079
107-3498 (HD - 45 mm)	Segment - Center	1	107-3490
	Segment - RH	3	107-3491
	Segment - LH	3	107-3492
	Nut	21	3K-9770
	Bolt	21	8T-9079
138-6473 (35 mm - ARM)	Segment - Center	1	138-6470
	Segment - RH	3	138-6471
	Segment - LH	3	138-6472
	Nut	21	3K-9770
	Bolt	21	8T-9079
109-3123 (Half Arrow)	Half Arrow - Center	1	116-7460
	Half Arrow - RH	3	116-7461
	Half Arrow - LH	3	116-7462
	Nut	21	3K-9770
	Bolt	21	8T-9079
<b>Sidebar Protectors</b>			
106-0912	Retainer	4	114-0359
	Sidebar Protector	2	9J-9600
	Pin	4	135-9350
	Shear Blocks	4	331-7417

# General Purpose

## 988 G & H – General Purpose

- Commonly used GET
- Not compatible with all buckets

<b>Bolt-on Cutting Edges</b>			
183-5318 (40 mm)	Edge - End	2	1U-0761
	Edge - Cutting	2	183-5325
	Nut	12	3K-9770
	Bolt	12	6V-8360

<b>Corner Protectors</b>			
174-7950	Corner Guard RH	1	253-0066
	Corner Guard LH	1	253-0067
	Nut	4	3K-9770
	Bolt	4	5P-8823

<b>Bolt-on Adapters (Set of 8)</b>			
232-0167 (K110)	Adapter - Center	6	315-0117
	Adapter - LH	1	315-0119
	Adapter - RH	1	315-0118
	Nut	4	3K-9770
	Bolt	14	198-1092
	Bolt	2	5P-8361
	Nut	12	5P-8362

<b>Bolt-on Segments (Set of 7)</b>			
183-5321 (45 mm)	Edge Segment	7	183-5324
	Nut	14	3K-9770
	Bolt	14	6V-8360

## Rock (Straight Nose)

### 988 G & H – Rock (Straight Nose)

- Commonly used GET
- Not compatible with all buckets

<b>Bolt-on Segments (Set of 7)</b>			
8E-9898 (40 mm)	Segment	7	101-9435
	Nut	21	3K-9770
	Bolt	21	6V-6535
107-3545 (HD 45 mm)	Segment - Center	7	107-3536
	Nut	21	3K-9770
	Bolt	21	6V-6535

<b>Sidebar Protectors</b>			
106-0912	Retainer	4	114-0359
	Sidebar Protector	2	9J-9600
	Pin	4	135-9350
	Shear Blocks	4	331-7417

# Rock (Spade Nose)

## 988 G & H – Rock (Spade Nose)

- Commonly used GET
- Not compatible with all buckets

<b>Bolt-on Segments (Set of 7)</b>			
109-9051 (40 mm)	Segment - Center	1	101-9435
	Segment - RH	3	101-9436
	Segment - LH	3	101-9437
	Nut	21	3K-9770
	Bolt	21	6V-6535
107-3533 (HD 45 mm)	Segment - Center	1	107-3536
	Segment - RH	3	107-3537
	Segment - LH	3	107-3538
	Nut	21	3K-9770
	Bolt	21	6V-6535
138-0869 (ARM)	Segment - Center	1	138-0865
	Segment - RH	3	138-0866
	Segment - LH	3	138-0867
	Nut	21	3K-9770
	Bolt	21	6V-6535
124-6346 (Half Arrow)	Half Arrow - Center	1	109-9080
	Half Arrow - RH	3	109-9081
	Half Arrow - LH	3	109-9082
	Nut	21	3K-9770
	Bolt	21	6V-6535

<b>Edge Protector (Half Arrow with Top Mounted Wear Plate)</b>			
232-0161 (45 mm Half Arrow with TMWP)	Half Arrow - Center	1	109-9080
	Half Arrow - RH	3	109-9081
	Half Arrow - LH	3	109-9082
	Wear Plate - Center	1	195-7180
	Wear Plate - RH	3	195-7181
	Wear Plate - LH	3	195-7182
	Bolt	21	5P-8361
	Nut	21	3K-9770
	Nut	21	5P-8362

<b>Top Mounted Wear Plate</b>			
195-7141	Wear Plate - Center	1	195-7180
	Wear Plate - RH	3	195-7181
	Wear Plate - LH	3	195-7182
	Bolt	21	5P-8361
	Nut	21	3K-9770
	Nut	21	5P-8362

<b>Sidebar Protectors</b>			
106-0912	Retainer	4	114-0359

## Rock (Spade Nose)

### 988 G & H – Rock (Spade Nose) (Cont'd.)

Sidebar Protectors			
	Sidebar Protector	2	9J-9600
	Pin	4	135-9350
	Shear Blocks	4	331-7417

# Rock, HD Rock, HD Abrasion, HD Granite (Spade Nose)

## 990 – Rock, HD Rock, HD Abrasion, HD Granite (Spade Nose)

- Commonly used GET
- Not compatible with all buckets

<b>Bolt-on Segments (Set of 7)</b>			
4T-6763 (40 mm)	Segment - Center	1	4T-6760
	Segment - RH	3	4T-6761
	Segment - LH	3	4T-6762
	Nut	28	3K-9770
	Bolt	28	5P-8823
107-3529 (HD 50 mm)	Segment - Center	1	107-3530
	Segment - RH	3	107-3531
	Segment - LH	3	107-3532
	Nut	28	3K-9770
	Bolt	28	5P-8823
107-6293 (HD 60 mm)	Segment - Center	1	107-6294
	Segment - RH	3	107-6295
	Segment - LH	3	107-6296
	Nut	28	3K-9770
	Bolt	28	5P-8823
123-4392 (Half Arrow - 60 mm)	Half Arrow - Center	1	275-5460
	Half Arrow - LH	3	275-5461
	Half Arrow - RH	3	275-5462
	Nut	28	3K-9770
	Bolt	28	5P-8823
109-2674 (Half Arrow - 75 mm)	Half Arrow - Center	1	275-5470
	Half Arrow - LH	3	275-5471
	Half Arrow - RH	3	275-5472
	Nut	28	3K-9770
	Bolt	28	5P-8823

<b>Half Arrow with Top Mounted Wear Plate</b>			
232-0162 (60 mm Half Arrow with TMWP)	Half Arrow - Center	1	275-5460
	Half Arrow - LH	3	275-5461
	Half Arrow - RH	3	275-5462
	Wear Plate - Center	1	195-7096
	Wear Plate - RH	3	195-7097
	Wear Plate - LH	3	195-7098
	Bolt	14	5P-8823
	Bolt	14	198-1092
	Nut	14	5P-8362
	Nut	28	3K-9770

<b>Half Arrow with ARM Top Mounted Wear Plate</b>			
303-3319 (60 mm Half Arrow with ARM TMWP)	Half Arrow - Center	1	275-5460
	Half Arrow - LH	3	275-5461



## Rock, HD Rock, HD Abrasion, HD Granite (Spade Nose)

### 990 – Rock, HD Rock, HD Abrasion, HD Granite (Spade Nose) (Cont'd.)

Half Arrow with ARM Top Mounted Wear Plate			
	Half Arrow - RH	3	275-5462
	Wear Plate - Center	1	195-7246
	Wear Plate - RH	3	195-7247
	Wear Plate - LH	3	195-7248
	Bolt	14	5P-8823
	Bolt	14	5P-8361
	Nut	14	5P-8362
	Nut	28	3K-9770

Top Mounted Wear Plate (Use with 195-7190, 195-7191 and 195-7192 Half Arrows)			
195-7094	Wear Plate - Center	1	195-7096
	Wear Plate - RH	3	195-7097
	Wear Plate - LH	3	195-7098
	Bolt	14	5P-8823
	Bolt	14	198-1092
	Nut	14	5P-8362
	Nut	28	3K-9770

Sidebar Protectors			
101-3083	Retainer	4	107-8559
	Sidebar Protector	2	1U-0740
	Pin	4	133-0738
	Shear Blocks	4	330-4456

### 992 G & K – Rock, HD Rock, HD Abrasion, HD Granite (Spade Nose)

- Commonly used GET
- Not compatible with all buckets

Bolt-on Segments (Set of 7)			
4T-6763 (40 mm)	Segment - Center	1	4T-6760
	Segment - RH	3	4T-6761
	Segment - LH	3	4T-6762
	Nut	28	3K-9770
	Bolt	28	5P-8823
107-3529 (HD 50 mm)	Segment - Center	1	107-3530
	Segment - RH	3	107-3531
	Segment - LH	3	107-3532
	Nut	28	3K-9770
	Bolt	28	5P-8823
107-6293 (HD 60 mm)	Segment - Center	1	107-6294
	Segment - RH	3	107-6295
	Segment - LH	3	107-6296

# Rock, HD Rock, HD Abrasion, HD Granite (Spade Nose)

## 992 G & K – Rock, HD Rock, HD Abrasion, HD Granite (Spade Nose) (Cont'd.)

<b>Bolt-on Segments (Set of 7)</b>			
	Nut	28	3K-9770
	Bolt	28	5P-8823
123-4392 (Half Arrow - 60 mm)	Half Arrow - Center	1	275-5460
	Half Arrow - LH	3	275-5461
	Half Arrow - RH	3	275-5462
	Nut	28	3K-9770
	Bolt	28	5P-8823
109-2674 (Half Arrow - 75 mm)	Half Arrow - Center	1	275-5470
	Half Arrow - LH	3	275-5471
	Half Arrow - RH	3	275-5472
	Nut	28	3K-9770
	Bolt	28	5P-8823

<b>Half Arrow with Top Mounted Wear Plate</b>			
232-0162 (60 mm Half Arrow with TMWP)	Half Arrow - Center	1	275-5460
	Half Arrow - LH	3	275-5461
	Half Arrow - RH	3	275-5462
	Wear Plate - Center	1	195-7096
	Wear Plate - RH	3	195-7097
	Wear Plate - LH	3	195-7098
	Bolt	14	5P-8823
	Bolt	14	198-1092
	Nut	14	5P-8362
	Nut	28	3K-9770

<b>Half Arrow with ARM Top Mounted Wear Plate</b>			
303-3319 (60 mm Half Arrow with ARM TMWP)	Half Arrow - Center	1	275-5460
	Half Arrow - LH	3	275-5461
	Half Arrow - RH	3	275-5462
	Wear Plate - Center	1	195-7246
	Wear Plate - RH	3	195-7247
	Wear Plate - LH	3	195-7248
	Bolt	14	5P-8823
	Bolt	14	5P-8361
	Nut	14	5P-8362
	Nut	28	3K-9770

<b>Top Mounted Wear Plate (Use with 195-7190, 195-7191 and 195-7192 Half Arrows)</b>			
195-7094	Wear Plate - Center	1	195-7096
	Wear Plate - RH	3	195-7097
	Wear Plate - LH	3	195-7098
	Bolt	14	5P-8823
	Bolt	14	198-1092
	Nut	14	5P-8362
	Nut	28	3K-9770

## Rock, HD Rock, HD Abrasion, HD Granite (Spade Nose)

### 992 G & K – Rock, HD Rock, HD Abrasion, HD Granite (Spade Nose) (Cont'd.)

<b>Sidebar Protectors</b>			
101-3083	Retainer	4	107-8559
	Sidebar Protector	2	1U-0740
	Pin	4	133-0738
	Shear Blocks	4	330-4456
<b>Wings</b>			
	Wing Plate	6	288-8235

# 993K Rock, HD Rock, and Granite Buckets

## 993K

- Commonly used GET
- Not compatible with all buckets

<b>Bolt-on Segments (Set of 7)</b>			
309-1071 (60 mm)	Segment - Center	1	107-6294
	Segment - RH	3	107-6295
	Segment - LH	3	107-6296
	Nut	28	3K-9770
	Bolt	28	5P-8361

<b>Half Arrow - 60 mm</b>			
309-1070	Half Arrow - Center	1	275-5460
	Half Arrow - RH	3	275-5461
	Half Arrow - LH	3	275-5462
	Nut	28	3K-9770
	Bolt	28	5P-8361

<b>Half Arrow - 75 mm</b>			
309-1043	Half Arrow - Center	1	275-5470
	Half Arrow - RH	3	275-5471
	Half Arrow - LH	3	275-5472
	Nut	28	3K-9770
	Bolt	28	5P-8361

<b>Half Arrow with Top Mounted Wear Plate</b>			
315-0140 (60 mm Half Arrow with TMWP)	Half Arrow - Center	1	275-5460
	Half Arrow - RH	3	275-5461
	Half Arrow - LH	3	275-5462
	Wear Plate - Center	1	307-5600
	Wear Plate - RH	3	307-5601
	Wear Plate - LH	3	307-5602
	Bolt	14	5P-8361
	Bolt	14	209-9311
	Nut	14	5P-8362
	Nut	28	3K-9770

<b>Half Arrow with ARM Top Mounted Wear Plate</b>			
264-2068 (75 mm Half Arrow with TMWP)	Half Arrow - Center	1	275-5470
	Half Arrow - LH	3	275-5471
	Half Arrow - RH	3	275-5472
	Wear Plate - Center	1	307-5600
	Wear Plate - RH	3	307-5601
	Wear Plate - LH	3	307-5602
	Bolt	14	5P-8361
	Bolt	14	209-9311
	Nut	14	5P-8362
	Nut	28	3K-9770

## 993K Rock, HD Rock, and Granite Buckets

### 993K (Cont'd.)

<b>Top Mounted Wear Plate (Use with 275-5460, 275-5461 and 275-5462 Half Arrows)</b>			
195-7094	Wear Plate - Center	1	307-5600
	Wear Plate - RH	3	307-5601
	Wear Plate - LH	3	307-5602
	Bolt	14	5P-8361
	Bolt	14	209-9311
	Nut	14	5P-8362
	Nut	28	3K-9770
<b>Sidebar Protectors</b>			
101-3083	Retainer	4	107-8559
	Sidebar Protector	2	1U-0740
	Pin	4	133-0738
	Shear Blocks	4	330-4456
<b>Wings</b>			
	Wing Plate	6	288-8235

# Loader GP Buckets

## Loader GP Bucket Bolt-On Segments

Base Edge Part Number	Segment Type							Hardware	
	Standard		Heavy Duty		ARM		Half Arrow		
	Center (qty)	End (qty)	Center (qty)	End (qty)	Center (qty)	End (qty)	Center (qty)	Bolt (qty)	Nut (qty)
4E-0659	8E-4569 (7)							1J-5607 (14)	2J-3507(14)
4E-6085	4T-6700 (7)		107-8580 (7)				173-7447 (7)	5P-8823 (14)	3K-9770 (14)
4E-6085 <sup>(1)</sup>	4T-6700 (5)	308-4327 (2)						5P-8823 (14)	3K-9770 (14)
5G-6133	128-2873 (6)							4F-7827 (12)	2J-23506(12)
5G-7304	4T-6697 (7)		140-6866 (7)			135-9648 (7)		5P-8823 (14)	3K-9770 (14)
5G-8342	128-2873 (7)							4F-7827 (14)	2J-23506(14)
5G-8763	128-2873 (4)	128-2872 (2)						4F-7827 (12)	2J-23506(12)
6W-2976	4T-6692 (5)	4T-6693 (2)						1J-5607 (14)	2J-3507(14)
6W-2977	4T-6691 (7)							1J-5607 (14)	2J-3507(14)
6W-2978	4T-6692 (7)							4F-4042 (14)	2J-3507(14)
6W-2979	4T-6692 (5)	4T-6693 (2)						4F-4042 (14)	2J-3507(14)
6W-2980	4T-6694 (7)		132-1035 (7)					4F-4042 (14)	2J-3507(14)
6W-2980 <sup>(2)</sup>	4T-6694 (5)	308-4324 (2)						4F-4042 (14)	2J-3507(14)
6W-2981	4T-6698 (7)		140-6867 (7)					5P-8823 (14)	3K-9770 (14)
6W-2981 <sup>(2)</sup>	4T-6698 (5)	308-4323 (2)	140-6867 (5)	310-4065 (2)				5P-8823 (14)	3K-9770 (14)
6W-2982	4T-6697 (7)		140-6866 (7)			135-9648 (7)		5P-8823 (14)	3K-9770 (14)
6W-2982 <sup>(2)</sup>	4T-6697 (5)	309-1042 (2)						5P-8823 (14)	3K-9770 (14)
6W-2983	4T-6696 (7)		140-6865 (7)					5P-8823 (14)	3K-9770 (14)
6W-2984	4T-6694 (5)	4T-6693 (2)	132-1035 (5)	132-1036 (2)				1J-5607 (14)	2J-3507(14)
6W-2985	4T-6695 (7)		132-1037 (7)					1J-5607 (14)	2J-3507(14)
6W-2986	4T-6694 (5)	4T-6693 (2)	132-1035 (5)	132-1036 (2)				1J-5607 (14)	2J-3507(14)
6W-2987	4T-6694 (5)	4T-6695 (2)	132-1035 (5)	132-1037 (2)				1J-5607 (14)	2J-3507(14)
6W-2988 <sup>(1)</sup>	4T-6694 (5)	4T-6695 (2)	132-1035 (5)	132-1037 (2)				1J-5607 (14)	2J-3507(14)
6W-2989	4T-6698 (7)		140-6867 (7)					5P-8823 (14)	3K-9770 (14)
6W-2989 <sup>(2)</sup>	4T-6698 (5)	308-4323 (2)	140-6867 (5)	310-4065 (2)				5P-8823 (14)	3K-9770 (14)
6W-2990	4T-6698 (7)		140-6867 (7)					5P-8823 (14)	3K-9770 (14)
6W-2990 <sup>(2)</sup>	4T-6698 (5)	308-4323 (2)	140-6867 (5)	310-4065 (2)				5P-8823 (14)	3K-9770 (14)
6W-2991	4T-6700 (7)		107-8580 (7)				173-7447 (7)	5P-8823 (14)	3K-9770 (14)
6W-2991 <sup>(2)</sup>	4T-6700 (5)	308-4327 (2)						5P-8823 (14)	3K-9770 (14)
7I-3015	100-6666 (7)		140-6870 (7)				174-4116 (7)	5P-8823 (14)	3K-9770 (14)
7I-3015 <sup>(2)</sup>	100-6666 (5)	308-4322 (2)	140-6870 (5)	310-4067 (2)			315-5550 (7)	5P-8823 (14)	3K-9770 (14)
7I-3631	100-6664 (7)		140-6869 (7)					5P-8823 (14)	3K-9770 (14)
8Y-4738	6Y-6362 (7)							4F-7827 (14)	2J-23506(14)
8Y-6263	4T-6697 (5)	4T-6696 (2)	140-6866 (5)	140-6865 (2)				6V-6535 (14)	3K-9770 (14)
8Y-6263 <sup>(2)</sup>	4T-6697 (5)	308-4325 (2)	140-6866 (5)	308-4326 (2)				6V-6535 (14)	3K-9770 (14)
8Y-8763	4T-6692 (7)							1J-5607 (14)	2J-3507(14)
9U-3748	138-6540 (7)		183-5324 (7)					5P-8823 (14)	3K-9770 (14)
9V-6570	4T-6692 (7)							1J-5607 (14)	2J-3507(14)
9V-6571	4T-6691 (7)							1J-5607 (14)	2J-3507(14)
9V-6572	4T-6694 (7)		132-1035 (7)					1J-5607 (14)	2J-3507(14)
9V-6572 <sup>(2)</sup>	4T-6694 (5)	308-4324 (2)						4F-4042 (14)	2J-3507(14)
9V-6573	4T-6695 (7)		132-1037 (7)					4F-4042 (14)	2J-3507(14)
9V-6574	4T-6700 (7)		107-8580 (7)				173-7447 (7)	5P-8823 (14)	3K-9770 (14)

1 Base edge is not serviced

2 K Series arrangement

## Loader GP Bucket Bolt-On Segments (Cont'd.)

Base Edge Part Number	Segment Type							Hardware	
	Standard		Heavy Duty		ARM		Half Arrow		
	Center (qty)	End (qty)	Center (qty)	End (qty)	Center (qty)	End (qty)	Center (qty)	Bolt (qty)	Nut (qty)
9V-6574 <sup>(3)</sup>	4T-6700 (5)	308-4327 (2)						5P-8823 (14)	3K-9770 (14)
9V-6575	4T-6699 (7)		140-6868 (7)				174-4114 (7)	5P-8823 (14)	3K-9770 (14)
9V-6575 <sup>(3)</sup>	4T-6699 (5)	308-3054 (2)	140-6868 (5)	310-4064 (2)			315-5548 (7)	5P-8823 (14)	3K-9770 (14)
105-2345	4T-6695 (7)		132-1037 (7)					1J-5607 (14)	2J-3507(14)
110-4712	4T-6695 (7)		132-1037 (7)					1J-5607 (14)	2J-3507(14)
110-4781	4T-6694 (7)		132-1035 (7)					1J-5607 (14)	2J-3507(14)
110-4781 <sup>(3)</sup>	4T-6694 (5)	308-4324 (2)						4F-4042 (14)	2J-3507(14)
111-9770	109-9019 (7)		135-8219(7)				174-4115 (7)	5P-8823 (14)	3K-9770 (14)
141-4847	140-7601 (7)		132-4715 (7)					4F-4042 (14)	2J-3507(14)
141-4847 <sup>(3)</sup>	140-7601 (5)	263-7545 (2)	132-4715 (5)	257-1762(2)				4F-4042 (14)	2J-3507(14)
183-5190	138-6540 (7)		183-5324(7)					5P-8823 (14)	3K-9770 (14)
257-3667	138-6540 (7)		183-5324(7)					5P-8823 (14)	3K-9770 (14)

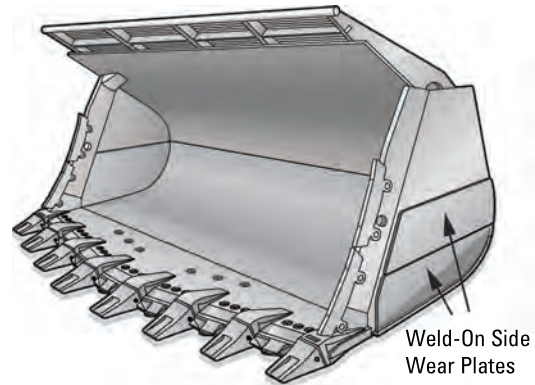
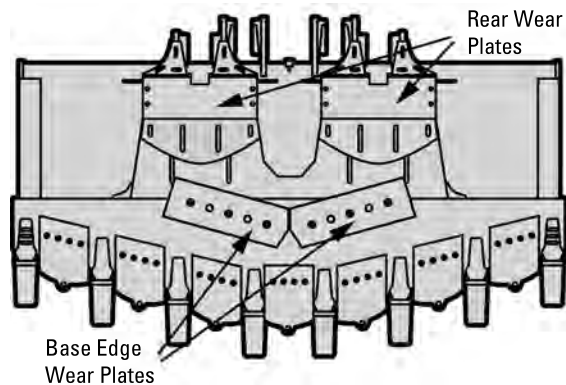
# Loader Wear Plates

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## Wear Plates

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Wear plates offer enhanced protection to the base edge, bucket sides, and bucket rear.



### Base Edge Wear Plates

- Covers the bottom area of the base edge not protected by segments.
- Extends base edge life.

### Heavy Duty Base Edge Wear Plates

- Provides extended base edge life due to a thicker base edge wear plate.

### Rear Wear Plates

- Extends life by protecting the rear of the bucket.

### Heavy Duty Rear Wear Plates

- Extends life by protecting the rear of the bucket.
- Provides more protection than the standard rear wear plates.

### Weld-On Rear Wear Plates

- Extends life by protecting the rear of the bucket.

### Weld-On Side Wear Plates

- Protects against bucket side plate wear



## Sidebar Protectors



- Protects the bucket sides.

Model	Bucket Type	Sidebar Protector	Pin	Retainer Assembly
980F, 980G	Rock	135-8246 (2)	135-9292 (4)	114-0359 (4)
988B, F, G	Rock	9J-9600 (2)	135-9350 (4)	114-0359 (4)
990, 992C, D, 992G	Rock	1U-0740 (2)	133-0738 (4)	107-8559 (4)
966G	Rock	135-8246 (4)	135-9292 (8)	114-0359 (8)
972G	Rock	135-8246 (4)	135-9292(8)	114-0359 (8)

## Bucket Corner Protector

Tip Size	Corner Protector Part Number		Bolt	Nut
	Left Hand	Right Hand		
J250	253-0061	253-0060	4F-4042 (4)	2J-3507 (4)
J300	253-0063	253-0062	8T-9079 (4)	3K-9770 (4)
J350	253-0065	253-0064	6V-6535 (4)	3K-9770 (4)
J400, J460	253-0067	253-0066	5P-8823 (4)	3K-9770 (4)

# Loader Tips

## Tips

Cat loader bucket tips are side pinned for excellent tip retention and quick, easy tip changing. The pin hole is located through the tip sides which are the areas of least wear.



### Long Tip

- The best choice for most applications.
- Made of longer wearing DH-3 steel for 988 and 992 sizes.



### Short Tip

- Provides more strength.
- Contain less wear material.



### Light Duty Long Tip

- For use in low impact with low to medium abrasiveness.
- Self-sharpening design and symmetrical shape.



### Penetration Tip

- Provides better penetration.
- Contains less wear material.



### Heavy Duty Long Tip

- Contains more wear material than Long Tip.
- Provides greater strength than Long Tip.
- Provides better penetration due to a streamlined-profile.



### Heavy Duty Long Life Tip

- Increases wear life 2 to 5 times more than the Heavy Duty Long Tip.
- Provides better productivity because they get sharper as they wear.



### Heavy Duty Abrasion Tip

- Contains the greatest amount of wear material.
- Provides good strength.
- Provides good penetration.



### Heavy Duty Penetration Tip

- Use in high impact, hard-to-penetrate material.
- Longer wear life.
- Stays sharp.

	J200	J225	J250	J300	J450/J350	J400	J460	J550	J600	J700	J800
Long	1U-3202	6Y-3222	1U-3252	1U-3302	1U-3352	7T-3402	9W-8452	9W-8552	6I-6602	4T-4702	
Short		6Y-6221	1U-3251	1U-3301	1U-3351	7T-3401	9W-8451	9W-8551	6I-6601		
Abrasion	4T-2203									4T-4703	

## Tips (Cont'd.)

	J200	J225	J250	J300	J450/J350	J400	J460	J550	J600	J700	J800
Light Duty Long Tip	195-9209		168-1253	168-1301	168-1351	168-1401	168-1451				
Penetration	1U-3209	6Y-8229	9J-4259	9J-4309	9J-4359	6Y-7409	9W-8459	9W-8559	7I-7609	4T-4709	117-6809
Heavy Duty Long		8E-4222	9N-4252	9N-4302	9N-4352	8E-4402	9N-4452	9N-4552	7Y-0602	9U-9702	6I-8802
Heavy Duty Long Life			135-8252	125-8302	135-9352	116-7402	101-9054	101-9055	107-8602	107-2001	
Heavy Duty Abrasion		6Y-6223	9N-4253	9N-4303	9N-4353	7T-3403	9N-4453	6Y-2553	6I-6603	9U-9703	6I-8803
Heavy Duty Penetration				135-9300	144-1358	135-9400	138-6451	138-6552	135-9600	135-9700	135-9800
Pin	8E-6208	132-4762	132-4763	132-4766	114-0358	116-7408	114-0468 <sup>(1)</sup>	107-3378	113-9608	113-4708	134-1808
Retainer	8E-6209	149-5733	149-5733	149-5733	114-0359	116-7409	107-3469 <sup>(1)</sup>	107-8559	113-9609	113-4709	134-1809

## Bolt-On Unitooth Tips



- Improves penetration where breakage is not a problem.
- Tip and adapter are one integrated piece for easy installation and lower initial costs.
- For use in nonabrasive materials.

Tip Size	Model
J200	910, 931, 914G, 935, IT12, IT14G
J250	916, 920, 924, 926, 928, 930, 936, 938, 939, 941, 943, 951, 953, IT18, IT28
J300 <sup>(2)</sup>	944, 950, 953B
J300 <sup>(3)</sup>	950B, 955, 960F, 963
J300 <sup>(4)</sup>	966C
J350	960F, 966D, 970F, 973, 977

## Bolt-On Unitooth Tip Chart

Unitooth Components	J200	J250	J300 <sup>(2)</sup>	J300 <sup>(3)</sup>	J300 <sup>(4)</sup>	J350
Unitooth Center Tip	8J-6207	1U-1857	1U-1877	8E-1637	1U-1877	6Y-0649
Unitooth One Bolt Corner Tip (lh)	1U-1868	1U-1858	1U-1878	1U-1878	1U-1888	1U-1888
Unitooth One Bolt Corner Tip (rh)	1U-1869	1U-1859	1U-1879	1U-1879	1U-1889	1U-1889
Unitooth Two Bolt Corner Tip (lh)		6I-8388	8E-8608	8E-8608	8E-5318	8E-5318
Unitooth Two Bolt Corner Tip (rh)		6I-8389	8E-8609	8E-8609	8E-5319	8E-5319

1 Some older models have a 19 mm (0.75") pin diameter, instead of the current 22 mm (0.875") pin diameter. For those older models which have the 19 mm (0.75") pin diameter, use a 6Y-2527 pin and a 8E-6359 retainer.

2 25 mm edge.

3 32 mm edge.

4 32 mm edge (bigger bolts).

# Loader Tips

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## Cat K Series Tips

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Cat K Series excavator bucket tips use a new vertical retention system that allows quick and easy tip changes. Providing a new locking interface at every tip change to improve retention reliability. Lower profile improves penetration and wear life.



### Penetration Tip

- For harder-to-penetrate, moderate impact, lower abrasion.
- Very good penetration.
- Top rib, bottom cavity to stay sharp.



### Spike Tip

- For maximum penetration, especially in cohesive material.
- Stays sharp for enhanced wear life.
- Top and bottom rib design.



### Double Spike Tip

- For harder-to-penetrate, fracturable materials.
- Very good penetration, stays sharp.
- Use in corner positions with Spike Centers.
- Length matches spike.



### Wide Tip

- For easy-to-penetrate trenching applications.
- Low impact.
- Smooth floor trenches.



### Heavy Penetration

- Recommended for high abrasive and impact conditions, especially shot rock.
- Excellent penetration and wear material, stays sharp.



### Heavy Abrasion

- Recommended for high abrasive, moderate impact, easier-to-penetrate materials.
- Excellent wear material, less penetration.



### General Duty

- Recommended for general applications in moderate impact and abrasive conditions.
- Good penetration, self-sharpening cavities.



### Extra Duty — (plus ARM parts option)

- Recommended for general applications requiring more wear material in moderate impact conditions.
- Good wear material, good penetration.

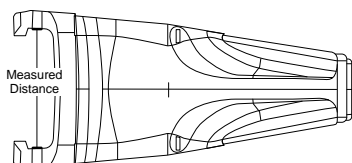
## Cat K Series Tips (Cont'd.)



### Penetration — (plus ARM parts option)

- Recommended for harder-to-penetrate, moderate impact, lower abrasive materials.
- Very good penetration, less wear material, stays sharp.

## K Family Identification



To identify tip or adapter family simply measure the distance between the “ears” of the tip in millimeters and round to the nearest 5 mm.

Ex: 80 mm (3.15") = K80

Ex: 87.4 mm (3.44") = K90

Ex: 96.1 mm (3.78") = K100

## Tip Chart

	K80	K90	K100	K110	K130	K150	K170
Wide	222-1080	222-1090	223-8100	223-8110	223-8130	195-5151	223-8170
Extra Duty	220-9081	220-9091	220-9101	232-2111	264-2131	264-2151	264-2171
Penetration	220-9082	220-9092	220-9102	220-9112	220-9132	229-7152	232-0172
Penetration Plus	220-9083	220-9093	220-9103	220-9113	220-9133	229-7153	232-0173
Spike	220-9087	220-9097	220-9107	220-9117	220-9137	229-7157	232-0177
Double Spike	220-9088	220-9098	220-9108	220-9118	220-9138	229-7158	232-0178
General Duty	220-9089	220-9099	220-9109	220-9119	220-9139	229-7159	232-0179
Heavy Penetration	222-1081	222-1091	223-8101	232-2112	264-2132	264-2152	264-2172
Heavy Abrasion	222-1082	222-1092	223-8102	223-8112	223-8132	229-7156	232-2178
Extra Duty Long Life (ARM)	229-7080	232-0090	232-0100	232-0110	232-2130	232-0150	233-7170
Penetration Long Life (ARM)	229-7081	232-0091	232-0101	232-0111	232-2131	232-0151	233-7171
Retainer	220-9090	220-9090	220-9090	220-9110	220-9130	233-7150	232-0170
SLAG Retainer				309-1119	232-2139	232-2159	232-2179

## Tips or Points

Description	J300	K80	J350	K90	J400	K100	J460	K110	J550	K130	J600	K150	J700	K170
J Wide = K Wide	107-3300	222-1080	107-3350	222-1090	107-3400	223-8100	107-3450	286-2111	107-3550	223-8130	N/A	195-5151	N/A	223-8170
J Heavy Duty Long = K Extra Duty	9N-4302	220-9081	9N-4352	220-9091	8E-4402	220-9101	9N-4452	286-2112	9N-4552	264-2131	7Y-0602	264-2151	9U-9702	264-2171
J Penetration = K Penetration	9J-4309	220-9082	9J-4359	220-9092	6Y-7409	220-9102	9W-8459	286-2113	9W-8559	220-9132	7I-7609	229-7152	4T-4709	232-0172
J Penetration Plus = K Penetration Plus	183-5300	220-9083	168-1359	220-9093	168-1409	220-9103	159-0459	286-2114	159-0559	220-9133	159-0607	229-7153	171-1709	232-0173
J Long Sharp = K Spike	168-1300	220-9087	168-1350	220-9097	159-0400	220-9107	159-0450	286-2115	159-0550	220-9137	159-0600	229-7157	136-8700	232-0177
J Twin Sharp = K Double Spike	135-9308	220-9088	135-9357	309-1098	135-9408	220-9108	138-6458	286-2116	138-6558	220-9138	135-9608	229-7158	N/A	232-0178
J Long = K General Duty	1U-3302	220-9089	1U-3352	220-9099	7T-3402	220-9109	9W-8452	286-2117	9W-8552	220-9139	6I-6602	229-7159	4T-4702	232-0179
J HDP = K Heavy Penetration	135-9300	222-1081	144-1358	222-1091	135-9400	223-8101	138-6451	286-2118	138-6552	264-2132	135-9600	264-2152	135-9700	264-2172
J HD Abrasion = K Heavy Abrasion	9N-4303	222-1082	9N-4353	222-1092	7T-3403	223-8102	9N-4453	286-2119	6Y-2553	223-8132	6I-6603	229-7156	9U-9703	232-2178

# Loader Tips

## K Family Identification (cont'd.) Tips or Points (Cont'd.)

Description	J300	K80	J350	K90	J400	K100	J460	K110	J550	K130	J600	K150	J700	K170
Extra Duty Long Life (ARM)	125-8302	229-7080	135-9352	232-0090	116-7402	232-0100	101-9054	315-0110	101-9055	232-2130	107-8602	232-0150	107-2001	233-7170
Penetration Long Life (ARM)	125-8309	229-7081	119-9359	232-0091	124-7409	232-0101	116-7459	315-0115	113-0559	232-2131	119-9609	232-0151	N/A	233-7171
Short									9W-8551	232-2137	61-6601	232-2157		
Rock Chisel Tip							317-4456		338-0550		338-0600			
Retainer		220-9090		220-9090		220-9090		286-2110		220-9130		233-7150		232-0170
SLAG Retainer								309-1119		232-2139		232-2159		232-2179

## Adapters or Shanks

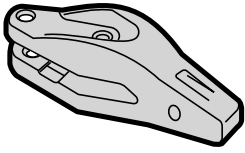
Description	J300	K80		J350	K90		J400	K100		J460	K110	
LDR Two Strap Center				135-9354	222-1094	(40 mm)	125-8404	223-8104	(45 mm)	114-0464	315-0114	(51 mm)
LDR Two Strap RH				135-9355	222-1095	(40 mm)	125-8405	223-8105	(45 mm)	114-0465	315-0115	(51 mm)
LDR Two Strap LH				135-9356	222-1096	(40 mm)	125-8406	223-8106	(45 mm)	114-0466	315-0116	(51 mm)
LDR Two Strap Long Life Center							125-8407	229-7100	(45 mm)	116-7464	309-1110	(51 mm)
LDR Two Strap Long Life RH							125-8408	229-7101	(45 mm)	116-7465	309-1111	(51 mm)
LDR Two Strap Long Life LH							125-8409	229-7102	(45 mm)	116-7466	309-1112	(51 mm)
LDR Flushmount Center	1U-1304	229-7084	(38 mm-25 mm)	1U-1354	229-7094	(32 mm-45 mm)	107-3404	229-7104	(38 mm-51 mm)	8E-0464	309-1113	(45 mm-51 mm)
LDR Abrasion Center										8E-1464	N/A	(51 mm)
LDR Abrasion Corner											N/A	(51 mm)
LDR Bolt-On Center	4T-4307	222-1087	(32 mm)	3G-3357	222-1097	(38 mm)	61-9898	223-8107	(45 mm)	183-4605	315-0117	(50 mm)
LDR Bolt-On RH Corner	8E-5309	222-1088	(32 mm-25 mm)	8E-5359	229-7098	(38 mm-32 mm)	61-8243	223-8108	(45 mm)	61-8299	315-0118	(50 mm)
LDR Bolt-On LH Corner	8E-5308	222-1089	(32 mm-25 mm)	8E-5358	229-7099	(38 mm-32 mm)	61-8244	223-8109	(45 mm)	61-8298	315-0119	(50 mm)
LDR Bolt-On Center	1U-0307	229-7087	(25 mm)	170-0073	223-8097	(32 mm)						
LDR Bolt-On RH Corner	8E-5309	222-1088	(32 mm-25 mm)	8E-5359	229-7098	(38 mm-32 mm)						
LDR Bolt-On LH Corner	8E-5308	222-1088	(32 mm-25 mm)	8E-5358	229-7099	(38 mm-32 mm)						

## K Family Identification (cont'd.) Adapters or Shanks (Continued)

Description	J550	K130		J600	K150		J700	K170	
LDR Two Strap Center	107-3554	223-8134	(63.5 mm)	119-8604	195-7154	(70 mm)	171-1704	232-2174	(76 mm)
LDR Two Strap RH	107-3555	223-8135	(63.5 mm)	119-8605	195-7155	(70 mm)	171-1705	232-2175	(76 mm)
LDR Two Strap LH	107-3556	223-8136	(63.5 mm)	119-8606	195-7156	(70 mm)	171-1706	232-2176	(76 mm)
LDR Two Strap Center	138-6554	232-0134	(51 mm)	N/A	232-0154	(63.5 mm)	133-0704	232-0174	(70 mm)
LDR Two Strap RH	138-6555	232-0135	(51 mm)	N/A	232-0155	(63.5 mm)	133-0705	232-0175	(70 mm)
LDR Two Strap LH	138-6556	232-0136	(51 mm)	N/A	232-0156	(63.5 mm)	133-0706	232-0176	(70 mm)
LDR Two Strap Long Life Center	112-2554	229-7130	(63.5 mm)	119-8607	232-2150	(70 mm)	187-2113	233-7174	(76 mm)
LDR Two Strap Long Life RH	112-2555	229-7131	(63.5 mm)	119-8609	232-2151	(70 mm)	187-2114	233-7175	(76 mm)
LDR Two Strap Long Life LH	112-2556	229-7132	(63.5 mm)	119-8608	232-2152	(70 mm)	187-2115	233-7176	(76 mm)
LDR Two Strap Long Life Center	159-0554	232-2134	(51 mm)	N/A	233-7154	(63.5 mm)	133-0707	238-3174	(70 mm)
LDR Two Strap Long Life RH	159-0555	232-2135	(51 mm)	N/A	233-7155	(63.5 mm)	133-0709	238-3175	(70 mm)
LDR Two Strap Long Life LH	159-0556	232-2136	(51 mm)	N/A	233-7156	(63.5 mm)	133-0708	238-3176	(70 mm)
LDR Flushmount Center	3G-4554	229-7134	(51 mm - 64 mm)	N/A	232-2154	(64 mm - 76 mm)			
LDR Abrasion Center	N/A	232-0138	(63.5 mm)	119-9604	232-0158	(70 mm)			
LDR Abrasion Corner	N/A	232-0139	(63.5 mm)	119-9605	232-0159	(70 mm)			

# Loader Adapters

## Bolt-On Center Adapters



Tip Size	Model	Edge Thickness	Bolt-On Adapter (center)	Bolt	Nut
J200	938, 939, 914G	19 mm (0.75 in)	9J-4207	5J-4771	2J-3506
	416, 426, 428, 436	20 mm (0.80 in)	8E-2184		
J225	938, 939, 914G	19 mm (0.75 in)	6Y-6227	1J-6762	2J-3506
J250	953, 951, 943, 941, 936, 930, 926, 920, 916, IT28, IT18	25 mm (1.00 in)	1U-0257	8J-2928	8J-2933
J300	944, 950, 953B, 953C	25 mm (1.00 in)	1U-0307	8J-2928	8J-2933
	950B, 950E, 950F, 944	32 mm (1.25 in)	4T-4307	5P-8136	8J-2933
	966C	32 mm (1.25 in)	3G-9307	5P-8361	5P-8362
	966C	32 mm (1.25 in)	3G-5307 <sup>(1)</sup>	8J-2928	8J-2933
J350	977, 973, 966D, 970F	38 mm (1.50 in)	3G-3357	5P-8361	5P-8362
	963B, 973, 977, 966C	32 mm (1.25 in)	170-0073	6V-8360	5P-8362
	980A, 980B, 980C, 980G, 980F	45 mm (1.75 in)	1U-1357	5P-8361	5P-8362
	980B	45 mm (1.75 in)	3G-2357 <sup>(1)</sup>	8J-2928	8J-2933
	977	38 mm (1.50 in)	3G-1357 <sup>(1)</sup>	8J-2928	8J-2933
J400	980C, 980F	45 mm (1.75 in)	6I-9898	5P-8361	5P-8362
J460	988, 980C, 980F	45 mm (1.75 in)	8E-2467	5P-8361	5P-8362
	977, 973, 966D, 970F	38 mm (1.50 in)	8E-3467	5P-8361	5P-8362

## One-Bolt Corner Adapters



Tip Size	Model	Edge Thickness	One-Bolt Adapter		Bolt	Nut
			(lh)	(rh)		
J200	935, 931, 910, IT12	19 mm (0.75 in)	1U-2208	1U-2209	6F-0196	2J-3505
J225	935, 931	19 mm (0.75 in)	6Y-6228	6Y-6229	6F-0196	2J-3505
J250	953, 951, 943, 941, 936, 930, 926, 920, 916, IT28, IT18	25 mm (1.00 in)	3G-4258	3G-4259	4J-9058	8J-2933
J300	944, 950, 950B, 950E, 950F, 960F	25-32 mm (1.00-1.25 in)	3G-4308	3G-4309	6V-6535	5P-8362
	953B, 953C, 963	25-32 mm (1.00-1.25 in)	3G-4308	3G-4309	4J-9058	8J-2933
	966C	32 mm (1.25 in)	3G-8308	3G-8309	5P-8823	5P-8362
J350	960F, 963B, 966D, 966E, 966F	32-38 mm (1.25-1.50 in)	3G-5358	3G-5359	5P-8823	5P-8362
	970F, 973, 977	32-38 mm (1.25-1.50 in)	3G-5358	3G-5359	5P-8823	5P-8362

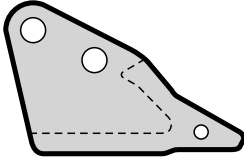
<sup>1</sup> 3-bolt adapter.



## One-Bolt Corner Adapters (Cont'd.)

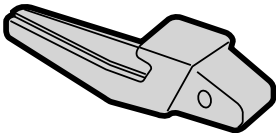
Tip Size	Model	Edge Thickness	One-Bolt Adapter		Bolt	Nut
			(lh)	(rh)		
	980A, 980B, 980C, 980F, 980G	45 mm (1.75 in)	1U-1358	1U-1359	6V-8360	5P-8362
J460	988, 980	45 mm (1.75 in)	8E-2469	8E-2468	6V-8360	5P-8362
	977, 973, 966D	38 mm (1.50 in)	8E-3469	8E-3468	6V-8360	5P-8362

## Two-Bolt Corner Adapters



Tip Size	Model	Edge Thickness	Two-Bolt Adapter		Bolt	Bolt	Nut
			(lh)	(rh)			
J250	920, 924F, 926, 928, 928F, 928G	25 mm (1.00 in)	6I-9250	6I-9251	4J-9058	4F-4042	2J-3507
	930, 936, 936E, 936F, 938F	25 mm (1.00 in)	6I-9250	6I-9251	4J-9058	4F-4042	2J-3507
	939, 941, 943, 951, 953	25 mm (1.00 in)	6I-9250	6I-9251	4J-9208	4F-4042	2J-3507
	IT18, IT24F, IT28	25 mm (1.00 in)	6I-9250	6I-9251	4J-9058	4F-4042	2J-3507
J300	944, 950, 953B, 953C, 963	25-32 mm (1.00-1.25 in)	8E-5308	8E-5309	8T-9079	6V-8360	3K-9770
	950B, 950E, 950F, 960F	25-32 mm (1.00-1.25 in)	8E-5308	8E-5309	8T-9079	5P-8823	3K-9770
J350	977, 973, 966, 963	32-38 mm (1.25-1.50 in)	8E-5358	8E-5359	5P-8361	6V-6535	3K-9770
J400/J460	980/988	44 mm (1.75 in)	6I-8244	6I-8243	8T-9079	6V-8360	3K-9770
J460	988	51 mm (2.00 in)	6I-8298	6I-8299	6V-6535	5P-8361	3K-9770

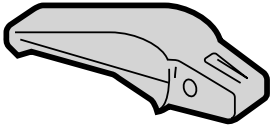
## Bottom Strap Adapters



Tip Size	Model	Edge Thickness	Bottom Strap Adapter		
			(lh)	(center)	(rh)
J200	935, 931, 910, IT12, 428, 426, 416	13-19 mm (0.50-0.75 in)	—	8J-7525	—
J250	953, 951, 943, 941, 936, 930, 926, 920, 916, IT28, IT18	25-32 mm (1.00-1.25 in)	—	3G-0169	—
J300	966C, 963, 955, 950	25-32 mm (1.00-1.25 in)	—	9J-8929	—
J350	980, 977, 973, 966D	32-45 mm (1.25-1.75 in)	1U-1352	1U-1350	1U-1351
J350	966D, 966E, 966F	40 mm (1.57 in)	1U-1352	1U-1350	1U-1351
J460	988, 983	45-57 mm (1.75-2.25 in)	8E-5466	8E-5464	8E-5465
J550	992	51-64 mm (2.00-2.50 in)	9J-3664	9J-3662	9J-3663

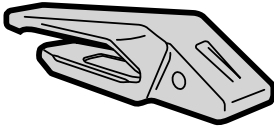
# Loader Adapters

## Flushmount Adapters



Tip Size	Model	Edge Thickness	Flushmount Adapter		
			(lh)	(center)	(rh)
J200	935, 931, 910, IT12, 428, 426, 416	13-25 mm (0.50-1.00 in)	—	4T-1204	—
J250	953, 951, 943, 941, 936, 930, 926, 920, 916, IT28, IT18	19-32 mm (0.75-1.25 in)	—	1U-1254	—
J300	966C, 963, 955, 950	25-38 mm (1.00-1.50 in)	—	1U-1304	—
J350	980, 977, 973, 966D	32-45 mm (1.25-1.75 in)	1U-1356	1U-1354	1U-1355
J400	980	38-51 mm (1.50-2.00 in)	—	107-3404	—
J460	988, 983	45-51 mm (1.75-2.00 in)	8E-0466	8E-0464	8E-0465
J550	990, 992C	51-64 mm (2.00-2.50 in)	3G-4556	3G-4554	3G-4555
	992, 992B	51-64 mm (2.00-2.50 in)	7J-9556	7J-9554	7J-9555

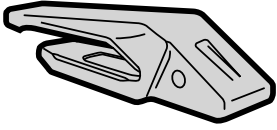
## Two-Strap Adapters



Tip Size	Model	Edge Thickness	Two-Strap Adapter		
			(lh)	(center)	(rh)
J450	980, 973 <sup>(2)</sup> , 966D <sup>(2)</sup>	45 mm (1.75 in)	4T-8456	4T-8454	4T-8455
J460	988, 983	51 mm (2.00 in)	8E-3466	8E-3464	8E-3465
	980	45 mm (1.75 in)	8E-2166	8E-2164	8E-2165
J550	990, 992	64 mm (2.50 in)	3G-9496	3G-9494	3G-9495
	988	51 mm (2.00 in)	4T-7556	4T-7554	4T-7555
J600	992	70 mm (2.75 in)	6I-8606	6I-8604	6I-8605
J700	994	76 mm (3.00 in)	4T-4706	4T-4704	4T-4705
	990, 992	64 mm (2.50 in)	9W-9706	9W-9704	9W-9705
	994	100 mm (4.00 in)	100-7416	—	—
J800	994	100 mm (4.00 in)	6I-8804	—	—

2 Requires spade base edge with segment bolt holes.

## Heavy Duty Adapters



Tip Size	Model	Edge Thickness	Heavy Duty Adapter		
			(lh)	(center)	(rh)
J350	966	40 mm (1.50 in)	135-9356	135-9354	135-9355
	980	45 mm (1.75 in)	113-0356	113-0354	113-0355
J400	980	45 mm (1.75 in)	125-8406	125-8404	125-8405
J460	988	51 mm (2.00 in)	114-0466	114-0464	114-0465
J550	990, 992	63 mm (2.50 in)	107-3556	107-3554	107-3555
	988	51 mm (2.00 in)	138-6556	138-6554	138-6555
J600	992	70 mm (2.75 in)	119-8606	119-8604	119-8605
	990, 992	63 mm (2.50 in)	143-3116	143-3115	143-3114
J700	992	70 mm (2.75 in)	133-0706	133-0704	133-0705
J700	994	100 mm (4.00 in)	—	100-7416	—
	992	70 mm (2.75 in)	133-0706	133-0704	133-0705
	992	76 mm (3.00 in)	171-1706	171-1704	171-1705
J800	994	100 mm (4.00 in)	—	61-8804	—

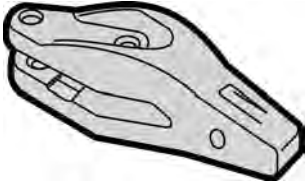
## Heavy Duty ARM Adapters



Tip Size	Model	Edge Thickness	Heavy Duty Arm Adapter		
			(lh)	(center)	(rh)
J400	980	45 mm (1.75 in)	125-8409	125-8407	125-8408
J460	988	51 mm (2.00 in)	116-7466	116-7464	116-7465
J550	990, 990	63 mm (2.50 in)	112-2556	112-2554	112-2555
	988	51 mm (2.00 in)	159-0556	159-0554	159-0555
J600	992	70 mm (2.75 in)	119-8606	119-8604	119-8605
	990, 992	63 mm (2.50 in)	186-5386	186-5384	186-5385
J700	992	70 mm (2.75 in)	133-0708	133-0707	133-0709
	994	76 mm (3.00 in)	187-2115	187-2113	187-2114

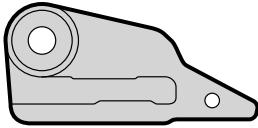
# Loader Adapters

## Upsize Bolt-On Center Adapters



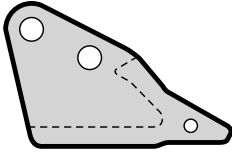
Tip Size	Edge Thickness	Model	Upsize Tip Size	Upsize Bolt-On Adapter (center)	Upsize Bolt	Upsize Nut
J200	19 mm (0.75 in)	910, 914G, 939	J225	6Y-6227	5J-4771	2J-3506
J250	25 mm (1.00 in)	916, 920, 926, 930, 936	J300	1U-0307	8J-2928	8J-2933
	25 mm (1.00 in)	941, 943, 951, 953	J300	1U-0307	8J-2928	8J-2933
	25 mm (1.00 in)	IT18, IT28	J300	1U-0307	8J-2928	8J-2933
J300	32 mm (1.25 in)	966C	J350	3G-7357	6V-8360	5P-8362
J350	38 mm (1.50 in)	966D, 970F, 973, 977	J460	8E-3467	5P-8361	5P-8362
	45 mm (1.75 in)	980	J460	8E-2467	5P-8361	5P-8362
J400	46 mm (1.80 in)	980G	J460	8E-2467	5P-8361	5P-8362

## Upsize One-Bolt Corner Adapters



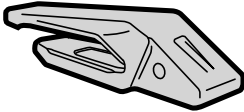
Tip Size	Edge Thickness	Model	Upsize Tip Size	Upsize Bolt-On Adapter		Upsize Bolt	Upsize Nut
				(lh)	(rh)		
J200	19 mm (0.75 in)	910, 914G, 939	J225	6Y-6228	6Y-6229	6F-0196	2J-3505
J250	25 mm (1.00 in)	916, 920, 926, 930, 936	J300	3G-4308	3G-4309	6V-6535	5P-8362
	25 mm (1.00 in)	941, 943, 951, 953	J300	3G-4308	3G-4309	6V-6535	5P-8362
	25 mm (1.00 in)	IT18, IT28	J300	3G-4308	3G-4309	6V-6535	5P-8362
J300	32 mm (1.25 in)	966C	J350	3G-5358	3G-5359	5P-8823	5P-8362
J350	38 mm (1.50 in)	966, 973, 977	J460	8E-3469	8E-3468	5P-8823	6V-8360
	45 mm (1.75 in)	980	J460	8E-2469	8E-2468	6V-8360	5P-8362

## Upsize Two-Bolt Corner Adapters



Tip Size	Edge Thickness	Model	Upsize Tip Size	Upsize Two-Bolt Adapter		Upsize Bolt	Upsize Bolt	Upsize Nut
				(lh)	(rh)			
J250	25 mm (1.00 in)	916, 920, 926, 930	J300	8E-5308	8E-5309	8T-9079	6V-8360	3K-9770
	25 mm (1.00 in)	941, 943, 951, 953	J300	8E-5308	8E-5309	8T-9079	6V-8360	3K-9770
J300	32 mm (1.25 in)	950, 953, 955, 963	J350	8E-5358	8E-5359	5P-8361	6V-6535	3K-9770

## Upsize Two-Strap Adapters



Tip Size	Edge Thickness	Model	Upsize Tip Size	Upsize Two-Strap Adapter		
				(lh)	(center)	(rh)
J350	45 mm (1.75 in)	980	J450	4T-8456	4T-8454	4T-8455
J350	45 mm (1.75 in)	980	J460	8E-2166	8E-2164	8E-2165
J460	51 mm (2.00 in)	983, 988	J550	4T-7556	4T-7554	4T-7555
J550	64 mm (2.50 in)	992	J700	9W-9706	9W-9704	9W-9705
J600	76 mm (3.00 in)	992	J700	133-0706	133-0704	133-0705
J700	100 mm (4.00 in)	994	J800		6I-8804	

## K Series Adapters

# Loader Adapters/Protectors

## K Series Adapters (Cont'd.)

Description	Base Edge Thickness													
	K80		K90		K100	K110	K130		K150		K170			
	25 mm	32 mm	32 mm	36 mm	45 mm	50 mm	50 mm	63 mm	63 mm	70 mm	70 mm	76 mm		
Adapters														
LDR Two Strap CNTR				222-1094	223-8104	232-2114	232-0134	223-8134	232-0154	195-7154	232-0174	232-2174		
LDR Two Strap RH				222-1095	223-8105	232-2115	232-0135	223-8135	232-0155	195-7155	232-0175	232-2175		
LDR Two Strap LH				222-1096	223-8106	232-2116	232-0136	223-8136	232-0156	195-7156	232-0176	232-2176		
LDR Two Strap Long Life CNTR (ARM)					229-7100	229-7110	232-2134	229-7130	233-7154	232-2150	238-3174	233-7174		
LDR Two Strap Long Life RH					229-7101	229-7111	232-2135	229-7131	233-7155	232-2151	238-3175	233-7175		
LDR Two Strap Long Life LH					229-7102	229-7112	232-2136	229-7132	233-7156	232-2152	238-3176	233-7176		
LDR Flushmount CNTR		229-7084		229-7094	229-7104	232-2117		229-7134		232-2154				
LDR Abrasion CNTR								232-0138		232-0158				
LDR Abrasion Corner								232-0139		232-0159				
LDR Bolt-On CNTR	229-7087	222-1087	223-8097	222-1097	223-8107	232-2110								
LDR Bolt-On Corner RH	222-1088	222-1088	222-1098	229-7098	223-8108	223-8118								
LDR Bolt-On Corner LH	222-1089	222-1089	222-1099	229-7099	223-8109	223-8119								
Models	953	950, 962	963	950, 962, 966, 972, 973	980	988	988	990, 992D, 990H, 992G, 992K	990, 992D, 992G, 992K	992G, 992K	992G, 992K	992G, 992K, 993K		

# Loader Adapters/Protectors



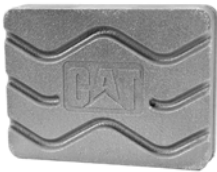
Part No.	Description	Length (mm)	Width (mm)	Thickness (mm)
280-4088	1.5 inch Chocky	241	38	25
280-4089	2.0 inch Chocky	241	51	25
280-4090	2.5 inch Chocky	241	64	25
280-4091	4.0 inch Chocky	241	102	25



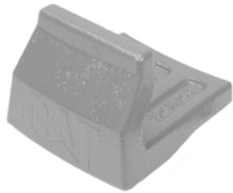
Part No.	Description	Diameter (mm)	Thickness (mm)
280-4092	2.5 inch Button	64	22
280-4093	3.5 inch Button	89	29
280-4094	4.5 inch Button	114	33
280-4095	6.0 inch Button	152	35



Part No.	Description	Length (mm)	Width (mm)	Diameter (mm)
280-4096	1.25 inch Roll Bar	229	38	32
280-4097	2.0 inch Roll Bar	305	52	51
280-4098	3.0 inch Roll Bar	305	69	76



Part No.	Description	Length (mm)	Width (mm)	Diameter (mm)
280-4099	6.0 inch x 8.0 inch Wear Block	200	150	37



Description	Straight Heel Shroud Part Number	Curved Heel Shroud Part Number	Width (mm)	Height (mm)
Small Heel Shroud	280-4078	280-4079	120	108
Medium Heel Shroud	138-6529	138-6551	175	150
Large Heel Shroud	157-1019	157-1027	250	200

# Loaders - Wear Protection

## Mechanically Attached Wear Plate System

### Wear Indicator

The wear plate has recessed holes (blind holes) cast into each corner to serve as a wear indicator making inspections quick and easy. When the holes become exposed in one or more corners, it is time to change the wear plate. If the wear plate is allowed to wear beyond the wear indicator, damage to base plate may occur.

### Parts Consist

Mechanically Attached Wear Plate System						
Series	Suggested Models	Base Plate (thk)	Wear Plate (dimension)	Compression Retainer	Radius Capability <sup>(1)</sup>	Retainer Plug
20 Series	844, 966, 980, 988, 345B, other similar sizes	138-0020 0.70 in thick (18 mm) 5.35 lb (2.43 kg)	138-0022 8.85 in x 7.87 in x 1.38 in (225 mm x 200 mm x 35 mm) 14.15 lb (6.42 kg)	138-0006	7.87 in (200 mm) minimum	275-5444
Heavy Duty	same	same	138-0023 8.85 in x 7.87 in x 1.97 in (225 mm x 200 mm x 50 mm) 23.9 lb (10.85 kg)	138-0006	same	275-5444
Heavy Duty ARM	same	same	264-2195	138-0006	same	275-5444
30 Series	854, 990, 992, 375, 5080, other similar sizes	138-0030 0.86 in thick (22 mm) 8.2 lb (3.72 kg)	138-0032 10.8 in x 7.87 in x 1.77 in (275 mm x 200 mm x 45 mm) 21.3 lb (9.67 kg)	138-0006	15.75 in (400 mm) minimum	275-5444
Standard ARM	same	same	229-7067	138-0006	same	275-5444
Heavy Duty	same	same	138-0033 10.8 in x 7.87 in x 2.36 in (275 mm x 200 mm x 60 mm) 32.6 lb (14.8 kg)	138-0006	same	275-5444
Heavy Duty ARM	same	same	317-3350	138-0006	same	275-5444
40 Series	5110, 5130, other similar sizes	138-0040 1.14 in thick (29 mm) 10.15 lb (4.61 kg)	138-0042 10.8 in x 7.87 in x 2.36 in (275 mm x 200 mm x 60 mm) 29.25 lb (13.28 kg)	138-0007	31.50 in (800 mm) minimum	275-5444
Heavy Duty	same	same	138-0043 10.8 in x 7.87 in x 2.95 in (275 mm x 200 mm x 75 mm) 41.2 lb (18.7 kg)	138-0007	same	275-5444
50 Series	994, 5230, other similar sizes	138-0050 1.14 in thick (29 mm) 13.4 lb (6.08 kg)	138-0052 11.81 in x 9.8 in x 2.95 in (300 mm x 250 mm x 75 mm) 55.25 lb (25.08 kg)	138-0007	47.25 in (1200 mm) minimum	275-5444
Heavy Duty	same	same	138-0053 11.81 in x 9.8 in x 3.93 in (300 mm x 250 mm x 100 mm) 83.15 lb (37.75 kg)	138-0007	same	275-5444

Skeletal Mechanically Attached Wear Plate System						
Series	Suggested Models	Base Plate (thk)	Wear Plate (dimension)	Compression Retainer	Radius Capability <sup>(1)</sup>	Retainer Plug
Standard	Off Highway Trucks	138-0020 0.70 in thick (18 mm) 5.35 lb (2.43 kg)	138-0024 8 in x 12.2 in x 1.38 in (202 mm x 310 mm x 35 mm) 12.9 lb (5.9 kg)	138-0006	7.87 in (200 mm)	275-5444
Heavy Duty	Off Highway Trucks	138-0020 0.70 in thick (18 mm) 5.35 lb (2.43 kg)	138-0025 8.15 in x 12.2 in x 1.77 in (207 mm x 310 mm x 45 mm) 18.3 lb (8.4 kg)	138-0006	7.87 in (200 mm)	275-5444

<sup>1</sup> Not recommended for convex radii smaller than those specified in this chart.



## GraderBits™ Systems

The Caterpillar GraderBits System is a road maintenance edge that lowers owning and operating costs by increasing productivity, decreasing blade maintenance, and reducing downtime.

The Caterpillar GraderBits System works by using special adapters and grader bits instead of a conventional cutting edge. The adapters are bolted onto the moldboard, and then, the grader bits are secured within the adapter using snap rings. Different combinations of grader bit sizes and types allow you to customize the edge pattern to deliver the best performance in any surface condition, including mining haul roads, public roads, farm roads, logging roads, and even paved roads.



### Standard Bit Arrangement

- For use on larger motor graders.
- Good in highly abrasive applications where penetration is not critical.



### Sharp Bit Arrangement

- For use on smaller motor graders.
- Use where maximum penetration is required.



### Penetration Bit Arrangement

- Use with midsize motor graders.



### Wide Bit Arrangement

- Available in a continuous design with narrow gap adapters.
- May be used on the ends of all grader bit configurations to extend wear life.

Model	Gap Size	Edge Length	GraderBit Arrangement <sup>(1)</sup>				Snap Ring Retainer <sup>(2)</sup>
			Standard	Sharp	Penetration	Wide	
All	Narrow	0.914 m (3 ft)	6Y-4339 (15)	105-5183 (15)	105-5180 (15)	6Y-4340 (15)	353-2624 (15)
		1.219 m (4 ft)	6Y-4339 (20)	105-5183 (20)	105-5180 (20)	6Y-4340 (20)	353-2624 (15)
14, 16	Wide	0.914 m (3 ft)	6Y-4339 (12)	105-5183 (12)	105-5180 (12)	6Y-4340 (12)	353-2624 (15)
		1.219 m (4 ft)	6Y-4339 (16)	105-5183 (16)	105-5180 (16)	6Y-4340 (16)	353-2624 (15)

<sup>1</sup> Includes snap ring retainer.

<sup>2</sup> Uses 1P-1860 snap ring pliers.

# Motor Grader - Motor Grader Bits

## GraderBit Systems Adapters

Model	Gap Size	Edge Length	Moldboard Length	Adapter Part Number	Bolts	Nuts
14, 16, 140H (3/Z bolts), 143H (3/Z bolts)	Narrow V' bolts	0.914 m (3 ft)	3.05 m (10 ft)	159-0318 (2)	5J-4771 (19)	2J-3506 (19)
			3.35 m (11 ft)	159-0318	5J-4771 (21)	2J-3506 (21)
			3.96 m (13 ft)	159-0318 (3)	5J-4771 (24)	2J-3506 (24)
			4.27 m (14 ft)	159-0318 (2)	5J-4771 (30)	2J-3506 (30)
			4.57 m (5 ft)	159-0318	5J-4771 (28)	2J-3506 (28)
		1.219 m (4 ft)	3.05 m (10 ft)	159-0317	5J-4771 (19)	2J-3506 (19)
			3.35 m (11 ft)	159-0317 (2)	5J-4771 (21)	2J-3506 (21)
			3.66 m (2 ft)	159-0317 (3)	5J-4771 (23)	2J-3506 (23)
			3.96 m (13 ft)	159-0317	5J-4771 (24)	2J-3506 (24)
			4.27 m (14 ft)	159-0317 (2)	5J-4771 (30)	2J-3506 (30)
			4.57 m (5 ft)	159-0317 (3)	5J-4771 (28)	2J-3506 (28)
			4.88 m (6 ft)	159-0317 (4)	5J-4771 (36)	2J-3506 (36)
	Wide bolts	0.914 m (3 ft)	3.05 m (10 ft)	159-0313 (2)	5J-4771 (19)	2J-3506 (19)
			3.35 m (11 ft)	159-0313	5J-4771 (21)	2J-3506 (21)
			3.96 m (13 ft)	159-0313 (3)	5J-4771 (24)	2J-3506 (24)
			4.27 m (14 ft)	159-0313 (2)	5J-4771 (30)	2J-3506 (30)
			4.57 m (5 ft)	159-0313	5J-4771 (28)	2J-3506 (28)
		1.219 m (4 ft)	3.05 m (10 ft)	159-0314	5J-4771 (19)	2J-3506 (19)
			3.35 m (11 ft)	159-0314 (2)	5J-4771 (21)	2J-3506 (21)
			3.66 m (2 ft)	159-0314 (3)	5J-4771 (23)	2J-3506 (23)
			3.96 m (13 ft)	159-0314	5J-4771 (24)	2J-3506 (24)
			4.27 m (14 ft)	159-0314 (2)	5J-4771 (30)	2J-3506 (30)
			4.57 m (5 ft)	159-0314 (3)	5J-4771 (28)	2J-3506 (28)
			4.88 m (6 ft)	159-0314 (4)	5J-4771 (36)	2J-3506 (36)
All except 14, 16, 140H (5/s- bolts), 143H (5/s- bolts)	Narrow 5/s' bolts	0.914 m (3 ft)	3.05 m (10 ft)	159-0311 (2)	3F-5108 (19)	4K-0367 (19)
			3.35 m (11 ft)	159-0311	3F-5108 (21)	4K-0367 (21)
			3.96 m (13 ft)	159-0311 (3)	3F-5108 (24)	4K-0367 (24)
			4.27 m (14 ft)	159-0311 (2)	3F-5108 (30)	4K-0367 (30)
			4.57 m (5 ft)	159-0311	3F-5108 (28)	4K-0367 (28)
		1.219 m (4 ft)	3.05 m (10 ft)	159-0312	3F-5108 (19)	4K-0367 (19)
			3.35 m (11 ft)	159-0312 (2)	3F-5108 (21)	4K-0367 (21)
			3.66 m (2 ft)	159-0312 (3)	3F-5108 (23)	4K-0367 (23)
			3.96 m (13 ft)	159-0312	3F-5108 (24)	4K-0367 (24)
			4.27 m (14 ft)	159-0312 (2)	3F-5108 (30)	4K-0367 (30)
			4.57 m (5 ft)	159-0312 (3)	3F-5108 (28)	4K-0367 (28)
			4.88 m (6 ft)	159-0312 (4)	3F-5108 (36)	4K-0367 (36)
	Wide 5/s' bolts	0.914 m (3 ft)	3.05 m (10 ft)	159-0315 (2)	3F-5108 (19)	4K-0367 (19)
			3.35 m (11 ft)	159-0315	3F-5108 (21)	4K-0367 (21)
			3.96 m (13 ft)	159-0315 (3)	3F-5108 (24)	4K-0367 (24)
			4.27 m (14 ft)	159-0315 (2)	3F-5108 (30)	4K-0367 (30)
			4.57 m (5 ft)	159-0315	3F-5108 (28)	4K-0367 (28)
		1.219 m (4 ft)	3.05 m (10 ft)	159-0316	3F-5108 (19)	4K-0367 (19)
			3.35 m (11 ft)	159-0316 (2)	3F-5108 (21)	4K-0367 (21)
			3.66 m (2 ft)	159-0316 (3)	3F-5108 (23)	4K-0367 (23)
			3.96 m (13 ft)	159-0316	3F-5108 (24)	4K-0367 (24)
			4.27 m (14 ft)	159-0316 (2)	3F-5108 (30)	4K-0367 (30)
			4.57 m (5 ft)	159-0316 (3)	3F-5108 (28)	4K-0367 (28)
			4.88 m (6 ft)	159-0316 (4)	3F-5108 (36)	4K-0367 (36)

# Motor Grader - Motor Grader Bits

## Mining Bit Systems

Mining Bit System for larger machines (16H and 24H) in heavy-duty applications like haul road maintenance. The Mining Bits have two separate pieces of carbide for added wear protection. The first is brazed on the face of the bit to reduce wear as the bit moves through the material. The second piece of carbide is inserted into a slot behind the face to protect the bottom of the bit. The Mining Bit also has an angled shank to facilitate proper orientation with respect to the ground — reducing chances for premature wear.

Model	Gap Size	Edge Length	Mining Bit Arrangement <sup>(3)</sup>	
			Standard	Wide
16H	Narrow	0.914 m (3 ft)	308-5193 (13)	135-9586
		1.219 m (4 ft)	308-5193 (13)	135-9586
	Wide	0.914 m (3 ft)	308-5193 (13)	135-9586
		1.219 m (4 ft)	308-5193 (13)	135-9586
24H	Wide	0.914 m (3 ft)	310-2113	N/A

## Mining Bit System Adapters

Model	Gap Size	Edge Length	Moldboard Length	Adapter Part Number	Bolts	Nuts
16H	Narrow 5/8" bolts	0.914 m (3 ft)	4.267 m (14 ft)	135-9596	3F-5108 (30)	4K-0367 (30)
			4.877 m (16 ft)	135-9596	3F-5108 (36)	4K-0367 (30)
	Wide 5/8" bolts	0.914 m (3 ft)	4.267 m (14 ft)	135-9593	3F-5108 (30)	4K-0367 (30)
			4.877 m (16 ft)	135-9593	3F-5108 (36)	4K-0367 (36)
	Narrow 3/4" bolts	0.914 m (3 ft)	4.267 m (14 ft)	135-9592	5J-4771 (30)	2J-3506 (30)
			4.877 m (16 ft)	135-9592	5J-4771 (36)	2J-3506 (36)
	Wide 3/4" bolts	0.914 m (3 ft)	4.267 m (14 ft)	135-9591	5J-4771(30)	2J-3506 (30)
			4.877 m (16 ft)	135-9591	5J-4771 (36)	2J-3506 (36)
	Narrow 5/8" bolts	1.219 m (4 ft)	4.267 m (14 ft)	135-9590	3F-5108	4K-0367 (30)
			4.877 m (16 ft)	135-9590	3F-5108	4K-0367 (36)
	Wide 5/8" bolts	1.219 m (4 ft)	4.267 m (14 ft)	135-9589	3F-5108	4K-0367 (30)
			4.877 m (16 ft)	135-9589	3F-5108	4K-0367 (36)
	Narrow 3/4" bolts	1.219 m (4 ft)	4.267 m (14 ft)	135-9588	5J-4771	2J-3506 (30)
			4.877 m (16 ft)	135-9588	5J-4771	2J-3506 (36)
	Wide 3/4" bolts	1.219 m (4 ft)	4.267 m (14 ft)	135-9587	5J-4771	2J-3506 (30)
			4.877 m (16 ft)	135-9587	5J-4771	2J-3506 (36)
24H	Wide 1" bolts	0.914 m (3 ft)	7.315 m (24 ft)	178-4095	1J-3527	2J-3507

3 Includes snap ring retainer 178-4092.

# Motor Grader Cutting Edges

## Cutting Edges

Caterpillar Motor Grader Cutting Edges are made of DH2 alloy steel, SAE specification high carbon steel, or Tungsten Carbide and are double bevel shaped for improved penetration.

DH2 Through-Hardened Edges are heat treated for longer wear life and greater breakage resistance than surface hardened edges or high carbon steel edges. DH2 Through-Hardened Edges have a lifetime warranty against breakage.

High Carbon Edges are wear resistant and intended for light duty applications.

Tungsten Carbide Edges provide up to twenty times more wear life in low impact, high wear applications.



### Curved Cutting Edges

- Provides best penetration.
- For use in most construction and finish grading applications.



### Flat Cutting Edges

- Provide greater strength and more wear material.
- For use with large machines in road maintenance and pioneering applications.



### Serrated Cutting Edges

- Provides better penetration of frozen or hard-packed materials.
- For use in gravel raking and spreading applications, as well as other special applications.

Edge Width	Edge Thickness	Edge Length	Edge Type	Steel Type	Bolt Size	Edge Part Number	Bolts	Nuts
121 mm (4.75 in)	19 mm (0.75 in)	0.610 m (2 ft)	Curved	Tungsten Carbide	0.62	207-4695	3F-5108 (5)	4K-0367 (5)
					0.75	208-8863	4F-7827 (5) <sup>(1)</sup>	2J-3506 (5)
		0.914 m (3 ft)	Curved	Tungsten Carbide	0.62	208-8862	3F-5108 (7)	4K-0367 (7)
					0.75	217-4698	4F-7827 (7) <sup>(1)</sup>	2J-3506 (7)
152 mm (6.00 in)	13 mm (0.50 in)	1.219 m (4 ft)	Curved	DH2	0.62	3G-8016	3F-5108 (9)	4K-0367 (9)
					0.75	9W-2293	3F-5108 (6)	4K-0367 (6)
				High Carbon	0.62	9W-2294	4F-7827 (6) <sup>(1)</sup>	2J-3506 (6)
					0.75	9W-2294	4F-7827 (6) <sup>(1)</sup>	2J-3506 (6)
		1.524 m (5 ft)	Curved	DH2	0.62	9J-3862	3F-5108 (11)	4K-0367 (11)
					0.75	9W-2295	3F-5108 (7)	4K-0367 (7)
				High Carbon	0.62	9W-2296	4F-7827 (7) <sup>(1)</sup>	2J-3506 (7)
					0.75	9W-2296	4F-7827 (7) <sup>(1)</sup>	2J-3506 (7)
1.828 m (6 ft)	Curved	DH2	0.62	8D-2786	3F-5108 (13)	4K-0367 (13)		
			0.75	9J-3660	4F-7827 (13) <sup>(1)</sup>	2J-3506 (13)		
		High Carbon	0.62	9W-2297	3F-5108 (8)	4K-0367 (8)		
			0.75	9W-2298	4F-7827 (8) <sup>(1)</sup>	2J-3506(8)		
152 mm (6.00 in)	13 mm (0.50 in)	1.828 m (6 ft)	Curved	High Carbon	0.62	9W-2297	3F-5108 (8)	4K-0367 (8)
					0.75	9W-2298	4F-7827 (8) <sup>(1)</sup>	2J-3506(8)
		2.133 m (7 ft)	Curved	DH2	0.62	8D-2787	3F-5108(15)	4K-0367 (15)
					0.75	9J-3659	4F-7827 (15) <sup>(1)</sup>	2J-3506(15)
				High Carbon	0.62	9W-2299	3F-5108 (9)	4K-0367 (9)

<sup>1</sup> For a 14G Motor Grader, use 5J-4773 bolts.  
 For a 16G Motor Grader with a 16 ft. blade, use 5F-8933 bolts.  
 For a 16G Motor Grader without a 16 ft. blade, use 5J-4771 bolts.  
 For a 24H Motor Grader, use 1J-3527 bolts for the last five bolts on each end of the edge.

# Motor Grader Cutting Edges

## Cutting Edges (Cont'd.)

Edge Width	Edge Thickness	Edge Length	Edge Type	Steel Type	Bolt Size	Edge Part Number	Bolts	Nuts				
		2.438 m (8 ft)	Curved	DH2	0.75	9W-2300	4F-7827 (9) <sup>(2)</sup>	2J-3506 (9)				
					0.62	8J-7782	3F-5108(17)	4K-0367 (17)				
				0.75	9J-3656	4F-7827 (17) <sup>(2)</sup>	2J-3506(17)					
				0.62	9W-2301	3F-5108(10)	4K-0367 (10)					
		2.743 m (9 ft)	Curved	High Carbon	0.62	4Z-8968	3F-5108 (11)	4K-0367 (11)				
					0.75	9W-2302	4F-7827 (10) <sup>(2)</sup>	2J-3506 (10)				
		3.048 m (10 ft)	Curved	High Carbon	0.62	9W-2303	3F-5108(12)	4K-0367 (12)				
					0.75	9W-2304	4F-7827 (12) <sup>(2)</sup>	2J-3506 (12)				
		3.658 m (12 ft)	Curved	High Carbon	0.62	9W-2305	3F-5108(13)	4K-0367 (13)				
					0.75	9W-2306	4F-7827 (14) <sup>(2)</sup>	2J-3506 (14)				
		4.267 m (14 ft)	Curved	High Carbon	0.62	9W-2307	3F-5108(16)	4K-0367 (16)				
					0.75	9W-2308	4F-7827 (16) <sup>(2)</sup>	2J-3506 (16)				
		16 mm (0.62 in)	0.610 m (2 ft)	Curved	DH2	0.62	9W-1835	3F-5108 (4)	4K-0367 (4)			
						1.219 m (4 ft)	Curved	High Carbon	0.62	9W-2325	3F-5108 (6)	4K-0367 (6)
									0.75	9W-2326	4F-7827 (6) <sup>(2)</sup>	2J-3506 (6)
			1.524 m (5 ft)	Curved	DH2	0.62	7D-4508	3F-5108 (11)	4K-0367 (11)			
						High Carbon	0.62	7T-1640	3F-5108 (7)	4K-0367 (7)		
							0.75	9W-2327	4F-7827 (7) <sup>(2)</sup>	2J-3506 (7)		
	1.828 m (6 ft)		Curved	DH2	0.62	5D-9553	3F-5108(13)	4K-0367 (13)				
					High Carbon	0.75	9J-3657	4F-7827 (13) <sup>(2)</sup>	2J-3506(13)			
						0.62	7T-1633	3F-5108 (8)	4K-0367 (8)			
	2.133 m (7 ft)		Curved	DH2	0.62	7T-1637	4F-7827 (8) <sup>(2)</sup>	2J-3506 (8)				
					High Carbon	0.62	5D-9554	3F-5108(15)	4K-0367 (15)			
						0.75	9J-3658	4F-7827 (15) <sup>(2)</sup>	2J-3506 (15)			
	2.438 m (8 ft)		Curved	DH2	0.62	7T-1626	4F-7827 (9) <sup>(2)</sup>	2J-3506 (9)				
					High Carbon	0.62	7T-1645	3F-5108 (9)	4K-0367 (9)			
						0.75	7T-1626	4F-7827 (9) <sup>(2)</sup>	2J-3506 (9)			
	3.353 m (11 ft)		Curved	High Carbon	0.62	8J-4043	3F-5108(17)	4K-0367 (17)				
					High Carbon	0.75	9J-3655	4F-7827 (17) <sup>(2)</sup>	2J-3506 (17)			
						0.62	7T-1632	3F-5108(10)	4K-0367 (10)			
	3.658 m (12 ft)	Curved	High Carbon	0.62	7T-1629	4F-7827 (10) <sup>(2)</sup>	2J-3506 (10)					
				High Carbon	0.62	4Z-8652	3F-5108(13)	4K-0367 (13)				
					0.62	4Z-8653	3F-5108(14)	4K-0367 (14)				
	19 mm (0.75 in)	1.524 m (5 ft)	Curved	DH2	0.62	3G-7966	3F-5108 (11)	4K-0367 (11)				
					1.828 m (6 ft)	Curved	DH2	0.62	5D-9556	3F-5108(13)	4K-0367 (13)	
								0.62	5D-9557	3F-5108(15)	4K-0367 (15)	
2.133 m (7 ft)	Curved	DH2	0.62	5D-9557	3F-5108(15)	4K-0367 (15)						
			0.75	4Z-8785	4F-7827 (15) <sup>(2)</sup>	2J-3506 (15)						
170 mm (6.69 in)	25 mm (1.00 in)	0.610 m (2 ft)	Curved Serrated	Tungsten	0.62	208-8864	3F-5108 (5)	4K-0367 (5)				
				Carbide	0.75	208-8865	4F-7827 (5) <sup>(2)</sup>	2J-3506 (5)				
		0.914 m (3 ft)	Curved Serrated	Tungsten	0.62	217-4696	3F-5108 (7)	4K-0367 (7)				
				Carbide	0.75	217-4697	4F-7827 (7) <sup>(2)</sup>	2J-3506 (7)				
171 mm (6.75 in)	19 mm (0.75 in)	0.610 m (2 ft)	Curved	Tungsten	0.62	195-7265	3F-5108 (5)	4K-0367 (5)				
				Carbide	0.75	195-7266	4F-7827 (5) <sup>(2)</sup>	2J-3506 (5)				
		0.914 m (3 ft)	Curved	Tungsten	0.62	208-8866	3F-5108 (7)	4K-0367 (7)				

- 2 For a 14G Motor Grader, use 5J-4773 bolts.  
 For a 16G Motor Grader with a 16 ft. blade, use 5F-8933 bolts.  
 For a 16G Motor Grader without a 16 ft. blade, use 5J-4771 bolts.  
 For a 24H Motor Grader, use 1J-3527 bolts for the last five bolts on each end of the edge.

# Motor Grader Cutting Edges

## Cutting Edges (Cont'd.)

Edge Width	Edge Thickness	Edge Length	Edge Type	Steel Type	Bolt Size	Edge Part Number	Bolts	Nuts
				Carbide	0.75	195-7267	4F-7827 (7) <sup>(3)</sup>	2J-3506 (7)
		1.219 m (4 ft)	Curved	Tungsten Carbide	0.75	208-8866	4F-7827 (9) <sup>(3)</sup>	2J-3506 (9)
203 mm (8.00 in)	13 mm (0.50 in)	1.219 m (4 ft)	Curved	DH2	0.62	3G-7965	3F-5108 (9)	4K-0367 (9)
					0.75	135-6738	4F-7827 (9) <sup>(3)</sup>	2J-3506 (9)
				High Carbon	0.62	9W-2309	3F-5108 (6)	4K-0367 (6)
					0.75	9W-2310	4F-7827 (6) <sup>(3)</sup>	2J-3506 (6)
		1.524 m (5 ft)	Curved	DH2	0.62	9J-3863	3F-5108 (11)	4K-0367 (11)
					0.75	134-1779	4F-7827 (11) <sup>(3)</sup>	2J-3506 (11)
				High Carbon	0.62	9W-2311	3F-5108 (7)	4K-0367 (7)
					0.75	9W-2312	4F-7827 (7) <sup>(3)</sup>	2J-3506 (7)
		1.828 m (6 ft)	Curved	DH2	0.62	8D-2788	3F-5108 (13)	4K-0367 (13)
					0.75	3G-1626	4F-7827 (13) <sup>(3)</sup>	2J-3506 (13)
				High Carbon	0.62	9W-2313	3F-5108 (8)	4K-0367 (8)
					0.75	9W-2314	4F-7827 (8) <sup>(3)</sup>	2J-3506 (8)
		2.133 m (7 ft)	Curved	DH2	0.62	8D-2789	3F-5108 (15)	4K-0367 (15)
					0.75	3G-1627	4F-7827 (15) <sup>(3)</sup>	2J-3506 (15)
	High Carbon			0.62	9W-2315	3F-5108 (9)	4K-0367 (9)	
				0.75	9W-2316	4F-7827 (9) <sup>(3)</sup>	2J-3506 (9)	
	2.438 m (8 ft)	Curved	DH2	0.62	8J-8980	3F-5108 (17)	4K-0367 (17)	
				0.75	3G-1628	4F-7827 (17) <sup>(3)</sup>	2J-3506 (17)	
			High Carbon	0.62	9W-2317	3F-5108 (10)	4K-0367 (10)	
				0.75	9W-2318	4F-7827 (10) <sup>(3)</sup>	2J-3506 (10)	
	2.438 m (8 ft)	Curved	High Carbon	0.75	9W-2318	4F-7827 (10) <sup>(3)</sup>	2J-3506 (10)	
	3.048 m (10 ft)	Curved	High Carbon	0.62	9W-2319	3F-5108 (12)	4K-0367 (12)	
				0.75	9W-2320	4F-7827 (12) <sup>(3)</sup>	2J-3506 (12)	
	3.658 m (12 ft)	Curved	High Carbon	0.62	9W-2321	3F-5108 (14)	4K-0367 (14)	
				0.75	9W-2322	4F-7827 (14) <sup>(3)</sup>	2J-3506 (14)	
	4.267 m (14 ft)	Curved	High Carbon	0.62	9W-2323	3F-5108 (16)	4K-0367 (16)	
				0.75	9W-2324	4F-7827 (16) <sup>(3)</sup>	2J-3506 (16)	
			DH2	0.62	109-3137	3F-5108 (5)	4K-0367 (5)	
0.75				3G-2166	4F-7827 (4) <sup>(3)</sup>	2J-3506 (4)		
1.219 m (4 ft)	Curved	DH2	0.62	132-1088	3F-5108 (9)	4K-0367 (9)		
			0.75	134-1773	4F-7827 (9) <sup>(3)</sup>	2J-3506 (9)		
		High Carbon	0.62	9W-2328	3F-5108 (6)	4K-0367 (6)		
			0.75	9W-2329	4F-7827 (6) <sup>(3)</sup>	2J-3506 (6)		
1.524 m (5 ft)	Curved	DH2	0.62	7D-4509	3F-5108 (11)	4K-0367 (11)		
			0.75	9W-2330	4F-7827 (7) <sup>(3)</sup>	2J-3506 (7)		
		High Carbon	0.62	7T-1641	3F-5108 (7)	4K-0367 (7)		
			0.75	9W-2330	4F-7827 (7) <sup>(3)</sup>	2J-3506 (7)		
1.828 m (6 ft)	Flat	DH2	0.62	4T-2967	3F-5108 (11)	4K-0367 (11)		
			0.75	4Z-8120	4F-7827 (13) <sup>(3)</sup>	2J-3506 (13)		
		Curved	DH2	0.62	5D-9562	3F-5108 (13)	4K-0367 (13)	
				0.75	9J-7701	4F-7827 (13) <sup>(3)</sup>	2J-3506 (13)	
High Carbon	Curved	0.62	7T-1636	3F-5108 (8)	4K-0367 (8)			
		0.75	7T-1639	4F-7827 (8) <sup>(3)</sup>	2J-3506 (8)			

- 3 For a 14G Motor Grader, use 5J-4773 bolts.  
 For a 16G Motor Grader with a 16 ft. blade, use 5F-8933 bolts.  
 For a 16G Motor Grader without a 16 ft. blade, use 5J-4771 bolts.  
 For a 24H Motor Grader, use 1J-3527 bolts for the last five bolts on each end of the edge.

# Motor Grader Cutting Edges

## Cutting Edges (Cont'd.)

Edge Width	Edge Thickness	Edge Length	Edge Type	Steel Type	Bolt Size	Edge Part Number	Bolts	Nuts		
		2.133 m (7 ft)	Flat	DH2	0.62	4T-2968	3F-5108 (13)	4K-0367 (13)		
					0.75	4T-2971	4F-7827 (13) <sup>(4)</sup>	2J-3506 (13)		
			Curved	DH2	0.62	5D-9561	3F-5108 (15)	4K-0367 (15)		
					0.75	7D-1158	4F-7827 (15) <sup>(4)</sup>	2J-3506 (15)		
				High Carbon	0.62	7T-1643	3F-5108 (9)	4K-0367 (9)		
					0.75	7T-1624	4F-7827 (9) <sup>(4)</sup>	2J-3506 (9)		
		Flat	DH2	0.62	4T-2969	3F-5108 (15)	4K-0367 (15)			
				0.75	4T-2970	4F-7827 (15) <sup>(4)</sup>	2J-3506 (15)			
		2.438 m (8 ft)	Curved	DH2	0.62	5D-9731	3F-5108 (17)	4K-0367 (17)		
					0.75	8J-9821	4F-7827 (17) <sup>(4)</sup>	2J-3506 (17)		
		203 mm (8.00 in)	16 mm (0.62 in)	2.438 m (8 ft)	Curved	High Carbon	0.62	7T-1631	3F-5108(10)	4K-0367 (10)
							0.75	7T-1628	4F-7827 (10) <sup>(4)</sup>	2J-3506 (10)
Flat	DH2				0.62	4T-2966	3F-5108(17)	4K-0367 (17)		
					0.75	4T-9603	4F-7827 (17) <sup>(4)</sup>	2J-3506 (17)		
19 mm (0.75 in)	0.610 m (2 ft)				Curved	DH2	0.62	6G-8623	3F-5108 (4)	4K-0367 (4)
							0.75	3G-2165	4F-7827 (4) <sup>(4)</sup>	2J-3506 (4)
			Flat	DH2	0.62	4Z-8129	3F-5108 (11)	4K-0367 (11)		
					1.219 m (4 ft)	Flat	DH2	0.62	4Z-8119	3F-5108 (6)
			Curved	DH2	0.62			132-1087	3F-5108 (9)	4K-0367 (9)
					0.75	109-3124	4F-7827 (9) <sup>(4)</sup>	2J-3506 (9)		
	High Carbon			0.62	9W-2338	3F-5108 (6)	4K-0367 (6)			
				0.75	9W-2339	4F-7827 (6) <sup>(4)</sup>	2J-3506 (6)			
	Curved Serrated		DH2	0.62	8D-3428	3F-5108 (9)	4K-0367 (9)			
				0.75	8J-8255	4F-7827 (9) <sup>(4)</sup>	2J-3506 (9)			
			1.524 m (5 ft)	Curved	DH2	0.62	9W-6252	3F-5108 (11)	4K-0367 (11)	
						0.75	4Z-8131	4F-7827 (7) <sup>(4)</sup>	2J-3506 (7)	
	High Carbon			0.62	9W-2340	3F-5108 (7)	4K-0367 (7)			
				0.75	9W-2341	4F-7827 (7) <sup>(4)</sup>	2J-3506 (7)			
	Curved Serrated		DH2	0.62	8D-3429	3F-5108 (11)	4K-0367 (11)			
				0.75	8J-8256	4F-7827 (11) <sup>(4)</sup>	2J-3506 (11)			
	Flat		DH2	0.62	4T-3034	3F-5108 (11)	4K-0367 (11)			
				1.828 m (6 ft)	Curved	DH2	0.62	5D-9558	3F-5108(13)	4K-0367 (13)
0.75	7D-1576		4F-7827 (13) <sup>(4)</sup>	2J-3506 (13)						
High Carbon	0.62		7T-1634	3F-5108 (8)		4K-0367 (8)				
	0.75		7T-1638	4F-7827 (8) <sup>(4)</sup>		2J-3506 (8)				
Curved Serrated	DH2		0.62	132-1072		3F-5108(13)	4K-0367 (13)			
			Flat	DH2		0.62	4T-3007	3F-5108(13)	4K-0367 (13)	
0.75	4T-3033				4F-7827 (13) <sup>(4)</sup>	2J-3506 (13)				
2.133 m (7 ft)	Curved		DH2	0.62	5D-9559	3F-5108(15)	4K-0367 (15)			
				0.75	7D-1577	4F-7827 (15) <sup>(4)</sup>	2J-3506 (15)			
			High Carbon	0.62	7T-1623	3F-5108 (9)	4K-0367 (9)			
				0.75	7T-1625	4F-7827 (9) <sup>(4)</sup>	2J-3506 (9)			
	Curved Serrated		DH2	0.62	4Z-9020	3F-5108(15)	4K-0367 (15)			

- 4 For a 14G Motor Grader, use 5J-4773 bolts.  
 For a 16G Motor Grader with a 16 ft. blade, use 5F-8933 bolts.  
 For a 16G Motor Grader without a 16 ft. blade, use 5J-4771 bolts.  
 For a 24H Motor Grader, use 1J-3527 bolts for the last five bolts on each end of the edge.

# Motor Grader Cutting Edges

## Cutting Edges (Cont'd.)

Edge Width	Edge Thickness	Edge Length	Edge Type	Steel Type	Bolt Size	Edge Part Number	Bolts	Nuts		
		2.438 m (8 ft)	Flat	DH2	0.62	4T-3036	3F-5108(15)	4K-0367 (15)		
					0.75	4T-3032	4F-7827 (15) <sup>(5)</sup>	2J-3506 (15)		
			Curved	DH2	0.62	5D-9732	3F-5108(17)	4K-0367 (17)		
					0.75	7D-1949	4F-7827 (17) <sup>(5)</sup>	2J-3506 (17)		
				High Carbon	0.62	7T-1630	3F-5108(10)	4K-0367 (10)		
					0.75	7T-1627	4F-7827 (10) <sup>(5)</sup>	2J-3506 (10)		
		Curved Serrated	DH2	0.62	132-1073	3F-5108(17)	4K-0367 (17)			
		Flat	DH2	0.62	4T-3035	3F-5108(17)	4K-0367 (17)			
				0.75	4T-3037	4F-7827 (17) <sup>(5)</sup>	2J-3506 (17)			
		25 mm (1.00 in)	1.219 m (4 ft)	Curved	DH2	0.75	109-3150	4F-7827 (9) <sup>(5)</sup>	2J-3506 (9)	
						0.75	4T-3512	4F-7827 (9) <sup>(5)</sup>	2J-3506 (9)	
				Flat	DH2	0.62	135-9692	3F-5108 (11)	4K-0367 (11)	
	0.75					4Z-8926	4F-7827 (13) <sup>(5)</sup>	2J-3506 (13)		
	Flat Serrated			DH2	0.75	7T-3600	4F-7827 (9) <sup>(5)</sup>	2J-3506 (9)		
					0.62	4T-2240	3F-5108 (11)	4K-0367 (11)		
	1.524 m (5 ft)	Curved Serrated	DH2	0.75	4T-3511	4F-7827 (11) <sup>(5)</sup>	2J-3506 (11)			
				0.62	7T-3497	3F-5108 (11)	4K-0367 (11)			
				0.62	7T-3497	3F-5108 (11)	4K-0367 (11)			
203 mm (8.00 in)	25.0 mm (1.00 in)	1.524 m (5 ft)	Flat Serrated	DH2	0.75	7T-3601	4F-7827 (11) <sup>(5)</sup>	2J-3506 (11)		
					0.62	4T-2244	3F-5108 (13)	4K-0367 (13)		
		1.828 m (6 ft)	Curved	DH2	0.75	4T-2231	4F-7827 (13) <sup>(5)</sup>	2J-3506 (13)		
					0.62	7T-3499	3F-5108 (13)	4K-0367 (13)		
			Flat	DH2	0.75	7T-3493	4F-7827 (13) <sup>(5)</sup>	2J-3506 (13)		
					0.62	4T-2242	3F-5108 (15)	4K-0367 (15)		
		2.133 m (7 ft)	Curved	DH2	0.75	4T-2233	4F-7827 (15) <sup>(5)</sup>	2J-3506 (15)		
					0.62	7T-3498	3F-5108 (15)	4K-0367 (15)		
					0.75	7T-3494	4F-7827 (15) <sup>(5)</sup>	2J-3506 (15)		
		2.438 m (8 ft)	Curved	DH2	0.62	4T-2237	3F-5108 (17)	4K-0367 (17)		
					0.75	4T-2236	4F-7827 (17) <sup>(5)</sup>	2J-3506 (17)		
			Flat	DH2	0.62	7T-3496	3F-5108 (17)	4K-0367 (17)		
					0.75	7T-3495	4F-7827 (17) <sup>(5)</sup>	2J-3506 (17)		
		254 mm (10.00 in)	25.0 mm (1.00 in)	1.219 m (4 ft)	Flat Serrated	DH2	0.75	4T-8800	4F-7827 (9) <sup>(5)</sup>	2J-3506 (9)
							0.75	4T-8801	4F-7827 (11) <sup>(5)</sup>	2J-3506 (11)
				1.524 m (5 ft)	Flat Serrated	DH2	0.75	4T-8801	4F-7827 (11) <sup>(5)</sup>	2J-3506 (11)
							0.75	4T-6502	4F-7827 (13) <sup>(5)</sup>	2J-3506 (13)
				1.828 m (6 ft)	Flat	DH2	0.75	4T-6502	4F-7827 (13) <sup>(5)</sup>	2J-3506 (13)
0.75	4T-6508						4F-7827 (15) <sup>(5)</sup>	2J-3506 (15)		
2.133 m (7 ft)	Flat Serrated			DH2	0.75	4Z-8055	4F-7827 (15) <sup>(5)</sup>	2J-3506 (15)		
					0.75	4T-6511	4F-7827 (17) <sup>(5)</sup>	2J-3506 (17)		
2.438 m (8 ft)	Flat Serrated			DH2	0.75	4Z-8056	4F-7827 (17) <sup>(5)</sup>	2J-3506 (17)		
		0.75	4Z-8056		4F-7827 (17) <sup>(5)</sup>	2J-3506 (17)				

- 5 For a 14G Motor Grader, use 5J-4773 bolts.  
 For a 16G Motor Grader with a 16 ft. blade, use 5F-8933 bolts.  
 For a 16G Motor Grader without a 16 ft. blade, use 5J-4771 bolts.  
 For a 24H Motor Grader, use 1J-3527 bolts for the last five bolts on each end of the edge.



# Motor Grader Cutting Edges

## Cutting Edges (Cont'd.)

Edge Width	Edge Thickness	Edge Length	Edge Type	Steel Type	Bolt Size	Edge Part Number	Bolts	Nuts	
	35.0 mm (1.38 in)	2.133 m (7 ft)	Flat	DH2	0.75	4T-8316	4F-7827 (15) <sup>(6)</sup>	2J-3506 (15)	
			Flat Serrated	DH2	0.75	4Z-8346	4F-7827 (15) <sup>(6)</sup>	2J-3506 (15)	
		2.438 m (8 ft)	Flat	DH2	0.75	4T-8317	4F-7827 (17) <sup>(6)</sup>	2J-3506 (17)	
			Flat Serrated	DH2	0.75	100-4581	4F-7827 (17) <sup>(6)</sup>	2J-3506 (17)	
	45.0 mm (1.75 in)	2.438 m (8 ft)	Flat	DH2	0.75	104-3628	4F-7827 (17) <sup>(6)</sup>	2J-3506 (17)	
		2.438 m (8 ft)	Flat Serrated	DH2	0.75	104-3631	4F-7827 (17) <sup>(6)</sup>	2J-3506 (17)	
280 mm (11.00 in)	25.0 mm (1.00 in)	2.133 m (7 ft)	Flat	DH2	0.75	140-6790	4F-7827 (15) <sup>(6)</sup>	2J-3506 (15)	
		2.438 m (8 ft)	Flat	DH2	0.75	140-6832	4F-7827 (17) <sup>(6)</sup>	2J-3506 (17)	
	35.0 mm (1.38 in)	2.438 m (8 ft)	Flat	DH2	0.75	132-1086	4F-7827 (17) <sup>(6)</sup>	2J-3506 (17)	
305 mm (12.00 in)	35.0 mm (1.38 in)	2.436 m (8 ft)	Flat	DH2	0.75	4Z-9188	4F-7827 (17) <sup>(6)</sup>	2J-3506 (17)	
330 mm (13.00 in)	28.5 mm (1.18 in)	1.217 m (4 ft)	Flat	DH2	1.00	109-3117	4J-9058 (9) <sup>(6)</sup>	2J-3507 (9)	
			Flat Serrated	DH2	1.00	138-6542	4J-9058 (9) <sup>(6)</sup>	2J-3507 (9)	
		2.436 m (8 ft)	Flat	DH2	0.75	128-2577	4F-7827 (17) <sup>(6)</sup>	2J-3506 (17)	
			Flat Serrated	DH2	0.75	134-1778	4F-7827 (17) <sup>(6)</sup>	2J-3506 (17)	
	60.0 mm (2.38 in)	1.219 m (4 ft)	Flat	DH2	1.00	132-1019	4J-9058 (9) <sup>(6)</sup>	2J-3507 (9)	
			Flat Serrated	DH2	1.00	132-4753	4J-9058 (9) <sup>(6)</sup>	2J-3507 (9)	
	406 mm (16.00 in)	28.0 mm (1.18 in)	1.219 m (4 ft)	Flat	DH2	1.00	135-9690	4J-9058 (9) <sup>(6)</sup>	2J-3507 (9)
		45.0 mm (1.75 in)		Flat	DH2	1.00	138-6440	4J-9058 (9) <sup>(6)</sup>	2J-3507 (9)
60.0 mm (2.38 in)		1.219 m (4 ft)	Flat	DH2	1.00	135-9349	4J-9058 (9) <sup>(6)</sup>	2J-3507 (9)	
			Flat Serrated	DH2	1.00	135-9796	4J-9058 (9) <sup>(6)</sup>	2J-3507 (9)	
75.0 mm (3.00 in)		1.219 m (4 ft)	Flat	DH2	1.00	135-9576	4J-9058 (9) <sup>(6)</sup>	2J-3507 (9)	
			Flat Serrated	DH2	1.00	135-9797	4J-9058 (9) <sup>(6)</sup>	2J-3507 (9)	

- 6 For a 14G Motor Grader, use 5J-4773 bolts.  
 For a 16G Motor Grader with a 16 ft. blade, use 5F-8933 bolts.  
 For a 16G Motor Grader without a 16 ft. blade, use 5J-4771 bolts.  
 For a 24H Motor Grader, use 1J-3527 bolts for the last five bolts on each end of the edge.

# Motor Grader End Bits

## Moldboard End Bits



- Designed to protect the end of the moldboard from wear and damage.
- For use in all applications.
- For machines equipped with a power blade arrangement, please refer to the Machine CAM parts book for the applicable moldboard end bits.

Model	Serial Number	Moldboard End Bit (2) Required	Bolts	Nuts
12, 12G	12 (All), 12G (61M1-11715)	7D-2052	3F-5108 (5)	4K-0367 (5)
12G	61M11716-UP	8E-5531	3F-5108 (5)	4K-0367 (5)
12H	All	8E-5531	3F-5108 (5)	4K-0367 (5)
14	All	7D-2083/4	3F-5108 (5)	4K-0367 (5)
14G	96U1-7324	9J-4405/6	4F-7827 (4)	2J-3506 (4)
	96U7325-UP	8E-5529	5J-4773 (5)	2J-3506 (5)
14H	All	8E-5529	5J-4773 (5)	2J-3506 (5)
16	All	9J-4407/8	3F-5108 (4)	4K-0367 (4)
16G	93U1-2777	9D-4880/1	4F-7827 (4)	2J-3506 (4)
	93U2778-UP	8E-5530	1J-6762 (5) <sup>(1)</sup>	2J-3506 (5)
16H	All	8E-5530	1J-6762 (5) <sup>(1)</sup>	2J-3506 (5)
24H	All	109-3118	1J-3527 (6)	2J-3507 (6)
112	All	7D-2052	3F-5108 (5)	4K-0367 (5)
120	87V1-6134	7D-2052	3F-5108 (5)	4K-0367 (5)
120G	87V6135-UP	8E-5531	3F-5108 (5)	4K-0367 (5)
120H	All	8E-5531	3F-5108 (5)	4K-0367 (5)
130	74V1-2292	7D-2052	3F-5108 (5)	4K-0367 (5)
130G	74V2293-UP	8E-5531	3F-5108 (5)	4K-0367 (5)
135H	All	8E-5531	3F-5108 (5)	4K-0367 (5)
140	72V1-9828	7D-2052	3F-5108 (5)	4K-0367 (5)
140G	72V9829-UP	8E-5531	3F-5108 (5)	4K-0367 (5)
140H (Blades using % bolts)	All with 112-4520 and 112-4521 Blade Groups	8E-5529	5J-4773 (5)	4K-0367 (5)
140H (Blades using 5/s bolts)	All with 8X-8011 and 8X-8016 Blade Groups	8E-5531	3F-5108 (5)	2J-3506 (5)
143H (Blades using % bolts)	All with 112-4520 and 112-4521 Blade Groups	8E-5529	5J-4773 (5)	4K-0367 (5)
143H (Blades using 5/s bolts)	All with 8X-8011 and 8X-8016 Blade Groups	8E-5531	3F-5108 (5)	2J-3506 (5)
				4K-0367 (5)
160H,163H	All	8E-5529	5J-4773 (5)	2J-3506 (5)
212	All	9J-4411	3F-5108 (4)	4K-0367 (4)

<sup>1</sup> Use the larger 5F-8933 bolt when rear moldboard reinforcing plates are used.

## Overlay End Bits



- Designed to protect the ends of the cutting edge from excessive wear.
- Curved overlay end bits can be rotated 180° and used on the other end of the mold-board for a second wear life.
- For use on machines used for ditching where cutting edges wear fastest on the outer corners.

Model	Serial Number	Edge Width	Edge Type	Overlay End Bit		Bolts	Nuts
				(lh)	(rh)		
12, 12G	61M1-11715	152 mm (6.00 in)	Curved	—	6D-1904	4F-3658 (5)	4K-0367 (5)
		203 mm (8.00 in)	Curved	—	6D-1948	4F-3658 (5)	4K-0367 (5)
			Flat <sup>(2)</sup>	4D-5758	4D-5757	4F-3658 (5)	4K-0367 (5)
12G	61M11716-UP	121 mm (4.75 in)	Curved	—	135-9345	4F-3657 (5)	4K-0367 (5)
		152 mm (6.00 in)	Curved	—	9W-1767	4F-3658 (5)	4K-0367 (5)
		203 mm (8.00 in)	Curved	—	9W-1768	4F-3658 (5)	4K-0367 (5)
12H	—	121 mm (4.75 in)	Curved	—	135-9345	4F-3657 (5)	4K-0367 (5)
		152 mm (6.00 in)	Curved	—	9W-1767	4F-3658 (5)	4K-0367 (5)
		203 mm (8.00 in)	Curved	—	9W-1768	4F-3658 (5)	4K-0367 (5)
14	early models	203 mm (8.00 in)	Curved	—	7D-5583	1J-6762 (5)	2J-3506 (5)
	later models	203 mm (8.00 in)	Flat <sup>(2)</sup>	4D-5758	4D-5757	4F-3658 (5)	4K-0367 (5)
14G	96U1-7324	203 mm (8.00 in)	Curved	—	7D-9999	1J-6762 (5)	2J-3506 (5)
	96U7325-UP	203 mm (8.00 in)	Curved	—	6Y-2805	1J-6762 (5)	2J-3506 (5)
14H	—	203 mm (8.00 in)	Curved	—	6Y-2805	1J-6762 (5)	2J-3506 (5)
16	early models	152 mm (6.00 in)	Curved	—	7D-5582	1J-6762 (5)	2J-3506 (5)
		203 mm (8.00 in)	Curved	—	7D-5193	4F-3658 (5)	4K-0367 (5)
16G	93U1-2777	203 mm (8.00 in)	Curved	—	7D-9999	1J-6762 (5)	2J-3506 (5)
	93U2778-UP	203 mm (8.00 in)	Curved	—	6Y-2805	1J-6762 (5)	2J-3506 (5)
120, 120G	87V1-6135	152 mm (6.00 in)	Curved	—	6D-1904	4F-3658 (5)	4K-0367 (5)
		203 mm (8.00 in)	Curved	—	6D-1948	4F-3658 (5)	4K-0367 (5)
			Flat <sup>(2)</sup>	4D-5758	4D-5757	4F-3658 (5)	4K-0367 (5)
120G	87V6135-UP	121 mm (4.75 in)	Curved	—	135-9345	4F-3657 (5)	4K-0367 (5)
		152 mm (6.00 in)	Curved	—	9W-1767	4F-3658 (5)	4K-0367 (5)
		203 mm (8.00 in)	Curved	—	9W-1768	4F-3658 (5)	4K-0367 (5)
120H	—	121 mm (4.75 in)	Curved	—	135-9345	4F-3657 (5)	4K-0367 (5)
		152 mm (6.00 in)	Curved	—	9W-1767	4F-3658 (5)	4K-0367 (5)
		203 mm (8.00 in)	Curved	—	9W-1768	4F-3658 (5)	4K-0367 (5)
130, 130G	74V1-2292	152 mm (6.00 in)	Curved	—	6D-1904	4F-3658 (5)	4K-0367 (5)
		203 mm (8.00 in)	Curved	—	6D-1948	4F-3658 (5)	4K-0367 (5)
			Flat <sup>(2)</sup>	4D-5758	4D-5757	4F-3658 (5)	4K-0367 (5)
130G	74V2293-UP	121 mm (4.75 in)	Curved	—	135-9345	4F-3657 (5)	4K-0367 (5)
		152 mm (6.00 in)	Curved	—	9W-1767	4F-3658 (5)	4K-0367 (5)
		203 mm (8.00 in)	Curved	—	9W-1768	4F-3658 (5)	4K-0367 (5)
135H	—	121 mm (4.75 in)	Curved	—	135-9345	4F-3657 (5)	4K-0367 (5)
		152 mm (6.00 in)	Curved	—	9W-1767	4F-3658 (5)	4K-0367 (5)
		203 mm (8.00 in)	Curved	—	9W-1768	4F-3658 (5)	4K-0367 (5)
140, 140G	72V1-9828	152 mm (6.00 in)	Curved	—	6D-1904	4F-3658 (5)	4K-0367 (5)

2 Flat overlay end bits must be used with fl at edges.

# Motor Grader End Bits

## Overlay End Bits (Cont'd.)

Model	Serial Number	Edge Width	Edge Type	Overlay End Bit		Bolts	Nuts
				(lh)	(rh)		
		203 mm (8.00 in)	Curved	—	6D-1948	4F-3658 (5)	4K-0367 (5)
			Flat <sup>(3)</sup>	4D-5758	4D-5757	4F-3658 (5)	4K-0367 (5)
140G	72V9829-UP	152 mm (6.00 in)	Curved	—	9W-1767	4F-3658 (5)	4K-0367 (5)
		203 mm (8.00 in)	Curved	—	9W-1768	4F-3658 (5)	4K-0367 (5)
140H <sup>(4)</sup> , 143H <sup>(4)</sup>	—	121 mm (4.75 in)	Curved	—	135-9345	4F-3657 (5)	4K-0367 (5)
		152 mm (6.00 in)	Curved	—	9W-1767	4F-3658 (5)	4K-0367 (5)
		203 mm (8.00 in)	Curved	—	9W-1768	4F-3658 (5)	4K-0367 (5)
140H <sup>(5)</sup> , 143H <sup>(5)</sup>	—	203 mm (8.00 in)	Curved	—	6Y-2805	1J-6762 (5)	2J-3506 (5)
160H, 163H	—	203 mm (8.00 in)	Curved	—	6Y-2805	1J-6762 (5)	2J-3506 (5)

## Reducer Bushings

- For moldboards with 3/4 inch bolt holes.

Part Number	Moldboard Thickness
280-4070	7/8 in
280-4071	1 in

NOTE: M Series Grader Moldboards are all 3/4 inch hole size (exception: 24M).

- 3 Flat overlay end bits must be used with fl at edges.  
 4 Applicable for blade group numbers 8X-8011 and 8X-8016.  
 5 Applicable for blade group numbers 112-4520 and 112-4521.

# Paving Products - Paving Product Bits, Tools and Holders

## Profiler/Road Reclaimer



- Caterpillar cutter bits are designed for optimum performance in a variety of materials.
- Proprietary carbide tips provide longer life and lower operational costs.

Item	Part Number		
<b>Blocks/Holders</b>	<b>Part Number</b>		
Holder - Breakaway Reclaimer (3A')	6R-3927		
Holder - Dual Bit Stabilizer (1')	113-0313		
Holder - Heavy Duty Breakaway Cold Planer/Reclaimer (3A')	151-9941		
Holder - Heavy Duty Weld-On Cold Planer (3/0)	113-0328		
Holder - Quick Change (7/s')	117-3887		
Holder - Standard Weld-On Reclaimer (3/0)	7R-6187		
Holder - Weld-On Cold Planer (3A')	9U-9617		
Holder - Weld-On Reclaimer/Stabilizer (7/s')	117-4076		
Mounting Block (For use with Weld-On Holders)	8T-4084		
Mounting Block - Breakaway (For use with 6R-3927 Holder)	6R-3926		
Mounting Block - Heavy Duty Breakaway (For use with 151-9941 Holder)	169-1412		
Mounting Block - Standard Reclaimer (For use with 7R-6187 Holder)	077-2848		
Holder - Quick Change (For use with 077-4018/077-2820)	107-3343		
<b>Soil Stabilizer Tools</b>	<b>Part Number</b>	<b>LH Part Number</b>	<b>RH Part Number</b>
Chopper Tools - Carbide Face	—	077-7343	077-4727
Chopper Tools - Hardened Steel	—	077-2775	077-2776
Quick Change Tools - Carbide Face	077-4018	—	—
Quick Change Tools - Hardened Steel	077-2820	—	—
Quick Change Tools - Holder	077-2807	—	—
Straight Tool	077-2774	—	—
Straight Tool Holder	077-2789	—	—
<b>Cutter Bits</b>	<b>Part Number</b>	<b>Pallet Quantity (2,000)</b>	
Asphalt Bit - Low Horse Power (3A' Shank)	222-7571	222-7578	
Asphalt Bit - Heavy Duty (3A' Shank)	140-2864	144-1238	
Asphalt Bit - Heavy Duty - Washered (3A' Shank)	222-7570	222-7579	
Asphalt Bit - Full Bodied - Washered (3A' Shank)	238-3191	238-3182	

## Paving Products - Paving Product Bits, Tools and Holders

### Profiler/Road Reclaimer (Cont'd.)

Asphalt Bit (3A" Shank)	350-7198	350-7199
Asphalt Bit - Washered (3A" Shank)	222-7570	222-7579
Asphalt Bit - Washered (3A" Shank)	316-2326	316-2327
Asphalt Bit - Washered (3A" Shank)	349-4945	349-4947
Asphalt Bit - Washered (3A" Shank)	349-4944	349-4946
Asphalt and Concrete Bit (3A" Shank)	351-2677	351-2678
Concrete Bit - Low Horse Power (3A' Shank)	227-7340	—
Concrete Bit (3A' Shank)	149-5763	144-1236
Concrete Bit (3A" Shank)	375-7681	376-2346
Asphalt and Soil Stabilizer Bit (7/s' Shank)	117-3884	342-1302
Asphalt and Soil Stabilizer Bit - Carbide Face (7/s' Shank)	117-3885	—
Soil Stabilizer Bit (7/s' Shank)	195-7244	—
Soil Stabilizer Bit (7/s" Shank)	316-6084	342-1304
Stabilizer Bit (1' Shank for use with 113-0313 Dual Holder)	113-0312	—
Washer - Hardened	8C-1856	—
<b>Specialty Tools</b>	<b>Part Number</b>	
Installation/Removal Tool	8T-4474	
Punch	104-8591	

## Scraper Cutting Edges

There's a complete line of scraper cutting edges, providing the right combination of edge thickness and arrangement to match practically any job condition.

All edges are rolled from DH-2 steel and through-hardened for strength and wear resistance. Two types are available:

### Level Cut Arrangement

- For finish work or very high impact conditions where stinger breakage is a problem.

### Stinger Arrangement

- The standard configuration of cutting edge on most scrapers. Provides good penetration and efficient flow of material into the bowl.

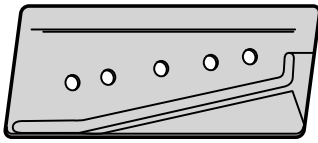
Model	Thickness	Stinger Arrangement		Changes for Level Cut		Bolts	Nuts
		Center	Ends	Center	Ends		
613, 613C	22 mm (0.88 in)	4T-6611	4T-6613 (2)	—	— <sup>(1)</sup>	4F-7827 (15)	2J-3506 (15)
615(46Z1-1342, 47Z1-1339)	22 mm (0.88 in)	7T-5104	7T-5105 (2)	—	— <sup>(1)</sup>	5J-2409 (13)	2J-3505 (13)
	22 mm (0.88 in)	9W-5807	9W-5810	—	9W-5806 (2)	4J-9058 (17)	2J-3507 (17)
621B, 621E, 621F, 627B, 627E, 627F	22 mm (0.88 in)	4T-6568	4T-6612 (2)	— <sup>(2)</sup>	—	3J-2801 (14)	2J-3507 (14)
	28 mm (1.12 in)	4T-2896	4T-6380 (2)	—	4T-2894 (2)	3J-2801 (14)	2J-3507 (14)
623B, 623E, 623F, J619, J621	22 mm (0.88 in)	4T-2887	4T-6612 (2)	4T-6620	—	4F-4042 (20)	2J-3507 (20)
	28 mm (1.12 in)	4T-2895	4T-6380 (2)	— <sup>(2)</sup>	—	4F-4042 (20)	2J-3507 (20)
631D, 631E, 637D, 637E	22 mm (0.88 in)	4T-6566	4T-6614 (2)	— <sup>(2)</sup>	—	4F-4042 (16)	2J-3507 (16)
	28 mm (1.12 in)	4T-3444	4T-6378 (2)	— <sup>(2)</sup>	—	4F-4042 (16)	2J-3507 (16)
	35 mm (1.38 in)	9J-4369	9W-6092 (2)	—	7J-0225 (2)	4F-4042 (16)	2J-3507 (16)
	41 mm (1.62 in)	9J-5899	7J-2959 (2)	— <sup>(2)</sup>	—	4F-4042 (16)	2J-3507 (16)
633D,639	28 mm (1.12 in)	4T-3428	4T-2899 (2)	— <sup>(2)</sup>	—	4F-4042 (17)	2J-3507 (17)
	35 mm (1.38 in)	9J-1111	9J-1109 (2)	— <sup>(2)</sup>	—	4F-4042 (17)	2J-3507 (17)
651B, 657B	35 mm (1.38 in)	7J-1551	7J-0225(2)	7J-0226	—	4J-9058 (34)	2J-3507 (17)
	41 mm (1.62 in)	7J-2977	7J-2978 (2)	7J-2981	—	4J-9058 (34)	2J-3507 (17)
651E (88Z146-UP)	35 mm (1.38 in)	9W-4901	9W-4902	— <sup>(2)</sup>	—	4J-9058 (48)	2J-3507 (48)
	35 mm (1.38 in)	9W-4505	9W-4399 (2)	— <sup>(2)</sup>	—	6V-6535 (29) <sup>(3)</sup>	3K-9770 (29)
	41 mm (1.62 in)	9W-4394	9W-4509 (2)	— <sup>(2)</sup>	—	6V-6535 (29) <sup>(3)</sup>	3K-9770 (29)
	45 mm (1.75 in)	9W-9701	9W-9702	— <sup>(2)</sup>	—	4J-9058 (48)	2J-3507 (48)
651F, 657F	35 mm (1.38 in)	9W-4901	9W-4902	— <sup>(2)</sup>	—	4J-9058 (48)	2J-3507 (48)
	45 mm (1.75 in)	9W-9701	9W-9702	— <sup>(2)</sup>	—	4J-9058 (48)	2J-3507 (48)
657E (86Z241-UP, 6MB91-UP)	35 mm (1.38 in)	9W-4901	9W-4902	— <sup>(2)</sup>	—	4J-9058 (48)	2J-3507 (48)
	35 mm (1.38 in)	9W-4505	9W-4399 (2)	— <sup>(2)</sup>	—	6V-6535 (29) <sup>(3)</sup>	3K-9770 (29)
	41 mm (1.62 in)	9W-4394	9W-4509 (2)	— <sup>(2)</sup>	—	6V-6535 (29) <sup>(3)</sup>	3K-9770 (29)
	45 mm (1.75 in)	9W-9701	9W-9702	— <sup>(2)</sup>	—	4J-9058 (48)	2J-3507 (48)

- 1 Reposition end sections.
- 2 Reposition center section.
- 3 Requires 4K-0684.

# Scrapers - Scraper Router Bits

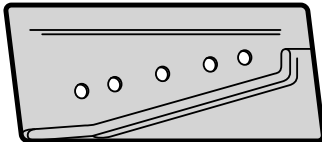
## Router Bits

Router Bits are used on all scrapers to protect the lower corners of the bowl. They are made of DH-2 steel and through-hardened for extra strength and wear resistance. Three types are available:



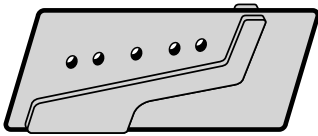
### Standard Router Bits

- Recommended for most applications. Reversible for added life and value.



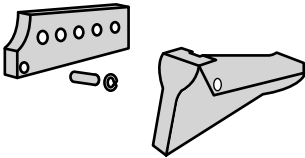
### Heavy Duty Router Bits

- Have 45% more wear material than standard router bits and are reversible. To avoid possible damage to the bowl, they should not be used in high impact conditions.



### Level Cut Bits

- Level cut end bits are used for clean-up or finishing type work with elevating scrapers. They clean-up windrows by extending further forward to keep material in front of the center cutting edge.



### Quick Change Router Bits

- Designed to reduce downtime in abrasive conditions. Pinned onto supports which bolt to the bowl.

Model	Std.	Heavy Duty	Level Cut	Quick-Change				Bolts	Nuts	Washers
				Support	Bit	Pin	Retain.			
613, 613B	9F-1831 <sup>(1)</sup>	—	—	—	—	—	—	— <sup>(2)</sup>	4K-0367 (3)	—
613C	4T-4336	9W-4903 <sup>(3)</sup>	—	—	—	—	—	8S-9092 (3)	4K-0367 (3)	5P-8247 (3)
615, 621, 623, 627	4J-8665	—	—	—	—	—	—	1D-4637 (5)	2J-3507 (5)	5P-8250 (5)
615, 621, 623, 627	—	—	220-9150	—	—	—	—	1D-4709 (5)	2J-3507 (5)	—
631, 633, 637	4J-8665	7J-3023 <sup>(4)</sup>	—	4T-0051	4T-0054	4T-0055	1U-2405	4F-4042 (5)	2J-3507 (5)	5P-8250 (5)
631, 633, 637	—	—	220-9150	—	—	—	—	1D-4709 (5)	2J-3507 (5)	—
639, 651B, 657B	4J-8665	7J-3023 <sup>(4)</sup>	—	4T-0051	4T-0054	4T-0055	1U-2405	4F-4042 (5)	2J-3507 (5)	5P-8250 (5)
639, 651B, 657B	—	—	220-9150	—	—	—	—	1D-4709 (5)	2J-3507 (5)	—
651E (88Z146-UP)	—	7J-3023	—	4T-0051	4T-0054	4T-0055	1U-2405	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)
651E (88Z146-UP)	—	—	220-9150	—	—	—	—	1D-4709 (5)	2J-3507 (5)	—
651E (88Z1-145)	4T-0668	—	—	4T-1512	4T-1514	8E-6358	8E-6359	5P-8823 <sup>(5)(5)</sup>	3K-9770 (5)	4K-0684 (5)
651E (88Z1-145)	—	—	220-9150	—	—	—	—	1D-4709 (5)	2J-3507 (5)	—
651F, 657F	—	7J-3023	—	4T-0051	4T-0054	4T-0055	1U-2405	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)
651F, 657F	—	—	220-9150	—	—	—	—	1D-4709 (5)	2J-3507 (5)	—
657E (86Z241-UP, 6MB91-UP)	—	7J-3023	—	4T-0051	4T-0054	4T-0055	1U-2405	4J-9058 (5)	2J-3507 (5)	5P-8250 (5)

1 9J-4414 (LH) and 9J-4413 (RH) end bits are also available for finishing and cleaning operations.

2 613 and 613B require one 1B-4367 bolt and two 8S-9092 bolts per router bit.

3 Clean up or two position router bit.

4 Uses 4J-9058 bolts.

5 Uses 6V-6535 bolts rather than 5P-8823 with quick-change.



# Scrapers - Scraper Router Bits

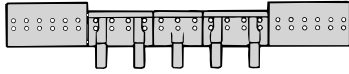
## Router Bits (Cont'd.)

Model	Std.	Heavy Duty	Level Cut	Quick-Change				Bolts	Nuts	Washers
				Support	Bit	Pin	Retain.			
657E (86Z241-UP, 6MB91-UP)	—	—	220-9150	—	—	—	—	1D-4709 (5)	2J-3507 (5)	—
657E (86Z1-240, 6MB1-90)	4T-0668	—	—	4T-1512	4T-1514	8E-6358	8E-6359	5P-8823 (5) <sup>(6)</sup>	3K-9770 (5)	4K-0684 (5)
657E (86Z1-240, 6MB1-90)	—	—	220-9150	—	—	—	—	1D-4709 (5)	2J-3507 (5)	—

6 Uses 6V-6535 bolts rather than 5P-8823 with quick-change.

# Scraper Cutting Edges and Tips

## Integrated Tooth Cutting Edges



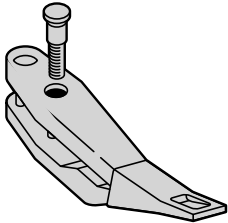
- Improves penetration in compacted soils.
- Consists of three center edge sections with cast-in adapters and two standard end sections.
- Replaceable tips provide low operating costs in abrasive conditions.

Model	Center Tooth Edge	End Tooth Edge	Cutting Edge Ends	Bolts	Nuts
623	1U-1901 (1)	1U-1902 (2)	4T-6612 (2)	3J-2801 (10) <sup>(1)</sup> 4F-4042 (20)	2J-3507 (30)
633, 639	9J-1108 (1)	9J-1107 (2)	9J-1109 (2) <sup>(2)</sup>	4F-4042 (34)	2J-3507 (34)

## Integrated Tooth Cutting Edge Tips

Model	Number of Teeth	Short	Long	Penetration	Wide	Sharp	Heavy Duty Long	Heavy Duty Abrasion	Pin	Retainer Assembly
623	5	1U-3301	1U-3302	9J-4309	107-3300	9W-8309	9N-4302	9N-4303	107-3308	8E-6259
633, 639	5	1U-3351	1U-3352	9J-4359	107-3350	9W-2359	9N-4352	9N-4353	8E-6358	8E-6359

## Bolt-On Adapters



- Improves penetration in compacted soils.
- Provides an easily replaceable tooth option for machines that change applications frequently and may not need teeth on all jobs.
- Installs over the center section in the stinger configuration.

Model	Adapter	Bolts	Nuts	Washers
613	9J-8455	5F-8933 (2)	2J-3506 (2)	
615 (47Z1-1339)	4T-5805	1J-0849 (2)	2J-3505 (2)	
615 (47Z1340-UP)	9J-2307	1J-3527 (2)	2J-3507 (2)	5P-8250 (2)
J619, J621, 623, 633, 639	9W-9971 <sup>(3)</sup>	1J-4947 (2)	2J-3507 (2)	5P-8250 (2)

1 For use on 4T-6612 Cutting Edge (5 per end).

2 Applicable for serial number 19W only. For serial number 86H, use 8J-3137 (2) cutting edge ends.

3 Recommended for use only with 9W-9972 notched center edge. Use 8J-3137 end edges with 86H models. Use 9J-1109 end edges with 19W models.

# Scraper Bolt-On Adapter Tips

## Bolt-On Adapter Tips

Model	Number of Teeth	Short	Long	Penetration	Wide	Sharp	Heavy Duty Long	Heavy Duty Abrasion	Pin	Retainer Assembly
613	4	1U-3251	1U-3252	9J-4259	107-3300	9W-8309	9N-4252	9N-4253	8E-6258	8E-6259
615 (47Z1-1339)	5	1U-3301	1U-3302	9J-4309	107-3300	9W-8309	9N-4302	9N-4303	107-3308	8E-6259
615 (47Z1340-UP)	4	1U-3301	1U-3302	9J-4309	107-3300	9W-8309	9N-4302	9N-4303	107-3308	8E-6259
J619, J621, 623, 633, 639	5	1U-3351	1U-3352	9J-4359	107-3350	9W-2359	9N-4352	9N-4353	8E-6358	8E-6359

## ARM Cutting Edges

In addition to our standard cutting edges, your dealer now has a full line of ARM Cutting Edges for Scrapers. These include ARM Center C/E, ARM End Edge, ARM Router Bits, and ARM Serrated Center C/E.

## Bowlside Protector — Pin-On

Model	Protector	Qty.	Pin	Qty.	Retainer	Qty.	Adapter Plate	Qty.
620, 630 650 Series	8J-4143	2	9J-8441	4	8E-5559	4	152-0034	2

## Bowlside Protector — Bolt-On

Model	Protector	Qty.	Bolt	Qty.	Nut	Qty.	Adapter Plate	Qty.
620, 630 650 Series	232-0048	2	1J-4948	8	2J-3507	8	232-0049	2

# Elevating Scraper Parts

## Elevating Scraper Parts

Model	613	613B	613C	615	615C	615D	615G
Chain Assembly	—	—	2T-0104	2T-0072, 239-8147	308-0325, 2T-0072, 2T-3038, 239-8147	8I-2435	216-6925
61 Link Assembly	2T-0104	2T-0104	—	—	—	—	—
80 Link Assembly	9J-0115	9J-0115	—	—	—	—	—
Link Assembly — Outside (with pins)	2T-1133	2T-1133	2T-1133	2T-0290	2T-0290	—	8J-7675
Inside	2T-1134	2T-1134	2T-1134	2T-0075	2T-0075	—	3G-3392
Offset (with pin)	2T-0076	2T-0076	2T-0076	2T-0076	2T-0076	—	3G-3393
Flight	2T-1136	2T-1136	2T-1136	2T-0073	2T-0073	—	8J-7672
Lock Pin	2T-1137	2T-1137	2T-1137	2T-1137	2T-1137	6J-8873	6J-8873
Link Pin	2T-1138	2T-1138	2T-1138	2T-1609	2T-1609	—	8J-7791
Roller	2T-3963	2T-3963	2T-3963	—	5J-3708	—	5J-3708
Bushing	—	—	—	—	216-6927	—	216-6927
Flight Link	—	6J-0560	—	—	—	—	—
Flight Assembly	2T-0679, 2T-3883, 8J-4174	2T-0679, 2T-3883, 8J-4174	2T-0679	2T-3893	2T-3893	8I-2113	217-9042
Sprocket	2T-2623, 9J-1653	2T-2744, 9J-1653	2T-0704, 2T-2623	2T-0249, 2T-2259	316-4419, 2T-0249, 2T-2259	8I-2192	216-6900
Idler Group	—	—	2T-3964	—	—	—	—
Small	—	—	—	—	2T-0046	—	—
Medium	—	—	—	—	2T-0047	—	—
Large	—	—	—	—	2T-0048	—	—
Roller Group	—	—	—	—	215-4459	—	215-4459
Idler	—	—	—	—	2T-0242	—	2T-0242

Model	623	623B	623E	623F	623G	631B	633
Chain Assembly	2T-3038	3G-3391	3G-3391, 2T-3038	2T-3038	2T-3038, 308-0325	—	—
Link Assembly — Outside (with pins)	—	8J-7675	8J-7675	—	8J-7675	—	—
Inside	3G-3392	—	3G-3392	—	3G-3392	6J-0556	8J-0556
Offset (with pin)	3G-3393	3G-3393	3G-3393	—	3G-3393	—	6J-3621
Flight	8J-7672	8J-7672	8J-7672	—	8J-7672	—	—
Lock Pin	6J-8873	6J-8873	6J-8873	6J-8873	6J-8873	—	6J-8873
Link Pin	8J-7791	8J-7791	8J-7791	—	8J-7791	6J-0557	6J-0557
Roller	5J-3708	5J-3708	5J-3708	—	5J-3708	7J-4320	7J-4320
Bushing	216-6927	216-6927	216-6927	—	216-6927	—	—
Flight Link	—	—	—	—	—	—	6J-0560
Flight Assembly	2T-3883	8J-7122	8J-7122, 2T-3883	2T-3883	2T-3883	—	—
Sprocket	2T-2891	8J-6544	2T-2891, 8J-6544	2T-2891	2T-2891, 316-4419	7J-9382	7J-9382
Idler Group	3G-0960	—	2T-0046, 3G-1086	—	—	—	—
Upper	—	—	3G-0960	—	—	—	—
Small	—	2T-0046	—	—	—	—	—
Medium	—	3G-0960	—	—	—	—	—
Large	—	3G-1086	—	—	—	—	—

# Elevating Scraper Parts

## Elevating Scraper Parts (Cont'd.)

Model	623	623B	623E	623F	623G	631B	633
Roller Group	—	8J-6562	8J-6562	—	215-4459	—	—
Idler	—	8J-6561	8J-6561	—	—	7J-1384	7J-1384

Model	633B	633C	633D	633E	639D	639E	J619
Chain Assembly			8J-3059	2T-3762	9J-9920	9J-9920	
Link Assembly — Outside (with pins)	—	—	—	—	—	—	8J-7675
Inside	6J-0556	—	8J-3221	6J-0556, 8J-3221	8J-3221	8J-3221	3G-3392
Offset (with pin)	—	—	—	—	—	—	5J-3710
Offset (without pin)	—	—	8J-4340	8J-4340	8J-4340	8J-4340	
Flight	—	—	—	—	—	—	9J-5187
Lock Pin	6J-8873	—	6J-0555	6J-0555	6J-0555	6J-0555	6J-8873
Link Pin	6J-0557	6J-0557	8J-3217	8J-3217	8J-3217	8J-3217	8J-7791
Roller	7J-4320		7J-4320, 7J-7507	7J-4320, 7J-7507	7J-4320, 7J-7507	7J-4320, 7J-7507	5J-3708
Bushing	—	—	—	—	—	—	216-6927
Flat Link — Sidebar Link	—	—	8J-3218, 8J-3219	8J-3218, 8J-3219	8J-3218, 8J-3219	8J-3218, 8J-3219	—
Flight Link —	6J-0560	6J-0560	—	—	—	—	—
Outside Link	—	—	8J-3220	8J-3220	8J-3220	8J-3220	—
Inside Link	—	—	8J-3222	8J-3222	8J-3222	8J-3222	—
Flight Assembly	—	—	9J-1587	8I-1272	9J-1587	9J-1587	—
Sprocket	7J-9382	—	7J-9382	7J-9382	7J-9382	7J-9382	6J-5070
Idler Group	—	—	9J-1035	9J-1035	9J-1035	9J-1035	—
Roller Assembly	—	—	7J-1184	7J-1184	7J-1184	7J-1184	—
Idler Assembly	—	—	9J-1513	9J-1513	9J-1513	9J-1513	—
Roller Group	—	—	—	2T-3972, 2T-3973, 8I-1643	—	—	—
Idler	—	7J-1384	7J-1384		—	—	—

Model	J621	950
Chain Assembly	3G-5327	—
Link Assembly — Outside (with pins)	8J-7675	—
Inside	3G-3392	—
Flight	8J-7672	—
Lock Pin	6J-8873	8J-2746
Link Pin	8J-7791	8J-2743
Roller	5J-3708	—
Bushing	216-6927	—
Sprocket	6J-5070	—

# Elevating Scraper Parts/Parts Kits

## Elevating Scraper Parts Kits

Model	613C	615, 615C	623E, 623F, 623G
<b>To receive all Part Kit quantities, order Part Kit number in bold.</b>			
Parts Kit	<b>217-4880(1)</b>	<b>217-4882 (1)</b>	<b>217-4884(1)</b>
Components:			
Chain Assembly	2T-0104 (2)	2T-0072 (2)	2T-3038 (2)
Sprockets	2T-2623 (2)	2T-0249 (2)	2T-2891 (2)
Bolts	1A-8537 (16)	0S-1756 (8) 3B-2968 (8)	0S-1756 (16)
Nuts	4K-0367 (16)	2J-3506(16)	2J-3506(16)
Washers	5P-8247 (16)	5P-8248 (16)	5P-8248 (32)
Bolts	0S-1603 (120)	0S-1576(144)	0S-1576 (120)
Nuts	6B-6684 (120)	6B-6683 (144)	6B-6683 (120)
Washers	5P-8245 (240)	5P-8247 (288)	5P-8247 (240)
Parts Kit	<b>217-4881 <sup>(1)</sup> (1)</b>	<b>217-4883 <sup>(1)</sup> (1)</b>	<b>217-4885 <sup>(1)</sup> (1)</b>
Components:			
Flight Assembly	2T-0679 (15)	2T-3893 (18)	2T-3883 (15)

1 NOTE: Hardware not included. Hardware for flight assemblies included in appropriate chain and sprocket kits listed above.

# Plastic Auger Groups

## Plastic Auger Groups — Models: 621F, 621G, 627F, 627G

Part Number	Description	Qty.	Hardware	Part Number	Qty.
144-5723	Cutting Edge	1	Bolt	4F-4042	3
			Nut	6V-8190	3
108-0424	Wear Plate	6			
108-0423	Liner – Upper	1	Washer	146-5795	94 <sup>(1)</sup>
			Plug	146-5796	94 <sup>(1)</sup>
108-0421	Liner – Middle	4			
108-0418	Liner – Lower	1			
108-0413	Shoe – Tungsten Carbide	38	Bolt – Plow	4F-3654	76
			Nut – Full	7X-0448	76
108-0412	Shoe – Nickel	38	Bolt — Plow	4F-3654	76
			Nut – Full	7X-0448	76
108-0410	Shoe – Std.	38	Bolt – Plow	4F-3654	76
			Nut – Full	7X-0448	76

## Plastic Auger Groups — Models: 631E, 631G, 637E, 637G

Part Number	Description	Qty.	Hardware	Part Number	Qty.
144-5723	Cutting Edge	1	Bolt	4F-4042	3
			Nut	6V-8190	3
150-2658	Wear Plate	8			
150-2661	Liner	1	Washer	146-5795	46 <sup>(1)</sup>
			Plug	146-5796	46 <sup>(1)</sup>
108-0431	Liner — Upper	1			
108-0430	Liner — Middle	3			
108-0427	Liner — Lower	1			
150-2663	Shoe — Std.	52	Bolt — Plow	4F-3654	104
			Nut — Full	7X-0448	104
150-2665	Shoe — Nickel Alloy	42	Bolt — Plow	4F-3654	84
			Nut — Full	7X-0448	84
150-2667	Shoe — Tungsten Carbide	42	Bolt — Plow	4F-3654	84
			Nut — Full	7X-0448	84

1 Washer, Plug and Total Quantity apply to all Liners.

# Plastic Auger Groups

## Plastic Auger Groups — Models: 651E, 657E

Part Number	Description	Qty.	Hardware	Part Number	Qty.
144-5723	Cutting Edge	1	Bolt	4F-4042	3
			Nut	2J-3507	3
150-2658	Wear Plate	8			
10-6649	Liner — Lower	1	Washer	146-5795	69 <sup>(2)</sup>
			Plug	146-5796	69 <sup>(2)</sup>
10-6654	Liner — Plastic	2			
10-6656	Liner — Plastic	2			
150-2663	Shoe — Std.	42	Bolt — Plow	4F-3654	84
			Nut — Full	7X-0448	84
150-2665	Shoe — Nickel	42	Bolt — Plow	4F-3654	84
			Nut — Full	7X-0448	84
150-2667	Shoe — Tungsten Carbide	42	Bolt — Plow	4F-3654	84
			Nut — Full	7X-0448	84

**NOTE: Difference between Plastic and Steel Augers:** Steel Augers use multiple steel wear plates.

<sup>2</sup> Washer, Plug and Total Quantity apply to all Liners.



# Steel Auger Groups

## Steel Auger Groups — Models: 621F, 621G, 629F, 629G

Part Number	Description	Qty.	Hardware	Part Number	Qty.
144-5723	Cutting Edge	1	Bolt	4F-4042	3
			Nut	6V-8190	3
108-0424	Wear Plate	37			
108-0420	Liner — Top	1	Washer	146-5795	34 <sup>(1)</sup>
			Plug	146-5796	34 <sup>(1)</sup>
108-0419	Liner — Middle	1			
108-0418	Liner — Lower	1			
108-0413	Shoe — Tungsten Carbide	38	Bolt — Plow	4F-3654	76
			Nut — Full	7X-0448	76
108-0412	Shoe — Nickel Alloy	38	Bolt — Plow	4F-3654	76
			Nut — Full	7X-0448	76
108-0410	Shoe — Std.	38	Bolt — Plow	4F-3654	76
			Nut — Full	7X-0448	76

## Steel Auger Groups — Models: 631E, 631G, 637E, 637G

Part Number	Description	Qty.	Hardware	Part Number	Qty.
144-5723	Cutting Edge	1	Bolt	4F-4042	3
			Nut	6V-8190	3
150-2628	Wear Plate	42			
108-0429	Liner — Top	1	Washer	146-5795	46 <sup>(1)</sup>
			Plug	146-5796	46 <sup>(1)</sup>
108-0428	Liner — Middle	4			
108-0427	Liner — Lower	1			
150-2663	Shoe — Std.	52	Bolt — Plow	4F-3654	104
			Nut — Full	7X-0448	104
150-2665	Shoe — Nickel Alloy	42	Bolt — Plow	4F-3654	84
			Nut — Full	7X-0448	84
150-2667	Shoe — Tungsten Carbide	42	Bolt — Plow	4F-3654	84
			Nut — Full	7X-0448	84

1 Washer, Plug and Total Quantity apply to all Liners.

# Steel Auger Groups

## Steel Auger Groups — Models: 651E, 657E

Part Number	Description	Qty.	Hardware	Part Number	Qty.
144-5723	Cutting Edge	1	Bolt	4F-4042	3
			Nut	2J-3507	3
150-2658	Wear Plate	47			
10-6649	Liner — Lower	1	Washer	146-5795	46 <sup>(2)</sup>
			Plug	146-5796	46 <sup>(2)</sup>
10-6653	Liner — Plastic	4			
150-2663	Shoe — Std.	42	Bolt — Plow	4F-3654	84
			Nut — Full	7X-0448	84
150-2665	Shoe — Nickel	42	Bolt — Plow	4F-3654	84
			Nut — Full	7X-0448	84
150-2667	Shoe — Tungsten Carbide	42	Bolt — Plow	4F-3654	84
			Nut — Full	7X-0448	84

**NOTE Difference between Plastic and Steel Augers:** Steel Augers use multiple steel wear plates.

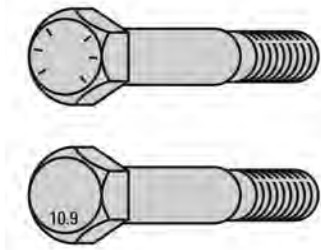
<sup>2</sup> Washer, Plug and Total Quantity apply to all Liners.



**HARDWARE**

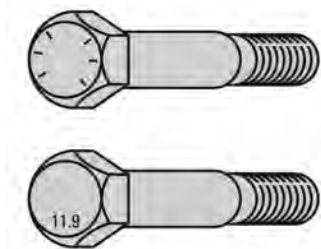
# Bolts

## Hex Head Bolts



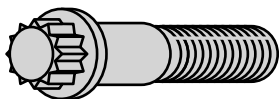
- Designed with smooth rolled threads for better clamp load, shear resistance and resistance to stripping.
- Made of fine grain steel for a more uniform micro-structure, resulting in improved toughness and fracture resistance.
- Inch Bolts:
  - Meet or exceed SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength of 150,000 psi.
  - Have 20% higher head height than SAE specifications for longer wear life, easier gripping and less slippage.
  - Marked with 6 radial dashes on the bolt head.
- Metric Bolts:
  - Meet or exceed ISO Class 10.9 specifications for tensile strength and proof load, minimum tensile strength of 1040 mPa (150,000 psi).
  - Marked with 10.9 on the bolt head.
- Bolt Coatings:
  - Phosphate and Oil coating provides better clamp loads and torque retention.
  - Zinc plating provides better long term corrosion resistance.

## High Strength Hex Head Bolts



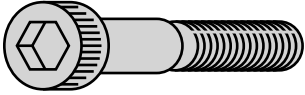
- Thread design and steel — similar to HEX Head Bolts
- Inch Bolts:
  - Have 20% higher head height than SAE specifications for longer wear life, easier gripping and less slippage.
  - Exceed SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength of 170,000 psi.
  - Marked with seven radial dashes on the bolt head.
- Metric Bolts:
  - Exceed ISO 10.9 specifications for tensile strength of 1170 mPa (170,000 psi).
  - Marked with 11.9 on the bolt head.
- Coatings – similar to HEX Head Bolts.

## 12 Point Head Bolts



- Designed with smooth rolled threads for better clamp load, shear resistance, and resistance to stripping.
- Made of fine grain steel for a more uniform micro-structure, resulting in improved toughness and fracture resistance.
- Exceeds SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength of 1170 mPa (170,000 psi).
- For use in restricted clearance applications.

## Hex Socket Head Screw Bolts



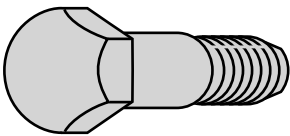
- Designed with smooth rolled threads for better clamp load, shear resistance, and resistance to stripping.
- Made of fine grain steel for a more uniform micro-structure, resulting in improved toughness and fracture resistance.
- Exceeds SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength of 1170 mPa (170,000 psi).
- For use in restricted clearance applications.

## Hex Head Forcing Bolts



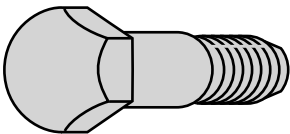
- Designed with smooth rolled threads for better clamp load, shear resistance, and strip resistance.
- Made of fine grain steel for a more uniform micro-structure, resulting in improved toughness and fracture resistance.

## Track Bolt and Split Master Link Bolts



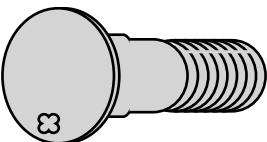
- High dome Hex head for longer wear life and reusability.
- Exceeds SAE Grade 8 specification for tensile strength and proof load, minimum tensile strength 170,000 psi.
- Special induction heat treat process provides Rockwell C37-42 hardness.

## High Strength Track Bolts



- Similar high dome Hex head as standard Track Bolts.
- Exceeds SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength 180,000 psi.
- Special induction heat treat process provides Rockwell C39-43 hardness.

## Cutting Edge Bolts



- Dome shaped head for added strength and wear resistance.
- Exceeds SAE Grade 8 specifications for tensile strength and proof load, minimum tensile strength of 150,000 psi.
- Special induction heat treat process provides Rockwell C33-39 minimum.

# Bolts

## Hex Head Bolts/Inch/Phosphate & Oil

Thread Size	OAL (in)	Grip Length (in)	Part Number
<b>Thread Size (in - TPI) 1/4 - 20</b>			
1/4 - 20	1/2	1/16	0S-1614
1/4 - 20	5/8	1/8	2A-0762
1/4 - 20	3/4	1/8	0S-1615
1/4 - 20	7/8	1/8	4F-7957
1/4 - 20	1	1/8	0S-1616
1/4 - 20	1 1/8	3/8	9F-6580
1/4 - 20	1 1/4	1/8	7B-2742
1/4 - 20	1 3/8	5/8	2A-5546
1/4 - 20	1 1/2	1/4	9F-7022
1/4 - 20	1 5/8	7/8	7B-8167
1/4 - 20	1 3/4	1	1B-2713
1/4 - 20	2	1 1/8	8B-2377
1/4 - 20	2 1/4	1 3/8	1D-4533
1/4 - 20	2 1/2	1 3/4	1B-2714
1/4 - 20	2 3/4	2	2A-4781
1/4 - 20	3	2	4B-9365
1/4 - 20	3 1/4	2 1/2	8F-8178
1/4 - 20	4	3 1/4	8S-4710
1/4 - 20	4 1/2	3 3/4	8S-4711
1/4 - 20	4 3/4	4	4L-3776
1/4 - 20	Nut	-	9S-8750
-	Washer	-	5P-0537
<b>Thread Size (in - TPI) 5/16 - 18</b>			
5/16 - 18	1/2	1/16	1C-0569
5/16 - 18	5/8	1/8	2H-3755
5/16 - 18	3/4	1/8	0S-1617
5/16 - 18	7/8	1/8	2B-2695
5/16 - 18	1	1/8	0S-1618
5/16 - 18	1 1/8	1/4	4B-3388
5/16 - 18	1 1/4	3/8	1B-7182
5/16 - 18	1 3/8	1/2	1B-2790
5/16 - 18	1 1/2	3/32	1A-9579
5/16 - 18	1 5/8	3/4	1H-5514
5/16 - 18	1 3/4	7/8	1B-9575
5/16 - 18	2	1 1/8	2B-2694
5/16 - 18	2 1/4	1 3/8	1D-4538
5/16 - 18	2 1/2	1 5/8	1D-4539
5/16 - 18	2 3/4	1 7/8	1D-4540
5/16 - 18	3	5/36	1D-4541
5/16 - 18	3 1/4	2 1/4	1F-5842
5/16 - 18	3 1/2	2 5/8	1F-4111
5/16 - 18	3 3/4	2 3/4	4B-0831
5/16 - 18	4	3	4B-3903
5/16 - 18	4 1/4	3 3/8	8H-8769
5/16 - 18	4 1/2	3 5/8	3H-5932
5/16 - 18	4 3/4	3 7/8	3H-3243
5/16 - 18	5 1/2	4 5/8	5L-1761

Thread Size	OAL (in)	Grip Length (in)	Part Number
5/16 - 18	5 3/4	4 7/8	8M-1865
5/16 - 18	6 1/2	5 3/8	4F-3508
5/16 - 18	Nut	-	5S-0003
-	Washer	-	9M-1974
<b>Thread Size (in - TPI) 3/8 - 16 and 3/8 - 24</b>			
3/8 - 16	1/2	3/32	4F-4879
3/8 - 16	5/8	3/32	0T-0102
3/8 - 16	3/4	1/8	0S-0509
3/8 - 16	7/8	1/8	0L-1351
3/8 - 16	1	1/8	0S-1594
3/8 - 16	1 1/8	5/16	1A-2029
3/8 - 16	1 1/4	1/4	0S-1588
3/8 - 16	1 1/4	1/4	165-3928 <sup>(1)</sup>
3/8 - 16	1 3/8	3/8	3B-1915
3/8 - 16	1 1/2	3/8	165-3929 <sup>(1)</sup>
3/8 - 16	1 5/8	7/8	2A-4639
3/8 - 16	1 3/4	3/4	165-3931 <sup>(1)</sup>
3/8 - 16	1 7/8	1 1/16	1C-2251
3/8 - 16	2	27/28	0S-1590
3/8 - 16	2 1/4	1 1/4	0L-2070
3/8 - 16	2 1/4	1 1/4	435-3128 <sup>(1)</sup>
3/8 - 16	2 1/4	1 1/4	165-3933 <sup>(1)</sup>
3/8 - 16	2 1/4	1/8	1M-0644
3/8 - 16	2 1/2	1 1/2	0L-1143
3/8 - 16	2 1/2	1 1/2	26-15615 <sup>(1)</sup>
3/8 - 16	2 3/4	1 3/4	0T-0573
3/8 - 16	2 3/4	1 3/4	165-3934 <sup>(1)</sup>
3/8 - 16	2 7/8	2 3/16	2H-5330
3/8 - 16	3	2	0S-1619
3/8 - 16	3	2	165-3935 <sup>(1)</sup>
3/8 - 16	3 1/4	2 1/4	0L-1352
3/8 - 16	3 1/2	2 1/2	0T-0065
3/8 - 16	3 1/2	2 1/2	245-3804 <sup>(1)</sup>
3/8 - 16	3 3/4	2 1/2	0S-1608
3/8 - 16	4	3	8S-9191
3/8 - 16	4 1/4	3 1/4	0T-0055
3/8 - 16	4 1/2	3 1/2	165-3936 <sup>(1)</sup>
3/8 - 16	4 1/2	3 1/4	1A-5964
3/8 - 16	4 3/4	3 3/4	1A-5183
3/8 - 16	4 3/4	3 3/4	245-3803 <sup>(1)</sup>
3/8 - 16	5	4	5B-9603
3/8 - 16	5	3 3/4	223-4903 <sup>(1)</sup>
3/8 - 16	5 1/4	4 1/4	5B-2638
3/8 - 16	5 1/4	4	165-3937 <sup>(1)</sup>
3/8 - 16	5 1/2	4 1/2	5F-4899
3/8 - 16	5 3/4	4 1/2	165-3925 <sup>(1)</sup>
3/8 - 16	6	4 7/8	1D-4706
3/8 - 16	6 1/4	4 3/4	8F-8544

1 High Strength Bolt

## Hex Head Bolts/Inch/Phosphate & Oil (Cont'd.)

Thread Size	OAL (in)	Grip Length (in)	Part Number	Thread Size	OAL (in)	Grip Length (in)	Part Number
3/8 - 16	6 1/4	4 3/4	231-4470 <sup>(2)</sup>	1/2 - 13	2 3/8	3/4	351-1777 <sup>(2)</sup>
3/8 - 16	6 1/2	5 1/4	4F-0411	1/2 - 13	2 1/2	1 1/4	9S-1366
3/8 - 16	7	5 3/4	9F-8999	1/2 - 13	2 3/4	1 1/2	1A-5822
3/8 - 16	7 1/2	6 1/4	6B-1557	1/2 - 13	3	1 3/4	0L-1329 <sup>(2)</sup>
3/8 - 16	8	6 3/4	8F-6350	1/2 - 13	3 1/4	2	0V-0375
3/8 - 16	8 1/2	7 1/4	9F-2773	1/2 - 13	3 1/2	2 1/4	1D-4566 <sup>(2)</sup>
3/8 - 16	9	7 3/4	5F-6044	1/2 - 13	3 3/4	2 1/2	1B-2886
3/8 - 16	10 1/4	9	7L-7524	1/2 - 13	3 3/4	3/16	275-9360
3/8 - 16	10 3/4	9 1/2	334-8167	1/2 - 13	4	2 3/4	0S-1573
3/8 - 16	12 3/8	11 1/8	8J-5985	1/2 - 13	4 1/4	3	1D-4569
3/8 - 16	Nut	-	9S-8752	1/2 - 13	4 1/4	3	5M-4113
-	Washer	-	5M-2894	1/2 - 13	4 1/4	3	223-9639
<b>Thread Size (in - TPI) 7/16 - 14</b>				1/2 - 13	4 1/2	3 1/4	8S-9089
7/16 - 14	1	1/8	0T-0318	1/2 - 13	4 1/2	3 1/4	463-6790
7/16 - 14	1 1/8	1/8	4F-8965	1/2 - 13	4 3/4	3 1/2	223-9638 <sup>(2)</sup>
7/16 - 14	1 1/4	1/8	0T-0320	1/2 - 13	4 3/4	3 1/2	2B-2006 <sup>(2)</sup>
7/16 - 14	1 3/8	1/4	3H-5368	1/2 - 13	5	3 3/4	2H-6488 <sup>(2)</sup>
7/16 - 14	1 1/2	3/8	0T-0772	1/2 - 13	5 1/4	4	6F-5282 <sup>(2)</sup>
7/16 - 14	1 3/4	5/8	0T-0768	1/2 - 13	5 1/2	4 1/4	1D-4572 <sup>(2)</sup>
7/16 - 14	2	7/8	0T-0319	1/2 - 13	6	4 3/4	1D-4574
7/16 - 14	2 1/4	1 1/8	1D-4707	1/2 - 13	6 1/4	4 3/4	9H-8260
7/16 - 14	2 1/2	1 3/8	1D-4703	1/2 - 13	6 1/2	5	231-4471 <sup>(2)</sup>
7/16 - 14	2 3/4	1 5/8	1D-4556	1/2 - 13	6 3/4	5 1/4	9M-7269
7/16 - 14	3	1 7/8	4F-5192	1/2 - 13	7	5 1/2	1A-7669
7/16 - 14	3 1/4	2 1/8	3B-8428	1/2 - 13	7 1/4	5 3/4	4S-5882
7/16 - 14	3 1/2	2 3/8	7F-8698	1/2 - 13	7 1/2	6	1A-0168
7/16 - 14	3 1/2	2 3/8	7F-8698	1/2 - 13	8	6 1/2	9S-1374
7/16 - 14	3 3/4	2 5/8	7X-0317	1/2 - 13	8	4	6V-6633
7/16 - 14	4	2 7/8	4F-7226	1/2 - 13	8 1/2	7	1B-3573
7/16 - 14	4	2 7/8	4F-7226	1/2 - 13	9	7 1/2	6M-9613
7/16 - 14	4 1/2	3 1/4	4B-7220	1/2 - 13	9 3/4	8 1/4	6V-1612
7/16 - 14	5	3 3/4	5B-5059	1/2 - 13	11	9 1/2	363-0193 <sup>(2)</sup>
7/16 - 14	5 1/2	4 3/8	8F-4197	1/2 - 13	11	9 1/2	8S-3887 <sup>(2)</sup>
7/16 - 14	6	4 7/8	8F-6419	1/2 - 13	12 8/25	10 41/50	4M-2442 <sup>(2)</sup>
7/16 - 14	Nut	-	3S-1546	1/2 - 13	14 25/29	13 69/80	6V-7568 <sup>(2)</sup>
-	Washer	-	5P-8244	1/2 - 13	Nut	-	1F-7958
<b>Thread Size (in - TPI) 1/2 - 13</b>				-	Washer	-	5P-8245
1/2 - 13	3/4	1/8	0S-1620	<b>Thread Size (in - TPI) 5/8 - 11 and 5/8 - 18</b>			
1/2 - 13	7/8	9/32	2H-3855	5/8 - 11	3/4	1/16	1H-9456
1/2 - 13	1	1/8	0S-1621	5/8 - 11	1	3/16	0S-1624
1/2 - 13	1 1/8	1/8	6H-1717	5/8 - 11	1 1/4	3/16	0S-1592
1/2 - 13	1 1/4	5/16	0S-1595	5/8 - 11	1 3/8	3/16	4B-4043
1/2 - 13	1 3/8	7/16	7B-3235	5/8 - 11	1 1/2	3/16	9X-6380 <sup>(2)</sup>
1/2 - 13	1 1/2	1/4	0S-1585	5/8 - 11	1 3/4	1/4	0S-1589
1/2 - 13	1 3/4	7/16	0S-1587	5/8 - 11	2	1/2	1A-1135 <sup>(2)</sup>
1/2 - 13	2	3/4	1A-1460	5/8 - 11	2 1/4	3/4	8S-9092 <sup>(2)</sup>
1/2 - 13	2	3/4	241-1855 <sup>(2)</sup>	5/8 - 11	2 1/2	5/8	0S-1625 <sup>(2)</sup>
1/2 - 13	2 1/4	1	2B-0947 <sup>(2)</sup>	5/8 - 11	2 3/4	1 1/4	1A-8537 <sup>(2)</sup>
1/2 - 13	2 1/4	3/8	5L-4398	5/8 - 11	3	1 1/2	1B-4367

# Bolts

## Hex Head Bolts/Inch/Phosphate & Oil (Cont'd.)

Thread Size	OAL (in)	Grip Length (in)	Part Number
5/8 - 11	3 1/4	1 3/4	1D-4585
5/8 - 11	3 1/2	2	1D-4586
5/8 - 11	3 3/4	2 1/4	9X-6417 <sup>(3)</sup>
5/8 - 11	4	2 1/2	0S-1569
5/8 - 11	4 1/4	2 3/4	1D-4588
5/8 - 11	4 1/2	3	1A-8651
5/8 - 11	4 3/4	3 1/4	1D-4590
5/8 - 11	5	3 1/2	1A-5405
5/8 - 11	5 1/2	4	1D-4593
5/8 - 11	5 62/63	4 1/2	1D-4595
5/8 - 11	6 1/4	4 1/2	5D-9514
5/8 - 11	6 1/4	4 1/2	231-7068 <sup>(3)</sup>
5/8 - 11	6 1/2	4 3/4	1D-4597
5/8 - 11	7	5 1/4	1D-4599
5/8 - 11	8	6 1/4	1B-7709
5/8 - 11	8 1/2	6 3/4	1D-4601
5/8 - 11	9	7 1/4	2H-3756
5/8 - 11	9 1/2	7 3/4	1D-4602
5/8 - 11	13	11 1/4	461-9980
5/8 - 11	13 1/4	11 1/2	174-1621 <sup>(3)</sup>
5/8 - 18	2 1/2	1	127-1571 <sup>(3)</sup>
5/8 - 18	6 1/4	4 1/2	156-7439
5/8 - 18	7	5 1/4	113-9122 <sup>(3)</sup>
5/8 - 18	7 1/4	5 1/2	349-8521 <sup>(3)</sup>
5/8 - 18	9 3/4	8 1/4	261-9576
5/8 - 18	Nut	-	6B-6683
5/8 - 11	Nut	-	4K-0367
-	Washer	-	5P-8247
Thread Size (in - TPI) 3/4 - 10 and 3/4 - 16			
3/4 - 10	1	5/16	7H-2069
3/4 - 10	1 1/4	5/16	0S-1583
3/4 - 10	1 1/2	5/16	0S-1626
3/4 - 10	1 3/4	5/16	1A-0458
3/4 - 10	2	5/16	0L-1178
3/4 - 10	2 1/4	1/2	2A-1538 <sup>(3)</sup>
3/4 - 10	2 1/2	3/4	1A-8063
3/4 - 10	2 3/4	1	1D-4608 <sup>(3)</sup>
3/4 - 10	3	1 1/4	1D-4609 <sup>(3)</sup>
3/4 - 10	3 1/4	1 1/2	1D-4610 <sup>(3)</sup>
3/4 - 10	3 1/2	1 3/4	3B-2968 <sup>(3)</sup>
3/4 - 10	3 3/4	2	7F-5227
3/4 - 10	4 1/4	2 1/2	0S-1756
3/4 - 10	4 1/2	2 3/4	0S-1627
3/4 - 10	4 3/4	3	3B-6753
3/4 - 10	5	3 1/4	1D-4614
3/4 - 10	5 1/2	3 3/4	1D-4615
3/4 - 10	5 3/4	4	6K-1330
3/4 - 10	6	4 1/4	1D-4616
3/4 - 10	6 1/4	4 1/4	1D-4617

Thread Size	OAL (in)	Grip Length (in)	Part Number
3/4 - 10	6 1/2	4 1/2	2B-1015
3/4 - 10	7	5	1D-4620
3/4 - 10	7 1/2	5 1/2	1D-4621
3/4 - 10	8	6	1D-4622
3/4 - 10	8 1/2	6 1/2	1D-4623
3/4 - 10	9	7	1D-4624
3/4 - 10	15	13	8K-1493
3/4 - 16	12	9 1/2	220-2832
3/4 - 16	Nut	-	6B-6682
3/4 - 10	Nut	-	2J-3506
-	Washer	-	5P-8248
Thread Size (in - TPI) 7/8 - 9 and 7/8 - 14			
7/8 - 9	2	3/8	0S-1973 <sup>(3)</sup>
7/8 - 9	2 1/2	1/2	174-3056 <sup>(3)</sup>
7/8 - 9	2 3/4	3/4	1D-4626 <sup>(3)</sup>
7/8 - 9	3 1/4	1 1/4	1D-4628 <sup>(3)</sup>
7/8 - 9	3 1/2	1 1/2	1D-4629 <sup>(3)</sup>
7/8 - 9	3 3/4	1 3/4	2H-3856 <sup>(3)</sup>
7/8 - 9	4	2	1D-4630 <sup>(3)</sup>
7/8 - 9	5 3/4	3 3/4	188-9435
7/8 - 9	8	5 3/4	1D-6259
7/8 - 9	10	7 3/4	2B-2391
7/8 - 14	3	1	123-4955 <sup>(3)</sup>
7/8 - 14	8 1/2	6 1/4	2T-3427
7/8 - 14	11	8 3/4	7X-7925 <sup>(3)</sup>
7/8 - 14	12 1/2	10 1/4	2T-3428
7/8 - 14	Nut	-	1A-5666
7/8 - 9	Nut	-	2J-3505
-	Washer	-	5P-8249
Thread Size (in - TPI) 1 - 8 and 1 - 14			
1 - 8	1 1/4	5/16	8S-4767
1 - 8	1 1/2	5/16	0V-0450
1 - 8	1 3/4	3/8	1J-7370
1 - 8	2	5/16	1J-5257
1 - 8	2 1/4	1/4	8S-9093
1 - 8	2 3/4	3/4	7Y-2146 <sup>(3)</sup>
1 - 8	2 3/4	1/2	9S-1363
1 - 8	3	3/4	1D-4709
1 - 8	3	3/4	7Y-1136 <sup>(3)</sup>
1 - 8	3 1/4	1	1D-4637
1 - 8	3 1/4	1	6I-8600 <sup>(3)</sup>
1 - 8	3 1/2	1 1/4	1D-4638
1 - 8	3 3/4	1 1/2	8H-5772
1 - 8	4	1 3/4	1D-4639 <sup>(3)</sup>
1 - 8	4 1/4	2	1D-4640 <sup>(3)</sup>
1 - 8	4 1/2	2 1/4	1D-4641
1 - 8	4 3/4	2 1/2	2A-1420
1 - 8	5	2 3/4	1D-4642 <sup>(3)</sup>
1 - 8	5 1/2	3 1/4	1D-4643



## Hex Head Bolts/Inch/Phosphate & Oil (Cont'd.)

Thread Size	OAL (in)	Grip Length (in)	Part Number	Thread Size	OAL (in)	Grip Length (in)	Part Number
1 - 8	5 1/2	3/8	9X-2194 <sup>(4)</sup>	1 1/8 - 7	Nut	-	4J-5977
1 - 8	6	3 3/4	9F-6936	-	Washer	-	3S-1349
1 - 8	6 1/4	4	227-6181 <sup>(4)</sup>	<b>Thread Size (in - TPI) 1 1/4 - 7 and 1 1/4 - 12</b>			
1 - 8	6 1/2	4	5B-5473	1 1/4 - 7	3 1/2	3/4	2B-1955
1 - 8	7	4 1/2	5F-9338	1 1/4 - 7	4 1/2	1 3/4	3R-2300
1 - 8	7 1/2	5	2B-7218	1 1/4 - 7	4 3/4	2	8F-1156
1 - 8	8	5 1/2	1D-4644	1 1/4 - 7	5	2 1/4	136-4188 <sup>(4)</sup>
1 - 8	8 1/2	6	1D-4645	1 1/4 - 7	5 1/2	2 3/4	1B-2721
1 - 8	9	6 1/2	1D-4646	1 1/4 - 7	6	3 1/4	2H-1537
1 - 8	9 1/2	7	1D-4647	1 1/4 - 7	6 1/2	3 1/2	6H-1628
1 - 8	10	7 1/2	142-7074 <sup>(4)</sup>	1 1/4 - 7	7	4	6V-2624 <sup>(4)</sup>
1 - 8	14	10 1/2	6M-2001	1 1/4 - 7	8 1/2	5 1/2	1J-6775
1 - 8	16	14	6M-1029	1 1/4 - 7	9	6	1K-9418
1 - 14	2 3/4	1 31/50	3S-7461	1 1/4 - 7	9 1/2	6 1/2	1K-9420
1 - 14	3 1/2	1 1/4	9S-1368	1 1/4 - 7	20	17	033-0512
1 - 14	8	5 1/2	8S-4757	1 1/4 - 12	11	8	142-0142
1 - 14	9	6 1/2	9F-8122	1 1/4 - 12	Nut	-	3S-1356
1 - 14	9 1/2	7	5F-7136	1 1/4 - 7	Nut	-	7H-7539
1 - 14	12	9 1/2	7X-0825	-	Washer	-	4K-0684
1 - 14	18 1/4	15 8/31	213-9024	<b>Thread Size (in - TPI) 1 1/2 - 6 and 1 1/2 - 12</b>			
1 - 14	Nut	-	1A-1935	1 1/2 - 6	3 1/2	2/5	519-2276
1 - 8	Nut	-	2J-3507	1 1/2 - 6	5	1 3/4	1K-9414
-	Washer	-	5P-8250	1 1/2 - 6	6 3/4	3 1/4	192-3694
<b>Thread Size (in - TPI) 1 1/8 - 7 and 1 1/8 - 12</b>				1 1/2 - 6	8	4 1/2	561-2178
1 1/8 - 7	2	1/4	3J-8281	1 1/2 - 6	12 1/2	9	127-4840 <sup>(4)</sup>
1 1/8 - 7	3	1/2	1J-2814	1 1/2 - 6	16 1/4	10 1/4	478-7546
1 1/8 - 7	3 1/2	3/7	1J-2175	1 1/2 - 6	18	14 1/2	506-4218
1 1/8 - 7	4 1/2	2	5M-0544	1 1/2 - 12	4	3/4	8F-5535
1 1/8 - 7	6	3 1/2	8H-5727	1 1/2 - 12	4 1/2	1 1/4	1F-6762
1 1/8 - 7	6 1/2	3 3/4	8T-4934	1 1/2 - 12	7	1/4	098-0635
1 1/8 - 7	7	2 3/4	262-7250 <sup>(4)</sup>	1 1/2 - 12	Nut	-	8H-3390
1 1/8 - 12	9 1/4	6	2M-3530	1 1/2 - 6	Nut	-	7X-0452
1 1/8 - 12	11 1/2	8 3/4	346-0351	-	Washer	-	3S-6162
1 1/8 - 12	Nut	-	3S-1356				

# Bolts

## Hex Head Bolts/Inch/Zinc Plated

Thread Size	OAL (in)	Grip Length (in)	Part Number
<b>Thread Size (in - TPI) 1/4 - 20 and 1/4 - 28</b>			
1/4 - 20	3/8	1/16	6V-1322
1/4 - 20	1/2	1/16	5S-7349
1/4 - 20	5/8	1/8	8T-9364
1/4 - 20	3/4	1/8	4M-5281
1/4 - 20	7/8	1/8	1H-3337
1/4 - 20	1	1/8	8T-8908
1/4 - 20	1 1/8	3/8	6D-2928
1/4 - 20	1 1/4	1/8	7X-2501
1/4 - 20	1 3/8	5/8	8C-0617
1/4 - 20	1 1/2	1/4	4M-5282
1/4 - 20	1 5/8	7/8	7X-3178
1/4 - 20	1 3/4	1	5P-2675
1/4 - 20	2	1 1/8	8T-9367
1/4 - 20	2 1/4	1 3/8	8T-9368
1/4 - 20	2 1/2	1 3/4	7X-0264
1/4 - 20	2 3/4	2	7X-0265
1/4 - 20	3	2	7X-0266
1/4 - 20	3 1/4	2 1/2	7X-0267
1/4 - 20	3 1/2	2 3/4	7X-0268
1/4 - 20	3 3/4	3	8C-3793
1/4 - 20	4	3 1/4	7X-0269
1/4 - 20	5 1/2	4 1/2	7X-0271
1/4 - 20	7	5 62/63	113-4201
1/4 - 28	1/2	3/32	7X-3182
1/4 - 28	5/8	5/64	0S-1570
1/4 - 28	7/8	5/64	6V-3960
1/4 - 28	1	1/4	0S-1597
1/4 - 20	Nut	-	6V-8185
-	Washer	-	8T-4205
<b>Thread Size (in - TPI) 5/16 - 18 and 5/16 - 24</b>			
5/16 - 18	1/2	1/16	8T-5391
5/16 - 18	5/8	1/8	5K-0906
5/16 - 18	3/4	1/8	4M-0061
5/16 - 18	7/8	1/8	8T-9043
5/16 - 18	1	1/8	4M-6425
5/16 - 18	1 1/8	1/4	6V-5782
5/16 - 18	1 1/4	3/8	6V-8918
5/16 - 18	1 3/8	1/2	8C-6561
5/16 - 18	1 1/2	3/32	8C-3121
5/16 - 18	1 5/8	3/4	8C-6876
5/16 - 18	1 3/4	7/8	7X-0440
5/16 - 18	1 3/4	1/8	9L-2796
5/16 - 18	2 1/4	1 3/8	8T-8912
5/16 - 18	2 1/2	1 5/8	5P-2955
5/16 - 18	2 3/4	1 7/8	7X-0274
5/16 - 18	3	2 1/8	4M-6424
5/16 - 18	3 1/4	2 1/4	7X-0275
5/16 - 18	3 1/2	2 5/8	7X-0276
5/16 - 18	3 3/4	2 3/4	7X-0277
5/16 - 18	4	3	7X-0278

Thread Size	OAL (in)	Grip Length (in)	Part Number
5/16 - 18	4 1/4	3 3/8	7X-3351
5/16 - 18	4 1/2	3 5/8	7X-0473
5/16 - 18	4 3/4	3 7/8	7X-0279
5/16 - 18	5	4 1/8	7X-0280
5/16 - 18	5 1/2	4 5/8	7X-0281
5/16 - 18	6	5 1/8	5P-0059
5/16 - 18	6 1/2	5 3/8	7X-0282
5/16 - 18	7	5 7/8	136-4181
5/16 - 18	Nut	-	6V-8189
-	Washer	-	9M-1974
<b>Thread Size (in - TPI) 3/8 - 16 and 3/8 - 24</b>			
3/8 - 16	7/16	1/8	203-7700
3/8 - 16	1/2	3/32	8T-9371
3/8 - 16	5/8	3/32	5P-8167
3/8 - 16	1 1/8	5/16	8T-2502
3/8 - 16	1 1/2	10/11	351-2247
3/8 - 16	1 1/2	3/32	7X-0860
3/8 - 16	1 5/8	7/8	7X-0288
3/8 - 16	1 3/4	3/4	5S-7383
3/8 - 16	1 3/4	1 5/24	354-5701
3/8 - 16	1 7/8	1 1/16	7X-0289
3/8 - 16	2	1 3/19	353-3914
3/8 - 16	2	27/28	8T-2501
3/8 - 16	2	3/8	7F-0192
3/8 - 16	2 1/8	1 1/8	7X-3186
3/8 - 16	2 1/4	1/8	8T-0192
3/8 - 16	2 1/2	1 1/2	4L-6459
3/8 - 16	2 1/2	1	8F-6974
3/8 - 16	2 52/93	1 62/87	354-5653
3/8 - 16	2 3/4	1 3/4	8T-9101
3/8 - 16	2 7/8	2 3/16	7X-3185
3/8 - 16	3	2	8T-7008
3/8 - 16	3	1 3/8	7F-1866
3/8 - 16	3 1/4	2 1/4	8T-8915
3/8 - 16	3 1/2	2 1/2	7X-0290
3/8 - 16	3 3/4	2 1/2	7X-0291
3/8 - 16	4	3	8T-9378
3/8 - 16	4 1/4	3 1/4	8T-9379
3/8 - 16	4 1/2	3 1/4	7X-0292
3/8 - 16	4 3/4	3 3/4	7X-0293
3/8 - 16	5	4	7X-0294
3/8 - 16	5 1/4	4 1/4	7X-0295
3/8 - 16	5 1/2	4 1/2	7X-0296
3/8 - 16	5 3/4	4 3/4	7X-0297
3/8 - 16	6	4 7/8	8C-7323
3/8 - 16	6 1/4	4 3/4	7X-0299
3/8 - 16	6 1/2	5 1/4	7X-0300
3/8 - 16	7	5 3/4	7X-0301
3/8 - 16	7 1/2	6 1/4	7X-0302
3/8 - 16	8	6 3/4	7X-0303
3/8 - 16	8 1/2	7 1/4	7X-0304

## Hex Head Bolts/Inch/Zinc Plated (Cont'd.)

Thread Size	OAL (in)	Grip Length (in)	Part Number
3/8 - 16	9	7 3/4	7X-0305
3/8 - 16	10	8 1/4	6V-7191
3/8 - 16	10 3/4	9 1/2	9X-2648
3/8 - 16	12	11	7M-1202
3/8 - 24	5/8	3/32	0T-0642
3/8 - 24	7/8	3/32	7X-0469
3/8 - 24	1	3/16	7X-3183
3/8 - 24	1 3/8	3/8	7X-3174
3/8 - 24	1 3/4	3/4	7X-7477
3/8 - 24	2 1/4	1 1/4	7X-3187
3/8 - 16	Nut	-	6V-8801
-	Washer	-	5M-2894
Thread Size (in - TPI) 7/16 - 14 and 7/16 - 20			
7/16 - 14	3/4	3/16	7X-0307
7/16 - 14	7/8	1/8	7X-0272
7/16 - 14	1	1/8	8T-9380
7/16 - 14	1 1/8	1/8	8T-6973
7/16 - 14	1 1/4	1/8	8T-9382
7/16 - 14	1 3/8	1/4	7X-0308
7/16 - 14	1 1/2	3/8	8T-8916
7/16 - 14	1 3/4	5/8	8C-6877
7/16 - 14	2	7/8	7X-0310
7/16 - 14	2 1/4	1 1/8	7X-0311
7/16 - 14	2 1/2	1 3/8	7X-0312
7/16 - 14	2 3/4	1 5/8	7X-0313
7/16 - 14	3	1 7/8	7X-0314
7/16 - 14	3 1/4	2 1/8	7X-0315
7/16 - 14	3 1/2	2 3/8	7X-0316
7/16 - 14	3 3/4	2 5/8	7X-0317
7/16 - 14	4	2 7/8	7X-0318
7/16 - 14	4 1/4	3 1/8	7X-0319
7/16 - 14	4 1/2	3 1/4	7X-0456
7/16 - 14	4 3/4	3 5/8	7H-3472
7/16 - 14	5	3 3/4	7X-0320
7/16 - 14	5 1/2	4 3/8	7X-0321
7/16 - 14	6	4 7/8	7X-0322
7/16 - 14	6 1/2	5 1/8	3L-0742
7/16 - 14	7	5 5/8	7H-7209
7/16 - 14	8	6 5/8	20-91253
7/16 - 20	1 1/2	3/8	8S-4723
7/16 - 20	1 3/4	3/20	205-6388
7/16 - 20	2 1/4	1 1/8	8S-4724
7/16 - 20	2 3/4	1 5/8	8S-4725
7/16 - 20	3	1 7/8	8S-4726
7/16 - 14	Nut	-	7X-0447
-	Washer	-	5P-8244
Thread Size (in - TPI) 1/2 - 13 and 1/2 - 20			
1/2 - 13	1/2	1/16	7X-0323
1/2 - 13	3/4	1/8	8T-9383
1/2 - 13	7/8	9/32	8T-9384
1/2 - 13	1 3/8	7/16	341-0742
1/2 - 13	1 3/8	7/16	8C-4436

Thread Size	OAL (in)	Grip Length (in)	Part Number
1/2 - 13	1 3/4	7/16	8T-8919
1/2 - 13	2	1 13/55	351-2245
1/2 - 13	2	3/4	8T-4835
1/2 - 13	2 1/4	1	5P-2424
1/2 - 13	2 1/4	5/26	9X-8278
1/2 - 13	2 1/2	1 1/4	7X-0325
1/2 - 13	2 1/2	1/4	1H-2415
1/2 - 13	2 3/4	1 1/2	8T-9389
1/2 - 13	2 3/4	2/13	175-4149
1/2 - 13	3	1 3/4	7X-0326
1/2 - 13	3	3/4	0S-1623
1/2 - 13	3 1/4	2	8T-8920
1/2 - 13	3 1/2	3/8	7D-5962
1/2 - 13	3 3/4	2 1/2	8T-9391
1/2 - 13	4	2 3/4	6V-4432
1/2 - 13	4 1/4	3	7X-0331
1/2 - 13	4 1/4	3/16	7D-9766
1/2 - 13	4 1/2	3 1/4	7X-0332
1/2 - 13	4 3/4	3 1/2	7X-0333
1/2 - 13	5	3 3/4	7X-0334
1/2 - 13	5	5/26	483-2712
1/2 - 13	5 1/4	4	7X-0335
1/2 - 13	5 1/2	4 1/4	7X-0336
1/2 - 13	5 3/4	4 1/2	7X-0337
1/2 - 13	6	4 3/4	7X-0338
1/2 - 13	6 1/4	4 3/4	7X-0339
1/2 - 13	6 1/2	5	7X-0340
1/2 - 13	7	5 1/2	7X-0341
1/2 - 13	7 1/2	6	8T-9392
1/2 - 13	7 1/2	3/4	8T-7834
1/2 - 13	8	6 1/2	7X-0481
1/2 - 13	8 1/2	7	7X-0471
1/2 - 13	8 3/4	7 1/4	2D-0516
1/2 - 13	11	9 1/2	293-9002
1/2 - 20	3/4	1/8	6F-7032
1/2 - 20	1	1/8	0S-1629
1/2 - 20	1 1/4	1/8	7X-3195
1/2 - 20	1 3/4	1/2	0S-1584
1/2 - 20	2	3/4	286-2493
1/2 - 13	Nut	-	6V-8188
-	Washer	-	5P-8245
Thread Size (in - TPI) 5/8 - 11 and 5/8 - 18			
5/8 - 11	3/4	1/16	7X-0342
5/8 - 11	1	3/16	5C-6266
5/8 - 11	1 1/8	9/32	7S-9372
5/8 - 11	1 1/4	3/16	7X-0343
5/8 - 11	1 3/8	3/16	7X-0344
5/8 - 11	1 1/2	3/16	8I-1391
5/8 - 11	1 3/4	1/4	7X-0345
5/8 - 11	2	1/2	7X-0346
5/8 - 11	2 1/4	3/4	7X-0347
5/8 - 11	2 1/2	5/8	8T-6871

# Bolts

## Hex Head Bolts/Inch/Zinc Plated (Cont'd.)

Thread Size	OAL (in)	Grip Length (in)	Part Number
5/8 - 11	2 3/4	1 1/4	8C-6362
5/8 - 11	2 3/4	1/2	7B-2725
5/8 - 11	3	1 1/2	7X-0349
5/8 - 11	3 5/32	3/16	105-6491
5/8 - 11	3 1/4	1 3/4	8T-9396
5/8 - 11	3 1/2	2	7X-0350
5/8 - 11	3 3/4	2 1/4	7X-0351
5/8 - 11	4	2 1/2	7X-0352
5/8 - 11	4 1/4	2 3/4	7X-0353
5/8 - 11	4 1/2	3	7X-0354
5/8 - 11	4 3/4	3 1/4	7X-0355
5/8 - 11	5	3 1/2	7X-0356
5/8 - 11	5	3/11	370-2185
5/8 - 11	5 1/2	4	7X-0358
5/8 - 11	5 3/4	2 1/4	8D-4348
5/8 - 11	5 62/63	4 1/2	7X-0359
5/8 - 11	6 1/4	4 1/2	7X-0360
5/8 - 11	6 1/2	4 3/4	7X-0361
5/8 - 11	7	5 1/4	7X-0362
5/8 - 11	7	2	9K-9679
5/8 - 11	7 1/4	5 1/2	9F-8689
5/8 - 11	7 1/2	5 3/4	1D-4600
5/8 - 11	8	6 1/4	7X-0363
5/8 - 11	8 1/2	6 3/4	7X-0364
5/8 - 11	9	7 1/4	7X-3184
5/8 - 11	9 1/2	7 3/4	7X-7890
5/8 - 11	10 1/4	8 1/2	1D-4603
5/8 - 11	10 1/2	8 3/4	5P-4626
5/8 - 11	11	9 1/4	5P-4625
5/8 - 11	11 1/2	9 3/4	5P-4624
5/8 - 11	12	10 1/4	5P-7971
5/8 - 18	1	5/36	170-4870
5/8 - 18	1 1/2	3/16	7X-3352
5/8 - 18	1 3/4	1/4	7X-3177
5/8 - 18	2	1/2	7X-3192
5/8 - 18	2 1/4	3/4	7X-3193
5/8 - 18	7	5 1/4	503-0790
5/8 - 18	9	6 3/4	148-2871
5/8 - 11	Nut	-	7X-0448
-	Washer	-	5P-8247
Thread Size (in - TPI) 7/16 - 10 and 7/16 - 16			
3/4 - 10	1	5/16	5C-7886
3/4 - 10	1 1/2	5/16	7X-0365
3/4 - 10	1 3/4	5/16	8T-9398
3/4 - 10	2	5/16	7X-0366
3/4 - 10	2 1/2	3/4	8T-8924
3/4 - 10	2 3/4	1	8C-6857
3/4 - 10	3 1/4	1 1/2	7X-0369
3/4 - 10	3 1/2	1 3/4	7X-0370
3/4 - 10	3 1/2	1/4	459-9006
3/4 - 10	3 3/4	2	7X-0371
3/4 - 10	4	2 1/4	8C-8842

Thread Size	OAL (in)	Grip Length (in)	Part Number
3/4 - 10	4 1/4	2 1/2	7X-0372
3/4 - 10	4 1/4	17/32	3K-3318
3/4 - 10	4 1/2	1 1/4	8J-1148
3/4 - 10	4 3/4	3	8T-8925
3/4 - 10	5	3 1/4	7X-0375
3/4 - 10	5 1/2	3 3/4	7X-0373
3/4 - 10	5 3/4	4	7X-0374
3/4 - 10	6	4 1/4	8T-9312
3/4 - 10	6 1/2	4 1/2	7X-0377
3/4 - 10	7	5	8T-9313
3/4 - 10	7 1/2	5 1/2	1J-8930
3/4 - 10	8	6	5P-4135
3/4 - 10	9	7	7X-3179
3/4 - 10	10	8	8F-4225
3/4 - 16	1 1/4	3/16	237-7252
3/4 - 16	2 3/4	1	8F-3152
3/4 - 16	3 1/4	1 1/2	473-2151
3/4 - 16	8	6	473-2149
3/4 - 10	Nut	-	6V-8182
-	Washer	-	5P-8248
Thread Size (in - TPI) 7/8 - 9 and 7/8 - 14			
7/8 - 9	6 1/2	4 1/4	7X-0393
7/8 - 9	4 1/4	2 1/4	7X-0455
7/8 - 9	4 1/2	2 1/2	7X-0388
7/8 - 9	6	3 3/4	7X-0392
7/8 - 9	9	6 3/4	7X-0397
7/8 - 9	4 3/4	2 3/4	7X-0389
7/8 - 9	2	3/8	7X-0381
7/8 - 9	8	5 3/4	7X-0395
7/8 - 9	3 3/4	1 3/4	7X-0453
7/8 - 9	2 3/4	3/4	7X-0383
7/8 - 9	2 1/4	3/8	7X-0382
7/8 - 9	3 1/4	1 1/4	7X-0385
7/8 - 9	1 1/2	1/4	7X-0379
7/8 - 9	8 1/2	6 1/4	7X-0396
7/8 - 9	1 3/4	3/8	7X-0380
7/8 - 9	7	4 3/4	7X-0394
7/8 - 9	5 1/2	3 1/2	7X-0391
7/8 - 9	4	2	7X-0387
7/8 - 14	2 1/2	1/2	7X-3180
7/8 - 14	1 5/8	3/14	9R-2466
7/8 - 9	Nut	-	7X-0449
-	Washer	-	5P-8249
Thread Size (in - TPI) 1 - 8 and 1 - 14			
1 - 8	1 1/4	5/16	7X-0399
1 - 8	1 1/2	5/16	7X-0400
1 - 8	1 3/4	3/8	7X-0401
1 - 8	2 1/4	1/4	7X-0403
1 - 8	2 3/8	1	6J-4302
1 - 8	2 3/4	1/2	7X-0405
1 - 8	3	3/4	7X-0406
1 - 8	3 1/4	1	7X-0407

## Hex Head Bolts/Inch/Zinc Plated (Cont'd.)

Thread Size	OAL (in)	Grip Length (in)	Part Number
1 - 8	3 1/2	1 1/4	7X-0408
1 - 8	3 57/77	3/8	215-6297
1 - 8	3 3/4	1 1/2	8T-8927
1 - 8	4 1/4	2	7X-0411
1 - 8	4 1/2	2 1/4	8C-8843
1 - 8	4 3/4	2 1/2	7X-0412
1 - 8	5	2 3/4	8C-8844
1 - 8	5 1/4	3 1/4	443-2430
1 - 8	5 1/2	3 1/4	7X-0443
1 - 8	6	3 3/4	1J-5929
1 - 8	6	1/2	3E-8047
1 - 8	6 1/2	4	7X-0444
1 - 8	7	4 1/2	7X-0413
1 - 8	7 1/2	5	7X-0414
1 - 8	8	5 1/2	7X-0415
1 - 8	8 1/2	6	7X-0416
1 - 8	9	6 1/2	7X-0417
1 - 8	9 1/2	7	7X-0418
1 - 8	10 1/2	8	8F-6453
1 - 8	11	8 1/2	183-7218
1 - 8	11 1/2	9	7X-4363
1 - 8	12	5/16	477-6583
1 - 8	14 1/2	12	466-8153
1 - 8	16	13 1/2	467-0905
1 - 8	17	14 1/2	467-0904
1 - 14	2	1/4	2H-3743
1 - 14	2 1/4	1/4	7X-0466
1 - 14	3	3/4	7X-0463
1 - 14	3 1/2	1 1/4	208-0956
1 - 14	4 22/25	3 1/4	077-5307
1 - 14	14	11 1/2	469-6696
1 - 8	Nut	-	299-3423
-	Washer	-	5P-8250
Thread Size (in - TPI) 1 1/8 - 7			
1 1/8 - 7	4 1/2	2	7X-0423
1 1/8 - 7	6	3 1/2	7X-0425
1 1/8 - 7	2	1/4	7X-0420
1 1/8 - 7	3	1/2	7X-0421
1 1/8 - 7	7 1/2	4 3/4	127-4835

Thread Size	OAL (in)	Grip Length (in)	Part Number
1 1/8 - 7	3 1/2	1	7X-0422
1 1/8 - 7	6 1/2	3 3/4	7X-0426
1 1/8 - 7	Nut	-	329-3710
-	Washer	-	3S-1349
Thread Size (in - TPI) 1 1/4 - 7 and 1 1/4 - 12			
1 1/4 - 7	4 1/4	1 1/2	1S-6560
1 1/4 - 7	4 1/2	1 3/4	7X-0429
1 1/4 - 7	5	2 1/4	7X-0445
1 1/4 - 7	5 1/2	2 3/4	7X-0430
1 1/4 - 7	6	3 1/4	7X-0431
1 1/4 - 7	6 1/2	3 1/2	7X-0432
1 1/4 - 7	7	4	7X-0433
1 1/4 - 7	7 1/2	4 1/2	462-9834
1 1/4 - 7	8	5	6V-2793
1 1/4 - 7	8 1/2	5 1/2	7X-0435
1 1/4 - 7	9	6	7X-0436
1 1/4 - 7	9 1/2	6 1/2	7X-0437
1 1/4 - 7	11	8	1K-9415
1 1/4 - 7	12 1/2	9 1/2	153-0142
1 1/4 - 7	13	10	153-1857
1 1/4 - 7	15	12	031-0213
1 1/4 - 12	2 1/4	1/4	7B-2289
1 1/4 - 12	3 1/2	3/4	2K-0439
1 1/4 - 12	11 1/2	8 3/8	6F-4438
1 1/4 - 7	Nut	-	7X-0451
-	Washer	-	4K-0684
Thread Size (in - TPI) 1 1/2 - 6 and 1 1/2 - 12			
1 1/2 - 12	3	1/4	7X-3305
1 1/2 - 6	2 3/4	0	443-2453
1 1/2 - 6	4	1/2	7X-0857
1 1/2 - 6	7	3 1/2	465-5149
1 1/2 - 6	7 1/2	4	469-6703
1 1/2 - 6	8 1/2	5	506-4227
1 1/2 - 6	10	6 1/2	462-9895
1 1/2 - 6	16 1/2	13	462-9867
-	Nut	-	7X-0452
-	Washer	-	3S-6162

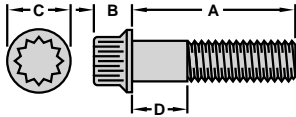
# Bolts

## Hex Head Bolts/Inch/Zinc Flake

Thread Size	OAL (in)	Grip Length (in)	Part Number
<b>Thread Size (in - TPI) 5/16 - 18</b>			
5/16 - 18	3/4	1/8	313-5637
5/16 - 18	2	1 1/8	8T-8911
<b>Thread Size (in - TPI) 3/8 - 16</b>			
3/8 - 16	3/4	1/8	5M-3062
3/8 - 16	7/8	1/8	5S-7379
3/8 - 16	1	1/8	4L-6454
3/8 - 16	1 1/4	1/4	9B-7237
3/8 - 16	1 3/8	3/8	5S-7382
3/8 - 16	1 1/2	3/8	4L-9337
3/8 - 16	2 1/4	1 1/4	8T-9377
3/8 - 18	1	1/8	313-5638
<b>Thread Size (in - TPI) 7/16 - 20</b>			
7/16 - 20	1 1/4	1/8	0T-0244
7/16 - 20	2	7/8	0T-0489
<b>Thread Size (in - TPI) 1/2 - 13 and 1/2 - 20</b>			
1/2 - 13	1	1/8	5P-2228
1/2 - 13	1 1/8	1/8	5C-6565
1/2 - 13	1 1/4	5/16	8T-8917
1/2 - 13	1 3/8	7/16	6C-3242 <sup>(5)</sup>
1/2 - 13	1 1/2	1/4	6C-3241 <sup>(5)</sup>
1/2 - 13	1 3/4	7/16	6C-3285 <sup>(5)</sup>
1/2 - 13	2 1/4	1	202-9769 <sup>(5)</sup>
1/2 - 13	3 1/2	2 1/4	7X-0328
1/2 - 13	6 1/2	5	329-7057 <sup>(5)</sup>
1/2 - 20	2 1/4	1	299-3398
1/2 - 20	3	1 3/4	421-3183
<b>Thread Size (in - TPI) 5/8 - 11</b>			
5/8 - 11	1 1/2	3/16	8T-9393
5/8 - 11	1 3/4	1/4	6C-3240 <sup>(5)</sup>
5/8 - 11	2	1/2	202-9008 <sup>(5)</sup>
5/8 - 11	2 1/4	1/2	202-9770 <sup>(5)</sup>
5/8 - 11	2 1/2	5/8	201-7354 <sup>(5)</sup>
5/8 - 11	2 3/4	1 1/4	201-7355 <sup>(5)</sup>
5/8 - 11	3	1 1/2	6C-3281 <sup>(5)</sup>
5/8 - 11	3 1/4	1 3/4	6C-3244 <sup>(5)</sup>
5/8 - 11	4 1/4	2 3/4	6C-3209 <sup>(5)</sup>
5/8 - 11	5 1/4	3 3/4	201-8898 <sup>(5)</sup>
5/8 - 18	3	1 1/2	299-3434
<b>Thread Size (in - TPI) 3/4 - 10</b>			
3/4 - 10	1 1/4	5/16	8T-9397

Thread Size	OAL (in)	Grip Length (in)	Part Number
3/4 - 10	1 3/4	5/16	6C-3284 <sup>(5)</sup>
3/4 - 10	2 1/4	1/2	201-2184 <sup>(5)</sup>
3/4 - 10	3	1 1/4	336-8237 <sup>(5)</sup>
3/4 - 10	3 1/4	1 1/2	299-5419 <sup>(5)</sup>
3/4 - 10	3 1/2	1 3/4	201-2185 <sup>(5)</sup>
3/4 - 10	3 3/4	2	6C-3234 <sup>(5)</sup>
3/4 - 10	4 1/4	1 3/4	251-5715 <sup>(5)</sup>
3/4 - 10	4 1/2	2 3/4	8T-9311
3/4 - 10	5	3 1/4	289-0272 <sup>(5)</sup>
3/4 - 10	6 1/4	4 1/4	6C-3222 <sup>(5)</sup>
3/4 - 10	6 1/2	4 1/2	6C-3224 <sup>(5)</sup>
3/4 - 10	8 1/2	6 1/2	299-3399
3/4 - 16	1 3/4	3/16	253-9037
3/4 - 16	10	8	311-1538
<b>Thread Size (in - TPI) 7/8 - 9 and 7/8 - 14</b>			
7/8 - 9	2 1/2	1/2	338-8484
7/8 - 9	3	1	6C-3210 <sup>(5)</sup>
7/8 - 9	3 1/2	1 1/2	299-3436 <sup>(5)</sup>
7/8 - 9	5	3	6C-3220 <sup>(5)</sup>
7/8 - 9	10	7 3/4	304-5286
7/8 - 14	11 1/2	9 1/4	329-3702
<b>Thread Size (in - TPI) 1 - 8</b>			
1 - 8	2	1/3	7X-0402
1 - 8	2 1/2	1/2	6I-6371 <sup>(5)</sup>
1 - 8	4	1 3/4	6C-3212 <sup>(5)</sup>
1 - 8	4 1/4	2	6C-3213 <sup>(5)</sup>
1 - 8	4 1/2	2 1/4	6C-3214 <sup>(5)</sup>
1 - 8	4 3/4	2 1/2	299-7350
1 - 8	6	3 3/4	6C-3216 <sup>(5)</sup>
1 - 8	6 1/2	4	6C-3208 <sup>(5)</sup>
1 - 8	7	4 1/2	6C-3215 <sup>(5)</sup>
1 - 8	7 1/2	5	6J-7107 <sup>(5)</sup>
<b>Thread Size (in - TPI) 1 1/4 - 7 and 1 1/4 - 12</b>			
1 1/4 - 7	3 1/2	3/4	7X-0427
1 1/4 - 7	4	1 1/4	7X-0428
1 1/4 - 7	10	7	1D-4649
1 1/4 - 12	3	1/4	491-5688
<b>Thread Size (in - TPI) 1 1/2 - 6 and 1 1/2 - 12</b>			
1 1/2 - 6	4 1/2	1 1/4	138-8455
1 1/2 - 6	5	1 3/4	7X-0439
1 1/2 - 6	6	2 1/2	288-8101 <sup>(5)</sup>
1 1/2 - 12	3 3/4	1/2	6C-3243 <sup>(5)</sup>

## 12 Point Head Bolt/Inch/Coarse & Fine Thread

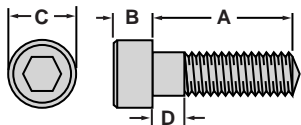


Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
<b>Coarse Thread</b>					
1/4 - 20	1/16 in	0.27 in	0.38 in	0.11 in	9S-5033
5/16 - 18	3/4 in	0.31 in	0.47 in	0.11 in	1T-0416
5/16 - 18	1 in	0.31 in	0.47 in	0.11 in	1T-0414
5/16 - 18	1 1/4 in	0.31 in	0.47 in	0.11 in	6L-4783
5/16 - 18	1 1/2 in	0.31 in	0.47 in	0.11 in	8M-8162
5/16 - 18	1 3/4 in	0.31 in	0.47 in	0.63 in	6L-4784
5/16 - 18	2 1/2 in	0.31 in	0.47 in	1.13 in	3S-4346
5/16 - 18	3 in	0.31 in	0.47 in	1.63 in	2S-5818
5/16 - 18	3 1/2 in	0.31 in	0.47 in	2.25 in	2S-0629
5/16 - 18	4 1/2 in	0.31 in	0.47 in	3.25 in	9M-4288
5/16 - 18	5 in	0.31 in	0.47 in	3.63 in	9M-4289
5/16 - 18	5 1/2 in	0.31 in	0.47 in	4.25 in	1S-9810
5/16 - 18	6 in	0.31 in	0.47 in	4.63 in	1S-9811
5/16 - 18	6 1/2 in	0.31 in	0.47 in	5.25 in	4S-5845
3/8 - 16	3/4 in	0.38 in	0.56 in	0.25 in	1T-0822
3/8 - 16	1 in	0.38 in	0.56 in	0.25 in	1T-0765
3/8 - 16	1 1/16 in	0.38 in	0.56 in	0.50 in	4D-5239
3/8 - 16	1 1/4 in	0.38 in	0.56 in	0.25 in	1T-0720
3/8 - 16	2 in	0.38 in	0.56 in	0.50 in	3S-1307
3/8 - 16	2 1/4 in	0.38 in	0.56 in	1.00 in	3S-0127
3/8 - 16	2 3/4 in	0.38 in	0.56 in	1.50 in	2S-3567
3/8 - 16	3 in	0.38 in	0.56 in	1.50 in	4S-9002
3/8 - 16	3 3/4 in	0.38 in	0.56 in	2.50 in	8M-2518
7/16 - 14	1 1/2 in	0.44 in	0.66 in	0.14 in	6K-3771
7/16 - 14	2 1/4 in	0.44 in	0.66 in	0.63 in	6K-3772
1/2 - 13	1 in	0.50 in	0.75 in	0.16 in	9M-6590
1/2 - 13	1 1/4 in	0.50 in	0.75 in	0.16 in	8M-2530
1/2 - 13	1 1/2 in	0.50 in	0.75 in	0.16 in	4K-5175
1/2 - 13	2 in	0.50 in	0.75 in	0.16 in	5J-5793
1/2 - 13	2 1/4 in	0.50 in	0.75 in	0.75 in	6J-2515

Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
1/2 - 13	2 1/2 in	0.50 in	0.75 in	1.00 in	7K-6058
1/2 - 13	2 3/4 in	0.50 in	0.75 in	0.75 in	9S-9739
1/2 - 13	3 1/2 in	0.50 in	0.75 in	1.50 in	338-4562
1/2 - 13	4 1/2 in	0.50 in	0.75 in	3.00 in	8D-0648
5/8 - 11	7/8 in	0.62 in	0.94 in	0.19 in	1S-9808
5/8 - 11	1 in	0.62 in	0.94 in	0.19 in	9S-8889
5/8 - 11	1 3/4 in	0.62 in	0.94 in	0.19 in	8S-2332
5/8 - 11	2 in	0.62 in	0.94 in	0.19 in	8S-2331
5/8 - 11	2 1/4 in	0.62 in	0.94 in	0.50 in	6M-9149
5/8 - 11	2 1/2 in	0.62 in	0.94 in	0.75 in	031-1382
5/8 - 11	3 in	0.62 in	0.94 in	1.25 in	031-3185
5/8 - 11	3 1/4 in	0.62 in	0.94 in	1.50 in	6J-3913
5/8 - 11	3 1/2 in	0.62 in	0.94 in	1.50 in	7K-3116
3/4 - 10	1 1/2 in	0.75 in	1.13 in	0.25 in	6J-3991
3/4 - 10	1 3/4 in	0.75 in	1.13 in	0.19 in	6M-8796
<b>Fine Thread</b>					
5/16 - 24	3/4 in	0.31 in	0.47 in	0.08 in	107-6826
3/8 - 24	5/8 in	0.38 in	0.56 in	0.08 in	1T-0510
3/8 - 24	1 in	0.38 in	0.56 in	0.08 in	1T-0417
3/8 - 24	1 1/4 in	0.38 in	0.56 in	0.50 in	1T-0448
3/8 - 24	1 3/4 in	0.38 in	0.56 in	0.50 in	1T-0954
3/8 - 24	2 1/2 in	0.38 in	0.56 in	1.00 in	5K-4451
7/16 - 20	2 3/4 in	0.44 in	0.66 in	1.25 in	5J-7820
1/2 - 20	3 in	0.50 in	0.75 in	1.50 in	8S-0509
5/8 - 18	1 in	0.62 in	0.94 in	0.19 in	9S-8890
5/8 - 18	3 in	0.62 in	0.94 in	0.75 in	2P-1956
5/8 - 18	2 1/2 in	0.62 in	0.94 in	0.75 in	9S-8891
3/4 - 16	3 1/4 in	0.75 in	1.13 in	1.00 in	9S-8892
7/8 - 14	2 1/2 in	0.88 in	1.31 in	0.16 in	2N-5014
1 - 14	2 1/2 in	1.00 in	1.50 in	0.75 in	2N-5006
1 - 14	4 in	1.00 in	1.50 in	1.00 in	9S-8893

# Bolts

## Hex Socket Head Screw Bolts/Inch/Coarse & Fine Thread



Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
<b>Coarse Thread</b>					
No. 4 - 40	3/8 in	0.11 in	0.19 in	0.05 in	2S-9255
No. 4 - 40	1/2 in	0.11 in	0.19 in	0.05 in	6D-3033
No. 4 - 40	5/8 in	0.11 in	0.19 in	0.05 in	107-1716
No. 4 - 40	1 1/4 in	0.11 in	0.19 in	0.05 in	228-6056
No. 6 - 32	1/2 in	0.16 in	0.27 in	0.05 in	6V-8927
No. 8 - 32	3/8 in	0.16 in	0.27 in	0.06 in	6D-3031
No. 8 - 32	1/2 in	0.16 in	0.27 in	0.06 in	6D-3897
No. 8 - 32	5/8 in	0.16 in	0.27 in	0.06 in	2N-2658
No. 8 - 32	3/4 in	0.16 in	0.27 in	0.06 in	7D-5473
No. 8 - 32	1 in	0.16 in	0.27 in	0.06 in	9M-4704
No. 10 - 24	1/2 in	0.19 in	0.31 in	0.08 in	5S-2671
No. 10 - 24	5/8 in	0.19 in	0.31 in	0.08 in	2H-0191
No. 10 - 24	3/4 in	0.19 in	0.31 in	0.08 in	3L-2540
No. 10 - 24	7/8 in	0.19 in	0.31 in	0.08 in	9F-1707
No. 10 - 24	1 in	0.19 in	0.31 in	0.08 in	8C-9034
No. 10 - 24	1 1/4 in	0.19 in	0.31 in	0.38 in	7L-0688
No. 10 - 24	1 1/2 in	0.19 in	0.31 in	0.38 in	5J-1714
No. 10 - 24	1 3/4 in	0.19 in	0.31 in	0.88 in	2N-0402
No. 10 - 24	2 in	0.19 in	0.31 in	0.88 in	8C-6512
1/4 - 20	3/8 in	0.25 in	0.38 in	0.11 in	7J-0637
1/4 - 20	1/2 in	0.25 in	0.38 in	0.11 in	8H-0708
1/4 - 20	5/8 in	0.25 in	0.38 in	0.11 in	033-5359
1/4 - 20	3/4 in	0.25 in	0.38 in	0.11 in	6V-3260
1/4 - 20	7/8 in	0.25 in	0.38 in	0.11 in	4N-2955
1/4 - 20	1 in	0.25 in	0.38 in	0.11 in	8H-0707
1/4 - 20	1 1/4 in	0.25 in	0.38 in	0.09 in	4L-7124
1/4 - 20	1 1/2 in	0.25 in	0.38 in	0.50 in	2H-3764
1/4 - 20	1 3/4 in	0.25 in	0.38 in	0.50 in	5L-9018
1/4 - 20	2 in	0.25 in	0.38 in	1.00 in	6L-1596
1/4 - 20	2 1/4 in	0.25 in	0.38 in	1.00 in	6L-5551
1/4 - 20	2 1/2 in	0.25 in	0.38 in	1.50 in	6H-3958
1/4 - 20	2 3/4 in	0.25 in	0.25 in	1.50 in	6J-2819
1/4 - 20	3 1/4 in	0.25 in	0.25 in	2.00 in	6V-7698
5/16 - 18	3/4 in	0.31 in	0.47 in	0.11 in	9F-5975
5/16 - 18	7/8 in	0.31 in	0.47 in	0.11 in	7X-3373
5/16 - 18	1 in	0.31 in	0.47 in	0.11 in	7J-9016
5/16 - 18	1 1/4 in	0.31 in	0.47 in	0.11 in	9F-6641
5/16 - 18	1 1/2 in	0.31 in	0.47 in	0.11 in	5J-5314
5/16 - 18	1 3/4 in	0.31 in	0.47 in	0.63 in	7S-6701
5/16 - 18	2 in	0.31 in	0.47 in	0.63 in	9S-7381
5/16 - 18	2 3/4 in	0.31 in	0.47 in	1.63 in	2L-1352
5/16 - 18	3 1/2 in	0.31 in	0.47 in	2.25 in	9S-7382
3/8 - 16	3/4 in	0.38 in	0.56 in	0.25 in	1L-0509

Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
3/8 - 16	7/8 in	0.38 in	0.56 in	0.25 in	4S-5565
3/8 - 16	1 in	0.38 in	0.56 in	0.25 in	2D-4534
3/8 - 16	1 1/4 in	0.38 in	0.56 in	0.25 in	2J-5245
3/8 - 16	1 1/2 in	0.38 in	0.56 in	0.25 in	4D-3120
3/8 - 16	1 3/4 in	0.38 in	0.56 in	0.50 in	5S-2586
3/8 - 16	2 in	0.38 in	0.56 in	0.50 in	1L-8793
3/8 - 16	2 1/4 in	0.38 in	0.56 in	1.00 in	2L-3793
3/8 - 16	2 1/2 in	0.38 in	0.56 in	1.00 in	1Y-7574
3/8 - 16	2 3/4 in	0.38 in	0.56 in	1.50 in	2K-6073
3/8 - 16	3 1/4 in	0.38 in	0.56 in	2.00 in	4B-3835
3/8 - 16	4 in	0.38 in	0.56 in	2.50 in	3B-7614
3/8 - 16	5 in	0.38 in	0.56 in	3.50 in	8L-3837
3/8 - 16	6 in	0.38 in	0.56 in	4.50 in	2D-8992
7/16 - 14	7/8 in	0.44 in	0.66 in	0.14 in	4J-1096
7/16 - 14	1 1/4 in	0.44 in	0.66 in	0.14 in	7B-7525
7/16 - 14	2 in	0.44 in	0.66 in	0.63 in	2N-0412
7/16 - 14	2 1/2 in	0.44 in	0.66 in	1.13 in	3J-4567
1/2 - 13	1/2 in	0.50 in	0.75 in	0.16 in	021-7916
1/2 - 13	3/4 in	0.50 in	0.75 in	0.16 in	013-8289
1/2 - 13	1 in	0.50 in	0.75 in	0.16 in	5H-4893
1/2 - 13	1 1/4 in	0.50 in	0.75 in	0.16 in	5F-8807
1/2 - 13	1 1/2 in	0.50 in	0.75 in	0.16 in	3F-7147
1/2 - 13	1 3/4 in	0.50 in	0.75 in	0.16 in	5S-2256
1/2 - 13	2 in	0.50 in	0.75 in	0.19 in	8B-7997
1/2 - 13	2 1/4 in	0.50 in	0.75 in	0.75 in	2L-0041
1/2 - 13	2 1/2 in	0.50 in	0.75 in	0.75 in	8B-7979
1/2 - 13	2 3/4 in	0.50 in	0.75 in	0.75 in	5S-2389
1/2 - 13	3 in	0.50 in	0.75 in	1.50 in	4L-8515
1/2 - 13	3 1/4 in	0.50 in	0.75 in	1.50 in	6D-0119
1/2 - 13	3 1/2 in	0.50 in	0.75 in	1.50 in	8B-7998
1/2 - 13	5 in	0.50 in	0.75 in	3.00 in	5S-2388
1/2 - 13	6 in	0.50 in	0.75 in	4.50 in	8L-4612
1/2 - 13	7 in	0.50 in	0.75 in	5.25 in	7L-0654
5/8 - 11	1 1/4 in	0.62 in	0.94 in	0.19 in	5S-2201
5/8 - 11	2 in	0.62 in	0.94 in	0.19 in	5S-2457
5/8 - 11	3 in	0.62 in	0.94 in	0.75 in	4D-0242
5/8 - 11	4 in	0.62 in	0.94 in	2.25 in	8L-4743
5/8 - 11	4 1/2 in	0.62 in	0.94 in	2.25 in	6H-3959
5/8 - 11	5 1/2 in	0.62 in	0.94 in	3.75 in	7L-8304
3/4 - 10	1 1/2 in	0.75 in	1.12 in	0.20 in	7L-9787
3/4 - 10	1 3/4 in	0.75 in	1.12 in	0.20 in	5F-5321
3/4 - 10	2 1/2 in	0.75 in	1.12 in	0.20 in	2N-6170
3/4 - 10	3 1/4 in	0.75 in	1.12 in	1.00 in	2N-1746
3/4 - 10	3 1/2 in	0.75 in	1.12 in	1.00 in	9S-4920



## Hex Socket Head Screw Bolts/Inch/Coarse & Fine Thread (Cont'd.)

Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
7/8 - 9	2 1/2 in	0.88 in	1.31 in	0.22 in	8L-4638
7/8 - 9	4 in	0.88 in	1.31 in	1.00 in	8L-9299
7/8 - 9	4 1/2 in	0.88 in	1.31 in	3.00 in	8L-4717
1 - 8	2 1/2 in	1.00 in	1.50 in	0.25 in	8L-6059
1 - 8	3 in	1.00 in	1.50 in	0.25 in	7L-9198
1 - 8	5 in	1.00 in	1.50 in	2.00 in	8L-3745
<b>Fine Thread</b>					
No. 10 - 32	7/16 in	0.19 in	0.31 in	0.13 in	8H-9299
No. 10 - 32	1 1/2 in	0.19 in	0.31 in	1.00 in	6V-7488
No. 10 - 32	5/8 in	0.19 in	0.31 in	0.06 in	3K-6168
No. 10 - 32	1 1/2 in	0.19 in	0.31 in	0.38 in	2R-8159
No. 10 - 32	2 1/4 in	0.19 in	0.31 in	1.18 in	9T-5110
1/4 - 28	1/2 in	0.25 in	0.38 in	0.08 in	7K-8407
1/4 - 28	5/8 in	0.25 in	0.38 in	0.08 in	021-7941
1/4 - 28	3/4 in	0.25 in	0.38 in	0.08 in	3H-1392
1/4 - 28	7/8 in	0.25 in	0.38 in	0.08 in	8S-1571
1/4 - 28	2 7/8 in	0.25 in	0.38 in	1.87 in	9T-5112
1/4 - 28	3 1/2 in	0.25 in	0.38 in	2.50 in	9T-5113
5/16 - 24	3/4 in	0.31 in	0.31 in	0.08 in	3F-8156
5/16 - 24	1 in	0.31 in	0.31 in	0.08 in	8T-0908
3/8 - 24	3/4 in	0.38 in	0.56 in	0.08 in	013-8253
3/8 - 24	7/8 in	0.38 in	0.56 in	0.08 in	4L-1507
3/8 - 24	1 in	0.38 in	0.56 in	0.08 in	5L-4183
3/8 - 24	1 1/4 in	0.38 in	0.56 in	0.08 in	1T-0131

Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
3/8 - 24	1 1/2 in	0.38 in	0.56 in	0.19 in	5L-8894
3/8 - 24	1 3/4 in	0.38 in	0.56 in	0.50 in	013-8257
3/8 - 24	2 in	0.38 in	0.56 in	0.50 in	013-8258
3/8 - 24	2 1/4 in	0.38 in	0.56 in	1.00 in	013-8259
7/16 - 20	1/2 in	0.44 in	0.66 in	0.11 in	8S-2696
7/16 - 20	1 in	0.44 in	0.66 in	0.10 in	089-7989
7/16 - 20	1 3/4 in	0.44 in	0.66 in	0.11 in	8F-1948
7/16 - 20	2 1/2 in	0.44 in	0.66 in	1.50 in	6H-3958
7/16 - 20	4 1/2 in	0.44 in	0.66 in	3.14 in	213-6004
1/2 - 20	1/2 in	0.50 in	0.75 in	0.11 in	021-7956
1/2 - 20	1 in	0.50 in	0.75 in	0.11 in	013-8307
1/2 - 20	1 1/4 in	0.50 in	0.75 in	0.11 in	1F-1375
1/2 - 20	1 1/2 in	0.50 in	0.75 in	0.11 in	8F-0069
1/2 - 20	1 3/4 in	0.50 in	0.75 in	0.11 in	013-8310
1/2 - 20	2 in	0.50 in	0.75 in	0.11 in	2H-3763
1/2 - 20	2 1/2 in	0.50 in	0.75 in	1.50 in	6H-3958
1/2 - 20	3 in	0.50 in	0.75 in	1.50 in	013-8315
5/8 - 18	1 1/4 in	0.62 in	0.94 in	0.11 in	183-5527
5/8 - 18	1 3/4 in	0.62 in	0.94 in	0.11 in	013-8374
5/8 - 18	2 1/4 in	0.62 in	0.94 in	0.11 in	9S-9078
5/8 - 18	4 1/4 in	0.62 in	0.94 in	2.25 in	174-3741
5/8 - 18	6 3/4 in	0.62 in	0.94 in	4.50 in	253-2180
3/4 - 16	2 in	0.75 in	1.12 in	0.13 in	061-8718

# Bolts

## Hex Head Bolts/Metric/Phosphate & Oil

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
<b>Thread Size (dia x pitch) M6 x 1.00</b>				
M6	1.00	12	3	8T-0639
M6	1.00	14	3	6V-8836
M6	1.00	16	3	6V-8837
M6	1.00	20	3	6V-8214
M6	1.00	25	3	6V-8490
M6	1.00	30	3	8T-0640
M6	1.00	35	3	6V-2315
M6	1.00	40	3	2W-9499
M6	1.00	45	3	6V-7728
M6	1.00	50	3	8T-0275
M6	1.00	55	3	6V-8211
M6	1.00	60	3	8T-5066
M6	1.00	70	52	6V-8359
M6	1.00	110	92	295-4303
M6	1.00	130	106	384-8758
M6	1.00	140	116	6V-9606
-	Nut	-	-	6V-8225
-	Washer	-	-	9X-8267
<b>Thread Size (dia x pitch) M8 x 1.00</b>				
M8	1.25	10	1.90	2W-9533
M8	1.25	12	2.50	6V-2316
M8	1.25	14	3.75	8T-0642
M8	1.25	16	3.75	6V-5215
M8	1.25	20	3.75	6V-5217
M8	1.25	30	3.75	160-8756
M8	1.25	35	3.75	6V-5218
M8	1.25	40	3.75	204-0714
M8	1.25	45	3.75	8T-0276
M8	1.25	50	3.75	6V-3918
M8	1.25	55	3.75	8C-5748
M8	1.25	60	3.75	8T-0100
M8	1.00	65	43	8T-2316
M8	1.25	70	3.75	5P-8347
M8	1.25	75	3.75	6V-9804
M8	1.25	80	3.75	6V-5221
M8	1.25	85	63	6V-5222
M8	1.25	90	68	8T-0292
M8	1.25	100	78	6V-5223
M8	1.25	105	83	143-4654
M8	1.25	110	88	6V-3821
M8	1.25	120	98	6V-9607
M8	1.25	130	102	7X-0457
M8	1.25	140	112	7X-0870
M8	1.25	145	117	276-5413
M8	1.25	150	122	8C-4984
M8	1.25	160	132	3E-8005
M8	1.25	165	137	237-2227
M8	1.25	180	152	9X-6000
M8	1.25	200	172	9X-6628
M8	1.25	205	164	174-3490

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
M8	1.25	240	199	9X-6630
-	Nut	-	-	5P-7970
-	Washer	-	-	9M-1974
<b>Thread Size (dia x pitch) M10 x 1.00</b>				
M10	1.50	12	4.50	6V-8084
M10	1.50	16	4.50	6V-8212
M10	1.50	20	4.50	6V-6317
M10	1.50	25	4.50	6V-4248
M10	1.50	30	4.50	6V-1820
M10	1.50	35	4.50	6V-3822
M10	1.50	40	4.50	6V-5842
M10	1.50	45	4.50	6V-5843
M10	1.50	50	4.50	6V-4249
M10	1.50	55	4.50	160-8742
M10	1.50	60	4.50	6V-5230
M10	1.50	65	4.50	8T-5035
M10	1.50	70	44	6V-7981
M10	1.50	75	49	6V-5815
M10	1.50	80	54	8T-0643
M10	1.50	85	59	160-8492
M10	1.50	90	64	8T-0644
M10	1.50	100	74	6V-1819
M10	1.50	110	78	8T-0355
M10	1.50	120	94	8T-5030
M10	1.50	130	98	210-4460
M10	1.50	140	108	8C-2926
M10	1.50	150	118	8T-9085
M10	1.50	160	128	8T-0356
M10	1.50	170	138	212-2085
M10	1.50	180	148	8T-7950
M10	1.50	200	168	8T-6854
-	Nut	-	-	2Y-5829
-	Washer	-	-	6V-5839
<b>Thread Size (dia x pitch) M12 x 1.75</b>				
M12	1.75	16	5.25	6V-8177
M12	1.75	20	5.25	8T-0293
M12	1.75	25	4	388-8553
M12	1.75	30	5.25	6V-3668
M12	1.75	40	5.25	6V-8197
M12	1.75	45	5.25	6V-5684
M12	1.75	50	5.25	6V-7673
M12	1.75	60	5.25	6V-3823
M12	1.75	65	5.25	160-8750
M12	1.75	70	40	6V-8336
M12	1.75	80	50	6V-5696
M12	1.75	90	60	8T-0372
M12	1.75	95	65	8T-0279
M12	1.75	100	70	8T-0106
M12	1.75	110	80	8T-0646
M12	1.75	130	94	253-6267
M12	1.75	140	104	7X-0909

## Hex Head Bolts/Metric/Phosphate & Oil (Cont'd.)

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number	Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
M12	1.75	160	124	8T-0162	M16	2.00	195	163	236-6366 <sup>(6)</sup>
M12	1.75	180	144	8T-6991	M16	2.00	200	156	9X-2075
M12	1.75	200	147	8C-3226	M16	2.00	200	156	6C-5303 <sup>(6)</sup>
M12	1.75	220	167	515-4689 <sup>(6)</sup>	M16	2.00	215	183	190-3153 <sup>(6)</sup>
M12	1.75	300	251	152-7146 <sup>(6)</sup>	M16	2.00	220	163	8T-7013
M12	1.75	340	291	155-5081	M16	2.00	220	176	242-1811 <sup>(6)</sup>
M12	1.75	470	410	162-1497 <sup>(6)</sup>	M16	2.00	230	173	160-0017 <sup>(6)</sup>
-	Nut	-	-	6V-8149	M16	2.00	240	183	161-4517
-	Washer	-	-	5P-8245	M16	2.00	250	193	126-1499
<b>Thread Size (dia x pitch) M16 x 2.00</b>					M16	2.00	260	203	8T-5045
M16	2.00	16	6	8T-2926	M16	2.00	260	203	477-1344 <sup>(6)</sup>
M16	2.00	25	6	6V-5224	M16	2.00	270	213	505-0058
M16	2.00	30	6	8T-0299	M16	2.00	420	384	120-9486 <sup>(6)</sup>
M16	2.00	35	6	6V-5844	M16	2.00	470	410	162-1498 <sup>(6)</sup>
M16	2.00	40	6	290-7296 <sup>(6)</sup>	-	Nut	-	-	8T-1757
M16	2.00	45	6	8T-0375	-	Washer	-	-	9X-8268
M16	2.00	45	6	154-1578 <sup>(6)</sup>	<b>Thread Size (dia x pitch) M20 x 2.50</b>				
M16	2.00	50	6	178-3707 <sup>(6)</sup>	M20	2.50	20	7.50	113-6989
M16	2.00	55	6	162-2776 <sup>(6)</sup>	M20	2.50	25	7.50	113-6990
M16	2.00	55	6	357-6018 <sup>(6)</sup>	M20	2.50	30	7.50	8T-0651
M16	2.00	60	6	6V-3303	M20	2.50	40	7.50	6V-7729
M16	2.00	60	22	202-6473 <sup>(6)</sup>	M20	2.50	45	7.50	8T-0652
M16	2.00	65	27	8T-0088	M20	2.50	45	6.20	219-7569 <sup>(6)</sup>
M16	2.00	65	27	441-6455 <sup>(6)</sup>	M20	2.50	50	7.50	6V-3531
M16	2.00	70	32	8T-0357	M20	2.50	55	15	093-6096
M16	2.00	70	32	357-6019 <sup>(6)</sup>	M20	2.50	55	7.50	6V-6787
M16	2.00	75	37	357-9606	M20	2.50	60	7.50	6V-3532
M16	2.00	80	42	8T-0281	M20	2.50	60	7.5	287-3585 <sup>(6)</sup>
M16	2.00	80	42	137-3301 <sup>(6)</sup>	M20	2.50	70	7.5	6V-5845
M16	2.00	90	52	8T-0358	M20	2.50	70	7.5	173-9685
M16	2.00	90	52	6C-8648 <sup>(6)</sup>	M20	2.50	80	34	6V-3669
M16	2.00	95	57	281-1112 <sup>(6)</sup>	M20	2.50	85	39	6V-5231
M16	2.00	100	61.65	8T-0207	M20	2.50	90	44	8T-0360
M16	2.00	100	62	170-1483 <sup>(6)</sup>	M20	2.50	90	44	457-9304
M16	2.00	110	72	8T-0649	M20	2.50	90	44	145-9278 <sup>(6)</sup>
M16	2.00	110	72	6C-5304 <sup>(6)</sup>	M20	2.50	100	54	6V-9667
M16	2.00	120	82	8T-0282	M20	2.50	110	64	8T-0362
M16	2.00	120	82	235-9631 <sup>(6)</sup>	M20	2.50	110	64	457-9305
M16	2.00	130	86	8T-0359	M20	2.50	110	64	5Q-3560 <sup>(6)</sup>
M16	2.00	130	86	6C-3522 <sup>(6)</sup>	M20	2.50	120	74	8T-0070
M16	2.00	140	96	6V-7675	M20	2.50	120	74	165-9756 <sup>(6)</sup>
M16	2.00	140	96	235-8810 <sup>(6)</sup>	M20	2.50	130	78	8T-0655
M16	2.00	150	106.2	6V-8154	M20	2.50	130	78	5Q-3561 <sup>(6)</sup>
M16	2.00	150	116	236-6365 <sup>(6)</sup>	M20	2.50	140	88	6V-9167
M16	2.00	160	116	8T-0650	M20	2.50	140	88	295-2409 <sup>(6)</sup>
M16	2.00	160	116	175-0454 <sup>(6)</sup>	M20	2.50	150	98	8T-0656
M16	2.00	170	126	6C-8647 <sup>(6)</sup>	M20	2.50	160	108	8T-0657
M16	2.00	180	136	8T-5002	M20	2.50	160	108	127-4836
M16	2.00	180	136	9X-6493 <sup>(6)</sup>	M20	2.50	170	118	6V-8807
M16	2.00	190	146	236-0483 <sup>(6)</sup>	M20	2.50	170	118	179-8733 <sup>(6)</sup>

# Bolts

## Hex Head Bolts/Metric/Phosphate & Oil (Cont'd.)

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
M20	2.50	170	132	189-3925 <sup>(7)</sup>
M20	2.50	180	128	8T-0658
M20	2.50	190	138	252-9148
M20	2.50	200	163	190-3152 <sup>(7)</sup>
M20	2.50	200	148	9X-6494 <sup>(7)</sup>
M20	2.50	220	155	8T-7505
M20	2.50	230	165	467-426 <sup>(7)2</sup>
M20	2.50	240	175	8T-0161
M20	2.50	240	203	190-3154 <sup>(7)</sup>
M20	2.50	280	215	9X-2475
M20	2.50	350	285	140-7092 <sup>(7)</sup>
M20	2.50	390	325	098-6000
-	Nut	-	-	6V-7742
-	Washer	-	-	8T-3282
Thread Size (dia x pitch) M24 x 3.00				
M24	3.00	50	9	6V-9199
M24	3.00	60	9	8T-0380
M24	3.00	70	9	8T-0664
M24	3.00	70	9	201-7949 <sup>(7)</sup>
M24	3.00	80	9	6V-8133
M24	3.00	80	9	173-9779 <sup>(7)</sup>
M24	3.00	100	46	8T-0667
M24	3.00	100	46	173-9684
M24	3.00	110	56	8T-0668
M24	3.00	110	56	244-6356 <sup>(7)</sup>
M24	3.00	120	66	137-3274
M24	3.00	120	66	112-1531
M24	3.00	130	70	8T-0669
M24	3.00	140	80	8T-0670
M24	3.00	140	80	112-1532
M24	3.00	150	90	141-6373
M24	3.00	160	100	8T-0672
M24	3.00	160	100	112-1533
M24	3.00	170	110	102-6445 <sup>(7)</sup>
M24	3.00	180	120	8T-0674
M24	3.00	180	120	353-1660 <sup>(7)</sup>
M24	3.00	200	140	6V-8198
M24	3.00	220	147	8T-0364
M24	3.00	240	167	8T-0365
M24	3.00	250	177	6V-8207
M24	3.00	260	187	8T-0367
M24	3.00	270	221	177-8363 <sup>(7)</sup>
M24	3.00	280	207	8T-5397
M24	3.00	300	227	152-0604
M24	3.00	340	267	166-9314

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
M24	3.00	420	347	100-3204
M24	3.00	500	427	129-0438
M24	3.00	700	627	489-1832
-	Nut	-	-	7X-0851
-	Washer	-	-	6V-8237
Thread Size (dia x pitch) M30 x 3.50				
M30	3.50	50	10.5	9X-2199
M30	3.50	60	7	286-9617
M30	3.50	75	9	7Y-1810 <sup>(7)</sup>
M30	3.50	80	10.5	8C-3222
M30	3.50	80	14	274-4642 <sup>(7)</sup>
M30	3.50	85	19	145-2970 <sup>(7)</sup>
M30	3.50	90	10.5	173-9683 <sup>(7)</sup>
M30	3.50	95	29	152-0194
M30	3.50	100	10.5	8T-0368
M30	3.50	100	34	202-7708 <sup>(7)</sup>
M30	3.50	110	44	8T-0283 <sup>(7)</sup>
M30	3.50	130	58	177-9754 <sup>(7)</sup>
M30	3.50	140	68	8T-0370
M30	3.50	150	78	101-1806 <sup>(7)</sup>
M30	3.50	160	88	177-9755 <sup>(7)</sup>
M30	2.00	190	118	493-5352 <sup>(7)</sup>
M30	3.50	190	118	171-9325 <sup>(7)</sup>
M30	3.50	200	128	163-8682 <sup>(7)</sup>
M30	3.50	210	134	199-4500 <sup>(7)</sup>
M30	3.50	210	138	163-8683 <sup>(7)</sup>
M30	3.50	220	135	178-2992 <sup>(7)</sup>
M30	3.50	235	150	199-4502 <sup>(7)</sup>
M30	3.50	240	155	9X-6151
M30	3.50	240	155	334-6836 <sup>(7)</sup>
M30	3.50	260	188	125-3300
M30	3.50	260	175	139-5942 <sup>(7)</sup>
M30	3.50	280	195	138-4179 <sup>(7)</sup>
M30	3.50	320	235	139-5943 <sup>(7)</sup>
M30	3.50	350	265	3E-8036 <sup>(7)</sup>
M30	3.50	450	365	113-1047 <sup>(7)</sup>
M30	3.50	500	415	3E-8009
M30	3.50	520	435	3E-8010
M30	3.50	550	460	332-4571
M30	3.50	620	535	3E-8012
M30	3.50	700	615	3E-8013
M30	3.50	760	675	3E-8011
-	Nut	-	-	8T-1583
-	Washer	-	-	9X-8399

## Hex Head Bolts/Metric/Zinc Plated

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
<b>Thread Size (dia x pitch) M6 x 1.00</b>				
M6	1.00	18	3	233-1291
M6	1.00	40	3	6C-9129
M6	1.00	45	3	8T-2947
M6	1.00	55	3	118-6503
-	Nut	-	-	5C-2890
-	Washer	-	-	9X-8256
<b>Thread Size (dia x pitch) M8 x 1.25</b>				
M8	1.25	12	2.50	421-4221
M8	1.25	16	3.75	8T-4200
M8	1.25	16	3.75	457-8757
M8	1.25	20	3.75	453-3432
M8	1.25	22	3.75	199-2235
M8	1.25	25	3.75	453-3433
M8	1.25	28	18	446-8221
M8	1.25	30	3.75	457-8758
M8	1.25	35	24.10	351-2246
M8	1.25	40	3.75	8T-4197
M8	1.25	45	3.75	453-3435
M8	1.25	50	3.75	247-4285
M8	1.25	60	4.50	9X-6277
M8	1.25	80	3.75	190-7979
M8	1.25	100	3.75	085-4773
M8	1.25	105	83	305-4746
M8	1.25	110	88	453-3438
M8	1.25	140	112	453-3439
M8	1.25	180	152	452-4277
-	Nut	-	-	5C-7261
-	Washer	-	-	8T-4224
<b>Thread Size (dia x pitch) M10 x 1.25 and M10 x 1.50</b>				
M10	1.25	16	3.75	251-1391
M10	1.25	20	3.75	5I-4936
M10	1.25	25	3.75	127-4839
M10	1.25	30	4.50	9X-8912
M10	1.25	35	3.75	303-8825
M10	1.25	40	3.75	128-7747
M10	1.25	45	27	154-2235
M10	1.25	50	3.75	388-6412
M10	1.25	55	33.75	205-6883
M10	1.25	70	44	5I-4969
M10	1.25	80	54	125-3003
M10	1.50	16	4.50	8T-4191
M10	1.50	20	4.50	457-8759
M10	1.50	25	4.50	455-3798
M10	1.50	30	4.50	453-3440
M10	1.50	35	4.50	457-5821
M10	1.50	40	4.50	151-8754
M10	1.50	40	14	279-0961
M10	1.50	45	19	172-7865
M10	1.50	50	4.5	323-3730
M10	1.50	60	34	172-7864

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
M10	1.50	60	4.50	180-4686
M10	1.50	65	4.50	260-6673
M10	1.50	70	4.50	237-2228
M10	1.50	75	4.50	438-9251
M10	1.50	86	25.40	271-3567
M10	1.50	95	69	271-7649
M10	1.50	100	4.50	8T-4782
M10	1.50	110	84	453-3442
M10	1.50	120	4.50	153-8497
M10	1.50	135	103	145-7231
M10	1.50	155	123	178-3333
M10	1.50	160	128	453-3444
M10	1.50	180	148	453-3445
Nut	1.50	-	-	8T-4133
Washer	1.50	-	-	8T-4121
<b>Thread Size (dia x pitch) M12 x 1.25 and M12 x 1.75</b>				
M12	1.25	20	3.75	199-0957
M12	1.25	25	3.75	150-3715
M12	1.25	30	5.25	119-9880
M12	1.25	35	3.75	176-8518
M12	1.25	40	5.25	143-0116
M12	1.25	45	15	226-3694
M12	1.75	20	5.25	461-2757
M12	1.75	30	5.25	451-2181
M12	1.75	35	5.25	453-3446
M12	1.75	40	5.25	453-3447
M12	1.75	45	15	453-3448
M12	1.75	45	5.25	165-7019
M12	1.75	50	20	453-3449
M12	1.75	60	30	453-3450
M12	1.75	70	40	491-0944
M12	1.75	75	5.25	438-9215
M12	1.75	80	5.25	092-5524
M12	1.75	90	10	7Y-0589
M12	1.75	100	80	365-0628
M12	1.75	100	40	286-0433
M12	1.75	105	80	198-5646
M12	1.75	115	85	250-0492
M12	1.75	125	60	124-5556
Nut	1.75	-	-	8T-4244
Washer	1.75	-	-	8T-4223
<b>Thread Size (dia x pitch) M16 x 2.00</b>				
M16	2.00	25	6	447-1730
M16	2.00	35	6	451-2180
M16	2.00	40	6	453-1259
M16	2.00	45	5	447-1709
M16	2.00	50	12	447-1711
M16	2.00	55	6	453-2837
M16	2.00	60	6	447-1707
M16	2.00	70	32	453-2838
M16	2.00	80	42	447-1708

# Bolts

## Hex Head Bolts/Metric/Zinc Plated (Cont'd.)

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
M16	2.00	90	52	447-1704
M16	2.00	90	6	453-4135
M16	2.00	100	6	453-4133
M16	2.00	100	56	522-0896
M16	2.00	110	72	453-1256
M16	2.00	120	82	447-1703
M16	2.00	130	86	447-1706
M16	2.00	140	96	453-2840
M16	2.00	150	106	453-2841
M16	2.00	160	116	453-2842
M16	2.00	170	126	486-6429
M16	2.00	180	136	453-2843
M16	2.00	190	146	454-6928
M16	2.00	200	156	453-4169
M16	2.00	230	173	328-4315
M16	2.00	240	183	453-4171
M16	2.00	260	203	453-4172
M16	2.00	280	223	453-4136
-	Nut	-	-	8T-4132
-	Washer	-	-	8T-4122
Thread Size (dia x pitch) M18 x 1.50 and M18 x 2.50				
M18	1.50	33	4.50	157-1442
M18	1.50	40	4.50	234-0390
M18	1.50	65	23	275-2231
M18	1.50	80	38	134-4765
M18	1.50	105	63	370-0553
M18	2.50	25	7.50	300-2648
M18	2.50	45	7.50	135-9421
M18	2.50	50	7.50	135-9422
M18	2.50	55	7.50	183-8005
M18	2.50	110	68	255-8933
Washer	-	-	-	8T-4123
Thread Size (dia x pitch) M20 x 2.50				
M20	2.50	30	30	453-2844
M20	2.50	35	7.50	453-4174
M20	2.50	40	7.50	453-2845
M20	2.50	45	6.20	447-1717
M20	2.50	50	4	447-1718
M20	2.50	60	14	447-1719
M20	2.50	70	7.50	447-1720
M20	2.50	80	34	447-1716
M20	2.50	90	44	453-2847
M20	2.50	100	54	447-1731
M20	2.50	120	74	447-1715
M20	2.50	130	7.50	168-7790
M20	2.50	130	78	447-1712
M20	2.50	150	98	447-1714
M20	2.50	160	6.2	146-4176
M20	2.50	160	122	186-5649
M20	2.50	170	118	7Y-5260
M20	2.50	180	128	453-4137
M20	2.50	180	142	7X-2568

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
M20	2.50	190	138	7Y-5261
M20	2.50	200	148	453-2850
M20	2.50	210	145	4I-6765
M20	2.50	220	155	453-2851
M20	2.50	280	215	198-6003
M20	2.50	320	255	454-3206
M20	2.50	450	385	154-7415
-	Washer	-	-	8T-4167
Thread Size (dia x pitch) M24 x 3.00				
M24	3.00	35	9	453-4177
M24	3.00	40	9	453-2852
M24	3.00	45	9	453-2853
M24	3.00	50	9	453-2854
M24	3.00	60	9	447-1722
M24	3.00	70	9	447-1726
M24	3.00	80	9	447-1725
M24	3.00	80	9	451-4523
M24	3.00	90	36	453-2855
M24	3.00	100	46	453-2856
M24	3.00	110	56	447-1723
M24	3.00	120	66	430-2986
M24	3.00	120	66	447-1724
M24	3.00	140	80	453-4179
M24	3.00	143	100	253-0777
M24	3.00	150	90	447-1732
M24	3.00	160	100	447-1721
M24	3.00	180	9	169-2519
M24	3.00	180	120	430-2985
M24	3.00	190	130	454-6929
M24	3.00	200	152	201-2836
M24	3.00	200	140	430-2984
M24	3.00	210	165	115-2748
M24	3.00	220	147	453-4182
M24	3.00	270	197	241-1912
M24	3.00	350	277	453-2857
-	Washer	-	-	9X-8258
Thread Size (dia x pitch) M30 x 3.50				
M30	3.50	80	14	453-2858
M30	3.50	90	24	447-1728
M30	3.50	100	34	451-9261
M30	3.50	110	44	447-1729
M30	3.50	120	12	309-6466
M30	3.50	120	54	447-1733
M30	3.50	130	10.50	453-4189
M30	3.50	140	68	453-2859
M30	3.50	150	78	447-1727
M30	3.50	160	88	447-2461
M30	3.50	220	135	453-4192
M30	3.50	260	188	453-4193
M30	3.50	380	295	177-1449
M30	3.50	435	350	453-2860
M30	3.50	450	365	453-2861

**Hex Head Bolts/Metric/Zinc Plated (Cont'd.)**

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
-	Nut	-	-	451-2186

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
-	Washer	-	-	309-2686

# Bolts

## Hex Head Bolts/Metric/Zinc Flake

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
<b>Thread Size (dia x pitch) M6 x 1.00</b>				
M6	1.00	10	3	7X-2619
M6	1.00	12	3	8T-4171
M6	1.00	14	3	8T-4970
M6	1.00	16	3	5C-9553
M6	1.00	20	3	8T-4138
M6	1.00	22	3	6V-6936
M6	1.00	25	3	6V-7357
M6	1.00	27	9	491-4660
M6	1.00	30	3	8T-4971
M6	1.00	32	14	488-9170
M6	1.00	35	3	7X-2533
M6	1.00	35	22	349-6111
M6	1.00	40	3	8C-8451
M6	1.00	42	24	491-3147
M6	1.00	45	3	9X-2480
M6	1.00	50	3	7X-2534
M6	1.00	60	3	7X-2535
M6	1.00	65	47	287-8257
M6	1.00	70	52	8T-3844
M6	1.00	80	62	8T-6974
M6	1.00	90	72	7X-7888
M6	1.00	95	77	8T-4145
M6	1.00	100	82	7X-0465
M6	1.00	100	82	457-2451 <sup>(8)</sup>
M6	1.00	180	156	9X-8498
M6	1.00	200	176	7X-0490
-	Nut	-	-	344-5673
-	Washer	-	-	9X-8256
<b>Thread Size (dia x pitch) M8 x 1.25</b>				
M8	1.25	10	1.9	7X-2620
M8	1.25	12	2.5	8T-4199
M8	1.25	14	2.5	7X-2536
M8	1.25	16	3.75	8T-4200
M8	1.25	18	3.75	6V-5216
M8	1.25	20	3.75	8T-4189
M8	1.25	25	3.75	8T-4908
M8	1.25	30	3.75	8T-7547
M8	1.25	35	3.75	7X-2537
M8	1.25	40	3.75	099-3649
M8	1.25	45	3.75	7X-0818
M8	1.25	45	27	349-6110
M8	1.25	50	3.75	8T-6912
M8	1.25	50	34	305-5385 <sup>(8)</sup>
M8	1.25	55	3.75	8T-7329
M8	1.25	60	3.75	8T-6869
M8	1.25	65	3.75	285-9066
M8	1.25	70	3.75	8T-6870
M8	1.25	75	3.75	096-5866

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
M8	1.25	80	3.75	8T-3647
M8	1.25	85	63	243-7112
M8	1.25	90	68	8T-4177
M8	1.25	100	78	7X-2538
M8	1.25	110	88	7X-2539
M8	1.25	115	93	269-8354
M8	1.25	120	98	7X-2540
M8	1.25	125	103	153-3061
M8	1.25	130	102	108-2989
M8	1.25	140	112	7X-2541
M8	1.25	145	117	301-9551
M8	1.25	150	122	7X-2542
M8	1.25	160	132	8T-7352
M8	1.25	170	142	317-1119
M8	1.25	180	152	315-5494
M8	1.25	220	179	9X-2028
-	Nut	-	-	344-5674
-	Washer	-	-	8T-4224
<b>Thread Size (dia x pitch) M10 x 1.25</b>				
M10	1.50	12	4.5	7X-2621
M10	1.50	16	4.5	8T-4191
M10	1.50	20	4.5	8T-4137
M10	1.50	25	4.5	8T-4136
M10	1.50	30	4.5	8T-4195
M10	1.50	35	4.5	8T-4196
M10	1.50	35	4.5	183-7121 <sup>(8)</sup>
M10	1.50	40	4.5	8T-4186
M10	1.50	45	4.5	8T-4182
M10	1.50	45	19	311-8193 <sup>(8)</sup>
M10	1.50	50	4.5	8T-4185
M10	1.50	50	4.5	250-0394 <sup>(8)</sup>
M10	1.50	55	4.5	085-8091
M10	1.50	55	29	276-1326 <sup>(8)</sup>
M10	1.50	60	4.5	8T-6466
M10	1.50	60	4.5	451-2617 <sup>(8)</sup>
M10	1.50	70	44	8T-5005
M10	1.50	70	44	196-6723 <sup>(8)</sup>
M10	1.50	75	49	280-8912
M10	1.50	80	54	8T-4172
M10	1.50	80	4.5	272-2351
M10	1.50	90	64	8T-4178
M10	1.50	90	4.5	272-3089
M10	1.50	100	74	8T-4198
M10	1.50	105	79	297-8107
M10	1.50	110	84	8T-6685
M10	1.50	120	94	7X-2543
M10	1.50	130	98	8T-5436
M10	1.50	140	108	7X-2544
M10	1.50	150	118	7X-2545



## Hex Head Bolts/Metric/Zinc Flake (Cont'd.)

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
M10	1.50	155	123	178-3333
M10	1.50	160	128	8T-6408
M10	1.50	170	138	308-0918
M10	1.50	175	143	313-5645
M10	1.50	180	148	7X-2546
M10	1.50	190	158	316-8227
M10	1.50	200	168	7X-2547
M10	1.50	210	172	6E-5293
M10	1.50	220	175	7X-0474
M10	1.50	230	185	153-2146
M10	1.50	240	195	159-7463
M10	1.50	250	205	157-4822
M10	1.50	260	215	8T-4144
M10	1.50	270	225	295-8888
M10	1.50	295	255	190-8250
M10	1.50	300	255	286-3219
-	Nut	-	-	344-5675
-	Washer	-	-	8T-4121
Thread Size (dia x pitch) M12 x 1.25				
M12	1.75	16	5.25	7X-2548
M12	1.75	20	5.25	8T-4179
M12	1.75	25	5.25	8T-4192
M12	1.75	30	5.25	8T-4139
M12	1.75	35	5.25	8T-4956
M12	1.75	35	5.25	362-1320 <sup>(9)</sup>
M12	1.75	40	5.25	8T-4183
M12	1.75	40	5.25	259-2627 <sup>(9)</sup>
M12	1.75	45	5.25	8T-4184
M12	1.75	45	5.25	319-6699 <sup>(9)</sup>
M12	1.75	50	5.25	8T-4194
M12	1.75	50	30	359-3328
M12	1.75	55	5.25	096-9986
M12	1.75	60	5.25	8T-4910
M12	1.75	65	5.25	172-9966
M12	1.75	70	40	8T-4648
M12	1.75	75	5.25	7Y-7992
M12	1.75	80	50	8T-6868
M12	1.75	85	55	485-1484
M12	1.75	85	55	323-3731 <sup>(9)</sup>
M12	1.75	90	60	8T-4176
M12	1.75	90	60	356-9261 <sup>(9)</sup>
M12	1.75	100	70	7X-2549
M12	1.75	110	80	7X-2550
M12	1.75	110	80	319-6698 <sup>(9)</sup>
M12	1.75	120	90	8T-5041
M12	1.75	130	94	8T-5001
M12	1.75	140	104	8T-5412
M12	1.75	140	60	151-1174
M12	1.75	150	114	8T-5092
M12	1.75	160	124	8T-7930

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
M12	1.75	170	134	372-2073
M12	1.75	180	144	8T-7929
M12	1.75	190	154	7X-2456
M12	1.75	190	23	296-8187
M12	1.75	200	147	7X-2551
M12	1.75	200	147	483-2035 <sup>(9)</sup>
M12	1.75	220	167	7X-7960
M12	1.75	240	191	7X-3335
M12	1.75	260	211	8C-8407
M12	1.75	300	251	270-5290 <sup>(9)</sup>
-	Nut	-	-	329-3356
-	Washer	-	-	8T-4223
Thread Size (dia x pitch) M16 x 1.25				
M16	2.00	20	6	142-8545
M16	2.00	25	6	8T-4190
M16	2.00	30	6	7X-2552
M16	2.00	35	6	8T-4779
M16	2.00	40	6	7X-2553
M16	2.00	45	6	8T-7338
M16	2.00	50	6	8T-4193
M16	2.00	50	6	485-2850
M16	2.00	55	6	099-0169
M16	2.00	60	6	8T-4140
M16	2.00	60	22	339-1910 <sup>(9)</sup>
M16	2.00	65	27	118-4977
M16	2.00	70	32	7X-2554
M16	2.00	70	32	118-7313 <sup>(9)</sup>
M16	2.00	75	37	489-4520
M16	2.00	80	42	7X-2555
M16	2.00	80	42	303-9441 <sup>(9)</sup>
M16	2.00	85	47	106-9162
M16	2.00	90	52	8T-4175
M16	2.00	90	6	489-3182
M16	2.00	90	6	170-8555
M16	2.00	90	52	141-8390 <sup>(9)</sup>
M16	2.00	90	52	303-9442 <sup>(9)</sup>
M16	2.00	100	56	7X-2556
M16	2.00	100	6	136-4182
M16	2.00	110	72	8T-4173
M16	2.00	110	72	392-9233 <sup>(9)</sup>
M16	2.00	120	82	8T-4174
M16	2.00	130	86	7X-2475
M16	2.00	140	96	7X-2557
M16	2.00	140	6	170-8556
M16	2.00	150	106	7X-2558
M16	2.00	160	116	7X-2559
M16	2.00	170	126	8T-6384
M16	2.00	180	136	8T-6385
M16	2.00	190	146	7Y-5227 <sup>(9)</sup>
M16	2.00	200	156	8T-6383

# Bolts

## Hex Head Bolts/Metric/Zinc Flake (Cont'd.)

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
M16	2.00	210	153	7Y-3557 <sup>(10)</sup>
M16	2.00	220	163	7X-2560
M16	2.00	240	183	100-8255
M16	2.00	260	203	8T-6382
M16	2.00	280	223	110-6968
M16	2.00	300	256	110-6969
M16	2.00	310	253	100-3740
M16	2.00	460	403	128-7800
-	Nut	-	-	8T-4132
-	Washer	-	-	9X-8257
<b>Thread Size (dia x pitch) M20 x 1.25</b>				
M20	2.50	30	7.5	8T-4780
M20	2.50	35	7.5	7X-2561
M20	2.50	40	7.5	8T-5460
M20	2.50	45	7.5	7X-2562
M20	2.50	45	7.5	288-3678 <sup>(10)</sup>
M20	2.50	50	7.5	8T-6430
M20	2.50	50	7.5	287-5701 <sup>(10)</sup>
M20	2.50	55	7.5	304-9129
M20	2.50	55	7.5	290-6437 <sup>(10)</sup>
M20	2.50	60	7.5	7X-2563
M20	2.50	60	7.5	106-4175 <sup>(10)</sup>
M20	2.50	60	7.5	257-8529 <sup>(10)</sup>
M20	2.50	65	7.5	262-7686
M20	2.50	70	7.5	8T-4141
M20	2.50	70	7.5	378-2695 <sup>(10)</sup>
M20	2.50	75	29	166-1880 <sup>(10)</sup>
M20	2.50	80	7.5	180-5932
M20	2.50	80	34	213-5007 <sup>(10)</sup>
M20	2.50	90	44	7X-2564
M20	2.50	90	44	112-3927 <sup>(10)</sup>
M20	2.50	90	44	303-9444 <sup>(10)</sup>
M20	2.50	100	54	7X-2565
M20	2.50	110	64	7X-2566
M20	2.50	110	64	112-3926 <sup>(10)</sup>
M20	2.50	110	64	303-9443 <sup>(10)</sup>
M20	2.50	120	74	8T-6381
M20	2.50	120	74	201-8034 <sup>(10)</sup>
M20	2.50	125	74	339-1911 <sup>(10)</sup>
M20	2.50	130	78	7X-2532
M20	2.50	140	88	8C-8478
M20	2.50	140	88	225-0098 <sup>(10)</sup>
M20	2.50	150	98	8T-4170
M20	2.50	150	98	202-0308 <sup>(10)</sup>
M20	2.50	160	108	7X-2488
M20	2.50	180	128	7X-2568
M20	2.50	190	138	437-5742
M20	2.50	200	148	7X-2569
M20	2.50	220	155	7X-2570
M20	2.50	230	165	4I-6766

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
M20	2.50	240	175	7X-2571
M20	2.50	240	175	8T-1491 <sup>(10)</sup>
M20	2.50	250	185	089-7990
M20	2.50	260	195	125-3297
M20	2.50	270	205	199-7178
M20	2.50	290	225	222-3595
M20	2.50	310	245	3E-8045
M20	2.50	320	255	7X-2440 <sup>(10)</sup>
M20	2.50	330	265	4I-6994
M20	2.50	350	285	473-7175 <sup>(10)</sup>
M20	2.50	380	315	296-2039
-	Nut	-	-	8T-4131
-	Washer	-	-	8T-4123
<b>Thread Size (dia x pitch) M24 x 1.25</b>				
M24	3.00	35	9	7X-2572
M24	3.00	40	9	7X-2573
M24	3.00	45	9	7X-2574
M24	3.00	50	9	8T-5379
M24	3.00	60	9	7X-2575
M24	3.00	70	9	7X-2576
M24	3.00	75	9	8T-0381
M24	3.00	80	9	8T-5878
M24	3.00	80	9	114-6099 <sup>(10)</sup>
M24	3.00	90	36	8T-0666 <sup>(10)</sup>
M24	3.00	100	46	7X-2489
M24	2.00	100	46	286-0721
M24	3.00	100	9	234-2007
M24	3.00	100	46	112-3929 <sup>(10)</sup>
M24	3.00	110	56	7X-2454
M24	3.00	110	56	293-4938 <sup>(10)</sup>
M24	3.00	120	66	8T-0363
M24	3.00	120	66	475-9623
M24	3.00	120	9	152-0191
M24	3.00	120	66	112-3931 <sup>(10)</sup>
M24	3.00	125	65	288-3686 <sup>(10)</sup>
M24	3.00	130	70	8T-6380
M24	3.00	130	70	112-3928 <sup>(10)</sup>
M24	3.00	140	80	8T-4649
M24	3.00	140	80	112-3930 <sup>(10)</sup>
M24	3.00	150	90	8C-3290
M24	3.00	150	90	147-5112 <sup>(10)</sup>
M24	3.00	160	100	7X-2567
M24	3.00	160	100	475-9624
M24	3.00	160	100	169-5792 <sup>(10)</sup>
M24	3.00	170	110	116-2434 <sup>(10)</sup>
M24	3.00	180	120	7X-2465
M24	3.00	180	108	319-3520
M24	3.00	190	130	7Y-5235
M24	3.00	190	130	298-2764 <sup>(10)</sup>
M24	3.00	200	140	7X-2578

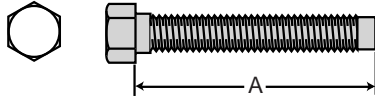
## Hex Head Bolts/Metric/Zinc Flake (Cont'd.)

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
M24	3.00	200	140	106-7994 <sup>(11)</sup>
M24	3.00	220	147	7X-2476
M24	3.00	240	167	7X-2579
M24	3.00	240	120	348-0255
M24	3.00	260	187	7X-2455
M24	3.00	280	207	9X-8477
M24	3.00	300	227	9X-8913
M24	3.00	315	242	121-7897
M24	3.00	320	247	104-9255
M24	3.00	340	267	127-4834
M24	3.00	350	277	140-3048
M24	3.00	360	287	132-5794
M24	3.00	380	307	41-6806
M24	3.00	420	347	310-4096
M24	3.00	500	427	488-9235
-	Nut	-	-	8T-4001
-	Washer	-	-	8T-4167
Thread Size (dia x pitch) M30 x 1.25				
M30	3.50	50	10.5	7X-7900
M30	3.50	70	10.5	7Y-5232
M30	3.50	80	10.5	8C-8723
M30	3.50	90	10.5	7X-2580
M30	3.50	100	10.5	7X-2581
M30	3.50	110	44	7X-2582
M30	3.50	110	44	302-4536 <sup>(11)</sup>
M30	3.50	120	54	335-8955
M30	3.50	120	54	7X-2583 <sup>(11)</sup>
M30	3.50	130	10.5	130-0099
M30	3.50	140	68	7X-2584
M30	3.50	150	78	107-3953
M30	3.50	160	88	7X-2585

Thread Size	Pitch (mm)	OAL (mm)	Grip Length (mm)	Part Number
M30	3.50	160	88	313-2634 <sup>(11)</sup>
M30	3.50	180	108	297-0846
M30	3.50	180	108	7X-2586 <sup>(11)</sup>
M30	2.00	180	108	438-9254
M30	3.50	200	128	9X-6385
M30	3.50	200	128	190-8494 <sup>(11)</sup>
M30	2.00	200	128	438-9255
M30	3.50	210	125	304-7356 <sup>(11)</sup>
M30	3.50	210	134	207-4918
M30	3.50	220	135	3E-9850
M30	3.50	230	145	107-8425 <sup>(11)</sup>
M30	3.50	240	155	217-4455
M30	3.50	260	175	7Y-5231
M30	3.50	280	195	108-7931 <sup>(11)</sup>
M30	3.50	290	205	376-9256
M30	3.50	300	215	3E-7442
M30	3.50	300	215	264-4449 <sup>(11)</sup>
M30	3.50	320	235	264-4450 <sup>(11)</sup>
M30	3.50	350	265	264-4451 <sup>(11)</sup>
M30	3.50	360	275	9X-8478
M30	3.50	370	285	264-4452 <sup>(11)</sup>
M30	3.50	380	295	264-4453 <sup>(11)</sup>
M30	3.50	400	315	100-3205 <sup>(11)</sup>
M30	3.50	420	335	152-1351 <sup>(11)</sup>
M30	3.50	430	345	264-4454 <sup>(11)</sup>
M30	3.50	435	350	105-6203
M30	3.50	450	365	176-7524
M30	3.50	650	565	345-8533
-	Nut	-	-	8C-8722
-	Washer	-	-	9X-8258

# Bolts

## Forcing Bolts/Inch/Fine Thread UNF

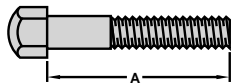


Thread Size (in - TPI)	A	Grip Length	Part Number
	Length		
7/8 - 14	5 3/8 in	0.33 in	5P-5265
1 - 14	6 15/16 in	0.97 in	5P-8715
1 1/2 - 12	2 7/8 in	0.33 in	6V-0187
1 1/2 - 12	4 3/4 in	0.33 in	5P-5264

## Forcing Bolts/Metric/Coarse Thread

Thread Size (dia x pitch)	A	Grip Length	Part Number
	Length		
M24 x 3.0	190 mm	13 mm	136-1978

## Track Bolts/Inch



Model	Thread Size (in - TPI)	A	Part Number
		Bolt Length	
307, E70, E70B	1/2 - 20	35 mm (1.38 in)	102-8072
307, PM465	1/2 - 20	38.1 mm (1.50 in)	3A-9605
D3, D4, 931	1/2 - 20	38.1 mm (1.50 in)	8H-7504
931C, 933C, 935C, 941, D3, D4, D4B, D3C, D4C, D3G, D4G, 215, TR225B, AP1050, PR450, SF350	9/16 - 18	41.4 mm (1.63 in)	4K-7038
AP650B, BG225C, AP1050B, BG245C	9/16 - 18	50.8 mm (2 in)	8S-4745
D5C, 561, D4, D5, D6, 941, 943, 951, 953, 955, 977, 205, 211, 213, 215, 215SA, 219, 225, PR750, PR1000, PM565, SF500, TR500 <sup>(12)</sup>	5/8 - 18	51 mm (2.01 in)	7H-3597
D5N, D5M, D5C, D5H, D4H, 953, 939, 939C	5/8 - 18	55.1 mm (2.17 in)	9G-3110
D6, D7, 572, 955, 963, 977, 215SA, 219, 225, 225SA, 229, 231, 235, FB227	3/4 - 16	54.8 mm (2.16 in)	1S-1859
D6N, D7N, D6R, D6H, D6M, D5H, 517, 257, FB227, D6HD	3/4 - 16	60.9 mm (2.40 in)	6V-1792
D7, D8, 571, 572, 973, 977, 235, 583	3/4 - 16	61.2 mm (2.41 in)	7H-3598
D7R, D7H, D8, 973, 983, 235	7/8 - 14	67.5 mm (2.66 in)	7H-3599
235	7/8 - 14	71.1 mm (2.80 in)	5P-4028
D8T/R/N, D8L, 583R, 578	7/8 - 14	87.1 mm (3.43 in)	6V-1723
D9, 594, 245 <sup>(13)</sup>	1 - 14	74.6 mm (2.94 in)	2M-5657
245	1 - 14	78.9 mm (3.11 in)	3T-6308
D9T/R/N	1 - 14	89.9 mm (3.54 in)	6T-2638
D9L, 589	1 - 14	96.7 mm (3.81 in)	6V-1726
D10T/R/N	1 1/8 - 12	96 mm (3.78 in)	7T-1000
D10	1 1/8 - 12	106.9 mm (4.21 in)	5P-3868
D11RN, 5130	1 3/8 - 12	109.2 mm (4.30 in)	6T-8853
5130	1 3/8 - 12	120.1 mm (4.73 in)	6I-8648

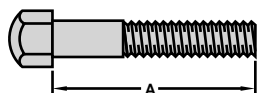
12 Use model D5C with 9K links

13 Use model 245 with 8K links

## Track Bolts/Inch/Self Cleaning Shoes

Model	Thread Size (in - TPI)	A	Part Number
		Bolt Length	
D3G, D4G, D3C, D4	9/16 - 18	41.4 mm (1.63 in)	4K-7038
D3G, D4G, D3C, D4	9/16 - 18	76.2 mm (3 in)	5A-3187
D4, D5	5/8 - 18	51 mm (2.01 in)	7H-3597
D5H, D5N, D5M, D4H	5/8 - 18	55.1 mm (2.17 in)	9G-3110
D4, D5	5/8 - 18	84 mm (3.31 in)	9G-8592
D5H, D5N, D5M, D4H	5/8 - 18	89.9 mm (3.54 in)	3T-3884
D6	3/4 - 16	54.8 mm (2.16 in)	1S-1859
D7H, D6R, D6H, D6N, D6M, D5H	3/4 - 16	60.9 mm (2.40 in)	6V-1792
D7	3/4 - 16	61.2 mm (2.41 in)	7H-3598
D6N, D6M, D5H	3/4 - 16	91.9 mm (3.62 in)	107-0718
D6	3/4 - 16	99 mm (3.90 in)	5A-7524
D7	3/4 - 16	104.1 mm (4.10 in)	5P-1028
D7H, D6R, D6H	3/4 - 16	104.9 mm (4.13 in)	6T-2162
D7R/H	7/8 - 14	67.5 mm (2.66 in)	7H-3599
D7R/H	7/8 - 14	109.9 mm (4.33 in)	116-8145

## Track Bolts/Metric



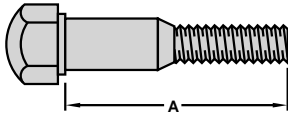
Model	Thread Size (dia x pitch)	A	Part Number
		Bolt Length	
308, 307B	M14 x 1.50	35 mm	136-2401
311, 312, 313, 314, E110, E110B, E120, E120B	M16 x 1.50	46 mm	4I-7538
E140	M16 x 1.50	55 mm	096-1043
E180	M18 x 1.50	58 mm	093-0262
315, 317, 318, 319, 320, 321, 322, E200B, E240B, E240C	M20 x 1.50	55 mm	9W-3619
E240, E300	M20 x 1.50	63 mm	093-0266
317, 318, 319, 320, 321, 322, 320S, 325	M20 x 1.50	63 mm	6Y-0846
E300B, EL300	M20 x 1.50	70 mm	093-0265
330, 345, 350 D6R SystemOne™	M22 x 1.50	67 mm	6Y-9024
350	M22 x 1.50	73 mm	143-4891
E450	M22 x 1.50	78 mm	093-0268
345B	M24 x 1.50	67 mm	301-2299
E650	M24 x 1.50	81 mm	093-0271
365B	M27 x 2.00	78 mm	144-0805
375, 5080	M27 x 2.00	90 mm	6Y-7432
385B, 5090	M30 x 2.00	90 mm	174-0221

# Bolts

## Track Bolts/Metric/Self Cleaning Shoes

Model	Thread Size (dia x pitch)	A	Part Number
		Bolt Length	
311, 312, 313, 314, E110, E110B, E120, E120B, E140	M16 x 1.50	68 mm	093-0259
311, 312, 313, 314, E110, E110B, E120, E120B, E140	M16 x 1.50	108 mm	093-0261
E180 <sup>(14)</sup>	M18 x 1.50	90 mm	093-0264
315, 317, 318, 319, 320, 321, 322, E200B, E240B, E240C	M20 x 1.50	55 mm	9W-3619
325	M20 x 1.50	63 mm	6Y-0846
315, 317, 318, 319, 320, 321, 322, E200B, E240B, E240C	M20 x 1.50	80 mm	8E-9349
E240 <sup>(14)</sup>	M20 x 1.50	108 mm	096-0551
325	M20 x 1.50	110 mm	6Y-5686
330	M22 x 1.50	110 mm	254-0224

## Split Master Link Bolts/Inch



Model	Thread Size (in - TPI)	A	Part Number
		Bolt Length	
D3G, D4G, D3C, D4C	9/16 - 18	76.2 mm (3 in)	5A-3187
AP650B, BG225C, AP1050B, BG245C	9/16 - 18	88.9 mm (3.50 in)	8S-4747
D5N, D5M, D4H, D5H, D5G, D5C, 939C, 953	5/8 - 18	67 mm (2.64 in)	3T-8601
D5N, D5M, D4H	5/8 - 18	83 mm (3.27 in)	9G-8592
D5C, D4, D5, D6, 561, 941, 943, 951, 953, 955, 977 <sup>(15)</sup>	5/8 - 18	88.9 mm (3.50 in)	3P-2274
D5H	5/8 - 18	91 mm (3.58 in)	3T-8580
D6N, D6M, D5H, 517	3/4 - 16	74 mm (2.91 in)	106-1642
D7H	3/4 - 16	80 mm (3.15 in)	6V-1793
D6N, D6M, D5H	3/4 - 16	99 mm (3.90 in)	107-0719
D6R/H, D6, D7	3/4 - 16	105 mm (4.13 in)	9S-1838
D7, 571, 572, 973, 977	3/4 - 16	113 mm (4.45 in)	2P-9670
D7R/H	7/8 - 14	87.1 mm (3.43 in)	6V-1723
D8T/R/N, D8L, 583R, 578	7/8 - 14	96 mm (3.78 in)	6V-1724
D7R/H	7/8 - 14	116 mm (4.57 in)	9W-9058
D8, 983, 583	7/8 - 14	123 mm (4.84 in)	8S-0395
D7R/H	7/8 - 14	129 mm (5.08 in)	6V-1725
D9, 594	1 - 14	87 mm (3.43 in)	8S-1723
D9T/R/N, D9L, 589	1 - 14	123 mm (4.84 in)	7T-2283
D9T/R/N, D9L, 589	1 - 14	148 mm (5.83 in)	6V-1728
D10T/R/N	1 1/8 - 12	134 mm (5.28 in)	7T-0999
D10T/R/N	1 1/8 - 12	164 mm (6.46 in)	7T-0998
D10	1 1/8 - 12	168 mm (6.61 in)	5P-8222
D11R/N	1 3/8 - 12	153 mm (6.02 in)	6T-8521
D11R/N	1 3/8 - 12	183 mm (7.20 in)	6T-8520

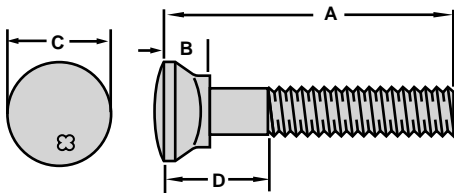
<sup>14</sup> Only one bolt length used.

<sup>15</sup> Use model D5C with 9K links

## Split Master Link Bolts/Inch/Self Cleaning Shoes

Model	Thread Size (in - TPI)	A	Part Number
		Bolt Length	
D3G, D4G, D3C, D4C	9/16 - 18	76.2 mm (3 in)	5A-3187
D3G, D4G, D3C, D4C	9/16 - 18	109 mm (4.29 in)	5P-4683
D5N, D5M, D4H	5/8 - 18	83 mm (3.27 in)	9G-8592
D4, D5	5/8 - 18	88.9 mm (3.50 in)	3P-2274
D5H	5/8 - 18	91 mm (3.58 in)	3T-8580
D5N, D5M, D4H, D5H	5/8 - 18	102 mm (4.02 in)	3T-3889
D4, D5	5/8-18	117.5 mm (4.63 in)	5P-0569
D6N, D6M, D5H	3/4 - 16	99 mm (3.90 in)	107-0719
D6R/H, D6, D7	3/4 - 16	105 mm (4.13 in)	9S-1838
D6N, D6M, D5H	3/4 - 16	109 mm (4.29 in)	107-0717
D7H, D7	3/4 - 16	113 mm (4.45 in)	2P-9670
D7H	3/4 - 16	125 mm (4.92 in)	6T-1441
D6R/H, D6, D7	3/4 - 16	139 mm (5.47 in)	3P-1111
D7R/H	7/8 - 14	116 mm (4.57 in)	9W-9058
D7R/H	7/8 - 14	129 mm (5.08 in)	6V-1725

## Cutting Edge Bolts/Inch/Coarse Thread



Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
<b>Thread Size (in - TPI) 3/8 - 16</b>					
3/8 - 16	1 in	0.31 in	0.67 in	0.44 in	8T-9414
3/8 - 16	2 in	0.31 in	0.67 in	1.00 in	4F-4048
3/8 - 16	Nut	-	-	-	9S-8752
<b>Thread Size (in - TPI) 1/2 - 13</b>					
1/2 - 13	1 1/4 in	0.44 in	0.89 in	0.50 in	4F-3647
1/2 - 13	1 1/2 in	0.44 in	0.89 in	0.63 in	4F-3646
1/2 - 13	1 3/4 in	0.44 in	0.89 in	0.63 in	4F-3648
1/2 - 13	2 in	0.44 in	0.89 in	0.75 in	4F-3649
1/2 - 13	2 1/4 in	0.44 in	0.89 in	1.00 in	4F-3650
1/2 - 13	2 1/2 in	0.44 in	0.89 in	1.25 in	4F-3651
1/2 - 13	2 3/4 in	0.44 in	0.89 in	1.50 in	4F-3652
1/2 - 13	3 in	0.44 in	0.89 in	1.75 in	4F-3662
1/2 - 13	3 1/2 in	0.45 in	0.89 in	2.25 in	4F-3663
1/2 - 13	5 in	0.44 in	0.89 in	3.75 in	4F-4043
1/2 - 13	Nut	-	-	-	1F-7958
<b>Thread Size (in - TPI) 5/8 - 11</b>					

Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
5/8 - 11	1 1/2 in	0.54 in	1.04 in	0.63 in	4F-3664
5/8 - 11	1 3/4 in	0.54 in	1.04 in	0.63 in	4F-3653
5/8 - 11	2 in	0.54 in	1.04 in	0.75 in	4F-3654
5/8 - 11	2 1/4 in	0.54 in	1.04 in	1.25 in	3F-5108
5/8 - 11	2 1/2 in	0.54 in	1.04 in	1.00 in	4F-3656
5/8 - 11	2 3/4 in	0.54 in	1.04 in	1.25 in	4F-3657
5/8 - 11	3 in	0.54 in	1.04 in	1.50 in	4F-3658
5/8 - 11	3 1/2 in	0.54 in	1.04 in	2.00 in	4F-3665
5/8 - 11	3 3/4 in	0.54 in	1.04 in	2.25 in	4F-0391
5/8 - 11	4 in	0.54 in	1.04 in	2.50 in	4F-3671
5/8 - 11	Nut	-	-	-	4K-0367
<b>Thread Size (in - TPI) 3/4 - 10</b>					
3/4 - 10	2 in	0.63 in	1.20 in	0.75 in	4F-3672
3/4 - 10	2 1/4 in	0.63 in	1.20 in	1.00 in	4F-7827
3/4 - 10	2 1/2 in	0.63 in	1.20 in	1.19 in	5J-4773
3/4 - 10	2 3/4 in	—	—	1.50 in	5J-4771
3/4 - 10	3 1/8 in	0.63 in	1.20 in	1.38 in	1J-6762

# Bolts

## Cutting Edge Bolts/Inch/Coarse Thread (Cont'd.)

Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
3/4 - 10	3 3/4 in	0.63 in	1.20 in	2.00 in	5F-8933
3/4 - 10	4 1/4 in	0.63 in	1.20 in	2.50 in	1J-0962
3/4 - 10	4 5/8 in	0.63 in	1.20 in	2.88 in	1J-6761
3/4 - 10	6 in	0.63 in	1.20 in	4.00 in	5P-6783
3/4 - 10	7 1/4 in	0.63 in	1.20 in	5.25 in	5P-6784
3/4 - 10	Nut	—	—	—	2J-3506
<b>Thread Size (in - TPI) 7/8 - 9</b>					
7/8 - 9	2 1/2 in	0.74 in	1.41 in	1.36 in	5J-4772
7/8 - 9	2 3/4 in	0.74 in	1.41 in	1.50 in	6F-0196
7/8 - 9	3 in	0.74 in	1.41 in	1.25 in	5J-2409
7/8 - 9	3 1/4 in	0.74 in	1.41 in	2.44 in	8J-2935
7/8 - 9	3 1/2 in	0.74 in	1.41 in	1.75 in	2J-2548
7/8 - 9	4 1/4 in	0.74 in	1.41 in	2.50 in	2J-5458
7/8 - 9	4 5/8 in	0.74 in	1.41 in	2.63 in	1J-0849
7/8 - 9	Nut	—	—	—	2J-3505
<b>Thread Size (in - TPI) 1 - 8</b>					
1 - 8	2 1/2 in	0.81 in	1.60 in	1.31 in	3J-2801
1 - 8	2 3/4 in	0.81 in	1.60 in	1.50 in	1J-5607

Thread Size (in - TPI)	A	B	C	D	Part Number
	Bolt Length	Head Height	Head Width	Grip Length	
1 - 8	3 in	0.81 in	1.60 in	1.75 in	4F-4042
1 - 8	3 1/4 in	0.81 in	1.60 in	1.91 in	4J-9058
1 - 8	3 1/2 in	0.81 in	1.60 in	2.19 in	4J-9208
1 - 8	3 3/4 in	0.81 in	1.60 in	2.69 in	8J-2928
1 - 8	4 in	0.81 in	1.60 in	2.95 in	5P-8136
1 - 8	4 1/2 in	0.81 in	1.60 in	2.25 in	1J-3527
1 - 8	5 1/4 in	0.81 in	1.60 in	3.00 in	1J-4947
1 - 8	6 in	0.81 in	1.60 in	3.00 in	317-1693
1 - 8	Nut	—	—	—	2J-3507
<b>Thread Size (in - TPI) 1 1/4 - 7</b>					
1 1/4 - 7	3 3/8 in	1.06 in	2.03 in	1.65 in	8T-9079
1 1/4 - 7	3 3/4 in	1.06 in	2.03 in	2.28 in	6V-6535
1 1/4 - 7	4 1/8 in	1.02 in	2.01 in	2.28 in	5P-8823
1 1/4 - 7	4 1/2 in	1.06 in	2.03 in	2.28 in	6V-8360
1 1/4 - 7	4 15/16 in	1.06 in	2.03 in	2.28 in	5P-8361
1 1/4 - 7	5 1/2 in	1.06 in	2.03 in	2.28 in	198-1092
1 1/4 - 7	6 1/2 in	1.06 in	2.03 in	2.28 in	209-9311
1 1/4 - 7	Nut	—	—	—	3K-9770

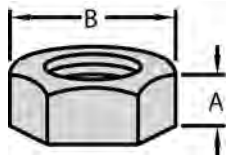
## Maintenance Tips For Cutting Edge Hardware

1. Clean all surfaces of rust, paint, nicks, and burrs.
2. Install bolts first in the center and work out toward the edge.
3. Tighten all bolts to the specified torque (see chart below for specifications).
4. Set bolt heads firmly into the edge countersink using a heavy hammer. Safety glasses **MUST** be worn when striking bolt heads.
5. Tighten all bolts again to the specified torque.

Thread Size (in - TPI)	(ft lb)	Torque (N-m)	Size
5/8	200 ± 30	270 ± 40	16 mm
3/4	350 ± 45	475 ± 60	19 mm
7/8	550 ± 65	750 ± 90	22 mm
1	825 ± 110	1125 ± 150	25 mm
1 1/4	1350 ± 220	1850 ± 300	31 mm



## Nuts/Hex/ Head/Inch



- Made of fine grain steel.
- Designed with a washer-faced surface.
- Provides a tensile strength comparable to SAE Grade 8 bolt.
- Hardened nuts marked with 6 lines, dashes, or dots for identification.

## Coarse Thread UNC/Phosphate & Oil Coated/Hardened

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
1/4 - 20	0.22 in	7/16 in	9S-8750
5/16 - 18	0.27 in	1/2 in	5S-0003
3/8 - 16	0.33 in	9/16 in	9S-8752
7/16 - 14	0.38 in	11/16 in	3S-1546
1/2 - 13	0.44 in	3/4 in	1F-7958
9/16 - 12	0.48 in	7/8 in	5P-0539
5/8 - 11	0.55 in	15/16 in	4K-0367

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
3/4 - 10	0.64 in	1 1/8 in	2J-3506
7/8 - 9	0.75 in	1 5/16 in	2J-3505
1 - 8	0.86 in	1 1/2 in	2J-3507
1 1/8 - 7	0.97 in	1 11/16 in	4J-5977
1 1/4 - 7	1.06 in	1 7/8 in	3K-9770
1 3/8 - 6	1.17 in	2 1/16 in	9M-3770
1 1/2 - 6	1.28 in	2 1/4 in	9S-8216

## Coarse Thread UNC/Zinc Plated/Hardened

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
1/4 - 20	0.22 in	7/16 in	6V-8185
5/16 - 18	0.27 in	1/2 in	6V-8189
3/8 - 16	0.33 in	9/16 in	6V-8801
7/16 - 14	0.37 in	11/16 in	7X-0447
1/2 - 13	0.44 in	3/4 in	6V-8188
5/8 - 11	0.55 in	15/16 in	7X-0448

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
3/4 - 10	0.64 in	1 1/8 in	6V-8182
7/8 - 9	0.75 in	1 5/16 in	7X-0449
1 - 8	0.86 in	1 1/2 in	6V-8190
1 1/8 - 7	0.61	1 11/16	2H-3787
1 1/4 - 7	1.06 in	1 7/8 in	7X-0451
1 1/2 - 6	1.28 in	2 1/4 in	7X-0452

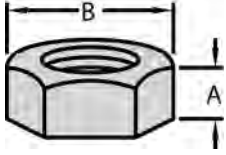
## Fine Thread UNF/Phosphate & Oil Coated/Hardened

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
1/4 - 28	0.22 in	7/16 in	9S-8748
5/16 - 24	0.27 in	1/2 in	9S-8751
3/8 - 24	0.33 in	9/16 in	3S-2713
7/16 - 20	0.38 in	11/16 in	9S-8905
1/2 - 20	0.44 in	3/4 in	6B-6684
9/16 - 18	0.48 in	7/8 in	5P-0540
5/8 - 18	0.55 in	15/16 in	6B-6683

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
3/4 - 16	0.64 in	1 1/8 in	6B-6682
7/8 - 14	0.75 in	1 5/16 in	1A-5666
1 - 14	0.86 in	1 1/2 in	1A-1935
1 1/8 - 12	0.97 in	1 11/16 in	3S-1356
1 1/4 - 12	1.06 in	1 7/8 in	7H-7539
1 3/8 - 12	1.17 in	2 in	2M-0400
1 1/2 - 12	1.28 in	2 1/4 in	8H-3390

# Nuts — Self-Locking Nuts/Hex Head/Inch

## Self Locking Nuts/Hex Head/Inch



- Made of fine grain steel.
- Resist loosening under vibration.
- Provides a tensile strength comparable with SAE Grade 8 bolts.
- Resist loosening under vibration.

## Coarse Thread UNC/Hardened

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
1/4 - 20	0.23 in	7/16 in	2D-6235
5/16 - 18	0.27 in	1/2 in	031-4155
3/8 - 16	0.33 in	9/16 in	2K-4973
7/16 - 14	0.38 in	11/16 in	6V-5729
1/2 - 13	0.44 in	3/4 in	1K-6872
9/16 - 12	0.50 in	7/8 in	034-9954

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
5/8 - 11	0.55 in	15/16 in	3K-2889
3/4 - 10	0.64 in	1 1/8 in	1K-6870
7/8 - 9	0.75 in	1 5/16 in	6K-0545
1-8	0.86 in	1 1/2 in	6K-3632
1 1/4 - 7	1.06 in	1 7/8 in	2J-5997
1 7/8 - 7	0.97 in	1 11/16 in	8D-9513

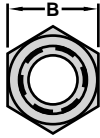
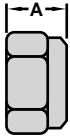
## Fine Thread UNF/Hardened

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
1/4 - 28	0.23 in	7/16 in	2L-9038
5/16 - 24	0.27 in	1/2 in	3D-8752
1/2 - 20	0.44 in	3/4 in	2K-0564
9/16 - 18	0.50 in	7/8 in	054-5448
5/8 - 18	0.55 in	15/16 in	2K-4821
3/4 - 16	0.64 in	1 1/8 in	2K-0337

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
7/8 - 14	0.75 in	1 5/16 in	5D-1986
1 - 14	0.86 in	1 1/2 in	2K-7471
1 1/8 - 12	0.97 in	1 11/16 in	3D-4904
1 1/4 - 12	1.06 in	1 7/8 in	2K-7468
1 1/2 - 12	1.28 in	2 1/4 in	5M-6667

# Nuts — Self-Locking Nuts/Hex Head/Inch/Plastic Insert

## Self-Locking Nuts/Hex Head/Inch/Plastic Insert



- Resist loosening under vibration.

### Coarse Thread/UNC/Zinc Plated/Hardened

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
1/4	0.31 in	7/16 in	3E-9865
5/16 - 18	0.34 in	1/2 in	3E-9860
3/8 - 16	0.45 in	9/16 in	3K-6060
1/2 - 13	0.59 in	3/4 in	9X-0941

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
5/8 - 11	0.75 in	15/16 in	3E-9861
3/4 - 10	0.88 in	1 1/16 in	3E-9862
7/8 - 9	0.98 in	1 1/4 in	3E-9863

### Coarse Thread/UNC/Zinc Plated/Non Hardened

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
No. 6-32	0.18 in	5/16 in	7D-6922
No. 8-32	0.23 in	11/32 in	6D-5801

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
No. 10-24	0.25 in	3/8 in	031-0249
3/8 - 16	0.37 in	11/16 in	9T-2730

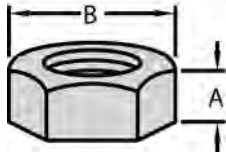
### Fine Thread/UNF/Zinc Plated/Non Hardened

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
No. 10-32	0.25 in	3/8 in	4L-1250
1/4	0.31 in	7/16 in	3F-7674
5/16 - 24	0.34 in	1/2 in	3F-2617

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
3/8 - 24	0.18 in	9/16 in	2F-8616
1/2 - 20	0.59 in	3/4 in	2M-2570

# Nuts — Hex Jam Nuts/Hex Head/Inch

## Hex Jam Nuts/Hex Head/Inch



- Designed with a chamfered and washer-faced surface.
- For use in locking other nuts to prevent loosening.

## Coarse Thread UNC/Non Hardened

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
1/4 - 20	0.16 in	7/16 in	1B-4427
5/16 - 18	0.19 in	1/2 in	5B-3180
3/8 - 16	0.22 in	9/16 in	1B-2578
7/16 - 14	0.25 in	11/16 in	1L-9048
9/16 - 12	0.31 in	7/8 in	8S-5151

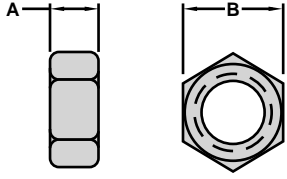
Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
5/8 - 11	0.38 in	15/16 in	1D-5118
3/4 - 10	0.42 in	1 1/8 in	1D-5119
7/8 - 9	0.48 in	1 5/16 in	5P-0541
1-8	0.55 in	1 1/2 in	1D-6306

## Fine Thread UNF/Non Hardened

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
1/4 - 28	0.16 in	7/16 in	6F-0612
5/16 - 24	0.19 in	1/2 in	4F-2294
3/8 - 24	0.22 in	9/16 in	5B-9079
7/16 - 20	0.25 in	11/16 in	5B-3254

Thread Size (in - TPI)	A	B	Part Number
	Nut Height	Nut Width	
3/4 - 16	0.42 in	1 1/8 in	1D-5120
7/8 - 14	0.48 in	1 5/16 in	1D-5121
1 - 14	0.55 in	1 1/2 in	2H-3786

## Nuts/Hex Head/Metric



- Made of fine grain steel.
- Designed with a washer-faced surface.
- Provides a proof load comparable to 10.9 metric bolt.

## Coarse Thread/Phosphate & Oil Coated/Hardened

Thread Size (dia x pitch)	A	B	Part Number
	Nut Height	Nut Width	
M6 x 1.00	5.20 mm	10 mm	6V-8225
M8 x 1.25	6.80 mm	13 mm	5P-7970
M10 x 1.50	8.40 mm	16 mm	2Y-5829
M12 x 1.75	10.80 mm	18 mm	6V-8149
M16 x 2.00	14.80 mm	24 mm	8T-1757

Thread Size (dia x pitch)	A	B	Part Number
	Nut Height	Nut Width	
M20 x 2.50	18.00 mm	30 mm	6V-7742
M24 x 3.00	21.50 mm	36 mm	7X-0851
M30 x 3.50	25.60 mm	46 mm	8T-1583
M36 x 4.00	31.00 mm	55 mm	8C-4032

## Coarse Thread UNC/Zinc Plated and Zinc Flake Hardened

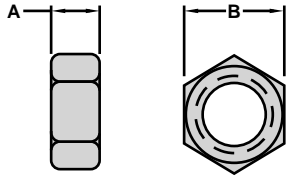
Thread Size (dia x pitch)	A	B	Part Number
	Nut Height	Nut Width	
M3 x 0.50	2.40 mm	5.5 mm	3C-6969
M6 x 1.00	5.20 mm	10 mm	5C-2890
M8 x 1.25	6.80 mm	13 mm	5C-7261
M10 x 1.50	8.40 mm	16 mm	8T-4133
M12 x 1.75	10.80 mm	18 mm	8T-4244
M16 x 2.00	14.80 mm	24 mm	8T-4132 <sup>(1)</sup>

Thread Size (dia x pitch)	A	B	Part Number
	Nut Height	Nut Width	
M20 x 2.50	18.00 mm	30 mm	8T-4131 <sup>(1)</sup>
M24 x 3.00	21.50 mm	36 mm	8T-4001 <sup>(1)</sup>
M30 x 3.50	25.60 mm	46 mm	8C-8722 <sup>(1)</sup>
M36 x 4.00	31.00 mm	55 mm	8T-4955 <sup>(1)</sup>

1 Zinc Flake

# Nuts — Self-Locking Nuts/Hex Head/Metric

## Self-Locking Nuts/Hex Head/Metric

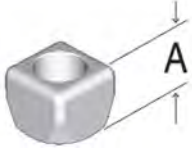


- Made of fine grain steel.
- Designed with a washer-faced surface.
- Provides a proof load comparable to 10.9 metric bolt.
- Resists loosening under vibration.

## Coarse Thread UNC/Hardened

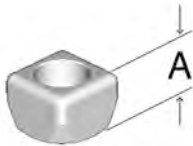
Thread Size (dia x pitch)	A		Part Number	Thread Size (dia x pitch)	B		Part Number
	Nut Height	Nut Width			Nut Height	Nut Width	
M6 x 1.00	5.90 mm	10 mm	6V-7743	M16 x 2.00	15.20 mm	24 mm	8T-4778
M8 x 1.25	7.10 mm	13 mm	6V-9189	M20 x 2.50	22.15 mm	30 mm	6V-7688
M10 x 1.50	9.00 mm	16 mm	6V-7744	M24 x 3.00	26.35 mm	36 mm	6V-7676
M12 x 1.75	11.60 mm	18 mm	6V-7687	M30 x 3.50	30.00 mm	46 mm	8T-5065

## Track Nuts Inch



Model	Thread Size (in - TPI)	A	Part Number
		Nut Height	
307, E70, E70B	1/2 - 20	12.9 mm (0.51 in)	102-8073
D4	1/2 - 20	14.2 mm (0.56 in)	8H-5724
D3, 931	1/2 - 20	15.875 mm (0.63 in)	117-8885
307, PM465	1/2 - 20	16 mm (0.63 in)	117-8885
D4, 941	9/16 - 18	15.4 mm (0.61 in)	7H-3606
D3, D3B, D3C, D4C, D4B, D4, D3G, D4G, 215, 931, 933, 935, 941, PR450, PM 565, AP650B, AP1050, BG225C, BG245C, SF350, TR225B	9/16 - 18	18.2 mm (0.72 in)	7K-2017
D5N, D5M, D5G, D5C, D4, D5, D6, 561, 939, 941, 943, 951, 953, 955, 977, 205, 211, 213, 215, 215SA, 219, 225, 215SA, 219, 225, PR750, PR1000, SF500, TR500	5/8 - 18	18.2 mm (0.72 in)	1M-1408
D6N, D6M, D5H, D6R/H, D7H, 517, 527, D6, D7, D8, 955, 936, 973, 977, 571, 572, 583, 215SA, 219, 225, 225SA, FB227, 229, 231, 235	3/4 - 16	18.2 mm (0.72 in)	1S-1860
D7R/H D8, 983, 583	7/8 - 14	23.6 mm (0.93 in)	2S-2140
973, 235	7/8 - 14	23.8 mm (0.94 in)	7T-9825
D9, 594, 245	1 - 14	25.4 mm (1 in)	1S-6421
245 <sup>(1)</sup>	1 - 14	25.4 mm (1 in)	2V-0250

## Metric



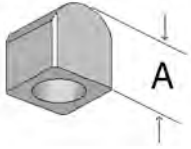
Model	Thread Size (dia x pitch)	A	Part Number
		Nut Height	
308, 307B	M14 x 1.50	14 mm	136-2402
311, 312, 313, 314, E110, E110B, E120B, E120	M16 x 1.50	16 mm	5I-6125
E140	M16 x 1.50	22 mm	099-0658
E180, EL180	M18 x 1.50	22 mm	093-0320
315, 317, 318, 319, 320, 321, 322, 325, 320S, E200B, EL200B, E240B, EL240B, E240C, EL240C	M20 x 1.50	21 mm	9W-3361
E240, EL240, E300B, E300, EL300, EL300B	M20 x 1.50	27 mm	093-0321
330, 345, 350, D6R SystemOne™	M22 x 1.50	22 mm	9W-4381
E450	M22 x 1.50	29 mm	096-0586
345B	M24 x 1.50	24 mm	150-4742
E650	M24 x 1.50	29 mm	093-0323
365B	M27 x 2.00	27 mm	144-0806
375, 5080	M27 x 2.00	38.5 mm	6Y-7433
385B, 5090B	M30 x 2.00	38.5 mm	174-0222

<sup>1</sup> Use with 8K links

# Nuts — Track Nuts

## Track Nuts (Cont'd.)

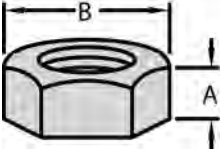
Inch



Model	Thread Size (in - TPI)	A	Part Number
		Nut Height	
D8T/R/N, D8L, 583R, 578	7/8 - 14	35 mm (1.38 in)	7G-6442
D9T/R/N	1 - 14	39.8 mm (1.57 in)	7G-0343
D10, D10T/R/N, 5110B	1 3/8 - 12	43.6 mm (1.72 in)	5P-8221
D11R/N, 5130	1 3/8 - 12	45.9 mm (1.81 in)	3T-6292



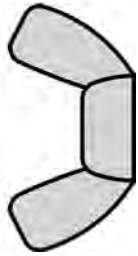
## Cutting Edge Nuts



Thread Size (in - TPI)	A	B	Part Number
	Height	Width	
1/2 - 20	0.44 in	3/4 in	6B-6684
5/8 - 11	0.55 in	15/16 in	4K-0367
3/4 - 10	0.64 in	1 1/8 in	2J-3506
3/4 - 16	0.64 in	1 1/8 in	6B-6682
7/8 - 9	0.75 in	1 5/16 in	2J-3505
1 - 8	0.86 in	1 1/2 in	2J-3507
1 1/4 - 7	1.06 in	1 7/8 in	3K-9770

# Nuts — Wing Nuts/Zinc Plated

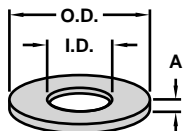
## Wing Nuts Zinc Plated



- Install and remove by hand.

<b>Inch</b>	
<b>Thread Size (in - TPI)</b>	<b>Part Number</b>
10 - 24	6F-6898
1/4 - 20	1F-1739
5/16 - 18	3B-0723
3/8 - 16	2B-9498
1/2 - 13	053-4881
<b>Metric</b>	
M5 x 0.8	240-6575
M6 x 1.0	8T-2910
M8 x 1.25	095-1250
M10 x 1.50	6V-8444
M10 x 1.50	275-8115
M10 x 1.50	7E-3510
M16 x 2.00	439-2984

## Washers/Flat/Inch



- Compatible with SAE Grade 5/Grade 8 and above bolts.

## Phosphate and Oil Coated/Hardened

Bolt Diameter	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
1/4 in	0.28 in	0.56 in	0.08 in	5P-0537
5/16 in	0.34 in	0.62 in	0.08 in	9M-1974
3/8 in	0.39 in	0.72 in	0.09 in	5M-2894
7/16 in	0.50 in	0.88 in	0.09 in	5P-8244
1/2 in	0.53 in	1.00 in	0.12 in	5P-8245
9/16 in	0.62 in	1.14 in	0.12 in	5P-8246
5/8 in	0.67 in	1.26 in	0.14 in	5P-8247

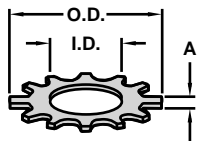
Bolt Diameter	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
3/4 in	0.79 in	1.44 in	0.14 in	5P-8248
7/8 in	0.94 in	1.62 in	0.16 in	5P-8249
1 in	1.09 in	1.94 in	0.20 in	5P-8250
1 1/8 in	1.19 in	2.06 in	0.25 in	3S-1349
1 1/4 in	1.31 in	2.12 in	0.25 in	4K-0684
1 1/2 in	1.59 in	2.62 in	0.25 in	3S-6162

## Zinc Plated/Hardened

Bolt Diameter	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
1/4 in	0.28 in	0.56 in	0.08 in	8T-4205
5/16 in	0.34 in	0.62 in	0.08 in	8T-4224
3/8 in	0.41 in	0.72 in	0.09 in	8T-4896
7/16 in	0.47 in	0.88 in	0.09 in	8T-5360
1/2 in	0.53 in	1.00 in	0.12 in	8T-4223
5/8 in	0.66 in	1.25 in	0.14 in	8T-4122

Bolt Diameter	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
3/4 in	0.78 in	1.44 in	0.14 in	8T-4994
7/8 in	0.94 in	1.62 in	0.16 in	8C-6913
1 in	1.09 in	1.94 in	0.20 in	8T-5361
1 1/8 in	1.22 in	2.06 in	0.25 in	7X-0531
1 1/4 in	1.34 in	2.19 in	0.25 in	7X-0533
1 1/2 in	1.59 in	2.64 in	0.25 in	7X-0537

## Lock Washers/External Tooth/Inch



- Provides "spring" action to keep assembly under tension.
- Resists corrosion due to zinc plated finish.

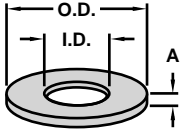
## Zinc Plated/Non-Hardened

Bolt Diameter	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
No. 6	0.15 in	0.31 in	0.02 in	5H-6555
No. 8	0.17 in	0.38 in	0.02 in	1H-4393
No. 10	0.20 in	0.40 in	0.02 in	096-0192
1/4 in	0.26 in	0.50 in	0.03 in	1H-3338
5/16 in	0.33 in	0.59 in	0.03 in	7H-3937

Bolt Diameter	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
3/8 in	0.39 in	0.69 in	0.04 in	4D-1326
7/16 in	0.46 in	0.75 in	0.04 in	7F-6998
1/2 in	0.52 in	0.89 in	0.04 in	3J-4818

# Washers

## Washers/Flat/Metric



- Compatible with ISO property class 8.8, 10.9, 11.9, 12.9.

## Phosphate and Oil Coated/Hardened

Bolt Diameter (mm)	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
M6	6.60 mm	12.00 mm	2.00 mm	9X-8267
M8	8.80 mm	16.00 mm	2.00 mm	9M-1974
M10	11.00 mm	21.00 mm	2.50 mm	6V-5839
M12	13.50 mm	25.50 mm	3.00 mm	5P-8245
M14	15.50 mm	29.00 mm	3.00 mm	5P-8246

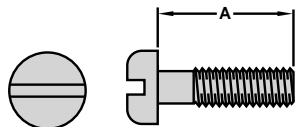
Bolt Diameter (mm)	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
M16	17.50 mm	30.00 mm	3.50 mm	9X-8268
M20	22.00 mm	35.00 mm	3.50 mm	8T-3282
M24	26.00 mm	44.00 mm	4.00 mm	6V-8237
M30	33.00 mm	56.00 mm	6.00 mm	9X-8399

## Zinc Plated/Hardened

Bolt Diameter (mm)	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
M6	6.60 mm	12.00 mm	2.00 mm	9X-8256
M8	8.80 mm	16.00 mm	2.00 mm	8T-4224
M10	11.00 mm	21.00 mm	2.50 mm	8T-4121
M12	13.50 mm	25.50 mm	3.00 mm	8T-4223

Bolt Diameter (mm)	Inside Diameter	Outside Diameter	A	Part Number
			Thickness	
M16	17.50 mm	30.00 mm	3.50 mm	9X-8257
M20	22.00 mm	35.00 mm	3.50 mm	8T-4123
M24	26.00 mm	44.00 mm	4.00 mm	8T-4167
M30	33.00 mm	56.00 mm	6.00 mm	9X-8258

## Pan Head/Machine Screws/Inch



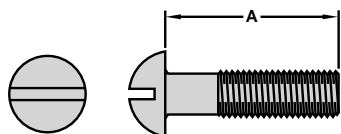
- Made of steel and finished with a zinc plating.
- Conforms to ANSI B18.6.3 standard.

Thread Size (in - TPI)	A	
	Screw Length	Part Number
No. 6 - 32	1/2 in	9X-6258
No. 6 - 32	3/4 in	214-3522
No. 6 - 32	1 in	030-8838
No. 6 - 32	1 1/4 in	2N-3477
No. 6 - 32	1 1/2 in	033-4815
No. 8 - 32	3/4 in	7U-4892
No. 8 - 32	1 1/4 in	6V-7697

Thread Size (in - TPI)	A	
	Screw Length	Part Number
No. 8 - 32	1 1/2 in	7S-1198
No. 8 - 32	2 in	5S-9105
No. 10 - 24	3/8 in	2N-3478
No. 10 - 24	1/2 in	8T-9394
No. 10 - 24	3/4 in	6V-1051
No. 10 - 24	1 1/2 in	2N-7456

Thread Size (in - TPI)	A	
	Screw Length	Part Number
1/4 - 20	3/8 in	9D-3868
1/4 - 20	5/8 in	3K-6881
1/4 - 20	3/4 in	2N-3680
1/4 - 20	1 in	9W-1464

## Round Head/Machine Screws/Inch



- Made of steel and finished with a zinc plating.
- Conforms to ANSI B18.6.3 standard.

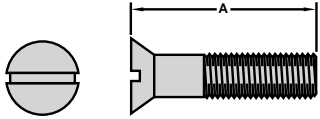
Thread Size (in - TPI)	A	
	Screw Length	Part Number
No. 6 - 32	1/4 in	2F-7306
No. 6 - 32	3/8 in	9X-6259
No. 6 - 32	1 1/4 in	2N-3477
No. 6 - 32	1 1/2 in	033-4815
No. 8 - 32	1/4 in	285-3944

Thread Size (in - TPI)	A	
	Screw Length	Part Number
No. 8 - 32	3/8 in	8C-8514
No. 8 - 32	1/2 in	8C-8514
No. 8 - 32	3/4 in	7U-4892
No. 8 - 32	1 in	103-9425
No. 10 - 24	1/4 in	108-8127
No. 10 - 24	3/8 in	2N-3478

Thread Size (in - TPI)	A	
	Screw Length	Part Number
No. 10 - 24	1/2 in	8T-9394
No. 10 - 24	3/4 in	6V-1051
No. 10 - 24	1 1/4 in	4B-1234
No. 10 - 24	1 1/2 in	2N-7456
No. 10 - 24	2 in	032-8924

# Screws

## Flat Head/Machine Screws/Inch/Coarse Thread

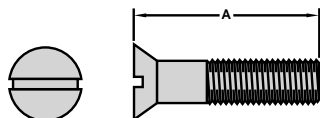


- Made of steel and finished with a zinc plating.
- Conforms to ANSI B18.6.3 standard.

Thread Size (in - TPI)	A		Part Number
	Screw Length	Drive Type	
No. 6 - 32	3/8 in	Int Hex	6V-7178
No. 6 - 32	1/2 in	Phillips	137-6723
No. 6 - 32	3/4 in	Slotted	2D-6327
No. 8 - 32	1/2 in	Phillips	8T-3427
No. 8 - 32	3/4 in	Slotted	244-0908
No. 10 - 24	3/8 in	Slotted	4B-1293
No. 10 - 24	1/2 in	Int Hex	8T-7922
No. 10 - 24	1/2 in	Slotted	8T-7922
No. 10 - 24	5/8 in	Int Hex	4B-1274
No. 10 - 24	3/4 in	Slotted	2H-6120
No. 10 - 24	1 in	Slotted	1H-8456
No. 10 - 24	1 1/4 in	Slotted	5P-5583
No. 10 - 24	1 3/4 in	Slotted	5P-5582
1/4 - 20	3/8 in	Slotted	2M-5139
1/4 - 20	1/2 in	Slotted	031-6100
1/4 - 20	5/8 in	Slotted	4B-1281
1/4 - 20	5/8 in	Int Hex	033-0695
1/4 - 20	3/4 in	Int Hex	6D-5799
1/4 - 20	1 in	Int Hex	8M-6802
1/4 - 20	1 in	Int Hex	7D-6921
1/4 - 20	1 1/4 in	Slotted	6V-4792
1/4 - 20	1 1/2 in	Slotted	1H-8294
1/4 - 20	1 3/4 in	Slotted	8M-6803

Thread Size (in - TPI)	A		Part Number
	Screw Length	Drive Type	
1/4 - 20	3 3/4 in	Int Hex	107-5011
5/16 - 18	1/2 in	Slotted	4B-1286
5/16 - 18	5/8 in	Int Hex	034-3223
5/16 - 18	3/4 in	Int Hex	153-8498
5/16 - 18	7/8 in	Torx	119-0036
5/16 - 18	1 1/4 in	Slotted	9S-0836
5/16 - 18	1 1/2 in	Slotted	129-2564
5/16 - 18	1 3/4 in	Int Hex	034-3101
5/16 - 18	1 3/4 in	Slotted	5P-0399
5/16 - 18	2 1/4 in	Slotted	6N-0768
5/16 - 18	4 in	Int Hex	107-5012
3/8 - 16	3/4 in	Int Hex	108-4311
3/8 - 16	1 in	Int Hex	030-9621
3/8 - 16	1 1/2 in	Slotted	8F-6987
3/8 - 16	1 3/4 in	Slotted	030-9110
3/8 - 16	2 in	Int Hex	032-0682
1/2 - 13	1 in	Int Hex	107-2783
1/2 - 13	1 in	Int Hex	4K-1493
1/2 - 13	1 1/2 in	Int Hex	8T-4012
1/2 - 13	1 3/4 in	Int Hex	2J-0996
5/8 - 18	1 1/2 in	Int Hex	8T-4110
3/4 - 10	1 3/4 in	Int Hex	255-1241
3/4 - 10	2 in	Int Hex	061-6666

## Flat Head/Machine Screws/Metric/Coarse Thread

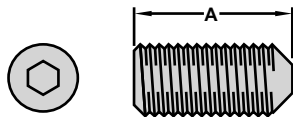


Thread Size (in - TPI)	Screw Length	Drive Type	Part Number
M2.5 x 0.45	10 mm	Phillips	6V-9668
M3 x 0.50	12 mm	Slotted	081-6373
M4 x 0.70	10 mm	Int Hex	3E-4302
M4 x 0.70	20 mm	Phillips	167-4063
M4 x 0.70	20 mm	Slotted	8T-7585
M5 x 0.80	12 mm	Int Hex	205-2941
M5 x 0.80	25 mm	Int Hex	8T-1573
M5 x 0.80	30 mm	Phillips	8C-6428
M5 x 0.80	35 mm	Slotted	8T-0386
M6 x 1.00	16 mm	Torx	127-1960
M6 x 1.00	16 mm	Int Hex	5C-7423
M6 x 1.00	20 mm	Int Hex	9X-6155
M6 x 1.00	20 mm	Phillips	8C-8454
M6 x 1.00	25 mm	Int Hex	208-2651
M6 x 1.00	25 mm	Int Hex	260-6695
M6 x 1.00	30 mm	Int Hex	205-5149
M6 x 1.00	30 mm	Int Hex	8C-6802
M6 x 1.00	40 mm	Phillips	7X-0847
M8 x 1.00	40 mm	Phillips	179-7262
M8 x 1.25	14 mm	Slotted	6V-8973
M8 x 1.25	16 mm	Int Hex	6V-8454
M8 x 1.25	20 mm	Int Hex	8C-7562
M8 x 1.25	20 mm	Int Hex	8C-7505
M8 x 1.25	30 mm	Int Hex	131-3539
M8 x 1.25	60 mm	Int Hex	114-3350
M8 x 1.25	80 mm	Slotted	133-8831
M10 x 1.50	20 mm	Int Hex	127-2909
M10 x 1.50	25 mm	Int Hex	6V-7726

Thread Size (in - TPI)	Screw Length	Drive Type	Part Number
M10 x 1.50	25 mm	Int Hex	157-0949
M10 x 1.50	30 mm	Int Hex	3E-4310
M10 x 1.50	40 mm	Int Hex	131-0836
M12 x 1.75	35 mm	Int Hex	123-0354
M12 x 1.75	40 mm	Int Hex	145-1893
M12 x 1.75	45 mm	Int Hex	160-0018
M12 x 1.75	60 mm	Int Hex	173-8341
M12 x 1.75	80 mm	Int Hex	172-4014
M16 x 2.00	30 mm	Int Hex	8C-6789
M16 x 2.00	50 mm	Int Hex	159-2953
M16 x 2.00	55 mm	Int Hex	246-4349
M16 x 2.00	60 mm	Int Hex	159-8839
M16 x 2.00	70 mm	Int Hex	144-2531
M16 x 2.00	80 mm	Int Hex	135-3241
M20 x 2.50	70 mm	Int Hex	169-6065
M20 x 2.50	75 mm	Int Hex	145-4075
M20 x 2.50	80 mm	Int Hex	170-3524
M20 x 2.50	90 mm	Int Hex	144-2698
M20 x 2.50	100 mm	Int Hex	144-2715
M20 x 2.50	110 mm	Int Hex	144-2687
M20 x 2.50	120 mm	Int Hex	144-3087
M20 x 2.50	150 mm	Int Hex	174-6943
M20 x 2.50	160 mm	Int Hex	175-0335
M24 x 3.00	90 mm	Int Hex	170-4740
M24 x 3.00	120 mm	Int Hex	144-6589
M24 x 3.00	140 mm	Int Hex	144-7425
M24 x 3.00	160 mm	Int Hex	144-5966

# Screws

## Cup Point/Set Screws/Inch/UNC



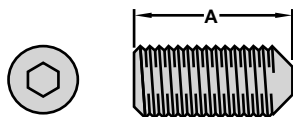
- Heat treated with a black oxide finish.

Thread Size (in - TPI)	A	
	Screw Length	Part Number
8 - 32	1/4 in	9L-9596
No. 10 - 24	1/4 in	5B-9324
No. 10 - 24	3/8 in	8C-8430
No. 10 - 24	1/2 in	4B-3627
1/4 - 20	1/4 in	4B-9806
1/4 - 20	1/4 in	8T-3601
1/4 - 20	5/16 in	010-2571
1/4 - 20	3/8 in	010-2570
1/4 - 20	1/2 in	4B-9808
1/4 - 20	1/2 in	173-5787
1/4 - 20	5/8 in	1K-6979
1/4 - 20	3/4 in	010-2573

Thread Size (in - TPI)	A	
	Screw Length	Part Number
1/4 - 20	1 in	8C-3996
5/16 - 18	1/4 in	010-2580
5/16 - 18	3/8 in	8B-7179
5/16 - 18	3/4 in	5P-2556
5/16 - 18	3/4 in	1T-0241
5/16 - 18	27/32 in	144-0691
5/16 - 18	1 3/16 in	4D-5253
5/16 - 18	1 1/2 in	5N-2882
5/16 - 18	1 1/2 in	1N-3887
3/8 - 16	1/4 in	010-2591
3/8 - 16	3/8 in	2F-5326
3/8 - 16	1/2 in	3B-8601

Thread Size (in - TPI)	A	
	Screw Length	Part Number
3/8 - 16	5/8 in	2F-5325
3/8 - 16	3/4 in	3H-8430
3/8 - 16	1 in	010-2597
3/8 - 16	1 1/8 in	4L-4155
1/2 - 13	1/2 in	010-2615
1/2 - 13	1/2 in	031-8610
1/2 - 13	1/2 in	8J-5912
1/2 - 13	5/8 in	010-2616
1/2 - 13	3/4 in	4B-1771
1/2 - 13	1 in	2H-3906

## Cup Point/Set Screws/Metric/Coarse Thread



- Heat treated with a black oxide finish.

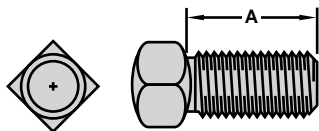
Thread Size (in - TPI)	A	
	Screw Length	Part Number
M4 x 0.70	20 mm	7X-7889
M5 x 0.70	12 mm	9Y-9846
M5 x 0.80	20 mm	106-5472
M5 x 0.80	25 mm	8T-5434
M5 x 0.80	30 mm	8T-6702
M6 x 1.00	6 mm	095-1260
M6 x 1.00	8 mm	9X-6608
M6 x 1.00	8 mm	6V-9327
M6 x 1.00	10 mm	6V-8932
M6 x 1.00	12 mm	8C-7531
M6 x 1.00	16 mm	095-1274
M6 x 1.00	16 mm	8T-0723
M6 x 1.00	25 mm	178-7877
M6 x 1.00	30 mm	099-5742
M6 x 1.00	40 mm	087-4759
M6 x 1.00	60 mm	109-5550
M8 x 1.25	16 mm	8T-0351

Thread Size (in - TPI)	A	
	Screw Length	Part Number
M8 x 1.25	20 mm	8T-2997
M8 x 1.25	30 mm	123-0368
M8 x 1.25	31.3 mm	6E-5583
M8 x 1.25	45 mm	9X-8914
M10 x 1.50	12 mm	095-1267
M10 x 1.50	16 mm	9X-6611
M10 x 1.50	21 mm	087-4710
M10 x 1.50	30 mm	096-2966
M10 x 1.50	44.3 mm	260-7524
M10 x 1.50	120 mm	274-9987
M12 x 1.25	50 mm	9T-6779
M12 x 1.75	10 mm	8T-9533
M12 x 1.75	12 mm	096-3216
M12 x 1.75	20 mm	095-1277
M12 x 1.75	30 mm	095-1270
M12 x 1.75	50 mm	9X-2403
M12 x 1.75	70 mm	9X-8482

Thread Size (in - TPI)	A	
	Screw Length	Part Number
M12 x 1.75	80 mm	9X-8483
M12 x 1.75	90 mm	125-1379
M12 x 1.75	110 mm	195-3834
M14 x 2.00	14 mm	096-6210
M16 x 2.00	22 mm	7Y-0466
M16 x 2.00	30 mm	095-1271
M16 x 2.00	130 mm	136-8416
M20 x 2.50	25 mm	099-8112
M20 x 2.50	45 mm	225-4607
M20 x 2.50	50 mm	096-5400
M20 x 2.50	60 mm	8T-5064
M20 x 2.50	80 mm	129-2220
M20 x 2.50	100 mm	8T-8555
M24 x 3.00	25 mm	157-2235
M27 x 2.00	27 mm	7Y-8436



## Square Head/Set Screws/Inch/Coarse Thread UNC



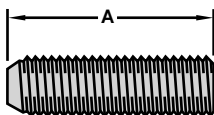
- Made of case-hardened steel with a full square head.

Thread Size (in - TPI)	A	
	Screw Length	Part Number
1/4 - 20	3/8 in	4B-3565
1/4 - 20	1/2 in	4B-3566
1/4 - 20	1 in	4B-3569
5/16 - 18	1/2 in	4B-3570
3/8 - 16	3/8 in	4B-3573
3/8 - 16	1/2 in	4B-3572
3/8 - 16	3/4 in	4B-3574
3/8 - 16	7/8 in	4B-4994
3/8 - 16	1 in	010-2597
3/8 - 16	1 1/4 in	4B-3576
3/8 - 16	1 1/2 in	4B-3577
3/8 - 16	1 3/4 in	2H-3881

Thread Size (in - TPI)	A	
	Screw Length	Part Number
1/2 - 13	3/4 in	4B-3580
1/2 - 13	1 1/4 in	4B-3583
1/2 - 13	1 1/2 in	4B-3584
1/2 - 13	1 3/4 in	4B-3585
1/2 - 13	2 in	4B-3586
1/2 - 13	5 in	4B-3626
5/8 - 11	1 1/2 in	4B-3594
5/8 - 11	1 3/4 in	4B-3595
5/8 - 11	2 in	4B-3596
5/8 - 11	2 in	4B-3619
5/8 - 11	3 in	4B-3599
3/4 - 10	1 1/2 in	4B-3601

Thread Size (in - TPI)	A	
	Screw Length	Part Number
3/4 - 10	1 3/4 in	4B-3602
3/4 - 10	2 in	4B-3603
3/4 - 10	2 1/2 in	4B-3604
3/4 - 10	2 27/32 in	4B-3605
3/4 - 10	4 1/2 in	8T-4162
1 - 8	2 3/4 in	2K-3229
1 - 8	3 1/4 in	292-5889
1 - 8	3 1/4 in	4D-8318
1 - 14	3 7/8 in	4L-6665
1 1/2 - 12	7 1/2 in	6V-5137

## Taper Lock/Studs/Inch/Coarse Thread



- Heat treated with a direct-hardening process.
- Hardened to Rockwell C33-39
- Designed with a taper point for a plug tap.
- Meet SAE grade 8 strength requirements.

Thread Size (in - TPI)	A	
	Screw Length	Part Number
3/8 - 16	1 3/8 in	9M-2151
3/8 - 16	1 9/16 in	5P-2603
3/8 - 16	1 9/16 in	2M-1538
3/8 - 16	1 11/16 in	2N-9288
3/8 - 16	1 3/4 in	2M-4779
3/8 - 16	1 3/4 in	516-5987
3/8 - 16	1 31/32 in	1J-8668
3/8 - 16	2 in	7L-0520
3/8 - 16	2 5/32 in	313-9550
3/8 - 16	2 3/16 in	4M-2743
3/8 - 16	2 3/16 in	6V-1525
3/8 - 16	2 3/8 in	106-1793
3/8 - 16	2 5/8 in	3M-0496
3/8 - 16	2 5/8 in	9L-1658
3/8 - 16	2 3/4 in	6V-1426
3/8 - 16	2 13/16 in	7S-6719
3/8 - 16	2 15/16 in	9M-3296
3/8 - 16	3 1/16 in	4S-6137

Thread Size (in - TPI)	A	
	Screw Length	Part Number
3/8 - 16	3 1/8 in	2M-8411
3/8 - 16	3 3/16 in	4S-6137
3/8 - 16	3 35/64 in	6V-1427
3/8 - 16	3 9/16 in	2M-2488
3/8 - 16	3 15/16 in	106-1792
3/8 - 16	4 in	6L-4428
3/8 - 16	4 3/16 in	2P-1974
3/8 - 16	4 1/2 in	101-8917
1/2 - 13	1 9/16 in	8M-8778
1/2 - 13	1 3/4 in	2D-8153
1/2 - 13	2 in	3D-0490
1/2 - 13	2 3/16 in	5M-1932
1/2 - 13	2 3/8 in	2D-8154
1/2 - 13	2 9/16 in	4J-6925
1/2 - 13	2 13/16 in	3D-0472
1/2 - 13	3 in	3D-6627
1/2 - 13	3 1/8 in	2D-8426
1/2 - 13	3 3/8 in	9H-1288

Thread Size (in - TPI)	A	
	Screw Length	Part Number
1/2 - 13	3 9/16 in	2D-8155
1/2 - 13	3 13/16 in	3D-0473
1/2 - 13	4 1/2 in	5P-7071
5/8 - 11	2 3/16 in	3D-4639
5/8 - 11	2 3/8 in	340-3689
5/8 - 11	2 9/16 in	340-3688
5/8 - 11	2 3/4 in	4D-4823
5/8 - 11	2 15/16 in	6L-7655
5/8 - 11	3 3/16 in	3J-8154
5/8 - 11	3 3/8 in	3D-8439
5/8 - 11	3 9/16 in	3D-5963
5/8 - 11	4 in	5P-3887
5/8 - 11	4 3/16 in	5D-4809
3/4 - 10	2 9/16 in	4D-6579
3/4 - 10	2 3/4 in	2D-8369
3/4 - 10	2 15/16 in	4D-6578
3/4 - 10	3 1/8 in	4D-7246
3/4 - 10	3 3/8 in	7D-3504

# Screws

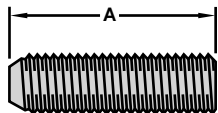
## Taper Lock/Studs/Inch/Coarse Thread (Cont'd.)

Thread Size (in - TPI)	A	Part Number
	Screw Length	
3/4 - 10	3 9/16 in	5J-6796
3/4 - 10	3 13/16 in	6D-1915
3/4 - 10	4 3/16 in	2P-1303
7/8 - 9	3 1/8 in	139-4782
7/8 - 9	3 9/16 in	4D-6589
7/8 - 9	3 3/4 in	139-4774

Thread Size (in - TPI)	A	Part Number
	Screw Length	
7/8 - 9	4 3/16 in	4D-7259
7/8 - 9	4 7/16 in	5P-2098
1 - 8	3 15/16 in	229-4975
1 - 8	3 15/16 in	5D-3118
1 - 8	4 3/16 in	9M-5854
1 - 8	4 7/16 in	9M-3948

Thread Size (in - TPI)	A	Part Number
	Screw Length	
1 - 8	4 15/16 in	6D-0419
1 - 8	5 1/8 in	5D-0600
1 1/2 - 16	2 5/16 in	2W-8225
1 1/2 - 16	39 5/8 in	2P-4304

## Taper Lock/Studs/Metric/Coarse Thread



- Heat treated with a direct-hardening process.
- Hardened to Rockwell C33-39
- Designed with a taper point for a plug tap.
- Meet SAE grade 8 strength requirements.

Thread Size (dia x pitch)	A	Part Number
	Screw Length	
M8 x 1.25	30 mm	329-8793
M8 x 1.25	40 mm	191-6301
M8 x 1.25	45 mm	232-5849
M8 x 1.25	55 mm	328-0826
M8 x 1.25	65 mm	9X-8496
M8 x 1.25	95 mm	192-7207
M10 x 1.50	35 mm	8T-7004
M10 x 1.50	35 mm	250-0485
M10 x 1.50	40 mm	418-6781
M10 x 1.50	45 mm	133-7810
M10 x 1.50	45 mm	186-0870
M10 x 1.50	45 mm	351-9434
M10 x 1.50	45 mm	9X-8281
M10 x 1.50	50 mm	264-0168
M10 x 1.50	50 mm	245-9750

Thread Size (dia x pitch)	A	Part Number
	Screw Length	
M10 x 1.50	50 mm	281-2592
M10 x 1.50	55 mm	309-1906
M10 x 1.50	60 mm	288-4402
M10 x 1.50	65 mm	109-3001
M10 x 1.50	70 mm	231-0336
M10 x 1.50	75 mm	224-5445
M10 x 1.50	80 mm	259-7140
M10 x 1.50	85 mm	116-3715
M10 x 1.50	85 mm	288-4403
M10 x 1.50	95 mm	268-4779
M10 x 1.50	100 mm	309-1905
M10 x 1.50	100 mm	274-6085
M12 x 1.75	45 mm	141-9481
M12 x 1.75	50 mm	8T-5414
M12 x 1.75	55 mm	3E-4319

Thread Size (dia x pitch)	A	Part Number
	Screw Length	
M12 x 1.75	65 mm	246-5451
M12 x 1.75	70 mm	310-1945
M12 x 1.75	80 mm	272-1882
M16 x 2.00	70 mm	8C-0623
M16 x 2.00	85 mm	296-5175
M16 x 2.00	90 mm	341-3770
M16 x 2.00	120 mm	342-9452
M16 x 2.00	130 mm	8C-6709
M20 x 2.50	75 mm	116-3719
M20 x 2.50	85 mm	286-2631
M24 x 3.00	105 mm	116-3720
M24 x 3.00	140 mm	292-4252
M36 x 4.00	135 mm	151-6288

## Standard/Studs/Inch/Coarse Thread UNC

Thread Size (in - TPI)	Screw Length	Part Number
No. 1 - 5	17 17/32 in	266-8994
No. 1 - 14	13 1/2 in	344-4705
No. 1 - 14	14 in	6V-2078
No. 1 - 14	14 15/16 in	252-9971
No. 1 - 14	16 3/8 in	252-9951
No. 1 - 14	18 in	5P-4776
1/4 - 20	1 3/4 in	037-6874
1/4 - 28	1 3/8 in	4V-0151
1/4 - 28	1 7/16 in	8Y-2952
1/4 - 28	2 1/4 in	8L-9315
5/16 - 24	1 3/8 in	3N-7824
5/16 - 24	1 3/4 in	3N-2775
5/16 - 24	2 3/8 in	6B-0607

Thread Size (in - TPI)	Screw Length	Part Number
5/16 - 24	3 in	061-7284
3/8 - 16	1 in	133-5261
3/8 - 16	1 3/4 in	5P-9263
3/8 - 16	1 3/4 in	4K-2877
3/8 - 16	2 in	9L-4023
3/8 - 16	2 in	031-2666
3/8 - 16	2 1/2 in	4D-9589
3/8 - 16	3 1/4 in	9W-9687
3/8 - 16	3 3/8 in	5F-6849
1/2 - 13	4 in	193-1450
1/2 - 13	4 1/64 in	3D-0471
1/2 - 13	5 in	262-4377

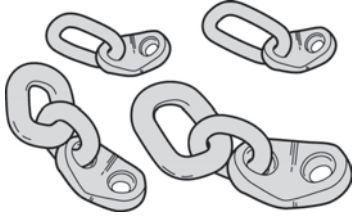
Thread Size (in - TPI)	Screw Length	Part Number
1/2 - 20	2 3/8 in	4D-7235
5/8 - 11	3 5/8 in	7U-5270
5/8 - 18	8 1/2 in	8B-7552
5/8 - 18	8 7/8 in	6W-8509
5/8 - 18	12 in	8K-8466
3/4 - 10	9 5/8 in	1U-9597
1 1/8 - 12	20 in	1U-7758
1 1/4 - 5	24 in	264-5774
1 1/4 - 12	18 in	5P-4184
1 1/2 - 12	23 5/8 in	5P-7273
1 1/2 - 12	32 3/32 in	6V-2074

# Screws

## Standard/Studs/Metric/Coarse Thread

Thread Size (dia x pitch)	Screw Length	Part Number	Thread Size (dia x pitch)	Screw Length	Part Number	Thread Size (dia x pitch)	Screw Length	Part Number
M5 x 0.80	40 mm	240-6577	M10 x 1.50	43 mm	172-2663	M10 x 1.50	105 mm	9R-2753
M6 x 1.00	25 mm	8T-3982	M10 x 1.50	48 mm	331-4350	M10 x 1.50	110 mm	356-2419
M6 x 1.00	40 mm	6R-7651	M10 x 1.50	55 mm	180-3998	M10 x 1.50	125 mm	288-7158
M6 x 1.00	108 mm	320-9318	M10 x 1.50	55 mm	376-3408	M12 x 1.75	60 mm	7X-3342
M8 x 1.25	31 mm	216-1035	M10 x 1.50	60 mm	357-0351	M12 x 1.75	85 mm	358-3156
M8 x 1.25	33 mm	216-1036	M10 x 1.50	60 mm	7Y-8710	M12 x 1.75	200 mm	152-2489
M8 x 1.25	35 mm	157-8861	M10 x 1.50	65 mm	9R-4764	M14 x 2.00	65 mm	285-6325
M8 x 1.25	50 mm	166-0599	M10 x 1.50	75 mm	164-1525	M14 x 2.00	85 mm	242-2911
M8 x 1.25	60 mm	121-0483	M10 x 1.50	80 mm	115-1958	M16 x 2.00	60 mm	9X-2209
M8 x 1.25	82 mm	111-9897	M10 x 1.50	83 mm	164-1438	M16 x 2.00	127 mm	338-3116
M8 x 1.25	225 mm	217-6670	M10 x 1.50	95 mm	309-1905	M16 x 2.00	150 mm	332-0035
M10 x 1.25	516 mm	334-7396	M10 x 1.50	100 mm	8T-3612	M24 x 3.00	140 mm	212-8687

## Link Brackets

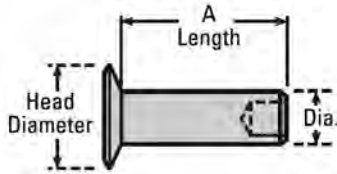


- Used to remove or install large components such as excavator swing gears (provides acceptable method of attaching hoist to component).
- 9U-6502 Link Bracket is used specifically to remove and install swing gear and bearing assembly on 5130 and 5230 Mining Excavators.
- All link brackets meet ANSI Standards for lifting devices.
- Bolts directly onto swing bearing/gear or other component (always use Grade 8 bolts to attach link bracket to component).
- Requires less clearance than standard eye bolt and makes placement/alignment of swing gear/bearing much faster and simpler.
- Used for any general purpose lifting where bracket can be attached to component.
- These link brackets are 100% proof tested at two times the working load limit. They comply with the requirements of ANSI/ASME B30.9.1984 as noted on the Certificate of Proof Test contained with each piece.

Part Number	Bolt Size	Working Load Limit	Minimum Bolt Torque
439-3938	3/8 in	1000 kg (2,205 lb)	43 Nm (32 lb ft)
439-3940	1/2 in	1800 kg (3,968 lb)	95 Nm (70 lb ft)
439-3939	3/4 in	4000 kg (8,818 lb)	360 Nm (266 lb ft)
439-3941	30 mm (1 1/4 in)	4000 kg (8,818 lb)	1300 Nm (959 lb ft)
241-3792	36 mm	5448 kg (12,011 lb)	2700 Nm (1,991 lb ft)

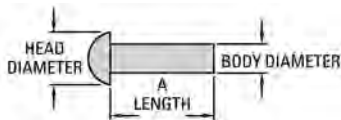
# Rivets

## Rivets/Flat Head/Countersunk Shank/Inch



Body Diameter	A	Head Diameter	Part Number	Material
	Length			
5/32 in	5/16 in	3/8 in	6B-4284	Steel
3/16 in	9/32 in	3/8 in	7B-5048	Brass
3/16 in	5/16 in	3/8 in	7B-5050	Brass
3/16 in	3/8 in	3/8 in	7B-5054	Brass
3/16 in	13/32 in	3/8 in	7B-5056	Brass
3/16 in	15/32 in	3/8 in	7B-5060	Brass
3/16 in	1/2 in	3/8 in	7B-5062	Brass
3/16 in	17/32 in	3/8 in	6B-1985	Steel
3/16 in	17/32 in	3/8 in	7B-5064	Brass
3/16 in	19/32 in	3/8 in	6B-4594	Steel
3/16 in	19/32 in	3/8 in	7B-5068	Brass
3/16 in	3/4 in	3/8 in	6B-1369	Steel

## Rivets/Button Head/Solid Shank/Inch

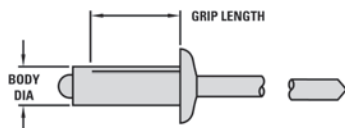


- Made of cold-formed steel.
- Meets ANSI B18.1.1 requirements.

Body Diameter	A	Head Diameter	Part Number
	Length		
1/8 in	1/4 in	0.23	4B-4304
1/8 in	3/8 in	0.23	4B-4306
3/16 in	3/8 in	0.34	4B-4310
3/16 in	1/2 in	0.34	4B-4311
3/16 in	5/8 in	0.34	4B-4312
3/16 in	3/4 in	0.34	4B-4314
3/16 in	1 in	0.34	4B-4315
1/4 in	3/8 in	0.45	4B-4319

Body Diameter	A	Head Diameter	Part Number
	Length		
1/4 in	1/2 in	0.45	4B-4320
1/4 in	3/4 in	0.45	4B-4322
1/4 in	1 1/8 in	0.45	4B-4325
5/16 in	5/8 in	0.56	4B-4334
5/16 in	7/8 in	0.56	4B-4336
5/16 in	1 in	0.56	4B-4337
3/8 in	7/8 in	0.67	4B-4344

## Rivets/Blind/Inch



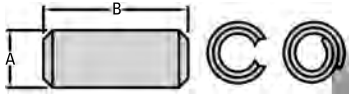
- Contains an open-end and a steel mandrel.

Body Diameter	Grip Length	Part Number
1/8 in	1/16 - 1/8 in	8L-7905
1/8 in	1/8 - 3/16 in	7K-6536
1/8 in	5/16 - 3/8 in	9M-5731
1/8 in	3/8 - 1/2 in	6K-3273

Body Diameter	Grip Length	Part Number
5/32 in	1/8 - 1/4 in	2N-2258
5/32 in	1/4 - 3/8 in	034-7044
3/16 in	1/8 - 1/4 in	9M-5733
3/16 in	1/4 - 3/8 in	9M-5732

Body Diameter	Grip Length	Part Number
3/16 in	3/8 - 1/2 in	033-9412
3/16 in	1/2 - 5/8 in	4D-6716

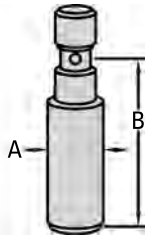
## Spring Pins/Roll Pin/Inch



- Contains a chamfered end for easy installation.
- Made of heat-treated steel.

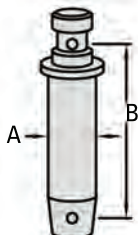
A	B	Part Number	A	B	Part Number	A	B	Part Number
Diameter	Pin Length		Diameter	Pin Length		Diameter	Pin Length	
1/16 in	1/4 in	8S-7499	3/16 in	1 in	6H-3956	3/8 in	5/8 in	1T-0068
1/16 in	3/8 in	1L-5316	3/16 in	1 1/4 in	138-1645	3/8 in	3/4 in	8T-5089
1/16 in	1/2 in	8S-3157	3/16 in	1 1/4 in	1H-1200	3/8 in	1 in	2L-3650
1/16 in	3/4 in	2L-4911	3/16 in	1 1/2 in	4H-3119	3/8 in	1 1/4 in	5J-3941
3/32 in	1/2 in	3H-1118	3/16 in	1 3/4 in	1J-5799	3/8 in	1 1/2 in	2J-5850
3/32 in	5/8 in	2K-3455	1/4 in	1/2 in	6B-6863	3/8 in	1 3/4 in	5L-5711
3/32 in	3/4 in	2L-5894	1/4 in	5/8 in	3H-2617	3/8 in	2 in	1J-8136
3/32 in	1 in	5M-8009	1/4 in	45/64 in	095-0884	3/8 in	2 1/2 in	053-1720
3/32 in	1 1/8 in	032-8870	1/4 in	3/4 in	7M-5130	3/8 in	3 in	045-7012
1/8 in	3/8 in	8L-6565	1/4 in	7/8 in	3S-2708	25/64 in	1 31/32 in	238-3200
1/8 in	1/2 in	3H-9675	1/4 in	1 in	5H-3182	15/32 in	1 3/16 in	195-6754
1/8 in	5/8 in	4H-1641	1/4 in	1 1/4 in	5H-3193	1/2 in	3/4 in	7K-6820
1/8 in	3/4 in	3K-4897	1/4 in	1 1/2 in	2L-1699	1/2 in	1 in	1N-5981
1/8 in	7/8 in	8T-0277	1/4 in	2 in	4H-6996	1/2 in	1 1/4 in	2K-9062
1/8 in	1 1/4 in	2K-8467	1/4 in	2 1/2 in	1J-5353	1/2 in	1 1/2 in	5H-4905
5/32 in	1/2 in	1T-0099	5/16 in	3/4 in	4H-1440	1/2 in	2 1/2 in	2K-8078
5/32 in	3/4 in	2L-5893	5/16 in	1 in	1T-0550	1/2 in	3 in	027-3873
5/32 in	1 in	5H-9839	5/16 in	1 1/4 in	8T-2925	1/2 in	3 1/2 in	031-0255
5/32 in	1 1/2 in	6V-3259	5/16 in	1 13/32 in	095-0891	1/2 in	4 in	8C-8513
3/16 in	1/2 in	5H-8985	5/16 in	1 1/2 in	2H-9445	37/64 in	4 21/64 in	9W-9455
3/16 in	5/8 in	2K-5986	5/16 in	1 3/4 in	5M-1179	21/32 in	5 1/8 in	6Y-8029
3/16 in	5/8 in	3S-8109	5/16 in	1 31/32 in	2M-3521	13/16 in	1 37/64 in	3Q-7864
3/16 in	3/4 in	4H-8380	5/16 in	3 in	2K-1594	13/16 in	2 3/4 in	9X-2617

## Drawbar and Clevis Pins/Type I



A	Pin Hole Diameter	B	Part Number
Diameter		Length	
1 1/2 in	25/64 in	9 7/8 in	7F-9546
2 in	25/64 in	8 3/8 in	9S-8184
2 in	25/64 in	9 3/8 in	2R-0179
2 15/64 in	25/64 in	10 3/8 in	1H-4106

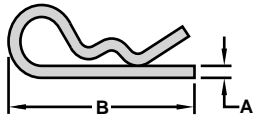
## Drawbar and Clevis Pins/Type II



A	Pin Hole Diameter	B	Part Number
Diameter		Length	
1 1/2 in	25/64 in	7 in	7F-9549
1 1/2 in	25/64 in	8 in	7F-9544
1 35/64 in	25/64 in	9 in	7F-9541
1 3/4 in	25/64 in	8 in	7F-9547

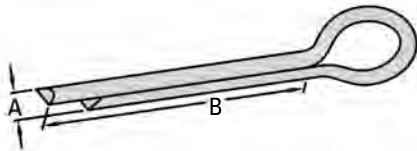
# Pins

## Locking Pins/Inch/Steel



A	Pin Hole Diameter	B	Part Number
Diameter		Length	
3/32 in	1/4 - 1/2 in	1.62 in	5P-0372
3/32 in	1/2 in	2.00 in	008-3843
1/8 in	1/2 - 3/4 in	1.75 in	6S-6646
1/8 in	5/8 - 7/8 in	2.50 in	8S-6377
5/32 in	5/8 - 7/8 in	3.00 in	5P-0370
3/16 in	3/4 - 11/16 in	3.75 in	5P-8837

## Cotter Pins/Inch/Zinc Plated Steel



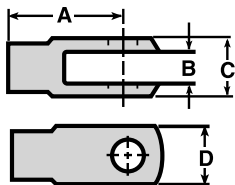
A	B	Cotter End Type	Part Number
Diameter	Pin Length		
1/16 in	3/4 in	Mitered End	3B-4605
1/16 in	1 1/4 in	Mitered End	3B-4606
1/16 in	1 1/2 in	Mitered End	010-3365
3/32 in	1 in	Mitered End	3B-4611
3/32 in	1 1/4 in	Mitered End	3B-4612
3/32 in	1 3/4 in	Chisel End	2H-3862
3/32 in	2 in	Mitered End	010-3378
1/8 in	15/32 in	Chisel End	6L-3960
1/8 in	1/2 in	Mitered End	3B-4613
1/8 in	1/2 in	Square End	3B-4607
1/8 in	1 in	Mitered End	3B-4617
1/8 in	1 1/4 in	Square End	3B-4618
1/8 in	2 1/4 in	Mitered End	3B-4622
1/8 in	2 1/2 in	Mitered End	8B-9264
5/32 in	1 1/2 in	Square End	3B-5301
5/32 in	2 in	Mitered End	2H-3768
5/32 in	2 1/4 in	Mitered End	095-0854
5/32 in	2 3/4 in	Mitered End	3B-4625
3/16 in	1 in	Mitered End	3B-4627
3/16 in	1 1/4 in	Square End	3B-4628
3/16 in	1 1/2 in	Mitered End	3B-4629

A	B	Cotter End Type	Part Number
Diameter	Pin Length		
3/16 in	2 in	Square End	3B-4631
3/16 in	2 1/4 in	Mitered End	3B-5302
3/16 in	2 1/2 in	Mitered End	3B-4632
3/16 in	2 3/4 in	Mitered End	3B-4633
3/16 in	3 in	Mitered End	3B-4634
3/16 in	4 in	Mitered End	3B-4636
1/4 in	1 in	Mitered End	3B-4637
1/4 in	1 1/2 in	Mitered End	3B-5313
1/4 in	1 3/4 in	Mitered End	3B-4639
1/4 in	2 in	Mitered End	3B-4640
1/4 in	2 1/2 in	Mitered End	3B-4641
1/4 in	3 in	Mitered End	099-5217
1/4 in	3 1/2 in	Mitered End	3B-4643
1/4 in	4 1/2 in	Mitered End	4D-8002
5/16 in	1 in	Mitered End	3B-6705
5/16 in	1 1/2 in	Mitered End	2H-3771
5/16 in	2 in	Mitered End	095-0863
5/16 in	2 1/4 in	Mitered End	3B-5315
5/16 in	2 1/2 in	Mitered End	3B-5316
5/16 in	3 in	Mitered End	3B-5317
5/16 in	3 1/2 in	Mitered End	095-0865
5/16 in	4 in	Mitered End	2H-3773

A	B	Cotter End Type	Part Number
Diameter	Pin Length		
5/16 in	5 in	Mitered End	2H-3774
3/8 in	1 1/2 in	Mitered End	3B-4644
3/8 in	2 in	Mitered End	3B-4646
3/8 in	2 1/2 in	Mitered End	3B-4647
3/8 in	2 3/4 in	Mitered End	3B-5319
3/8 in	3 in	Mitered End	3B-5320
3/8 in	3 1/2 in	Mitered End	3B-5322
3/8 in	4 in	Mitered End	3B-5329
3/8 in	4 1/2 in	Mitered End	4J-1888
13/32 in	2 1/2 in	Mitered End	095-7944
13/32 in	3 11/32 in	Mitered End	095-0868
13/32 in	5 1/2 in	Mitered End	096-1820
1/2 in	2 in	Mitered End	3B-5323
1/2 in	2 1/2 in	Mitered End	3B-5324
1/2 in	2 3/4 in	Mitered End	3B-5325
1/2 in	3 in	Mitered End	2H-3775
1/2 in	3 1/2 in	Mitered End	3B-5326
1/2 in	4 1/4 in	Square End	1J-2919
1/2 in	4 23/32 in	Mitered End	095-0872
1/2 in	5 1/2 in	Square End	3J-2985
5/8 in	3 in	Mitered End	3B-5327

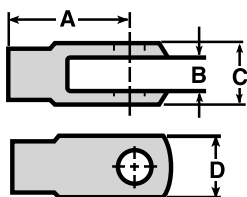


## Yoke-Type Rod End/Inch



Diameter	A	B	C	D	Part Number	Nut	Pin Assy.	Clevis Pin	Retain. Clip	Retain. Pin	Cotter Pin
	Length to Pin Hole	Gap Size	Height	Width							
1/4 in	26.2 in	7.10 in	15.90 in	12.70 in	2M-4036	6V-8187	–	4B-3057	–	–	3B-4607
1/4 in	50.8 in	7.10 in	15.90 in	12.70 in	8B-3768	6V-8187	–	4B-3057	–	–	3B-4607
5/16 in	30.2 in	8.70 in	19.00 in	15.00 in	3D-9609	6V-8186	–	1A-2457	–	–	3B-4611
5/16 in	57.0 in	8.70 in	18.00 in	15.00 in	010-4037	6V-8186	–	1A-2457	–	–	3B-4611
3/8 in	34.9 in	11.10 in	22.20 in	17.50 in	1M-1341	6V-8183	8T-8932	1B-0676	–	–	3B-4615
3/8 in	63.5 in	11.10 in	22.20 in	17.50 in	1A-9252	6V-8183	–	1B-0676	–	–	3B-4617
1/2 in	46.0 in	14.30 in	28.60 in	23.90 in	2M-8340	7X-3374	–	8B-1419	–	6S-6646	3B-4617
1/2 in	76.2 in	14.30 in	28.60 in	23.90 in	6F-7010	7X-3374	–	8B-1419	–	6S-6646	3B-4617
5/8 in	57.9 in	17.50 in	34.90 in	30.20 in	4M-7930	5D-3183	–	9S-1315	–	–	3B-4617
5/8 in	125.4 in	17.50 in	34.90 in	30.20 in	9S-1314	5D-3183	–	9S-1315	–	–	3B-4617

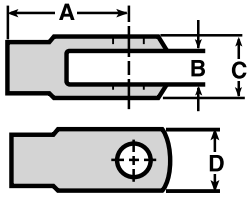
## Yoke-Type Rod End/Metric



Diameter	A	B	C	D	Part Number	Nut	Pin Assy.	Clevis Pin	Retain. Clip	Retain. Pin	Cotter Pin
	Length to Pin Hole	Gap Size	Height	Width							
M12-LH	72.0 mm	12.0 mm	24.0 mm	24.0 mm	7X-0858	8T-4244	8T-5382	8T-6905, 7X-3161	8T-6903	6S-6646	3B-4615
M12	72.0 mm	12.0 mm	24.0 mm	24.0 mm	8T-4650	8T-4244	8T-5382	8T-6905, 7X-3161	8T-6903	6S-6646	3B-4615
M6	36.0 mm	6.0 mm	12.0 mm	12.0 mm	8T-4742	5C-2890	8T-4744	269-2892	8T-6902	–	–
M10	40.0 mm	10.0 mm	20.0 mm	20.0 mm	8T-4815	8T-4133	8T-4743	9R-2806	9R-2807	–	–
M10-LH	60.0 mm	10.0 mm	20.0 mm	20.0 mm	8C-6955	9X-2065	8T-5381	9R-2806	9R-2807	–	–
M10	60.0 mm	10.0 mm	20.0 mm	20.0 mm	8T-5063	8T-4133	9T-5381	9R-2806	9R-2807	–	–
M12	48.0 mm	12.2 mm	24.0 mm	24.0 mm	8C-3393	8T-4244	8C-3394	8T-6905, 7X-3161	8T-6903	6S-6646	3B-4615

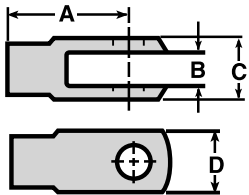
# Rod Ends

## Yoke-Type Rod End/Jump Sizes/Metric



Diameter	A	B	C	D	Part Number	Nut	Pin Assy.	Clevis Pin	Retain. Clip	Retain. Pin	Cotter Pin
	Length to Pin Hole	Gap Size	Height	Width							
M10 <sup>(1)</sup>	40.0 mm	10.0 mm	20.0 mm	20.0 mm	3E-3826	8T-4133	–	1B-0676	–	6S-6646	3B-4615

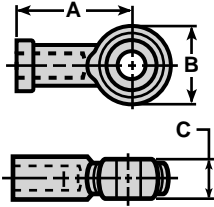
## Yoke-Type Rod End/Forged/Metric



Diameter	A	B	C	D	Part Number	Nut	Pin Assy.	Clevis Pin	Retain. Clip	Retain. Pin	Cotter Pin
	Length to Pin Hole	Gap Size	Height	Width							
M6 <sup>(2)</sup>	45.0 mm	7.1 mm	15.9 mm	13.0 mm	7X-2496	5C-2890	–	7X-2618	–	–	3B-4607
M10 <sup>(1)</sup>	34.9 mm	11.1 mm	22.2 mm	17.5 mm	8T-4968	8T-4133	–	1B-0676	–	6S-6646	3B-7615
M10 <sup>(1)</sup>	63.5 mm	11.1 mm	22.2 mm	17.5 mm	8T-3988	8T-4133	–	1B-0676	–	6S-6646	3B-7615
M12 <sup>(3)</sup>	46.4 mm	14.3 mm	28.6 mm	23.9 mm	7X-7660	8T-4244	–	8B-1419	–	–	3B-4617

- 1 9.5 mm bore.
- 2 External thread.
- 3 12.7 mm bore.

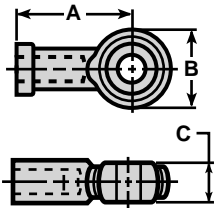
## Spherical Rod End/Inch



Diameter	A	B	C	Part Number
	Length to Pin Hole	Diameter	Height	
1/4 in	1.33 in	0.89 in	0.37 in	6L-7751
5/16 in	1.37 in	1.02 in	0.44 in	7H-3641
5/16 in	1.40 in	1.02 in	0.44 in	5P-6672
5/16 in	1.40 in	1.02 in	0.44 in	7L-4186
5/16 in	1.90 in	1.02 in	0.44 in	7E-9748
5/16 in	1.90 in	1.02 in	0.44 in	6V-8955
5/16 in	1.90 in	1.02 in	0.44 in	6V-9163
5/16 in	1.90 in	1.02 in	0.44 in	6L-3353
3/8 in	1.63 in	1.00 in	0.50 in	225-3770
3/8 in	1.63 in	1.00 in	0.50 in	225-3769
3/8 in	1.64 in	1.13 in	0.50 in	8C-7321

Diameter	A	B	C	Part Number
	Length to Pin Hole	Diameter	Height	
3/8 in	1.64 in	1.13 in	0.50 in	8C-7315
3/8 in	1.64 in	1.13 in	0.50 in	7X-7875
3/8 in	1.64 in	1.13 in	0.50 in	7X-7874
3/8 in	1.64 in	1.13 in	0.50 in	4D-4064
3/8 in	1.96 in	1.13 in	0.50 in	8C-6971
1/2 in	2.14 in	1.39 in	0.63 in	4D-4065
1/2 in	2.63 in	1.50 in	0.63 in	212-6854
5/8 in	2.52 in	1.57 in	0.75 in	2K-5804
5/8 in	2.63 in	1.50 in	0.75 in	125-6857
1 1/4 in	4.13 in	2.76 in	1.37 in	8C-1457

## Spherical Rod End/Metric

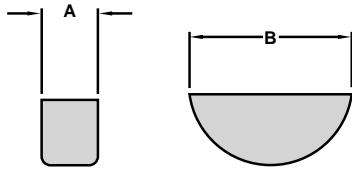


Diameter (mm)	A	B	C	Part Number
	Length to Pin Hole	Diameter	Height	
M6	29.0 mm	22.0 mm	9.0 mm	8C-3111
M6	29.0 mm	22.0 mm	9.0 mm	7U-2713
M6	30.0 mm	18.0 mm	9.0 mm	208-8479
M8	36.0 mm	24.0 mm	13.0 mm	381-2885
M8	36.0 mm	24.0 mm	13.0 mm	381-2911
M8	36.0 mm	22.0 mm	12.0 mm	7X-7915
M10	42.0 mm	30.0 mm	14.0 mm	132-0994
M10	42.0 mm	30.0 mm	14.0 mm	8T-6431
M10	47.0 mm	30.0 mm	14.0 mm	8C-5057
M12	50.0 mm	31.0 mm	16.0 mm	240-9815
M12	54.0 mm	30.0 mm	16.0 mm	102-8245
M12	49.0 mm	34.0 mm	16.0 mm	240-9816
M12	54.0 mm	34.0 mm	10.0 mm	279-0963

Diameter (mm)	A	B	C	Part Number
	Length to Pin Hole	Diameter	Height	
M12	49.0 mm	34.0 mm	19.0 mm	8C-3392
M14	63.0 mm	40.0 mm	14.0 mm	309-4481
M14	63.0 mm	40.0 mm	12.0 mm	309-4480
M14	50.0 mm	30.0 mm	16.0 mm	095-6591
M16	66.7 mm	37.9 mm	21.0 mm	098-5653
M16	63.0 mm	42.0 mm	21.0 mm	9R-4760
M20	77.0 mm	53.0 mm	25.0 mm	254-3355
M20	78.0 mm	53.0 mm	16.0 mm	260-3418
M20	78.0 mm	53.0 mm	16.0 mm	260-3417
M20	133.0 mm	50.8 mm	25.4 mm	390-7798
M24	94.0 mm	65.0 mm	20.0 mm	253-3745
M24	94.0 mm	65.0 mm	20.0 mm	253-3746
M42	270.0 mm	108.0 mm	51.0 mm	180-6758

# Woodruff Keys

## Woodruff Keys

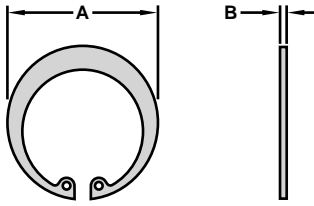


- Made of medium carbon steel and machined to a smooth finish.

A Thickness	B Diameter	MFG Number	Part Number
1/16 in	5/16 in	206	4F-2291
1/16 in	3/8 in	211	3B-2098
1/8 in	3/8 in	212	1B-8735
1/8 in	3/8 in	213	5H-2532
1/8 in	1/2 in	2	8L-4000
1/8 in	1/2 in	2	3H-1489
1/8 in	1/2 in	2	1B-8701
1/8 in	1/2 in	3	1B-8702
1/8 in	5/8 in	4	1B-8703
1/8 in	5/8 in	5	1B-8704
1/8 in	3/4 in	7	1B-8706
3/16 in	8/13 in	–	8M-5599
3/16 in	5/8 in	6	1B-8705
3/16 in	3/4 in	8	1B-8707
3/16 in	3/4 in	9	1B-8708
3/16 in	3/4 in	9	5H-2671
3/16 in	7/8 in	10	1B-8709
3/16 in	7/8 in	11	1B-8710
3/16 in	1 in	13	1B-8712
3/16 in	1 1/8 in	16	1B-8715
1/4 in	3/4 in	91	2B-9373

A Thickness	B Diameter	MFG Number	Part Number
1/4 in	7/8 in	A	1B-8736
1/4 in	7/8 in	–	094-4628
1/4 in	1 in	14	3K-4723
1/4 in	1 in	15	1B-8714
1/4 in	1 1/8 in	18	1B-8716
1/4 in	1 1/4 in	21	1B-8719
1/4 in	1 3/8 in	22	1B-8720
1/4 in	1 1/2 in	24	1B-8722
5/16 in	1 in	B	1H-6627
5/16 in	1 1/8 in	C	1B-8737
5/16 in	1 1/4 in	D	1B-8738
5/16 in	1 3/8 in	23	1B-8721
5/16 in	1 1/2 in	25	1B-8723
5/16 in	2 3/4 in	SX	1B-8742
3/8 in	1 1/4 in	E	1B-8739
3/8 in	1 3/8 in	F	1B-8740
3/8 in	1 1/2 in	G	1B-8741
3/8 in	2 3/4 in	T	1B-8743
3/8 in	2 3/4 in	TX	1B-8744
1/2 in	2 3/4 in	V	1B-8745

## Snap Rings/Internal/Inch



- Made of tempered carbon steel.

Bore Diameter	A	B	Part Number
	Free Diameter	Thickness	
<b>Tempered Basic</b>			
0.44 in	0.48 in	0.025 in	3D-8358
0.50 in	0.55 in	0.035 in	1S-1638
0.56 in	0.62 in	0.035 in	2R-1256
0.69 in	0.76 in	0.035 in	1H-4142
0.75 in	0.83 in	0.035 in	2M-8191
0.81 in	0.90 in	0.042 in	5S-4455
0.88 in	0.97 in	0.042 in	2L-6726
0.90 in	1.00 in	0.042 in	4L-1466
1.00 in	1.11 in	0.042 in	4D-1322
1.12 in	1.25 in	0.050 in	5S-1522
1.25 in	1.39 in	0.050 in	2D-6398
1.38 in	1.53 in	0.050 in	1L-3768
1.44 in	1.60 in	0.050 in	2H-1142
1.50 in	1.66 in	0.062 in	8N-7294
1.56 in	1.73 in	0.062 in	3K-9879
1.65 in	1.83 in	0.062 in	2R-1230
1.81 in	1.95 in	0.069 in	7X-2908
1.81 in	2.01 in	0.062 in	2D-5826
1.85 in	2.05 in	0.078 in	1L-8490
2.05 in	2.28 in	0.078 in	6J-7855
2.31 in	2.54 in	0.078 in	2D-6648
2.44 in	2.61 in	0.079 in	8T-9598
2.44 in	2.70 in	0.078 in	6L-8797
2.50 in	2.77 in	0.078 in	4D-1736
2.75 in	3.05 in	0.093 in	6K-3531
2.83 in	3.01 in	0.098 in	09S-0942
2.83 in	3.12 in	0.093 in	2H-5549
3.00 in	3.33 in	0.093 in	2R-1236
3.15 in	3.37 in	0.098 in	2W-1145
3.16 in	3.52 in	0.109 in	1K-6985
3.25 in	3.62 in	0.109 in	8J-7636
3.35 in	3.56 in	0.118 in	6V-5590
3.50 in	3.89 in	0.109 in	3D-8341
3.54 in	3.76 in	0.118 in	8T-0707
3.56 in	3.94 in	0.109 in	1J-6472
3.88 in	4.29 in	0.109 in	1S-3311
3.88 in	4.29 in	0.109 in	9M-9935
3.94 in	4.36 in	0.109 in	5J-3964
4.00 in	4.42 in	0.109 in	7M-2275
4.13 in	4.41 in	0.157 in	8T-7567
4.33 in	4.76 in	0.109 in	5L-4751
4.53 in	4.80 in	0.157 in	9T-2584
4.72 in	5.21 in	0.109 in	067-3161

Bore Diameter	A	B	Part Number
	Free Diameter	Thickness	
4.92 in	5.20 in	0.157 in	3E-4334
5.00 in	5.49 in	0.109 in	2L-0043
5.12 in	5.39 in	0.109 in	8T-9044
5.50 in	6.07 in	0.125 in	8D-2258
5.91 in	6.22 in	0.157 in	109-0119
6.00 in	6.62 in	0.125 in	5L-4756
6.25 in	6.89 in	0.156 in	8J-8905
6.63 in	7.31 in	0.156 in	6V-4495
7.00 in	7.72 in	0.156 in	1L-7388
7.25 in	7.99 in	0.187 in	1U-4022
8.00 in	8.82 in	0.187 in	8T-5380
8.25 in	9.09 in	0.187 in	9X-1802
8.27 in	8.74 in	0.197 in	3E-9400
9.06 in	9.53 in	0.197 in	101-2860
10.24 in	10.82 in	0.197 in	3E-9401
11.02 in	11.61 in	0.197 in	192-7145
11.42 in	12.01 in	0.197 in	103-8096
13.39 in	14.06 in	0.236 in	117-9750
–	2.35 in	0.078 in	3J-8500
–	2.53 in	0.079 in	250-2940
–	2.91 in	0.093 in	216-6148
–	3.05 in	0.094 in	8N-7296
–	3.32 in	0.093 in	253-1238
–	5.19 in	0.156 in	7C-1413
<b>Rectangular</b>			
0.69 in	0.73 in	0.035 in	3P-8485
2.17 in	2.38 in	0.125 in	6V-2832
2.31 in	2.48 in	0.078 in	7X-2495
3.08 in	3.41 in	0.124 in	290-9849
3.54 in	3.81 in	0.109 in	8C-3229
3.75 in	3.90 in	0.062 in	6V-0835
3.75 in	3.93 in	0.125 in	6V-5837
4.00 in	4.30 in	0.109 in	6V-6768
4.25 in	4.56 in	0.109 in	121-1257
4.45 in	4.66 in	0.125 in	4J-4968
4.63 in	4.94 in	0.109 in	121-1258
4.72 in	4.94 in	0.125 in	5P-6414
4.75 in	4.97 in	0.062 in	6V-0473
4.82 in	5.08 in	0.125 in	5P-7074
5.00 in	5.19 in	0.078 in	132-1183
5.12 in	5.36 in	0.156 in	3P-7313
5.32 in	5.44 in	0.098 in	8T-2151
5.50 in	5.69 in	0.210	8W-3074
5.51 in	5.75 in	0.156 in	5P-9957

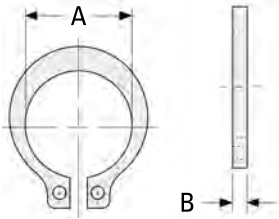
Bore Diameter	A	B	Part Number
	Free Diameter	Thickness	
6.25 in	6.52 in	0.093 in	6V-0836
6.25 in	7.25 in	0.156 in	271-1440
6.30 in	6.57 in	0.093 in	7X-7608
6.48 in	6.83 in	0.125 in	236-2541
6.50 in	6.83 in	0.156 in	8T-1742
6.50 in	6.83 in	0.156 in	8C-4400
6.51 in	6.84 in	0.093 in	9W-3136
7.09 in	7.38 in	0.187 in	3E-3212
7.48 in	7.89 in	0.187 in	1Q-3332
7.50 in	7.89 in	0.086 in	185-2888
7.64 in	7.97 in	0.172 in	6V-2833
7.75 in	8.24 in	0.125 in	6V-1586
7.87 in	8.27 in	0.120 in	313-4918
7.90 in	8.31 in	0.125 in	188-0751
8.00 in	8.51 in	0.187 in	8C-6799
8.50 in	9.04 in	0.187 in	3E-4371
9.06 in	9.62 in	0.187 in	117-8806
10.00 in	10.35 in	0.076 in	261-3121
10.00 in	10.46 in	0.187 in	5P-8194
12.60 in	12.92 in	0.157 in	241-0163
16.75 in	17.09 in	0.078 in	183-6233
17.72 in	20.08 in	0.210 in	7G-5831
27.68 in	31.65	0.210 in	5P-7989
31.48 in	9.00 in	0.210 in	5T-4024
35.12 in	39.37 in	0.210 in	8X-0559
40.55 in	49.21 in	0.210 in	139-7645
–	1.34 in	0.197 in	6Y-2875
–	1.34 in	0.197 in	6Y-2115
–	1.71 in	0.252 in	8N-6739
–	2.29 in	0.120 in	4D-1186
–	2.39 in	0.078 in	4M-8010
–	2.50 in	0.125 in	1T-0895
–	3.00 in	0.126 in	234-0743
–	3.56 in	0.095 in	8F-1145
–	3.75 in	0.125 in	5H-0793
–	4.19 in	0.127 in	1H-9106
–	4.31 in	0.188 in	1P-9646
–	4.81 in	0.138 in	7Y-4672
–	4.83 in	0.093 in	533-4824
–	5.37 in	0.125 in	7J-3296
–	5.80 in	0.138 in	087-5393
–	5.91 in	0.333 in	6T-0364
–	6.13 in	0.120 in	3P-8218
–	7.07 in	0.125 in	1T-1232

# Snap Rings

## Snap Rings/Internal/Inch (Cont'd.)

Bore Diameter	A	B	Part Number	Bore Diameter	A	B	Part Number	Bore Diameter	A	B	Part Number
	Free Diameter	Thickness			Free Diameter	Thickness			Free Diameter	Thickness	
–	7.77 in	0.210 in	8X-0563	3.35 in	3.55 in	0.111 in	4M-8910	9.25 in	9.56 in	0.086 in	6V-7979
–	8.19 in	0.125 in	5P-6047	3.56 in	3.78 in	0.111 in	066-5816	9.33 in	9.87 in	0.165 in	3W-2421
–	8.94 in	0.197 in	091-5224	3.94 in	4.18 in	0.111 in	8S-9104	9.76 in	10.07 in	0.086 in	6P-8309
–	10.63 in	0.157 in	144-4284	4.13 in	4.28 in	0.061 in	9M-6166	10.25 in	10.79 in	0.187 in	5P-9362
–	12.13 in	0.125 in	7G-1596	4.33 in	4.59 in	0.111 in	5M-4480	10.59 in	11.13 in	0.165 in	3W-2025
–	12.76 in	0.118 in	108-2736	4.50 in	4.77 in	0.111 in	3K-2556	10.75 in	11.09 in	0.086 in	9M-1976
–	13.78 in	0.125 in	3T-0007	4.75 in	5.03 in	0.111 in	3K-2559	11.02 in	11.42 in	0.187 in	340-2381
–	14.87 in	0.125 in	1T-0896	5.00 in	5.30 in	0.111 in	1M-8649	13.52 in	14.07 in	0.187 in	5P-6651
–	15.51 in	0.156 in	115-0764	5.12 in	5.31 in	0.153 in	340-2367	14.29 in	14.76 in	0.111 in	9W-3301
<b>Spiral</b>				5.12 in	5.44 in	0.127 in	5J-9454	14.96 in	15.52 in	0.111 in	8E-2827
1.25 in	1.33 in	0.050 in	8H-1037	5.25 in	5.56 in	0.127 in	2S-0613	15.43 in	15.92 in	0.111 in	7T-8004
2.00 in	2.13 in	0.062 in	2D-0592	5.75 in	5.95 in	0.072 in	9H-3452	17.09 in	17.65 in	0.111 in	7X-2627
2.06 in	2.19 in	0.078 in	2K-6091	6.00 in	6.31 in	0.127 in	7S-3004	18.61 in	19.30 in	0.187 in	5P-4041
2.13 in	2.26 in	0.078 in	6H-9361	7.00 in	7.37 in	0.156 in	340-2375	19.53 in	20.15 in	0.111 in	7X-2628
2.44 in	2.59 in	0.078 in	2D-1523	7.37 in	7.76 in	0.187 in	340-2382	–	12.76 in	0.187 in	5P-4256
2.63 in	2.79 in	0.093 in	5S-7779	8.25 in	8.68 in	0.187 in	340-2377				
3.13 in	3.25 in	0.061 in	2J-7761	9.05 in	9.47 in	0.187 in	340-2378				

## Snap Rings/External/Inch



- Made of tempered carbon steel.

Shaft Diameter	A	B	Part Number	Shaft Diameter	A	B	Part Number	Shaft Diameter	A	B	Part Number
	Free Diameter	Thickness			Free Diameter	Thickness			Free Diameter	Thickness	
0.25 in	0.22 in	0.025 in	6H-5829	2.94 in	2.72 in	0.093 in	7J-6580	—	1.64 in	0.207 in	3K-9269
0.38 in	0.34 in	0.025 in	9M-7611	3.02 in	2.79 in	0.126 in	147-5764	—	1.75 in	0.105 in	4K-1240
0.44 in	0.40 in	0.025 in	4H-0094	3.03 in	2.75 in	0.120 in	5P-9863	—	1.81 in	0.120 in	4B-1136
0.44 in	0.43 in	0.035 in	8C-5061	3.11 in	2.85 in	0.157 in	9W-5925	—	1.81 in	0.120 in	9W-6904
0.47 in	0.43 in	0.025 in	6L-3801	3.16 in	2.92 in	0.093 in	1N-8620	—	1.86 in	0.125 in	6S-3172
0.50 in	0.46 in	0.059 in	6P-1037	3.27 in	2.97 in	0.142 in	6Y-5790	—	1.88 in	0.157 in	213-4227
0.56 in	0.52 in	0.035 in	3D-2975	3.35 in	3.09 in	0.093 in	9S-4368	—	1.90 in	0.207 in	3K-9263
0.59 in	0.55 in	0.035 in	2L-8509	3.35 in	3.15 in	0.157 in	9W-6277	—	2.01 in	0.126 in	197-0087
0.62 in	0.58 in	0.035 in	8F-4610	3.50 in	3.24 in	0.109 in	5L-4753	—	2.02 in	0.063 in	096-7380
0.75 in	0.69 in	0.042 in	2J-6356	3.55 in	3.35 in	0.157 in	9W-6278	—	2.14 in	0.135 in	4M-1709
0.81 in	0.75 in	0.042 in	9F-5444	3.62 in	3.35 in	0.109 in	7J-6525	—	2.16 in	0.125 in	5M-4443
0.94 in	0.87 in	0.042 in	6H-6109	3.74 in	3.58 in	0.126 in	315-6224	—	2.16 in	0.207 in	6K-0468
0.98 in	0.89 in	0.079 in	3E-4332	4.00 in	3.70 in	0.109 in	8F-1959	—	2.25 in	0.125 in	6H-2953
0.98 in	0.91 in	0.042 in	1L-8497	4.02 in	3.78 in	0.207 in	6V-2835	—	2.26 in	0.188 in	3S-2619
1.00 in	0.93 in	0.042 in	001-5600	4.25 in	3.99 in	0.109 in	1N-5410	—	2.28 in	0.095 in	3K-6701
1.06 in	0.98 in	0.050 in	3K-8276	4.38 in	4.11 in	0.109 in	5H-5012	—	2.31 in	0.120 in	4H-6195
1.12 in	1.04 in	0.050 in	5L-4019	6.25 in	5.87 in	0.156 in	2L-0044	—	2.31 in	0.125 in	6H-6237
1.19 in	1.10 in	0.050 in	4M-5285	10.07 in	9.91 in	0.120 in	151-5729	—	2.33 in	0.188 in	4S-6712
1.25 in	1.16 in	0.050 in	2M-4287	—	0.16 in	0.020 in	1W-0565	—	2.36 in	0.126 in	195-6899
1.31 in	1.21 in	0.050 in	4D-8309	—	0.21 in	0.020 in	7N-8821	—	2.37 in	0.120 in	1M-1655
1.38 in	1.27 in	0.050 in	1J-6474	—	0.33 in	0.026 in	4N-2953	—	2.41 in	0.120 in	4B-1135
1.50 in	1.38 in	0.098 in	145-0909	—	0.40 in	0.059 in	2S-1387	—	2.64 in	0.138 in	099-6975
1.56 in	1.45 in	0.062 in	2L-6965	—	0.52 in	0.035 in	7N-6825	—	2.69 in	0.187 in	6Y-1890
1.62 in	1.50 in	0.062 in	9L-2336	—	0.61 in	0.060 in	3J-6008	—	2.71 in	0.188 in	8S-6328
1.69 in	1.56 in	0.062 in	5L-2931	—	0.62 in	0.031 in	5I-9311	—	2.87 in	0.177 in	104-7336
1.77 in	1.64 in	0.062 in	2J-7550	—	0.62 in	0.038 in	4T-0933	—	3.09 in	0.207 in	7K-4520
1.81 in	1.68 in	0.062 in	5K-9106	—	0.62 in	0.083 in	096-4032	—	3.15 in	0.187 in	4M-1708
1.85 in	1.69 in	0.120 in	253-3262	—	0.67 in	0.102 in	4N-7521	—	3.19 in	0.120 in	165-0512
1.88 in	1.74 in	0.062 in	1K-6995	—	0.72 in	0.062 in	4F-3544	—	3.38 in	0.207 in	5K-7989
1.89 in	1.77 in	0.098 in	3E-3891	—	0.78 in	0.079 in	130-8150	—	3.88 in	0.207 in	7S-2020
1.93 in	1.76 in	0.120 in	7T-7162	—	0.78 in	0.105 in	4H-8158	—	3.94 in	0.118 in	177-5241
1.97 in	1.82 in	0.062 in	8L-9811	—	0.91 in	0.060 in	6H-3455	—	3.98 in	0.250 in	8G-1259
2.12 in	1.96 in	0.078 in	1K-6984	—	0.91 in	0.060 in	1A-6235	—	4.25 in	0.188 in	2M-4480
2.16 in	1.99 in	0.078 in	4K-4284	—	1.06 in	0.236 in	243-2101	—	4.44 in	0.188 in	2P-3421
2.24 in	2.07 in	0.063 in	094-1399	—	1.06 in	0.630 in	234-8962	—	4.78 in	0.250 in	8P-4608
2.50 in	2.31 in	0.078 in	5K-4627	—	1.34 in	0.090 in	1A-4590	—	4.86 in	0.250 in	7P-2781
2.56 in	2.32 in	0.120 in	9W-6927	—	1.37 in	0.120 in	2A-4758	—	5.32 in	0.138 in	155-9189
2.56 in	2.38 in	0.078 in	6S-1753	—	1.44 in	0.091 in	191-2164	—	5.98 in	0.125 in	6P-3964
2.62 in	2.43 in	0.078 in	1K-6992	—	1.52 in	0.062 in	7S-4439	—	6.00 in	0.244 in	2B-7862
2.74 in	2.68 in	0.142 in	8E-2144	—	1.53 in	0.120 in	2B-9747	—	6.04 in	0.250 in	7P-4796
2.75 in	2.54 in	0.093 in	5J-3864	—	1.56 in	0.118 in	3T-2405	—	6.30 in	0.187 in	155-4881
2.80 in	2.50 in	0.120 in	5P-9862	—	1.61 in	0.120 in	9W-6926	—	6.46 in	0.079 in	136-2444
2.83 in	2.62 in	0.197 in	9W-5915	—	1.62 in	0.120 in	4B-1127	—	6.75 in	0.177 in	3V-9541

# Snap Rings

## Snap Rings/External/Inch (Cont'd.)

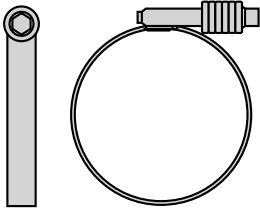
Shaft Diameter	A	B	Part Number
	Free Diameter	Thickness	
–	6.88 in	0.177 in	9C-7368
–	7.75 in	0.250 in	8K-2691

Shaft Diameter	A	B	Part Number
	Free Diameter	Thickness	
–	7.76 in	0.156 in	6P-7983
–	8.75 in	0.187 in	1J-6269

Shaft Diameter	A	B	Part Number
	Free Diameter	Thickness	
–	8.86 in	0.125 in	1W-2824



## Hose Clamps



Working Diameter	Part Number
<b>Belleville</b>	
17 - 32 mm (5/8 - 1 1/4 in)	159-1503
21 - 27 mm (7/8 - 1 1/16 in)	9X-2488
25 - 44 mm (1 - 1 3/4 in)	7X-7958
32 - 54 mm (1 1/4 - 2 1/8 in)	8T-4983
45 - 67 mm (1 3/4 - 2 5/8 in)	8T-6703
57 - 79 mm (2 1/4 - 3 1/8 in)	8T-4984
83 - 105 mm (3 1/4 - 4 1/8 in)	8T-4985
95 - 118 mm (3 6/8 - 4 5/8 in)	9X-2201
108 - 130 mm (4 1/4 - 5 1/8 in)	8T-4986
121 - 143 mm (4 3/4 - 5 5/8 in)	9X-6654
133 - 156 mm (5 1/4 - 6 1/8 in)	8T-4987
146 - 168 mm (5 3/4 - 6 5/8 in)	3E-7424
149 - 307 mm (5 7/8 - 12 1/8 in)	366-5879
159 - 181 mm (6 1/4 - 7 1/8 in)	8T-4988
172 - 194 mm (6 3/4 - 7 3/4 in)	124-2732
184 - 206 mm (7 1/4 - 8 1/8 in)	8T-4989
210 - 232 mm (8 1/ - 9 1/8 in)	8T-4990
248 - 270 mm (9 3/4 - 10 5/8 in)	116-8535
335 - 381 mm (13 1/4 - 15 in)	301-0402
<b>T-Bolt Spring</b>	
35.05 - 39.12 mm (1 3/8 - 1 1/2 in)	250-2952
36.5 - 39.6 mm (1 7/16 - 1 9/16 in)	222-6962
42.9 - 47.4 mm (1 11/16 - 1 7/8 in)	220-3246
44.5 - 49 mm (1 3/4 - 1 15/16 in)	216-1649
46 - 52.4 mm (1 13/16 - 2 1/16 in)	232-4901
47.6 - 53.7 mm (1 7/8 - 2 7/64 in)	222-1178
49.28 - 57.15 mm (1 15/16 - 2 1/4 in)	296-5807
52.4 - 58.5 mm (2 1/16 - 2 5/16 in)	221-5252
54.1 - 62 mm (2 1/8 - 2 7/16 in)	215-4012
55.6 - 63.5 mm (2 3/16 - 2 1/2 in)	263-9020
55.65 - 63.45 mm (2 3/16 - 2 1/2 in)	215-4011
57.2 - 65 mm (2 1/4 - 2 9/16 in)	212-6933
57.2 - 65 mm (2 1/4 - 2 9/16 in)	214-7457
58.6 - 66.6 mm (2 5/16 - 2 5/8 in)	212-6934
58.7 - 66.5 mm (2 5/16 - 2 5/8 in)	214-7458
60.4 - 68.4 mm (2 3/8 - 2 3/4 in)	217-6885
61.9 - 69.9 mm (2 7/16 - 2 3/4 in)	223-9985
61.9 - 69.9 mm (2 7/16 - 2 3/4 in)	216-6944

Working Diameter	Part Number
63.45 - 71.45 mm (2 1/2 - 2 13/16 in)	221-8571
63.5 - 71.4 mm (3 - 2 13/16 in)	215-4013
65.1 - 71.2 mm (2 9/16 - 2 13/16 in)	216-6945
68.25 - 76.25 mm (2 11/16 - 3 in)	226-0449
68.25 - 76.25 mm (2 11/16 - 3 in)	216-4983
68.3 - 78 mm (2 11/16 - 3 1/16 in)	324-3210
69.9 - 75.9 mm (2 3/4 - 3 in)	208-6054
69.9 - 77.7 mm (2 3/4 - 3 1/16 in)	320-0635
71.4 - 79.2 mm (2 13/16 - 3 1/8 in)	295-5550
71.4 - 79.2 mm (2 13/16 - 3 1/8 in)	209-4573
73.2 - 81 mm (2 7/8 - 3 3/16 in)	209-4574
74.6 - 82.5 mm (2 15/16 - 3 1/4 in)	209-4575
77.7 - 85.6 mm (3 1/16 - 3 3/8 in)	209-4577
79.5 - 87.4 mm (3 1/8 - 3 7/16 in)	208-6055
81 - 88.9 mm (3 3/16 - 3 1/2 in)	209-4578
82.55 - 90.45 mm (3 1/4 - 3 9/16 in)	209-4579
84.1 - 91.9 mm (3 5/16 - 3 5/8 in)	209-4580
85.9 - 93.7 mm (3 3/8 - 3 11/16 in)	209-4581
87.3 - 95.2 mm (3 7/16 - 3 3/4 in)	209-4582
90.5 - 98.4 mm (3 9/16 - 3 7/8 in)	254-5633
92.2 - 100 mm (3 5/8 - 3 15/16 in)	166-1153
93.7 - 101.6 mm (3 11/16 - 4 in)	209-4586
96.8 - 102.9 mm (3 13/16 - 4 3/64 in)	209-4588
98.4 - 104.5 mm (3 7/8 - 4 7/64 in)	209-4589
100 - 106.1 mm (4 - 4 1/8 in)	216-6947
103.12 - 111 mm (4 1/16 - 4 3/8 in)	307-9917
104.6 - 112.9 mm (4 1/8 - 4 7/16 in)	135-6259
104.65 - 112.78 mm (4 1/8 - 4 7/16 in)	208-7448
106.43 - 114.3 mm (4 3/16 - 4 1/2 in)	212-6932
109.5 - 115.6 mm (4 5/16 - 4 9/16 in)	209-4590
109.5 - 115.6 mm (4 5/16 - 4 9/16 in)	216-6946
112.7 - 120.6 mm (4 7/16 - 4 3/4 in)	230-3671
117.6 - 125.5 mm (4 5/8 - 5 in)	224-0807
120.65 - 128.52 mm (4 3/4 - 5 1/16 in)	250-2953
122.2 - 130 mm (4 13/16 - 5 1/8 in)	221-9208
128.5 - 136.4 mm (5 1/16 - 5 3/8 in)	222-2277
130.2 - 142.9 mm (5 1/8 - 5 5/8 in)	135-6260
130.3 - 138.2 mm (5 1/8 - 5 7/16 in)	219-0314
131.82 - 139.7 mm (5 3/16 - 5 1/2 in)	256-4448

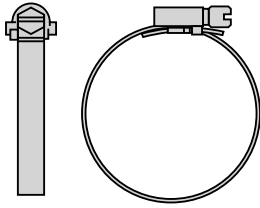
# Hose Clamps

## Hose Clamps (Cont'd.)

Working Diameter	Part Number
133.35 - 141.22 mm (5 1/4 - 5 9/16 in)	247-1925
134.87 - 142.75 mm (5 5/16 - 5 5/8 in)	239-5609
135 - 147 mm (5 5/16 - 5 13/16 in)	147-1685
136.22 - 144.53 mm (5 3/8 - 5 11/16 in)	246-8026
136.65 - 144.53 mm (5 3/8 - 5 11/16 in)	226-0087
141.22 - 149.09 mm (5 9/16 - 5 7/8 in)	237-0226
143 - 150.88 mm (5 5/8 - 5 15/16 in)	220-4125
150.11 - 155.45 mm (5 29/32 - 6 1/8 in)	220-4126
152.42 - 160.32 mm (6 - 6 5/16 in)	240-2651
155.7 - 163.6 mm (6 1/8 - 6 7/16 in)	219-0313
155.7 - 168.4 mm (6 1/8 - 6 1/2 in)	135-6261
158.7 - 164.9 mm (6 1/4 - 6 1/2 in)	214-0584
158.75 - 171.45 mm (6 1/4 - 6 3/4 in)	233-8350
160.3 - 168.1 mm (6 5/16 - 6 5/8 in)	216-2212
160.3 - 168.1 mm (6 5/16 - 6 5/8 in)	216-2211
163.6 - 176.3 mm (6 7/16 - 6 15/16 in)	231-3264
165.1 - 171.2 mm (6 1/2 - 6 3/4 in)	224-0808
169.93 - 182.63 mm (6 3/4 - 7 3/16 in)	233-8351
181.1 - 188.99 mm (7 1/8 - 7 7/16 in)	230-2536
184.15 - 192.02 mm (7 1/4 - 7 9/16 in)	251-4184
185.67 - 198.37 mm (7 1/4 - 7 13/16 in)	233-8482
187.45 - 195.33 mm (7 3/8 - 7 11/16 in)	231-5210
188.98 - 201.68 mm (7 7/16 - 7 15/16 in)	233-8483
196.85 - 209.55 mm (7 3/4 - 8 1/4 in)	233-8354
206.38 - 214.25 mm (8 1/8 - 8 7/16 in)	289-4013
208 - 220.7 mm (8 3/16 - 8 11/16 in)	323-3315
211.07 - 223.77 mm (8 5/16 - 8 13/16 in)	233-8484
215.9 - 228.6 mm (8 1/2 - 9 in)	254-0816

Working Diameter	Part Number
216.78 - 224.65 mm (8 17/32 - 8 27/32 in)	230-2535
222.25 - 234.95 mm (8 3/4 - 9 1/4 in)	233-8356
254 - 266.7 mm (10 - 10 1/2 in)	230-2534
265.18 - 277.88 mm (10 7/16 - 10 15/16 in)	233-8485
268.22 - 280.92 mm (10 1/2 - 11 1/16 in)	251-0039
287.66 - 307.98 mm (11 21/64 - 12 1/8 in)	232-1779
635 - 647 mm (25 - 25 1/2 in)	313-5058
Wave Liner	
25 - 38 mm (1 - 1 1/2 in)	289-9139
27 - 35 mm (1 1/16 - 1 3/8 in)	284-3502
33 - 48 mm (1 1/4 - 1 7/8 in)	335-8254
35 - 51 mm (1 3/8 - 2 in)	280-8911
39 - 57 mm (1 1/2 - 2 1/4 in)	300-6036
39 - 59 mm (1 1/2 - 2 5/16 in)	347-3148
46 - 67 mm (1 13/16 - 2 5/8 in)	347-4163
48 - 70 mm (1 7/8 - 2 3/4 in)	314-7599
51 - 76 mm (2 - 3 in)	335-9214
56 - 83 mm (2 3/16 - 3 1/4 in)	343-6821
60 - 89 mm (2 3/8 - 3 1/2 in)	347-4165
60 - 91 mm (2 3/8 - 3 9/16 in)	346-9043
69 - 102 mm (2 11/16 - 4 in)	343-1820
73 - 108 mm (2 7/8 - 4 1/4 in)	346-4789
76 - 114 mm (3 - 4 1/2 in)	346-4790
86 - 127 mm (3 3/8 - 5 in)	346-4791
94 - 140 mm (3 11/16 - 5 1/2 in)	346-4788
102 - 152 mm (4 - 6 in)	346-4792
124 - 173 mm (4 7/8 - 6 13/16 in)	342-9511

## Standard Hose Clamps



Working Diameter	Part Number
6 - 16 mm (1/4 - 5/8 in)	1P-4278
16 - 27 mm (5/8 - 1 1/16 in)	5D-1026
22 - 44 mm (7/8 - 1 3/4 in)	9M-7958
32 - 51 mm (1 1/4 - 2 in)	5P-2230
43 - 64 mm (1 11/16 - 2 1/2 in)	9M-0164
45 - 67 mm (1 3/4 - 2 5/8 in)	5P-0597

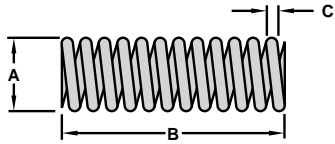
Working Diameter	Part Number
54 - 105 mm (2 1/8 - 4 1/8 in)	5P-0598
65 - 89 mm (2 9/16 - 3 1/2 in)	9M-7959
89 - 108 mm (3 1/2 - 4 1/4 in)	9M-6738
133 - 156 mm (5 1/4 - 6 1/8 in)	5P-0599
156 - 229 mm (6 1/8 - 9 in)	5P-0600

### Clamp Style Recommendations

- For low pressure joints, up to 7 PSI, a standard worm drive clamp is recommended.
- For joints with higher pressure, which does not exceed 50 PSI, a constant pressure style clamp is recommended (T-Bolt, Belleville, and Wave Liner).
- For pressure lines exceeding 50 PSI, a T-Bolt style clamp or hose assembly with crimped fittings should be used.

# Springs

## Springs/Compression



A	B	C	Part Number
Outside Diameter	Length	Wire Diameter	
<b>1/4 Inch</b>			
1/4 in	5/16 in	0.031 in	9N-1747
1/4 in	3/8 in	0.031 in	9L-9522
1/4 in	1/2 in	0.031 in	098-7468
1/4 in	9/16 in	0.031 in	3G-0670
1/4 in	3/4 in	0.031 in	7V-3827
1/4 in	1 in	0.063 in	4T-7794
1/4 in	1 5/16 in	0.063 in	1V-8784
1/4 in	1 1/2 in	0.031 in	9N-4049
1/4 in	2 1/4 in	0.031 in	9N-1622
1/4 in	2 13/16 in	0.063 in	8J-9273
<b>3/8 Inch</b>			
3/8 in	1/2 in	0.031	6B-3364
3/8 in	9/16 in	0.063	7M-3801
3/8 in	7/8 in	0.063	4K-8350
3/8 in	15/16 in	0.031	9S-1347
3/8 in	1 1/8 in	0.031	9L-6422
3/8 in	1 1/4 in	0.031	3N-6233
3/8 in	1 5/8 in	0.031	6N-8793
3/8 in	1 3/4 in	0.031	2V-3457
3/8 in	2 1/4 in	0.031	2L-4403
3/8 in	3 1/8 in	0.094	1P-9602
3/8 in	3 3/8 in	0.094	7B-9411
3/8 in	3 5/8 in	0.094	4M-5912
<b>1/2 Inch</b>			
1/2 in	5/8 in	0.031 in	6F-0967
1/2 in	1 in	0.031 in	5K-3918
1/2 in	1 1/4 in	0.031 in	5F-7464
1/2 in	1 1/2 in	0.063 in	6Y-0172
1/2 in	1 5/8 in	0.031	3C-0585
1/2 in	1 3/4 in	0.125	3G-7402
1/2 in	1 7/8 in	0.063	9M-1986
1/2 in	2 in	0.031	7M-7244
1/2 in	2 1/4 in	0.063	0L-1466
1/2 in	2 1/2 in	0.063	6P-7701
1/2 in	2 5/8 in	0.031	3N-5738
1/2 in	3 1/4 in	0.031	0L-1142
1/2 in	3 3/4 in	0.063	5B-1952
1/2 in	3 7/8 in	0.094	5J-9605
1/2 in	4 3/4 in	0.063	5M-6110
1/2 in	4 7/8 in	0.094	3T-7584

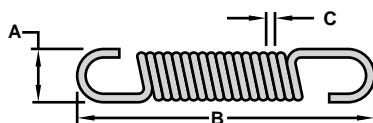
A	B	C	Part Number
Outside Diameter	Length	Wire Diameter	
1/2 in	5 3/8 in	0.094	6T-1318
1/2 in	5 7/8 in	0.094	9S-9876
<b>5/8 Inch</b>			
5/8 in	1/2 in	0.063	6T-8234
5/8 in	5/8 in	0.031	9N-6249
5/8 in	1 1/8 in	0.094	6S-8736
5/8 in	1 1/4 in	0.094	9M-3091
5/8 in	1 13/16 in	0.063	3F-8845
5/8 in	1 7/8 in	0.094	4F-9503
5/8 in	2 in	0.094	9W-1467
5/8 in	2 1/8 in	0.063	2P-5700
5/8 in	2 1/2 in	0.063	2F-5889
5/8 in	2 3/4 in	0.063	4F-6145
5/8 in	3 1/8 in	0.094	4J-4051
5/8 in	3 1/4 in	0.063	1W-6077
5/8 in	3 3/8 in	0.125	3P-7566
5/8 in	3 1/2 in	0.063	6P-9784
5/8 in	4 3/8 in	0.094	2P-4498
5/8 in	4 1/2 in	0.125	9T-1676
<b>3/4 Inch</b>			
3/4 in	7/8 in	0.031	4T-2684
3/4 in	1 in	0.125	6F-4294
3/4 in	1 3/8 in	0.031	3N-7848
3/4 in	1 1/2 in	0.094	7M-3496
3/4 in	1 5/8 in	0.125	5F-2201
3/4 in	2 in	0.063	5F-9035
3/4 in	2 1/4 in	0.094	7G-5378
3/4 in	2 3/8 in	0.125	9S-8237
3/4 in	2 1/2 in	0.125	1K-4476
3/4 in	2 5/8 in	0.125	3D-2777
3/4 in	2 7/8 in	0.063	8F-3398
3/4 in	3 1/8 in	0.094	6H-1649
3/4 in	3 7/8 in	0.063	2H-6117
3/4 in	4 in	0.125	1S-5646
3/4 in	4 1/2 in	0.031	9T-8208
3/4 in	4 7/8 in	0.094	2S-6538
<b>7/8 Inch</b>			
7/8 in	7/16 in	0.063	3P-8042
7/8 in	15/16 in	0.063	9P-9211
7/8 in	2 in	0.094	9S-8632
7/8 in	2 7/8 in	0.125	1W-9860

## Springs/Compression (Cont'd.)

A Outside Diameter	B Length	C Wire Diameter	Part Number
7/8 in	3 in	0.125	5N-3015
7/8 in	3 1/8 in	0.125	3P-0246
7/8 in	3 3/8 in	0.125	1W-2208
7/8 in	3 1/2 in	0.125	9L-9243
7/8 in	4 5/8 in	0.125	6B-8809
7/8 in	5 3/8 in	0.156	4D-7637
7/8 in	5 1/2 in	0.094	7M-1405
7/8 in	5 15/16 in	0.094	4H-1221
7/8 in	6 7/16 in	0.125	4D-9469
<b>1 Inch</b>			
1 in	5/8 in	0.063	9T-1699
1 in	7/8 in	0.125	7W-2110
1 in	1 in	0.094	7V-0444
1 in	1 1/8 in	0.094	9P-8308
1 in	1 1/4 in	0.094	6T-7221
1 in	1 3/8 in	0.094	7J-0736
1 in	1 1/2 in	0.125	1P-0620
1 in	1 5/8 in	0.063	4N-5663
1 in	1 3/4 in	0.125	1S-7592
1 in	1 7/8 in	0.063	9F-1993

A Outside Diameter	B Length	C Wire Diameter	Part Number
1 in	2 in	0.094	2S-8398
1 in	2 1/8 in	0.125	9T-2168
1 in	2 1/4 in	0.156	8H-9488
1 in	2 3/8 in	0.094	2J-0075
1 in	2 5/8 in	0.125	3V-5498
1 in	2 3/4 in	0.094	8J-3819
1 in	3 in	0.094	4J-7066
1 in	3 1/8 in	0.094	5J-3719
1 in	3 1/4 in	0.094	8J-1705
1 in	3 1/2 in	0.156	9T-1848
1 in	3 3/4 in	0.094	5J-3419
1 in	4 in	0.063	4B-4910
1 in	4 1/4 in	0.156	6L-4173
1 in	4 3/4 in	0.094	8J-6728
1 in	5 in	0.063	3L-4521
1 in	5 1/4 in	0.094	8J-5839
1 in	5 1/2 in	0.188	6N-1320
1 in	6 1/8 in	0.156	2S-2760
1 in	6 7/8 in	0.125	5M-7884

## Springs/Extension



A Outside Diameter	B Length	C Wire Diameter	Part Number
<b>5/16 Inch</b>			
5/16 in	1 1/4 in	0.035 in	7F-7613
5/16 in	1 7/16 in	0.031 in	1A-3540
<b>3/8 Inch</b>			
3/8 in	1 1/2 in	0.063 in	1A-1376
3/8 in	4 9/32 in	0.047 in	5H-4291
<b>1/2 Inch</b>			
1/2 in	1 1/4 in	0.063 in	8L-8491
1/2 in	2 in	0.063 in	1A-0302
<b>9/16 Inch</b>			
9/16 in	1 5/8 in	0.063 in	5M-9708
9/16 in	4 1/4 in	0.063 in	2R-0416
<b>11/16 Inch</b>			
11/16 in	4 in	0.094 in	1D-1313
11/16 in	6 in	0.094 in	7D-5289
<b>3/4 Inch</b>			

A Outside Diameter	B Length	C Wire Diameter	Part Number
3/4 in	2 5/32 in	0.063 in	1A-8189
<b>25/32 Inch</b>			
25/32 in	3 3/4 in	0.094 in	1F-4449
<b>7/8 Inch</b>			
7/8 in	3 1/4 in	0.094 in	8Y-4581
7/8 in	3 13/16 in	0.094 in	9S-1312
7/8 in	4 in	0.125 in	7G-1251
<b>1 Inch</b>			
1 in	4 in	0.094 in	009-2445
1 in	5 1/8 in	0.094 in	035-7877
1 in	5 3/8 in	0.156 in	038-2805
<b>1 3/6 Inch</b>			
1 3/6 in	5 5/32 in	0.156 in	9P-9185
1 3/6 in	5 3/8 in	0.125 in	091-7882
1 3/6 in	6 1/2 in	0.156 in	091-7881

# Springs

## Springs Extension/Crossover Loop

Outside Diameter	Length	Wire Diameter	End Configuration	Spring End Orientation	Part Number
3/4 in	4 17/64 in	0.091 in	Crossover Loop	360	1M-0437
49/64 in	8 29/64 in	0.091 in	Crossover Loop	180	4M-4014
1 in	7 1/7 in	0.120 in	Crossover Loop	90	4B-6493
1 1/16 in	8 3/4 in	0.105 in	Crossover Loop	360	9H-6700
1 3/32 in	5 13/32 in	0.091 in	Crossover Loop	360	5K-5697
1 1/2 in	7 in	0.148 in	Crossover Loop	360	119-0952

## Springs Extension/Machine Hook

Outside Diameter	Length	Wire Diameter	End Configuration	Spring End Orientation	Part Number
15/32 in	2 1/16 in	0.047 in	Machine Hook	180	9D-1058
15/32 in	2 5/8 in	0.048 in	Machine Hook	90	4F-6123
31/64 in	1 1/4 in	0.059 in	Machine Hook	180	8L-8491
1/2 in	2 3/4 in	0.048 in	Machine Hook	90	3W-6485
1/2 in	2 61/64 in	0.072 in	Machine Hook	360	1S-6889
1/2 in	5 29/64 in	0.058 in	Machine Hook	360	9L-6626
17/32 in	1 9/16 in	0.047 in	Machine Hook	90	8P-2290
9/16 in	1 5/8 in	0.072 in	Machine Hook	180	5M-9708
9/16 in	2 1/8 in	0.076 in	Machine Hook	90	2G-3765
9/16 in	2 11/32 in	0.072 in	Machine Hook	360	2P-3682
9/16 in	3 in	0.062 in	Machine Hook	90	9L-7372
9/16 in	3 7/8 in	0.055 in	Machine Hook	180	203-7559
9/16 in	4 1/4 in	0.063 in	Machine Hook	180	106-0070
37/64 in	2 9/16 in	0.098 in	Machine Hook	360	4M-8799
5/8 in	2 19/64 in	0.091 in	Machine Hook	180	2S-1381
21/32 in	3 5/16 in	0.120 in	Machine Hook	90	6W-5817
11/16 in	1 43/64 in	0.062 in	Machine Hook	180	3B-9762
11/16 in	2 in	0.076 in	Machine Hook	360	8M-1019
11/16 in	2 in	0.078 in	Machine Hook	360	8C-3442
11/16 in	3 15/16 in	0.091 in	Machine Hook	180	1D-1313
11/16 in	4 3/4 in	0.091 in	Machine Hook	90	8D-8456
11/16 in	6 in	0.091 in	Machine Hook	180	7D-5289
45/64 in	1 29/32 in	0.063 in	Machine Hook	90	3Y-2806
23/32 in	2 9/32 in	0.080 in	Machine Hook	90	1U-1648
3/4 in	3 15/32 in	0.079 in	Machine Hook	180	159-9875
3/4 in	7 1/2 in	0.331 in	Machine Hook	90	7G-6942
25/32 in	3 13/64 in	0.024 in	Machine Hook	180	8Y-4581
51/64 in	3 7/64 in	0.207 in	Machine Hook	180	8W-2823
13/16 in	2 23/64 in	0.069 in	Machine Hook	180	176-2447
7/8 in	2 61/64 in	0.135 in	Machine Hook	360	318-9461
7/8 in	4 1/8 in	0.120 in	Machine Hook	180	7G-1251
7/8 in	5 1/4 in	0.120 in	Machine Hook	360	1H-2348
15/16 in	3 27/32 in	0.438 in	Machine Hook	360	3W-4324
1 in	5 17/64 in	0.120 in	Machine Hook	360	9R-1587
1 in	5 1/2 in	0.115 in	Machine Hook	180	141-6343
1 3/32 in	3 in	0.091 in	Machine Hook	180	6K-1898
1 3/32 in	3 1/8 in	0.160 in	Machine Hook	360	194-7034
1 1/8 in	4 7/8 in	0.148 in	Machine Hook	360	9D-2641
1 1/8 in	11 in	0.135 in	Machine Hook	90	6K-1961
1 5/32 in	4 59/64 in	0.157 in	Machine Hook	90	090-8612

## Springs Extension/Machine Hook (Cont'd.)

Outside Diameter	Length	Wire Diameter	End Configuration	Spring End Orientation	Part Number
1 5/32 in	5 5/32 in	0.162 in	Machine Hook	180	9P-9185
1 3/16 in	5 11/32 in	0.138 in	Machine Hook	180	296-5446
1 1/4 in	5 1/2 in	0.162 in	Machine Hook	180	149-2065
1 1/4 in	6 5/16 in	0.162 in	Machine Hook	360	2J-2664
1 19/64 in	2 25/32 in	0.156 in	Machine Hook	360	111-3780
1 19/64 in	6 1/64 in	0.234 in	Machine Hook	360	103-4867
1 11/32 in	6 3/4 in	0.162 in	Machine Hook	360	7B-5594
1 13/32 in	12 1/2 in	0.156 in	Machine Hook	90	5H-6044
1 5/8 in	5 27/32 in	0.207 in	Machine Hook	360	4E-8340
1 5/8 in	10 3/16 in	0.187 in	Machine Hook	90	4F-2943
2 in	11 33/64 in	0.263 in	Machine Hook	360	125-5071
2 1/8 in	13 in	0.283 in	Machine Hook	180	344-6306
2 1/2 in	9 1/16 in	0.225 in	Machine Hook	180	6G-0254
3 in	19 11/16 in	0.394 in	Machine Hook	90	447-3255

## Springs Extension/Machine Loop

Outside Diameter	Length	Wire Diameter	End Configuration	Spring End Orientation	Part Number
1/2 in	1 39/64 in	0.062 in	Machine Loop	90	4H-3521
1/2 in	2 in	0.062 in	Machine Loop	180	1A-0302
5/8 in	3 3/4 in	0.080 in	Machine Loop	360	4M-1768
5/8 in	4 1/16 in	0.080 in	Machine Loop	360	4S-8569
21/32 in	5 13/32 in	0.072 in	Machine Loop	360	5N-5291
3/4 in	5 1/4 in	0.080 in	Machine Loop	90	7D-9722
1 5/32 in	4 29/32 in	0.157 in	Machine Loop	90	419-9829

# Kits

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## Hardware Bin Kits

Thirteen different Hardware Bin Kits are available for customers who want to stock hardware bins for their service departments and/or service vehicles with various quantities of popular sizes of Cat bolts, nuts and washers. Kits available:

Part Number	Thread	Coating	Contains	Pieces	Bolt Head
3E-6640	Inch - Coarse	Phosphate and Oil	59 Part Numbers	1735	Hex
3E-9420	Inch - Coarse	Phosphate and Oil	38 Part Numbers	1975	Hex
3E-9422	Metric - Coarse	Phosphate and Oil	38 Part Numbers	1580	Hex

## Hardware Shop and Field Kits

Five different Hardware Shop/Field Kits are available for small repair shops or field service vehicles. Kits contain assortments of popular sizes of Cat bolts with matching washers and nuts, in phosphate and oil coatings. The hardware is packaged in a rugged metal box with hinged metal cover and latch. Inch Hardware Kits come in two sizes, small and large, depending on the quantity of hardware in the kit. Kits available:

Part Number	Thread	Coating	Size	Contains	Pieces
178-2207	Inch - Fine	Phosphate and oil	Large	24 Part Numbers	476
178-2209	Inch - Coarse	Phosphate and oil	Small	27 Part Numbers	502
178-2210	Inch - Coarse	Phosphate and oil	Large	34 Part Numbers	936
178-2211	Metric - Coarse	Phosphate and oil	Small	32 Part Numbers	630





- Quickly identifies hardware thread diameter and pitch
- Four holes on mounting base for easy attachment to retail parts counter, service shop tool crib, or field service truck

Dimensions (L x H x W)	609 m (24 in) x 101 mm (4 in) x 76 mm (3 in)
Metric:	
Media literature number	250-6866
Range	16 mm-2.0 to 4 mm-0.7
No. of bolt sizes	15
Inch:	
Media literature number	250-6865
Range	3/4-16 to #6-32
No. of bolt sizes	21
Sheet metal/wood screw sizes	5





**OPERATOR ENVIRONMENT**

# Cat Cabin Air Quality System

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## Universal Precleaner Kits

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### To Protect Operators in High-Risk Areas



You are responsible for the safety of equipment operators throughout your fleet. That's why Caterpillar equips all of its heavy equipment with pressurized cabins and standard positive air filtration. However, some harsh applications—particularly at construction, quarry, waste, mining and oil/gas-extraction sites—produce excessive amounts of airborne particles and odors that can cause acute respiratory problems. The Cat Cabin Air Quality System adds an extra measure of protection for your operators who work in these types of harmful environments.



# Cat Cabin Air Quality System

## Improve Cabin Air Quality Easily and Efficiently

### STEP 1

Order one Cat Advanced Cabin Filtration Kit for every machine that you want to retrofit. <sup>(1)</sup>



Extended length/Life



Standard

Part Number	Item
418-6474	Advanced Cabin Filtration Kit includes: (This unit comes with a MERV16 filter– part number 457-2836 – unless a different filter is specified. See the MULTI-TIERED FILTER OFFERINGS on the next page.)
514-6873	Extended Length/Life Kit

### Step 2

Select the most suitable filter for each system, to match its end-use application. All filters listed below feature Caterpillar’s advanced filtration technology, which reduces airborne irritants to create a cleaner and more comfortable working environment for the operator. Compared to standard filters, which have a filtration level in the range of MERV 8 to MERV 10, these advanced options perform at a level of MERV 16 or higher. Plus, these filters are engineered for durability: Each filter provides 500+ hours of life.



MULTI-TIERED FILTER OFFERINGS FOR INITIAL INSTALLATION AND ONGOING MAINTENANCE					
LENGTH/LIFE	FILTRATION LEVEL	TYPICAL OPERATING ENVIRONMENT (Sample substances)	DESCRIPTION	TYPICAL PARTICLE SIZE (Efficiency)	PART NUMBER
Standard Length/Life 448.2 mm x 286 Space claim  500+ Hours	MERV16 <sup>(2)</sup>	General Use (Dust & Silica)	<ul style="list-style-type: none"> <li>Offers excellent removal of dust, soil pollen and mold spores in enclosed operator cabs</li> </ul>	< 1.0 µm (>95%)	457-2836

1 Caterpillar recommends reading the Maintenance Guide for Cab Pressurization on All Caterpillar Products (REHS6117).  
 2 The MERV16 rating is equivalent to an F9 rating according to EN779, and roughly equivalent to E11 according to EN1822.

# Cat Cabin Air Quality System

## Step 2 (Cont'd.)

MULTI-TIERED FILTER OFFERINGS FOR INITIAL INSTALLATION AND ONGOING MAINTENANCE					
LENGTH/LIFE	FILTRATION LEVEL	TYPICAL OPERATING ENVIRONMENT (Sample substances)	DESCRIPTION	TYPICAL PARTICLE SIZE (Efficiency)	PART NUMBER
	HEPA <sup>(3)</sup>	Finer Dusts (Asbestos) and/or Smoke	<ul style="list-style-type: none"> <li>Higher efficiency (compared to MERV16 filter) for better dust reduction<sup>(4)</sup></li> </ul>	< 0.3 µm (≈ 99.9%)	457-3049
	Activated Carbon	Odor Reducing (Waste & Diesel Smells)	<ul style="list-style-type: none"> <li>Ideal for landfill operations</li> <li>Higher performance activated charcoal ensures fast rate of absorption</li> <li>Delivers increased odor reduction compared to competition</li> <li>Higher capacity extends life and reduces maintenance cost</li> <li>Superior particle removal efficiency reduces eye, nose, and throat irritants</li> <li>No adverse effect on air flow, heat or air conditioning performance</li> <li>No operator exposure to loose carbon particles, even in rough applications</li> </ul>	< 0.3 µm (≈ 99.9%)	472-7939
Extended Length/Life (for machines that will be used or have been used in hazardous gas environments) 286 mm x 626 mm Space claim  750+ Hours	MERV16 <sup>(5)</sup>	General Use (Dust & Silica)	(See MERV16 filter description above)	< 1.0 µm (>95%)	503-4678
	HEPA <sup>(3)</sup>	Finer Dusts (Asbestos) and/or Smoke	(See HEPA filter description above)	< 0.3 µm (≈ 99.9%)	503-7472
	Activated Carbon	Odor Reducing (Waste & Diesel Smells)	(See Odor Reducing filter description above)	< 0.3 µm (≈ 99.9%)	503-7917
	CLASS 1 ABEK-Hg GASES**	Hazardous Gases (Sulfur Dioxide SO <sub>2</sub> , Hydrogen Sulphide H <sub>2</sub> S, Chlorine Cl <sub>2</sub> , Hydrogen Cyanide HCN, Ammonia NH <sub>3</sub> )	<ul style="list-style-type: none"> <li>The only filter intended for filtering hazardous material</li> </ul>	< 0.3 µm (≈ 99.9%)	472-7444

3 The HEPA filters are certified to H13 according to EN1822.

4 The air quality leaving the 333-2112 HEPA filter meets the minimum efficiency requirement of 99.97% at 0.3 microns to be considered a HEPA filter. However, using 333-2112 HEPA filter will not guarantee the operator cab environment is to a HEPA level of cleanliness. Caterpillar recommends operators use personal protective equipment (PPE) when working in environments with hazardous materials.

5 The MERV16 rating is equivalent to an F9 rating according to EN779, and roughly equivalent to E11 according to EN1822.

# Cat Work Lights, Signal Lights, Strobes and Bulbs

## Cat Work Lights

When you're working against the clock, Cat Work Lights help turn night into day and increase productivity of both machines and operators in a wide range of applications. Premium Cat Work Lights are designed to meet the demanding vibration levels of both large and small machines, offering long life and low maintenance costs. Well-lit work areas also increase operator safety with enhanced visibility for the operator and personnel. Count on highly reliable Cat Work Lights to light up your job site — and make time work for you.

## Cat Light Emitting Diode (LED) Work Lights



Operators and work sites prefer the bright lights of LEDs. The Cat LED work lights are designed for applications where high service life and durability is important. The extremely long life of LEDs is an easy decision to upgrade to LED work lights, thus drastically reducing owning and operating costs.

LED lights estimated life is over 40K hours, low power consumption, multi voltage use (9V to 32+), high vibration resistance, water-proof, environmentally safe, and contains no bulbs. The features and versatility of LED's is a smart choice and ideal for all applications.

LED Work Lights						
Part Number	Lens Pattern	Lens Dimension (in)	Lumens	Voltage (VDC)	Connector	Additional
541-6340	Flood	3x3	300	9 to 32	2 DT Intregal	–
541-6342	Flood	3x3	300	9 to 32	2 DT Intregal	Magnetic
424-5598	Wide Flood	2.4x2.4	350	12 to 48	2 DT Intregal	–
488-5634	Wide Flood	2.4x2.4	350	12 to 48	2 DT Intregal	Amber
487-1739	Flood-Diffused	4x4	700	9 to 32	2 DT Intregal	Flush
386-1722	Wide Flood	4x4	750	9 to 32	2 DT Intregal	–
386-1724	Flood	4x4	750	9 to 32	2 DT Intregal	ECE
417-0977	Wide Flood	4x4	750	9 to 32	2 DT Intregal	–
491-4517	Wide Flood	4x4	750	9 to 32	2 DT Intregal	–
431-9514	Flood	3 Round	800	9 to 32	2 DT Intregal	–
539-5524	Flood	4x4	800	9 to 32	2 DT Intregal	Snap-In
518-4060	Wide Flood	3.5x3.5	850	9 to 32	2 DT Intregal	Off set
524-8521	Wide Flood	4 Round	850	9 to 32	2 DT Intregal	–
526-4904	Wide Flood	4 Round	850	9 to 32	2 DT Intregal	Off set
426-5380	Wide Flood	3 Round	1000	9 to 32	2 DT Intregal	–
466-2421	Wide Flood	3 Round	1000	9 to 32	2 DT Intregal	–
524-8522	Wide Flood	4 Round	1200	9 to 32	2 DT Intregal	–
526-4905	Wide Flood	4 Round	1200	9 to 32	2 DT Intregal	–
451-5632	Wide Flood	4x4.5	1300	24	2 DT Intregal	Pole
459-0177	Flood	4x4	1500	9 to 32	2 DT Pigtail	Snap-In
431-9513	Flood	Oval	1700	9 to 32	2 DT Intregal	–
455-8660	Flood	5x9	1950	9 to 32	2 DT Intregal	–

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## Cat Light Emitting Diode (LED) Work Lights (Cont'd.)

LED Work Lights						
Part Number	Lens Pattern	Lens Dimension (in)	Lumens	Voltage (VDC)	Connector	Additional
424-5603	Flood	5 Round	2100	9 to 32	2 DT Intregal	–
449-9219	Flood	4x4	2100	9 to 32	2 DT Intregal	Offset
474-4631	Flood	4x4	2100	9 to 32	2 DT Intregal	–
505-8916	Flood	4x4	2100	9 to 32	2 DT Intregal	–
489-0286	Wide Flood	2x7	2600	9 to 32	2 DT Intregal	Boom Mount
374-1437	Wide Flood	4x4	3000	24	2 DT Intregal	–
398-7378	Wide Flood	4x4	3000	24	2 DT Pigtail	Pole
476-6074	Flood	4x4	3000	12 to 100	2 DT Intregal	–
441-0314	Flood	4x4	4200	9 to 32	2 DT Intregal	–
450-4950	Wide Flood	4x4	4200	9 to 32	2 DT Intregal	–
451-2535	Wide Flood	4x4	4200	9 to 32	2 DT Intregal	–
461-8616	Wide Flood	4x4	4200	9 to 32	2 DT Intregal	Tall Bracket
476-6075	Flood	5x5	5000	12 to 100	2 DT Intregal	–

## High Intensity Gas Discharge (HID) Lights (Xenon)



High Intensity Gas Discharge Work Lights from Caterpillar increase productivity of both machines and operators providing bright light around-the-clock or extended night operations. Cat HID Work Lights are built to handle tough jobs efficiently, producing the equivalent of several halogen lights with the same wattage for exterior floodlighting. Compared to Halogen lights, HID lights resist vibration and shock better and last longer. Your operators will work more safely and efficiently in a work area widely illuminated by the bright HID Work Lights. Life expectancy is six to eight times that of Halogen lamps and produce more than two times more light output than Halogen. HID lights are available in three sizes and two light patterns.

HID - Work Lights						
Part Number	Lens Pattern	Lens Dimension (in)	Bulb	Voltage (VDC)	Connector	Mounting
319-0378	Flood	5x5	290-8160	24	2 DT Pigtail	Suspended
319-7380	Flood	4x4	290-8160	24	2 DT Intregal	Vertical
324-3740	Flood	4 Round	290-8160	24	2 DT Intregal	Suspended
334-6198	Flood	4 Round	290-8160	24	2 DT Intregal	Vertical
332-9402	Flood	5x5	290-8160	24	2 DT Intregal	Suspended
347-9427	Flood	5x5	290-8160	24	2 DT Intregal	Vertical
388-6288	Long Range	4x4	290-8160	24	2 DT Intregal	Vertical
388-6291	Trapezoid	4x4	290-8160	24	2 DT Intregal	Suspended
388-6292	Flood	4x4	290-8160	12	2 DT Intregal	Vertical
388-6293	Flood	4x4	290-8160	12	2 DT Intregal	Vertical
388-6294	Flood	4x4	290-8160	24	2 DT Intregal	Vertical



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## High Intensity Gas Discharge (HID) Lights (Xenon) (Cont'd.)

HID - Work Lights						
Part Number	Lens Pattern	Lens Dimension (in)	Bulb	Voltage (VDC)	Connector	Mounting
388-6295	Long Range	4x4	290-8160	24	2 DT Intregal	Suspended
441-6485	Trapezoid	4x4	290-8160	24	2 DT Intregal	Vertical

## Shock-Resistant Halogen Lights



Versatile Cat Shock-Resistant Halogen Lights offer up to ten times improvement in bulb life versus non shock-resistant lights, contributing to lower operation costs in applications with high vibration where current bulb life is short. These lights are environmentally sealed and meet Caterpillar design specifications for resistance to water spray and vibration.

Halogen - Work Lights							
Part Number	Lens Pattern	Lens Dimension (in)	Bulb	Voltage (VDC)	Connector	Mounting	Additional
109-7041	Flood	3x5	351-9918	24	Pigtail	Flush	–
199-3137	Flood-rear	3x5	351-9918	24	2 DT Intregal	Suspended	–
212-9347	Wide Flood	3x3	9W-0607	12	2 DT Intregal	Vertical	–
214-2968	Wide Flood	3x3	9W-0607	12	2 DT Intregal	Suspended	–
214-2969	Long Range	3x3	9W-0607	12	2 DT Intregal	Suspended	–
219-6485	Wide Flood	3x3	351-9918	24	2 DT Intregal	Vertical	–
219-6486	Long Range	3x3	351-9918	24	2 DT Intregal	Vertical	–
219-6487	Wide Flood	3x3	351-9918	24	2 DT Intregal	Suspended	–
219-6488	Long Range	3x3	351-9918	24	2 DT Intregal	Suspended	–
225-5075	Long Range	3x3	351-9918	24	2 DT Pigtail	Suspended	–
234-4324	Long Range	3x3	351-9918	24	2 DT Intregal	Vertical	–
234-7727	Long Range	3x3	9W-0607	12	2 DT Intregal	Vertical	Offset
240-0101	Long Range	3x3	9W-0607	12	2 DT Intregal	Suspended	–
242-3517	Flood	3x5	351-9918	24	2 DT Pigtail	Suspended	–
257-3171	Flood	5x5	351-9918	24	2 DT Intregal	Vertical	Amber
268-4071	Flood	3x3	9W-0607	12	2 DT Pigtail	Flush	Snap-In
290-5760	Long Range	3x3	9W-0607	12	2 DT Intregal	Vertical	–
310-2172	Wide Flood	3x3	351-9918	24	2 DT Pigtail	Suspended	Fireproof
321-0836	Flood	3x3	351-9918	24	2 DT Pigtail	Flush	Snap-In
325-4471	Wide Flood	3.5 Round	351-9918	24	2 DT Intregal	Vertical	–
339-3505	Wide Flood	3.5 Round	351-9918	24	2 DT Intregal	Suspended	–
353-2833	Wide Flood	3x3	351-9918	24	2 DT Intregal	Suspended	–
353-2834	Wide Flood	3x3	351-9918	24	2 DT Intregal	Vertical	–
153-2073	Wide Flood	5x5	351-9918	24	2 DT Intregal	Vertical	–
227-5978	Flood	5x5	351-9918	24	2 DT Intregal	Suspended	–

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## Shock-Resistant Halogen Lights (Cont'd.)

Halogen - Work Lights							
Part Number	Lens Pattern	Lens Dimension (in)	Bulb	Voltage (VDC)	Connector	Mounting	Additional
374-4623	Wide Flood	4x4	351-9918	24	2 DT Intregal	Vertical	Pole
388-3782	Wide Flood	3.5 Round	9W-0607	12	2 DT Intregal	Suspended	-
394-9642	Wide Flood	4x4	351-9918	24	Cigar Plug	Magnetic	-
397-6221	Flood	4x6	9W-0607	12	2 DT Pigtail	Flush	-
418-5542	Flood	4x6	351-9918	12	2 DT Intregal	Suspended	-
418-5543	Flood	4x6	351-9918	12	2 DT Intregal	Vertical	-
418-5544	Flood	4x6	351-9918	24	2 DT Intregal	Vertical	-
438-5311	Flood	3x5	113-8886	12	2 DT Pigtail	Vertical	-
539-1039	Wide Flood	3.5 Round	351-9918	24	2 DT Intregal	Vertical	-

## Light Emitting Diode (LED) Signal Lights



Designed for long life and lower maintenance costs over incandescent signal light bulbs, Cat LED Signal Lights have a demonstrated life of over 40,000 hours — that's 800 times the life of an incandescent signal bulb. LED signal lights use no filaments, so they resist high vibration, and they can be retrofitted to any (12/24 Volt) application. LED signal lights meet Cat design specifications for resistance to water spray, water dunk and vibration, and are permanently sealed with sonic welded lenses and potted circuitry.

LED - Signal Lights				
Part Number	Purpose	Voltage (VDC)	Color	Additional
135-0428	Turn/Park	12 to 24	Amber	-
143-2014	Stop/Tail	12 to 24	Red	-
201-5464	Turn	12 to 24	Amber	ECE
208-5021	-	12 to 24	Blue	VIMS
246-9869	Marker	24	Red	-
246-9870	Marker	24	Green	-
246-9871	Marker	24	Amber	-
259-8450	Stop/Tail	24	Red	ECE
321-7871	Payload	24	Green	-
332-3972	Dot	12 to 24	Amber	-
334-5409	Turn/Park	24	Amber	-
334-5410	Turn	24	Amber	-
334-8049	Stop/Tail	12 to 24	Red	-
337-5437	Dot	12 to 24	Red	-
337-5438	Dot	12 to 24	Green	-
355-7153	Mode	12 to 24	Clear	Red LED
355-7154	Mode	12 to 24	Clear	Blue LED
355-7155	Mode	12 to 24	Clear	Green LED

# Cat Work Lights, Signal Lights, Strobes and Bulbs

## Light Emitting Diode (LED) Signal Lights (Cont'd.)

LED - Signal Lights				
Part Number	Purpose	Voltage (VDC)	Color	Additional
355-7156	Mode	12 to 24	Clear	Amber LED
366-7920	Stop/Turn/Tail	24	Red & Amber	-
375-0305	Mode	24	Clear	Blue LED
390-8510	Reversing	24	Clear	Blue LED, Strobe
392-4634	Stop/Turn/Tail	24	Clear	Red & Amber LED
				Pattern 1
				Red & Amber LED
				Pattern 2
428-6700	Stop/Turn/Tail	24	Red & Amber	ECE
444-6526	Stop/Turn/Tail	24	Red & Amber	-
449-3759	Turn	12	Amber	-
450-4949	Stop/Turn/Tail	24	Red & Amber	ECE
456-0642	Dot	12 to 24	Red	-
456-0644	Dot	12 to 24	Amber	-
476-6053	Stop/Tail	12 to 24	Amber	-
510-1509	Stop/Tail/Turn	24	Red & Amber	-
524-3145	Reversing	24	Clear	Strobe

## Signal Lights

Part Number	Description	Voltage (VDC)	Color	Bulb	Additional
5C-8964	Turn	24	Amber	P21W	Right Hand
5C-9029	Turn	24	Amber	P21W	Left Hand
142-8634	Stop/Turn/Tail	12	Red & Amber	426-5377 & 9W-3326	ECE
172-6490	Stop/Turn/Tail	12	Red & Amber	426-5377 & 9W-3326	
212-3924	Marker	24	Red & Clear	9X-4494	ECE
214-4684	Stop/Turn/Tail	12	Red & Amber	9W-3326	
227-9530	Payload	24	Red	8T-9749	-
227-9531	Payload	24	Green	8T-9749	-
231-5144	Turn & Park	24	Amber	8T-9749	-
258-0930	Tail	12	Red	9W-2471	
262-4726	Stop/Turn/Tail	12	Red & Amber	9W-3326 & 108-7605	Round
262-4727	Rear Fog	12	Red	9W-3326	ECE
262-4728	Reversing	12	Clear	9W-3326	-
313-6036	Rear Fog	24	Red	9X-4493	-
327-6125	Turn	24	Amber	P21W	Right Hand
327-7104	Stop/Turn/Tail	24	Red / Amber / Clear	8U-2622	-
327-8515	Turn	24	Amber	P21W	Left Hand
336-9096	Stop/Turn/Tail	12	Red & Amber	7S-1800 & 9W-3326	ECE

# Cat Work Lights, Signal Lights, Strobes and Bulbs

## Signal Lights (Cont'd.)

Part Number	Description	Voltage (VDC)	Color	Bulb	Additional
337-7223	Position	24	Clear	130-3565	Snap-In Mount, ECE
374-4299	Stop/Turn	12	Red & Amber	P21/P21W	-
	Position				
444-6530	Marker	24	Clear	202-7201	ECE
459-6750	Reversing	12	Clear	9W-3326	ECE
397-6223	Turn/Position	12	Amber & Clear	9W-3326 & 108-7605	ECE
397-6225	Stop/Tail/Turn	12	Red & Amber	7S-1800 & 9W-3326	ECE

## Special - Signal Lights

Part Number	Description	Voltage (VDC)	Color	Bulb	Additional
369-8715	Turn	12	Amber	226-4560	-
424-4285	Position Front	24	Clear	9X-4492	ECE
424-4286	Turn Front	24	Amber	242-0588	ECE
438-5418	Position Front	12	Clear	9W-3326	-

## Combination Headlights / Turn Signal



Cat offers a variety of Combination headlight/signal lights for your application. This light provides high beam, low beam, position light and turn-signal in one package with easy one bolt mounting. This light meets Cat vibration and sealing requirements and approved for use in US, Europe, India, and Japan.

Combination - Head Lights						
Part Number	Voltage (VDC)	Description	Mounting	Mount Side	Drive Side	Additional
105-4849	24	Combination Head/Turn	Vertical	Left	-	ECE
105-4850	24	Combination Head/Turn	Vertical	Right	-	ECE
416-1085	12	Combination Head/Turn	Horizontal	Right	Left	ECE
416-1086	12	Combination Head/Turn	Horizontal	Left	Left	ECE
466-0650	24	Combination Head/Turn	Horizontal	Right	Left	LED, ECE
466-0651	24	Combination Head/Turn	Horizontal	Left	Left	LED, ECE
504-7204	9 to 32	Combination Head/Turn	Horizontal	Right	Left	LED, ECE
504-7205	9 to 32	Combination Head/Turn	Horizontal	Left	Left	LED, ECE
525-5297	9 to 32	Combination Head/Turn	Horizontal	Right	Right	LED, ECE
525-5298	9 to 32	Combination Head/Turn	Horizontal	Left	Right	LED, ECE
335-7370	24	Combination Head/Turn	Horizontal	Right	-	-
335-7371	24	Combination Head/Turn	Horizontal	Left	-	-
302-0406	24	Combination Head/Turn	Horizontal	Right	-	-
302-0408	24	Combination Head/Turn	Horizontal	Left	-	-

# Cat Work Lights, Signal Lights, Strobes and Bulbs

## Combination Headlights / Turn Signal (Cont'd.)

Shock Resistant						
Part Number	Volts	Description	Traffic side	Machine side	Connector	Approval
344-3455	24	Combination Head/Turn	RH	RH	DT rect. (6)	ECE
344-3456	24	Combination Head/Turn	RH	LH	DT rect. (6)	ECE
344-3457	24	Combination Head/Turn	LH	RH	DT rect. (6)	ECE
344-3458	24	Combination Head/Turn	LH	LH	DT rect. (6)	ECE
344-3459	24	Combination Head/LED Turn	RH	RH	DT rect. (6)	ECE
344-3460	24	Combination Head/LED Turn	RH	LH	DT rect. (6)	ECE

Non-Shock Resistant						
Part Number	Volts	Description	Traffic side	Machine side	Connector	Approval
238-2797	24	Combination Head/Turn	RH	RH	DT rect. (6)	ECE
238-2798	24	Combination Head/Turn	RH	LH	DT rect. (6)	ECE
195-0189	12	Combination Head/Turn	RH	RH	DT rect. (6)	ECE
195-0190	12	Combination Head/Turn	RH	LH	DT rect. (6)	ECE
195-0191	12	Combination Head/Turn	LH	RH	DT rect. (6)	ECE
195-0192	12	Combination Head/Turn	LH	LH	DT rect. (6)	ECE
259-9287	24	Combination Head/ LED Turn	RH	LH	DT rect. (6)	ECE
259-9288	24	Combination Head/ LED Turn	RH	RH	DT rect. (6)	ECE

## Individual Headlights

Part No.	Volts	Description	Traffic side	Machine side	Connector	Approval
238-8638	24	5X5 Low Beam – Vertical	RH	Both	DT rect. (2)	ECE
238-8639	24	5X5 Low Beam – Vertical	LH	Both	DT rect. (2)	ECE
151-2457	12	5X5 Low Beam – Suspended	RH	Both	Screw Terminals	ECE
311-1920	12	3X3 Low Beam - Vertical	RH	Both	DT rect. (2)	ECE

## LED - Head Lights

Part Number	Description	Lens Dimension (in)	Lumens (lm)	Voltage (VDC)	Connector
386-1723	High Beam	4x4	750	9 to 32	2 DT Intregal
441-0315	High Beam	4x4	4200	9 to 32	2 DT Intregal
441-0316	Low Beam	4x4	4200	9 to 32	2 DT Intregal
461-7569	Low Beam	5 Round	2100	9 to 32	2 DT Intregal
474-4633	High Beam	4x4	4200	9 to 32	2 DT Intregal
505-8917	High Beam	4x4	4200	9 to 32	2 DT Intregal
505-8918	Low Beam	4x4	4200	9 to 32	2 DT Intregal
525-5289	Low Beam	4x4	2100	9 to 32	2 DT Intregal
525-5290	High Beam	4x4	2100	9 to 32	2 DT Intregal

# Cat Work Lights, Signal Lights, Strobes and Bulbs

## HID - Head Lights

Part Number	Description	Lens Dimension (in)	Voltage (VDC)	Connector	Mounting	Additional
311-1920	Low Beam	3x3	12	2 DT Intregal	Vertical	ECE

## Halogen - Head Lights

Part Number	Voltage (VDC)	Description	Lens Dimension (in)	Bulb	Connector	Mounting	Additional
9X-1442	24	High Beam	5x5	9X-7849	M4 Screw	Vertical	ECE
438-5312	12	Low Beam	3x5	124-6803	2 DT Pigtail	Vertical	ECE
9X-7169	24	Low Beam	5x5	351-9918	M4 Screw	Vertical	-
180-1300	24	High Beam	5x5	351-9918	2 DT Intregal	Vertical	-
290-5749	24	High Beam	3x3	351-9918	2 DT Intregal	Suspended	-
157-0305	24	High Beam	5x5	351-9918	2 DT Intregal	Suspended	-
161-0908	24	Low Beam	5x5	351-9918	2 DT Intregal	Suspended	-
161-3509	24	Low Beam	5x5	351-9918	2 DT Intregal	Vertical	-
397-6222	12	High/Low Beam	4x6	9W-3324	3 Blades	Flush	-

## Rotating Beacons and Strobes



Cat Rotating Beacons use a halogen bulb on a rotating base. Strobes are warning beacons, which use electronics to emit light using a gas tube and LEDs use a semiconductor as the light source. As with other Cat lights, the beacons and strobes are designed to withstand high-vibration conditions and increase safety on any job site.

LED - Beacons						
Part Number	Voltage (VDC)	Type	Flash Rate	Color	Connector	Additional
355-7153	12/24	Short strobe	-	Red	3 DT	-
355-7154	12/24	Short strobe	-	Blue	3 DT	-
355-7155	12/24	Short strobe	-	Green	3 DT	-
355-7156	12/24	Short strobe	-	Amber	3 DT	-
289-6268	10 to 48	Strobe	120 FPM	Amber	2 DT Recepticle	-
338-1132	12/24	Strobe	230 DBL FPM	Amber	2 DT Recepticle	-
371-2241	12/24	Strobe	122 DBL FPM	Amber	2 DT Recepticle	ECE
377-4057	12/24	Strobe	122 DBL FPM	Amber	2 DT Recepticle	With 90 degree conduit
378-6901	12/24	Strobe	122 DBL FPM	Amber	2 DT Recepticle	ECE, Magnet
382-2746	12/24	Strobe	230 DBL FPM	Blue	2 DT Recepticle	-

# Cat Work Lights, Signal Lights, Strobes and Bulbs

## Rotating Beacons and Strobes (Cont'd.)

LED - Beacons						
Part Number	Voltage (VDC)	Type	Flash Rate	Color	Connector	Additional
421-5582	12/24	Strobe	230 DBL FPM	Amber	6 DT Recepticle	With Pattern Select
444-6522	12/24	Strobe	122 DBL FPM	Amber	Cigar Plug	ECE, Magnet
453-0133	12/24	Strobe	122 DBL FPM	Amber	2 DT Recepticle	ECE
493-0411	12/24	Strobe	80 RPM	Red	6 DT Recepticle	With Pattern Select

Halogen - Beacons							
Part Number	Voltage (VDC)	Type	Flash Rate	Bulb	Color	Connector	Mounting Bracket
108-1029	24	Rotating	160 RPM	9X-7849	Amber	Cigar Plug	Magnet
140-3668	12/24	Strobe	130 DBL FPM	-	Amber	Cigar Plug	Magnet
284-3757	12/24	Strobe	130 DBL FPM	-	Amber	2 DT	3X M6
309-1325	12	Rotating	160 RPM	9X-8118	Amber	Cigar Plug	Magnet
294-2546	12	Rotating	180 RPM	-	Amber	Single Pole plug	Pole mount
180-3664	12	Rotating	160 RPM	9X-8118	Amber	Cigar Plug	Magnet

## Sealed Beam Electrical Lamps



Part Number	Item	Voltage	ANSI Number	Wattage
1M-5899	Dual Head Lamp	24	4579	80/60
1M-5896	Flood Lamp	6	4078	50
2M-4168	Flood Lamp	12	4478	60
9W-1281	Flood Lamp (Halogen)	24	H4578	60
2P-7469	Flood Lamp (Screw Terminal)	12	4410	35
6N-7987	Flood Lamp (Screw Terminal)	24	4752	60
7G-9319	Fog Lamp	24	4402A	50
7N-7682	Head Lamp (Screw Terminal)	24	4750	60
1M-5897	Hi/Lo Lamp	6	4031	45/35
1H-7027	Hi/Lo Lamp	12	4431	45/35
5S-5149	High Head Lamp	24	4814	90
8T-8752	Low Head Lamp (Halogen)	24	H4813	90
7T-1371	Spot Lamp	24	4505	50
069-2999	High/Spot	12	4416	30

# Cat Work Lights, Signal Lights, Strobes and Bulbs

## Signal Lights - Incandescent



Item	Voltage	Body Assembly	Style	Lens Color
Stop/Tail	12	092-2992	Rectangle	Red
Stop/Tail	24	107-4401	Rectangle	Red
Stop/Tail	24	7M-7147	Round	Red
Turn	12	3E-9346	Rectangle	Amber
Turn	24	3E-6466	Rectangle	Amber
Turn	24	231-5144	Round	Amber
Payload	24	227-9530	Round	Red
Payload	24	227-9531	Round	Green
Position	24	162-5402	Rectangle	Clear

## Reversing Lights

Part Number	Description	Bulb Number	Lens PN	Voltage (V)	Orientation
261-1502	Reversing Lamp	9X-4493	264-5346	24	Rectangular
338-5716	Reversing Lamp	9X-4493	304-7167	24	Rectangular
386-1724	Reversing Lamp - LED	-		9V-32V	Rectangular

## License Plate Lights

Part Number	Voltage (VDC)	Bulb	Color	Additional
190-8962	12	195-9712	Clear	-
196-0030	12	195-9712	Clear	ECE
259-0134	24	5C-9583	Clear	ECE
326-8837	24	9X-4494	Clear	ECE
437-1159	12	130-3514	Clear	ECE
304-4163	12	LED	Clear	-
390-8511	24	LED	Clear	-
472-0507	12/24	LED	Clear	ECE










## LED - Utility Lights

Part Number	Voltage (VDC)	Type	Color	Additional
250-8335	24	Utility	Amber	2 LED
316-6409	10 to 32	Utility	White	-
418-5545	12/24	Utility	Clear	Interior
433-1072	10 to 32	Utility	White	LED



# Cat Work Lights, Signal Lights, Strobes and Bulbs

## Miniature Electrical Lamps

Part Number	Voltage	ANSI Number	Item	Part Number	Voltage	ANSI Number	Item
9D-4185	24	459		7N-9943	24	2232	
5D-0284	12	1895		9W-2111	24	1495	
118-5075	14	194A		9S-3335	24	623R	
8M-6176	12	53		3C-4883	12	P21W	
7X-2058	24	265		9K-9140	24	1309	
1S-4168	12	93		7X-9065	12	161	
5M-8034	12	1156		110-2079	24	657	
8J-4863	24	307		8L-9801	12	1816	
9X-4493	24	13498		1239294	28	757	
8T-9749	24	1638		100-3245	24	2661	
034-2535	24	1662		8M-7119	6	1154	No Image
9X-4492	24	13499		7N-9967	24	28MB	
7S-1800	12	1157	5D-1708	24	456		
9B-3117	6	63	3E-8825	24	7839B		
7N-1996	24	624					
3H-2691	24	1251					
084-4375	12	N/A					
7M-9957	12	631					
7H-2976	24	1683					

# Cat Work Lights, Signal Lights, Strobes and Bulbs

## LED Bulbs



Care has to be taken when selecting LED indicators as a replacement for incandescent bulbs. LEDs do not operate like incandescent bulbs and will not work with diagnostic drivers and can possibly glow when powered by electronic controls due to leakage current. LED indicators do not have over-voltage protection circuitry so care has to be taken when used with other electrical devices (i.e. solenoids).

Part Number	Volts	Base Type	Base Size	Bulb Size	Color	Polarity	MSCD	Bulb Style
125-9955	24	Slide	T5.5	–	Red	Bi-Polar	–	Single
125-9956	24	Slide	T5.5	–	Amber	Bi-Polar	–	Single
125-9957	24	Slide	T5.5	–	Green	Bi-Polar	–	Single
163-1876	24	Wedge	W-2	T-3 1/4	Red	Bi-Polar	2500	Single / Diffuser
163-1878	24	Wedge	W-2	T-3 1/4	Amber	Bi-Polar	2000	7-Cluster
163-1879	24	Wedge	W-2	T-3 1/4	Green	Bi-Polar	2000	Single / Diffuser
163-1882	24	Bayonet	A-1	T-3 1/4	Red	Bi-Polar	2500	Single / Diffuser
163-1883	24	Bayonet	A-1	T-3 1/4	Amber	Bi-Polar	2000	7-Cluster
163-1884	24	Bayonet	A-1	T-3 1/4	Green	Bi-Polar	2000	Single / Diffuser
163-1885	24	Bayonet	A-1	T-3 1/4	Blue	Bi-Polar	150	Single / Diffuser
163-6509	24	Bayonet	A-1	T-3 1/4	White	Bi-Polar	3000	7-Cluster
165-5674	24	Bi-Pin	–	T-3 1/4	White	Polar	900	Single
171-1033	24	Bayonet	B-2	G-6	Red	Bi-Polar	5000	7-Cluster
188-3447	8	Wedge	W-2	T-3 1/4	White	Bi-Polar	1560	Single
336-0067	24	Wedge	W-2	T-3 1/4	White	Bi-Polar	3000	7-Cluster

## Miniature Lamps

Part Number	Voltage (VDC)	Standard	Base Type	Base Size	Bulb Size	Color
118-5075	12	194A	Wedge	W-2	T-3 1/4	Amber
3E-8825	24	7839-B	2 Pin	Bi-Pin	T-1	Clear
130-3515	24	W5W	Wedge	W2.1 x 9.2D	T-3 1/4	Clear
226-4561	12	W5W	Wedge	W2.1 x 9.2D	T-3 1/4	Clear
3E-1814	24	85	Wedge	W2.1 x 4.9D	T-1 3/4	Clear
163-2936	30	-	Screw	ES	A21	-
3N-5588	30	6S6	Screw	E12	S6	Clear
7X-2058	24	265	Bayonet	A-1	G-3 1/4	Clear
7X-2058	24	R10W	Bayonet	BA15s	B-2	Clear
9W-2471	12	67	Bayonet	B-1	G-6	Clear
226-4560	12	PY21W	Bayonet	BAU15s	S-8	Amber
242-0588	24	PY21W	Bayonet	BAU15s	S-8	Amber
1U-5792	24	-	GU5.3 2-Pin	GX5.3	MR16	Clear
195-9712	12	R10W	Bayonet	BA15s	B-6	Clear
140-2916	12	P21W	Bayonet	BA15s	T-1 3/4	Clear
130-3565	24	R5W	Bayonet	BA15s	-	Clear

# Cat Work Lights, Signal Lights, Strobes and Bulbs

## Miniature Lamps (Cont'd.)

Part Number	Voltage (VDC)	Standard	Base Type	Base Size	Bulb Size	Color
2N-2372	12	1892	Bayonet	BA9s	T-3 1/4	Clear
130-3514	12	C5W	Festoon	SV8.5-8	T-4 3/4	Clear
5C-9583	24	C5W	Festoon	SV8.5-8	T-4 3/4	Clear
292-8507	-	-	Festoon	-	-	-
259-1286	24	C5W	Festoon	SV8.5-8	T-4 3/4	Clear
210-8754	12	C5W	Festoon	SV8.5-8	T-4 3/4	Clear
156-9427	24	C5W	Festoon	SV8.5-8	T-4 3/4	Clear
081-3379	24	R10W	Bayonet	BA15s	-	Clear
9U-5118	12	-	Bayonet	A18a	-	Clear
5C-8315	24	5637	Bayonet	BA15s	-	Clear
107-1983	24	464	Wedge	W2.1 x 9.2D	T-3 1/4	Clear
115-1748	24	W3W	Wedge	W2.1 x 9.2D	T-3 1/4	Clear
108-7605	12	R5W	Bayonet	BA15s	-	Clear
100-3246	12	T4W	Bayonet	BA9s	T-2 3/4	Clear
5M-8034	12	1156	Bayonet	B-1	S-8	Clear
9X-4493	24	13498	Bayonet	BAY15s	S-8	Clear
8T-9749	24	1638	Bayonet	B-2	S-8	Clear
034-2535	24	1662	Bayonet	C-2	S-8	Clear
9X-4492	24	13499	Bayonet	BAY15d	S-8	Clear
7S-1800	12	1157	Bayonet	C-2	S-8	Clear
7N-1996	24	624	Bayonet	B-2	G-6	Clear
084-4375	12	-	Wedge	W-2 X 4.6d	T-1 1/2	Clear
7M-9957	12	631	Bayonet	B-1	G-6	Clear
7N-9943	24	2232	Bayonet	B-1	S-8	Clear
9W-2111	24	1495	Bayonet	BA9s	T-4 1/2	Clear
7X-9065	12	161	Wedge	W-2 X 9.2d	T-3 1/4	Clear
110-2079	24	657	Wedge	W-2 X 9.2d	T-3 1/4	Clear
8L-9801	12	1816	Bayonet	BA9s	T-3 1/4	Clear
123-9294	24	757	Bayonet	BA9s	T-3 1/4	Clear
100-3245	24	2661	Bayonet	BA9s	T-2 3/4	Clear
7N-9967	24	28MB	Bayonet	BA9s	T-2 1/2	Clear
9W-3326	12	P21W	Bayonet	BA15s	-	Clear
4Y-3414	-	-	-	-	-	-
4Y-3415	-	-	-	-	-	-
9X-4494	24	R10W	Bayonet	BA15s	B-2	Clear

# Cat Work Lights, Signal Lights, Strobes and Bulbs

## LED Lamps

Part Number	Voltage (VDC)	Base Type	Base Size	Bulb Size	Color	Polarity	Additional
163-1880	24	Wedge	W-2	T-3 1/4	Blue	Bi-Polar	Single
163-6508	24	Wedge	W-2	T-3 1/4	White	Bi-Polar	3 LED Cluster
116-5269	24	Bayonet	A-1	T-3 1/4	Green	Bi-Polar	7 LED Cluster
305-5629	24	Bayonet	W-2	G-6	White	Bi-Polar	6 LED Cluster
116-5270	24	Bayonet	A-1	T-3 1/4	Red	Bi-Polar	7 LED Cluster
116-5270	24	Bayonet	A-1	T-3 1/4	Amber	Bi-Polar	7 LED Cluster
374-0666	24	Bayonet	A-1	T-3 1/4	Yellow	Bi-Polar	Single

## Halogen Bulbs

Part Number	Voltage	Type	Wattage
314-5728	24	H7	70
290-7057	12	H7	55
9W-0607	12	H3	55
351-9918	24	H3	70
9W-3324	12	H4	60/55

Part Number	Voltage	Type	Wattage
9X-3465	24	H4	75/70
9X-8118	12	H1	68
9X-7849	24	H1	70
113-8886	12	H11	50

## Halogen Lamps

Part Number	Voltage (VDC)	Type	Base Type	Wattage (W)
081-2873	12	R2	P45t	45
528-7802	12	H4	P43T	45

## HID Bulbs

Part Number	Voltage	Category	Wattage
209-6638	12 or 24	D2S	35
290-8160	12 or 24	D1S	35

# Cat Work Lights, Signal Lights, Strobes and Bulbs

## LED Purpose Lights



The evolving versatility of LEDs expands the use and application of LED lighting. Adding compartment LED lighting brightens areas where lighting can benefit hard to see areas not typically lit up by easily adding compact LED lights.

Part Number	Purpose	Volts	Color	Dimension
424-5598	Step/Compartment	12 to 48	Bright White	2.4 in x 2.4 in
418-5545	Engine/Compartment	12 to 24	Bright White	5 in x 1 in
379-3416	Back-up/Porch	24	Bright White	5 in x 3 in
419-3911	Dash/Indicator/ market/step	12 to 24	Amber	1" round
419-3912	Dash/Indicator/ market/step	12 to 24	Blue	1" round
442-1341	Dash/Indicator/ market/step	12 to 24	Red	1" round
443-2975	Dash/Indicator/ market/step	12 to 24	Green	1" round
333-7383	Dash/Indicator/ market/step	24	Soft White	1" round
456-0632	Dash/Indicator/ market/step	12 to 24	Bright White	1" round
459-0178	Payload marker	9 to 32	Red	2.5" round
459-0179	Payload marker	9 to 32	Green	2.5" round
459-0180	Payload marker	9 to 32	Amber	2.5" round

## Dome Lights

Part Number	Volts	Connector	Mount	Switch	Bulb	Comments
3E-7301	12	Pigtail DT (3)	Rectangle- Surface mt.	2-Position Switch (On/Off)	7M-9957	Heavy Duty
7X-6399	24	Pigtail SS (2)	Rectangle- Surface mt.	None	7N-9943	Heavy Duty
084-4277	12	Blade terminals	Rectangle- Flush mt.	3-Position Switch (On/Off/On)	210-8754	Switch in lens
107-6032	24	Blade terminals	Rectangle- Flush mt.	3-Position Switch (On/Off/On)	259-1286	Switch in lens
345-1932	24	Pigtail DT (3)	Round- Surface mt.	None	—	LED
375-1478	24	Pigtail DT (3)	Rectangle- Surface mt.	2-Position Switch (On/Off)	—	LED (3)
338-1128	24	Pigtail DT (3)	Rectangle- Flush mt.	3-Position Switch (On/Off/On)	—	LED (3)

# Cat Work Lights, Signal Lights, Strobes and Bulbs

## Dome – Interior Lights

Part Number	Description	Voltage (VDC)	Bulb	Additional
6T-4864	Surface Mount with switch	24	7N-9943	–
426-0976	Flush	12	210-8754	Blade
560-6076	Snap-on	12	LED	–
347-0794	Flush	24	LED	Blade
431-9515	Flush	12/24	LED	Blade

## Interior Specialty

Part Number	Volts	Connector	Features	Bulb
8Y-6335	24	Blade terminals	Map light – round eyeball	305-5629
250-8335	24	Pigtail DT (2)	Courtesy light - Rectangle Amber	LED
162-5402	24	Pigtail DT (2)	Rectangle - Clear	9X-4494

## LED Step Lights

Part Number	Volts	Connector	Features	Bulb
333-7383	28	Amp 2	Round	LED
304-4163	12	Pigtail DT (2)	Rectangle- Flush mt.	LED

## Reflectors



Part Number	Description	Color	Shape	Size
252-6645	Reflector	Yellow	Oval	100 x 45 x 5 mm
252-6646	Reflector	Red	Oval	100 x 45 x 5 mm
9R-1499	Reflector	Red	Rectangle	108 x 44 x 9 mm
9R-2404	Reflector	Amber	Rectangle	108 x 44 x 9 mm
129-8547	Reflector	Amber	Rectangle	45 x 73 mm
227-9859	Reflector	Red	Rectangle	70 x 31.5 x 5 mm
156-5431	Reflector	Red	Rectangle	76 x 44 x 8 mm
116-9621	Reflector	Yellow	Rectangle	94 x 44 x 7 mm
116-9622	Reflector	Red	Rectangle	94 x 44 x 7 mm
6C-5712	Reflector	Orange	Rectangle	55 x 115 x 7 mm
313-5271	Reflector	Red	Round	60 mm
313-5270	Reflector	Amber	Round	60 mm
6C-5736	Reflector	Red	Round	85 mm

# Cat Work Lights, Signal Lights, Strobes and Bulbs

## Lighting Reference

### Mount Type



Suspended Mount  
(Hanging type mounting)



Vertical Mount  
(Pedestal type mounting)

### Light Patterns



Flood Beam Pattern  
General & Work Lighting



Spot Beam Pattern  
Concentrated Beam



Trapezoid Beam Pattern  
Forward Illumination

## Utility - AC Lights

Part Number	Lens Pattern	Lens Dimension (in)	Lumens	Voltage (VDC)	Amps	Additional
486-2346	Flood	Dome	1000	120 VAC	13 W	Area Light
486-2351	Flood	Round	1000	240 VAC	13 W	Area Light
486-2353	Flood	Rectangle	3400	120 to 277 VAC	32 W	Area Light
523-7473	Flood	Rectangle	6600	120 to 277 VAC	62 W	Area Light
524-0910	Flood	Dome	1000	120 VAC	13 W	Area Light

## Work - AC Lights

Part Number	Lens Pattern	Lens Dimension (in)	Lumens	Voltage (VDC)	Amps
489-0289	Flood	Rectangle	13500	120 to 277 VAC	145 W
489-0289	Flood	Rectangle	27000	120 to 277 VAC	290 W

# Cat Radio and Accessories

## Built Tough for the Most Rugged Environments

Just as you do with any other part or component, you should consider the durability of a radio. A car radio isn't going to be durable enough to withstand the vibrations and other extremes where you work. Instead, select one that is designed to take abuse.

Cat offers a line of rugged radios and accessories that can withstand the toughest applications in machines, on-highway trucks, boats or private sector use. Cat radios and accessories also are designed to withstand both hot and cold temperature extremes.

Select Cat radios from basic standard features, DAB functionality, or SiriusXM options. Standard features included on most models.

- Exceeds shock and vibration standard SAE J1455
- Withstand temperatures from -40° to 85° C (-40° to 185° F)
- AM/FM
- Bluetooth
- Front/Rear Aux port

## Basic AM/FM Receiver



Cat offers four models, beginning with the basic AM/FM receiver.

**Features:**

- Total Power (RMS) 72 (18x4)
- LED lighted display
- Quartz clock (30 day backup)
- 6 AM and 18 FM presets
- Auto preset memory with preset scan
- Scan
- Seek Up/Down
- Worldwide frequency compatible tuner
- Weather band
- Front auxiliary input (MP3 Player or I-Pod)

Part Number	Description
462-9618	AM/FM Receiver

## AM/FM Receiver Short-Bus, DAB

The Short-Bus radios include basic functions and are half the depth of standard DIN radios.

Features:

- LED lighted display
- Quartz clock, 30-Day backup
- 6 AM/18 FM presets
- Scan/Seek
- Front auxiliary input

Part Number	Description
525-1508	AM/FM Receiver, Bluetooth
524-3711	DAB AM/FM Receiver, Bluetooth



## Deluxe AM/FM Receiver with Bluetooth capability



**This model has the following radio features:**

- Total Power (RMS) 68 (17x4)
- MP3 playback (USB and Auxiliary port only)
- LED backlighting
- 6 AM presets and 12 FM presets
- Auto-store memory
- Seek/Scan tuning
- Preset scan
- Alarm Clock
- Worldwide frequency compatible tuner
- Weather band
- USB port faceplate
- Front and rear Auxiliary input
- Bluetooth

**Taking advantage of the Bluetooth capability requires an external microphone (Cat part 349-8642), and an external microphone harness (Cat part 353-1634) that plugs into the back of the radio.**

Part Number	Description
439-1562	AM/FM Receiver
462-9619	AM/FM Receiver with 30-Day Clock Backup

## Deluxe AM/FM Receiver with CD and Bluetooth capability



**This model has the following radio and CD features:**

- Total Power (RMS) 68 (17 x 4)
- LED lighted display
- Quartz clock
- 6 AM and 18 FM presets
- Auto preset memory with preset scan
- Scan
- Seek Up/Down
- Worldwide frequency compatible tuner
- Displays elapsed time and track
- Next/previous track
- Fast forward/reverse
- Anti-shock floating mechanism
- Track, scan, search and repeat
- Auto-loading mechanism
- Front and rear auxiliary input (MP3 Player or I-Pod®)
- Bluetooth

**Taking advantage of the Bluetooth capability requires an external microphone (Cat part 349-8642), and an external microphone harness (Cat part 353-1634) that plugs into the back of the radio.**

Part Number	Description
439-1563	AM/FM Receiver with CD
462-9620	AM/FM Receiver with CD and 30-Day Clock Backup

# Cat Radio and Accessories

## Deluxe AM/FM Receiver with CD, Satellite Radio, and Bluetooth capability



In addition to the integrated satellite radio, this model also has the following features:

- Total Power (RMS) 68 (17x4)
- MP3 playback (USB, Auxiliary port and CD)
- LED backlighting
- 6 AM presets and 12 FM presets
- Auto-store memory
- Seek/Scan tuning
- Preset scan
- Alarm Clock
- Worldwide frequency compatible tuner
- Weather band
- Anti-shock floating mechanism
- Track, scan, search and repeat
- Track pause
- Random track play
- Fast forward/reverse
- Next/previous track
- Ignition off load and eject
- SiriusXM
- Bluetooth

Taking advantage of the Bluetooth capability requires an external microphone (Cat part 349-8642), and an external microphone harness (Cat part 353-1634) that plugs into the back of the radio.

Part Number	Description
439-1564	SiriusXM, AM/FM Receiver with CD
462-9621	SiriusXM, AM/FM Receiver with CD and 30-Day Clock Backup

## Bluetooth Microphone for Cat Radios

- The Bluetooth function allows hands free usage of your cell phone through the radio.
  - This is not a voice-activated device.
- Bluetooth capability is available in Cat radio part numbers 439-1562, 439-1563, 439-1564, 462-9619, 462-9620, and 462-9621
- There is an expanded feature for Bluetooth on Cat radio part number 439-1562 that also allows streaming of music from your cell phone through the radio.
- This Microphone is used in conjunction with Bluetooth Harness (353-1634).

Part Number	Description
349-8642	Bluetooth Microphone

## Bluetooth Harness for Cat Radios

- This Harness is used in conjunction with Bluetooth Microphone (349-8642).

Part Number	Description
353-1634	Bluetooth Harness

## Auxiliary Port for Cat Radios

- The Aux Port allows the operator to plug in an MP3 player (I-Pod) for use through the radio.
- The auxiliary port comes in two pieces:
  1. a stereo jack to be mounted in the dash board and
  2. a wiring harness to connect the stereo jack to the plug in at the back of the radio.
- Available for use with Cat radio part numbers 439-1562 and 439-1564.
- Cannot be used with 439-1562 and 439-1564 radios if the wiring harness for Bluetooth capability has already been installed.

Part Number	Description
344-5594	Auxiliary Port
501-3885	Rear Aux Input, 3200 mm long
391-4481	Rear Aux Input 2500mm long, symbol upside down

## USB Charging Ports

Part Number	Description
514-6437	1.0A Single Port USB charging port (Standalone - no data sync)
539-3586	2.4A Single Port USB smart charger (Standalone - no data sync)
539-3587	2.4A Dual Port USB smart charger (Standalone - no data sync)

## Adapter Harnesses



Part Number	Manufacturer	Model
106-8153	Non-radio ready machine - Cat or competitor	Plugs into the Deutsch connector end of the 200-5728 harness. This is a Deutsch connector to wire harness that can be used in wiring in a Cat radio into a non-radio ready Cat or competitive machine.
200-5728	Radio ready machines - Cat	This harness adapts the radio to the harness in Cat Radio-ready machines
279-9663	Kenworth and Peterbilt On-highway trucks	Kenworth: COE K100E series. All conventional models built after March 1988 — February 2005. Peterbilt: All medium duty COE Midranger, all medium duty conventional 330, COE models built after October 1986, conventional models built after October 1986, convention model, premium sound, from February 2000.
279-9664	Kenworth and Peterbilt On-highway trucks	Kenworth: All medium duty convention T300 and T2000. Peterbilt: 387 (except concert Class).
279-9665	International On-highway trucks	International: 2600-8300 series medium duty, 9000 series conventional Pro Sleeper from June 1994.
279-9666	Mack On-highway truck	Mack: COE model MH, RD, RM and DMM models built after November 1992. Mack: CH and CL series Vision.
279-9668	Sterling On-highway trucks	Sterling: 1999-2001 models

# Cat Radio and Accessories

## Antennas - Flexible



### Flexible rubber mast

- Antenna mast length is 355 mm (14 in) with 1/2-20 connector. Antenna can be adjusted from 0 to 180 degrees in mounting base.

Part Number	Description
8E-1118	Flexible Antenna - Rubber Mast

## Antennas - Sealed



- Antenna mast length is 0.21 m (8.3 in).
- Antenna can be adjusted from 0 to 90 degrees in mounting base.

Part Number	Description
374-0752	Sealed Antenna
391-4357	Rubber Sealed Base, 1.6 m cable

## Antennas - Wire Whip



### Wire whip with spring

- Antenna mast length is 0.8 m (31.5 in) with 1/2-20 connector. Antenna can be adjusted from 0 to 180 degrees in mounting base.

Part Number	Description
9W-3072	Wire Whip Antenna
437-3856	Wire Whip Antenna, 1.2 m cable

## Additional Antennas

Part Number	Description
6C-3431	AM/FM, 0.35 m Mast, 2.4 m cable
259-4883	AM/FM, Fiberglass, 0.45 m Mast, 3.6 m cable, 240 degree rotation
9U-2332	CB, Stainless rod, 1.6 m
9U-2331	AM/FM Stainless rod, 0.74 m
515-8094	AM/FM Stainless rod, 0.65 m
481-8212	Combo AM/FM/WB/SDARS, 0.195 m Mast
515-8093	Combo DAB/AM/FM Rod 0.35 m
515-8095	Active DAB Cable Assembly
525-7960	Active DAB Windshield Antenna Assembly

## Antennas - Satellite

Part Number	Description	Cable Length
284-9055	Satellite Antenna - Mirror Mount	8 ft (2.4 m)

## Speakers - Round



Part Number	Description	Speaker Grill/Cover PN
168-8772	Coaxial 5.25 inch, 60W	101-3055
174-3722	Coaxial 5.25 inch, 80W	101-3055
432-3696	Coaxial 6 inch, 200W (2 Speakers)	Included
509-8664	Coaxial 6.5 inch, 250W (2 Speakers)	Included
262-9567	Coaxial 4 inch, 75W	262-9568
528-1447	Coaxial 4 inch, 50W	528-1448
6T-7695	Dual Cone 5.25 inch	101-3055
345-1031	Dual Cone 5 inch, 60W (2 Speakers)	N/A
7Y-5505	Dual Cone 4.5 inch, 15W	N/A
7Y-5434	Dual Cone 5.5 inch, 15W	Included
528-1514	Dual Cone 4.5 inch, Black	N/A
169-7290	Dual Cone 6.5 inch	169-7291

# Cat Radio and Accessories

## Speakers - Rectangular

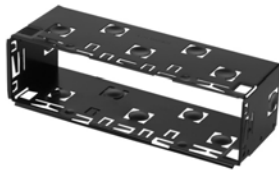


### 7.32 inch (186 mm) two speaker with internal crossover

- Impedance: 6 Ohms
- Power: 75 Watts
- Frequency response: 90 Hz to 20 KHz

Part Number	Description
106-8154	Rectangular Speaker (75 Watts)

## Radio Sleeve



- Sleeve is used to hold radio into dash

Part Number	Description
192-7054	Radio Sleeve

## Coax Cable



Part Number	Length	Connector
<b>Radio connector to antenna connector</b>		
101-2640	1000 mm (39.4 in)	1/2 - 20
109-8981	1200 mm (47.2 in)	1/2 - 20
110-6391	4280 mm (168.5 in)	1/2 - 20
117-2932	4080 mm (160.6 in)	1/2 - 20
162-7264	3500 mm (137.8 in)	1/2 - 20
199-3387	1800 mm (70.9 in)	1/2 - 20
8R-6111	1525 mm (60 in)	1/2 - 20
9W-3073	2670 mm (105.1 in)	1/2 - 20
<b>Radio connector to 90 degree antenna connector</b>		
146-3722	650 mm (25.6 in)	1/2 - 20
9U-8746	500 mm (19.7 in)	1/2 - 20

## Converters - 24 Volts to 12 Volts

### 5 amp continuous



- Used to reduce machine 24 volts to 12 volts. When the radio is wired to one (of the two batteries in series) the battery never gets a full charge, which can result in premature battery failure.

Part Number	Description
340-7160	Converter - 5 amp continuous

### 10 amp continuous



- Used to reduce machine 24 volts to 12 volts. When the radio is wired to one (of the two batteries in series) the battery never gets a full charge, which can result in premature battery failure.

Part Number	Description
340-7161	10 amp continuous

### 15 amp continuous/20 amp intermittent

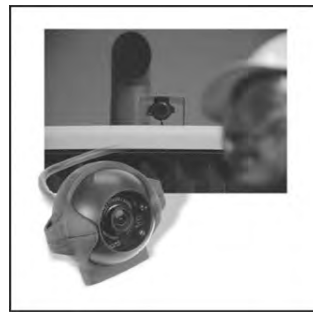


- Used to reduce machine 24 volts to 12 volts. When the radio is wired to one (of the two batteries in series) the battery never gets a full charge, which can result in premature battery failure.

Part Number	Description
443-6362	Converter - 15 amp continuous/20 amp intermittent

# Cameras

## Cat Work Area Vision System (WAVS) Customized Kits



Customized kits are now available for the Cat Work Area Vision System. The kits include a display (without RAM mount), camera(s), display harness, and switcher (if more than one camera). These kits do not contain camera cables, display RAM mount, or camera brackets; these are to be ordered separately. Due to various types of cable and brackets, selecting the proper cables (length and type) for the machine allows you to customize your kit.

Kit Types	Kit Part Number	Kit Contents
1 camera	353-5450	Display (with 4 m cord), 1 camera, display harness
2 cameras	353-5451	Display (with 4 m cord), 2 cameras, display harness, camera switcher
3 cameras	353-5452	Display (with 4 m cord), 3 cameras, display harness, camera switcher

### Benefits of Customizable Kits:

- Proper fit of camera system to your machine
- System that is ideal for your application
- No excess cable to hide
- Purchase only what you need

### Camera Cable Options









Cable Length		Cable Part Number	
		Armored	Standard
3.28 ft	1 m	–	320-9715
9.8 ft	3 m	283-0657	261-3223
16.4 ft	5 m	274-4477	251-8248
24.6 ft	7.5 m	283-0658	266-2116
29.5 ft	9 m	283-0659	–
36 ft	11 m	274-4478	251-4169
52.5 ft	16 m	274-4479	271-7453
68.9 ft	21 m	–	251-8249

**Note:** Cables can be connected in series and in combination with armored and non-armored types  
Cable connector caps: Male: 336-6692, Female: 336-6687



## Cat Work Area Vision System (WAVS) Customized Kits (Cont'd.)

### Brackets Available:

Part Number	Description	Pictorial
248-6979	Bracket to mount on side wall of machine/structure	
290-0106	Bracket to mount on side wall of machine/structure	
276-2638	Bracket to mount on side wall of machine/structure	
320-5392	Bracket to mount on side wall of machine/structure	
347-0745	Bracket to mount on top of machine/structure	
268-9063	Bracket to mount on top of machine/structure	
305-3748	Bracket to mount on sidewall of machine/structure or use with supporting bracket 312-4475	
312-4475	Bracket to support 305-3748	
418-0232	Magnetic mount for camera	




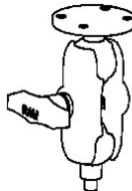

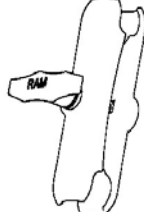
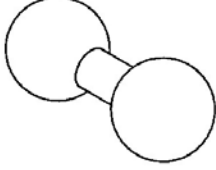
### Mount for Display

The display mount recommended is the RAM mount. Not intended for the Light Duty System. See the table below:

# Cameras

## Cat Work Area Vision System (WAVS) Customized Kits (Cont'd.)

### RAM Mount Parts

Part Number	Description	Pictorial
259-4397	3.5" Ram Mount	
259-4398	Studded (3/8") Ram Mount Ball	
259-4399	Ram Mount Ball Base	
259-4400	3.5" Mount, Stud Ball, (3/8"), & Ball Bases	
261-3222	3.5" Mount, 2 Ball Bases	
270-3311	5.75" Ram Mount	
271-7455	Double Ball Connector	

## Original Generic WAVS Kits Still Available

The generic Cat WAVS kits are still available. These are 1, 2, or 3 camera kits which include a display (with mount), cameras, switcher (if more than one camera), brackets and 16 m armored cable(s). Table below lists the part numbers for these generic kits.

### Generic WAVS Kits:

Generic Kit Type	Part Number
1 Camera Kit	282-4441
2 Camera Kit	282-4442
3 Camera Kit	282-4443

- The Cat Work Area Vision System improves productivity and increases operator awareness of surroundings, work tool activity, and changing work area conditions.
- The versatile camera system can provide machine operators with views from up to 3 cameras through advanced switching algorithms. Developed for rugged applications and environments, the Cat Work Area Vision System is simple to install on any machine and offers powerful capabilities.
- The internal display, a 7-inch color TFT (Thin Film Transistor) LCD with an auto-sense illumination for changing light conditions has an Aspect Ratio of 16:9 and a Sealing specification of IP67, which withstands splashing.
- The Color Camera (max viewing angle 115 degrees) has a robust design that withstands vibration and pressure washing and includes an internal heater for removal of condensation, snow, and ice.

**For Cable Length determination steps, Cable selection, and Camera Wash System, refer to PELJ1173**

## New WAVS for Use in Light Duty Applications

The Caterpillar designed Light Duty Camera system is available and ideal for small construction machines (12V) that operate in less severe applications.

This system has a similar look and functionality to the current WAVS product, but designed more for the smaller vehicles operating in less-extreme conditions. This Cat designed system includes a 7 inch TFT LED Backlight Display with mount (includes 1.8m camera cable and power harness), camera(s), and an 11m coaxial standard type cable.

**The WAVS Light Duty kits are offered in a one or two camera configuration, see table below for kit part numbers.**

### WAVS Light Duty Kit Part Numbers

Part Number	Description	Includes
377-9894	One Camera Kit	Display with harness (1.8 m) and mount, one camera, 11 m cable
379-0069	Two Camera Kit	Display with harness (1.8 m) and mount, two cameras, 11 m cables

# Cameras

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## New WAVS for Use in Light Duty Applications (Cont'd.)

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### Display / Monitor Features

- On screen display (OSD) menu language options (English, Dutch, German, French, Italian, Polish, Portuguese, Spanish, Turkish, Swedish, Finnish, Danish and Norwegian)
- Easy to navigate menu structure

### Display Camera Settings

- Auto Brightness Control (ABC) one touch display
- Contrast adjustment one touch display
- Brightness adjustment one touch display
- Camera tags (on screen)
- Mirror image
- Upside down image
- Horizontal and vertical line mark
- Graticule (grid overlay)

### Camera Features

The 12V, Color Camera (max viewing angle 115 degrees) has a robust design that withstands vibration and pressure washing and the built-in heater eliminates condensation, snow, and ice buildup. A preferred camera eyeball design makes adjusting the camera position easy and versatile with no vertical or horizontal bracket limitations.

### Camera Cables

The Light Duty kits include 11m standard cabling, see Camera Cable Options table for additional lengths.

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## Digital Video Recorder (DVR)

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Video Recording is available from up to four video feeds. Recordings are broken down into 15-minute increments along with a date time stamp to ease video searching. A date time stamp also displays on the video

The DVR is delivered with a 128GB SD card, storing a minimum of 72 hours recording time. Field-testing results resulted in units recording two weeks with space remaining on the SD card. The DVR utilizes a First In-First Out (FIFO) loop recording.

The DVR is compatible with the G407, CMPD and WAVS displays. While Object Detection and Proximity Awareness are encouraged to help prevent incidents, they are not required for the DVR.

Part Number	Description
468-7954	DVR for Small Off-Highway Trucks
474-2002	DVR for Wheel Loaders, Motor Graders, etc
474-9570	DVR for large Mining Trucks

# Back-Up Alarms, Horns, Audible Signals

## Back-Up Alarms

Caterpillar offers a variety of back up alarms that operate at 12 and/or 24 volts and provide sound output of 87 -112 dB (A). These back up alarms are compact in size and have universal mounting brackets to maximize location options. The back up alarms provides rugged durability and is designed to withstand high vibration and protection from moisture. The back up alarms meet the requirements of SAE J994, CE, or E mark. The alarm works on positive or negative ground systems and are protected from reverse polarity and voltage transients.

Select back up alarms are self adjusting to sense the ambient sound environment and adjust volume of the back up alarm to be heard just above the ambient sound.

Two styles of back up alarms available are Tonal alarms and White Noise alarms. Tonal alarms are the traditional alarms which produces the "Beep-Beep" sound, where the newer White Noise or Broadband Sound (BBS) alarms produce more of a "Shhh-Shhh" sound.

The White noise alarms are recommended for use in noise regulated zones where operations are near neighborhoods, within municipalities, or outside daytime hours. The White Noise alarm is only heard in and around the hazard area predominately to the rear of the vehicle and to a lesser degree at the sides of the vehicle.

### Tonal Back Up Alarms



Part Number	Loudness dB (A)	Mounting Distance (mm)	Connection
170-0950	97	76.2 - 82.6	Studs
394-6435	97	76.2 - 82.6	Deutsch
161-2539	102	76.2 - 82.6	Studs
289-8427	102	76.2 - 82.6	Deutsch
300-9546	107	76.2 - 82.6	Deutsch
154-5428	97	96 - 112.8	Deutsch
370-1485	97, 107, 112	152	Deutsch
220-0230	97	79 - 159	Deutsch
220-0229	107	79 - 159	Deutsch
213-9100	112	79 - 159	Deutsch
267-2145	87-112	79 - 159	Deutsch

### White Noise Back Up Alarms

Part Number	Loudness dB (A)	Mounting Distance (mm)	Connection
389-2297	97	98 - 108	Deutsch
385-7539	107	153	Deutsch
385-7540	77 - 97	98 - 108	Deutsch
385-7541	87 - 107	153	Deutsch

# Back-Up Alarms, Horns, Audible Signals

## Combination Audio Visual Alarm

The Audio Visual Alarm includes a tonal (112) db (A)) and a flashing signal light, which helps operators quickly identify reverse moving vehicles in areas where ear protection devices are worn.

Audio Visual Alarm			
Part Number	Decibel dB (A)	Mounting Distance (mm)	Connection
521-6436*	112	144	Deutsch

\* Additional parts needed, Harness (297-2535), Bracket (557-8803), Install instructions M0076526

## Forward Warning Horns

Caterpillar's Forward Warning Horns operate at 12V or 24V and have sound loudness from 105 – 125 dB. The horns meet the requirements of SAE J1105 Type O, CE, and SAE J377.



Part No.	Cycle	Tone	Voltage (VDC)	Loudness (dB)
146-5804	Intermittent	Low	24	114-119
163-1201	Intermittent	Low	24	108
164-9425	Intermittent	Low	12	108
174-7876	Intermittent	Low	24	108
462-1900	Intermittent	Low	24	115-125
109-4575	Intermittent	High	12	108
174-7875	Intermittent	High	24	108
354-5320	Intermittent	High	24	108-116
453-4566	Intermittent	High	24	105
462-1901	Intermittent	High	24	115-125

# Back-Up Alarms, Horns, Audible Signals

## Audible Signal Devices

Audible signal devices provide notification for machines, systems and/or process alarms, useful where visual indications are insufficient or impractical. Available devices include Piezo or solenoids with continuous or pulse notifications.

Part No.	Part Description	Mount	Voltage (VDC)	Loudness (dB)	Duty Cycle
110-8046	Piezo	Panel	12	80-95	Intermittent
123-9694	Piezo	Panel	12/24	80-84	N/A
167-8712	Piezo	Panel	3/7	80 @ 3V	Continuous
				90 @ 7V	
198-6568	Piezo	Panel	12/24	80-90	Continuous
217-5364	Piezo	Panel	12/24	78 +/- 2.9 @ 12V	Continuous
				84 +/- 2.9 @ 24V	
232-1792	Piezo	Panel	12/24	85 +/- 1.2 @ 12V	Continuous
				92 +/- 1.2 @ 24V	
3E-6328	Solenoid coil	Bracket	24	90+/-10	Continuous
3E-6329	Solenoid coil	Bracket	24	90+/-10	Intermittent
3E-6330	Solenoid coil	Bracket	12	90+/-10	Intermittent
3E-9168	Piezo	Panel	6/16	80-95	Intermittent
9X-5316	Piezo	Panel	6/16	80-95	Continuous







**O-RINGS**



# Cat O-Rings

## Cat O-Rings - Deliver Long, Leak-Free Performance



### Prevent fluid contamination and deliver long, leak-free performance

- Meet or exceed SAE standards
- Specifically matched to your Cat system's different fluid types, temperatures, and pressures
- Provide superior resistance to compression set
- Feature special dimensional tolerances and O-ring coatings for improved installation and performance
- Marked with the Cat logo and part number for easy identification and protection against counterfeit seals
- Available in time- and money-saving kits

## Ten O-Ring Tips

- Keep O-rings packaged until installation.
- Don't store O-rings near heat.
- Protect O-rings from UV rays.
- Remove old O-rings with brass or plastic picks to prevent groove damage.
- Don't reuse O-rings.
- Clean the seal groove before installation.
- Don't soak O-rings.
- Don't twist or cut O-rings during installation.
- Don't select O-rings based on material color. There is no universal color standard.
- Maintain your cooling system. High fluid temperatures are the number-one cause of shortened seal life.

## SAE AS568 Standard O-rings

Cross Section Dia (mm)	Inner Dia (mm)	Standard Size	NBR (75)	NBR (90)	FKM (75)	FKM (90)	Silicone (70)	HNBR (78)	EPDM (70)
1.78	2.57	5	–	–	8C-3095	–	–	–	–
1.78	2.9	6	6H-9691	–	9N-1749	–	–	–	–
1.78	3.68	7	3H-0442	–	–	168-0268	–	150-4651	–
1.78	4.47	8	8F-7219	6V-5722	–	–	8M-8468	–	–
1.78	5.28	9	8F-9538	3G-1209	192-7117	107-3116	8M-5250	–	–
1.78	6.07	10	2D-6392	6V-5586	9N-1756	–	3L-6768	–	–
1.78	7.65	11	5F-9144	–	061-7538	–	–	9X-7380	–
1.78	7.67	11	–	4J-5477	–	228-7088	–	–	121-4345
1.78	9.25	12	1H-1023	–	464-0509	–	5H-8853	–	6D-7128
1.78	9.27	12	–	6V-8397	–	228-7089	–	–	–
1.78	10.82	13	6M-5062	095-1750	317-0808	9X-7409	–	9X-7381	–
1.78	12.42	14	4K-2039	–	033-6033	–	–	9X-7408	180-8424
1.78	12.47	14	–	6V-8398	–	228-7090	–	–	–

## SAE AS568 Standard O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	Standard Size	NBR (75)	NBR (90)	FKM (75)	FKM (90)	Silicone (70)	HNBR (78)	EPDM (70)
1.78	14	15	5L-4758	095-1751	149-2091	033-6043	5P-6620	9X-7382	–
1.78	15.6	16	4D-2297	–	8L-2746	9X-7737	–	–	6V-5138
1.78	17.17	17	1S-8947	6V-8399	2P-2975	135-2652	–	9X-7383	–
1.78	18.77	18	8M-8997	9X-7454	5P-9757	9X-7681	–	–	250-2343
1.78	20.35	19	–	6V-6580	221-9941	5E-9816	–	–	–
1.78	21.95	20	030-4605	8J-2413	221-9937	–	–	–	–
1.78	23.52	21	8C-3098	–	501-9547	8C-3093	–	–	–
1.78	25.12	22	5L-4759	–	231-2317	310-7258	–	–	–
1.78	26.7	23	077-3241	005-8592	033-6032	136-3377	–	9X-7384	–
1.78	28.3	24	003-8137	4K-4986	5P-5600	–	–	–	–
1.78	29.87	25	6V-0894	–	9X-7734	–	5P-6436	–	–
1.78	30.01	25	–	6V-8400	–	228-7094	–	–	–
1.78	31.47	26	8F-0212	–	179-8128	310-7255	–	–	–
1.78	33.05	27	5D-6539	8T-4827	5P-5601	–	–	–	–
1.78	34.65	28	5D-6543	5K-5221	5P-9658	–	5P-4932	–	–
1.78	37.82	29	–	187-9630	7X-4782	–	–	–	–
1.78	37.98	29	–	8T-0315	–	228-7095	–	–	–
1.78	41	30	3J-9015	5K-6526	–	–	–	–	–
1.78	44.17	31	3P-1979	5K-0227	5E-8767	–	–	–	–
1.78	47.35	32	–	5K-0216	5E-8768	–	5P-8907	–	–
1.78	50.52	33	6V-0895	–	180-3927	–	–	–	–
1.78	53.7	34	–	–	151-8670	–	3P-5859	–	–
1.78	56.87	35	219-1897	–	–	–	–	–	–
1.78	60.05	36	077-5843	095-1753	–	–	–	–	–
1.78	63.22	37	–	–	7X-4745	–	3P-0815	–	–
1.78	66.4	38	–	–	247-6020	–	–	–	–
1.78	69.57	39	–	–	247-6019	–	2P-5820	–	–
1.78	72.75	40	–	9J-5686	–	–	–	–	–
1.78	75.92	41	–	–	6V-3865	–	–	–	–
1.78	82.27	42	5P-2931	–	6V-5778	–	–	–	–
1.78	88.6	43	–	–	8T-6717	–	–	–	8T-2944
1.78	88.62	43	5P-3881	–	–	–	–	–	–
1.78	94.97	44	7X-9372	–	5E-8769	–	201-9933	–	–
1.78	101.32	45	7X-5494	–	6V-1320	–	8T-2572	–	–
1.78	107.67	46	–	9X-7357	–	–	–	–	–
1.78	120.37	48	8C-5237	–	–	–	199-9240	–	–
1.78	126.72	49	–	–	3E-6799	–	–	–	–
1.78	133.07	50	–	–	6V-1934	–	–	–	–
2.62	4.42	106	–	8J-1699	–	–	–	–	–
2.62	5.23	107	8B-7216	5P-4933	–	–	–	–	–

# Cat O-Rings

## SAE AS568 Standard O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	Standard Size	NBR (75)	NBR (90)	FKM (75)	FKM (90)	Silicone (70)	HNBR (78)	EPDM (70)
2.62	6.02	108	196-1804	5P-5874	9X-7676	—	—	—	235-5678
2.62	7.59	109	4J-2506	6J-3134	032-8970	—	—	—	—
2.62	9.19	110	6F-5559	4J-5309	330-8196	107-3118	8M-8157	—	—
2.62	10.77	111	5H-6005	4J-9535	8L-2777	109-3204	8M-5127	—	—
2.62	12.37	112	8F-9206	7Y-5219	269-7852	126-7524	8M-5251	—	—
2.62	13.94	113	6F-4855	4J-5268	228-4947	6V-8350	8M-4437	203-3940	—
2.62	15.54	114	8F-3469	5J-2974	112-3102	107-3117	8M-5260	118-5068	—
2.62	17.12	115	6F-6672	4J-5351	323-7347	6V-8351	8M-4438	—	—
2.62	18.72	116	7F-8607	6V-3922	7L-9061	109-3203	8M-5253	—	—
2.62	20.3	117	4M-8303	5P-3108	5P-9186	033-6041	8M-4389	—	—
2.62	21.89	118	9H-6761	361-3549	5P-8356	3E-6786	8M-8283	—	—
2.62	23.47	119	4D-9986	6V-5326	330-8197	6V-8352	9X-4609	—	—
2.62	25.07	120	3D-4245	6V-5556	361-8205	6V-6339	1S-7462	—	—
2.62	26.64	121	3D-2992	7E-4846	6V-6228	114-8718	8M-4431	—	205-4831
2.62	28.24	122	2K-8199	099-8232	5P-7530	6V-4591	8M-8514	—	—
2.62	29.82	123	3S-9233	6V-8978	7X-4744	—	8M-1112	—	243-2646
2.62	31.42	124	2S-4663	096-3044	9X-3979	9X-7722	—	—	297-4854
2.62	32.99	125	2K-8198	6V-8218	250-0466	230-3728	8M-8515	—	—
2.62	34.59	126	5M-2057	096-6100	6V-4367	166-2903	—	—	355-1596
2.62	36.17	127	6J-2419	6V-5393	5P-8065	245-4907	—	107-9570	—
2.62	37.77	128	4D-3107	6V-5391	210-9246	6V-7323	6F-0249	—	8T-5917
2.62	39.34	129	5P-8215	1R-5318	269-7847	6V-1250	—	—	—
2.62	40.94	130	9X-7684	6V-5597	3E-6788	—	—	219-7000	—
2.62	42.52	131	4L-7711	—	9X-7432	188-2199	—	—	—
2.62	44.12	132	2D0598	5P-2568	330-8195	—	—	—	—
2.62	45.69	133	7D-9749	3E-6771	8C-3078	6E-5413	—	—	204-7844
2.62	47.29	134	032-9882	—	225-6948	—	—	—	—
2.62	48.9	135	3D-2898	—	6V-8676	—	—	—	—
2.62	50.47	136	8C-3080	321-5628	8C-3079	—	—	—	—
2.62	52.07	137	005-8593	—	—	6E-5412	—	—	—
2.62	53.64	138	3D-7805	—	272-2583	—	—	—	8C-5196
2.62	55.25	139	004-1963	—	6V-3832	135-2655	—	—	231-4708
2.62	56.82	140	—	7Y-5269	144-7338	—	—	144-7339	—
2.62	58.42	141	7J-2036	119-7843	5P-5756	—	3S-4489	—	—
2.62	59.99	142	8T-7000	—	009-2061	—	—	—	—
2.62	61.6	143	8S-0768	—	6D-7889	—	—	—	2275903
2.62	63.17	144	8C-3081	—	009-2062	—	—	—	8T-2929
2.62	64.77	145	—	279-0169	5P-5757	—	5S-4548	—	—
2.62	66.34	146	5M-6509	131-3715	378-0746	—	—	—	—
2.62	67.94	147	107-4057	—	—	—	129-5701	—	—

## SAE AS568 Standard O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	Standard Size	NBR (75)	NBR (90)	FKM (75)	FKM (90)	Silicone (70)	HNBR (78)	EPDM (70)
2.62	69.52	148	004-1964	–	360-2963	–	–	–	–
2.62	71.12	149	3K-4025	–	–	–	–	–	–
2.62	72.69	150	5P-0908	–	8C-5197	–	–	–	–
2.62	75.87	151	7R-8872	119-7844	5E-8770	–	–	–	–
2.62	82.22	152	5P-3863	5P-2569	8C-3089	6V-3551	–	–	–
2.62	88.57	153	6V-2483	–	6V-3834	136-3378	–	–	8T-6340
2.62	94.92	154	4F-4097	–	–	107-3119	–	185-3503	7X-4752
2.62	101.27	155	3K-0715	8T-5049	6D-7146	107-3120	–	–	–
2.62	107.62	156	–	1T-1068	–	133-6578	–	–	9X-7549
2.62	113.97	157	6S-3002	–	6V-7350	–	–	–	–
2.62	120.32	158	–	9X-7566	5E-8771	–	–	–	117-3036
2.62	126.67	159	7J-6285	323-2282	117-8801	–	–	–	9X-7697
2.62	133.02	160	2P-1692	–	–	–	–	–	–
2.62	139.37	161	5J-3886	117-7282	346-8576	–	–	–	–
2.62	145.72	162	1W-9312	9X-7358	346-8577	146-4263	–	–	–
2.62	152.07	163	5P-3864	–	9X-4576	–	–	–	–
2.62	158.42	164	8T-6404	–	9X-7286	–	–	–	–
2.62	164.8	165	–	9X-7391	–	–	–	–	4S-7762
2.62	171.12	166	9D-8042	–	–	–	–	–	–
2.62	177.47	167	5P-5397	–	311-0827	–	–	–	–
2.62	183.82	168	9X-7725	–	–	–	–	–	–
2.62	190.17	169	–	–	9X-7295	–	–	–	–
2.62	202.87	171	–	–	223-8512	9X-7410	7X-4799	–	–
2.62	209.22	172	162-9997	–	316-9962	–	–	–	–
2.62	215.57	173	161-4102	–	–	–	–	–	–
2.62	221.92	174	–	–	261-3307	–	–	–	–
2.62	234.62	176	–	–	107-3114	–	–	–	–
2.62	240.97	177	190-8501	–	–	–	–	–	–
2.62	247.32	178	–	–	154-8741	–	–	–	–
3.53	5.94	202	2H-5001	9J-6491	–	–	8M-8281	–	–
3.53	7.52	203	–	6V-5555	137-8101	–	–	–	–
3.53	9.12	204	2J-6274	6V-0913	7X-4805	6V-3548	–	–	–
3.53	10.69	205	–	–	119-9443	–	–	–	–
3.53	12.29	206	2M-4453	5P-6300	5P-0840	–	8M-4447	147-0182	–
3.53	13.87	207	3H-3385	–	125-1372	219-7001	8M-8282	–	–
3.53	15.47	208	2J-0157	6J-1038	5P-5598	–	8M-4448	–	8C-0504
3.53	17.04	209	–	–	5P-8119	–	–	–	–
3.53	18.64	210	5F-7054	4J-5140	130-0229	189-0193	8M-4435	169-7487	5P-3148
3.53	20.22	211	1H-8171	008-2103	061-7539	–	–	9X-7385	–
3.53	21.82	212	3H-0107	4J-8996	3P-1156	–	8M-4445	112-3132	–

# Cat O-Rings

## SAE AS568 Standard O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	Standard Size	NBR (75)	NBR (90)	FKM (75)	FKM (90)	Silicone (70)	HNBR (78)	EPDM (70)
3.53	23.39	213	5H-2767	–	6V-3683	109-3207	8M-4446	–	–
3.53	24.99	214	5F-1678	4J-5267	3P-1155	109-3205	8M-4988	–	–
3.53	26.57	215	4F-8946	180-8722	451-1493	–	8M-4432	–	–
3.53	28.17	216	2H-3932	4J-8997	061-9458	279-2252	8M-5248	121-0145	227-2519
3.53	29.74	217	4F-9029	6V-0357	165-4854	–	8M-4433	–	–
3.53	31.34	218	6F-6673	4J-0519	5P-8210	–	8M-5254	–	–
3.53	32.92	219	4F-7391	4J-0520	295-5609	237-3800	8M-4987	437-4425	–
3.53	34.52	220	3H-1461	4J-0521	330-3517	215-3198	8M-5249	–	7L-4774
3.53	36.09	221	5F-9657	4J-8998	6V-5266	230-3775	1S-9799	–	–
3.53	37.69	222	4F-7952	4J-0522	061-7540	191-2962	8M-4986	118-7214	–
3.53	40.87	223	6F-0711	4J-5573	346-4897	194-9584	8M-4992	118-8586	226-3571
3.53	44.04	224	1H-9696	4J-0523	8J-4351	5P-1480	8M-4443	129-1653	8T-9588
3.53	47.22	225	7F-8267	4J-0524	061-9455	234-3544	8M-5661	–	–
3.53	50.39	226	5F-8000	4J-0525	5P-8211	–	8M-4436	–	384-9992
3.53	53.57	227	7F-8268	4J-0526	124-1858	8C-3077	8M-5010	–	–
3.53	56.74	228	8F-6711	4J-0527	447-7206	6V-4590	8M-4390	112-1577	8T-1703
3.53	59.92	229	175-7894	4J-0528	5P-4892	–	1S-2174	–	–
3.53	63.09	230	1H-5728	3P-0439	061-9457	–	8M-4395	–	–
3.53	66.27	231	8F-8882	3E-6730	6J-2244	–	8M-5252	118-8706	–
3.53	69.44	232	175-7895	6J-2680	425-2519	8T-0568	9M-7539	112-1574	167-4407
3.53	72.62	233	6H-3977	149-0231	6V-1179	–	–	–	–
3.53	75.79	234	175-7896	–	5P-4889	–	5M-3038	–	205-4832
3.53	78.97	235	175-7897	3E-6732	153-1157	170-7098	–	–	–
3.53	82.14	236	2H-3931	6V-6707	6V-1196	170-4821	6L-9965	–	8C-3073
3.53	85.32	237	2H-6338	117-1266	124-1859	–	2P-3538	–	8C-3072
3.53	88.49	238	175-7898	6R-0365	6V-8002	–	3S-1427	224-6079	200-6410
3.53	91.67	239	8H-7521	3E-6735	131-3718	–	2M-2561	258-8738	–
3.53	94.84	240	1H-8128	5P-6302	3E-6773	–	5K-1770	–	–
3.53	98.02	241	175-7900	9X-4611	6V-1197	–	9M-9936	–	–
3.53	101.19	242	1H-6227	–	6V-6353	–	2S-2182	–	–
3.53	104.37	243	4M-0189	–	5D-5957	–	7M-9909	–	–
3.53	107.54	244	2H-3928	–	3E-6785	–	8S-5654	–	213-9397
3.53	110.72	245	175-7902	3E-6703	8T-9527	–	9M-9729	–	–
3.53	113.89	246	5H-6734	190-3011	9X-7287	–	–	271-4928	–
3.53	117.07	247	2J-8163	331-2496	5D-5958	–	5P-1705	–	–
3.53	120.24	248	5F-3144	175-7903	259-4598	–	8M-5255	–	213-9396
3.53	123.42	249	5F-3999	331-2487	6V-8260	–	7M-6637	–	–
3.53	126.59	250	175-7904	031-4392	9X-7371	–	4S-5898	–	–
3.53	129.77	251	3F-5792	–	130-0229	–	5P-3457	–	–
3.53	132.94	252	175-7905	316-2516	6V-7351	–	9N-1619	–	–

## SAE AS568 Standard O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	Standard Size	NBR (75)	NBR (90)	FKM (75)	FKM (90)	Silicone (70)	HNBR (78)	EPDM (70)
3.53	136.12	253	2H-3935	316-2517	6V-1195	–	9N-2693	–	–
3.53	139.29	254	8F-9516	190-3010	–	–	8M-5007	–	–
3.53	142.47	255	2D-8009	–	161-8068	–	6V-1904	129-1609	–
3.53	145.64	256	5H-3252	6J-5541	243-2737	6V-3549	–	–	–
3.53	148.82	257	2K-8257	096-6789	161-8069	–	3S-5135	129-1610	8T-5918
3.53	151.99	258	8F-8733	7D-9014	6V-5553	170-7106	5D-4311	–	–
3.53	158.34	259	2K-4472	–	6V-3319	–	8M-4704	135-2654	–
3.53	164.69	260	6F-4718	–	298-6387	175-5077	1S-4974	–	–
3.53	171.04	261	9F-1399	–	5P-8428	170-4825	2S-4071	311-0828	213-9395
3.53	177.39	262	2K-2939	–	6V-1902	–	5S-4554	–	–
3.53	183.74	263	4H-6520	–	6V-3907	175-5088	1S-6119	–	–
3.53	190.09	264	3J-0634	5J-2383	437-2800	224-6080	–	149-5461	6V-5098
3.53	196.44	265	1H-8278	126-4003	–	–	–	271-4926	8T-2921
3.53	202.79	266	1J-2176	–	227-5538	–	9M-9545	–	–
3.53	209.14	267	9M-5024	7Y-4294	238-6646	224-6081	9N-2694	122-3771	–
3.53	215.49	268	4K-6804	–	156-5198	–	–	122-3772	–
3.53	221.84	269	8F-5900	–	186-3075	–	–	–	–
3.53	228.19	270	8F-6230	–	6V-3684	–	–	–	–
3.53	234.54	271	1T-0132	–	235-3546	–	8L-3017	–	–
3.53	240.89	272	2D-9572	–	170-5942	–	9N-1609	–	–
3.53	247.24	273	5S-3676	–	–	–	–	–	–
3.53	253.59	274	5H-4909	243-4572	–	–	7D-1979	185-3502	–
3.53	266.29	275	8J-8879	–	464-8978	–	–	205-6051	–
3.53	278.99	276	2R-0239	–	180-4365	–	–	–	–
3.53	291.69	277	5P-2545	–	213-9833	–	9N-1520	–	–
3.53	304.39	278	2D-6533	–	165-4852	–	–	–	–
3.53	329.79	279	4D-6695	–	–	–	9N-1552	–	–
3.53	355.19	280	4S-5879	–	5D-5959	–	9N-1562	–	–
3.53	380.59	281	4D-1577	–	–	–	–	135-2653	–
3.53	405.26	282	7S-8561	–	–	–	–	–	–
3.53	430.66	283	4S-5924	–	–	–	–	–	–
3.53	454.91	284	7X-1548	–	–	–	–	–	–
5.33	12.06	310	3H-4970	–	8S-5011	–	1S-7104	247-0708	–
5.33	15.24	312	5H-8038	–	6V-3955	–	8M-4990	–	–
5.33	18.42	314	3B-8453	–	6V-3348	–	1S-0004	–	6V-5061
5.33	19.99	315	9H-4557	–	–	–	–	–	–
5.33	21.59	316	6H-5672	–	2N-3350	–	9H-6067	–	6V-5062
5.33	23.16	317	8F-4994	–	112-3540	–	9M-4849	114-2687	7L-4773
5.33	24.77	318	8B-4967	–	6V-4430	–	8M-5266	–	8T-0280
5.33	26.34	319	–	–	8C-3104	–	–	–	–

# Cat O-Rings

## SAE AS568 Standard O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	Standard Size	NBR (75)	NBR (90)	FKM (75)	FKM (90)	Silicone (70)	HNBR (78)	EPDM (70)
5.33	27.94	320	5H-7370	–	293-7589	–	8M-4991	–	–
5.33	31.12	322	4F-5607	–	6V-5134	–	5H-7153	–	305-4484
5.33	32.69	323	5M-7423	–	–	–	–	–	–
5.33	34.29	324	5M-5860	–	6V-3830	–	1S-9544	–	5P-7204
5.33	37.47	325	4F-7389	–	5P-8068	–	9M-7002	109-0078	6V-9769
5.33	40.64	326	2H-3927	8S-5953	5P-5846	–	9M-9647	109-0072	6L-7817
5.33	43.82	327	4F-8824	–	8C-5230	–	2S-2251	109-0073	2N-5749
5.33	46.99	328	4F-9653	9S-8307	8C-3107	–	6L-1648	112-3258	6V-1585
5.33	50.17	329	5K-5959	–	113-5304	–	6L-1651	109-0076	171-4358
5.33	53.34	330	4F-7390	–	6V-3831	–	–	112-3260	2N-5243
5.33	56.52	331	3H-2652	7S-4001	109-2332	–	6L-1650	110-7752	2N-0475
5.33	59.69	332	6F-8146	099-4780	3P-0651	–	6L-9284	112-3259	–
5.33	62.86	333	2H-2665	2R-0039	237-7623	–	6L-1649	112-1102	8T-1919
5.33	66.04	334	2H-3933	–	3P-0656	–	8H-1607	–	–
5.33	69.22	335	7F-2122	006-8352	3P-0653	–	8M-4989	109-0075	–
5.33	72.39	336	5F-3092	–	269-7885	–	9M-4218	110-7753	288-5476
5.33	75.57	337	7H-2444	–	6V-5051	–	–	109-0092	–
5.33	78.74	338	9F-4446	–	6V-3833	–	1M-6036	109-0079	–
5.33	81.92	339	4L-9564	5D-1597	287-5812	–	6L-5359	–	–
5.33	85.09	340	8H-2046	–	259-4600	–	9M-4217	259-4597	6V-5066
5.33	88.26	341	1H-0474	–	6V-0973	–	–	112-8186	–
5.33	91.44	342	5F-0149	–	5P-7818	–	9X-7727	109-0074	–
5.33	94.62	343	5H-8624	–	6V-4315	–	–	–	–
5.33	97.79	344	9M-2092	–	5S-9134	–	6V-5188	109-0080	6V-5139
5.33	100.97	345	4F-7387	9X-7458	6V-3908	–	4H-3243	109-0077	416-1498
5.33	104.14	346	1J-2859	–	6V-5052	–	–	–	–
5.33	107.32	347	9F-7283	–	6V-5101	–	1S-1225	–	6V-5504
5.33	110.49	348	1S-7408	–	7D-7111	–	–	–	–
5.33	113.66	349	5H-5672	–	5P-8872	–	8S-5655	112-1580	6V-5140
5.33	116.84	350	5P-4326	–	8C-3103	–	–	–	6V-5067
5.33	120.02	351	1P-9005	331-2485	270-1820	–	–	–	–
5.33	123.19	352	2S-8439	–	310-3954	–	107-3185	109-0081	8T-2903
5.33	126.36	353	068-9002	–	–	–	–	258-8734	–
5.33	129.54	354	8J-1688	371-0443	6V-4314	–	–	258-8733	6V-5068
5.33	132.72	355	5P-1979	–	258-8735	–	–	–	–
5.33	135.89	356	–	–	9X-7562	–	–	–	–
5.33	139.06	357	9M-3786	–	6V-5054	–	3S-1219	–	6V-6809
5.33	142.24	358	6D-9157	–	6V-3835	–	–	–	225-7003
5.33	145.42	359	3S-1223	–	–	–	–	–	–
5.33	148.59	360	6V-5657	–	–	–	–	–	–



## SAE AS568 Standard O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	Standard Size	NBR (75)	NBR (90)	FKM (75)	FKM (90)	Silicone (70)	HNBR (78)	EPDM (70)
5.33	151.77	361	7J-8956	315-7986	6V-5055	–	–	–	–
5.33	158.12	362	8T-6444	491-1544	6V-4297	–	8C-3091	–	–
5.33	164.46	363	8J-1665	–	258-6947	170-4824	7S-8758	–	–
5.33	170.82	364	–	5P-7593	258-8736	–	–	–	–
5.33	177.17	365	8T-7568	–	109-7411	–	9X-7704	107-6280	–
5.33	183.52	366	5K-1787	–	6V-5102	–	–	–	–
5.33	189.86	367	3F-1547	–	–	–	–	–	–
5.33	196.22	368	5M-7142	–	6V-3349	–	–	–	197-8006
5.33	202.56	369	9M-5894	–	375-6181	–	–	–	–
5.33	202.57	369	–	–	177-6911	–	–	–	6V-7703
5.33	208.92	370	4N-1230	–	5P-8429	–	–	259-4596	–
5.33	215.26	371	5P-3092	–	–	–	–	–	253-9950
5.33	221.62	372	5H-4081	1U-3174	6V-5141	–	–	134-5959	–
5.33	227.96	373	–	5P-5374	–	–	5D-9344	–	–
5.33	234.32	374	–	–	6V-5375	–	–	–	–
5.33	240.66	375	–	5P-2235	–	–	–	–	–
5.33	240.67	375	–	–	6V-7701	–	5P-8105	–	–
5.33	247.01	376	–	386-5910	–	–	–	–	–
5.33	253.36	377	8L-9241	320-6169	–	–	–	–	–
5.33	266.06	378	3S-3074	109-5702	174-3357	275-8521	5P-5819	–	–
5.33	278.76	379	–	5P-2236	6V-5554	292-9201	–	–	–
5.33	291.46	380	2M-1309	–	6V-5057	–	–	–	–
5.33	304.17	381	–	6V-3263	159-8802	–	–	158-6563	–
5.33	329.56	382	7S-8554	–	–	–	–	–	–
5.33	329.57	382	–	–	9X-7688	–	–	–	–
5.33	354.97	383	6V-1175	–	8C-3828	–	–	–	–
5.33	380.36	384	2M-3340	–	118-7536	–	–	–	–
5.33	405.3	385	5M-6200	223-5519	–	–	–	–	–
5.33	430.66	386	5P-9806	–	–	–	9L-5650	–	–
5.33	456.06	387	2R-0098	–	6V-5059	–	–	–	–
5.33	481.41	388	8D-4771	–	–	–	–	–	–
5.33	532.21	390	4H-6730	–	–	–	380-1397	–	–
5.33	557.61	391	9H-3360	–	–	–	–	–	–
5.33	582.68	392	3D-8422	–	–	–	–	–	–
5.33	608.1	393	8T-3013	–	–	–	–	–	–
5.33	633.48	394	9H-6832	–	–	–	–	–	–
6.99	113.66	425	114-9275	–	–	–	7S-1156	–	–
6.99	116.84	426	9S-3888	107-6259	170-5941	–	9M-8788	–	–
6.99	120.02	427	–	–	–	–	3H-0976	–	7L-2031
6.99	123.19	428	–	6F-0671	5S-6760	–	–	–	–

# Cat O-Rings

## SAE AS568 Standard O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	Standard Size	NBR (75)	NBR (90)	FKM (75)	FKM (90)	Silicone (70)	HNBR (78)	EPDM (70)
6.99	126.36	429	8F-4469	—	6V-5103	—	2M-5173	—	6L-9405
6.99	132.72	431	5H-9524	—	—	—	—	—	—
6.99	135.89	432	4F-7507	—	3E-6751	—	—	—	—
6.99	139.06	433	5H-6733	—	6V-5167	—	6H-1995	—	—
6.99	145.42	435	2Y-8252	384-5137	—	—	—	—	—
6.99	148.59	436	5P-3620	003-2770	269-7886	—	5D-6642	—	—
6.99	151.76	437	8H-0273	6H-4162	5P-8862	—	6L-5473	—	—
6.99	158.12	438	5L-5032	140-0240	—	—	—	467-2620	—
6.99	164.46	439	2H-6124	—	135-6950	—	7M-6952	—	—
6.99	170.82	440	2D-1692	006-8350	—	—	—	192-4309	5P-6619
6.99	177.16	441	4F-9652	—	6V-5095	—	5D-7665	—	—
6.99	183.52	442	2D-1690	—	7X-4810	—	—	—	—
6.99	189.86	443	5F-6222	—	—	—	—	—	201-9701
6.99	202.56	445	2D-1691	—	3P-0658	—	6L-5360	—	—
6.99	215.26	446	4F-7388	—	—	—	—	—	279-3397
6.99	227.96	447	1J-2890	—	—	—	—	—	—
6.99	240.66	448	1M-9015	—	—	—	—	—	—
6.99	253.37	449	3E-6794	—	—	—	—	—	—
6.99	266.06	450	8F-8861	—	—	—	—	—	—
6.99	278.76	451	2H-6340	—	—	—	—	—	—
6.99	291.46	452	8H-8257	—	—	—	—	—	—
6.99	304.16	453	4M-0661	—	—	—	—	—	1W-0118
6.99	316.86	454	4D-4508	—	6V-3967	—	—	—	8T-9047
6.99	329.56	455	5M-4454	—	—	—	1Z-6392	—	—
6.99	342.26	456	5P-9217	—	6V-6638	—	—	—	—
6.99	354.96	457	4J-1253	—	—	—	—	—	—
6.99	367.67	458	6V-5862	—	—	—	—	—	—
6.99	380.36	459	8F-9960	—	—	—	—	—	—
6.99	393.07	460	5P-4342	—	—	—	—	—	—
6.99	417.96	462	—	—	137-4350	—	—	—	—
6.99	430.66	463	3S-9896	—	241-6948	—	—	—	—
6.99	468.76	466	8T-4811	—	—	—	—	—	—
6.99	481.46	467	5D-1071	—	—	—	—	—	—
6.99	494.16	468	2D-8363	—	6V-5060	—	—	—	—
6.99	532.26	470	3D-8241	—	—	—	380-6914	—	—
6.99	582.68	472	2D-8364	—	—	—	—	—	—
6.99	608.08	473	5D-6428	—	—	—	—	—	—
6.99	659	475	—	—	185-7080	—	—	—	—

## Cat Standard O-rings for Fluid Lines

### Inch Straight Thread O-Ring (STOR) Seals

Cross Section Dia (mm)	Inner Dia (mm)	Dash Size	Thread Size	NBR (90)	FKM (90)	EPDM (70)
1.63	6.07	-2	5/16 - 24	4J-7533	238-5078	8T-9587
1.63	7.65	-3	3/8 - 24	7J-0201	238-5079	8K-0001
1.83	8.92	-4	7/16 - 20	3J-7354	214-7566	6V-9027
1.83	10.52	-5	1/2 - 20	1J-9671	214-7567	291-8144
1.98	11.89	-6	9/16 - 18	3J-1907	214-7568	6V-3250
2.21	16.36	-8	3/4 - 16	3K-0360	238-5080	6V-6609
2.46	19.18	-10	7/8 - 14	2M-9780	238-5081	6V-3251
2.95	23.47	-12	1-1/16 - 12	3D-2824	238-5082	6V-5063
2.95	26.62	-14	1-3/16 - 12	4K-1388	238-5083	291-8145
2.95	29.74	-16	1-5/16 - 12	7M-8485	238-5084	6V-5064
3.00	37.47	-20	1-5/8 - 12	2S-4078	228-7096	6V-5065
3.00	43.69	-24	1-7/8 - 12	6K-6307	238-5086	8C-0562
3.00	59.36	-32	2-1/2 - 12	030-4606	228-7097	-

### Metric Straight Thread O-Ring (STOR) Seals

Cross Section Dia (mm)	Inner Dia (mm)	Thread Size	NBR (90)	FKM (90)	EPDM (70)
1.5	6.2	M8 x 1	-	228-7099	-
1.5	8.2	M10 x 1	8T-7876	8C-3076	262-9990
2.1	9.4	M12 X 1.5	6V-9028	228-7100	219-0669
2.1	11.4	M14 X 1.5	6V-6560	228-7101	216-8579
2.1	13.4	M16 X 1.5	8T-6850	228-7102	291-8179
2.1	15.4	M18 X 1.5	8T-7524	228-7103	199-9751
2.1	17.4	M20 X 1.5	8T-7877	228-7104	-
2.1	19.4	M22 X 1.5	6V-7970	228-7105	216-7485
2.8	23.7	M27 X 2	8T-7525	228-7106	216-8578
2.8	29.7	M33 X 2	8T-7526	215-4639	216-8580
2.8	38.7	M42 X 2	8C-5193	228-7108	-
2.8	44.7	M48 X 2	291-8177	216-9642	-
2.8	56.7	M60 X 2	291-8178	209-5798	294-9065

### O-Ring Face Seals (ORFS)

Cross Section Dia (mm)	Inner Dia (mm)	Thread Size	NBR (90)	FKM (90)	EPDM (70)
1.78	11.23	9/16 - 18	4J-5477	228-7088	121-4345
1.78	12.83	11/16 - 16	6V-8397	228-7089	6D-7128
1.78	16.03	13/16 - 16	6V-8398	228-7090	180-8424

# Cat O-Rings

## Cat Standard O-rings for Fluid Lines (Cont'd.)

### O-Ring Face Seals (ORFS) (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	Thread Size	NBR (90)	FKM (90)	EPDM (70)
1.78	19.28	1 – 14	7J-9108	228-7091	6V-5138
1.78	22.5	1-3/16 – 12	6V-9746	228-7092	294-9072
1.78	27.22	1-7/16 – 12	5K-9090	228-7093	–
1.78	33.57	1-11/16 – 12	6V-8400	228-7094	–
1.78	41.54	2 – 12	8T-0315	228-7095	294-9075

## JIS (Japanese Industrial Standard) O-rings

Cross Section Dia (mm)	Inner Dia (mm)	Standard Size	NBR (75)	NBR (90)	FKM (75)	FKM (90)	HNBR (78)
1.9	2.8	P3	095-1508	95-1571	–	–	–
1.9	3.8	P4	095-1509	7Y-5280	–	206-9288	–
1.9	4.8	P5	095-1510	095-1572	–	–	–
1.9	5.8	P6	3T-7528	095-1573	–	–	–
1.9	6.8	P7	095-1511	095-1574	207-4849	199-0518	–
1.9	7.8	P8	–	095-1575	103-8254	277-2550	–
1.9	8.8	P9	095-1513	095-1576	–	236-2184	–
1.9	9.8	P10	095-1514	095-1578	–	189-9763	–
2.4	9.8	P10A	–	095-1577	–	–	–
2.4	10.8	P11	095-1515	095-1579	–	206-9292	121-7137
2.4	11.8	P12	095-1516	095-1580	–	–	–
2.4	12.3	P12.5	185-0550	095-1581	8T-9522	249-6660	–
2.4	13.8	P14	095-1517	095-1582	–	–	–
2.4	14.8	P15	095-1518	095-1583	103-8255	206-9293	–
2.4	15.8	P16	095-1519	095-1584	273-8316	206-9294	–
2.4	17.8	P18	–	095-1585	–	206-9295	–
2.4	19.8	P20	095-1521	095-1586	–	206-9296	–
2.4	20.8	P21	095-1522	095-1587	–	109-1294	–
2.4	21.8	P22	095-1524	095-1590	–	277-2545	229-4896
3.1	24.4	G25	095-1657	095-1696	–	249-6659	–
3.1	29.4	G30	0951658	095-1698	–	206-9298	–
3.1	34.4	G35	095-1659	095-1700	–	206-9299	–
3.1	39.4	G40	–	095-1701	–	109-1296	–
3.1	44.4	G45	–	095-1703	–	206-9285	–
3.1	49.4	G50	095-1662	095-1704	–	–	–
3.1	54.4	G55	095-1663	095-1705	–	–	–
3.1	59.4	G60	–	095-1706	–	–	–
3.1	64.4	G65	–	095-1707	–	206-9286	–
3.1	69.4	G70	–	095-1708	–	–	–

## JIS (Japanese Industrial Standard) O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	Standard Size	NBR (75)	NBR (90)	FKM (75)	FKM (90)	HNBR (78)
3.1	74.4	G75	–	095-1709	–	206-9300	–
3.1	79.4	G80	–	095-1710	193-1736	–	–
3.1	84.4	G85	8T-3338	095-1711	273-8315	–	–
3.1	89.4	G90	–	095-1712	–	–	–
3.1	94.4	G95	095-1671	095-1713	096-3944	249-6657	–
3.1	99.4	G100	6V-8467	095-1714	–	–	–
3.1	104.4	G105	095-1673	095-1715	–	236-6919	–
3.1	109.4	G110	095-1674	095-1716	274-1262	292-3264	–
3.1	114.4	G115	095-1675	095-1717	–	–	–
3.1	119.4	G120	095-1676	095-1718	–	–	–
3.1	124.4	G125	–	095-1719	–	–	–
3.1	129.4	G130	095-1678	095-1720	–	–	–
3.1	134.4	G135	095-1679	095-1721	–	–	–
3.1	139.4	G140	095-1680	095-1722	–	–	–
3.1	144.4	G145	095-1681	095-1723	–	–	–
3.5	21.7	P22A	–	095-1589	–	–	–
3.5	22.1	P22.4	095-1525	095-1591	–	–	–
3.5	23.7	P24	095-1526	095-1592	–	190-7674	–
3.5	24.7	P25	095-1527	095-1593	273-8317	–	–
3.5	25.7	P26	095-1528	095-1594	273-8319	206-9301	–
3.5	27.7	P28	–	095-1595	–	–	–
3.5	28.7	P29	095-1530	095-1596	–	–	–
3.5	29.7	P30	095-1531	095-1597	–	–	–
3.5	30.7	P31	–	095-1598	–	–	–
3.5	31.7	P32	095-1533	095-1599	–	–	–
3.5	33.7	P34	095-1534	095-1600	–	–	–
3.5	34.7	P35	8T-2148	095-1601	–	–	–
3.5	35.7	P36	–	095-1602	–	–	–
3.5	37.69	P38	–	–	–	190-7673	–
3.5	37.7	P38	095-1537	095-1603	–	–	–
3.5	38.7	P39	095-1538	096-5572	273-8318	–	–
3.5	39.7	P40	095-1539	095-1604	–	–	–
3.5	40.7	P41	095-1540	095-1605	–	–	–
3.5	41.7	P42	095-1541	095-1606	–	–	–
3.5	43.7	P44	–	095-1607	–	–	–
3.5	44.7	P45	095-1543	095-1608	–	–	–
3.5	45.7	P46	095-1544	095-1609	–	–	–
3.5	47.7	P48	–	095-1610	–	–	–
3.5	48.7	P49	095-1545	–	–	–	–
3.5	49.7	P50	095-1547	095-1613	–	–	–
5.7	49.6	P50A	095-1546	095-1612	–	–	–

# Cat O-Rings

## JIS (Japanese Industrial Standard) O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	Standard Size	NBR (75)	NBR (90)	FKM (75)	FKM (90)	HNBR (78)
5.7	51.6	P52	096-0121	095-1614	—	—	—
5.7	54.6	P55	8T-6346	095-1616	—	—	—
5.7	55.6	P56	—	095-1617	—	—	—
5.7	57.6	P58	—	095-1618	—	—	—
5.7	59.6	P60	095-1549	095-1619	—	—	—
5.7	61.6	P62	—	095-1620	—	—	—
5.7	64.6	P65	095-1550	095-1621	—	—	—
5.7	66.6	P67	270-6438	—	—	—	—
5.7	69.6	P70	095-1551	095-1622	—	—	—
5.7	74.6	P75	095-1552	—	—	—	—
5.7	79.6	P80	095-1553	095-1623	—	—	—
5.7	84.6	P85	095-1554	095-1624	—	—	—
5.7	89.6	P90	—	095-1625	—	—	—
5.7	94.6	P95	—	095-1626	—	—	—
5.7	99.6	P100	—	095-1627	—	—	—
5.7	104.6	P105	—	095-8859	—	—	—
5.7	109.6	P110	095-1558	095-1628	—	—	—
5.7	111.6	P112	132-3056	—	—	—	—
5.7	114.6	P115	095-1560	095-1630	—	—	—
5.7	119.6	P120	—	095-1631	—	—	—
5.7	124.6	P125	—	096-5382	—	—	—
5.7	129.6	P130	095-1562	095-1632	—	—	—
5.7	139.6	P140	095-1563	095-1633	—	—	—
5.7	144.6	P145	—	095-1634	—	—	—
5.7	149.2	P150	—	—	—	483-3274	—
5.7	149.3	P150	095-1682	—	—	—	—
5.7	149.6	P150	—	095-1635	—	—	—
5.7	154.3	G155	096-4921	095-1725	—	—	—
5.7	159.3	G160	—	095-1726	—	—	—
5.7	164.3	G165	—	095-1727	—	—	—
5.7	169.3	G170	095-1684	095-1728	—	—	081-4674
5.7	179.3	G180	095-1685	095-1730	—	—	—
5.7	184.3	G185	095-1686	—	—	—	—
5.7	189.3	G190	095-1687	095-1731	—	—	—
5.7	194.3	G195	095-1688	—	—	—	—
5.7	199.3	G200	095-1689	095-1732	—	—	—
5.7	209.3	G210	—	095-1733	—	—	—
5.7	219.3	G220	095-1691	095-1734	—	—	—
5.7	229.3	G230	095-1692	095-1735	—	—	—
5.7	249.3	G250	—	095-1736	—	—	—
5.7	259.3	G260	—	095-1737	—	—	—

## JIS (Japanese Industrial Standard) O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	Standard Size	NBR (75)	NBR (90)	FKM (75)	FKM (90)	HNBR (78)
5.7	269.3	G270	–	1R-6543	–	–	–
5.7	279.3	G280	095-1694	–	–	–	–
5.7	289.3	G290	–	–	9X-4623	–	–
5.7	299.3	G300	095-1695	–	–	–	–
8.4	154.5	P155	–	095-1636	–	–	–
8.4	164.5	P165	–	095-1637	–	–	–
8.4	174.5	P175	–	095-1638	–	–	–
8.4	179.5	P180	–	095-1639	–	–	–
8.4	189.5	P190	095-1565	–	–	–	–
8.4	199.5	P200	095-1566	–	–	–	–
8.4	214.5	P215	095-1567	–	–	–	–
8.4	249.5	P250	095-1568	–	–	–	–
8.4	384.5	P385	095-1570	–	–	–	–

## BS (British Standard) O-rings

Cross Section Dia (mm)	Inner Dia (mm)	Standard Size	NBR (75)	NBR (90)	FKM (75)	FKM (90)
1.6	11.1	0111-16	–	–	814-284	–
1.6	13.1	0131-16	8C-3097	–	–	–
1.6	22.2	0221-16	–	–	814-581	–
1.6	27.1	0271-16	8C-3101	–	–	–
2.4	17.6	0176-24a	2U-1571	–	–	–
2.4	47.6	0476-24	–	–	195-7657	–
3	34.5	0345-30a	–	490-8788	–	–
3	37.5	0375-30a	–	2S4-078	5P-7815	228-7096
3	54.5	0545-30	–	–	081-3364	–
3	59.36	0595-30	–	030-4606	5P-7817	228-7097
3	84.5	0845-30	–	–	9X-4622	–
3	104.5	1045-30	–	–	227-5904	–
3	110	1095-30	–	490-8609	–	–
3	120	1195-30	5W-5486	140-0226	–	–
3	124	1245-30	–	8U-2552	–	–
3	125	1245-30	222-5792	–	276-3188	–
3	144.5	1445-30	–	–	192-5167	–
3	150	1495-30	109-5700	–	–	–
3	154.5	1545-30	2U-5345	–	–	–
3	160	1595-30	–	8U-2538	–	–
3	175	1745-30	201-7396	–	–	–
3	179	1795-30	–	–	192-5168	–
3	185	1845-30	270-6871	–	–	–

# Cat O-Rings

## BS (British Standard) O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	Standard Size	NBR (75)	NBR (90)	FKM (75)	FKM (90)
3	189.5	1895-30	2U-5346	—	—	—
3	200	1995-30	109-5693	—	—	—
3	210	2095-30	—	490-8720	—	—
5.7	52.3	0523-57a	2U-1574	—	—	—
5.7	64.6	0643-57a	095-1550	095-1621	—	—
5.7	69.6	0693-57a	095-1551	095-1622	—	—
5.7	74.6	0743-57a	095-1552	—	—	—
5.7	79.6	0793-57a	095-1553	095-1623	—	—
5.7	84.6	0843-57a	095-1554	095-1624	—	—
5.7	89.6	0893-57a	—	095-1625	—	—
5.7	94.6	0943-57a	—	095-1626	—	—
5.7	99.6	0993-57a	—	095-1627	—	—
5.7	104.6	1043-57a	—	095-8859	—	—
5.7	109.6	1093-57a	095-1558	095-1628	—	—
5.7	114.6	1143-57a	095-1560	095-1630	—	—
5.7	119.6	1193-57a	—	095-1631	—	—
5.7	124.6	1243-57a	—	096-5382	—	—
5.7	129.6	1293-57a	095-1562	095-1632	—	—
5.7	139.6	1393-57a	095-1563	095-1633	—	—
5.7	144.6	1443-57a	—	095-1634	—	—
5.7	149.3	1493-57	095-1682	095-1635	—	483-3274
5.7	154.3	1543-57	096-4921	095-1725	—	—
5.7	159.3	1593-57	—	095-1726	—	—
5.7	164.3	1643-57	—	095-1727	—	—
5.7	169.3	1693-57	095-1684	095-1728	—	—
5.7	179.3	1793-57	095-1685	095-1730	—	—
5.7	184.3	1843-57	095-1686	—	—	—
5.7	189.3	1893-57	095-1687	095-1731	—	—
5.7	194.3	1943-57	095-1688	—	—	—
5.7	199.3	1993-57	095-1689	095-1732	—	—
5.7	209.3	2093-57	—	095-1733	—	—
5.7	219.3	2193-57	095-1691	095-1734	—	—
5.7	229.3	2293-57	095-1692	095-1735	—	—
5.7	249.3	2493-57	—	095-1736	—	—
5.7	259.3	2593-57	—	095-1737	—	—
5.7	269.3	2693-57	—	1R-6543	—	—
5.7	279.3	2793-57	095-1694	—	—	—
5.7	289.3	2893-57	—	—	9X-4623	—
5.7	299.3	2993-57	095-1695	—	—	—
5.7	399.3	3993-57	7U-7852	—	—	—
8.4	154.5	1541-84a	—	095-1636	—	—



## BS (British Standard) O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	Standard Size	NBR (75)	NBR (90)	FKM (75)	FKM (90)
8.4	164.5	1641-84a	–	095-1637	–	–
8.4	174.5	1741-84a	–	095-1638	–	–
8.4	179.5	1791-84a	–	095-1639	–	–
8.4	189.5	1891-84a	095-1565	–	–	–
8.4	199.5	1991-84a	095-1566	–	–	–
8.4	249.5	2491-84a	095-1568	–	–	–

## Non-Standard O-rings

Cross Section Dia (mm)	Inner Dia (mm)	NBR (75)	NBR (90)	FKM (75)	FKM (90)	Silicone (70)	HNBR (78)	EPDM (70)
1.17	10.41	–	–	189-3769	–	–	–	–
1.35	11.63	1P-8116	–	–	–	–	–	–
1.4	25.63	–	–	–	9X-7430	–	–	–
1.42	3.99	–	–	5P-9262	–	–	–	–
1.5	1.5	–	–	179-7400	–	–	–	–
1.5	4.5	–	3E-4288	–	–	–	–	–
1.5	5	–	–	8C-3131	–	–	–	–
1.5	6	192-7507	–	–	–	–	–	–
1.5	6.5	–	3E-4289	–	–	–	–	–
1.5	7	–	192-7512	–	–	–	–	–
1.5	7.5	–	192-7513	–	–	–	–	–
1.5	8	192-7514	3E-4296	–	–	–	–	–
1.5	10	–	3E-4297	–	–	–	–	–
1.5	15	192-7510	–	–	–	–	–	–
1.5	16	–	–	242-4313	–	–	–	–
1.5	17	–	–	–	8C-3106	–	–	–
1.6	14	–	–	8C-3132	–	–	–	–
1.63	6.07	–	4J-7533	163-4565	238-5078	–	–	8T-9587
1.63	7.65	–	7J-0204	5P-7813	238-5079	–	–	8K-0001
1.78	6.4	–	147-6603	–	–	–	–	–
1.78	13.34	–	–	317-0810	–	–	117-2983	–
1.78	15.72	–	7J-9108	136-7226	228-7091	–	–	–
1.78	60.43	–	–	311-6130	–	–	–	–
1.78	78.56	–	–	–	–	5P-3114	–	–
1.78	157.5	–	–	–	–	415-1704	–	–
1.78	302.03	–	–	367-9384	–	–	–	–
1.83	8.92	–	3J-7354	6V-5048	214-7566	–	9X-7378	6V-9027
1.83	10.52	–	1J-9671	5P-7814	214-7567	–	–	291-8144
1.88	7.98	–	6V-5324	–	–	–	–	–

# Cat O-Rings

## Non-Standard O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	NBR (75)	NBR (90)	FKM (75)	FKM (90)	Silicone (70)	HNBR (78)	EPDM (70)
1.9	10.8	—	—	—	249-6661	—	—	—
1.98	11.89	—	3J-1907	190-7634	214-7568	—	—	6V-3250
2	5	192-7506	—	—	—	—	—	—
2	9	—	—	9X-4617	—	—	—	—
2	10	—	9T-4057	—	—	—	—	—
2	11	192-7515	—	—	—	—	—	—
2	12	—	3E-4298	—	—	—	—	—
2	15	—	—	3E-6749	—	—	—	—
2	17	—	—	—	3E-6769	—	—	—
2	35	242-9574	—	—	—	—	—	—
2	78	—	—	192-7120	—	—	—	—
2	84.5	165-9448	—	—	—	—	—	—
2	149.5	177-2553	—	—	—	—	—	—
2.1	9.4	—	6V-9028	199-9267	228-7100	—	—	219-0669
2.1	11.4	—	6V-6560	—	228-7101	199-9252	—	216-8579
2.1	13.4	—	8T-6850	—	228-7102	—	—	291-8174
2.2	9.6	—	—	—	9X-7317	—	—	—
2.21	16.36	—	3K-0360	8L-2786	238-5080	—	112-5282	6V-6609
2.38	22.22	—	—	2T-2894	—	—	—	—
2.4	16.3	—	—	—	117-8766	—	—	—
2.4	18.3	—	—	8T-9523	—	—	—	—
2.4	19.3	—	—	9X-4619	—	—	—	—
2.4	25.3	—	3E-6763	—	—	—	—	—
2.44	17.5	—	—	351-1904	—	—	—	—
2.46	19.18	—	2M-9780	136-7227	238-5081	—	114-4427	6V-3251
2.5	10	—	192-7509	—	—	—	—	—
2.5	16	—	192-7508	—	—	—	—	—
2.5	17	—	—	—	213-9242	—	—	—
2.5	25	—	118-2725	—	—	—	—	—
2.5	33	—	3E-6764	—	—	—	—	—
2.5	195	—	—	—	3E-6770	—	—	—
2.62	8.1	—	356-2456	—	—	—	—	—
2.62	9.8	7W-3983	—	—	—	—	—	—
2.62	17.96	—	6V-5325	—	—	—	—	—
2.62	19.4	—	—	326-2042	—	—	—	—
2.62	24.3	—	—	326-2041	—	—	—	—
2.62	27.18	—	—	263-4016	—	—	—	—
2.62	36.54	—	—	—	131-3719	—	—	—
2.62	79.38	207-2757	—	—	—	—	107-5769	—
2.62	92.41	—	—	185-3241	—	—	—	—

## Non-Standard O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	NBR (75)	NBR (90)	FKM (75)	FKM (90)	Silicone (70)	HNBR (78)	EPDM (70)
2.62	93.12	—	140-7969	—	—	—	—	—
2.62	269.4	8C-5176	—	—	—	—	—	—
2.62	287.91	201-3321	—	—	—	—	—	—
2.66	9.87	—	173-5549	—	—	—	—	—
2.8	22.7	—	8T-7878	—	—	—	—	—
2.95	23.47	—	3D-2824	6V-5050	238-5082	—	—	6V-5063
2.95	26.59	—	—	6V-1903	—	—	119-5155	—
2.95	29.74	—	7M-8485	5P-7701	238-5084	—	—	6V-5064
2.95	34.42	—	230-5935	—	238-5085	—	—	—
3	32	—	5W-8039	—	—	—	—	—
3	43.69	—	6K-6307	5P-7816	238-5086	—	—	8C-0562
3	46	—	123-0373	—	—	—	—	—
3	53.1	—	—	9X-3978	—	—	—	8T-2928
3	85	—	—	—	177-0344	—	—	—
3	102	179-3560	—	—	—	—	—	—
3.1	174	—	095-7383	—	—	—	—	—
3.1	190	—	096-4377	—	—	—	—	—
3.1	191.3	—	—	—	210-0835	—	—	—
3.15	30	—	—	8T-9524	—	—	—	—
3.18	34.11	4D-5256	—	—	—	—	—	—
3.4	285.6	177-8740	—	273-8314	—	—	—	—
3.5	98.5	—	—	—	5W-5480	—	—	—
3.53	13.21	—	—	—	—	5M-1868	—	—
3.53	24.77	—	—	243-5739	—	—	—	—
3.53	39.27	2J-1826	—	—	—	—	—	—
3.53	39.9	—	—	243-5741	—	—	—	—
3.53	43.3	—	—	243-5742	—	—	—	—
3.53	55.6	137-3623	—	—	—	—	—	—
3.53	65.07	5B-4399	—	—	—	—	—	—
3.53	214.3	2M-0340	—	—	—	—	—	—
3.53	230.67	—	—	—	—	146-7311	—	—
3.53	238.23	—	—	—	—	146-7312	—	—
3.53	269.88	9H-5548	—	—	—	—	—	—
3.53	282.37	6V-7991	—	—	—	—	—	—
3.53	307.57	—	—	5P-9035	—	—	—	—
3.53	316.87	5P-2861	—	—	—	—	—	—
3.53	317.91	—	—	—	—	6V-2406	—	—
3.53	323.44	—	5J-1086	—	—	—	—	—
3.53	340.99	171-9375	—	—	—	—	—	—
3.53	345	116-5897	—	—	—	—	—	—

# Cat O-Rings

## Non-Standard O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	NBR (75)	NBR (90)	FKM (75)	FKM (90)	Silicone (70)	HNBR (78)	EPDM (70)
3.53	351	171-9298	—	—	—	—	—	—
3.53	367.89	6D-0692	—	—	—	—	—	—
3.53	385.34	8D-2714	—	6V-5058	—	—	—	—
3.53	399.8	5P-9147	—	—	—	—	—	—
3.53	412.34	2P-3628	—	—	—	—	—	—
3.53	421.84	295-9234	—	—	—	—	—	—
3.53	434	—	—	—	—	—	269-9158	—
3.53	470	8C-5240	—	—	—	—	—	—
3.53	481.46	2D-6507	—	—	—	—	—	—
3.53	484.86	6W-4310	—	—	—	—	—	—
3.53	523.47	7D-7519	—	—	—	—	—	—
3.53	552.04	4D-0449	—	—	—	—	—	—
3.53	570	—	—	—	—	9X-7550	—	—
3.53	698.09	6D-1355	—	—	—	—	—	—
3.53	749	5P-4076	—	—	—	359-0854	—	—
3.53	985	—	—	—	—	202-7482	—	—
3.53	1108	—	—	—	—	150-8791	—	—
3.55	160	283-6090	—	—	—	—	—	—
3.55	185	123-2003	—	—	—	—	—	—
4	35	—	—	207-2755	—	—	—	—
4	75	—	112-6921	—	—	—	—	—
4	112	—	—	8U-2359	—	—	—	—
4	171	287-8400	—	—	—	—	—	—
4	545	—	—	282-2935	—	—	—	—
4.29	9.52	7B-0305	—	—	—	—	—	—
4.3	9.53	—	—	—	—	3S-5496	—	—
4.31	140.2	—	—	142-6217	—	—	—	142-7072
4.31	141	—	—	—	—	—	110-2220	—
4.39	113.8	—	—	—	—	—	—	3S-3977
4.39	117.1	—	—	—	—	—	—	45-65581
4.78	7.92	2A-3307	—	—	—	—	—	—
4.78	469.9	4F-2411	—	—	—	—	—	—
4.88	139.8	—	—	—	—	—	—	3S-3978
4.88	152.4	—	—	—	—	—	—	6L-7812
4.88	165.1	—	—	—	—	—	—	6L-7815
4.88	175	—	—	—	—	—	—	7N-2046
5.33	7.14	—	—	4G-4972	—	—	—	—
5.33	46.2	—	—	—	—	9M-2610	—	—
5.33	199.39	—	8J-4386	—	—	—	—	—
5.33	211.19	—	—	—	—	—	134-5958	—

## Non-Standard O-rings (Cont'd.)

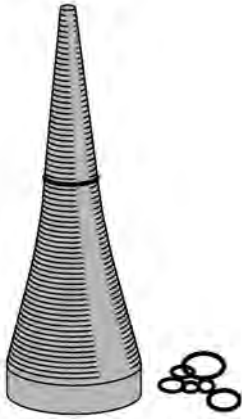
Cross Section Dia (mm)	Inner Dia (mm)	NBR (75)	NBR (90)	FKM (75)	FKM (90)	Silicone (70)	HNBR (78)	EPDM (70)
5.33	270.21	–	–	–	–	2W-2073	–	–
5.33	287	–	–	8C-9023	–	–	–	–
5.33	310.13	5H-4082	–	–	–	–	–	–
5.33	317.24	–	–	6V-7702	–	–	–	–
5.33	325	–	–	–	–	–	–	1W-0115
5.33	335	–	–	6V-3602	–	–	–	–
5.33	342.9	2M-3818	–	–	–	–	–	–
5.33	372	–	–	8T-0098	–	–	–	–
5.33	390	–	–	6V-4244	–	–	–	–
5.33	399.42	7S-4571	–	–	–	–	–	–
5.33	411.48	5M-7329	–	–	–	–	–	–
5.33	421.7	–	–	8T-8883	–	–	–	–
5.33	422	144-8299	–	–	–	–	–	–
5.33	440.69	6M-5218	–	–	–	381-8976	–	–
5.33	488	–	–	179-4551	–	–	–	–
5.33	494.66	9H-0846	–	6V-5043	–	–	–	–
5.33	514.65	9M-5892	–	–	–	–	–	–
5.33	548.64	–	–	–	–	8S-6251	–	–
5.33	587.54	–	–	228-7098	–	–	–	–
5.33	643.38	8D-5096	–	–	–	381-8975	–	–
5.33	684.28	5D-7523	–	–	–	–	–	–
5.33	736.6	2D-6506	–	–	–	–	–	–
5.33	760	5P-4057	–	–	–	–	–	–
5.33	786.76	3D-3295	–	–	–	–	–	–
5.33	795	–	–	–	–	186-3712	–	–
5.33	838.2	279-8816	–	–	–	–	–	–
5.33	843	–	–	–	–	5P-9519	–	–
5.33	885.92	–	–	–	–	422-1004	–	–
5.33	920	–	–	–	–	111-1503	–	–
5.33	940	–	–	–	–	6V-6557	–	–
5.33	970	–	–	–	–	433-7022	–	–
5.33	1180	–	–	–	–	152-0985	–	–
5.33	1275	–	–	–	–	152-7039	–	–
5.7	226	–	–	–	–	–	162-7473	–
5.84	72.39	–	–	346-7703	–	–	–	–
6	180	145-6735	–	–	–	–	–	–
6.22	49.23	2B-8293	–	–	–	–	–	–
6.35	53.98	–	–	–	–	–	–	6L-7816
6.99	31.12	–	–	–	–	–	–	8C-5209
6.99	56.52	7D-1195	–	–	–	–	–	–

# Cat O-Rings

## Non-Standard O-rings (Cont'd.)

Cross Section Dia (mm)	Inner Dia (mm)	NBR (75)	NBR (90)	FKM (75)	FKM (90)	Silicone (70)	HNBR (78)	EPDM (70)
6.99	61.6	5P-8432	—	—	—	—	—	—
6.99	64.26	1T-0136	—	—	—	—	—	—
6.99	69.22	1M-0556	—	—	—	—	—	—
6.99	75.56	5H-2824	—	—	—	—	—	—
6.99	81	—	—	—	—	4L-8337	—	—
6.99	81.92	—	—	310-3953	—	—	—	—
6.99	88.26	—	—	130-5694	—	5S-1188	—	—
6.99	94.61	—	—	—	—	5H-7704	—	—
6.99	94.62	—	—	6V-3917	—	—	—	—
6.99	100.96	—	—	6V-2695	—	5H-1039	—	—
6.99	107.31	—	—	6V-5166	—	6H-1871	—	—
6.99	208.9	—	—	170-4822	—	—	—	—
6.99	210.9	161-4511	—	—	—	—	—	—
6.99	218.5	—	—	6V-3603	—	—	—	—
6.99	268.44	5P-3487	—	9X-7442	—	—	—	—
6.99	310.13	4M-0737	—	—	—	—	—	—
6.99	386.24	—	—	137-4349	—	—	—	—
6.99	460	—	—	—	—	289-2270	—	—
6.99	520.07	5P-2587	—	—	—	—	—	—
6.99	564.5	—	—	—	—	143-6387	—	—
6.99	955	—	—	180-2923	—	—	—	—
6.99	1091	—	—	172-5635	—	—	—	—
7.5	56	175-6176	—	—	—	—	—	—
9	96	—	—	—	—	—	367-8465	—
10	124.7	—	—	—	—	—	367-8466	—
10	155	—	—	—	—	—	367-8468	—
10	175	—	—	—	—	—	367-8469	—
10	200	—	—	—	—	—	367-8470	—
10	210	—	—	—	—	—	367-8471	—
10	250	—	—	—	—	—	367-8473	—

## O-Ring Measuring Cone



- Designed to measure SAE industry standard O-Ring dimensions by cross section and dash size.
- Made of high impact, yellow plastic with 65 steps indicating the varying inside diameters.
- Contains a round base with five industry standard O-Ring cross section diameters cut into the edge.
- Makes finding the correct O-Ring replacement easier and faster.

Item	Part Number
O-Ring Measuring Cone	9U-5155

# O-Ring Seal Kits

## O-Ring Seal Kits 270-1528 (Mixed SAE — Nitrile)



- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower cost-per hour.

Part Number	Description	Seal Type	Contents	Application
270-1528	O-Ring Seal Kit	O-Ring Seal	32 Sizes, 570 Seals Nitrile, 90 Duro	SAE STOR Fittings, SAE ORFS Fittings, SAE Code 61 Flanges, SAE Code 62 Flanges

270-1528 Kit Contents		
Part Number	Description	Qty.
030-4606	SAE Straight Thread O-Ring (STOR)	20
1J-9671	SAE Straight Thread O-Ring (STOR)	20
2M-9780	SAE Straight Thread O-Ring (STOR)	20
2S-4078	SAE Straight Thread O-Ring (STOR)	20
3D-2824	SAE Straight Thread O-Ring (STOR)	20
3J-1907	SAE Straight Thread O-Ring (STOR)	20
3J-7354	SAE Straight Thread O-Ring (STOR)	20
3K-0360	SAE Straight Thread O-Ring (STOR)	20
4J-0519	SAE Code 61/62 Flange Seal	15
4J-0520	SAE Code 61/62 Flange Seal	15
4J-0521	SAE Code 61/62 Flange Seal	15
4J-0522	SAE Code 61/62 Flange Seal	15
4J-0523	SAE Code 61/62 Flange Seal	15
4J-0524	SAE Code 61/62 Flange Seal	15
4J-0525	SAE Code 61/62 Flange Seal	10
4J-0526	SAE Code 61/62 Flange Seal	10
4J-0527	SAE Code 61/62 Flange Seal	10

270-1528 Kit Contents		
Part Number	Description	Qty.
4J-5140	SAE Code 61/62 Flange Seal	20
4J-5267	SAE Code 61/62 Flange Seal	20
4J-5477	SAE O-Ring Face Seal (ORFS)	20
4J-7533	SAE O-Ring Face Seal (STOR)	20
4K-1388	SAE O-Ring Face Seal (STOR)	20
5K-9090	SAE O-Ring Face Seal (ORFS)	20
6K-6307	SAE O-Ring Face Seal (STOR)	20
6V-8397	SAE O-Ring Face Seal (ORFS)	20
6V-8398	SAE O-Ring Face Seal (ORFS)	20
6V-8400	SAE O-Ring Face Seal (ORFS)	20
6V-9746	SAE O-Ring Face Seal (ORFS)	20
7J-0204	SAE O-Ring Face Seal (ORFS)	20
7J-9108	SAE O-Ring Face Seal (ORFS)	20
7M-8485	SAE O-Ring Face Seal (STOR)	20
8T-0315	SAE O-Ring Face Seal (ORFS)	20
276-9576 <sup>(1)</sup>	Utility Box	1

<sup>1</sup> Not available for individual sale



## O-Ring Seal Kits 270-1533



- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower cost-per hour.

Part Number	Description	Seal Type	Contents	Application(s)
270-1533	O-Ring Seal Kit	O-Ring Seal	32 Sizes, 149 Seals Silicone, 70 Duro	Low-Pressure, High-Temperature Applications

270-1533 Kit Contents		
Part Number	Description	Qty.
1S-0004	Silicone Rubber O-Ring	5
2S-2251	Silicone Rubber O-Ring	5
6L-1651	Silicone Rubber O-Ring	3
8M-4389	Silicone Rubber O-Ring	5
8M-4390	Silicone Rubber O-Ring	3
8M-4432	Silicone Rubber O-Ring	5
8M-4435	Silicone Rubber O-Ring	5
8M-4436	Silicone Rubber O-Ring	3
8M-4437	Silicone Rubber O-Ring	10
8M-4438	Silicone Rubber O-Ring	5
8M-4443	Silicone Rubber O-Ring	3
8M-4445	Silicone Rubber O-Ring	5
8M-4446	Silicone Rubber O-Ring	5
8M-4986	Silicone Rubber O-Ring	10
8M-4987	Silicone Rubber O-Ring	10
8M-4988	Silicone Rubber O-Ring	5

270-1533 Kit Contents		
Part Number	Description	Qty.
8M-4990	Silicone Rubber O-Ring	3
8M-4991	Silicone Rubber O-Ring	3
8M-4992	Silicone Rubber O-Ring	3
8M-5010	Silicone Rubber O-Ring	3
8M-5248	Silicone Rubber O-Ring	5
8M-5249	Silicone Rubber O-Ring	5
8M-5252	Silicone Rubber O-Ring	3
8M-5254	Silicone Rubber O-Ring	5
8M-5661	Silicone Rubber O-Ring	3
8M-8157	Silicone Rubber O-Ring	5
8M-8283	Silicone Rubber O-Ring	3
8M-8515	Silicone Rubber O-Ring	5
9H-6067	Silicone Rubber O-Ring	5
9M-4849	Silicone Rubber O-Ring	5
9M-7002	Silicone Rubber O-Ring	3
9M-9647	Silicone Rubber O-Ring	3
276-9576	Utility Box <sup>(2)</sup>	1

2 Not available for individual sale

# O-Ring Seal Kits

## O-Ring Seal Kits 270-1535 (Cat Flanges)



- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower cost-per hour.

Part Number	Description	Seal Type	Contents	Application(s)
270-1535	O-Ring Seal Kit	Rectangular Seal	9 Sizes, 80 Seals Nitrile, 90 Duro	Cat Flanges

270-1535 Kit Contents		
Part Number	Description	Qty.
1P-3700	Rectangular Seal	10
1P-3702	Rectangular Seal	10
1P-3703	Rectangular Seal	10
1P-3704	Rectangular Seal	10
1P-3705	Rectangular Seal	10

270-1535 Kit Contents		
Part Number	Description	Qty.
1P-3706	Rectangular Seal	10
1P-3707	Rectangular Seal	10
1P-3708	Rectangular Seal	5
1P-3709	Rectangular Seal	5
276-9578 <sup>(3)</sup>	Utility Box	1

## O-Ring Seal Kits 270-1537 (Metric STOR — Nitrile)



- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower cost-per hour.

Part Number	Description	Seal Type	Contents	Application(s)
270-1537	O-Ring Seal Kit	O-Ring Seal	10 Sizes, 125 Seals Nitrile, 90 Duro	Metric STOR (ISO 6149)

270-1537 Contents		
Part Number	Description	Qty.
6V-6560	ISO (Metric) Straight Thread O-Ring Seal	15
6V-7970	ISO (Metric) Straight Thread O-Ring Seal	10
6V-9028	ISO (Metric) Straight Thread O-Ring Seal	15
8T-6850	ISO (Metric) Straight Thread O-Ring Seal	15

270-1537 Contents		
Part Number	Description	Qty.
8T-7524	ISO (Metric) Straight Thread O-Ring Seal	15
8T-7525	ISO (Metric) Straight Thread O-Ring Seal	10
8T-7526	ISO (Metric) Straight Thread O-Ring Seal	5
8T-7876	ISO (Metric) Straight Thread O-Ring Seal	15

3 Not available for individual sale

## O-Ring Seal Kits 270-1537 (Metric STOR — Nitrile) (Cont'd.)

270-1537 Contents		
Part Number	Description	Qty.
8T-7877	ISO (Metric) Straight Thread O-Ring Seal	15

270-1537 Contents		
Part Number	Description	Qty.
8T-7878	ISO (Metric) Straight Thread O-Ring Seal	10
276-9578 <sup>(4)</sup>	Utility Box	1

## O-Ring Seal Kits 270-1539 (SAE ORFS — Nitrile)



- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower cost-per hour.

Part Number	Description	Seal Type	Contents	Application(s)
270-1539	O-Ring Seal Kit	O-Ring Seal	8 Sizes, 120 Seals Nitrile, 90 Duro	SAE ORFS Fittings

270-1539 Kit Contents		
Part Number	Description	Qty.
4J-5477	SAE O-Ring Face Seal	20
5K-9090	SAE O-Ring Face Seal	10
6V-8397	SAE O-Ring Face Seal	20
6V-8398	SAE O-Ring Face Seal	20

270-1539 Kit Contents		
Part Number	Description	Qty.
6V-8400	SAE O-Ring Face Seal	10
6V-9746	SAE O-Ring Face Seal	10
7J-9108	SAE O-Ring Face Seal	20
8T-0315	SAE O-Ring Face Seal	10
276-9578 <sup>(4)</sup>	Utility Box	1

4 Not available for individual sale

# O-Ring Seal Kits

## O-Ring Seal Kits 270-1540 (Air Conditioning Fittings)



- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower cost-per hour.

Part Number	Description	Seal Type	Contents	Application(s)
270-1540	O-Ring Seal Kit	O-Ring Seal	12 Sizes, 150 Seals	Air-Conditioning Fittings (R134 Compatible)

270-1540 Contents		
Part Number	Description	Qty.
121-7136	O-Ring Seal	10
121-7137	O-Ring Seal	10
121-7138	O-Ring Seal	10
229-4896	O-Ring Seal	10
9X-7378	O-Ring Seal	15
9X-7379	O-Ring Seal	15

270-1540 Contents		
Part Number	Description	Qty.
9X-7380	O-Ring Seal	15
9X-7381	O-Ring Seal	15
9X-7382	O-Ring Seal	15
9X-7383	O-Ring Seal	10
9X-7384	O-Ring Seal	10
9X-7385	O-Ring Seal	15
276-9578 <sup>(5)</sup>	Utility Box	1

## O-Ring Seal Kits 270-1545 (SAE Code 61/61)



- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower cost-per hour.

Part Number	Description	Seal Type	Contents	Application(s)
270-1545	O-Ring Seal Kit	O-Ring Seal	6 Sizes, 60 Seals Nitrile, 90 Duro	SAE Code 61 Flanges, SAE Code 62 Flanges

270-1545 Contents		
Part Number	Description	Qty.
4J-0520	SAE Code 61/62 Flange Seal	10
4J-0522	SAE Code 61/62 Flange Seal	10
4J-0524	SAE Code 61/62 Flange Seal	10

270-1545 Contents		
Part Number	Description	Qty.
4J-0527	SAE Code 61/62 Flange Seal	10
4J-5140	SAE Code 61/62 Flange Seal	10
4J-5267	SAE Code 61/62 Flange Seal	10
276-9578 <sup>(5)</sup>	Utility Box	1

<sup>5</sup> Not available for individual sale

## O-Ring Seal Kits 271-0459 (SAE ORFS — FKM)



- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower cost-per hour.

Part Number	Description	Seal Type	Contents	Application(s)
271-0459	O-Ring Seal Kit	O-Ring Seal	8 Sizes, 40 Seals FKM, 90 Duro	SAE ORFS Fittings, High Temperature, High Pressure

271-0459 Kit Contents		
Part Number	Description	Qty.
228-7088	SAE O-Ring Face Seal	5
228-7089	SAE O-Ring Face Seal	5
228-7090	SAE O-Ring Face Seal	5
228-7091	SAE O-Ring Face Seal	5
228-7092	SAE O-Ring Face Seal	5

271-0459 Kit Contents		
Part Number	Description	Qty.
228-7093	SAE O-Ring Face Seal	5
228-7094	SAE O-Ring Face Seal	5
228-7095	SAE O-Ring Face Seal	5
276-9578 <sup>(6)</sup>	Utility Box	1

## O-Ring Seal Kits 271-0460 (SAE STOR — FKM)



- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower cost-per hour.

Part Number	Description	Seal Type	Contents	Application(s)
271-0460	O-Ring Seal Kit	O-Ring Seal	13 Sizes, 65 Seals FKM, 90 Duro	SAE STOR Fittings High Temperature, High Pressure

271 Kit Contents		
Part Number	Description	Qty.
214-7566	SAE Straight Thread O-Ring Seal	5
214-7567	SAE Straight Thread O-Ring Seal	5
214-7568	SAE Straight Thread O-Ring Seal	5
228-7096	SAE Straight Thread O-Ring Seal	5
228-7097	SAE Straight Thread O-Ring Seal	5
238-5078	SAE Straight Thread O-Ring Seal	5
238-5079	SAE Straight Thread O-Ring Seal	5

271 Kit Contents		
Part Number	Description	Qty.
238-5080	SAE Straight Thread O-Ring Seal	5
238-5081	SAE Straight Thread O-Ring Seal	5
238-5082	SAE Straight Thread O-Ring Seal	5
238-5083	SAE Straight Thread O-Ring Seal	5
238-5084	SAE Straight Thread O-Ring Seal	5
238-5086	SAE Straight Thread O-Ring Seal	5
276-9578 <sup>(6)</sup>	Utility Box	1

6 Not available for individual sale

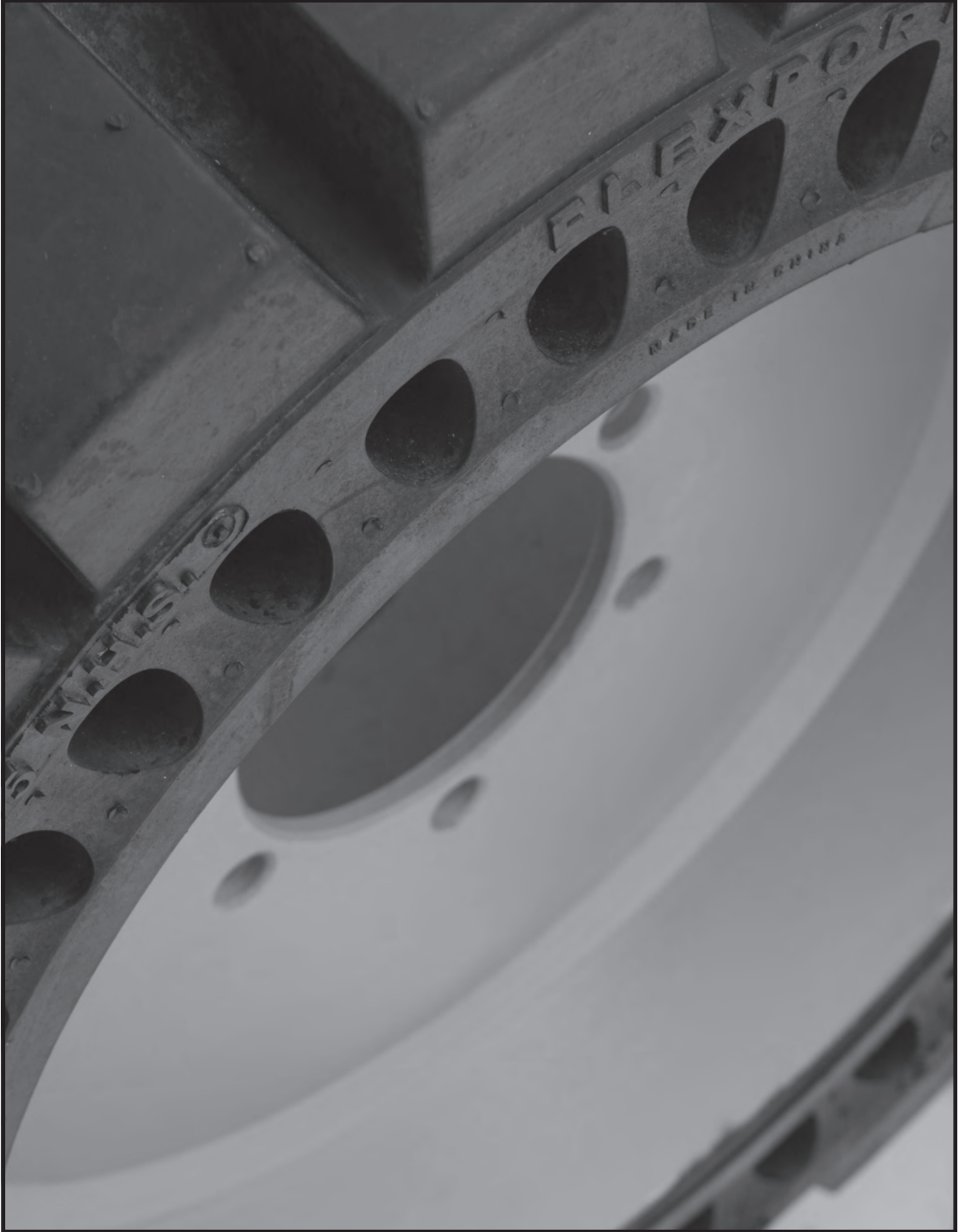
# O-Ring Seal Kits

## Seal Application Chart

Material Type	Typical Duro A Hardness <sup>(7)</sup>	Operating Temperature Range <sup>(8)</sup>	Air	Engine Oils	Diesel Fuel	Coolant	Hydraulic Oil / Automatic Transmission Fluid	Biodiesel
Nitrile (NBR)	75, 90	-40°C to 100°C (-40°F to 212°F)	✓	✓	✓	✓	✓	
HNBR	78, 90	-40°C to 115°C (-40°F to 239°F)	✓	✓	✓	✓ <sup>(9)</sup>	✓	✓
EPDM	70	-55°C to 121°C (-67°F to 250°F)	✓			✓		
Silicone	70	-55°C to 150° (-67°F to 302°F)	✓	✓				
Fluoroelastomer (FKM)	75, 90	-40°C to 175°C (-40°F to 347°F)	✓	✓	✓		✓	✓

Nitrile	<p>This material has good abrasion and cut resistance.</p> <p><b>Compatible With:</b><sup>(9)</sup> air, ethylene glycol, petroleum based fluids (e.g. engine oil, hydraulic oil), diesel fuel, silicone fluids, greases, water, water based coolants, urea, transmission fluids</p> <p><b>Not Compatible With:</b> brake fluids, high levels of ozone, biodiesel fuel</p>
HNBR	<p>HNBR provides excellent abrasion and cut resistance. It works well with Air, Engine Oil, Diesel Fuel, Hydraulic Oil and Automatic Transmission Fluid applications.</p> <p><b>Compatible With:</b> diesel fuels, petroleum based fluids (e.g. engine oil, hydraulic oil), greases, transmission fluids, silicone fluids, steam, water based coolants<sup>(9)</sup>, urea<sup>(9)</sup></p> <p><b>Not Compatible With:</b> brake fluids, chlorinated hydrocarbons</p>
EPDM	<p>This material has good abrasion and cut resistance.</p> <p><b>Compatible With:</b> water, water based coolants, urea, alcohols, silicone fluids, steam (200°C max), air, ozone</p> <p><b>Not Compatible With:</b> petroleum based fluids (e.g. engine oil, hydraulic oil), hydrocarbons (e.g. diesel fuel, biodiesel fuel), transmission fluids, brake fluids</p>
Silicone	<p>This material performs well in a wide range of temperatures - from extremely low to very high. It has limited strength and abrasion/cut resistance. Recommended for low pressure applications.</p> <p><b>Compatible With:</b> air, ethylene glycol, high aniline point oil<sup>(9)</sup>, ozone</p> <p><b>Not Compatible With:</b> organic solvents, petroleum based fluids (e.g. engine oil, hydraulic oil), hydrocarbons (e.g. diesel fuel, biodiesel fuel), low aniline point oil, steam, hot water, water based coolants, transmission fluids, urea</p>
FKM	<p>This material provides superior performance in most applications, and is highly resistant to compression set. It is effective at high temperatures, and has good abrasion and cut resistance.</p> <p><b>Compatible With:</b> petroleum based fluids (e.g. engine oil, hydraulic oil), hydrocarbons (e.g. diesel fuel, biodiesel fuel), silicone fluids, air</p> <p><b>Not Compatible With:</b> amines, brake fluids, water based coolants, fire resistant fluids, steam, water</p>

- 7 Material hardness can vary depending on the part number. Typically 75A materials are for applications where pressure < 1500 psi and 90A materials are for applications where pressure is >1500 psi.
- 8 Temperature limits are general and can vary by specific material. Repeated or constant exposure to temperatures higher than the normal operating range can drastically reduce seal life, resulting in premature leakage.
- 9 Compatibility is dependent on the specific type of material. Contact dealer support for additional information.



**TIRES**

# Cat Flexport™ Tires

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## Cat Flexport Tires

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### For Skid Steer Loaders and Wheel Loaders



### **COMFORTABLE. STABLE. DURABLE.**

Created with operator comfort in mind, Flexport Tires use a series of elliptical-shaped ports molded through the outer ring of the sidewalls. The ports increase tire flexibility to produce a smoother, more cushioned ride on any surface—from waste and scrap to quarry and glass. The ports won't crush under the weight of a full bucket, and the innovative design also improves machine stability when lifting and carrying.

#### **Features & Benefits**

- Patented sidewall ports make the ride more comfortable for operators.
- Elliptical ports won't collapse under heavy loads, reducing stress points for longer wear life.
- Greater machine stability when carrying maximum loads.
- Deep tread delivers long wear life and excellent traction—on any surface.
- Tread pattern handles tough terrain, and allows easy, smooth transitions from unimproved to improved surfaces.
- Highest quality rubber compound manufactured to Caterpillar specifications means durability for longer wear life and a consistent product.
- Puncture-proof design puts an end to fixing flats.
- One-piece tire-and-rim design reduces tire-servicing costs.
- In compliance with Cat ROPS

**The Cat Flexport Tires are designed specifically for your wheel loaders and skid steer loaders. Available in three different tread patterns— construction, smooth-tread and OTR (off the road).**



## Flexport Tire Tread Types

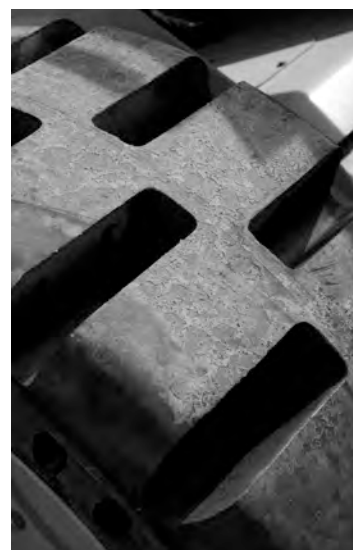
Construction Tread	Smooth - Tread	Off the Road (OTR)
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Flexport Tires' construction tread design is the right choice for maximum performance in your toughest environments. It is designed for smaller machine applications where better traction is required.



Cat Flexport Tires Smooth-Tread design is ideal for special applications where debris is an issue like scrap yards, recycling centers and some waste transfer stations.



The OTR design has a block pattern that provides a degree of traction in applications where debris is not an issue.

Applications	Flexport Construction	Flexport Smooth Tread	Flexport OTR
Building & Farming	•		•
Demolition	•		
Hammering	•		
Industrial & Waste	•	•	
Landscaping	•		•
Loading	•		•
Pavement Profiling	•		
Quarry Cleanup	•		
Recycling	•	•	
Scrap Yard	•	•	
Transfer Station	•	•	

# Cat Flexport™ Tires

## Cat Flexport Tires for Skid Steer Loaders



Cat Flexport tires for Skid Steer Loaders are a 1-piece tire / rim design and are available in directional construction, smooth and OTR tread patterns.

For most applications, the machine width can be customized by altering the placement of the rim on the machine.

Cat Flexport tires are available on both new machines and from your Cat Dealer as service parts.

## Flexport Assemblies for Skid Steer Loaders

Flexport Tire Part Number	Machine Application	Available for First Fit	Available for Aftermarket	Tread Design	Flexport Size	Pneumatic Size Equivalent	Flexport Weight (kg)
329-6989 (LH)	216B, 216B2, 216B3, 226B, 226B2, 226B3, 232B, 232B2,	Y	Y	Construction	31 x 6 x 10	10 x 16.5	112
329-6990 (RH)	232D, 236D, 242B, 242B2, 242B3, 242D	Y	Y	Construction	31 x 6 x 10	10 x 16.5	112
329-6989 (LH)	216B, 216B2, 216B3, 226B, 226B2, 226B3, 232B, 232B2,	Y	Y	Construction	31 x 6 x 10	10 x 16.5	112
329-6990 (RH)	232D, 236D, 242B, 242B2, 242B3, 242D	Y	Y	Construction	31 x 6 x 10	10 x 16.5	112
345-7585	216B, 216B2, 216B3, 226B, 226B2, 226B3, 232B, 232B2, 242B, 242B2, 242B3	-	Y	Smooth	31 x 6 x 10	10 x 16.5	125
329-6783 (RH)	236B, 236B2, 236B3, 246B, 246C, 246CQ, 246D, 248B, 252B, 252B3,	Y	Y	Construction	33 x 6 x 11	12 x 16.5	132
329-6784 (LH)	256C, 262B, 262C, 262C2, 262D, 268B, 272C (72" WIDTH)	Y	Y	Construction	33 x 6 x 11	12 x 16.5	132
329-6783 (RH)	272D (72" WIDTH), 272D XHP, 277C, 279C, 287C, 289C, 297C, 299C	Y	Y	Construction	33 x 6 x 11	12 x 16.5	132
329-6784 (LH)		Y	Y	Construction	33 x 6 x 11	12 x 16.5	132
329-6785	236B, 236B2, 236B3, 246B, 246C, 246CQ, 248B, 252B, 252B3, 256C, 262B, 262C, 262C2, 268B, 272C, 272D, XHP	-	Y	Smooth	33 x 6 x 11	12 x 16.5	149
324-33427	236B, 236B2, 236B3, 246B, 246C, 246CQ, 248B, 252B, 252B3, 256C, 262B, 262C, 262C2, 268B, 272C, 272D, XHP	-	Y	OTR	33 x 6 x 11	12 x 16.5	140

## Flexport Rims for Skid Steer Loaders

Flexport Part Number	Rim Bolt Pattern (No. of Holes / Hole Dia. / Bolt Circle - mm)	Rim Pilot Hole Diameter - mm	Tire / Rim Assembly Offset	Tire / Rim Assembly to Machine Torque
329-6989	8, 17, 203.2	152.5	31.7	163 +/- 7 Nm
329-6990				
345-7585				
329-6783			44.5	
329-6784				
329-6785				
324-3427				

## Cat Flexport Tires for Compact Wheel Loaders



Cat Flexport tires for Compact Wheel Loaders are a 1-piece tire / rim design and are available in directional construction, smooth and OTR tread patterns.

Cat Flexport tires are available on both new machines and from your Cat Dealer as service parts.

## Flexport Assemblies for Compact Wheel Loaders

Flexport Part Number	Machine Application	Available for First	Available for Aftermarket	Tread Design	Flexport Size	Pneumatic Size Equivalent	Flexport Weight (kg)
329-7298	904B	–	Y	Smooth	33 x 6 x 11	12 x 16.5	154
465-9047 (LH)	904H, 903D	–	Y	Construction	33 x 6 x 11	12 x 16.5	125
465-9048 (RH)		–	Y	Construction	33 x 6 x 11	12 x 16.5	125
327-8482	904H	–	Y	OTR	33 x 6 x 11	12 x 16.5	150
315-7843	904H, 904H2, 906K, 906M, 907H, 907H2, 907K, 907M	Y	Y	OTR	38 x 7 x 13.5	12.5 x 80/18	241
316-0016	908H	–	Y	OTR	40 x 7 x 13.5	12.5 x 20	255
353-7103	914G	–	Y	OTR	53.5 x 9 x 16.5	17.5 x 25	573
447-1131	914K, 914G2, 914M, 918M	Y	Y	OTR	53.5 x 9 x 16.5	17.5 x 25	590

## Flexport Rims for Compact Wheel Loaders

Flexport Part Number	Rim Bolt Pattern (No. of Holes / Hole Dia. / Bolt Circle -mm)	Rim Pilot Diameter - mm	Tire / Rim Assembly Offset	Tire / Rim Assembly to Machine Torque
329-7298	6 / 22 / 203.2	152.4	55	520 +/- 70 Nm
465-9048	6 / 21.5 / 205	161.8	16	300 Nm
465-9047				
327-8482				
315-7843	8 / 21 / 275	221	47.5	360 +/- 25
316-0016	8 / 21 / 275	221	10	360 +/- 25
353-7103	8 / 26 / 200	147	53	300 +/- 40 Nm + additional turn of 60 +/- 5 deg
447-1131	10 / 26 / 335	281	10	550 +/- 60 Nm

# Cat Flexport™ Tires

## Cat Flexport Tires for Small Wheel Loaders



Cat Flexport tires for Small Wheel Loaders are a 1-piece tire / rim design and are available in smooth and OTR tread patterns. Fitment of a Cat Flexport tire on a Small Wheel Loader requires the use of an adaptor plate and hardware as shown. Cat Flexport tires are available from your Cat Dealer as service parts.

## Flexport Assemblies for Small Wheel Loaders

Flexport Part Number	Machine Application	Available for First Fit	Available for Aftermarket	Tread Design	Flexport Size	Pneumatic Size Equivalent	Flexport Weight (kg)
324-3436	924K, 926M, 930H, 930K, 930M, 938K, 938M	Y	Y	OTR	60.5 x 10.5 x 21	20.5 x 25	842
324-3437	924K, 926M, 930H, 930K, 930M, 938K, 938M	Y	Y	Smooth	60.5 x 10.5 x 21	20.5 x 25	889

Flexport Part Number	Machine Application	Cat Adaptor Disc	Blank Adaptor Disc	Adaptor Mounting Instructions	Adaptor Hardware			Adaptor Torque	Adaptor Order Bolt Pattern (No. of Holes / Hole Dis. / Bolt Circle - mm)	Adapter Disc Weight (kg)	
					Bolt (x 20)	Washer (x 40)	Nut (x 20)				
324-3436	924K, 926M, 930H, 930K, 930M	336-8289	364-1287	ASSEMBLE TO DEEP SIDE OF THE RIM	451-4523	451-5656	451-4526	900 +/- 100 Nm	20 / 26 / 6732	62	
324-3437										58	
324-3436	938G	336-8291								45	
324-3437										938K, 938M	369-4675
324-3437											

### NOTE

In certain machine configurations, Cat Flexport tires may cause the machine to exceed ROPS capacity. To be certain that the machine does not exceed ROPS, the machine should be weighed to verify that the ROPS limits will not be exceeded with Flexport Tires. The ROPS capacity can be found on the cab of the machine.

## Cat Flexport Tires for Medium Wheel Loaders



Cat Flexport tires for Medium Wheel Loaders are a 1-piece tire / rim design and are available in smooth and OTR tread patterns.

Fitment of a Cat Flexport tire on a Medium Wheel Loader requires the use of an adapter plate and hardware as shown.

Cat Flexport tires are available from your Cat Dealer as service parts.

Flexport Part Number	Machine Application	Available for First Fit	Available for Aftermarket	Tread Design	Flexport Size	Pneumatic Size Equivalent	Flexport Weight (kg)
332-5712	950H, 950K, 950M	Y	Y	OTR	65 x 13 x 25	23.5 x 25	1144
	962H, 962K, 962M	Y	Y				
324-3421	950H, 950K, 950M	Y	Y	Smooth	65 x 13 x 25	23.5 x 25	1235
	962H, 962K, 962M	Y	Y				
316-0529	966H, 966K, 966KXE, 966M, 966MXE, 972H, 972K, 972M, 972MXE	Y	Y	OTR	70 x 14 x 28	26.5 x 25	1533
322-9596	966H, 966K, 966KXE, 966M, 966MXE, 972H, 972K, 972M, 972MXE	Y	Y	Smooth	70 x 14 x 28	26.5 x 25	1608
324-3432	980H/K	–	Y	OTR	74.5 x 14 x 31.5	29.5 x 25	2034
324-3433	980H/K	–	Y	Smooth	74.5 x 14 x 31.5	29.5 x 25	2170

Flexport Part Number	Machine Application	Rim Part Number	Tire Rim & Adapter			
			Bolt Pattern (No. of Holes / Hole Dia. / Bolt Circle - mm)	Pilot Hole Diameter (mm)	to Axle Torque	Offset
332-5712	950H/K, 962H/K	323-1707	20 / 26 / 310	262	570 +/- 80 additional 60 +/- 5 degrees	21.5
324-3431						
316-0529	966H/K, 972H/K	316-0527	20 / 26 / 375	327	570 +/- 80 additional 60 +/- 5 degrees	0
322-9596						
324-3432	980H/K	323-1708	26 / 26 / 485	430	1000 +/- 25 Nm	306
324-3433						

Flexport Part Number	Machine Application	Cat Adapter Disc	Blank Adapter Disc	Adapter Mounting Instructions	Adapter Hardware			Adapter Torque	Adapter Outer Bolt Pattern (No of Holes / Hole Disc / Bolt Circle -mm)	Adapter Disc Weight (kg)
					Bolt (x 20)	Washer (x 40)	Nut (x 20)			
332-5712	950H, 950K, 950M, 962H, 962K, 962M	364-1289	336-8295	ASSEMBLE TO DEEP SIDE OF THE RIM	7X-2577	267-3507	268-8262	900 +/- 100 Nm	20 / 26 / 673.1	58
324-3431									20 / 26 / 625	44
316-0529	966H, 966K, 966KXE, 966M, 966MXE, 972H, 972K, 972M, 972MXE	364-1290	316-0526	ASSEMBLE TO DEEP SIDE OF THE RIM	7X-2577	267-3507	268-8262	900 +/- 100 Nm	20 / 26 / 625	44
322-9596									20 / 26 / 625	44

### NOTE

In certain machine configurations, Cat Flexport tires may cause the machine to exceed ROPS capacity. To be certain that the machine does not exceed ROPS, the machine should be weighed to verify that the ROPS limits will not be exceeded with Flexport Tires. The ROPS capacity can be found on the cab of the machine...

# Cat Flexport™ Tires

## Head-to-Head Comparison Results



### Flexport elliptical design for superior to round design

	<p><b>Other tire companies manufacture tires with round holes.</b></p> <ul style="list-style-type: none"> <li>• The round design easily collapses into a flat shape under a load, which creates corners that cause "pinch" or "stress" points.</li> <li>• Stress point damage will typically result in cracking and chunking of a tire.</li> </ul>
	<p><b>Caterpillar designed Flexport Tires with elliptical-shaped ports.</b></p> <ul style="list-style-type: none"> <li>• Flexport's elliptical ports are designed not to crush when compressed by heavy weight.</li> <li>• Because the ports don't crush, this reduces stress points—and increases wear life.</li> </ul>

Load	0%	25%	50%	100%
Industry Round Vent				
Flexport Elliptical Vent				

## Premium Conventional Tires



Cat Premium Conventional tires are engineered to deliver the trademark Cat durability—which says a lot. Skid steer sizes are equipped with the industry’s deepest tread depth, thickest side wall (on a premium conventional model), and heaviest rim guard. Cat tires outperform the competition.

### Advantages

- Self-cleaning, open tread design for reduced maintenance time
- Extra large, tapered lugs for traction in slippery conditions and maximum wear life
- Dual side wall construction for puncture and tear protection
- An advanced blend of natural and synthetic rubber and a reinforced bead area for maximum wear life
- Heavy rim guard reduces potential for damage to tire bead and wheel flange

### Applications: Highly Recommended

- Dry Soil
- Snow

### Applications: Recommended

- Rock & Shale
- Quarries
- Rocky Soil
- Wet Soil
- Sandy Soil

Part Number	Tire Width	Wheel Diameter	Ply Rating	Inflated Dimensions			Load Specifications @ 5 mph			Maximum Load	Tread Depth
				Rim Width	Section Width	Outside Diameter	Maximum Inflation	Suggested Inflation	Suggested Inflation		
<b>Skid Steer Loaders</b>											
185-9932	254 mm (10 in)	419 mm (16.5)	8	209 mm (8.2 in)	271 mm (10.7 in)	784 mm (30.9 in)	413kPa (60 psi)	310 kPa (45 psi)	1,800 kg (4,145 lb)	24 kg (52 lb)	19 mm (24/32)
185-9933	304 mm (12 in)	419 mm (16.5 in)	10	247 mm (9.7 in)	312 mm (12.3 in)	838 mm (33 in)	448 kPa (65 psi)	310 kPa (45 psi)	2,542 kg (5,604 lb)	35 kg (77 lb)	21 mm (26/32 in)
238-7740	177 mm (7 in)	381 mm (15 in)	6	139 mm (5.5 in)	203 mm (8 in)	759 mm (29.9 in)	413 kPa (60 psi)	–	15 kg (34 lb)	15 kg (34 lb)	14 mm (18/32 in)
<b>Backhoe Loaders</b>											
357-1994	317 mm (12.5 in)	457 mm (18 in)	10	228 mm (9 in)	304 mm (12 in)	985 mm (38.8 in)	317 kPa (46 psi)	275 kPa (40 psi)	38 kg (85 lb)	38 kg (85 lb)	25 mm (1 in)
357-1995	467 mm (18 in)	660 mm (26 in)	12	406 mm (16 in)	477 mm (18.8 in)	1,417 mm (55.8 in)	220 kPa (32 psi)	193 kPa (28 psi)	98 kg (217 lb)	98 kg (217 lb)	28 mm (34/32 in)
357-1996	429 mm (16.9 in)	711 mm (28 in)	12	381 mm (15 in)	442 mm (17.4 in)	1,386 mm (54.6 in)	262 kPa (33 psi)	227 kPa (33 psi)	85 kg (187 lb)	85 kg (187 lb)	27 mm (35/32 in)
<b>Telehandlers</b>											
208-8512	394 mm (15.5 in)	635 mm (25 in)	–	304 mm (12 in)	425 mm (16.7 in)	1,316 mm (51.8 in)	399 kPa (58 psi)	372 kPa (54 psi)	88 kg (195 lb)	88 kg (195 lb)	28 mm (34/32 in)
281-6590	330 mm (13 in)	609 mm (24 in)	12	203 mm (8 in)	360 mm (14.2 in)	1,392 mm (54.8 in)	448 kPa (65 psi)	339 kPa (58 psi)	2,721 kg (6,000 lb)	73 kg (161 lb)	23 mm (29/32 in)
281-6591	355 mm (14 in)	609 mm (24 in)	12	254 mm (10 in)	390 mm (15.4 in)	1,392 mm (54.8 in)	427 kPa (65 psi)	372 kPa (54 psi)	3,084 kg (6,800 lb)	92 kg (203 lb)	25 mm (1 in)

# Cat Pneumatic Tires

## XD Tires

The XD design is tough through and through. From the deep tread and ultra heavy side walls to the extra large rim guard, the XD equips your skid steer to maneuver effectively in the most extreme applications. In fact, the features that make the XD so tough also make it 26 percent heavier. Concrete and demolition, quarries, and asphalt recycling jobs are just some of the rigorous environments where the XD is the clear choice.



### Advantages

- 14 ply rating enhances tear and puncture resistance
- 40 percent deeper tread depth than Premium Conventional model ensures long tire life on rough terrain
- Less void between the tread lugs reduces wear by spreading it across a larger surface area
- Superior carcass strength allows the tire to bear up to 1,300 lbs more than competitive models

### Applications: Highly Recommended

- Asphalt
- Bricks
- Sand Stone
- Rock & Shale
- Quarries
- Rocky Soil

### Applications Recommended

- Concrete
- Scrap Yard
- Gravel
- Dry Soil
- Wet Soil

Part Number	Tire Width	Wheel Diameter	Ply Rating	Inflated Dimension			Load Specifications @ 5 mph			Tire Weight	Tire Depth
				Rim Width	Section Width	Outside Diameter	Maximum Inflation	Suggested Inflation	Maximum Load		
222-3962	254 mm (10 in)	419 mm (16.5 in)	10	209 mm (8.25 in)	264 mm (10.4 in)	777 mm (30.6 in)	517 kPa (75 psi)	275 kPa (40 psi)	1,968 kg (4,340 lb)	37 kg (81 lb)	35 mm (44/32 in)
222-3963	305 mm (12 in)	419 mm (16.5 in)	14	247 mm (9.74 in)	312 mm (12.3 in)	830 mm (32.7 in)	621 kPa (90 psi)	345 kPa (50 psi)	2,540 kg (5,600 lb)	48 kb (105 lb)	35 m (44/32 in)



## Premium Conventional Flotation Tires



For work in soft terrain, such as at a nursery, in sand, or some landscape sites, use Cat Premium Conventional Flotation tires. A new industry trend, the flotation design can replace the use of tracks in some applications. Cat Premium Conventional Flotation tires are constructed with the same rugged durability as Cat Premium Conventional tires, but are engineered specifically to create less ground pressure.

The flotation tire design incorporates the traditional lug pattern with a wider footprint to provide a lower ground pressure.

Tire assembly diameter is either 31 or 33 inches, depending on the machine model. The wheel bolt holes are an eight hole pattern on an eight inch bolt circle. This wheel design has an outset of 1.75 inches.

The flotation tires are designed to stay within the larger bucket widths of the Cat machines (66 inch bucket use for 216, 226, 28, 232, and 242 Models or 72 inch bucket use for 236, 246, 248, 252, 262, 268, and 272 Models). The 33-inch flotation tire is also compatible with the 904.

The Cat flotation tire is made like the premium conventional tire, except the tire width is 15.5 inches instead of 10 or 12 inches.

### Advantages

- Self-cleaning, open tread design for reduced maintenance time
- Extra large, tapered lugs for traction in slippery conditions and maximum wear life
- Dual side wall construction for puncture and tear protection
- An advanced blend of natural and synthetic rubber and a reinforced bead area for maximum wear life
- Heavy rim guard reduces potential for damage to tie bead and wheel flange
- Wider footprint for better load distribution
- Stable ride in soft terrain without sinking
- Heavier, 12-ply rating for greater load carrying capacity

### Applications: Highly Recommended

- Wet Soil
- Sandy Soil
- Mud

### Applications: Recommended

- Rocky Soil
- Dry Soil
- Snow

Part Number	Tire Width	Wheel Diameter	Ply Rating	Inflated Dimensions			Load Specifications @ 5 mph			Tire Weight	Tread Depth
				Rim Width	Section Width	Outside Diameter	Maximum Inflation	Suggested Inflation	Maximum load		
199-5436	393 mm (15.5 in)	419 mm (16.5 in)	8	304 mm (12 in)	381 mm (15 in)	787 mm (31 in)	241 kPa (35 psi)	206 kPa (30 psi)	2,032 kg (4,480 lb)	28kg (62 lb)	19 mm (24/32 in)
199-5440	393 mm (15.5 in)	419 mm (16.5 in)	12	304 mm (12 in)	381 mm (15 in)	838 mm (33 in)	379 kPa (55 psi)	310 kPa (45 psi)	2,2944 kg (6,490 lb)	38 kg (85lb)	21 mm (26/32 in)





**Undercarriage Parts**

# Product Information

## Link Assemblies

### Functions

- Provide a rail for the machine to run on.
- Provide a means to attach track shoes.
- Transmits driving force from track bushing to track shoe.

### Requirements

- Flexible joints between sections.
- Matched wear and structural life of components.
- Components replaceable and/or reusable.

### Features

- Assembled from components designed and manufactured to fit and work together as a system.
- Pins, bushings and links resist loosening, cracking, and breaking until worn beyond wear limits.
- Designed for a second wear life if proper maintenance and rebuilding practices are followed.

### Supporting Reference Material Available

- Sleeve Bearing Track Data Sheet (PEHJ0004)
- Grease Lubricated Track Data Sheet (PEHP9555)
- SystemOne™ Undercarriage Elevated Sprocket Machines (PEHJ0060)
- SystemOne Undercarriage Oval Track Machines (PEHJ0064)
- Positive Pin Retention Data Sheet (PEHP7025)
- Heavy Duty Track Data Sheet (PEHP5031)
- Rotating Bushing Track Data Sheet (PEHP5030)
- Sealed and Lubricated Track Data Sheet (PEDP0036)

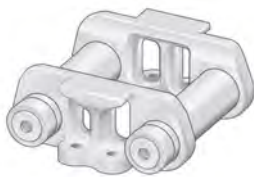


Sleeve Bearing Track



Grease Lubricated Track

**Note: Sealed Track is not offered on elevated sprocket tractors.**



SystemOne Track



Positive Pin Retention Track



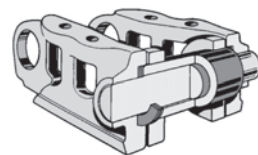
Heavy Duty Track



Rotating Bushing Track



Sealed and Lubricated Track



Sealed Track

## Track Links

### Functions

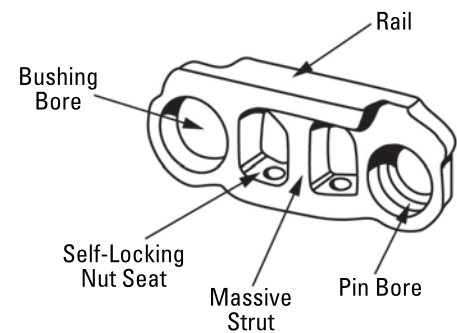
- Provide a continuous rail for rollers.
- Support weight of the machine.

### Requirements

- Machined to close tolerances for pin, bushing and shoe retention.
- Long rail wear life.
- Resist cracking, spalling and fatigue failures.
- Rebuildable.

### Features

- Forged of Deep Hardening Steel.
- High body hardness.
- Uniform rail hardness.
- High rail design.
- Massive strut design.
- Self-locking nut seats.
- Rebuildable.



### Deep Hardening Steel

Deep Hardening Steel used in current links allows high body hardness, greater hardened depth and greater fatigue resistance than plain medium carbon steel.

### High Body Hardness

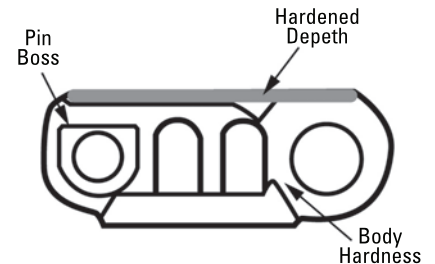
Links on current track-type tractors, loaders, and excavators have a high body hardness. This increases toughness, durability, fatigue resistance and improves pin and bushing retention.

### Uniform Rail Hardness

Link rails are pattern induction heated, spray water quenched and furnace tempered for a deep, uniform hardened depth. This gives link rails a crown hardness pattern that resists side wear and roll-over. The hardened rail matches the track roller tread and flange hardness for optimum wear life.

### Duralink™ Design

The Duralink is a crowned link, designed for maximum durability. This reduces idler scallop wear to eliminate vibration and increases the depth of hardness for 20-40% longer wear life. It also has more material at the nut seat window to eliminate cracking. Link height varies by model for D8 – D11.



### Rebuildability

Cat track links are rebuildable; high body hardness results in good pin and bushing retention, even after repeated disassembly and reassembly.

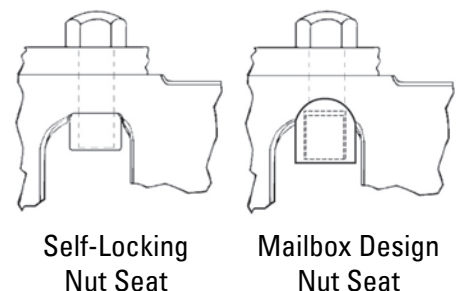
### Massive Strut Design

Provides the best available resistance to cracking failures that result from flexing shoes, pins, and bushings.

### Self-locking Nut Seats

Allow easy installation and removal of track shoes. Also, help keep hardware tight.

**The nut and nut seat on "L", "N", "R", and "T" series tractors are rounded to reduce stress risers in the link.**



# Product Information

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## Split Master Link

### Function

- Allows convenient removal and installation of track.
- Eliminates the need for a master pin and master bushing.

### Requirements

- Wear life equal to regular link.
- Same strength as regular link.
- Serviceable and Reusable.

### Features

- Bolt-together design for faster and easier assembly and disassembly.
- Allows use of regular pins and bushings.
- Factory assembled with lubricant.



### Bolt-Together Design

Removing and installing track has always been time consuming. To improve this, Caterpillar designed a two-piece or split master track link, joined with bolts. Only a torque wrench is needed to separate the track in place of field press tooling.

### Regular Pins and Bushings

Split master links require no master pins, master bushings, nor spacers. Instead they use standard pins and bushings. Thus, pins and bushings in split master links wear at the same rate as all others and can be turned along with others.

**NOTE: Split master links often require a master shoe, with different bolt hole pattern than other shoes and four special track bolts.**

## MASTER LINK ASSEMBLING AND TORQUING PROCEDURE

- Refer to machine O&M manual for master bolt assembly and torque specifications

### SystemOne™ LINK BOX

#### Serviced at the Link Box level

- Contains two common links and two cartridges

#### Track Links

- New rail design for increase wear life
- Stronger straight link design
- Stronger straight link design
- Forged of deep hardened steel that provides high body hardness, hardened depth and toughness
- Rail guided design for superior guiding
- Self-locking nuts

#### Cartridge

- Factory sealed and welded to control end play
- Improved seal integrity through an innovative new sealing system
- Uses standard Cat Synthetic SAE 75W-140 gear oil to lubricate the joint

## SystemOne TRACK CLAMP MASTER

### Master Links with Center Strut

- Refer to machine O&M manual for master bolt assembly and torque specifications

### Master Links without Center Strut

- Refer to machine O&M manual or D&A manual for master bolt assembly and torque specifications

## Track Pins / Track Bushings

### Track Pins

#### Functions

- Help hold track section together.
- Act as hinge with bushing at adjoining section.
- Transfer loads between bushing and link.
- Provide reservoir for lubricant in Sealed and Lubricated Track.

#### Requirements

- Strength — to resist flexing and cracking, even when worn to limit.
- Wear Resistant.
- Finished to close dimensions — for accurate press fit with link and clearances with bushing I.D.

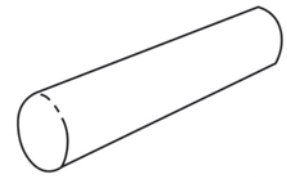
#### Features

- Machined from medium carbon steel.
- Heat treated.
  - Induction hardened.
  - Spray water quenched.
  - Tempered.
- Sealed and Lubricated Track pins ground to final dimensions.

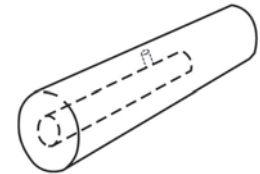
#### Medium Carbon Steel

Caterpillar manufactures track pins from a medium carbon steel which provides a tough pin with good surface hardness. This provides good spalling and cracking resistance in high impact conditions.

Sealed and Lubricated Track pins are center drilled to provide an oil reservoir and cross drilled to provide a passage for the oil to flow between the pin and bushing. After heat treatment the pin ends are ground to provide the close final dimensions required for accurate press fit and oil retention.



Sealed Track Pin



Sealed and Lubricated Track Pin

# Product Information

## Track Pins / Track Bushings (Cont'd.)

### Track Bushings

#### Functions

- Help hold track section together.
- Act as hinge with pin of adjacent section.
- Provide sealing surface to keep abrasives out and lubricant in with Sealed and Lubricated Track.

#### Requirements

- Strength — to resist cracking, even when worn to service limits.
- Finished to close dimensions — for accurate press fit into link bushing bore clearance with pin O.D.
- Wear resistant — on I.D. equal to pin, on O.D. greater than sprocket.
- Smooth finish on end — to maximize sealing and minimize seal wear.

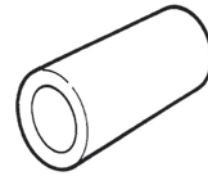
#### Features

- Formed by cold extrusion of low carbon steel. (Extruded bushings have smoother inner and outer surfaces with more uniform dimensions than machined bushings.)
- Carburized and heat treated for optimum hardness and toughness.

#### Difference between Sealed Track bushings and Sealed and Lubricated Track bushings

Sealed and Lubricated Track bushings are:

- Polished on the ends for a smooth sealing surface.
- Shorter than Sealed Track bushings to provide the space needed in the link counter bore for the thicker thrust ring and seal.



Straight Wall



Stepped

## Track Seals

### Sealed Track Seals

#### Functions

- Retard abrasive entry between pin and bushing.
- Prevent bushing from wearing against link counterbore.
- Carry side loads.

#### Requirements

- Wear life equal to pin and bushing turn time.
- Have spring-like resiliency without brittleness.

#### Features

- Made from hardened and tempered spring steel. Seals are formed like cone shaped washers. Used in pairs, they fit into each link counterbore. One washer butts against the bushing end, the other against the link counterbore base. When track sections are pressed together, the washers flatten to form a seal. The spring effect of the flattened washers maintains sealing pressure as they wear. Seals are designed to wear against each other instead of against the link counterbore and bushing end. This system extends internal pin and bushing life by 20-30% compared to unsealed track. Sealed Track Seals are not reusable at turn time.



Uncompressed Seals



Compressed Seals



## Track Seals (Cont'd.)

### GREASE LUBRICATED TRACK SEALS

Internal pin and bushing wear is usually the reason for track maintenance with Sealed Track. Caterpillar engineers have designed a track system that reduces internal pin and bushing wear on excavators. The sealing arrangement is what makes this reduction possible.

#### Functions

- Keep abrasives out of internal pin and bushing joint.
- Keep grease in joint.
- Absorb side or thrust loads.
- Reduction in noise compared to Sealed Track

#### Requirements

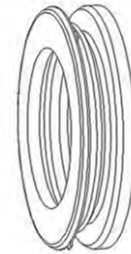
- Pin and Bushing internal wear life affected less by external environment.
- Not a lifetime lubricated track.

#### Features

- Seal Assembly – Consists of a “W” shape polyurethane seal. The seal contacts the smooth bushing end. The seal distributes an even load along the sealing surface to assure a 360° seal.
- Seals are designed to operate at a maximum temperature of 70° C (160° F). Exposure to high temperatures will reduce seal life.
- Shorter bushing compared to Sealed Track.

#### Benefits of Grease Lubricated Track

- Internal pin and bushing wear reduced as the primary maintenance consideration.
- The system keeps abrasives from entering the internal pin, bushing, and link counterbore area of the joint.
- Grease reduces normal friction and wear between the pin and bushing.
- Decrease of internal wear and resulting track pitch extension reduces snaky track; this reduces wear on other components, such as links, rollers, and guiding components.
- Most undercarriage components are reusable.
- Internal bushing life is extended about 20% compared to Sealed Track.



# Product Information

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## Sealed and Lubricated Track Seals

Internal pin and bushing wear is usually the reason for track maintenance with Sealed Track. Caterpillar engineers designed a track system that would eliminate internal pin and bushing wear as a maintenance consideration. The sealing arrangement is what makes this possible.

### Functions

- Keep abrasives out of internal pin and bushing joint.
- Keep lubricant in joint.
- Absorb side or thrust loads.

### Requirements

- Pin and Bushing internal wear life not affected by external environment.

### Features

- Seal Assembly — Consists of a plastic seal and resilient rubber load ring. The seal contacts the smooth bushing end. The rubber load ring distributes an even load along the sealing surface to assure a 360° seal. Seals are designed to operate at a maximum temperature of 70° C (160° F). Exposure to higher temperatures will reduce seal life.
- Greater end play capacity from .030 to .060.
- Thrust Ring — Made from hardened steel, it protects the seal assembly from side thrust loads. The ring has notches so the oil can flow past the ring into the sealing areas.
- Rigid Seal Design now available for all Elevated Sprocket machines, Low Sprocket machines, and Track Type Loader machines.



Rigid Seal

### Benefits of Sealed and Lubricated Track

- Internal pin and bushing wear eliminated as the primary maintenance consideration.
- The system keeps abrasives from entering the internal pin, bushing, and link counterbore area of the joint.
- Lubricant eliminates normal friction and wear between the pin and bushing.
- Absence of internal wear and resulting track pitch extension reduces snaky track; this reduces wear on other components, such as links, rollers and guiding components.
- Most undercarriage components are reusable.
- External bushing life is extended about 50% compared to Sealed Track.

### Oil

- Caterpillar uses Synthetic SAE 75W–140 gear oil to lubricate the joint.

## Sprockets

### Functions

- Transfer driving loads from the final drive to the track through the bushings.

### Requirements

- Wear life — equal to at least one side of the bushing.
- Strength — to resist cracking.

### BOLT-ON SEGMENTS

Used on: All Track-Type Tractors and Track-Type Loaders, but not available for D4E or 941.

### Features

- Formed from Deep Hardening Steel.
- Both segments and sprockets are manufactured to accurately mate with bushings.
- Tightly controlled manufacturing processes to ensure proper mounting segment hardware.

### Benefits of Bolt-on Sprocket Segments

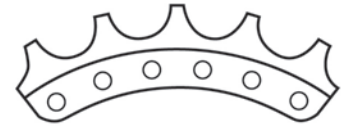
- Reduced maintenance and downtime.
- No need to remove track group to replace sprockets.
- Segments are easier to handle.
- No risk of misalignment.
- Reversible — switching segments to opposite sides of the machine can increase sprocket life.

### Conversion to Bolt-on Sprocket Segments

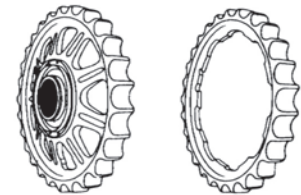
A one-piece weld-on adapter ring is available for converting some older models to bolt-on sprocket segments. Once a customer converts a machine to the bolt-on design, he will save both labor and downtime cost when the segments need replacing.

### Torquing Procedure

- Refer to machine O&M manual or D&A manual for sprocket bolt assembly and torque specifications.



Bolt-on Segments



Cast Assembly and Weld-on Rim

### CAST ASSEMBLY, WELD-ON, AND BOLT-ON RIM

Used on: Earlier Tractors, Earlier Loaders, and 200 Series Excavators. Current 300 Series Excavators have bolt-on one piece sprockets.

### Features

- Cast from Deep Hardening Steel.

### Deep Hardening Steel

Cat sprockets are formed from Deep Hardening Steel which allows about twice the hardened depth as plain medium carbon steel.

# Product Information

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## Track Shoes

### Functions

- Support the machine's weight on the ground
- Provide traction.

### Requirements

- Strength — to resist bending and breaking.
- Wear resistant grouser and plate.
- Retention — to resist loosening during link wear life.

### Features

- Furnace or induction hardened, die quenched and tempered.
- Curved leading and trailing edge.
- Rebuildable

Curved leading and trailing edges provide stiffness to reduce shoe bending and hardware loosening. Overlapped edges keep debris from lodging between shoes as the track bends around the sprocket and idler.

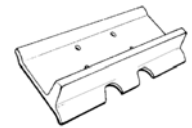
## Track Shoe Selection

The wide variety of working conditions makes choosing the right shoe very important. **A good rule is: choose the narrowest shoe that provides adequate flotation.** Shoes that are too wide will loosen, bend and crack more easily. They require more power to turn, and affect maneuverability. Shoes of the correct width give maximum performance and the lowest possible cost to the entire system.

**Caterpillar offers the following track shoes:**

### SINGLE GROUSER MODERATE SERVICE SHOES (MS)

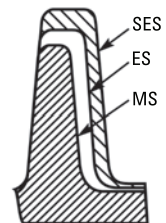
The Moderate Service shoe is the best shoe for low to medium impact and abrasive conditions. It gives the best penetration and traction, resists wear and bending and is available in various widths and modifications. Rolled from modified medium carbon steel.



Single Grouser Shoe

### Single Grouser Extreme Service Shoes (ES)

Extreme Service shoes should be used wherever the Moderate Service shoe bends or breaks, or where links out last shoes. Extreme Service shoes are both stronger to resist bending and breaking and have more allowable wear material than the Moderate Service shoe. Greater Strength – Extreme Service shoes are rolled from tough alloy steel. They are also more massive. They are heat treated to provide a higher tensile strength to resist bending and breaking in high impact conditions. More Wear Material – Extreme Service shoes have up to **approximately 50% more allowable** wear material than the respective Moderate Service shoe. More Rebuildable – Because of the thicker section on the Extreme Service shoe, it can be successfully regrousered more times than the Moderate Service shoe (when used in similar conditions and worn to comparable limits).



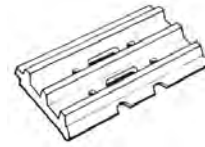
### Single Grouser Super Extreme Service Shoes (SES)

Super Extreme Service shoes provide approximately 25% more life than the Extreme Service in high wear applications.

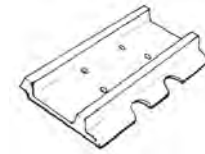
## Track Shoes

### Multi-Grouser Shoe (Triple and Double Grouser)

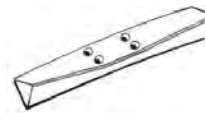
Multi-Grouser shoes have less penetration and traction than Single Grouser shoes, but better turning ability. These shoes are standard on track-type loaders and excavators because less turning resistance and greater maneuverability are needed. By spreading tractor weight over the larger contact area of several low profile grousers, the turning resistance is reduced and maneuverability improved.



Triple Grouser



Double Grouser



Low Ground Pressure Shoe

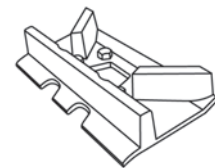
### Special Shoes

#### Self-Cleaning, Low Ground Pressure Shoe

This shoe is designed for use in loose, muddy conditions. As these shoes move around the sprocket and idler, they separate from one another, causing debris to fallout. These cast steel shoes come in widths that make them suitable for LGP machines only and should not be used in high abrasive or high impact conditions.

#### Chopper

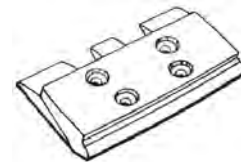
This shoe is designed for use in demolition and landfill applications where compaction is required. Designed with a full length front grouser, two angled side grousers and a center opening for material extrusion, these shoes provide long wear life and structural life in the most demanding underfoot conditions.



Chopper Shoe

#### Steel Mill Flat

Designed for use in hot slag and other heavy abrasive materials where low penetration and high wear and bending resistance is required. Large, countersunk bolt holes are designed to protect the bolt heads.



Steel Mill Flat

### Track Shoe Supports for Hydraulic Excavators

Forestry applications for Hydraulic Excavators generally involve high impact and severe underfoot conditions for the undercarriage components. For this reason, full length track shoe supports mounted to the track roller frame are recommended for forestry applications. These shoe supports are intended to limit the torsional loads experienced by the link assembly when the machine encounters uneven underfoot conditions.

As the machine rides over objects such as rocks or stumps, the track shoe deflects and the track chain begins to twist. With track shoe supports, the shoes contact the support and prevent further twisting of the chain. These supports limit the loads going into the link assembly and significantly reduce the occurrence of link cracking and track pin walking.

# Product Information

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## Track Hardware

### Track Bolts

#### Function

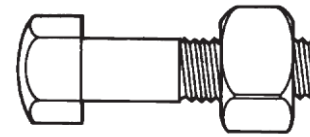
- Hold the shoe on the link.

#### Requirements

- Wear resistant head.
- Tensile and shear strength.

#### Features

- Induction hardened heads.
- Rolled threads.
- Tensile strength exceeds Grade 8 specifications.
- Reusable



Rolled Threads

#### Induction Hardened Heads

Track bolt heads are induction hardened to protect them from deforming in high impact, highly abrasive conditions to extend their wear life.

#### Rolled Threads

Rolled threads resist stripping better than cut threads. By rolling, the natural flow lines of the steel follow the thread contours. Cutting threads cut the flow lines, making the threads weaker.

#### Strength

Cat track bolts exceed Grade 8 strength requirements with a minimum tensile strength of 160,000 PSI.

### Track Nuts

#### Function:

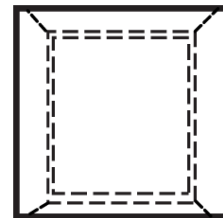
- Used with the track bolt to hold the shoe to the link.

#### Requirements

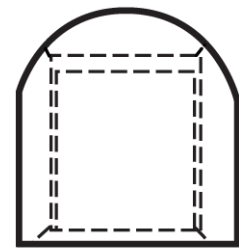
- Strength
- Retention on bolt.

#### Features

- Furnace hardened and tempered.
- Self-locking.



Square Nut Design



Mailbox Nut Design

#### Furnace hardened

Track nuts are thru-hardened and tempered to match or exceed bolt strength. Track nut core hardness is Rc30 minimum.

#### Self-locking

Track nuts are designed to fit into the nut seats in the link strap area. Broached grooves hold the nut so bolts can be removed from the shoe.

#### Track Shoe Tightening Procedure

- Refer to machine O&M manual or D&A manual for track bolt assembly and torque specifications.

## Track Rollers

### Functions

- Support the machine on the track.
- Guide the machine along the track.

### Requirements

- Strength — to resist structural failure before tread wear life is utilized.
- Shell tread wear life equal to links
- Shell tread and flanges rebuildable.
- Most internal components reusable.
- No maintenance during original tread wear life.

### Features

- Shells forged from deep hardening steel and are designed to resist bellmouthing.
- Shafts and bearings are designed to reduce friction and wear and to provide maximum strength.
- Lifetime Lubricated for minimum maintenance.

### Bronzed Sleeve Bearing

- Sleeve design provides a large surface area for better load distribution.
- Inner diameter surface is polished to a smooth finish.
- Soft bronze coating in the bearing absorbs any small foreign particles before they can damage the shaft and seals.

### Duo-Cone™ Seal

- Seals oil in and abrasives out.
- The Duo-Cone Seal consists of two metal seal rings and two rubber toric rings. The toric rings provide the proper pressure to both sides of the metal seal rings.
- Resists permanent deformation and temperature changes from -40F (-40C) to 225F (107C). **Extreme Temperature Seals** respond over a wider temperature range from -60F (-50C) to 325F (163C) constant and 450F (233C) peak.
- Duo-Cone Seals are designed to last through several roller shell tread lives, depending on individual conditions. For reusability guidelines, refer to SEBF8511 (Guidelines for Reusable Parts).

### Oil

- Cat Lifetime Lubricated Track Rollers use a 30 weight oil, which cools and lubricates better than grease.
- Cat track-type tractors and loaders use both single and double flange rollers. Typically excavators use all single flange rollers. Single flange rollers are used adjacent to the sprocket so they can be placed closer to the sprocket. Double flanged rollers are used to maximize the guiding effect wherever space permits.

# Product Information

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## Track Rollers (Cont'd.)

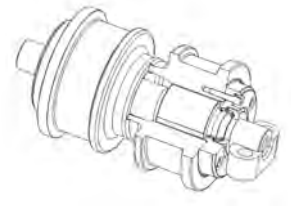
### SystemOne Track Rollers

- Serviced at Roller Group level
  - Single flange roller shell
    - Forged from deep hardened steel and through hardened heat treated for internal strength to resist bellmouthing and uniform hardened depth that provides wear life equal to link wear life
    - Through hardened flanges to resist wear and prevent cracking or breakage
    - Tall flange rollers for superior guiding
  - Track Roller Shaft
    - Forged and heat treated for strength
    - Bearing surfaces are hardened and polished to reduce friction and wear
  - End Caps
    - Retain the roller shaft to the track roller frame and provides serviceability
    - Not part of the roller group and serviced separately
- The unique characteristics of the four roller designs are as follows:

## For D11R, D11N, D10, D10T, D10R, D10N, D9T, D9R, D9N, D9L, D8T, D8R, D8N, D8L

### Track Roller Shell

- Forged from Deep Hardening Steel and heat treated for internal strength to resist bellmouthing and to increase rebuildability.
- 2-piece roller shell rim
- Heat treated for a deep, uniform hardened depth that provides wear life equal to link wear life.
- Thru-hardened flanges to resist bending and improve rebuildability.
- Steel-backed bronze bearings are press fit inside the shell.



### Track Roller Shaft

- Forged and heat treated for strength.
- Bearing surfaces are hardened and polished to reduce friction and wear.
- Larger diameter for greater load bearing capacity.

### Retainer

- Bolts to the ends of the track roller shells.
- Transmits side loads to the roller shaft and houses the Duo-Cone Seals.

### End Caps

- End caps retain the roller shaft to bogies, and provide serviceability.
- **End caps are serviced separately.**

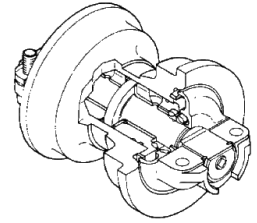


### Track Rollers (Cont'd.)

For D7R, D7H, D6R, D6H, D6N, D6M, D5H, D5N, D5M, D4H 973,963,953,943

#### Track Roller Shell

- Forged from Deep Hardening Steel and heat treated for internal strength to resist bell-mouthing and to increase rebuildability.
- 2-piece roller shell rim
- Heat treated for a deep, uniform hardened depth that provides wear life equal to link wear life.
- Thru-hardened flanges to resist bending and improve rebuildability.



#### Track Roller Shaft

- Forged and heat treated for strength.
- Bearing surfaces are hardened and polished to reduce friction and wear.
- Center flange absorbs side thrust from roller shell.

#### Cast Iron Bushing

- Supports the bronze sleeve bearing.
- Cast from iron to absorb loads without permanent deformation.
- Large lubricant reservoir to reduce heat build-up.

#### End Collar

- Attaches the track roller to the track roller frame.
- Houses and protects the outer Duo-Cone Seal.

#### Snap Ring Design

- Retain cast iron bushing.
- Eliminates need to use bolts to retain cast iron bushing.

# Product Information

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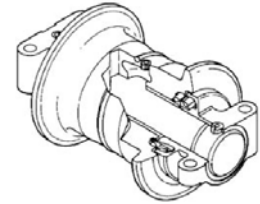
## For Excavators

### Track Roller Shell

- 2-piece roller shell rim.
- Forged from deep hardening steel and heat treated for internal strength to resist bellmouthing.
- Heat treated for a deep, uniform hardened depth that provides good wear life
- A large oil reservoir is provided for in the shell and is filled through a threaded hole located between the wear surfaces.
- Steel-backed bronze bearing is press fit inside the shell.

### Track Roller Shaft

- Forged and heat treated for strength.
- Bearing surfaces are hardened and polished to reduce friction and wear.
- Large diameter for a greater load bearing capacity.
- Straight, solid shaft, with a hole in each end to provide positive attachment of the end collar.
- Reduces end play growth.



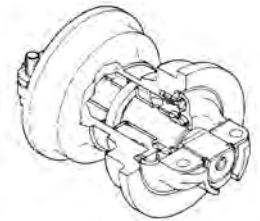
### End Collar

- Completely encircles the shaft to give added strength. Connected to the shaft by pins. Mounting surface area is larger for improved bolt retention.

## For Low Sprocket D9H, D8K, D7G, D6D, D5G, D5C, D5B, D4E, D4B, D4G, D3G, D4C, D3C, D3 and 983, 977, 955, 951, 941, 939, 935, 933, 931

### Track Roller Shell

- Forged from Deep Hardening Steel and heat treated for internal strength to resist bellmouthing and to increase rebuildability.
- 2-piece roller shell rim.
- Heat treated for a deep, uniform hardened depth that provides wear life equal to link wear life.
- Thru-hardened flanges to resist bending and improve rebuildability.



### Track Roller Shaft

- Forged and heat treated for strength.
- Bearing surfaces are hardened and polished to reduce friction and wear.
- Center flange absorbs side thrust from roller shell.

### Cast Iron Bushing

- Supports the bronze sleeve bearing.
- Cast from iron to absorb loads without permanent deformation.
- Large lubricant reservoir to reduce heat build-up.

### End Collar

- Attaches the track roller to the track roller frame.
- Houses and protects the outer Duo-Cone Seal.

## Track Roller Sequence

Use the following charts to determine the original position of track rollers, identified by their flange type. The letter “D” represents a Double flange roller and the letter “S” represents a Single flange roller.

### ELEVATED SPROCKET MACHINES

Model	Rollers Per Side	Roller Position									
D11R/N <sup>(1)</sup> , D10T/R/N <sup>(1)</sup> , D10 <sup>(1)</sup>	8	S	S	D	D	D	D	S	S		
D9T/R/N <sup>(1)</sup> , D9L	8	S	S	D	D	D	D	S	S		
D8T/R/N <sup>(1)</sup> , D8L <sup>(1)</sup>	8	S	S	D	D	D	D	S	S		
D7R/H STD & LGP	7	S	D	S	D	S	D	S			
D7R/H XR	8	S	D	S	D	D	S	D	S		
D6T/R/H STD	6	S	D	S	D	S	S				
D6H XL & XR	7	S	D	S	D	S	D	S			
D6T/R/H XW & XL	7	S	D	S	D	S	D	S			
D6T/R/H LGP	8	S	D	S	D	D	S	D	S		
D6N/M XL, D5H TSK & XL	7	S	D	S	D	S	D	S			
D5H STD	6	S	D	S	S	D	S				
D6N/M LGP, D5H LGP	8	S	D	S	D	D	S	D	S		
D5M, D4H STD, D5N/M XL, D4H XL	7	S	D	S	D	S	D	S			
D5M LGP, D4H LGP & TSK	7	S	D	S	D	S	D	S			
D5N/M LGP, D4H LGP	8	S	D	S	D	D	S	D	S		
527 517 Skidders	7	S	D	S	D	S	D	S			
527 517 Skidders	8	S	D	S	D	D	S	D	S		
572R, 561M, 561H	7	S	D	S	D	S	D	S			
578	8	S	S	D	D	D	D	S	S		
583R	9	D	D	D	D	D	D	D	D	D	
589	10	S	S	D	D	D	D	D	D	S	S

#### SystemOne Track Roller Sequence:

For elevated sprocket machines all rollers are single flange. Rollers per side are the same as in the table above.

### LOW SPROCKET TRACTORS AND LOADERS

Model	Rollers Per Side	Roller Position						
		F	2	3	4	5	6	7
D9G & H	7	D	D	S	D	S	D	S
D9D, E & G	7	D	D	S	D	S	D	S
D8H & K	7	D	D	S	S	D	D	S
D8H	6	D	S	D	S	D	S	
D8NC (8.00" Pitch)	7	D	D	S	D	S	D	S
D7E, F & G	6	D	S	D	S	D	S	
D7 LGP	7	D	D	S	D	S	D	S
D7NC (8.00" Pitch)	5	S	D	S	D	S		
D6C & D	6	D	S	D	S	D	S	
D6B & D6NC	6	S	D	D	D	D	S	
D6 LGP	7	D	D	S	D	S	D	S
D6K	7	S	S	S	S	S	S	S

1 Machines with large diameter single flange rollers.

# Product Information

## Track Roller Sequence (Cont'd.)

### LOW SPROCKET TRACTORS AND LOADERS (Cont'd.)

Model	Rollers		Roller Position						
	Per Side	F	2	3	4	5	6	7	
D5C	6	S	D	S	S	D	S		
D5 & D5B	6	S	D	D	S	D	S		
D5 LGP	7	S	D	D	S	D	D	S	
D4G XL LGP, D5C XL LGP, D5G XLLGP	7	S	D	S	D	S	D	S	
D4B, D4B LGP, D4C, D4C LGP	6	S	D	S	S	D	S		
D4D & E, LGP	5	D	D	S	D	S			
D4NC	4	S	D	D	S				
D3, D3 LGP, D3B, D3C	5	S	D	S	D	S			
D3B LGP, D3C LGP, D3G XL LGP	6	S	D	S	S	D	S		
D3 Special LGP	7	D	D	S	S	D	S	S	
D2	4	S	D	D	S				
983	7	D	D	S	D	S	D	S	
973	7	S	D	D	S	D	D	S	
977E, H & K	7	D	D	S	D	S	D	S	
977D & No. 6	7	S	D	D	D	D	D	S	
955K, L & LGP, 963	6	S	D	D	S	D	S		
955H	6	S	D	D	D	D	S		
955F, E & C	5	D	D	S	D	S			
953, 943	6	S	D	S	S	D	S		
951A	5	D	S	D	S	D			
951B	5	S	D	S	D	S			
951 LGP	5	S	D	S	D	S			
941 incl. LGP, 933E & F	5	D	D	S	D	S			
933C, 933 <sup>(2)</sup> , 939	6	S	D	S	S	D	S		
931 incl. LGP, 935	5	S	D	S	D	S			

#### SystemOne Track Roller Sequence:

For low sprocket tractors and loaders all rollers are single flange. Rollers per side are the same as in the table above.

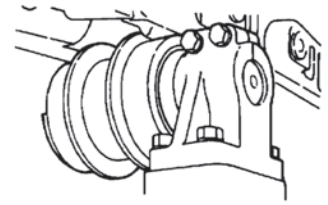
## Carrier Rollers

### Functions

- Support the track as it moves between the sprocket and idler.
- Guide the track between the sprocket and idler.

### Requirements

- Strength — to resist failure before tread wear life is utilized.
- Tread wear life matched to track links.
- Treads and flanges rebuildable on forged shells
- Most internal components reusable.
- No maintenance required during tread wear life.



Carrier Roller Group

## Carrier Roller Shell

Carrier rollers have shells forged from Deep Hardening Steel for strength, wear life and rebuildability. Cat carrier rollers used Duo-Cone Seals for maintenance free operation.

### Features

- Heat treated shells for body strength and long wear life.
- Shaft and bearings designed to carry and turn with heavy track weight.
- Lifetime Lubricated for minimum maintenance.

### Note

D8T and larger track-type tractors use a single flange track roller group as the carrier roller.

# Product Information

## Idlers

### Idler Assembly

#### Functions

- Guide the track in and out of the track rollers.
- Intermittently support the machine's weight.
- Provide a way to control track slack and tension.

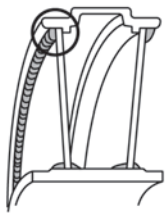
#### Requirements

- Strength to resist failure before tread wear life is utilized.
- Tread wear life equal to or greater than link wear life to service limits.
- Treads and center flanges rebuildable.
- No lubricant maintenance during original tread wear life.

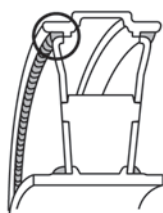
#### Features

- Tread hardness similar to links, track rollers and carrier rollers for impact strength and balanced wear life.
- Lifetime Lubricated for minimum maintenance.
- Rebuildable tread.

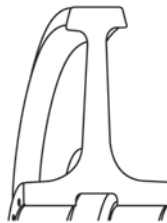
#### Fabricated Idlers



Straight Side Plate



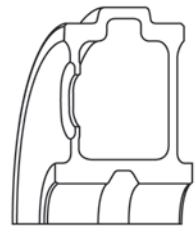
Curved Side Plate



Center Tread Idler (CTI)



Typical Cast/Forged Idler



Cast Idler

## Track Roller Guards

#### Functions

- Protect the track, rollers and sprockets from rocks and debris.
- Provide some additional tracking guiding assistance.

Cat track roller guards help prevent large rocks and other high strength debris from jamming and being crushed between the track rollers, track and sprockets. This crushing could accelerate wear and damage components. Caterpillar offers two types of roller guards — full and partial. Both bolt to the roller frame.

The full length track roller guards cover the entire roller area. With full length guards, track guiding guards cannot be used. Full length track roller guards have bolt-on wear strips. See CTS Handbook for usage information.

Partial length track roller guards are designed to be used with end guiding guards. They protect the roller area while allowing the use of end guiding guards. See CTS Handbook for usage information.



Full Length Guard



Partial Length Guard

## Track Roller Guards (Cont'd.)

### Track Guiding Guards

Caterpillar offers three types of track guiding guards — end guiding guards, center guiding guards, and full length guiding guards.

#### Function

- Help align and guide the track in and out of the idler and the sprocket and through the rollers.

#### End Guiding Guard

- Located at the front and rear of the track roller frame.
- Helps guide the track as it enters and leaves the sprocket and idler.
- Prevents link gouging by the sprocket during turning and sidehill operations.

#### Segmented (Center) Guiding Guard

- Located in the middle of the track roller frame.
- Maintains track alignment.
- Reduces link scuffing with other undercarriage components.
- Allows packing material to fall free.

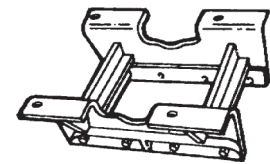
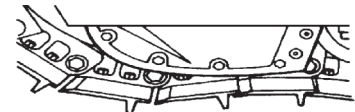
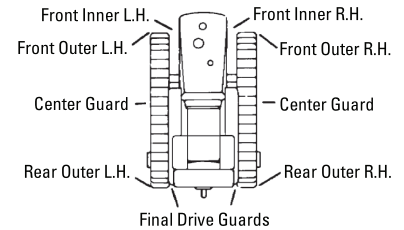
#### Full Length Guiding Guard

- Covers entire roller area.
- Maintains track alignment.

#### Cast Guards (Center and Full Length)

- Strength.
- Better pin coverage.

Cat track guiding guards have heat treated bolt-on wear strips. They can easily be replaced to restore the worn surface without changing the entire guard assembly.



# Conversion Guide

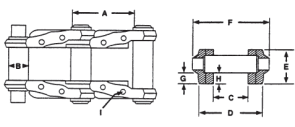
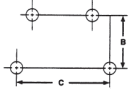
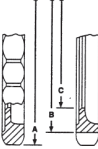
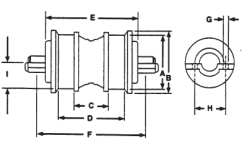
## Determining Competitive Undercarriage Conversions

To identify which Cat components can be used, and if modifications are required, to convert any track type machine to Cat undercarriage components, refer to the following guidelines:

- Refer to guidelines on the following pages to determine what dimensions should be collected on the competitive machine to make a complete or partial conversion to Cat undercarriage.
- Use Conversion Report Form/Work Sheet PEEP0210, to collect dimensional data.
- Refer to IRM UC96-12, titled "Cat Undercarriage Components Dimension Guide". This guide provides information to compare the dimensions of the competitive undercarriage with Cat undercarriage components for conversion purposes.

**Conversion Report Form/Work Sheet**

Competitive Model \_\_\_\_\_ Dealer \_\_\_\_\_  
 Serial Number/Year \_\_\_\_\_ Branch \_\_\_\_\_  
 Conversion Date \_\_\_\_\_ Salesman \_\_\_\_\_

Link Assembly	Competitive Dimensions	Worn	New*
	Pitch (A)	_____	_____
	Bushing Outside Diameter (B)	_____	_____
	Rail Spread	_____	_____
	Inside (C)	_____	_____
	Outside (D)	_____	_____
	Link Height (E)	_____	_____
	Length of Pin (F)	_____	_____
	Rail to Pin Boss (G)	_____	_____
	Rail to Bushing (H)	_____	_____
	Bolt Size (I)	_____	_____
Link Part Number	_____	_____	_____
	Bolt Hole Spacing (A)	_____	_____
	(B)	_____	_____
	(C)	_____	_____
	Bolt Size	_____	_____
Track Shoe Part Number	_____	_____	_____
	Tip Diameter (A)	_____	_____
	Root Diameter (B)	_____	_____
	Inner Diameter (C)	_____	_____
	Sprocket Part Number	_____	_____
	Modifications	_____	_____
	Tread Outside Diameter (A)	_____	_____
	Flange Outside Diameter (B)	_____	_____
	Roller	_____	_____
	Inside (C)	_____	_____
	Outside (D)	_____	_____
	Roller Width (E)	_____	_____
	Width Between Bolt Centers (F)	_____	_____
	Bolt Size (G)	_____	_____
	Bolt Hole Spacing (H)	_____	_____
	Roller Frame to Tread Surface (I)	_____	_____
	Single Flange Part Number	_____	Qty. _____
	Double Flange Part Number	_____	Qty. _____
Modifications	_____	_____	

\*Actual or Estimated from Worn Dimension

Competitive Dimensions	Worn	New*
<b>Carrier Roller</b>		
Tread Outside Diameter (A)	_____	_____
Flange Outside Diameter (B)	_____	_____
Roller	_____	_____
Inside (C)	_____	_____
Outside (D)	_____	_____
Shaft Outside Diameter (E)	_____	_____
Shaft Length (F)	_____	_____
Reference Dimension (G)	_____	_____
Carrier Roller Part Number	_____	_____
Modifications	_____	_____
<b>Idler Group</b>		
Tread Outside Diameter (A)	_____	_____
Flange Outside Diameter (B)	_____	_____
Idler	_____	_____
Inside (C)	_____	_____
Outside (D)	_____	_____
Shaft Outside Diameter (E)	_____	_____
Shaft Length (F)	_____	_____
Idler Assembly Part Number	_____	_____
Modifications/Other Parts	_____	_____
<small>*Actual or Estimated from Worn Dimensions</small>		
<b>Comments/Problems</b> _____ _____ _____		

**CATERPILLAR®**



## Link Assembly

### Primary Dimensions

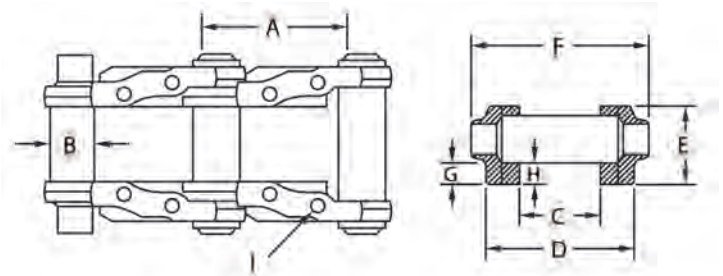
Pitch	— A
Bushing O.D.	— B
Rail Spread	
Inside	— C
Outside	— D

### Secondary Dimensions

Link Height	— E
Pin Length	— F
Rail to Pin Boss	— G
Rail to Bushing	— H
Bolt Size	— I

### Other Considerations

Number of Sections



## Primary Dimensions

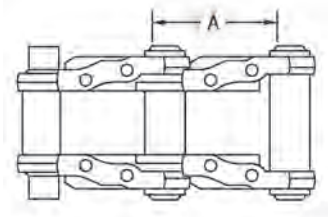
The primary dimensions are the critical dimensions to determine if a Cat link assembly can be used with the OEM sprocket and/or OEM rolling components. Compare measurements to Cat link assembly dimensions, refer to IRM UC96-12. If measurements are within the ranges shown then the Cat link assembly may be used with the OEM sprocket and/or rollers. If measurements and Cat link dimensions are different, or conversion to Cat sprockets and/or rollers is desired, sprocket and/or roller measurements must also be taken.

### Pitch — A

Purpose: Determines OEM sprocket compatibility with Cat track.

Range:  $\pm .03$ " (.76 mm)

Method: Track pitch (A) is the distance between pin centers in adjacent track sections. Track pitch can be determined by measuring the distance from one side of the pin to the same side of the pin in the adjacent section. When measuring to determine OEM pitch on worn link assemblies, you will need to adjust for an increase in track pitch due to internal wear.



# Conversion Guide

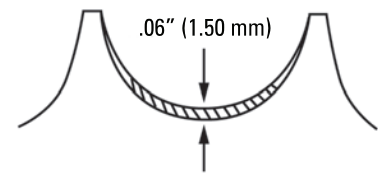
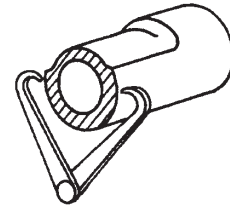
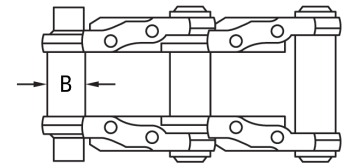
## Link Assembly (Cont'd.)

### Bushing Outer Diameter (O.D.) — B

Purpose: Determines OEM sprocket compatibility with Cat track.

Range: - .12" (3.04 mm) without modifications  
± .12" (3.04 mm) with modifications

Method: The bushing outer diameter measurement should be taken across the unworn horizontal centerline of the bushing. In cases where the competitive track bushing is of smaller diameter than the Cat track bushing, and where the competitive sprocket must be used, the new competitive sprocket root should be ground out to properly accommodate the larger diameter bushing. This grinding should be done with the sprocket held in a fixture to achieve uniform profile and pitch. Failure to grind out the difference in radius can result in mismatch and accelerated bushing wear. Normal break-in cannot be expected to relieve the difference without some detrimental wear.



### Rail Spread

Inside — C

Outside — D

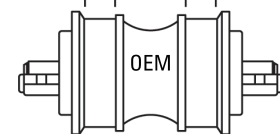
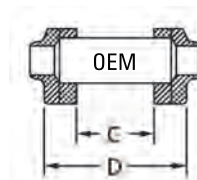
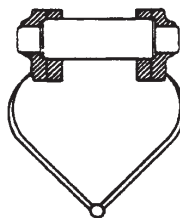
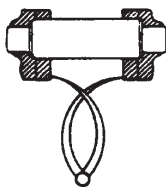
Purpose: Determines OEM rolling component compatibility with Cat track.

Range: Inner — .0" to + .19" (4.83 mm)

Outer — -.19" (4.83 mm) to + .0"

Method: The inside and outside rail spreads can be measured as shown at below.

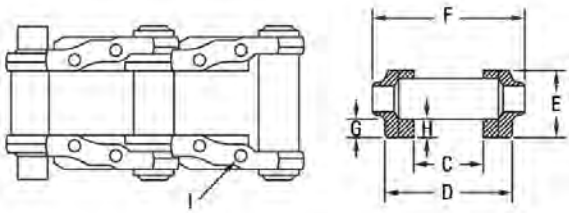
Note: As link assemblies wear, there will be a slight change of rail spread. It does not significantly affect measured dimensions.



## Link Assembly (Cont'd.)

### SECONDARY DIMENSIONS

The secondary dimensions are less critical. Although they rarely prevent a conversion, modifications may be necessary in order to protect a complete Cat undercarriage system.



#### Link Height — E

Purpose: Determines if machine height will be raised or lowered and affects number of sections required.

#### Pin Length — F

Purpose: Determines if pin will clear guards or other machine parts.

#### Rail to Pin Boss — G

Purpose: Determines material available for wear.

#### Rail to Bushing — H

Purpose: Determines if link will clear idler, roller flanges, and provide maximum wear material without sacrificing guidability, number of sections required.

#### Bolt Size — I

Purpose: Bolt sizes need to be equivalent to ensure use of competitive shoe and proper fastener strength.

## OTHER CONSIDERATIONS

### Number of Sections

The number of Cat track sections required should be determined from the number used on the competitive machine at the time of conversion.

Assuming the sprockets and rolling components maintain relatively constant placement and sizes, the following procedure is usually accurate enough to determine the number of Cat sections required.

$$\text{No. Sections of Cat} = \frac{\text{OEM Pitch (New)} \times \text{No. Sections Currently}}{\text{Cat Pitch}}$$

Example: Calculations for converting a competitive 7.50" pitch 36-section machine to Cat 8.00" pitch track are as follows:

7.50" x 36 = 270 total inches of chain required on this machine. 270" / 8.00" or 33.75 or 34 sections of Cat 8.00" pitch track required for conversion.

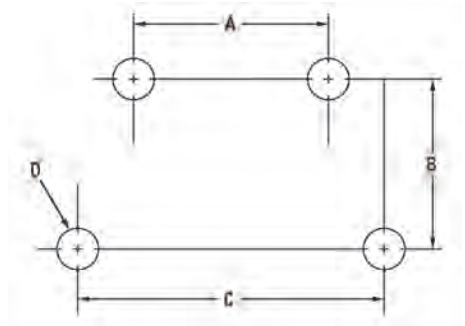
If link height and/or rail to pin boss clearance increases a large amount, the preceding formula may lead to a link assembly that is too short.

# Conversion Guide

## Track Shoe

### Primary Dimensions

Bolt Hole Spacing	— A
	— B
	— C
Bolt Size	— D



### Bolt Hole Spacing — A, B, C

Purpose: Determines interchangeability of track shoes.

Range: .0"

Method: There are two methods of measuring shoe bolt spacing:

1. Measure a track shoe, by measuring from one side of a bolt hole to the same point of the hole adjacent
2. Measure an assembled track group, by measuring from the center of the bolt head to the center of the adjacent bolt

### Bolt Size — D

Purpose: Determines reuse of track shoes and/or track hardware.

Range: .0"

### Other Considerations

The shoe leading and trailing edges must maintain proper clearance, especially if link pitch changes, to allow proper assembly and operation.

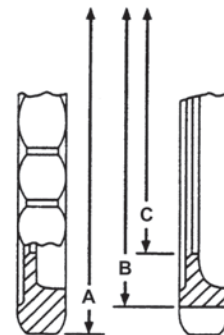
## Sprocket

### Primary Dimensions

Tip Diameter	— A
Root Diameter	— B
Inner Diameter	— C

### Other Considerations

Offset  
Segment Hardware



### Primary Dimensions

Use these dimensions to determine if a Cat sprocket can be used on the competitive machine.

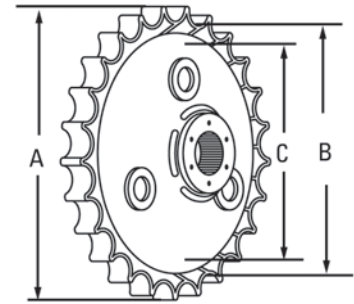
## Sprocket (Cont'd.)

### Tip Diameter — A

**Purpose:** Determines if machine interference will result from using Cat sprocket.

**Range:** Not Specified

**Method:** Measure the overall diameter of the sprocket. It may be helpful to mark the center of the hub or axle. Then, using a 12" ruler extended from the tooth tip measure to the hub center with a tape measure. The most accurate sprocket measurements can be obtained after the track has been removed from the machine. Either too large or too small tip diameter can result in track or sprocket interference with other machine components.



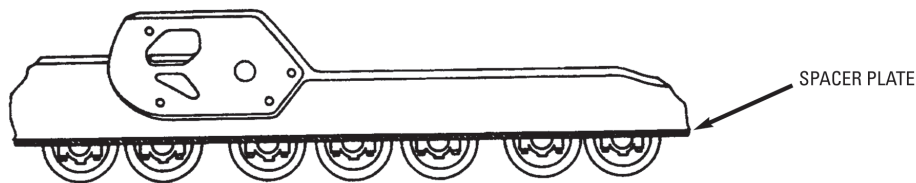
### Root Diameter — B

**Purpose:** Determines if sprocket will carry machine weight.

**Range:** Not Specified

**Method:** Measure the diameter of the (estimated) unworn sprocket roots. The track bushings must increase elevation such that at the six o'clock sprocket position the bushing is above the level that it left the last roller.

It may be necessary to use spacer plates on the competitive track roller frame to increase ground clearance when using a larger diameter Cat sprocket. This should lift the track roller frame at the bottom entry position. Spacers may be fabricated from 1030 or 1020 steel. Full length spacer plates are recommended and bolts should be checked for tightness at regular intervals.



### Inner Diameter — C

**Purpose:** Determines if there is adequate space and geometry for welding.

**Range:** Not Specified

**Method:** Measure the area that will facilitate welding. Use same procedure described above.

## Other Considerations

### Offset

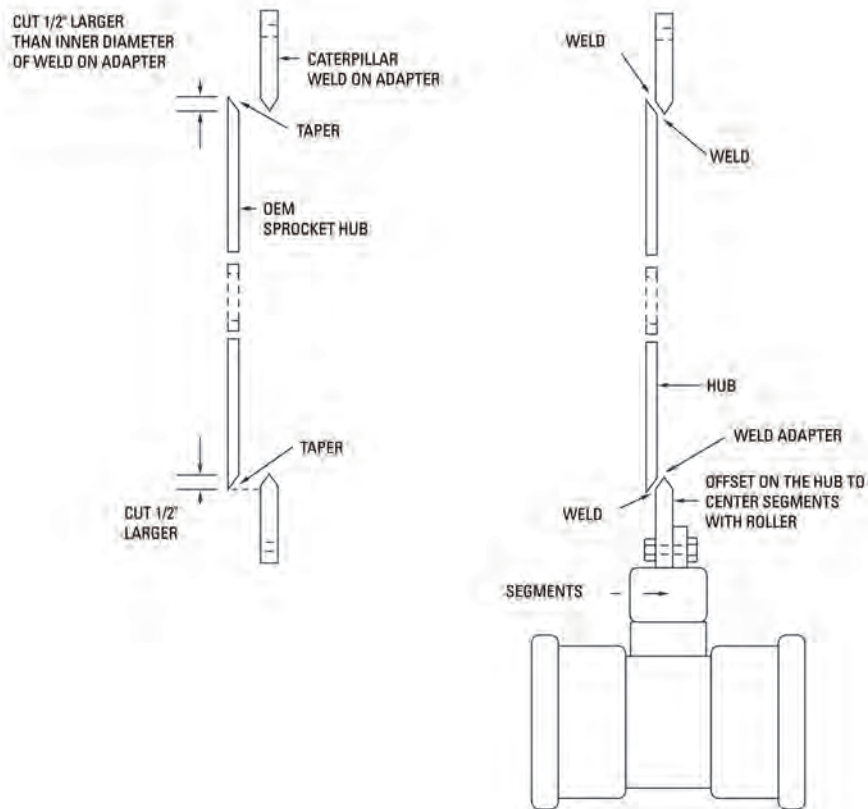
The Cat rim or adapter ring and segments may have a different offset than the OEM design. Failure to compensate for the offset will result in sprocket-link interference.

Whether you use an adapter ring or a weld-on rim, the inner diameter must allow proper mounting and orientation on the competitive sprocket "hub."

When welding, the sprocket teeth must be in line with the track roller center line and the rim or segments must be clear of all other parts.

# Conversion Guide

## Other Considerations (Cont'd.)



### Segment Hardware

Any additional clearances needed for segment hardware must be considered, especially if the sprocket runs close to final drive housings, guards, etc.

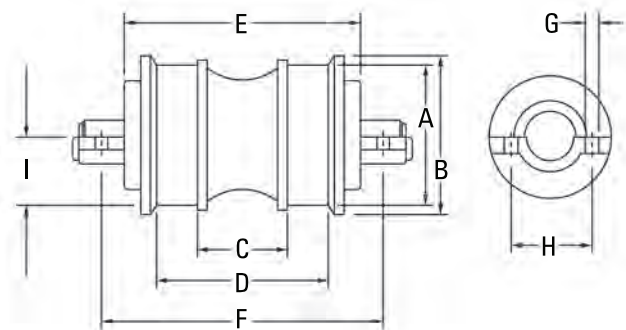
### Track Rollers

#### Primary Dimensions

- Tread Diameter — A
- Tread
  - Inside — C
  - Outside — D
- Mounting Width — E
- Roller Frame to Tread Surface — I
- Width Between Bolt Centers — F
- Bolt Hole Spacing — H

#### Other Considerations

- Flange Diameter — B
- Bolt Size — G
- Roller Spacing



## Track Rollers (Cont'd.)

### Primary Dimensions

Use these dimensions to determine if Cat link assemblies will fit on the competitive track rollers.

#### Tread

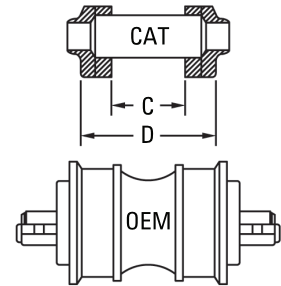
**Inside** — C  
**Outside** — D

Purpose: Determines Cat link assembly compatibility with OEM track rollers.

Range: Outside — .0" to + .19" (4.83 mm)

Inside — .19" (4.83 mm) to + .0"

Method: Measure from inside flange to inside flange and outside flange to outside flange. Measurements from worn rollers will result in slightly inaccurate dimensions. If clearances appear to be close compensation for wear may be needed. Note: Be sure to compare these measurements to the link assembly intended for use in the conversion.



Use these dimensions to determine if Cat track rollers can be used on the competitive machine.

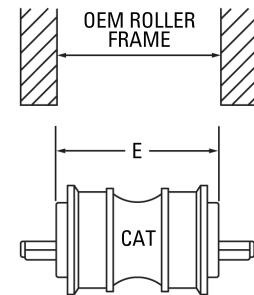
#### Mounting Width — E

Purpose: Determines if Cat rollers will fit in OEM frame.

Range: - .10" (2.54 mm) to + .0" (.0 mm)

Method: Measure the OEM track roller frame and compare to Dimension E on the Cat roller.

Note: Failure to maintain a clearance between the roller frame and roller end collar vertical faces may cause roller damage.

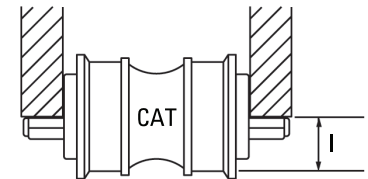


#### Roller Frame to Tread Surface — I

Purpose: Determines if Cat roller lowers or raises machine.

Range: Depends on roller wear limits, idler and sprocket placement.

Method: Differences in tread diameter or end collar design can result in slightly raising or lowering overall height of machine. This can cause track interference with frame, guards or cause sprocket to carry some machine weight. Frame to tread surface (Dimension I) should be measured and any potential interference compensated for as necessary on a case by case basis. If required, roller frame spacers can be used.



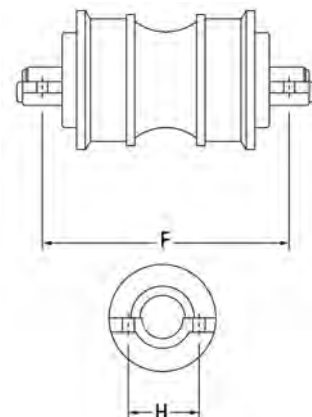
#### Width of Bolt Centers — F

##### Bolt Spacing — H

Purpose: To determine use of existing bolt pattern.

Range: ± .01" (.254 mm)

Method: Measure from the center to center point of bolts in track roller frame. For comparison, use Cat track roller dimensions as reference. If patterns are not within range, plugging, drilling, and tapping of the competitive roller frame may be needed.



### Other Considerations

#### Flange Outer Diameter

# Conversion Guide

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## Track Rollers (Cont'd.)

Two points to check are (1) roller flange to link pin boss clearance, and (2) roller flange and track frame interference.

### Bolt Size

If bolt size and tread type are similar, reuse of competitive hardware maybe possible.

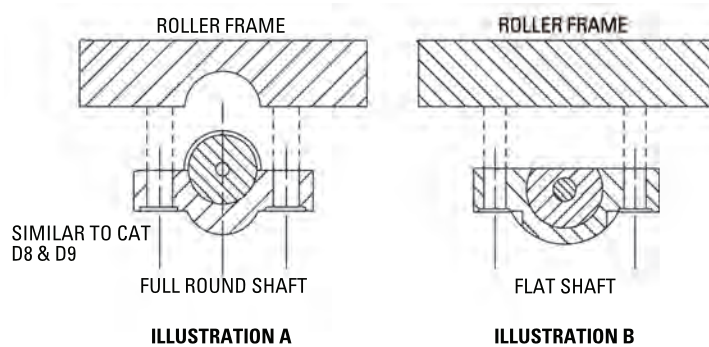
### Roller Spacing

If the Cat roller selected has different tread, flange diameters and/or roller frame to tread surface dimensions, be sure to compensate for these to prevent idler/sprocket interference, especially on the front and rear roller.

### Shaft and End Collar Design

(flat shaft mounting vs. round shaft mounting)

For example, Cat D8 and D9 size track rollers utilize a full round shaft mounting which requires a saddle type cutout in the roller frame (Illustration B). D8 size roller conversion can use 983 rollers which do mount flat as in Illustration A. However, D9 roller conversion will require a roller frame saddle arrangement.

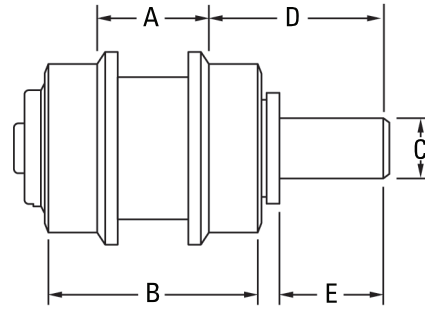




## Carrier Rollers

### Primary Dimensions

Tread Inside	— A
Tread Outside	— B
Shaft Outer Diameter	— C
Reference Dimension	— D



### Other Considerations

Shaft Mounting Length	— E
Dowel	
Spacing	
Size	

## Primary Dimensions

Use these dimensions to determine if Cat link assemblies can be used on the competitive carrier roller.

### Tread

<b>Inside</b>	— A
<b>Outside</b>	— B

Purpose: Determines link assembly compatibility with carrier rollers.

Range: Inside — .19" (4.83 mm) to +.0"  
 Outside — .0" to +.19" (4.83 mm)

Method: Measure from inside flange to inside flange and outside flange to outside flange. Measurements from worn rollers will result in slightly inaccurate dimensions. If clearances appear to be close compensation for wear may be needed. Note: Be sure to compare these measurements to the link assembly intended for use in the conversion.

Use these dimensions to determine if Cat carrier rollers can be used on the competitive machine.

### Shaft Outer Diameter — C

Purpose: Determines compatibility of Cat roller shaft with competitive carrier roller holder.

Range: As small as competitive roller holder will hold. As large as competitive roller shafts.

Method: Measure competitive shaft with calipers, compare to Cat roller; if Cat roller is smaller, a sleeve may be fabricated to compensate for small diameter.

### Reference Dimensions — D

Purpose: Determines compatibility of Cat carrier roller with competitive carrier roller holder and link assembly.

Range:  $\pm .10$ " (2.54 mm) depends on tread inside and competitive holders.

Method: Measure from radius to holder to determine reference dimension. The reference dimensions assure proper carrier roller alignment with the link assembly.

# Conversion Guide

## Other Considerations

### Shaft Mounting Length — E

The Cat carrier roller shaft may have a longer or shorter shaft mounting length, providing it does not interfere with the holder or other components.

### Dowel Spacing and Size

The dowel spacing and size may need to be moved or resized; many times this is accomplished by drilling new holes in the competitive holder.

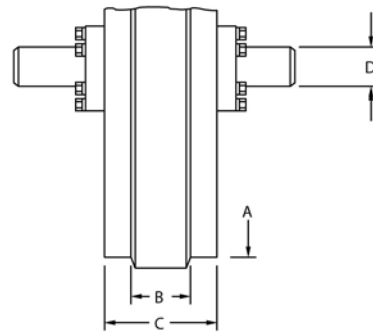
## Idler

### Primary Dimensions

Tread Diameter	— A
Tread Inside	— B
Tread Outside	— C
Mounting Shaft Diameter	— D

### Other Considerations

Slide Plate Profile



## Primary Dimensions

Use these dimensions to determine if Cat link assemblies can be used on the competitive idlers.

### Tread Diameter — A

Purpose: Determines link assembly compatibility with idler.

Range: Slightly smaller than OEM up to OEM diameter.

Method: Measure the diameter; compensate for wear as much as possible.

### Tread

**Inside — B**

**Outside — C**

Purpose: Determines link assembly compatibility with idler.

Range: Inside — .19" (4.83 mm) to +.0"

Outside — .0" to +.19" (4.83 mm)

Method: Measure from inside flange to inside flange and outside flange to outside flange. Measurements from worn rollers will result in slightly inaccurate dimensions. If clearances appear to be close compensation for wear may be needed. Note: Be sure to compare these measurements to the link assembly intended for use in the conversion.

Use these dimensions to determine if Cat carrier rollers can be used on the competitive machine.

### Mounting Shaft — D

Purpose: Determines use of OEM mounting block.

Range: Same shaft O.D., same mounting arrangement.

Method: Compare Cat shaft O.D., length and mounting type with competitive idler. Modification to OEM mounting block may permit use of Cat idler.

## **Other Considerations**

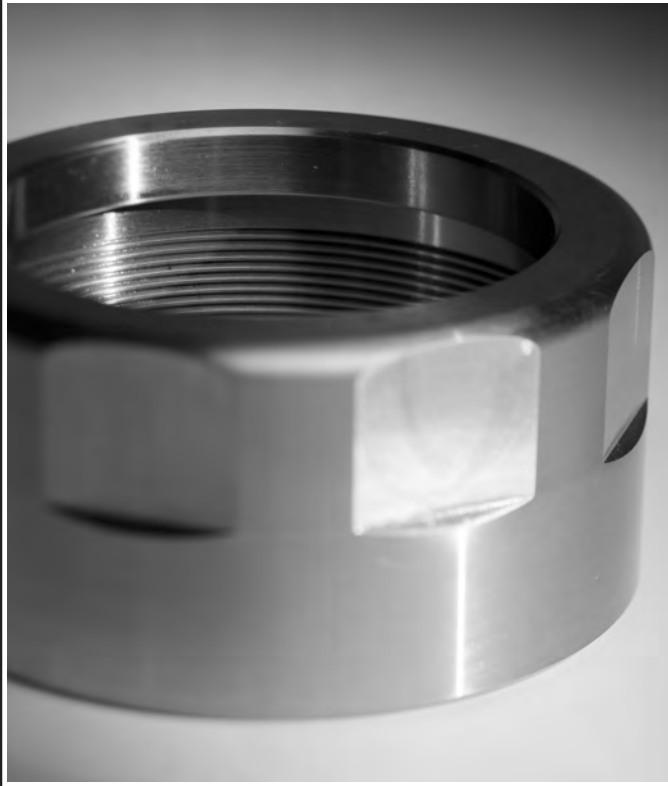
### **Side Plate Profile**

Some manufacturers use guards that run close to idler side plates; modification may be needed to avoid interference.

**For additional conversion information go to this Knowledge Network site:**

<https://kn.cat.com/cat.cfm?ID=11053>





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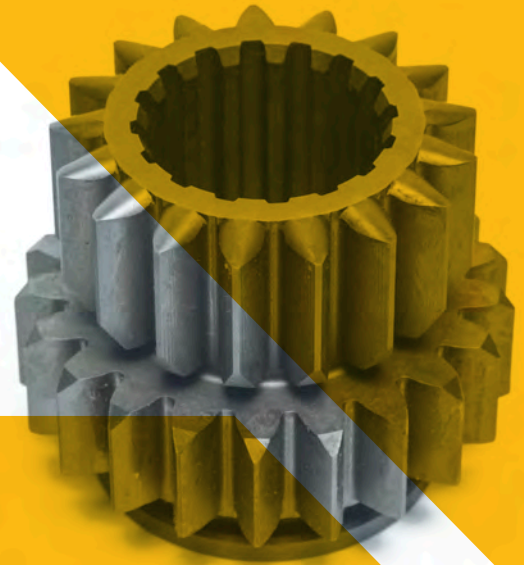
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# Yellowmark Drive Train Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
002-1212	Cup-Roller Brg	399-4446	107-5006	Joint Gp-Univ	416-2137	116-8537	Shaft Gp-Drive-D	418-9570
005-0469	Cup-Rlr Bearing	418-9610	107-5007	Joint Gp-Slip	416-2145	116-8539	Spider & Brg Kit	399-4399
005-0471	Cone-Spl Tapered	415-1924	107-5610	Yoke	398-8334	117-0019	Disc-Friction	417-9492
005-4834	Cone-Rlr Bearing	422-6490	107-9172	Piston	375-2622	117-3321	Disc-Friction	492-1894
005-8639	Bearing-Aligning	415-1925	108-1760	Bearing-Ball	417-9493	117-7826	Housing As	518-3968
030-0060	Bearing-Cup	415-1926	108-7754	Housing As.	433-9856	118-5837	Shaft As	522-2294
030-0061	Bearing-Cone	418-9605	108-7930	Bearing As	377-7463	118-7805	Pinion-Bevel	394-9197
030-1957	Cone-Bearing	420-2502	108-8250	Carrier-Seal	421-7830	119-5727	Bearing-Spl Ball	417-9491
054-2213	Spider & Brg As	347-0464	108-8769	Gear - Planet	523-5944	119-7042	Shaft	347-0480
054-6549	Pinion-Planetary	347-0478	109-5562	Shaft-Pin (Bev)	275-5272	119-7047	Seal	347-0481
054-7091	Bearing-Rlr As	384-5959	109-5679	Shaft-Bev Pinion	541-4960	119-7053	Flange	417-9471
055-1260	Housing Bk-Outer	347-0479	109-7687	Bearing-Ball	420-3220	121-7583	Gear-Planet	364-5257
055-1986	Seal-Lip Type	347-0465	110-0013	Cup-Rlr Brg	384-5960	121-7627	Bearing-Roller	453-3653
094-1509	Shaft-Planet	360-2273	110-0551	Hub As	416-2146	121-7632	Disc-Clutch	394-9195
100-3596	Piston	380-1511	110-0840	Track Rod As.	391-1097	122-1881	Plate-Clutch	347-0475
100-3597	Plate-Reaction	380-1501	110-1488	Gear-Ring	394-0882	122-6787	Yoke As	416-2139
100-3650	Support-Trunnion	394-2580	110-2665	Shaft-Planet	391-9871	124-0501	Cone-Spl Tapered	399-4441
100-3651	Support-Trunnion	445-7699	110-4802	Gear-Ring	522-2291	124-0502	Cup-Spl Tapered	416-2161
100-5927	Joint Gp-Univ	390-5260	110-7053	Gear-Planet	566-3506	124-0503	Cone-Spl Tapered	418-9604
101-1503	Shaft	394-9199	110-7056	Gear-Planet	374-3497	126-2522	Cone-Spl Tapered	377-7397
101-1504	Shaft	373-5379	110-7059	Carrier-Planet	301-4636	126-7130	Shaft As	275-5300
101-5141	Disc-Friction	380-7473	110-7209	Carrier As	301-5237	126-7924	Disc-Friction	566-7125
101-5144	Disc-Friction	380-7516	110-7216	Gear-Sun	391-9877	126-8181	Cone-Spl Tapered	434-3295
101-7517	Housing	391-1094	110-7228	Carrier-Planet	390-0918	127-3365	Joint Gp-Slip	367-6067
101-7689	Yoke As	422-7245	110-7229	Gear-Ring	522-2292	127-5970	Gear-Planet	301-3398
102-4563	Gear-Transfer	399-4430	110-7231	Gear-Sun	522-2293	128-3935	Bearing-Race	396-9897
103-1713	Yoke-Bk-Flange	382-6892	110-7232	Gear-Sun	417-9472	128-4128	Rod Gp-Tie	385-6136
103-5961	Wheel	398-2963	110-7243	Carrier As	384-5961	129-2380	Bearing-Spl Ball	523-5961
104-3133	Carrier-Planet	435-2897	110-8368	Bearing-Cup	416-2172	129-2381	Gear-Planet	275-5274
105-0017	Cylinder	416-2130	111-3895	Yoke	421-3080	129-4299	Gear-Planet	446-3077
105-2125	Joint Gp-Slip	398-2937	112-0764	Support-Trunnion	523-0545	129-4300	Carrier-Planet	523-0550
105-2485	Gear-Tfr Output	398-2932	112-2255	Gear-Bevel	446-3076	129-4323	Shaft-Planet	522-2296
105-2486	Gear-Transfer	391-9882	112-5495	Joint Gp-Univ	297-4858	129-5403	Gear-Ring	522-2297
105-2487	Gear-Tfr Output	391-9881	112-5585	Shaft-Planet	308-9932	130-3013	Shaft As	391-9865
105-7535	Bearing-Dbl Row	417-9496	112-7308	Carrier-Planet	419-8803	130-3014	Shaft As	391-9864
105-8183	Housing As.	524-1300	112-7309	Shaft-Planet	380-7521	130-5867	Piston-Reaction	522-2298
105-8586	Pinion As	375-2630	112-8041	Carrier-Planet	295-5681	130-6879	Seal	347-0482
105-8724	Hub	418-9598	112-8042	Carrier-Planet	390-0916	130-8412	Piston-Clutch	394-0910
105-8727	Shaft-Axle	423-6986	113-1149	Shaft As-AWD	418-9574	131-3736	Socket Gp-Basic	325-6211
105-8735	Gear-Diff Bevel	416-2154	113-1150	Shaft As-Main	433-6670	131-3737	Socket As	282-6626
105-8754	Bearing-Sleeve	522-5215	114-1294	Shaft-Pinion	523-5960	131-3738	Socket As	282-6627
106-0714	Shaft	364-5260	114-1383	Shaft-Planet	398-8349	131-4091	Seal-Ring	542-4703
106-7098	Flange AsSM	390-5271	114-9036	Shaft-Input	492-3490	131-6091	Gear-Sliding	385-7201
106-7099	Carrier-Planet	388-6585	115-1651	Joint Gp-Slip	524-7075	131-8246	Yoke As (8.5C)	430-5362
106-7131	Shaft	288-8714	115-1653	Yoke	522-5214	131-8248	Yoke As	434-6113
106-7798	Bearing-Ball	417-9494	115-7119	Kit - Dt Bearing	518-3967	132-2463	Joint Gp-Slip	432-6605
106-7799	Bearing-Ball	396-9947	116-7711	Gear-Sun	492-3494	132-6597	Cone-Spl	422-6477
107-5005	Joint Gp-Univ	396-9929	116-7712	Gear-Planet	491-2022	133-8890	Race	399-4423
			116-8533	Yoke As	451-9031			

# Yellowmark Drive Train Parts

Cat Part Number	Part Name	Yellowmark Part Number
134-0039	Housing-Piston	432-4217
134-3056	Guard	421-7831
135-6160	Shaft-Sun Gear	394-8239
136-7813	Bearing-Race	460-8296
138-2317	Wheel	396-9948
139-0683	Gasket Kit	390-5290
139-6849	Gasket Kit	388-6586
139-6850	Gasket Kit	384-4809
139-9170	Gasket Kit	447-0825
139-9172	Gasket Kit	384-5964
139-9173	Gasket Kit	434-7261
139-9175	Gasket Kit	377-7464
13-9176	Gasket Kit	390-5283
139-9177	Gasket Kit	377-7465
139-9178	Gasket Kit	434-7262
139-9179	Gasket Kit	390-5289
140-2382	Gasket Kit	390-5285
140-2383	Gasket Kit	396-9927
140-8900	Kit - Dt Bearing	518-3971
141-6136	Socket Gp	333-4953
141-6137	Socket Gp	325-6212
141-6138	Socket Gp	325-6213
142-3391	Spider As	523-5965
143-4918	Gear-Sun	491-2026
143-7356	Bearing As	380-1483
144-1150	Gasket Kit	391-9879
144-7878	Manifold	523-5952
147-1007	Kit-Dt Gasket	388-6587
147-1010	Gasket Kit	390-5278
147-1012	Gasket Kit	434-7263
147-1206	Gear Planet	418-9597
147-1740	Gear-Planet	377-7466
147-1900	Gasket Kit	447-0826
147-3309	Spindle	282-6628
147-3310	Spindle-Wheel	383-2111
147-3311	Spindle-Wheel	469-8102
147-3400	Spindle	282-6549
148-0885	Stat or-Converter	379-0161
148-4632	Gear-Sun	522-2301
148-4634	Shaft-Planet	360-2274
148-4635	Gear-Ring	522-5206
148-4644	Drive Gp-Swing-A	523-0553
148-4705	Gear-Ring	526-0601
148-4715	Gear-Coupling	522-5205
148-9288	Case As-Diff	380-1496
149-2914	Pinion-Dif Bevel	396-9950
149-5985	Stat or-Converter	419-1865
151-4836	Diff Gp	416-2120
154-5676	Gasket Kit	447-0827

Cat Part Number	Part Name	Yellowmark Part Number
154-5679	Kit-Dt Gasket	390-5277
154-5682	Gasket Kit	434-7264
154-5683	Kit-Dt Gasket	420-6528
154-5685	Kit-Dt Gasket	396-0649
155-6048	Kit-Dt Gasket	434-7272
155-6057	Kit-Gasket-Trans	388-6588
155-8688	Gasket Kit	434-7273
155-8690	Gasket Kit	434-7274
155-8691	Kit-Dt Gasket	396-0650
155-8694	Gasket Kit	451-1503
155-8696	Kit-Dt Gasket	396-9944
155-8698	Gasket Kit	394-0914
156-0134	Kit-Bearing	518-3972
156-1930	Gear-Planet Ring	522-2303
156-8206	Kit-Dt Gasket	451-3112
156-8208	Kit-Gasket-Trans	434-7275
156-8578	Shaft	417-9490
157-5075	Gear-Planet	394-9821
158-1433	Gasket Kit	393-1003
158-1438	Kit-Dt Gasket	434-7276
158-1439	Kit-Dt Gasket	434-7290
158-1441	Kit-Dt Gasket	394-9207
158-6482	Gear-Set (Bevel)	541-4961
159-1845	Yoke As -1480	380-1494
159-1847	Yoke As -1610	373-5381
159-8169	Gear-Planet	391-9870
160-0305	Bearing-Aligning	396-9945
161-9082	Gasket Kit	434-7277
162-0191	Gear-Planet	418-9593
162-0195	Carrier-Planet	435-4784
162-0268	Hub As	426-3475
162-0270	Carrier-Planet	394-9819
163-5776	Piston	523-0554
163-7280	Gasket Kit	434-7260
164-3071	Gear-Planet	522-2306
164-4891	Plate As.	391-1093
164-6476	Gear-Sun	522-5201
165-5634	Shaft As.-Output	421-7067
166-2142	Hub Gp-Shaft	394-8238
166-6757	Yoke	446-3078
166-6930	Cone-Spl Tapered	399-4443
167-0622	Gasket Kit	434-7279
168-8453	Bearing-Spl Ball	417-4497
169-5590	Gear-Sun	522-2307
169-5804	Yoke As	444-0574
170-4697	Plate-Reaction	491-2030
170-4698	Plate-Reaction	492-3495
170-8714	Disc-Friction	456-9193
171-3942	Yoke	398-2931
171-6696	Diaphragm	384-4811

Cat Part Number	Part Name	Yellowmark Part Number
173-0888	Univ Jt As	394-0898
174-3405	Yoke As	398-2929
174-6829	Gasket Kit	394-8237
174-6836	Gasket Kit - Top	434-7280
175-4157	Drum As-Brake	523-0558
176-9273	Piston	297-4860
177-4132	Kit-Dt Gasket	394-8227
177-7886	Cone	418-9605
178-8608	Cone	422-6479
179-1970	Yoke As.	376-9053
186-4117	Carrier As	394-8235
186-4118	Gear-Planet	347-0483
186-4439	Gear-Planet	380-1485
186-4440	Shaft-Planet	364-5261
188-2886	Gasket Kit	434-7281
188-3865	TC Gp-W/TDR	529-6118
191-2683	Gear-Sun	523-0561
191-5973	Shaft-Sun Gear	523-0562
193-4640	Spider & Brg Kit	491-2033
196-3986	Gasket Kit	390-5275
196-4873	Bearing-Spl Ball	523-0563
196-6845	Yoke As	451-9034
197-6440	Bearing-Align	523-0564
198-3880	Carrier-Planet	526-0019
199-0760	Bearing-Roller	465-8981
199-4582	Bearing-Needle	388-6589
201-9517	Joint Gp-Slip	493-5546
202-2380	Shaft As.-Input	399-4432
203-9726	Gasket Kit	434-7282
205-1098	Gasket Kit	434-7283
206-5794	Gear-Sun	394-8233
206-6405	Bearing-Spl Ball	420-2503
207-2015	Gasket Kit	447-0828
207-2016	Gasket Kit	434-7284
207-8176	Cover-XMSN	420-3218
208-7534	Case As-Diff	388-6590
208-8796	Retainer	417-9489
209-9886	Tie Rod As	396-9901
210-2154	Kit-Gasket-Trans	394-8232
210-2155	Kit-Gasket-Trans	434-7285
210-7305	Shaft	396-9952
213-1304	Kit-Dt Gasket	394-8231
213-1305	Kit-Dt Gasket	394-8230
213-8734	Cover-Transfer	420-3217
215-2398	Plate	297-7232
216-5359	Kit-Dt Gasket	451-1504
216-5361	Kit - Gasket	383-2109
216-7957	U-Joint	367-6069
218-3172	Gear-Planet	492-2467
218-3174	Carrier-Planet	492-1881



# Yellowmark Drive Train Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
220-4554	Kit-Dt Gasket	417-9469	265-5287	Ring-Seal	472-8028	1B-3937	Cup-Roller Brg	377-7394
220-4556	Kit - Gasket	391-9878	273-3160	Ballstud	396-9954	1B-3978	Cup-Roller Brg	399-4437
221-6946	Kit-Dt Gasket	394-9208	274-4553	Disc-Clutch	416-2153	1B-4038	Cup-Roller Brg	423-6988
221-6947	Kit - Gasket	394-9209	278-0221	Housing-Brake	523-0569	1B-4043	Cone-Roller Brg	377-7395
221-6949	Kit-Dt Gasket	419-8663	278-0222	Housing-Brake	523-0570	1B-4102	Bearing-Ball	399-4426
221-6985	Retainer	399-4406	278-0223	Housing-Brake	456-0554	1B-5675	Bearing	377-7396
221-9755	Gear-Planet	390-5293	278-0224	Housing-Brake	523-0571	1B-6577	Cone-Spl Tapered	374-1839
222-0862	Housing	419-1860	282-4348	Kit-Dt Gasket	419-8665	1H-4493	Cone-Spl Tapered	386-4939
223-1101	Kit-Dt Gasket	451-1505	282-6648	Kit-Dt Gasket	396-9955	1H-5338	Cup-Roller Brg	374-8345
226-0930	Gear-Transfer	394-0888	288-2551	Kit-Dt Gasket	396-9958	1H-8937	Drum-CI Brake	226-7993
229-2949	Rod As.- Track	347-0486	288-2552	Kit-Gasket-TXG	391-9884	1J-2860	Cup-Spl Tapered	374-8347
229-2950	Rod As.- Track	347-0487	292-5516	Kit-Dt Gasket	391-9885	1J-4757	Cone-Bearing	374-1840
233-9748	Disc-Friction	417-9502	297-6870	Kit-Dt Gasket	451-1510	1L-7205	Bearing-Ball	416-2167
234-4251	Bearing-Sleeve	491-2035	297-6872	Kit-Dt Gasket	394-8228	1L-7319	Cup-Roller Brg	380-7499
234-4589	Rod As	495-2553	310-6159	Spider	463-7670	1M-0176	Flange-Drum	223-4810
236-6276	Bearing-Sleeve	526-3046	312-0782	Worm-Circ Drv	282-6623	1M-1947	Support As	226-6096
236-8675	Disc-Friction	428-7202	319-5239	Wheel	396-9956	1M-1994	Bearing As-Rlr	399-6066
237-2859	Bearing-Rlr	368-0125	328-4374	Disc-Friction	384-5966	1M-4095	Bearing-Inner	417-9486
239-9956	Brake Disc	347-0485	328-4375	Disc-Friction	443-1922	1M-4167	Shaft-Planet	219-9700
240-2914	Bearing-Sleeve	526-9327	331-8538	Seal-Wheel	391-9874	1M-6573	Cup-Roller Brg	399-4438
240-6899	Kit-Seal-H.Cyl-1	492-2513	334-1032	Disc-Friction	440-3116	1M-7912	Cone-Roller Brg	380-7503
241-1397	Kit-Dt Gasket	434-7286	334-1033	Disc-Friction	394-8242	1M-8776	Bearing-Roller	417-4516
241-1399	Kit-Dt Gasket	394-9211	334-1034	Disc-Friction	518-3984	1M-8923	Race-Brg Outer	440-3117
241-7340	Bearing-Sleeve	419-0884	335-6121	Gear-Ring	492-3491	1M-9177	Plate-CI Press	226-6112
241-7341	Bearing-Sleeve	526-3049	336-4979	Kit-Gasket(Dt)	451-1511	1M-9444	Retainer-Spring	299-2046
241-7342	Bearing-Sleeve	528-7159	346-2033	Plate	518-3985	1P-0579	Housing As	219-9678
241-7379	Bearing-Sleeve	528-7160	352-1053	Kit-Dt Gasket	447-0829	1P-0623	Bearing	420-3224
241-7380	Bearing-Sleeve	526-3050	353-0611	Drive Gp-Final-D	523-0574	1P-1897	Gear-Final Drive	215-1670
241-7382	Bearing-Sleeve	526-3051	354-1305	Gear-Sun	523-0575	1P-1943	Gear-Idler & First	446-3067
243-0723	Kit-Dt Gasket	391-9886	357-0450	Disc-Friction	492-1895	1P-2636	Cup-Roller Brg	396-4147
243-0725	Kit-Dt Gasket	396-9953	358-9117	Gear-Planet	380-7490	1P-2662	Cone-Roller Brg	374-1851
243-0726	Kit-Dt Gasket	394-9210	368-0297	Plate-Clutch	377-7420	1P-2694	Cone-Rlr Brg	374-1841
243-0727	Kit-Dt Gasket	451-1506	372-0730	Gear-Ring	518-3988	1P-2695	Cup-Rlr Brg	374-8344
243-0728	Kit-Dt Gasket	394-9206	392-6301	Kit-Spider & Brg	390-0915	1P-2696	Cone-Bearing	374-1834
243-0729	Kit-Dt Gasket	434-7287	443-2029	Converter As	528-7182	1P-3934	Cup-Roller Brg	420-6535
243-0731	Kit-Dt Gasket	451-1507	450-0595	Chain Gp	390-5262	1P-3935	Cone-Roller Brg	377-7397
244-2310	Gear-Planet	518-6085	458-3635	Piston-Clutch	281-1693	1P-3958	Bearing-Spl	434-6114
246-5916	Kit-Seal-H.Cyl-1	472-8026	463-9184	Carrier-Planet	393-1015	1P-4110	Disc-Friction	433-9858
247-7143	Yoke	451-9025	483-1058	Yoke -1710	319-3479	1P-4147	Bearing-Rlr As	417-4507
24-78751	Rod As	493-5539	0R-1628	Hub-Gear	219-2977	1P-4693	Cup-Rlr Bearing	377-7398
247-8812	Rod As	493-5524	0R-1635	Hub-Gear	222-1763	1P-4694	Cone-Roller Brg	380-7504
249-7870	Gear-Sun	526-0602	0R-1642	Hub-Gear	219-2976	1P-4695	Cup-Rlr Bearing	374-1842
250-1845	Disc-Friction	523-5969	0R-1643	Hub-Gear	219-2975	1P-4696	Cone-Rlr Bearing	374-1843
252-5650	Rim As	397-5067	0R-1648	Hub-Gear	221-1056	1P-6265	Gear-Bevel	221-9177
257-0424	Shaft	421-8170	1A-3987	Disc-Ster CI Dr	230-7119	1P-7522	Yoke As	382-6893
262-4335	Kit - Dt Gasket	434-7288	1B-3897	Cone-Roller Brg	418-9611	1P-7590	Support As-FR	213-4400
262-4338	Kit - Dt Gasket	451-1508	1B-3922	Cup-Roller Brg	416-2158			
262-4339	Kit-Dt Gasket	451-1509	1B-3924	Cone-Roller Brg	422-6482			
264-2769	Bearing As.-Spl	419-8664	1B-3934	Cup-Roller Brg	392-4487			

# Yellowmark Drive Train Parts

Cat Part Number	Part Name	Yellowmark Part Number
1P-7834	Cup-Bearing	380-7500
1P-7835	Cone-Bearing	377-7399
1P-7895	Cone-Roller Brg	396-4145
1P-8835	Shaft As	215-1672
1P-9593	Cone-Rlr Brg	377-7400
1P-9594	Bearing-Cup	377-7401
1S-0057	Plate-Clutch	377-7404
1S-3743	Bearing-Ball	384-4786
1S-7056	Bearing-Ball	422-6483
1S-8754	Joint Gp-Univ	308-9873
1S-8764	Ring-Fly Clu Adj	226-8014
1S-9670	Univ Jt As	443-2017
1T-0018	Wheel-Impeller	516-7985
1T-0020	Wheel-Turbine	297-4862
1T-0022	Wheel-Impeller	430-8040
1T-0043	Bearing-Ball	390-5294
1T-0051	Wheel-Impeller	388-6582
1T-0079	Wheel-Turbine	382-6894
1T-0210	Bearing-Ball	417-4498
1T-0221	Wheel-Turbine	390-5268
1T-0231	Retainer-Bearing	319-3471
1T-0237	Flange As-Output	239-7929
1T-0256	Gear-Pump Drive	239-7930
1T-0299	Cup-Roller Brg	422-6494
1T-0334	Bearing-Ball	380-1476
1T-0364	Flange-Joint	388-6567
1T-0365	Flange-Joint	434-1861
1T-0387	Wheel-Impeller	522-2286
1T-0406	Wheel-Impeller	384-3854
1T-0421	Flange As-Output	295-5442
1T-0437	Housing-Rotating	295-5685
1T-0438	Retainer-Bearing	295-0410
1T-0441	Bearing-Ball	449-4738
1T-0443	Carrier As-Guide	247-3368
1T-0521	Retainer-Bearing	325-6180
1T-0589	Cup-Roller Brg	386-4942
1T-0595	Carrier-Wheel	239-7939
1T-0610	Bearing-Ball	396-4136
1T-0633	Impeller-Conv	390-5266
1T-0655	Bearing-Thrust	377-7409
1T-0660	Impeller-Conv	388-6595
1T-0669	Housing-Rotating	516-7986
1T-0679	Roller-Freewheel	384-4797
1T-0686	Race-Brg Thrust	380-7464
1T-0699	Impeller-Conv	235-1808
1T-0737	Race-Spl Thrust	384-4798

Cat Part Number	Part Name	Yellowmark Part Number
1T-0762	Race-Thrust	384-4803
1T-0781	Impeller	380-7488
1T-0782	Turbine-Conv	377-7410
1T-0787	Plate-Freewheel	430-8131
1T-0807	Race-Thrust Brg	453-3651
1T-0841	Impeller-Conv	544-0278
1T-0842	Turbine-Conv	516-7987
1T-0861	Impeller-Conv	421-1715
1T-0876	Hub-Turbine	397-5058
1T-0930	TC Gp-Basic	388-6566
1T-1016	Carrier-Guide	388-6584
1T-1033	Plate-CI Backing	431-4136
1T-1051	Impeller-Conv	388-6598
1T-1053	Turbine As - Conv	377-7412
1T-1078	Bearing-Thrust	384-4802
1T-1079	Hub-Impeller	416-2152
1T-1278	Bearing-Thrust	370-8370
1T-1281	Retainer-Brg	390-0924
1T-1282	Race-Brg Thrust	373-1755
1T-1331	Stat or- Converter	229-8237
1T-1333	Carrier As	445-9250
1T-1348	Support As-Carr	419-4049
1T-1386	Yoke-Univ Joint	325-6239
1T-1389	Carrier-Bearing	247-4124
1T-1399	Impeller-Conv	391-9829
1T-1401	Ring-Seal	384-4799
1T-1428	Retainer-Brg	300-2587
1T-1446	Impeller-Conv	377-7413
1T-1494	Impeller-Conv	388-6564
1T-1562	Wheel As-Guide	388-6580
1T-1607	Spider As	434-9637
1T-1639	Ring	513-2465
1T-1647	Impeller-Conv	377-7415
1T-1691	Impeller-Conv	297-4863
1T-1701	Carrier-Stat or	384-3853
1T-1804	Stator As-Conv	388-0572
1T-1805	Turbine-Conv	380-1490
1T-1841	TC Gp-Basic	516-0765
1T-1880	Carrier-Ring	295-0408
1T-1953	Impeller-Conv	523-0531
1T-1981	Stator As-Conv	377-7416
1T-1987	Housing-Rotating	297-4864
1T-1988	Shaft-Output	428-6656
1T-1991	Stator As-Conv	380-1482
1T-1993	Wheel-Turbine	235-0920
1T-2041	Carrier As	396-9893
1T-2048	Carrier As-Stat	472-8038
1T-2050	Carrier As-Stat	325-6040

Cat Part Number	Part Name	Yellowmark Part Number
1T-2052	Stat or As.	295-5683
1U-0145	Bearing-Thrust	417-9482
1V-0188	Disc	386-4943
1V-8280	Plate	382-6889
1V-8604	Gear-Ring	308-9853
1V-8606	Gear-Sun	308-9860
1V-9822	Shaft-Pin (Bev)	539-8554
1W-4506	Adapter-Seal	372-7515
3B-3967	Race-Roller Brg	386-4947
3B-4124	Cup-Spl Tapered	422-6481
3B-8845	Bearing-Inner	417-4509
3D-5315	Pinion-Dif Bevel	308-9856
3D-9126	Cup-Roller Brg	399-4435
3D-9132	Cone-Roller Brg	453-3652
3D-9133	Cup-Roller Brg	418-9601
3E-4880	Coupling As	417-9465
3F-1396	Cone-Roller Brg	524-1288
3F-1972	Retainer As	226-7988
3F-3049	Cone-Roller Brg	418-9600
3F-6492	Ballstud	388-0588
3G-3521	Bearing	380-7513
3G-5337	Bearing-Spher	418-9602
3H-1996	Bearing-Ball	380-1498
3J-3493	Ballstud	256-4832
3K-0158	Seal-Lip Type	513-2466
3K-0526	Bearing-Ball	386-4949
3K-2230	Gear-Planet	219-9658
3K-4290	Rod End	374-1823
3K-7020	Gear-Planet	221-9074
3K-7110	Gear-Planet	253-1435
3L-1425	Bearing-Ball	311-9356
3L-9409	Cup-Roller Brg	399-4436
3L-9410	Cone-Spl Tapered	391-9899
3N-6411	Cup-Rlr Bearing	423-7759
3N-8463	Bearing-Roller	394-9193
3P-0296	Gear	416-2149
3P-0297	Shaft As	275-5297
3P-0298	Carrier-Input	384-5922
3P-0329	Drum As-Gear	544-0276
3P-0329	Drum As-Gear	544-0276
3P-0343	Gear-Idler	516-7988
3P-0726	Shaft As	275-5298
3P-0786	Coupling	433-0440
3P-0801	Plate-Clutch	383-2119
3P-0894	Shaft As-Planet	302-3446
3P-0895	Bearing-Spl -Ball	394-9184
3P-0951	Bearing-Spl Ball	416-2159
3P-0953	Bearing-Spl Ball	512-6464

# Yellowmark Drive Train Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
3P-1210	Cone-Roller Brg	399-4433	3P-9366	Piston-Clutch	391-9861	48-62947	Yoke As	302-2702
3P-1609	Carrier-Planet	302-4292	3P-9394	Shaft-Planet	215-1680	4B-7255	Cone-Bearing	386-4951
3P-1619	Gear-Transfer	468-5017	3S-0040	Plate-Clutch	384-4796	4B-7270	Cone-Bearing	399-4439
3P-1621	Carrier As	526-0259	3S-0044	Plate-Clutch	377-7424	4B-9373	Cone-Roller Brg	399-4440
3P-1624	Flange As	468-5018	3S-1404	Bearing-Outer	417-4508	4B-9374	Bearing-Cup	380-7494
3P-1651	Piston As	302-4296	3S-1691	Disc-Steer Cl Dr	302-2705	4C-1627	Shaft-Axle	523-0535
3P-1686	Plate-Clutch	388-0586	3S-4646	Bearing-Roller	419-2302	4D-2619	Bearing	417-4494
3P-1687	Plate-Clutch	428-6658	3S-7153	Gear-Sliding	227-0024	4D-3151	Bearing As-Rlr	502-6873
3P-1691	Housing As	432-5219	3S-7504	Gear-Idler	226-6084	4D-3882	Cone-Roller Brg	399-6060
3P-1697	Coupling	390-0911	3S-7987	Shaft-Planet	226-6074	4D-4065	Rod End-Spher	374-1824
3P-2414	Housing-Clutch	391-9831	3S-8055	Bearing-Inner	433-7506	4D-4324	Cone-Spl Tapered	420-6534
3P-2415	Carrier-Planet	396-0653	3S-8634	Hub-Gear	219-2977	4D-4325	Cup-Spl Tapered	420-6533
3P-2564	Race-Brg Outer	417-9480	3S-9669	Bearing	416-2168	4D-6664	Coupling-Shaft	243-0338
3P-2582	Bearing-Spl Ball	417-9478	3S-9919	Shaft As	239-7959	4D-6926	Segment-Control	228-9455
3P-2685	Piston-Clutch	308-9908	3T-1407	Disc-Friction	392-4516	4D-7534	Bearing As-Rlr	441-5602
3P-2759	Carrier-Planet	394-9820	3T-1898	Drum	219-9674	4E-0209	Seal	491-2021
3P-2761	Housing-Clutch	430-8994	3T-1899	Drum	219-9690	4E-0403	Gear-Planet	260-0781
3P-2822	Retainer	422-3509	3T-1921	Drum-Cl Inner	229-8227	4E-0752	Joint Gp-Univ	435-0197
3P-2852	Clutch-Hub	301-4902	3T-2139	Housing As-Cl	394-2583	4E-2138	Gear-Sun	399-4401
3P-2854	Shaft As-Clutch	416-2127	3T-2145	Carrier As	325-6041	4E-2165	Gear-Sun	376-9070
3P-2855	Plate-Clutch	377-7422	3T-4008	Gear-Planet	295-5444	4E-2166	Carrier-Planet	373-5383
3P-2863	Gear-Idler	399-6044	3T-4009	Gear-Ring	544-0270	4E-2168	Piston	375-2623
3P-2871	Case-Final Drive	398-2939	3T-4011	Shaft As-Planet	295-5698	4E-3604	Joint Gp-Univ	421-5542
3P-2872	Case-Final Drive	390-5296	3T-4384	Housing As-Cl	435-2573	4E-3751	Yoke As	451-0750
3P-2983	Gear-Sun	417-9468	3T-4568	Shaft-Planet	314-8712	4E-7717	Shaft-Sprocket	432-6606
3P-3059	Gear-Sun	308-9861	3T-4824	Gear-Planet	295-5699	4E-8534	Retainer-Seal	300-2588
3P-3208	Flange-Joint	301-4647	3T-5021	Carrier-Planet	295-5700	4E-8535	Retainer-Seal	300-2589
3P-3241	Plate-Pressure	325-6167	3T-5100	Hub-Impeller	451-9022	4E-9426	Collar	231-0000
3P-3242	Shaft-Planet	308-9923	3T-5102	Impelle-Conv	416-2125	4E-9658	Joint Gp-Slip	452-9553
3P-3245	Shaft-Planet	308-9924	3T-5200	Carrier-Planet	295-5701	4F-2041	Cup-Roller Brg	418-9609
3P-3246	Shaft-Planet	308-9925	3T-5419	Impeller-Conv	416-2144	4F-2393	Bearing-Ball	380-1499
3P-3735	Housing As	391-9830	3T-5929	Gear	288-8718	4F-6066	Guard-Dirt	502-3590
3P-3738	Housing As	385-7196	3T-6175	Gear-Transfer	398-8351	4H-4021	Plate As-Loading	229-8219
3P-3739	Carrier As	431-4032	3T-6176	Gear-Transfer	398-8350	4H-4615	Cone-Rlr Brg	499-4298
3P-4265	Piston-Clutch	397-5063	3T-8904	Yoke As	443-2056	4J-1999	Ballstud	314-8625
3P-5349	Piston As	275-5292	3T-9960	Disc-Friction	417-9487	4K-0255	Retainer As	226-6102
3P-5672	Yoke	223-6313	3V-0593	Rim As	418-9568	4K-1328	Drum-Ster Cl Dr	216-7840
3P-5736	Hub-Gear	219-2975	3V-4046	Plate-Pressure	380-7470	4K-6212	Shaft-Bev Pinion	223-4806
3P-5737	Shaft As-Clutch	275-5273	3V-5148	Pinion-Swing Gr	231-0251	4K-6736	Drum-Brake	223-6320
3P-5754	Hub-Gear	219-2976	3V-5317	Gear	231-0010	4K-7269	Support-Trun-Frt	299-2067
3P-5955	Disc-Friction	428-7205	3V-7065	Plate	380-1487	4K-7270	Support-Trunnion	373-5384
3P-6318	Flange-Drum	213-8165	3V-8777	Gear-Spiral	541-4956	4K-7420	Retainer	297-7234
3P-6584	Hub-Gear	221-1056	3W-2414	CouplingAs	523-5959	4K-7467	Bearing As-Rlr	380-1500
3P-7042	Housing-Clutch	390-0912	3W-5159	Plate-Parking Bk	391-9904	4K-7556	Yoke	385-6118
3P-7489	Plate-Clutch	377-7423	3W-5501	Gear-Planet	288-8719	4K-9598	Retainer	297-7235
3P-7640	Gear-Ctrshft	325-6093	3W-6551	Shaft	295-5702	4M-3915	Bearing-Caged	377-7427
3P-7641	Gear-Ctrshft	325-6094	3W-6555	Shaft	295-5703	4M-5226	Bearing-Ball	399-6061
3P-7643	Gear-Pinion Shft	302-2669	3W-8570	Bearing	416-2136	4M-5858	Bearing-Spl Ball	417-4495
3P-8393	Plate-Clutch	388-0592	3Y-7992	Gear & Pinion	524-1280			

# Yellowmark Drive Train Parts

Cat Part Number	Part Name	Yellowmark Part Number
4M-6107	Bearing-Roller	380-7507
4N-0432	Bearing-Ball	417-4499
4S-5891	Plate-Clutch	388-0575
4S-5932	Housing-Clutch	566-2653
4S-5937	Housing-Clutch	566-2659
4S-5943	Piston-Clutch	221-9112
4S-5944	Gear-Sun	567-5863
4S-5947	Gear-Ring	567-5868
4S-5948	Gear-Ring	567-5869
4S-6189	Pinion-Reverse	226-6077
4S-6707	Piston-Clutch	215-1686
4S-8005	Pinion-Fdr	226-6076
4S-8530	Shaft-Planet	221-9111
4S-8534	Shaft As-Planet	221-9116
4S-8538	Bearing-Spl Ball	417-4502
4S-8670	Shaft-Planet	300-2590
4S-8687	Piston-Clutch	226-8008
4S-8708	Housing-Clutch	216-3557
4S-9073	Disc-Friction	566-2095
4S-9325	Race-Spl Rlr Brg	418-9590
4S-9326	Bearing	417-4506
4S-9782	Race & Roller As	385-3779
4S-9783	Race-Rlr Bearing	418-9589
4T-1684	Bearing	377-7428
4T-5495	Ballstud	314-8626
4V-0092	Hub As	396-9934
4V-0093	Gear-Planet	394-9826
4V-0094	Shaft-Planet	380-1486
4V-2057	Bearing-Spher	419-6019
4V-2518	Shaft	297-7243
4V-2744	Gear	224-1303
4V-3396	Hub-Gear	222-1763
4V-3842	Support-Trunnion	396-9935
4V-4079	Spider	526-0020
4V-4483	Plate-Lock	396-9933
4V-4852	Piston	433-0452
4V-5100	Support-Trunnion	299-2068
4V-5213	Spindle	299-2060
4V-5388	Shaft-Bev Pinion	297-7244
4V-5392	Spider	377-7430
4V-5393	Gear-Bevel	297-7189
4V-5394	Gear-Diff	297-7177
4V-6527	Disc	376-9050
4V-7082	Joint Gp-Slip	367-6068
4V-7543	Retainer	281-1699
4V-7545	Gear-Ring	394-9823
4V-7725	Piston	394-2581
4V-8534	Shaft-Planet	281-1700

Cat Part Number	Part Name	Yellowmark Part Number
4V-8535	Hub As	423-9669
4V-8538	Gear-Ring	288-8720
4V-8611	Yoke As	418-9567
4V-9577	Shaft-Planet	231-0001
4W-1203	Cup-Rlr Brg	418-9603
4Y-0709	Disc-Friction	377-7431
5A-4003	Shaft-Sprocket	229-8228
5A-5740	Gear-Sliding	229-8229
5A-7840	Shaft-Tr Sprkt	215-1687
5A-7841	Hub-Gear	526-3813
5A-9551	Gear-FinalDrive	226-7979
5C-0857	Plate-Mating	376-3624
5C-1834	Gear	231-0002
5C-3712	Gear	231-0003
5C-3714	Gear	231-0222
5C-3715	Gear	231-0223
5C-3717	Gear	231-0225
5C-5236	Gear	231-0226
5C-8584	Gear-Planet	231-0006
5D-2989	Bearing	380-7511
5D-4799	Bearing-Roller	416-2160
5D-6296	Cone-Spl Tapered	399-6062
5D-6298	Cup-Spl Tapered	399-6063
5D-6657	Race-Spl	417-4530
5D-6659	Bearing	417-4511
5D-7449	Cup-Spl Tapered	416-2161
5D-8153	Shaft-Drive	421-8180
5D-9675	Spider	394-9203
5D-9906	Shaft-Axle	228-9413
5F-1248	Cone-Roller Brg	399-4441
5F-2465	Cup-Roller Brg	447-8060
5F-2830	Bearing-Needle	384-5925
5F-8651	Bearing-Ball	420-3223
5G-4381	Yoke As	469-4662
5G-5846	Pinion	418-9585
5G-8708	Drum	384-4794
5H-0047	Disc-CI Drive	388-0576
5H-5500	Collar-Fly CI	302-2704
5J-6424	Bearing-Aligning	416-2135
5J-9348	Bearing As	416-2162
5J-9451	Bearing	374-8338
5K-1068	Retainer-Seal	260-0786
5K-2294	Bearing	396-9912
5K-3171	Plate-Coupling	417-9475
5K-3929	Bearing As-Rlr	416-2163
5K-3967	Yoke As	308-9946
5K-8591	Bearing-Outer	380-7502
5L-2030	Cone-Roller Brg	418-9614

Cat Part Number	Part Name	Yellowmark Part Number
5L-2031	Cup-Roller Brg	384-5927
5L-5772	Race & Roller As	394-9200
5L-6326	Bearing-Ball	420-3222
5L-9656	Cone-Bearing	399-4448
5M-0549	Gear-Trans	215-1689
5M-0578	Bearing	419-7775
5M-1988	Piston-Steer CI	219-9691
5M-1990	Pilot-CI Piston	229-8233
5M-2051	Bearing-Caged	380-7467
5M-2054	Bearing	380-7510
5M-3499	Shaft-Planet	319-3475
5M-3941	Shaft-Planet	215-1691
5M-3942	Shaft-Planet	215-1692
5M-3947	Shaft-Planet	566-3446
5M-3996	Gear-Ring	214-0527
5M-4427	Gear-Sun	214-0529
5M-5018	Bearing-Roller	380-7509
5M-5073	Joint Gp-Univ	325-6113
5M-5075	Cap-Shaft Brg	526-0038
5M-6120	Gear-Sun	213-8740
5M-6126	Bearing	377-7433
5M-6198	Shaft-Planet	215-1694
5M-6199	Shaft As-Planet	215-1694
5M-6208	Gear-Ring	247-4121
5M-6210	Shaft-Planet	219-9683
5M-6211	Shaft-Planet	219-9684
5M-6636	Support-Frame	540-4300
5M-6651	Hub-Gear	211-2135
5M-6670	Shaft-Sprocket	216-7847
5M-7342	Flange-Shaft	215-1696
5M-7344	Gear-Fifth	213-8741
5M-7740	Gear-Bevel	539-8556
5M-7841	Gear-Ring	214-0525
5M-7869	Gear-Ring	214-0530
5M-7875	Carrier-Front	213-4495
5M-7882	Joint Gp-Univ	297-7210
5M-7923	Shaft-Output	215-1697
5M-7936	Bearing-Outer	386-4953
5M-9644	Bearing-Outer	384-5929
5N-1932	Shaft-Clutch	425-0216
5P-0403	Bearing-Roller	420-6542
5P-1370	Bearing As-Rlr	416-2164
5P-1949	Cup-Rlr Bearing	415-1916
5P-2448	Bearing-Ball	399-6064
5P-2503	Cup-Rlr Bearing	384-5930
5P-2504	Cone-Rlr Bearing	420-6541
5P-2526	Cup-Rlr Bearing	380-7498

# Yellowmark Drive Train Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
5P-3489	Race-Brg Outer	396-9905	5T-5158	Camshaft-RH	394-9190	6I-8916	Disc-Friction	566-2028
5P-3490	Cone-Rlr Bearing	380-7518	5T-5682	DriveR	418-9579	6I-9103	Bearing-Outer	421-8182
5P-3930	Bearing As-Rlr	419-6022	5T-7124	Housing	526-0039	6I-9507	Piston-Clutch	417-9470
5P-4992	Bearing-Ball	380-1507	5T-7129	Housing	472-8013	6I-9508	Piston-Clutch	390-5274
5P-5044	Race-Brg Outer	417-9479	5T-8739	Spider Gp-Brg&	373-5386	6I-9509	Plate	398-2960
5P-5045	Bearing-Spl Ball	415-1917	5V-1168	Spider & Brg As	377-7435	6I-9784	Carrier-Planet	535-9626
5P-5066	Bearing-Outer	416-2165	5V-1274	Spider	385-6110	6I-9786	Gear-Ring	518-3994
5P-5067	Race-Spl Rlr Brg	396-4137	5V-2972	Joint Gp-Univ	528-7169	6I-9788	Gear-Planet	518-6082
5P-5167	Race-Brg Outer	417-4529	5V-4573	Disc	388-0591	6I-9808	Bearing-Ball	417-9484
5P-5354	Cup-Rlr Bearing	399-4445	5V-5917	Pinion-Diff	297-7224	6K-2034	Shaft	544-0277
5P-5410	Bearing-Spl Ball	396-4134	5V-6125	Diaphragm	384-5931	6K-2085	Shaft-Bev Pinion	539-8557
5P-5411	Race-Brg Outer	417-9481	5V-6327	Yoke-Flange Bk	391-1086	6K-2707	Plate-Lock	319-3470
5P-6254	Bearing	42-02495	5V-6328	Yoke As	451-9035	6K-3674	Shaft-Bev Pinion	253-1427
5P-6982	Bearing-Ball	39-24501	5V-7222	Gear-Final Drive	231-0237	6K-4442	Rod End-Special	373-5388
5P-7487	Bearing-Aligning	434-3300	5Y-0154	Spider	566-9156	6K-4597	Yoke As	446-3069
5P-7802	Bearing-Aligning	420-2496	6B-3223	Cup-Bearing	399-6065	6K-4599	Yoke As	385-6111
5P-7807	Bearing-Ball	314-8502	6B-5163	Bearing	417-4514	6K-4600	Yoke	226-5993
5P-8043	Bearing-Cone	423-6989	6B-7178	Fork-Band Adj	299-2009	6K-4617	Shaft-Sprocket	221-7951
5P-8876	Cup-Rlr Bearing	416-2170	6C-0739	Carrier As	231-0012	6K-5528	Cup-Roller Brg	447-8059
5P-9176	Bearing	396-4141	6C-3500	Shaft-Bev Pinion	384-4788	6K-5625	Gear-Bevel	253-1438
5P-9177	Race-Brg Inner	396-4139	6C-5062	Pinion	231-0016	6K-5745	Retainer-Bearing	330-9281
5P-9301	Bearing-Spl Ball	417-4496	6D-0738	Pinion-Dif Bevel	394-9840	6K-5746	Bearing-Roller	417-4503
5P-9439	Bearing-Spl Ball	371-4306	6D-1734	Cup-Roller Brg	416-2171	6K-5899	Yoke	520-6381
5P-9505	Cone-Roller Brg	420-6540	6D-2348	Disc-Friction	380-7489	6K-7356	Yoke As	330-9296
5P-9514	Bearing-Ball	417-9467	6D-2529	Spider & Brg As	500-0377	6K-8088	Bearing-Roller	399-4428
5P-9531	Cone-Rlr Bearing	386-4956	6D-4671	Ballstud	420-6530	6K-8275	Cone-Roller Brg	399-6070
5P-9538	Bearing-Roller	421-8183	6D-7712	Pinion As	528-7170	6P-0169	Hub-Fly Clutch	297-7204
5P-9769	Cone-Rlr Bearing	422-6486	6F-2956	Cup-Spl Tapered	420-6538	6P-0236	Guide-Lever	422-6475
5P-9962	Bearing-Aligning	399-4397	6G-0387	Disc	394-2579	6P-0549	Guard Wear	223-4812
5S-0192	Pinion-Fdr	215-1698	6G-0389	Spider	384-4800	6P-0593	Bearing-Roller	386-4959
5S-0464	Gear-First Red	216-7852	6G-0400	Shaft-Drive	399-4403	6P-0748	Carrier-Planet	373-5389
5S-0465	Pinion-Reduction	566-3375	6G-2707	Shaft-Axle	422-2650	6P-1407	Screen-Suction	525-2498
5S-4428	Joint-Drive	499-4299	6G-2749	Camshaft	422-4933	6P-2233	Gear-Planet	281-1690
5S-4442	Bearing-Spl Ball	419-6025	6G-2750	Camshaft	422-4927	6P-2234	Gear-Planet	380-1479
5S-4493	Carrier-Planet	566-9654	6G-5704	Piston	394-9838	6P-2473	Gear-Ring	449-9834
5S-4863	Holder As-Cage	215-1732	6G-7213	Carrier-Planet	396-9936	6P-2474	Gear-Ring	480-8277
5S-6531	Holder As-Cage	214-2078	6H-2577	Spider Gp-Brg&	333-4954	6P-2776	Gear-Final Drive	217-7718
5S-6978	Shaft-Planet	221-9103	6H-3566	Cone-Bearing	415-1918	6P-2923	Yoke As	382-6891
5S-7010	Shaft-Planet	221-9104	6H-3957	Bearing-Ball	311-9358	6P-3593	Support	229-8231
5S-7013	Gear-Ring	567-5877	6I-3907	Adapter-Pilot	398-8348	6P-3597	Retainer	222-1770
5S-7023	Carrier-Planet	566-9157	6I-6583	Gear-Sun	526-0043	6P-3735	Shaft-Planet	368-0103
5S-7894	Flange As	216-7854	6I-6585	Gear-Planet	526-0260	6P-3904	Retainer-Bearing	396-0644
5S-8767	Gear-First	226-6085	6I-8132	Pinion	226-6080	6P-5404	Plate-Cl & Brake	325-6168
5T-0975	Camshaft-Brake	422-4935	6I-8500	Plate-Clutch	377-7436	6P-6739	Shaft-Planet	308-9929
5T-0999	Camshaft-Brake	422-4934	6I-8510	Housing As - Clu	373-5387	6P-7742	Shaft-Planet	281-1695
5T-1362	Univ Joint As-5C	325-6011	6I-8642	Race-Brg Outer	396-9898	6P-7743	Shaft-Planet	281-1696
5T-5157	Camshaft-LH	394-9189	6I-8849	Cone-Rlr Bearing	415-1919	6P-7968	Plate-Clutch	416-2133
			6I-8860	Cup-Roller Brg	380-7495	6P-8003	Gear-Planet	281-1689
						6P-8005	Gear-Planet	281-1691

# Yellowmark Drive Train Parts

Cat Part Number	Part Name	Yellowmark Part Number
6S-2828	Cup-Roller Brg	384-5932
6S-3051	Cup-Rlr Brg	415-1928
6S-3158	Yoke	380-1478
6S-3203	Drum-Ster Cl	388-0590
6S-3397	Shaft-Ster Cl	388-6593
6S-3398	Drum-Cl Driving	390-5279
6S-3490	Gear-Planet	506-5622
6S-3976	Bearing	388-0589
6S-6009	Yoke-Univ Joint	446-3070
6S-6031	Cup-Rlr Brg	415-1920
6S-6032	Cone-Rlr Brg	415-1921
6S-6902	Spider & Brg As	390-5280
6T-0064	Shaft-Planet	295-6442
6T-0239	Piston	418-9591
6T-0243	Plate-Thrust	325-6169
6T-0275	Carrier	520-2881
6T-0443	Pinion-Sft & Bev	567-5838
6T-1705	Shaft-Pump Drive	283-5201
6T-1996	Plate-Clutch	368-0117
6T-2975	Retainer	420-3219
6T-3080	Plate-Cl & Brake	325-6170
6T-3324	Housing As-Cl	391-9827
6T-3726	Carrier As	390-5269
6T-4481	Shaft-Planet	221-7946
6T-5383	Gear-Ring	375-2624
6T-6779	Housing As-Clu	398-2962
6T-6987	Piston	492-3492
6T-7882	Gear-Planet	296-1352
6T-8250	Retainer	319-3473
6T-8886	Disc-Ster Cl	380-7517
6V-0327	Cup-Rlr Brg	399-4444
6V-0328	Cone-Rlr Brg	399-4442
6V-0329	Cone-Rlr Brg	396-4142
6V-0330	Cup-Rlr Brg	422-6487
6V-0347	Cone-Spl Tapered	420-6537
6V-0538	Bearing-Spl Ball	398-2935
6V-0662	Cup-Rlr Brg	420-6539
6V-0664	Cone-Rlr Brg	423-6990
6V-0832	Cone-Rlr Bearing	453-3654
6V-1013	Bearing	396-4140
6V-1014	Race-Spl Rlr Brg	416-2173
6V-1194	CUP-Rlr Brg	499-4300
6V-1781	Bearing-Spl Ball	380-1508
6V-2202	Bearing-Spl Ball	380-1574
6V-4350	Race-Spl Rlr Brg	384-5933
6V-4582	Bearing-Ball	380-1504
6V-5003	Bearing-Aligning	420-2498

Cat Part Number	Part Name	Yellowmark Part Number
6V-5413	Gasket Kit	390-5291
6V-5414	Gasket Kit	434-7289
6V-7476	Kit-Dt Gasket	390-5282
6V-8795	Bearing-Cone	500-0378
6W-1958	Element	390-5284
6W-2899	Shaft-Pinion	446-3057
6W-2900	Gear-Bevel	541-4957
6W-3662	Ring-Drive	446-3079
6W-4281	Yoke-Flange	308-9949
6W-4751	Yoke As	398-8337
6W-4755	Joint Gp-Univ	396-9924
6W-4789	Shaft Gp-Drive-D	452-0444
6W-7290	Shaft-Planet	308-9930
6Y-0061	Gear-Sun	524-1289
6Y-0209	Cone-Roller Brg	566-3148
6Y-0579	Coupling	434-9636
6Y-0926	Gear-Planet	295-6427
6Y-0984	Gear-Ring	295-6428
6Y-1031	Cone-Rlr Bearing	434-5098
6Y-1032	Cup-Rlr Bearing	434-5097
6Y-1084	Impeller-Conv	380-1477
6Y-1089	Turbine-Conv	385-6112
6Y-1090	Stat or-Converter	385-6113
6Y-1300	Disc-Friction	492-1891
6Y-1320	Plate-Clutch	384-5935
6Y-1603	Housing-Clutch	438-1818
6Y-1604	Carrier As	468-9790
6Y-2027	Disc-Friction	377-7441
6Y-2109	Carrier-Seal	524-1291
6Y-2539	Cone-Roller Brg	464-4050
6Y-2540	Cup-Roller Brg	434-8985
6Y-2689	Coupler	422-3508
6Y-3148	Shaft-Output	524-1292
6Y-3151	Stat or-Converter	388-6562
6Y-3484	Bearing-Spl Ball	416-2166
6Y-3955	Bearing-Ball	417-9485
6Y-4457	Bearing-Aligning	420-2504
6Y-4573	Carrier As	421-7243
6Y-4689	Bearing-Aligning	420-6532
6Y-4819	Carrier-Planet	296-1348
6Y-4846	Carrier-Planet	524-1293
6Y-5348	Disc-Friction	384-4827
6Y-5352	Disc-Friction	492-3486
6Y-5692	Plate-Brake	380-7492
6Y-5913	Disc-Friction	391-9836
6Y-5914	Disc-Friction	390-5265
6Y-5915	Disc-Friction	384-5936
6Y-5916	Disc-Friction	377-7442
6Y-6832	Bearing-Rlr As	421-8181

Cat Part Number	Part Name	Yellowmark Part Number
6Y-6931	Shaft As	517-3624
6Y-6932	Carrier-Planet	525-2494
6Y-7466	Shaft As-Input	566-2103
6Y-7652	Cup-Rlr Brg	399-6067
6Y-7909	Disc-Friction	374-4676
6Y-7914	Disc-Friction	390-5264
6Y-7916	Disc-Friction	428-7204
6Y-7919	Disc-Friction	501-1056
6Y-7920	Disc-Friction	388-0587
6Y-7922	Disc-Friction	492-1892
6Y-7929	Disc-Friction	456-0555
6Y-7932	Disc-Friction	492-1893
6Y-7934	Disc-Friction	384-5937
6Y-7935	Disc-Friction	383-2121
6Y-7946	Disc-Friction	384-4801
6Y-7954	Disc-Friction	520-4220
6Y-7956	Disc-Friction	374-4677
6Y-7961	Disc-Friction	501-1057
6Y-7962	Disc-Friction	501-2027
6Y-7965	Disc-Friction	392-4518
6Y-7970	Disc-Friction	501-2028
6Y-8255	Shaft-Input	524-7071
6Y-8675	Housing As	418-9584
6Y-9373	Disc-Friction	518-3960
6Y-9713	Gear As-Sun	523-5951
6Y-9885	Bearing-Rlr As	396-9906
7B-5088	Drum-Steer Cl Dr	223-4813
7B-7515	Bearing-Ball	399-6059
7D-4523	Coupling	245-5817
7D-4891	Seal	528-7171
7D-6524	Shaft-Axle	228-8917
7D-7259	Bearing-Roller	394-9201
7D-7442	Hub-Fd Gear	228-8918
7D-7607	Gear-Dif Bevel	388-0595
7D-7889	Gear-Ring	275-5276
7D-8185	Disc	518-3962
7D-8225	Seal-Ring	472-8016
7D-8226	Seal-Ring	472-8017
7D-8348	Cup-Rlr Brg	384-5939
7D-8349	Cone-Rlr Brg	419-6074
7D-8354	Sprocket	398-8335
7D-8434	Disc	377-7443
7D-8437	Cone-Roller Brg	380-1502
7D-8636	Cone-Bearing	418-9606
7D-8637	Cup-Bearing	418-9607
7D-9267	Yoke	330-9297
7F-2742	Bearing-Ball	422-6488
7F-7780	Pin-Anchor	384-4825
7G-0437	Plate-Clutch	417-9466

# Yellowmark Drive Train Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
7G-2037	Joint Gp-Univ	226-8017	7G-7014	Flange-Stub	396-9925	7P-6531	Shaft-Sun Gear	430-5352
7G-2038	Tube-Univ Joint	520-2888	7G-7218	Carrier-Planet	283-5205	7P-8076	Gear-Planet	390-5263
7G-2473	Gear-Planet	221-9101	7G-7610	Gear-Ring	375-2625	7P-9568	Gear-Planet	446-3072
7G-2474	Gear-Planet	300-2577	7G-7611	Gear-Ring	398-2925	7P-9578	Shaft	470-3787
7G-2475	Gear-Planet	223-4815	7G-7612	Gear-Ring	520-2891	7S-3002	Bearing-Spl Ball	386-4961
7G-2476	Gear-Planet	223-4816	7G-7616	Hub-Clutch	526-0599	7S-4000	Piston	416-2143
7G-2480	Gear-Planet	226-6091	7G-7724	Piston-Clutch	283-5206	7S-4497	Gear-Cplg & Sun	444-1842
7G-2481	Gear-Planet	226-6092	7G-8136	Shaft-Output	517-3627	7S-4523	Gear-Ring	419-8799
7G-2487	Gear-Planet	221-9092	7G-9555	Univ Joint As	314-8721	7S-4534	Bearing-Caged	417-9497
7G-2492	Gear-Planet	239-7933	7H-1318	Coupling-Ster Cl	226-8002	7S-6839	Hub-Clutch	399-4407
7G-2494	Gear-Planet	422-2490	7H-4566	Cup-Roller Brg	399-6068	7S-6964	Gear-Ring	214-0532
7G-2496	Gear-Planet	446-3071	7H-6967	Bearing-Ball	422-6489	7S-7625	Support As	226-6095
7G-2500	Gear-Planet	296-1350	7H-7628	Bearing	453-3655	7S-7973	Guard Wear	542-4728
7G-2516	Gear-Planet	283-5203	7I-4187	Yoke-1550	380-1510	7S-7975	Guard Wear	239-7966
7G-2517	Gear-Planet	213-8747	7I-5399	Shaft	421-8178	7S-8572	Gear-Ring	567-5883
7G-2521	Gear-Planet	213-8749	7J-1309	Bearing-Aligning	360-2275	7S-8577	Shaft-Planet	420-6529
7G-2824	Piston	295-6439	7J-3216	Bearing	368-0104	7S-8631	Shaft As	275-5296
7G-2828	Plate-Clutch	325-6171	7J-4083	Piston	396-9907	7T-0119	Support As	299-2066
7G-3451	Gear-Planet	297-7188	7J-5242	Spider & Brg As	450-7548	7T-0341	Support	425-9191
7G-3452	Gear-Planet	275-5290	7J-8210	Cone-Roller Brg	423-6987	7T-1285	Gear-Planet	297-7190
7G-3453	Gear-Planet	377-7444	7J-8893	Cone-Roller Brg	374-1846	7T-2336	Disc-Friction	433-7096
7G-3454	Gear-Planet	300-2578	7J-8894	Bearing-CUP	512-6465	7T-2523	Gear	520-6382
7G-3455	Gear-Planet	300-2582	7K-0442	Univ Joint As	567-5895	7T-2647	Shaft-Output	566-2097
7G-3456	Gear-Planet	300-2583	7K-0449	Yoke As	297-7271	7T-3038	Gear-Reverse	445-1097
7G-3457	Gear-Planet	308-9857	7K-0450	Yoke As	297-7272	7T-3039	Gear	445-1095
7G-3461	Gear-Planet	275-5291	7K-2135	Bearing-Roller	417-4492	7T-3173	Piston-Clutch	346-5680
7G-3707	Piston-Clutch	302-2691	7K-3527	Shaft As-Joint	448-9153	7T-3194	Yoke	346-5681
7G-3711	Gear-Ring	523-0532	7K-3913	Rim As	398-2952	7T-3343	Plate-Clutch	297-7231
7G-4757	Gear-Ring	520-2889	7K-4458	Gear-Final Drive	226-6093	7T-3365	Carrier-Planet	388-6563
7G-4758	Gear-Planet	288-8723	7K-4512	Pinion-Fdr	226-6081	7T-3566	Piston	394-9191
7G-4759	Shaft-Sun Gear	523-5946	7K-4770	Pinion	226-6082	7T-3676	Hub-Reaction	388-6578
7G-4990	Case-XMSN	388-6561	7K-5448	Cup-Bearing	415-1922	7T-4053	Shaft As-Output	398-2940
7G-5444	Carrier-Planet	297-7165	7K-5449	Bearing-Cone	384-4824	7T-4752	Turbine-Conv	416-2148
7G-5445	Carrier-Planet	469-4669	7K-6432	Retainer-Bearing	398-2933	7T-4753	Stat or-Converter	384-5945
7G-5569	Gear-Ring	524-1294	7K-7237	Gear-Planet	231-0009	7T-4754	Impeller-Conv	385-7231
7G-5572	Gear-Sun	300-2580	7K-7431	Hub As	470-3783	7T-5426	Cone-Roller Brg	453-3657
7G-5589	Gear-Ring	281-1692	7K-8237	Drum	226-6100	7T-6578	Gear-Planet	518-6083
7G-5593	Gear-Sun	300-2581	7K-8238	Flange	213-8166	7T-6580	Gear-Ring	517-3628
7G-5594	Gear-Sun	492-3487	7K-8877	Cone-Bearing	374-1847	7T-6581	Shaft-Planet	518-3963
7G-5614	Shaft-Planet	281-1697	7L-7508	Bearing-Ball	420-6536	7T-6652	Cone-Rlr Bearing	416-2124
7G-5746	Housing-Clutch	392-4520	7M-1154	Bearing-Spl	417-4515	7T-6994	Plate	518-3964
7G-5749	Piston-Clutch	416-2132	7M-1889	Guard As	213-9108	7T-7621	Bearing As-Rlr	384-4823
7G-5780	Shaft-Planet	325-6196	7M-1890	Guard As-FD Wear	213-9109	7T-8136	Shaft-Planet	314-8714
7G-5783	Gear-Planet	288-8724	7M-5334	Cone-Roller Brg	420-2505	7T-8174	Gear-Planet	388-0583
7G-5784	Gear-Planet	288-8725	7M-7219	Bearing-Thrust	384-4816	7T-8336	Hub	418-9580
7G-5833	Gear-Ring	520-2890	7N-5825	Gear-PTO Drive	215-1759	7T-8337	Shaft	416-2138
7G-6061	Coupling	492-3488	7N-7166	Race-Brg Thrust	417-4531	7T-8518	Carrier As	536-6360
7G-6062	Gear-Ring	302-2678	7P-2372	Joint As	367-6072	7T-8816	Bearing-Spl Ball	420-2491
7G-6952	Shaft As-Output	524-1295				7T-9272	Gear-Sun	296-1354
7G-7013	Coupling-Pump Dr	295-5450						

# Yellowmark Drive Train Parts

Cat Part Number	Part Name	Yellowmark Part Number
7T-9370	Gear-Sun	283-5207
7T-9542	Gear-Ring	384-4822
7T-9647	Piston-Clutch	275-5294
7T-9755	CUP-Roller Brg	512-6466
7T-9931	Countershaft	215-1760
7T-9989	Housing As-Cl	380-1509
7V-5645	Rod-Indicator	397-5061
7V-5979	Gear	231-0238
7V-6790	Shaft-Bev Pinion	308-9922
7V-6791	Shaft-Pin (Bev)	384-4821
7Y-0213	Gear-Planet	301-4760
7Y-0219	Gear-Coupling	376-7652
7Y-0221	Gear-Planet	301-4758
7Y-0223	Shaft-Planet	301-4625
7Y-0224	Gear-Planet	301-4759
7Y-0225	Shaft-Planet	301-4571
7Y-0228	Carrier As	301-5239
7Y-0238	Gear-Sun	301-4689
7Y-0242	Carrier	301-4637
7Y-0249	Gear-Sun	301-4694
7Y-0608	Shaft-Pinion	520-2902
7Y-0639	Gear-Sun	520-2903
7Y-0642	Gear-Ring	520-6383
7Y-0645	Carrier	520-6384
7Y-0659	Gear-Planet	520-6386
7Y-0662	Shaft-Planet	520-6387
7Y-0663	Gear-Planet	520-6388
7Y-0731	Carrier As	521-6886
7Y-0912	Bearing-Rlr As	417-4513
7Y-0999	Gear-Ring	520-6389
7Y-1100	Bearing-Roller	394-8226
7Y-1215	Coupling	422-3512
7Y-1427	Gear-Sun	288-8727
7Y-1428	Gear-Planet	288-8728
7Y-1430	Gear-Sun	314-8671
7Y-1431	Gear-Planet	288-8729
7Y-1432	Carrier-Planet	314-8659
7Y-1433	Carrier-Planet	520-6390
7Y-1461	Coupling	301-4649
7Y-1563	Gear Gp-Brg & BSC	385-3776
7Y-1644	Gear-Planet	301-3406
7Y-1755	Gear-Ring	520-6391
7Y-1768	Gear-Ring	450-9167
7Y-1774	Carrier-Planet	376-7654
7Y-1775	Shaft-Pinion	314-8718
7Y-4269	Bearing As-Rlr	419-2308
7Y-4270	Bearing As-Rlr	388-6577
8B-2570	Race-Brg Outer	500-0385

Cat Part Number	Part Name	Yellowmark Part Number
8B-5964	Race-Brg Inner	505-0222
8B-5965	Race & Roller As	417-4512
8B-5972	Bearing-Ball	314-8503
8B-8439	Bearing-Ball	399-6069
8C-8555	Gasket Kit	434-7278
8D-1648	Disc	367-6070
8D-1669	Gear-Sun	418-9596
8D-1671	Gear-Planet	416-2155
8D-1817	Cup-Roller Brg	434-3296
8D-2116	Gear-Bevel	384-4805
8D-2256	Cone-Roller Brg	374-1848
8D-2277	Gear	399-4431
8D-2423	Shaft-Drive	394-8221
8D-2461	Gear-Ring	520-6393
8D-2519	Shaft-Planet	300-2591
8D-2528	Shaft-Drive	394-9829
8D-2532	Carrier-Planet	529-6116
8D-3442	Gear-Bevel	433-2026
8D-3591	Carrier-Planet	301-4769
8D-3669	Gear-Diff Ring	418-9581
8D-3743	Sprocket	391-9876
8D-3877	Gear-Sun	275-5278
8D-3958	Shaft As-Drive	520-6394
8D-4027	Housing-Diff	380-7522
8D-4278	Spacer	435-6048
8D-4402	Yoke	365-8823
8D-4942	Housing As	392-4514
8D-5048	Yoke As	415-1899
8D-5059	Diff Gp	388-6572
8D-5344	Gear-Worm	243-0341
8D-6139	Camshaft	394-9188
8D-6491	Gear-Bevel	520-6395
8D-7427	Shaft-Dr Pinion	282-6568
8D-7693	Housing	384-4830
8D-7719	Spider & Brg As	384-5946
8D-8159	Retainer	419-8661
8D-8233	Retainer	399-4429
8D-8587	Gear-Transfer	398-8352
8D-8627	Washer-Thrust	506-2397
8D-8634	Gear-Planet	275-5275
8D-8639	Gear-Ring	275-5277
8D-9457	Gear-Diff	430-9000
8D-9482	Gear-Diff Bevel	302-2673
8D-9739	Seal-Ring	542-4697
8D-9973	Housing	391-9825
8E-0735	Converter As-Tor	528-7172
8E-1301	CouplingAs	520-6397
8E-2043	Yoke As	385-6115
8E-2058	Bearing	384-5949

Cat Part Number	Part Name	Yellowmark Part Number
8E-2748	Hub-Reaction	492-3489
8E-2890	Gear	422-2489
8E-3726	Stat or-Converter	394-0907
8E-4024	Carrier-Planet	398-8333
8E-4051	Hub	523-0533
8E-4526	Disc-Friction	417-9495
8E-4589	Carrier As	416-2122
8E-4954	Housing As-Cl	391-9823
8E-5001	Shaft As.	434-2400
8E-5284	Bearing	388-0582
8E-5380	Bearing-Needle	491-2038
8E-5993	Gear As-Idler	215-1903
8E-7455	Gear-Planet	221-7947
8E-7456	Gear-Planet	221-7948
8E-7567	Gear-Transfer	517-3629
8E-7569	Case-XMSN	394-0899
8E-8285	Gear-Pump Drive	566-3503
8E-9740	Gear-Output Tfr	432-8905
8E-9741	Gear-Output Tfr	391-1088
8E-9807	Housing As-CL	524-7072
8F-3170	Bearing-Roller	417-4504
8F-7278	Diaphragm	392-4485
8G-0890	Bearing-Align	374-8340
8G-4189	Bearing-Aligning	295-6411
8G-4259	Bearing-Aligning	374-8341
8G-4510	Plate-Clutch	383-2113
8G-4565	Gear-Planet	520-6398
8G-4568	Gear	520-6399
8H-0901	Cup-Spl Tap Roll	399-4444
8H-0902	Cone-Roller Brg	399-4442
8H-1174	Drum-Ster Cl Dr	226-6101
8H-2434	Drum-Ster Cl Dr	216-7862
8H-4320	Bearing-Ball	419-2301
8H-5352	Bearing-Ball	453-3658
8H-9789	Bearing-Ball	374-8342
8J-4411	Bearing-Aligning	384-4815
8J-5392	Ballstud	364-5264
8J-6322	Cup-Roller Brg	399-4447
8J-6861	Bearing As	384-5950
8J-7978	Bearing-Spher	388-0581
8K-0509	Plate-Mating	382-5053
8K-2518	Joint As	231-0267
8K-5453	Shaft As	506-5625
8K-5991	Gear-Diff Bevel	253-1439
8K-5999	Gear-Sun	253-1440
8K-6015	Gear-Bevel	539-8558
8K-6282	Gear-Sun	281-1698
8K-6283	Gear-Sun	221-9077



# Yellowmark Drive Train Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
8K-6321	Gear-Sun	253-1441	8R-1465	Rim As	417-9501	8W-2309	Shaft-Planet	392-4504
8K-9661	Gear-Bevel	213-8218	8R-1703	Pinion-Diff	521-6888	8W-3881	Bearing	394-8224
8M-5070	Disc-Friction	566-2006	8R-1704	Gear-Diff	521-6889	8W-4652	Housing-Spindle	385-7215
8M-8068	Bearing-Spl Ball	417-4500	8R-1888	Shaft-Planet	524-1296	8W-4653	Housing-Spindle	385-7214
8M-8623	Gear-Sun	213-8755	8R-1891	Gear-Ring	450-7547	8W-7452	Housing	416-2141
8M-8628	Flange-Joint	217-9776	8R-1892	Gear-Ring	520-6402	8W-8138	Shaft	377-7453
8M-8644	Housing-Clutch	215-1782	8R-2193	Piston	376-9051	8W-8286	Sprocket	299-2061
8M-8646	Plate As-Center	216-3583	8R-2196	Plate-Reaction	375-2626	8W-8289	Sprocket	282-6629
8M-8650	Piston-Clutch	217-9778	8R-2199	Gear-Planet	421-7986	8W-8317	Sprocket	275-5287
8M-8677	Carrier-Planet	213-4449	8R-2203	Gear-Ring	542-2391	8W-8319	Sprocket	380-7482
8N-1365	Gear-Drive	394-8222	8R-2533	Piston	377-7446	8W-8462	Joint Gp-Univ	421-7829
8P-0514	Yoke As	308-9947	8R-2535	Plate-Reaction	377-7447	8W-8628	Spindle-FR Axle	282-6571
8P-0605	Gear-First Red	213-8453	8R-2537	Carrier-Planet	491-2039	8W-9566	Flange As	376-9073
8P-0606	Pinion-Sec Red	215-1783	8R-3252	Shaft-Planet	297-7259	8W-9587	Flange As	373-5394
8P-0953	Turbine-Conv	297-7269	8R-4568	Piston	385-6108	8W-9728	Gear	399-6045
8P-0961	Impeller-Conv	433-9204	8R-4571	Carrier-Planet	524-1297	8X-3434	Arm As-Leaning	438-1816
8P-1182	Shaft	227-4771	8R-4821	Carrier-Planet	308-9837	8X-3435	Arm As-Leaning	438-1814
8P-1183	Gear-Bevel	226-7980	8R-6631	Hub	443-2057	8X-6738	Shaft-Planet	394-8225
8P-1325	Hub-Ster Cl Dr	226-8005	8R-6830	Joint Gp-Slip	388-0567	8Y-0809	Spider Gp-Brg&	417-4526
8P-1326	Pilot-Cl Piston	226-6097	8R-8335	Gear-Bevel	368-0105	8Y-6652	Yoke As	528-9118
8P-1327	Pinion-Fdr	226-8000	8R-9306	Pinion-Diff Bev	388-0569	9C-2249	Yoke As	382-6890
8P-1636	Gear-Pump Drive	520-6400	8R-9440	Case As-Diff	520-6403	9C-2310	Spindle	424-4945
8P-1656	Plate-Clutch	367-6071	8R-9750	Gear-Planet	391-9869	9C-3095	Spider Gp-Brg&	394-8219
8P-1774	Pinion-Fdr	226-8001	8S-2127	Cone-Roller Brg	566-3227	9C-3530	Joint Gp-Univ	449-9832
8P-1892	Piston	283-5208	8S-3487	Gear As-Ring	221-7949	9C-3848	Bearing	417-4493
8P-1916	Gear-Planet	283-5209	8S-3517	Bearing-Spl Ball	417-4501	9C-4080	Yoke-Brake	302-2703
8P-1918	Gear-Planet	283-5210	8S-3554	Yoke	448-9154	9C-4096	Yoke-Bk Flange	369-9496
8P-1919	Gear-Planet	300-2579	8S-6370	Yoke	431-2155	9C-4985	Gear-Bevel	539-8559
8P-1948	Gear-Ring	469-4663	8S-9075	Bearing-Cone	418-9612	9C-5687	Separator	377-7456
8P-1964	Plate-Clutch	377-7445	8S-9076	Cup-Bearing	418-9613	9C-5852	Hub As	297-7208
8P-2019	Ring-Seal	542-4698	8S-9151	Cup-Spl Tapered	374-8348	9C-6317	Shaft-Planet	373-5397
8P-2022	Ring-Seal	542-4699	8T-0072	Cone-Rlr Brg	377-7448	9C-6329	Plate-Reaction	377-7457
8P-2023	Ring-Seal	542-4700	8T-0209	Race-Spl Rlr Brg	384-5951	9C-6335	Gear-Planet	319-3439
8P-2042	Shaft-Planet	283-5211	8T-0333	Bearing-Aligning	526-3037	9C-8074	Gear-Planet	308-9858
8P-2051	Plate-Clutch	385-6116	8T-1177	Bearing-Rlr	419-1862	9C-8075	Gear-Sun	308-9864
8P-3512	Piston-Clutch	416-2131	8T-1643	Kit-Dt Gasket	388-6575	9C-8204	Shaft-Bev Pinion	539-8560
8P-4047	Shaft-Planet	373-5390	8T-7047	Gasket Kit	384-5952	9C-8205	Gear-Bevel	319-8175
8P-4520	Piston-Clutch	394-0908	8T-8883	Seal-O-Ring	472-8020	9C-8219	Gear-Bevel	541-4958
8P-4537	Pinion-Reduction	216-7867	8V-1537	Gear-Sun	446-3061	9C-8278	Case As-Diff	423-6984
8P-5229	Carrier-Stat or	395-1309	8V-1540	Univ Jt As	388-6574	9C-8418	Plate-Reaction	385-6129
8P-5959	Gear-Sun	508-2937	8V-3134	Pinion-Bevel	260-0788	9C-8669	Shaft-Bev Pinion	368-0107
8P-5961	Gear-Ring	385-6137	8V-3550	Rim As	417-9477	9C-8772	Piston	376-9052
8P-6083	Yoke-U Joint	446-3073	8V-6382	Hub As	308-9868	9D-0120	Gear-Planet	288-8737
8P-7396	Hub-Planet Gear	239-7967	8V-6390	Drum-Brake	377-7449	9D-0129	Gear-Ring	521-6896
8P-7788	Retainer-Cl Pstn	417-9476	8V-6435	Spider & Brg Kit	377-7451	9D-1491	Coupling	416-2121
8P-8559	Yoke-6C	443-2016	8V-6825	Joint Gp-Slip	453-0972	9D-2716	Spindle-Wheel	228-9463
8P-8567	Carrier-Stat or	450-5586	8W-0376	Shaft	394-9194	9D-3242	Cone-Roller Brg	453-3659
8P-8677	Hub-Impeller	297-7205	8W-2307	Shaft-Planet	275-5284	9D-4413	Shaft-Axle	421-7983
8P-9507	Piston-Clutch	283-5212	8W-2308	Shaft-Planet	275-5285			
8R-0942	Plate-Reaction	380-1484						

# Yellowmark Drive Train Parts

Cat Part Number	Part Name	Yellowmark Part Number
9D-5741	Worm-Circle Dr	297-7270
9D-5746	Gear-Worm	299-2011
9F-3212	Bearing-Ball	384-5953
9F-7585	Race-SPL Rlr Brg	566-2736
9F-8074	Bearing-Outer	452-3180
9G-0280	Piston	283-5213
9G-0281	Ring-Seal	542-4701
9G-0284	Housing-Clutch	283-5214
9G-0285	Piston	283-5215
9G-0286	Ring-Seal	542-4702
9G-0289	Shaft-Planet	283-5216
9G-0290	Hub-Clutch	283-5217
9G-1488	Housing-Clutch	430-7620
9G-1491	Carrier-Planet	281-1685
9G-1919	Gear-Planet	371-4307
9G-2413	Shaft-Output	297-7255
9G-5525	Shaft-Planet	419-8662
9G-5842	Gear-Transfer	394-0913
9G-6774	Gear-Transfer	398-8343
9G-8117	Housing As-CI	302-2686
9G-8637	Gear-Sun	521-6897
9G-8638	Gear-Planet	295-6425
9G-8931	Yoke As	446-3074
9G-9174	Gear-Sun	295-6430
9G-9182	Spindle	468-9791
9G-9183	Shaft	295-0417
9G-9764	Yoke As	319-3478
9H-1918	Gear-Bevel	539-8561
9H-1980	Pinion-Bevel	541-4959
9H-5233	Piston-Clutch	219-9708
9J-3206	Bearing-Spher	360-2275
9J-9812	Bearing	434-7258
9K-0322	Gear-Bevel	542-4713
9K-1171	Cup-Rlr Bearing	430-3339
9K-1193	Gear-Sun	221-9099
9K-1773	Gear-Ring	221-9100
9K-3413	Gear-Bevel	223-4807
9K-3969	Spider & Brg As	432-8275
9K-5780	Rim As	388-6597
9K-8757	Rod End-Special	311-9361
9K-9156	Retainer As	297-7236
9L-2685	Rod End	419-1866
9M-0701	Piston-Steer Cl	219-9692
9M-1328	Bearing-Aligning	325-6018
9M-1500	Shaft-Planet	219-9685
9M-1976	Ring-Retaining	544-4876
9M-1995	Gear-Sun	213-8756
9M-1996	Shaft-Planet	215-1875
9M-1997	Bearing-Ball	384-5954

Cat Part Number	Part Name	Yellowmark Part Number
9M-2038	Gear-Tfr Driven	215-1876
9M-2039	Gear-Tfr Driving	219-9672
9M-2042	Race-Roller Brg	417-9500
9M-2045	Pinion-Bevel	215-1878
9M-2049	Gear-Ring	214-0533
9M-2744	Cone-Spl Tapered	380-1480
9M-3914	Bearing-Aligning	420-2501
9M-5045	Guard As-Wear	213-9111
9M-8117	Shaft-Fly Clutch	226-6073
9M-8119	Retainer-Inlet	226-8022
9N-1545	Race-Thrust	394-9205
9N-4460	Housing As-CI	297-7203
9P-0566	Case-Fdr	419-1861
9P-1925	Gear-Bevel	526-0265
9P-3436	Holder As-Cage	216-7875
9P-3663	Carrier-Planet	213-6939
9P-3731	Carrier-Planet	301-4767
9P-3757	Gear	394-9196
9P-3758	Gear-Planet	419-8805
9P-3803	Carrier-Planet	468-5013
9P-5363	Piston-Clutch	219-9687
9P-5379	Housing-Clutch	215-1904
9P-5531	Gear-Sun	417-9499
9P-6592	Gear-Planet	215-1915
9P-6799	Piston-Clutch	469-4671
9P-6800	Piston-Clutch	380-1505
9P-6903	Plate	368-0108
9P-7101	Plate-Clutch	368-0122
9P-7390	Disc As-Friction	518-3965
9P-7757	Gear-Sun	283-5218
9P-8283	Plate-Clutch	296-1364
9P-8516	Gear-Ring	373-5398
9P-8517	Case-XMSN	394-0909
9P-8521	Gear-Ring	296-1353
9P-8613	Gear-Idler	524-1282
9P-8623	Shaft-Planet	314-8719
9P-8624	Shaft-Planet	295-5446
9P-8626	Gear-Sun	283-5219
9P-9000	Shaft-Ster Cl	217-7738
9P-9031	Gear-Sun	283-5220
9P-9360	Gear-First Red	213-8454
9P-9361	Gear-Final Drive	223-4809
9P-9362	Pinion-Fdr	215-1944
9P-9363	Pinion-Reduction	219-9677
9P-9507	Race-Thrust	371-4309
9P-9517	Stat or-Converter	297-7262
9R-0313	Hub As	388-6591
9R-1572	Wheel As-Front	388-6604
9R-2410	Retainer As.	346-5688
9R-2414	Gear-Planet Ring	566-2632

Cat Part Number	Part Name	Yellowmark Part Number
9R-2419	Kit-Bearing	383-2137
9R-2424	Gear-Planet Sun	346-5690
9R-2476	Disc-Bk Rear	346-5691
9R-2477	Disc As	346-5692
9R-2480	Case As	394-0881
9R-2487	Gear	394-9186
9R-2488	Gear	566-2614
9R-2491	Spider	346-5693
9R-2601	Rod Gp-Tie	385-6133
9R-2842	Rod-Tie	385-6134
9R-2843	Rod-Tie	385-6135
9R-2844	Housing-Steering	523-5957
9R-2846	Pin	346-5694
9R-2857	Rod-Piston	418-9588
9R-3161	Shaft-Sun Gear	521-6898
9R-3527	Carrier-Planet	396-9892
9R-4067	Joint Gp-Univ	373-5399
9R-6950	Pinion-Planetary	391-9872
9R-8199	Joint-Double	384-4813
9R-8714	Fork	390-0929
9R-8715	Spider As-Brg&	346-5716
9R-8718	Yoke As	364-5258
9R-9190	Rod Gp-Tie	346-5718
9R-9400	Case As	346-5719
9R-9403	Pinion	347-0477
9R-9444	Gear Set	566-2591
9S-3581	Cup-Roller Brg	415-1923
9S-3582	Cone-Roller Brg	396-4144
9S-4829	Race-Brg Inner	423-9668
9S-5211	Plate-Clutch	380-1493
9S-5265	Shaft As	215-1945
9S-5267	Carrier As	392-4512
9S-5279	Bearing-Inner	453-3661
9S-6788	Pump Gp-Oil	217-2602
9S-6875	Pinion-Final Dr	217-7705
9S-6917	Gear-Cplg Ring	446-3075
9S-7949	Cup-Roller Brg	420-6531
9S-8789	Plate-Clutch	302-2712
9S-9541	Gear-Bevel	542-4714
9U-0465	Shaft-Pinion	394-0904
9U-0466	Gear-Bevel	418-9587
9U-0654	Coupling	297-7167
9U-0971	Gear-Sun	368-0124
9U-0975	Hub As	390-5259
9U-1179	Joint Gp-Univ	421-7828
9U-2400	Housing As	231-0249
9U-2787	Gear-Planet	367-6093
9U-3124	Gear-Planet	288-8806
9U-3125	Gear-Sun	288-8807

# Yellowmark Drive Train Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
9U-3665	Joint Gp-Univ	398-8342	9W-1564	TC Gp-Basic	528-7174	9W-5768	Gear-Ring	380-7474
9U-3668	Yoke	492-1887	9W-1566	Impeller-Conv	390-5270	9W-6044	Shaft-Planet	384-5957
9U-3670	Yoke As	432-4221	9W-1567	Impeller-Conv	391-9880	9W-6046	Carrier As	388-0645
9U-9657	Bearing-Spl Ball	371-4308	9W-1572	Shaft-XMSN Input	419-1864	9W-6097	Spool-Selector	491-2040
9V-1290	Wheel	396-9946	9W-2344	Coupling-Pump Dr	314-8666	9W-6099	Piston-Clutch	391-9828
9V-2411	Housing-Bearing	521-6900	9W-2977	Hub As	423-6985	9W-6102	Gear-Ring	524-1298
9V-5160	Plunger Kt-Adj	385-7218	9W-2997	Housing-Clutch	529-6117	9W-6433	Impeller-Conv	308-9871
9V-5173	Joint Gp-Univ	451-9019	9W-3372	Gear-Planet	523-5970	9W-6434	Hub-Impeller	443-2018
9V-5174	Joint Gp-Univ	375-2628	9W-3377	Shaft	521-6901	9W-6435	Flange-Drive	308-9846
9V-6165	Plate-Outer	377-7460	9W-3607	Shaft As-Input	440-3115	9W-7019	Disc-Friction	377-7461
9V-6526	Ring-Retaining	422-2485	9W-3660	Pinion-Bevel	521-6902	9W-7040	Piston-Clutch	377-7462
9V-7682	Gear-Bevel	544-0274	9W-4162	Bearing	396-9899	9W-7458	Piston-Clutch	391-9862
9V-7683	Shaft-Bev Pinion	544-0275	9W-4163	Race-Rlr Bearing	394-9202	9W-7481	Gear-Planet	295-6431
9V-7710	Univ Joint As	394-8234	9W-4175	Shaft-XMSN Input	394-8241	9W-7925	Cone-Roller Brg	422-6491
9V-9833	Gear-Bevel	394-8243	9W-4662	Disc-Friction	428-7203	9W-7926	Cup-Roller Brg	421-2554
9V-9840	Spider	417-9498	9W-4702	Stat or-Converter	308-9939	9W-8270	Gear-Ring	308-9859
9W-0517	Carrier-Planet	281-1686	9W-4949	Carrier-Planet	281-1687	9W-8384	Hub-Turbine	297-7207
9W-0550	Shaft-XMSN Upper	226-6000	9W-4950	Gear-Sun	281-1688	9W-8437	Gear-Sun	450-7550
9W-0551	Shaft-Pinion	388-6592	9W-4957	Carrier-Planet	390-0913	9W-9069	Shaft-Input	524-1299
9W-0552	Shaft-Pinion	226-6001	9W-5459	Piston	566-2479	9W-9400	Bearing-Spher	499-4308
			9W-5531	Tube As-Magnet	522-5216			

# Yellowmark Engine Parts

Cat Part Number	Part Name	Yellowmark Part Number
100-2930	Gasket Kit - F	393-1026
100-2937	Kit - Gasket (OCL)	436-8417
100-2941	Gasket Kit	393-1020
100-2951	Gasket Kit Sch	447-8649
100-2953	Gasket Kit Sch	393-1025
100-4594	Muffler As	360-7862
100-5953	Gasket Kit - F	437-4573
100-6298	Camshaft As	398-2958
100-6920	Adapter-Nozzle	380-1552
100-7860	Valve-Inlet	270-4360
101-0155	Pipe As-Exhaust	399-4427
101-1530	Bearing-Main	419-6382
101-1816	Bridge As-Intake	374-4689
101-1817	Bridge As-Exh	374-4690
101-1818	Bridge As-Exh	374-4691
101-3125	Gasket	420-8567
101-3374	Gear-Camshaft Dr	376-9069
101-7354	Manifold-Exhaust	386-3060
101-8644	Kit - Gasket (OCL)	436-8416
101-9640	Gear-Air Compr	398-2966
102-1561	Lifter As-Valve	311-9402
102-3927	Muffler As	420-6219
102-8501	Manifold-Exhaust	377-5853
102-8503	Manifold-Exhaust	392-4513
102-8608	Manifold-Exhaust	376-9062
102-8636	Gear-F Pmp Drive	472-8035
103-0887	Pulley-Idler	449-9546
104-1706	Valve-Regulating	432-8281
104-3014	Gasket Kit	388-0656
104-5283	Manifold-Exhaust	394-9831
104-9635	Kit - Gasket-Sch	436-8415
105-1738	Manifold-Exhaust	374-4692
105-8651	Core As-Oclr	434-9521
106-2822	Gasket Kit	436-8376
106-8711	Elbow-Exhaust	383-3709
107-0621	Kit - Gasket-Sch	436-8414
107-7473	Muffler As.	385-7223
107-7708	Bearing-Main	419-6381
107-7750	Pulley	382-6896
107-8106	Manifold-Exh	374-7487
107-8107	Manifold-Exh	398-2926
107-8108	Manifold-Exh	385-6141
107-8109	Manifold-Exh	374-7488
107-8112	Manifold-Exh	376-9063
108-0219	Sleeve	522-2289
108-2102	Bonnet-Valve	455-3274
108-5603	Screw-Adj Arm	379-0166
108-5680	Gage-Oil Level	378-4001
108-6630	Pump Gp-F Inj-B	432-8276

Cat Part Number	Part Name	Yellowmark Part Number
108-6631	Plunger & BBL As	419-4744
108-6633	Pump Gp-Fuel Inj	420-6215
109-4848	Pulley-C Shaft	416-5507
109-5319	Ring-Intmed	528-7162
109-6928	Gasket Kit	436-8413
109-9323	Muffler As	369-9491
109-9463	Muffler As	360-7864
110-1337	Ring Kit-Pstn	377-5834
110-5096	Head As-Cyl	394-0915
110-5097	Head As-Cyl	532-6157
111-2645	Valve-Pump Byp	441-1561
111-8015	Gasket As-Head	279-4977
112-1665	Muffler As.	435-4847
112-3249	Muffler As	247-2661
112-5088	Muffler As.	396-9943
112-5089	Muffler As-NA	390-0982
112-5538	Kit - Gasket-Sch	436-8412
112-7750	Manifold-Exhaust	390-0919
112-7751	Manifold-Exhaust	390-0917
112-7993	Gasket Kit	437-3231
113-6200	Gasket	438-2020
114-0915	Shield As	394-0887
114-1398	Gauge-Oil Level	394-9815
114-4787	Kit - Gasket (OCL)	388-0657
115-2367	Valve-Exhaust	384-8700
115-2368	Valve-Inlet	384-8704
115-2989	Manifold-Exhaust	434-9635
115-3657	Kit - Gasket-OCL	437-4572
115-4204	Pulley As-Idler	301-5219
115-4237	Pulley-Idler	374-4693
115-4517	Core As-Oclr	421-7281
115-9398	Arm-Valve Rocker	433-0448
115-9399	Arm-Valve Rocker	433-0447
115-9400	Arm As-UI Rocker	433-0446
115-9403	Shaft As	434-7259
116-1102	Sleeve-Injector	451-9024
116-7885	Pan-Oil (Front)	379-0173
117-0456	Crankshaft As	394-2587
117-5200	Spider As-Fan	428-8686
117-7899	Gasket Kit - Sch	436-8409
117-9712	Shaft - Dr Idler	425-7754
118-2089	Pulley	434-2449
118-8458	Spider As-Fan	395-1306
118-9906	Muffler As	360-7865
119-2940	Gasket	378-4002
119-6772	Valve-Exhaust	384-8699
120-0300	Fan As-Radiator	419-4648
121-5455	Tube As-Exhaust	449-4735
121-5457	Tube As-Exhaust	419-4670

Cat Part Number	Part Name	Yellowmark Part Number
121-5459	Tube As.-Exhaust	420-6397
121-5461	Tube As-Exhaust	419-4666
121-7746	Pre-Cleaner As	360-2311
122-0321	Valve-Exhaust	384-8698
122-0322	Valve-Inlet	384-8703
122-8900	Kit - Gasket(F)	437-3230
123-6597	Gasket Kit	436-8421
124-3237	Pre-Cleaner As	432-4220
124-3684	Gasket Kit-Sch	437-8646
124-7566	Kit - Gasket-Acl	437-4570
124-7569	Gasket Kit	393-1041
124-7570	Kit - Gasket-Acl	437-4569
124-7609	Gear-Pump Idler	428-8504
125-2728	Core As	395-1302
125-2950	Gear As	301-4762
126-0734	Muffler As	397-5052
126-5056	Shield As-Man LH	369-9492
126-5057	Shield As-Man LH	369-9493
126-5875	Flywheel As.	374-4694
126-7134	Pipe As-Exhaust	451-9032
126-8557	Pulley	433-2027
127-1517	Gasket Kit - F	437-4568
127-2194	Gasket Kit-Sch	437-8645
127-3467	Manifold-Exhaust	394-9827
127-4525	Gage As	386-3043
127-4953	Gasket Kit-Sch	437-8676
127-5022	Gasket Kit-Sch	437-8643
127-5537	Core As-Oclr	325-6045
127-6356	Cover As.-Pump	420-8566
127-6974	Gasket Kit	393-3638
127-8592	Muffler As	347-0463
127-8594	Muffler As-Turbo	390-0981
128-1009	Muffler As	435-6047
128-2922	Kit - Gasket (WP)	386-3814
128-3132	Gasket Kit	437-4566
129-3068	Rebuild Kit-Pump	363-7455
129-3069	Rebuild Kit-Pump	363-7456
129-9907	Impeller-Pump	383-1589
130-1455	Gasket Kit	437-4604
130-1521	Gasket Kit - Sch	393-1030
130-6856	Pre-Cleaner As	361-1717
131-8674	Gear As-Drive	394-0911
132-7923	Gasket Kit-Sch	437-8642
133-3359	Manifold-Exhaust	419-4730
133-3565	Tube As-Exhaust	374-4695
133-3566	Tube As-Exhaust	378-4003
133-3919	Gasket Kit-Sch	393-1031
133-4995	Gasket-Cyl Head	434-2445
133-6597	Pipe- Extension	420-6220
133-7098	Crown As-Piston	518-3970

# Yellowmark Engine Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
133-8991	Line As-Fuel Inj	378-4004	141-5787	Kit - Gasket(OCL)	437-4611	150-1916	Manifold-Exh	395-1322
133-8992	Line As-Fuel Inj	378-4005	141-7277	Kit - Gasket-FS	437-4610	150-3416	Muffler	360-9620
133-8993	Line As-Fuel Inj	378-4006	141-7955	Gasket Kit	437-4609	150-4637	Pan-Oil	377-5843
133-8994	Line As-Fuel Inj	378-4007	141-9792	Gasket Kit - OCL	393-3632	150-8459	Kit - Gasket(F)	438-1798
133-8995	Line As-Fuel Inj	378-4008	142-0226	Kit - Gasket-FS	393-1034	150-8685	Gasket Kit	392-4503
133-8996	Line As-Fuel Inj	378-4009	142-0227	Gasket Kit	437-4608	154-1642	Gasket Kit - SCL	437-8117
133-9016	Pulley	421-7191	142-0228	Gasket Kit - Sch	393-1035	154-8030	Gasket	394-0894
134-3036	Gasket Kit	393-3629	142-0404	Kit - Gasket-FS	437-4607	155-1378	Gasket Kit - Sch	437-8152
134-3038	Gasket Kit	437-3228	142-1662	Kit - Gasket(F)	392-4511	155-1379	Gasket Kit - Sch	386-3815
134-3068	Kit - Gasket(F)	393-3636	142-1699	Gasket Kit	392-4507	155-2819	Ejector As-Exh	325-6078
134-4200	Manifold-Exhaust	443-2060	142-2221	Gasket Kit - Sch	437-8127	155-5619	Gasket	382-5054
134-9807	Gasket Kit	437-3214	142-2535	Gasket Kit	437-4593	155-6637	Gear-Oil Drive	425-9189
135-0239	Gasket Kit	437-4606	142-3035	Kit - Gasket (WLG)	393-0926	156-6237	Elbow As	396-1567
135-2151	Tensioner	419-4735	142-5093	Gasket Kit	437-4605	157-2828	Muffler As	360-9621
135-2376	Gasket Kit-Lower	393-3634	142-7526	Gasket Kit	393-0918	159-3021	Gasket	377-5845
135-2707	Kit - Gasket (BSC)	392-4506	142-8811	Muffler As	360-2297	160-1799	Crankshaft As	523-5947
135-3225	Shaft As	399-8582	142-8845	Muffler As	360-9619	160-8178	Rod As-Conn	379-8869
135-4928	Shaft-Water Pump	386-3813	143-1314	Kit - Gasket-T	437-4603	160-9874	Kit - Gasket-SCL	386-3048
135-7989	Gasket Kit	393-3633	143-2605	Kit - Gasket-Mch	393-0915	161-3411	Gasket	394-0896
135-8167	Pipe-Extension	395-1305	143-5428	Gasket Kit	437-8115	161-4111	Pump Gp-XX 1 GR	374-7502
136-0819	Valve-Exhaust	384-8697	143-5430	Gasket Kit	437-4602	161-4112	Pump Gp-XX 2 GR	518-3973
137-1339	Pump Gp-Water	434-6112	143-5447	Gasket Kit - F	393-1036	161-4280	Valve-Inlet	511-5281
137-1970	Impeller-Pump	380-1553	144-0482	Gasket	420-8547	161-7128	Spring As.	419-4726
137-4097	Muffler As.	360-7866	144-0502	Ring Kit-Piston	395-1312	162-3904	Pump As-F Prm	391-1102
137-6500	Rotocoil As.	397-5053	144-0503	Piston & Ring Kt	380-1554	162-4012	Gasket Kit - F	437-8126
137-6995	Muffler As	360-7868	144-0744	Compressor Gp	435-6046	163-1387	Gear-Flywheel	374-4697
138-1987	Gasket Kit - F	437-3238	145-0162	Bearing-Main	419-6380	163-3103	Manifold-Exh	430-8992
138-4037	Kit - Gasket (Acl)	438-1797	145-0163	Bearing-Main	419-6336	163-4063	Core As-Rdtr	391-9826
138-4039	Kit - Gasket (F)	437-3224	145-0164	Bearing-Main	419-6376	163-4109	Manifold-Exhaust	433-9857
138-4338	Kit-Gasket-T	393-1032	145-0165	Bearing-Main	419-6388	163-5316	Kit - Gasket(F)	437-2018
138-6743	Gasket Kit	437-3223	145-2867	Kit - Gasket (WP)	449-9830	163-5636	Kit - Gasket(OCL)	437-2017
138-6744	Rebuild Kit-Pump	363-7457	145-4585	Muffler As	360-9627	163-5723	Gasket Kit - Sch	437-8641
138-7025	Kit - Gasket (F)	437-3222	145-6726	Gasket Kit	437-4600	164-2138	Gasket Kit - Sch	437-2016
138-9381	Plate-Spacer	424-7052	145-7390	Valve-Intake	510-4850	164-6560	Body As-Piston	477-7125
139-8963	Kit-Gasket-Mch	436-8404	145-8503	Shaft As-Idler	426-0035	164-6560	Body As-Piston	480-8804
140-1093	Gasket Kit - Sch	436-8394	146-4229	Gasket Kit - Sch	437-4599	164-6574	Kit - Gasket-Acl	437-2015
140-2246	Gasket Kit	383-3710	146-9733	Muffler As	435-6045	165-4262	Body As-Piston	477-7126
140-2746	Kit-Gasket-Mch	437-3219	147-3781	Kit - Gasket (WP)	422-2484	165-4262	Body As-Piston	270-4353
140-2749	Gasket Kit	393-1033	147-6170	Gasket Kit	437-4598	165-9864	Gasket Kit-Sch	388-0659
140-9631	Kit - Gasket (F)	437-3217	147-8211	Valve-Exhaust	510-4851	166-9142	Gasket	420-8546
141-0338	Kit - Gasket (Acl)	437-3215	147-9670	Fan As-Rev	435-9912	167-8123	Damper As	299-2006
141-0340	Kit - Gasket (F)	436-8402	148-7455	Valve - Exhaust	270-4361	167-8126	Damper As	382-8019
141-0348	Gasket Kit	437-4579	148-8269	Gasket Kit - CL	437-4597	168-4531	Body As-Piston	477-7127
141-1021	Gasket Kit	437-4615	148-8861	Gasket Kit	437-4596	168-4531	Body As-Piston	480-8803
141-1028	Kit - Gasket(Sch)	435-2576	148-9810	Gasket Kit	393-3631	168-4540	Crown As-Piston	518-3974
141-1939	Gasket Kit	437-4613	149-0625	Kit - Gasket(F)	437-4595	170-0556	Kit-Rebuild-Pump	383-3712
141-4109	Core As-Oclr	416-5518	149-0629	Gasket Kit - Sch	437-4594	170-0558	Kit-Rebuild-Pump	390-1001
141-4617	Kit - Gasket(Acl)	393-0917	149-2752	Muffler	360-9628	170-0560	Rebuild Kit-Pump	363-7458
141-4974	Gasket Kit	388-0658	149-4912	Gasket Kit - Sch	437-4616	170-0564	Rebuild Kit-Pump	380-7576
			150-1914	Manifold-Exh	434-6111			

# Yellowmark Engine Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
170-0566	Kit-Rebuild-Pump	377-5835	193-3322	Gasket Kit - OCL	437-2007	219-7975	Kit - Gasket(Sch)	437-1999
170-0570	Rebuild Kit-Pump	380-7577	196-0028	Gear As-Idler	364-5259	220-3779	Kit - Gasket(F)	437-1998
170-4860	Bonnet-Oil Clr	430-5359	196-0029	Gear As-Idler	374-4674	221-0859	Kit - Gasket-T	437-8135
170-7501	Kit - Gasket(OCL)	437-2014	196-0224	Gear As-Idler	542-4706	221-3371	Kit - Gasket-Mch	437-2031
170-7502	Shaft-Dr Idler	374-7484	197-9251	Pin As.-Piston	454-6110	221-9356	Flywheel As	435-2575
170-8541	Core As-Rdtr	379-0180	199-5067	Muffler As	360-7894	222-0458	Muffler As	393-0929
171-8780	Kit - Gasket (OCL)	437-2013	200-3199	Muffler As-Eject	396-1565	222-1177	Kit - Gasket-Sch	437-2008
172-5185	Shaft-Water Pump	325-6201	200-3200	Muffler As-Eject	418-9586	222-7974	Kit - Gasket	437-2044
172-5188	Shaft-Water Pump	325-6202	201-5243	Kit - Gasket(F)	437-2019	222-7987	Kit - Gasket	437-2043
172-5189	Impeller-Pump	295-5687	202-3572	Shaft As-Drive	426-0037	222-9154	Kit - Gasket	437-8133
172-5190	Impeller-Pump	325-6111	203-5805	Bearing-Sleeve	521-3625	223-1102	Kit - Gasket-F	437-8132
172-6712	Impeller-Pump	325-6112	203-6090	Bearing-Sleeve	521-3626	223-3343	Kit - Gasket-Acl	437-8131
172-7760	Pump Gp-Water	380-7574	204-4458	Gasket Kit - Acl	437-8151	223-3344	Kit - Gasket(OCL)	437-2040
172-7763	Pump Gp-Water	374-7499	204-4462	Gasket Kit - Sch	437-2005	223-3345	Kit - Gasket-Sch	437-8130
172-7765	Pump Gp-Water	394-9835	205-6788	Gear	523-5967	223-7811	Kit - Gasket(Sch)	437-8636
172-7766	Pump Gp-Water	374-4698	207-1332	Bellows As	444-0569	223-8228	Kit - Gasket(Sch)	437-8142
172-7767	Pump Gp-Water	296-1365	208-0421	Muffler As	360-9624	224-3973	Kit - Gasket-RS	437-8123
172-7771	Pump Gp-Water	419-4646	208-6161	Gasket Kit - F	437-8150	224-4323	Kit - Gasket-RS	393-3627
172-7772	Pump Gp-Water	438-2009	208-6165	Kit - Gasket-Mch	437-8149	224-6638	Bearing-Rod	419-6371
172-7775	Pump Gp-Water	398-2942	210-7443	Gasket Kit - Sch	437-8125	226-2018	Kit - Gasket-Acl	393-0921
172-7776	Pump Gp-Water	395-1314	211-0592	Bearing - Main	419-6368	226-4757	Seal Gp-Cshaft-A	518-3977
174-0739	Gasket Kit - F	437-2012	212-4893	Bearing-Thrust	419-6372	229-1490	Sleeve-Injector	393-3659
174-5385	Gasket Kit - OCL	393-1037	213-3193	Rod As-Conn	379-8870	229-5153	Bearing-Thrust	419-6370
176-4168	Bridge As-Valve	419-4727	213-3294	Gage As-O Level	398-2930	229-5154	Bearing-Thrust	419-6369
176-4172	Bridge As-Valve	457-4600	213-6732	Muffler As-LH	363-7099	231-0649	Kit - Gasket (Sch)	437-8673
176-6997	Shaft	399-8573	213-6733	Muffler As-RH	363-7098	231-1591	Muffler As.	360-9625
176-6998	Impeller-Wtr Pmp	425-9367	213-8621	Kit - Gasket-WP	437-2003	232-1841	Kit - Gasket (FS)	387-2922
176-8167	Kit - Gasket-Acl	437-2011	214-6045	Bellows As	435-4846	232-2600	Kit - Gasket-FS	437-8672
180-6645	Shaft As.	396-1566	215-7140	Kit - Gasket(Mch)	437-2002	232-2672	Kit - Gasket-FS	393-0922
185-2831	Line As	380-1516	216-4499	Kit - Gasket-Sch	437-8147	232-2922	Kit - Gasket-RS	437-8671
186-2001	Rotocoil As	397-5055	216-4592	Gasket Kit - OCL	437-8145	232-3233	Bearing-Main	376-9085
187-0605	Gasket Kit - CL	382-5055	216-4781	Gasket Kit	437-8144	232-3675	Kit - Gasket-RS	437-8670
187-3307	Gasket As-Cyl	438-2022	216-5583	Bearing-Sleeve	522-2287	232-3679	Kit - Gasket (RS)	437-2039
187-3523	Core Gp-O Clr	523-0534	216-5584	Bearing-Sleeve	521-3627	232-4504	Kit - Gasket-FS	437-2038
187-8979	Gear As	393-3656	216-5585	Bearing-Sleeve	518-6084	232-4658	Kit - Gasket-FS	437-2037
187-8989	Crankshaft As	523-5948	217-0577	Bearing-Rod	518-3976	232-6148	Kit - Gasket(RS)	437-2036
189-1814	Kit - Gasket(OCL)	437-2009	217-0578	Bearing-Rod	419-4669	232-6173	Kit - Gasket-FS	393-0923
190-0649	Tightener-Belt	434-1407	217-7884	Gasket Kit - WP	437-8143	232-6574	Kit - Gasket-RS	437-2034
190-3832	Core As-Oclr	438-3251	217-8938	Tightening-Belt	419-4735	232-6599	Kit - Gasket (Mch)	437-2033
190-9861	Kit-Gskt-Acl	386-3812	218-4389	Kit - Gasket(Sch)	437-8124	232-6642	Kit - Gasket (Sch)	437-2020
191-7941	Line As-Fuel Inj	378-4011	219-3501	Kit - Gasket	437-8129	233-5220	Pump Gp-Eng Oil	518-3978
191-7942	Line As-Fuel Inj	374-4699	219-6544	Kit - Gasket-Acl	437-2001	233-6728	Kit - Gasket-FS	437-2032
191-7943	Line As-Fuel Inj	374-4700	219-6556	Kit - Gasket(F)	437-8141	233-6984	Kit - Gasket(FS)	437-2045
191-7944	Line As-Fuel Inj	374-4701	219-6560	Kit - Gasket(F)	437-8153	233-7083	Kit - Gasket-FS	387-2919
191-7945	Line As-Fuel Inj	378-4012	219-6578	Kit - Gasket-Mch	437-8139	233-8668	Kit - Gasket-Mch	437-2030
191-7946	Line As-Fuel Inj	378-4013	219-6610	Kit - Gasket	437-8138	233-8669	Kit - Gasket-Mch	393-1038
192-0478	Kit - Gasket (Sch)	437-1995	219-7628	Kit - Gasket-Mch	437-8137	233-8683	Kit - Gasket-Mch	393-1039
			219-7629	Kit - Gasket-Sch	437-8136	233-9198	Kit - Gasket-Sch	437-2029
			219-7630	Kit - Gasket	437-2000	233-9200	Kit - Gasket-Sch	393-0927

# Yellowmark Engine Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
233-9203	Kit - Gasket-Sch	437-2028	262-7133	Kit - Gasket(Sch)	437-8633	325-2721	Kit - Gasket(T)	393-3662
233-9456	Kit - Gasket-Sch	422-7510	264-6898	Kit - Gasket-Sch	382-5069	326-4278	Crankshaft As	524-1287
233-9464	Kit - Gasket(Sch)	393-0925	265-9183	Kit - Gasket(Sch)	437-8632	326-4280	Crankshaft As	524-7074
233-9466	Kit - Gasket-Sch	437-2026	265-9185	Kit - Gasket(OCL)	437-8631	327-7193	Pulley As-Idle	482-8097
233-9473	Kit - Gasket-Sch	437-2025	265-9186	Kit - Gasket(Sch)	437-8630	328-4240	Arm As-V Rocker	433-0443
233-9474	Kit - Gasket (Sch)	437-2024	266-2540	Kit - Gasket(Sch)	437-8629	328-5572	Bearing-Rod	419-6349
233-9480	Kit - Gasket-Sch	437-2023	266-4561	Kit - Gasket-CL	437-8628	328-5573	Bearing-Conn Rod	419-6387
234-1630	Kit - Gasket(RS)	393-1040	266-5907	Kit - Gasket-CL	438-0155	328-5574	Bearing-Rod	419-7266
234-1874	Kit - Gasket-FS	437-8668	266-6621	Kit - Gasket(CL)	438-0154	334-8389	Crankshaft As	242-3439
234-1929	Kit - Gasket-RS	393-1022	267-4743	Core As-Oil Clr	518-3980	337-0872	Crankshaft As	242-3440
234-7988	Kit - Gasket-Sch	387-2925	268-2932	Kit - Gasket-Sch	438-0153	341-2430	Damper As-CSht	542-4727
234-7989	Kit - Gasket-Sch	437-8122	272-1956	Gasket	419-4710	341-2431	Damper As	279-4990
234-7991	Kit - Gasket-Mch	437-8121	272-4673	Muffler	301-7974	347-8681	Kit - Gasket(FS)	438-0133
234-7994	Kit - Gasket-Sch	437-8120	272-4774	Motor Gp-Elecstg	538-2146	347-8682	Kit - Gasket(OCL)	438-0132
234-7996	Kit - Gasket-Sch	437-8665	277-7089	Shaft As	380-7578	347-8683	Kit - Gasket(RS)	438-0131
234-7998	Kit - Gasket-Mch	437-8640	278-8781	Kit - Gasket(Sch)	437-8653	347-8684	Kit - Gasket(Sch)	438-0130
234-7999	Kit - Gasket-Sch	437-8119	281-2813	Kit - Gasket-Sch	387-2921	347-8688	Kit - Gasket(Sch)	438-0170
234-8001	Kit - Gasket-Mch	437-8118	282-7958	Crankshaft As	524-1284	352-0200	Pump Gp-Water	434-6109
234-8002	Kit - Gasket-Sch	386-3817	283-5666	Gasket-Cyl Head	388-6565	352-0209	Pump Gp-Water	375-4336
234-8009	Kit - Gasket-Sch	382-5056	283-6443	Kit - Gasket-T	437-8652	352-2077	Guard Gp-Rec	434-6108
234-8011	Kit - Gasket-Sch	437-8664	286-2494	Kit - Gasket-Sch	387-2920	352-2151	Pump Gp-Water	434-6107
234-8013	Kit - Gasket-Sch	437-8650	287-8465	Kit - Gasket-FS	437-8627	352-2153	Pump As-Water	433-0444
234-8014	Kit - Gasket-Sch	437-8662	289-4093	Kit - Gasket-Sch	438-0152	352-2157	Pump Gp-Water	433-0441
234-8015	Kit - Gasket-Sch	437-8674	289-4884	Kit - Gasket-Mch	437-8651	352-2160	Pump Gp-Water	433-0789
234-8016	Kit - Gasket-Sch	393-0919	289-5160	Kit - Gasket-Sch	437-8663	352-2163	Pump As-Water	434-6106
234-8019	Kit - Gasket-Sch	437-8639	289-5181	Kit - Gasket-Mch	438-0151	360-2740	Core As-Oil Clr	319-3435
234-8020	Kit - Gasket-Sch	437-8660	289-6232	Kit - Gasket(Sch)	437-8661	362-8853	Seal-Cshaft	518-3987
236-4413	Pump Gp-Water	434-6110	289-9183	Kit - Gasket-Sch	438-0150	384-9907	Crankshaft As	525-2493
236-8883	Kit - Gasket-OCL	437-8659	290-0187	Kit - Gasket-Sch	437-8116	391-8256	Kit - Gasket-Sch	447-8653
237-6367	Kit - Gasket-Sch	437-8625	290-2060	Kit - Gasket-Sch	438-0149	430-2593	Crankshaft As	368-5916
239-4290	Kit - Gasket-Sch	435-2574	291-9117	Kit - Gasket (Sch)	438-0148	437-3861	Arm As-UI Rkr	433-7507
242-9834	Kit - Gasket-Mch	387-2923	292-2500	Kit - Gasket-Mch	438-0147	441-9566	Gear-Flywheel	374-4703
242-9847	Kit - Gasket-Mch	438-0129	293-1009	Kit - Gasket(Mch)	438-0146	460-5395	Kit - Gasket (Sch)	436-8395
242-9857	Kit - Gasket-Mch	437-8637	293-3018	Kit - Gasket(Sch)	438-0145	469-5314	Liner-Cylinder	458-0154
243-4690	Kit - Gasket (OCL)	437-8658	293-3041	Kit - Gasket-Mch	438-0144	486-6737	Shaft As-Balance	314-8715
243-4780	Kit - Gasket(CL)	437-8657	293-6012	Kit - Gasket-Mch	438-0128	486-6738	Shaft As-Balance	314-8716
246-3130	Shaft-Water Pump	392-4508	297-1742	Kit - Gasket-Sch	438-0156	489-2731	Crankshaft As.	368-5912
251-1224	Kit - Gasket-Mch	437-8655	300-9500	Kit - Gasket-Sch	387-2914	490-1719	Valve-Intake	510-4852
252-1152	Muffler As.	395-1307	307-1303	Muffler As.	361-6574	490-1721	Valve-Exhaust	510-4863
252-7955	Kit - Gasket(CL)	437-8654	312-5931	Kit - Gasket(Sch)	438-0140	490-7199	Valve-Inlet	391-1106
253-1752	Plate-Thrust	379-0170	313-3996	Crankshaft As	524-1285	490-7200	Valve-Exhaust	391-1107
254-5676	Kit - Gasket-Sch	437-8649	313-3997	Crankshaft As	524-1286	498-1690	Valve-Inlet	247-6892
255-2899	Pipe As-Tail	301-5246	315-6671	Kit - Gasket(OP)	438-0139	524-5564	Pin-Piston	501-7997
255-6863	Gasket	450-5024	316-4396	Kit - Gasket(Sch)	393-3661	524-5613	Pin-Piston	501-8025
256-9653	Flywheel As.	425-3444	318-9013	Kit - Gasket(Sch)	437-8128	524-7980	Pin-Piston	501-8023
261-1544	Crankshaft As	523-7401	319-3607	Kit - Gasket(RS)	438-0137	524-7982	Pin-Piston	501-8022
261-9647	Crankshaft As	523-7402	321-5746	Bearing-Main	419-6367	524-7984	Pin-Piston	501-8000
261-9648	Crankshaft As	523-7403	322-2929	Kit - Gasket(Sch)	438-0135	524-7986	Pin-Piston	295-6438
262-4378	Seal Gp-Basic	325-6193	323-4174	Kit - Gasket(Sch)	438-0134			
262-5009	Kit - Gasket(Sch)	437-8635						

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Cat Part Number	Part Name	Yellowmark Part Number
524-7988	Pin-Piston	501-7998
524-7990	Pin-Piston	506-2392
524-7993	Pin-Piston	500-0384
524-7995	Pin-Piston	506-5623
524-7997	Pin-Piston	311-9432
525-0480	Pin-Piston	501-8026
1A-0744	Screw-Rocker Adj	379-0167
1J-4034	Seal-Lip Type	512-6460
1M-5270	Pipe-Extension	367-6065
1M-7250	Bowl	360-2296
1N-2936	Muffler As	298-2782
1N-2946	Extension-Exh	367-6064
1N-3165	Plunger-RLF V	373-1883
1N-3300	Shield As	374-4702
1N-3574	Block Gp-Cyl	460-8298
1N-3576	Block Gp-Cyl	279-4978
1N-3706	Pipe-Extension	434-6497
1N-3821	Bearing-Conn Rod	376-9076
1N-3822	Bearing-Conn Rod	376-9077
1N-4304	Head Gp-Cyl -A	269-8761
1N-4317	Bearing-Main	419-7253
1N-4336	Bearing-Conn Rod	419-6329
1N-4337	Bearing-Conn Rod	419-6328
1P-0005	Pump Gp-Fuel Tfr	256-4756
1P-0009	Rod As-Conn	311-9450
1P-1216	Manifold-Exhaust	261-0902
1P-1367	Plunger-Valve	432-8913
1P-1721	Gear-Balance	298-2769
1P-1722	Gear-Balance	298-2770
1P-4303	Head As-Cylinder	242-3434
1P-6400	Plunger As-Pump	383-1568
1P-7125	Governor As	383-3672
1P-7936	Spider As-Fan	383-3673
1P-8554	Coupling-Exhaust	325-6052
1P-9945	Bracket As-Fan	296-1344
1S-1967	Chamber As	247-3291
1S-1970	Chamber As	247-3292
1S-3062	Director-Water	418-9572
1S-3926	Manifold-Exhaust	430-7622
1S-7057	Gasket	420-6384
1S-8607	Baffle	380-7540
1T-0436	Gear-Pump Drive	247-3367
1W-0156	Core As-Oclr	416-5525
1W-0311	Bearing-Main	376-9078
1W-0312	Bearing-Main	376-9079
1W-0370	Muffler As.	360-7869
1W-0458	Shield As-Turbo	367-6082
1W-0466	Shield As-Turbo	369-9495

Cat Part Number	Part Name	Yellowmark Part Number
1W-0568	Pump Gp-F Tfr	377-5859
1W-0777	Muffler As	247-2662
1W-1219	Trunnion As	314-8724
1W-1661	Bearing-Main	376-9080
1W-1662	Bearing-Main	382-6900
1W-1669	Piston	325-6158
1W-1695	Pump Gp-F Tfr	279-4980
1W-1698	Housing-Tfr Pump	296-1356
1W-1700	Pump Gp-F Tfr	377-5846
1W-1766	Muffler As.	298-2783
1W-1822	Valve-Exhaust	443-1205
1W-1877	Gear As-Idler	426-0027
1W-2489	Muffler As	360-7870
1W-2491	Muffler As-Eject	360-7871
1W-2572	Muffler As.	247-2663
1W-3062	Retainer As	311-9445
1W-3900	Gasket-Front Cvr	472-8006
1W-4283	Gear As-Idler	499-4284
1W-4284	Gear-O Pump Dr	515-9316
1W-4369	Pulley-Alt	296-1340
1W-4402	Gear-Camshaft	279-4981
1W-4407	Hub-Fan Pulley	296-1358
1W-4623	Muffler As	360-9622
1W-4737	Gear-CShft	295-5688
1W-4740	Gear As.-Drive	295-5689
1W-5009	Crankshaft As	398-2969
1W-5036	Bracket As-Fan	425-1210
1W-5105	Ring Gp-Piston	311-9446
1W-5300	Rotocoil As	443-2659
1W-5646	Shaft-Water Pump	515-9317
1W-5910	Tappet As-Guide	383-1569
1W-5912	Tappet As-Guide	325-6223
1W-5920	Bearing-Camshaft	421-1558
1W-6183	Shield As-Manf	367-6083
1W-6184	Shield As	416-5524
1W-6185	Shield As	374-4704
1W-6186	Shield As	374-4705
1W-6209	Crankshaft As	463-7668
1W-6356	Gasket	438-1795
1W-6440	Gasket-Cyl Head	449-9548
1W-6473	Compressor Gp	448-9150
1W-6541	Plunger As	325-6173
1W-6987	Valve As-Check	420-6221
1W-7035	Kit-Pump (RBD)	421-1553
1W-7072	Rebuild Kt-Pump	428-6657
1W-7073	Rebuild Kt-Pump	383-3677
1W-7074	Kit-Rebuild-Pump	419-4712
1W-7080	Kit-Pump (RBD)	392-4515

Cat Part Number	Part Name	Yellowmark Part Number
1W-7082	Rebuild Kt-Pump	383-3681
1W-7238	Shaft As-Pump Dr	379-0164
1W-7239	Shaft As-Idler	379-0163
1W-7940	Spider As-Fan	295-5443
1W-8539	Bearing-Conn Rod	419-7251
1W-8606	Valve-Inlet	443-1204
1W-9171	Bonnet-Valve	374-4707
1W-9191	Line As-Fuel Inj	311-9403
1W-9201	Line As-Fuel Inj	311-9411
1W-9202	Line As-Fuel Inj	311-9412
1W-9203	Line As-Fuel Inj	311-9413
1W-9204	Line As-Fuel Inj	311-9414
1W-9205	Line As-Fuel Inj	311-9415
1W-9206	Line As-Fuel Inj	311-9416
1W-9207	Line As-Fuel Inj	311-9417
1W-9208	Line As-Fuel Inj	311-9418
1W-9209	Line As-Fuel Inj	311-9419
1W-9210	Line As-Fuel Inj	311-9420
1W-9211	Line As-Fuel Inj	311-9421
1W-9212	Line As-Fuel Inj	311-9422
1W-9229	Muffler As	302-4282
1W-9302	Gear-Crankshaft	386-3059
1W-9490	Pulley-Alt	394-0885
1W-9519	Muffler As	397-5043
1W-9771	Crankshaft As	368-5913
1W-9812	Gear-Crankshaft	380-1513
1W-9832	Muffler As	416-5493
2A-4429	Lock-Retainer	379-0174
2G-6285	Valve Kt	383-1570
2H-2330	Bearing-Sleeve	452-9554
2H-3069	Lifter As-Valve	387-2927
2H-5080	Gasket Kt-V GR	438-0180
2L-6744	Plunger	426-0030
2N-1572	Muffler As-Exh	361-6575
2N-1599	Gear	378-3970
2N-3236	Gasket-Man Exh	415-1900
2N-5693	Gasket-Aftclr	438-2019
2N-5842	Screw-Bridge Adj	418-1934
2P-0220	Gasket-Pump	398-2927
2P-0484	Chamber As	247-3296
2P-1129	Pulley-Tightener	540-4298
2P-1131	Arm As-Tightener	430-8132
2P-1170	Shaft As-Gear	296-1367
2P-1438	Pipe-Exh Ext	325-6157
2P-1757	Hub-Fan Pulley	296-1357
2P-1781	Spacer-Oil Pump	325-6214
2P-2406	Pulley	264-5870
2P-2407	Pulley	383-3684



# Yellowmark Engine Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
2P-2656	Line As-Fuel Inj	430-9650	2W-7255	Shaft-Water Pump	325-6203	3S-2252	Manifold-Exhaust	261-0887
2P-2744	Muffler As.	247-2664	2W-7455	Gear As	396-9957	3S-3875	Screen-Suction	435-4849
2P-2784	Ejector As-Exh	367-6063	2W-7590	Cooler As-Oil	378-3971	3S-7517	Pulley-Belt Adj	540-4299
2P-2788	Adapter-Fan	390-0984	2W-7610	Gear-Hyd Pump Dr	418-1940	3W-7770	Tube As	385-7227
2P-3839	Crankshaft As	398-2968	2W-7614	Gear-Crankshaft	425-7752	3Y-9984	Manifold-Exhaust	325-6123
2P-4611	Pipe-Exhaust	365-8821	2W-7678	Gear-Water Pump	325-6088	4H-7302	Guide-Lifter	500-0373
2P-5081	Muffler As	360-7872	2W-7774	Ejector As-Exh	393-0914	4H-7496	Plate-Pump Seal	420-6217
2P-5608	Pipe-Extension	367-6066	2W-7933	Core As-O Clr	374-4708	4L-3437	Gasket	420-8572
2P-5609	Muffler As.	247-2665	2W-7980	Camshaft As	378-3972	4L-3756	Bearing-Thrust	311-9366
2P-6128	Pulley	264-5872	2W-8038	Gear-Camshaft	425-7751	4L-4653	Plate-Thrust	311-9440
2P-6245	Shaft As-Pump	325-6197	2W-8147	Gear-Crankshaft	513-7989	4L-6706	Gasket	421-1028
2P-6246	Trunnion Gp	516-1577	2W-8271	Arm As-Rocker	432-8912	4L-7820	Rod Assembly	311-9449
2P-6255	Muffler As.	247-2666	2W-8437	Muffler As	385-7198	4M-0410	Gear-Oil Pump Dr	428-6660
2P-7828	Pan-Oil	314-8691	2W-8493	Pulley-Fan	430-5361	4M-4431	Shaft-Pump Dr	390-0994
2P-7830	Pump Gp	314-8533	2W-8494	Pulley-Alt	295-5692	4M-9214	Shaft-Pump Drive	314-8543
2P-7850	Crankshaft	487-2940	2W-9162	Breather As	512-6456	4M-9215	Gear-Pump Idler	311-9391
2P-8907	Spider As-Fan	330-9289	2W-9978	Core As-Oclr	279-4983	4M-9216	Gear-Pump Drive	311-9390
2P-8912	Elbow-Exhaust	398-2957	3B-1142	Retainer-Spring	391-1099	4N-0209	Bonnet-Valve	378-3973
2S-1273	Chamber As	319-3434	3B-6217	Muffler As	247-2671	4N-0406	Gear-Tfr Pump	373-1903
2S-2430	Thrower-Chsft O	380-7543	3B-6218	Muffler As	247-2672	4N-0429	Gear-Tfr Pump	373-1915
2S-3486	Gasket Kt-V G	438-0179	3E-3322	Gasket Kit - F	437-8114	4N-0685	Bearing-Sleeve	379-0191
2S-4015	Plunger As-Valve	311-9438	3E-3332	Kit - Gasket(OCL)	437-8113	4N-1106	Shaft As-Rocker	377-5837
2S-5551	Coupling-Exhaust	398-2934	3E-3339	Gasket Kit	393-3614	4N-1116	Shaft As-Pump	374-7473
2S-6739	Pulley-Tightener	298-2794	3E-4325	Kit - Gasket (F)	437-8112	4N-1119	Gear-Tfr Pump	373-1884
2S-7264	Pump As-Fuel Inj	395-1318	3E-4326	Gasket Kit	437-8111	4N-1157	Coupling-Exhaust	379-0177
2S-8884	Ring-Piston	465-8995	3E-4329	Kit - Gasket(OCL)	437-8110	4N-1320	Gasket-Adapter	398-2928
2V-6327	Support As-Front	391-9832	3E-6772	Seal-Water	382-8017	4N-1675	Manifold-Exhaust	443-2015
2W-0027	Bearing-Conn Rod	518-3993	3E-7461	Gasket Kit-Sch	437-4575	4N-1767	Valve-Bypass	419-4716
2W-0994	Body As-Preclnr	367-6084	3E-7466	Gasket Kit	393-3615	4N-1849	Pipe-Air	421-7143
2W-1223	Pump Gp-Water	385-7197	3E-7473	Gasket Kit	393-3616	4N-2484	Bonnet-Valve	455-3272
2W-1225	Pump Gp-Water	380-7532	3E-7496	Gasket Kit - Sch	437-8105	4N-2514	Gear-Flywheel	421-7283
2W-1748	Elbow-Exhaust	447-0821	3E-8905	Gasket Kit	393-3617	4N-2572	Spider As.	451-9027
2W-3391	Body As-F Inj V	383-3687	3H-0881	Ring-Piston	465-8998	4N-2690	Shaft As	386-3053
2W-3428	Muffler As	298-2784	3H-5867	Retainer-Spring	390-0992	4N-2697	Pulley-Tightener	376-9056
2W-3597	Muffler As	397-5044	3K-3124	Muffler-Trap	247-2673	4N-3092	Spider As-Fan	363-7465
2W-3875	Gear-Oil Pump Dr	399-8548	3N-2078	Pump Gp-Fuel Tfr	311-9444	4N-3281	Line As-Fuel Inj	247-3362
2W-4087	Gear As-Idler	418-9582	3N-3017	Adapter As	433-2031	4N-3282	Line As-Fuel Inj	247-3363
2W-4437	Gear As-Idler	388-0556	3N-3220	Gasket-Cyl Head	500-8508	4N-3283	Line As-Fuel Inj	247-3364
2W-5240	Pipe-Pump Outlet	376-9055	3N-3368	Pipe-Exhaust	311-9434	4N-3284	Line As-Fuel Inj	247-3365
2W-5536	Core As-Radiator	380-7554	3N-7326	Thrower-CSHft O	311-9458	4N-3339	Spider As.	419-0891
2W-5539	Core As-Rad	374-7492	3N-7327	Thrower-CSHft O	311-9459	4N-3664	Guide-Valve	314-8524
2W-5540	Core As-Radiator	363-7452	3N-7702	Shaft-Pump Idler	428-7201	4N-3714	Chamber As	363-7450
2W-6280	Bracket As-Fan	431-5271	3P-0037	Manifold-Exhaust	505-0214	4N-3875	Ring-Piston	465-8997
2W-6632	Core As-Rad	391-1096	3P-0114	Elbow-Exhaust	314-8516	4N-3927	Compressor As	435-6051
2W-6757	Trunnion As	295-5678	3P-0165	Pulley-Fan Drive	298-2775	4N-4534	Pulley-Crkshft	374-4709
2W-6965	Coupling	416-5490	3R-5327	Pipe-Extension	383-1571	4N-4577	Muffler As.	308-9877
2W-6967	Elbow As	420-6385	3S-1467	Pump Gp-F Inj-B	452-9555	4N-4668	Breather-Engine	396-7271
2W-7213	Bearing-Sleeve	419-4667	3S-1723	Kit - Gasket (WP)	438-0178			

# Yellowmark Engine Parts

Cat Part Number	Part Name	Yellowmark Part Number
4N-4679	Pulley-Fan	394-9837
4N-4782	Pulley	325-6176
4N-4864	Pump Gp-F Tfr	242-3442
4N-4878	Pump Gp-F Tfr	390-0995
4N-4880	Pump Gp-F Tfr	256-4758
4N-5184	Muffler As	360-7874
4N-5191	Muffler As	298-2785
4N-5390	Pulley-Alt Drive	264-5879
4N-5614	Arm As-Rocker	374-4710
4N-5958	Tube-Exhaust Ext	385-3811
4N-6302	Belt Set-Vee	314-8495
4N-6658	Bearing-Sleeve	373-1885
4N-7692	Crankshaft As	269-8764
4N-7693	Crankshaft As	269-8763
4N-7982	Pulley	264-5880
4N-8344	Spider As-Fan	416-5520
4N-8434	Spider As-Fan	451-9030
4N-8472	Housing-Aftclr	419-0887
4N-8591	Coupling-Exhaust	325-6053
4N-8809	Chamber As	247-3297
4N-8814	Line As-F Inj	247-3366
4N-8942	Muffler As	298-2786
4N-9213	Elbow-Exhaust	330-9270
4N-9325	Pulley-Alt Drive	419-4657
4N-9941	Line As-Fuel Inj	380-1562
4N-9942	Line As-Fuel Inj	380-1563
4N-9943	Line As-Fuel Inj	380-1572
4N-9944	Line As-Fuel Inj	380-1565
4P-0251	Core As-Oclr	526-0018
4P-0660	Muffler As	298-2787
4P-0854	Core As-Oil Clr	419-0890
4P-0893	Core As-Radiator	376-9057
4P-0894	Core As-Radiator	528-7163
4P-0897	Core As-Radiator	376-9058
4P-1463	Muffler As	360-7876
4P-3546	Valve As-Relief	325-6236
4P-3683	Pump Gp-Water	374-7498
4P-3754	Core As-Oclr	438-2016
4P-4010	Muffler As	298-2788
4P-4757	Muffler As	360-7877
4P-5433	Compressor As	419-4728
4P-5435	Compressor As	396-9942
4P-5884	Core As-Oclr	435-0196
4P-6548	Muffler As	360-7878
4P-6589	Pipe As	382-6898
4P-6649	Muffler As	416-5527
4P-7051	Pulley-Alt	376-9064
4P-7731	Core Gp-O Clr	385-7228

Cat Part Number	Part Name	Yellowmark Part Number
4P-7790	Shaft As-Arm	457-4596
4P-7801	Line As-Fuel Inj	373-1888
4P-7802	Line As-Fuel Inj	373-1889
4P-7803	Line As-Fuel Inj	373-1890
4P-7804	Line As-Fuel Inj	373-1891
4P-7805	Line As-Fuel Inj	373-1892
4P-7806	Line As-Fuel Inj	373-1893
4P-7807	Line As-Fuel Inj	373-1894
4P-7808	Line As-Fuel Inj	373-1895
4P-7809	Line As-Fuel Inj	373-1896
4P-7810	Line As-Fuel Inj	373-1897
4P-7811	Line As-Fuel Inj	373-1898
4P-7812	Line As-Fuel Inj	373-1899
4P-7826	Gear-Camshaft	472-8008
4P-7827	Gear-Crankshaft	380-7533
4P-8279	Manifold-Exhaust	430-8041
4P-8280	Manifold-Exhaust	430-7236
4P-8577	Rod As-Injector	455-5513
4P-8915	Gasket-Cyl Head	377-5838
4P-9381	Line As-Fuel Inj	279-4984
4P-9382	Line As-Fuel Inj	279-4985
4P-9383	Line As-Fuel Inj	279-4988
4P-9384	Line As-Fuel Inj	279-4989
4P-9385	Line As-Fuel Inj	279-4986
4P-9386	Line As-Fuel Inj	279-4987
4P-9395	Line As-Fuel Inj	383-3690
4P-9396	Line As-Fuel Inj	383-3691
4P-9961	Line As-Fuel Inj	325-6115
4P-9962	Line As-Fuel Inj	325-6116
4P-9963	Line As-Fuel Inj	298-2777
4P-9964	Line As-Fuel Inj	298-2778
4S-7793	Thrower-CSht O	367-6085
4S-8472	Hood As-Preclnr	296-1355
4S-8855	Coupling-Exhaust	369-9488
4W-0255	Spider As-Fan	382-5052
4W-0419	Core As-Oclr	379-0182
4W-0456	Muffler As-Eject	360-7879
4W-2061	Pan As-Oil Sump	416-5519
4W-2472	Spring-Valve	380-7550
4W-2474	Rotocoil As	388-6571
4W-2541	Shaft-Gov Cont	399-8580
4W-2566	Adapter-Seal	383-1573
4W-2567	Adapter-Seal	383-1574
4W-3632	Muffler As	385-7224
4W-5053	Muffler As	360-7881
4W-5363	Core Gp-O Clr	380-7531
4W-5477	Pump Gp-F Tfr	380-1512

Cat Part Number	Part Name	Yellowmark Part Number
4W-5549	Core As-Oclr	311-9376
4W-5550	Core As-Oclr	311-9377
4W-5693	Bearing-Con Rod	419-6324
4W-5698	Bearing-Main	419-6323
4W-5699	Bearing-Main	419-6307
4W-5700	Bearing-Main	419-6320
4W-5701	Bearing-Main	419-6333
4W-5702	Bearing-Con Rod	419-6318
4W-5703	Bearing-Con Rod	419-7255
4W-5719	Adapter As	373-1906
4W-5733	Adapter As-Valve	378-3975
4W-5998	Rod-Valve Push	379-0168
4W-6805	Flywheel As	421-3325
4W-7188	Core As-Oclr	374-7501
4W-7382	Core As-Oclr	380-1514
4W-8485	Muffler As	430-4472
4W-9480	Rod As-Pstn &	378-3976
4W-9492	Repair Kt-Major	375-2261
4W-9771	Gear-Crankshaft	302-2674
4W-9822	Core Gp-O Clr	374-4711
4W-9989	Gear As-Idler	302-2677
4Y-2817	Ejector As	295-6423
4Y-4951	Muffler As	419-0889
5B-9169	Plug-Drain	419-4736
5H-7071	Director-Water	388-0555
5I-7619	Pulley	301-4772
5I-7707	Pipe	438-2011
5I-7708	Pipe	438-2014
5I-7710	Pipe	438-2013
5I-7711	Pipe	438-2012
5I-7914	Muffler	435-4791
5I-7959	Pulley As	301-5256
5L-2093	Gasket	393-3619
5L-7520	Elbow-Exhaust	419-4711
5L-7634	Elbow-Turbo Exh	380-1555
5L-8856	Coupling-Exhaust	311-9379
5L-9371	Connector-Inlet	311-9375
5L-9738	Coupling-Exhaust	311-9380
5M-2824	Coupling-Exhaust	431-5270
5M-3560	Bearing-Sleeve	392-4521
5M-5822	Gear-Pump Drive	247-4120
5M-5856	Pipe-Extension	373-1913
5N-4378	Shaft As-Pump	311-9456
5N-8501	Head As-Cyl	256-4762
5N-8657	Manifold-Exhaust	261-0886
5N-8879	Manifold-Exhaust	542-4721
5N-9055	Manifold-Exhaust	261-0890
5P-8053	Kit - Gasket-Sch	415-1901

# Yellowmark Engine Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
5P-8054	Gasket Kit	437-8109	6I-1364	Spider As	391-9824	6N-5967	Elbow	394-9825
5P-8366	Gasket Kit - Sch	387-2911	6I-1647	Arm Gp-V Rocker	433-0451	6N-5978	Coupling-Exhaust	369-9487
5P-8545	Gasket Kit	437-8626	6I-1650	Arm Gp-V Rocker	433-0450	6N-5987	Shaft-Water Pump	390-0998
5P-8768	Kit - Gasket	393-1024	6I-2408	Muffler As.	378-3978	6N-6015	Pump Gp-Water	453-6502
5P-8772	Gasket Kit	383-1575	6I-2409	Pipe	383-3693	6N-6490	Bracket As-Fan	420-8569
5P-8789	Gasket Kt	393-3620	6I-2726	Bearing-Sleeve	419-4757	6N-6721	Coupling	377-5830
5P-8950	Gasket Kit	393-3621	6I-2981	Plate-Block	374-7495	6N-6969	Chamber As	247-3299
5P-8970	Gasket Kt-Liner	383-1576	6I-3066	Gasket-Cyl Head	380-1518	6N-7154	Rotocoil As	380-7556
5P-8974	Gasket Kit - WP	387-2912	6I-3662	Muffler As	360-7882	6N-7175	Rotocoil As	382-8042
5P-9237	Gasket Kit	438-0174	6I-4024	Gasket-Plate	377-5839	6N-7263	Gasket-Cyl Head	380-7386
5P-9552	Gasket Kt	393-3623	6I-4613	Plate-Spacer	380-7405	6N-7295	Manifold-Exhaust	261-0903
5P-9553	Gasket Kit - WP	393-3624	6I-4689	Gasket-Cyl Head	377-5840	6N-7653	Gage As-O Level	428-7206
5P-9568	Gasket Kit	393-3625	6I-6425	Muffler As	386-3045	6N-7695	Cover-Oil Pump	441-1564
5P-9814	Gasket Kt-VG	393-3635	6L-2279	Plug-PTF	419-4739	6N-8645	Ejector As	388-0560
5P-9840	Kit - Gasket-Sch	437-8140	6L-4714	Panel-Acl Filter	314-8532	6N-8992	Adapter-Fan	394-9810
5P-9841	Gasket Kit - VG	393-3626	6L-4716	Gasket-Exhaust	398-2951	6N-9133	Gasket-Plate	398-2959
5P-9972	Gasket Kit	393-5207	6L-6481	Elbow-Air Inlet	311-9385	6N-9135	Gasket-Plate	500-8510
5S-1220	Lifter As-Valve	387-2926	6L-8968	Coupling-Exhaust	311-9381	6N-9211	Core As-O Clr	435-6049
5S-1684	Gasket Kt-V GR	393-5224	6N-0425	Coupling-Exhaust	394-9836	6N-9220	Core As-Oil Clr	513-7996
5S-1757	Insert-Seat	311-9401	6N-0597	Pulley-Fan	420-6391	6N-9653	Core As-Oil Clr	386-3056
5S-1822	Chamber As	248-5406	6N-0622	Elbow-Exhaust	380-7534	6N-9654	Core As-Oil Clr	435-4787
5S-1833	Chamber As	247-3298	6N-0714	Pulley-Alt	264-5884	6N-9670	Core As-Oil Clr	513-7997
5S-5917	Screw-Rocker Adj	380-7537	6N-0731	Muffler As-Exh	382-8018	6N-9752	Core As-Oil Clr	468-5016
5S-5918	Rod-Valve Push	394-0903	6N-0957	Core As-Radiator	398-2938	6P-2090	Base-XMSN O Fil	397-5049
5S-6795	Chamber As	242-3437	6N-1025	Shaft-Pump Idler	520-2879	6S-3975	Trunnion	396-9940
6B-6224	Ferrule	419-4738	6N-1036	Gear-Oil Pump	279-4991	6V-0214	Kit - Gasket-Mch	437-4590
6C-3617	Support-Trunnion	374-4712	6N-1186	Pulley-Belt	448-2424	6V-0216	Kit - Gasket-Sch	437-4589
6E-4985	Cover-Filter	424-2015	6N-1218	Core As-Radiator	379-0181	6V-0220	Kit - Gasket(CL)	437-4588
6G-0078	Breather	435-4789	6N-1553	Coupling-Exhaust	295-6422	6V-0229	Gasket Kit	437-4587
6H-5843	Thrower-Chsft O	393-3612	6N-1813	Pump Gp-BFT 1 GR	330-9279	6V-0233	Kit - Gasket-T	437-4586
6H-5845	Baffle-Oil	390-0926	6N-1878	Muffler As	360-7883	6V-0235	Gasket Kit	437-4585
6I-0031	Line As-Fuel Inj	374-4713	6N-1931	Plunger	379-0171	6V-0237	Kit - Gasket-Exp	437-4584
6I-0032	Line As-Fuel Inj	374-4714	6N-1965	Line As-F Inj	250-7535	6V-0241	Gasket Kit - F	393-3628
6I-0033	Line As-Fuel Inj	374-4715	6N-1966	Line As-F Inj	250-7536	6V-0600	Gasket Kit	437-4583
6I-0034	Line As-Fuel Inj	375-2262	6N-2460	Pump Gp-Eng Oil	395-1316	6V-0611	Kit - Gasket-FS	437-4581
6I-0035	Line As-Fuel Inj	374-4716	6N-2687	Spider As.-Fan	385-7199	6V-1168	Gasket Kit	437-4565
6I-0036	Line As-Fuel Inj	374-4717	6N-2820	Pump Gp-Eng Oil	415-1903	6V-1181	Gasket Kit	437-4578
6I-0037	Line As-Fuel Inj	374-4718	6N-2823	Crankshaft As	523-5950	6V-1339	Gasket Kit	388-0651
6I-0038	Line As-Fuel Inj	374-4719	6N-3641	Pulley-Tightener	380-7536	6V-1395	Gasket Kt-VG	438-0173
6I-1032	Line As-Fuel Inj	390-0931	6N-3964	Muffler As	360-7884	6V-1785	Kit - Gasket-Mch	437-3190
6I-1035	Line As-Fuel Inj	390-0921	6N-4184	Muffler As	385-7226	6V-2209	Gasket Kit	419-4732
6I-1036	Line As-Fuel Inj	390-0922	6N-4597	Coupling-Exhaust	369-9489	6V-2237	Gasket Kit	437-3212
6I-1038	Line As-Fuel Inj	390-0923	6N-5300	Pulley-CShaft	378-3979	6V-2246	Gasket Kit	391-1091
6I-1099	Manifold-Exh	424-6366	6N-5354	Pipe-Extension	430-8130	6V-2466	Kit - Gasket-FS	437-3211
6I-1240	Governor As	380-7538	6N-5392	Manifold-Exhaust	394-0905	6V-2502	Gasket Kit	437-3210
6I-1327	Bonnet-Valve	455-3273	6N-5435	Ejector As-Exh	443-2663	6V-2523	Gasket Kit	437-3209
6I-1345	Shaft As-O Pump	374-7475	6N-5437	Muffler As.	247-2674	6V-2527	Gasket Kit	387-2918
6I-1346	Pump Gp-BEO 2 GR	295-5674				6V-2529	Gasket Kit	437-3208
6I-1363	Spider As	380-1517				6V-2539	Gasket Kit	437-3207
						6V-2543	Gasket Kit	437-3206

# Yellowmark Engine Parts

Cat Part Number	Part Name	Yellowmark Part Number
6V-2544	Gasket Kit	437-3205
6V-2545	Gasket Kit - F	437-3204
6V-2546	Gasket Kit - F	437-3203
6V-2547	Gasket Kit - F	437-3189
6V-2580	Gasket Kt-V G	393-3637
6V-2909	Gasket Kit - F	388-0652
6V-2936	Gasket Kt-V G	387-2915
6V-2981	Gasket Kit - VG	437-3201
6V-2983	Gasket Kt	437-3213
6V-2998	Gasket Kit	437-3199
6V-3736	Gasket Kt-Instl	438-0157
6V-3737	Gasket Kt-Lines	438-0171
6V-3743	Kit - Gasket Pump	438-0169
6V-3749	Gasket Kt	387-2916
6V-3751	Gasket Kt-V G	393-5222
6V-4540	Gasket Kit - WP	393-1021
6V-4714	Kit - Gasket (CL)	437-3197
6V-4785	Gasket Kit - FS	388-0661
6V-5426	Kit - Gasket-WP	438-0167
6V-5428	Kit - Gasket-OCL	386-3044
6V-5465	Gasket Kt	438-0166
6V-5467	Gasket Kt-F Sys	387-2924
6V-5468	Kit - Gasket	438-0165
6V-5495	Gasket Kt-Exp TK	393-5211
6V-5905	Gasket Kit	437-3195
6V-5918	Gasket Kit	437-3194
6V-5919	Gasket Kit	437-3193
6V-5920	Gasket Kit - F	388-0653
6V-5976	Gasket Kit	393-5200
6V-6371	Gasket Kit	438-0164
6V-6375	Gasket Kt-Lines	438-0162
6V-6384	Kit - Gasket-WP	387-2917
6V-6385	Kit - Gasket (WP)	438-0161
6V-6894	Rebuild Kt-Pump	383-3696
6V-6896	Rebuild Kit	390-1006
6V-7266	Gasket Kt-Head	393-5212
6V-7459	Gasket Kit	391-1095
6V-7479	Gasket Kt-Cyl HD	438-0160
6V-8041	Gasket Kit	437-3191
6V-9221	Gasket Kit	391-1092
6V-9228	Gasket Kt-Cyl HD	438-0159
6V-9255	Gasket Kt	387-2913
6V-9259	Gasket Kt	393-5213
6V-9698	Gasket Kt-Pump	388-0647
6V-9725	Kit - Gasket (F)	437-3200
6V-9729	Gasket Kit - F	393-5195
6V-9736	Kit - Gasket (F)	437-3202
6V-9921	Gasket Kit	437-3236
7C-0145	Core As-Oclr	374-4720
7C-0563	Rod As-Pstn&	520-2886

Cat Part Number	Part Name	Yellowmark Part Number
7C-1067	Impeller-Pump	378-3980
7C-1068	Impeller-Pump	378-3981
7C-1371	Coupling-Exhaust	369-9490
7C-3039	Core As-Oclr	363-7451
7C-3729	Pulley	376-9066
7C-3862	Camshaft	458-0151
7C-3938	Pulley-Alt	433-2030
7C-5665	Elbow-90 Deg	399-8547
7C-5851	Muffler As	298-2790
7C-6398	Muffler As	360-7885
7C-6450	Pipe Gp-Ext	377-5862
7C-6628	Pulley-Alt	396-9894
7C-6976	Bearing-Conn Rod	419-6317
7C-6977	Bearing-Conn Rod	419-6316
7C-7344	Muffler As	360-7886
7C-7955	Gasket-Cover	382-6899
7C-8365	Drive Gp-Fan BSC	433-2025
7E-0558	Bearing-Rod	419-7256
7E-0559	Bearing-Rod	419-7257
7E-0853	Muffler As	360-7887
7E-2888	Gear-Fuel Pump	397-5062
7E-2944	Muffler As	360-7888
7E-3205	Manifold-Inlet	376-9060
7E-3509	Pipe As-EX Ext	373-1907
7E-3557	Spider As-Fan	430-4471
7E-3909	Tube-Exhaust	398-8339
7E-4728	Rod As-Conn	379-8863
7E-5663	Muffler As	247-2667
7E-5816	Shaft-Fan	399-8552
7E-5996	Rod As-Conn	379-8864
7E-6794	Arm As-Injector	433-0449
7E-6807	COMPRESSOR Gp -B	515-9318
7E-7830	Valve-Exhaust	500-0379
7E-7894	Bearing-Rod	419-7260
7E-8830	Bracket As-Fan	383-3697
7E-8926	Head Kt-Cyl	377-5847
7E-9595	Core As-Radiator	396-9926
7E-9918	Repair Kit-Major	388-0655
7E-9980	Camshaft	377-5851
7G-7681	Shaft As	307-1530
7L-0103	Impeller-Pump	398-2967
7L-0104	Impeller-Pump	311-9395
7L-2041	Shaft-Water Pump	428-7200
7L-4302	Gasket	420-8570
7L-8240	Bellows	419-4741
7M-4046	Bearing-Sleeve	394-8206
7M-4204	Manifold-Exhaust	261-0901

Cat Part Number	Part Name	Yellowmark Part Number
7M-4358	Manifold-Exhaust	261-0907
7M-4603	Body-Fuel Valve	311-9348
7M-4926	Retainer-Piston	314-8538
7M-5692	Impeller-Pump	433-0791
7M-7140	Manifold-Exhaust	536-6346
7M-7358	Valve-Inlet	298-2774
7M-7681	Rod-Valve PUSH	500-0383
7M-7817	Valve-Inlet	311-9474
7M-8265	Manifold-Exhaust	521-6885
7N-0061	Muffler As	360-7889
7N-0113	Core As-Oclr	388-0564
7N-0128	Core As-Oil Clr	299-1994
7N-0165	Core As-O Clr	295-5670
7N-0619	Pulley-Fan	383-1581
7N-0691	Elbow-Water Rglt	378-3983
7N-1152	Pulley-Fan	333-4951
7N-1183	Plunger As-Fuel	419-4742
7N-1220	Plunger As-Pump	419-4743
7N-1275	Pulley-Fan	380-7535
7N-1393	Muffler As	374-7477
7N-1572	Cover-Water Pump	377-5854
7N-1760	Ejector As	373-1914
7N-2063	Shaft As-Pump	386-3055
7N-2834	Kit-Repair	374-4723
7N-2871	Line As-Fuel Inj	319-8172
7N-2872	Line As-Fuel Inj	319-8173
7N-2874	Line As-Fuel Inj	298-2779
7N-2875	Line As-Fuel Inj	298-2780
7N-2876	Line As-Fuel Inj	298-2781
7N-2949	Pulley	264-5887
7N-3349	Shaft As-Drive	394-0889
7N-3350	Gear As-Pump Dr	319-3437
7N-3352	Plate-Spacer	386-3062
7N-3486	Manifold-Exhaust	261-0899
7N-3521	Core As-O Clr	383-3699
7N-3536	Gear-Fuel	279-4993
7N-3630	Head As-Cylinder	531-5490
7N-4170	Pump Gp-Eng Oil	379-0169
7N-4515	Body As-Piston	311-9346
7N-4618	Ejector As-Exh	397-5060
7N-4674	Muffler As.	373-1910
7N-5089	Gasket	394-0890
7N-5218	Manifold-Exhaust	435-4786
7N-5219	Manifold-Exhaust	425-2362
7N-5449	Spool-Press RLF	434-2450
7N-5503	Gear-CShft RR	233-2182
7N-5511	Gear As-Idler	233-2180
7N-5539	Muffler As	360-7891

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Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
7N-5810	Gear As-Idler	233-2179	7W-2138	Bearing-Main	419-7250	8F-8523	Bearing-Sleeve	383-3701
7N-5815	Gear-CShft RR	233-2181	7W-2164	Core As-Oclr	299-1996	8H-1994	Valve-Exhaust	443-1206
7N-5910	Impeller-Pump	314-8686	7W-2203	Head Gp-Cyl BSC	516-7982	8H-2810	Case As-Filter	314-8512
7N-6340	Head As-Cylinder	531-5491	7W-3773	Pulley-CShaft	383-1583	8L-3972	Baffle	311-9345
7N-6677	Core As-O Clr	299-1995	7W-4070	Gear-Camshaft	380-1551	8L-4529	Pulley-Alt	264-5889
7N-7091	Line As-Fuel Inj	396-9938	7W-4137	Shaft As.	378-3986	8L-5769	Shaft-Fan	439-1137
7N-7092	Line As-Fuel Inj	396-9937	7W-4473	Manifold-EX	443-2095	8L-6273	Manifold-Exhaust	524-1301
7N-7386	Gasket-Cyl Head	392-4519	7W-5095	Gear-Flywheel	425-9190	8L-6274	Manifold-Exhaust	524-1302
7N-7435	Kit-Major Repair	374-4724	7W-5164	Gasket	420-8568	8L-8867	Pulley	434-1409
7N-7447	Head As-Compr	520-2895	7W-5194	Muffler As.	346-5682	8M-0874	Plunger As-Valve	311-9439
7N-7639	Rotator-Valve	383-1582	7W-5426	Camshaft As.	378-3987	8N-0002	Trunnion As	314-8728
7N-7765	Governor As	377-5841	7W-5435	Adapter-Nozzle	374-7493	8N-0081	Trunnion	393-5196
7N-7998	Plate-Block	374-7496	7W-5524	Ejector As-Exh	397-5056	8N-0560	Gear-O Pump Dr	378-3990
7N-8018	Seal-Water	418-1964	7W-5687	Hub-CShft	314-8684	8N-0561	Gear-Pump Idler	373-1886
7N-8021	Plate-Block	374-7497	7W-5692	Pulley-CShaft	386-3041	8N-0701	Bearing-Sleeve	419-4745
7N-8022	Gasket-Cyl Head	378-3985	7W-5696	Hub-CShft	424-5887	8N-0703	Bearing-Sleeve	472-8037
7N-8117	Muffler As	247-2668	7W-5698	Pulley-CShaft	295-5679	8N-0784	Manifold-Mount	393-1044
7N-8371	Line As-Fuel Inj	373-1901	7W-5699	Pulley-CShaft	378-3988	8N-0822	Ring Gp-Piston	456-9323
7N-8629	Coupling-Elbow	419-4664	7W-5733	Gasket	421-7333	8N-0875	Valve-Exhaust	247-6893
7N-8828	Pulley	420-6395	7W-5838	Ejector As-EX	443-2660	8N-1187	Head Gp-Cyl	242-3435
7N-8923	Muffler As	416-5499	7W-5844	Bearing-Conn Rod	419-4650	8N-1188	Head Gp-Cyl	242-3436
7N-8957	Gear-Crankshaft	422-2652	7W-5928	Pump Gp-F Inj-B	432-8277	8N-1594	Shield As	378-3991
7N-9026	Trunnion	520-2896	7W-5929	Plunger & BBL As	391-9895	8N-1616	Shield As	377-5856
7N-9145	Gear-Flywheel	279-4994	7W-6459	Core As-Oclr	395-1313	8N-1619	Shield As	377-5857
7N-9146	Gear-Fly Starter	279-4995	7W-8064	Valve-Inlet	384-8705	8N-1620	Shield As-Manf	374-4725
7N-9312	Damper As-Cshft	542-4727	7W-8584	Manifold-Exhaust	396-9932	8N-1622	Shield As-Manf	374-4726
7N-9647	Muffler As	386-3050	7W-9707	Muffler As-Eject	360-9626	8N-1628	Shaft As-F Pump	383-3703
7N-9674	Muffler As	360-7892	7X-2396	Gasket Kit	393-5194	8N-1721	Rod As-Conn	269-5291
7N-9803	Pin-Piston	501-8002	7X-2397	Gasket Kit	393-5193	8N-1726	Rod As-Conn	379-8866
7S-1784	Cap As-Rain	512-6452	7X-2754	Gasket Kit - F	437-3235	8N-1849	Bearing-Conn Rod	379-0196
7S-3161	Lifter-Valve	279-4996	7X-2846	Gasket Kit	437-8647	8N-1984	Rod As-Conn	242-3441
7S-4097	Adapter-Exh Man	383-3700	7X-7954	Gasket Kit	393-5204	8N-2051	Compressor Gp	539-8563
7S-4411	Cap As-Rain	373-1912	7X-7975	Gasket Kit	437-3233	8N-2258	Shield As-Bottom	421-1562
7S-5003	Cap As-Rain	379-0184	7Y-1315	Pipe As-Tail	385-7209	8N-2275	Bearing-Sleeve	311-9365
7S-5787	Chamber As	247-3300	7Y-1508	Muffler As	395-1303	8N-2368	Shield As	449-9547
7S-7070	Head As-Cylinder	325-6107	7Y-1513	Pipe As-Exhaust	301-5249	8N-2516	Bonnet-Valve	377-5858
7S-7681	Pipe-Exh Ext	385-7213	7Y-1978	Muffler As	360-7893	8N-3180	Body As-Piston	250-6563
7S-8443	Muffler	247-2675	7Y-2040	Muffler As	301-7975	8N-3181	Piston Gp-Basic	250-6555
7S-8736	Pipe-Ext Exhaust	382-5066	8A-2251	Liner-Cylinder	376-9068	8N-3182	Body As-Piston	250-6564
7W-0140	Gear-Drive	399-8546	8A-2305	Repair Kt-Major	386-3042	8N-3183	Piston Gp-Basic	250-6556
7W-0182	Plunger & BBL As	391-9893	8C-0580	Gasket Kit - T	393-1023	8N-3248	Gasket As	415-1893
7W-0205	Core As-Oclr	379-0183	8C-3467	Gasket Kit - F	437-4574	8N-3251	Shaft As-Rkr Arm	314-8711
7W-0508	Gear-FP Drive	296-1351	8C-4402	Gasket Kit - F	436-8393	8N-3304	Pulley-Tightener	419-4708
7W-0561	Pump Gp-F Inj-B	432-8278	8C-4455	Gasket Kit	436-8392	8N-3312	Shaft As-Rkr Arm	325-6200
7W-0675	Core As-Oclr	434-4016	8C-4456	Gasket Kit - Sch	393-1029	8N-3325	Arm Gp-V Rocker	314-8623
7W-1713	Core Gp-O Clr	438-2010	8C-5704	Gasket Kit - Sch	393-1027	8N-3327	Arm Gp-V Rocker	314-8624
7W-2059	Gasket-Cyl HD	380-1548	8C-6553	Gasket Kit	436-8390	8N-3451	Line As-Fuel Inj	390-0927
7W-2136	Bearing-Conn Rod	419-7281	8C-8714	Kit - Gasket-CL	436-8389	8N-3452	Line As-Fuel Inj	390-0928
			8C-8741	Kit - Gasket-(RS)	438-0172			

# Yellowmark Engine Parts

Cat Part Number	Part Name	Yellowmark Part Number
8N-3453	Line As-Fuel Inj	390-0940
8N-3454	Line As-Fuel Inj	390-0930
8N-3455	Line As-Fuel Inj	390-0920
8N-3539	Plunger As-Pump	377-5861
8N-3666	Repair Kt-Major	377-5842
8N-3723	Valve-Exhaust	311-9472
8N-3753	Rod As-Conn	379-8867
8N-4110	Bearing-Sleeve	394-8207
8N-4445	Pipe-Exhaust Ext	386-3061
8N-4810	Gasket-Cyl Head	437-2046
8N-4960	Plate-Thrust	501-0547
8N-4975	Muffler As.	443-2661
8N-5384	Manifold-Exhaust	536-6361
8N-5385	Manifold-Exhaust	391-9835
8N-5386	Manifold-Exhaust	528-7173
8N-5387	Elbow-Exh Ext	373-1908
8N-5388	Muffler As	360-7895
8N-5779	Coupling-Exhaust	325-6047
8N-5884	Pulley-Fan Drive	416-5500
8N-5929	Cover-Water Pump	296-1349
8N-6004	Head As-Cyl	247-3369
8N-6308	Bearing-Conn Rod	419-7267
8N-6796	Head Gp-Cyl	269-5290
8N-7764	Bearing-Main	419-6310
8N-7765	Bearing-Main	419-7269
8N-7766	Bearing-Main	419-7270
8N-7771	Bearing-Conn Rod	419-7272
8N-7773	Bearing-Conn Rod	419-7274
8N-7782	Rotocoil As	383-1585
8N-7923	Bearing-Main	419-7275
8N-7924	Bearing-Main	419-7276
8N-7933	Bearing-Conn Rod	419-7280
8N-7934	Bearing-Conn Rod	419-6308
8N-8196	Adapter-Exh Manf	377-5852
8N-8220	Bearing-Conn Rod	377-5860
8N-8221	Bearing-Conn Rod	419-6377
8N-8222	Bearing-Conn Rod	419-6322
8N-8223	Bearing-Conn Rod	419-6386
8N-8225	Bearing-Main	419-6385
8N-8226	Bearing-Main	376-9081
8N-8227	Bearing-Main	376-9082
8N-8228	Bearing-Main	376-9083
8N-8229	Bearing-Main	376-9084
8N-8983	Hub-Fan Pulley	421-7227
8N-9489	Chamber As	247-3301
8N-9523	Elbow	425-2566
8N-9622	Bracket As-Fan	433-2024

Cat Part Number	Part Name	Yellowmark Part Number
8N-9733	Line As-F Inj	319-8174
8R-1015	Support-Trunnion	374-4712
8S-0248	Breather As	325-6033
8S-0493	Shaft As-Pump	325-6198
8S-0905	Muffler As	302-2690
8S-1522	Chamber As	390-1004
8S-1523	Chamber As	388-0565
8S-1892	Gasket Kt-WP	436-8398
8S-2389	Body-Fuel Valve	377-5831
8S-2809	Muffler	247-2677
8S-3617	Chamber As	247-3302
8S-3653	Bonnet-Valve	374-4728
8S-3656	Plunger As-Pump	419-4750
8S-3970	Chamber As	242-3438
8S-3995	Gage As-Level	430-8042
8S-4996	Muffler	390-0909
8S-5438	Muffler As	360-7896
8S-6782	Adapter-Exhaust	383-1586
8S-7716	Manifold-Exhaust	295-0415
8S-7717	Manifold-Exhaust	261-0894
8S-7718	Manifold-Exhaust	295-0416
8S-9686	Gasket Kit	393-5215
8S-9698	Gasket Kit	393-5221
8T-1606	Kit - Gasket-Sch	386-3046
8T-1622	Gasket Kit - Sch	436-8388
8T-1630	Kit - Gasket-F	436-8387
8T-1631	Kit - Gasket-Mch	436-8375
8T-2455	Gasket Kit	436-8396
8T-2466	Gasket Kit	393-5199
8T-2470	Gasket Kit	393-5219
8T-2489	Gasket Kit - Sch	436-8408
8T-2499	Kit - Gasket-Sch	436-8383
8T-2500	Kit - Gasket	393-1028
8T-3383	Kit - Gasket-Mch	447-8648
8T-4870	Gasket Kit	436-8378
8T-6479	Gasket Kit	436-8377
8T-6485	Gasket Kit	436-8406
8T-6487	Kit - Gasket-Sch	436-8384
8T-9486	Gasket Kt	393-5197
8W-0328	Cylinder-Damper	419-4715
8X-1805	Pulley	521-6893
9B-1320	Valve-Check	377-5832
9H-2256	Pump Gp-F Prm	311-9443
9H-5797	Plunger As-Pump	391-9891
9H-6236	Rod As	390-0999
9L-5519	Manifold-Exhaust	392-4500
9L-5520	Manifold-Exhaust	383-1587
9L-5521	Manifold-Exhaust	396-9895
9L-5836	Coupling-Exhaust	385-7212

Cat Part Number	Part Name	Yellowmark Part Number
9L-5839	Coupling-Exhaust	374-7480
9L-7682	Valve-Inlet	385-9266
9M-4955	Pump Gp-F Tfr	242-3443
9M-5350	Spring-Valve	380-7573
9N-0316	Bracket-Pulley	434-1993
9N-1161	Line As-Fuel Inj	383-3705
9N-3345	Pulley As-Idler	398-8341
9N-3668	Base As-Coolant	419-4718
9N-3970	Line As-Fuel Inj	390-1005
9N-5246	Bearing-Camshaft	384-4772
9N-5529	Body-F Inj Valve	378-3993
9N-5769	Cover-Housing	325-6050
9N-5786	Lifter-Valve	457-6607
9N-5920	Bearing-Conn Rod	419-6383
9N-6221	Crankshaft As	368-5914
9N-6500	Rod-Valve Push	383-3706
9R-0139	Bearing-Sleeve	526-3038
9S-1195	Pump As-Oil	390-1000
9S-1267	Ejector As-Exh	397-5059
9S-1768	Pipe-Ext Exhaust	380-7544
9S-2354	Manifold-Exhaust	261-0888
9S-2355	Manifold-Exhaust	261-0891
9S-2356	Manifold-Exhaust	261-0905
9S-6129	Pulley-Alt Drive	264-5891
9S-6147	Body As	369-9499
9S-6743	Chamber As	247-3303
9S-7079	Muffler As	247-2669
9S-7148	Cap As-Rain	378-3994
9S-7534	Pipe-Exh Ext	398-2950
9S-7788	Ring-Piston	461-5124
9S-8597	Spring	399-8561
9S-8679	Chamber As	325-6042
9S-9328	Muffler	395-1308
9S-9696	Spider As-Fan	383-3707
9X-2192	Gasket Kit-Sch	393-5189
9X-6560	Gasket Kit	382-5073
9X-8296	Gasket KT-F	518-3966
9Y-0231	Line As-F Inj	390-0932
9Y-0232	Line As-F Inj	390-0933
9Y-0233	Line As-F Inj	390-0934
9Y-0234	Line As-F Inj	390-0935
9Y-0235	Line As-F Inj	390-0936
9Y-0236	Line As-F Inj	390-0937
9Y-0237	Line As-F Inj	390-0938
9Y-0238	Line As-F Inj	390-0939
9Y-1403	Muffler As	393-0930
9Y-1798	Seal-Water	379-0165

# Yellowmark Engine Parts

Cat Part Number	Part Name	Yellowmark Part Number
9Y-1917	Pulley-Fan	395-1311
9Y-2148	Tube As-Exhaust	378-3995
9Y-2149	Tube As-Exh	374-7481
9Y-2150	Tube As-Exhaust	374-4729
9Y-2151	Tube As-Exhaust	374-7482
9Y-2988	Breather As	361-1716

Cat Part Number	Part Name	Yellowmark Part Number
9Y-2991	Bearing-Sleeve	377-5833
9Y-2992	Bearing-Sleeve	325-6032
9Y-3317	Core As-Radiator	378-3996
9Y-3318	Core As-Radiator	374-7491
9Y-3969	Line As-Fuel Inj	378-3998
9Y-4668	Muffler As	373-1911

Cat Part Number	Part Name	Yellowmark Part Number
9Y-5168	Manifold-Exhaust	374-7483
9Y-6054	Rod As-Conn	379-8868
9Y-8534	Support-Shft	463-7671
9Y-9431	Pre-Cleaner As	361-1718
9Y-9497	Bearing-Conn Rod	441-1563

# Yellowmark General Usage Parts

Cat Part Number	Part Name	Yellowmark Part Number
064-3274	Mount	391-9834
086-0414	Flange	392-4522
086-0523	Pin	314-8696
087-5533	Bearing-Sleeve	314-8628
087-5548	Bearing-Sleeve	396-1568
087-5802	Link-RH	301-7964
087-5803	Link As	301-7966
087-5805	Pin	301-7967
087-5806	Pin	301-7968
087-5845	Pin	301-7969
087-5847	Bearing-Sleeve	314-8629
087-5978	Flange	374-3496
087-6372	Pin	396-7284
096-4002	Bearing	420-3221
096-7911	Bearing-Sleeve	314-8653
096-7912	Bearing-Sleeve	314-8654
096-7913	Bearing-Sleeve	314-8655
099-0718	Bearing-Sleeve	360-2313
099-0721	Bearing-Sleeve	314-8641
099-0722	Link As	415-1909
100-2848	Ring-Guide	399-6057
100-6267	Plate As-Idler	375-9983
101-2204	Pin As	524-1303
101-2619	Spring Gp-Recoil	509-6307
101-2749	Adaptr-Water Pmp	375-9984
101-4020	Pin As	396-7285
102-3167	Pin As	418-9575
102-4560	Bearing-Sleeve	347-0469
103-5345	Bearing-Sleeve	393-3640
104-4747	Pin	392-4527
104-7238	Plate	380-7404
104-8584	Housing-Rgltr	419-4725
104-8655	Bearing-Sleeve	391-9892
105-2070	Bushing	394-0221
105-2659	Bearing-Sleeve	419-2304
105-8704	Support-Trunnion	416-5510
106-6540	Retainer	418-1941
106-6878	Pin	372-7510
107-2139	Pin As.	360-2352
107-5002	Cage-Bearing	396-7261
107-8375	Shaft As	439-1134
107-9737	Pin As	522-2288
107-9739	Pin As	393-3689
108-2735	Ring-Lock	386-4935
108-2736	Ring-Lock	384-3476
108-9191	Pin As	424-3515
109-0367	Pin	421-1566
109-0377	Pin As	399-8543

Cat Part Number	Part Name	Yellowmark Part Number
109-0380	Pin As	396-7276
109-0958	Pin	394-0208
109-9349	Mount	384-3469
109-9350	Mount	393-1046
109-9368	Mount	384-3471
109-9369	Mount	393-1047
109-9445	Mount	393-1048
109-9446	Mount	393-1049
110-4652	Housing	302-2683
110-6167	Pin As	375-9972
111-4332	Plate	396-7290
111-4340	Pin	451-1512
111-4343	Pin	390-5272
112-5060	Bracket As	364-5270
112-5061	Bracket As	364-5271
112-9629	Pin	521-3624
113-2963	Pin As	523-0546
113-2966	Pin As	380-7398
113-3791	Pin As	492-1888
113-9098	Pin	425-6447
113-9099	Pin	425-3449
114-0468	Pin-G.E.T.	443-1203
114-1153	Pin As.	523-0547
115-2775	Pin As	418-1967
115-2958	Pin-Lower	393-0939
115-3184	Cap-Lower	395-1324
115-4072	Bearing	397-5069
115-6365	Spring Gp-Recoil	509-6292
115-6469	Spacer	425-3645
115-7048	Pin	393-3684
117-5435	Pin As	393-0934
117-5612	Pipe	398-2965
117-6270	Support As	434-1400
117-6675	Step As	419-0881
118-0869	Pin As	492-1880
118-2800	Housing As.-Rgl	419-4719
118-5196	Pin	380-7397
118-6335	Pin	436-3042
119-2863	Pin	314-8698
119-2950	Gasket	433-8195
119-3790	Gasket As-Cyl HD	499-4309
120-3861	Bracket As	415-1897
121-8702	Pin As	524-1304
122-6378	Pin As	492-2466
122-6381	Pin As	419-6073
122-6387	Pin As	425-6448
122-6393	Pin As	492-1890
124-3240	Pin	282-6548
124-5233	Pin	443-2664
124-5741	Pin	394-0204

Cat Part Number	Part Name	Yellowmark Part Number
125-1037	Pin As	375-9985
125-2873	Core As-AC Cond	436-2254
126-9461	Pin	392-4528
127-6371	Link As	523-0548
128-0285	Pin As	499-2699
128-5010	Pin	522-5211
128-9863	Bearing-Sleeve	314-8630
128-9864	Bearing-Sleeve	425-6437
128-9882	Bearing-Sleeve	314-8642
128-9883	Bearing-Sleeve	360-2314
128-9884	Bearing-Sleeve	360-2315
129-7768	Bearing-Sleeve	360-2316
130-0479	Pin As	415-1907
130-0485	Pin	396-7286
130-1637	Shaft	347-0471
130-1918	Pin As	393-0933
130-2533	Pin	396-7265
130-2621	Pin As	390-5273
130-3139	Bearing-Sleeve	391-9875
130-4778	Housing As	419-4659
130-4779	Housing As	441-1562
130-5451	Pin	394-9816
130-9292	Spring Gp-Recoil	509-6299
131-6001	Pin As	376-3646
131-7123	Bearing-Sleeve	422-6919
132-0985	Bearing-Sleeve	399-6056
132-2419	Pin As	491-2023
132-2427	Pin As	491-2024
132-2553	Pin	491-2025
133-1247	Seal-Integral	542-4704
133-2437	Link	377-6199
134-1779	Edge-Cutting	9W-2312
134-2733	Bearing-	522-2299
134-8948	Plate	399-8588
134-8949	Plate	383-2110
134-8950	Plate	399-8587
134-8951	Plate	382-5061
135-0524	Piston-Clutch	380-7402
135-5553	Bearing	394-0203
135-9819	Seal-Integral	499-2698
136-0437	Pad-Stabilizer	523-5962
136-1711	Pin As	523-5963
137-2817	Bearing-Sleeve	434-2399
137-2818	Bearing-Sleeve	380-7381
137-2819	Bearing-Sleeve	360-2317
137-2820	Bearing-Sleeve	360-2318
137-2821	Bearing-Sleeve	419-4717
137-2822	Bearing-Sleeve	453-0971



# Yellowmark General Usage Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
137-2919	Bearing-Sleeve	360-2319	169-4200	Gasket	472-8023	213-1365	Bearing-Sleeve	330-9256
137-3060	Bearing-Sleeve	360-2320	174-6820	Bearing-Sleeve	387-2903	213-1370	Bearing-Sleeve	380-7370
137-4117	Link As. - Beari	523-0551	174-6822	Bearing-Sleeve	387-2901	215-9365	Bearing	422-6917
137-8479	Spacer	395-1323	174-8255	Link As-Brg&	523-0556	226-1340	Spring - Recoil	542-4708
138-1840	Retainer-Seal	374-6511	175-0070	Bracket-Mot MT	491-2031	227-5904	Seal-O-Ring	491-2034
141-3420	Bearing-Sleeve	522-5208	176-1402	Pin	425-2562	227-6-228	Cage	360-2343
142-1227	Pin As	523-5964	177-9024	Adapter-Damper	299-1956	227-6908	Bearing-Sleeve	526-3043
142-2303	Pin As	423-3537	178-3086	Ballstud	374-1453	228-0416	Seal As	430-5356
143-3321	Bearing-Sleeve	425-3583	178-3088	BallStud	522-2308	228-0419	Seal As	443-3571
143-3841	Bearing-Sleeve	526-3040	179-2997	Spring Gp-Recoil	509-6308	228-5614	Bearing-Sleeve	526-9334
143-5448	Gasket Kit - Sch	447-8652	179-3033	Spring Gp-Recoil	509-6310	228-5617	Bearing-Sleeve	526-9333
144-7289	Roller As	434-1862	179-6152	Bearing	361-1704	228-5621	Bearing-Sleeve	360-2323
144-7293	Roller As	434-1992	179-6153	Bearing	542-4705	228-5654	Bearing-Sleeve	527-7487
144-7299	Roller As	434-1991	183-2358	Bearing	425-3588	229-1091	Bearing-Sleeve	526-9332
144-7314	Roller As	434-8984	184-1413	Pin As	393-1050	229-1092	Bearing-Sleeve	526-9331
144-7321	Roller As	523-0552	185-7219	Pin As	522-5200	229-1095	Bearing-Sleeve	526-9330
145-0803	Pin	393-0936	186-5652	Pin	392-4532	229-1096	Bearing-Sleeve	526-9329
145-0804	Sleeve	391-9905	186-5662	Pin	421-1560	233-5001	Strip	393-3683
145-6749	Shaft As-Input	433-9211	186-5663	Pin As	522-2309	234-3811	Bearing-Sleeve	526-3044
146-7987	Shim	491-2027	186-5730	Pin	393-3688	234-3931	Pin As	482-8088
146-8003	Pin As	492-1882	186-5732	Pin	527-7489	235-7527	Bearing-Sleeve	526-3045
146-8010	Pin As	522-5207	187-3825	Pad As.	397-5054	235-7628	Pin As	523-0566
147-4358	Pin	419-6030	187-3827	Pad As.	397-5057	235-7642	Pin As	523-0567
147-4359	Pin	393-0937	189-3869	Bearing-Sleeve	526-3041	235-7772	Bearing-Sleeve	527-7488
148-3091	Bearing-Sleeve	365-8825	189-3878	Link As	438-1813	236-6268	Bearing-Sleeve	453-6499
148-3465	Pin	383-2112	189-3922	Pin	393-0938	236-6269	Bearing-Sleeve	453-6500
148-4643	Bearing	522-2302	189-3923	Pin	393-0935	236-6270	Bearing-Sleeve	425-6436
148-7871	Pin As	491-2029	189-4148	Pin As	423-3536	236-6271	Bearing-Sleeve	360-2324
150-0351	Spacer	396-7291	189-4150	Pin As	423-3535	236-7724	Retainer	299-2048
153-3580	Shaft	299-2055	189-6062	Pin As	425-2561	236-8183	Bearing-Sleeve	453-6501
154-5278	Pin	393-3685	191-3240	Housing-Motor	418-1962	236-8561	Bearing-Sleeve	526-9328
154-5279	Pin	392-4529	191-3243	Housing-Motor	418-1963	237-0944	Bearing-Sleeve	394-0194
154-5280	Pin	391-9868	192-8318	Bearing-Sleeve	360-2321	237-2252	Bearing-Sleeve	347-0474
157-6257	Collar	393-0912	193-0646	Spacer	419-2310	237-9849	Cage-Bearing	443-1201
159-0959	Pin As	418-9578	193-1683	Pad	416-5496	238-0293	Adapter-Jacket	424-0742
159-0961	Pin	396-7287	193-1684	Pad	396-0645	239-1497	Trunnion	394-0197
159-8127	Bracket As	522-2304	193-1688	Pad	416-5495	239-4322	Spring Gp-Recoil	509-6312
160-1014	Pin As	347-0473	193-5016	Flange	425-3644	239-4333	Spring Gp-Recoil	509-6313
160-5691	Pin	393-0931	195-0103	Bearing-Sleeve	526-3042	240-2912	Bearing-Sleeve	418-1969
160-6305	Cap-Bearing	295-5686	197-5510	Support As	419-0880	240-2913	Bearing-Sleeve	360-2325
160-6306	Cap-Bearing	325-6038	200-7929	Housing	416-5489	240-2915	Bearing-Sleeve	360-2326
160-6309	Cap-Bearing	528-7178	201-4802	Sleeve	419-2309	240-2916	Bearing-Sleeve	360-2327
161-9918	Retainer-Bearing	395-1321	208-5026	Pin	325-6133	240-2937	Bearing-Sleeve	526-3047
162-0152	Bearing-Sleeve	422-9519	208-8795	Retainer	430-5355	241-7231	Bearing-Sleeve	526-3048
163-3749	Bearing-Sleeve	433-7505	208-8797	Retainer	432-8908	244-4254	Link As	482-8092
165-5255	Pin As	425-6449	209-6188	Plate	393-1053	244-4277	Bearing-Sleeve	360-2322
166-7870	Pad As-street	416-5515	211-9286	Pin As.	522-2310			
168-0444	Pin	393-3687	212-3088	Pin As	522-2311			
169-4199	Gasket-Oil Pan	433-8194	213-1364	Bearing-Sleeve	330-9255			

# Yellowmark General Usage Parts

Cat Part Number	Part Name	Yellowmark Part Number
244-4360	Bearing-Sleeve	526-9326
244-8504	Pin As	426-0032
248-6816	Mount	419-0876
248-7835	Bearing-Sleeve	526-9325
250-1984	Trunnion	319-3476
250-2398	Pin As	382-8047
250-2402	Pin As	360-2351
251-2557	Pin	526-0603
251-2558	Pin As	523-0568
251-7319	Bearing-Sleeve	425-6450
254-3052	Pin	482-8093
254-3053	Pin	482-8094
258-0768	Bearing Sleeve	394-0201
258-2303	Bearing-Sleeve	307-1524
258-2305	Bearing-Sleeve	325-6029
258-2308	Bearing-Sleeve	325-6019
260-7799	Pinion-Circ Drv	367-6094
262-7044	Bearing	418-1948
264-6903	KIT-Gasket (T)	518-3979
268-5569	Pin As	415-1905
269-6989	Pin	425-2559
275-0120	Pin As	419-7245
281-0029	KIT-Gasket-SFI	518-3983
285-0852	Trunnion	527-7491
287-8291	Pin As	523-0572
310-1899	Pin As	393-0932
310-3510	Roller As.	434-1919
310-8658	Pin As	425-1526
312-1067	Pin As	361-1696
318-6248	Hub-Sprocket	523-0573
319-2228	Shoe-Circle Gde	419-4706
319-2229	Shoe-Circle Gde	396-7288
325-3291	Roller As	434-1918
333-9877	Pin As	394-0217
343-4836	Mount As	424-6369
346-3285	Edge-Ctg (DBC)	9W-2330
347-6081	Gauge As	360-2348
392-4479	KIT-Gasket (SCH)	518-3990
392-4672	KIT-Gasket (SCH)	518-3991
392-5540	KIT-Gasket-CL	518-3992
446-1522	Strip-Wear	380-7418
446-1525	Strip-Wear	297-7263
450-8070	Collet	308-9841
1A-9252	Rod End-Yoke	377-5849
1H-4106	Pin As-Drawbar	325-6126
1H-4478	Pin	330-9272
1J-0774	Bracket	369-9485
1J-2087	Bushing	421-9041
1J-6744	Bearing	361-1705

Cat Part Number	Part Name	Yellowmark Part Number
1J-6746	Pin	256-4817
1J-6747	Pin	367-6078
1K-8041	Bearing-Sleeve	330-9257
1M-0090	Gasket-Manifold	445-7701
1M-1930	Cage-Pinion Brg	217-7727
1M-3917	Shaft	386-4915
1M-9029	Guard	226-0219
1N-3113	Support-Elbow	433-8185
1P-0963	Guard As-Roller	226-0179
1P-1006	Strip-Guard	226-0245
1P-3318	Strip	385-7206
1P-5480	Cover As.-End	299-1998
1P-7115	Mount As	418-1936
1P-7295	Shaft-Acc Drive	431-5261
1P-9989	Pipe-Head Outlet	363-7453
1R-6226	Pin As	515-9312
1R-6322	Cylinder	384-3463
1S-0876	Bolt-Spring	226-0224
1S-1888	Bracket-Lamp	297-7147
1S-2233	Bearing-Sleeve	379-0188
1S-2269	Sleeve	226-2720
1S-5315	Cap As-Brace Brg	226-4848
1S-5331	Cylinder-Adj	226-0214
1S-6422	Pilot As-Spring	226-4849
1S-8734	Bracket-Roller	226-0212
1S-9209	Shaft-Tightener	374-6499
1T-0224	Carrier-Ring	239-7928
1T-0278	Bearing-Sleeve	394-0213
1T-0447	Carrier-Ring	295-0409
1T-0576	Bearing-Sleeve	379-0186
1T-0766	Bearing-Sleeve	383-2107
1T-0767	Bearing-Sleeve	383-2108
1T-0902	Bearing-Sleeve	389-6326
1T-0969	Bearing-Sleeve	453-6497
1T-1534	Carrier-Ring	386-4916
1T-1790	Carrier As	296-1347
1T-1940	Housing As	396-0646
1T-2069	Carrier-Bearing	439-4543
1T-2077	Retainer-Bearing	380-7408
1U-0725	Retainer	314-8707
1U-0738	Bearing-Sleeve	333-4942
1U-0872	Pin	325-6136
1U-0873	Pin	325-6137
1U-0990	Pin	325-6138
1U-1204	Trunnion	325-6224
1U-1212	Cap-Bearing	515-9313
1U-1444	Shaft As	516-1576

Cat Part Number	Part Name	Yellowmark Part Number
1U-4661	Lever Gp	396-7267
1V-1080	Housing-Brg Spt	260-0775
1V-3995	Pin	319-3449
1V-4593	Pin	515-9314
1V-4838	Link As-Spring	308-9874
1V-5736	Bearing-Sleeve	379-0187
1V-6342	Gear As	308-9847
1V-6934	Bearing-Sleeve	364-5265
1V-8240	Bearing-Sleeve	308-9807
1V-8241	Bearing-Sleeve	308-9808
1V-8242	Bearing-Sleeve	308-9809
1V-8439	Pin As	308-9881
1V-8849	Collar	308-9838
1V-8850	Pin	308-9891
1V-8851	Cap	308-9833
1V-8852	Cap	308-9834
1V-8947	Pin As	308-9882
1V-8949	Pin As	308-9883
1V-8953	Pin	308-9892
1V-9143	Bearing-Sleeve	308-9810
1V-9148	Bearing-Sleeve	308-9811
1V-9208	Link As-Rear	299-2020
1W-3397	Plate	391-9810
1W-4738	Bearing-Sleeve	325-6020
1W-4746	Retainer-Gear	295-5690
1W-6005	Bearing-Sleeve	417-4521
2A-7089	Bearing-Sleeve	380-7382
2B-0941	Spacer	418-1955
2D-5383	Gasket	445-7709
2D-5961	Pin-Axle Pivot	228-9438
2D-6341	Pin	330-9273
2D-6420	Race-Roller Brg	512-6454
2D-8657	Shaft-Shift	516-0768
2D-9130	Washer-Thrust	308-9943
2D-9459	Cage-Bearing	431-5257
2F-0025	Tube	325-6233
2G-2411	Ballstud As	387-2899
2G-2858	Cap-Pivot	243-0345
2G-4011	Collar	330-9269
2G-5838	Shaft	425-6452
2G-6157	Pin	282-6550
2G-7309	Shaft	393-3682
2G-7387	Bearing-Sleeve	330-9258
2G-7388	Bearing-Sleeve	330-9259
2G-7464	Insert-Bolt	386-4918
2G-7759	Cage As	399-8574
2G-7829	Housing As-Drive	297-7196
2G-8083	Pin	393-3666

# Yellowmark General Usage Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
2G-8084	Pin	392-4531	2M-2416	Guard-Idler-LH	226-4933	2V-6371	Cover As	398-8338
2G-8238	Yoke As	282-6631	2M-4208	Spacer-Timing	417-4533	2V-7092	Plate-Retainer	374-6510
2G-8608	Bearing-Sleeve	385-3783	2M-4209	Spacer-Timing	417-4532	2V-7198	Pilot As-Rec Spg	302-2709
2G-8609	Pin	319-3450	2M-6960	Cage-Gear Brg	239-7971	2V-7524	Stop-Rec Spring	506-5620
2G-8610	Pin	389-6316	2M-7116	Strip-Tapping	384-3480	2V-7525	Stop-Rec Spring	506-5621
2G-8613	Pin	282-6553	2M-8340	Rod End-Yoke	374-4678	2W-6250	Support	422-7897
2G-8616	Pin	282-6554	2N-3386	Support-Shield	419-1863	2W-6546	Cover	512-6455
2G-8617	Pin	282-6555	2P-1005	Bearing-Sleeve	296-1342	2W-7176	Shaft-FP & Gov Dr	432-8906
2G-8620	Pin	282-6556	2P-1738	Plate As-Oil Pan	325-6164	2W-7177	Shaft-FP & Gov Dr	433-9215
2G-8621	Pin	282-6557	2P-4426	Shaft As-Planet	384-3478	2W-9094	Adapter-Exhaust	299-2534
2G-8623	Pin	393-3675	2P-4698	Bearing-Sleeve	389-6318	3B-3969	Race-Roller Brg	499-4297
2G-8625	Pin	282-6558	2P-4701	Shaft As-Gear	297-7257	3D-4718	Bearing-Sleeve	245-5795
2G-8628	Pin	282-6559	2P-5897	Strip-Wear	506-2395	3E-4903	Mount As	396-7274
2G-8629	Pin	282-6560	2P-7622	Bolt-Spring	226-4850	3E-4924	Mounting As	391-9812
2G-8630	Pin	389-6304	2P-7984	Yoke As-Idler	226-0220	3E-6757	Seal-Pin	512-6457
2G-8631	Bearing-Sleeve	391-9811	2P-9632	Damper As	542-4717	3F-4971	Pin	295-5693
2G-8633	Pin	282-6561	2P-9632	Damper As	542-4717	3F-6149	Pin	299-2033
2G-8639	Bearing-Sleeve	380-7560	2P-9665	Spring-Recoil	516-0770	3F-6185	Pin	295-5694
2G-8735	Pin	391-1105	2P-9672	Cage-Pinion Brg	226-7972	3F-6523	Pin-Clevis	256-4818
2G-8739	Retainer	389-6314	2S-3188	Plate	299-2041	3F-6612	Cap-Ball Joint	297-7155
2G-8769	Pin	282-6562	2S-3913	Cage-Gear Brg	217-7722	3F-6613	Socket-Joint	515-9320
2G-9097	Cap	418-1926	2S-3966	Ring-Seal	297-7237	3G-0027	Pin As	388-6601
2G-9098	Cap	300-2573	2S-6097	Tang	375-9979	3G-0034	Trunnion	361-1712
2H-4386	Plate-Ring Lock	431-5259	2S-6150	Cover-Pulley	428-8817	3G-0222	Bearing-Sleeve	374-6512
2H-4438	Stud-CL Spring	431-5260	2S-6196	Shaft-Pulley	438-9541	3G-0897	Roller As	516-0773
2H-5046	Link-Fly CL Cam	299-2024	2S-6263	Guard Gp-Spring	226-0192	3G-0898	Roller As	526-0021
2H-5047	Roller	385-7204	2S-6264	Guard Gp-Spring	226-0193	3G-0910	Cap-Bearing	325-6037
2H-5048	Link	389-6334	2S-6265	Rod Gp-Recoil	226-0197	3G-2580	Bearing-Sleeve	422-9526
2J-1227	Retainer	440-0850	2S-7157	Plate As	544-0281	3G-2665	Cover	308-9842
2J-5038	Rod End-Spher	510-4849	2T-0374	Pin	418-1952	3G-2797	Bearing-Sleeve	360-2329
2J-5596	Pin-Pivot	297-7211	2T-1581	Bearing-Sleeve	399-6051	3G-3346	Bushing	385-3786
2J-5649	Pin-Cylinder	256-4782	2T-2911	Roller As	516-0771	3G-3347	Bushing	385-3792
2J-8489	Bearing-Sleeve	295-5691	2T-3885	Housing	448-4967	3G-4292	Bearing	425-6439
2K-0227	Bearing-Sleeve	384-4780	2T-3890	Shaft As-Stub	425-9376	3G-4704	Bearing-Sleeve	379-0185
2K-0535	Nut	299-2026	2V-0447	Bearing-Sleeve	380-7559	3G-5285	Bearing-Sleeve	360-2312
2K-0714	Plate-Thrust	299-2040	2V-0705	Pin As	241-2524	3G-5999	Bearing-Sleeve	391-9813
2K-1386	Bearing	423-6991	2V-0706	Bearing-Sleeve	388-0637	3G-6058	Pin As	389-6306
2K-4442	Bearing-Sleeve	308-9812	2V-0707	Bearing-Sleeve	360-2328	3G-6098	Pin As	383-2124
2K-4502	Bearing-Sleeve	299-1986	2V-1256	Bearing-Sleeve	422-9529	3G-6313	Bearing	325-6007
2K-4507	Bearing-Sleeve	325-6021	2V-1722	Pin As	241-2525	3G-7482	Sleeve	425-3455
2K-4513	Bearing-Sleeve	308-9814	2V-4331	Collar	387-2910	3G-7752	Pin As	384-4779
2K-5073	Bushing	299-1989	2V-4405	Housing-Brg Spt	396-0648	3G-8136	Retainer	425-3585
2K-6413	Pin	360-2270	2V-4700	Pin	308-9894	3G-8245	Bearing-Sleeve	399-8586
2L-4238	Mount	385-7222	2V-4765	Link As	516-1578	3G-8900	Pin	325-6140
2M-0125	Cylinder-Adj	226-0215	2V-5656	Ring-Snap	374-1454	3G-8917	Pin	325-6141
2M-0369	Pilot-Spring R	226-0226	2V-5715	Bushing	299-1987	3G-8932	Pin	325-6143
2M-0398	Sleeve-Bolt	226-0235	2V-6129	Cover	390-5295	3G-9303	Pin	367-6079
2M-1163	Plate As-Spring	383-2123				3H-7161	Pin	256-4819

# Yellowmark General Usage Parts

Cat Part Number	Part Name	Yellowmark Part Number
3H-7164	Pin-Pivot	256-4820
3H-8726	Mount As	385-7208
3J-1943	Collar	468-5015
3J-2333	Bearing-Sleeve	422-9525
3J-2373	Bearing-Sleeve	380-7562
3J-2443	Bearing	383-2125
3J-2682	Bracket	296-1345
3J-2903	Cover	422-6922
3J-3668	Pin	512-6458
3J-3953	Bearing-Sleeve	384-4778
3J-4284	Cap-Brg	314-8656
3J-4778	Roller As	394-2582
3J-4779	Roller As	516-0774
3J-5190	Cap-Brg	256-4837
3J-5432	Pin-Pivot	361-1711
3J-6043	Trunnion	319-3477
3J-6167	Bearing-Sleeve	299-1960
3J-6412	Bearing-Sleeve	386-4920
3J-6442	Bearing-Sleeve	299-1961
3J-6484	Bearing-Sleeve	380-7383
3J-6502	Pin	319-3453
3J-6558	Brace As	416-5522
3J-6559	Cap-Bearing	296-1346
3J-6560	Screw-Adj	297-7240
3J-6561	Screw-Adj	297-7241
3J-6570	Support-Bearing	299-2069
3J-6573	Screw-Adjusting	302-2714
3J-6575	Trunnion	297-7265
3J-6577	Pin-Brace	367-6077
3J-7798	Bracket	385-3791
3J-8688	Bearing-Sleeve	380-1561
3J-9097	Retainer	397-5045
3J-9133	Bearing-Sleeve	361-1691
3J-9511	Bearing-Sleeve	385-3782
3K-0963	Pin-Lock	308-9895
3K-2511	Dowel-Reaction	383-2126
3K-9604	Cage-Bearing	396-0654
3K-9608	Guard-Dirt	374-1447
3N-1968	Mount	397-5046
3N-3786	Rod-Thrt Cont	397-5051
3N-4892	Lever-Gov Cont	439-4542
3N-5869	Support-Elbow	375-9973
3N-9160	Ring-CShft Seal	311-9447
3P-0395	Cage-Carrier Brg	217-7723
3P-1459	Spring-Recoil	375-5448
3P-1465	Spring-Recoil	384-3479
3P-1885	Spring-Recoil	375-5449
3P-2865	Shaft As-Idler	393-1056

Cat Part Number	Part Name	Yellowmark Part Number
3P-3103	Carrier-Ring	385-7203
3P-3424	Shaft	416-5526
3P-3429	Cage-Bearing	452-0430
3P-3505	Shaft-Brake	384-3477
3P-3623	Lock-Adj Nut	542-4718
3P-4135	Support As	396-7266
3P-4142	Plate As	299-2039
3P-4143	Suspension As	393-3644
3P-4157	Yoke As-Idler	226-0221
3P-4197	Guard As-Idler	226-0189
3P-6560	Stop-Rec Spring	226-0232
3P-6561	Stop-Rec Spring	226-0233
3P-8186	Housing-Screen	390-5261
3P-8845	Bearing-Inner	416-5491
3R-8530	Boss	425-3454
3S-1262	Retainer	308-9915
3S-1292	Bearing-Sleeve	425-8226
3S-3917	Guard As-Sprkt	226-0188
3S-3918	Guard As-Sprkt	226-4950
3S-6989	Nut-Spanner	219-9701
3S-7308	Cage-Pinion Brg	219-9702
3S-9466	Bearing-Sleeve	314-8509
3T-0996	Bearing-Sleeve	295-5695
3T-1162	Sleeve-Wear	325-6209
3T-2077	Bearing	512-6459
3T-2094	Bearing-Sleeve	388-0638
3T-2095	Bearing-Sleeve	384-3459
3T-2481	Strip	295-5448
3T-2849	Strip	295-5697
3T-3150	Guide-Frt Idler	394-0191
3T-4308	Bearing-Sleeve	296-1341
3T-4482	Guide-Frt Idler	226-0248
3T-5294	Spacer	325-6216
3T-7192	Guard As	325-6100
3T-7195	Guard As	325-6101
3T-7701	Cylinder As	325-6058
3T-7710	Guide	325-6102
3T-7711	Guide	325-6103
3T-9496	Plate-Retainer	299-2042
3V-2281	Link As	299-2023
3V-2337	Pin As	319-3440
3V-3855	Housing-Brg Spt	375-9980
3V-4643	Rod As	389-6333
3V-5257	Bracket-Carr Rlr	297-7149
3V-5762	Support As	389-6310
3V-6515	Link As	394-0186
3V-6648	Pin As	308-9884
3V-6697	Housing	424-4944

Cat Part Number	Part Name	Yellowmark Part Number
3V-7427	Housing As	297-7197
3V-8976	Cylinder As	433-7508
3W-0241	Pin As	393-3676
3W-0630	Pin	307-1525
3W-0640	Piston	325-6160
3W-0643	Cylinder	325-6061
3W-1852	Ring-Retainer	513-2467
3W-2196	Housing As	396-0661
3W-2197	Plate As	416-5511
3W-2214	Housing As	418-1947
3W-2215	Plate As	396-0655
3W-2420	Bearing	417-4517
3W-4363	Pin As	375-2634
3W-6144	Hub-Sprocket	396-7277
3W-7559	Pin As	419-4731
3W-8177	Retainer	428-7634
3W-8238	Cap	425-3448
3W-8239	Sleeve-Wear	360-2342
3W-8240	Bearing-Sleeve	425-6438
3W-8339	Plate	397-5047
3W-8355	Pin As	425-2565
3W-8398	Bearing-Sleeve	379-0189
3W-8403	Sleeve	393-3673
3W-8406	Cap	416-5534
3W-8409	Bearing	398-8336
3W-8572	Pin As	393-3672
3W-8679	Yoke As	425-1384
3Y-2768	Ring	439-4544
4B-1455	Cap As-Filler	361-1719
4B-7064	Shaft-Worm	245-5803
4C-1335	Washer-Thrust	399-4425
4D-2229	Cage-Bearing	229-1598
4E-0079	Cage-Bearing	434-4387
4E-1011	Pin As	430-9676
4E-1035	Pin	241-2553
4E-1065	Pin As	241-2538
4E-2250	Housing	399-6043
4E-3196	Pin As	361-1697
4E-3197	Pin As	374-6507
4E-3456	Lever As	367-6081
4E-3997	Housing-Pinion	374-6498
4E-4524	Pin As	380-7392
4E-5213	Cover As	299-2000
4E-7608	Bearing-Sleeve	388-0639
4F-1121	Bracket	299-1981
4F-1252	Pin	295-5704
4F-5003	Spring As-Arm	383-2127
4F-5004	Spring As-Arm	383-2128

# Yellowmark General Usage Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
4H-9040	Nut	226-7996	4K-0300	Bearing-Sleeve	308-9817	4T-0732	Bracket	314-8627
4H-9073	Bearing-Sleeve	500-0375	4K-1102	Bearing-Sleeve	325-6010	4T-0780	Trunnion	526-0027
4H-9640	Bearing-Sleeve	386-4921	4K-3004	Bearing-Trun Sup	314-8632	4T-0998	Lever	314-8687
4I-0453	Bearing-Sleeve	360-2331	4K-3128	Bearing-Sleeve	314-8633	4T-1504	Trunnion	314-8727
4I-0465	Pin	372-7511	4K-3150	Pin	385-3788	4T-1520	Cage As	526-0029
4I-0704	Bearing-Sleeve	360-2332	4K-4780	Strip As-Wear	299-2063	4T-6151	Trunnion	295-5671
4I-4617	Pin As	424-6367	4K-4894	Cage-Bearing	453-0968	4T-7534	Pin	433-9209
4I-4618	Pin As	482-8084	4K-6558	Pin-Lower	302-2710	4T-7640	Shaft As	393-3643
4I-4619	Pin As	425-2564	4K-6760	Cap-Lower	300-2574	4T-7641	Roller As	526-0044
4I-4621	Pin As	526-0024	4K-6761	Cap-Upper	300-2575	4T-9311	Housing	396-0652
4I-4665	Bearing-Sleeve	364-5267	4K-7287	Support As-Rear	383-2116	4V-0015	Plate-Lock	282-6563
4I-4666	Bearing-Sleeve	388-0640	4K-8225	Pin-Cylinder	297-7215	4V-0189	Pin	374-6504
4I-4805	Pin	365-8828	4K-8561	Pin	299-2036	4V-0380	Bearing-Sleeve	500-0376
4I-4806	Pin	364-5268	4K-8734	Bearing-Sleeve	299-1962	4V-0381	Bearing-Sleeve	299-1963
4I-4807	Pin	383-2139	4L-8473	Plate-Wear	419-0883	4V-2120	Pin	365-8830
4I-4809	Pin As	482-8085	4M-1641	Dowel-Reaction	386-4952	4V-2588	Pin As	435-6050
4I-4811	Pin As	480-8268	4M-9183	Bearing-Sleeve	386-4924	4V-2723	Pin	419-6016
4I-4812	Pin As	480-8269	4N-0342	Plate-Cam Thrust	375-9974	4V-2872	Bearing-Sleeve	380-7558
4I-4996	Pin As	526-0025	4N-0362	Cover As-Rgltr	419-4722	4V-2873	Bearing-Sleeve	379-0192
4I-5015	Pin	365-8829	4N-1010	Support-Elbow	416-5509	4V-2881	Link As-Bearing	384-3464
4I-5016	Pin	396-7272	4N-1015	Bearing-Sleeve	417-4525	4V-2883	Bearing-Sleeve	379-0193
4I-7342	Spring Gp-Recoil	509-3335	4N-1098	Shaft As	374-1455	4V-3044	Plate-Lock	308-9911
4I-7401	Spring	380-7414	4N-1186	Bearing-Sleeve	417-4519	4V-3603	Pin As	319-3441
4J-0121	Cap-Bearing	360-2344	4N-2954	Sleeve-Camshaft	299-2059	4V-3613	Pin As	526-0036
4J-1612	Pin	308-9896	4N-4161	Mount As	374-1448	4V-3619	Pin As	380-7393
4J-1614	Pin-Pivot	542-4719	4N-4519	Quadrant-Control	444-0572	4V-3623	Pin As	375-9967
4J-1616	Bracket	299-1982	4N-4520	Guide	388-6600	4V-3625	Pin As	418-1944
4J-1641	Trunnion	314-8725	4N-4539	Sleeve	314-8720	4V-3680	Bellcrank	308-9802
4J-2043	Trunnion	544-0282	4N-4942	Rod-Eye	421-8919	4V-5099	Cover	418-1929
4J-2379	Bearing-Sleeve	393-1014	4N-5572	Gasket	433-8192	4V-5400	Housing-Brg Spt	385-7202
4J-2414	Trunnion	296-1370	4N-5858	Cap-CShtf Brg	448-9157	4V-5454	Link	299-2025
4J-2585	Pin	299-2034	4N-6257	Adapter	415-1904	4V-6421	Pin As	319-3442
4J-2592	Brace As	418-1928	4N-6413	Support-Alt	433-9855	4V-7099	Pin As	361-1698
4J-2847	Trunnion As	297-7267	4N-8204	Mount As	374-1449	4V-7105	Pin As	361-1699
4J-3342	Ring-Wear	512-6462	4P-2383	Adapter-Inlet	438-1812	4V-8518	Link As-Brg&	374-1450
4J-3420	Ring-Wear	544-4871	4P-9942	Seal-End Tank	385-7217	4V-8519	Bearing-Sleeve	307-1526
4J-3583	Screw-Adjusting	297-7242	4P-9943	Seal-End Tank	385-7216	4V-8520	Bearing-Sleeve	307-1527
4J-3589	Cap-Ball Joint	297-7157	4Q-1346	Link As-Bearing	425-3649	4V-8629	Bearing-Sleeve	379-0194
4J-3590	Bearing	297-7139	4S-5049	Guard As-RH	226-0183	4V-8643	Bearing-Sleeve	374-8354
4J-5241	Retainer	434-1415	4S-5050	Guard As-LH	226-0184	4V-8661	Pin As	375-9968
4J-5693	Bearing-Sleeve	385-3790	4S-5367	Bushing As	375-9986	4V-8673	Bearing-Sleeve	307-1528
4J-5694	Bearing-Sleeve	379-0190	4S-6256	Nut-Brg Adj	235-8008	4V-8674	Bearing-Sleeve	307-1529
4J-5695	Bearing-Sleeve	386-4922	4S-6559	Tube	325-6234	4V-8675	Bearing-Sleeve	394-0187
4J-6167	Bearing-Sleeve	325-6009	4S-8718	Cage-Carrier Brg	217-7724	4V-9901	Pin As	374-6508
4J-6326	Bearing-Half	376-3630	4S-9062	Cap-FD Bearing	226-0204	4W-0452	Seal As	325-6191
4J-6374	Bearing-Sleeve	295-6407	4T-0202	Pin As	325-6130	4W-2042	Spacer	325-6217
4J-7650	Retainer As	440-0851	4T-0231	Retainer	376-3641	4W-2357	Mount As	386-4927
4K-0299	Bearing-Sleeve	308-9816	4T-0589	Slider	434-1411	4W-2607	Seal Gp-CShtf	311-9453
						4W-4588	Sleeve	394-0218

# Yellowmark General Usage Parts

Cat Part Number	Part Name	Yellowmark Part Number
4W-6150	Adapter-Support	432-4219
4W-6869	Spacer-Fuel Pump	417-4534
4W-9655	Support	419-0882
4Y-1034	Pin As	396-0641
4Y-4340	Pin As	319-3442
4Y-4905	Washer-Soft	416-5535
4Y-5711	Pin As	425-6442
4Y-7089	Pin As-Rmte Lub	397-5042
5C-3784	Pin As	241-2512
5C-5829	Pin As	241-2510
5C-5837	Retainer-Pin	299-2047
5C-6739	Bearing-Sleeve	445-7704
5C-8273	Adapter	415-1902
5D-6201	Shoe-Yoke	243-0356
5D-9553	Edge-Cutting	7T-1633
5D-9554	Edge-Cutting	7T-1645
5D-9558	Edge-Cutting	7T-1634
5D-9559	Edge-Cutting	7T-1623
5D-9561	Edge-Cutting	7T-1643
5D-9562	Edge-Cutting	7T-1636
5D-9731	Edge-Cutting	7T-1631
5D-9732	Edge-Cutting	7T-1630
5D-9745	Shoe-Guide	330-9285
5F-0736	Pin-Pivot	256-4823
5F-2256	Cage-Bearing	226-7973
5F-7958	Shaft-Roller	434-1865
5F-7993	Pin	319-3454
5F-8001	Roller As Upper	527-7373
5G-3612	Cap Gp-Protn	295-6419
5G-9075	Strip	295-0412
5G-9076	Strip	295-0413
5H-5553	Screw-Tappet Adj	311-9451
5I-3299	Pin As	526-0037
5I-3301	Pin As	387-2929
5I-3371	Pin As	393-3668
5J-1192	Bearing-Sleeve	374-8355
5J-1193	Bearing-Sleeve	382-8046
5J-1392	Trunnion	528-9119
5J-1449	Pin As	393-3671
5J-1806	Pin	396-0662
5J-1825	Pin	367-6080
5J-1968	Shaft-Roller	386-4928
5J-1980	Pin	385-3805
5J-2245	Bearing	422-6916
5J-2246	Bearing	418-1927
5J-2445	Bearing-Sleeve	380-7563
5J-3506	Retainer	399-8551
5J-4321	Trunnion	302-2700

Cat Part Number	Part Name	Yellowmark Part Number
5J-4929	Bearing	256-4796
5J-5365	Pin	380-7553
5J-5643	Connector	325-6043
5J-6430	Bearing-Sleeve	379-0195
5J-6611	Bearing-Sleeve	383-2140
5J-7980	Pin	256-4783
5J-7981	Pin	256-4784
5J-8103	Bearing-Sleeve	389-6309
5J-8118	Bearing-Sleeve	451-9018
5J-8361	Bearing-Sleeve	384-4775
5J-8363	Bearing-Sleeve	394-0209
5K-0609	Cover	308-9843
5K-0871	Pin-Lower	282-6630
5K-0984	Bearing-Sleeve	330-9262
5K-0989	Cap-Upper	297-7158
5K-0990	Pin	299-2035
5K-0991	Cap-Lower	319-3433
5K-2432	Pin-Cylinder	384-3473
5K-2754	Spring-Recoil	418-1956
5K-3490	Spacer	308-9933
5K-3491	Spacer	308-9934
5K-3493	Cover	391-9814
5K-3495	Collar	383-2129
5K-3499	Pin-Lower	308-9898
5K-3502	Cap-Lower	308-9835
5K-3968	Cage-Bearing	308-9804
5K-4079	Cage-Bearing	308-9805
5K-4268	Retainer-Bearing	308-9916
5K-4273	Bearing-Sleeve	374-1461
5K-4787	Bearing-Sleeve	308-9819
5K-5927	Boss	299-1973
5K-5933	Cover As	247-4125
5K-6377	Pin	241-2610
5K-6383	Pin	241-2612
5K-7995	Bearing-Sleeve	308-9820
5K-8265	Pin	241-2590
5K-8592	Bearing	566-3321
5K-8628	Cage	449-4732
5L-2648	Bearing-Sleeve	311-9362
5L-2660	Bearing-Sleeve	311-9363
5L-7632	Support-Elbow	433-9854
5M-2971	Guard As-F Idler	226-0190
5M-5894	Cover-Bearing	448-2438
5M-6637	Bearing-Sleeve	380-7376
5M-6674	Guard-F Idler LH	226-2736
5M-7290	Cage-Bearing	216-7848
5M-7306	Cylinder	226-2737

Cat Part Number	Part Name	Yellowmark Part Number
5M-7340	Cage-Bearing	325-6034
5M-7341	Cover-Bearing	452-0443
5M-7701	Cylinder	385-7229
5M-7955	Shaft As-Planet	364-5273
5N-2902	Seal-Oil	314-8540
5N-3274	Plate	425-3648
5N-4504	Plate-Port	397-5048
5N-6165	Bearing	425-3587
5P-8194	Ring-Retaining	308-9920
5S-0160	Strip-Guard	226-2738
5S-0161	Strip-Guard	226-2739
5S-0927	Sleeve-Wear	425-3453
5S-0928	Carrier-Ring	443-2969
5S-1211	Cover-Valve	314-8665
5S-4326	Housing-Screen	435-4790
5S-4557	Bearing	311-9360
5S-5879	Bracket-Shaft	330-9247
5S-7630	Bearing-Sleeve	394-0219
5S-7893	Joint-Drive	380-7387
5T-0906	Cover	282-6625
5T-2333	Segment-Circle	528-7167
5T-2925	Strip-Wear	282-6564
5T-2926	Shoe-Circle Gde	302-2699
5T-3030	Pin As	389-6308
5T-3288	Yoke	424-0743
5T-3323	Pin As	380-7394
5T-3327	Pin As	383-2130
5T-3329	Pin As	380-7395
5T-4267	Segment-Circle	528-7168
5T-5222	Shoe-Circle Gde	297-7261
5T-6620	Shoe-Circle Gde	424-4943
5T-6819	Pin	425-2563
5T-6820	Bearing	425-3447
5T-7130	Housing	396-0656
5T-8500	Shoe-Circle Dr	243-0359
5T-8501	Shoe-Circle Dr	243-0358
5T-8525	Plate	389-6307
5T-8526	Pin As.	396-7270
5T-8528	Pin As.	396-7269
5T-8652	Pin As	383-2131
5T-8654	Pin As	396-0668
5T-8687	Pin As	423-3542
5T-9430	Race-Seal Ring	398-8347
5T-9536	Roller-Ejector	399-8559
5T-9594	Pin As	419-6069
5V-1386	Bearing-Sleeve	526-0040
5V-1508	Pin As.	361-1703
5V-1509	Pin As	319-3443
5V-1511	Pin As	418-1945

# Yellowmark General Usage Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
5V-1530	Link As	374-1463	6J-5342	Retainer	325-6182	6K-8307	Pin	241-2593
5V-5279	Bearing-Sleeve	299-1966	6J-5383	Bearing	542-4696	6K-8308	Pin	241-2594
5V-5661	Bearing-Sleeve	299-1965	6J-6043	Bearing-Sleeve	374-1456	6K-8309	Pin	241-2595
5V-5866	Pin As.	361-1707	6J-6229	Pin	299-2030	6K-8311	Pin	241-2599
6A-7099	Bearing-Sleeve	388-0644	6J-6604	Pin	419-6071	6K-8314	Pin	252-6863
6A-7129	Bearing-Sleeve	301-3130	6J-7500	Retainer	383-2104	6K-8316	Pin	252-6865
6A-7196	Pilot-Front	385-7200	6J-7563	Pin	319-3459	6K-8542	Pin	252-6867
6B-3158	Shoe-Yoke LH	243-0357	6J-8183	Bracket	394-0195	6K-8544	Pin	252-6874
6B-7469	Spacer	417-4535	6J-9221	Roller As	526-0263	6K-8546	Pin	252-6868
6C-1573	Rod	297-7238	6J-9224	Roller As	520-2878	6K-8895	Cap	374-6500
6D-0217	Bearing-Sleeve	325-6022	6J-9258	Trunnion As	256-4846	6K-8897	Bracket As	299-1977
6D-5415	Plate	382-8043	6J-9480	Pin As	384-4774	6K-9070	Washer-Thrust	330-9294
6D-6859	Bearing	330-9248	6J-9482	Pin As	380-7400	6K-9150	Bearing-Sleeve	330-9264
6D-7788	Joint	380-7388	6J-9749	BallStud	521-6884	6K-9151	Bearing-Sleeve	330-9265
6D-8671	Bolt-Draft	243-0333	6K-2694	Bearing-Sleeve	453-6504	6L-6490	Sleeve-O-Ring	398-8346
6E-0787	Bearing-Sleeve	425-6443	6K-2697	Bearing-Sleeve	330-9263	6L-7751	Rod End-Spher	472-8015
6E-1108	Bearing-Sleeve	325-6023	6K-2703	Pin-Lower	252-6853	6L-7816	Seal-O-Ring	314-8542
6E-5449	Bearing-Sleeve	464-4048	6K-2704	Pin-Upper	252-6873	6L-8761	Sleeve-O-Ring	396-7268
6F-2904	Bearing	295-5673	6K-2706	Cap-Lower	451-6443	6M-1592	Bearing-Sleeve	374-1462
6F-6992	Cap-Ballsocket	297-7160	6K-2899	Bearing-Sleeve	453-6505	6N-0977	Bearing-Sleeve	417-4524
6F-7523	Cap-Bearing	325-6039	6K-3937	Pin	241-2557	6N-1572	Mount As	308-9876
6G-1633	Chain Gp	282-6565	6K-4148	Bearing-Sleeve	393-3670	6N-2549	Mount As	384-3467
6G-1908	Housing As-Drive	297-7198	6K-4180	Pin-Upper	252-6854	6N-3256	Mount As	314-8688
6G-1914	Shim	434-1864	6K-4189	Spacer	367-6075	6N-7174	Shield	314-8544
6G-1919	Cap-Pivot	243-0337	6K-4190	Cap-Lower	297-7161	6N-8441	Bearing-Sleeve	380-7371
6G-2947	Shaft	243-0346	6K-4191	Cap-Upper	300-2576	6N-9743	Support-Muffler	308-9940
6G-3784	Bearing-Sleeve	425-6455	6K-4192	Pin-Lower	542-4726	6P-2322	Plate	389-6311
6G-3785	Bearing-Sleeve	425-6454	6K-4193	Plate-Lock	282-6566	6P-4327	Pad	384-3472
6G-4372	Strip-Wear	380-7416	6K-5513	Pin	241-2558	6P-5172	Guard Gp-Rec	226-0196
6G-4524	Strip-Wear	380-7417	6K-5619	Shaft	253-1429	6P-5173	Guard Gp-Rec	229-8617
6G-4525	Strip-Wear	282-6624	6K-5744	Cage-Bearing	330-9266	6P-5343	Rod Gp-Tck Adj	226-0200
6G-4642	Shim	434-1863	6K-6001	Pin	308-9902	6P-6653	Plate-Guide	540-4301
6G-4680	Adapter	302-2633	6K-6046	Pin	241-2602	6P-7564	Carrier-Ring	384-3850
6G-4681	Cap	526-0042	6K-6047	Pin	241-2603	6P-7704	Carrier-Ring	314-8658
6G-4831	Shaft	391-9809	6K-6053	Pin	241-2604	6P-7706	Carrier-Ring	388-6603
6G-5155	Bearing-Thrust	394-0220	6K-6054	Pin	241-2605	6P-8340	Sleeve	422-7895
6G-5343	Bearing-Sleeve	450-9169	6K-6175	Pin	241-2606	6P-8829	Retainer	380-7407
6G-6844	Bearing-Sleeve	419-6070	6K-6185	Pin-Cylinder	252-6859	6S-3442	Strip-Wear	386-4929
6G-6847	Bearing-Sleeve	419-4723	6K-6349	Pin	252-6860	6S-3457	Pin	325-6147
6G-9428	Bracket-Rail	396-7264	6K-6350	Bearing-Sleeve	451-6444	6S-3463	Bearing-Sleeve	374-6513
6G-9429	Bracket-Rail	396-7263	6K-7161	Pin	241-2559	6S-3465	Bearing-Sleeve	382-6903
6G-9430	Bracket	418-1938	6K-7162	Pin	241-2560	6S-3472	Pin As.	421-9629
6I-6457	Rod	421-8920	6K-7164	Pin	241-2561	6S-3474	Pin As	375-9981
6J-0774	Trunnion	256-4844	6K-7165	Pin	241-2562	6S-4074	Bearing	330-9249
6J-1702	Roller As	526-0261	6K-7166	Pin-Arm Pivot	241-2563	6S-7220	Plate As	396-0657
6J-2326	Pin	319-3458	6K-7167	Pin	241-2569	6T-0248	Ring-Seal	295-6440
6J-3999	Connector	428-7631	6K-7284	Pin	241-2591	6T-0952	Pad As	367-6087
6J-5179	Retainer	380-7406	6K-7287	Pin	241-2564	6T-0956	Pad As	367-6088

# Yellowmark General Usage Parts

Cat Part Number	Part Name	Yellowmark Part Number
6T-0960	Pad As	367-6089
6T-1235	Gasket	433-8190
6T-1261	Insert	418-1937
6T-1702	Support As	299-2065
6T-1711	Plate	389-6324
6T-1724	Bar As-Equalizer	283-5223
6T-1933	Collar-Idler End	226-2746
6T-1935	Guide-Frt Idler	440-3257
6T-1980	Collar-Idler End	226-0210
6T-5611	Spacer	435-8520
6T-8249	Pin	399-8542
6T-8801	Guide As	396-0640
6T-8907	Pad As	380-7391
6T-9564	Guide As	416v5530
6V-2982	KIT-Gasket(RS)	518-3959
6W-0240	Bearing-Brace	297-7143
6W-4284	Cage-Bearing	308-9832
6W-4733	Retainer-Bearing	391-1089
6W-5119	Housing-Support	450-8051
6W-7352	Retainer	424-0741
6W-9172	Bearing	389-6330
6W-9173	Bearing	374-1457
6Y-0145	Plate-Locking	419-8801
6Y-0210	Bearing-Sleeve	453-6506
6Y-0305	Cage As-Bearing	297-7150
6Y-0306	Bearing-Sleeve	391-1104
6Y-0576	Support As	416-5531
6Y-1690	Carrier-Ring	384-3849
6Y-2065	Mount As-650 Cup	377-5844
6Y-2878	Retainer	424-0740
6Y-3545	Pin	391-9815
6Y-3896	Pin As	325-6132
6Y-4027	Pin	325-6148
6Y-5793	Ring-Seal	451-9028
6Y-5814	Pin	389-6305
6Y-6126	Plate-Wear	325-6174
6Y-6127	Plate-Wear	325-6175
6Y-6134	Bearing-Sleeve	325-6013
6Y-6234	Bearing-Sleeve	325-6014
6Y-6236	Bearing-Sleeve	325-6024
6Y-6382	Strip	419-0888
6Y-6582	Plate-Wear	419-2307
6Y-6751	Pin	325-6149
6Y-6752	Pin	325-6150
6Y-6775	Pin	325-6151
6Y-7470	Bracket	544-0271
6Y-7471	Pin-Pivot	325-6152
6Y-7474	Pin-Pivot	325-6153

Cat Part Number	Part Name	Yellowmark Part Number
6Y-7795	Pad As	391-9816
6Y-7796	Pad As	391-9817
6Y-8037	Guide As	435-9915
6Y-8248	Pin	325-6154
6Y-8842	Block-Rubber	432-8274
6Y-9930	Mount As	360-2353
6Y-9960	Mount As.	376-3639
7C-3567	Mount As	314-8689
7C-4297	Seal As-CShaft	325-6192
7C-4349	Mount As	383-2117
7C-6697	Shaft - Idler	425-9370
7C-9198	Block	419-2303
7D-1158	Edge-Cutting	7T-1624
7D-1576	Edge-Cutting	7T-1638
7D-1577	Edge-Cutting	7T-1625
7D-1949	Edge-Cutting	7T-1627
7D-4508	Edge-Cutting	7T-1640
7D-4519	Shaft	245-5807
7D-5859	Adapter	297-7136
7D-5861	Adapter	243-0364
7D-8362	Cover	396-0658
7E-5085	Bushing	377-5829
7E-6002	Bearing-Sleeve	417-4523
7E-6003	Bearing-Sleeve	417-4522
7E-6004	Bearing-Sleeve	417-4520
7E-7302	Bracket	416-5497
7E-9907	Spacer-FP Timing	394-0222
7F-9541	Pin As-Drawbar	296-1361
7F-9547	Pin As.-Drawbar	295-0414
7G-2830	Ring-Seal	295-6441
7G-4281	Housing As-Spt	297-7201
7G-4605	Support As	387-2938
7G-5618	Manifold As	283-5204
7G-5972	Plate-Thrust	393-1055
7G-6042	Cage As	216-7856
7G-6044	Cage As	216-7857
7G-6059	Carrier-Ring	393-0911
7G-6489	Spring-Recoil	520-2904
7G-6576	Cage As	216-7859
7G-6681	Cage As	216-7860
7G-8389	Guard	226-0202
7G-8389	Guard	540-4302
7G-9708	Plate-Thrust	393-1054
7H-2424	Sleeve-Spring	226-4852
7H-4710	Bushing-Sleeve	299-1990
7I-7712	Cylinder	393-1019
7I-7713	Rod	391-9873
7I-7714	Piston As	422-9530

Cat Part Number	Part Name	Yellowmark Part Number
7I-7717	Spring	392-4525
7J-0086	Bearing As	256-4842
7J-0373	Shaft As	399-8578
7J-1333	Bearing-Sleeve	295-6408
7J-1334	Bearing-Sleeve	325-6015
7J-1335	Bearing-Sleeve	380-7567
7J-1336	Bearing-Sleeve	384-4776
7J-1337	Bearing	380-7367
7J-1393	Cap As	520-2877
7J-1770	Cap-Bearing	396-0664
7J-2604	Bearing-Sleeve	380-7369
7J-4888	Bearing-Sleeve	385-3789
7J-4981	Trunnion	394-0210
7J-4982	Bearing	383-2132
7J-4983	Cap-Bearing	384-3460
7J-5131	Trunnion	296-1371
7J-5356	Guide LH	416-5503
7J-6250	Bearing-Sleeve	385-3803
7J-6869	Ring	389-6329
7J-6884	Shaft	387-2937
7J-7488	Bearing	256-4836
7J-8458	Bearing-Sleeve	380-7374
7J-9344	Bearing-Sleeve	360-2334
7J-9346	Bearing-Sleeve	374-8357
7J-9365	Bearing-Sleeve	453-6507
7J-9366	Bearing-Sleeve	299-1985
7J-9434	Shaft	380-7557
7J-9682	Bearing-Sleeve	360-2335
7J-9694	Bearing-Sleeve	385-3794
7J-9707	Bearing-Sleeve	308-9821
7J-9708	Bearing-Sleeve	299-1964
7J-9731	Bearing-Sleeve	308-9822
7J-9814	Bearing-Sleeve	308-9824
7J-9842	Bearing-Sleeve	299-1968
7J-9884	Bearing-Sleeve	325-6016
7K-0078	Bearing-Sleeve	308-9825
7K-0084	Bearing-Sleeve	453-6508
7K-0085	Bearing-Sleeve	393-3646
7K-0087	Bearing-Sleeve	374-6514
7K-0639	Spring-Recoil	520-2892
7K-0686	Trunnion-Rear	541-4962
7K-1510	Washer-Thrust	330-9295
7K-1512	Cover	469-8101
7K-5213	Pin	252-6869
7K-6497	Pin	252-6870
7K-7176	Pin	241-2570
7K-7200	Pin	241-2600



# Yellowmark General Usage Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
7K-9212	Seal-Pin	513-7995	7N-1164	Mount As	295-5451	7W-3580	Bracket-Mtg	418-1939
7K-9343	Pin	241-2571	7N-2155	Bearing	383-2133	7W-7546	Gasket-Plate	433-8187
7K-9344	Pin	241-2607	7N-2156	Bearing-Sleeve	380-7373	7Y-0631	Spring	375-5446
7K-9345	Pin	241-2608	7N-2213	Bearing-Sleeve	394-0190	7Y-0646	Cover	520-6385
7K-9346	Pin	252-6871	7N-2957	Cover-Rad Cap	361-1722	7Y-0680	Piston	360-2262
7K-9347	Pin	252-6875	7N-4407	Gasket-Rod Comp	433-9853	7Y-0773	Spring Gp-Recoil	509-6226
7K-9348	Pin	252-6872	7N-5206	Mount As	374-1451	7Y-0896	Cover	424-0128
7K-9360	Pin	319-3461	7N-5656	Sleeve	384-3848	7Y-1035	Mount	383-2118
7K-9506	Pin	241-2584	7N-7878	Cover-Plate	434-2401	7Y-1258	Piston	367-6091
7K-9513	Pin	241-2596	7N-9352	Gasket	433-8188	7Y-1606	Spring	375-5447
7K-9514	Pin	241-2597	7P-1577	Pin As	375-9969	7Y-1634	Spring Gp-Recoil	509-6306
7K-9515	Pin	241-2589	7P-2285	Pin As	393-3669	7Y-1646	Shaft-Planet	301-4624
7K-9528	Bearing-Sleeve	308-9828	7P-3214	Pin	425-3452	7Y-1685	Rod	333-4952
7K-9589	Bearing-Sleeve	453-6509	7P-3466	Bearing-Sleeve	422-9523	7Y-1687	Piston As	360-2266
7K-9591	Bearing-Sleeve	365-8826	7P-3472	Pin	374-8366	7Y-1738	Support	443-5198
7K-9592	Bearing-Sleeve	360-2336	7P-4695	Tube	424-0860	7Y-1772	Cage	374-3500
7K-9593	Bearing-Sleeve	360-2337	7P-4777	Pin	416-5488	7Y-1780	Cylinder	360-2261
7K-9601	Bearing-Sleeve	360-2338	7P-6348	Bearing	399-6042	7Y-1781	Cover	513-7976
7K-9602	Bearing-Sleeve	360-2339	7P-6596	Bearing-Sleeve	295-6409	7Y-2345	Pin	394-0211
7K-9604	Bearing-Sleeve	308-9829	7P-6770	Support As	389-6299	7Y-2348	Pin	314-8697
7K-9638	Bearing-Sleeve	365-8827	7P-6984	Pin	393-3674	7Y-2349	Pin	301-4556
7K-9639	Bearing-Sleeve	314-8643	7P-7734	Rod As	376-3643	7Y-2357	Pin	301-4564
7K-9640	Bearing-Sleeve	389-6328	7P-7858	Bearing-Sleeve	374-8362	7Y-2392	Link-RH	301-4765
7K-9642	Bearing-Sleeve	360-2340	7P-8370	Bearing	295-6410	7Y-2395	Bearing-Sleeve	314-8646
7K-9643	Bearing-Sleeve	445-7707	7S-1234	Bushing As-Spt	394-0192	7Y-2396	Bearing-Sleeve	314-8634
7K-9644	Bearing-Sleeve	360-2341	7S-3206	Seal-O-Ring	436-2656	7Y-3427	Bearing-Sleeve	314-8635
7K-9697	Link As-Front	520-2893	7S-7043	Mount As	389-6332	7Y-3428	Bearing-Sleeve	314-8647
7K-9717	Link As-Rear	434-2447	7S-7809	Cap As-Radiator	295-6417	7Y-3546	Link	438-1817
7K-9794	Link As-Rear	431-5262	7T-0204	Bearing-Brace	247-4126	7Y-3547	Pin	396-7278
7K-9981	Pin As	308-9887	7T-0205	Bearing-Brace	247-4127	7Y-3548	Pin	396-7289
7K-9988	Pin	308-9904	7T-0206	Bearing-Brace	297-7144	7Y-3549	Pin	360-2349
7K-9989	Pin	308-9905	7T-1776	Slide	396-0659	7Y-3550	Pin	360-2350
7K-9990	Pin	308-9906	7T-2036	Cap As-Fuel	361-1721	7Y-3551	Bearing-Sleeve	380-7375
7M-0457	Guard-Frame	226-0217	7T-2879	Trunnion As	396-7262	7Y-3552	Bearing-Sleeve	364-5266
7M-0665	Bar As-Equalizer	231-3312	7T-4865	Pin	520-2900	7Y-3553	Bearing-Sleeve	301-0433
7M-0680	Housing As-Susp	444-1841	7T-4971	Cap-Bearing	428-8816	7Y-4666	Bearing-Sleeve	314-8636
7M-1776	Plate-Idle Gde	226-0222	7T-5216	Sleeve-Wear	422-9522	7Y-5102	Bearing-Sleeve	380-7368
7M-1845	Plate As-Spring	384-3474	7T-5510	Pad As-Resilient	367-6090	7Y-5128	Bearing-Sleeve	314-8648
7M-1850	Strip-Wear	389-6327	7T-6427	Pin	319-3462	7Y-5131	Bearing-Sleeve	301-4626
7M-1851	Bolt-Spring	226-0223	7V-0638	Spacer	425-3651	7Y-6389	Bearing	372-7507
7M-1856	Pilot-Rec Spg	226-0225	7V-3719	Collet As	376-3644	7Y-6607	Bearing	372-7508
7M-1859	Pilot As-Spring	226-0207	7V-5981	Driver	231-0256	7Y-6608	Bearing	314-8649
7M-1861	Stop-Spring RH	226-0228	7V-6715	Pin As	361-1701	7Y-6626	Bearing	314-8650
7M-1862	Stop-Spring LH	226-0229	7V-6716	Pin As	396-7273	8D-0983	Mounting	384-3470
7M-2531	Rod-Tie	297-7239	7V-6898	Pin As	241-2539	8D-1634	Retainer	416-5533
7M-3416	Bearing	566-2017	7W-1927	Ring-Retainer	387-2935	8D-1651	Cover	396-7279
7M-7226	Gasket-Cam Cover	433-8189	7W-2315	Retainer	384-3475	8D-1784	Pin	282-6567
7M-9398	Plate-Guide	297-7230	7W-2731	Retainer	423-3541	8D-1833	Pin	364-5269
			7W-3145	Plate	422-7894			

# Yellowmark General Usage Parts

Cat Part Number	Part Name	Yellowmark Part Number
8D-2351	Pin	297-7217
8D-2429	Pin As	319-3445
8D-2469	Shaft-Drive	275-5280
8D-2786	Edge-Cutting	9W-2297
8D-2787	Edge-Cutting	9W-2299
8D-2788	Edge-Cutting	9W-2313
8D-2789	Edge-Cutting	9W-2315
8D-3744	Shaft-Drive	275-5283
8D-3997	Pin As	389-6302
8D-4673	Pin-Cylinder	302-2711
8D-4675	Pin-Cylinder	391-9863
8D-4766	Pin-Cylinder	365-8832
8D-5949	Stud	416-5492
8D-6629	Bearing	418-1953
8D-7083	Bearing	386-4930
8D-7086	Bearing	330-9251
8D-7096	Pin-Axle Leaning	297-7219
8D-7167	Pin	389-6319
8D-7284	Bearing	330-9252
8D-8168	Bearing	453-6511
8D-8572	Bearing-Sleeve	380-7384
8D-8633	Shaft-Drive	275-5281
8D-8805	Cover	299-2002
8D-8829	Bearing-Sleeve	361-1692
8D-9296	Bearing	330-9253
8D-9804	Housing-Drive	302-2682
8D-9815	Pin-Cylinder	297-7220
8E-3525	Hub-Sprocket	393-1043
8E-4026	Pin As	394-0902
8E-5450	Seal-EBar	325-6190
8E-6220	Pin As	422-4559
8E-6221	Pin	325-6155
8E-6442	Pin-Pivot	523-0536
8E-6752	Bearing-Sleeve	388-6576
8E-6754	Connector As	325-6044
8E-6755	Bearing-Sleeve	325-6026
8E-6756	Bearing-Sleeve	325-6027
8E-6758	Connector As	396-0639
8E-9214	Pin	325-6156
8F-6058	Bearing-Sleeve	416-5494
8F-9365	Pin	319-3463
8G-0935	Cap	425-3584
8G-1682	Pin	241-2585
8G-3102	Piston	325-6162
8G-3733	Pin As	419-7636
8G-3965	Hub-Sprocket	424-4942
8G-4022	Bearing	422-6920
8G-4027	Pin As	393-3677

Cat Part Number	Part Name	Yellowmark Part Number
8G-4187	Pin As	295-5676
8G-4190	Seal-EBar	296-1366
8G-4372	Support As	376-3645
8G-8311	Bearing - Sleeve	295-6412
8G-8331	Pin As	443-2971
8G-8944	Sleeve-Wear	418-1954
8H-1383	Rod-Tie	299-2051
8H-7812	Cover-Bearing	506-5624
8H-7980	Piston	226-0249
8H-8175	Bearing-Sleeve	376-3636
8H-8898	Pin	385-3801
8I-1098	Shaft	396-7275
8J-0201	Bearing-Sleeve	384-4781
8J-0278	Bearing-Sleeve	385-3808
8J-0632	Pin	396-7280
8J-1616	Lever	330-9271
8J-2653	Lever As	299-2015
8J-2654	Lever As	299-2016
8J-2880	Cap-Bearing	295-6420
8J-3443	Bearing	396-7281
8J-4043	Edge-Cutting	7T-1632
8J-5014	Pin	384-4773
8J-5654	Bearing-Sleeve	325-6028
8J-5778	Bearing-Sleeve	374-8359
8J-6536	Bearing	425-6444
8J-6552	Carrier-Bearing	399-6055
8J-7211	Guide-LH	428-8815
8J-7466	Seat	385-3787
8J-7596	Bearing-Sleeve	361-1693
8J-7694	Bearing	431-5264
8J-7727	Pin	380-7552
8J-7782	Edge-Cutting	9W-2301
8J-8980	Edge-Cutting	9W-2317
8J-9821	Edge-Cutting	7T-1628
8J-9926	Bearing-Sleeve	383-2115
8K-0067	Spacer	396-1569
8K-0455	Pin	241-2547
8K-0533	Bearing-Sleeve	314-8637
8K-1754	Spacer	231-0247
8K-2082	Spring-Recoil	388-6560
8K-2198	Cylinder	382-5062
8K-2682	Adapter	231-0268
8K-4392	Bearing-Sleeve	389-6325
8K-4850	Cage-Bearing	451-0745
8K-5283	Plate	299-2043
8K-5334	Pin	241-2598
8K-5587	Rod Gp-Recoil	226-4954
8K-5757	Bearing-Sleeve	367-6076

Cat Part Number	Part Name	Yellowmark Part Number
8K-5758	Pin	241-2566
8L-4282	Hub	444-0573
8L-4889	Shaft-Aux Drive	433-9212
8M-6191	Sleeve-Bolt	226-0234
8M-6676	Cylinder-Adj	226-4960
8M-7166	Housing-Screen	297-7192
8M-7207	Guard As-FR R RH	226-0236
8M-7208	Guard As-Frame	226-0237
8M-8652	Shaft	297-7252
8N-0111	Mount As	374-1452
8N-0788	Cover	440-0849
8N-1214	Mount As	325-6125
8N-1300	Bushing As-Spt	394-0193
8N-2518	Bearing-Sleeve	417-4518
8N-2641	Sleeve	325-6210
8N-4550	Shaft-Pulley	445-9247
8N-5305	Spacer	363-7464
8N-5579	Retainer	425-3451
8N-7257	Mount As	396-0660
8N-7486	Condenser As	436-2263
8N-8110	Gasket-Cam Hsg	433-8186
8N-8258	Bearing-Sleeve	452-1077
8P-0187	Nut-Adjusting	219-9676
8P-0621	Nut-Adjusting	451-0746
8P-1324	Cage-GR Shft Brg	229-8239
8P-1653	Nut-Sprocket Adj	449-4734
8P-1851	Hub As-Sprocket	224-1314
8P-1853	Nut-Adjusting	226-7997
8P-1855	Hub As-Sprocket	227-4770
8P-1865	Bar As-Equalizer	231-3313
8P-2430	Shaft As	297-7258
8P-3563	Cage-Bearing	451-0747
8P-3595	Mount	418-1950
8P-5117	Rod Gp-Tck Adj	226-2747
8P-6274	Guard As-LH	226-4949
8P-6275	Guard As-RH	226-0191
8P-8221	Plate-Guide	226-2748
8R-0931	Housing-Pinion	302-4300
8R-1088	Bearing-Sleeve	419-0885
8R-1693	Pin As	415-1906
8R-3921	Collet	308-9839
8R-3941	Collet	393-1016
8R-3943	Collet	308-9840
8R-4184	Bearing-Sleeve	374-6515
8R-4265	Collet	384-3462
8R-4268	Collet	384-3461
8R-6213	Mount As	389-6301
8R-7336	Bearing	301-3394

# Yellowmark General Usage Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
8R-7425	Retainer	308-9917	8Y-1198	Strip	325-6220	9J-0940	Pin	319-3467
8S-1061	Pilot As-Spring	226-0227	8Y-1199	Strip	325-6221	9J-0944	Pin	380-7399
8S-1831	Guard As-Sprkt	226-4947	8Y-1853	Strip	428-7633	9J-0945	Bearing-Sleeve	383-2135
8S-2123	Cage-FDR Bearing	217-7726	8Y-2735	Spring	383-2134	9J-0946	Bearing	421-9759
8S-2126	Spacer-Hub Brg	222-1767	8Y-6559	Hub	416-5501	9J-0950	Bearing-Sleeve	396-0667
8S-2140	Trunnion-Gear	226-8020	8Y-6659	Spring-Recoil	422-7893	9J-0951	Bearing-Sleeve	396-0666
8S-6511	Bearing-Sleeve	380-7372	8Y-7186	Link As	399-8584	9J-1140	Bushing	384-4782
8S-7818	Bracket	226-0211	9B-0399	Link As-CL Drive	431-5268	9J-1141	Bushing	384-4783
8V-1612	Shaft	425-6456	9C-0624	Pin As.	361-1709	9J-1187	Bearing-Sleeve	384-4785
8V-1624	Lever	299-2019	9C-0625	Pin As	308-9888	9J-1379	Pin As	389-6303
8V-2632	Pin As	241-2523	9C-1484	Pin As	319-3446	9J-1676	Bearing-Sleeve	380-7378
8V-2634	Pin As	241-2518	9C-3857	Pin	374-6503	9J-1679	Bearing-Sleeve	380-7566
8V-2639	Pin As	241-2542	9C-4007	Bearing-Sleeve	374-1459	9J-2290	Pin As	423-3538
8V-5439	Pin As	241-2531	9C-4202	Ring	424-0127	9J-2332	Bearing-Pivot	299-1969
8V-6384	Spacer As	308-9935	9C-4737	Pin As	241-2520	9J-2365	Retainer	325-6186
8V-7175	Pin	241-2567	9C-4912	Pin As	241-2517	9J-2759	Trunnion	394-0216
8V-7176	Pin	241-2568	9C-4978	Pin-Lower	319-3466	9J-3657	Edge-Cutting	7T-1637
8V-7659	Pin As	361-1702	9C-6029	Bearing-Planet	375-9982	9J-3658	Edge-Cutting	7T-1626
8V-7885	Housing-Support	297-7193	9C-6187	Pin As	241-2521	9J-3659	Edge-Cutting	9W-2300
8W-1708	Pin	388-0643	9C-6318	Bearing-Sleeve	374-6516	9J-3741	Shaft	386-4933
8W-1749	Plate	380-7403	9C-8986	Collet As	374-6502	9J-3862	Edge-Cutting	9W-2295
8W-1751	Bracket As	288-8732	9C-9191	Trunnion	302-2701	9J-5284	Bearing-Sleeve	380-7379
8W-1752	Bracket-Rail	288-8733	9C-9194	Housing-Pinion	522-5217	9J-5875	Bearing-Sleeve	308-9830
8W-1753	Bracket-Rail	288-8734	9D-1511	Bearing-Sleeve	333-4943	9J-5942	Bearing-Sleeve	380-7380
8W-1756	Bracket-RAIL	521-6890	9D-1512	Bearing-Sleeve	333-4944	9J-5972	Roller As	523-5956
8W-3589	Link As-Spring	380-7389	9D-1589	Mounting	387-2928	9J-6001	Cap As	444-0570
8W-4066	Bracket-Rail	288-8735	9D-3288	Bolt-Draft	333-4941	9J-6260	Trunnion	426-0031
8W-4067	Bracket-Rail	288-8736	9D-4094	Bearing-Sleeve	418-1933	9J-6549	Bearing-Sleeve	453-6514
8W-4167	Bearing-Sleeve	361-1694	9D-5444	Pin	380-7396	9J-7099	Bearing-Sleeve	391-9818
8W-4523	Bearing-Sleeve	385-3798	9D-5921	Shaft-Dr Pinion	297-7254	9J-7701	Edge-Cutting	7T-1639
8W-5092	Pinion-Circle Dr	282-6569	9D-6889	Plate As	394-9818	9J-8323	Trunnion	361-1713
8W-5293	Pin	282-6570	9D-7924	Mount As	360-2356	9J-9427	Bearing-Sleeve	361-1695
8W-5296	Pin	438-2017	9D-8285	Cap	391-9822	9J-9487	Bearing-Sleeve	447-0822
8W-6324	Kit-Wear Strip	424-0739	9D-9665	Bracket-Cyl Mtg	299-1980	9J-9598	Pin	296-1362
8W-6476	Pin	418-1935	9D-9967	Washer-Thrust	389-6323	9K-0723	Pin	396-7283
8W-6493	Pin	395-1320	9D-9968	Washer-Thrust	391-9890	9K-0724	Collar	392-4524
8W-6494	Pin	391-9902	9F-3358	Link As-CL Drive	394-0207	9K-0725	Cap	444-0575
8W-6497	Pin	319-3465	9F-4182	Socket As	523-0538	9K-0726	Cap	393-3680
8W-8512	Pin As	385-7220	9F-7101	Bushing-Collar	299-1988	9K-0802	Spacer	419-0892
8X-0576	Kit-Wear Strip	383-2105	9G-0007	Hub	224-1311	9K-0804	Pin	367-6092
8X-0962	Pin	423-3539	9G-1696	Pad As	391-9820	9K-0805	Cap	415-1910
8X-0967	Pin As	425-6445	9G-6744	Bearing-Sleeve	418-1931	9K-0806	Cap	430-4469
8X-5425	Guide As-Hose	432-4222	9G-7038	Pin	396-0665	9K-5639	Pin	425-6451
8X-8067	Mounting	394-0205	9G-7993	Cage-GR Brg RH	239-7973	9K-8423	Bearing-Sleeve	421-9043
8X-8406	Cap-Drawbar	521-6895	9G-9078	Sleeve	431-6618	9K-8425	Bearing-Sleeve	314-8638
8X-8407	Adapter	523-0537	9G-9086	Bearing-Sleeve	416-5528	9K-8428	Pin As	241-2533
8Y-0035	Yoke As	393-1057	9J-0105	Hub	415-1894	9K-8435	Pin	241-2552
8Y-0395	Pin As	393-3678	9J-0123	Trunnion	325-6227			
8Y-0978	Plate As	434-1402						

# Yellowmark General Usage Parts

Cat Part Number	Part Name	Yellowmark Part Number
9K-9158	Bearing-Sleeve	299-1970
9K-9271	Holder As-Cage	217-7730
9L-5908	Gasket	433-8196
9L-5961	Adapter-Compr Dr	416-5508
9L-6371	Rod-Eye	363-7459
9M-1853	Mount As.	376-3638
9M-1990	Dowel-Reaction	386-4963
9M-2417	Retainer-Gear	380-7409
9M-3025	Cover As	299-2001
9M-4370	Bearing-Sleeve	453-6515
9M-4789	Shaft-Gov Cont	297-7256
9M-5477	Bearing-Sleeve	374-6517
9M-8395	Bearing-Sleeve	391-1103
9N-3167	Plate-Block Bot	430-4468
9-N4622	Pin	319-3468
9P-0620	Cage-Pinion Brg	221-1052
9P-0863	Pin	389-6321
9P-6912	Pin	394-0189
9P-8663	Spacer	422-9521
9P-9575	Cage-Bev GR Brg	216-7876
9R-0097	Pin	346-5684
9R-0320	Bearing-Sleeve	527-7485
9R-0424	Pin	346-5686
9R-0437	Pin	389-6320
9R-1725	Bearing-Sleeve	425-6446
9R-1917	Bearing-Sleeve	418-1958
9R-2421	Shaft	346-5689
9R-4208	Pin	425-3450
9R-6070	Pin As	393-3681

Cat Part Number	Part Name	Yellowmark Part Number
9R-6161	Pin	374-6505
9R-6162	Pin	418-1943
9R-6163	Pin	346-5701
9R-6475	Pad As	346-5702
9R-6545	Pin	346-5703
9R-7092	Bar	364-5272
9R-7696	Pin	346-5705
9R-8231	Pad As	397-5066
9R-8235	Pad As	383-2106
9R-8579	Pin	346-5711
9R-8580	Pin As	418-1932
9R-8663	Pin	365-8831
9R-8709	Pin	346-5715
9R-8724	Guide As	521-6899
9R-9402	Seal-Rax	347-0476
9R-9475	Bearing-Sleeve	380-7377
9R-9505	Bearing-Sleeve	453-6516
9R-9812	Pin	347-0468
9S-1026	Cage-Gear Brg	216-7873
9S-3321	Cage-Pinion Brg	226-7974
9S-3955	Cage-Gear Brg	216-7874
9S-5771	Bushing As	385-7219
9S-8184	Pin-Drawbar	398-8345
9S-8217	Bolt-Spring	469-4672
9U-0974	Bushing-Sleeve	374-1460
9U-8481	Pin As.	295-5675
9V-0247	Plate	417-4527
9V-2410	Housing-Bearing	302-2679
9V-3052	Plate	434-1401

Cat Part Number	Part Name	Yellowmark Part Number
9V-3289	Pin As	382-6904
9V-3363	Pin As	396-0663
9V-3405	Bearing-Sleeve	425-6453
9V-3406	Bearing-Sleeve	425-6441
9V-3829	Collar	382-6905
9V-3852	Bearing-Sleeve	450-9166
9V-3853	Pin	319-3469
9V-4975	Bearing-Sleeve	384-4784
9V-6162	Pin As	499-4307
9V-6523	Cap	297-7162
9V-6524	Cap	297-7163
9V-7860	Support As-Front	308-9938
9W-0099	Bearing-Sleeve	314-8639
9W-0876	Bearing-Sleeve	325-6031
9W-1677	Bearing	297-7145
9W-1683	Pin	391-9819
9W-2579	Plate	314-8701
9W-3605	Carrier-Ring	314-8662
9W-4897	Bracket As	295-6414
9W-6390	Sleeve	385-3795
9W-7919	Bearing-Sleeve	425-3647
9W-8888	Pin-Pivot	523-0540
9W-9027	Plate	419-2306
9W-9930	Mount As	295-6437
9W-9931	Mount As.	360-2354
9W-9940	Mount As.	360-2355
9X-4580	Seal As	451-6455
9Y-0635	Spacer	435-8519
9Y-7215	Sleeve-Isolator	425-3646

# Yellowmark Hydraulic Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
094-1850	Bearing-Trunnion	419-4747	144-9072	Cylinder As	394-8209	234-1949	KIT-Seal-H.Cyl-1	492-2469
100-3414	Pump Gp-Vn Bsc-A	422-8149	148-2593	Head	383-1591	234-1950	KIT-Seal-H.Cyl-1	492-1885
100-4529	Piston As	424-6368	151-5349	Head	383-1592	235-7770	Bearing-Sleeve	528-7158
100-6174	Cyl Gp-0089 421	425-9368	152-6485	Cyl Gp-102 472 Y	390-0985	235-9832	Head	419-4658
100-8010	Valve	423-5583	155-5091	Cartridge Gp	422-8124	246-8883	Rod As	425-9364
102-8112	Cylinder	360-2276	156-0738	Rod As	394-8210	247-8853	Cyl Gp-0150 1156	399-8583
105-2094	Cyl Gp-0076 1194	423-7868	157-0956	Pump Gp-Vn Bsc-B	422-8154	247-8856	Rod As	395-1317
105-2095	Rod As	421-1565	163-3127	Sleeve	419-4668	248-7857	Bearing-Sleeve	526-3052
105-2155	Pump Gp-Vn Bsc-A	422-8151	164-7174	Cyl Gp-0076-1067	423-7865	266-7939	Rod As	498-5340
105-3196	Motor Gp-Grtr	282-6547	165-2495	Cyl Gp-0064-0292	399-8562	269-0381	Cyl Gp-100 254 X	393-3660
107-3950	Head	383-1588	165-2496	Cyl Gp-0064-0292	399-8568	278-1971	Cyl Gp-BAsIC	528-7181
111-8181	Cyl Gp-197 864 Y	390-0986	166-6352	Tube As.	432-4223	278-1972	Cylinder As.	394-9813
112-1773	Piston	347-0462	169-9527	Cyl Gp-0076-0352	430-5959	278-9255	Bearing-Sleeve	526-3053
112-5003	Cyl Gp-159 582 Y	393-3654	170-5212	Rod As	399-8575	279-5267	Insert	375-4335
114-1071	Piston	388-6583	172-2349	Cylinder As (LH)	430-5958	283-6119	Rod As	493-5525
114-4680	Gear As-Pump	374-7485	173-1926	Cyl Gp-0102-0541	399-8576	283-6133	Rod As	493-5526
115-0637	Pump Gp-Gr 1	226-0160	173-1927	Cyl Gp-0102-0541	426-0036	289-2935	Seal As-Buffer	472-8029
119-1852	Cyl Gp 102 755	430-5960	174-7432	Head	388-0660	289-2946	Seal-U-Cup	472-8030
119-5203	Rod As	495-2551	175-3370	Rod	493-5521	289-7743	Rod As	493-5527
119-5217	Rod As	493-5535	176-3900	Accumlator	416-5513	289-7830	Rod As	495-0125
119-8749	Pump Gp-Mtrg BSC	528-7177	177-2575	Rod As	495-0123	289-7831	Rod As	493-5540
121-2501	Pump Gp-VN BSC-C	525-2495	177-2599	Rod As	493-5523	289-7870	Rod As	493-5528
121-4313	Pump Gp-VN BSC-C	525-2497	177-2610	Rod As	493-5536	289-7886	Rod As	422-7246
122-6658	Pump Gp-GR 1	518-3969	177-2613	Rod As	493-5537	289-7929	Rod As	493-5529
123-2111	Piston	462-5714	178-3713	Cyl Gp-0051-0158	493-5547	289-7937	Rod As	493-5530
123-3472	Pump Gp-Gr 1 Bsc	345-1978	179-3044	Cylinder	385-6138	289-7944	Rod As	493-5531
123-8509	Pump Gp-Vn Bsc	422-8152	183-3721	Cyl Gp-0089-0347	535-9623	289-8000	Rod As	493-5532
124-2726	Head	377-5855	184-9843	Head	347-0461	290-9182	Bearing-Sleeve	528-7161
125-0024	Cyl Gp 152 800	399-8566	185-0198	Rod As	495-0124	295-9397	Rod As	493-5533
125-0025	Rod As	394-8208	185-0225	Rod As	498-5339	297-4896	Cyl Gp-Basic	425-9363
126-1956	Bearing-Sleeve	522-2295	188-4211	Cylinder As	425-9366	305-3582	Rod As	493-5534
126-5984	Ring-Backup	419-4654	189-3041	Rod As	394-9811	307-1961	Plate	472-8031
127-5969	Gear-Sun	521-3628	191-3118	Cyl Gp-0170 1680	399-8560	308-1845	Seal-Wiper	472-8032
127-8932	Cylinder As	422-4937	191-4610	Pump Gp-Vane	422-8160	312-4248	Seal As.-Buffer	542-4710
128-7228	Pump Gp-Vn Bsc-A	422-8153	191-7725	Cyl Gp-0076-1067	423-7867	318-9959	Rod As	493-5541
129-4259	Cyl Gp 102 1437	393-3655	191-7727	Cylinder As.	430-5957	328-4266	Cylinder As.	393-3664
134-2659	Rod As	388-6568	192-6445	Cyl Gp-235 535 Y	393-3651	328-4267	Cyl Gp-140 114 Y	393-3653
135-7393	Head	382-6895	192-6446	Cyl Gp-235 535 Y	393-3657	350-9342	Rod As	495-0126
136-3156	Cyl Gp-0089-0352	532-6159	192-6447	Head	425-9365	350-9344	Rod As	493-5542
137-3700	Rod As	493-5520	192-6448	Rod As	428-7630	352-1102	Rod As	495-2554
137-7854	Rod As	529-6114	204-3695	Rod As	493-5538	352-1103	Rod As	498-5341
140-8435	Flange	451-9015	206-0502	Cylinder As.	423-7866	352-1104	Rod As	493-5543
141-2919	Rod As	399-8567	206-0503	Cyl Gp-0114-0695	426-0038	352-1105	Rod As	493-5544
143-7220	Cylinder As	532-6160	225-4529	Cyl Gp-0160 1356	393-3658	352-1106	Rod As	495-2555
			226-8202	Seal-Wiper	472-8024	356-8794	Rod As	498-5505
			233-9204	KIT-Seal-H.Cyl-1	472-8025	357-7540	Valve-Fill	360-2292
			234-1948	KIT-Seal-H.Cyl-1	492-2468	360-5446	Rod As	493-5545
						374-1605	Pump Gp-GR 3 BSC	518-3989
						390-4220	Rod As	498-5342

# Yellowmark Hydraulic Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
1H-8382	Gear-Oil Pump Dr	226-6103	3G-2751	Cartridge Gp-RR	422-8126	3G-7666	Cartridge Gp	422-8098
1J-0708	Ring-Wear	544-4869	3G-2752	Cartridge Gp-RR	422-8127	3G-7667	Cartridge Gp	422-8107
1N-3958	Elbow	325-6087	3G-2806	Cartridge Gp	422-8128	3G-8746	Rod As	394-8217
1P-2187	Pump Gp-Gr 1 Bsc	299-2044	3G-2834	Cartridge Gp-RR	426-0025	3G-8792	Cylinder As	469-4666
1P-4145	Valve Gp-Press	247-4436	3G-2835	Cartridge Gp-RR	422-8106	3G-9891	Pump Gp-Gr A	399-8541
1P-4231	Pump Gp-Gear	226-0156	3G-2837	Cartridge Gp-RR	422-8123	3J-9325	Piston	390-0993
1P-6752	Pump Gp-Gr 1 Bsc	226-0161	3G-2858	Pump Gp-Gr A	424-7054	3J-9703	Ring-Wear	544-4870
1U-0406	Plate-Wear	499-0485	3G-4601	Pump Gp-Vn-Bsc-B	422-8139	3N-6841	Tube As-Inlet RH	311-9464
1U-0408	Cyl Gp-0165 1549	415-1898	3Gv4602	Pump Gp-Vn-Bsc-B	439-1131	3P-0203	Pump Gp-Gr Basic	418-1965
1U-1625	Pump Gp-Gr A	421-1555	3G-4752	Cyl Gp-035-060-Y	390-0987	3P-0204	Pump Gp-Gr Basic	421-2550
1U-1997	Rod As	419-4652	3G-5192	Cyl Gp-0126 1128	399-8577	3P-4002	Pump Gp-Gear	217-2595
1U-2135	Cyl Gp-0121 955	395-1304	3G-5223	Cyl Gp-0083-1016	399-8557	3P-4855	Pump Gp-GR 1	217-2596
1U-2665	Cartridge Gp	422-8108	3G-5224	Cyl Gp-0083-0459	425-9375	3P-6293	Pump Gp-GR 1	217-2597
1U-2666	Cartridge Gp	422-8115	3G-5264	Cylinder As.	393-1018	3P-6814	Pump Gp-Gr 1	226-0163
1U-2667	Cartridge Gp	422-8116	3G-5492	Rod As	377-5836	3P-6816	Pump Gp-Gr 1	226-0164
1U-2668	Cartridge Gp	422-8117	3G-5497	Cyl Gp-0210 535	394-9822	3S-2616	Pump Gp-Trans	226-0165
1U-2669	Cartridge Gp	422-8118	3G-5502	Cylinder As	390-0988	3S-5017	Elbow-Exhaust	369-9498
1U-2738	Piston Assembly	367-6074	3G-5707	Cyl Gp-0210 188	399-8556	3T-0300	Pump Gp-Gr 2 Bsc	421-1557
1U-3522	Rod As	390-5281	3G-5750	Bearing-Plate	419-4734	3T-1445	Pump Gp-Gr 3	386-3051
1U-3883	Shaft	544-0280	3G-6846	Pump Gp-Vn Bsc-A	422-8165	3T-1446	Pump Gp-Gr 3 Bsc	325-6178
1U-3953	Cartridge Gp	426-0024	3G-6910	Bearing-Plate	419-4733	3T-5355	Flange	386-3052
1U-3969	Pump Gp-Vn Bsc-B	422-8150	3G-7412	Pump Gp-Vn Bsc-B	422-8167	3T-5672	Gear As-Pump	295-5447
1U-3998	Seal As	472-8005	3G-7600	Cyl Gp-076 314 U	422-4936	3T-5674	Gear As-Pump	295-5449
1U-4851	Cyl Gp-0102 1360	422-4560	3G-7637	Pump Gp-Vn Bsc-A	422-8148	3T-7398	Guide As	419-4647
1V-6913	Tube As	435-4793	3G-7638	Pump Gp-Vn Bsc-B	422-8174	3T-8359	Pump Gp-Gr 1 Bsc	295-5445
2G-1034	Valve-Safety	380-7555	3G-7639	Pump Gp-Vn Bsc-B	422-8173	3W-8160	Piston As	393-1051
2J-0564	Locknut	510-4848	3G-7640	Pump Gp-Vn Bsc-B	422-8172	4D-0487	Valve As-Check	375-4334
2J-1424	Rod As	469-4665	3G-7651	Cartridge Gp	422-8121	4D-4661	Pump Gp-Vn Bsc-A	422-8162
2N-7242	Tube As	444-5677	3G-7652	Cartridge Gp	426-0026	4I-1524	Cylinder As	394-8216
2P-1739	Tube As-Pump	325-6229	3G-7653	Cartridge Gp	422-8099	4J-3745	Ring-Wear	513-7993
2P-1751	Bell As-Suction	430-7624	3G-7654	Cartridge Gp	422-8100	4J-4497	Cylinder Gp-RH	399-8585
2P-2697	Tube As-Air Vent	382-6901	3G-7655	Cartridge Gp	422-8119	4J-4498	Cylinder Gp-LH	425-9374
2P-2719	Pipe-Oil Filler	363-7454	3G-7657	Cartridge Gp	422-8101	4M-1001	Pump Gp-FD Oil	226-0166
2P-3645	Pump Gp-Gr 2 Bsc	450-2389	3G-7658	Cartridge Gp	426-0427	4N-0913	Screen As-Bell	374-7489
2P-5774	Gear As-Oil Pump	428-6659	3G-7659	Cartridge Gp	422-8102	4P-7688	Valve As-Check	420-6216
2P-9313	Pump Gp-Gr 1 Bsc	418-1966	3G-7660	Cartridge Gp	422-8103	4S-8660	Pump Gp-Trans	226-0167
2S-5100	Valve-Ball	386-3049	3G-7661	Cartridge Gp	422-8113	4T-0406	Rod As	394-8215
2W-6030	Tube	314-8729	3G-7662	Cartridge Gp	422-8105	4T-0416	Cartridge Gp	422-8138
3G-1239	Pump Gp-Vn Bsc-B	439-1135	3G-7663	Cartridge Gp	422-8120	4T-0417	Cartridge Gp	422-8109
3G-1305	Cyl Gp-159 586 Y	430-5966	3G-7664	Cartridge Gp	422-8130	4T-0422	Cartridge Gp	422-8129
3G-1627	Edge-Cutting	9W-2316				4T-0509	Pump Gp-Vn Bsc-B	422-8159
3G-1688	Seal KT	523-5954				4T-1893	Cartridge Gp	422-8110
3G-1853	Cyl Gp-076 406 Y	415-1895				4Tv3196	Cartridge Gp	422-8112
3G-2717	Cartridge Gp	439-1132				4T-4073	Valve Gp-SHTL	439-1138
3G-2720	Cartridge Gp-RR	448-5051				4T-6869	Cartridge Gp	422-8104
3G-2749	Cartridge Gp-RR	422-8125						

# Yellowmark Hydraulic Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
4T-7819	Cyl Gp-051 127 Y	426-0028	6E-5917	Cylinder As	533-2946	7S-6976	Body As-Pump	419-4649
4T-9290	Cyl Gp-0152 495	399-8579	6E-6153	Plate-Port	346-5678	7S-7400	Pump Gp	226-0173
4V-3548	Tube As	528-7164	6Ev6163	Shaft	346-5679	7S-7602	Pump Gp-CL Oil	226-0174
4V-3555	Tube As	528-7165	6E-6416	Cylinder As	425-9371	7S-8660	Pump Gp-Trans	226-0175
4W-9773	Gear-Hyd Pump Dr	380-7549	6E-6476	Pump Gp-Vn Bsc-A	422-8163	7W-1058	Tube As-Supply	393-3613
5D-0470	Valve Gp-QREL	314-8549	6E-6482	Pump Gp-Vn Bsc-B	422-8164	7W-9020	Bell As-Pump Suc	378-3989
5H-1719	Pump Gp-FD Oil	226-0168	6E-6483	Pump Gp-Vn Bsc-B	422-8176	7Y-0207	Cylinder	383-1584
5I-8628	Plate-Valve	301-4771	6G-5533	Gear-Worm	527-7374	7Y-0594	Coupling	520-2901
5J-0778	Cyl Gp-184 597 Y	399-8544	6G-8425	Valve Gp-Cont	367-6086	7Y-3591	Bearing-Sleeve	520-6392
5J-2449	Cylinder Gp-Bowl	419-8800	6J-7513	Head	526-0262	7Y-5108	Rod As	394-0912
5J-2453	Rod As.	394-8214	6N-3025	Tube As	419-4656	8D-2878	Ring-Wear	330-9282
5J-2528	Plunger	391-1318	6P-7357	Gear As-Pump	388-0561	8D-3949	Ring-Wear	330-9283
5J-4989	Seal As	544-4872	6P-7358	Pump Gp-Gr 1 Bsc	308-9913	8D-4009	Tube As	392-4496
5J-4991	Seal As	544-4873	6T-0016	Pump Gp-Gr 4 Bsc	418-1957	8D-7996	Bearing-Sleeve	472-8018
5J-5020	Seal As	544-4874	6T-2293	Piston-Load	426-0040	8J-0546	Cyl Gp-076 276 Y	430-8116
5J-7010	Seal As	472-8011	6W-9677	Tube As-RH	388-6569	8J-1624	Valve As	390-0997
5L-9370	Elbow-Man Inlet	311-9388	6W-9678	Tube As-LH	388-6570	8J-2022	Piston As-Pump	367-6073
5M-6212	Tube	390-0996	7C-2880	Bell As-Suction	380-1520	8J-4492	Stem	383-3702
5M-6709	Check As-Ball	380-7542	7C-3760	Tube As-O Drain	375-5443	8J-6296	Shaft	419-6072
5M-7864	Pump Gp-Scavenge	226-0169	7C-5403	Tube As	374-4673	8J-6384	Bearing-Sleeve	472-8034
5N-1841	Flange-Pipe	426-0029	7E-3455	Tube As	374-4721	8J-6867	Cylinder As	533-2161
5S-1601	Pump Gp-Gr 2 Bsc	386-3054	7E-5287	Elbow As-Ex	430-4470	8J-8590	Cyl Gp-076 274 Y	430-5963
5T-0925	Actuator Gp-BK	379-0198	7G-2262	Pump Gp-Gr 2 Bsc	421-1552	8J-8652	Seal Kit	521-6887
5U-0557	Pump Gp-Vn Bsc-B	422-8175	7G-3815	Pump Gp-Gr 2 Bsc	226-0171	8J-8719	Seal As	523-5955
6C-0570	Pump Gp-Mtrg Bsc	374-5380	7G-5301	Pump Gp-GR 1 BSC	217-2600	8J-8809	Pump Gp-Gr	419-4653
6E-0775	Head	425-9373	7G-7431	Piston-Selector	432-8911	8M-3368	Valve-Check	388-6599
6E-2190	Rod As	394-8213	7I-7180	Piston	421-7142	8N-0935	Gear-Pump Drive	399-8569
6E-2191	Rod As	529-6113	7I-7181	Piston	393-5217	8N-2104	Bell As-Suction	380-1521
6E-2387	Cartridge Gp	422-8132	7J-0583	Pump Gp-Vn Bsc-A	426-1698	8N-7315	Tube As-Outlet	325-6232
6E-2396	Cartridge Gp	422-8122	7J-3338	Rod As	394-0906	8N-9402	Coupling	325-6048
6E-2928	Pump Gp-Vn Bsc-A	426-1701	7J-3351	Head	380-1515	8P-3377	Tube As	392-4498
6E-2929	Pump Gp-Vn Bsc-A	422-8157	7J-6461	Crown	325-6054	8P-7790	Valve Gp-Press	247-4437
6E-2930	Pump Gp-Vn Bsc-B	422-8158	7J-8295	Head	388-0566	8S-6380	Tube As	452-0446
6E-2931	Pump Gp-Vn Bsc-B	422-8161	7J-8301	Cylinder As	473-8931	8W-8147	Gear-Worm	521-6891
6E-2932	Pump Gp-Vn Bsc-B	422-8155	7J-8302	Cyl Gp-040-334 X	473-8932	8X-5303	Gear-Worm	521-6894
6E-4258	Cartridge	422-8133	7J-9222	Cylinder As	506-2393	9C-6281	Tube As	398-2953
6E-4730	Pump Gp-Vn Bsc-B	426-1925	7J-9223	Cyl Gp-0089-0347	532-6158	9D-2252	Insert	385-6139
6E-4892	Cyl Gp-089 478 Y	394-9828	7J-9367	Rod As	469-4660	9D-2754	Insert	333-4948
6E-5028	Rod As	425-9372	7K-8890	Tube As	391-1098	9D-2756	Insert	333-4949
6E-5651	Head	526-0041	7M-1296	Valve-Relief	390-0990	9G-1499	Gear-Pump (Oil)	295-6424
6E-5831	Pump Gp-Vn Bsc-A	426-1699	7N-5645	Tube As-Outlet	378-3984	9G-3056	Pump Gp-Gr 4A	421-1563
			7N-5819	Gear-Hyd Pump Dr	215-1758	9G-7411	Gear-Pump (Oil)	297-7182
			7P-7245	Valve	386-3811	9G-7412	Gear As-Pump	297-7183
			7S-2983	Pump Gp	450-2390	9G-9543	Gear-Pump (Oil)	295-6426
			7S-4629	Pump Gp-Trans	226-0158	9J-2007	Piston As	419-4714
						9J-2433	Cylinder As	480-8276
						9J-3466	Cyl Gp-028 121 Y	393-0913

# Yellowmark Hydraulic Parts

Cat Part Number	Part Name	Yellowmark Part Number
9J-5048	Pump Gp-Vn Bsc-A	422-8166
9J-5049	Pump Gp-Vn Bsc-B	422-8156
9J-5050	Pump Gp-Vn Bsc-B	422-8168
9J-5053	Pump Gp-Vn Bsc-B	422-8169
9J-5058	Pump Gp-Vn Bsc-B	422-8170
9J-5061	Pump Gp-Vn Bsc-B	422-8171
9J-5070	Pump Gp-Vn Bsc-B	422-8140
9J-5080	Pump Gp-Vn Bsc-A	422-8141
9J-5082	Pump Gp-Vn Bsc-A	422-8142
9J-5083	Pump Gp-Vn Bsc-A	422-8143
9J-5091	Shaft	499-4302
9J-5101	Shaft	499-4304
9J-5104	Shaft	499-4305
9J-6556	Rod As	394-8212
9J-7891	Cartridge Gp-RR	422-8134
9J-8006	Piston	449-4736

Cat Part Number	Part Name	Yellowmark Part Number
9J-8165	Cyl Gp-050 288 Y	398-2941
9J-8166	Cylinder As	394-9834
9J-8674	Cyl Gp-0089-0148	501-0549
9M-8281	Gear As-Pump	325-6089
9P-2201	Valve Gp-RLF	386-3816
9P-2653	Pump Gp-Gr 1 Bsc	386-3057
9P-7917	Valve Gp-Cont -C	385-3810
9P-9610	Pump Gp-Gr 1 Bsc	283-5221
9R-0080	Coupling	346-5683
9S-6590	Pump Gp-CL Oil	226-0176
9T-0142	Cyl Gp-0184-0281	394-9830
9T-0486	Pump Gp-Vn Bsc-A	422-8144
9T-0766	Bearing-Sleeve	526-3039
9T-1697	Cartridge Gp-	422-8137
9T-2200	Cartridgr Gp	422-8114
9T-2387	Rod As	393-5218
9T-2472	Cyl Gp-76 1017 U	396-9930
9T-2852	Cylinder As-LH	423-7869
9T-2860	Cyl Gp-0133-1535	395-1310
9T-3055	Cylinder As	430-5962
9T-3866	Pump Gp-Vn Bsc-A	422-8145

Cat Part Number	Part Name	Yellowmark Part Number
9T-3884	Piston As	393-3639
9T-3948	Rod As	393-0940
9T-4761	Head	325-6108
9T-4762	Head	325-6109
9T-5336	Cartridge Gp	422-8131
9T-5360	Plate-Pressure	424-4941
9T-5729	Cyl Gp-0038 158	422-2486
9T-6090	Head	523-0539
9T-6123	Pump Gp-Vn Bsc-B	422-8147
9T-6577	Pump Gp-Gr B	419-0873
9T-6906	Gear-Idler	419-4662
9T-7414	Pump Gp-Gr B	421-1564
9T-7916	Pump Gp-Vn Bsc-B	426-1697
9T-8676	Bearing-Sleeve	527-7486
9T-8944	Cyl Gp-102 356 Y	393-3665
9U-9162	Tube As	451-9023
9V-4333	Gear-Oil Pump IP	226-6105
9V-8693	Actuator Gp-BK	375-2629
9W-3271	Body As-Oil Pump	430-4553
9X-7264	Seal As	544-0272
9Y-5295	Tube-Gov Conn	419-4756



# Yellowmark Undercarriage Parts

Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number	Cat Part Number	Part Name	Yellowmark Part Number
085-5738	Support As	513-7977	165-7211	Strip	325-6219	5P-4589	Seal-U-Cup	528-7166
086-0560	Piston	513-7978	179-2998	Adjustment Gp -A	509-6309	6W-3504	Guard As	520-2882
099-0166	Spring	399-4400	179-3004	Spring	482-8099	6Y-9508	Pad As	520-2883
101-7880	Spring	523-5958	179-3005	Rod	513-7980	6Y-9509	Pad As	520-2885
102-8109	Adjustment Gp -A	509-6291	179-3008	Cylinder	480-8272	7M-0673	Suspension As	520-2894
102-8139	Spring	392-4526	179-3035	Spring	482-8086	7P-6768	Rod As	469-4670
104-6374	Piston	393-1052	179-3046	Seal-Lip Type	513-7981	7P-6773	Pilot	470-3785
108-0850	Shaft As	523-5953	184-4395	Guide	393-1042	7T-1150	Retainer	520-2897
109-6938	Bracket	451-9033	191-3235	Housing-Sprocket	394-0200	7T-1151	Seal As-Shaft	520-2898
112-4296	Cylinder As	443-5197	192-8303	Guard As-Trk Gde	487-2936	7T-1152	Retainer	526-0264
112-4297	Cylinder As	443-5199	194-1182	Adjustment Gp -A	509-6311	7T-3697	Cylinder As	520-2899
115-6368	Spring	513-7979	194-1230	Rod	513-7982	7Y-1457	Adjustment Gp -A	509-6227
115-6369	Rod	526-0600	194-1231	Spring	482-8100	7Y-1460	Nut	513-7973
115-6400	Spring	399-8564	194-1244	Spring	523-5966	7Y-1602	Recoil Gp-ADJ&-A	509-6228
115-6422	Recoil Gp-ADJ&	509-6293	194-1253	Spring	482-8087	7Y-1737	Rod	513-7974
115-6423	Recoil Gp-ADJ&	509-6294	194-1257	Recoil Gp-ADJ&-A	508-6653	7Y-2581	Guard As-Trk Gde	480-8270
115-6424	Recoil Gp-ADJ&-A	509-3333	196-7078	Strip Wear Front	418-1968	8E-4164	Bar As-Equalizer	469-4661
115-6425	Recoil Gp-ADJ&-A	509-3334	201-2076	Bar As-Equalizer	542-4707	8S-4394	Plate As	528-9120
115-6427	Spring	301-4776	201-2078	Bar As-Equalizer	418-1946	9G-1697	Pad As	391-9821
115-6428	Piston As	394-0188	219-8469	Guard As-Trk Gde	487-2937	9G-6476	Rod Gp-Idler Rec	226-0198
115-6429	Cylinder	301-4679	239-4323	Spring	513-7983	9G-8300	Bearing-Idler	517-3622
117-5553	Guard As-Tck Gde	419-4729	239-4350	Spring	513-7984	9G-8301	Bearing-Idler	517-3623
122-5076	Rod	301-4569	239-4369	Spring	527-7490	9G-8302	Guide	226-4853
122-5077	Cylinder	301-4673	239-4378	Support	480-8274	9G-8303	Collar-Idler End	226-0242
122-5135	Recoil Gp-ADJ&-A	509-6295	239-4384	SPACER	513-7985	9G-9180	Hub-Sprocket	295-6436
122-5136	Recoil Gp-ADJ&-A	509-6296	239-4389	Recoil Gp-ADJ&-A	509-6314	9H-7670	Piston	226-4961
122-5176	Recoil Gp-ADJ&	509-6297	239-4390	Recoil Gp-ADJ&-A	480-8275	9K-9157	Retainer As	505-0219
122-5177	Recoil Gp-ADJ&	509-6298	239-4391	Rod	482-8089	9K-9273	Nut-Adjusting	226-7998
130-9293	Rod	314-8708	239-4392	Cylinder	482-8090	9M-6692	Strip	386-4934
131-3739	Rod-Tie	380-7519	240-2988	Guard As-Trk Gde	482-8091	9M-9758	Shaft-F Idler	529-8645
133-2554	Guard As-Trk Gde	524-1305	248-2987	Guide	419-4709	9S-1043	Guard As-Guiding	226-0240
134-3080	Pin-Lower	522-5210	274-4274	Bearing-Sleeve	391-9896	9S-1044	Guard As-Guiding	226-0241
136-2369	Piston As	522-5209	297-9150	Adjustment Gp -A	482-8095	9S-1045	Strip-Guard	226-0246
141-4689	Bar Gp-Equalizer	443-3570	297-9151	Adjustment Gp -A	508-6655	9S-1046	Strip-Guard	226-0247
144-5574	Guide As	544-0273	297-9152	Adjustment Gp -A	508-6650	9S-8245	Strip-Tck Gde GD	226-0243
145-3027	Recoil Gp-ADJ&	509-6303	297-9155	Piston	482-8096	9S-8246	Strip-Tck Gde GD	226-0244
145-3028	Recoil Gp-ADJ&-A	509-6304	297-9156	Piston	513-7987	9S-8257	Guard As-Guiding	226-0238
145-3029	Recoil Gp-ADJ&-A	509-6305	297-9157	Piston	513-7988	9S-8258	Guard As-Guiding	226-0239
145-3030	Cylinder	360-2260	1S-3513	Lock-Pin	500-0370	9S-8353	Strip-Tck Gde GD	226-4854
145-3031	Piston As	487-2938	2P-5896	Strip-Wear	506-2394	9S-8354	Strip-Tck Gde GD	226-4855
145-3035	Plate	487-2939	2V-7441	Spring	516-0772	9S-8358	Guard As-Guiding	226-4856
145-3036	Spring	375-5445	3P-2178	Strip-Wear	506-2396	9U-9198	Strip	388-0641
145-3037	Support	480-8271	3P-2778	Seal As	516-0783	9V-9408	Spring	425-9369
145-3039	Recoil Gp-ADJ&	524-1283	4I-7338	Adjustment Gp -A	509-6225	9X-4582	Seal As	521-6903
154-9838	Sleeve-Wear	522-5202				9X-4584	Seal As	528-7175



# Parts Catalog References

**Interested in learning more?** Need a part for your engine, drive train, hydraulic system, or undercarriage? Contact your Cat Dealer. We have the full lineup of parts for Cat machines and engines. We also have the experts to make sure you get the right parts and service solutions when and where you need them.

<b>Catalog Title</b>	<b>Description</b>	<b>Media Number</b>
<b>Cat Batteries Application Guide</b>	This application guide shows Cat battery part numbers for Cat machines, cars, trucks and many other applications which require an automotive type battery. It also includes Cat Starters and Alternators.	PEGP7801
<b>Cat Tire Product Guide</b>	This revised cross reference guide is an important tool to help sell Skid Steer, Wheel Loader and Backhoe Loader Tires for both Caterpillar and competitive models. The guide contains tire reference information, tire specifications and wheel specifications. It is an easy to use guide that will ensure you select the right wheel and tire for each machine.	PECP9064
<b>PSK Undercarriage</b>	The Undercarriage Parts Sales Kit (PSK) contains part numbers, specifications, features and benefits for Cat Undercarriage.	PECP3003
<b>Parts Catalog Library for Cat Dealers</b>	This page on dealer.cat.com has links to all Cat Parts Catalogs: <a href="https://dealer.cat.com/en/ps/parts/parts-mktg/c/parts-catalogs.html">https://dealer.cat.com/en/ps/parts/parts-mktg/c/parts-catalogs.html</a>	

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