

Hydraulic/Mechanical Pullers/Drivers

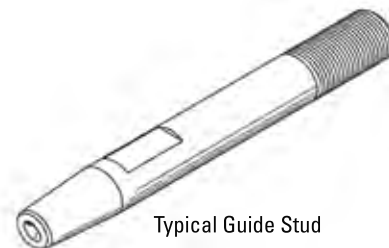
General Purpose Pullers and Attachments	10-3
Jaw Pullers.....	10-12
Bearing Pullers	10-18
Single and Double Acting Puller Cylinders.....	10-24
Hydraulic Pumps.....	10-35
Hydraulic Wrenches and Accessories.....	10-42
Miscellaneous	10-47

General Purpose Pullers and Attachments

Summary of General Purpose Pullers and Attachments Guide Studs

Thread Size	Length	Part Number
M10 x 1.5	76 mm (2.99 in)	FT2515
M16 x 2.0	1015 mm (39.96 in)	FT2468
M16 x 2	200 mm (7.87 in)	FT2712

Thread Size	Length	Part Number
M20 x 2.5	152 mm (5.98 in)	128-5049
M24 x 3	75 mm (2.95 in)	154-6400
M30 x 3.5	220 mm (8.66 in)	174-8986
M36 x 3.5	285 mm (11.22 in)	175-6853
M24 x 3.0	165 mm (6.50 in)	195-0954
M12 x 1.75	95 mm (3.74 in)	1U-5826
M24 x 3	254 mm (10 in)	1U-6130
5/8 - 11	305 mm (12.01 in)	1U-9091
M24 x 3	279 mm (11 in)	1U-9785
M24 x 3	305 mm (12.01 in)	1U-9817
M20 x 2.5	300 mm (11.81 in)	310-3992
M24 x 3	300 mm (11.81 in)	310-3993
M24 x 3	185 mm (7.28 in)	4C-8352
M16 x 2	120 mm (4.72 in)	8T-0514
1/2 -20	127 mm (5 in)	9U-6238
M12 x 1.75	70 mm (2.76 in)	9U-6248
5/8 - 11	127 mm (5 in)	9U-6896

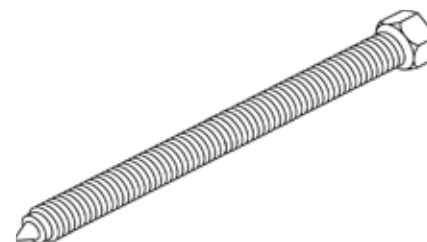


Typical Guide Stud

Forcing Screws

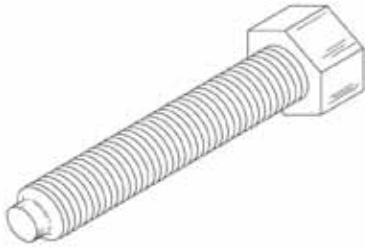
Thread Size	Length	Part Number
1 1/2 -12	17.1 mm (0.67 in)	3H-0470
1-14	660.4 mm (26 in)	8S-6586
1-14	7.2 mm (0.29 in)	5H-9976
1-14	336.6 mm (13.25 in)	5F-7366
1-8	19.6 mm (0.77 in)	9S-6074

Thread Size	Length	Part Number
11/16 - 18	231 mm (9.09 in)	1P-2326
13/16 -16	11.4 mm (0.45 in)	1P-2328
3/4 -12	10.2 mm (0.40 in)	4C-5626
5/8 -18	127 mm (5 in)	1U-6693
5/8 -18	330.2 mm (13 in)	5F-7345
9/16 -20	178 mm (7.01 in)	1P-2324



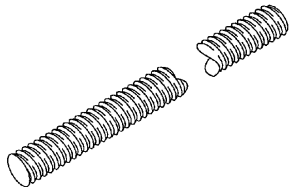
General Purpose Pullers and Attachments

Forcing Bolts



Thread Size	Length	Part Number
1 1/2 - 12	114 mm (4.49 in)	5P-5264
1 1/4 - 12	13.2 mm (0.52 in)	5P-0256
1-14	176.5 mm (6.95 in)	5P-8715
1/2 -13	127 mm (5 in)	5J-0490
3/4 -10	127 mm (5 in)	5J-7910
3/4 -10	88.9 mm (3.50 in)	4B-6208
3/4 -16	71.4 mm (2.81 in)	6V-7837
3/4 -16	101.6 mm (4 in)	8S-6470
3/8 -16	177.8 mm (7 in)	6L-7283
3/8 -16	88.9 mm (3.50 in)	5B-4274
5/8 - 11	88.9 mm (3.50 in)	1D-1090
5/8 -11	177.8 mm (7 in)	4M-6957
7/8 -14	135 mm (5.31 in)	5P-5265
M10 x 1.5	150 mm (5.91 in)	154-6181
M12 x 1.75	150 mm (5.91 in)	154-6182
M16 x 2.0	300 mm (11.81 in)	154-6183
M20x2.5	250 mm (9.84 in)	154-6184
M24 x 3	101.6 mm (4 in)	328-4173
M24x3	250 mm (9.84 in)	154-6185
M30 x 3.5	165 mm (6.50 in)	196-8520
M30 x 3.5	250 mm (9.84 in)	176-6536
M8 x 1.25	150 mm (5.91 in)	154-6360

Threaded Rods



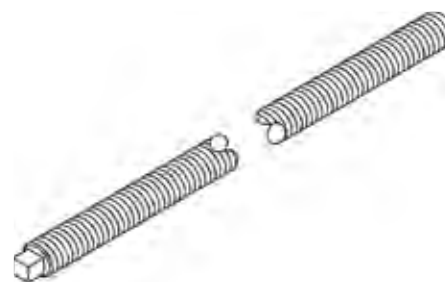
NOTE:

Threaded rod is not to be used with hydraulic cylinders.

Thread Size	Length	Part Number
1 - 14	457 mm (17.99 in)	5P-4776
1 1/2 -12	584 mm (22.99 in)	5F-9893
2 1/2 -8	600 mm (23.62 in)	6V-6084
5/8 - 11	914 mm (36 in)	376-8697
5/8 - 11	245 mm (9.65 in)	221-9778
7/8 -14	362 mm (14.25 in)	3H-0460
7/8 -9	838 mm (32.99 in)	1M-6766
M04 x 0.7	1,000 mm (39.37 in)	4C-8176
M06 x 1.0	1,000 mm (39.37 in)	1U-6340
M08 x 1.25	405 mm (15.94 in)	1U-6341
M10 x 1.5	350 mm (13.78 in)	9T-2240
M10 x 1.5	1,000 mm (39.37 in)	1U-6342
M12 x 1.75	1,000 mm (39.37 in)	1U-6343
M14 x 2.0	1,000 mm (39.37 in)	1U-6344
M16 x 2.0	1,000 mm (39.37 in)	9U-7692
M48 x 5.0	920 mm (36.22 in)	9U-6814
--	203 mm (7.99 in)	8B-7552

Puller Studs

Thread Size	Length	Part Number	Max. Capacity
1 1/2 - 12	140 mm (5.51 in)	FT2371	100 ton
1 1/2 - 12	460 mm (18.11 in)	FT2370	100 ton

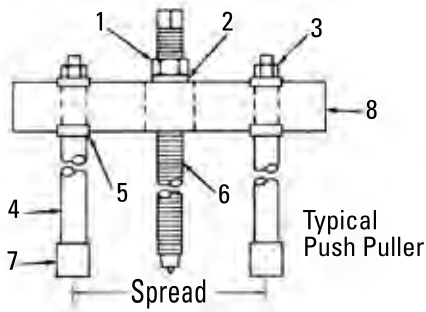


Thread Size	Length	Part Number	Max. Capacity (tons)
1 - 14	635 mm (25 in)	4C-9633	30
1 - 14	457 mm (17.99 in)	5P-4776	30
1 - 14	380 mm (14.96 in)	6V-2078	55
1 - 8	635 mm (25 in)	9U-5267	30
1 1/2 - 12	1,500 mm (59.05 in)	289-0013	100
1 1/2 - 12	815 mm (32.09 in)	6V-2074	100
1 1/2 - 12	1,220 mm (48.03 in)	9U-6698	100
1 1/2 - 2	600 mm (23.62 in)	5P-7273	100
1 1/4 - 12	356 mm (14.02 in)	5P-8714	60
1 1/4 - 12	735 mm (28.94 in)	4C-9634	60
1 1/4 - 12	1,000 mm (39.37 in)	289-0008	60
1 1/4 - 12.2	457 mm (17.99 in)	5P-4184	80
1 1/8 - 12	508 mm (20 in)	1U-7758	31
2 - 12	1,220 mm (48.03 in)	9U-7763	150
M20 x 2.5	350 mm (13.78 in)	123-4370	20
M20 x 2.5	1,000 mm (39.37 in)	259-9239	20
M24 x 3	1,200 mm (47.24 in)	162-4197	30
M24 x 3	650 mm (25.59 in)	9U-5343	30
M30 x 3.5	1,980 mm (77.95 in)	137-8460	50
M30 x 3.5	800 mm (31.50 in)	9U-5344	50
M36 x 4	1,575 mm (62.01 in)	9U-6811	80
M36 x 4	920 mm (36.22 in)	9U-7998	80
M36 x 4	2,000 mm (78.74 in)	220-1776	80
M48 x 5	2,415 mm (95.08 in)	136-5747	100
M48 x 5	381 mm (15 in)	9U-6812	100
M48 x 5	508 mm (20 in)	9U-6813	100
M48 x 5	1,575 mm (62.01 in)	9U-6815	100
M48 x 5.0	920 mm (36.22 in)	9U-6814	100
M64 x 6	2,616 mm (102.99 in)	9U-6702	150
M64 x 6	1,829 mm (72.01 in)	4C-8150	150

General Purpose Pullers and Attachments

Push Pullers

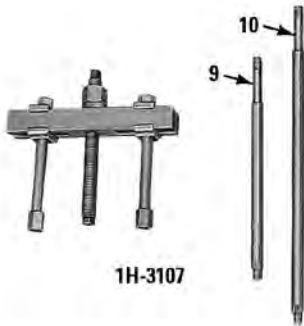
Warranty: Six Months



- Used alone or in combination with bearing pulling attachments for removal and installation of gears, bearings, shafts, and other press-fitted parts
- Pulling or pushing force can be applied, depending on how the pullers are set up
- Legs of various lengths are available and legs can be joined together with adapters for added reach
- The reversible ratchet with tubular handle is ideal for turning the 1 inch x 12 hex forcing nut on the 8B-7548 Bearing Puller Assembly
- Where more force is required, select an appropriate hydraulic puller

Item A	Part Number	Description
1H-3107 Push Puller, 30 Ton Capacity (Spread 17.78 to 42.55 cm [7 in to 16 1/4 in])		
1	3H-0466	Nut
2	3H-0467	Washer
3	1B-4209	Nut - Full
4	3H-0469	Leg, 20.3 cm (8 in) reach
5	3H-0468	Plate
6	3H-0470	Screw (1 1/2 in-12 x 17 1/4 in long)
7	5P-4807	Cap
8	1U-9889	Crossblock

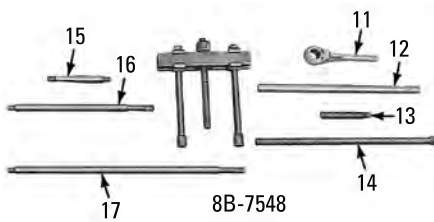
Optional Accessories



Optional Accessories (Sold Separately)

Optional Accessories (Sold Separately)		
Item	Part Number	Description
9	1H-3108	Leg, 45.7 cm (18 in) reach
10	1H-3109	Leg, 71.1 cm (28 in) reach

8B-7548 Bearing Puller Assembly



8B-7548 Bearing Puller Assembly, 17.5 Ton Capacity (Spread 7.94 to 29.85 cm [31/8 to 11 3/4 in])		
Item	Part Number	Description
1	5B-0637	Nut
2	5F-7353	Thrust Washer
3	1B-4207	Nut
4	5F-7369	Leg, 24.1 cm (9.5 in) reach
5	3H-0465	Puller Plate
6	5F-7366	Screw - Forcing
7	5P-4808	Cap (5/8 - 18)
8	1U-9895	Cross block
Optional Accessories (Sold Separately)		
11	8H-0684	Wrench
12	8B-7563	Handle (for 8H-0684)
13	5H-9976	Screw, 18.4 cm (7.25 in) long

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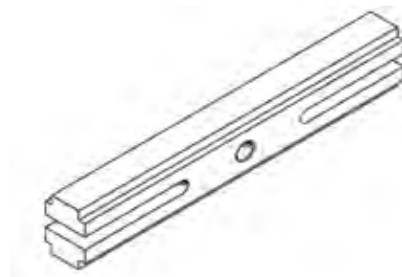
8B-7548 Bearing Puller Assembly (Continued)

8B-7548 Bearing Puller Assembly, 17.5 Ton Capacity (Spread 7.94 to 29.85 cm [31/8 to 11 3/4 in])		
Item	Part Number	Description
Optional Accessories (Sold Separately) (Continued)		
14	8S-6586	Forcing Screw, 1 in
15	8B-7550	Leg, 11.4 cm (4.5 in) reach
16	8B-7549	Leg - Push Puller 16.5 in
17	162-4206	Leg, 57.2 cm (22.5 in) reach

150-1782 Cross Block

Warranty: Six Months

- Used in combination with 8B-7548 Push Puller
- Made from hardened steel



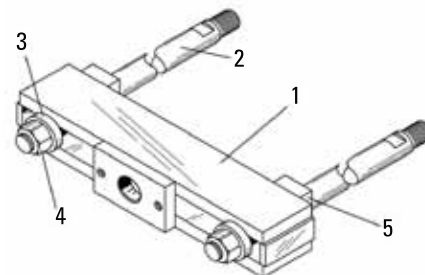
Part Number	Description	Thickness	Width	Length	Center Hole Diameter
150-1782	Cross Block	50.8 mm (2 in)	76.2 mm (3 in)	609.6 mm (24 in)	26 mm (1.02 in)

149-5138 Puller Assembly, 50 Ton

Warranty: Six Months

- Used to apply force for pulling or pushing applications
- Used with 3H-0470 Screw (1 1/2-12 x 17.25 long), 3H-0466 Nut, and 3H-0467 Washer or with hydraulic cylinder
- 50 ton capacity
- Assembly includes all items in figure

Spread	215.9 to 520.7 mm (8.50 to 20.50 in)
Reach	609.9 mm (24.0 in)
Capacity	50 Ton
Center hole diameter	42.9 mm (1.69 in)
Thread size (push/pull leg)	1.25-12



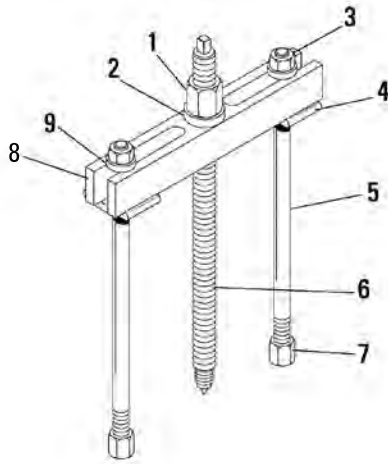
Item	Part Number	Description
1	150-1784	Cross Block
2	150-1785	Push Puller Leg [609.9 mm (24.0 in) reach]
3	150-1961	Leg Washer
4	7H-7539	Nut - Full, 1 1/4 - 12
5	150-1786	Slide Plate
--	149-5138	Puller Assembly

General Purpose Pullers and Attachments

126-7175 Push Puller Assembly

Model: All Models

Warranty: Six Months



- Used to apply up to 13 tons of force for pulling or pushing applications
- Set includes 4 different lengths of extension legs (can be joined together with adapters for additional reach)
- Forcing screw has 1/2 inch square drive
- Assembly includes all items in figure

Capacity	13 ton
Spread	53.8 - 184.2 mm, (2.12 - 7.25 in)
Square drive	1/2 in

Item	Part Number	Description
1	126-7182	Forcing Screw Nut (3/4 - 16)
2	6V-2360	Hard Washer
3	6B-6684	Full Nut (1/2 - 20)
4	126-7181	Sliding Plate
5	126-7177	Puller Leg, 158.8 mm (6.25 in) reach
5	126-7180	Puller Leg, 438.2 mm (17.25 in) reach
5	126-7179	Puller Leg, 336.6 mm (13.25 in) reach
5	126-7178	Puller Leg, 209.6 mm (8.25 in) reach
6	126-7176	Forcing Screw (3/4 - 16)
7	5P-4808	Cap (5/8 - 18)
8	126-7183	Cross Block
9	2M-0849	Hard Washer
--	126-7175	Push Puller Assembly

No. 1 General Purpose Puller

Warranty: Six Months



- Small, versatile, and saves time when disassembling machines
- Especially valuable to servicemen who must select only essential tools for work that is to be done away from the shop
- Slots in the yoke accommodate studs, bolts, and cap screws up to 15.88 mm (5/8 in) diameter; holes are provided on the sides of the yoke for puller arms which adapt this tool to a wide range of work

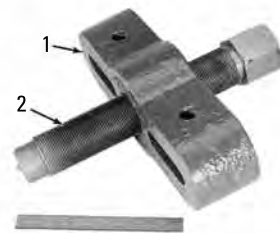
Item	Part Number	Description	Size
1	1B-6449	Yoke	--
2	1A-2701	Screw	5.75 in, 1 in-8 thd

No. 2 General Purpose Puller

Warranty: Six Months

- Used for many pulling operations on older machines
- 2 slots can accommodate studs or bolts up to 22.23 mm (7/8 in) diameter
- 0L-1772 Studs and 1D-4720 Nuts are available for use with this puller

Item	Part Number	Description
1	2B-1421	Bar, Spread Range with 22.23 mm (7/8 in) bolts 98.43 - 206.38 (3 7/8 - 8 1/8 in)
2	0L-1772	Stud, 5/8 in - 11 NC, 20.32 cm (8 in) long, (2)
2	1D-4720	Nut
2	2B-1417	Screw, 29.85 cm (11 3/4 in) long, 1 3/4 in - 12 thd



5F-7465 Puller

Warranty: Six Months

- Easier to use in many applications for removing gears, pulleys, flanges, etc.
- 6V-4871 Reaction Bar not included in 5F-7465 and 6V-3010 Puller Groups but is also available

Part Number	Screw Length	Thread Size	Thread Length	Crossbar Dimensions	Crossbar Length	Crossbar Slot Width
5F-7465	13.00 in	5/8 in-18	7.70 in	1.25 in Square	5.25 in	0.495 in



Item	Part Number	Description
--	5F-7465	Puller
Service/Repair Parts		
1 ¹	5F-7344	Block
2	5F-7345	Screw

¹Also used on 8B-7554

6V-3010 Puller Group

Warranty: Six Months

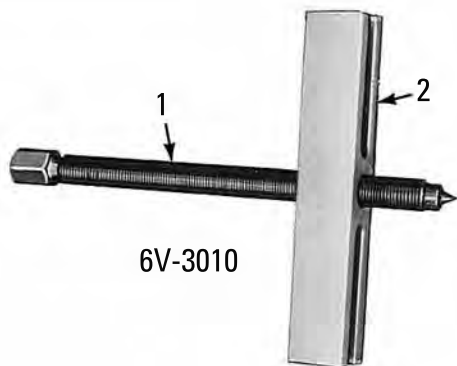
Part Number	Screw Length	Thread Size	Thread Length	Crossbar Dimensions	Crossbar Length	Crossbar Slot Width
6V-3010	11.6 in	3/4 in-16	10.00 in	1.38 in Square	8.25 in	0.54 in

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General Purpose Pullers and Attachments

6V-3010 Puller Group (Continued)

Warranty: Six Months



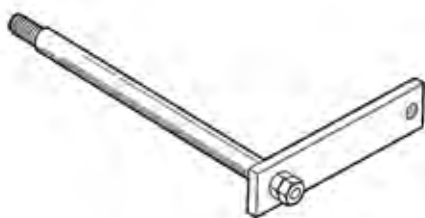
Item	Part Number	Description
--	6V-3010	Puller Group ¹
Service/Repair Parts		
1	6V-4832	Screw
5	6V-3009	Cross Bar

¹ Spread range with 1/2 in bolts 50.2 - 196.9 mm (2 - 7 3/4 in)

FT2681 Lifting Tool

Model: 545 Skidder

Warranty: None

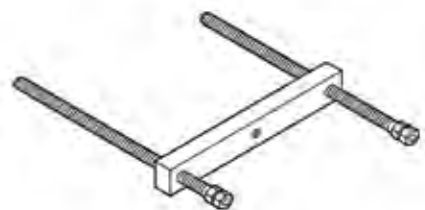


- Used to lift bull gear from winch housing
- Also compresses clutch freespool springs with slight modification
- Material (plate and tube): SAE 1018 steel

FT2682 Lifting Tool

Model: 545 Skidders

Warranty: None



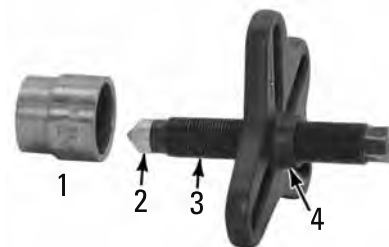
- Used to lift large reduction gear from winch housing (place threaded rod through drilled hole and attach bracket)
- Makes removal easier
- Material (plate and rod): SAE 1018 steel

8S-2264 Puller Group

8S-8375 Sleeve

Warranty: Six Months

- Used for various pulling operations such as:
 - Removing accessory drive gears on D330C, D333C, 3304 and 3306 Engines
 - Removing crankshaft front pulley on 1100 and 3100 Series Engines
 - Water pump disassembly and assembly on D342, D353 and 3406 Engines
 - Water pump disassembly and assembly on D342, D353 and 3406 Engines
 - With an 8S-8375 Sleeve to remove the accessory drive gear on 120.65 mm (4.75 in) bore 2-valve engines
 - In other general purpose applications
- Available separately: 6V-7837 Screw, 2.81 inch, 3/4 inch-16 thd



Item	Part Number	Description
1 ¹	8S-8375	Sleeve
2	8S-5133	Plug
3	8S-6470	Screw
4	8S-5132	Puller Plate
--	8S-2264	Puller Group

¹ Not part of 8S-2264 Group

1U-6671 Flange Puller Group

Warranty: Six Months

Item	Description
2	Puller Plate

Item	Part Number	Description
1	1U-6693	Forcing Screw
3	1U-6694	Shaft Protector
4	0S-1619	Bolt
5	6F-7031	Bolt
--	1U-6671	Flange Puller Group



Jaw Pullers

Combination 2-Jaw or 3-Jaw Pullers

Warranty: Six Months

- Double-duty crosshead allows the puller to be converted to either a 2- or 3-jaw operation
- Used alone or in combination with bearing pulling attachments for numerous disassembly operations
- The more pressure that is applied with these pullers, the tighter they grip
- Attachment arms available



1P-2320

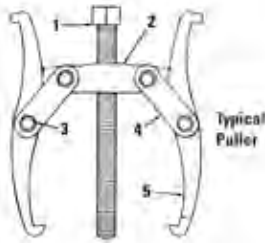


1P-2321



1P-2322

1P-2320, 1P-2321, 1P-2322 Jaw Pullers



Typical Puller

Item	Description
2	Head

Item	Part Number	Description
--	1P-2320	Jaw Puller Assembly
--	1P-2322	Puller
--	1P-2321	Jaw Puller Assembly
1P-2320 Combination 2- or 3-Jaw Puller, 5-Ton Capacity Service Parts (Maximum Spread 7 in, Maximum Reach 3.25 in)		
1	1P-2324	Screw
3	3H-0462	Bolt and Nut
4	8H-0698	Strap
5	5F-7376	Jaw
1P-2321 Combination 2- or 3-Jaw Puller, 7-Ton Capacity (Maximum Spread 10.50 in, Maximum Reach 5.0 in)		
1	1P-2326	Screw
2	1P-2325	Head
3	3H-0463	Bolt and Nut
4	8H-0709	Strap
5	5F-7373	Jaw
5 ¹	9S-9153	Jaw
1P-2322 Combination 2- or 3-Jaw Puller, 13-Ton Capacity (Maximum Spread 14 in, Maximum Reach 11.00 in)		
1	1P-2328	Screw
2	1P-2327	Head
3	3H-0464	Bolt and Nut
4	8H-0704	Strap
5 ¹	1P-0546	Jaw

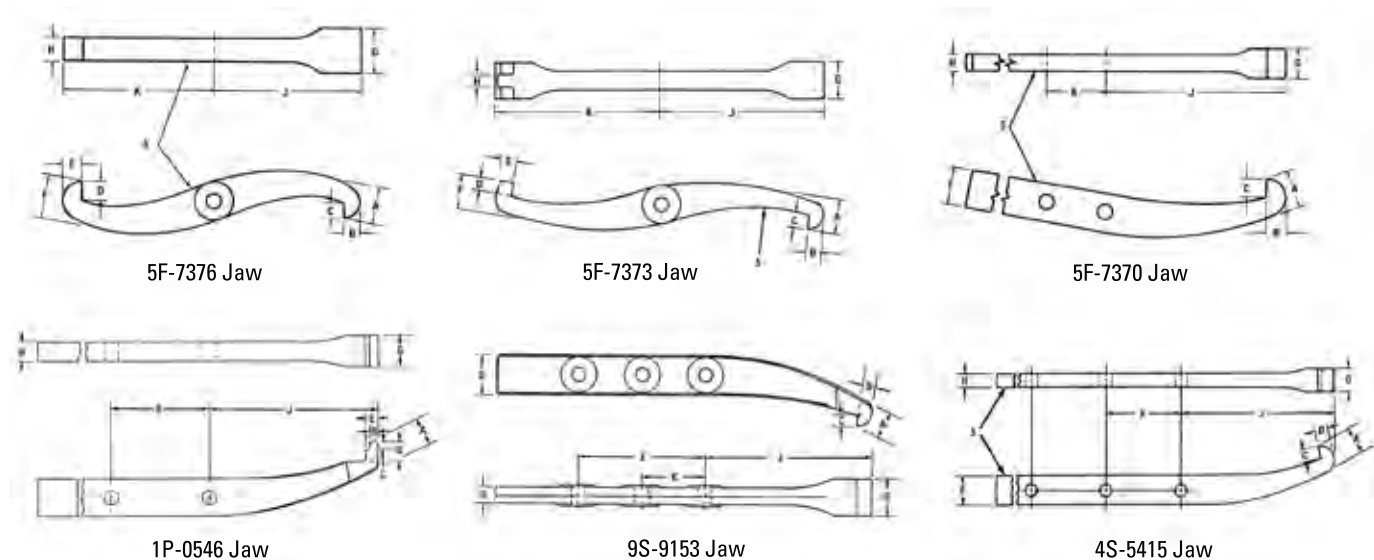
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1P-2320, 1P-2321, 1P-2322 Jaw Pullers (Continued)

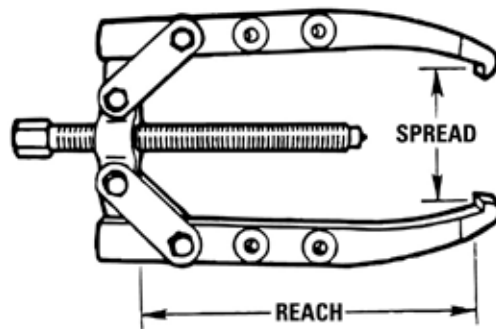
Item	Part Number	Description
1P-2322 Combination 2- or 3-Jaw Puller, 13-Ton Capacity (Maximum Spread 14 in, Maximum Reach 11.00 in) (Continued)		
5 ¹	4S-5415	Jaw
5	5F-7370	Jaw

¹Optional accessory (sold separately)

1P-2320, 1P-2321, 1P-2322 Jaw Pullers



Puller Assembly Jaw Dimensions



Puller Assembly Jaw Dimensions												
Part Number ¹	A	B	C	D	E	F	G	H	J	K	Reach	Spread
5F-7376	0.62 in	0.25 in	0.22 in	0.25 in	0.38 in	0.75 in	0.75 in	0.34 in	2.13 in	2.13 in	3.25 in	7.00 in
9S-9153	0.75 in	0.38 in	0.32 in	1.00 in	3.50 in	--	1.00 in	0.44 in	4.56 in	1.75 in	--	--
5F-7373	0.75 in	0.34 in	0.32 in	0.44 in	0.25 in	1.00 in	1.00 in	0.38 in	4.25 in	4.25 in	5.00 in	10.50 in
1P-0546	1.00 in	0.25 in	0.25 in	0.62 in	0.38 in	--	1.00 in	0.62 in	5.56 in	3.25 in	--	--
4S-5415	1.13 in	0.56 in	0.56 in	--	--	1.25 in	1.00 in	0.62 in	6.13 in	3.25 in	--	--

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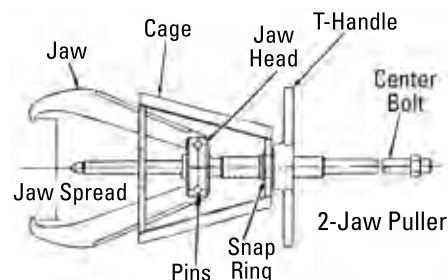
Puller Assembly Jaw Dimensions (Continued)

Puller Assembly Jaw Dimensions												
Part Number ¹	A	B	C	D	E	F	G	H	J	K	Reach	Spread
5F-7370	1.13 in	0.56 in	0.56 in	--	--	1.25 in	1.00 in	--	5.75 in	2.00 in	11.00 in	14.00 in

¹4S-5415, 1P-0546, 9S-9153: Optional jaws (sold separately)

Two-and Three-Jaw Puller Family

Warranty: Six Months



- These pullers with their attachments can be used for a variety of pulling applications such as bearings, bearing cages and gears
- Cage to guide jaws for fast set up, solid contact and superior safety
- Forcing screw threads designed for less effort to apply high torque
- Hardened tip
- Slim tapered jaws allow for easier gripping and better access to tight spots
- Nut recessed to avoid mushrooming and disfiguration from impact
- Cage prevents the jaws from snapping back or flying off during the pulling operation
- Turning the T-handle moves the cage against the jaws and secures them to the component to be pulled
- Restrainer holds the puller in position until the pulling operation has been completed and the puller released
- Protector points are available to prevent damage to the forcing screw points when extreme force is applied
- Extender points are also available for installation on some pullers to give 38 mm (1.5 in) more reach

2 - Jaw Puller Serviced Parts	
Part Number	Description ¹
4C-3082	Puller
4C-3085	Puller
4C-3088	Puller
4C-3091	Puller
Puller 4C-3082 Parts	
4C-3084	Cage ²
1U-6411	Center Bolt ²
1U-6416	Jaw ²
4C-3083	Jaw-Head ²
9U-6264	Pin
1U-6403	Point Extender ³
1U-6397	Point Protector
2M-4287	Snap Ring

2 - Jaw Puller Serviced Parts	
Part Number	Description ¹
Puller 4C-3085 Parts	
4C-3087	Cage ²
1U-6412	Center Bolt ²
1U-6417	Jaw ²
4C-3086	Jaw-Head ²
1U-6401	Pin (need 3)
1U-6404	Point Extender ³
1U-6398	Point Protector
1J-6474	Snap Ring
1U-6407	T-Handle ²

2 - Jaw Puller Serviced Parts	
Part Number	Description ¹
Puller 4C-3088 Parts	
1U-6413	Center Bolt ²
4C-3089	Jaw-Head ²
1U-6402	Pin (need 3)
1U-6399	Point Protector
8J-8322	Snap Ring
1U-6408	T-Handle ²
Puller 4C-3091 Parts	
1U-6414	Center Bolt ²
4C-3092	Jaw-Head ²
1U-6402	Pin (need 3)
1U-6399	Point Protector
5K-4627	Snap Ring

¹ All Pullers will need 2 Pins

² MAO (Made-As-Ordered) parts

³ Extends length of forcing screws by 38.1 mm (1.50 in)

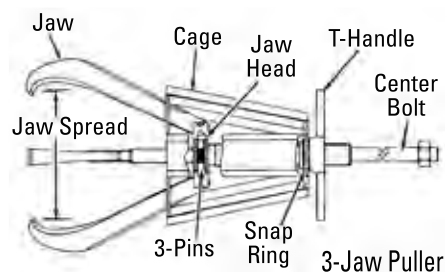
2-Jaw Puller Specifications

Puller Part No. ¹	Puller Capacity (U.S. Tons)	2-Jaw Reach Maximum	2-Jaw Spread Min. - Max.	Forcing Screw Size Diameter x Length	Tool Weight	Input Maximum Torque
4C-3082	6	152 mm (6 in)	13 to 178 mm (0.5 to 7 in)	323.8 mm (5/8 x 12 3/4 in)	3.2 kg (7 lb)	116 N·m (85 ft-lb)
4C-3085	14	254 mm (10 in)	25 to 381 mm (1 to 15 in)	489.0 mm (3/4 x 19 1/4 in)	6.4 kg (14 lb)	367 N·m (270 ft-lb)
4C-3088	25	330 mm (13 in)	64 to 457 mm (2.5 to 18 in)	660 mm (1 1/8 x 26 in)	13.6 kg (30 lb)	680 N·m (501 ft-lb)
4C-3091	35	406 mm (16 in)	76 to 635 mm (3 to 25 in)	800.1 mm (1 1/4 x 31 1/2 in)	22.7 kg (50 lb)	1,292 N·m (953 ft-lb)

¹ Does not include protector or extender points

3-Jaw Puller Serviced Parts

Part Number	Description
1U-6400	Puller Assembly
1U-6405	Puller Assembly
1U-6410	Puller Assembly
1U-6415	Puller Assembly
Puller 1U-6400 Parts	
1U-6397	Point Protector
1U-6403	Point Extender ¹
1U-6411	Center Bolt ²
1U-6416	Jaw ²
1U-6420	Jaw-Head ²
2M-4287	Snap Ring
9U-6264	Pin
Puller 1U-6405 Parts	
1J-6474	Snap Ring
1U-6398	Point Protector
1U-6401	Pin (need 3)
1U-6404	Point Extender ¹
1U-6407	T-Handle ²
1U-6412	Center Bolt ²
1U-6417	Jaw ²
1U-6421	Jaw-Head ²
1U-6425	Cage ²
Puller 1U-6410 Parts	
1U-6399	Point Protector
1U-6402	Pin (need 3)
1U-6408	T-Handle ²
1U-6413	Center Bolt ²
1U-6422	Jaw-Head ²
8J-8322	Snap Ring
Puller 1U-6415 Parts	
1U-6399	Point Protector
1U-6402	Pin (need 3)
1U-6414	Center Bolt ²



Hydraulic/Mechanical Pullers/Drivers

(Continued)

Jaw Pullers

3-Jaw Puller Serviced Parts (Continued)

Part Number	Description
Puller 1U-6415 Parts (Continued)	
1U-6423	Jaw-Head ²
5K-4627	Snap Ring

¹ Extends length of forcing screws by 38.1 mm (1.50 in)

² MAO (Made-As-Ordered) parts

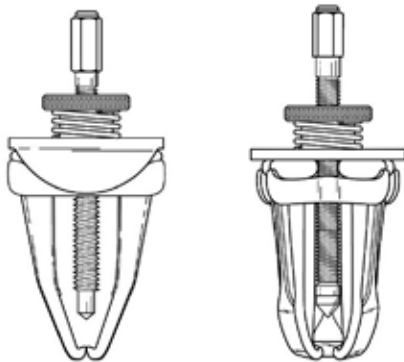
3-Jaw Puller Specifications

Puller Part Number	Puller Capacity (Tons)	3-Jaw Reach Maximum	3-Jaw Spread Min. - Max.	Forcing Screw Size Diameter x Length	Total Weight	Input Max. Torque
1U-6400	10	152 mm (6 in)	13 - 178 mm (2 1/2 - 7 in)	323.8 mm 5/8 x 12 3/4 in)	4 kg (9 lb)	175 N·m (129 ft-lb)
1U-6405	20	254 mm (10 in)	25 - 381 mm (1 - 15 in)	489.0 mm (3/4 x 19 1/4 in)	8 kg (17 lb)	410 N·m (302 ft-lb)
1U-6410	30	330 mm (13 in)	64 - 457 mm (2 1/2 - 18 in)	660 mm (1 1/8 x 26 in)	20 kg (45 lb)	1,090 N·m (804 ft-lb)
1U-6415	40	140.6 mm (6 in)	76 - 635 mm (3 - 25 in)	800.1 mm (1 1/4 x 31 1/2 in)	32 kg (70 lb)	1,350 N·m (996 ft-lb)

Hydraulic/Mechanical Pullers/Drivers

Two- and Three-Jaw Pullers

Warranty: Lifetime



- Anvil head can be tapped with a hammer to jar loose stubborn parts
- Spring-loaded cover plate securely holds jaws in yoke (creates a positive grip, allowing for easier and quicker installation)
- Jaws can be reversed to grip inside or outside diameters
- Forged steel jaws ensure a strong, long lasting puller
- Coarse threads increase life of the pressure screw (also allows for easy chasing of damaged threads)
- Centering adapter centers pushing force (prevents misalignment and provides friction-free turning)

	242-9955	242-9956
Type	2 Jaw	3 Jaw
Capacity	2 1/2 ton	7 1/2 ton
Maximum reach	140 mm (5.5 in)	76 mm (3.0 in)
Maximum spread inside	20 - 82 mm (0.87 - 3.25 in)	38 - 89 mm (1.5 - 3.5 in)
Maximum spread outside	76 mm (3.0 in)	114 mm (4.5 in)
Weight	0.5 kg (1.1 lb)	1.4 kg (3.0 lb)

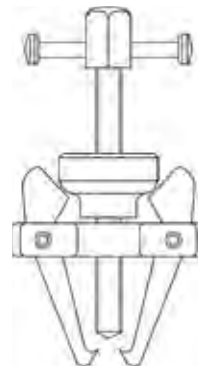
Part Number	Description
242-9955	Jaw Puller
242-9956	Jaw Puller

213-1067 Impeller Puller Assembly

Warranty: Six Months

Part Number	Description
213-1067	Impeller Puller Assembly

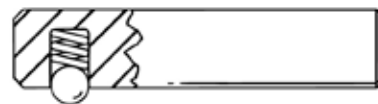
- 3-jaw puller used to remove impeller from sea water pump on marine engines



Jaw Pins for Two- and Three-Jaw Pullers

Warranty: Six Months

- Different pin design now used for service repair of all 2- and 3-jaw pullers
- Design incorporates ball and spring design, ensuring pin retention in the puller head and making assembly and disassembly easier (former design relied on a knurled section on the pin to keep it in place)
- Current ball and spring design requires slight modification to the pullers jaw head (modification procedure is packaged with the pins)
- New pin design will retain the existing 1U-6401 and 1U-6402 part numbers (former pins are still useable, and only pins of the new design require head modification)
- New shorter pin, 9U-6462, is now available to service the 4C-3082 and 1U-6400 pullers (was previously serviced with the 1U-6401 pin which was longer than required)



Part Number	Description	Diameter	Length	Serviced Pullers
1U-6401	Pin (need 3)	9.5 mm (0.374 in)	44.5 mm (1.752 in)	4C-3085, 1U-6405
1U-6402	Pin (need 3)	12.7 mm (0.500 in)	66.5 mm (2.618 in)	4C-3088, 4C-3091, 1U-6410, 1U-6415
9U-6264	Pin	9.5 mm (0.374 in)	35.6 mm (1.402 in)	4C-3082, 1U-6400

Bearing Pullers

Bearing Cup Pulling Attachments

Warranty: Six Months



- Used in conjunction with push-pullers to provide easy removal of bearing cups, oil seals, and bushings from blind holes without damage

Item	Part Number	Description	Capacity (Tons)	Size
--	1H-3112	Puller Assembly	15	--
1H-3112 Service/Repair Parts				
1	6V-7888 ¹	Leg	--	--
Optional Accessories (Sold Separately)				
2	1P-5551	Screw	--	35.56 cm (14 in) long
3	1P-5546	Cross Block,	--	33.02 cm (13 in) long

¹ Standard legs

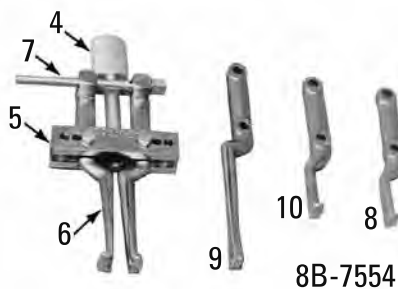
5P-7311 Chain Puller



5P-7311 Chain Puller (can be converted to a bearing cup puller by changing legs to those used on 8B-7554 Puller)

Part Number	Description	Size
5P-7311	Chain Puller Assembly	--
Service/Repair Parts		
5P-7341	Jaw	26.67 cm (10.5 in) long
5F-7344	Block	--
5P-4750	Screw	--

8B-7554 Bearing Cup Puller Attachment



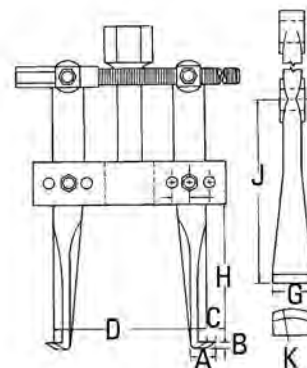
Item	Part Number	Description	Capacity (Tons)	Size
--	8B-7554	Puller Assembly	5.5	--
Service/Repair Parts				
4	8B-7553	Adapter	--	--
5	5F-7344	Block	--	--
6	6V-7887 ¹	Leg	--	--
7	5P-4750	Screw	--	--
Optional Accessories (Sold Separately)				
8	1S-5188 ²	Leg	--	18.11 cm (7.13 in) long
9	7S-7786 ²	Leg	--	26.67 cm (10.5 in) long
10	1P-7461 ²	Leg	--	17.93 cm (7.06 in) long

¹ Standard legs

² Optional legs (sold separately)

Bearing Cup Pulling Attachment Dimensions

- Used in conjunction with push-pullers to provide easy removal of bearing cups, oil seals, and bushings from blind holes without damage



Part Number ¹	A	B	C	D (Min.)	D (Max.)	E	F	G	H	J	K
1H-3112 Puller²											
6V-7888 ²	25.4 mm (1.00 in)	6.35 mm (0.25 in)	6.35 mm (0.25 in)	76.2 mm (3.00 in)	228.6 mm (9.00 in)	19.05 mm (0.75 in)	19.05 mm (0.75 in)	50.8 mm (2.00 in)	152.4 mm (6.00 in)	180.85 mm (7.12 in)	63.5 mm (2.50 in)
8B-7554 Puller²											
6V-7887 ²	15.75 mm (0.62 in)	3.05 mm (0.12 in)	6.35 mm (0.25 in)	38.1 mm (1.50 in)	152.4 mm (6.00 in)	12.7 mm (0.50 in)	12.7 mm (0.50 in)	28.45 mm (1.12 in)	127.0 mm (5.00 in)	146.05 mm (5.75 in)	38.1 mm (1.50 in)
1S-5188 ³	14.22 mm (0.56 in)	4.57 mm (0.18 in)	4.57 mm (0.18 in)	38.1 mm (1.50 in)	127.0 mm (5.00 in)	12.7 mm (0.50 in)	12.7 mm (0.50 in)	20.57 mm (0.81 in)	74.68 mm (2.94 in)	95.25 mm (3.75 in)	25.4 mm (1.00 in)
7S-7786 ³	11.18 mm (0.44 in)	4.57 mm (0.18 in)	4.57 mm (0.18 in)	38.1 mm (1.50 in)	177.8 mm (7.00 in)	12.7 mm (0.50 in)	12.7 mm (0.50 in)	20.57 mm (0.81 in)	155.45 mm (6.12 in)	176.28 mm (6.94 in)	25.4 mm (1.00 in)
1P-7461 ³	12.7 mm (0.50 in)	2.79 mm (0.11 in)	2.79 mm (0.11 in)	38.1 mm (1.50 in)	127.0 mm (5.00 in)	12.7 mm (0.50 in)	12.7 mm (0.50 in)	20.57 mm (0.81 in)	74.68 mm (2.94 in)	93.22 mm (3.67 in)	33.27 mm (1.31 in)

¹ Optional legs (sold separately) for 1S-5188, 7S-7786 and 1P-7461

² Standard legs

³ Optional legs (sold separately)

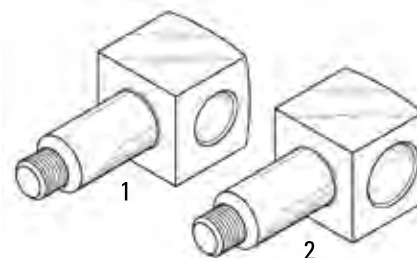
Hydraulic/Mechanical Pullers/Drivers

Swivel Nuts

Warranty: Six Months

- Used on 8B-7554 Bearing Cup Puller Attachment
- Service replacement nuts for 5P-4750 Adjustment Screw Assembly
- Replace worn or damaged parts to extend tool life

Item	Part Number	Description	Use
1	357-2991	Swivel Nut	fits on adjustment end of adjustment screw
2	357-2992	Swivel Nut	fits on stationary end of adjustment screw



Bearing Pullers

380-5712 Puller Kit, 380-5713 Calibration Ring 380-5717 Check Valve Tool and 380-5718 Check Valve Key

Model Usage: HH44DE Harvester Head
Warranty: Six Months

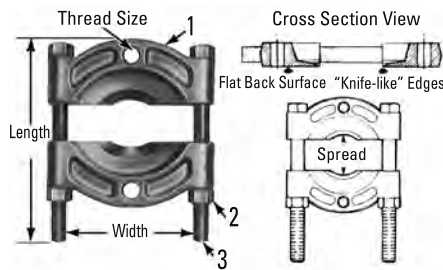


- 380-5712 used to easily remove and install the drive sprocket on the saw motor
- 380-5713 used to replace piston seals on the feed out cylinder
- 380-5717 used to replace the check valve on the tensioning system
- 380-5718 used to replace the check valve on the chain lubricator

Specifications		
Part No.	Dimensions	Weight
380-5712	431.8 x 76.2 mm (17 x 3 in) - Includes (1) grinder/plate, (2) hex head bolts, (1) nut and (1) puller bolt	1.93 kg (4.25 lb)
380-5713	75 x 50 mm (2.95 x 1.97 in)	.29 kg (.64 lb)
380-5717	57 x 44 mm (2.24 x 1.73 in)	.045 kg (.10 lb)
380-5718	70 x 30 mm (2.75 x 1.18 in)	.004 kg (.009 lb)

Bearing Puller Assemblies

Warranty: Six Months



- Used for numerous operations where space does not permit attaching other types of pullers directly on the part to be pulled
- Knife-like edges can be forced behind gears or bearings and used in conjunction with push-pullers, or the forcing screws illustrated

Item	Part Number	Description	Qty.	Capacity	Spread	Length	Width	Thread Size
--	9S-9152	Bearing Puller Assembly	--	4	0.12 - 2.00 in	4.19	2.44	3/8 in - 16
--	8H-0663	Bearing Puller Assembly	--	9	0.38 - 4.62 in	8.5	4.25	5/8 in - 18
--	1H-3110	Bearing Puller Assembly	--	20	0.75 - 13.38 in	20.5	10.25	1 in - 14
--	5F-7343	Puller	--	20	0.625 - 8.00 in	14.38	7.12	1 in - 14
--	8B-7551	Bearing Puller Assembly	--	15	0.50 - 5.25 in	10.5	6.00	5/8 in - 18
9S-9152 Service/Repair Parts								
1	9S-9151	Block	2	--	--	--	--	--
2	1B-4204	Nut	2	--	--	--	--	--
3	1P-1430	Bolt	2	--	--	--	--	--

(Continued)

Bearing Puller Assemblies (Continued)

Warranty: Six Months

Item	Part Number	Description	Qty.	Capacity	Spread	Length	Width	Thread Size
8H-0663 Service/Repair Parts								
2	1B-4206	Nut	4	--	--	--	--	--
3	8B-7552	Stud	2	--	--	--	--	--
8B-7551 Service/Repair Parts								
1	3H-0453	Block	2	--	--	--	--	--
2	1B-4207	Nut	4	--	--	--	--	--
3	3H-0459	Stud	2	--	--	--	--	--
5F-7343 Service/Repair Parts								
1	3H-0454	Block	2	--	--	--	--	--
2	1B-4208	Nut	4	--	--	--	--	--
3	3H-0460	Stud	2	--	--	--	--	--
1H-3110 Service/Repair Parts								
1	3H-0455	Block	2	--	--	--	--	--
2	3S-1356	Nut	4	--	--	--	--	--
3	1U-7758	Stud	2	--	--	--	--	--

1P-0500 Bearing and Seal Driver Group

Warranty: Six Months

- Contains plate sizes from 7/16 inch to 1 inch diameter (in 1/16 inch increments)
- Particularly useful for work on small components such as oil and water pumps
- Plates in this group are also contained in the 1P-0510 Group
- All bolts have 1/4 inch-20 threads
- Proper installation of bearings, races and seals can be accomplished quickly and easily with these driver tools
- Drive plates can be used in various combinations to install parts flush with a housing or some distance below a housing surface
- Instructions included

Includes:
Instruction Sheet



Part Number	Description
1P-0500	Bearing and Seal Driver Group
Group Consists of:	
1P-0454	Plate, 0.438 in Diameter
1P-0455	Plate, 0.500 in Diameter
1P-0456	Drive Plate
1P-0457	Plate, 0.625 in Diameter
1P-0458	Plate, 0.687 in Diameter

Part Number	Description
Group Consists of: (Continued)	
1P-0459	Plate, 0.750 in Diameter
1P-0460	Plate, 0.812 in Diameter
1P-0461	Plate, 0.875 in Diameter
1P-0462	Plate, 0.937 in Diameter
1P-0463	Plate
1P-0528	Extension Tube
1P-0529	Handle

Part Number	Description
Group Consists of: (Continued)	
4L-7124	Bolt - Hex Socket Head ¹
5L-9018	Bolt, 1 3/4 in long
6B-7225	Wrench, 3/16 in Hex
6J-2819	Bolt, 2 3/4 in long
6L-5551	Bolt
6L-5897	Bolt, 7/8 in long
9S-1725	Case ²
9S-9155	Spacer

¹Part of 1P-0520 Driver Group

²Warranty: Manufacturer, 90 Day

Bearing Pullers

1P-0510 Bearing and Seal Driver Group

Warranty: Six Months



- Contains plate sizes from 7/16 inch to 3.00 inch diameter (in 1/16 inch increments)
- All bolts have 1/4 inch-20 threads
- Proper installation of bearings, races and seals can be accomplished quickly and easily
- Drive plates can be used in various combinations to install parts flush with a housing or some distance below a housing surface
- Instructions included

Included
Instruction Sheet

Part Number	Description
1P-0510	Bearing and Seal Driver Group
Consist:	
1P-0454	Plate, 0.438 in Diameter
1P-0455	Plate, 0.500 in Diameter
1P-0456	Drive Plate
1P-0457	Plate, 0.625 in Diameter
1P-0458	Plate, 0.687 in Diameter
1P-0459	Plate, 0.750 in Diameter
1P-0460	Plate, 0.812 in Diameter
1P-0461	Plate, 0.875 in Diameter
1P-0462	Plate, 0.937 in Diameter
1P-0463	Plate
1P-0464	Plate, 1.062 in Diameter
1P-0465	Plate, 1.125 in Diameter
1P-0466	Plate, 1.187 in Diameter
1P-0467	Plate, 1.250 in Diameter
1P-0468	Plate, 1.312 in Diameter
1P-0469	Plate, 1.375 in Diameter

Part Number	Description
Consist: (Continued)	
1P-0470	Plate, 1.437 in Diameter
1P-0471	Plate, 1.500 in Diameter
1P-0472	Plate, 1.563 in Diameter
1P-0473	Plate, 1.625 in Diameter
1P-0474	Plate, 1.687 in Diameter
1P-0475	Plate, 1.750 in Diameter
1P-0476	Plate, 1.812 in Diameter
1P-0477	Plate, 1.870 in Diameter
1P-0478	Plate, 1.937 in Diameter
1P-0479	Plate, 2.000 in Diameter
1P-0480	Plate, 2.062 in Diameter
1P-0481	Plate, 2.125 in Diameter
1P-0482	Plate, 2.187 in Diameter
1P-0483	Plate, 2.250 in Diameter
1P-0484	Plate, 2.312 in Diameter
1P-0485	Plate, 2.375 in Diameter
1P-0486	Plate, 2.437 in Diameter
1P-0487	Plate, 2.500 in Diameter

Part Number	Description
Consist: (Continued)	
1P-0488	Plate, 2.562 in Diameter
1P-0489	Plate, 2.625 in Diameter
1P-0490	Plate, 2.687 in Diameter
1P-0491	Plate, 2.750 in Diameter
1P-0492	Plate
1P-0493	Plate, 2.875 in Diameter
1P-0494	Plate, 2.937 in Diameter
1P-0495	Plate, 3.000 in Diameter
1P-0528	Extension Tube
1P-0529	Handle
1P-0531	Handle ¹
4L-7124	Bolt - Hex Socket Head ¹
5L-9018	Bolt, 1 3/4 in long
6B-7225	Wrench, 3/16 in Hex
6J-2819	Bolt, 2 3/4 in long
6L-5551	Bolt
6L-5897	Bolt, 7/8 in long
9S-9155	Spacer

¹ Part of 1P-0520 Driver Group

1P-0520 Bearing and Seal Driver Group

Warranty: Six Months



- Contains plate sizes from 3 1/16 inch to 6 1/4 inch diameter (in 1/16 inch increments)
- All bolts have 1/4 inch-20 threads
- Proper installation of bearings, races and seals can be accomplished quickly and easily with these driver tools
- Drive plates can be used in various combinations to install parts flush with a housing or some distance below a housing surface
- Instructions included

Includes:
Box Bearing Driver

(Continued)

1P-0520 Bearing and Seal Driver Group (Continued)

Warranty: Six Months

Part Number	Description
1P-0520	Bearing and Seal Driver Group
Parts in Group	
1P-0496	Plate, 3.062 in Diameter
1P-0497	Plate, 3.125 in Diameter
1P-0498	Plate, 3.187 in Diameter
1P-0499	Plate, 3.250 in Diameter
1P-0501	Plate, 3.312 in Diameter
1P-0502	Plate, 3.375 in Diameter
1P-0503	Plate, 3.437 in Diameter
1P-0504	Plate, 3.500 in Diameter
1P-0505	Plate, 3.562 in Diameter
1P-0506	Plate, 3.625 in Diameter
1P-0507	Plate, 3.687 in Diameter

Part Number	Description
Parts in Group (Continued)	
1P-0508	Plate, 3.750 in Diameter
1P-0509	Plate, 3.812 in Diameter
1P-0511	Plate, 3.875 in Diameter
1P-0512	Plate, 3.937 in Diameter
1P-0513	Plate, 4.000 in Diameter
1P-0514	Plate, 4.062 in Diameter
1P-0515	Plate, 4.125 in Diameter
1P-0516	Plate, 4.187 in Diameter
1P-0517	Plate, 4.250 in Diameter
1P-0518	Plate, 4.312 in Diameter
1P-0519	Plate, 4.375 in Diameter
1P-0521	Plate, 4.437 in Diameter
1P-0522	Plate, 4.500 in Diameter
1P-0523	Plate, 4.750 in Diameter

Part Number	Description
Parts in Group (Continued)	
1P-0524	Plate, 5.000 in Diameter
1P-0525	Plate, 5.500 in Diameter
1P-0526	Plate, 6.000 in Diameter
1P-0527	Plate, 6.250 in Diameter
1P-0531	Handle ¹
1P-0532	Handle ¹
4L-7124	Bolt - Hex Socket Head ¹
5L-9018	Bolt, 1 3/4 in long
6B-7225	Wrench, 3/16 in Hex
6J-2819	Bolt, 2 3/4 in long
6L-5551	Bolt
6L-5897	Bolt, 7/8 in long
9S-9155	Spacer

¹Part of 1P-0520 Driver Group

Single and Double Acting Puller Cylinders

Single and Double Acting Puller Cylinders

Summary of Single and Double Acting Puller Cylinder Groups

Part Number	Maximum Capacity	Stroke	Weight	Overall Length	Overall Cylinder Diameter	Maximum Operating Pressure	Center Hole Diameter	Seal Kits
Double Acting Cylinder Groups								
346-5029	150	136.65 mm (5.38 in)	94.30 kg (207.9 lb)	283.2 mm (11.15 in)	247.7 mm (9.75 in)	68,950 kPa (10,000 psi)	79.4 mm (3.13 in)	316-1501
1U-5197	80	10.16 cm (4 in)	30.07 kg (66.3 lb)	241.3 mm (9.50 in)	165.1 mm (6.5 in)	68,950 kPa (10,000 psi)	38.6 mm (1.52 in)	6V-0008
316-1491	100	152.4 mm (6 in)	79.37 kg (175 lb)	342.9 mm (13.50 in)	212.85 mm (8.38 in)	68,950 kPa (10,000 psi)	79.5 mm (3.13 in)	316-1502
316-1489	60	165.1 mm (6.5 in)	35.38 kg (78 lb)	323.8 mm (12.75 in)	158.6 mm (6.25 in)	68,950 kPa (10,000 psi)	54.1 mm (2.13 in)	316-1500
6V-3160	31	50.8 mm (2 in)	6.80 kg (15 lb)	12.7 mm (0.50 in)	10.16 cm (4 in)	68,950 kPa (10,000 psi)	29.4 mm (1.16 in)	--
6V-3170	55	12.7 mm (0.5 in)	9.53 kg (21 lb)	88.9 mm (3.50 in)	137.2 mm (5.4 in)	68,950 kPa (10,000 psi)	33.2 mm (1.31 in)	6V-3168
6V-3175	55	50.8 mm (2 in)	13.15 kg (29 lb)	132.1 mm (5.20 in)	137.2 mm (5.4 in)	68,950 kPa (10,000 psi)	33.2 mm (1.31 in)	6V-3168
8S-7172	103	355.6 mm (14 in)	71.67 kg (158 lb)	657.9 mm (25.90 in)	160 mm (6.3 in)	68,950 kPa (10,000 psi)	--	9S-4527
9S-8900	71	177.8 mm (7 in)	49.47 kg (109.1 lb)	454.7 mm (17.90 in)	134.6 mm (5.3 in)	68,950 kPa (10,000 psi)	--	9S-9080
9S-8901	103	165.1 mm (6.5 in)	72.57 kg (160 lb)	472.4 mm (18.60 in)	160 mm (6.3 in)	68,950 kPa (10,000 psi)	50.8 mm (2 in)	9S-4527
Single Acting Cylinder Groups								
360-6970	25	50.8 mm (2.0 in)	6.35 kg (14 lb)	165.1 mm (6.50 in)	85.5 mm (3.38 in)	68,950 kPa (10,000 psi)	--	361-4315
346-5029	150	136.65 mm (5.38 in)	94.30 kg (207.9 lb)	283.2 mm (11.15 in)	247.7 mm (9.75 in)	68,950 kPa (10,000 psi)	79.4 mm (3.13 in)	316-1501
196-0222	100	168.4 mm (6.63 in)	41.28 kg (91 lb)	504.9 mm (19.88 in)	158.7 mm (6.25 in)	68,950 kPa (10,000 psi)	--	--
316-1494	30	155.7 mm (6.13 in)	21.77 kg (48 lb)	330.2 mm (13 in)	114.3 mm (4.5 in)	68,950 kPa (10,000 psi)	33.3 mm (1.31 in)	316-1505
316-1495	30	63.5 mm (2.5 in)	10.88 kg (24 lb)	178.6 mm (7.03 in)	114.3 mm (4.5 in)	68,950 kPa (10,000 psi)	33.3 mm (1.31 in)	316-1504
316-1493	12	76.2 mm (3 in)	4.44 kg (9.8 lb)	184.2 mm (7.25 in)	69.85 mm (2.75 in)	68,950 kPa (10,000 psi)	19.6 mm (0.77 in)	316-1504
5P-9725	10	257 mm (10.12 in)	0.45 kg (1 lb)	660.4 mm (26 in)	57.2 mm (2.25 in)	68,950 kPa (10,000 psi)	--	--
316-1496	20	50.8 mm (2 in)	7.71 kg (17 lb)	162 mm (6.38 in)	98.6 mm (3.88 in)	68,950 kPa (10,000 psi)	26.9 mm (1.06 in)	316-1507
150-3624	75	155.7 mm (6.13 in)	33.34 kg (73.5 lb)	311.1 mm (12.25 in)	146 mm (5.75 in)	68,950 kPa (10,000 psi)	--	163-5469
Hydraulic Puller Group								
1P-0820	17.5	50.8 mm (2 in)	6.62 kg (14.6 lb)	155.6 mm (6.13 in)	5.75 x 3.75 in	68,950 kPa (10,000 psi)	27 mm (1.06 in)	--

Summary of Single Acting Hydraulic Lifting Cylinders

Part Number	Capacity (Ton)	Retracted Height	Extended	Outside Diameter	Seal Kit
Spring Return Lifting Rams					
396-9840	25	30.48 cm (12 in)	50.8 cm (20 in)	86.36 mm (3.4 in)	419-5743

9S-8901 Double Acting Cylinder Group

Warranty: Six Months

- Provides a special crosshead which allows the puller to be converted to either a 2- or 3-jaw operation
- Especially well suited for removing final drive sprockets
- Includes 9S-9068 Handle and 9S-4523 Cylinder Base Cap

Overall length	467 mm (18.6 in)
Cylinder diameter	160 mm (6.3 in)
Stroke	165 mm (6.5 in)
Weight	72.5 kg (160 lb)
Capacity	78.9 t (87 tons) rod in, 93.4 t (103 tons) rod out
Maximum operating pressure	68,950 kPa (10,000 psi)
Includes: NEEG2098 Decal	



Part No.	Description
9S-8901	Cylinder Group
Service/Repair Parts	
1P-2375	Coupler Assembly Quick Connective (Male)
1P-7437	Protective Cap
2N-1746	Hex Bolt

Part No.	Description
Service/Repair Parts (Continued)	
3B-4506	Lock Washer
6H-4158	Pin
7B-2499	Ring
9S-4522	Piston

Part No.	Description
Service/Repair Parts (Continued)	
9S-4527	Cylinder Repair Kit
9S-9063	Cylinder Head Assembly
9S-9067	Cylinder Rod
9S-9068	Handle

9S-8900 Double Acting Cylinder Group

Warranty: Six Months

- Provides a special crosshead which allows the puller to be converted to either a 2- or 3-jaw operation
- Especially well suited for removing final drive sprockets

Overall length	455 mm (17.9 in)
Cylinder diameter	134 mm (5.3 in)
Stroke	180 mm (7.1 in)
Weight	49.4 kg (109 lb)
Capacity	50 t (55 tons) rod in, 64.4 t (71 tons) rod out
Maximum operating pressure	68,950 kPa (10,000 psi)
Includes: NEEG2109 Decal	



(Continued)

Single and Double Acting Puller Cylinders

9S-8900 Double Acting Cylinder Group (Continued)

Warranty: Six Months

Part No.	Description
9S-8900	Cylinder Group
Service/Repair Parts	
1B-4330	Nut
1P-2375	Coupler Assembly Quick Connective (Male)
1P-7437	Protective Cap

Part No.	Description
Service/Repair Parts (Continued)	
3B-4504	Lock Washer
6H-4158	Pin
7B-2499	Ring
7B-2742	Bolt
8H-3128	Bolt - Hex Socket Head

Part No.	Description
Service/Repair Parts (Continued)	
9S-4528	Bearing
9S-9067	Cylinder Rod
9S-9073	End Cap / Handle
9S-9078	Bolt
9S-9080	Repair Kit

8S-7172 Double Acting Cylinder Group

Warranty: Six Months



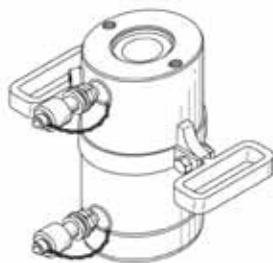
- Used with the 1P-3490 Master Pin Arrangement to remove and install track master pins
- Allows the operation to be accomplished in 1 stroke
- Includes 9S-4523 Cylinder Base Cap

Overall length	65.78 cm (25.9 in)
Cylinder diameter	16 cm (6.3 in)
Stroke	35.56 cm (14.0 in)
Weight	71.66 kg (158 lb)
Capacity	78.9 t (87 tons) rod in 93.4 t (103 tons) rod out
Maximum operating pressure	68,950 kPa (10,000 psi)
Includes: NEEG2107 Decal	

Part Number	Description
8S-7172	Cylinder Group
Service/Repair Parts	
1P-2375	Coupler Assembly Quick Connective (Male)
9S-4521	Rod
9S-4522	Piston
9S-4528	Bearing
9S-4920	Bolt
9S-4527	Cylinder Repair Kit

316-1489 Double Acting Cylinder Group

Warranty: Manufacturer's Limited Lifetime



- Has a large center hole through which forcing screws or other accessories may be extended for lifting and pulling applications

Overall length	32.38 cm (12.75 in)
Cylinder diameter	15.87 cm (6.25 in)
Stroke	16.51 cm (6.5 in)
Weight	35.38 kg (78 lb)
Capacity	60 tons
Center hole diameter	54.10 mm (2.13 in)
Maximum operating pressure	68,950 kPa (10,000 psi)
Includes: NEEG2111 Decal	

(Continued)

316-1489 Double Acting Cylinder Group (Continued)

Warranty: Manufacturer's Limited Lifetime

Part Number	Description
316-1489	Cylinder Group (60 Ton)
Service/Repair Parts	
1P-2375	Coupler Assembly Quick Connective (Male)
1P-7437	Protective Cap
316-1500	Seal Kit

6V-3160, 6V-3170 and 6V-3175 Double Acting Hydraulic Cylinders

Warranty: Six Months

- Designed with an external relief valve for the rod end of the cylinder
- Valve prevents an increase in pressure at the rod end if there is a restriction of the return oil to the pump
- Relief valve setting is 72,394 kPa (10,500 psi)
- When there is too much pressure a small amount of oil is released through the relief valve
- 6V-3170 includes piston
- 6V-3175 includes 6V-3173 Piston



Part Number	6V-3170	6V-3160	6V-3175
Overall length	88.9 mm (3.5 in)	12.7 cm (5.0 in)	13.18 cm (5.19 in)
Cylinder diameter	13.81 cm (5.44 in)	10.16 cm (4.0 in)	13.81 cm (5.44 in)
Stroke	12.7 mm (0.5 in)	50.8 mm (2.0 in)	50.8 mm (2.0 in)
Weight	9.52 kg (21 lb)	6.80 kg (15 lb)	6.80 kg (15 lb)
Capacity	50 t (55 tons)	28 t (31 tons)	50 t (55 tons)
Hole diameter	33.27 mm (1.31 in)	29.46 mm (1.16 in)	33.27 mm (1.31 in)
Maximum operating pressure	68,950 kPa (10,000 psi)	68,950 kPa (10,000 psi)	68,950 kPa (10,000 psi)
Decal	NEEG2113	NEEG2112	NEEG2113
Repair Kit	6V-3168	6V-3159	6V-3168

Part Number	Description
6V-3170	55 ton Cylinder
6V-3160	Cylinder Group
6V-3175	Hydraulic Cylinder
6V-3160 Service/Repair Parts¹	
1P-2375	Coupler Assembly Quick Connective (Male)
1P-7437	Protective Cap
6V-3159	Repair Kit
9L-2336	Ring

Part Number	Description
6V-3170 Service/Repair Parts²	
1P-2375	Coupler Assembly Quick Connective (Male)
6V-3172	Head
1P-7437	Protective Cap
6V-3168	Repair Kit
191-6624	Valve, Relief

Part Number	Description
6V-3175 Service/Repair Parts²	
1P-2375	Coupler Assembly Quick Connective (Male)
6V-3172	Head
6V-3173	Piston
1P-7437	Protective Cap
6V-3168	Repair Kit
191-6624	Valve, Relief

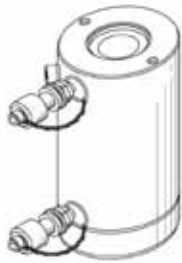
¹Includes: NEEG2112 Decal

²Includes: NEEG2113 Decal

Single and Double Acting Puller Cylinders

316-1491 Cylinder Group

Warranty: Manufacturer's Limited Lifetime



- Has center hole design

Overall length	34.29 cm (13.5 in)
Cylinder diameter	21.28 cm (8.38 in)
Stroke	15.24 cm (6.0 in)
Weight	79.37 kg (175 lb)
Capacity	100 tons
Center hole diameter	79.50 mm (3.13 in)
Maximum operating pressure	68,950 kPa (10,000 psi)

Part Number	Description
316-1491	Cylinder Group (100T) 6 in stroke
Service/Repair Parts	
1P-2375	Coupler Assembly Quick Connective (Male)
1P-7437	Protective Cap
316-1502	Repair Kit

196-0222 Cylinder Group (100 Ton)

Warranty: Six Months



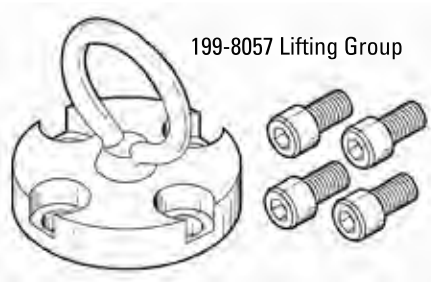
- Single-acting, spring-return cylinder
- Equipped with a quick disconnect fitting
- May be lifted with 199-8057 Lifting Group

Part Number	Description
196-0222	Cylinder Group

Capacity	100 Ton
Stroke	168.3 mm (6.63 in)
Retracted height	337.0 mm (13.25 in)
Extended height	505.0 mm (19.88 in)
Outside diameter	160.0 mm (6.25 in)
Collar thread	6 1/4-12
Collar thread length	56.0 mm (2.25 in)
Working pressure	up to 68,950 kPa (10,000 psi)

199-8057 Lifting Group

Warranty: Six Months



199-8057 Lifting Group

Part Number	Description
199-8057	Lifting Group
Service/Repair Parts	
1P-2375	Coupler Assembly Quick Connective (Male)
1P-7437	Protective Cap

6V-3176 Relief Valve

Warranty: Six Months

Part Number	Description
6V-3176	Valve Assembly
Replacement Parts	
191-6624	Valve, Relief

- Used on cylinders without a relief valve
- Can be added to the rod end of any center hole 2-way (double-acting) cylinder, which is rated for 68,950 kPa (10,000 psi) operation
- Gives extra protection to the service tool
- Prevents an increase in pressure caused by a restriction (blockage) of the return oil to the pump
- Beyond the relief valve setting of 10,500 psi, the operator will see small amounts of oil released through the valve



5P-9725 Hydraulic Cylinder, Single Acting

Warranty: Six Months

- Primary use for this hydraulic cylinder is with the 5P-8639 Press Group
- Rod is extended by hydraulic pressure and returned by spring pressure

Overall length	40.33 cm (15.88 in)
Cylinder diameter	57.15 mm (2.25 in)
Stroke	25.70 cm (10.12 in)
Weight	6.35 kg (14 lb)
Capacity	10 tons
Maximum operating pressure	68,950 kPa (10,000 psi)
Threaded cylinder	2 1/4 in-14 thd
Includes: SEES5625 Decal	

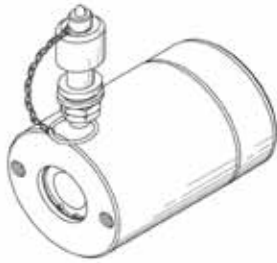
Part Number	Description
5P-9725	Cylinder Group
Service/Repair Parts	
1P-2375	Coupler Assembly Quick Connective (Male)
1P-7437	Protective Cap
5P-9724	Repair Kit



Single and Double Acting Puller Cylinders

316-1496 Single Acting Hydraulic Cylinder

Warranty: Manufacturer's Limited Lifetime



- Has center hole large enough for 25.4 mm (1 in) puller stud
- Piston is extended by hydraulic pressure and retracted by spring pressure

Overall length	16.20 cm (6.38 in)
Cylinder diameter	98.55 cm (3.88 in)
Stroke	50.8 mm (2 in)
Weight	7.71 kg (17 lb)
Capacity	20 tons
Center hole diameter	26.92 mm (1.06 in)
Maximum operating pressure	68,950 kPa (10,000 psi)

Part Number	Description
316-1496	Cylinder
Service/Repair Parts	
1P-2375	Coupler Assembly Quick Connective (Male)
1P-7437	Protective Cap
316-1507	Repair Kit

1P-0820 Hydraulic Puller Group

Warranty: Six Months



- Lightweight and compact
- Can be used to pull or push bearings, gears, shafts, or other press-fitted parts
- Has a 17.5 ton capacity and generally can be used in place of the 8B-7548 Bearing Puller Assembly
- Uses accessories found in 8B-7548

Stroke	50.8 mm (2.0 in)
Usable reach	11 5/8 in
Capacity	17.5 tons
Threaded insert	1 in-8
Maximum operating pressure	68,950 kPa (10,000 psi)

Item	Description
1	Adjusting Crank

Service/Repair Parts	
SEES5617	Decal Pressure
NEEG2101	Decal

Item	Part Number	Description
--	1P-0820	Puller Group - Hyd
1P-0820 Consists of:		
2	9S-6074	Adjusting Screw
3	9S-7338	Cross Block Group ¹
4 ²	1P-2329	Threaded Insert
4 ²	1P-7361	Plain Insert (not part of 1P-0820)

¹ Includes plate

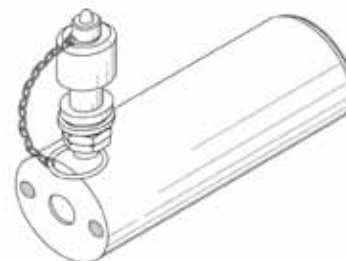
² Can use either 1P-2329 or 1P-7361

316-1493 Hydraulic Puller

Warranty: Manufacturer's Limited Lifetime

- Especially useful for pulling pins that have up to a 19.56 mm (0.77 in) center tapped hole
- Provides 12 tons pulling force
- Puller ram is extended by hydraulic pressure and returned by spring pressure

Overall length	7.25 in
Cylinder diameter	2.75 in
Stroke	3.00 in
Weight	9.8 lb
Capacity	12 tons
Center hole diameter	0.77 in
Maximum operating pressure	68,950 kPa (10,000 psi)
Includes	
NEEG2106	Decal



Part Number	Description
316-1493	Hydraulic Puller Group
Service/Repair Parts	
1P-2375	Coupler Assembly Quick Connective (Male)
1P-7437	Protective Cap
316-1504	Seal Kit

316-1494 Cylinder Group

Warranty: Manufacturer's Limited Lifetime

- Single-acting, spring-return 30 Ton cylinder
- Center hole design allows screws, cables, etc. to go straight through ram
- Long stroke design

Capacity	30 ton
Center hole diameter	33.27 mm (1.31 in)
Retracted height	33.02 cm (13 in)
Extended height	48.59 cm (19.13 in)
Collar thread	4 1/2-12



Part Number	Description
316-1494	Cylinder Group
Service/Repair Parts	
1P-2375	Coupler Assembly Quick Connective (Male)
1P-7437	Protective Cap
316-1505	Seal Repair Kit

Hydraulic/Mechanical Pullers/Drivers

Single and Double Acting Puller Cylinders

316-1495 Single Acting Hydraulic Cylinder

Warranty: Manufacturer's Limited Lifetime



- Center hole design
- Piston is extended by hydraulic pressure and retracted by spring pressure

Overall length	17.85 cm (7.03 in)
Cylinder diameter	11.43 cm (4.5 in)
Stroke	63.5 mm (2.5 in)
Weight	10.88 kg (24 lb)
Capacity	30 ton
Maximum operating pressure	68,950 kPa (10,000 psi)

Part Number	Description
316-1495	Single Acting Hydraulic Cylinder
Service/Repair Parts	
1P-2375	Coupler Assembly Quick Connective (Male)
1P-7437	Protective Cap
316-1505	Seal Repair Kit

Aluminum Rams

Warranty: Six Months



- Lightweight and durable
- Lightweight and low collapsed height means ram is easily carried and positioned
- Special locking collar feature lets you mechanically support loads for a long time without relying on hydraulics alone and without tying up your hydraulic pump

1U-7536 Aluminum Ram Base

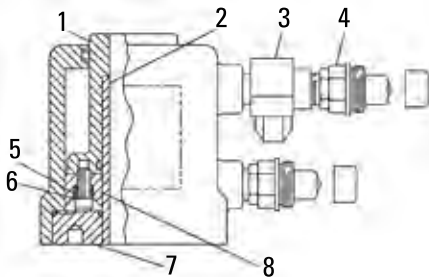
- Serrated ram base (7 sq. in.) provides extra support and stability for 55 ton rams
- Attaches with two 1/2 inch-20 screws (included)

Part Number	Description
1U-7536	Aluminum Ram Base

Repair Parts for Discontinued 7F-9540 Cylinder Group

Model: 7F-9540 Hydraulic Ram (Discontinued)

Warranty: Six Months



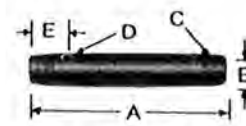
- Used to service discontinued 7F-9540 Cylinder Group

Item	Part Number	Description
Service/Repair Parts		
1	7F-9898	Ram
2	5M-5365	Sleeve
3	6V-3176	Valve Assembly
3	1P-2375	Coupler Assembly Quick Connective (Male)
5	7F-9896	Spring
6	7F-9897	Ring
7	5M-5364	Base Assembly
8	7F-9899	U-Leather Seal

Ram Accessories

Warranty: Six Months

- Rated for the full capacity of the rams, making the rams more versatile than they are already
- Accessories thread directly onto ram top or base



Extension Tube



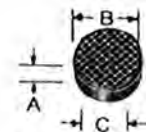
Threaded Tube Coupling



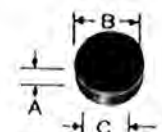
90° "V" Base



Ram Flat Base



Serrated Saddle



Smooth Saddle

Part Number	Description	A	B	C	D	E	Ton Capacity
Accessories							
1U-9656	Tube Extension	254.00 mm (10 in)	22.23 mm diameter (7/8 in diameter)	3/4 in - 14 NPT	8.33 mm diameter (21/64 in diameter)	26.19 mm (1 1/32 in)	5
1U-9659	Tube Extension	254.00 mm (10 in)	36.51 mm diameter (1 7/16 in diameter)	1 1/4 in - 11 1/2 NPT	11.51 mm diameter (29/64 in diameter)	50.80 mm (2 in)	10
1U-8818	Threaded Tube Coupling	44.45 mm (1 3/4 in)	22.23 mm diameter (7/8 in diameter)	3/4 in - 14 NPT	4.76 mm diameter (3/16 in diameter)	14.29 mm (9/16 in)	5
1U-8822	Threaded Tube Coupling	41.28 mm (1 5/8 in)	36.51 mm diameter (1 7/16 in diameter)	1 1/4 in - 11 1/2 NPSM	7.94 mm diameter (5/16 in diameter)	14.29 mm (9/16 in)	10
1U-9658	90° V Base	34.92 mm (1 3/8 in)	26.19 mm (1 1/16 in)	3/4 in - 14 NPSM	--	--	5
1U-9661	90° V Base	53.97 mm (2 1/8 in)	53.98 mm (2 1/8 in)	1 1/4 in - 11 1/2 NPSM	--	--	10
1U-8816	Ram Flat Base	114.30 mm (4 1/2 in)	63.50 mm (2 1/2 in)	3/4 in - 14 NPSM	34.13 mm (1 11/32 in)	--	5
1U-8819	Ram Flat Base	166.69 mm (6 9/16 in)	88.90 mm (3 1/2 in)	1 1/4 in - 11 1/2 NPSM	36.51 mm (1 7/16 in)	--	10
1U-8817	Ram Flat Base	28.58 mm (1 1/8 in)	33.34 mm diameter (1 5/16 in diameter)	3/4 in - 14 NPSM	--	--	5
1U-8820	Serrated Saddle	28.58 mm (1 1/8 in)	50.8 mm diameter (2 in diameter)	1 1/4 in - 11 1/2 NPSM	--	--	10
1U-8824	Serrated Saddle	28.58 mm (1 1/8 in)	76.20 mm diameter (3 in diameter)	2 in - 11 1/2 NPSM	--	--	25

(Continued)

Single and Double Acting Puller Cylinders

Ram Accessories (Continued)

Warranty: Six Months

Part Number	Description	A	B	C	D	E	Ton Capacity
Accessories (Continued)							
1U-8821	Smooth Saddle	28.58 mm (1 1/8 in)	50.8 mm diameter (2 in diameter)	1 1/4 in - 11 1/2 NPSM	--	--	10

Hydraulic Pumps

Specifications for Electric/Hydraulic Pumps

All pumps are equipped with an adjustable external relief valve except 1U-7520.

Part Number	Voltage	Line Frequency	Reservoir Capacity	Motor Hp	Maximum Pressure	Oil Delivery (cu in/min) ¹				Control Valve	Electronic Control	For Use With
						100 psi	1,000 psi	5,000 psi	10,000 psi			
1U-5555	115	60	7.57 L (2.0 gal)	1 1/2	68,947 kPa (10,000 psi)	--	--	--	--	--	Foot Controlled Switch	Double Acting Rams
1U-5565	230	50	7.57 L (2.0 gal)	1 1/2	68,947 kPa (10,000 psi)	425	45	45	45	4-Way	Foot Controlled Switch	--
4C-5080	230	60	7.57 L (2.0 gal)	1 1/2	68,947 kPa (10,000 psi)	425	45	45	45	Sole-noid	Foot Controlled Switch	--
1U-7520	115	50-60	7.57 L (2.0 gal)	1/2	68,947 kPa (10,000 psi)	--	--	--	--	4-Way	Toggle Switch run/off/jog	Double Acting Rams
2P-5500	230	50-60	1.70 L (0.45 gal)	1/2	68,947 kPa (10,000 psi)	170	32	25	18	3-Position	Toggle Switch run/off/jog and Remote Switch on 6 ft Cord	Double Acting Rams
2P-5550	115	50-60	1.70 L (0.45 gal)	1/2	68,947 kPa (10,000 psi)	--	--	--	--	--	Toggle Switch run/off/jog and Remote Switch on 6 ft Cord	Double Acting Rams
3S-6224	115	50-60	7.57 L (2.0 gal)	1 1/8	68,947 kPa (10,000 psi)	--	--	--	--	Manual	Toggle Switch run/off/jog and Remote Switch on 6 ft Cord	Double Acting Rams
8S-8033	230	50-60	7.57 L (2.0 gal)	1 1/8	68,947 kPa (10,000 psi)	650	80	70	55	--	Toggle Switch run/off/jog and Remote Switch on 6 ft Cord	--

¹ Conversion 231 cu in = 1 gal

Specifications for Air/Hydraulic Pumps

All pumps are equipped with an adjustable external relief valve except 1U-7520.

(Continued)

Hydraulic Pumps

Specifications for Air/Hydraulic Pumps (Continued)

Part Number ²	Air Requirement	Reservoir Capacity	Motor Hp	Maximum Pressure	Oil Delivery (cu in/min) ¹				Control Valve	For Use With
					100 psi	1,000 psi	5,000 psi			
1U-7524	9 cfm at 689 kPa (100 psi)	1311 cc (80 cu in)	--	68,947 kPa (10,000 psi)	59	30	4	3-Position Finger-Tip Control on 12 ft Control Line	Single Acting Rams	
1U-7545	9 cfm at 689 kPa (100 psi)	1311 cc (80 cu in)	--	68,947 kPa (10,000 psi)	59	30	4	3-Position Manual Rams	Single Acting Rams	
1U-7554	9 cfm at 689 kPa (100 psi)	1311 cc (80 cu in)	--	68,947 kPa (10,000 psi)	59	--	30	3-Position Manual Rams	Single Acting Rams	
1U-7522	50 cfm at (80 psi)	7.57 L (2.0 gal)	3	69,000 kPa (10,008 psi)	465	50	50	3-Position 4-Way	Double Acting Rams	

¹ Conversion 231 cu in = 1 gal

² 1U-7554 is the same as 1U-7545 except the relief valve is set to match the 1U-7485 Floor Crane

Specifications for Manual/Hydraulic Pumps

Part Number	Reservoir Capacity	Maximum Operating Pressure	Volume Per Stroke	Control Value	For Use With:
1U-7544	140 cu in	1st Stage, 2069 kPa (300 psi) - 2nd Stage, 69,000 kPa (10,000 psi)	38.51 cc (2.35 cu in) - 2.41 cc (0.147 cu in)	Built in - 2-Way	Single Acting Rams
1U-5230	55 cu in	69,000 kPa (10,000 psi)	2.62 cc (0.160 cu in)	--	Single Acting Rams
9U-6600	7.57 kg (2.0 gal)	1st Stage, 1379 kPa (200 psi) - 2nd Stage, 68,950 kPa (10,000 psi)	119.46 cc (7.29 cu in) - 4.75 cc (0.290 cu in)	3-Position - 4-Manual	Double Acting Rams

9U-6600 Hand Pump Group

Warranty: Six Months



- Replaced discontinued 4C-4865 Hydraulic Hand Pump
- Portable power source for Hydraulic Service Tools
- Square reservoir configuration and slightly larger pumping capacity
- Pump repair parts are explained in the Special Instruction Form SEHS9061 which is supplied with each unit

Reservoir (tank) capacity	7.9 L (2.1 gal)	
Usable capacity	7.6 L (2.0 gal)	
Fluid	SAE 10 non-detergent petroleum oil	
Weight (with oil)	26 kg (58 lb)	
Valve port size	3/8 in NPT	
Approximate size	308 x 321 x 766 mm (12.12 x 12.64 x 30.16 in)	
Specifications	Volume Per Stroke	Pressure
First Pressure Level	119 cc (7.29 cu in)	1380, ± 345 kPa (200, ± 50 psi)
Second Pressure Level	4.75 cc (0.290 cu in)	69,000, ± 3,450 kPa (10,000, ± 500 psi)

(Continued)

9U-6600 Hand Pump Group (Continued)

Warranty: Six Months

Part Number	Description
9U-6600	Hand Pump Group

Service/Repair Parts

Service/Repair Parts	
Part Number	Description
4C-4866	Service Kit
9U-6588	Pump Housing
9U-6589	Pump Link
9U-6590	O-ring Seal
9U-6591	Pivot Disc
9U-6592	Piston

Service/Repair Parts	
Part Number	Description
9U-6593	Plunger
9U-6596	Filter
9U-6602	Filter
9U-6603	Tube Assembly
9U-6604	Tube Assembly
9U-6606	Four-way Valve
9U-6607	Service Kit

2P-5550 (115V) and 2P-5500 (230V) Electric Hydraulic Pump

Part No.	Description
2P-5550	(115V) Electric Hydraulic Pump
2P-5500	(230V) Electric Hydraulic Pump

- Powered by electric motors to provide much faster operation than the hand operated pump groups
- Both pumps are equipped with switches (1) for remote operation.
- Two 8F-0024 Hose Assemblies or two 6D-7726 Hose Assemblies, two 3B-7722 Bushings, two 1P-2376 Couplers, one 2N-1931 Fitting, and the 8T-0820 or 8T-5343 Gauge can be used with these pumps to operate hydraulic cylinders or pullers
- Repair Kits available: (sold separately) 2P-2307 Pump and Control Valve Repair Kit 5P-0953 Pressure Regulator Repair Kit



Hydraulic/Mechanical Pullers/Drivers

Conversion Parts for Increasing Reservoir Capacity of 2P-5550 and 2P-5500 Pumps

Warranty: Six Months

Use these parts to convert the reservoir capacity of the 2P-5550 and 2P-5500 Electric Hydraulic Pumps from 0.45 gallons to 2 gallons. This conversion makes it possible for these pumps to actuate rams with larger displacements and thus provide electric hydraulic pumps that can be driven by a portable generating unit for such field jobs as final drive disassembly and assembly.



(Continued)

Hydraulic Pumps

Conversion Parts for Increasing Reservoir Capacity of 2P-5550 and 2P-5500 Pumps (Continued)

Warranty: Six Months

Item	Part Number	Description
1	5P-4233	Base Plate
2	5P-4234	Reservoir, 7.6 L (2 gal)
3	2P-2285	Gasket
4	5P-4231	Suction Tube Extension (3/8 in-24 thd; for Model B) or

Item	Part Number	Description
4	5P-8731	Suction Tube Extension (1/2 in-20 thd; for Model C)
5	9G-5127	Breather-Vent
6	135-2532	Bushing
7	5P-0947	Gasket
Not shown	5P-4232	Cap

3S-6224 (115V) and 8S-8033 (230V) Electric Hydraulic Pump

Warranty: Six Months

- Higher capacity motors in the 3S-6224 and 8S-8033 Pumps provide faster ram operation than afforded by the 2P-5550 and 2P-5500 Pumps
- Motor operation can be controlled from a switch (1) mounted on the pump body or by a remote switch (2) attached to a 1.83 m (6 ft) cord
- Remote switch permits operator to move to the most advantageous position when applying pressure to the tool setup

Attachments for 3S-6224 (115V) and 8S-8033 (230V) Electric Hydraulic Pumps

Several additional items are required to attach these pumps to a hydraulic cylinder or puller. The parts are listed below and illustrated on a 3S-6224 Pump.

Item	Part Number	Description	Quantity	Size
1 ¹	8T-5343	Pressure Gauge	--	--
1	8T-0820	Standard Pressure Gauge	1	--
2	135-2532	Bushing	2	--
3 ²	135-2533	Street Elbow	1	--
4	1P-2376	Coupler Assembly Quick Connective (Female) (2)	2	--
4	1P-2377	Plug As - Dust	2	--
5	8F-0024	Hose Assembly	2	183 cm (72 in)
5	6D-7726	Hydraulic Hose (2)	2	351 cm (138 in)
Not Shown				
--	1U-9903	Valve Repair Kit	--	--
--	2P-2287	Valve Kit	--	--

¹ Can use either 8T-5343 or 8T-0820 gauge

² This fitting may be eliminated if desired. It is used to make both hoses come out in the same direction from the valve on top of the pump assembly. This provides a neater appearance and more usable hose length.

Hydraulic Shop Presses

Warranty: Lifetime

Part No.	OTC No.	Force	Weight	A Height	B Outside Width	G Inside Width	E Max. Working Height	Pump	Optional Hydraulic Group
1U-7459	1850	55 ton	317.1 kg (699 lb)	179.71 cm (70 3/4 in)	120.65 cm (47 1/2 in)	88.9 cm (35 in)	104.46 cm (41 1/8 in)	Manual	1U-7466
1U-7461	1851	55 ton	313.9 kg (692 lb)	179.71 cm (70 3/4 in)	120.65 cm (47 1/2 in)	88.9 cm (35 in)	104.46 cm (41 1/8 in)	Air	1U-7466
1U-7463	1845	55 ton	420 kg (926 lb)	182.88 cm (72 in)	123.19 cm (48 1/2 in)	91.44 cm (36 in)	83.19 cm (32 3/4 in)	Electric	1U-7466

(Continued)

Hydraulic Shop Presses (Continued)

Warranty: Lifetime

Part No.	OTC No.	Force	Weight	A Height	B Outside Width	G Inside Width	E Max. Working Height	Pump	Optional Hydraulic Group
1U-7464	1846	55 ton	417.3 kg (920 lb)	182.88 cm (72 in)	123.19 cm (48 1/2 in)	91.44 cm (36 in)	83.19 cm (32 3/4 in)	Manual	1U-7466
1U-7465	1847	55 ton	415.9 kg (917 lb)	182.88 cm (72 in)	123.19 cm (48 1/2 in)	91.44 cm (36 in)	83.19 cm (32 3/4 in)	Air	1U-7466
1U-7468	1854	100 ton	534.8 kg (1,179 lb)	220.03 cm (86 5/8 in)	120.65 cm (47 1/2 in)	88.90 cm (35 in)	115.57 cm (45 1/2 in)	Electric	--
1U-7471	1858	100 ton	746.2 kg (1,645 lb)	196.22 cm (77 1/4 in)	162.56 cm (64 in)	127.00 cm (50 in)	106.68 cm (42 in)	Electric	--
1U-7482	1865	100 ton	1,261 kg (2,780 lb)	286.07 cm (112 5/8 in)	153.67 cm (60 1/2 in)	128.27 cm (50 1/2 in)	152.4 cm (60 in)	Electric	--
1U-7483	1866	150 ton	1,967.7 kg (4,338 lb)	313.06 cm (123 1/4 in)	160.66 cm (63 1/4 in)	130.18 cm (51 1/4 in)	162.56 cm (64 in)	Electric	--
4C-5639	1867	200 ton	2,020.8 kg (4,455 lb)	313.06 cm (123 1/4 in)	160.66 cm (63 1/4 in)	130.18 cm (51 1/4 in)	162.56 cm (64 in)	Electric	--

Accessories for 80, 100 and 150 Ton Shop Presses

Use With Press:			
80 Ton	100 Ton	150 Ton	Accessory
1U-7472	1U-7472	1U-7472	Straightening Fixtures (Pr.)
1U-7473	1U-7473	1U-7474	V-Blocks (Pr.)
1U-7476 ¹	1U-7476 ²	1U-7475	Push Adapter
1U-7477 ¹	1U-7477 ²		V-Push Adapter
	1U-7480 ²		Adapter

¹ These two components are used together on 80 ton presses and should be ordered together
² These three components are used together on 100 ton presses and should be ordered together

1U-7459 and 1U-7461 Economy Shop Presses, 55 Ton

Warranty: Six Months

- Durable steel frame resists buckling or bending and hand operated winch and cable mechanism adjusts lower press bolster

1U-7459

- Includes a ram with 15.88 cm (6 1/4 in) stroke, 1U-7544 Hydraulic Hand Pump, 1U-7547 Hose Gauge (6.35 mm ID x 1.83 m [1/4 in ID x 6 ft]), and pump mounting bracket

1U-7461

- Same as 1U-7459 except with 1U-7545 Air/Hydraulic Pump (1U-7545 requires 9 cfm at 689.5 kPa [100 psi] at the pump)



Part Number	Description	Weight
1U-7459	Economy Shop Presses, 55 Ton	317.06 kg (699 lb)
1U-7461	Economy Shop Presses, 55 Ton	313.89 kg (692 lb)

1U-7463, 1U-7464 and 1U-7465 Heavy-Duty Shop Presses, 55 Ton

Warranty: Six Months



- Larger versions of the 25 ton presses
- Side to side positioning of ram allows full capacity pressing along entire bolster length without buckling or bending
- Single-acting ram has a 33.02 cm (13 in) stroke
- Choice of pumps is available to suit individual needs

1U-7463

- Includes electric/hydraulic pump, 1U-7547 Hose Gauge (9.53 mm ID x 2.44 m [3/8 in ID x 8 ft]), and pump mounting bracket (Pump: 1/2 Hp, single-phase, 115 V/60 Hz)

1U-7464

- Same as 1U-7463 except with 1U-7544 Hydraulic Hand Pump

1U-7465

- Same as 1U-7463 except has an air/hydraulic pump (requires 9 cfm at 689.5 kPa [100 psi] at the pump) and hose (9.53 mm ID x 3.05 m [3/8 in ID x 10 ft])

Part Number	Description	Weight
1U-7463	Heavy-Duty Shop Press, 55 Ton	420.03 kg (926 lb)
1U-7464	Heavy-Duty Shop Press, 55 Ton	417.31 kg (920 lb)
1U-7465	Heavy-Duty Shop Press, 55 Ton	415.90 kg (917 lb)

1U-7466 Press Accessory Set for 55 Ton Shop Presses



- Use with 55 ton presses
- Weight: 85 lb

Item	Description
1	Bearing pulling attachment
2	Ram push adapter with 25.4 mm (1 in) diameter shank
3	Ram pushing adapter with 31.75 mm (1 1/4 in) diameter shank
4	V-push adapter
5	Pair of V-blocks
6	Ram forcing cap
7	Threaded adapter

NEED IMAGE

1U-7468 Economy Shop Press, 100 Ton

Warranty: Lifetime



- Ready to tackle the tough pressing tasks encountered daily in construction, trucking and agricultural maintenance shops
- Large 88.9 cm (35 in) opening between press uprights allows you to easily handle large gears, shafts, sprockets, etc.
- Hand operated winch and cable mechanism gives operator positive control in adjustment of lower press bolster to any height

1U-7468

- Includes ram with 10 inch stroke, electric/hydraulic pump, 1U-7547 Hose Gauge (6.35 mm ID x 2.44 m [1/4 in ID x 8 ft]), and pump mounting bracket (Pump: 1/2 Hp, single-phase, 60 Hz, 115 Volt)

Part Number	Description	Weight
1U-7468	Economy Shop Press, 100 Ton	534.8 kg (1,179 lb)

1U-7471 Heavy-Duty Shop Press, 100 Ton

Warranty: Lifetime

- Handles all your really tough pressing jobs
- Rugged construction assures that the frame will withstand loads of full-rated capacity across the upper bolster without structural damage
- Wide open uprights (over 30.5 cm [12 in]) allow easy side loading of bars and shafts for bending or straightening
- Ram head glides smoothly along upper bolster on rollers, allowing fast and easy horizontal adjustments
- Upper bolster can be lowered 8 inches for convenient positioning during repetitive jobs
- Double-acting ram with 33.02 cm (13 in) stroke and electric/hydraulic pump and 2 hoses (6.35 mm ID x 3.05 m [1/4 in ID x 10 ft]) (Pump: 3 Hp, 3-phase, 230V/460V, 60 Hz, 3450 RPM, 24V controls)



Part Number	Description	Weight
1U-7471	Heavy-Duty Shop Press, 100 Ton	746.2 kg (1,645 lb)

1U-7482, 1U-7483, and 4C-5639 Roll Bed® Shop Presses, 100, 150 and 200 Ton

Warranty: Lifetime

- Patented Roll Bed feature allows you to roll out press bed to load and unload heavy work with overhead crane
- Choice of hydraulics makes these presses as functional as you need for the biggest pressing jobs
- Movable ram head and 3.05 m (10 ft) remote control combined with large, open working area allows operator to easily view work from all sides
- Heavy-duty, cold-rolled steel construction assures plenty of staying power to withstand full rated capacity loads
- Bearings make bed positioning smooth and easy
- Width adjusts from 10.16 to over 68.58 cm (4 in to over 27 in) and is secured with locking bolts
- Workhead moves on bearings across the upper bolster for off-center pressing jobs
- Has off-center load capacity
- To raise or lower the upper bolster, simply turn a crank handle
- Hydraulic rams meet ANSI B30.1 Standards



1U-7482

- Includes ram with 33.02 cm (13 in) stroke, hose gauge, pump mounting bracket, and electric/hydraulic pump (3 Hp, 3-phase, 230V/460V, 60 Hz, 3450 RPM, 24V controls)
- 100 ton capacity

1U-7483

- Same as 1U-7482 except with a different ram with 33.02 cm (13 in) stroke and hoses (6.34 mm ID x 3.66 m [1/4 in ID x 12 ft])
- 150 ton capacity

4C-5639

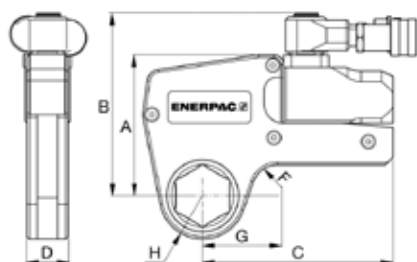
- Same as 1U-7483 except with a different ram with 33.02 cm (13 in) stroke
- 200 ton capacity

Part Number	Description	Weight
1U-7482	Roll Bed Shop Press, 100 Ton	1,261 kg (2,780 lb)
1U-7483	Roll Bed Shop Press, 150 Ton	1,967.7 kg (4,338 lb)
4C-5639	Roll Bed Shop Press, 200 Ton	2,020.8 kg (4,455 lb)

Hydraulic Wrenches and Accessories

Low Profile Hydraulic Torque Wrench

Warranty: Limited Lifetime



European Union Compliant, CE marked

- Used to tighten and loosen nuts and bolts for industrial applications
- Minimal parts enable easy on-site maintenance
- Optimized strength to weight ratio provides lightweight, ergonomic design for easy fit and handling
- Fast operation due to large rotation per wrench cycle (30 degree rotation angle) & rapid return stroke
- Constant torque output provides high accuracy across the full stroke
- Nickel plated for excellent corrosion protection
- 360 degree hydraulic swivel manifold with screw lock couplings increases wrench and hose maneuverability

Specifications

Part No.	Description	Max. Torque (ft lb)	Dimensions							Hex Size (in)	Weight (lb)
			A	B	C	D	F	G	H		
385-3988 (2000 ft lb Drive Unit) Contents:											
385-3992	1 7/16" (36mm) A/F Cassette	2000 ft lb	4.3 in	5.6 in	5.8 in	1.3 in	0.8 in	2.1 in	1.2 in	1 7/16 in	4.19 lb
385-3997	1 5/8" (41mm) A/F Cassette	2000 ft lb	4.3 in	5.6 in	5.8 in	1.3 in	0.8 in	2.3 in	1.3 in	1 5/8 in	4.41 lb
385-4002	1 13/16" (46mm) A/F Cassette	2000 ft lb	4.3 in	5.6 in	5.8 in	1.3 in	0.8 in	2.4 in	1.4 in	1 13/16 in	4.41 lb
385-4011	Reaction Paddle	2000 ft lb	--	--	--	--	--	--	--	--	--
385-5036	Double Swivel Manifold	--	--	--	--	--	--	--	--	--	--
417-9068	1 1/2" (38mm) A/F tapered Cassette – reduced torque	1250 ft lb	4.3 in	5.6 in	5.8 in	1.28 to 0.96 in	0.8 in	2.4 in	1.4 in	1 13/16 in	4.41 lb
385-8467 (4000 ft lb Drive Unit) Contents:											
385-5036	Double Swivel Manifold	--	--	--	--	--	--	--	--	--	--
385-8471	1 7/16" (36mm) A/F Cassette	4000 ft lb	5.4 in	6.6 in	7 in	1.6 in	0.8 in	2.4 in	1.5 in	1 7/16 in	7.72 lb
385-8476	1 13/16" (46mm) A/F Cassette	4000 ft lb	5.4 in	6.6 in	7 in	1.6 in	0.8 in	2.5 in	1.6 in	1 13/16 in	7.94 lb
385-8481	2 3/16" (55mm) A/F Cassette	4000 ft lb	5.4 in	6.6 in	7 in	1.6 in	0.8 in	2.9 in	1.7 in	2 3/16 in	8.38 lb
385-8490	Reaction Paddle	4000 ft lb	--	--	--	--	--	--	--	--	--

(Continued)

Specifications (Continued)

Part No.	Description	Max. Torque (ft lb)	Dimensions							Hex Size (in)	Weight (lb)
			A	B	C	D	F	G	H		
385-8732 (8000 ft lb Drive Unit) Contents:											
385-5038	Double Swivel Manifold	--	--	--	--	--	--	--	--	--	--
385-8737	2 9/16" (65mm) A/F Cassette	8000 ft lb	6.8 in	8.1 in	8.2 in	2.5 in	0.8 in	3.38 in	2.1 in	2 9/16 in	17.64 lb

Service/Repair Parts

Drive Unit Service/Repair Parts					
Part No.	Description	Drive Unit Seal Kit	Drive Unit Rebuild Kit	Swivel Manifold Kit	Swivel Manifold Seal Kit
385-3988	2000 ft lb Drive Unit	385-3989	385-3990	384-8912	385-5037
385-8467	4000 ft lb Drive Unit	385-8468	385-8469	384-8912	385-5037
385-8732	8000 ft lb Drive Unit	385-8733	385-8735	385-8580	385-5039

Cassette Service/Repair Parts

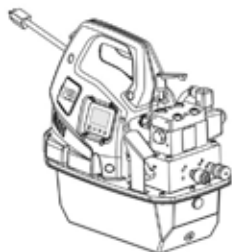
Part No.	Description	Ratchet Kit	Ratchet Lever Assembly	Cassette Spares Kit	Drive Show Spring Kit
2000 ft lb Cassettes					
385-3992	1 7/16" (36mm) A/F Cassette	385-3993	385-3994	385-4010	384-8915
385-3997	1 5/8" (41mm) A/F Cassette	385-3998	385-3999	385-4010	384-8915
385-4002	1 13/16" (46mm) A/F Cassette	385-4003	385-4004	385-4010	384-8915
417-9068	1 1/2" (38mm) A/F tapered Cassette – reduced torque	424-3607	385-3994	385-4010	384-8915
4000 ft lb Cassettes					
385-8471	1 7/16" (36mm) A/F Cassette	385-8472	385-8473	385-8489	384-8915
385-8476	1 13/16" (46mm) A/F Cassette	385-8477	385-8478	385-8489	384-8915
385-8481	2 3/16" (55mm) A/F Cassette	385-8482	385-8483	385-8489	384-8915
8000 ft lb Cassettes					
385-8737	2 9/16" (65mm) A/F Cassette	385-8738	385-8739	385-8745	385-8583

Hydraulic Torque Wrench Pump

Warranty: Limited Lifetime



385-8479 and 384-8916



385-3995 and 385-3996

European Union Compliant, CE marked

- Features high efficiency pump design with higher oil flow and bypass pressure 1.7 hp universal electric motor with high power to weight ratio and low voltage operation
- High strength, molded composite shroud protects motor and electrical components with an ergonomic, non-conductive handle
- Low voltage pendant for additional operator safety
- Valve technology reduces oil operating temperatures and withstands contaminants to increase pump reliability

These features only apply to 385-3995 and 385-3996 Pumps

- Digital display with built-in hour meter, pressure and torque display and shows self-diagnostics, cycle count and low voltage warning information
- Equipped with auto cycle operation when advance button is pressed continuously (pump operable with or without auto cycle feature)

Part No. 385-3995, 385-3996, 385-8479, 384-8916

	Pump with LCD Display, Auto-cycle and readings in Torque Values	Pump with LCD Display, Auto-cycle and readings in Torque Values	Pump with standard analog pressure gauge	Pump with standard analog pressure gauge
Part Number	385-3995	385-3996	385-8479	384-8916
Motor	115 VAC, Single Phase, 50/60 Hz	208-240 VAC, Single Phase, 50/60 Hz	115 VAC, Single Phase, 50/60 Hz	208-240 VAC, Single Phase, 50/60 Hz
Display	LCD	LCD	Analog Gauge	Analog Gauge
Valve	Auto Cycle	Auto Cycle	Standard	Standard
Power	1.26 kW (1.7 hp)	1.26 kW (1.7 hp)	1.26 kW (1.7 hp)	1.26 kW (1.7 hp)
Flow Rate	60 CU in./min @ 10,000 PSI	60 CU in./min @ 10,000 PSI	60 CU in./min @ 10,000 PSI	60 CU in./min @ 10,000 PSI
Reservoir Capacity	6.62 L (1.75 gal)	6.62 L (1.75 gal)	6.62 L (1.75 gal)	6.62 L (1.75 gal)
Maximum Operating Pressure	10,000 PSI	10,000 PSI	10,000 PSI	10,000 PSI
Dimensions	10.49 x 17.71 x 18.99 in (266.7 x 450 x 482.6 mm)	10.49 x 17.71 x 18.99 in (266.7 x 450 x 482.6 mm)	10.49 x 17.71 x 18.99 in (266.7 x 450 x 482.6 mm)	10.49 x 17.71 x 18.99 in (266.7 x 450 x 482.6 mm)
Comes with fittings and skid bar				

Service Parts

	385-3995	385-3996	385-8479	384-8916
115 VAC Valve Assembly	384-8480	--	384-7273	--
230 VAC Valve Assembly	--	384-8919	--	384-8919
Pendant	385-4001	385-4001	385-7917	385-7917
Analog Pressure Gauge Assembly	--	--	385-7914	385-7914
Brush Replacement Kit	346-6160	346-6160	346-6160	346-6160
Breather Plug	346-6159	346-6159	346-6159	346-6159
Roll Cage	346-6163	346-6163	346-6163	346-6163
Skid Plate	346-6164	346-6164	346-6164	346-6164
Relief Valve Repair Kit	385-8584	385-8584	385-8584	385-8584
Valve Repair Kit	385-8587	385-8587	385-8587	385-8587
Repair Kit	385-3991	385-3991	385-3991	385-3991

Accessories

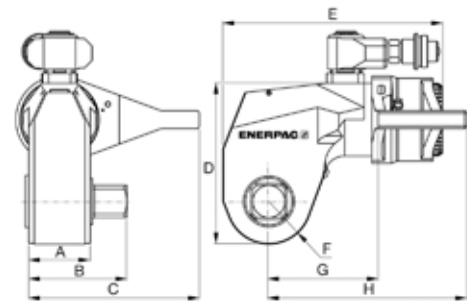
Description	Part No.
Twin Torque Hose Assembly - 19 ft with couplers	417-9067

Square Drive Hydraulic Torque Wrench

Warranty: Limited Lifetime

European Union Compliant, CE marked

- Used to tighten and loosen nuts and bolts for industrial applications
- Minimal parts enable easy on-site maintenance
- Adjustable multi-position reaction arm enhances flexibility of tool
- Optimized strength to weight ratio provides a lightweight, ergonomic design for easy fit and handling
- Fast operation due to large rotation per wrench cycle (35 degree rotation angle) rapid return stroke
- Constant torque output provides high accuracy across the full stroke
- Nickel plated for excellent corrosion protection
- Compact, high strength uni-body construction provides a small operating radius while reducing internal deflections and ensuring accuracy and repeatability
- Push button square drive release for quick reverse of square drive
- 360 degree hydraulic swivel manifold with screw lock couplings increases wrench and hose maneuverability



Specifications

Part No.	Description	Max. Torque (ft lb)	Square Drive	Dimensions								Weight
				A	B	C	D	E	F	G	H	
384-8910	1400 ft lb Wrench	1400 ft lb	3/4 in	1.54 in	2.48 in	4.33 in	3.74 in	5.36 in	0.99 in	2.72 in	4.69 in	5.94 lb
385-7874	3000 ft lb Wrench	3020 ft lb	1 in	1.89 in	3.03 in	5.28 in	4.96 in	6.78 in	1.3 in	3.55 in	6.27 in	11 lb
385-8578	6000 ft lb Wrench	6010 ft lb	1 1/2 in	2.24 in	3.55 in	7.05 in	6.38 in	7.92 in	1.66 in	4.41 in	7.37 in	18.7 lb
385-9413	11000 ft lb Wrench	11,000 ft lb	1 1/2 in	2.8 in	4.37 in	7.22 in	7.29 in	8.9 in	1.95 in	5.2 in	8.94 in	33 lb
384-7264	25000 ft lb Wrench	25,140 ft lb	2 1/2 in	3.43 in	5.63 in	9.61 in	9.46 in	11.5 in	2.5 in	7.17 in	11.5 in	68.2 lb

Hydraulic Wrenches and Accessories

Service/Repair Parts

Hydraulic Wrench	384-8910	385-7874	385-8578	385-9413	384-7264
Drive Unit Seal Kit	384-8911	385-7875	385-8579	385-9414	384-7265
Swivel Manifold Kit	384-8912	384-8912	385-8580	385-8580	384-7266
Drive Unit Rebuild Kit	384-8913	385-7877	385-8581	385-9416	384-7267
Ratchet Kit	384-8914	385-7912	385-8582	385-9417	384-7268
Swivel Manifold Seal Kit	385-5037	385-5037	385-5039	385-5039	385-5039
Square Drive & Retainer Kit	384-8917	385-7915	385-8585	385-9420	384-7271
Ratchet Lever & Pin	384-8918	385-7916	385-8586	385-9421	384-7272
Drive Shoe Spring Kit	384-8915	384-8915	385-8583	385-8583	385-7913
Double Swivel Manifold	385-5036	385-5036	385-5038	385-5038	385-5038
Reaction Arm	384-8920	385-7918	385-8588	385-9423	384-7274
Reaction Tube Extension	—	385-7919	—	—	—
Extended Reaction Arm	—	—	385-8589	—	—

Miscellaneous

FT3109 Installer Group

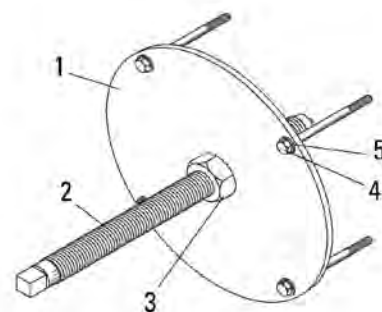
Model: SR5 Generators

Warranty: None

- Used to install rear rotor bearing on Cat® SR5 Generator
- Correctly installs press-fit bearing
- Material: SAE 1020M steel

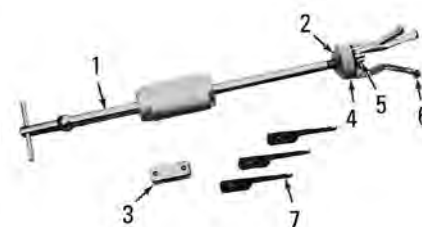
Item	Description	Quantity
1	1020M Steel Plate, 6.4 mm (0.250 in) thick x 266.7 mm (10.5 in) diameter	1

Item	Part Number	Description	Quantity
Service/Repair Parts			
3	5F-7366	Screw - Forcing	1
2	1A-1935	Nut	1
4	6V-5223	Bolt, M8 x 31.75 mm (1.25 in)	4
5	9M-1974	Washer	4

**1P-0074 Slide Hammer Puller, 5 Ton Capacity**

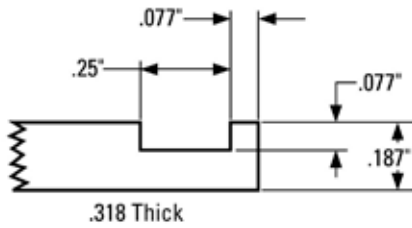
Warranty: Six Months

- Equipped with a 2.3 kg (5 lb) hammer and 2- or 3-jaws depending on the application
- Jaws can be reversed to handle inside pulling jobs such as bearing cups as well as regular outside pulling jobs on gears, bearings, etc.



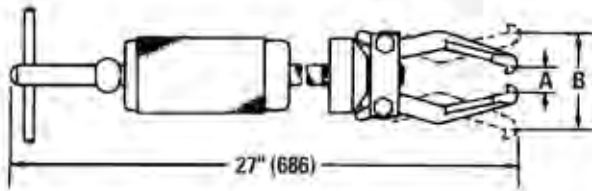
Item	Part Number	Description
--	1P-0074	Slide Hammer Puller
1	1P-0073	Shank
2	1P-0068	Cone
3	1P-0070	Two Jaw Head
4	1P-0069	Three Jaw Head
5	1A-8285	Nut (3)
5	6H-0187	Bolt (3)
6	1P-0071	Jaw (3)
Optional Attachment (not part of 1P-0074 Puller) (Sold Separately)		
7	2P-2312	Leg 4.7 in long, three required to pull seal retainer plates on the input and output shafts of Lift Truck Hydrostatic transmissions

2P-2312 Leg



Tip Dimensions for 2P-2312 Leg

Dimensions

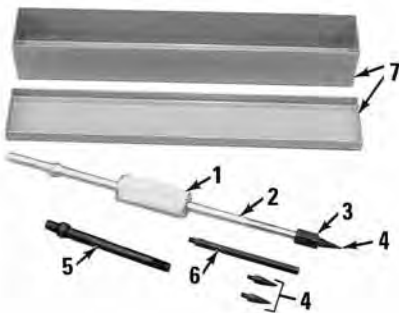


Inside A (Min.)	Inside A (Max.)	Outside B (Min.)	Outside B (Max.)
2-Jaw Spread			
31.75 mm (1.25 in)	85.85 mm (3.38 in)	25.40 mm (1.00 in)	114.30 mm (4.50 in)
3-Jaw Spread			
33.27 mm (1.31 in)	120.65 (4.75 in)	38.10 mm (1.50 in)	114.30 mm (4.50 in)

Hydraulic/Mechanical Pullers/Drivers

1U-7600 Slide Hammer Puller Group

Warranty: Six Months



- Used for pulling lip type seals of all sizes
- Weight of hammer: 1.1 kg (2 1/2 lb)

Item	Description
7	Metal box

Item	Part Number	Description
--	1U-7600	Slide Hammer Puller Group
1	1U-7603	Hammer
2	1U-7601	Rod
3	1U-7602	Adapter
4	1P-3073	Screw Tip (3)
5	1U-7649	Shank
6	1P-2868	Shaft

Optional Accessory (Sold Separately)

--	5P-6521	Screw Tip - available for removing lip type crankshaft seals with thin metal walls
----	---------	--

Threaded Adapters

Warranty: Six Months

- Used as ends or connectors for Push-Puller legs



Part Number	Female End	Male End	Capacity (Tons)	Length	Capacity
Type 1					
8B-7557	5/8 in-18	3/8 in-16	3.1	--	--
153-8963	5/8 in-18	5/16 in-18	2.1	--	--
8T-9139	5/8 in-18	7/16 in-14	4.2	--	--
8B-7558	5/8 in-18	1/2 in-20	6.6	--	--
8B-7559	5/8 in-18	1/2 in-13	5.7	--	--
8B-7556	5/8 in-18	5/8 in-11	9.1	--	--
293-6365	5/8 in-11	1 in-14	9.0	--	--
5F-7340	1 in-14	3/4 in-16	15.5	--	--
5F-7339	5/8 in-18	3/4 in-16	15.5	--	--
5F-7341	5/8 in-18	3/4 in-10	13.5	--	--
5P-4167	1 in-14	3/4 in-10	13.5	--	--
5H-1276	5/8 in-18	7/8 in-14	21.2	--	--
135-0482	5/8 in-18	7/8 in-9	18.7	--	--
5P-6581	1 in-14	7/8 in-14	21.2	--	--
5F-7342	5/8 in-18	1 in-14	28.5	--	--
5P-4768	1 in-14	1 in-8	26.4	--	--
5H-1274	5/8 in-18	1 1/4 in-12	-- ¹	--	--
8S-6587	1 in-14	1 1/4 in-12	-- ¹	--	--
5P-8677	1 1/4 in-12	1 1/2 in-12	46.7	--	--
8T-5270	1 1/2 in-12	2 in-12	-- ¹	--	--
Type 2					
8T-9140	1/2 in-20	5/8 in-18	5.3	--	--
8B-7555	5/8 in-18	3/4 in-16	12.3	--	--
154-6796	1 in-8	1 1/2 in-12	-- ¹	--	--
1H-3111	1 in-14	1 in-14	22.9	--	--
5P-8623	1 1/4 in-12	1 1/4 in-12	-- ¹	--	--
4C-9471	1 1/4 in-7	1 1/2 in-12	-- ¹	--	--
6V-3094	1 1/4 in-12	1 3/4 in-12	-- ¹	--	--
1M-6763	1 1/4 in-7	2 1/8 in-12	-- ¹	--	--
9H-4072	1 1/4 in-7	2 5/8 in-12	-- ¹	--	--
4C-9487	1 1/2 in-12	1 1/2 in-12	70	--	--
6H-1626	1 1/4 in-7	2 3/8 in-12	-- ¹	--	--
8T-7781	2 in-8	2 in-8	116.8	--	--

(Continued)

Threaded Adapters (Continued)

Warranty: Six Months

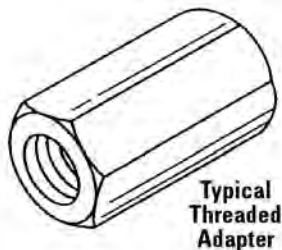
Part Number	Female End	Male End	Capacity (Tons)	Length	Capacity
4C-5648 -- Male Metric Adapter Kit -- Type 1					
4C-5649	5/8 in-18	M6 x 1.0	--	2 1/4 in	1.1 tons
4C-5650	5/8 in-18	M8 x 1.0	--	2 1/4 in	2.3 tons
4C-5651	5/8 in-18	M8 x 1.25	--	2 1/4 in	2.1 tons
4C-5652	5/8 in-18	M10 x 1.25	--	2 1/4 in	3.9 tons
4C-5653	5/8 in-18	M10 x 1.50	--	2 1/4 in	3.3 tons
4C-5654	5/8 in-18	M12 x 1.25	--	2 1/4 in	5.6 tons
4C-5655	5/8 in-18	M12 x 1.75	--	2 1/4 in	4.9 tons
4C-5656 -- Male Metric Adapter Kit -- Type 1					
4C-5657	5/8 in-18	M14 x 1.5	--	2 1/4 in	7.5 tons
4C-5658	5/8 in-18	M14 x 2.0	--	2 1/4 in	6.7 tons
4C-5659	5/8 in-18	M16 x 1.5	--	2 3/4 in	10.3 tons
4C-5660	5/8 in-18	M16 x 2.0	--	2 3/4 in	9.3 tons
4C-5661	5/8 in-18	M20 x 1.5	--	2 3/4 in	17.0 tons
4C-5662	5/8 in-18	M20 x 2.5	--	2 3/4 in	14.6 tons
4C-5663 -- Female Metric Adapter Kit -- Type 1					
4C-5664	5/8 in-18	M6 x 1.0	--	1 5/8 in	0.9 tons
4C-5665	5/8 in-18	M8 x 1.25	--	1 5/8 in	1.7 tons
4C-5667	5/8 in-18	M12 x 1.75	--	1 5/8 in	3.9 tons
4C-5668	5/8 in-18	M14 x 2.0	--	1 5/8 in	5.4 tons
4C-5669	5/8 in-18	M16 x 2.0	--	1 5/8 in	7.5 tons
4C-5670	5/8 in-18	M20 x 2.5	--	1 5/8 in	11.8 tons
4C-5671 -- Male Metric Adapter Kit-- Type 1					
4C-5672	1 in-14	M16 x 1.5	--	3 in	10.3 tons
4C-5673	1 in-14	M16 x 2.0	--	3 in	9.3 tons
4C-5674	1 in-14	M18 x 1.5	--	3 in	13.4 tons
4C-5675	1 in-14	M20 x 1.5	--	3 in	17.0 tons
4C-5676	1 in-14	M20 x 2.5	--	3 in	14.6 tons
4C-5677	1 in-14	M22 x 1.5	--	3 in	21.0 tons
4C-5678	1 in-14	M24 x 2.0	--	3 in	23.9 tons
4C-5679	1 in-14	M24 x 3.0	--	3 in	21.1 tons

¹Contact Dealer Service Tool Division for capacity. See catalog back cover for numbers and addresses.

Threaded Adapters

Model: All Models

Warranty: Six Months



- Used to connect English and Metric threaded rods
- May be used with 8B-7548 Push Puller
- Also used as an adapter to install metric wheel studs

(Continued)

Threaded Adapters (Continued)

Model: All Models
Warranty: Six Months

Part Number	Capacity	Thread Size	Thread Size (dia x pitch)	Length	Hex Size
140-2183	27.5 tons	1-14 female	M22 x 1.5 female	76.2 mm (3 in)	38.1 mm (1.50 in)
140-2184	20 tons	1-14 female	M20 x 1.5 female	76.2 mm (3 in)	38.1 mm (1.50 in)
140-2185	15 tons	1-14 female	M18 x 1.5 female	76.2 mm (3 in)	38.1 mm (1.50 in)

Step Plates and Centering Spacers

Warranty: Six Months

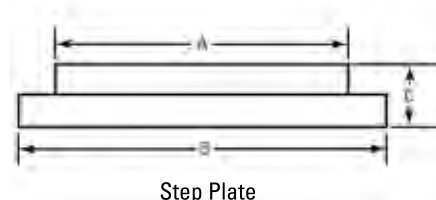
- Used to protect shaft centers from distortion when extreme pressures are applied through the puller screw
- Intended to use between the end of the puller screw and a hollow shaft

Step Plate Part Number ¹	Diameter (A)	Diameter (B)	Height (C)
8B-7560	1.25 in	1.63 in	0.75 in
8B-7561	1.38 in	1.75 in	0.75 in
9S-9154	1.62 in	2.0 in	0.75 in
5P-7377	2.70 in	3.75 in	1.20 in

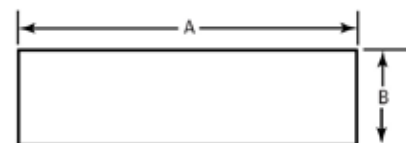
¹ Special tools for flywheel housing seal installation

Centering Spacer

Spacer Part Number	Diameter (A)	Thickness (B)
9S-9155	1.00 in	0.75 in
0L-1774	1.94 in	0.75 in



Step Plate



Spacer

Service Coupler Assemblies

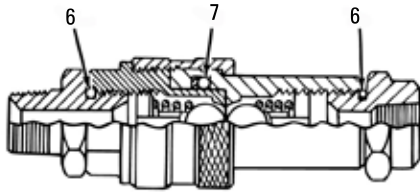
Warranty: Six Months

- Quick disconnect couplers used on all Cat[®] Hydraulic Service Tools
- Have a higher disconnected pressure rating for the male half
- Allows additional protection in case of accidental pressurization

Item	Part Number	Description
1	1P-7437	Protective Cap
2	1P-2378	Dust Cap
3	1P-2375	Coupler Assembly Quick Connective (Male)
4	1P-2376	Coupler Assembly Quick Connective (Female) (2)
5	1P-2377	Plug As - Dust



1P-2375 Coupler and 1P-2376 Coupler Connected

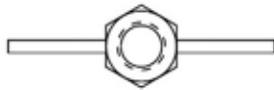


Item	Part Number	Description	Usage
1P-2375 Coupler and 1P-2376 Coupler Connected			
6	4J-5268	Seal	Part of 1P-2375 and 1P-2376
7	2P-5539	Seal	Used on later 1P-2376 Couplers ¹
7	4J-5140	Seal	Used on early 1P-2376 Couplers ¹

¹With the threaded locking collar in extended position, later couplers measure 66.5 mm (2.62 in) and earlier couplers measure 77.7 mm (3.06 in) in length

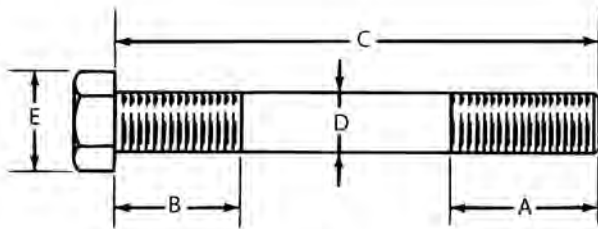
Fast Runner Nuts

Warranty: Six Months



Part Number	Description	Size
9U-6832	Speed Nut	1 1/4 in - 12
1P-0544	Fast Runner Nut	1 1/4 - 7
9U-5345	Fast Runner Nut Assembly	M24 x 3.0
9U-5346	Fast Runner Nut, M30	M30 x 3.5
9U-6809	Nut - Fast Runner, (M36 x 4)	M36 x 4.0
9U-6810	Nut - Fast Runner (M48 x 5.0)	M48 x 5.0
1P-0543	Fast Runner Nut	1 in - 8
9U-6833	Fast Runner Nut Assembly, 250 KN (30 Ton)	1 in - 14
Not Shown		
9U-6800	Nut - Speed (M64)	M64
9U-6903	Nut - Speed (M48)	M48 x 5

Dimensions of Inch forcing screws, puller bolts and studs



(Continued)

Dimensions of Inch forcing screws, puller bolts and studs (Continued)

Part Number	Thread Size A	Thread Length A	Thread Size B	Thread Length B	Length C	Diameter D	Head Size E ¹
Dimensions of Inch forcing screws, puller bolts and studs							
1P-1430	7/16 in-20	2.70 in	--	--	4.50 in	--	0.620 in H
1P-2324	9/16 in-20	5.90 in	--	--	7.00 in ²	--	0.620 in H
5F-7345	5/8 in-18	--	--	--	13.00 in ²	--	0.750 in H
1P-2326	11/16 in-18	7.90 in	--	--	9.10 in ²	--	0.750 in H
6V-7837	3/4 in-16	1.50 in	--	--	--	--	--
8S-6470	3/4 in-16	4.50 in	--	--	--	--	--
3H-0459	3/4 in-16	Full Length	--	--	10.90 in ²	--	1.100 in
2B-1957	--	--	3/4 in - 10	3.30 in	5.50 in	0.594 in	1.100 in
1P-2328	13/16 in-16	11.40 in	--	--	12.80 in ²	--	0.880 in H
3H-0460	7/8 in-14	Full Length	--	--	14.30 in ²	--	H
5P-5265	7/8 in-14	5 3/8 in	--	--	5.30 in	--	1300 in H
1M-6766	7/8 in-9	3.00 in	3/4 in-10	1.00 in	33.00 in	0.875 in	--
5P-2678	7/8 in-9	2.95 in	7/8 in-9	1.50 in	38.20 in	0.870 in	--
6V-2078	1 in-14	14.98 in	--	--	14.98 in	0.990 in	--
5P-8715	1 in-14	6 15/16 in	--	--	6.90 in	--	1.500 in H
5F-7366	1 in-14	--	--	--	11.80 in	--	0.407 in S
8S-6586	1 in-14	24.40 in	--	--	26.00 in ²	--	1.1 in H
5H-9976	1 in-14	5.80 in	--	--	7.30 in ²	--	0.680 in S
5F-7379	1 in-14	7.00 in	--	--	10.80 in	--	1.50 in H
5P-4776	1 in-14	Full Length	--	--	18.00 in	--	--
9S-6074	1 in-8	10.50 in	--	--	19.70 in	--	0.680 in S
9U-5267	1 in-8	Full Length	--	--	25.00 in	--	--
4C-9633	1 in-14	Full Length	--	--	25.00 in	--	--
1U-7758	1 1/8 in-12	Full Length	--	--	20.00 in	--	H
5P-0256	1 1/4 in-12	11.50 in	--	--	13.20 in ²	--	1.500 in H
5P-8714	1 1/4 in-7	8.10 in	1 1/4 in-12	1.30 in	14.00 in	1.250 in	--
4C-9634	1 1/4 in-12	Full Length	--	--	28.90 in	--	--
5P-4184	1 1/4 in-12	18.00 in	--	--	18.00 in	--	--
165-3790	1 1/4 in-12	60.00 in	--	--	60.00 in	--	--
6V-2074	1 1/4 in-12	32.09	--	--	32.09	--	--
3H-0470	1 1/4 in-12	--	--	--	17.10 in	--	S
9U-6698	1 1/4 in-12	Full Length	--	--	48.00 in	--	--
5F-9893	1 1/2 in-6	19.50 in	1 1/2 in-12	1.50 in	23.00 in	--	--
5P-5207	1 1/2 in-12	--	2 1/2 in-8	--	28.00 in	--	R
5P-7273	1 1/2 in-12	Full Length	--	--	23.60 in	--	--
5P-5264	1 1/2 in-12	4 3/4 in	--	--	4.50 in	--	--
6V-6084	2 1/2 in-8	5.63 in	2 1/2 in-8	3.94 in	23.62 in	--	--
Dimensions of Metric forcing screws, puller bolts and studs: Metric Guide Studs							
169-6969	M16 x 2.0	25.4 mm	M16 x 2.0	101.6 mm	435 mm	16 mm	--
128-5049	M20 x 2.5	32 mm	--	--	152 mm	20 mm	--
1U-6130	M24 x 3	70 mm	--	--	254 mm	24 mm	--
1U-9767	M24 x 3	70 mm	--	--	279 mm	24 mm	--
1U-9817	M24 x 3	70 mm	--	--	305 mm	24 mm	--
174-8986	M30 x 3.5	55 mm	--	--	220 mm	30 mm	--
154-6400	M30 x 3.5	75 mm	M30 x 3.5	75 mm	700 mm	30 mm	--

(Continued)

Dimensions of Inch forcing screws, puller bolts and studs (Continued)

Part Number	Thread Size A	Thread Length A	Thread Size B	Thread Length B	Length C	Diameter D	Head Size E ¹
Dimensions of Metric forcing screws, puller bolts and studs: Metric Guide Studs (Continued)							
175-6853	M36 x 3.5	65 mm	--	--	285 mm	36 mm	--
Metric Forcing Bolts							
154-6360	M8 x 1.25	Full	--	--	150 mm ²	8 mm	13 mm H
154-6181	M10 x 1.5	Full	--	--	150 mm ²	10 mm	16 mm H
154-6182	M12 x 1.75	Full	--	--	150 mm ²	12 mm	18 mm H
154-6183	M16 x 2.0	Full	--	--	300 mm ²	16 mm	24 mm H
154-6184	M20 x 2.5	Full	--	--	300 mm ²	20 mm	30 mm H
325-4173	M24 x 3.0	Full	--	--	101.6 mm ²	24 mm	36 mm H
154-6185	M24 x 3.0	Full	--	--	250 mm ²	24 mm	36 mm H
176-6536	M30 x 3.5	Full	--	--	250 mm ²	30 mm	46 mm H

¹R-Round Head H-Hex Head S-Square Head

²Dimensions include bolt head

Metric Threaded Steel Rod

Model: General Use

Warranty: Six Months



- General usage service tools released for disassembly and assembly of various hydraulic pumps and motors
- Can be used wherever metric thread bolt, forcing screw or puller stud required as long as mechanical limits of rods are not exceeded
- Many components used on Cat® machines contain metric threads; threaded holes are often provided on those components to aid in disassembly and assembly; metric threaded bolts, however, are not always readily available in right size and length; versatile metric threaded rods come in 6 sizes and can be cut to correct length for the job.

Reference

SEN3358, Service Manual, Disassembly and Assembly (calls for metric threaded rods for pumps and motors used in 205, 206, 211, 212, 213, 214 and 224 Excavators)

Part Number	Metric Thread	Stud Length	Capacity
Dimensions and Capacities for Metric Puller Studs			
1U-6340	M6 x 1.0	1,000 mm (39 in)	0.9 tons
1U-6341	M8 x 1.25	1,000 mm (39 in)	1.6 tons
9U-6814	M48 x 5.0	920 mm (36 in)	100 tons
9U-6813	M48 x 5.0	508 mm (20 in)	100 tons
9U-6812	M48 x 5.0	381 mm (15 in)	100 tons
9U-6815	M48 x 5.0	1,575 mm (62 in)	100 tons
9U-6702	M64 x 6.0	2,600 mm (102 in)	150 tons
4C-8150	M64 x 6.0	1,800 mm (71 in)	150 tons
1U-6342	M10 x 1.5	1,000 mm (39 in)	2.5 tons
123-4370	M20 x 2.5	350 mm (14 in)	20 tons
1U-6343	M12 x 1.75	1,000 mm (39 in)	3.7 tons

Part Number	Metric Thread	Stud Length	Capacity
Dimensions and Capacities for Metric Puller Studs (Continued)			
9U-5343	M24 x 3.0	650 mm (26 in)	30 tons
1U-6344	M14 x 2	1,000 mm (39 in)	5.1 tons
9U-5344	M30 x 3.5	800 mm (31 in)	50 tons
9U-7692	M16 x 2	1,000 mm (39 in)	6.8 tons
169-6969	M16 x 2	435 mm (17 in)	6.8 tons
9U-6811	M36 x 4.0	1,575 mm (62 in)	80 tons
9U-7998	M36 x 4.0	920 mm (36 in)	80 tons
4C-8176	M4 x 0.7	914 mm (36 in)	--
136-5747	M48 x 5.0	--	--
162-4197	M24 x 3.0	1,200 mm (47 in)	--
137-8460	M30 x 3.5	1,980 mm (78 in)	--

Gauges

Warranty: Six Months

- Capacity 0 to 70,000 kPa (0 to 10,000 psi)
- Accuracy: Grade A
- Liquid-filled
- 101.6 mm (4 in) diameter face

Part Number	Description	Scales
8T-0820	Standard Pressure Gauge	10,000 psi, 70,000 kPa
8T-5343	Pressure Gauge	10,000 psi 30, 50, 70, 100 and 150 ton
8T-5342	Back mount -- Face in psi and tonnage	10,000 psi 30, 50, 70, 100 and 150 ton

Hoses

Warranty: Six Months

Note:

The service couplers and adapters are for adapting the hoses to Cat® Hydraulic Pumps.

Part Number	Description	Length	Inside Diameter	Pressure Capabilities	Coupling Thread Size
8F-0024	Hose Assembly	1.82 m (6 ft)	6.35 mm (1/4 in)	689.5 kPa (100 psi)	1/4 in NPTF
6D-7726	Hydraulic Hose (2)	3.50 m (11 1/2 ft)	6.35 mm (1/4 in)	689.5 kPa (100 psi)	1/4 in NPTF
Optional Accessories (Sold Separately)					
1P-7437	Protective Cap	--	--	--	--
1P-2378	Dust Cap	--	--	--	--
1P-2375	Coupler Assembly Quick Connective (Male)	--	--	--	--
1P-2376	Coupler Assembly Quick Connective (Female) (2)	--	--	--	--
1P-2377	Plug As - Dust	--	--	--	--
135-2532	Bushing	--	--	--	--
135-2533	Street Elbow	--	--	--	--

