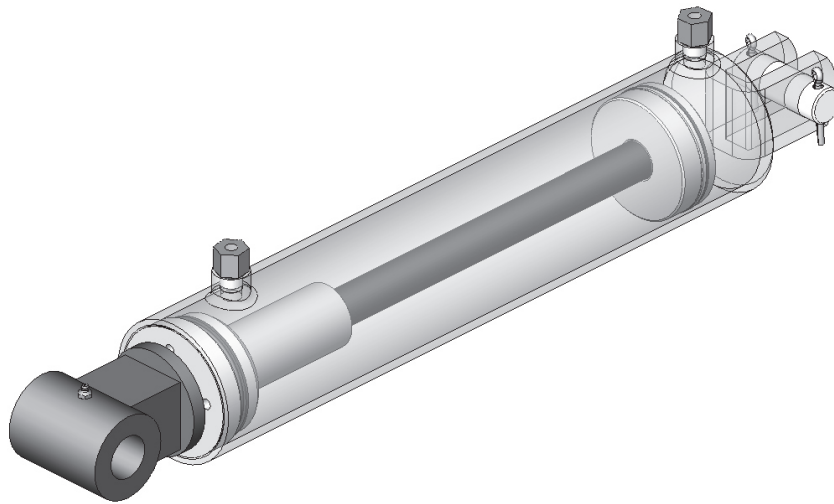




# Hydraulic Cylinders Repair Parts Catalog



**LANDOLL COMPANY, LLC**

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# Illustrated Parts List

## Cylinders by Bore Size and Stroke

Bore Size Stroke	Part Number	Rod Diameter
1.75 x 06	129251P	1.0
2 x 03	204810P	1.125
2 x 06	9D282G	1.0
2 x 06	9D282L	1.125
2.5 x 06	9J440G	1.125
2.5 x 06	9J440L	1.125
2.5 x 20	6J812G	1.25
2.5 x 20	6J812L	1.25
2.5 x 20	116344P	1.25
3 x 06	3J567P	1.375
3 x 08	2J674C	1.25
3 x 08	2J674L	1.25
3 x 08	2J674M	1.375
3 x 08	2J674P	1.375
3 x 08	3J603C	1.25
3 x 08	3J603P	1.375
3 x 08	5J280G	1.125
3 x 08	5J280P	1.375
3 x 08	5K440G	1.25
3 x 08	5K440L	1.25
3 x 16	9D137G	1.375
3 x 16	9D137L	1.5
3 x 16	9D137P	1.5
3 x 30	6J216P	1.375
3.5 x 06	167310P	1.5
3.5 x 08	5J128P	1.375
3.5 x 16	4K777G	1.375
3.5 x 16	6K843G	1.5
3.5 x 16	6K843L	1.5
3.5 x 16	7J680C	1.75
3.5 x 16	7J680G	1.75
3.5 x 16	7J680P	1.5
3.5 x 16	9D524G	1.375
3.5 x 16	9D524L	1.5
3.5 x 16	9K733G	1.75
3.5 x 16	9K733L	1.75
3.5 x 16	2P381L	1.25
3.5 x 20	1P156L	1.5
3.5 x 20	6J811G	1.375
3.5 x 20	6J811L	1.5
3.5 x 20	6J811P	1.5
3.75 x 08	2K087P	1.375
3.75 x 16	8K902M	--
3.75 x 16	8K924M	--

3.75 x 16	2P931L	1.375
4 x 08	193252P	1.375
4 x 08	2K088P	1.375
4 x 08	1-242-010171-3P	1.75
4 x 10	167308P	1.75
4 x 12	234522P	1.375
4 x 12	1-242-010197-3P	1.75
4 x 16	4K992G	1.75
4 x 16	4K992L	1.75
4 x 16	8K901M	--
4 x 16	8K923M	--
4 x 16	9D731G	1.75
4 x 16	9D731L	1.5
4 x 16	9D731P	1.5
4 x 20	1-242-010180-3P	1.75
4 x 24	3J568G	1.75
4 x 24	3J568L	2.0
4 x 24	9J493G	1.75
4 x 24	9J493L	1.75
4 x 24	1-242-010172-3P	1.75
4 x 29.75	229388	1.75
4 x 30	219160L	1.75
4 x 30	5J830G	1.75
4 x 30	5J830L	1.75
4 x 30	5J830P	1.75
4 x 30	9K502P	1.75
4 x 36	2P460L	1.75
4 x 48	2P810L	2.0
4.5 x 08	2K094P	2.0
4.5 x 08	193251P	2.0
4.5 x 14	9K389G	1.75
4.5 x 14	9K389L	1.75
4.5 x 14	181342P	2.0
4.5 x 14	234521P	2.0
4.5 x 16	3J818G	1.75
4.5 x 16	3J818L	1.75
4.5 x 20	114004P	2.0
4.5 x 36	183553L	1.75
4.75 x 08	2K093P	1.5
5 x 24	1-242-010172-5P	2.0
5 x 42	173376L	2.0
5 x 42	173376CH	2.0
5 x 48	9K501P	2.25
5.5 x 42	181526L	2.0
5.5 x 42	181526W	2.0

# 1P156L Hydraulic Cylinder, 3-1/2 x 20 - Lion - 648294

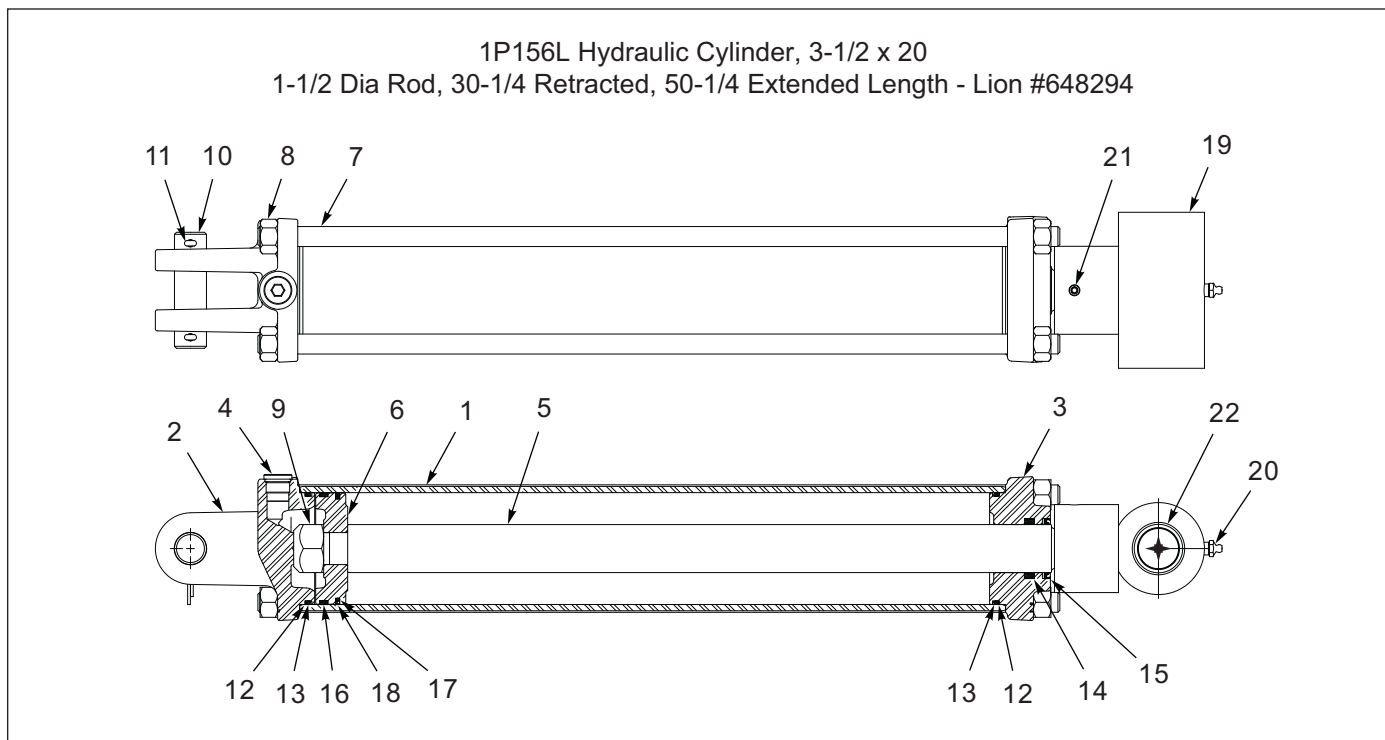


Figure 1-1: 1P156L Hydraulic Cylinder, 3-1/2 x 20 - Lion - 648294

# 1P156L Hydraulic Cylinder, 3-1/2 x 20 - Lion - 648294

ITEM	PART NUMBER	DESCRIPTION	QTY
	1P156	HYD CYL, 3 1/2 X 20	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	PLUG, SOCKET HEAD 3/4-16	1
5	-----	ROD	1
6	-----	PISTON	1
7	-----	TIE ROD	4
8	-----	NUT, HEX 5/8-18, ZP	8
9	-----	NUT, LOCK 1-14, GRB, ZP	1
10	5J650	PIN, 1.0 X 3.625 H2	1
11	110-4224	PIN, COTTER 3/16 X 2IN LG	2
12	-----	SEAL, BU#236 19PI-236	2
13	-----	O-RING, 236 (3.25X3.5) D90	2
14	-----	SEAL, HALLITE 605 ROD 1-1/2 D	1
15	-----	SEAL, NOK-AR2263-EO 1-1/2" BO	1
16	-----	WEAR RING, 3.50-3.25-.25-GFN	1
17	-----	O-RING, 151 (3.0X3.188) DURO90	1
18	-----	SEAL, PTFE PISTON RING 3-1/2D	1
19	1P339	CROSS TUBE, ROD END <b>(INCLUDES ITEMS 20-22)</b>	1
20	1-298-010001-1	FIT, GREASE 1/8PTF X 0.688	1
21	1P444	SET SCREW, 3/8-16 X 3/4 NYLON TIP	1
22	1P196	SPRING BUSHING, 1.25X1.5X0.75	2
23	1P744	LION CYLINDER SEAL KIT (3.5") <b>(INCLUDES ITEMS 12-18)</b>	1

# 1P156L Hydraulic Cylinder, 3-1/2 x 20 - Lion - 671662

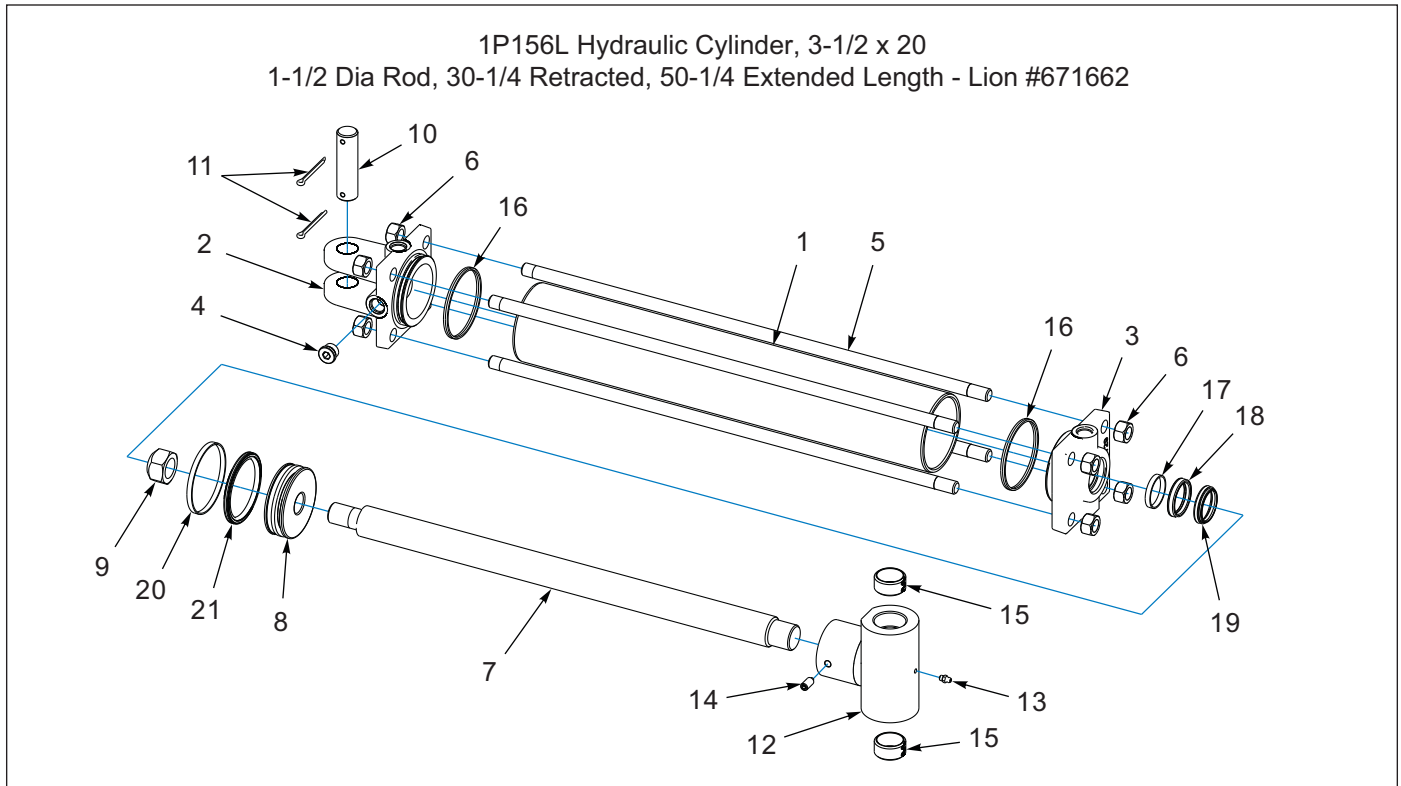
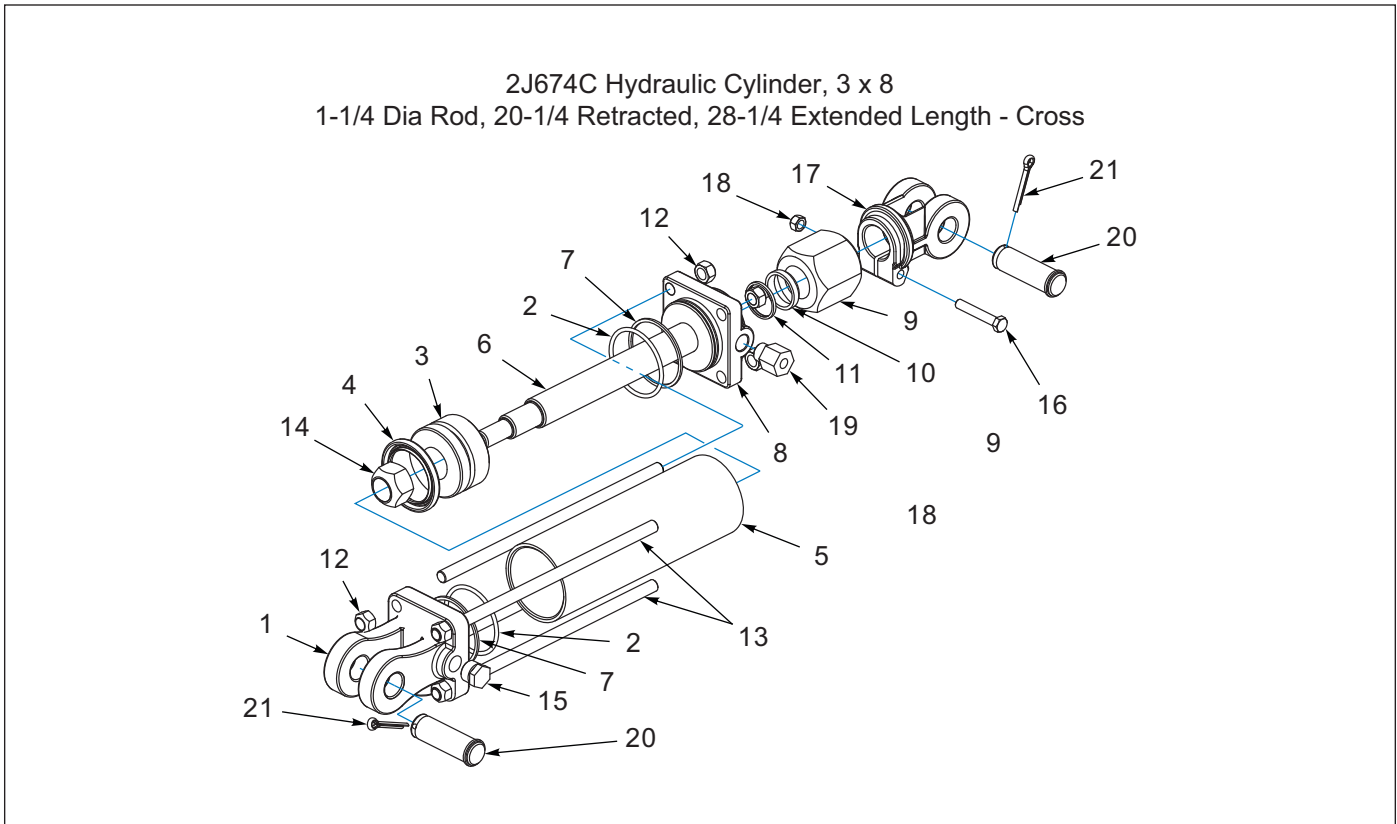


Figure 1-2: 1P156L Hydraulic Cylinder, 3-1/2 x 20 - Lion - 671662

# 1P156L Hydraulic Cylinder, 3-1/2 x 20 - Lion - 671662

ITEM	PART NUMBER	DESCRIPTION	QTY
	1P156	HYD CYL, 3 1/2 X 20	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	PLUG, SOCKET HEAD 3/4-16	1
5	-----	TIE ROD	4
6	-----	NUT, HEX 5/8-18, ZP	8
7	-----	ROD	1
8	-----	PISTON	1
9	-----	NUT, LOCK 1-14, GRB, ZP	1
10	5J650	PIN, 1.0 X 3.625 H2	1
11	110-4224	PIN, COTTER 3/16 X 2IN LG	2
12	1P339	CROSS TUBE, ROD END (INCLUDES ITEMS 13-15)	1
13	1-298-010001-1	FIT, GREASE 1/8PTF X 0.688	1
14	1P444	SET SCREW, 3/8-16 X 3/4 NYLON TIP	1
15	1P196	SPRING BUSHING, 1.25X1.5X0.75	2
16	-----	SEAL, BU#236 19PI-236	2
17	-----	O-RING, 236 (3.25X3.5) D90	2
18	-----	SEAL, HALLITE 605 ROD 1-1/2 D	1
19	-----	SEAL, NOK-AR2263-EO 1-1/2"BO	1
20	-----	WEAR RING, 3.50-3.25-.25-GFN	1
21	-----	O-RING, 151 (3.0X3.188) DURO90	1
22	1P744	LION CYLINDER SEAL KIT (3.5") (INCLUDES ITEMS 16-21)	1

**2J674C Hydraulic Cylinder, 3 x 8 - Cross**



**Figure 1-3: 2J674C Hydraulic Cylinder, 3 x 8 - Cross**

**2J674C Hydraulic Cylinder, 3 x 8 - Cross**

ITEM	PART NUMBER	DESCRIPTION	QTY
	2J674	HYD CYL. 3 X 8	1
1	-----	BASE CLEVIS	1
2	-----	O-RING	2
3	-----	PISTON	1
4	-----	CROWN SEAL	1
5	5K687	TUBE	1
6	-----	ROD	1
7	-----	BACK UP	2
8	-----	HEAD	1
9	-----	STOP COLLAR ASSEMBLY	1
10	-----	WIPER	1
11	-----	U-CUP	1
12	9K485	TIE ROD NUT	8
13	-----	TIE ROD	4
14	-----	NUT	1
15	-----	PLUG ASSEMBLY	1
16	5K697	CAPSCREW	1
17	5K696	ROD CLEVIS	1
18	5K698	NUT	1
19	7J025	ADAPTER ASSEMBLY	2
20	2D799	CLEVIS PIN, 1 X 3"	2
21	110-4224	PIN,COTTER 3/16 X 2IN LG	2

## 2J674L Hydraulic Cylinder, 3 x 8 - Lion - 648424

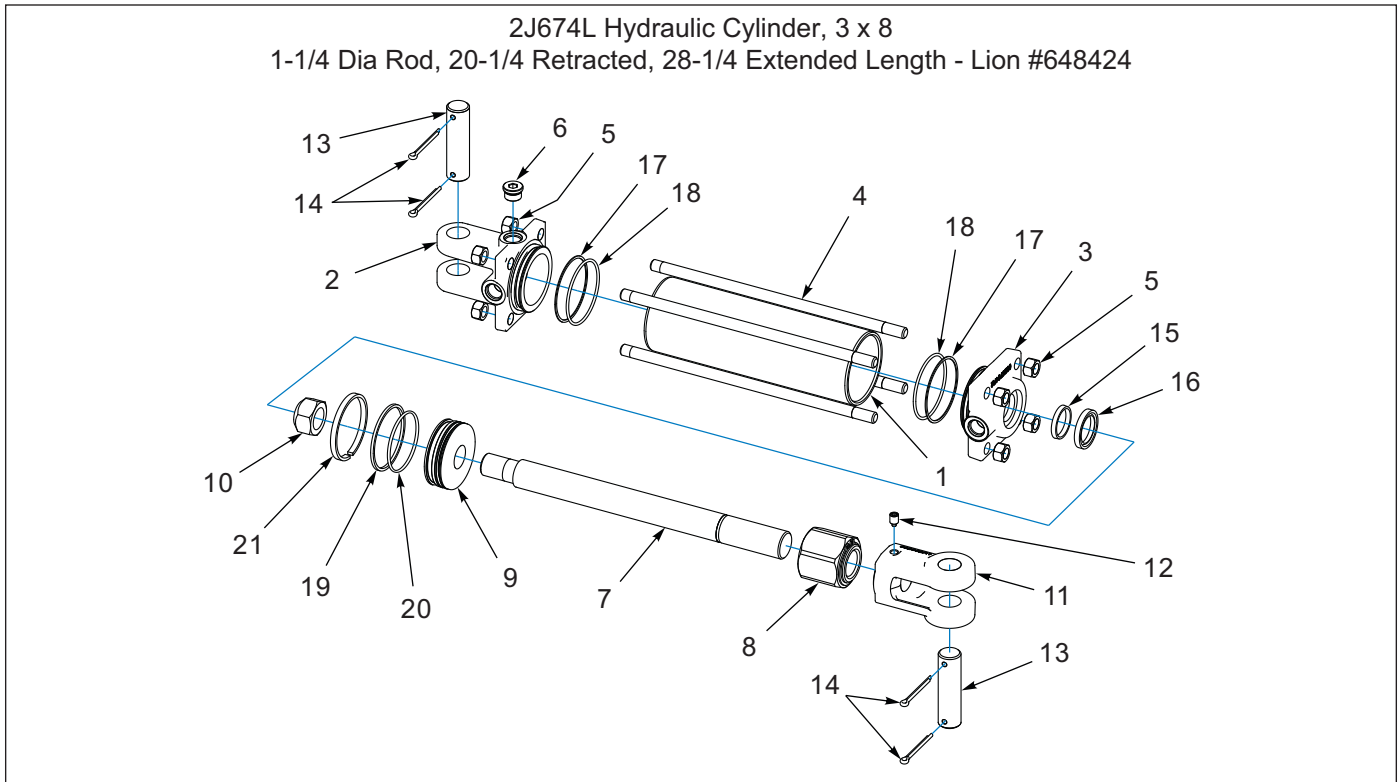


Figure 1-4: 2J674L Hydraulic Cylinder, 3 x 8 - Lion - 648424

## 2J674L Hydraulic Cylinder, 3 x 8 - Lion - 648424

ITEM	PART NUMBER	DESCRIPTION	QTY
	2J674	HYD CYLINDER - 3 X 8	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	1-512-010007-09	NUT,HEX 1/2-13,ZP	8
6	-----	PLUG,SOCKET HEAD 3/4-16	1
7	-----	ROD	1
8	-----	STROKE CONTROL ASSEMBLY	1
9	-----	PISTON	1
10	-----	NUT, LOCK 1.0-14 GRB	1
11	2P737	ROD CLEVIS 1" PIN X 1.25-12 X 2.625 (INCLUDES ITEMS 12)	1
12	1P443	SET SCREWS,3/8-16 X 1/2 NYLON TIP	1
13	5J650	PIN, 1.0 X 3.625 H2	2
14	110-4224	PIN,COTTER 3/16 X 2IN LG	4
15	-----	SEAL,HALLITE 605 ROD 1-1/4 D	1
16	-----	SEAL WIPER ROD, 1.250 METAL E	1
17	-----	SEAL,BU#232 19PI-232	2
18	-----	O-RING,232 (2.75X3) BUNAN D9	2
19	-----	SEAL,PTFE PISTON RING 3 DIA	1
20	-----	O-RING, 145 (2.562X2.75) DUR9	1
21	-----	WEAR RING,3.00-2.75-.25-GFN	1
22	1P743	SEAL KIT (INCLUDES ITEMS 15-21)	1

## 2J674L Hydraulic Cylinder, 3 x 8 - Lion - 671654

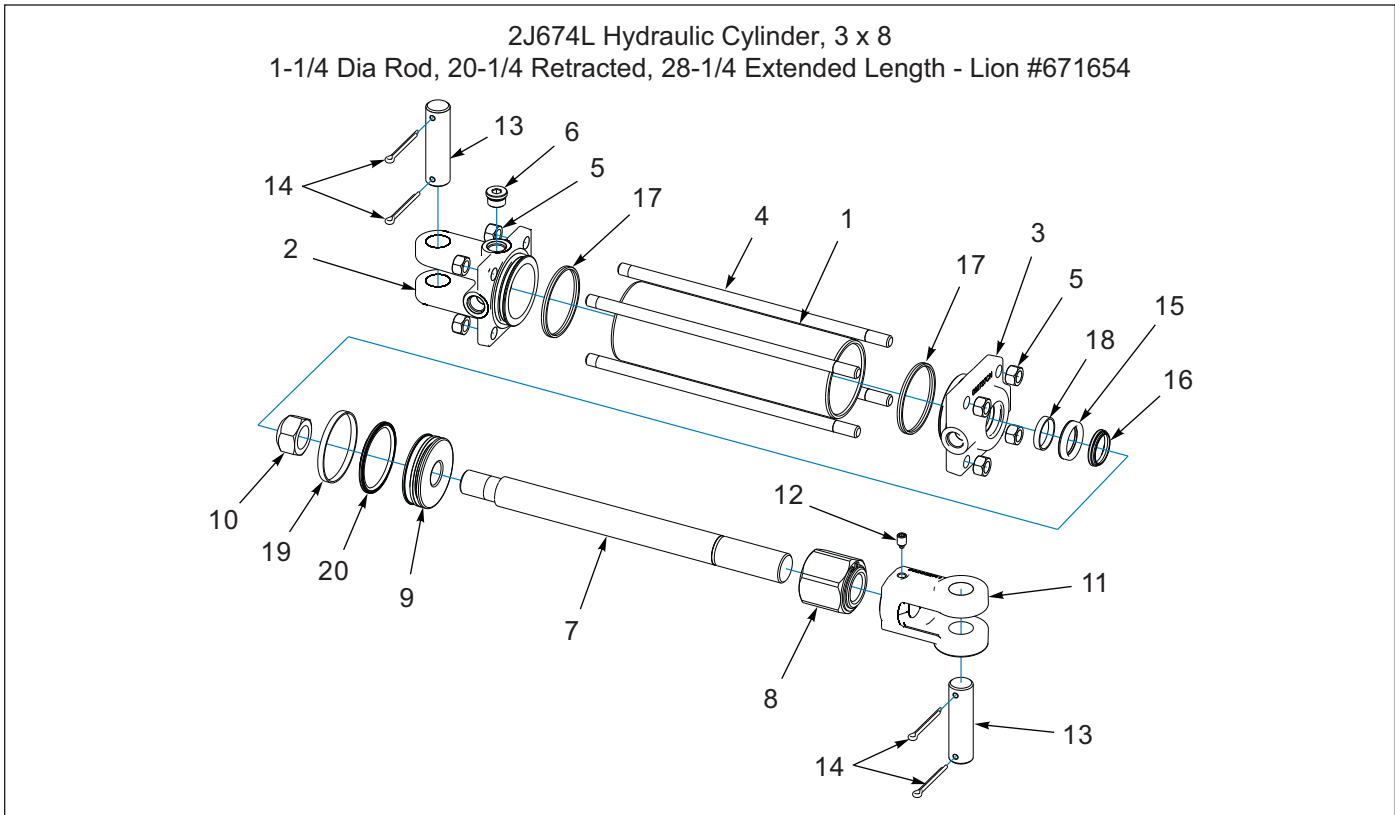


Figure 1-5: 2J674L Hydraulic Cylinder, 3 x 8 - Lion - 671654

## 2J674L Hydraulic Cylinder, 3 x 8 - Lion - 671654

ITEM	PART NUMBER	DESCRIPTION	QTY
	2J674	HYD CYLINDER - 3 X 8	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	1-512-010007-09	NUT,HEX 1/2-13,ZP	8
6	-----	PLUG,SOCKET HEAD 3/4-16	1
7	-----	ROD	1
8	-----	STROKE CONTROL ASSEMBLY	1
9	-----	PISTON	1
10	-----	NUT, LOCK 1.0-14 GRB	1
11	2P737	ROD CLEVIS 1" PIN X 1.25-12 X 2.625 (INCLUDES ITEMS 12)	1
12	1P443	SET SCREWS,3/8-16 X 1/2 NYLON TIP	1
13	5J650	PIN, 1.0 X 3.625 H2	2
14	110-4224	PIN,COTTER 3/16 X 2IN LG	4
15	-----	SEAL,HALLITE 605 ROD 1-1/4 D	1
16	-----	SEAL WIPER ROD, 1.250 METAL E	1
17	-----	SEAL,BU#232 19PI-232	2
18	-----	O-RING,232 (2.75X3) BUNAN D9	2
19	-----	SEAL,PTFE PISTON RING 3 DIA	1
20	-----	WEAR RING,3.00-2.75-.25-GFN	1
21	1P743	SEAL KIT (INCLUDES ITEMS 15-20)	1



## 2J674M Hydraulic Cylinder, 3 x 8 - Midway

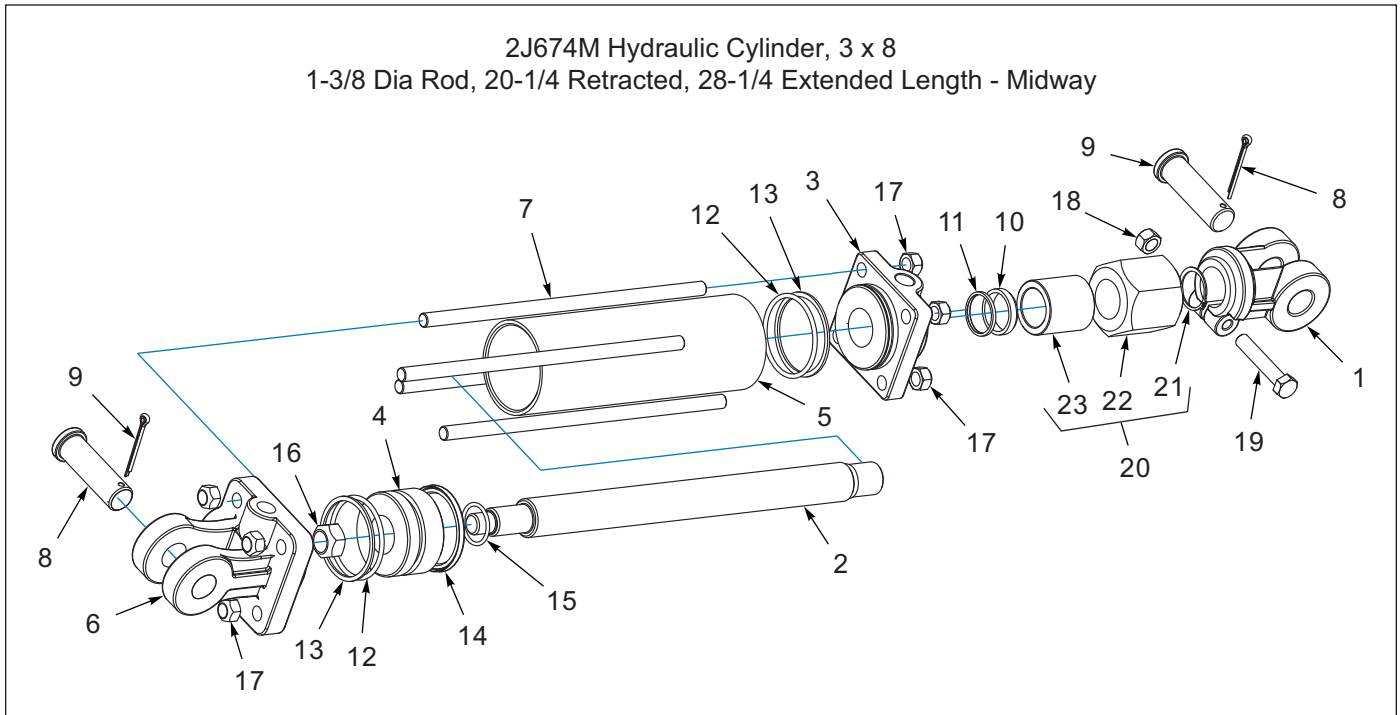
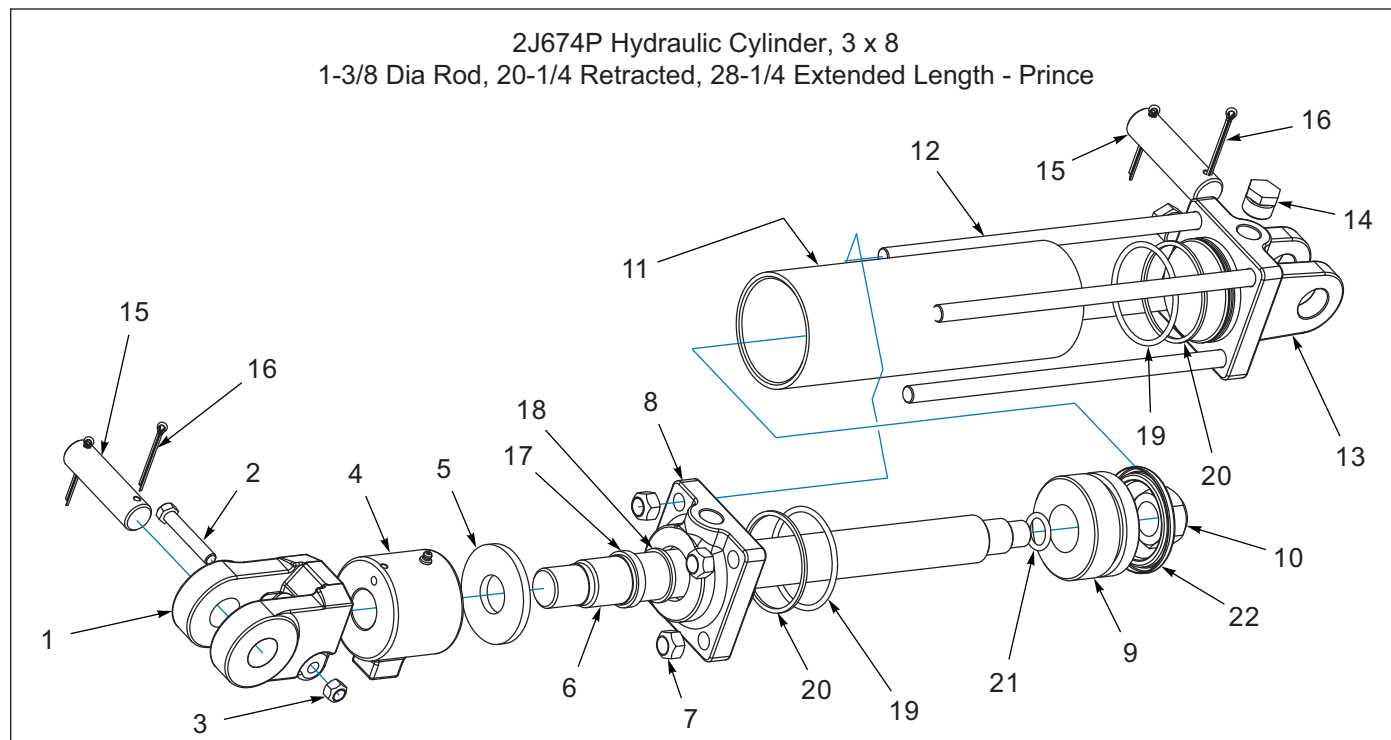


Figure 1-6: 2J674M Hydraulic Cylinder, 3 x 8 - Midway

## 2J674M Hydraulic Cylinder, 3 x 8 - Midway

ITEM	PART NUMBER	DESCRIPTION	QTY
	2J674	HYD CYLINDER - 3 X 8	1
1	9K484	CLEVIS	1
2	9K483	ROD	1
3	9K482	HEAD	1
4	9K481	PISTON	1
5	9K480	TUBE	1
6	9K479	BASE	1
7	9K478	TIE ROD	4
8	9K038	CLEVIS PIN	2
9	110-4224	PIN,COTTER 3/16 X 2IN LG	2
10	-----	ROD WIPER	1
11	-----	U-CUP	1
12	-----	O-RING	2
13	-----	BACK-UP	2
14	-----	CROWN SEAL	1
15	-----	O-RING	1
16	-----	PISTON NUT,	1
17	9K485	TIE ROD NUT,	8
18	1-512-010005-05	CLEVIS NUT, 3/8-16 NC STOVER GR. B PLATED	1
19	7C937	HHCS, 3/8-16 NC X 1 3/4" SOCKET HD.	1
20	9K486	COLLAR ASSEMBLY (INCLUDES ITEMS 21-23)	1
21	9K489	RETAINER	1
22	9K488	HEX COLLAR	1
23	9K487	ROD COLLAR	1
24	9K490	SEAL KIT (INCLUDES ITEMS 10-15)	1

## 2J674P Hydraulic Cylinder, 3 x 8 - Prince



**Figure 1-7: 2J674P Hydraulic Cylinder, 3 x 8 - Prince**

## 2J674P Hydraulic Cylinder, 3 x 8 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	2J674	HYD CYLINDER - 3 X 8	1
1	9D481	ROD END CLEVIS	1
2	1-654-010051-10	HHCS, 3/8-16 NC X 2 1/4" LONG GR. 5	1
3	1-512-010005-05	HEX NUT, SLFLKG GRB 3/8-16	1
4	7K943	STROKE CONTROL ASSEMBLY	1
5	5J170	DUST COVER	1
6	7K942	PISTON ROD	1
7	2C112	HEX NUT, 1/2-13 NC - HEAVY	4
8	7K931	GLAND (WITH PORT REQUIRING O-RING FITTING)	1
9	7K930	PISTON	1
10	-----	LOCKNUT, 1-14 UNF, SELF LOCKING	1
11	-----	TUBE	1
12	7K934	TIE ROD	4
13	7J049	BASE (WITH PORTS REQUIRING O-RING FITTINGS)	1
14	1-007-010025	PLUG, 3/4-16 O-RING BOSS	3
15	5J650	CLEVIS PIN	2
16	110-4224	PIN,COTTER 3/16 X 2IN LG	4
17	-----	ROD WIPER	1
18	-----	U-CUP	1
19	-----	O-RING	2
20	-----	BACK-UP WASHER	2
21	-----	O-RING	1
22	-----	CROWN SEAL	1
23	7K926	PMCK-BD-0565 SEAL KIT (INCLUDES ITEMS 17-22)	1

## 2K087P Hydraulic Cylinder, 3-3/4 x 8 - Prince

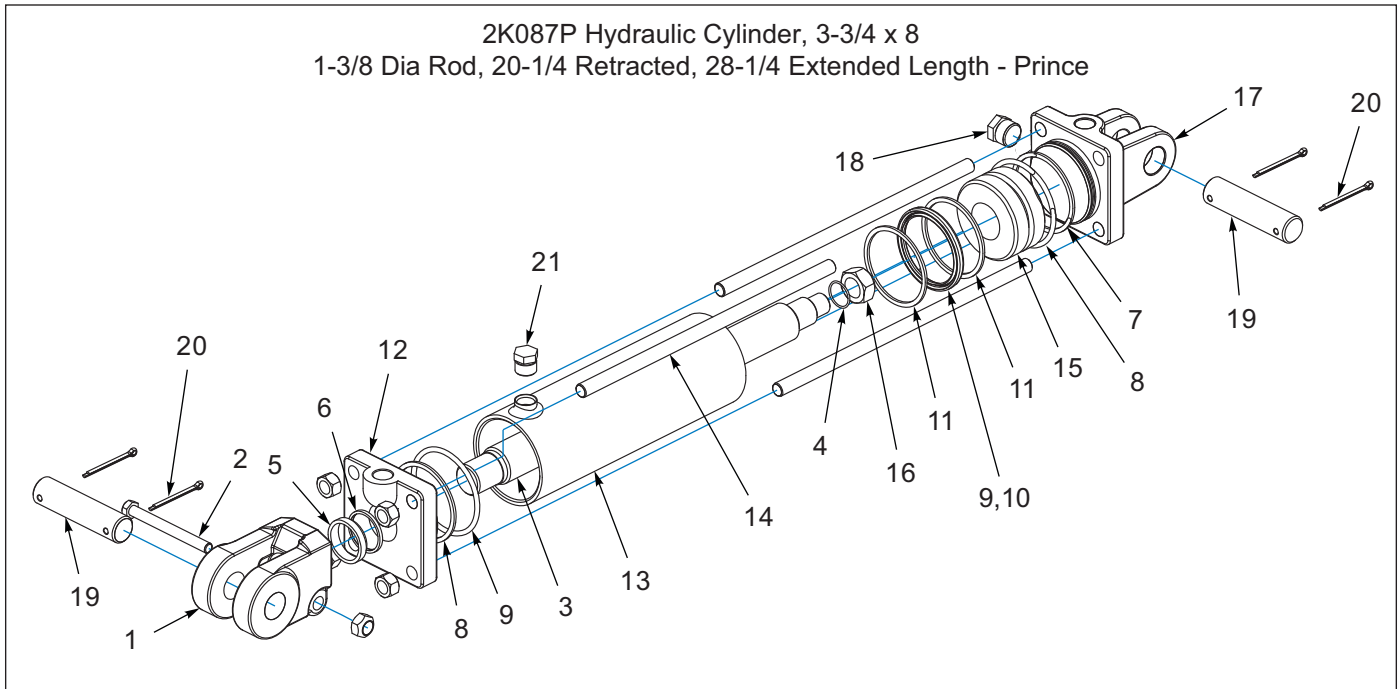
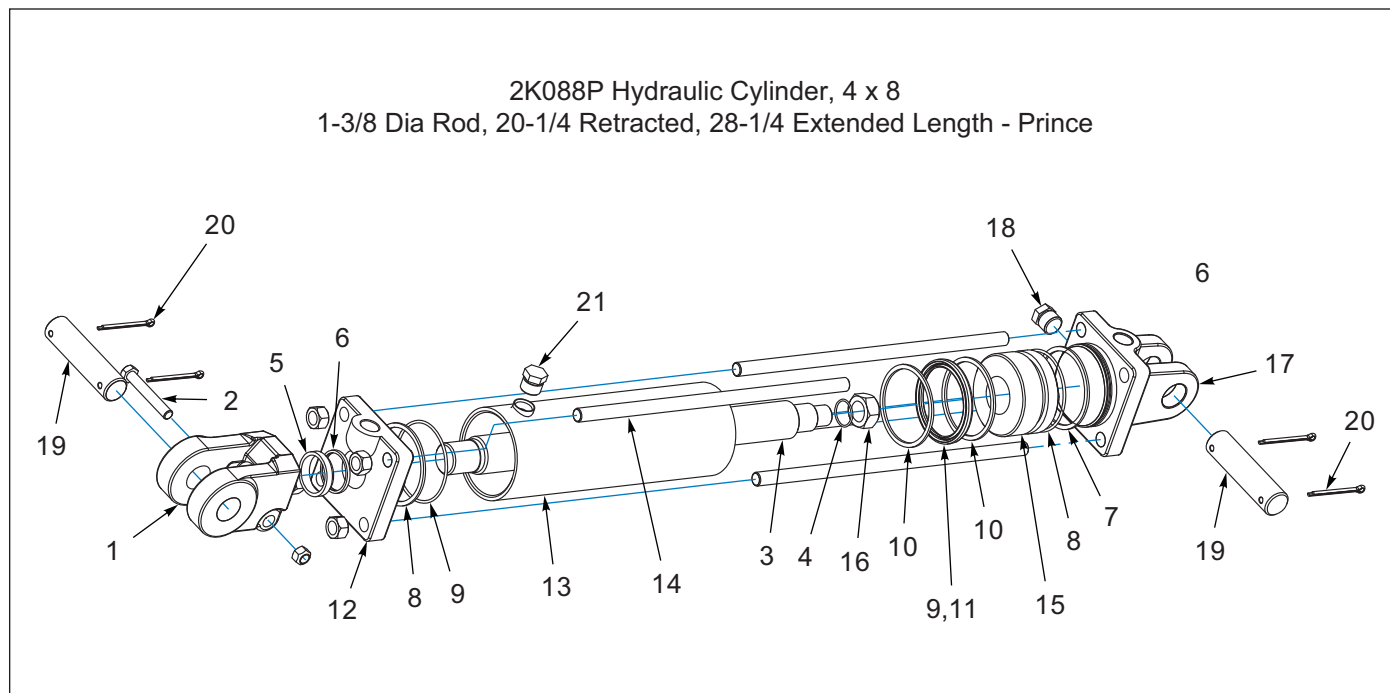


Figure 1-8: 2K087P Hydraulic Cylinder, 3-3/4 x 8 - Prince

## 2K087P Hydraulic Cylinder, 3-3/4 x 8 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	2K087	HYD CYLINDER - 3.75 X 8	1
1	-----	ROD END CLEVIS,W/1.125-12UNF-3 THRD (3J723) (BEFORE 02/98)	1
1	140306	CLEVIS FOR 1-242-010179-2 (AFTER 02/98)	1
2	1-654-010051-11	SCREW HX CP, 3/8-16 X 2 1/2 G5 ZP	1
2	1-512-010005-05	NUT, HEX SLFLKG GRB 3/8-16	1
3	2K321	PISTON ROD, 1.125-12UNF-3 CLEVIS END (BEFORE 02/98)	1
3	140306	CLEVIS FOR 1-242-010179-2 (AFTER 02/98)	1
4	-----	O-RING	1
5	-----	ROD WIPER	1
6	-----	U-CUP	1
7	-----	BACK UP WASHER	2
8	-----	O-RING	2
9	-----	O-RING	1
10	-----	TEFLON SEAL	1
11	-----	BEARING RING	2
12	2K318	GLAND W/ BUSHING	1
13	9J651	TUBE ASSEMBLY	1
14	8J859	TIE ROD WITH NUT	4
15	2K319	PISTON	1
16	-----	LOCK NUT, 1"-14 NF	1
17	7J064	BASE	1
18	1-007-010025	PLUG,3/8-16 O-RING BOSS	3
19	7J067	CLEVIS PIN, 1" DIA. X 4" LONG	2
20	110-4224	PIN, COTTER 3/16 X 2IN LG	4
21	9J623	PLUG	1
22	2K320	PMCK-AN-233 SEAL KIT (INCLUDES ITEMS 4-11)	1

## 2K088P Hydraulic Cylinder, 4 x 8 - Prince



**Figure 1-9: 2K088P Hydraulic Cylinder, 4 x 8 - Prince**

## 2K088P Hydraulic Cylinder, 4 x 8 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	2K088	HYD CYLINDER - 4 X 8	1
1	-----	ROD END CLEVIS,W/1.125-12UNF-3 THRD (3J723) (BEFORE 02/98)	1
1	140306	CLEVIS FOR 1-242-010179-2 (AFTER 02/98)	1
2	1-654-010051-11	SCREW HX CP, 3/8-16 X 2 1/2 G5 ZP	1
2	1-512-010005-05	NUT, HEX SLFLKG GRB 3/8-16	1
3	2K321	PISTON ROD, 1.125-12UNF-3 CLEVIS END (BEFORE 02/98)	1
3	140306	CLEVIS FOR 1-242-010179-2 (AFTER 02/98)	1
4	-----	O-RING	1
5	-----	ROD WIPER	1
6	-----	U-CUP	1
7	-----	BACK UP WASHER	2
8	-----	O-RING	2
9	-----	O-RING	1
10	-----	BEARING RING	2
11	-----	TEFON SEAL	2
12	2K322	GLAND	1
13	9J622	TUBE ASSEMBLY	1
14	8J859	TIE ROD WITH NUT	4
15	2K323	PISTON	1
16	-----	LOCK NUT, 1"-14 NF	1
17	7J053	BASE	1
18	1-007-010025	PLUG, 3/4-16 O-RING BOSS	3
19	7J067	CLEVIS PIN, 1" DIA. X 4" LONG	2
20	110-4224	PIN,COTTER 3/16 X 2IN LG	4
21	9J623	PLUG	1
22	2K324	SEAL KIT (INCLUDES ITEMS 4 - 11)	1

## 2K093P Hydraulic Cylinder, 4-3/4 x 8 - Prince

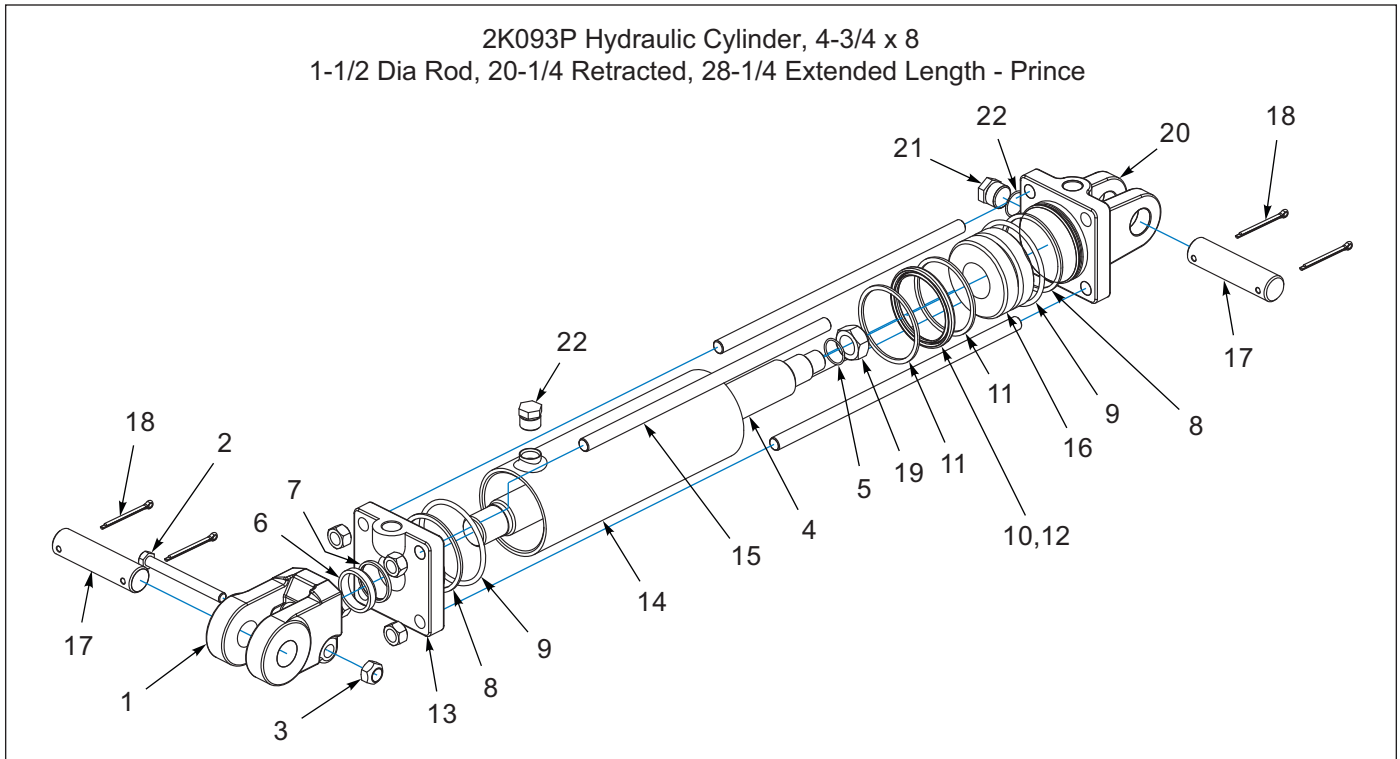


Figure 1-10: 2K093P Hydraulic Cylinder, 4-3/4 x 8 - Prince

## 2K093P Hydraulic Cylinder, 4-3/4 x 8 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	2K093	HYD CYLINDER - 4 3/4 X 8	1
1	1J072	ROD END CLEVIS	1
2	1-654-010051-11	SCREW HX CP 3/8-16X2-1/2 G5 ZP	1
3	1-512-010005-05	NUT, HEX SLFLKG GRB 3/8-16	1
4	2K442	PISTON ROD	1
5	-----	O-RING	1
6	-----	ROD WIPER	1
7	-----	U-CUP	1
8	-----	BACK UP WASHER	2
9	-----	O-RING	2
10	-----	O-RING	1
11	-----	BEARING RING	2
12	-----	TEFON SEAL	1
13	-----	GLAND W/ BUSHING	1
14	9J628	TUBE ASSEMBLY	1
15	5J161	TIE ROD WITH NUT	4
16	-----	PISTON	1
17	7J067	CLEVIS PIN, (1" DIA. X 4" LONG)	2
18	110-4224	PIN,COTTER-3/16 X 2IN LG	4
19	8J852	LOCK NUT, 1-1/8"-12 GRB,ZP	1
20	-----	BASE	1
21	1-007-010025	PLUG, 3/4-16 O-RING BOSS	3
22	9J623	O-RING	1
23	2K445	SEAL KIT (INCLUDES ITEMS 5-12)	1

## 2K094P Hydraulic Cylinder, 4-1/2 x 8 - Prince

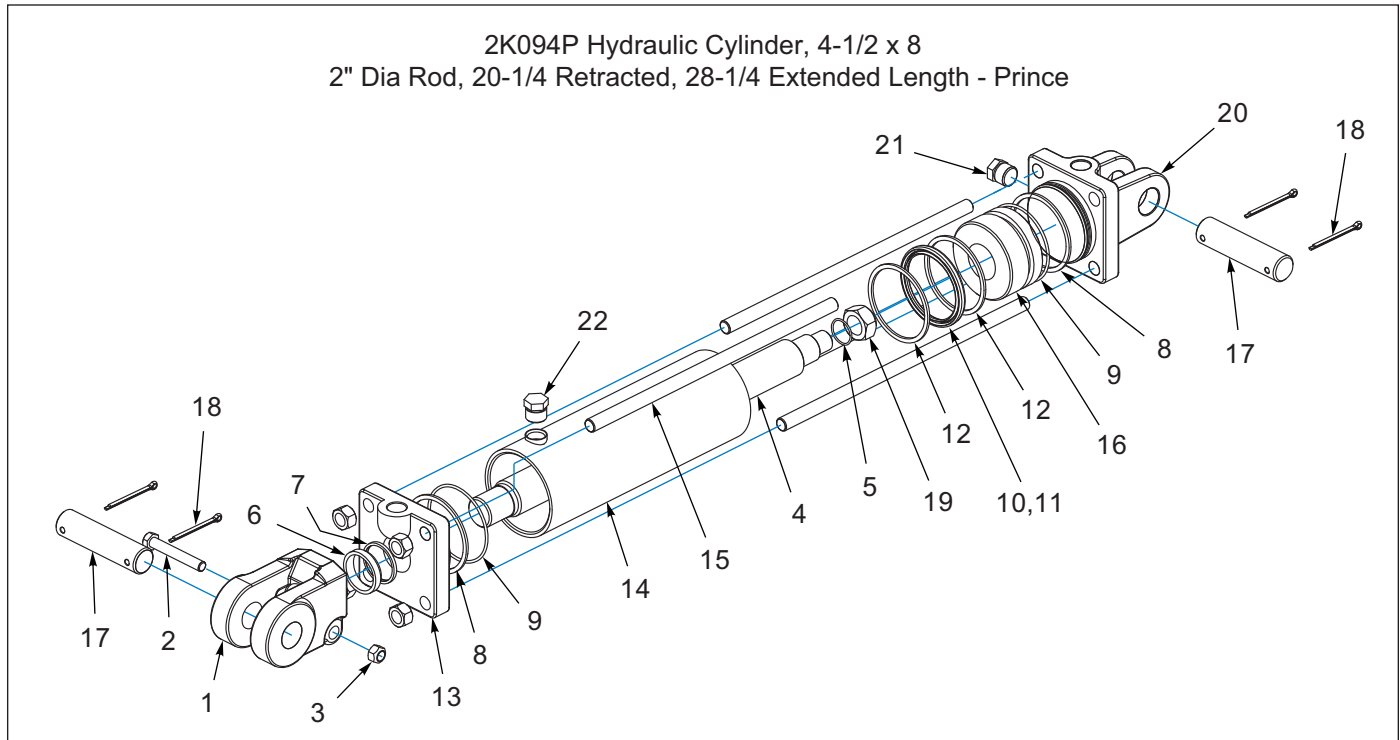


Figure 1-11: 2K094P Hydraulic Cylinder, 4-1/2 x 8 - Prince

## 2K094P Hydraulic Cylinder, 4-1/2 x 8 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	2K094	HYD CYLINDER - 4 1/2 X 8	1
1	1J072	ROD END CLEVIS	1
2	1-654-010051-11	SCREW HX CP 3/8-16X2-1/2 G5 ZP	1
3	1-512-010005-05	NUT, HEX SLFLKG GRB 3/8-16	1
4	2K446	PISTON ROD	1
5	-----	O-RING	1
6	-----	ROD WIPER	1
7	-----	U-CUP	1
8	-----	BACK UP WASHER	2
9	-----	O-RING	2
10	-----	O-RING	1
11	-----	TEFLON SEAL	1
12	-----	BEARING RING	2
13	-----	GLAND W/ BUSHING	1
14	9J626	TUBE ASSEMBLY	1
15	5J161	TIE ROD WITH NUT	4
16	-----	PISTON	1
17	6D529	CLEVIS PIN, (1" DIA. X 4" LONG)	2
18	110-4224	PIN,COTTER-3/16 X 2IN LG	4
19	8J852	LOCK NUT, 1-1/8"-12 GRB,ZP	1
20	7J059	BASE	1
21	1-007-010025	PLUG, 3/4-16 O RING BOSS	3
22	9J623	PLUG	1
23	2K449	SEAL KIT (INCLUDES ITEMS 5-12)	1

## 2P381L Hydraulic Cylinder, 3-1/2 x 16 - Lion

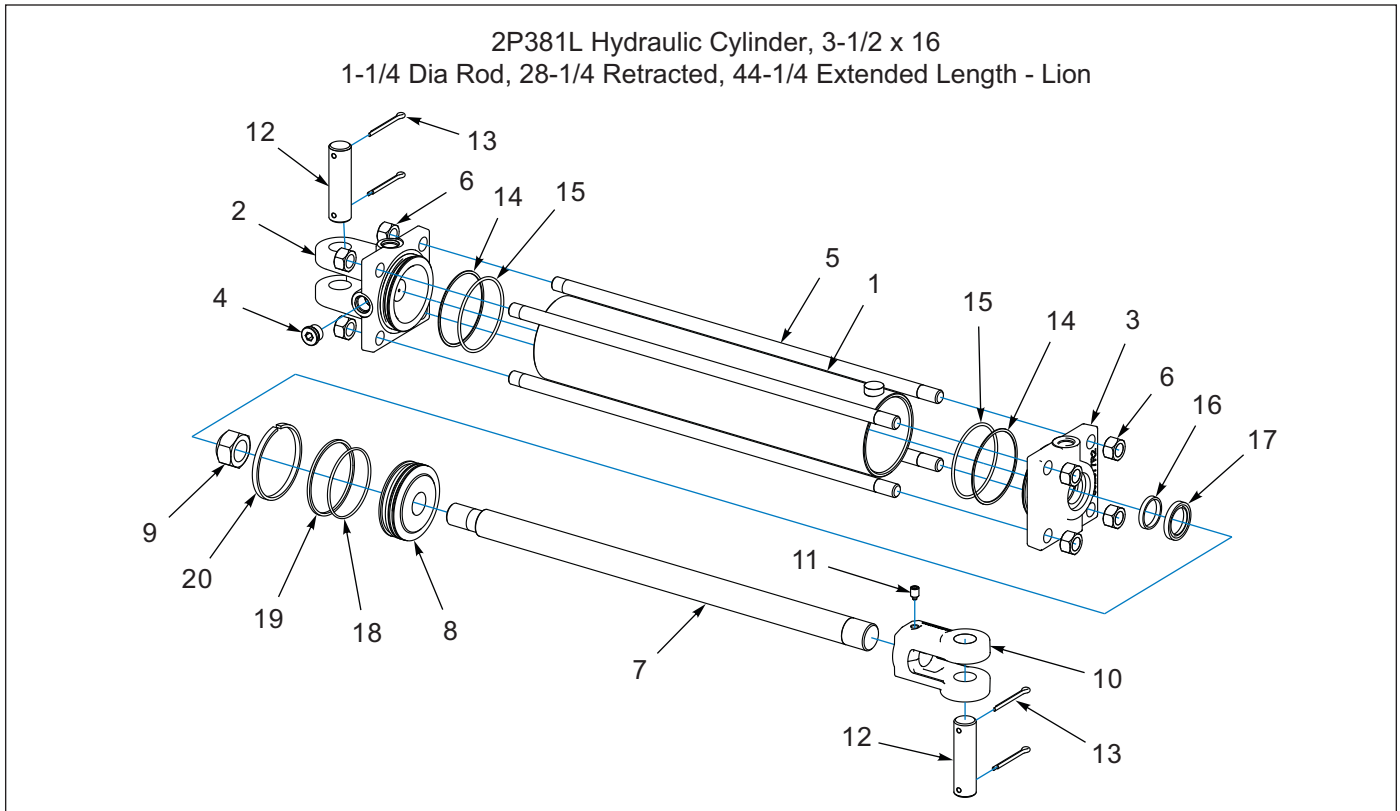


Figure 1-12: 2P381L Hydraulic Cylinder, 3-1/2 x 16 - Lion

## 2P381L Hydraulic Cylinder, 3-1/2 x 16 - Lion

ITEM	PART NUMBER	DESCRIPTION	QTY
	2P381	HYD CYLINDER - 3 1/2 X 16	1
1	-----	TUBE WELDMENT	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	PLUG, SOCKET HEAD 3/4-16	1
5	-----	TIE ROD	4
6	1-511-010002-07	NUT HEX JAM, 5/8-18UNF GR2	8
7	-----	ROD, CYL 1.25	1
8	-----	PISTON	1
9	226579	NUT HX SLFLKG 1-14 GRB, ZP	1
10	2P737	ROD CLEVIS 1" PIN X 1.25-12 X 2.625 (INCLUDES ITEM 11)	1
11	1P443	SET SCREW, 3/8-16 X 1/2 NYLON TIP	1
12	5J650	PIN, 1.0 X 3.625 H2	2
13	110-4224	PIN, COTTER 3/16 X 2IN LG	4
14	-----	SEAL, BU#236 19PI-236	2
15	-----	O-RING, 236 (3.25X3.5) D90	2
16	-----	SEAL, HALLITE 605 ROD 1-1/4 D	1
17	-----	SEAL WIPER ROD, 1.250 METAL E	1
18	-----	O-RING, 151 (3.0X3.188) DUR90	1
19	-----	SEAL, PTFE PISTON RING 3-1/2D	1
20	-----	WEAR RING, 3.50-3.25-.25-GFN	1
21	1P744	SEAL KIT (INCLUDES ITEMS 14-20)	1

## 2P460L Hydraulic Cylinder, 4 x 36 - Lion - 648913

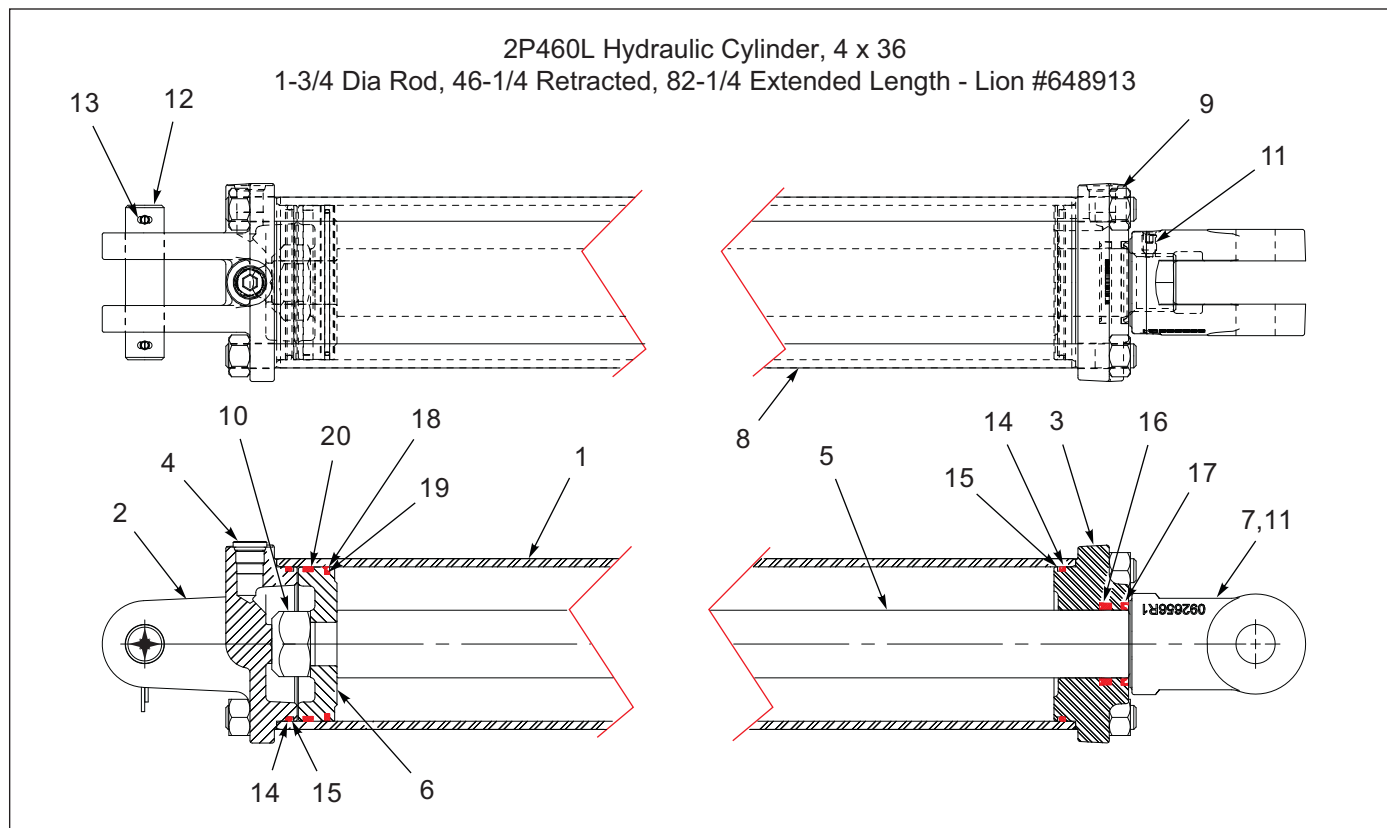


Figure 1-13: 2P460L Hydraulic Cylinder, 4 x 36 - Lion - 648913

## 2P460L Hydraulic Cylinder, 4 x 36 - Lion - 648913

ITEM	PART NUMBER	DESCRIPTION	QTY
	2P460	HYD CYLINDER - 4 X 36	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	PLUG, SOCKET HEAD 3/4-16	1
5	-----	ROD	1
6	-----	PISTON	1
7	-----	ROD CLEVIS	1
8	-----	TIE ROD	4
9	-----	NUT, HEX 5/8-18, ZP	8
10	8J852	NUT, LOCK 1-1/8-12, GRB, ZP	1
11	1P443	SET SCREW, 3/8-16 X 1/2 NYL	1
12	7J067	CLEVIS PIN, 1.0 X 4.0 H2	1
13	110-4224	PIN,COTTER 3/16 X 2IN LG	2
14	-----	SEAL, BU#240 19PI-240	2
15	-----	O-RING, 240 (3.75X4.0) DURO 90	2
16	-----	SEAL, HALLITE 605 ROD 1.75D	1
17	-----	SEAL, NOK-AR2573-EO 1.75BO	1
18	-----	SEAL, PTFE PISTON RING 4 DIA.	1
19	-----	O-RING, 153 (3.5X3.688) DUR	1
20	-----	WEAR RING, 4.00-3.75-.25-GFN	1
21	1P745	SEAL KIT (INCLUDES ITEMS 14-20)	1



## 2P460L Hydraulic Cylinder, 4 x 36 - Lion - 671668

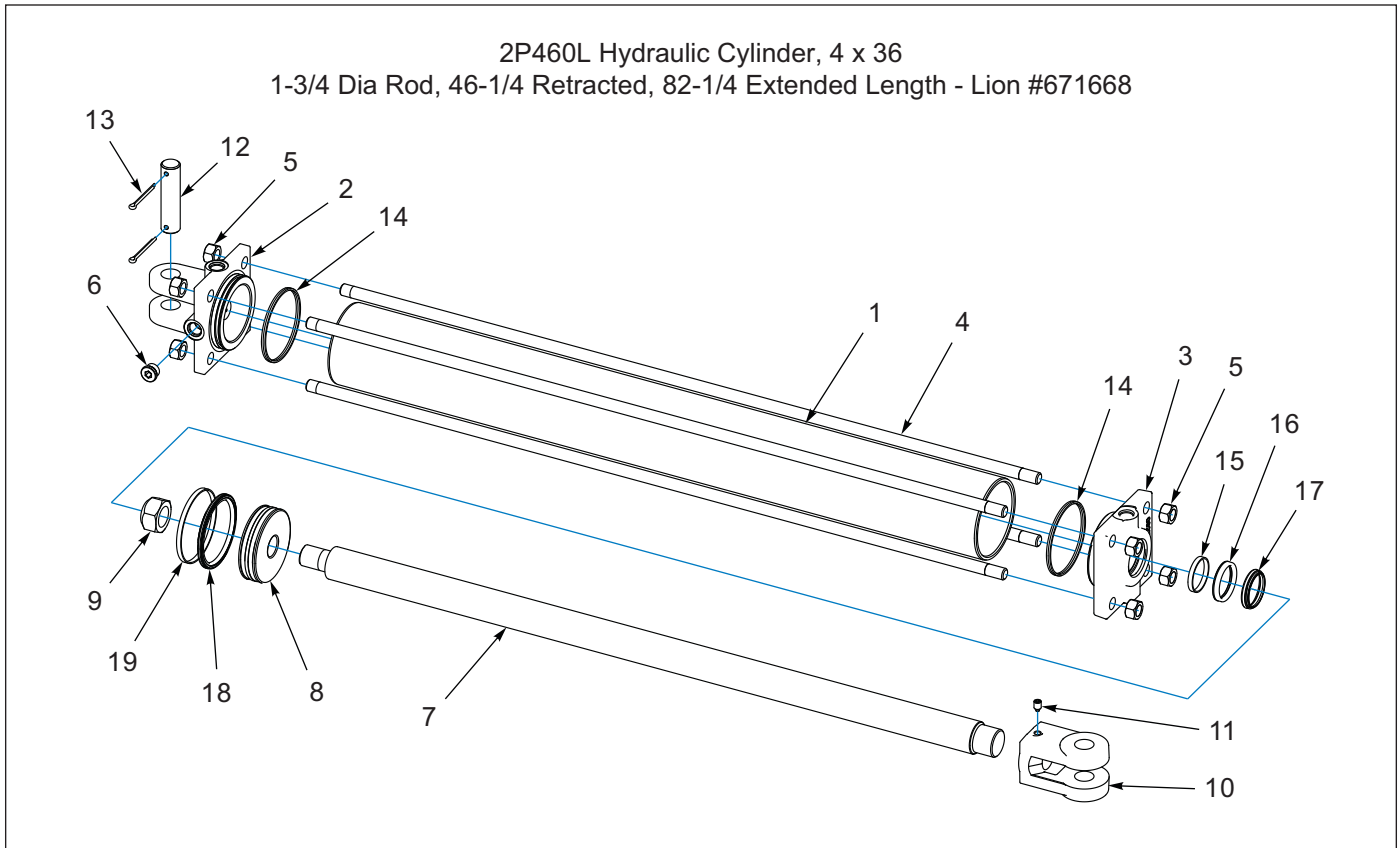


Figure 1-14: 2P460L Hydraulic Cylinder, 4 x 36 - Lion - 671668

## 2P460L Hydraulic Cylinder, 4 x 36 - Lion - 671668

ITEM	PART NUMBER	DESCRIPTION	QTY
	2P460	HYD CYLINDER - 4 X 36	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP 4.00-1.75	1
4	-----	TIE ROD	4
5	1-511-010002-07	NUT HEX JAM,5/8-18UNF GR2	8
6	-----	PLUG, SOCKET HEAD 3/4-16	1
7	-----	ROD, 1-3/4	1
8	-----	PISTON 4.00-1.125	1
9	8J852	NUT, LOCK 1-1/8-12, GRB, ZP	1
10	2P738	CLEVIS,1" PIN X 1.5-12 X 2.75 (INCLUDES ITEM 11)	1
11	1P443	SET SCREW, 3/8-16 X 1/2 NYL	1
12	7J067	PIN, 1.0 X 4.0 H2	1
13	110-4224	PIN,COTTER 3/16 X 2IN LG	2
14	-----	SEAL DUAL 4.00	2
15	-----	WEAR RING, 1.87-1.75-0.250	1
16	-----	SEAL, ZURCON U-CUP RU9 1.75	1
17	-----	SEAL WIPER 1.75	1
18	-----	SEAL SURCON WYNSEAL 4.00	1
19	-----	WEAR RING, 4.00-3.88-0.250	1
20	1P745	SEAL KIT (INCLUDES ITEMS 14-19)	1

## 2P810L Hydraulic Cylinder, 4 x 48 - Lion

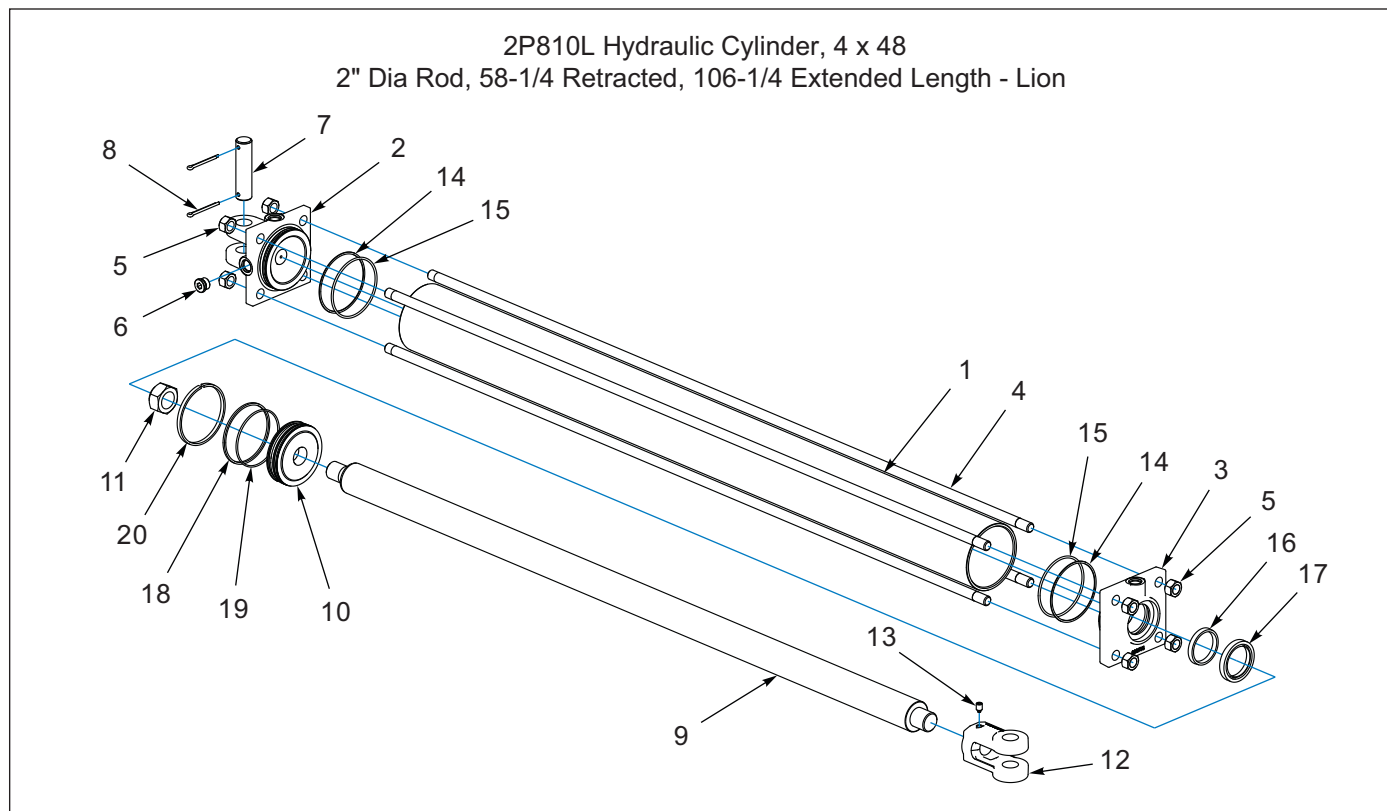


Figure 1-15: 2P810L Hydraulic Cylinder, 4 x 48 - Lion

## 2P810L Hydraulic Cylinder, 4 x 48 - Lion

ITEM	PART NUMBER	DESCRIPTION	QTY
	2P810	HYD CYLINDER - 4 X 48	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	-----	NUT,HEX 5/8-18,ZP	8
6	-----	PLUG,SOCKET HEAD 3/4-16	1
7	7J067	PIN,1.0 X 4.0 H2	1
8	110-4224	PIN,COTTER 3/16 X 2IN LG	2
9	-----	ROD	1
10	-----	PISTON	1
11	8J852	NUT,LOCK 1-1/8-12,GRB,ZP	1
12	2P737	ROD CLEVIS 1" PIN X 1.25-12 X 2.625 (INCLUDES ITEM 13)	1
13	1P443	SET SCREW,3/8-16 X 1/2 NYLON TIP	1
14	-----	SEAL,BU#240 19PI-240	2
15	-----	O-RING,240 (3.75X4.0) DURO 90	2
16	-----	SEAL,HALLITE 605 ROD 2 DIA	1
17	-----	SEAL,NOK-AR2915-EO 2X2.685	1
18	-----	SEAL,PTFE PISTON RING 4DIA	1
19	-----	O-RING,153 (3.5X3.688) DUR	1
20	-----	WEAR RING,4.00-3.75-.25-GFN	1
21	1P745	SEAL KIT (INCLUDES ITEMS 14-20)	1

## 2P931L Hydraulic Cylinder, 3-3/4 x 16 - Lion

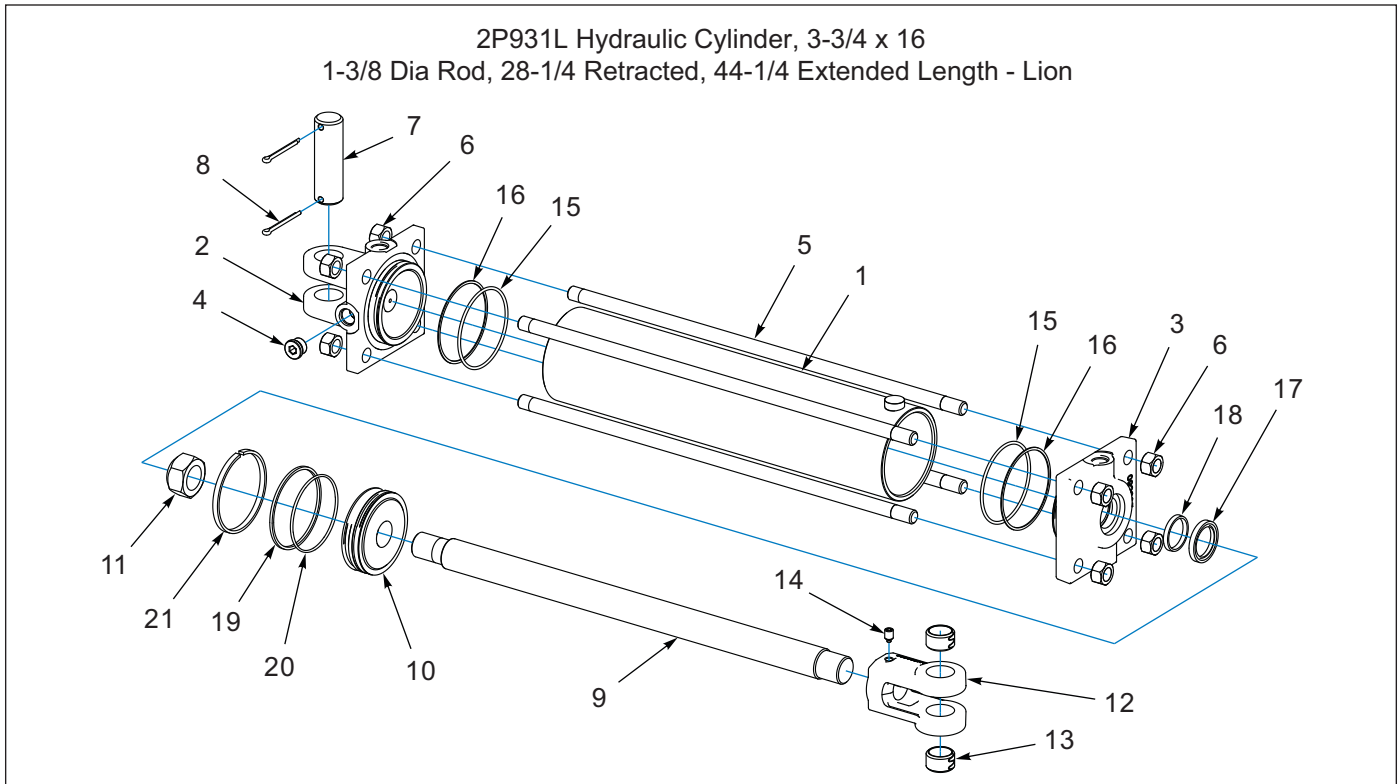


Figure 1-16: 2P931L Hydraulic Cylinder, 3-3/4 x 16 - Lion

## 2P931L Hydraulic Cylinder, 3-3/4 x 16 - Lion

ITEM	PART NUMBER	DESCRIPTION	QTY
	2P931	HYD CYLINDER - 3-3/4 X 16	1
1	-----	TUBE WELDMENT	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	PLUG, SOCKET HEAD 3/4-16	1
5	-----	TIE ROD	4
6	-----	NUT, HEX 5/8-18, ZP	8
7	4J549	PIN, 1.25 X 4.0 H2	1
8	110-4224	PIN, COTTER 3/16 X 2IN LG	2
9	-----	CYLINDER ROD, 1.38	1
10	-----	PISTON 3.75-1.12-TP	1
11	8J852	NUT, LOCK 1-1/8-12, GRB, ZP	1
12	2P111	ROD CLEVIS (INCLUDES ITEMS 13,14)	1
13	3P079	SPRING BUSHING, 1.0X1.25X0.75	2
14	1P443	SET SCREW, 3/8-16 X 1/2 NYLON TIP	1
15	-----	O-RING, 238 (3-1/2X3-3/4) D9	2
16	-----	SEAL, BU#238	2
17	-----	SEAL, NOK-AR1997-EO 1-3/8"BO	1
18	-----	SEAL, HALLITE 605 ROD 1-3/8 D	1
19	-----	SEAL, PTFE PISTON RING 3-3/4D	1
20	-----	O-RING 152 3-1/4X3-7/16UR9	1
21	-----	WEAR RING, 3.75-3.50-.25-GFN	1
22	2P955	SEAL KIT (INCLUDES ITEMS 15-21)	1

### 3J567P Hydraulic Cylinder, 3 x 6 - Prince

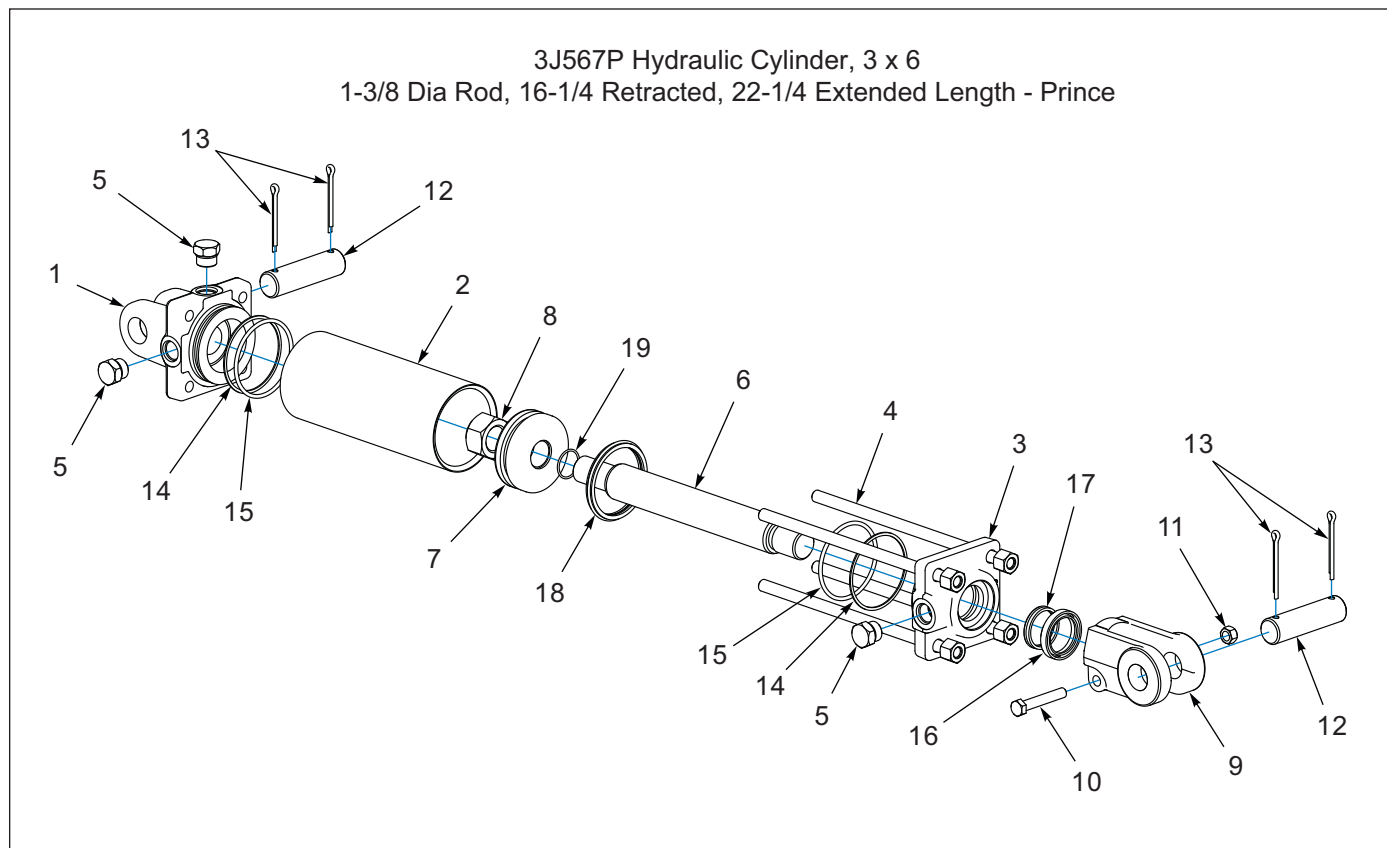
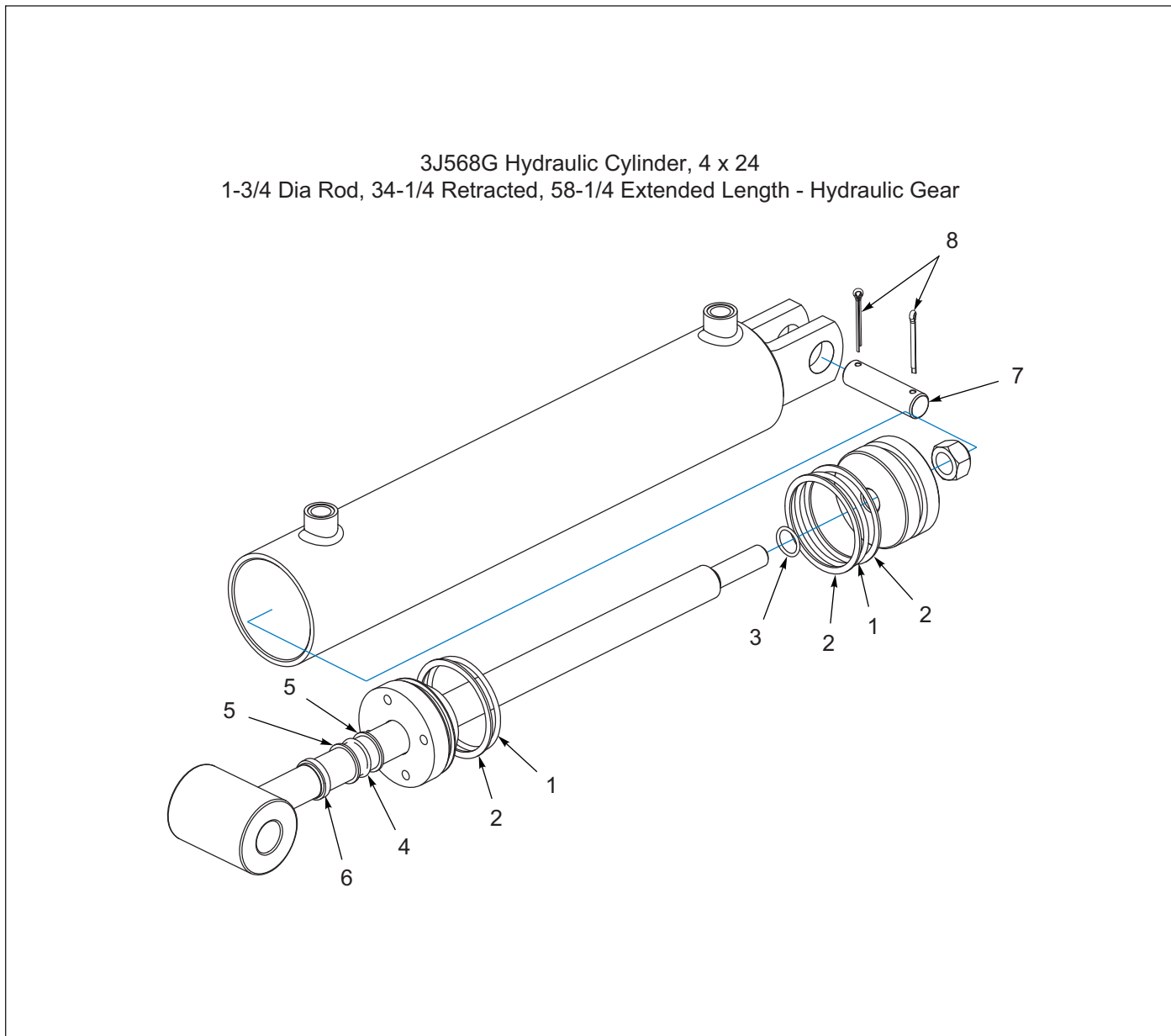


Figure 1-17: 3J567P Hydraulic Cylinder, 3 x 6 - Prince

### 3J567P Hydraulic Cylinder, 3 x 6 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	3J567	HYD CYLINDER - 3 X 6	1
1	-----	BASE CLEVIS	1
2	-----	TUBE, CYL	1
3	-----	ROD CAP	1
4	-----	TIE ROD ASSEMBLY	4
5	1-007-010025	PLUG, 3/4-16 O-RING BOSS	3
6	-----	PISTON ROD	1
7	-----	PISTON	1
8	-----	PISTON NUT	1
9	9D481	ROD CLEVIS	1
10	1-654-010051-10	SCREW, HX CP3/8-16X2-1/4 GR5	1
11	1-512-010005-05	NUT,HEX,SLFLKG GRB 3/8-16	1
12	5J650	PIN,1.0 X 3.625 H2	2
13	110-4224	PIN, COTTER 3/16 X 2IN LG	4
14	-----	B/U WASHER	2
15	-----	O-RING	2
16	-----	ROD WIPER	1
17	-----	U-CUP	1
18	-----	PISTON SEAL	1
19	-----	PISTON O-RING	1
20	3J117	SEAL KIT (2 KIT PACKAGES) (INCLUDES ITEMS 14-19)	1

### 3J568G Hydraulic Cylinder, 4 x 24 - Hydraulic Gear



3J568G Hydraulic Cylinder, 4 x 24  
1-3/4 Dia Rod, 34-1/4 Retracted, 58-1/4 Extended Length - Hydraulic Gear

Figure 1-18: 3J568G Hydraulic Cylinder, 4 x 24 - Hydraulic Gear

### 3J568G Hydraulic Cylinder, 4 x 24 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	3J568	HYD CYLINDER - 4 X 24	1
1	-----	O RING	2
2	-----	BACK-UP RING	3
3	-----	SEAL	1
4	-----	ROD SEAL	1
5	-----	BACK UP RING	2
6	-----	WIPER	1
7	3J771	CYLINDER PIN	1
8	1-557-010362-63	PIN,COTTER 1/4X2, ZP	2
9	1J956	SEAL KIT (INCLUDES ITEMS 1-6)	1

### 3J568L Hydraulic Cylinder, 4 x 24 - Lion - 648333

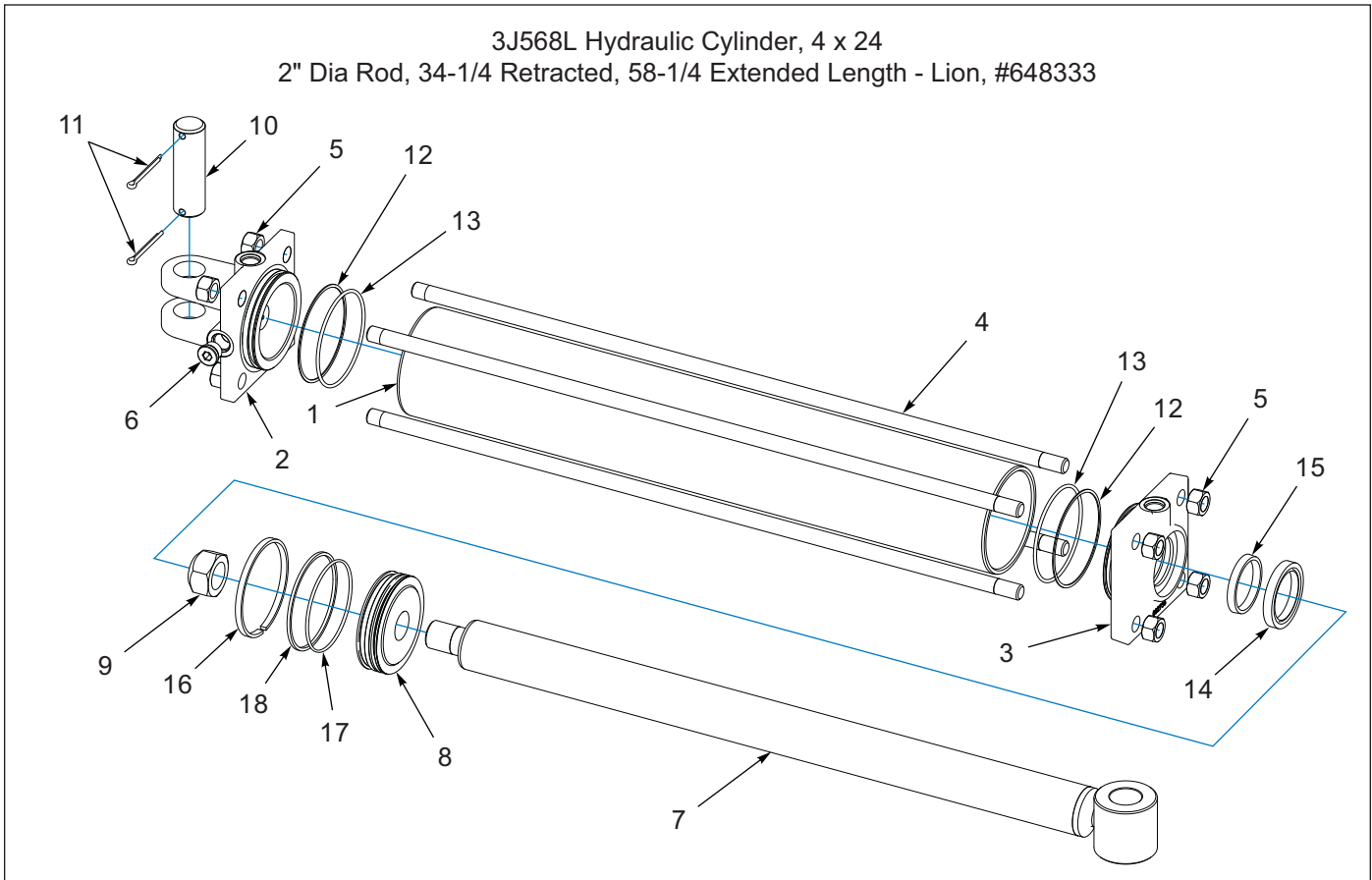


Figure 1-19: 3J568L Hydraulic Cylinder, 4 x 24 - Lion - 648333

### 3J568L Hydraulic Cylinder, 4 x 24 - Lion - 648333

ITEM	PART NUMBER	DESCRIPTION	QTY
	3J568	HYD CYLINDER - 4 X 24	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	1-511-010002-07	NUT HEX JAM,5/8-18UNF GR2	8
6	-----	PLUG, SOCKET HEAD 3/4-16	1
7	-----	ROD WELDMENT	1
8	-----	PISTON	1
9	8J852	NUT, LOCK 1-1/8-12, GrB, ZP	1
10	4J549	PIN, 1.25 x 4.0 H2	1
11	110-4224	PIN, COTTER 3/16 X 2IN LG	2
12	-----	SEAL, BU#240 19PI-240	2
13	-----	O-RING, 240 (3.75x4.0) DURO 90	1
14	-----	SEAL, NOK-AR2915-EO 2x2.685	1
15	-----	SEAL, HALLITE 605 ROD 2 DIA	1
16	-----	WEAR RING, 4.00-3.75-.25-GFN	1
17	-----	O-RING, 153 (3.5x3.688) DUR	1
18	-----	SEAL, PTFE PISTON RING 4DIA	1
19	1P745	SEAL KIT (INCLUDES ITEMS 12-18)	1

### 3J568L Hydraulic Cylinder, 4 x 24 - Lion - 671666

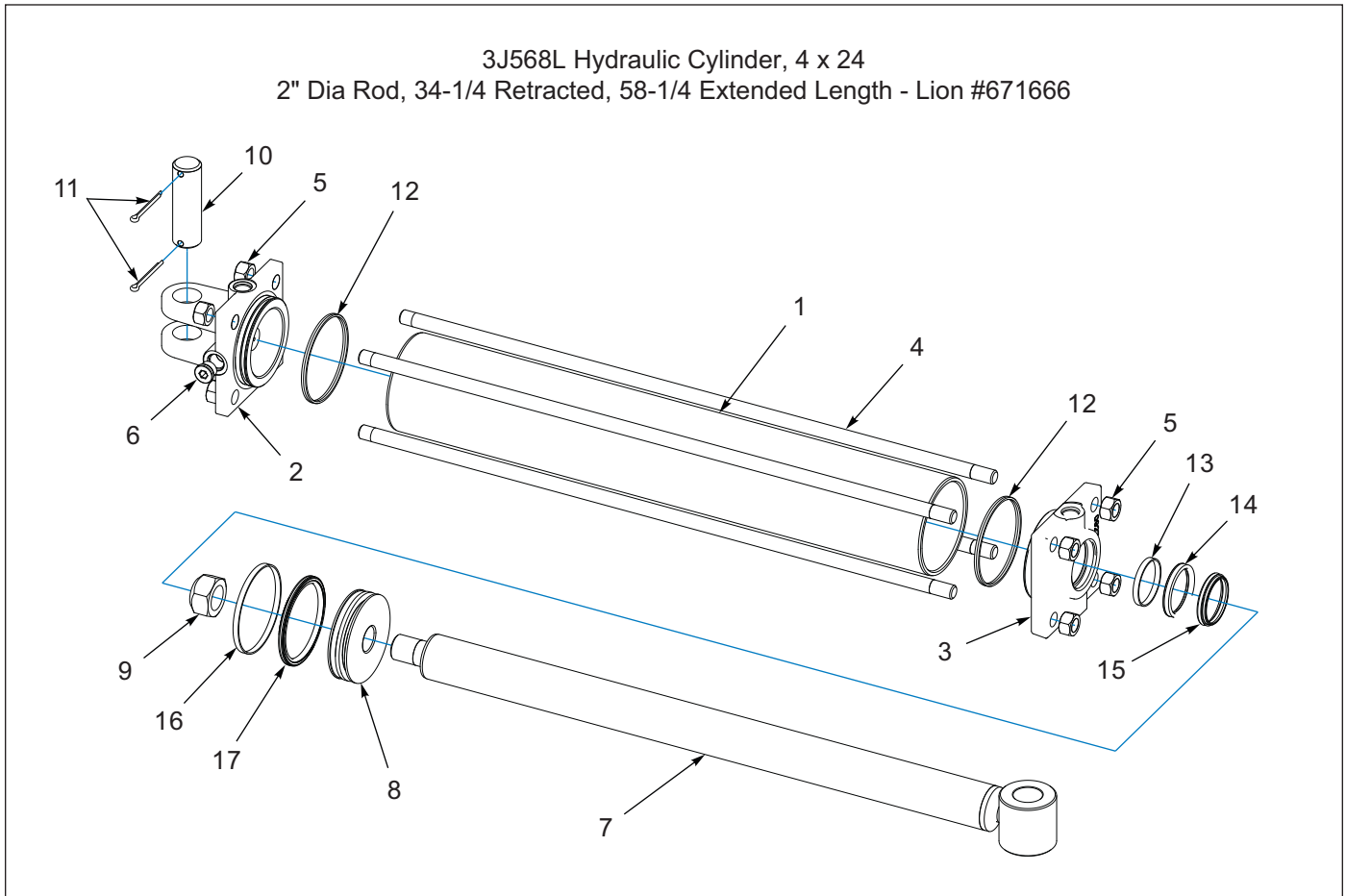


Figure 1-20: 3J568L Hydraulic Cylinder, 4 x 24 - Lion - 671666

### 3J568L Hydraulic Cylinder, 4 x 24 - Lion - 671666

ITEM	PART NUMBER	DESCRIPTION	QTY
	3J568	HYD CYLINDER - 4 X 24	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	1-511-010002-07	NUT HEX JAM,5/8-18UNF GR2	8
6	-----	PLUG,SOCKET HEAD 3/4-16	1
7	-----	ROD WELDMENT	1
8	-----	PISTON	1
9	8J852	NUT,LOCK 1-1/8-12,GrB,ZP	1
10	4J549	PIN,1.25 x 4.0 H2	1
11	110-4224	PIN,COTTER 3/16 X 2IN LG	2
12	-----	WEAR RING 2.12-2.00-0.250	2
13	-----	SEAL SURCON U-CUP RU9 2.00	1
14	-----	SEAL WIPER 2.00 WNUC TSS	1
15	-----	SEAL DUAL 4.00	2
16	-----	WEAR RING 4.00-3.88-0.250	1
17	-----	SEAL SURCON WYNSEAL 4.00	1
18	1P745	SEAL KIT (INCLUDES ITEMS 12-17)	1

### 3J603C Hydraulic Cylinder, 3 x 8 - Cross

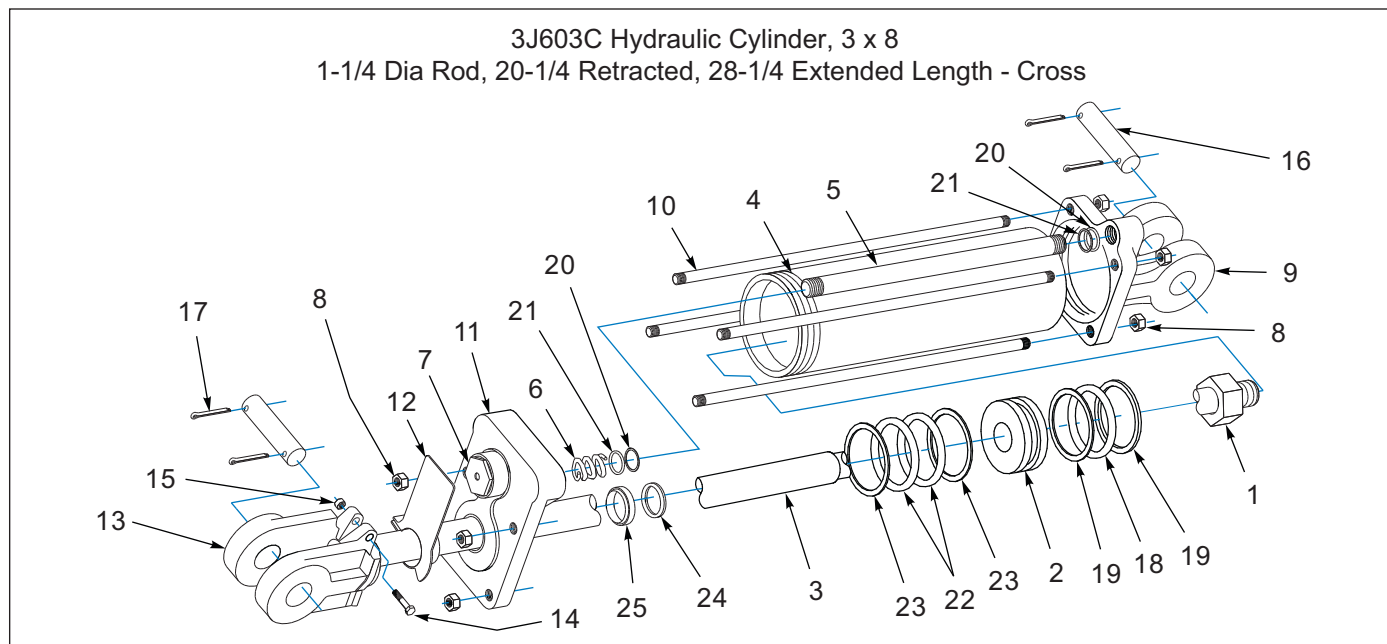


Figure 1-21: 3J603C Hydraulic Cylinder, 3 x 8 - Cross

### 3J603C Hydraulic Cylinder, 3 x 8 - Cross

ITEM	PART NUMBER	DESCRIPTION	QTY
	3J603	HYD CYLINDER	1
1	5K684	NUT	1
2	5K685	PISTON	1
3	5K686	ROD	1
4	5K687	TUBE	1
5	5K688	FEED TUBE	1
6	5K689	SPRING	1
7	5K690	CARTRIDGE ASSEMBLY	1
8	5K691	NUT	8
9	5K692	BASE CLEVIS	1
10	5K693	TIE ROD	4
11	5K694	HEAD	1
12	5K695	ACTUATOR ASSEMBLY	1
13	5K696	ROD CLEVIS	1
14	5K697	CAPSCREW	1
15	5K698	NUT	1
16	7J067	CLEVIS PIN, 1 X 4	2
17	110-4224	PIN,COTTER-3/16 X 2IN LG	4
18	-----	O-RING	1
19	-----	BACK-UP RING	2
20	-----	BACK-UP RING	2
21	-----	O-RING	2
22	-----	O-RING	2
23	-----	BACK-UP RING	2
24	-----	U-CUP	1
25	-----	WIPER	1
26	5K699	SEAL KIT (INCLUDES ITEMS 18 - 25)	1



### 3J603P Hydraulic Cylinder, 3 x 8 - Prince

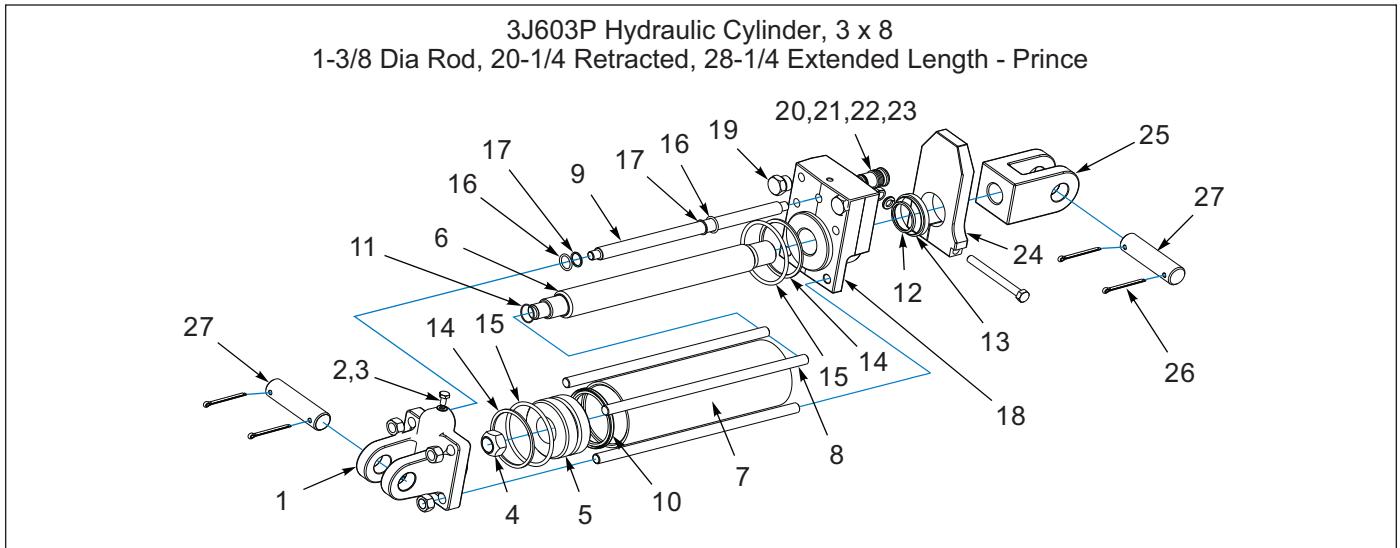
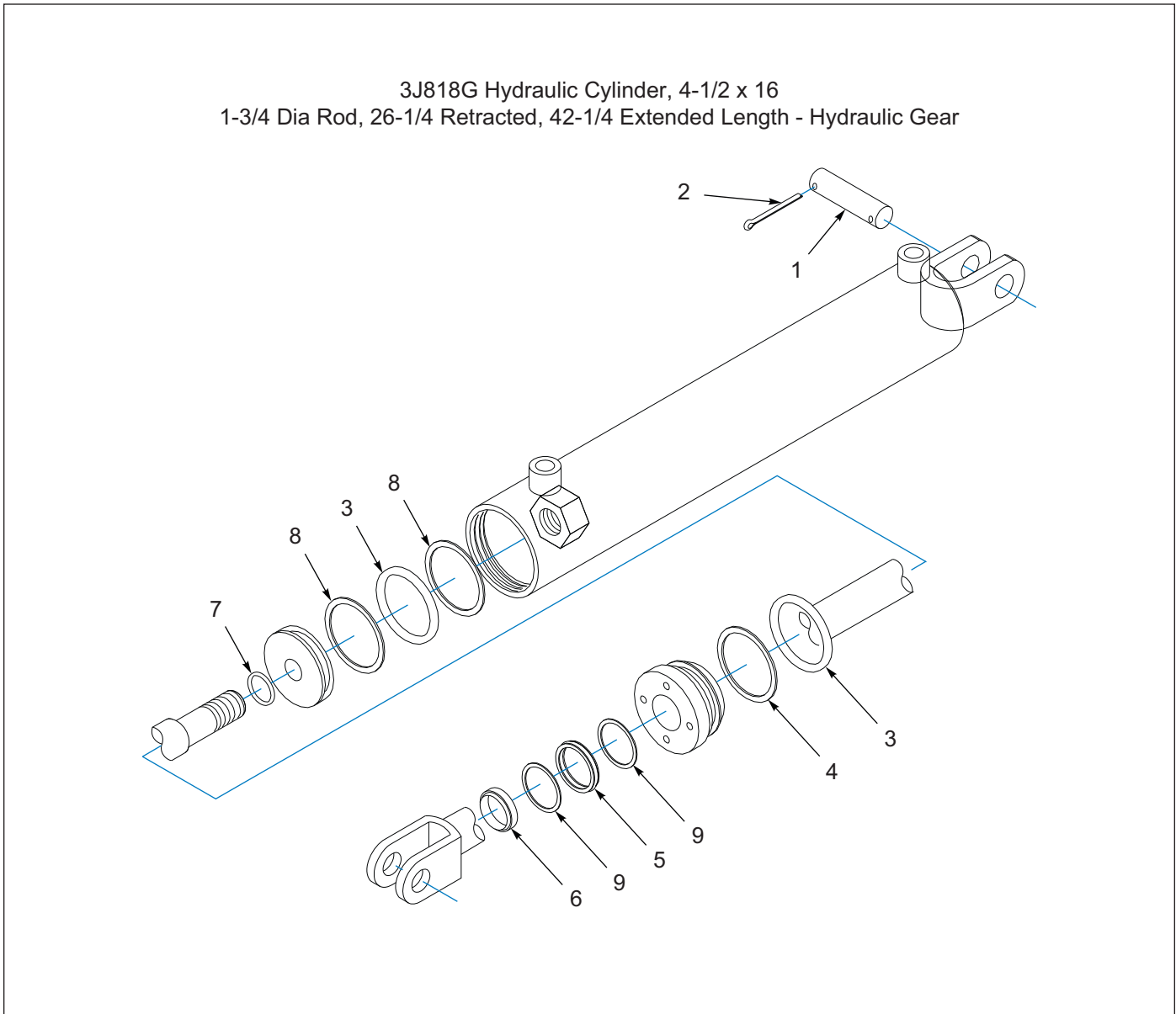


Figure 1-22: 3J603P Hydraulic Cylinder, 3 x 8 - Prince

### 3J603P Hydraulic Cylinder, 3 x 8 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	3J603	HYDRAULIC CYLINDER 3 X 8	1
1	-----	BUTT ( <b>BASE</b> )	1
2	-----	NYLTITE SEAL	1
3	3J730	CAPSCREW	1
4	6D918	LOCK NUT ( <b>3/4-16</b> )	1
5	-----	PISTON	1
6	-----	PISTON, ROD	1
7	3J719	TUBE, CYL	1
8	3J721	TIE ROD	4
9	3J720	MANIFOLD TUBE	1
10	-----	URETHANE SEAL	1
11	-----	O-RING	1
12	-----	U-CUP	1
13	-----	WIPER	1
14	-----	BACK-UP WASHER	2
15	-----	O-RING	2
16	-----	O-RING	2
17	-----	BACK-UP WASHER	2
18	7J050	GLAND ( <b>WITH PORTS REQUIRING O-RINGS</b> )	1
18	3J726	GLAND ( <b>WITH PIPE THREADS</b> )	1
19	1-007-010025	PLUG, 3/4-16 O-RING BOSS	1
20	9J638	VALVE ASSEMBLY	1
21	-----	O-RING	1
22	-----	O-RING	1
23	-----	BACK-UP WASHER	1
24	9J804	STRIKER PLATE ASM-5K695 - DEA	1
25	-----	CLEVIS ASSEMBLY	1
26	110-4224	PIN,COTTER-3/16 X 2IN LG	4
27	5J650	CLEVIS PIN	2
28	3J729	SEAL KIT ( <b>INCLUDES ITEMS 10-17</b> )	1

### 3J818G Hydraulic Cylinder, 4-1/2 x 16 - Hydraulic Gear



**Figure 1-23: 3J818G Hydraulic Cylinder, 4 -1/2 x 16 - Hydraulic Gear**

### 3J818G Hydraulic Cylinder, 4-1/2 x 16 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	3J818	HYD CYLINDER - 4-1/2 X16 DA	1
1	3J498	CYLINDER PIN	1
2	1-557-010362-63	PIN,COTTER 1/4X2 ZP	2
3	-----	O RING	2
4	-----	BACK-UP RING	1
5	-----	ROD SEAL	1
6	-----	WIPER	1
7	-----	O RING	1
8	-----	BACK-UP RING	2
9	-----	BACK-UP RING	2
10	5J140	SEAL KIT (INCLUDES ITEMS 3-9)	1

### 3J818L Hydraulic Cylinder, 4-1/2 x 16 - Lion

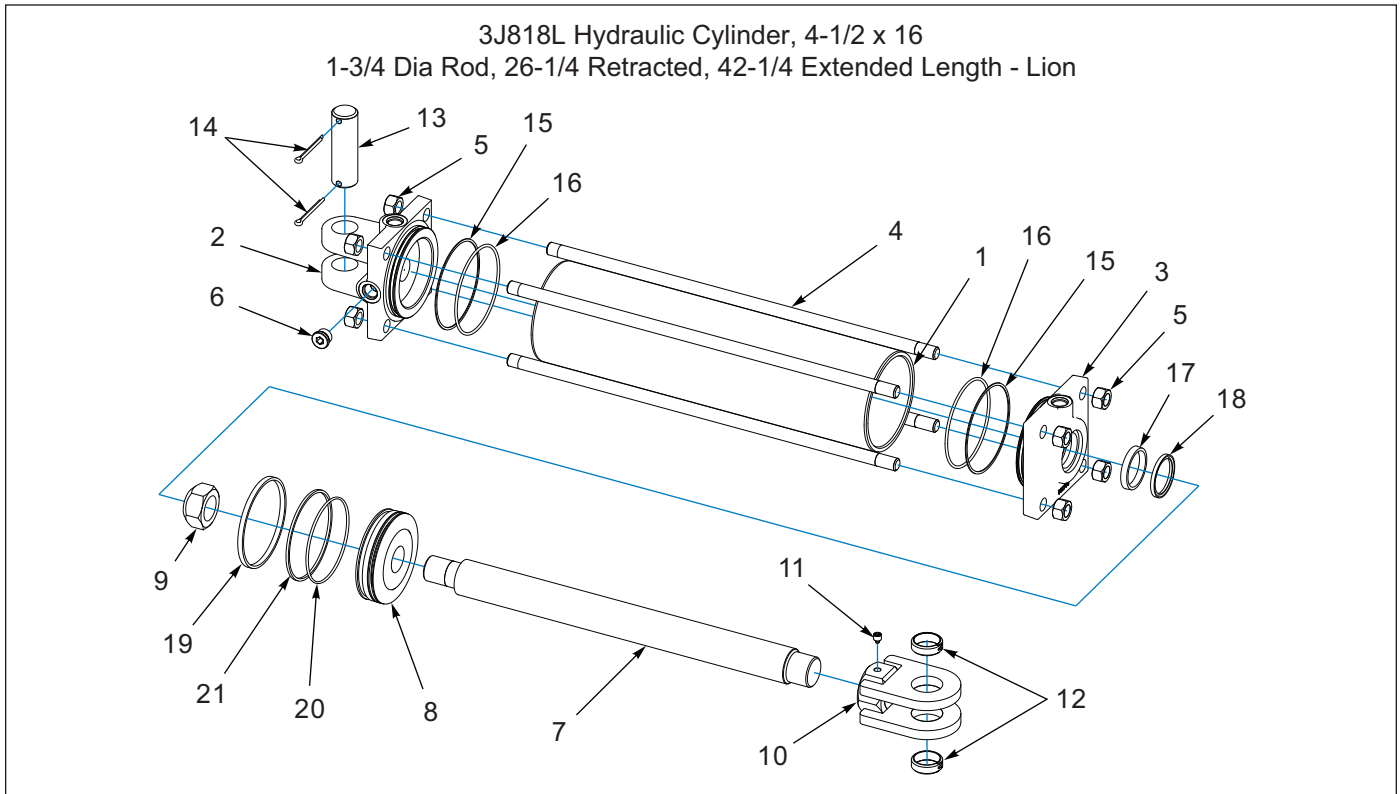


Figure 1-24: 3J818L Hydraulic Cylinder, 4-1/2 x 16 - Lion

### 3J818L Hydraulic Cylinder, 4-1/2 x 16 - Lion

ITEM	PART NUMBER	DESCRIPTION	QTY
	3J818	HYD CYLINDER - 4-1/2 X 16 DA	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	-----	NUT,HEX 5/8-18,ZP	8
6	-----	PLUG,SOCKET HEAD 3/4-16	1
7	-----	ROD	1
8	-----	PISTON	1
9	-----	NUT,LOCK 1-1/4-12,ZP	1
10	1P769	CLEVIS 1.5-12 X 2.25 X 4.375 (INCLUDES ITEMS 11,12)	1
11	1P770	SET SCREW,3/8-16 x 3/8 NYLON TIP	1
12	181176	SPRING BUSHING,1.25x1.5x0.5 (AFTER 02/14/2014)	2
13	4J549	PIN,1.25 x 4.0 H2	1
14	110-4224	PIN,COTTER 3/16 X 2IN LG	2
15	-----	SEAL,BU#244	2
16	-----	O-RING,244 (4.25x4.5) D90	2
17	-----	SEAL,HALLITE 605 ROD 1.75D	1
18	-----	SEAL,NOK-AR2573-EO 1.75BO	1
19	-----	WEAR RING,4.50-4.25-.25-GFN	1
20	-----	O-RING,155 (4.0x4.188) DUR90	1
21	-----	SEAL,PTFE PISTON RING 4.5D	1
22	1P746	SEAL KIT (INCLUDES ITEMS 15-21)	1

### 4K777G Hydraulic Cylinder, 3-1/2 x 16 - Hydraulic Gear

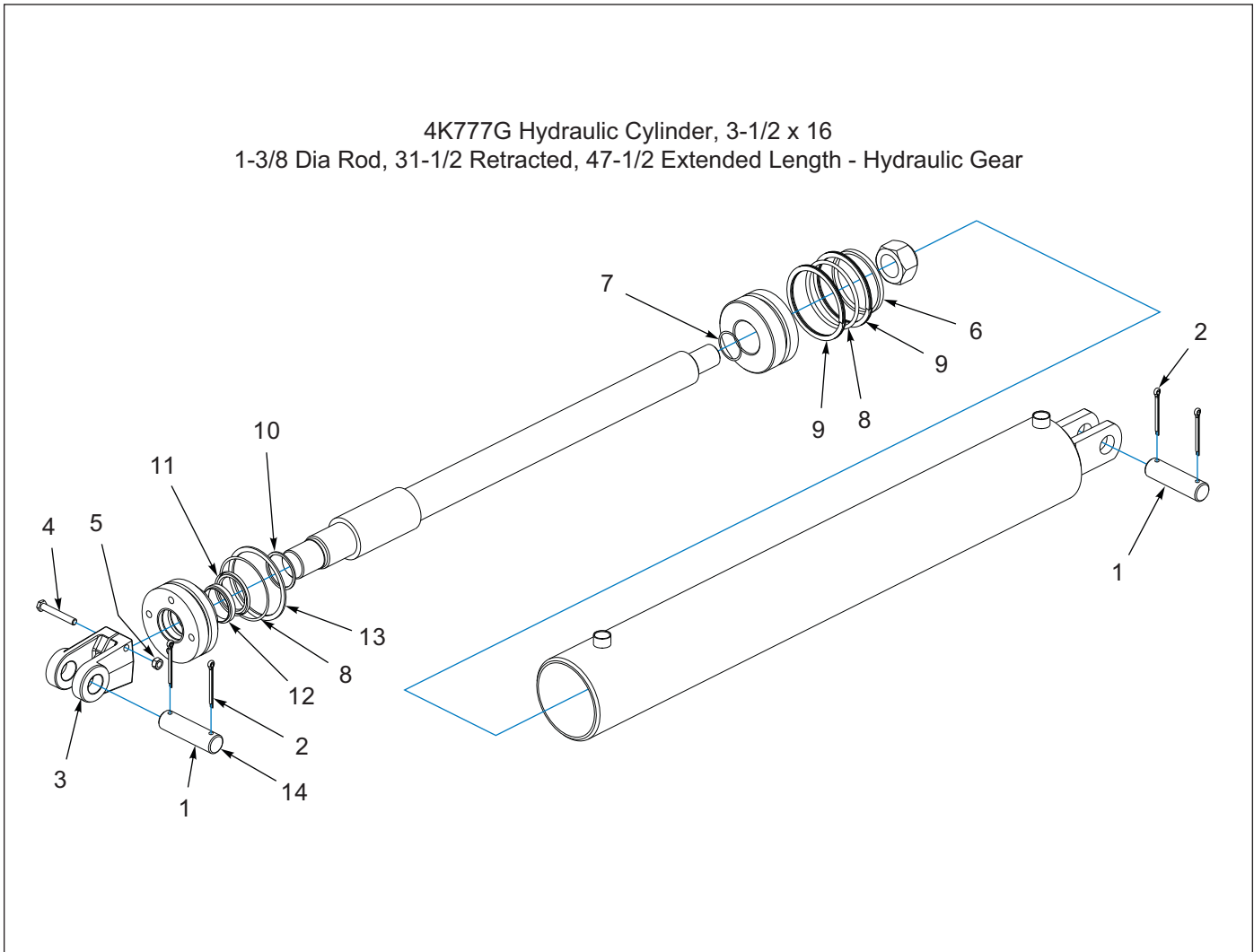
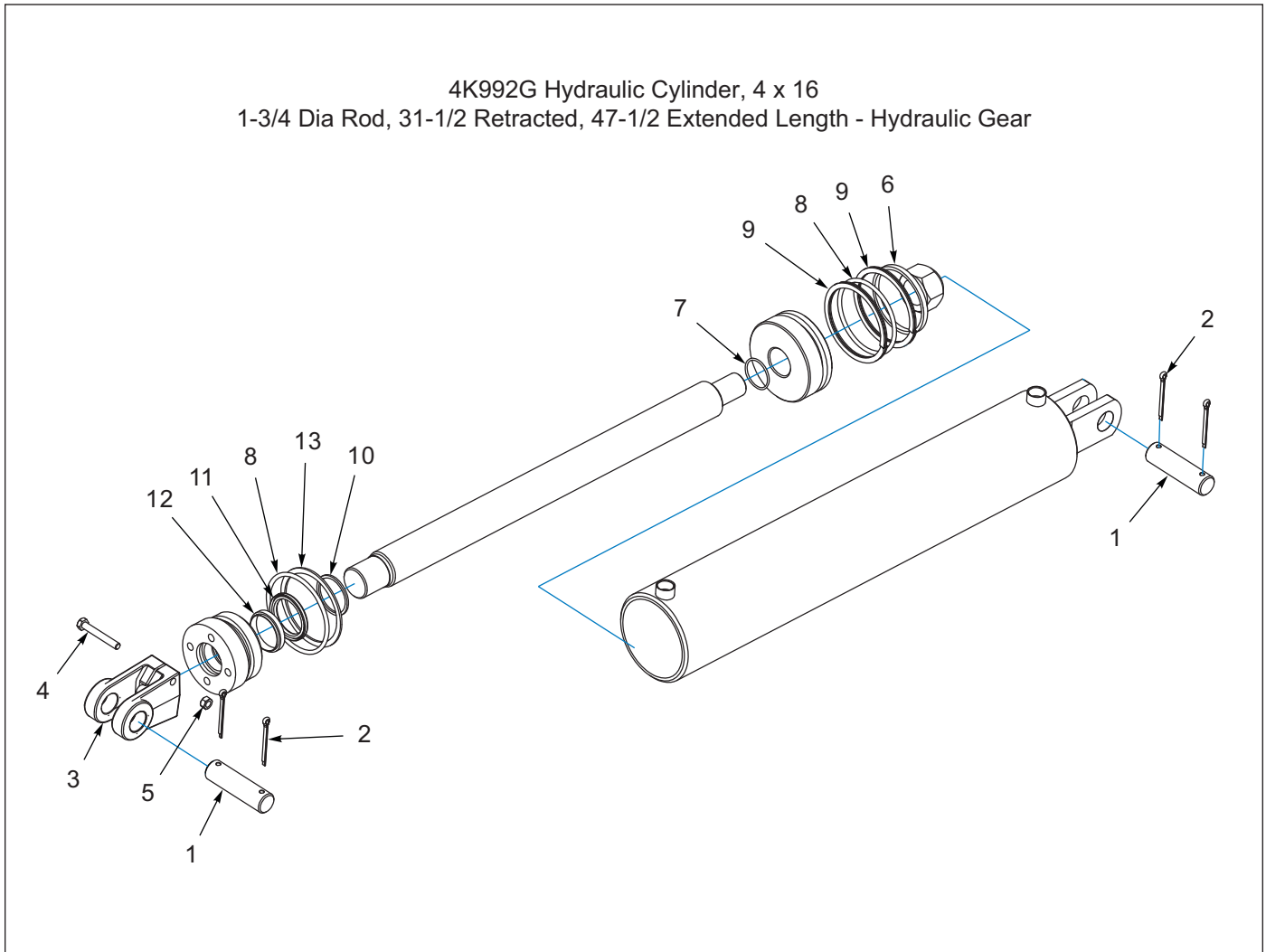


Figure 1-25: 4K777G Hydraulic Cylinder, 3-1/2 x 16 - Hydraulic Gear

### 4K777G Hydraulic Cylinder, 3-1/2 x 16 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	4K777	HYD CYL 3-1/2 X 16 (USE PART NUMBER 6K843)	1
1	5J650	PIN	2
2	110-4224	PIN,COTTER-3/16 X 2IN LG	4
3	5J195	CLEVIS	1
4	1-654-010049-11	SCREW,HX CAP,5/16-18UNCX2-1/2	1
5	104032	NUT,HX SLF-LKG W/MYL 5/16-18	1
6	-----	WEAR RING	1
7	-----	O-RING	1
8	-----	O-RING	2
9	-----	SPRING BACKUP	2
10	-----	WEAR RING	1
11	-----	O-RING	1
12	-----	WIPER	1
13	-----	BACKUP RING	1
14	5K793	SEAL KIT (INCLUDES ITEMS 7-14)	1

### 4K992G Hydraulic Cylinder, 4 x 16 - Hydraulic Gear



4K992G Hydraulic Cylinder, 4 x 16  
1-3/4 Dia Rod, 31-1/2 Retracted, 47-1/2 Extended Length - Hydraulic Gear

Figure 1-26: 4K992G Hydraulic Cylinder, 4 x 16 - Hydraulic Gear

### 4K992G Hydraulic Cylinder, 4 x 16 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	4K992	HYD CYLINDER - 4 X 16	1
1	5J650	PIN	2
2	110-4224	PIN,COTTER-3/16 X 2IN LG	4
3	5J195	CLEVIS	1
4	1-654-010049-11	SCREW,HX CAP, 5/16-18UNCX2-1/2	1
5	104032	NUT, HX SLF-LKG W/MYL 5/16-18	1
6	-----	WEAR RING	1
7	-----	O-RING	1
8	-----	O-RING	2
9	-----	SPIRAL BACKUP	2
10	-----	WEAR RING	1
11	-----	POLYSEAL	1
12	-----	WIPER	1
13	-----	BACKUP RING	1
14	5K799	SEAL KIT (INCLUDES ITEMS 6-13)	1

### 4K992L Hydraulic Cylinder, 4 x 16 - Lion - 648343

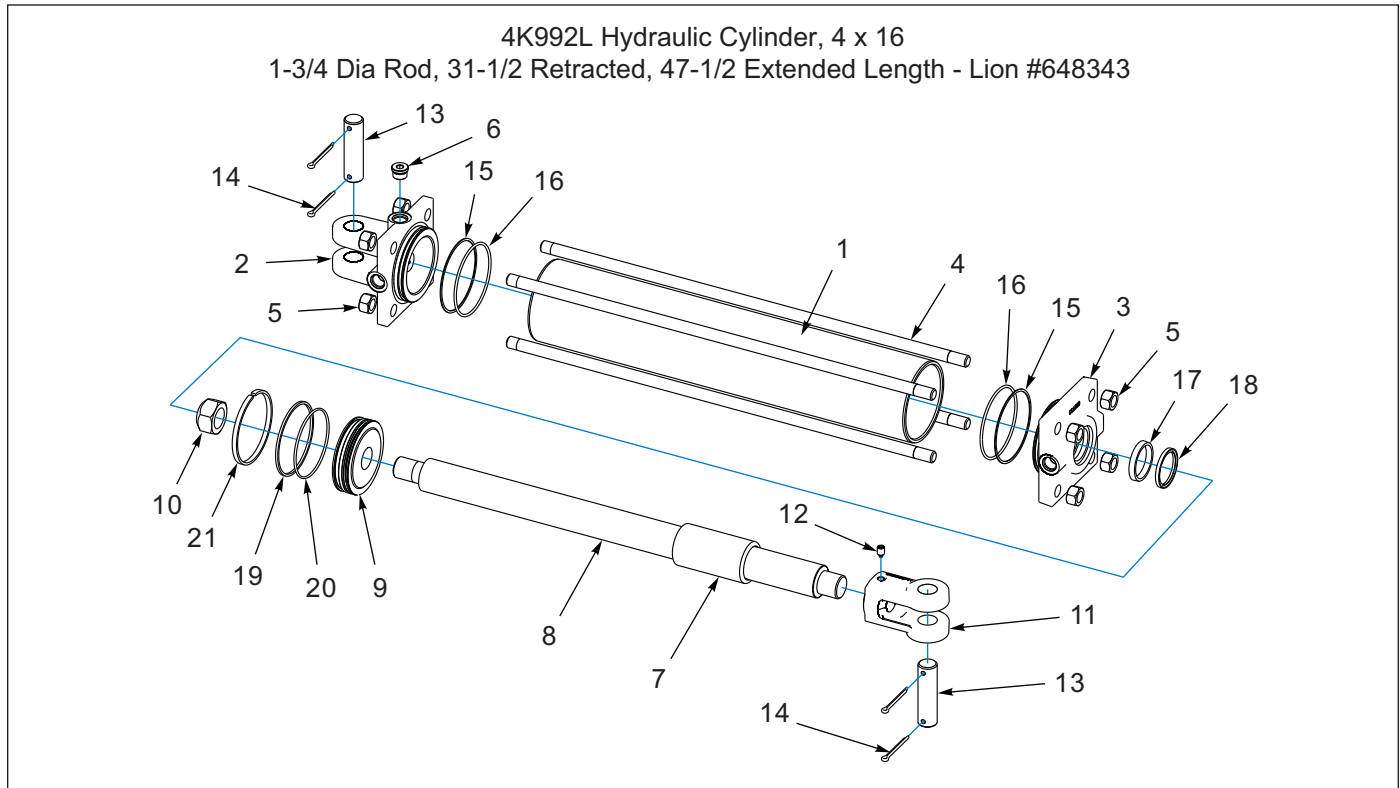


Figure 1-27: 4K992L Hydraulic Cylinder, 4 x 16 - Lion - 648343

### 4K992L Hydraulic Cylinder, 4 x 16 - Lion - 648343

ITEM	PART NUMBER	DESCRIPTION	QTY
	4K992	HYDRAULIC CYLINDER, 4 X 16	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	1-511-010002-07	NUT HEX JAM,5/8-18UNF GR2	8
6	-----	PLUG,SOCKET HEAD 3/4-16	1
7	-----	STOP TUBE	1
8	-----	ROD	1
9	-----	PISTON	1
10	8J852	NUT,LOCK 1-1/8-12,GRB,ZP	1
11	2P741	CLEVIS, 1" PIN X 1.25-12 X 2.625 (INCLUDES ITEM 12)	1
12	1P443	SET SCREW,3/8-16 x 1/2 NYLON TIP	1
13	5J650	PIN,1.0 x 3.625 H2	2
14	110-4224	PIN,COTTER-3/16 X 2IN LG	4
15	-----	SEAL,BU#240 19PI-240	2
16	-----	O-RING,240 (3.75x4.0) DURO 90	2
17	-----	SEAL,HALLITE 605 ROD 1.75D	1
18	-----	SEAL,NOK-AR2573-EO 1.75BO	1
19	-----	SEAL,PTFE PISTON RING 4DIA	1
20	-----	O-RING,153 (3.5x3.688) DUR	1
21	-----	WEAR RING,4.00-3.75-.25-GFN	1
22	1P745	SEAL KIT (INCLUDES ITEMS 15-21)	1

### 4K992L Hydraulic Cylinder, 4 x 16 - Lion - 671664

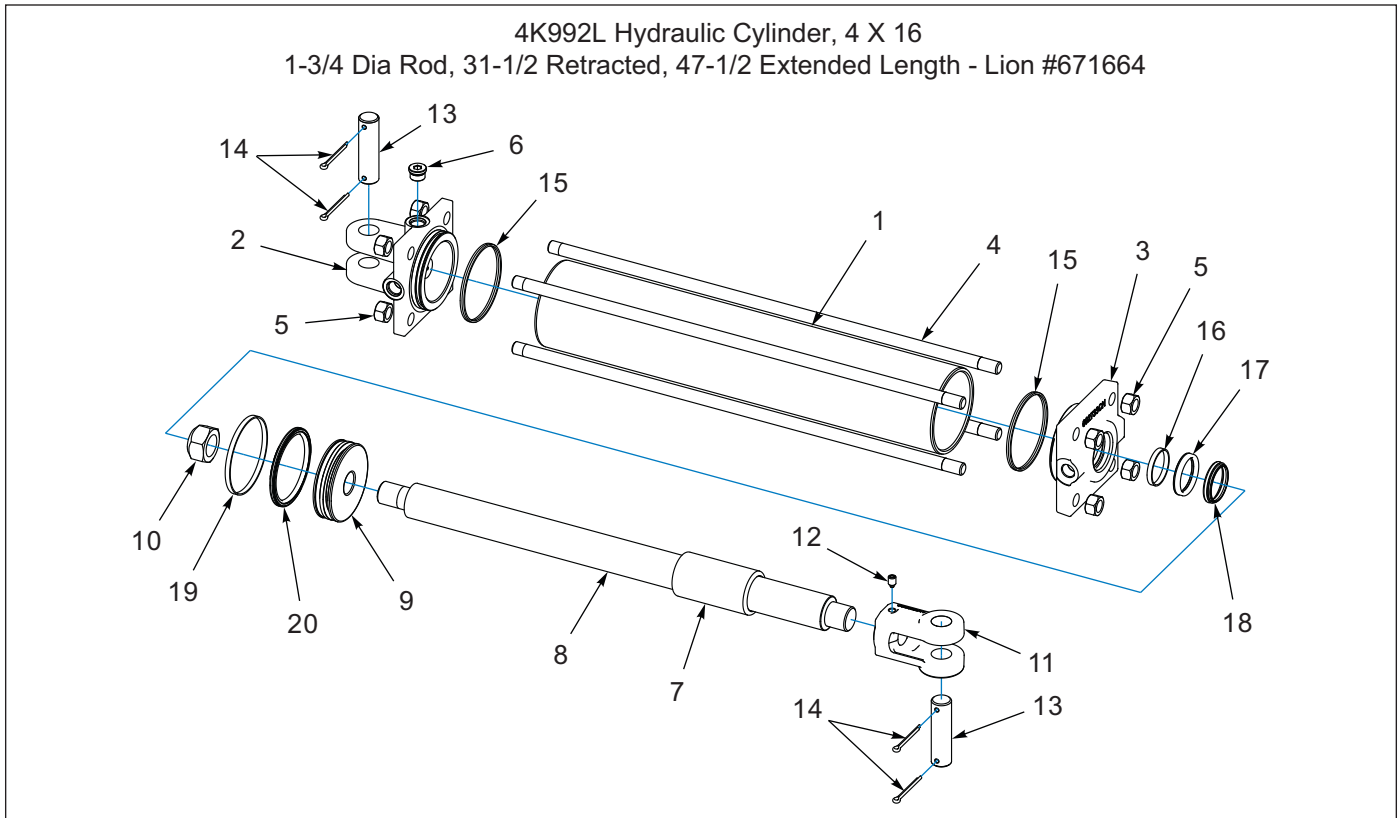
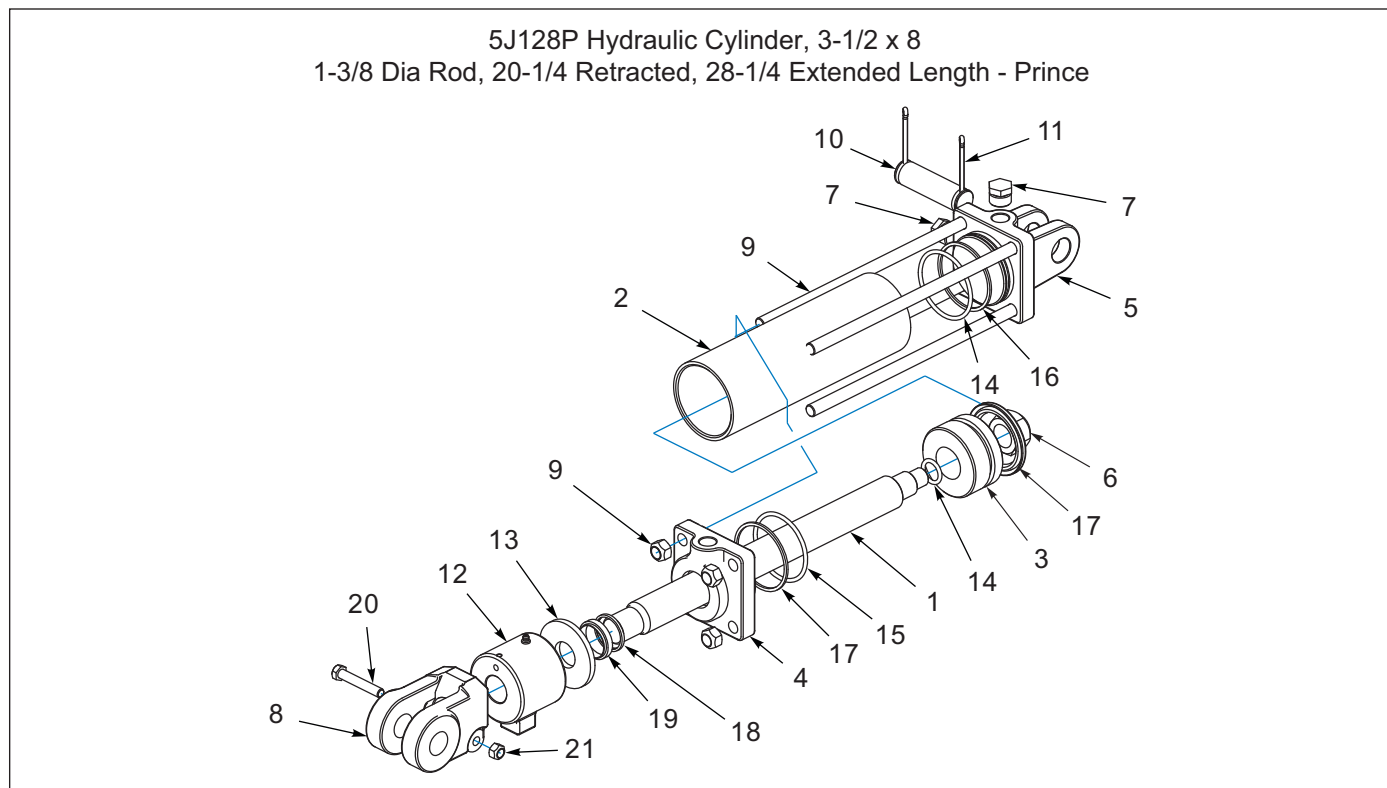


Figure 1-28: 4K992L Hydraulic Cylinder, 4 x 16 - Lion - 671664

### 4K992L Hydraulic Cylinder, 4 x 16 - Lion - 671664

ITEM	PART NUMBER	DESCRIPTION	QTY
	4K992	HYDRAULIC CYLINDER, 4 X 16	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	1-511-010002-07	NUT HEX JAM,5/8-18UNF GR2	8
6	-----	PLUG, SOCKET HEAD 3/4-16	1
7	-----	STOP TUBE	1
8	-----	ROD	1
9	-----	PISTON	1
10	8J852	NUT, LOCK 1-1/8-12, GRB, ZP	1
11	2P741	CLEVIS, 1" PIN X 1.25-12 X 2.625 (INCLUDES ITEM 12)	1
12	1P443	SET SCREW, 3/8-16 x 1/2 NYLON TIP	1
13	5J650	PIN, 1.0 x 3.625 H2	2
14	110-4224	PIN, COTTER-3/16 X 2IN LG	4
15	-----	SEAL DUAL 4.00	2
16	-----	WEAR RING 1.87-1.75-0.250	1
17	-----	SEAL ZURCON U-CUP RU9 1.75	1
18	-----	SEAL, WIPER 1.75	1
19	-----	WEAR RING 4.00-3.88-0.250	1
20	-----	SEAL SURCON WYNSEAL 4.00	1
21	1P745	SEAL KIT (INCLUDES ITEMS 15-20)	1

## 5J128P Hydraulic Cylinder, 3-1/2 x 8 - Prince



**Figure 1-29: 5J128P Hydraulic Cylinder, 3-1/2 x 8 - Prince**

## 5J128P Hydraulic Cylinder, 3-1/2 x 8 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	5J128	HYDRAULIC CYLINDER, 3-1/2 X 8	1
1	7K936	PISTON ROD	1
2	5J183	TUBE	1
3	7K937	PISTON	1
4	7K938	GLAND	1
5	7J055	BUTT CLEVIS	1
6	6D918	LOCK NUT, 3/4-16 NF	1
7	1-007-010025	PLUG,3/4-16 O-RING BOSS	3
8	7K939	CLEVIS ASSEMBLY	1
9	7K932	TIE ROD ASSEMBLY	4
10	5J650	CLEVIS PIN	1
11	110-4224	PIN,COTTER 3/16 X 2IN LG	2
12	7K940	STROKE CONTROL	1
13	5J170	DUST COVER	1
14	-----	O-RING	1
15	-----	O-RING	2
16	-----	BACK UP WASHER	2
17	-----	CROWN SEAL	1
18	-----	U-CUP	1
19	-----	WIPER	1
20	1-654-010051-10	3/8-16 NC X 2 1/4" GR5	1
21	1-512-010005-05	HEX NUT, 3/8-16 NC, SELF-LOCKING	1
22	7K941	PMCK-BD-0567 SEAL KIT (INCLUDES ITEMS 14-19)	1



### 5J280G Hydraulic Cylinder, 3 x 8 - Hydraulic Gear

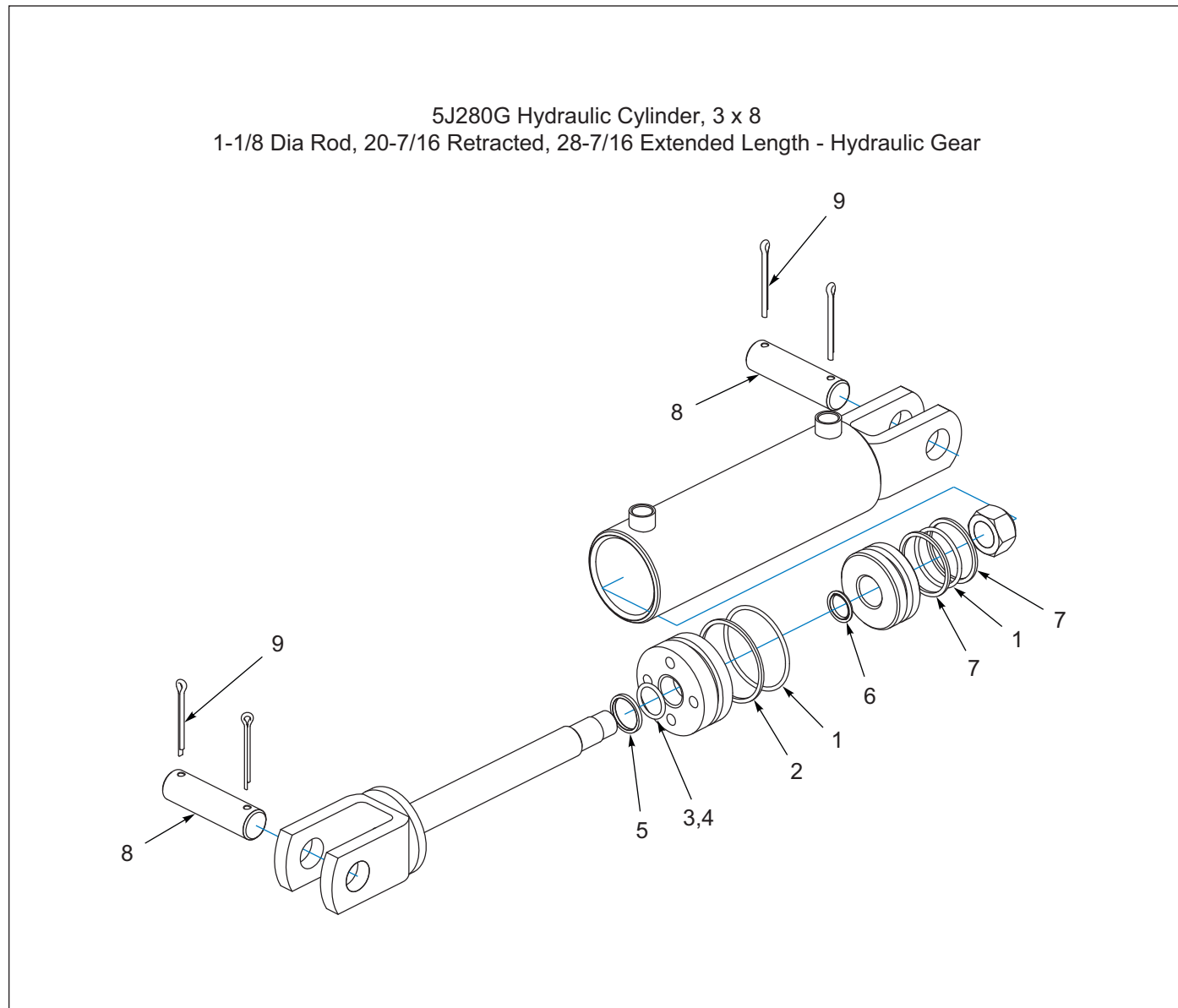


Figure 1-30: 5J280G Hydraulic Cylinder, 3 x 8 - Hydraulic Gear

### 5J280G Hydraulic Cylinder, 3 x 8 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	5J280	HYDRAULIC CYLINDER, 3 X 8	1
1	-----	O RING	2
2	-----	BACK-UP RING	1
3	-----	O RING	1
4	-----	BACK UP RING	1
5	-----	WIPER	1
6	-----	SEAL	1
7	-----	SPIRAL TEFLON BACK-UP RING	2
8	5J650	CYLINDER PIN	2
9	110-4224	PIN,COTTER3/16 X 2IN LG	4
10	3J263	SEAL KIT (INCLUDES ITEMS 1-7)	1

### 5J280P Hydraulic Cylinder, 3 x 8 - Prince

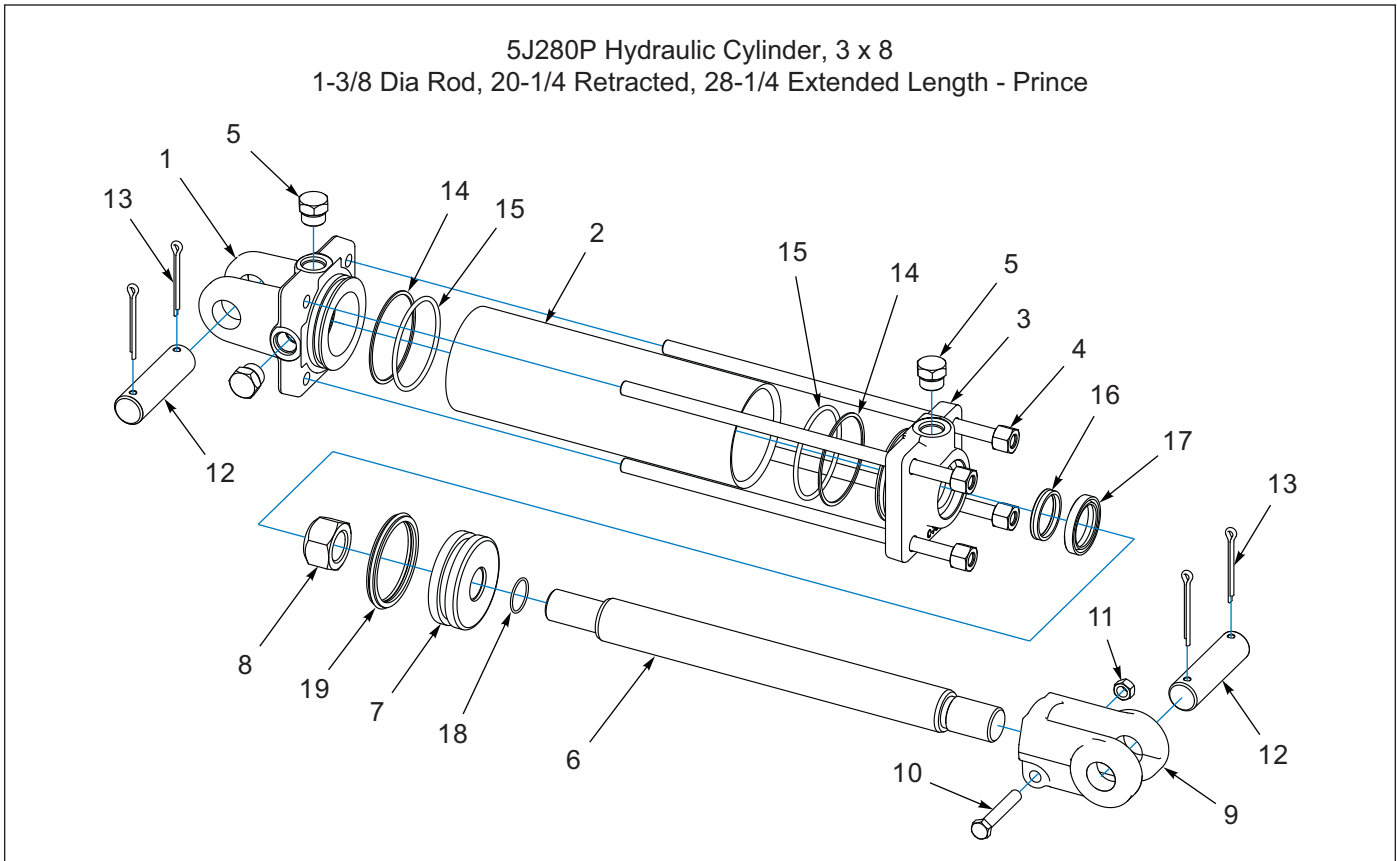


Figure 1-31: 5J280P Hydraulic Cylinder, 3 x 8 - Prince

### 5J280P Hydraulic Cylinder, 3 x 8 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	5J280	HYDRAULIC CYLINDER, 3 X 8	1
1	-----	BASE CLEVIS	1
2	-----	TUBE	1
3	-----	ROD CAP	1
4	-----	TIE ROD ASSEMBLY	1
5	1-007-010025	PLUG, 3/4-16 O-RING BOSS	1
6	-----	PISTON ROD	1
7	7K930	PISTON	1
8	-----	PISTON NUT	1
9	9D481	ROD CLEVIS (INCLUDES ITEMS 10 AND 11)	1
10	1-654-010051-10	SCREW, HX CP 3/8-16 X 2-1/4 GR5	1
11	1-512-010005-05	NUT, HEX SLFLKG GRB 3/8-16	2
12	5J650	PIN, 1.0 X 3.625 H2	2
13	110-4224	PIN,COTTER 3/16 X 2IN LG	1
14	-----	B/U WASHER	2
15	-----	O-RING	2
16	-----	U-CUP	1
17	-----	ROD WIPER	1
18	-----	PISTON O-RING	1
19	-----	PISTON SEAL	1
20	7K926	PMCK-BD-0565 SEAL KIT (INCLUDES ITEMS 14-19)	1

### 5J830G Hydraulic Cylinder, 4 x 30 - Hydraulic Gear

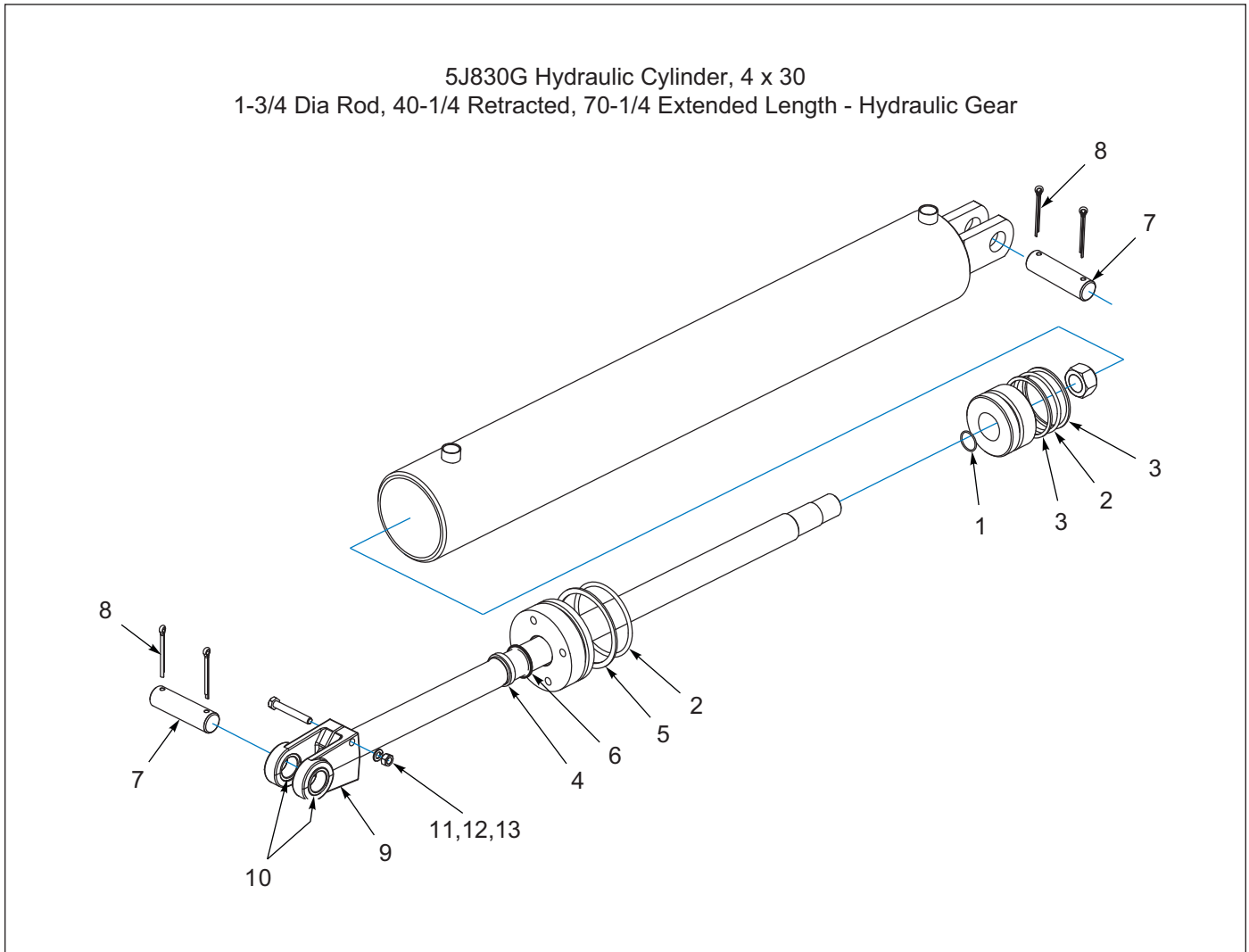


Figure 1-32: 5J830G Hydraulic Cylinder, 4 x 30 - Hydraulic Gear

### 5J830G Hydraulic Cylinder, 4 x 30 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	5J830	HYD CYLINDER - 4 X 30	1
1	-----	O-RING	1
2	-----	O RING	2
3	-----	SPIRAL TEFLON BACKUP	1
4	-----	ROD WIPER	1
5	-----	PARBACK	1
6	-----	POLYSEAL	1
7	5J650	PIN, CLEVIS 1.0 X 3.625	1
8	110-4224	PIN,COTTER 3/16 X 2IN LG	4
9	5J195	CLEVIS (INCLUDES ITEM 10)	1
10	5K964	BUSHING	2
11	108628	SCREW HX CP 5/16 -18UNC X 2 1/4	1
12	1-512-010007-06	NUT, HEX 5/16-18	1
13	1-861-010034-10	WASHER LKG 5/16	1
14	8K604	SEAL KIT (INCLUDES ITEMS 4-6 AND 9-11)	1

### 5J830L Hydraulic Cylinder, 4 x 30 - Lion - 648335

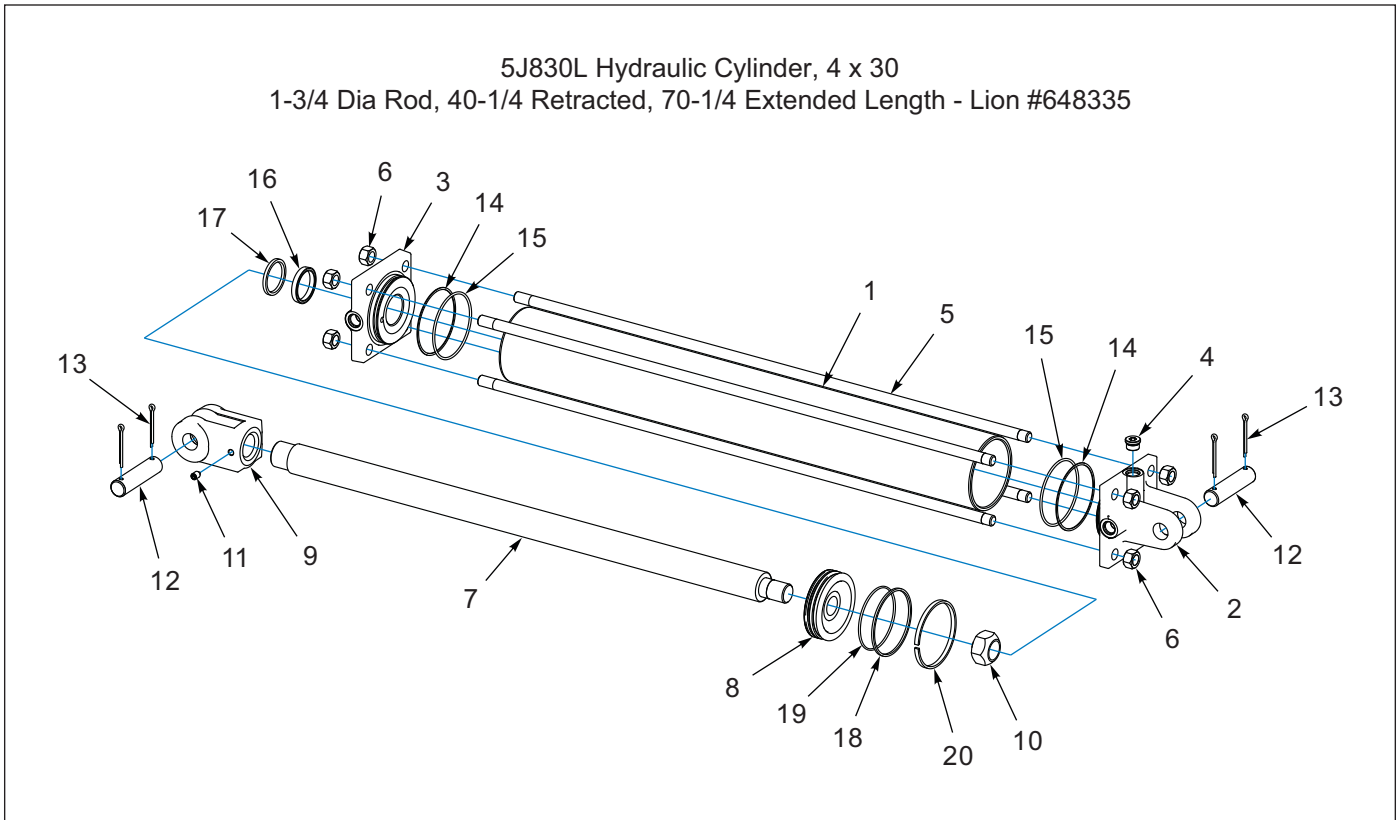


Figure 1-33: 5J830L Hydraulic Cylinder, 4 x 30 - Lion - 648335

### 5J830L Hydraulic Cylinder, 4 x 30 - Lion - 648335

ITEM	PART NUMBER	DESCRIPTION	QTY
	5J830	HYD CYLINDER - 4 X 30	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	PLUG, SOCKET HEAD 3/4-16	1
5	-----	TIE ROD	4
6	-----	NUT, HEX 5/8-18, ZP	8
7	-----	ROD	1
8	-----	PISTON	1
9	2P738	CLEVIS, 1" PIN X 1.5-12 X 2.75 (INCLUDES ITEM 11)	1
10	8J852	NUT, LOCK 1-1/8-12, GRB, ZP	1
11	1P443	SET SCREW, 3/8-16 X 1/2 NYLON TIP	1
12	7J067	PIN, 1.0 X 4.0 H2	2
13	110-4224	PIN, COTTER 3/16 X 2IN LG	4
14	-----	SEAL, BU#240 19PI-240	2
15	-----	O-RING, 240 (3.75X4.0) DURO 90	2
16	-----	SEAL, HALLITE 605 ROD 1.75D	1
17	-----	SEAL, NOK-AR2573-EO 1.75BO	1
18	-----	SEAL, PTFE PISTON RING 4DIA	1
19	-----	O-RING, 153 (3.5 X 3.688) DUR	1
20	-----	WEAR RING, 4.00-3.75-.25-GFN	1
21	1P745	SEAL KIT (INCLUDES ITEMS 14-20)	1

### 5J830L Hydraulic Cylinder, 4 x 30 - Lion - 671667

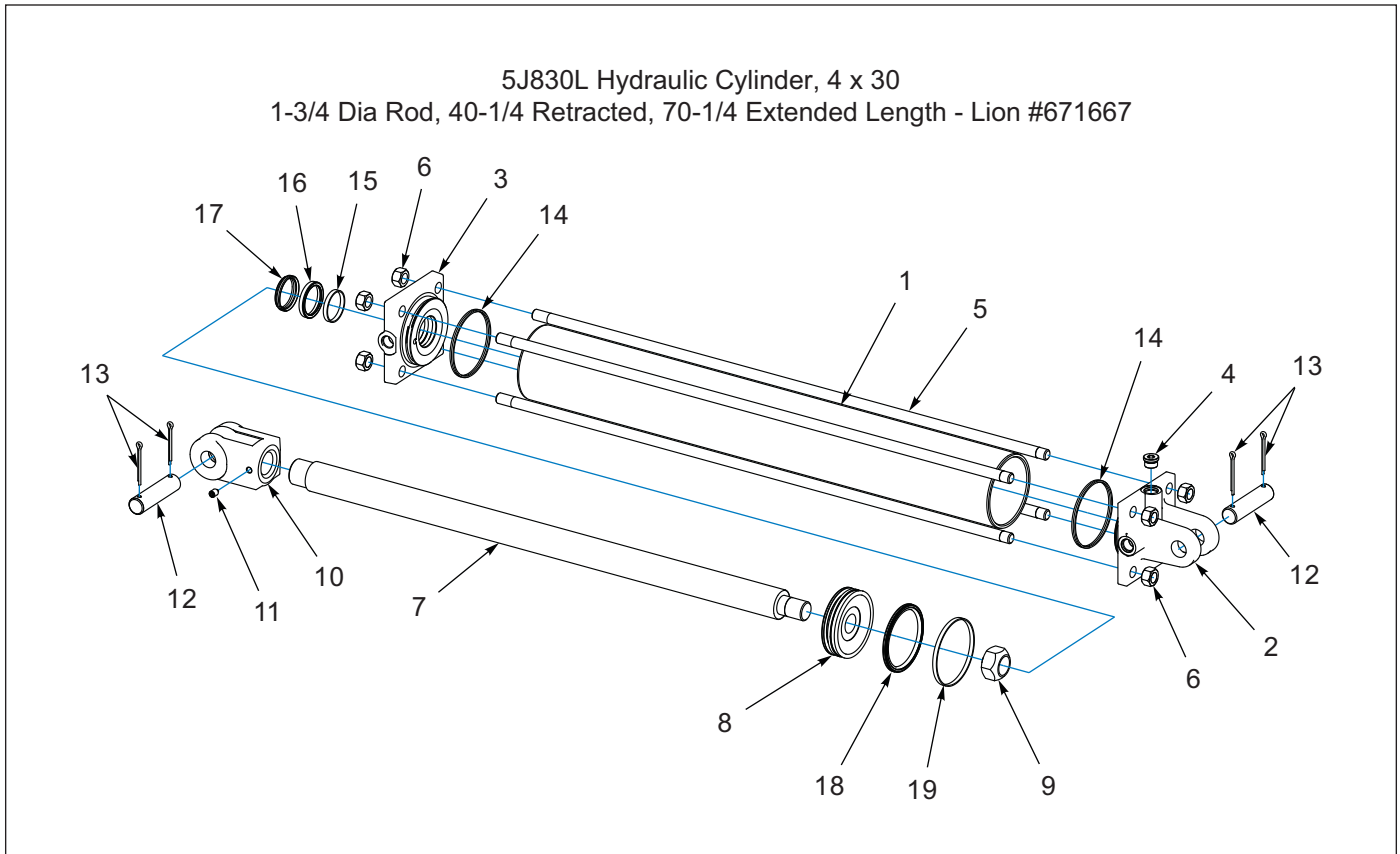


Figure 1-34: 5J830L Hydraulic Cylinder, 4 x 30 - Lion - 671667

### 5J830L Hydraulic Cylinder, 4 x 30 - Lion - 671667

ITEM	PART NUMBER	DESCRIPTION	QTY
	5J830	HYD CYLINDER - 4 X 30	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	PLUG, SOCKET HEAD 3/4-16	1
5	-----	TIE ROD	4
6	-----	NUT, HEX 5/8-18, ZP	8
7	-----	ROD	1
8	-----	PISTON	1
9	8J852	NUT, LOCK 1-1/8-12, GRB, ZP	1
10	2P738	CLEVIS, 1" PIN X 1.5-12 X 2.75 (INCLUDES ITEM 11)	1
11	1P443	SET SCREW, 3/8-16 X 1/2 NYLON TIP	1
12	7J067	PIN, 1.0 X 4.0 H2	2
13	110-4224	PIN, COTTER 3/16 X 2IN LG	4
14	-----	SEAL DUAL 4.00	2
15	-----	WEAR RING 1.87-1.75-0.250	1
16	-----	SEAL ZURCON U-CUP RU9 1.75	1
17	-----	SEAL, WIPER 1.75	1
18	-----	SEAL SURCON WYNSEAL 4.00	1
19	-----	WEAR RING 4.00-3.88-0.250	1
20	1P745	SEAL KIT (INCLUDES ITEMS 14-19)	1

## 5J830P Hydraulic Cylinder, 4 x 30 - Prince

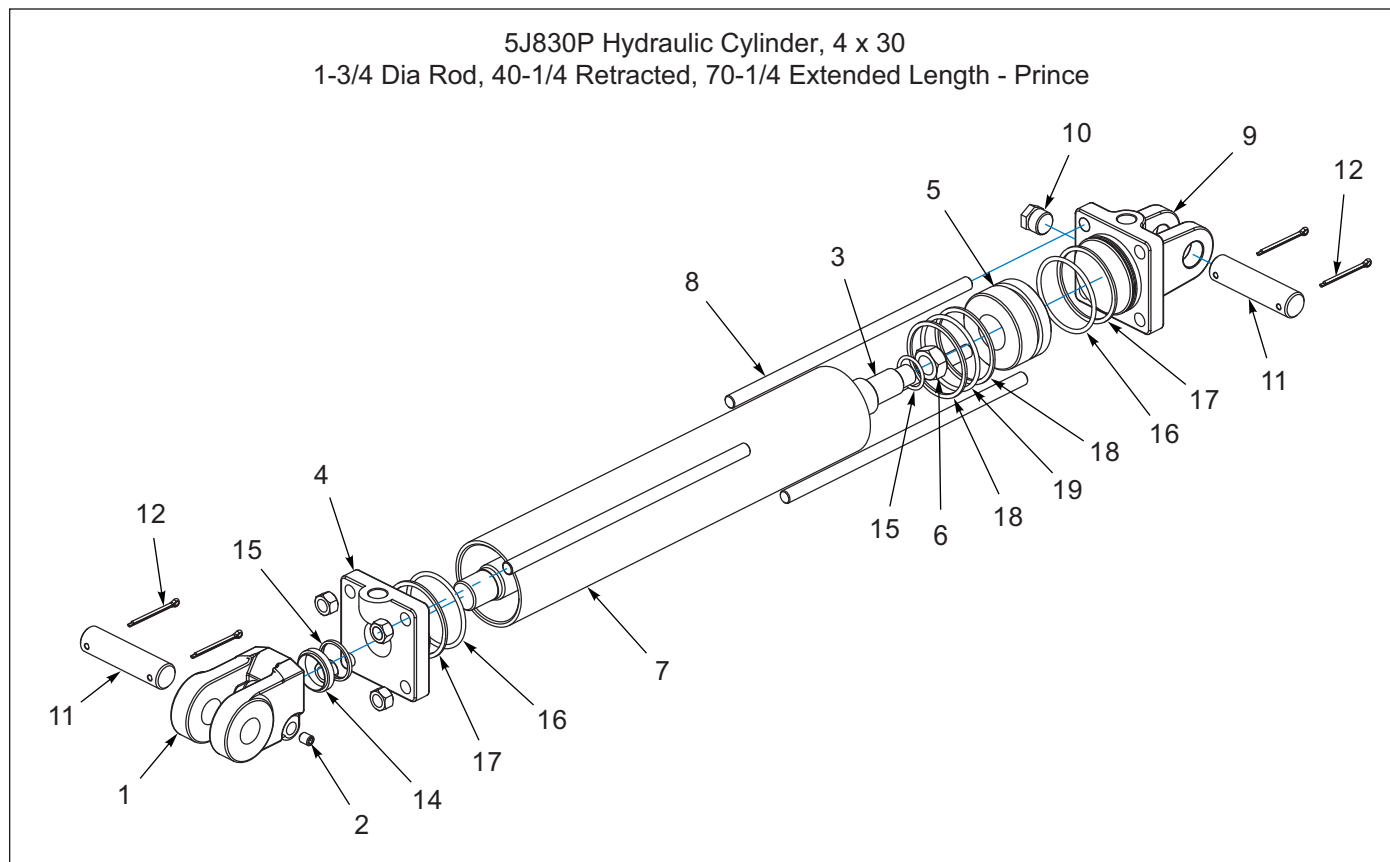


Figure 1-35: 5J830P Hydraulic Cylinder, 4 x 30 - Prince (Before 01/14/2008)

## 5J830P Hydraulic Cylinder, 4 x 30 - Prince (Before 01/14/2008)

ITEM	PART NUMBER	DESCRIPTION	QTY
	5J830	HYD CYLINDER - 4 X 30 (BEFORE 01/14/2008)	1
1	1J072	ROD END CLEVIS	1
2	-----	SET SCREW, 3/8-24 NF X 1/2"	1
3	6J336	PISTON ROD	1
4	-----	GLAND	1
5	-----	PISTON	1
6	-----	LOCKNUT, 1 1/4-12 NF	1
7	6J337	TUBE	1
8	6J338	TIE ROD	4
9	7J053	BASE	1
10	1-007-010025	PLUG,3/4-16 O-RING BOSS	1
11	7J067	CLEVIS PIN	2
12	110-4224	PIN,COTTER 3/16 X 2IN LG	4
13	-----	O-RING	1
14	-----	ROD WIPER	1
15	-----	U-CUP	1
16	-----	O-RING	2
17	-----	BACK-UP WASHER	2
18	-----	BACK UP WASHER	2
19	-----	O-RING	1
20	1J070	SEAL KIT (INCLUDES ITEMS 13-19)	1

### 5K440G Hydraulic Cylinder, 3 x 8 - Hydraulic Gear

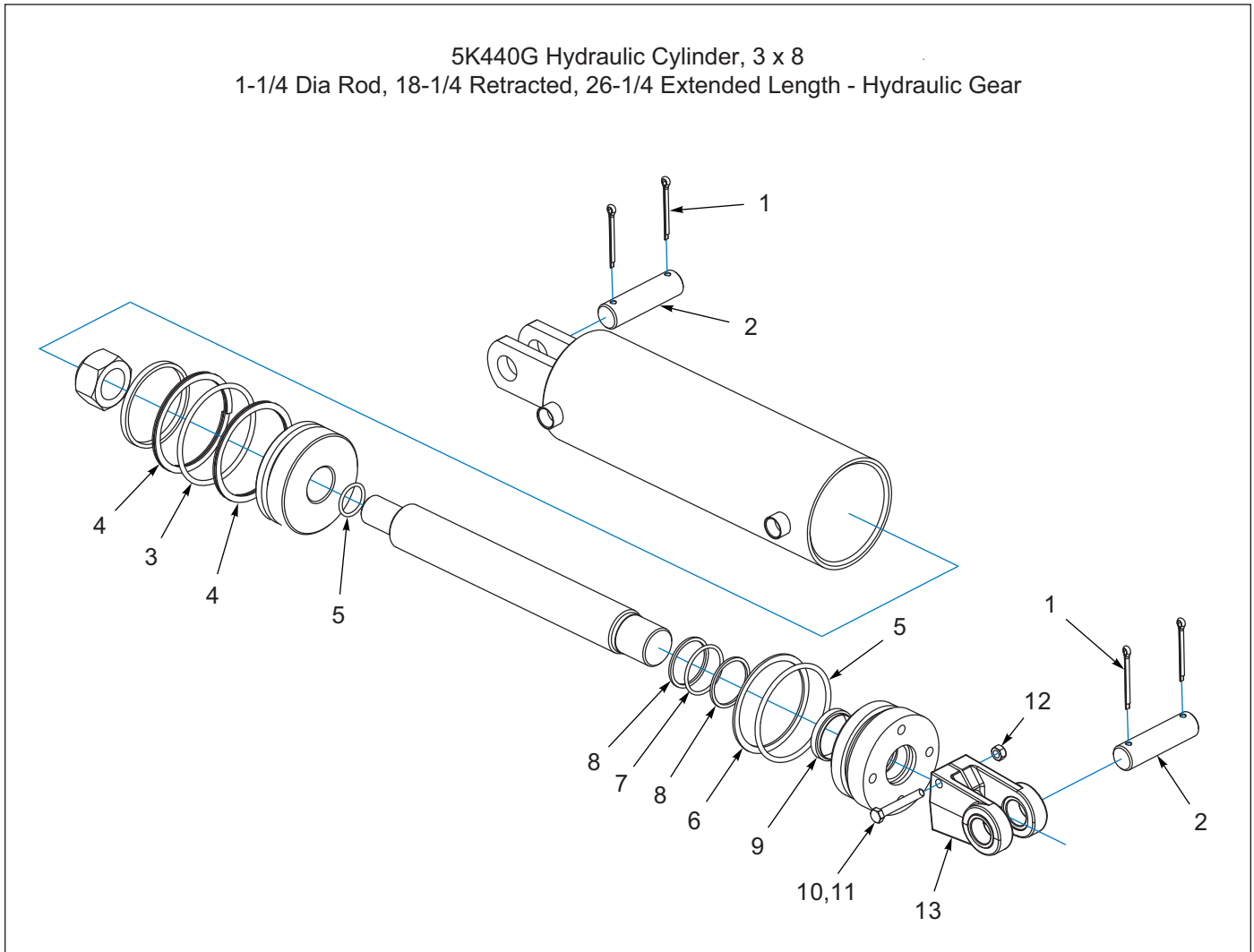


Figure 1-36: 5K440G Hydraulic Cylinder, 3 x 8 - Hydraulic Gear

### 5K440G Hydraulic Cylinder, 3 x 8 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	5K440	HYD CYLINDER - 3 X 8	1
1	110-4224	PIN,COTTER 3/16 X 2IN LG	4
2	5J650	PIN	2
3	-----	O-RING	2
4	-----	SPIRAL BACKUP RING	2
5	-----	SEAL	1
6	-----	BACKUP RING, THK	1
7	-----	O-RING	1
8	-----	BACKUP RING	2
9	-----	WIPER	1
10	108628	SCREW HX CP 5/16-18UNC X 2-1/4	1
11	1-861-010034-10	WASHER,LKG 5/16	1
12	1-512-010007-06	NUT, HEX 5/16-18	1
13	5J195	CLEVIS	1
14	5K838	SEAL KIT (INCLUDES ITEMS 3-9)	1

### 5K440L Hydraulic Cylinder, 3 x 8 - Lion - 648336

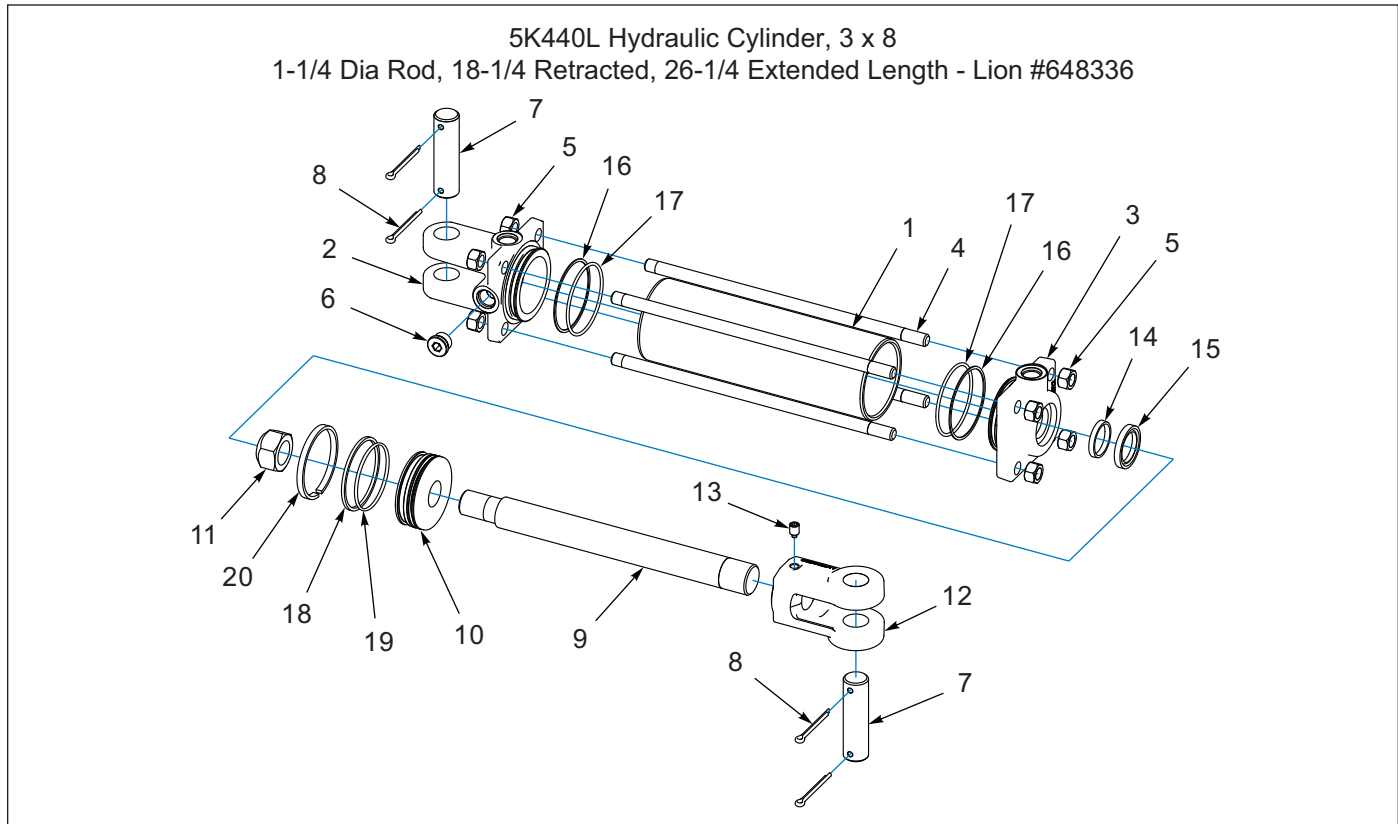


Figure 1-37: 5K440L Hydraulic Cylinder, 3 x 8 - Lion - 648336

### 5K440L Hydraulic Cylinder, 3 x 8 - Lion - 648336

ITEM	PART NUMBER	DESCRIPTION	QTY
	5K440	HYD CYLINDER - 3 X 8	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	1-512-010007-09	NUT, HEX 1/2-13 ZP	8
6	-----	PLUG, SOCKET HEAD 3/4-16	1
7	5J650	PIN, CLEVIS, 1.0X3.625	2
8	110-4224	PIN, COTTER 3/16 X 2IN LG	4
9	-----	ROD	1
10	-----	PISTON	1
11	-----	NUT, LOCK 1-14, GrB, ZP	1
12	2P737	CLEVIS, 1" PIN X 1.25-12 X 2.625 (INCLUDES ITEM 13)	1
13	1P443	SET SCREW, 3/8-16 x 1/2 NYLON TIP	1
14	-----	SEAL, HALLITE 605 ROD 1-1/4 D	1
15	-----	SEAL WIPER ROD, 1.250 METAL E	1
16	-----	SEAL, BU#232 19PI-232	2
17	-----	O-RING, 232 (2.75x3) BUNA N D9	2
18	-----	SEAL, PTFE PISTION RING 3DIA	1
19	-----	O-RING, 145 (2.562x2.75) DUR9	1
20	-----	WEAR RING, 3.00-2.75-.25-GFN	1
21	1P743	SEAL KIT (INCLUDES ITEMS 14-20)	1



### 5K440L Hydraulic Cylinder, 3 x 8 - Lion - 671653

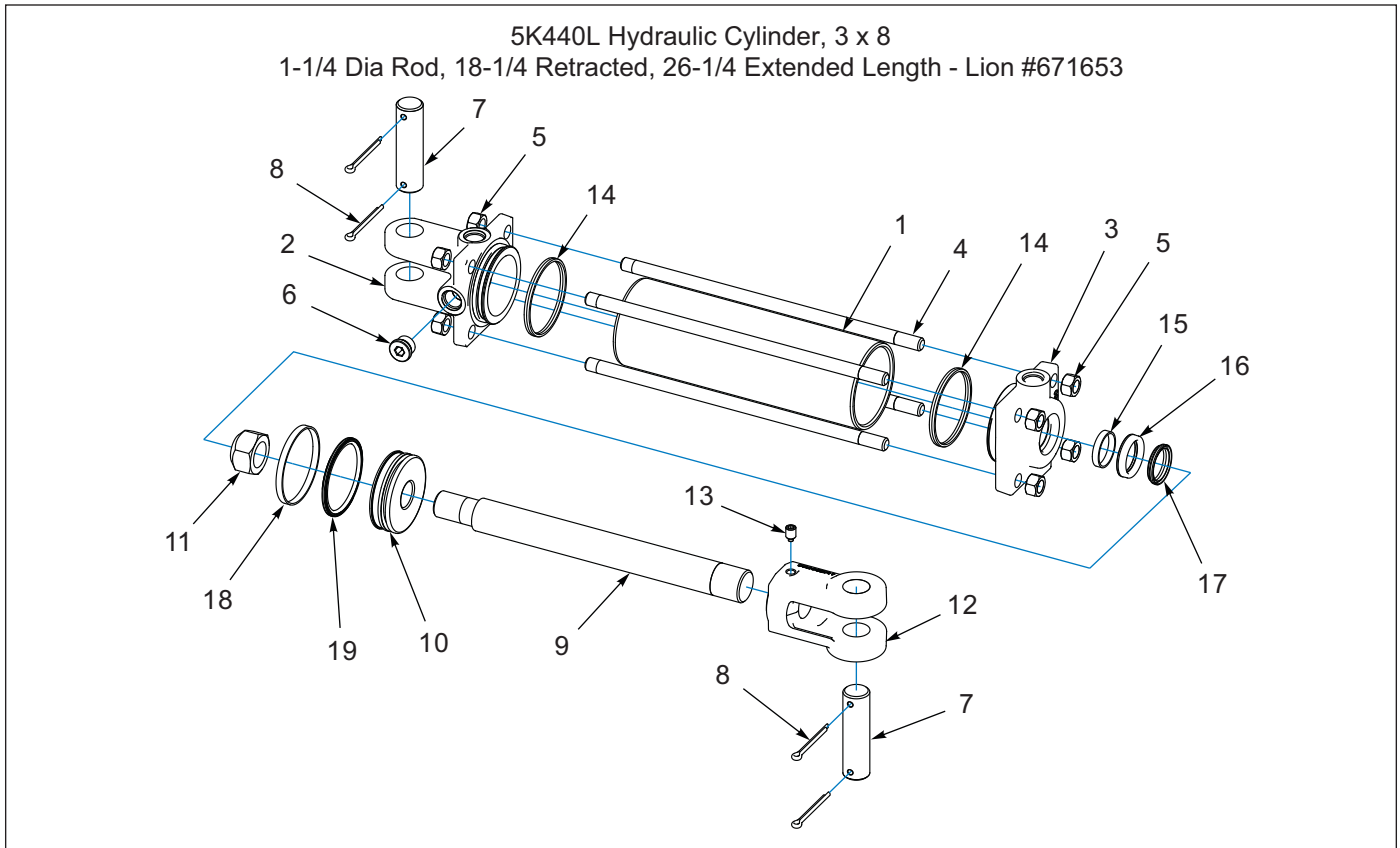


Figure 1-38: 5K440L Hydraulic Cylinder, 3 x 8 - Lion - 671653

### 5K440L Hydraulic Cylinder, 3 x 8 - Lion - 671653

ITEM	PART NUMBER	DESCRIPTION	QTY
	5K440	HYD CYLINDER - 3 X 8	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	1-512-010007-09	NUT, HEX 1/2-13 ZP	8
6	-----	PLUG, SOCKET HEAD 3/4-16	1
7	5J650	PIN, CLEVIS, 1.0X3.625	2
8	110-4224	PIN, COTTER 3/16 X 2IN LG	4
9	-----	ROD	1
10	-----	PISTON	1
11	-----	NUT, LOCK 1-14, GrB, ZP	1
12	2P737	CLEVIS, 1" PIN X 1.25-12 X 2.625 (INCLUDES ITEM 13)	1
13	1P443	SET SCREW, 3/8-16 x 1/2 NYLON TIP	1
14	-----	SEAL DUAL 3.00	2
15	-----	WEAR RING 1.37-1.25-0.250	1
16	-----	SEAL ZURCON U-CUP RU9 1.25	1
17	-----	SEAL WIPER 1.25 WNUC	1
18	-----	WEAR RING 3.00-2.88-0.250	1
19	-----	SEAL ZURCON WYNSEAL 3.00"	1
20	1P743	SEAL KIT (INCLUDES ITEMS 14-19)	1

## 6J216P Hydraulic Cylinder, 3 x 30 - Prince

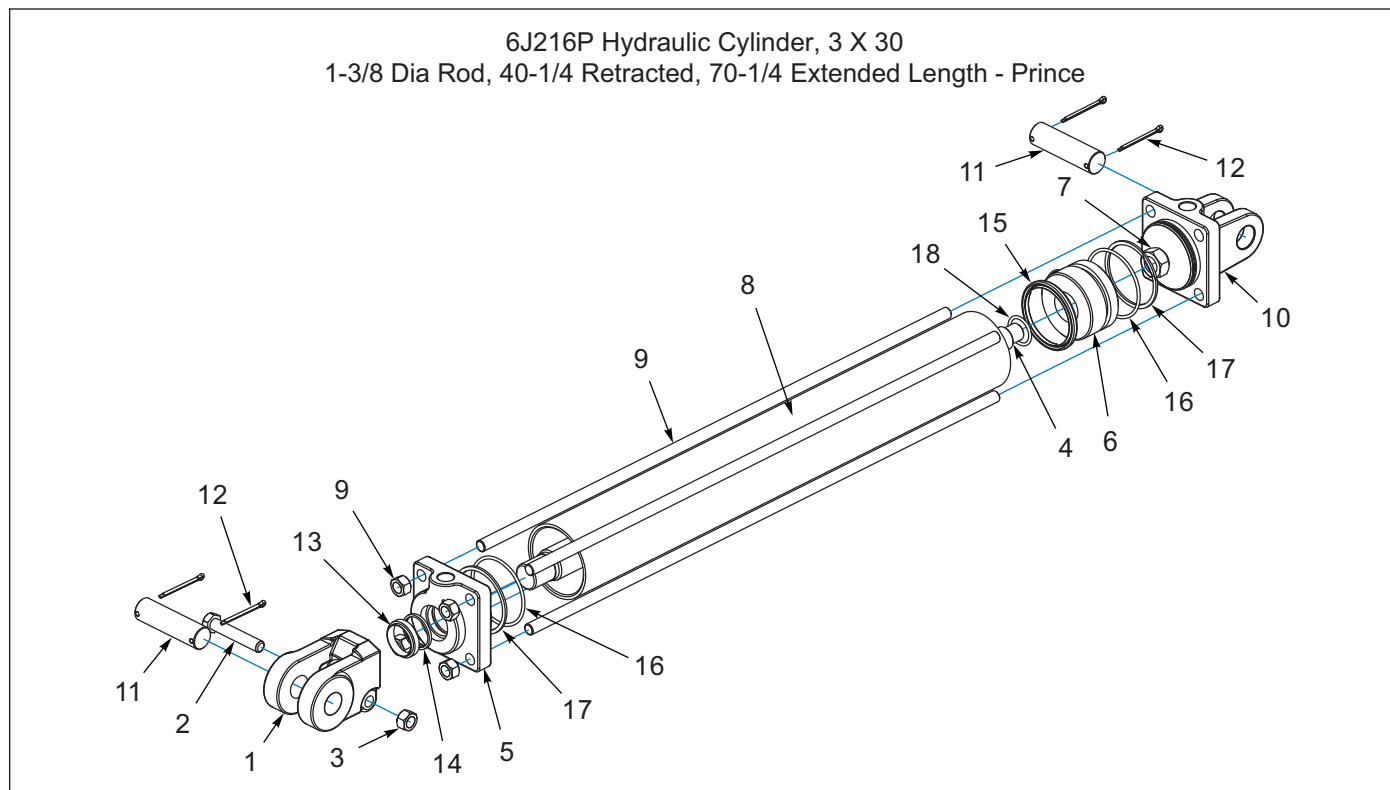


Figure 1-39: 6J216P Hydraulic Cylinder, 3 x 30 - Prince

## 6J216P Hydraulic Cylinder, 3 x 30 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	6J216	HYD CYLINDER - 3 X 30	1
1	9D481	ROD CLEVIS	1
2	1-654-010051-10	SCREW, HX CP 3/8-16X2-1/4 GR5	1
3	1-512-010005-05	NUT, HEX SLFLKG GRB 3/8-16	1
4	7K929	ROD	1
5	7K931	GLAND	1
6	7K930	PISTON	1
7	-----	PISTON NUT, 1-14 UNF, SELF LOCKING	1
8	6J340	TUBE	1
9	7K932	TIE ROD ASSEMBLY	4
10	7J049	BUTT END CLEVIS	1
11	5J650	CLEVIS PIN	2
12	110-4224	PIN,COTTER 3/16 X 2IN LG	4
13	-----	ROD WIPER	1
14	-----	BACK-UP RING	1
15	-----	CROWN SEAL	1
16	-----	O-RING - END CAP	2
17	-----	BACK UP RING	2
18	-----	O-RING	1
19	7K926	SEAL KIT (AFTER 08/2003 CYLINDER PAINTED BLACK) (INCLUDES ITEMS 13-18)	1
20	9D482	SEAL KIT (BEFORE 08/2003 CYLINDER PAINTED RED) (INCLUDES ITEMS 13-18)	1

## 6J811G Hydraulic Cylinder, 3-1/2 x 20 - Hydraulic Gear

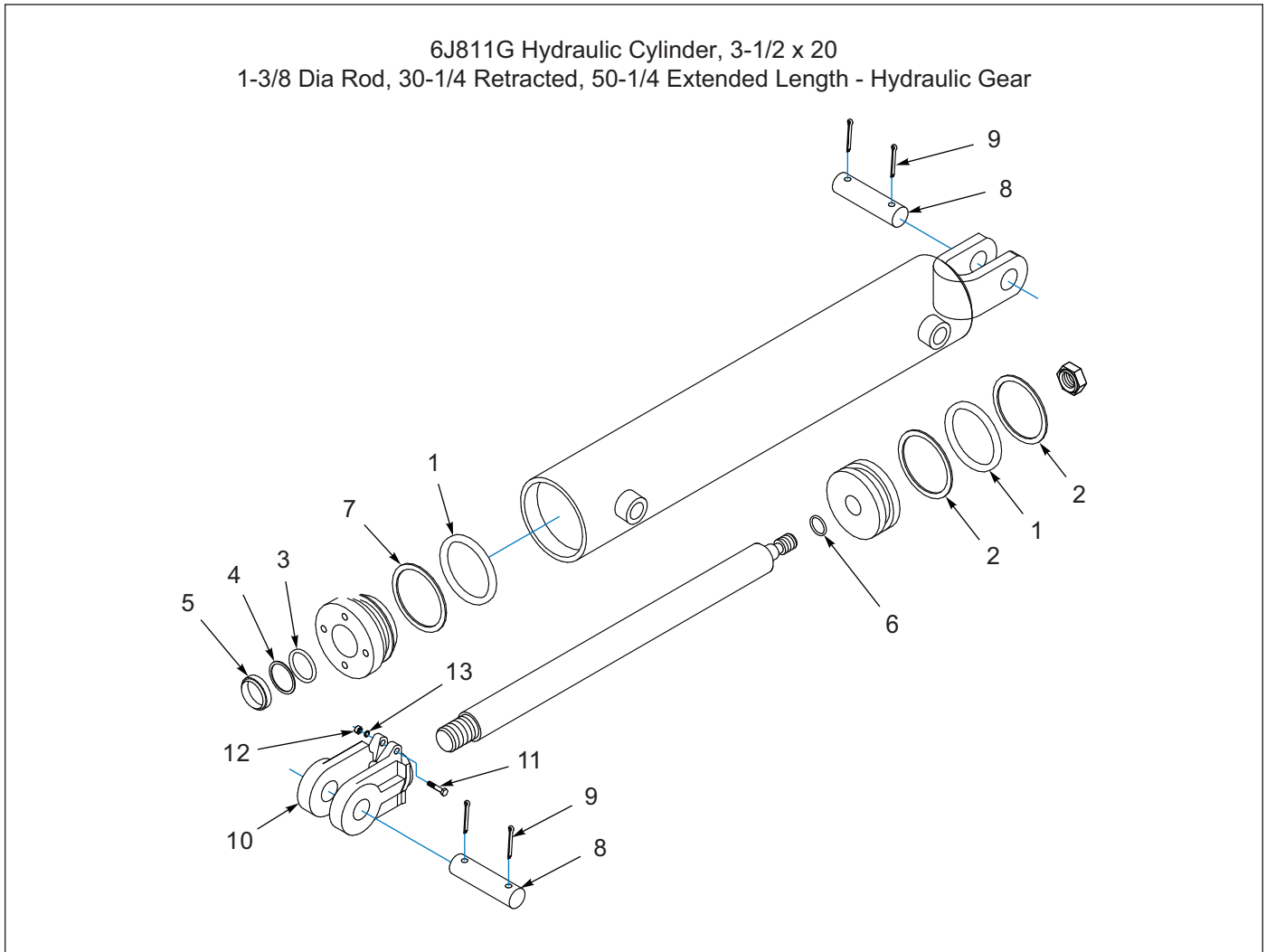


Figure 1-40: 6J811G Hydraulic Cylinder, 3-1/2 x 20 - Hydraulic Gear

## 6J811G Hydraulic Cylinder, 3-1/2 x 20 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	6J811	HYD CYLINDER - 3 1/2 X 20	1
1	-----	O RING	2
2	-----	BACK-UP RING	2
3	-----	O RING	1
4	-----	BACK UP RING	1
5	-----	ROD WIPER	1
6	-----	O RING	1
7	-----	BACK UP RING	1
8	5J650	CYLINDER PIN	2
9	110-4224	PIN,COTTER 3/16 X 2IN LG	4
10	5J195	ROD END CLEVIS	1
11	108628	SCREW HX CP 5/16-18UNCX2-1/4	1
12	1-512-010007-06	NUT, HEX 5/16-18	1
13	1-861-010034-10	WASHER,LKG 5/16	1
14	1J961	SEAL KIT (INCLUDES ITEMS 1-7)	1

### 6J811L Hydraulic Cylinder, 3-1/2 x 20 - Lion - 648290

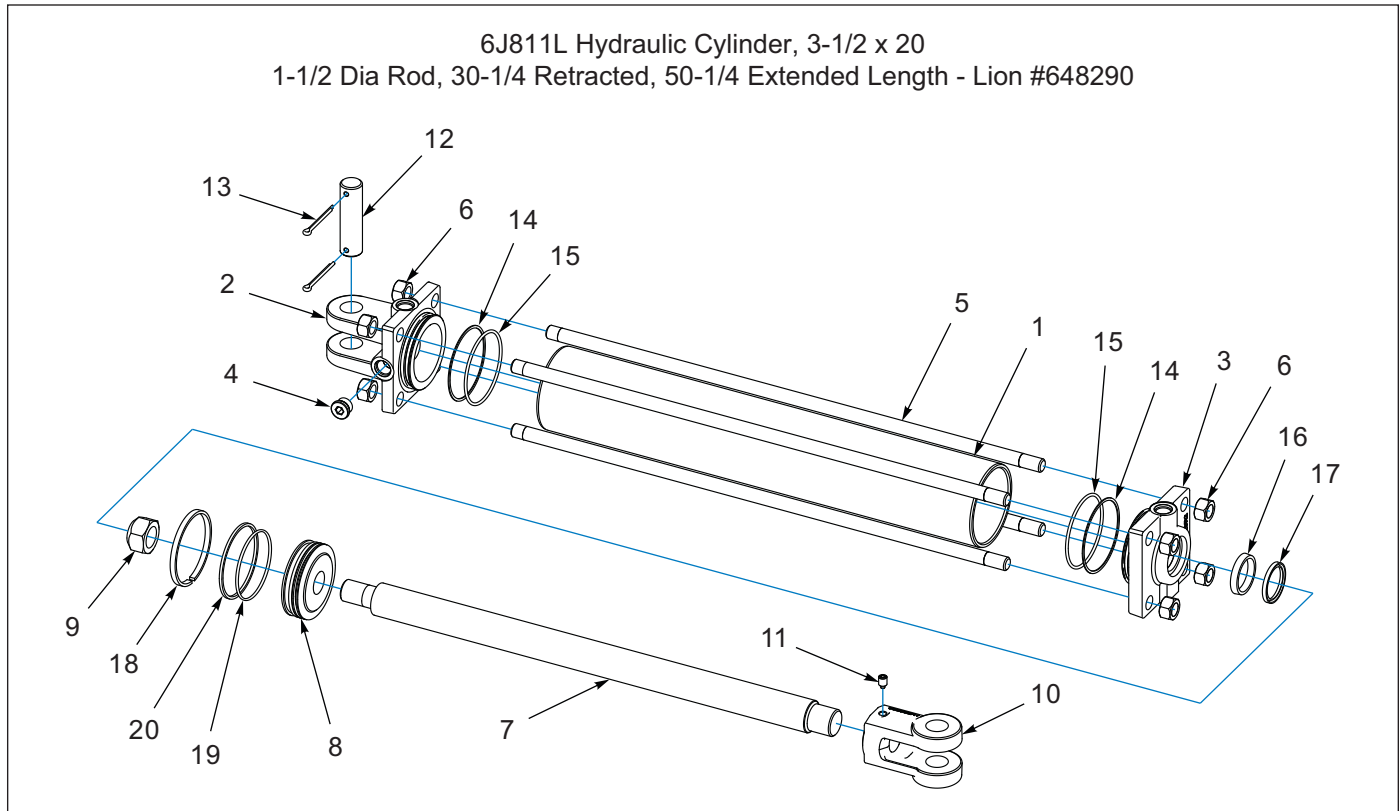


Figure 1-41: 6J811L Hydraulic Cylinder, 3-1/2 x 20 - Lion - 648290

### 6J811L Hydraulic Cylinder, 3-1/2 x 20 - Lion - 648290

ITEM	PART NUMBER	DESCRIPTION	QTY
	6J811	HYD CYLINDER - 3 1/2 X 20	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	PLUG, SOCKET HEAD 3/4-16	1
5	-----	TIE ROD	4
6	-----	NUT, HEX 5/8-18, ZP	8
7	-----	ROD	1
8	-----	PISTON	1
9	-----	NUT, LOCK 1-14, GrB, ZP	1
10	2P737	ROD CLEVIS 1" PIN X 1.25-12 X 2.625 (INCLUDES ITEM 11)	1
11	1P443	SET SCREW, 3/8-16 x 1/2 NYLON TIP	1
12	5J650	PIN, 1.0 x 3.625 H2	1
13	110-4224	PIN, COTTER 3/16 X 2IN LG	2
14	-----	SEAL, BU#236 19PI-236	2
15	-----	O-RING, 236 (3.25x3.5) D90	2
16	-----	SEAL, HALLITE 605 ROD 1-1/2 D	1
17	-----	SEAL, NOK-AR2263-EO 1-1/2"BO	1
18	-----	WEAR RING, 3.50-3.25-.25-GFN	1
19	-----	O-RING, 151 (3.0x3.188) DUR90	1
20	-----	SEAL, PTFE PISTON RING 3-1/2D	1
21	1P744	SEAL KIT (INCLUDES ITEMS 14-20)	1

### 6J811L Hydraulic Cylinder, 3-1/2 x 20 - Lion - 671661

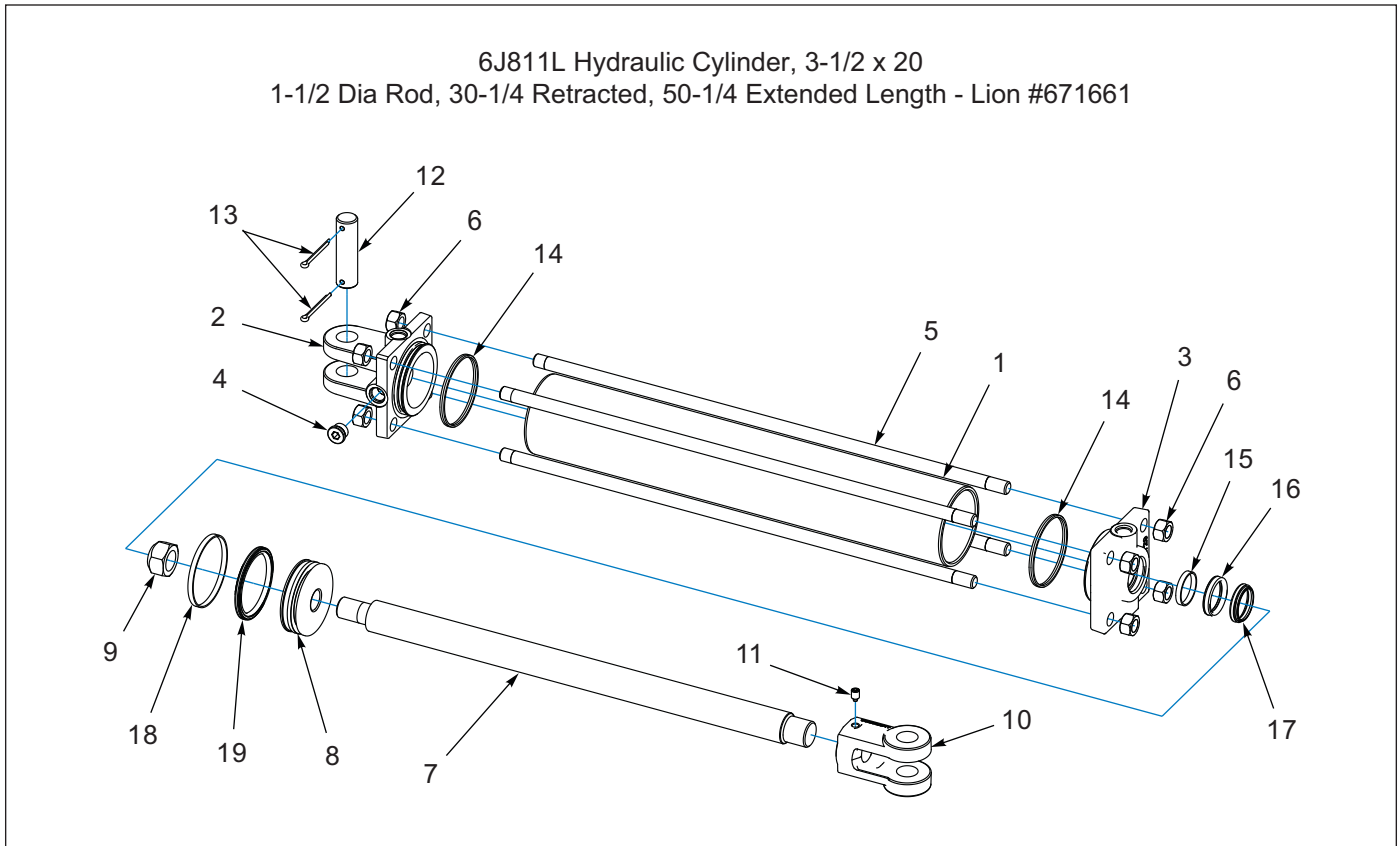


Figure 1-42: 6J811L Hydraulic Cylinder, 3-1/2 x 20 - Lion - 671661

### 6J811L Hydraulic Cylinder, 3-1/2 x 20 - Lion - 671661

ITEM	PART NUMBER	DESCRIPTION	QTY
	6J811	HYD CYLINDER - 3 1/2 X 20	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	PLUG, SOCKET HEAD 3/4-16	1
5	-----	TIE ROD	4
6	-----	NUT, HEX 5/8-18, ZP	8
7	-----	ROD	1
8	-----	PISTON	1
9	-----	NUT, LOCK 1-14, GrB, ZP	1
10	2P737	ROD CLEVIS 1" PIN X 1.25-12 X 2.625 (INCLUDES ITEM 11)	1
11	1P443	SET SCREW, 3/8-16 x 1/2 NYLON TIP	1
12	5J650	PIN, 1.0 x 3.625 H2	1
13	110-4224	PIN, COTTER 3/16 X 2IN LG	2
14	-----	SEAL DUAL 3.50	2
15	-----	WEAR RING 1.63-1.50-0.250	1
16	-----	SEAL ZURCON U-CUP RU9 1.50	1
17	-----	SEAL WIPER 1.50 WNUC TSS	1
18	-----	WEAR RING 3.50-3.38-0.250	1
19	-----	SEAL ZURCON WYNSEAL 3.50"	1
20	1P744	SEAL KIT (INCLUDES ITEMS 14-19)	1

### 6J811P Hydraulic Cylinder, 3-1/2 x 20 - Prince

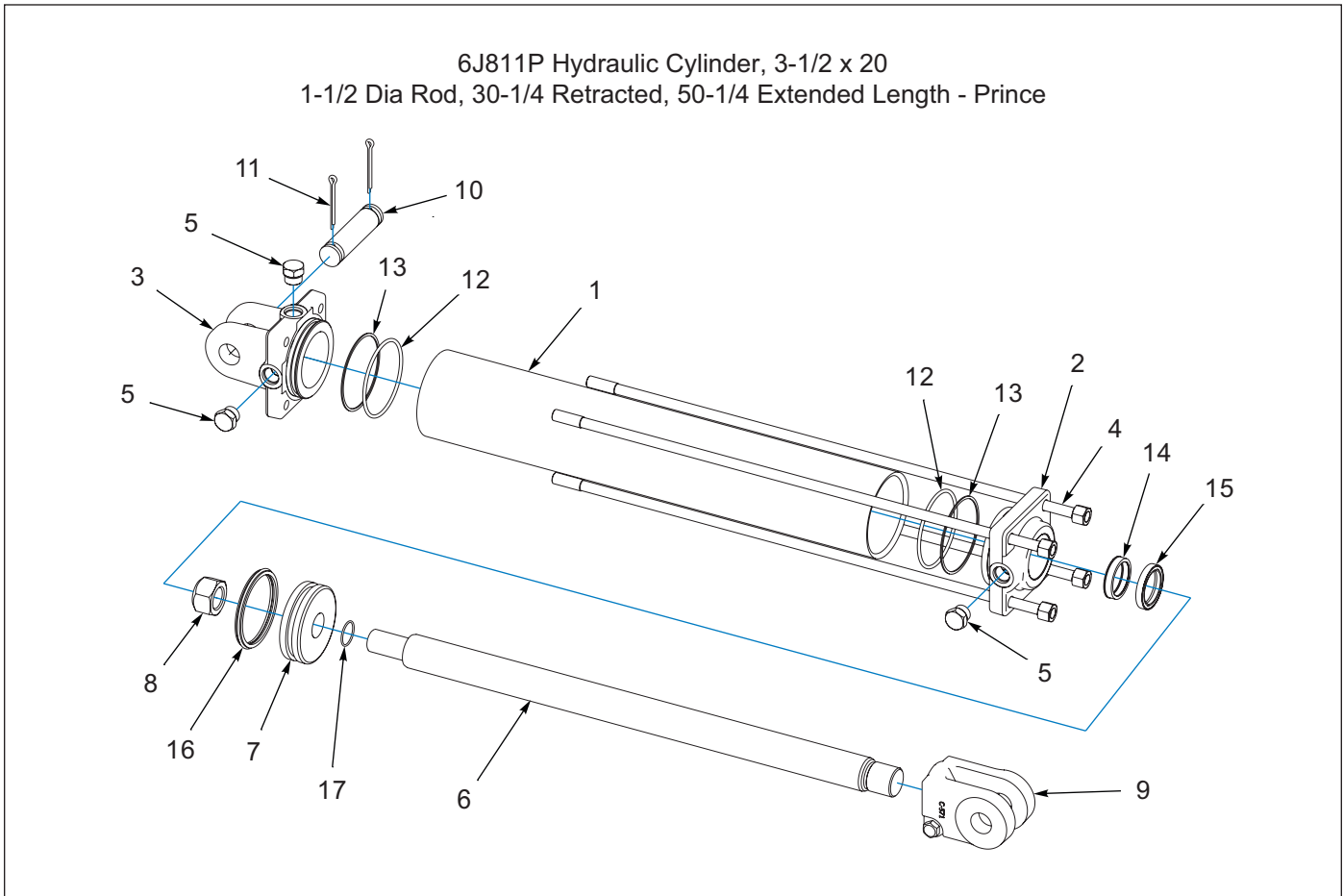
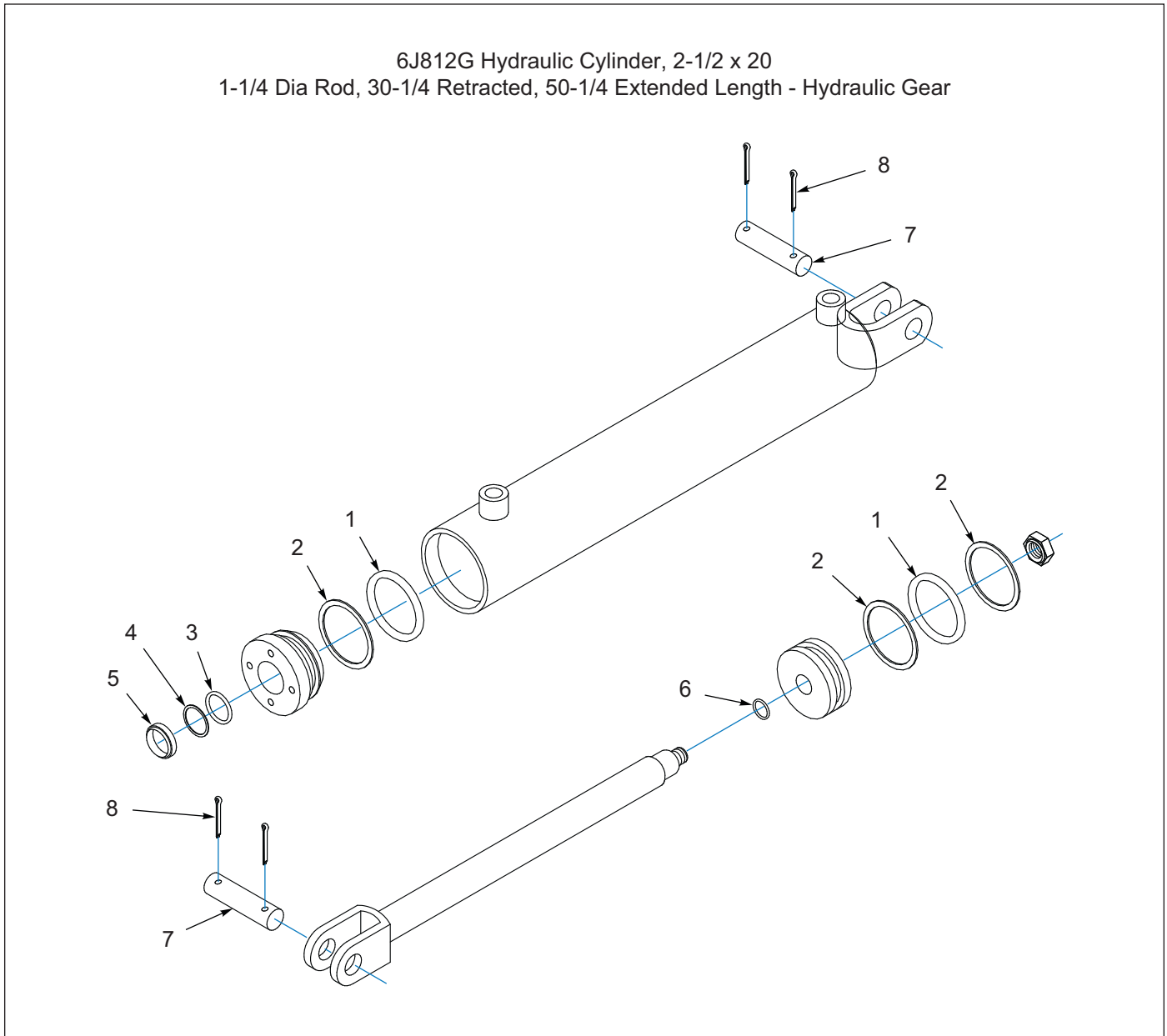


Figure 1-43: 6J811P Hydraulic Cylinder, 3-1/2 x 20 - Prince

### 6J811P Hydraulic Cylinder, 3-1/2 x 20 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	6J811	HYD CYLINDER - 3 1/2 X 20	1
1	-----	TUBE	1
2	-----	GLAND	1
3	-----	BUTT	1
4	-----	TIE ROD STUD W/HEX NUT	4
5	1-007-010025	PLUG,3/4-16 O-RING BOSS	3
6	-----	PISTON ROD	1
7	-----	PISTON	1
8	220000210	PISTON LOCKNUT	1
9	236931	CLEVIS ASSEMBLY	1
10	190400004	CYLINDER PIN 4IN	1
11	110-4224	PIN,COTTER 3/16 X 2IN LG	2
12	-----	O-RING	2
13	-----	BU-WASHER	2
14	-----	U-CUP	1
15	-----	CANNED WIPER	1
16	-----	CROWN SEAL	1
17	-----	PISTON O-RING	1
18	236928	SEAL KIT,PMCK-CG-0137 (INCLUDES ITEMS 12-17)	1

## 6J812G Hydraulic Cylinder, 2-1/2 x 20 - Hydraulic Gear



**Figure 1-44: 6J812G Hydraulic Cylinder, 2-1/2 x 20 - Hydraulic Gear**

## 6J812G Hydraulic Cylinder, 2-1/2 x 20 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	6J812	HYD CYLINDER - 2-1/2 X 20	1
1	-----	O RING	2
2	-----	BACK-UP RING	3
3	-----	O RING	1
4	-----	BACK-UP RING	2
5	-----	WIPER	1
6	-----	SEAL	1
7	5J650	PIN,1.0 x 3.625 H2	2
8	110-4224	PIN,COTTER 3/16 X 2IN LG	4
9	6J542	SEAL KIT (INCLUDES ITEMS 1-6)	1

## 6J812L Hydraulic Cylinder, 2-1/2 x 20 - Lion

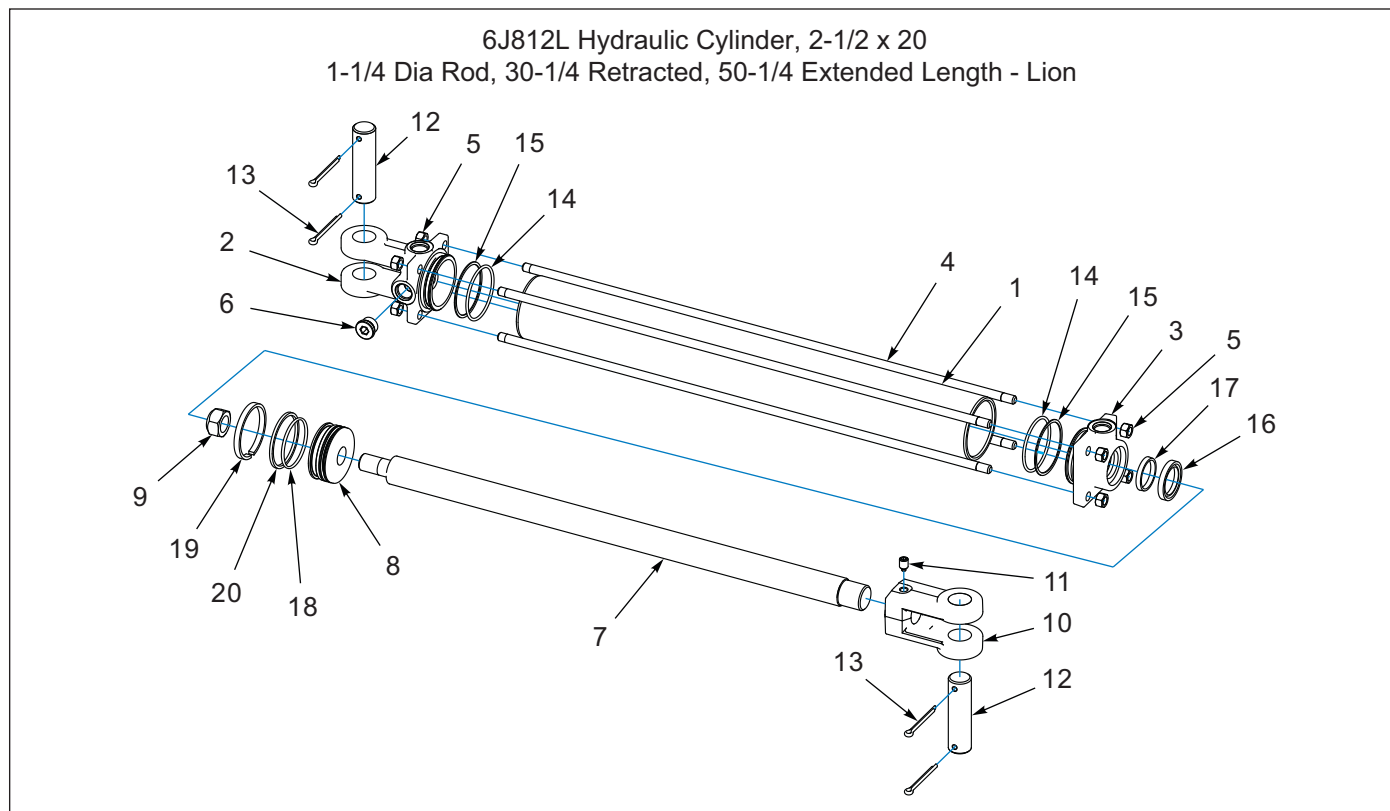


Figure 1-45: 6J812L Hydraulic Cylinder, 2-1/2 x 20 - Lion

## 6J812L Hydraulic Cylinder, 2-1/2 x 20 - Lion

ITEM	PART NUMBER	DESCRIPTION	QTY
	6J812	HYD CYLINDER - 2-1/2 X 20	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	1-512-010007-07	NUT, HEX 3/8-16 ZP	8
6	-----	PLUG, SOCKET HEAD 3/4-16	1
7	-----	ROD	1
8	-----	PISTON	1
9	1P805	NUT, HEX SLFLKG GRB 3/4-16	1
10	2P736	ROD CLEVIS <b>(INCLUDES ITEM 11)</b>	1
11	1P443	SET SCREW, 3/8-16 X 1/2 NYL	1
12	5J650	PIN, CLEVIS 1.0 X 3.625	2
13	110-4224	PIN, COTTER 3/16 X 2IN LG	4
14	-----	O-RING, 228 (2.25X2.5) DURO	2
15	-----	SEAL, BU#228 19PI-228	2
16	-----	SEAL WIPER ROD, 1.250 METAL E	1
17	-----	SEAL, HALLITE B605 ROD 1-1/4 D	1
18	-----	O-RING, 137 (2.063X2.25) DUR9	1
19	-----	WEAR RING, 2.50-2.25-.25-GFN	1
20	-----	SEAL, PTFE PISTON RING 2-1/2D	1
21	1P742	SEAL KIT <b>(INCLUDES ITEMS 14-20)</b>	1



### 6K843G Hydraulic Cylinder, 3-1/2 x 16 - Hydraulic Gear

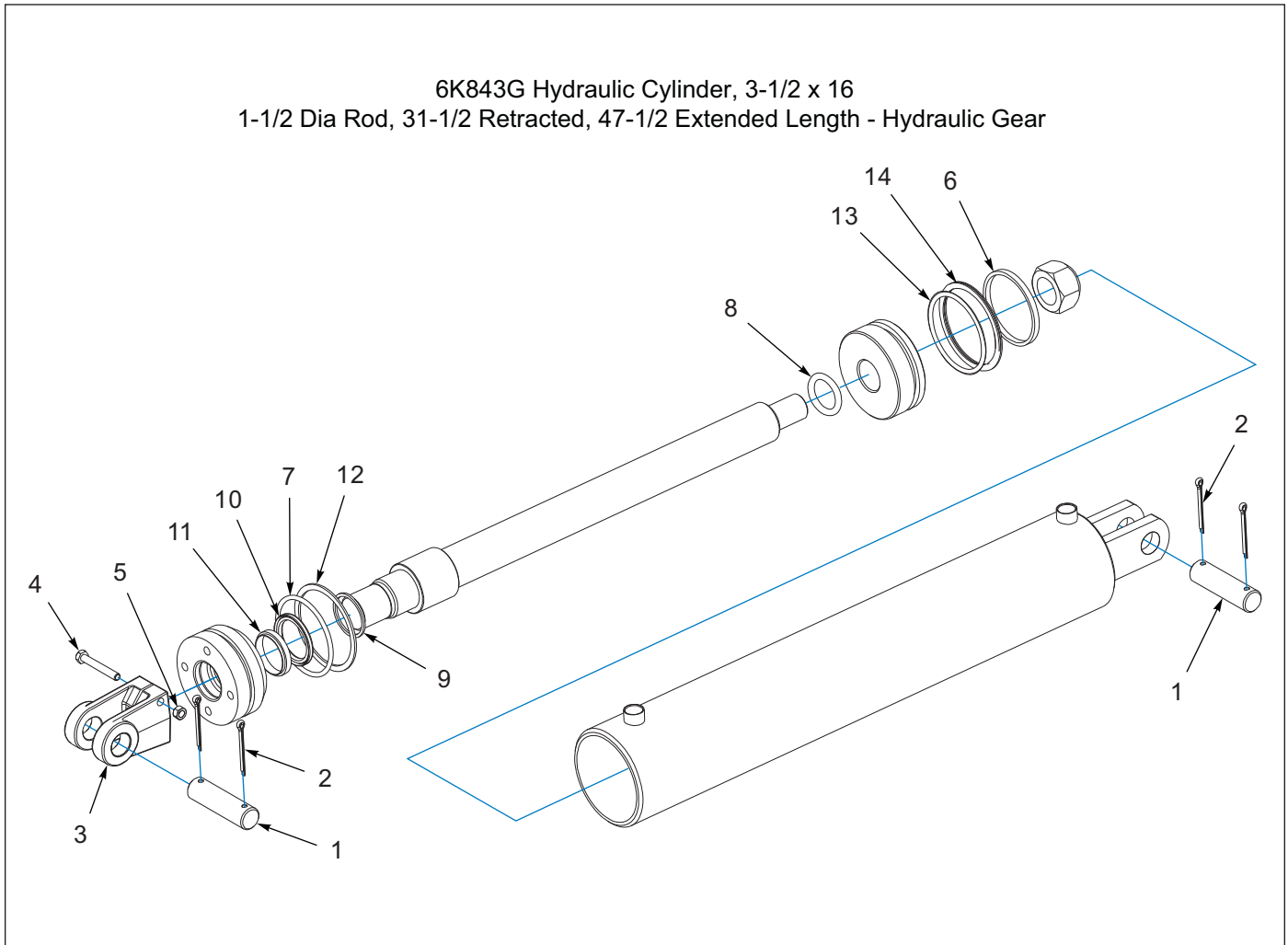


Figure 1-46: 6K843G Hydraulic Cylinder, 3-1/2 x 16 - Hydraulic Gear

### 6K843G Hydraulic Cylinder, 3-1/2 x 16 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	6K843	HYD CYLINDER - 3 1/2 X 16	1
1	5J650	PIN,CLEVIS 1.0X3.625	2
2	110-4224	PIN,COTTER 3/16 X 2IN LG	4
3	5J195	CLEVIS	1
4	1-654-010049-11	SCREW,HX CAP, 5/16-18UNCX2-1/2	1
5	104032	NUT,HX SLF-LKG W/MYL 5/16-18	1
6	-----	WEAR RING	1
7	-----	O-RING	1
8	-----	O-RING	1
9	-----	WEAR RING	1
10	-----	POLYSEAL	1
11	-----	WIPER	1
12	-----	BACKUP RING	1
13	-----	NITRILE ENERGIZER	1
14	-----	SEAUN6 RING	1
15	7K260	SEAL KIT (INCLUDES ITEMS 6-14)	1

### 6K843L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 648338

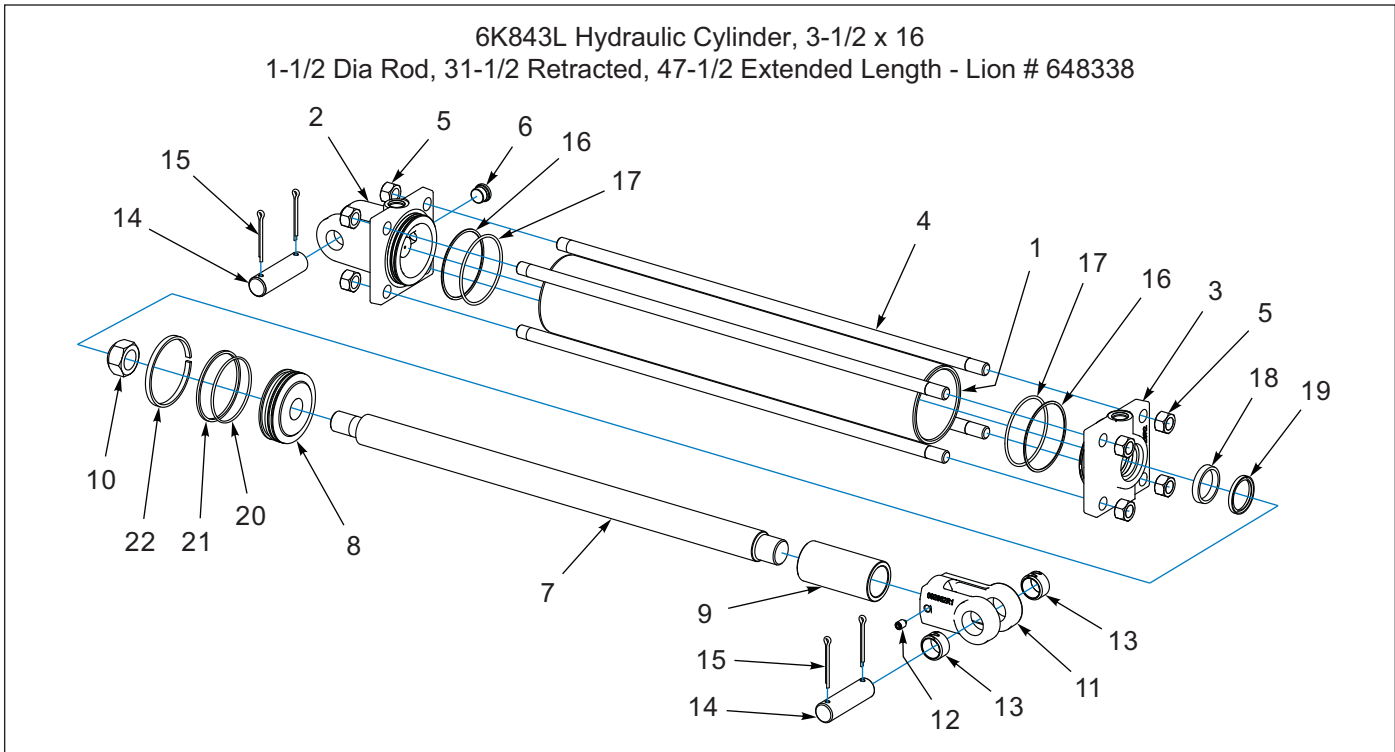


Figure 1-47: 6K843L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 648338

### 6K843L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 648338

ITEM	PART NUMBER	DESCRIPTION	QTY
	6K843	HYD CYLINDER - 3 1/2 X 16	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	-----	NUT,HEX 5/8-18,ZP	8
6	-----	PLUG,SOCKET HEAD 3/4-16	1
7	-----	ROD	1
8	-----	PISTON	1
9	-----	STOP TUBE	1
10	-----	NUT,LOCK 1-14,GRB,ZP	1
11	2P111	ROD CLEVIS (INCLUDES ITEMS 12 AND 13)	1
12	1P443	SET SCREW,3/8-16 X 1/2 NYLON TIP	1
13	3P079	SPRING BUSHING, 1.0 X 1.25 X 0.75	2
14	5J650	PIN, 1.0 X 3.625 H2	2
15	110-4224	PIN,COTTER 3/16 X 2IN LG	4
16	-----	SEAL,BU#236 19PI-236	2
17	-----	O-RING,236 (3.25 X 3.5) D90	2
18	-----	SEAL,HALLITE 605 ROD 1-1/2D	1
19	-----	SEAL,NOK-AR2263-EO 1-1/2"BO	1
20	-----	O-RING,151 (3.0 X 3.188) DURO90	1
21	-----	SEAL,PTFE PISTON RING 3-1/2D	1
22	-----	WEAR RING,3.50-3.25-.25-GFN	1
23	1P744	LION CYLINDER SEAL KIT(3.5") (INCLUDES ITEMS 16-22)	1

### 6K843L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 671657

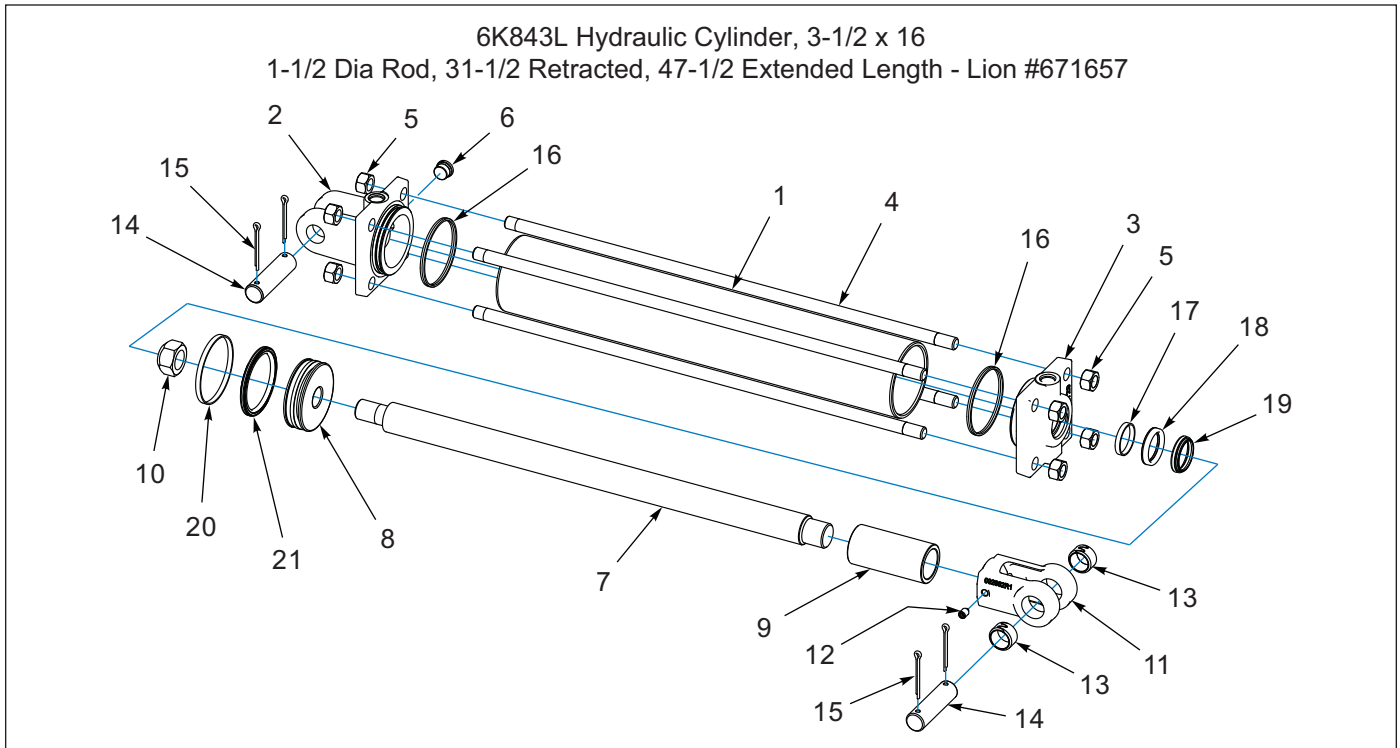
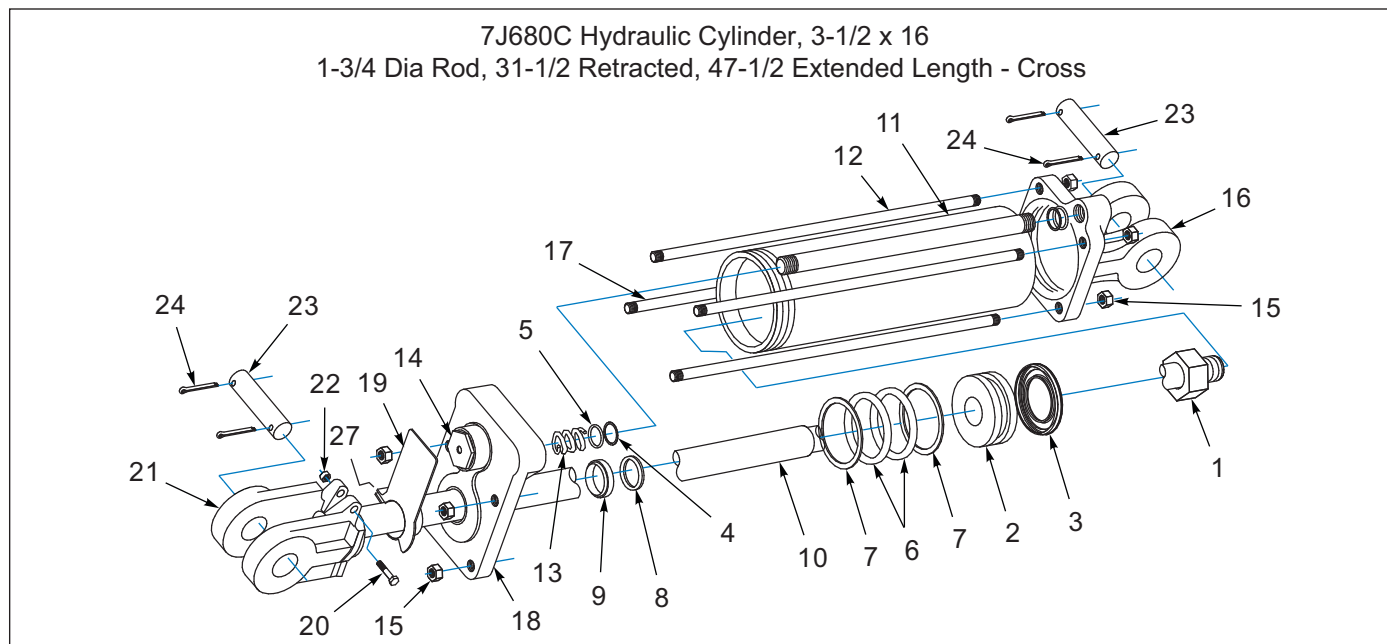


Figure 1-48: 6K843L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 671657

### 6K843L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 671657

ITEM	PART NUMBER	DESCRIPTION	QTY
	6K843	HYD CYLINDER - 3 1/2 X 16	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	-----	NUT,HEX 5/8-18,ZP	8
6	-----	PLUG,SOCKET HEAD 3/4-16	1
7	-----	ROD	1
8	-----	PISTON	1
9	-----	STOP TUBE	1
10	-----	NUT,LOCK 1-14,GRB,ZP	1
11	2P111	ROD CLEVIS <b>(INCLUDES ITEMS 12 AND 13)</b>	1
12	1P443	SET SCREW,3/8-16 X 1/2 NYLON TIP	1
13	3P079	SPRING BUSHING, 1.0 X 1.25 X 0.75	2
14	5J650	PIN, 1.0 X 3.625 H2	2
15	110-4224	PIN,COTTER 3/16 X 2IN LG	4
16	-----	SEAL,BU#236 19PI-236	2
17	-----	O-RING,236 (3.25 X 3.5) D90	2
18	-----	SEAL,HALLITE 605 ROD 1-1/2D	1
19	-----	SEAL,NOK-AR2263-EO 1-1/2"BO	1
20	-----	O-RING,151 (3.0 X 3.188) DURO90	1
21	-----	SEAL,PTFE PISTON RING 3-1/2D	1
22	-----	WEAR RING,3.50-3.25-.25-GFN	1
23	1P744	LION CYLINDER SEAL KIT(3.5") <b>(INCLUDES ITEMS 16-22)</b>	1

## 7J680C Hydraulic Cylinder, 3-1/2 x 16 - Cross



**Figure 1-49: 7J680C Hydraulic Cylinder, 3-1/2 x 16 - Cross**

## 7J680C Hydraulic Cylinder, 3-1/2 x 16 - Cross

ITEM	PART NUMBER	DESCRIPTION	QTY
	-----	HYD CYLINDER - 3 1/2 X 16 (7J680 - REPLACE W/ 9K733 & 1P325)	1
1	5K684	NUT	1
2	9K004	PISTON	1
3	-----	CROWN SEAL	1
4	-----	BACK-UP	2
5	-----	O-RING	2
6	-----	O-RING	2
7	-----	BACK-UP	2
8	-----	U-CUP	1
9	-----	WIPER	1
10	9K003	ROD	1
11	9K002	TUBE	1
12	9K001	FEED TUBE	1
13	5K689	SPRING	1
14	5K690	CARTRIDGE ASSEMBLY	1
15	8K999	HEX NUT,9/16-18 UNF	8
16	8K998	BASE CLEVIS	1
17	8K997	TIE ROD	4
18	8K996	HEAD	1
19	8K995	ACTUATOR ASSEMBLY	1
20	7C937	HHCS, 3/8" X 1 3/4" SOCKET HD	1
21	8K994	ROD CLEVIS	1
22	1-512-010007-07	NUT, HEX 3/8-16 ZP	1
23	4J549	CLEVIS PIN	2
24	110-4224	PIN,COTTER 3/16 X 2IN LG	4
27	1-654-010049-06	SCREW,H/CAP 5/16-18UNCX1-1/4	1
28	9K005	SEAL KIT (INCLUDES ITEMS 3-9)	1

## 7J680P Hydraulic Cylinder, 3-1/2 x 16 - Prince

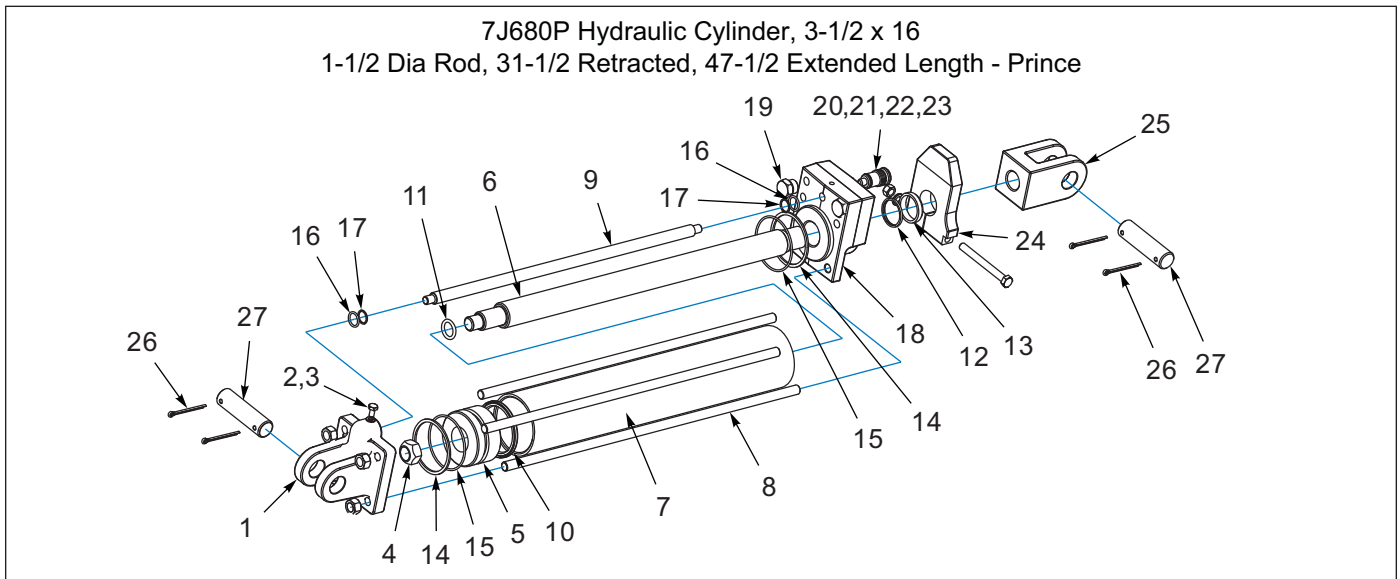


Figure 1-50: 7J680P Hydraulic Cylinder, 3-1/2 x 16 - Prince

## 7J680P Hydraulic Cylinder, 3-1/2 x 16 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	-----	HYDRAULIC CYLINDER 3-1/2 X 16 (7J680 - REPLACE W/ 9K733 & 1P325)	1
1	-----	BUTT (BASE)	1
2	-----	NYLTITE SEAL	1
3	3J730	CAPSCREW	1
4	6D918	LOCK NUT 3/4-16	1
5	9J244	PISTON	1
6	9J245	PISTON ROD	1
7	-----	TUBE	1
8	9J247	TIE ROD	4
9	9J248	MANIFOLD TUBE	1
10	-----	URETHANE SEAL	1
11	-----	O-RING	1
12	-----	U-CUP	1
13	-----	WIPER	1
14	-----	BACK-UP WASHER	2
15	-----	O-RING	2
16	-----	O-RING	2
17	-----	BACK-UP WASHER	2
18	9J249	GLAND	1
19	1-007-010024	PLUG, 3/4-16 O-RING BOSS	2
20	9J638	VALVE ASSEMBLY	1
21	-----	O-RING	1
22	-----	O-RING	1
23	-----	BACK-UP WASHER	1
24	3K884	STRIKER PLATE	1
25	9J251	CLEVIS ASSEMBLY	1
26	1-557-010362-65	PIN COTTER, 1/4X2-1/2 ZP	2
27	3J498	CLEVIS PIN	1
28	8J975	SEAL KIT (INCLUDES ITEMS 10-17)	1

## 8K901M Hydraulic Cylinder, 4 x 16 - Midway

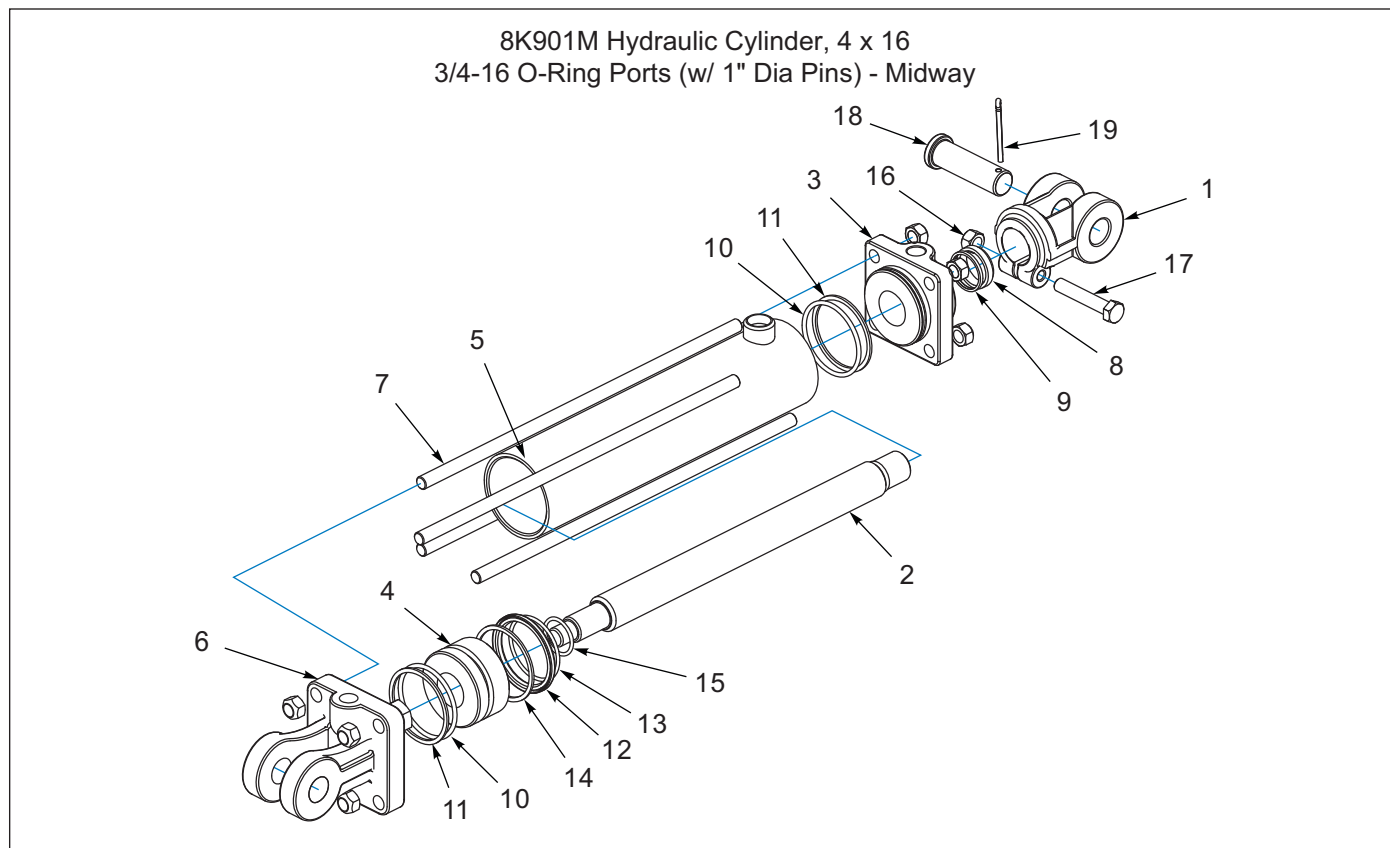


Figure 1-51: 8K901M Hydraulic Cylinder, 4 x 16 - Midway

## 8K901M Hydraulic Cylinder, 4 x 16 - Midway

ITEM	PART NUMBER	DESCRIPTION	QTY
	8K901	4 X 16 CYL W/1"PIN	1
1	8K903	CLEVIS	1
2	8K904	ROD	1
3	8K906	HEAD	1
4	8K908	PISTON	1
5	8K910	TUBE	1
6	8K912	BASE	1
7	8K913	TIE ROD	4
8	-----	ROD WIPER	1
9	-----	U-CUP	1
10	-----	O-RING	2
11	-----	BACK-UP	2
12	-----	TEFLON SEAL	1
13	-----	LOADER O/R	1
14	-----	WEAR RING	1
15	-----	O-RING	1
16	1-512-010005-05	NUT, HEX SLFLKG GRB 3/8-16	1
17	7C937	SOCKET CAPSCREW FOR 7J680 CYL	1
18	9K038	CLEVIS PIN	1
19	110-4224	PIN,COTTER 3/16 X 2IN LG	1
20	8K895	SEAL KIT (INCLUDES ITEMS 8-15)	1

## 8K902M Hydraulic Cylinder, 3-3/4 x 16 - Midway

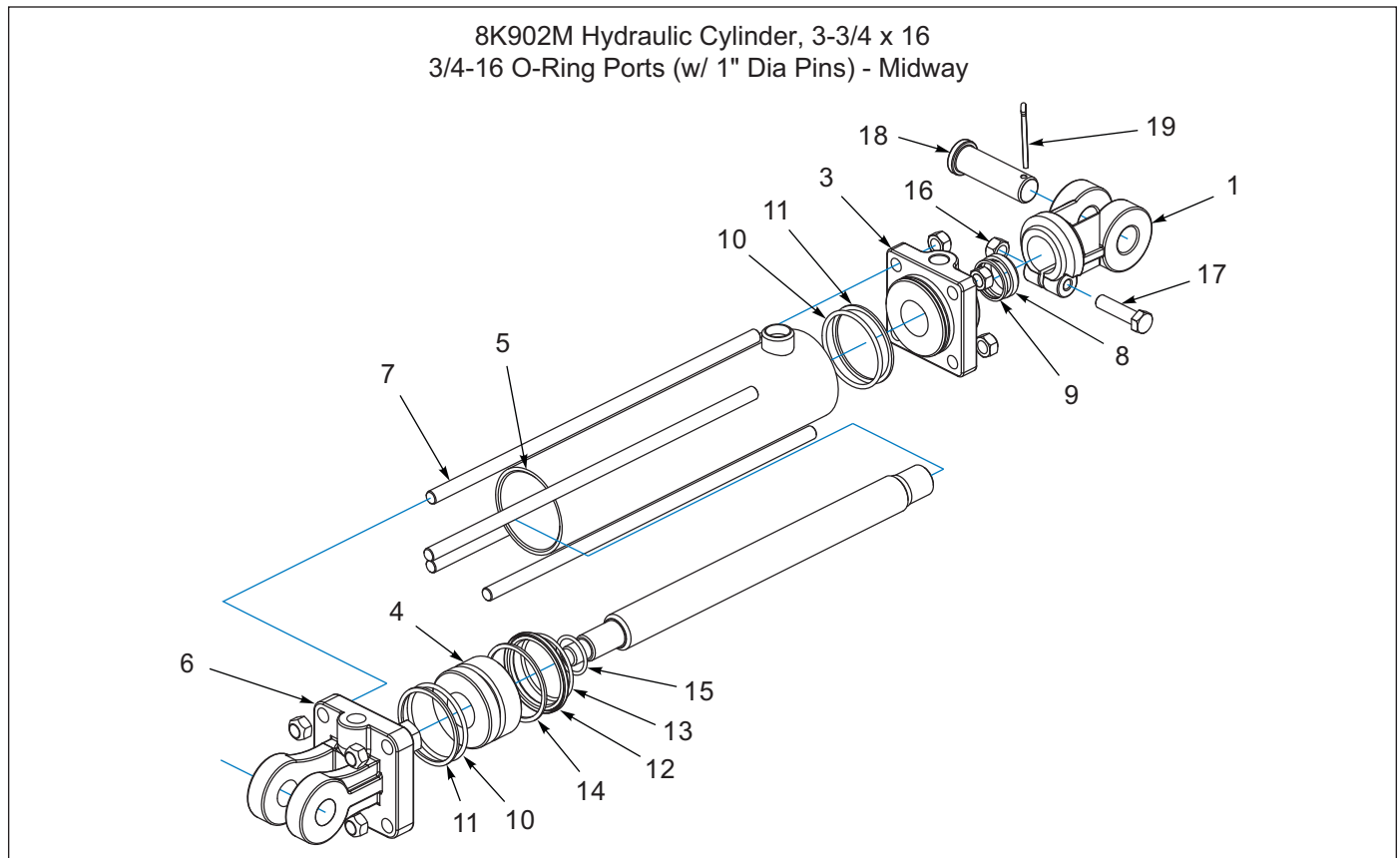


Figure 1-52: 8K902M Hydraulic Cylinder, 3-3/4 x 16 - Midway

## 8K902M Hydraulic Cylinder, 3-3/4 x 16 - Midway

ITEM	PART NUMBER	DESCRIPTION	QTY
	8K902	3-3/4 X 16 CYL W/1"PIN	1
1	8K903	CLEVIS	1
2	8K904	ROD	1
3	8K905	HEAD	1
4	8K907	PISTON	1
5	8K909	TUBE	1
6	8K911	BASE	1
7	8K913	TIE ROD	4
8	-----	ROD WIPER	1
9	-----	U-CUP	1
10	-----	O-RING	2
11	-----	BACK-UP	2
12	-----	TEFON SEAL	1
13	-----	LOADER O/R	1
14	-----	WEAR RING	1
15	-----	O-RING	1
16	1-512-010005-05	NUT, HEX SLFLKG GRB 3/8-16	1
17	7C937	SOCKET CAPSCREW-FOR 7J680 CYL	1
18	9K038	CLEVIS PIN	1
19	110-4224	PIN,COTTER 3/16 X 2IN LG	1
20	8K894	SEAL KIT (INCLUDES ITEMS 8-15)	1

## 8K923M Hydraulic Cylinder, 4 x 16 - Midway

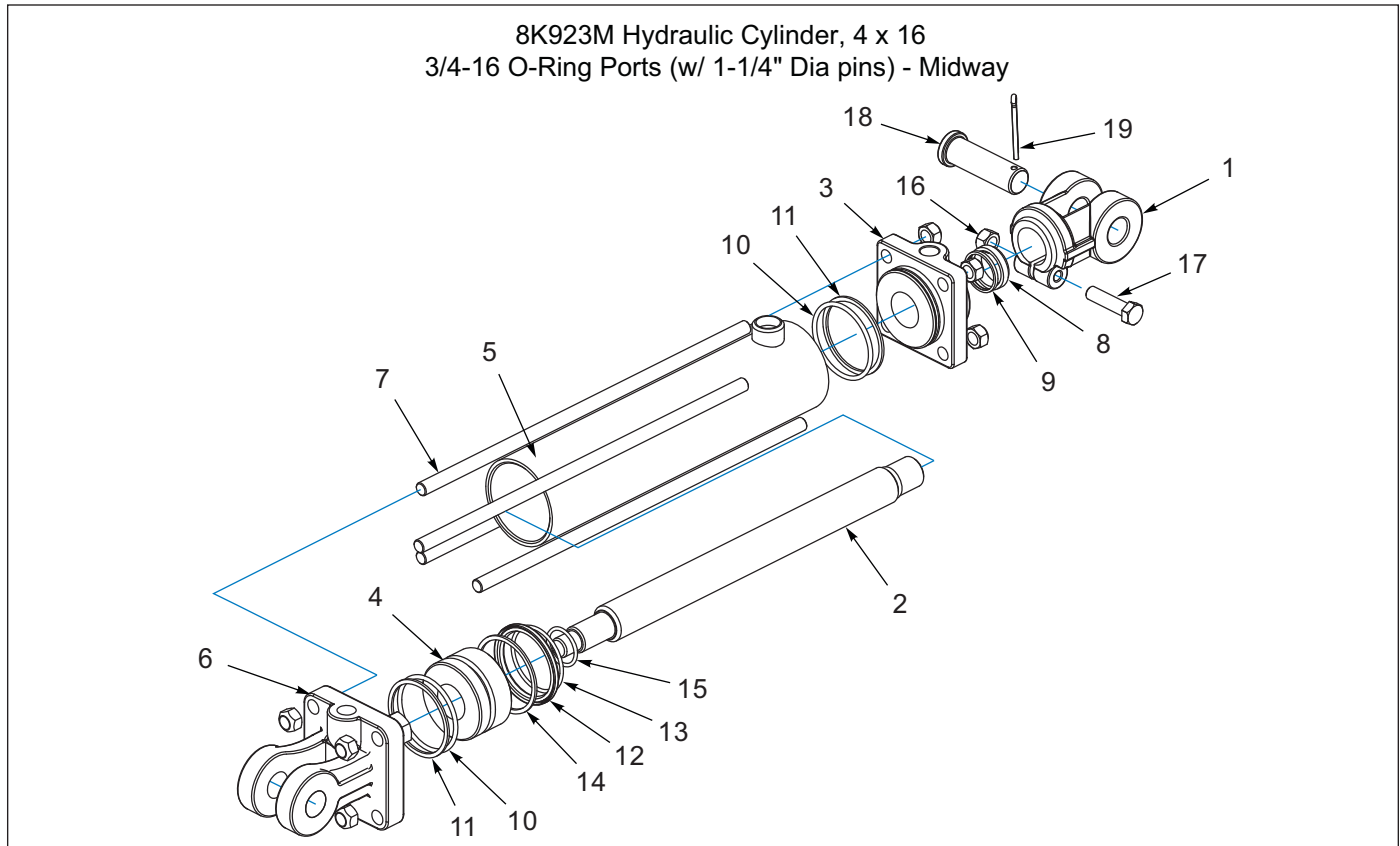


Figure 1-53: 8K923M Hydraulic Cylinder, 4 x 16 - Midway

## 8K923M Hydraulic Cylinder, 4 x 16

ITEM	PART NUMBER	DESCRIPTION	QTY
	8K923	4 X 16 CYL W/1-1/4" PINS	1
1	8K921	CLEVIS	1
2	8K904	ROD	1
3	8K906	HEAD	1
4	8K908	PISTON	1
5	8K910	TUBE	1
6	8K925	BASE	1
7	8K913	TIE ROD	4
8	-----	ROD WIPER	1
9	-----	U-CUP	1
10	-----	O-RING	2
11	-----	BACK-UP	2
12	-----	TEFON SEAL	1
13	-----	LOADER O/R	1
14	-----	WEAR RING	1
15	-----	O-RING	1
16	1-512-010005-05	NUT, HEX SLFLKG GRB 3/8-16	1
17	7C937	SOCKET CAPSCREW-FOR 7J680 CYL	1
18	9K039	CLEVIS PIN	1
19	110-4224	PIN,COTTER 3/16 X 2IN LG	2
20	8K895	SEAL KIT (INCLUDES ITEMS 8-15)	1



### 8K924M Hydraulic Cylinder, 3-3/4 x 16 - Midway

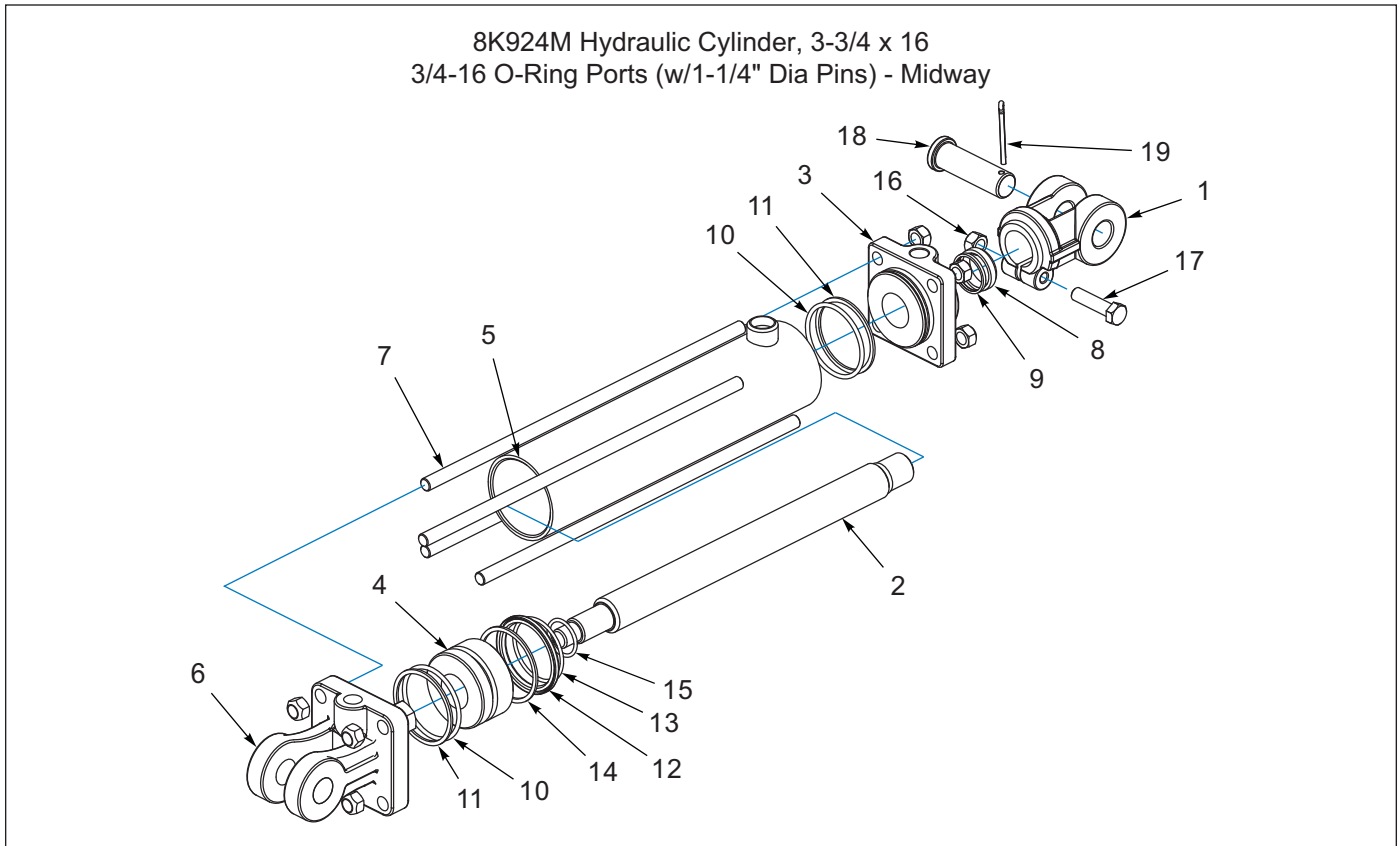
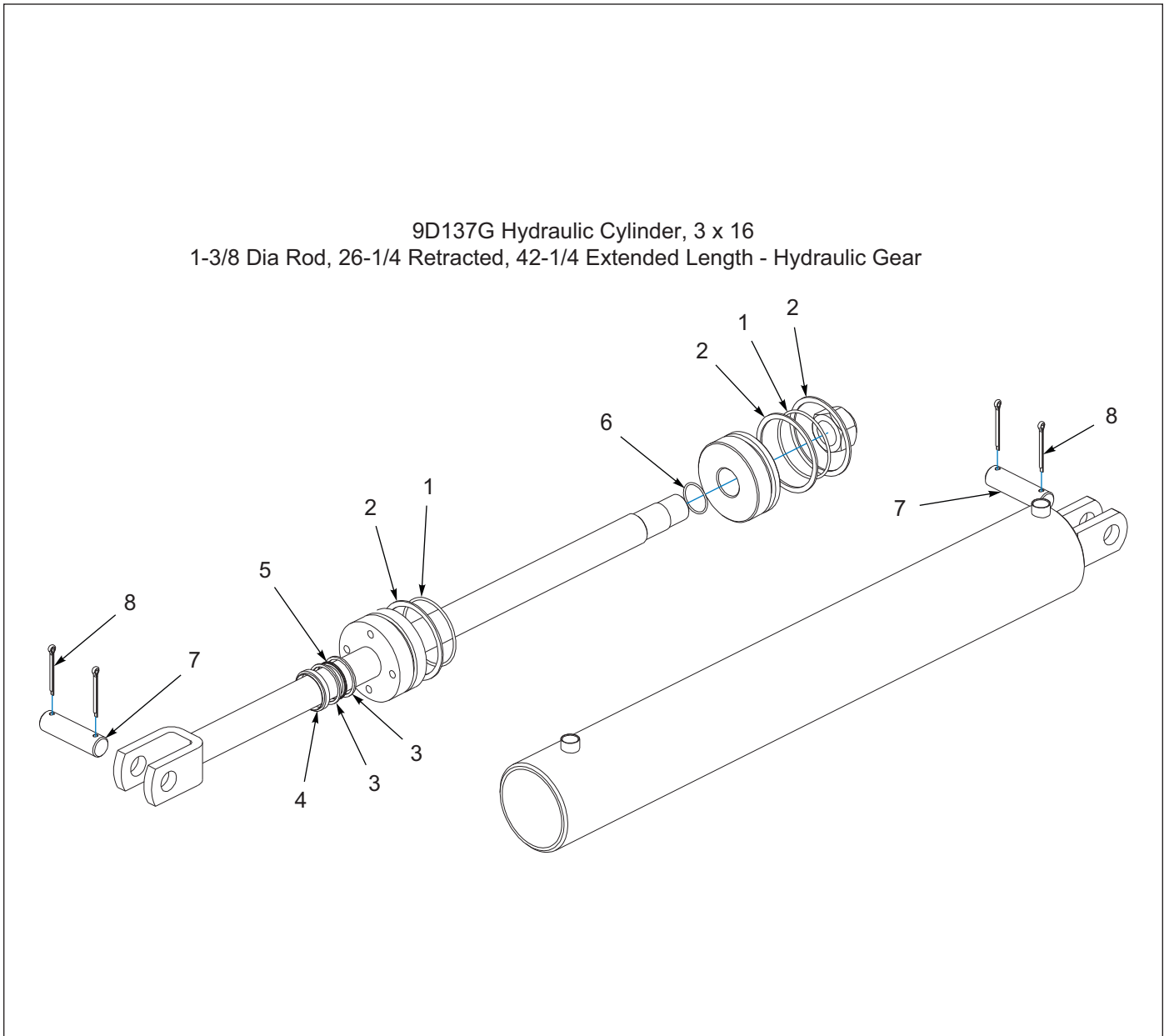


Figure 1-54: 8K924M Hydraulic Cylinder, 3-3/4 x 16

### 8K924M Hydraulic Cylinder, 3-3/4 x 16 - Midway

ITEM	PART NUMBER	DESCRIPTION	QTY
	8K924	3-3/4 X 16 CYL W/1-1/4" PINS	1
1	8K921	CLEVIS	1
2	8K904	ROD	1
3	8K905	HEAD	1
4	8K907	PISTON	1
5	8K909	TUBE	1
6	8K922	BASE	1
7	8K913	TIE ROD	4
8	-----	ROD WIPER	1
9	-----	U-CUP	1
10	-----	O-RING	2
11	-----	BACK-UP	2
12	-----	TEFON SEAL	1
13	-----	LOADER O/R	1
14	-----	WEAR RING	1
15	-----	O-RING	1
16	1-512-010005-05	NUT, HEX SLFLKG GRB 3/8-16	1
17	7C937	SOCKET CAPSCREW-FOR 7J680 CYL	1
18	9K039	CLEVIS PIN	1
19	110-4224	PIN,COTTER 3/16 X 2IN LG	1
20	8K895	SEAL KIT (INCLUDES ITEMS 8-15)	1

## 9D137G Hydraulic Cylinder, 3 x 16 - Hydraulic Gear



**Figure 1-55: 9D137G Hydraulic Cylinder, 3 x 16 - Hydraulic Gear**

## 9D137G Hydraulic Cylinder, 3 x 16 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	9D137	HYD CYLINDER - 3 X16	1
1	-----	O RING	2
2	-----	BACK-UP RING	3
3	-----	BACK UP RINGS	2
4	-----	WIPER	1
5	-----	ROD SEAL	1
6	-----	O RING	1
7	5J650	PIN,CLEVIS 1.0X3.625	2
8	110-4224	PIN,COTTER 3/16 X 2IN LG	4
9	1J966	SEAL KIT (INCLUDES ITEMS 1-6)	1

### 9D137L Hydraulic Cylinder, 3 x 16 - Lion - 648292

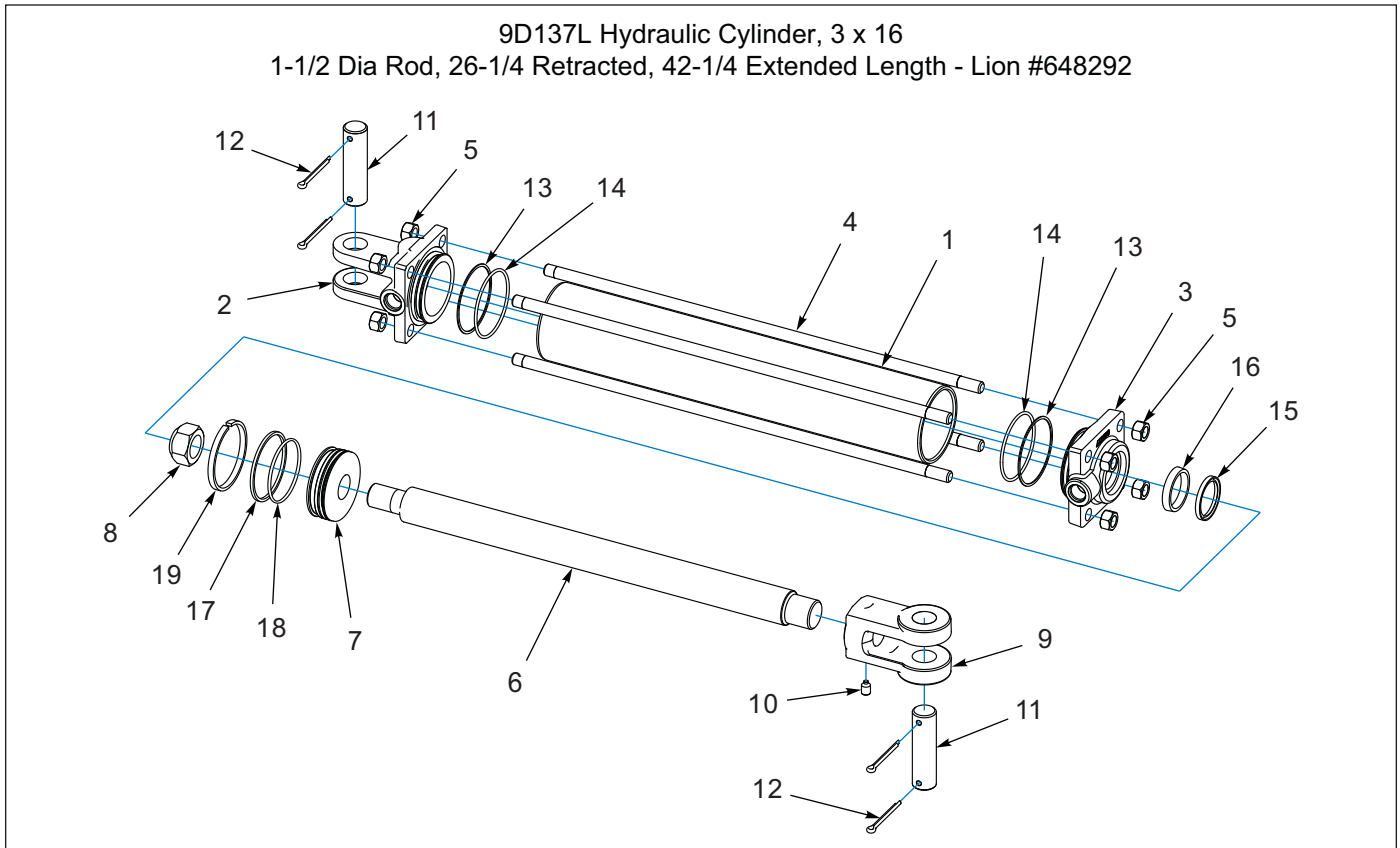


Figure 1-56: 9D137L Hydraulic Cylinder, 3 x 16 - Lion - 648292

### 9D137L Hydraulic Cylinder, 3 x 16 - Lion - 648292

ITEM	PART NUMBER	DESCRIPTION	QTY
	9D137	HYD CYLINDER - 3 X16	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	-----	NUT,HEX 5/8-18,ZP	8
6	-----	ROD	1
7	-----	PISTON	1
8	-----	NUT, LOCK 1-14,GRB,ZP	1
9	2P737	ROD CLEVIS 1" PIN X 1.25-12 X 2.625 (INCLUDES ITEM 10)	1
10	1P443	SET SCREW, 3/8-16 X 1/2 NYL	1
11	5J650	CLEVIS PIN (1.0 X 3.625 H2)	2
12	110-4224	PIN,COTTER 3/16 X 2IN LG	4
13	-----	SEAL, BU#236 19PI-236	2
14	-----	O-RING, 236 (3.25X3.5) D90	2
15	-----	SEAL, HALLITE 605 ROD 1-1/2 D	1
16	-----	SEAL, NOK-AR2263-EO 1-1/2"BO	1
17	-----	WEAR RING, 3.50-3.25-.25-GFN	1
18	-----	O-RING, 151 (3.0x3.188) DUR90	1
19	-----	SEAL, PTFE PISTION RING 3-1/2 DIA.	1
20	1P743	SEAL KIT (INCLUDES ITEMS 13-19)	1

### 9D137L Hydraulic Cylinder, 3 x 16 - Lion - 671655

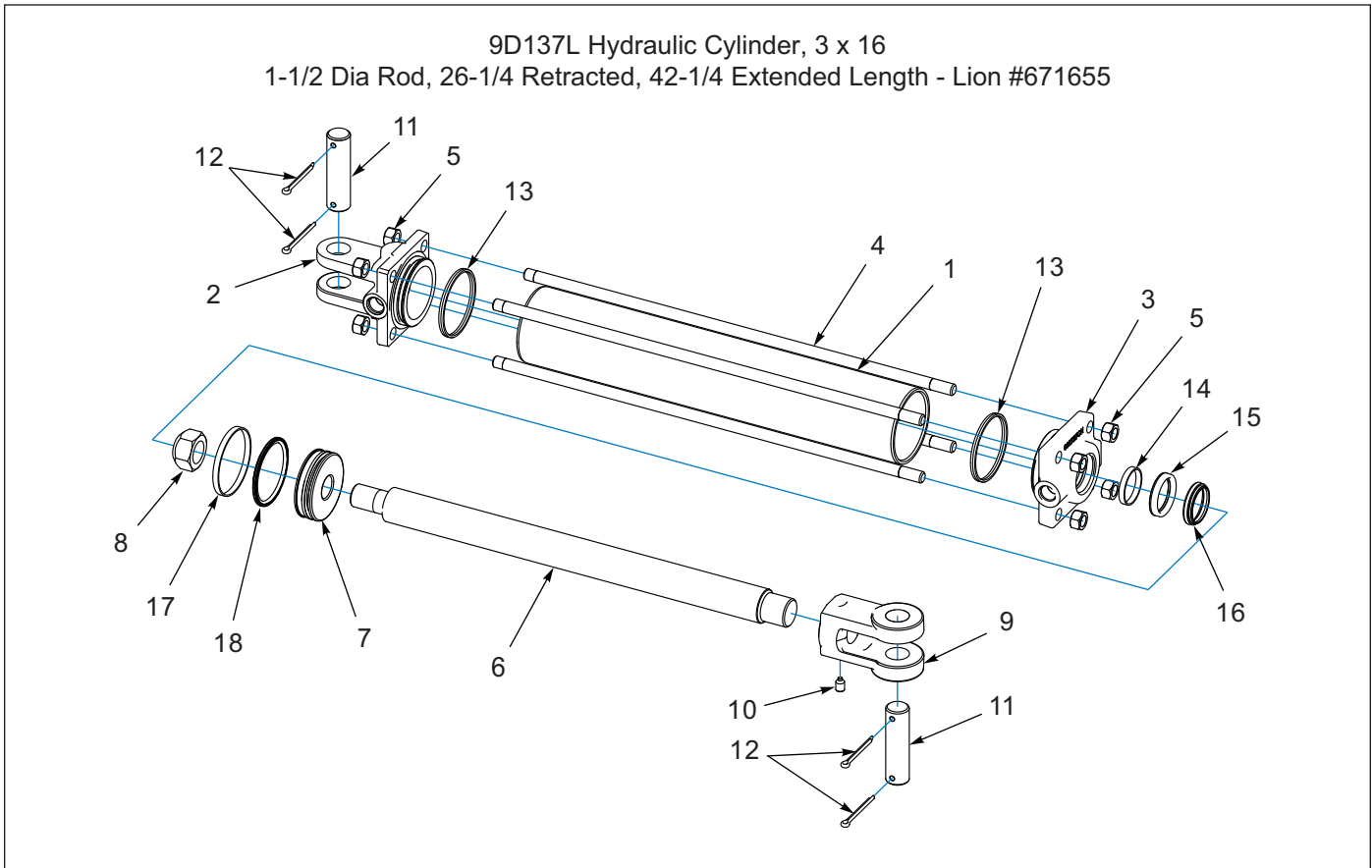


Figure 1-57: 9D137L Hydraulic Cylinder, 3 x 16 - Lion - 671655

### 9D137L Hydraulic Cylinder, 3 x 16 - Lion - 671655

ITEM	PART NUMBER	DESCRIPTION	QTY
	9D137	HYD CYLINDER - 3 X16	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	-----	NUT,HEX 5/8-18,ZP	8
6	-----	ROD	1
7	-----	PISTON	1
8	-----	NUT, LOCK 1-14,GRB,ZP	1
9	2P737	ROD CLEVIS 1" PIN X 1.25-12 X 2.625 (INCLUDES ITEM 10)	1
10	1P443	SET SCREW, 3/8-16 X 1/2 NYL	1
11	5J650	CLEVIS PIN (1.0 X 3.625 H2)	2
12	110-4224	PIN,COTTER 3/16 X 2IN LG	4
13	-----	SEAL DUAL 3.00	2
14	-----	WEAR RING 1.63-1.50-0.250	1
15	-----	SEAL ZURCON U-CUP RU9 1.50	1
16	-----	SEAL WIPER 1.50 WNUC TSS	1
17	-----	WEAR RING 3.00-2.88-0.250	1
18	-----	SEAL ZURCON WYNSEAL 3.00"	1
19	1P743	SEAL KIT (INCLUDES ITEMS 13-18)	1

### 9D137P Hydraulic Cylinder, 3 x 16 - Prince

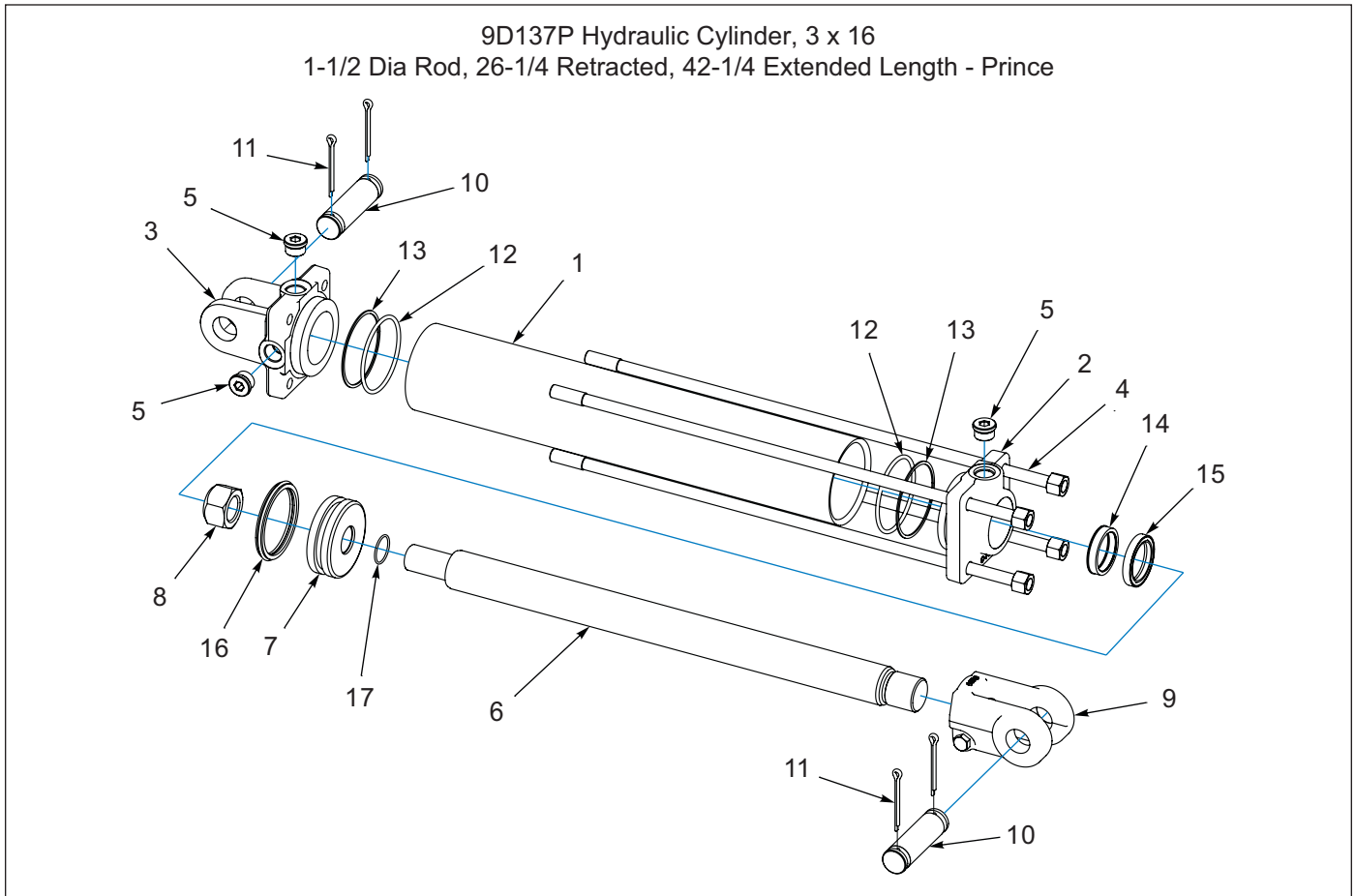


Figure 1-58: 9D137P Hydraulic Cylinder, 3 x 16 - Prince

### 9D137P Hydraulic Cylinder, 3 x 16 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	9D137	HYD CYLINDER - 3 X16	1
1	-----	TUBE	1
2	-----	GLAND	1
3	-----	MACHINED CLEVIS	1
4	-----	TIE ROD STUD W/HEX NUT	4
5	121029	PLUG,#8 SAE MOR BOSS HX SKT	3
6	-----	PISTON ROD	1
7	-----	PISTON	1
8	220000210	PISTON LOCKNUT	1
9	236930	CLEVIS ASSEMBLY	1
10	190400001	CYLINDER PIN,1 X 3-1/2	2
11	110-4224	PIN,COTTER-3/16 X 2IN LG	4
12	-----	O-RING	2
13	-----	B/U WASHER	2
14	-----	U-CUP	1
15	-----	CANNED WIPER	1
16	-----	PISTON SEAL	1
17	-----	PISTON O-RING	1
18	236927	SEAL KIT,PMCK-CG-0120 (INCLUDES ITEMS 12-17)	1

## 9D282G Hydraulic Cylinder, 2 x 6 - Hydraulic Gear

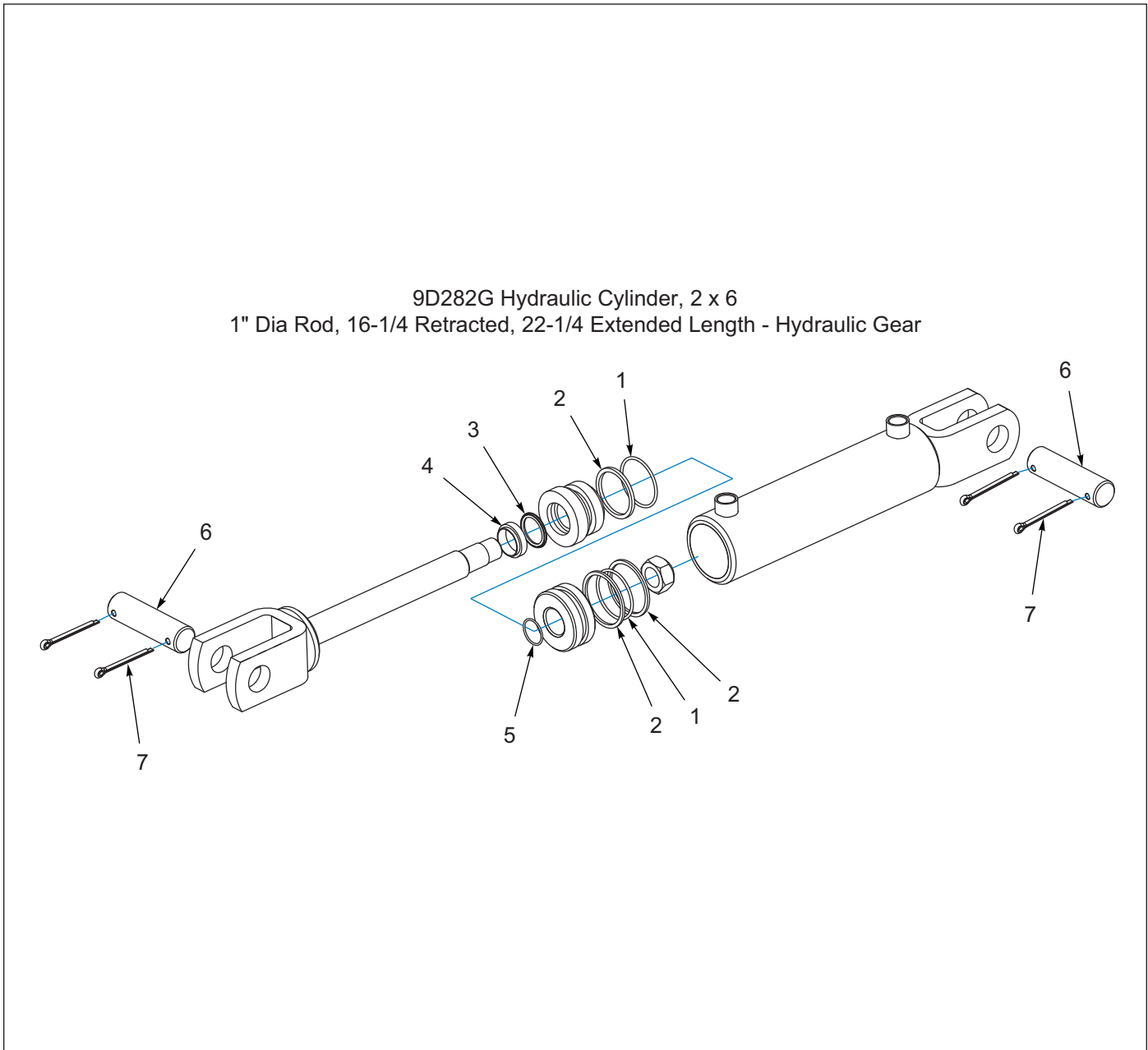


Figure 1-59: 9D282G Hydraulic Cylinder, 2 x 6 - Hydraulic Gear

## 9D282G Hydraulic Cylinder, 2 x 6 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	9D282	HYD CYLINDER - 2 X 6	1
1	-----	O RING	2
2	-----	BACK-UP RING	3
3	-----	ROD SEAL & BACK UP RINGS	1
4	-----	WIPER	1
5	-----	O-RING	1
6	5J650	CYLINDER PIN	2
7	110-4224	PIN,COTTER 3/16 X 2IN LG	4
8	3J573	SEAL KIT (INCLUDES ITEMS 1-5)	1

### 9D282L Hydraulic Cylinder, 2 x 6 - Lion - 648344

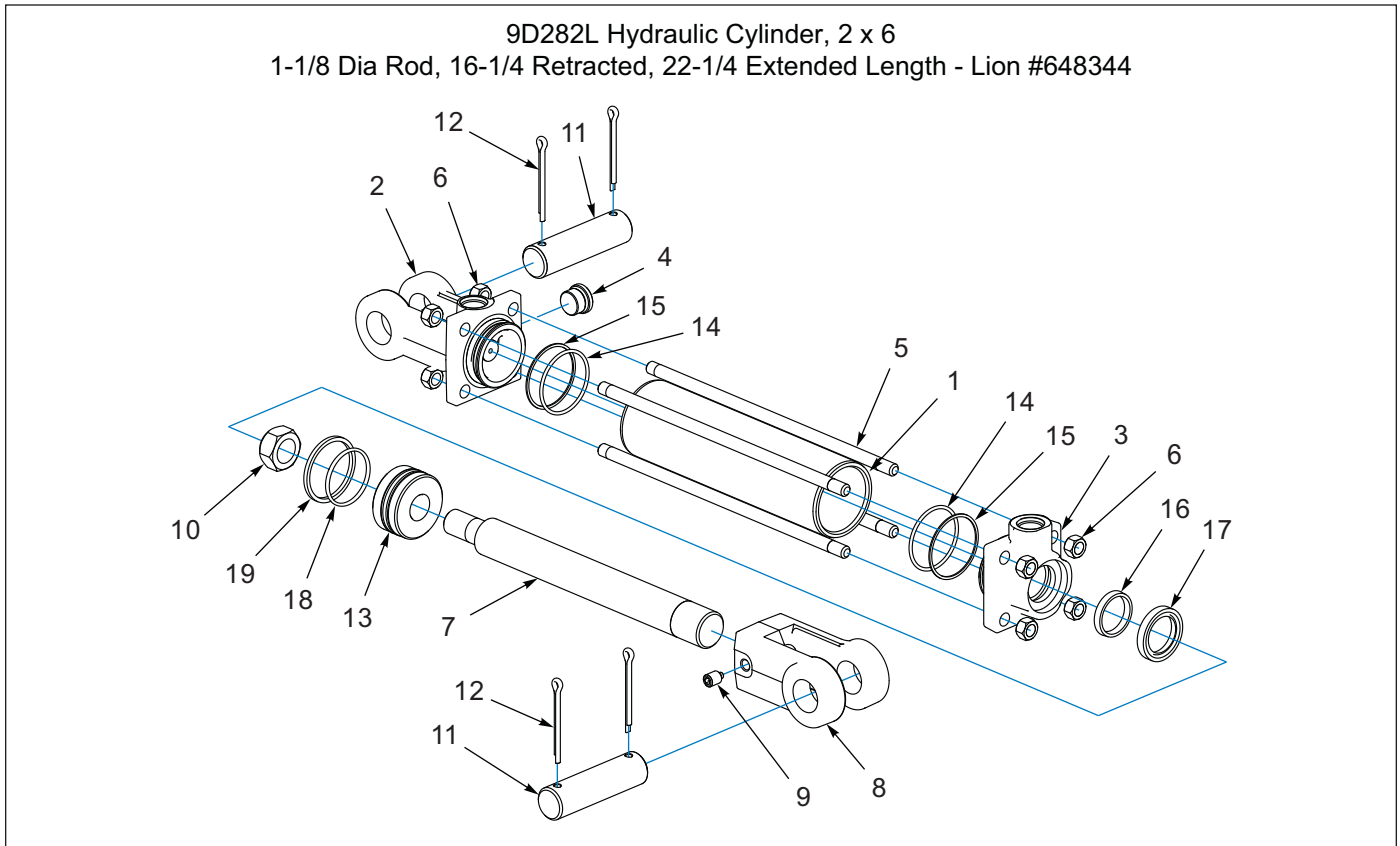


Figure 1-60: 9D282L Hydraulic Cylinder, 2 x 6 - Lion - 648344

### 9D282L Hydraulic Cylinder, 2 x 6 - Lion - 648344

ITEM	PART NUMBER	DESCRIPTION	QTY
	9D282	HYD CYLINDER - 2 X 6	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	PLUG, SOCKET HEAD 3/4-16 (NOT SHOWN)	1
5	-----	TIE ROD	4
6	1-512-010007-07	NUT, HEX 3/8-16 ZP	8
7	-----	ROD	1
8	2P736	ROD CLEVIS (INCLUDES ITEM 9)	1
9	1P443	SET SCREW, 3/8-16 X 1/2 NYLON TIP	1
10	1P805	NUT, LOCK 3/4-16, GRB, ZP	1
11	5J650	PIN, 1.0 X 3.625 H2,	2
12	110-4224	PIN, COTTER 3/16 X 2IN LG	4
13	-----	PISTON	1
14	-----	O-RING, 133 (1.812X2) BUNA-N D9	2
15	-----	SEAL, BU#133 19PI-133	2
16	-----	SEAL, HALLITE 605 ROD 1.125D	1
17	-----	SEAL, WIPER ROD 1.125 METAL E	1
18	-----	O-RING, 129 (1.562X1.75) DUR9	1
19	-----	SEAL, PTFE PISTON RING 2DIA	1
20	1P741	SEAL KIT (INCLUDES ITEMS 14-19)	1

### 9D282L Hydraulic Cylinder, 2 x 6 - Lion - 671651

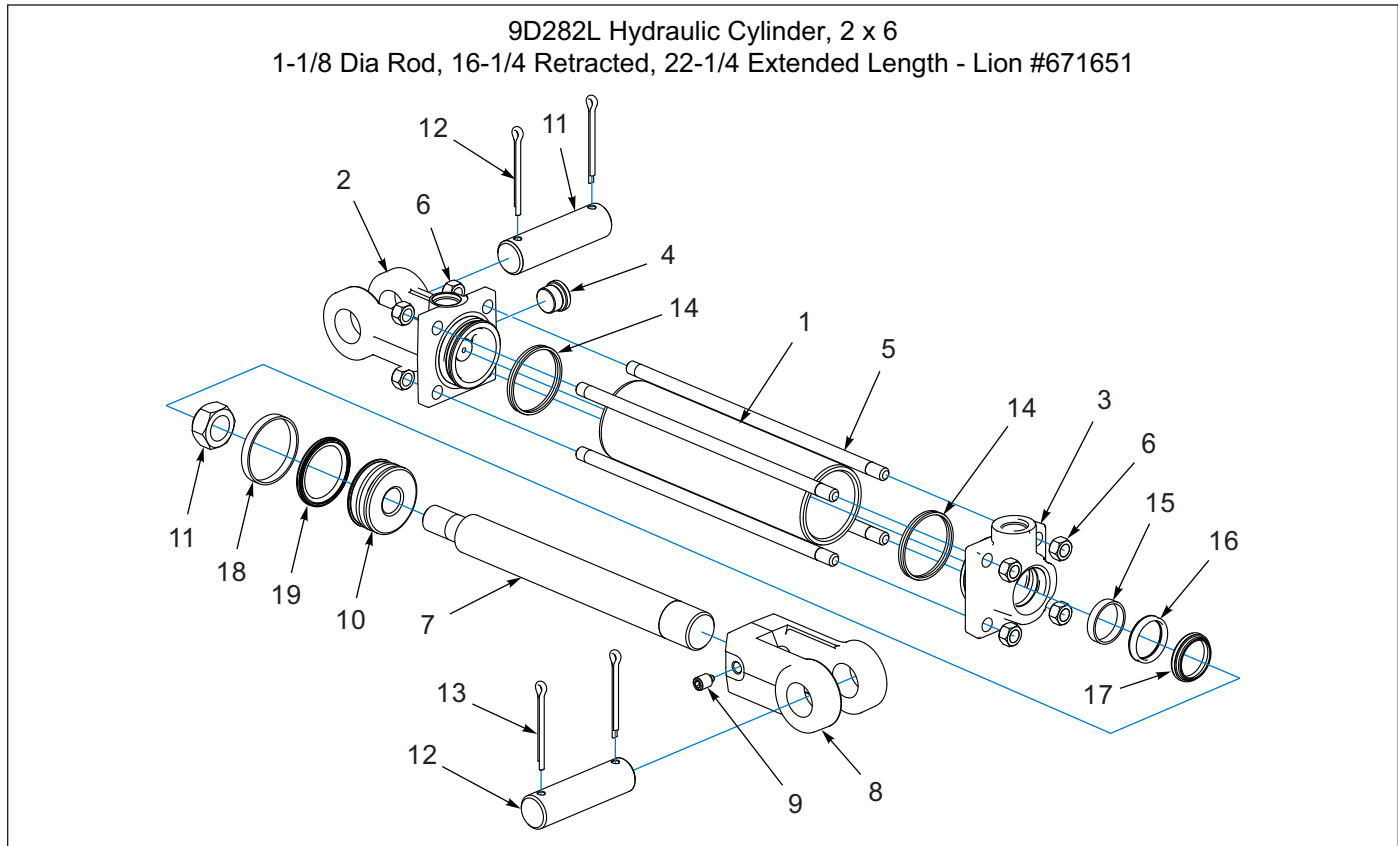


Figure 1-61: 9D282L Hydraulic Cylinder, 2 x 6 - Lion - 671651

### 9D282L Hydraulic Cylinder, 2 x 6 - Lion - 671651

ITEM	PART NUMBER	DESCRIPTION	QTY
	9D282	HYD CYLINDER - 2 X 6	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	PLUG, SOCKET HEAD 3/4-16 (NOT SHOWN)	1
5	-----	TIE ROD	4
6	1-512-010007-07	NUT, HEX 3/8-16 ZP	8
7	-----	ROD	1
8	2P736	ROD CLEVIS (INCLUDES ITEM 9)	1
9	1P443	SET SCREW, 3/8-16 X 1/2 NYLON TIP	1
10	-----	PISTON	1
11	1P805	NUT, LOCK 3/4-16, GRB, ZP	1
12	5J650	PIN, 1.0 X 3.625 H2,	2
13	110-4224	PIN, COTTER 3/16 X 2IN LG	4
14	-----	SEAL DUAL 2.00-.170	2
15	-----	WEAR RING 1.25-1.13-0.250	1
16	-----	SEAL ZURCON U-CUP RU9 1.13	1
17	-----	SEAL WIPER 1.13 WNUC	1
18	-----	WEAR RING 2.00-1.88-0.250	1
19	-----	SEAL ZURCON WYNSEAL 2.00"	1
20	1P741	SEAL KIT (INCLUDES ITEMS 14-19)	1



### 9D524G Hydraulic Cylinder, 3-1/2 x 16 - Hydraulic Gear

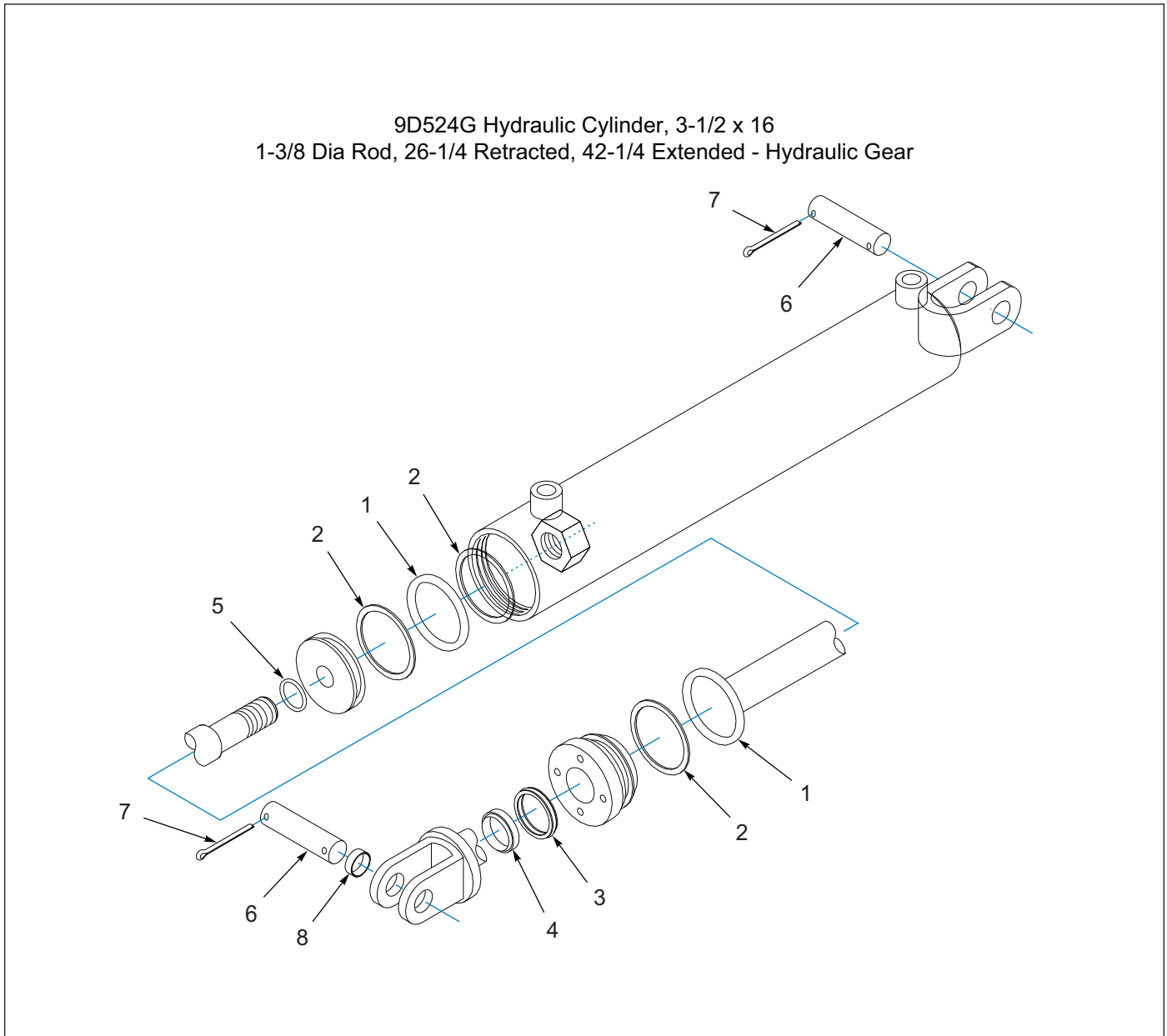
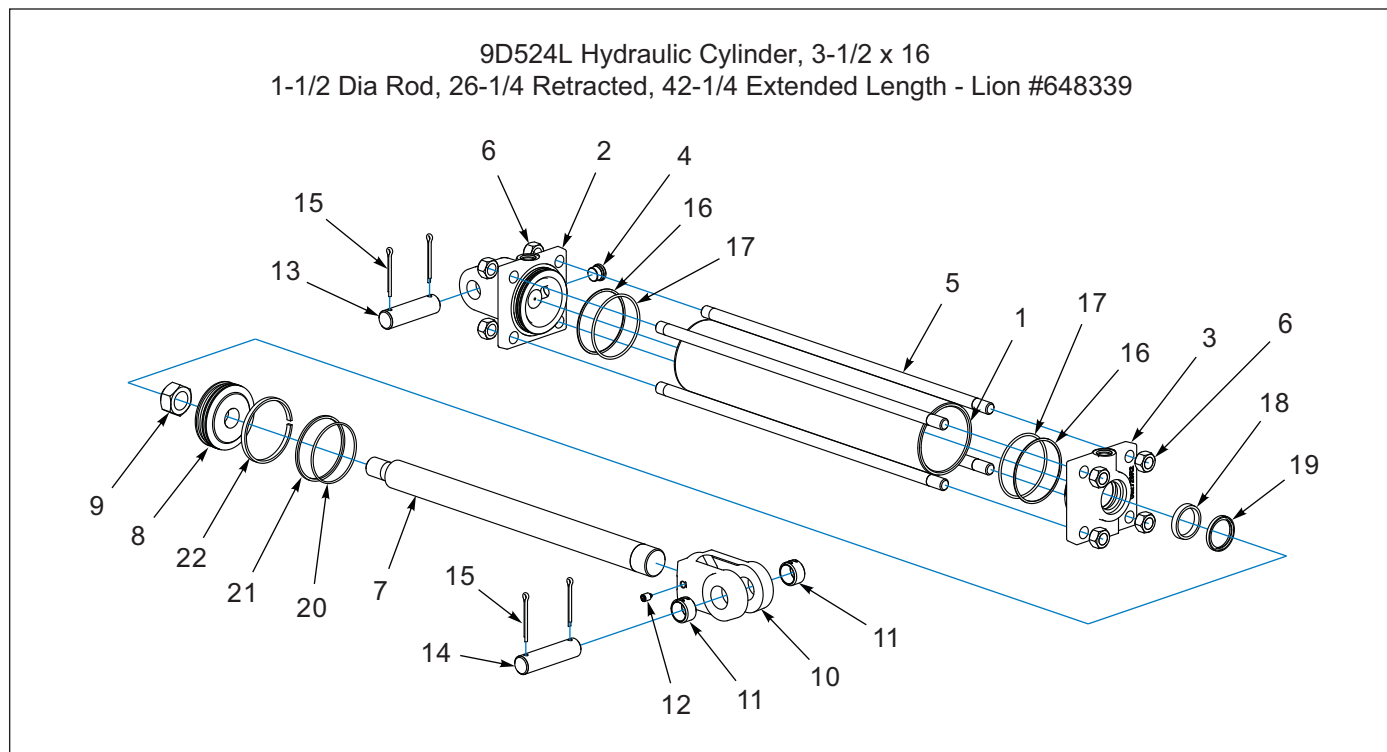


Figure 1-62: 9D524G Hydraulic Cylinder, 3-1/2 x 16 - Hydraulic Gear

### 9D524G Hydraulic Cylinder, 3-1/2 x 16 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	9D524	HYD CYLINDER - 3-1/2 X 16	1
1	-----	O RING	2
2	-----	BACK-UP RING	3
3	-----	ROD SEAL & BACK UP RINGS	1
4	-----	WIPER	1
5	-----	O RING	1
6	5J650	PIN,CLEVIS 1.0X3.625	2
7	110-4224	PIN,COTTER 3/16 X 2IN LG	4
8	8J918	TENSION BUSHING	2
9	1J961	SEAL KIT (INCLUDES ITEMS 1-5)	1

## 9D524L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 648339



**Figure 1-63: 9D524L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 648339**

## 9D524L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 648339

ITEM	PART NUMBER	DESCRIPTION	QTY
	9D524	HYD CYLINDER - 3-1/2 X 16	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	PLUG, SOCKET HEAD 3/4-16	1
5	-----	TIE ROD	4
6	-----	NUT, HEX 5/8-18, ZP	8
7	-----	ROD	1
8	-----	PISTON	1
9	-----	NUT, LOCK 1-14, GRB, ZP	1
10	2P740	ROD CLEVIS W/BUSHINGS (INCLUDES ITEMS 11 AND 12)	1
11	3P079	SPRING BUSHING, 1.0X1.25X0.75	2
12	1P443	SET SCREW, 3/8-16 X 1/2 NYLON TIP	1
13	5J650	PIN, 1.0 X 3.625 H2	1
14	7J067	PIN, 1.0 X 4.0 H2	1
15	110-4224	PIN, COTTER 3/16 X 2IN LG	4
16	-----	SEAL, BU#236 19PI-236	2
17	-----	O-RING, 236 (3.25X3.5) D90	2
18	-----	SEAL, HALLITE 605 ROD 1-1/2 D	1
19	-----	SEAL, NOK-AR2263-EO 1-1/2 BO	1
20	-----	O-RING, 151 (3.0 X 3.188) DUR90	1
21	-----	SEAL, PTFE PISTON RING 3-1/2D	1
22	-----	WEAR RING, 3.50-3.25-.25-GFN	1
23	1P744	SEAL KIT (INCLUDES ITEMS 16-22)	1

### 9D524L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 671656

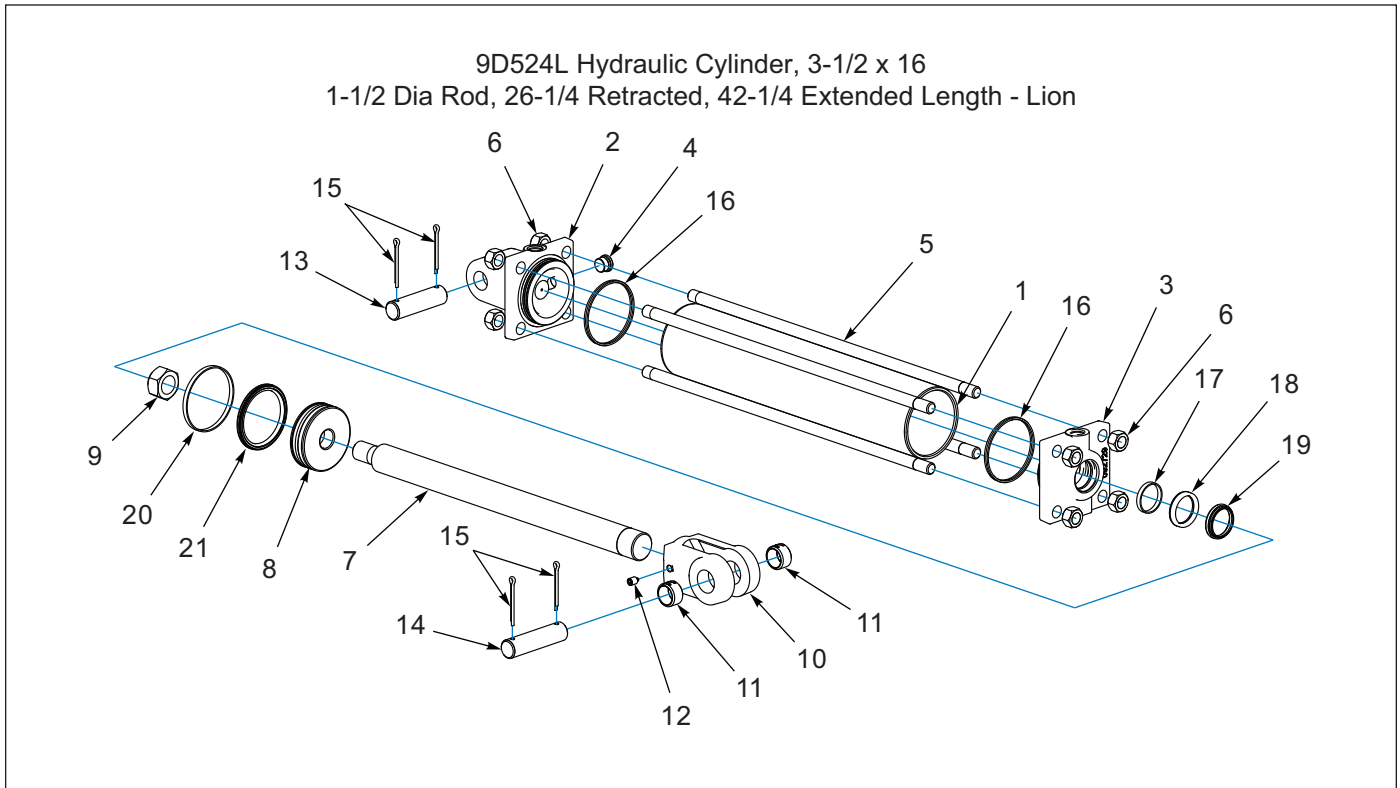


Figure 1-64: 9D524L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 671656

### 9D534L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 671656

ITEM	PART NUMBER	DESCRIPTION	QTY
	9D524	HYD CYLINDER - 3-1/2 X 16	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	PLUG, SOCKET HEAD 3/4-16	1
5	-----	TIE ROD	4
6	-----	NUT, HEX 5/8-18, ZP	8
7	-----	ROD	1
8	-----	PISTON	1
9	-----	NUT, LOCK 1-14, GRB, ZP	1
10	2P740	ROD CLEVIS W/BUSHINGS (INCLUDES ITEMS 11 AND 12)	1
11	3P079	SPRING BUSHING, 1.0X1.25X0.75	2
12	1P443	SET SCREW, 3/8-16 X 1/2 NYLON TIP	1
13	5J650	PIN, 1.0 X 3.625 H2	1
14	7J067	PIN, 1.0 X 4.0 H2	1
15	110-4224	PIN, COTTER 3/16 X 2IN LG	4
16	-----	SEAL DUAL 3.50	2
17	-----	WEAR RING 1.63-1.50-0.250	1
18	-----	SEAL ZURCON U-CUP RU9 1.50	1
19	-----	SEAL WIPER 1.50 WNUC TSS	1
20	-----	WEAR RING 3.50-3.38-0.250	1
21	-----	SEAL ZURCON WYNSEAL 3.50"	1
22	1P744	SEAL KIT (INCLUDES ITEMS 16-21)	1

### 9D731G Hydraulic Cylinder, 4 x 16 - Hydraulic Gear

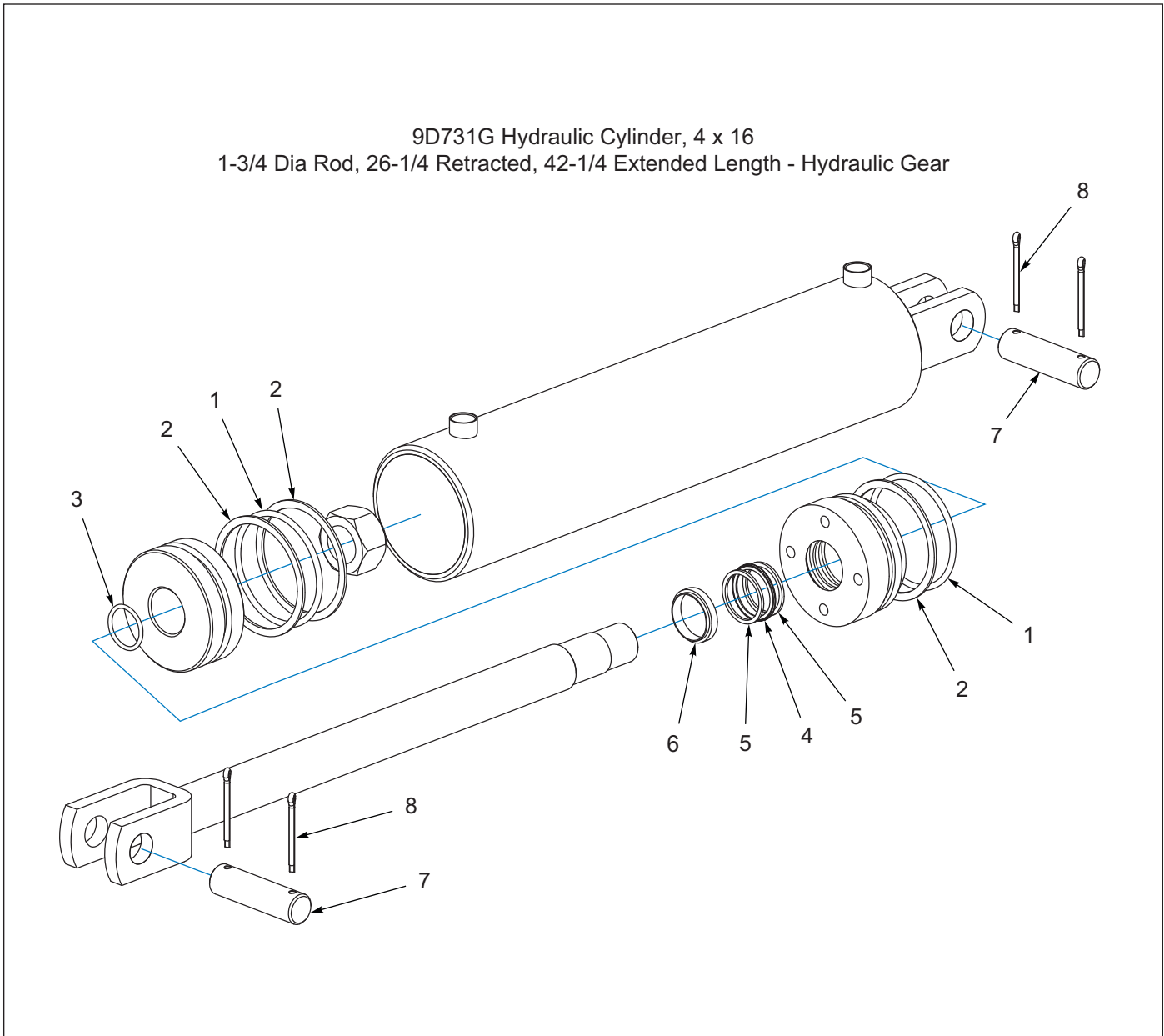


Figure 1-65: 9D731G Hydraulic Cylinder, 4 x 16 - Hydraulic Gear

### 9D731G Hydraulic Cylinder, 4 x 16 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	9D731	HYD CYLINDER - 4 X 16	1
1	-----	O-RING	2
2	-----	BACK-UP RING	3
3	-----	O-RING	1
4	-----	ROD SEAL	1
5	-----	BACK-UP RING	2
6	-----	WIPER	1
7	5J650	CYLINDER PIN	2
8	110-4224	PIN,COTTER 3/16 X 2IN LG	4
9	1J956	SEAL KIT (INCLUDES ITEMS 1-6)	1

### 9D731L Hydraulic Cylinder, 4 x 16 - Lion - 648340

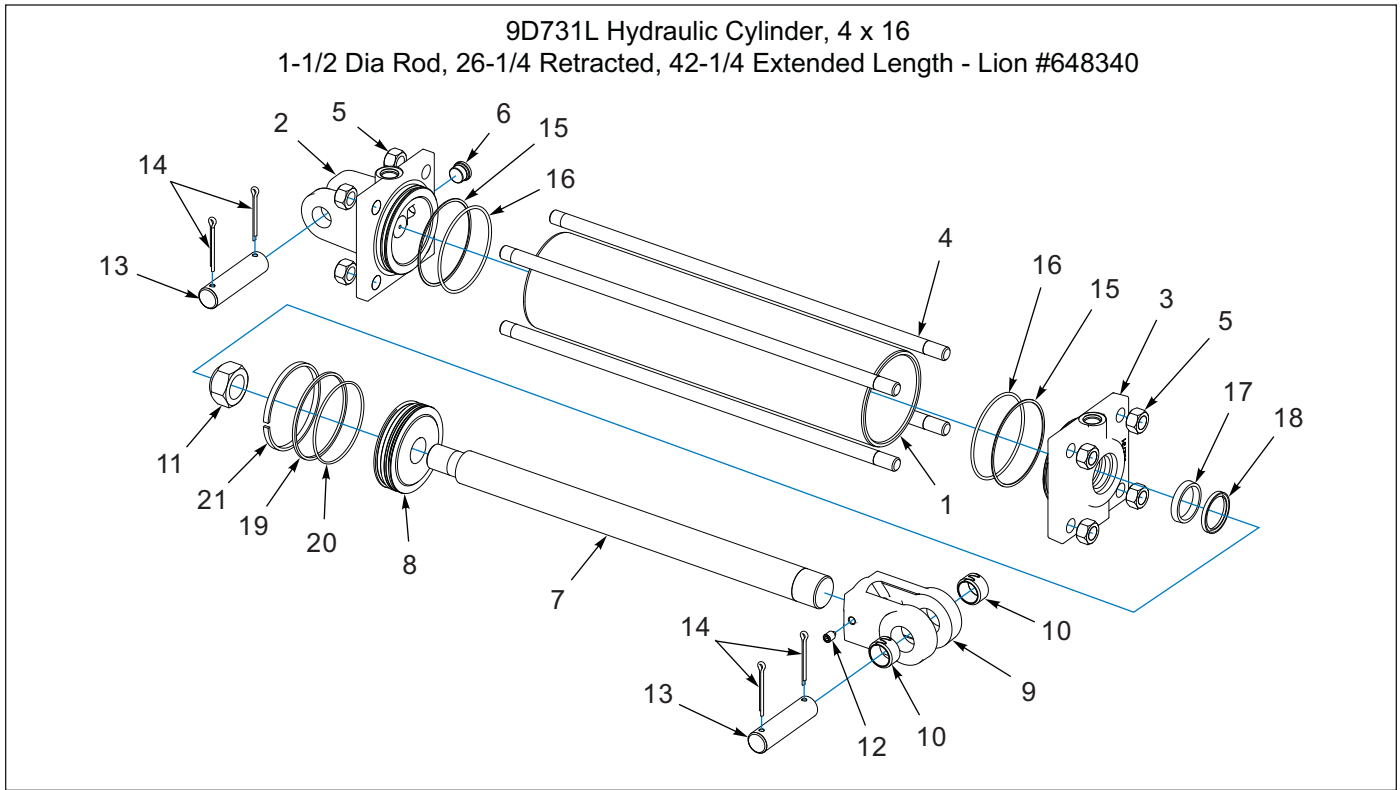


Figure 1-66: 9D731L Hydraulic Cylinder, 4 x 16 - Lion - 648340

### 9D731L Hydraulic Cylinder, 4 x 16 - Lion - 648340

ITEM	PART NUMBER	DESCRIPTION	QTY
	9D731	HYD CYLINDER - 4 X 16	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	1P805	NUT,HEX SLFLKG GRB 3/4-16	8
6	-----	PLUG,SOCKET HEAD 3/4-16	1
7	-----	ROD	1
8	-----	PISTON	1
9	2P740	ROD CLEVIS W/BUSHINGS (INCLUDES ITEMS 10 AND 12)	1
10	3P079	SPRING BUSHING,1.0x1.25x0.75	2
11	8J852	NUT,LOCK 1-1/8-12,GrB,ZP	1
12	1P443	SET SCREW,3/8-16 x 1/2 NYLON TIP	1
13	7J067	PIN,1.0 x 4.0 H2	2
14	110-4224	PIN,COTTER 3/16 X 2IN LG	4
15	-----	SEAL,BU#240 19PI-240	2
16	-----	O-RING,240 (3.75x4.0) DURO 90	2
17	-----	SEAL,HALLITE 605 ROD 1-1/2 D	1
18	-----	SEAL,NOK-AR2263-EO 1-1/2"BO	1
19	-----	SEAL,PTFE PISTON RING 4DIA	1
20	-----	O-RING,153 (3.5x3.688) DUR	1
21	-----	WEAR RING,4.00-3.75-.25-GFN	1
22	1P745	SEAL KIT (INCLUDES ITEMS 15-21)	1

## 9D731L Hydraulic Cylinder, 4 x 16 - Lion - 671663

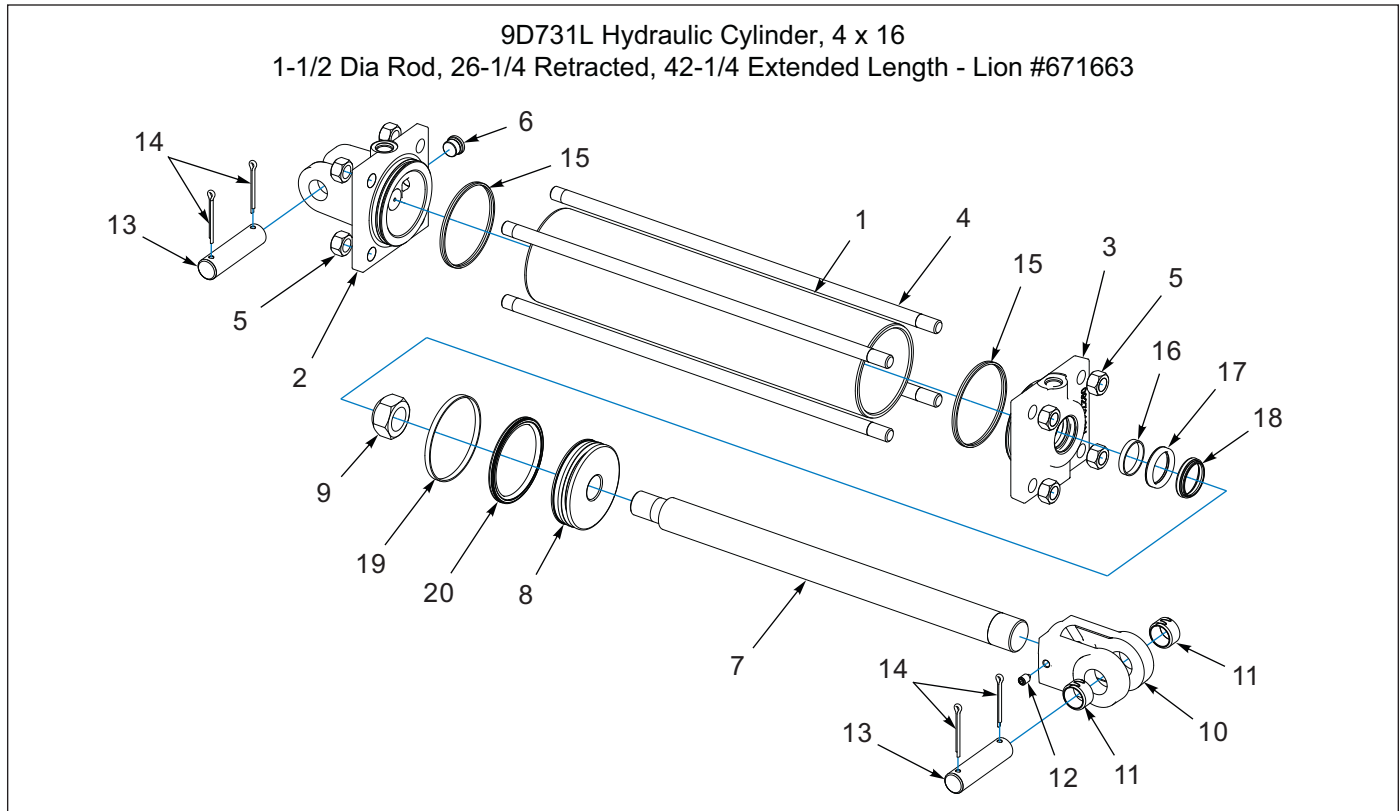


Figure 1-67: 9D731L Hydraulic Cylinder, 4 x 16 - Lion - 671663

## 9D731L Hydraulic Cylinder, 4 x 16 - Lion - 671663

ITEM	PART NUMBER	DESCRIPTION	QTY
	9D731	HYD CYLINDER - 4 X 16	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	1P805	NUT,HEX SLFLKG GRB 3/4-16	8
6	-----	PLUG,SOCKET HEAD 3/4-16	1
7	-----	ROD	1
8	-----	PISTON	1
9	8J852	NUT,LOCK 1-1/8-12,GrB,ZP	1
10	2P740	ROD CLEVIS W/BUSHINGS (INCLUDES ITEMS 11 AND 12)	1
11	3P079	SPRING BUSHING,1.0x1.25x0.75	2
12	1P443	SET SCREW,3/8-16 x 1/2 NYLON TIP	1
13	7J067	PIN,1.0 x 4.0 H2	2
14	110-4224	PIN,COTTER 3/16 X 2IN LG	4
15	-----	SEAL DUAL 4.00	2
16	-----	WEAR RING 1.63-1.50-0.250	1
17	-----	SEAL ZURCON U-CUP RU9 1.50	1
18	-----	SEAL WIPER 1.50 WNUC TSS	1
19	-----	WEAR RING 4.00-3.88-0.250	1
20	-----	SEAL SURCON WYNSEAL 4.00	1
21	1P745	SEAL KIT (INCLUDES ITEMS 15-20)	1

### 9D731P Hydraulic Cylinder, 4 x 16 - Prince

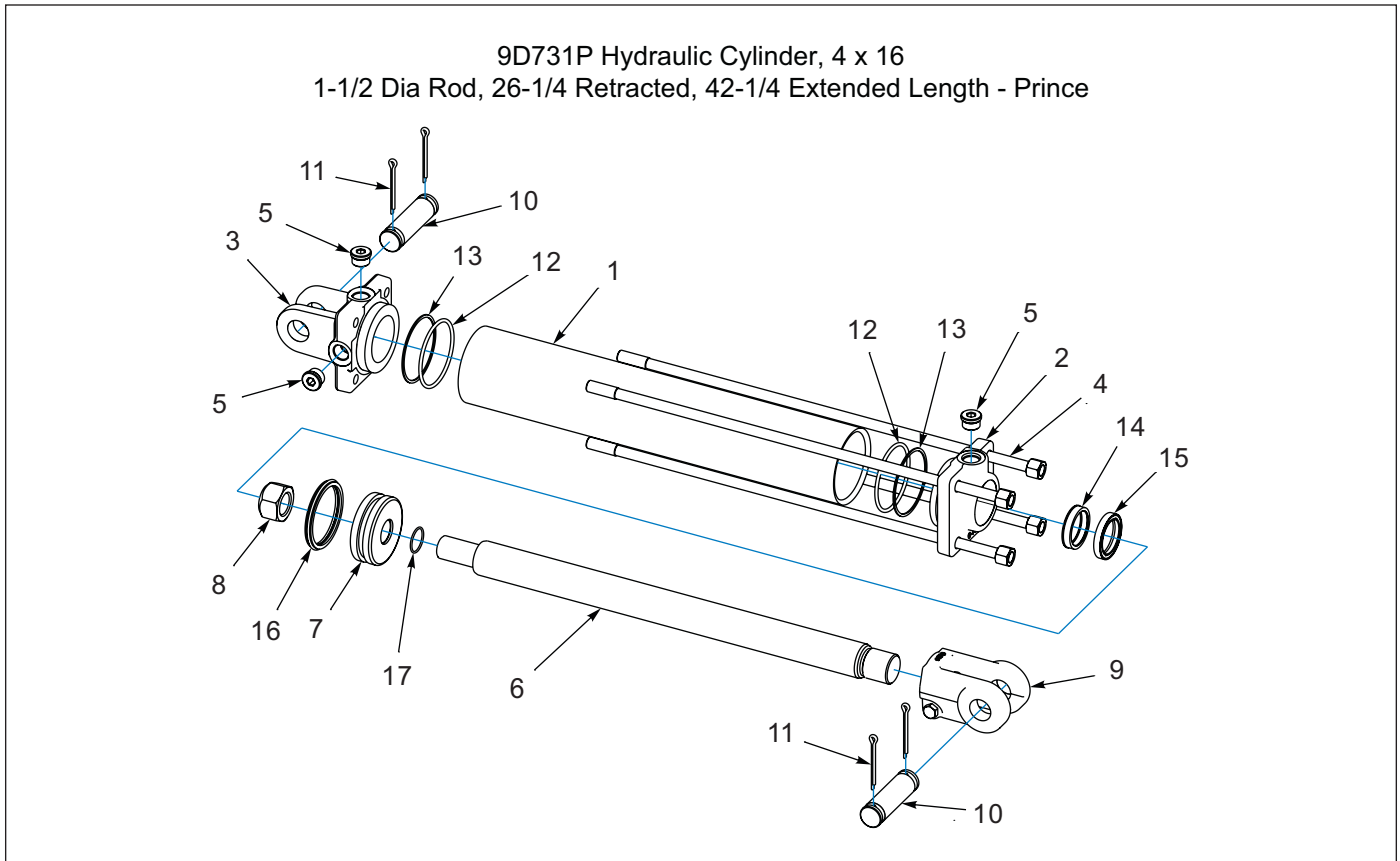


Figure 1-68: 9D731P Hydraulic Cylinder, 4 x 16 - Prince

### 9D731P Hydraulic Cylinder, 4 x 16 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	9D731	HYD CYLINDER - 4 X 16	1
1	-----	TUBE	1
2	-----	GLAND	1
3	147375	BUTT	1
4	-----	TIE ROD STUD W/HEX NUT	4
5	121029	PLUG,#8 SAE MOR BOSS HX SKT	3
6	-----	PISTON ROD	1
7	-----	PISTON	1
8	220000211	PISTON LOCKNUT	1
9	236929	CLEVIS ASSEMBLY (INCLUDES ITEM 10)	1
10	236932	BUSHING	2
11	190400035	PIN,HR CYL CLEVIS 1 X 4	2
12	110-4224	PIN,COTTER-3/16 X 2IN LG	4
13	-----	O-RING	2
14	-----	BU-WASHER	2
15	-----	U-CUP	1
16	-----	CANNED WIPER	1
17	-----	PISTON BEARING RING	1
18	-----	CROWN SEAL	1
19	-----	O-RING	1
20	236926	SEAL KIT,PMCK-CG-0119 (INCLUDES ITEMS 13-19)	1

## 9J440G Hydraulic Cylinder, 2-1/2 x 6 - Hydraulic Gear

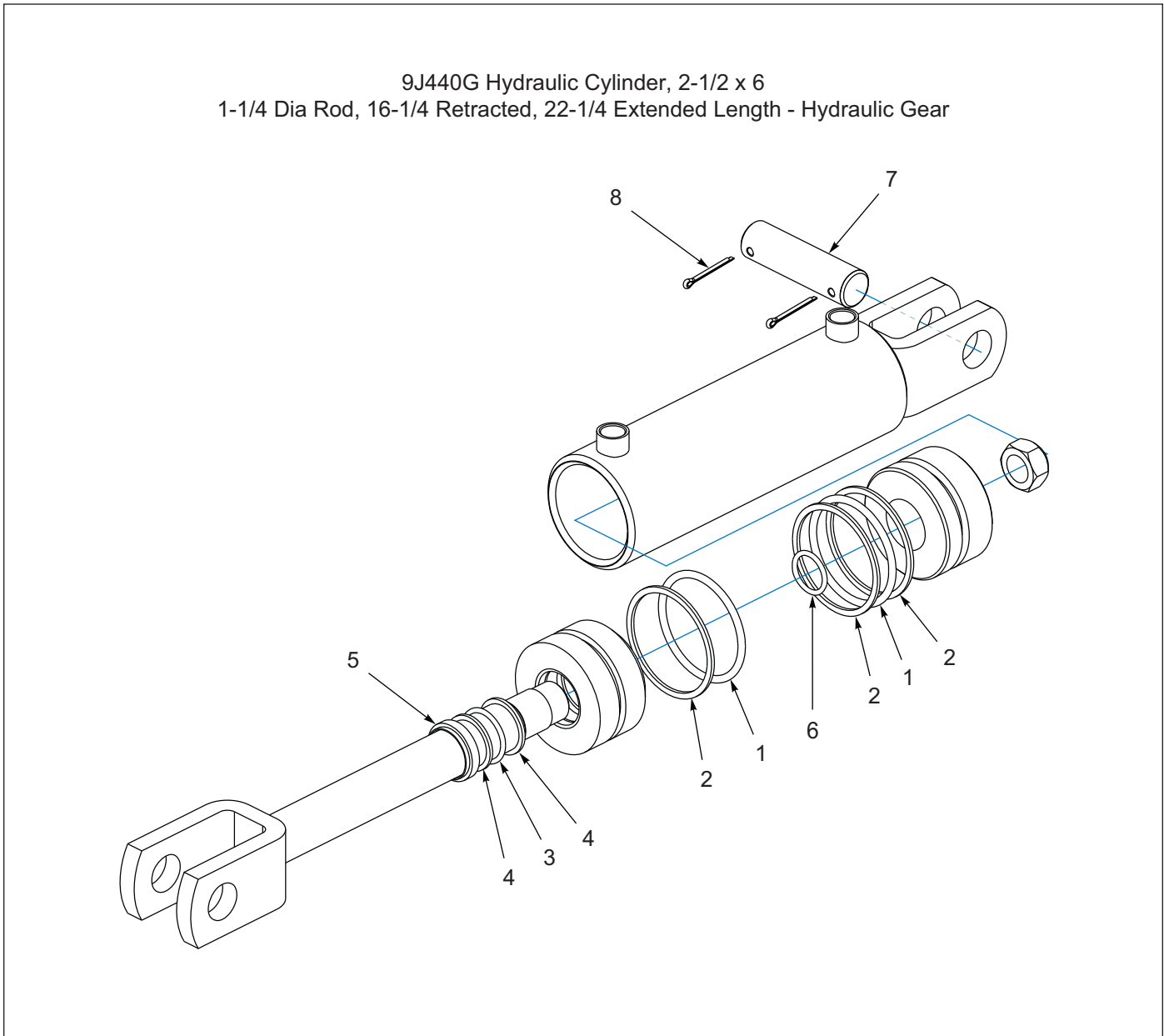


Figure 1-69: 9J440G Hydraulic Cylinder, 2-1/2 x 6 - Hydraulic Gear

## 9J440G Hydraulic Cylinder, 2-1/2 x 6 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	9J440	HYD CYLINDER - 2-1/2 X 16	1
1	-----	O-RING	2
2	-----	BACK-UP RING	2
3	-----	O-RING	1
4	-----	BACK UP RING	2
5	-----	WIPER	1
6	-----	O-RING	1
7	5J650	PIN,CLEVIS 1.0X3.625	1
8	110-4224	PIN,COTTER 3/16 X 2IN LG	2
9	6J542	SEAL KIT (INCLUDES ITEMS 1-6)	1



### 9J440L Hydraulic Cylinder, 2-1/2 x 6 - Lion - 648495

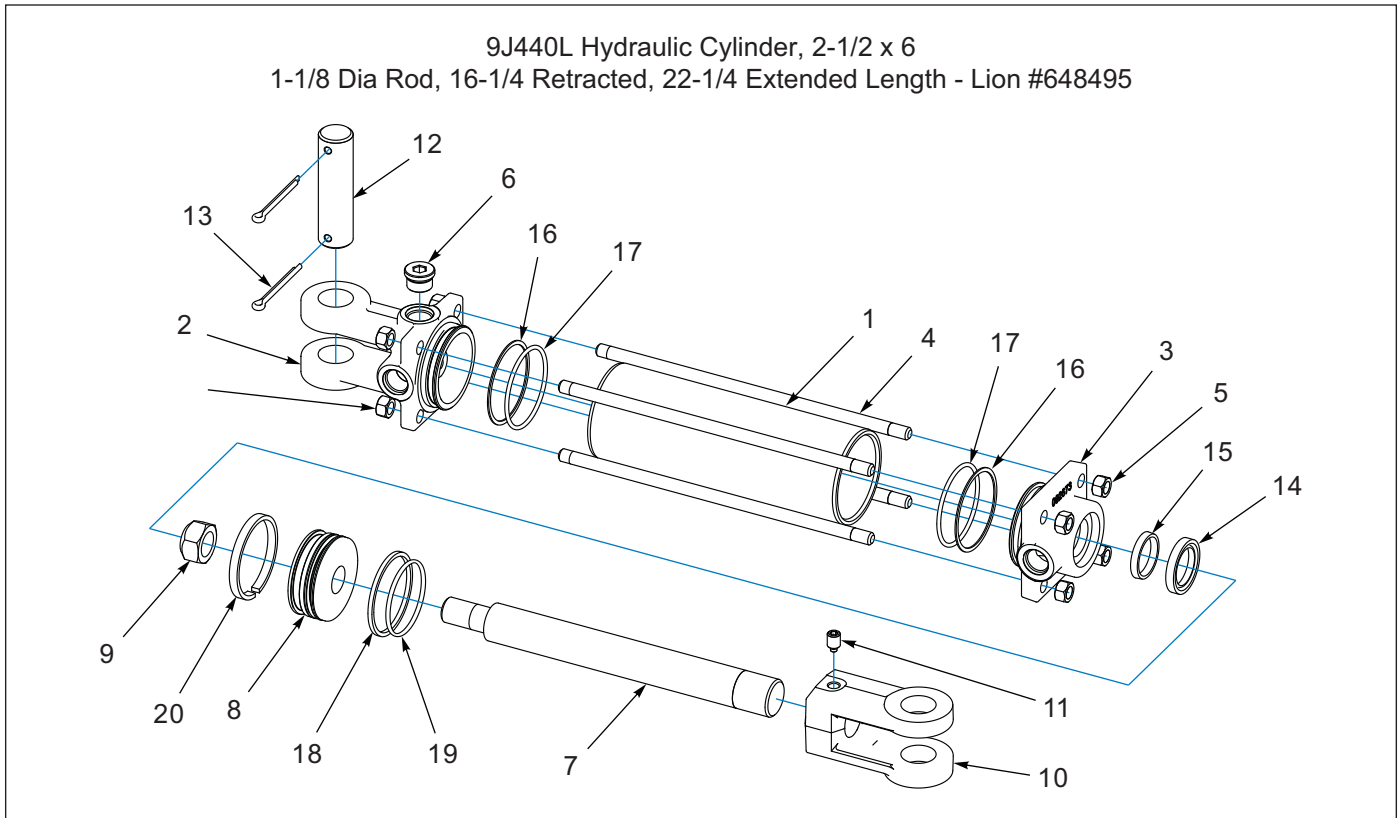


Figure 1-70: 9J440L Hydraulic Cylinder, 2-1/2 x 6 - Lion - 648495

### 9J440L Hydraulic Cylinder, 2-1/2 x 6 - Lion - 648495

ITEM	PART NUMBER	DESCRIPTION	QTY
	9J440	HYD CYLINDER - 2-1/2 X 16	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	1-512-010007-07	NUT,HEX 3/8-16 ZP	8
6	-----	PLUG,SOCKET HEAD 3/4-16	1
7	-----	ROD	1
8	-----	PISTON	1
9	1P805	NUT,LOCK 3/4-16,GRB,ZP	1
10	2P735	ROD CLEVIS (INCLUDES ITEM 11)	1
11	1P443	SET SCREW,3/8-16 X 1/2 NYLON TIP	1
12	5J650	PIN,1.0 X 3.625 H2	1
13	110-4224	COTTER PIN, 3/16 X 2IN LG	2
14	-----	SEAL,WIPER ROD 1.125 METAL E	1
15	-----	SEAL,HALLITE 605 ROD 1.125D	1
16	-----	SEAL,BU#228 19PI-228	2
17	-----	O-RING,228 (2.25X2.5) DURO	2
18	-----	SEAL,PTFE PISTON RING 2-1/2D	1
19	-----	O-RING,137 (2.063X2.25) DUR9	1
20	-----	WEAR RING,2.50-2.25-.25-GFN	1
21	1P742	SEAL KIT (INCLUDES ITEMS 14-20)	1

### 9J440L Hydraulic Cylinder, 2-1/2 x 6 - Lion - 671652

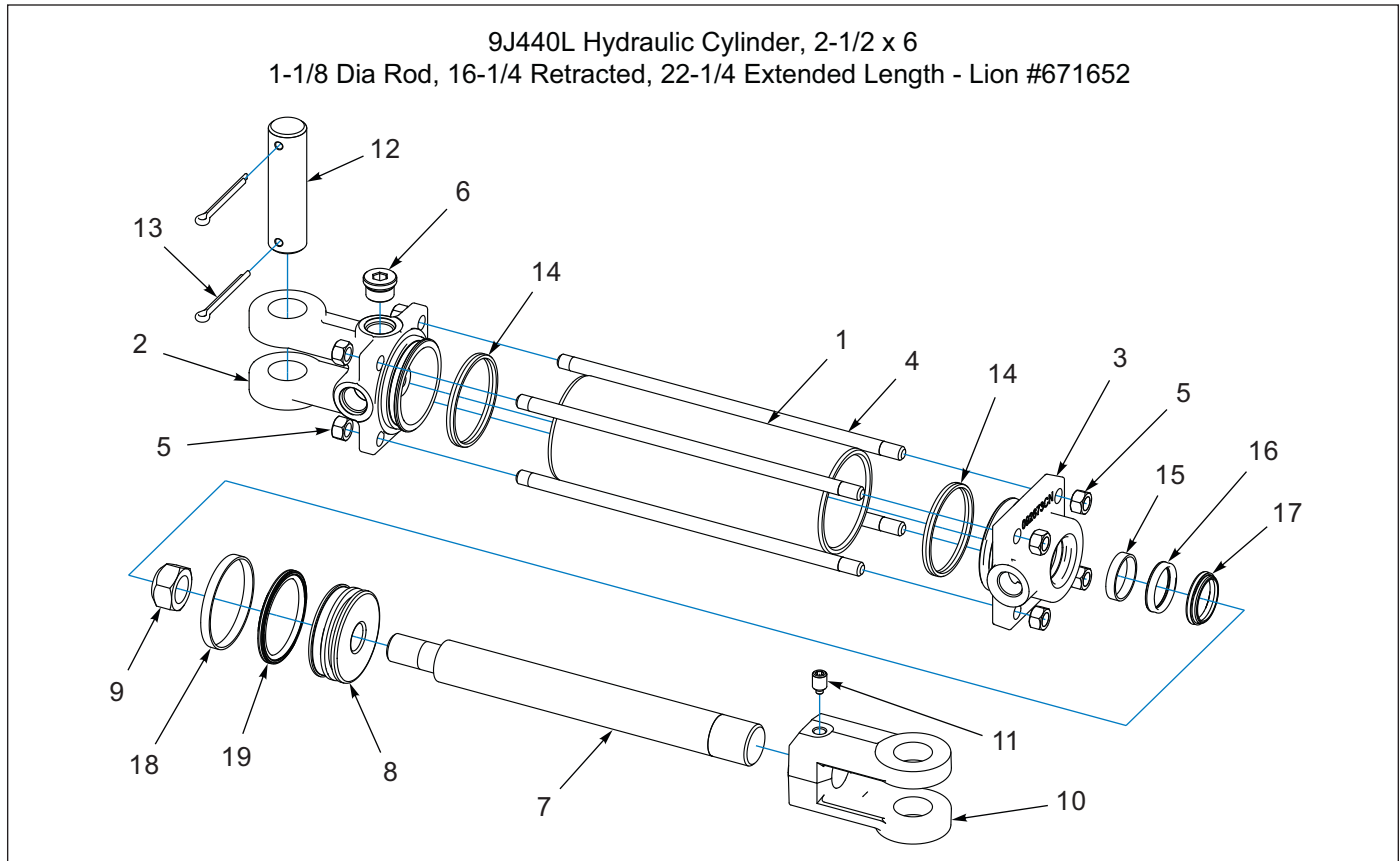
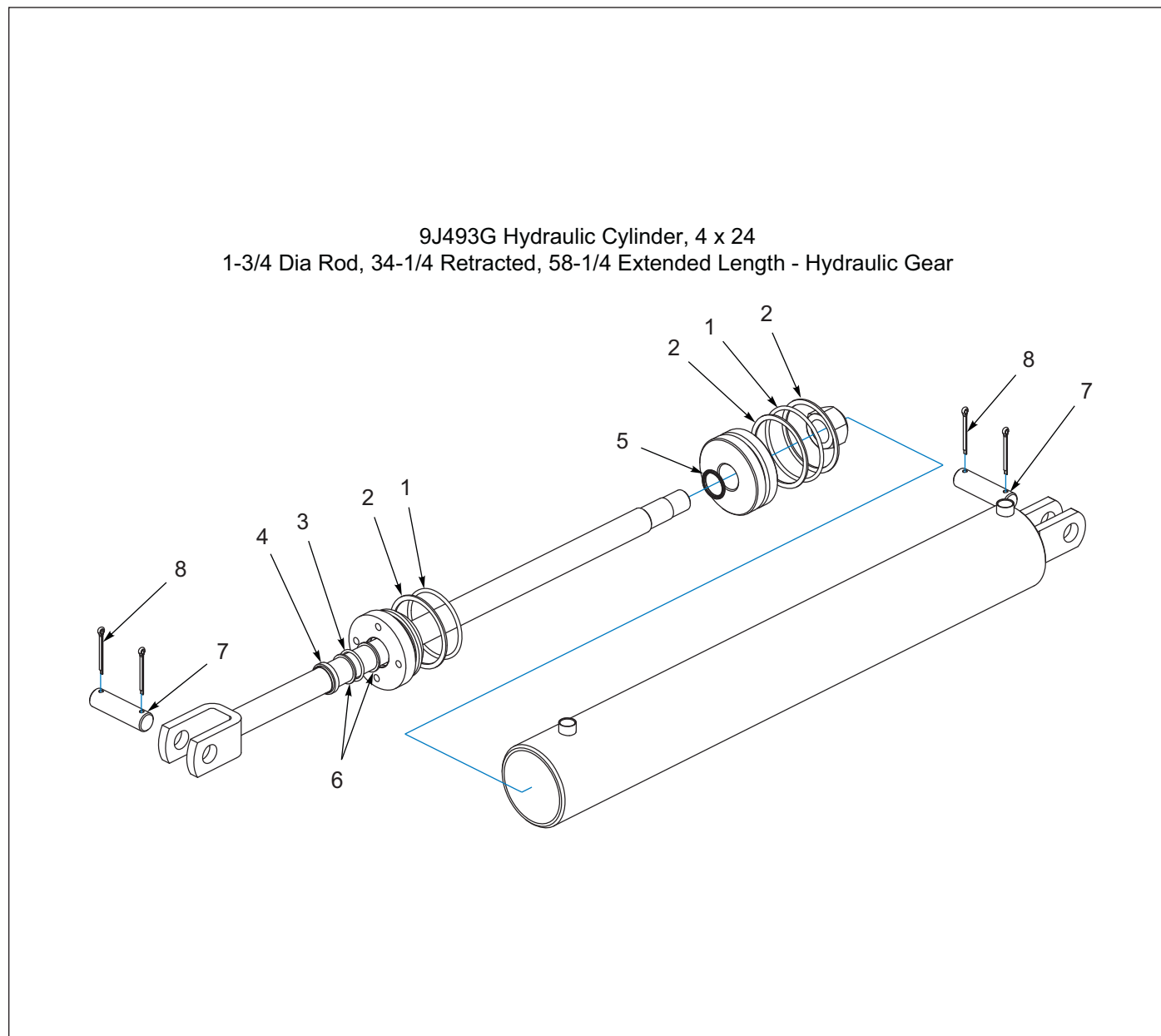


Figure 1-71: 9J440L Hydraulic Cylinder, 2-1/2 x 6 - Lion - 671652

### 9J440L Hydraulic Cylinder, 2-1/2 x 6 - Lion - 671652

ITEM	PART NUMBER	DESCRIPTION	QTY
	9J440	HYD CYLINDER - 2-1/2 X 16	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	TIE ROD	4
5	1-512-010007-07	NUT,HEX 3/8-16 ZP	8
6	-----	PLUG,SOCKET HEAD 3/4-16	1
7	-----	ROD	1
8	-----	PISTON	1
9	1P805	NUT,LOCK 3/4-16,GRB,ZP	1
10	2P735	ROD CLEVIS <b>(INCLUDES ITEM 11)</b>	1
11	1P443	SET SCREW,3/8-16 X 1/2 NYLON TIP	1
12	5J650	PIN,1.0 X 3.625 H2	1
13	110-4224	COTTER PIN, 3/16 X 2IN LG	2
14	-----	SEAL DUAL 2.50	2
15	-----	WEAR RING 1.25-1.13-0.250	1
16	-----	SEAL ZURCON U-CUP RU9 1.13	1
17	-----	SEAL WIPER 1.13 WNUC	1
18	-----	WEAR RING 2.50-2.38-0.250	1
19	-----	SEAL ZURCON WYNSEAL 2.50"	1
20	1P742	SEAL KIT <b>(INCLUDES ITEMS 14-19)</b>	1

## 9J493G Hydraulic Cylinder, 4 x 24 - Hydraulic Gear



9J493G Hydraulic Cylinder, 4 x 24  
1-3/4 Dia Rod, 34-1/4 Retracted, 58-1/4 Extended Length - Hydraulic Gear

Figure 1-72: 9J493G Hydraulic Cylinder, 4 x 24 - Hydraulic Gear

## 9J493G Hydraulic Cylinder, 4 x 24 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	9J493	HYD CYLINDER - 4 X 24	1
1	-----	O-RING	2
2	-----	BACK-UP RING	2
3	-----	O-RING	1
4	-----	WIPER	1
5	-----	O-RING	1
6	-----	BACK-UP RING	1
7	3J498	PIN, 1-1/4 X 3-3/4	2
8	1-557-010362-63	PIN,COTTER 1/4X2 ZP	4
9	1J956	SEAL KIT (INCLUDES ITEMS 1-6)	1

## 9J493L Hydraulic Cylinder, 4 x 24 - Lion - 648345

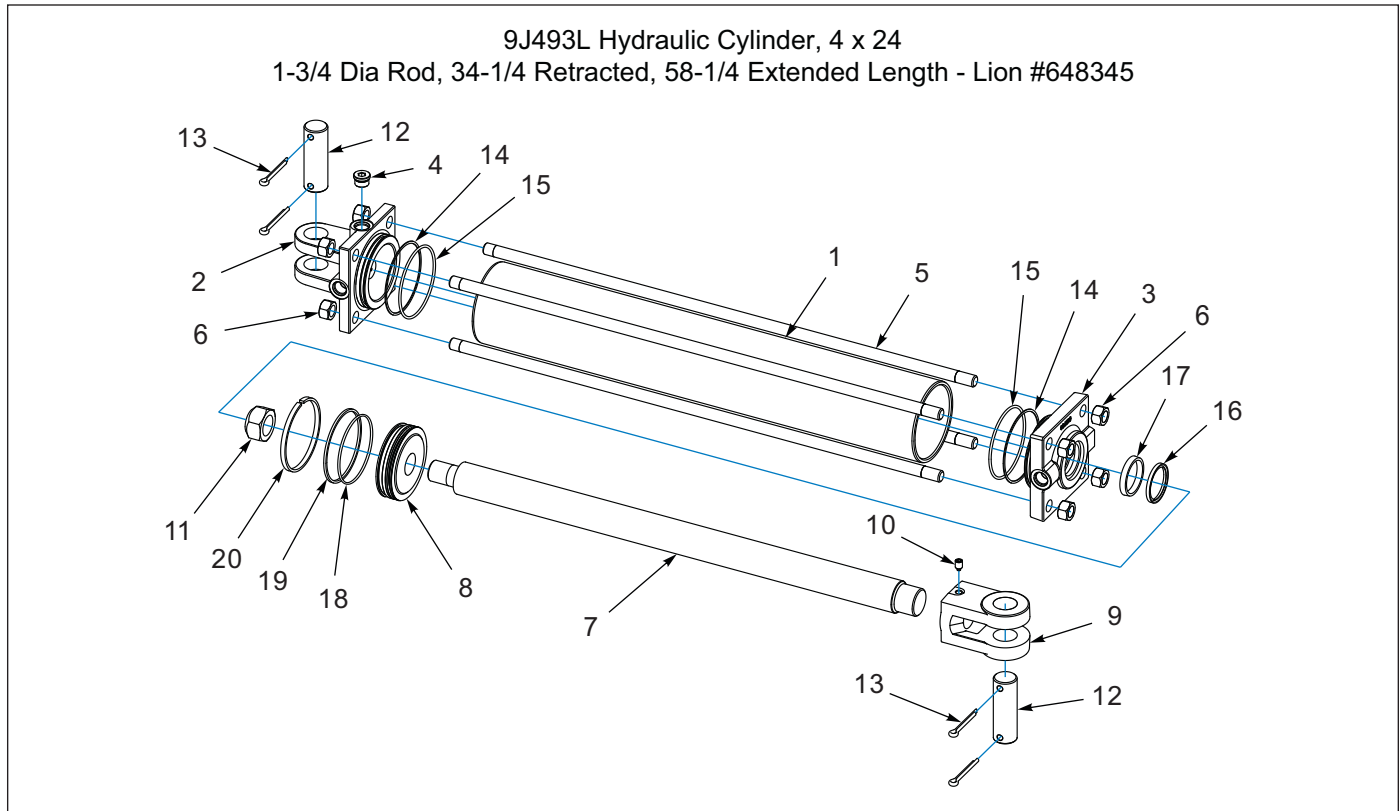


Figure 1-73: 9J493L Hydraulic Cylinder, 4 x 24 - Lion - 648345

## 9J493L Hydraulic Cylinder, 4 x 24 - Lion - 648345

ITEM	PART NUMBER	DESCRIPTION	QTY
	9J493	HYD CYLINDER - 4 X 24	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	PLUG, SOCKET HEAD 3/4-16	1
5	-----	TIE ROD	4
6	1-511-010002-07	NUT HEX JAM, 5/8-18UNF GR2	8
7	-----	ROD	1
8	-----	PISTON	1
9	2P739	CLEVIS 1.25PIN X 1.5 X 2.75 <b>(INCLUDES ITEM 10)</b>	1
10	1P443	SET SCREW, 3/8-16 x 1/2 NYLON TIP	1
11	8J852	NUT, LOCK 1-1/8-12, GrB, ZP	1
12	3J498	PIN, 1.25 x 3.75 H2	2
13	1-557-010362-63	PIN, COTTER 1/4X2 ZP	4
14	-----	SEAL, BU#240 19PI-240	2
15	-----	O-RING, 240 (3.75x4.0) DURO 90	2
16	-----	SEAL, NOK-AR2573-EO 1.75BO	1
17	-----	SEAL, HALLITE 605 ROD 1.75D	1
18	-----	O-RING, 153 (3.5x3.688) DUR	1
19	-----	SEAL, PTFE PISTON RING 4DIA	1
20	-----	WEAR RING, 4.00-3.75-.25-GFN	1
21	1P745	SEAL KIT <b>(INCLUDES ITEMS 14-20)</b>	1

### 9J493L Hydraulic Cylinder, 4 x 24 - Lion - 671665

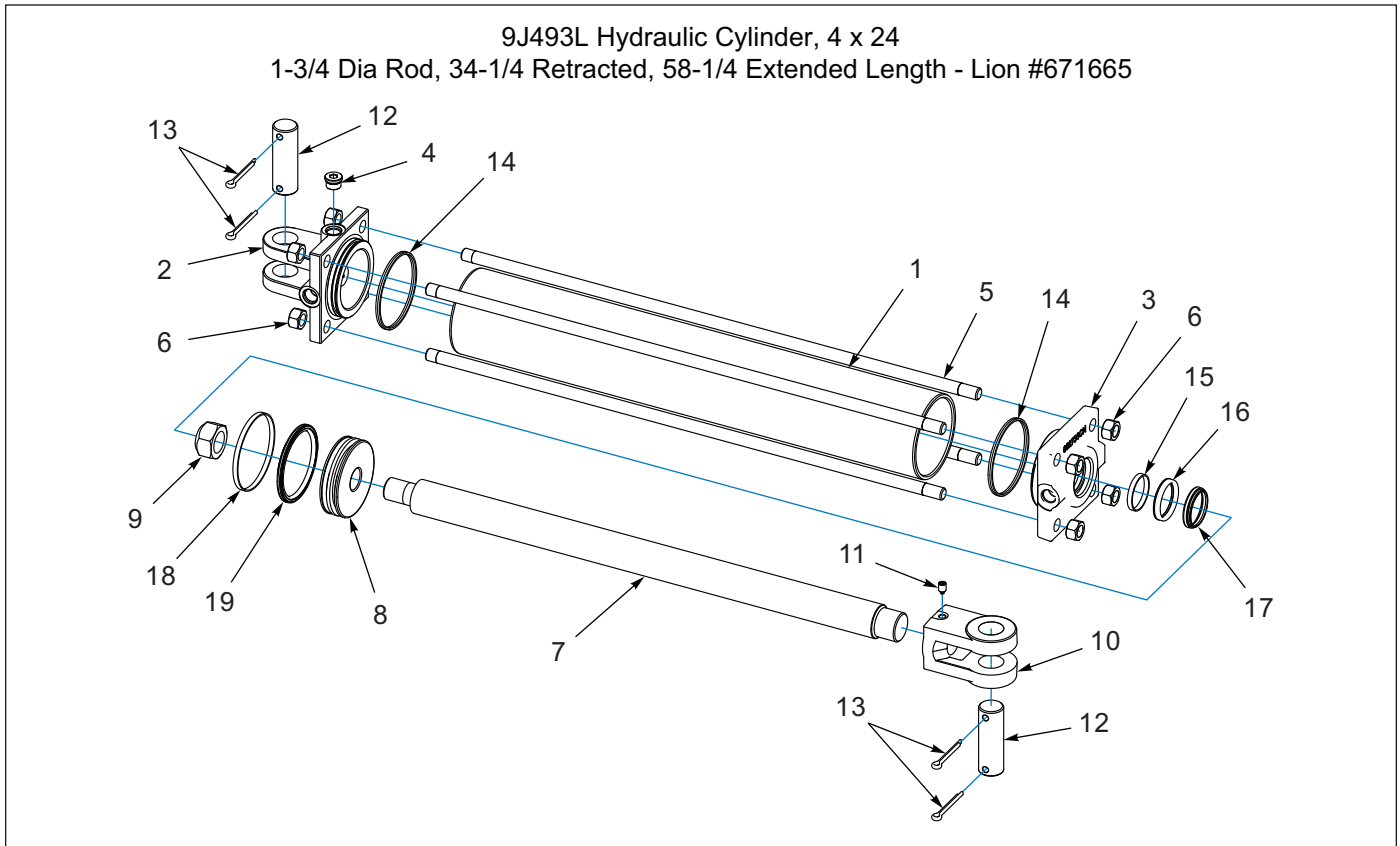


Figure 1-74: 9J493L Hydraulic Cylinder, 4 x 24 - Lion - 671665

### 9J493L Hydraulic Cylinder, 4 x 24 - Lion - 671665

ITEM	PART NUMBER	DESCRIPTION	QTY
	9J493	HYD CYLINDER - 4 X 24	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	PLUG, SOCKET HEAD 3/4-16	1
5	-----	TIE ROD	4
6	1-511-010002-07	NUT HEX JAM, 5/8-18UNF GR2	8
7	-----	ROD	1
8	-----	PISTON	1
9	8J852	NUT, LOCK 1-1/8-12, GrB, ZP	1
10	2P739	CLEVIS 1.25PIN X 1.5 X 2.75 (INCLUDES ITEM 11)	1
11	1P443	SET SCREW, 3/8-16 x 1/2 NYLON TIP	1
12	3J498	PIN, 1.25 x 3.75 H2	2
13	1-557-010362-63	PIN, COTTER 1/4X2 ZP	4
14	-----	SEAL DUAL 4.00	2
15	-----	WEAR RING 1.87-1.75-0.250	1
16	-----	SEAL ZURCON U-CUP RU9 1.75	1
17	-----	SEAL, WIPER 1.75	1
18	-----	WEAR RING 4.00-3.88-0.250	1
19	-----	SEAL SURCON WYNSEAL 4.00	1
20	1P745	SEAL KIT (INCLUDES ITEMS 14-19)	1

## 9K389G Hydraulic Cylinder, 4-1/2 x 14 - Hydraulic Gear

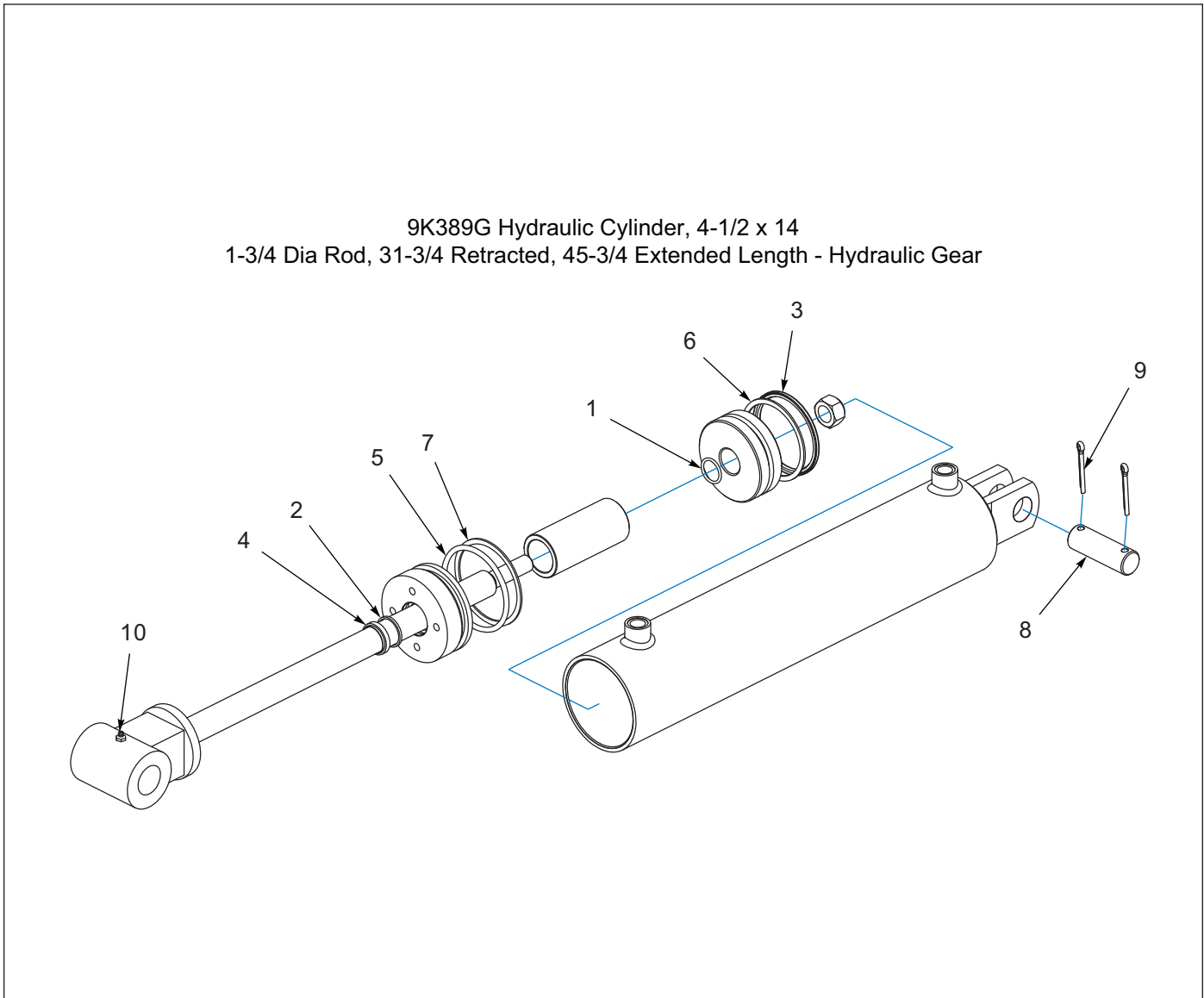


Figure 1-75: 9K389G Hydraulic Cylinder, 4-1/2 x 14 - Hydraulic Gear

## 9K389G Hydraulic Cylinder, 4-1/2 x 14 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	9K389	HYD CYLINDER - 4-1/2 X 14	1
1	-----	O-RING	1
2	-----	POLYSEAL	1
3	-----	CROWN SEAL	1
4	-----	ROD WIPER	1
5	-----	O-RING	1
6	-----	PARBACK (BACK-UP) RING	1
7	-----	VENTED BACK-UP RING	1
8	3J498	PIVOT PIN (REAR)	1
9	1-557-010362-63	PIN,COTTER 1/4X2 ZP	2
10	5000	LUBE FITTING, 1/8 NPT STR.	1
11	9K434	SEAL KIT (INCLUDES ITEMS 1-7)	1

# 9K389L Hydraulic Cylinder, 4-1/2 x 14 - Lion

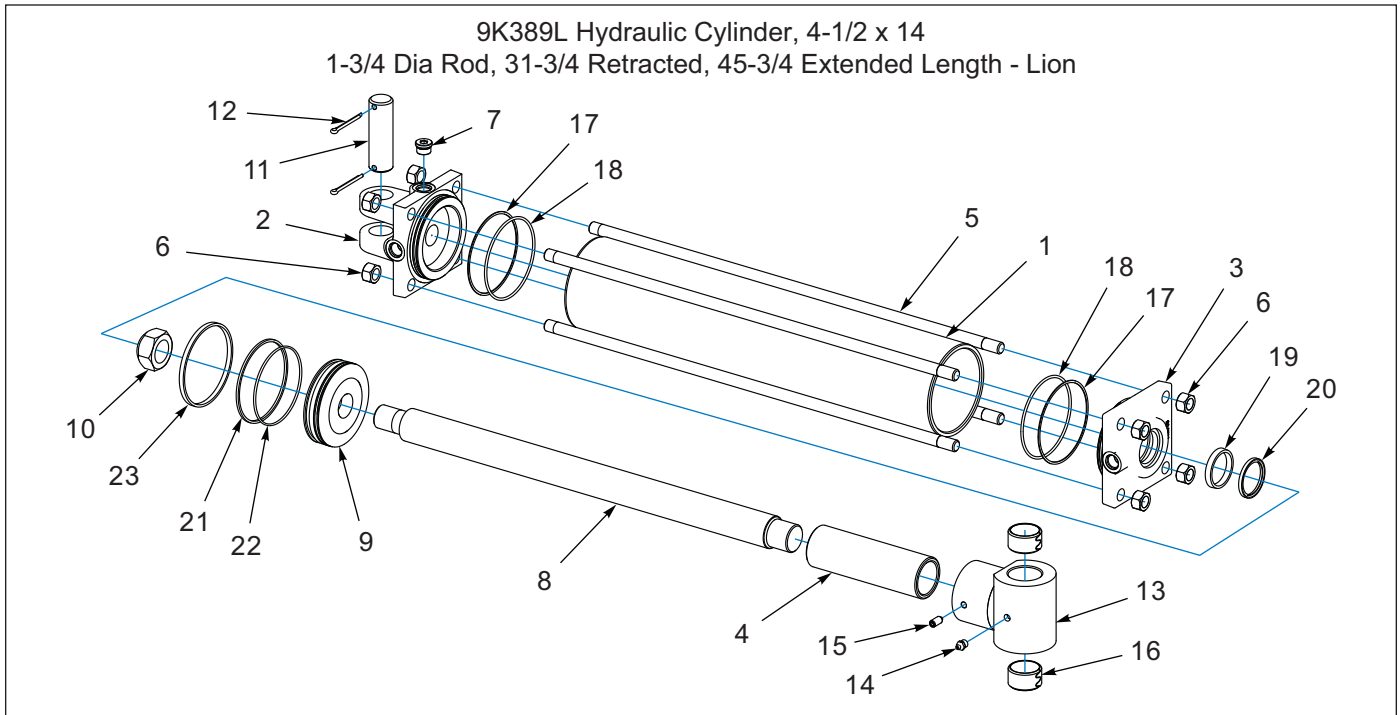


Figure 1-76: 9K389L Hydraulic Cylinder, 4-1/2 x 14 - Lion

# 9K389L Hydraulic Cylinder, 4-1/2 x 14 - Lion

ITEM	PART NUMBER	DESCRIPTION	QTY
	9K389	HYD CYLINDER - 4-1/2 X 14	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	STOP TUBE	1
5	-----	TIE ROD	4
6	1-511-010002-07	NUT HEX JAM,5/8-18UNF GR2	8
7	-----	PLUG,SOCKET HEAD 3/4-16	1
8	-----	ROD	1
9	-----	PISTON	1
10	220000212	NUT, LOCK 1-1/4-12,ZP	1
11	4J549	PIN, 1.25 X 4.0 H2	1
12	110-4224	PIN,COTTER 3/16 X 2IN LG	2
13	1P440	CROSS TUBE,1.5-12 THRD <b>(INCLUDES ITEMS 14-16)</b>	1
14	5000	FIT,GREASE 1/8PTF x 0.688	1
15	1P444	SET SCREW,3/8-16 x 3/4 NYLON TIP	1
16	1P439	SPRING BUSHING,1.5x1.75x1.0	2
17	-----	SEAL,BU#244	2
18	-----	O-RING,244 (4.25x4.5) D90	2
19	-----	SEAL,HALLITE 605 ROD 1.75D	1
20	-----	SEAL,NOK-AR2573-EO 1.75BO	1
21	-----	SEAL,PTFE PISTON RING 4.5D	1
22	-----	O-RING,155 (4.0x4.188) DUR90	1
23	-----	WEAR RING,4.50-4.25-.25-GFN	1
24	1P746	SEAL KIT <b>(INCLUDES ITEMS 17-23)</b>	1

### 9K501P Hydraulic Cylinder, 5 x 48 - Prince

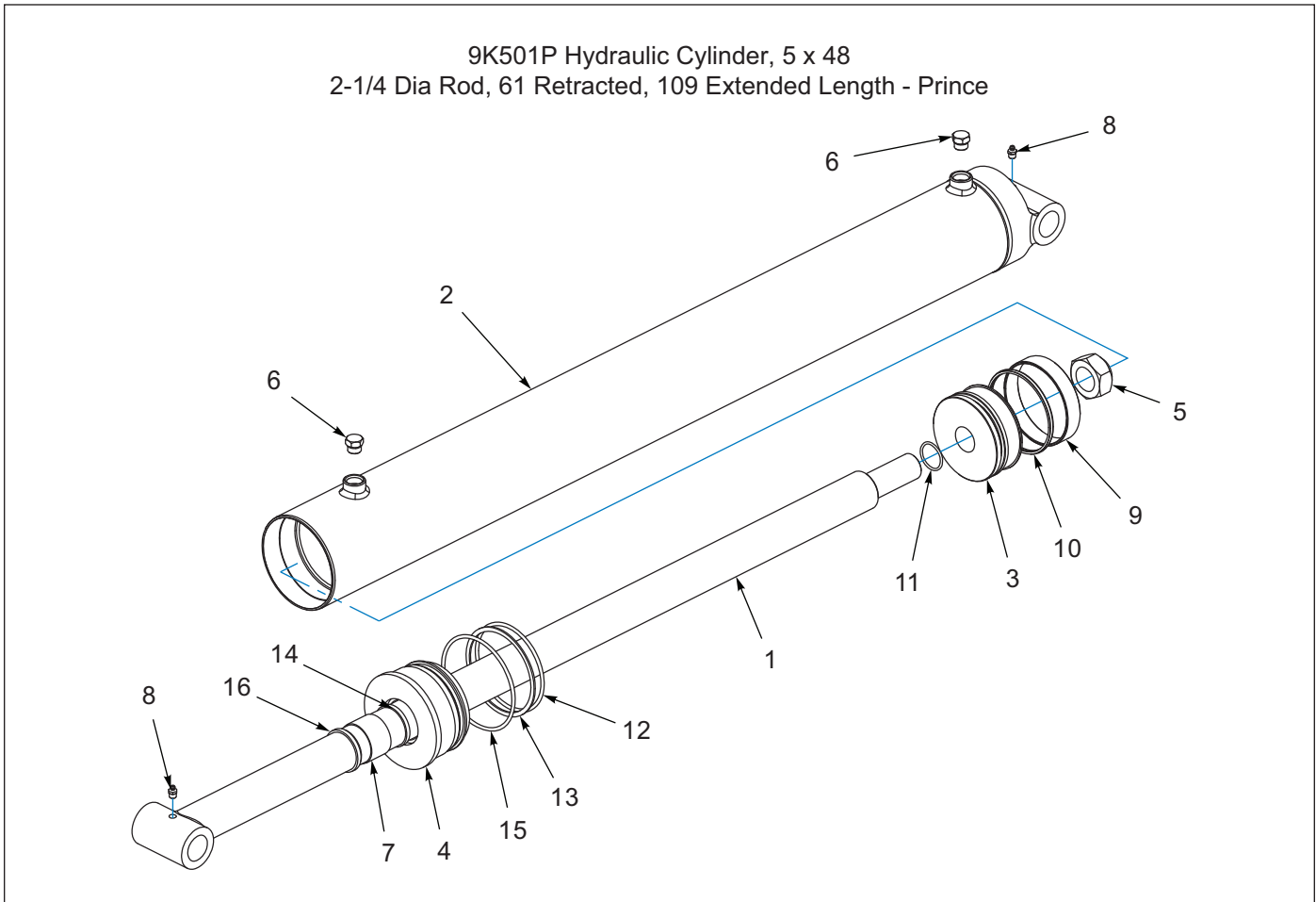


Figure 1-77: 9K501P Hydraulic Cylinder, 5 x 48 - Prince

### 9K501P Hydraulic Cylinder, 5 x 48 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	9K501	HYD CYLINDER - 5 X 48	1
1	9K704	PISTON ROD ASSEMBLY	1
2	9K448	BUTT & TUBE ASSEMBLY	1
3	9K449	PISTON	1
4	9K450	GLAND	1
5	9K447	LOCK NUT, 1 1/2-6 NC	1
6	1-007-010025	PORT PLUG	2
7	9K459	DX BUSHING	1
8	5000	LUBE FITTING	2
9	-----	BEARING RING	1
10	-----	CROWN SEAL	1
11	-----	O-RING	1
12	-----	O-RING	1
13	-----	BACKUP WASHER	1
14	-----	U-CUP	1
15	-----	O-RING	1
16	-----	WIPER	1
17	9K670	SEAL KIT (INCLUDES ITEMS 10-16)	1



### 9K502P Hydraulic Cylinder, 4 x 30 - Prince

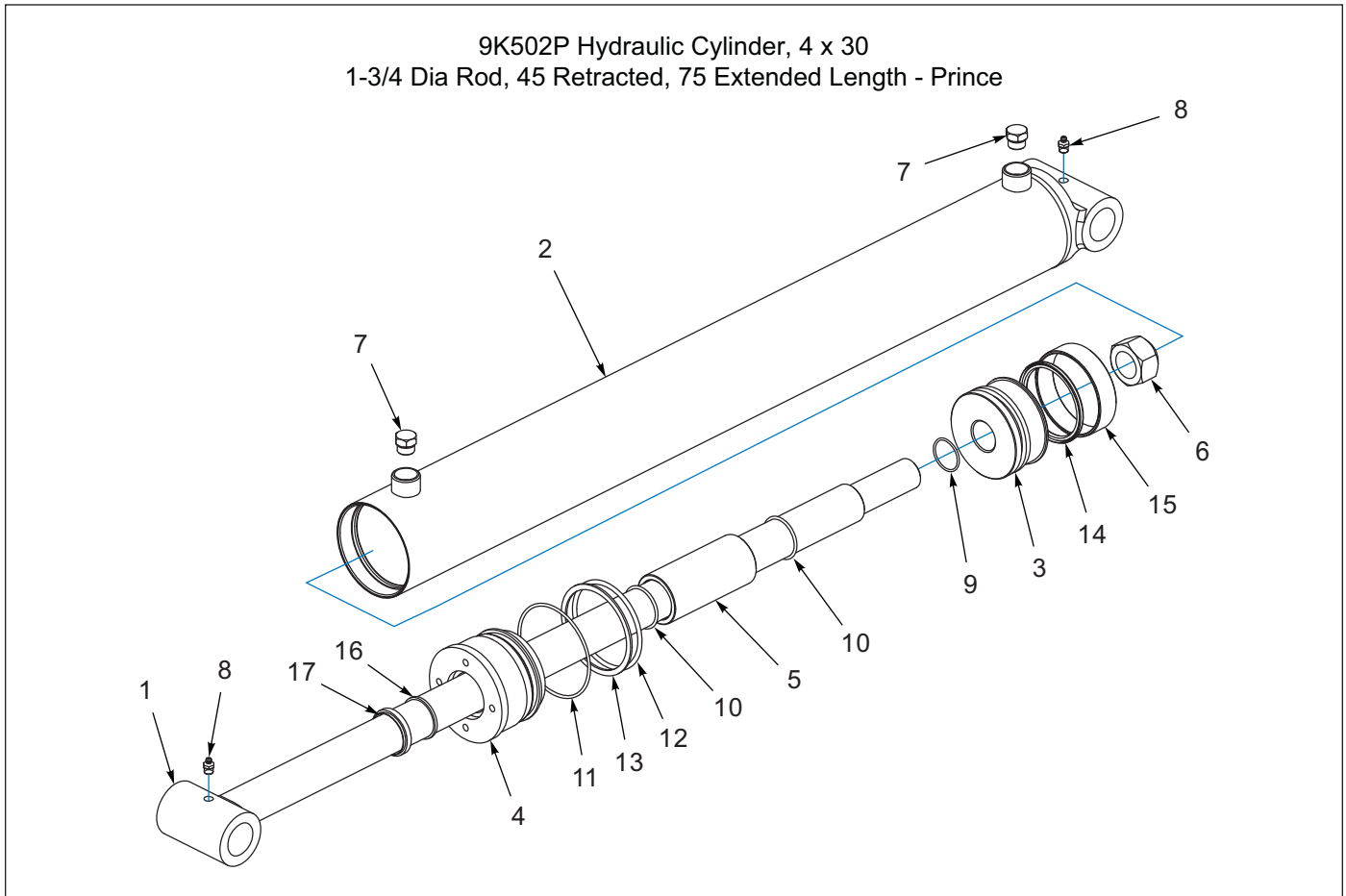
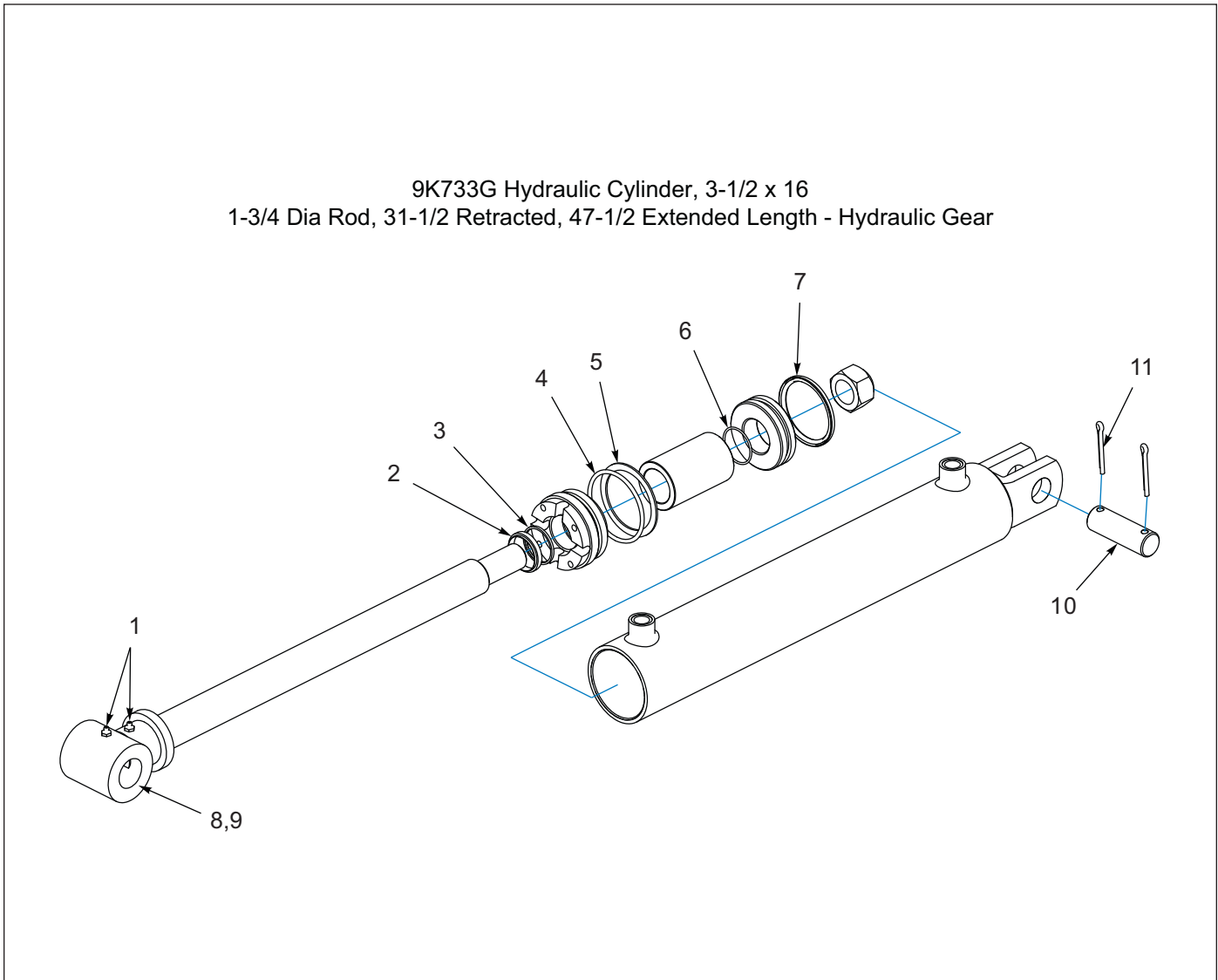


Figure 1-78: 9K502P Hydraulic Cylinder, 4 x 30 - Prince

### 9K502P Hydraulic Cylinder, 4 x 30 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	9K502	HYD CYLINDER - 4 X 30	1
1	9K466	PISTON ROD ASSEMBLY	1
2	9K467	BUTT & TUBE ASSEMBLY	1
3	9K468	PISTON	1
4	9K469	GLAND	1
5	9K470	SPACER	1
6	-----	LOCK NUT, 1 1/4-12	1
7	-----	SHIPPING PLUG	2
8	-----	LUBE FITTING	2
9	-----	O-RING	1
10	-----	O-RING	2
11	-----	O-RING	1
12	-----	O-RING	1
13	-----	BACKUP WASHER	1
14	-----	CROWN SEAL	1
15	-----	BEARING RING	1
16	-----	U-CUP	1
17	-----	CANNED WIPER	1
18	9K671	SEAL KIT (INCLUDES ITEMS 9-17)	1

## 9K733G Hydraulic Cylinder, 3-1/2 x 16 - Hydraulic Gear



9K733G Hydraulic Cylinder, 3-1/2 x 16  
1-3/4 Dia Rod, 31-1/2 Retracted, 47-1/2 Extended Length - Hydraulic Gear

Figure 1-79: 9K733G Hydraulic Cylinder, 3-1/2 x 16 - Hydraulic Gear

## 9K733G Hydraulic Cylinder, 3-1/2 x 16 - Hydraulic Gear

ITEM	PART NUMBER	DESCRIPTION	QTY
	9K733	HYD CYLINDER - 3-1/2 X 16	1
1	5000	ZERK FITTING 1/8NPT	2
2	-----	ROD WIPER	1
3	-----	U-CUP	1
4	-----	O-RING	1
5	-----	BACK-UP RING	1
6	-----	O-RING	1
7	-----	POLYSEAL	1
8	1P483	CROSS TUBE (INCLUDES ITEMS 1 AND 9)	1
9	1P196	SPRING BUSHING (NOT SHOWN)	2
10	3J498	1 1/4" DIA PIN	1
11	1-557-010362-63	PIN,COTTER 1/4X2 ZP	2
12	1P122	SEAL KIT (INCLUDES ITEMS 2-7)	1

### 9K733L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 648347

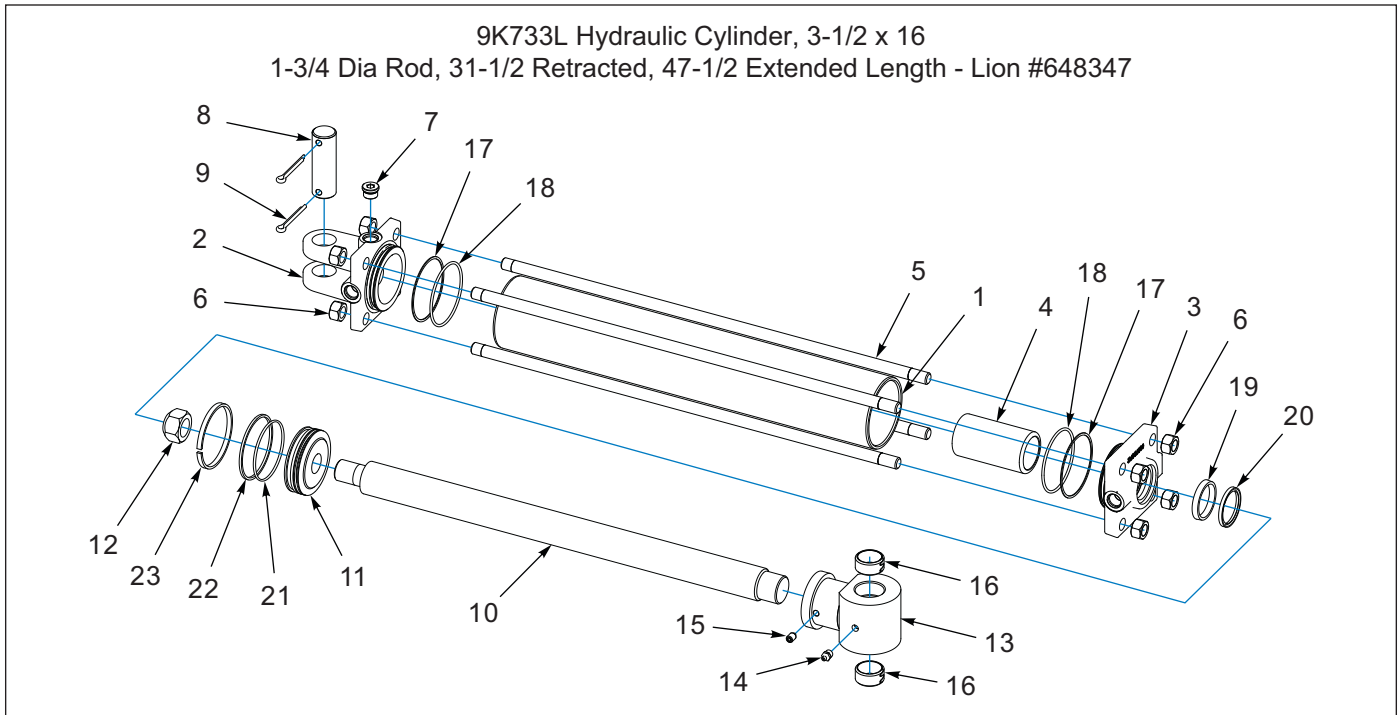


Figure 1-80: 9K733L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 648347

### 9K733L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 648347

ITEM	PART NUMBER	DESCRIPTION	QTY
	9K733	HYD CYLINDER - 3-1/2 X 16	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	STOP TUBE	1
5	-----	TIE ROD	4
6	-----	NUT,HEX 5/8-18,ZP	8
7	-----	PLUG,SOCKET HEAD 3/4-16	1
8	3J498	PIN,1.25 X 3.75	1
9	1-557-010362-63	PIN,COTTER 1/4 X 2 ZP	2
10	-----	ROD	1
11	-----	PISTON	1
12	1-512-010005-19	NUT,LOCK 1-8, GRB,ZP	1
13	1P483	CROSS TUBE,ROD END 1.5-12 THRD (INCLUDES ITEMS 14-16)	2
14	5000	ZERK FITTING 1/8NPT	1
15	1P443	SET SCREW,3/8-16 X 1/2 NYLON TIP	1
16	1P196	SPRING BUSHING,1.25X1.5X0.75	2
17	-----	SEAL,BU#236 19PI-236	2
18	-----	O-RING,236 (3.25X3.5) D90	2
19	-----	SEAL,HALLITE 605 ROD 1.75D	1
20	-----	SEAL,NOK-AR2573-EO 1.75BO	1
21	-----	O-RING,151 (3.0X3.188) DUR90	1
22	-----	SEAL,PTFE PISTON RING 3-1/2D	1
23	-----	WEAR RING,3.50-3.25-.25-GFN	1
24	1P744	SEAL KIT (INCLUDES ITEMS 17-23)	1

### 9K733L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 671660

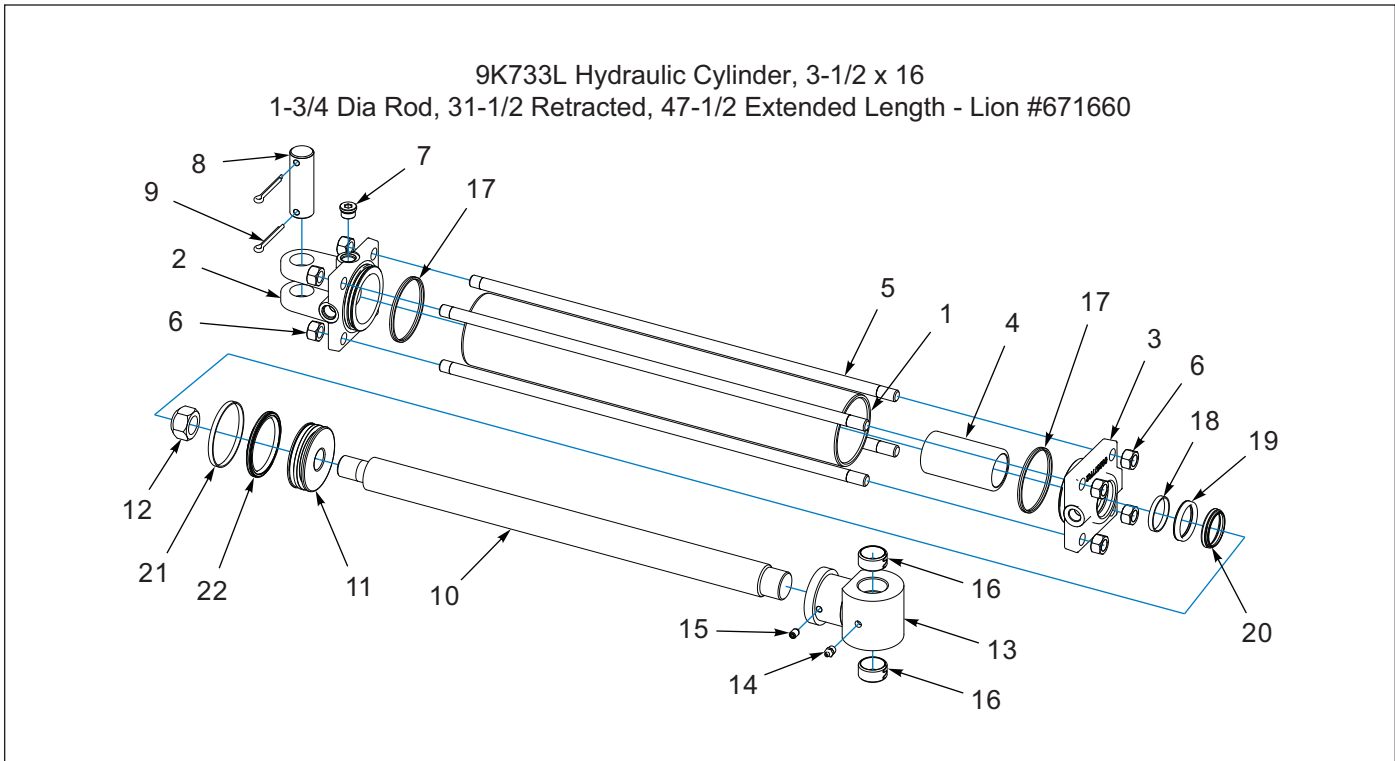


Figure 1-81: 9K733L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 671660

### 9K733L Hydraulic Cylinder, 3-1/2 x 16 - Lion - 671660

ITEM	PART NUMBER	DESCRIPTION	QTY
	9K733	HYD CYLINDER - 3-1/2 X 16	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	STOP TUBE	1
5	-----	TIE ROD	4
6	-----	NUT,HEX 5/8-18,ZP	8
7	-----	PLUG,SOCKET HEAD 3/4-16	1
8	3J498	PIN,1.25 X 3.75	1
9	1-557-010362-63	PIN,COTTER 1/4 X 2 ZP	2
10	-----	ROD	1
11	-----	PISTON	1
12	1-512-010005-19	NUT,LOCK 1-8, GRB,ZP	1
13	1P483	CROSS TUBE,ROD END 1.5-12 THRD (INCLUDES ITEMS 14-16)	1
14	5000	ZERK FITTING 1/8NPT	1
15	1P443	SET SCREW,3/8-16 X 1/2 NYLON TIP	1
16	1P196	SPRING BUSHING,1.25X1.5X0.75	2
17	-----	SEAL DUAL 3.50	2
18	-----	WEAR RING 1.87-1.75-0.250	1
19	-----	SEAL ZURCON U-CUP RU9 1.75	1
20	-----	SEAL, WIPER 1.75	1
21	-----	WEAR RING 3.50-3.38-0.250	1
22	-----	SEAL ZURCON WYNSEAL 3.50"	1
23	1P744	SEAL KIT (INCLUDES ITEMS 17-22)	1

# 114004 Hydraulic Cylinder, 4-1/2 x 20 - Prince

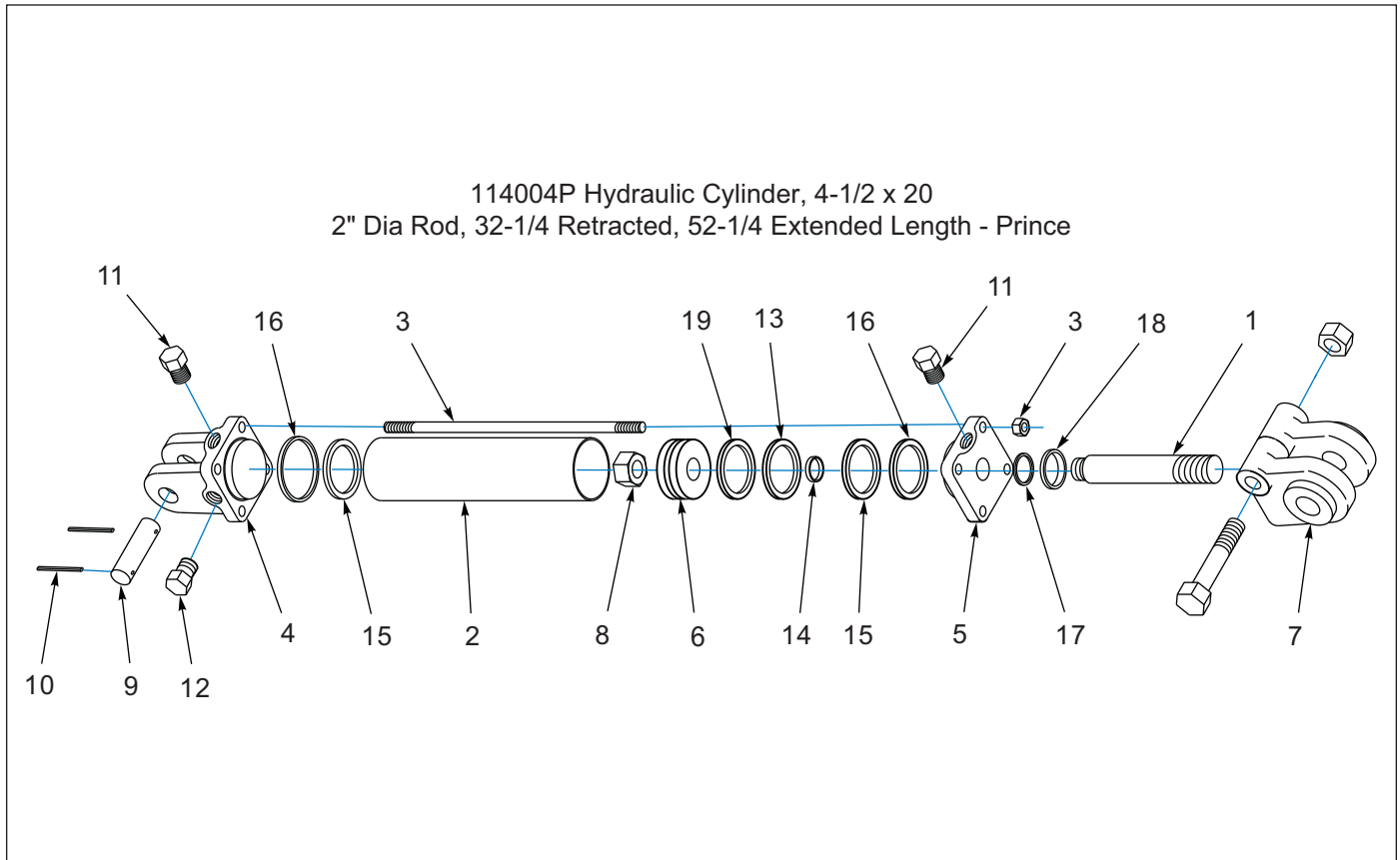


Figure 1-82: 114004 Hydraulic Cylinder, 4-1/2 x 20 - Prince

# 114004 Hydraulic Cylinder, 4-1/2 x 20 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	114004	CYLINDER, HYD 4-1/2X20 3000PSI	1
1	163037	PISTON ROD	1
2	-----	TUBE	1
3	-----	TIEROD ASSY	4
4	-----	BUTT	1
5	163038	GLAND ASSY	1
6	-----	PISTON	1
7	100000362	CLEVIS ASSY	1
8	-----	LOCKNUT	1
9	-----	CLEVIS PIN	2
10	-----	COTTER PIN	4
11	-----	PLASTIC PLUG	2
12	-----	PORT PLUG	1
13	-----	CROWN SEAL	1
14	-----	O-RING	1
15	-----	O-RING	2
16	-----	BU-WASHER	2
17	-----	U-CUP	1
18	-----	WIPER	1
19	-----	BEARING RING	1
20	132077	SEAL KIT (INCLUDES ITEMS 13-18)	1

# 116344 Hydraulic Cylinder, 2-1/2 x 20 - Prince

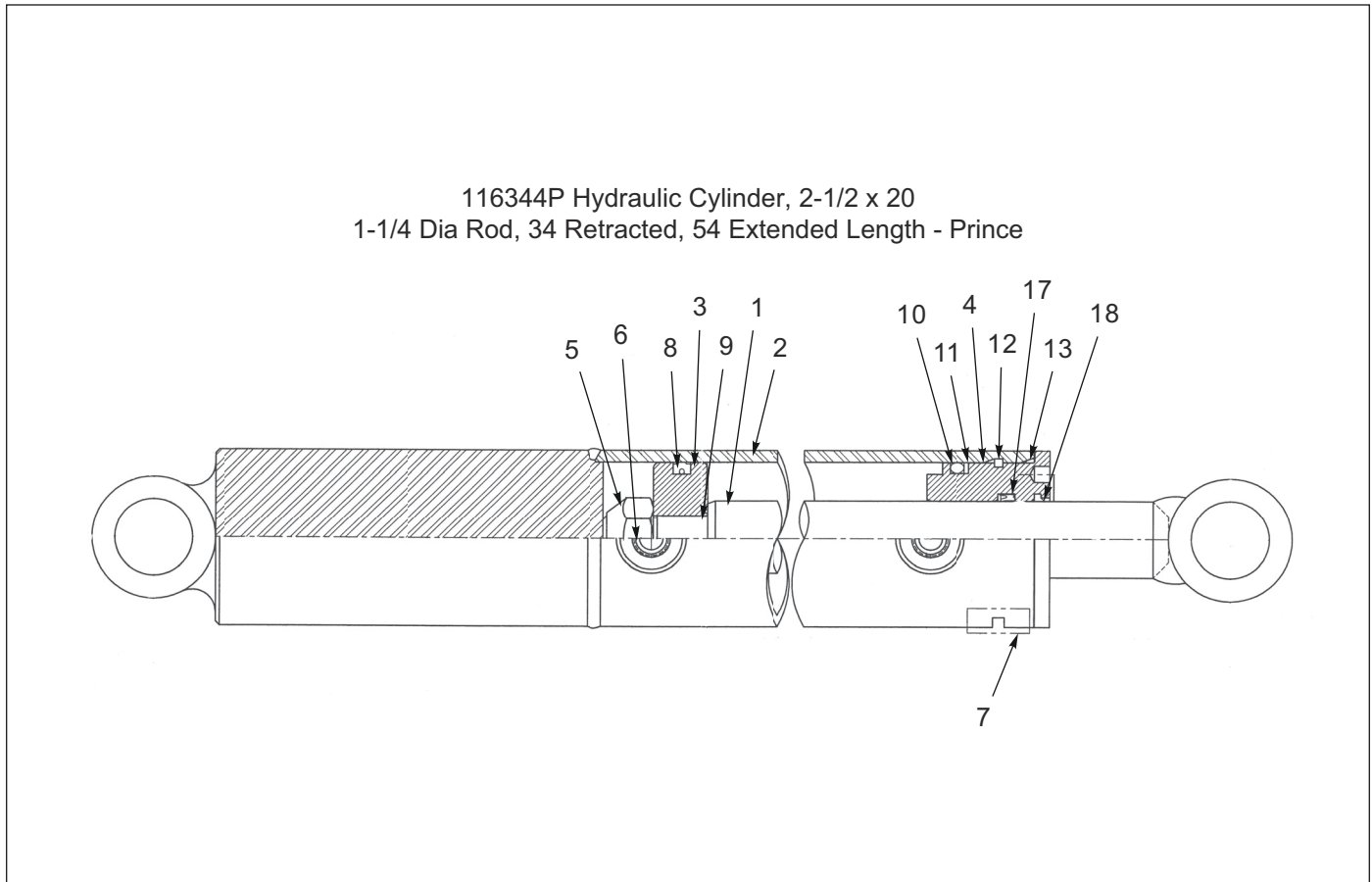


Figure 1-83: 116344 Hydraulic Cylinder, 2-1/2 x 20 - Prince

# 116344 Hydraulic Cylinder, 2-1/2 x 20 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	116344	CYLINDER,HYD 2-1/2X20	1
1	120802	PISTON ROD ASSEMBLY	1
2	-----	BUTT AND TUBE ASSEMBLY	1
3	117512	PISTON	1
4	120803	GLAND	1
5	-----	LOCKNUT	1
6	-----	PORT PLUG	2
7	-----	SQUARE WIRE TAPE	1
8	-----	CROWN SEAL	1
9	-----	O-RING	1
10	-----	O-RING	1
11	-----	BU-WASHER	1
12	-----	SQUARE RET. WIRE	1
13	-----	O-RING	1
14	-----	U-CUP	1
15	-----	WIPER	1
16	-----	INSTALLATION RING	1
17	-----	U-CUP	1
18	-----	WIPER	1
19	117514	SEAL KIT (INCLUDES ITEMS 8-18)	1

## 129251 Hydraulic Cylinder, 1-3/4 x 6 - Prince

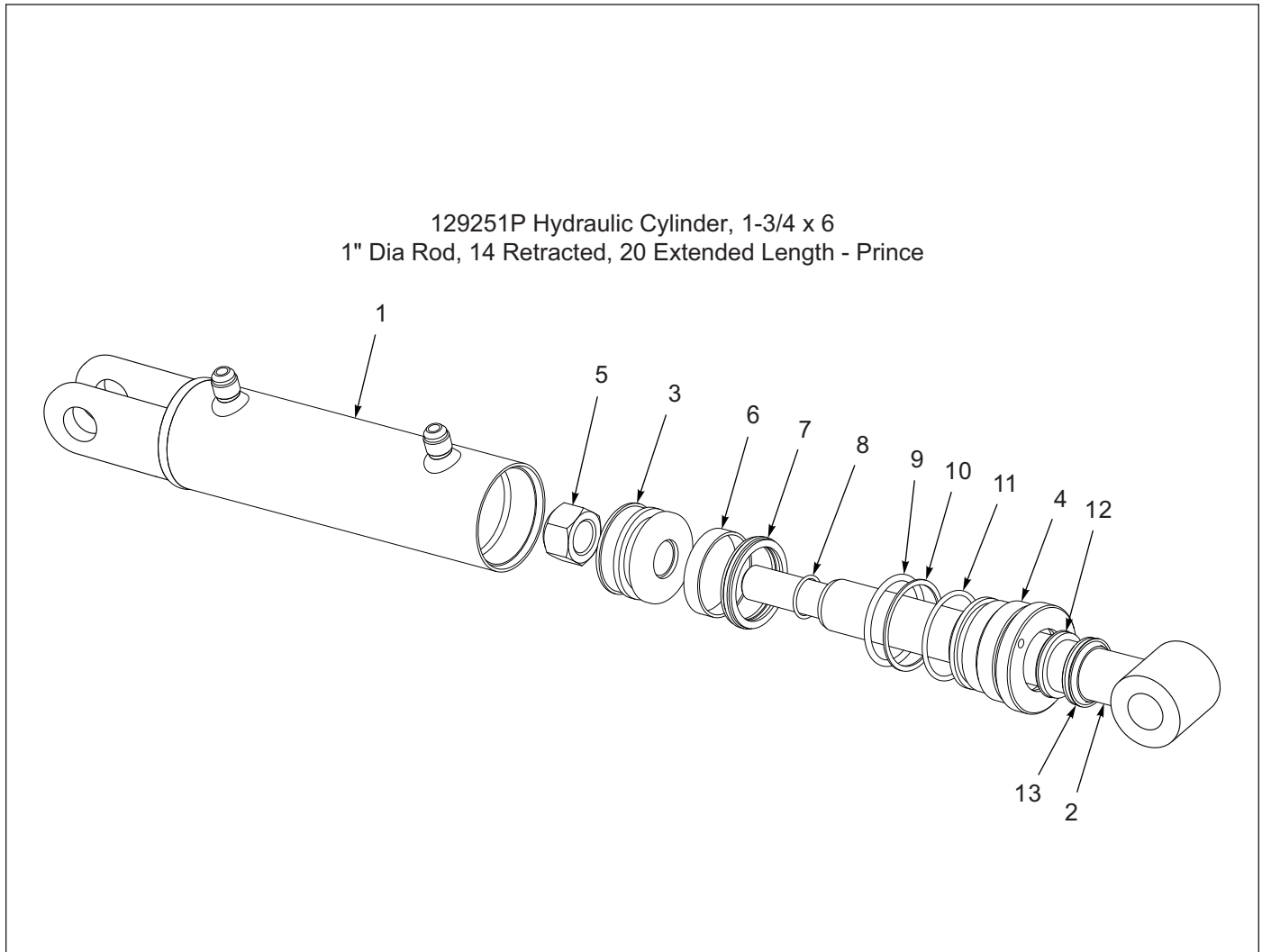
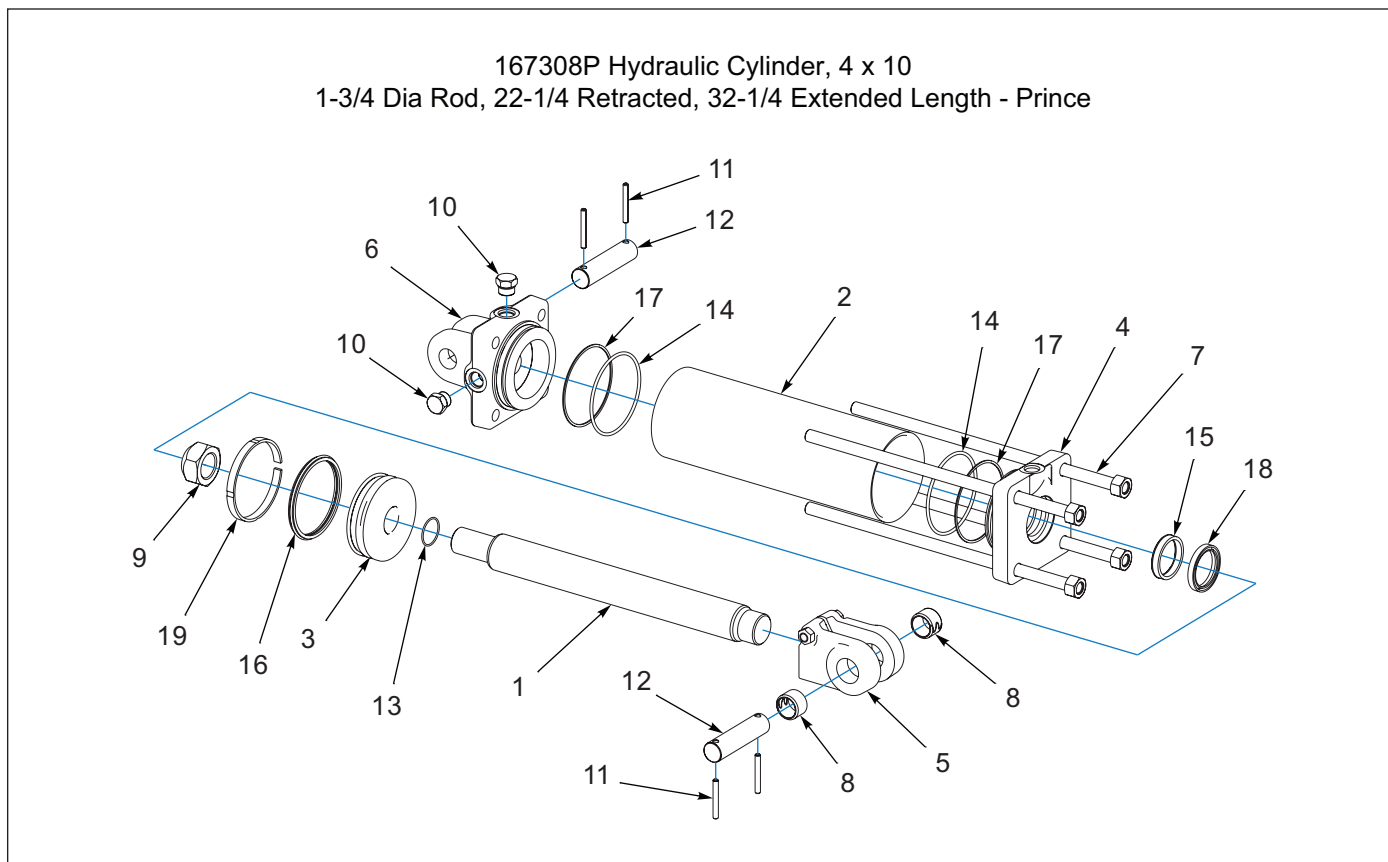


Figure 1-84: 129251 Hydraulic Cylinder, 1-3/4 x 6 - Prince

## 129251 Hydraulic Cylinder, 1-3/4 x 6 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	129251	CYLINDER,HYD 1-3/4X6	1
1	-----	BUTT AND TUBE ASSEMBLY	1
2	169650	PISTON ROD	1
3	-----	PISTON	1
4	169651	GLAND	1
5	-----	LOCKNUT	1
6	-----	BEARING RING	1
7	-----	CROWN SEAL	1
8	-----	O-RING	1
9	-----	O-RING	1
10	-----	BU-WASHER	1
11	-----	O-RING	1
12	-----	U-CUP	1
13	-----	WIPER	1
14	131868	PACKING KIT (INCLUDES ITEMS 6-13)	1

# 167308 Hydraulic Cylinder, 4 x 10 - Prince



167308P Hydraulic Cylinder, 4 x 10  
1-3/4 Dia Rod, 22-1/4 Retracted, 32-1/4 Extended Length - Prince

Figure 1-85: 167308 Hydraulic Cylinder, 4 x 10 - Prince

# 167308 Hydraulic Cylinder, 4 x 10 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	167308	CYLINDER, HYDRAULIC 4 X 10 3000 PSI	1
1	154099	PISTON ROD	1
2	-----	TUBE	1
3	-----	PISTON	1
4	154101	GLAND	1
5	154102	CLEVIS ASSEMBLY	1
6	-----	BUTT	2
7	-----	TIEROD ASSEMBLY	4
8	-----	BUSHING	2
9	-----	LOCKNUT	1
10	-----	SHIPPING PLUG	3
11	-----	ROLL PIN	4
12	-----	CLEVIS PIN	2
13	-----	O-RING	1
14	-----	O-RING	2
15	-----	U-CUP	1
16	-----	CROWN SEAL	1
17	-----	BU-WASHER	2
18	-----	WIPER	1
19	-----	BEARING RING	1
20	154104	PACKING KIT (INCLUDES ITEMS 13 - 19)	1



# 167310 Hydraulic Cylinder, 3-1/2 x 6 - Prince

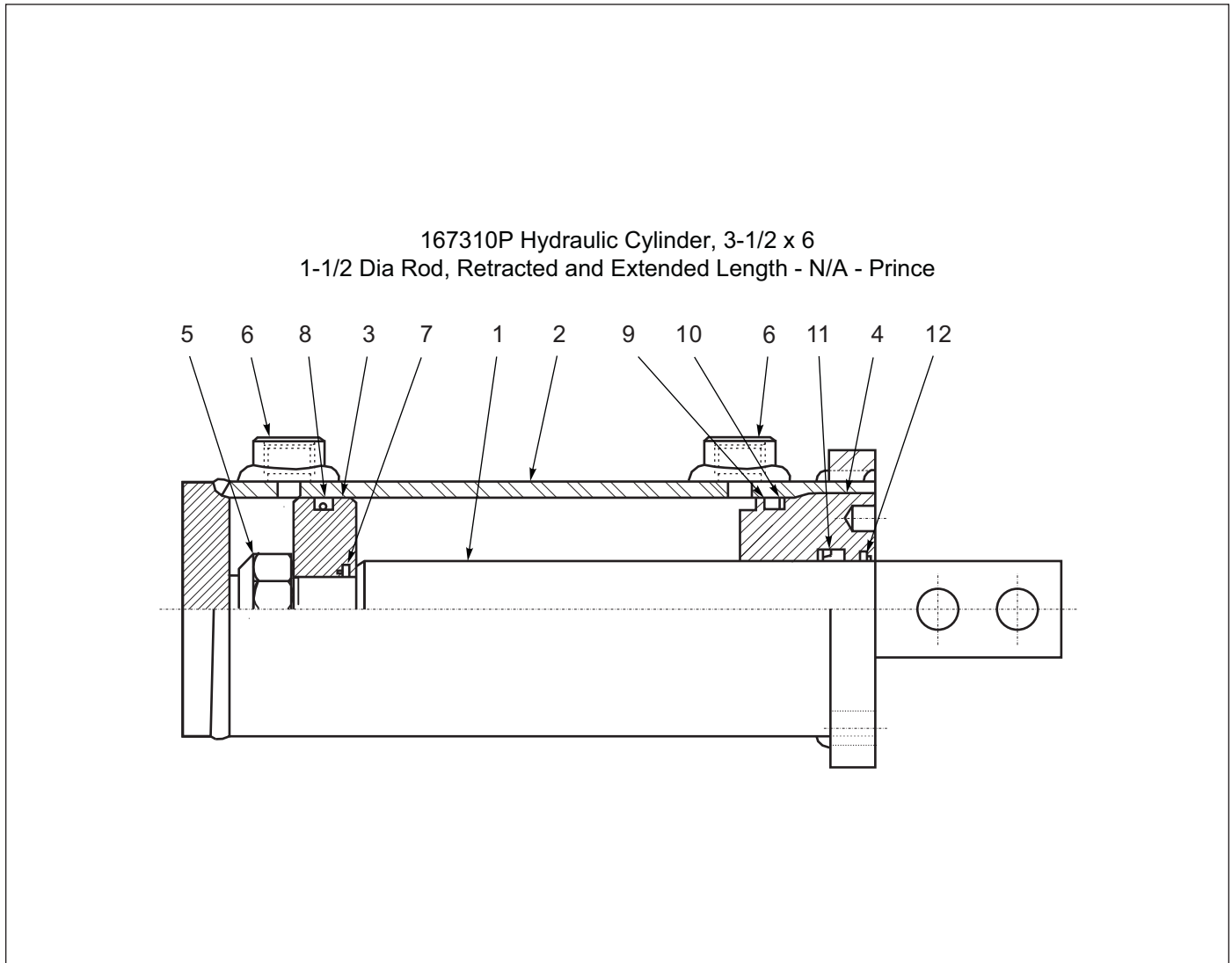


Figure 1-86: 167310 Hydraulic Cylinder, 3-1/2 x 6 - Prince

## 167310 Hydraulic Cylinder, 3-1/2 x 6 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	167310	CYLINDER, HYDRAULIC 3-1/2" X 6"	1
1	142803	PISTON ROD	1
2	-----	BUTT AND TUBE ASSEMBLY	1
3	-----	PISTON	1
4	142806	GLAND	1
5	-----	LOCKNUT	1
6	-----	PORT PLUG	2
7	-----	O-RING	1
8	-----	CROWN SEAL	1
9	-----	O-RING	1
10	-----	BU-WASHER	1
11	-----	U-CUP	1
12	-----	CANNED WIPER	1
13	142807	PACKING KIT (INCLUDES ITEMS 7-12)	1

# 173376 Hydraulic Cylinder, 5 x 42 - Carlson Hydraulics

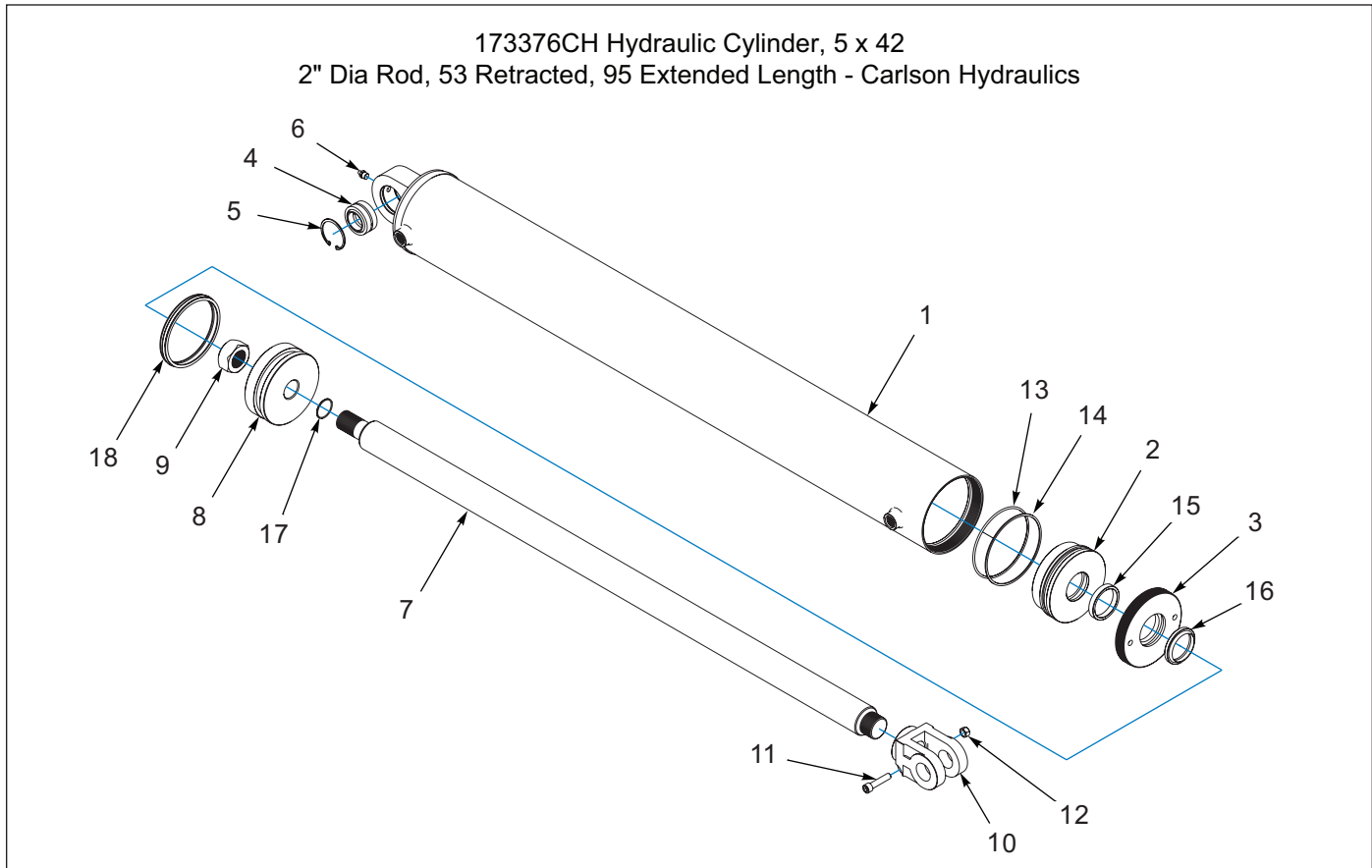


Figure 1-87: 173376 Hydraulic Cylinder, 5 x 42 - Carlson Hydraulics

# 173376 Hydraulic Cylinder, 5 x 42 - Carlson Hydraulics

ITEM	PART NUMBER	DESCRIPTION	QTY
	173376	HYD CYLINDER, 5X42	1
1	-----	BARREL,CYL WELDED	1
2	-----	ROD GLAND	1
3	-----	CAP,ROD GLAND	1
4	173404	SPHERICAL BEARING,1-1/4	1
5	173403	RETAINING RING,N5000-200	1
6	5000	ZERK FITTING 1/8NPT	1
7	-----	PISTON ROD	1
8	-----	PISTON	1
9	-----	LOCKNUT,1.25-12	1
10	248384	ROD CLEVIS ASSEMBLY (INCLUDES ITEMS 11-12)	1
11	111482	SCREW,HEX SKT 3/8-16UNCX1-3/4	1
12	1-512-010007-07	NUT,HEX 3/8-16 ZP	1
13	-----	O-RING	1
14	-----	BU WASHER	1
15	-----	U-CUP	1
16	-----	WIPER	1
17	-----	O-RING	1
18	-----	CROWN SEAL	1
19	248385	SEAL KIT,CARLSON CYL 173376CH (INCLUDES ITEMS 13-18)	1

# 173376 Hydraulic Cylinder, 5 x 42 - Lion

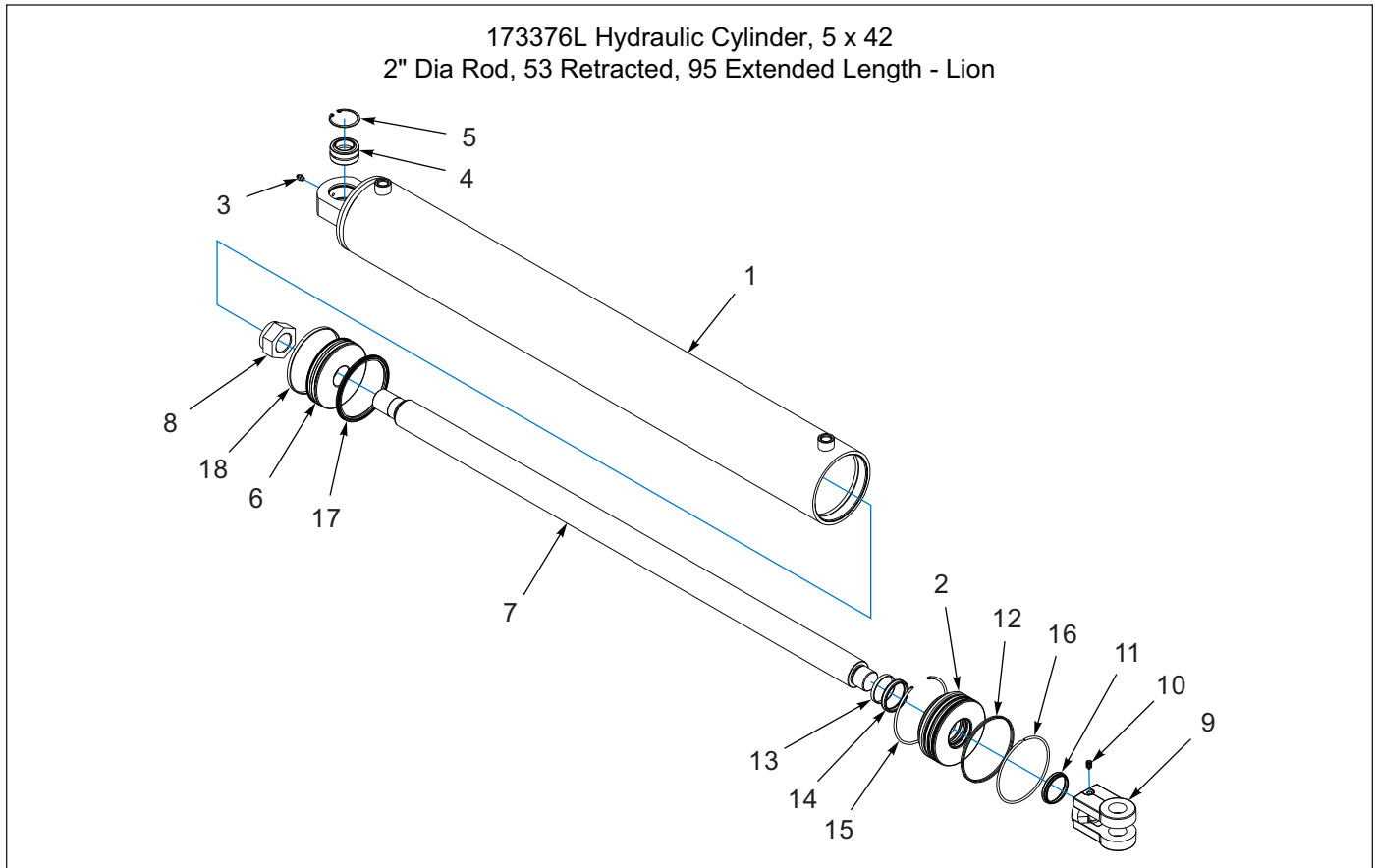


Figure 1-88: 173376 Hydraulic Cylinder, 5 x 42 - Lion

# 173376 Hydraulic Cylinder, 5 x 42 - Lion

ITEM	PART NUMBER	DESCRIPTION	QTY
	173376	HYD CYLINDER, 5X42	1
1	-----	TUBE WELDT 5.00-42.00-RR-W	1
2	-----	CYLINDER HEAD 5.00-2.00-RR-TSS	1
3	1-298-010001-1	ZERK FITTING 1/4 SAE	1
4	173404	SPHERICAL BEARING,1-1/4	1
5	173403	RETAINING RING, N5000-200	1
6	-----	PISTON 5.00-1.500-TSS-ISO-WR	1
7	-----	ROD CYL 2.00-42.00-1.50-1.50	1
8	-----	NUT HEX 1-1/2-12UNF LOCK GR	1
9	2P739	CLEVIS 1.25PIN X 1.5 X 2.75 (INCLUDES ITEM 10)	1
10	1P443	SET SCREW, 3/8-16 X 1/2 NYL	1
11	-----	SEAL WIPER 2.00 WNUC TSS	1
12	-----	SEAL DUAL 5.00 Z20 PU	1
13	-----	WEAR RING 2.12-2.00-0.250	1
14	-----	SEAL ZURCON U-CUP RU9 2.00	1
15	-----	RETAINING RING INTERNAL 5.00	1
16	-----	RETAINING RING EXTERNAL 5.00	1
17	-----	SEAL SURCON WYNSEAL 5.00"-IS	1
18	-----	WEAR RING 5.00-4.88-0.250	1
19	173405	SEAL KIT (INCLUDES ITEMS 11-18)	1

# 181342 Hydraulic Cylinder, 4-1/2 x 14 (Side Port) - Prince

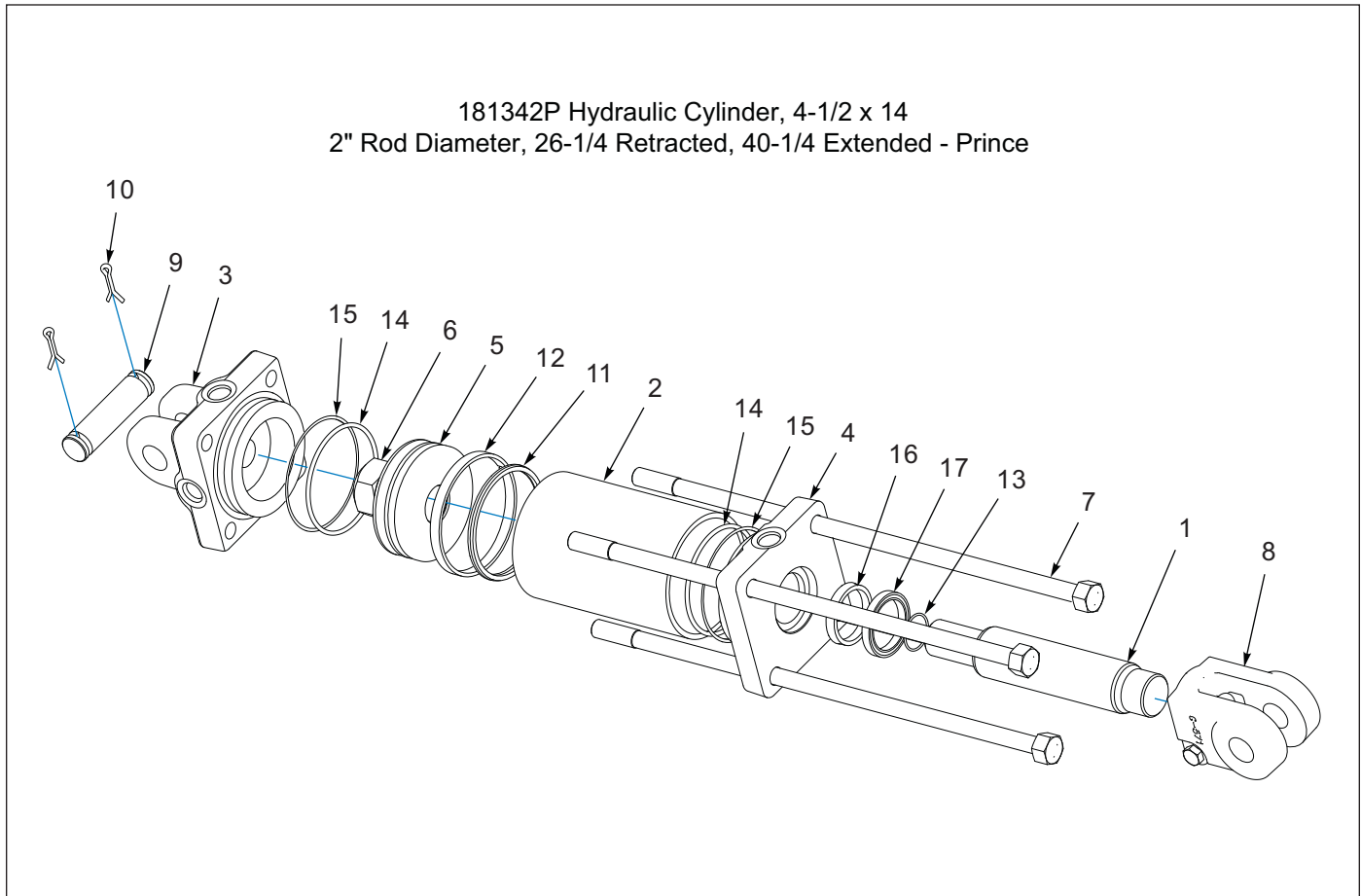


Figure 1-89: 181342 Hydraulic Cylinder, 4-1/2 x 14 (Side Port) - Prince

# 181342 Hydraulic Cylinder, 4-1/2 x 14 (Side Port) - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	181342	CYLINDER, HYDRAULIC 4-1/2 X 14	1
1	-----	PISTON ROD	1
2	-----	TUBE	1
3	-----	BUTT	1
4	163038	GLAND	1
5	-----	PISTON	1
6	-----	LOCKNUT	1
7	-----	TIE ROD ASSEMBLY	1
8	100000362	CLEVIS ASSEMBLY	1
9	4J549	HINGE PIN (1.25 X 4.0)	2
10	110-4224	PIN,COTTER 3/16 X 2IN LG	4
11	-----	CROWN SEAL	2
12	-----	BEARING RING	1
13	-----	O-RING	1
14	-----	O-RING	2
15	-----	BU-WASHER	2
16	-----	U-CUP	1
17	-----	WIPER	1
18	132077	SEAL KIT, PMCK-SAE-34500 (INCLUDES ITEMS 11-17)	1

# 181526 Hydraulic Cylinder, 5-1/2 x 42 - Lion

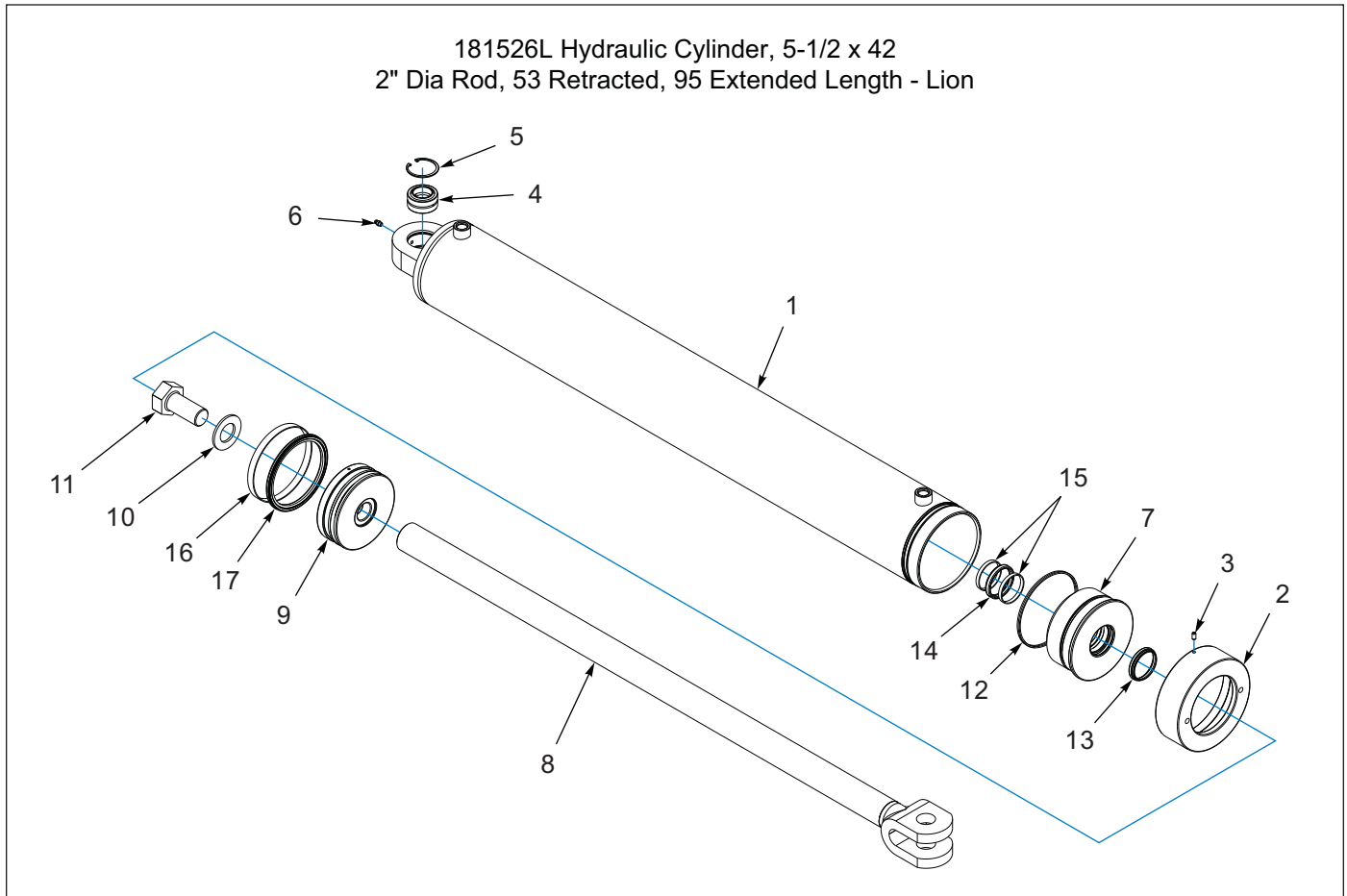


Figure 1-90: 181526 Hydraulic Cylinder, 5-1/2 x 42 - Lion

# 181526 Hydraulic Cylinder, 5-1/2 x 42 - Lion

ITEM	PART NUMBER	DESCRIPTION	QTY
	181526	HYD CYLINDER,5-1/2 X 42 (50'-52' MODELS)	1
1	-----	TUBE WELDT 5.50-42.00	1
2	-----	HEAD NUT 5.50 CAP STYLE	1
3	110-0104	SET SCREW,1/4-20 x 1/2 FLAT PT	1
4	173404	SPHERICAL BEARING,1-1/4	1
5	173403	RETAINING RING,N5000-200	1
6	1-298-010001-1	FIT,GREASE 1/4-28 TAPER	1
7	-----	CYL HEAD 5.50-2.50-SF-TSS-WR	1
8	-----	ROD WELDT 2.00-42.00	1
9	-----	PISTON 5.5-1.25-TSS-WR-BOLT	1
10	-----	WASHER 2.50-1.375-.165 HARDEN	1
11	-----	SCREW 1.25-12UNFx2.50L GR8	1
12	-----	SEAL DUAL 5.5 Z20 PU	1
13	-----	SEAL WIPER 2.00 SNAP IN DA24	1
14	-----	SEAL SURCON U-CUP RU9 2.00	1
15	-----	WEAR RING 2.12-2.00-0.250	2
16	-----	WEAR RING 5.50-5.25-0.500	1
17	-----	SEAL ZURCON WYNSEAL 5.50	1
18	183661	SEAL KIT (INCLUDES ITEMS 12-17)	1

# 181526 Hydraulic Cylinder, 5-1/2 x 42 - Wetherell

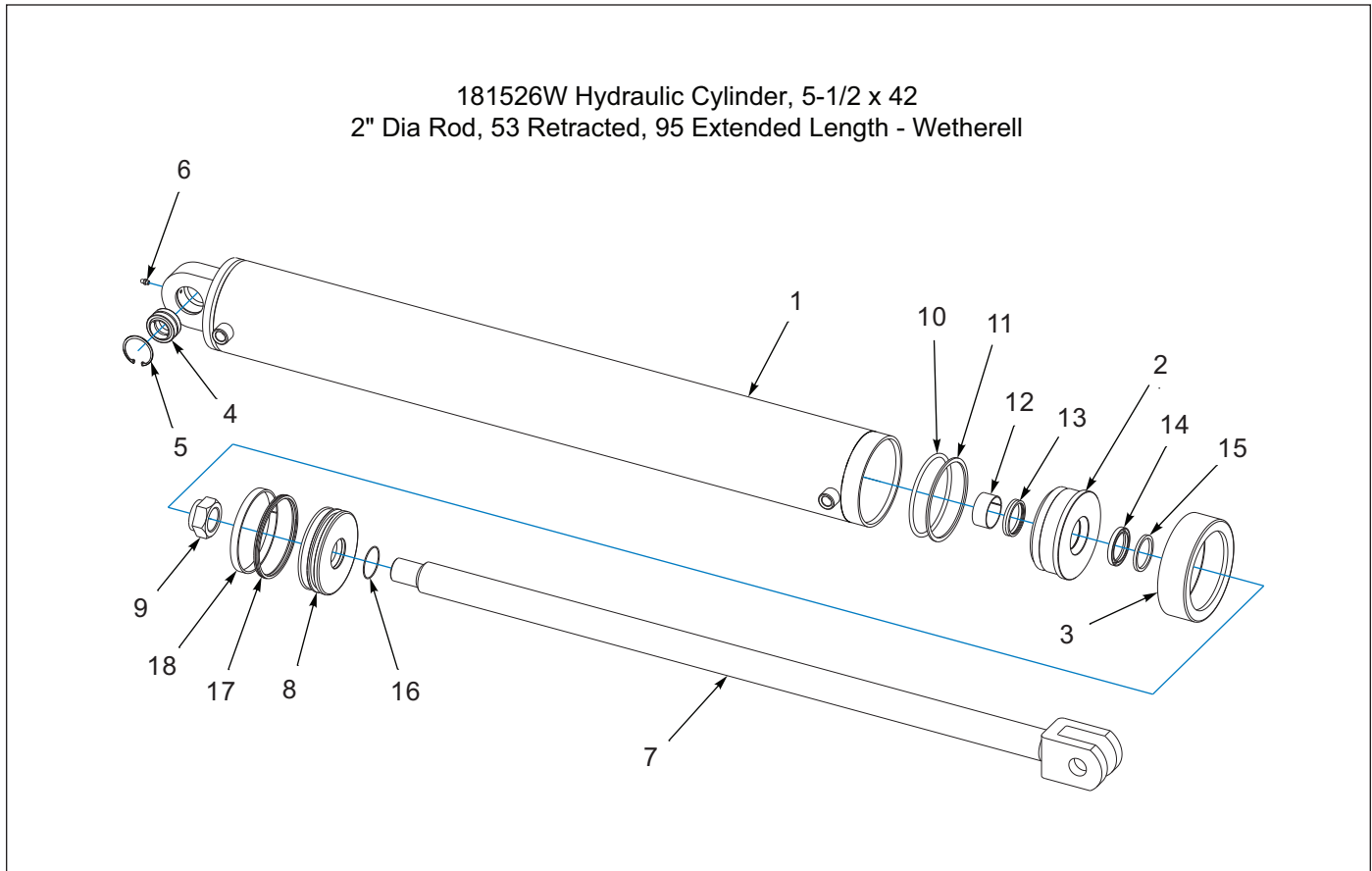


Figure 1-91: 181526 Hydraulic Cylinder, 5-1/2 x 42 - Wetherell

# 181526 Hydraulic Cylinder, 5-1/2 x 42 - Wetherell

ITEM	PART NUMBER	DESCRIPTION	QTY
	181526	HYD CYLINDER,5-1/2 X 42 (50'-52' MODELS)	1
1	-----	BARREL WELDMENT	1
2	-----	HEAD GLAND	1
3	-----	HEAD GLAND RETAINING RING	1
4	173404	SPHERICAL BUSHING,1-1/4	1
5	173403	RETAINING RING,N5000-200	1
6	1-298-010001-1	FIT,GREASE 1/4-28 TAPER	1
7	-----	CYLINDER ROD WLD	1
8	-----	PISTON	1
9	-----	NUT,HEX TOPLOCK 1-1/2-12 GRC	1
10	-----	O-RING,HEAD	1
11	-----	BU WASHER	1
12	-----	ROD WEAR RING	1
13	-----	U-CUP GLAND SEAL	1
14	-----	ROD WIPER SEAL	1
15	-----	ROD SQ O-RING	2
16	-----	O-RING	1
17	-----	PISTON CROWN SEAL	1
18	-----	PISTON CROWN SEAL	1
19	248386	SEAL KIT WETHERELL CYL 181526W (INCLUDES ITEMS 10-18)	1

# 183553 Hydraulic Cylinder, 4-1/2 x 36 - Lion

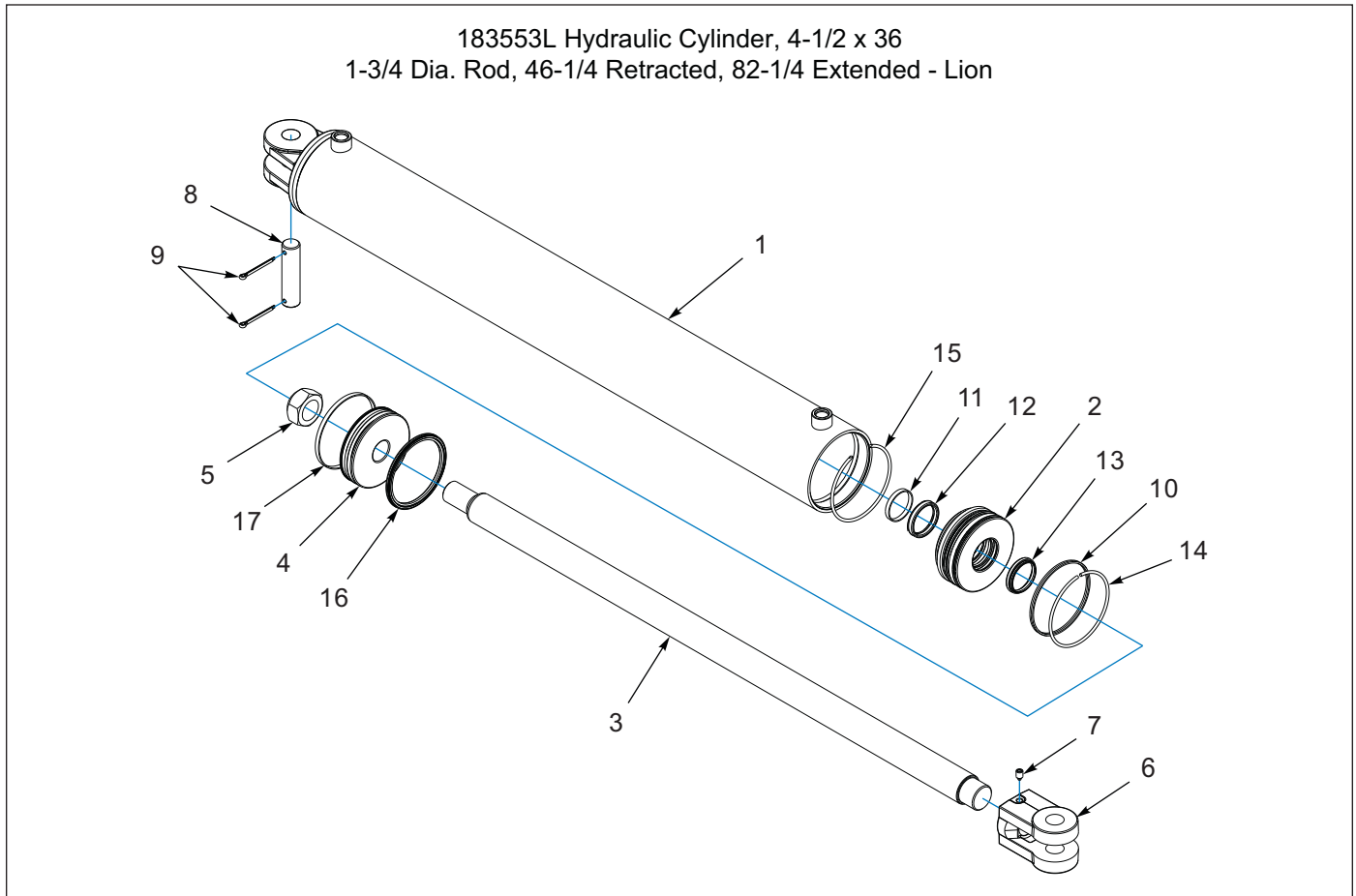
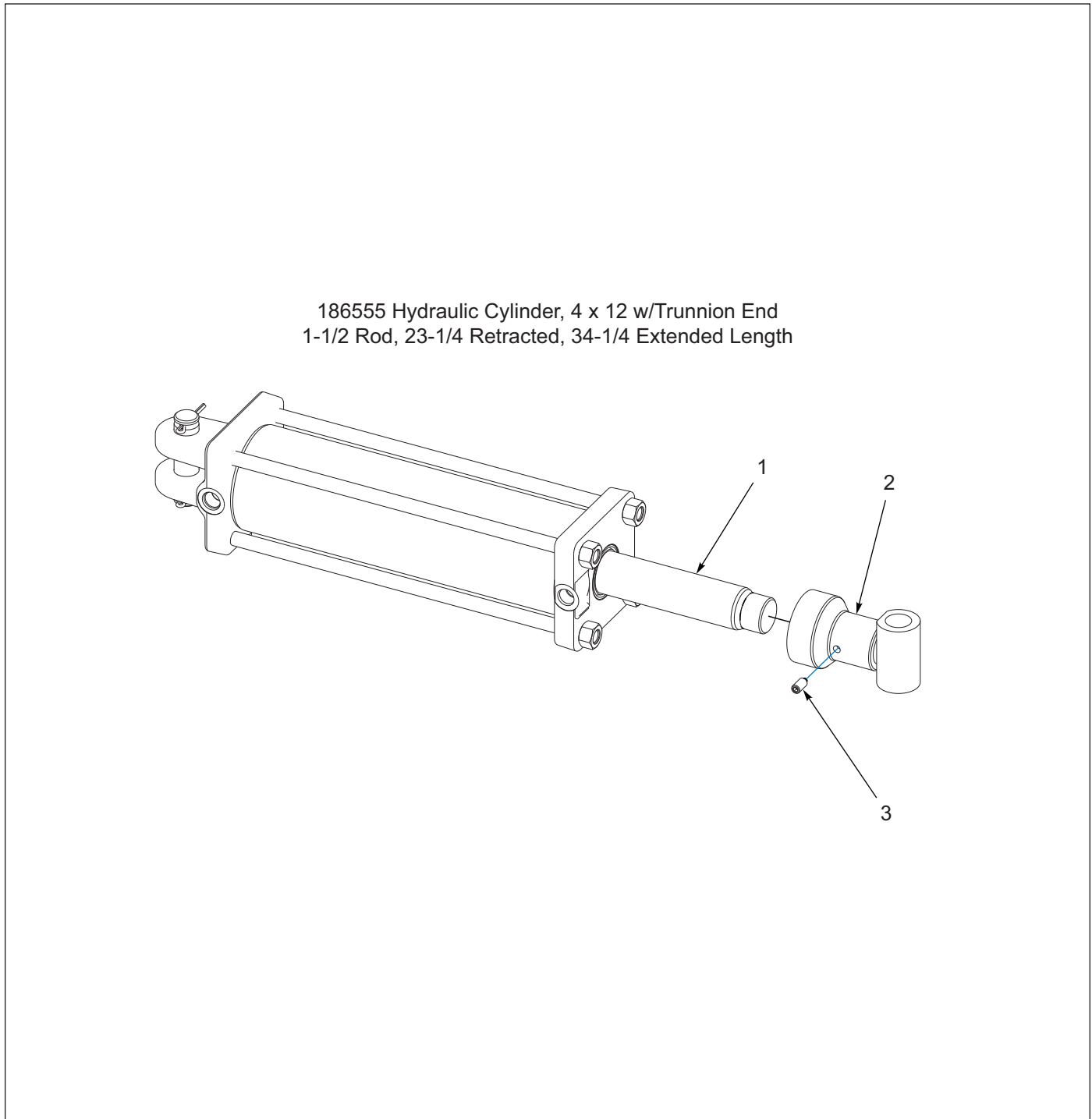


Figure 1-92: 183553 Hydraulic Cylinder, 4-1/2 x 36 - Lion

# 183553 Hydraulic Cylinder, 4-1/2 x 36 - Lion

ITEM	PART NUMBER	DESCRIPTION	QTY
	183553	HYD CYLINDER - 4-1/2" X 36"	1
1	-----	TUBE WELDT 4.5-36.00-RR-W	1
2	-----	CYL HEAD 4.5-1.75-RR-TSS-WR	1
3	-----	ROD CYL 1.75-36.00-1.25-1.50	1
4	-----	PISTON 4.50-1.250-TSS-ISO-WR	1
5	220000212	NUT, LOCK 1-1/4-12, ZP	1
6	2P738	CLEVIS,1" PIN X 1.5-12 X 2.75 (INCLUDES ITEM 7)	1
7	1P443	SET SCREW, 3/8-16 X 1/2 NYLON TIP	1
8	7J067	CLEVIS PIN	1
9	110-4224	PIN,COTTER 3/16 X 2IN LG	2
10	-----	SEAL DUAL 4.50 Z20 PU	1
11	-----	WEAR RING 1.87-1.75-0.250	1
12	-----	SEAL ZURCON U-CUP RU9 1.75	1
13	-----	SEAL WIPER 1.75 SNAP IN DA24	1
14	-----	RETAINING RING EXTERNAL 4.50	1
15	-----	RETAINING RING INTERNAL 4.50	1
16	-----	SEAL ZURCON WYNSEAL 4.50"-IS	1
17	-----	WEAR RING 4.50-4.38-0.250	1
18	185302	SEAL KIT FOR 183553 CYL (INCLUDES ITEMS 10-15)	1

## 186555 Hydraulic Cylinder, 4 x 12 with Trunnion End



**Figure 1-93: 186555 Hydraulic Cylinder, 4 x 12 with Trunnion End**

## 186555 Hydraulic Cylinder, 4 x 12 with Trunnion End

ITEM	PART NUMBER	DESCRIPTION	QTY
	186555	CYL ASM, 4X12 W/TRUNNION END	1
1	1-242-010197-3	CYLINDER 4 X12 3000PSI (SEE PAGE 1-106)	1
2	168355	TRUNNION ASM, 1-1/2 ROD (INCLUDES ITEM 3)	1
3	1P444	SET SCREW, 3/8-16 X 3/4 NYLON	1



# 193251 Hydraulic Cylinder, 4-1/2 x 8 Re-Phase - Prince

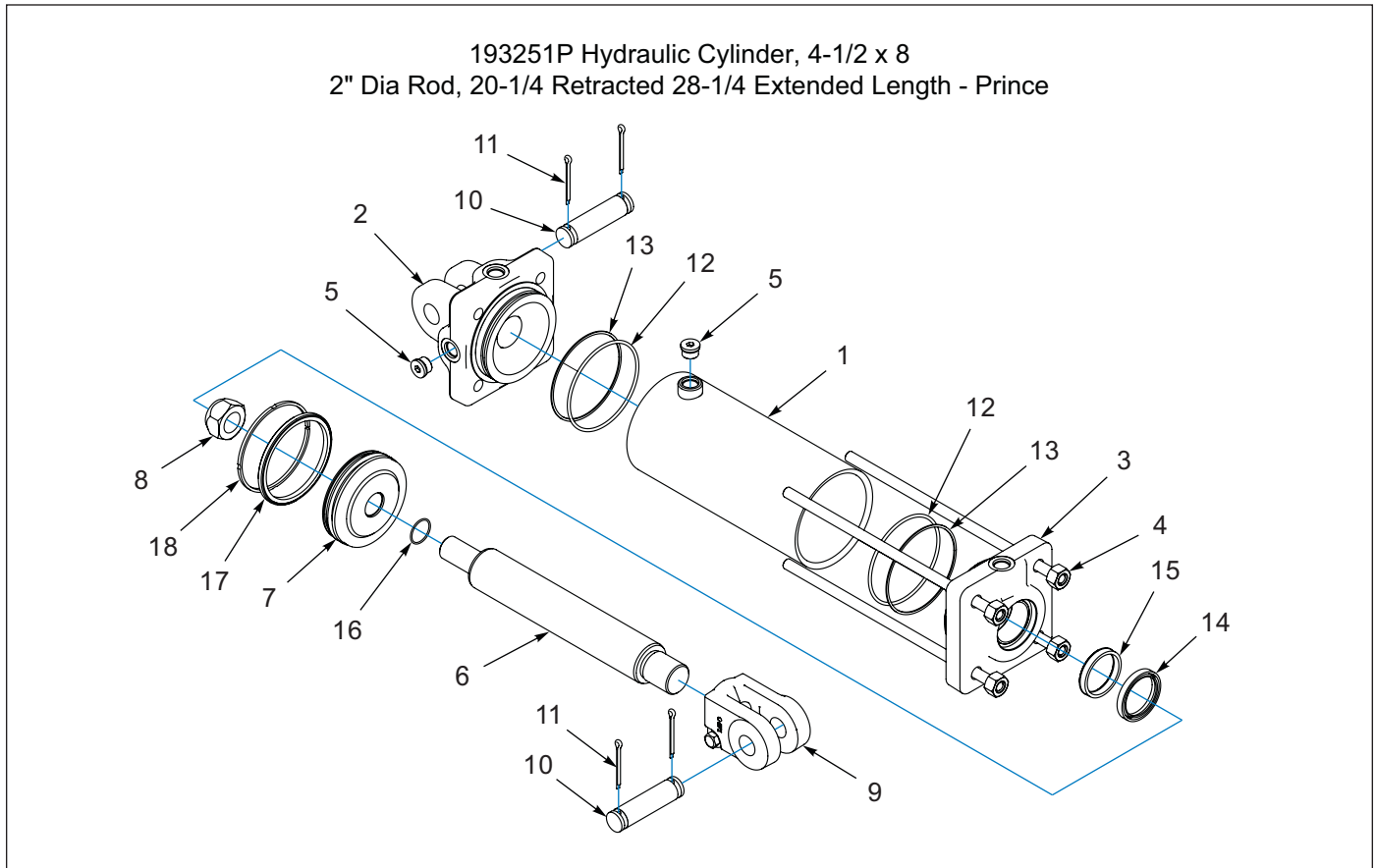


Figure 1-94: 193251 Hydraulic Cylinder, 4-1/2 x 8 Re-Phase - Prince

# 193251 Hydraulic Cylinder, 4-1/2 x 8 Re-Phase - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	193251	HYD CYL 4-1/2 X 8 RE-PHASE	1
1	-----	TUBE ASSY	1
2	142000004	BUTT	1
3	082000092	ROD CAP	1
4	-----	TIE ROD ASSY	4
5	-----	PORT PLUG	2
6	-----	PISTON ROD	1
7	-----	PISTON	1
8	220000211	LOCKNUT	1
9	100000326	CLEVIS ASSY	1
10	190400004	CYLINDER PIN 4IN	2
11	110-4224	PIN,COTTER 3/16 X 2IN LG	4
12	-----	O-RING	2
13	-----	BU-WASHER	2
14	-----	WIPER	1
15	-----	U-CUP	1
16	-----	O-RING	1
17	-----	CHAMF TEFLON SEAL	1
18	-----	BEARING RING	1
19	113216	SEAL KIT,PMCK-AU-0650 (INCLUDES ITEMS 12-18)	1

# 193252 Hydraulic Cylinder, 4 x 8 Re-Phase - Prince

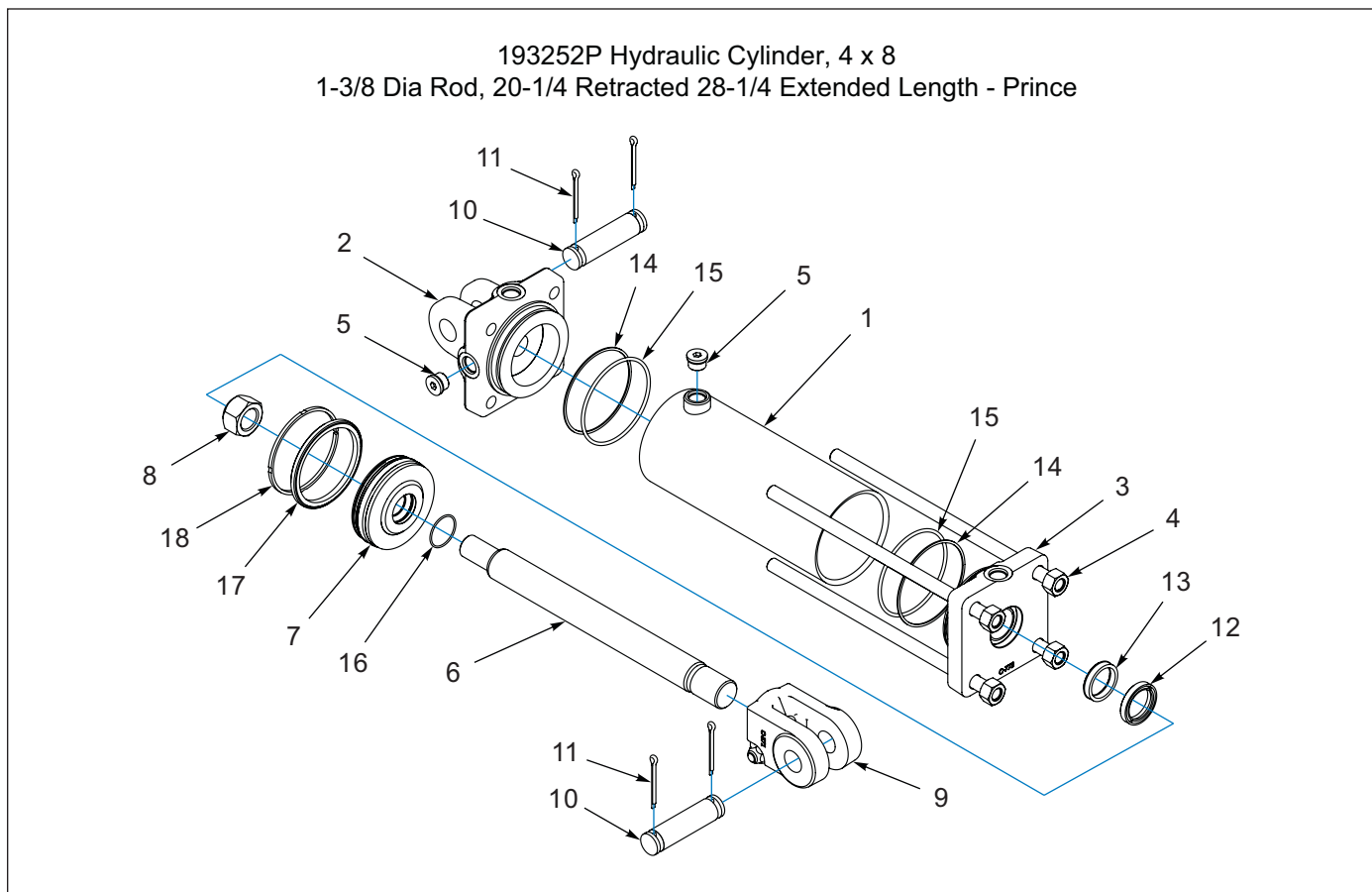


Figure 1-95: 193252 Hydraulic Cylinder, 4 x 8 Re-Phase - Prince

# 193252 Hydraulic Cylinder, 4 x 8 Re-Phase - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	193252	HYD CYL 4 X 8 RE-PHASE	1
1	-----	TUBE ASSY	1
2	147375	BUTT	1
3	081900374	GLAND ASSY	1
4	-----	TIE ROD ASSY	4
5	-----	PORT PLUG	2
6	-----	PISTON ROD	1
7	-----	PISTON	1
8	-----	PISTON NUT	1
9	140306	CLEVIS FOR 1-242-010179-2	1
10	190400004	CYLINDER PIN 4IN	2
11	110-4224	PIN, COTTER 3/16 X 2IN LG	4
12	-----	ROD WIPER	1
13	-----	U-CUP	1
14	-----	BU-WASHER	2
15	-----	O-RING	2
16	-----	O-RING	1
17	-----	RECT TEFLON	1
18	-----	BEARING RING	1
19	113215	SEAL KIT,PMCK-AU-0649 (INCLUDES ITEMS 12-18)	1

## 204810 Hydraulic Cylinder, 2 x 3 - Prince

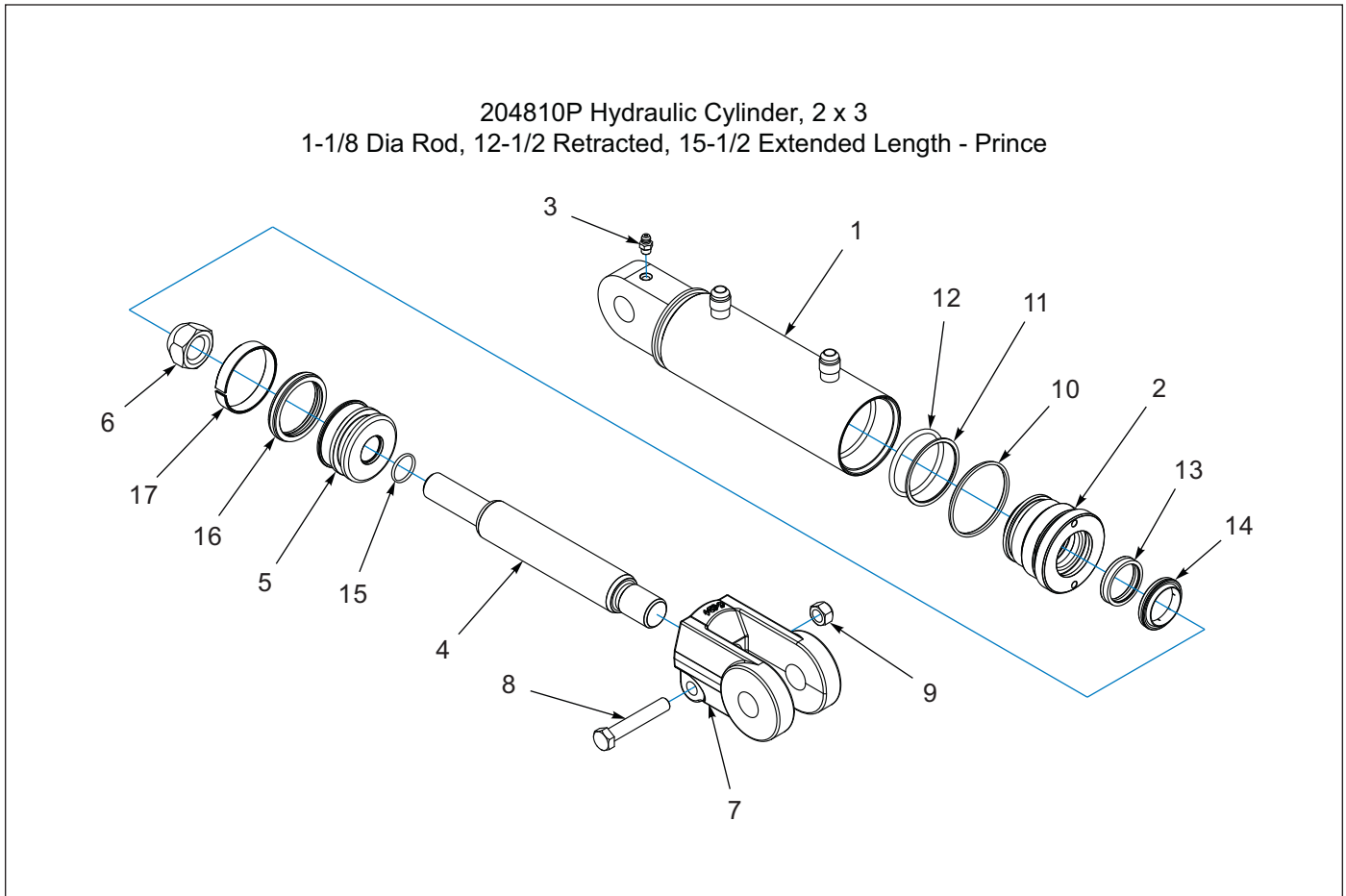


Figure 1-96: 204810 Hydraulic Cylinder, 2 x 3 - Prince

## 204810 Hydraulic Cylinder, 2 x 3 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	204810	HYD CYL, 2 X 3	1
1	-----	BUTT AND TUBE ASM	1
2	-----	GLAND	1
3	1-298-010001-1	FIT,GREASE 1/4-28 TAPER	1
4	-----	ROD	1
5	-----	PISTON	1
6	-----	LOCKNUT	1
7	-----	CLEVIS	1
8	1-654-010051-10	SCREW,HX CP 3/8-16X2-1/4GR5	1
9	1-512-010005-05	NUT,HEX,SLFLKG GRB 3/8-16	1
10	-----	O-RING	1
11	-----	BU-WASHER	1
12	-----	O-RING	1
13	-----	U-CUP	1
14	-----	ROD WIPER	1
15	-----	O-RING	1
16	-----	CROWN SEAL	1
17	-----	PISTON BEARING SEAL	1
18	208425	SEAL KIT (INCLUDES ITEMS 10-17)	1

## 219160 Hydraulic Cylinder, 4 x 30 - Lion

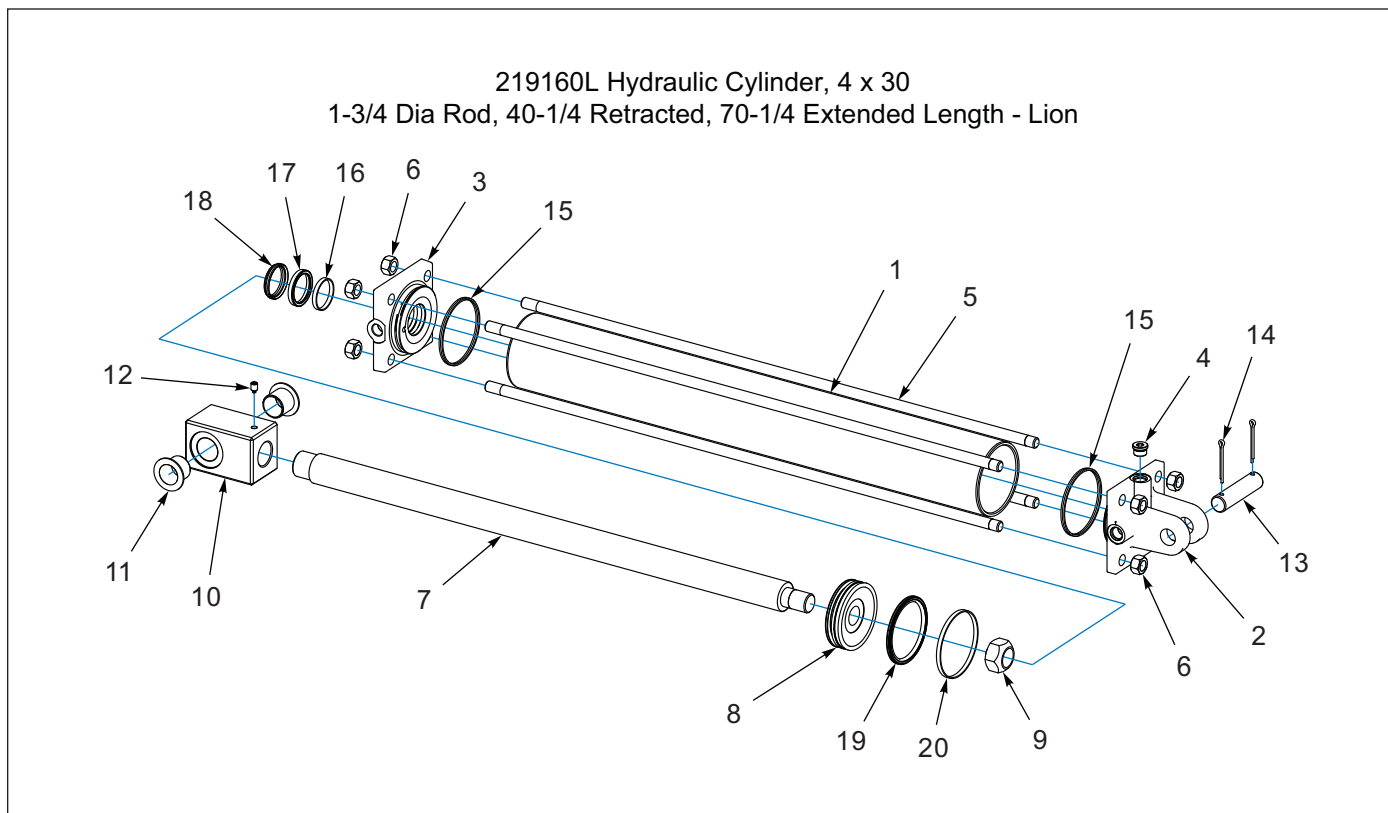


Figure 1-97: 219160 Hydraulic Cylinder, 4 x 30 - Lion

## 219160 Hydraulic Cylinder, 4 x 30 - Lion

ITEM	PART NUMBER	DESCRIPTION	QTY
	219160	HYD CYLINDER - 4 X 30	1
1	-----	TUBE	1
2	-----	CLEVIS CAP	1
3	-----	ROD CAP	1
4	-----	PLUG, SOCKET HEAD 3/4-16	1
5	-----	TIE ROD	4
6	-----	NUT, HEX 5/8-18, ZP	8
7	-----	ROD	1
8	-----	PISTON	1
9	8J852	NUT, LOCK 1-1/8-12,GRB, ZP	1
10	219162	ROD END ASM, 1.25 X 1.5-12 (INCLUDES ITEMS 11 AND 12)	1
11	110590	BEARING, 1.25 X 1.41 X 1.24 FL	2
12	1P443	SET SCREW,3/8-16 X 1/2 NYLON TIP	1
13	7J067	PIN, 1.0 X 4.0 H2	1
14	110-4224	PIN,COTTER 3/16 X 2IN LG	2
15	-----	SEAL DUAL 4.00	2
16	-----	WEAR RING 1.87-1.75-0.250	1
17	-----	SEAL ZURCON U-CUP RU9 1.75	1
18	-----	SEAL, WIPER 1.75	1
19	-----	SEAL SURCON WYNSEAL 4.00	1
20	-----	WEAR RING 4.00-3.88-0.250	1
21	1P745	SEAL KIT (INCLUDES ITEMS 15-20)	1

## 229388 Hydraulic Cylinder, 4 x 29-3/4 w/Internal Spacer - Optional

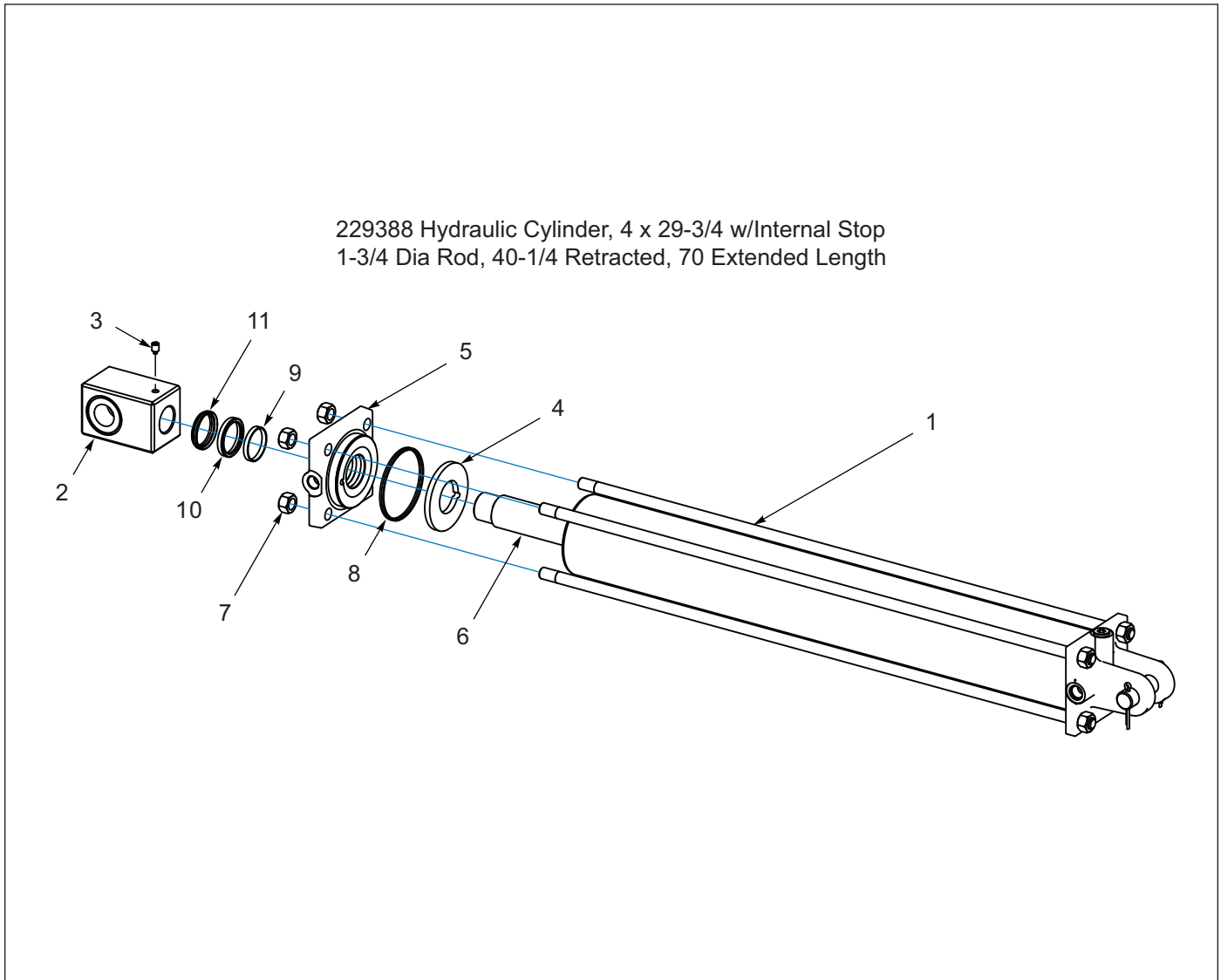


Figure 1-98: 229388 Hydraulic Cylinder, 4 x 29-3/4 w/Internal Spacer - Optional

## 229388 Hydraulic Cylinder, 4 x 29-3/4 w/Internal Spacer - Optional

ITEM	PART NUMBER	DESCRIPTION	QTY
	229388	HYD CYL,4 X 29.75 (WITH INTERNAL STOP)	1
1	219160	HYD CLY,4 X 30 (INCLUDES ITEM 2, 5-11) (SEE PAGE 1-98)	1
2	219162	CYL ROD END ASM, 1.25 X 1.5-12 (INCLUDES ITEM 3)	1
3	1P443	SET SCREW, 3/8-16 X 1/2 NYLON TIP	1
4	226789	WASHER, 1.813 X 3.5 X .3125	1
5	-----	ROD CAP	1
6	-----	ROD	1
7	-----	NUT, HEX 5/8-18,ZP	8
8	-----	SEAL DUAL 4.00	2
9	-----	WEAR RING 1.87-1.75-0.250	1
10	-----	SEAL ZURCON U-CUP RU9 1/75	1
11	-----	SEAL, WIPER 1.75	1
12	1P745	SEAL KIT (INCLUDES 8-11)	1

## 234521 Hydraulic Cylinder, 4-1/2 x 14 Re-Phase - Prince

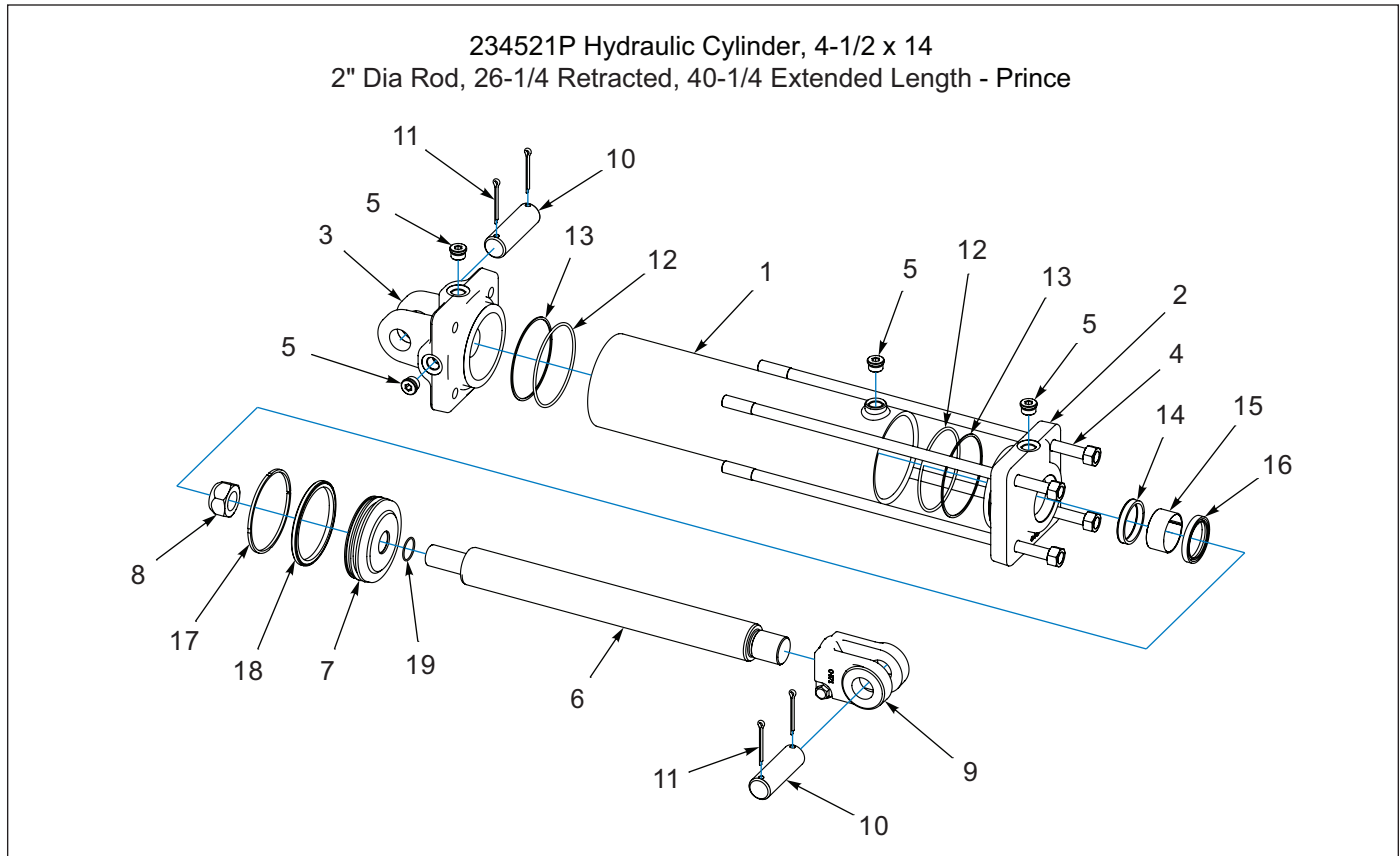


Figure 1-99: 234521 Hydraulic Cylinder, 4-1/2 x 14 Re-Phase - Prince

## 234521 Hydraulic Cylinder, 4-1/2 x 14 Re-Phase - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	234521	CYLINDER, REPHASE 4-1/2 X 14	1
1	-----	BYPASS TUBE ASM	1
2	-----	GLAND	1
3	-----	BUTT CLEVIS	1
4	-----	THE ROD STUD W/HEX NUT	4
5	121029	PLUG #8 SAE M O-R BOSS HX SKT	4
6	-----	PISTON ROD	1
7	-----	PISTON	1
8	220000211	NUT, HYD CYL 1-242-010173-6	1
9	100000328	CLEVIS ASSY, 4-1/2X12 CYL	1
10	4J549	HINGE PIN (1.25 X 4.0 H2)	2
11	110-4224	PIN,COTTER-3/16 X 2IN LG	4
12	-----	O-RING	2
13	-----	BU-WASHER	2
14	-----	U-CUP	1
15	-----	ROD BEARING RING	1
16	-----	WIPER	1
17	-----	O-RING	1
18	-----	CHAMF TEFLON SEAL	1
19	-----	BEARING RING	1
20	236924	SEAL KIT,PMCK-CG-0238 (INCLUDES ITEMS 12-19)	1

## 234522 Hydraulic Cylinder, 4 x 14 Re-Phase - Prince

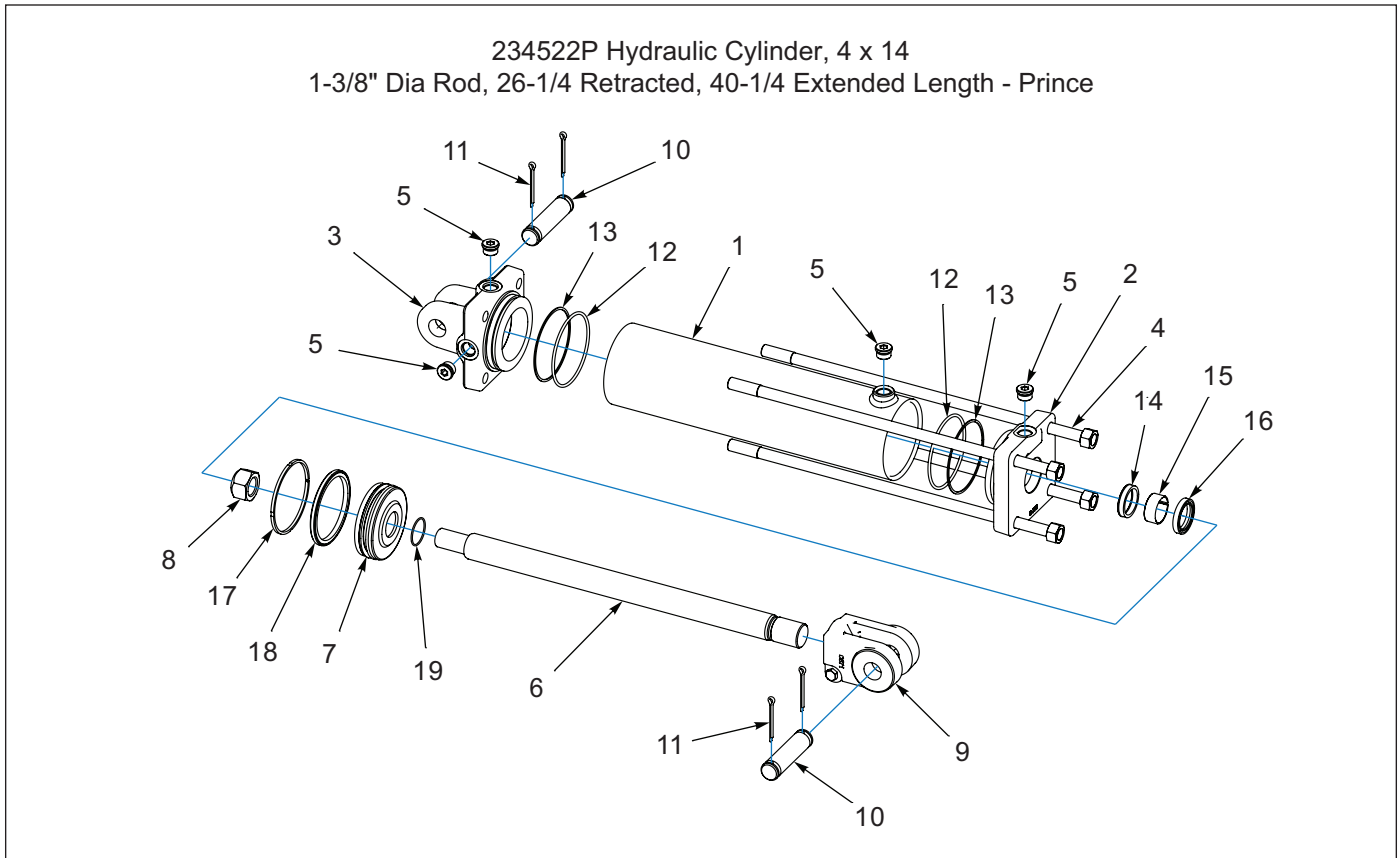


Figure 1-100: 234522 Hydraulic Cylinder, 4 x 14 Re-Phase - Prince

## 234522 Hydraulic Cylinder, 4 x 14 Re-Phase - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	234522	CYLINDER, REPHASE 4 X 14	1
1	-----	TUBE ASSEMBLY	1
2	-----	GLAND	1
3	147375	BUTT	1
4	-----	TIE ROD STUD W/HEX NUT	4
5	121029	PLUG #8 SAE M O-R BOSS HX SKT	4
6	-----	PISTON ROD	1
7	-----	PISTON	1
8	220000210	LOCK NUT 4 X8 OR 4 X 24 PRINCE	1
9	238841	CLEVIS 1-1/4 PIN	1
10	190400035	PIN, HT CYL CLEVIS 1 IN	2
11	110-4224	PIN, COTTER-3/16 X 2IN LG	4
12	-----	O-RING	2
13	-----	BU-WASHER	2
14	-----	U-CUP	1
15	-----	ROD BEARING RING	1
16	-----	ROD WIPER	1
17	-----	BEARING RING	1
18	-----	RECT TEFLON	1
19	-----	O-RING	1
20	236925	SEAL KIT,PMCK-CG-0239 (INCLUDES ITEMS 12-19)	1

# 1-242-010171-3 Hydraulic Cylinder, 4 x 8 - Prince

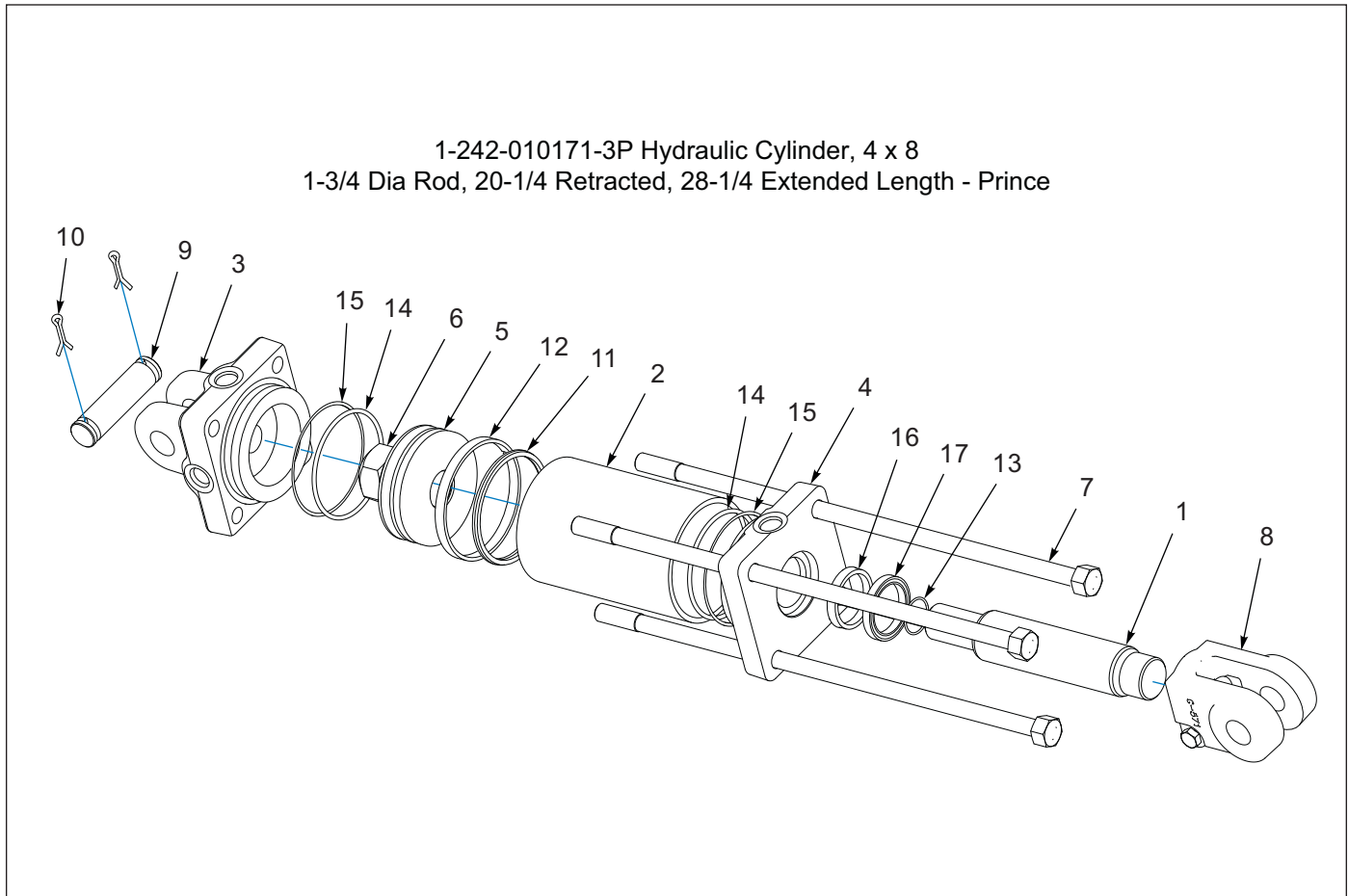


Figure 1-101: 1-242-010171-3 Hydraulic Cylinder, 4 x 8 - Prince

# 1-242-010171-3 Hydraulic Cylinder, 4 x 8 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	1-242-010171-3	CYLINDER, HYDRAULIC 4 X 8 3000 PSI	1
1	011000318	PISTON ROD	1
2	-----	TUBE	1
3	-----	BUTT	1
4	162674	GLAND	1
5	-----	PISTON	1
6	-----	LOCKNUT	1
7	-----	TIEROD ASSEMBLY	4
8	100000326	CLEVIS ASSEMBLY	1
9	190400035	CLEVIS PIN	2
10	110-4224	PIN,COTTER 3/16 X 2IN LG	4
11	-----	CROWN SEAL	1
12	-----	O-RING	1
13	-----	O-RING	2
14	-----	BU-WASHER	2
15	-----	U-CUP	1
16	-----	WIPER	1
17	-----	BEARING RING	1
18	1-242-010178-3	PACKING KIT (INCLUDES ITEMS 11-17)	1



# 1-242-010172-3 Hydraulic Cylinder, 4 x 24 - Prince

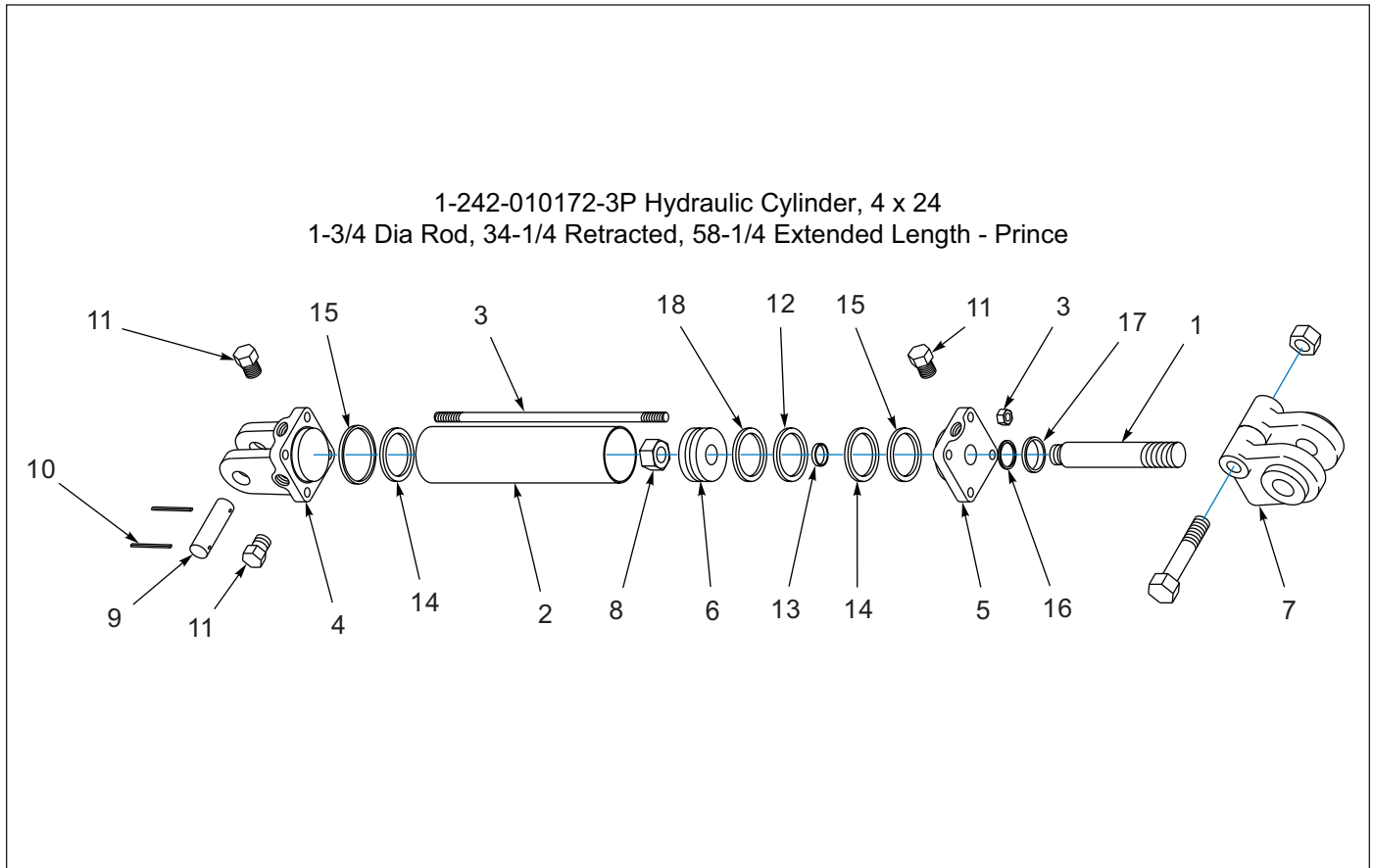


Figure 1-102: 1-242-010172-3 Hydraulic Cylinder, 4 x 24 - Prince

# 1-242-010172-3 Hydraulic Cylinder, 4 x 24 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	1-242-010172-3	CYL HYD 4 X 24 3000 PSI	1
1	111863	PISTON ROD	1
2	-----	TUBE	1
3	-----	TIE ROD ASSY	4
4	-----	BUTT	1
5	-----	GLAND ASSY	1
6	111868	PISTON	1
7	100000326	CLEVIS ASSY	1
8	220000212	LOCKNUT	1
9	111790	CLEVIS PIN	2
10	111789	ROLL PIN	4
11	1-007-010025	PLUG, 3/4-16 O-RING BOSS	3
12	-----	CROWN SEAL	1
13	-----	O-RING	1
14	-----	O-RING	2
15	-----	BU-WASHER	2
16	-----	U-CUP	1
17	-----	WIPER	1
18	111912	BEARING RING	1
19	1-242-010178-3	SEAL KIT (INCLUDES ITEMS 12 - 18)	1

# 1-242-010172-5 Hydraulic Cylinder, 5 x 24 - Prince

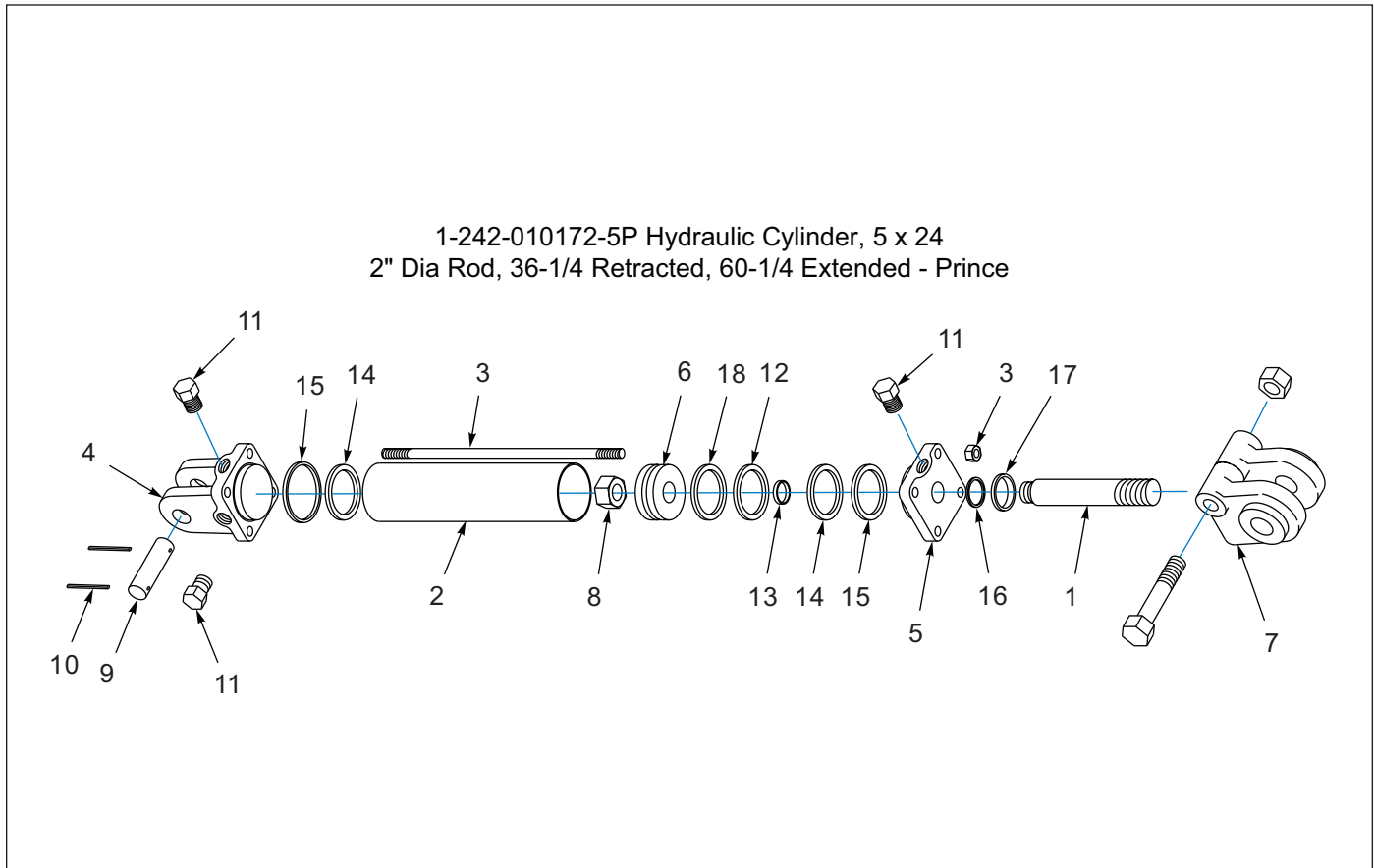


Figure 1-103: 1-242-010172-5 Hydraulic Cylinder, 5 x 24 - Prince

# 1-242-010172-5 Hydraulic Cylinder, 5 x 24 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	1-242-010172-5	CYL HYD 5 X 24 3000 PSI	1
1	011100728	PISTON ROD	1
2	111864	TUBE	1
3	111879	TIE ROD ASSY	4
4	111878	BUTT	1
5	111873	GLAND ASSY	1
6	111869	PISTON	1
7	100000362	CLEVIS ASSY	1
8	111908	LOCKNUT	1
9	111880	CLEVIS PIN	2
10	111789	ROLL PIN	4
11	111907	PORT PLUG, 7/8-14 O-RING BOSS	3
12	-----	CROWN SEAL	1
13	-----	O-RING	1
14	-----	O-RING	2
15	-----	BU-WASHER	2
16	-----	U-CUP	1
17	-----	WIPER	1
18	111912	BEARING RING	1
19	125488	SEAL KIT (INCLUDES ITEMS 12 - 18)	1

# 1-242-010180-3 Hydraulic Cylinder, 4 x 20 - Prince

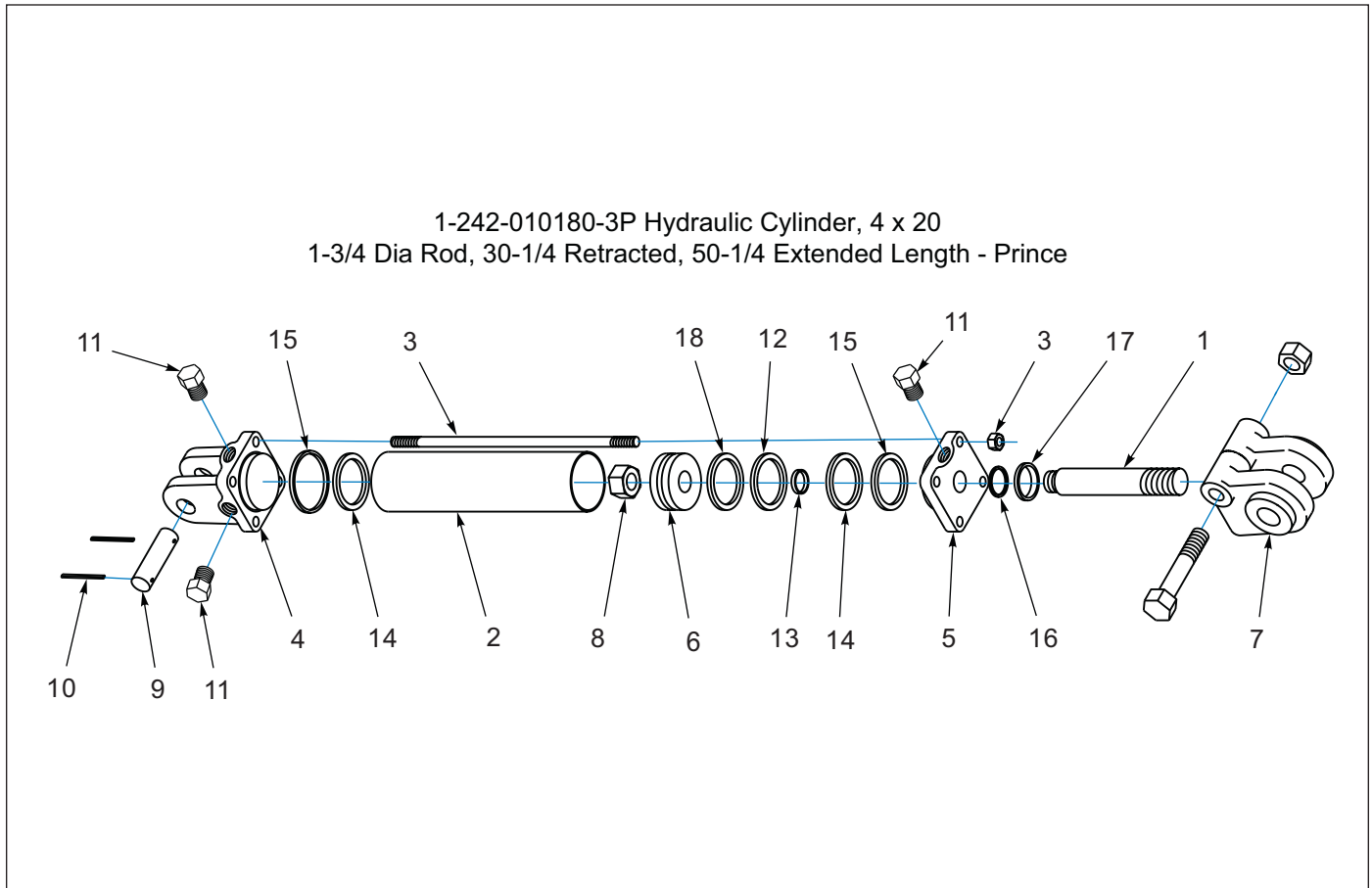


Figure 1-104: 1-242-010180-3 Hydraulic Cylinder, 4 x 20 - Prince

# 1-242-010180-3 Hydraulic Cylinder, 4 x 20 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	1-242-010180-3	CYLINDER, HYD 4X20STRK 3000PSI	1
1	011000323	PISTON ROD 4X20 SAE34020	1
2	-----	TUBE	1
3	-----	TIE ROD ASSY	4
4	-----	BUTT	1
5	-----	GLAND ASSY	1
6	-----	PISTON	1
7	100000326	CLEVIS ASSY	1
8	220000212	LOCKNUT	1
9	111790	PIN,CLEVIS #190400104 1500	2
10	111789	PIN,ROLL #190100057 1500	4
11	1-007-010025	PLUG, 3/4-16 O-RING BOSS	3
12	-----	CROWN SEAL	1
13	-----	O-RING	1
14	-----	O-RING	2
15	-----	BU-WASHER	2
16	-----	U-CUP	1
17	-----	WIPER	1
18	-----	BEARING RING	1
19	1-242-010178-3	SEAL KIT (INCLUDES ITEMS 12-18)	1

# 1-242-010197-3 Hydraulic Cylinder, 4 x 12 - Prince

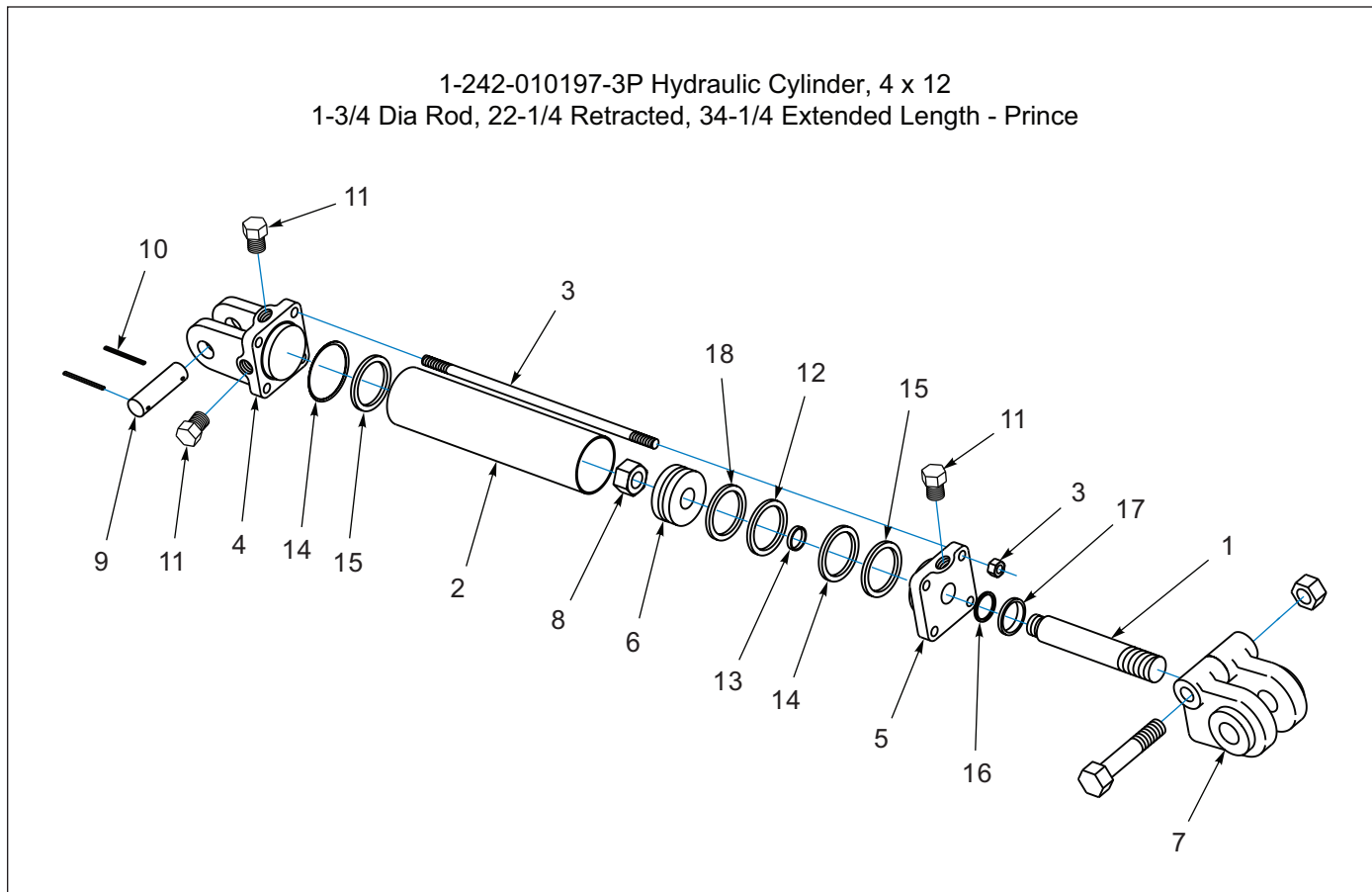


Figure 1-105: 1-242-010197-3 Hydraulic Cylinder, 4 x 12 - Prince

# 1-242-010197-3 Hydraulic Cylinder, 4 x 12 - Prince

ITEM	PART NUMBER	DESCRIPTION	QTY
	1-242-010197-3	CYLINDER, HYD 4X12 3000PSI	1
1	-----	PISTON ROD 4X12	1
2	-----	TUBE	1
3	-----	TIE ROD ASSY	4
4	-----	BUTT	1
5	-----	GLAND ASSY	1
6	-----	PISTON	1
7	100000326	CLEVIS ASSY	1
8	220000212	LOCKNUT	1
9	111790	CLEVIS, PIN	2
10	111789	ROLL PIN	4
11	1-007-010025	PORT PLUG	1
12	-----	CROWN SEAL	1
13	-----	O-RING	1
14	-----	O-RING	2
15	-----	BU-WASHER	2
16	-----	U-CUP	1
17	-----	WIPER	1
18	-----	BEARING RING	1
19	1-242-010178-3	SEAL KIT (INCLUDES ITEMS 12-18)	1

## Glossary

For clarity this glossary of industry standard abbreviations and their definitions are provided. For additional information, see instruction on the inside front cover or the last page of this manual.

**A**

**ASM** ..... Assembly

**B**

**BATT** ..... Battery  
**BHSC** ..... Button Head Socket Cap  
**BLK** ..... Black

**C**

**CB** ..... Carriage Bolt  
**CONN** ..... Connector  
**CRG** ..... Carriage  
**CTSK** ..... Countersunk  
**CTWT** ..... Counterweight  
**CVR** ..... Cover  
**CYD** ..... Cylinder

**D**

**DBL** ..... Double  
**DIA** ..... Diameter

**E**

**ENCLSD** ..... Enclosed

**F**

**FHCS** ..... Flanged Head Cap Screw  
**FHHCS** ..... Flanged Hex Head Cap Screw  
**FL OR FLG** ..... Flange  
**FLT** ..... Flat

**G**

**GA** ..... Gauge

**H**

**HHCS** ..... Hex Head Cap Screw  
**HCS** ..... High Carbon Steel  
**HD** ..... Head  
**HLCL** ..... Helical  
**HCSKT** ..... Hex Socket  
**HSFC** ..... Hex Socket Flat Countersunk  
**HYD** ..... Hydraulic

**I**

**ID** ..... Inside Diameter

**L**

**LH** ..... Lefthand  
**LKG OR LOCK** ..... Locking  
**LWR** ..... Lower

**M**

**MANF** ..... Manifold  
**MNT** ..... Mount

**N**

**NRW** ..... Narrow  
 ----- ..... Not Serviced Separately

**O**

**OD** ..... Outside Diameter  
**OHG** ..... Overhead Guard  
**ORFS OR ORS** ..... O-Ring Seal  
**ORP OR ORB** ..... O-Ring Boss

**P**

**P-STEER** ..... Power Steering  
**PTFE** ..... Polytetrafluoroethylene (Teflon)

---

**R**

RH ..... Righthand  
RND ..... Round

---

**S**

SER ..... Series  
SHCS ..... Socket Head Cap Screw  
SHLD ..... Shield  
SKT ..... Socket  
SLFLKG ..... Selflocking  
SOC ..... Socket  
SPDT ..... Single Pole Double Throw  
SPR ..... Spring  
SQ ..... Square  
SRTD ..... Serrated  
SSCR ..... Setscrew  
SST ..... Stainless Steel  
STD ..... Standard

---

**U**

UPR ..... Upper

---

**W**

WHL ..... Wheel  
WLD OR WLDMT ..... Weldment

**Numerics**

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# Instructions for Ordering Parts

**\*\* Repair parts must be ordered through an Authorized Dealer \*\***

DEALER INSTRUCTIONS FOR ORDERING PARTS FROM LANDOLL PARTS DISTRIBUTION CENTER

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Fax #: [888-527-3909](tel:888-527-3909)

Order online: [dealer.landoll.com](http://dealer.landoll.com)

## Document Control Revision Log:

Date	Form #	Improvement(s): Description and Comments
03/2017	rev0317	Updated drawing and added new cylinders
12/2017	rev1217	Lion Cylinders were changed to an improved sealing package
10/2021	2J124-1021	Added 6J811P, 9D137P, 9D731P, Removed 7J680G
07/2022	2J124-0722	Added 234521, 23522 ECN 47818
12/2022	2J124-1222	Updated 167308P
01/2024	2J124-2401	ECN 49622 - Added 173376CH, 181526W *Revised Form Format "Year/Month" Updated ISO logos to ISO 9001:2015 (Revised 04/2024)



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Equipment from Landoll Company, LLC is built to exacting standards ensured by ISO 9001:2015 registration at all Landoll manufacturing facilities.

# Hydraulic Cylinders Repair Parts Catalog

## Re-Order Part Number 2J124

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