



# Parts Manual

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Model Layer Picker Device

Serial Number 30A-LP-007

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**cascade**<sup>®</sup>

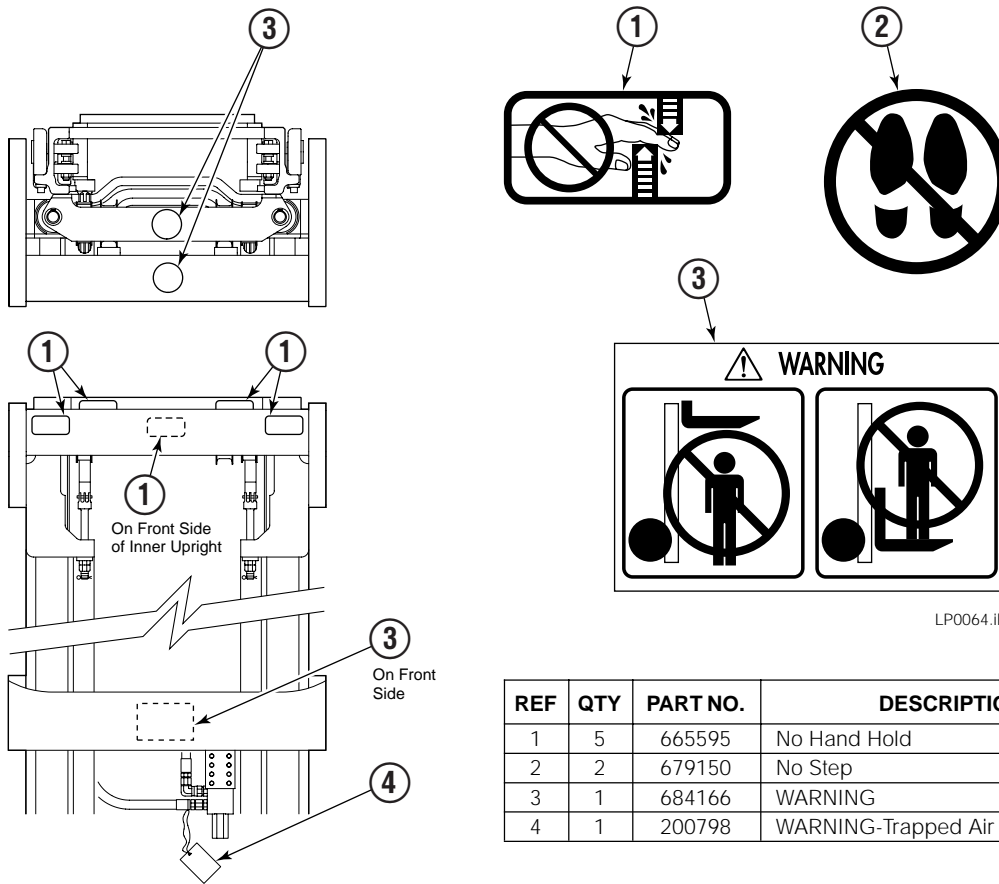
For Technical Assistance call: 800-227-2233, Fax: 888-329-8207

To Order Parts call: 888-227-2233, Fax: 888-329-0234

OR

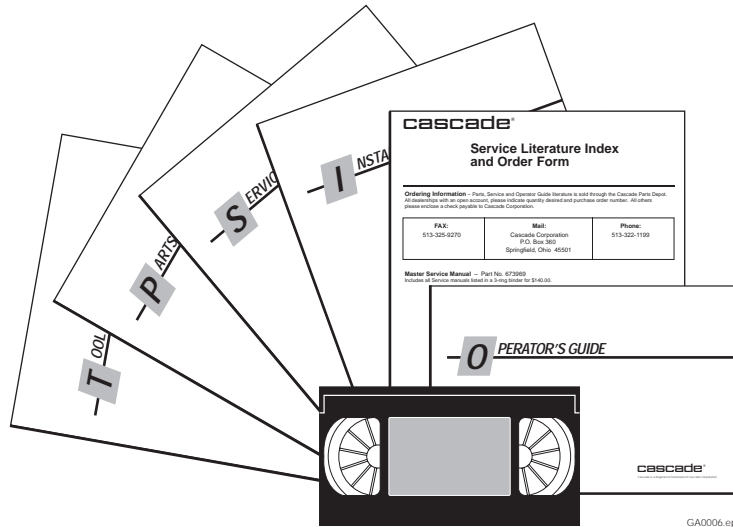
Write: Cascade Corporation, P.O. Box 20187, Portland, OR 97220

# Safety Decals



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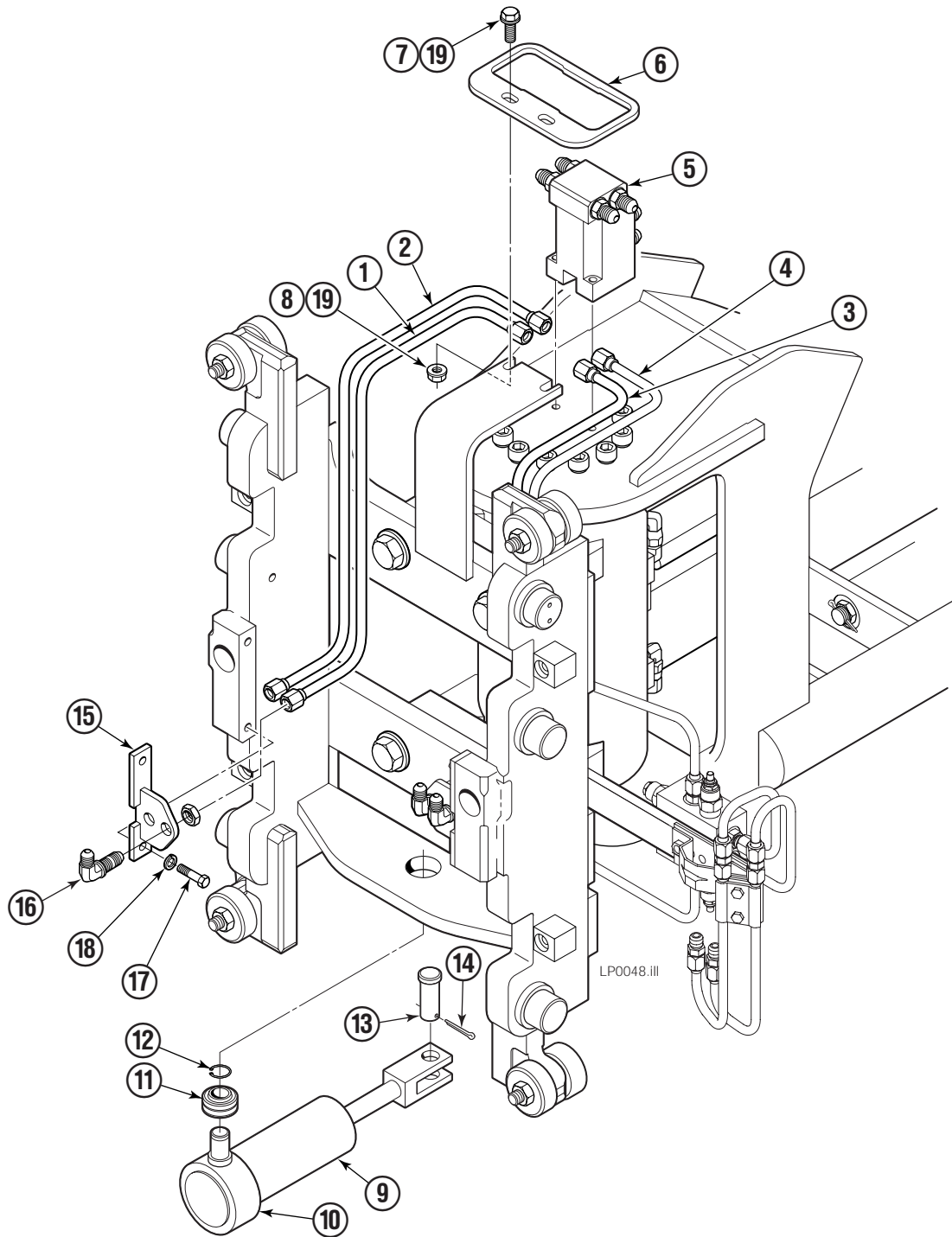
# Publications



GA0006.eps

PART NO.	DESCRIPTION
-	Parts Manual
-	Service Manual
222964	Installation Instructions
222225	Operators Guide
679929	Tool Catalog
673964	Literature Index Order Form

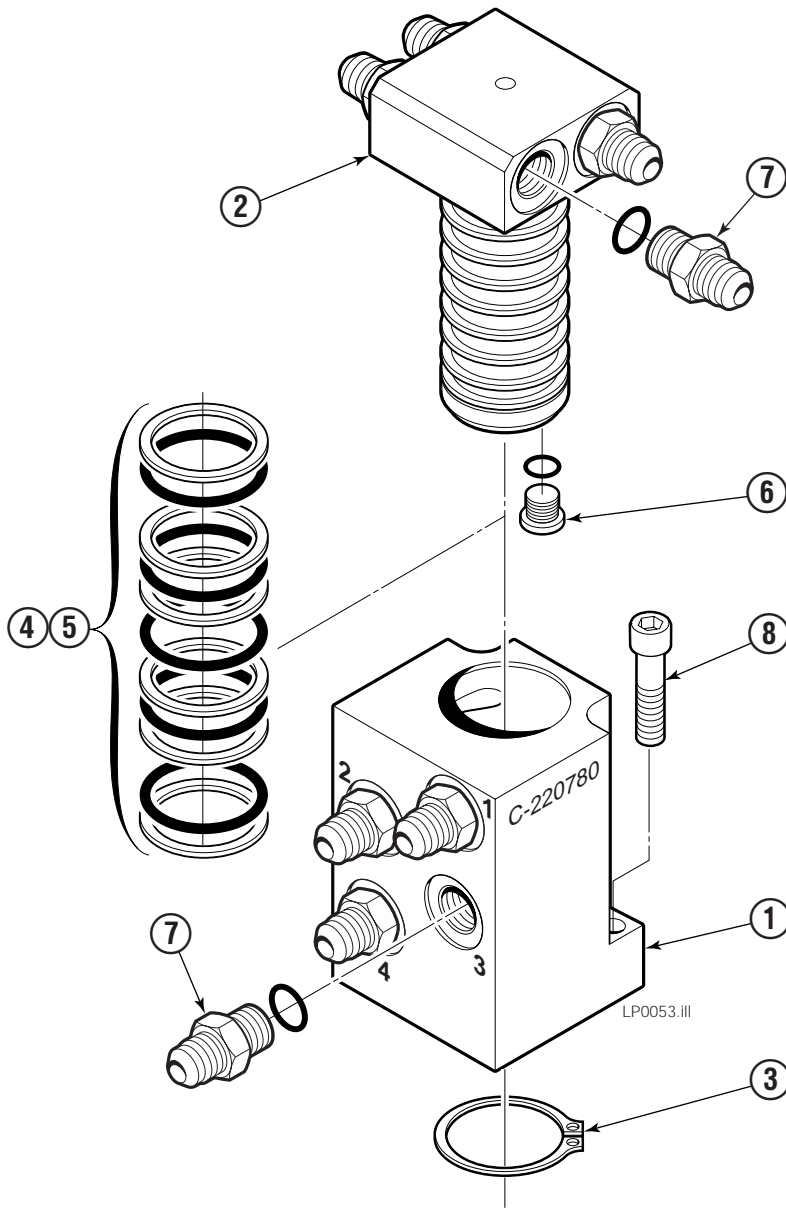
# Layer Picker Assembly



REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		3013272	Layer Picker Hydraulic Group	10	1	221975	Bracket
1	1	3013273	Tube	11	1	221978	Bearing
2	1	3013274	Tube	12	1	3124	Retaining Ring
3	2	3013275	Tube	13	1	221979	Clevis Pin
4	4	3013276	Tube	14	1	6525	Cotter Pin
5	1	220780	Revolving Connection ▲	15	2	206898	Bracket
6	1	221649	Bracket	16	4	2453	Fitting, 6-6
7	2	768538	Capscrew, M10x30	17	4	787372	Capscrew, M8x20
8	2	786882	Nut, M10	18	4	206315	Lockwasher, M8
9	1	221656	Shock Absorber	19	4	201570	Washer, M10

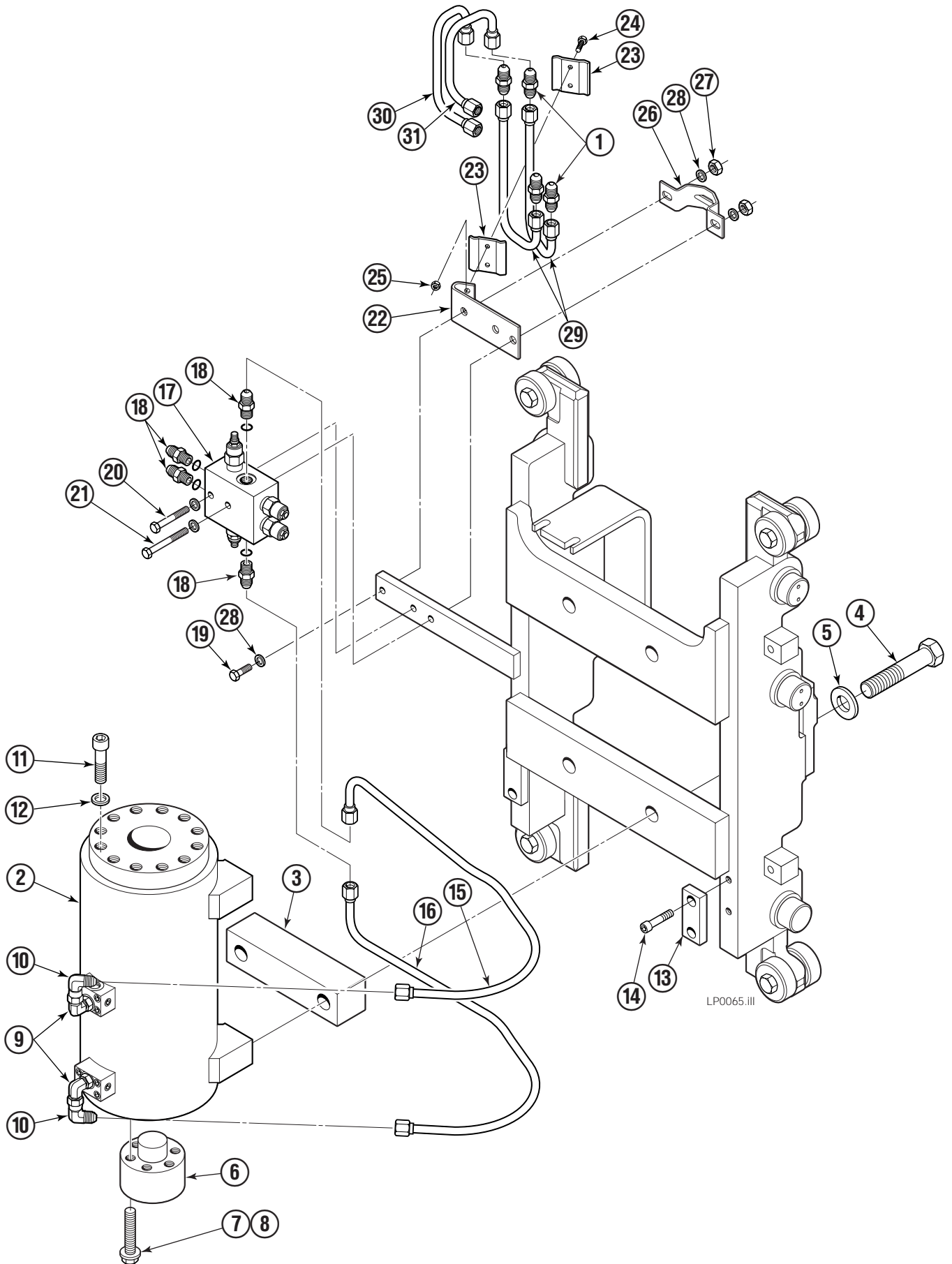
▲ See Revolving Connection page for parts breakdown.

# Revolving Connection



REF	QTY	PART NO.	DESCRIPTION
		220780	Revolving Connection
1	1	220781	Body
2	1	322714	Shaft
3	1	3139	Retaining Ring
4	8	615122	Back-Up Ring
5	5	655949	O-Ring
6	4	663694	Fitting, 3
7	8	604511	Fitting, 8-8
8	2	768796	Capscrew, M8x35

# Layer Picker Assembly

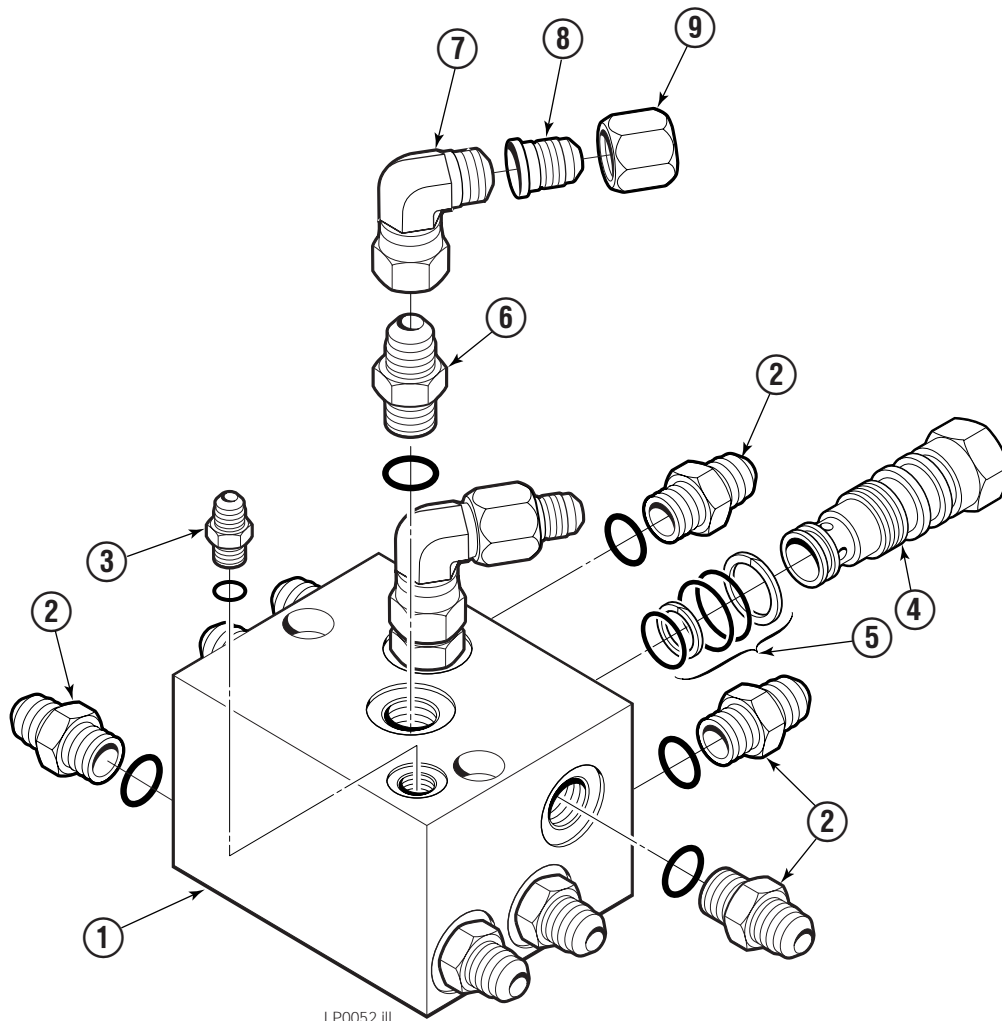


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# Layer Picker Assembly

REF	QTY	PART NO.	DESCRIPTION
		3013272	Layer Picker Assembly
1	4	2347	Fitting, 6-6
2	1	220760	Actuator
3	2	220774	Spacer
4	4	221203	Capscrew, 7/8NCx2.75 in.
5	4	221204	Washer
6	1	220769	Shaft
7	6	4511	Capscrew, 1/2NCx2.75 in.
8	6	667910	Washer
9	2	601676	Fitting, 6-6
10	2	6280	Fitting, 6-6
11	12	607087	Capscrew, 5/8NCx2.00 in.
12	12	667225	Washer
13	2	221980	Bumper
14	4	753159	Capscrew, M6x10
15	1	223021	Tube
16	1	223022	Tube
17	1	221642	Valve
18	4	604511	Fitting, 6-6
19	1	629516	Capscrew, 3/8NCx1.00 in.
20	1	674910	Capscrew
21	1	3611	Capscrew, 3/8NCx3.00 in.
22	1	674373	Bracket
23	2	674374	Clamp
24	2	3555	Capscrew, 1/4NCx1.00 in.
25	2	645986	Nut
26	1	673428	Clamp
27	2	6099	Nut
28	5	674376	Washer
29	2	674371	Tube
30	1	223019	Tube
31	1	223020	Tube

# Clamp Valve



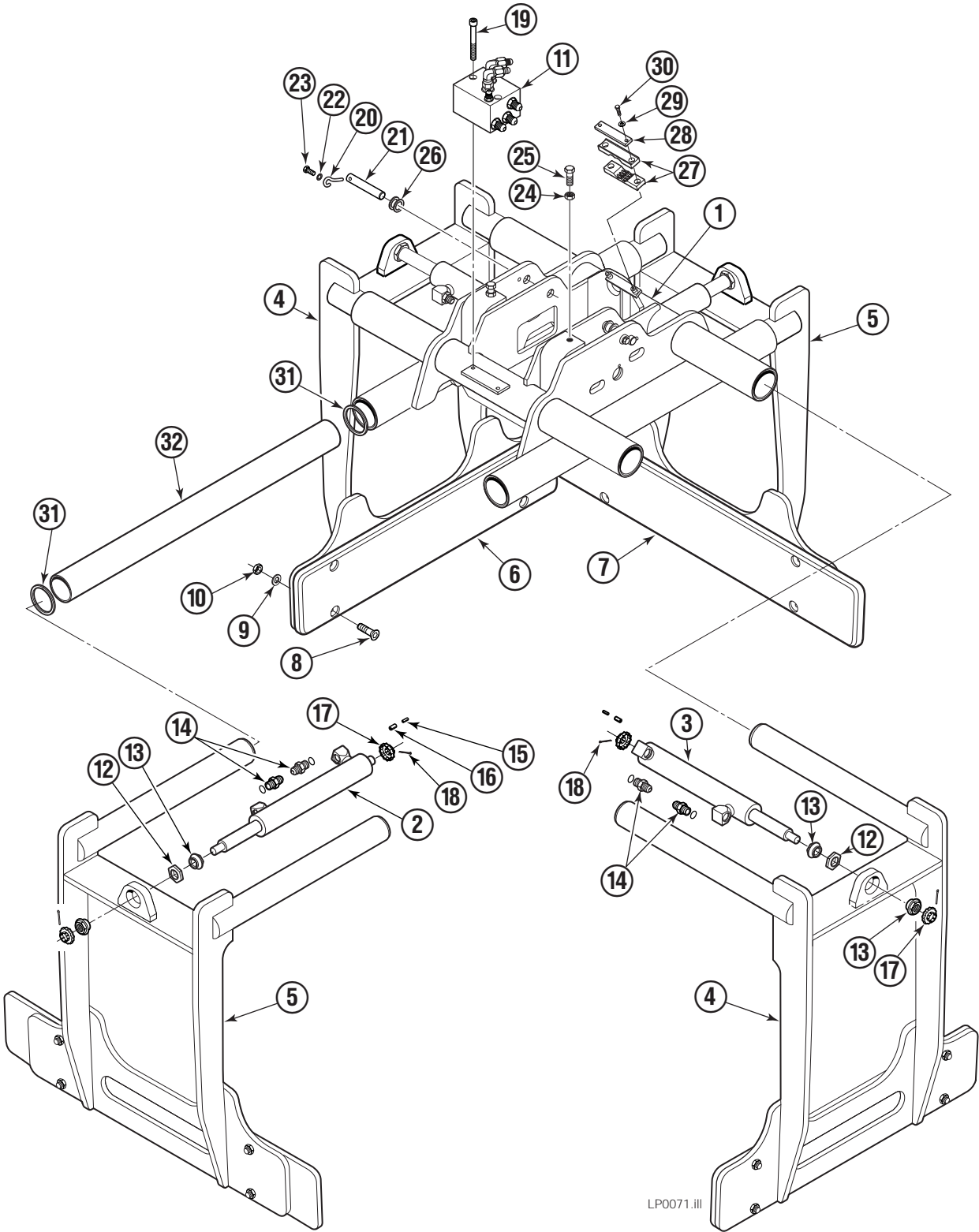
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REF	QTY	PART NO.	DESCRIPTION
		219694	Valve Assembly
1	1	219693	Body
2	8	611288	Fitting, 6-8
3	1	617915	Fitting, 4-4
4	1	659058	Check Valve - PO
5	1	667516	Service Kit
6	2	601377	Fitting, 8-8
7	2	605761	Fitting, 8-8 ▲
8	2	2671	Fitting, 8 ▲
9	2	2618	Nut, 8 ▲

▲ Not included in Valve Assembly.

Reference: Hydraulic Group 222080.

# Clamp Assembly



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# Clamp Assembly

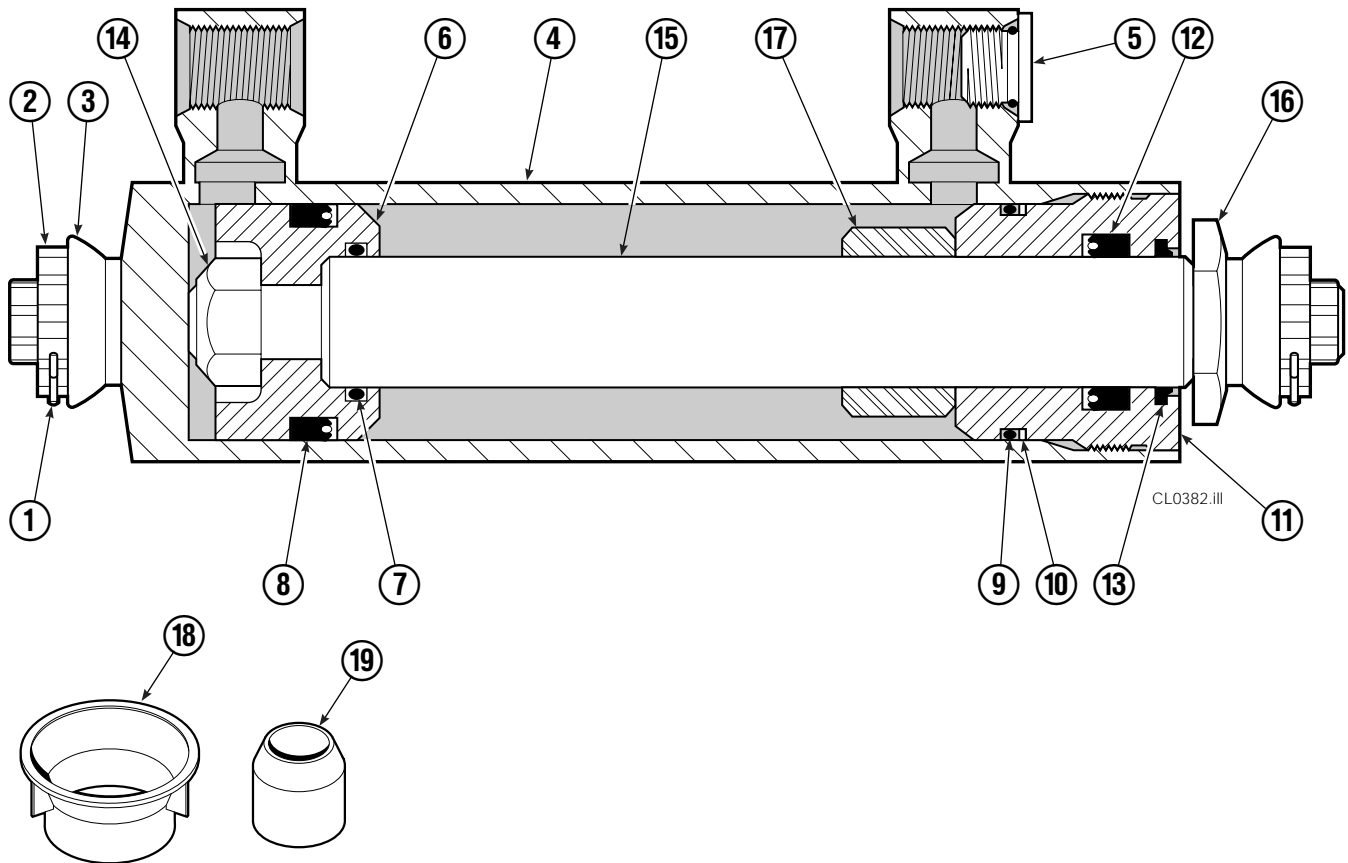
REF	QTY	PART NO.	DESCRIPTION
		3013078	Clamp Assembly
1	1	3013079	Frame
2	2	3010322	Cylinder ▲ – Long
3	2	3013457	Cylinder ▲ – Short
4	2	3013265	Arm – Long
5	2	3013266	Arm – Short
6	2	223025	Contact Pad, 6x30
7	2	3013070	Contact Pad, 12x42
8	16	755028	Capscrew, M12x50
9	16	200456	Washer, M12
10	16	205979	Nut, M12
11	1	219694	Valve ●
12	4	667626	Washer
13	8	667625	Nut
14	8	611288	Fitting, 6-6
15	4	7861	Roll Pin – Inner
16	4	7962	Roll Pin – Outer
17	8	667624	Retainer
18	8	6510	Cotter Pin
19	2	768802	Capscrew, M8x70
20	2	689954	Eye Pin
21	2	218169	Pin
22	2	787398	Washer, M8
23	2	787372	Capscrew, M8x20
24	2	688387	Jam Nut, M12
25	2	768555	Capscrew, M12x40
26	8	399469	Shim
27	2	208731	Molded Insert
28	1	203407	Bar
29	2	206323	Lockwasher, M6
30	2	763169	Capscrew, M6x20
31	8	222901	Retaining Ring
32	4	10543-0767	Bushing

▲ See Cylinder page for parts breakdown.

● See Valve page for parts breakdown.

Reference: Common Parts Group 223708, Arm Group 3013080,  
Contact Pad Group 3013069.

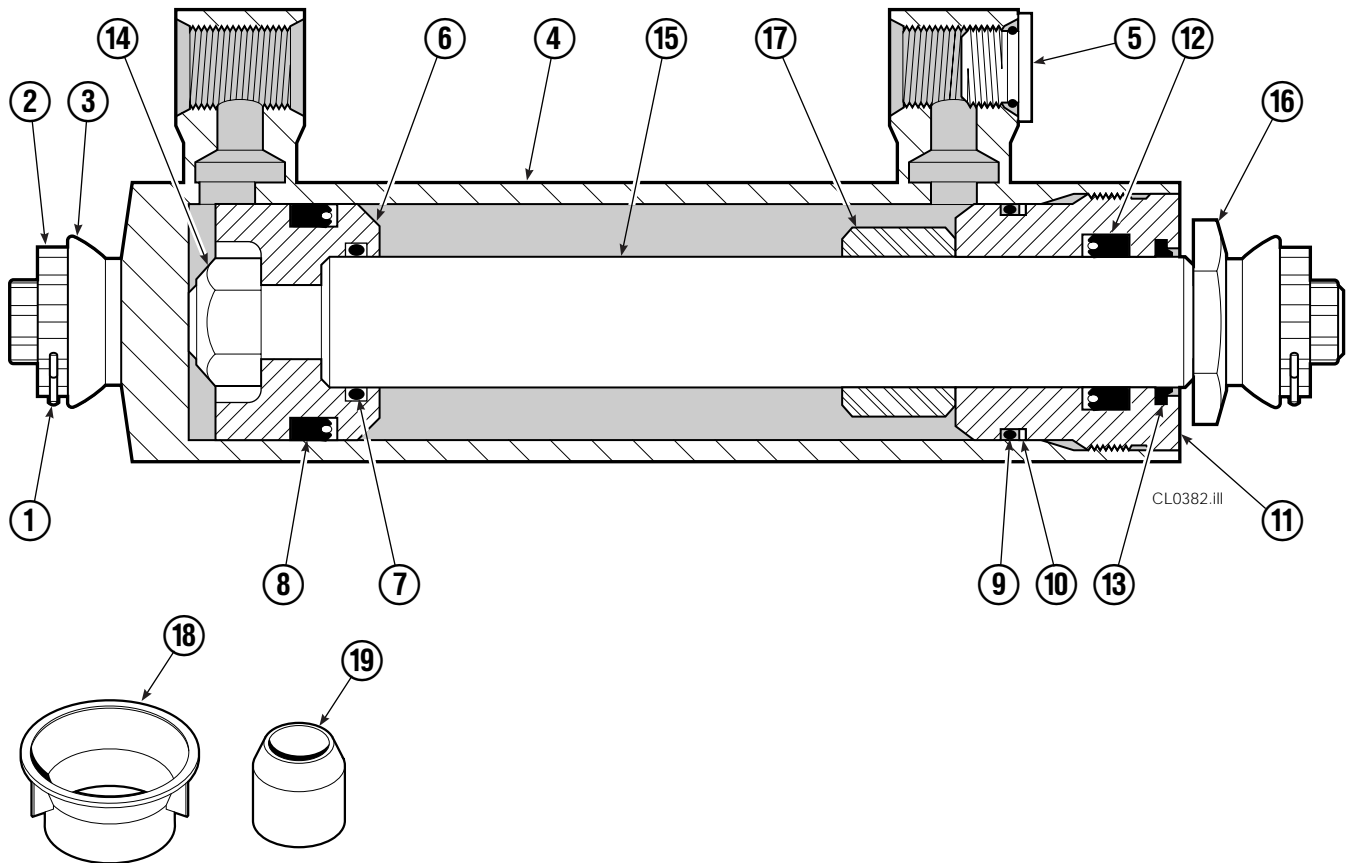
# Clamp Cylinder



REF	QTY	PART NO.	DESCRIPTION
		3013457	Cylinder Assembly
1	2	6510	Cotter Pin ■
2	2	667624	Nut Retainer ■
3	2	667625	Nut ■
4	1	398810	Shell
5	1	602580	Fitting
6	1	559702	Piston
7	1	2716	O-Ring ▲
8	1	662450	Seal ▲
9	1	2722	O-Ring ▲
10	1	615126	Back-Up Ring ▲
11	1	413799	Retainer
12	1	662448	Seal ▲
13	1	636853	Wiper ▲
14	1	667623	Nut
15	1	3010506	Rod
16	1	667626	Washer
17	1	3013458	Spacer
18	1	671047	Seal Loader, Piston ▲
19	1	671051	Seal Loader, Retainer ▲
		560729	Service Kit

▲ Included in Service Kit 560729.  
 ■ Included in Nut Service Kit 668926.  
 Reference: ST-0283, ST-0284.

# Clamp Cylinder



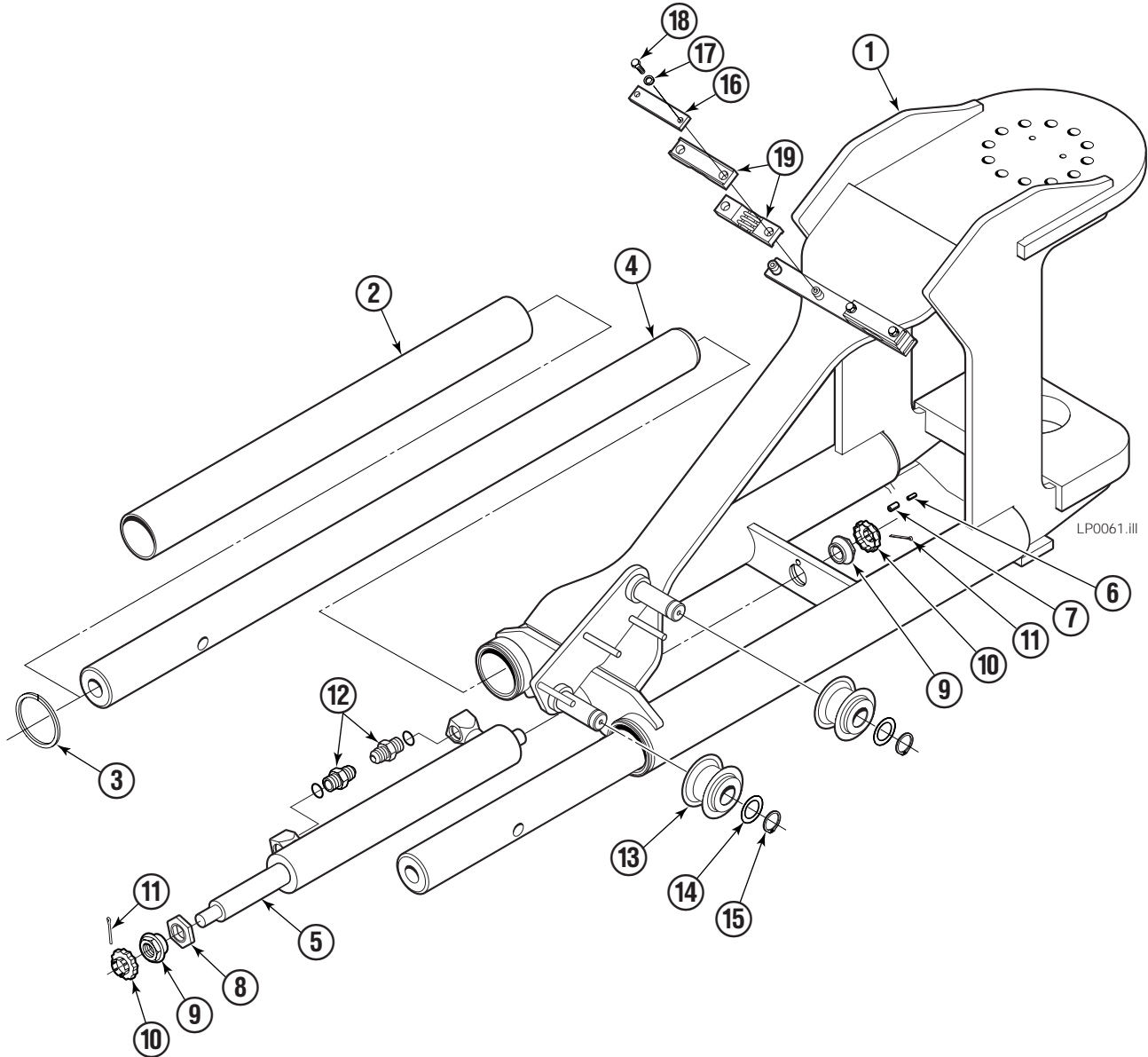
REF	QTY	PART NO.	DESCRIPTION
		3010322	Cylinder Assembly
1	2	6510	Cotter Pin ■
2	2	667624	Nut Retainer ■
3	2	667625	Nut ■
4	1	398810	Shell
5	1	602580	Fitting
6	1	559702	Piston
7	1	2716	O-Ring ▲
8	1	662450	Seal ▲
9	1	2722	O-Ring ▲
10	1	615126	Back-Up Ring ▲
11	1	413799	Retainer
12	1	662448	Seal ▲
13	1	636853	Wiper ▲
14	1	667623	Nut
15	1	3010506	Rod
16	1	667626	Washer
17	1	-	Spacer
18	1	671047	Seal Loader, Piston ▲
19	1	671051	Seal Loader, Retainer ▲
		560729	Service Kit

▲ Included in Service Kit 560729.

■ Included in Nut Service Kit 668926.

Reference: ST-0283, ST-0284.

# Boom Arm Assembly

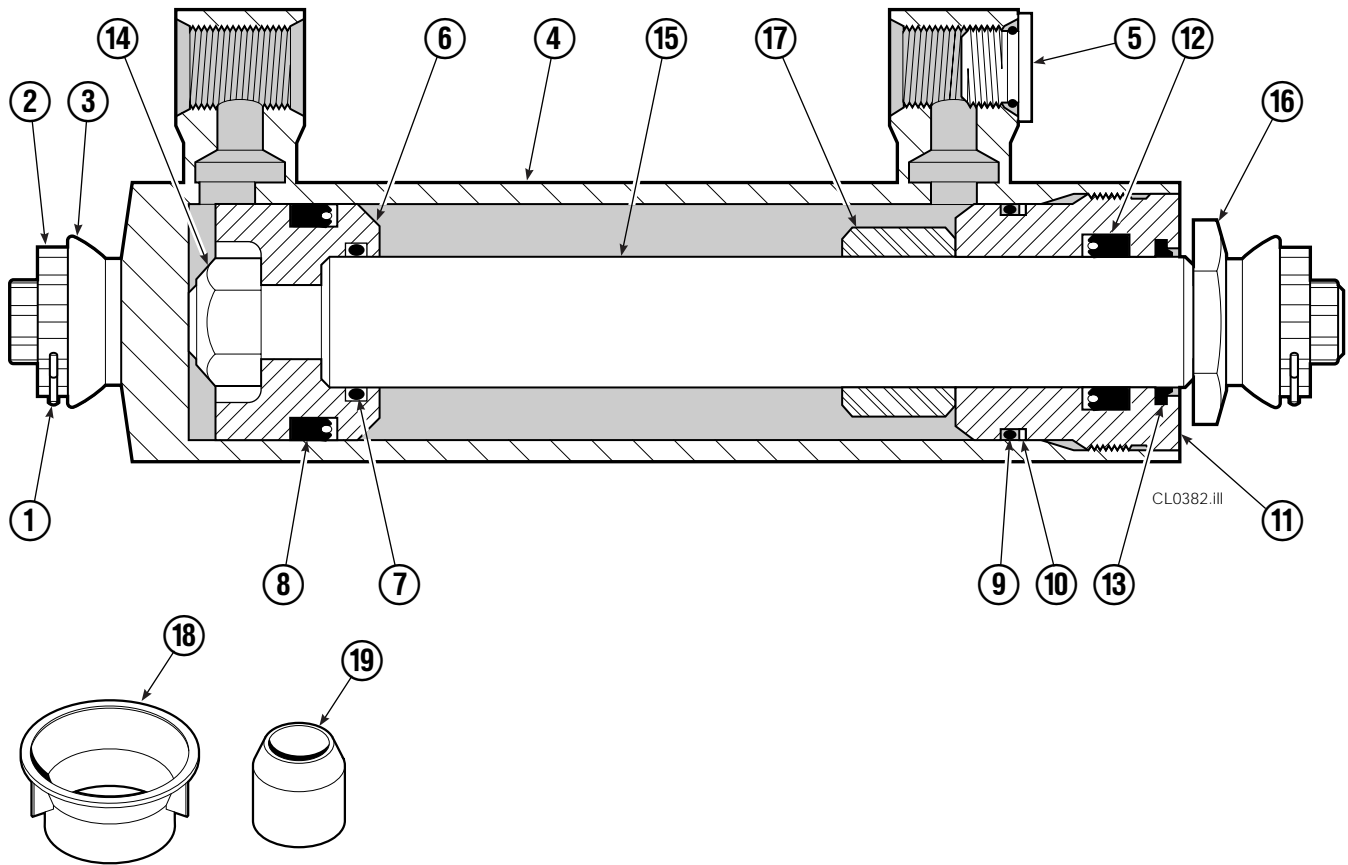


REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		3013067	Boom Arm Assembly	10	2	667624	Retainer
1	1	222469	Frame	11	2	6510	Cotter Pin
2	2	220778	Bushing	12	2	611288	Fitting, 6-6
3	2	222901	Retaining Rng	13	2	210667	Sheave
4	2	220777	Bar	14	2	205086	Washer
5	1	3013068	Cylinder ▲	15	2	688935	Snap Ring
6	1	7861	Roll Pin - Inner	16	2	203407	Bar
7	1	7962	Roll Pin - Outer	17	4	206323	Lockwasher, M6
8	1	667626	Washer	18	4	763169	Capscrew, M6x20
9	2	667625	Nut	19	4	208731	Molded Insert

▲ See Cylinder page for parts breakdown.

Reference: Common Parts Group 223933.

# Boom Cylinder



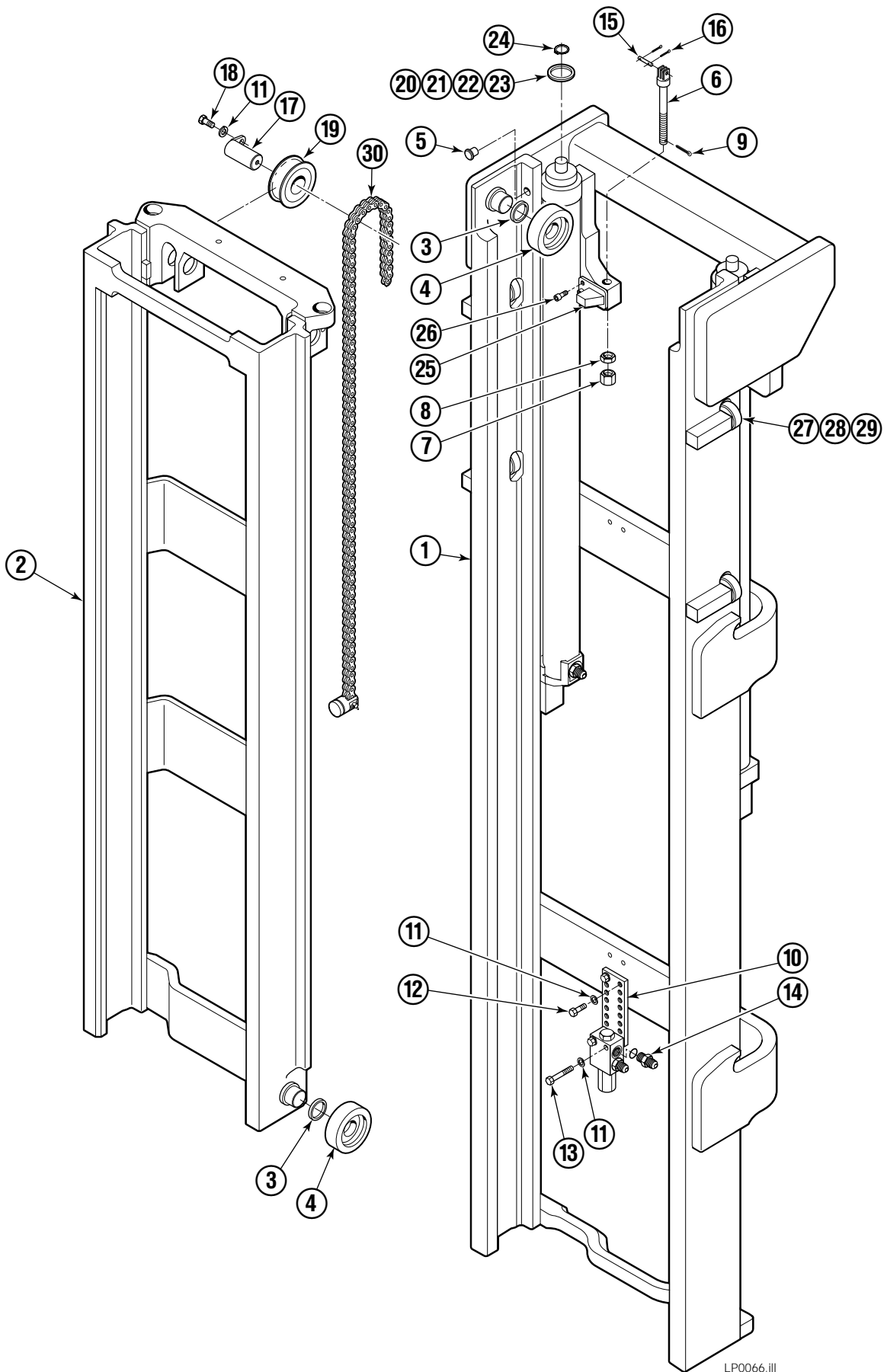
REF	QTY	PART NO.	DESCRIPTION
		3013068	Cylinder Assembly
1	2	6510	Cotter Pin ■
2	2	667624	Nut Retainer ■
3	2	667625	Nut ■
4	1	3006096	Shell
5	1	602580	Fitting
6	1	559702	Piston
7	1	2716	O-Ring ▲
8	1	662450	Seal ▲
9	1	2722	O-Ring ▲
10	1	615126	Back-Up Ring ▲
11	1	413799	Retainer
12	1	662448	Seal ▲
13	1	636853	Wiper ▲
14	1	667623	Nut
15	1	3006067	Rod
16	1	667626	Washer
17	1	3013066	Spacer
18	1	671047	Seal Loader, Piston ▲
19	1	671051	Seal Loader, Retainer ▲
		560729	Service Kit

▲ Included in Service Kit 560729.

■ Included in Nut Service Kit 668926.

Reference: ST-0283, ST-0284.

# Mast Assembly



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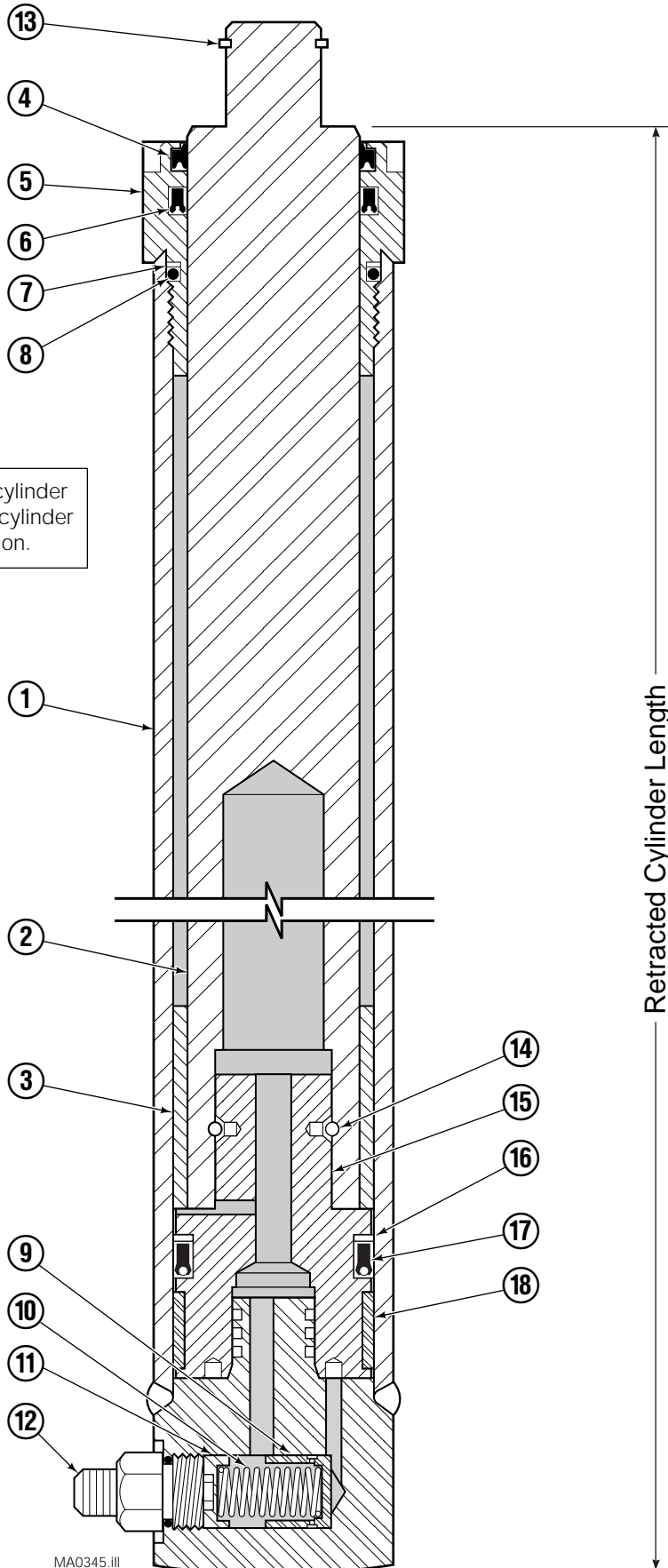
# Mast Assembly

REF	QTY	PART NO.	DESCRIPTION
1	1	218921	Outer Upright
2	1	220484	Inner Upright
3	●	631881	Shim, .03 in. (0,7 mm)
4	4	662145	Roller
5	2	212587	Wear Plug Service Kit
6	2	210435	Chain Anchor
7	2	200006	Nut, .625 NF GR8
8	2	200007	Jam Nut, .625 NF GR8
9	2	6518	Cotter Pin
10	1	683831	Bar
11	6	681238	Lockwasher, M10
12	2	684649	Capscrew, M10x25
13	2	683823	Capscrew, M10x50
14	2	601377	Fitting, 8-8
15	2	684305	Pin
16	4	6508	Cotter Pin
17	2	683802	Pin
18	2	683820	Capscrew, M10x16
19	2	660051	Sheave
20	2	200524	Shim, .06 in. (1,5 mm)
21	2	200525	Shim, .09 in. (2,3 mm)
22	2	205085	Shim, .01 in. (0,3 mm)
23	2	205086	Shim, .03 in. (0,7 mm)
24	2	688935	Snap Ring
25	2	220481	Plate
26	4	219596	Capscrew
27	4	683819	Thrust Roller
28	4	753221	Capscrew
29	4	684660	Lockwasher
30	2	678770	Chain

● Quantity as Required.

Reference: Common Parts Group 696564, S-3799,  
Mast Assembly 3013270.

# Main Lift Cylinder-2600 PSI



**WARNING:** Replacing the cylinder with a different part number cylinder may cause mast to malfunction.

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# Main Lift Cylinder-2600 PSI

REF	QTY	PART NO.	DESCRIPTION
	1	580705	Cylinder Assembly
1	1	5432-1237	Shell
2	1	5444-1205	Plunger
3	---	---	Spacer
4	1	562663	Plunger Wiper ▲
5	1	562630	Retainer
6	1	562569	Plunger Seal ▲
7	1	559859	Back-Up Ring ▲
8	1	559858	O-Ring ▲
9	1	563782	Piston-Lowering Fuse
10	1	562847	Spring
11	1	562848	Spring Guide
12	1	611289	Fitting, 8-10 ■
13	1	3129	Snap Ring ▲
14	1	559906	Pull-In Wire ▲
15	1	560462	Piston
16	1	560066	Back-Up Ring ▲
17	1	563631	Piston Seal ▲
18	1	559864	Wear Ring ▲

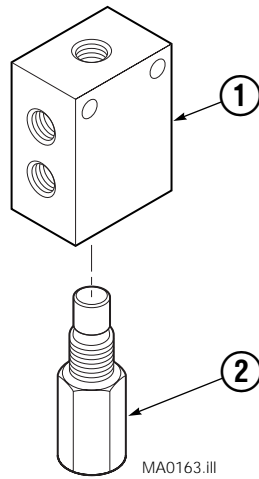
▲ Included in Service Kit 562591.

■ Not included in Cylinder Assembly.

Reference: S-6079, S-6080.

# Lowering Control Valve

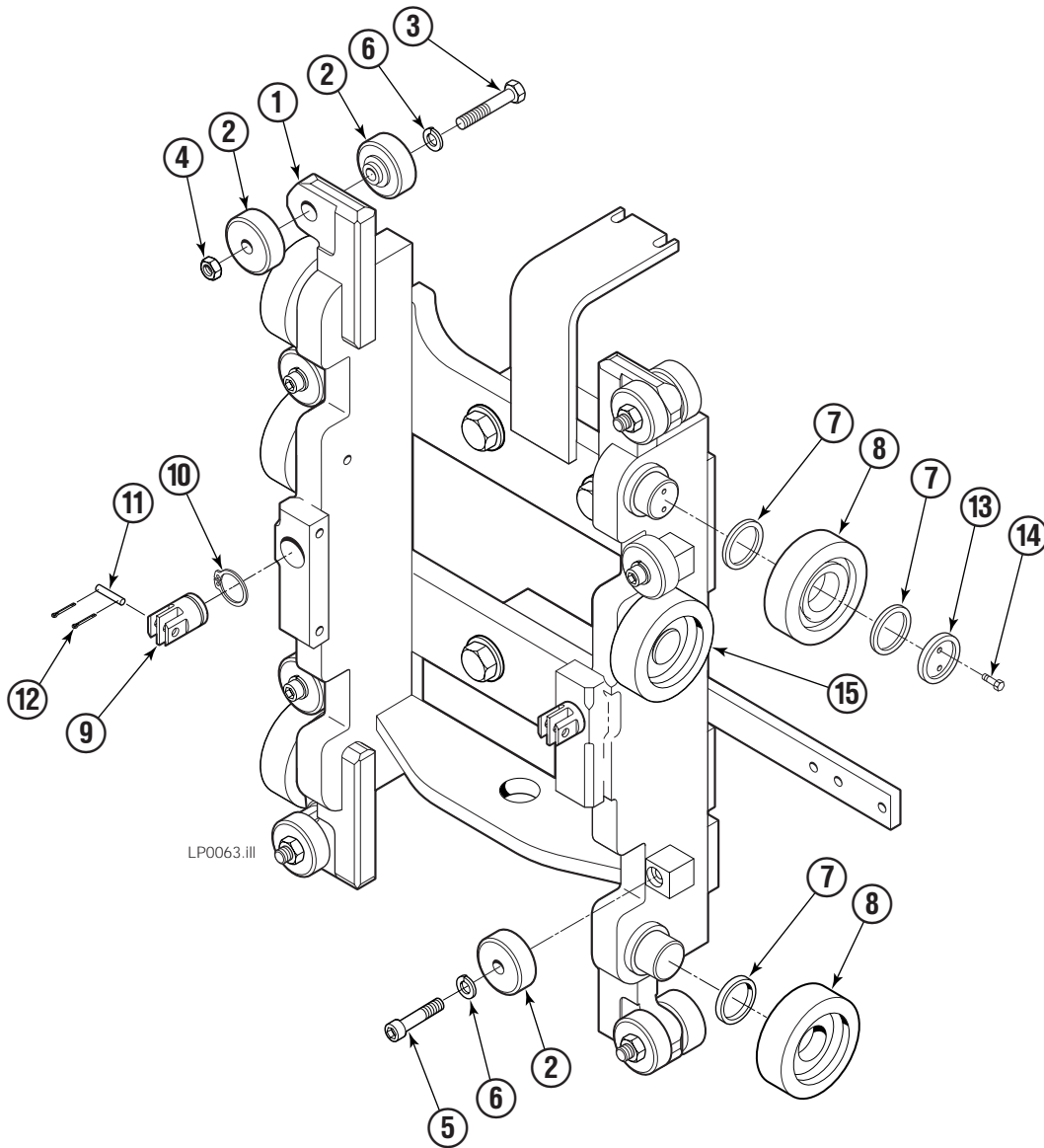
## 2600 PSI System Pressure



REF	QTY	PART NO.	DESCRIPTION
		684810	Lowering Control Valve
1	1	684152	Valve Body
2	1	684210	Valve Cartridge ▲

▲ This part must not be substituted. Check part number on side of cartridge when replacing.

# Carriage—Heavy Duty

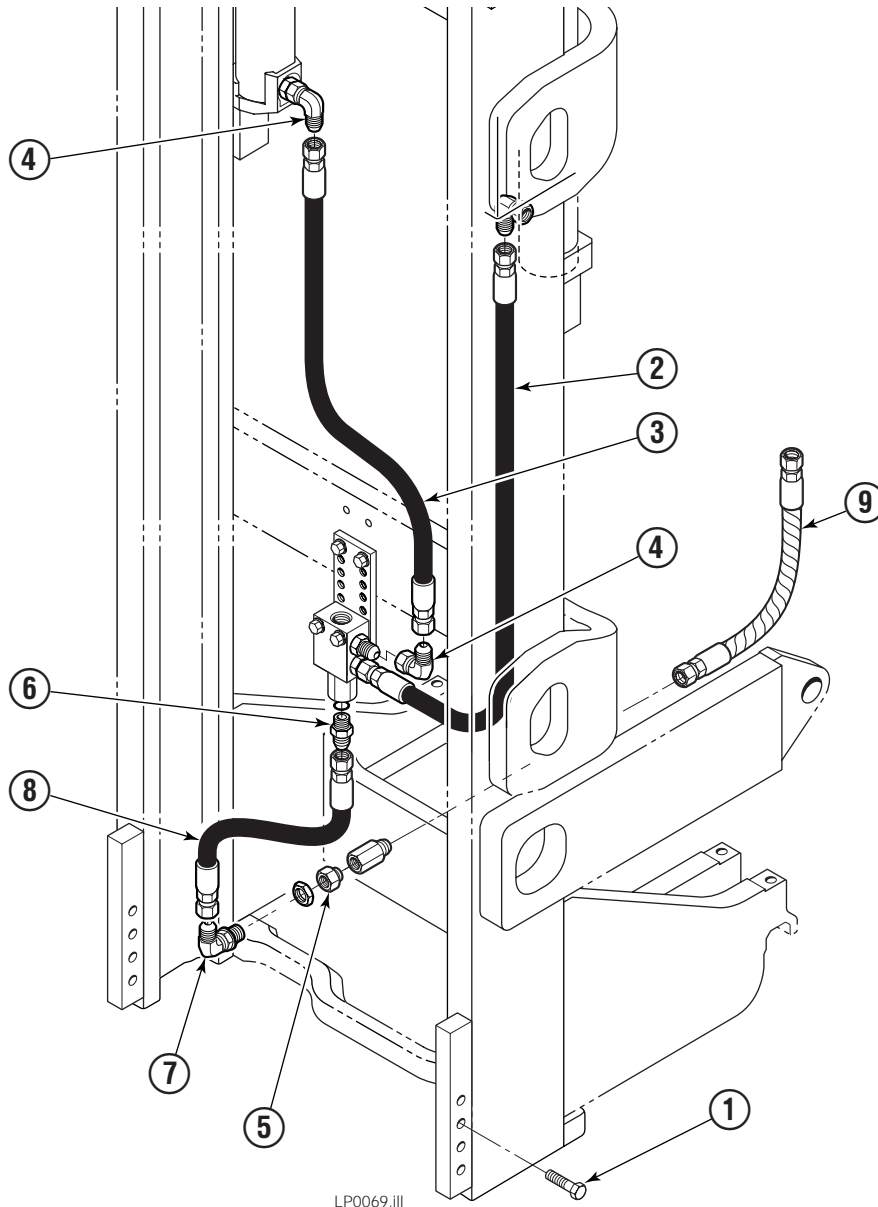


REF	QTY	PART NO.	DESCRIPTION
1	1	3013267	Carriage
2	12	683819	Roller
3	4	209780	Capscrew, M12x80
4	4	204979	Nut, M12
5	4	753221	Capscrew, M12x50
6	8	684660	Lockwasher, M12
7	■	631881	Shim, .03 in. (0,7 mm)
8	4	662145	Roller
9	2	680243	Chain Anchor
10	2	3135	Snap Ring
11	2	684305	Chain Pin
12	4	6508	Cotter Pin
13	2	658378	Retainer ▲
14	4	680218	Capscrew, M3x12 ▲
15	2	660050	Roller ▲

■ Quantity as required.

▲ Included in Roller Kit 688378.

# Mast Installation



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REF	QTY	PART NO.	DESCRIPTION
1	8	768557	Capscrew
2	1	224098	Hose, 38.00 in.
3	1	212649	Hose, 27.50 in.
4	3	605761	Fitting, 8-8
5	1	687361	Fitting
6	1	601377	Fitting, 8-8
7	1	2454	Fitting, 8-8
8	1	684300	Hose, 28 in.
9	1	687364	Hose

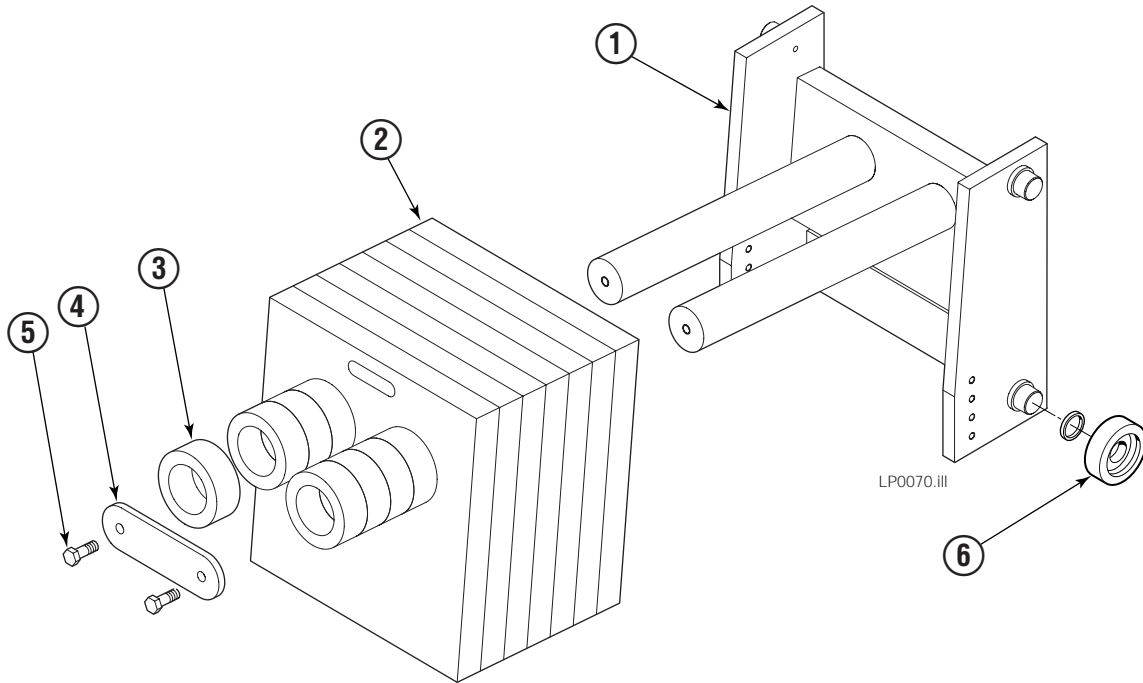
Reference: Mounting Control Doc: S-3402.

Mounting Group: 222099.

Installation Kit: 684115.

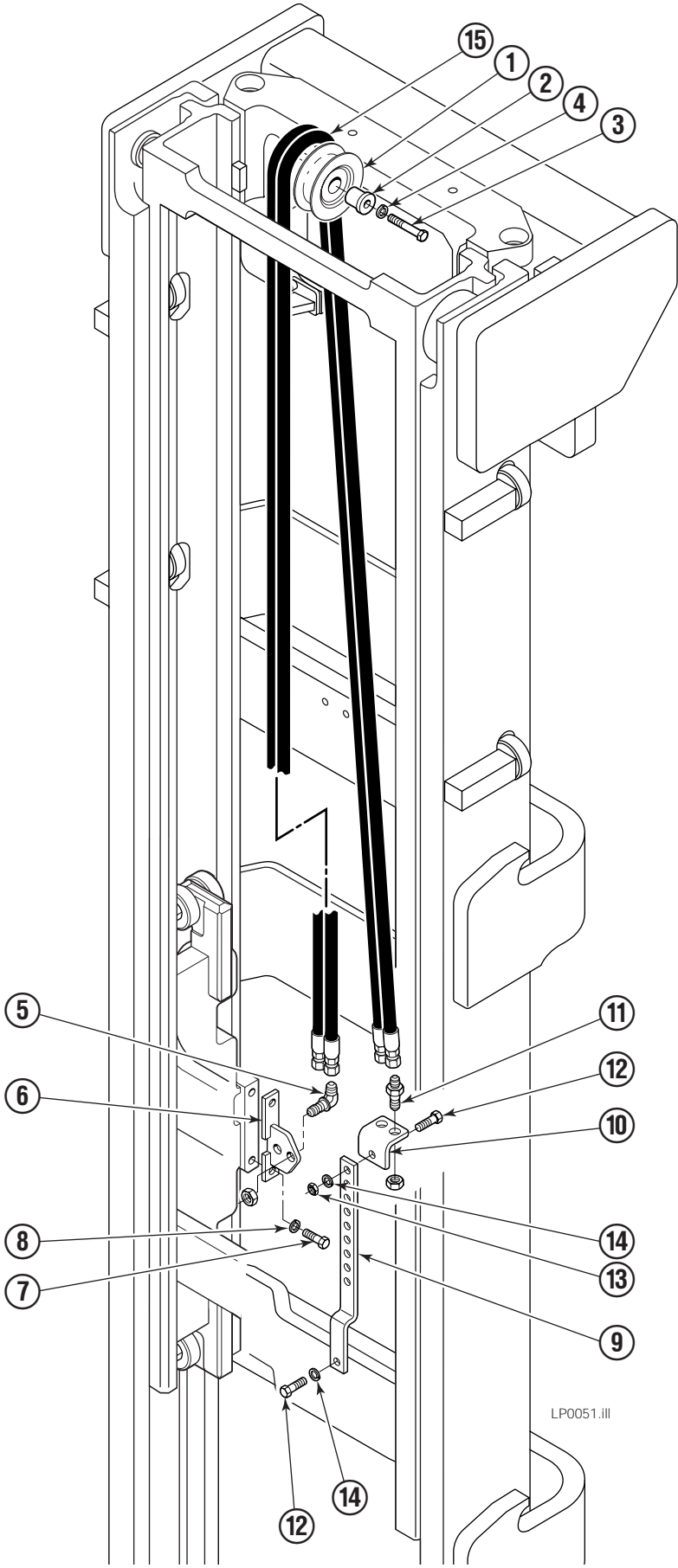
Hydraulic Group: 224096.

# Carriage Ballast



REF	QTY	PART NO.	DESCRIPTION
		3013295	Carriage Ballast Assembly
1	1	3013298	Carriage
2	7	3013297	Ballast Plate
3	8	3013304	Spacer
4	1	3013300	Retainer
5	2	752903	Capscrew
6	4	662145	Roller

# Internal Hose Reeving



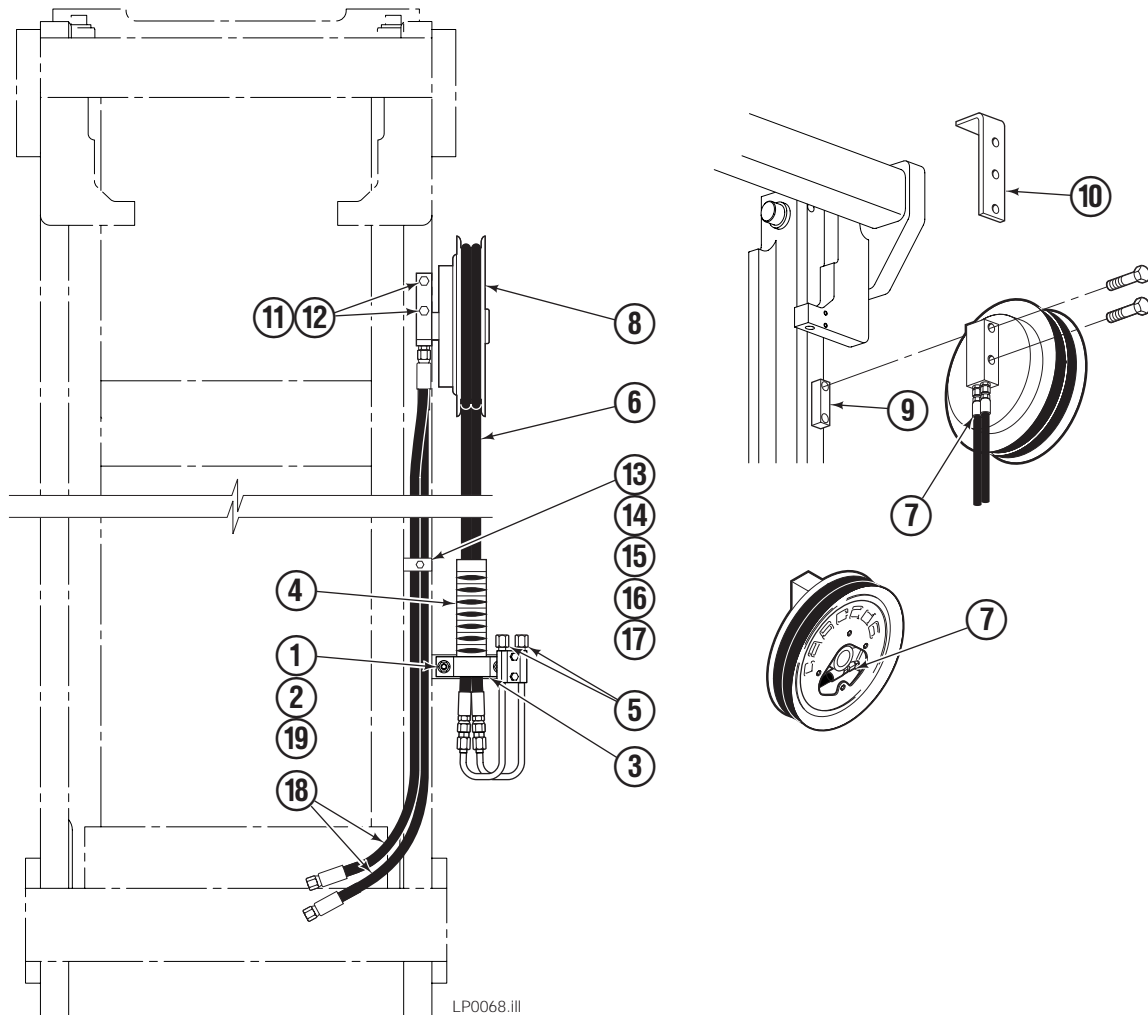
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# Internal Hose Reeving

REF	QTY	PART NO.	DESCRIPTION
		3013271	Internal Hose Reeving
1	2	209623	Sheave
2	2	684657	Shaft
3	2	205206	Capscrew, M12x55
4	2	683822	Lockwasher, M12
5	4	2453	Fitting, 8-8
6	2	206898	Bracket
7	4	787372	Capscrew, M8x20
8	4	206315	Lockwasher, M8
9	2	684658	Bracket
10	2	683919	Bracket
11	4	2375	Fitting, 8-8
12	4	684649	Capscrew, M10x25
13	2	763023	Nut, M10
14	4	681238	Lockwasher, M10
15	4	3550-3205	Hose

Reference: Common Parts Group 684819, S-3548.

# Hydraulic Supply Group

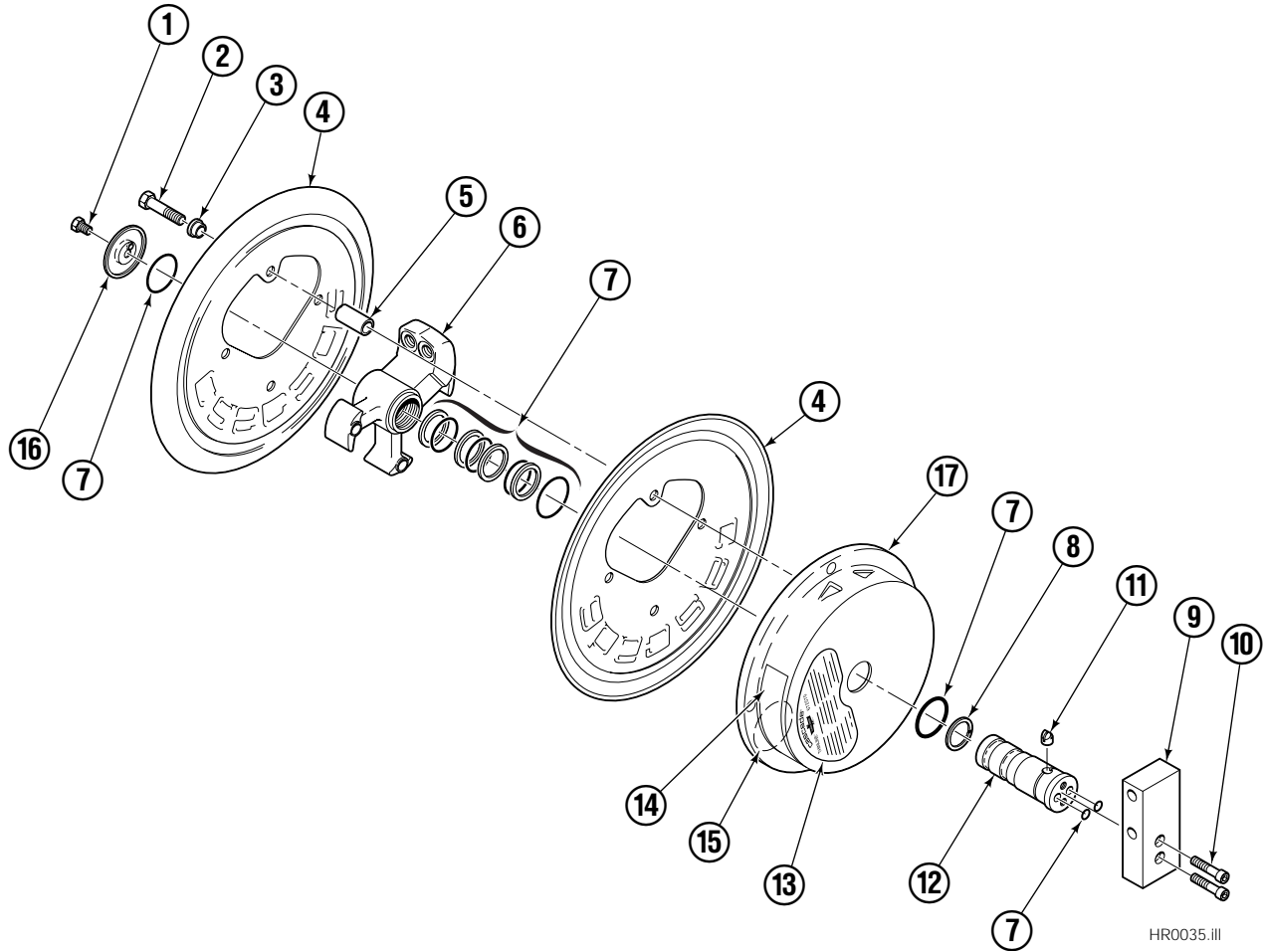


REF	QTY	PART NO.	DESCRIPTION
		673594	Hydraulic Supply Group
1	2	3599	Capscrew, 3/8NCx.50 in.
2	1	673520	Carriage Block
3	1	673428	Clamp
4	1	673510	Hose Restraint Assembly
5	1	674288	Hose Up Connection Assembly ▲
6	1	673394	Twinline Hose Assembly
7	4	604511	Fitting, 6-6
8	1	672572	THINLINE Hose Reel, RH ●
9	1	673526	Mounting Block
10	1	685487	Mounting Bracket
11	2	3661	Capscrew, 1/2NCx2.75 in.
12	2	6290	Lockwasher, 1/2
13	1	3578	Capscrew, 5/16NCx1.25 in.
14	1	6287	Lockwasher, 5/16
15	1	744535	Clamp
16	1	677536	Spacer
17	1	744662	Bar
18	2	2178	Header Hose
19	2	674376	Washer

▲ See Hose Up Connection Assembly page for parts breakdown.

● See Hose Reel page for parts breakdown.

# Hose Reel Assembly

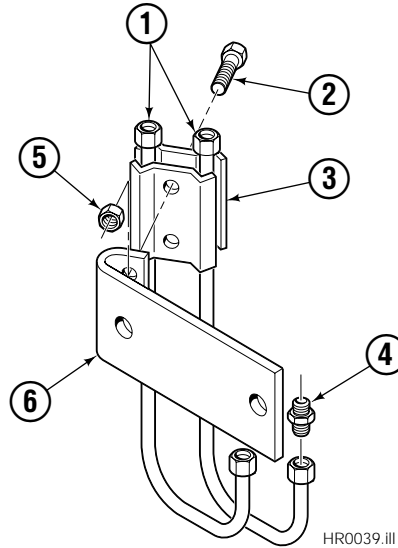


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REF	QTY	PART NO.	DESCRIPTION
		672572	Hose Reel, No. 6-13, RH
1	1	672542	Capscrew, M8x10
2	4	768525	Capscrew, M8x40
3	4	672540	Sleeve
4	2	672567	Flange, 13 in. (330mm) dia.
5	1	672552	Hose Guide
6	1	672547	Hub
7	1	672563	Seal Service Kit
8	1	675610	Snap Ring
9	1	672551	Mounting Block
10	2	672550	Capscrew, M10
11	1	645982	Spring Retainer
12	1	672543	Shaft
13	1	673423	Nameplate, RH
14	1	655271	Patent Plate
15	1	673392	Warning Decal
16	1	672544	Cap
17	1	672579	Spring Assembly, RH

# Hydraulic Accessories

## Hose Terminal Up



REF	QTY	PART NO.	DESCRIPTION
		674288	Up Connection Kit
1	2	674371	Tube
2	2	3555	Capscrew, 1/4NCx1.00
3	2	674374	Clamp
4	2	2347	Fitting, 4-4
5	2	645986	Nut, 1/4
6	1	674373	Bracket



**Do you have questions you need answered right now?** Call your nearest Cascade Parts Department.

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