



# Parts Manual

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Model \_\_\_\_\_ **Push-Pull**

Serial Number \_\_\_\_\_ **45E-PPS-A003R2**

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**cascade**<sup>®</sup>  
**corporation**

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

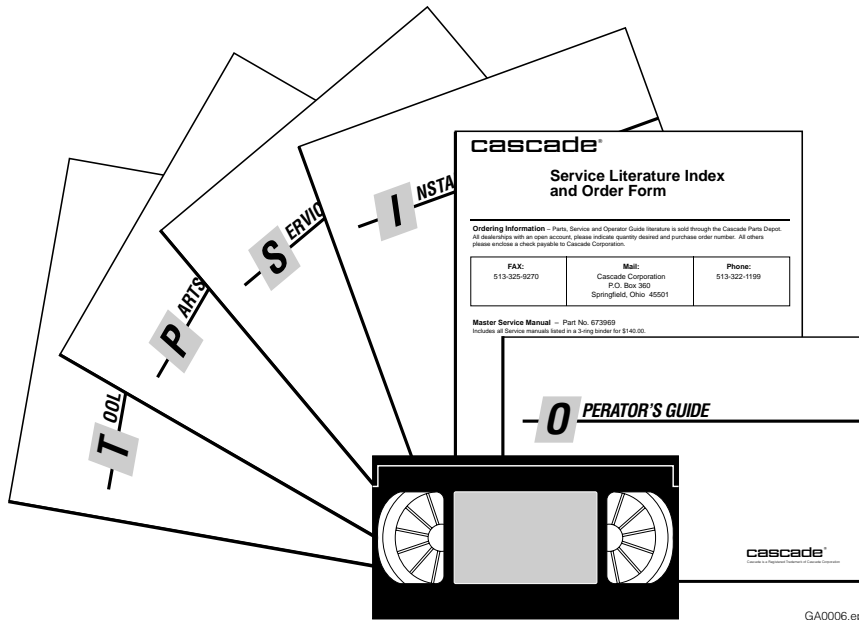
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**OR**

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

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# Publications



GA0006.eps

PART NO.	DESCRIPTION
	Parts Manual
686455	Service Manual
684945	Operators Guide
685531	Operators Pocket Guide
684944	Installation Instructions
680664	Servicing Cascade Cylinders-VHS
679929	Tool Catalog
673964	Literature Index Order Form

# Decals



Optional Faceplate Extension



Part No. 679150  
(1 Place & 1 optional)



Part No. 665595  
(2 Place & 2 optional)



Part No. 656038  
(6 Places)



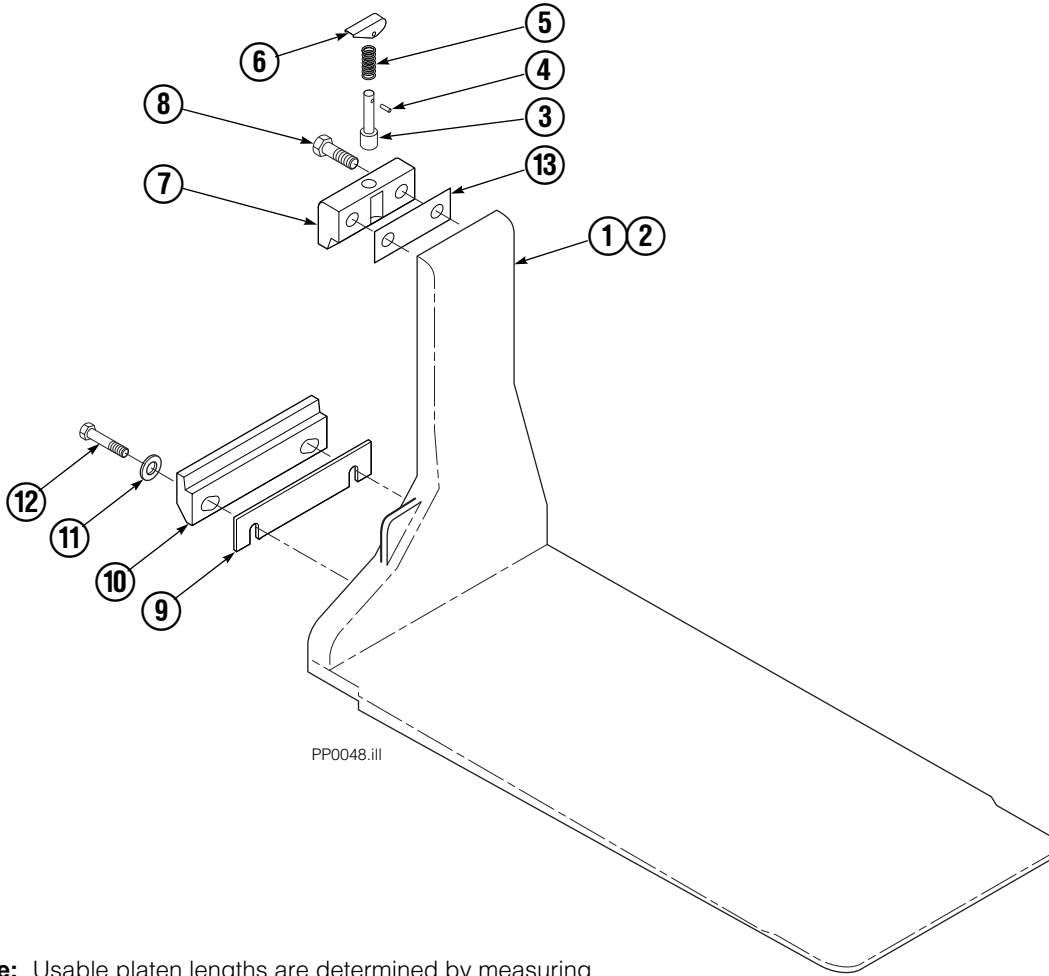
Part No. 679059  
(1 Place if equipped with Quick Change Hooks)



Nameplate

PP0060.iii

# Platen Group



PP0048.iii

**Note:** Usable platen lengths are determined by measuring from the faceplate (fully retracted position) to the platen tip or total platen length minus 4 1/2".

REF	QTY	PART NO.	DESCRIPTION
		685751	Platen Group
1	1	685752	Platen – LH
2	1	685753	Platen – RH
3	2	622907	■ Pin
4	2	8007	■ Rivet
5	2	622908	■ Spring
6	2	622897	■ Handle
7	2	685533	■ Upper Hook
8	4	685677	Capscrew
9	★	206969	Shim (.030)
10	2	682851	Lower Hook
11	4	667225	Washer
12	4	779009	Capscrew
13	●	688379	Shim (.060)

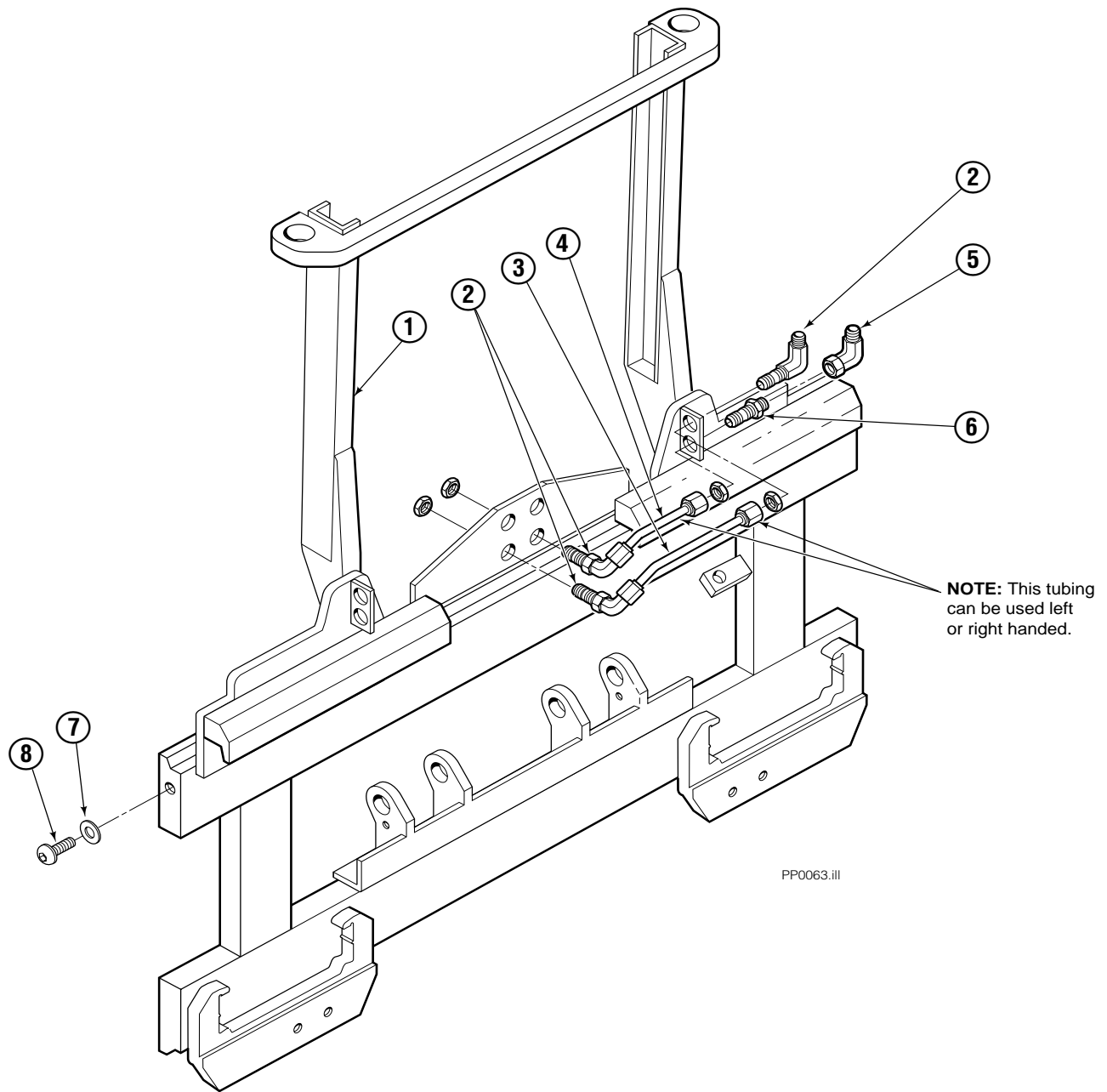
★ As required.

● As required (2 maximum).

■ Included in Upper Hook Assembly 688386.

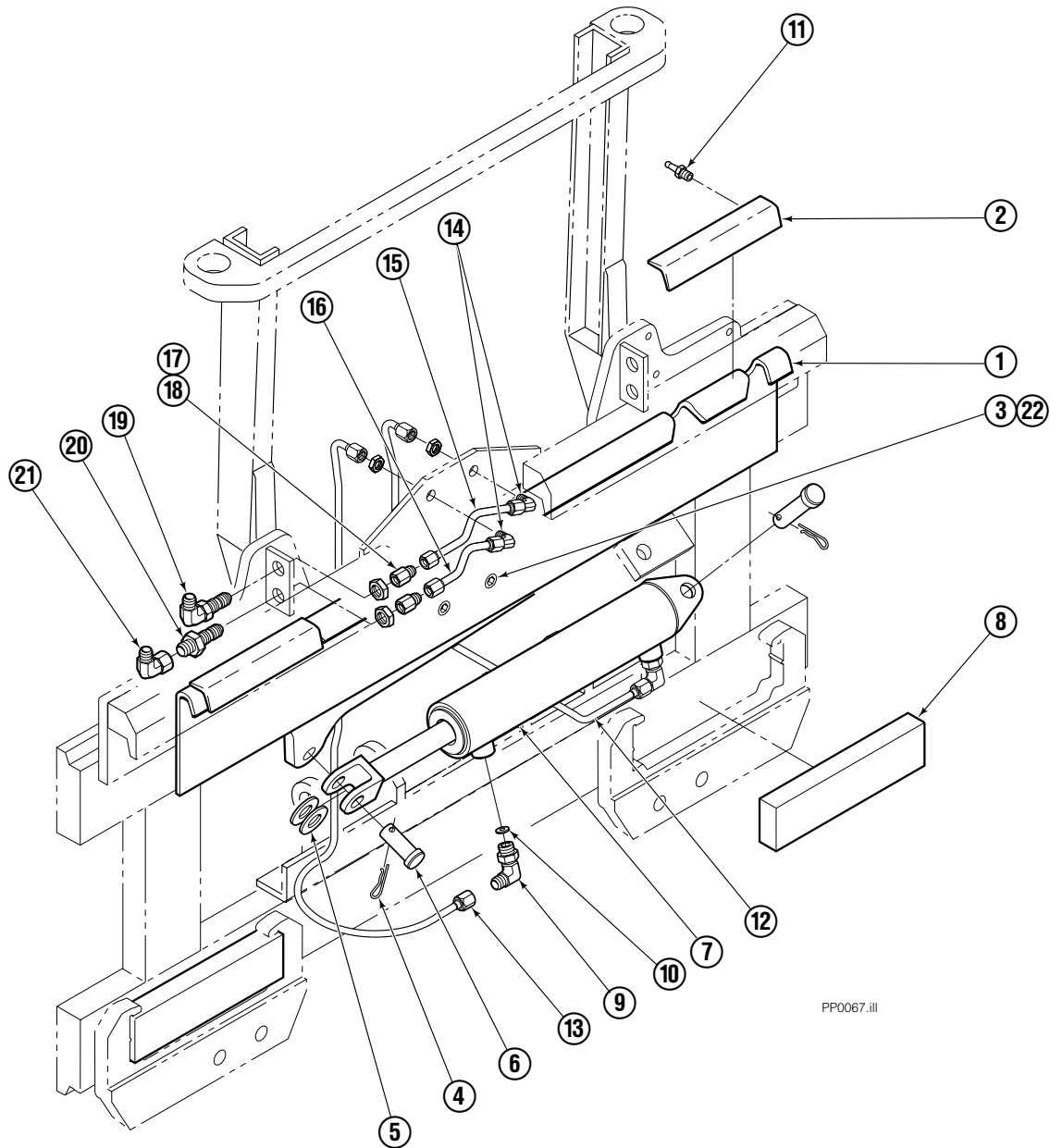
Reference: S-3408.

# Frame Group ITA II



35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		204649	Frame Group
1	1	204651	Frame
2	3	2453	Fitting, 6-6
3	1	686509	Tube
4	1	686510	Tube
5	1	2680	Fitting, 6-6
6	1	2375	Fitting, 6-6
7	2	683001	Washer
8	2	683142	Capscrew

# S/S Mounting Group ITA II



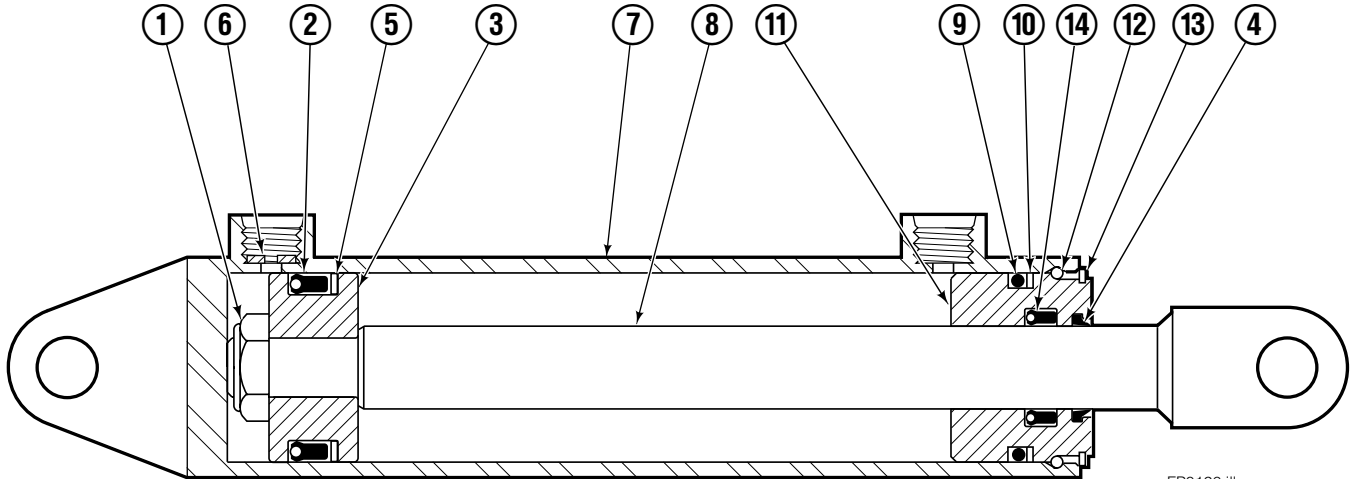
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35E/45E							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		682833	Mounting Group	12	1	686511	Tube
1	1	682554	Anchor Bracket	13	1	686512	Tube
2	2	671165	■ Bearing Segment	14	2	2451	Fitting, 4-4
3	2	768759	Setscrew	15	1	686515	Tube
4	2	6517	Cotter Pin	16	1	686516	Tube
5	2	6234	Washer	17	2	2669	Fitting, 4-6
6	2	678525	Clevis Pin	18	2	2617	Fitting, 6-6
7	1	675548	● Cylinder	19	1	2453	Fitting, 6-6
8	2	682814	Bearing	20	1	2375	Fitting, 6-6
9	2	666984	Fitting, 4-6	21	1	2680	Fitting, 6-6
10	2	675550	Washer	22	2	688387	Jam Nut
11	4	7403	■ Grease Fitting				

■ Included in Bearing Service Kit 671423.

● See Cylinder page for parts breakdown.

# Sideshift Cylinder ITA Class III

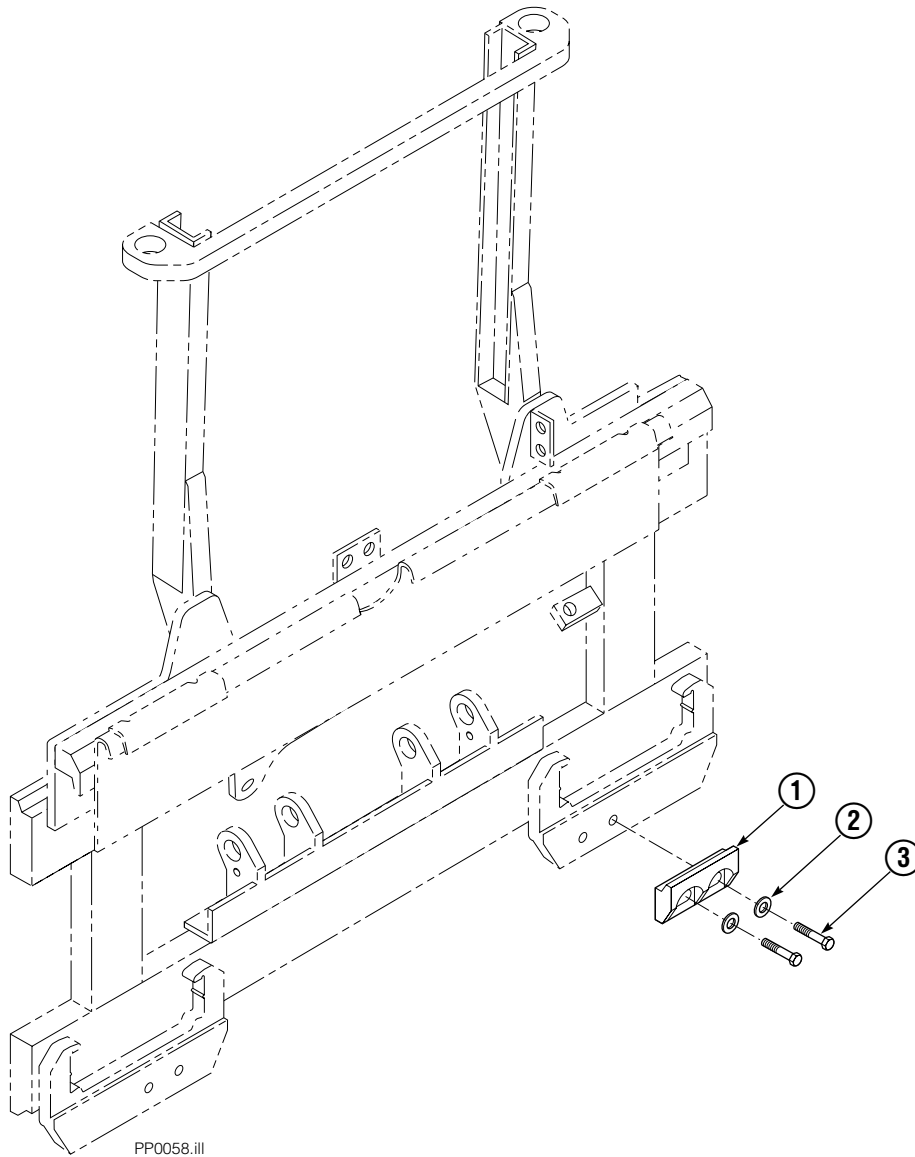


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55E			
REF	QTY	PART NO.	DESCRIPTION
		675548	Cylinder Assembly
1	1	553857	Nut
2	1	662452	■ Seal
3	1	553501	Piston
4	1	636851	■ Wiper
5	1	638247	■ Back-up Ring
6	1	675550	Washer (orifice .085 in.)
7	1	675549	Shell
8	1	553449	Rod
9	1	2785	■ O-Ring
10	1	615128	■ Back-up Ring
11	1	553500	Retainer
12	1	553856	Retaining Ring
13	1	7202	Snap Ring
14	1	641835	■ Seal
		553861	Service Kit

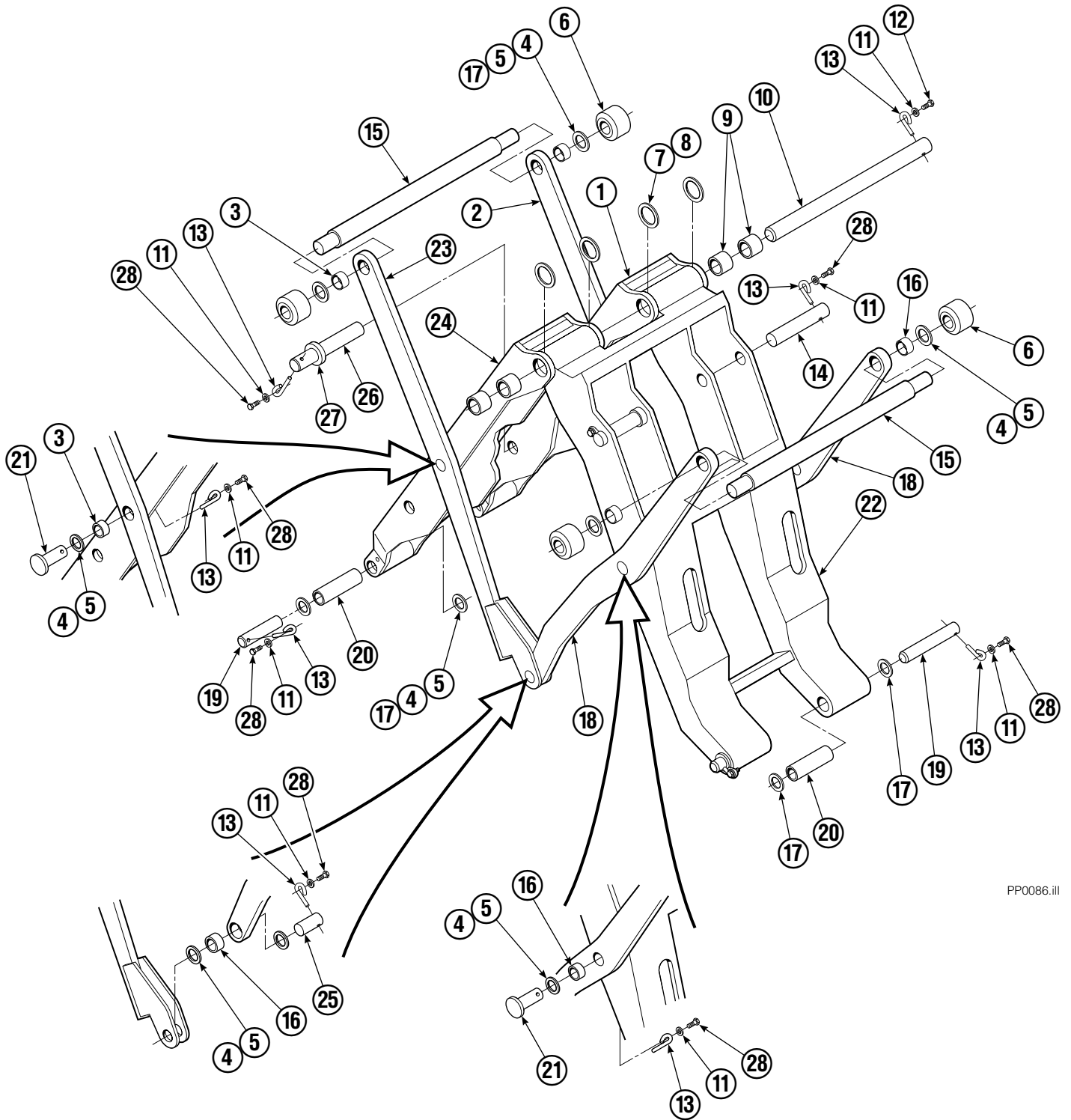
■ Included in Service Kit 553861.

# Bolt-On Lower Hook Group ITA II



REF	QTY	PART NO.	DESCRIPTION
		683178	Lower Hook Group ITA II
1	2	679360	Hook
2	4	667225	Washer
3	4	779010	Capscrew

# Mechanism Group



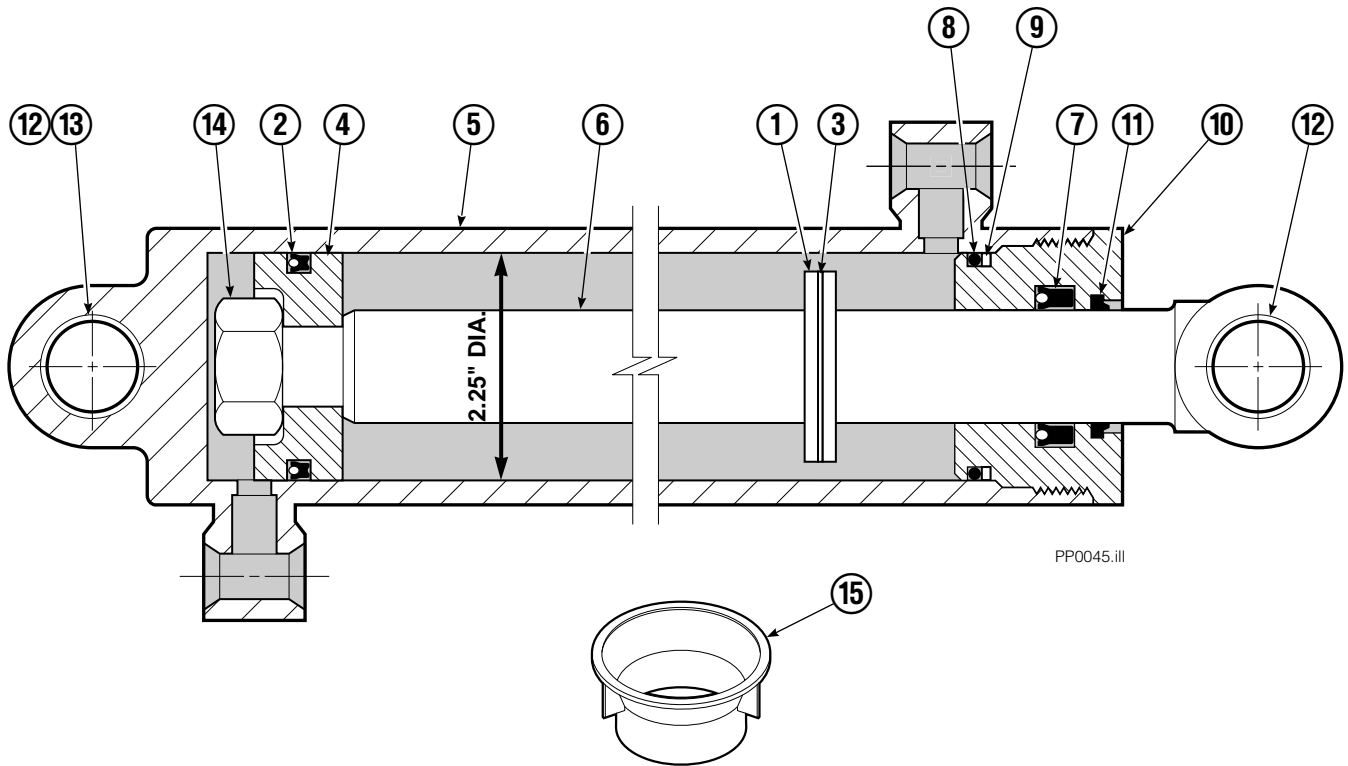
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# Mechanism Group

<b>35E/45E</b>			
<b>REF</b>	<b>QTY</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
		204644	Mechanism Group
1	1	204691	Arm-Inner Secondary R. H.
2	1	204692	Arm-Secondary Outer R. H.
3	4	683154	■ Bushing
4	●	683161	Shim (.030)
5	●	683162	Shim (.060)
6	4	205070	Roller
7	●	683163	Shim (.030)
8	●	683164	Shim (.060)
9	4	683155	■ Bushing
10	1	682821	Pin
11	15	6229	Washer
12	2	685661	Capscrew
13	15	682999	Eye-Pin
14	2	682822	Pin-Head
15	2	205065	Pin
16	6	683153	■ Bushing
17	●	204532	Shim (.12)
18	2	204694	Arm-Outer Primary
19	4	204533	Pin-Frame
20	4	204535	■ Bushing
21	4	204695	Pin
22	1	204604	Arm-Inner Primary
23	1	204693	Arm-Secondary Outer L. H.
24	1	204690	Arm-Inner Secondary L. H.
25	2	204696	Pin-Outer
26	2	682823	Pin-Rod
27	2	683165	Spacer
28	13	767961	Capscrew

- Quantity as required.
- Included in Bushing Service Kit 205075.

# Cylinder



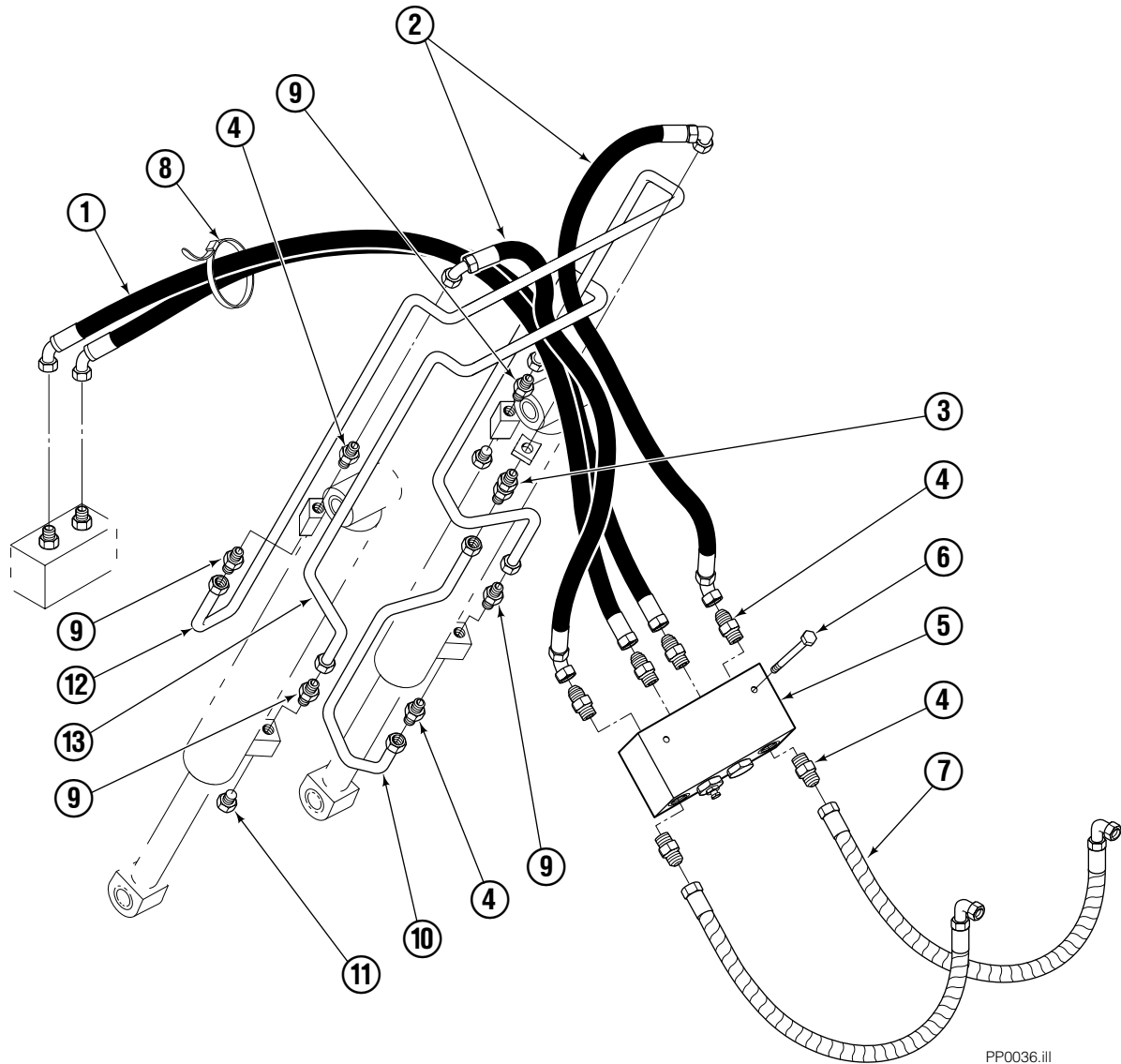
PP0045.iii

REF	QTY	PART NO.	DESCRIPTION
		582636	Cylinder Assembly
1	1	—	Spacer
2	1	564159	■ Seal
3	1	7348	Snap Ring
4	1	564161	Piston
5	1	562717	Shell
6	1	558626	Rod
7	1	662448	■ Seal
8	1	2787	■ O-Ring
9	1	615130	■ Back-Up Ring
10	1	558628	Retainer
11	1	636853	■ Wiper
12	4	559697	Bearing
13	1	559698	Spacer
14	1	678019	Nut
15	1	671048	■ Seal Loader Kit

■ Included in Service Kit 562339.

Reference: S-3424.

# Hydraulic Group



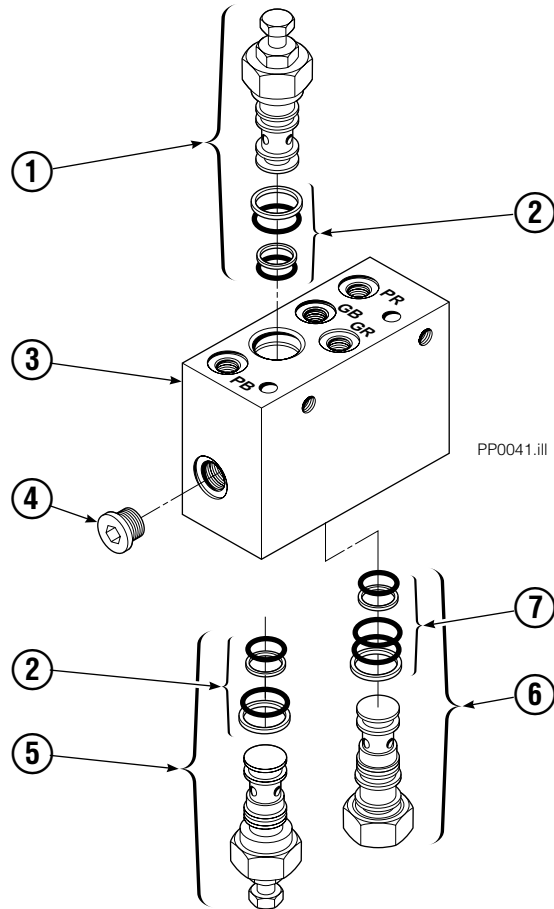
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35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		685828	Hydraulic Group ITA II
1	1	685831	Hose
2	2	683173	Hose
3	1	2375	Fitting, 6-6
4	8	604511	Fitting, 6-6
5	1	682812	■ Valve
6	2	765329	Capscrew, M8x1.25x20-8.8
7	2	685978	Hose ITA II
8	2	684956	Cable tie
9	4	605235	Fitting 5-6
10	1	200647	Tube
11	2	604510	Plug, 6
12	1	200649	Tube
13	1	200648	Tube

■ See Valve page for parts breakdown.

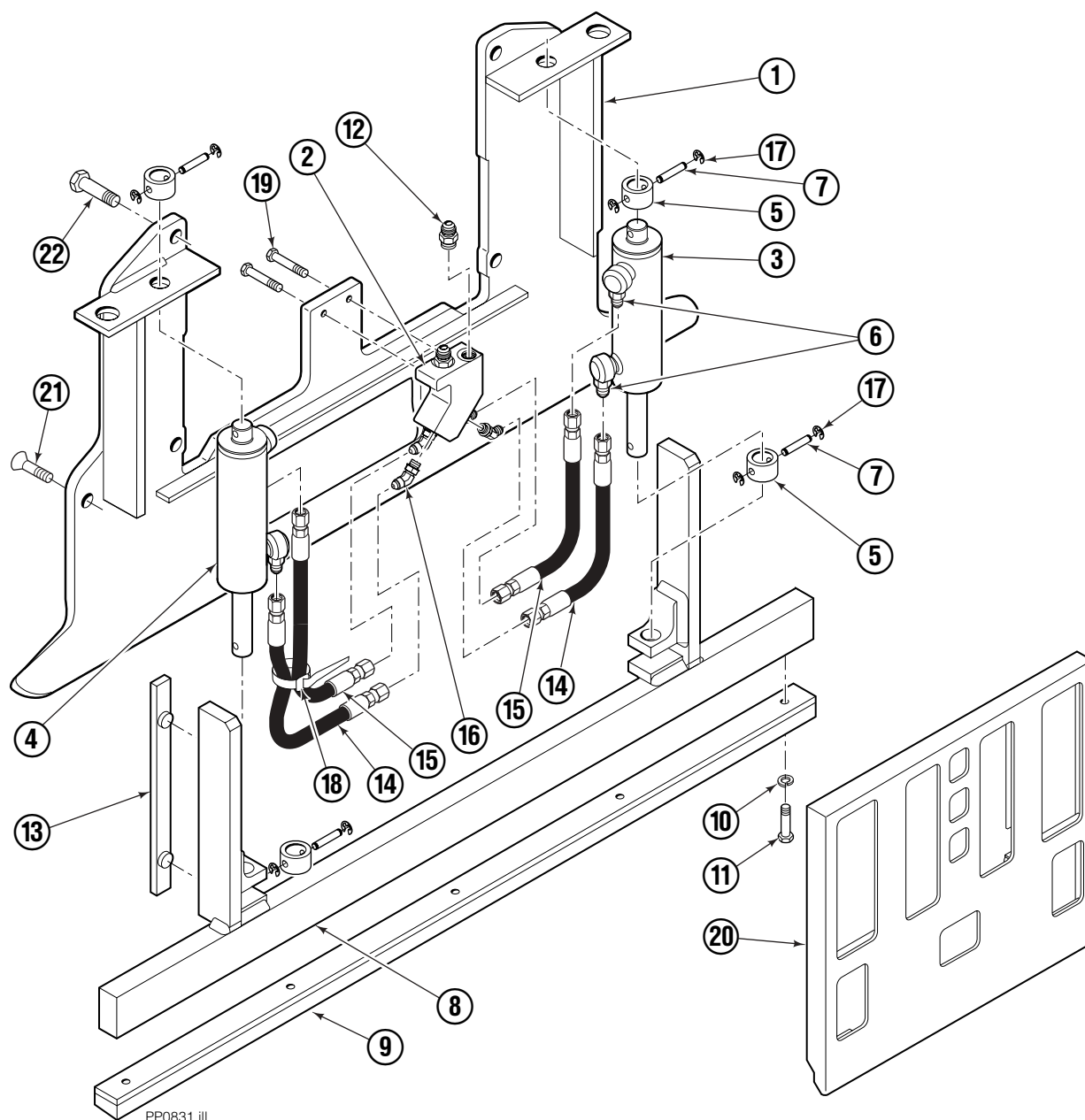
# Valve

## Load Push/Pull



REF	QTY	PART NO.	DESCRIPTION
		682812	Valve Assembly
1	1	677125	Sequence Valve (Retract)
2	2	669597	Service Kit
3	1	682813	Body
4	5	663694	Fitting, 3
5	1	677124	Sequence Valve (Extend)
6	1	659058	Gripper Check Valve
7	1	667516	Service Kit

# Faceplate Group



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## 45E

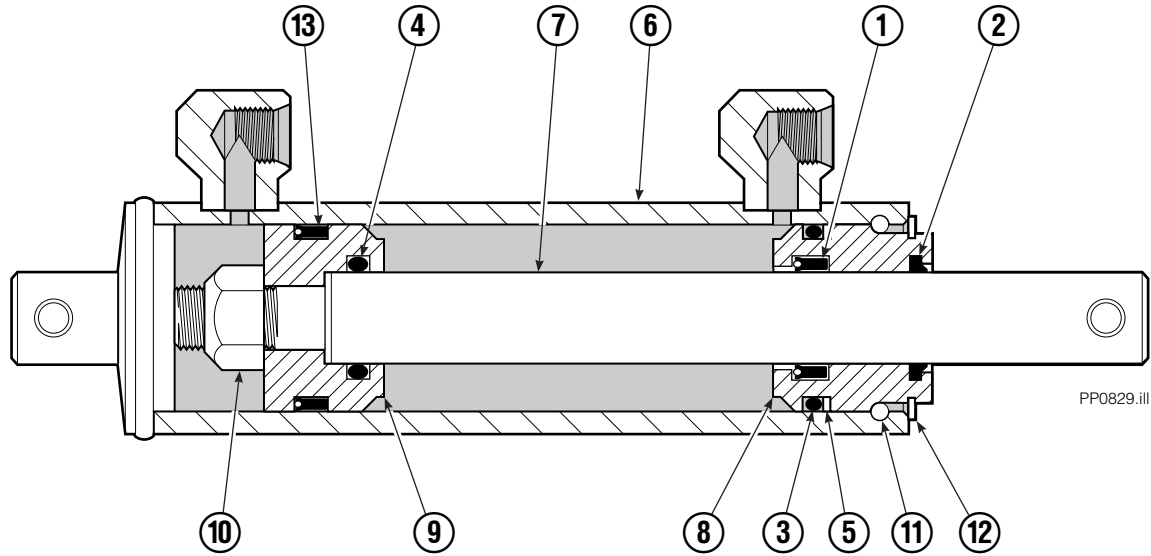
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		6019140	Faceplate Group, 40 x 40 in. ■	11	5	787375	Capscrew, M8 x 20
		6020440	Gripper Jaw Assembly ●	12	2	604511	Fitting, 6-6
1	1	206396	Gripper Jaw	13	2	686573	Bearing
2	1	6002134	Valve	14	2	6002138	Hose, 315 mm
3	1	6020444	Gripper Cylinder, LH ◆	15	2	6002139	Hose, 450 mm
4	1	6020443	Gripper Cylinder, RH ◆	16	4	617918	Fitting, 4-4
5	4	6020462	Collar	17	8	669894	Retaining Ring
6	4	617915	Fitting, 4-4	18	4	684956	Wire Tie
7	4	6014089	Pin	19	2	787373	Capscrew, M8 x 20
8	1	6002135	Gripper Bar	20	1	6002142	Faceplate, 40 x 40 in. ■
9	1	672712	Gripper Pad	21	2	768714	Capscrew, M16 x 60
10	5	680253	Lockwasher, M8	22	4	225346	Capscrew, M16 x 60

■ Width x height.

◆ See Gripper Cylinder page for parts breakdown.

● Includes items 1-19.

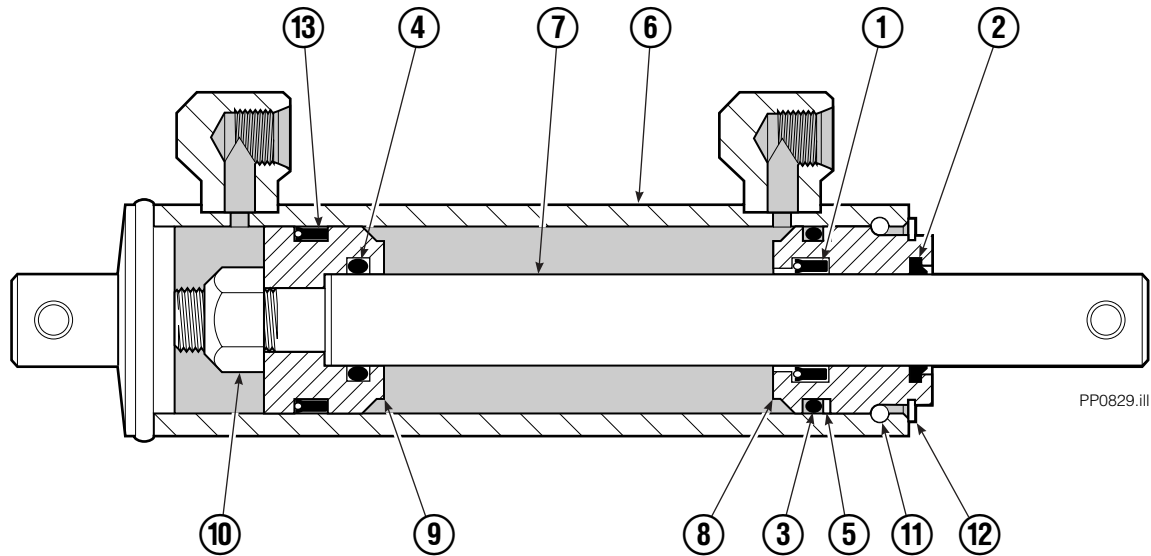
# Gripper Cylinder Left Hand



REF	QTY	PART NO.	DESCRIPTION
		6020444	Gripper Cylinder - LH
1	1	646540	▼ Seal
2	1	636850	▼ Wiper
3	1	2718	▼ O-Ring
4	1	2710	▼ O-Ring
5	1	615122	▼ Back-Up Ring
6	1	6020453	Shell
7	1	6020461	Rod
8	1	685664	Retainer
9	1	685665	Piston
10	1	563462	Nut
11	1	563916	Ring
12	1	3137	Ring
13	1	663728	▼ Piston Seal

▼ Included in Service Kit 684827.

# Gripper Cylinder Right Hand



REF	QTY	PART NO.	DESCRIPTION
		6020443	Gripper Cylinder – RH
1	1	646540	▼ Seal
2	1	636850	▼ Wiper
3	1	2718	▼ O-Ring
4	1	2710	▼ O-Ring
5	1	615122	▼ Back-Up Ring
6	1	6020452	Shell
7	1	6020461	Rod
8	1	685664	Retainer
9	1	685665	Piston
10	1	563462	Nut
11	1	563916	Ring
12	1	3137	Ring
13	1	663728	▼ Piston Seal

▼ Included in Service Kit 684827.



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