



# Parts Manual

---

Model Push-Pull

Serial Number 45E-PS-102

---

**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

**Internet:** [www.cascorp.com](http://www.cascorp.com)

# 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)



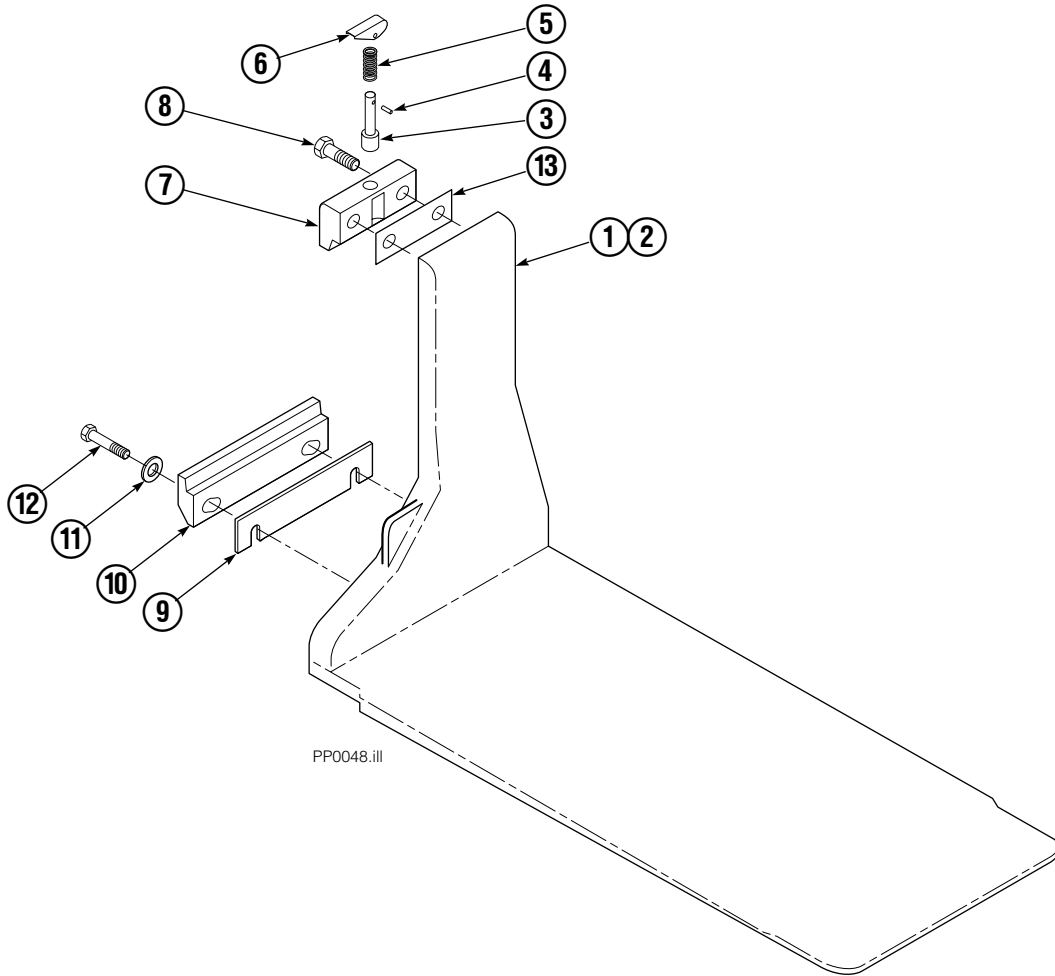
Part No. 679059  
(1 Place if equipped with Quick Change Hooks)



Nameplate

PP0060.iii

# Platens



PP0048.ill

**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
		685766	Platen Group
1	1	685767	Platen L. H.
2	1	685768	Platen R. H.
3	2	622907	Pin
4	2	8007	Rivet
5	2	622908	Spring
6	2	622897	Handle
7	2	688386	Upper Hook Assembly ■
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)

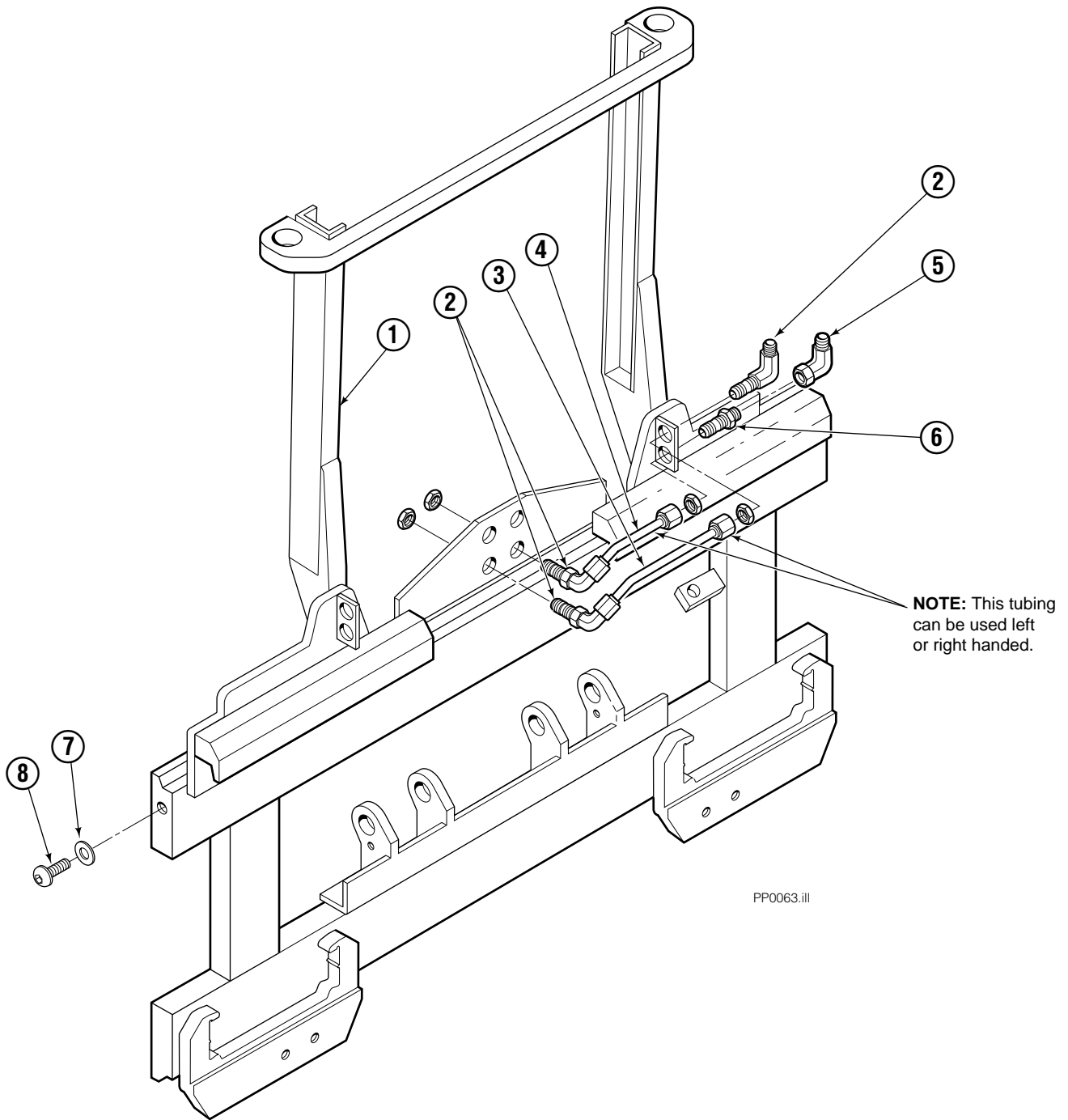
★ As required.

● As required (2 maximum)

■ Items 3 through 6 are included in Upper Hook Assembly 688386.

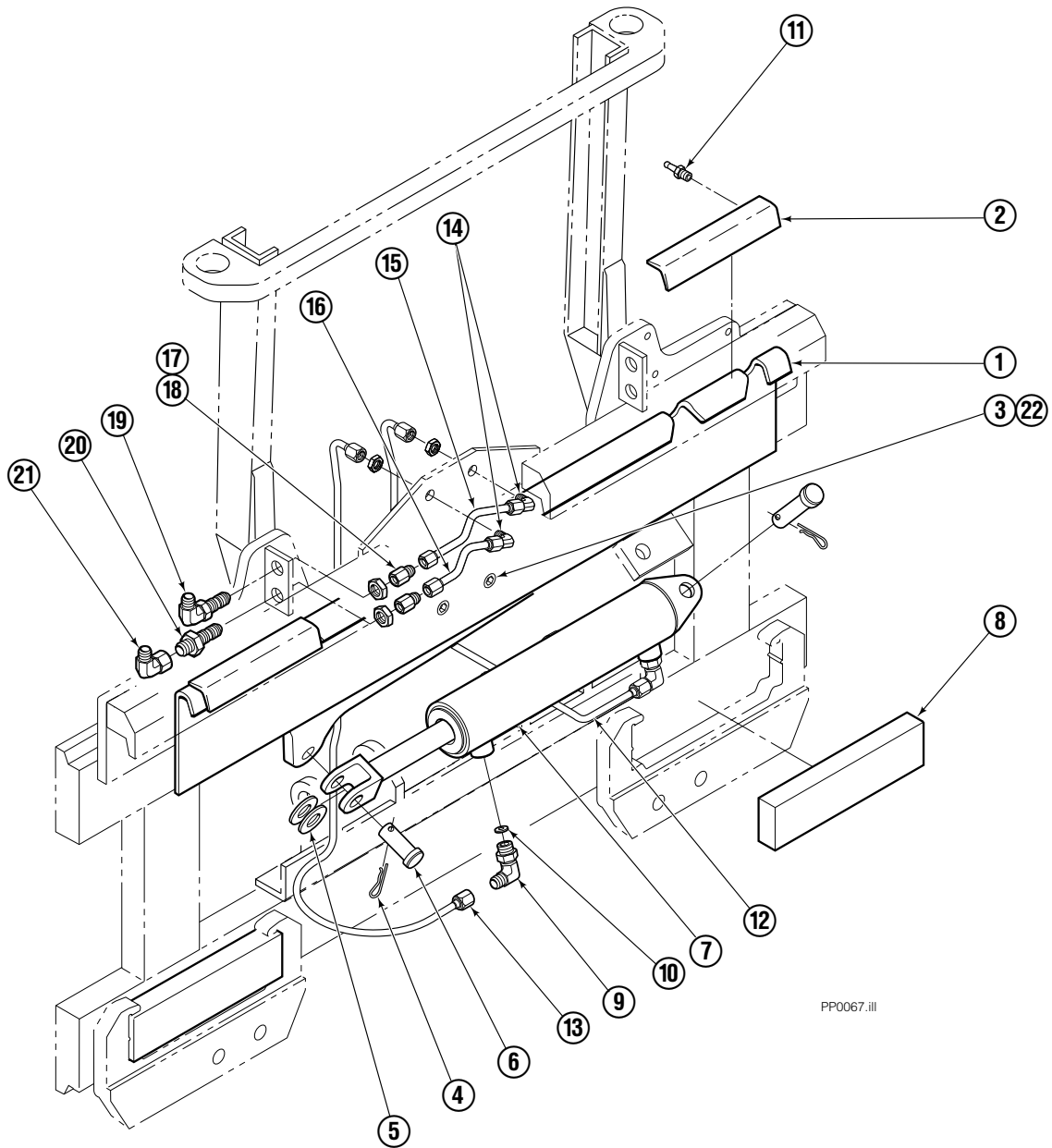
Reference: S-3408.

# Frame Group ITA II



35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		682828	Frame Group ITA II
1	1	682604	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



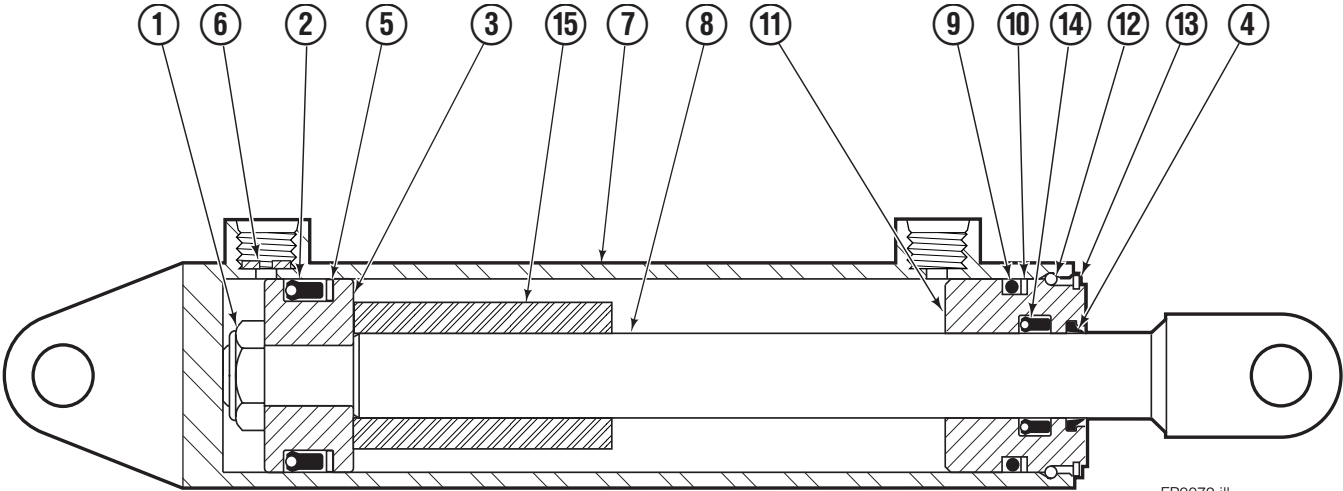
PP0067.iii

## 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

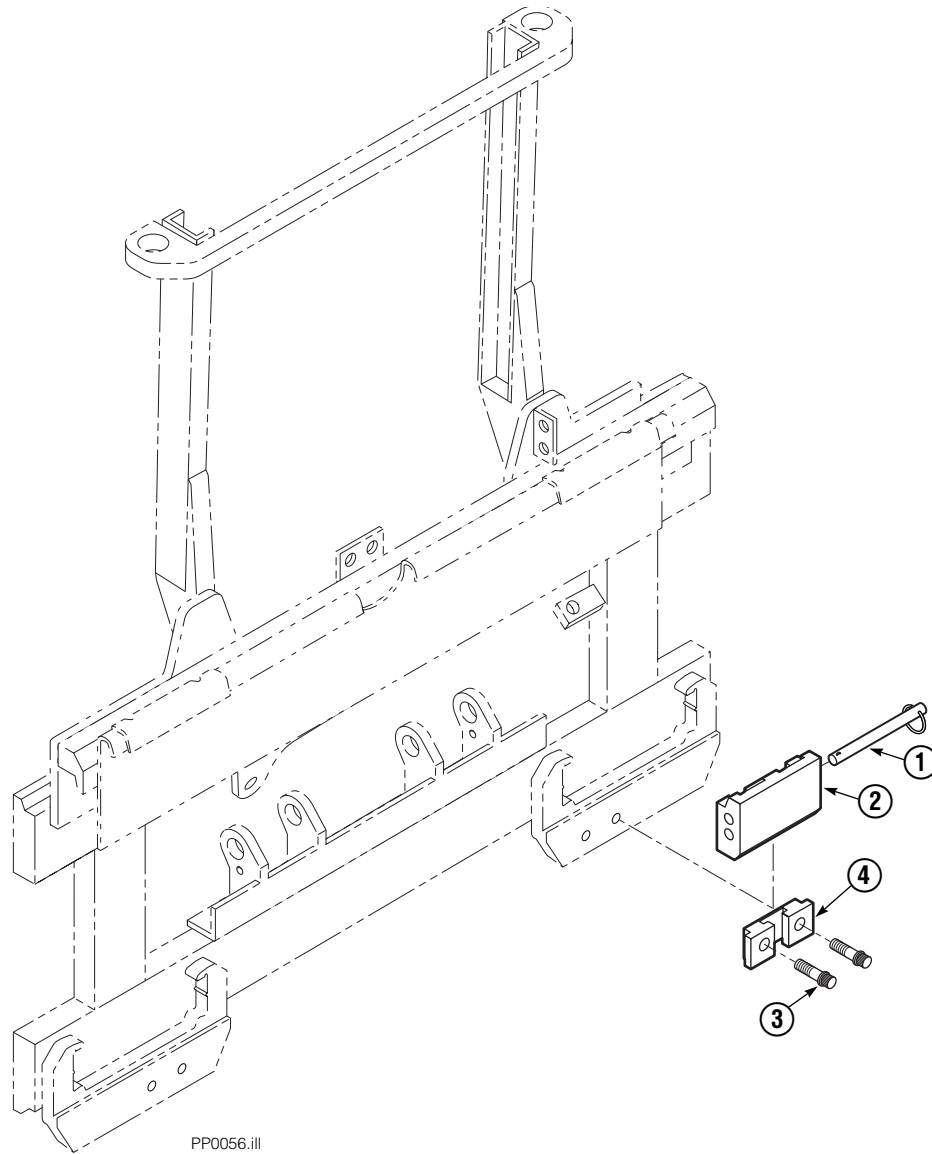


FP0079.iii

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)
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
15	1	---	Spacer
		553861	Service Kit

■ Included in Service Kit 553861.

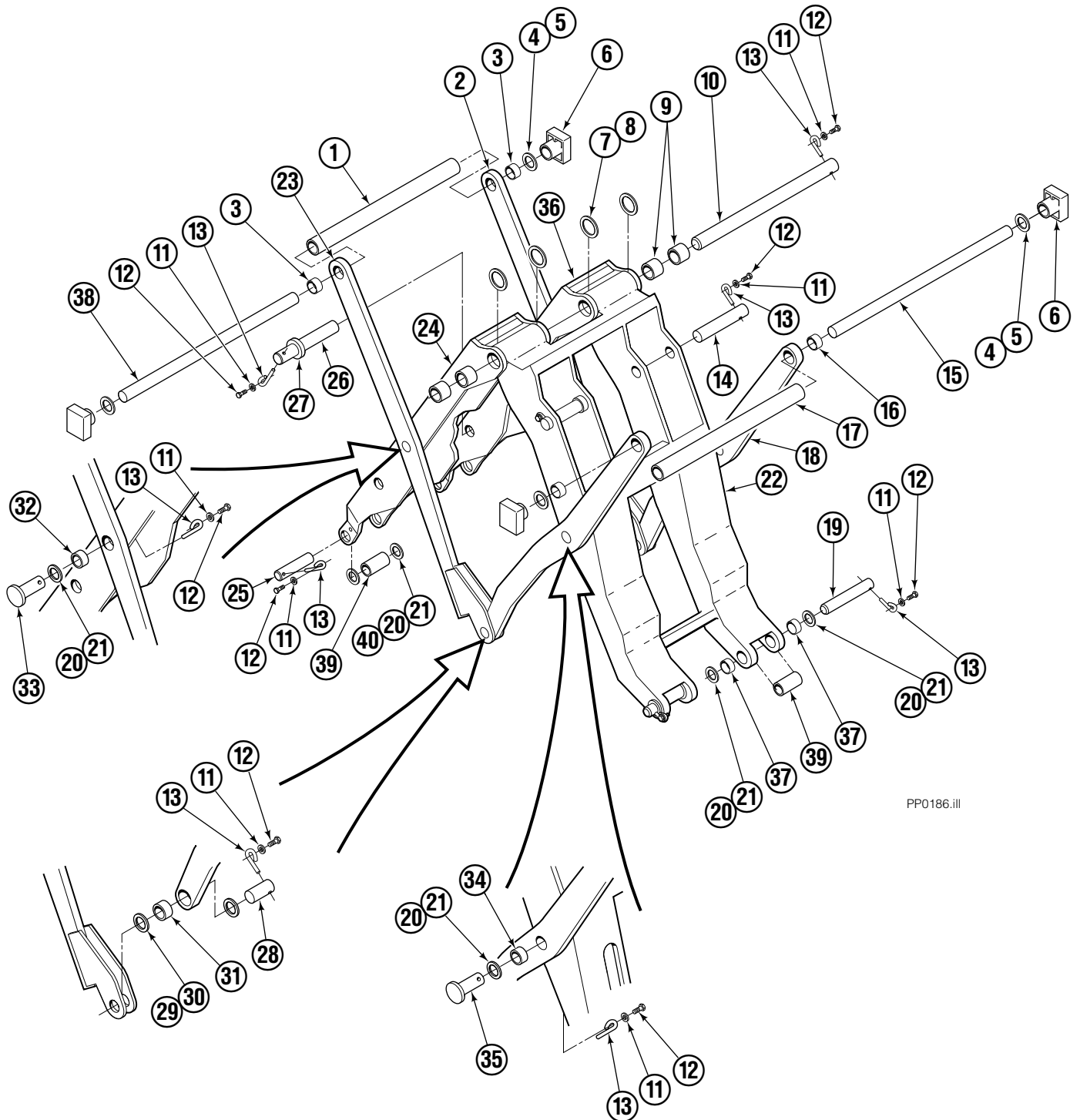
# Quick-Change Lower Hook Group ITA II



PP0056.iii

35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		683179	Lower Hook Group ITA II
1	2	678832	Pin
2	2	675514	Hook
3	4	683182	Capscrew
4	2	675515	Guide

# Mechanism Group



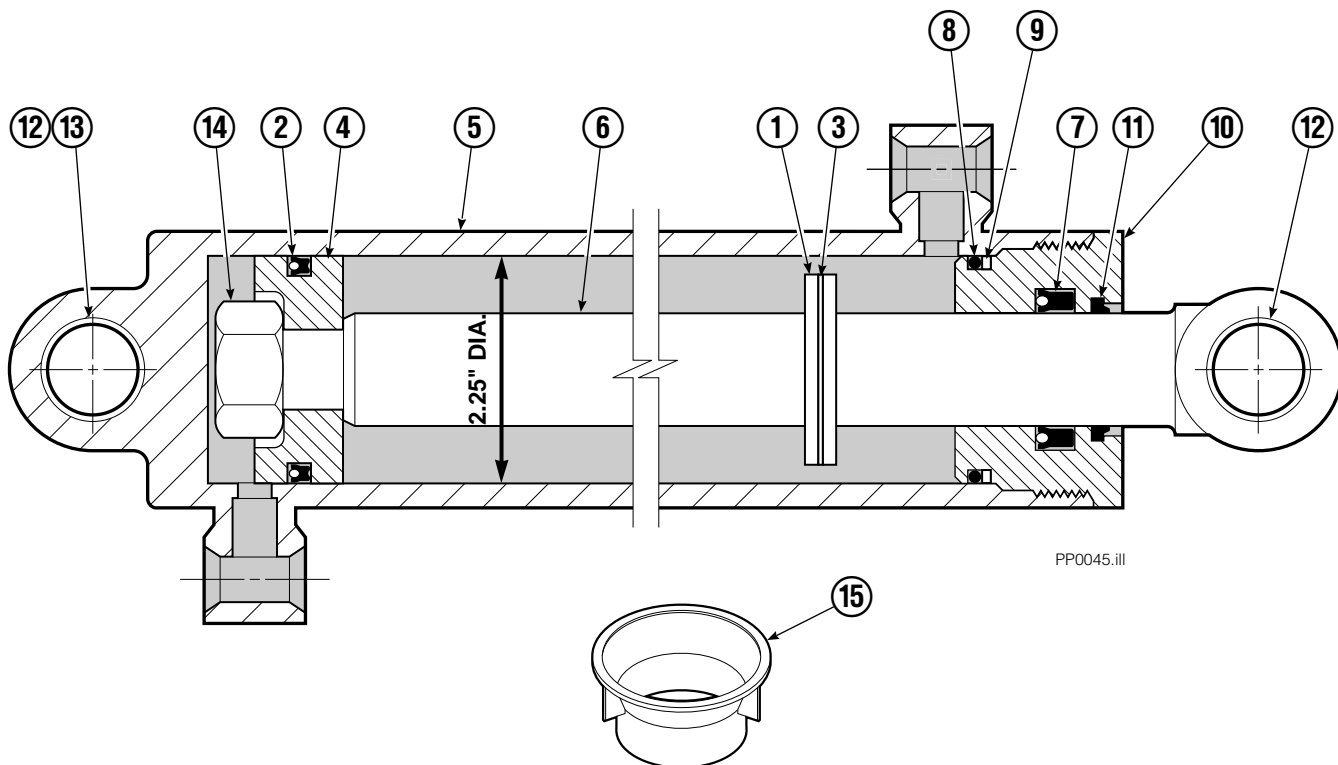
PP0186.iii

# Mechanism Group

35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		682829	Mechanism Group
1	1	682818	Tube
2	1	683000	Arm-Secondary Outer R. H.
3	2	683154	Bushing
4	●	683161	Shim (.030)
5	●	683162	Shim (.060)
6	4	682866	Bearing
6	4	688396	Bearing - Heavy Duty
7	●	683163	Shim (.030)
8	●	683164	Shim (.060)
9	4	683155	Bushing
10	1	682821	Pin
11	15	6229	Washer
12	15	685661	Capscrew, M8x1.25x14-8.8
13	15	682999	Eye-Pin
14	2	682822	Pin-Head
15	1	682815	Pin
16	2	683153	Bushing
17	1	682817	Tube
18	2	682543	Arm-Outer Primary
19	2	682819	Pin-Frame
20	●	683159	Shim
21	●	683160	Shim
22	1	682598	Arm-Inner Primary
23	1	682540	Arm-Secondary Outer L. H.
24	1	682588	Arm-Inner Secondary L. H.
25	2	682820	Pin-Faceplate
26	2	682823	Pin-Rod
27	2	683165	Spacer
28	2	682824	Pin-Outer
29	●	683158	Shim
30	●	683157	Shim
31	2	683149	Bushing
32	2	683152	Bushing
33	2	682826	Pin-Secondary Outer
34	2	683151	Bushing
35	2	682825	Pin-Primary Outer
36	1	682589	Arm-Inner Secondary R.H.
37	4	683150	Bushing
38	1	682816	Pin
39	4	685127	Spacer
40	●	685838	Shim

● Quantity as required.

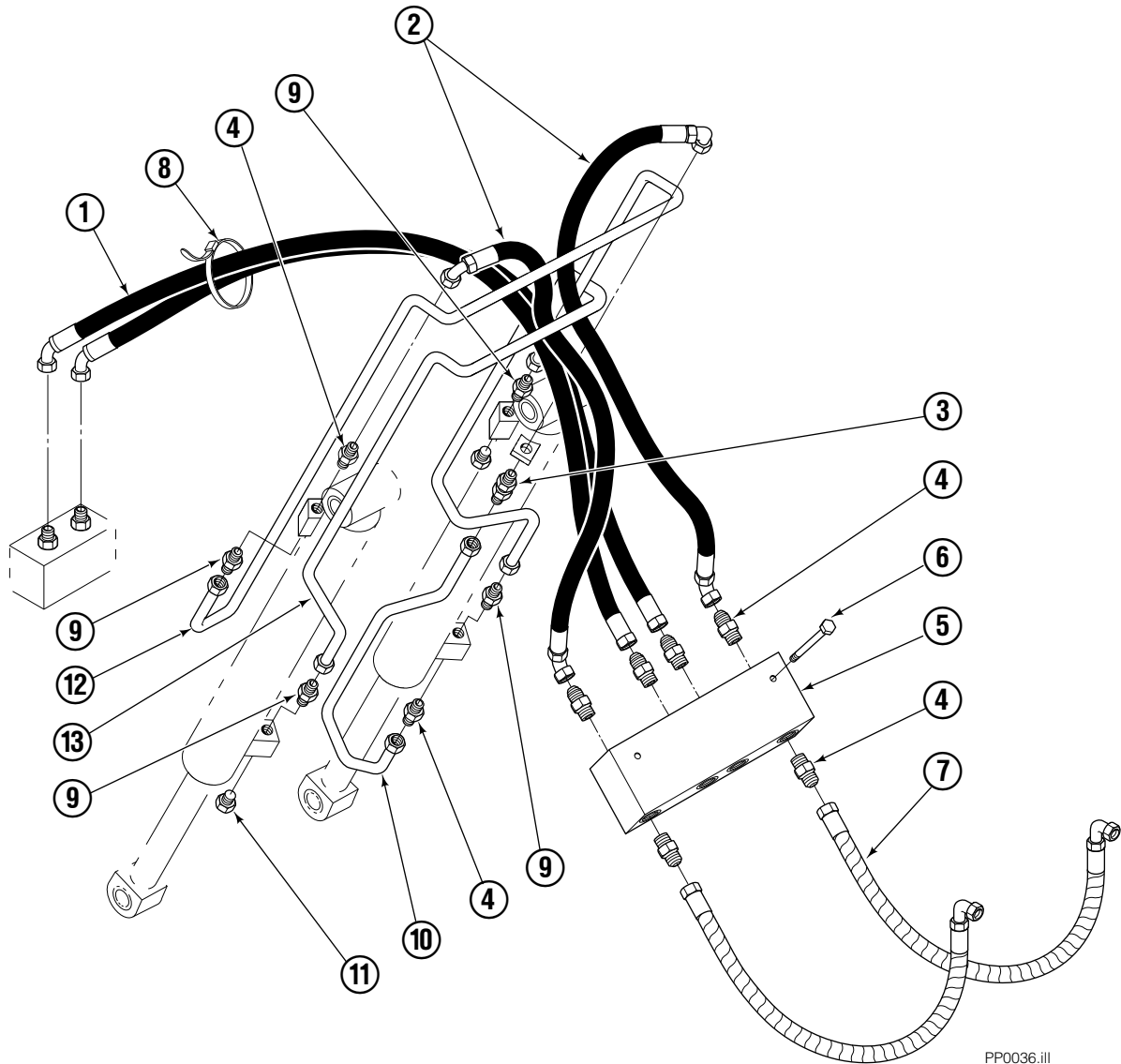
# Cylinder



REF	QTY	PART NO.	DESCRIPTION
		580240	Cylinder Assembly
1	1	---	Spacer
2	1	661649	Seal ■
3	1	7348	Snap Ring
4	1	558623	Piston
5	1	558624	Shell
6	1	558626	Rod
7	1	559705	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	553717	Nut
15	1	672905	Seal Loader Kit ■

■ Included in Service Kit 559521.

# Hydraulic Group



PP0036.ill

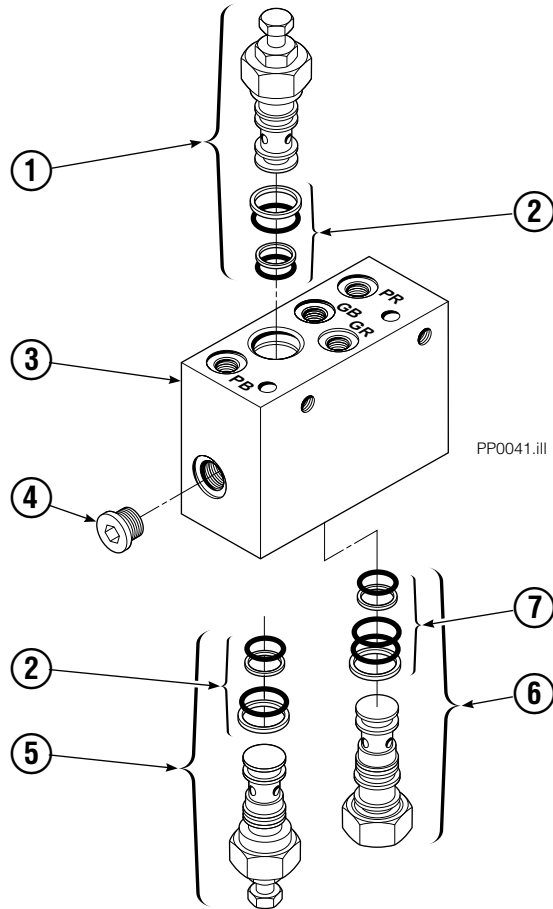
## 35E/45E

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.

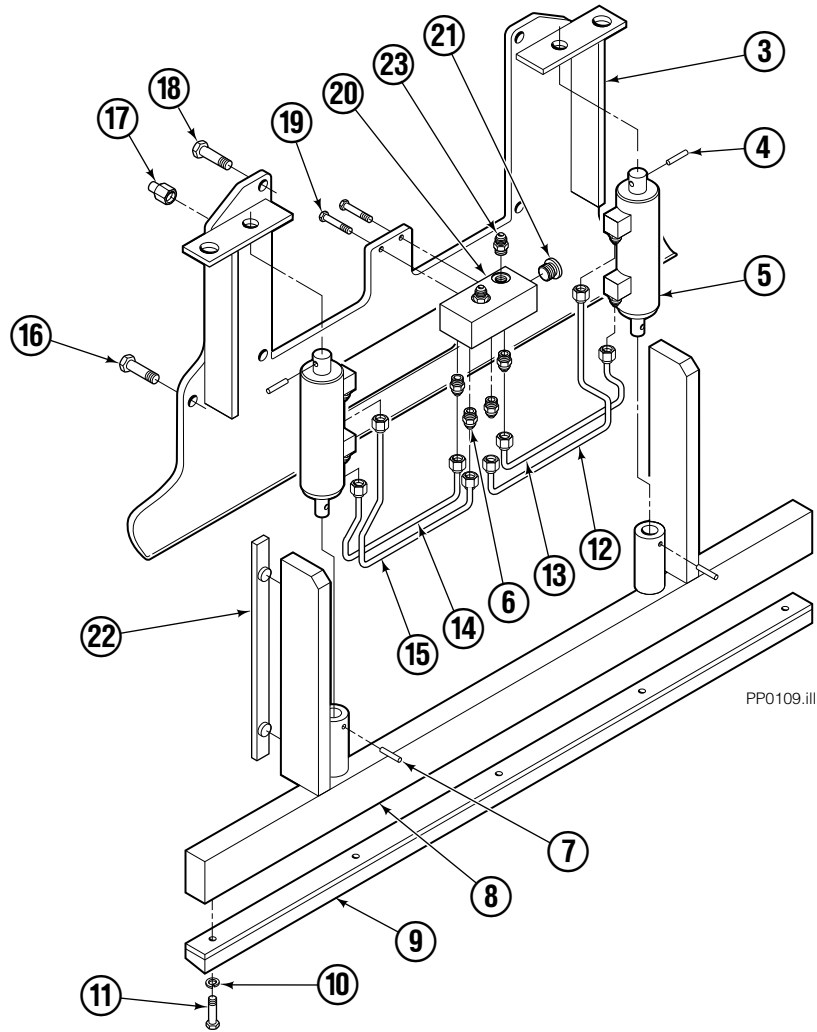
# Valve

## Load Push/Pull



35E/45E			
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

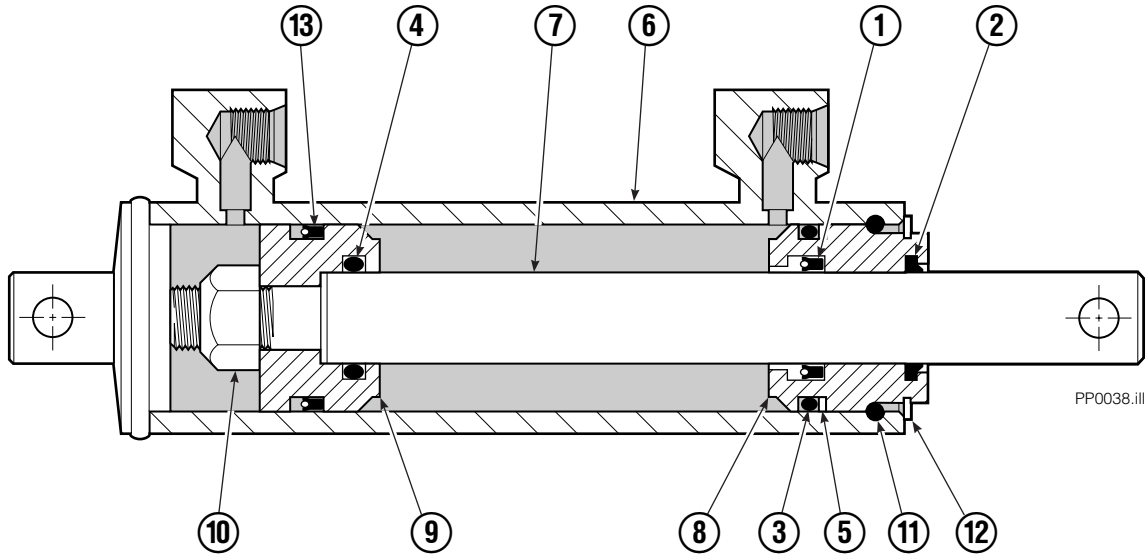


PP0109.ill

35E/45E							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		685667	Faceplate Group 40" x 40" ■	12	1	682847	Tube
		686570	Gripper Jaw Assembly ●	13	1	682846	Tube
1	1	682591	Faceplate 40" x 40" ■	14	1	682848	Tube
2	4	683150	Bushing	15	1	682849	Tube
3	1	682583	Gripper Jaw	16	2	768710	Capscrew
4	2	673385	Drive Pin	17	4	682850	Stop
5	2	682844	Gripper Cylinder ▼	18	4	779010	Capscrew
6	8	617915	Fitting, 4-4	19	2	763166	Capscrew, M8x1,25x25-8.8
7	2	200877	Drive Pin	20	1	685832	Junction Block
8	1	686571	Gripper Bar	21	2	609234	Plug, 4
9	1	672712	Gripper Pad	22	2	686573	Bearing
10	5	6444	Lockwasher	23	2	604511	Fitting, 6-6
11	5	768794	Capscrew, M8x1,25x20-8.8				

- Width x height.
- Includes items 2 through 20.
- ▼ See Gripper Cylinder page for parts breakdown.

# Gripper Cylinder



PP0038.III

35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		682844	Gripper Cylinder
▼ 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	685662	Shell
7	1	685663	Rod
8	1	685664	Retainer
9	1	685665	Piston
10	1	563462	Nut
11	1	563916	Ring
12	1	684284	Snap Ring
▼ 13	1	663728	Piston Seal

▼ Included in Service Kit 684827.

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

**Cascade Corporation**  
2501 Sheridan Avenue  
Springfield, OH 45505  
Tel: 888-CASCADE (227-2233)  
FAX: 888-329-0234  
www.cascorp.com

**Cascade Canada Inc.**  
5570 Timberlea Blvd.  
Mississauga, Ontario  
Canada L4W-4M6  
Tel: 905-629-7777  
FAX: 905-629-7785

**Cascade GmbH**  
D-41199 Monchengladbach  
Klosterhofweg 52  
Germany  
Tel: 21-66-602091  
FAX: 21-66-680947

**Cascade Finland**  
01370 Vantas  
Finland  
Tel: 358-0-836-1925  
FAX: 358-0-836-1935

**Cascade N.V.  
European Headquarters**  
P.O. Box 3009  
1300 El Almere  
Damsluisweg 56  
1332 ED Almere  
The Netherlands  
Tel: 31-36-5492911  
FAX: 31-36-5492964

**Cascade N.V.  
Benelux Sales and Service**  
P.O. Box 3009  
1300 El Almere  
Damsluisweg 56  
1332 ED Almere  
The Netherlands  
Tel: 31-36-5492950  
FAX: 31-36-5492974

**Cascade (UK) Ltd.**  
15, Orgreave Crescent  
Dore House Industrial Estate  
Handsworth  
Sheffield S13 9NQ  
England  
Tel: 742-697524  
FAX: 742-695121

**Cascade Scandinavia  
Hydraulik A.B.**  
Muskötgatan 19, E8-9  
S25466 Helsingborg  
Sweden  
Tel: 42-151135  
FAX: 42-152997

**Cascade Norway**  
Østerliveien 37A  
1153 Oslo  
Norway  
Tel: 47-22-743160  
FAX: 47-22-743157

**Cascade France S.A.R.L.**  
11, Rue Jean Charcot  
Zone Industrielle Sud or  
B.P. 22  
91421 Morangis Cedex  
France  
Tel: 1- 64547501  
FAX: 1-9790584

**Cascade Hispania S.A.**  
Avenida De La Fabregada, 7  
Hospitalet De Llobregat  
Barcelona  
Spain  
Tel: 3-335-5158  
FAX: 3-335-4756

**Cascade Japan Ltd.**  
5-5-41,  
Torikai Kami  
Settsu, Osaka  
Japan, 566  
Tel: 81-726-53-3490  
FAX: 81-726-53-3497

**Cascade Korea**  
Room 508, Pum Yang Bldg.  
750-14, Bang Bac-Dong  
Se-Cho Ku, Seoul  
Korea  
Tel: 2599-7131 ext. 512  
FAX: 2533-8089

**HYCO-Cascade Pty. Ltd.**  
1445 Ipswich Road  
Rocklea,  
Queensland 4107  
Australia  
Tel: 3-274-2722  
FAX: 3-274-3456

**HYCO-Cascade (NZ) Ltd.**  
15 Ra Ora Drive, East Tamaki  
P.O. Box 38-440  
Howick, Auckland  
New Zealand  
Tel: 9-273-9136  
FAX: 9-273-9137

**Cascade (Africa) Pty. Ltd.**  
P.O. Box 625, Isando 1600  
60A Steel Road  
Sparton, Kempton Park  
South Africa  
Tel: 975-9240  
FAX: 394-1147

**Cascade-Xiamen**  
Wanshan No. 1 Workshop  
Huli Road  
Xiamen 361006  
Fujian, PRC  
Tel: 592-562-4600  
FAX: 592-562-4671

**Cascade (Singapore)  
Trading Co.**  
Four Seasons Park  
Autumn Block - Apt. 1802  
12 Cascaden Walk  
Singapore  
Tel: 65-834-1935  
FAX: 65-834-1936

