



Parts Manual

Model Push-Pull

Serial Number 45E-PPS-194

cascade[®]

For Technical Assistance and to Order Parts . . .

Call: 1-800-CASCADE or 503-669-6300

OR

Write: Cascade Corporation, P.O. Box 20187, Portland, OR 97294-0187

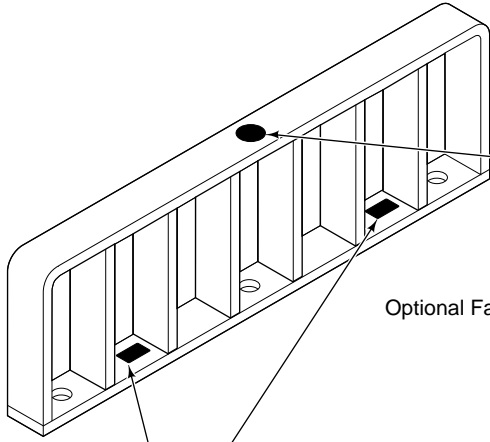
Publications



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



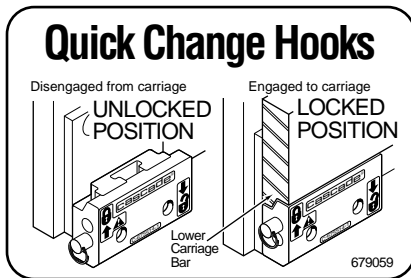
Part No. 679150
(1 Place & 1 optional)



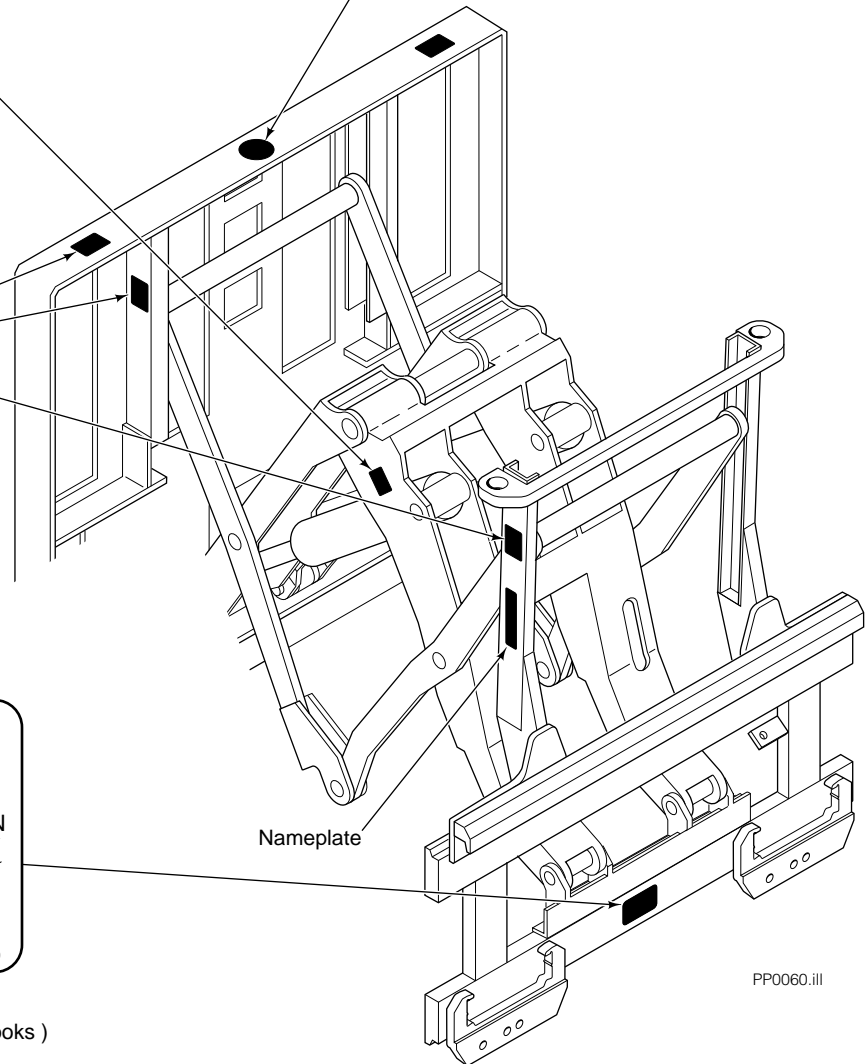
Part No. 665595
(2 Place & 2 optional)



Part No. 656038
(6 Places)

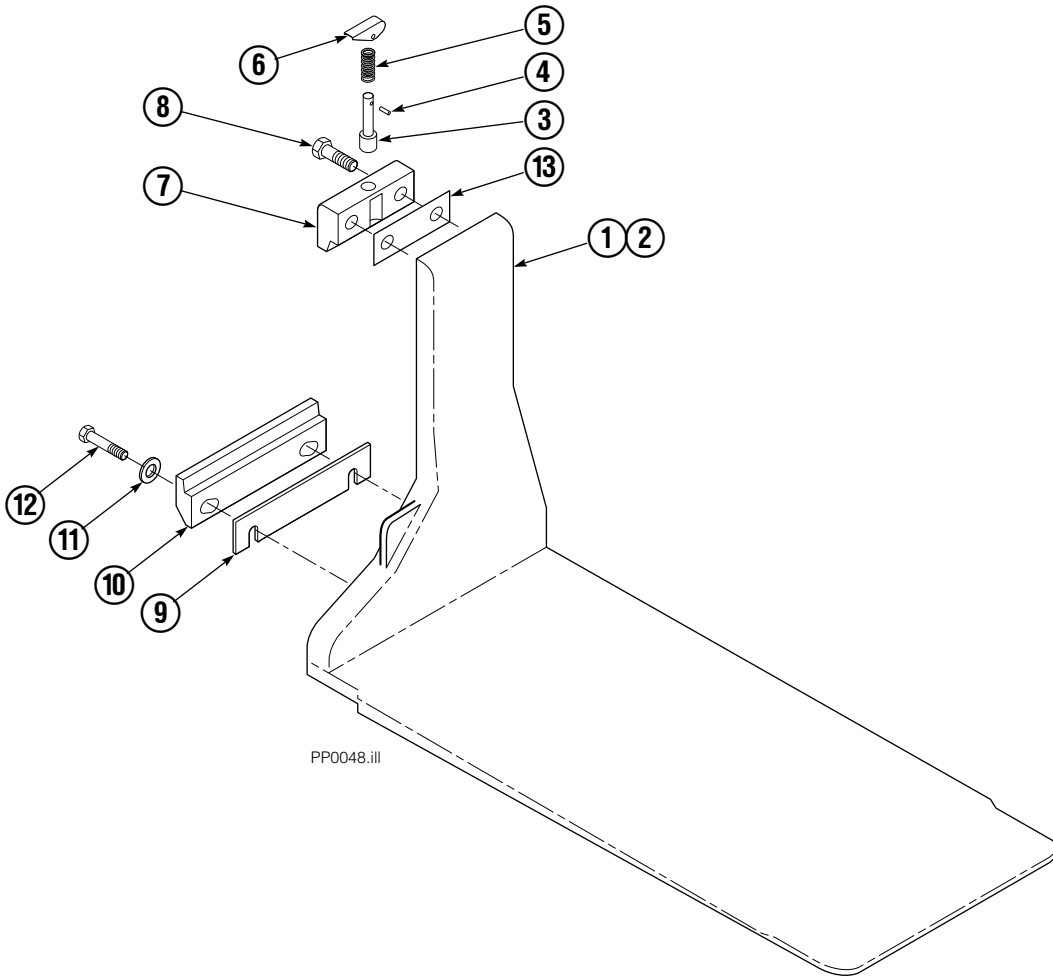


Part No. 679059
(1 Place if equipped with Quick Change Hooks)



PP0060.iii

Platens



PP0048.ill

REF	QTY	PART NO.	DESCRIPTION
		6007803	Platen Group
1	1	6008057	Platen L. H.
2	1	6008055	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	685534	Capscrew
9	★	206969	Shim (.030)
10	2	682851	Lower Hook
11	4	667225	Washer
12	4	779010	Capscrew
13	●	688379	Shim (.060)

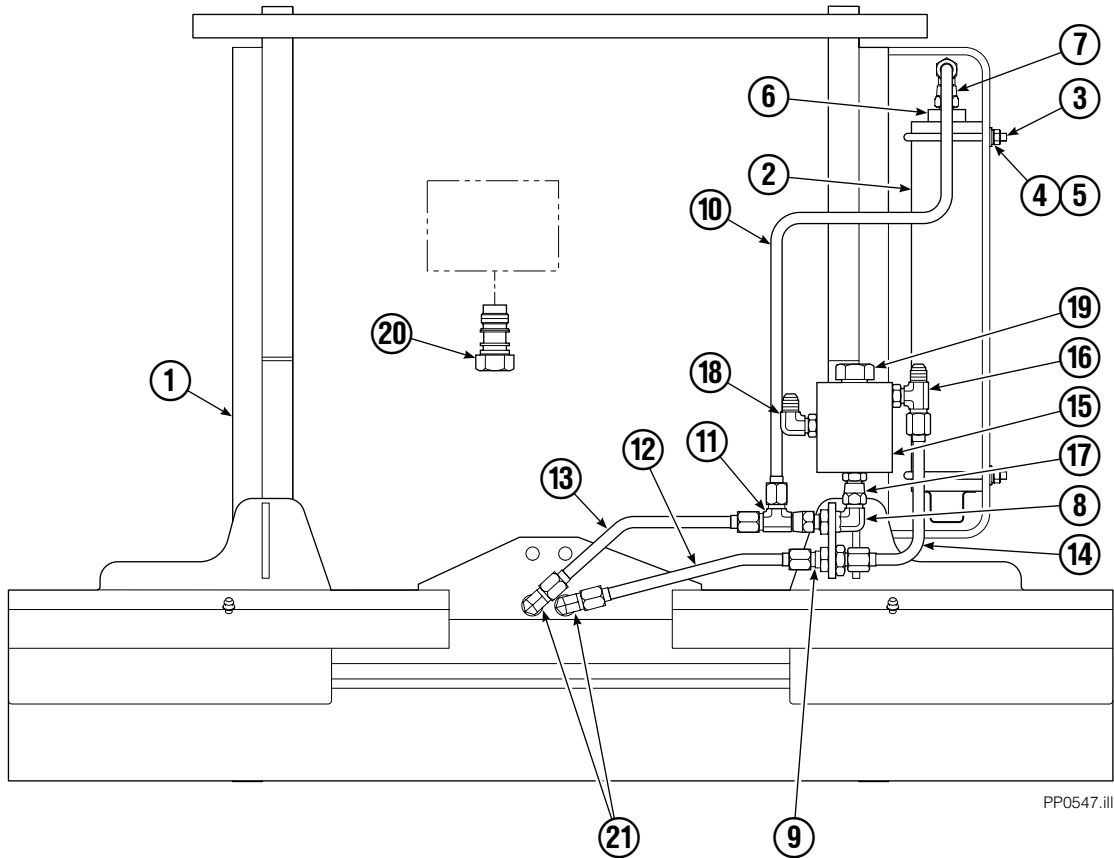
★ As required.

● As required (2 maximum)

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

Ref: S-4001

Frame Group ITA II



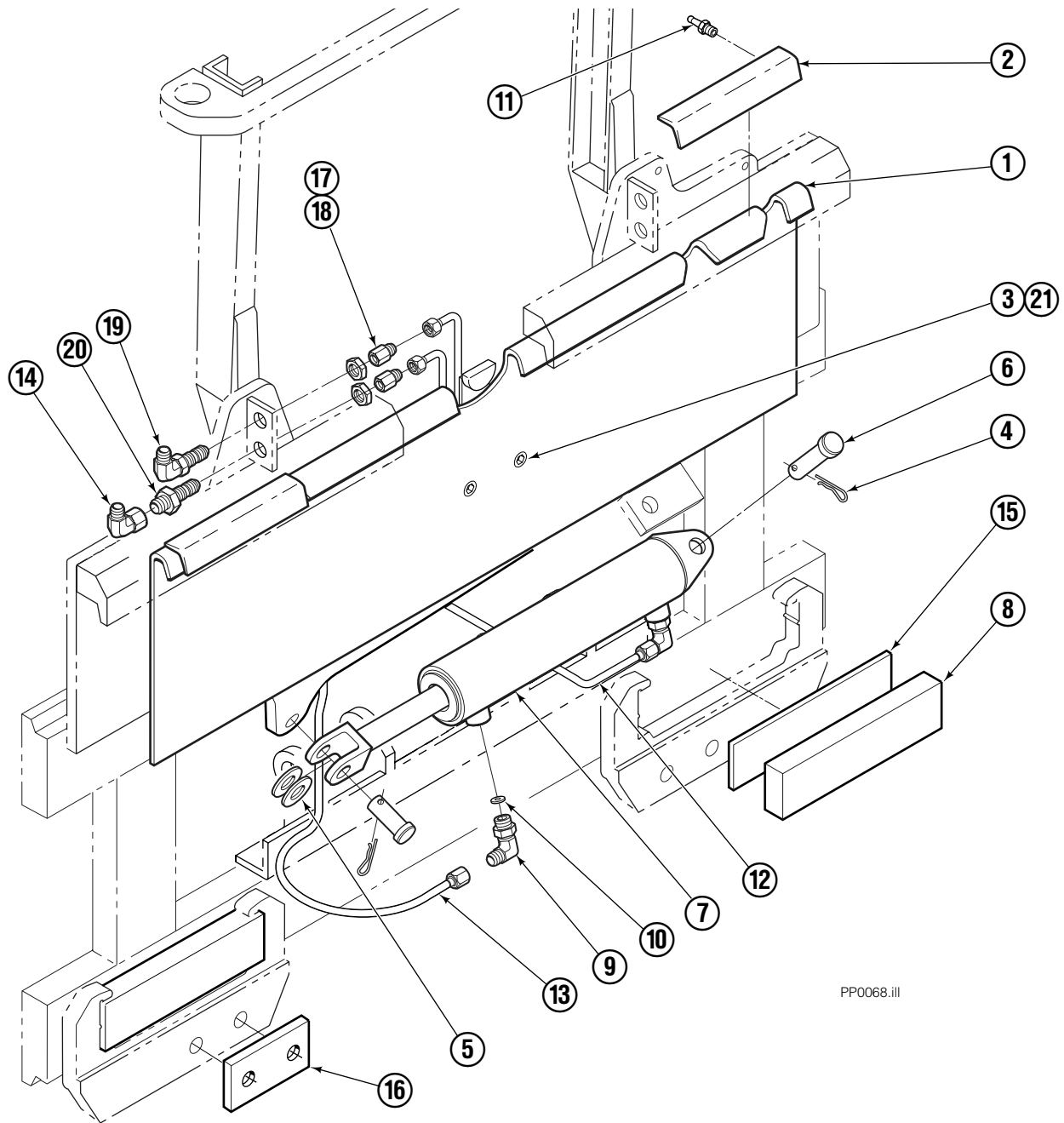
PP0547.ill

45E			
REF	QTY	PART NO.	DESCRIPTION
		6008058	Frame Group ITA II
1	1	6008402	Frame
2	1	364109	Accumulator
3	2	364099	U-Bolt
4	4	6288	Lockwasher
5	4	6230	Washer
6	1	205855	Fitting, 12-6
7	1	2680	Fitting, 6-6
8	1	2453	Fitting, 6-6
9	1	2375	Fitting, 6-6
10	1	6008401	Tube Assembly
11	1	611329	Fitting, 6-6
12	1	395139	Tube Assembly
13	1	395138	Tube Assembly
14	1	396460	Tube Assembly
15	1	217572	Check Valve
16	1	611311	Fitting, 6-6
17	1	213094	Fitting
18	1	601676	Fitting, 6-6
19	1	659058	● Valve Cartridge
20	1	218012	▲ Plug
21	2	2492	Fitting, 6

● Removed from Valve Assembly 682812.

▲ Replaces valve cartridge 659058 in Valve Assembly.

S/S Mounting Group ITA III



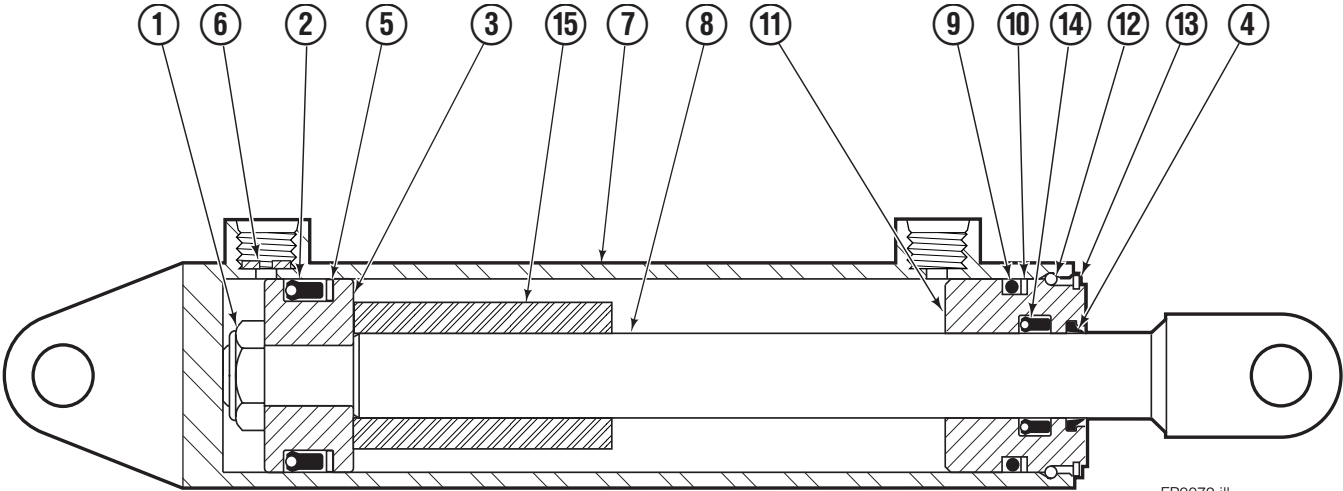
35E/45E

REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		682835	Mounting Group	11	4	7403	■ Grease Fitting
1	1	682557	Anchor Bracket	12	1	686513	Tube
2	2	672018	■ Bearing Segment	13	1	686514	Tube
3	2	768759	Setscrew	14	1	2680	Fitting, 6
4	2	6517	Cotter Pin	15	2	683250	Strip
5	2	6234	Washer	16	2	683218	Spacer
6	2	678525	Clevis Pin	17	2	2669	Fitting, 4-6
7	1	675548	● Cylinder	18	2	2617	Fitting, 6-6
8	2	682814	Bearing	19	1	2453	Fitting, 6-6
9	2	666984	Fitting, 4-6	20	1	2375	Fitting, 6-6
10	1	675550	Washer	21	2	688387	Jam Nut

■ Included in Bearing Service Kit 672022.

● See Cylinder page for parts breakdown.

Sideshift Cylinder

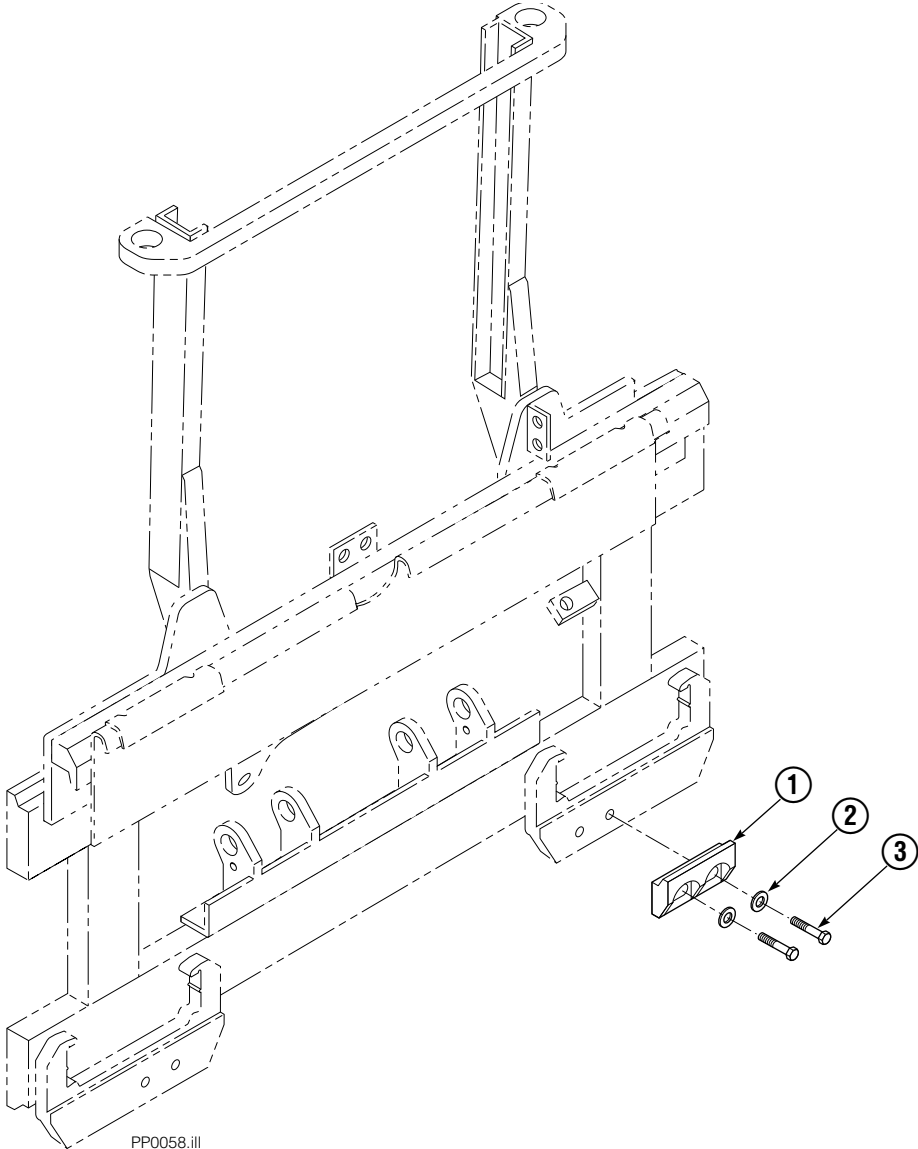


FP0079.iii

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

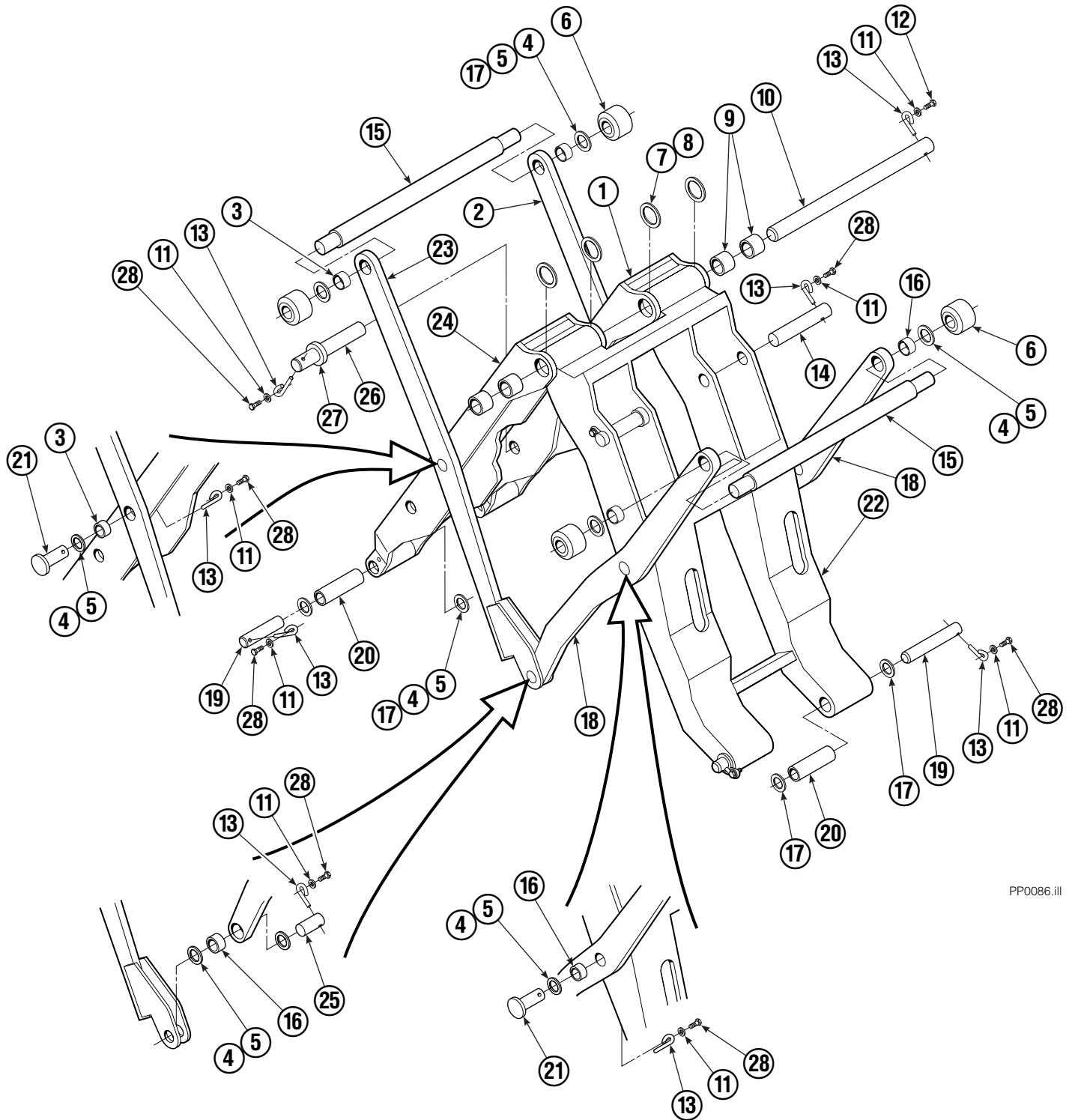
■ Included in Service Kit 553861.

Bolt-On Lower Hook Group – ITA III



35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		683180	Lower Hook Group ITA III
1	2	679361	Hook
2	4	667225	Washer
3	4	779010	Capscrew

Mechanism Group



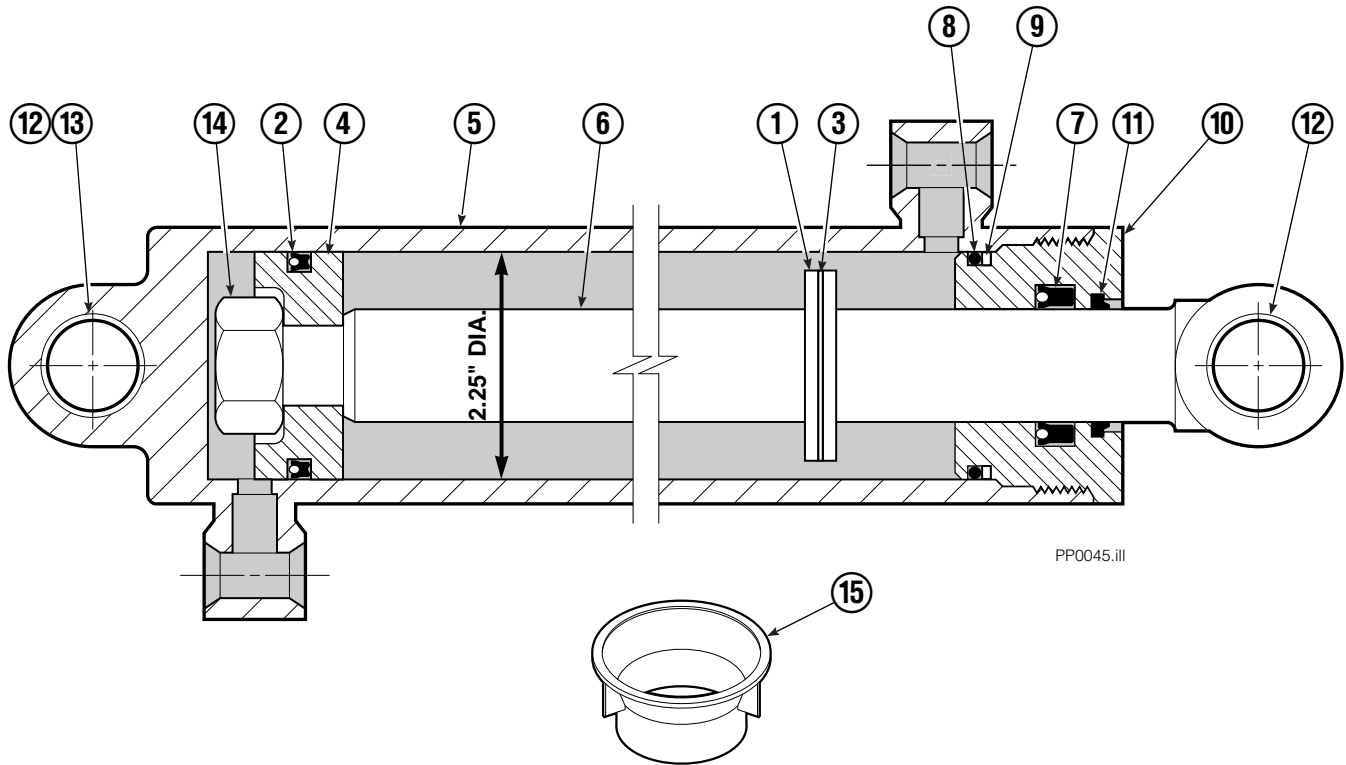
PP0086.iii

Mechanism Group

35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		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

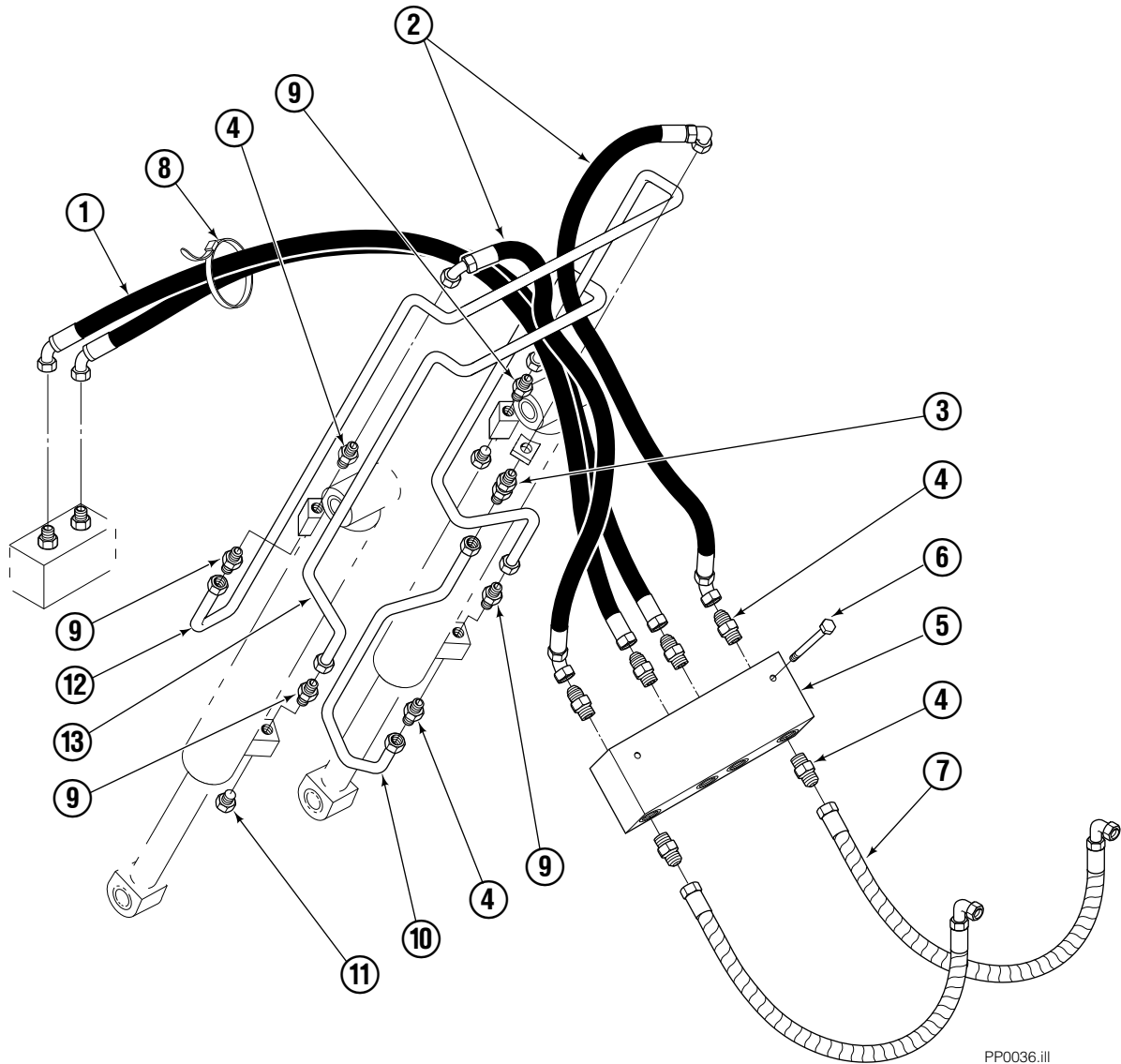


REF	QTY	PART NO.	DESCRIPTION
		582636	Cylinder Assembly
1	1	-	Spacer
2	1	564159	Seal ■
3	1	7348	Snap Ring
4	1	564161	Piston
5	1	562717	Shell
6	1	558626	Rod
7	1	662448	Seal ■
8	1	2787	O-Ring ■
9	1	615130	Back-Up Ring ■
10	1	558628	Retainer
11	1	636853	Wiper ■
12	4	559697	Bearing
13	1	559698	Spacer
14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

■ Included in Service Kit 562339.

Ref: S-3424

Hydraulic Group



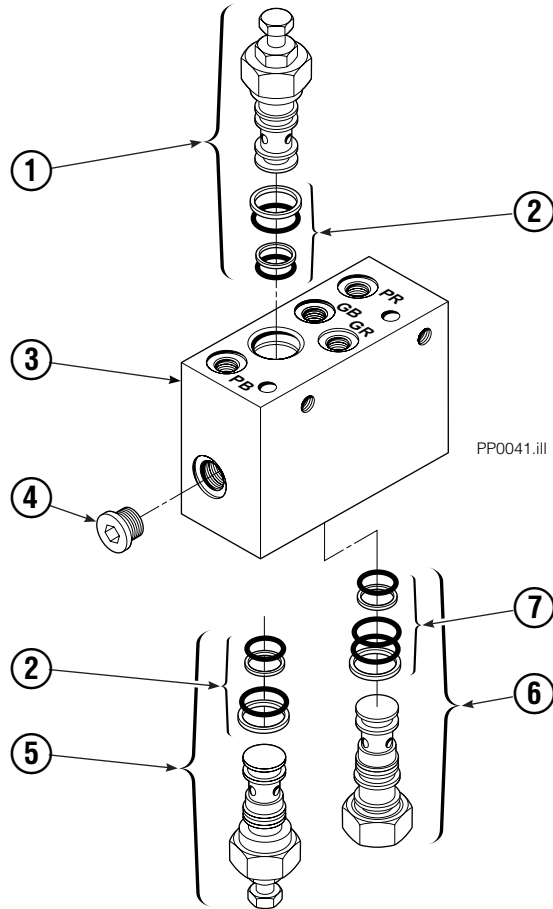
PP0036.iii

35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		685829	Hydraulic Group ITA III
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	685979	Hose ITA III
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.

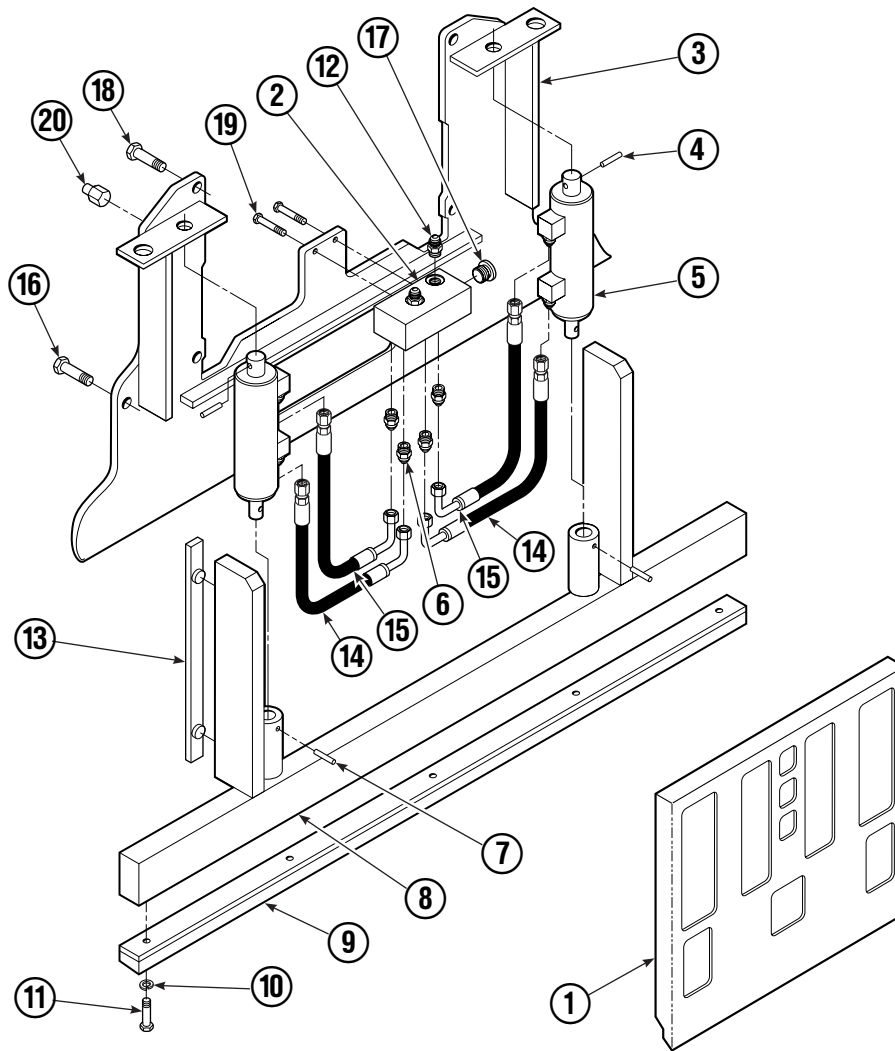
Valve

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

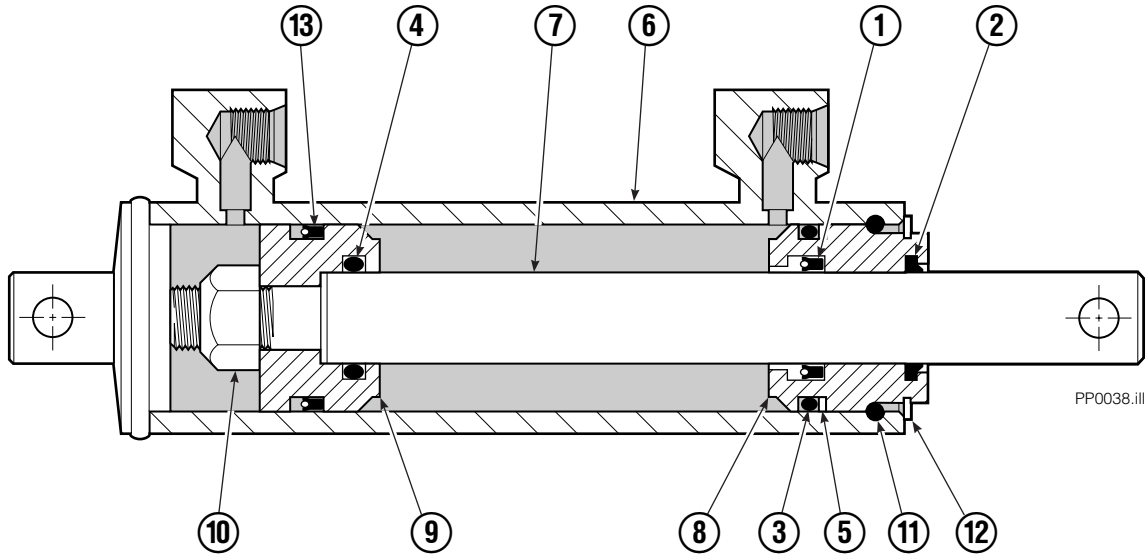


PP0226.iii

35E/45E							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		205966	Faceplate Group 40" x 40" ■	10	5	6444	Lockwasher
		205961	Gripper Jaw Assembly ●	11	5	768794	Capscrew, M8x1,25x20-8.8
1	1	204634	Faceplate 40" x 40" ■	12	2	604511	Fitting, 6-6
2	1	205959	Junction Block	13	2	686573	Bearing
3	1	206396	Gripper Jaw	14	2	205957	Hose
4	2	673385	Drive Pin	15	2	205958	Hose
5	2	682844	Gripper Cylinder ▼	16	2	768710	Capscrew
6	8	617915	Fitting, 4-4	17	2	609234	Plug, 4
7	2	200877	Drive Pin	18	4	779010	Capscrew
8	1	206403	Gripper Bar	19	2	763166	Capscrew, M8x1,25x25-8.8
9	1	672712	Gripper Pad	20	4	682850	Stop

- 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

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

