



Parts Manual

Model _____ Push/Pull _____

Catalog Number _____ 45E-PS-187 _____

cascade®
corporation

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

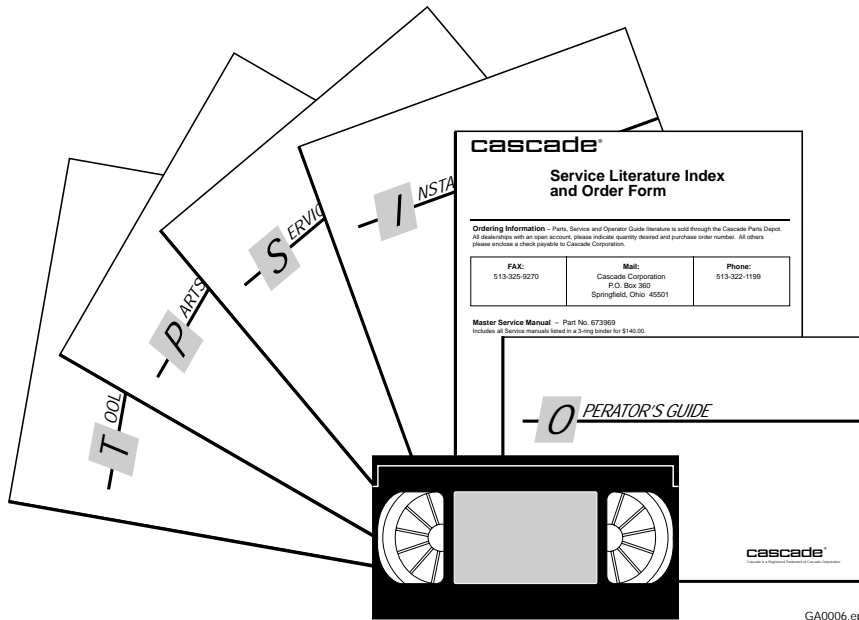
To Order Parts call: 888-227-2233, Fax: 888-329-0234

OR

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

Internet: www.cascorp.com

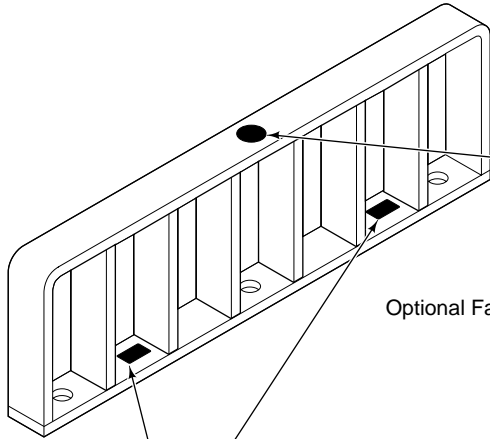
Publications



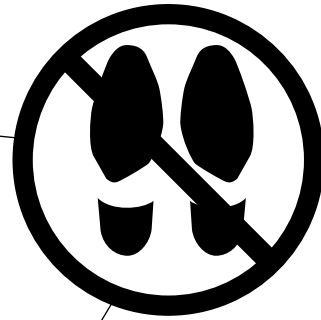
GA0006.eps

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



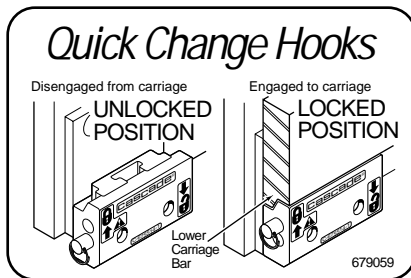
Part No. 679150
(1 Place & 1 optional)



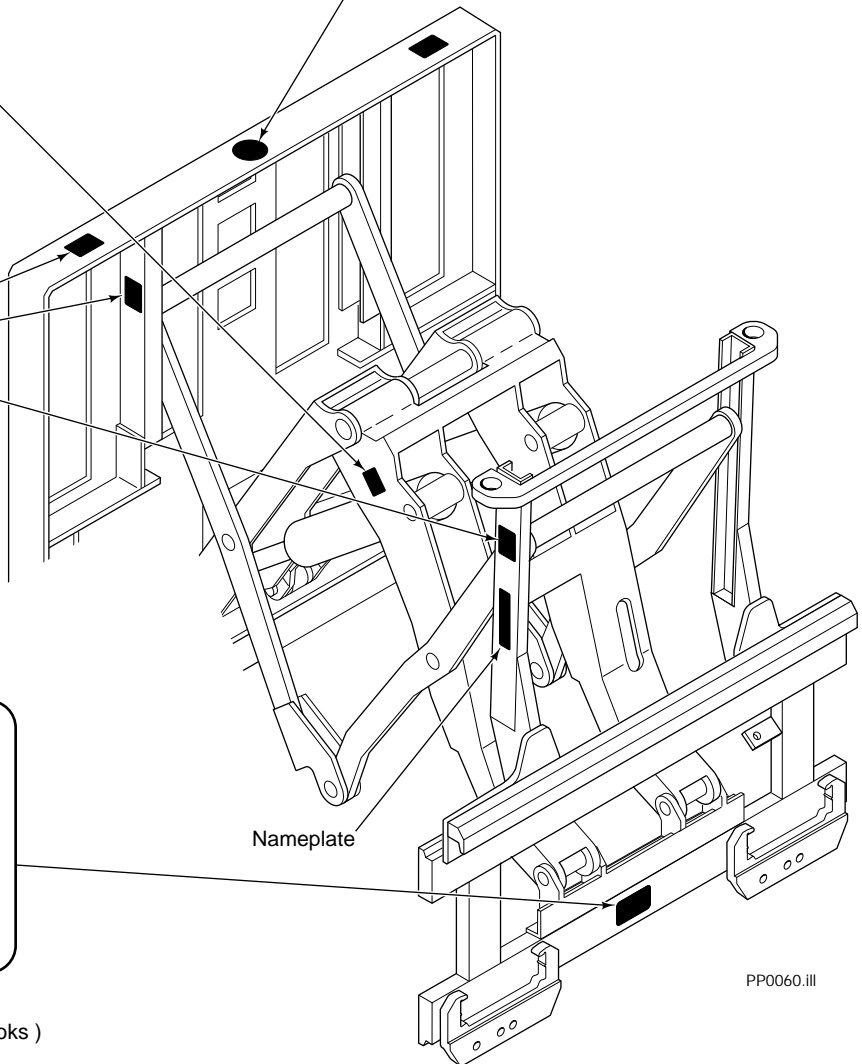
Part No. 665595
(2 Place & 2 optional)



Part No. 656038
(6 Places)



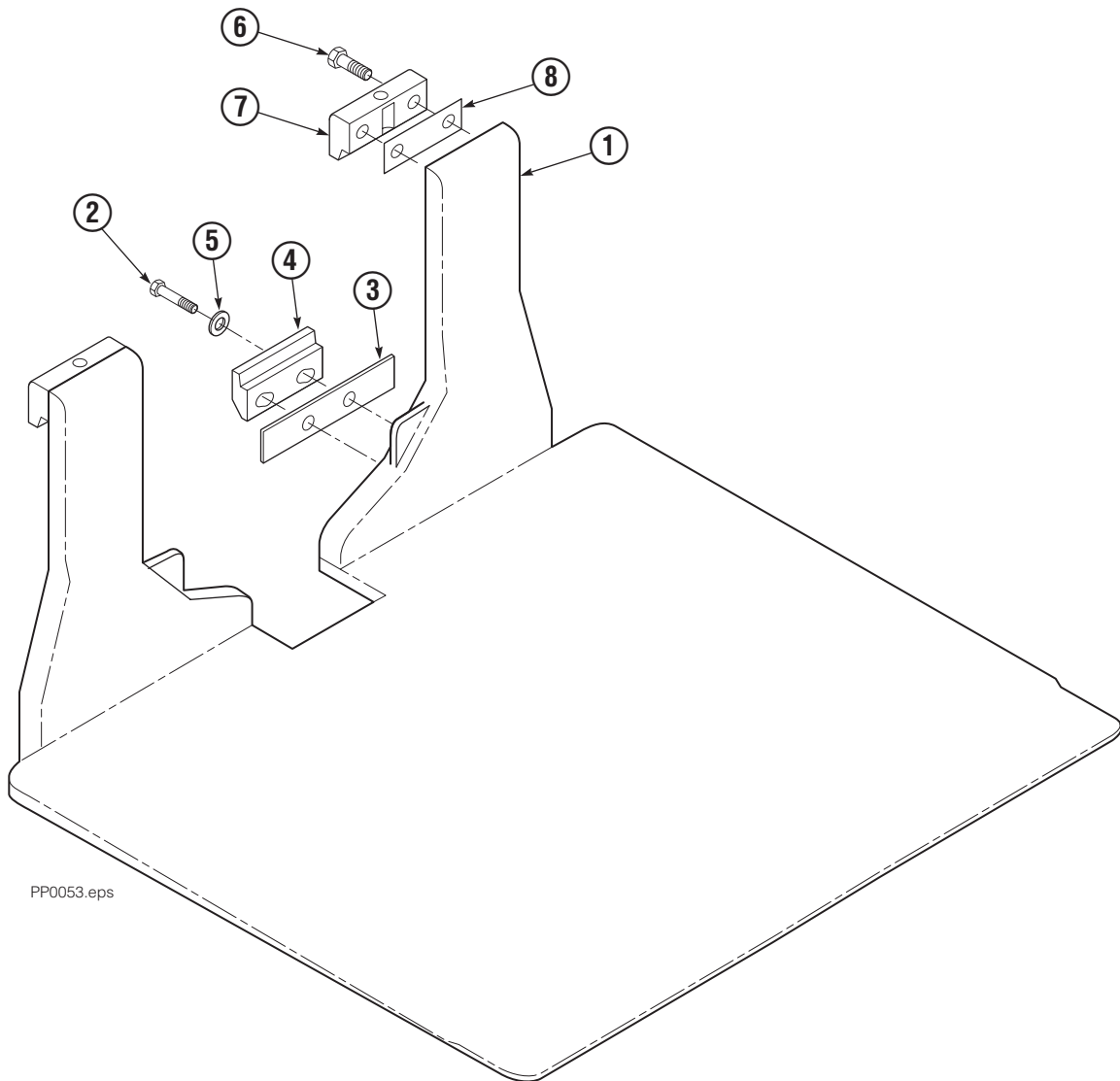
Part No. 679059
(1 Place if equipped with Quick Change Hooks)



Nameplate

PP0060.iii

One Piece Platen Group



PP0053.eps

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".

35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		348228	One Piece Platen Group
1	1	348332	Platen, 40" x 46" ◆
2	4	209016	Capscrew, M16 x 35
3	●	685675	Shim (.030)
4	2	667370	Lower Hook
5	4	667225	Washer
6	4	685677	Capscrew, M16 x 45
7	2	685533	Upper Hook
8	■	688379	Shim (.060)

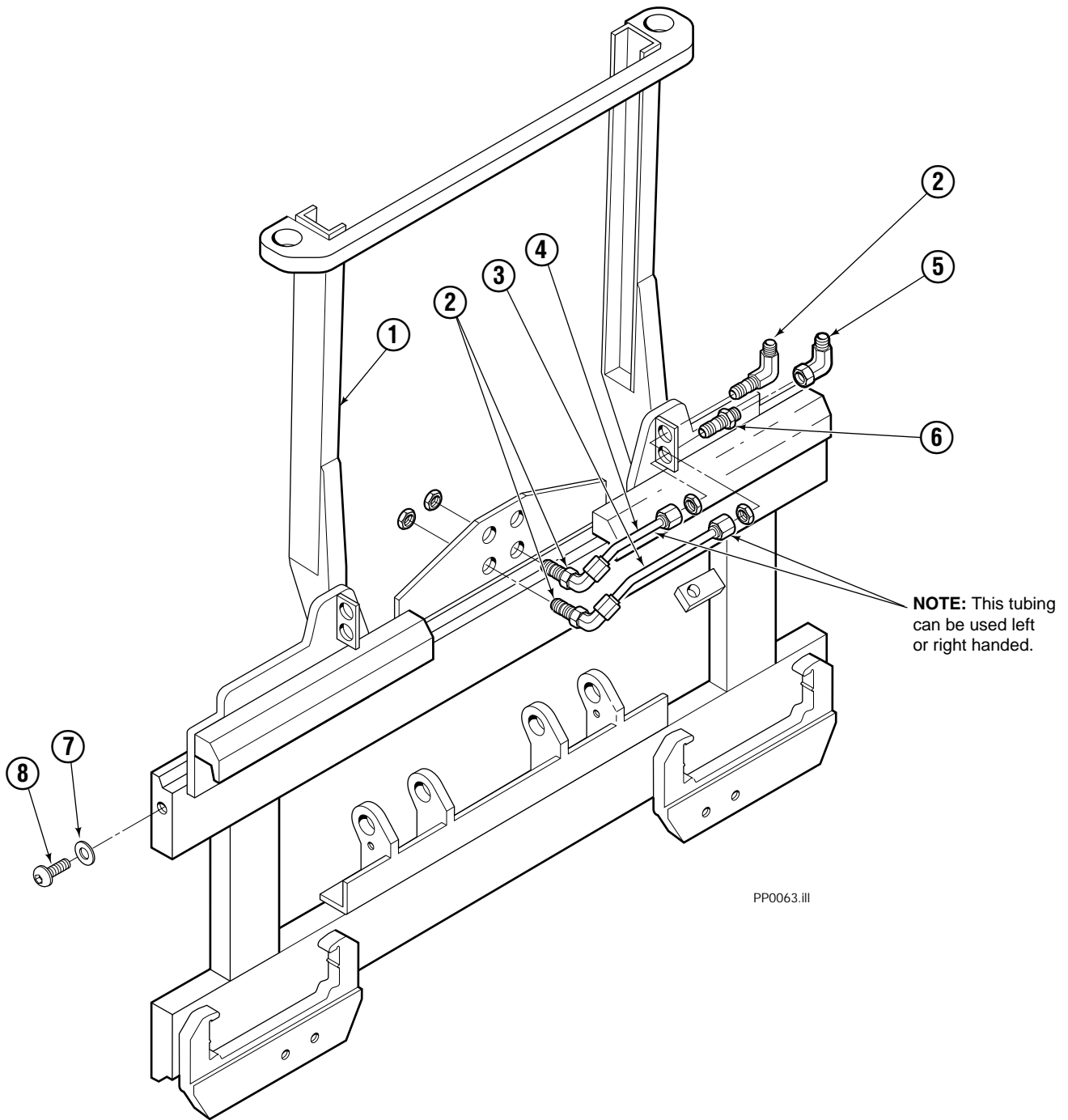
◆ Width x Length.

● As required.

■ As required (2 maximum).

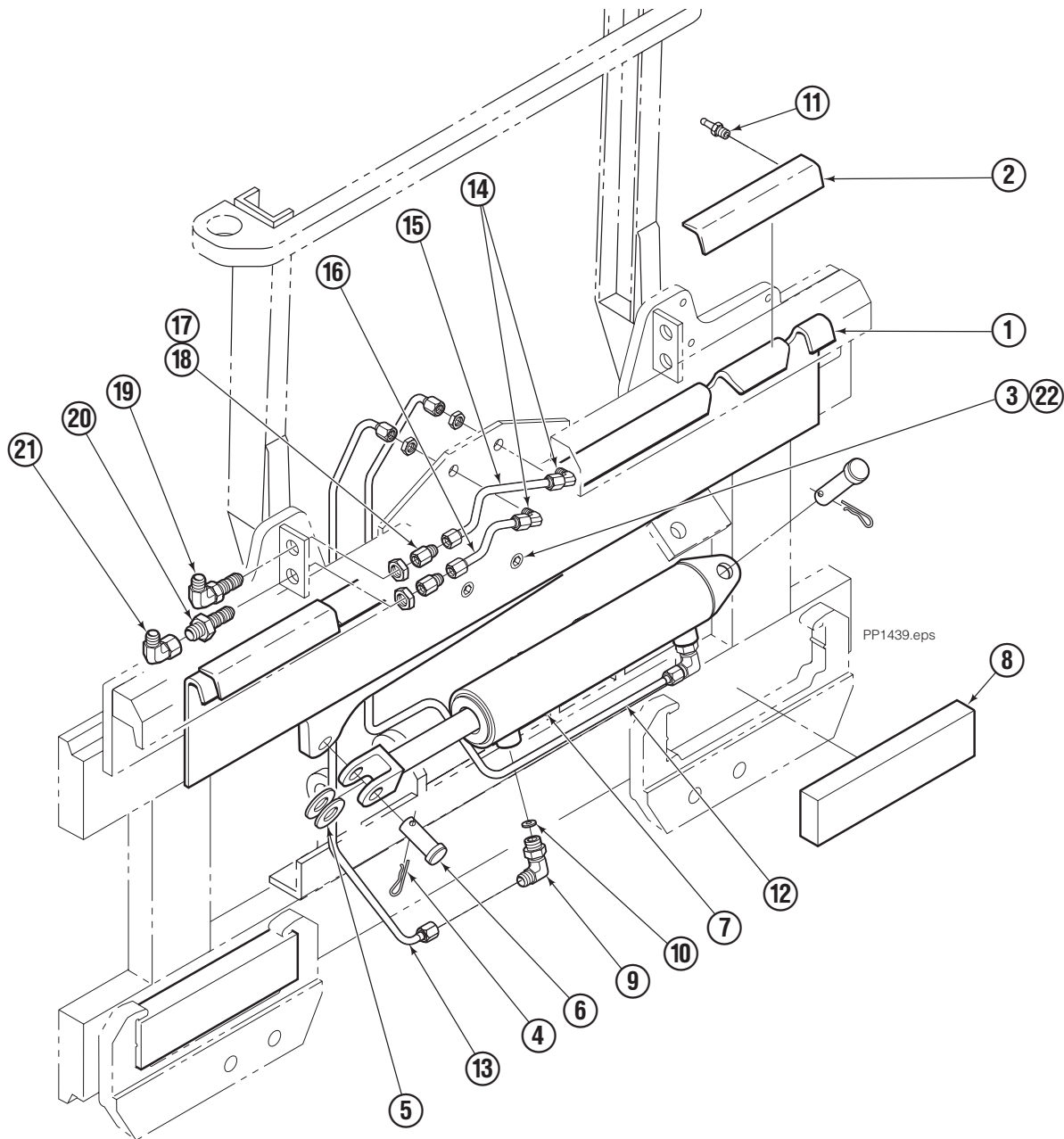
Reference: S-3412. S-3413.

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



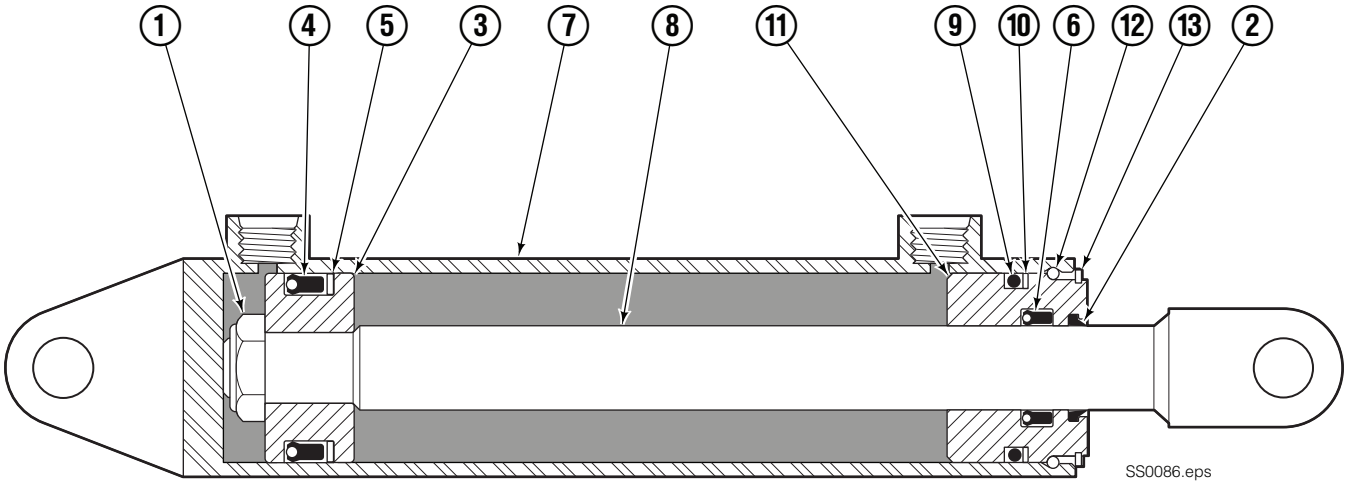
35E/45E							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		682833	Mounting Group - R7	12	1	211757	Tube
1	1	682554	Anchor Bracket	13	1	211758	Tube
2	2	671165	■ Bearing Segment	14	2	2451	Fitting, 4-4
3	2	768759	Setscrew, M12 x 35	15	1	686515	Tube
4	2	6517	Cotter Pin	16	1	686516	Tube
5	2	6234	Washer	17	2	2669	Fitting, 4-6
6	2	214036	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	Restrictor Washer	22	2	688387	Jam Nut
11	4	7403	■ Grease Fitting				

◆ See Cylinder page for parts breakdown.

■ Included in Bearing Service Kit 671423.

Reference: SK-5385.

Sideshift Cylinder

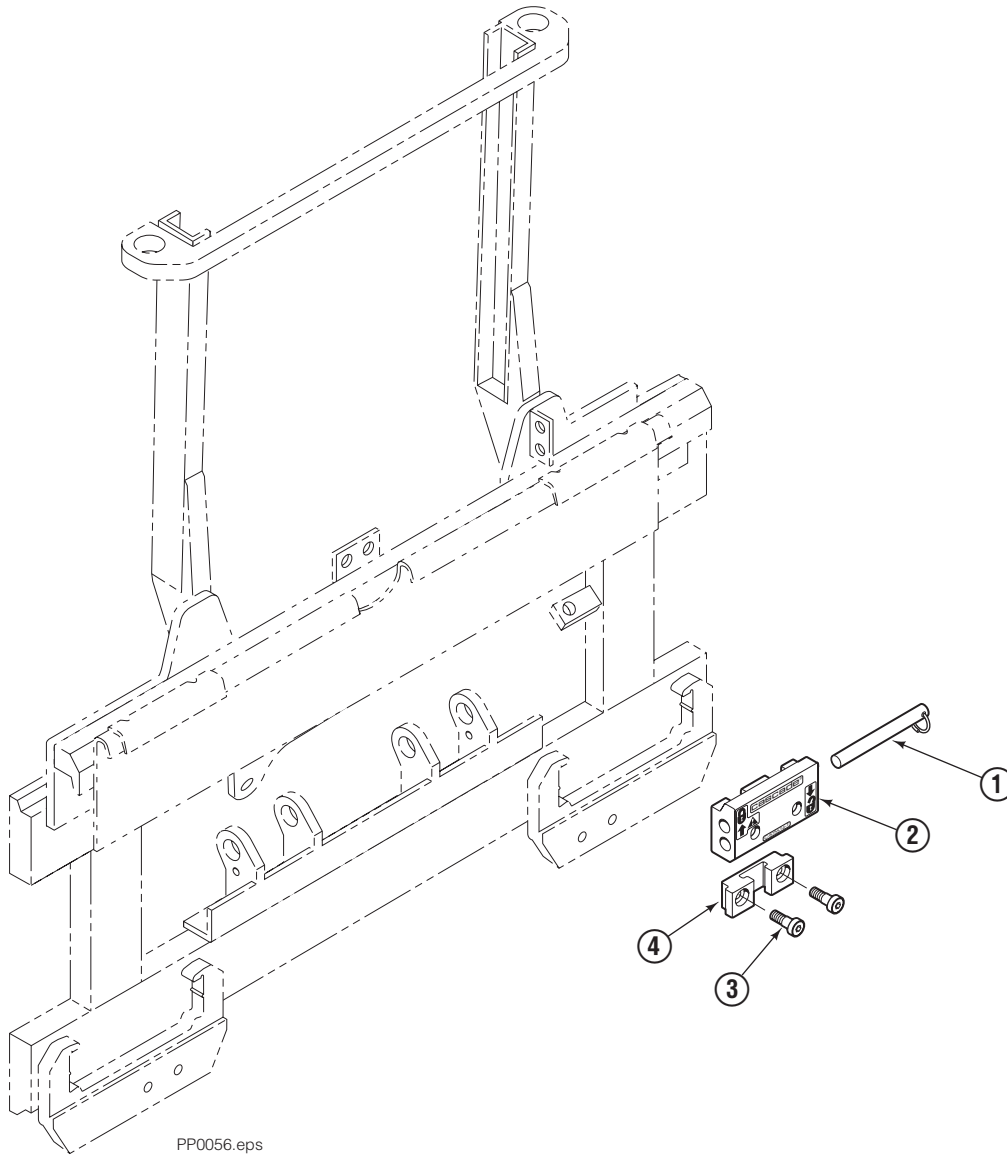


SS0086.eps

REF	QTY	PART NO.	DESCRIPTION
		675548	Cylinder Assembly
1	1	553857	Nut
2	1	636851	■ Wiper
3	1	553501	Piston
4	1	662452	■ Seal
5	1	638247	■ Back-up Ring
6	1	641835	■ Seal
7	1	675549	Shell
8	1	553499	Rod
9	1	2785	■ O-Ring
10	1	615128	■ Back-up Ring
11	1	553500	Retainer
12	1	553856	Retaining Ring
13	1	7202	Retaining Ring
		553861	Service Kit

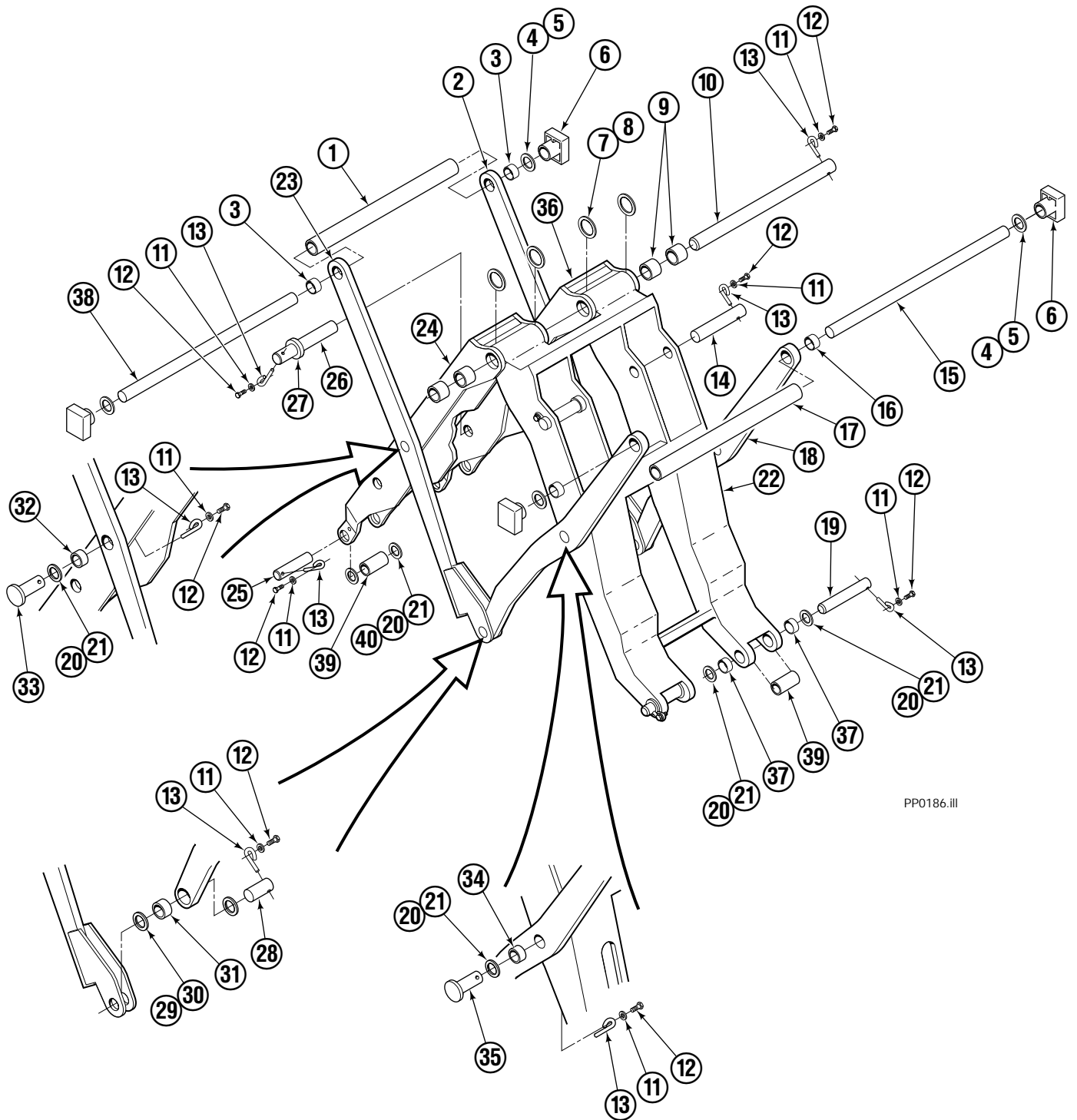
■ Included in Service Kit 553861.

Quick-Disconnect Lower Hook Group ITA II



35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		683179	Lower Hook Group
1	2	678832	Pin
2	2	675514	Hook
3	4	683182	Capscrew, M16 x 35
4	2	675515	Guide

Mechanism Group



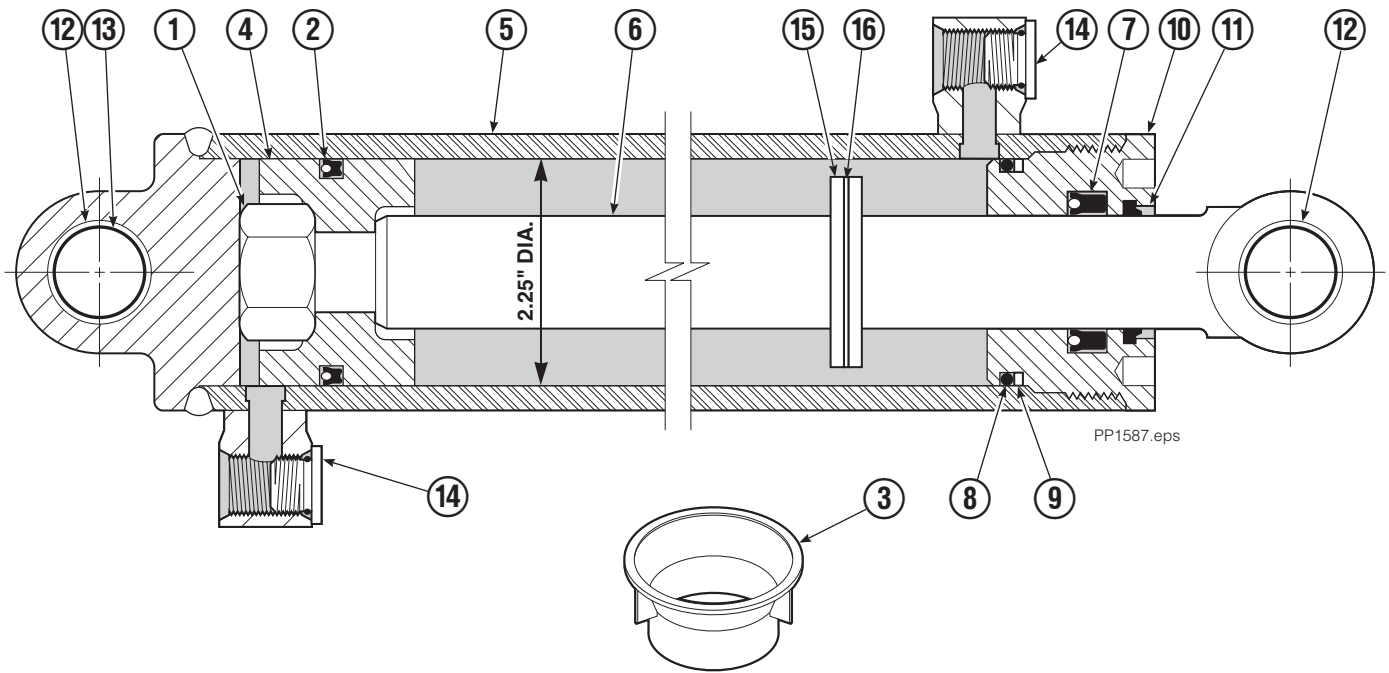
PP0186.iii

Mechanism Group

35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		682829	Mechanism Group
1	1	682818	Tube
2	1	683000	Arm-Secondary Outer RH
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 LH
24	1	682588	Arm-Inner Secondary LH
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 RH
37	4	683150	Bushing
38	1	682816	Pin
39	4	685127	Spacer
40	●	685838	Shim

● Quantity as required.

Cylinder Assembly

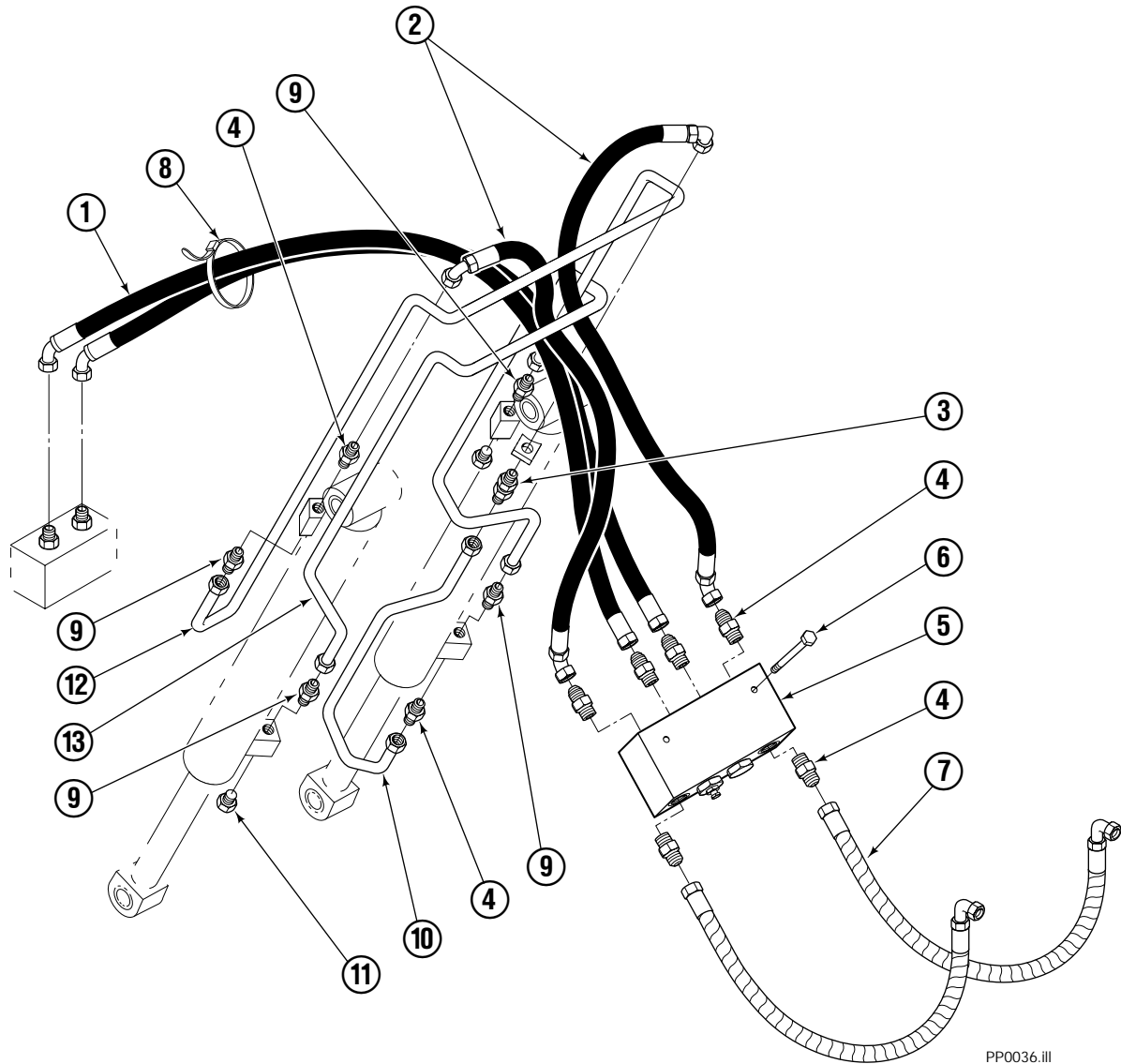


REF	QTY	PART NO.	DESCRIPTION
		685369	Cylinder Assembly
1	1	553717	Nut
2	1	661649	◆ Seal
3	1	671048	◆ Seal Loader
4	1	558623	Piston
5	1	558624	Shell
6	1	558626	Rod
7	1	559705	◆ Seal
8	1	2787	◆ O-Ring
9	1	615130	◆ Back-Up Ring
10	1	558628	Retainer
11	1	636853	◆ Wiper
12	4	559697	Bearing
13	1	559698	Spacer
14	2	604510	Fitting, 6
15	1	685379	Spacer
16	1	7348	Snap Ring
		559521	Service Kit

◆ Included in Service Kit 559521.

Reference: S-8201, S-8202, 580240 Cylinder Assembly.

Hydraulic Group



PP0036.iii

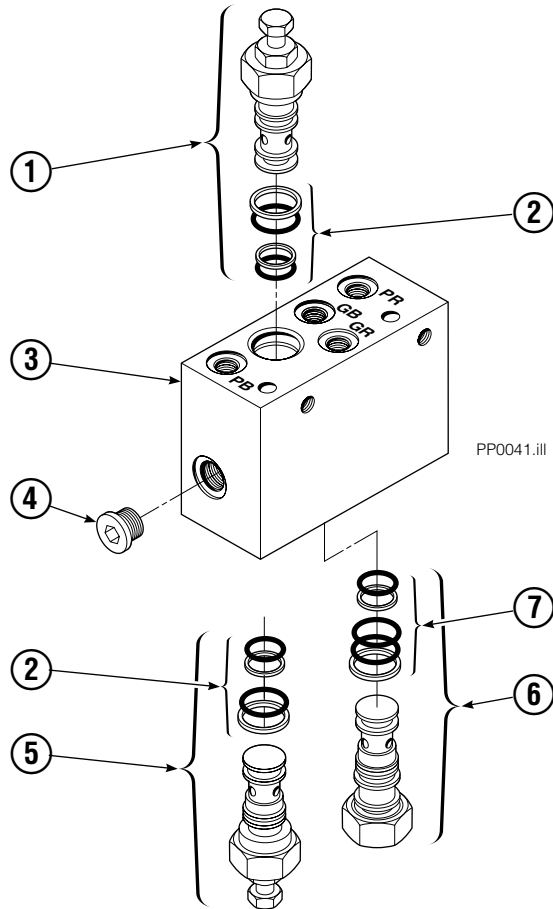
35E/45E

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.

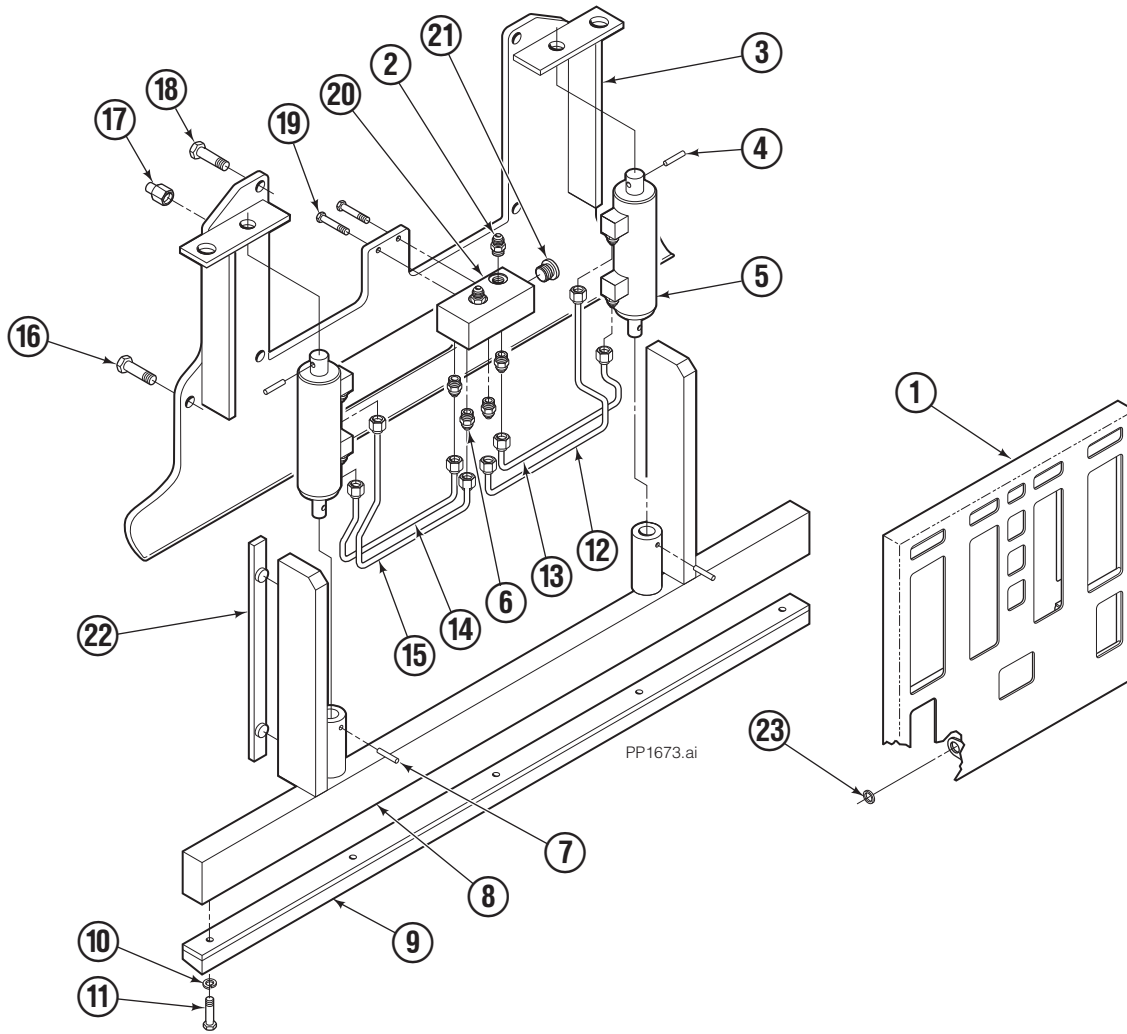
Valve

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



35E/45E							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		688403	Faceplate Group	12	1	682847	Tube
	1	686570	Gripper Jaw Assembly ●	13	1	682846	Tube
1	1	688404	Faceplate - 40" x 52" ■	14	1	682848	Tube
2	2	604511	Fitting, 6-6	15	1	682849	Tube
3	1	682583	Gripper Jaw	16	2	768710	Capscrew, M16 x 30
4	2	673385	Drive Pin	17	4	682850	Stop
5	2	682844	Gripper Cylinder ◆	18	4	779010	Capscrew, M16 x 35
6	8	617915	Fitting, 4-4	19	2	763166	Capscrew, M8 x 25
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	4	683150	Bushing
11	5	768794	Capscrew, M8 x 25				

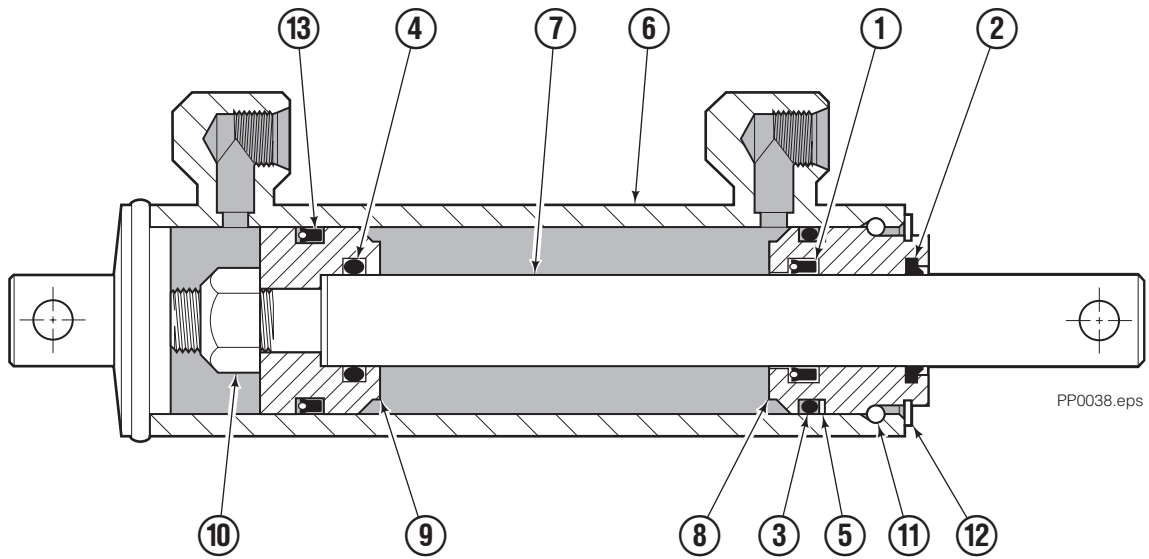
■ Width x height.

◆ See Cylinder page for parts breakdown.

● Includes items 2 through 23 only.

Reference: S-3533.

Gripper Cylinder

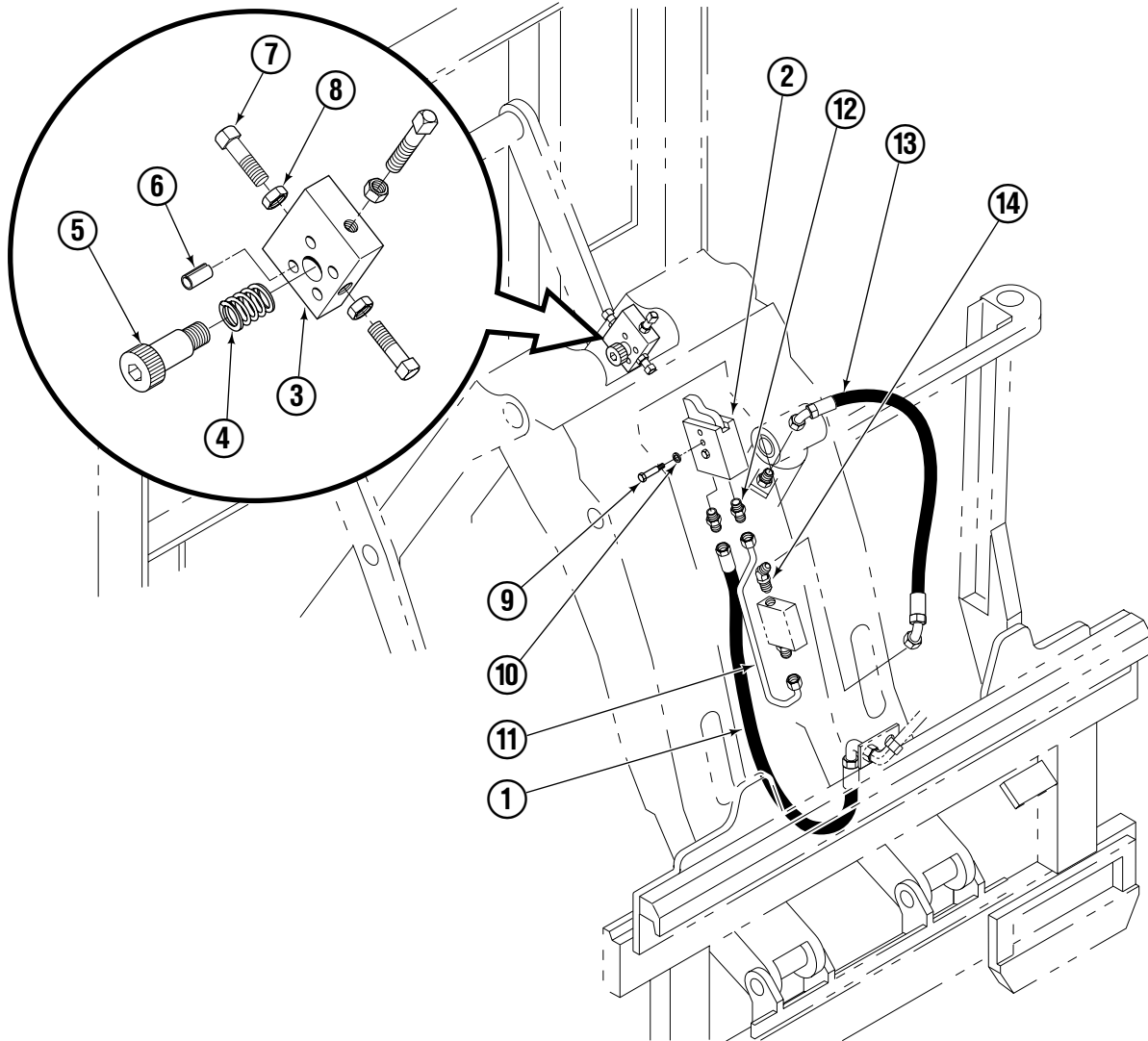


PP0038.eps

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	3137	Snap Ring
13	1	663728	▲ Piston Seal

▲ Included in Service Kit 684827.

Hydraulic Stop Group

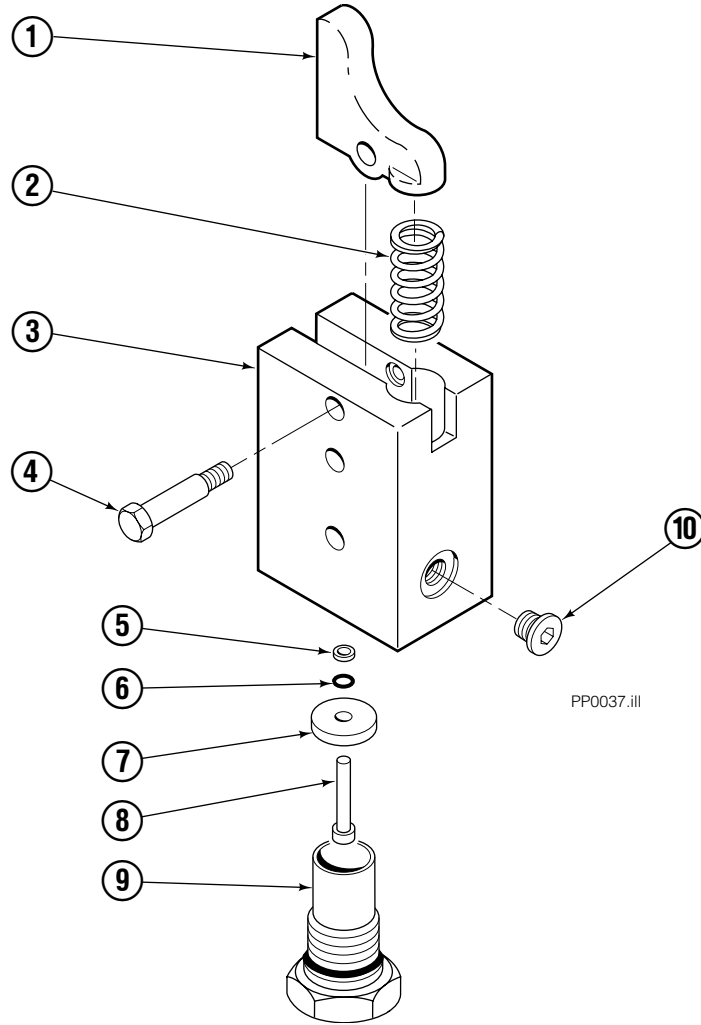


PP0034.iii

REF	QTY	PART NO.	DESCRIPTION
		684567	Hydraulic Stop Group – ITA II
1	1	684568	Hose – ITA II
2	1	684572	■ Valve
3	1	684578	Selector Body
4	1	684580	Spring
5	1	685659	Shoulder Bolt
6	1	769026	Roll Pin
7	3	684582	Capscrew
8	3	684583	Nut
9	2	768527	Capscrew, M8x1,25x50-8.8
10	2	6287	Lockwasher
11	1	684584	Tube
12	2	604511	Fitting, 6-6
13	1	211970	Hose
14	1	611302	Fitting, 6

■ See Valve page for parts breakdown.

Hydraulic Stop Valve



REF	QTY	PART NO.	DESCRIPTION
		684572	Hydraulic Stop Valve
1	1	684575	Actuator
2	1	630041	Spring
3	1	684573	Body
4	1	684576	Shoulder Screw
5	1	615000	Back-up Ring
6	1	2696	O-Ring
7	1	669310	Spacer
8	1	684577	Plunger
9	1	671690	Valve Cartridge
10	1	663694	Fitting, 3

Do you have questions you need answered right now? Call your nearest Cascade Parts Department. Visit us online at www.cascorp.com

**Cascade Corporation
U.S. Headquarters**
2201 NE 201st
Fairview, OR 97024-9718
Tel: 800-CASCADE (227-2233)
FAX: 888-329-8207

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

Cascade GmbH
Niederwippekühl 1
58579 Schalksmühle
Germany
Tel: 02355-50900
FAX: 02355-509020

Cascade Finland
A. Petreliuksenkatu 3
01370 Vantaa
Finland
Tel: 09-8361925
FAX: 09-8361935

**Cascade N.V.
Benelux Sales and Service**
Damsluisweg 56
PO Box 3009
1300 El Almere
The Netherlands
Tel: 036-5492950
FAX: 036-5492974

Cascade Kenhar Ltd.
3 Kelbrook Road
Parkhouse Ind. Estate
Openshaw,
Manchester M11 2DD
England
Tel: 0800-243015
FAX: 0161-4384055

**Sales Scotland
Macade Systems Ltd.**
18 Melford Road
Righead Ind. Estate
Bellshill ML4 3LR
Scotland
Tel: 01698-845777
FAX: 01698-845888

Cascade (Africa) Pty. Ltd.
PO Box 625, Isando 1600
60A Steel Road
Sparton, Kempton Park
South Africa
Tel: 27-11-975-9240
FAX: 27-11-394-1147

Cascade Scandinavia AB
Hammarvägen 10
PO Box 124
S-56723 Vaggeryd
Sweden
Tel: 039-336950
FAX: 039-336959

**Cascade France
S.A.R.L. MHP**
1D Rue De Charaintru BP 18,
91360 Epinay-Sur-Orge
France
Tel: 01-6454-7500
FAX: 01-6454-7501

Cascade Hispania S.A.
Carrer 5, Sector C
Zona Franca Duanera
Poligono de la Zona Franca
08040 Barcelona, Spain
Tel: 93-264-07-30
FAX: 93-264-07-31

Cascade Italia S.R.L.
Via Dell'Artigianato 1
37050 Vago di Lavagno (VR)
Italy
Tel: 39-045-8989111
FAX: 39-045-8989160

Movimenta Lda.
Parque Industrial
Vale do Alecrim, Lote 108
2950-403 Palmela
Portugal
Tel: 351-212387340
FAX: 351-212387349

**Sales Switzerland
Fahrzeugbedarf**
8810, Horgen
Switzerland
Tel: 01-7279797
FAX: 01-7279798

Sales Poland
Targowa 35/61
03-728 Warszawa
Tel: 022-619 00 49
FAX: 022-619 00 49
Mobile Tel: 0501-27 29 55

Sales Russia
EMCG Material Handling
Equipment
Moscow
Tel: 095-795-2400
FAX: 095-795-2475
Email: emcg@emcg.ru

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

Cascade Korea
121B 9L Namdong Ind.
Complex, 691-8 Gojan-Dong
Namdong-Ku
Inchon, 405-310 Korea
Tel: 82-32-821-2051
FAX: 82-32-821-2055

Cascade Australia
1445 Ipswich Road
Rocklea, QLD 4107
Australia
Tel: 1-800-227-223
FAX: 617-3373-7333

Cascade New Zealand
15 Ra Ora Drive
East Tamaki, Auckland
New Zealand
Tel: 64-9-273-9136
FAX: 64-9-273-9137

Cascade-Xiamen
No. 668 Yangguang Rd.
Xinyang Industrial Zone
Haicang, Xiamen City
Fujian Province
P.R. China 361026
Tel: 86-592-651-2500
FAX: 86-592-651-2571

**Sunstream Industries
Pte Ltd.**
No. 3 Tuas Link 1
2263
Singapore
Tel: 65-6863-3488
FAX: 65-6863-1368

**Cascade do Brasil
Distribuidora de Garras
e Garfos LTDA**
Rua João Guerra, 134
Macuco, Santos - SP
Brasil 11015-130
Tel: 55-13-2105-8800
Fax: 55-13-2105-8899

