



Parts Manual

Model _____ Push/Pull

Serial Number _____ 45E-PA-411

cascade®

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

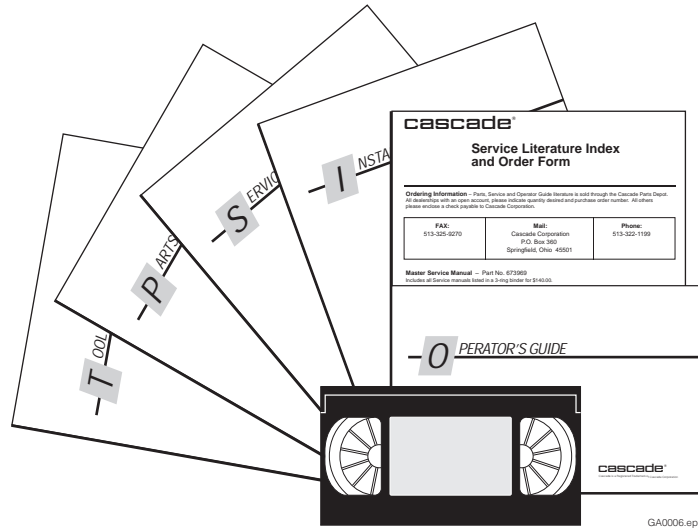
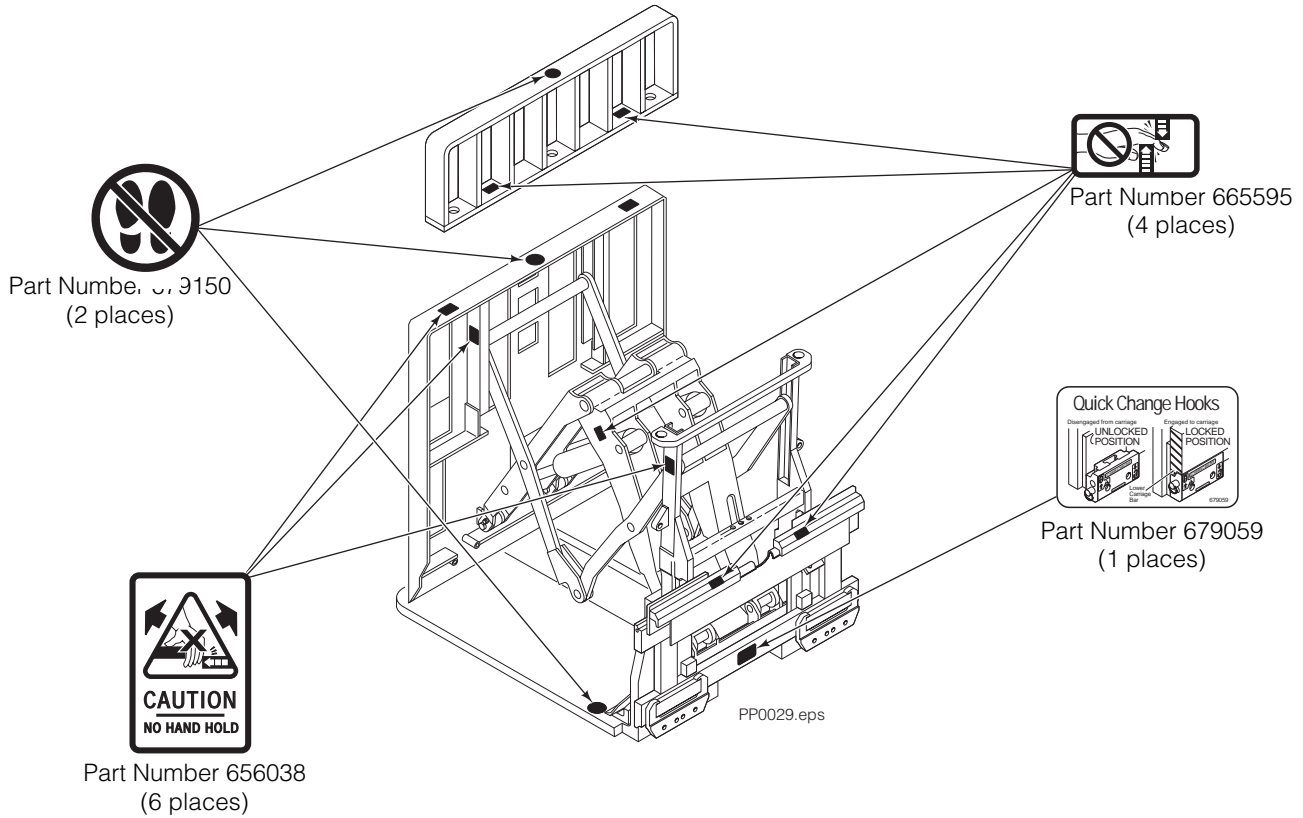
To Order Parts call: 888-227-2233, Fax: 888-329-0234

OR

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

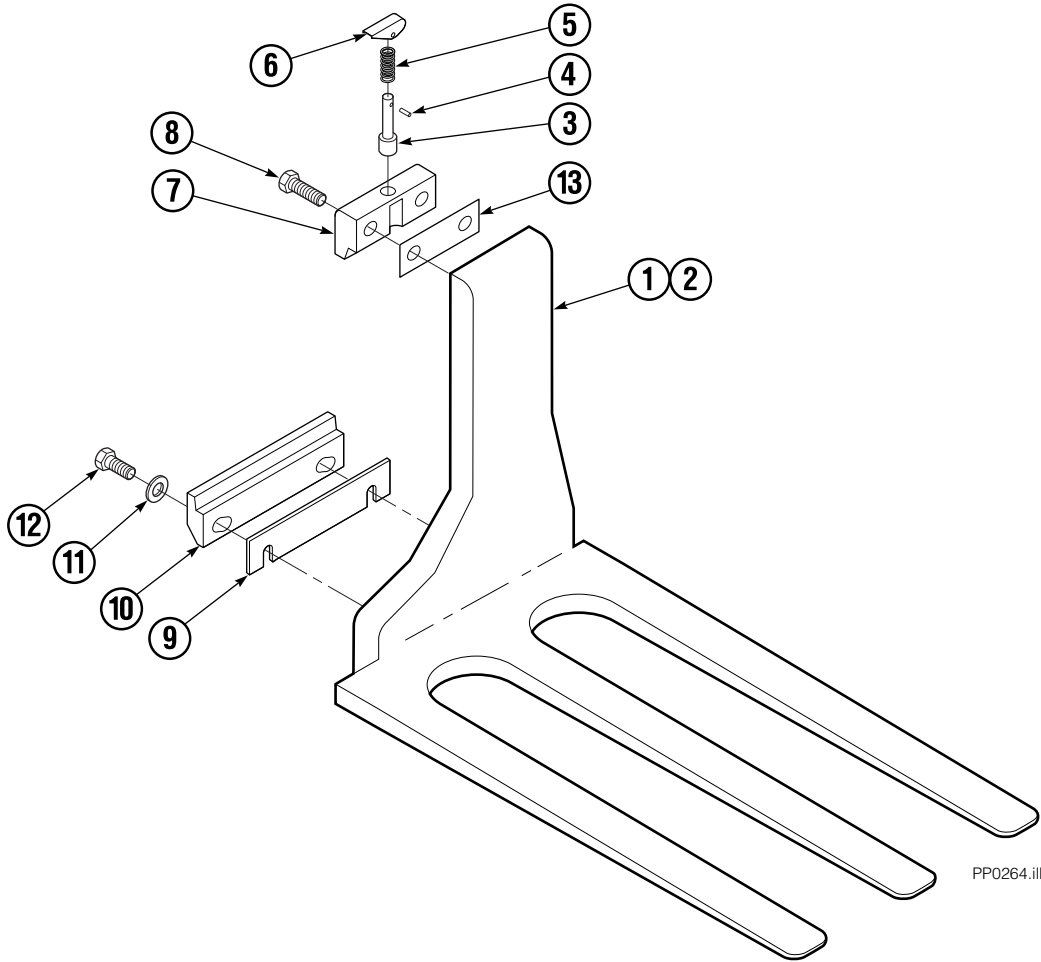
Decals

35E/45E Sheet-Sav



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

Fork Group



PP0264.ill

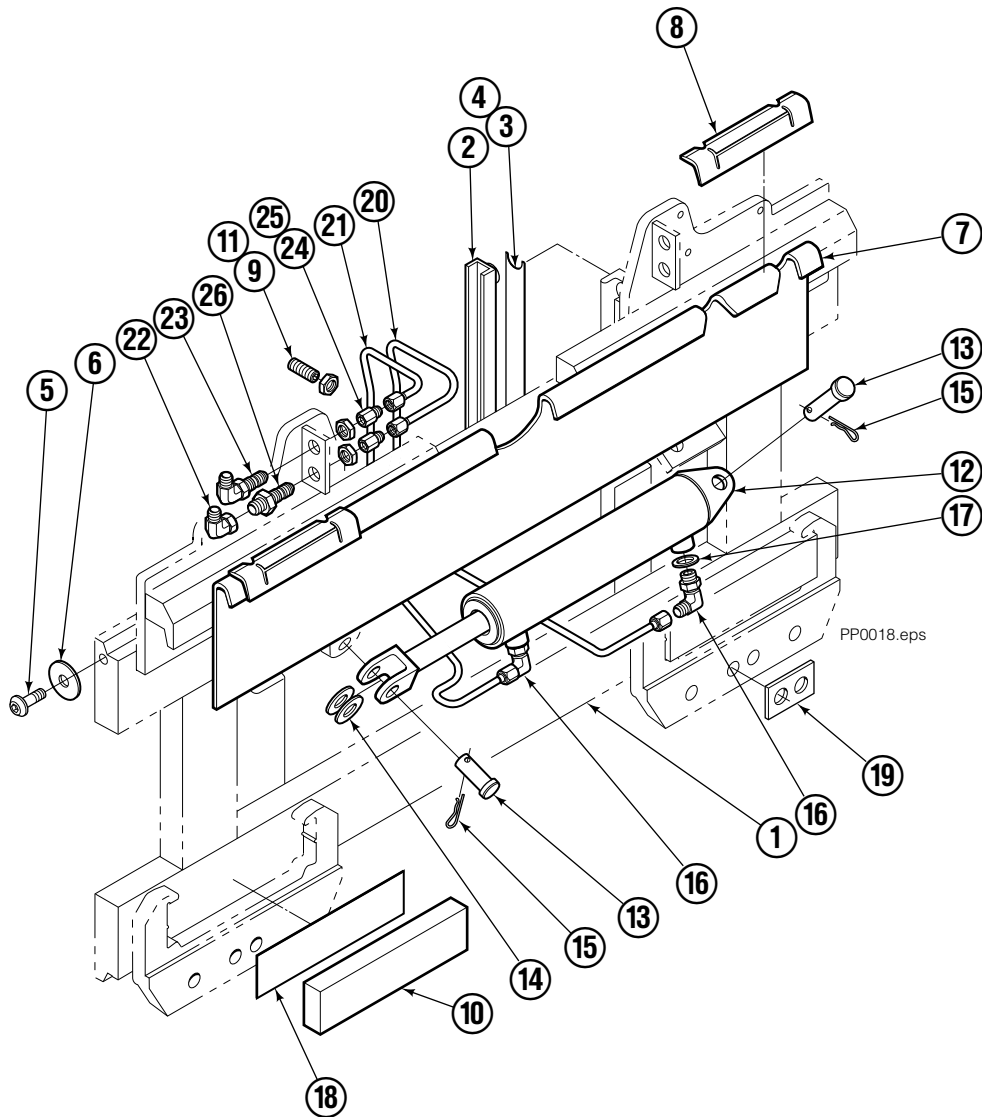
35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		399936	Fork Group
1	1	3000570	Fork, R.H.
2	1	3000572	Fork, L.H.
3	2	622907	▲ Pin
4	2	8007	▲ Rivet
5	2	622908	▲ Spring
6	2	622897	▲ Handle
7	2	685533	▲ Upper Hook
8	4	685677	Capscrew, M16 x 45
9	●	682858	Shim (.030)
10	2	682851	Lower Hook
11	4	667225	Washer
12	4	779010	Capscrew, M16 x 35
13	■	688379	Shim (.060)

▲ Included in Upper Hook Assembly 688386.

● As Required.

■ As Required (2 maximum).

S/S Platen Carrier Group ITA III

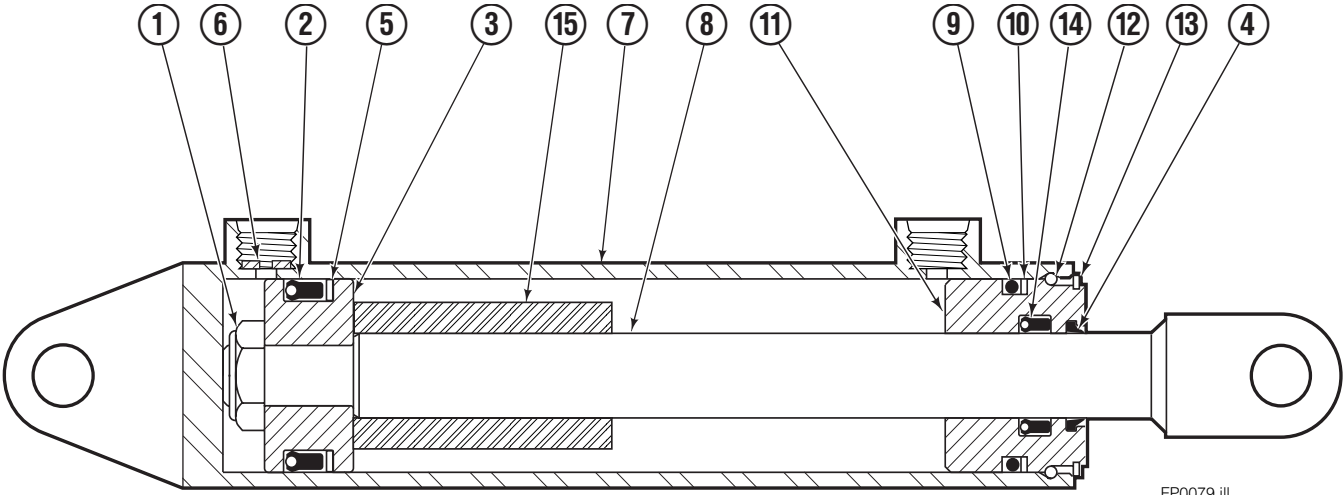


35E/45E

REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		207050	Platen Carrier Group	14	2	6234	Washer
1	1	207031	Platen Carrier	15	2	6517	Cotter Pin
2	2	206964	Bearing	16	2	666984	Fitting, 6-6
3	●	674298	Shim (.015)	17	1	675550	Washer
4	●	674299	Shim (.020)	18	2	683250	Strip
5	2	683142	Capscrew	19	2	683218	Spacer
6	2	683001	Washer	20	1	207047	Tube
7	1	682557	Anchor Bracket	21	1	207048	Tube
8	2	672018	Bearing	22	1	2680	Fitting, 6-6
9	2	768759	Setscrew	23	1	2453	Fitting, 6-6
10	2	682814	Bearing	24	2	2617	Fitting, 6
11	2	688387	Jam Nut	25	2	2669	Fitting, 4-6
12	1	■675548	Cylinder Assembly	26	1	2375	Fitting, 6-6
13	2	214036	Pin-Clevis				

- As required maximum 1 per side.
- See Cylinder page for parts breakdown.

Sideshift Cylinder

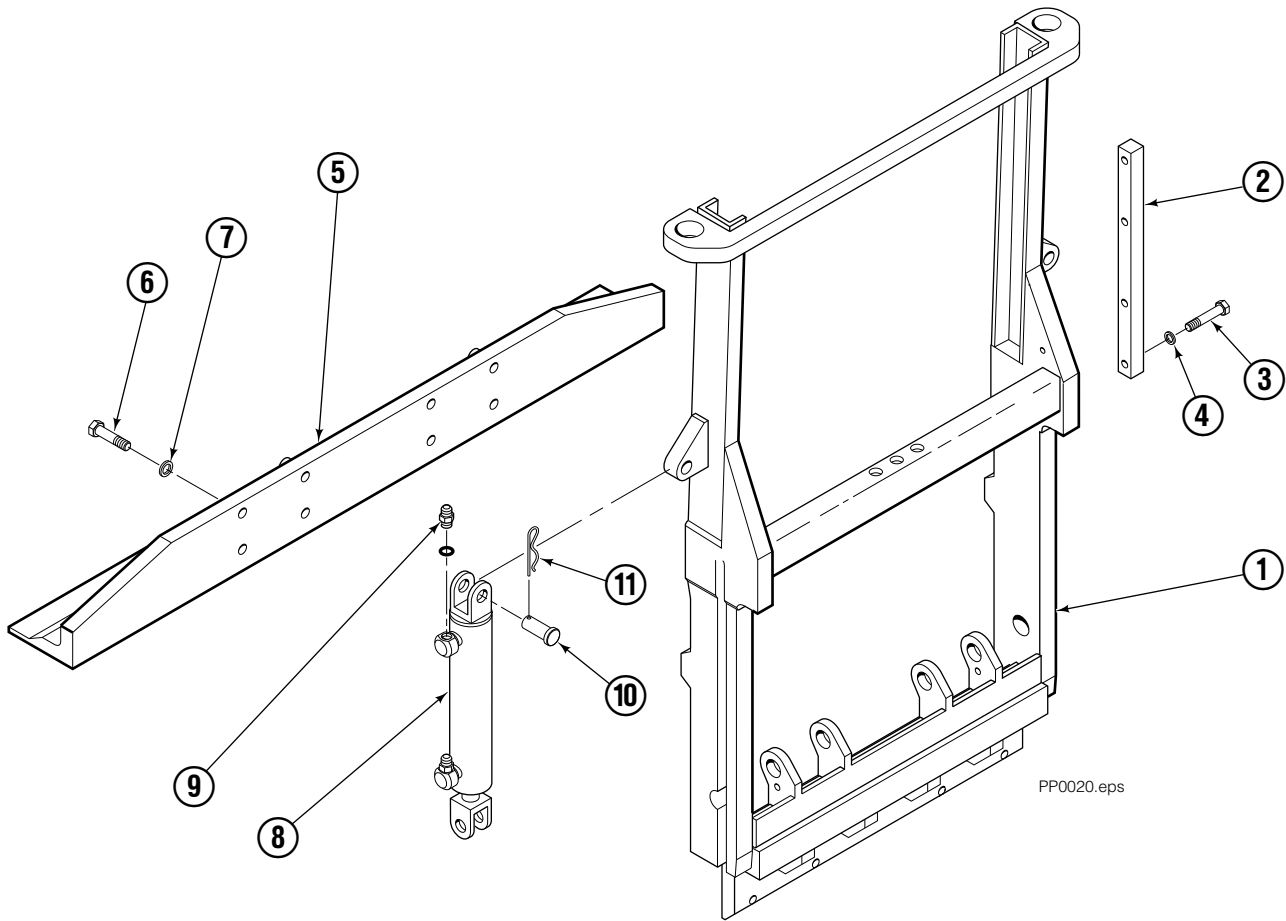


FP0079.iii

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.

Frame Group

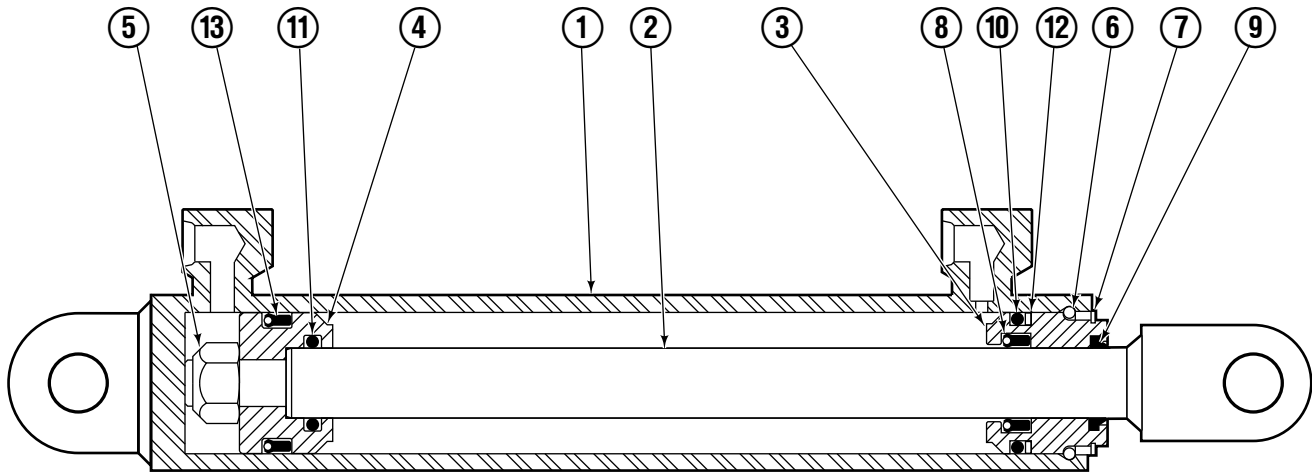


PP0020.eps

35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		206950	Frame Group
1	1	206945	Frame
2	1	206954	Bar
3	2	768525	Capscrew
4	2	686119	Washer
5	1	206955	Foot
6	8	766929	Capscrew
7	8	678991	Lockwasher
8	2	■583942	Cylinder
9	4	617915	Fitting, 4-4
10	4	678525	Pin-Clevis
11	4	672726	Cotter Pin

■ See Cylinder page for parts breakdown.

Sheet-Sav Cylinder

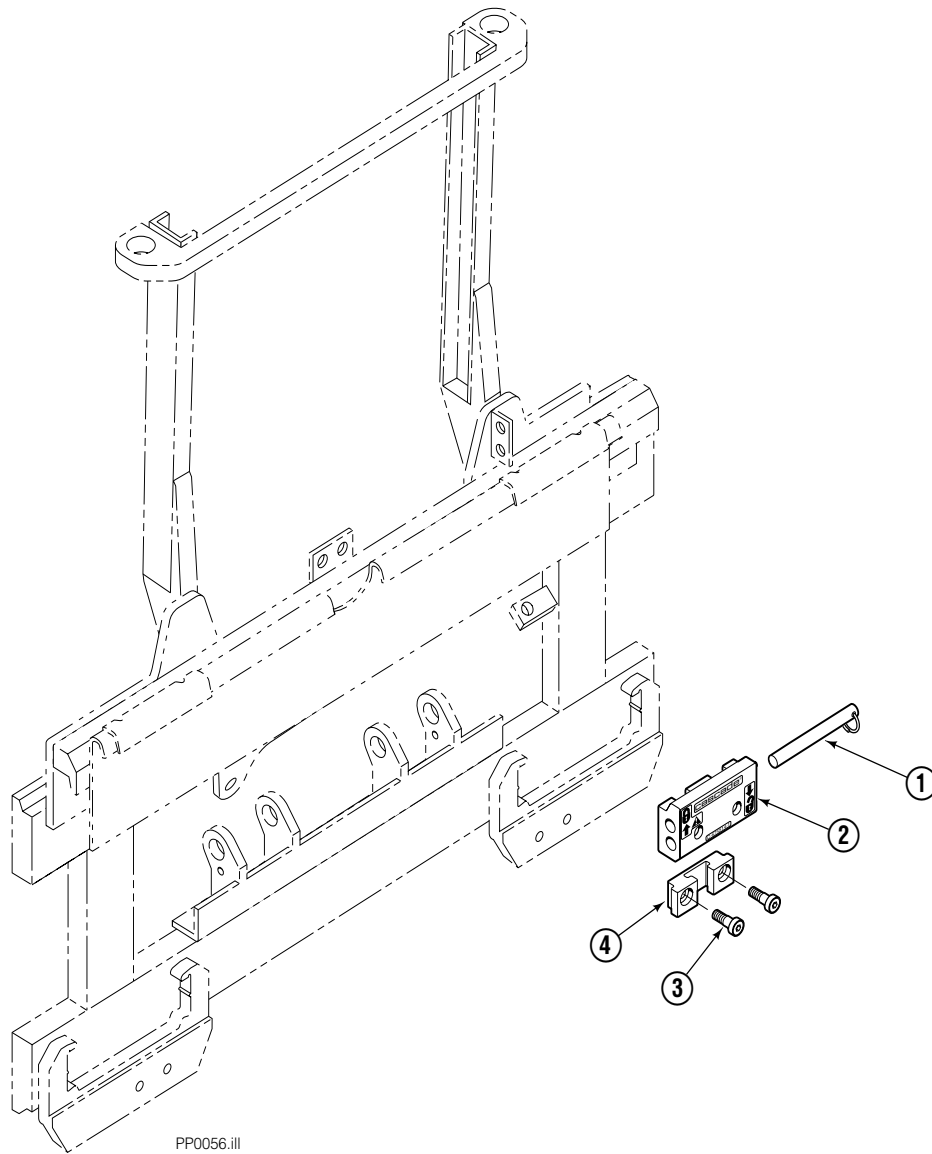


PP0023.eps

35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		583942	Cylinder Assembly
1	1	564162	Shell
2	1	564165	Rod
3	1	685664	Retainer
4	1	685665	Piston
5	1	563462	Nut
6	1	563916	Ring-Stop
7	1	3137	Retaining Ring
▼ 8	1	646540	Seal
▼ 9	1	646850	Wiper
▼ 10	1	2718	O-Ring
▼ 11	1	2710	O-Ring
▼ 12	1	615122	Back-up Ring
▼ 13	1	663728	Seal

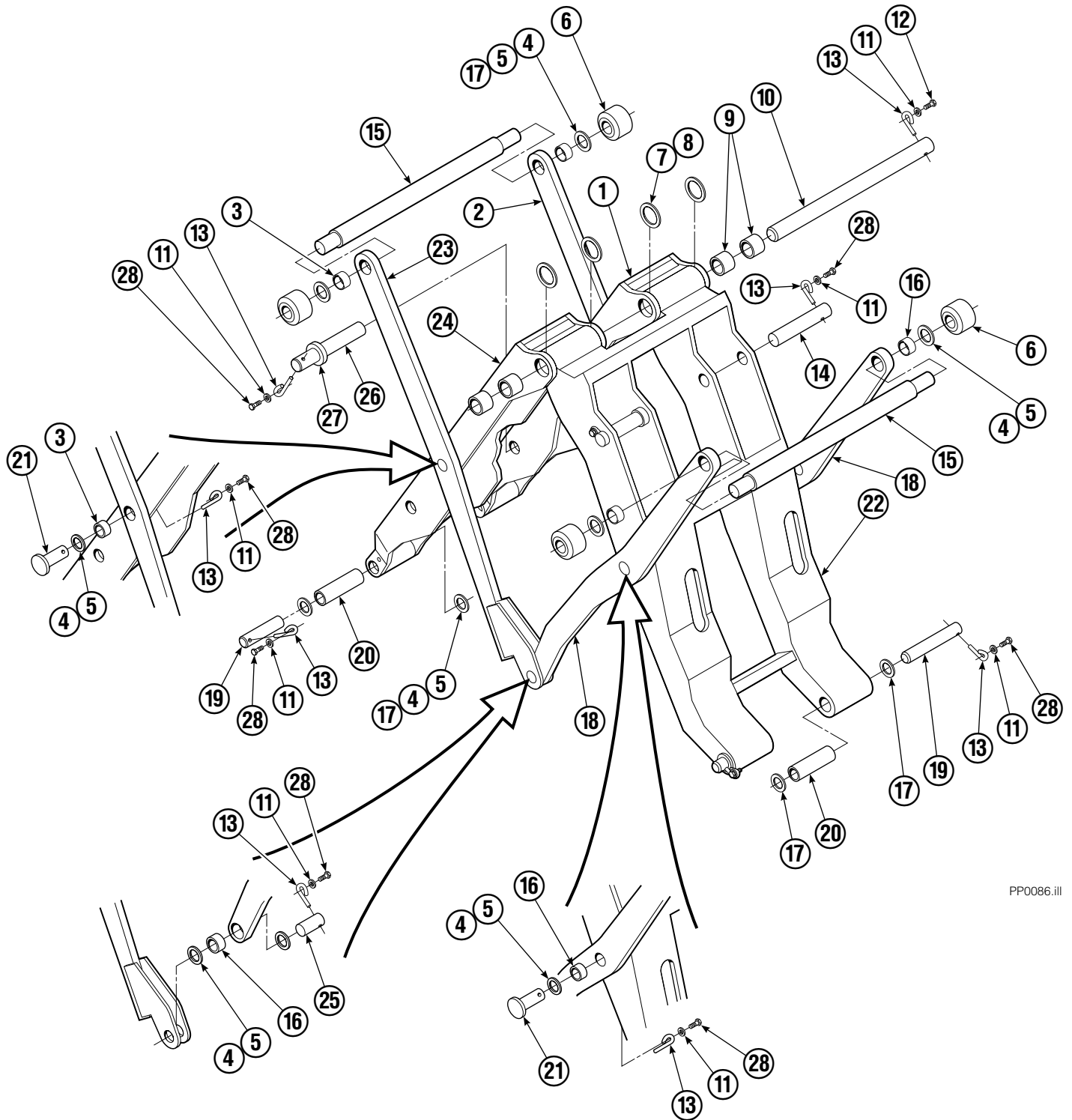
▼ Included in Service Kit 684827.

Quick-Change Lower Hook Group – ITA III



REF	QTY	PART NO.	DESCRIPTION
		683181	Lower Hook Group ITA III
1	2	678832	Pin
2	2	675957	Hook
3	4	779019	Capscrew, M16 x 35
4	2	675958	Guide

Mechanism Group



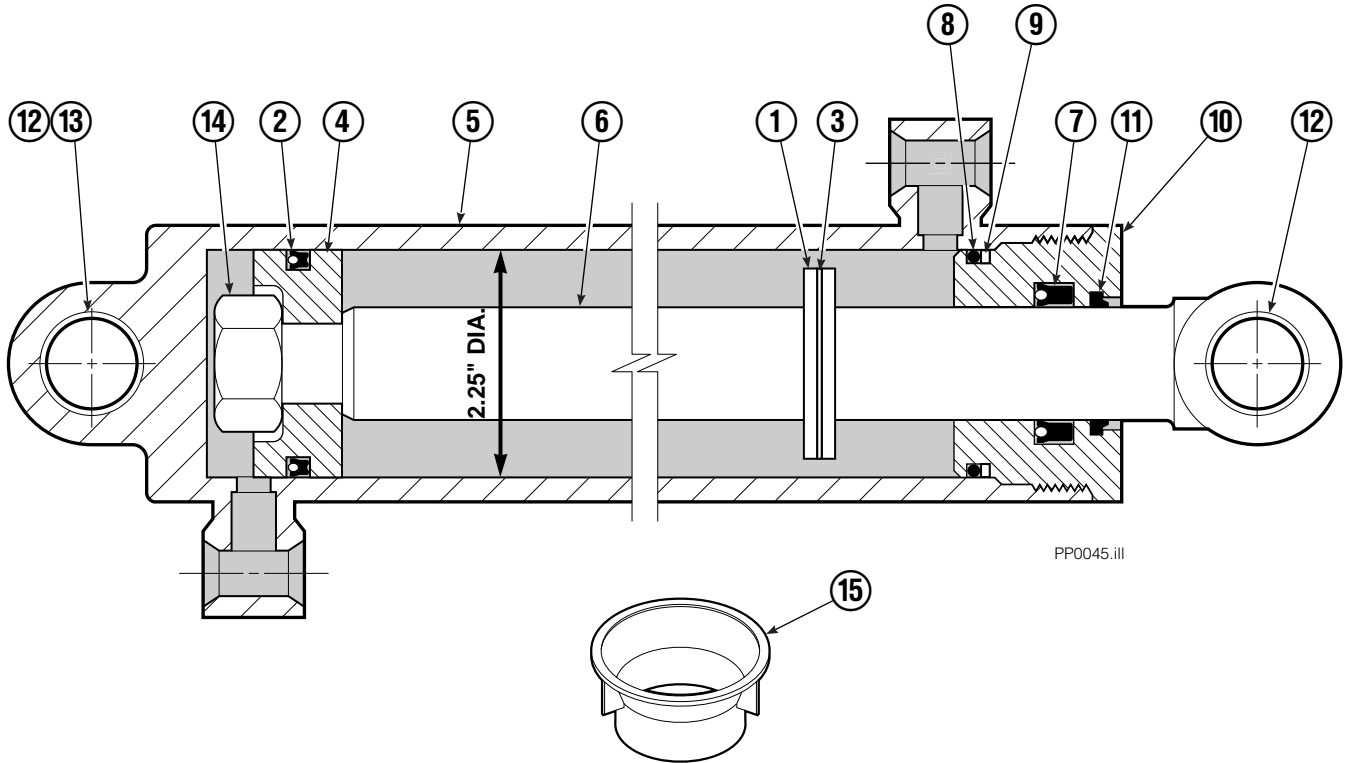
PP0086.iii

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

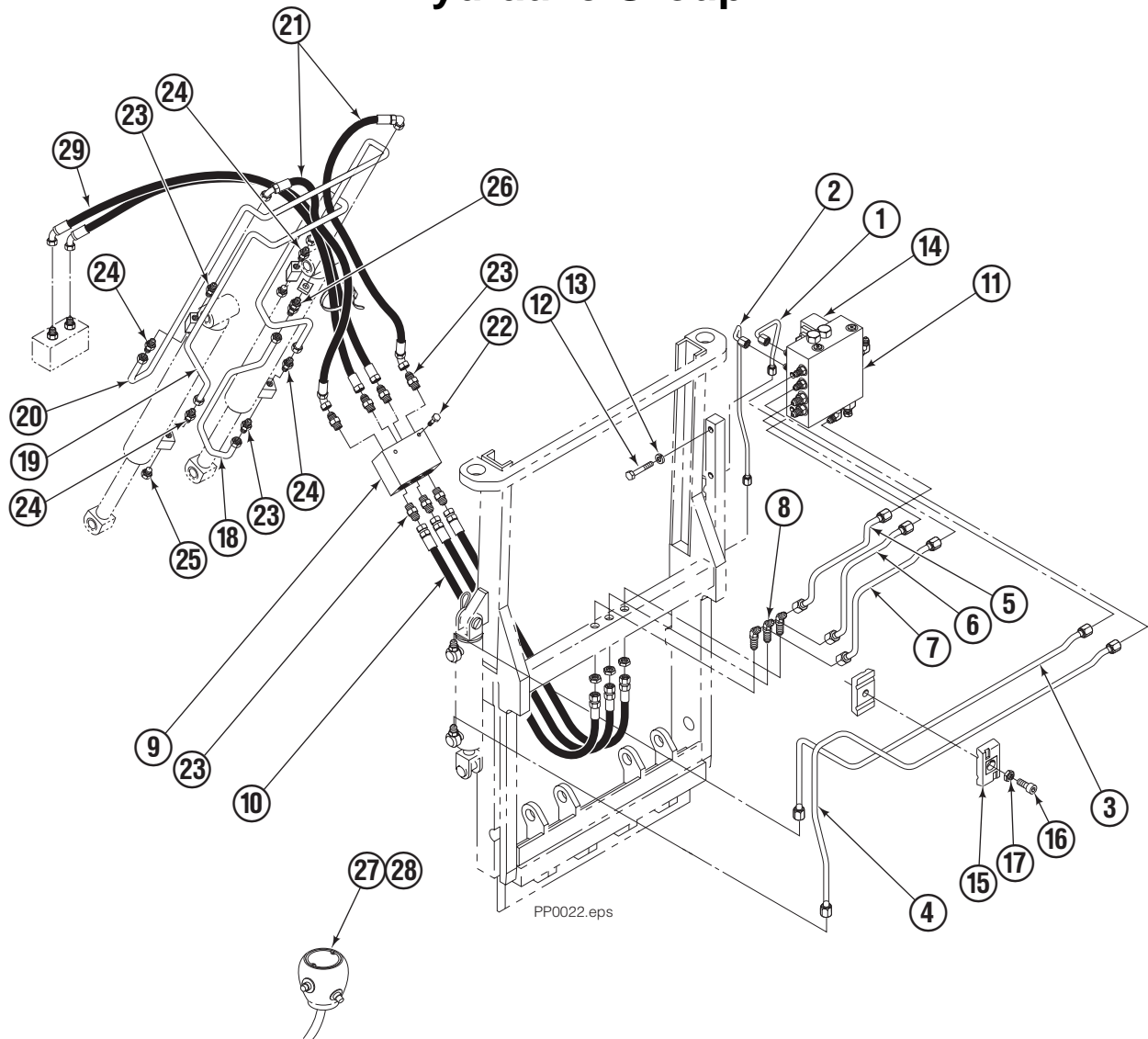


REF	QTY	PART NO.	DESCRIPTION
		582636	Cylinder Assembly
1	1	---	Spacer
2	1	564159	Seal ■
3	1	7348	Snap Ring
4	1	564161	Piston
5	1	562717	Shell
6	1	558626	Rod
7	1	662448	Seal ■
8	1	2787	O-Ring ■
9	1	615130	Back-Up Ring ■
10	1	558628	Retainer
11	1	636853	Wiper ■
12	4	559697	Bearing
13	1	559698	Spacer
14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

■ Included in Service Kit 562339.

Ref: S-3424

Hydraulic Group



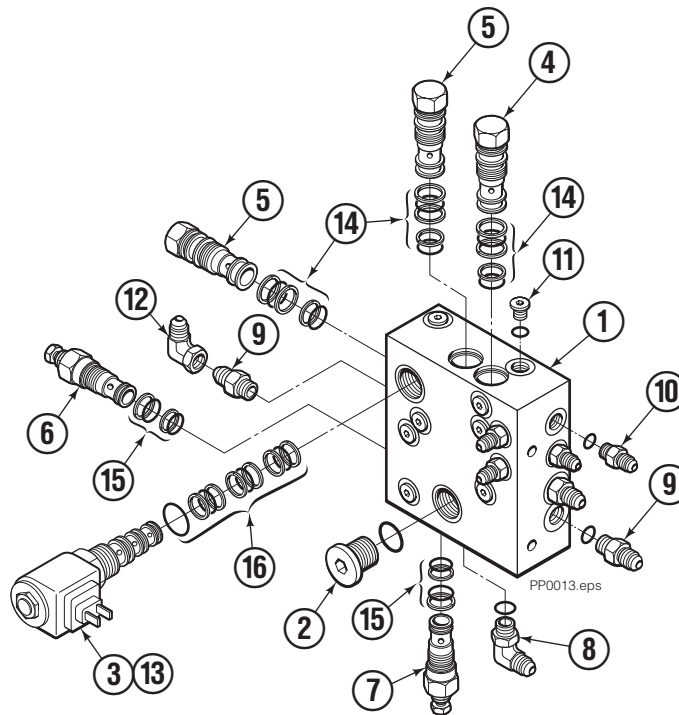
35E/45E

REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		206940	Hydraulic Group (without gripper control)	15	2	207041	Clamp
1	1	206931	Tube	16	1	768794	Capscrew
2	1	206932	Tube	17	1	767414	Nut
3	1	206933	Tube	18	1	200647	Tube
4	1	206934	Tube	19	1	200648	Tube
5	1	206935	Tube	20	1	200649	Tube
6	1	206936	Tube	21	2	683173	Hose
7	1	206937	Tube	22	2	765329	Capscrew
8	3	2492	Fitting, 6-6	23	7	604511	Fitting, 6-6
9	1	206927	Junction Block	24	4	605235	Fitting, 5-6
10	3	685981	Hose	25	2	604510	Fitting, 6
11	1	206942	■ Valve (without gripper control)	26	1	2375	Fitting, 6-6
12	2	768525	Capscrew	28	1	206939	● Knob (without gripper control)
13	2	686119	Washer	29	1	685831	Hose
14	1	669432	Diode (without gripper control)				

- See Valve page for parts breakdown.
- See Knob page for parts breakdown.

Valve

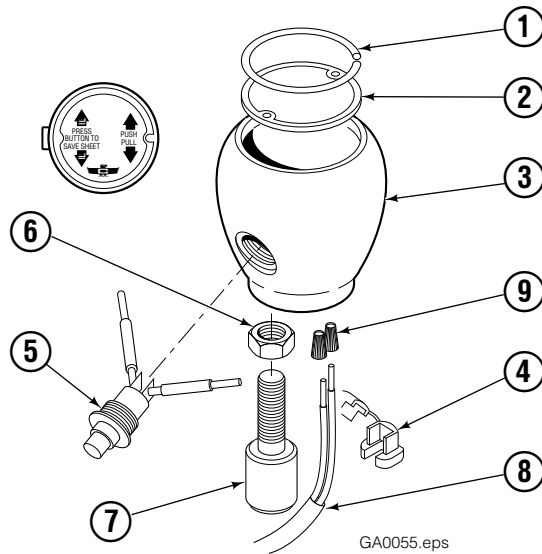
Without Independent Gripper Control



35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		206942	Valve Assembly
1	1	206943	Valve Body
2	1	609453	Fitting, 10
3	1	206991	Solenoid Valve
4	1	206944	Check Valve
5	2	659058	Check Valve
6	1	677125	Relief Valve
7	1	677124	Relief Valve
8	2	601676	Fitting, 6-6
9	3	604511	Fitting, 6-6
10	4	617915	Fitting, 4-4
11	12	609234	Fitting, 4
12	1	2680	Fitting, 6-6
13	1	206995	Coil - 12V
13	1	206996	Coil - 24V
13	1	206997	Coil - 36V
13	1	206998	Coil - 48V
14	3	667516	Service Kit
15	2	669597	Service Kit
16	1	667379	Service Kit

Control Knob

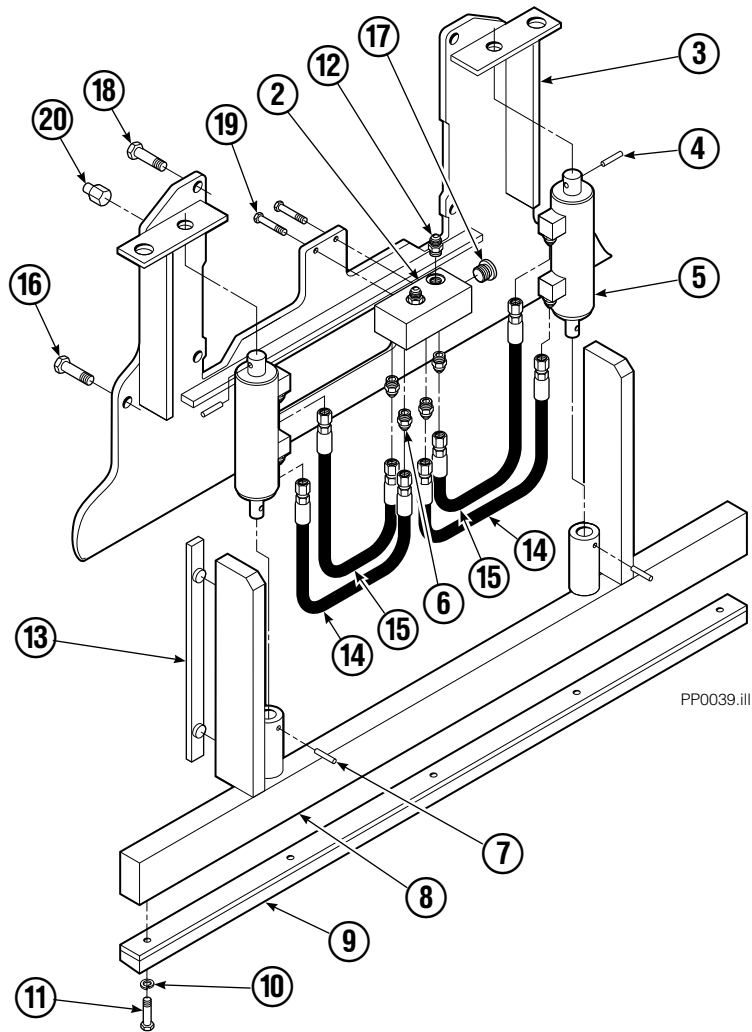
Without Gripper Control



35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		206939	Knob Group
1	1	665250	Snap Ring
2	1	206986	Cover
3	1	667012	Knob
4	1	665076	Strain Relief
5	1	677112	■ Switch
6	1	5902	Nut, 3/8 NC
7	1	665081	Adapter
8	1	667718	Cable Assembly
9	2	667752	Connector-Gray

■ This switch may be purchased without wires. Order part number 665004. Soldering is required.

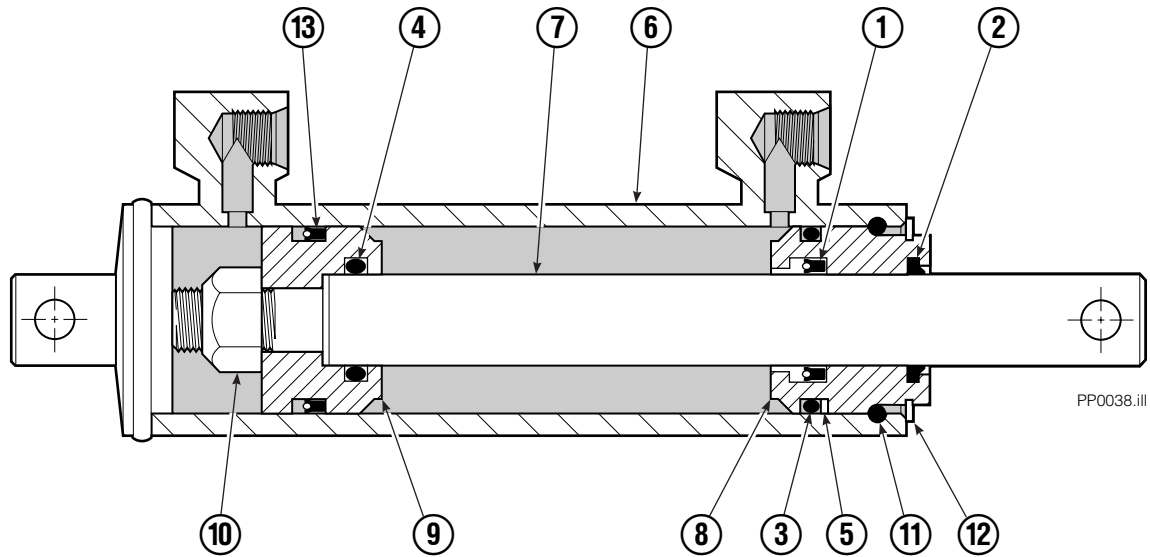
Faceplate Group



35E/45E							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		205970	Faceplate Group 40" x 40" ■	10	5	6444	Lockwasher
		205963	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	---	Stop

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

Gripper Cylinder



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.
87 Antimony Street
Carole Park,
Brisbane 4300
Australia
Tel: 7-271-1966
FAX: 7-271-3830

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

