



Parts Manual

Model _____ Push/Pull _____

Serial Number 45E-PA-442

cascade[®]

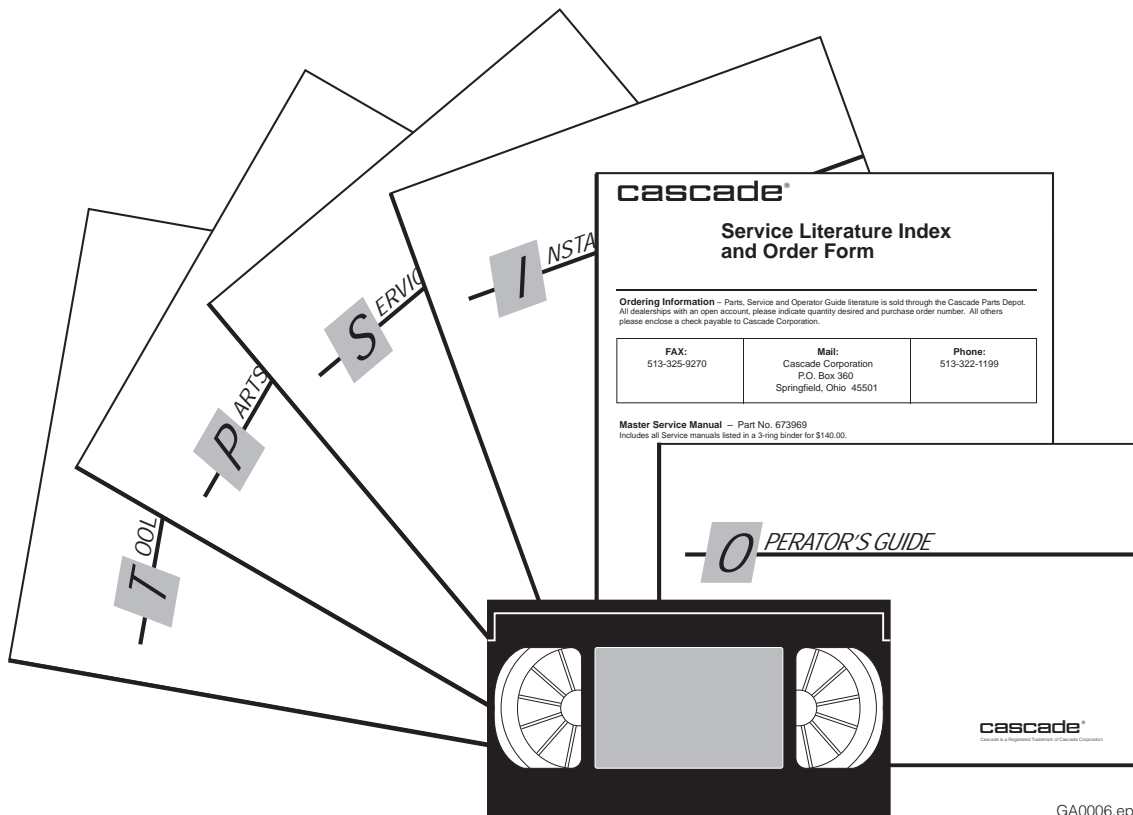
For Technical Assistance and to Order Parts . . .

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

OR

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

Publications

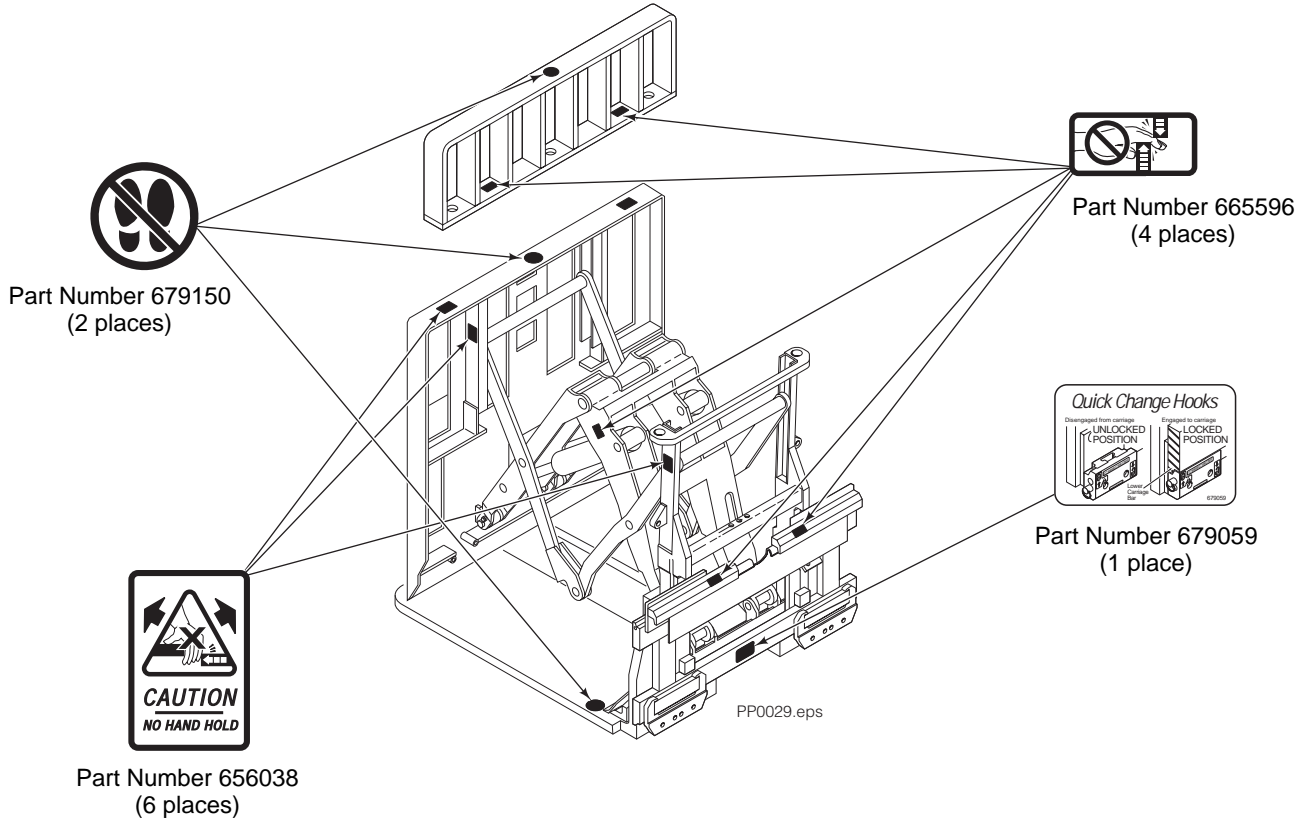


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PART NO.	DESCRIPTION
	Parts Manual
686455	Service Manual
684945	Operators Guide
685531	Operators Pocket Guide
684944	Installation Instructions
680664	Servicing Cascade Cylinders-VHS
679929	Tool Catalog
673964	Literature Index Order Form

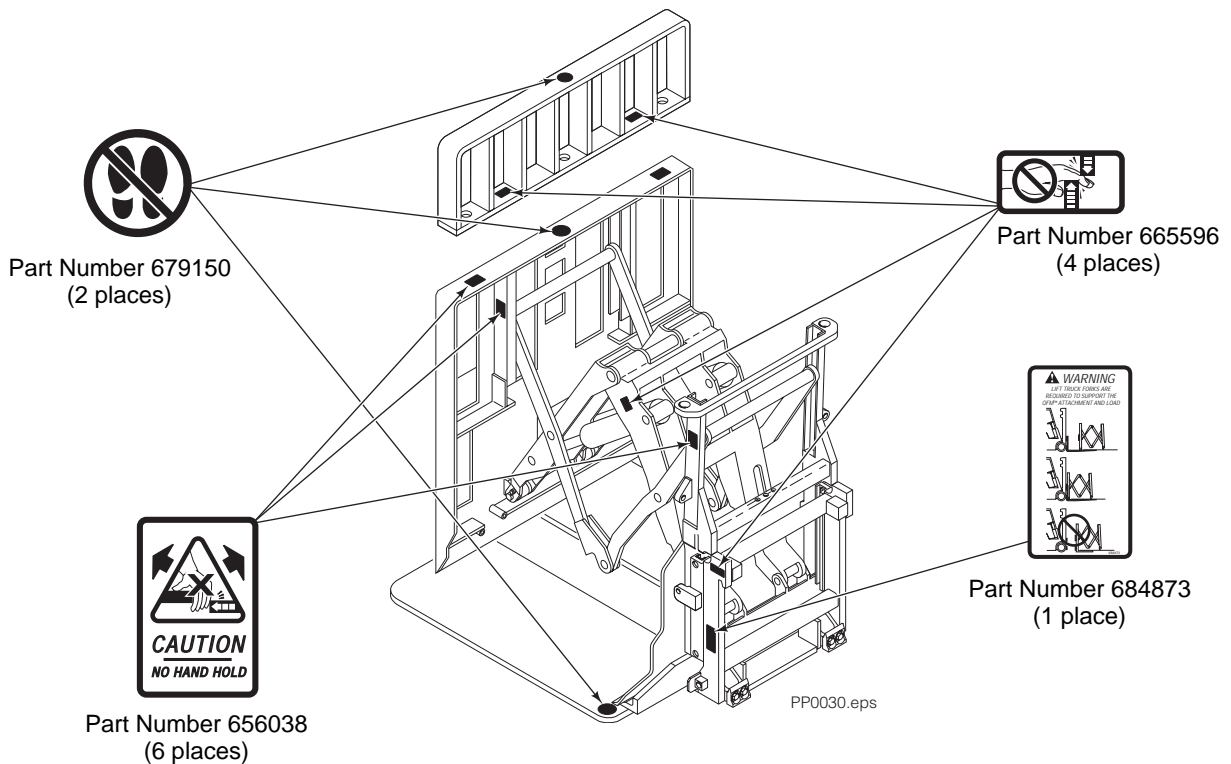
Decals

35E/45E Sheet-Sav

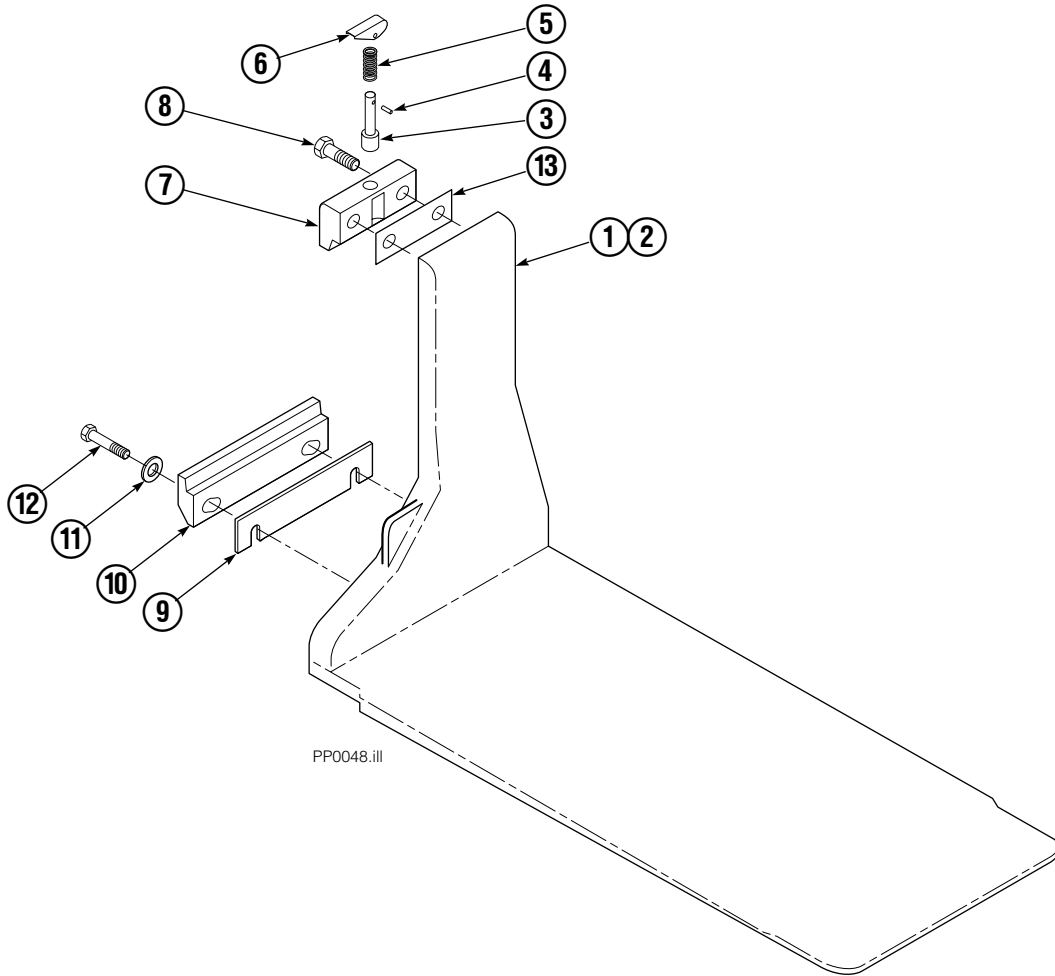


Decals

35E/45E QFM™ Sheet-Sav



Platens



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
		387675	Platen Group
1	1	387676	Platen L. H.
2	1	387677	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)

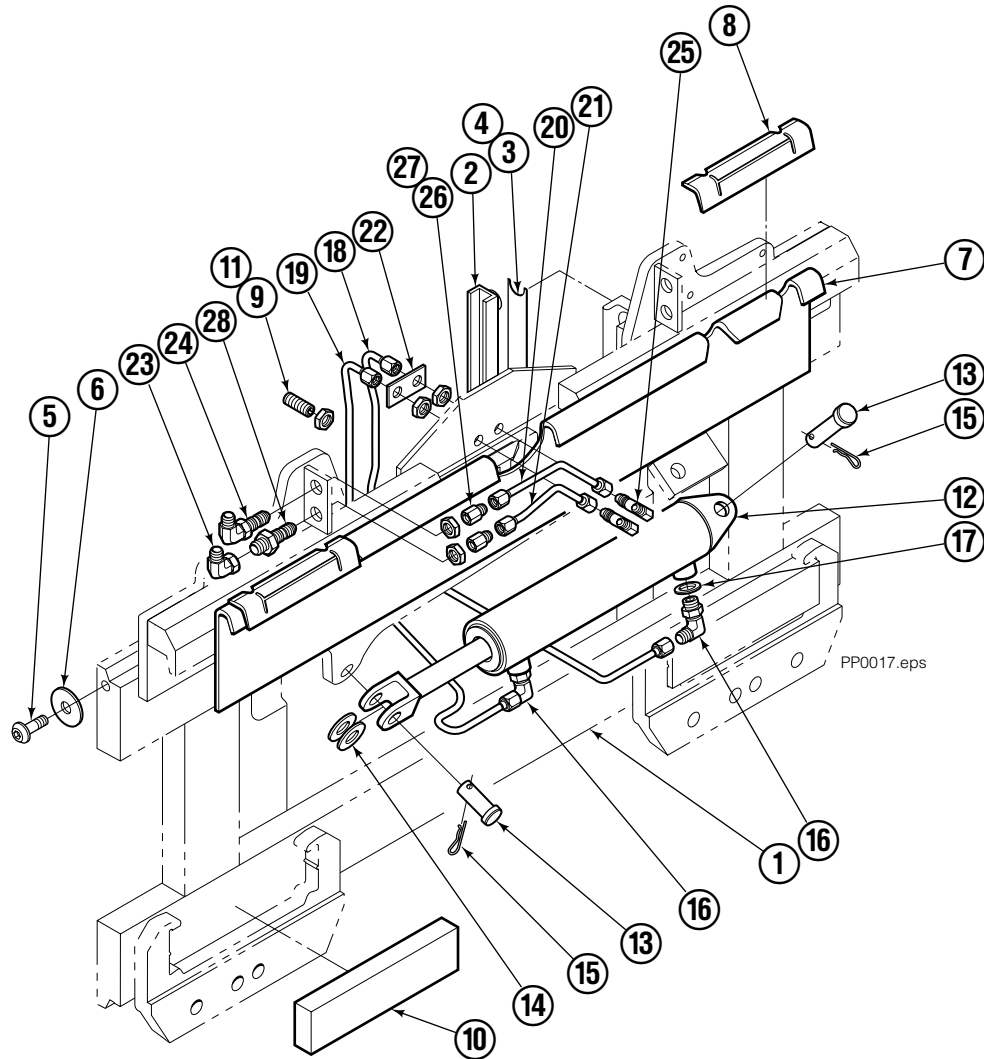
★ As required.

● As required (2 maximum)

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

Ref: S-3408

S/S Platen Carrier Group ITA II



35E/45E

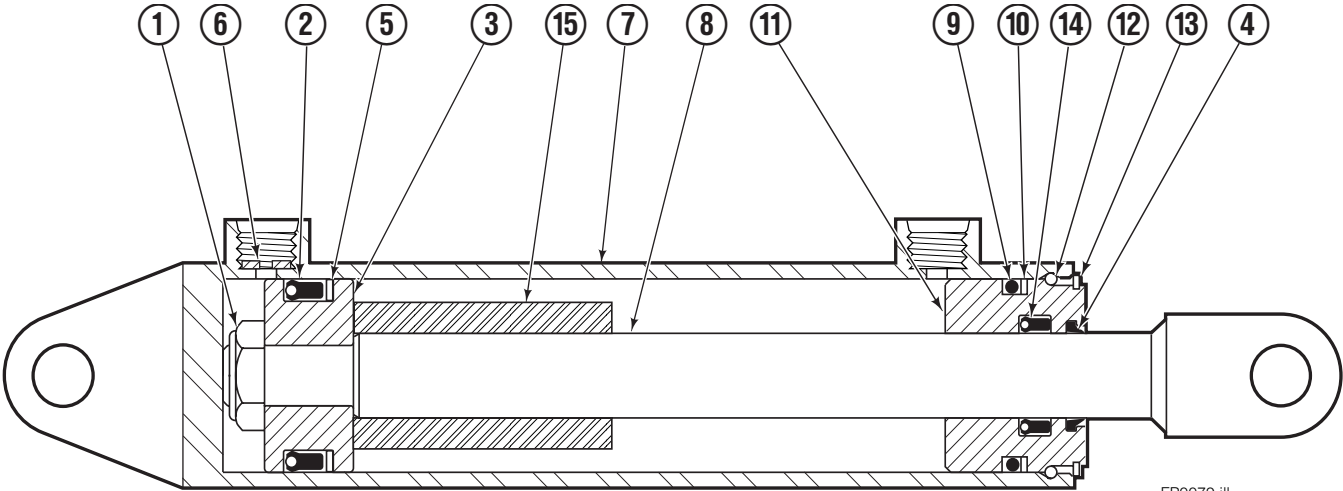
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		3006511	Platen Carrier Group	15	2	6517	Cotter Pin
1	1	387680	Platen Carrier	16	2	666984	Fitting, 6-6
2	2	206964	Bearing	17	1	675550	Washer
3	●	674298	Shim (.015)	18	1	207042	Tube
4	●	674299	Shim (.020)	19	1	207043	Tube
5	2	683142	Capscrew	20	1	207044	Tube
6	2	683001	Washer	21	1	207045	Tube
7	1	682554	Anchor Bracket	22	1	207046	Spacer
8	2	671165	Bearing	23	1	2680	Fitting, 6-6
9	2	768759	Setscrew	24	1	2453	Fitting, 6-6
10	2	682814	Bearing	25	2	2451	Fitting, 4-4
11	2	688387	Jam Nut	26	2	2617	Fitting, 6
12	1	675548	Cylinder Assembly ■	27	2	2669	Fitting, 4-6
13	2	214036	Pin-Clevis	28	1	2375	Fitting, 6-6
14	2	6234	Washer				

● As required, maximum 1 per side.

■ See Sideshift Cylinder page for parts breakdown.

Reference: Mounting Group 206970, SK-5986.

Sideshift Cylinder

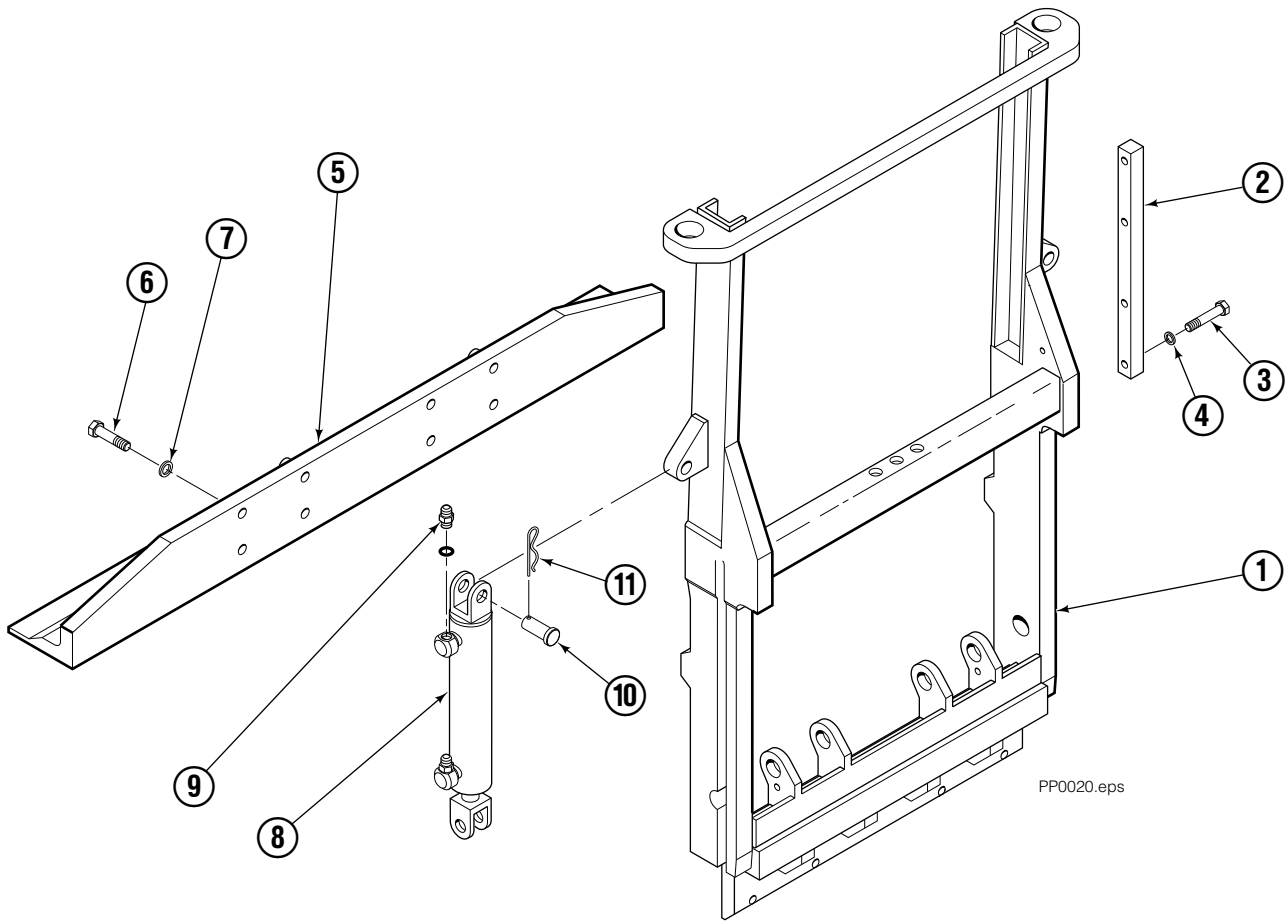


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REF	QTY	PART NO.	DESCRIPTION
		675548	Cylinder Assembly
1	1	553857	Nut
■ 2	1	662452	Seal
3	1	553501	Piston
■ 4	1	636851	Wiper
■ 5	1	638247	Back-up Ring
6	1	675550	Washer (orifice .085)
7	1	675549	Shell
8	1	553449	Rod
■ 9	1	2785	O-Ring
■ 10	1	615128	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

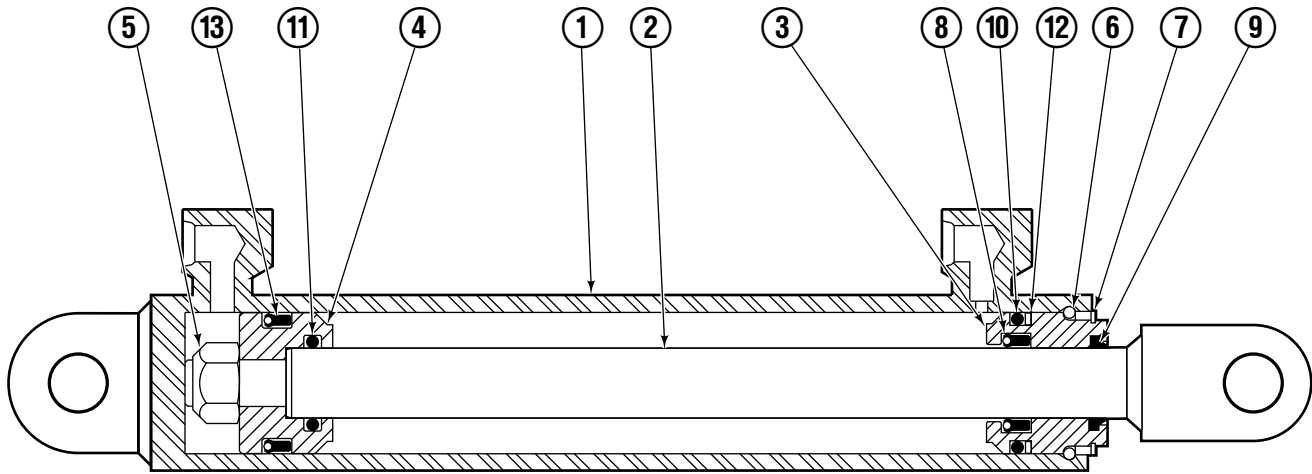


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35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		389320	Frame Group
1	1	206945	Frame
2	1	206954	Bar
3	2	768525	Capscrew
4	2	686119	Washer
5	1	389310	Foot
6	8	766929	Capscrew
7	8	678991	Lockwasher
8	2	■583942	Cylinder
9	4	617915	Fitting, 4-4
10	4	678525	Pin-Clevis
11	4	672726	Cotter Pin

■ See Cylinder page for parts breakdown.

Sheet-Sav Cylinder

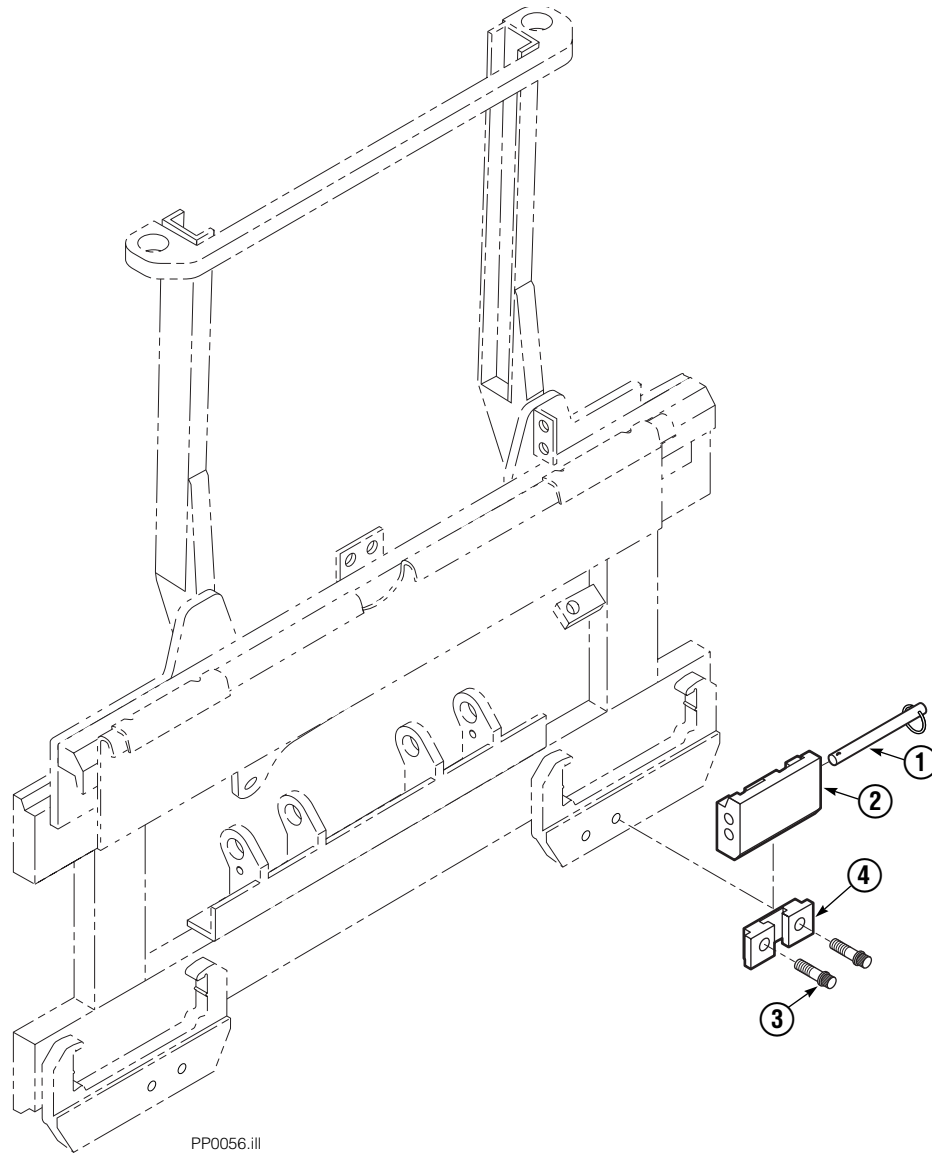


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35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		583942	Cylinder Assembly
1	1	564162	Shell
2	1	564165	Rod
3	1	685664	Retainer
4	1	685665	Piston
5	1	563462	Nut
6	1	563916	Ring-Stop
7	1	3137	Retaining Ring
▼ 8	1	646540	Seal
▼ 9	1	646850	Wiper
▼ 10	1	2718	O-Ring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

▼ Included in Service Kit 684827.

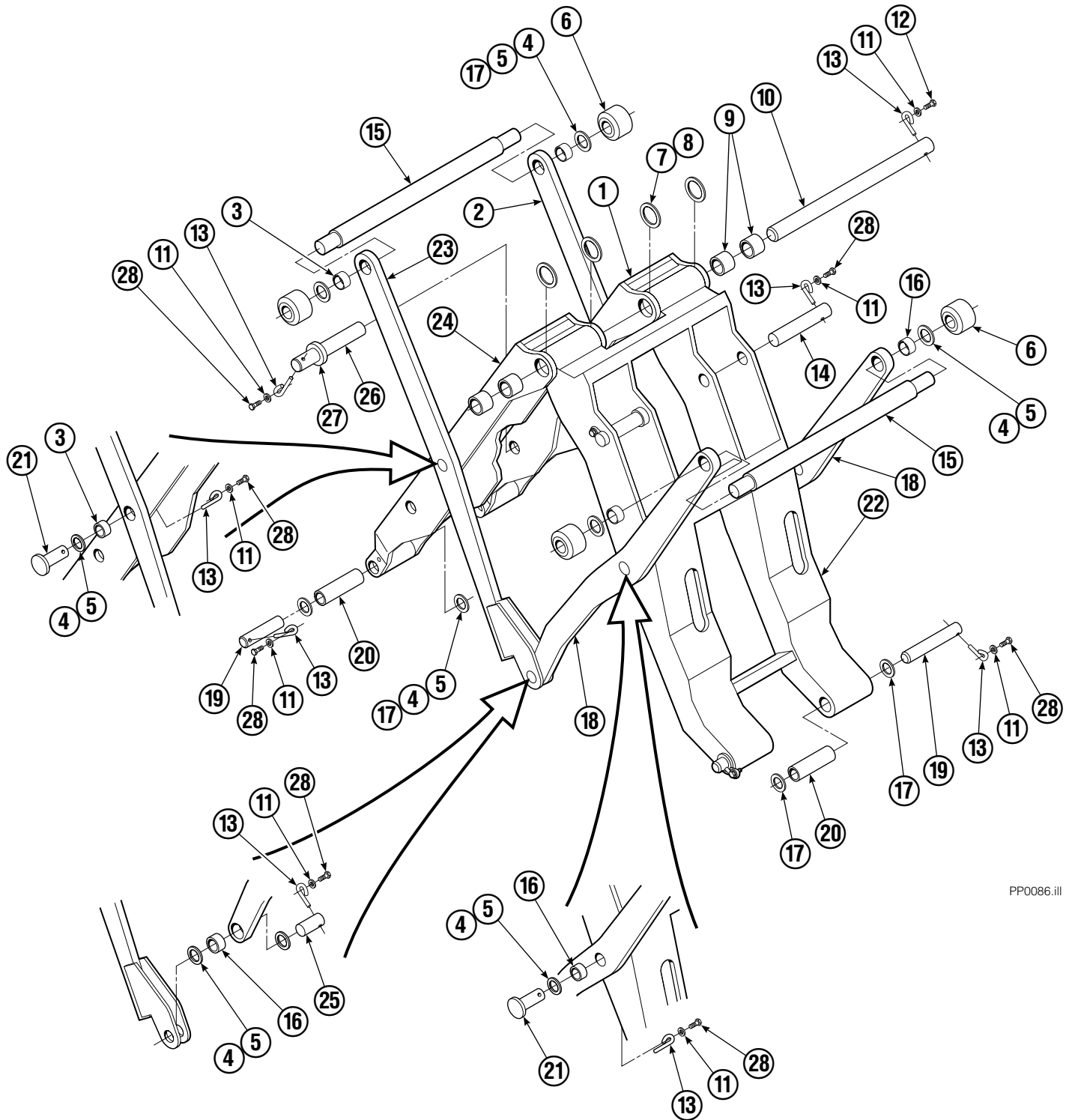
Quick-Change Lower Hook Group ITA II



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



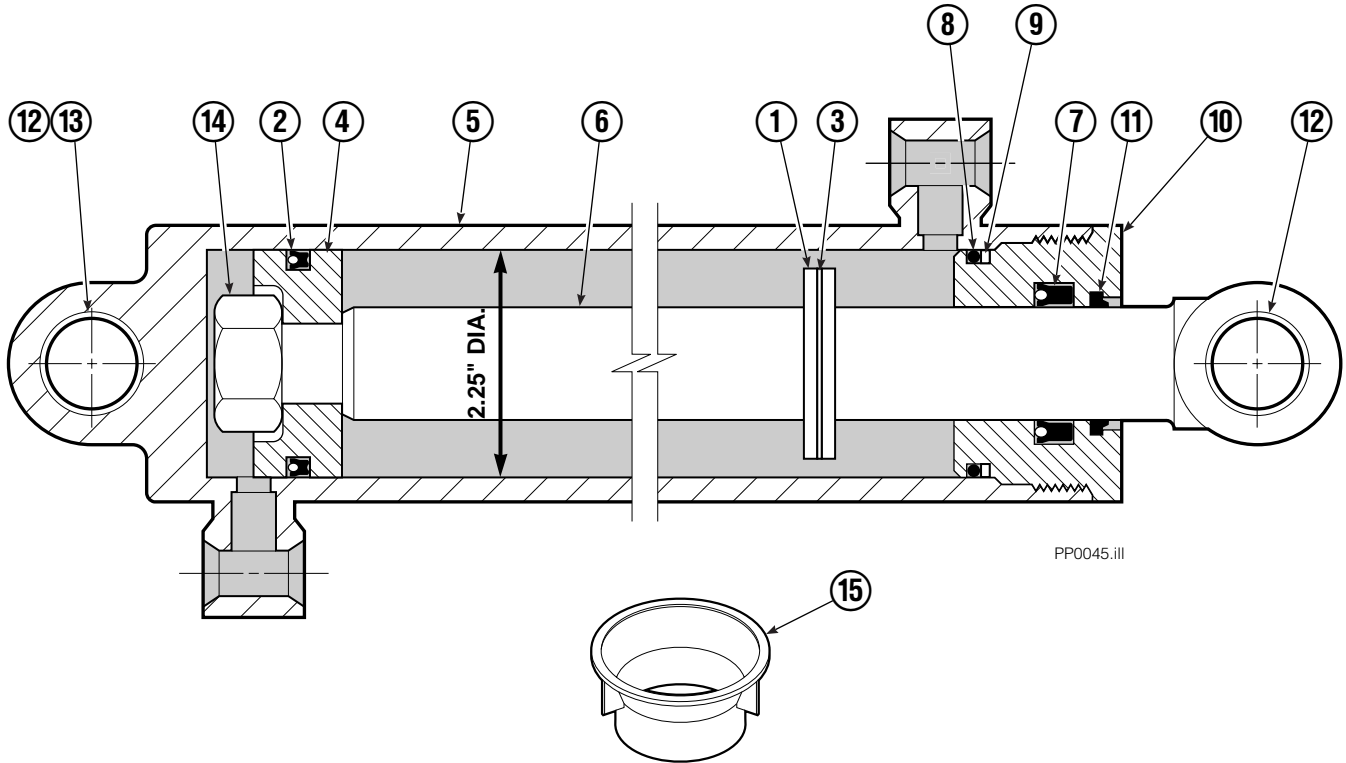
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Mechanism Group

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

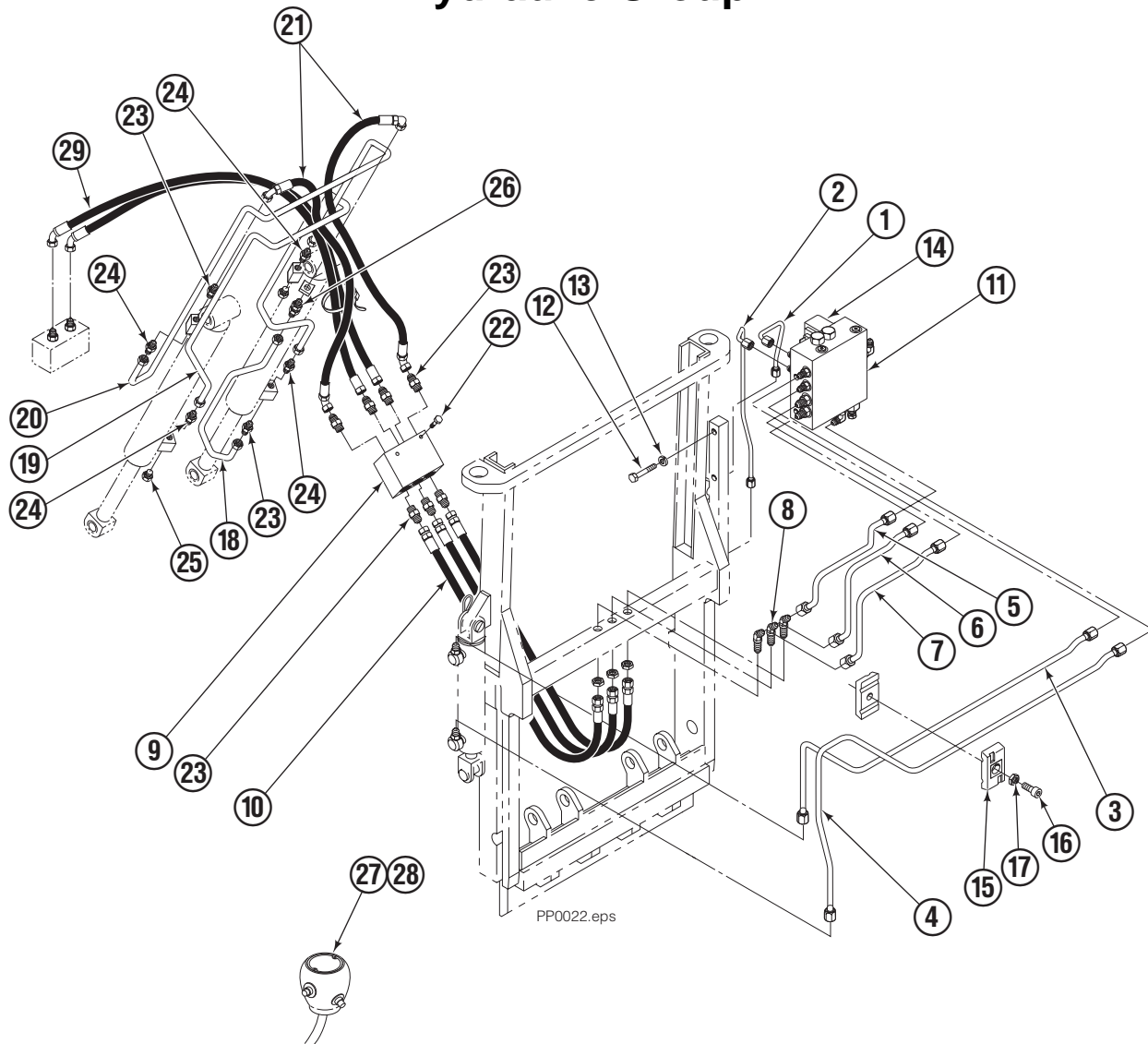


REF	QTY	PART NO.	DESCRIPTION
		582636	Cylinder Assembly
1	1	---	Spacer
2	1	564159	Seal ■
3	1	7348	Snap Ring
4	1	564161	Piston
5	1	562717	Shell
6	1	558626	Rod
7	1	662448	Seal ■
8	1	2787	O-Ring ■
9	1	615130	Back-Up Ring ■
10	1	558628	Retainer
11	1	636853	Wiper ■
12	4	559697	Bearing
13	1	559698	Spacer
14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

■ Included in Service Kit 562339.

Ref: S-3424

Hydraulic Group



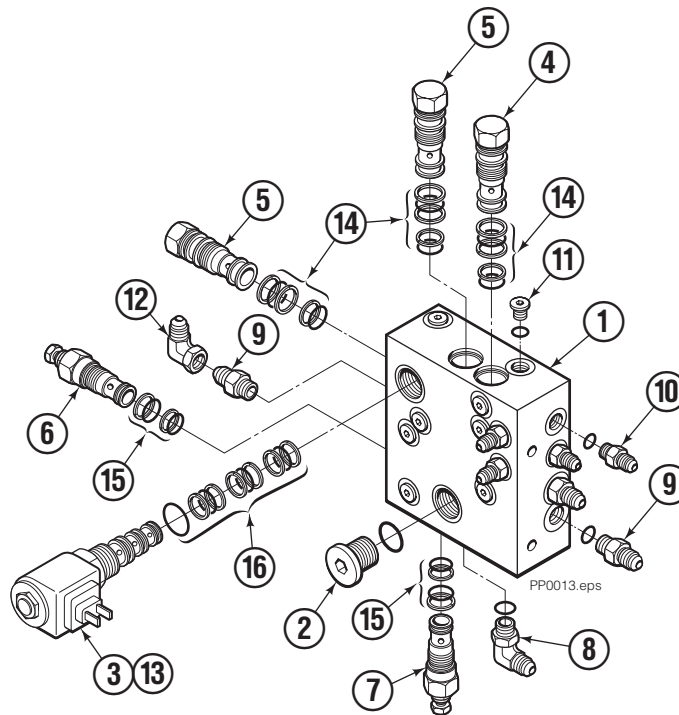
35E/45E

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

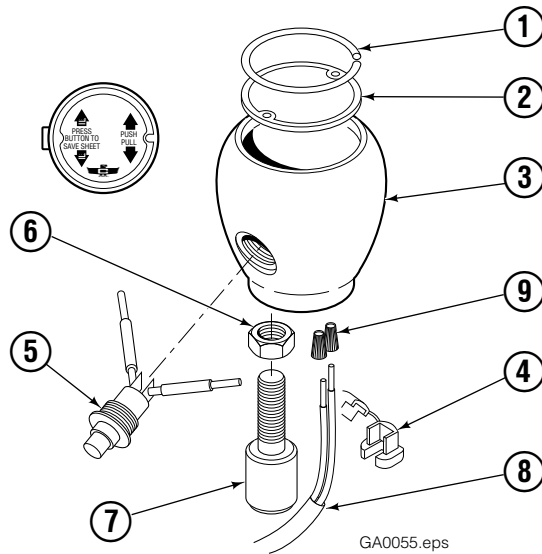
Without Independent Gripper Control



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

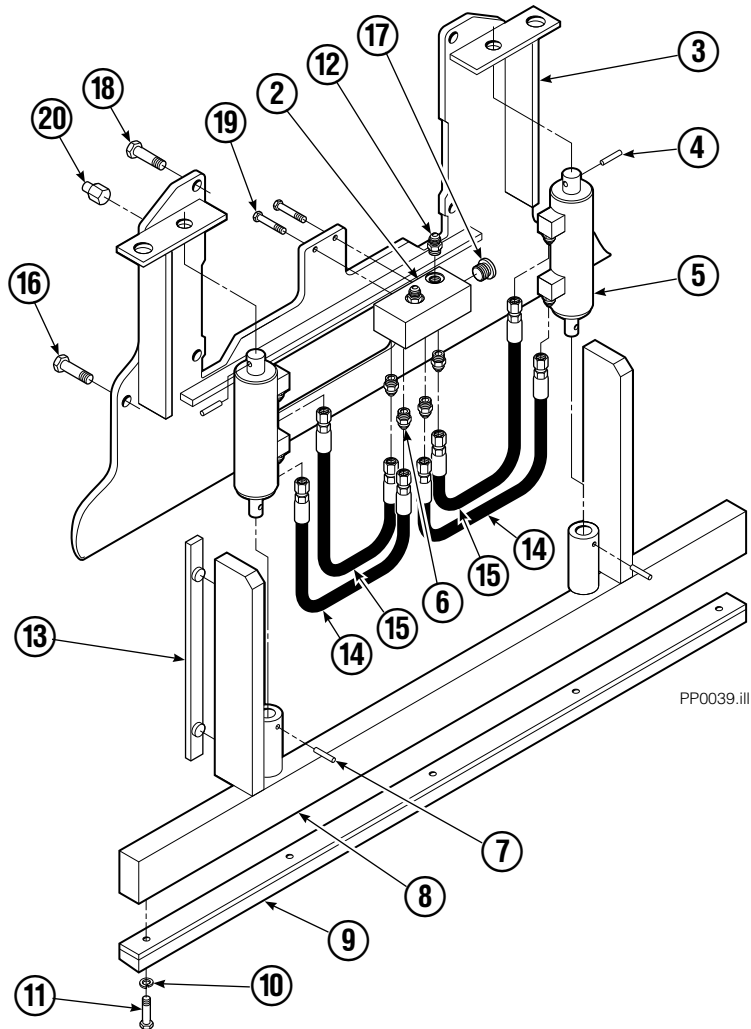
Without Gripper Control



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



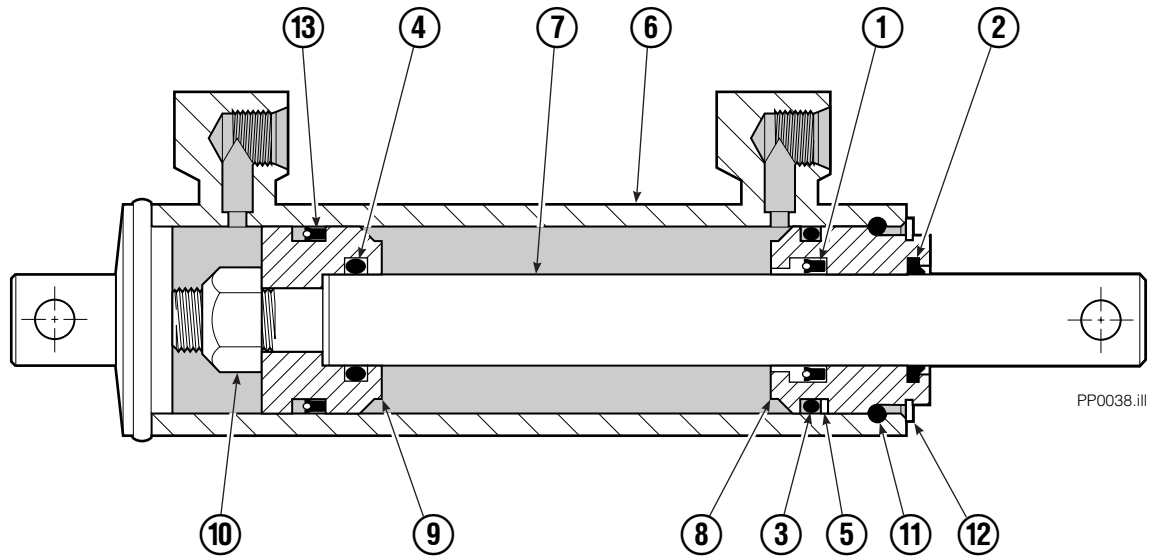
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35E/45E

REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		389318	Faceplate Group 40" x 40" ■	10	5	6444	Lockwasher
		389313	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	389314	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	389317	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



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.

Recommended Spare Parts List

35E/45E Sheet-Sav Push/Pull				
PART NUMBER	DESCRIPTION	ATTACHMENTS SERVICED		
		1-5	6-19	20-50
35E/45E				
	PLATEN GROUP			
622907	Platen Pin	1	2	4
622908	Spring	1	2	4
8007	Rivet	4	8	8
622897	Handle	2	2	8
667225	Lower Platen Hook	1	2	2
779010	Capscrew-Lower Hook	1	1	2
688386	Upper Platen Hook	0	2	4
685534	Capscrew-Upper Hook	2	4	4
	PLATEN CARRIER GROUP			
671165	Upper Bearing Kit-ITA II (sideshift only)	2	4	4
672018	Upper Bearing Kit-ITA III (sideshift only)	2	4	6
682814	Lower Bearing	2	4	4
206964	Frame Bearing	2	4	4
675548	Sideshift Cylinder	0	1	2
553861	Sideshift Cylinder Service Kit	1	2	4
	FRAME GROUP			
583942	Sheet-Sav Cylinder	0	2	2
684827	Sheet-Sav Cylinder Service Kit	2	2	2
	LOWER-HOOKS			
675514	Quick Change Lower Hook-ITA II	2	4	6
675957	Quick Change Lower Hook-ITA III	2	4	6
675515	Guide-Quick Change Lower Hook-ITA II	2	4	6
675958	Guide-Quick Change Lower Hook-ITA III	2	4	6
678832	Pin-Quick Change Lower Hook	2	4	6
679360	Bolt-on Lower Hook-ITA II	2	4	6
679361	Bolt-on Lower Hook-ITA III	2	4	6
	MECHANISM GROUP			
205070	Rollers	4	8	8
205075	Bushing Service Kit	2	4	6
■	Shims (all)	8	16	30
682999	Eye Pin	4	8	16
	PUSH/PULL CYLINDER			
■	Cylinder	0	2	2
■	Cylinder Service Kit	2	4	6
	HYDRAULIC GROUP			
604511	Fitting, 6-6	2	4	6
685981	Hose	2	4	6
683173	Hose (cylinder)	2	4	6
685831	Hose (junction block)	2	4	6
■	Tubes (all)	1	2	4
206941	Valve Assembly (with gripper)	0	1	1
206942	Valve Assembly (without gripper)	0	1	2
677125	Cartridge (retract)	1	1	1
677124	Cartridge (extend)	1	1	1
659058	Cartridge (gripper check)	1	1	1
688384	Valve Assembly	0	1	2
206987	Solenoid Valve (with gripper only)	1	1	1
206991	Solenoid Valve	1	1	1
206944	Cartridge (check)	1	1	2
206938	Control Knob (with gripper)	0	0	1
206939	Control Knob (without gripper)	0	0	1
665004	Control Knob Switch	1	2	4

■ See specific parts page for part number.

Recommended Spare Parts List

35E/45E Sheet-Sav Push/Pull				
PART NUMBER	DESCRIPTION	ATTACHMENTS SERVICED		
		1-5	6-19	20-50
35E/45E				
	FACEPLATE GROUP			
672844	Gripper Cylinder	0	2	4
684827	Gripper Cylinder Service Kit	2	4	8
205957	Hose	1	2	2
205958	Hose	1	2	2
686573	Gripper Bearing	2	4	4
	PUBLICATIONS			
207551	Parts Manual	1	1	2
686455	Service Manual	1	1	2
684945	Operators Guide	1	1	2
685531	Operators Pocket Guide	1	1	2
684944	Installation Instructions	1	1	2
679929	Tool Catalog	1	1	2
673964	Literature Index Order Form	1	1	2
	VIDEO			
680664	Servicing Cascade Cylinders	1	1	1

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