



Parts Manual

Model Push-Pull

Serial Number 45E-PH-241

cascade®

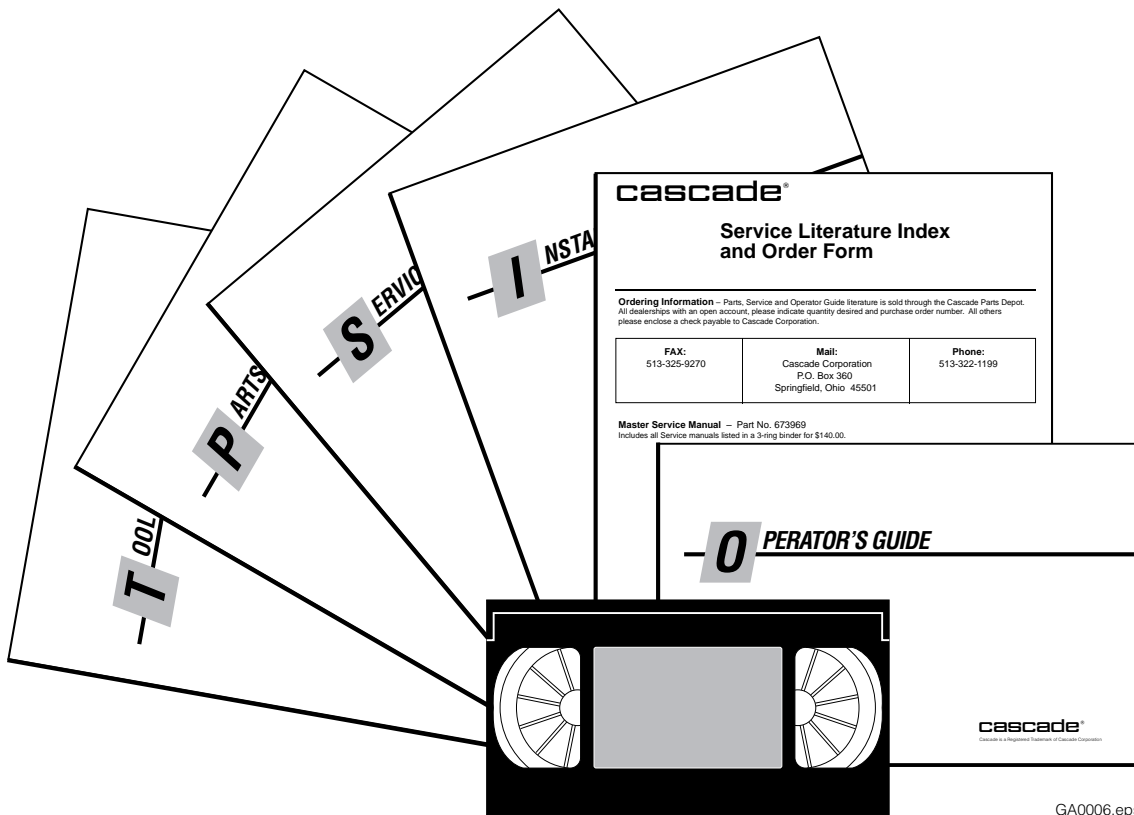
For Technical Assistance and to Order Parts . . .

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

OR

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

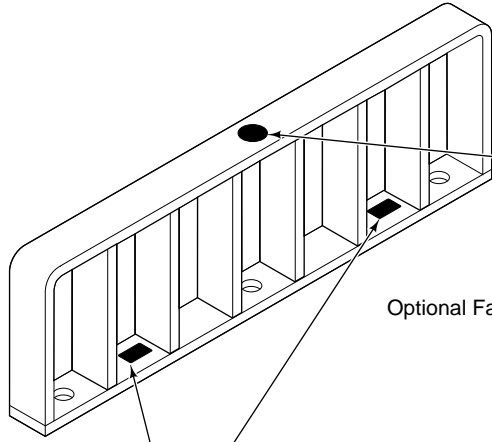
Publications



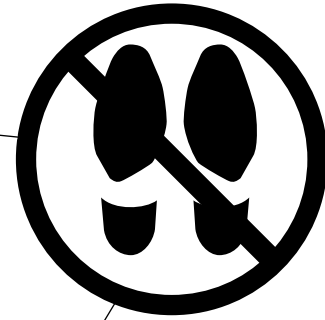
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PART NO.	DESCRIPTION
	Parts Manual
686455	Service Manual
684945	Operators Guide
685531	Operators Pocket Guide
684944	Installation Instructions
680664	Servicing Cascade Cylinders-VHS
679929	Tool Catalog
673964	Literature Index Order Form

Decals



Optional Faceplate Extension



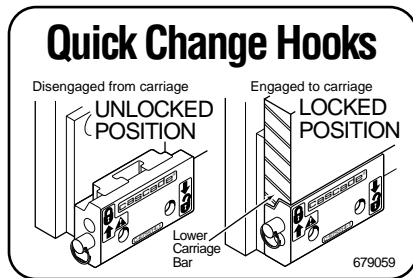
Part No. 679150
(1 Place & 1 optional)



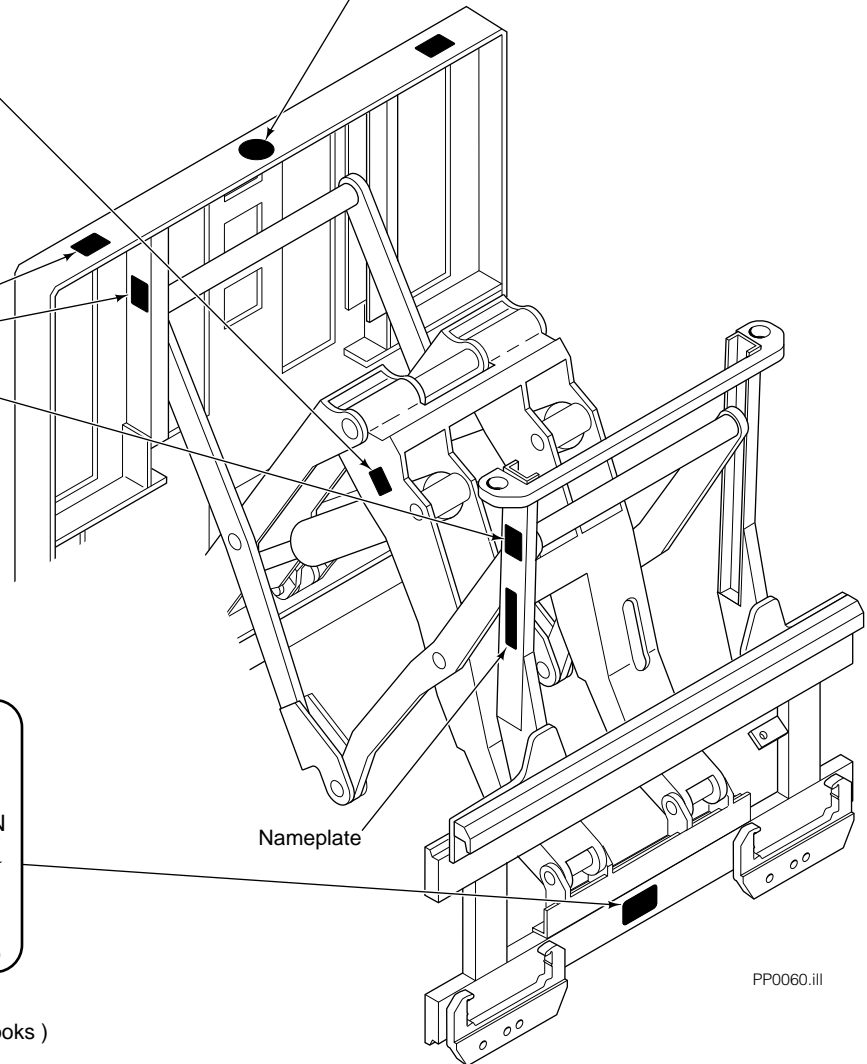
Part No. 665595
(2 Place & 2 optional)



Part No. 656038
(6 Places)

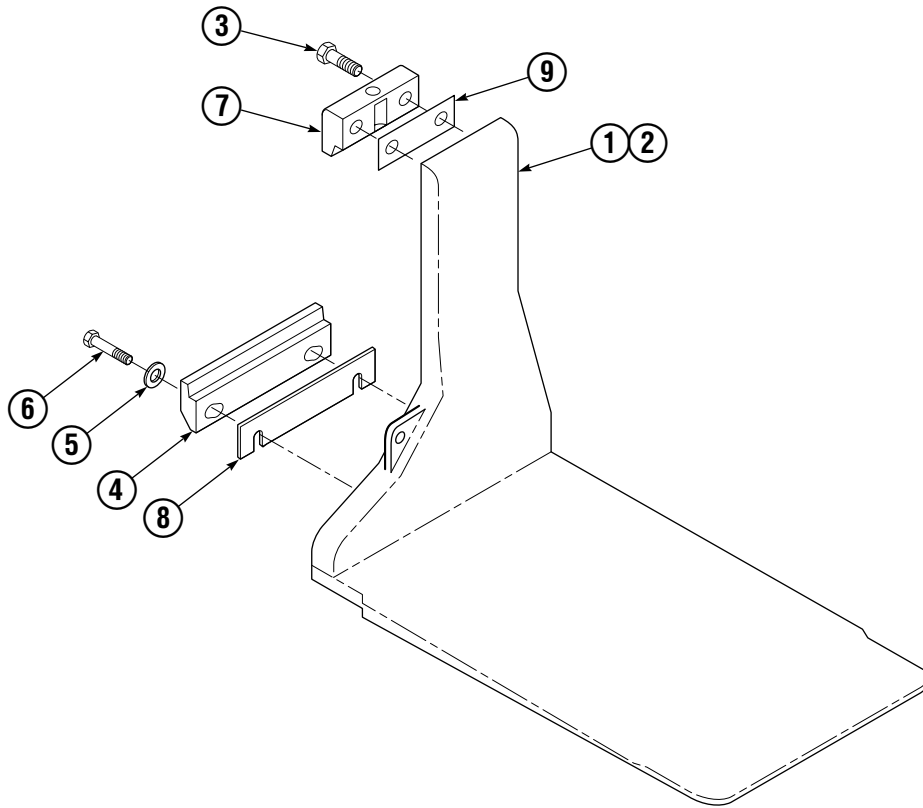


Part No. 679059
(1 Place if equipped with Quick Change Hooks)



PP0060.iii

Hydraulically Adjustable 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".

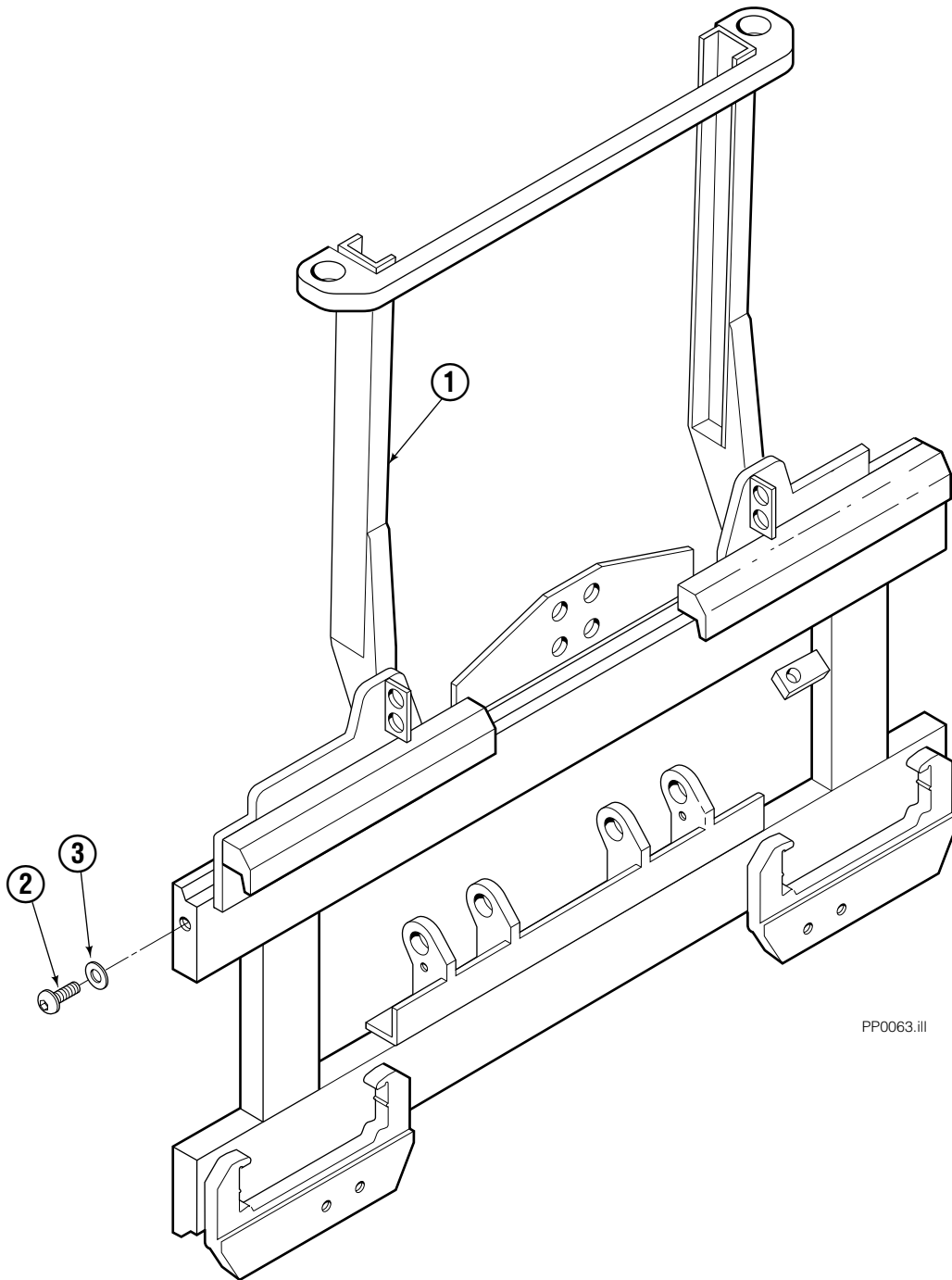
REF	QTY	PART NO.	DESCRIPTION
		375019	Platen Group
1	1	375020	Platen L. H.
2	1	375021	Platen R. H.
3	4	685534	Capscrew
4	2	682851	Lower Hook
5	4	667225	Washer
6	4	779010	Capscrew
7	2	685533	Upper Hook
8	★	206969	Shim (.030)
9	●	688379	Shim (.060)

★ As required.

● As required (2 maximum)

Ref: S-8589

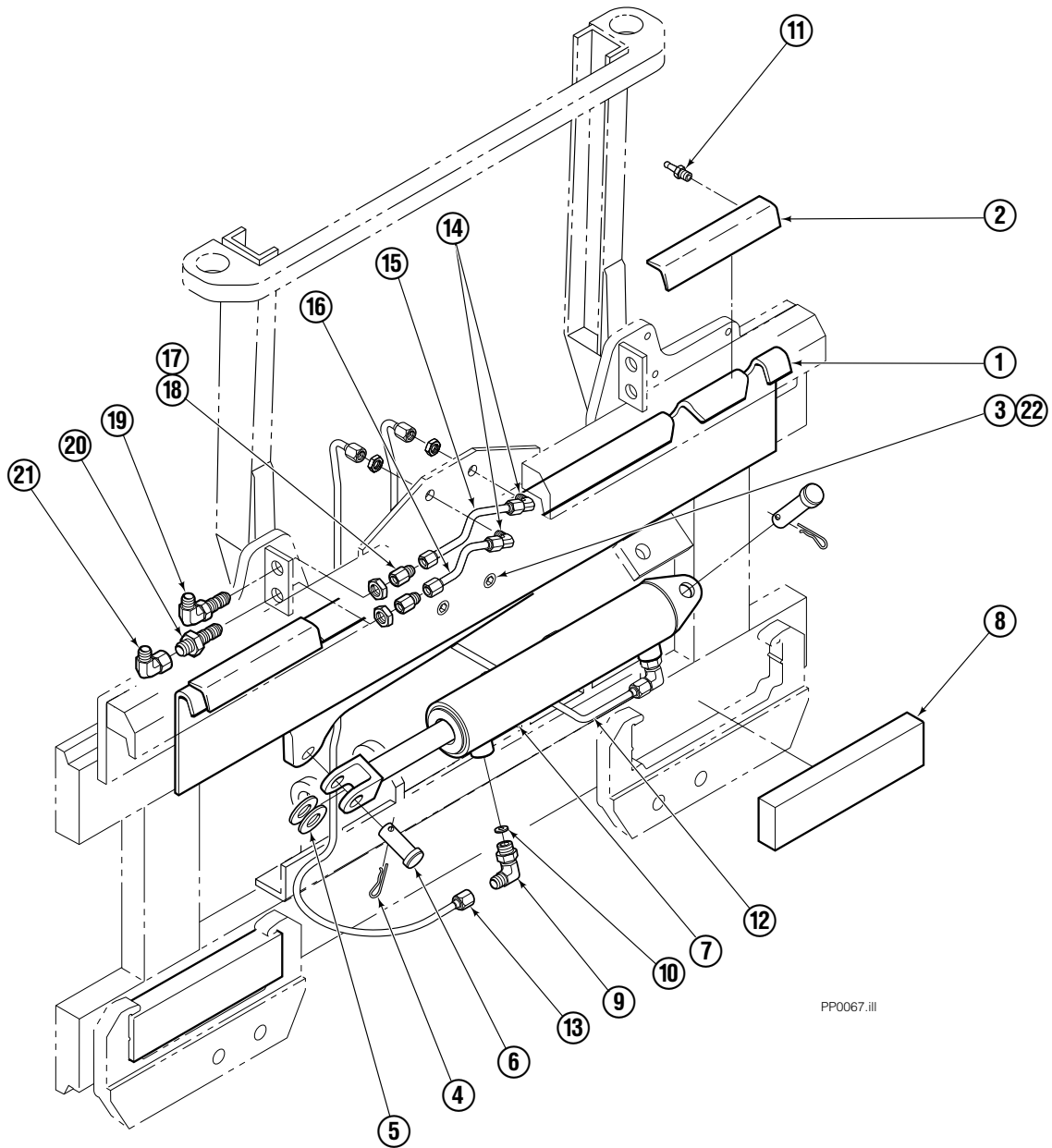
Frame Group ITA II



PP0063.iii

35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		368004	Frame Group ITA II
1	1	368018	Frame
2	2	683142	Capscrew
3	2	683001	Washer

S/S Mounting Group ITA II

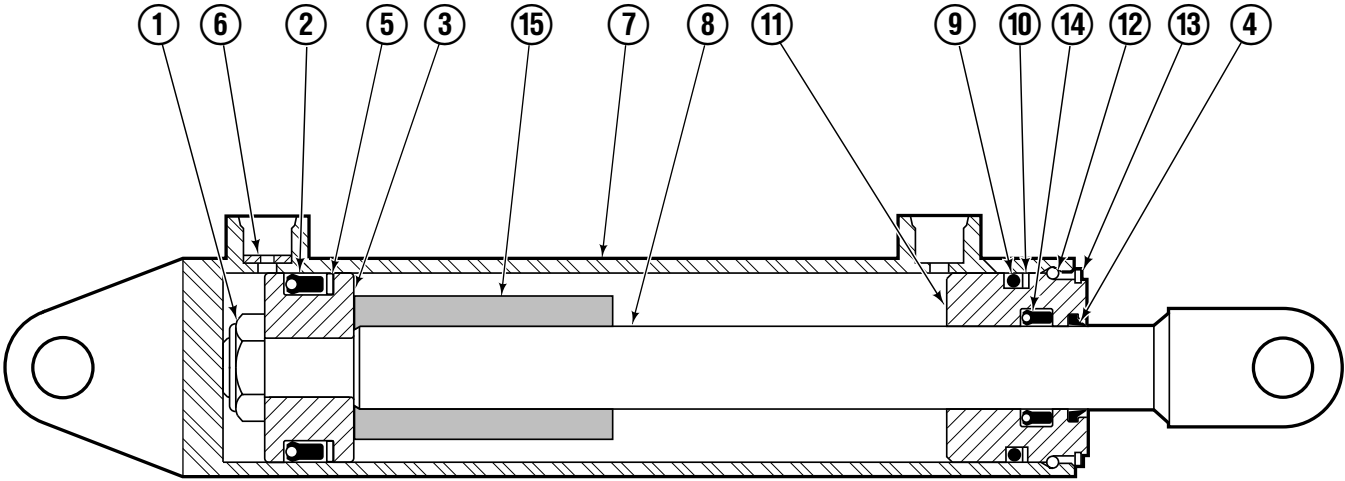


PP0067.iii

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

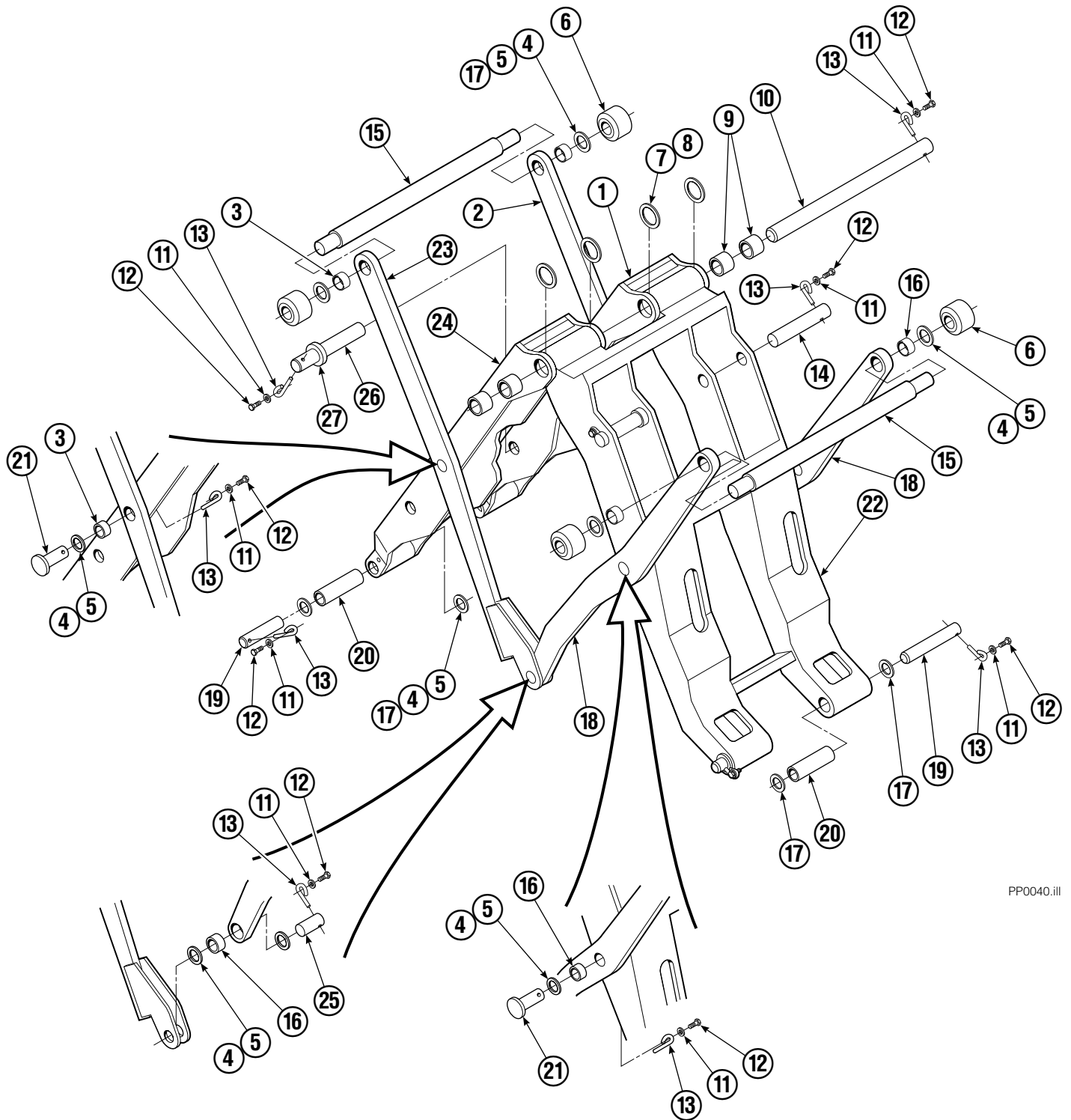


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REF	QTY	PART NO.	DESCRIPTION
		675548	Cylinder Assembly
1	1	553857	Nut
■ 2	1	662452	Seal
3	1	553501	Piston
■ 4	1	636851	Wiper
■ 5	1	638247	Back-up Ring
6	1	675550	Washer (orifice .085)
7	1	675549	Shell
8	1	553449	Rod
■ 9	1	2785	O-Ring
■ 10	1	615128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

Mechanism Group



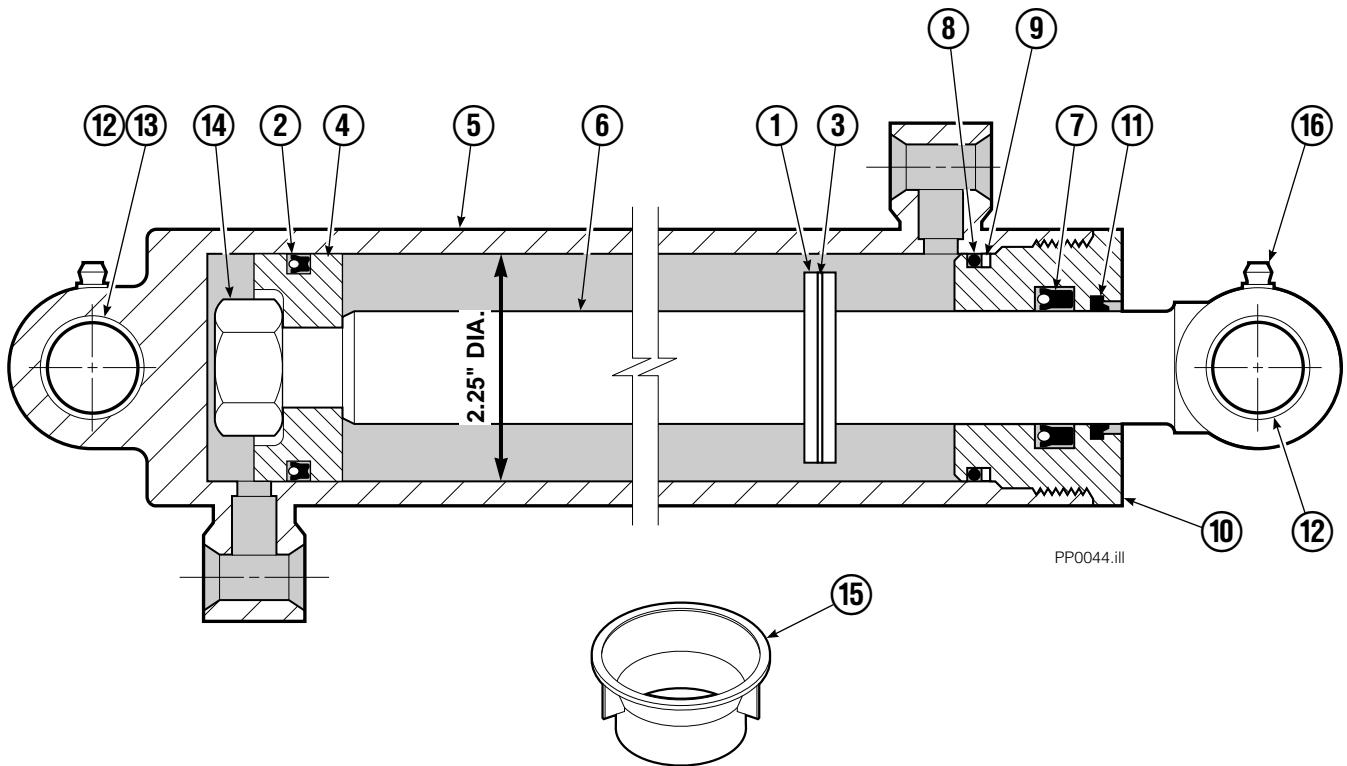
PP0040.ill

Mechanism Group

35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		364009	Mechanism Group
1	1	364240	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	15	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	364238	Arm-Inner Primary
23	1	204693	Arm-Secondary Outer L. H.
24	1	364239	Arm-Inner Secondary L. H.
25	2	204696	Pin-Outer
26	2	682823	Pin-Rod
27	2	683165	Spacer
28	6	7401	Grease Fitting

- Quantity as required.
- Included in Bushing Service Kit 205075.

Cylinder



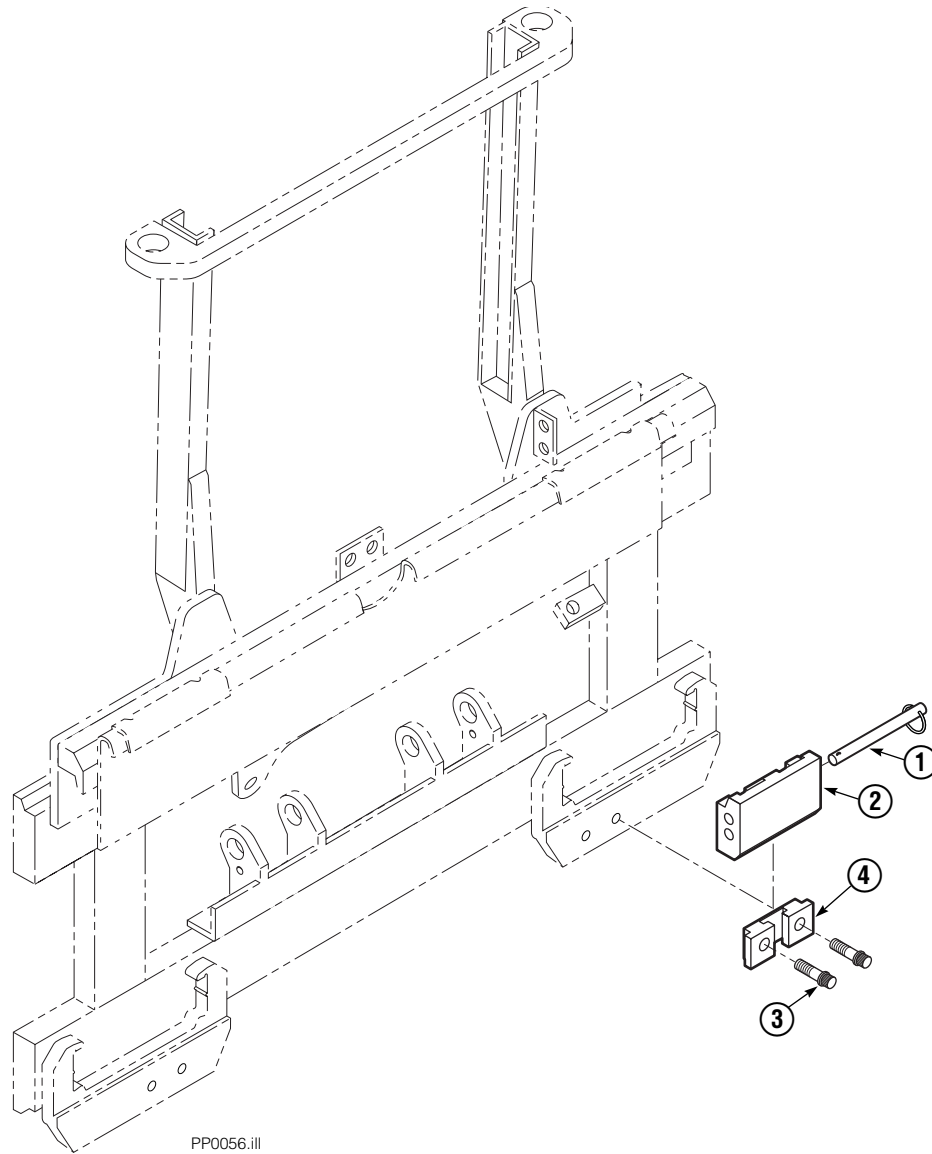
35E/45E

REF	QTY	PART NO.	DESCRIPTION
		358091	Cylinder Assembly
1	1	353370	Spacer
2	1	562553	Seal ■
3	1	7348	Snap Ring
4	1	562333	Piston
5	1	364727	Shell
6	1	364715	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	678019	Nut
15	1	671048	Seal Loader Kit ■
16	2	7401	Grease Fitting

■ Included in Service Kit 562339.

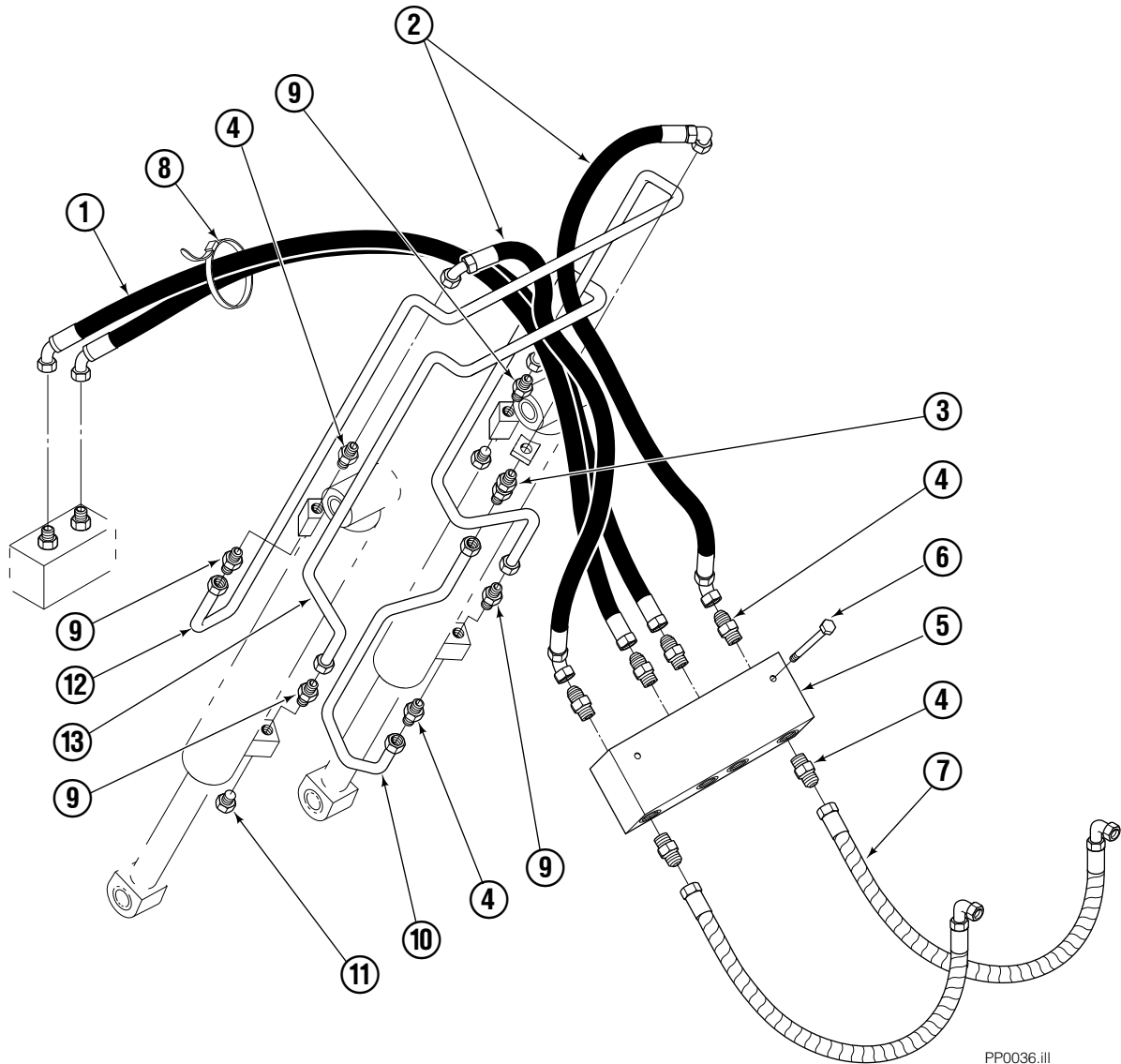
Ref: S-8434

Quick-Change Lower Hook Group ITA II



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

Hydraulic Group



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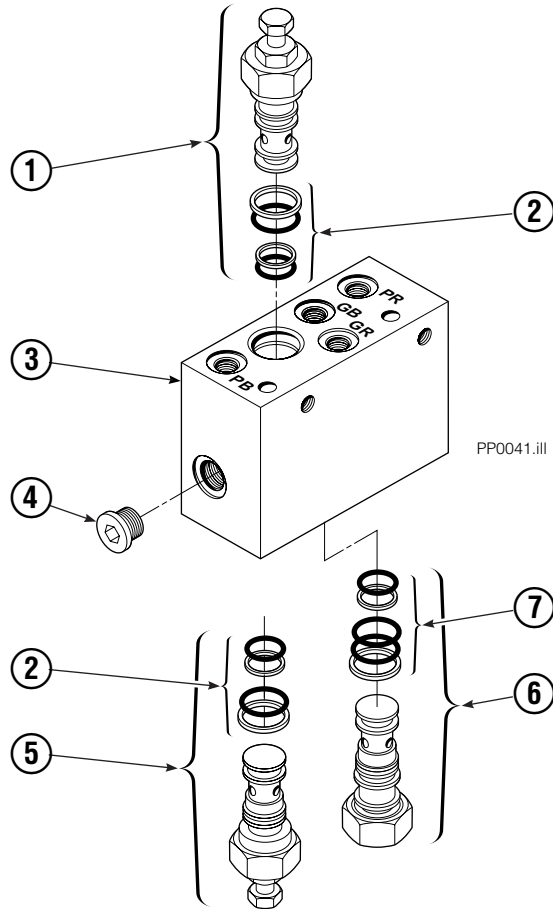
35E/45E

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.

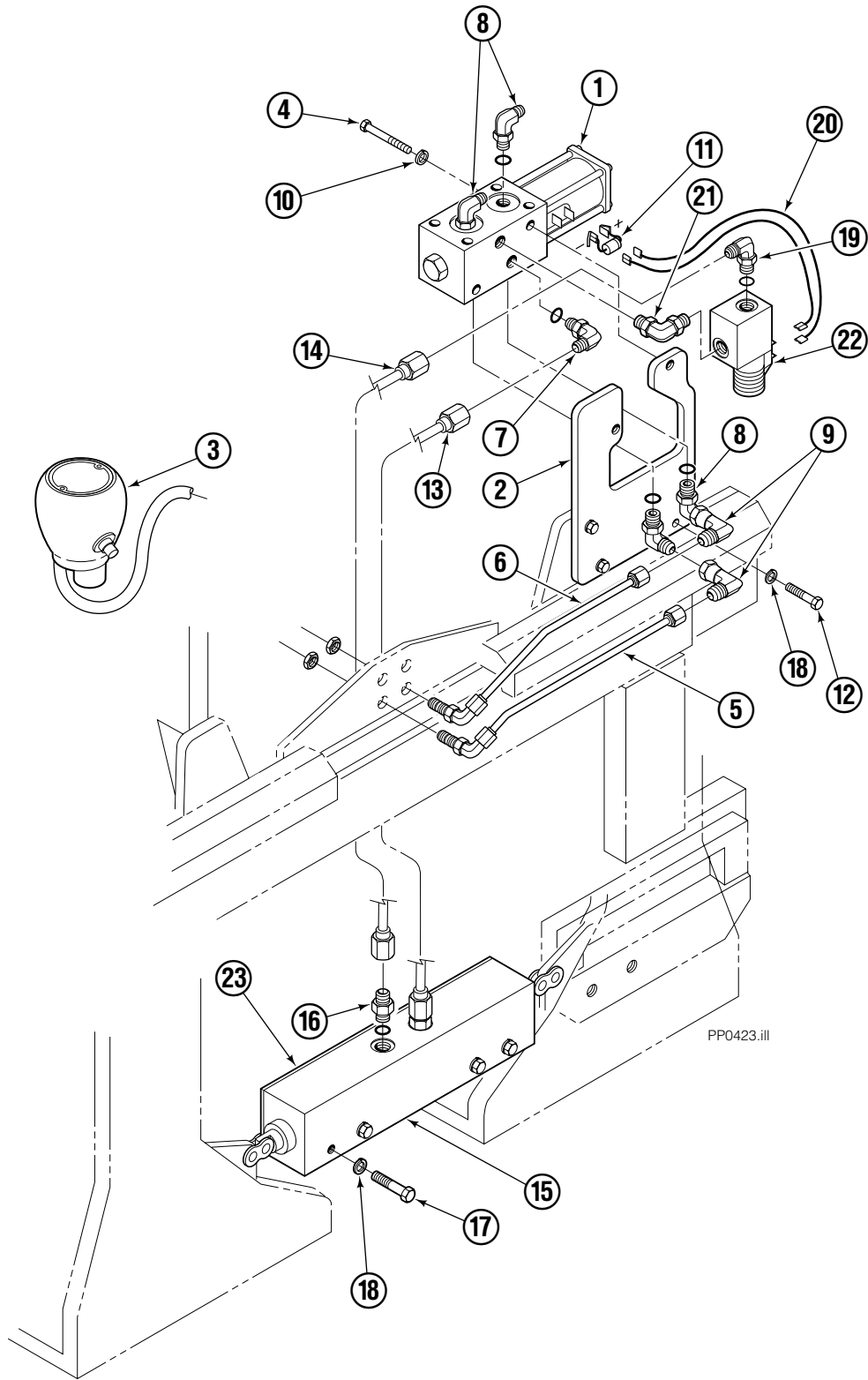
Valve

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

Solenoid Adaption



Solenoid Adaption

35/45E			
REF	QTY	PART NO.	DESCRIPTION
		368006	Solenoid Adaption Group
1	1	◆	Solenoid Valve
2	1	683222	Plate
3	1	355058	■ Knob
4	2	768521	Capscrew, M6x80
5	1	356817	Tube
6	1	356818	Tube
7	1	666984	Fitting, 4-6
8	4	601676	Fitting, 6-6
9	2	2680	Fitting, 6-6
10	2	6201	Lockwasher, M6
11	1	669432	Diode
12	3	765329	Capscrew , M8x1,25x20
13	1	355500	Tube
14	1	364229	Tube
15	1	350731	▲ Cylinder
16	2	617915	Fitting, 4-4
17	4	768527	Capscrew, M8x1,25x50
18	7	6287	Lockwasher, M8
19	1	617917	Fitting, 4-4
20	2	357541	Wire
21	1	619235	Fitting
22	1	◆	Solenoid Valve
23	●	209665	Shim

◆ See Coil and Solenoid Valve page for parts breakdown.

▲ See Cylinder page for parts breakdown.

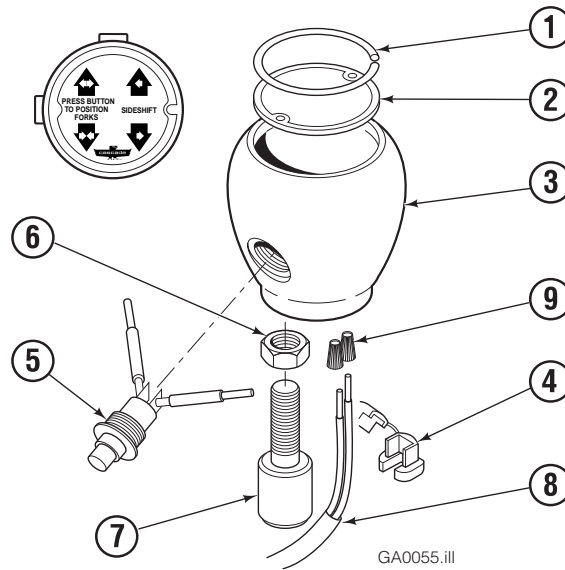
■ See Control Knob page for parts breakdown.

● Quantity as needed.

Reference: 364066, SK-5396.

Control Knob

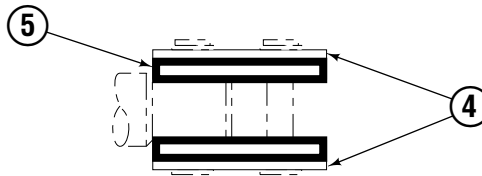
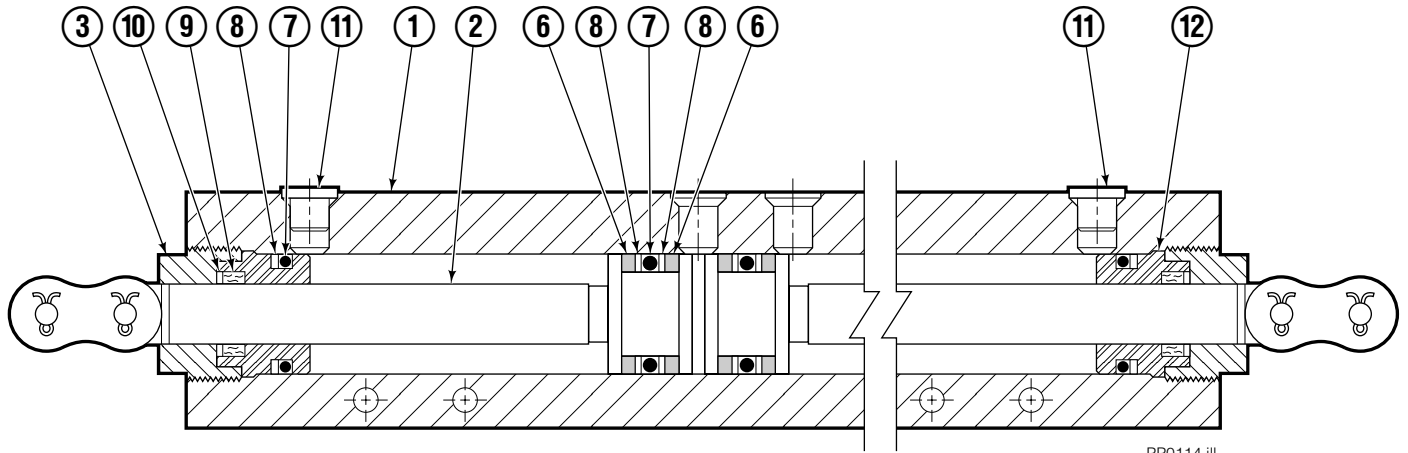
Two Function – Sideshift Only



35E/45E			
REF	QTY	PART NO.	DESCRIPTION
		355058	Knob Group
1	1	665250	Snap Ring
2	1	355059	Cover
3	1	665012	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.

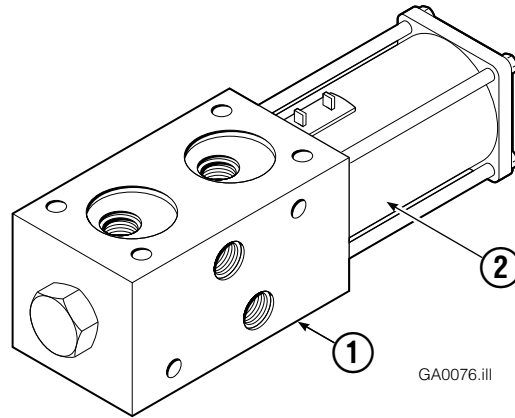
Hydraulic Adjustable Platen Cylinder



REF	QTY	PART NO.	DESCRIPTION
		350731	Cylinder Assembly
1	1	361843	Shell
2	2	361844	Rod
3	2	560306	Retainer Nut
4	2	667733	Link
5	4	667734	Side Plate
6	4	■ 683238	Nylon ring
7	4	■ 2712	O-Ring
8	6	■ 615116	Back-Up Ring
9	2	■ 560307	Rod Seal
10	2	■ 560309	Back-Up Ring
11	2	609234	Plug
12	2	560305	Retainer

■ Included in Service Kit 560308.

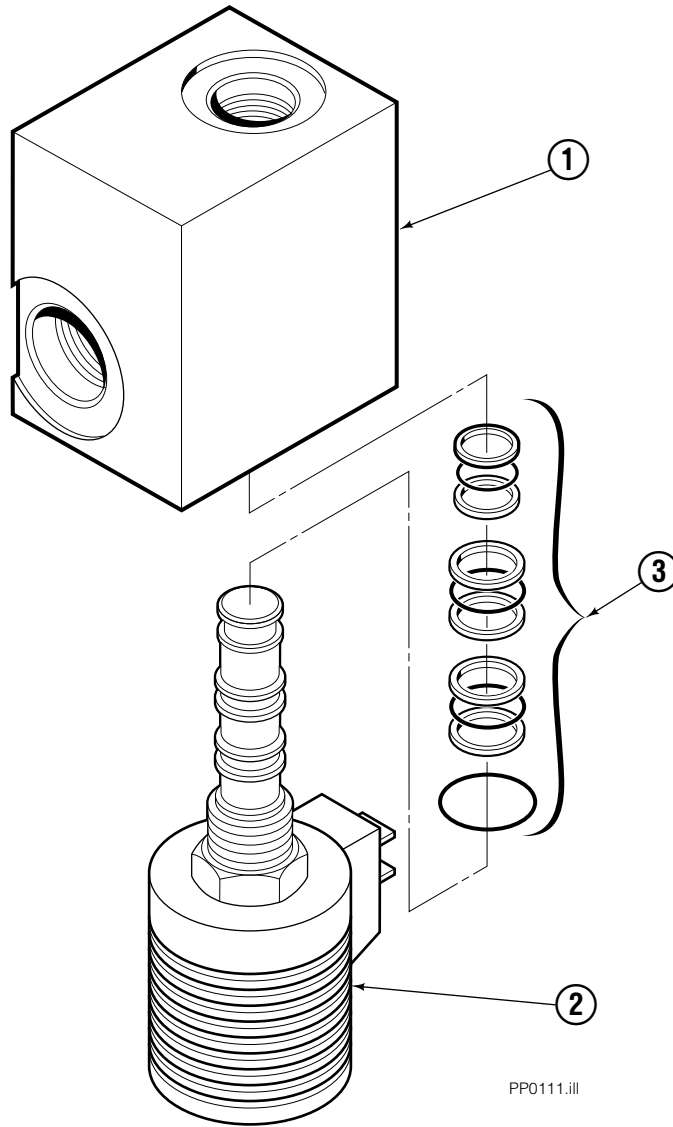
Solenoid Valves



Racine

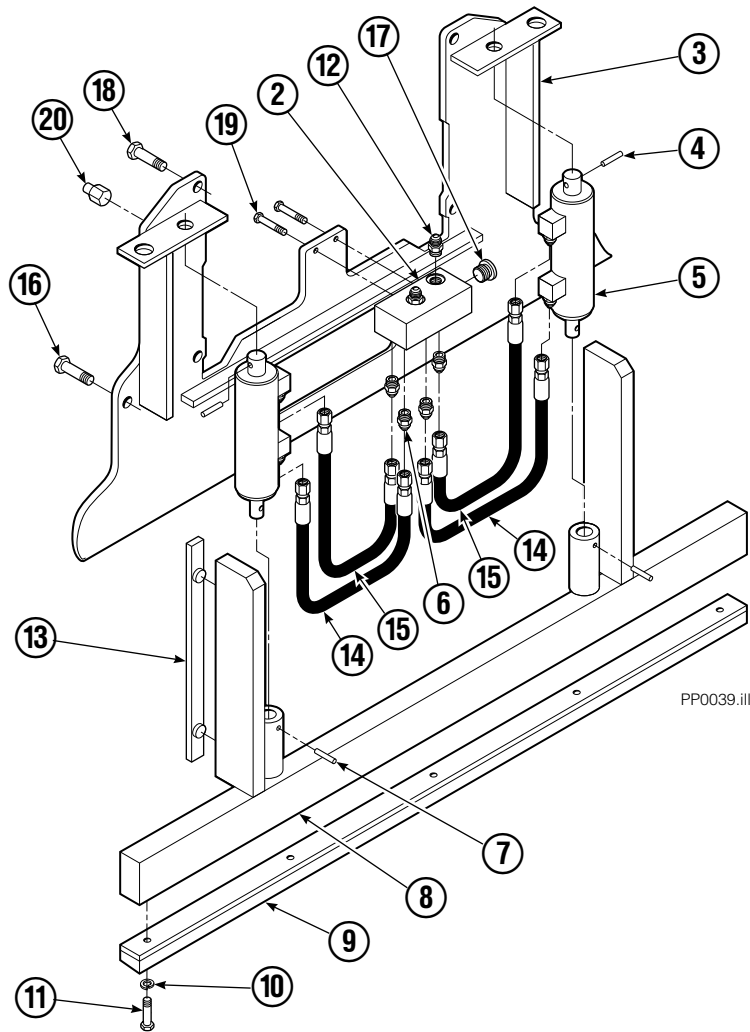
REF	QTY	PART NO.	DESCRIPTION
1	1	614093	Solenoid Valve - 48V
2	1	665047	Coil - 48V
		685012	Service Kit

Solenoid Valves



REF	QTY	PART NO.	DESCRIPTION
1	1	204991	Solenoid Valve - 12V
1	1	204992	Solenoid Valve - 24V
1	1	204993	Solenoid Valve - 36V
1	1	204994	Solenoid Valve - 48V
1	1	204995	Solenoid Valve - 72V
2	1	204980	Coil - 12V
2	1	204981	Coil - 24V
2	1	204982	Coil - 36V
2	1	204983	Coil - 48V
2	1	204984	Coil - 72V
3	1	204990	Service Kit

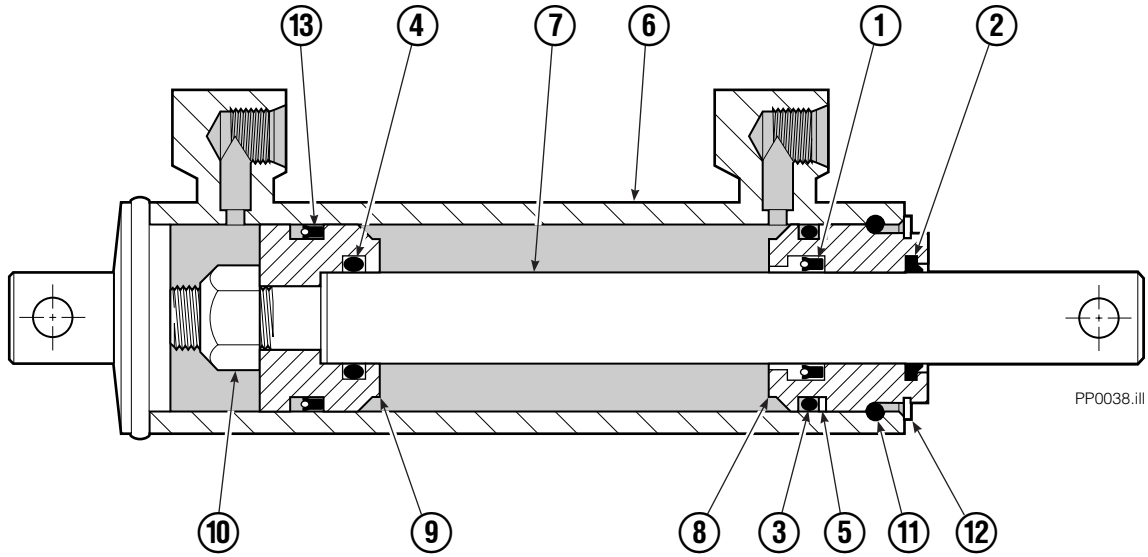
Faceplate Group



35E/45E							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		205967	Faceplate Group 40" x 48" ■	10	5	6444	Lockwasher
		205961	Gripper Jaw Assembly ●	11	5	768794	Capscrew, M8x1,25x20-8.8
1	1	204639	Faceplate 40" x 48" ■	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	2	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.

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