



Parts Manual

Model Push-Pull Sheet-Sav

Serial Number 45E-PAS-217

cascade[®]
corporation

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

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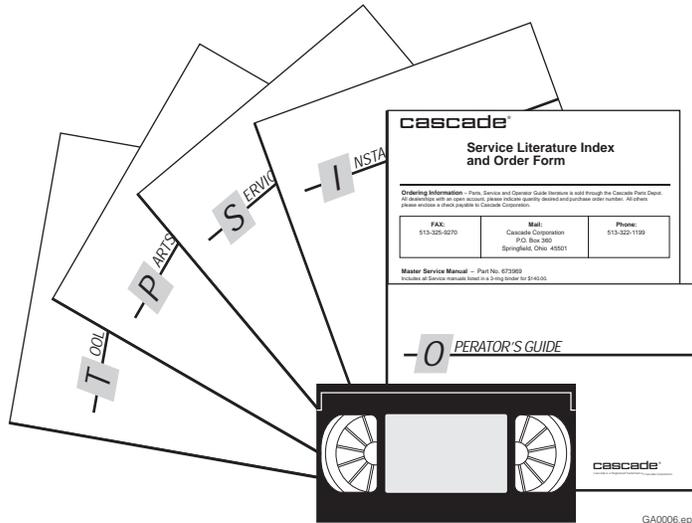
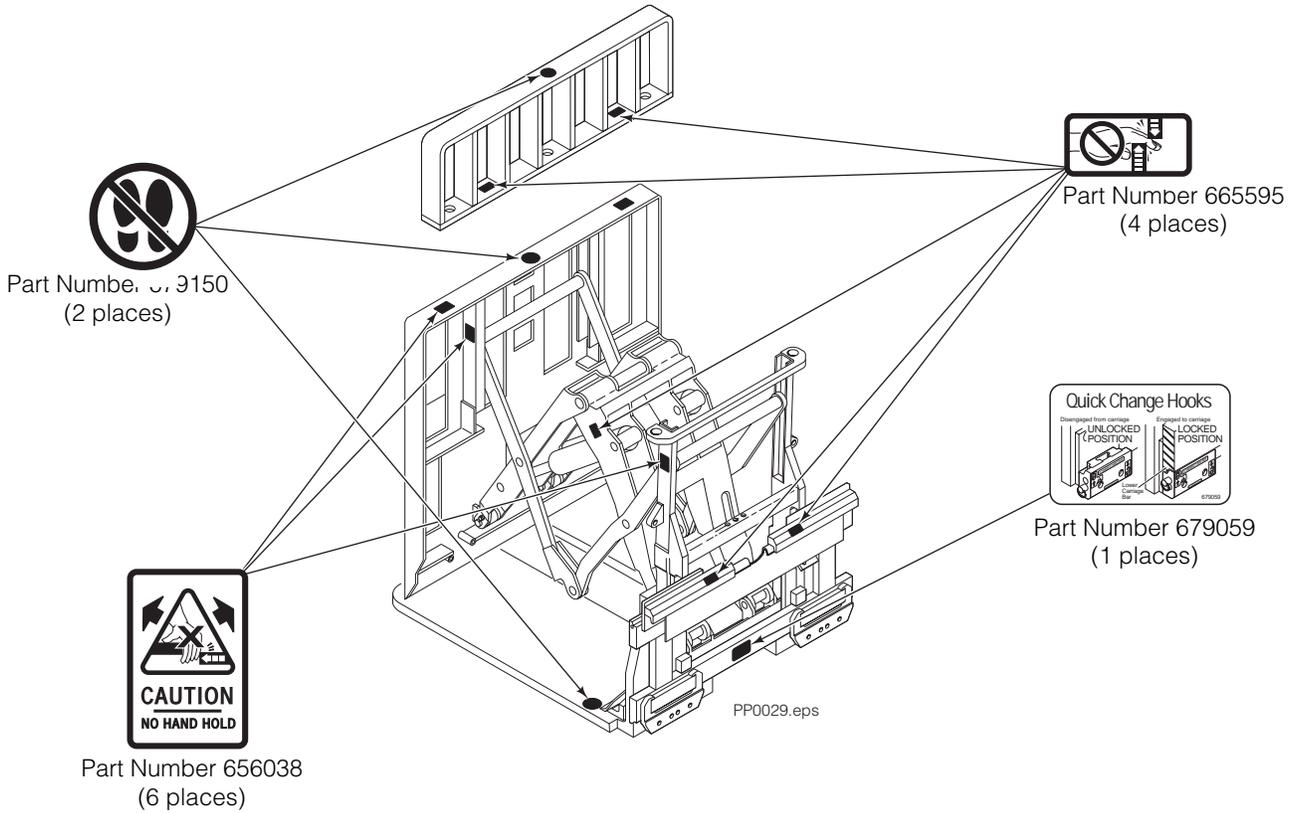
OR

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

Internet: www.cascorp.com

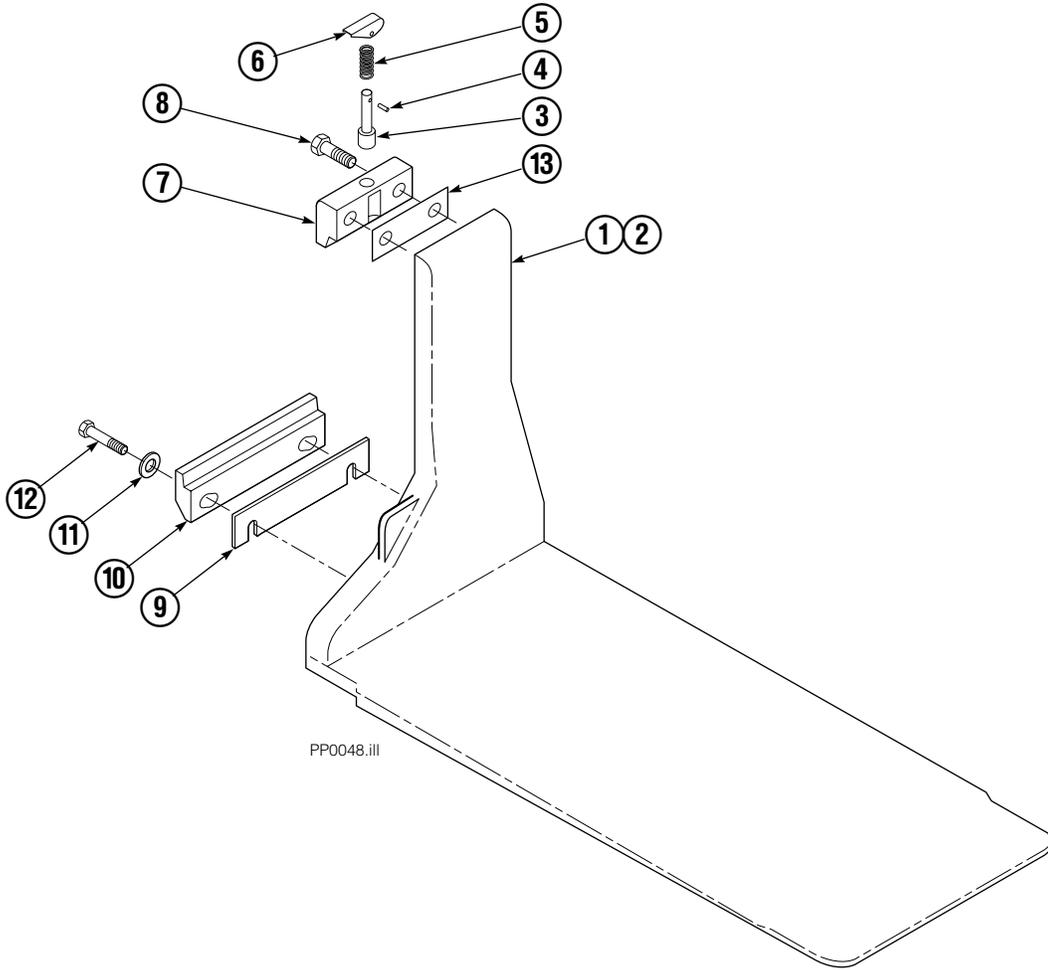
Decals

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 |

Platen Group



PP0048.iii

| REF | QTY | PART NO. | DESCRIPTION |
|-----|-----|----------|--------------------|
| | | 376861 | Platen Group |
| 1 | 1 | 207275 | Platen – LH |
| 2 | 1 | 207260 | Platen – RH |
| 3 | 2 | 622907 | Pin ■ |
| 4 | 2 | 8007 | Rivet ■ |
| 5 | 2 | 622908 | Spring ■ |
| 6 | 2 | 622897 | Handle ■ |
| 7 | 2 | 685533 | Upper Hook ■ |
| 8 | 4 | 685534 | Capscrew, M16 x 50 |
| 9 | ★ | 206969 | Shim (.030) |
| 10 | 2 | 682851 | Lower Hook |
| 11 | 4 | 667225 | Washer |
| 12 | 4 | 209016 | Capscrew, M16 x 35 |
| 13 | ● | 688379 | Shim (.060) |

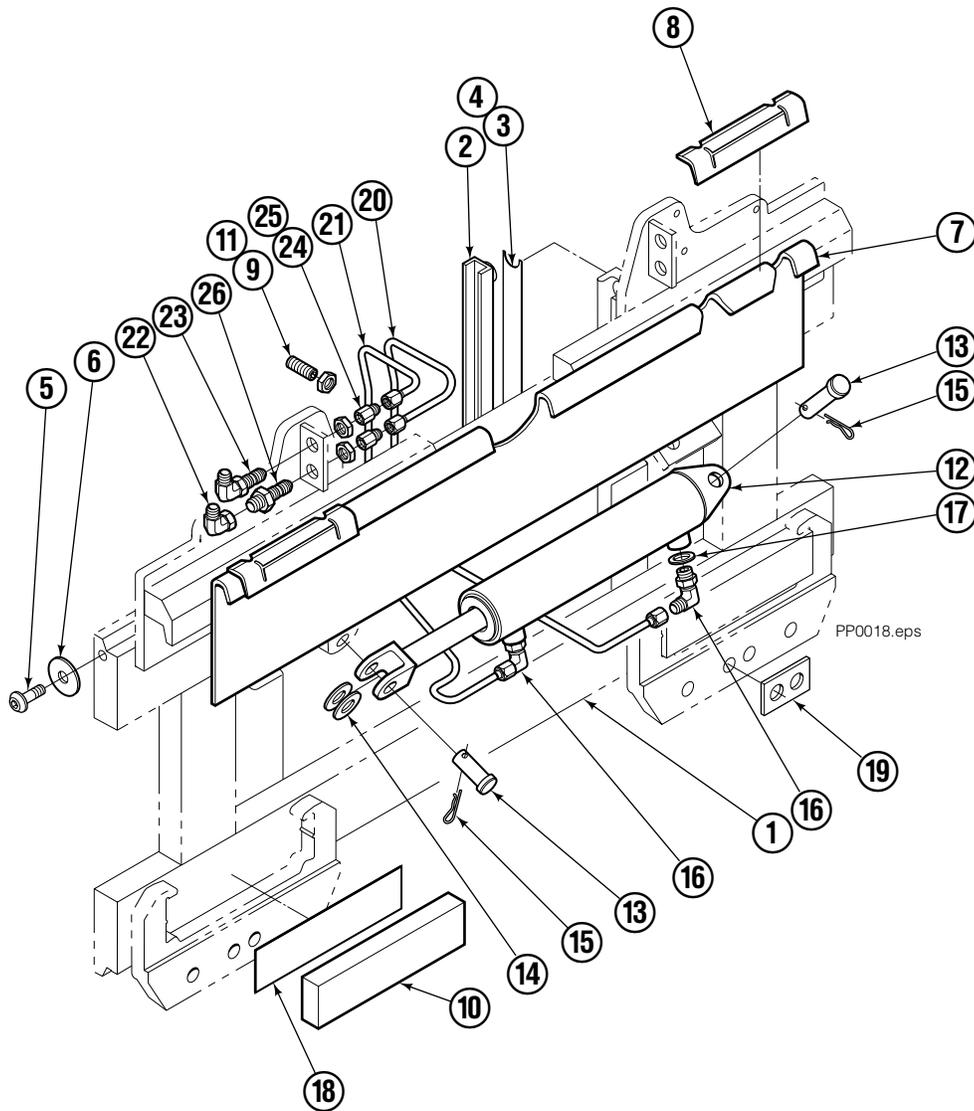
★ As required.

● As required (2 maximum).

■ Included in Upper Hook Assembly 688386.

Reference: S-3985.

S/S Platen Carrier Group ITA III

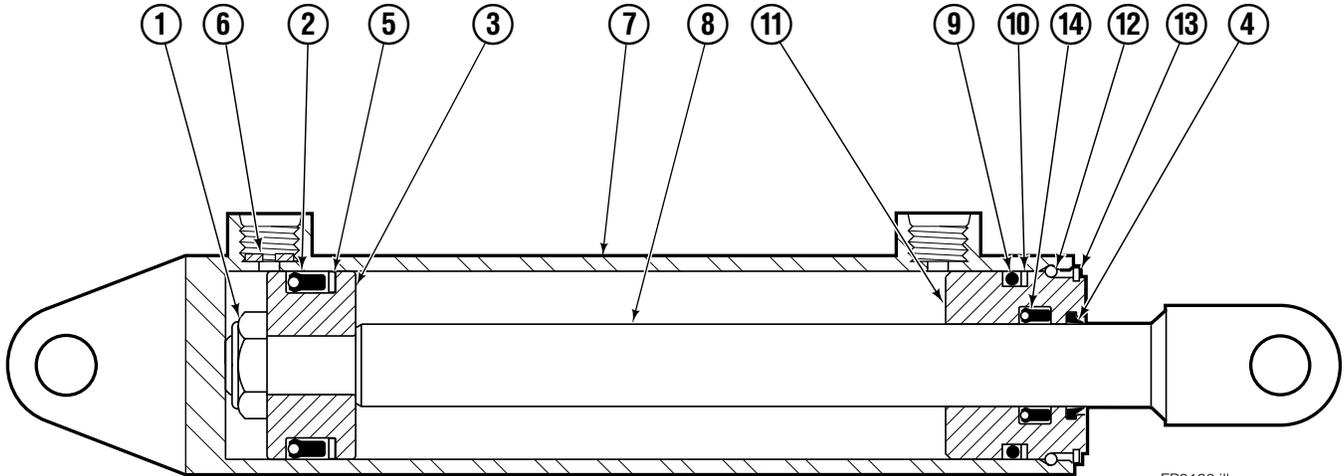


35E/45E

| REF | QTY | PART NO. | DESCRIPTION | REF | QTY | PART NO. | DESCRIPTION |
|-----|-----|----------|----------------------|-----|-----|----------|--------------|
| | | 6008160 | Platen Carrier Group | 14 | 2 | 6234 | Washer |
| 1 | 1 | 6008161 | Platen Carrier | 15 | 2 | 6517 | Cotter Pin |
| 2 | 2 | 6008210 | 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 | 804065 | 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 ITA Class III

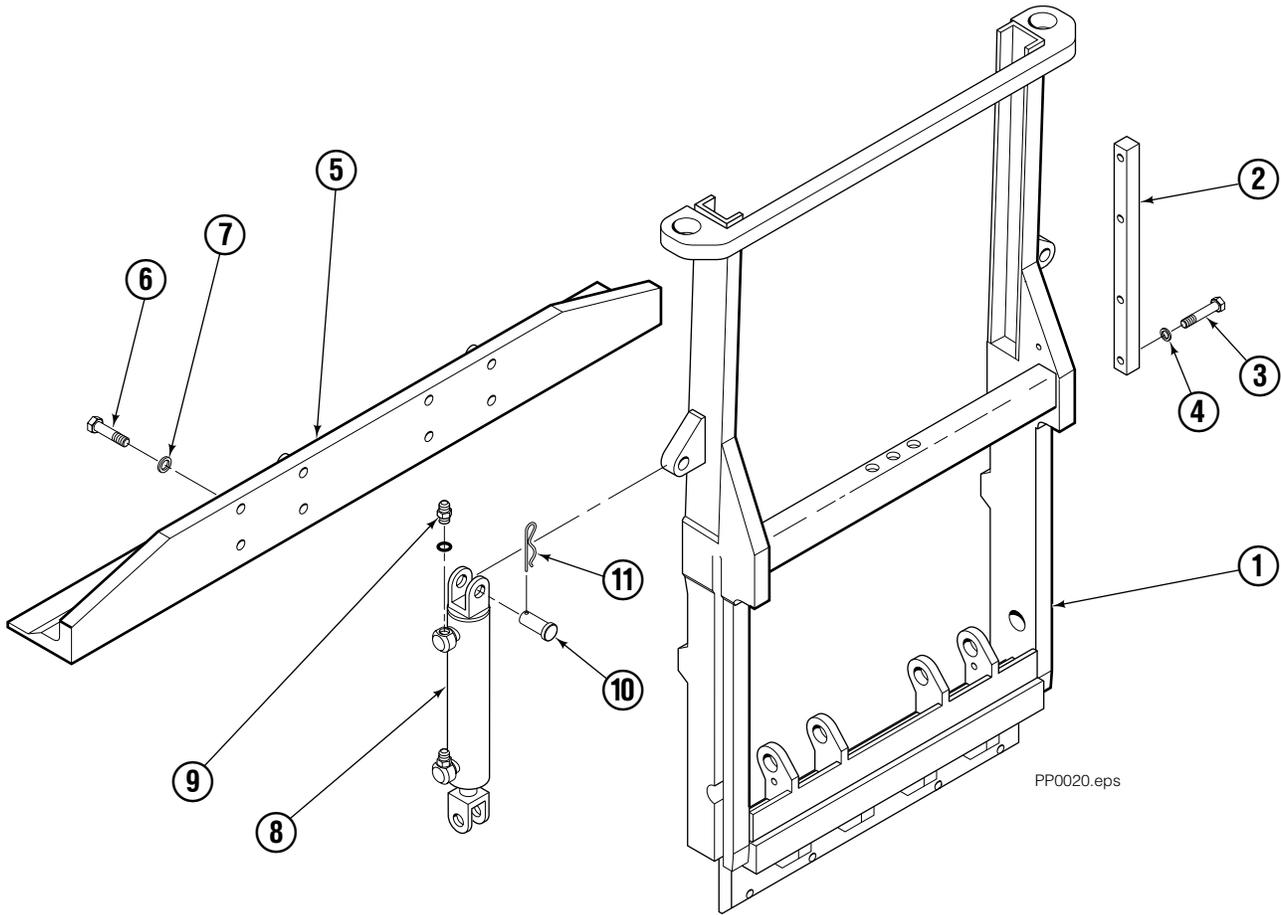


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| 45E | | | |
|-----|-----|----------|---------------------------|
| REF | QTY | PART NO. | DESCRIPTION |
| | | 675548 | Cylinder Assembly |
| 1 | 1 | 553857 | Nut |
| 2 | 1 | 662452 | ■ Seal |
| 3 | 1 | 553501 | Piston |
| 4 | 1 | 636851 | ■ Wiper |
| 5 | 1 | 638247 | ■ Back-up Ring |
| 6 | 1 | 675550 | Washer (orifice .085 in.) |
| 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 |
| | | 553861 | Service Kit |

■ Included in Service Kit 553861.

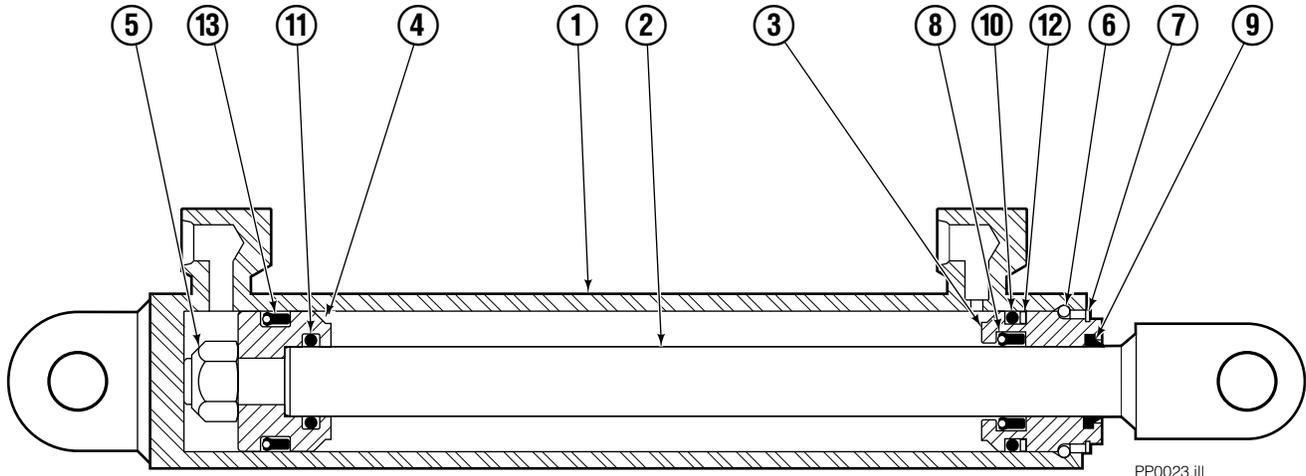
Frame Group



| 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



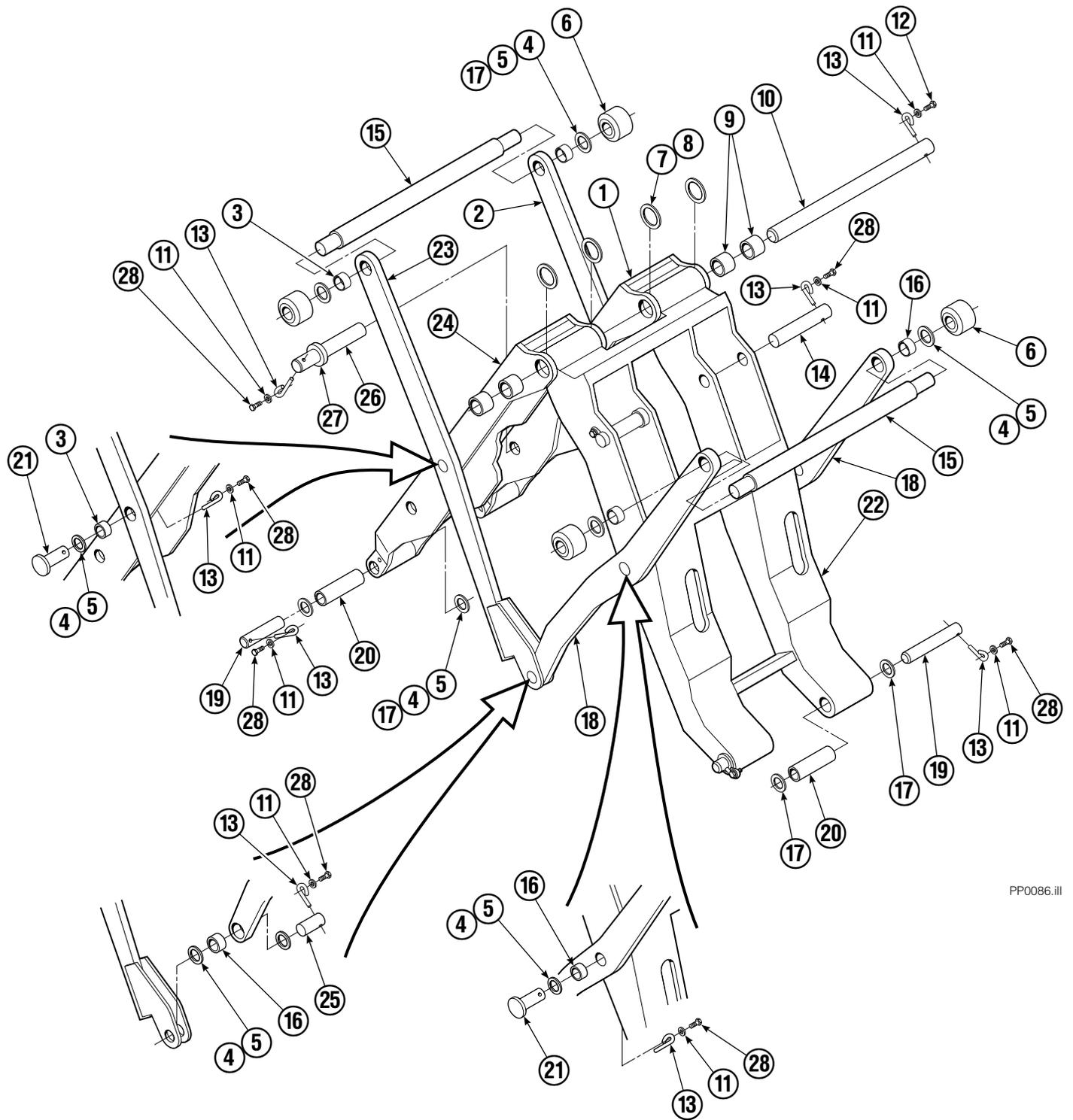
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35E/45E

| 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 | Seal |
| 7 | 1 | 3137 | Retaining Ring |
| 8 | 1 | 646540 | ■ Seal |
| 9 | 1 | 636850 | ■ 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.

Mechanism Group



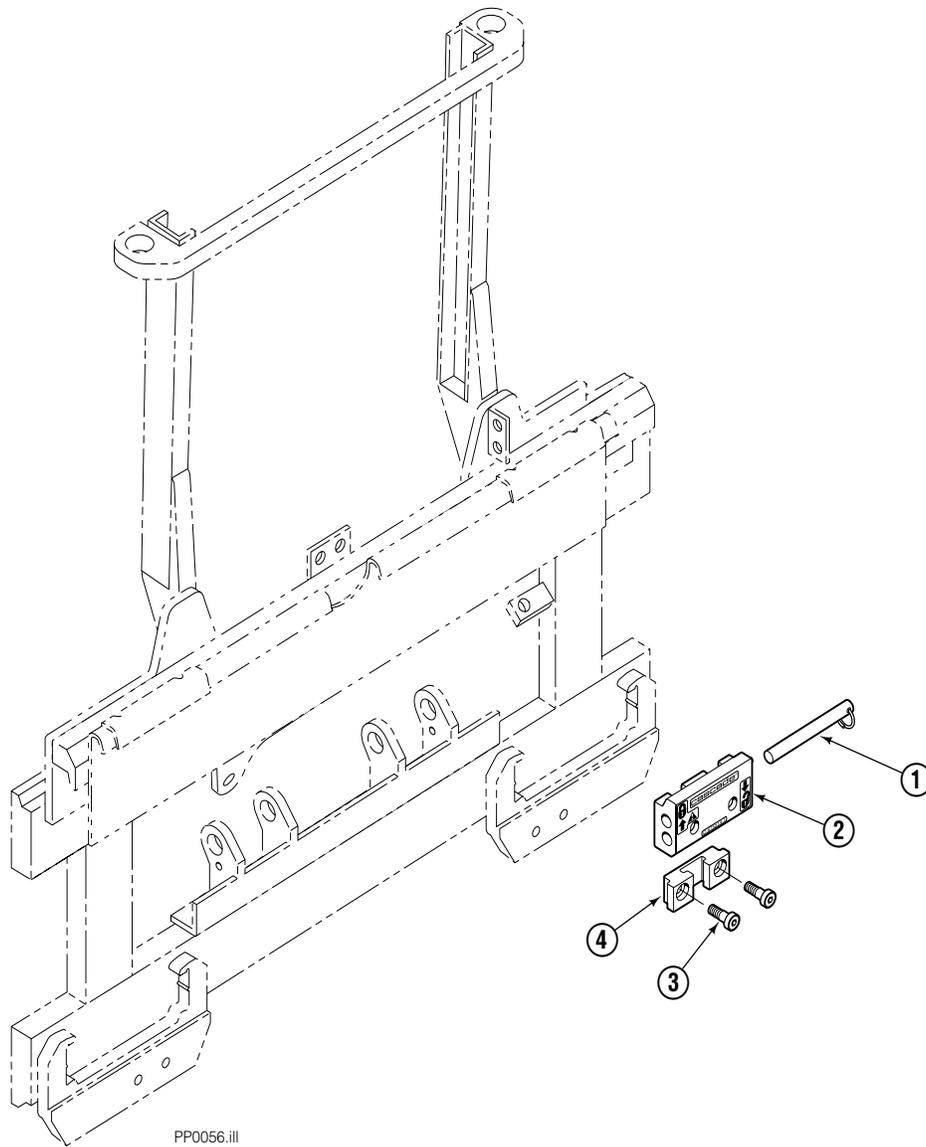
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Mechanism Group

| 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 |

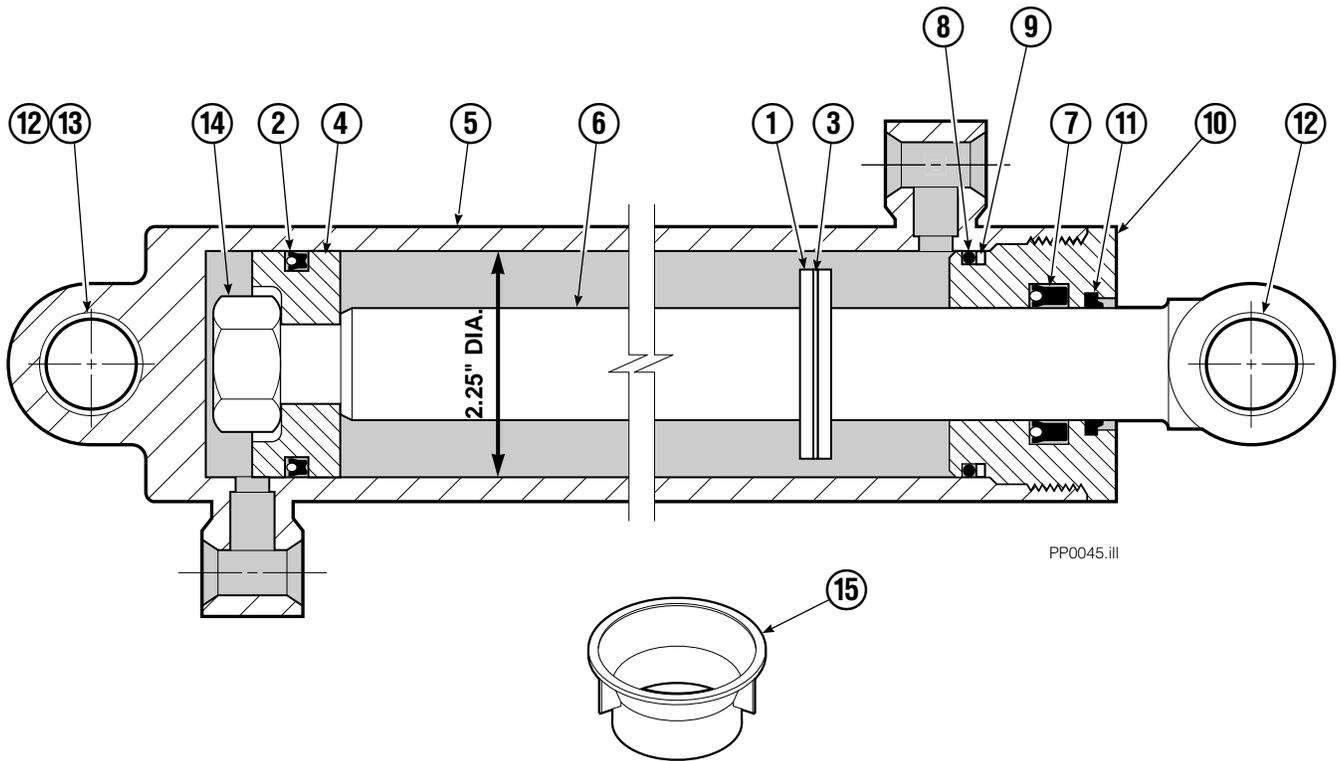
- Quantity as required.
- Included in Bushing Service Kit 205075.

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 |

Cylinder



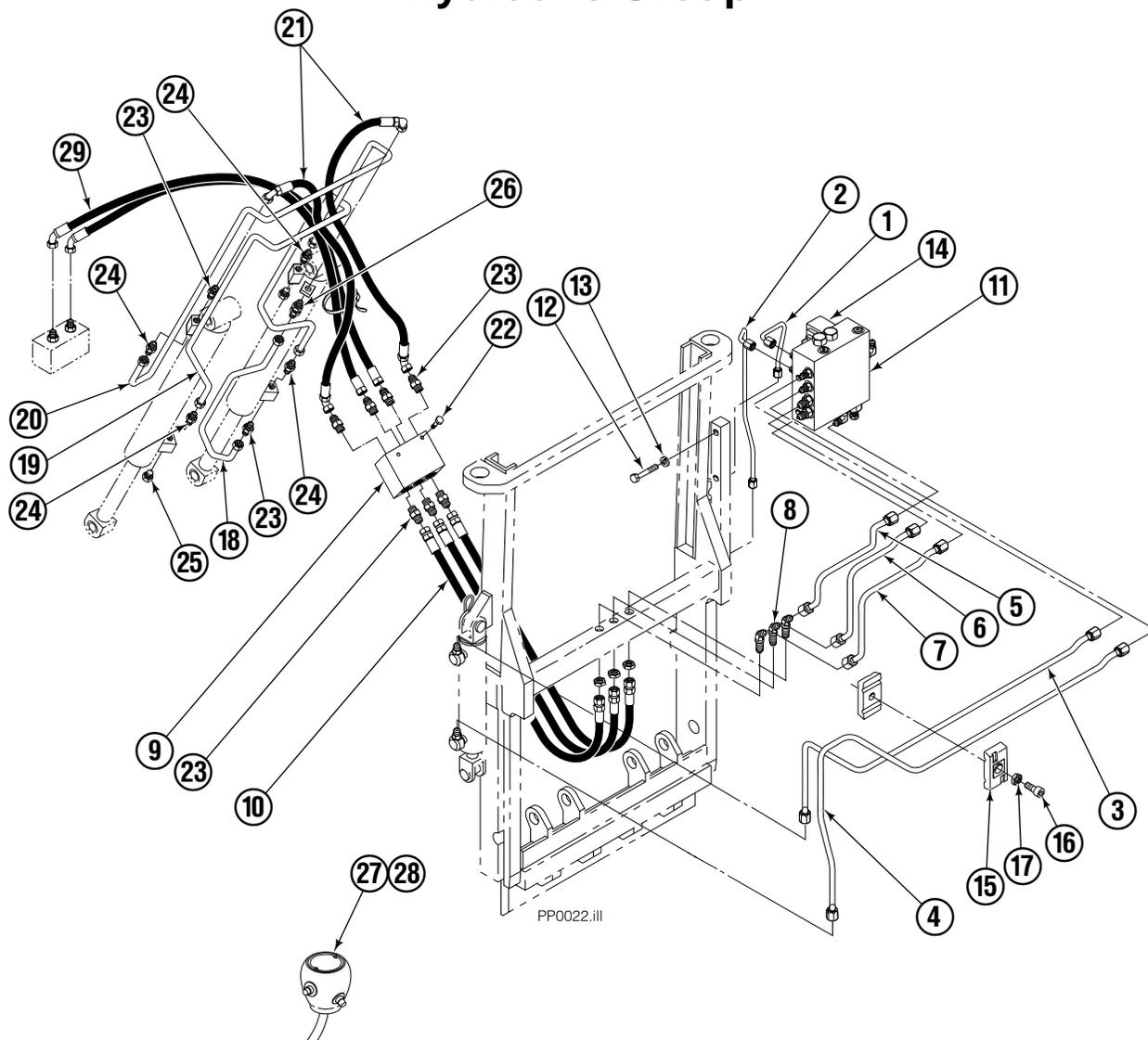
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| REF | QTY | PART NO. | DESCRIPTION |
|-----|-----|----------|-------------------|
| | | 582636 | Cylinder Assembly |
| 1 | 1 | — | Spacer |
| 2 | 1 | 564159 | Seal ■ |
| 3 | 1 | 7348 | Snap Ring |
| 4 | 1 | 564161 | Piston |
| 5 | 1 | 562717 | Shell |
| 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.

Reference: S-3424.

Hydraulic Group



35E/45E

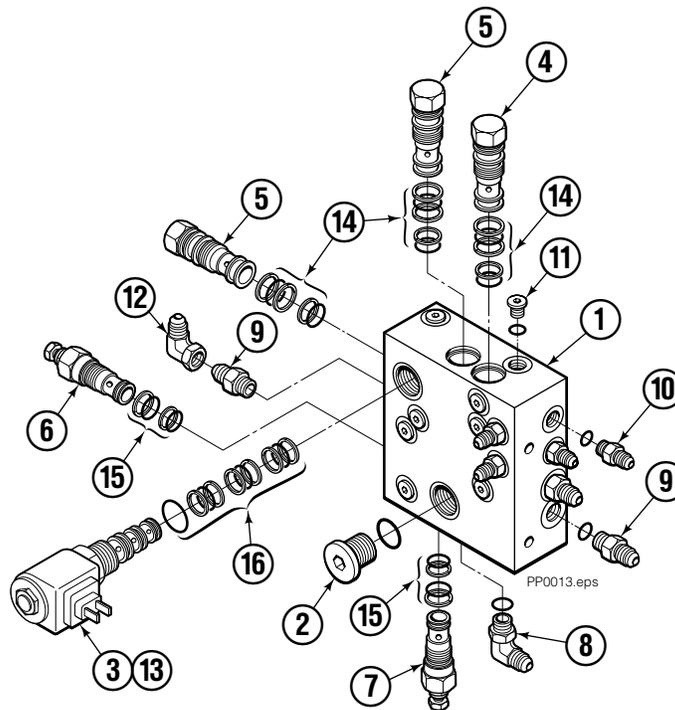
| REF | QTY | PART NO. | DESCRIPTION | REF | QTY | PART NO. | DESCRIPTION |
|-----|-----|----------|---|-----|-----|----------|----------------------------------|
| | | 206940 | Hydraulic Group (without gripper control) | 15 | 2 | 207041 | Clamp |
| 1 | 1 | 206931 | Tube | 16 | 1 | 768794 | Capscrew |
| 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

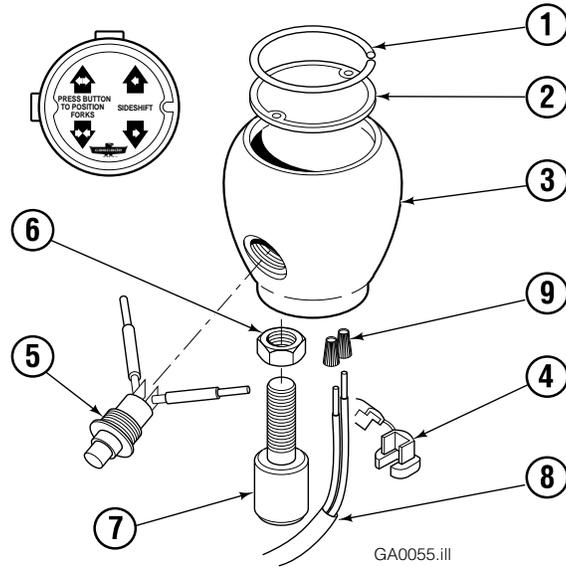


35E/45E

| 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

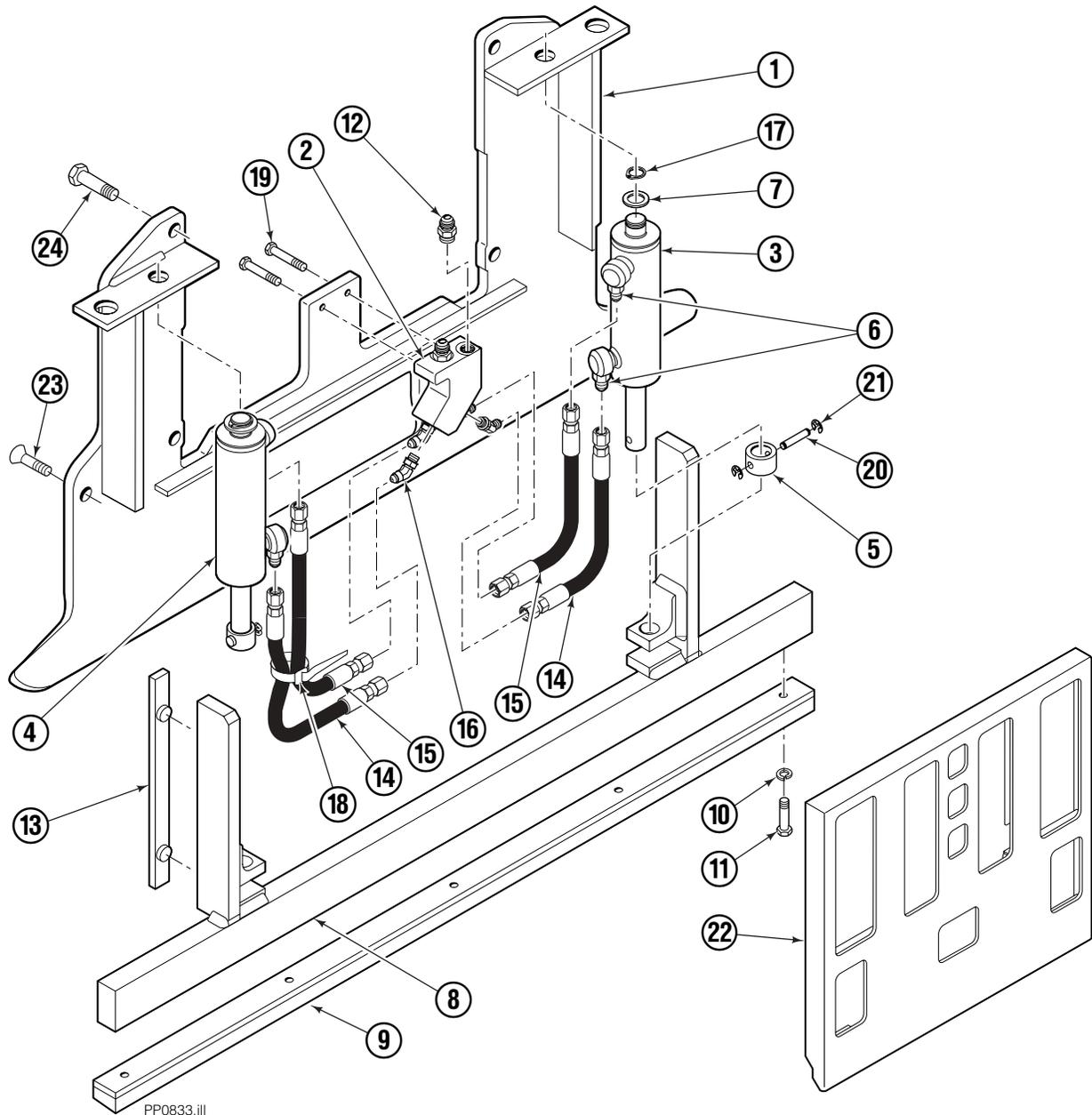
Without Gripper Control



| 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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45E

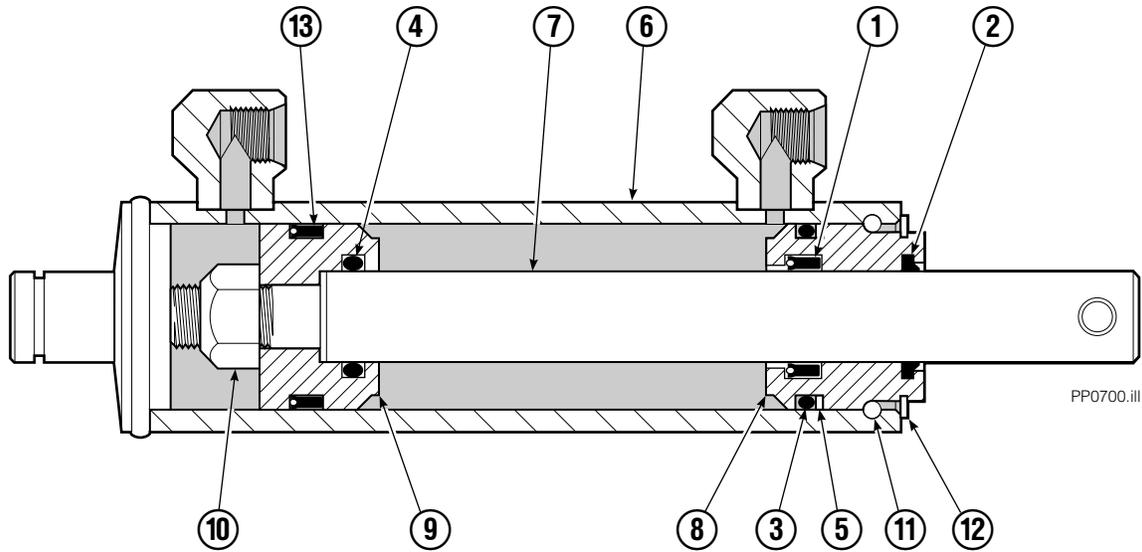
| REF | QTY | PART NO. | DESCRIPTION | REF | QTY | PART NO. | DESCRIPTION |
|-----|-----|----------|--------------------------------|-----|-----|----------|--------------------------|
| | | 6002141 | Faceplate Group, 40 x 40 in. ■ | 12 | 2 | 604511 | Fitting, 6-6 |
| | | 6002140 | Gripper Jaw Assembly ● | 13 | 2 | 686573 | Bearing |
| 1 | 1 | 206396 | Gripper Jaw | 14 | 2 | 6002138 | Hose, 315 mm |
| 2 | 1 | 6002134 | Valve | 15 | 2 | 6002139 | Hose, 450 mm |
| 3 | 1 | 6020456 | Gripper Cylinder, LH ◆ | 16 | 4 | 617918 | Fitting, 4-4 |
| 4 | 1 | 6020455 | Gripper Cylinder, RH ◆ | 17 | 2 | 6003718 | Retaining Ring |
| 5 | 2 | 6020451 | Collar | 18 | 4 | 684956 | Wire Tie |
| 6 | 4 | 617915 | Fitting, 4-4 | 19 | 2 | 787373 | Capscrew, M8 x 20 |
| 7 | 2 | 6001555 | Washer | 20 | 2 | 6020412 | Pin |
| 8 | 1 | 6002135 | Gripper Bar | 21 | 4 | 6020463 | Retaining Ring |
| 9 | 1 | 672712 | Gripper Pad | 22 | 1 | 6002142 | Faceplate, 40 x 40 in. ■ |
| 10 | 5 | 680253 | Lockwasher, M8 | 23 | 2 | 768714 | Capscrew, M16 x 60 |
| 11 | 5 | 787375 | Capscrew, M8 x 20 | 24 | 4 | 225346 | Capscrew, M16 x 60 |

■ Width x height.

◆ See Gripper Cylinder page for parts breakdown.

● Includes items 1-21.

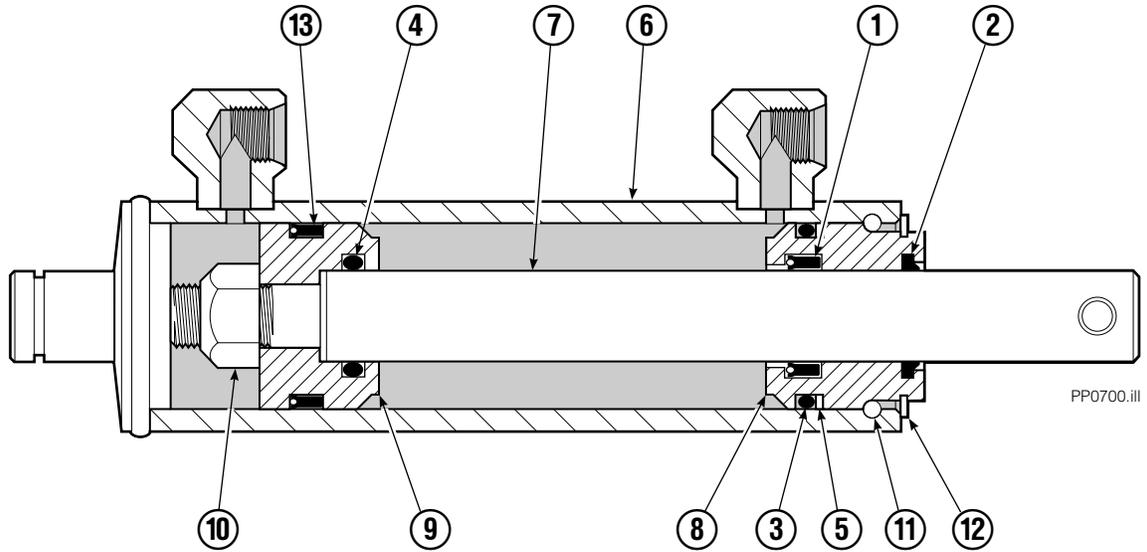
Gripper Cylinder Left Hand



| REF | QTY | PART NO. | DESCRIPTION |
|-----|-----|----------|-----------------------|
| | | 6020456 | Gripper Cylinder - LH |
| 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 | 6002131 | Shell |
| 7 | 1 | 6020445 | Rod |
| 8 | 1 | 685664 | Retainer |
| 9 | 1 | 685665 | Piston |
| 10 | 1 | 563462 | Nut |
| 11 | 1 | 563916 | Ring |
| 12 | 1 | 3137 | Ring |
| 13 | 1 | 663728 | ▼ Piston Seal |

▼ Included in Service Kit 684827.

Gripper Cylinder Right Hand



| REF | QTY | PART NO. | DESCRIPTION |
|-----|-----|----------|-----------------------|
| | | 6020455 | Gripper Cylinder – RH |
| 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 | 6014091 | Shell |
| 7 | 1 | 6020445 | Rod |
| 8 | 1 | 685664 | Retainer |
| 9 | 1 | 685665 | Piston |
| 10 | 1 | 563462 | Nut |
| 11 | 1 | 563916 | Ring |
| 12 | 1 | 3137 | Ring |
| 13 | 1 | 663728 | ▼ Piston Seal |

▼ Included in Service Kit 684827.

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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: 49-216-668230
FAX: 49-216-6682323

Cascade Finland
Albert Petreliuksenkatu 3
01370 Vantaa
Finland
Tel: 358-9-836-1925
FAX: 358-9-836-1935

**Cascade N.V.
European Headquarters**
P.O. Box 3009
1300 El Almere
Damluisweg 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
Damluisweg 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 AB
Box 124
Hammarvägen 10
567 23 Vaggeryd
Sweden
Tel: 42-0-393-36950
FAX: 46-0-393-36959

Cascade Norway
Østerliveien 37A
1153 Oslo
Norway
Tel: 47-22-743160
FAX: 47-22-743157

Cascade France S.A.R.L.
1D Rue De Charaintru
BP 18, 91360 Epinay-Sur-Orge
Morangis Cedex, France
Tel: 33-1- 64547500
FAX: 33-1-64547501

Cascade Hispania S.A.
Carrer 5 Sector C
Zona Franca Duanera
Poligono de la Zon Franca
08040 Barcelona, Spain
Office No. 256
Tel: 93-264-07-30
FAX: 93-264-07-31

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

Cascade Korea
108B, Namdong Ind Complex
658-3 Gojan-Dong
Namdong-Gu
Inchon, 405-310 Korea
Tel: 82-32-821-2051
FAX: 82-32-821-2055

Cascade Australia
1445 Ipswich Road
Rocklea, QLD 4106
Australia
Tel: 1-800227-223
FAX: (07) 3373-7333

Cascade New Zealand
15 Ra Ora Drive
East Tamaki, 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: 27-11-975-9240
FAX: 27-11-394-1147

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

**Cascade (Singapore)
Trading Co.**
Four Seasons Park
Autumn Block - Apt. 1802
12 Cuscaden Walk
Singapore
Tel: 65-834-1935
FAX: 65-834-1936

