



# Parts Manual

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Model 77F Roll Clamp

Serial Number 77F-RDP-120

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**cascade**<sup>®</sup>  
corporation

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

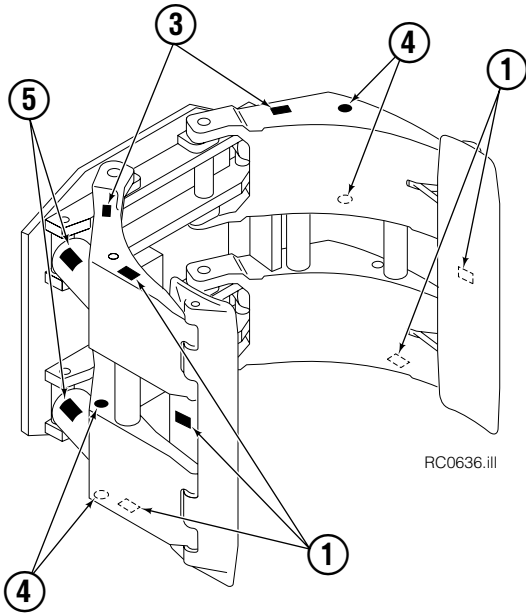
**To Order Parts call:** 888-227-2233, Fax: 888-329-0234

**OR**

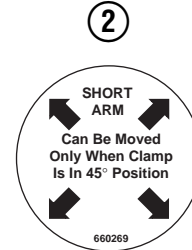
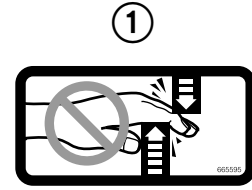
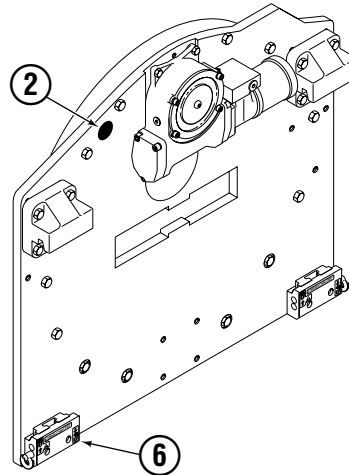
**Write:** Cascade Corporation, P.O. Box 20187, Portland, OR 97220

**Internet:** [www.cascorp.com](http://www.cascorp.com)

# Safety Decals



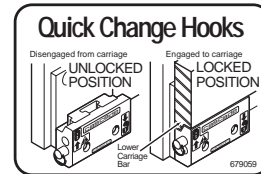
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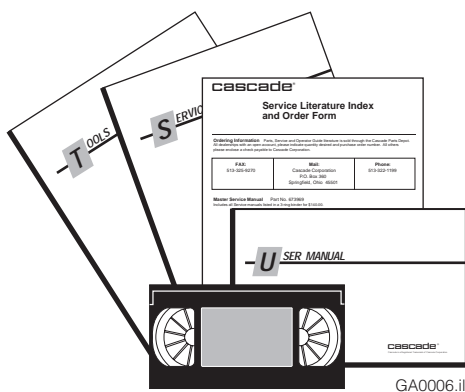


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| Roll Clamp Safety Decals |     |          |                                   |
|--------------------------|-----|----------|-----------------------------------|
| REF                      | QTY | PART NO. | DESCRIPTION                       |
| 1                        | 6   | 665595   | No Hand Hold Decal                |
| 2                        | 3   | 660269   | Short Arm Rotation Position Decal |
| 3                        | 4   | 656038   | Caution Decal                     |
| 4                        | 4   | 679150   | No Step Decal                     |
| 5                        | 4   | 665677   | Trapped Pressure Decal            |
| 6                        | 1   | 679059   | Quick-Change Hook Decal           |

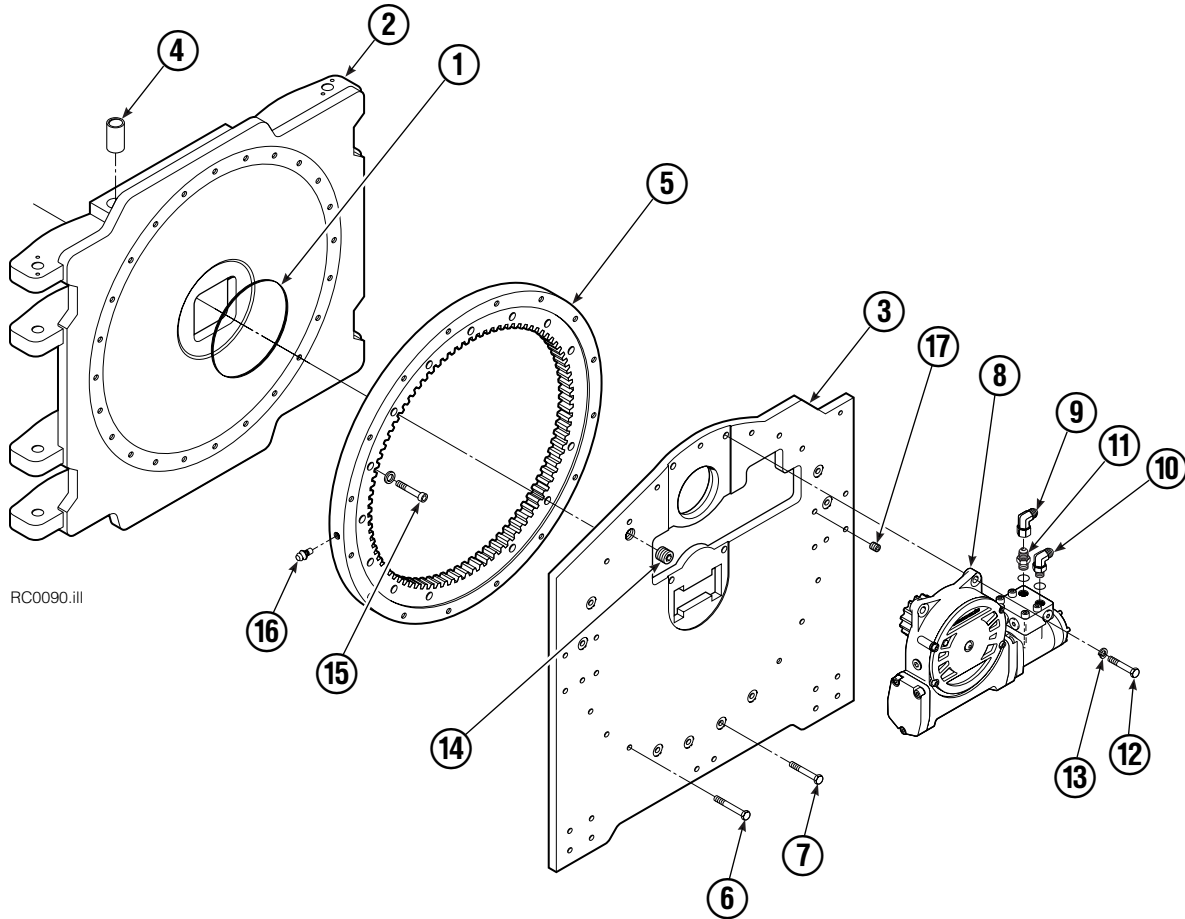
# Publications



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| Roll Clamp Publications |   |
|-------------------------|---|
| 674512                  | Service Manual                          |
| 674509                  | Operator's Guide – Fixed Frame          |
| 676268                  | Operator's Guide – Swing Frame          |
| 674510                  | Installation Instructions – Fixed Frame |
| 674511                  | Installation Instructions – Swing Frame |
| 677555                  | Driver Training Video – VHS             |
| 678363                  | Troubleshooting Video – VHS             |
| 680664                  | Servicing Cascade Cylinders – VHS       |
| 679929                  | Tool Catalog                            |
| 673964                  | Literature Index Order Form             |

# Frame Group



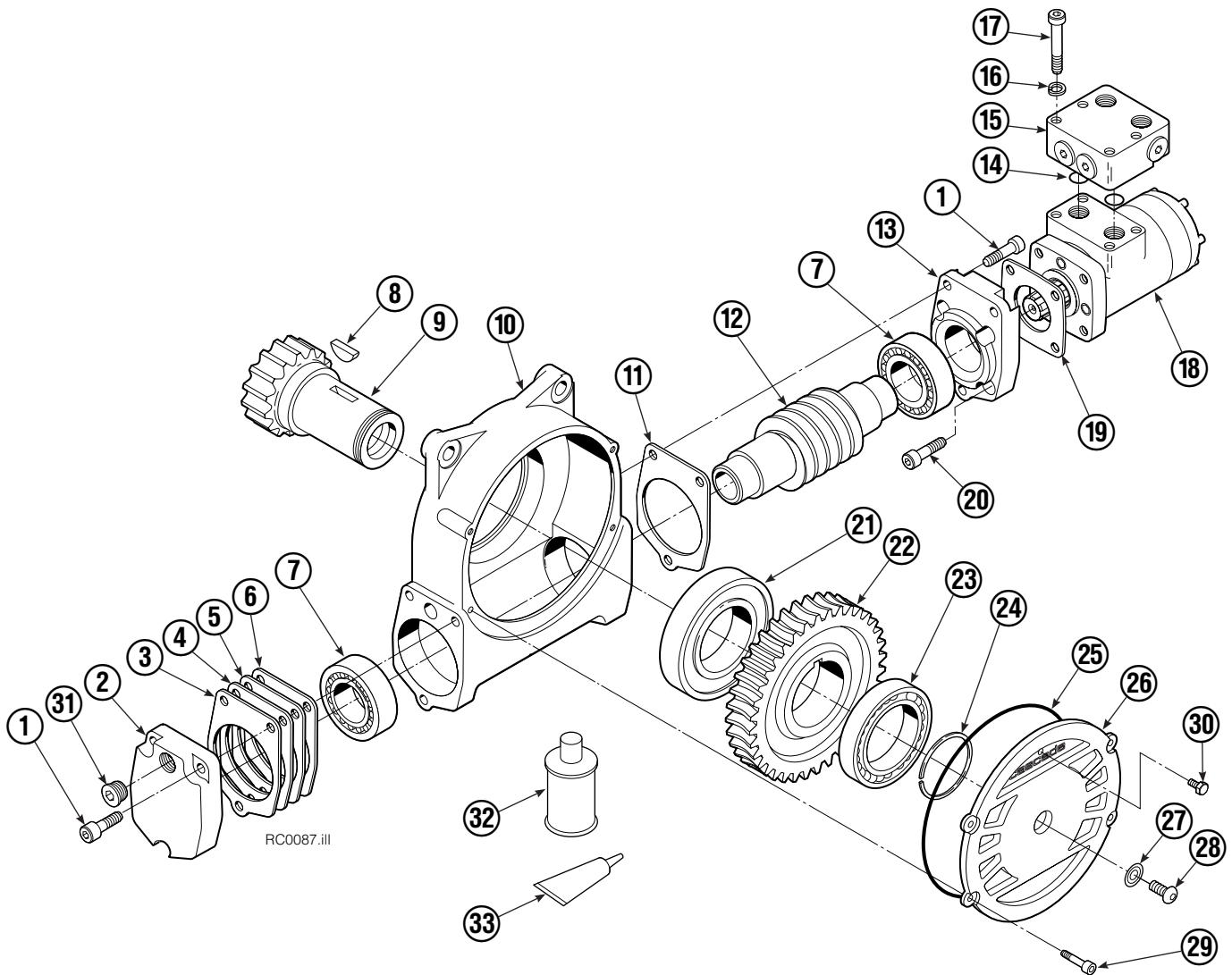
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| 77F |     |          |                                      |
|-----|-----|----------|--------------------------------------|
| REF | QTY | PART NO. | DESCRIPTION                          |
|     |     | 399294   | Frame Group                          |
| 1   | 1   | 670931   | Seal                                 |
| 2   | 1   | 682437   | Faceplate                            |
| 3   | 1   | 678381   | Baseplate                            |
| 4   | 8   | 675007   | Bushing                              |
| 5   | 1   | 672830   | Bearing Assembly                     |
| 6   | 13  | 643539   | Capscrew                             |
| 7   | 11  | 643538   | Capscrew                             |
| ● 8 | 1   | 399292   | Drive Group                          |
| 9   | 1   | 605761   | Fitting, 8-8                         |
| 10  | 1   | 601250   | Fitting, 8-8                         |
| 11  | 1   | 601377   | Fitting, 8-8                         |
| 12  | 4   | 661742   | Capscrew                             |
| 13  | 17  | 6290     | Lockwasher                           |
| 14  | 1   | 6605     | Plug                                 |
| 15  | 24  | 4507     | Capscrew                             |
| 16  | 1   | 7401     | Grease Fitting                       |
| 17  | 4   | 631385   | Plug                                 |
|     | 1   | 672842   | Bearing Service Kit (items 5 and 15) |

● See Drive Group page for parts breakdown.

Reference: Common Parts Group 399293.

# Drive Group



| REF | QTY | PART NO. | DESCRIPTION                 | REF | QTY | PART NO. | DESCRIPTION                               |
|-----|-----|----------|-----------------------------|-----|-----|----------|---|
|     |     | 399292   | Drive Group with Motor      | 19  | 1   | 670575   | Gasket                                    |
|     | ■   | 675631   | Drive Group without Motor   | 20  | 4   | 4468     | Capscrew, 3/8 NC x .75 GR8                |
| 1   | 6   | 607071   | Capscrew, 7/16 NC x 1.0 GR8 | 21  | 1   | 670580   | Bearing                                   |
| 2   | 1   | 676855   | Cover                       | 22  | 1   | 675609   | Worm Gear                                 |
| 3   | ●   | 674513   | Shim – .005" (blue)         | 23  | 1   | 670581   | Bearing                                   |
| 4   | ●   | 670574   | Shim – .010" (brown)        | 24  | 1   | 7214     | Snap Ring                                 |
| 5   | ●   | 671757   | Shim – .015" (pink)         | 25  | 1   | 643423   | O-Ring                                    |
| 6   | ●   | 671758   | Shim – .020" (yellow)       | 26  | 1   | 670567   | Cover                                     |
| 7   | 2   | 670579   | Bearing                     | 27  | 1   | 603680   | Seal                                      |
| 8   | 1   | 670582   | Key                         | 28  | 1   | 4874     | Capscrew                                  |
| 9   | 1   | 670556   | Pinion                      | 29  | 4   | 671535   | Capscrew, 5/16 NC x .75                   |
| 10  | 1   | 670565   | Housing                     | 30  | 1   | 644010   | Relief Fitting                            |
| 11  | 1   | 686465   | Gasket                      | 31  | 1   | 604510   | Fitting, 6                                |
| 12  | 1   | 675608   | Worm                        | 32  | 1   | 656300   | Gear Box Lube - 48 oz.                    |
| 13  | 1   | 775553   | Adapter                     | 33  | 1   | 668184   | Sealant                                   |
| 14  | 2   | 2705     | Seal                        |     |     | 670578   | Shim Service Kit (items 3-6, 11, 25 & 33) |
| 15  | 1   | 670549   | Check Valve ▲               |     |     | 675637   | Bearing Service Kit (items 21 & 33)       |
| 16  | 4   | 6444     | Lockwasher                  |     |     | 675638   | Bearing Service Kit (items 3-7, 11 & 25)  |
| 17  | 4   | 607059   | Capscrew, 5/16 NC           |     |     | 206394   | Motor Kit (items 11, 14, 18, 19, 20, 33)  |
| 18  | 1   | 215903   | Drive Motor                 |     |     |          |   |

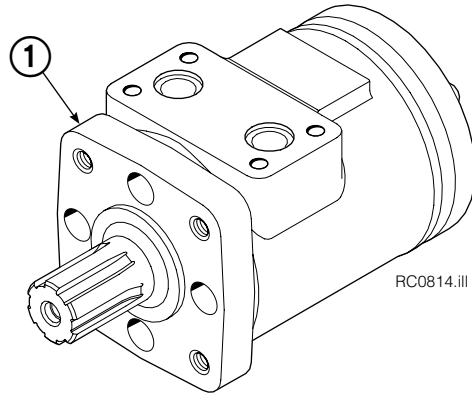
■ Includes all items except 15, 17 and 18.

● Quantity as required.

▲ See Check Valve page for parts breakdown.

Reference: Common Parts Group 675627, SK-5032.

# Drive Motor

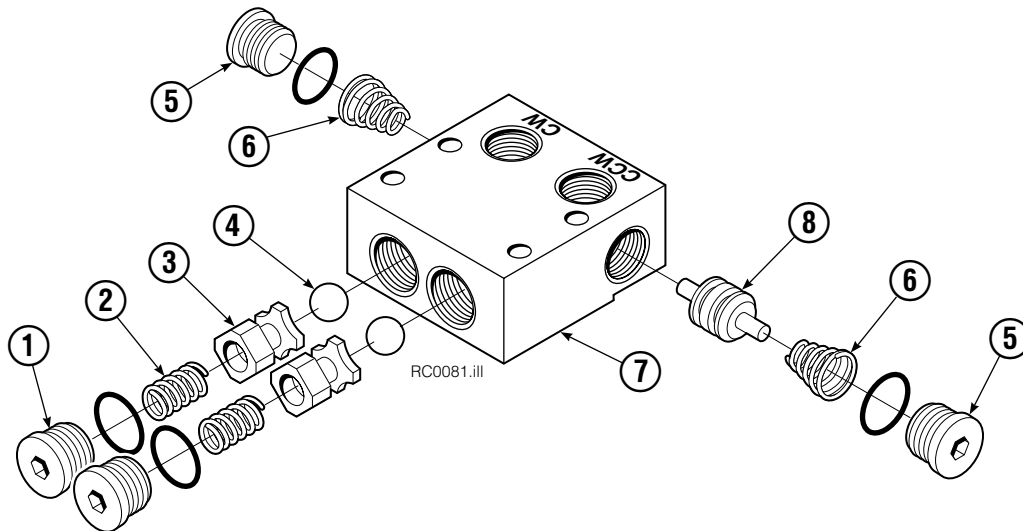


| REF | QTY | PART NO. | DESCRIPTION |
|-----|-----|----------|-------------|
| 1   | 1   | 215903   | Drive Motor |
| ●   | 1   | 206405   | Service Kit |

Cascade provides service replacement parts for the listed parts only. Due to cost, if others parts need replacement, the complete drive motor should be replaced.

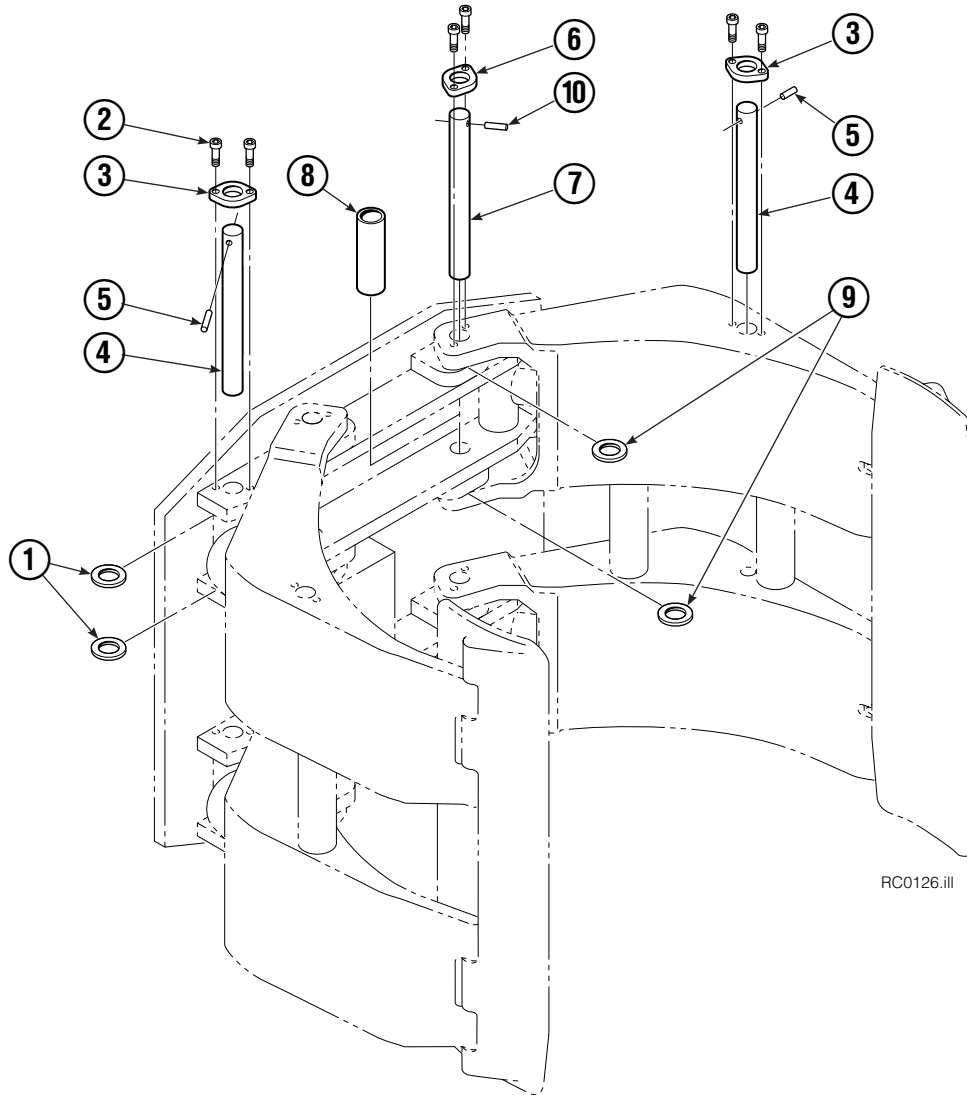
- Compatible with water glycol based hydraulic fluids.

# Check Valve



| REF | QTY | PART NO. | DESCRIPTION          |
|-----|-----|----------|----------------------|
|     |     | 670549   | Check Valve Assembly |
| 1   | 2   | 609453   | Fitting, 10          |
| 2   | 2   | 670552   | Spring               |
| 3   | 2   | 670551   | Guide                |
| 4   | 2   | 7020     | Ball                 |
| 5   | 2   | 602580   | Fitting, 8           |
| 6   | 2   | 673989   | Spring               |
| 7   | 1   | 670550   | Body                 |
| 8   | 1   | 670553   | Spool                |

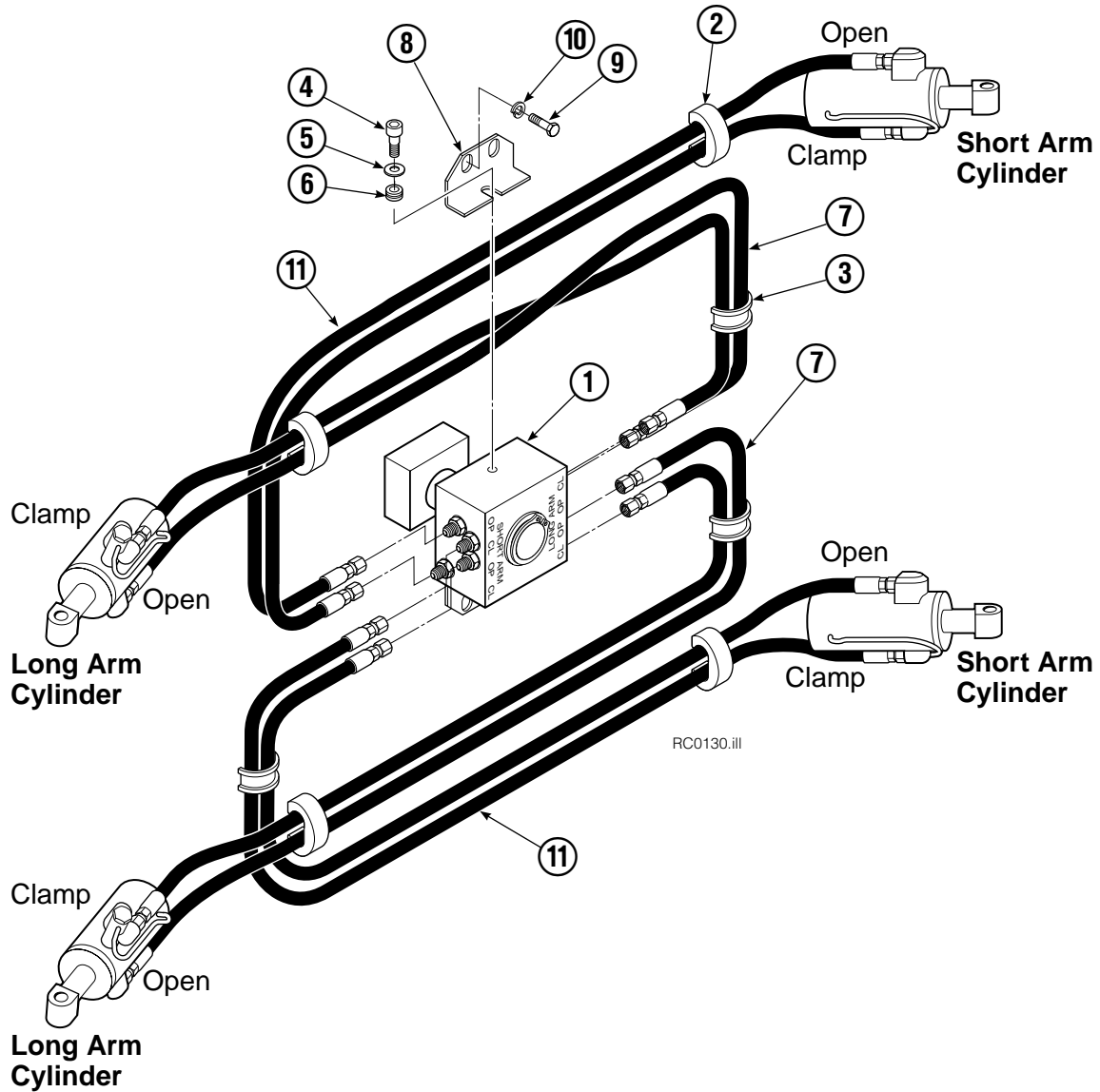
# Common Components Group



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| 77F |     |          |                            |
|-----|-----|----------|----------------------------|
| REF | QTY | PART NO. | DESCRIPTION                |
|     |     | 680637   | Components Group           |
| 1   | 8   | 660200   | Shim                       |
| 2   | 24  | 4466     | Capscrew, 3/8 NC x .50 GR8 |
| 3   | 8   | 674828   | Retainer                   |
| 4   | 8   | 680651   | Pin                        |
| 5   | 8   | 673385   | Drive Pin                  |
| 6   | 4   | 674830   | Retainer                   |
| 7   | 4   | 675022   | Pin                        |
| 8   | 4   | 681673   | Spacer                     |
| 9   | 16  | 673379   | Shim                       |
| 10  | 4   | 675086   | Drive Pin                  |

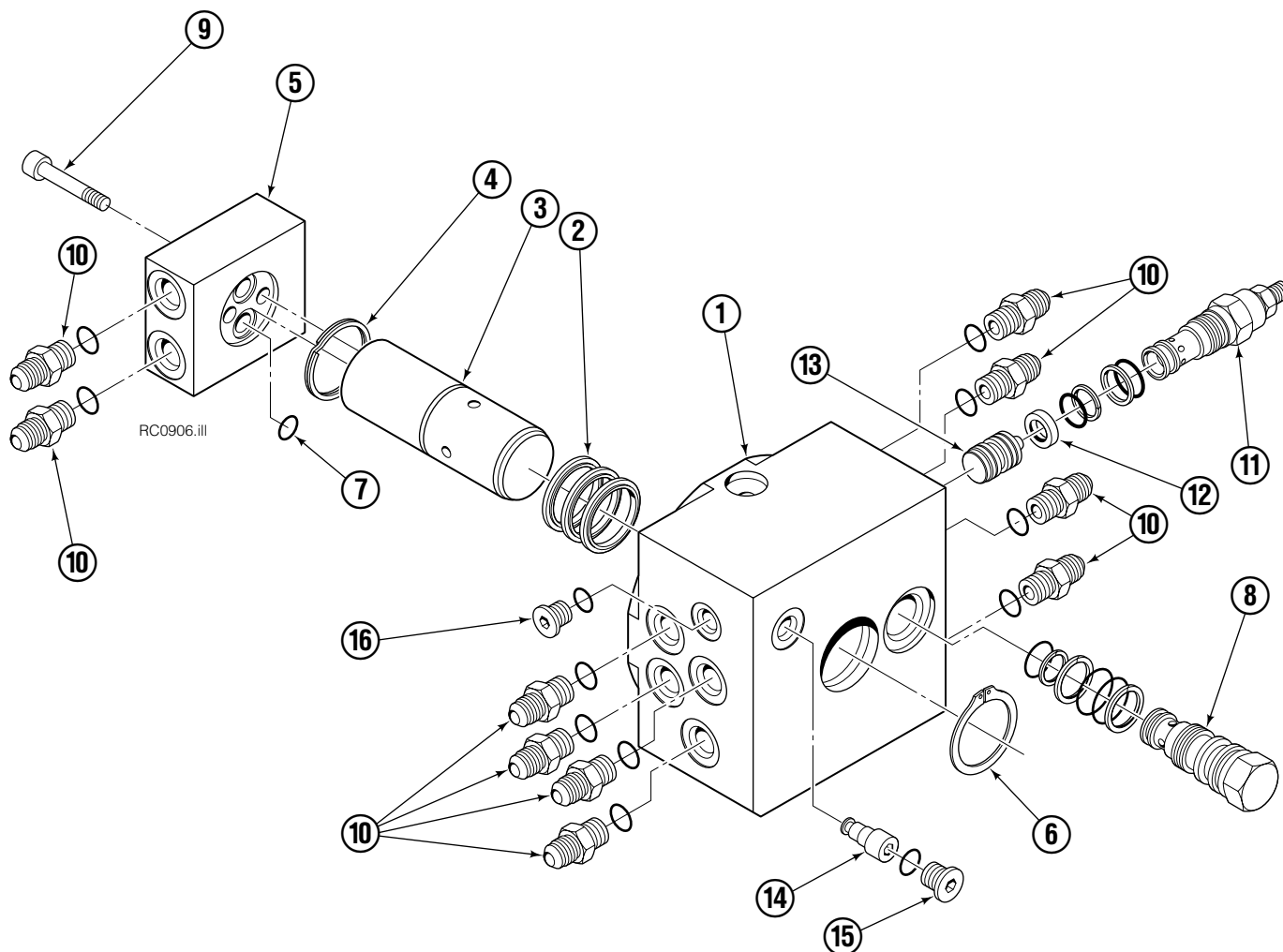
# Hosing Group



| 77F |     |          |                        |
|-----|-----|----------|------------------------|
| REF | QTY | PART NO. | DESCRIPTION            |
|     |     | 228072   | Hosing Group           |
| 1   | 1   | 227949   | Revolving Connection ▲ |
| 2   | 4   | 673417   | Segment                |
| 3   | 4   | 680114   | Insert                 |
| 4   | 2   | 665992   | Shoulder Bolt          |
| 5   | 2   | 209021   | Washer                 |
| 6   | 2   | 208765   | Grommet                |
| 7   | 4   | 680239   | Hose, 63.75 in.        |
| 8   | 2   | 209211   | Angle                  |
| 9   | 2   | 4467     | Capscrew, .375 x .625  |
| 10  | 2   | 6288     | Lockwasher, .375       |
| 11  | 4   | 680238   | Hose, 58.75 in.        |

▲ See Revolving Connection for parts breakdown.

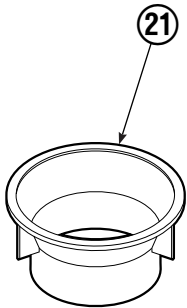
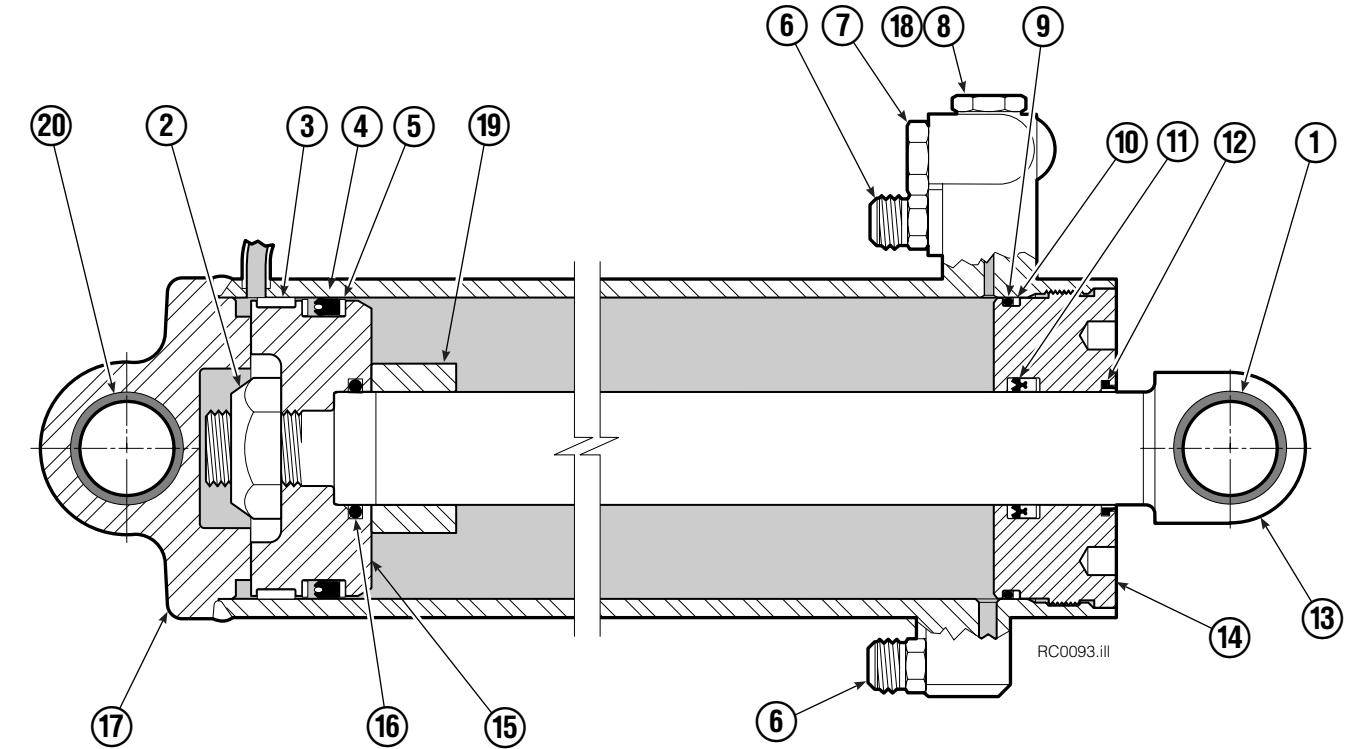
# Revolving Connection



| 77F/90F |     |          |                        |     |     |          |                     |
|---------|-----|----------|------------------------|-----|-----|----------|---------------------|
| REF     | QTY | PART NO. | DESCRIPTION            | REF | QTY | PART NO. | DESCRIPTION         |
|         |     | 227949   | Revolving Connection   | 9   | 2   | 768798   | Capscrew, M8 x 45 ◆ |
| 1       | 1   | 227910   | Body                   | 10  | 10  | 604511   | Fitting, 6-6        |
| 2       | 3   | 214649   | Seal ◆                 | 11  | 1   | 227331   | Sequence Valve      |
| 3       | 1   | 227912   | Shaft                  | 12  | 1   | 227318   | Quad Ring ◆         |
| 4       | 1   | 7341     | Retaining Ring ◆       | 13  | 1   | 227320   | Spool               |
| 5       | 1   | 222684   | End Block              | 14  | 1   | 220865   | Shuttle Check       |
| 6       | 1   | 3138     | Retaining Ring ◆       | 15  | 1   | 609234   | Fitting             |
| 7       | 2   | 564448   | O-ring ◆               | 16  | 1   | 663694   | Fitting             |
| 8       | 1   | 227330   | Flow Divider Cartridge |     |     |          |                     |

◆ Included in Seal Kit 227948.

# Short Arm Cylinder

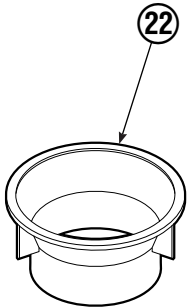
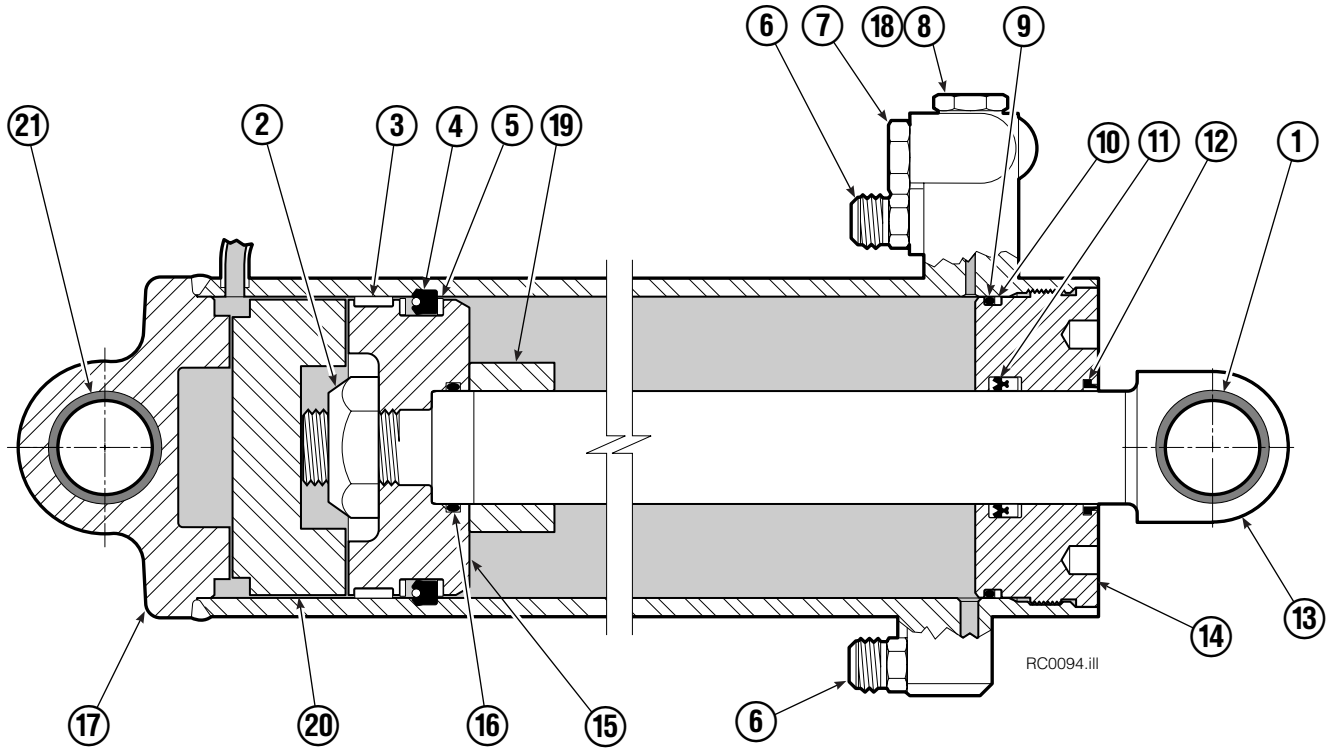


| REF | QTY | PART NO. | DESCRIPTION             |
|-----|-----|----------|-------------------------|
|     |     | 557360   | Cylinder Assembly       |
| 1   | 1   | 674843   | Bearing                 |
| 2   | 1   | 560997   | Nut                     |
| 3   | 1   | 660769   | Bearing ♦               |
| 4   | 1   | 662462   | Seal ♦                  |
| 5   | 2   | 638295   | Back-Up Ring ♦          |
| 6   | 2   | 604511   | Fitting, 6-6            |
| 7   | 1   | 556852   | Fitting, 4              |
| 8   | 1   | 557212   | Check Valve             |
| 9   | 1   | 2801     | O-Ring ♦                |
| 10  | 1   | 563977   | Back-Up Ring ♦          |
| 11  | 1   | 554598   | Seal ♦                  |
| 12  | 1   | 564930   | Wiper ♦                 |
| 13  | 1   | 557390   | Rod                     |
| 14  | 1   | 555724   | Retainer                |
| 15  | 1   | 557389   | Piston                  |
| 16  | 1   | 2722     | O-Ring ♦                |
| 17  | 1   | 555741   | Shell                   |
| 18  | 1   | 667516   | Check Valve Service Kit |
| 19  | 1   | 555774   | Spacer                  |
| 20  | 2   | 675006   | Bearing                 |
| 21  | 1   | 669243   | Seal Loader             |
|     |     | 555725   | Service Kit             |

♦ Included in Service Kit 555725.

Reference: S-5313, S-5314

# Long Arm Cylinder

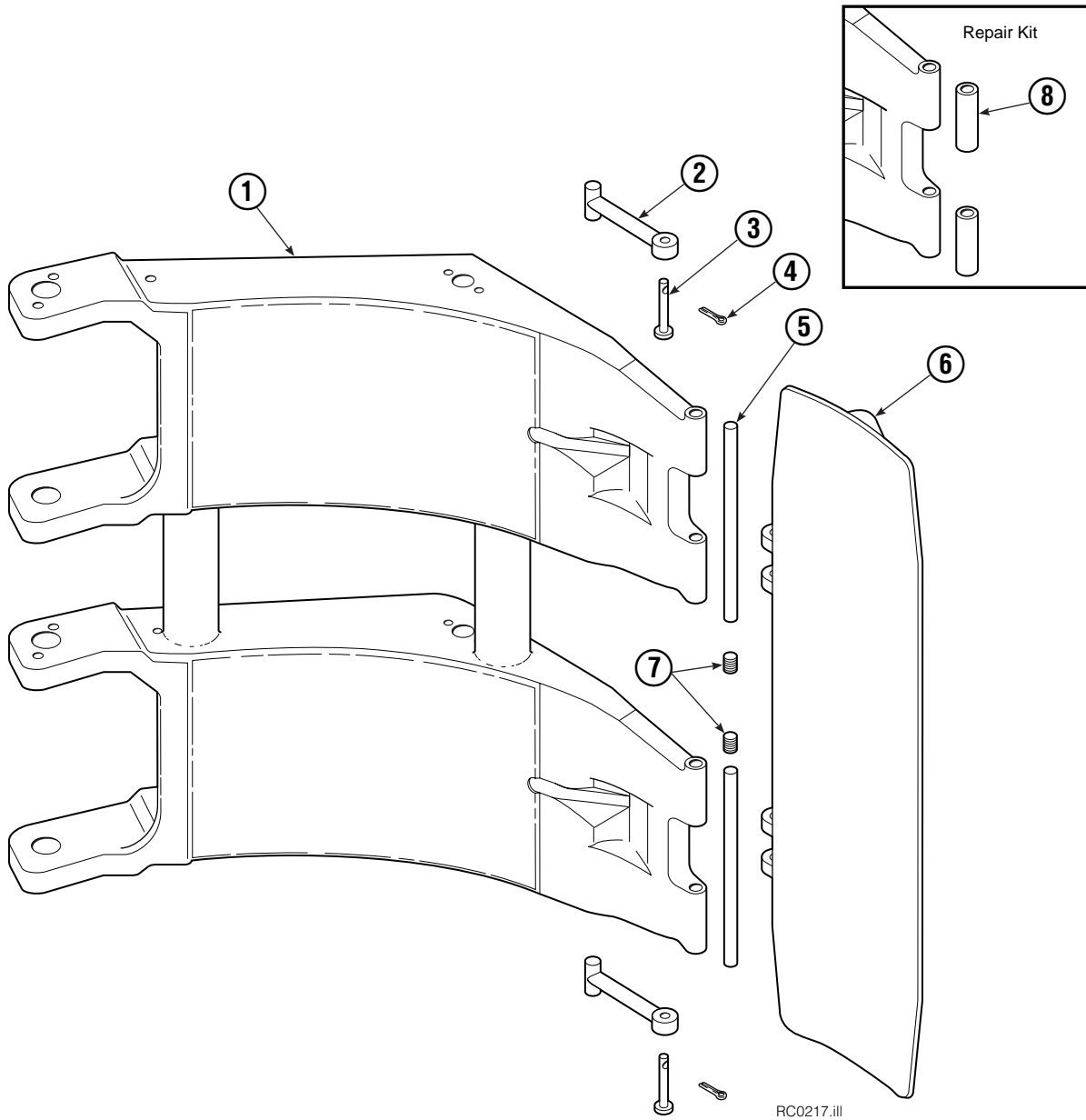


| REF | QTY | PART NO. | DESCRIPTION             |
|-----|-----|----------|-------------------------|
|     |     | 557380   | Cylinder Assembly       |
| 1   | 1   | 674843   | Bearing                 |
| 2   | 1   | 560997   | Nut                     |
| ◆3  | 1   | 660769   | Bearing                 |
| ◆4  | 1   | 662462   | Seal                    |
| ◆5  | 2   | 638295   | Back-Up Ring            |
| 6   | 2   | 604511   | Fitting, 6-6            |
| 7   | 1   | 556852   | Fitting, 4              |
| 8   | 1   | 557212   | Check Valve             |
| ◆9  | 1   | 2801     | O-Ring                  |
| ◆10 | 1   | 563977   | Back-Up Ring            |
| ◆11 | 1   | 554598   | Seal                    |
| ◆12 | 1   | 564930   | Wiper                   |
| 13  | 1   | 557399   | Rod                     |
| 14  | 1   | 555724   | Retainer                |
| 15  | 1   | 557389   | Piston                  |
| ◆16 | 1   | 2722     | O-Ring                  |
| 17  | 1   | 555718   | Shell                   |
| 18  | 1   | 667516   | Check Valve Service Kit |
| 19  | 1   | —        | Spacer                  |
| 20  | 1   | —        | Spacer                  |
| 21  | 2   | 675006   | Bearing                 |
| 22  | 1   | 669243   | Seal Loader             |
|     |     | 555725   | Service Kit             |

◆ Included in Service Kit 555725.

Ref: S-5320, S-5321

# Short Arm

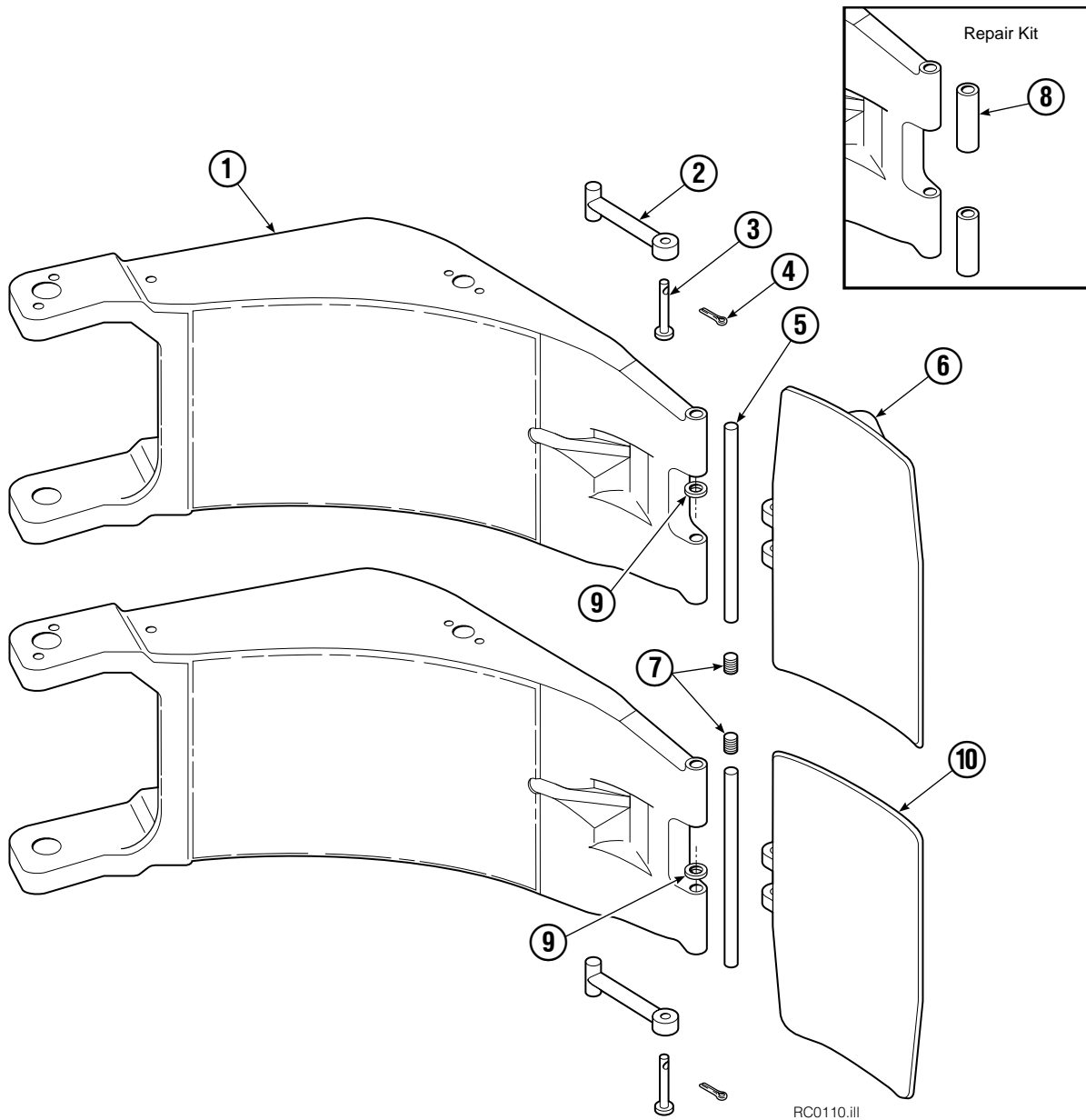


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| 77F |     |          |                     |
|-----|-----|----------|---------------------|
| REF | QTY | PART NO. | DESCRIPTION         |
|     |     | 674948   | Contact Pad Group ■ |
| 1   | 1   | 678544   | Short Arm           |
| 2   | 2   | 674994   | Link                |
| 3   | 2   | 682978   | Clevis Pin          |
| 4   | 2   | 6525     | Cotter Pin          |
| 5   | 2   | 674993   | Pin                 |
| 6   | 1   | 674962   | Contact Pad         |
| 7   | 2   | 689900   | Plug                |
| 8   | 1   | 676810   | Arm Tip Repair Kit  |

■ Includes items 2 thru 7.

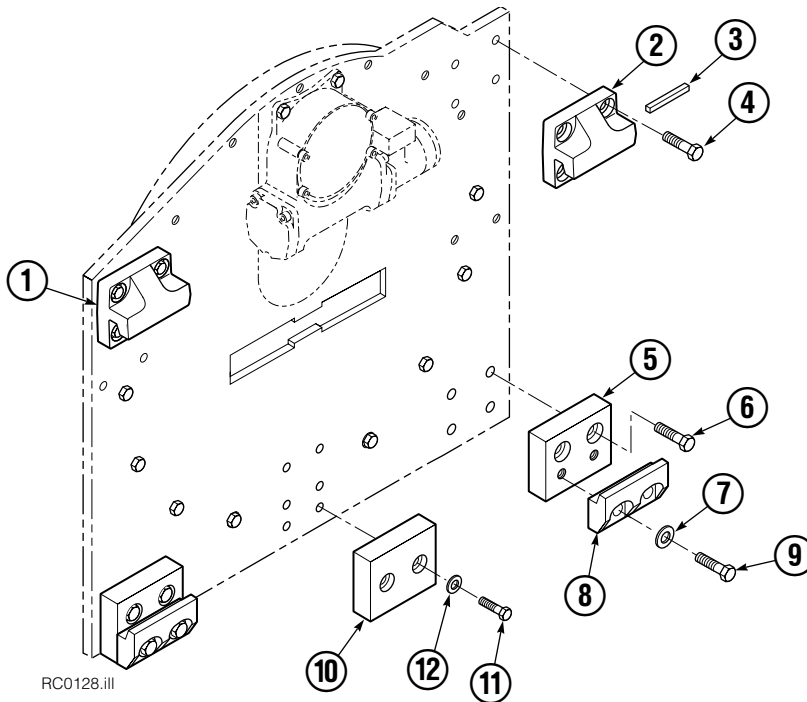
# Contact Pad Group & Long Arm



| 77F |     |          |                                |
|-----|-----|----------|--------------------------------|
| REF | QTY | PART NO. | DESCRIPTION                    |
|     |     | 386612   | Contact Pad Group (items 2-10) |
| 1   | 2   | 675134   | Arm                            |
| 2   | 2   | 674994   | Link                           |
| 3   | 2   | 682978   | Clevis Pin                     |
| 4   | 2   | 6525     | Cotter Pin                     |
| 5   | 2   | 674993   | Pin                            |
| 6   | 1   | 339724   | Contact Pad                    |
| 7   | 2   | 689900   | Plug                           |
| 8   | 1   | 676810   | Arm Tip Repair Kit             |
| 9   | ■   | 667910   | Washer                         |
| 10  | 1   | 339723   | Contact Pad                    |

■ Quantity as required.

# Bolt-On Mounting Group



| Class III, 0° |     |          |                         |
|---------------|-----|----------|-------------------------|
| REF           | QTY | PART NO. | DESCRIPTION             |
|               |     | 678502   | Mounting Group          |
| 1             | 1   | 670684   | Upper Hook – LH         |
| 2             | 1   | 670685   | Upper Hook – RH         |
| 3             | 1   | 670704   | Stop Kit                |
| 4             | 8   | 667765   | Capscrew, 5/8 NC x 1.50 |
| 5             | 2   | 675080   | Spacer                  |
| 6             | 4   | 673387   | Capscrew, 5/8 NC x 1.75 |
| 7             | 4   | 667225   | Washer                  |
| 8             | 2   | 675969   | Lower Hook              |
| 9             | 4   | 674252   | Capscrew, 5/8 NC x 2.75 |
| 10            | 1   | 675081   | Center Spacer           |
| 11            | 2   | 4472     | Capscrew, 3/8 NC x 1.50 |
| 12            | 2   | 6372     | Lockwasher, 3/8 in. ID  |

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**Cascade Corporation**

2501 Sheridan Avenue  
Springfield, OH 45505  
Tel: 888-CASCADE (227-2233)  
FAX: 888-329-0234  
www.cascorp.com

**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  
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 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 Yangguant Rd.  
Xinyang Industry Zone  
Haicant, 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

