



# Parts Manual

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Model 50D Revolving Clamp

Serial Number 50D-CFR-248

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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



REF	QTY	PART NO.	DESCRIPTION
1	2	665595	No Hand Hold Decal
2	2	679150	No Step Decal

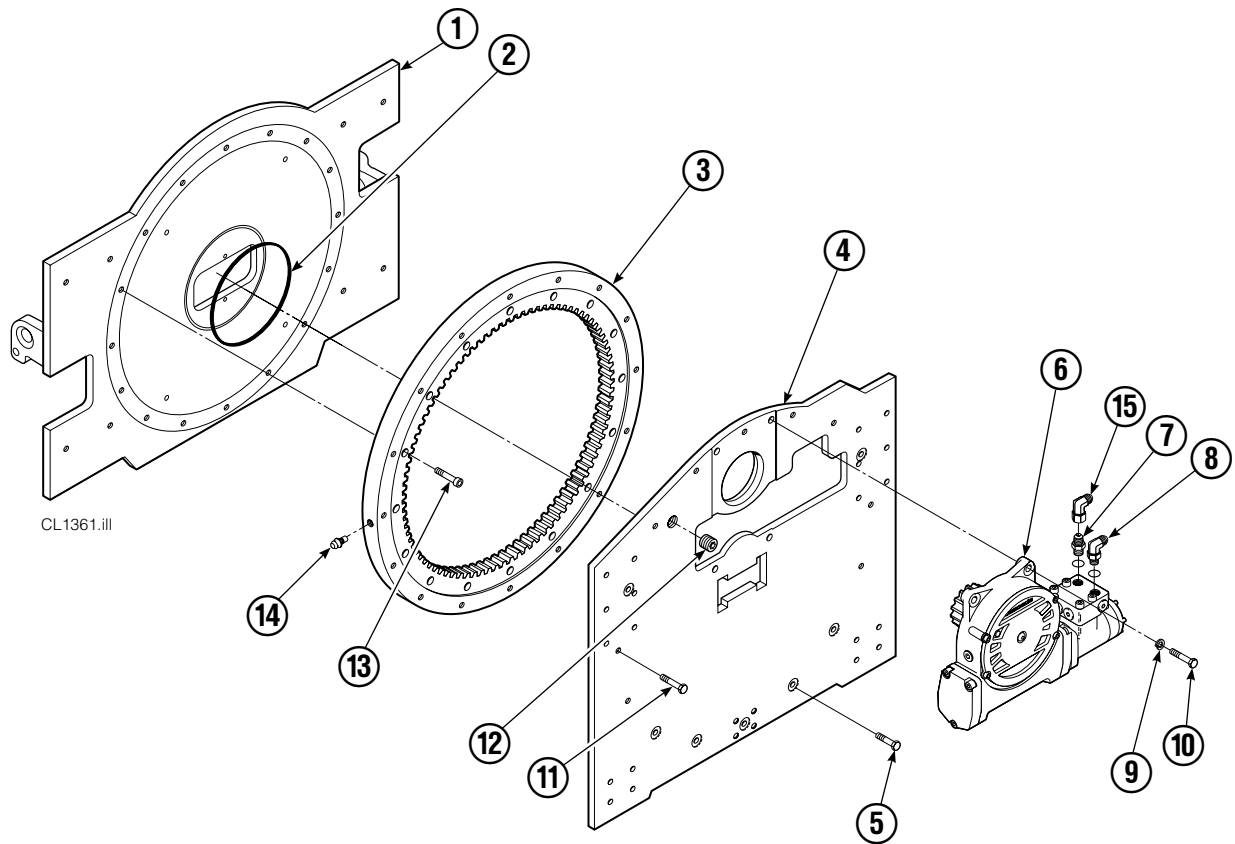


# Publications



PART NO.	DESCRIPTION
672362	Service Manual
672903	Operators Guide
672361	Installation Instructions
680664	Servicing Cascade Cylinders-VHS
679929	Tool Catalog
673964	Literature Index Order Form

# Rotator Group



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50D			
REF	QTY	PART NO.	DESCRIPTION
		687238	Rotator Group
1	1	687230	Faceplate
2	1	670931	Seal
3	1	672828	Bearing Assembly
4	1	687229	Baseplate
5	7	643538	Capscrew, 1/2 NC x 1.50 GR8
6	1	795491	Drive Group ▲
7	1	601377	Fitting, 8-8
8	1	601250	Fitting, 8-8
9	4	6290	Lockwasher, 1/2 in. ID
10	4	661742	Capscrew, 1/2 NC x 1.25 GR5
11	9	643539	Capscrew, 1/2 NC x 1.75 GR8
12	1	6605	Plug
13	16	4505	Capscrew, 1/2 NC x 1.25
14	1	7401	Grease Fitting
15	1	605761	Fitting, 8-8
		672481	Bearing Service Kit

▲ See Drive Group page for parts breakdown.

Reference: Common Parts Group 680700, SK-5346, SK-5649.

# Drive Group



REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		795491	Drive Group with 2.8 c.i. Motor	19	1	206392	Drive Motor – 2.8 c.i. ▼
1	6	769570	Capscrew, M12 x 25	20	4	4468	Capscrew, 3/8 NC x .75 GR8
2	1	676855	Cover	21	1	670580	Bearing
3	●	674513	Shim – .005" (blue)	22	1	675609	Worm Gear
4	●	670574	Shim – .010" (brown)	23	1	670581	Bearing
5	●	671757	Shim – .015" (pink)	24	1	7214	Snap Ring
6	●	671758	Shim – .020" (yellow)	25	1	643423	O-Ring
7	2	670579	Bearing	26	1	775552	Cover
8	1	670582	Key	27	1	783609	Seal
9	1	670506	Pinion	28	1	783608	Capscrew, M12 x 16
10	1	775551	Housing	29	4	200882	Capscrew, M8 x 20
11	1	686465	Gasket	30	1	644010	Relief Fitting
12	1	675608	Worm	31	1	604510	Fitting, 6
13	1	775553	Adapter	32	1	656300	Gear Box Lube – 48 oz.
14	2	2705	O-Ring	33	1	668184	Sealant
15	1	670549	Check Valve ▲			670578	Shim Service Kit (items 3-6,25,33)
16	4	6444	Lockwasher			675637	Bearing Service Kit (items 21 & 33)
17	4	607059	Capscrew, 5/16 NC x 1.75 GR8			675638	Bearing Service Kit (items 3-7,25)
18	1	670575	Gasket			685227	Motor Kit-4.5 (items 4,14,18)

- Quantity as required.
- ▲ See Check Valve page for parts breakdown.
- ▼ See Drive Motor page for parts breakdown.

## Drive Motor



REF	QTY	PART NO.	DESCRIPTION
		206392	Drive Motor
1	1	675478	Shaft
2	1	675477	Drive
3	1	675479	Spacer Plate
4	1	675480	■ Gerotor Set (101-1768-007)
4	1	685075	■ Gerotor Set (101-1768-009)
5	1	675482	End Cap
6	1	206405	● Service Kit
7	1	685089	■ Flange (101-1768-007)
7	1	685090	■ Flange (101-1768-009)

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.

■ See Nameplate under valve for correct part number of Gerotor Set and Flange.

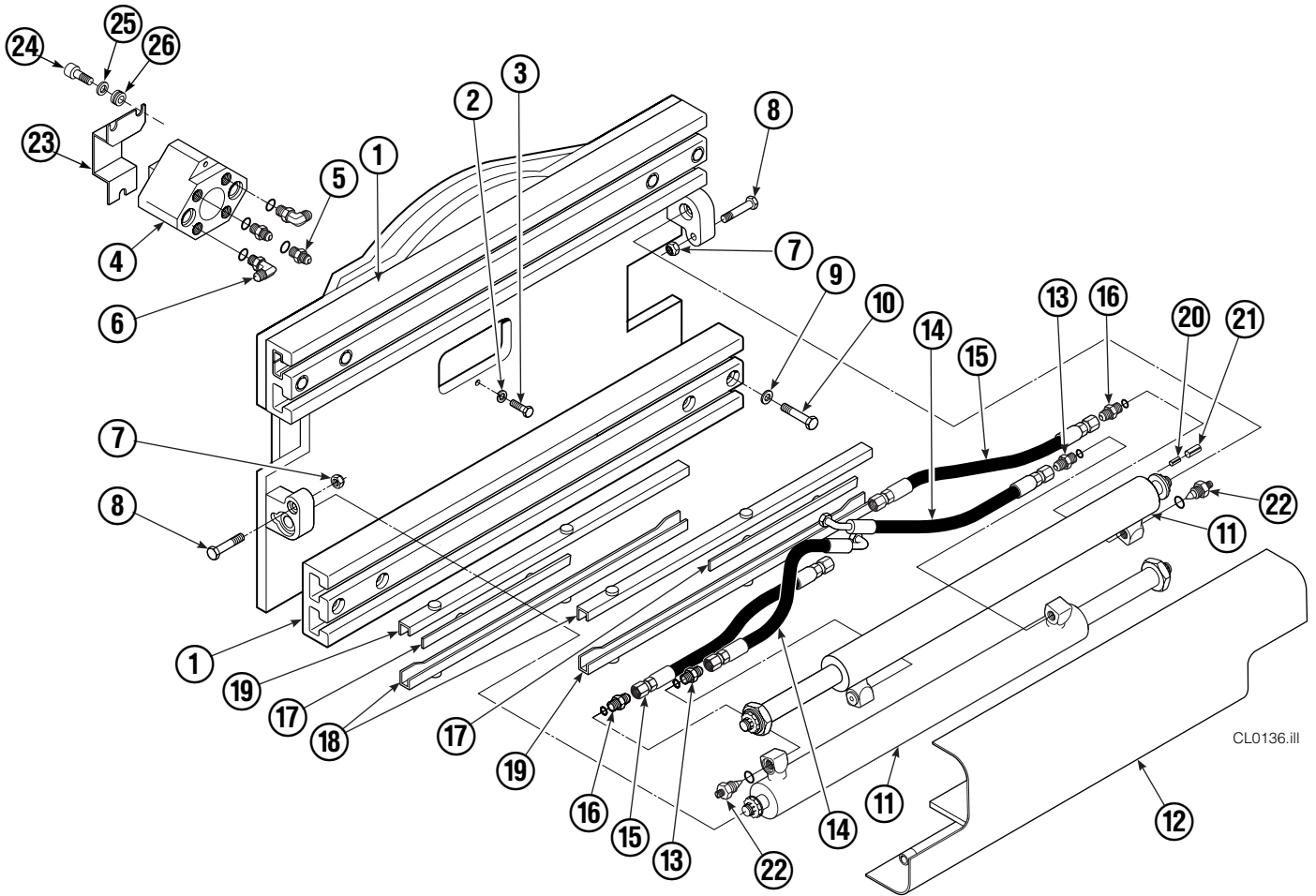
● Compatible with water glycol based hydraulic fluids.

## 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

# Frame Group



50D							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		687284	Frame Group	14	2	631443	Hose
1	2	674167	Frame	15	2	678027	Hose
2	2	686119	Lockwasher, M8	16	2	686369	Fitting
3	2	765352	Capscrew, M8 x 30	17	4	667663	Bearing
4	1	686420	Revolving Connection ■	18	4	668904	Bearing
5	2	604511	Fitting, 6-6	19	4	668905	Bearing
6	2	601676	Fitting, 6-6	20	2	7882	Roll Pin - Inner
7	2	665707	Nut, 1/2 in. ID	21	2	7961	Roll Pin - Outer
8	2	3660	Capscrew, 1/2 NC x 2.50	22	2	667609	Restrictor Cartridge ●
9	8	667225	Washer, 5/8 in. ID	23	1	209067	End Block Bracket
10	8	667644	Capscrew, 5/8 NC x 3.25	24	3	665992	Shoulder Bolt
11	2	667666	Cylinder ▲	25	3	209021	Washer, M10
12	1	667664	Bumper	26	3	208765	Grommet
13	2	611288	Fitting, 6-8				

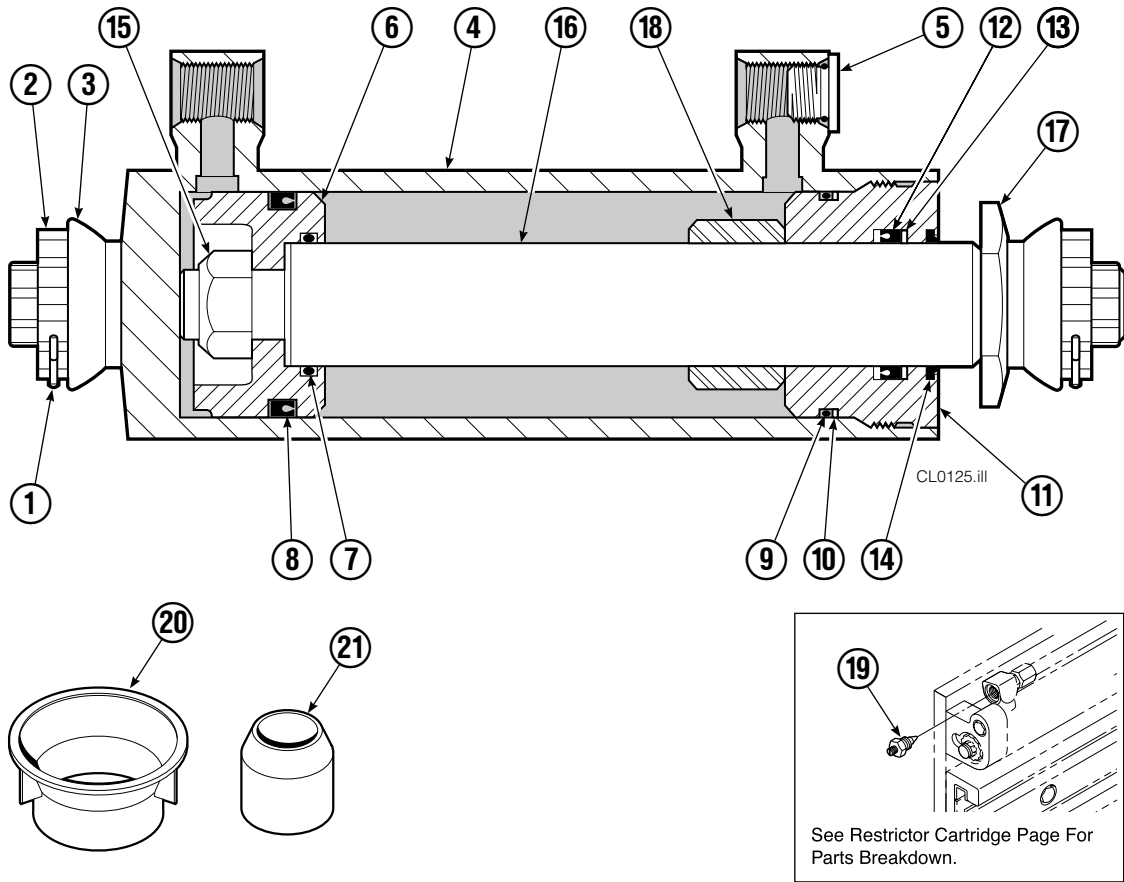
■ See Revolving Connection page for parts breakdown.

▲ See Cylinder page for parts breakdown.

● See Restrictor Cartridge page for parts breakdown.

Reference: SK-5659.

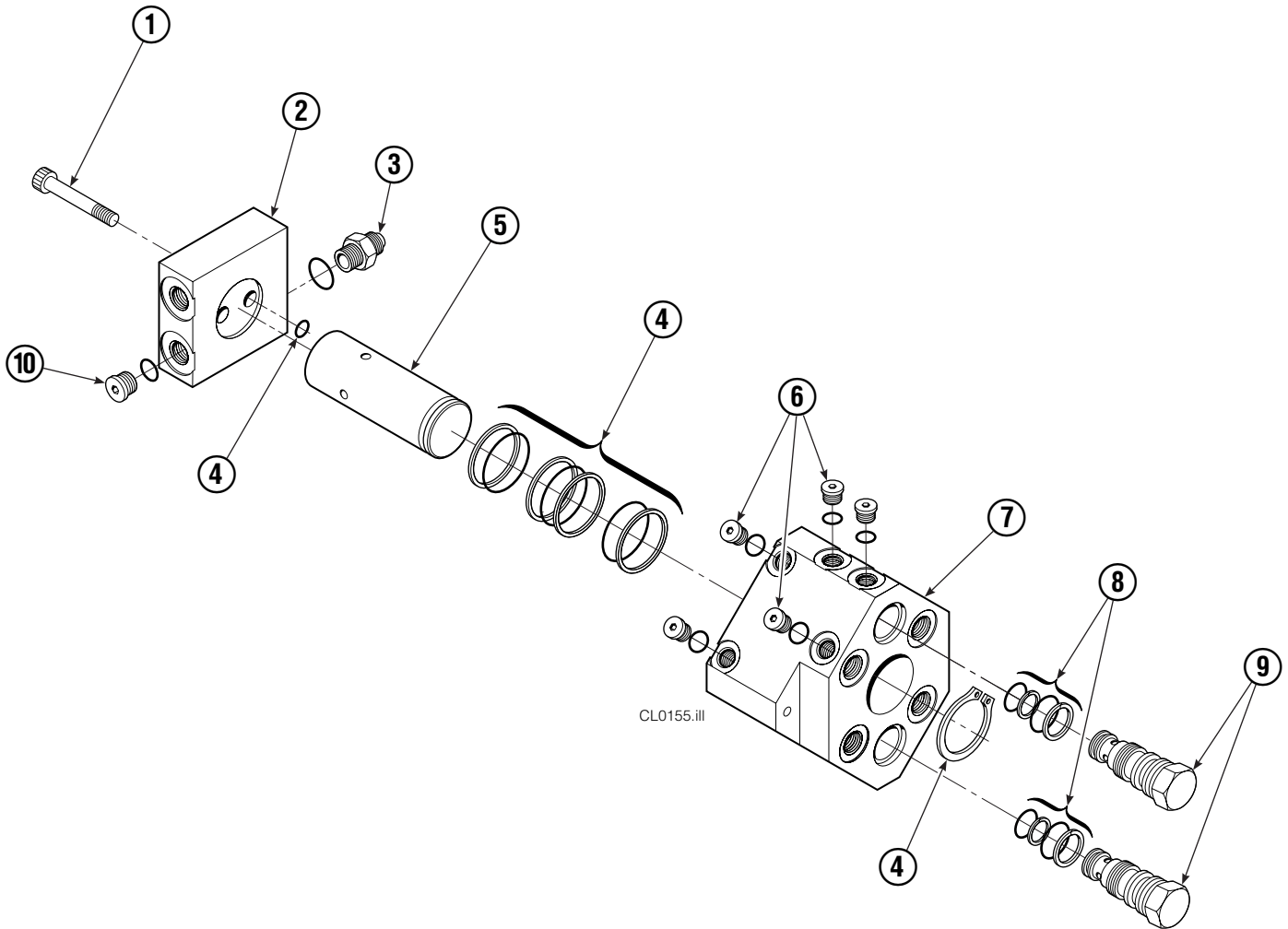
# Cylinder



50D			
REF	QTY	PART NO.	DESCRIPTION
		667666	Cylinder Assembly
1	2	6511	■ Cotter Pin
2	2	667667	■ Nut Retainer
3	2	667668	■ Nut
4	1	553760	Shell
5	1	602580	Fitting
6	1	558402	Piston
7	1	2722	▲ O-Ring
8	1	557376	▲ Seal
9	1	2791	▲ O-Ring
10	1	615134	▲ Back-Up Ring
11	1	667675	Retainer
12	1	662451	▲ Seal
13	1	638246	▲ Nylon Ring
14	1	564930	▲ Wiper
15	1	561012	Nut
16	1	667670	Rod
17	1	667676	Washer
18	1	—	Spacer
19	1	667609	Restrictor Cartridge ●
20	1	671049	▲ Seal Loader, Piston
21	1	671052	▲ Seal Loader, Retainer
		667723	Service Kit

- ▲ Included in Service Kit 667723.
  - Included in Nut Service Kit 668925.
  - Not included in Cylinder Assembly.
- Reference: S-7666.

# Revolving Connection



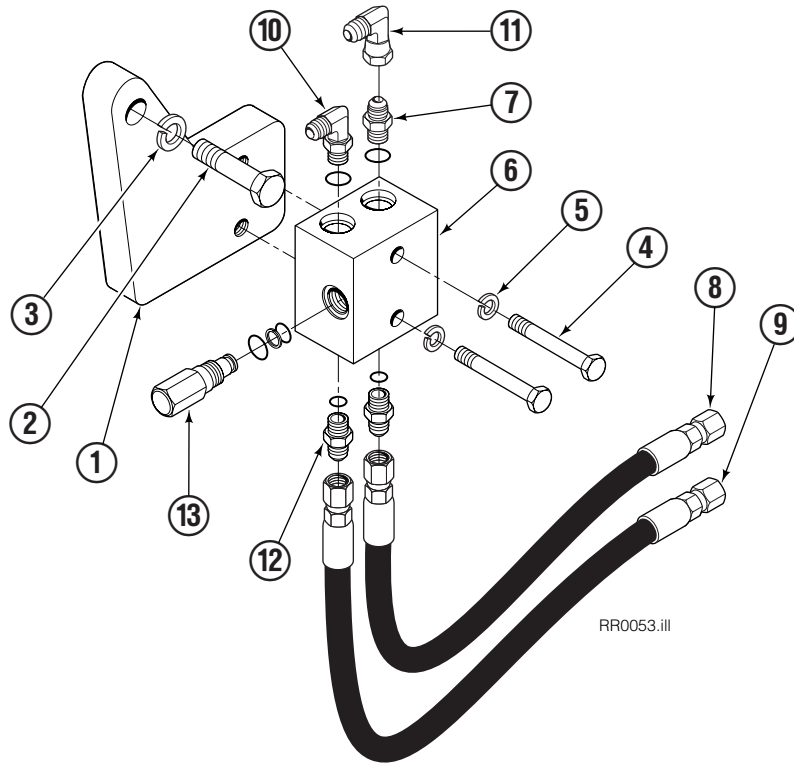
35D/50D			
REF	QTY	PART NO.	DESCRIPTION
		686420	Revolving Connection
1	2	768795	Capscrew, M8 x 1,25 x 30 x 8.8
2	1	686421	End Block
3	2	604511	Fitting, 6-6
4	1	687237	Service Kit
5	1	686422	Shaft
6	5	663694	Fitting, 3
7	1	686423	Body
8	2	667516	Check Valve Service Kit
9	2	678376	Check Valve
10	2	604510	Fitting, 6

# Restrictor Cartridge



REF	QTY	PART NO.	DESCRIPTION
		667609	Restrictor Cartridge
1	1	2701	O-Ring
2	1	667611	Plunger
3	1	2841	O-Ring
4	1	667610	Plug - Special
5	1	5716	Jam Nut

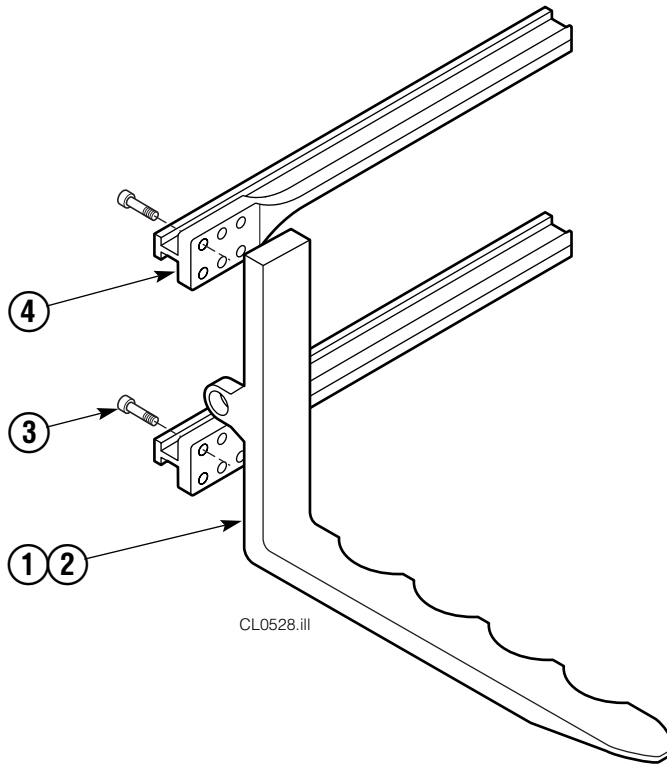
# Valve Group



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REF	QTY	PART NO.	DESCRIPTION
		689952	Valve Group
		679888	Valve Assembly (Items 6 & 13)
1	1	679934	Plate
2	1	645636	Capscrew
3	1	6290	Lockwasher
4	2	643519	Capscrew
5	2	6287	Lockwasher
6	1	679889	Valve Body
7	1	601377	Fitting, 8-8
8	1	206479	Hose
9	1	210351	Hose
10	1	601250	Fitting, 8-8
11	1	605761	Fitting, 8-8
12	2	611288	Fitting, 6-8
13	1	679890	Relief Valve

# Drum Arms

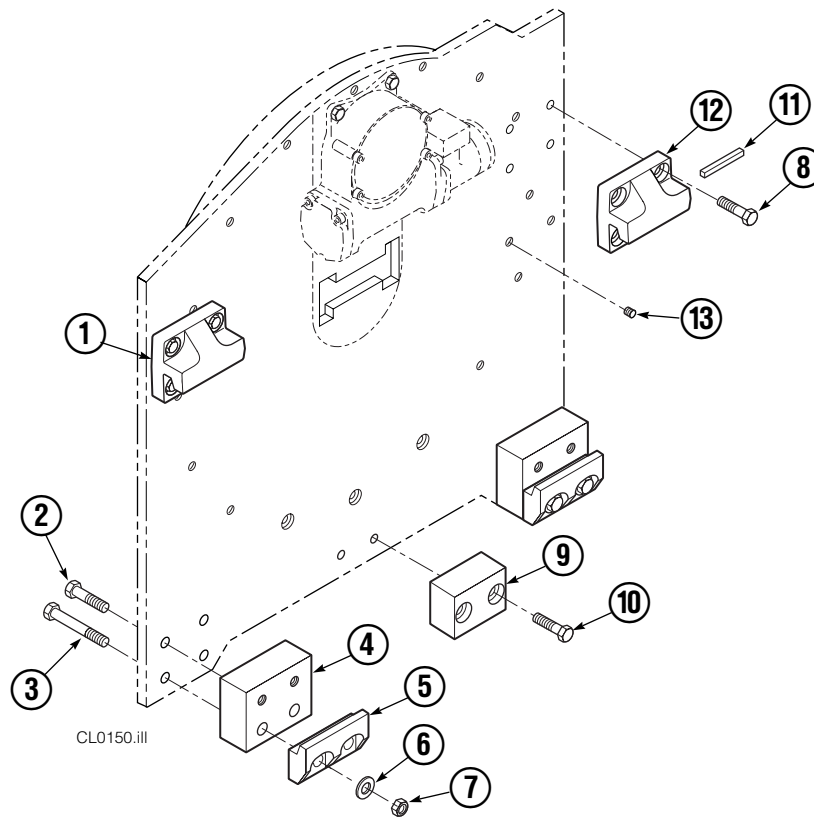


<b>ARM CAPSCREW EXTENSION TOOL</b> Required for proper torquing of capscrews		
	35D/50D	667699

<b>50D</b>			
REF	QTY	PART NO.	DESCRIPTION
		371019	Fork Group ●
1	1	371021	Arm Weldment – LH
2	1	371020	Arm Weldment – RH
3	24	607105	Capscrew, 3/4 NC x 2.00 GR8
4	4	667700	Arm Bar

● Includes items 1, 2 and 3.

# Bolt-On Mounting Group



## Class III, 0°

REF	QTY	PART NO.	DESCRIPTION
		680632	Mounting Group
1	1	670527	Upper Hook – LH
2	4	641284	Capscrew, 5/8 NC x 2.25
3	4	669305	Capscrew, 5/8 NC x 5.00
4	2	682068	Spacer
5	2	675969	Lower Hook
6	4	667225	Washer
7	4	676281	Nut, 5/8
8	8	667369	Capscrew, 5/8 NC x 1.25
9	1	682067	Center Spacer
10	2	677828	Capscrew, 1/2 NC x 1.00
11	1	669344	Stop Kit
12	1	670528	Upper Hook – RH
13	2	631385	Plug, 5/8



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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  
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 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

