



Parts Manual

Model 50D Turn-A-Load

Serial Number 50D-TAL-133

cascade[®]

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

Safety Decals



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

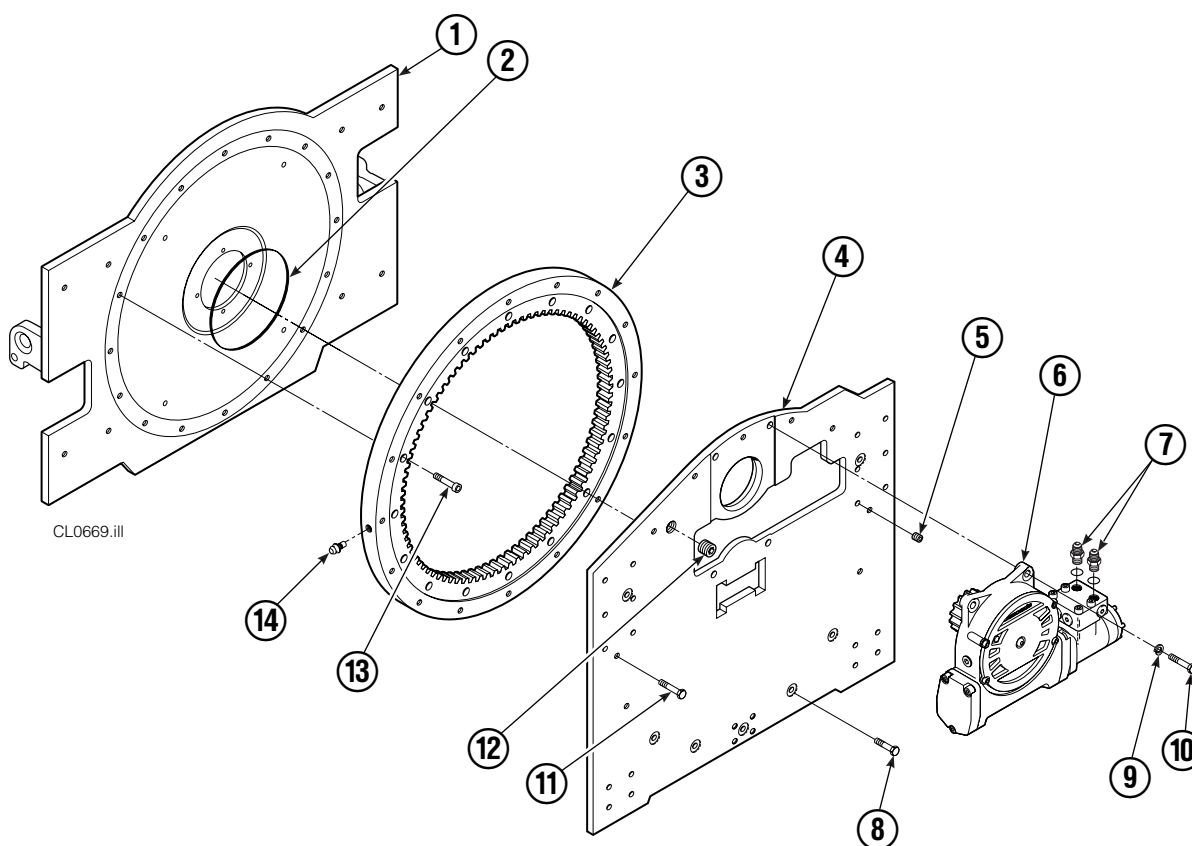


Publications



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



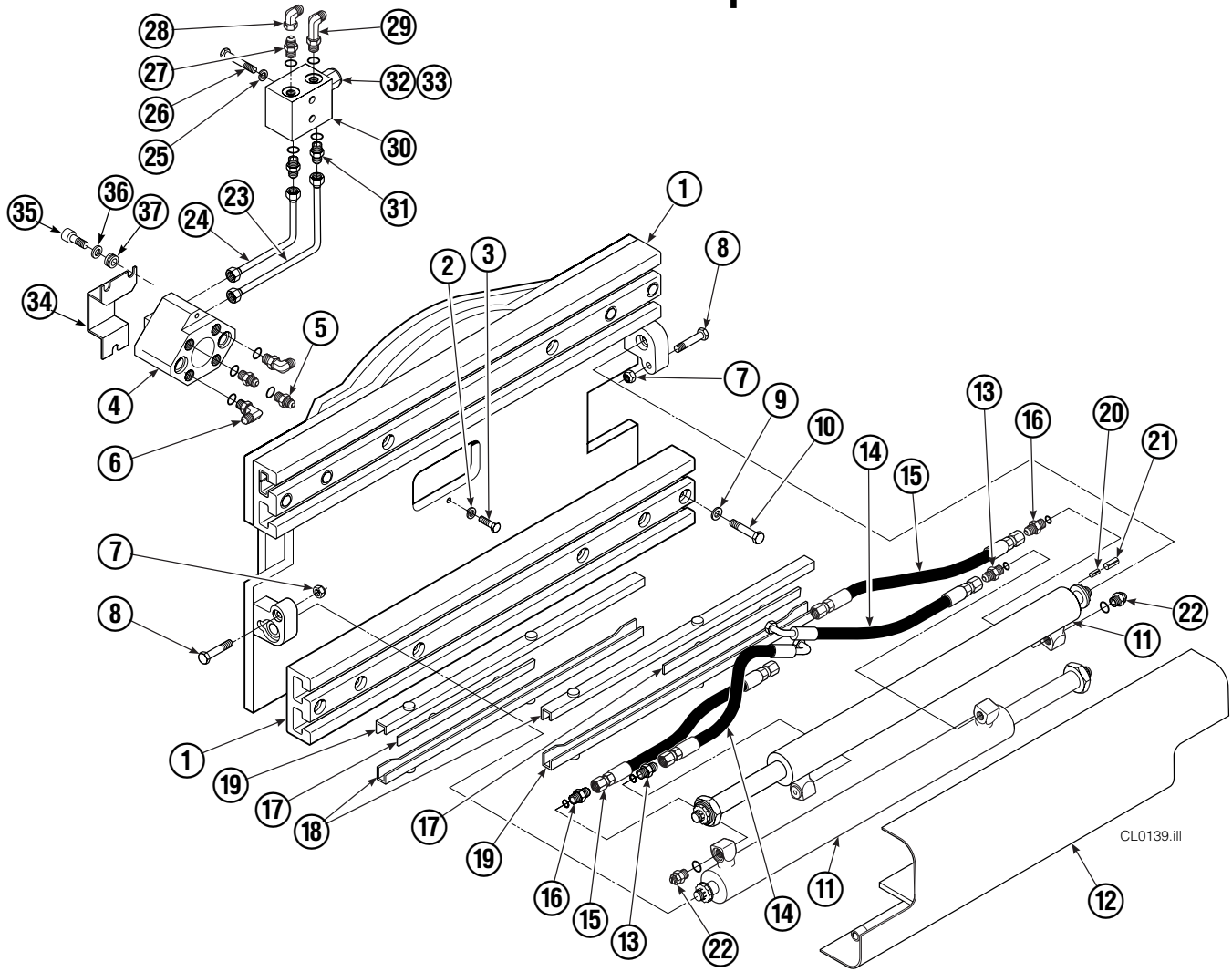
CL0669.iii

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	6	631385	Plug
6	1	675628	Drive Group ▲
7	2	611303	Fitting
8	7	643538	Capscrew, 1/2 NC x 1.50 GR8
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
14	1	7401	Grease Fitting
		672481	Bearing Service Kit

▲ See Drive Group page for parts breakdown.

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

Frame Group



50D							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		687284	Frame Group	19	4	668905	Bearing
		689952	Backhand Relief Group (items 23-33)	20	2	7882	Roll Pin - Inner
1	2	674167	Frame	21	2	7961	Roll Pin - Outer
2	2	686119	Lockwasher, M8	22	2	667609	Restrictor Cartridge ●
3	2	765352	Capscrew, M8 x 30	23	1	686409	Tube
4	1	686420	Revolving Connection ■	24	1	686408	Tube
5	2	604511	Fitting, 6-6	25	2	6287	Lockwasher, 5/16
6	2	601676	Fitting, 6-6	26	2	643519	Capscrew, 5/16 x 2.50
7	2	665707	Nut, 1/2 in. ID	27	1	601377	Fitting, 8-8
8	2	3660	Capscrew, 1/2 NC x 2.50	28	1	605761	Fitting, 8-8
9	8	667225	Washer, 5/8 in. ID	29	1	601250	Fitting, 8-8
10	8	667644	Capscrew, 5/8 NC x 3.25	30	1	679888	Relief Valve Assembly
11	2	667666	Cylinder ▲	31	2	611288	Fitting, 6-8
12	1	667664	Bumper	32	1	679890	Relief Valve
13	2	611288	Fitting, 6-8	33	1	667510	Service Kit
14	2	631443	Hose	34	1	209067	End Block Bracket
15	2	678027	Hose	35	3	665992	Shoulder Bolt
16	2	686369	Fitting	36	3	209021	Washer, M10
17	4	667663	Bearing	37	3	208765	Grommet
18	4	668905	Bearing				

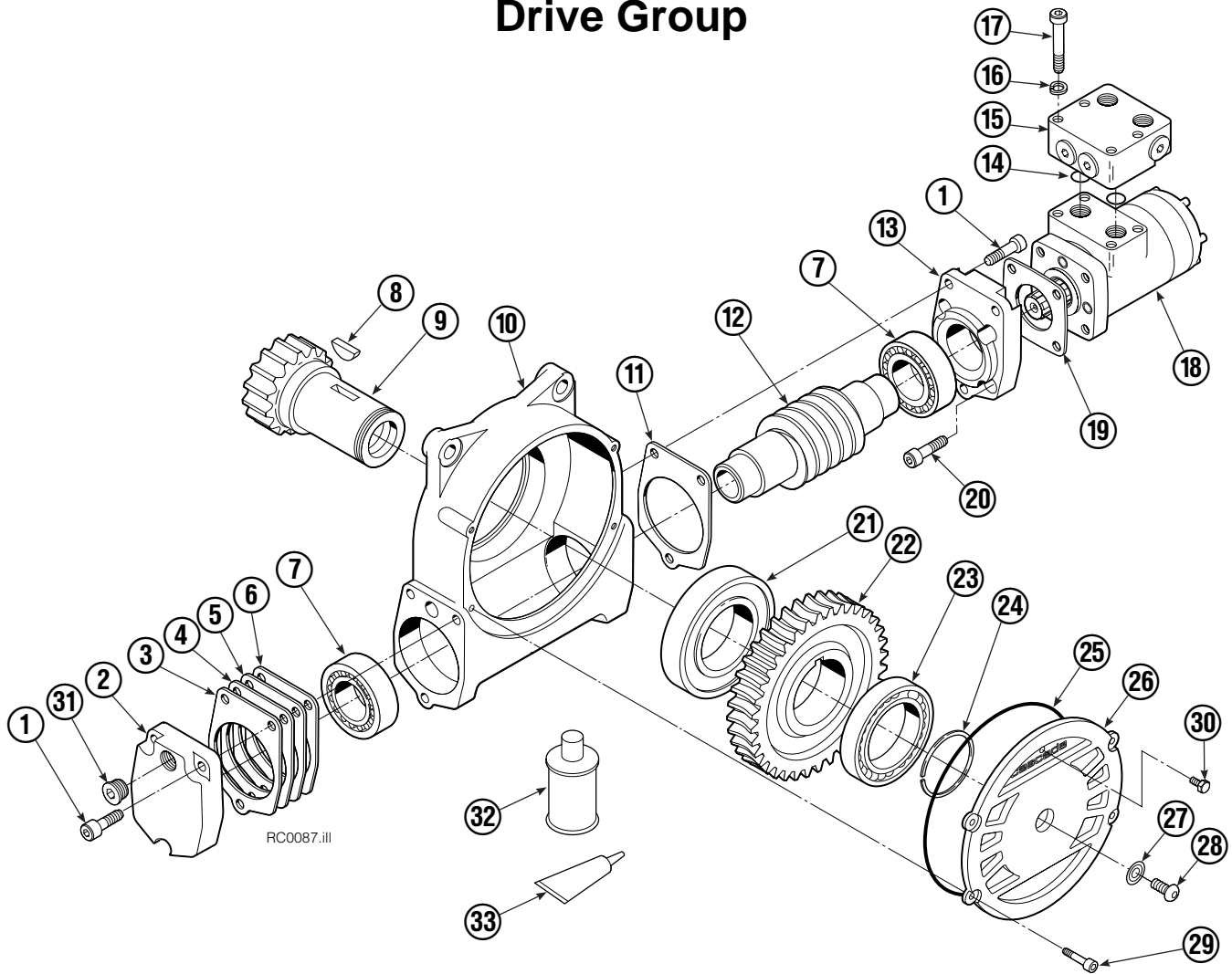
■ See Revolving Connection page for parts breakdown.

● See Restrictor Cartridge page for parts breakdown.

▲ See Cylinder page for parts breakdown.

Reference: SK-5659.

Drive Group

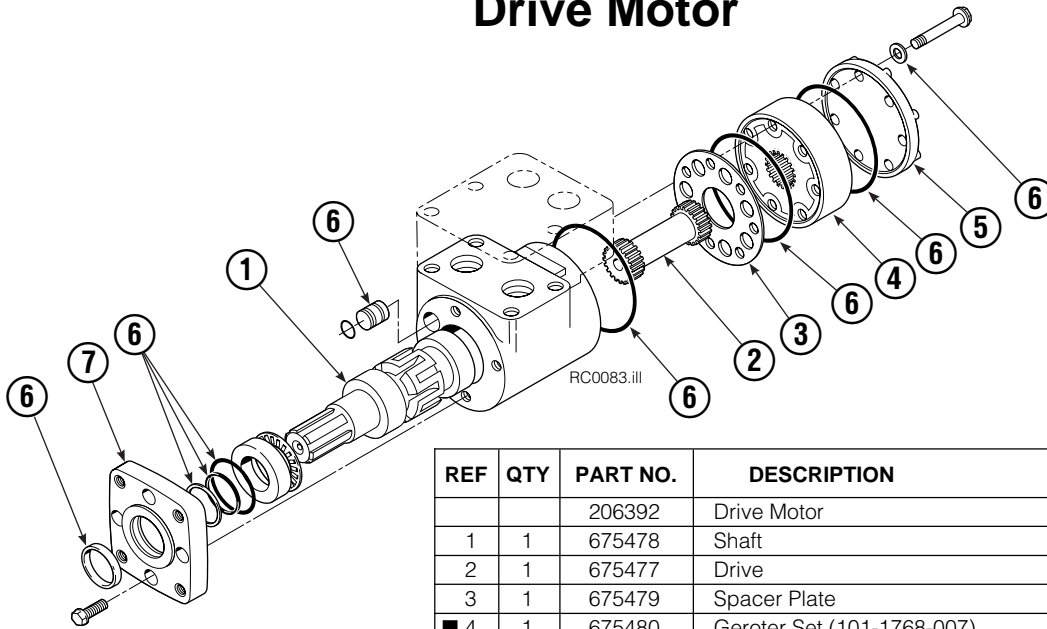


REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		675628	Drive Group with Motor	19	1	670575	Gasket
	■	675631	Drive Group without Motor	20	4	4468	Capscrew, 3/8 NC x .75 GR8
1	6	607061	Capscrew	21	1	670580	Bearing
2	1	676855	Cover	22	1	675609	Worm Gear
3	●	674513	Shim – .005 in. (blue)	23	1	670581	Bearing
4	●	670574	Shim – .010 in. (brown)	24	1	7214	Snap Ring
5	●	671757	Shim – .015 in. (pink)	25	1	643423	Gasket
6	●	671758	Shim – .020 in. (yellow)	26	1	670567	Cover
7	1	670579	Bearing	27	1	603680	Seal
8	1	670582	Key	28	1	783608	Capscrew, M12 x 16
9	1	670506	Pinion	29	4	671535	Capscrew
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	670570	Adapter	33	1	668184	Sealant
14	2	2705	O-Ring			670578	Shim Service Kit (items 3-6, 11, 33)
15	1	670549	Check Valve			675637	Shim Service Kit (items 21, 33)
16	4	6444	Lockwasher, 5/16			675638	Shim Service Kit (items 3-7)
17	4	607059	Capscrew, 5/16 NC			206394	Motor Kit (items 11,14,18,19,20,33)
18	1	206392	Drive Motor ▲				

- Includes all items except 15, 17 and 18.
- Quantity as required.
- ▲ See Drive Motor page for parts breakdown.

Reference: Common Parts Group 675627, SK-5032.

Drive Motor

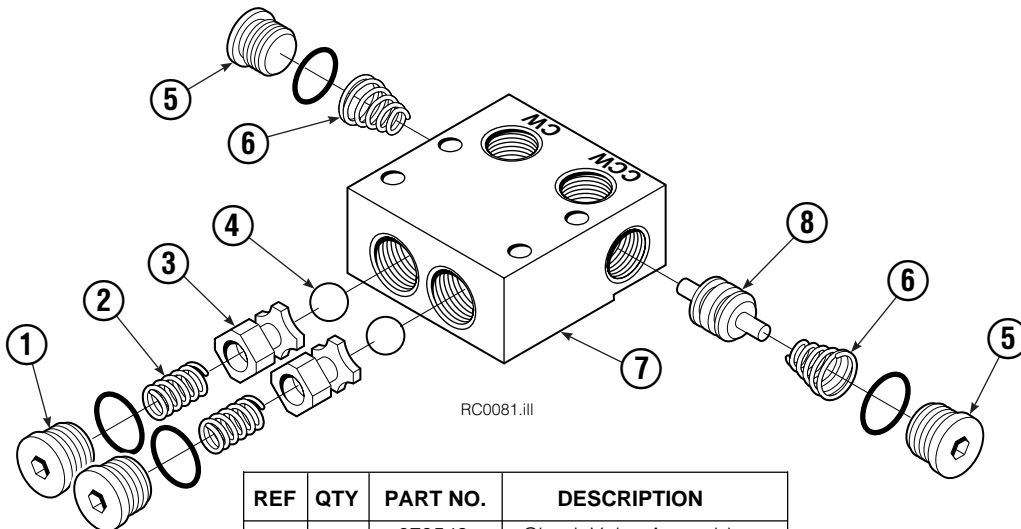


REF	QTY	PART NO.	DESCRIPTION
		206392	Drive Motor
1	1	675478	Shaft
2	1	675477	Drive
3	1	675479	Spacer Plate
■ 4	1	675480	Gerotor Set (101-1768-007)
■ 4	1	685075	Gerotor Set (101-1768-009)
5	1	675482	End Cap
● 6	1	206405	Service Kit
■ 7	1	685089	Flange (101-1768-007)
■ 7	1	685090	Flange (101-1768-009)

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.

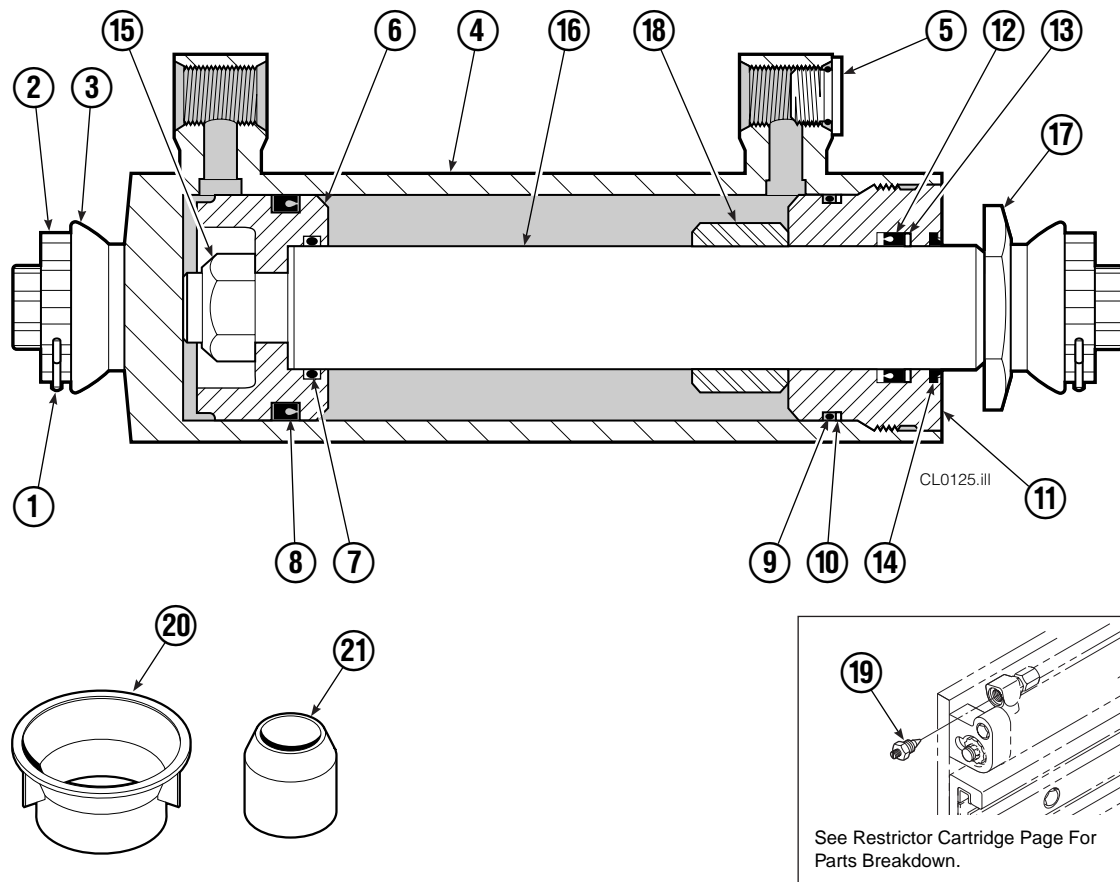
- See Nameplate under valve for correct part number of Gerotor Set and Flange.
- Compatible with water glycol based hydraulic fluids.

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

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

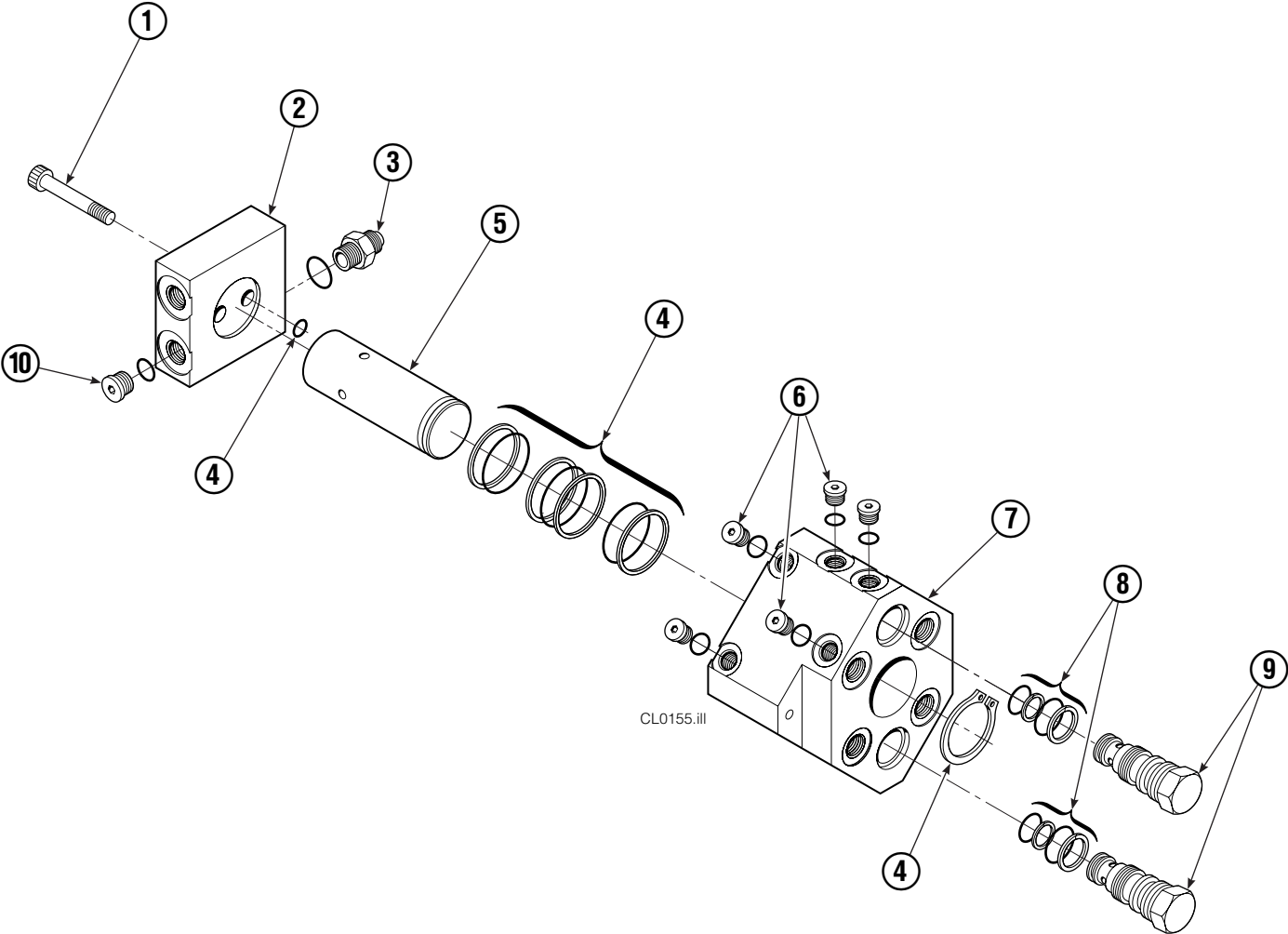
▲ Included in Service Kit 667723.

■ Included in Nut Service Kit 668925.

● Not included in Cylinder Assembly.

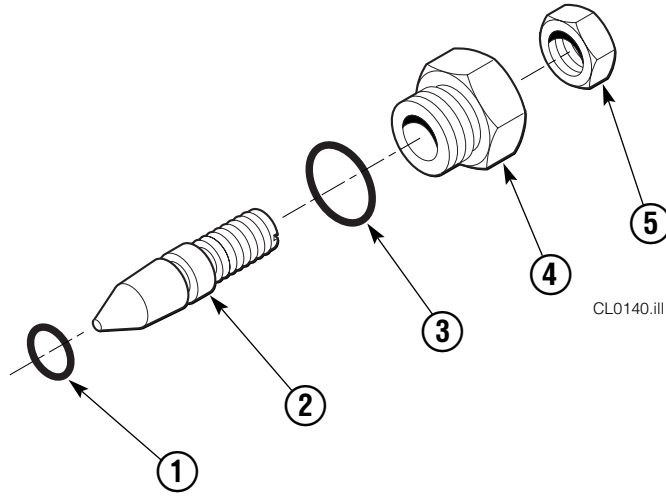
Reference: S-7666.

Revolving Connection



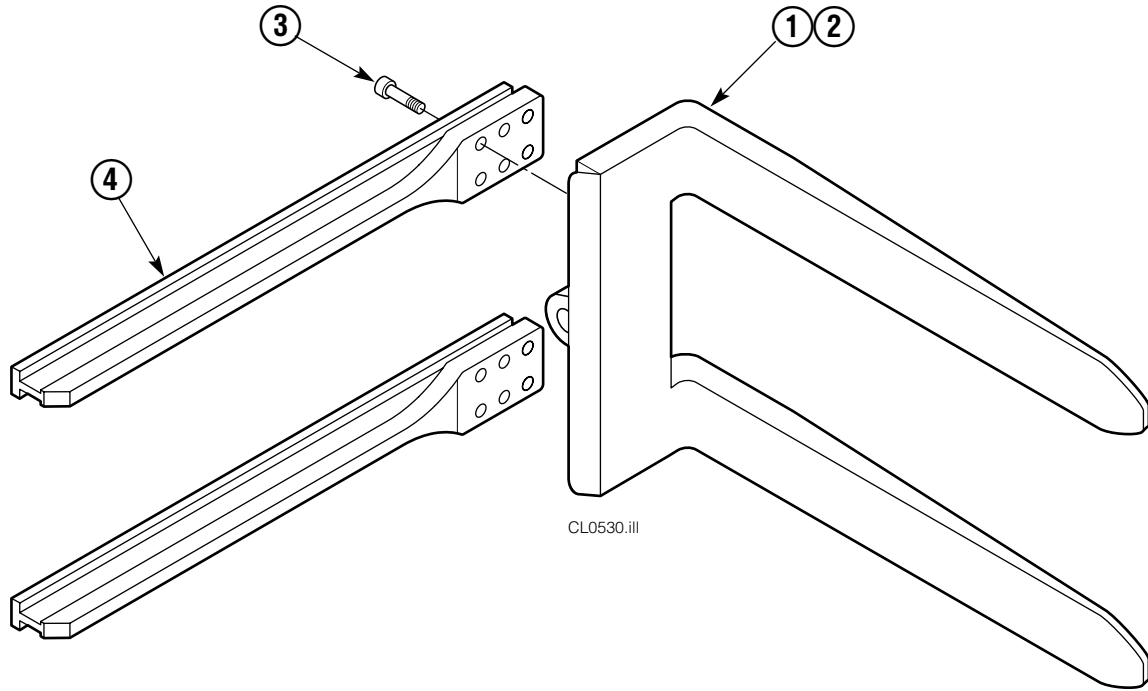
35D/50D			
REF	QTY	PART NO.	DESCRIPTION
		686420	Revolving Connection
1	2	768795	Capscrew, M8 x 1,25 x 30 x 8.8
2	1	686421	End Block
3	2	604511	Fitting, 6-6
4	1	687237	Service Kit
5	1	686422	Shaft
6	5	663694	Fitting, 3
7	1	686423	Body
8	2	667516	Check Valve Service Kit
9	2	678376	Check Valve
10	2	604510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

Arm Group

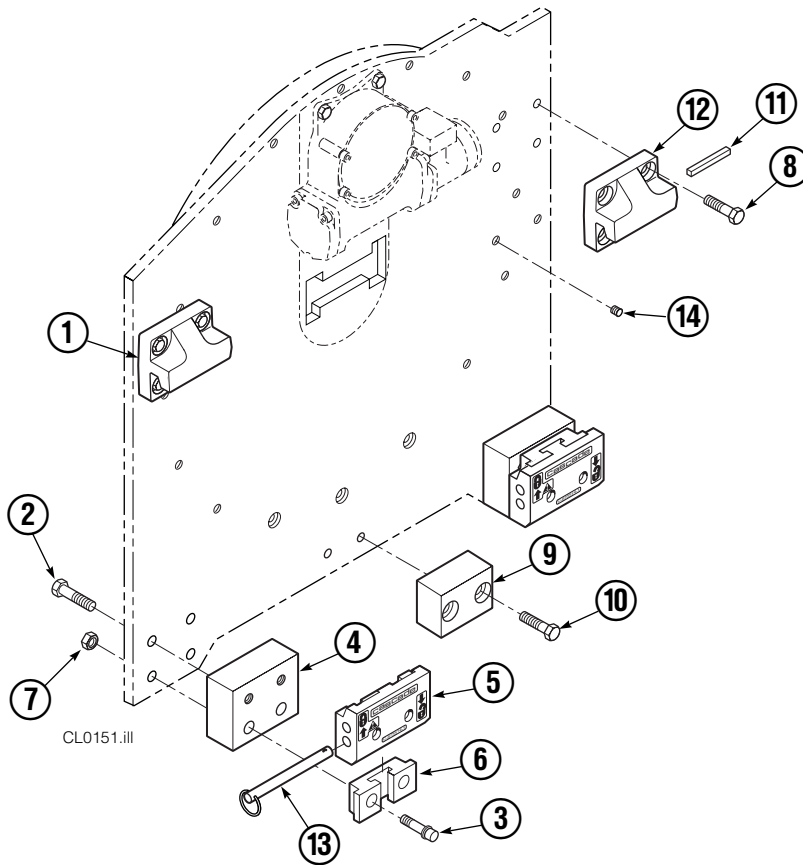


ARM CAPSCREW EXTENSION TOOL Required for proper torquing of capscrews		
	50D	667699

50D			
REF	QTY	PART NO.	DESCRIPTION
		358820	Arm Group ■
1	1	358821	Arm
2	1	—	Arm
3	12	607105	Capscrew
4	2	667700	Arm Carrier

■ Includes items 1-3 only.

Quick Change Mounting Group



Class III, 0°			
REF	QTY	PART NO.	DESCRIPTION
		680688	Mounting Group
1	1	670527	Upper Hook – LH
2	4	641284	Capscrew, 5/8 NC x 2.25
3	4	607096	Capscrew, 5/8 NC x 5.00
4	2	682068	Spacer
5	2	675957	Lower Hook
6	2	675958	Guide
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	678832	Pin
14	2	631385	Plug, 5/8

Do you have questions you need answered right now? Call your nearest Cascade Parts Department.

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: 21-66-602091
FAX: 21-66-680947

Cascade Finland
01370 Vantas
Finland
Tel: 358-0-836-1925
FAX: 358-0-836-1935

**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
Hydraulik A.B.**
Muskötgatan 19, E8-9
S25466 Helsingborg
Sweden
Tel: 42-151135
FAX: 42-152997

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

Cascade France S.A.R.L.
11, Rue Jean Charcot
Zone Industrielle Sud or
B.P. 22
91421 Morangis Cedex
France
Tel: 1- 64547501
FAX: 1-9790584

Cascade Hispania S.A.
Avenida De La Fabregada, 7
Hospitalet De Llobregat
Barcelona
Spain
Tel: 3-335-5158
FAX: 3-335-4756

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

Cascade Korea
Room 508, Pum Yang Bldg.
750-14, Bang Bac-Dong
Se-Cho Ku, Seoul
Korea
Tel: 2599-7131 ext. 512
FAX: 2533-8089

HYCO-Cascade Pty. Ltd.
1445 Ipswich Road
Rocklea,
Queensland 4107
Australia
Tel: 3-274-2722
FAX: 3-274-3456

HYCO-Cascade (NZ) Ltd.
15 Ra Ora Drive, East Tamaki
P.O. Box 38-440
Howick, 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: 975-9240
FAX: 394-1147

Cascade-Xiamen
Wanshan No. 1 Workshop
Huli Road
Xiamen 361006
Fujian, PRC
Tel: 592-562-4600
FAX: 592-562-4671

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

