



Parts Manual

Model 50D Turn-A-Load

Serial Number 50D-TAL-123R0

cascade[®]
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

Safety Decals



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

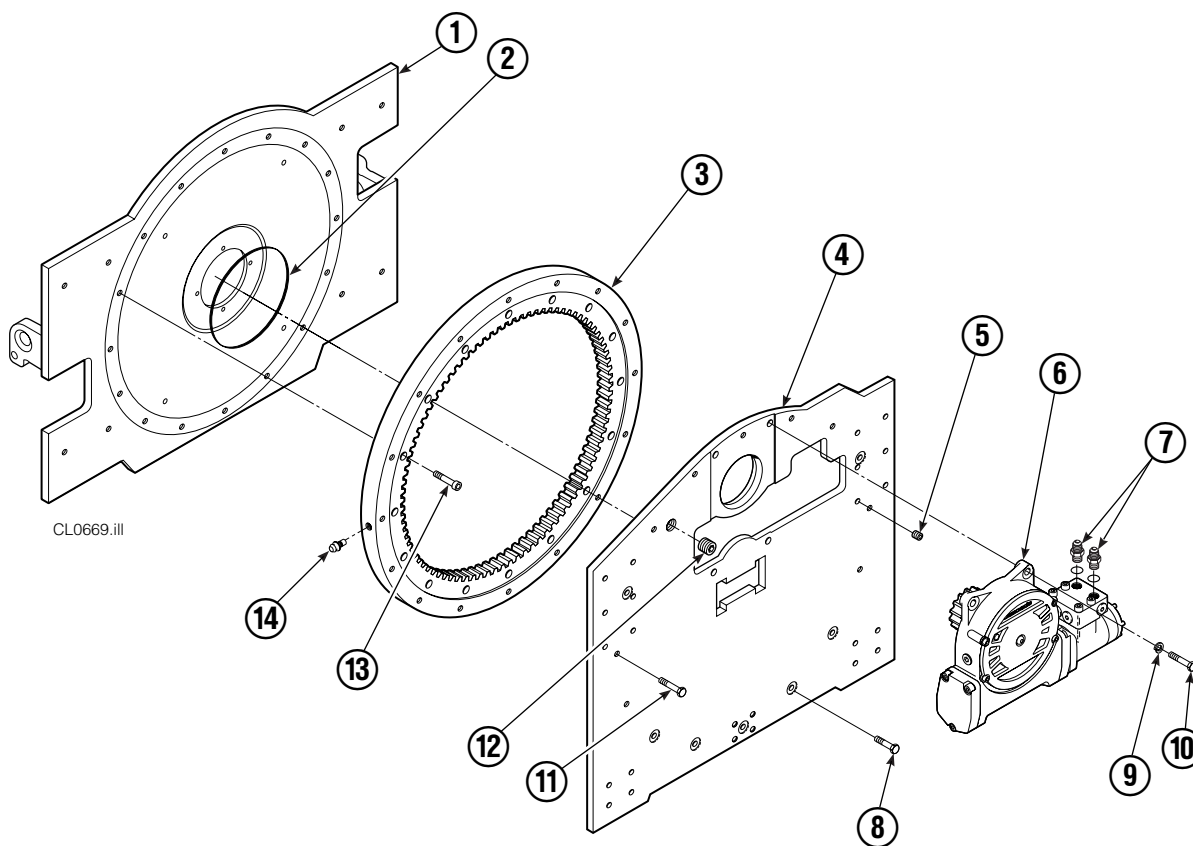


Publications



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

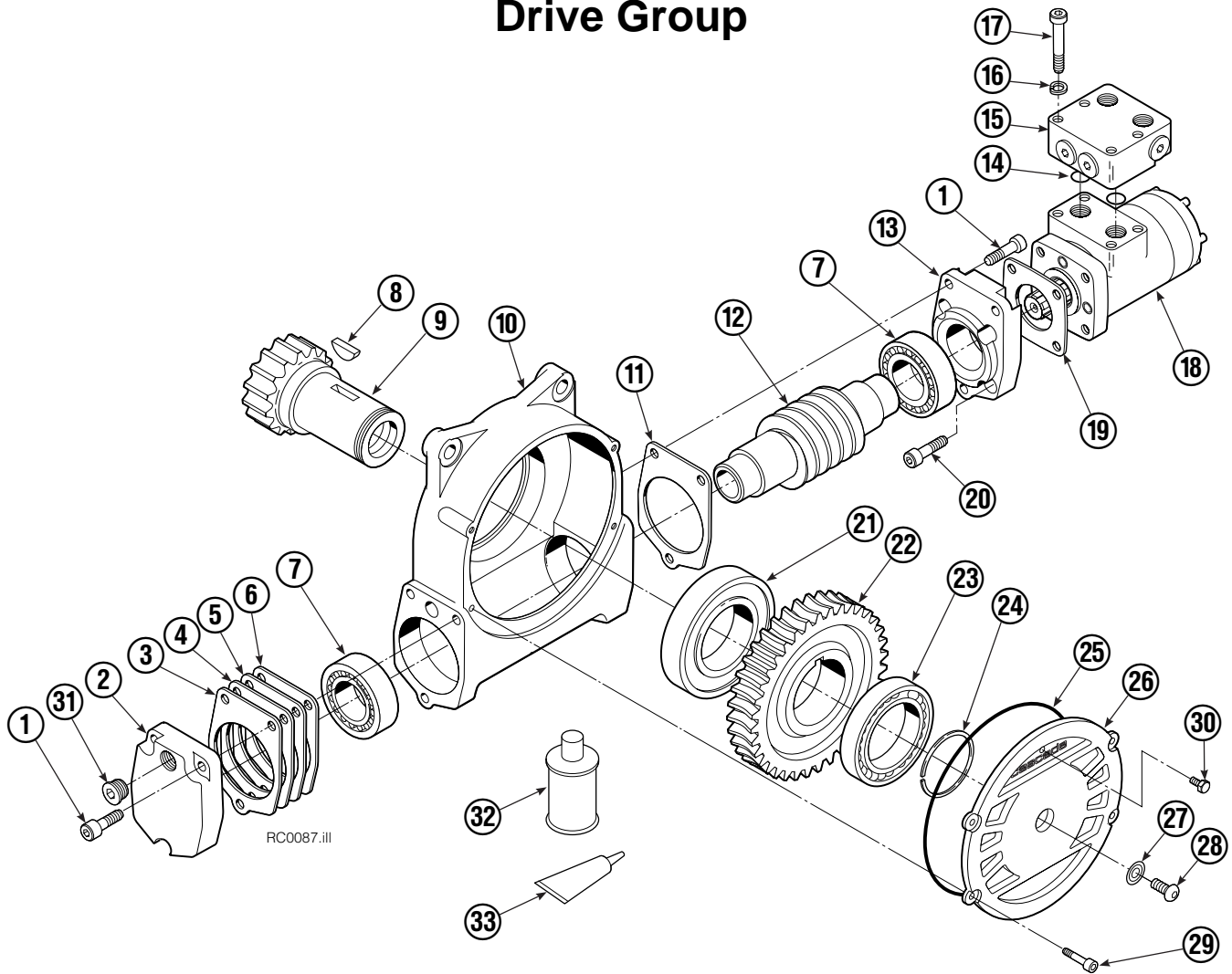


50D			
REF	QTY	PART NO.	DESCRIPTION
		687238	Rotator Group
1	1	687230	Faceplate
2	1	670931	Seal
3	1	672828	Bearing Assembly
4	1	687229	Baseplate
5	6	631385	Plug
6	1	675628	Drive Group ▲
7	2	611303	Fitting
8	7	643538	Capscrew, 1/2 NC x 1.50 GR8
9	4	6290	Lockwasher, 1/2 in. ID
10	4	661742	Capscrew, 1/2 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.

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.

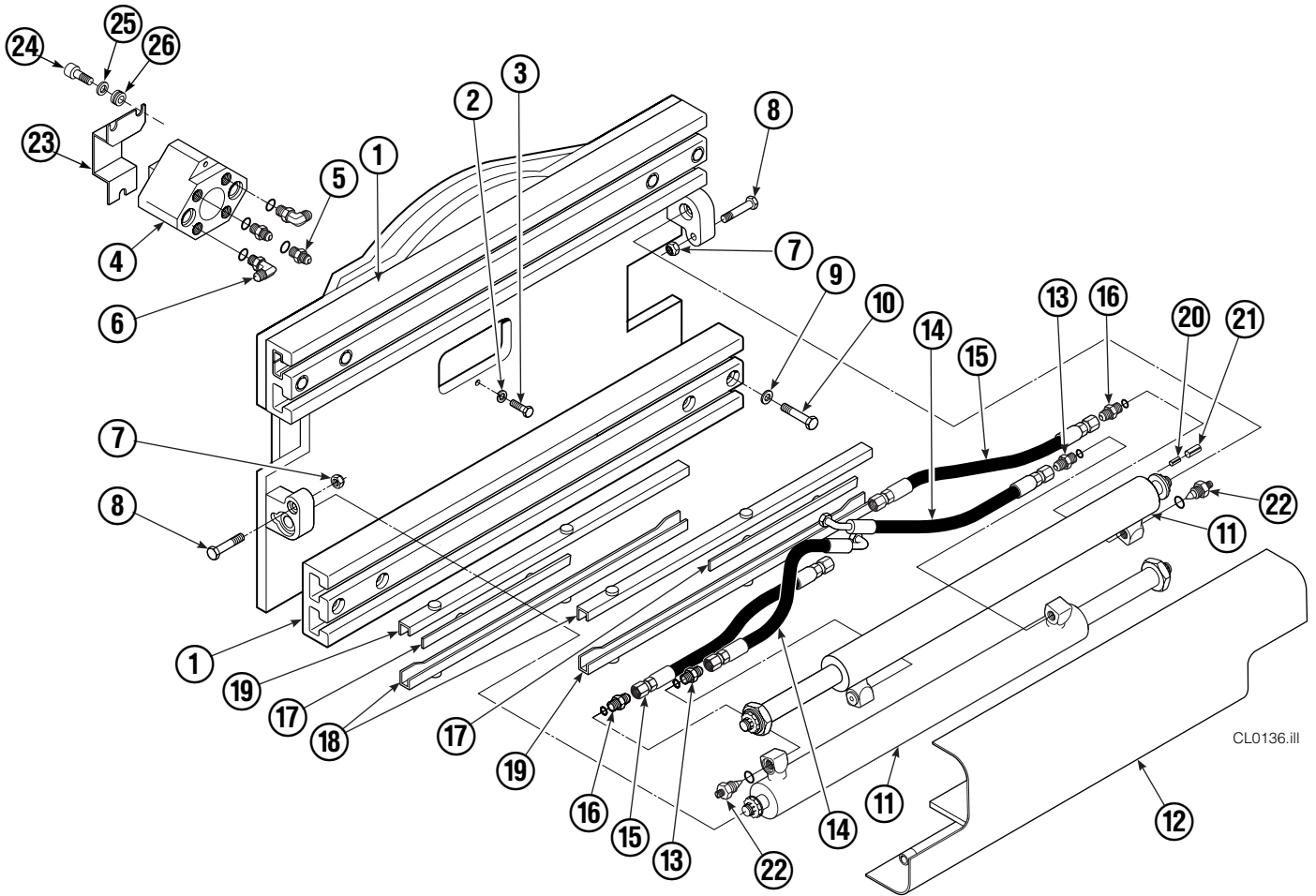
- See Nameplate under valve for correct part number of Gerotor Set and Flange.
- Compatible with water glycol based hydraulic fluids.

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

Frame Group



CL0136.iii

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				

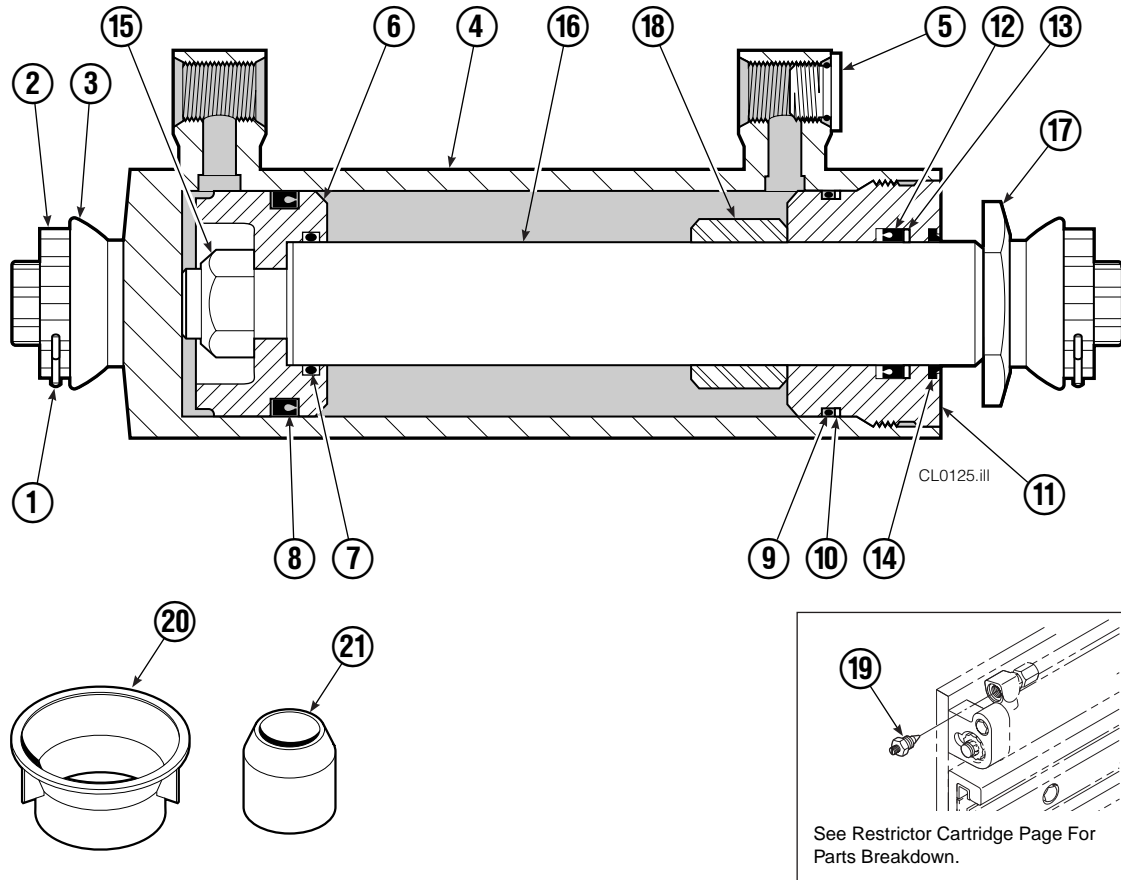
■ See Revolving Connection page for parts breakdown.

▲ 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

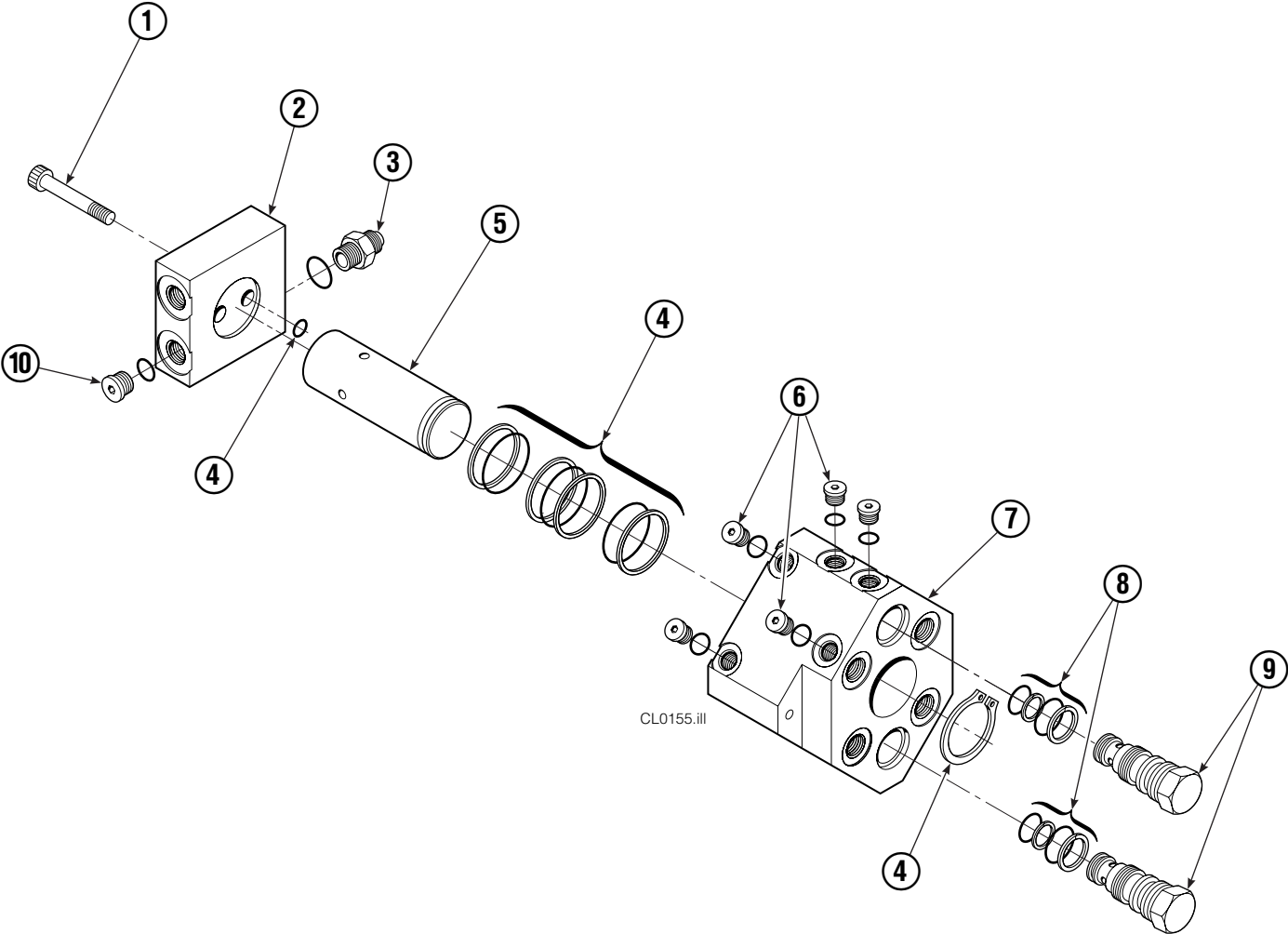
▲ Included in Service Kit 667723.

■ Included in Nut Service Kit 668925.

● Not included in Cylinder Assembly.

Reference: S-7666.

Revolving Connection



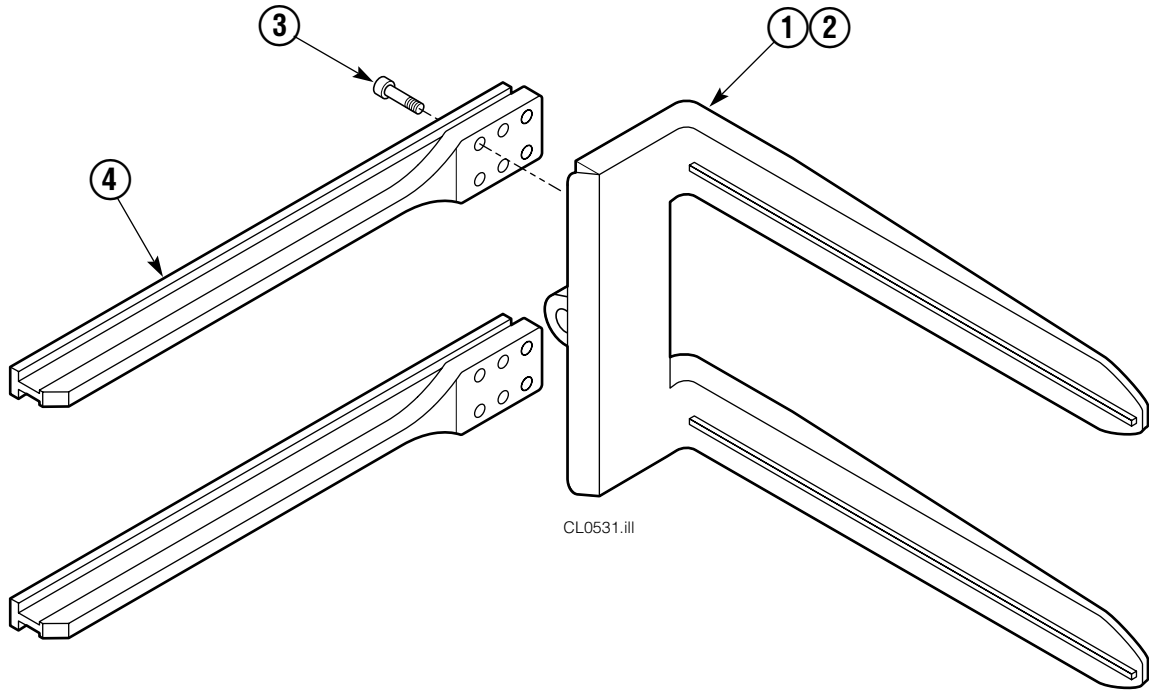
35D/50D			
REF	QTY	PART NO.	DESCRIPTION
		686420	Revolving Connection
1	2	768795	Capscrew, M8 x 1,25 x 30 x 8.8
2	1	686421	End Block
3	2	604511	Fitting, 6-6
4	1	687237	Service Kit
5	1	686422	Shaft
6	5	663694	Fitting, 3
7	1	686423	Body
8	2	667516	Check Valve Service Kit
9	2	678376	Check Valve
10	2	604510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

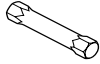
Restrictor Cartridge



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

Arm Group

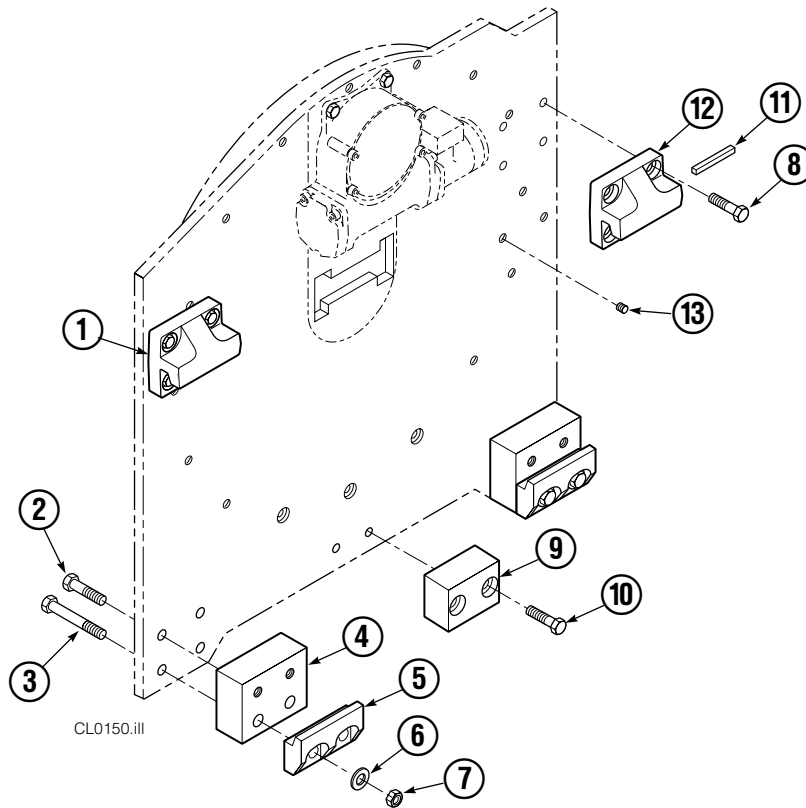


ARM CAPSCREW EXTENSION TOOL		
Required for proper torquing of capscrews		
	35-50D	667699

50D			
REF	QTY	PART NO.	DESCRIPTION
		329236	Arm Group ■
1	1	329237	Arm - RH
2	1	329237	Arm - LH
3	24	607105	Capscrew
4	4	667700	Arm Bar

■ Includes items 1-3 only.

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

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
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

