



# Parts Manual

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Model 35D Turn-A-Load

Serial Number 35D-TAL-166

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**cascade**<sup>®</sup>  
corporation

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**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

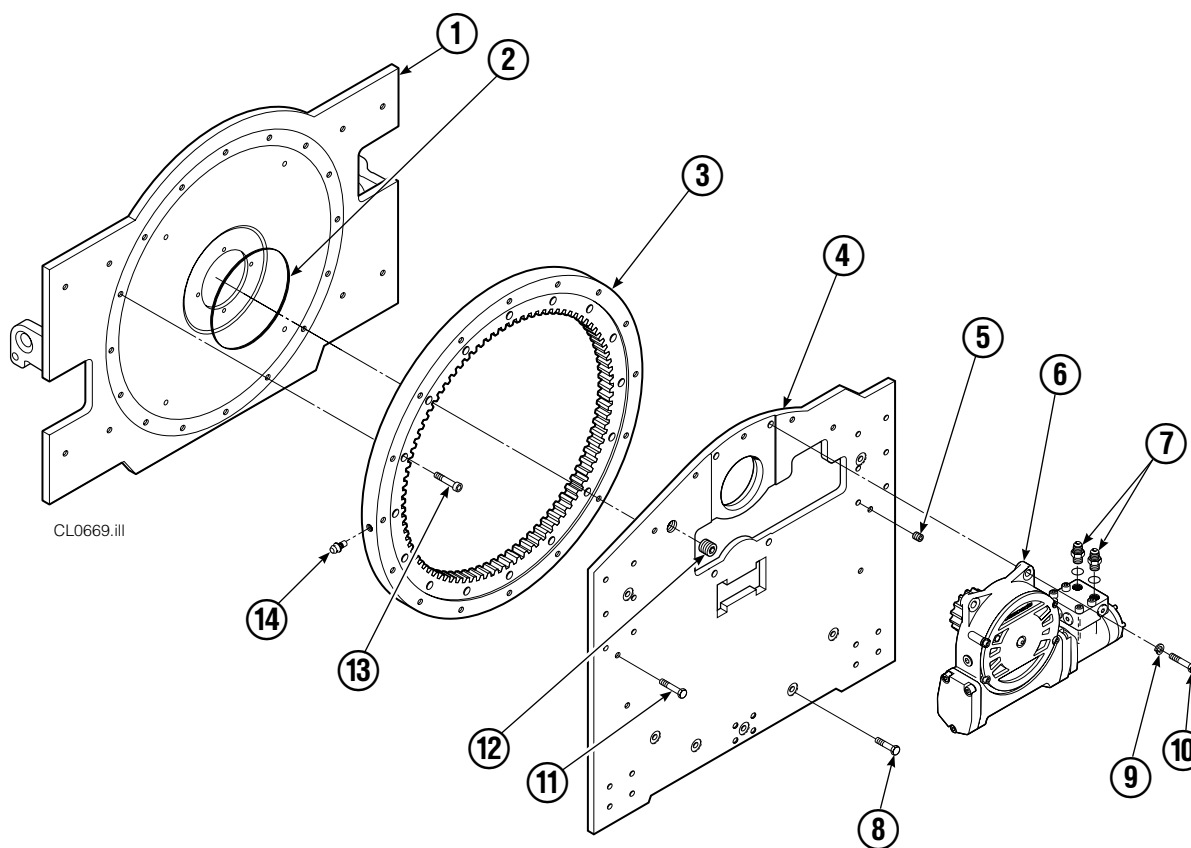


# Publications



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



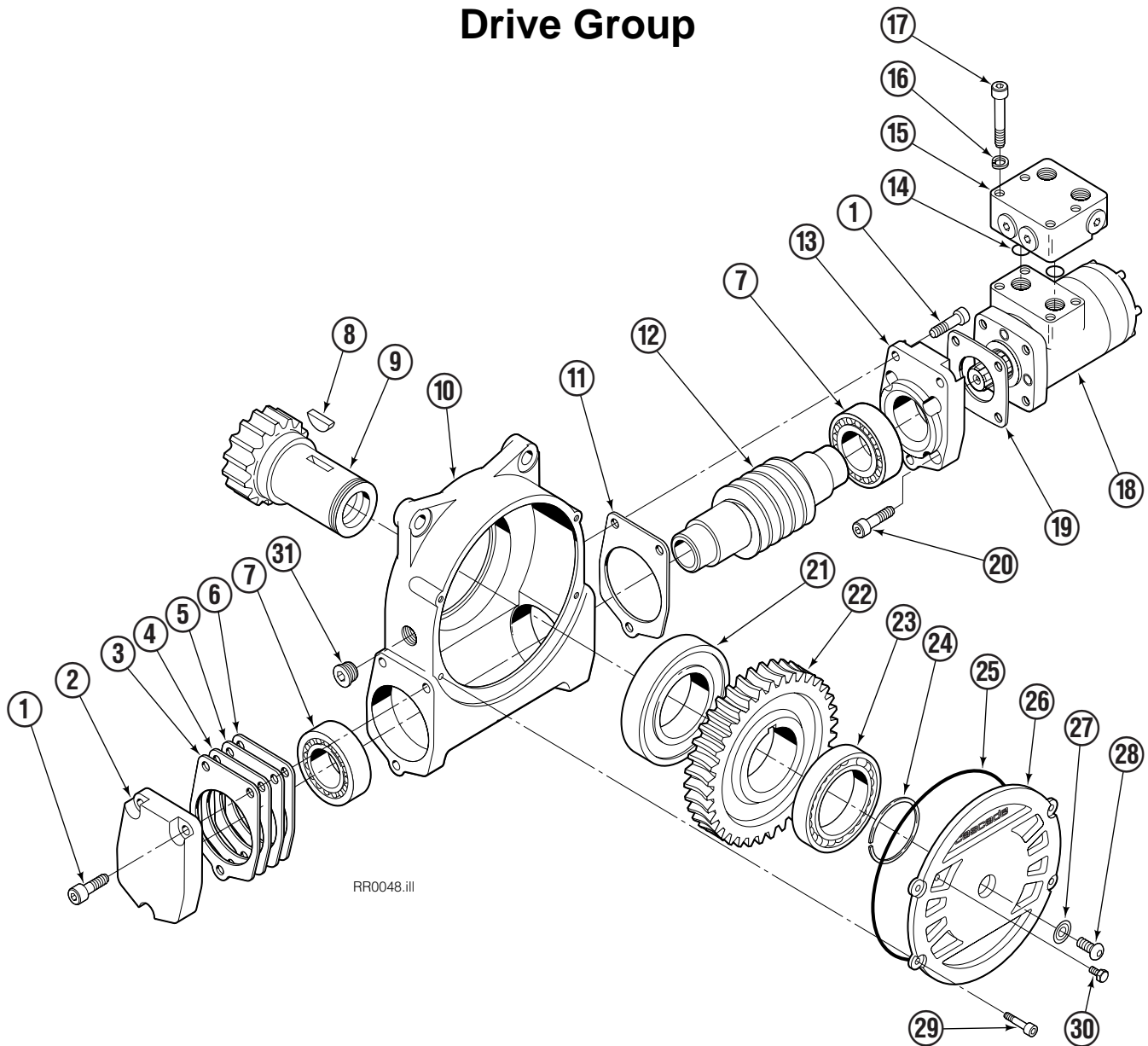
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35D			
REF	QTY	PART NO.	DESCRIPTION
		350341	Rotator Group
1	1	350343	Faceplate
2	1	670931	Seal
3	1	672828	Bearing Assembly
4	1	687229	Baseplate
5	6	631385	Plug
6	1	675628	Drive Group ▲
7	1	601377	Fitting, 8-8
8	7	643538	Capscrew, 1/2 NC x 1.50 GR8
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	19	1	670575	Gasket
1	6	607071	Capscrew, 7/16 NC x 1.0 GR8	20	4	4468	Capscrew, 3/8 NC x .75 GR8
2	1	676855	Cover	21	1	670580	Bearing
3	●	675627	Shim - .005"	22	1	675609	Worm Gear
4	●	670574	Shim - .010"	23	1	670581	Bearing
5	●	671757	Shim - .015"	24	1	7214	Snap Ring
6	●	671758	Shim - .020"	25	1	643423	O-Ring
7	2	670579	Bearing	26	1	670567	Cover
8	1	670582	Key	27	1	603680	Seal
9	1	670506	Pinion	28	1	4874	Capscrew, 3/8 NC x .50 GR8
10	1	670565	Housing	29	4	671535	Capscrew, 5/16 NC x .75
		686465	Gasket	30	1	644010	Relief Fitting
11	1	675608	Worm	31	1	604510	Fitting, 6
12	1	670570	Adaptor	32	1	656300	Gear Box Lube - 48 oz. (not shown)
13	1	2705	O-Ring	33	1	668184	Sealant (not shown)
14	2	670549	Check Valve ★			670578	Shim Service Kit (items 3-6, 11, 33)
15	1	6444	Lockwasher			675637	Shim Service Kit (items 21, 33)
16	4	607059	Capscrew, 5/16 NC x 1.75 GR8			675638	Shim Service Kit (items 3-7)
17	4	206392	Drive Motor ▲			206394	Motor Kit (items 11,14,18,19,20,33)

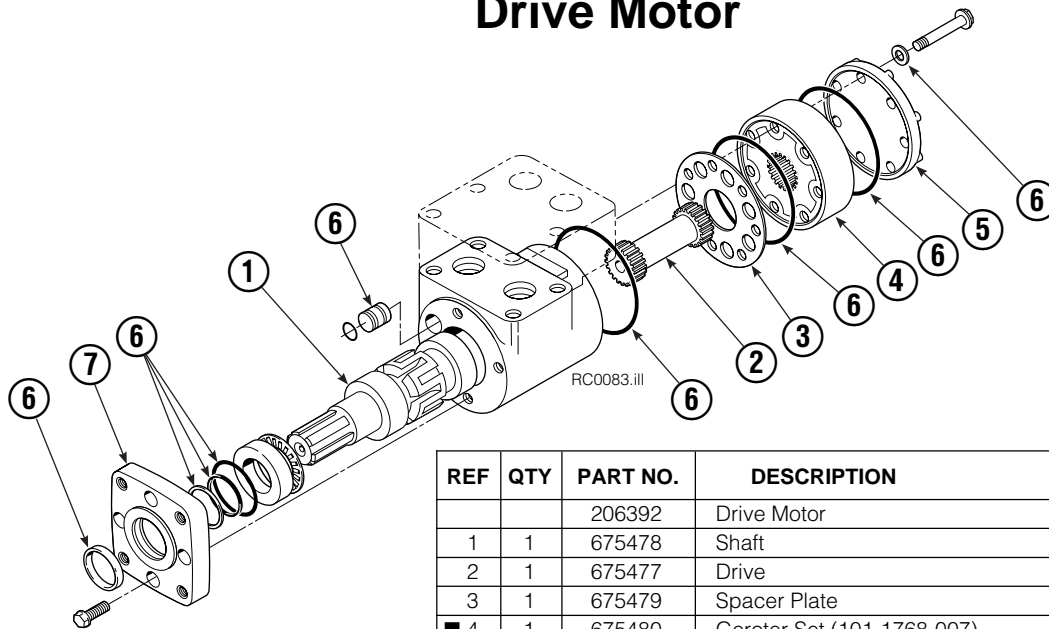
● Quantity as required.

★ See Check Valve page for parts breakdown.

▲ See Drive Motor page for parts breakdown.

Common Parts - 675627

## Drive Motor

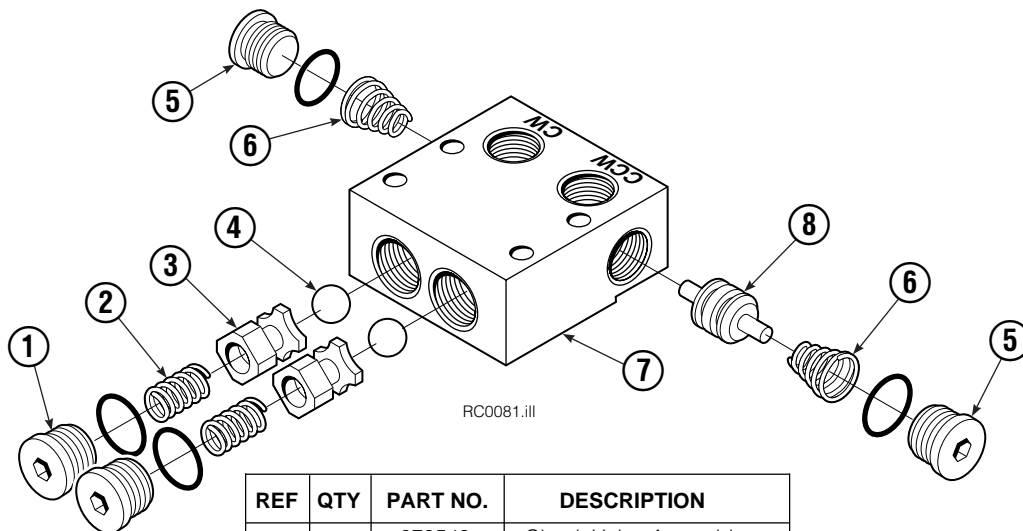


REF	QTY	PART NO.	DESCRIPTION
		206392	Drive Motor
1	1	675478	Shaft
2	1	675477	Drive
3	1	675479	Spacer Plate
■ 4	1	675480	Gerotor Set (101-1768-007)
■ 4	1	685075	Gerotor Set (101-1768-009)
5	1	675482	End Cap
● 6	1	206405	Service Kit
■ 7	1	685089	Flange (101-1768-007)
■ 7	1	685090	Flange (101-1768-009)

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.

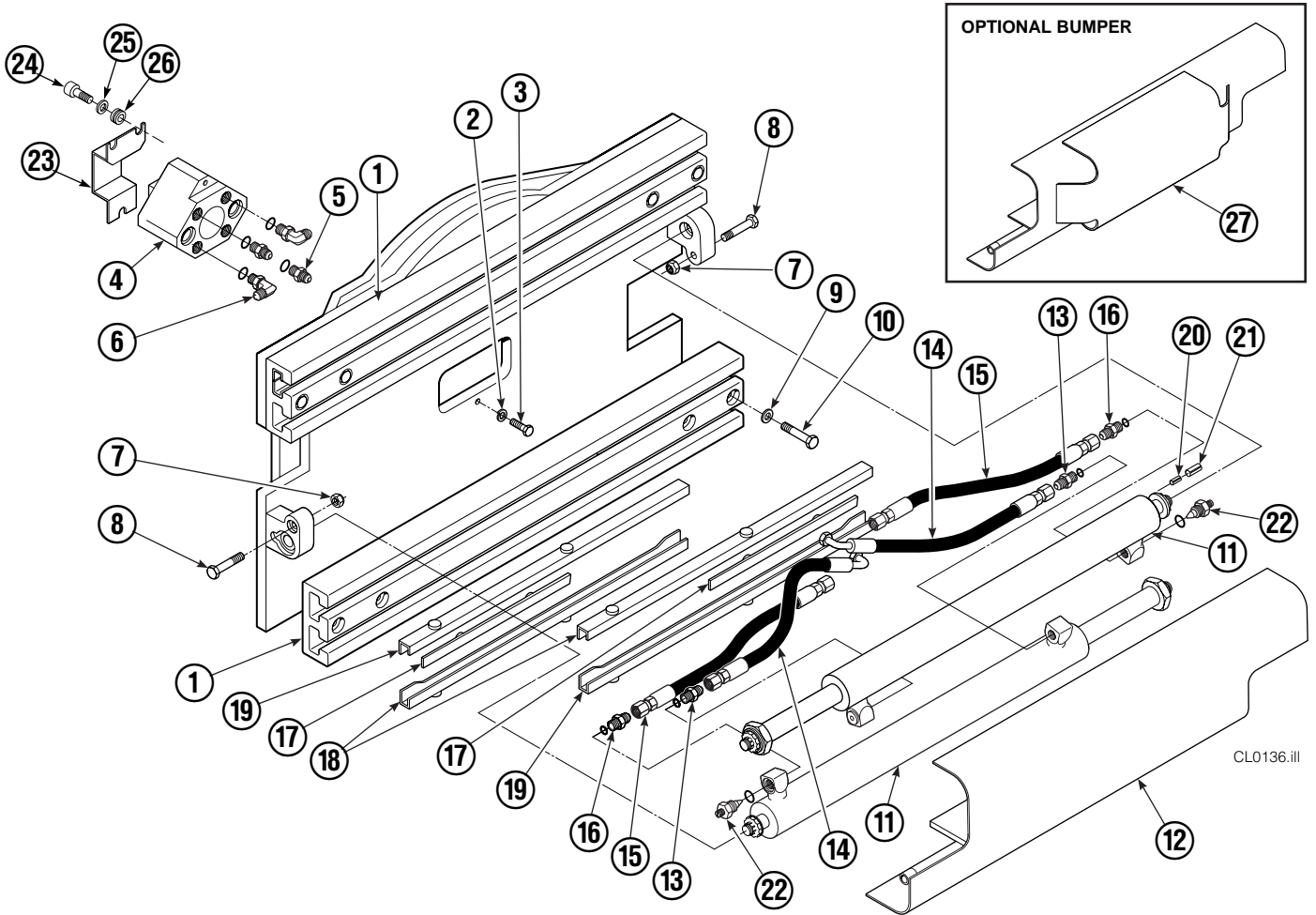
- See Nameplate under valve for correct part number of Gerotor Set and Flange.
- Compatible with water glycol based hydraulic fluids.

## 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



35D							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		3012119	Frame Group	14	2	629319	Hose
1	2	376546	Frame	15	2	362277	Hose
2	2	686119	Lockwasher, M8	16	2	686369	Fitting
3	2	765352	Capscrew, M8 x 30	17	4	667663	Bearing
4	1	350331	Revolving Connection ■	18	4	668910	Bearing
5	2	604511	Fitting, 6-6	19	4	668911	Bearing
6	2	601676	Fitting, 6-6	20	2	7861	Roll Pin - Inner
7	2	665707	Nut, 1/2 in. ID	21	2	7962	Roll Pin - Outer
8	2	3659	Capscrew, 1/2 NC x 2.50	22	2	667609	Restrictor Cartridge ●
9	8	667910	Washer, 1/2 in. ID	23	1	209067	End Block Bracket
10	8	667909	Capscrew, 1/2 NC x 3.00	24	2	665992	Shoulder Bolt
11	2	385708	Cylinder ▲	25	2	209021	Washer, M10
12	1	—	Bumper	26	2	208765	Grommet
13	2	611288	Fitting, 6-8	27	1	385710	Bumper

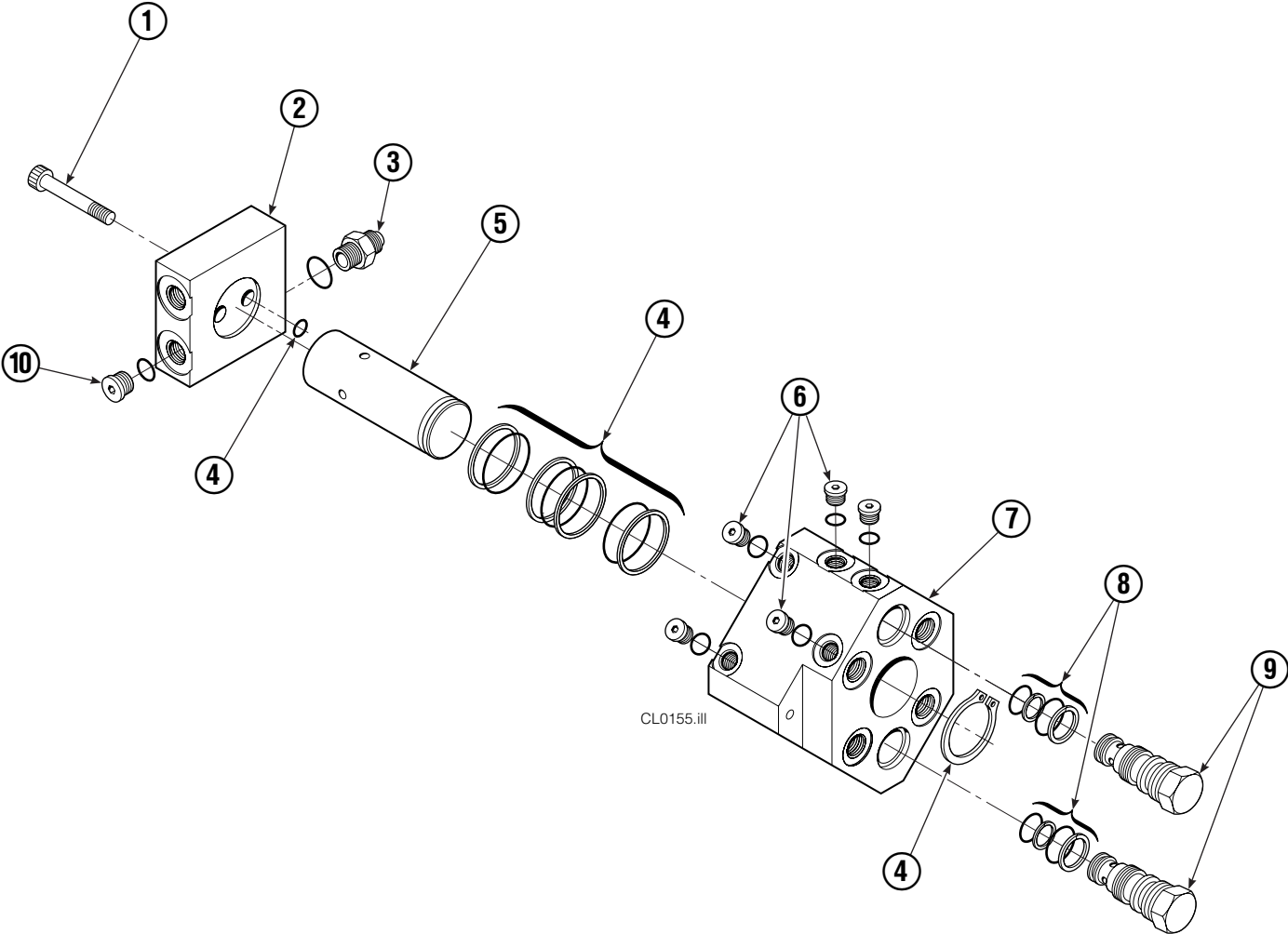
■ See Revolving Connection page for parts breakdown.

▲ See Cylinder page for parts breakdown.

● See Restrictor Cartridge page for parts breakdown.

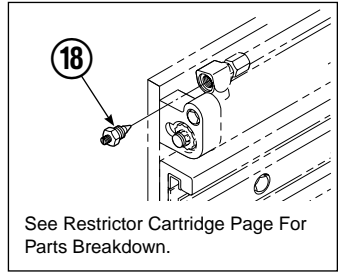
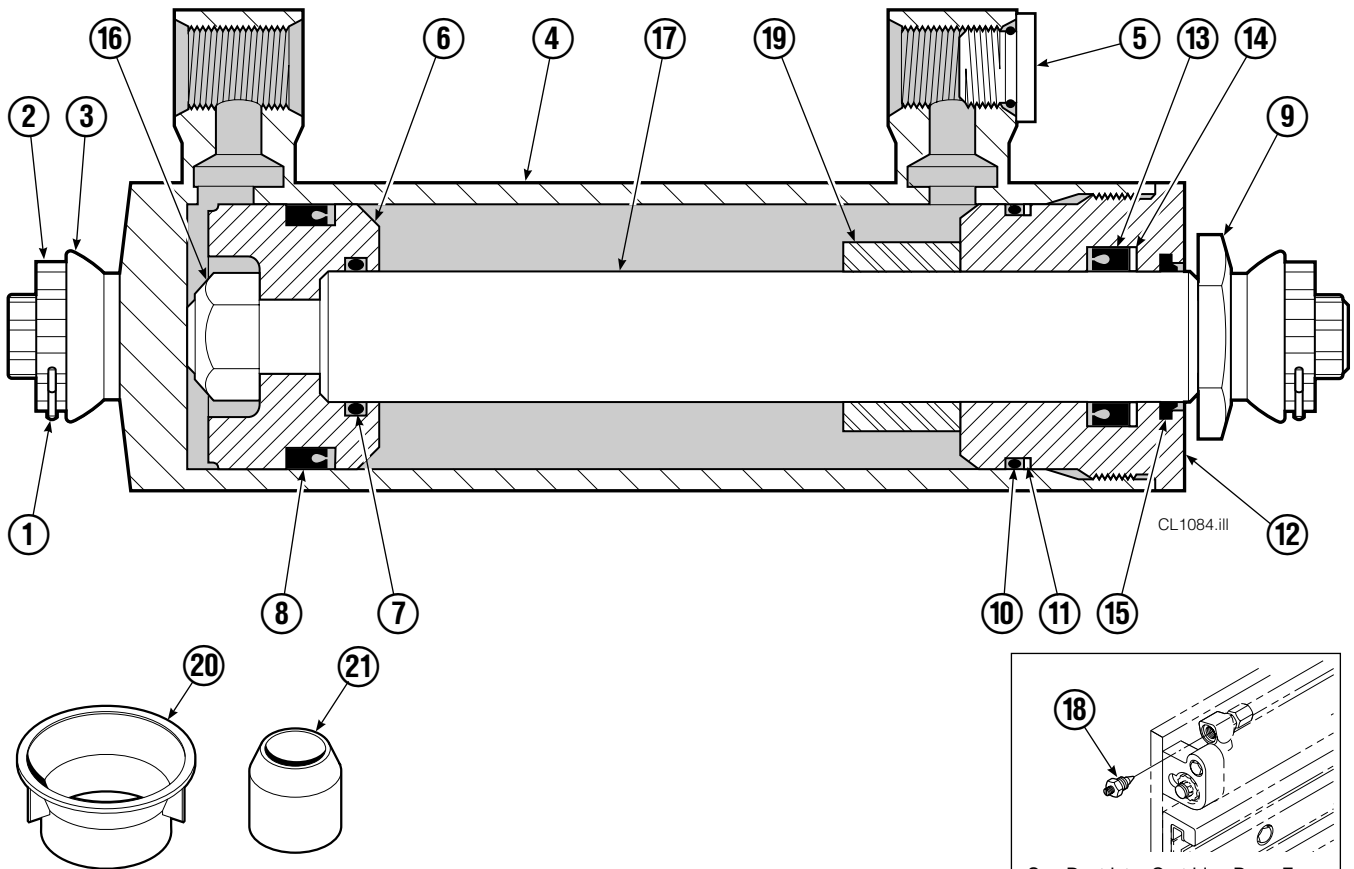
Reference: SK-5660.

# Revolving Connection



<b>35D/50D</b>			
REF	QTY	PART NO.	DESCRIPTION
		350331	Revolving Connection
1	2	768796	Capscrew
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	350332	Body
8	2	667516	Check Valve Service Kit
9	2	678376	Check Valve
10	2	604510	Fitting, 6

# Cylinder



35D			
REF	QTY	PART NO.	DESCRIPTION
		385708	Cylinder Assembly
1	2	6510	Cotter Pin ■
2	2	667624	Nut Retainer ■
3	2	667625	Nut ■
4	1	330606	Shell
5	1	602580	Fitting
6	1	558400	Piston
7	1	2716	O-Ring ▲
8	1	662454	Seal ▲
9	1	667626	Washer
10	1	2787	O-Ring ▲
11	1	615130	Back-Up Ring ▲
12	1	667917	Retainer
13	1	662448	Seal ▲
14	1	638243	Nylon Ring ▲
15	1	636853	Wiper ▲
16	1	668031	Nut
17	1	565073	Rod
18	2	667609	Restrictor Cartridge ●
19	1	584310	Spacer
20	1	671049	Seal Loader, Piston ▲
21	1	671052	Seal Loader, Retainer ▲
		667995	Service Kit

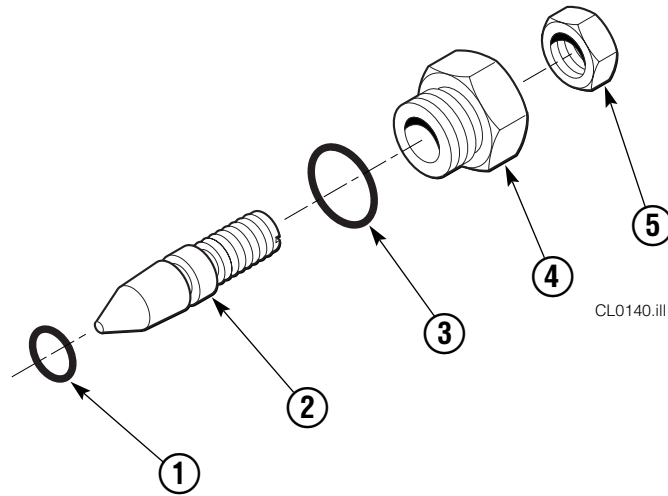
▲ Included in Service Kit 667995.

■ Included in Nut Service Kit 668926.

● Not included in Cylinder Assembly.

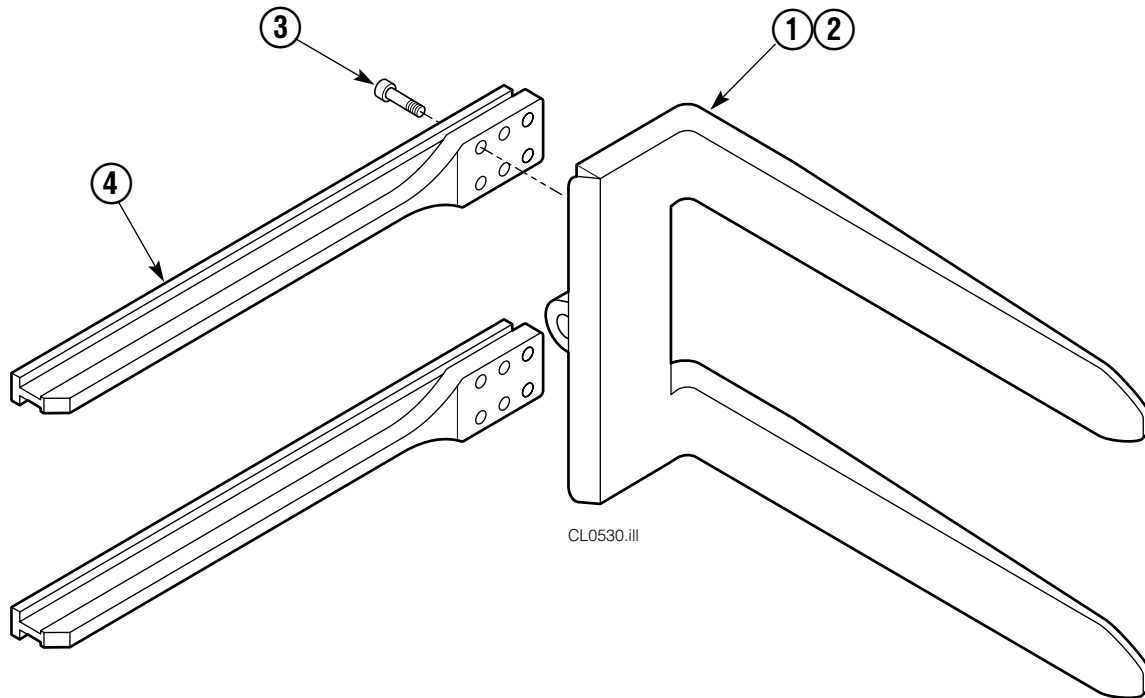
Reference: S-7662.

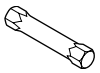
# Restrictor Cartridge



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

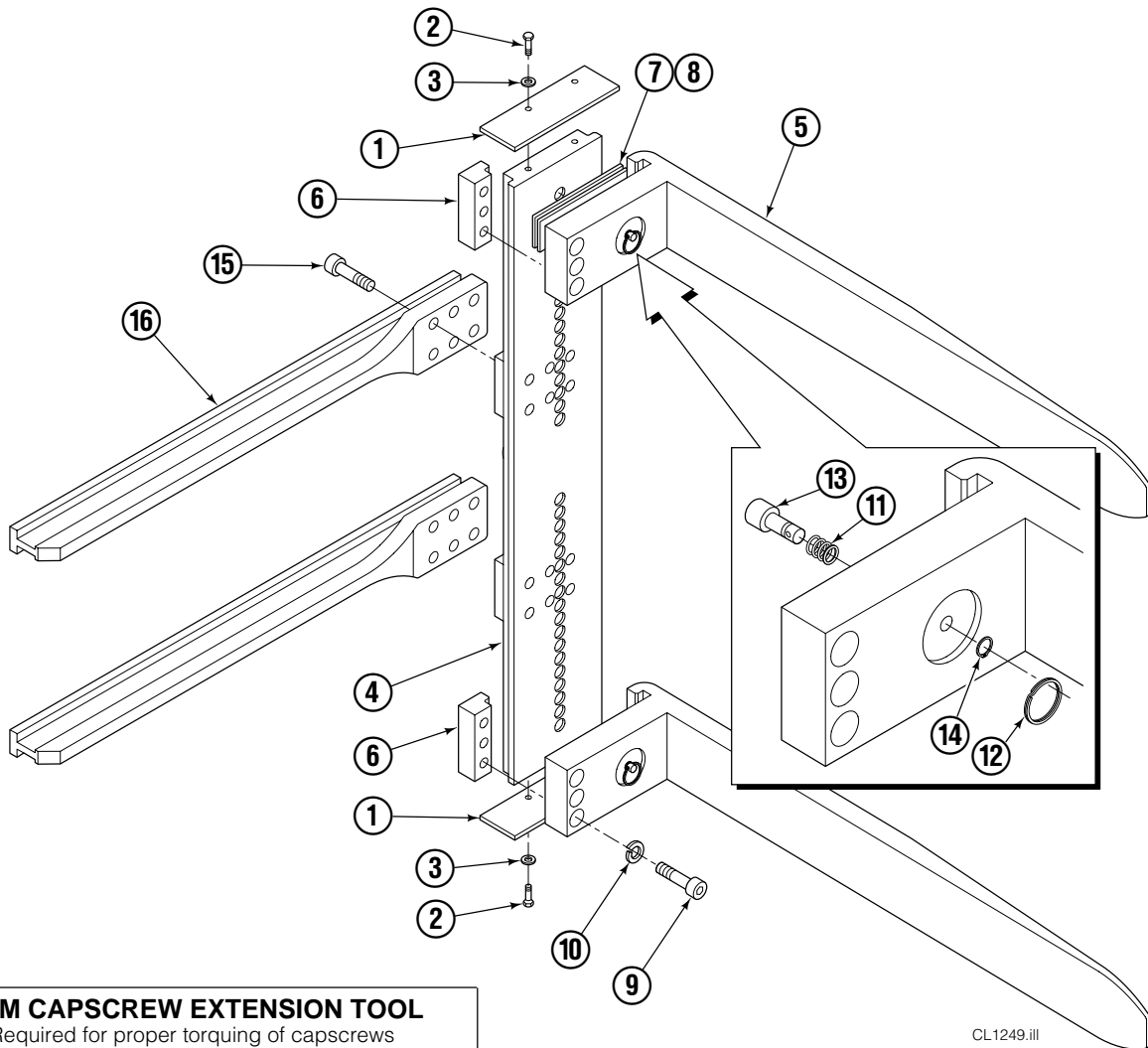


ARM CAPSCREW EXTENSION TOOL		
Required for proper torquing of capscrews		
	35-50D	667699

35D			
REF	QTY	PART NO.	DESCRIPTION
		392548	Arm Group ▲
1	1	392850	Arm
2	1	—	Arm
3	12	607103	Capscrew
4	2	350348	Arm Bar

▲ Includes items 1, 2 & 3 only.

# Turnaload Adjustable Assembly



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## ARM CAPSCREW EXTENSION TOOL

Required for proper torquing of capscrews



35D/50D

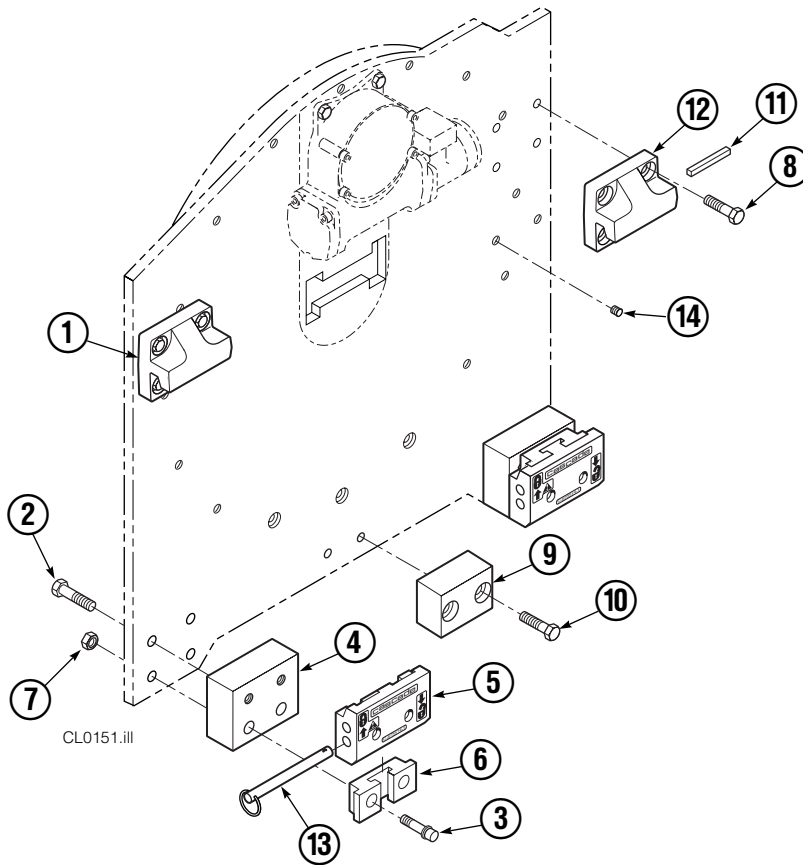
667699

35D			
REF	QTY	PART NO.	DESCRIPTION
		3011233	Turnaload Adjustable Assembly▲
1	2	385723	Plate
2	4	671222	Capscrew
3	4	6230	Washer
4	1	385719	Hanger Assembly
5	2	3011232	Fork
6	2	345797	Hook
7	■	345798	Shim
8	■	345799	Shim
9	6	607106	Capscrew
10	6	6448	Lockwasher
11	2	669600	Spring
12	2	673794	Split Ring
13	2	669603	Pin
14	2	3117	Retaining Ring
15	12	607103	Capscrew
16	2	350348	Arm Bar

▲ Includes items 1 thru 16.

■ As Required.

# 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.

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