



# Parts Manual

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Model 50D Turnaload

Serial Number 50D-TAL-154

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**cascade**<sup>®</sup>

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

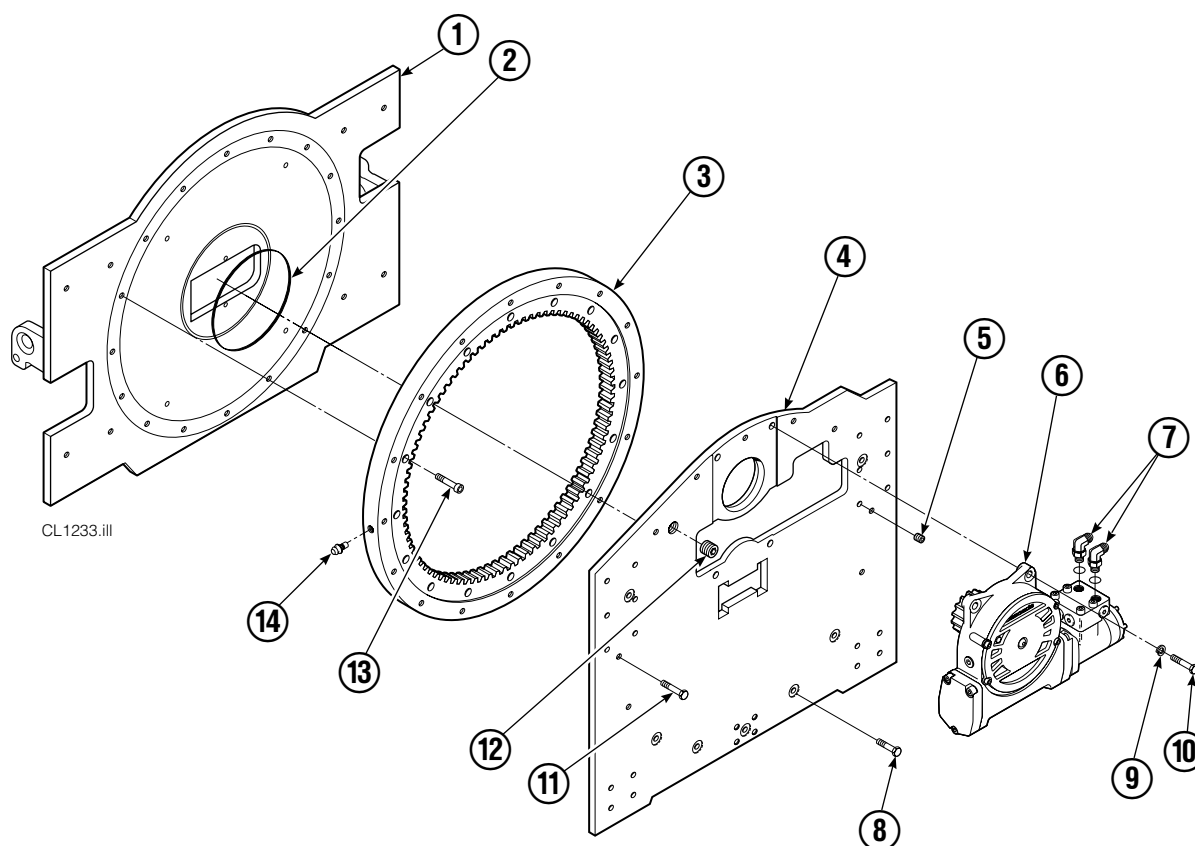


# Publications



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



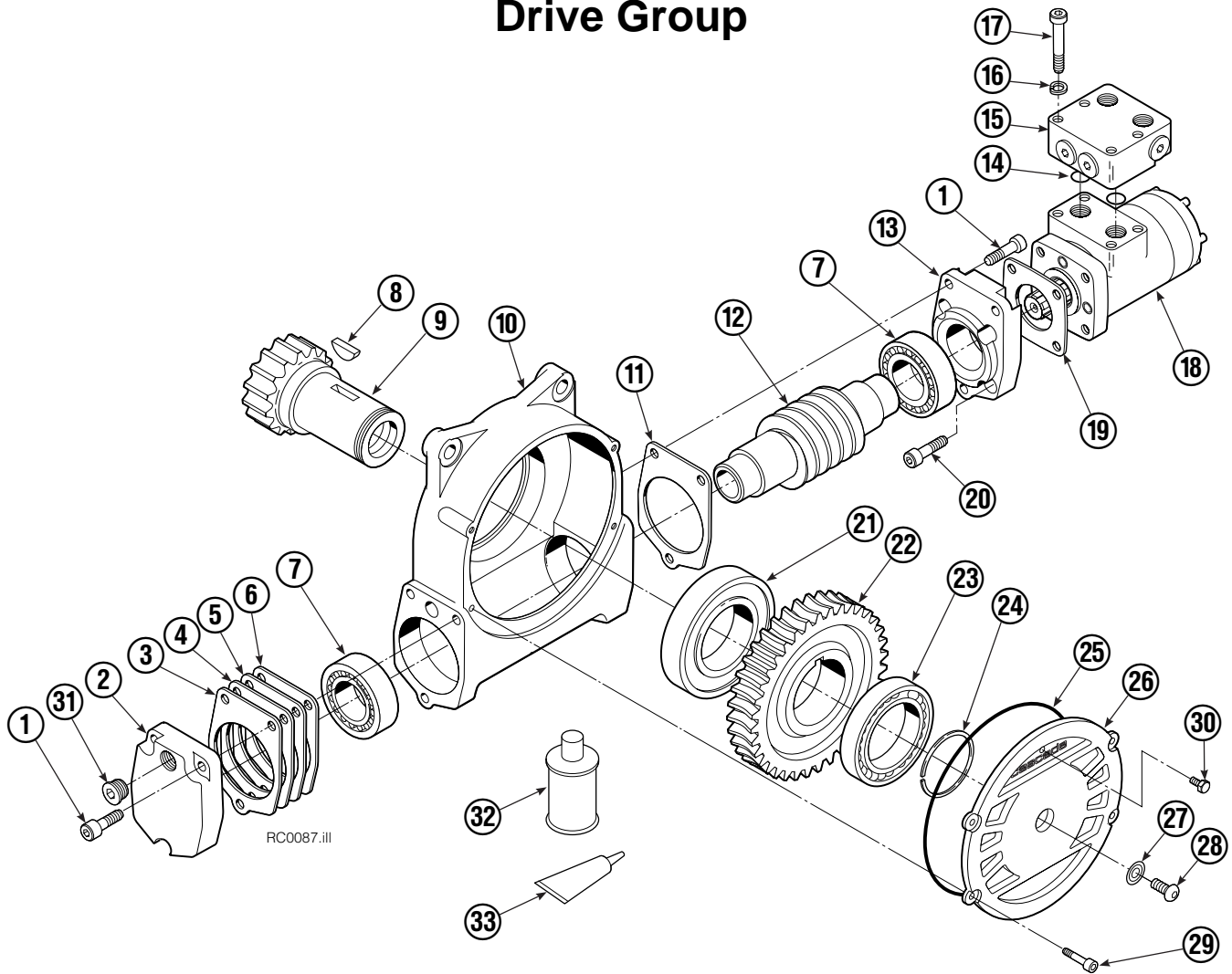
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50D			
REF	QTY	PART NO.	DESCRIPTION
		350778	Rotator Group
1	1	350780	Faceplate
2	1	670931	Seal
3	1	672828	Bearing Assembly
4	1	687229	Baseplate
5	6	631385	Plug
6	1	675628	Drive Group ▲
7	2	611303	Fitting
8	7	643538	Capscrew, 1/2 NC x 1.50 GR8
9	4	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.

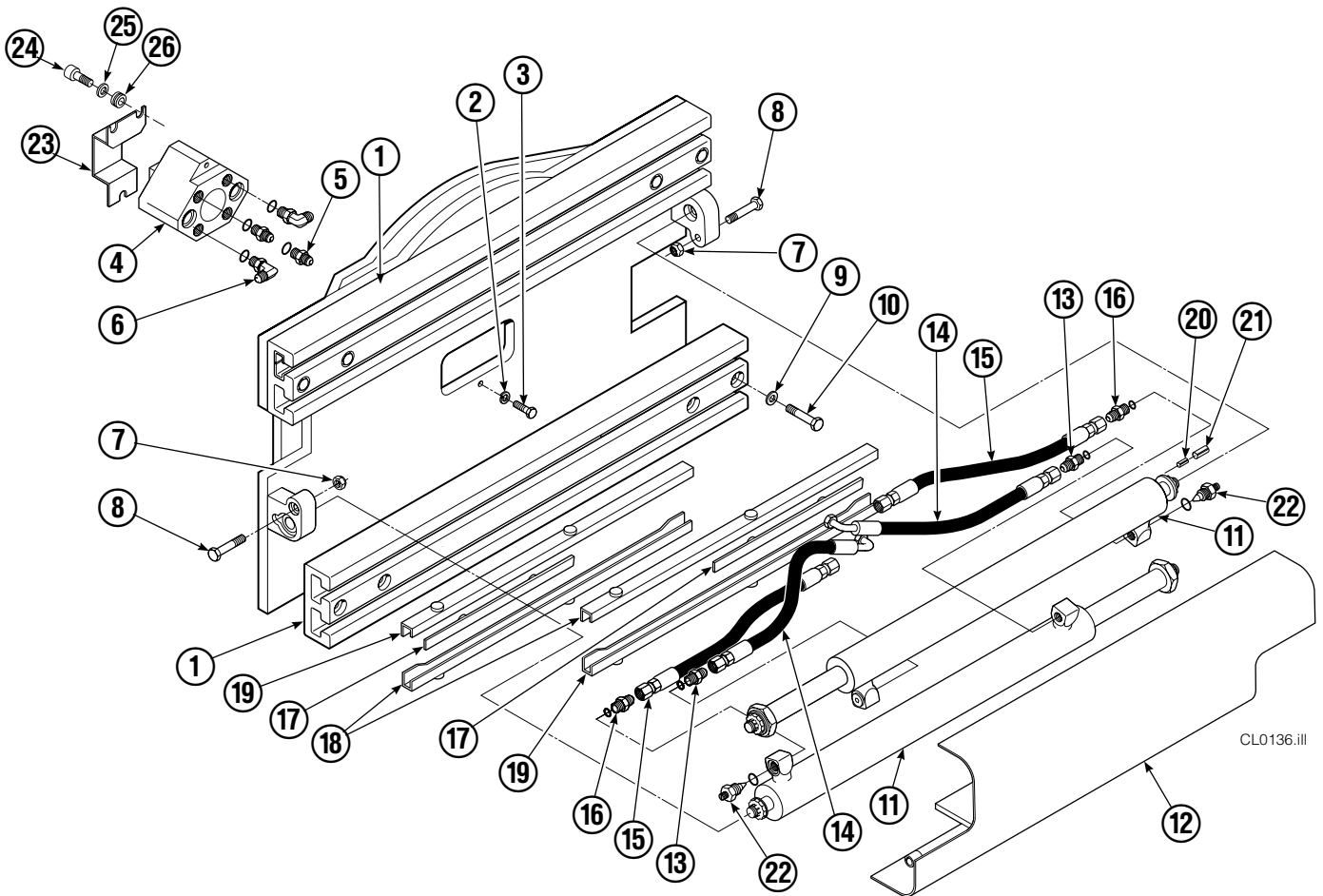
- See Nameplate under valve for correct part number of Gerotor Set and Flange.
- Compatible with water glycol based hydraulic fluids.

# 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

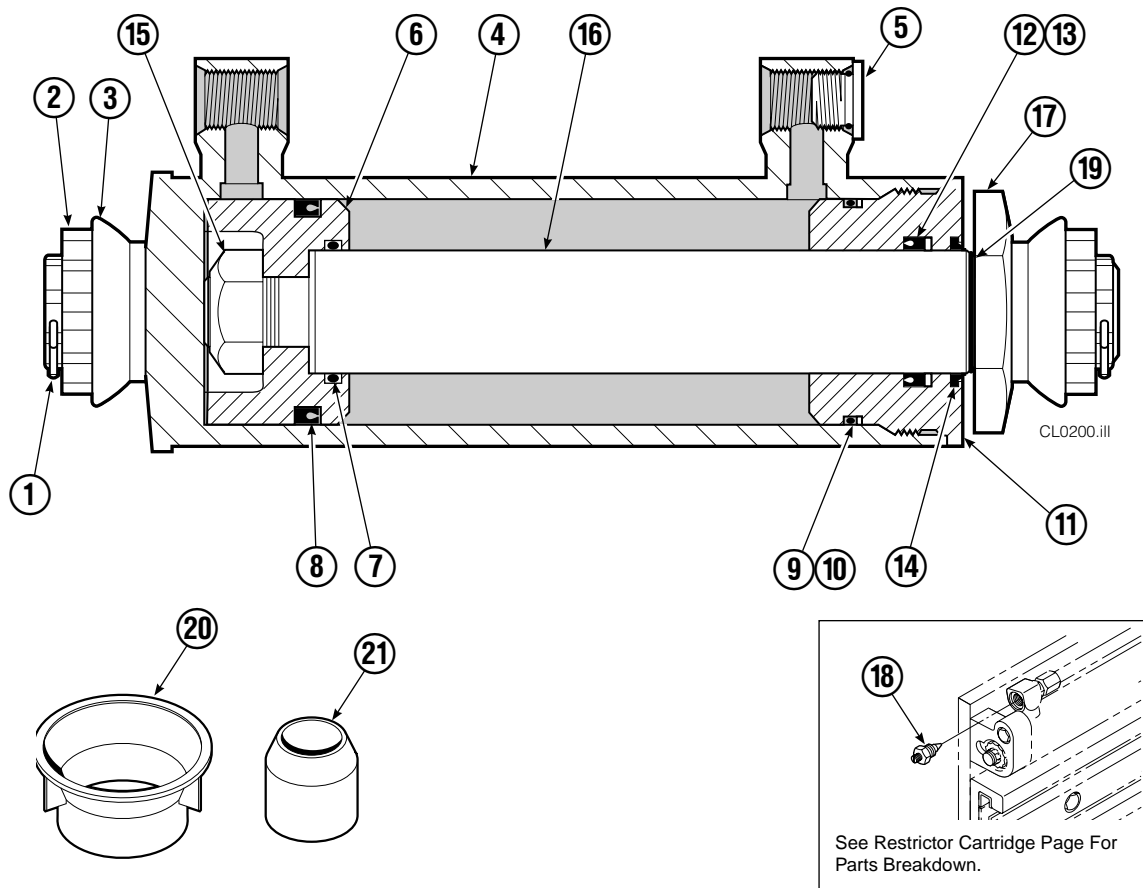
# Frame Group



50D							
REF	QTY	PART NO	DESCRIPTION	REF	QTY	PART NO	DESCRIPTION
		6014369	Frame Group	14	2	619146	Hose, 16.5 in.
1	2	350782	Frame	15	2	685977	Hose, 19.75 in.
2	2	686119	Lockwasher, M8	16	2	686369	Fitting
3	2	765352	Capscrew, M8x1,25x30-8.8	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	7962	Roll Pin-Inner
7	2	665707	Nut	21	2	7861	Roll Pin-Outer
8	2	3659	Capscrew, 1/2 NCx2.50	22	2	667609	Restrictor Cartridge ■
9	8	667910	Washer	23	1	209067	End Block Bracket
10	8	667909	Capscrew	24	2	665992	Shoulder Bolt
11	2	357523	Cylinder ▲	25	2	209021	Washer
12	1	372386	Bumper	26	2	208765	Grommet
13	2	611288	Fitting, 6-8				

- See Restrictor Cartridge page for parts breakdown.
- ▲ See Cylinder page for parts breakdown.
- See Revolving Connection page for parts breakdown.

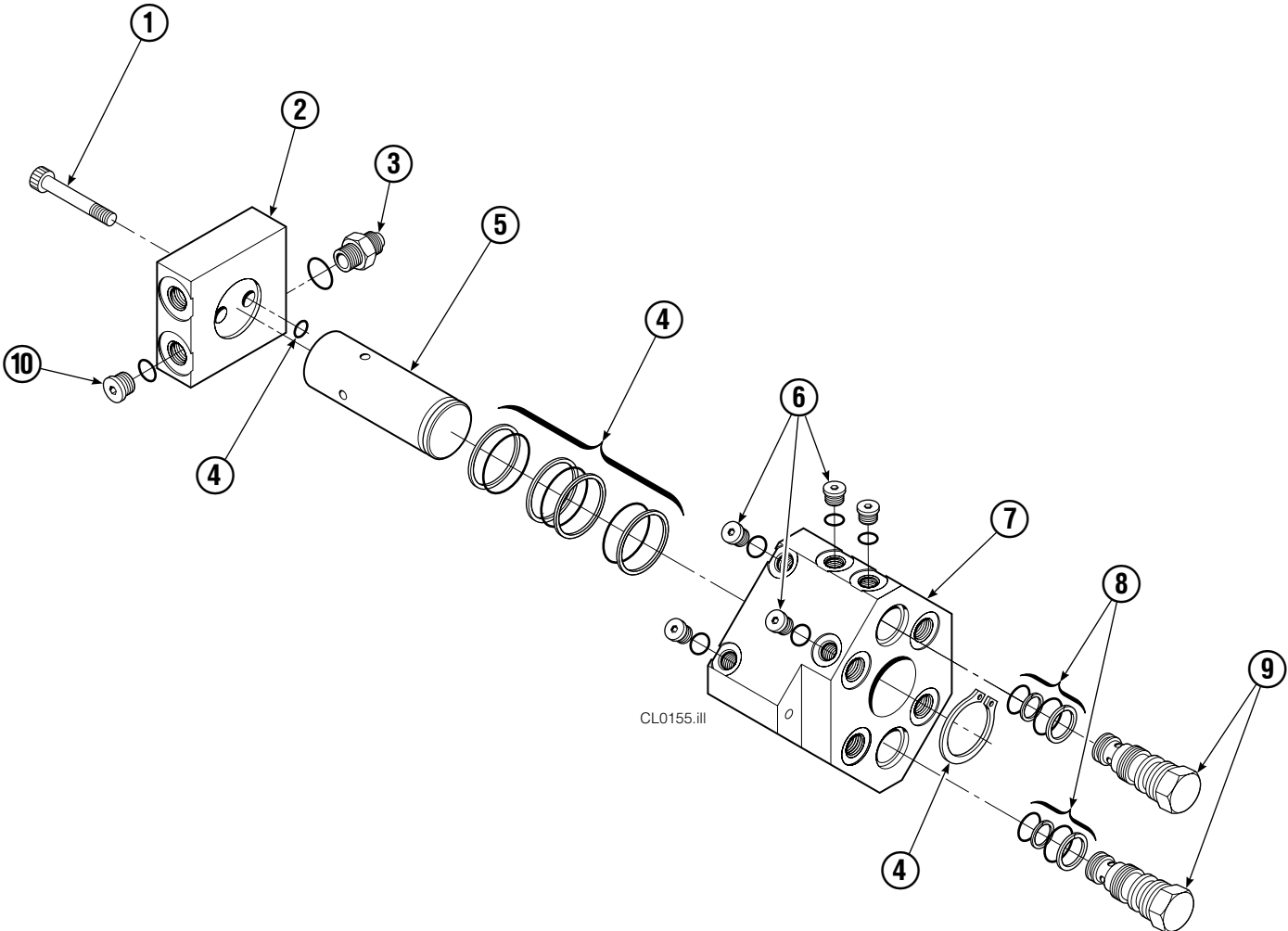
# Cylinder



50D			
REF	QTY	PART NO.	DESCRIPTION
		357523	Cylinder Assembly
1	2	6511	■ Cotter Pin
2	2	667667	■ Nut Retainer
3	2	667668	■ Nut
4	1	563328	Shell
5	1	602580	Fitting
6	1	558400	Piston
7	1	2716	▲ O-Ring
8	1	662454	▲ Seal
9	1	2787	▲ O-Ring
10	1	615130	▲ Back-Up Ring
11	1	667917	Retainer
12	1	662448	▲ Seal
13	1	638243	▲ Nylon Ring
14	1	636853	▲ Wiper
15	1	667623	Nut
16	1	563329	Rod
17	1	555439	Washer
18	1	667609	Restrictor Cartridge ●
19	1	555440	Retaining Ring
20	1	671048	▲ Seal Loader, Piston
21	1	671051	▲ Seal Loader, Retainer
		667995	Service Kit

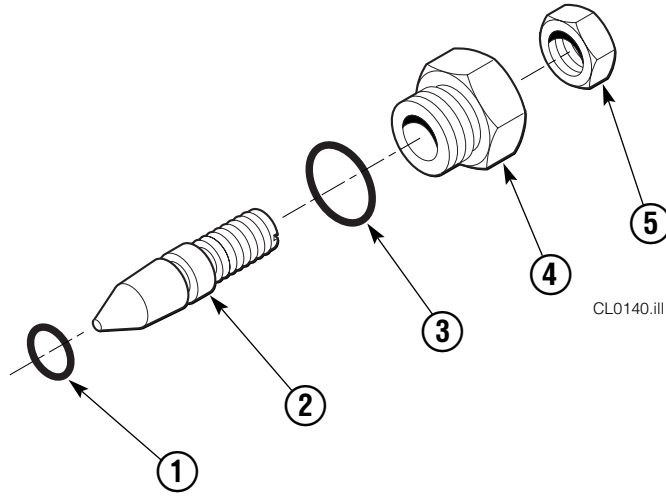
- ▲ Included in Service Kit 667995.
  - Included in Nut Service Kit 668925.
  - Not Included in Cylinder Assembly.
- Ref: S-6055, S-6056.

# Revolving Connection



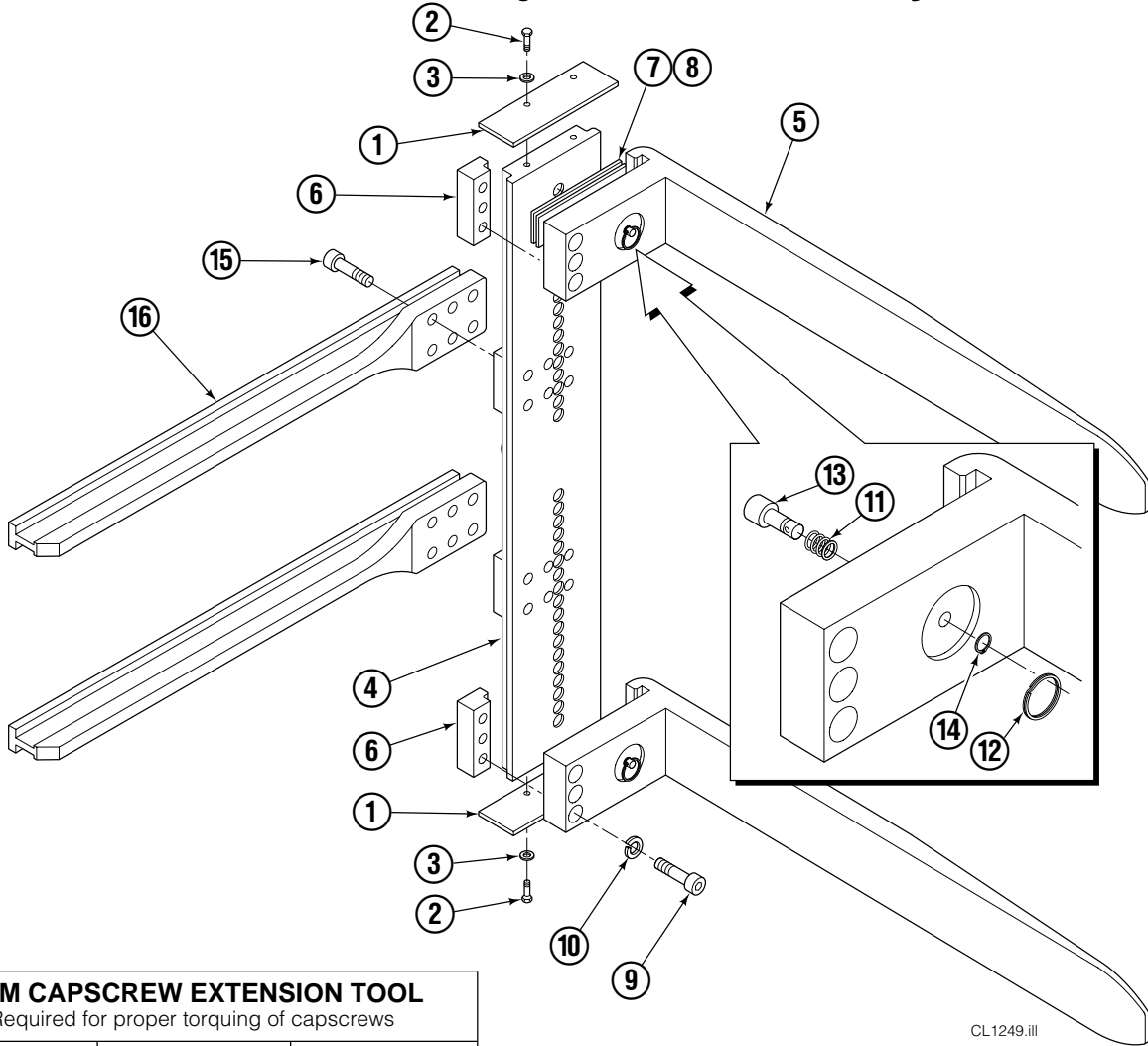
<b>35D/50D</b>			
REF	QTY	PART NO.	DESCRIPTION
		350331	Revolving Connection
1	2	768796	Capscrew
2	1	686421	End Block
3	2	604511	Fitting, 6-6
4	1	687237	Service Kit
5	1	686422	Shaft
6	5	663694	Fitting, 3
7	1	350332	Body
8	2	667516	Check Valve Service Kit
9	2	678376	Check Valve
10	2	604510	Fitting, 6

# 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

# Turnload Adjustable Assembly



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## ARM CAPSCREW EXTENSION TOOL

Required for proper torquing of capscrews



35D/50D

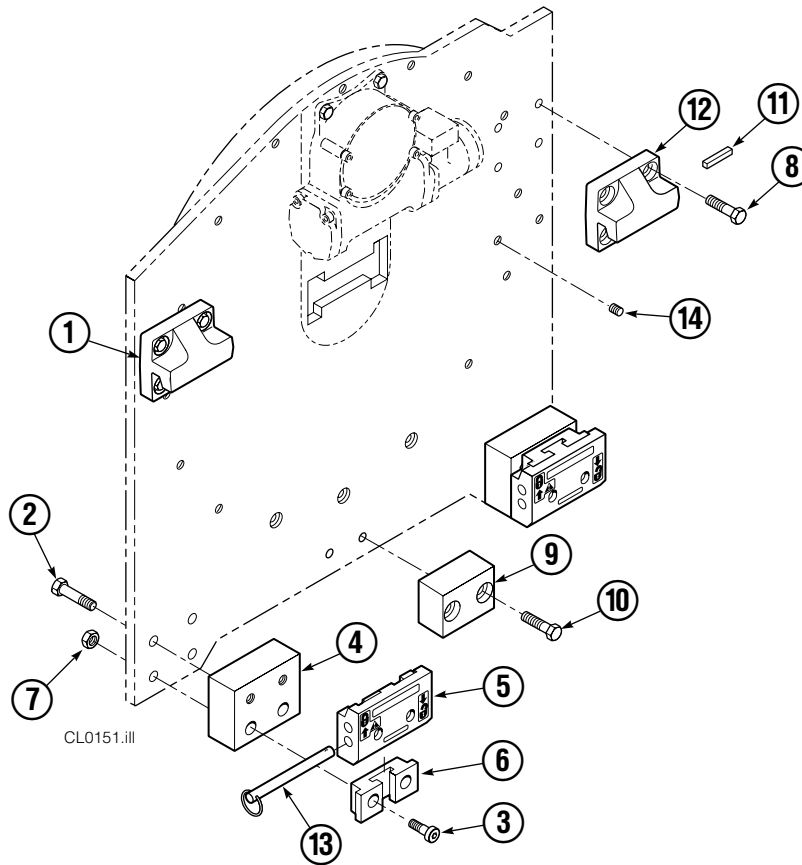
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50D			
REF	QTY	PART NO.	DESCRIPTION
		6010631	Arm Group
	2	6010632	Turnload Adjustable Assembly▲
1	2	6004486	Plate
2	4	671222	Capscrew
3	4	6230	Washer
4	1	6010658	Hanger Assembly
5	2	6010647	Fork
6	2	6004480	Hook
7	■	345798	Shim
8	■	345799	Shim
9	6	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	24	607105	Capscrew
16	2	380977	Arm Bar

▲ Includes items 1 thru 16.

■ As Required.

# 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

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