



# Parts Manual

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Model \_\_\_\_\_ Turnaload™

Catalog Number \_\_\_\_\_ 35D-TAL-310

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**cascade**®  
**corporation**

**For Technical Assistance call:** 800-227-2233, Fax: 888-329-8207

**To Order Parts call:** 888-227-2233, Fax: 888-329-0234

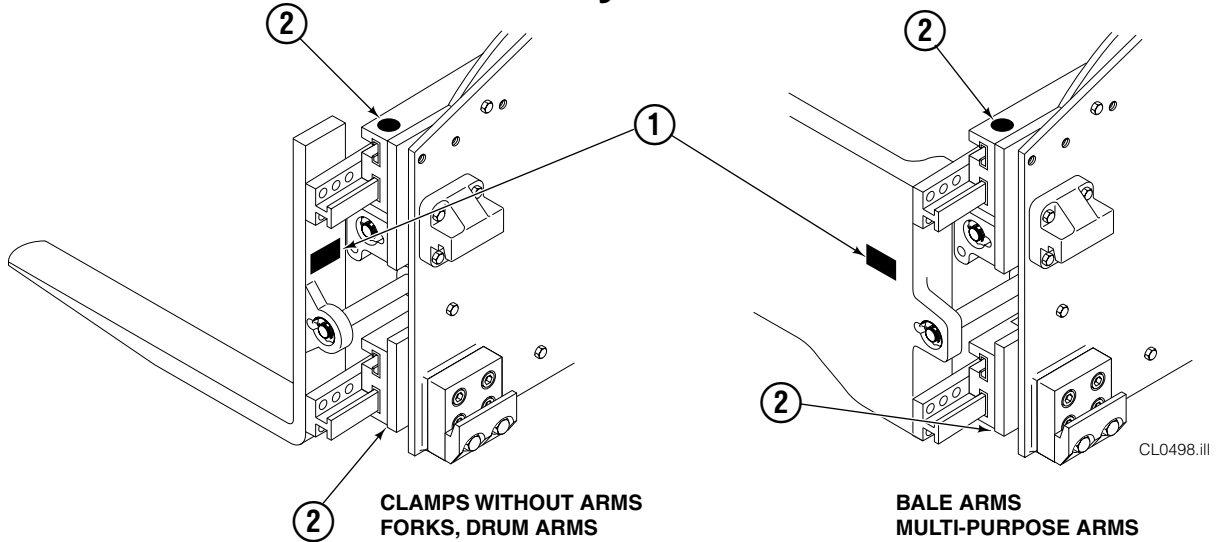
**OR**

**Write:** Cascade Corporation, P.O. Box 20187, Portland, OR 97220

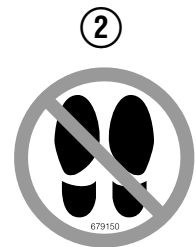
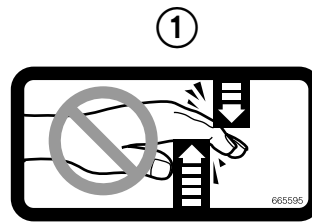
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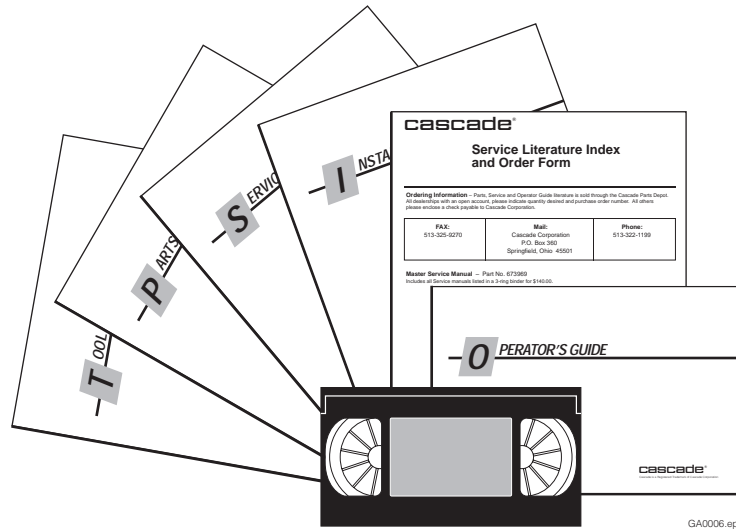
# Safety Decals



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

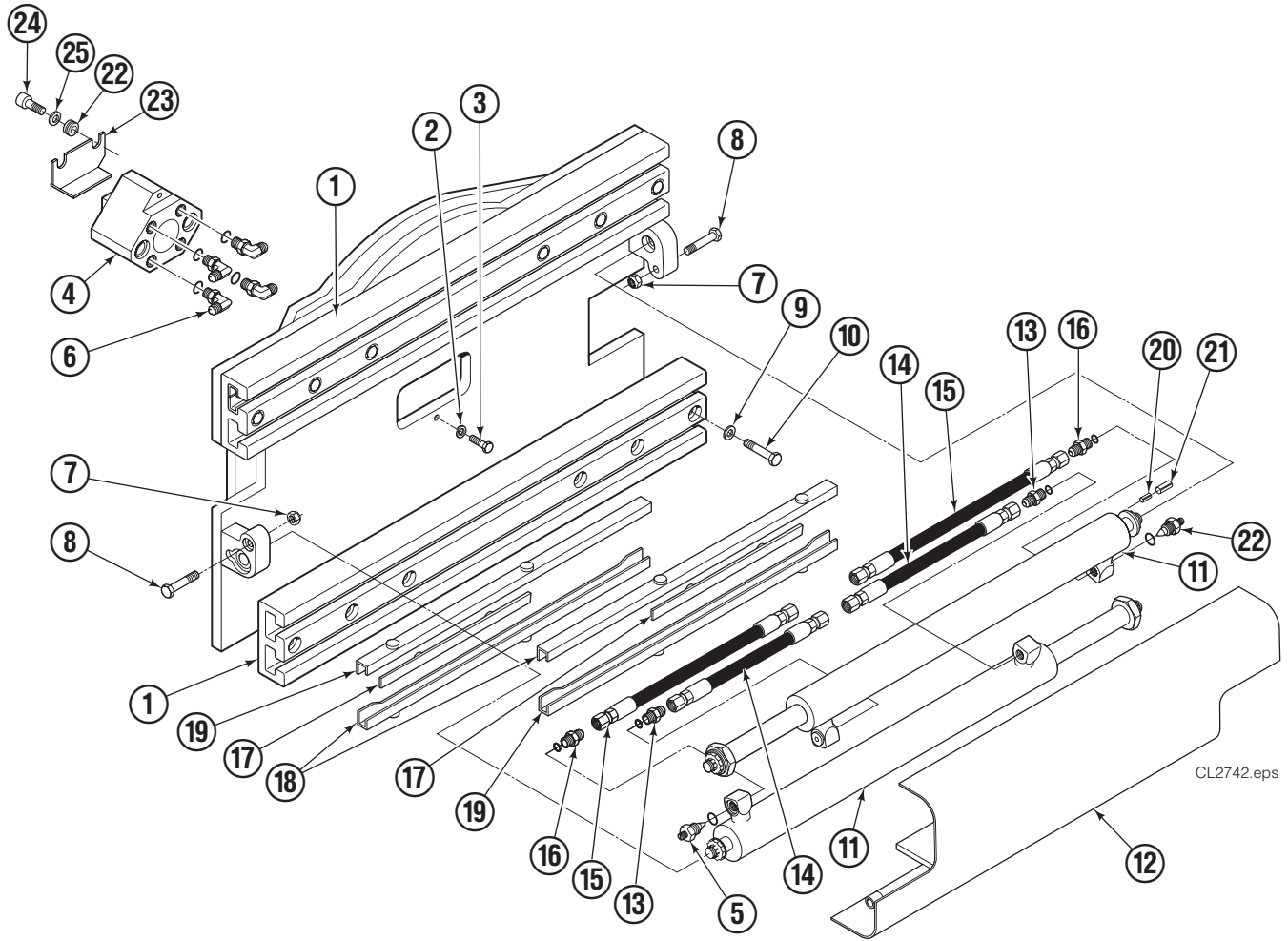


# Publications



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

# Clamp Components



CL2742.eps

35D							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		6086716	Clamp Components	13	2	611288	Fitting, 6-8
1	2	376431	Frame	14	2	675055	Hose, 17.50 in.
2	2	686119	Lockwasher, M8	15	2	675055	Hose, 17.50 in.
3	2	765352	Capscrew, M8 x 30	16	2	686369	Fitting
4	1	686420	Revolving Connection ■	17	4	667663	Bearing
5	2	667609	Restrictor Cartridge ●	18	4	668910	Bearing
6	4	601676	Fitting, 6-6	19	4	668911	Bearing
7	2	665707	Nut, 1/2	20	2	768953	Roll Pin - Inner
8	2	3659	Capscrew, 1/2 x 2.50	21	2	769009	Roll Pin - Outer
9	8	667910	Washer, 1/2	22	2	208765	Grommet
10	8	667909	Capscrew, 1/2 x 3.00	23	1	209067	End Block Bracket
11	2	366690	Cylinder ◆	24	2	665992	Shoulder Bolt
12	1	6086729	Bumper	25	2	209021	Washer, M10

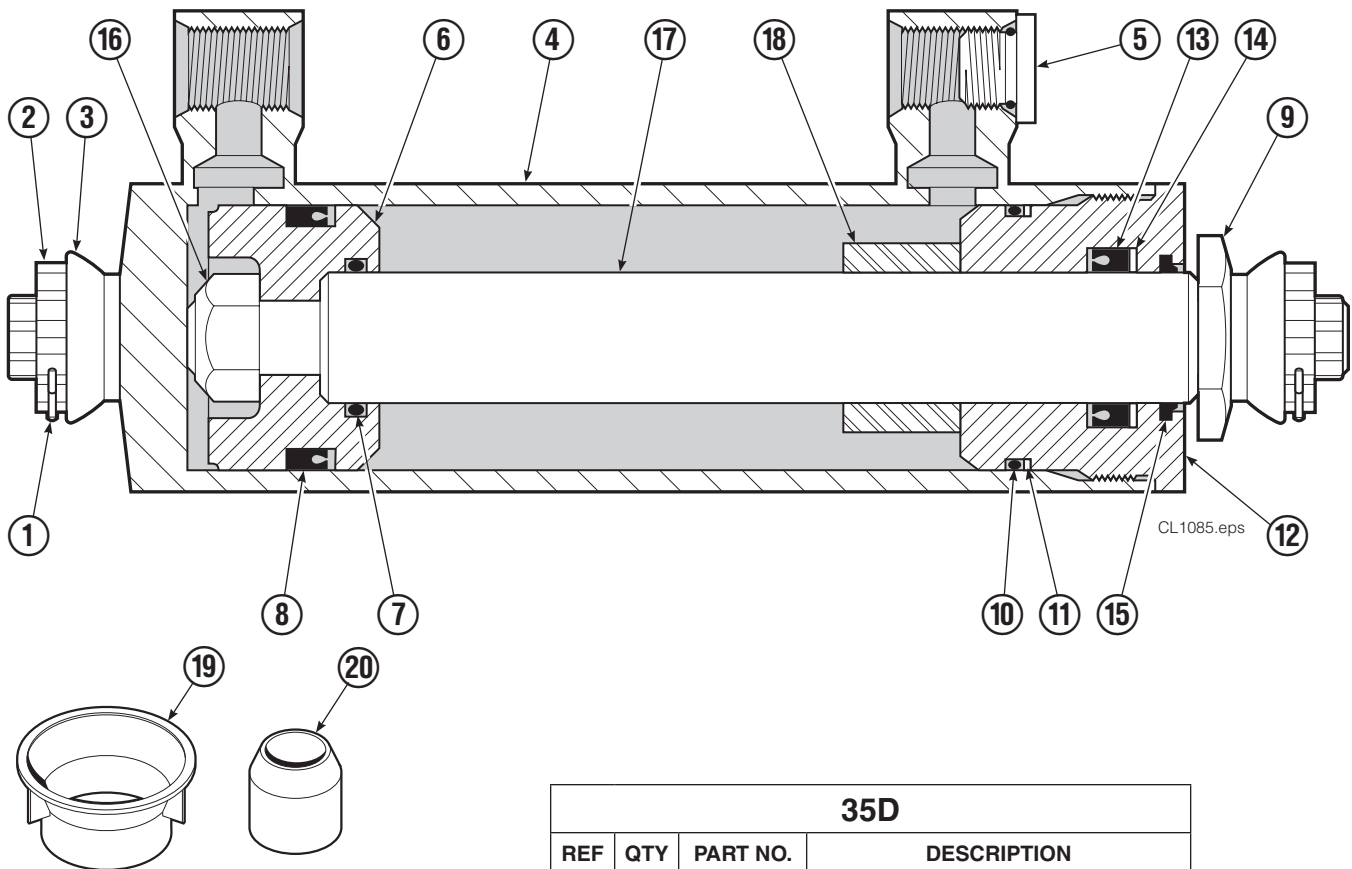
■ See Revolving Connection page for parts breakdown.

◆ See Cylinder page for parts breakdown.

● See Restrictor Cartridge page for parts breakdown.

Reference: SK-5660.

# Cylinder Assembly



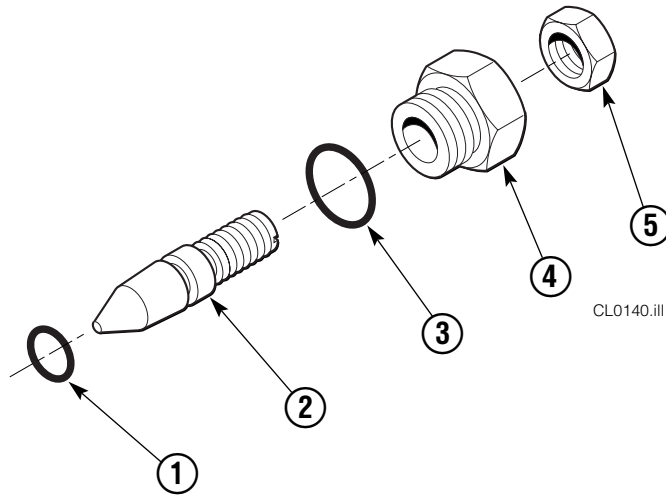
35D			
REF	QTY	PART NO.	DESCRIPTION
		366690	Cylinder Assembly
1	2	6510	■ Cotter Pin
2	2	667624	■ Nut Retainer
3	2	667625	■ Nut
4	1	564046	Shell
5	1	602580	Fitting
6	1	558400	Piston
7	1	2716	◆ O-Ring
8	1	662454	◆ Seal
9	1	667626	Washer
10	1	2787	◆ O-Ring
11	1	615130	◆ Back-up Ring
12	1	667917	Retainer
13	1	662448	◆ Seal
14	1	638243	◆ Nylon Ring
15	1	636853	◆ Wiper
16	1	668031	Nut
17	1	564047	Rod
18	1	—	Spacer
19	1	671048	◆ Seal Loader, Piston
20	1	671051	◆ Seal Loader, Retainer
		667995	Service Kit

■ Included in Nut Service Kit 668926.

◆ Included in Service Kit 667995.

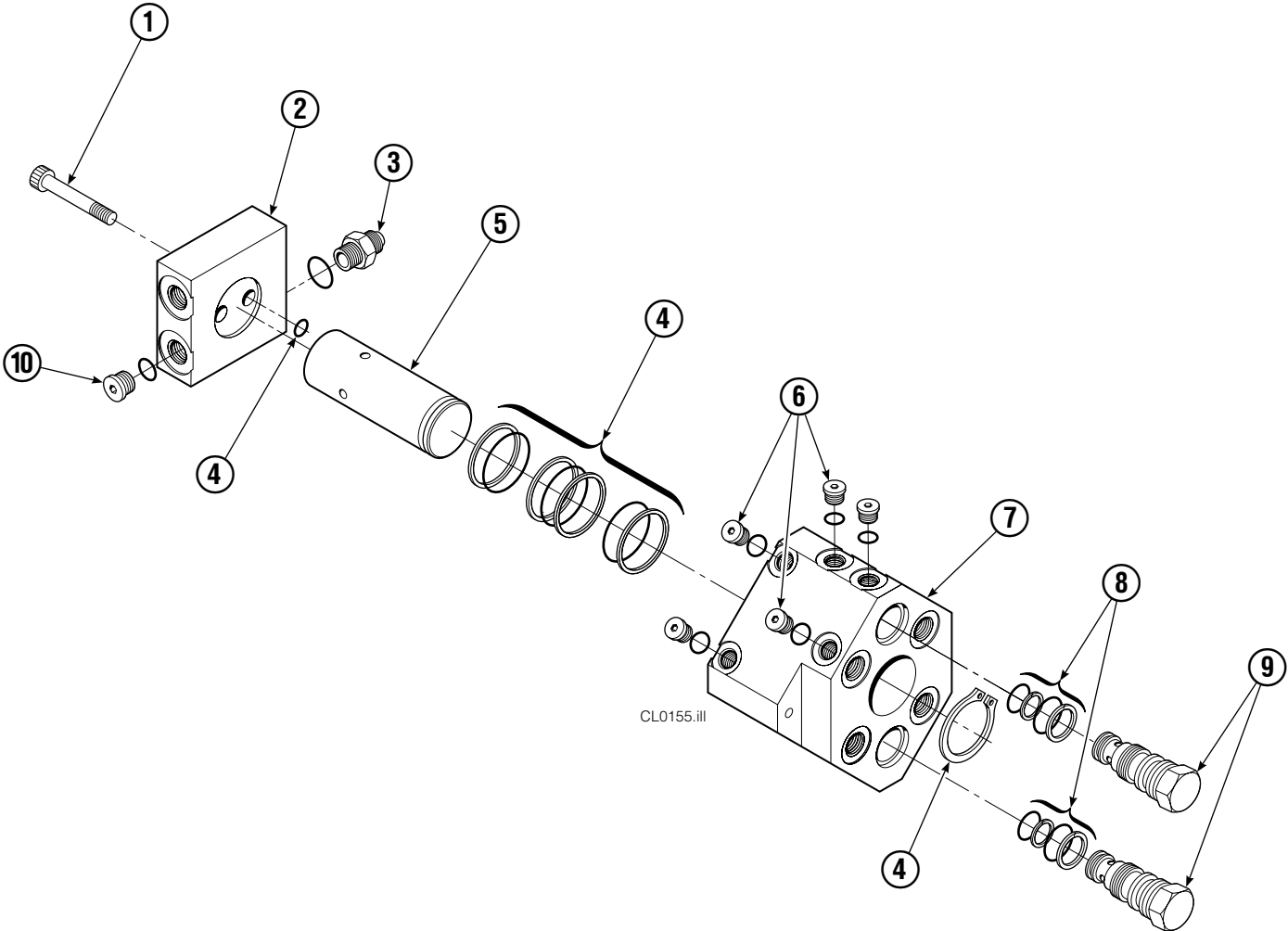
Reference: S-7625, S-7662.

# Restrictor Cartridge



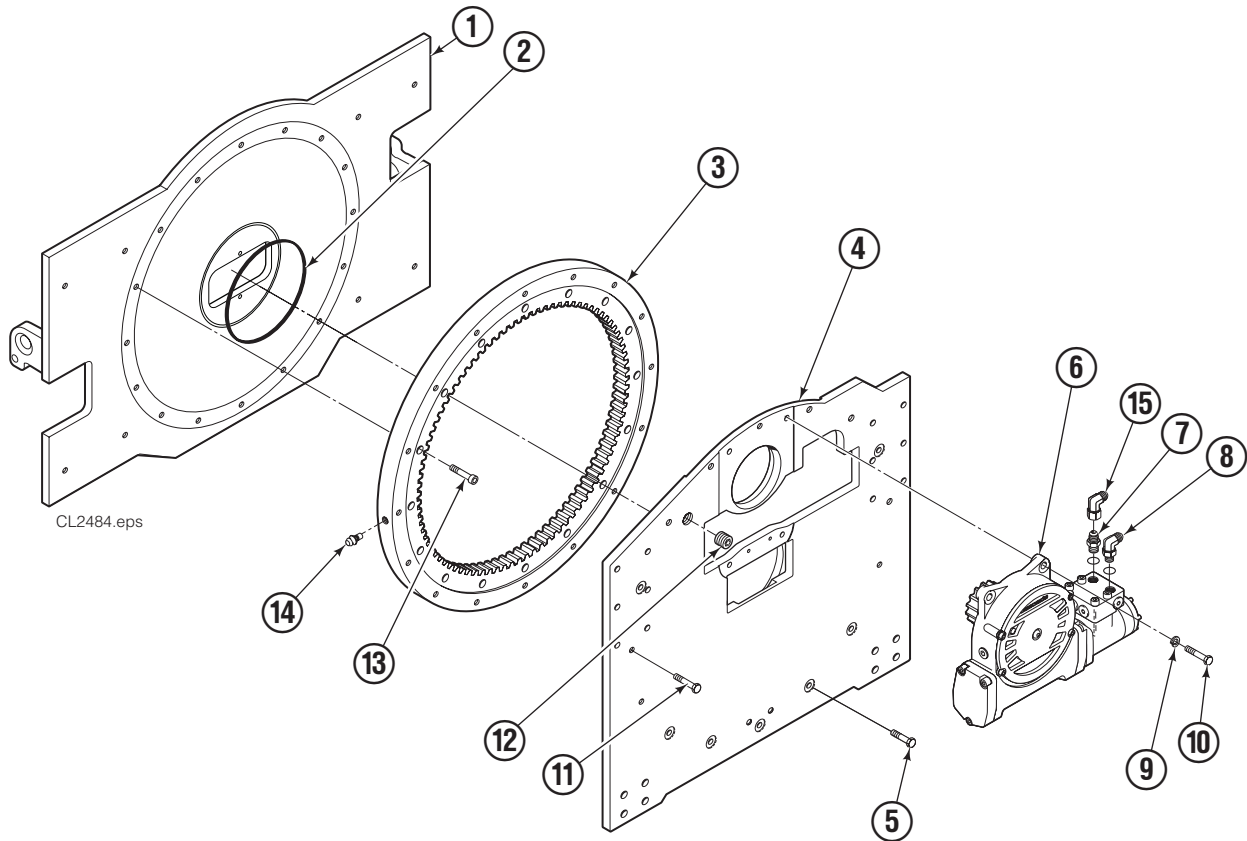
REF	QTY	PART NO.	DESCRIPTION
		667609	Restrictor Cartridge
1	1	2701	O-Ring
2	1	667611	Plunger
3	1	2841	O-Ring
4	1	667610	Plug - Special
5	1	5716	Jam Nut

# Revolving Connection



<b>35D/50D</b>			
<b>REF</b>	<b>QTY</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
		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

# Base Unit Group



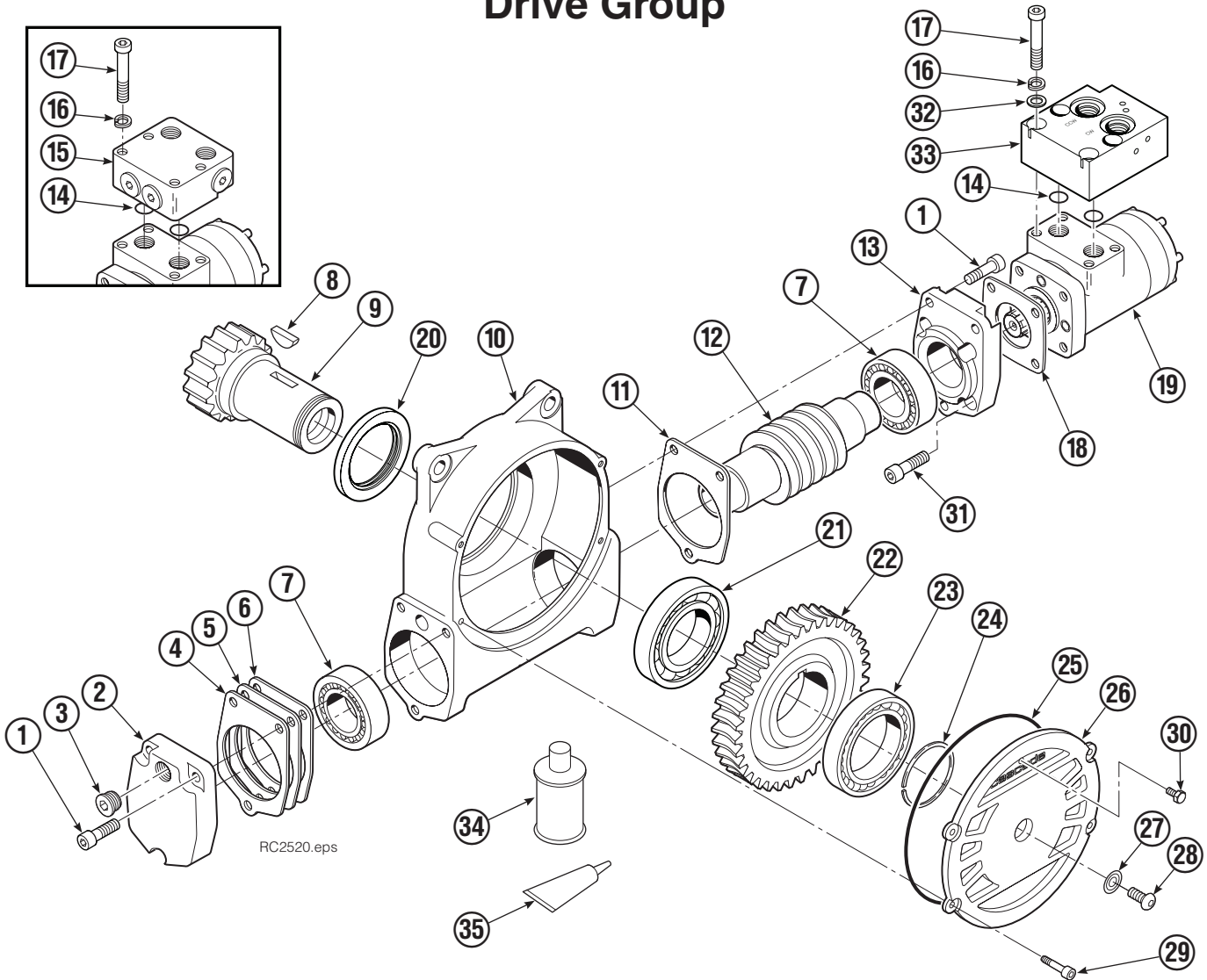
35D			
REF	QTY	PART NO.	DESCRIPTION
		393199	Base Unit Group
1	1	393200	Faceplate
2	1	670931	Seal
3	1	672828	◆ Bearing Assembly
4	1	687229	Baseplate
5	7	643538	Capscrew, 1/2 x 1.50
6	1	795491	Drive Group ▲
7	1	601377	Fitting, 8-8
8	1	601250	Fitting, 8-8
9	4	6290	Lockwasher, 1/2 in. ID
10	4	661742	Capscrew, 1/2 x 1.25
11	9	643539	Capscrew, 1/2 x 1.75
12	1	6605	Plug
13	16	4505	◆ Capscrew, 1/2 x 1.25
14	1	7401	Grease Fitting
15	1	605761	Fitting, 8-8
		672481	Bearing Service Kit

◆ Included in Bearing Service Kit 672481.

▲ See Drive Group page for parts breakdown.

Reference: Common Parts Group 680700, Fastener Kit 699003, SK-5343, 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	1	3014870	Seal
2	1	676855	Cover	21	1	6033892	Bearing ★
3	1	604510	Fitting, 6	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	4	4468	Capscrew, 3/8 x .75
13	1	775553	Adapter	32	4	221494	Washer, M8
14	2	2705	O-Ring	33	1	6063316	Check Valve ◆
15	1	670549	Check Valve ◆	34	1	656300	Gear Box Lube – 48 oz.
16	4	6444	Lockwasher	35	1	668184	Sealant
17	4	607059	Capscrew, 5/16 x 1.75			670578	Shim Service Kit (items 4-6,11,25,35)
18	1	670575	Gasket			212919	Motor Kit–2.2 (items 11,14,18,19,35)

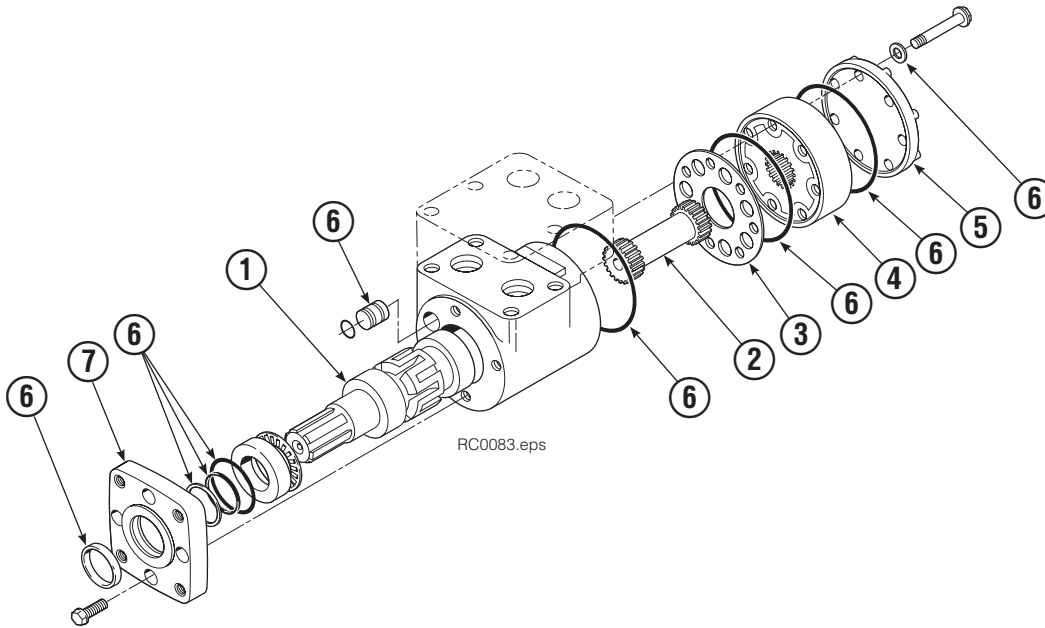
● Quantity as required.

◆ See Valve page for parts breakdown.

■ See Drive Motor page for parts breakdown.

★ For service replacement use Bearing 670580.

# Drive Motor

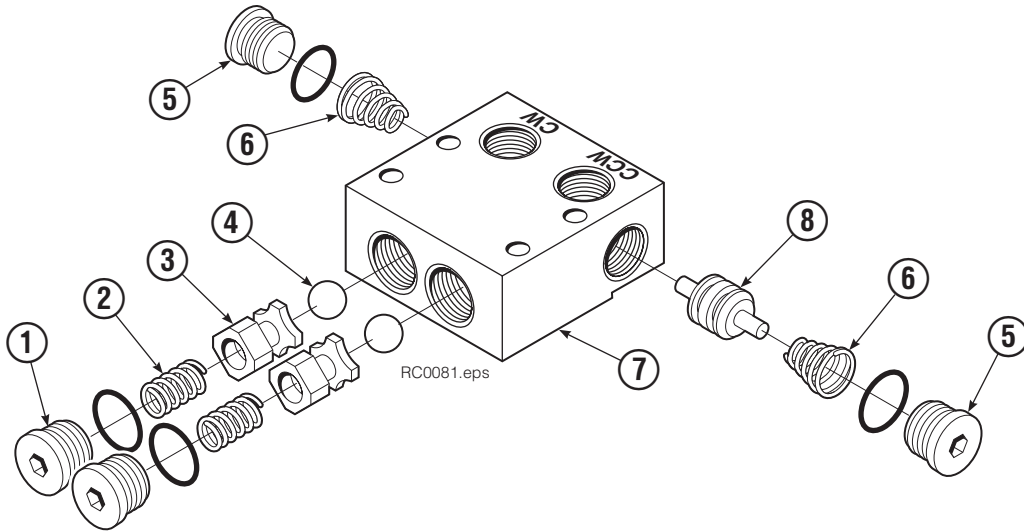


REF	QTY	PART NO.	DESCRIPTION
		206392	Drive Motor – 2.8 c.i.
1	1	675478	Shaft
2	1	675477	Drive
3	1	675479	Spacer Plate
4	1	675480	Gerotor Set (101-1768-007) ■
	1	685075	Gerotor Set (101-1768-009) ■
5	1	675482	End Cap
6	1	206405	Service Kit ●
7	1	685089	Flange (101-1768-007) ■
	1	685090	Flange (101-1768-009) ■

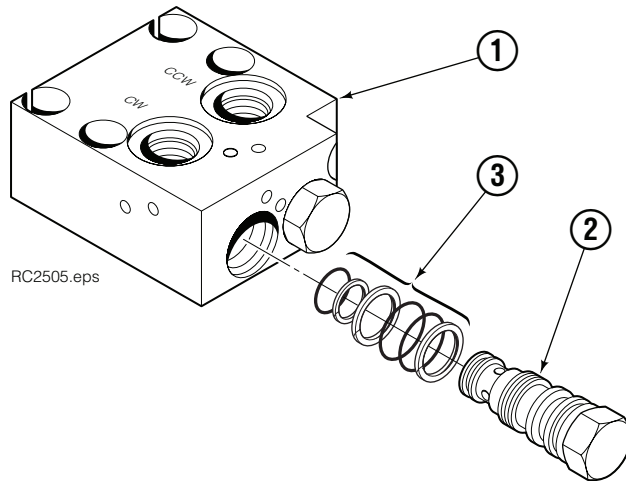
Cascade provides service replacement parts for the listed parts only. Due to cost, if other parts need replacement, the complete drive motor should be replaced.

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

# Check Valve

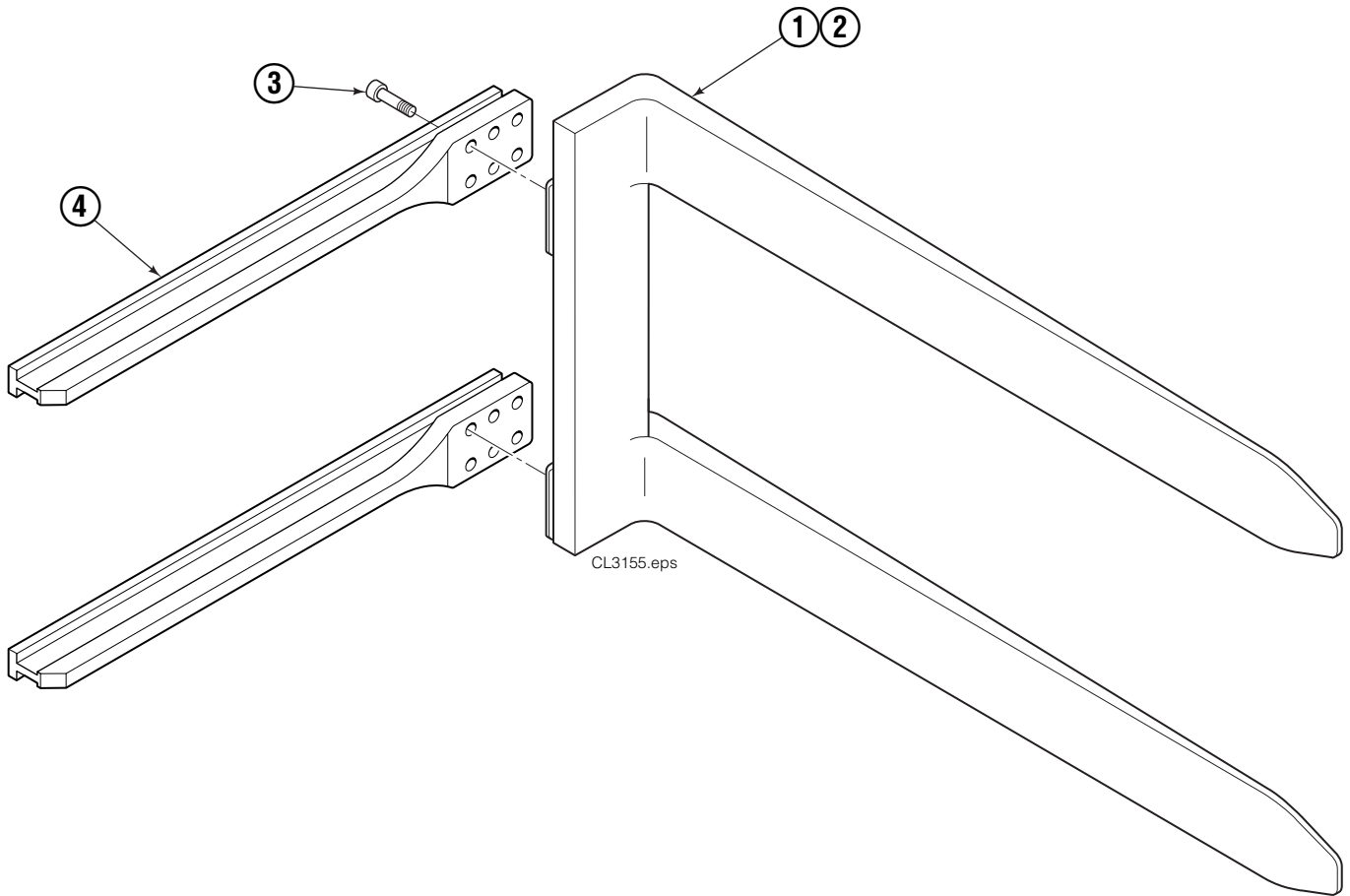


REF	QTY	PART NO.	DESCRIPTION
		670549	Check Valve Assembly
1	2	609453	Fitting, 10
2	2	670552	Spring
3	2	670551	Guide
4	2	7020	Ball
5	2	602580	Fitting, 8
6	2	673989	Spring
7	1	670550	Body
8	1	670553	Spool



REF	QTY	PART NO.	DESCRIPTION
		6063316	Check Valve Assembly
1	1	6063282	Valve Body
2	2	6038929	Check Valve – PO
3	2	667516	Service Kit

# Turnaload Arm Group

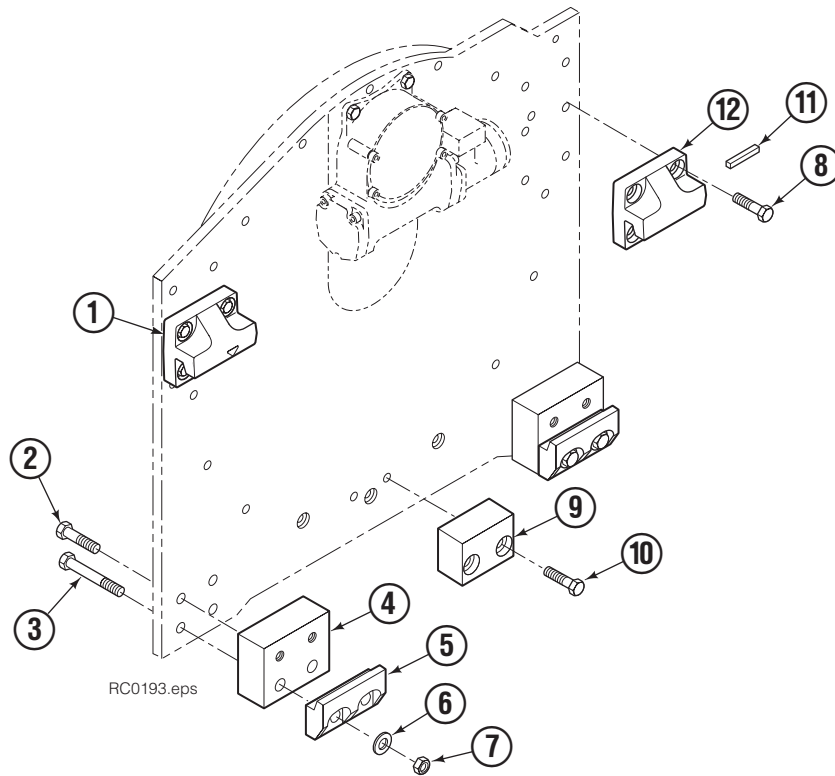


<b>ARM CAPSCREW EXTENSION TOOL</b>		
Required for proper torquing of capscrews		
	35D/50D	667699

REF	QTY	PART NO.	DESCRIPTION
		6086741	Turnaload Arm Group ◆
1	1	6086702	Turnaload Weldment
2	1	6086702	Turnaload Weldment
3	24	607103	Capscrew, .75 x 1.50
4	4	367761	Arm Bar

◆ Includes items 1 – 3 only.

# Bolt-On Mounting Group



## Class II, 0°

REF	QTY	PART NO.	DESCRIPTION
		680630	Mounting Group
1	1	670523	Upper Hook – LH
2	4	639121	Capscrew, .625 x 1.50
3	4	674261	Capscrew, .625 x 3.75
4	2	676037	Spacer
5	2	675968	Lower Hook
6	4	667225	Washer
7	4	676281	Nut, .625
8	8	667765	Capscrew, .625 x 1.50
9	1	680683	Center Spacer
10	2	677828	Capscrew, .50 x 1.00
11	1	669344	Stop Block Kit
12	1	670524	Upper Hook – RH

# Recommended Spare Parts List

35D Turnload Clamp 35D-TAL-310				
PART NUMBER	DESCRIPTION	ATTACHMENTS SERVICED		
		1-5	6-19	20-50
	<b>DRIVE GROUP</b>			
675608	Worm	0	1	2
670506	Pinion	0	1	2
670581	Bearing	0	1	1
7214	Snap Ring	2	2	4
643423	O-Ring	1	2	2
206392	Drive Motor	0	1	1
206394	Drive Motor Seal Kit	1	1	2
668184	Sealant	1	1	2
675638	Bearing Service Kit	1	1	2
675637	Bearing Service Kit	1	2	2
656300	Gear Box Lube	1	2	2
599489	Graphite Lubricant, 16 oz. Aerosol	2	4	6
	<b>FRAME GROUP</b>			
675005	Hose	0	2	4
376431	Frame	0	1	2
6086729	Bumper	0	0	1
668910	Bearing	4	8	12
667663	Bearing	4	8	12
668911	Bearing	4	8	12
	<b>CYLINDER</b>			
366690	Cylinder Assembly	0	0	1
564046	Shell	0	1	1
558400	Piston	0	0	2
667917	Retainer	0	0	2
667914	Rod	0	1	2
668926	Nut Kit	0	2	4
667995	Service Kit	2	4	8
	<b>CHECK VALVE</b>			
670549	Check Valve Assembly	0	0	1
	<b>REVOLVING CONNECTION</b>			
687237	Shaft Service Kit	1	2	2
667516	Check Valve Service Kit	2	4	4
	<b>ARMS</b>			
607103	Capscrew	24	24	24
667699	Arm Capscrew Extension Tool	1	2	2
	<b>PAINT</b>			
685660	12 oz. Aerosol Heritage White	1	1	1
	<b>PUBLICATIONS</b>			
673900	Parts Manual	1	1	1
672362	Service Manual	1	1	1
672361	Installation Instruction	1	1	1
672903	Operator's Guide	1	1	1
679929	Tool Catalog	1	1	1
	<b>VIDEOS</b>			
680667	Servicing Cascade Cylinders	1	1	1



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