



# Parts Manual

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Model 35D Turnaload

Serial Number 35D-TAL-123

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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

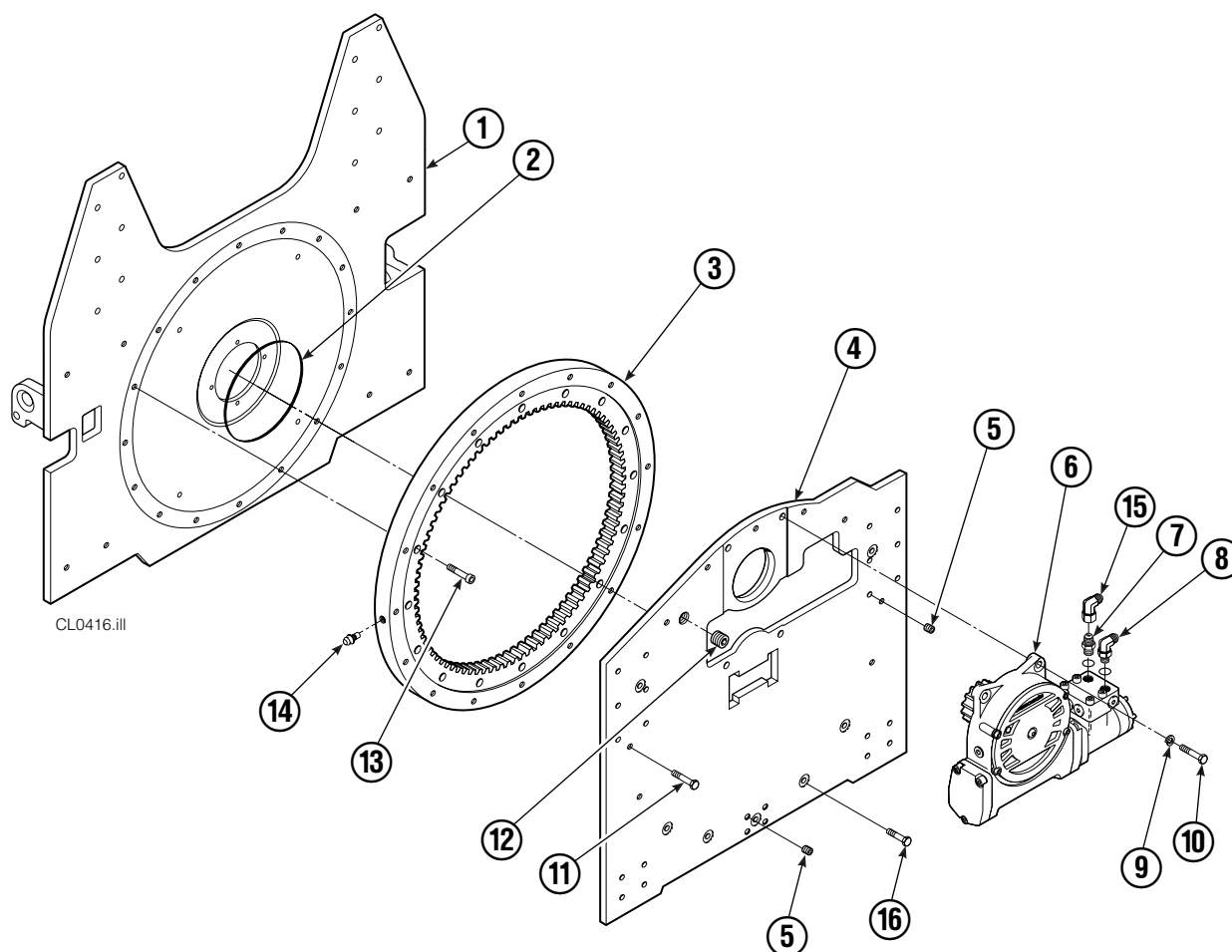


# Publications



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

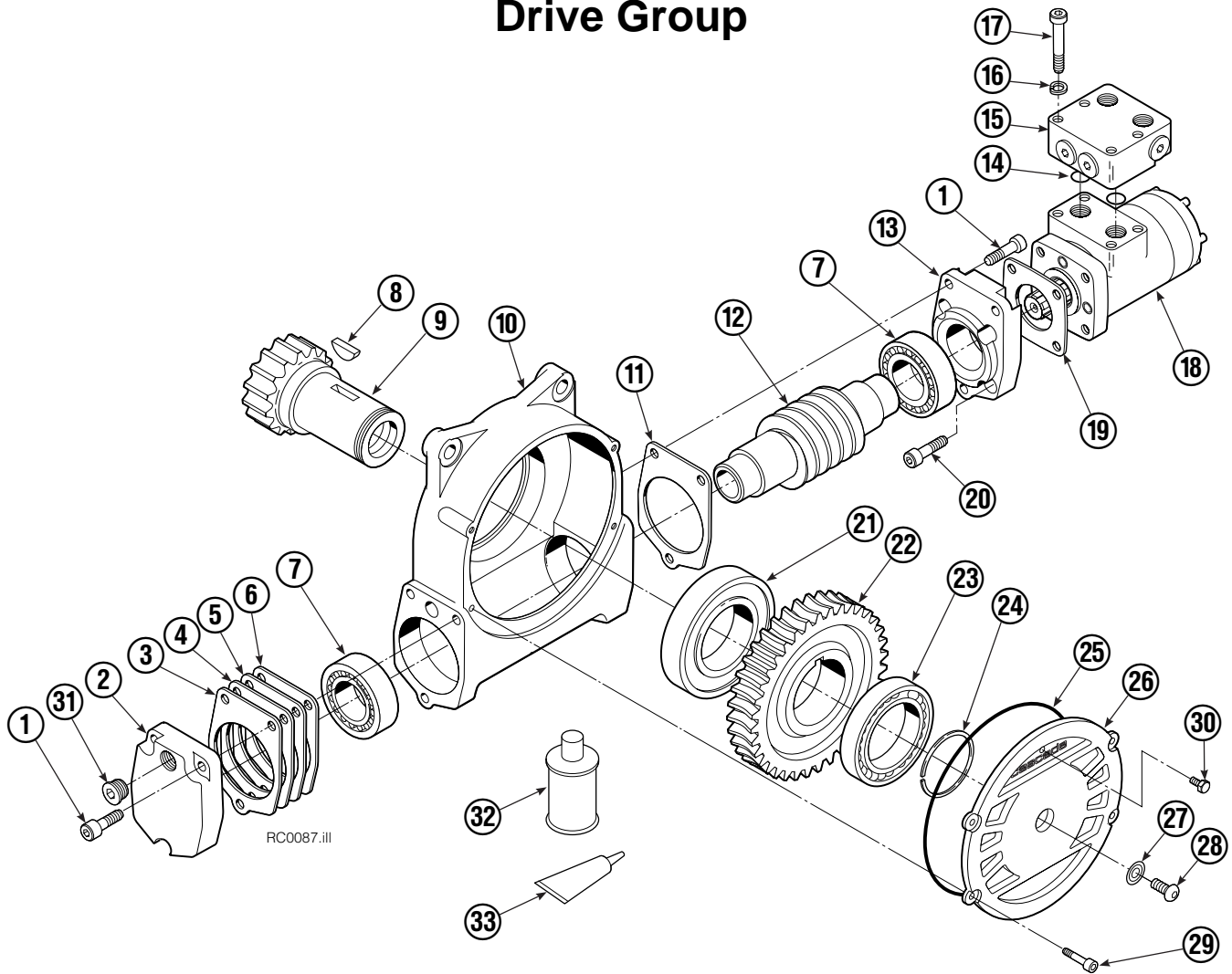


35D			
REF	QTY	PART NO.	DESCRIPTION
		357310	Rotator Group
1	1	325718	Faceplate
2	1	670931	Seal
3	1	672828	Bearing Assembly
4	1	358320	Baseplate
5	6	631385	Plug
6	1	675628	Drive Group ▲
7	1	601377	Fitting, 8-8
8	1	601250	Fitting, 8-8
9	4	6290	Lockwasher, 1/2 in. ID
10	4	661742	Capscrew, 1/2 NC x 1.25 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
15	1	605761	Fitting, 8-8
16	7	643538	Capscrew, 1/2 NC x 1.50 GR8
		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.

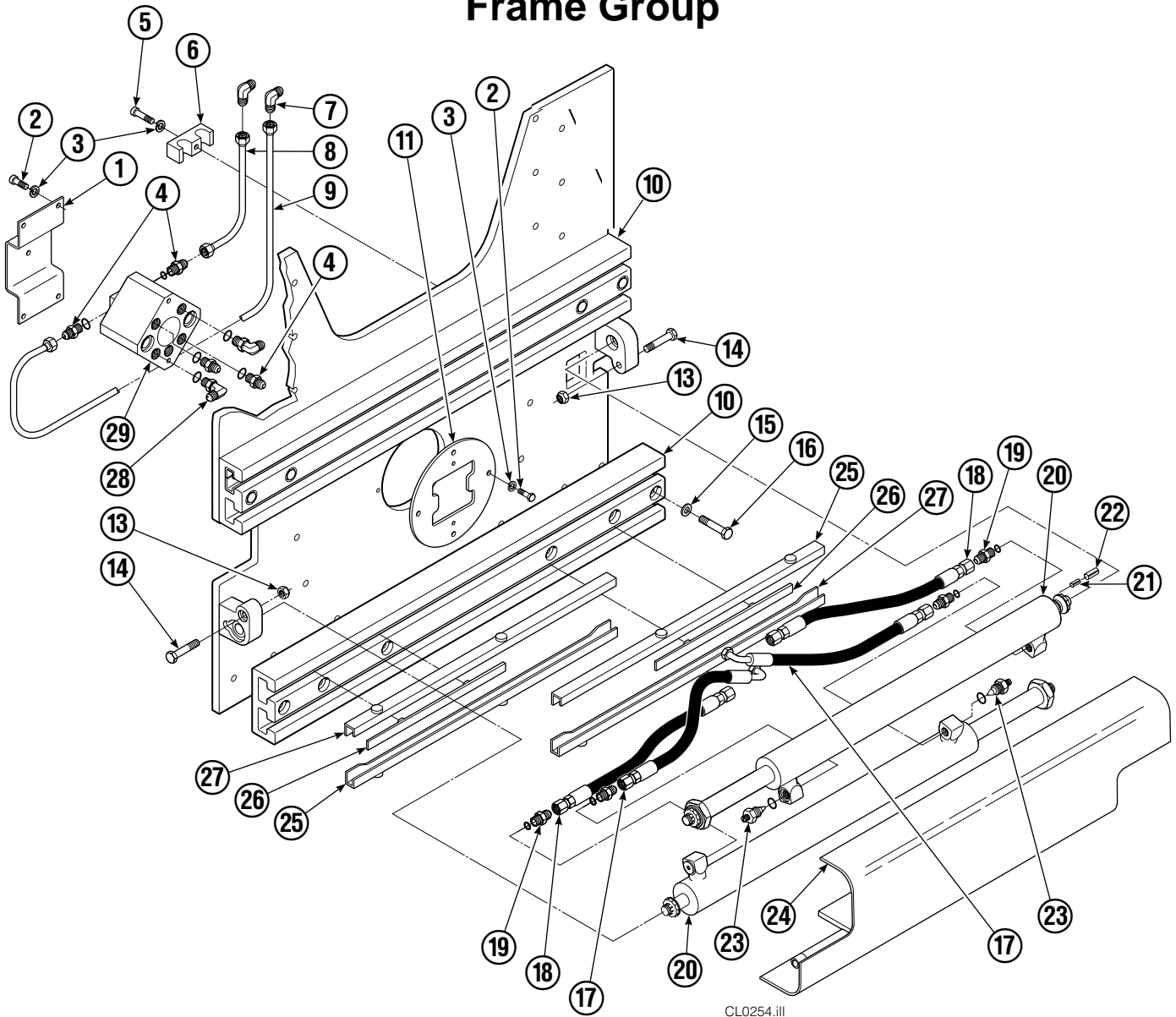
- See Nameplate under valve for correct part number of Gerotor Set and Flange.
- Compatible with water glycol based hydraulic fluids.

# 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



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## 35D

REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		3000896	Frame Group	15	8	667910	Washer, 5/8 in. ID
1	1	670939	Bracket	16	8	667909	Capscrew, 5/8 NC x 3.25
2	8	3574	Capscrew, 5/16 NC x .62	17	2	677995	Hose
3	9	6287	Lockwasher, 5/16 in. ID	18	2	678027	Hose
4	2	662187	Fitting, 8-6	19	4	611288	Fitting, 8-8
5	1	3578	Capscrew, 5/16 NC x 1.25	20	2	327616	Cylinder ▲
6	1	629511	Bracket	21	2	7861	Roll Pin - Inner
7	2	2440	Fitting, 8-8	22	2	7962	Roll Pin - Outer
8	1	670945	Tube	23	2	667609	Restrictor Cartridge ●
9	1	670944	Tube	24	1	667908	Bumper
10	2	674166	Frame	25	4	668910	Bearing
11	1	670938	Plate	26	4	667663	Bearing
12	4	6510	Cotter Pin (not shown)	27	4	668911	Bearing
13	2	665707	Nut, 1/2 in. ID	28	2	601676	Fitting, 6-6
14	2	3659	Capscrew, 1/2 NC x 2.50	29	1	325715	Revolving Connection ■

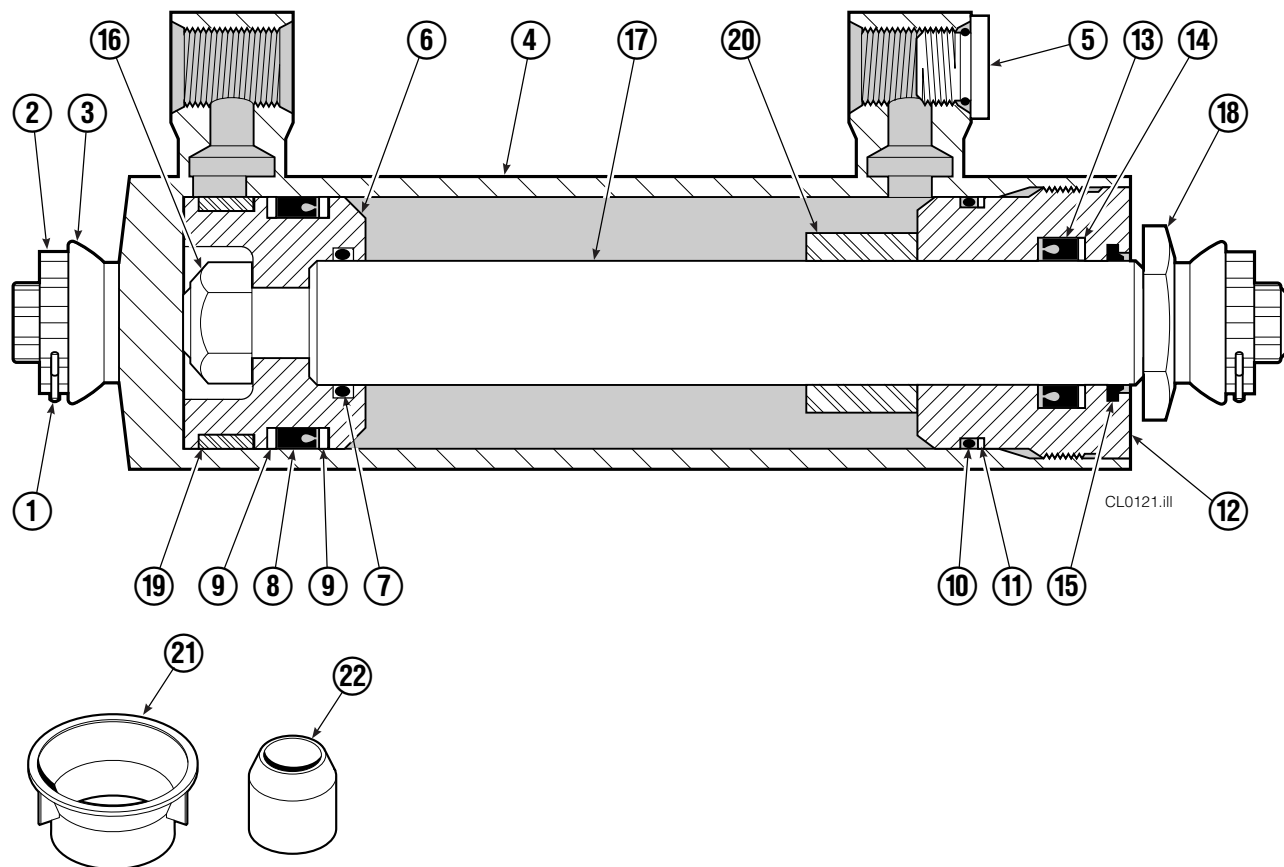
■ See Revolving Connection page for parts breakdown.

Reference: SK-5319.

▲ See Cylinder page for parts breakdown.

● See Restrictor Cartridge page for parts breakdown.

# Cylinder



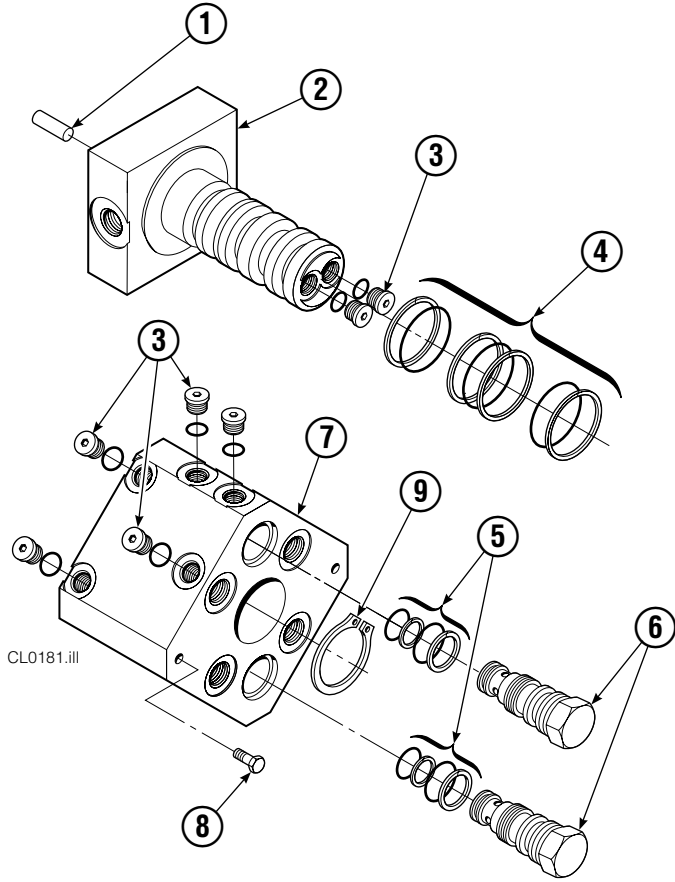
35D			
REF	QTY	PART NO.	DESCRIPTION
		327616	Cylinder Assembly
1	2	6510	Cotter Pin ■
2	2	667624	Nut Retainer ■
3	2	667625	Nut ■
4	1	553758	Shell
5	1	602580	Fitting
6	1	670891	Piston
7	1	2716	O-Ring ▲
8	1	662454	Seal ▲
9	2	638249	Nylon Ring ▲
10	1	2787	O-Ring ▲
11	1	615130	Back-Up Ring ▲
12	1	667917	Retainer
13	1	662448	Seal ▲
14	1	638243	Nylon Ring ▲
15	1	636853	Wiper ▲
16	1	667623	Nut
17	1	667914	Rod
18	1	667626	Washer
19	1	660761	Bearing
20	1	327617	Spacer
21	1	671049	Seal Loader, Piston ▲
22	1	671052	Seal Loader, Retainer ▲
		667995	Service Kit

▲ Included in Service Kit 667995.

■ Included in Nut Service Kit 668926.

Reference: S-7662.

# Revolving Connection



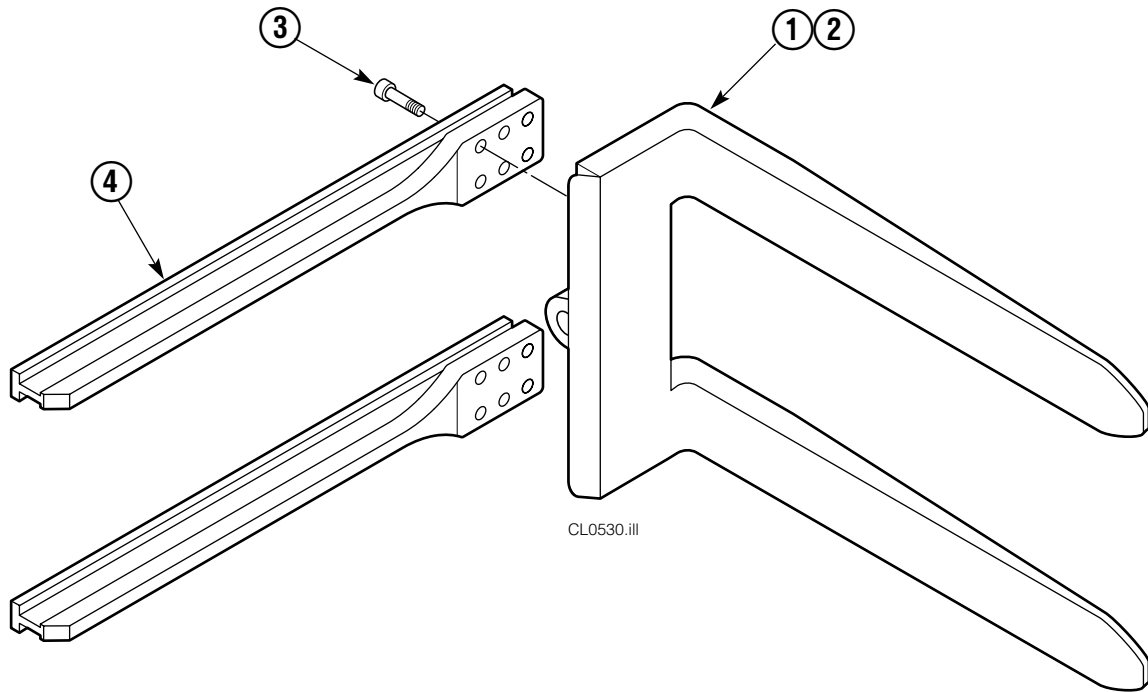
REF	QTY	PART NO.	DESCRIPTION
		325715	Revolving Connection
1	1	606805	Dowel Pin
2	1	670942	Shaft
3	7	663694	Fitting, 3
4	1	660476	Shaft Service Kit
5	2	667516	Check Valve Service Kit
6	2	678376	Check Valve
7	1	325716	Body
8	2	4466	Capscrew, 3/8 NC x .50 GR8
9	1	3139	Snap Ring


# 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



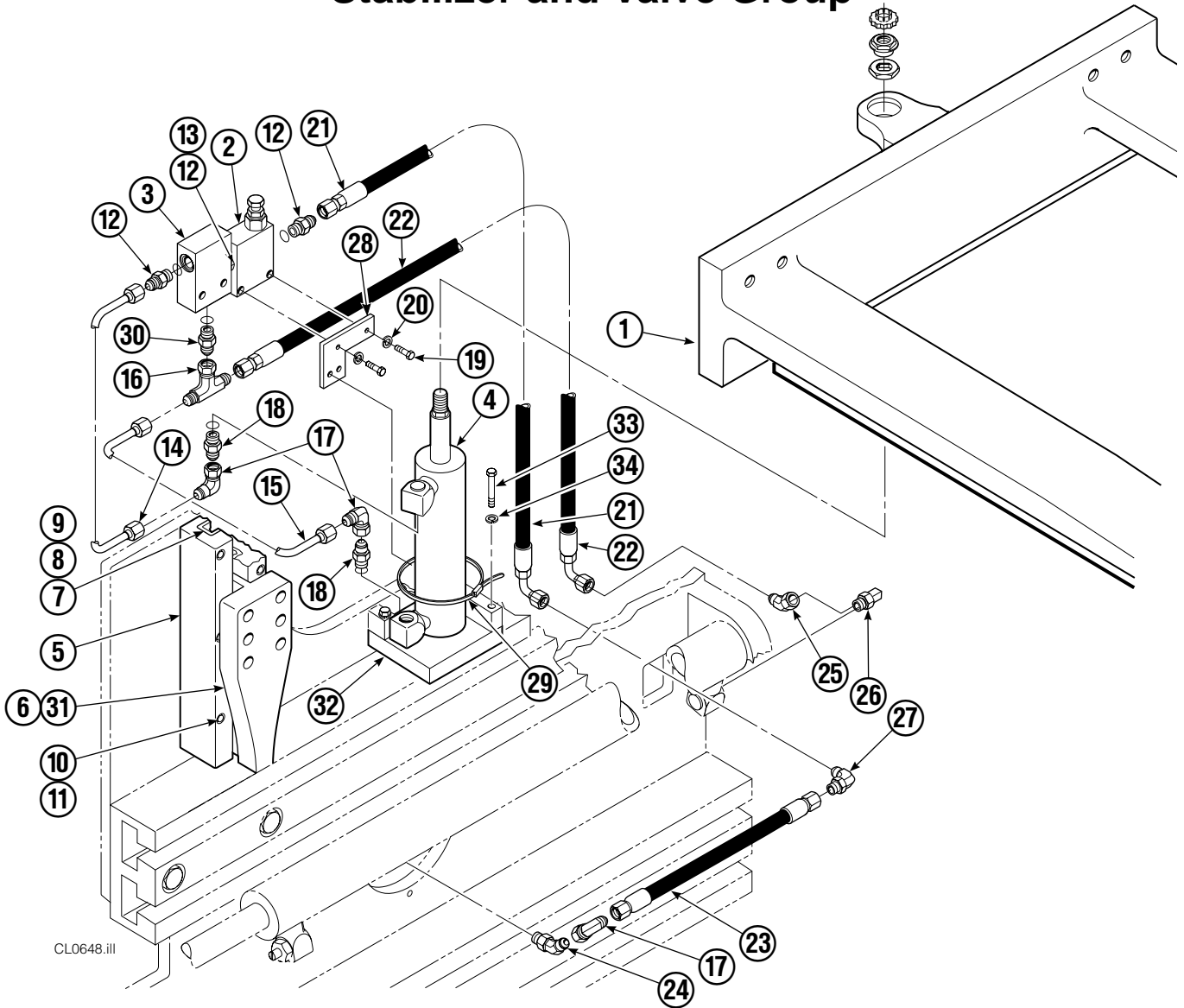
ARM CAPSCREW EXTENSION TOOL		
Required for proper torquing of capscrews		
	35-50D	667699

35D			
REF	QTY	PART NO.	DESCRIPTION
		3000902	Arm Group ▲
1	1	3000903	Arm – LH
2	1	3000903	Arm – RH
3	24	676103	Capscrew
4	4	382035	Arm Bar

▲ Includes items 1-3 only.

Reference: S-7867, 7839

# Stabilizer and Valve Group

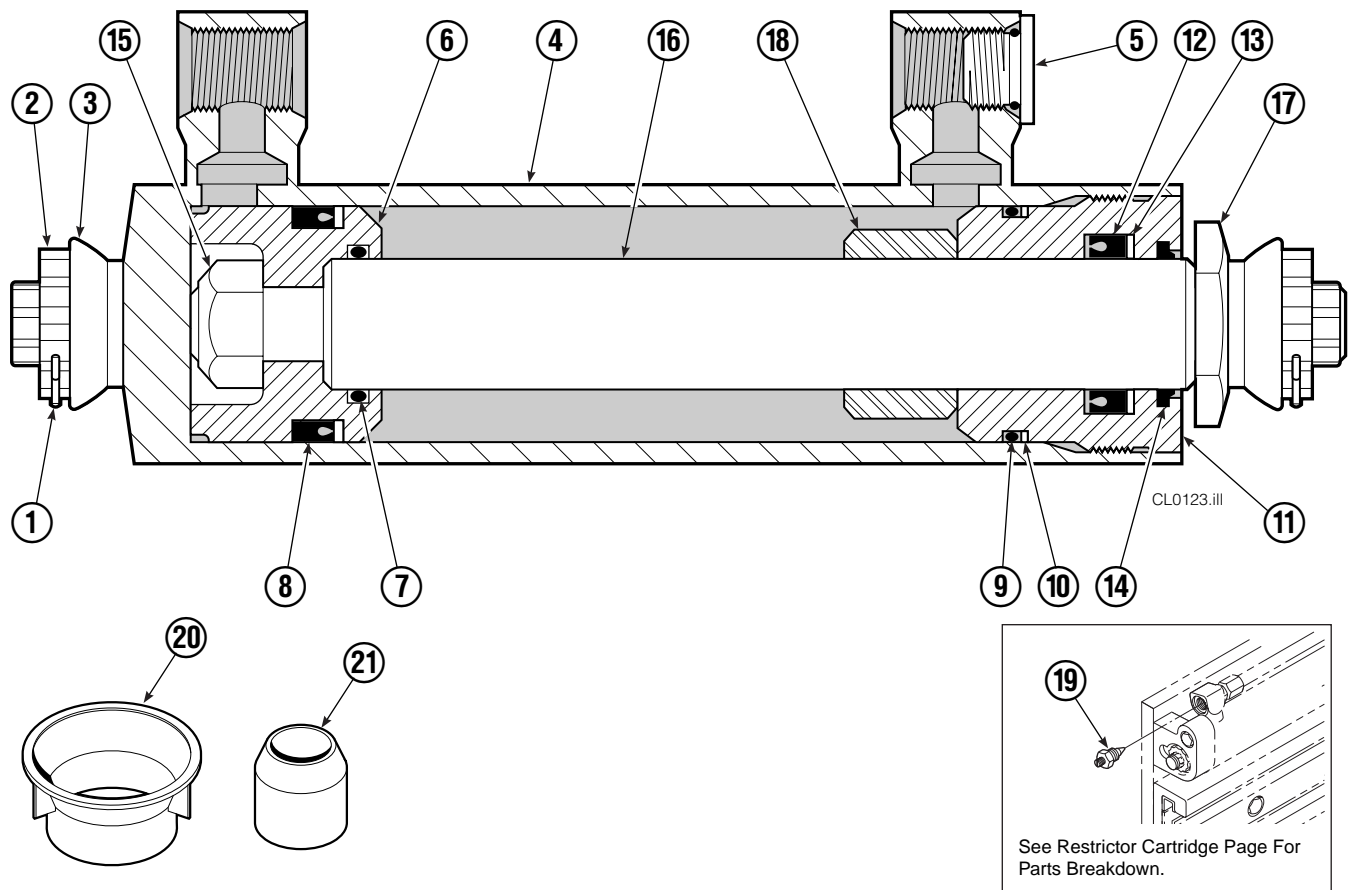


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35D							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		3000901	Stabilizer and Valve Group	18	2	611288	Fitting, 6-8
1	1	3000898	Stabilizer	19	2	3557	Capscrew
2	1	320829	Valve	20	2	6286	Lockwasher
3	1	656694	Valve	21	1	673350	Hose
4	1	324807	Cylinder ▲	22	1	674324	Hose
5	2	324812	Frame	23	1	2126	Hose
6	2	361315	Arm Bar	24	1	611302	Fitting, 6-6
7	2	324815	Bearing	25	1	605230	Fitting, 6-6
8	2	324814	Bearing	26	1	641404	Fitting, 6-8
9	2	324816	Bearing	27	1	2439	Fitting, 6-6
10	12	672833	Capscrew	28	1	321123	Plate
11	12	6444	Lockwasher	29	1	649086	Cable Tie
12	4	604511	Fitting, 6-6	30	1	2306	Fitting, 6-6
13	1	2840	O-Ring	31	12	607085	Capscrew
14	1	324818	Tube	32	1	319698	Plate
15	1	324819	Tube	33	2	633683	Capscrew
16	1	611311	Fitting, 6-6	34	2	6319	Lockwasher
17	3	2680	Fitting, 6-6				

▲ See specific Cylinder page for parts breakdown.

# Cylinder



35D			
REF	QTY	PART NO.	DESCRIPTION
		324807	Cylinder Assembly
1	2	6510	Cotter Pin ■
2	2	667624	Nut Retainer ■
3	2	667625	Nut ■
4	1	324805	Shell
5	1	602580	Fitting
6	1	558200	Piston
7	1	2716	O-Ring ▲
8	1	662452	Seal ▲
9	1	2785	O-Ring ▲
10	1	615128	Back-Up Ring ▲
11	1	563906	Retainer
12	1	662448	Seal ▲
13	1	638243	Nylon Ring ▲
14	1	636853	Wiper ▲
15	1	667623	Nut
16	1	324806	Rod
17	1	667626	Washer
18	1	—	Spacer
19	1	667609	Restrictor Cartridge ●
20	1	671047	Seal Loader, Piston ▲
21	1	671051	Seal Loader, Retainer ▲
		668021	Service Kit

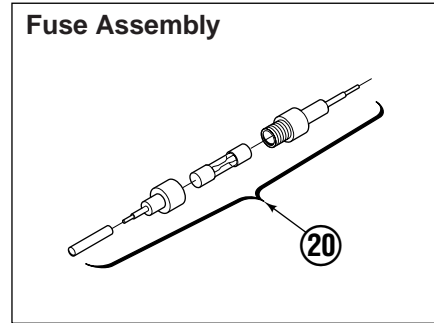
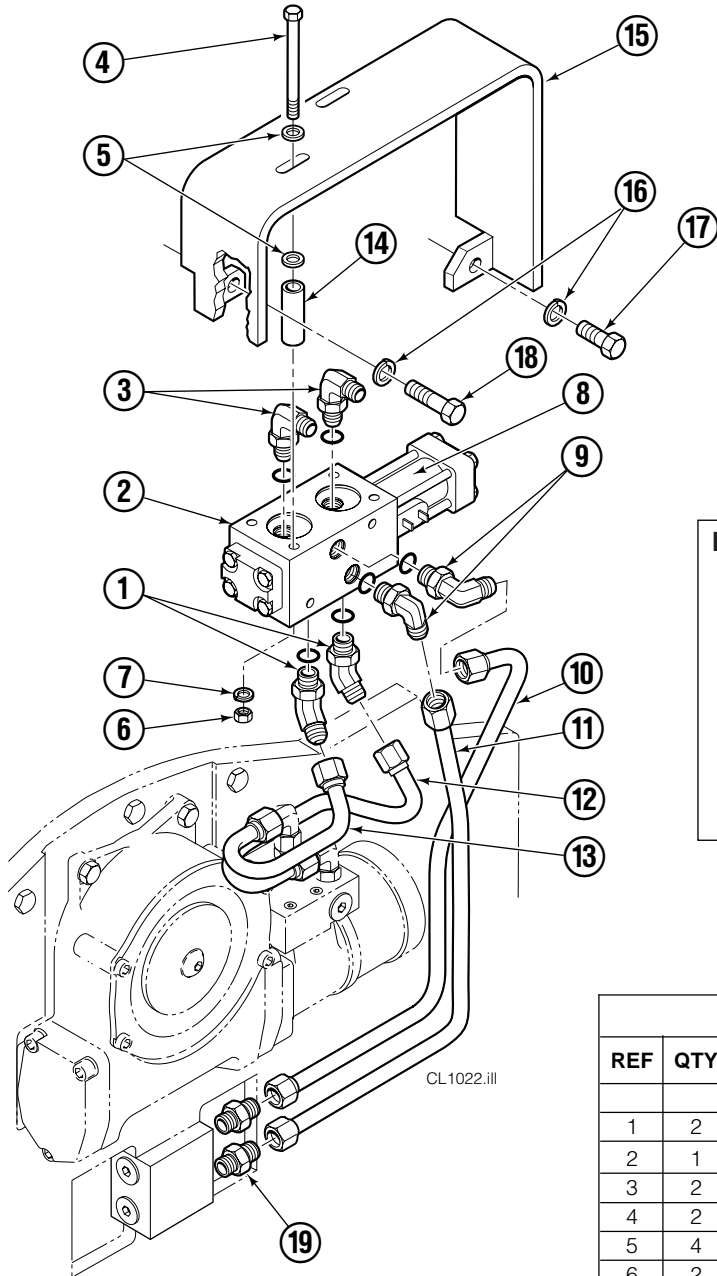
▲ Included in Service Kit 668021.

■ Included in Nut Service Kit 668926.

● Not included in Cylinder Assembly.

Reference: S-7605, S-7658

# Solenoid Adaption

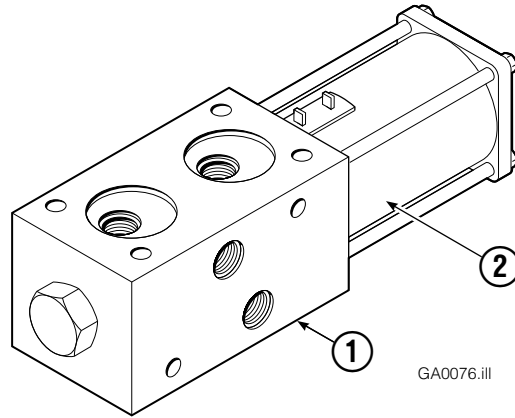


35D/50D			
REF	QTY	PART NO	DESCRIPTION
		687314	Solenoid Adaption Group
1	2	651302	Fitting
2	1	●	Solenoid Valve ▲
3	2	651303	Fitting
4	2	3592	Capscrew, 5/16 NC x 5.50
5	4	6229	Washer
6	2	15251	Nut
7	2	6287	Lockwasher
8	1	●	Coil
9	2	601676	Fitting
10	1	687312	Tube
11	1	687311	Tube
12	1	671516	Tube
13	1	671512	Tube
14	2	665115	Tube Spacer
15	1	675411	Guard
16	2	6290	Lockwasher
17	1	601854	Capscrew, 1/2 NC x 1.0
18	1	636408	Capscrew, 1/2 NC x 2.0
19	2	604511	Fitting
20	1	677573	Fuse Assembly (7.5 AMP)

● See Solenoid Valve & Coil page.

▲ Includes item 8.

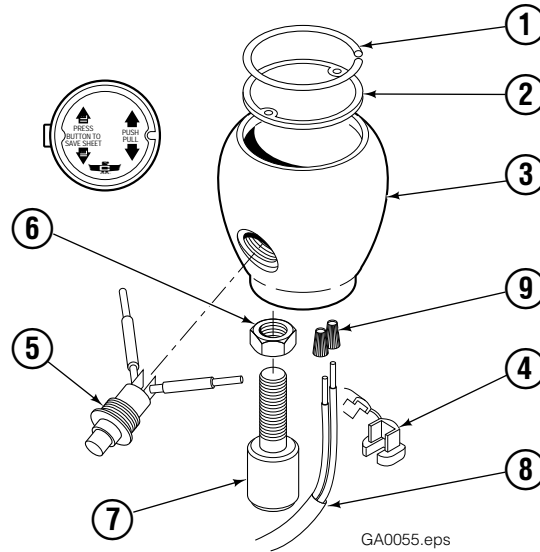
# Solenoid Valves



## Racine

REF	QTY	PART NO.	DESCRIPTION
1	1	614092	Solenoid Valve - 36V
2	1	665046	Coil - 36V
		685012	Service Kit

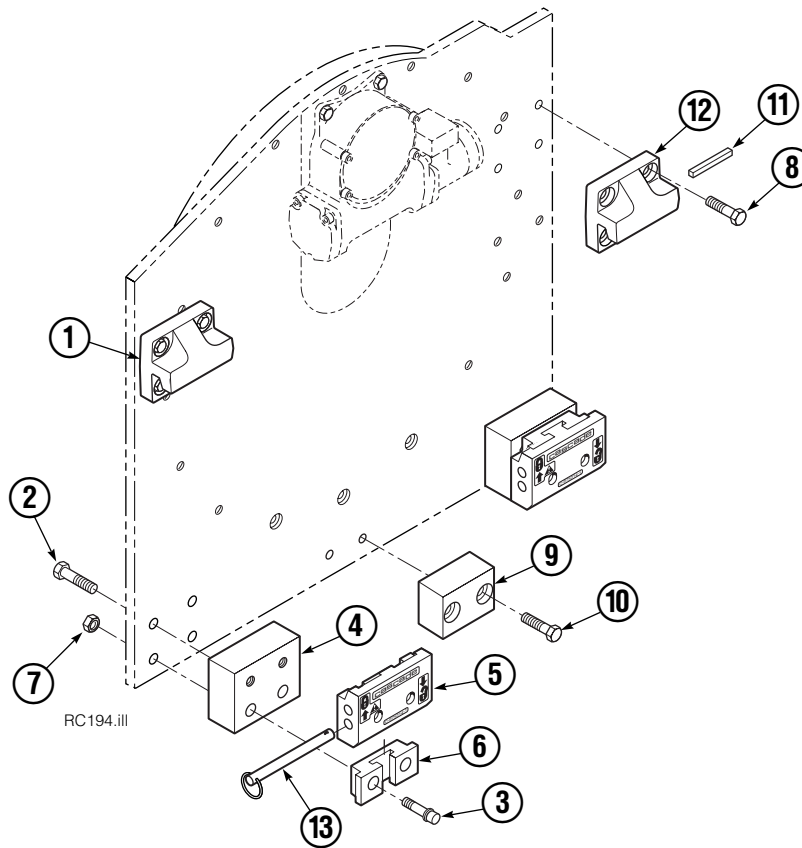
# Control Knob



REF	QTY	PART NO.	DESCRIPTION
		686479	Knob Group
1	1	665250	Snap Ring
2	1	686018	Cover
3	1	665012	Knob
4	1	665076	Strain Relief
5	1	677112	■ Switch
6	1	5902	Nut, 3/8 NC
7	1	665081	Adapter, 3/8"
8	1	665077	Cable Assembly
9	2	667752	Connector-Gray
10	1	672087	Adapter, 1/2"

- This switch may be purchased without wires.  
Order part number 665004. Soldering is required.

# Quick Change Mounting Group



Class II, 0°			
REF	QTY	PART NO.	DESCRIPTION
		680686	Mounting Group
1	1	670523	Upper Hook – LH
2	4	3709	Capscrew, 5/8 NC x 1.50
3	4	679827	Capscrew, 5/8 NC x 3.75
4	2	676037	Spacer
5	2	675514	Lower Hook
6	2	675515	Guide
7	4	676281	Nut, 5/8
8	8	667765	Capscrew, 5/8 NC x 1.50
9	1	680683	Center Spacer
10	2	677828	Capscrew, 1/2 NC x 1.00
11	1	669344	Stop Kit
12	1	670524	Upper Hook – RH
13	2	678832	Pin

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

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