

PARTS MANUAL

40D Revolving Clamp

***This manual contains standard production
Serial Numbers***

209614, 209615, 209616, 209617

Special Engineered Options are not included.

Manual Number 220646

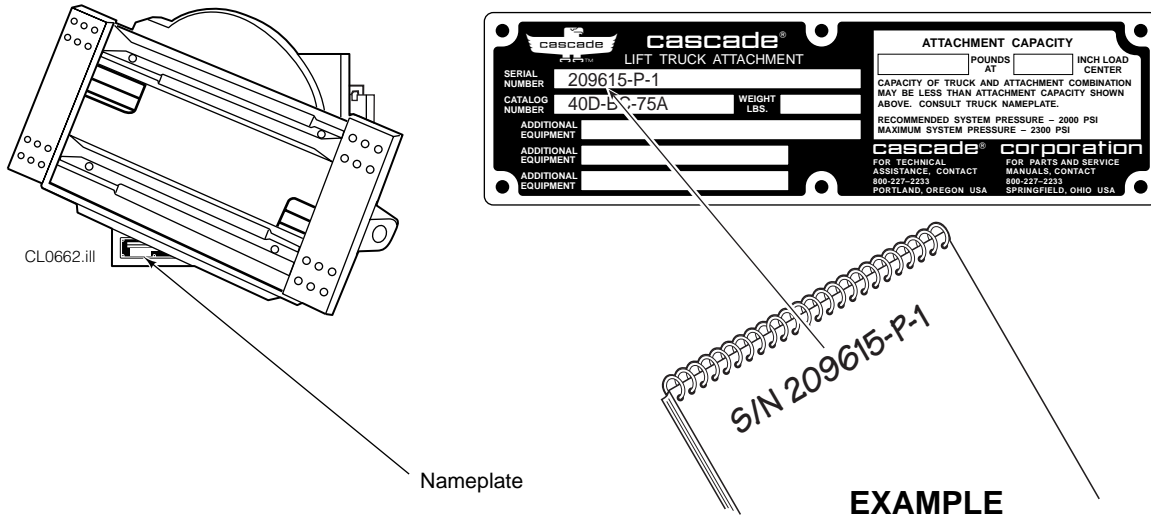
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About This Manual

Introduction

This manual shows the parts breakdown for standard production Cascade D-Series Clamps. Locate the nameplate attached to the lower right front face of the baseplate. If the nameplate is missing, all necessary information is stamped into the frame at the same location. This number must be used when ordering replacement parts for this product.



Ordering Parts

Customers – Cascade parts and service literature is available through authorized lift truck dealers. To place an order, contact the lift truck dealer of your choice.

Lift Truck Dealers – To order parts and service literature contact:

Cascade Parts Sales
2501 Sheridan Avenue
Springfield, OH 45505
Telephone: 888-CASCADE (227-2233)
FAX: 888-329-0234

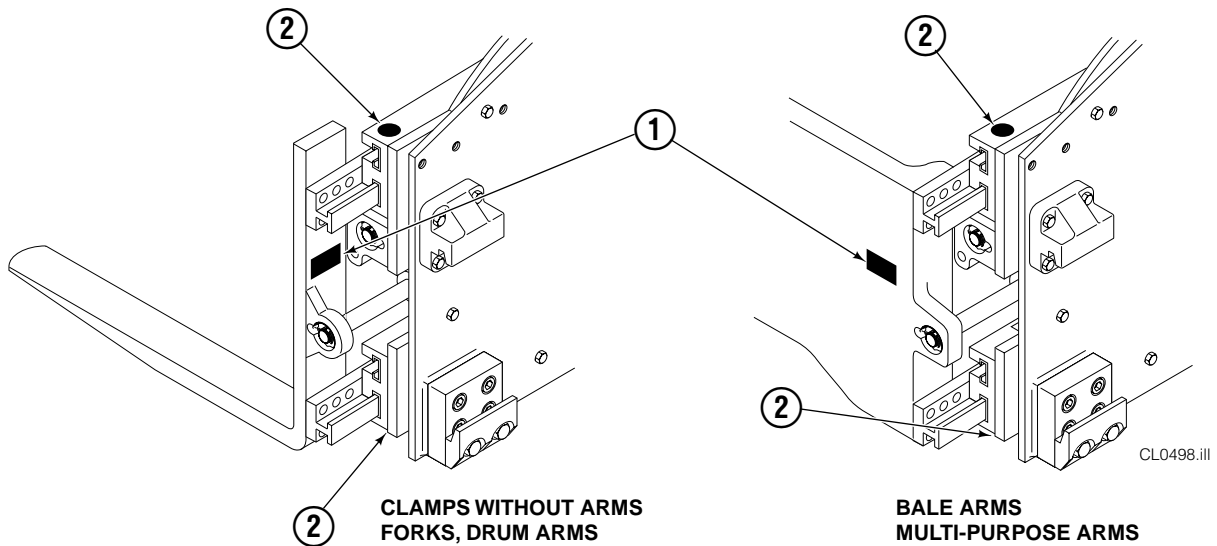


WARNING: For safety of yourself and others, DO NOT install the parts shown in this manual unless you have thoroughly reviewed the appropriate Service Manual.

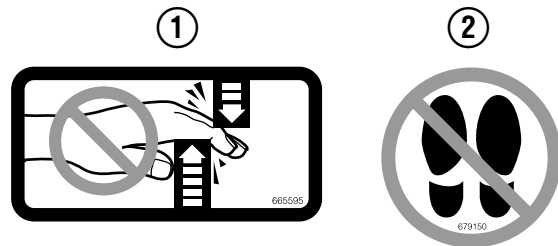
Serial Number Index

Serial Number	Model	Clamp Components Page	Cylinder Page	Revolving Connection Page	Rotator Group Page	Drive Group Page	Arm Group Page	Mounting Group Page
209614	40D	1	2	3	4	5	8	9
209615	40D	1	2	3	4	5	8	9
209616	40D	1	2	3	4	5	8	10
209617	40D	1	2	3	4	5	8	10

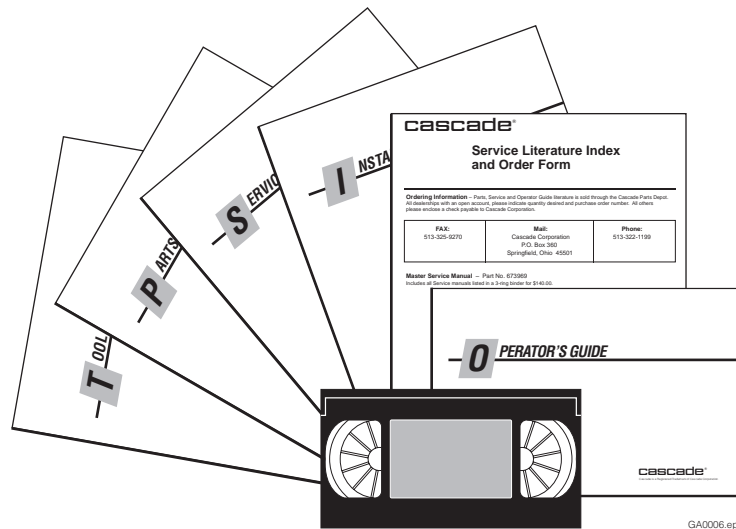
Safety Decals



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

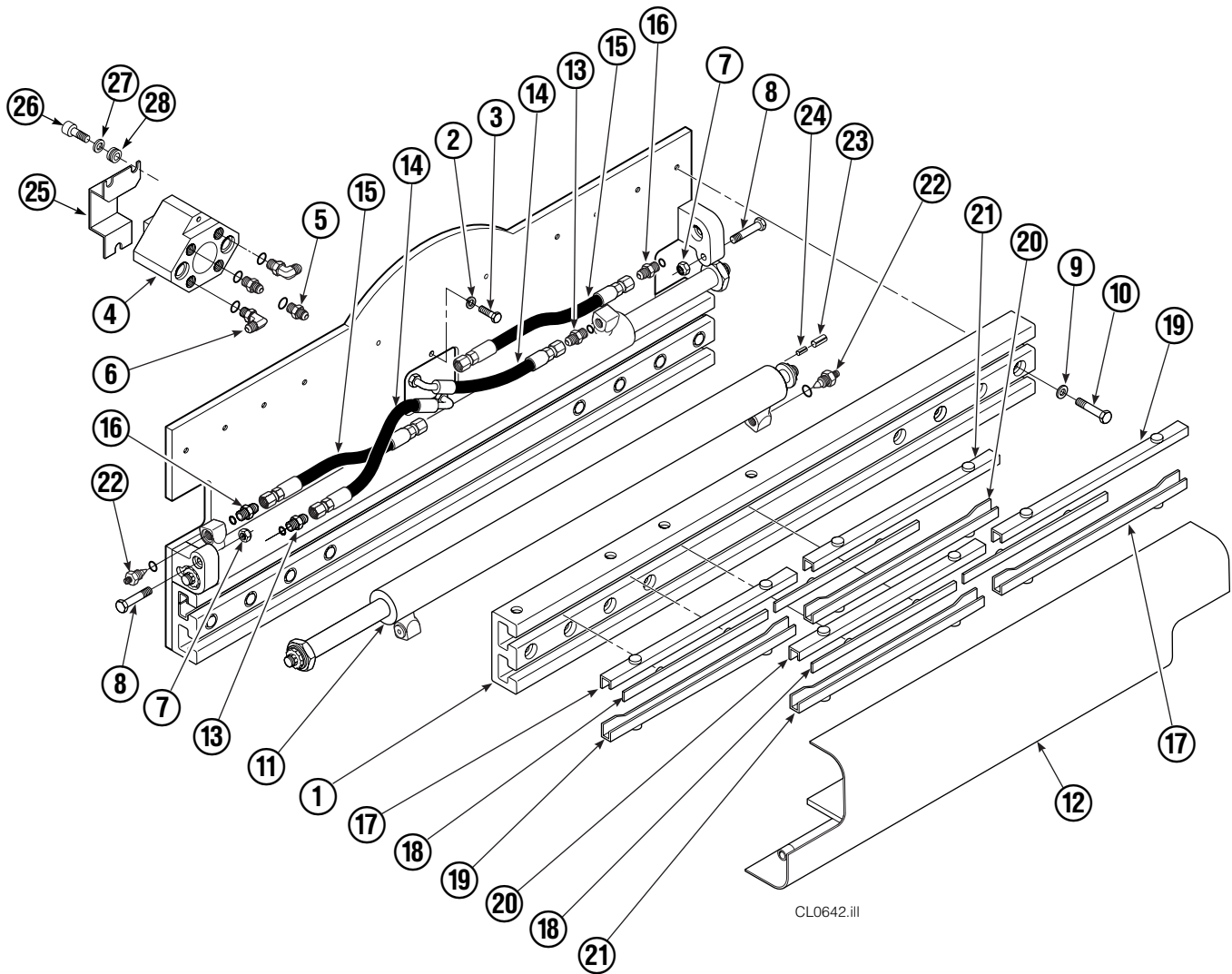


Publications



PART NO.	DESCRIPTION
220646	Parts Manual
672362	Service Manual
672903	Operators Guide
672361	Installation Instructions
680664	Servicing Cascade Cylinders-VHS
679929	Tool Catalog
673964	Literature Index Order Form

Clamp Components



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40D							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		209445	Frame Group	15	2	678027	Hose
1	2	207325	Frame	16	2	686369	Fitting
2	2	686119	Lockwasher, M8	17	4	671852	Bearing
3	2	765352	Capscrew, M8 x 30	18	4	667663	Bearing
4	1	686420	Revolving Connection ■	19	4	671851	Bearing
5	2	604511	Fitting, 6-6	20	4	671854	Bearing
6	2	601676	Fitting, 6-6	21	4	671853	Bearing
7	2	665707	Nut, 1/2 in. ID	22	2	667609	Restrictor Cartridge ●
8	2	640699	Capscrew, 1/2 NC x 2.75	23	2	7961	Roll Pin - Outer
9	16	667225	Washer, 5/8 in. ID	24	2	7882	Roll Pin - Inner
10	16	667644	Capscrew, 5/8 NC x 3.25	25	1	209067	End Block Bracket
11	2	207317	Cylinder ▲	26	3	665992	Shoulder Bolt
12	1	207318	Bumper	27	3	209021	Washer, M10
13	2	611288	Fitting, 6-8	28	3	208765	Grommet
14	2	631443	Hose				

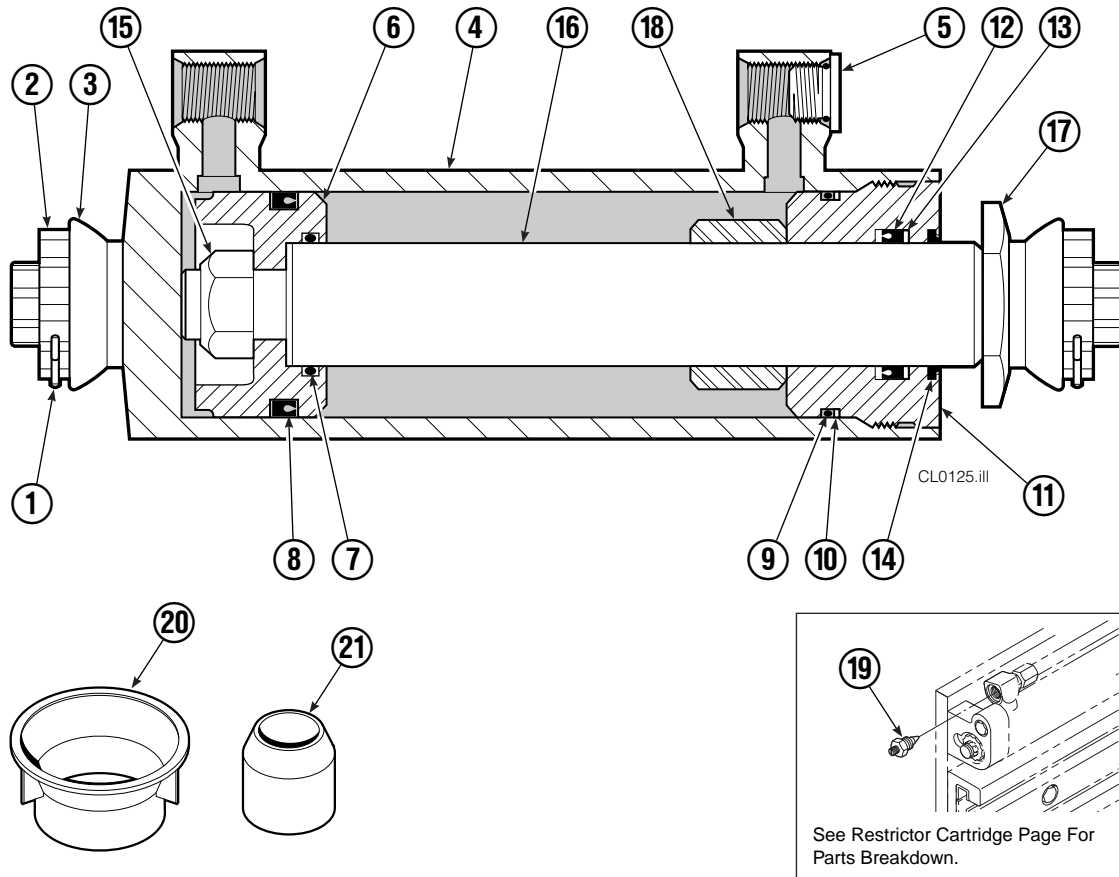
■ See Revolving Connection page for parts breakdown.

▲ See Cylinder page for parts breakdown.

● See Restrictor Cartridge page for parts breakdown.

Reference: SK-5659.

Cylinder



40D			
REF	QTY	PART NO.	DESCRIPTION
		207317	Cylinder Assembly
1	2	6511	Cotter Pin ■
2	2	667667	Nut Retainer ■
3	2	667668	Nut ■
4	1	564194	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	628047	Wiper ▲
15	1	561012	Nut
16	1	654195	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

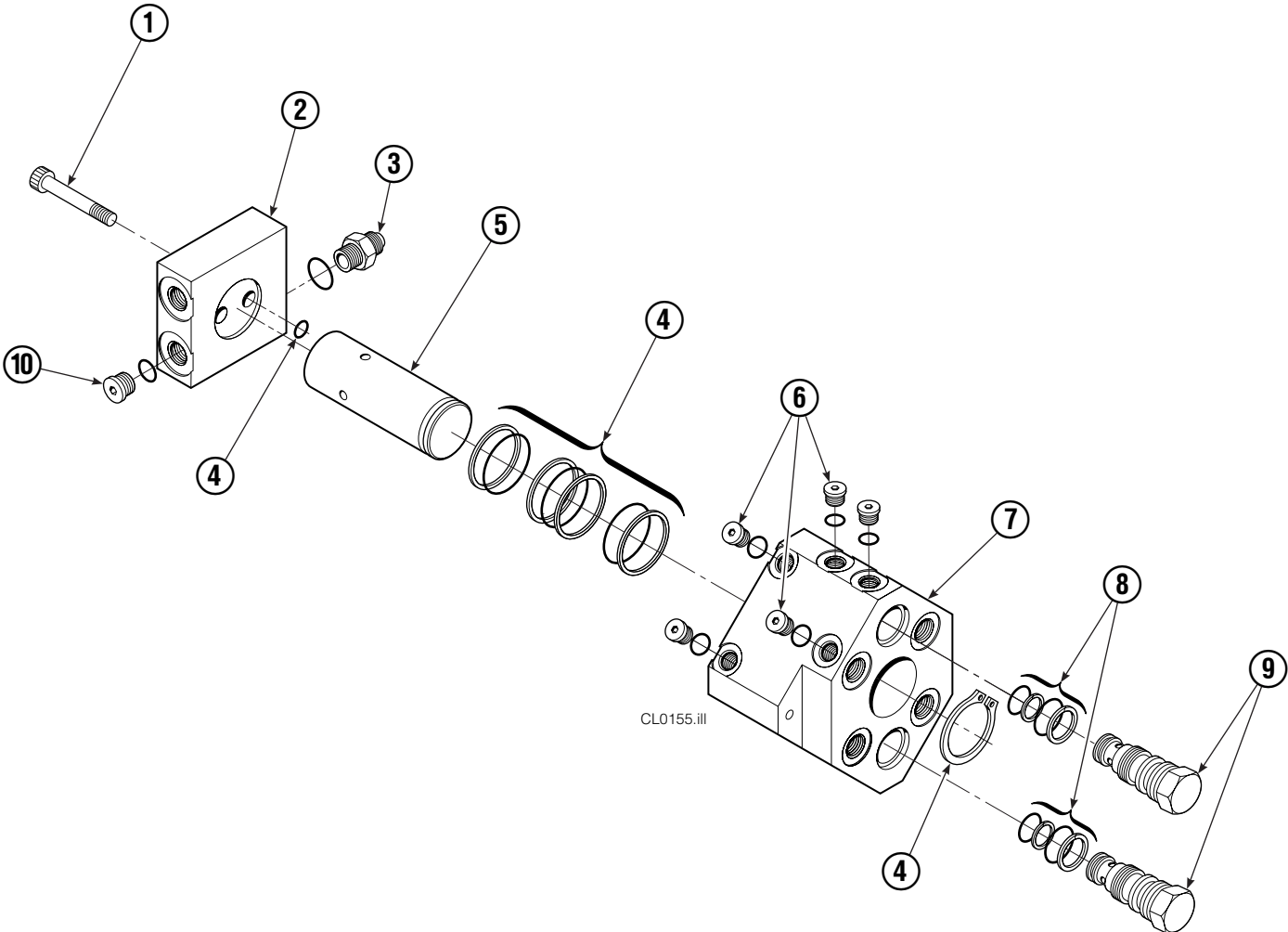
▲ Included in Service Kit 667723.

■ Included in Nut Service Kit 668925.

● Not included in Cylinder Assembly.

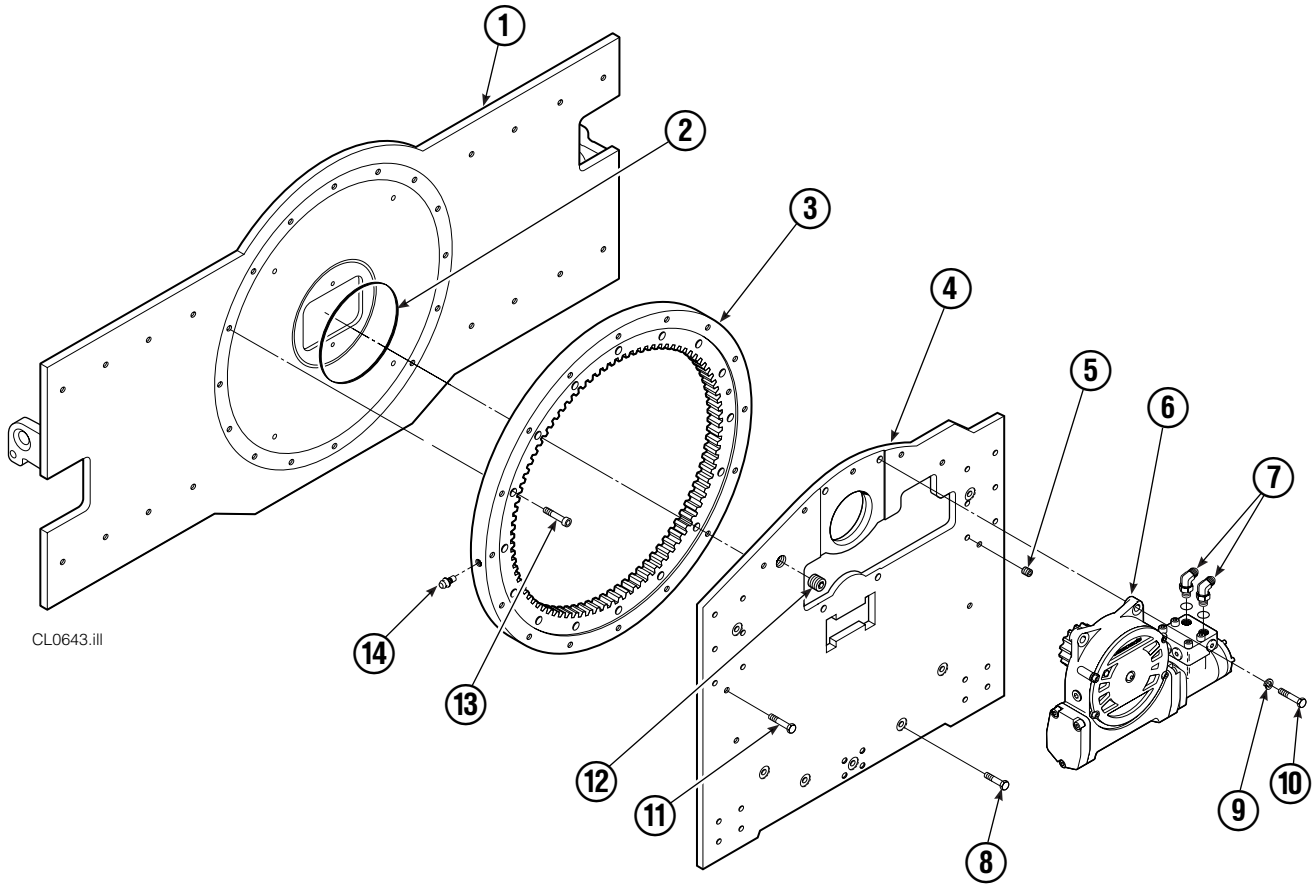
Reference: S-7666.

Revolving Connection



40D			
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

Rotator Group



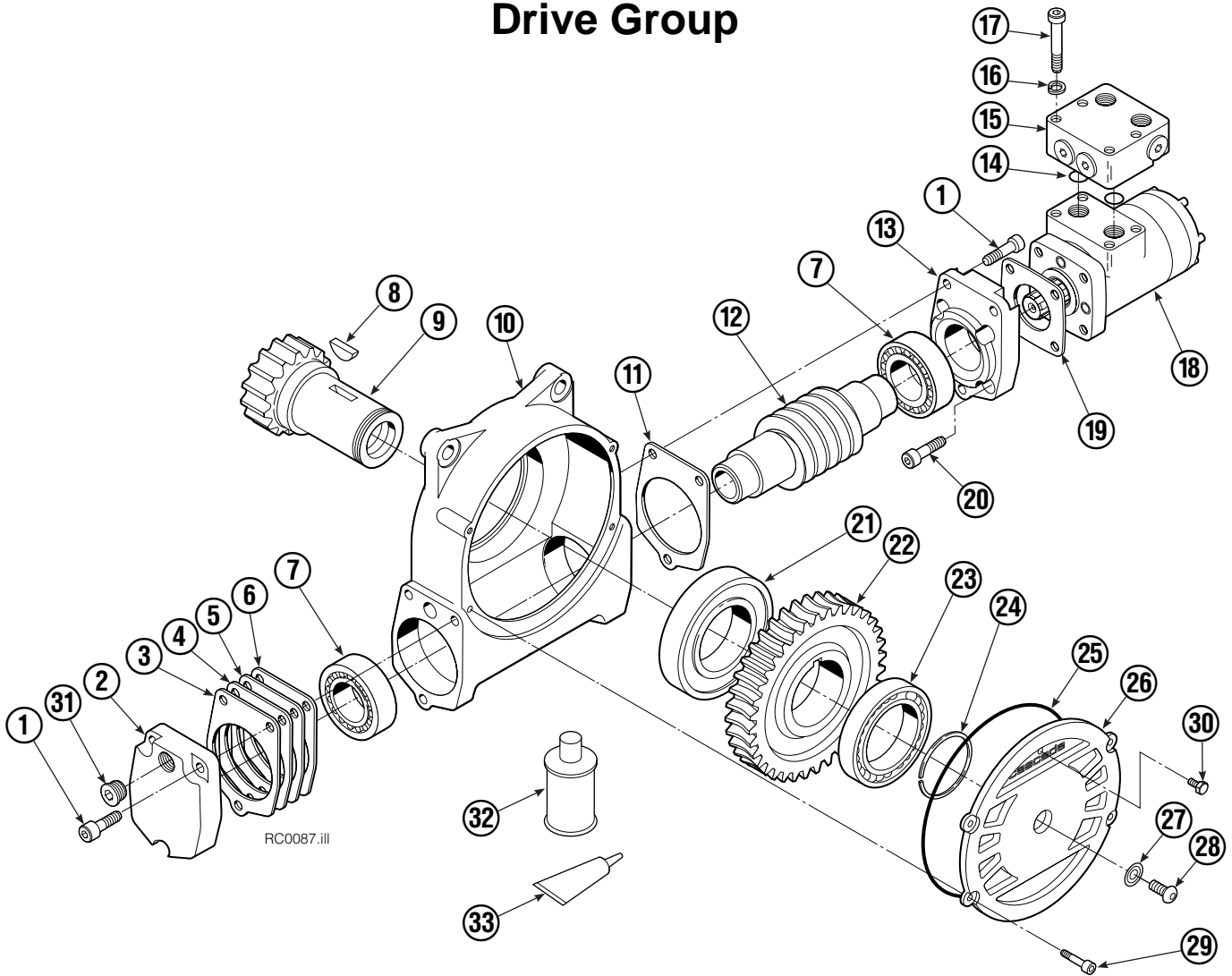
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40D			
REF	QTY	PART NO.	DESCRIPTION
		207389	Rotator Group
1	1	207387	Faceplate
2	1	670931	Seal
3	1	672828	Bearing Assembly
4	1	687229	Baseplate
5	6	631385	Plug
6	1	675628	Drive Group ▲
7	2	611303	Fitting, 8-8
8	7	643538	Capscrew, 1/2 NC x 1.50 GR8
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

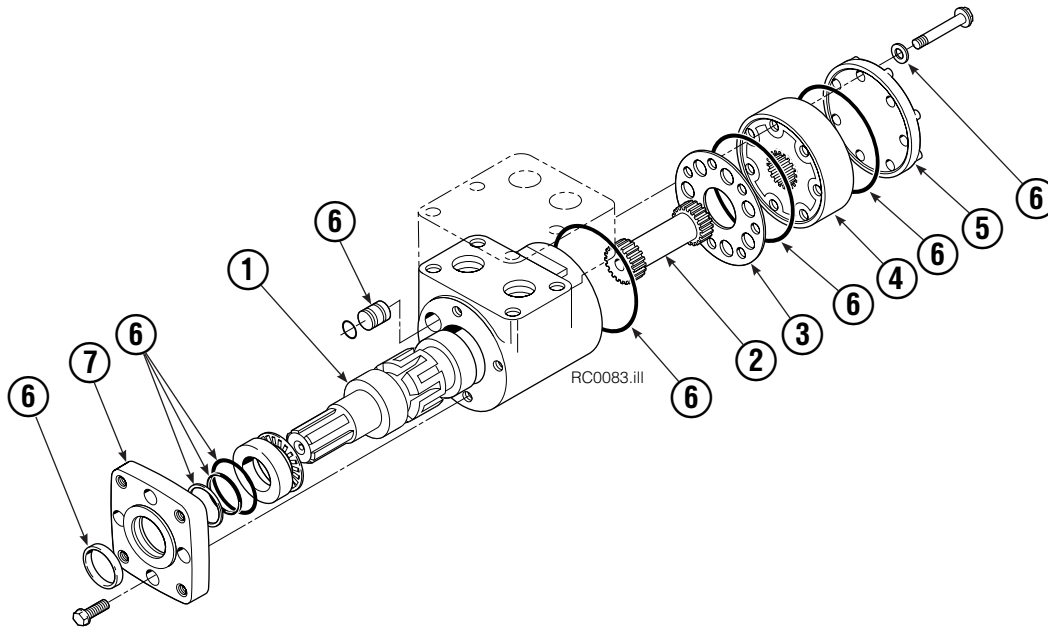


40D							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		675628	Drive Group with Motor	19	1	670575	Gasket
	■	675631	Drive Group without Motor	20	4	4468	Capscrew, 3/8 NC x .75 GR8
1	6	607061	Capscrew	21	1	670580	Bearing
2	1	676855	Cover	22	1	675609	Worm Gear
3	●	674513	Shim – .005 in. (blue)	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

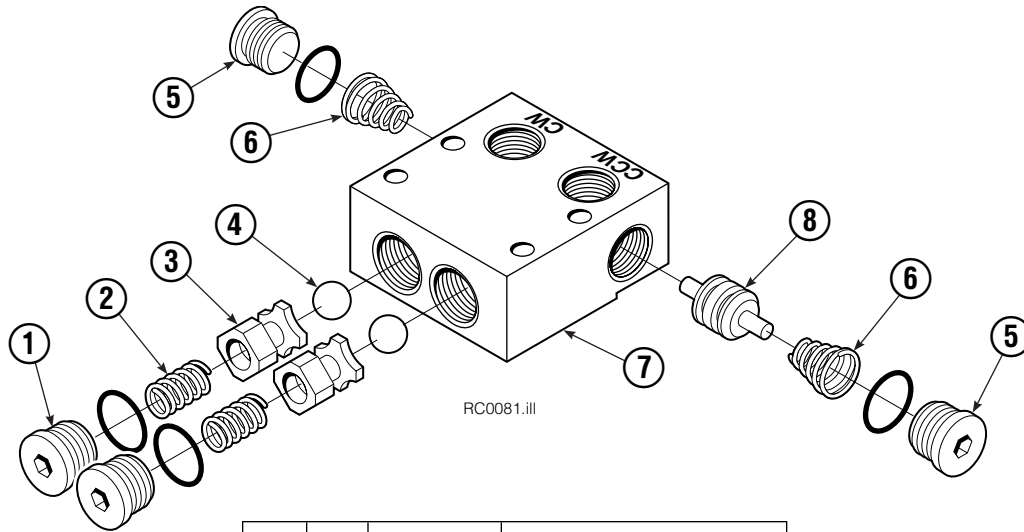


40D			
REF	QTY	PART NO.	DESCRIPTION
		206392	Drive Motor
1	1	675478	Shaft
2	1	675477	Drive
3	1	675479	Spacer Plate
■ 4	1	675480	Gerotor Set (101-1768-007)
■ 4	1	685075	Gerotor Set (101-1768-009)
5	1	675482	End Cap
● 6	1	206405	Service Kit
■ 7	1	685089	Flange (101-1768-007)
■ 7	1	685090	Flange (101-1768-009)

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.

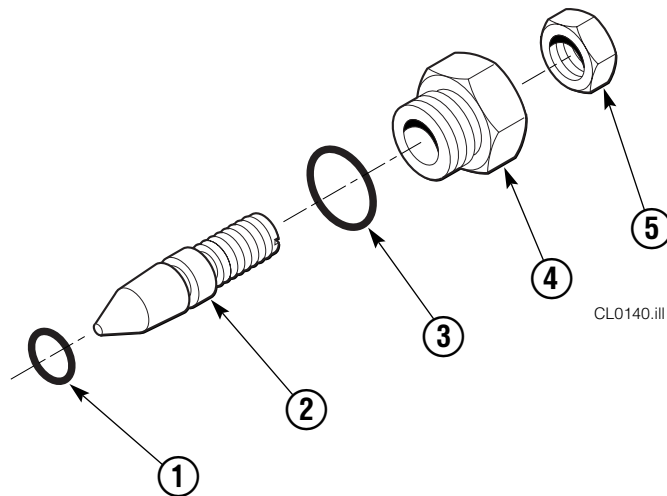
- See Nameplate under valve for correct part number of Gerotor Set and Flange.
- Compatible with water glycol based hydraulic fluids.

Check Valve



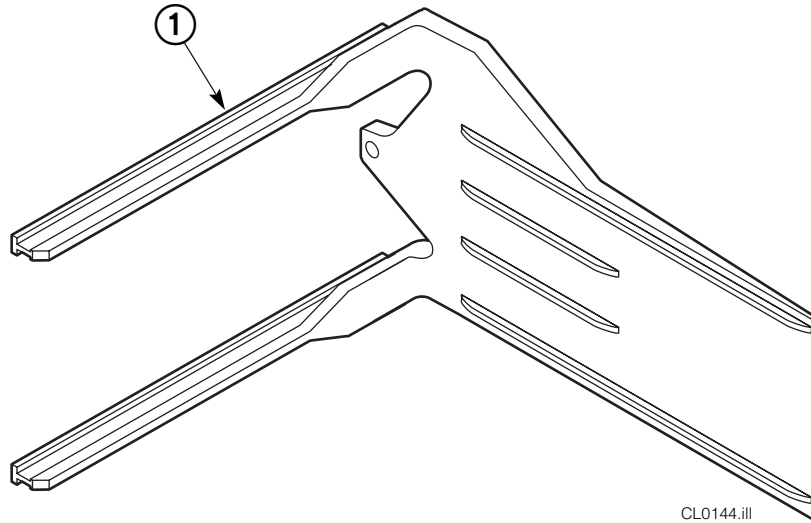
REF	QTY	PART NO.	DESCRIPTION
		670549	Check Valve Assembly
1	2	609453	Fitting, 10
2	2	670552	Spring
3	2	670551	Guide
4	2	7020	Ball
5	2	602580	Fitting, 8
6	2	673989	Spring
7	1	670550	Body
8	1	670553	Spool

Restrictor Cartridge



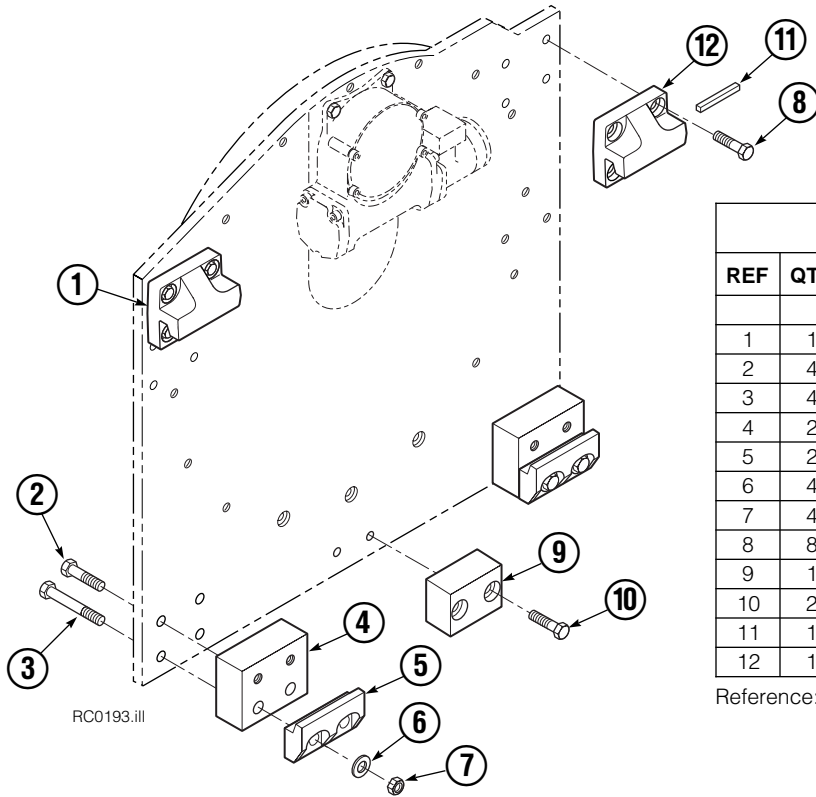
REF	QTY	PART NO.	DESCRIPTION
		667609	Restrictor Cartridge
1	1	2701	O-Ring
2	1	667611	Plunger
3	1	2841	O-Ring
4	1	667610	Plug – Special
5	1	5716	Jam Nut

Bale Arm Assembly



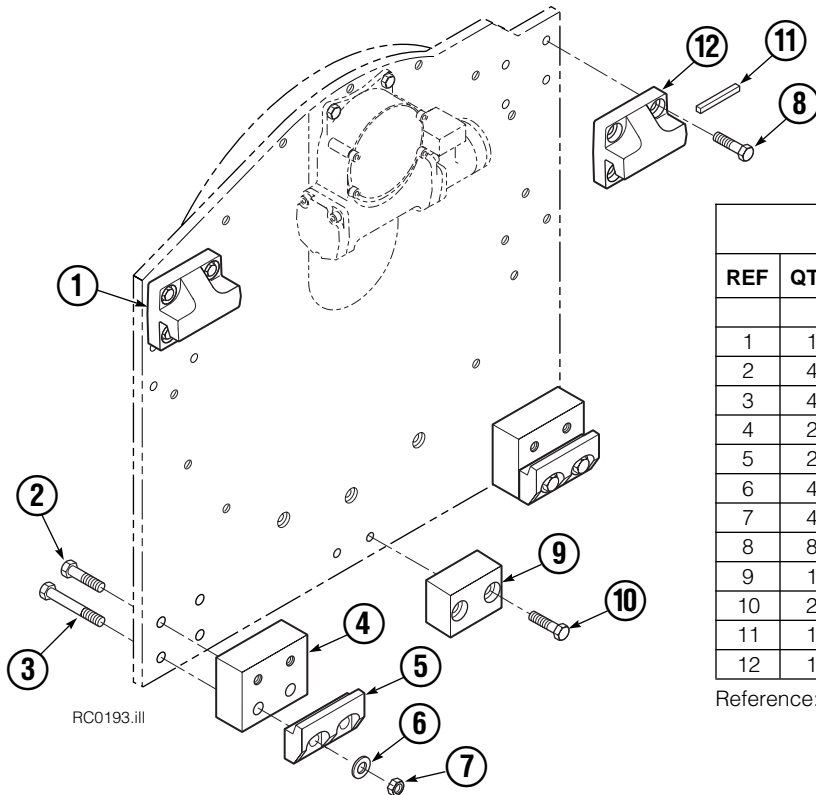
40D			
REF	QTY	PART NO.	DESCRIPTION
		207320	Bale Arm Assembly
1	1	207321	Arm Weldment – LH
1	1	207344	Arm Weldment – RH

Bolt-On Mounting Group



40D, Class II, 4°			
REF	QTY	PART NO.	DESCRIPTION
		680629	Mounting Group
1	1	670523	Upper Hook – LH
2	4	3708	Capscrew, 5/8 NC x 1.25
3	4	640299	Capscrew, 5/8 NC x 2.75
4	2	676036	Spacer
5	2	675968	Lower Hook
6	4	667225	Washer
7	4	676281	Nut, 5/8 in. ID
8	8	667765	Capscrew, 5/8 NC x 1.50
9	1	680681	Center Spacer
10	2	680684	Capscrew, 1/2 NC x .75
11	1	669344	Stop Kit
12	1	670524	Upper Hook – RH

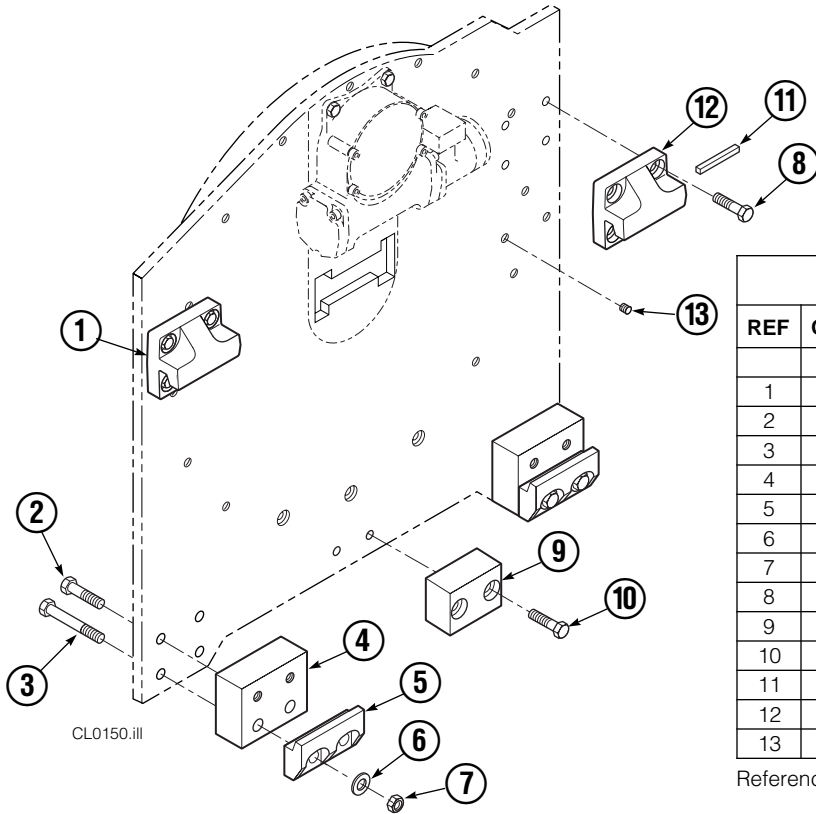
Reference: SK-5649.



40D, Class II, 0°			
REF	QTY	PART NO.	DESCRIPTION
		680630	Mounting Group
1	1	670523	Upper Hook – LH
2	4	3709	Capscrew, 5/8 NC x 1.50
3	4	674261	Capscrew, 5/8 NC x 3.75
4	2	676037	Spacer
5	2	675968	Lower Hook
6	4	667225	Washer
7	4	676281	Nut, 5/8 in. ID
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

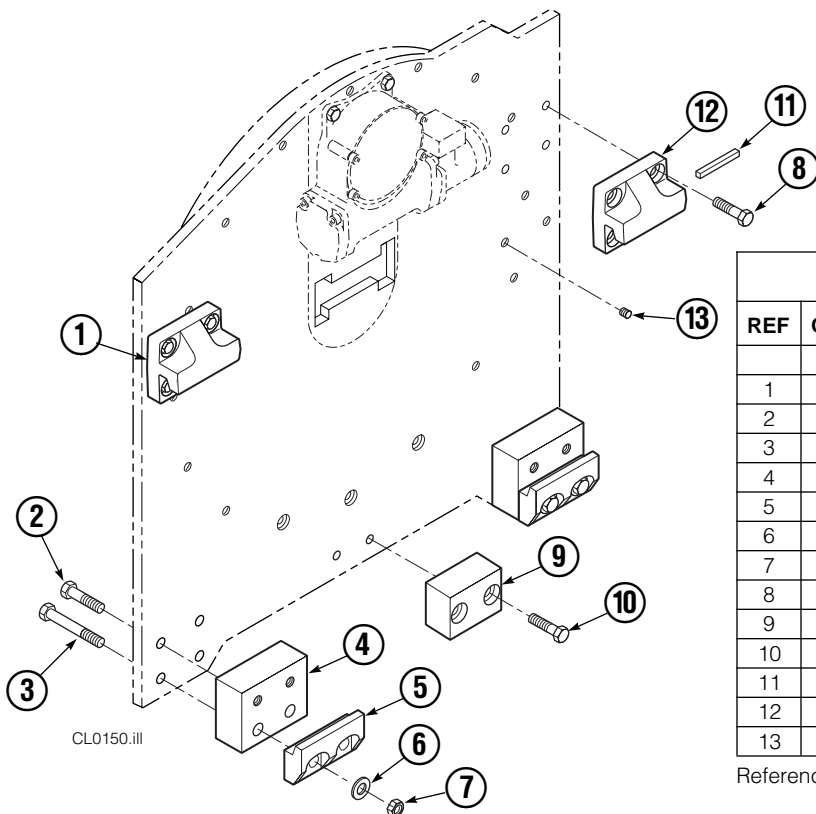
Reference: SK-5649.

Bolt-On Mounting Group



40D, Class III, 4°			
REF	QTY	PART NO.	DESCRIPTION
		680631	Mounting Group
1	1	670527	Upper Hook – LH
2	4	3709	Capscrew, 5/8 NC x 1.50
3	4	674261	Capscrew, 5/8 NC x 3.75
4	2	676037	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	680683	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

Reference: SK-5649.



40D, 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

Reference: SK-5649.

Recommended Spare Parts List

40D Revolving Clamp				
PART NO.	DESCRIPTION	ATTACHMENTS SERVICED		
		1-5	6-19	20-50
DRIVE GROUP				
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
206405	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
FRAME AND HYDRAULICS				
631443	Hose	0	1	2
678027	Hose	0	1	2
207325	Frame	0	1	2
207318	Bumper	0	0	1
667663	Bearing	4	8	12
671851	Bearing	4	8	12
671852	Bearing	4	8	12
671853	Bearing	4	8	12
671854	Bearing	4	8	12
599489	Graphite Lubricant, 16 oz. Aerosol	2	4	6
CYLINDER				
207317	Cylinder Assembly	0	0	1
564194	Shell	0	0	1
558402	Piston	0	0	2
667675	Retainer	0	0	2
654195	Rod	0	1	2
667723	Cylinder Service Kit	0	2	4
CHECK VALVE				
670549	Check Valve Assembly	0	1	1
REVOLVING CONNECTION				
687237	Shaft Service Kit	1	1	1
667516	Check Valve Service Kit	2	4	4
PAINT				
685660	12 oz. Aerosol Can – Heritage White	1	1	1
209845	12 oz. Aerosol Can – Gray	1	1	1
PUBLICATIONS				
220646	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
677553	Driver Training Video	1	1	1

■ See specific parts page for part number.

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

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