



Parts Manual

Model 60G Roll Clamp

Serial Number 60G-RC-251

cascade[®]

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

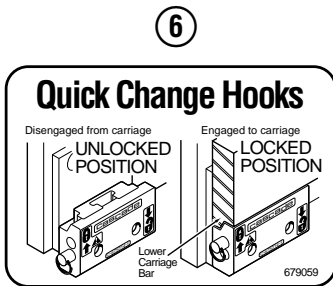
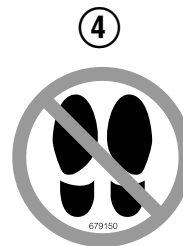
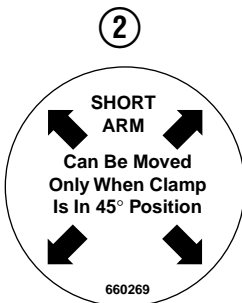
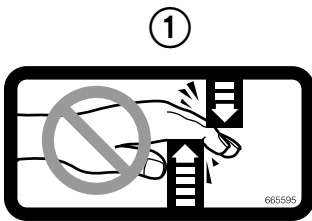
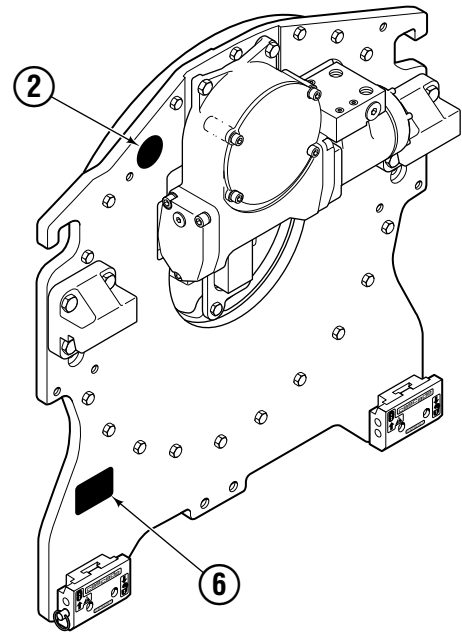
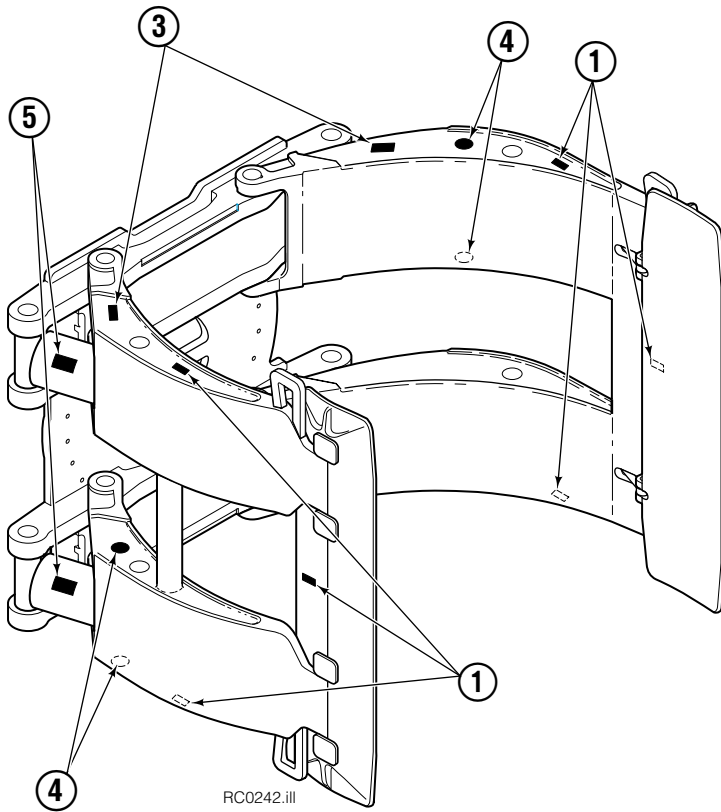
To Order Parts call: 888-227-2233, Fax: 888-329-0234

OR

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

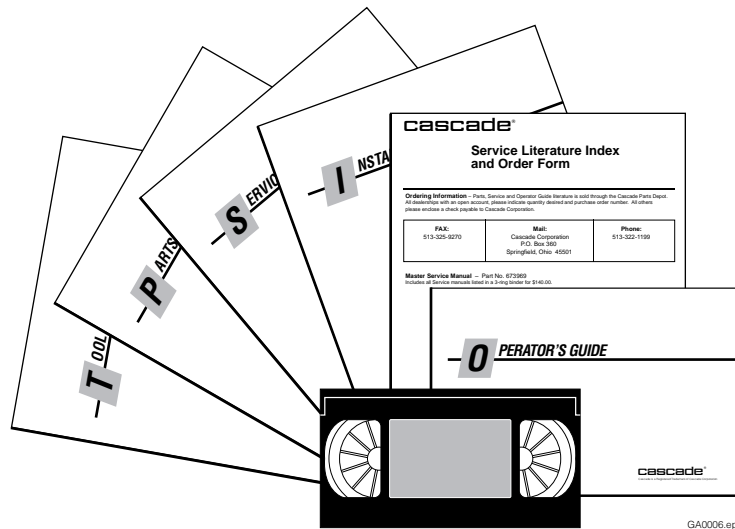
Internet: www.cascorp.com

Decals



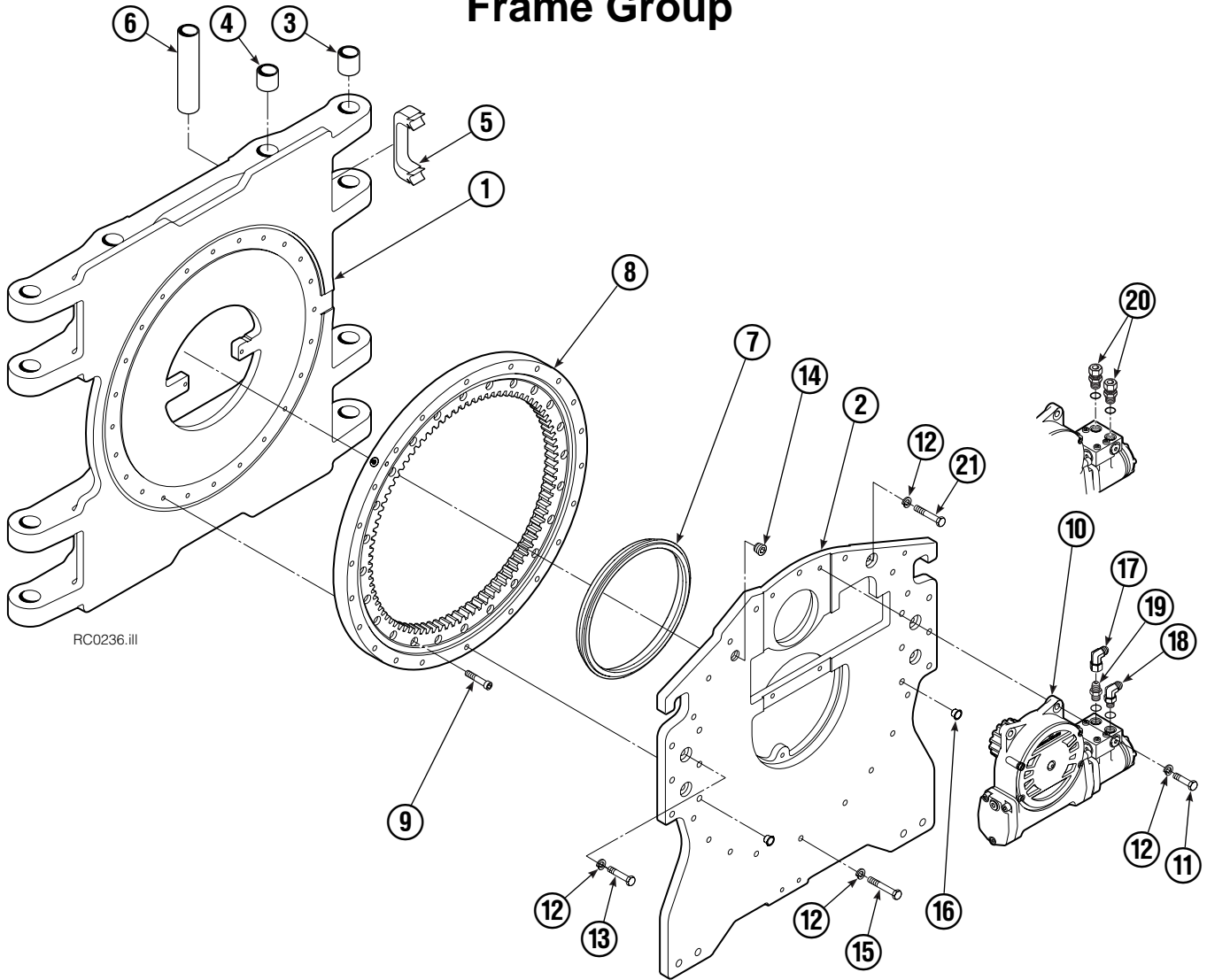
60G			
REF	QTY	PART NO.	DESCRIPTION
1	6	665595	No Hand Hold Decal
2	1	660269	Short Arm Rotation Position Decal
3	4	656038	Caution Decal
4	4	679150	No Step Decal
5	4	665677	Trapped Pressure Decal
6	1	679059	Quick-Change Hook Decal

Publications



60G	
PART NO.	DESCRIPTION
	Parts Manual
213744	Service Manual
210135	Operator's Guide
212420	Installation Instructions - Fixed Frame
677555	Driver Training Video - VHS
678363	Troubleshooting Video - VHS
680664	Servicing Cascade Cylinders - VHS
679929	Tool Catalog
673964	Literature Index Order Form

Frame Group



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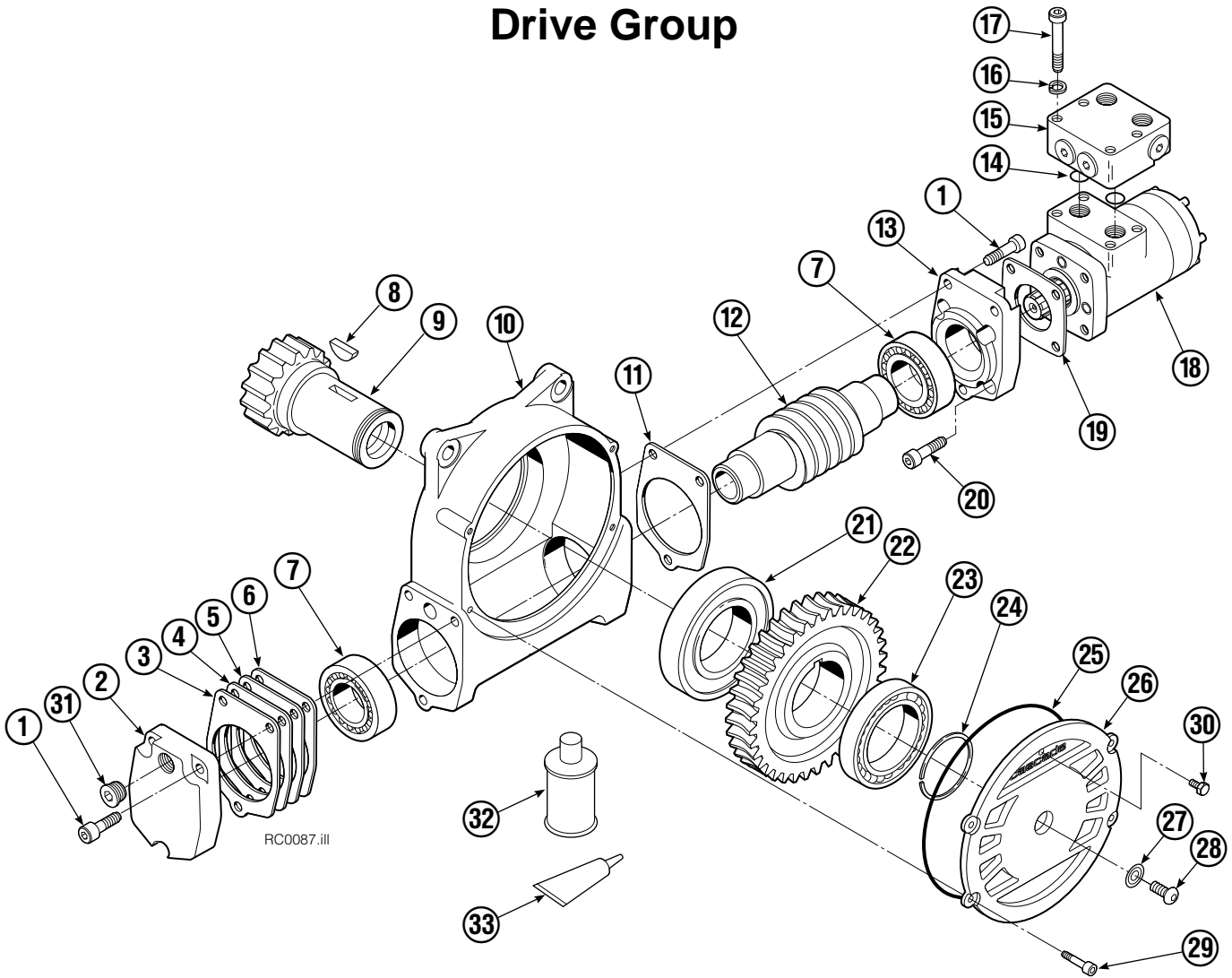
60G

REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		213801	Frame Group w/o Stop – 51 in. ▲	13	4	206174	Capscrew, M12 x 45
		213805	Frame Group w/o Stop – 60 in. ▲	14	1	6605	Fitting, 3/4 in.
		213807	Frame Group w/o Stop – 72 in. ▲	15	18	213633	Capscrew, M12 x 55
1	1	213802	Frame w/o Stop – 51 in.	16	2	631428	Plug
	1	213806	Frame w/o Stop – 60 in.	17	1	605761	Fitting, 8-8 SAE
	1	213808	Frame w/o Stop – 72 in.	18	1	601250	Fitting, 8-8 SAE
2	1	209940	Baseplate w/o Stop	19	1	601377	Fitting, 8-8 SAE
3	8	211718	Bearing		2	765492	Fitting, 8 SAE – M10 L-Series
4	8	211717	Bearing	20	2	765493	Fitting, 8 SAE – M12 L-Series
5	4	211712	Hose Guard		2	756920	Fitting, 8 SAE – M12 S-Series
6	4	209987	Spacer	21	1	209684	Capscrew, M12 x 50
7	1	209944	Seal			212905	Bearing Service Kit (items 3, 4, 6)
8	1	213761	Bearing Assembly			212907	Pin Service Kit (items 4, 6)
9	24	767596	Capscrew, M12 x 40			212908	Pin Service Kit (items 3)
10	1	212308	Drive Group – 2.2 c.i. Motor ●			212914	Bearing Service Kit (items 8,9,12,13,15,21)
	1	795491	Drive Group – 2.8 c.i. Motor ●			212917	Drive Group Kit – 2.2 (items 10,11,12)
11	4	211689	Capscrew, M12 x 30			212918	Drive Group Kit – 2.8 (items 10,11,12)
12	26	683822	Lockwasher, M12				

- ▲ Maximum roll handling capacity.
- See Drive Group page for parts breakdown.

Reference: Common Parts Group 211975, 213762 & 215015.
 Baseplate Group 213763 & 213765.
 Fitting Group 212367.
 S-4506, S-4165, S-4188, S-4189.

Drive Group

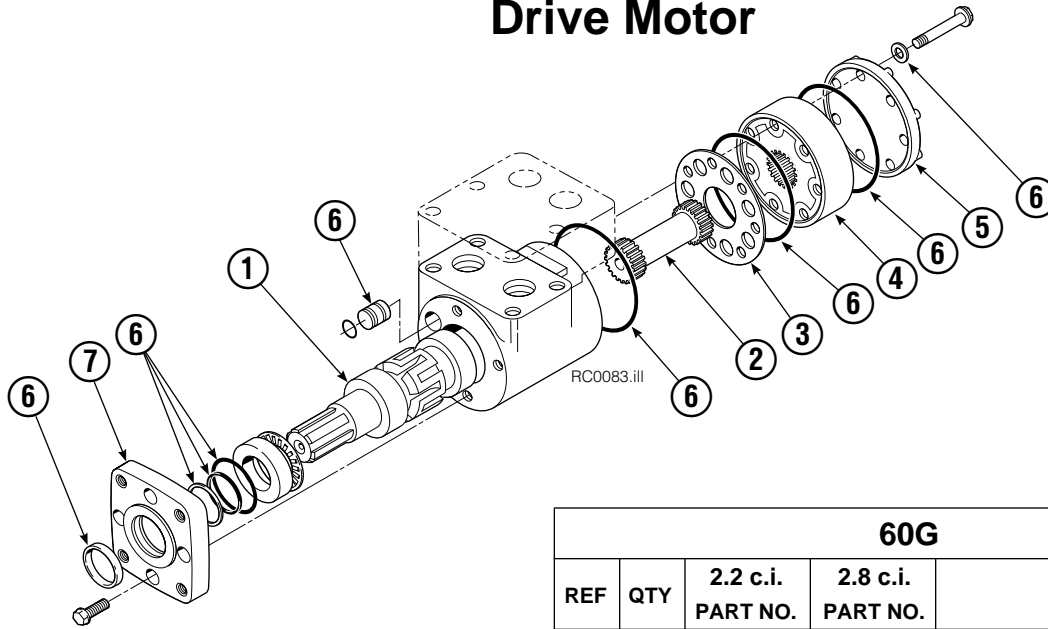


60G							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		212308	Drive Group with 2.2 c.i. Motor	19	1	670575	Gasket
		795491	Drive Group with 2.8 c.i. Motor	20	4	4468	Capscrew, 3/8 NC x .75 GR8
1	6	768826	Capscrew, M12 x 25	21	1	670580	Bearing
2	1	795258	Cover	22	1	675609	Worm Gear
3	●	674513	Shim - .005" (blue)	23	1	670581	Bearing
4	●	670574	Shim - .010" (brown)	24	1	7214	Snap Ring
5	●	671757	Shim - .015" (pink)	25	1	204970	Gasket
6	●	671758	Shim - .020" (yellow)	26	1	775552	Cover
7	2	670579	Bearing	27	1	783609	Seal
8	1	670582	Key	28	1	783608	Capscrew, M12 x 16
9	1	670506	Pinion	29	4	775639	Capscrew, M8 x 20
10	1	775551	Housing	30	1	644010	Relief Fitting
11	1	686465	Gasket	31	1	602580	Fitting, 8
12	1	675608	Worm	32	1	656300	Gear Box Lube - 48 oz.
13	1	775553	Adapter	33	1	668184	Sealant
14	2	2705	O-Ring			670578	Shim Service Kit (items 3-6,11,25,33)
15	1	670549	Check Valve			675637	Bearing Service Kit (items 21 & 33)
16	4	6444	Lockwasher			675638	Bearing Service Kit (items 3-7,11,25)
17	4	607059	Capscrew, 5/16 NC x 1.75 GR8			212919	Motor Kit-2.2 (items 11,14,18,19,20,33)
18	1	210139	Drive Motor - 2.2 c.i. ▲			206394	Motor Kit-2.8 (items 11,14,18,19,20,33)
18	1	206392	Drive Motor - 2.8 c.i. ▲				

● Quantity as required.

▲ See Drive Motor page for parts breakdown.

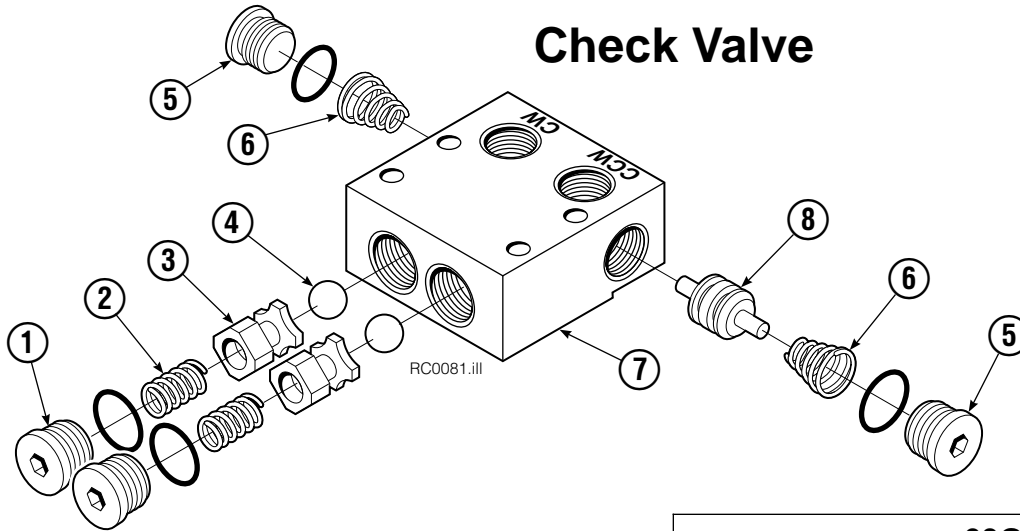
Drive Motor



60G				
REF	QTY	2.2 c.i. PART NO.	2.8 c.i. PART NO.	DESCRIPTION
		210139	206392	Drive Motor
1	1	675478	675478	Shaft
2	1	675477	675477	Drive Link
3	1	211528	675479	Spacer Plate
4	1	210137	675480	Geroler/Gerotor Set
5	1	211527	675482	End Cap
6	1	206405	206405	Service Kit ●
7	1	685090	685090	Flange

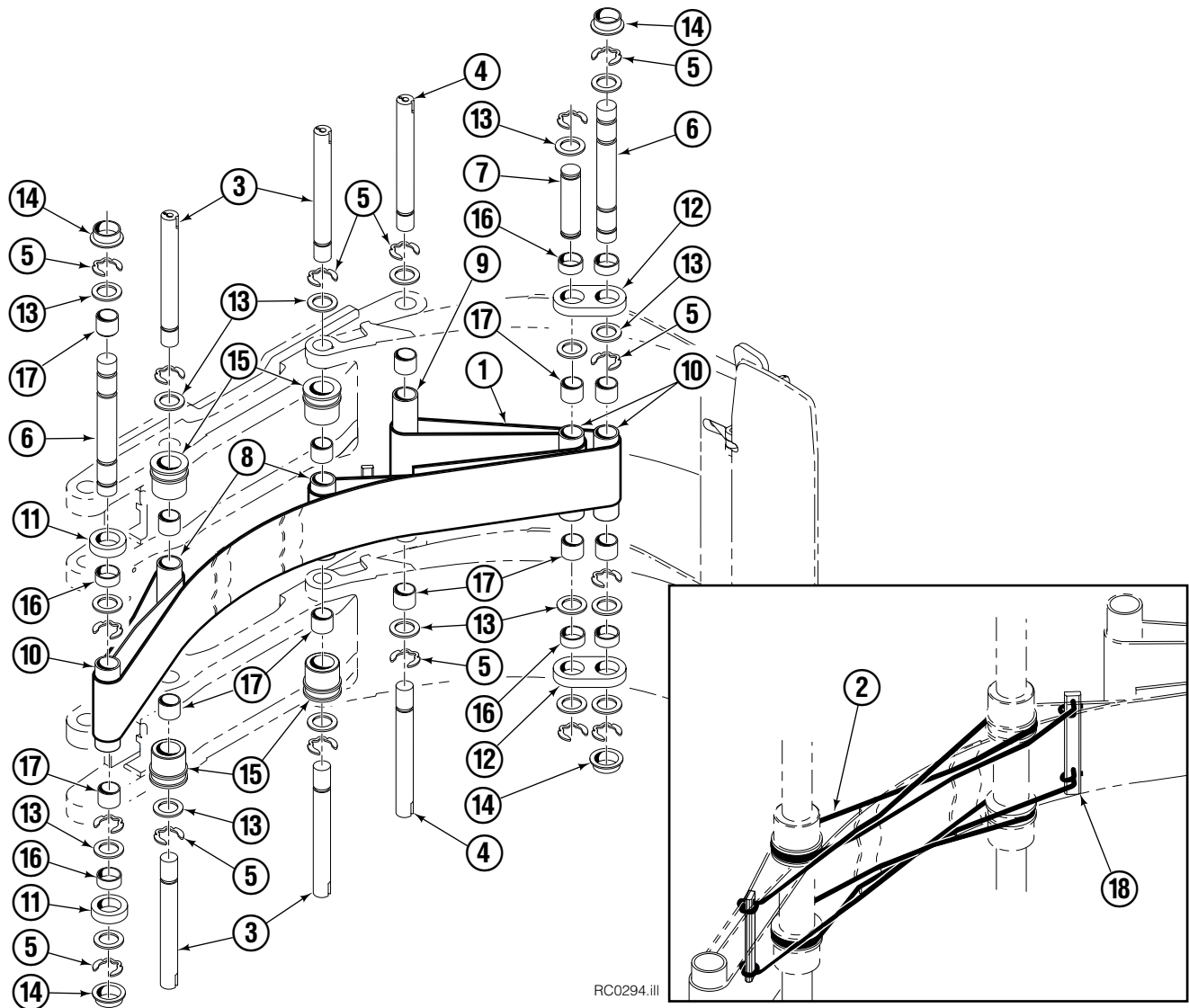
Cascade provides service replacement parts for the listed parts only. Due to cost, if others parts need replacement, the complete Drive Motor should be replaced.

Check Valve



60G			
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

Adjustable Bumper Group



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60G					
REF	QTY	51 in. ■	60 in. ■	72 in. ■	DESCRIPTION
		PART NO.	PART NO.	PART NO.	
		212820	212822	212823	Adjustable Bumper Group
1	1	213034	213036	213037	Belt
2	2	213038	213040	213041	Elastic Band

■ Maximum roll handling capacity.

Common Parts

REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		213046	Common Parts Group	11	2	213027	Guide
3	4	213024	Pin	12	2	213028	Guide
4	2	213025	Pin	13	●	213029	Shim
5	16	209986	Retaining Ring	14	4	213030	Retainer
6	2	213026	Pin	15	4	213042	Pulley
7	1	213044	Pin	16	6	213045	Bearing
8	2	213031	Roller	17	12	211717	Bearing
9	1	213032	Roller	18	2	213942	Retainer
10	3	213033	Guide				

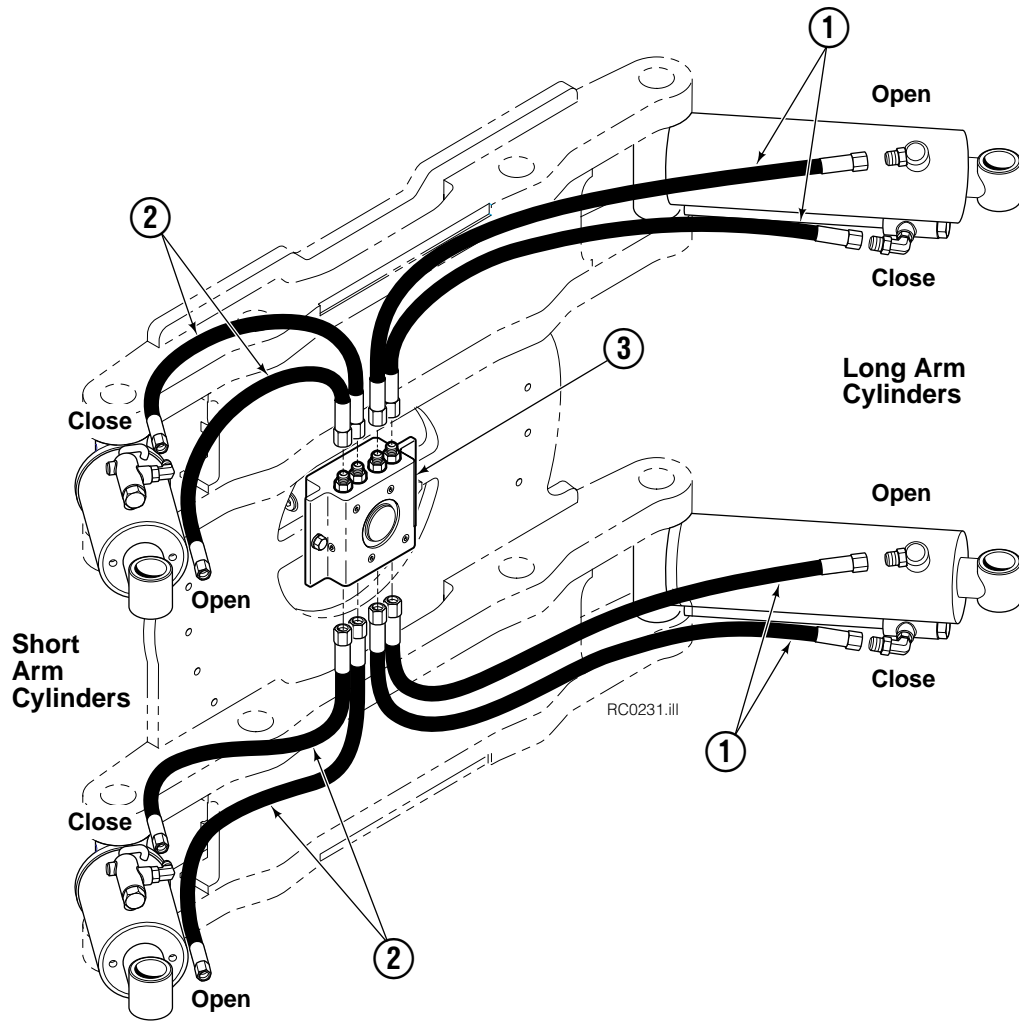
● As Required.

Reference: S-4596, S-4597.

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1-800-CAS-CADE (227-2233) or 503-669-6300, FAX: 503-669-6338

Hosing Group Positioned Short Arm



60G			
REF	QTY	72 in. ■ PART NO.	DESCRIPTION
		210016	Hose Group
1	4	210024	Hose
2	4	210025	Hose
3	1	▲	Revolving Connection

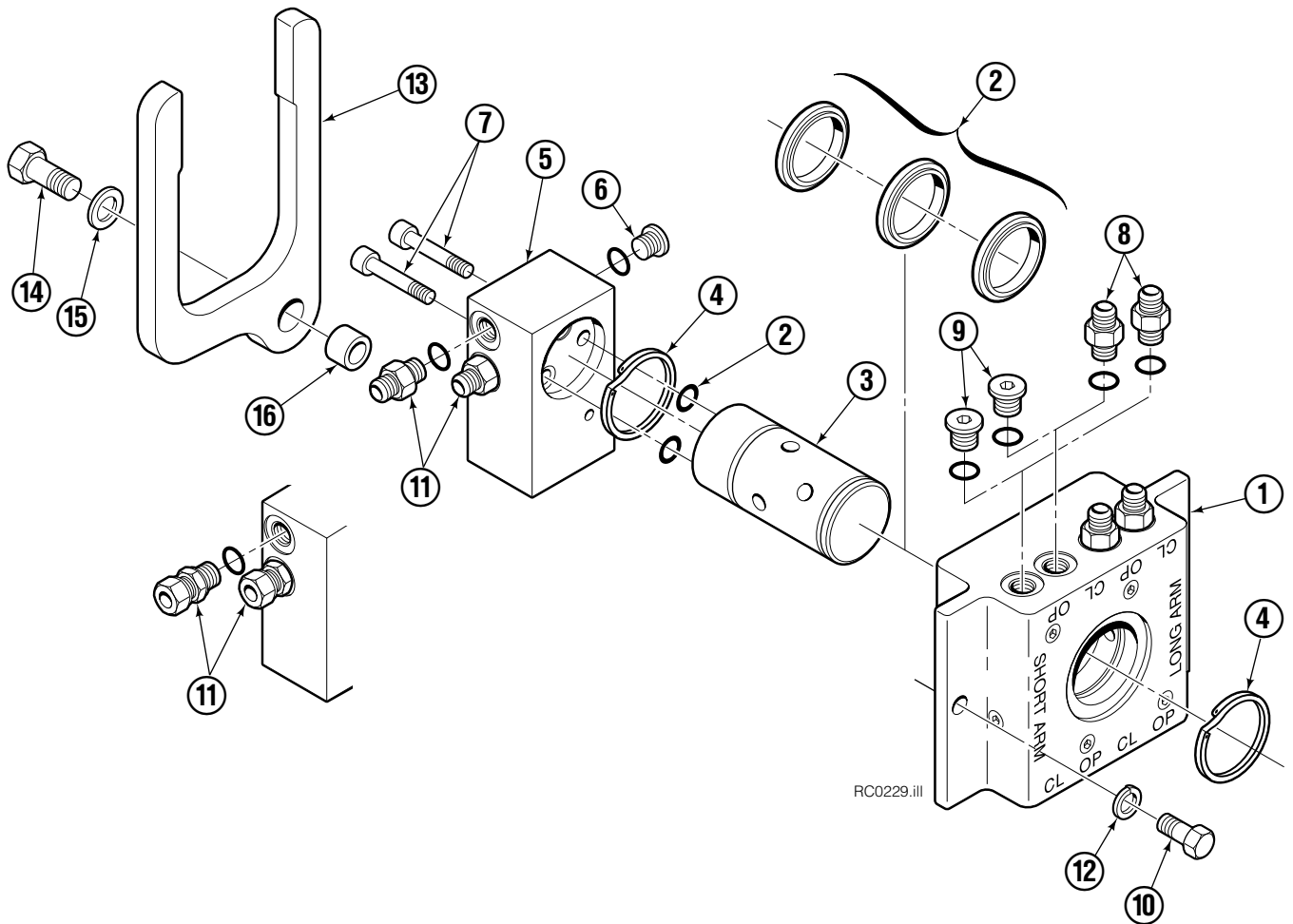
■ Maximum roll handling capacity.

▲ See Revolving Connection page for part number.

Reference: S-4192, S-4193.

Revolving Connection

Standard Long Arm / Without Relief

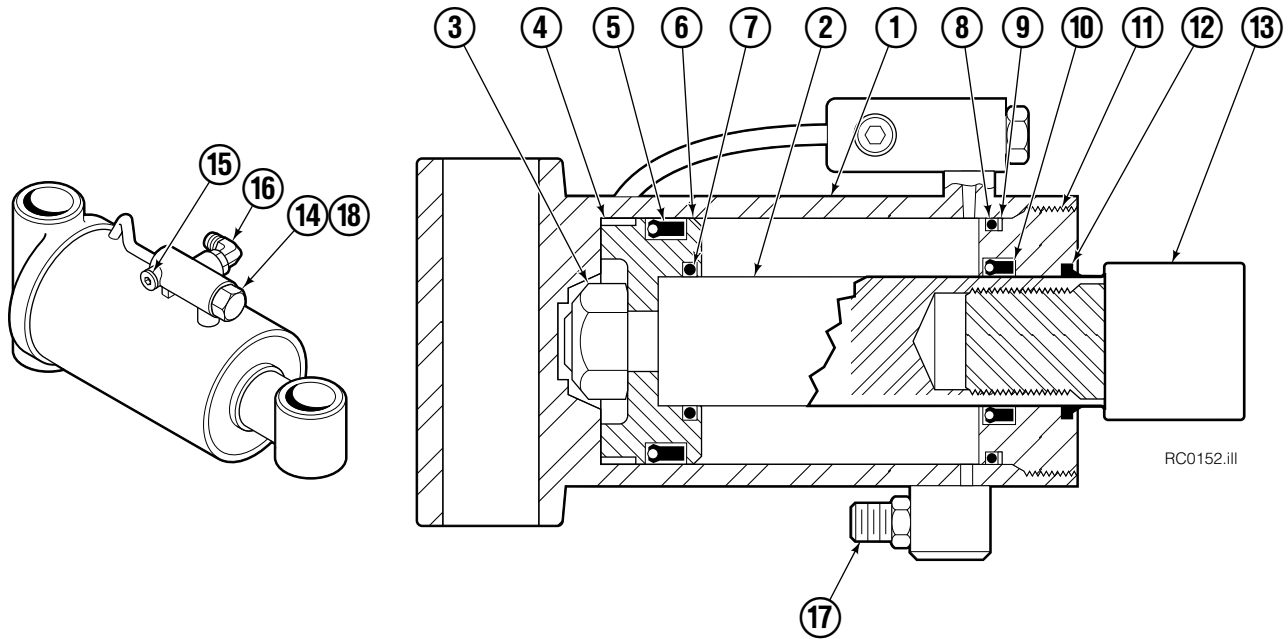


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60G							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		212201	Rev. Connection – Pos. Short Arm	11	2	601377	Fitting, 8-8 SAE
1	1	209950	Body	11	2	765492	Fitting, 8-8 SAE – M10 L-Series
2	1	212912	Service Kit	11	2	765493	Fitting, 8 SAE – M12 L-Series
3	1	209952	Shaft	11	2	756920	Fitting, 8 SAE – M12 S-Series
4	2	7350	Retaining Ring	12	2	681238	Lockwasher, M10
5	1	212169	End Block	13	1	211909	End Block Retainer
6	2	602580	Fitting, 8	14	1	213095	Cap screw, M10
7	2	768798	Cap screw, M8	15	1	206322	Lockwasher, M10
8	●	604511	Fitting, 6 – Pos. Short Arm	16	1	212725	Spacer
10	2	768538	Cap screw, M10				

● Quantity as required.
Reference: SK-6113.

Cylinders



60G				
REF	QTY	Short Arm	Long Arm	DESCRIPTION
		72 in. ■	72 in. ■	
		PART NO.	PART NO.	
		210128	210132	Cylinder Assembly
1	1	4195-185	4195-395	Shell
2	1	4130-335	4130-500	Rod

■ Maximum roll handling capacity.

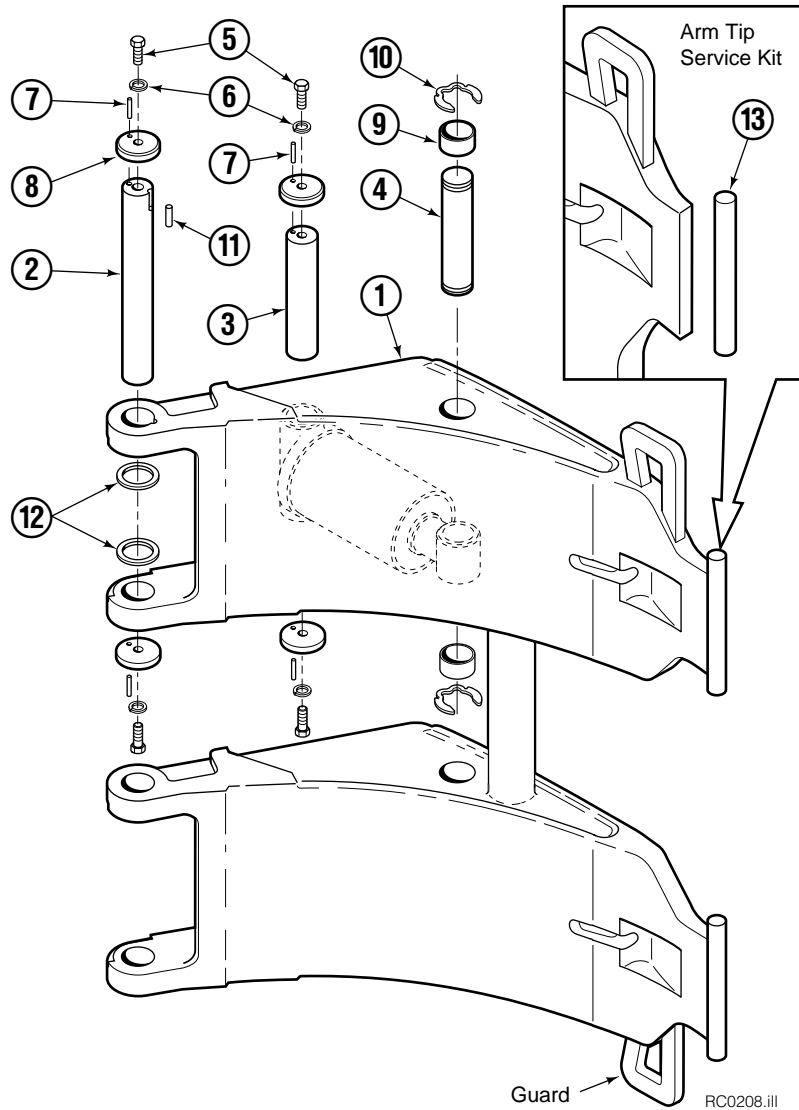
Common Parts

REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
3	1	560997	Nut	12	1	564443	Wiper ▲
4	1	211295	Wear Ring ▲	13	1	209764	Rod Eye
5	1	564902	Seal ▲	14	1	659058	Check Valve
6	1	211292	Piston	15	1	609234	Fitting, 4
7	1	210087	O-Ring ▲	16	1	601676	Fitting, 6-6
8	1	564445	O-Ring ▲	17	1	604511	Fitting, 6-6
9	1	564446	Back-Up Ring ▲	18	1	667516	Check Valve Service Kit
10	1	564442	Seal ▲			210133	Cylinder Service Kit
11	1	209763	Retainer				

▲ Included In Service Kit 210133.

Reference: S-4454, S-4460.

Short Arm



60G			
REF	QTY	72 in. ■ PART NO.	DESCRIPTION
		212037	Arm Group w/o Guard
1	1	213322	Arm w/o Guard

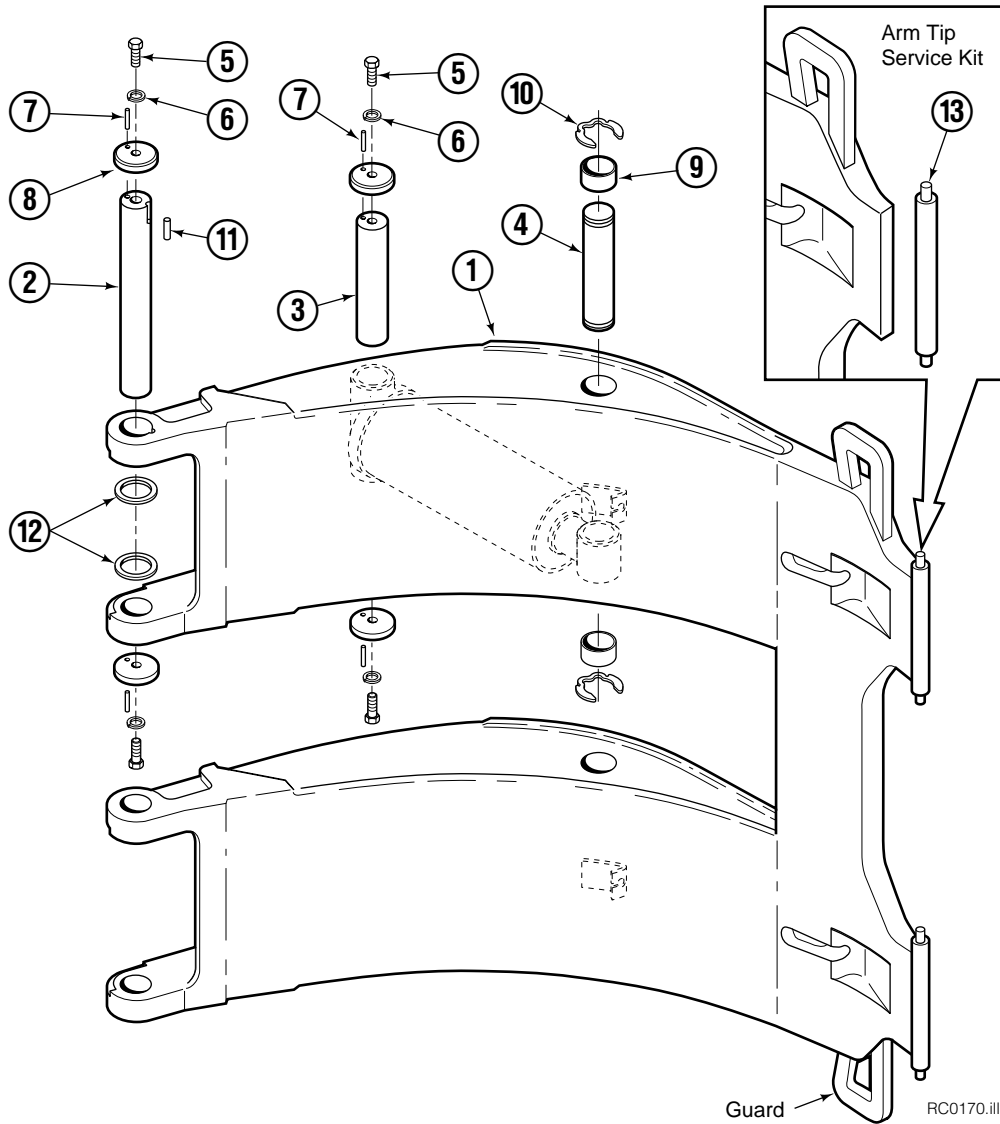
■ Maximum roll handling capacity.

Common Parts

REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		212933	Common Parts Group	8	8	209985	Cap
2	2	209982	Arm Pivot Pin	9	4	210080	Bearing
3	2	209983	Cylinder Pivot Pin	10	4	209986	Retaining Ring
4	2	4175-150	Cylinder Rod Pivot Pin	11	2	212382	Dowel Pin, 8x16 mm
5	8	212632	Capscrew, M10x1.5x20	12	16	209941	Shim - .062 in.
6	8	209021	Washer, M10	13	1	212902	Arm Tip Service Kit
7	8	769009	Roll Pin				

Reference: S-4173.

Long Arm



60G			
REF	QTY	72 in. ■	DESCRIPTION
		PART NO.	
		212564	Arm Group w/o Guard
1	1	213352	Arm w/o Guard

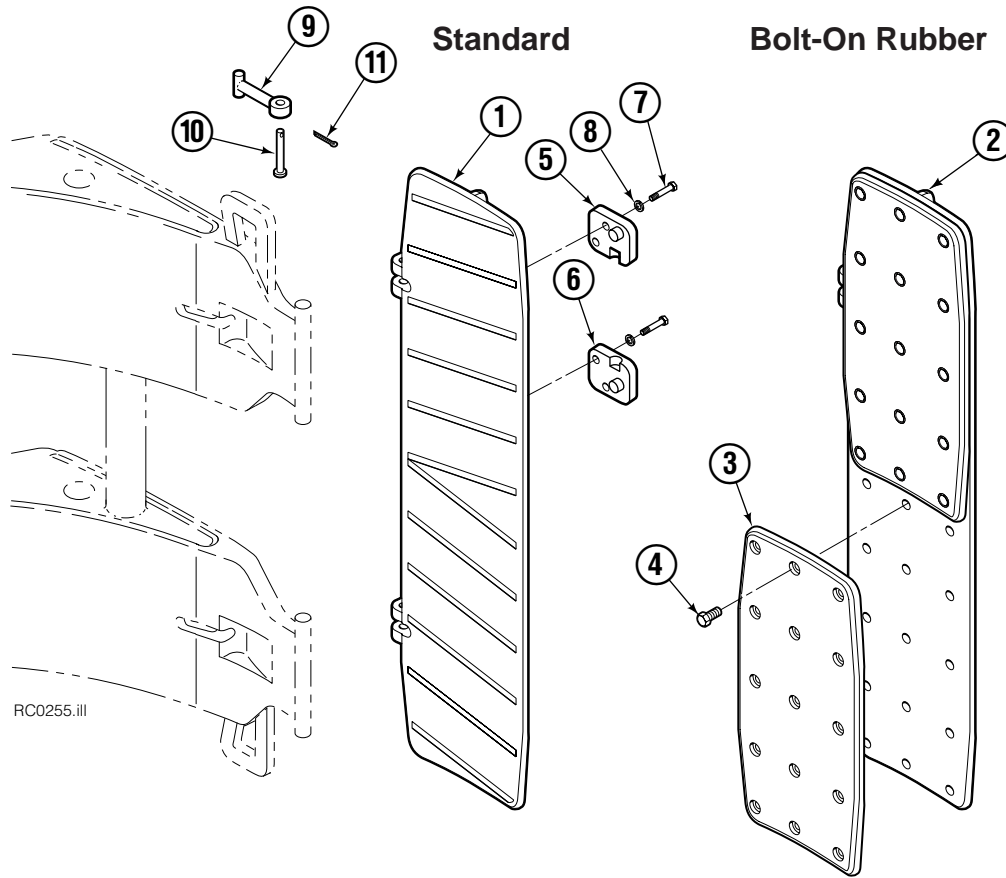
■ Maximum roll handling capacity.

Common Parts

REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		212933	Common Parts Group	8	8	209985	Cap
2	2	209982	Arm Pivot Pin	9	4	210080	Bearing
3	2	209983	Cylinder Pivot Pin	10	4	209986	Retaining Ring
4	2	4175-150	Cylinder Rod Pivot Pin	11	2	212382	Dowel Pin, 8x16 mm
5	8	212632	Capscrew, M10x1.5x20	12	16	209941	Shim - .062 in.
6	8	209021	Washer, M10	13	1	212903	Arm Tip Service Kit
7	8	769009	Roll Pin				

Reference: S-4171.

Pad Groups – Short Arm



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60G			
REF	QTY	72 in. ■	DESCRIPTION
		PART NO.	
		391741	Bolt-On Rubber Pad Group
2	1	390486	Pad, Bolt-On Rubber
3	2	209921	Bolt-On Rubber
4	30	201263	Capscrew, M8
5	4	6287	Lockwasher, M8

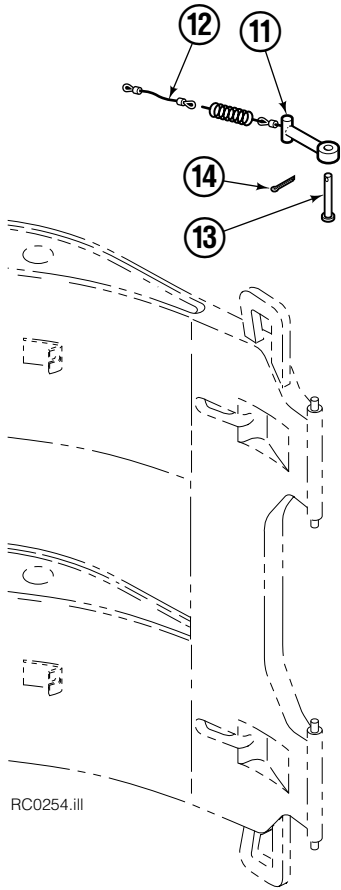
■ Maximum roll handling capacity.

Common Parts

REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		212935	Common Parts Group – Short Arm	9	8	681473	Lockwasher, M12
6	2	209904	Retainer, R.H. ▲	10	2	209909	Link
7	2	209905	Retainer, L.H. ▲	11	2	674265	Clevis Pin
8	8	763021	Capscrew, M12	12	2	6525	Cotter Pin

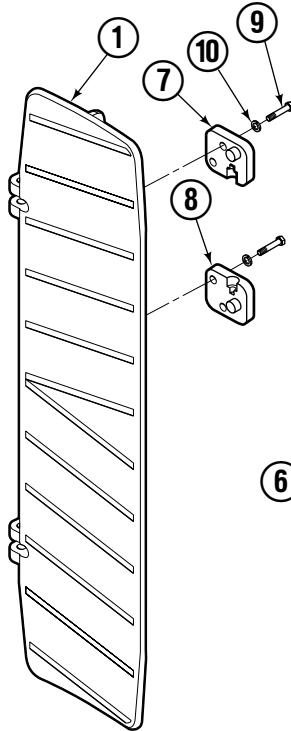
▲ Driver's view, clamp in horizontal position, Short Arm up.
Reference: S-4176, S-4177.

Pad Groups – Long Arm

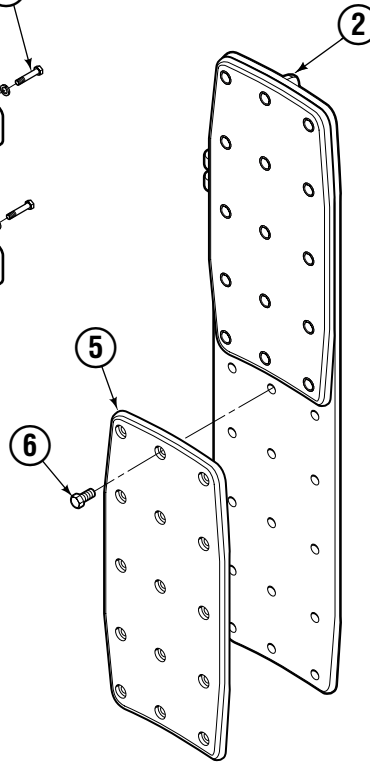


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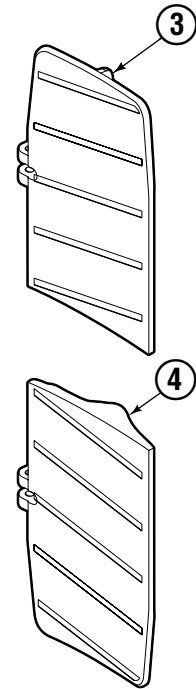
Standard



Bolt-On Rubber



Split



60G			
REF	QTY	72 in. ■ PART NO.	DESCRIPTION
		391740	Bolt-On Rubber Pad Group
2	1	390486	Pad, Bolt-On Rubber
5	2	209921	Bolt-On Rubber
6	30	201263	Capscrew, M8
7	4	6287	Lockwasher, M8

■ Maximum roll handling capacity.

▲ Driver's view, clamp in horizontal position, Long Arm up.

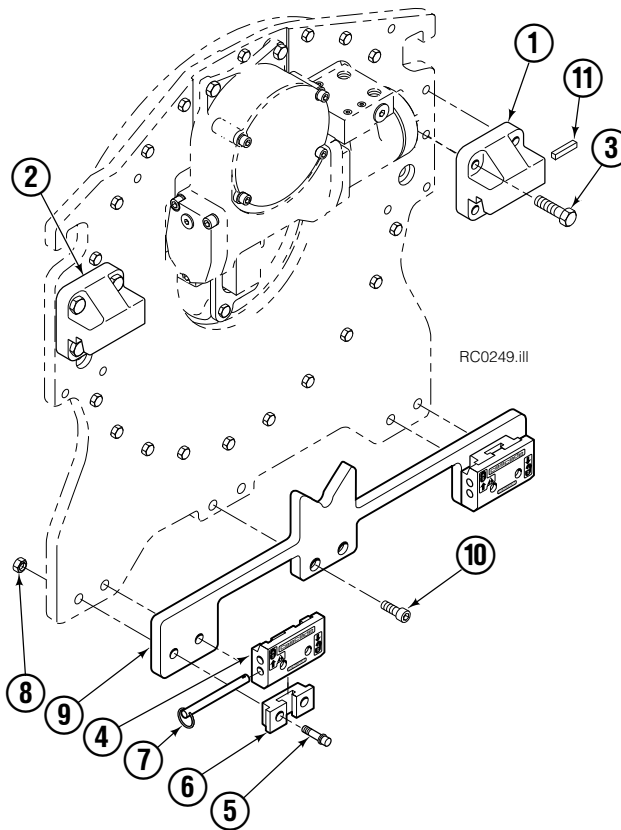
Common Parts

REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		212934	Common Parts Group – Long Arm		2	4182-40	Cable – 51 in. ■
8	2	211997	Retainer, R.H. ▲	13	2	4182-110	Cable – 60 in. ■
9	2	211998	Retainer, L.H. ▲		2	4182-245	Cable – 72 in. ■
10	8	763021	Capscrew, M12	14	2	674265	Clevis Pin
11	8	681473	Lockwasher, M12	15	2	6525	Cotter Pin
12	2	209916	Link Assembly				

▲ Driver's view, clamp in horizontal position, Long Arm up.

Reference: S-4176, S-4177.

Mounting Groups – 2°



60G Quick-Change Mounting			
REF	QTY	ITA III	DESCRIPTION
		PART NO.	
		210006	Mounting Group
1	1	209932	Upper Hook - R.H.
2	1	209933	Upper Hook - L.H.
3	4	779010	Capscrew, M16x2x35-8.8
4	2	675957	Lower Hook
5	4	768843	Capscrew, M16x2x70-8.8
6	2	675958	Guide
7	2	678832	Pin
8	4	781534	Nut, M16x2
9	1	209936	Spacer
10	2	212146	Capscrew, M12x1,75x25-8.8
11	1	669344	Stop Kit

Reference: S-4186

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

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