



# Parts Manual

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Model 90F Roll Clamp

Serial Number 90F-RCS-170

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**cascade**®  
**corporation**

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

**Internet:** [www.cascorp.com](http://www.cascorp.com)

# Safety Decals



RC0636.ill



Roll Clamp Safety Decals			
REF	QTY	PART NO.	DESCRIPTION
1	6	665595	No Hand Hold Decal
2	3	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

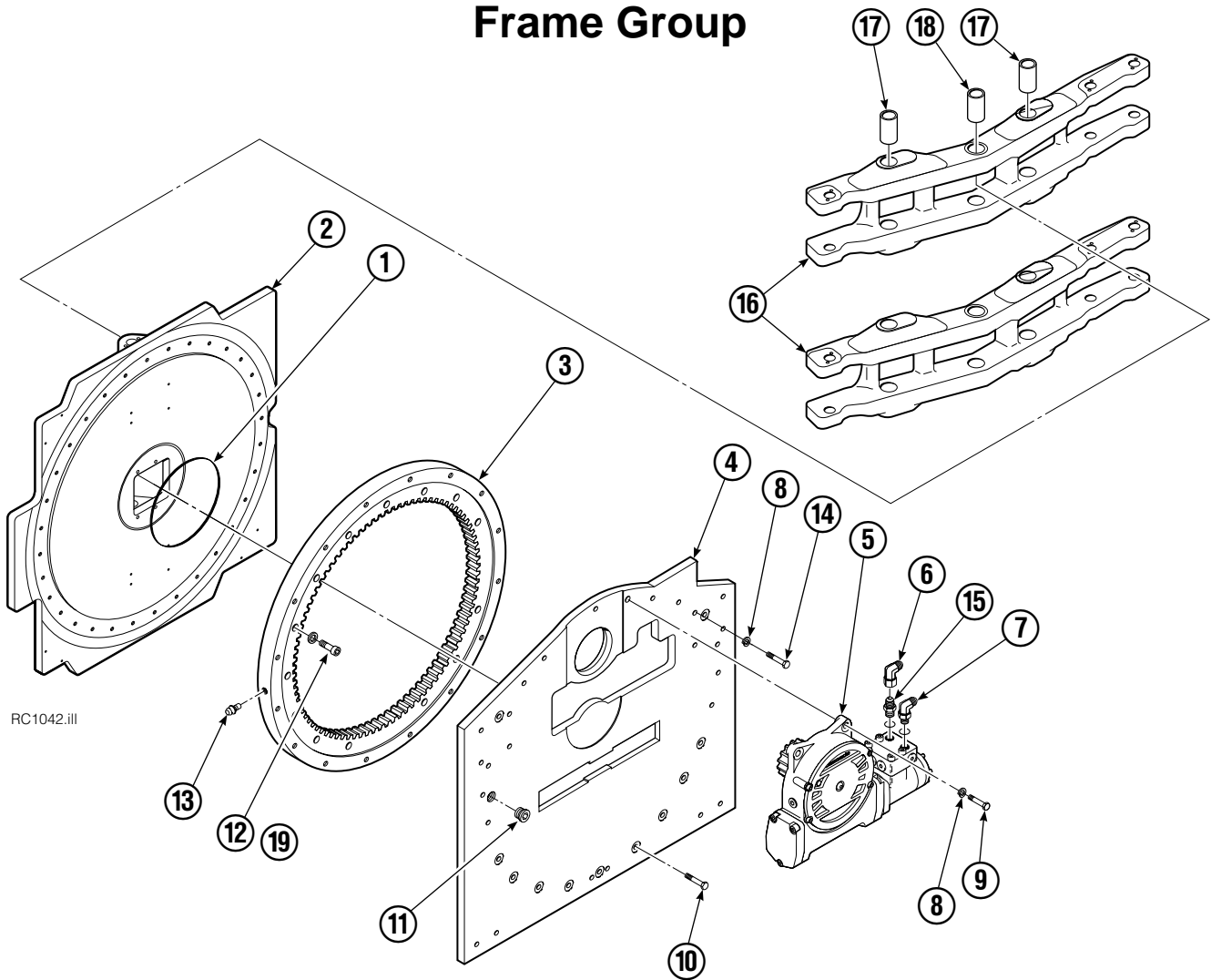
# Publications



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Roll Clamp Publications	
674512	Service Manual
674509	Operator's Guide – Fixed Frame
676268	Operator's Guide – Swing Frame
674510	Installation Instructions – Fixed Frame
674511	Installation Instructions – Swing 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



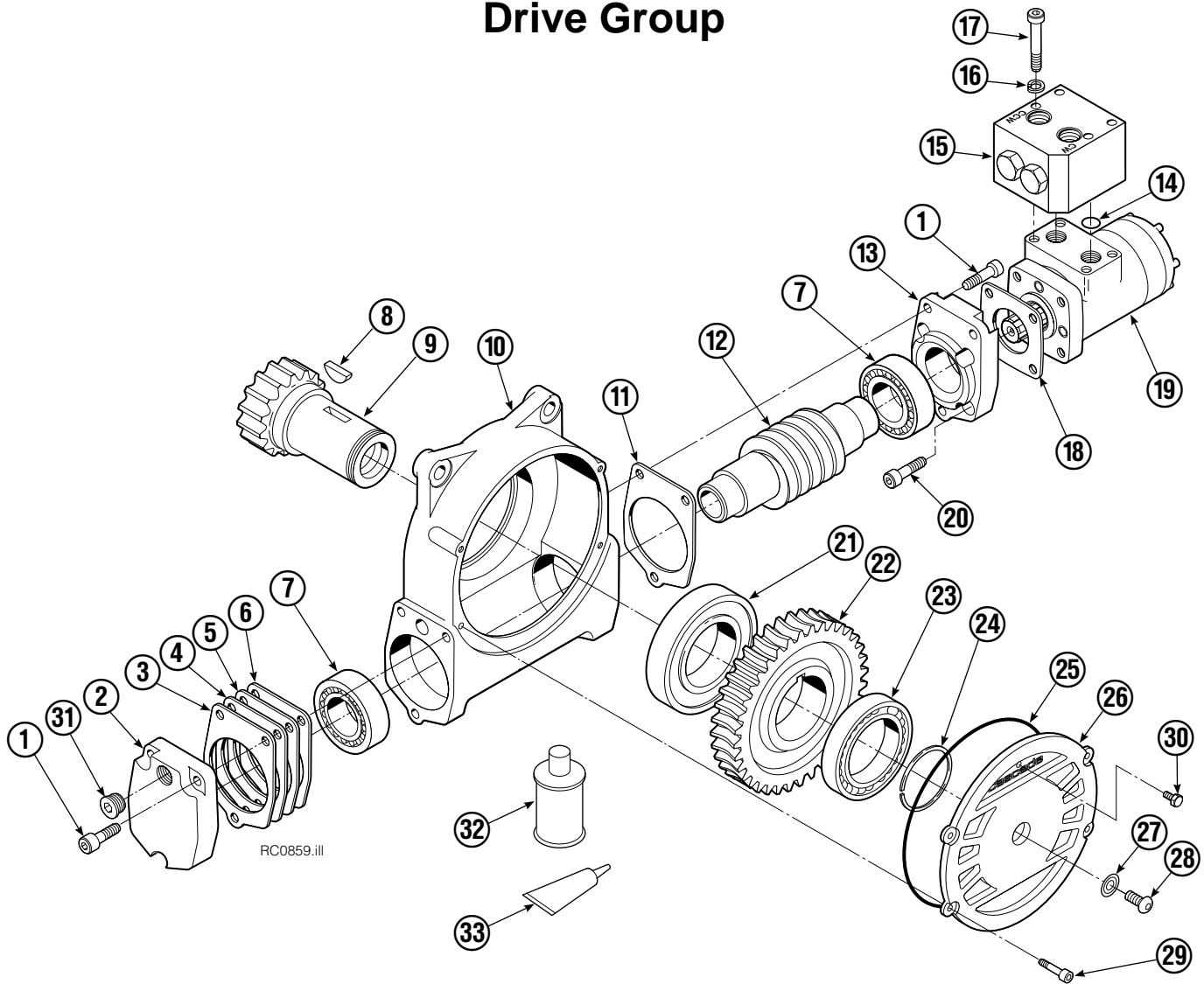
90F			
REF	QTY	PART NO.	DESCRIPTION
		6013479	Frame Group
1	1	670931	Seal
2	1	393458	Faceplate
3	1	214481	Bearing Assembly
4	1	214484	Baseplate
5	1	6013477	Drive Group ●
6	1	605761	Fitting, 8-8
7	1	601250	Fitting, 8-8
8	4	6290	Lockwasher, 1/2 ID
9	4	763021	Capscrew, M12 x 30
10	13	206174	Capscrew, M12 x 45
11	1	664071	Plug
12	32	753221	Capscrew, M12 x 50
13	1	7401	Grease Fitting
14	19	213633	Capscrew, M12 x 55
15	1	601377	Fitting, 8-8
16	2	381130	Swing Frame ▲
17	8	675008	Bushing ▲
18	4	675006	Bushing ▲
19	32	681473	Lockwasher, M12

● See Drive Group page for parts breakdown.

▲ Included in Swing Frame Group 381129.

Reference: SK-6189, 393464, 223703.

# Drive Group



90F							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		6013477	Drive Group with 2.8 c.i. Motor	19	1	215903	Drive Motor – 3.0 c.i. ▲
1	6	769570	Capscrew, M12 x 25	20	4	4468	Capscrew, 3/8 NC x .75 GR8
2	1	676855	Cover	21	1	670580	Bearing
3	●	674513	Shim – .005" (blue)	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	670556	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	1	604510	Fitting, 6
13	1	775553	Adapter	32	1	656300	Gear Box Lube – 48 oz.
14	2	2705	O-Ring	33	1	668184	Sealant
15	1	6000553	Check Valve ◆			670578	Shim Service Kit (items 3-6,25,33)
16	4	6444	Lockwasher			675637	Bearing Service Kit (items 21 & 33)
17	4	607059	Capscrew, 5/16 NC x 1.75 GR8			675638	Bearing Service Kit (items 3-7,25)
18	1	670575	Gasket			222979	Motor Kit (items 11,14,18,19,20,33)

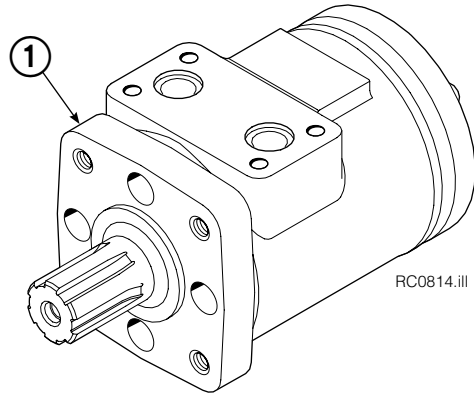
● Quantity as required.

◆ See Valve page for parts breakdown.

▲ See Drive Motor page for parts breakdown.

Reference: Common Parts 795490.

# Drive Motor

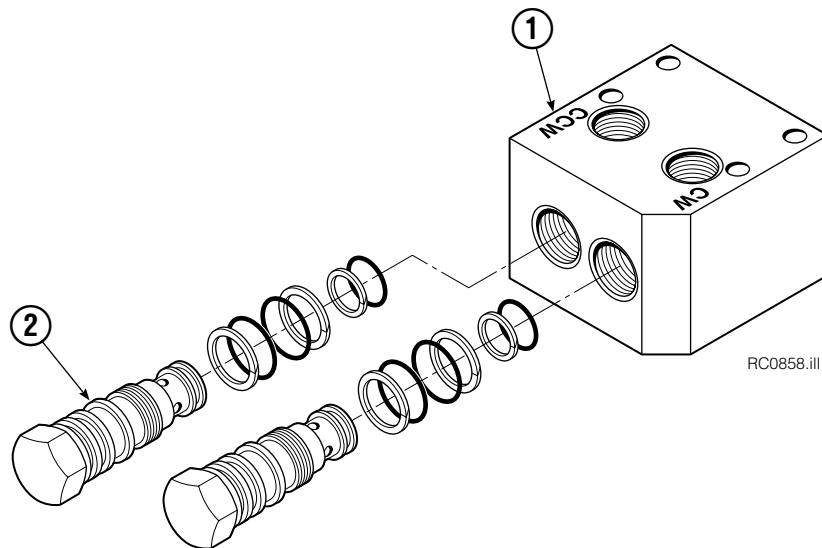


REF	QTY	PART NO.	DESCRIPTION
1	1	215903	Drive Motor
●	1	206405	Service Kit

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.

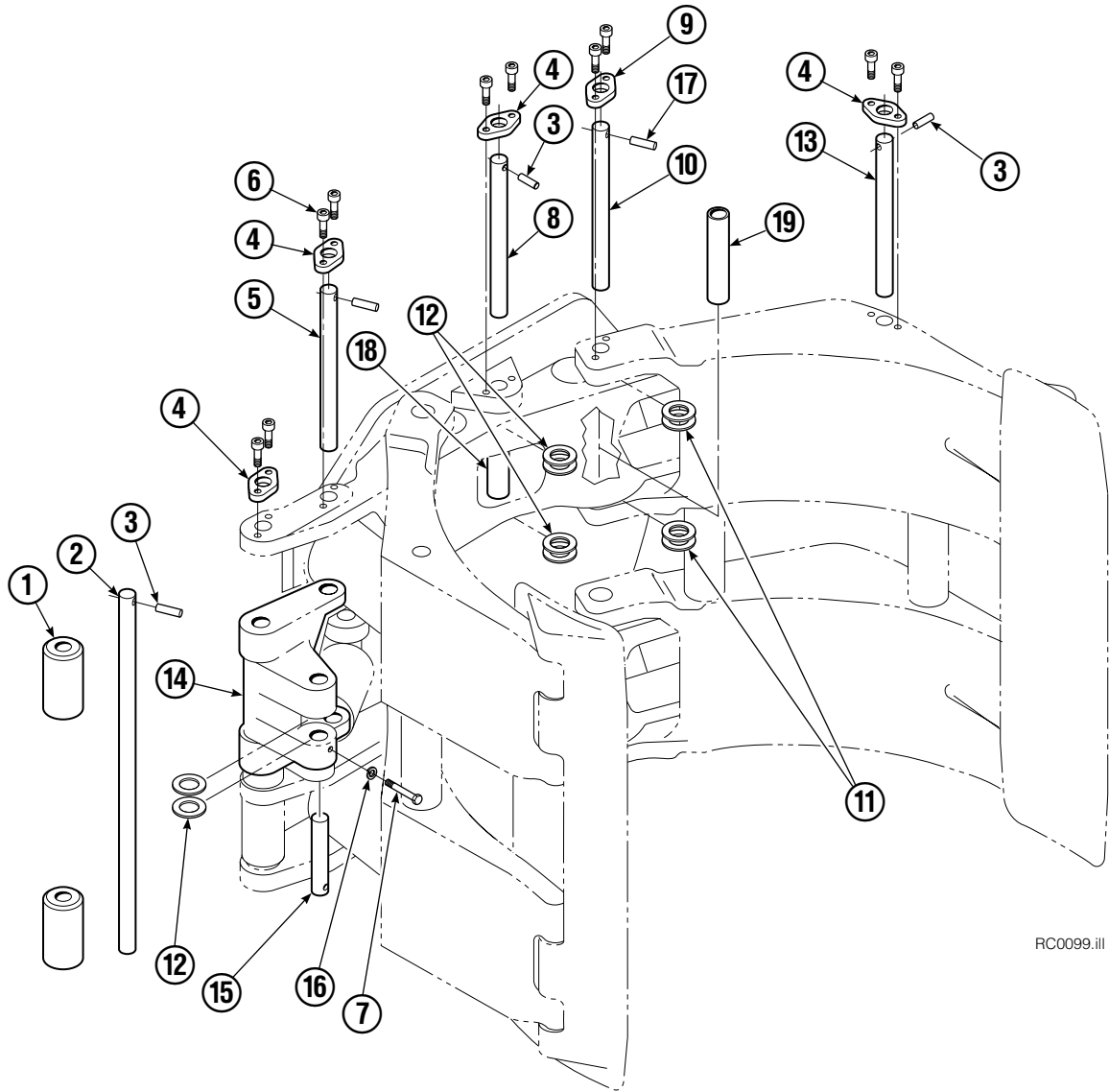
- Compatible with water glycol based hydraulic fluids.

# Check Valve



REF	QTY	PART NO.	DESCRIPTION
		6000553	Check Valve Assembly
1	1	6002747	Body
2	2	227790	Check Valve

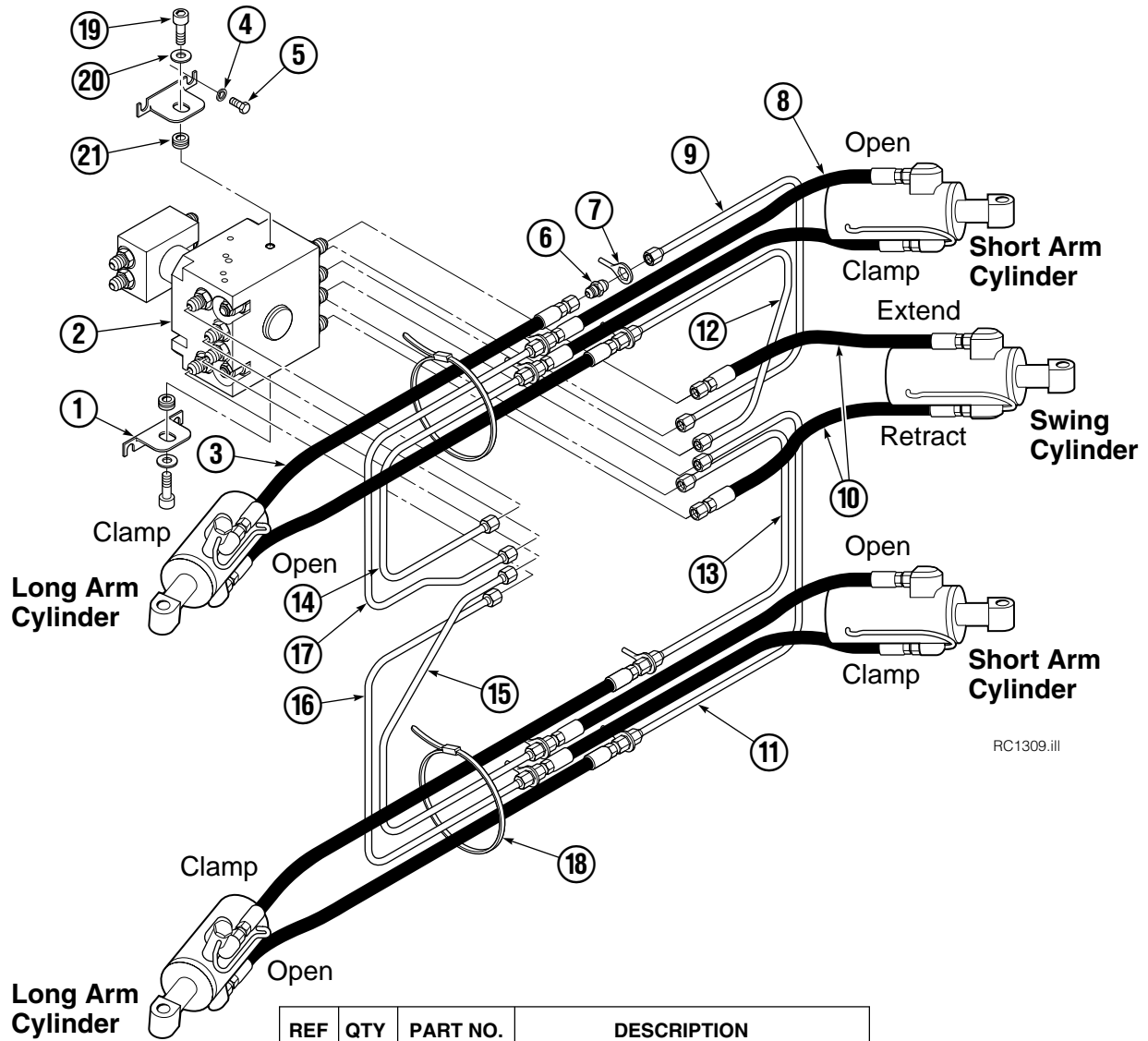
# Common Components Group



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90F			
REF	QTY	PART NO.	DESCRIPTION
		356184	Components Group
1	2	675024	Roller
2	1	675021	Pin
3	11	673385	Drive Pin
4	11	674828	Retainer
5	4	675018	Pin
6	30	4466	Capscrew, 3/8 NC x .50 GR8
7	2	643518	Capscrew, 5/16 NC x 2.25 GR8
8	2	675019	Pin
9	4	674830	Retainer
10	4	675022	Pin
11	16	673379	Shim
12	16	660200	Shim
13	4	676088	Pin
14	1	356185	Swing Casting
15	2	675023	Pin
16	2	6287	Lockwasher, 4/16 ID
17	4	675086	Drive Pin
18	2	681668	Spacer
19	4	681672	Spacer

# Swing Frame Hosing Group

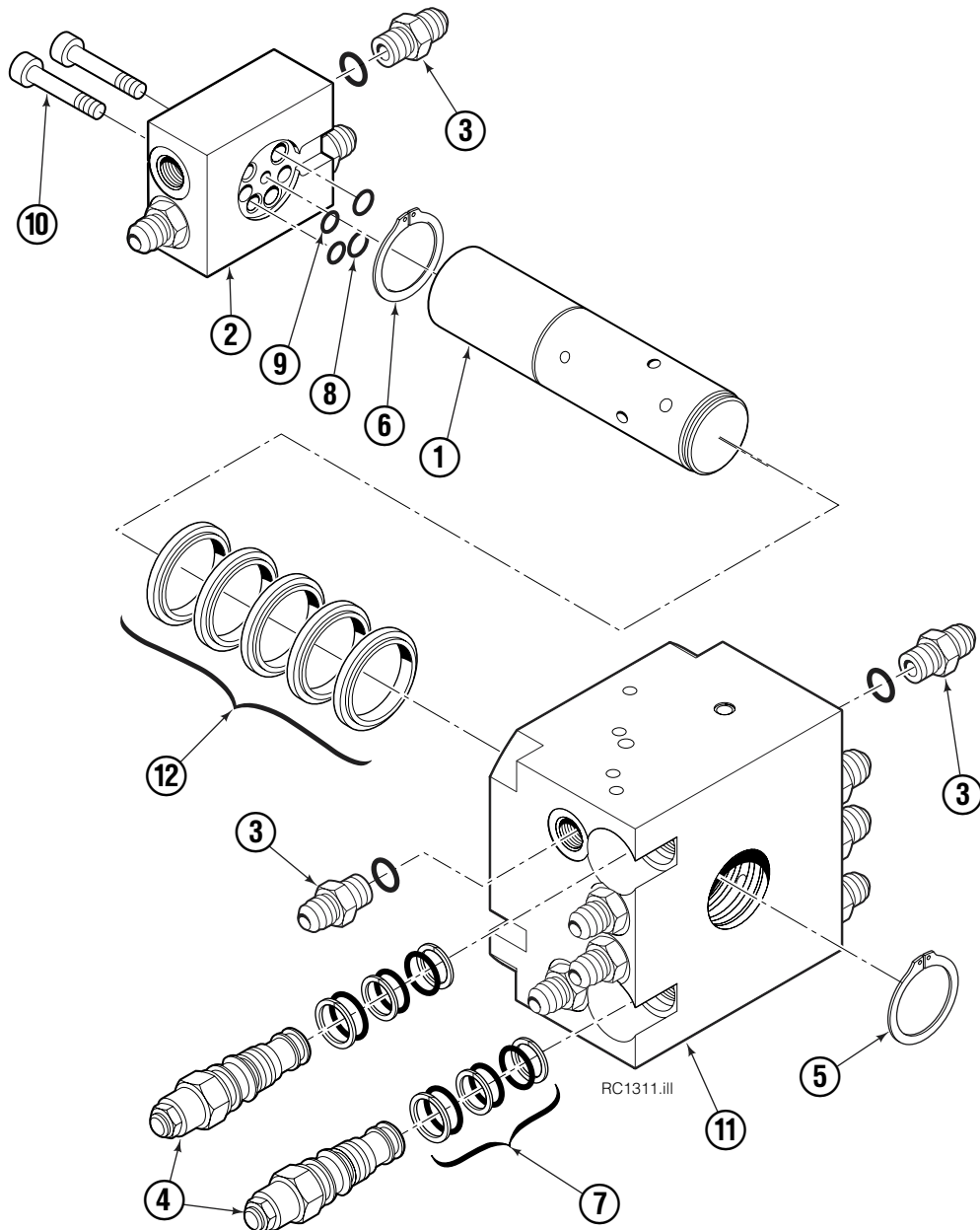


RC1309.III

REF	QTY	PART NO.	DESCRIPTION
		6025898	Hosing Group
1	2	206606	Angle
2	1	6025133	Revolving Connection ●
3	4	675067	Hose, 34.00 in.
4	4	6288	Lockwasher, 3/8"
5	4	3600	Capscrew, 3/8 NC x .625
6	8	2347	Fitting, 6-6
7	8	674743	Eye Bolt
8	4	381146	Hose, 26.30 in.
9	1	675051	Tube
10	2	675058	Hose, 18.25 in.
11	1	675049	Tube
12	1	675050	Tube
13	1	675048	Tube
14	1	675047	Tube
15	1	675045	Tube
16	1	675044	Tube
17	1	675046	Tube
18	2	649086	Cable Tie
19	2	208780	Shoulder Bolt
20	2	209021	Washer
21	2	208765	Grommet

● See Revolving Connection page for parts breakdown.  
Reference: SK-5831.

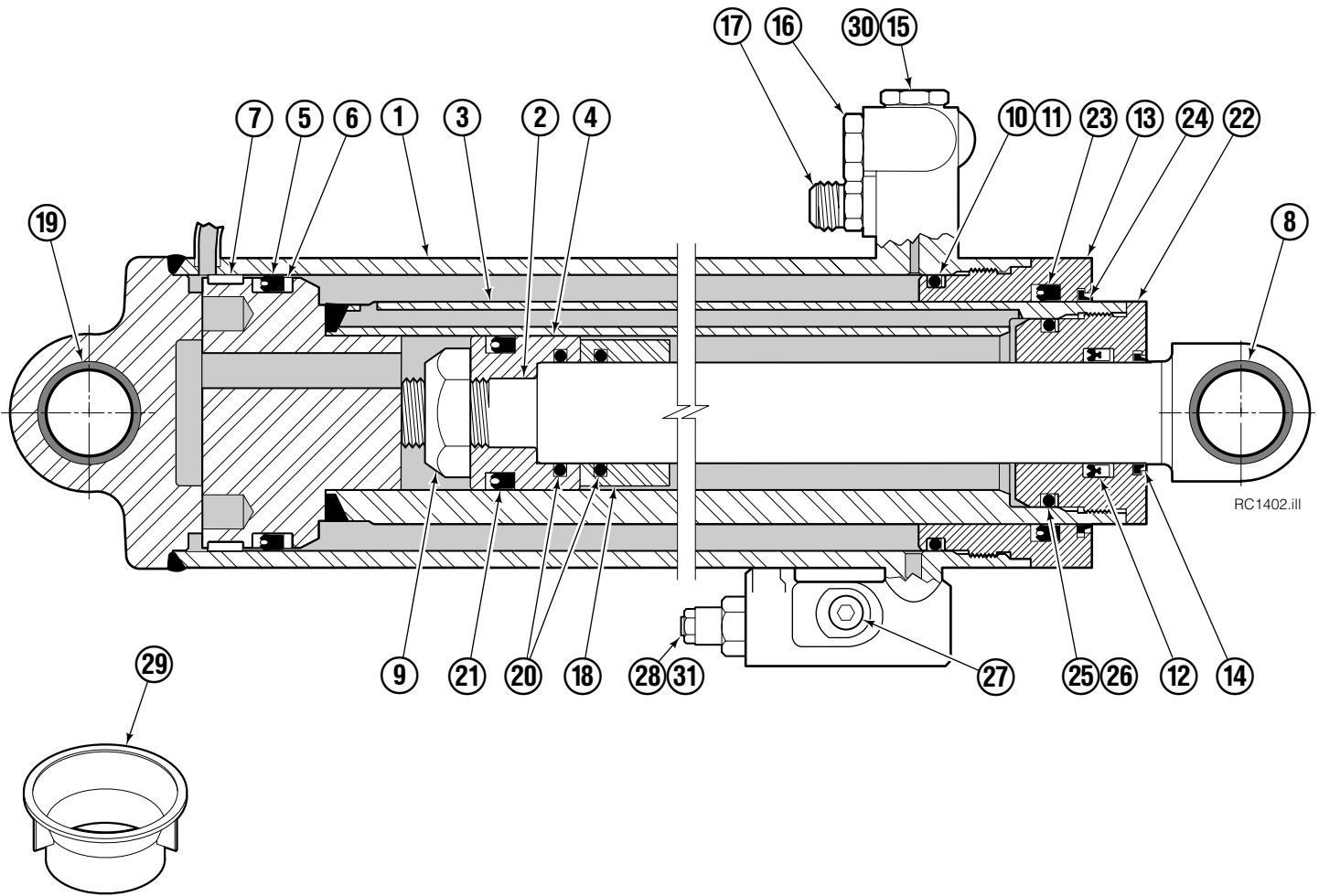
# Revolving Connection



REF	QTY	PART NO.	DESCRIPTION
		6025133	Revolving Connection
1	1	6017883	Shaft
2	1	6017882	End Block
3	14	604511	Fitting, 6
4	2	674732	Counterbalance Valve
5	1	3138	● Retaining Ring
6	1	7341	● Retaining Ring
7	2	667516	Service Kit
8	2	684587	● O-Ring
9	2	613376	● O-Ring
10	2	768797	● Capscrew, M8 x 40
11	1	6018024	Body
12	5	214649	● Shaft Seal
		6018085	Service Kit

● Included in Service Kit 6018085.

# Cylinder



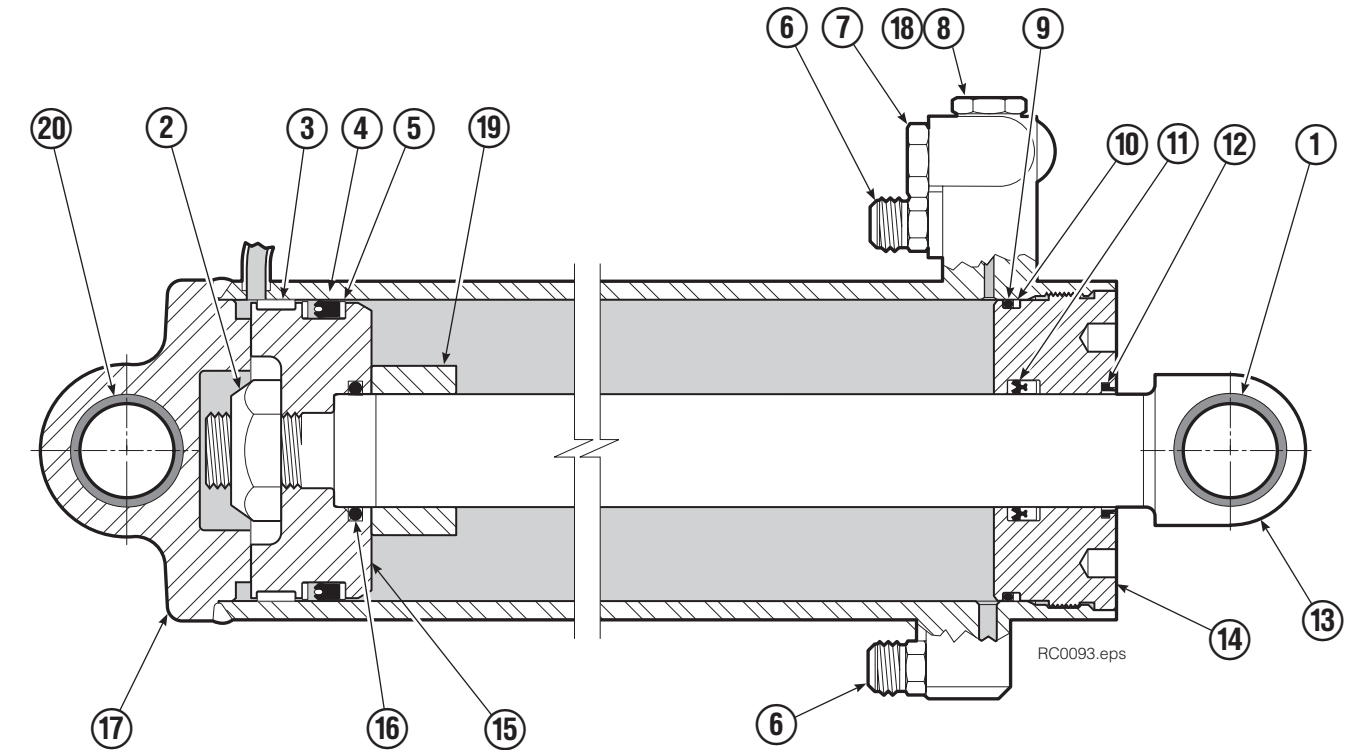
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		6024313	Cylinder Assembly	16	1	556852	Fitting, 4
1	1	21306-388	Shell	17	2	604511	Fitting, 6-6
2	1	5555-368.42	Rod	18	1	5552-83.04	Spacer
3	1	5553-379.84	Plunger	19	2	675006	Bearing
4	1	559684	Piston	20	2	2722	O-Ring
5	1	662462	◆ Seal	21	1	647870	Seal
6	1	638295	◆ Nylon Ring	22	1	667675	Retainer
7	1	660769	◆ Ring - Wear	23	1	553524	Seal
8	1	674843	◆ Bearing	24	1	636860	Wiper
9	1	560997	Nut	25	1	2791	O-Ring
10	1	2801	◆ O-Ring	26	1	615134	Back-up Ring
11	1	563977	◆ Back-up Ring	27	1	609234	Fitting
12	1	554598	◆ Seal	28	1	6026147	Counterbalance Valve
13	1	559685	Retainer	29	1	672910	Seal Loader Kit
14	1	564930	◆ Wiper	30	1	667516	Service Kit
15	1	557212	■ Check Valve	31	1		Service Kit

◆ Included in Service Kit 559837.

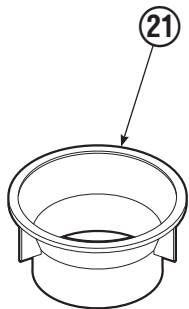
■ Included in Service Kit 667516.

Reference: S-6114, S-6115, S-21305.

# Cylinder Assembly



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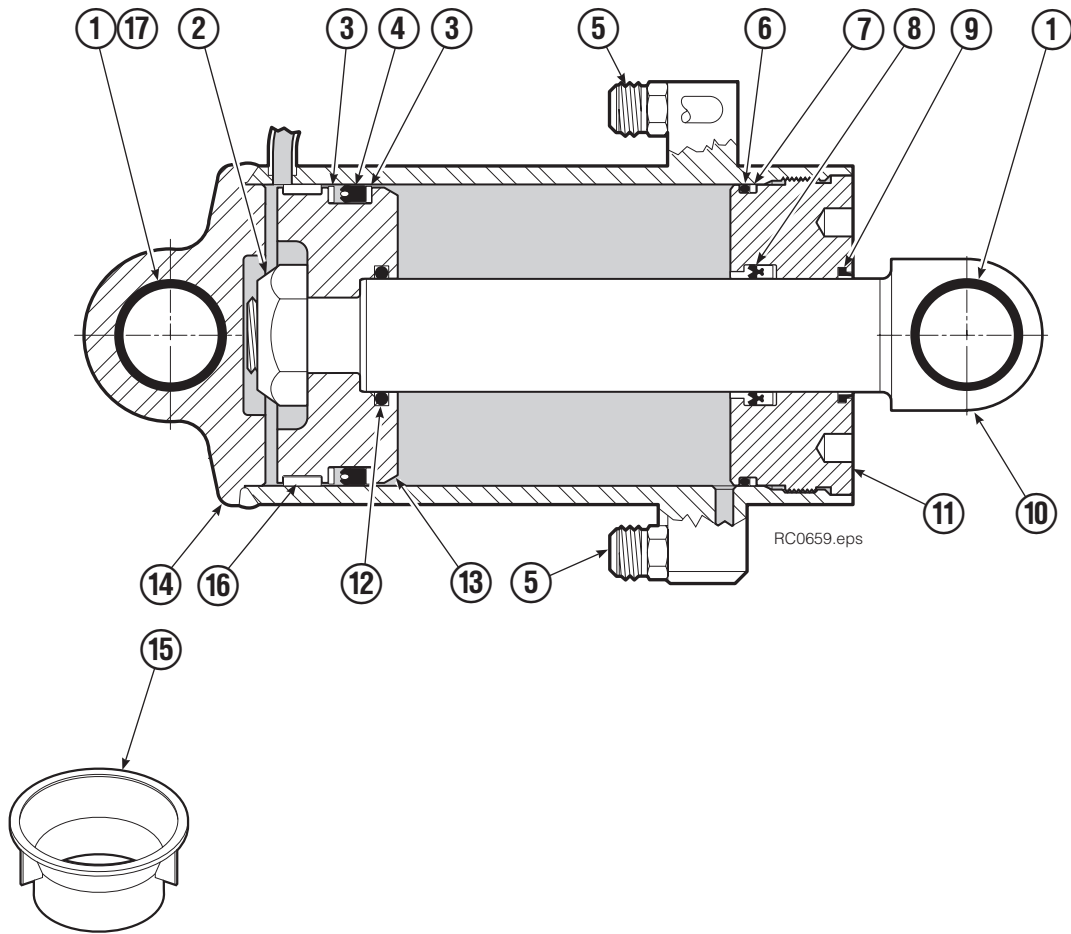


REF	QTY	PART NO.	DESCRIPTION
		385089	Cylinder Assembly
1	1	674843	Bearing
2	1	560997	Nut
3	1	660769	▲ Bearing
4	1	662462	▲ Seal
5	2	638295	▲ Back-Up Ring
6	2	604511	Fitting, 6-6
7	1	556852	Fitting, 4
8	1	557212	Check Valve
9	1	6025373	▲ O-Ring
10	1	615144	▲ Back-Up Ring
11	1	554598	▲ Seal
12	1	564930	▲ Wiper
13	1	584302	Rod
14	1	555724	Retainer
15	1	557389	Piston
16	1	2722	▲ O-Ring
17	1	584300	Shell
18	1	667516	Check Valve Service Kit
19	1	—	Spacer
20	2	675006	Bearing
21	1	669243	Seal Loader
		555725	Service Kit

▲ Included in Service Kit 555725.

Reference: S-5313, S-5314.

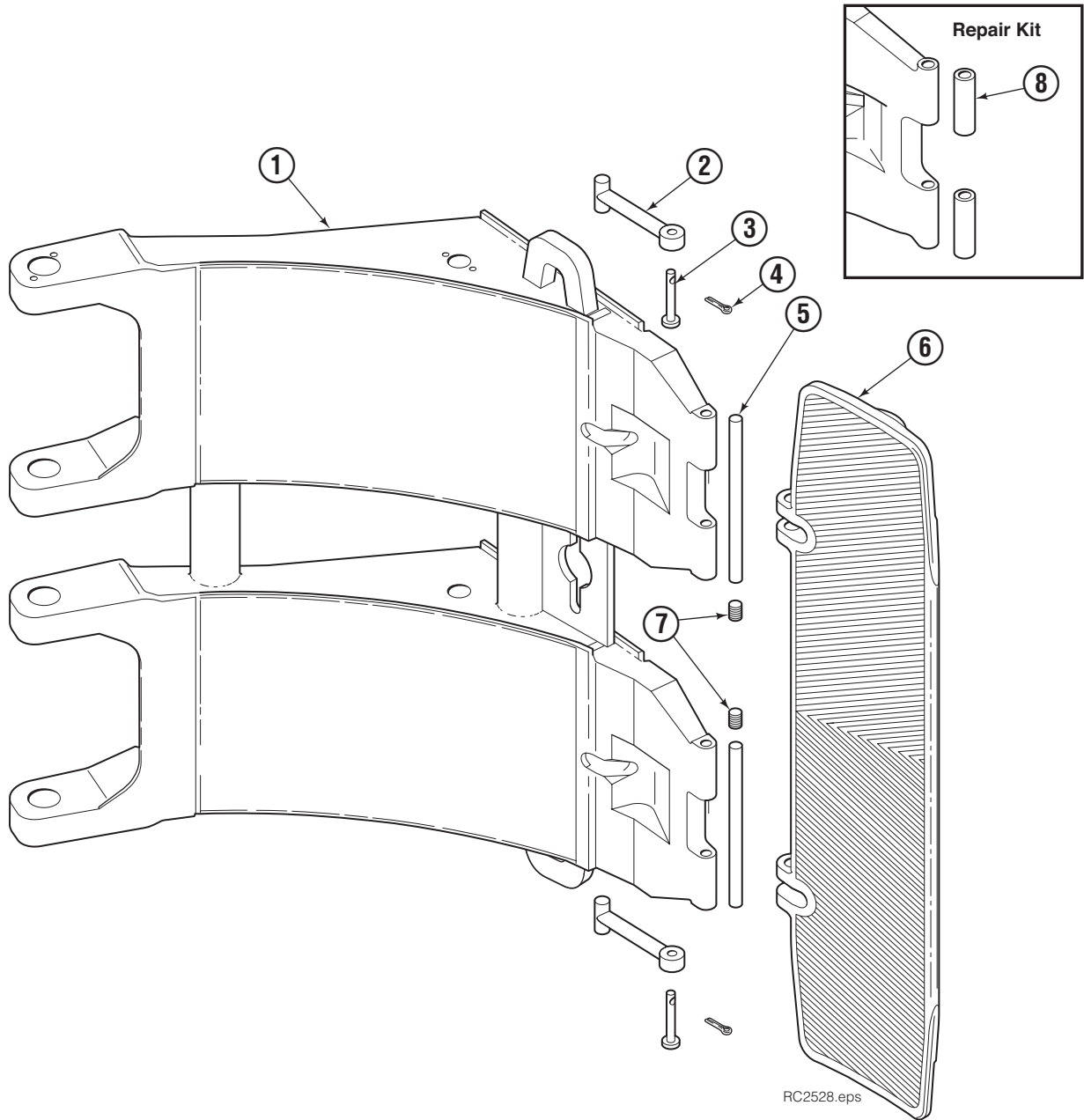
# Swing Cylinder Assembly



REF	QTY	PART NO.	DESCRIPTION
		580034	Cylinder Assembly
1	3	674843	Bearing
2	1	561997	Nut
3	2	638295	◆ Nylon Ring
4	1	662462	◆ Seal
5	2	604511	Fitting, 6-6
6	1	2801	◆ O-Ring
7	1	563977	◆ Back-Up Ring
8	1	554598	◆ Seal
9	1	564930	◆ Wiper
10	1	557713	Rod
11	1	555724	Retainer
12	1	2722	◆ O-Ring
13	1	557389	Piston
14	1	555776	Shell
15	1	672910	◆ Seal Loader
16	1	660769	◆ Wear Ring
17	1	558837	Sleeve
		555725	Service Kit

◆ Included in Service Kit 555725.

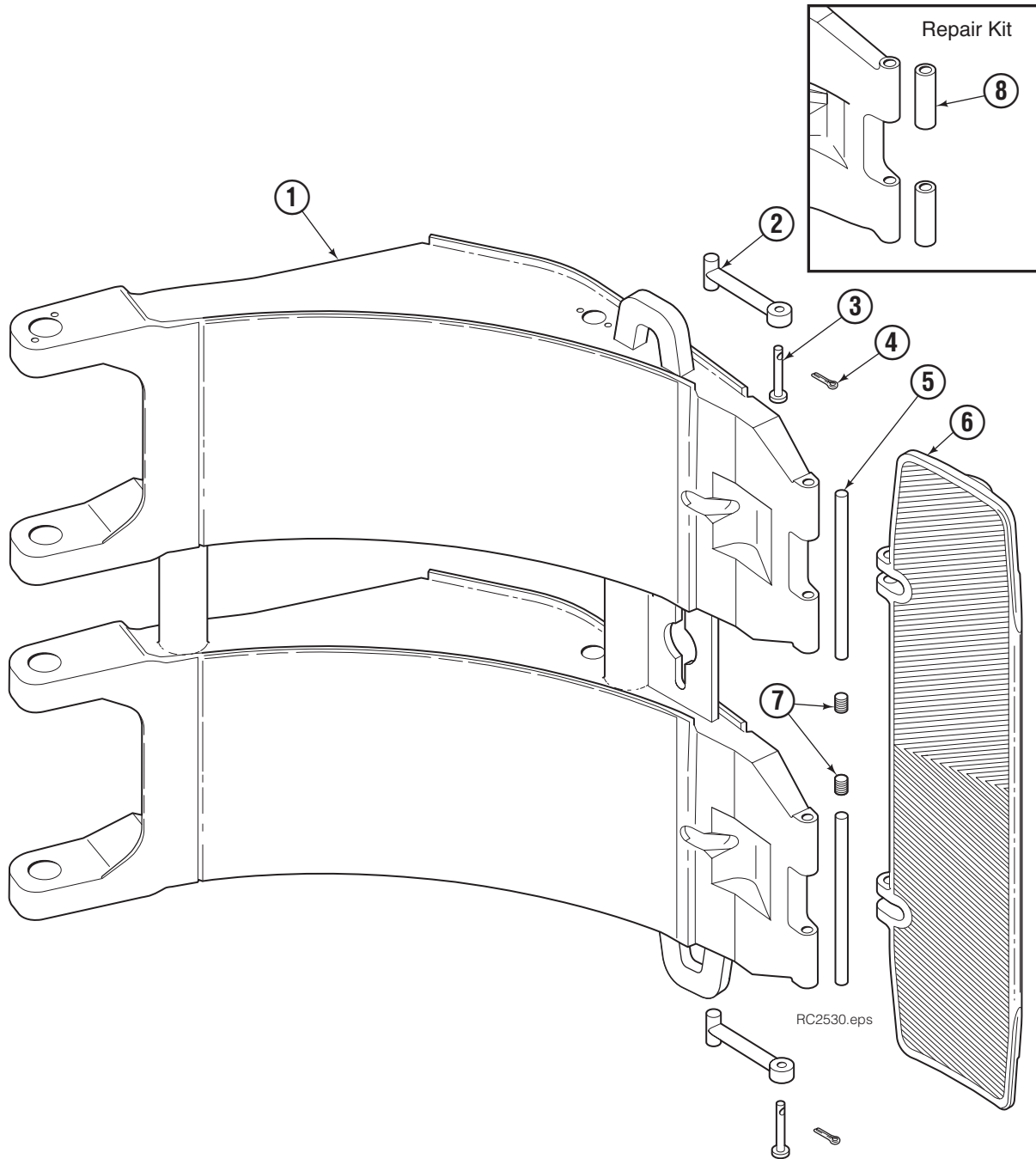
# Contact Pad Group - Short Arm



90F			
REF	QTY	PART NO.	DESCRIPTION
		674948	Contact Pad Group ♦
1	1	6013466	Short Arm
2	2	674994	Link
3	2	682978	Clevis Pin
4	2	6525	Cotter Pin
5	2	674993	Pin
6	1	674962	Contact Pad
7	2	689900	Plug
8	1	676810	Arm Tip Repair Kit

♦ Includes items 2 – 7 only.

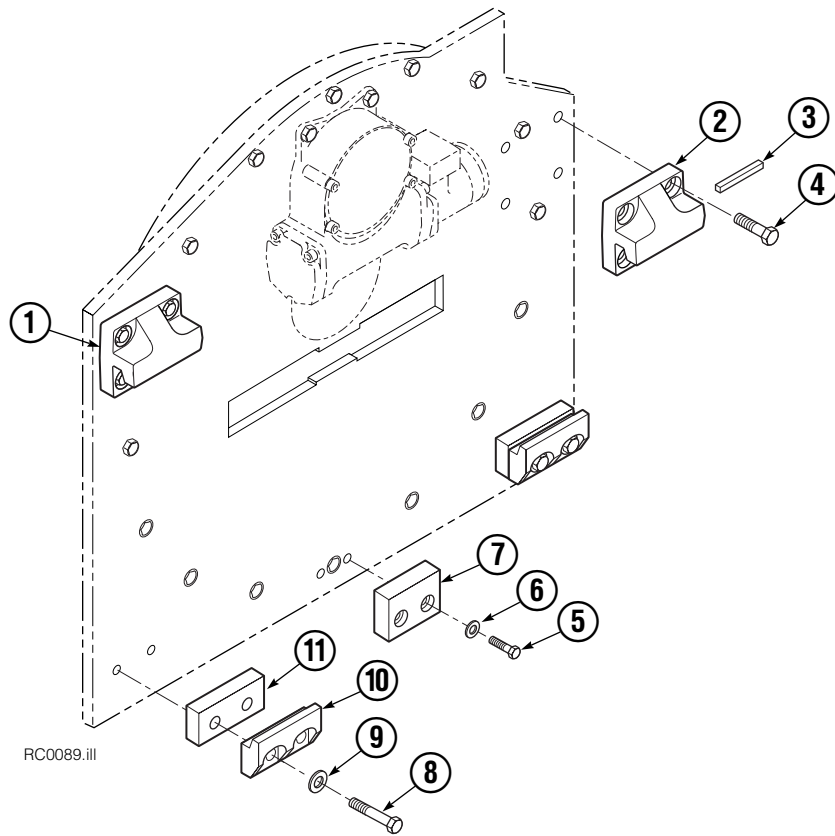
# Contact Pad Group - Long Arm



90F			
REF	QTY	PART NO.	DESCRIPTION
		206598	Contact Pad Group ♦
1	1	6013453	Long Arm
2	2	674994	Link
3	2	682978	Clevis Pin
4	2	6525	Cotter Pin
5	2	674993	Pin
6	1	206601	Contact Pad
7	2	689900	Plug
8	1	676810	Arm Tip Repair Kit

♦ Includes items 2 – 7 only.

# Bolt-On Mounting Group



Class IV, 1.8°			
REF	QTY	PART NO.	DESCRIPTION
		684880	Mounting Group
1	1	684877	Upper Hook – LH
2	1	675061	Upper Hook – RH
3	1	670704	Stop Kit
4	8	679082	Capscrew, M20 x 35
5	2	768810	Capscrew, M10 x 30
6	2	680030	Lockwasher, M10
7	1	681057	Center Spacer
8	4	676854	Capscrew, M20 x 60
9	4	670692	Washer
10	2	679832	Lower Hook
11	2	681056	Spacer

Reference: SK-5286.



**Do you have questions you need answered right now?** Call your nearest Cascade Parts Department. Visit us online at [www.cascorp.com](http://www.cascorp.com)

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