



# Parts Manual

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**120D, 150D  
360° Rotators**

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**Serial Numbers 681020 through 681325**

Manual Number 683251 R-0

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# How To Use This Manual

## Introduction

This manual illustrates service replacement parts for standard production Cascade 120D and 150D Rotators.

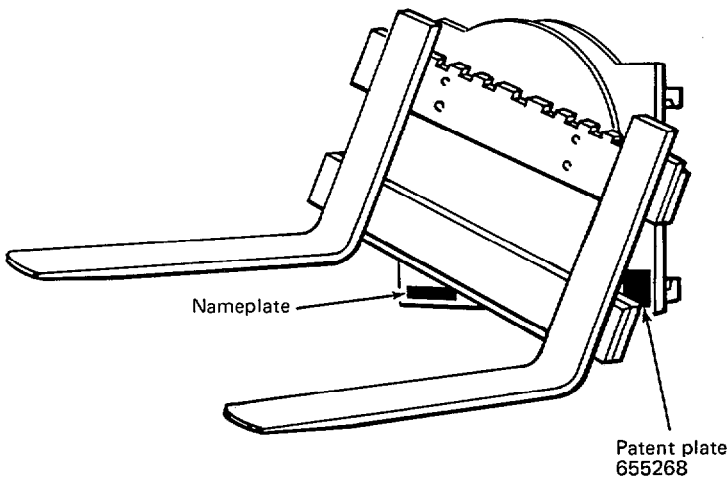
The parts manuals for attachments designed by the Application Engineering Department have an A.E.D. designation on the cover of the manual.

This standard attachment manual is not interchangeable with an A.E.D. Manual since it does not reflect the special engineering of an A.E.D. attachment.

To locate a service replacement part for a standard attachment, follow the steps below.

### 1. Locate the Nameplate

The nameplate is attached to the bottom of the baseplate. If the nameplate is missing, all necessary information is stamped into the baseplate at the same location.



### 2. Note the Serial Number

Record the six-digit Serial Number. See the example.

### 3. Refer to Serial Number Index

Locate your Serial Number in the Serial Number Index on the following page.

**IMPORTANT: DO NOT USE THIS MANUAL TO ORDER PARTS FOR AN A.E.D. ATTACHMENT.** Contact Cascade Corporation to obtain the correct parts manual. You must supply the serial number and all additional equipment numbers to order the correct manual.

### 4. Ordering

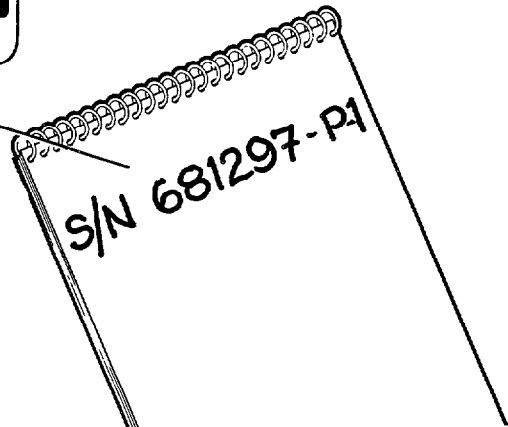
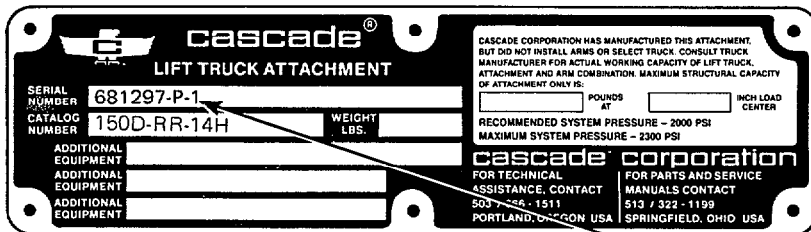
**Retail Customers** – Cascade Service Replacement Parts and Service Literature are sold through authorized lift truck dealers. To order, contact the lift truck dealer of your choice.

**Lift Truck Dealers** – To order Service Replacement Parts or Service Literature, contact:

Cascade Parts Depot  
2501 Sheridan Avenue  
P.O. Box 360  
Springfield, Ohio 45505  
(513) 322-1199  
Telex: 279563  
FAX: 513-325-9270

### 5. Parts Log

We have supplied a parts ordering log located on the last page. Use this log as a permanent record of parts ordered from this manual.

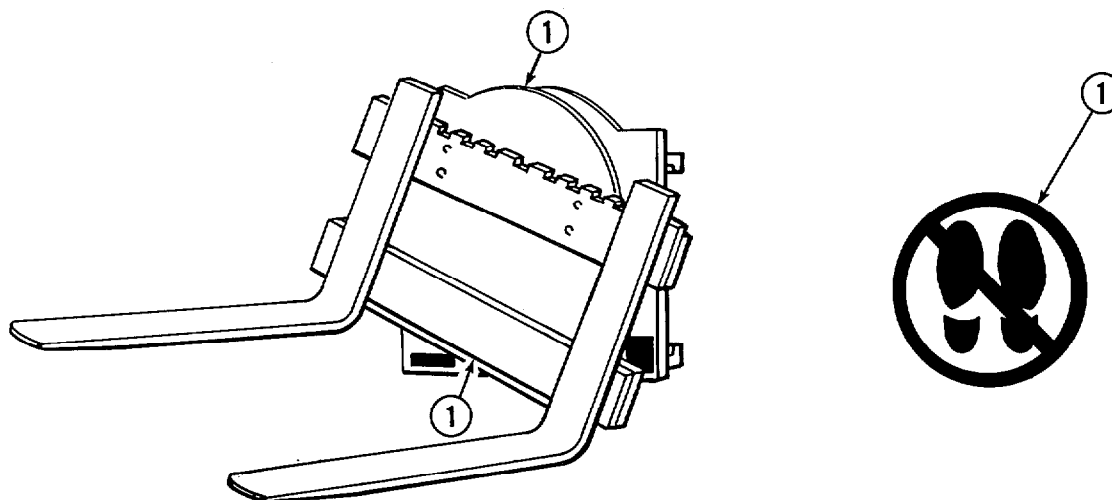


# Serial Number Index

Serial Number	Model	Base Group	Drive Group	Fork Bar Group	Adjustable Forks	Mounting Group
681020	120D	1	3	7	8	9
681021	120D	1	3	7	8	9
681022	120D	1	3	7	8	9
681023	120D	1	3	7	8	9
681024	120D	1	3	7	8	9
681025	120D	1	3	7	8	9
681026	120D	1	3	7	8	9
681027	120D	1	3	7	8	9
681028	120D	1	3	7	8	9
681029	120D	1	3	7	8	9
681030	120D	1	3	7	8	9
681031	120D	1	3	7	8	9
681032	120D	1	3	7	8	9
681033	120D	1	3	7	8	9
681034	120D	1	3	7	8	9
681035	120D	1	3	7	8	9
681036	120D	1	3	7	8	9
681037	120D	1	3	7	8	9
681038	120D	1	3	7	8	9
681039	120D	1	3	7	8	9
681040	120D	1	3	7	8	9
681041	120D	1	3	7	8	9
681042	120D	1	3	7	8	9
681043	120D	1	3	7	8	9
681045	120D	1	3	7	8	9
681047	120D	1	3	7	8	9
681073	120D	1	3	7	8	9
681074	120D	1	3	7	8	9
681075	120D	1	3	7	8	9
681297	150D	2	4	7	8	9
681298	150D	2	4	7	8	9
681299	150D	2	4	7	8	9
681300	150D	2	4	7	8	9
681301	150D	2	4	7	8	9
681302	150D	2	4	7	8	9
681303	150D	2	4	7	8	9
681304	150D	2	4	7	8	9
681305	150D	2	4	7	8	9
681306	150D	2	4	7	8	9
681307	150D	2	4	7	8	9
681308	150D	2	4	7	8	9
681309	150D	2	4	7	8	9
681313	150D	2	4	7	8	9
681314	150D	2	4	7	8	9
681315	150D	2	4	7	8	9
681316	150D	2	4	7	8	9
681317	150D	2	4	7	8	9
681318	150D	2	4	7	8	9
681319	150D	2	4	7	8	9
681320	150D	2	4	7	8	9
681321	150D	2	4	7	8	9
681322	150D	2	4	7	8	9
681323	150D	2	4	7	8	9
681324	150D	2	4	7	8	9
681325	150D	2	4	7	8	9

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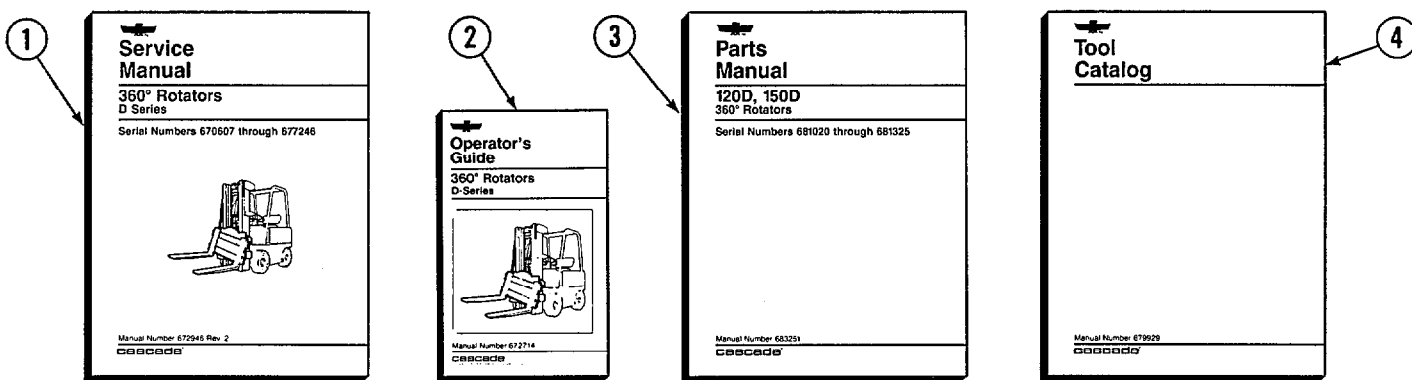
# Safety Decals



120D/150D			
REF	QTY	PART NO.	DESCRIPTION
1	2	679150	No Step Decal

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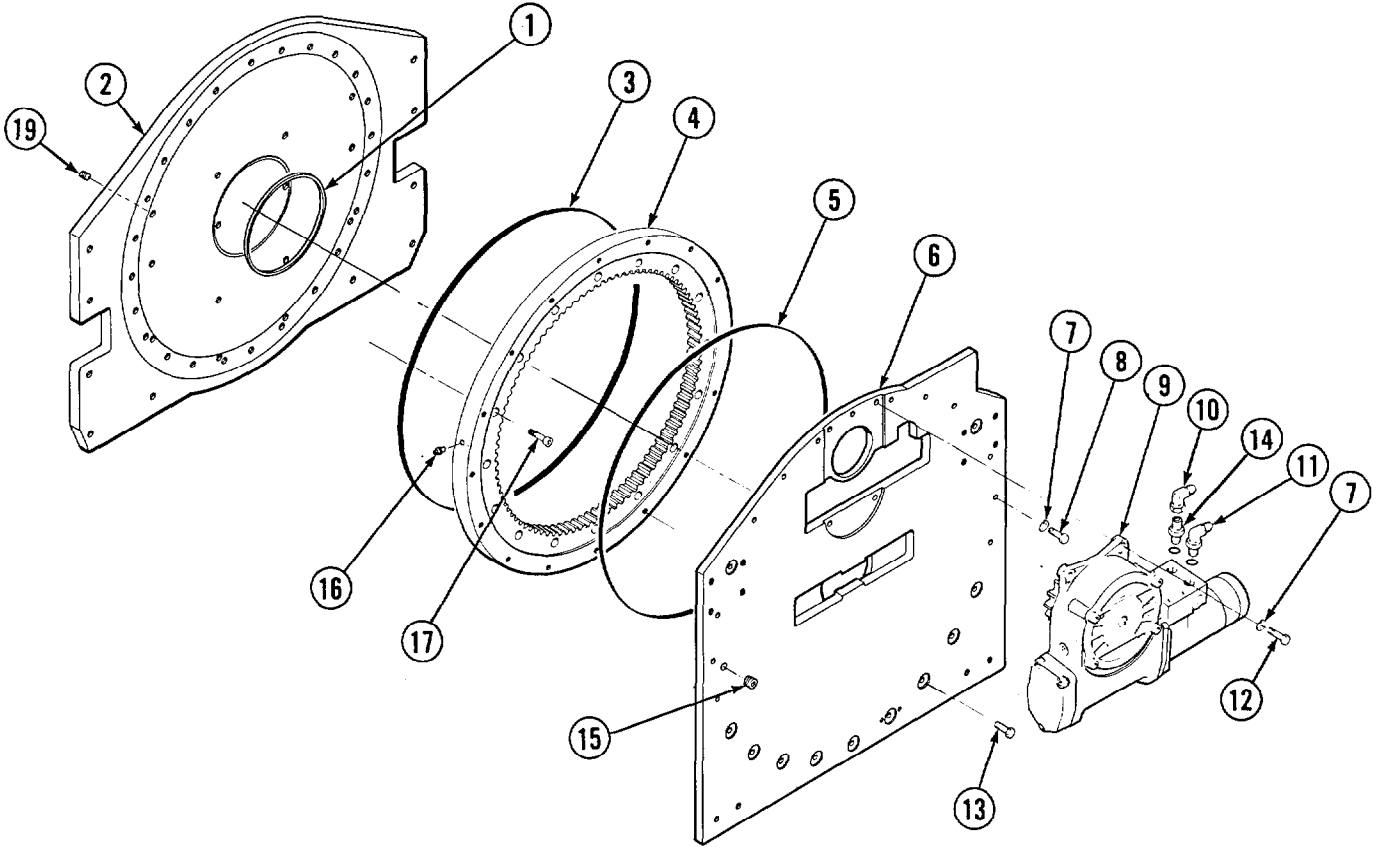
# Publications



120D/150D			
REF	QTY	PART NO.	DESCRIPTION
1	1	672946	Service Manual
2	1	672714	Operator's Guide
3	1	683251	Parts Manual
4	1	679929	Tool Catalog

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# Base Unit Group

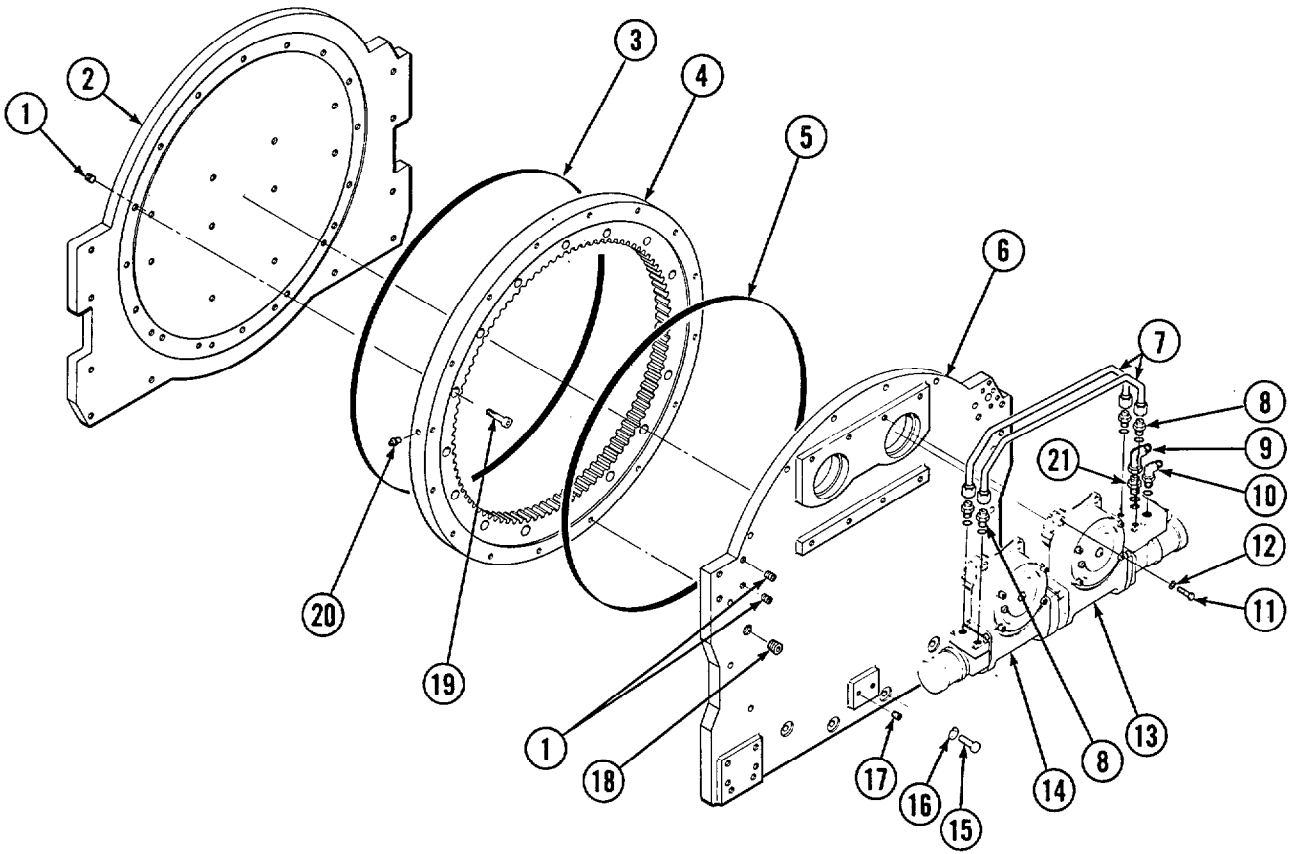


120D			
REF	QTY	PART NO.	DESCRIPTION
		681003	Base Unit Group
1	1	670931	Seal
2	1	681008	Faceplate
3	1	670515	Seal
◆ 4	1	681010	Bearing Assembly
5	1	670516	Seal
6	1	681004	Baseplate
7	17	6290	Lockwasher, M12 ID
8	13	768557	Capscrew, M12 x 50-8.8
● 9	1	675639	Drive Group
10	1	605761	Fitting, 8-8
11	1	601250	Fitting, 8-8
12	4	763021	Capscrew, M12 x 30-8.8
13	11	776298	Capscrew
14	1	601377	Fitting, 8-8
15	1	6605	Plug
16	1	7401	Grease Fitting
◆ 17	24	682918	Capscrew
		672482	Bearing Service Kit

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- Includes items 3 and 5.
- See page 3 for replacement parts breakdown.
- ◆ Included in Bearing Service Kit 672482.

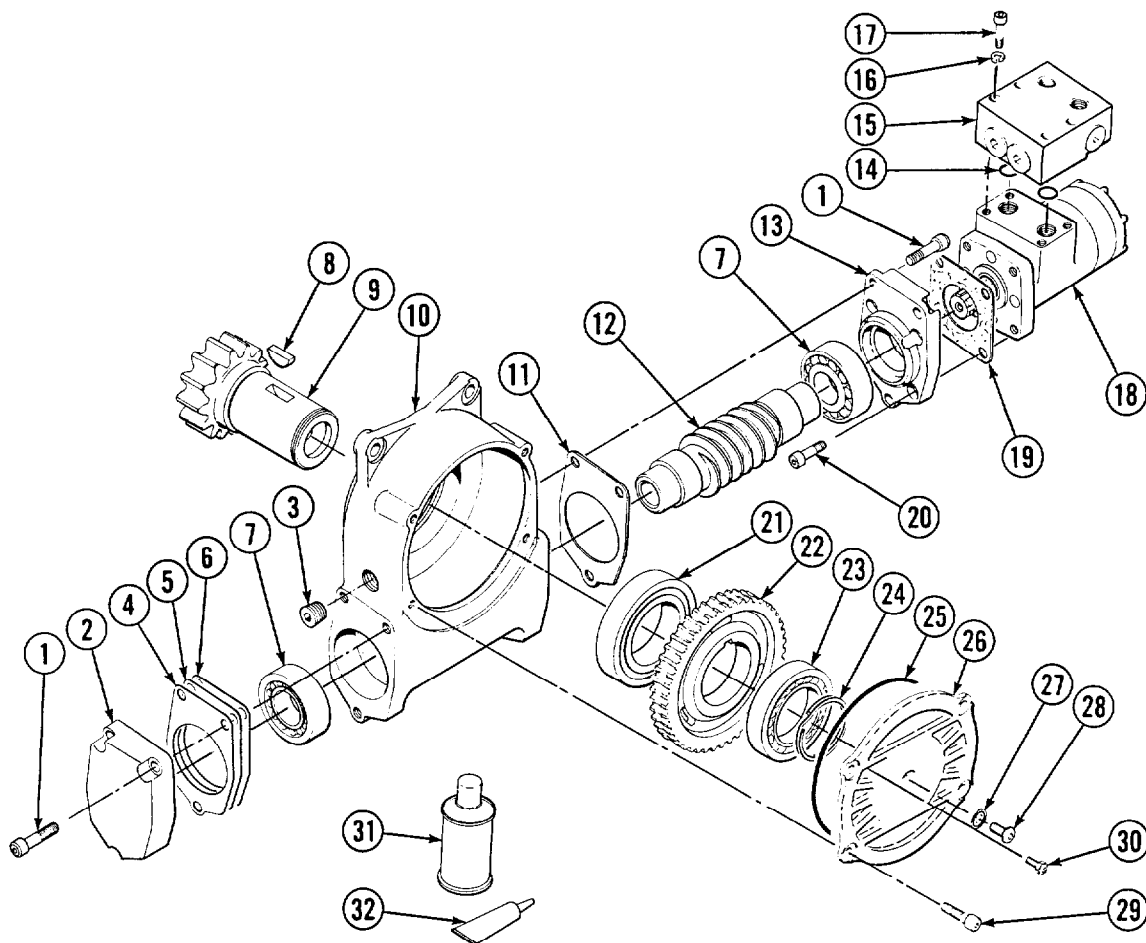
# Base Unit Group



150D			
REF	QTY	PART NO.	DESCRIPTION
		670772	Base Unit Group
★ 1	18	631428	Plug
2	1	670773	Faceplate
3	1	670518	Seal
◆ 4	1	670782	Bearing Assembly
5	1	670517	Seal
6	1	670774	Baseplate
7	2	670786	Tube Assembly
8	4	662187	Fitting, 8-6
9	1	605761	Fitting, 8-8
10	1	601250	Fitting, 8-8
11	8	661742	Capscrew, 1/2 NC x 1.25 GR5
12	8	6290	Lockwasher
●13	1	670558	Drive Group – R.H.
●14	1	670562	Drive Group – L.H.
15	16	637582	Capscrew, 3/4 NC x 2.25 GR5
16	16	6294	Lockwasher
17	2	631427	Plug
18	1	6605	Plug
◆19	16	672832	Capscrew
20	1	7401	Grease Fitting
21	1	601377	Fitting, 8
		672483	Bearing Service Kit

- ★ Plugs are used as dust covers for bearing assembly. 2912b-4/10  
 ■ Includes items 3 and 5.  
 ● See page 4 for replacement parts breakdown.  
 ◆ Included in Bearing Service Kit 672483.

# Drive Group

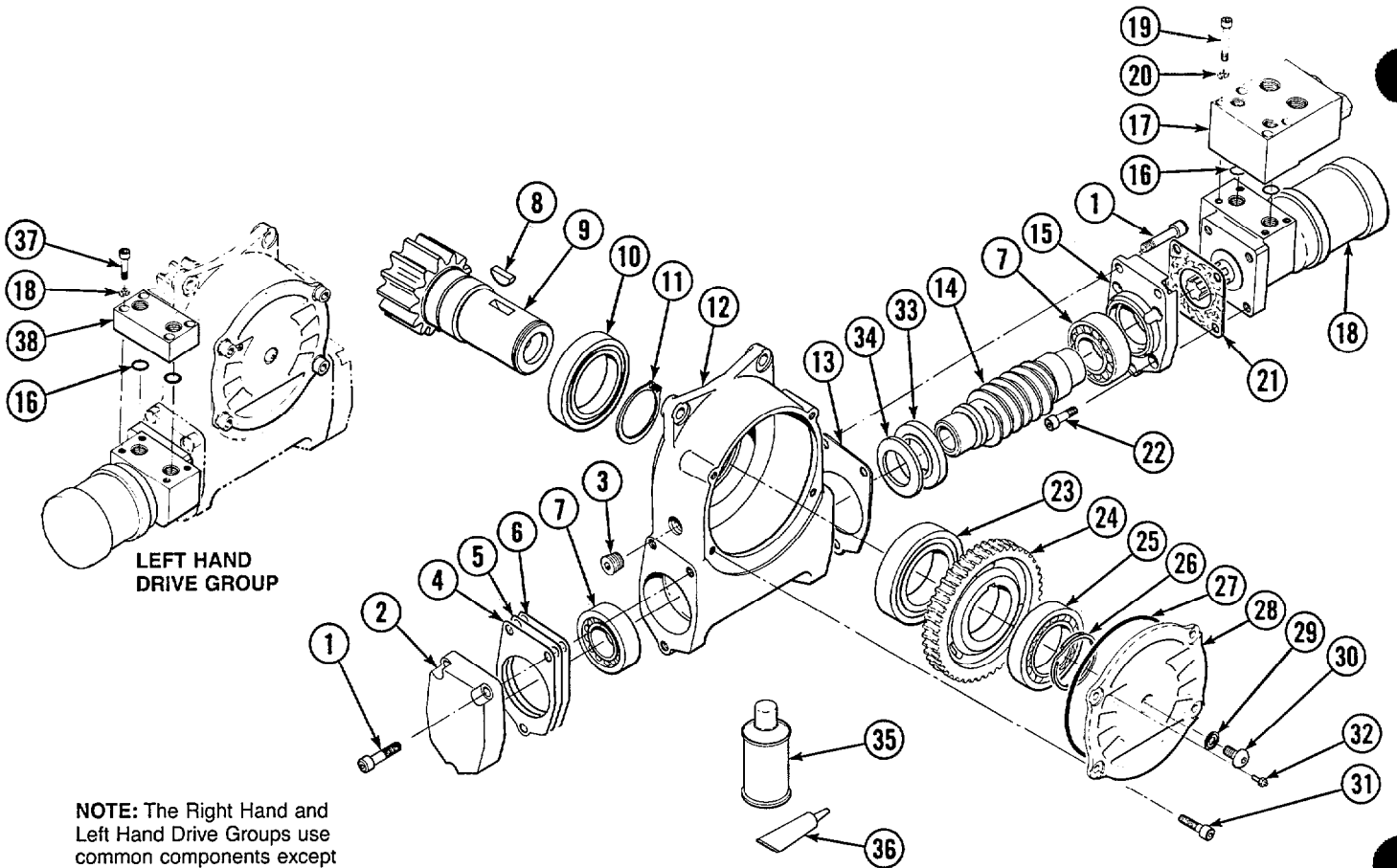


120D							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		675639	Drive Group with Motor	■18	1	675329	Drive Motor
		◆675633	Drive Group without Motor	19	1	670575	Gasket
1	6	607071	Capscrew, 7/16 NC x 1.0 GR8	20	4	4688	Capscrew, 3/8 NC x .75 GR8
2	1	676855	Cover	21	1	670580	Bearing
3	1	6609	Plug	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	670567	Cover
8	1	670582	Key	27	1	672350	Seal
9	1	670556	Pinion	28	1	4874	Capscrew, 3/8 NC x .50 GR8
10	1	670565	Housing	29	4	671535	Capscrew
11	1	670574	Shim -.010" (Brown)	30	1	644010	Relief Fitting
12	1	675608	Worm	31	1	656300	Gear Box Lube - 48 oz.
13	1	670570	Adapter	32	1	668184	Sealant
14	2	2705	Seal			670578	Shim Service Kit, (Items 4, 5, 6 & 32)
★15	1	670549	Check Valve			675637	Bearing Service Kit, (Items 21 & 32)
16	4	6444	Lockwasher			675638	Bearing Service Kit, (Items 4-7 & 32)
17	4	607059	Capscrew, 5/16 NC x 1.75 GR8			675343	Motor Service Kit, (Items 4, 14, 18, 19, & 32)

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- Quantity as required.
- ★ See page 5 for replacement parts breakdown.
- ◆ Does not include items 15, 16, 17 and 18.
- See page 6 for replacement parts breakdown.

# Drive Group



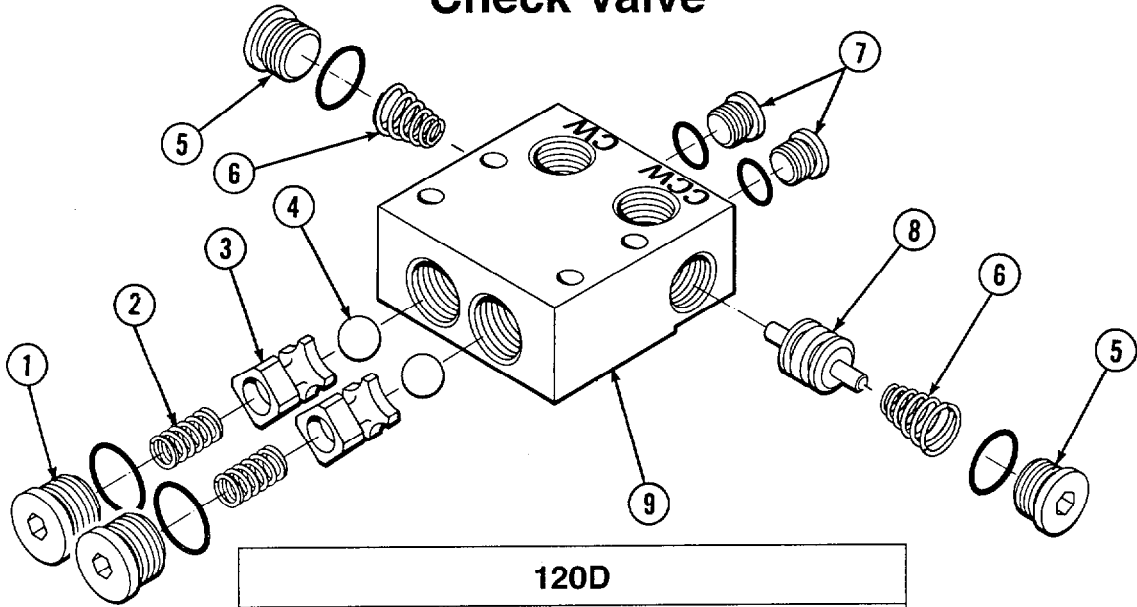
**NOTE:** The Right Hand and Left Hand Drive Groups use common components except items 17-20, 37 & 38.

150D							
REF	QTY	PART NO.	DESCRIPTION	REF	QTY	PART NO.	DESCRIPTION
		670558	Drive Group – R.H.	21	1	670575	Gasket
		670562	Drive Group – L.H.	22	4	4468	Capscrew, 3/8 NC x .75
	■	673896	Drive Box Service Kit – R.H.	23	1	670580	Bearing
	■	675867	Drive Box Service Kit – L.H.	24	1	676448	Worm Gear
1	6	607071	Capscrew, 7/16 NC x 1.0 GR8	25	1	670581	Bearing
2	1	676855	Cover	26	1	7214	Snap Ring
3	1	6609	Plug	27	1	643423	O-Ring
4	●	670574	Shim-.010" (Brown)	28	1	670567	Cover
5	●	671757	Shim-.015" (Pink)	29	1	603680	Seal
6	●	671758	Shim-.020" (Yellow)	30	1	4874	Capscrew, 3/8 NC x .50 GR8
7	2	670579	Bearing	31	4	671535	Capscrew, 5/16 NC x .75
8	1	670582	Key	32	1	644010	Relief
9	1	670559	Pinion	33	1	672448	Washer
10	1	670560	Bearing	34	1	672449	Washer Spring
11	1	3160	Snap Ring	35	1	656300	Gear Box Lube – 48 oz.
12	1	670565	Housing	36	1	668184	Sealant
13	1	670574	Shim-.010" (Brown)	37	4	607054	Capscrew, 5/16 NC x .75 GR8
14	1	676447	Worm	38	1	670563	Manifold – L.H. Drive only
15	1	670570	Adapter			670578	Shim Service Kit, (Items 4, 5, 6 & 36)
16	2	2705	Seal			671583	Bearing Service Kit, (Items 23 & 36)
◆ 17	1	670561	Valve Assembly – R.H. only			671584	Bearing Service Kit, (Items 4-7)
★ 18	1	675329	Drive Motor			676449	Service Kit, (Items 4-6, 14, 24, & 36)
19	4	607060	Capscrew, 5/16 NC x 2.00 GR8			675343	Motor Service Kit, (Items 4, 16, 18, 21 & 36)
20	4	6444	Lockwasher				

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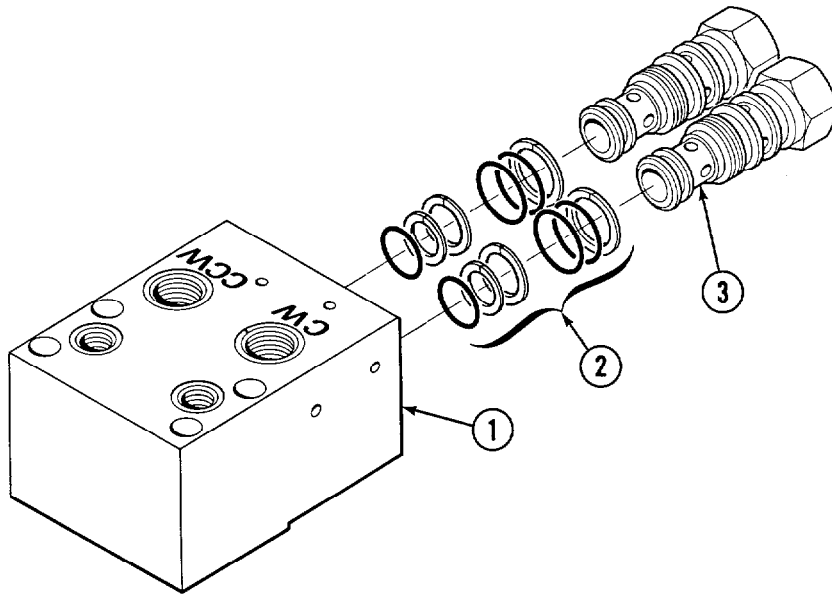
- Includes all items except 17-20, 37 & 38.
- Quantity as required.
- ◆ See page 5 for replacement parts breakdown.
- ★ See page 6 for replacement parts breakdown.

# Check Valve



120D			
REF	QTY	PART NO.	DESCRIPTION
		670549	Check Valve Assembly
1	2	609453	Plug
2	2	670552	Spring
3	2	670551	Guide
4	2	7020	Ball
5	2	602580	Plug
6	2	670554	Spring
7	2	604510	Plug
8	1	670553	Spool
9	1	670550	Body

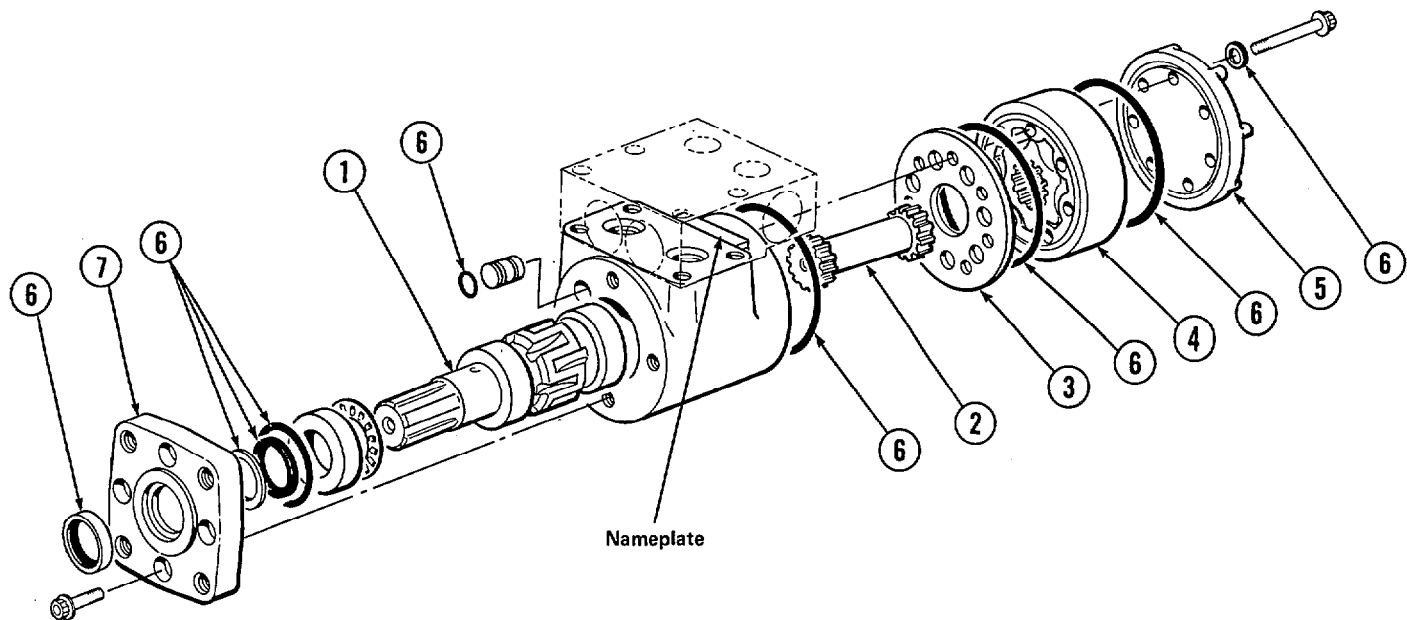
2912d-6/10



150D			
REF	QTY	PART NO.	DESCRIPTION
		670561	Check Valve Assembly
1	1	670583	Body
2	2	656223	Seal Kit
3	2	665097	Check Valve

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# Drive Motor



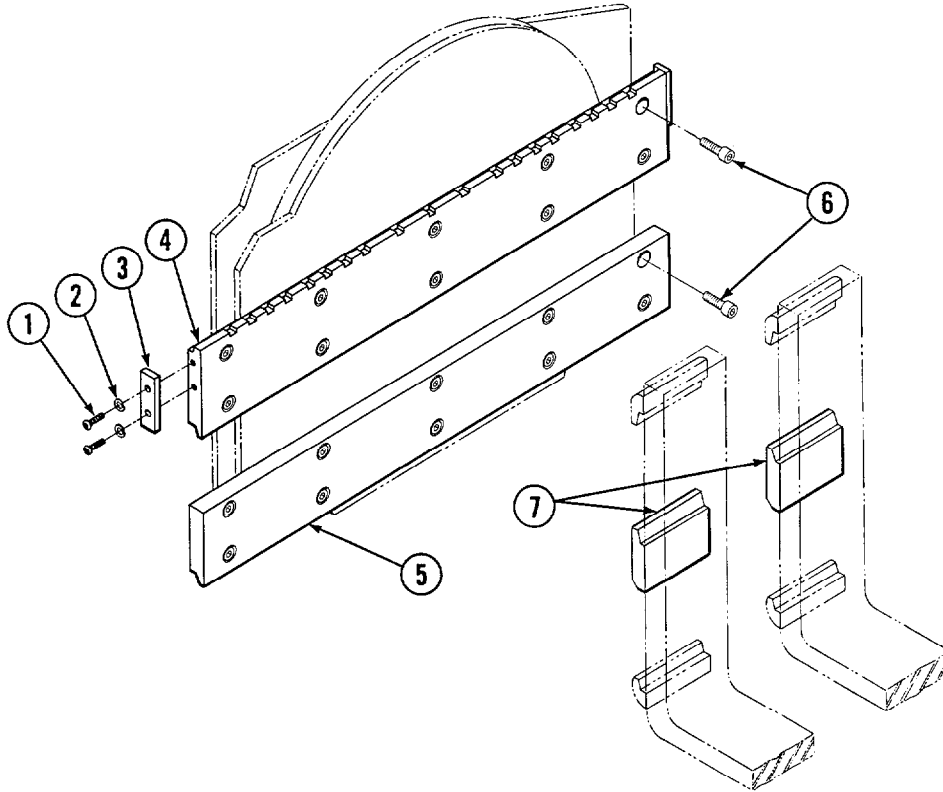
120D/150D			
REF	QTY	PART NO.	DESCRIPTION
		675329	Drive Motor
1	1	675478	Shaft
2	1	675477	Drive
3	1	675479	Spacer Plate
*4	1	675408	Geroter Set (101-1768-007)
	1	685075	Geroter Set (101-1768-009)
5	1	675482	End Cap
6	1	675474	Service Kit
*7	1	685089	Flange (101-1768-007)
	1	685090	Flange (101-1768-009)

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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 Geroter Set and Flange.

# Fork Bar Group



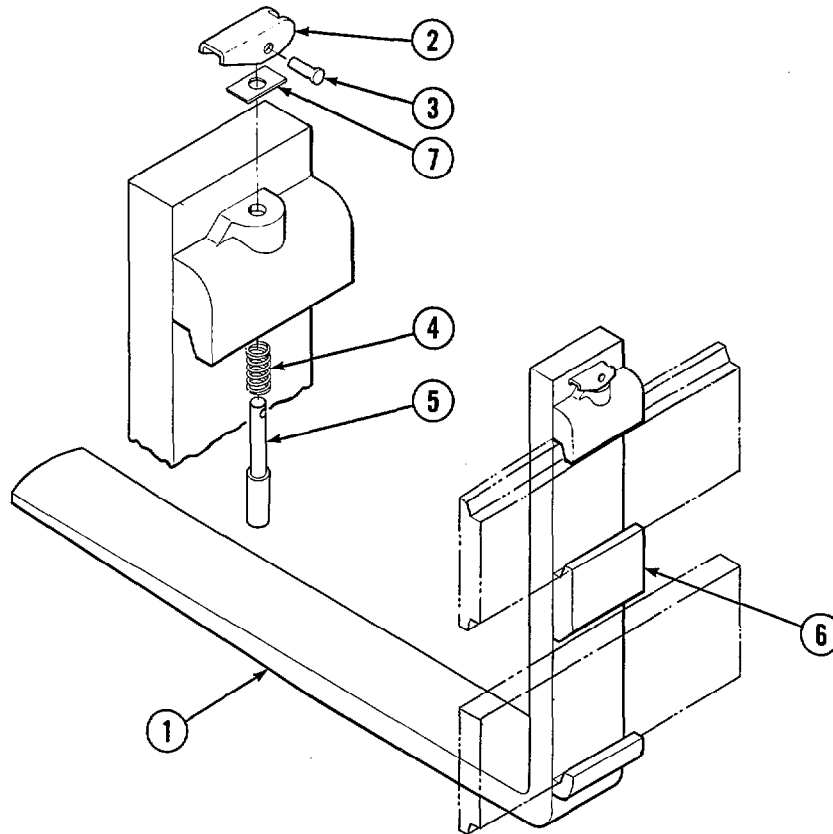
120D					
REF	QTY	49" PART NO.	61" PART NO.	73" PART NO.	DESCRIPTION
		681077	681078	681079	Fork Bar Assembly
1	4	4880	4880	4880	Capscrew, 1/2 NC x 1.0 GR8
2	4	6290	6290	6290	Lockwasher
3	2	622148	622148	622148	Keeper
4	1	681242	681243	681244	Upper Bar
5	1	681245	681246	681247	Lower Bar
6	24	681248	681248	681248	Capscrew
7	2	633671	633671	633671	Hook

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150D					
REF	QTY	49" PART NO.	61" PART NO.	73" PART NO.	DESCRIPTION
		681239	681240	681241	Fork Bar Assembly
1	4	4880	4880	4880	Capscrew, 1/2 NC x 1.0 GR8
2	4	6290	6290	6290	Lockwasher
3	2	622148	622148	622148	Keeper
4	1	681242	681243	681244	Upper Bar
5	1	681245	681246	681247	Lower Bar
6	24	681249	681249	681249	Capscrew
7	2	633671	633671	633671	Hook

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# Adjustable Forks



120D					
REF	QTY	48" PART NO.	60" PART NO.	72" PART NO.	DESCRIPTION
		633708	633709	633710	Fork Assembly
1	1	646988	646989	646990	Fork
2	1	622897	622897	622897	Handle
3	1	8007	8007	8007	Rivet
4	1	633668	633668	633668	Spring
5	1	633670	633670	633670	Pin
6	1	633671	633671	633671	Hook
7	1	633669	633669	633669	Washer

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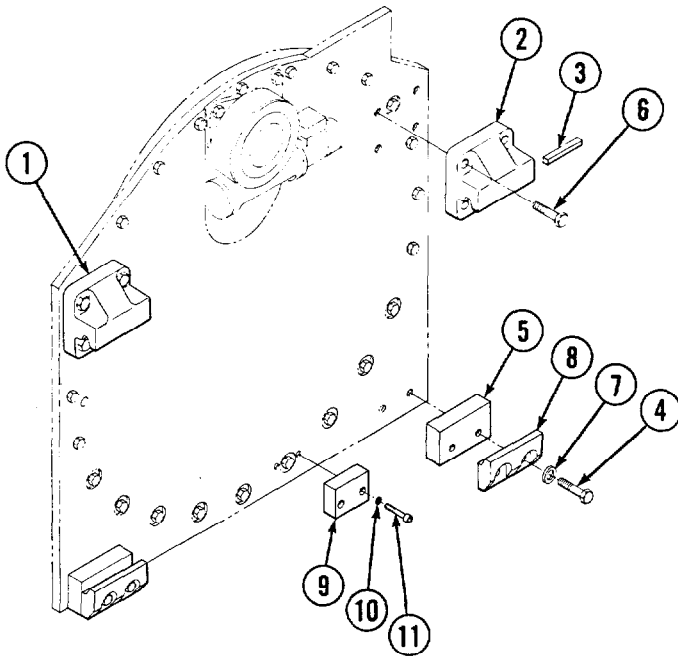
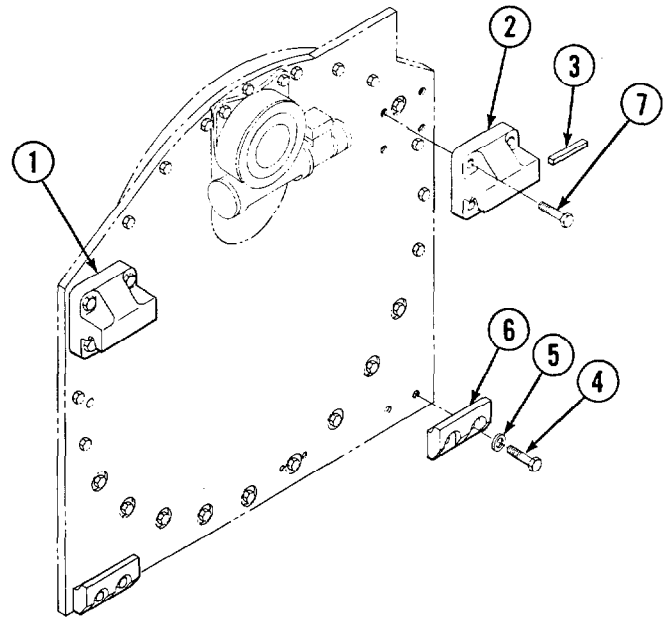
150D					
REF	QTY	48" PART NO.	60" PART NO.	72" PART NO.	DESCRIPTION
		681144	681445	681446	Fork Assembly
1	1	681141	681142	681143	Fork
2	1	622897	622897	622897	Handle
3	1	8007	8007	8007	Rivet
4	1	633668	633668	633668	Spring
5	1	633670	633670	633670	Pin
6	1	633671	633671	633671	Hook
7	1	633669	633669	633669	Washer

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# Mounting Group

120D Class IV, 4°			
REF	QTY	PART NO.	DESCRIPTION
		681017	Mounting Group
1	1	681063	Upper Hook-L.H.
2	1	681062	Upper Hook-R.H.
3	1	670704	Stop Kit
4	4	779020	Capscrew
5	4	670692	Washer
6	2	679832	Lower Hook
7	8	679082	Capscrew

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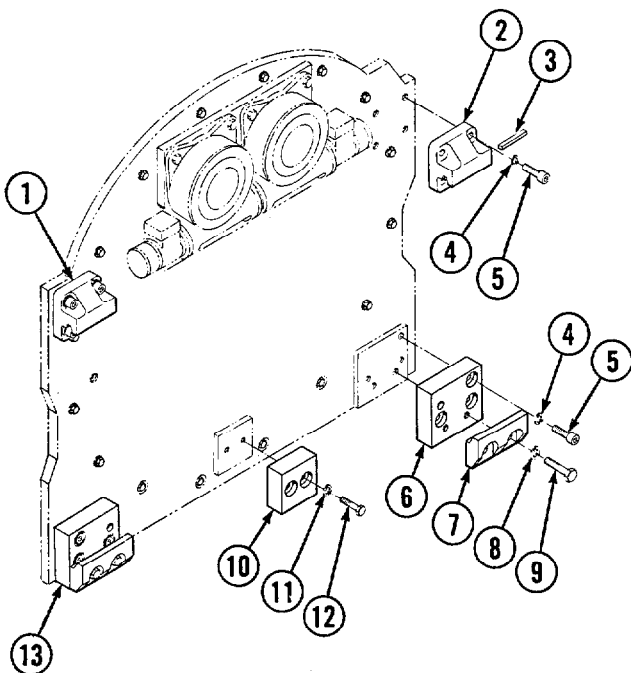
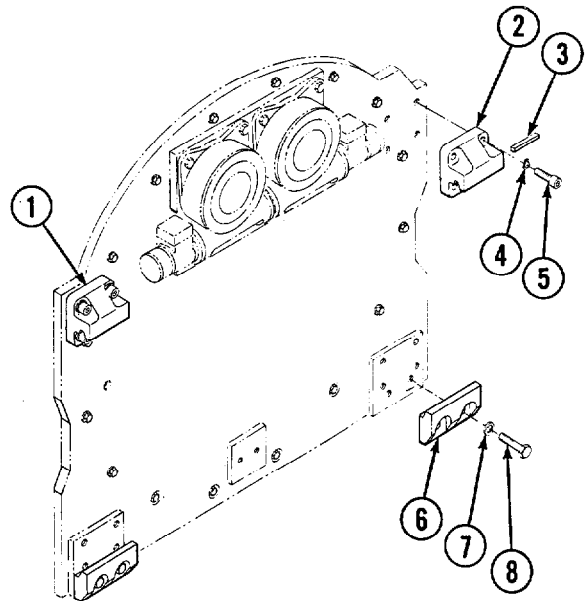
120D Class IV, 0°			
REF	QTY	PART NO.	DESCRIPTION
		681018	Mounting Group
1	1	675062	Upper Hook-L.H.
2	1	675061	Upper Hook-R.H.
3	1	670704	Stop Kit
4	4	679083	Capscrew
5	2	681019	Spacer
6	8	679082	Capscrew
7	4	670692	Washer
8	2	679832	Lower Hook
9	1	675081	Spacer
10	2	6372	Washer
11	2	768810	Capscrew

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# Mounting Group

150D Class IV, 4°			
REF	QTY	PART NO.	DESCRIPTION
		670787	Mounting Group
1	1	670690	Upper Hook-L.H.
2	1	670691	Upper Hook-R.H.
3	1	670704	Stop Kit
4	8	6448	Lockwasher
5	8	670104	Capscrew, 3/4 NC x 1.75 GR8
6	2	670694	Lower Hook
7	4	670692	Washer
8	4	670693	Capscrew

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150D Class IV, 0°			
REF	QTY	PART NO.	DESCRIPTION
		670788	Mounting Group
1	1	670690	Upper Hook-L.H.
2	1	670691	Upper Hook-R.H.
3	1	670704	Stop Kit
4	14	6448	Lockwasher
5	14	670104	Capscrew, 3/4 NC x 1.75 GR8
6	1	672700	Adapter Plate-R.H.
7	2	670694	Lower Hook
8	4	670692	Washer
9	4	670693	Capscrew
10	1	670693	Bumper
11	2	6290	Lockwasher
12	2	3657	Capscrew, 1/2 NC x 2.0
13	1	672699	Adapter Plate-L.H.

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# Recommended Spare Parts List

120D, 150D Rotators					
PART NO.		DESCRIPTION	ATTACHMENTS SERVICED		
120D	150D		1-5	6-19	20-50
		<b>DRIVE GROUP</b>			
675608	676447	Worm	0	1	2
670556	670559	Pinion	0	1	2
670581	670581	Bearing	0	1	1
7214	7214	Snap Ring	2	2	4
643423	643423	O-Ring	1	2	2
675329	675329	Drive Motor	0	1	1
675474	675474	Drive Motor Seal Kit	1	1	2
668184	668184	Sealant	1	2	2
—	670560	Bearing	0	1	2
675638	671584	Bearing Service Kit	1	1	2
675637	671583	Bearing Service Kit	1	2	2
656300	656300	Gear Box Lube	1	2	2
		<b>CHECK VALVE</b>			
670549	670561	Check Valve Assembly	0	1	1
—	665097	Check Valve	0	2	2
—	656223	Seal Kit	1	2	2
		<b>STOP KIT</b>			
670704	670704	Stop Kit	1	2	2
		<b>PAINT, CASCADE YELLOW</b>			
668209	668209	12 oz. Aerosol Can	1	1	1
		<b>PUBLICATIONS</b>			
672946	672946	Service Manual	1	1	1
672914	672914	Operators Guide	1	1	1
683251	683251	Part Manual	1	1	1
679929	679929	Tool Catalog	1	1	1

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

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