



PARTS BOOK

FLAIL HEADS

• 50" CUT, DUAL DOOR • BOOM MOUNT • 5.10.18 •

DIAMOND MOWERS, LLC
350 E 60th St. North
Sioux Falls, SD 57104

FOR WARRANTY CALL DIAMOND MOWERS DIRECT:
888-960-0364

OUR TECHNICIANS WILL DIAGNOSE YOUR SITUATION
OVER THE PHONE TO GET YOU UP AND RUNNING QUICKLY.

Phone: 605-977-3300
Fax: 605-655-5870
www.diamondmowers.com

DEMAND BRILLIANCE.

© DIAMOND MOWERS, LLC



Foreword

This manual contains the parts breakdown and identification of the various components and structures that make up your mower implement.

The illustrations, drawings, and diagrams in this manual are based on the latest information available at the time of publication. Your machine may have product improvements and features not yet contained in this parts manual.

Diamond Mowers, LLC reserves the right to make changes at any time without notice or obligation.

Diamond Mowers, LLC™ and Wetblade™ are trademarks of Diamond Mowers, LLC.

This manual should be consulted prior and while assembling the unit, and anytime parts or assembly clarification is needed.

Copyright© 2016 Diamond Mowers, LLC

All rights reserved. While every precaution has been taken in the preparation of this manual, the publisher assumes no responsibility for errors or omissions. No part of this book covered by the copyrights hereon may be reproduced or copied in any form or by any means - graphic, electronic, or mechanical, including photocopying, taping, or information storage and retrieval systems - without written permission of the publisher.



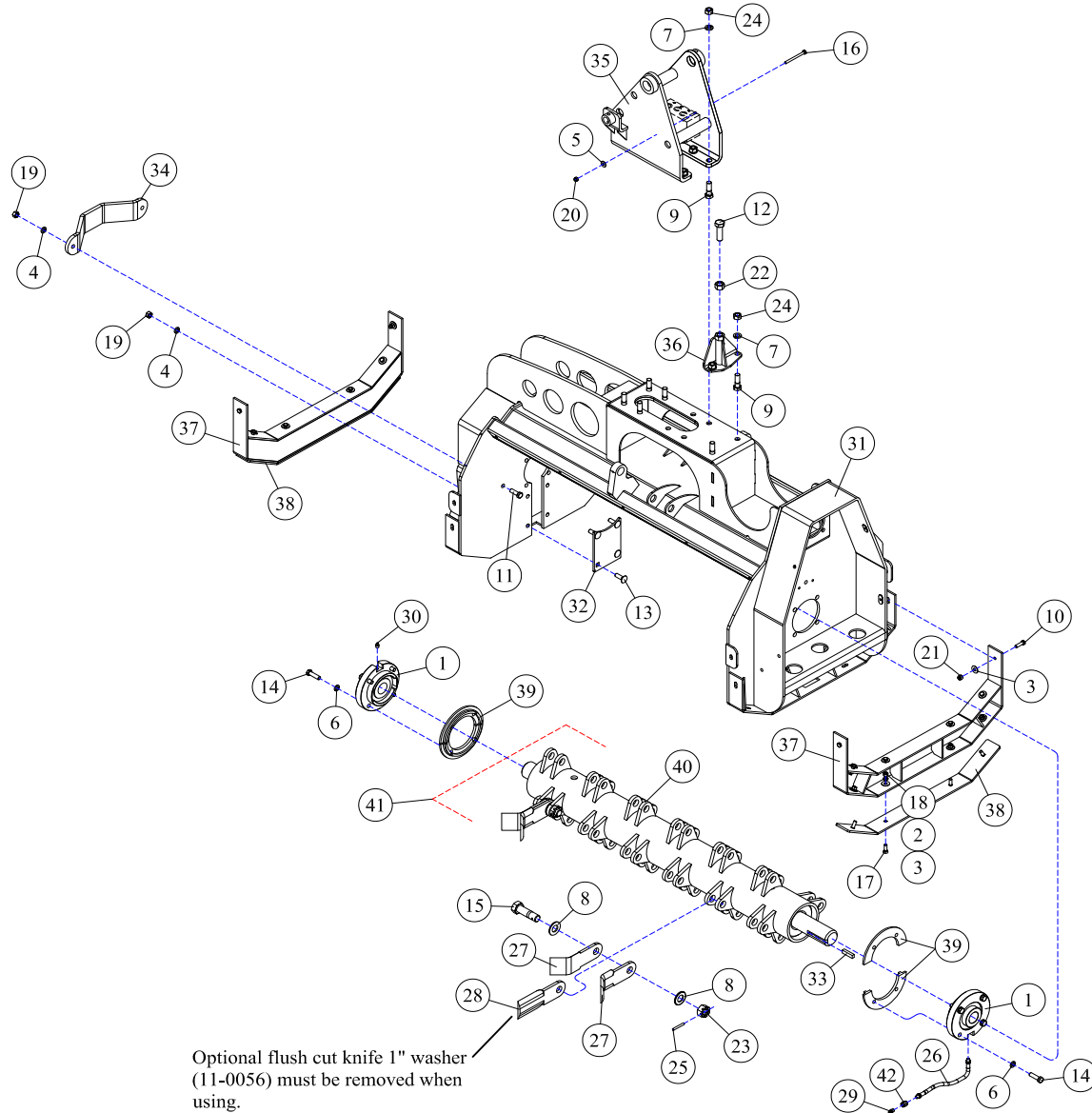
Table of Contents

FLAIL HEADS	4
BOOM FLAIL HEAD - 50" CUTTER ASSEMBLY, DUAL TRAP DOOR.....	5
DECAL IDENTIFICATION - BOOM FLAIL.....	6
BOOM FLAIL HEAD - 50" DRIVE ASSEMBLY, DUAL TRAP DOOR.....	7
BOOM FLAIL HEAD - 50" HYDRAULIC TRAPDOOR, DUAL TRAP DOOR.....	8
BOOM FLAIL HEAD - 44" & 50" BLADE CONFIGURATIONS.....	9
DRIVE ASSEMBLIES	10
DRIVE ASSEMBLY - 50" FLAIL MOWER (WHEEL LOADER POWERED BOOM ONLY).....	11
DECK ASSEMBLIES	12
30-0509 - MOTOR ASSEMBLY.....	13
LIFT ASSEMBLIES	14
14-0020 - 2X6 TIE-ROD CYLINDER.....	15



FLAIL HEADS

BOOM FLAIL HEAD - 50" CUTTER ASSEMBLY, DUAL TRAP DOOR

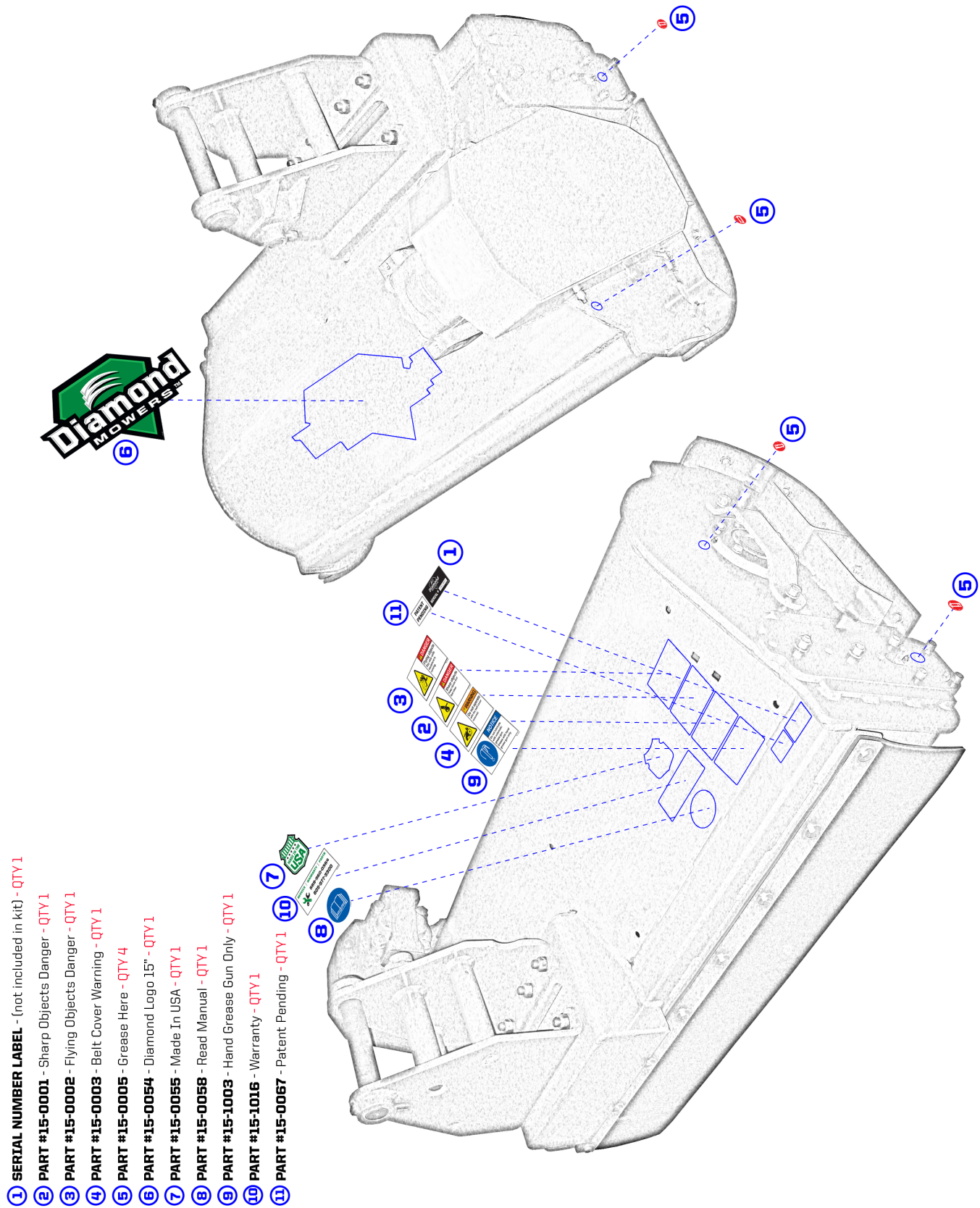


REF#	PARTS DESCRIPTION	REQ	PART #
1	CUTTER SHAFT BEARING	2	10-0006
2	3/8 LOCK WASHER	8	11-0005
3	3/8 FLAT WASHER	20	11-0009
4	1/2 LOCK WASHER	6	11-0011
5	5/16 FLAT WASHER	2	11-0015
6	1/2 H.S. LOCK WASHER	8	11-0036
7	5/8 H.S. LOCK WASHER	10	11-0043
8	1 SAE H.S. FLAT WASHER	48	11-0056
9	5/8 X 2 H.S. NF HEX CAPSCREW	10	11-0508
10	3/8 X 1-1/4 NC HEX CAPSCREW	12	11-0533
11	1/2 X 1-1/2 NC HEX CAPSCREW	2	11-0534
12	3/4 X 2-1/2 NC HEX CAPSCREW	1	11-0563
13	1/2 X 1-1/2 NC CARRIAGE BOLT	4	11-0608
14	1/2 X 1-3/4 H.S. NF HEX CAPSCREW	8	11-0664
15	1 X 3-1/2 SPECIAL CTR SHF BOLT	24	11-0757
16	5/16 X 3-1/2 NC HEX CAPSCREW	2	11-0782
17	3/8 X 1-1/4 NC PLOW BOLT	8	11-0804
18	3/8 NC HEX NUT	8	11-1001
19	1/2 NC HEX NUT	6	11-1016
20	5/16 NC NYLOCK NUT	2	11-1023
21	3/8 NC NYLOCK NUT	12	11-1024
22	3/4 NC HEX NUT	1	11-1033

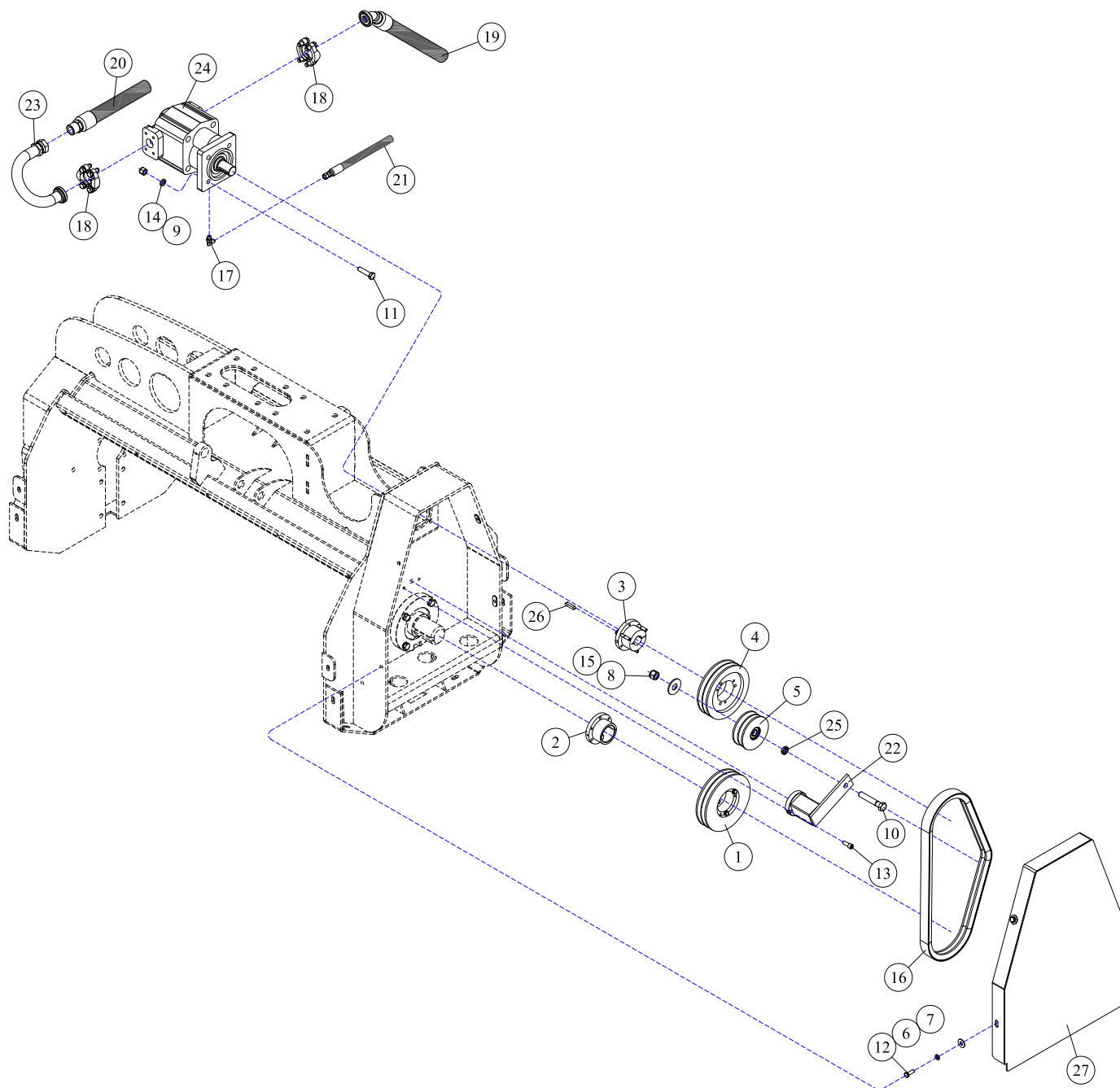
REF#	PARTS DESCRIPTION	REQ	PART #
23	1 NC SLOTTED JAM NUT	24	11-1054
24	5/8 H.S. NF STOVER NUT	10	11-1143
25	1/4 X 2 ROLL PIN	24	11-2005
26	GREASE ZERK HOSE	1	21-0002
27	FLAIL KNIFE, HEAVY DUTY BRUSH	48	22-1017
28	FLUSH CUT KNIFE	24	22-1021
29	1/8" X 45DEG GREASE ZERK	1	23-0002
30	1/8" GREASE ZERK	1	23-0003
31	50" BOOM FLAIL BONNET	1	25-0181
32	COVER PLATE	1	31-0397
33	CUTTER SHAFT KEY	1	37-0021
34	CUTTER SHAFT GUARD	1	41-0097
35	MAST	1	41-0195
36	DECK ROLL STOP	1	41-0473
37	SKID SHOE BRACKET	2	41-1227
38	SKID SHOE	2	42-0042
39	BEARING GUARD	4	46-0018
40	CUTTER SHAFT	1	46-0024
41	CUTTER SHAFT COMPLETE	1	46-1017
42	1/8" BRASS COUPLER	1	9996
43	BLADE KIT (Includes 8, 15, 23, 25, & 27)	1	44-0229

DECAL IDENTIFICATION - BOOM FLAIL

090718



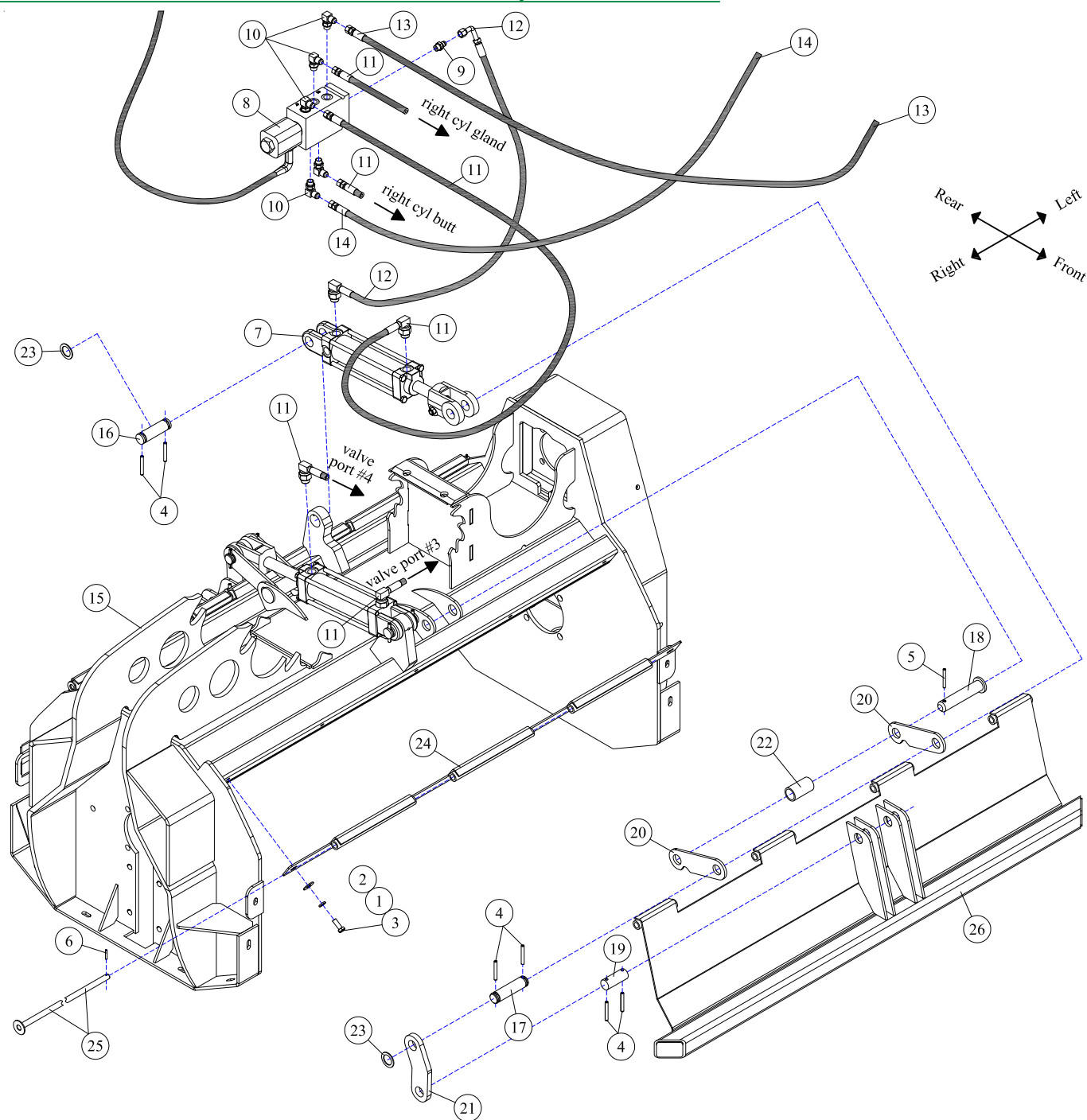
BOOM FLAIL HEAD - 50" DRIVE ASSEMBLY, DUAL TRAP DOOR



REF#	PARTS DESCRIPTION	REQ	PART #
1	PULLEY, 7.5"	1	10-1008
2	2-3/16" TAPERLOCK BUSHING	1	10-1012
3	1-1/4" TAPERLOCK BUSHING	1	10-1014
4	PULLEY, 7.1"	1	10-1015
5	SHEAVE IDLER ASSEMBLY	1	10-1016
6	3/8 LOCK WASHER GR5	4	11-0005
7	3/8 FLAT WASHER GR5	4	11-0009
8	3/4 FLAT WASHER GR5	1	11-0010
9	1/2 LOCK WASHER GR5	4	11-0011
10	5/8 X 3-1/2 NC HEX CAPSCREW	1	11-0512
11	1/2 X 2 NC HEX CAPSCREW	4	11-0522
12	3/8 X 1 NC HEX CAPSCREW	4	11-0532
13	3/8 X 1 H.S. NC SOCKET HEAD CAPSCREW	1	11-0752
14	1/2 NC NYLOCK NUT	4	11-1018

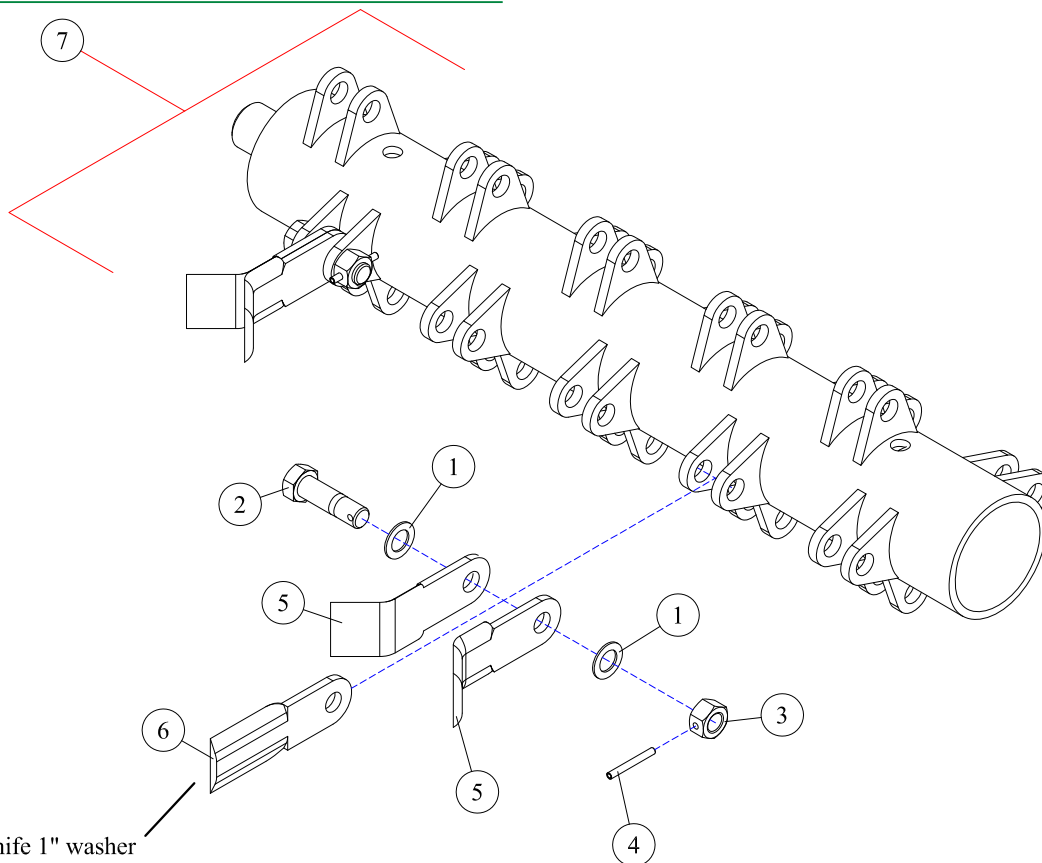
REF#	PARTS DESCRIPTION	REQ	PART #
15	5/8 NC NYLOCK NUT	1	11-1025
16	DOUBLE BELT 560	1	12-0020
17	1/4MJIC X 1/4MORB 90DEG, ADAPTER	1	21-1264
18	FLANGE KIT	2	21-2105
19	HOSE 1 X 64 (#20FLG-45DEG X 1FJIC)	1	21-3894
20	HOSE 1 X 65 (1MP X 1FJIC)	1	21-3895
21	HOSE 3/8 X 75 (1/4FJIC X 1/2MJIC)	1	21-4324
22	ROSTA TENSIONER	1	24-0081
23	PRE-FORMED TUBE	1	28-0014
24	MOTOR M350 1-3/4" GEAR (Excluding wheel loader-powered booms.)	1	30-0509
25	SPACER	1	34-0033
26	MOTOR KEY	1	37-0020
27	BELT GUARD	1	41-0123

BOOM FLAIL HEAD - 50" HYDRAULIC TRAPDOOR, DUAL TRAP DOOR



REF#	PARTS DESCRIPTION	REQ	PART #
1	3/8 LOCK WASHER GR 5	10	11-0005
2	3/8 FLAT WASHER GR 5	10	11-0009
3	3/8 X 1 NC HEX CAPSCREW	10	11-0532
4	1/4 ROLL PIN	12	11-2005
5	7/32 ROLL PIN	2	11-2006
6	5/32 ROLL PIN	2	11-2054
7	2 X 6 CYLINDER	2	14-0020
8	DIVERTER VALVE	1	16-0130
9	ADAPTER, 3/8MJIC X 3/8MORB	1	21-1401
10	ELBOW, 3/8MJIC X 3/8ADJ-OR-90DEG	5	21-1402
11	HOSE 1/4 X 19 (1/2MORB-90 X 3/8FJIC)	3	21-4161
12	HOSE 1/4 X 19 (1/2MORB-90 X 3/8FJIC-90)	1	21-4162
13	HOSE 1/4 X 78 (5/16MJIC X 3/8FJIC)	1	21-4257

REF#	PARTS DESCRIPTION	REQ	PART #
14	HOSE 1/4 X 81 (5/16MJIC X 3/8FJIC)	1	21-4258
15	BONNET, 50" BOOM FLAIL - HYD TRAP	1	25-0181
16	CYLINDER PIN, 1 X 3-1/2"	2	27-0004
17	CYLINDER PIN, 1 X 4"	2	27-0005
18	LINKAGE PIN	2	27-0017
19	MANUAL TRAP DOOR PIN 1" ROD	2	27-0041
20	DECK LINKAGE	4	31-0118
21	DOOR LINKAGE	2	31-0119
22	DOOR SPACER	2	31-0120
23	14GA BUSHING	4	34-0061
24	HINGE	2	41-0596
25	HINGE ROD	2	41-0598
26	HYDRAULIC SHIELD	2	41-1195

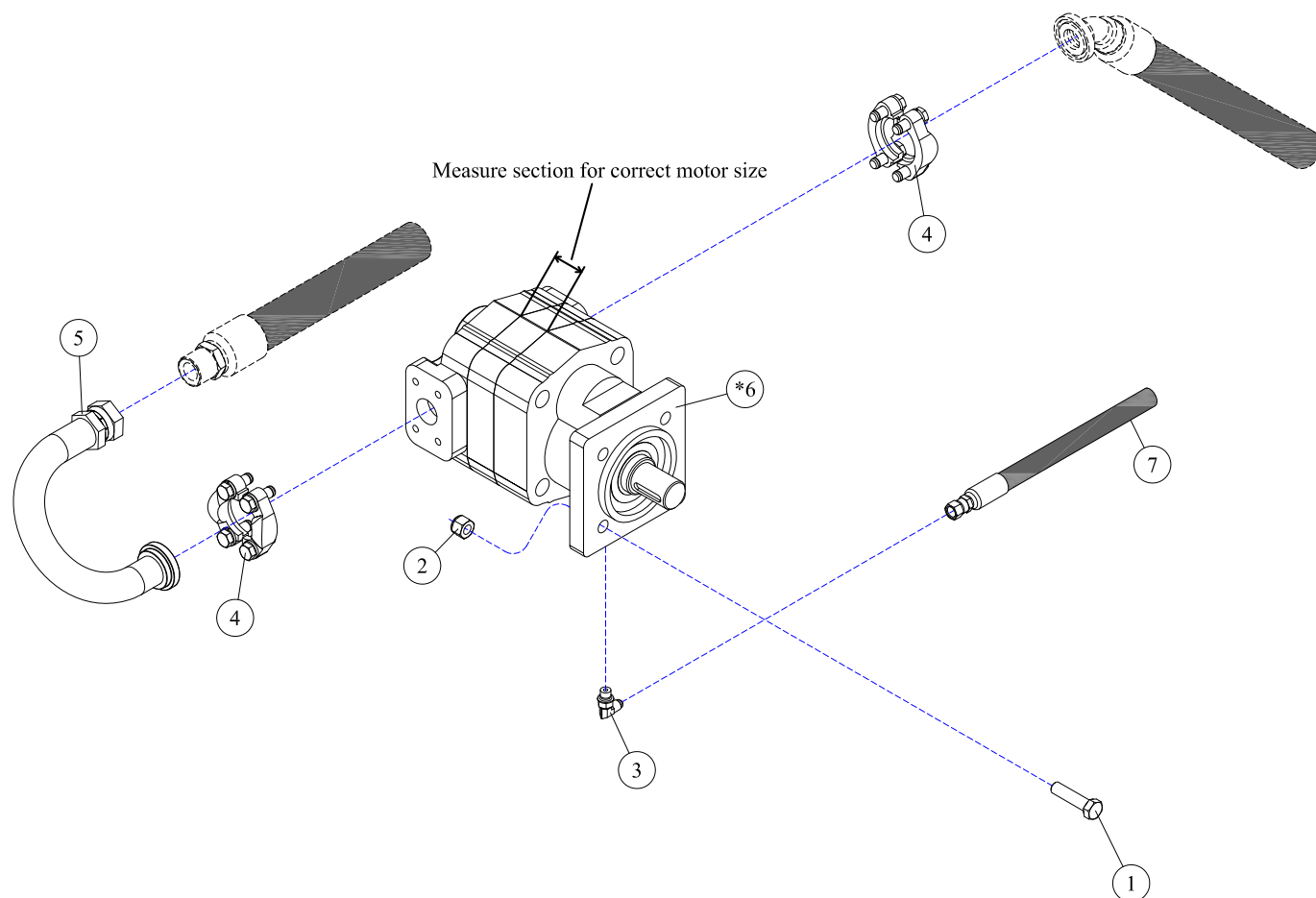
BOOM FLAIL HEAD - 44" & 50" BLADE CONFIGURATIONS

Optional flush cut knife 1" washer (11-0056) must be removed when using.

REF#	PARTS DESCRIPTION	REQ	PART #
<u>44" HEAVY DUTY BOOM FLAIL</u>			
1	1 SAE H.S. FLAT WASHER	40	11-0056
2	1 X 3-1/2 SPECIAL CUTTER SHAFT BOLT	20	11-0757
3	1 NC SLOTTED JAM NUT	20	11-1054
4	1/4 X 2 ROLL PIN	20	11-2005
5	FLAIL KNIFE, HEAVY DUTY BRUSH	40	22-1017
6	FLUSH CUT KNIFE	20	22-1021
7	CUTTER SHAFT COMPLETE	1	46-1030
<u>50" HEAVY DUTY BOOM FLAIL</u>			
1	1 SAE H.S. FLAT WASHER	48	11-0056
2	1 X 3-1/2 SPECIAL CTR SHF BOLT	24	11-0757
3	1 NC SLOTTED JAM NUT	24	11-1054
4	1/4 X 2 ROLL PIN	24	11-2005
5	FLAIL KNIFE, HEAVY DUTY BRUSH	48	22-1017
6	FLUSH CUT KNIFE	24	22-1021
7	CUTTER SHAFT COMPLETE	1	46-1017



DRIVE ASSEMBLIES

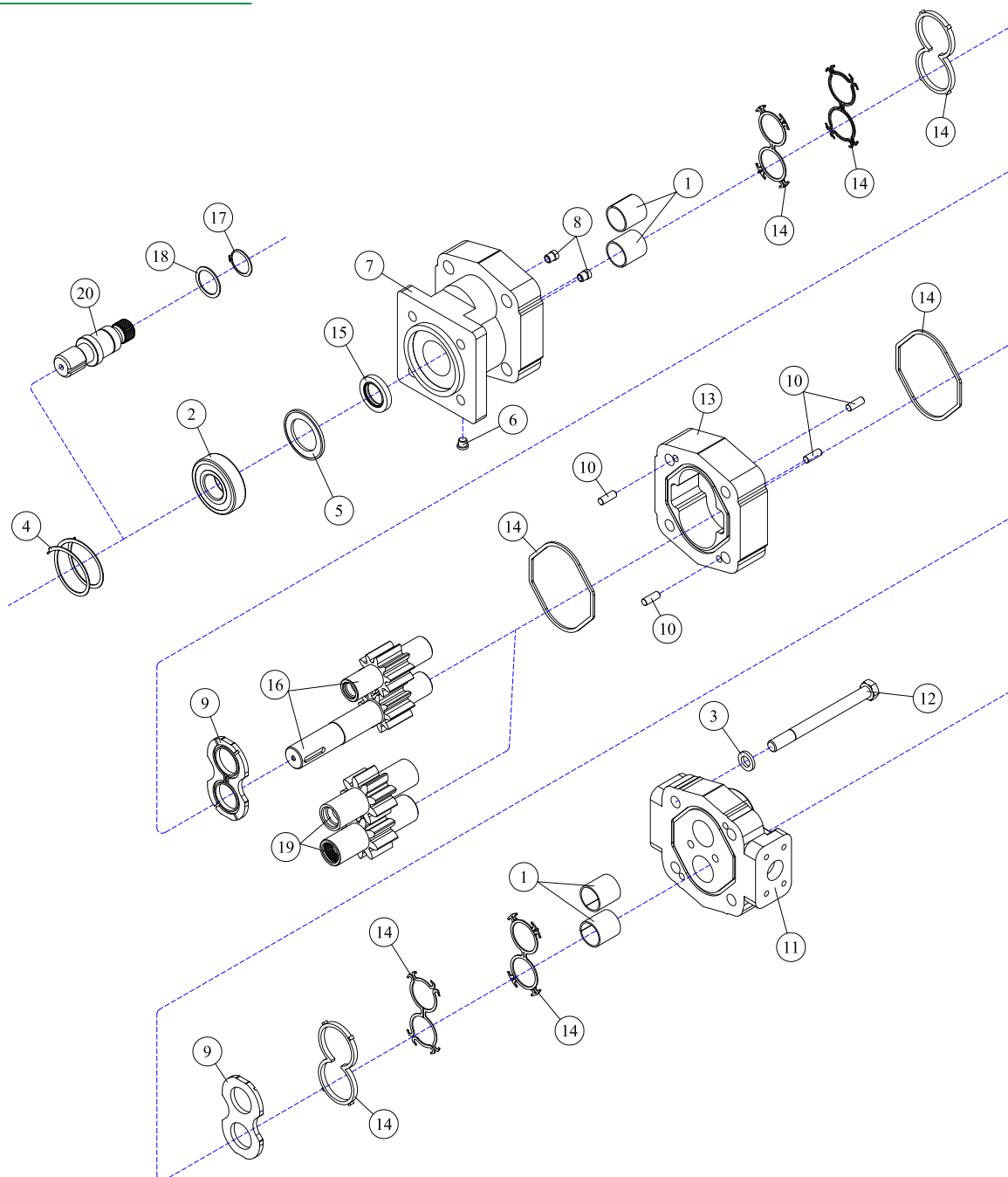
DRIVE ASSEMBLY - 50" FLAIL MOWER (WHEEL LOADER POWERED BOOM ONLY)

* Note: These are the flow rates AFTER the oil has passed through the 4:1 divider.

REF#	PARTS DESCRIPTION	REQ	PART #
1	1/2 X 2 NC HEX CAPSCREW	4	11-0522
2	1/2 NC NYLOCK NUT	4	11-1018
3	1/4MJIC X 1/4MORB 90DEG, ADAPTER	1	21-1264
4	FLANGE KIT	2	21-2105
5	PRE-FORMED TUBE	1	28-0014
* 6	MOTOR		
	M350, 1-1/4" GEAR SET, 1-3/4" SECT, 30-39 GAL/MIN	1	30-0513
	M350, 1-3/4" GEAR SET, 2-1/4" SECT, 40-45 GAL/MIN	1	30-0509
7	HOSE 3/8 X 75 (1/4FJIC X 1/2MJIC)	1	21-4324

The image shows a close-up, slightly angled view of a wooden deck. The wood grain is prominent, with various shades of brown and tan. A horizontal grey band runs across the middle of the image, serving as a background for the text. The text is in a bold, black, sans-serif font, flanked by two horizontal green lines.

DECK ASSEMBLIES

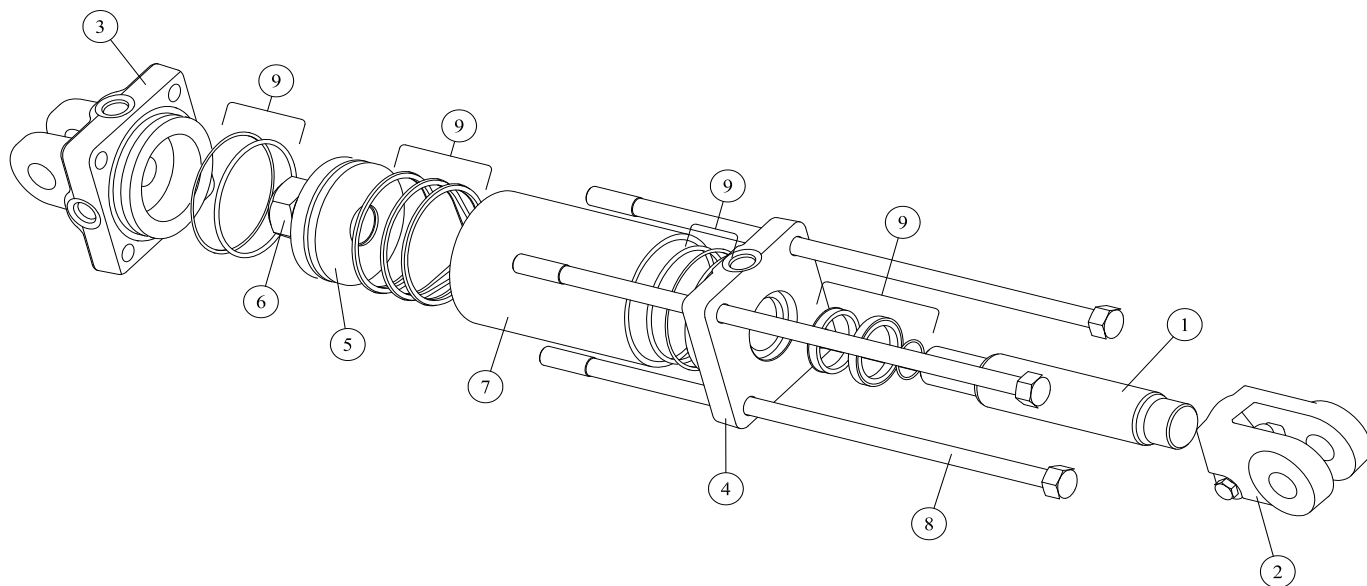
30-0509 - MOTOR ASSEMBLY

REF#	PARTS DESCRIPTION	REQ	PART #
1	BUSHING	4	30-1002
2	BALL BEARING	1	30-1044
3	WASHER	4	30-1071
4	SPIROLOCK	1	30-1094
5	RETAINING RING	1	30-1095
6	PLUG	1	30-1096
7	SHAFT END COVER	1	30-1097
8	CHECK ASSEMBLY	2	30-1098
9	THRUST PLATE	2	30-1100
10	DOWEL PIN	4	30-1102
11	PORT END COVER W/ BUSHINGS	1	30-1137
12	STUD	4	30-1134
13	GEAR HOUSING 1-3/4"	1	30-1208
14	SEAL KIT		
	SEAL KIT (integral shaft only) comes w/ 30-1162	1	30-1207

REF#	PARTS DESCRIPTION	REQ	PART #
	SEAL KIT (continental shaft only)	1	30-1211
15	SHAFT SEAL		
	CONTINENTAL SHAFT ONLY:		
	300 PSI (included in M350 seal kit)	1	30-1209
	INTEGRAL SHAFT ONLY:		
	500 PSI	1	30-1036
*	SHAFT TOOL (not shown) (required for install)	1	30-1162
	GEAR SET OPTION A:		
16	INTEGRAL SHAFT AND GEAR 1-3/4"	1	30-1024
	GEAR SET OPTION B:		
17	RETAINING RING	1	30-1258
18	RETAINING WASHER	1	30-1259
19	2-1/4" GEAR SET	1	30-1025
20	CONTINENTAL SHAFT, SPLINED	1	30-1335



LIFT ASSEMBLIES

14-0020 - 2X6 TIE-ROD CYLINDER

REF#	PARTS DESCRIPTION	REQ	PART #
1	PISTON ROD	1	14-1173
2	CLEVIS ASSEMBLY	1	14-1064
3	BUTT	1	14-1062
4	GLAND	1	14-1063
5	PISTON	1	14-1067
6	LOCKNUT	1	14-1068
7	TUBE	1	14-1174
8	TIE-ROD ASSEMBLY	4	14-1175
9	SEAL KIT	1	33-0025



**100% SATISFACTION
GUARANTEE**
★ GET IT, LOVE IT, *or* LEAVE IT! ★

**72-HOUR PARTS
SHIPPING GUARANTEE**