

## **PARTS BOOK**

#### **ROTARY HEADS**

· 72" CUT · EXCAVATOR MOUNT · 5.10.18 ·

DIAMOND MOWERS, LLC 350 E 60<sup>th</sup> St. North Sioux Falls, SD 57104 FOR WARRANTY CALL DIAMOND MOWERS DIRECT:

DUR 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



### **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 heron 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.



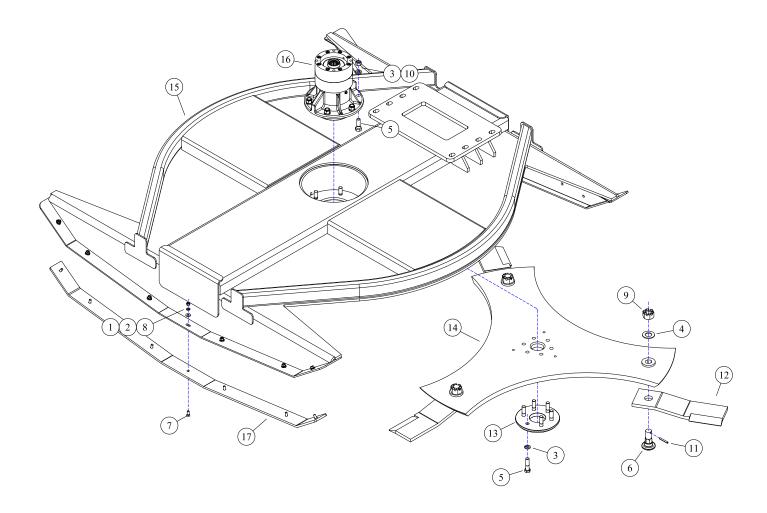
### **Table of Contents**

RUTARY HEADS	
EXCAVATOR ROTARY HEAD - 72" DIRECT DRIVE	5
DRIVE ASSEMBLIES	E
HOW TO DETERMINE YOUR MOTOR PART NUMBER	
DRIVE ASSEMBLY - 72", 16-41GPM	
DRIVE ASSEMBLY - 72", 17-25GPM	
DECK ASSEMBLIES	1C
30-0515 - MOTOR ASSEMBLY	11
30-0518 - MOTOR ASSEMBLY	12
30-0520 - MOTOR ASSEMBLY	13
30-0524 - MOTOR ASSEMBLY	14
30-0528 - MOTOR ASSEMBLY	15
30-0529 - MOTOR ASSEMBLY	1E
35-0088 - DIRECT DRIVE SPINDLE	17

# ROTARY HEADS



#### **EXCAVATOR ROTARY HEAD - 72" DIRECT DRIVE**



REF#	PARTS DESCRIPTION	REQ	PART#
1	3/8 LOCK WASHER	14	11-0005
2	3/8 FLAT WASHER	14	11-0009
3	5/8 H.S. LOCK WASHER	12	11-0043
4	1-1/8 H.S. SAE FLAT WASHER	3	11-0057
5	5/8 X 2-1/4 H.S. NF HEX CAPSCREW	12	11-0691
6	BLADE BOLT - HEX BASE	3	11-0759
7	3/8 X 1-1/4 PLOW BOLT	14	11-0804
8	3/8 NC HEX NUT	14	11-1001
9	1-1/8 H.S. NF SLOTTED HEX NUT	3	11-1050
10	5/8 H.S. NF STOVER NUT	6	11-1143
11	ROLL PIN, 1/4 X 2	3	11-2005
12	5/8" BRUSH BLADE	3	22-0006
13	BOLT PROTECTOR	1	24-0004
14	DISH	1	24-0151
15	72" DECK SHELL	1	25-0132
16	SPINDLE	1	35-0088
17	SKID SHOE	2	42-0036
18	BLADE KIT (Includes 4, 6, 9, 11, & 12)	1	44-0228

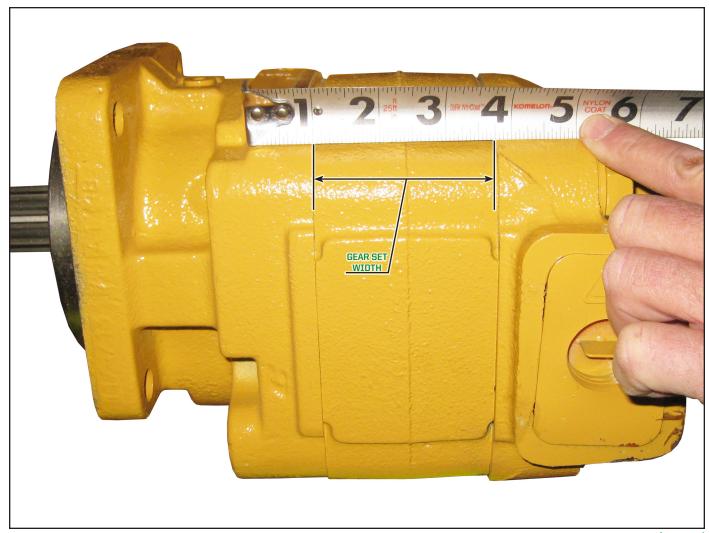
# DRIVE ASSEMBLIES



#### **HOW TO DETERMINE YOUR MOTOR PART NUMBER**

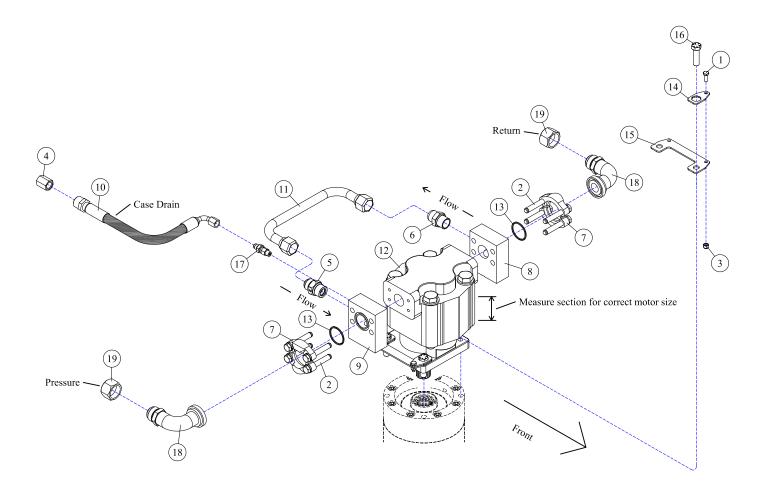
Note: The following parts pages in the <u>DRIVE ASSEMBLIES</u> section have multiple motor options; to identify which motor you have, follow the instructions below: you will have to first determine your vehicles hydraulic oil GPM requirements (i.e. 16-41gpm).

- Determine what your hydraulic oil flow requirements are for your vehicle in gallons per minute (GPM).
- Locate the **Drive Assemblies** page in the table of contents in the front of this manual that has a GPM range consistent with your vehicle's GPM requirements, and go to that page. Locate your motor part number.
- ▶ If multiple motor options and part numbers are available on your parts page, measure the width of the gear section of your motor to determine which part number is correct for your motor. Measure the gear section shown in the illustration below (see Figure 1).



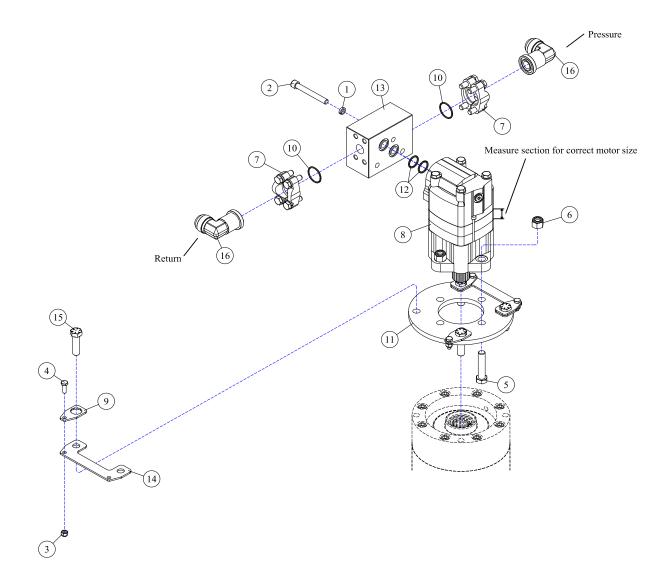
Motor - (Figure 1)

#### **DRIVE ASSEMBLY - 72", 16-41GPM**



REF#	PARTS DESCRIPTION	REQ	PART#
1	1/4 X 3/4 NC HEX CAP	4	11-0588
2	7/16 X 3 NC HEX CAPSCREW (included with #8 & 9)	4	11-0587
3	1/4 NC NYLOCK NUT	4	11-1022
4	3/8FJIC CAP NUT	1	21-1582
5	CHECK VALVE	1	21-1474
6	3/4 MORB X 3/4 MJIC ADAPTER	1	21-1475
7	#20 FLANGE KIT (included with #8 & 9)	2	21-2105
8	CROSS OVER MANIFOLD KIT (includes #2,7 & 13)	1	21-2180
9	TEE MANIFOLD KIT (includes #2,7 & 13)	1	21-2181
10	HOSE 3/8 X 24 (3/8FJIC 90DEG X 3/8MJIC)	1	21-4291
11	RUN-AROUND TUBE	1	28-0051
12	MOTOR		
	M365, 1-1/2" GEAR SET, 2" SECT, 16-22 GAL/MIN	1	30-0515
	M365, 1-3/4" GEAR SET, 2-1/4" SECT, 23-28 GAL/MIN	1	30-0520
	M365, 2-1/4" GEAR SET, 2-3/4" SECT, 29-34 GAL/MIN	1	30-0524
	M365, 2-1/2" GEAR SET, 3" SECT, 35-41 GAL/MIN	1	30-0518
13	O-RING (included with #7, 8 & 9)	2	33-0013
14	MOTOR BOLT LOCK TAB	4	31-0503
15	MOTOR BOLT LOCK BASE	2	31-0504
16	1/2-20 X 1-3/4 H.S. NF HEX CAP GR.8	4	11-0664
17	ADAPTER, 1/4MOR X 3/8MJIC	1	21-1597
18	ADAPTER,#20FLG X 1MJIC 90DEG	2	21-1267
19	1FJIC CAP NUT	2	21-1454

### DRIVE ASSEMBLY - 72", 17-25GPM

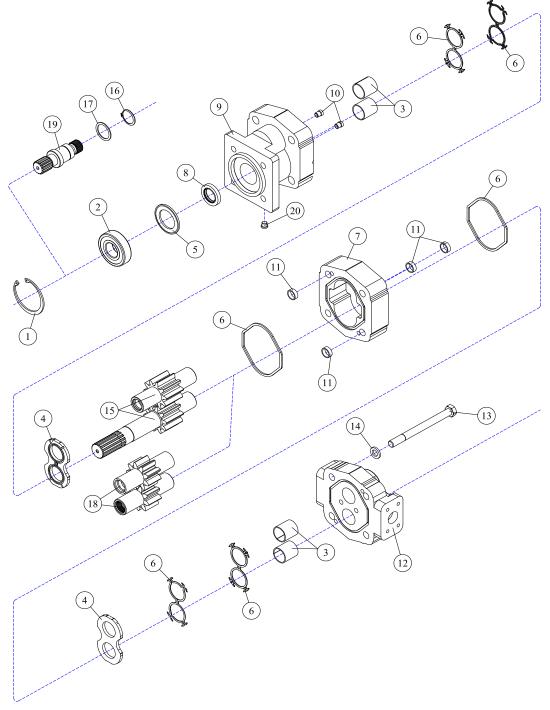


REF#	PARTS DESCRIPTION	REQ	PART#
1	3/8 HI-COLLAR LOCK WASHER	3	11-0054
2	3/8 X 2-1/2 NC SOCKET HEAD CAPSCREW	3	11-0701
3	1/4 NC NYLOCK NUT	4	11-1022
4	1/4 X 3/4 NC HEX CAP	4	11-0588
5	1/2 X 2-1/4 NC HEX CAPSCREW	4	11-0531
6	1/2 NC NYLOCK NUT	4	11-1018
7	#12 FLANGE KIT (includes #33-0062)	2	21-2186
8	MOTOR (includes #30-1206)		
	2000 SERIES, 11/16" SECT, 17-23 GAL/MIN	1	30-0528
	2000 SERIES, 7/8" SECT, 24-28 GAL/MIN	1	30-0529
9	MOTOR BOLT LOCK TAB	4	31-0503
10	O-RING (LARGE) (included with #21-2186)	2	33-0062
11	MOTOR SPACER	1	35-0075
12	O-RING (SMALL) (included with #30-1206)	2	30-1205
13	PRESSURE AND RETURN BLOCK (included with motors)	1	30-1206
14	MOTOR BOLT LOCK BASE	2	31-0504
15	1/2-20 X 1-3/4 H.S. NF HEX CAP GR.8	4	11-0664
16	FITTING, #12FLANGE X 1MJIC-90DEG	2	21-1302

# DECK ASSEMBLIES



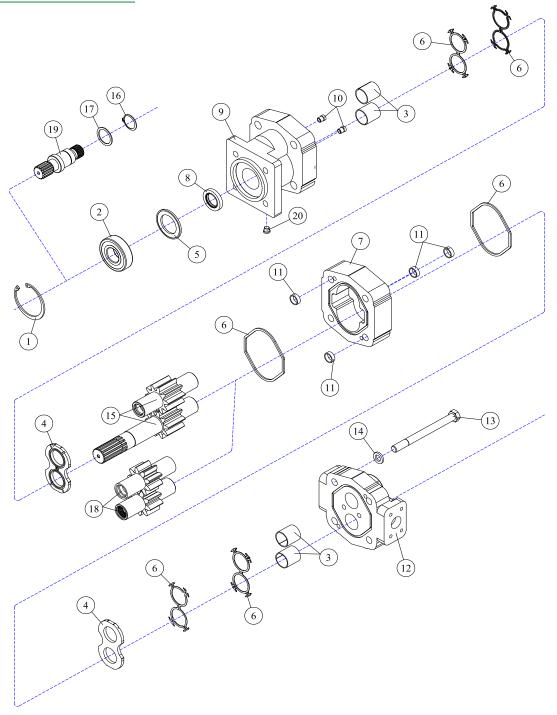
#### 30-0515 - MOTOR ASSEMBLY



REF#	PARTS DESCRIPTION	REQ	PART#
1	SNAP RING	1	30-1009
•		1	
2	OUTBOARD BEARING	1	30-1010
3	BUSHING	4	30-1011
4	THRUST PLATE	2	30-1012
5	SEAL RETAINER	1	30-1017
6	M365 SEAL KIT	Avail	30-1021
7	GEAR HOUSING	1	30-1023
8	SHAFT SEAL		
	150 PSI (included in M365 seal kit)	1	30-1210
	500 PSI	1	30-1156
9	SHAFT END COVER	1	30-1086
10	CHECK ASSEMBLY	2	30-1087
11	ALIGNMENT BUSHING	4	30-1090

REF#	PARTS DESCRIPTION	REQ	PART#
12	PORT END COVER	1	30-1091
13	STUD	4	30-1092
14	WASHER	4	30-1093
	GEAR SET OPTION A:		
15	1-1/2" GEAR SET	1	30-1159
	GEAR SET OPTION B:		
16	RETAINING RING	1	30-1019
17	WASHER	1	30-1020
18	1-1/2" GEAR SET	1	30-1022
19	CONTINENTAL SHAFT, SPLINED	1	30-1144
20	PLUG	1	30-1096
*	SEAL APPLICATOR TOOL (not shown)	Avail	30-1048

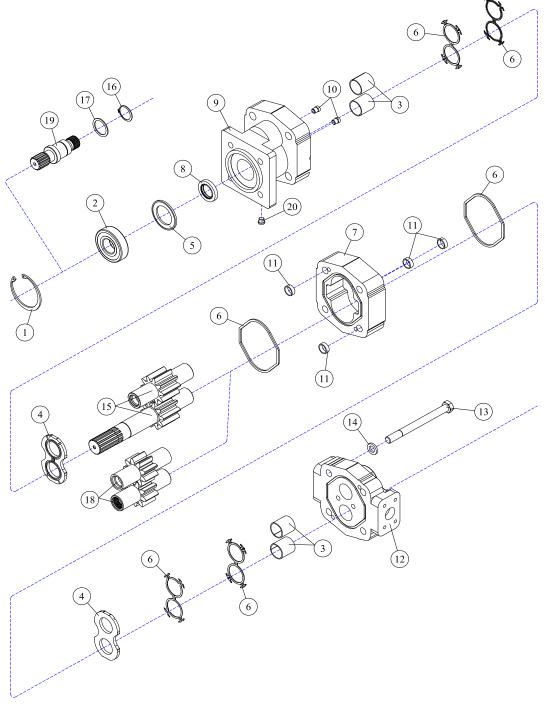
#### 30-0518 - MOTOR ASSEMBLY



REF#	PARTS DESCRIPTION	REQ	PART#
1	SNAP RING	1	30-1009
2	OUTBOARD BEARING	1	30-1010
3	BUSHING	4	30-1011
4	THRUST PLATE	2	30-1012
5	SEAL RETAINER	1	30-1017
6	M365 SEAL KIT	Avail	30-1021
7	2-1/2" M365 GEAR HOUSING	1	30-1137
8	SHAFT SEAL		
	150 PSI (included in M365 seal kit)	1	30-1210
	500 PSI	1	30-1156
9	SHAFT END COVER	1	30-1086
10	CHECK ASSEMBLY	2	30-1087
11	ALIGNMENT BUSHING	4	30-1090

REF#	PARTS DESCRIPTION	REQ	PART#
12	PORT END COVER	1	30-1091
13	STUD	4	30-1334
14	WASHER	4	30-1093
	<b>GEAR SET OPTION A:</b>		
15	2-1/2" GEAR SET	1	30-1170
	GEAR SET OPTION B:		
16	RETA INING RING	1	30-1019
17	WASHER	1	30-1020
18	2-1/2" GEAR SET	1	30-1136
19	CONTINENTAL SHAFT, SPLINED	1	30-1144
20	PLUG	1	30-1096
*	SEAL APPLICATOR TOOL (not shown)	Avail	30-1048

#### 30-0520 - MOTOR ASSEMBLY

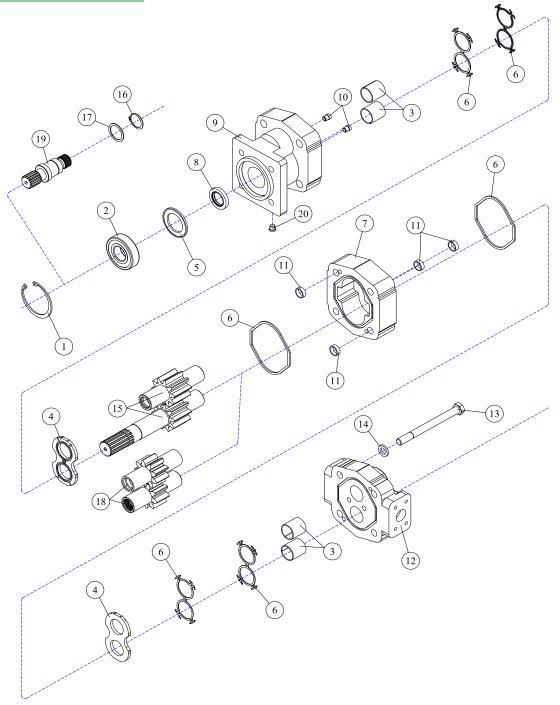


REF#	PARTS DESCRIPTION	REQ	PART#
1	SNAP RING	1	30-1009
2	OUTBOARD BEARING	1	30-1010
3	BUSHING	4	30-1011
4	THRUST PLATE	2	30-1012
5	SEAL RETAINER	1	30-1017
6	M365 SEAL KIT	Avail	30-1021
7	GEAR HOUSING	1	30-1015
8	SHAFT SEAL		
	150 PSI (included in M365 seal kit)	1	30-1210
	500 PSI	1	30-1156
9	SHAFT END COVER	1	30-1086
10	CHECK ASSEMBLY	2	30-1087
11	ALIGNMENT BUSHING	4	30-1090

REF#	PARTS DESCRIPTION	REQ	PART#
12	PORT END COVER	1	30-1091
13	STUD	4	30-1092
14	WASHER	4	30-1093
	GEAR SET OPTION A:		
15	1-3/4" GEAR SET	1	30-1166
	GEAR SET OPTION B:		
16	RETAINING RING	1	30-1019
17	WASHER	1	30-1020
18	1-3/4" GEAR SET	1	30-1013
19	CONTINENTAL SHAFT, SPLINED	1	30-1144
20	PLUG	1	30-1096
*	SEAL APPLICATOR TOOL (not shown)	Avail	30-1048

#### 30-0524 - MOTOR ASSEMBLY

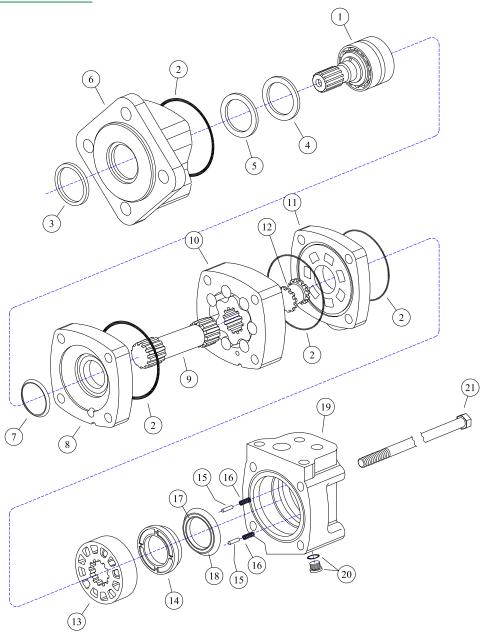
DEMAND BRILLIANCE.



REF#	PARTS DESCRIPTION	REQ	PART#
1	SNAP RING	1	30-1009
2	OUTBOARD BEARING	1	30-1010
3	BUSHING	4	30-1011
4	THRUST PLATE	2	30-1012
5	SEAL RETAINER	1	30-1017
6	M365 SEAL KIT	Avail	30-1021
7	2-1/4" M365 GEAR HOUSING	1	30-1026
8	SHAFT SEAL		
	150 PSI (included in M365 seal kit)	1	30-1210
	500 PSI	1	30-1156
9	SHAFT END COVER	1	30-1086
10	CHECK ASSEMBLY	2	30-1087
11	ALIGNMENT BUSHING	4	30-1090

REF#	PARTS DESCRIPTION	REQ	PART#
12	PORT END COVER	1	30-1091
		1	
13	STUD	4	Call
14	WASHER	4	30-1093
	GEAR SET OPTION A:		
15	2-1/4" GEAR SET	1	30-1165
	GEAR SET OPTION B:		
16	RETAINING RING	1	30-1019
17	WASHER	1	30-1020
18	2-1/4" GEAR SET	1	30-1025
19	CONTINENTAL SHAFT, SPLINED	1	30-1144
20	PLUG	1	30-1096
*	SEAL APPLICATOR TOOL (not shown)	Avail	30-1048

### <u>30-0528 - MOTOR ASSEMBLY</u>

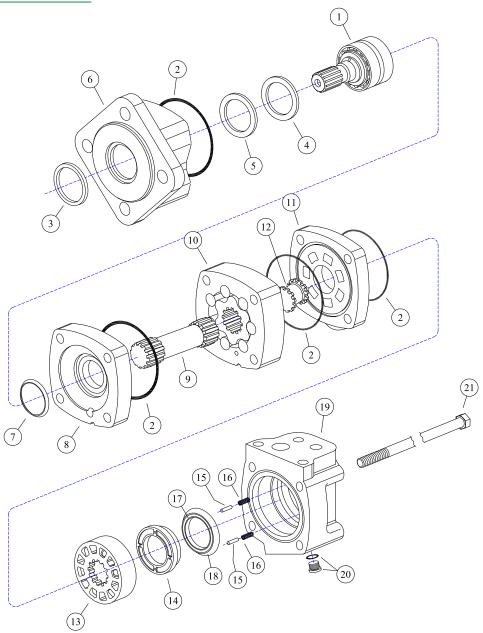


<sup>\*</sup> Part included with item # 22 seal kit

REF#	PARTS DESCRIPTION	REQ	PART#
1	SHAFT & BEARING KIT (1-1/4" SPLINED 14T)	1	30-1311
2	SEAL	4	30-1312
3	SEAL, EXCLUSION	1	30-1313
4	SEAL, SHAFT	1	30-1314
5	RING, BACK-UP	1	30-1315
6	HOUSING, BEARING, DIAGONAL (FOUR BOLT)	1	30-1316
7	SEAL, SHAFT FACE	1	30-1317
8	PLATE, WEAR	1	30-1318
9	DRIVE, MAIN	1	30-1319
10	GEROLER	1	30-1320
11	PLATE, VALVE	1	30-1321
12	DRIVE VALVE	1	30-1322

REF#	PARTS DESCRIPTION	REQ	PART#
13	VALVE	1	30-1323
14	BALANCERING	1	30-1324
15	PIN, BALANCE RING	2	30-1325
16	SPRING, COMPRESSION	2	30-1326
17	SEAL, FACE, INNER	1	30-1327
18	SEAL, FACE, OUTER	1	30-1328
19	HOUSING, VALVE	1	30-1329
20	PLUG ASSEMBLY W/ O-RING	1	30-1309
	O-RING	1	30-1330
21	SCREW, CAP	4	30-1331
22	SEAL KIT	1	33-0064

### <u>30-0529 - MOTOR ASSEMBLY</u>



<sup>\*</sup> Part included with item # 22 seal kit

REF#	PARTS DESCRIPTION	REQ	PART#
1	SHAFT & BEARING KIT (1-1/4" SPLINED 14T)	1	30-1311
2	SEAL	4	30-1312
3	SEAL, EXCLUSION	1	30-1313
4	SEAL, SHAFT	1	30-1314
5	RING, BACK-UP	1	30-1315
6	HOUSING, BEARING, DIAGONAL (FOUR BOLT)	1	30-1316
7	SEAL, SHAFT FACE	1	30-1317
8	PLATE, WEAR	1	30-1318
9	DRIVE, MAIN	1	30-1319
10	GEROLER	1	30-1320
11	PLATE, VALVE	1	30-1321
12	DRIVE, VALVE	1	30-1322

REF#	PARTS DESCRIPTION	REQ	PART#
13	VALVE	1	30-1323
14	BALANCERING	1	30-1324
15	PIN, BALANCE RING	2	30-1325
16	SPRING, COMPRESSION	2	30-1326
17	SEAL, FACE, INNER	1	30-1327
18	SEAL, FACE, OUTER	1	30-1328
19	HOUSING, VALVE	1	30-1329
20	PLUG ASSEMBLY W/ O-RING	1	30-1309
	O-RING	1	30-1330
21	SCREW, CAP	4	30-1331
22	SEAL KIT	1	33-0064

#### 35-0088 - DIRECT DRIVE SPINDLE

Grease with #2 lithium based grease every 500hrs. Use 10 pumps (.44oz) into each of the two grease zerks.

#### Warning: Do not overgrease

Overgreasing will cause damage or premature failure of the bearings, housing & seals.

REF#	PARTS DESCRIPTION	REQ	PART#
1	BEARING	2	10-0055
2	LOCKING WASHER	1	11-0048
3	3/8 X 2-3/4 NC SKT HEAD CAPSCREW	8	11-0703
4	1/4 X 1/2 NC CAPSCREW	4	11-0741
5	2-1/2 SPANNER NUT	1	11-1037
6	LARGE SNAP RING	1	11-2021
7	SMALL SNAP RING	1	11-2022
8	PIPE PLUG	1	21-1136
9	1/8 X 90 GREASE ZERK	2	23-0005
10	UPPER SEAL	1	33-0035
11	LOWER SEAL	1	33-0057
12	SPINDLE HOUSING	1	35-0021
13	SEAL/MOTOR MOUNT	1	35-0022
14	ALIGNMENT PIN	2	35-0032
15	SPACER	1	35-0050
16	BOTTOM SEAL PLATE	1	35-0063
17	SPACER	1	35-0064
18	BOTTOM PLATE	1	35-0065
19	GREASE CATCH	1	35-0066
20	SPINDLE SHAFT COMPLETE	1	35-0090
*21	SPLINED INSERT KIT	1	35-0091
22	BREATHER	2	80-1016
23	3/8 LOCK WASHER GR 5	8	11-0005

<sup>\*</sup> The splined insert kit includes the insert removal tool 11-0913.

