



# PARTS BOOK

**50" BOOM ROTARY HEADS**

• *DUAL HYD TRAP, INV MNT* • *SERIAL #XXXXX+* •

DIAMOND MOWERS, LLC  
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Sioux Falls, SD 57104

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## 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.

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

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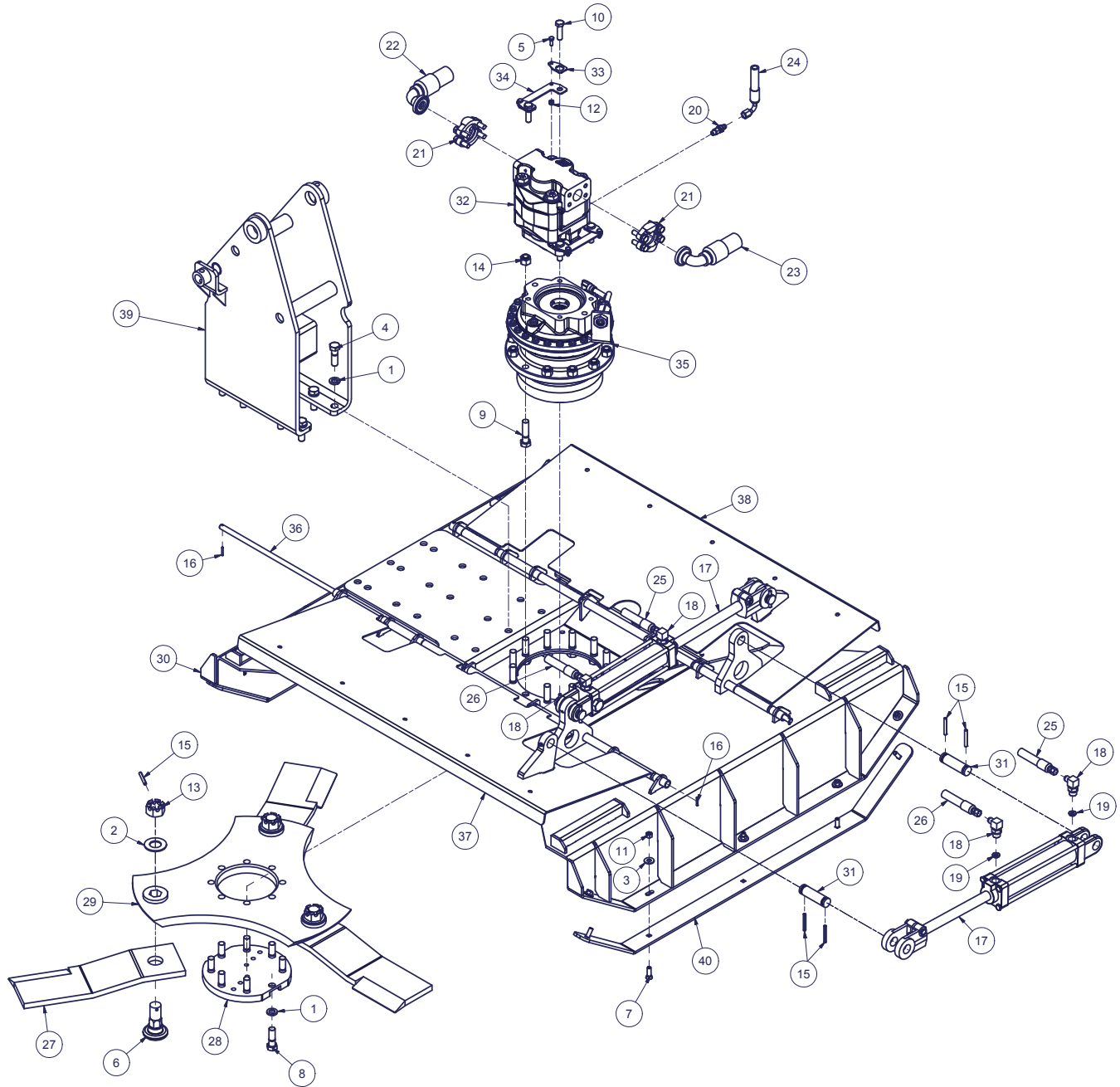
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# ROTARY HEADS



## ROTARY HEADS - 50" D3, DUAL HYDRAULIC TRAPDOORS, INVERSE MOUNT



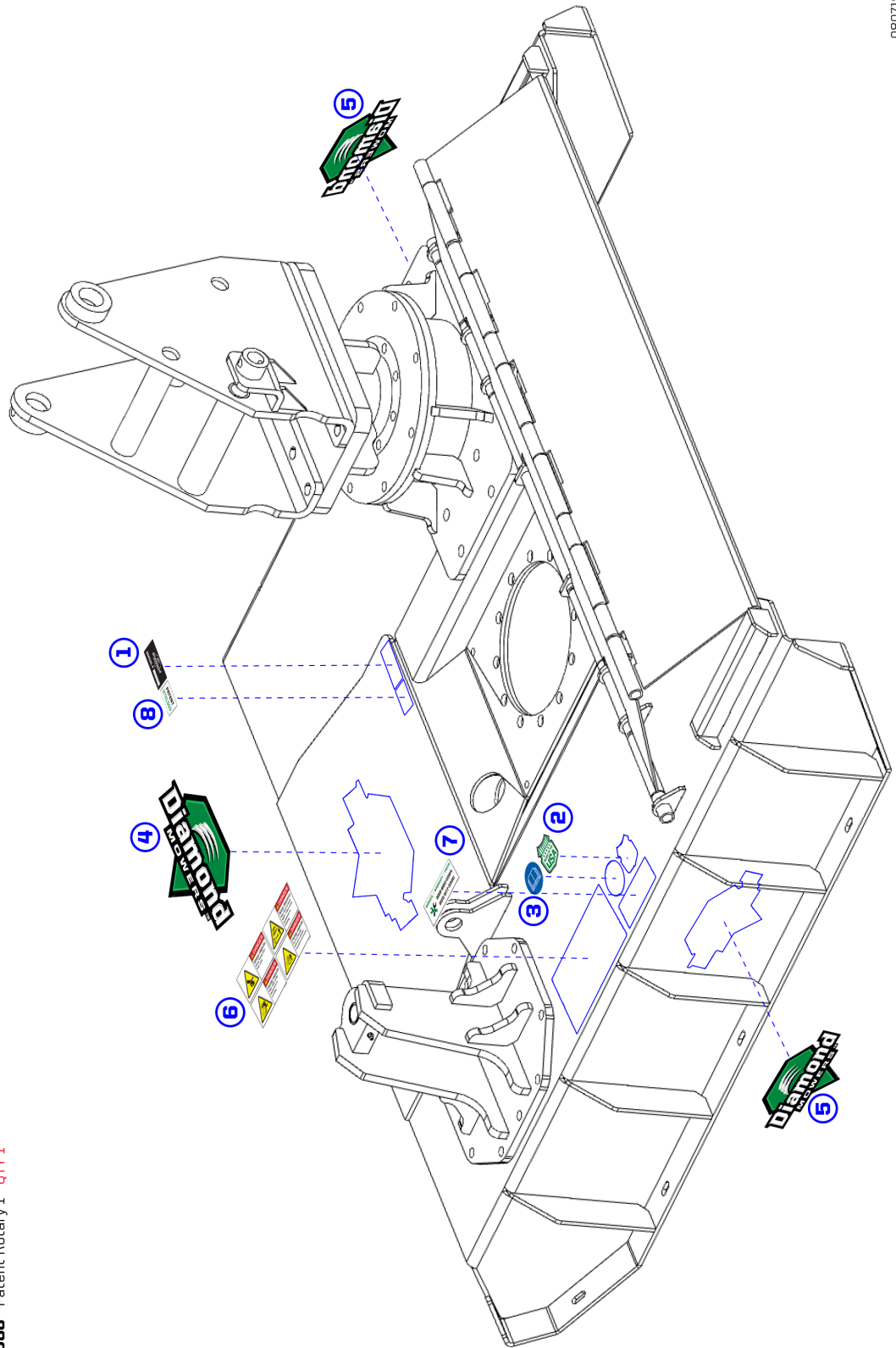
25-1698 Rev 000

REF#	PARTS DESCRIPTION	REQ	PART#	TORQUE (ft-lbs)	TORQUE (Nm)
1	5/8 LOCK WASHER GR 8	16	11-0043		
2	1-1/8 SAE FLAT WASHER GR 8	3	11-0057		
3	3/8 SAE FLAT WASHER	10	11-0090		
4	5/8 X 2 NF HEX CAP GR 8	8	11-0508	211.9	287.3
5	1/4 X 3/4 NC HEX CAP	4	11-0588	8.5	11.5
6	D3 BLADE BOLT	3	11-0759	1444.0	1957.8
7	3/8 X 1-1/4 NC PLOW BOLT	10	11-0804	30.9	41.9
8	5/8 X 2 NC HEX CAP, GR 8	8	11-0970	211.9	287.3
9	5/8 X 2-1/2 NC HEX CAP, GR 8	12	11-0971	211.9	287.3
10	1/2 X 1-1/2 NC HEX CAP, GR. 8	4	11-0972	106.4	144.3
11	3/8 NC HEX NUT	10	11-1001		
12	1/4 NC NYLOCK NUT	4	11-1022		
13	1-1/8-12 NF SLOTTED HEX NUT GR 8	3	11-1050		
14	5/8 NC NYLOCK NUT, GR. 8	12	11-1073		
15	ROLL PIN, 1/4" X 2"	11	11-2005		
16	ROLL PIN, 5/32" X 1"	4	11-2054		
17	2 X 8 TIE ROD CYLINDER	2	14-0010		
18	3/8M/JIC X 1/2MORB-90DEG	4	21-1403		
19	DISC RESTRICTOR	4	21-1551		
20	ADAPTER, 1/4MOR X 3/8M/JIC	1	21-1597		

REF#	PARTS DESCRIPTION	REQ	PART#	TORQUE (ft-lbs)	TORQUE (Nm)
21	#20 FLANGE KIT	2	21-2105		
22	HOSE 1 X 64.5 (#20FLG-90 X 1FJIC)	1	21-2516		
23	HOSE 1 X 57 (#20FLG-90 X 1FJ)	1	21-2517		
24	HOSE 3/8 X 62 (3/8FJIC-90DEG X 1/2M/JIC)	1	21-4304		
25	HOSE 3/8 X 66 (3/8FJIC X 1/2M/JIC)	2	21-4547		
26	HOSE 3/8 X 77 (3/8FJIC X 1/2M/JIC)	2	21-4548		
27	BRUSH BLADE - 5/8	3	22-0006		
28	BOLT PROTECTOR, 60 FBS, AUBURN	1	24-0224		
29	DISH, 50 TRI-HEX, AUBURN	1	24-0227		
30	50 INCH D3 BOOM ROTARY DUAL DOOR	1	25-0235		
31	CLEVIS PIN, 1 X 3-1/2	4	27-0004		
32	MOTOR, M365 1-1/2" GEAR, 14 SPLINE	1	30-0515		
33	MOTOR TOP LOCK PLATE	4	31-0503		
34	V3LOCK BOTTOM	2	31-0504		
35	D3 SPINDLE, DIRECT DRIVE	1	35-0093		
36	REAR TRAP DOOR ROD	2	41-0009		
37	50" ROTARY HYD TRAP DOOR, FRONT	1	41-1282		
38	50" ROTARY HYD TRAP DOOR, REAR	1	41-1283		
39	MAST, D3 INVERSE DECK	1	41-1708		
40	SKID SHOE 50 INCH D3 ROTARY DUAL DOOR	2	42-0064		

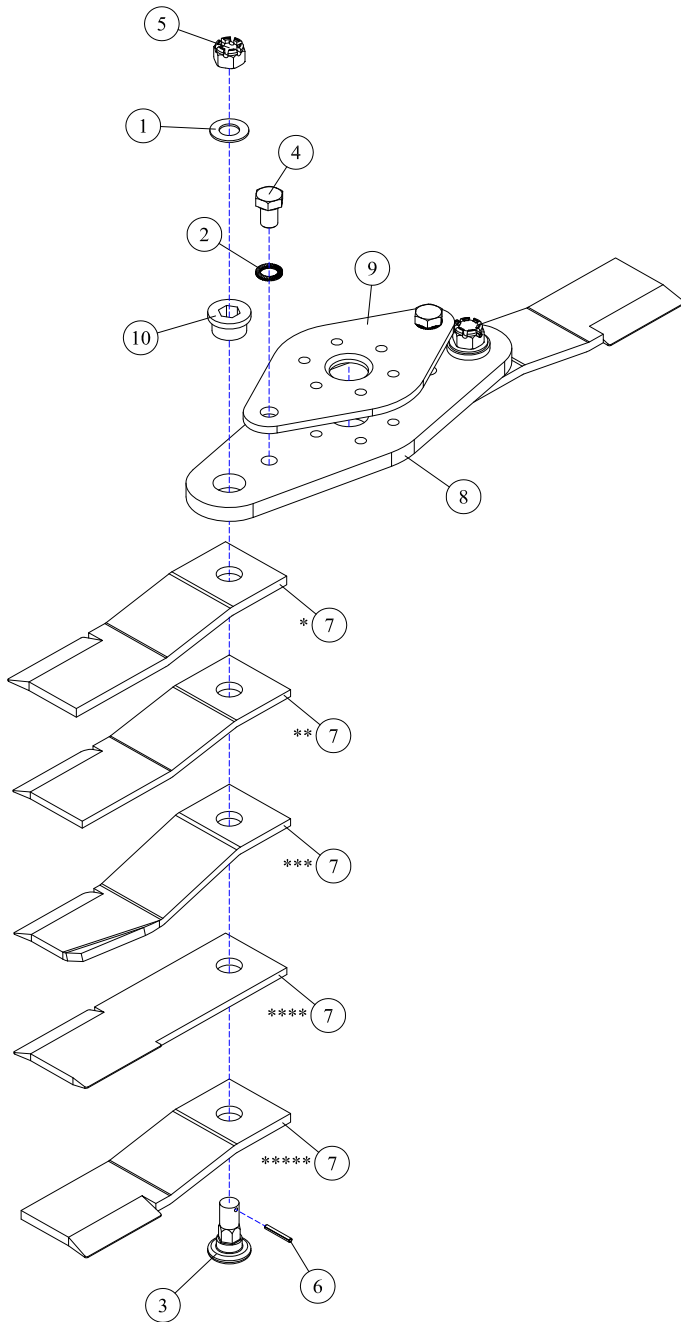
**ROTARY HEADS - DECAL IDENTIFICATION**

080718

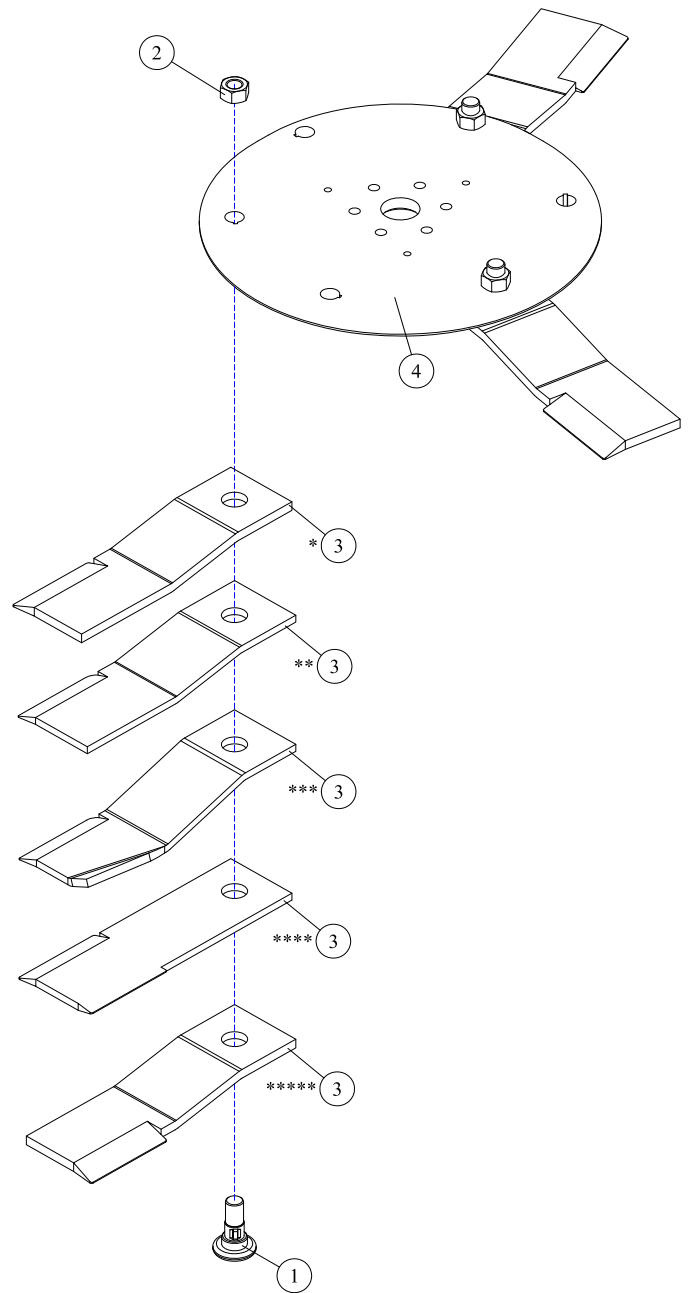


- ① SERIAL NUMBER LABEL - (not included in kit) - QTY 1
- ② PART #15-0055 - Made In USA - QTY 1
- ③ PART #15-0058 - Read Manual - QTY 1
- ④ PART #15-0053 - Diamond Mowers Logo 13" - QTY 1
- ⑤ PART #15-0050 - Diamond Mowers Logo 7" - QTY 2
- ⑥ PART #15-0057 - Decal Group Horizontal - QTY 1
- ⑦ PART #15-1016 - Warranty - QTY 1
- ⑧ PART #15-0066 - Patent Rotary 1 - QTY 1

ROTARY HEADS - 50" BLADE CONFIGURATIONS

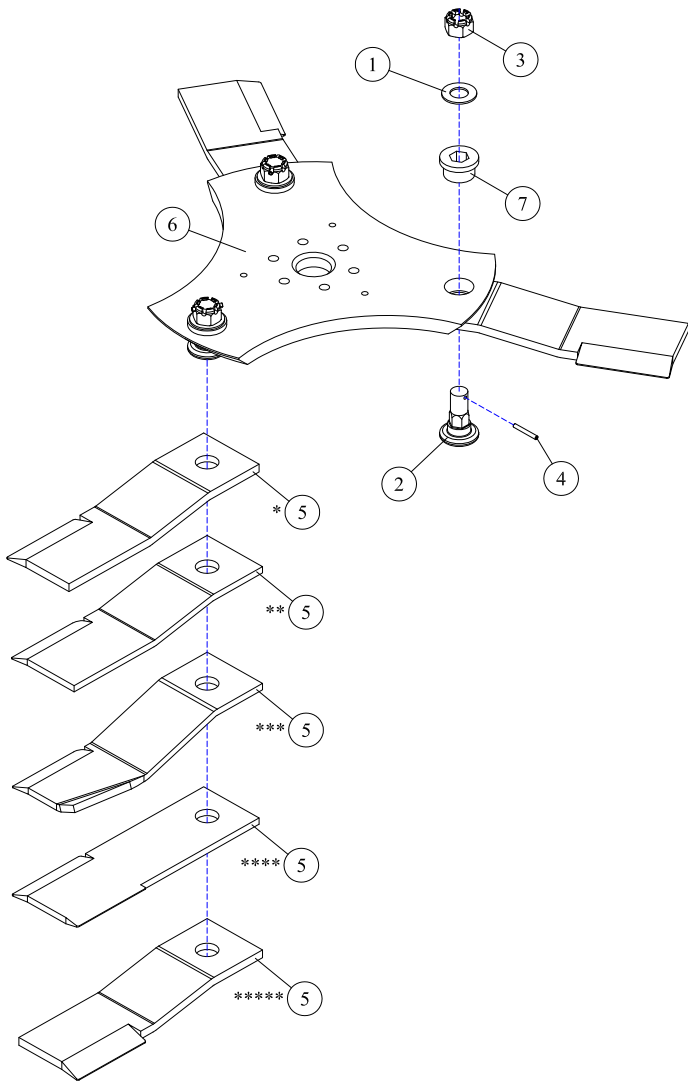


REF#	PARTS DESCRIPTION	REQ	PART #
1	1-1/8 H.S. FLAT WASHER	2	11-0057
2	1" NORDLOCK WASHER	2	11-0059
3	BLADE MOUNTING BOLT	2	11-0759
4	1 X 1-1/2 NF H.S. HEX CAP	2	11-0772
5	BLADE MOUNTING NUT	2	11-1050
6	1/4 X 2 ROLLPIN	2	11-2005
7	<b>KNIFE</b>		
*	50" BRUSH BLADE - 5/8"	3	22-0006
**	50" BRUSH KNIFE - 1/2"	3	22-0003
***	50" GRASS KNIFE, HIGH SUCTION - 1/2"	3	22-0005
****	50" BI-DIRECTIONAL BLADE - 1/2"	3	22-0012
*****	50" BRUSH KNIFE - REVERSE ROTATION - 5/8"	3	22-0017
8	BLADE BAR, BOTTOM	1	24-0097
9	BLADE BAR, TOP	1	31-0097
10	REPLACEABLE HEX INSERT	Avail	90-7010

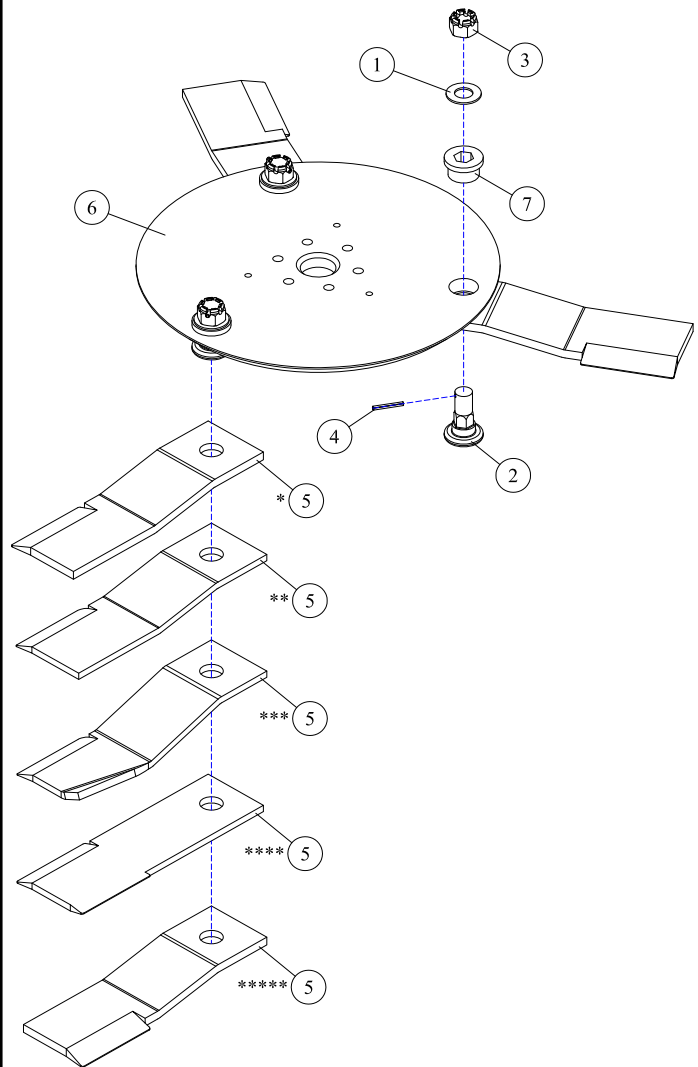


REF#	PARTS DESCRIPTION	REQ	PART #
1	BLADE BOLT - 1-1/8 KEYED	3	11-0503
2	1-1/8 NF NYLOCK NUT	3	11-1008
3	<b>KNIFE</b>		
*	50" BRUSH BLADE - 5/8"	3	22-0006
**	50" BRUSH KNIFE - 1/2"	3	22-0003
***	50" GRASS KNIFE, HIGH SUCTION - 1/2"	3	22-0005
****	50" BI-DIRECTIONAL BLADE - 1/2"	3	22-0012
*****	50" BRUSH KNIFE - REVERSE ROTATION - 5/8"	3	22-0017
4	BLADE DISH	1	24-0002

ROTARY HEADS - 50" BLADE CONFIGURATIONS



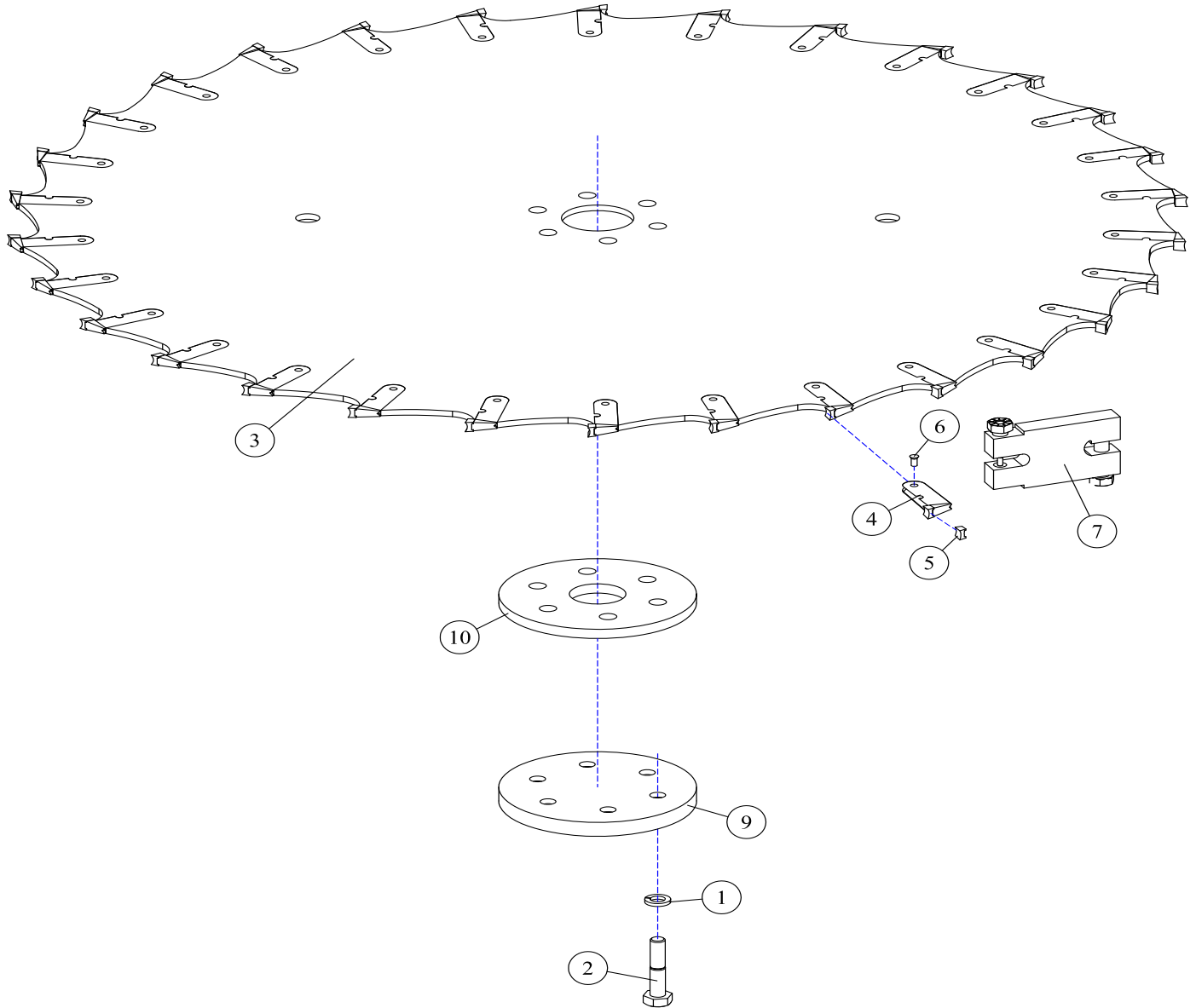
REF#	PARTS DESCRIPTION	REQ	PART #
1	1-1/8 H.S FLAT WASHER	3	11-0057
2	BLADE MOUNTING BOLT	3	11-0759
3	BLADE MOUNTING NUT	3	11-1050
4	ROLLPIN	3	11-2005
5	<b>KNIFE</b>		
*	50" BRUSH BLADE - 5/8"	3	22-0006
**	50" BRUSH KNIFE - 1/2"	3	22-0003
***	50" GRASS KNIFE, HIGH SUCTION - 1/2"	3	22-0005
****	50" BI-DIRECTIONAL BLADE - 1/2"	3	22-0012
*****	50" BRUSH KNIFE - REVERSE ROTATION - 5/8"	3	22-0017
6	D3 50" TRI-HEX DISH	1	24-0085
7	REPLACEABLE HEX INSERT	Avail	90-7010



REF#	PARTS DESCRIPTION	REQ	PART #
1	1-1/8 H.S FLAT WASHER	3	11-0057
2	BLADE MOUNTING BOLT	3	11-0759
3	BLADE MOUNTING NUT	3	11-1050
4	ROLLPIN	3	11-2005
5	<b>KNIFE</b>		
*	50" BRUSH BLADE - 5/8"	3	22-0006
**	50" BRUSH KNIFE - 1/2"	3	22-0003
***	50" GRASS KNIFE, HIGH SUCTION - 1/2"	3	22-0005
****	50" BI-DIRECTIONAL BLADE - 1/2"	3	22-0012
*****	50" BRUSH KNIFE - REVERSE ROTATION - 5/8"	3	22-0017
6	D3 50" ROUND DISH	1	24-0100
7	REPLACEABLE HEX INSERT	Avail	90-7010



**ROTARY HEADS 50" - SAW BLADE ATTACHMENT (OPTIONAL)**

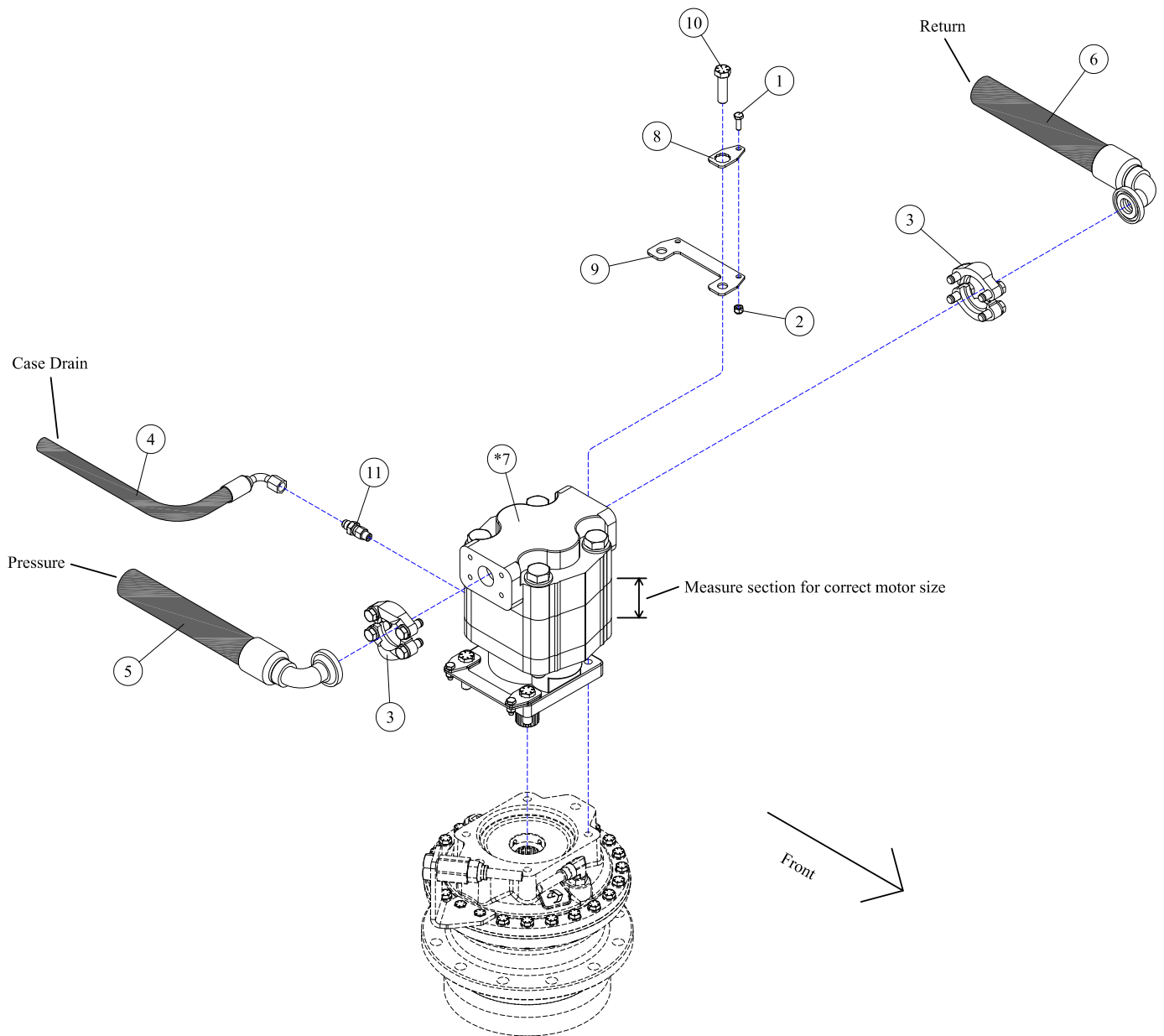


REF#	PARTS DESCRIPTION	REQ	PART #
1	5/8 H.S. LOCK WASHER	6	11-0043
2	5/8 X 2 NF H.S. CAPSCREW	6	11-0508
3	48" SAW BLADE	1	22-3001
4	CARBIDE TIP HOLDER	30	22-3002
5	CARBIDE REPLACEMENT TIP	30	22-3004
6	RIVET	30	22-3005
7	RIVET REMOVAL TOOL	Avail	22-3006
8	SHARPENING TOOL (NOT SHOWN)	Avail	22-3007
9	BOLT PROTECTOR	1	24-0004
10	BOLT PROTECTOR SPACER	1	24-0215

# DRIVE ASSEMBLIES



## DRIVE ASSEMBLIES - 50" BOOM ROTARY (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	1/4 X 3/4 NC HEX CAP	4	11-0588
2	1/4 NC NYLOCK NUT	4	11-1022
3	#20 FLANGE KIT	2	21-2105
4	HOSE 3/8 X 62 (3/8FJIC-90DEG X 1/2MJIC)	1	21-4304
5	HOSE 1 X 65 (1FJIC X #20FLG-90DEG)	1	21-2516
6	HOSE 1 X 57 (1FJIC X #20FLG-90DEG)	1	21-2517

REF#	PARTS DESCRIPTION	REQ	PART #
* 7	<b>MOTOR</b>		
	M365, 1-1/4" GEAR SET, 1-3/4" SECT, <b>30-39 GAL/MIN</b>	1	30-0532
	M365, 1-1/2" GEAR SET, 2" SECT, <b>40-45 GAL/MIN</b>	1	30-0515
8	MOTOR BOLT LOCK TAB	4	31-0503
9	MOTOR BOLT LOCK BASE	2	31-0504
10	1/2-20 X 1-3/4 H.S. NF HEX CAP GR.8	4	11-0664
11	ADAPTER, 1/4MOR X 3/8MJIC	1	21-1597

# DECK ASSEMBLIES

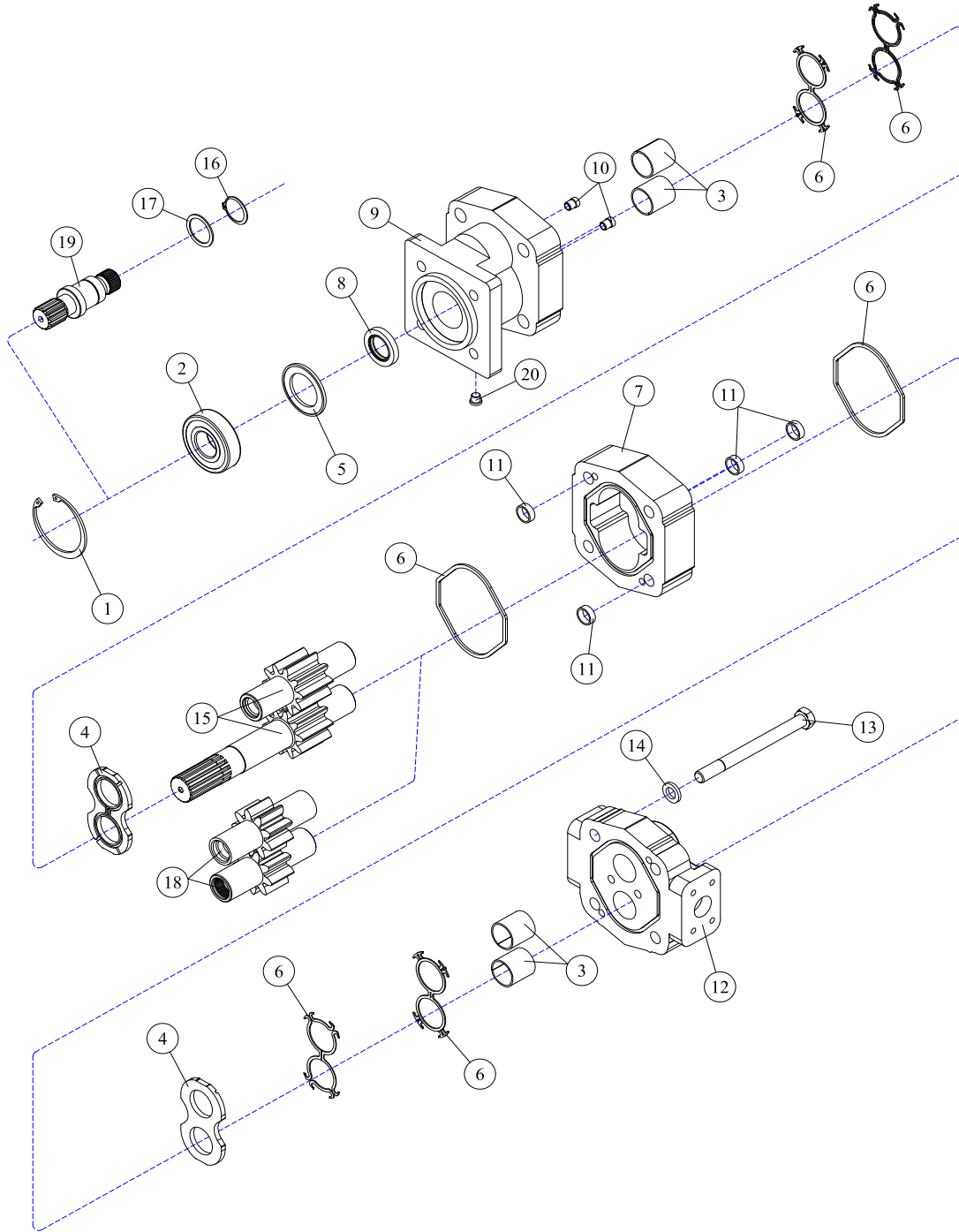


30-0503 - MOTOR ASSEMBLY

**UNDER  
CONSTRUCTION**

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**30-0524 - 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	2-1/4" M365 GEAR HOUSING	1	30-1026
8	<b>SHAFT SEAL</b>		
	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	Call
14	WASHER	4	30-1093
	<b>GEAR SET OPTION A:</b>		
15	2-1/4" GEAR SET	1	30-1165
	<b>GEAR SET OPTION B:</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

**35-0093 - DIRECT DRIVE SPINDLE**

REF#	PARTS DESCRIPTION	REQ	PART #
1	BEARING-CONE (TOP)	1	10-0094
2	BEARING-CUP (TOP)	1	10-0095
3	BEARING-CONE (BOTTOM)	1	10-0096
4	BEARING-CUP (BOTTOM)	1	10-0097
5	BOLT-HEX HEAD	24	11-1611
6	WASHER-FLAT	24	11-1612
7	RING-RETAINING	1	11-1613
8	NUT-LOCK	1	11-1614
9	WASHER-LOCK	1	11-1615
10	SCREW-SKT HD CAP	6	11-1616
11	PIPE PLUG (TO COVER) (MAGNETIC)	1	21-1609
12	PIPE PLUG (TO COVER) (NON-MAGNETIC)	1	21-1610
13	PIPE PLUG (TO HUB) (MAGNETIC)	2	21-1611
14	WASHER-THRUST (TOP)	1	35-0096
15	COUPLING	1	35-0097
16	PLATE-KEEPER	1	35-0098
17	WASHER-THRUST (BOTTOM)	1	35-0099
**18	HUB	1	35-0100
19	SEAL-OIL	1	35-0101
*20	GUARD	1	35-0102
**21	SHAFT-OUTPUT	1	35-0103
22	<b>COVER</b>		
	C BASE (STANDARD)	1	35-0094
	D BASE (OPTIONAL)	1	35-0095

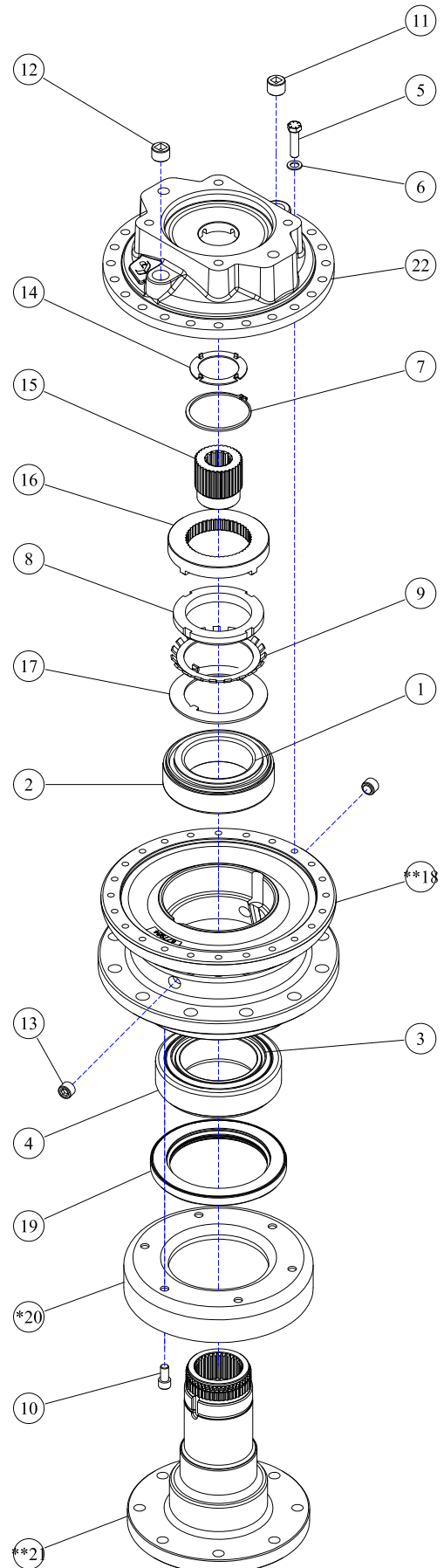
NOTE: WHEN ORDERING ANY ITEMS MARKED \* ABOVE, ALSO ORDER SERVICE KIT 33-0078

NOTE: WHEN ORDERING ANY ITEMS MARKED \*\* ABOVE, ALSO ORDER SERVICE KIT 33-0079

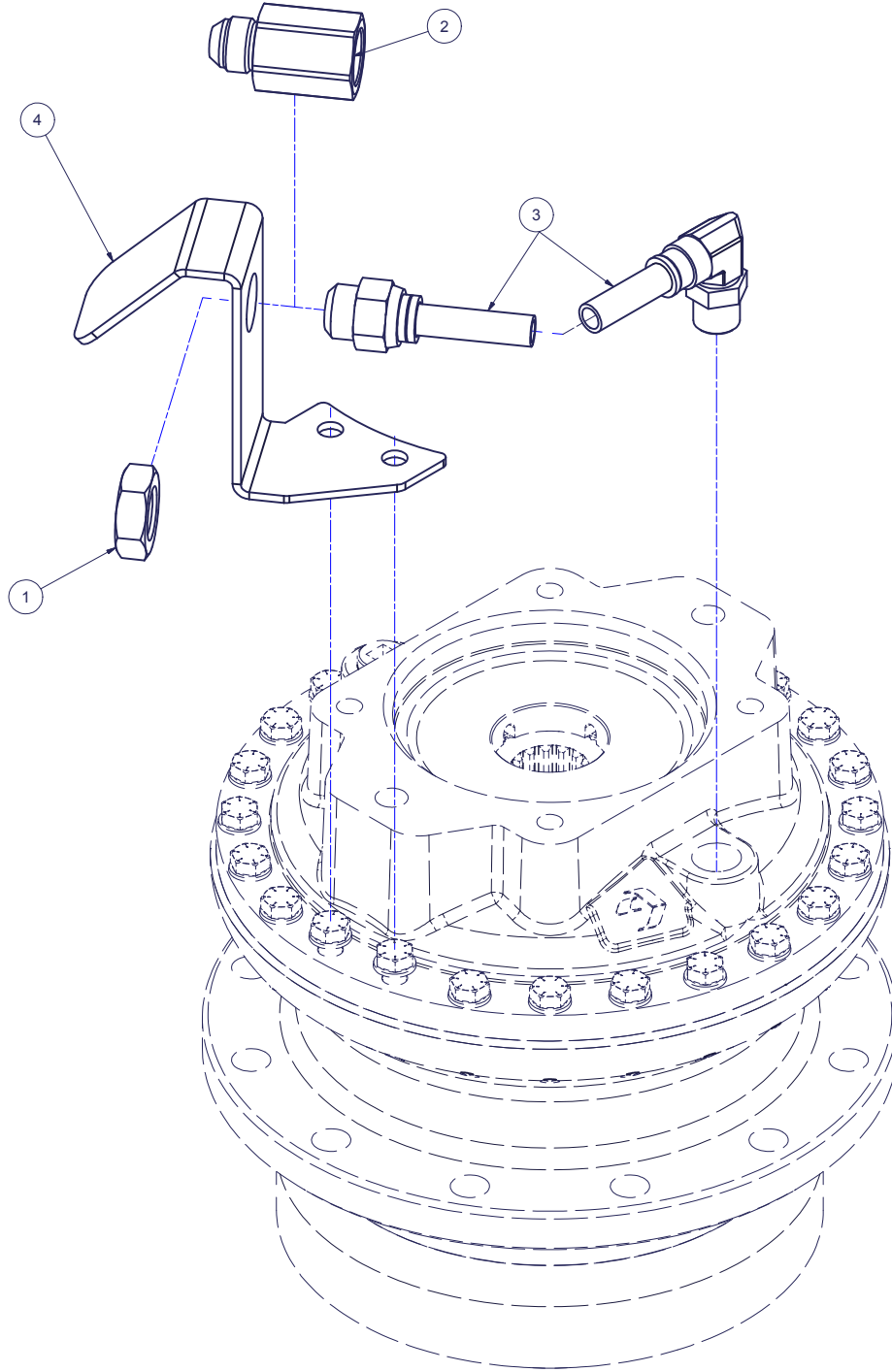
SERVICE KITS

PART #	DESCRIPTION	INCLUDED ITEMS
33-0078	SEAL KIT	9, 19
33-0079	BEARING & SEAL KIT	1, 2, 3, 4, 9, 19
33-0080	COUPLER KIT	14, 15

KITS ALSO INCLUDE A TUBE OF SEALANT PART NO. 35-0104



**PRESSURE RELIEF VALVE - 35-0093 DIRECT DRIVE SPINDLE**



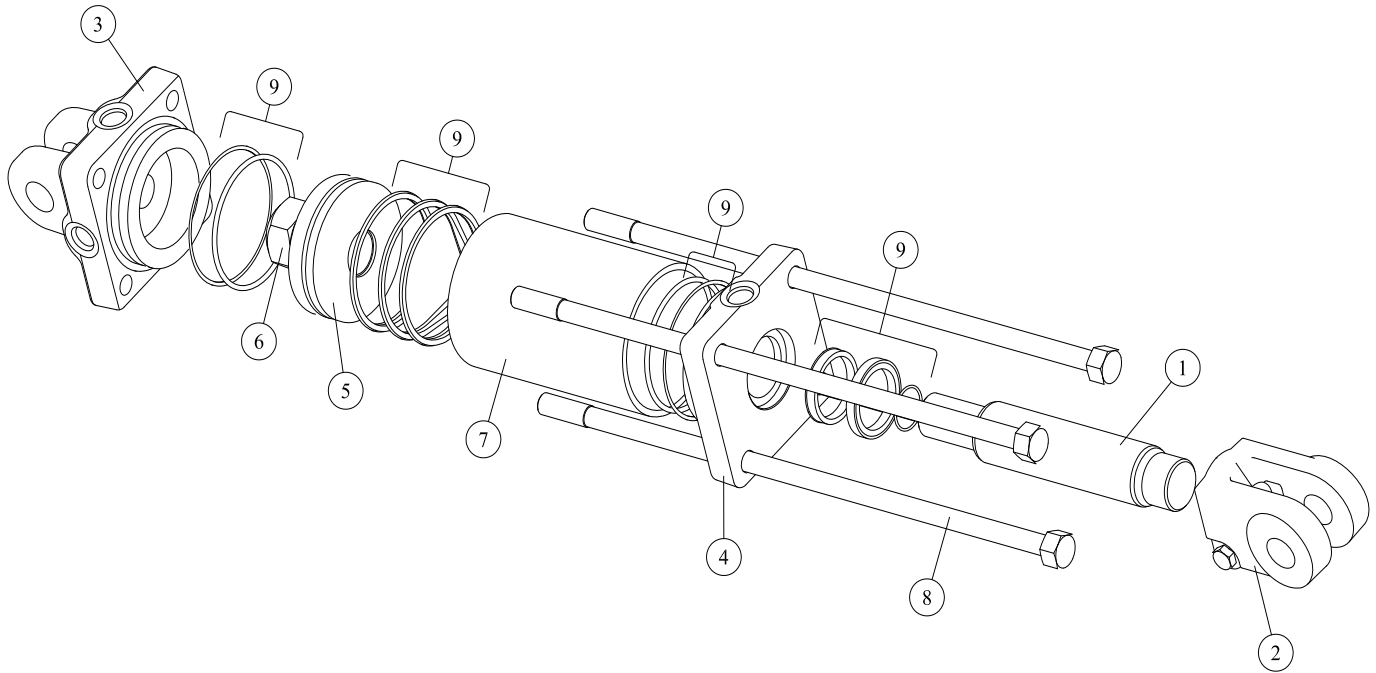
REF#	PARTS DESCRIPTION	REQ	PART#	TORQUE (ft-lbs)	TORQUE (Nm)
1	7/8 UNF JAM NUT	1	11-1159		
2	JEMTEC D3 SPINDLE RELIEF VALVE	1	21-1653		
3	HOSE 1/2 X 8 (5/8 JIC - 1/2 MP 90 DEG SWIVEL)	1	21-2419		
4	D3 RELIEF VALVE MOUNT	1	31-0688		



# LIFT ASSEMBLIES



**14-0010 - 2X8 TIE-ROD CYLINDER**



REF#	PARTS DESCRIPTION	REQ	PART #
1	PISTON ROD	1	14-1066
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	14-1172
8	TIE-ROD ASSEMBLY	4	14-1069
9	SEAL KIT	1	33-0025

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

**72-HOUR PARTS  
SHIPPING GUARANTEE**