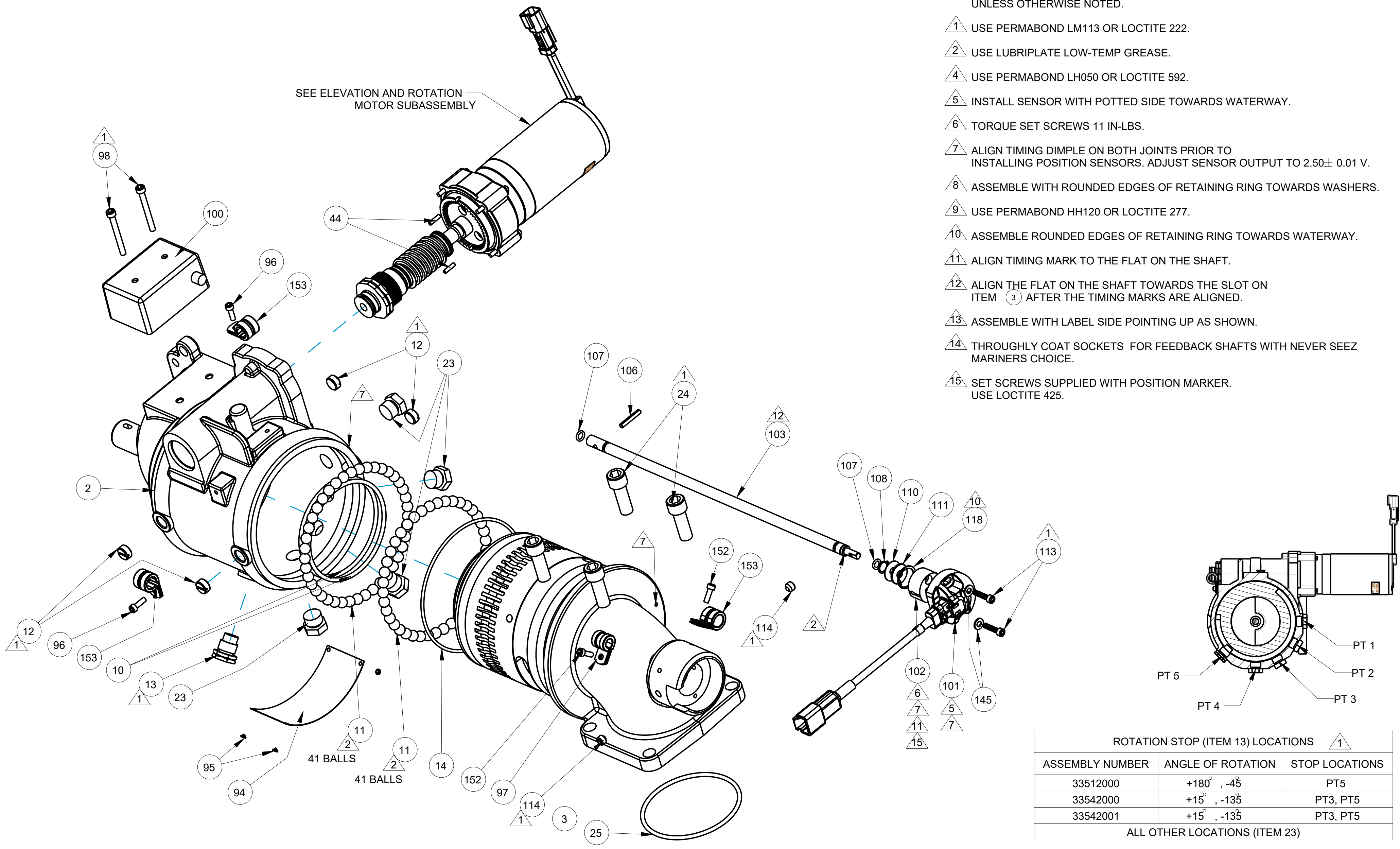




TECHNICAL SERVICE PARTS
 STYLE 3351, 3354
 PRODUCT TUCKAWAY RHINO W/SENSORS

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Chg.	Date
07	02-18
08	01-20



- ASSEMBLY NOTES:
- 1 USE PERMABOND LM113 OR LOCTITE 222.
 - 2 USE LUBRIPLATE LOW-TEMP GREASE.
 - 4 USE PERMABOND LH050 OR LOCTITE 592.
 - 5 INSTALL SENSOR WITH POTTED SIDE TOWARDS WATERWAY.
 - 6 TORQUE SET SCREWS 11 IN-LBS.
 - 7 ALIGN TIMING DIMPLE ON BOTH JOINTS PRIOR TO INSTALLING POSITION SENSORS. ADJUST SENSOR OUTPUT TO 2.50 ± 0.01 V.
 - 8 ASSEMBLE WITH ROUNDED EDGES OF RETAINING RING TOWARDS WASHERS.
 - 9 USE PERMABOND HH120 OR LOCTITE 277.
 - 10 ASSEMBLE ROUNDED EDGES OF RETAINING RING TOWARDS WATERWAY.
 - 11 ALIGN TIMING MARK TO THE FLAT ON THE SHAFT.
 - 12 ALIGN THE FLAT ON THE SHAFT TOWARDS THE SLOT ON ITEM 3 AFTER THE TIMING MARKS ARE ALIGNED.
 - 13 ASSEMBLE WITH LABEL SIDE POINTING UP AS SHOWN.
 - 14 THOROUGHLY COAT SOCKETS FOR FEEDBACK SHAFTS WITH NEVER SEEZ MARINERS CHOICE.
 - 15 SET SCREWS SUPPLIED WITH POSITION MARKER. USE LOCTITE 425.

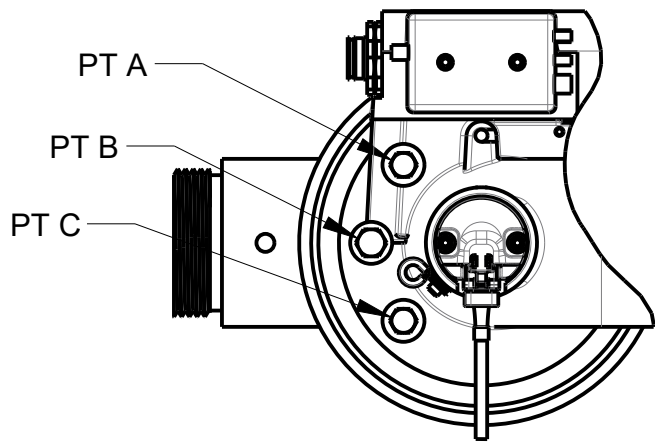
ROTATION STOP (ITEM 13) LOCATIONS 1		
ASSEMBLY NUMBER	ANGLE OF ROTATION	STOP LOCATIONS
33512000	+180° , -45°	PT5
33542000	+15° , -135°	PT3, PT5
33542001	+15° , -135°	PT3, PT5
ALL OTHER LOCATIONS (ITEM 23)		

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Parts List Sheet:
122560
 D45868

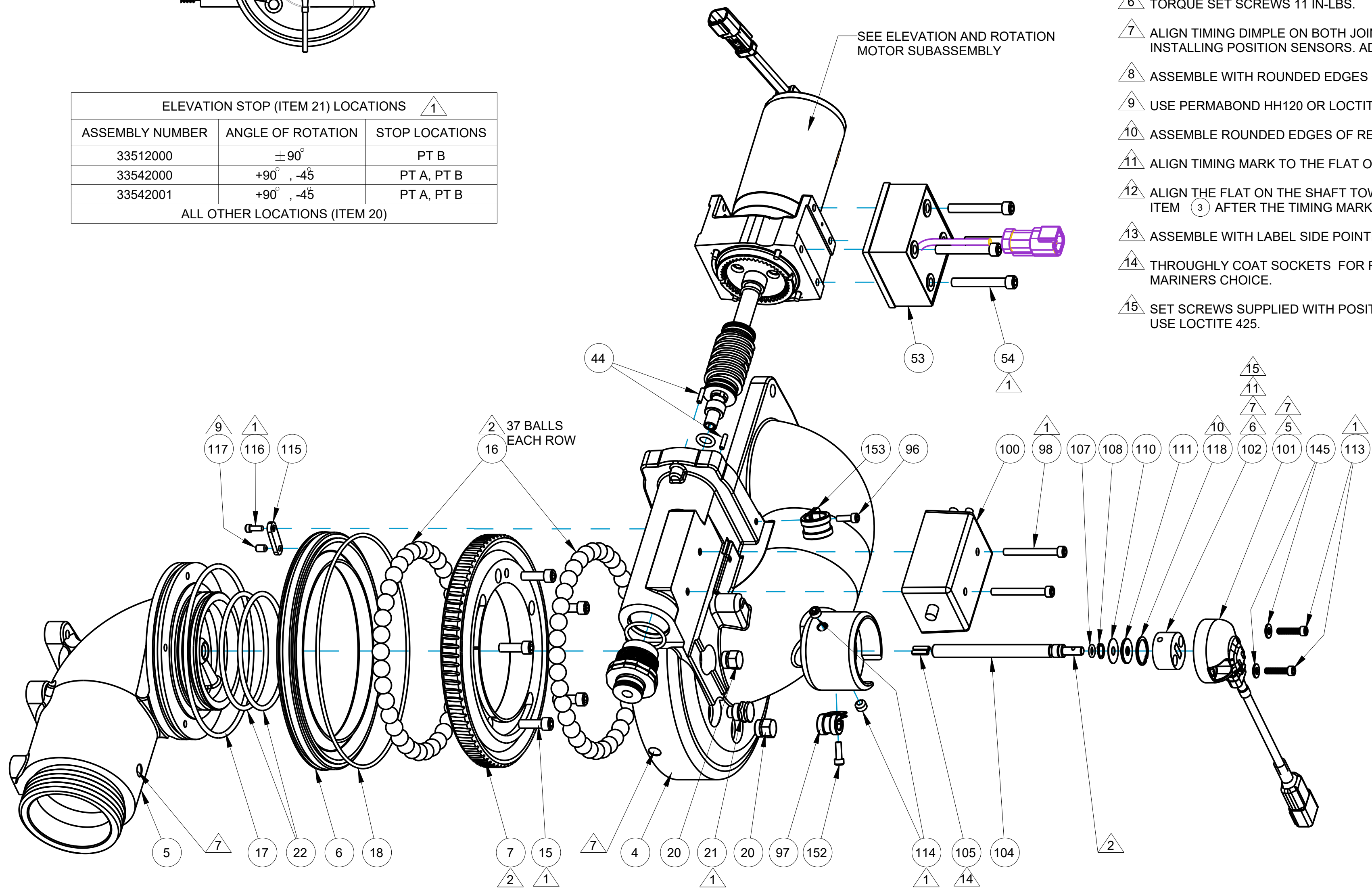


ELEVATION STOP (ITEM 21) LOCATIONS		
ASSEMBLY NUMBER	ANGLE OF ROTATION	STOP LOCATIONS
33512000	±90°	PT B
33542000	+90° , -45°	PT A, PT B
33542001	+90° , -45°	PT A, PT B
ALL OTHER LOCATIONS (ITEM 20)		

ASSEMBLY NOTES:

USE PARKER O-LUBE ON ALL O-RINGS AND MATING SURFACES UNLESS OTHERWISE NOTED.

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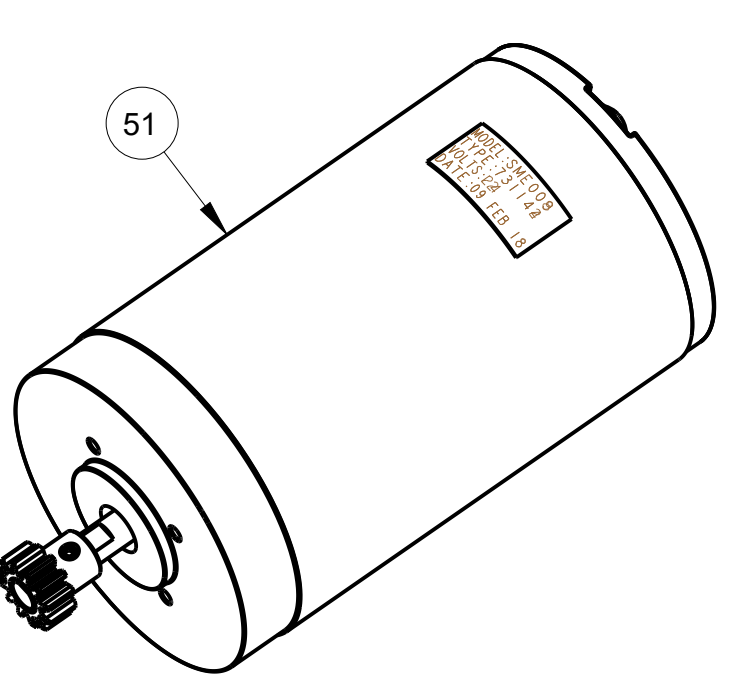
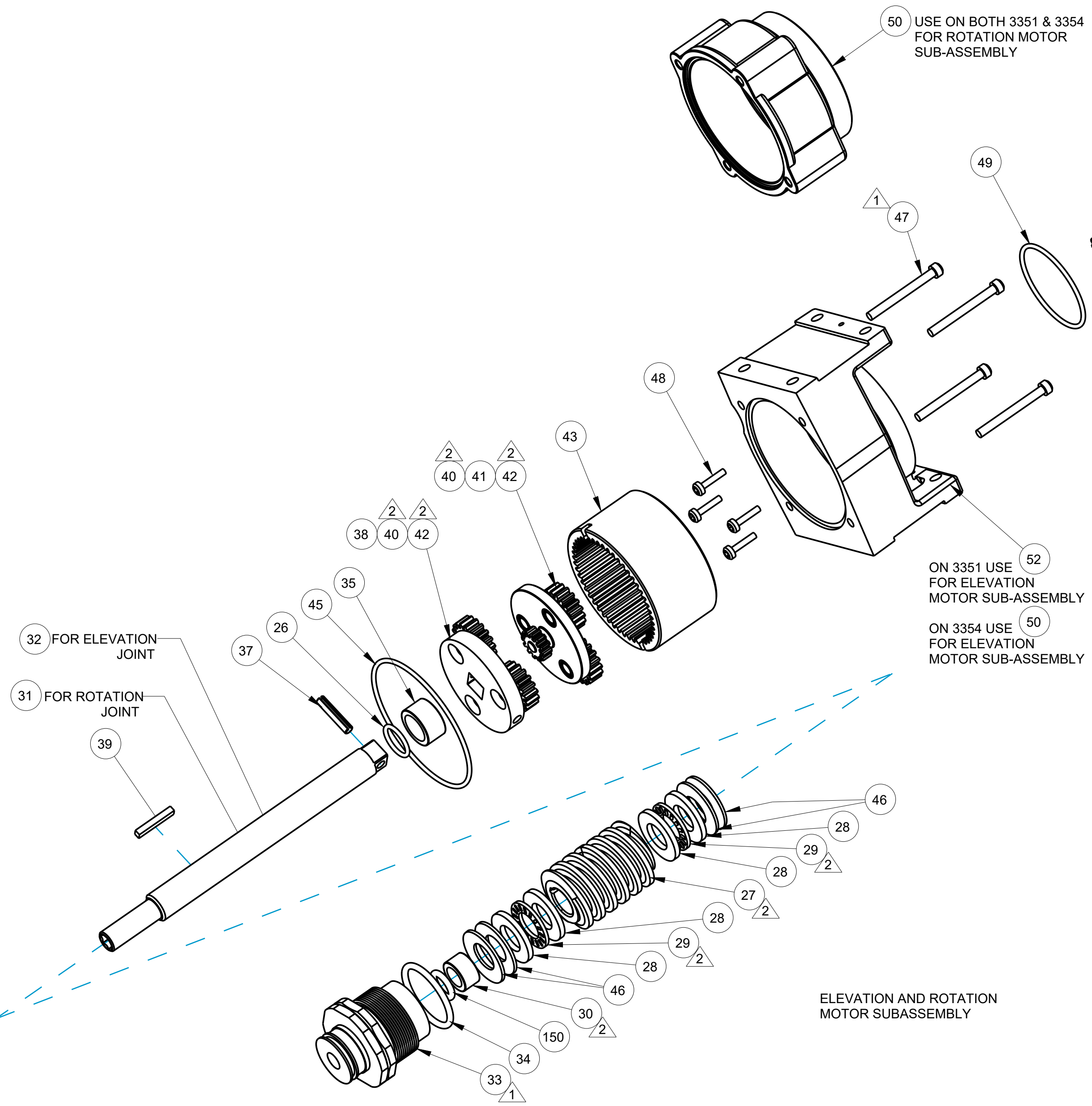
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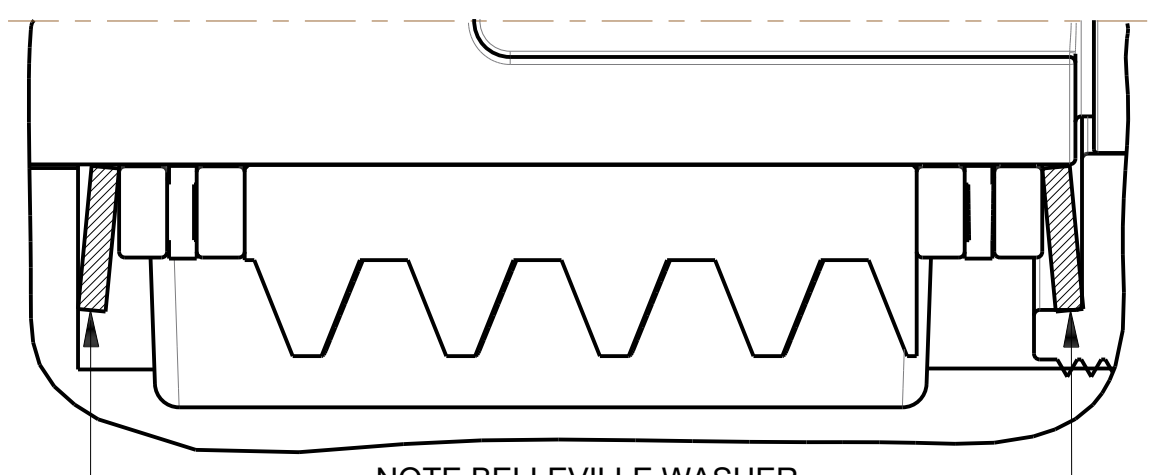
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NOTE BELLEVILLE WASHER INSTALLATION DIRECTION

ELEVATION AND ROTATION MOTOR SUBASSEMBLY

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TECHNICAL SERVICE PARTS

STYLE 3351, 3354

PRODUCT TUCKAWAY RHINO W/SENSORS

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Chg.	Date
07	02-18
08	01-20

Find		Description	Item	3351 QTY	3354 QTY
2		BASE INLET	122556	1	1
3		ELBOW INLET	127122	1	-
3		ELBOW INLET	127123	-	1
4		ELBOW MIDDLE	122375	1	1
5		ELBOW OUTLET	122378	1	1
6		RING BALL RETAINER	117690	1	1
7		GEAR OUTLET	117689	1	1
10		O-RING 2-238	757036	2	2
11	A	BALL BRASS 3/8"DIA	-	82	82
12		PLUG 1/2 -20 X 1/4"	742112	4	4
13		STOP VERTICAL	769596	2	2
14		O-RING 2-158	757326	1	1
15		SCREW SOCKET HEAD CAP 1/4 -20 X 3/4"	765030	5	5
16	B	BALL BRASS 1/2"DIA	-	74	74
17		O-RING 2-249	757075	1	1
18		O-RING 2-166	757366	1	1
20		PLUG 1/2-20 X1/2"	744337	2	1
21		STOP	769498	1	2
22		O-RING 2-236	757035	2	2
23		PLUG ELEVATION 5/8-18	744397	3	3
24		SCREW SOCKET HEAD CAP 7/16-14 X 1-1/4"	765207	4	4
25		O-RING 2-237	757081	1	1
26		O-RING 2-014	757041	2	2
27		GEAR WORM	718273	2	2
28		WASHER THRUST	784121	8	8
29		BEARING NEEDLE TORRINGTON	703453	4	4
30		BEARING 3/8"ID	704393	2	2
31		SHAFT ELEVATION	770353	1	1
32		SHAFT ROTATION	770352	1	1
33		CAP BEARING	121467	2	2
34		O-RING 2-121	757329	2	2
35		BEARING ROLLER NEEDLE 1/2"ID	704395	2	2
37		PIN ROLL	744118	2	2
38	C	CARRIER OUTPUT	707455	2	2
39		KEY SPECIAL	727044	2	2
40	C	GEAR PLANET	718165	12	12
41	C	PLATE CARRIER	742119	2	2
42	C	RIVET SHORT	754052	12	12
43		GEAR INTERNAL ELEVATION	718164	2	2
44		PIN ROLL	744288	4	4

Find	Description	Item	3351 QTY	3354 QTY
45	O-RING 2-036	757312	2	2
46	SPRING BELLEVILLE	769276	8	8
47	SCREW SOCKET HEAD CAP 6-32 X 1 3/8"	767132	8	8
48	SCREW SOCKET HEAD CAP W/PATCH 6-32 X 1/2"	765052	8	8
49	O-RING 2-029	757056	2	2
50	HOUSING GEARBOX	109320	1	2
51	MOTOR 12V	34911013	2	2
51	MOTOR 24V	34911007	2	2
52	HOUSING GEARBOX	118092	1	-
53	INCLINOMETER DUAL AXIS	60430003	1	-
54	SCREW SOCKET HEAD CAP 1/4 -20 X 1 3/4"	767116	4	-
94	TAG ID	773330	1	1
95	NAIL GRIP	736052	4	4
96	SCREW SOCKET HEAD CAP NYLON PATCH 8-32 X 3/8"	768058	3	3
97	CLAMP CABLE 5/16"	707548	2	2
98	SCREW SOCKET HEAD CAP 10-24 X 1 3/4"	767126	4	4
100	HARNESS WIRING 96"	721629	1	-
100	HARNESS WIRING 96"	721630	-	1
101	SENSOR MAGNETIC ROTARY ANGLE	60430006	2	2
102	MARKER POSITION MAGNET	731127	2	2
103	SHAFT ROTATION	770350	1	1
104	SHAFT ELEVATION	770348	1	1
105	PIN ROLL	744078	2	2
106	PIN ROLL	744430	1	1
107	O-RING 2-010	757476	3	3
108	RING TRUARC	758247	2	2
110	SHIM .730X.240X .015	769887	2	2
111	WASHER .732 X .238 X .060	784192	2	2
113	SCREW SOCKET HEAD CAP 8-32 X 3/4"	765178	4	4
114	SCREW SOCKET HEAD CUP POINT SET 5/16-18 X 1/4"	765071	4	4
115	KEEPER	120137	1	1
116	SCREW SOCKET HEAD CAP 6-32 X 3/8"	765175	1	1
117	SCREW SOCKET HEAD CUP POINT SET 10-24 X 5/16"	765040	1	1
118	RING RETAINING	758127	2	2
145	WASHER	784123	4	4
150	O-RING 2-110	757295	2	2
152	SCREW SOCKET HEAD CAP NYLON PATCH 10-24 X 3/8"	767029	3	3
153	CLAMP CABLE 7/16"	707975	4	4
A	KIT OF 50 BALLS 3/8" BRASS	109342		
B	KIT OF 50 BALLS 1/2" BRASS	116252		
C	REPAIR KIT	33530029		

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Parts List Sheet:

122560

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