



4900 X-Axis Drive Unit Anti-Backlash Belt Replacement Instructions 26-8828-00

Purpose: This kit is used to Replace or repair the X-Axis Drive Unit Anti-Backlash Belt in the 4900 X-Axis Drive Units 8828-760 & 8828-761.

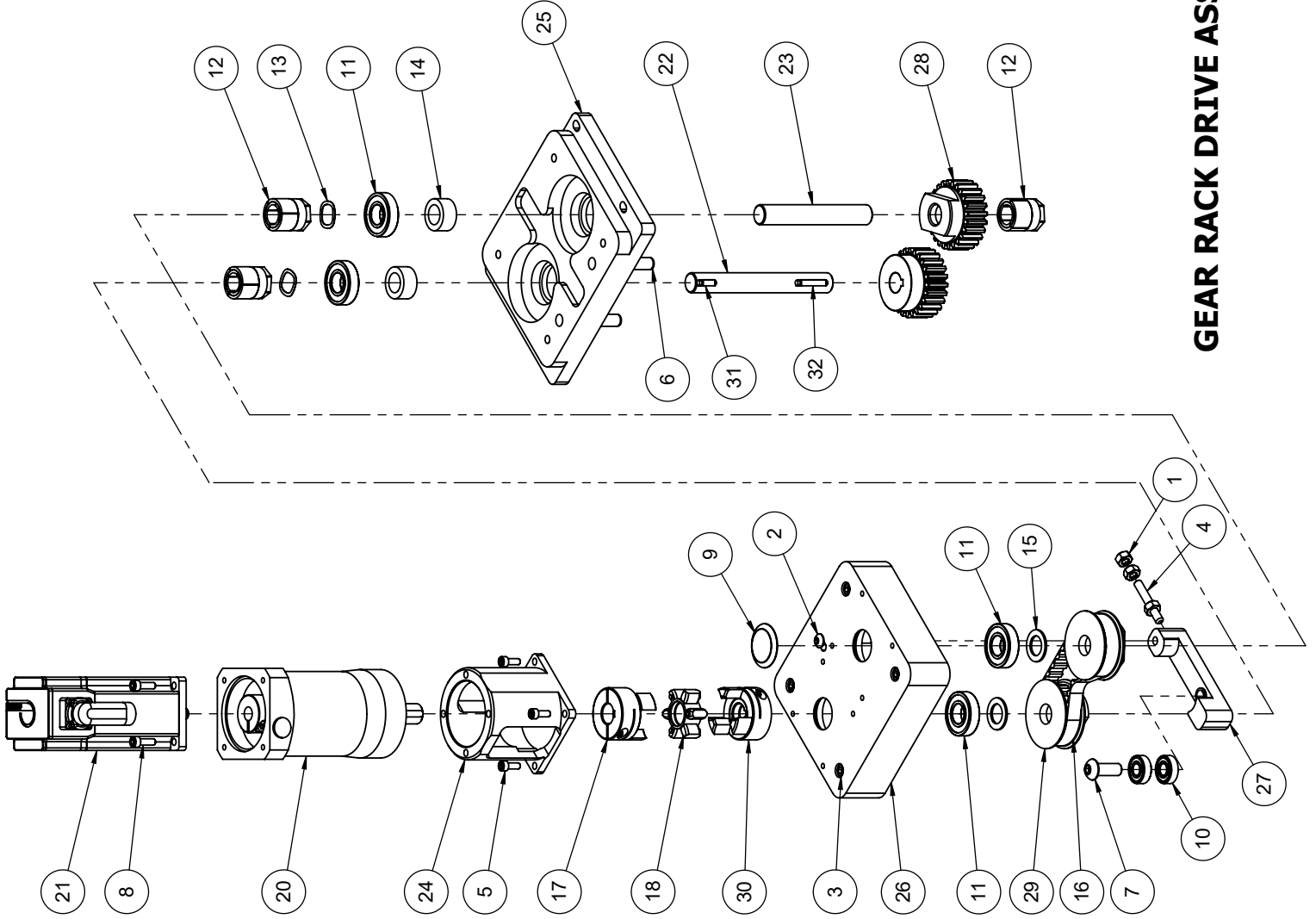
Before carrying out any maintenance work, be sure that the main power supply has been disconnected and that there are no live circuits in the machine main Panel.

Contents of 26-8828-00 Kit:

- 2x 12-1090 Timing Belt
- 2x 12-1192 Drive Gear
- 1x 17-648 Installation/Adjustment Instructions
- 1x 8832-037 Gear Rack Section

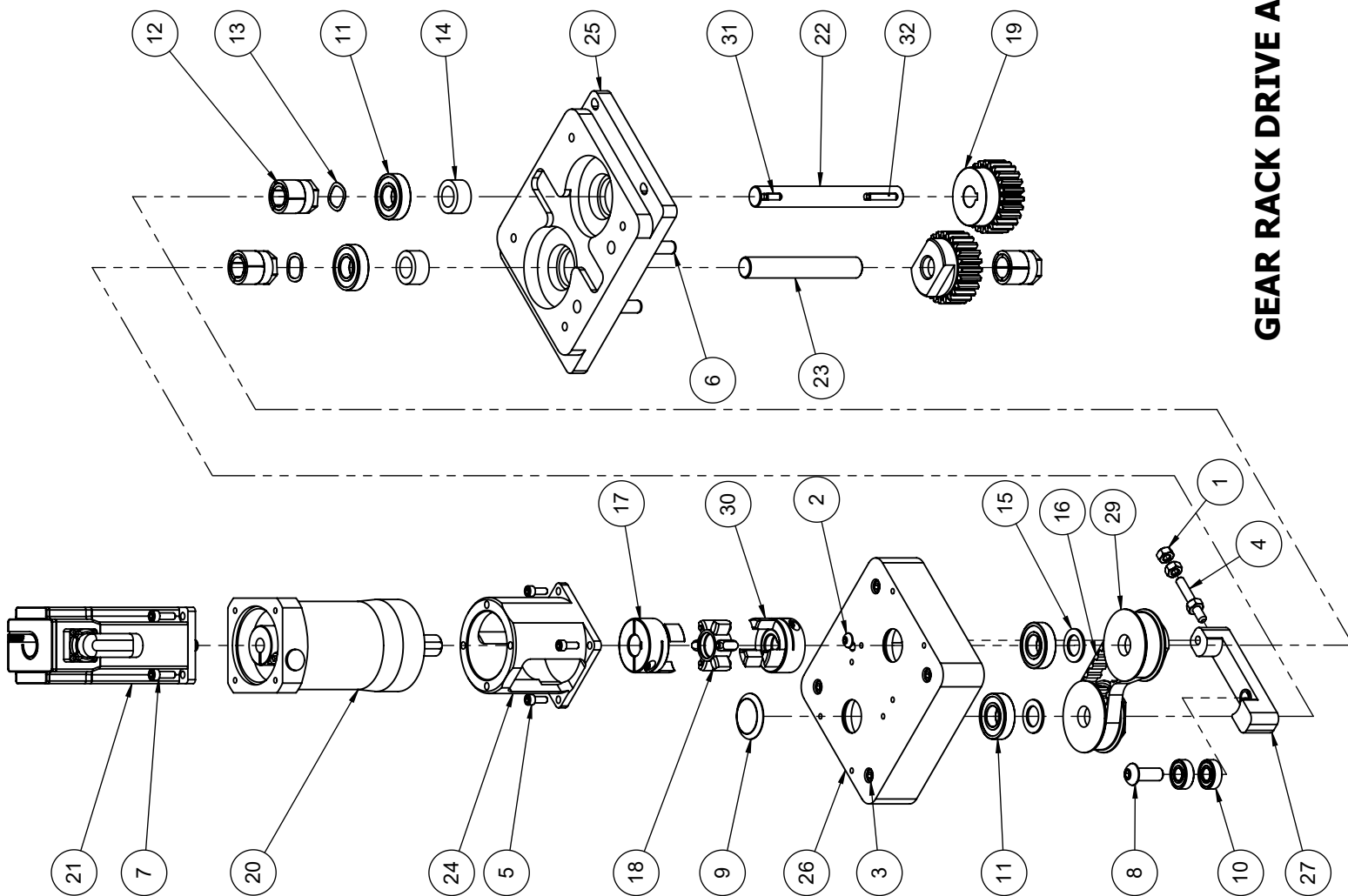
X-Axis Anti-Backlash Adjustment Procedure:

1. With the gear rack drive assembly removed from the machine, make sure that the belt tensioner bracket, #27, is loose/free to move.
2. Using the short piece of gear rack, make sure the two gears are timed without putting any load on the timing belt, #16 (#27 should be loose/free to move). You may have to loosen the quick grip clamp bushing, #12, to adjust the gear on the idler shaft. Make sure bushing is tight before proceeding.
3. Install the gear rack drive assembly onto the 4900. Set the proper gear to rack spacing using a 1/16" (.06) shim between the 3/8" dia. Dowel pins and the back of the gear rack.
4. Apply tension to the belt, #16, by tightening the jam nuts, #1, until there is no backlash detected when rotating the drive shaft backwards and forwards.
5. Lock the belt tensioner bracket in place using the second jam nut and by tightening bolt #2.
6. Repeat this process for the other gear rack drive.



ITEM	PART NUMBER	DESCRIPTION	QTY
1	*****	1/4-20 Hex Nut	3
2	*****	1/4-20 x 1" BHCS	1
3	*****	1/4-20 x 1-3/4" SHCS	4
4	*****	1/4-20 x 1-3/4" Set Screw	1
5	*****	10-32 x 1/2" SHCS	4
6	*****	3/8 x 2" Dowel Pin	2
7	*****	5/16-18 x 1" BHCS	1
8	*****	M5 x .08 x 16mm SHCS	4
9	11-2180	McMaster Carr 9750K260 Plug	1
10	12-017	Nachi R6-2RS Bearing	2
11	12-019	KIN RIT R10 2RS Bearing	4
12	12-1085	Quick Grip Screw Clamp Bushing	3
13	12-1087	McMaster Carr Wave Disc Spring	2
14	12-1088	McMaster Carr 92415A148 Spacer	2
15	12-1089	McMaster Carr 90482A636	2
16	12-1090	McMaster Carr 6484k144 Belt	1
17	12-1091	McMaster Carr 9845T4 Coupling	1
18	12-1093	McMaster Carr 9845T21 Spider	1
19	12-1122	Spur Gear, 12P 24T, Ø5/8 Bore w_ Key	1
20	12-918	Y Axis Gearbox	1
21	15-368	Servo, AM8022-0E20-0000	1
22	8829-022	Drive Shaft	1
23	8829-024	Idler Shaft	1
24	8829-045	Motor Adaptor, Actuator	1
25	8829-066	Gear Rack Base Plate	1
26	8829-067	Belt Case	1
27	8829-068	Belt Tensioner Brkt	1
28	8829-069	Modified Gear	1
29	8829-070	Modified Timing Pulley	2
30	8831-051	Coupling Half, Ø5/8 W/Key	1
31	9072-050	Key, 3/16 x 1/2"	1
32	9072-100	Square Key, 3/16 x 1"	1

GEAR RACK DRIVE ASSEMBLY, RH



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27	8829-068	Belt Tensioner Brkt	1
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GEAR RACK DRIVE ASSEMBLY, LH