

**ELECTRONIC
MACHINE
PARTS, LLC**

ILD T - 4

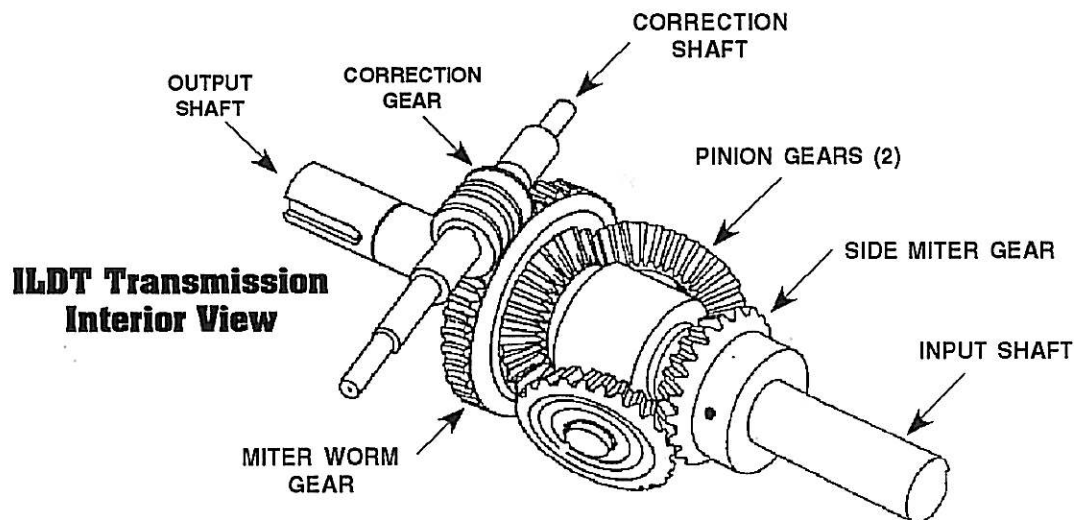
Operating and Maintenance Manual With Parts List

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Operating and Maintenance Manual With Parts List For **ILD T-4 Inline Transmission**

1. Introduction - ILDT- 4 Inline Transmission

- a. The ILDT-4 Inline Transmission offers a cost effective yet durable solution to your Phase Positioning, and Timing applications.
- b. Designed with a 2:1 or 1:2 input - output ratio and a 360 degree correction range that may be adjusted while in motion, the ILDT-4 provides a quick method for properly phasing 2 shafts.
- c. The ILDT is available with a choice of correction ratio's (20:1 or 40:1). This ratio determines the number of turns of the correction shaft needed to rotate the 2 RPM shaft 360 degrees.
- d. The correction can be achieved manually or motorized. For registration and motion control applications, the correction can be done automatically using an EMP Register System.
- e. The ILDT-4 is rated at 4 HP at 300 RPM. Maximum input speed to the unit must not exceed 600 RPM.



2. Theory of Operation

a. Both shafts of the ILDT rotate in the same direction and either may be used as the input shaft to obtain a 2:1 or 1:2 speed change. The actual phase correction is made by rotating the correction gear position. The correction gear will reposition the miter worm gear which then introduces a relative speed change between the input and output shafts.

This momentary speed change adjusts the phase angular relationship of the input and output shafts. The degree of phase correction is dependent on the internal gear ratio selected. The standard ratio is 20:1, which means 20 complete turns of the correction shaft will rotate the 2 RPM shaft 360 degrees.

3. Lubrication

- a. The ILDT Transmission is shipped from factory WITHOUT oil.
- b. An oil access plug is located on the top of the unit. Prior to use, fill the ILDT-4 with 1-quart of MOBIL GEAR OIL No. 629, or any AGMA 4EP grade oil equivalent.
- c. This oil should be changed every 2000 hours of use.

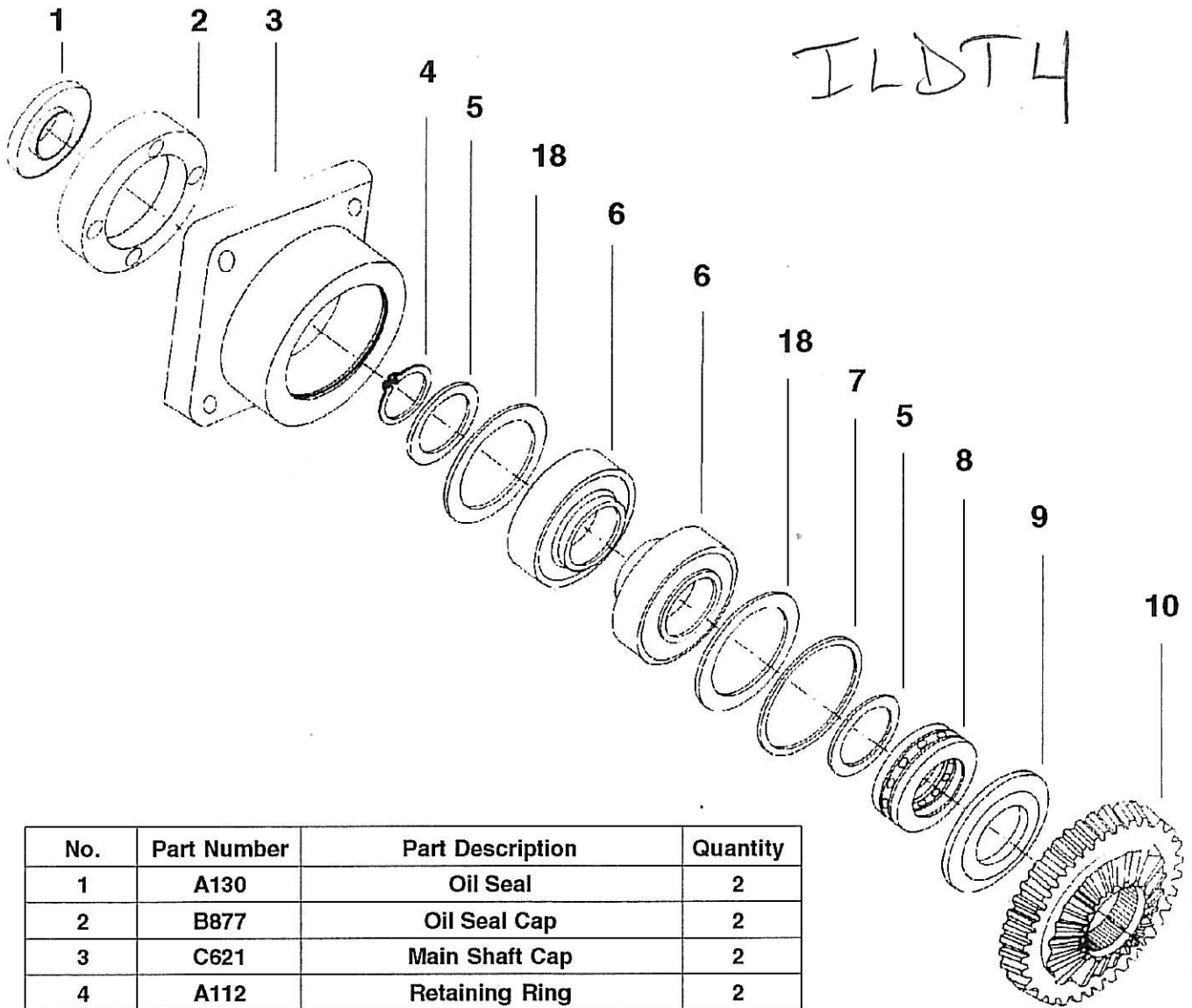
4. Installation

- a. Four 3/4" wide mounting slots for 5/8"-11 bolts on 5 x 9-1/4" mounting centers are provided to install the ILDT-4 Transmission.

5. Ordering Spare Parts

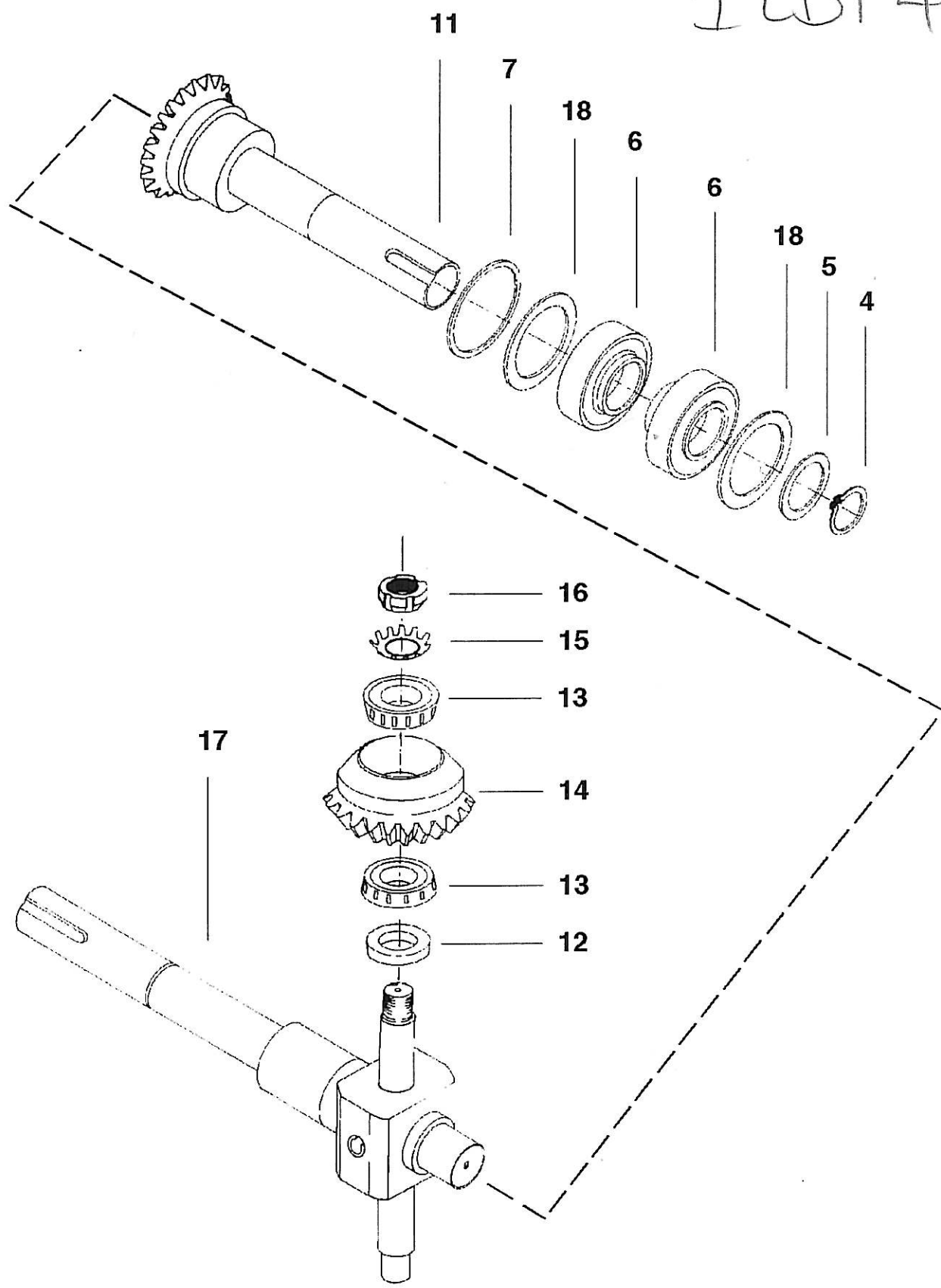
When ordering, please specify

- 1 - Model Number From Tag on ILDT-4
- 2 - Part Number
- 3 - Description
- 4 - Quantity

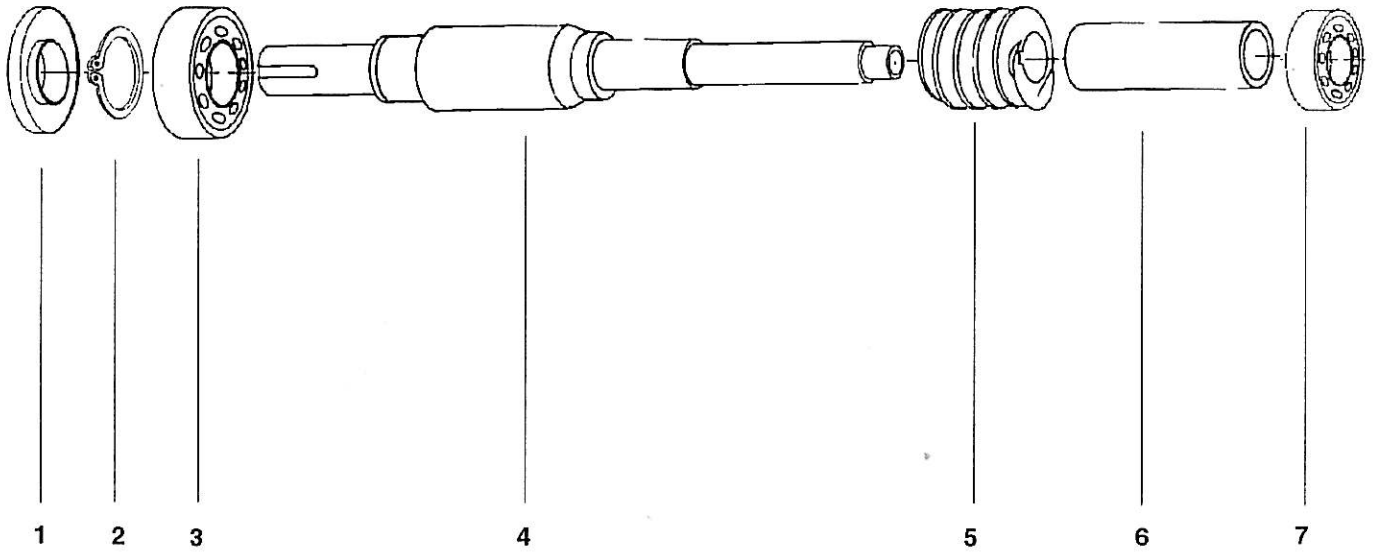


No.	Part Number	Part Description	Quantity
1	A130	Oil Seal	2
2	B877	Oil Seal Cap	2
3	C621	Main Shaft Cap	2
4	A112	Retaining Ring	2
5	B868	Spacer	3
6	A148	Bearing	4
7	A114	Retaining Ring	2
8	A176	Thrust Bearing	1
9	B876	Step Spacer	1
10	C601-1	Miter - Worm Gear Assembly 40:1	1
10A	C601-2	Miter - Worm Gear Assembly 20:1	1
11	B885	2RPM Shaft Assembly	1
12	B871	Spacer	2
13	A158	Cone Bearing	4
14	B860	Minion Pinion Gear Assembly	2
15	A246-10	Lock Washer	2
16	A250-10	Lock - Nut	2
17	C629	1 RPM Shaft Assembly	1
18	A316	Spacer	2

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No.	Part Number	Part Description	Quantity
1	A129	Oil Seal	1
2	A113	Retaining Ring	1
3	A138	Bearing	1
4	C630	Correction Shaft A or B	1
4a	C1418	Correction Shaft A & B	1
5	A296	Correction Gear 20:1	1
5a	A273	Correction Gear 40:1	1
6	B886	Spacer for Shaft C630	1
6a	B2140	Spacer For Shaft C1418	1
7	A139	Ball Bearing For Shaft C630	1
7a	A138	Ball Bearing For Shaft C1418	1