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ILD T - 2

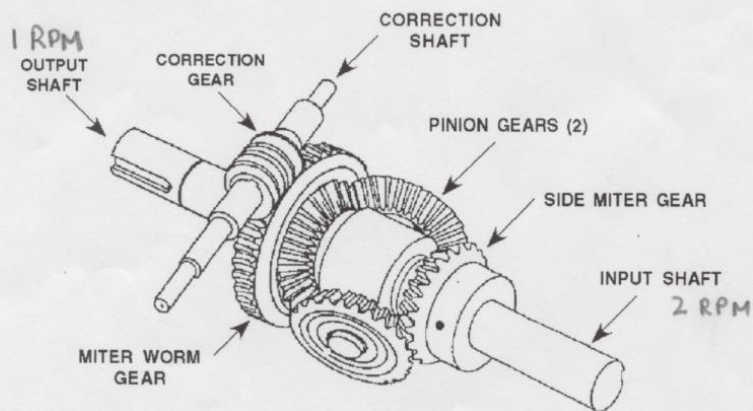
**Operating and
Maintenance Manual
With Parts List
Miter Gear Version**

**Electronic Machine Parts
400 Oser Avenue
Hauppauge, NY 11788
631-434-3700 phone ~ 631-434-3718 fax
sales@empregister.com
www.empregister.com**

Operating and Maintenance Manual With Parts List For **ILDT-2 Inline Transmission**

1. Introduction - ILDT-2 Inline Transmission

- a. The ILDT-2 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-2 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-2 is rated at 2.5 HP at 300 RPM. Maximum input speed to the 1 RPM shaft must not exceed 600 RPM.



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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-2 with 1 pint of MOBIL GEAR OIL No. 629, or any AGMA 4EP grade oil equivalent.
- c. This oil should be changed every 2000 hours of use.

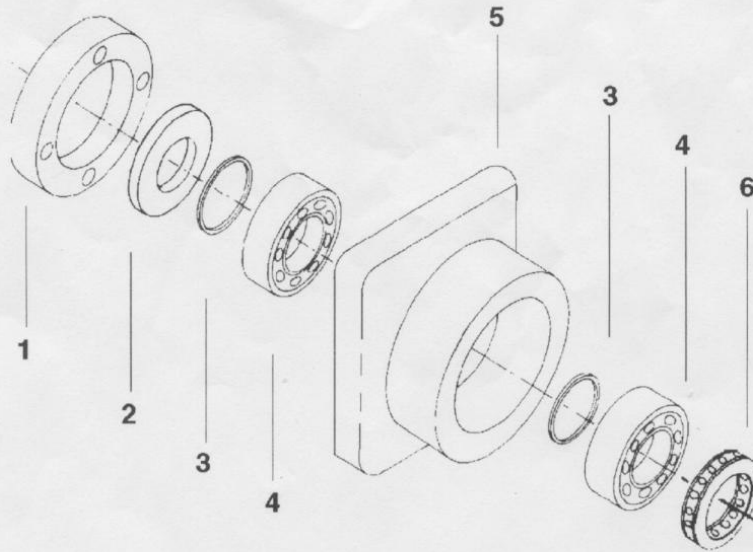
4. Installation

- a. Four 3/8-16x3/4" deep mounting holes are provided to install the ILDT-2 Transmission. Optional mounting legs are available.

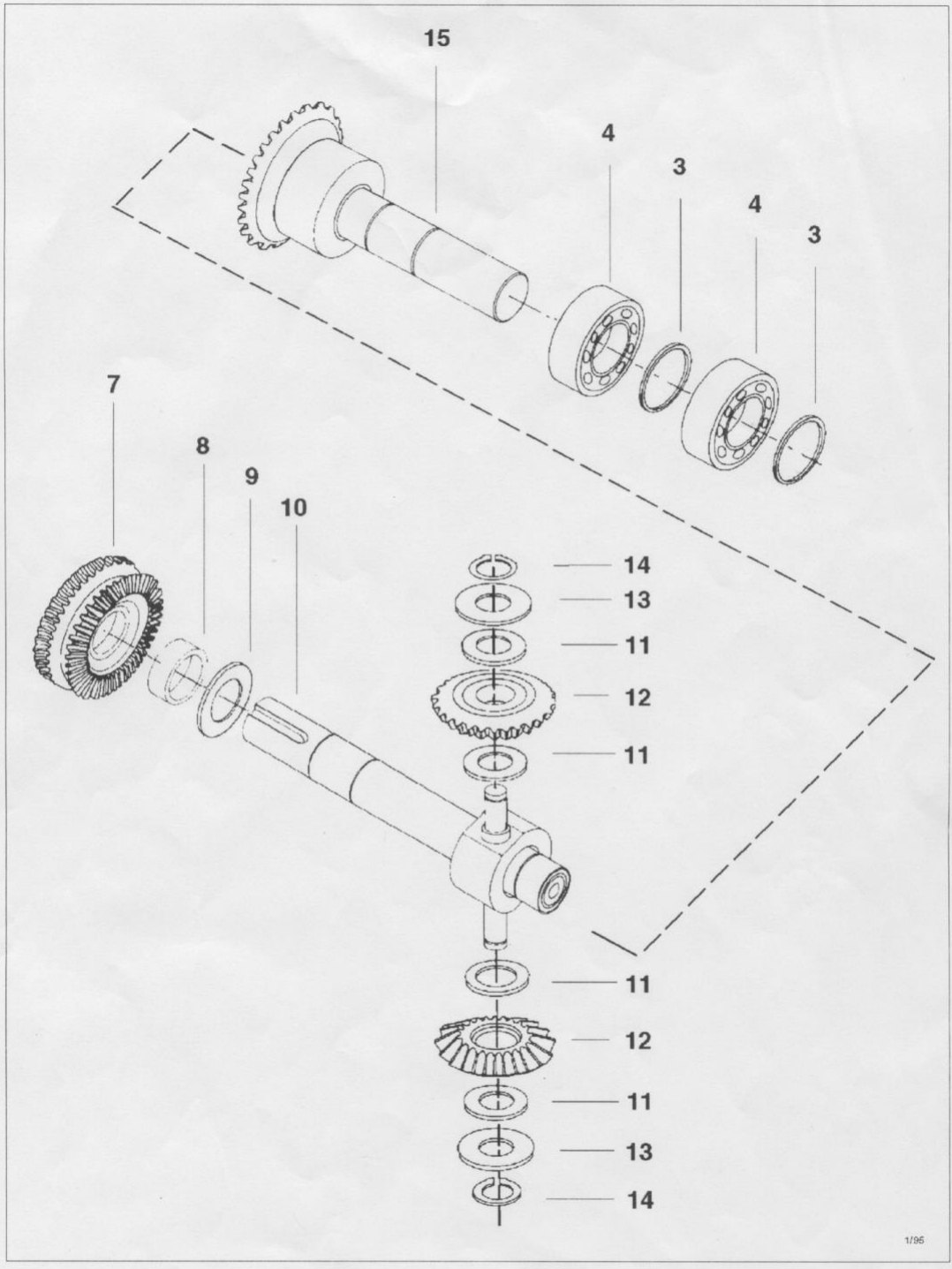
5. Ordering Spare Parts

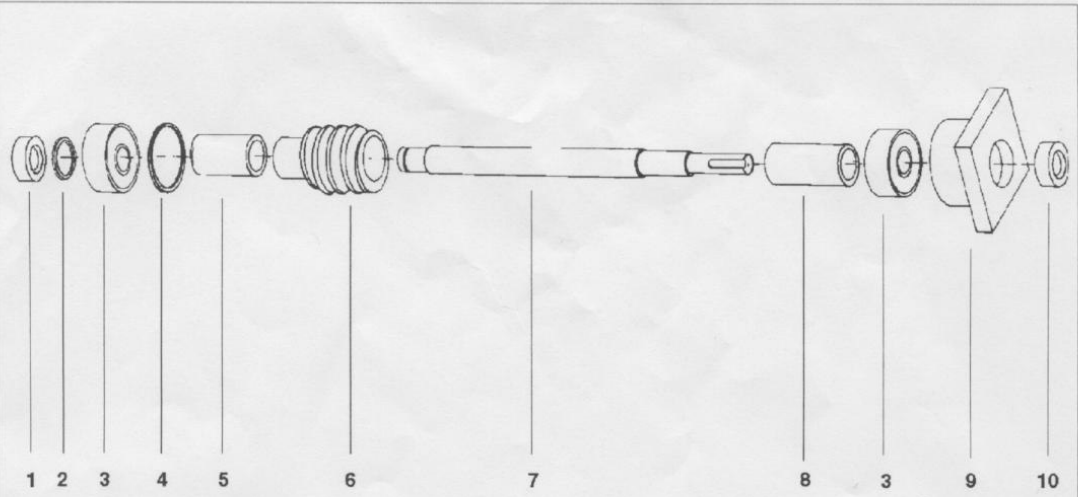
When ordering, please specify

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



No.	Part Number	Part Description	Quantity
1	B802	Oil Seal Cap	2
2	A125	Oil Seal	2
3	A100	Retainer Ring	4
4	A137	Ball Bearing	4
5	C472	Main Cap	2
6	A178	Thrust Bearing	1
7	C1501	40:1 Miter-Worm Gear Assembly	1
7a	C1573	20:1 Miter-Worm Gear Assembly	1
8	B2299	Spacer	1
9	A315	Shim - Main Shaft	1
10	B2556	1 Rpm Shaft Assembly	1
11	A313	Pinion Spacer	1
12	C1514	Pinion Gear Assembly	1
13	A314	Shim - Pinion Shaft	1
14	A103	Retaining Ring	1
15	B2557	2 RPM Shaft Assembly	1





No.	Part Number	Part Description	Quantity
1	A218	Caplug	1
2	A102	Retaining Ring	1
3	A157	Bearing	2
4	A104	Retaining Ring	1
5	B745	Spacer	1
6	B268	Correction Gear 40:1	1
6a	B1821	Correction Gear 20:1	1
7	B750 - 1	Correction Shaft A or B	1
7a	B430 - 1	Correction Shaft A & B	1
8	B431	Spacer	1
9	B735	Bearing Cap	2
10	A126	Oil Seal	2