Technical Bulletin

No: TB041 Rev: 1 Date: 29 January, 2008

Description: EMI 400 Worm Drive Inspection



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BACKGROUND INFORMATION:

The 250 Ton EMI 400 Top Drive uses a twin worm screw drive to perform Pipe Handler Rotate and Lock functions. A high reduction worm drive provides a permanent passive lock when the worms are not powered.

Premature wear of the gear teeth has been discovered with some worm drive assemblies after a limited time in service. This bulletin defines wear limits for this condition, plus worm end-cap fastener inspection information.

AFFECTED PRODUCT:

All 250T EMI 400 Top Drives incorporating the Dual Worm Drive Pipe Handler System (see table below & Figure 1.)

Description	Part No.	Serial No.	Mfg. Date
Worm Slew Drive, 14" w/Dual Motor,	731039	All	All
Hyd., 5 cu-in (Generation 1)			
Worm Slew Drive, 14" w/Dual Motor, Hyd.,	810360 / 820128	All	All
5 cu-in, w/stop (<i>Generation 2</i>)			

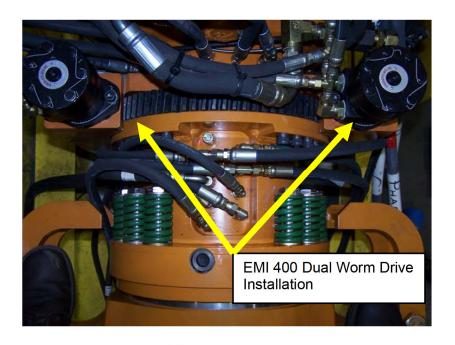


Figure 1.



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ACTION REQUIRED:

As part of the Top Drive monthly inspection schedule, conduct the following:

Dimensionally inspect at least 5 teeth selected randomly around the slewing gear as shown in Figure 2. If gear wear exceeds specified limit the assembly should be replaced.

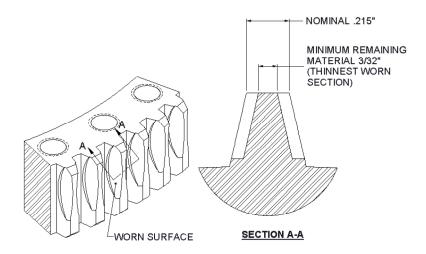


Figure 2.

As part of the Top Drive weekly inspection schedule, conduct the following:

- 1. Visually inspect slew gear teeth wearing status.
- 2. Visually inspect integrity of the worm retainer cap fasteners (motor and off motor end) as shown in Figures 3 and 4. If anomalies are found correct condition and report to your local TESCO Sales and Service Representative.

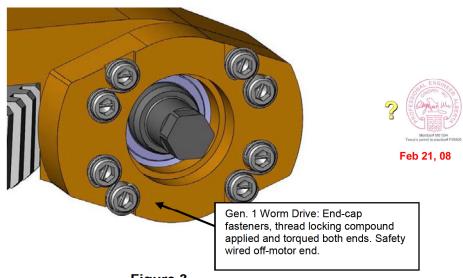


Figure 3.

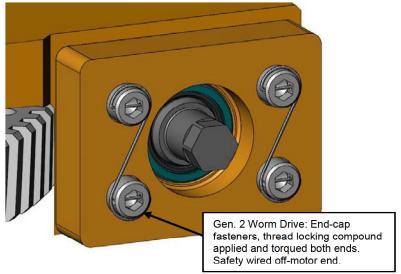


Figure 4.

Contact your local TESCO Parts and Service Center for further information regarding this bulletin

Contact your local TESCO Parts and Service Center for further information regarding this bulletin and or supply of affected components noted above.

Region	Telephone Number	
Asia pacific	62 21 725 5454	
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Latin America	54 11 4384 0199	
Middle East & Africa	971 4 887 3735	
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