


Safety Bulletin				Tesco Corporation 5616 – 80th Avenue SE Calgary, Alberta, Canada T2C 4N5 Tel: 1-877-TESCO-77 (North America) Tel: 1 (713) 359-7195 (AMSS 24-hour support) Tel: 1 (713) 359-7295 (International) Email: bulletins@tescocorp.com www.tescocorp.com www.tescoparts.com
No: SB083	Rev: 0	Date: May 22, 2014		
Pipe Handler Rotating Issue ECI Top Drive Systems				
<input type="checkbox"/> Internal Use Only		<input checked="" type="checkbox"/> External Use	<input checked="" type="checkbox"/> Mandatory	<input type="checkbox"/> Recommended

NOTE: All numbers in parentheses are TESCO part numbers unless otherwise noted.

BACKGROUND INFORMATION:

TESCO has found a potential safety hazard regarding the program associated with the pipe handler lock function on the TESCO ECI Top Drives.

When the pipe handler switch at the driller’s panel is set to unlock, the pipe handler will unlock. Under normal operating conditions, the proximity switch on the top drive will sense the unlock condition and the pipe handler caution light on the driller’s panel will illuminate and remain lit. Normal pipe handler rotation can be achieved. Pipe handler rotation in drill or connect mode with the grabber closed is not possible.

There might be instances, however, when the proximity switch or circuit becomes damaged/inoperable and is unable to sense the location of the pipe handler lock. This will cause the pipe handler caution light on the driller’s panel to flash. In this scenario, undesired pipe handler rotation is possible at as high as 14RPM (with an eDrive system), but IN ADDITION TO THIS, a more *undesirable condition of being able to rotate the pipe handler in drill or connect mode at significant speeds with the grabber closed is present.*

NOTE: Until a recent observation of this undesirable condition for pipe handler rotation, this issue had remained undetected as TESCO ECI Top Drives have been operating in the field for many years without incident. Program issues have NOT caused any injury or equipment damage.

AFFECTED PRODUCTS:

The pipe handler rotation issue affects the TESCO 500/650TON ECI(S) 900/1350HP and 750TON ECIX 1350HP Top Drives.

ACTION REQUIRED:

TESCO has resolved the issue by updating the PLC program. The PLC program update adds a safety feature to the drive system whereby the pipe handler can no longer rotate once the caution light begins flashing.

TESCO will provide updated code based on the original design. Any customization that customers might have made will be over-written. Program updates will be done via Proficy Machine Edition 7.0 software only. After the updates are complete, connection to the PLC via older DOS-based LogicMaster software will not be possible. **Change Bulletin CB-052 describes the update procedure.**

Customers are encouraged to contact a local TESCO service center for more information regarding the PLC revision update. A qualified TESCO Technician will be made available onsite by TESCO’s After Market Sales and Service (AMSS) department to update the PLC program as soon as it is practical.

IMPORTANT: Until the updates are complete, operators in the field should take extra precautions when the pipe handler caution light is flashing when the pipe handler-unlock function is used. Ensure that no personnel are in the vicinity of the bails and the derrick.

Alternatively, customers with access to the GE Fanuc 90-30 series PLC and GE PACSystem RX3i series PLC can update the PLC programs directly by using the following procedure:

1. Ensure that a laptop has the GE Proficy Machine Edition 7.0 software installed.
2. Obtain the latest PLC program from TESCO.
3. Connect the laptop to the PLC (via serial on 90-30, Ethernet on RX3i).
4. Open the PLC program from Proficy.
5. Download the latest program (write to EPROM).
6. Disconnect the laptop.

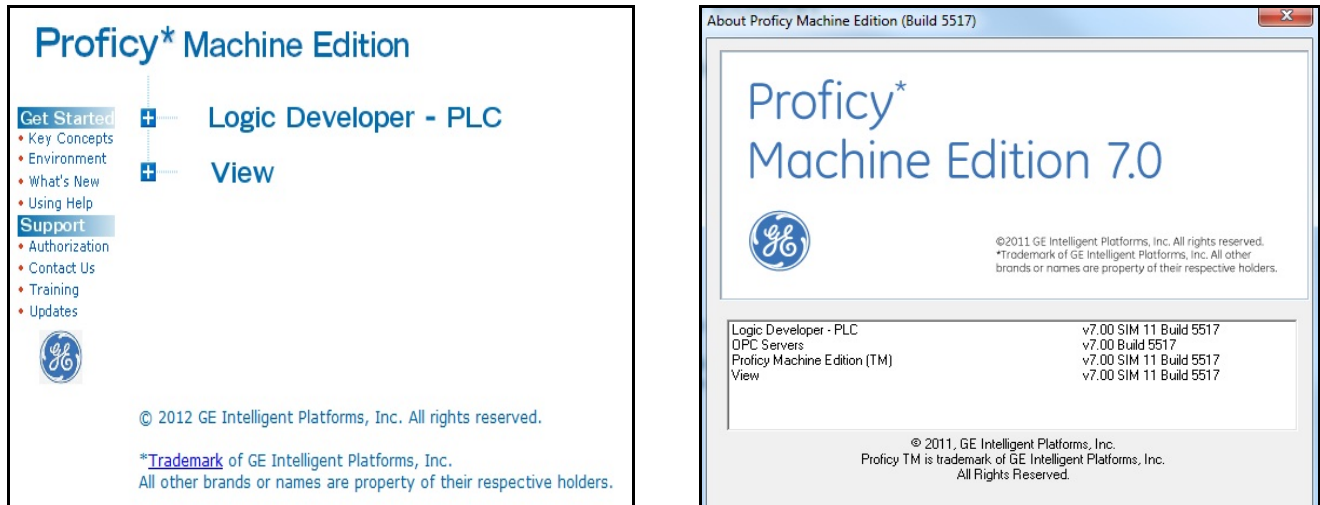


Figure 1: Proficy Machine Edition 7.0 software

Version	Date (D/M/Y)	ECN	Description of changes
Rev 0	22/05/2014	088-0007	Initial release of document

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