



Technical 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
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Safety Wiring of Bolts for 600hp Electric Motors			

BACKGROUND INFORMATION:

It was discovered that the bolts connecting the 600hp motor frame components were not properly secured (lock wired). Leaving these bolts unsecured jeopardizes motor integrity and as a result, endangering the safety of top drive operation.

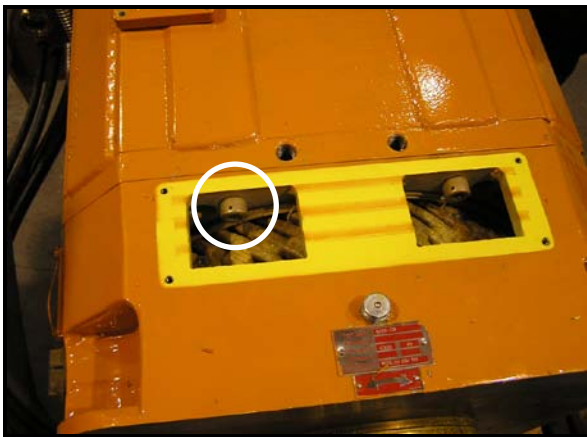


Figure 1: Motor main body frame



Figure 2: Close-up view of bolt in motor main body frame

Note: Figure 1 and Figure 2 show bolts with pre-drilled heads. However, some bolts might not have pre-drilled holes in the heads. Therefore, an additional step of drilling holes on the heads of the bolts might be required.

AFFECTED PRODUCTS:

The following 600hp motors manufactured by WEG (5000019) and Ward Leonard (840060) are affected.

Part Number	Description
5000019	Motor, Elec, 600HP, 575VAC/60Hz, 575VAC Blow, 1188RPM, CSA CL1, D2
840060	Motor, Elec, 600HP, 575VAC/60Hz, 575V Blower Motor, 1180rpm, CSA, Zone1, Single Splined Shaft

Rev	Date (D/M/Y)	ECN	Description of Bulletin Changes
0	06/02/2011	127-0425	Initial release of document

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ACTION REQUIRED:

1. Remove all louvers covering the motor frame components (Figure 3).



Figure 3: Remove louver to access bolts inside motor main body frame

2. There are eight bolts (two on each side of the motor) connecting the motor's main body frame to the upper and lower sections of the frame.
 - a) Unscrew two bolts at the time.

Drilling (optional): Drill bolt heads .100 dia through
 - b) Apply yellow Loctite to the bolt threads.
 - c) To prevent the bolts from becoming loose, lock wire the bolts in a similar fashion to Figure 4, which demonstrates proper lock wiring for right hand threads. In the case for these motors, ensure the wire runs inside the motor frame.



Figure 4: Example of bolts that are properly lock wired

3. After the bolts have been securely lock-wired, re-install the louvers and also secure them with lock-wiring.
4. This technical bulletin should be distributed to the TESCO Business Unit service department and the appropriate lock wiring of bolts should be carried out during service visits.