Safety Bulletin

No: SB065 | Rev: 0 | Date: 05 Sept 2012

Description: Spiralock™ Fasteners for Bolted Flange Torque Track

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.tescocorp.com

## **BACKGROUND INFORMATION:**



Spiralock<sup>™</sup> is a registered trademark of Spiralock Corporation.

An incident occurred in which a Spiralock fastener loosened and fell from a bolted flange torque track. Further investigation found that two sizes of 3/4" Spiralock fasteners were being used, a larger one with Ø1.5" flange (TESCO part number 19218) and a smaller one with Ø1.25" flange (TESCO part number 720848).

## AFFECTED PRODUCT:

All TESCO Top Drive installations utilizing bolted flange torque track are affected.

## **ACTION REQUIRED:**

On top drive installations utilizing the 12"x8" bolted flange torque track (Figure 1), the 3/4" ASTM A193-B7 studs (TESCO part number 1124) must be removed and replaced by 3/4" Grade 8 studs (TESCO part number 5017530). The B7 studs are black anodized and are marked "B7" on the ends, whereas the Grade 8 studs are chromate plated (gold colored) and are not marked "B7" on the ends. Confirm that the flange connection nuts are all 3/4" Spiralock Grade 8 nuts with Ø1.25" flange (TESCO part number 720848). Torque the 3/4" flange fasteners to the manufacturer specified torque: 388 to 423 ft-lbs if lubed, or 517 to 564 ft-lbs if dry. Working from the middle outwards use a criss-cross tightening pattern to ensure even clamping, see Figure 3 and Figure 4.

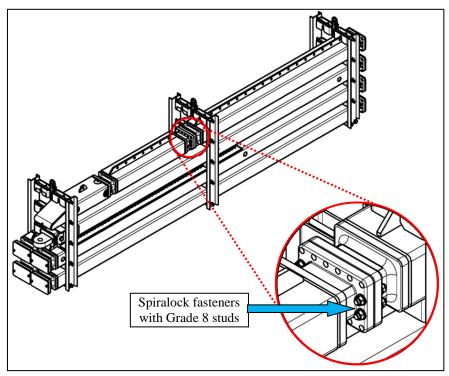


Figure 1: 12"x8" bolted flange torque track

On top drive installations utilizing 12"x4" bolted flange torque track (Figure 2, typically 150/250-HMIS-475 installations) the 7/8" ASTM A193-B7 studs (TESCO part number 6080) must be removed and replaced by 7/8" Grade 8 studs (TESCO part number 5017532). The B7 studs are black anodized and are marked "B7" on the ends, whereas the Grade 8 studs are chromate plated (gold colored) and are not marked "B7" on the ends. Confirm that the flange connection nuts are all 7/8" Spiralock Grade 8 nuts (TESCO part number 720196). Torque the 7/8" flange fasteners to the manufacturer specified torque: 625 to 682 ft-lbs if lubed, or 833 to 909 ft-lbs if dry. Working from the middle outwards use a criss-cross tightening pattern to ensure even clamping, see Figure 5.

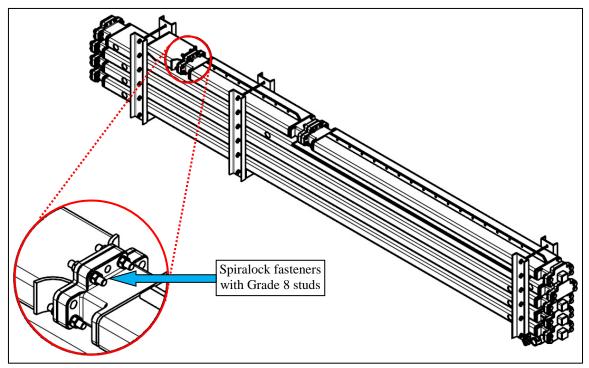


Figure 2: 12"x4" bolted flange torque track

In addition to torqueing the fasteners to manufacturer specification, ensure that the weekly inspection requirements for all bolts and threaded rods are followed, as recommended in the Top Drive Maintenance Guides, "Torque Arrest System Service Requirements".

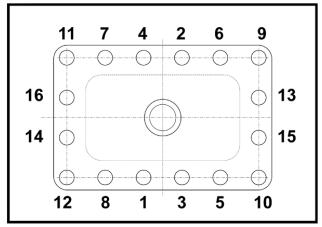


Figure 3: Fastener tightening for 12"x8" torque track flange, uses 720848 (EMI, ECI, EXI, HCI)

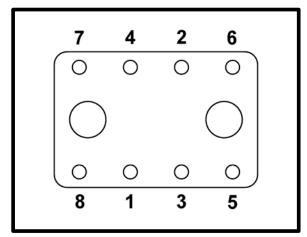


Figure 4: Fastener tightening for 12"x8" low profile torque track flange, uses 19218 (HXI, EMI)

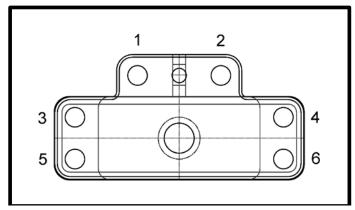


Figure 5: Fastener tightening for 12"x4" torque track flange, uses 720196 (HMI)

Version	Date (D/M/Y)	ECN	Description of Bulletin Changes
Rev 0	5/09/2012	097-0214	Initial release of document