# H TECHNICAL PROCEDURE TRAILER SUSPENSION SYSTEMS HT250US, HT300US AND CXU

SUBJECT: Shock Mount Assembly Procedure

LIT NO: L725 DATE: September 2018

**REVISION:** B

# **INTRODUCTION**

The procedures in this document apply to shock bolt replacement kits for Hendrickson HT<sup>™</sup> SERIES HT250US, HT300US and CONNEX<sup>™</sup> CXU 23K/25K suspension systems.

- **IMPORTANT:** Hendrickson does not recommend reusing fasteners. Bolt metal and threads are stressed when tightened. Duplicating clamp loads under torque is not assured for used fasteners.
- IMPORTANT: DO NOT apply additional lubricant to fastener threads. Doing so will reduce the friction between fastener components which can lead to overtightening, unpredictable clamp loads and unreliable fastener connections.
- **IMPORTANT:** If the proper clamp load is not achieved, shock failure may occur and may result in damage to the suspension and/or its components.

NOTICE: This procedure applies to Hendrickson Genuine Parts used in the performance of these procedures. Hendrickson shock eyelets have a solid inner metal insert that will not crush under the specified clamp loads.

For general safety and precautionary statements, refer to Hendrickson literature number <u>T12007</u>, available at www.Hendrickson-intl.com/TrailerLit.

For assistance in the United States and Canada, call Hendrickson Trailer Technical Services at 866-RIDEAIR (743-3247) or e-mail **HTTS**@Hendrickson-intl.com.

# SHOCK MOUNT BOLT REPLACEMENT

Shock mount bolt kits can include replacement parts for lower or both shock mount assemblies. These include steps for assembling fasteners for both upper and lower shock mounting brackets.

### **REMOVING SHOCK**

- 1. If applicable, remove both the upper and lower shock bolt hardware and the shock absorber.
- 2. Discard removed bolt(s) and related hardware.

#### **UPPER SHOCK MOUNT BOLT REASSEMBLY**

When replacing a shock, it is usually best to assemble the shock to the upper mounting bracket first.

- 1. **Insert** the 3<sup>1</sup>/<sub>4</sub>-inch shock bolt through the shock.
- 2. **Thread** the lock nut onto the upper shock mount bolt.
- **NOTE:** Do not torque bolts until both upper and lower shock mounts are assembled.
- Hold upper nut with 1<sup>1</sup>/<sub>8</sub>-inch wrench and tighten the upper shock bolt to 225±10 ft. lbs. (300±10 Nm) of torque.
- 4. Visually check all components to ensure fasteners are tight.



#### LOWER SHOCK MOUNT REASSEMBLY

Use this procedure to install the lower shock mount hardware (Figure 1).

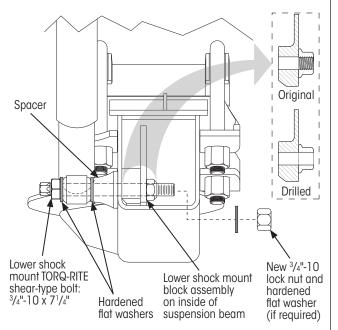


Figure 1: Lower shock bolt assembly

- Inspect threads on the existing lower shock bolt and lower shock mount block assembly (Figure 1). If the threads are undamaged, skip to <u>Step 3</u>.
- **NOTE:** <u>Step 2</u> is required for suspensions built prior to 1999 with a <sup>3</sup>/<sub>4</sub>"-16 x 5<sup>1</sup>/<sub>4</sub>" lower shock bolt. It is also required if the bolt broke in the nut during removal.
- 2. **Using** a <sup>3</sup>/<sub>4</sub>-inch drill bit, **drill out** the broken bolt or threads in the original nut (<u>Figure 1</u>).
- Assemble the new <sup>3</sup>/<sub>4</sub>"-10 x 7<sup>1</sup>/<sub>4</sub>" TORQ-RITE sheartype hex-head bolt (<u>Figure 2</u>) onto the shock with two harden flat washers and spacer as shown in (<u>Figure 1</u>). New fastener hardware is supplied with the service parts kit.
- 4. **Insert** threaded end of the bolt into the lower shock mount block assembly.
- 5. If the threads of the lower shock mount block assembly were **not drilled out**, skip the next two steps.

- Reaching through the rear of the suspension beam, slide the third hardened flat washer (supplied with the service parts kit) over the threads of the lower shock bolt (Figure 1).
- 7. **Thread** the new torque-prevailing nut onto the threads of the bolt.
- 8. Hand tighten the lower shock bolt.
- **NOTE: If the threads were drilled out, hold** the torque-prevailing nut with a 1<sup>1</sup>/<sub>8</sub>-inch wrench while tightening with tools.

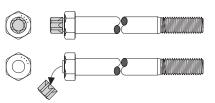


Figure 2: TORQ-RITE<sup>®</sup> shear-type hex-head bolt

- Using a Torx E20 ¾-inch drive socket and ¾-inch impact wrench, tighten the TORQ-RITE shear-type hex-head bolt until the shear head feature separates from the bolt head as shown in Figure 2. This will occur at 225±10 ft. lbs. (300±10 Nm).
- 10. Visually check all components to ensure fasteners are tight.
- 11. Discard any unused parts.

#### Call Hendrickson at 866.RIDEAIR (743.3247) for additional information.



 TRAILER COMMERCIAL VEHICLE SYSTEMS

 2070 Industrial Place SE

 Canton, OH 44707-2641 USA

 866. RIDEAIR (743.3247)

 330.489.0045 • Fax 800.696.4416

#### Hendrickson Canada 250 Chrysler Drive, Unit #3 Brampton, ON Canada L6S 6B6 800.668.5360 905.789.1030 • Fax 905.789.1033

#### Hendrickson Mexicana

Circuito El Marqués Sur #29 Parque Industrial El Marqués Pob. El Colorado, Municipio El Marqués, Querétaro, México C.P. 76246 +52 (442) 296.3600 • Fax +52 (442) 296.3601

www.hendrickson-intl.com