

H TECHNICAL PROCEDURE

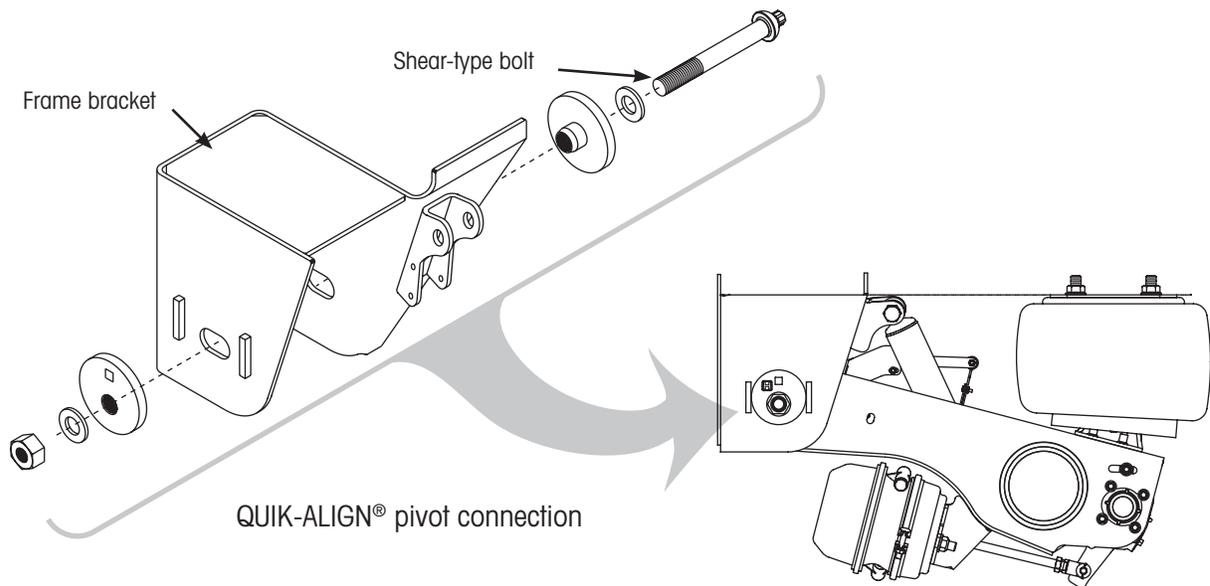
TRAILER SUSPENSION SYSTEMS

SUBJECT: QUIK-ALIGN® Pivot Connection
Fastener Upgrade

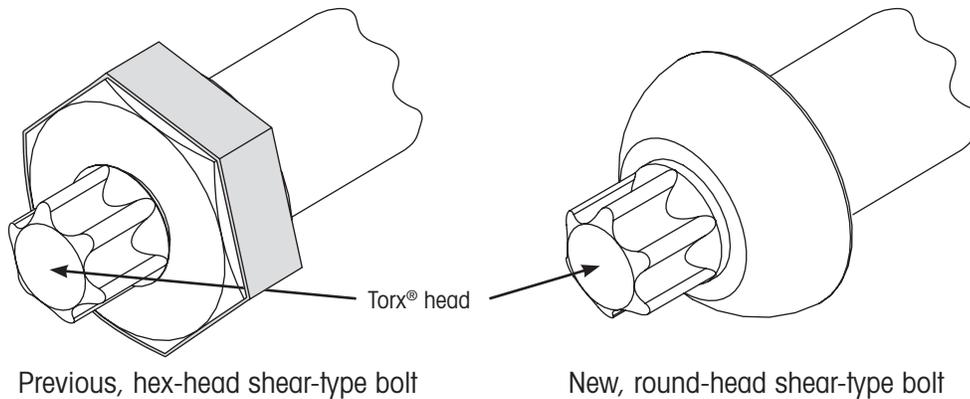
LIT NO: B92
DATE: May 2014

REVISION: D

In keeping with our philosophy of continuous improvement, Hendrickson Trailer Suspension Systems will implement a revision to all suspension models and aftermarket kits equipped with the QUIK-ALIGN® pivot connection. A round-head shear type bolt will replace the previous hex-head shear-type bolt to help make the connection tamper resistant.



The shear-type bolt is well known to Hendrickson customers as a fast, flexible and convenient way to apply the proper torque and clamp force at the pivot connection. Simply install the bolt from the inboard side of the frame bracket and tighten with an E20 Torx® socket until the bolt's Torx® head shears off. That feature has not changed. The new shear-type bolt functions exactly the same as the previous design.





FASTENERS FACTORY TORQUED BY HENDRICKSON (VANTRAAX® ONLY)

A non-shear-type Hendrickson hex-head bolt will continue to be used on all pre-aligned and factory-torqued VANTRAAX® pivot connections.

HENDRICKSON DOES NOT AUTHORIZE REUSE OF THE BOLT

Neither the previous design nor the new round-head shear-type bolt may be reused. Whenever the pivot connection is disassembled, the shear-type bolt must be removed by grinding or another appropriate method and discarded. The bolt and nut are not reuseable. A new shear-type bolt and hex nut must be installed and sheared to achieve the proper pivot connection torque and clamp force.

IMPORTANT: It is acceptable to mix the new round-head shear-type bolt with the previous hex-head shear-type bolt on the same suspension. Any new, unused hex-head shear-type bolts you may have in stock can be used to exhaust inventory.

The shear-type bolt is an effective, reliable and proven fastener. When properly installed, the shear-type bolt will provide the trouble-free, high-strength connection you have come to expect. Anyone who assembles or reassembles the pivot connection (OEMs, dealers, repair facilities, etc.) is responsible for the proper installation of the shear-type bolt. Failure to reach the required torque can result in an insufficient clamp force and unreliable axle alignment.

⚠CAUTION: DO NOT APPLY anti-sieze compound or additional lubricant to pivot connection hardware. A dry lubricant coating has been applied to the threads of the pivot connection bolt and nut. Do not allow undercoating, paint, surface coatings, or any other commonly used compounds to contact the threads of the pivot connection fasteners. These compounds can act like a lubricant, reducing the friction between the threads of the nut and bolt. This can lead to overtightened fasteners, unpredictable pivot connection clamp loads and unreliable axle alignments. Threads should be clean, dry and free of contamination, as supplied by Hendrickson.

IMPORTANT: An improperly torqued pivot connection can result in injury and/or property damage.

REQUIRED TOOLS

Hendrickson offers three drive sockets that may be used with the shear-type bolt:

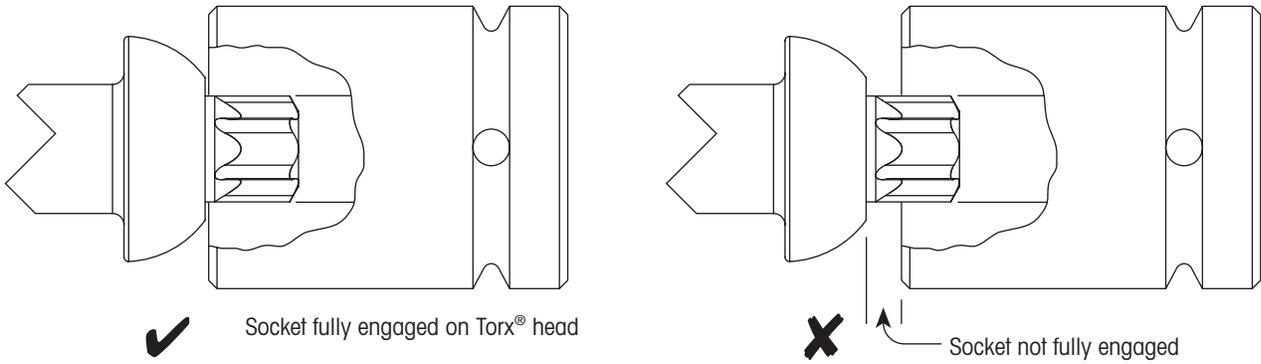
DESCRIPTION	DRIVE SIZE	PART NUMBER	COMMENTS
Hendrickson E20 Torx® Socket	3/4 inch	A-24303	Cost effective tool for occasional use (not recommended for use in high-volume trailer production environments).
Hendrickson E20 Torx® Socket	1 inch	A-24536	For medium-duty use (dealers, repair facilities, etc.) or for those with one inch drive air tools.
Hendrickson E20 Torx® Socket With Sleeve	1 inch	A-25119	For high-volume trailer production environments or manufacturing facilities — the sleeve allows the operator to rest the tool on the bolt during the entire shear operation resulting in full engagement, less fatigue and properly torqued pivot connections.

Equivalent sockets such as Camcar TX-8120 or Strong Tools E-20 T.S. may also be used.

IMPORTANT: To avoid damaging the shear bolt's Torx® head (regardless of the drive socket being used), ensure that the drive socket has fully engaged the Torx® head.

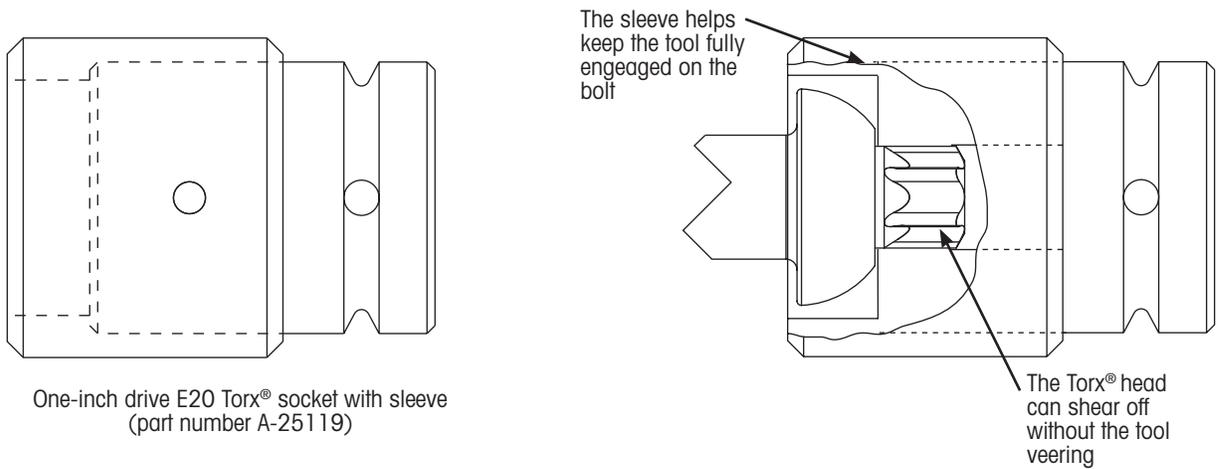


QUIK-ALIGN® PIVOT CONNECTION FASTENER UPGRADE



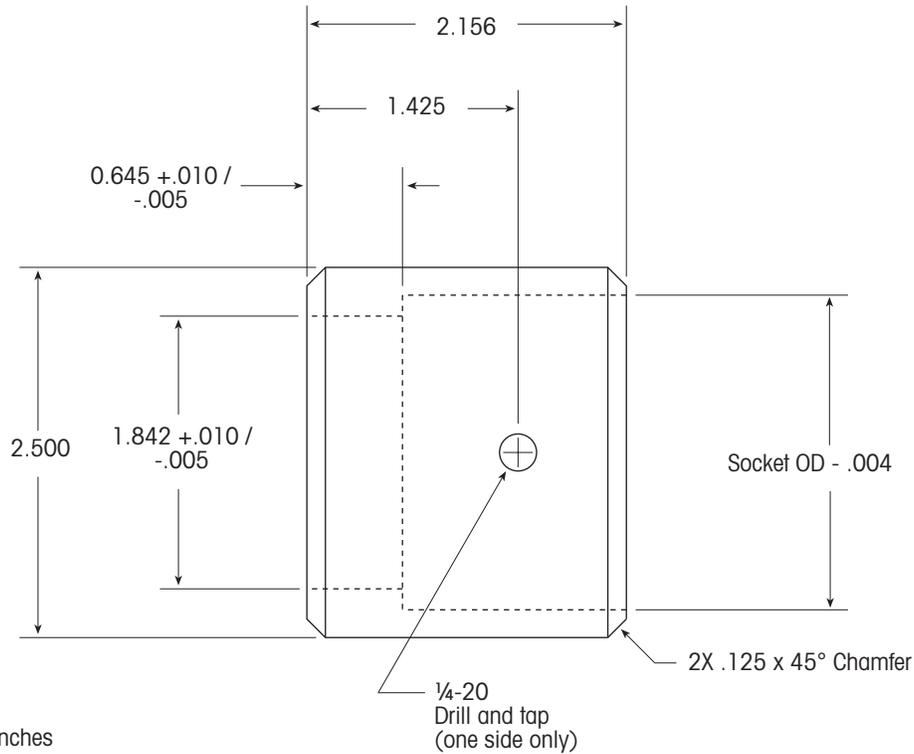
Hendrickson does not recommend the 3/4-in. drive socket for use in high volume trailer production environments. The 3/4-in. drive socket can back away from full Torx® head engagement during the shearing process and strip the Torx-head splines. When damage occurs to the Torx-head splines, the proper torque and clamp force may not be achieved.

For high volume trailer production and service facilities, Hendrickson recommends the one-inch drive E20 Torx® socket with sleeve (part number A-25119). The sleeve helps support the tool by riding over the entire head of the shear bolt. It also provides greater operator control at the moment of shear by preventing the heavy tool from veering. The operator can rest the tool against the collar during the entire operation resulting in full socket-to-bolt engagement, reduced fatigue and consistent, properly torqued pivot connections.



If you already own the one-inch drive E20 Torx® socket without the sleeve (part number A-24536) and wish to add the sleeve to it, dimensions are included on the back page. A local fabricating shop can make and assemble the sleeve for you using this information.

If you have any questions about the use or operation of the new shear-type bolt and/or questions concerning the Hendrickson E20 Torx® sockets, please contact our technical service department in the United States at 866-743-3247 or in Canada at 905-789-1030.



Measurements are in inches

NOTES:

1. Sleeve undersized by .004; shrink fit socket into sleeve OD.
2. Drill and tap assembly for 1/4-20 x .25 (oval point) standard hex socket set screw.
3. Material: Ø2.500 6150 H.R.S.
4. Heat treatment (sleeve):
 - oil drenched: 1550° F (538° C)
 - tempered: 1000° F (843° C)

Call your trailer dealer or Hendrickson at **866.RIDEAIR (743.3247)** for additional information.



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