Installation Instructions for Hendrickson Steer-Tek Front Axel H-190K2.5

Workhorse UFO, Freightliner FRED, Volvo Class 7/8

INCLUDED IN THIS KIT

QTY.1	55-190-6	Anchor Bracket
QTY.1	55-206	Tie Rod Bracket
QTY.1	12-38-1625K	U-Bolt Kit
QTY.1	16-900	Spacer 1 ½ x ¾ x ¾
QTY.1	10-8-400	³ / ₄ - 16 X 4 Bolt

Set front wheels of vehicle to a straight-ahead position. This is <u>important</u>. Later adjustment of the Tie Rod Bracket may be avoided if front wheels are set perfectly straight.

- 1. Anchor Bracket. Remove nuts from front axle rear U-bolt (Figure 1), on passenger side install bracket 55-190-6, replace and tighten nuts securely.* REMOVE WASHERS IF NESSASARY TO GET A FULL NUT OF THREAD* (Figure 4) AFTER INSTALL TURN WHEEL TO EXTREME BOTH WAYS TO CHECK FOR CLEARANCE.
- 2. Using U-bolts and nuts provided, install Tie Rod Bracket on opposite end of tie rod with 3/4" mounting holes extending from the side of tie rod to which unit will be mounted. Leave bracket slightly loose on tie rod for final positioning later. Thoroughly clean this section of tie rod before attaching bracket.
- 3. Select the best unit to bracket installation position based on the following procedure:
 - (A) Unit should be installed to provide maximum protection by front axle.
 - (B) Small diameter end of unit should be 1/2" to 1" lower than large end of unit when installation is complete if possible.
 - (C) Unit may be attached either above or below both Anchor and/or Tie Rod Bracket if clearance allows, check the distance on the oil pan or any other obstruction that may come in contact with the unit.
 - (D) It is preferable to install unit with large diameter end attached to Anchor Bracket; however, it may be installed in the opposite direction to obtain desired angle.
- 5. (A) Attach one end of the unit to the Anchor Bracket with the ½ inch spacer provided between the bracket and the unit. Insert the ¾ x 3 ½ bolt with washer between bolt head and the mounting eye.
 - (B) Install 3/4" lock nut to mounting bolt and tighten with a wrench to 80-92 pounds of torque.
- 6. (A) Next attach unit to tie rod by sliding Tie Rod Bracket to align the <u>nearest</u> 3/4" hole in bracket with unit mounting eye. Insert ¾ inch bolt with washer between the bolt head and the mounting eye. Fasten a locknut and tighten with a wrench just enough to allow the unit eyelet to still easily rotate around the mounting bolt.
 - (B) Adjust the Tie Rod Bracket by rotating around tie rod to the point necessary to bring small diameter end of unit to a point 1/2" to 1" lower than large end of unit. When positioned tighten the four U-bolt nuts to 20/30 pounds of torque.
 - (C) Tighten 3/4-16 locknut to 80-90 pounds of torque.

7. Check to be sure installed unit clears all other parts of vehicle by turning steering wheel to both extreme positions. If unit scrapes or binds at any point, review these instructions and make necessary corrections.



Figure 1



Figure 2



Figure 3





ROAD TEST & ADJUSTMENT PROCEDURES

To ensure proper alignment and installation of the SAFE-T-PLUS unit, the vehicle should be road tested. Take along a socket wrench to fit the U-Bolts on the Tie Rod. While driving on a straight stretch of road, vehicle should easily follow a straight course, if not, adjustment is necessary.

To adjust, hold and note the steering wheel position that causes the vehicle to track straight, stop vehicle and set brakes. Loosen nuts on Tie Rod U-Bolts and allow unit to self-center. (Frequently this movement is not noticeable) Retighten nuts 25 - 30 lbs torque and test drive again. Repeat this step if necessary until vehicle will hold a straight line.

NOTE: Continue to hold the steering wheel in a straight forward position until the adjustment has been completed. Otherwise the wheels will return to the pulling position instead of the straight-ahead position desired.

If you need additional assistance, please call us toll-free at (800) 872-7233.