

HASSEMBLY INSTRUCTIONS

Steering Stabilizer Kit AIRTEK® for International Truck Vehicle Models 9200/9400

SUBJECT: Kit No. 60961-167 LIT NO: 59310-053 DATE: August 2011

REVISION: A

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Hendrickson Kit No. 60961-167

(International No. H60961167)

CONTENTS

Description

1/2"-13 UNC U-bolt

1/2" Hardened Washer

1/2"-13 UNC Nvlocknut

34"-10 UNC 31/2" Bolt

3/4"-10 UNC Locknut

34"-10 UNC 9" Bolt

INTRODUCTION

Hendrickson Truck Suspension Systems has worked with International Truck to develop the following Steering Stabilizer Kit available for International 9200 and 9400 model vehicles manufactured with Hendrickson AIRTEK[®] integrated front air suspension and steer axle system.

These assembly instructions cover the proper installation of the Steering Stabilizer Kit. This kit is available only through International Truck, (Part No. H60961167) who must authorize the installation of the above referenced Steering Stabilizer Kit. Contact Hendrickson toll-free at 1-866-755-5968 (U.S. and Canada) with any questions regarding these assembly instructions.

STABILIZER KIT INSTALLATION INSTRUCTIONS

DISASSEMBLY

- 3/4"-10 UNC Nylocknut

 3/4" Washer

 INSTRUCTIONS

 Shock Absorber

 Bottom Axle Wrap Plate

 Tie Rod Mounting Plate
- 1. Turn the wheels left and right and ensure that the steer
 - ing stops contact the axle (it may be necessary to turn the vehicle engine on to perform this step).
- 2. After checking to see that the wheel stops contact the axle, ensure the tires are returned to the straight position.
- 3. Turn off vehicle engine (if turned on). Chock the wheels.

🛕 DANGER

AIR SPRING ASSEMBLIES MUST BE DEFLATED PRIOR TO LOOSENING ANY CLAMP GROUP HARDWARE. UNRESTRICTED AIR SPRING ASSEMBLIES CAN VIOLENTLY SHIFT. DO NOT INFLATE AIR SPRING ASSEMBLIES WHEN THEY ARE UNRESTRICTED. AIR SPRING ASSEMBLIES MUST BE RESTRICTED BY SUSPENSION OR OTHER ADEQUATE STRUCTURE. DO NOT INFLATE BEYOND PRESSURES RECOMMENDED BY AIR SPRING MANUFACTURER, CONTACT HENDRICKSON TECHNICAL SERVICES FOR DETAILS. IMPROPER USE OR OVER INFLATION MAY CAUSE AIR SPRING ASSEMBLIES TO BURST, CAUSING PROPERTY DAMAGE AND/OR SEVERE PERSONAL INJURY.

- 4. Remove all air from the front suspension air system by disconnecting the suspension height control valve linkage(s) at the rubber grommet(s) and allowing the lever to drop. This will exhaust air from the system.
- 5. Raise the vehicle.
- 6. Support the frame and suspend the front axle with the shocks attached.
- 7. Support the axle with a jack.
- 8. Unseat the right air spring at the axle top pad.
- 9. From the right side clamp group ONLY, remove the ³/₄" straight bolt fasteners and discard.





- 1. Install the new ³/₄" x 9" clamp group straight bolts.
- 2. Place the bottom axle wrap plate over the rear clamp group straight bolt as shown, see notch orientation in Figure 1.
- 3. Add the new ³/₄" locknuts. Snug the locknuts, **DO NOT** tighten to torque at this time.



- Ensure that the clamp group is properly aligned and the straight bolts are seated properly in the top pad, and the bottom axle wrap is centered on the top axle wrap, see Figures 3 and 4.
 - FIGURE 2
- 5. Tighten the ³/₄" clamp group locknuts evenly in 50 foot pound increments to 290-330 foot pounds in the proper pattern to achieve uniform bolt tension, see Figure 2.





FIGURE 1



FIGURE 5

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- 6. Measure the distance between the left and right grease zerks on the tie rod assembly, see Figure 5.
- 7. Divide this measurement in half.
- 8. Mark the centerline of the tie rod tube with this measurement.
- 9. Position the **tie rod mounting plate** 149.2 mm (5⁷/₈" ± ¹/₁₆") to the left of the tie rod centerline (towards the drivers side), see Figure 5.
- 10. Attach the **tie rod mounting plate** using the hardware provided in the service kit, see Figure 6. **DO NOT tighten** to torque at this time.
- 11. Attach steering stabilizer shock to bottom axle wrap plate using the ³/₄" x 3¹/₂" long hex bolt, locknut and washer, see Figure 1. **DO NOT** tighten to torque at this time.
- 12. Attach the other end of the stabilizer shock absorber to the tie rod mounting plate using the remaining ³/₄" x 3¹/₂" long bolt, washer and locknut, see Figure 6.

FIGURE 6



- 13. Verify that the tie rod mounting plate is still 149.2 mm (5⁷/₈" ± ¹/₁₆") from the centerline of the tie rod, see Figure 5.
- 14. Tighten the ½" tie rod mounting plate U-bolt locknuts evenly to 🗈 100-110 foot pounds in a cross pattern, see Figure 6.
- Tighten the ¾" locknut for the steering stabilizer shock on the bottom axle wrap plate to ■ 225-255 foot pounds, see Figure 2.
- 16. Tighten the ³/₄" steering stabilizer shock locknut for the tie rod mounting plate to **2** 225-255 foot pounds, see Figure 6.
- 17. Verify that the tie rod mounting plate is vertical.

- 18. Verify that the vehicle can achieve full left and right wheel cut without the steering stabilizer running out of travel. If the wheel cut test fails, adjust the location of the tie rod mounting plate left or right to achieve full wheel cut.
- 19. Reseat the right air spring at the axle top pad.
- 20. Remove safety stands.
- 21. Install the height control valve linkage(s) and inflate the suspension to normal operating pressure.
- 22. Verify proper ride height, adjust if necessary.
- 23. Remove chocks from wheels.

Refer any questions regarding this publication to Hendrickson Tech Services. Contact information:

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Visit www.hendrickson-intl.com for Hendrickson product information.

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