INTRODUCTION

Following appropriate inspection procedures is important to help ensure the proper maintenance and operation of the suspension system and component parts. Hendrickson recommends the PRIMAAX® EX / FIREMAAX® EX • PRIMAAX® / FIREMAAX® heavy-duty rear suspension is inspected at pre-delivery, the first 1,000 miles of service and at the regular preventive maintenance intervals. Off-highway and severe service operating conditions require more frequent inspections than on-highway service operation.

Carefully inspect the suspension, refer to Hendrickson Technical Procedure publications 17730-238 and/or 17730-263 (Kenworth) for complete PRIMAAX EX / FIREMAAX EX • PRIMAAX / FIREMAAX suspension inspection procedures, important safety notices, and preventive maintenance details, available at www.hendrickson-intl.com.

Following appropriate inspection procedures is important to help ensure the proper maintenance and operation of the PRIMAAX EX / FIREMAAX EX • PRIMAAX / FIREMAAX suspension system and component parts function to their highest efficiency.

NOTE

Torque values shown in this publication apply only if Hendrickson supplied fasteners are used. If non Hendrickson fasteners are used, follow the torque specification listed in the vehicle manufacturer’s service manual.

SAFETY REMINDER

All applicable warnings and cautions should be read carefully to help prevent personal injury and to assure that proper methods are used. Improper maintenance, service or repair may damage the vehicle, cause personal injury, render the vehicle unsafe in operation, or void manufacturer’s warranty.

Failure to follow the applicable safety precautions can result in personal injury and/or property damage. Carefully read and understand all safety related information within the applicable Hendrickson publications, on all decals and those provided by the vehicle manufacturer before operating the vehicle, or conducting any maintenance, service or repair.

WARNING

OVERLOADED SUSPENSIONS CAN CAUSE COMPONENT FAILURE, LOSS OF VEHICLE CONTROL, SEVERE PERSONAL INJURY OR DEATH.

- DO NOT EXCEED SUSPENSION CAPACITY RATINGS.
- DO NOT OPERATE AUXILIARY LIFT AXLES OR OTHER LOAD TRANSFERRING DEVICES IN ANY WAY THAT CAN OVERLOAD THE SUSPENSION.
AREAS OF INSPECTION

The inspection must include the following components:

- Air springs
- Air supply and fittings
- All fasteners
- Tire wear
- Clamp group
  - Top pad
  - U-bolt locknuts
- U-beam assembly
  - Cross tube
  - Support beam
  - End cap (enhanced or detachable)
- Frame hanger bracket
- Height control valve
- QUIK-ALIGN® connections
  - S-cam support tube bracket
  - Shock absorbers
  - Torque rods
    - Transverse
    - Longitudinal

➤ Signifies performance critical components.

HENDRICKSON RECOMMENDED PREVENTIVE MAINTENANCE INTERVALS

PRE-DELIVERY INSPECTION – PRIMAAX EX / FIREMAAX EX

1. Visually inspect the suspension for proper assembly.
2. Verify the lateral alignment of the drive axles are within the vehicle manufacturer’s tolerances, contact the vehicle manufacturer for the correct lateral alignment instructions.
3. Visually inspect the overall condition of the U-beam assembly (support beam assembly, cross tube, and integrated end cap) for any damage.
4. **DO NOT RE- TORQUE** the integrated end cap (vehicles built **AFTER** March 2009), see Figure 1.
5. Check all other fasteners for proper torque with special attention to the following suspension connections:
   - QUIK-ALIGN fasteners, see Figure 2.
   - Torque rod to top pad fasteners, see Figure 2.
   - Clamp group fasteners (U-bolts), see Figure 3.
6. Verify the ride height is within specification. Ride height is measured from the bottom of the frame rail to the centerline of the axle. There are different ride heights for the various PRIMAAX EX / FIREMAAX EX suspensions, contact the vehicle manufacturer for the correct ride height dimension.

INSPECTION AT 1,000 MILES – PRIMAAX EX / FIREMAAX EX

1. Visually inspect suspension components with special attention to air springs and U-beam assembly (support beam assembly, cross tube, and integrated end cap). Check for:
   - Proper suspension function
   - Any signs of unusual movement, loose or missing components
   - Any signs of abrasive or adverse contact with other components
   - Any damaged, bent or cracked parts
2. Check all fasteners for proper torque with special attention to the following suspension connections.
   - QUIK-ALIGN fasteners, see Figure 2.
   - Torque rod to top pad fasteners, see Figure 2.
   - Clamp group fasteners (U-bolts), see Figure 3.

**FIGURE 2**

**FIGURE 3**

**PREVENTIVE MAINTENANCE – PRIMAAX EX / FIREMAAX EX • PRIMAAX / FIREMAAX**

- **Off highway and severe service** – Every 25,000 miles or six months, whichever comes first
- **100% On-highway** – Every 50,000 miles or 12 months, whichever comes first

**NOTE**
Figures 1 through 3 illustrate PRIMAAX EX / FIREMAAX EX suspension basic connections, refer to Technical Publications 17730-238 and 17730-263 for the applicable configuration for your PRIMAAX / FIREMAAX suspension.
1. Visually inspect suspension components with special attention to air springs and U-beam Assembly (support beam assembly, cross tube, and integrated or detachable end cap). Check for:
   - Proper suspension function
   - Any signs of unusual movement, loose or missing components
   - Any signs of abrasive or adverse contact with other components
   - Any damaged, bent or cracked parts

2. Check all fasteners for proper torque with special attention to the following suspension connections.
   - QUIK-ALIGN fasteners, see Figure 2.
   - Torque rod to top pad fasteners, see Figure 2.
   - Clamp group fasteners (U-bolts), see Figure 3.

3. Verify the ride height is within specification. Ride height is measured from the bottom of the frame rail to the centerline of the axle. There are different ride heights for the various PRIMAAX EX / FIREMAAX EX suspensions, contact the vehicle manufacturer for the correct ride height dimension.

4. Verify that the lateral alignment of the drive axles is within the vehicle manufacturer’s tolerances, contact the vehicle manufacturer for the correct lateral alignment instructions.

For technical questions, contact Hendrickson Tech Services toll-free at 1-866-755-5968 or email techservices@hendrickson-intl.com. For more information on Hendrickson products, visit www.hendrickson-intl.com.