



H TECHNICAL PROCEDURE

HAULMAAX® Rear Suspension

SUBJECT: Pre-delivery Inspection and Preventive Maintenance

LIT NO: 17730-255

DATE: April 2017

REVISION: D

IMPORTANT

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 HAULMAAX® heavy-duty rear suspension be inspected at pre-delivery, the first 1,000 miles and at the regular preventive maintenance intervals. Off-highway and severe service operating conditions require more frequent inspections than on-highway service operation. Inspection must include the components referenced in this publication.

Carefully inspect the vehicle, refer to Hendrickson Technical Procedure publication number 17730-244 for complete HAULMAAX suspension inspection procedures, important safety notices and preventive maintenance details, available at www.hendrickson-intl.com.

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

ADHERE TO THE PUBLISHED CAPACITY RATINGS FOR THE SUSPENSION. ADD-ON AXLE ATTACHMENTS AND OTHER LOAD TRANSFERRING DEVICES CAN INCREASE THE SUSPENSION LOAD ABOVE ITS RATED AND APPROVED CAPACITIES, WHICH CAN RESULT IN COMPONENT DAMAGE AND LOSS OF VEHICLE CONTROL, POSSIBLY CAUSING PERSONAL INJURY OR PROPERTY DAMAGE.

⚠ WARNING

PROGRESSIVE LOAD SPRING PRE-DELIVERY INSPECTION

THE HAULMAAX SUSPENSION MUST BE EQUIPPED WITH AT LEAST ONE LOAD SPRING SHIM ON EACH SIDE OF THE SUSPENSION. FAILURE TO DO SO CAN CAUSE PREMATURE COMPONENT WEAR, EQUALIZING BEAM MISALIGNMENT, LOSS OF VEHICLE CONTROL AND POSSIBLE PERSONAL INJURY OR PROPERTY DAMAGE.

Check for proper use of progressive load spring shims (minimum of one shim and maximum of four shims), which is dependent on the following criteria:

- For applications where increasing stability is required, equally install additional shims per side. This may eliminate any gap between the load spring and the top load spring shim which is acceptable. Refer to the Alignment & Adjustments Section of the HAULMAAX Technical Procedure Publication No. 17730-244.



HENDRICKSON RECOMMENDED INSPECTION INTERVALS	PRE-DELIVERY INSPECTION	FIRST IN-SERVICE INSPECTION	PREVENTIVE MAINTENANCE
Inspect load springs, rebound straps, wear plates and bolster springs / tie-bar bolster springs.	Within the first 100 miles (160 km)	Within the first 1,000 miles (1,600 km) or 100 Hours	Every 3 Months / 600 Hours
Inspect the equalizing beam end connections			Every 6 Months / 1200 Hours or 25,000 miles / 40,000 km
Visually inspect for proper assembly and function. Check for all of the following and replace components as necessary. <ul style="list-style-type: none"> • Signs of unusual movement, loose or missing components • Signs of abrasive or adverse contact with other components • Damaged, bent or cracked parts 			Every 12 Months / 2400 Hours
Inspect fasteners for proper torque as recommended in the Torque Specification Section of the HAULMAAX Technical Procedure Publication No. 17730-244 with special attention to the following suspension connections: <ul style="list-style-type: none"> • Saddle to the outboard frame bracket connection • Equalizing beam end connections • Inboard frame bracket to the cross member connections • Load spring contact plate to equalizing beam assembly connections 			
Verify the lateral alignment of axles are within the vehicle manufacturer's tolerances			

COMPONENT INSPECTION

Following the appropriate inspection procedures is important to help ensure the proper maintenance and operation of the HAULMAAX suspension system and component parts. Look for bent or cracked parts. Replace all worn or damaged parts.

- **Equalizing beam assembly** — Check the overall condition of the equalizing beam for dents, dings, or other damage. Check the equalizing beam end connections for tearing or extreme bulging. Check for any metal-to-metal contact in the bushed joints. Refer to the Equalizing Beam End Connection Inspection of the HAULMAAX Technical Procedure Publication No. 17730-244.
- **Fasteners** — Look for any loose or damaged fasteners on the entire suspension. Ensure all fasteners are tightened to a torque value within the specified torque range. See recommended torque specifications for Hendrickson supplied fasteners in Torque Specification Section of the HAULMAAX Technical Procedure Publication No. 17730-244. For fasteners not supplied by Hendrickson, see vehicle manufacturer. Use a calibrated torque wrench to check torque in the tightening direction. As soon as the fastener starts to move, record the torque. Correct the torque if necessary.

NOTE

Hendrickson recommends the use of Grade 8 bolts, hardened flat washers, and Grade C lock-nuts. Washers are not necessary when flange head fasteners are used.

- **Frame brackets** — Look for any signs of wear and damage.
- **Load springs, bolster springs / tie-bar bolster springs and rebound straps** — Refer to the Load springs, Bolster Springs and Rebound Straps Inspection section of the HAULMAAX Technical Procedure Publication No. 17730-244.



- **Saddle assembly** — Check all attaching fasteners for proper torque. Visually inspect the saddle for signs of movement on the frame rail or damage. Inspect the area around the saddle gussets for cracks.
- **Shock absorbers** (if equipped) — Look for any signs of dents or leakage. Misting is not considered a leak. Refer to the Shock Absorber Inspection of the HAULMAAX Technical Procedure Publication No. 17730-244.
- **Torque rods** — All torque rods must be inspected every six months for looseness, torn or shredded rubber, bushing walk-out, and for proper fastener torque. If there is metal-to-metal contact in the bushing joint, this is a sign of excessive bushing wear and the bushing needs to be replaced.
- **Wear and damage** — Inspect all parts of the suspension for wear and damage. Look for bent or cracked parts.
- **Wear plate** — Look for any signs of wear and damage. See Wear Plate Inspection Section of the HAULMAAX Technical Procedure Publication No. 17730-244.

See vehicle manufacturer's applicable publications for other preventive maintenance requirements.

Hendrickson technical and parts support contact information:



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