

# H TECHNICAL BULLETIN

# HAULMAAX® Rear Suspension

SUBJECT: Progressive Load Spring LIT NO: SEU-0238 DATE: July 2014 REVI

**REVISION:** A

## INTRODUCTION

**FIGURE 1** 

**NEW PROGRESSIVE LOAD SPRING** As of July 15,2014, Hendrickson Truck Commercial Vehicle Systems began it's launch of a new load spring (see Figure 1) for HAULMAAX<sup>®</sup> rear suspensions on new production vehicles. The **NEW progressive load spring** replaces the previously equipped **auxiliary load spring**, and reduces the load spring shims from three to two.

### **NEW FEATURES**

- High-density load spring which always engages in unloaded and loaded condition
- Helps improve empty ride quality and loaded stability
- Eliminates load spring shims adjustment for most applications
- Equipped with two (2) load spring shims

The progressive load spring system easily adjusts to the load for an enhanced combination of empty-ride quality and loaded stability. Extra wide bolster spring centers and a unique progressive load spring provide exceptional stability for demanding applications such as refuse, concrete mixers and dump. Unlike other walking-beam suspensions, the innovative HAULMAAX design eliminates fixed center bushing pivot points to reduce wheel hop. Here's how the **progressive load spring** works:

**Unloaded Condition** — In the empty condition, the diagonally mounted rubber bolster springs act in shear and compression to help provide optimum spring deflection for outstanding ride quality. Bolster springs absorb vertical road inputs and fore/aft shock.

The new high-density progressive load spring design is always engaged to help improve empty ride quality, see Figure 2.

**Loaded Condition** — As payload increases, the bolster springs compress and increase in stiffness, while maintaining excellent ride quality.

 With higher loading, the progressive load spring engages further for additional stability, see Figure 3.

#### FIGURE 2

UNLOADED CONDITION

## FIGURE 3

As payload increases, bolster springs compress and engage the progressive load spring.





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#### PROGRESSIVE LOAD SPRING AFTERMARKET KIT

An aftermarket service kit (No. 60961-747) is available to convert from the previous auxiliary load spring to the progressive load spring. This will require installation of progressive load springs on both sides of the tandem suspension to operate properly.

#### **REPLACEMENT AND INSPECTION**

The progressive load spring appears slightly different than the previous auxiliary load spring, see Figure 1. However, the same component replacement procedure is to be used for both load springs with the exception of the quantity of the load spring shims.



#### **PROGRESSIVE LOAD SPRING SERVICE KITS**

- 60961-745 Single replacement if equipped with progressive load springs
- 60961-747 Tandem replacement or conversion from the auxiliary load spring
- 60961-746 This service kit is intended to help adjust for vehicle lean conditions that
  may be induced by a side-to-side vehicle weight bias found with particular types of
  vehicle bodies or vehicle-mounted equipment used in certain applications (ex. side
  loading refuse and well driller).

Refer to Hendrickson Technical Publication 17730-244 for complete maintenance, service and safety instructions regarding the HAULMAAX rear suspension, available online at www.hendrickson-intl.com.

For more information contact your local Hendrickson parts supplier, truck dealer or Hendrickson Tech Services at:



Toll-free U.S. and Canada 1.866.755.5968 Outside U.S. and Canada 1.630.910.2800



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