

H ASSEMBLY INSTRUCTIONS

HAULMAAX® Rebound Strap Enhancement Kit for Outrigger Applications

SUBJECT: Kit No. 64179-045

LIT NO: 59310-048

DATE: September 2014

REVISION: B

INTRODUCTION

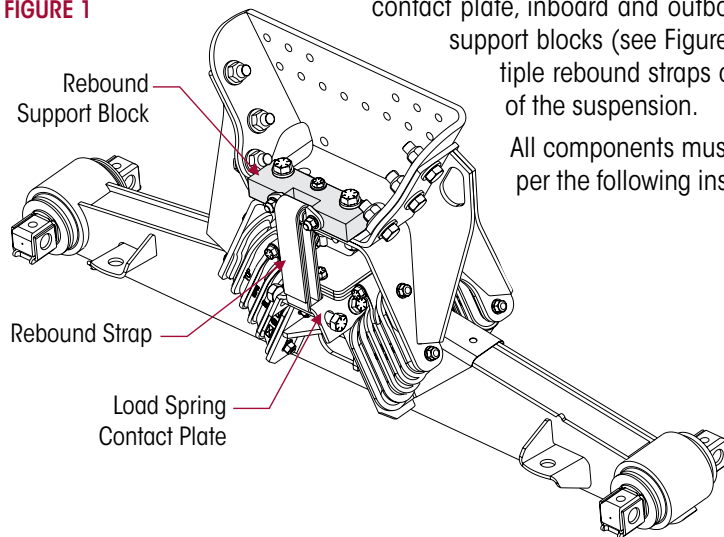
This procedure is intended to assist maintenance personnel with the installation, on an as-needed basis, of the Rebound Strap Enhancement Kit for Outrigger Applications Kit No. 64179-045 for HAULMAAX® 400/460 rear suspensions.

See Hendrickson publication 17730-244 for complete safety and service instructions for the HAULMAAX suspension available online at www.hendrickson-intl.com.

Installation of this kit will involve replacement of the standard inboard mounted rebound strap and load spring contact plate with a special load spring contact plate, inboard and outboard rebound support blocks (see Figure 1) and multiple rebound straps on both sides of the suspension.

All components must be installed per the following instructions.

FIGURE 1



Rebound Strap Enhancement Kit for Outrigger Applications Kit No. 64179-045

Contents per Tandem

DESCRIPTION	Qty.
3/4"-16 UNF 6.0" Bolt	4
3/4"-16 UNF Locknut	4
3/4" Hardened Washer	4
3/4"-10 UNC 4.0" Bolt	4
3/4"-10 UNC Flange Locknut	4
1/2"-13 UNC 2.25" Bolt	4
1/2"-13 UNC 4.0" Bolt	12
1/2"-13 UNC Outboard Frame Bracket 5.0" Bolt	2
1/2"-13 UNC Flange Nut	18
1/2" Hardened Washer	14
5/8"-11 UNC 1.5" Flange Bolt	8
5/8"-11 UNC Flange Nut	8
Rebound Strap	4
Load Spring Contact Plate	2
Rebound Clip	2
Load Spring Spacer	2
Inboard Rebound Support Block	2
Outboard Rebound Support Block	2

NOTE

Prior to installation of the Rebound Strap Enhancement Kit, inspect all components of the HAULMAAX suspension for proper assembly and function, with special attention to the bolster springs. If any damage to the bolster springs is noted, replace prior to kit installation. Refer to Hendrickson publication 17730-244 for details on component inspection.



REBOUND STRAP ENHANCEMENT KIT FOR OUTRIGGER APPLICATIONS INSTALLATION INSTRUCTIONS

DISASSEMBLY

1. Chock the front wheels of the vehicle.
2. From the **INBOARD SIDE** of the suspension remove the following components on both sides of the vehicle, see Figure 2.
 - a. Remove the rebound clip.
 - b. Remove the 5/8" inboard load spring bracket fasteners.
 - c. Remove the inboard load spring contact plate fasteners.



CAUTION

WHEN RAISING OR LOWERING A VEHICLE ENSURE ALL PERSONNEL ARE CLEAR OF THE VEHICLE. NEVER WORK ON A VEHICLE THAT IS NOT PROPERLY SUPPORTED.

3. Raise the vehicle frame to create a sufficient gap between the progressive / auxiliary load spring and the shim(s), see Figure 3. Support the vehicle frame at this height.

FIGURE 2

***INBOARD SIDE**

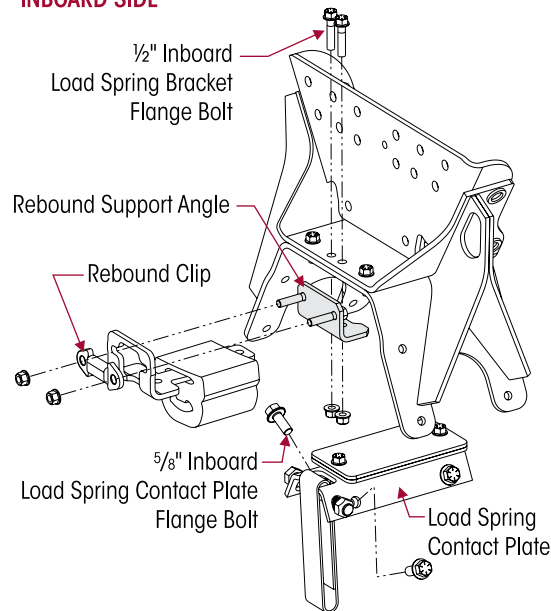
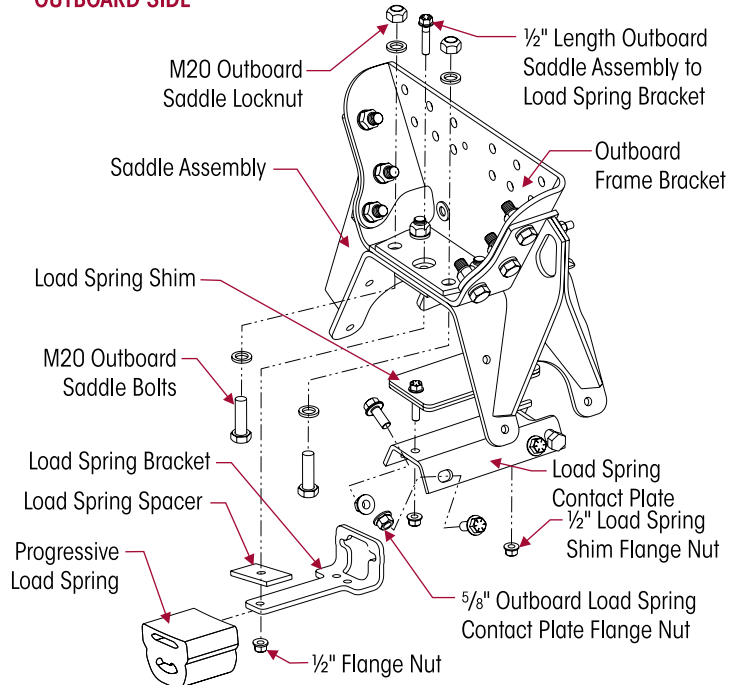


FIGURE 3

***OUTBOARD SIDE**



NOTE

*Load spring configuration may vary. Progressive load spring shown for vehicles built after July 15, 2014.

4. From the **OUTBOARD SIDE** of the suspension remove the following components on both sides of the vehicle, see Figure 3.
 - a. Remove the two (2) M20 outboard saddle fasteners.
 - b. Remove the outboard bracket fastener. Remove the bracket, rebound support angle, and outboard spacer.
 - c. Remove the 5/8" outboard contact plate fasteners.
 - d. Lift and remove the contact plate and rebound strap.

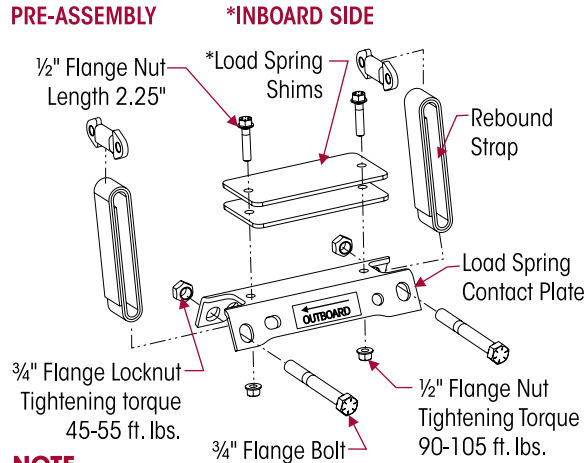


PRE-ASSEMBLY

1. Remove the shims from the current contact plate. Remove contact plate and discard.
2. Transfer the load spring shims to the new load spring contact plate. Install the bolts through the shims, then through the contact plate. Install locknuts and tighten to 90-105 foot pounds torque, see Figure 4.

FIGURE 4

PRE-ASSEMBLY

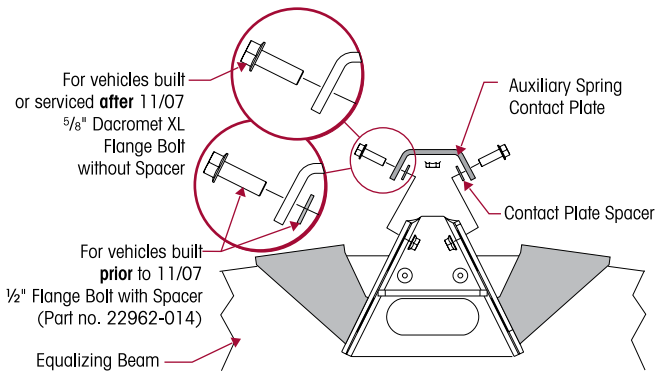


NOTE

* Number of load spring shims may vary.
Progressive load spring configuration shown.

FIGURE 5

CONTACT PLATE SPACER



ASSEMBLY

NOTE

The Rebound Strap Enhancement Kit for Outrigger Applications uses $\frac{5}{8}$ " fasteners to attach the load spring contact plate to the "A" bracket on the equalizing beam, see Figure 6. Vehicles built prior to November 2007 were manufactured with $\frac{1}{2}$ " fasteners and spacers between the contact plate and the "A" bracket, see Figure 5. On these vehicles, the equalizing beam "A" bracket may require slight modification.

3. On vehicles built prior to 11/2007 — verify the "A" bracket will accept a $\frac{5}{8}$ " bolt in the contact plate mounting slot. If a $\frac{5}{8}$ " bolt will not pass through the "A" bracket then enlarge the slot slightly using a die grinder or file.

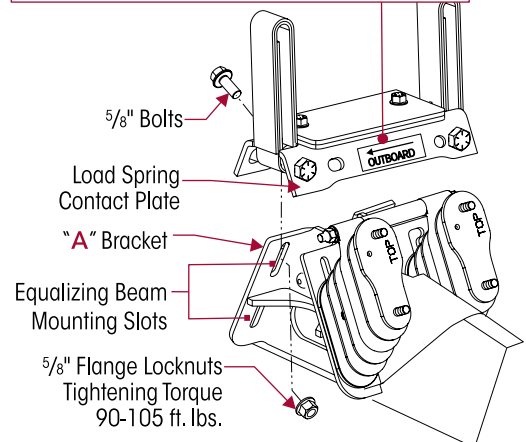
NOTE

DO NOT install spacers between the contact plate and the equalizing beam "A" bracket.

FIGURE 6

NOTE

Ensure the arrow on load spring contact plate points to the outboard side of the suspension.

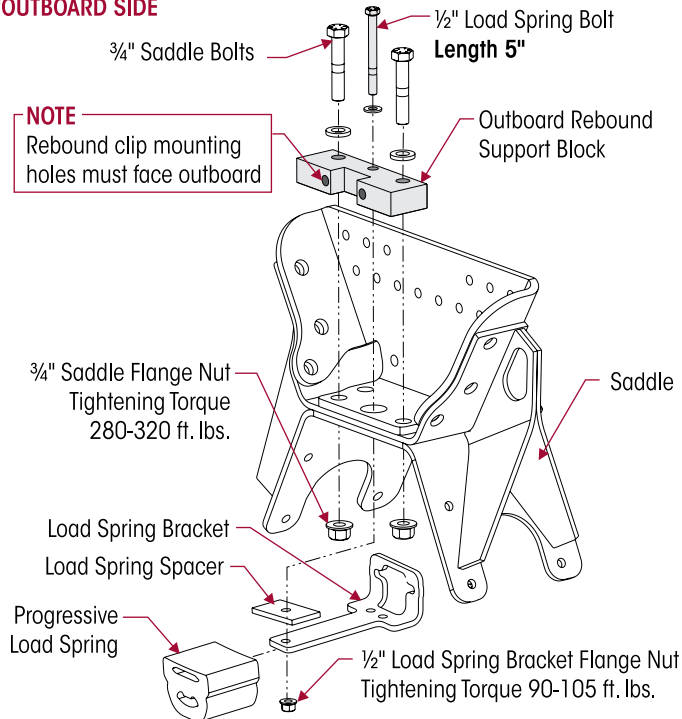


4. Position the contact plate on top of the equalizing beam "A" bracket. **Ensure the arrow** on the contact plate points to the outboard side of the suspension as indicated on the contact plate, see Figure 6.
5. Align the holes in the contact plate with the slots in the top of the equalizing beam and install the $\frac{5}{8}$ " bolts through the contact plate then through the equalizing beam "A" bracket. Install the locknuts on the bolts and tighten to 90-105 foot pounds torque, see Figure 6.



6. Assemble the new rebound straps and lower mounting fasteners to the new contact plate. Tighten fasteners to 45-55 foot pounds torque, see Figure 4.
7. Repeat **Steps 1 through 4** for the contact plate on the opposite side of the vehicle.
8. From the **OUTBOARD SIDE** of the suspension install the following components on both sides of the vehicle, see Figure 7.
 - a. Position the outboard rebound support block on the saddle and install the two (2) new $\frac{3}{4}$ " saddle fasteners. Ensure the outboard rebound support block is positioned with the rebound clip mounting holes to the outboard side of the suspension, see Figure 7. **DO NOT** tighten the fasteners at this time.

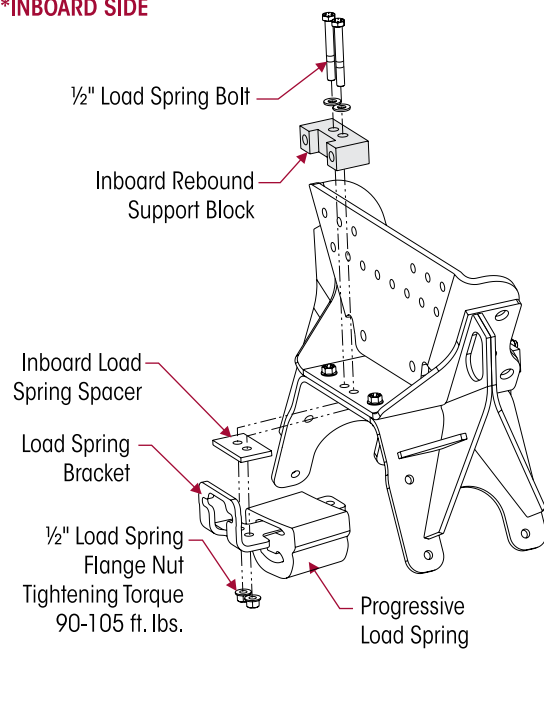
FIGURE 7
***OUTBOARD SIDE**



NOTE

*Shown progressive load spring configuration, vehicles built after July 15, 2014.

FIGURE 8
***INBOARD SIDE**



- b. Install the load spring, the load spring bracket, outboard load spring spacer, and the new bracket fastener. **DO NOT** tighten the fastener at this time.
 - c. Repeat **Steps 8a and b.** on the opposite side of the vehicle.
9. From the **INBOARD SIDE** of the suspension install the following components on both sides of the vehicle, see Figure 8.

NOTE

This kit uses an inboard load spring spacer, see Figure 8, and **DOES NOT** use the rebound support angle, shown in Figure 2.

- a. Install the inboard rebound support block, load spring bracket, load spring spacer and bracket fasteners. Tighten fasteners to 90-105 foot pounds torque.
 - b. Repeat **Step 9a** for the suspension on the opposite side of the vehicle.
10. Tighten the **OUTBOARD SIDE** rebound support block fasteners on both sides of the vehicle to the following torque values, see Figure 7.
 - $\frac{3}{4}$ " fasteners – 280-320 foot pounds.
 - $\frac{1}{2}$ " fasteners – 90-105 foot pounds.



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11. Remove the frame supports and lower the vehicle onto the ground.
12. Install the **INBOARD** rebound clip through the rebound strap and install the fasteners. Tighten fasteners to 90-105 foot pounds torque. Repeat for the inboard rebound clip and rebound strap on the opposite side of the vehicle, see Figure 9.
13. Install the **OUTBOARD** rebound clip through the rebound strap and install fasteners. Tighten fasteners to 90-105 foot pounds torque. Repeat for the outboard rebound clip and rebound strap on the opposite side of the vehicle, see Figure 10.
14. Remove the wheel chocks from the vehicle.

FIGURE 9
INBOARD SIDE

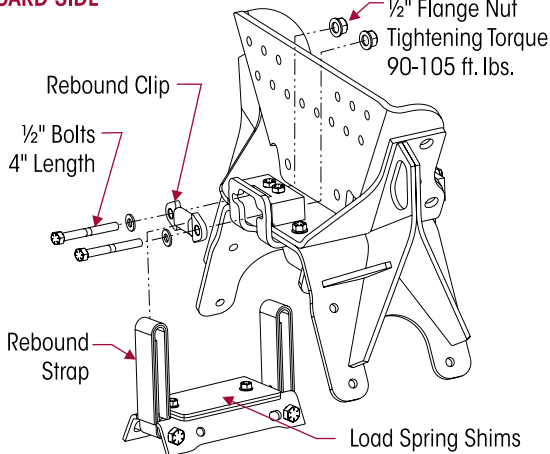
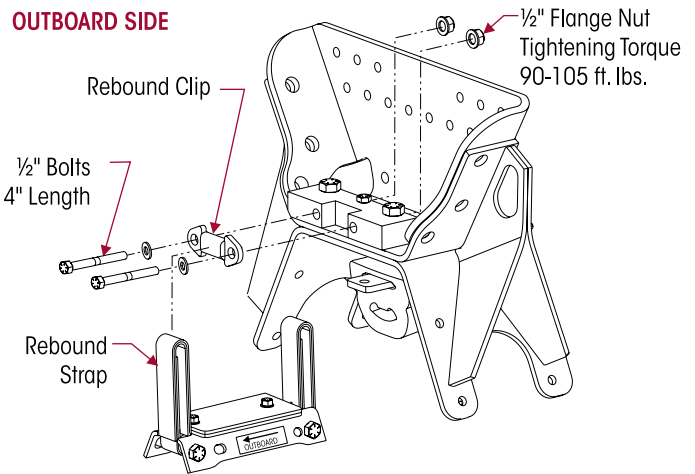


FIGURE 10
OUTBOARD SIDE



NOTE

Shown progressive load spring configuration with two load spring shims, vehicles built after July 15, 2014.

Refer any questions on this publication to Hendrickson Tech Services.



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