

# **ASSEMBLY INSTRUCTIONS**

## **HAULMAAX® Saddle Assembly**

**SUBJECT:** Service Kits Number 57974-050, -051

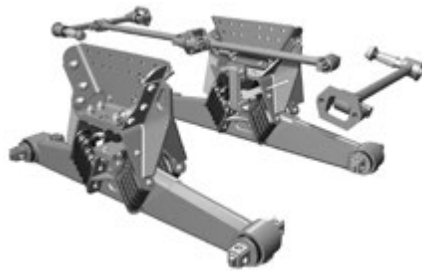
**LIT NO:** 59310-043

**DATE:** April 2018

**REVISION:** C



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### **INTRODUCTION**

This publication is intended to assist maintenance personnel with the installation, on an as-needed basis, of Service Kit Numbers 57974-051 (for HAULMAAX® 40K) and 57974-050 (for HAULMAAX 46K equipped with tie-bar bolsters) for saddle assembly replacement on HAULMAAX rear suspensions. Each service kit and these service instructions are intended to be used in simultaneously replacing both saddle assemblies on a vehicle. Refer to the current version of Hendrickson HAULMAAX Technical Publication No. 17730-244 for preventive maintenance, tightening torque interval guidelines, and complete service and safety instructions, available online at [www.hendrickson-intl.com](http://www.hendrickson-intl.com).

### **CAUTION**

A TECHNICIAN USING A SERVICE PROCEDURE OR TOOL WHICH HAS NOT BEEN RECOMMENDED BY HENDRICKSON MUST FIRST SATISFY HIMSELF THAT NEITHER HIS SAFETY NOR THE VEHICLE'S SAFETY WILL BE JEOPARDIZED BY THE METHOD OR TOOL SELECTED. INDIVIDUALS DEVIATING IN ANY MANNER FROM THE INSTRUCTIONS PROVIDED WILL ASSUME ALL RISKS OF CONSEQUENTIAL PERSONAL INJURY OR DAMAGE TO EQUIPMENT INVOLVED.

### **WARNING**

DISCARD USED FASTENERS. ALWAYS USE NEW FASTENERS TO COMPLETE A REPAIR. FAILURE TO DO SO COULD RESULT IN FAILURE OF THE PART, OR MATING COMPONENTS, ADVERSE VEHICLE HANDLING, PERSONAL INJURY, OR PROPERTY DAMAGE.

To obtain maximum service life from the HAULMAAX suspension Hendrickson recommends inspecting the suspension, including fastener torque values, at pre-delivery, the first 1,000 miles of service, and at regular annual preventive maintenance intervals.

### **NOTE**

Off-highway and severe service operating conditions require more frequent inspections than on-highway service. Fastener torque values should be checked at least once a year and corrected to specified torque when necessary. For Hendrickson supplied fasteners use the torque values supplied in this publication. For non-Hendrickson supplied fasteners use the torque values supplied by the vehicle manufacturer.

### **NOTE**

Hendrickson recommends the use of Grade 8 bolts and Grade C locknuts for all bolted joints. If flange head bolts and locknuts are not used then hardened structural washers must be used under the bolt heads and locknuts.

### **Saddle Assembly Service Kit Contents (Vehicle Set)**

#### **HAULMAAX 40K Kit No. 57974-051**

<b>DESCRIPTION</b>	<b>QTY.</b>
Saddle Assembly	2
½"-13 UNC x 2.25" Flange Bolt	10
½"-13 UNC Flange Nut	42
Outboard Frame Bracket to Saddle Assembly Fastener Kit	1
⅝"-11 UNC x 1.5" Dacromet Flange Bolt	8
⅝"-11 UNC Dacromet Flange Nut	8

#### **HAULMAAX 46K w/Tie-bar Bolsters Kit No. 57974-050**

<b>DESCRIPTION</b>	<b>QTY.</b>
Saddle Assembly	2
½"-13 UNC x 2.25" Flange Bolt	10
½"-13 UNC x 10.0" Flange Bolt	4
½"-13 UNC Flange Nut	46
Outboard Frame Bracket to Saddle Assembly Fastener Kit	1
Bolster Spring Spacer	4
⅝"-11 UNC x 1.5" Dacromet Flange Bolt	8
⅝"-11 UNC Dacromet Flange Nut	8

## SADDLE ASSEMBLY

### NOTE

When changing both saddle assemblies, simultaneously perform the following replacement steps on both sides of the vehicle.

### DISASSEMBLY



1. Chock the front wheels of the vehicle.
2. Raise the vehicle and remove the rear tires.
3. Support both rear axles with jack stands.
4. Remove and discard the upper fasteners from the rebound clip and load spring bracket, see Figure 1.
5. Remove and discard the fasteners connecting the load spring assembly to the saddle and the load spring spacer, see Figure 1. Remove the load spring assembly.
6. Loosen, **DO NOT** remove, the ½" flange head locknuts connecting the bolster springs/tie-bar bolster springs to the saddle assembly.
7. Remove and discard the ½" fasteners connecting the bolster springs / tie-bar bolster springs to the equalizing beam.
8. Remove the tie-bar bolt and spacer (if equipped).
9. Remove and discard the 5/8" fasteners from the load spring contact plate and equalizing beam, see Figure 1.
10. Remove the load spring contact plate.
11. Remove and discard the upper shock absorber fasteners (if equipped), from the upper shock brackets. Push the shock absorbers down and clear of the upper shock brackets.
12. Raise the rear of the vehicle to clear the bolster springs/tie-bar bolster springs from the equalizing beam. Support the vehicle at this height.
13. Remove and discard the ½" fasteners that connect the bolster springs / tie-bar bolster springs to the saddle, and remove the bolster springs, see Figure 2.

### WARNING

THE WEIGHT OF THE SADDLE IS APPROXIMATELY 70 POUNDS. CARE SHOULD BE TAKEN AT REMOVAL AND INSTALLATION TO PREVENT PERSONAL INJURY OR DAMAGE TO COMPONENTS.

14. Remove and discard the M20 fasteners from the saddle and outboard frame bracket, see Figure 3.
15. Remove the saddle.

### ASSEMBLY

1. Mount the new saddle to the outboard frame bracket by installing the M20 fasteners and tighten to  310 ± 30 foot pounds torque, see Figure 3.
2. Mount the bolster springs/tie-bar bolster springs to the saddle and loosely install the ½" flange head locknuts on the bolster spring studs. **DO NOT** tighten at this time.
3. If equipped with a tie-bar bolster spring, install the tie-bar bolt from the outboard side. Install the bolt through the outboard bolster mount, the tie-bar sleeve and the inboard bolster mount. Install the tie-bar locknut and tighten to  98 ± 7 foot pounds torque.

### CAUTION

IF THE WEAR PLATES LOCATED BETWEEN THE EQUALIZING BEAM AND THE BOLSTER SPRINGS/TIE-BAR BOLSTER SPRINGS ARE DAMAGED, THEY MUST BE REPLACED. FAILURE TO DO SO CAN CAUSE DAMAGE TO MATING COMPONENTS.


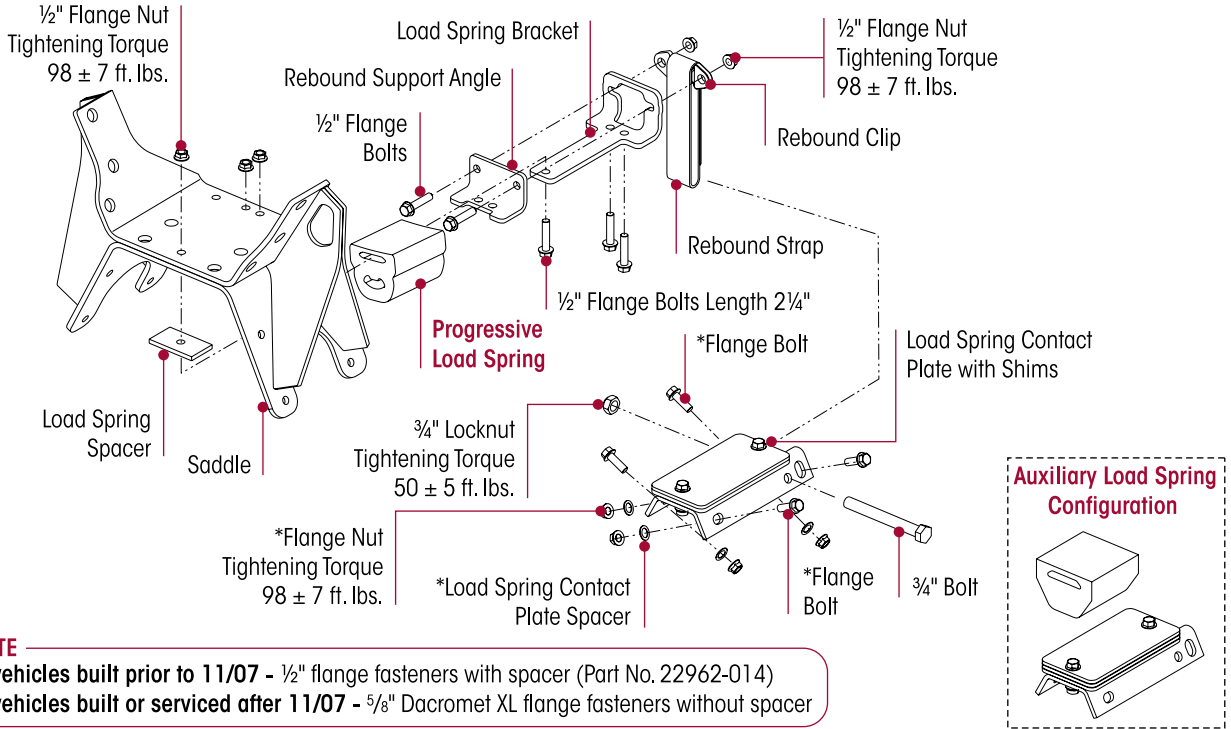
4. Remove the frame supports and lower the vehicle, guiding the lower bolster spring mounting studs into the wear plates and equalizing beam mounting slots. Ensure bolster spring studs sit at the bottom of the mounting slots on the beam, see Figure 2.
5. Install the lower ½" flange head locknuts on the bolster spring studs and tighten both upper and lower bolster spring fasteners to  98 ± 7 foot pounds torque, see Figure 2.



FIGURE 1



**\*NOTE**

For vehicles built prior to 11/07 - 1/2" flange fasteners with spacer (Part No. 22962-014)  
 For vehicles built or serviced after 11/07 - 5/8" Dacromet XL flange fasteners without spacer

FIGURE 2

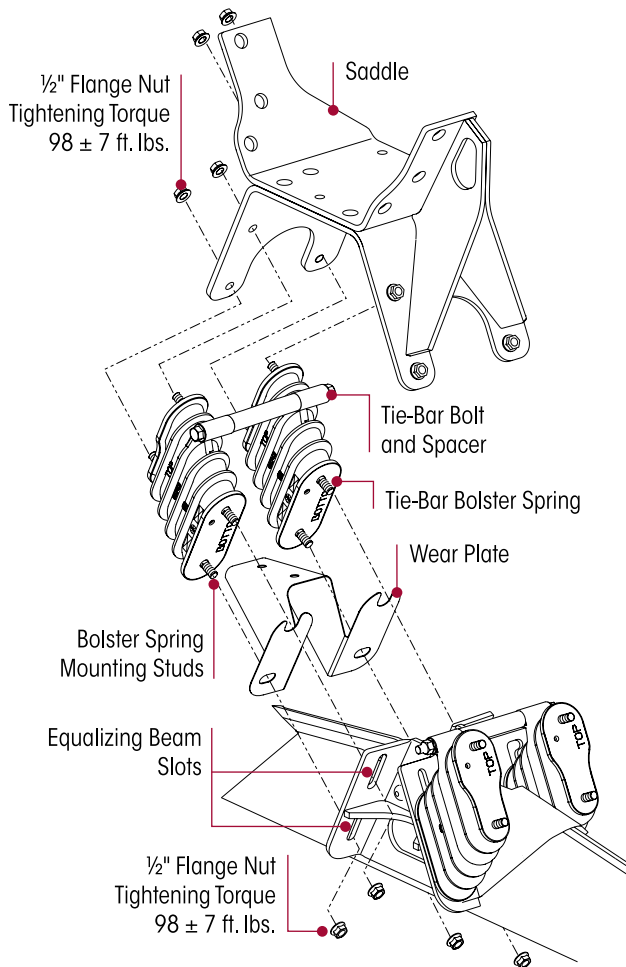
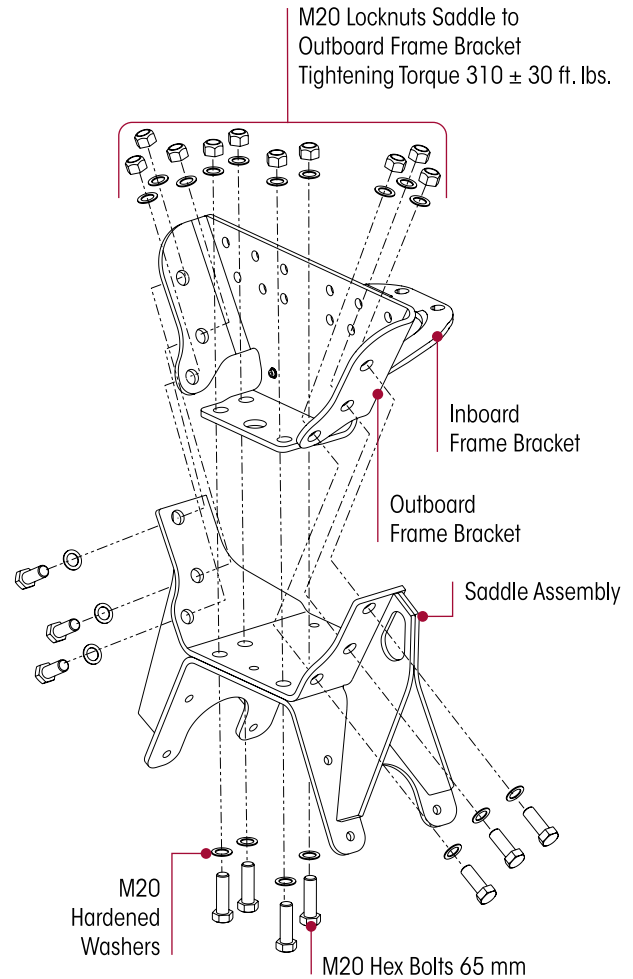
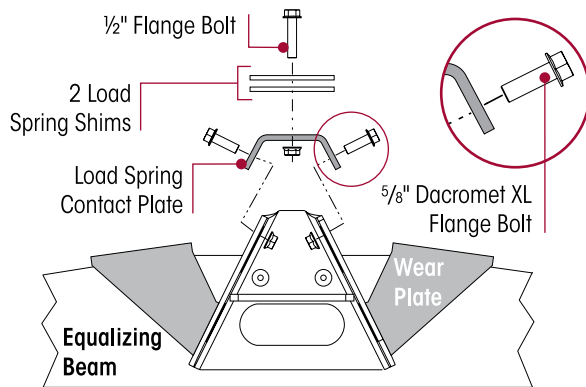


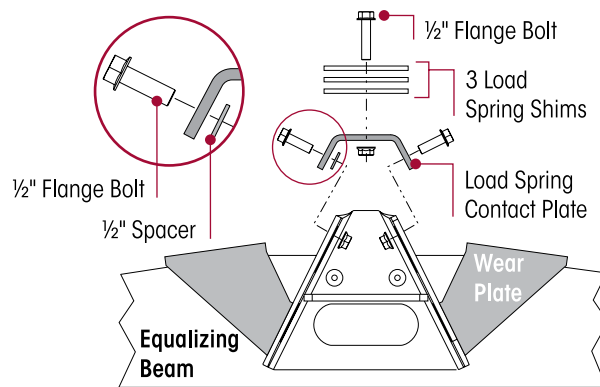
FIGURE 3



**FIGURE 4**  
Vehicles built / serviced **AFTER 11/07**



Vehicles built **PRIOR TO 11/07**



6. Mount the load spring wear plate on the equalizing beam and install the fasteners. Tighten to  $98 \pm 7$  foot pounds torque, see Figure 4.
7. Locate the upper shock absorbers (if equipped) into the upper shock bracket and install the fasteners. Tighten to  $160 \pm 10$  foot pounds torque.
8. Install the lower  $\frac{1}{2}$ " flange head locknuts on the bolster spring studs and tighten both upper and lower bolster spring fasteners to  $98 \pm 7$  foot pounds torque, see Figure 2.
9. Mount the load spring group: progressive / auxiliary load spring, load spring bracket, rebound support angle, and load spring spacer to the saddle by installing the  $\frac{1}{2}$ " flange head bolts, see Figure 1. Tighten to  $98 \pm 7$  foot pounds torque.
10. Mount the rebound clip and rebound strap to load spring bracket by installing the  $\frac{1}{2}$ " flange head bolts and flange head locknuts and tighten to  $98 \pm 7$  foot pounds torque, see Figure 1.
11. Remove the jack stands and install tires.
12. Lower the vehicle.
13. Remove wheel chocks.

Hendrickson technical and parts support contact information:



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