

Authorized Field Change

AFC G-07903

Date: August, 2007

Subject File: SPRINGS

Subject: Potential for Hendrickson AirTek Front Suspension Spring Contact with the End of a Huck Bolt at the Front Suspension Rear Bracket on International 9000 Model Trucks

Vendor: AirTek

Model: 9200i

Start Date: 08/29/2006 End Date: 10/10/2006

Model: 9400i

Start Date: 08/29/2006 End Date: 10/10/2006

Model: 9900i

Start Date: 08/29/2006 End Date: 10/10/2006

Unit Code: 03AZE

DESCRIPTION

This AFC applies to all 9000 trucks that are equipped with feature code 03AZE.

All of the above mentioned truck models need to be inspected for potential spring contact with the end of a Huck bolt at the front suspension rear bracket. This contact could result in a front suspension spring fracture.

PARTS INFORMATION

Table 1

Part Number	Description	Quantity
Huck Replacement		
414078C1	Bolt, Hex Flg Hd 5/8–18 UNF x 2.0" Grade 8	2
414089C1	Nut, Hex Lock Flg 5/8–18 UNF	2
8000892R91	Spring replacement kit — for single spring replacement	1 or 2 as required by service procedure

SERVICE PROCEDURE



WARNING – To avoid personal injury or death, shift transmission to park or neutral, set parking brake, and block wheels before doing diagnostic or service procedures.

1. Place hood in raised position.

SERVICE PROCEDURE (CONT.)

2. Remove left and right fender extensions.
3. Inspect left and right suspension springs for any contact made with the end of huck bolt (Figure 1).

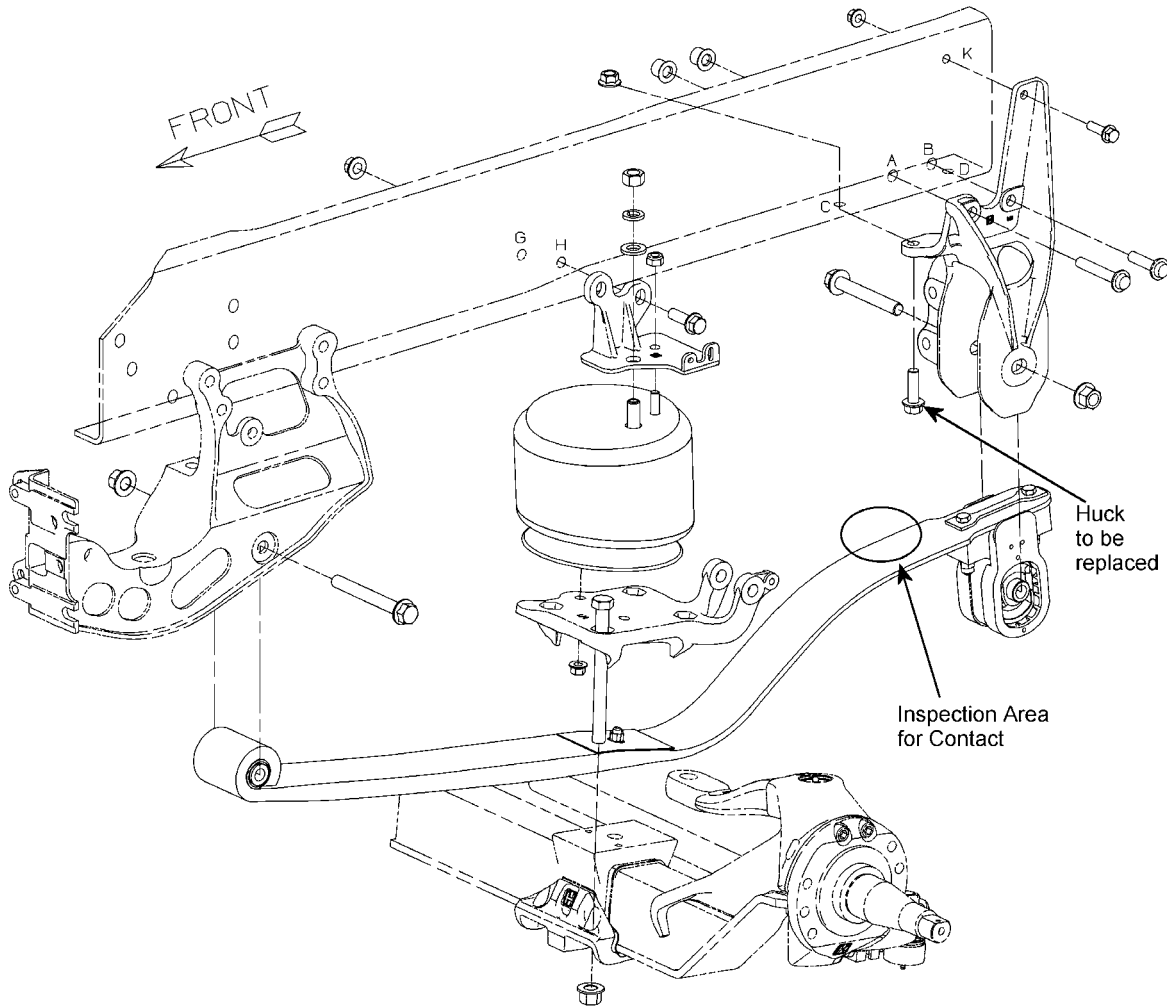


Figure 1

4. If any contact is visible on a spring, that particular spring requires replacement. Continue to Step 5 for repair of any side of the vehicle where the spring does NOT exhibit contact. Go to the Spring Replacement Procedure (page 3) for springs that show evidence of contact.
5. Remove huck bolt (Figure 1) and replace it with bolt number 414078C1 (5/8" x 2" Grade 8) or equivalent. Bolt must be installed from the bottom (head facing down). Install nut part number 414089C1 (5/8" Grade 8) or equivalent and torque to 220 lbf-ft.
6. Re-install the fender extensions if no spring replacement is required and close hood. Procedure is complete.
7. If one or both springs require replacement, continue to Spring Replacement Procedure below.

SPRING REPLACEMENT PROCEDURE



WARNING – To avoid personal injury or death, deflate and disconnect the air system prior to raising the front of the vehicle. Prior to and during deflation and inflation of the front air suspension system, ensure that all personnel and equipment are clear from under the vehicle and around the service area.



WARNING – To avoid personal injury or death, park truck on solid level surface. Place vehicle in neutral and set parking brake.

1. See Air Spring Warnings above prior to deflating or inflating the suspension system.
2. Deflate the air springs by detaching the upper rubber grommet of the height control valve linkage from the upper stud and exhaust the suspension system air by lowering the height control valve linkage arm.
3. Completely drain all of the air tanks.
4. Disconnect the air lines from the air spring.
5. Install a floor jack with a 4" lifting plate below the axle and raise the truck.
6. Remove the tires.
7. Install frame stands behind the front spring rear mounts to support the vehicle. It may be necessary to remove peripheral components for installation.
8. Lower the jack allowing the axle to hang, but do not remove the jack from the axle.
9. Loosen both spring eye bolts, but DO NOT remove the bolts.
10. Remove both rear spring eye bolts.

SERVICE HINT : To ease in the removal of the spring eye bolts it may be necessary to raise or lower the axle slightly.

11. Remove both lower shock absorber mounting bolts.
12. Disconnect the lower air spring mounting fasteners from the top pad and discard.
13. Loosen (DO NOT REMOVE) the clamp group nylon locknuts for the leaf spring that is NOT being replaced.

SPRING REPLACEMENT PROCEDURE (CONT.)

! WARNING – Do not use a cutting torch to remove clamp group bolts or attaching fasteners. The use of such heat on suspension components can adversely affect the strength of the parts. A component damaged in this manner can result in the loss of vehicle control and possible personal injury or property damage.

14. Remove the 3/4" clamp group fasteners, top pad, and the bottom axle wrap and liner from the leaf spring that is going to be removed (Figure 2).

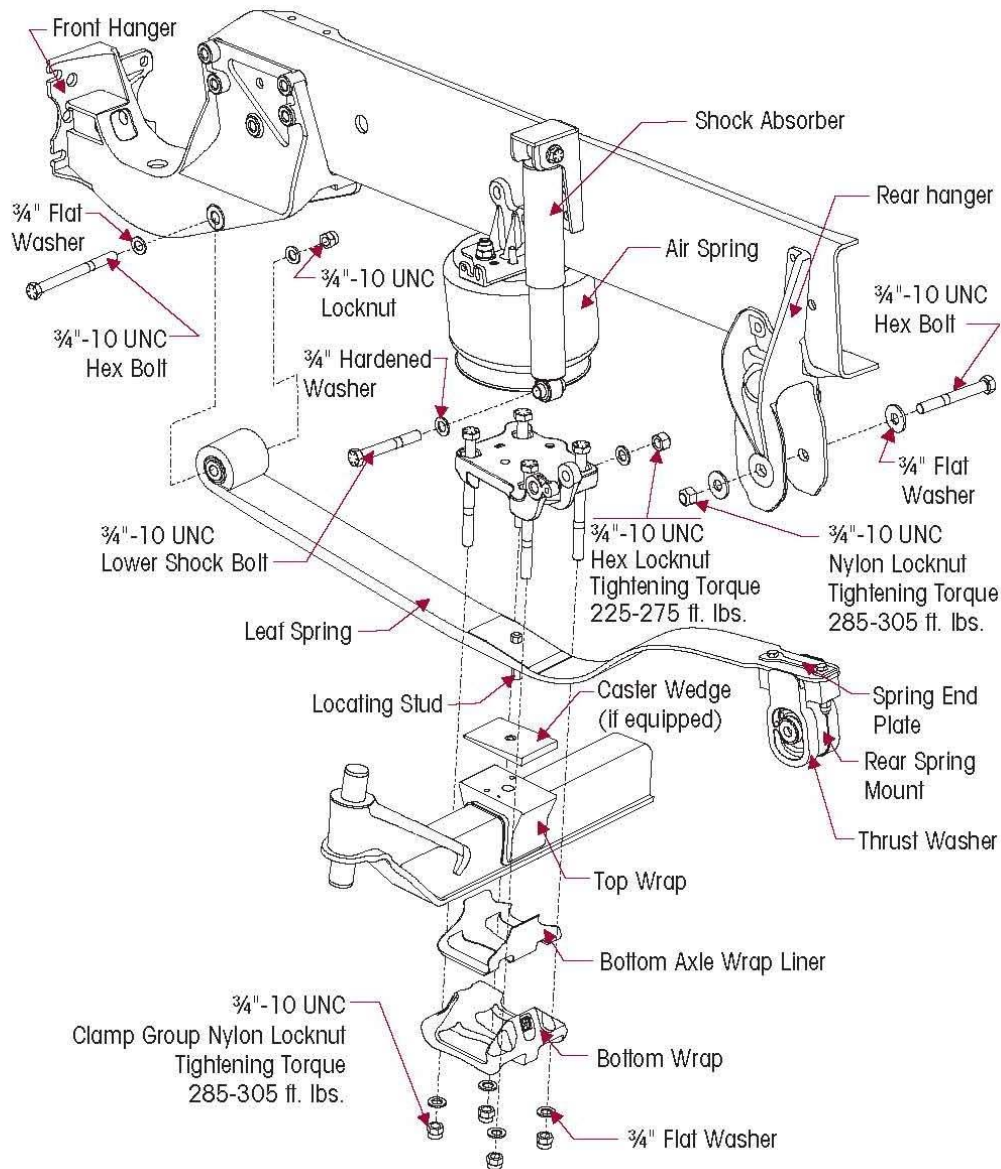


Figure 2

SPRING REPLACEMENT PROCEDURE (CONT.)

15. Lower the jack, allowing the suspension to pivot down out of the rear hanger.
16. Remove the front spring eye bolts from the leaf spring being serviced and discard.
17. Remove the leaf spring assembly. Approximate weight of the spring is 60 pounds.

NOTE – Be aware of the amount and the orientation of caster wedges (if equipped) on the top axle wrap, they may slide during leaf spring removal.

HUCK BOLT REPLACEMENT: Remove huck bolt (Figure 1) and replace it with bolt part number 414078c1 or equivalent. Bolt must be installed from the bottom (head facing down). Install nut part number 414089c1 or equivalent, and torque to 298 Nm (220 lbf-ft).

SPRING INSTALLATION

1. Install the leaf spring assembly over the axle and into the front spring hanger.
2. Install the 3/4" front spring eye bolt and fastener, but DO NOT tighten.
3. Ensure to re-install any caster wedges (if equipped) that may have been displaced during leaf spring disassembly, in the same orientation as removed prior to disassembly.
4. Engage the leaf spring to the axle with the leaf spring locating stud into the aligning hole of the top axle wrap.
5. Install the top pad on top of the leaf spring.
6. Install a new bottom axle wrap liner in the bottom axle wrap.
7. Install the bottom axle wrap.
8. Install the new clamp group bolts (Grade 8), washers, and the new nylon locknuts (Grade c). The nylock locknuts must be replaced when the clamp group is removed.
9. Tighten the clamp group fasteners to 136 Nm (100 lbf-ft).
10. Raise the axle and guide the spring assembly into the rear spring hanger.
11. Install the 3/4" rear spring eye bolt in the rear hanger. The bolt must be installed from the inboard side to the outboard side (see Figure 2).
12. Install the lower shock mounting bolts from the outboard side to the inboard side.
13. Lower the floor jack.

NOTE – Only the weight of the axle should be on the spring at the time of the front and rear spring eye fasteners are tightened to torque.

14. Tighten the lower shock mounting bolts to 352 Nm (260 lbf-ft) torque.
15. Tighten the front and rear spring eye 3/4" locknuts to 407 Nm (300 lbf-ft) torque.

SPRING INSTALLATION (CONT.)

16. Install the air spring into the top pad with new nuts. Torque nuts to 41 Nm (30 lbf-ft). Make sure the air spring piston seats into the top pad correctly (see Figure 3).

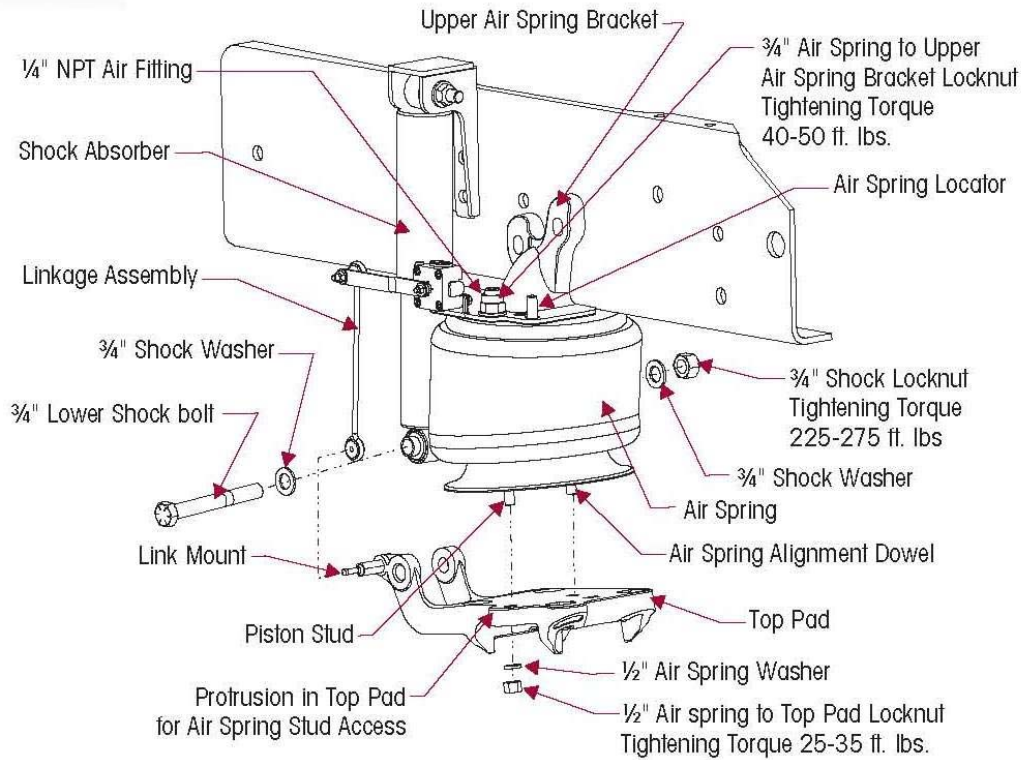


Figure 3

17. Install the tires.
18. See air spring warnings and instructions in the important safety notice section of this publication prior to deflating or inflating the suspension system.
19. Install air lines to the air spring and air up the system.
20. Install the height control valve linkage and inflate the suspension to normal operating pressure.
21. Raise the vehicle and remove the frame supports.
22. Lower the vehicle.
23. Remove the floor jack.
24. Ensure that the clamp group is properly aligned and the hex bolts are seated in the top pad, and the bottom axle wrap is centered on the top axle wrap (see Figure 4).

SPRING INSTALLATION (CONT.)

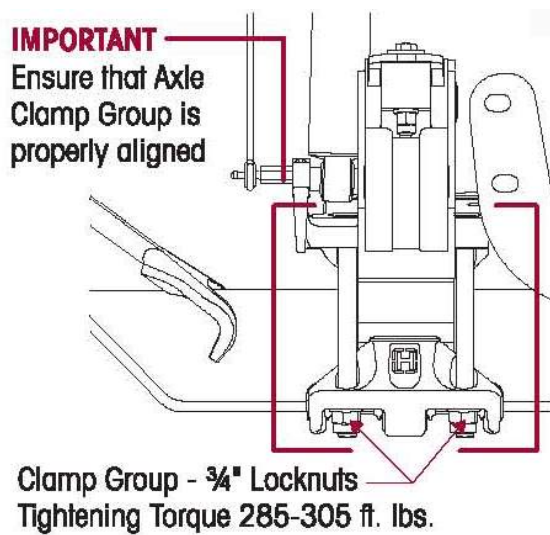


Figure 4

25. Tighten the clamp group locknuts evenly in 70 Nm (50 lbf-ft) increments to 386–414 Nm (285–305 lbf-ft) torque in the proper pattern to achieve uniform bolt tension (see Figure 5).

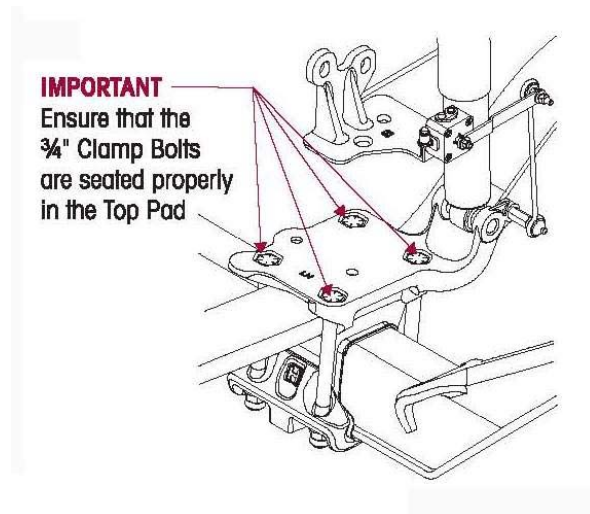


Figure 5

26. Verify proper ride height. See attachment for Alignment and Adjustment section of this publication.
27. Remove the wheel chocks.

Operation number must appear on all claims.

Table 2 Labor Information

Operation No.	Description	Time
A40-07903-1	Inspect and replace huck bolts	1.0 hr
A40-07903-2	Add on for one spring	1.3 hrs
A40-07903-3	Add on for both springs	2.4 hrs

ADMINISTRATIVE PROCEDURE

Expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Authorized Field Change Number G-07903

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Manual, Section 7-1. Special attention should be given to Items 39 through 44.

To assure this important improvement is made in a timely manner, all claims for G-07903 activity must be submitted by August 31, 2008 or within the normal warranty period for the vehicle, if after August 31, 2008.

GROUP	NOUN	C	WARR.	TP	PAD
GROUP Enter number G—					
NOUN Leave blank					
C (CAUSE) Enter either 1, 2, 3. (see below)					
1. Inspected (No repair required).					
2. Inspected and repaired.					
3. Defective part from parts stock.					
WARRANTY (Warranty Code) Enter 40.					
TYPE PART Enter P for type part causing failure.					
PAD Enter 100					

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