

Technical Service Note 31-07 (Rev. "A" SN range correction.)

SUBJECT: UPS End of Frame (EOF) Crossmember Relocation.

PRODUCTS: Cascadia SNs GD8252 through GD8393 (145 Trucks)
specifying Data Code:
572-032 HOSTLER 4,000# CAPACITY TOWING REAR CMBR.

GROUP: 31

PROBLEM / SYMPTOMS: The location of the EOF crossmsmber with respect to the centerline of the rear suspension is 1.0 inch (25.4mm) to far forward resulting in interference between the lower drop crossmember and rear suspension air spring. This condition can result in a failure of the rear suspension air spring.

Production Action:

Engineering has set up the EOF crossmember locating calculation to be auto generated rather than manual.

Field Action:

The EOF crossmember assembly will be relocated 2.0 inches (50mm) further rear to insure clearance to the rear suspension air spring.

Parts Required:

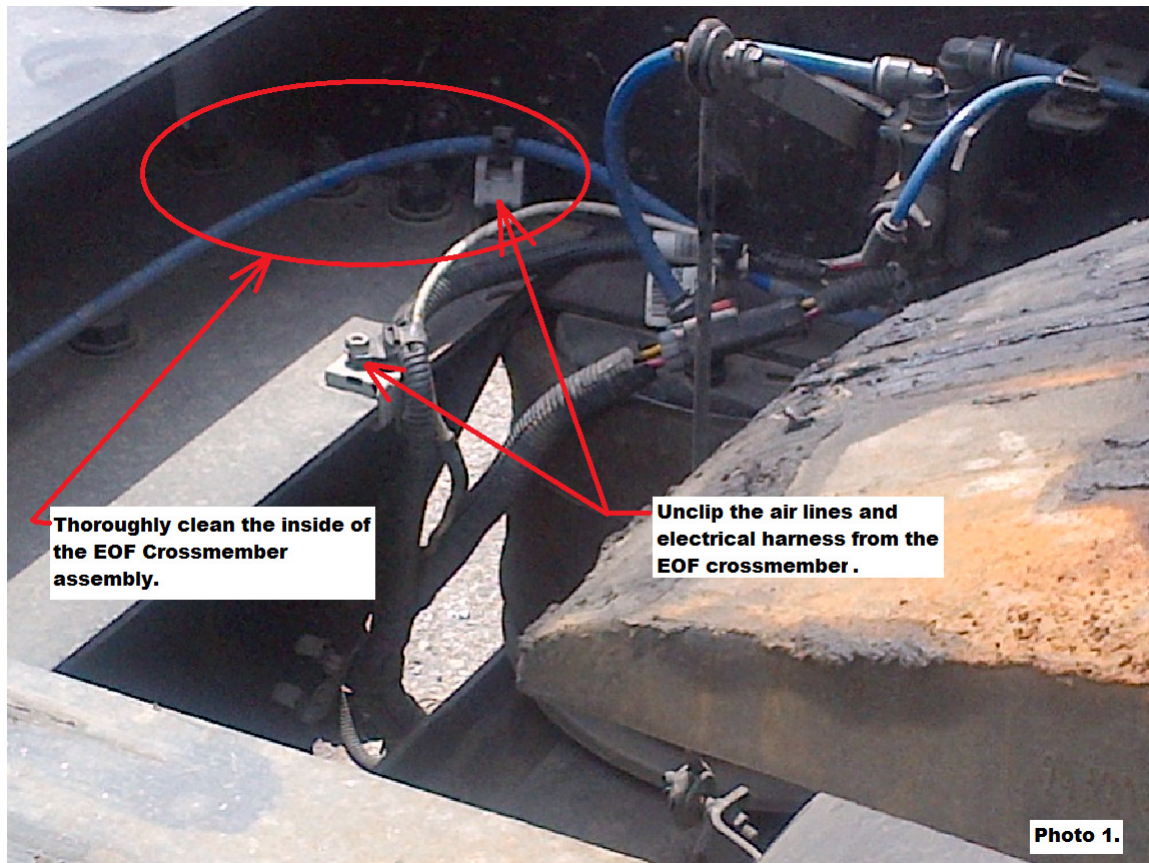
<u>Part Number:</u>	<u>Description:</u>	<u>Quantity:</u>
23-09114-000	WASHER-HRDN,0.69X1.31X.177,ZN	32
23-13179-110	NUT-HEX,PT,5/8-11,C,ZC,,559	16
23-09444-175	SCREW-CAP,HEX5/8-11X1.75 GR8PO	8
23-09444-225	SCREW-CAP,5/8-11X2.25GR8PO.403	4
23-09444-325	SCREW-CAP,HEX5/8-11X3.25 GR8PO	2
23-09444-275	SCREW-CAP,5/8-11X2.75GR8PO.403	2
16-19768-000	AIR BAG,A/L,CO,AL,STD RIDE	As Required
15-23172-000	C/MBR-RR CLSG,DRP CTR,LOWER	As Required

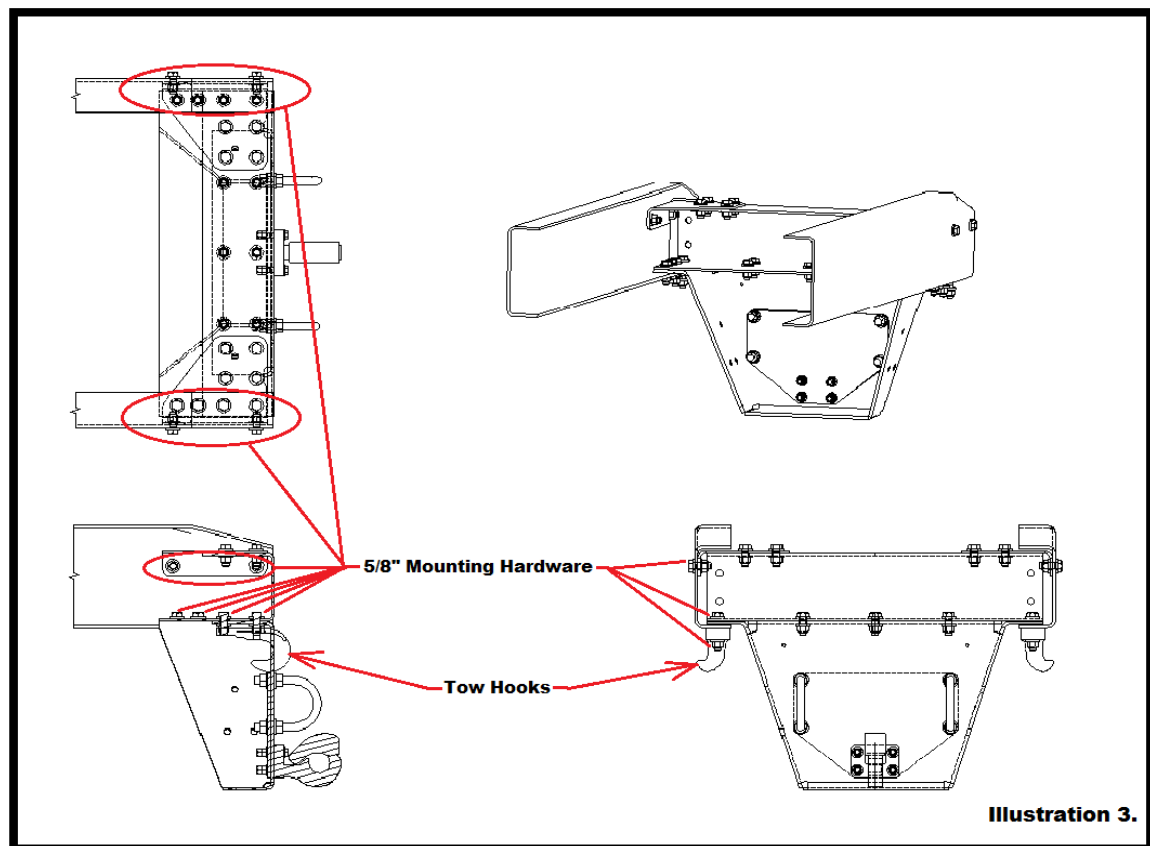
Work Instruction:

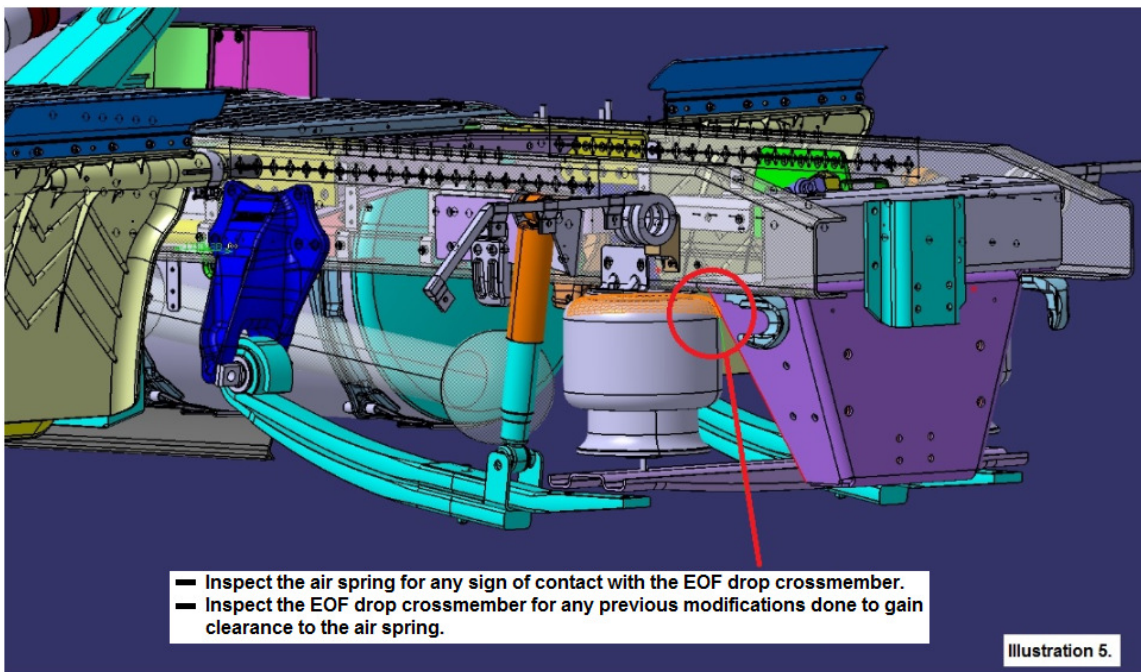
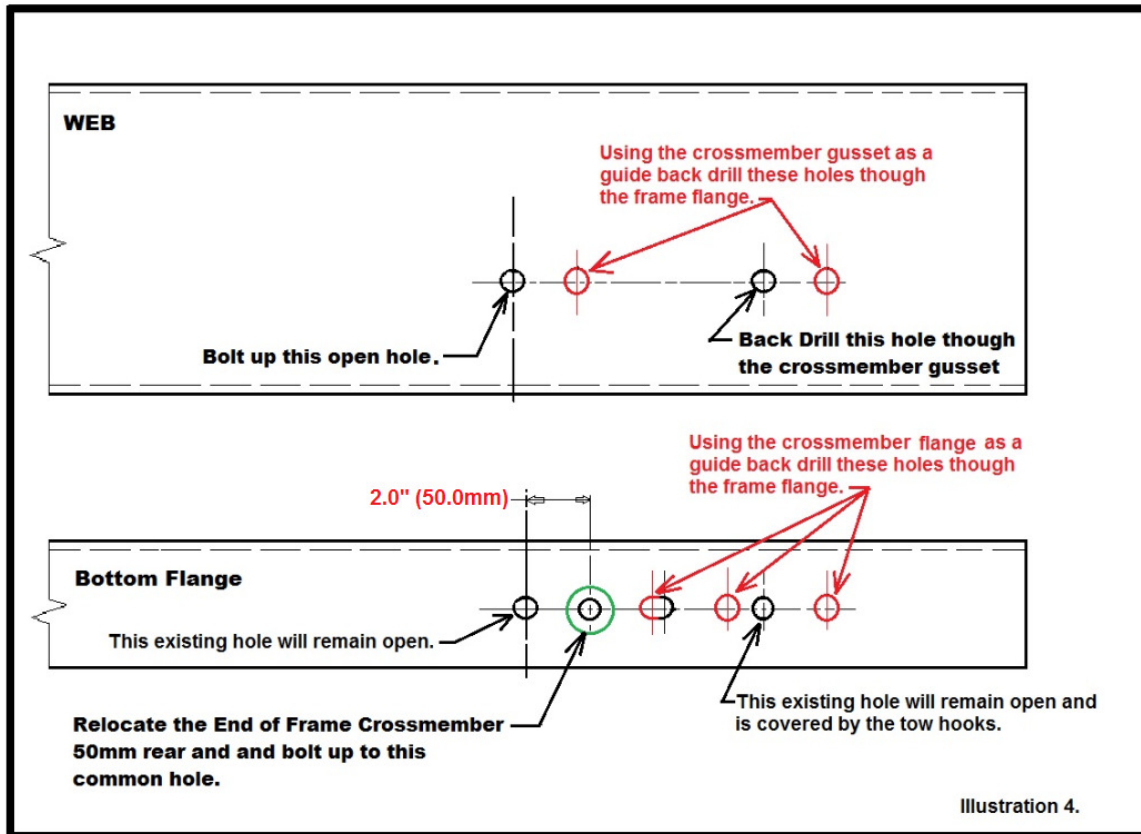
- 1) Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.

- 2) Unclip the air lines and electrical harnesses tied to the EOF crossmember assembly. Reference photo 1.
- 3) Thoroughly clean the inside and top of the EOF crossmember assembly and frame flange just rear of the crossmember. Reference photos 1 & 2.
- 4) Remove the tow hooks from the bottom flange of the frame rail. Remove and discard the 5/8" hardware that attaches the crossmember to the frame flange and frame web. Reference illustration 3.
- 5) Inspect the EOF drop crossmember for any previous modification done to gain clearance to the air spring. If the EOF drop crossmember has been modified it must be replaced. Reference Illustration 5.
- 6) Slide the EOF Crossmember assembly 2.0 inches (50mm) to the rear of the frame.
Note: The forward most holes in the crossmember flange will tie into existing holes in the frame flange. Reference illustration 4.
- 7) Secure the EOF crossmember to the frame flange at the "common" forward holes using new 5/8" hardware on both the LH and RH sides.
- 8) From inside the crossmember back drill the three crossmember flange holes through the frame flange to 11/16 inch (17.5mm) diameter. Back drill the two crossmember gusset holes through the frame web to 11/16 inch (17.5mm) diameter. Repeat on the opposite frame. Reference illustration 4.
- 9) From the frame side back drill the rear most hole in the web through the crossmember gusset to 11/16 inch (17.5mm) diameter. Repeat on the opposite frame. Reference Illustration 4.
- 10) Reinstall new 5/8" hardware and tow hooks to the bottom flange of the frame. Reinstall new 5/8" hardware to the crossmember gussets and frame web. Bolt up the open holes in the frame web with 5/8" hardware.
- 11) **Important:** Torque the 5/8" hardware from the nut side to **128 ft.-lbs.**

- 12) Inspect the Airliner rear suspension air spring. If there are any signs of contact between the top of the air spring and EOF crossmember the air spring must be replaced. Reference Illustration 5.
- 13) Clip the airlines and electrical harnesses that were removed to the EOF crossmember assembly. Reference photo 1.







Reference Documentation: FSPR: 24724; FRACAS 12249

IMPORTANT:

- TSN's may contain sensitive information; do not forward directly to customers, dealers or suppliers. Upon the discretion of the recipient, select information may be copied and sent (under separate cover) to those excluded above.
- This information is NOT authorization for warranty.
- Refer to: \\Public Folders\\All Public Folders\\Service Engineering\\Technical Service Notes (Outlook Public Folders) for previous TSN's