

September 2019  
FL820A  
NHTSA #19V-548  
Transport Canada #2019-364

## Subject: Airliner Suspension Brake Line Clearance

**Models Affected: Specific Model Year 2019-2020 Cascadia vehicles manufactured June 13, 2018, through July 15, 2019, and equipped with a certain 40K Light Weight Extra Duty Airliner suspension and 51 inch axle spacing configuration.**

### General Information

Daimler Trucks North America LLC (DTNA), on behalf of its Freightliner Trucks Division, has decided that a defect that relates to motor vehicle safety exists on the vehicles mentioned above.

There are approximately 190 vehicles involved in this campaign.

On certain vehicles, the clearance between the ride height control valve linkage and brake airlines may not be adequate and could lead to contact and chafing of the brake airline. Chafing of the brake airline may lead to an airline leak that may be undetectable during pre-trip inspection and could cause significant damage to the airline, potentially resulting in reduced brake effectiveness, increasing the risk of a vehicle crash.

A bracket will be installed to relocate the height control valve, located on the inside of the right hand frame rail just rear of the forward drive axle, for increased clearance to the brake airline. The airlines will be inspected and replaced as needed. Repairs will be performed by Daimler Trucks North America authorized service facilities.

### Additional Repairs

Dealers must complete all outstanding Recall and Field Service campaigns prior to the sale or delivery of a vehicle. A Dealer will be liable for any progressive damage that results from its failure to complete campaigns before sale or delivery of a vehicle.

Owners may be liable for any progressive damage that results from failure to complete campaigns within a reasonable time after receiving notification.

### Work Instructions

Please refer to the attached work instructions. Prior to performing the campaign, check the vehicle for a completion sticker (Form WAR260).

### Replacement Parts

Replacement parts are now available and can be obtained by ordering the part number(s) listed below from your facing Parts Distribution Center.

**NOTE:** Less than 10 percent of airlines are expected to need replacement.

If our records show your dealership has ordered any vehicles involved in campaign number FL820, a list of the customers and vehicle identification numbers will be available in OWL. Please refer to this list when ordering parts for this recall.

**Table 1** - Replacement Parts for FL820

Campaign Number	Part Description	Part Number	Qty.
FL820A	BRKT,HT CTRL,A/L,HI ,RH	16-20393-000	1 ea
	HOSE- 8,C/B,(2)SAE 45 SWVL END	12-21021-052	1 ea
	BLANK COMPLETION STICKER	WAR260	1 ea

**Table 1**

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## Removed Parts

U.S. and Canadian Dealers, please follow Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts. Export distributors, please destroy removed parts unless otherwise advised.

## Labor Allowance

**Table 2** - Labor Allowance

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Corrective Action
FL820A	Inspect brake airline, install bracket and set ride height	1.4	996-R075A	12-Repair Recall/Campaign
	Inspect and replace brake airline, install bracket and set ride height (Less than 10% of vehicles are expected to need this procedure)	1.9	996-R075B	12-Repair Recall/Campaign

**Table 2**

**IMPORTANT:** When the Recall has been completed, locate the base completion label in the appropriate location on the vehicle, and attach the red completion sticker provided in the recall kit (Form WAR260). If the vehicle does not have a base completion label, clean a spot on the appropriate location of the vehicle and first attach the base completion label (Form WAR259). If a recall kit is not required or there is no completion sticker in the kit, write the recall number on a blank sticker and attach it to the base completion label.

## Claims for Credit

You will be reimbursed for your parts, labor, and handling (landed cost for Export Distributors) by submitting your claim through the Warranty system within 30 days of completing this campaign. Please reference the following information in OWL:

- Claim type is **Recall Campaign**.
- In the Campaign field, enter the campaign number and appropriate condition code (**FL820-A**).
- In the Primary Failed Part Number field, enter **25-FL820-000**.
- In the Parts field, enter the appropriate part number(s) as shown in the Replacement Parts Table.
- In the Labor field, first enter the appropriate SRT from the Labor Allowance Table. Administrative time will be included automatically as SRT 939-6010A for 0.3 hours.
- The VMRS Component Code is **F99-999-005** and the Cause Code is **A1 - Campaign**.
- **U.S. and Canada -- Reimbursement for Prior Repairs.** When a customer asks about reimbursement, please do the following:
  - Accept the documentation of the previous repair.
  - Make a brief check of the customer's paperwork to see if the repair may be eligible for reimbursement. (See the "Copy of Owner Letter" section of this bulletin for reimbursement guidelines.)
  - Submit an OWL Recall Pre-Approval Request for a decision.
  - Include the approved amount on your claim in the Other Charges section.
  - Attach the documentation to the pre-approval request.
  - If approved, submit a based on claim for the pre-approval.
  - Reimburse the customer the appropriate amount.

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**IMPORTANT:** OWL must be viewed prior to performing the recall to ensure the vehicle is involved and the campaign has not been previously completed. Also, check for a completion sticker prior to beginning work.

U.S. and Canadian dealers, contact the Warranty Campaigns Department via Web inquiry at [DTNACONNECT.com](http://DTNACONNECT.com) / WSC, if you have any questions or need additional information. Export distributors, submit a Web inquiry or contact your International Service Manager.

U.S. and Canadian Dealers: To return excess kit inventory related to this campaign, U.S. dealers must submit a Parts Authorization Return (PAR) to the Memphis PDC. Canadian dealers must submit a PAR to their facing PDC. All kits must be in resalable condition. PAR requests must include the original purchase invoice number. Export Distributors: Excess inventory is not returnable.

The letter notifying U.S. and Canadian vehicle owners is included for your reference.

Please note that the National Traffic and Motor Vehicle Safety Act, as amended (Title 49, United States Code, Chapter 301), requires the owner's vehicle(s) be corrected within a reasonable time after parts are available to you. The Act states that failure to repair a vehicle within 60 days after tender for repair shall be prima facie evidence of an unreasonable time. However, circumstances of a particular situation may reduce the 60 day period. Failure to repair a vehicle within a reasonable time can result in either the obligation to (a) replace the vehicle with an identical or reasonably equivalent vehicle, without charge, or (b) refund the purchase price in full, less a reasonable allowance for depreciation. The Act further prohibits dealers from selling a vehicle unless all outstanding recalls are performed. Any lessor is required to send a copy of the recall notification to the lessee within 10 days. Any subsequent stage manufacturer is required to forward this notice to its distributors and retail outlets within five working days.

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## Copy of Notice to Owners

### Subject: Airliner Suspension Brake Line Clearance

**For the Notice to U.S. Customers:** This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act. **For the Notice to Canadian Customers:** This notice is sent to you in accordance with the requirements of the Motor Vehicle Safety Act. This is to inform you that your vehicle may contain a defect that could affect the safety of a person.

Daimler Trucks North America LLC (DTNA), on behalf of its Freightliner Trucks Division, has decided that a defect that relates to motor vehicle safety exists on specific Model Year 2019-2020 Cascadia vehicles manufactured June 13, 2018, through July 15, 2019, and equipped with a certain 40K Light Weight Extra Duty Airliner suspension and 51 inch axle spacing configuration.

On certain vehicles, the clearance between the ride height control valve linkage and brake airlines may not be adequate and could lead to contact and chafing of the brake airline. Chafing of the brake airline may lead to an airline leak that may be undetectable during pre-trip inspection and could cause significant damage to the airline, potentially resulting in reduced brake effectiveness, increasing the risk of a vehicle crash.

A bracket will be installed to relocate the height control valve, located on the inside of the right hand frame rail just rear of the forward drive axle, for increased clearance to the brake airline. The airlines will be inspected and replaced as needed. Repairs will be performed by Daimler Trucks North America authorized service facilities.

Please contact an authorized Daimler Trucks North America dealer to arrange to have the Recall performed and to ensure that parts are available at the dealership. To locate an authorized dealer, search online at [www.Daimler-TrucksNorthAmerica.com](http://www.Daimler-TrucksNorthAmerica.com). On the menu tab, select "Contact," scroll down to "Find a Dealer," and select the appropriate brand. The Recall will take approximately two hours and will be performed at no charge to you. You may also confirm your vehicle's involvement in this recall at this URL: <https://dtna-dlinfo.prd.freightliner.com:48518/VinLookup/vin-module/getVinLookupPage>

You may be liable for any progressive damage that results from your failure to complete the Recall within a reasonable time after receiving notification.

If you do not own the vehicle that corresponds to the identification number(s) which appears on the Recall Notification, please return the notification to the Warranty Campaigns Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, Federal law requires that you forward this notice to the lessee within 10 days. If you are a subsequent stage manufacturer, Federal law requires that you forward this notice to your distributors and retail outlets within five working days. If you have paid to have this recall condition corrected prior to this notice, you may be eligible to receive reimbursement. Please see the reverse side of this notice for details.

If you have questions about this Recall, please contact the Warranty Campaigns Department at (800) 547-0712, 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, e-mail address [DTNA.Warranty.Campaigns@Daimler.com](mailto:DTNA.Warranty.Campaigns@Daimler.com). **For the Notice to U.S. Customers:** If you are not able to have the defect remedied without charge and within a reasonable time, you may wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the Vehicle Safety Hotline at (888) 327-4236 (TTY: 800-424-9153); or to <http://www.safercar.gov>. **For the Notice to Canadian Customers:** If you wish to submit a complaint about this recall, you can contact Transport Canada road safety, 80 rue Noel, Gatineau, Quebec J8Z 0A1 or call (800) 333-0510.

We regret any inconvenience this action may cause but feel certain you understand our interest in motor vehicle safety.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

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## **Reimbursement to Customers for Repairs Performed Prior to Recall**

If you have already **paid** to have this recall condition corrected you may be eligible to receive reimbursement.

Requests for reimbursement may include parts and labor. Reimbursement may be limited to the amount the repair would have cost if completed by an authorized Daimler Trucks North America LLC dealer. The following documentation must be presented to your dealer for consideration for reimbursement.

Please provide original or clear copies of all receipts, invoices, and repair orders that show:

- The name and address of the person who paid for the repair
- The Vehicle Identification Number (VIN) of the vehicle that was repaired
- What problem occurred, what repair was done, when the repair was done
- Who repaired the vehicle
- The total cost of the repair expense that is being claimed
- Proof of payment for the repair (such as the front and back of a cancelled check or a credit card receipt)

Reimbursement will be made by check from your Daimler Trucks North America LLC dealer.

Please speak with your Daimler Trucks North America LLC authorized dealer concerning this matter.

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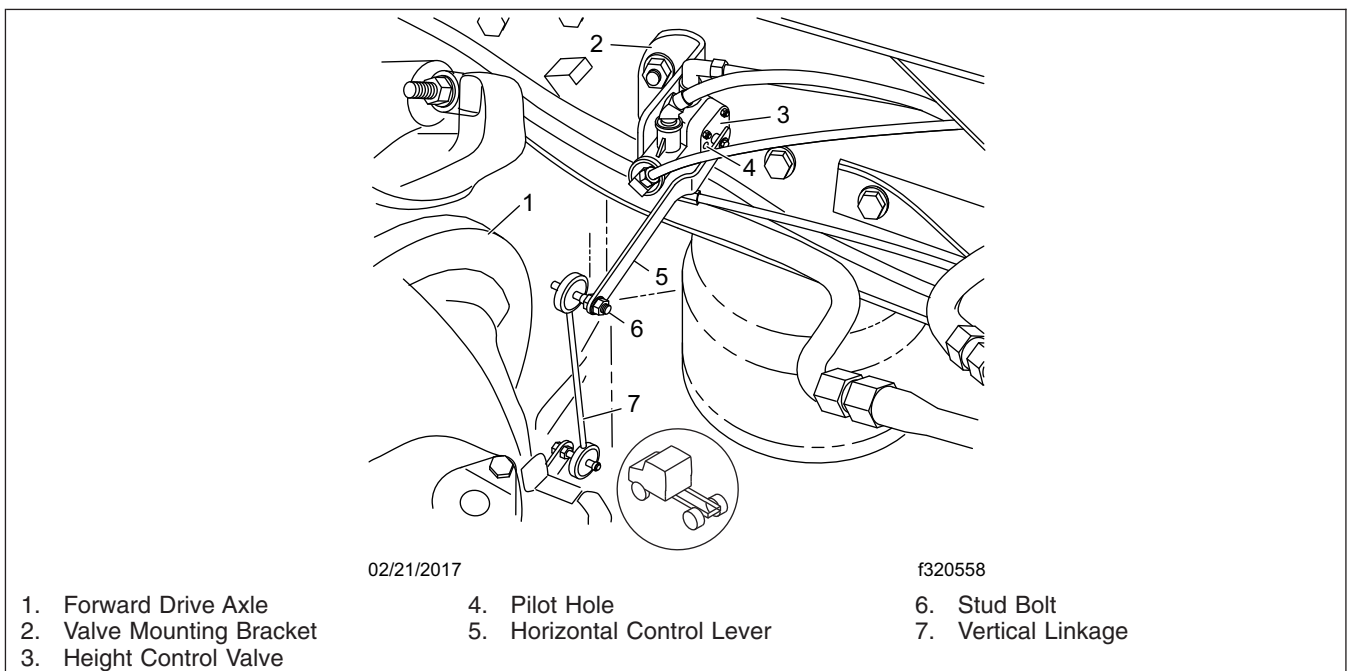
## Work Instructions

### Subject: Airliner Suspension Brake Line Clearance

**Models Affected: Specific Model Year 2019-2020 Cascadia vehicles manufactured June 13, 2018, through July 15, 2019, and equipped with a certain 40K Light Weight Extra Duty Airliner suspension and 51 inch axle spacing configuration.**

### Height Control Valve Bracket Replacement

1. Check the base label (Form WAR259) for a completion sticker for FL820 (Form WAR260) indicating this work has been done. The base label is usually located on the passenger-side door about 12 inches (30 cm) below the door latch. If a completion sticker is present, no work is needed. If a completion sticker is not present, continue with the next step.
2. Park the vehicle on a level surface, put the transmission in neutral. Build the system air pressure to at least 100 Psi (690 Kpa). Shut down the engine, and set the parking brake.
3. Chock the tires.
4. Release the park brake.
5. Drain all air from the air tanks.
6. Locate the shock absorber on the right hand frame rail at the forward drive axle. Remove the hexnut, hex-bolt, and hardened washers from the shock-absorber lower mounting bracket.
7. Remove the nut, upper retainer and upper bushing from the top of the shock absorber, then pull the shock absorber out of the upper mounting bracket.
8. Locate the airliner height control valve on the inside of the right hand frame rail just rear of the forward drive axle.
9. Remove any zip ties from air lines or the valve that may restrict removal of the height control valve from the valve mounting bracket.
10. Remove the nut and washer that attaches the vertical linkage to the lower clip on the axle housing. See [Fig.1](#)



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## NOTICE

When removing or loosening a Barksdale height control valve from a mounting bracket, always hold the valve-side mounting studs in place with an Allen wrench while loosening or tightening the nuts that attach the valve to the bracket. Because the mounting studs are threaded into the valve body, loosening the nuts without holding the studs can tighten the studs, which can crush the valve body and damage the valve. Conversely, tightening the nuts without holding the studs can back the studs out, causing a separation of the two halves of the valve body, and possibly a leak.

11. While holding the height control valve mounting studs in place with an Allen wrench, remove the nuts and washers that attach the valve to the mounting bracket. Remove the height control valve from the bracket.
12. Remove the three M16 fasteners that hold the shock bracket and existing height control valve bracket. Remove the height control valve bracket from inside of the frame rail and discard.
13. Install the existing shock bracket and new replacement height control valve bracket P/N 16-20393-000. Tighten the M16 fasteners 128 lbf-ft (174 N-m).
14. Position the height control valve on the new height control valve bracket. While holding the height control valve mounting studs in place with an Allen wrench, install the nuts and washers, and tighten the nuts 95 lbf-in (1100 N-cm). See [Fig. 2](#). Do not overtighten.

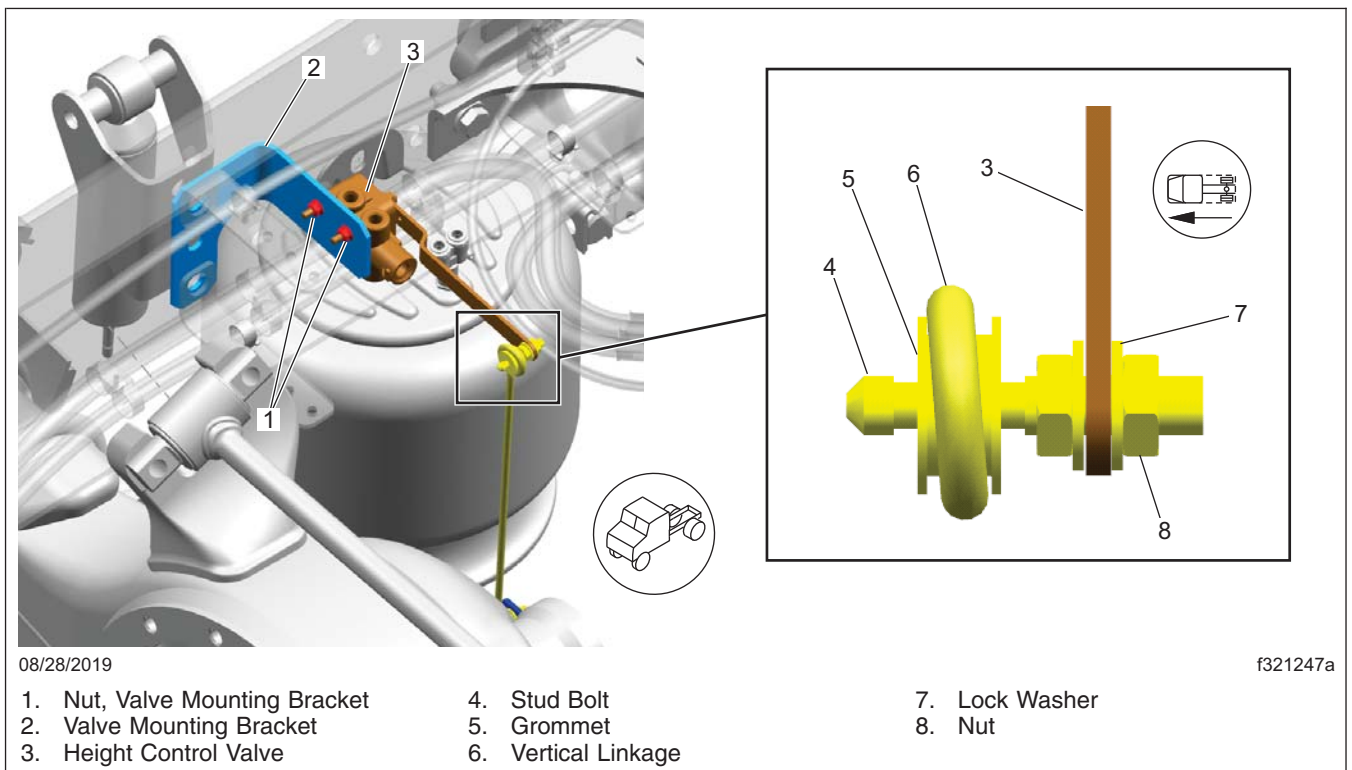
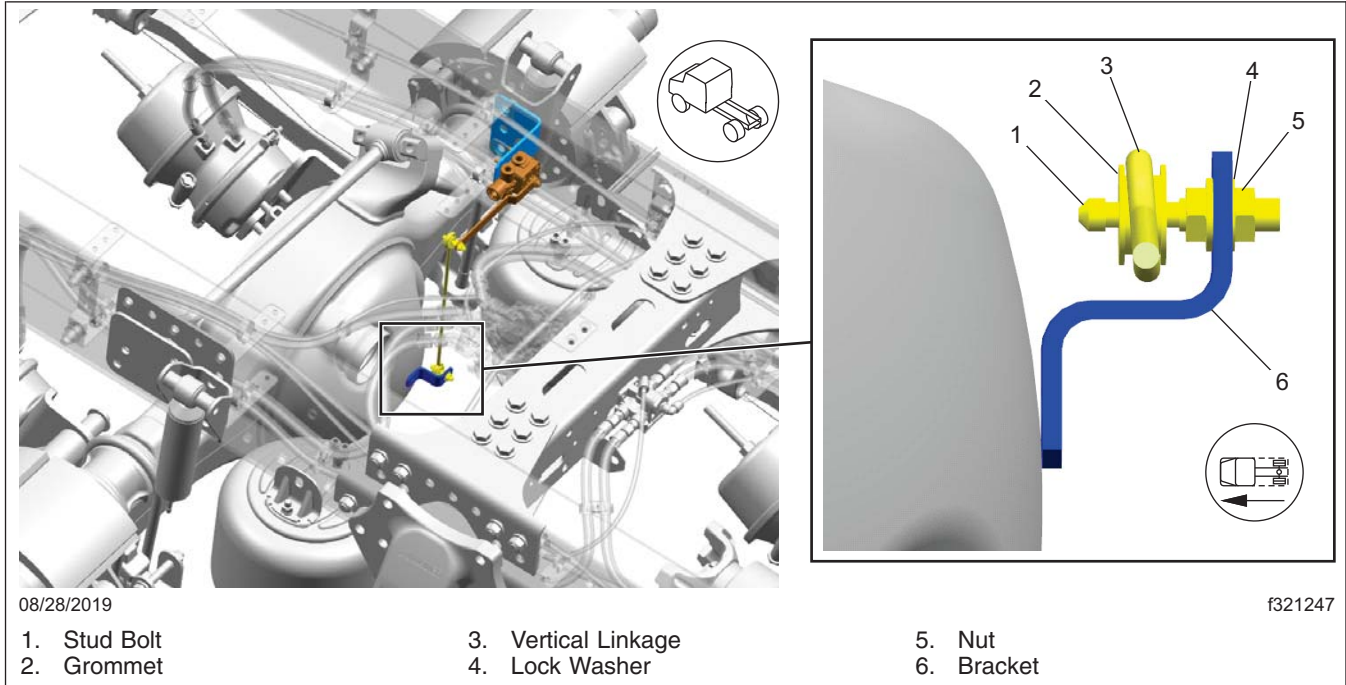


Fig. 2, Connecting Vertical Linkage to the Height Control Valve

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15. Connect the vertical linkage to the lower clip on the axle housing as shown in **Fig. 3**.

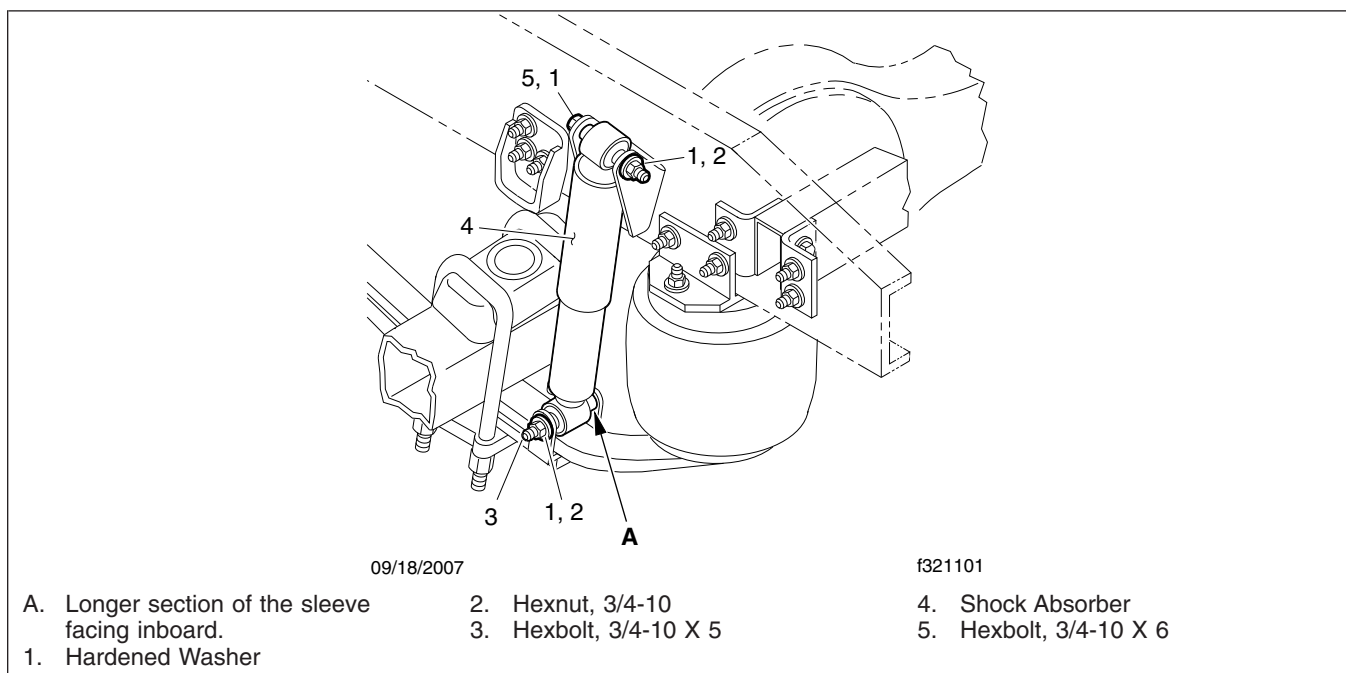


**Fig. 3, Vertical Linkage Connection at the Lower Clip on the Axle**

16. Install zip ties on the air lines and height control valve.

17. Install the shock absorber. At the lower mounting, make sure the longer section of the sleeve is facing inboard. See **Fig. 4**.

18. Tighten the shock-absorber mounting hexnuts 128 lbf·ft (174 N·m).

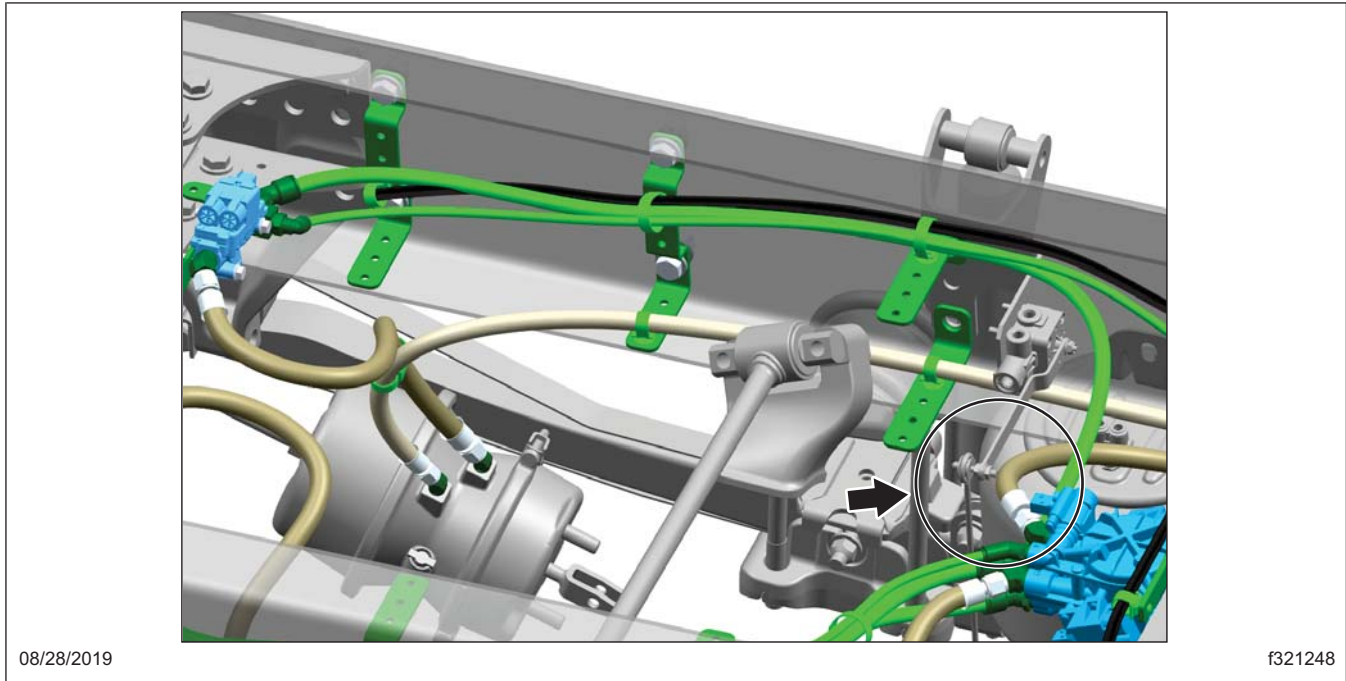


**Fig. 4, Shock Absorber Installation**



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19. Inspect the brake airlines just rear of the height control valve linkage. If there is any indication that the linkage has rubbed/abraded the brake air lines, replace the airlines. See **Fig. 5**.



**Fig. 5, Brake Airline Inspection**

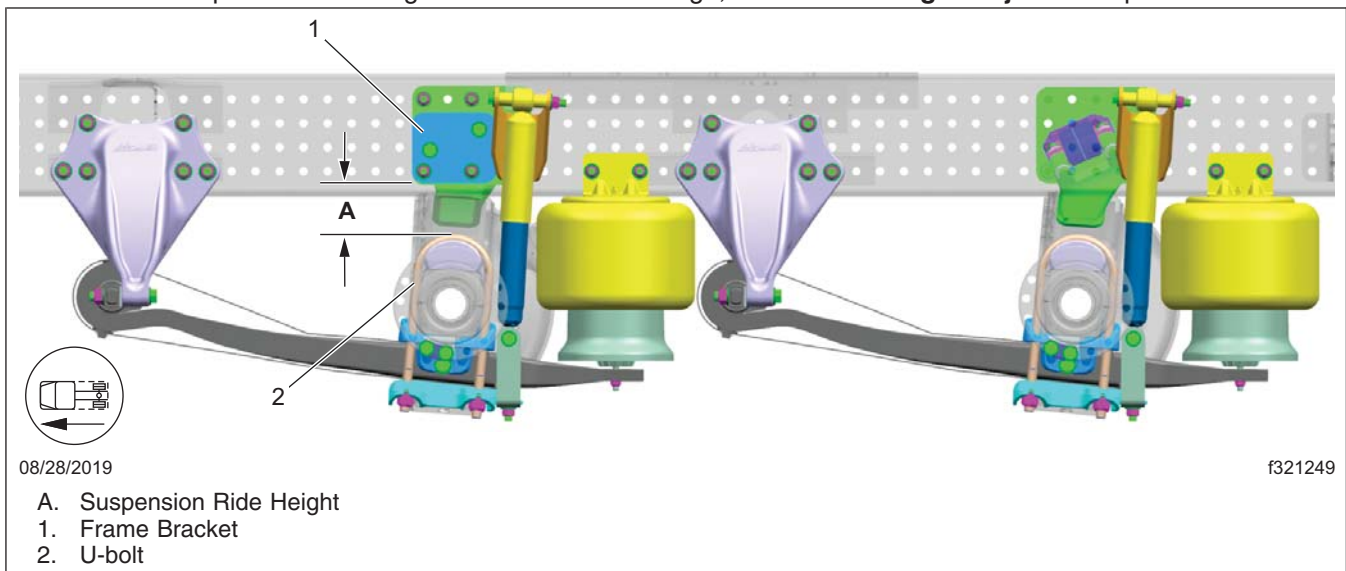
**NOTE:** Less than 10 percent of airlines are expected to need replacement.

20. Start the engine and build the system air pressure to at least 100 Psi (690 kpa). Shut down the engine.

21. Inspect the brake airlines and height control valve for any air leaks and repair as required.

22. Measure the suspension ride height on the same side the height control valve is mounted. See **Fig.6**.

- If the suspension ride height measures 111mm +/- 6mm (4.37" +/- 0.25"), the suspension ride height is within the specification.
- If the suspension ride height is not within this range, follow **Ride Height Adjustment** procedure.

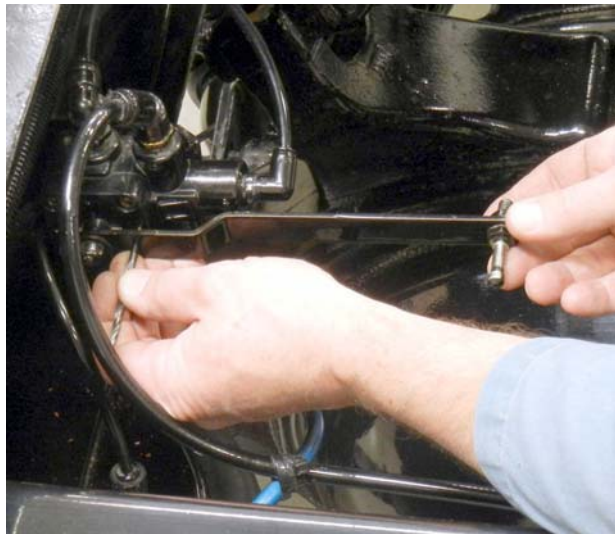


**Fig. 6, Suspension Ride Height Measurement**

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## Ride Height Adjustment

1. Disconnect the height control valve linkage at the lever stud.
2. If the ride height is not correct, lift or lower the valve lever to adjust the height until it is at the proper ride height.
3. Pin the lever in neutral position with a 5/32-inch drill bit or nylon rod to lock the lever in neutral position.  
See [Fig.7.](#) and [Fig. 8.](#)



02/21/2017

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**Fig. 7, Pinning the Valve Lever**



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**Fig. 8, Height Control Valve Adjustment**

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## NOTICE

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**When loosening a Barksdale height control valve from a mounting bracket, always hold the valve-side mounting studs in place with an Allen wrench while loosening or tightening the nuts that attach the valve to the bracket. Because the mounting studs are threaded into the valve body, loosening the nuts without holding the studs can tighten the studs, which can crush the valve body and damage the valve. Conversely, tightening the nuts without holding the studs can back the studs out, causing a separation of the two halves of the valve body, and possibly a leak.**

4. While holding the height control valve mounting studs in place with an Allen wrench, loosen the nuts that attach the valve to the mounting bracket.
5. Adjust the position of the valve body until the lever still pinned in neutral position can connect to the linkage. Attach the linkage. The linkage rod should be vertical, and the valve body should now be in the correct position for the vehicle's ride height.
6. While holding the height control valve mounting studs in place with an Allen wrench, tighten the nuts 95 lbf-in (1100 N-cm). Do not overtighten, as that could damage the valve. (For dual valves, tighten both.)
7. Remove the pin or drill bit holding the height control lever in neutral position.
8. Drive the vehicle unloaded for about 1/4 mile (1/2 km), then park the vehicle on a level surface using a light brake application. Set the park brake and chock the tires
9. Check the ride height of the vehicle again, measuring where indicated in the drawing or figure for the suspension.
  - If the distance is within the acceptable range, the ride height is correctly set, continue to step 12.
  - If the distance is not within the acceptable range, repeat the ride height adjustment procedure.
10. Clean a spot on the base label (Form WAR259), write recall number FL820 on a blank red completion sticker (Form WAR260), and attach it to the base label.