



NUMBER: 02-007-21

GROUP: 02 - Front Suspension

DATE: November 20, 2021

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This Technical Service Bulletin has also been released as a Rapid Response Transmittal (RRT) 21-168, date of issue November 20, 2021. All applicable Sold and Un-Sold RRT VINs have been loaded. To verify this RRT service action is applicable to the vehicle, use VIP or perform a VIN search in DealerCONNECT/Service Library. All repairs are reimbursable within the provisions of warranty. This RRT will expire 18 months after the date of issue.

SUBJECT:

Air Suspension Slow to Change Height

OVERVIEW:

This bulletin involves inspecting the vehicle for pinched front air suspension lines.

MODELS:

2021 (WL) Jeep Grand Cherokee

NOTE: This bulletin applies to vehicles within the following markets/countries: North America.

NOTE: This bulletin applies to vehicles built on or before September 01, 2021 (MDH 0901XX) equipped with Quadra-Lift™ Air Suspension (Sales Code SER).

SYMPTOM/CONDITION:

The customer may notice a "Service Air Suspension" message in the cluster. Upon further investigation a technician may find one or more of the following Diagnostic Trouble Codes (DTCs) set:

- C1556-16 - Height Sensors Implausible - Out Of Plane
- C1567-85 - Left Front Ride Height Level Performance-Signal Above Allowable Range
- C1569-85 - Right Front Ride Height Level Performance-Signal Above Allowable Range
- C15A2-00 - Ride Height System Unlevel.
- C15A1-00 - Unable to Obtain Desired Ride Height.
- C15A0-01 - There is an internal fault in control unit "Suspension". The temperature is above threshold.
- C15AD-92 - Ride Height System- Perform- Mance Or Incorrect Operation.
- C220C-98 - Active Suspension Module Internal- Component Or System Over Temperature.

Customers may also experience one or more of the following:

- Slow changes in ride heights.
- Ride height changes denied due Air Suspension Control Module (ASCM) timing out.
- Uneven front suspension.
- Air suspension inoperable.

DIAGNOSIS:

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in DealerCONNECT/Service Library, verify all related systems are functioning as designed. If DTCs or symptom conditions, other than the ones listed above are present, record the issues on the repair order and repair as necessary before proceeding further with this bulletin.

If a customer's VIN is listed in VIP or your RRT VIN list, perform the repair. If any vehicle not on the VIN list exhibits the symptom/condition or DTC, perform the Repair Procedure.

PARTS REQUIRED:

Qty.	Part No.	Description
3 (AR)	68084816AA	Union
1 (AR)	68464672AE	Air Lines, Assembly

REPAIR PROCEDURE:

1. Remove the Body Control Module (BCM). Refer to the detailed service procedures available in DealerCONNECT> Service Library under: 08 - Electrical / 8E - Electronic Control Modules / Module, Body Control (BCM) / Removal
2. Move the cowl insulation pad out of the way to get better access to the air lines.
3. Inspect the air line under the BCM, mainly around the BCM mounting studs ([Fig. 1](#)) .

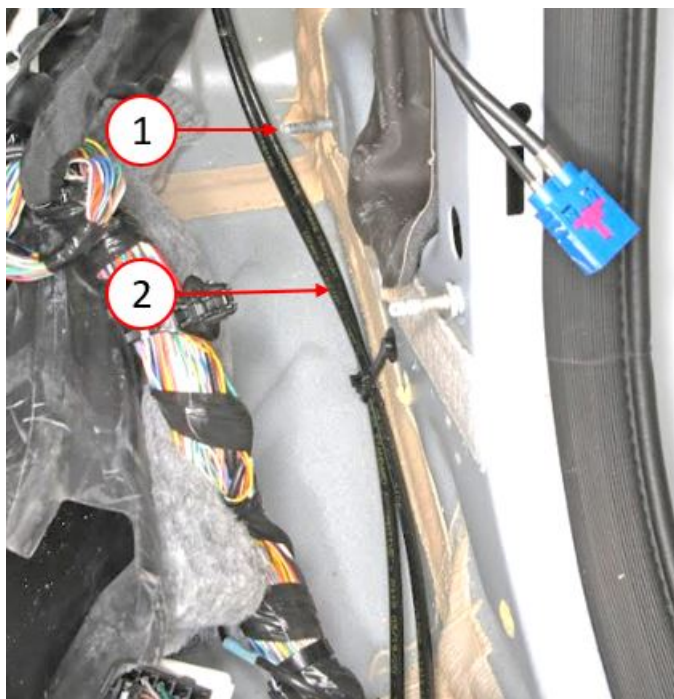


Fig. 1

Air Line Routed Properly

- 1 - BCM Mounting Stud
2 - Air Lines

4. Were any pinched air lines found?
 - YES >>> Repair the air lines . Proceed to [Step 6](#).
 - NO >>> This inspection has been completed. Use inspection LOP (02-66-01-96) to close the active RRT. Proceed to [Step 5](#) and install the BCM.
5. Install the Body Control Module (BCM). Refer to the detailed service procedures available in DealerCONNECT> Service Library under: 08 - Electrical / 8E - Electronic Control Modules / Module, Body Control (BCM) / Installation. This bulletin has been completed.

NOTE: The air suspension system can be disabled and enabled by using the Display Screen Module (DSM) in the vehicle under “Tire Jack” mode, which is the preferred method. If the disable level control routine in the diagnostic scan tool is used, it will only disable the level control (automatic and manual) for that ignition cycle. The air suspension system can also be enabled by driving the vehicle above 8 km/h (5 mph). The air suspension must be disabled prior to lifting the vehicle or performing any work.

6. Prep the vehicle for lifting it up on the hoist. Using the radio display screen go into the settings menu, than select “Suspension” than “Tire Jack Mode”.
7. Using the scan tool, the air pressure needs to be removed from both front air springs. Select Air Suspension Control Module (ASCM), Misc-Function, “Deflate To Reservoir” and than select both front air springs.

NOTE: If the air line(s) are pinched it may be necessary to loosen air line fittings to release residual air pressure.

8. Verify the front air spring are completely deflated by going into “Component Air Mass > Pressure > Ride Height Readings” verify pressure readings are low.
9. Disconnect both front air lines at the top of the front air springs.
10. Remove the cowl panel cover. Refer to the detailed service procedures available in DealerCONNECT> Service Library under: 23 - Body / Exterior / Cover, Cowl Panel / Removal.
11. Disconnect the air line retainers at the cowl and body.
12. Stagger cut the air lines rearward of the damaged area ([Fig. 2](#)) .

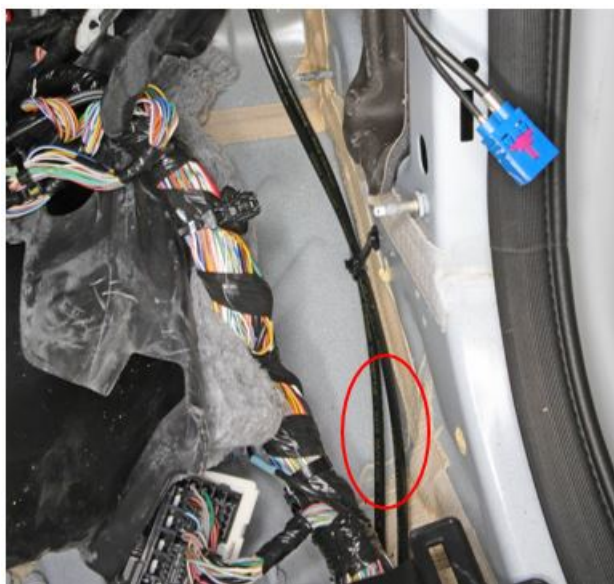


Fig. 2
Recommended Location For Air Line Splicing

13. Remove the front air lines from the vehicle.

14. Take the new air line assembly and the old damaged air lines that were just removed from the vehicle. Lay them next to one another. Cut the new line about a foot longer than needed. A more exact cut will be done in the vehicle when the new air lines are installed.
15. Install previously cut front air lines into the vehicle. **Do not** connect the air line to the air spring at this point.

CAUTION! Care must be taken not to mix the left front and right front air lines. Air suspension will not operate properly and DTCs will set.

16. To confirm which line goes to the left front and right front, on the inside of the vehicle put a piece of tape over each front (new) air line.
17. Go to the left front and use compressed air and blow into the left front air line.
18. Go back into the vehicle and the line that the piece of tape was blown off, that is the left front air line. Mark line the left front.
19. Do the same thing for the rear line. Put tape on each air line going to the rear of the vehicle.
20. Raise the vehicle on the hoist. Disconnect the air lines that has blue and black strips (SLF) from the "Fast Down Leveling Valve" and blow compressed air into the air line (Fig. 3) . The valve is located by the rear axle.

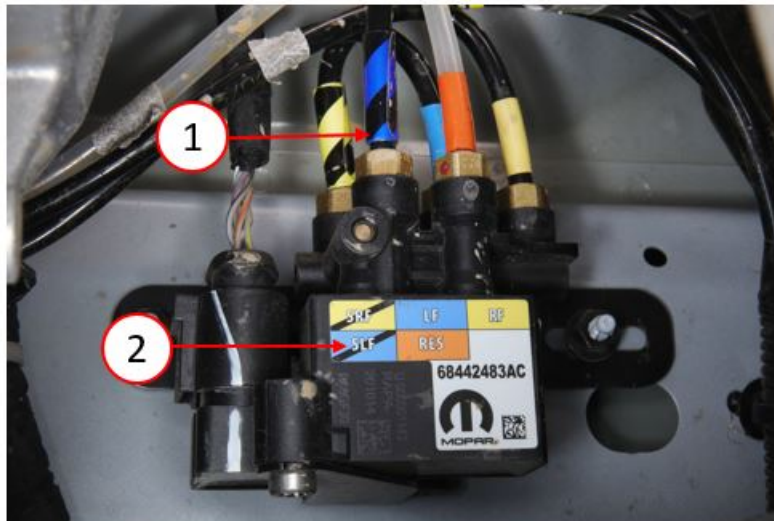


Fig. 3
Fast Down Leveling Valve

- 1 - Left Front Air Line, Blue and Black Strips
2 - Air Line Location

21. Reconnect the air line at the valve and lower the vehicle.
22. Mark the line that had the tape blown off, left front.

NOTE: Before trimming off the extra air line make sure not to cut to much off, this may cause issues with routing the air lines in the proper location. Also make sure not to mix up the left and right front air lines.

23. Lay the new air line coming from the left front and the old left front air line coming from the rear next to one another. Trim off extra air line off the new and remove the white cap then connect the air lines with one of the unions.
24. Do the same with the right front air lines, trim off extra air line and use a union to connect the air lines.
25. Confirm that the lines are locked in place by lightly pull back on the air lines.

26. Wrap foam tape around each fitting to help prevent any noises.

NOTE: At each end of the union, there are two fittings that will unscrew from the body of the union. These will be used as replacement air line fittings (Fig. 4) .

27. Unscrew both fittings from the Unions body (P/N 68084816AA).

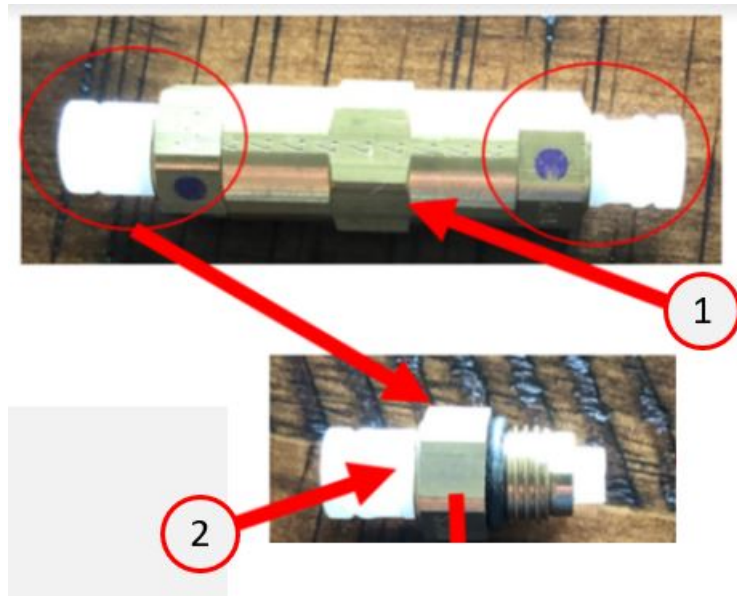


Fig. 5
Union With New Air Line Fittings

- 1 - Union Body
- 2 - Air Line Fitting

28. Install fittings on each front air spring. Leave the white caps on the fitting for now (Fig. 5) .

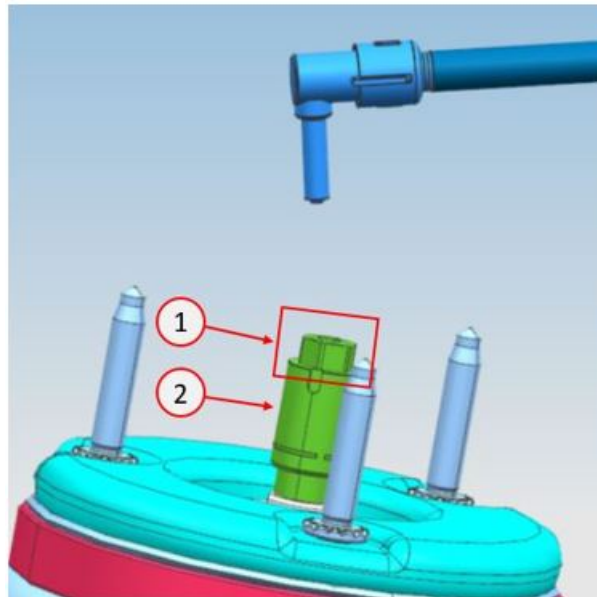


Fig. 6
Air Spring Fitting

- 1 - New Air line Fitting Location
- 2 - Do NOT Loosen Or Remove This Part

29. Make sure to Install the new air line assembly in the same location as the old lines. Connect all air line retainers in the cowl and body.
30. Remove the white caps from the fittings. Push the new lines into the fitting on the air springs.
31. Confirm that the lines are locked in place by lightly pull back on the lines.
32. Install the cowl panel cover. Refer to the detailed service procedures available in DealerCONNECT> Service Library under: 23 - Body / Exterior / Cover, Cowl Panel / Installation.

CAUTION! When installing the BCM, make sure the lines are not routed so they can be pinched under the mounting bracket.

33. Install the Body Control Module (BCM). Refer to the detailed service procedures available in DealerCONNECT> Service Library under: 08 - Electrical / 8E - Electronic Control Modules / Module, Body Control (BCM) / Installation.
34. Connect the negative battery cable.
35. Using wiTECH perform the routine "Complete Fill". Follow the on screen prompts to fill the left and right front air springs.
36. Exit plant mode.
37. Take the vehicle out of "Tire Jack" mode using the display screen
38. Clear any DTCs that may have been set during this repair procedure.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
02-66-01-96	Air Line, Assembly Inspect (2 - Skilled)	6 - Electrical and Body Systems	0.7 Hrs.
02-66-01-97	Air Line, Assembly Inspect and Replace (2 - Skilled)	6 - Electrical and Body Systems	1.8 Hrs.

FAILURE CODE:

ZZ	Service Action
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