

NUMBER: 02-001-22 REV. A

GROUP: 02 - Front Suspension

DATE: April 23, 2022

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This bulletin supersedes Technical Service Bulletin (TSB) 02-001-22, date of issue March 08, 2022, which should be removed from your files. All revisions are highlighted with **asterisks** and include revised Rapid Service Update (RSU number, build date, Diagnostic Trouble Code (DTC), repair procedure and LOP.

This Technical Service Bulletin (TSB) has also been released as a Rapid Service Update (RSU) **22-083, date of issue April 23, 2022**. All applicable Sold and Un-Sold RSU VINs have been loaded. To verify this RSU 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 RSU will expire 18 months after the date of issue.

SUBJECT:

Air Suspension Inoperable

OVERVIEW:

This bulletin involves inspecting the vehicle for multiple air suspension failures.

MODELS:

2022 (WS) Grand Wagoneer/Wagoneer

- NOTE: This bulletin applies to vehicles within the following markets/countries: North America.
- NOTE: This bulletin applies to vehicles built on or before **February 15, 2022 (MDH 0215XX)** equipped with Quadra-Lift™ Air Suspension (Sales Code SER).

SYMPTOM/CONDITION, UNSOLD VEHICLES BUILT ON OR BEFORE 11/15/21:

**The customer may notice a "Service Air Suspension" message in the cluster or the air ride suspension is inoperable. Upon further investigation a technician may find several Diagnostic Trouble Codes (DTCs) set because of the issues below:

Customers may also experience the following:

• Air suspension inoperable for both the front and rear suspension.

If the vehicle is unsold built on or before 11/15/21, Proceed to the first bullet point Step • of the Inspection Procedure.

SYMPTOM/CONDITION, SOLD VEHICLES BUILT BEFORE 2/15/22 OR UNSOLD VEHICLES BUILT ON OR BETWEEN 11/16/21 AND 2/15/22:

*The customer may notice a "Service Air Suspension" message in the cluster or the air ride suspension is inoperable. Upon further investigation a technician may find the following DTC is set:

• C15AE-00 - Compressor Pressure Line Leak-.

If the vehicle is a sold vehicle built before 2/15/22 or an unsold vehicle built on or between 11/16/21 and 2/15/22, Proceed to Step 1 of the Repair Procedure.**

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 RSU VIN list, perform the repair. This RSU only applies to vehicles on the RSU VIN list.

NOTE: **Several issues could be the cause if the vehicle is on the RSU VIN list. All areas of concern that must be inspected while performing or during the repair procedure:

- Electrical connection for the Air Suspension Control Module (ASCM) is not fully seated.
- Vent hose inlet/outlet for air compressor for being properly connected (Fig. 1).



Fig. 1 Vent Hose and (ASCM) Connection

• Air lines not fully seated either front or rear suspension (Fig. 2) .





Fig. 2 Air Lines Not Fully Seated

• Front or rear ride height sensor not connected to the control arm (Fig. 3) or (Fig. 4).





Fig. 3 Front Electrical Connector





Fig. 4 Rear Electrical Connector

• Shipping caps not removed from vent hose (Fig. 5) .



Fig. 5 Shipping Caps Left On Hose

REPAIR PROCEDURE, UNSOLD VEHICLES BUILT ON OR BEFORE 11/15/21:

CAUTION! The steps in the repair procedure to deflate the system must be performed even if the air suspension system is inoperable.

- 1. Prep the vehicle for lifting it up on the hoist. Using the radio display screen go into the settings menu, then select "Suspension" than "Tire Jack Mode".
- Using the scan tool record air springs pressure values using "Component Air Mass > Pressure > Ride Height Readings".
- 3. Using the scan tool, the air pressure needs to be partially removed from all air springs. Select Air Suspension Control Module (ASCM), Misc-Function, "Deflate To Reservoir" and than select each of the four air springs, to short time deflate.
- NOTE: In the event the reservoir pressure is too high, than you must deflate to atmosphere, by performing a partial deflate, short time to atmosphere "Reservoir only".
- Verify the front air springs are partially deflated by going into "Component Air Mass > Pressure
 > Ride Height Readings" ensure pressure readings are lower than previously recorded values.
- Raise and support the vehicle. Refer to the detailed service procedures available in DealerCONNECT> Service Library under: 04 - Vehicle Quick Reference / Hoisting / Standard Procedure.
- Remove the front inner wheel liners. Refer to the detailed service procedures available in DealerCONNECT> Service Library under: 23 - Body / Exterior / Shield / Removal > Front Wheelhouse Splash Shield.
- 7. Inspect and if necessary remove the red caps (Fig. 5) from the hose and reconnect the front vent hose and electrical connector to the ASCM (Fig. 6).





Fig. 6 ASCM and Vent Hose Connections

- 8. Inspect and if necessary reconnect the front air suspension electrical connectors at the front ride height sensors (both sides) (Fig. 3).
- 9. Inspect and if necessary properly reconnect the front air suspension lines to the suspension air bag (both sides) (Fig. 2) .
- NOTE: Air line should be inserted up to the tape, allowable up to 1 mm clearance.
- 10. Inspect and if necessary reconnect the front air suspension linkage rods at the front ride height sensors (both sides).

- Install the front inner wheel liners. Refer to the detailed service procedures available in DealerCONNECT> Service Library under: 23 - Body / Exterior / Shield / Installation > Front Wheelhouse Splash Shield.
- Remove the rear inner wheel liners. Refer to the detailed service procedures available in DealerCONNECT> Service Library under: 23 - Body / Exterior / Shield / Removal > Rear Wheelhouse Splash Shield.
- 13. Inspect and if necessary reconnect the rear air suspension electrical connectors at the front ride height sensors (both sides) (Fig. 4).
- 14. Inspect and if necessary properly reconnect the rear air suspension lines to the suspension air bag (both sides) (Fig. 2).

NOTE: Air line should be inserted up to the tape, allowable up to 1 mm clearance.

- 15. Inspect and if necessary reconnect the rear air suspension linkage rods at the front ride height sensors (both sides).
- Install the rear inner wheel liners. Refer to the detailed service procedures available in DealerCONNECT> Service Library under: 23 - Body / Exterior / Shield / Installation > Rear Wheelhouse Splash Shield.
- 17. Lower the vehicle from the hoist.
- 18. Using wiTECH perform the routine "ASCM Exit Plant Mode".
- 19. Using wiTECH perform the routine, Follow the on screen prompts to Set Ride Height Level", select "Normal Ride Height".
- 20. Take the vehicle out of "Tire Jack" mode using the display screen.
- 21. Clear any DTCs that may have been set during this repair procedure. Use repair LOP (02-66-01-98) to close out the RSU.

REPAIR PROCEDURE, SOLD VEHICLES BUILT BEFORE 2/15/22 OR UNSOLD VEHICLES BUILT ON OR BETWEEN 11/16/21 AND 2/15/22:

- CAUTION! The steps in the repair procedure to deflate the system must be performed even if the air suspension system is inoperable.
- 1. Prep the vehicle for lifting it up on the hoist. Using the radio display screen go into the settings menu, then select "Suspension" than "Tire Jack Mode".
- Using the scan tool record air springs pressure values using "Component Air Mass > Pressure > Ride Height Readings".
- 3. Using the scan tool, the air pressure needs to be partially removed from all air springs. Select Air Suspension Control Module (ASCM), Misc-Function, "Deflate To Reservoir" and than select each of the four air springs, to short time deflate.
- NOTE: In the event the reservoir pressure is too high, than you must deflate to atmosphere, by performing a partial deflate, short time to atmosphere "Reservoir only".
- Verify the front air springs are partially deflated by going into "Component Air Mass > Pressure
 > Ride Height Readings" ensure pressure readings are lower than previously recorded values.
- Raise and support the vehicle. Refer to the detailed service procedures available in DealerCONNECT> Service Library under: 04 - Vehicle Quick Reference / Hoisting / Standard Procedure.
- Remove the right front inner wheel liner. Refer to the detailed service procedures available in DealerCONNECT> Service Library under: 23 - Body / Exterior / Shield / Removal > Front Wheelhouse Splash Shield.





Fig. 7 Shipping Caps Left On Hose

- Install the right front inner wheel liner. Refer to the detailed service procedures available in DealerCONNECT> Service Library under: 23 - Body / Exterior / Shield / Installation > Front Wheelhouse Splash Shield.
- 9. Lower the vehicle from the hoist.
- 10. Using wiTECH perform the routine "ASCM Exit Plant Mode".

- 11. Using wiTECH perform the routine, Follow the on screen prompts to Set Ride Height Level", select "Normal Ride Height".
- 12. Take the vehicle out of "Tire Jack" mode using the display screen.
- 13. Clear any DTCs that may have been set during this repair procedure. Use repair LOP (02-66-01-99).**

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
02-66-01-98	Air Line Suspension, Hoses and Electri- cal Connectors - Inspect and Repair (Unsold vehicles built on or before 11/15/21 only) (2 - Skilled)	6 - Electrical and Body Systems	1.5 Hrs.
02-66-01-99	Air Line Suspension, Red Caps - Inspect and Repair (Sold vehicles built before 2/15/22 or Unsold vehicles built on or between 11/16/21 and 2/15/22 only) (2 - Skilled)	6 - Electrical and Body Systems	0.5 Hrs.

FAILURE CODE:

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Service Action