



Solution

Title (customer effect) Volvo Chassis - Equipped With Volvo Active Driver Assist (VADA) With Lane Departure Warning System (LDWS) - Safety Direct Processor (SDP) Fault Code MID 209 SPN 1705 FMI 5 Active Following OEM Radio Replacement With Aftermarket Part, Radio Mute Function Inoperative - US17 And Newer

Cause A Volvo Chassis - Equipped With Volvo Active Driver Assist (VADA) With Lane Departure Warning System (LDWS) may set Active Fault Code SPN 1705 FMI 5 in the Safety Direct Module (MID 209) if the OEM radio is replaced with an aftermarket head unit.

Solution

Overview

On Volvo Trucks built with VADA with LDWS, Volvo Active Driver Assist with Lane Departure Warning System, the replacement or removal of the OEM installed radio may cause an active fault code, MID 209 SPN 1705 FMI 5. MID 209 is listed as the Safety Direct Processor in Tech Tool and “SDP” in ACOM. This fault code is for the “Mute Wire Open Circuit”. The SDP has a wire connected to the radio that mutes the radio when the lane departure warnings become active.

Repair

This issue is resolved by installing Jumper Harness part number 23215656 at the SDP in cab the overhead panel.

Procedure

1. Remove the Overhead Switch Panel
 - A. Remove the Switch Blank in the center of the panel:



B. Remove the screw holding the panel in place:



2. With the overhead switch panel removed
 - A. Locate the cream 10-pin connector:

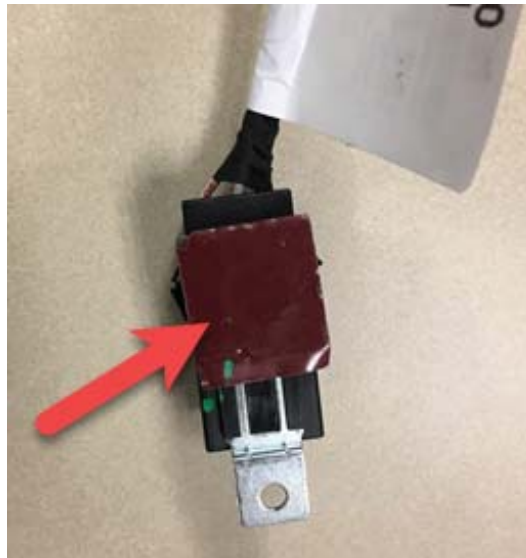


B. Disconnect the connector

3. Plug the jumper harness into the open connectors



4. Remove the plastic from the sticky tape on the jumper harness relay



5. Mount the relay in the position shown below with the sticky tape



6. Secure the harness in the overhead using zip ties as necessary



7. Reinstall the overhead switch panel.

8. Check that the DTC is now inactive.

If the Radio Mute feature does not function following the repair:

1. Locate the yellow connector that was plugged into the back of the OEM radio as shown below



A. The wire installed in the connector is the Radio Mute wire.

2. The aftermarket radio documentation will need to be reviewed to verify if the radio supports a GND Mute input.

A. If the Mute input is supported, the wire will need to be connected to the correct wire or pin in the aftermarket pigtail (supplied with the radio) or connector

Internal comments (BO)

HTML Formatting: Page break before "If the Radio Mute Feature does not function following the repair"

Function(s)/component(s) affected

Function affected radio , 8 1 0 ABS , MID 136 ABS , MID 206 – RADIO GAP , Diagnostic tool

Function Group

Function Group 368 control unit for functions concerning comfort and safety in drivers/passenger compartment , 39 miscellaneous , 593 anti-lock brake (anti-skid)

Customer effect

Main customer effect calibration/programming/pairing/missing operation , diagnostics/methodology , fault code/display

Lights/Messages on information display

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Fault code(s)

US10 Fault Codes SPN 1705 FMI 5

NA_MIDs MID 209

Conditions

Vehicle operating mode when driving , when stationary

Frequency of occurrence of problem always

Administration

Author RU4469V

Dealer ID RU4469V

Last modified by RU4469V

Creation date 01-11-2017 20:11

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Status Published

NA_VOLVO_Vehicle_Range

NA_VOLVO_Vehicle_Range VNR , VNL , VHD , VAH
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Emission Standard

Emission Standard OBD2017 , US17 GHG
