

Radio, Replacement
VN, VT, VHD, VAH

FSB 392-004, Radio, Replacement

(December 2016)

On Volvo Trucks built between October 6, 2008 and August 18, 2014, with a factory installed programmable radio, the old radio may no longer be available for purchase. To upgrade from a GLAD format radio to a DEA500 format radio follow the following instructions.

Necessary Part Numbers

Refer to the tables below to determine which parts and part numbers are necessary to perform this procedure.


Replacement Radio	
Original Radio	New Radio Part Number
Base Level Radio (No logos on top right corner)	22949606
Mid Level Radio (MP3 logo on top right only)	22949605 (*See note below)
Mid Level Radio (MP3 and Bluetooth logo on top right)	22949605
Mid Level Radio (MP3, Bluetooth, and Satellite Radio logo on top right corner)	22949604



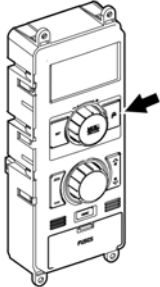
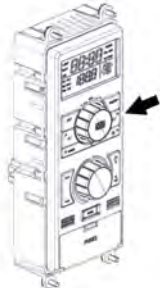
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Note: For customers upgrading from the Mid Level Radio without Bluetooth, the replacement radio will include Bluetooth capability. An optional microphone kit can be installed to enable the Bluetooth telephone functionality.

Additional Optional Microphone Kit (For trucks without a microphone currently installed.)	
Microphone Kit Type	Microphone Kit Part Number
Installed in empty switch hole	PNSPP603846
Installed with double stick tape	PNSPP604240

Additional Optional Blank Switch	
Feature Set	Blank Switch Part Number
USB/Aux plug	20410947  W8115799

Note: If the customer accepts to lose the “radio on/off” feature from the bunk controls, jumper harness part number 22351684 may be used. All other controls will still be available. If the customer would like to retain the “radio on/off” feature in the bunk controls, a new Living Environment Control Module (LECM) and sleeper harness overlay will be required. Refer to the tables below to determine the required parts and “Repair B” for instructions on installing a new LECM and sleeper overlay harness.

Radio Jumper Harness	
Feature Set	Jumper Harness Part Number
Daycab or Sleeper Cab with out Bunk Controls  W3116252	22351684
Sleeper Cab with Bunk Controls  W3116253	22473834

Replacement LECM	
Original LECM	New LECM Part Number
Original LECM	22382004

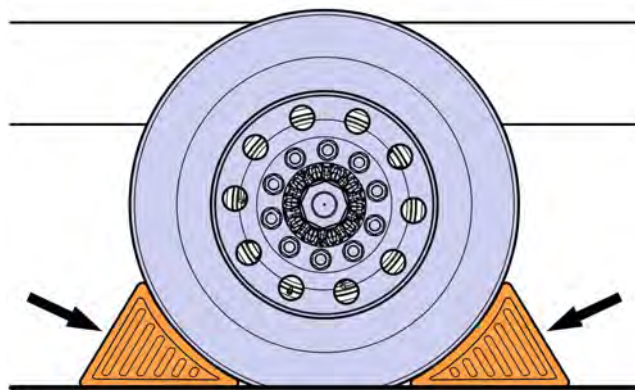
Sleeper Harness Overlay	
Truck Model	Sleeper Overlay Part Number
VNM 430, VNL430	22456393
VNM 630VNL 630VNL 670	22456394
VNL730	22456395
VNL780	22471335

Decommissioning the Truck for Repair

You must read and understand the precautions and guidelines in Service Information, group 30, "General Safety Practices, Electrical" before performing this procedure. If you are not properly trained and certified in this procedure, ask your supervisor for training before you perform it.

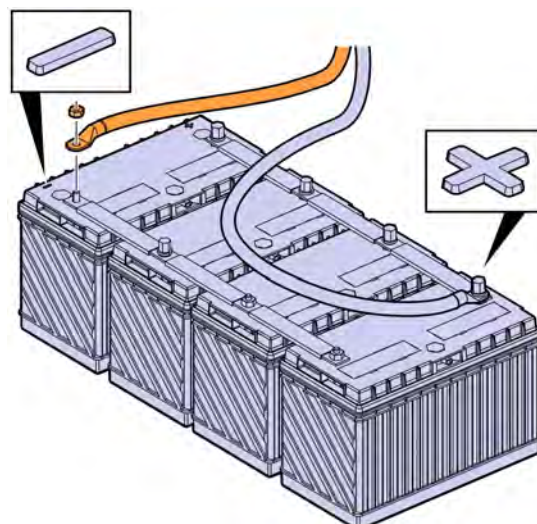
NOTE: Information is subject to change without notice. Illustrations are used for reference only and can differ slightly from the actual vehicle being serviced. However, key components addressed in this information are represented as accurately as possible.

- 1 Park the vehicle on a flat and level surface.
- 2 Apply the parking brake.
- 3 Place the transmission in neutral or park.
- 4 Install the wheel chocks.



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- 5 Disconnect the cable from the battery's negative terminal.

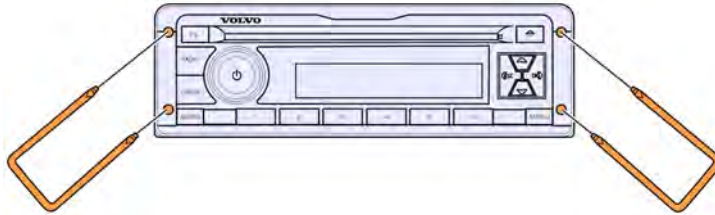


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Repair A

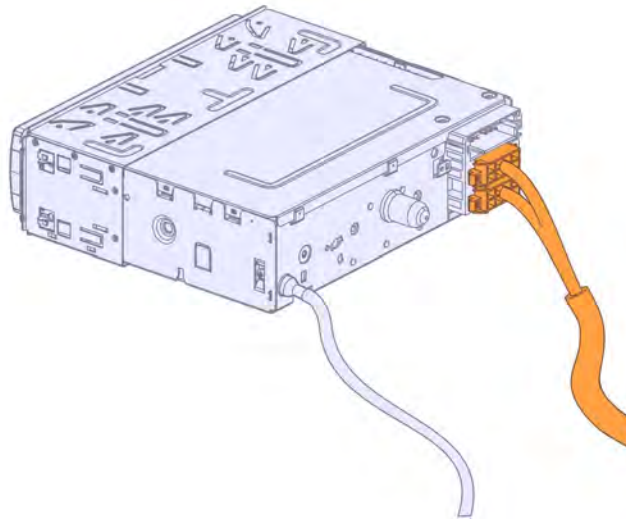
Radio, Replacement Procedure

- 1 Remove the Radio using a radio removal tool.



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- 2 Disconnect the main harnesses from the radio and discard the radio
- 3 Connect the new jumper harness to the main harness and the new radio.



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- 4 Install the new radio.

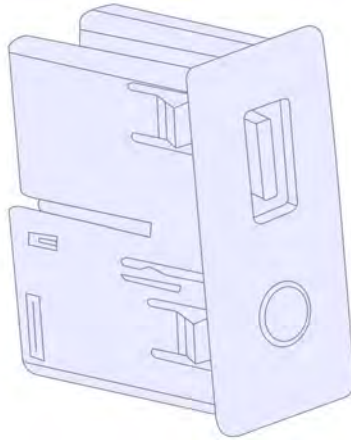


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USB/Aux Input, Removal

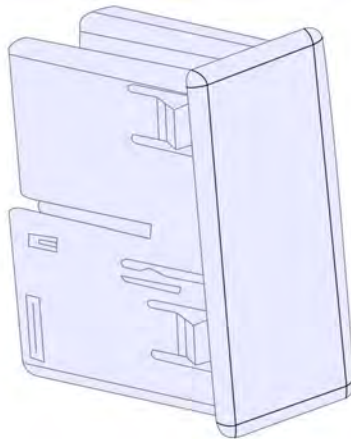
Note: Some trucks are equipped with a USB/Aux port on the instrument panel. Use the following instructions to remove it.

- 1 Remove USB/Aux input socket.



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- 2 Disconnect and scrap the USB/Aux socket.
- 3 Tie back the remaining harness with a cable tie.
- 4 Install blank switch panel.



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Repair B

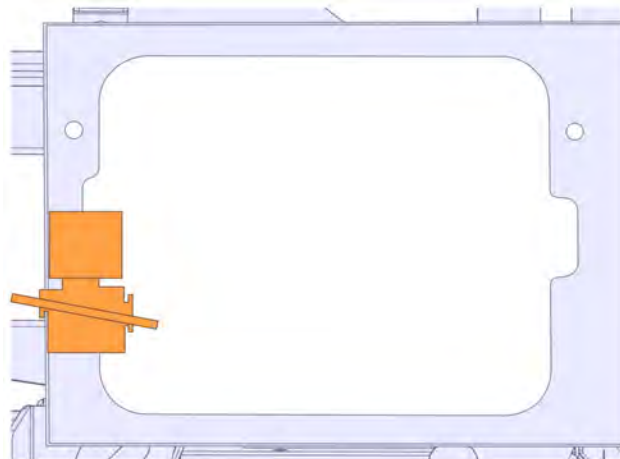
Interior Components, Removal

Note: The use of an additional technician may be necessary to safely remove large components.

- 1 Remove the threshold plate.
- 2 Remove the fire extinguisher.
- 3 Remove the driver's seat belt attachment point to the seat and floor.
- 4 Disconnect the air line, seat harness, and shifter harness.
- 5 Remove the driver's seat with help as needed.
- 6 Remove the cup holder trim panel over the dog box.
- 7 Remove the driver side lower panels covering the brake and accelerator pedals.
- 8 Remove the interior cab divider trim.
- 9 Remove the driver's side rear grab handle.
- 10 Remove the driver's side seat belt retractor.
- 11 Remove the side vent and LECM trim panel.
- 12 If equipped, remove the refrigerator.
- 13 If equipped, remove the driver side cabinets.
- 14 Remove the driver's side door seal.
- 15 Pull up the floor mat from the driver side enough to access the sleeper harness.
- 16 Pull back the cab wall to expose the harness.

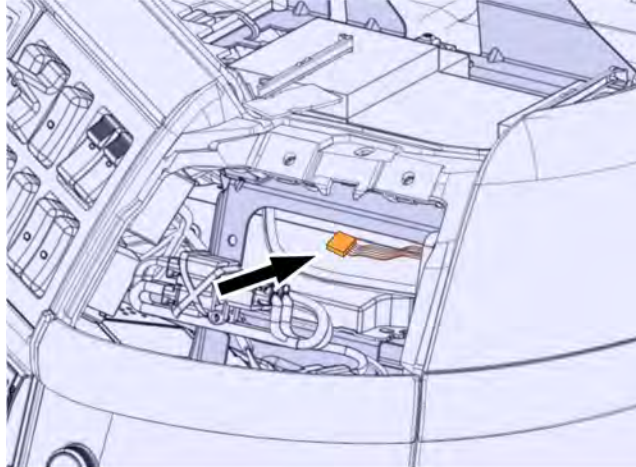
LECM Overlay and Jumper Harness, Install

- 1 Connect the jumper harness to the main harness radio connectors.
- 2 Route the relay to the FRC frame and secure the relay to the frame with a cable tie.



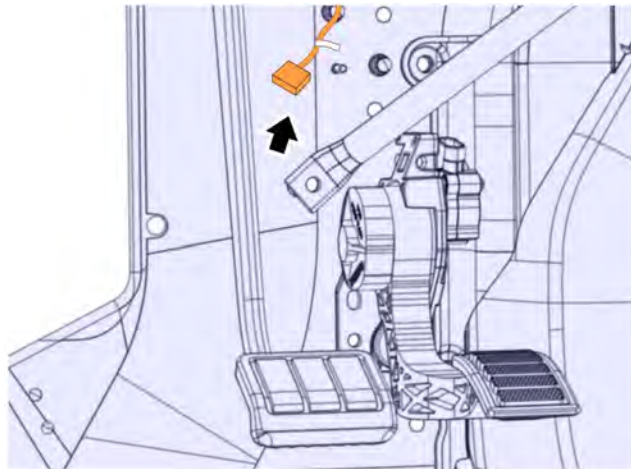
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- 3 Underneath the FRC, identify the ground splice pack "SKX03F"



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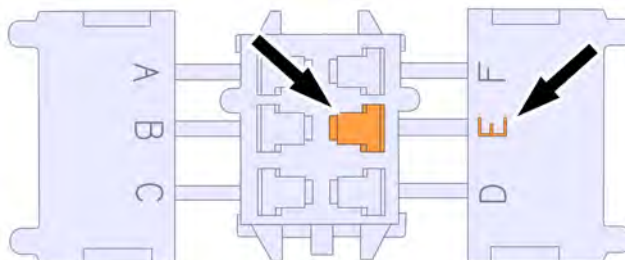
- 4 Insert the remaining sleeper overlay terminal into any open terminal in the ground splice pack making sure to remove and install the terminal lock as necessary..
- 5 Route the harness towards the accelerator pedal area.
- 6 Above the accelerator pedal, identify main harness connector "MCSL5."



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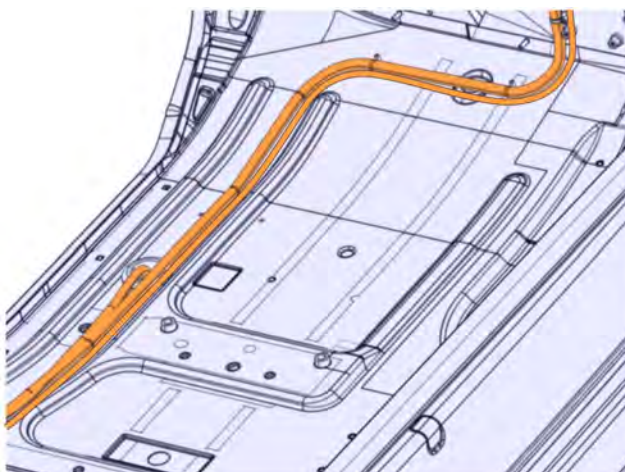
- 7 Disconnect the connector and identify the female end.

- 8 Insert sleeper overlay terminal labeled "MCSL5:E" into cavity "E" on the female MCSL5 connector.



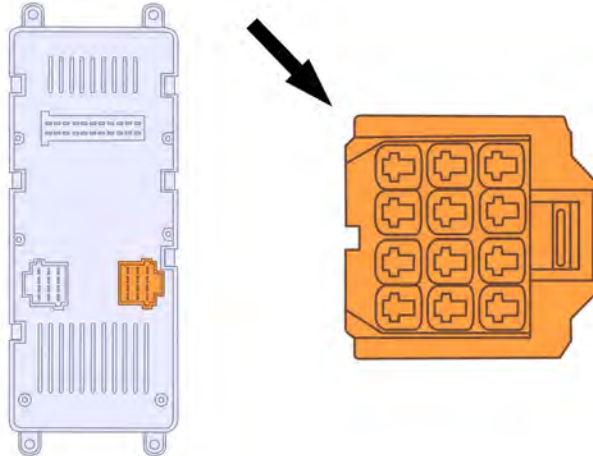
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- 9 Route the end labeled "LECM_C4" along the sleeper harness towards the sleeper and up through the hole for the LECM.



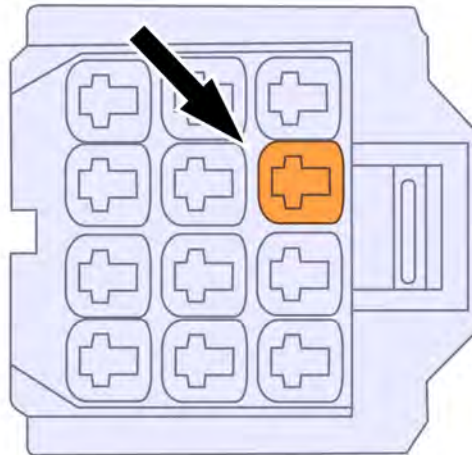
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10 Locate connector "C" on the LECM harness.



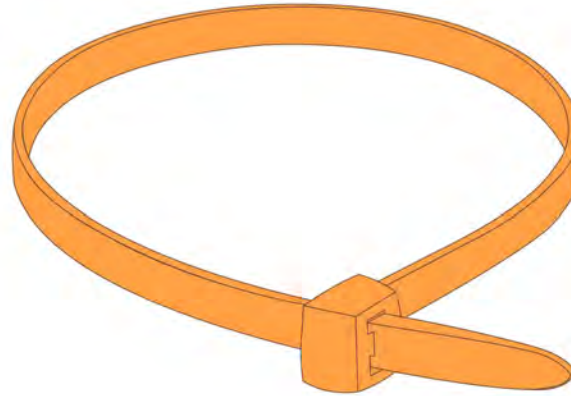
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11 Insert the overlay harness terminal labeled "LCEM_C4" into cavity 4.



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12 Use cable ties to secure the sleeper overly as necessary.



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13 Test the system for functionality.

Interior Components, Install

Note: The use of an additional technician may be necessary to safely install large components.

- 1 Put the cab wall back in place.
- 2 Install the floor mat.
- 3 Install the driver's side door seal.
- 4 If equipped, install the driver's side cabinets.
- 5 If equipped, install the driver's side refrigerator.
- 6 Connect the connectors to the new LECM.
- 7 Install the new LECM and vent trim panels.
- 8 Install the driver's side seat belt retractor and torque to 45 +/- 5 Nm.
- 9 Install the grab handle and torque to 22 +/- 3 ft-lbs.
- 10 Install the interior cab divider trim.
- 11 Install the lower panels covering the accelerator pedal.
- 12 Install the cup holder trim panel over the dog box.
- 13 Install the driver's seat with help as needed.
- 14 Connect the seat air line, seat harness, and shifter harness.
- 15 Torque tighten the seat mounting bolts to 48 +/- 8 Nm.
- 16 Install the driver seat belt bolt to the seat.
- 17 Torque tighten the driver seat belt bolt to 45 +/- 5 Nm.
- 18 Install the fire extinguisher.
- 19 Install the threshold plate.

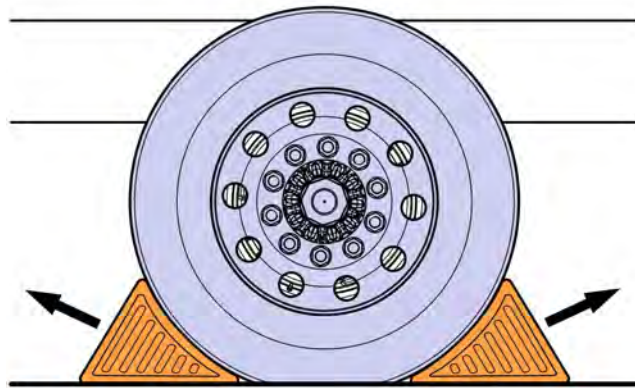
Vehicle Programming

Note: Required for all vehicles.

- 1 Connect the battery.
- 2 Connect the vehicle to tech tool.
- 3 Run accessory kit number 85151224 to update central systems. No further ECU programming is required.

Commissioning the Truck for Operation

- 1 Remove the wheel chocks.



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