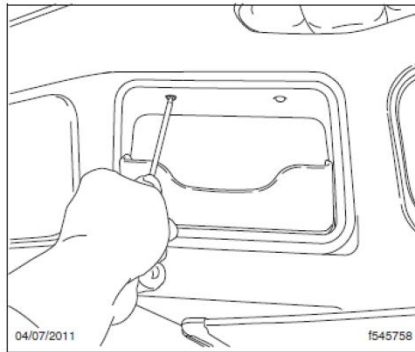


Video Radar Decision Unit Removal and Installation
Removal

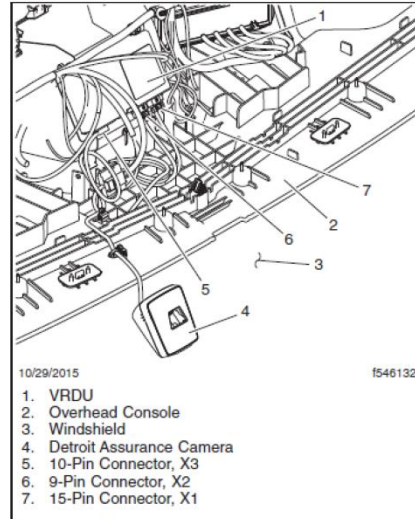
1. Park the vehicle, shut down the engine, and apply the parking brakes. Chock the tires.
2. Disconnect the batteries.
3. Remove the sunglass holder from the overhead console by removing the two mounting screws. See [Fig. 1](#).


Fig. 1. Sunglass Holder Removal

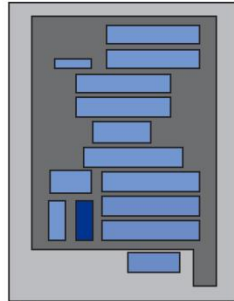
4. If necessary, remove the Virtual Technician to gain access to the VRDU. Refer to [Section 54.13](#), [Subject 100](#) for more information
5. Disconnect the three connectors from the Video Radar Decision Unit (VRDU). See [Fig. 2](#).
6. Remove the VRDU from the mounting bracket.

Installation

1. Position the VRDU on the mounting bracket.
2. Install the three connectors. See [Fig. 2](#).
3. If previously removed, install the Virtual Technician.
4. Connect the batteries.
5. Install the sunglass holder in the overhead console.
6. Connect the vehicle to DiagnosticLink and program the new VRDU.


Fig. 2. VRDU Assembly

7. Test the operation of the VRDU.
8. Align the radar. Refer to [Subject 120](#) for the alignment procedure.

Video Radar Decision Unit (VRDU) ECU


07/25/2016

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Module: 736

The video radar decision unit (VRDU) ECU is located below the powertrain CAN starpoint connector.

Removal

1. Park the vehicle, shut down the engine, and apply the parking brakes. Chock the tires.
2. Remove the electronics bay cover and the passenger-side lower dash cover. Refer to [Section 60.06](#) in this manual for instructions.
3. Remove the vehicle power distribution module (VPDM) from the front of the electronics bay. Refer to [Section 54.08, Subject 100](#) for instructions.
4. Remove the connectors from the VRDU.
5. Press the VRDU ECU firmly towards the back of the electronics bay to release the ECU from the forward mounting slots, then lift the ECU.
6. Remove the VRDU ECU from the vehicle.

Installation

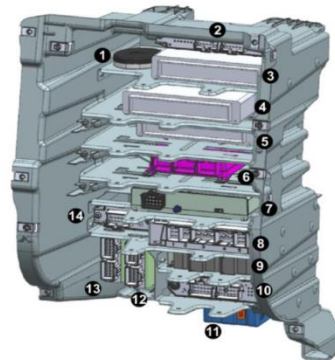
1. Position the VRDU ECU in the electronics bay, then press the ECU firmly towards the back of the slot. Lower the ECU until it is firmly seated behind the mounting tabs.
2. Connect the electrical connectors to the VRDU.

3. Install the VPDM. Refer to [Section 54.08, Subject 100](#) for instructions.
4. Install the dash panels. Refer to [Section 60.06](#) in this manual for instructions.

Related Content

For more information on the VRDU, refer to the following information:

- Assistance CAN in the **Datalinks** section of the *New Cascadia Electrical System and Troubleshooting Manual* for connector and pin locations for the assistance CAN. The VRDU is the primary gateway for the assistance CAN data-link.
- Detroit Assurance in the **Driver Assistance and Safety Systems** section of the *New Cascadia Electrical System and Troubleshooting Manual* for a description of the Detroit Assurance vehicle safety system; the VRDU is the primary ECU in the Detroit Assurance system.



07/25/2016

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1. Truck Data Center Antenna
2. Chassis CAAN Starpoint Connector
3. Truck Data Center ECU
4. Expansion Module
5. Expansion Module
6. Electronically Controlled Air Suspension ECU
7. Integrated Predictive Powertrain Control
8. Common Powertrain Controller ECU
9. Antilock Braking System ECU
10. Cabin CAN Starpoint
11. Central Gateway
12. **Video Radar Decision Unit ECU**
13. Expansion Module
14. Powertrain CAN Starpoint Connector