

Dual DVD Rear Seat Entertainment Headrest Package Installation

Table 1: [Kit Contents](#)

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Table 4: [Dual DVD Rear Seat Entertainment Headrest Package Installation](#)

Installation Instructions Part Number

23139991

Kit Contents

Qty	Description
2	Headrest Assembly
1	Remote Control
4	Cables 1, 2 (A, B)
2	Cable #3 (A,B)
1	DVD Jumper Harness
1	Metal Wire Puller
1	Owner's Manual
2	IR Headphones
6	AAA Batteries
1	Control Box With Double Back Foam Tape
1	Hardware Bag
1	Installation Instructions
1	Quickstart Guide
4	Clamps
2	T-Tap
4	Head Restraint Guide

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Hardware Bag Contents

Qty	Description
4	10-Inch Wire Ties
8	6-Inch Wire Ties
3	Wire Tie Bases

Additional Items Needed for Installation

Electrical Tape

[Recommended Tools](#)

Safety Tools

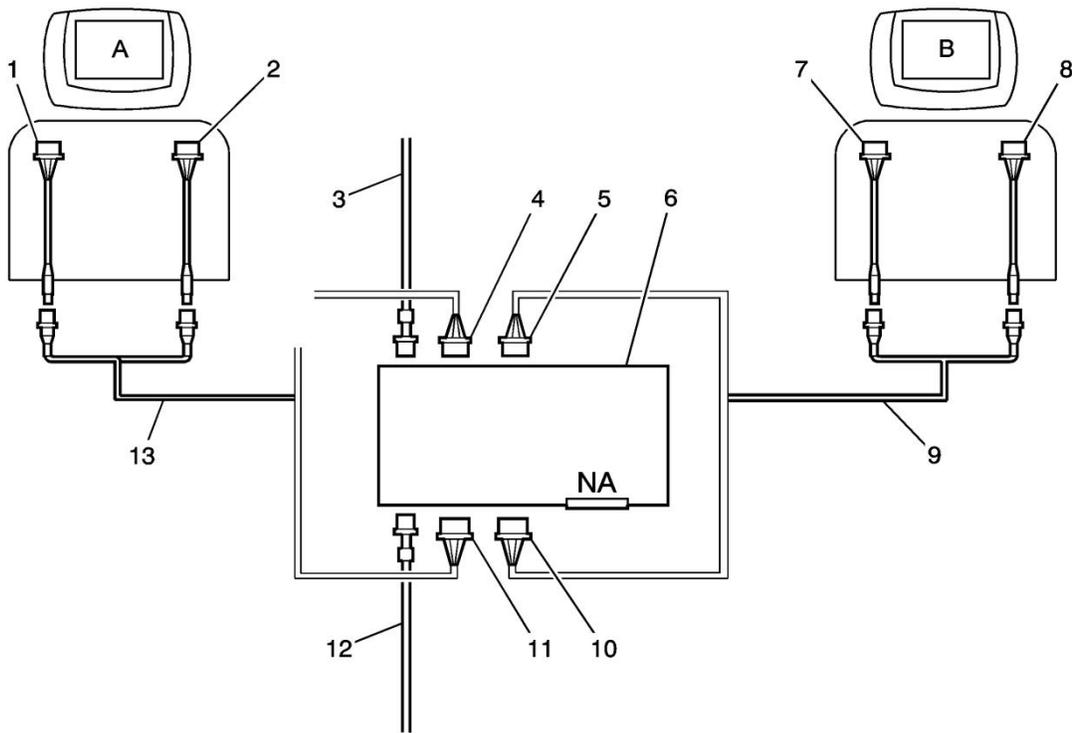
- Seat/Floor Cover
- Blankets

Installation Tools

- Pliers
- Nylon Trim Removal Tool
- Flat Head & Phillips Screwdriver
- T20 Torx-Head Screwdriver
- Wire Harness Terminal Picks GM Part Number 12094429 and 12094430
- 10mm Socket Wrench
- Wire Cutters

[Recommended Sequence](#)

1. Install the Wiring and Module.
2. Remove Factory Headrest.
3. Install Dual DVD Headrest.



DVD System Wire Description

Callout	Description
1	Signal Cable 1A
2	Signal Cable 2A
3	FM Antenna Cable
4	Signal Input (White)
5	Signal Input (Blue)
6	Control Box
7	Signal Cable 1B
8	Signal Cable 2B
9	Signal Cable 3B
10	Signal Out (Black)

Callout	Description
11	Signal Out (Red)
12	Jumper Harness to Vehicle Power
13	Signal Cable 3A

[Installation Sequence](#)

Important: After safety mandated preparatory steps have been taken, the installation sequence is the suggested method for completing the accessory installation. In some instances, the suggested sequence is written for one associate to install and in others the sequence is given as part of a team accessory installation. Unless otherwise stated in the document, the associates may perform the installation steps in any order to make the installation as efficient as possible while maintaining consistent quality.

[Pre-Installation Precaution](#)

Use seat and floor protectors to avoid damage to surfaces.

VIN is communicating to module over serial data, If LOC shows on radio, Reprogram radio.

[Battery Disconnect \(Recommended\)](#)

Disconnect the negative battery cable. Refer to [Battery Negative Cable Disconnection and Connection](#).

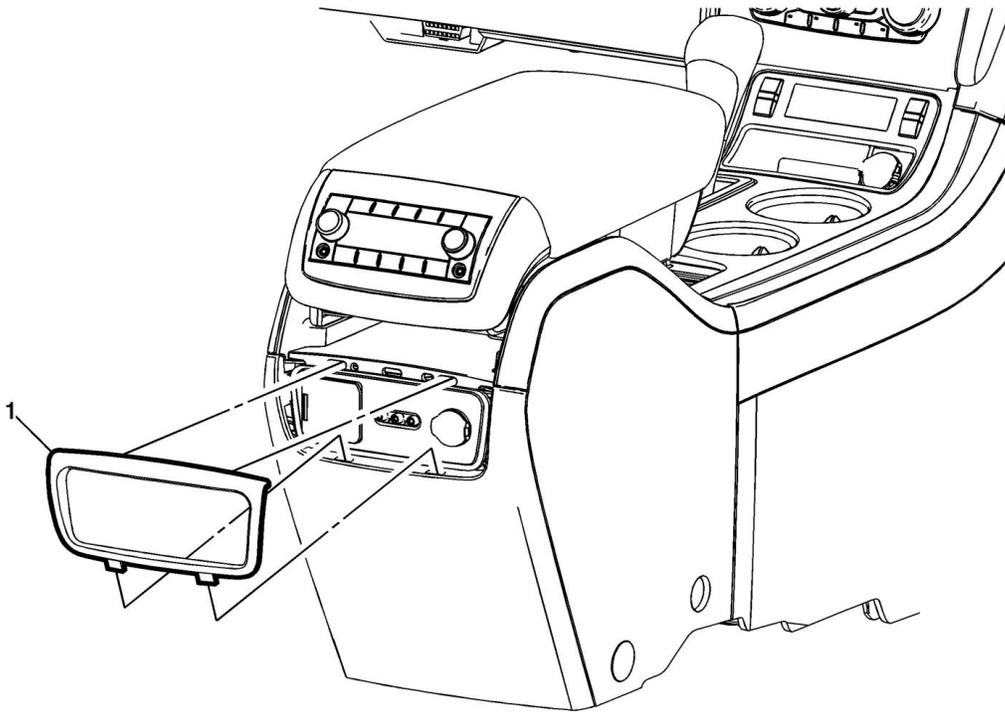
Note: It is recommended to apply battery charger to maintain charge in battery while installing.

Note: For power seats, it will be necessary to reconnect battery during the following procedure to adjust the seat for/aft position.

Tighten

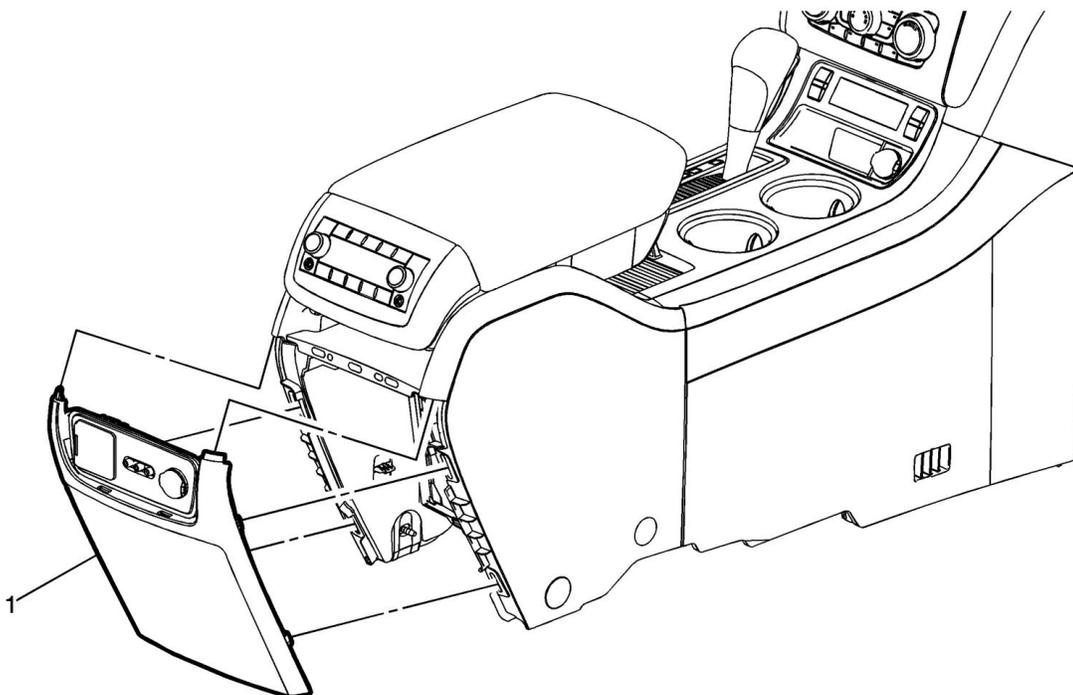
When re-connecting negative battery cable, tighten the nut to 9 Y (80 lb in).

[Install DVD Jumper Harness Connector Wiring \(Included in Kit\)](#)

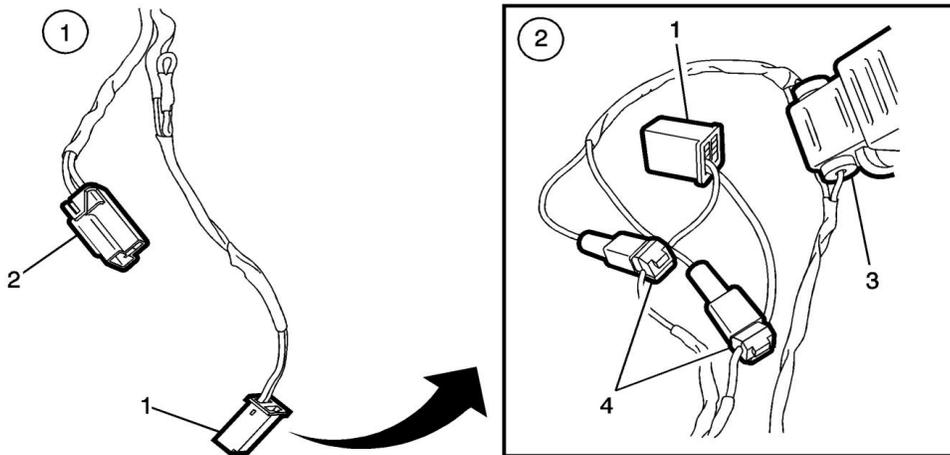


1. Remove front floor console accessory trim plate applique.

Use a flat-bladed plastic trim tool in order to release the front floor console accessory trim plate applique (1) from the front floor console assembly.

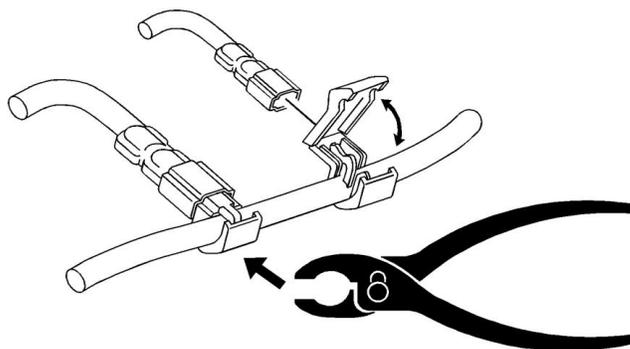
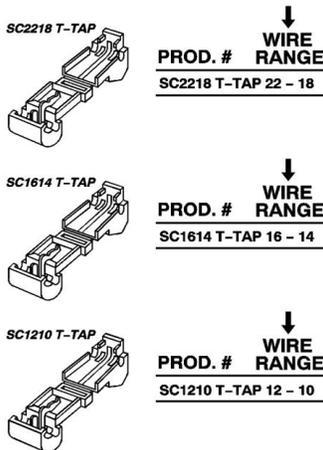


2. Disengage retaining tabs and remove the front floor console rear trim panel (1) from the front floor console.

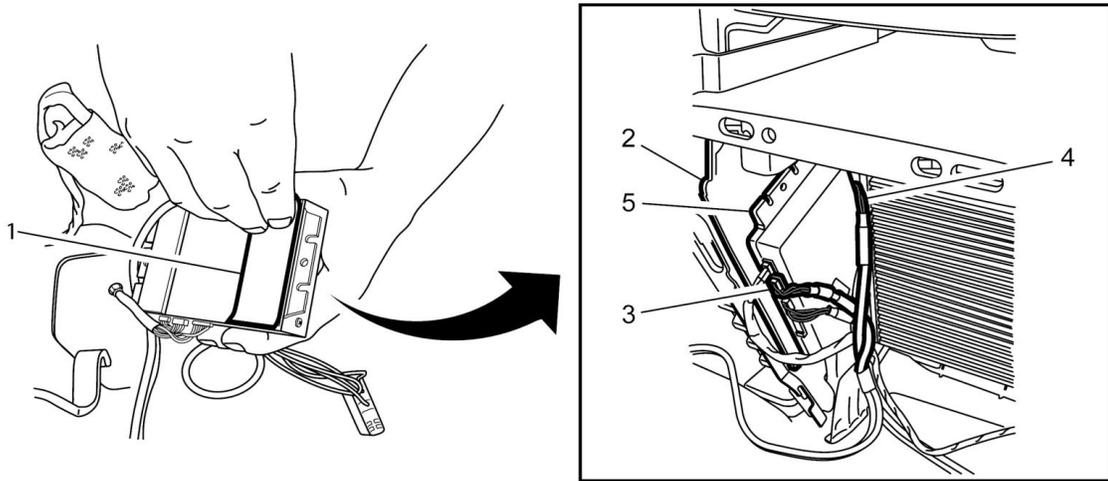


3. Disconnect dual USB charge connector (1) and accessory power outlet connector (2) from the floor console rear trim panel.
4. Using the T-Taps (4) supplied with the accessory package, install the jumper harness wire with the in-line fuse (3) to the dual USB charge connector (1) wire from cavity #6 and install the jumper harness ground wire to the dual USB charge connector wire from cavity #4.

T-Tap Connector Installation Instruction

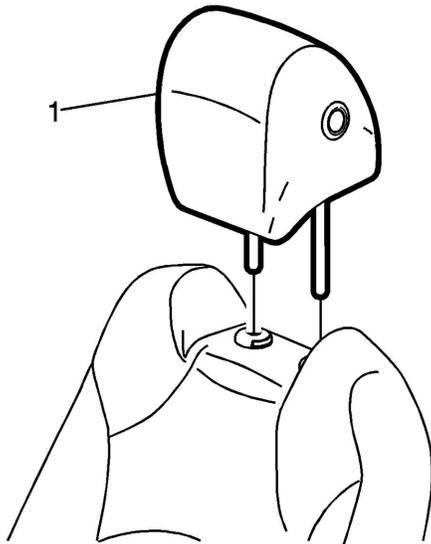


[Install DVD Control Bo and Wiring](#)



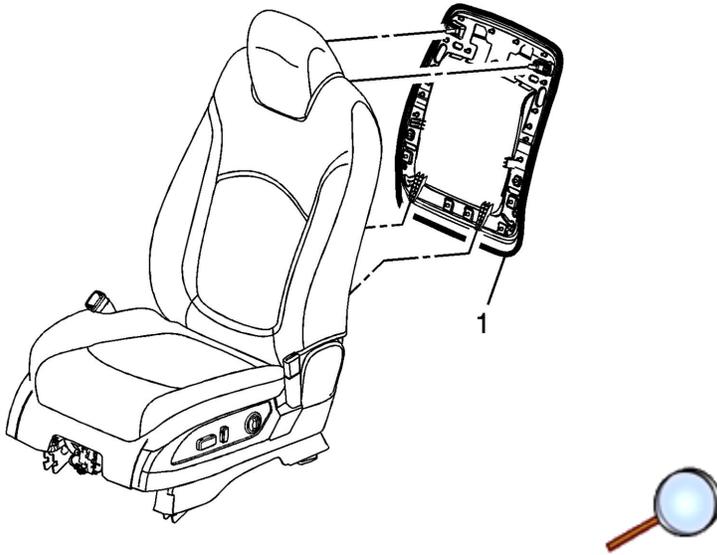
1. Connect cables 3A, 3B, jumper harness and FM module antenna wire to control box (connectors are color coded).
2. Peel off the form sticky tape (1) from the control module and stick the control module (5) to the left side wall of the floor console main compartment (2).
3. Route cable 3A (RED and WHITE) from the control box underneath the console toward the outer side (3) and cable 3B (BLUE and BLACK) from the control box underneath the console toward the inner side (4).
4. Use wire ties to secure the cables/jumper harness.
5. Re-install the floor console rear dual USB charge port trim panel and rear APO trim plate.

[Remove Factory Headrest](#)



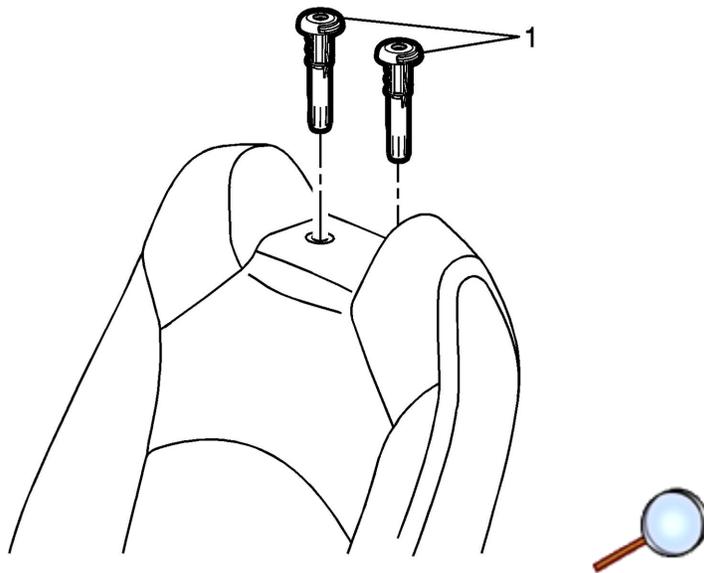
Remove the driver and passenger head restraint (1). Refer to [Driver or Passenger Seat Head Restraint Replacement](#).

[Driver or Passenger Seat Back Cushion Finish Panel Removal](#)



Remove the driver and passenger front seat cushion finish panel (1). Refer to [Front Seat Back Cushion Finish Panel Replacement](#).

[Remove and Replace Head Restraint Guide](#)



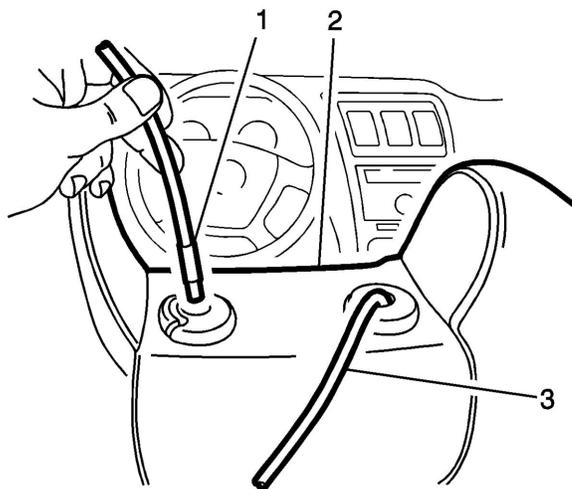
Remove and replace the driver and passenger head restraint guides (1) with supplied head restraint guides with accessory package. Refer to [Driver or Passenger Seat Head Restraint Guide Replacement](#).

[Install Video Headrest](#)

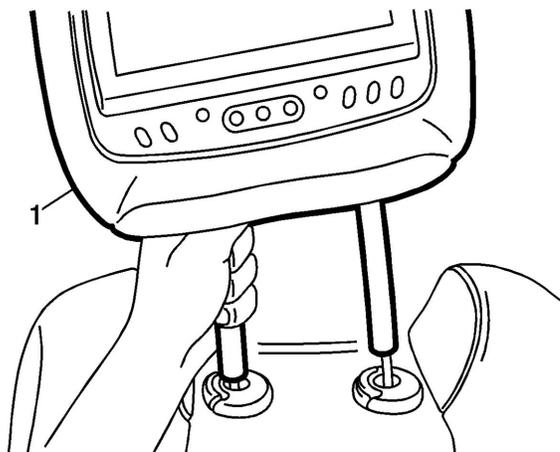
Driver and Passenger DVD Headrest Identification

The cable with RED/WHITE connector ends is Driver DVD headrest.

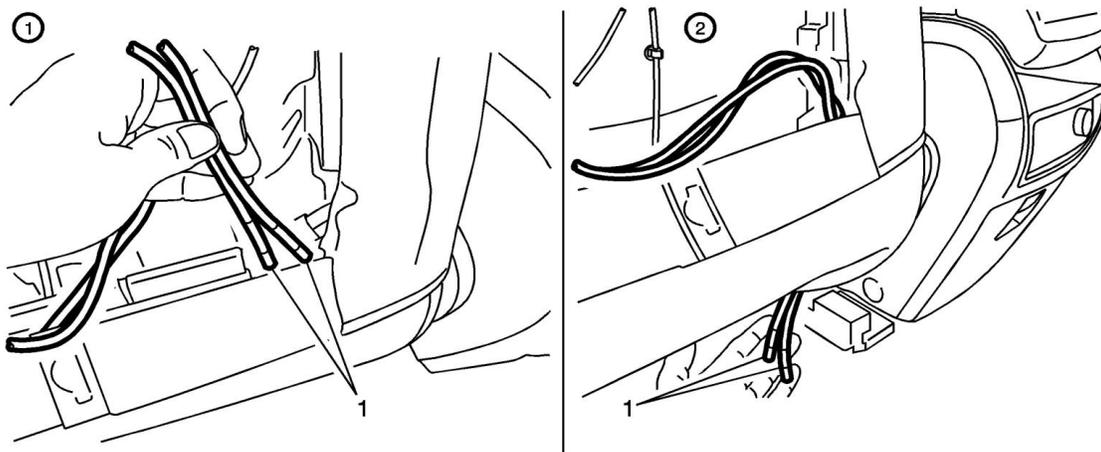
The cable with BLUE/BLACK connector ends is Passenger DVD headrest.



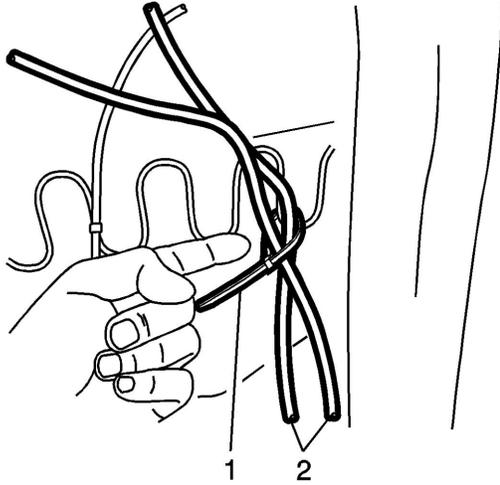
1. Insert cables 1A (1) and 2A (3) into holes at top of driver seat (2).



2. Install DVD headrest (1) and keep headrest in the up most position.

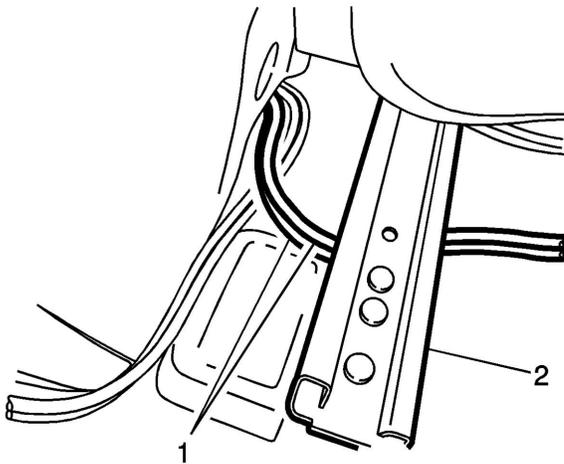


- Route cables (1) together along inboard side of seatback and exit out of the bottom of right side of seat following OEM harness.

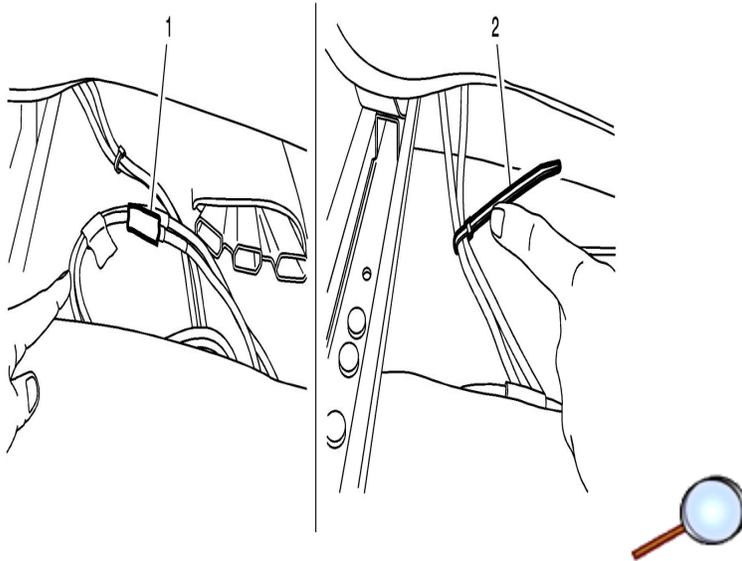


- Wire tie (1) cables (2) at two or more places to prevent rattle and trim excess length.
- Repeat for passenger side video headrest.

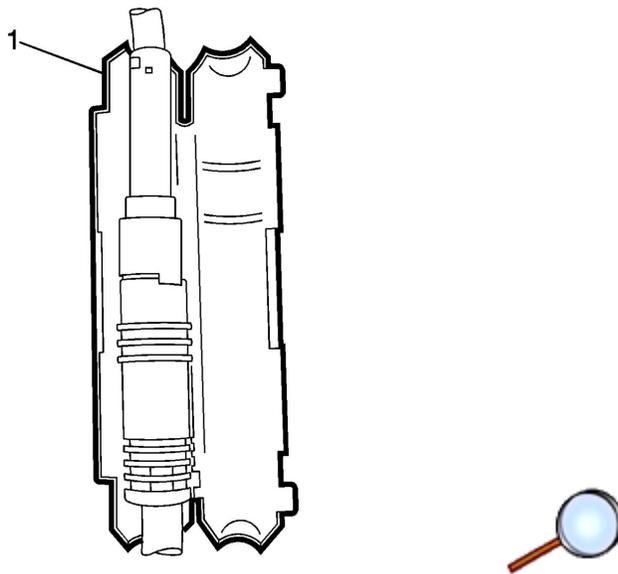
Final Wiring Operation



- Route cable 3A (driver side) (1) and cable 3B (passenger side) (1) from the control box underneath seat tracks (2).



2. Connect other end of cable 3B to cables 1B and 2B (1) under the passenger seat and wire tie (2). Trim excess length.



3. Use two clamps (1) to insure that connection is secure and stow excess underneath carpeting.
4. Repeat process to connect cable 3A to cable 1A and 2A under the driver seat.

Complete Installation

1. Install 2 AAA batteries in the remote.
2. Install 2 AAA batteries in each headphone headset.
3. After Functional Verification in the next section, store owners manual in glove box. Store remote and headphones back in small box container.
4. Reverse removal procedures to reinstall trim and seats. After reinstallation, make sure DVD system is functioning properly.
5. Reconnect negative battery cable.

Functional Verification

Dual DVD Rear Seat Entertainment Headrest Package Installation

Accessory Function Checks	Look for
Turn vehicle ignition to ON, depress power button on each headrest monitor	Monitor should power on, start up screen should appear on screen.
Insert a DVD into each monitor, press enter.	Both DVD should begin playing.
Listen with wireless headphones. Be sure to set to channel "A" to listen to monitor "A" and channel "B" to listen to monitor "B"	Audio should be heard through vehicle headphones.
Depress "eject" button.	Disc should eject.
Turn on vehicle radio and set station to station selected on FM Transmitter.	Audio from monitor "A" should be heard through vehicle speakers.

[Video Entertainment System Troubleshooting Hints](#)

Schematic Reference: Video System Schematics

- Many conditions that affect video system operation may be corrected without removing the DVD Headrest Assembly or the DVD Control Box Assembly. Make sure to understand all features of system operation before beginning the diagnosis of the system. Verify the condition and follow the diagnostic procedures in order to isolate and correct the condition.
- Be sure the vehicle battery is fully charged before beginning video entertainment system diagnosis.

Video or Audio Distortion

The manufacturing process for producing DVD's does not have the same quality control processes in place that compact disk manufacturing does. If there are video or audio quality problems with an individual DVD, try playing that disk in another DVD player. If the quality is poor for both players, return the disk to the place of purchase and request an exchange. If the quality problem is only seen in one of the players, examine the disk for scratches dirt or smudges and attempt to clean the disk with one of the disk cleaning systems that are commercially available. Video or audio distortion during auxiliary playback can often be attributed to the DC to AC inverter that is used to power the auxiliary device. The power inverters tend to introduce noisy signals into the vehicle electrical system.

DVD Player Inoperative (Power LED Not Illuminated)

Note: The following information list the most probable cause of the concern to the least probable cause followed by the appropriate test for that condition.

1. The ignition is not turned on.
 - ⇒ Turn the ignition on.
2. Power and ground not connected to vehicle.
 - ⇒ Verify power at Vehicle Body Harness Cavity #19 (RED) wire and ground at passenger's side B pillar ground.
3. Cable 1A (Red Cable) not connected to Cable 3A (if not receiving power to Monitor A-Driver Side) or Cable 1B (Black Cable) not connected to Cable 3B (if not receiving power to Monitor B-Passenger Side).
 - ⇒ Make sure cables are connected.
4. Cable 3A (if not receiving power to monitor A – Driver side) not connected to control box or cable 3B (if not receiving power to monitor B – passenger side)
 - ⇒ Check connection to control box.

5. Jumper Harness is not connected to Control Box.

⇒ Verify connection to DVD Control Box. Check for power at end of Jumper Harness (white connector 3-way) at Control Box. If no power at Control Box, check the fuse and the relay on the Jumper Harness. If no power at Control Box, check power at vehicle body harness cavity #19 (RED) wire. of power at control box – replace the control box.

6. Remove monitor that is not receiving power.

⇒ Check power at Red Connector (Monitor A-Driver Side) or power at Black Connector (Monitor B-Passenger Side) or power at BLACK connector (monitor B – passenger side). Circuits are located at cavity 5 and 6 (RED and BLACK wires are adjacent to each other). If power and ground are verified at connectors, replace the DVD Electronics (Monitor). Refer to DVD Electronics Replacement.

7. DVD Electronics inoperative.

⇒ Replace the DVD Electronics. Refer to DVD Electronics Replacement.

DVD Player Inoperative (Power LED Illuminated)

Note: The following lists the most probable cause of the concern to the least probable cause followed by the appropriate test for that condition.

1. The DVD Player is not turned on.

⇒ Press the Power Button to turn unit on.

2. Press the play button.

⇒ If no disc in unit, NO DISC message appears on display.

3. Insert Disc. If unit does not accept disc.

⇒ Replace DVD Electronics. Refer to DVD Electronics Replacement.

DVD Display Inoperative (LEDs Illuminate but No Video)

Note: The following lists the most probable cause of the concern to the least probable cause followed by the appropriate test for that condition.

Note: Inspect the DVD wires for damage at the connectors (control box end and monitor end). If 3A or 3B wires are damaged, replace the cables only. If the headrest wires are damaged, replace the headrest only and not the monitor.

1. Verify that the correct source is selected.

⇒ Monitor A or Monitor B should appear in the upper right hand corner of display.

2. Cable 2A (White Cable) not connected to Cable 3A (if no display on Monitor A-Driver Side) or Cable 2B (Blue Cable) not connected to Cable 3B (if no display on Monitor B-Passenger Side).

⇒ Make sure cables are connected.

3. Cable 3A (if not receiving power to Monitor A-Driver Side) or Cable 3B (if not receiving power to Monitor B-Passenger Side).

⇒ Cables not connected to Control Box.

4. Remove monitor that is not receiving video.

⇒ Verify that connectors are connected to the Monitor. If no video is displayed, replace the DVD Electronics (Monitor). Refer to DVD Electronics Replacement.

Cannot Hear Audio Through Vehicle Speakers (FM Modulation Inoperative)

Note: The following lists the most probable cause of the concern to the least probable cause followed by the appropriate test for that condition.

1. FM Transmitter not turned on.

⇒ Turn on the FM Transmitter using the Remote Control. Press the DVD Button (A) on the Remote Control to control Monitor A-Driver Side Headrest. Press the Sound Around On/Off Button. "CH On" should appear on Monitor A display.

2. Radio and DVD Unit are not set to the same FM Frequency.

- ⇒ Press the Sound Around Select button to select a frequency (88.3 MHz, 88.7 MHz, 89.1 MHz, 89.5 MHz, 89.9 MHz, or 90.3 MHz). The frequency should appear on Monitor A display in the upper right hand corner. Tune the radio to the frequency selected. If no DVD audio over speakers, verify audio by selection another radio frequency. If no DVD audio over speakers, replace the DVD Control Box.

Video Entertainment System Wireless Headphone Inoperative

Note: The following lists the most probable cause of the concern to the least probable cause followed by the appropriate test for that condition.

1. Volume control on the wireless headphone set is turned all the way down.

- ⇒ Adjust the volume control on the headphones.

2. Incorrect channel selected.

- ⇒ To hear audio from Monitor A-Driver Side, select Channel A. To hear audio from Monitor B-Passenger Side, select Channel B.

3. Dead batteries or batteries placed incorrectly in the wireless headphone set.

- ⇒ Turn on power the headphone set. If the headset indicator does not turn on, place batteries in correctly or replace the batteries in the headset as needed.

4. Make sure headphone is in line of sight and no obstructions of the Monitor being listened from.

5. Faulty headphone set.

- ⇒ Test the operation of the system using a known good headphone set. If operation is OK, replace the faulty headphone set.

6. Inoperative infra-red transmitter in the (DVD Monitor (s)).

- ⇒ Replace the DVD Electronics. Refer to DVD Electronics Replacement.

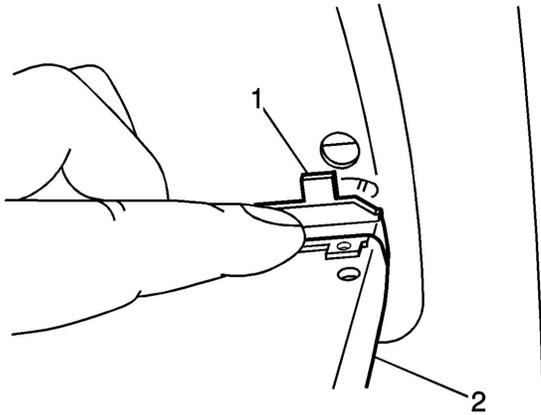
Video Entertainment System Remote Control Inoperative

Note: The following lists the most probable cause of the concern to the least probable cause followed by the appropriate test for that condition.

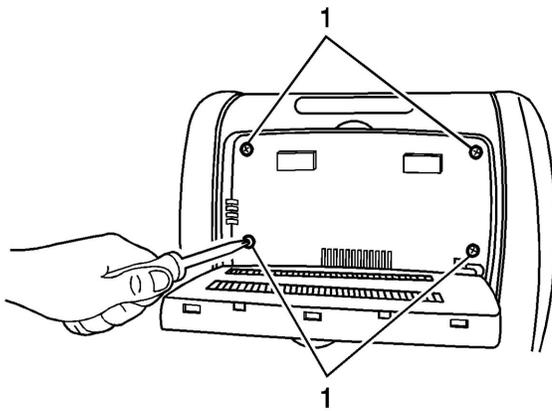
The buttons on the video remote control do not operate the video disc player, but the buttons on the DVD Headrest Monitor Control Panel operate normally.

- ⇒ Press DVD A button to control Monitor A or press DVD B button to control Monitor B.
- ⇒ Dead batteries or batteries placed incorrectly in the video remote control. Place batteries in correctly or replace the dead batteries as needed.
- ⇒ Faulty remote control. Test the operation of the system using a known good remote control. If operation is OK, replace the faulty remote control.
- ⇒ Inoperative infrared transmitter in the (DVD) Monitor (s). Replace the DVD Electronics.

[DVD Electronics Replacement](#)

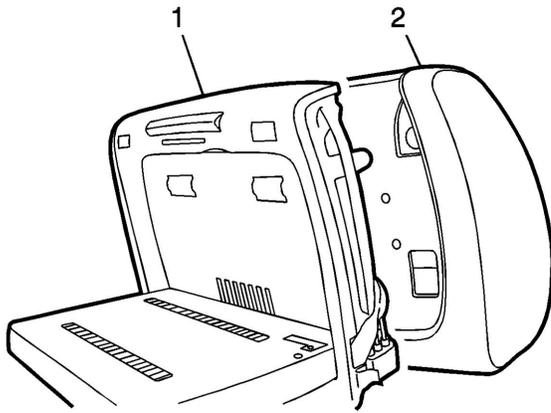


1. Open monitor (2).
2. Slide Pivot latch (1) to the left.

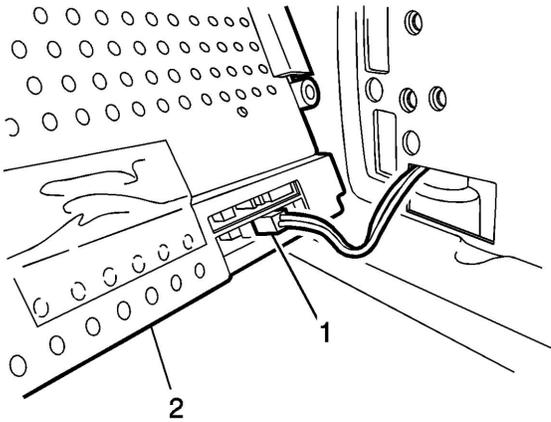


3. Remove the four screws (1).





4. Partially remove the monitor (1) from the headrest (2).



5. Depress release and remove the electrical connectors (1).

6. Remove monitor (2) from headrest.

7. Reverse steps 1 - 6 to install new monitor.