

TOYOTA /2005/6 AVALON

INVISION REV II DUAL PLAYER HEADREST VIDEO

**Part Number: Lt. Taupe - 00016-00710 / Stone - 00016-00720 / Ivory - 00016-00730
Touring Edition - 00016-00745
Accessory Code: EH3**



Kit Contents

Item #	Quantity Reqd.	Description
1	2	Headrest Assembly
2	2	Remote Control
3	2	Cables #3
4	1	Power Cord #9
5	1	Bag with Storage Straps
6	1	Metal Wire Puller
7	1	Owner's Manual
8	2	Headrest Cover
9	2	IR Headphones
10	8	AAA Batteries
11	1	Control Box
12	1	Hardware Bag
13	1	Fm Antenna

Hardware Bag Contents

Item #	Quantity Reqd.	Description
1	2	Red T-Taps
2	1	Alcohol Swab
3	2	10" Wire Ties
4	20	6" Wire Ties
5	1	3"x1/2" Two Side Tape
6	1	4" x 8" Foam Tape

Additional Items Required For Installation

Item #	Quantity Reqd.	Description
		Electrical Tape

Recommended Tools

Safety Tools	
Seat/Floor Covers	Blankets
Installation Tools	
Pliers	Wire Cutters
Nylon Removal Tool	10mm Socket
#2 Phillips Screwdriver	12mm Socket
Special Tools	
Special Chemicals	

Color Applicability/Trim Level

Vehicle Trim Color	Accessory Color	Ivory	Graphite	Gray	Dk Charcoal
IVORY		X			
GRAPHITE			X		
LT GRAY				X	
DK CHARCOAL					X

Recommended Sequence of Application

Item #	Accessory
1	
2	
3	

*Mandatory

Legend

	STOP: Damage to the vehicle may occur. Do not proceed until process has been complied with.
	OPERATOR SAFETY: Use caution to avoid risk of injury
	CRITICAL PROCESS: Proceed with caution to ensure a quality installation. These points will be audited on a completed vehicle installation
	GENERAL PROCESS: This highlights specific processes to ensure a quality installation. These points will be audited during the accessory installation
	TOOLS & EQUIPMENT: This calls out the specific tools and equipment required for this process
	REVISION MARK: This mark highlights a change in installation with respect to previous issue.

SPECIAL NOTE:**Installation Sequences**

After **TMS** and **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.

A. Pre-installation Precaution

1. Use Seat and Floor Protectors to avoid damage to surfaces.
2. If the vehicle is equipped with an Anti-theft radio, the radio code must be written down prior to disconnecting the battery cable. The code must be re-entered when the negative battery cable is reinstalled. Disconnecting the battery may cause certain vehicle settings to be lost. Manufacture's recommendations for the battery removal should be followed. Disconnecting the battery is recommended.

B. Battery disconnect

1. Move seats forward and recline back slightly.



2. Remove the NEGATIVE (-) battery terminal using a 10mm socket before starting any

disassembly. (Fig. B2) 

Fig. B2



C. Remove center console

- ➔ 1. Remove (2) bolts from center console storage bin with a 12 mm socket.
(Fig. C1) 
- ➔ 2. Unscrew gear selector knob by hand.
(Fig. C2)
- ➔ 3. Insert Nylon Removal Tool (NRT) at rear of center console to loosen trim. (Fig. C3) 
- ➔ 4. Lift out center console trim by hand. (Fig. C4)
- ➔ 5. If navigation system controls are present, remove electrical plug as trim is removed.
(Fig. C5)

Fig. C1



Fig. C2



Fig. C3



Fig. C4



Fig. C5



➔ 6. Remove (2) screws from center console using a #2 Phillips screwdriver. (Fig. C6) 

➔ 7. Lift out center console and remove from vehicle.

D. Mount control box

➔ 1. Connect all cables to control box using color coded connectors. (Fig. D1)

➔ 2. Mount control box with (2) wire ties to HVAC duct beside gear selector. (Fig. D2)

E. Install headrest cables

➔ 1. Route cable #3A toward driver seat, through split in carpet.

➔ 2. Secure cables under the seat along the factory wiring harness using (3) wire ties. (Fig. E1a-b)

Fig. C6



Fig. D1



Fig. D2



Fig E1a



Fig E1b



➔ 3. Bundle any excess wire using (1) wire tie and tuck under carpet. (Fig. E3)

Fig. E3



➔ 4. Repeat using cable #3b on passenger side.

F. Install power wiring

➔ 1. Attach (1) red T-tap to each the red wire and the white wire with the black stripe on connector DM1 of the power outlet circuit using pliers. (Fig. F1) 

Fig. F1



➔ 2. Attach the black wire from the control box to the T-tap on the white with black stripe wire (PIN#1) and the red wire from the control box to the T-tap on the red wire (PIN#2). (Fig. F2)

Fig. F2



G. Remove factory headrests

➔ 1. Remove driver side headrest while depressing release button. (Fig. G1)

Fig. G1



➔ 2. Repeat for passenger side.

H. Disassemble seatbacks

➔ 1. Disengage both elastic straps at bottom of seat. (Fig. H1)

Fig. H1



➡ 2. Lift flap to remove (2) screws using a #2 Phillips screwdriver. (Fig. H2) 

Fig. H2



➡ 3. Pull out lower part of seat back to remove 2 mounting tabs. (Fig. H3)

Fig. H3



➡ 4. Push down on seat back to remove. (Fig. H4)

Fig. H4



➡ 5. Lift out J-snaps to remove flap. (Fig. H5)

Fig. H5



➡ 6. Repeat for passenger side.

I. Install video headrests

➡ 1. Feed cables #1A and #2A from monitor "A" down holes in top of driver side seatback. (Fig. I1)

Fig. I1



- ➔ 2. Insert headrest while pulling cables down seatback. (Fig. I2)
- ➔ 3. Use 6" wire ties to attach cables to seat back suspension. (Fig. I3)
- ➔ 4. Route cables along factory wiring to seat base.(Fig. I4)
- ➔ 5. Allow cables to exit between the elastic straps and attach them to the factory harness using a 6" wire tie. (Fig. I5)
- ➔ 6. Connect cables #1A and #2A to cable #3A under seat and secure to factory wiring with wire ties at each side of connection point.
- ➔ 7. Repeat for passenger side with headrest monitor "B".

J. Reassemble trim/ battery

- ➔ 1. Reassemble trim components and battery by reversing sections H, C, and B. Torque battery to 36 inch. Lbs.

Fig. I2



Fig. I3



Fig. I4



Fig. I5



K. Complete installation

-  1. Install 2AAA batteries in each remote.
-  2. Install 2AAA batteries in each headphone headset.
-  3. After testing system, store owners manual in glove box. Store remotes, headphones and remote/ headphone storage straps in rear of center console.

Functional Verification:**Check:**

Accessory Function checks:

Turn vehicle ignition to ON, depress power button on each headrest monitor.

Insert DVD into monitor, press enter.

Listen with wireless headphones (be sure to set to channel "A" to listen to monitor "A" and channel "B" to listen to monitor "B").

Depress "eject" button.

Select Sound Around button on remote to turn on the FM transmitter. Turn on vehicle radio and set station to station selected on FM transmitter.

Look For:

Monitor should power on, start up screen should appear onscreen.

DVD should begin playing

Audio should be heard through vehicle headphones.

Disc should eject.

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)

Important: The following information lists 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. DVD Jumper Harness not connected to vehicle. Verify Accessory Power and Ground.
3. DVD Jumper Harness not connected to Power Cord #9. Verify Accessory Power and Ground.
4. 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.
5. 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) not connected to Control Box. Make sure cables are connected.
6. Power Cord #9 is not connected to Control Box.
7. Check for power at end of Power Cord #9 (white connector 3-way) at Control Box. If power at Control Box – Replace the Control Box.
8. 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). If power and ground verified at connectors, replace the DVD Electronics (Monitor).

DVD Player Inoperative (Power LED Illuminated)

Important: The following information 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 the DVD Electronics (Monitor).

DVD Display Inoperative (LEDs Illuminate but No Video)

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

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) not connected to Control Box or Cable 3B (if not receiving power to Monitor B – Passenger Side) not connected to Control Box.
4. Remove monitor that is not receiving video. Verify that connectors are connected to the Monitor. If no video displayed, replace the DVD Electronics (Monitor).

Cannot Hear Audio Through Vehicle Speakers(FM Transmitter Inoperative)

Important: The following information 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 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 upper right hand corner. Tune the Radio to the frequency selected. If no DVD audio over speakers, verify audio by selecting another radio frequency. Replace the DVD Control Box.

Video Entertainment System Wireless Headphone Inoperative

Important: The following information 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 to 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 infrared transmitter in the (DVD) Monitor (s)--Replace the DVD Electronics.

Video Entertainment System Remote Control Inoperative

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

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

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

