## Toyota Tundra (Bench Front Seat) Part Number: 00016-00796; 97; 98; & 99 Assessory Code: EH3

## 2007- Invision Rev. II Dual Player Headrest Video



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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 #	Qty	Component Description
1	2	Red T-Taps
2	1	4" x 8" Foam Tape
3	2	11" Wire Ties
4	12	6" Wire Ties

Additional Items Required For Installation

Item #	Qty	Description

Blankets

Recommended Tools

Safety Tools	
Seat/Floor Covers	

Installation Tools	
Pliers	Wire Cutters
10mm Socket/ Ratchet	#2 Phillips Screw Driver
NRT (Nylon Removal Tool)	

Special Tools	
Special Chemicals	

#### Color Applicability/Trim Level Color Accessory Sandbeige Redrock Graphite Black Vehicle Trim Color Redrock - 96 Х Graphite - 97 Х Sandbeige - 98 Х Black - 99 Х

#### Legend

TTRE	<u>STOP:</u> Damage to the vehicle may occur. Do not proceed until process has been complied with.
む	OPERATOR SAFETY: Use caution to avoid risk of injury
V	<u>CRITICAL PROCESS:</u> Proceed with caution to ensure a quality installation. These points will be audited on a completed vehicle installation
	TOOLS & EQUIPMENT: This calls out the specific cools and equipment required for this process
l	<b><u>REVISION MARK:</u></b> 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.

Fig.B2

### 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. C1







Fig. C5



6. Remove (1) bolt using a 10mm socket/ ratchet at bottom right side of driver's knee panel. (Fig. C6) 7. Partially remove knee panel from lower dash on inboard side to gain access to Phillips screw located behind it. (Cover knee panel with cloth to avoid damage) (Fig. C7) 8. Using a #2 Phillips screwdriver remove (1) screw from just behind the inboard driver's knee panel. (Fig. C8) 😂 9. Remove storage tray from lower dash panel by sliding tray out and pushing down on retainer lid. (Fig. C9) 10. Remove (1) screw from storage tray opening with a #2 Phillips screwdriver. (Fig. C10) 🥯







Fig. C6

Fig. C7

Fig. C8



Fig. C10



Fig. C11



(Fig. C11)

12. Disconnect electrical connections from rear

of power point trim panel and remove from

vehicle. (Fig. C12)

13. Remove driver's side factory headrest while depressing release button. (Fig. C13)

14. Unhook elastic straps from beneath driver's

seat retaining lower seat cover panel.

(Fig. C14)

15. Repeat steps 13 and 14 for passenger side.





Fig. C14

Fig. C13





Fig. D2









Fig. D6



### D. Install power wiring

 Route wire puller below carpet from rear driver side of center seat opening forward to center console opening. (Fig. D1a-b)
 Route power cord #9 behind trim mounting area to keep fuse in power point area. (Fig. D2)
 Attach power cord #9 to wire puller. (Fig. D3)
 Pull wire puller from front center console opening towards rear of vehicle center seat
 opening.
 Detach wire puller from power cable #9 in rear of center seat.
 Attach red T-taps to gray wire (PIN#1) and the white wire with black stripe (PIN#2) on

connector J15 of the cigarette lighter circuit with Fig. D3

pliers. (Fig. D6) 🥯



J15

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7. Attach the red wire from cable #9 to the gray
factory wire (PIN#1). Attach the black wire from
cable #9 to the white wire with black stripe
(PIN#2). (Fig. D7)
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### E. Route headrest cables

 Route cables #3A from rear center seat area below carpet toward separation in carpet beneath drivers seat. (Fig. E1)
 Transfer cable #3A from split in carpet to opening where factory harness exists under driver's seat. (Fig. E2)
 Repeat steps 1 and 2 on passenger side using cable #3B.



#### F. Install video headrest

 Insert wire puller in the driver's outboard hole on top of seat back. (Fig. F1)
 Route wire puller to inboard bottom of seat

back. (Fig. F2)









Fig. D7

Fig. E1







- 3. Attach cable #1A to wire puller with spring clip. (Fig. F3)
- 4. Pull cable #1A through to bottom of seat back.
- 5. Repeat for inboard hole of seat back with cable #2A.
- 6. Insert headrest into seat and leave at up
- most position, pull out all excess cable toward
- bottom of seat. (Fig. F6)
- 7. Connect cable #1A and #2A to cable #3A
- (Fig. F7)
- 8. Wire tie cables #1A, #2A and #3A on both
- sides of connection to factory wiring harness.
- (Fig. F8)





Fig. F6



Fig. F8

Fig. F7



Fig. F9a



### G. Mount control box

 Make all connections to control box using color coded connections including antenna and power cord #9. (Fig. G1)
 Wrap control box in foam tape. (Fig. G2)
 With excess cables facing toward rear of vehicle insert control box beneath carpet on passenger side of rear center seat opening. (Fig. G3)



Fig. F9b



Fig. G2

Fig. G1



Fig. G3



Fig. G4

4. Bundle excess wire behind control box and

secure with (2) 11" wire tie. (Fig. G4)



# H. Reassemble trim

1. Reassemble trim by reversing steps B and C.



# I. Complete installation

1. Install 2 AAA batteries in each remote control and wireless headphone headset.

2. Place headphones and remotes in pockets on back of seats. Place owners manual in glove box.

3. Test system using steps on following page.

4. Check all previously disconnected factory

connectors and accessories to ensure they are

all connected and operational.





# VEHICLE FUNCTION CHECK

AFTER ALL PANELS, COVERS, AND COMPONENTS HAVE BEEN REINSTALLED, THAT WERE REMOVED, TEST THOROUGHLY, ALL MECHANICAL AND ELECTRICAL COMPONENTS DISCONNECTED AND OR REMOVED FROM THE VEHICLE DURING THE INSTALLATION OF THIS ACCESSORY.

Functional Verification: Check: 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 onscreen.
Insert DVD into monitor, press enter.	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.
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.	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 connector3-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.

 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.
 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.

 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.
 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, or90.3 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.

