Document: 4227 6/21/06

#### TOYOTA /2005/6 TACOMA 4 DOOR

#### INVISION REV II DUAL PLAYER HEADREST VIDEO

Part Number: Lt. Taupe -00016-00710 / Dk. Gray - 00016-00780 /

**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

The ware Bug Contents			
Item #	Quantity Reqd.	Description	
1	2	Blue T-Taps	
2	2	10" Wire Ties	
3	12	6" Wire Ties	
4	1	4" x 8" Foam Tape	
5	1	3"x1/2" Two Side Tape	

#### Additional Items Required For Installation

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I	Item #	Quantity Reqd.	Description
I			Electrical Tape

#### Recommended Tools

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

Color Applicability/Trim Level

Color Applicability/1					
Vehicle Trim Color	Accessory Color	Lt. Taupe	Dk Gray		
Lt. Taupe		Х			
'					
Dk.Gray				Χ	

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.



<u>OPERATOR SAFETY:</u> 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



<u>GENERAL PROCESS:</u> 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



<u>REVISION MARK:</u> 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



 Move front seats forward and recline back slightly.

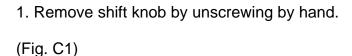


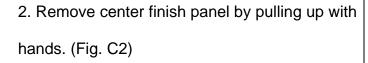
2. Remove the NEGATIVE (-) battery terminal using a 10mm socket before starting any disassembly. (Fig. B2)

Fig. B2



### C. Disassemble center console





3. Remove (2) screws in center area of center console with a #2 Phillips head screwdriver.

(Fig. C3)

- Remove carpeted cover in floor of center console by lifting with hands. (Fig. C4)
- 5. Remove (2) 10mm bolts with a 10mm socket/ratchet from inside center console.

(Fig. C5)

Fig. C1



Fig. C2



Fig. C3



Fig. C4



Fig. C5



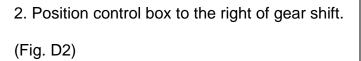


6. Remove center console by lifting up first then sliding back and out. (Fig. C6)

## D. Install control box and cables



 Make all connections to control box using color coded connectors. (Fig. D1)





3. Be sure to keep cables clear and secure away from any and all moving parts that may pinch cables or cause unwanted interference.

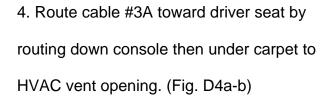


Fig. C6



Fig. D1



Fig. D2



Fig. D4a



Fig. D4b





5. Transfer cable to O.E. wire opening.

(Fig. D5)



- 6. Secure cable #3A to O.E. wire conduit with wire ties. (Fig. D6)
- 7. Repeat using cable #3B on the passenger side.



## E. Remove factory headrests

- Remove driver side headrest by lifting up while depressing release lever. (Fig. E1)
- 2. Repeat for passenger side.



## F. Trim removal



- Remove passenger side kick panel by pulling inward with hands. (Fig. F1)
- 2. Remove glove box dampener by depressing tabs and pulling dampener off shaft. (Fig. F2)

Fig. D5



Fig. D6



Fig. E1



Fig. F1



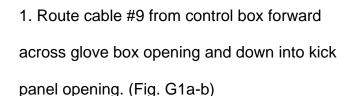
Fig. F2





3. Remove glove box by squeezing sides towards each other and lifting from hinge point.(Fig. F3)

## G. Routing and installing power cables



- 2. Attach with pliers (1) blue T-tap to white/
  black wire (chassis ground) and (1) blue T-tap
  to white wire (PIN #9 of white connector IK1 for
  power windows). (Fig. G2)
- 3. Attach red power cable from control box cable #9 to T-tap on white wire at PIN #9 of electrical connector IK1. (Fig. G3)

Fig. F3



Fig. G1a



Fig. G1b



Fig. G2

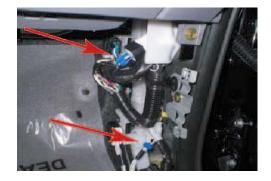
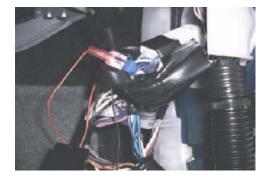


Fig. G3



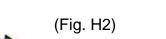


4. Attach black ground cable from control box cable #9 to T-tap on white/ black wire of chassis ground at kick panel. (Fig. G4)

#### H. Install video headrests

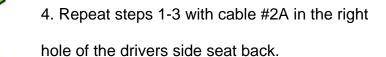


1. Insert hand in lower inboard corner of seatback cover of driver seat. Feed wire puller in the left hole in top of seatback, routing it to hand in lower inboard corner. (Fig. H1)

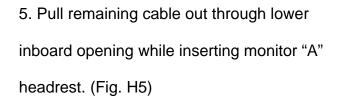




3. Pull cable through to lower inboard opening.



2. Attach monitor cable #1A to wire puller.





- 6. Leave headrest in up most position.
- 7. Secure cables #1A and #2A with wire ties to factory wires under seat towards cable #3A.

  (Fig. H7)

Fig. G4



Fig. H1



Fig. H2



Fig. H5



Fig. H7





8. Connect cables #1A and #2A to cable #3A.Secure with wire tie at each side of connection.(Fig. H8)



9. Repeat for passenger seat only if vehicle is NOT equipped with forward folding seat back/ table, refer to step 10 below if equipped.



10. Remove seatback panel by pulling from bottom first then lowering and removing panel.(Fig. H10)



11. Insert monitor cables #1B and #2B into holes in top of seatback while installing video headrest. (Fig. H11)



12. Fold seat in forward/ down position.



13. OPTIONAL: remove hog rings from inboard and lower sides of seatback cover. (Fig. H13)

Fig. H8



Fig. H10



Fig. H11



Fig. H13





14. Feed monitor cables between seatback frame and foam, then through hole in seat cover at inboard hinge area. Use other hand to pull cables between plastic hinge cover and seatback cover. (Fig. H14a-b)



15. While pulling back lower seatback cover flap, tuck cable behind flap and under seat.(Fig. H15)



16. Fix cable to factory harness with a wire tie.(Fig. H16)



17. Be sure wire is tucked back in center area inside the hinge covers as shown. (Fig. H17)

Fig. H14a



Fig. H14b



Fig. H15



Fig. H16



Fig. H17





18. Connect cables #1B and #2B to cable #3B.Secure with wire tie at each side of connection.(Fig. H18)

# I. Reassemble console and kick panel.



 Reassemble console, kick panel and battery by reversing sections B, C, and F.

# J. Complete installation



- 1. Install 2 AAA batteries in each remote.
- 2. Install 2 AAA batteries in each set of headphones.

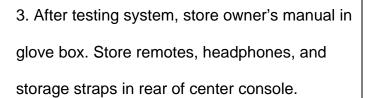


Fig. H18



# 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 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.
- 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, 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.

