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### TOYOTA / 2007- 4RUNNER

#### INVISION REV II DUAL PLAYER HEADREST VIDEO

Part Number: Lt. Taupe - 00016-00710 / Stone- 00016-00720

**Accessory Code: EH3** 



Kit Contents

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

Hardware Bag Contents

raraware Bag contents					
Item #	Quantity Reqd.	Description			
1	3 Red T-Taps				
2	1	1 Alcohol Swab			
3	2	10" Wire Ties			
4	15	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	
Nylon Removal Tool	10mm Socket
#2 Phillips Screwdriver	Wire Cutters
Special Tools	
Special Chemicals	

Color Applicability/Trim Level

Accessory	Stone	BEIGE			
	Х				
		Х			
		Stone	BEIGE Stone X	X	BEIGE Stone 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.



<u>CAUTION:</u> A process that must be carefully observed in order to reduce the risk of damage to the accessory/ vehicle and to ensure a quality installation.



TOOLS & EQUIPMENT: Used in Figures calls out the specific tools and equipment recommended for this process.



REVISION MARK: This mark highlights a change in installation with respect to previous issue.

#### SPECIAL HOTE: Installation Segrences

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.

### **SPECIAL NOTE:**

### <u>Installation Sequences</u>

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. NOTE: be sure to open rear hatch, PRIOR to disconnecting the battery.
- 3. Remove the NEGATIVE (-) battery terminal using a 10mm socket before starting any disassembly. (Fig. B3)

Fig. B3



### C. Remove factory headrests

- Lift drivers side headrest up and out of seatback while depressing release button near post base. (Fig. C1)
- 2. Repeat for passenger side headrest.

#### D. Remove center console

- 1. Open storage compartment.
- 2. Remove shift override cover by prying up with a Nylon Removal Tool (NRT), place somewhere as not to loose it. (Fig. D2)
- 3. Shift to neutral while depressing shift override button with NRT. (Fig. D3)
- 4. Remove shifter finish panel by pulling up with hands. (Fig. D4)
- 5. Remove (3) electrical connectors from underneath shifter finish panel. (Fig. D5)

Fig. C1



Fig. D2



Fig. D3



Fig. D4



Fig. D5



- 6. Remove outer shifter finish by pulling up with hands. (Fig. D6)
- 7. Remove (6) bolts with a 10mm socket/ratchet. (Fig. D7)
- 8. Unsnap forward lower trim panel from center console by unsnapping sides with hands.(Fig. D8)
- 9. Remove (2) electrical connectors from inside center console. (Fig. D9)
- 10. Remove center console completely from vehicle. (Fig. D10)

Fig. D6



Fig. D7



Fig. D8



Fig. D9



Fig. D10



- E. Remove seatback panels (see steps E1-4 for LTD leather seating, steps E1,5,6 for cloth seats)
  - Unhook lower elastic straps from driver seat bottom. (Fig. E1)
  - 2. Lift lower flap and remove (2) Phillips head screws with a #2 Phillips head screwdriver.

(Fig. E2)

- 3. Grab seat back map pocket and remove by pulling back and down with hands. (Fig. E3)
- 4. Repeat steps 1-3 for passenger seat.
- 5. Unzip sides of driver side seat back and fold over top of seat back. (Fig. E5)
- 6. Repeat steps 1 and 5 for passenger seat.

### F. Mount control box.

 Make all connections to control box using color coded connectors. (Fig. F1)

Fig. E1



Fig. E2



Fig. E3



Fig. E5



Fig. F1



2. Attach control box to HVAC duct, just behind and to the left of gear selector, using (2) 12" wire ties. (Fig. F2)

### G. Route headrest cables

- Feed cable #3A through carpet from center console. (Fig. G1)
- 2. Route cables towards front of seat along factory wiring harness. (Fig. G2)
- 3. Attach cable #3A to factory wire harness underneath seat using (2) wire ties.
- 4. Securely bundle any extra cable from moving parts in center console area and repeat for passenger side using cable #3B.

# H. Install power wiring

- 1. With pliers attach (1) red T-tap to each factory power outlet wire PIN #1 and PIN #2 from electrical connector P6. (Fig. H1)
- 2. Attach red wire from control box cable #9 to vehicle brown wire with red stripe (PIN #2) and black wire to vehicle white wire with black stripe (PIN#1). (Fig. H2)

Fig. F2

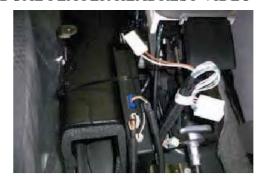


Fig. G1



Fig. G2

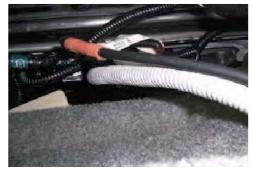


Fig. H1



Fig.H2



### I. Install video headrests

- 1. Insert cables from monitor "A" into drivers side headrest holes in seatback. (Fig. I1)
- 2. Continue pulling while inserting video headrest into top of seatback. (Fig. I2)
- 3. Leave in up position.
- 4. Route cables #1A and #2A through lower inboard hole in seat back. (Fig. I4)
- 5. Attach cables to factory wiring with (2) wire ties. (Fig. I5)
- 6. Connect cables #1A and #2A to cable 3A under seat. Add wire ties to each side of connector. (Fig. I6)
- 7. Snap security clamp around each connection point between cables #1 & #2 to cable #3 Fig. I6A



Fig. I1



Fig. I2



Fig. I4



Fig. I5



Fig. I6



- 7. Attach cables to seat back support spring with a 6" wire tie. (Fig. I7)
- 8. Repeat steps 1-7 for passenger seat.
- J. Reassemble center console/ battery cable, etc.
  - Reassemble center console and seatbacks
     by reversing steps D, E, and B.

### K. Complete installation

- Install 2 AAA batteries in each remote control.
- 2. Install 2 AAA Batteries in each wireless headphone headset.
- 3. Test system following steps on following page.
- 4. After testing, store owners manual in glove box. Store headphones, remotes and storage strap bag in rear of center console.

Fig. I7

# 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.

#### TOYOTA / 4RUNNER

#### INVISION REV II DUAL PLAYER HEADREST VIDEO

### **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.

# <u>Video Entertainment System Wireless Headphone Inoperative</u>

**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.

