

**Part Number: Mounting Kit: PT546-21070**  
**Tuner Assy: 86180-0W030**

**NOTE:** Part number of this accessory may not be the same as the part number shown.

**Tuner Assy Kit Contents (86180-0W030)**

Item #	Quantity Req'd.	Description
1	1	Tuner Assy, Stereo Component

**Mounting Kit Contents (PT546-21070)**

Item #	Quantity Req'd.	Description
1	1	Ground Cable
2	1	Wire, To Radio Installation
3	2	L-Bracket
4	2	Base Bracket
5	1	Template (to locate brackets)
6	1	Butyl Cushions
7	1	Antenna
8	1	XM Satellite Radio Brochure

**Hardware Bag Contents-1 (PT546-21070)**

Item #	Quantity Req'd.	Description
1	4	Nut (M6)
2	4	Screw (M5 x L8)

**Hardware Bag Contents-2 (PT546-21070)**

Item #	Quantity Req'd.	Description
1	13	Lock Tie A
2	1	Clip

**Hardware Bag Contents-3 (PT546-21070)**

Item #	Quantity Req'd.	Description
1	1	Ground Plate
2	1	Lock Tie B
3	2	Sheet Tape
4	1	Cable Rail

**Additional Items Required For Installation**

Item #	Quantity Req'd.	Description
1	1	Receiver Cover – PT903-52040

**Conflicts**

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**Recommended Tools**

Personal & Vehicle Protection	Notes
Safety Goggles	
Seat Cover	
Floor Protectors	
Protective Tape	Masking Tape

Special Tools	Notes
None	
Installation Tools	Notes
Ratchet	
Extension	
Sockets	10 mm, 12 mm, 14 mm
Screwdriver	Philips, #2
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST # 00002-06001-01
Clip Removal Tool	
Utility Knife	
Torque Wrench	
Side Cutter	
Special Chemicals	Notes
Cleaner	3M™ Prep Sol-70

**General Applicability**

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**Recommended Sequence of Application**

Item #	Accessory
1	Radio
2	Satellite Radio

\*Mandatory

**Vehicle Service Parts** (may be required for reassembly)

Item #	Quantity Req'd.	Description
1		
2		

**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.



**CAUTION:** 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.

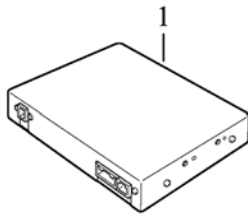


**TOOLS & EQUIPMENT:** Used in Figures calls out the specific tools and equipment recommended for this process.



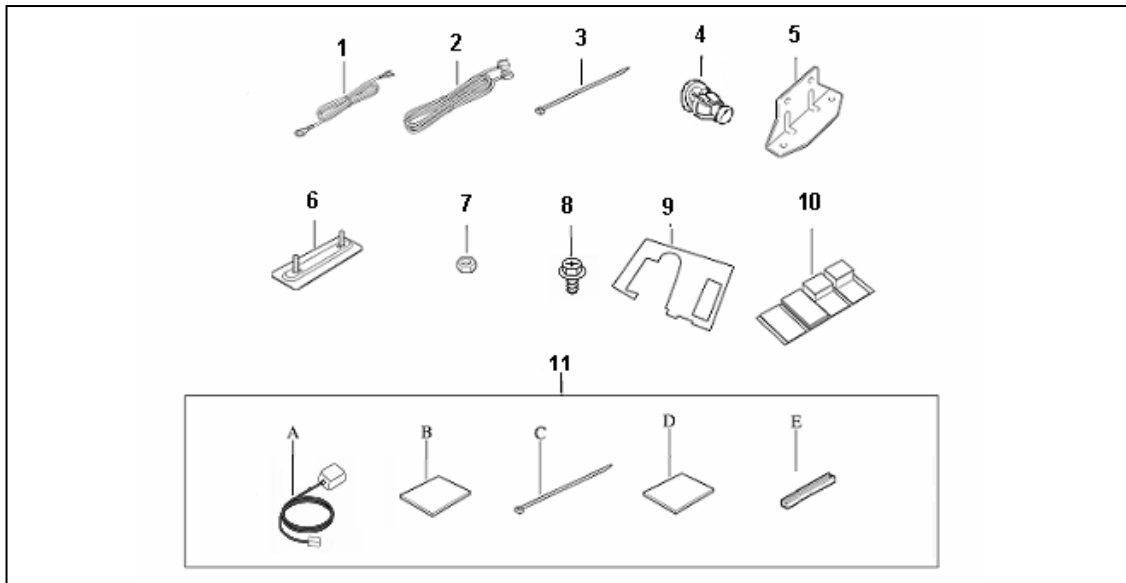
**REVISION MARK:** This mark highlights a change in installation with respect to previous issue.

Parts Description of Tuner Assy (86180-0W030)



Item #	Parts Name	Parts No.	Qty
1	Tuner	86180-0W030	1

Parts Description of Mounting Kit (PT546-21070)



Item #	Parts Name	Qty
1	GROUND CABLE	1
2	WIRE, TO RADIO INSTALLATION (Referred to as Tuner Cable in Manual)	1
3	LOCK TIE A	13
4	A PILLAR CLIP	1
5	L- BRACKET	2
6	BASE BRACKET	2
7	NUT (M6)	4
8	SCREW (M5 x L8)	4
9	TEMPLATE (to locate brackets)	1
10	BUTYL CUSHIONS	1
11	A ANTENNA	1
	B GROUND PLATE	1
	C LOCK TIE B	1
	D URETHANE TAPE (SHEET TAPE)	2
	E CABLE RAIL	1

Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation. These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:-

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

Please see your Toyota dealer for a copy of this document.

## 1. Vehicle Disassembly.

- (a) Remove the negative battery cable.  
(Fig. 1-1)



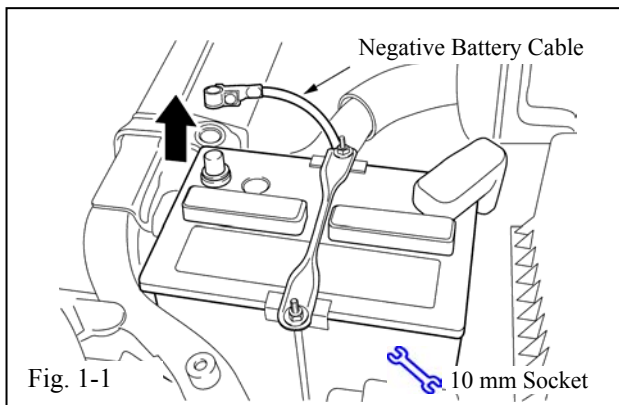
- (1) Protect fender before starting.



- (2) For vehicles equipped with automatic transmission, place the shifter in the N (neutral) position and set the parking brake prior to disconnecting the battery.



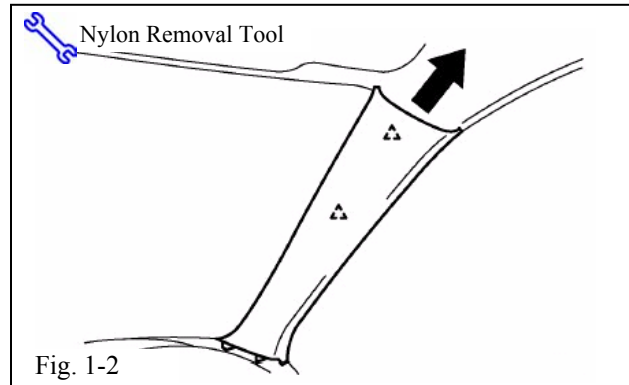
- (3) Do not touch the positive terminal with any tool when removing cable.



- (b) Remove the "A" Pillar Garnish.

### W/O Curtain Side Air Bag

- (1) Using a nylon removal tool, remove the garnish by inserting the tool under the garnish and then prying outward until the clips are disengaged. (Fig. 1-2)
- (2) Slide upward to remove the garnish.



### With Curtain Side Air Bag



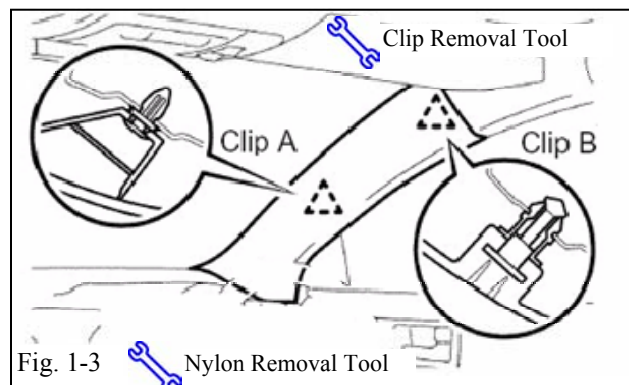
- (3) Using a nylon removal tool, disengage the clip labeled A. (Fig. 1-3)

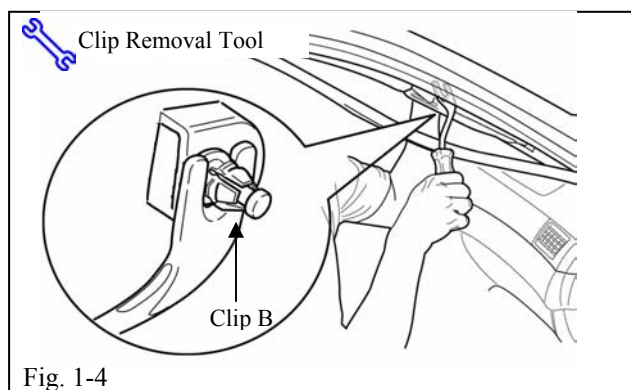


- (4) Insert a clip removal tool onto clip B under the garnish.



**NOTE:** Apply protective tape or a rag between the clip removal tool and the "A" pillar to prevent the clip removal tool from scratching the paint.



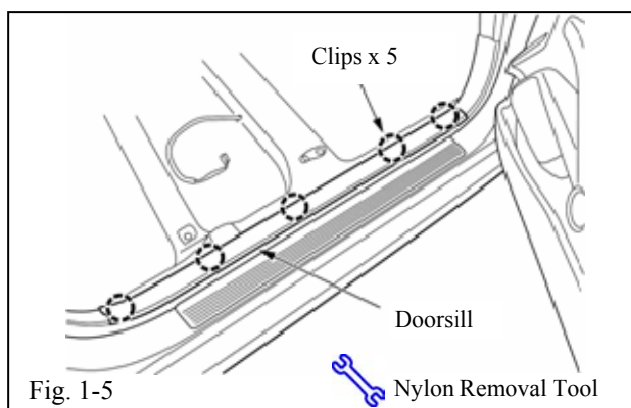


- (5) Now push the upper portion of the garnish in by hand and then pry outward with the clip removal tool to release the clip. (Fig. 1-4)



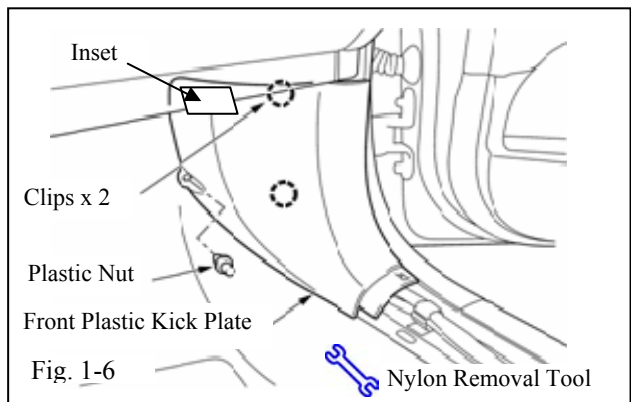
**NOTE:** The new clip included in the kit must be used when reinstalling the “A” pillar garnish.

- (6) Slide garnish upward to remove.



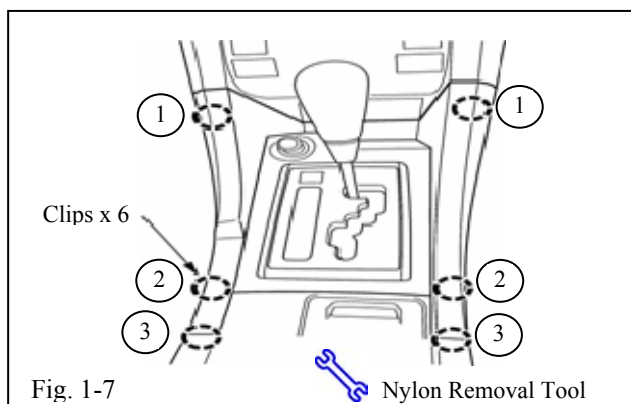
- (c) Remove passenger side doorsill. (Fig. 1-5)

**NOTE:** If a clip remains on the vehicle, remove it and replace it back into the plastic doorsill cover.



- (d) Remove front plastic kick plate. (Fig. 1-6)

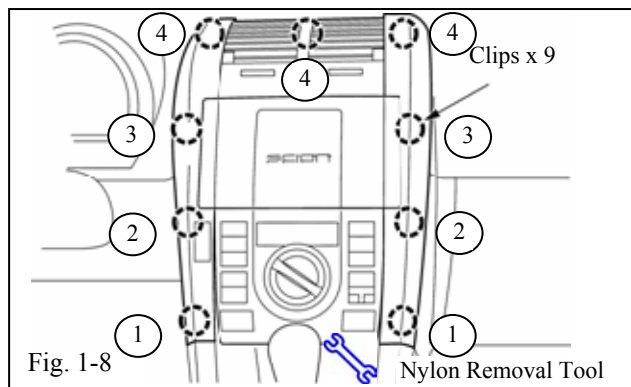
- (1) Unscrew plastic nut by hand.
- (2) Pry off cover.



- (e) Remove the lower console panel. (Fig. 1-7)

- (1) Confirm shifter is in neutral position.
- (2) Remove the six (6) clips in order shown.
- (3) Remove connector and clip for lighter.





(f) Remove the upper console panel. (Fig. 1-8)

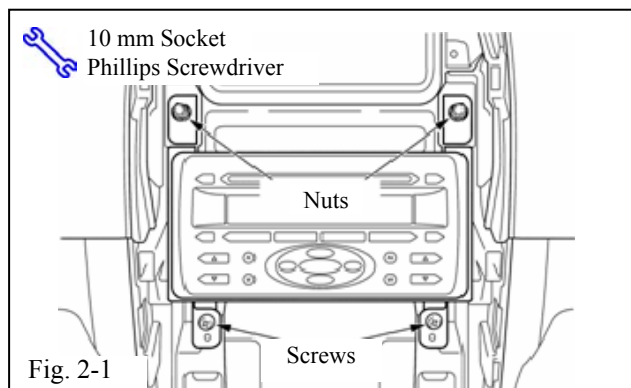
(1) Close the radio cover.



(2) Remove the nine (9) clips in order shown.

(3) Pull off connector for air conditioner.

## 2. Remove the Head Unit.

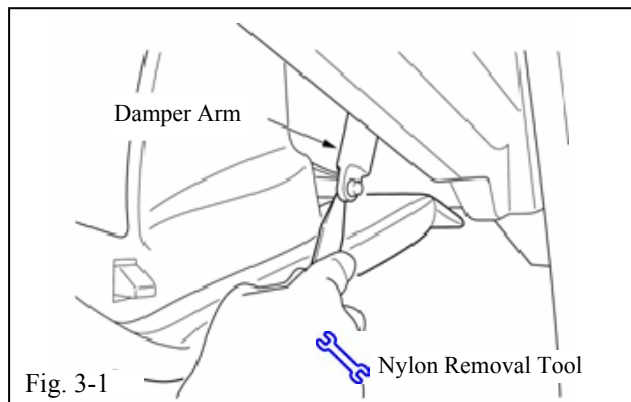


(a) Remove the two (2) nuts on top and the two (2) screws on the bottom. (Fig. 2-1)

(b) Pull head unit straight out.

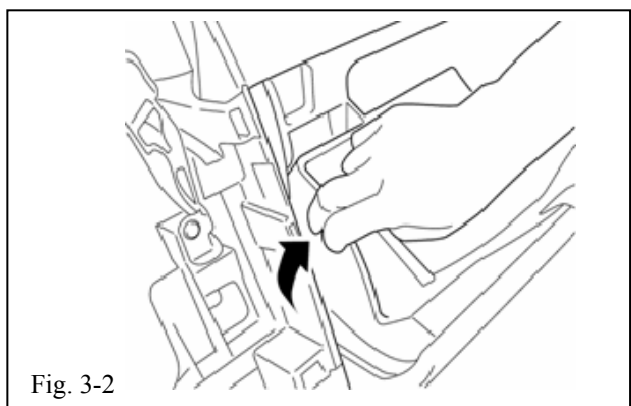
(c) Disconnect the connectors.

## 3. Remove the Glove Box.



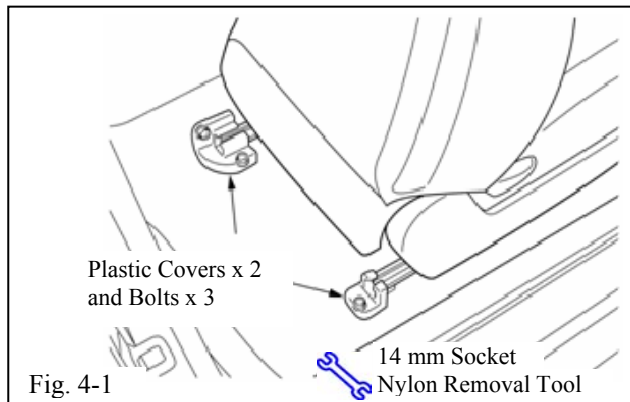
(a) Open the glove box.

(b) Disconnect the damper using a nylon removal tool. (Fig. 3-1)



(c) Push both sides and pull off one by one. (Fig. 3-2)

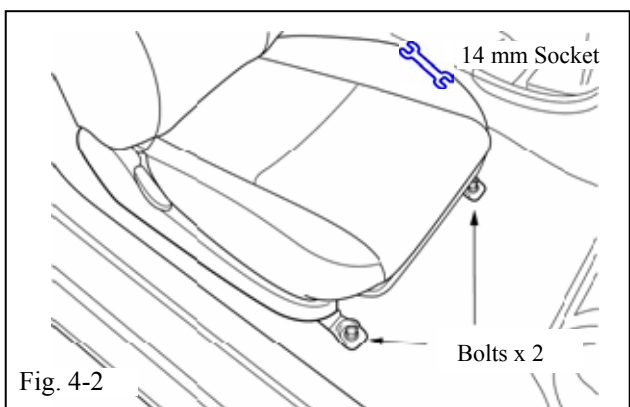
(d) Pull the glove box straight out to release the bottom clips.



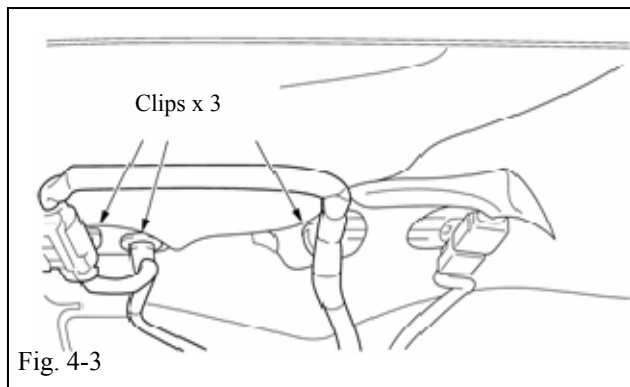
#### 4. Remove Passenger Front Seat.



- (a) Protect the center console area before removing seat.
- (b) Slide the seat forward and remove the two (2) plastic covers on the seat rails. Remove the three (3) bolts under the plastic covers. (Fig. 4-1)



- (c) Slide the seat backwards and remove the two (2) bolts that hold the front end of the seat rails. (Fig. 4-2)



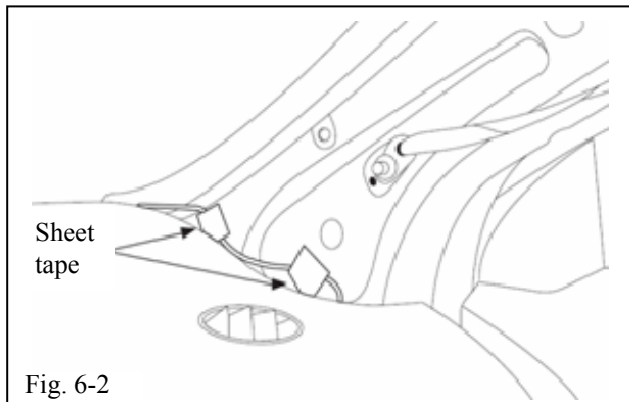
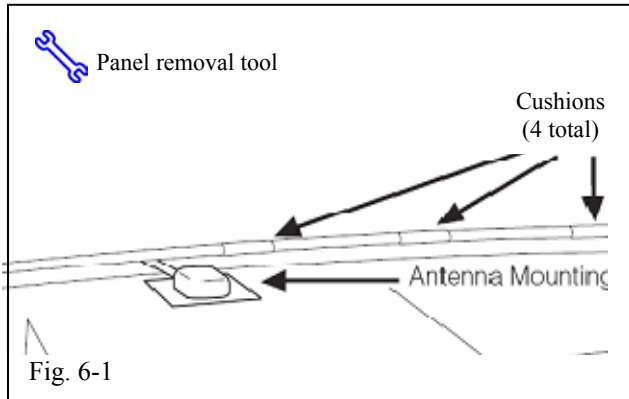
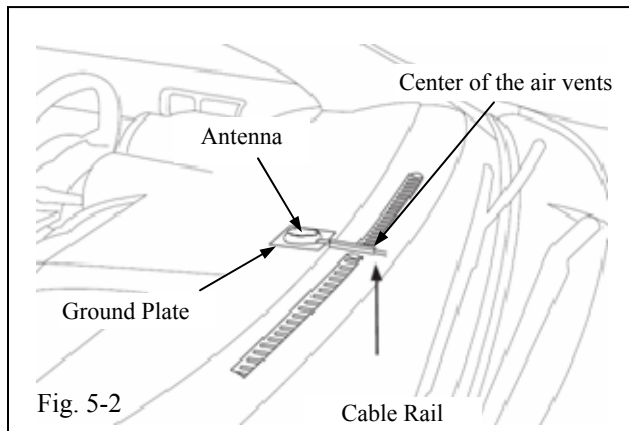
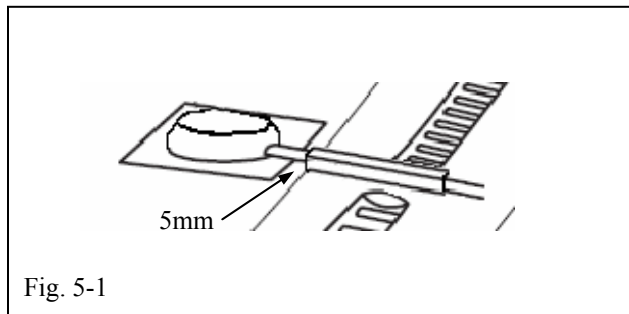
- (d) Remove the three (3) clips shown. (Fig. 4-3)

- (e) Place the seat in the rear seat area.



**NOTE:** Be careful not to damage the seat, scuff plate, door and other vehicle parts when moving the seat in the vehicle.



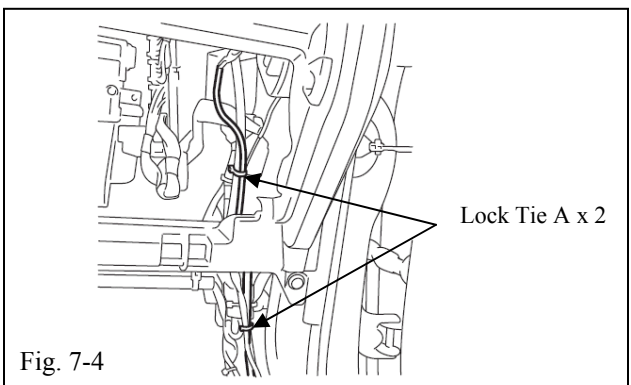
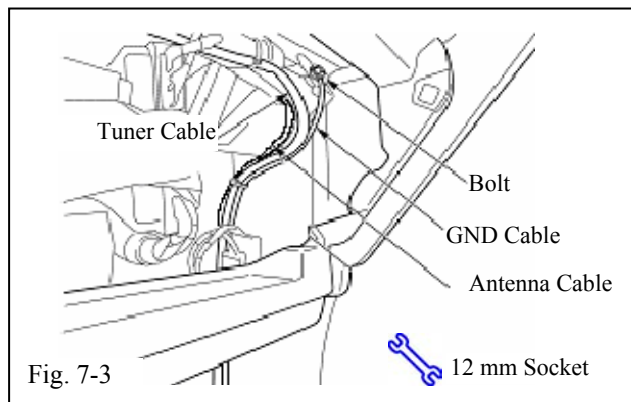
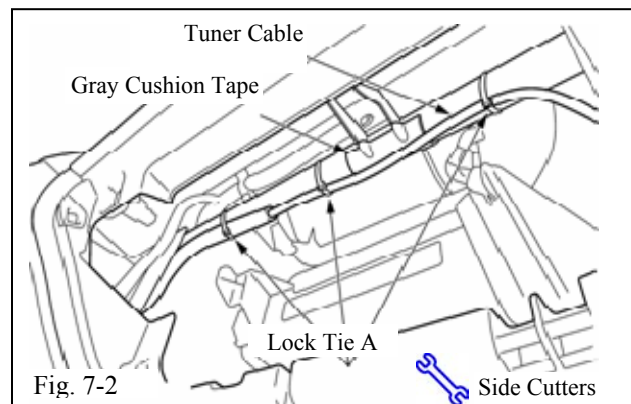
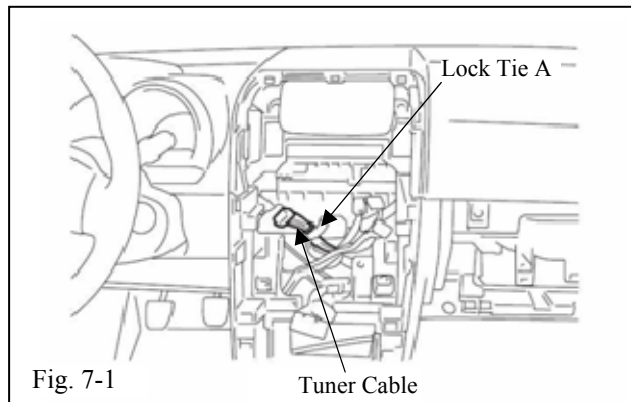


## 5. Install the Antenna.

- Clean the center IP area of the vehicle.
- Place the antenna cable inside the cable rail approximately 1 inch from the end of the antenna.
- Remove release paper backing from cable rail.
- Place the cable rail along the center axis of the vehicle. Use the air vents as reference. (Fig. 5-1 & Fig. 5-2)
- Remove the release paper backing from the ground plate and place the ground plate 5mm from the edge of the IP. (Fig. 5-1)
- Remove the release paper from the back of the antenna, and then attach to the center of the ground plate. (Fig. 5-2)

## 6. Install the Antenna Cable.

- Pull on antenna cable to remove any slack created from the cable rail installation.
- Route the antenna cable along the front windshield using the removal tool to press the cushions into place. (Fig. 6-1)
- Route the antenna cable as shown and secure with sheet tape. (Fig. 6-2)



## 7. Install and Route the Tuner and Ground Cable.

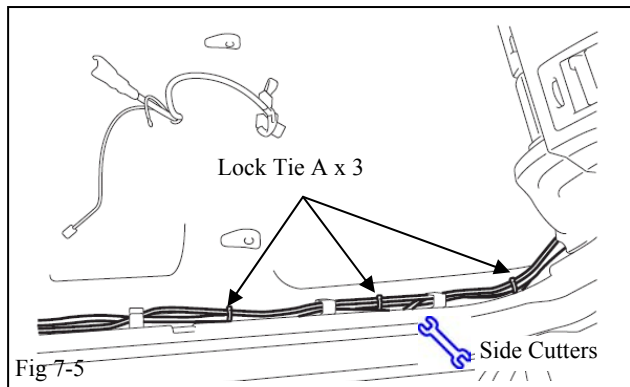
(a) Install and route the tuner cable from the center cluster. Provide sufficient cable slack to connect to the audio head unit as shown. Adjust the slack of the cable to match slack of other cables. Secure with one (1) lock tie (Fig. 7-1)

(b) Route the tuner cable along the front support bar. Secure the tuner cable to the front support bar with three (3) lock ties (A). Be sure to place gray cushion tape over the (potentially sharp) welds on the support bar. (Fig. 7-2)

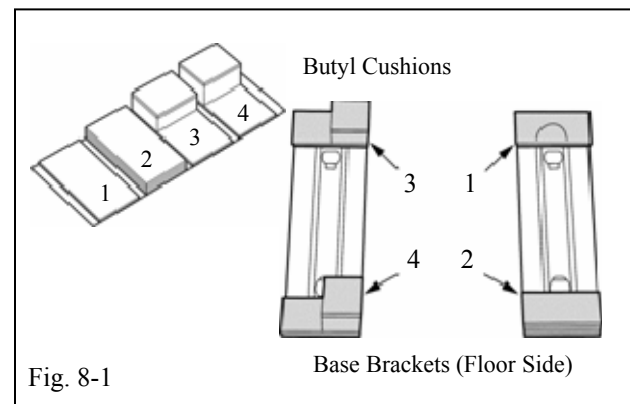
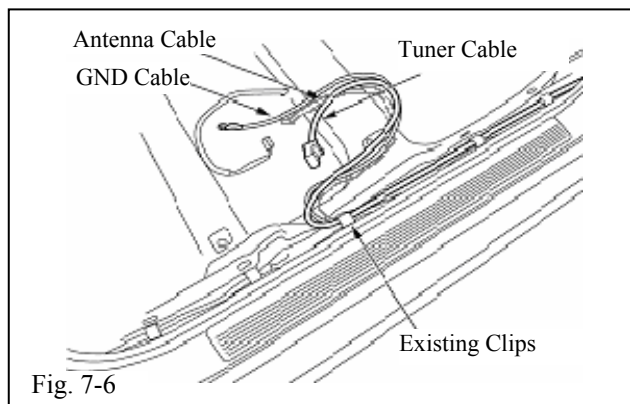
(c) Install the tuner ground cable as shown. Loosen the bolt and slide in the spade connector, then retighten the bolt. (Fig. 7-3)

(d) Route the tuner cable and antenna cable with the ground cable downward along the kick panel. Secure with two (2) lock tie as shown. (Fig. 7-4)



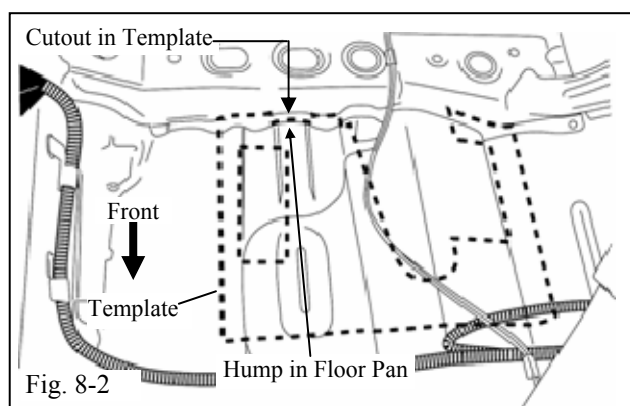


- (e) Route the tuner, antenna, and ground cables through the existing wire clips along the doorsill. (Fig.s 7-5 and 7-6)
- (f) Secure with three (3) lock ties A as shown. (Fig. 7-5)

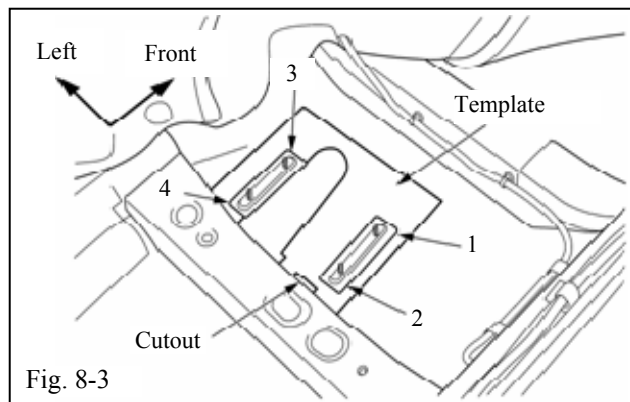


## 8. Install the Receiver.

- (a) Place the butyl cushions on the base brackets as shown. (Fig. 8-1)
- (b) Fold the carpeting back. Clean the base bracket mounting area.

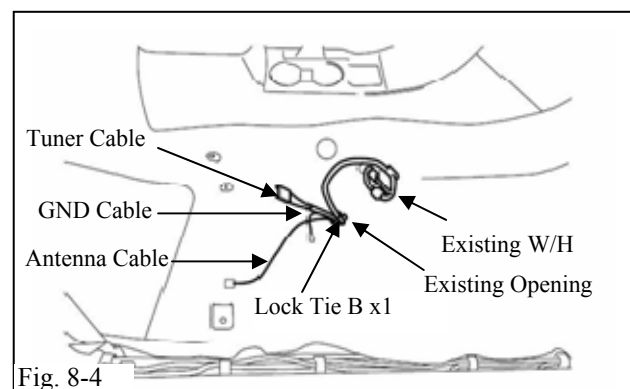


- (c) Position the mounting template as shown. White side faces up. Line up rear of template with seat support cross member. Line up the cutout in the template with the hump in floor pan. Press down to form the template to the floor pan. (Fig. 8-2)

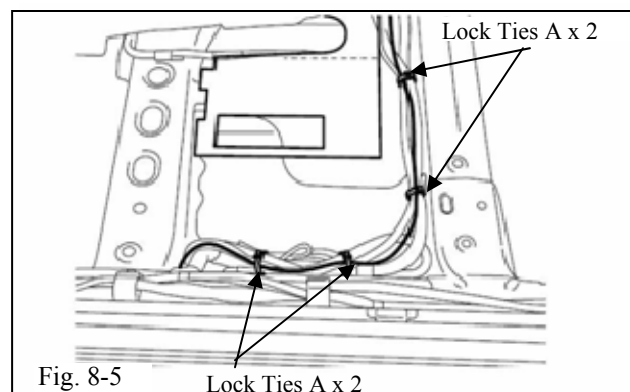


(d) Using the template as a guide, install the base brackets with butyl cushions to the floor pan. (Fig. 8-3)

(e) Remove and discard the template.



(f) Route the antenna cable, tuner cable and ground cable under the carpet and through the existing opening in the carpet. The tuner cable should protrude approximately 120 mm from the carpet; the ground cables should extend approximately 200 mm, and the antenna cable should be pulled to remove all the slack. Secure with 1 lock tie B as shown. (Fig. 8-4)

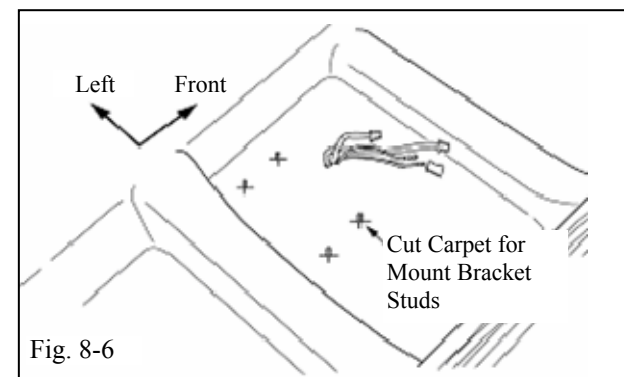


(g) Route the tuner cable, ground cable, and the antenna cable as shown in Fig. 8-5.

(h) Bundle excess receiver and ground cable length in the area shown. Secure with four (4) lock ties (A) as shown. (Fig. 8-5)

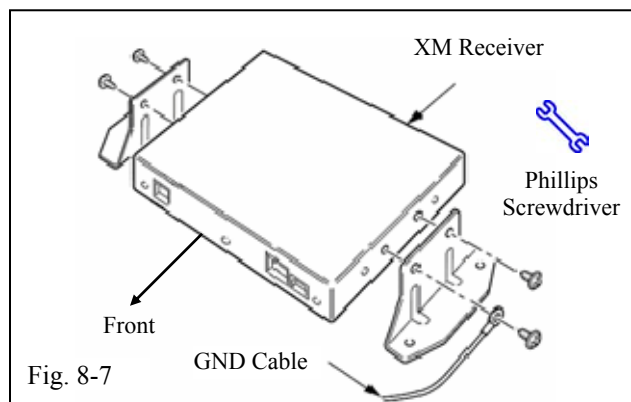


(1) Make sure the cables do not interfere with inner of scuff plate.



(i) Fold the carpet back down over the base brackets. Using a utility knife, cut four X-shaped openings in the carpet to expose the base bracket studs. (Fig. 8-6)

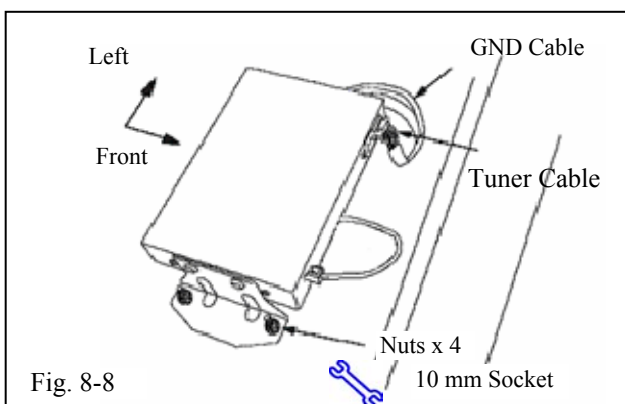
(j) Replace the carpet making sure to hook the carpet side to the existing 5 (five) clips.



(k) Install the L-brackets and ground cable onto the receiver. (Fig. 8-7)

(l) Place the receiver with L-brackets onto the studs so that the connectors face toward the front of the vehicle. Install the nuts onto the studs and tighten. (Fig. 8-8)

(m) Plug the tuner cable and antenna cable into the tuner.



## 9. Reinstall the Radio/Player Head Unit.

(a) Connect the satellite tuner cable and the connectors removed in Step 2. (c) into the rear of the head unit.



(b) Insert head unit into opening and re-install the two (2) screws and two (2) nuts in order shown. (Fig. 9-1)

## 10. In Process Functional Test.

(a) Temporarily reconnect battery negative cable.

(b) Turn ignition key to "ACC" position.

(c) Press the power button on the receiver/player head unit. Verify the backlighting illuminates.

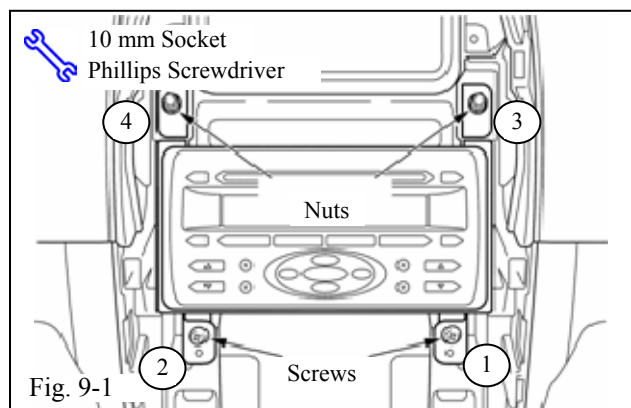
(d) Press and release the "SAT" button on the head unit.

(1) Verify that a satellite channel is received, or a "NO SIGNAL" message appears on the display.

**NOTE:** If "ANTENNA" appears (flashing) on the display – then the antenna cable is disconnected from the satellite tuner.

**NOTE:** If the head unit will not tune or go into satellite mode – then the tuner cable is disconnected from the satellite tuner.

(e) Disconnect battery negative cable.

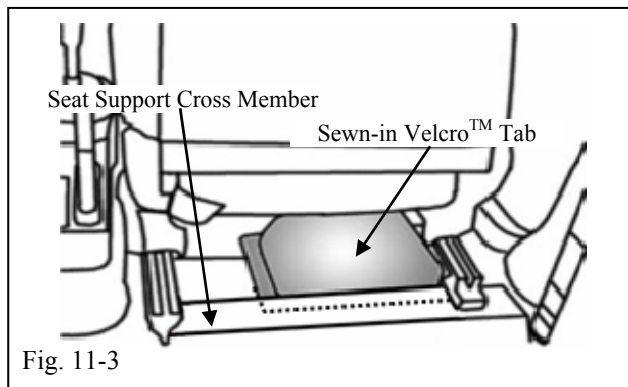
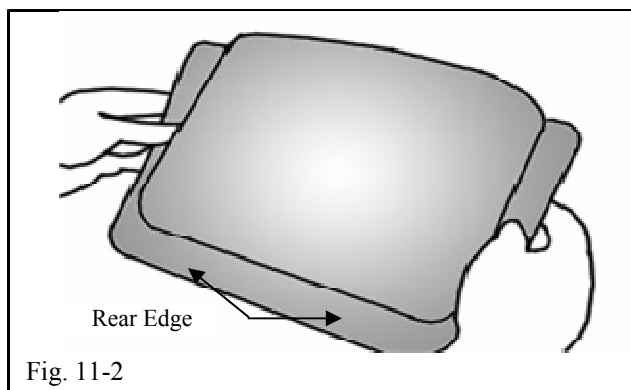
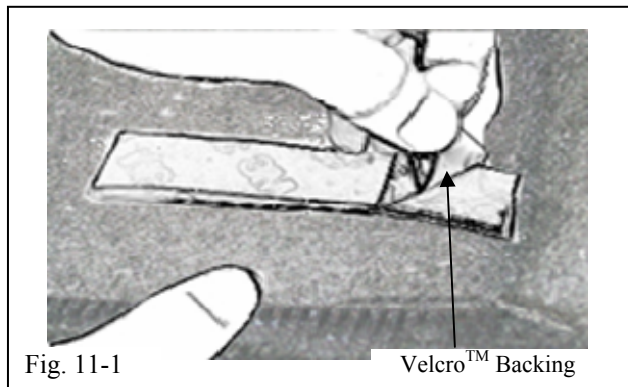


## 11. Installing Receiver Cover.

- (a) Remove the satellite receiver cover (P/N PT903-52040) from the poly bag.
- (b) Shape the cover so that it forms an open box shape with the Velcro™ facing down.

**NOTE:** Shipping and storage may have caused the shape to distort.

- (c) Peel the backing off the sewn-in Velcro™ strip inside the cover. (Fig. 11-1).
- (1) Do not separate the Velcro™.
- (d) Clean the top of satellite receiver box with 3M™ Prep Sol-70.
- (e) Align the rear edge of the cover with the rear edge of the satellite receiver. (Fig. 11-2).
- (f) Place the rear edge between the receiver and seat support cross member, such that the rear edge is on the floor pan. (Fig. 11-3)
- (g) Center cover to ensure satellite receiver mounting bolts are covered. Press Velcro™ to the floor carpet around the perimeter.
- (h) Press the sewn-in Velcro™ tab on the top underside of the cover firmly to the satellite receiver. (Fig. 11-3).



## 12. Complete the Reassembly of the Vehicle:

### (a) Re-install the front seat

- (1) Reinstall the four (4) bolts loosely, then tighten them.



- (2) Tighten bolts to 42 N-m (31 lbf-ft)

- (3) Reconnect any disconnected connectors.

### (b) Reinstall glove box.

### (c) Reinstall upper console panel.

- (1) Reconnect any disconnected connectors.

### (d) Reinstall lower console panel.

- (1) Reconnect the lighter connector and clip.

### (e) Reinstall kick plate.



- (1) Ensure that inset (Fig. 1-18) is located first.

### (f) Reinstall doorsill.

### (g) Reinstall A Pillar garnish. Use clip included in kit.

### (h) Verify the panels fit together properly with no uneven gaps between them.

## 13. Reconnect Battery Cable.

### (a) Reconnect the vehicle's negative battery cable. (Fig. 13-1)

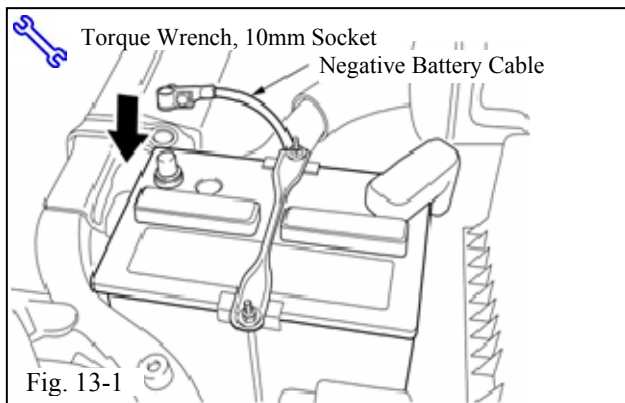
- (1) Position the negative battery cable to the original factory position.

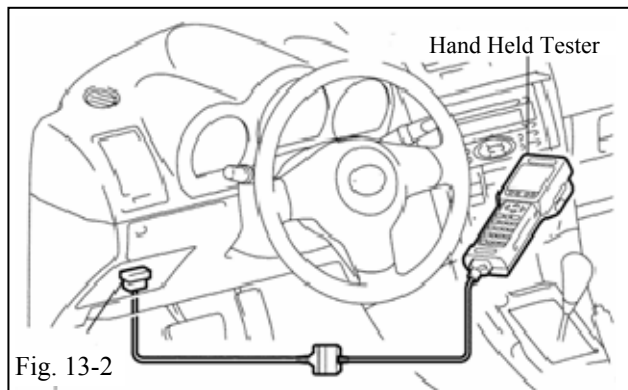


- (2) Tighten the nut with 4.1 N-m (36 lbf-in) of torque.



- (3) Be careful not to touch the positive battery terminal.





(b) Connect the scan tool connector to the vehicle's diagnostic connector in the lower dash area. (Fig. 13-2)

- (1) Turn ignition switch to ON position.
- (2) Check for Airbag ECU trouble codes – if present then clear the DTCs.
- (3) Refer to hand held scan tool tester operator's manual for further details.



**NOTE:** Check for the latest version of the software on Toyota Information System (TIS) before setting up the scan tool.



**NOTE:** Ensure the software is the latest version (software release 13.3a R028: 1/20/06 or later.)



**NOTE:** Download the latest software from Toyota Information System (TIS).

(c) Reset the power windows.

- (1) Turn ignition key to ON position.
- (2) Push down the power window switches of each door, and lower the windows halfway.
- (3) Pull up the switches until the windows close and hold switches up for a further one (1) second (minimum.)

(d) Reset the power moon roof.

- (1) Push and hold moon roof switch to close side until moon roof closes. Hold for a further two (2) seconds.

(e) Clean up and remove any trash.



(f) Place the owner "XM Satellite Radio" brochure in the glove box.



Checklist - these points **MUST** be checked to ensure a quality installation.

Check:	Look For:
<p><u>Accessory Function Checks</u></p> <p><input type="checkbox"/> Satellite Radio Tuner.</p> <p><input type="checkbox"/> Receiver/player Assembly.</p>	<p>*Verify the proper operation of the Satellite Radio Tuner.</p> <p>*Verify the proper operation of the Receiver/player Assembly</p> <p>*(Refer to the receiver assembly and radio owner's manuals.)</p>
<p><u>Vehicle Function Checks</u></p> <p><input type="checkbox"/> Hazard switch.</p> <p><input type="checkbox"/> Passenger's seat belt reminder light.</p> <p><input type="checkbox"/> Passenger front seat.</p> <p><input type="checkbox"/> Rear passenger seat back.</p> <p><input type="checkbox"/> SRS warning light.</p> <p><input type="checkbox"/> HVAC.</p> <p><input type="checkbox"/> SSP function.</p> <p><input type="checkbox"/> Lighter socket.</p> <p><input type="checkbox"/> Steering wheel audio controls</p> <p><input type="checkbox"/> Diagnostic Codes – using Scan Tool.</p>	<p>Proper operation of the hazard switch.</p> <p>Proper operation of the passenger's seat belt reminder light</p> <p>Removed seat is securely fastened.</p> <p>Seat in upright position and seat back lock mechanism secured.</p> <p>SRS warning light illuminates for approximately 6 seconds with the ignition ON, and then goes out.</p> <p>Proper operation of the air conditioning system.</p> <p>Verify the radio SSP function is set to "tC" by pressing the "SSP" button on the head unit for 5 seconds. (If not, press the volume control and set to "tC".)</p> <p>Proper operation of lighter socket.</p> <p>Functioning steering wheel audio controls.</p> <p>Confirm that no diagnostic trouble codes are present.</p>