

**Part Number: Mounting Kit: PT546-08070**  
**Tuner Assy: 86180-0W031**

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

**Tuner Assy Kit Contents (86180-0W031)**

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

**Mounting Kit Contents (PT546-08070)**

Item #	Quantity Req'd.	Description
1	1	Ground Cable
2	1	Wire, To Radio Installation
3	2	Tuner Bracket
4	2	Base Bracket
5	1	Template A (Sheet)
6	4	Butyl Cushion
7	1	Antenna
8	3	Hardware Bags
9	1	XM Satellite Radio Brochure

**Hardware Bag Contents – 1 (PT546-08070)**

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

**Hardware Bag Contents – 1 (PT546-08070)**

Item #	Quantity Req'd.	Description
1	8	Lock Tie A
2	3	Cushion Tape A (135 x 80)

**Hardware Bag Contents – 1 (PT546-08070)**

Item #	Quantity Req'd.	Description
1	1	Template B
2	5	Sheet Tape (30 x 30)
3	4	Cushion Tape B (30 x 30)
4	8	Lock Tie B
5	1	HFC Connector Housing

**Additional Items Required For Installation**

Item #	Quantity Req'd.	Description
1		

**Conflicts**

iPod Interface, Sirius Satellite Radio
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**Recommended Tools**

<b>Personal &amp; Vehicle Protection</b>	<b>Notes</b>
Safety Goggles	
Seat Protectors	
Floor Protectors	
Protective Tape	Masking Tape
Protective Blanket	
<b>Special Tools</b>	<b>Notes</b>
None	
<b>Installation Tools</b>	<b>Notes</b>
Ratchet	
Extensions	
Sockets	10mm, 12mm, 14mm
Torque Wrench	4 N•m (3 lbf•ft), 36 N•m (27 lbf•ft), 42 N•m (31 lbf•ft)
Screwdriver	#2 Phillips
Nylon Pry Tool	e.g., Panel Pry Tool #1 Toyota SST #00002-06001-0
Carpet Punch	7 mm
<b>Special Chemicals</b>	<b>Notes</b>
Cleaner	3M™ Prep Sol-70

**General Applicability**

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**Recommended Sequence of Application**







Item #	Accessory
1	

\*Mandatory

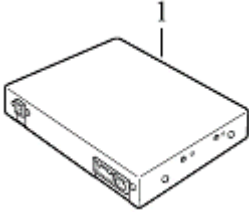
**Vehicle Service Parts** (may be required for reassembly)

Item #	Quantity Req'd.	Description
1		

**Legend**

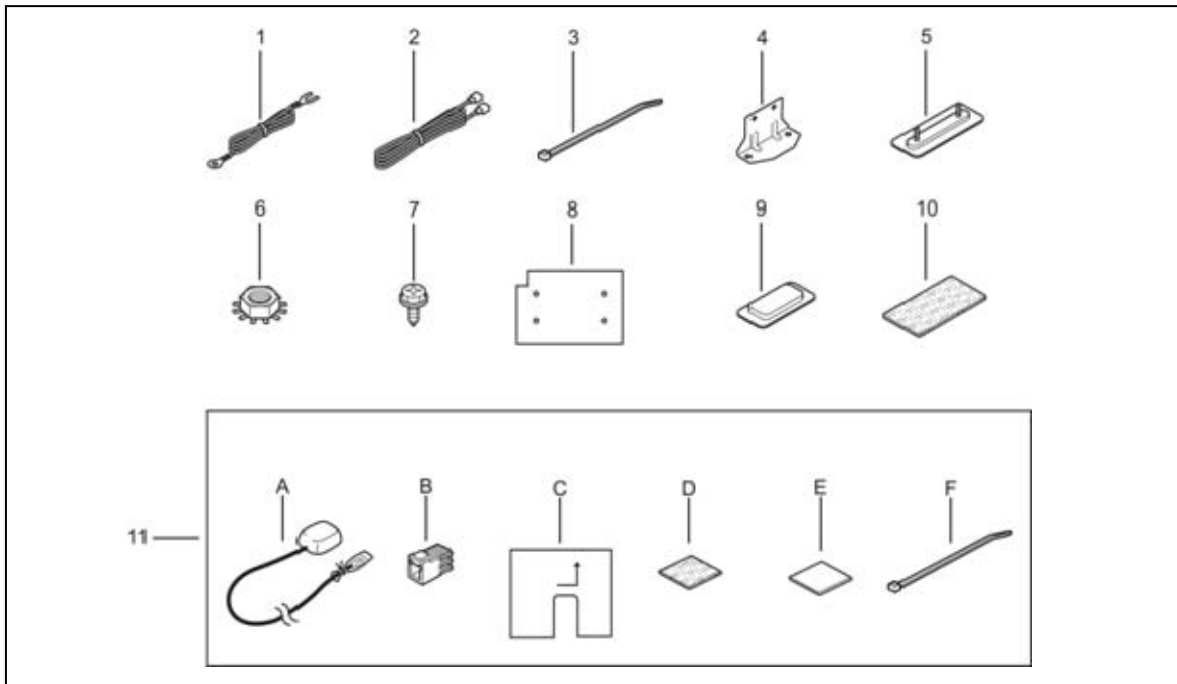
	<b>STOP:</b> Damage to the vehicle may occur. Do not proceed until process has been complied with.
	<b>OPERATOR SAFETY:</b> Use caution to avoid risk of injury.
	<b>CAUTION:</b> A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.
	<b>TOOLS &amp; EQUIPMENT:</b> Used in Figures calls out the specific tools and equipment recommended for this process.
	<b>REVISION MARK:</b> This mark highlights a change in installation with respect to previous issue.
	<b>SAFETY TORQUE:</b> This mark indicates that torque is related to safety.

Parts Description of Tuner Assy (86180-0W030)



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

Parts Description of Mounting Kit (PT546-34070)



Item #	Parts Name	Qty
1	Ground Cable	1
2	Wire, To Radio Installation	1
3	Lock Tie A (AVC-LAN)	8
4	Tuner Bracket	2
5	Base Bracket	2
6	Nut (M6)	4
7	Screw (M5 x L8)	4
8	Template (to locate bracket) (Sheet)	1
9	Butyl Cushion	4
10	Cushion Tape A (80 x 135)	3
11	A Antenna	1
	B HFC Connector Housing	1
	C Template B (to locate Antenna)	1
	D Cushion Tape B (30 x 30)	4
	E Sheet Tape (30 x 30)	5
	F Lock Tie B	8

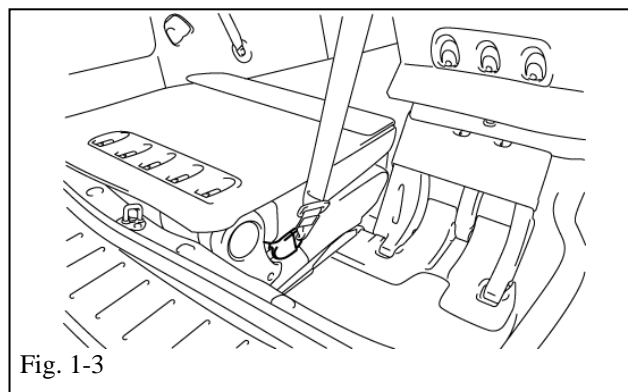
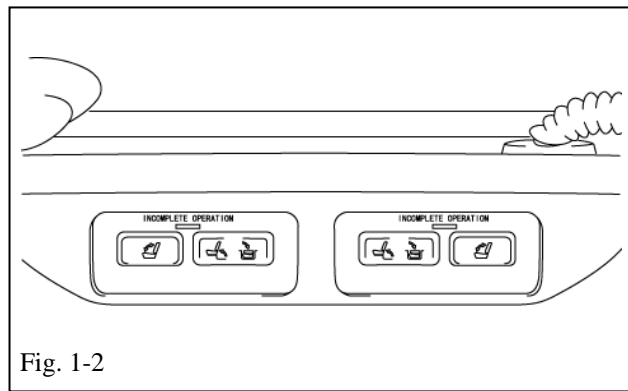
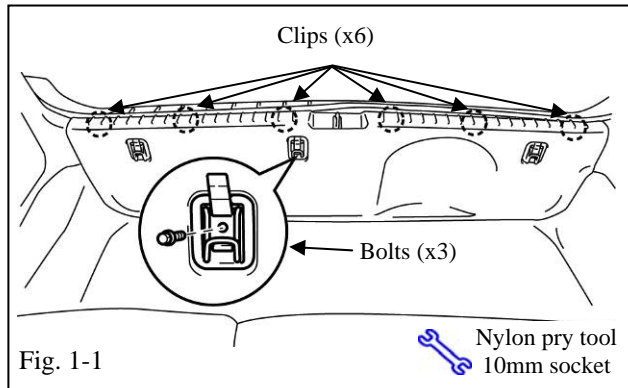
Care must be taken when installing this accessory to ensure that damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the Accessory Installation Practices document.

The Accessory Installation Practices 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 the Accessory Installation Practices document.



### 1. Vehicle Disassembly

- STOP** (a) Protect fender before starting.
- STOP** (b) Place removed vehicle components on protective blanket.
- +** **CAUTION:** For vehicle without electric seats, disconnect battery first (see 1.(f)).
- (c) Remove the rear threshold trim plate. (Fig.1-1)
  - (1) Remove three (3) bolts and cargo tie down hardware.
  - (2) Using a nylon pry tool, disengage six (6) clips; then remove the rear cargo threshold trim plate.
- (d) Fold the rear seat into the storage area as follows.
  - (1) If the vehicle is equipped with the optional power control panel, use the controls to fold the left rear seat into the storage area. (Fig. 1-2). Proceed to step (e).
  - (2) If the seats are manually controlled, use the directions provided, use the strap marked "fold/lift seatback" to fold seatback downward, then use the strap marked "to stow/use" to stow the seat into the storage area (Figure 1-3).

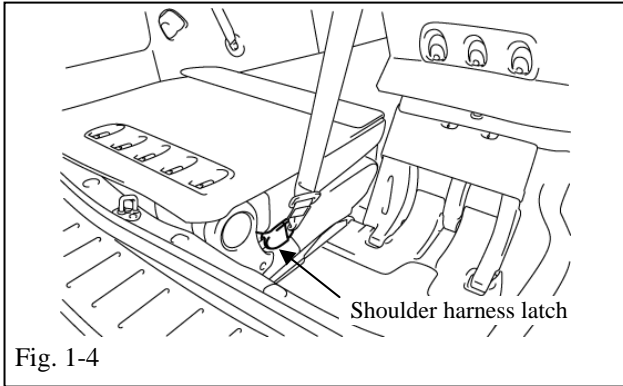


Fig. 1-4

(e) Disconnect the seat belt shoulder harness latch; then fold the right rear seat into the storage area. (Fig. 1-4)

(f) Place Drivers seat in mid position if equipped with electric seats.

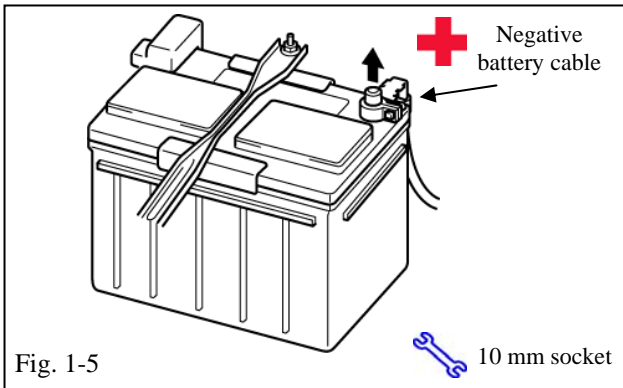


Fig. 1-5

(g) Remove the negative (-) battery cable (Fig. 1-5)

**+** **CAUTION:** Do not touch the positive terminal with any tool when removing cable .

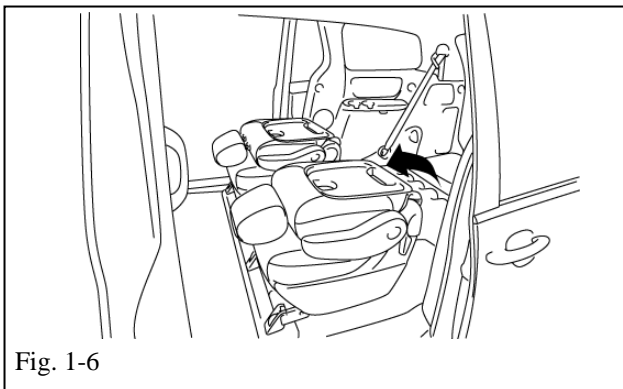


Fig. 1-6

(h) Remove the left middle seat as follows:

(1) Release and fold the seatback downward. (Fig. 1-6)

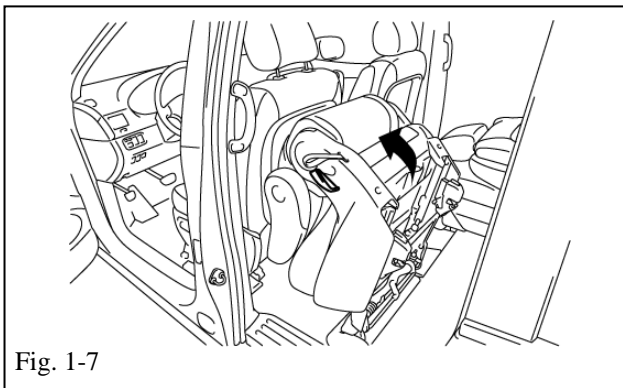


Fig. 1-7

(2) Release using the seatback lever or pull strap and fold the seat assembly forward. (Fig. 1-7)

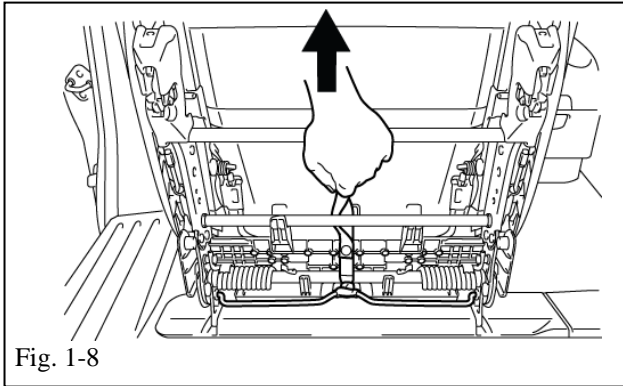


Fig. 1-8

(3) Pull the strap upward to release the seat. Fold and rotate to remove the seat assembly upright; then remove the seat assembly from the vehicle. (Fig. 1-8).

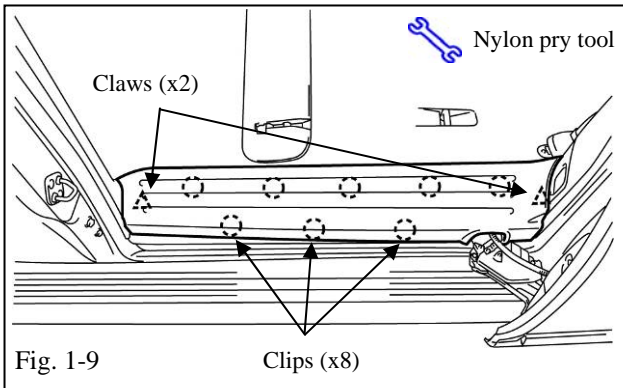


Fig. 1-9

(i) Remove driver side middle door scuff plate. (Fig. 1-9)

(1) Using a nylon pry tool, disengage eight (8) clips and two (2) claws and remove the driver side middle door scuff plate.

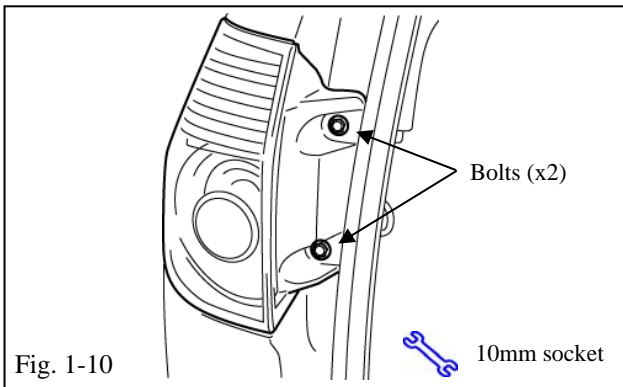


Fig. 1-10

(j) Remove the two (2) bolts; then remove the left rear tail lamp assembly. (Fig. 1-10)

(k) Disconnect electrical connector (1).



**NOTE:** When disconnecting wiring connectors, do not pull on the wiring; pull on the connector only.

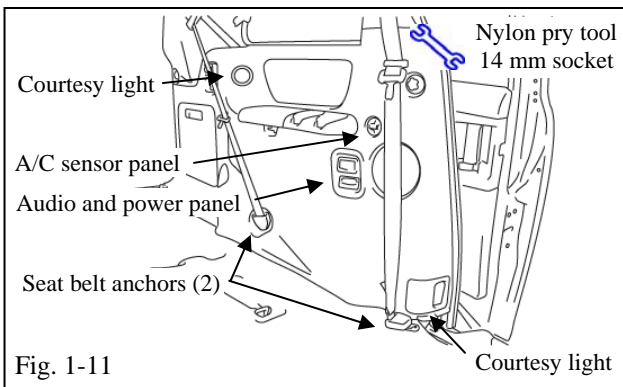


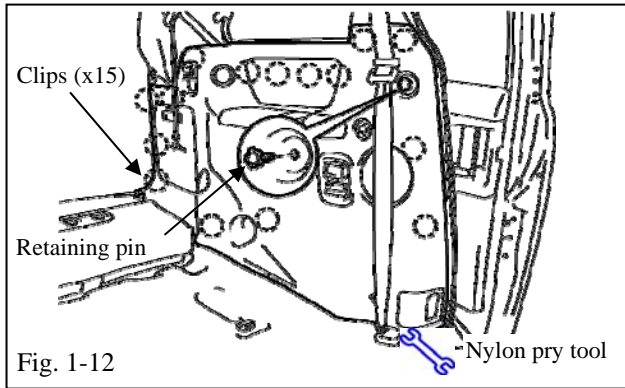
Fig. 1-11

(l) Remove the following from the left rear interior panel: (Fig. 1-11)

- (1) Seat belt anchors (2)
- (2) Courtesy lights (2)
- (3) Audio and power panel (if equipped)
- (4) A/C sensor panel (if equipped)

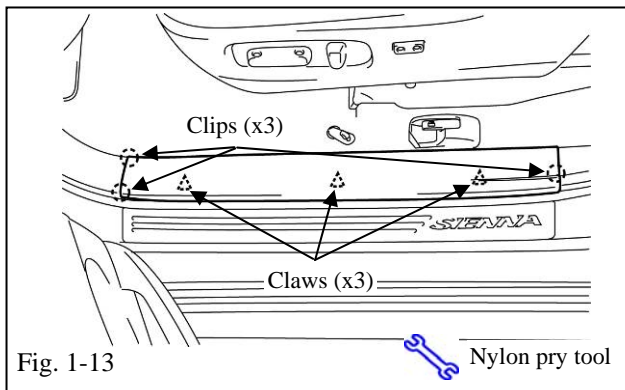


**NOTE:** Tape seat belt anchor and bolt to protect vehicle components.

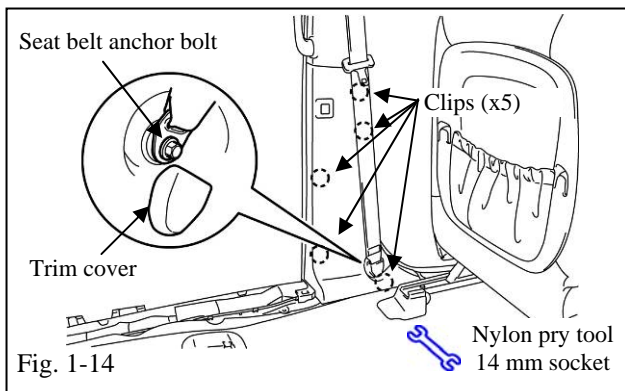


- (m) Remove retaining pin (1). (Fig. 1-12)
- (n) Remove the interior panel. (Fig. 1-12)
  - (1) Using a nylon pry tool, disengage fifteen (15) clips and remove the left rear interior panel.

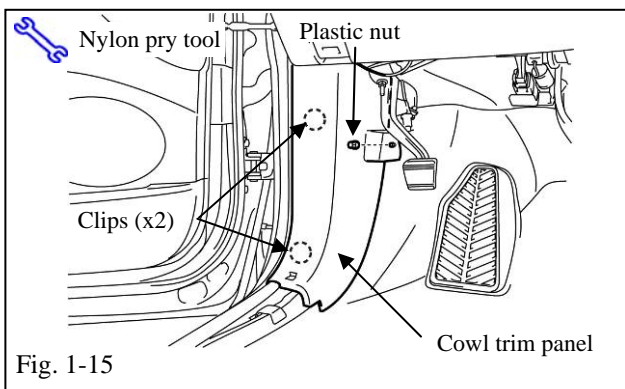
**+** **CAUTION:** 12V/120W accessory power must be disconnected before removal.



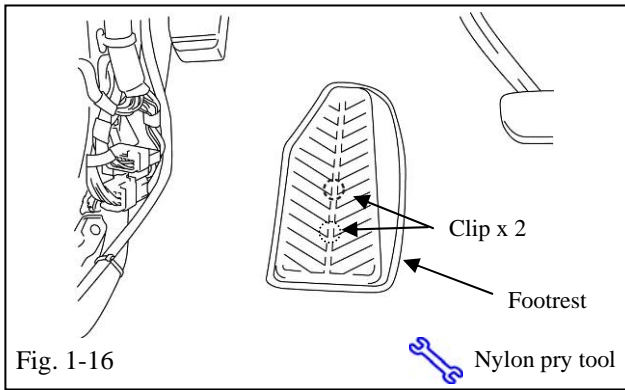
- (o) Remove the driver's side door scuff as follows:
  - (1) Using a nylon pry tool, disengage three (3) clips and three (3) claws and remove the driver side middle door scuff plate. (Fig. 1-13)



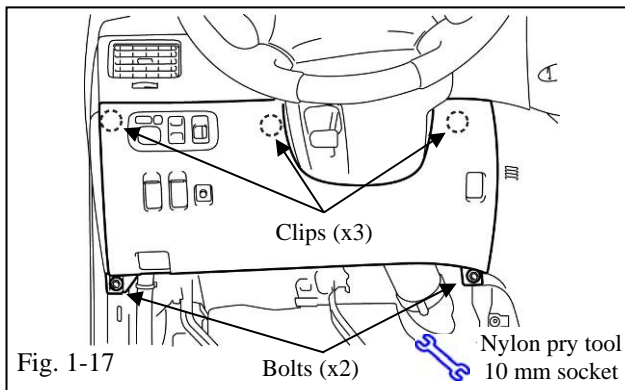
- (p) Remove the B-pillar trim panel as follows: (Fig. 1-14)
  - (1) Remove the seat belt anchor trim cover and bolt.
  - (2) Using a nylon pry tool, disengage five (5) clips and remove the B-pillar trim panel.



- (q) Remove the driver side cowl trim panel. (Fig. 1-15)
  - (1) Remove the plastic nut.
  - (2) Use a nylon pry tool to disengage the two (2) clips; then remove the cowl trim panel.



(r) Remove the footrest. (Fig. 1-16)

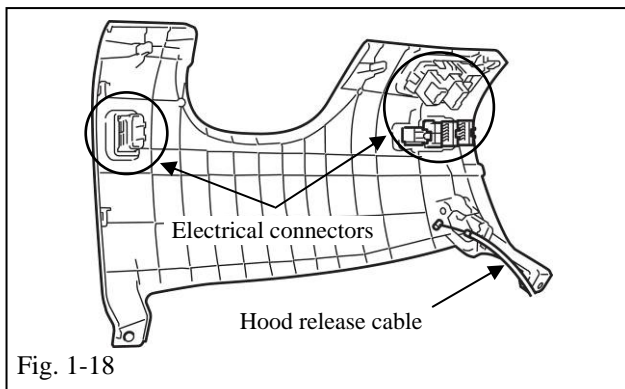


(s) Remove driver side lower dash panel. (Fig. 1-17)

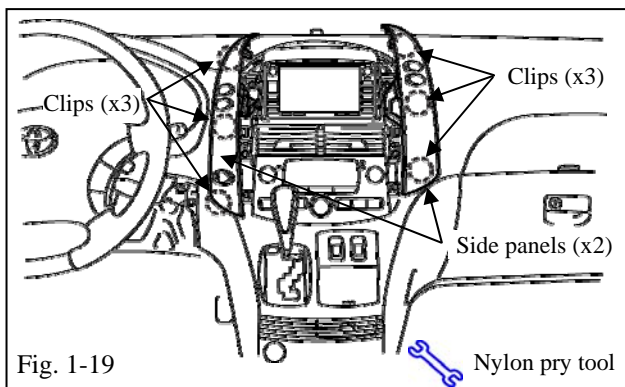
(1) Remove the two (2) bolts from the lower instrument panel as shown.

(2) Using a nylon pry tool, disengage three (3) clips and remove the driver side lower dash panel.

(3) Disconnect the electrical connectors (power mirrors, rear vent, option, slide door off, set (tire pressure)) and the hood release cable from the back of the lower dash panel. (Fig. 1-18)



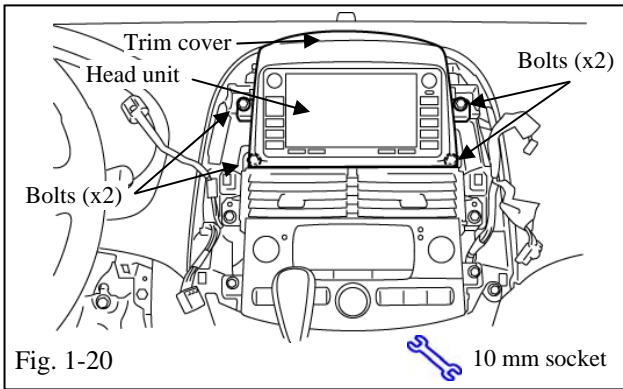
**CAUTION:** When disconnecting wiring connectors do not pull on the wiring; pull on the connector only.



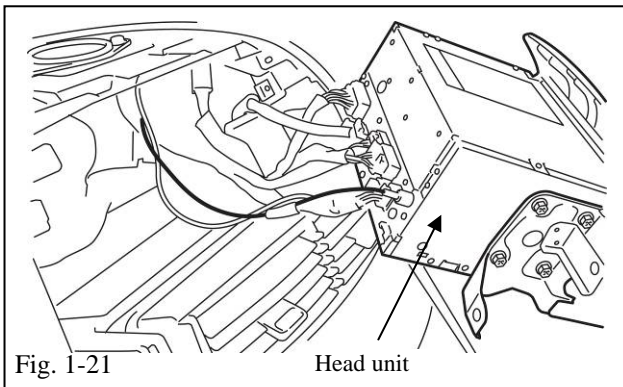
(t) Remove head unit side panels. (Fig. 1-19)

(1) Using a nylon pry tool, disengage three (3) clips on each side and remove the side panels.

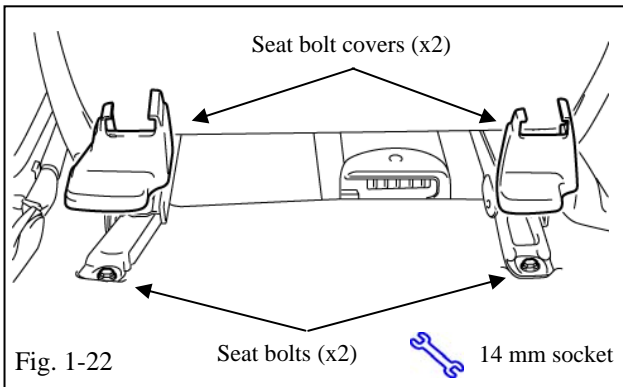
(2) Disconnect the electrical connectors (hazard, defrost, light door off/on, aux jack) from the back side of the panels.



(u) Remove the four (4) bolts, then slide the head unit rearward and upward, and remove the top trim cover. (Fig. 1-20)

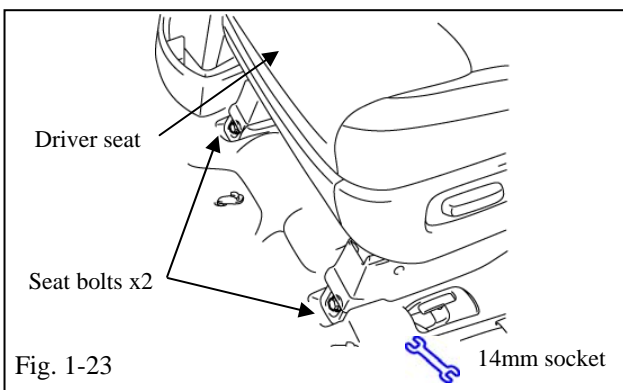


(v) Remove the electrical connectors and antenna from the rear of the head unit; then remove the head unit. (Fig. 1-21)



(w) Remove the driver's seat as follows:

(1) Remove the two (2) bolt covers and two (2) bolts from the rear mounting brackets. (Fig. 1-22)

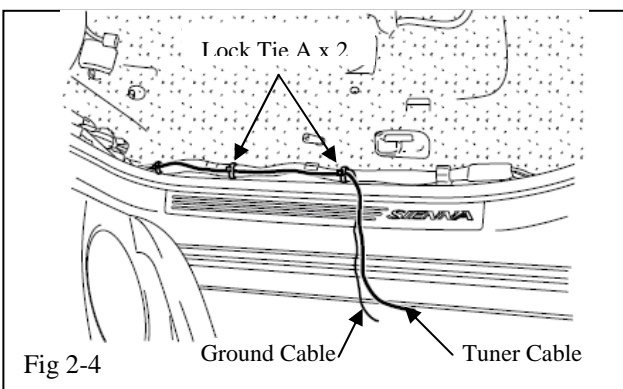
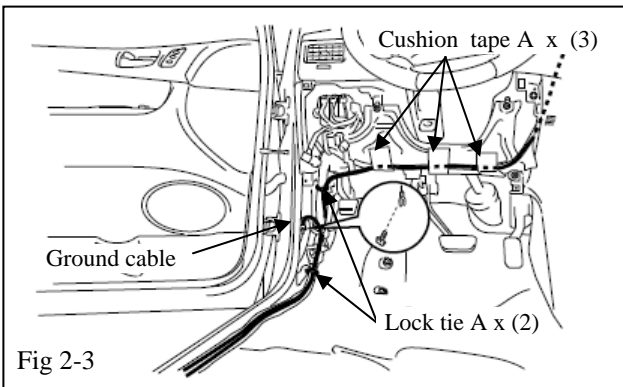
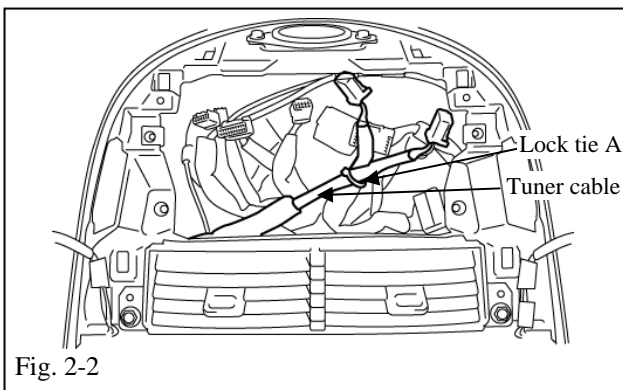
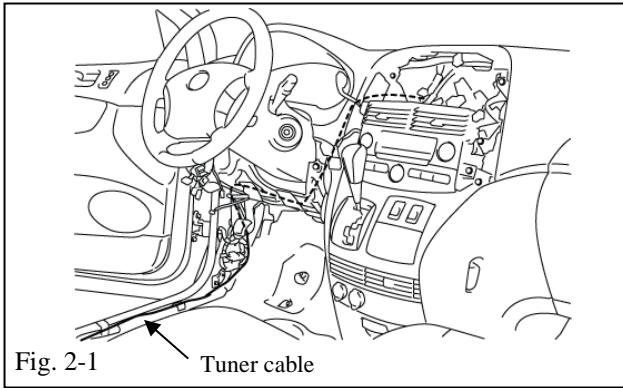


(2) Remove two (2) bolts from the front mount brackets; then remove the seat. (Fig. 1-23)

**+** **NOTE:** Do not remove seat. Tilt backwards and ensure slack in harness.



## 2. Tuner Cable and Ground Wire Installation



(a) Install the tuner cable into the center opening; then route the cable behind the reinforcement bar in the center cluster and below the steering wheel, then downward along the cowl trim panel and toward the door sill as shown. (Fig. 2-1)

(b) Secure the tuner cable to the existing wire harness with one (1) lock tie A. (Fig. 2-2)

(c) Install the ground cable. (Fig. 2-3)

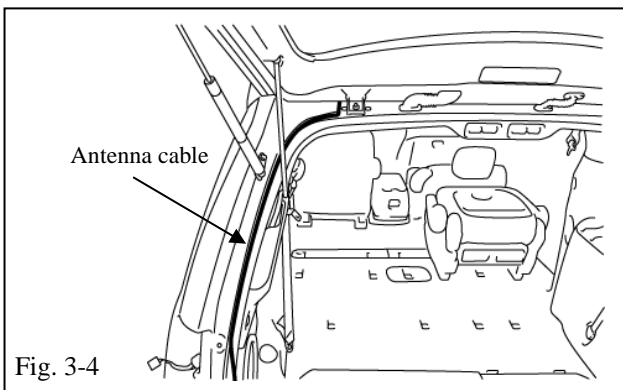
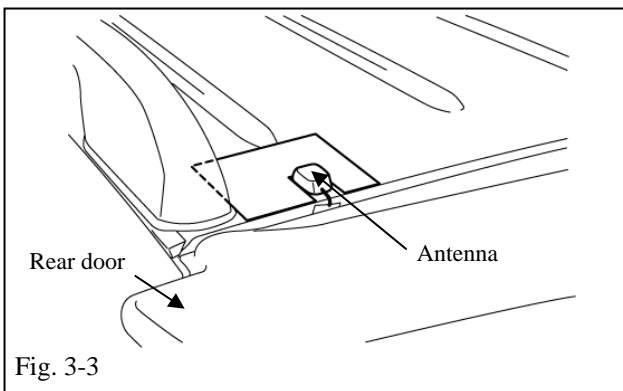
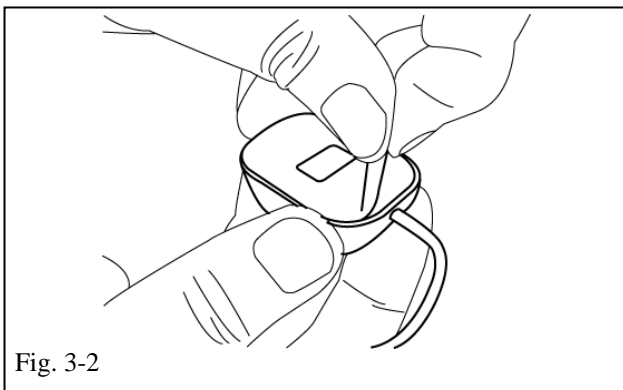
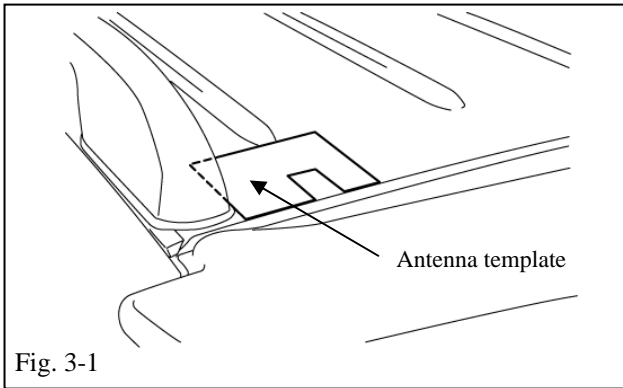
(1) Loosen the existing ground screw.

(2) Route the ground cable into the side cowl area, then secure the ground cable terminal with the ground screw.

(d) Secure the tuner cable with three (3) cushion tapes A and two (2) lock tie A as shown. (Fig. 2-3)

(e) Route the tuner and ground cables along the door sill as shown. (Fig. 2-4)

(f) Secure the tuner and ground cables with two (2) lock tie A as shown. (Fig. 2-4)



### 3. Antenna Installation

**NOTE:** Carefully clean the mounting surface for the template, the antenna, and the cushion tapes (use 3M™ Prep Sol-70, or soap and water and High Performance Wipes).

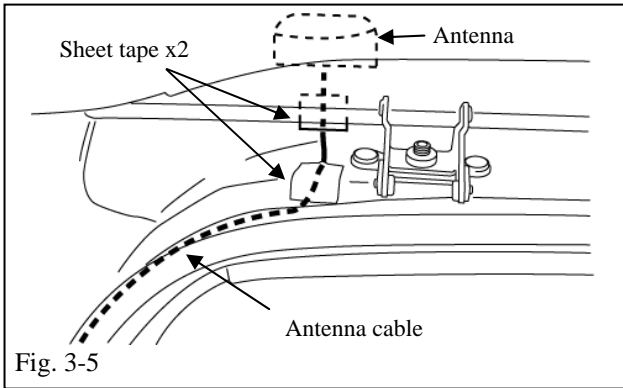
(a) Install the antenna as follows:

(1) Tape the antenna template onto the roof as shown. (Fig. 3-1)

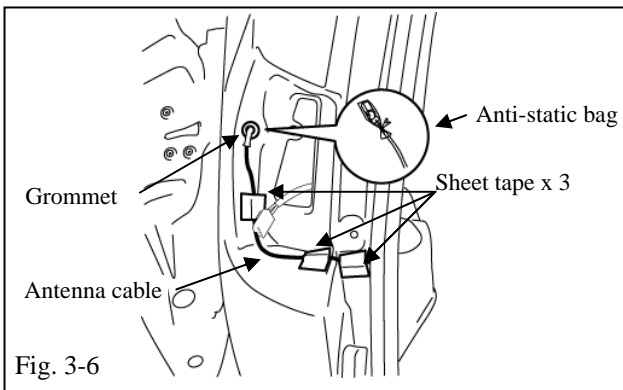
(2) Remove the release paper from the antenna. (Fig. 3-2)

(3) Install the antenna within the template cutout area. (Fig. 3-3)

(4) Route the antenna cable over the edge of the rear door opening, then along the door channel toward the driver side tail lamp mount area. (Fig. 3-4)



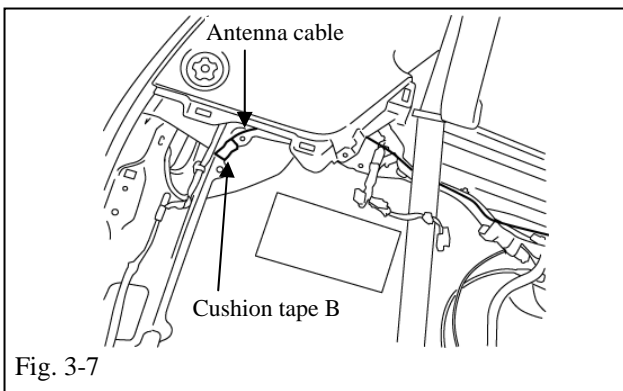
- (5) Secure the antenna cable to the body with two (2) sheet tape; then tuck the antenna cable under the weather strip. (Fig. 3-5)



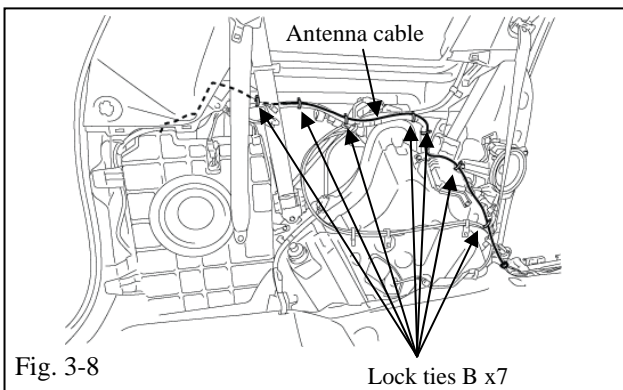
- (6) Route the antenna cable through the existing hole in the tail lamp mounting area as shown; then install the wire and grommet into the hole. Secure the antenna cable with three (3) sheet tape around tail lamp as shown. (Fig. 3-6)



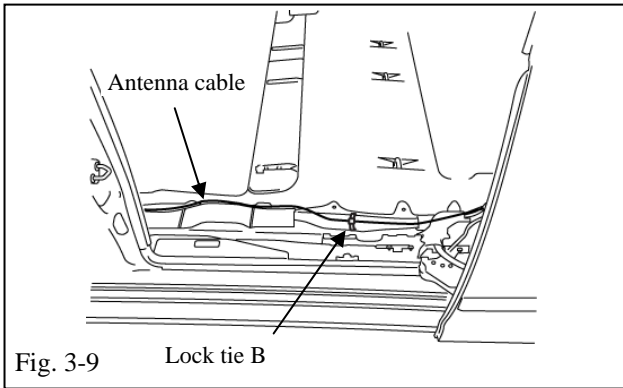
**NOTE:** Do not remove anti-static bag until antenna wire routing is complete.



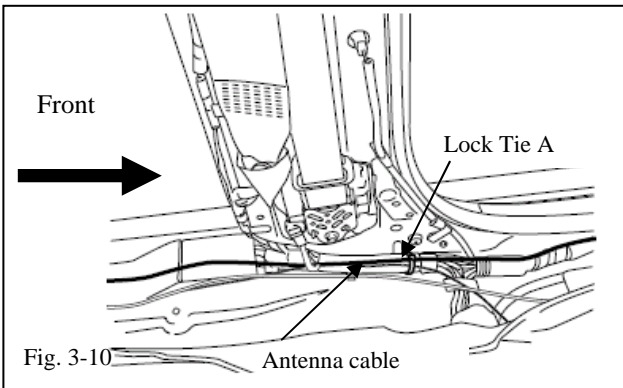
- (7) Route antenna cable into interior as shown. Cover metal with cushion tape B and secure antenna cable with 2<sup>nd</sup> cushion tape B. Antenna cable is sandwiched between two pieces of cushion tape. (Fig. 3-7)



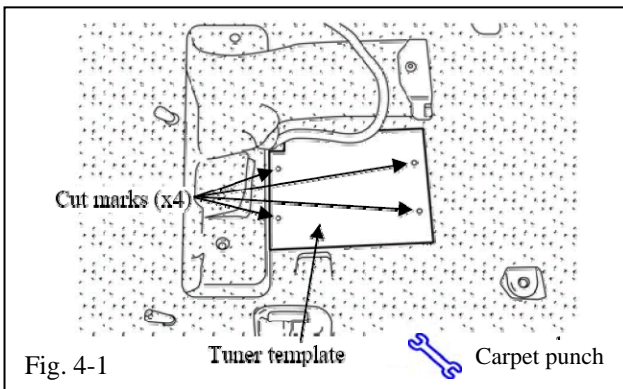
- (8) Route the antenna cable into the interior as shown. Secure with seven (7) lock ties B. (Fig. 3-8)



(9) Route the antenna cable through the existing door channel guides in the middle sliding door area toward the front, then secure the antenna cable with a lock tie B. (Fig. 3-9)



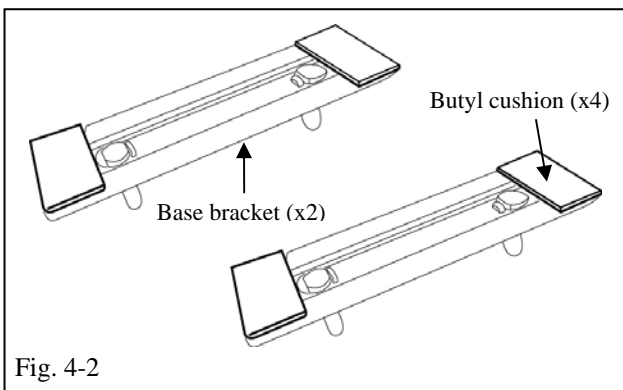
(10) Route the antenna cable from the middle sliding door area along the B-pillar toward the front driver's seat area and secure with a lock tie A as shown. (Fig 3-10)



#### 4. Install Tuner

- (a) Position the Template A on the carpet, then transfer the cut marks onto the carpet. (Fig. 4-1)
- (b) Remove the template; then use a carpet punch to create four (4) holes identified by the template.

**NOTE:** Always dry fit before installing



- (c) Install four (4) butyl cushions onto the base brackets as shown. (Fig. 4-2)
- (d) Clean the base bracket mount area with 3M solvent.

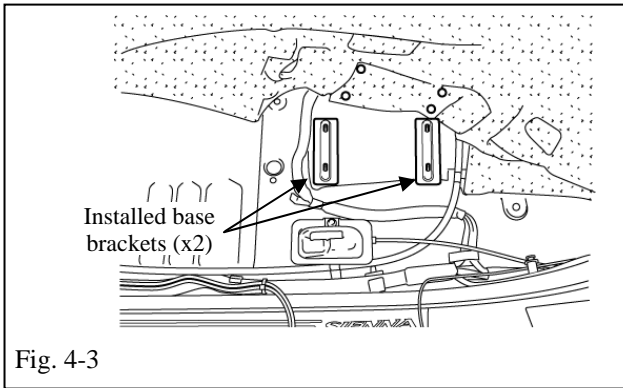


Fig. 4-3

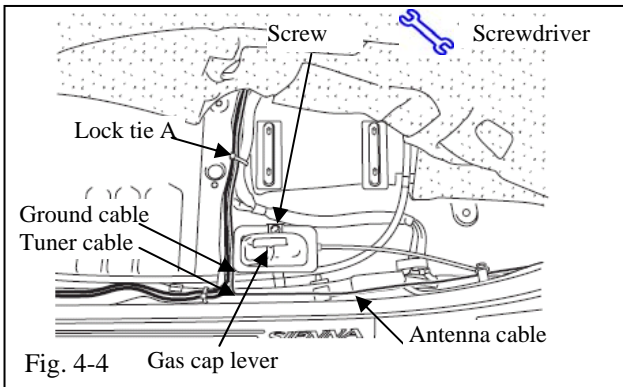


Fig. 4-4

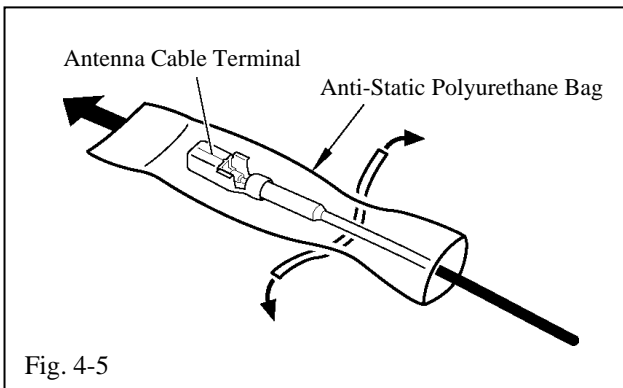


Fig. 4-5

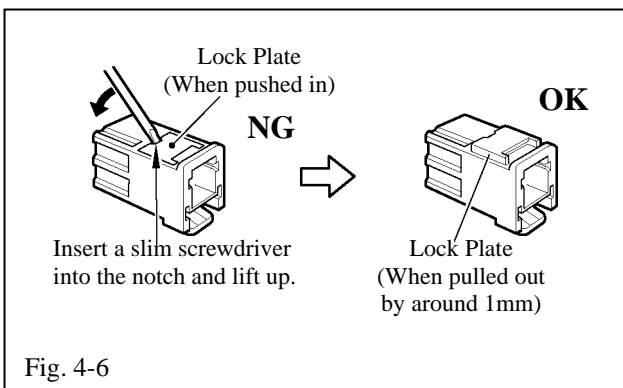
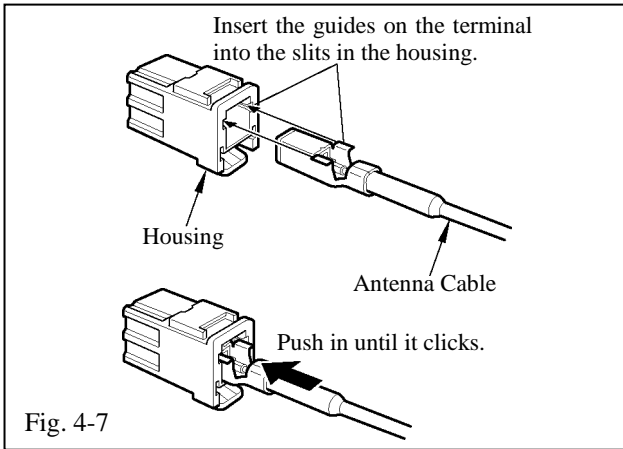
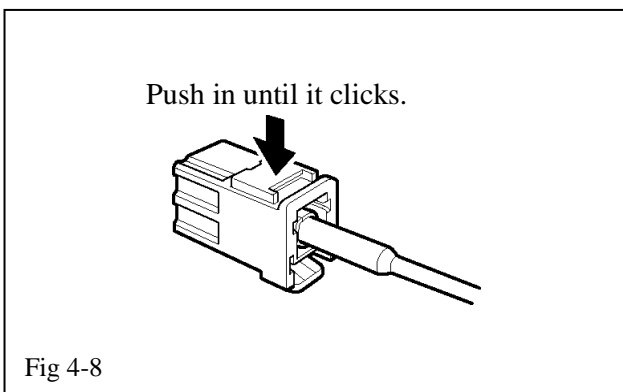


Fig. 4-6

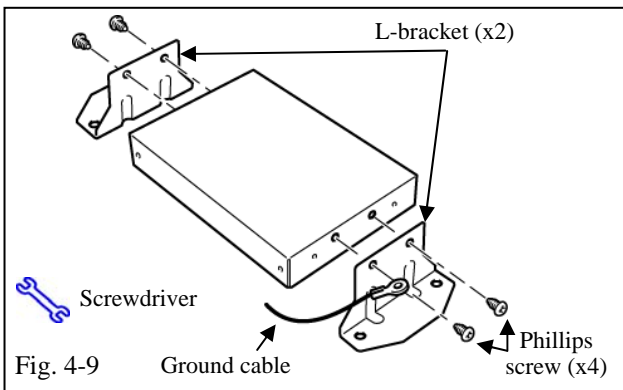
- (e) Insert base bracket studs through the cut holes, remove the release paper from the butyl cushions; then press the carpet downward to install the base brackets. (Fig. 4-3)
  - (f) Lift carpet to verify the base brackets are properly mounted.
  - (g) Remove screw and remove gas cap lever as shown. (Fig. 4-4)
  - (h) Route the ground cable, the tuner cable, and the antenna cable under e-brake cable, with existing wire harness, and through the openings in the carpet. Secure the cables to the existing harness with a lock tie A as shown. (Fig. 4-4)
  - (i) Reinstall gas cap lever and screw.
  - (j) Attach a housing to the antenna cable terminal.
    - (1) Remove the anti-static polyurethane bag from the terminal. (Fig. 4-5)
    - (2) If the lock plate of the housing is pushed in, pull it out. (Fig. 4-6)
- NOTE:** This step is not required if the lock plate is already pulled out.



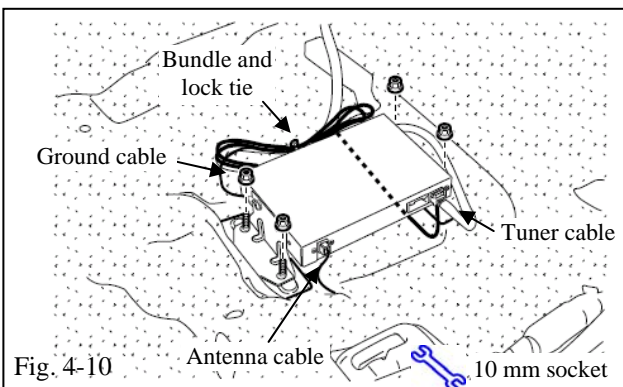
- (3) Push the terminal into the housing.  
(Fig. 4-7)



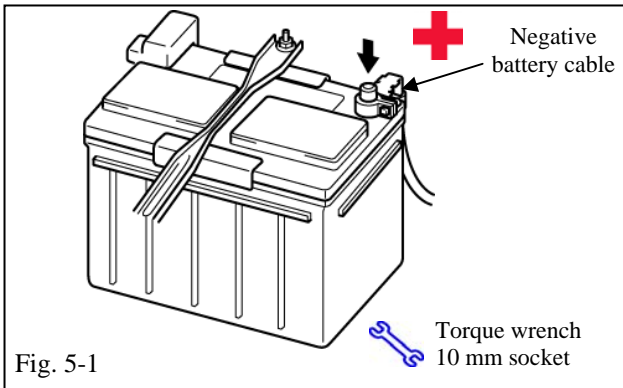
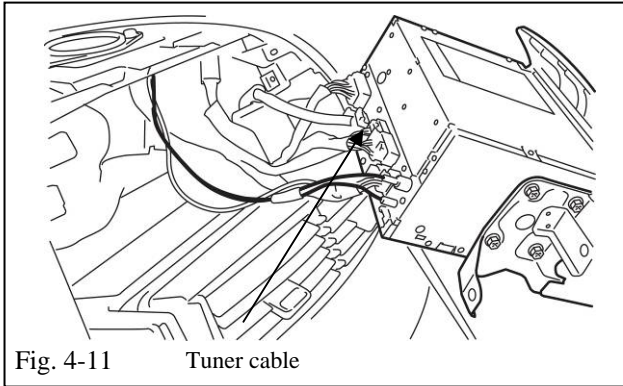
- (4) Push the lock plate in. (Fig. 4-8)



- (k) Install two (2) L-brackets onto the tuner using the supplied hex screws (M5 x L8). (Fig. 4-9)
- (l) Install the ground cable terminal onto the L-bracket screw. (Fig. 4-9)



- (m) Install the tuner assembly onto the base bracket studs with the supplied nuts. (Fig. 4-10)
- (n) Plug the tuner cable and the antenna cable into the tuner; then bundle excess wire and cables with a lock tie A as shown. (Fig. 4-10)



- (o) Plug the XM tuner cable into the head unit. (Fig. 4-11)

**5. Test SDARS Functionality**

- (a) Temporarily reconnect the negative battery cable. (Fig 5-1)

**STOP** NOTE: Be careful not to touch the positive terminal.

- !** (b) Test for SDARS functionality.
- !** (c) After testing for SDARS functionality, disconnect the negative battery cable, then proceed to Vehicle Reassembly.

**6. Vehicle Reassembly**

- (a) Reinstall all removed vehicle components.
- (b) Reconnect any disconnected connectors.
- (c) Verify that panels fit together properly with no uneven gaps between them.
- S** (d) Reinstall front seat:  
Specified tightening torque:  
37 N·m (27 lbf-ft)
- S** (e) Reinstall negative battery cable. (Fig 5-1)  
Specified tightening torque:  
4.1 N·m (36 lbf-in)
- S** (f) Reinstall seat belt anchors:  
Specified tightening torque:  
42 N·M (31 lbf-ft)

**+** CAUTION: Do not touch the positive terminal with any tool during reassembly.

- (g) Place the XM brochure in the glove box.
- (h) Clean up and remove any trash.
- (i) Proceed to Functional Verification.

**TOYOTA SIENNA 2007 - XM SATELLITE RADIO**  
 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 proper operation of the satellite radio tuner.</p> <p>Verify proper operation of the receiver/player assembly                      (Refer to the receiver assy 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 seat belt reminder light</p> <p><input type="checkbox"/> Defrost switch</p> <p><input type="checkbox"/> Door light on/off switch</p> <p><input type="checkbox"/> Aux. Jack</p> <p><input type="checkbox"/> Removed driver seat</p> <p><input type="checkbox"/> Proper operation of the removed seat lock mechanism</p> <p><input type="checkbox"/> Removed second row seat</p> <p><input type="checkbox"/> Seat belts</p> <p><input type="checkbox"/> Power mirrors</p> <p><input type="checkbox"/> Rear vent</p> <p><input type="checkbox"/> Slide door</p> <p><input type="checkbox"/> Tire pressure set</p> <p><input type="checkbox"/> Hood release</p> <p><input type="checkbox"/> 12V accessory power</p> <p><input type="checkbox"/> Courtesy lights</p>	<p>Verify proper operation of the hazard switch.</p> <p>Verify proper operation of passenger seat belt reminder light.</p> <p>Verify proper operation of Defrost Switch</p> <p>Verify proper functioning of door light switch</p> <p>Verify proper functioning of the Aux. Jack</p> <p>Verify that removed seat is securely re-fastened.</p> <p>Verify the proper operation of the removed seat lock mechanism.</p> <p>Verify that the 2<sup>nd</sup> row seat is securely reinstalled and functions properly.</p> <p>Verify proper functioning of the Removed Seat Belts</p> <p>Verify proper operation of the Power Mirrors</p> <p>Verify proper operation of the Rear Vent</p> <p>Verify proper operation of the Slide Door</p> <p>Verify proper operation of the Tire Pressure Set Switch</p> <p>Verify proper operation of the Hood Release Mechanism</p> <p>Verify proper operation of the 12V acc. power</p> <p>Verify proper operation of the Courtesy Lights</p>