

**Part Number: Mounting Kit PT546-08100
Tuner Assy 86180-0W032**

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

Tuner Assembly Kit Contents (86180-0W032)

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

Mounting Kit Contents (PT546-08100)

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

Hardware Bag Contents – 1 (PT546-08100)

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

Hardware Bag Contents – 2 (PT546-08100)

Item #	Quantity Req'd.	Description
1	3	Cushion Tape
2	10	Lock Tie

Hardware Bag Contents – 3 (PT546-08100)

Item #	Quantity Req'd.	Description
1	5	Seal (Sheet Tape)
2	13	Lock Tie

Additional Items Required For Installation

Item #	Quantity Req'd.	Description

Conflicts

Ipod

Requirements

XM satellite ready base grade audio

Vehicle Service Parts (may be required for reassembly)

Item #	Quantity Req'd.	Description

Recommended Tools

Personal & Vehicle Protection	Notes
Safety Goggles	
Seat Covers	
Floor Protectors	
Special Tools	Notes
Arch (Carpet) Punch	5/16" Hole Diameter
Seat Brace Tool	
Installation Tools	Notes
Ratchet	
Extensions	
Sockets	10 mm, 12 mm, 14 mm
Torque Wrench	4.1 N•m (36 lbf•in): Battery Cable, 37 N•m (27 lbf•ft): Front Seat 42 N•m (31 lbf•ft): Seat Belt
Screwdriver	Phillips, #2
Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST # 00002-06001-01
Masking Tape	(2" wide)
Mallet	
Electrical Tape	
Side Cutter	
Special Chemicals	Notes
Cleaner	VDC approved cleaner.

General Applicability







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Recommended Sequence of Application

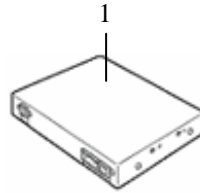
Item #	Accessory
1	V4 RES w/o Smart
2	Blue Logic
3	XM

*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.
	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.
	SAFETY TORQUE: This mark indicates that torque is related to safety.

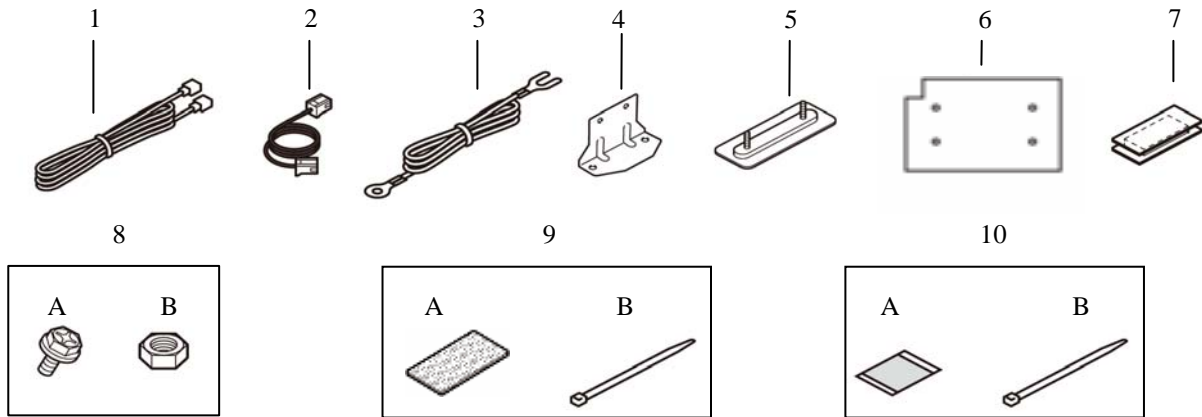
Parts Description of Receiver Assembly Radio Unit (86180-0W032)



Item #	Parts Name	Parts No.	Qty
1	Tuner Assy, Stereo Component*1	86180-0W032	1

*1: In the installation instructions and figures, this is referred to as "Tuner".

Parts Description of Mounting Kit (PT546-08100)



Item #	Parts Name	Qty
1	Wire, To Radio Installation*2	1
2	Cord (Antenna Extension)	1
3	Ground Cable	1
4	Tuner Bracket	2
5	Base Bracket	2
6	Template (to locate base brackets)	1
7	Cushion (Butyl)	4
8	A Bolt (M5 x L8)	4
	B Nut (M6)	4
9	A Cushion Tape	3
	B Lock Tie	10
10	A Seal (Sheet Tape)	5
	B Lock Tie	13

*2: In the installation instructions and figures, this is referred to as "AVC-LAN Cable".

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.

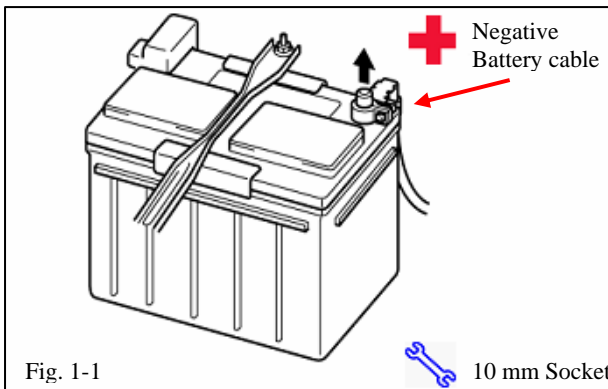
This document covers such items as:-

- 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.

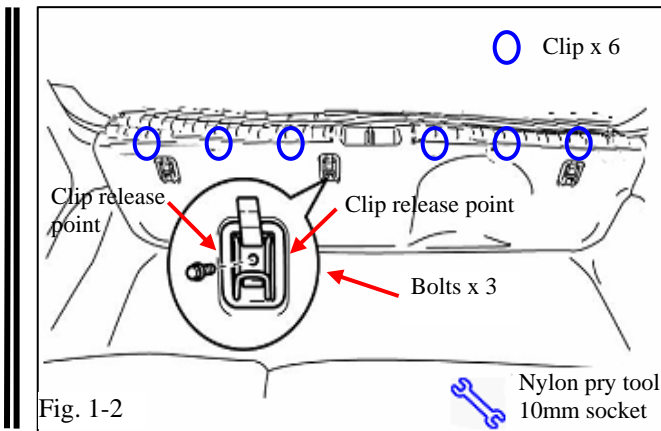
NOTES

- STOP** Removed Parts: -
Place all removed parts on a protected surface.
- STOP** Connectors: -
When disconnecting connectors, do not pull on the wires; pull on the connectors.
- STOP** Lock Ties: -
When using lock ties to secure harness, clip the lock ties after securing them.
- STOP** Machine Screws: -
Start all machine screws by hand.
- STOP** When disconnecting a yellow connector for the SRS airbag, wait 90 seconds or more after disconnecting the negative battery cable before performing the next task.

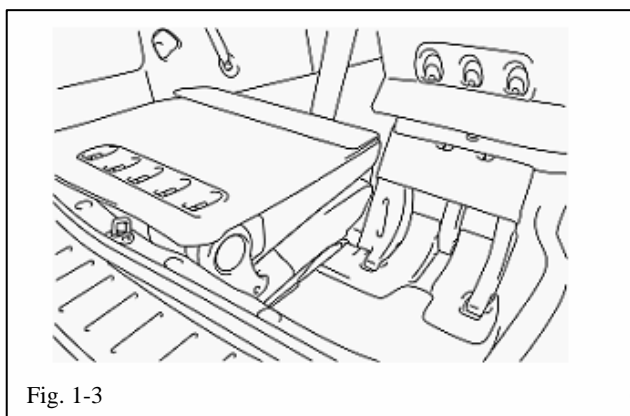


1. Disassembly of Vehicle

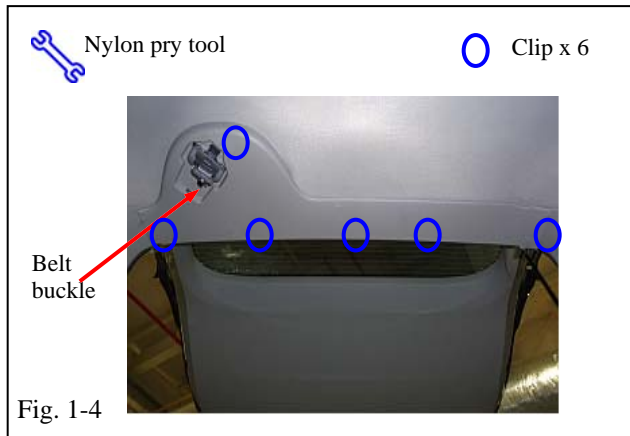
- || (a) Tape fuel door closed to prevent door from opening during lower IP removal process.
- (b) Open tail gate, and side doors.
- +** (c) Remove the negative battery cable. (Fig. 1-1)



- (d) Remove the rear threshold trim plate.
(Fig. 1-2)
 - (1) Remove 3 bolts and cargo tie down hardware.
 - (2) Disengage 6 clips and remove panel.



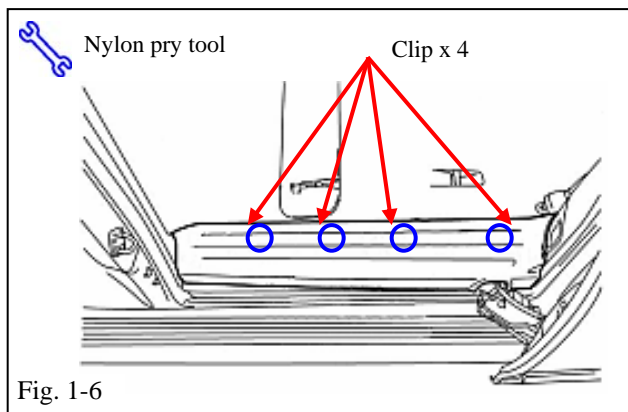
- (e) Fold the drivers' side rear seat into the storage area using the handle and strap.
(Fig. 1-3)



- (f) Remove the upper tail gate trim. (Fig. 1-4)
 - (1) Disengage 6 clips, and rotate belt buckle so that it can pass through the panel opening.

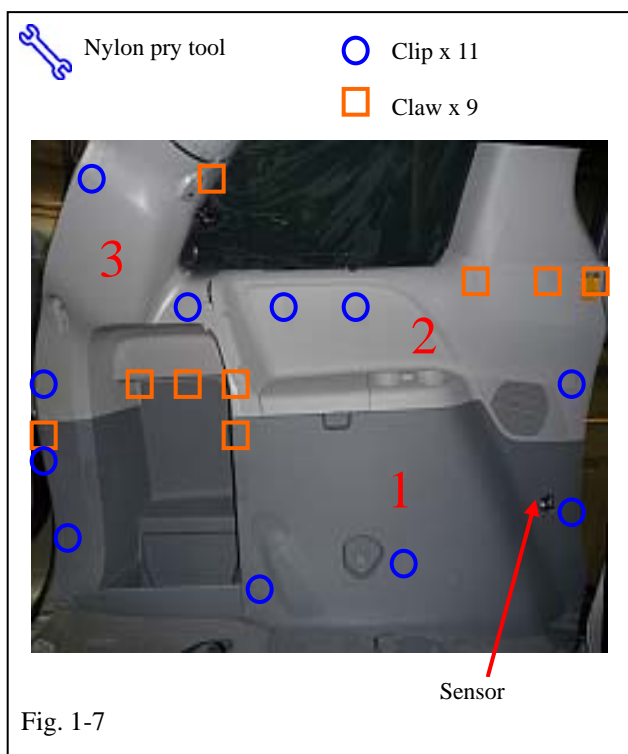


- (g) Remove seat belt and luggage hook.
(Fig. 1-5)
 - (1) Press center pin of hook to disengage.
 - (2) Cover seat belt mounting brackets with protective cover to prevent scratching.



(h) Remove driver side, middle door scuff plate.
(Fig. 1-6)

(1) Disengage the 4 clips on the scuff plate.



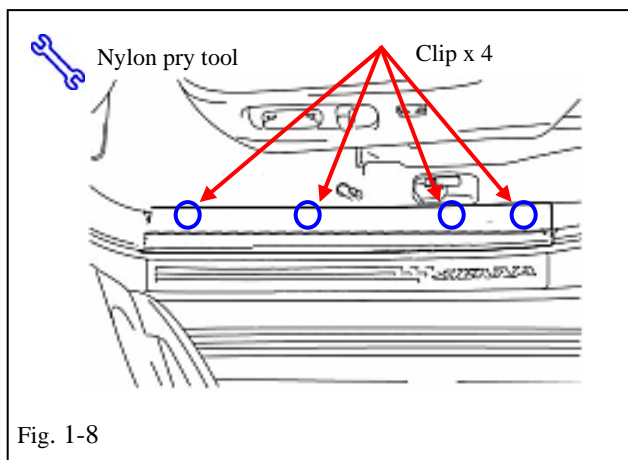
(i) Remove large rear driver side trim piece.
(Fig. 1-7)

(1) Remove circular sensor and unplug wire harness if applicable.

(2) Disengage clips and claws to remove panel.

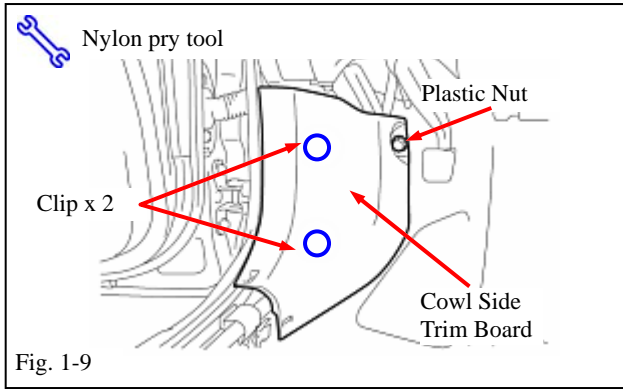
⚠ Panels 1 & 2 are fused together do not attempt to separate them. Panel 3 can be separated from the other panels.

(3) Pull back panel, pass seat belt through openings, and disconnect any wiring before removing panel.

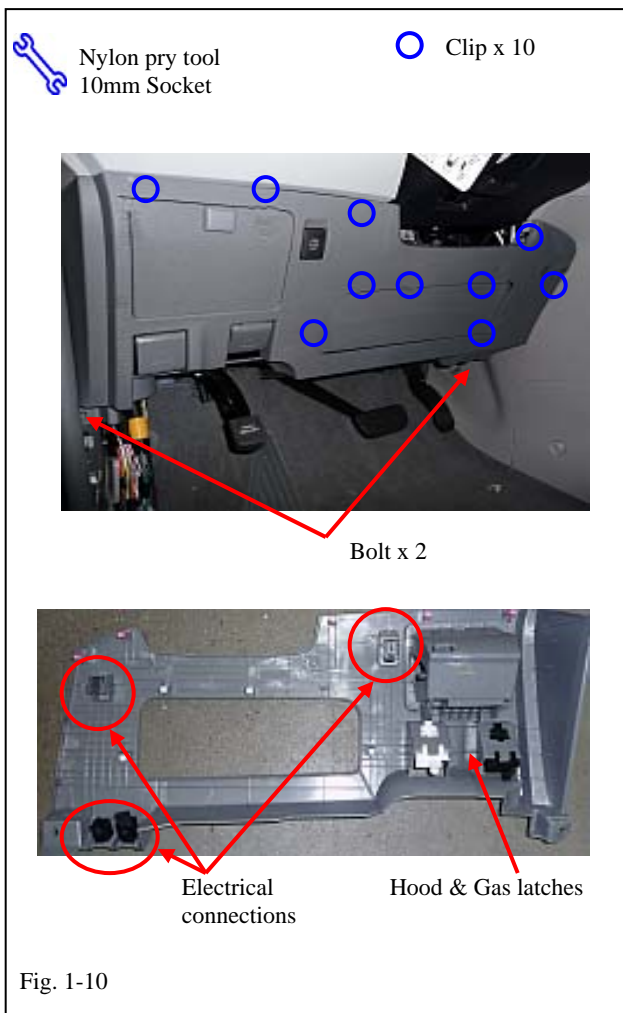


(j) Remove the front scuff plate. (Fig. 1-8)

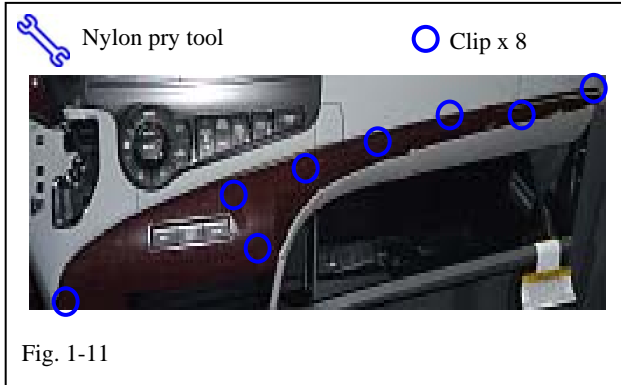
(1) Disengage the 4 clips to remove the front driver side scuff plate. Follow the revised front scuff plate removal process (V2, V4, V5).



- (k) Remove the driver side cowl trim board.
(Fig. 1-9)
- (1) Remove the plastic nut.

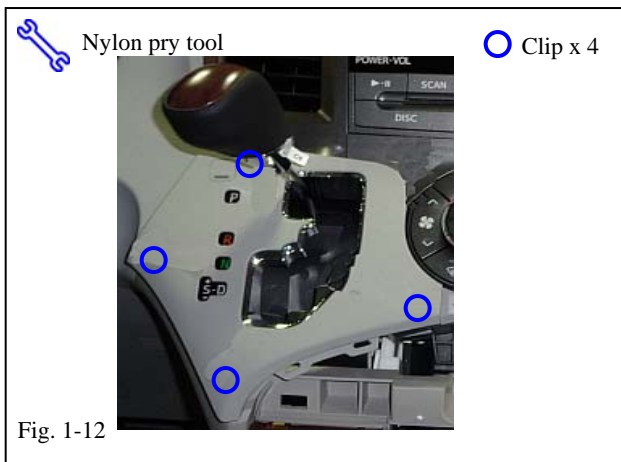


- (l) Remove driver side lower dash panel.
(Fig. 1-10)
- (1) Remove the 2 10mm bolts on the bottom corners of the panel.
- (2) Disengage the 10 clips to remove the lower dash piece.
- (3) Disconnect any electrical wire harnesses.
- (4) Disconnect the fuel cap and hood release latches.



(m) Remove the passenger side dash trim.

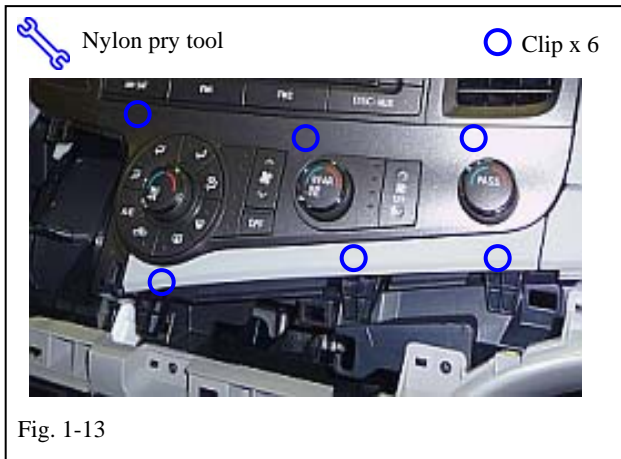
- (1) Disengage the 8 clips and disconnect any electrical connections to remove the wood grain dash piece. (Fig. 1-11)



(2) Remove shift lever panel. (Fig 1-12)

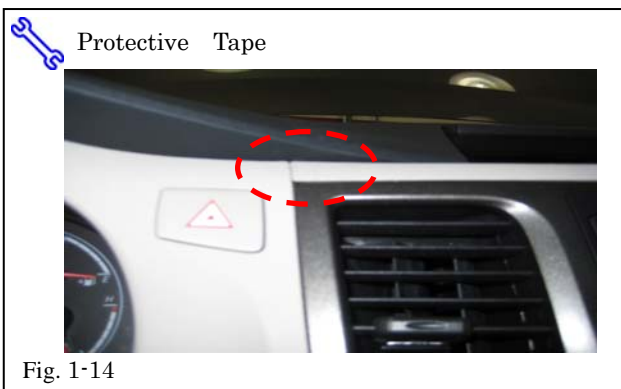
- (1) Unscrew knob.
- (2) Disengage 4 clips.
- (3) Disconnect wire harness, and remove panel.

|| (4) Move shift lever to L.

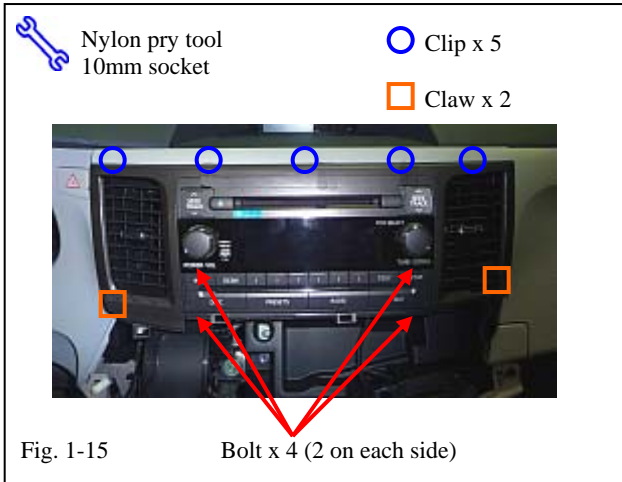


(3) Remove HVAC control panel. (Fig 1-13)

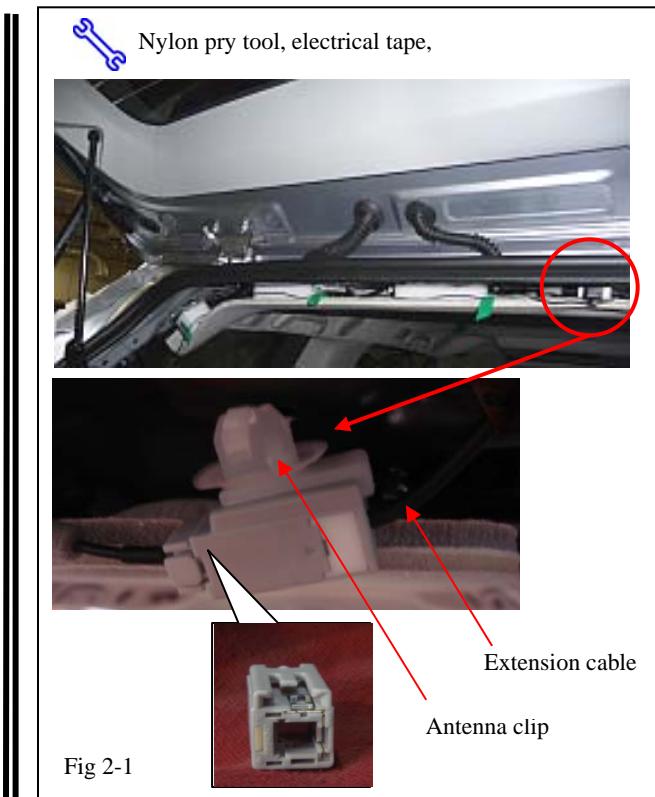
- (1) Disengage 6 clips, disconnect any wire harness connections, and remove control panel.



|| (4) Apply protective tape to dash overhang at left upper corner of radio head unit. (Fig. 1-14)

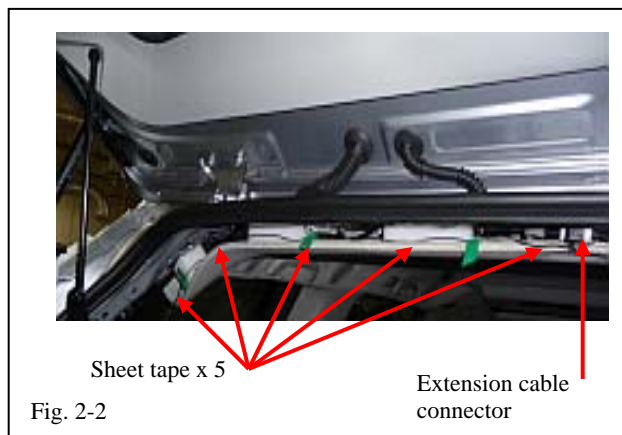


- (n) Remove radio assembly. (Fig. 1-15)
 - (1) Remove the bolts located below the L & R sides of the radio.
 - (2) Disengage the 5 clips and 2 claws.
 - (3) Pull out the radio / vent assy.
 - (4) Disconnect radio harness connections.
 - (5) Vent covers will remain on radio.



2. Antenna Extension Installation


- (a) Connect extension cable. (Fig 2-1)
 - (1) Locate antenna connection above head liner in tail gate area.
 - (2) Remove antenna clip from roof hole, disconnect antenna, disconnect holder from clip and discard empty connector.
 - (3) Clip new extension cable holder onto the antenna clip.
 - (4) Connect the vehicle antenna, and return the clip to the roof panel hole.

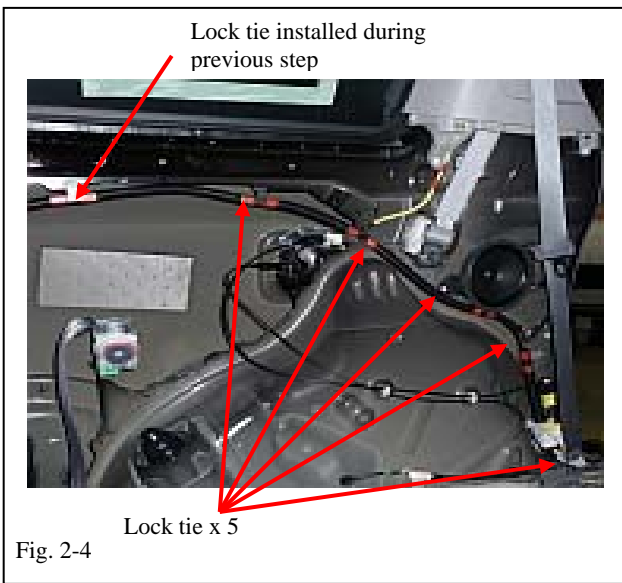


- (b) Route extension cable to the left and secure to top of the head liner with 5 sheet tapes where indicated. (Fig. 2-2)

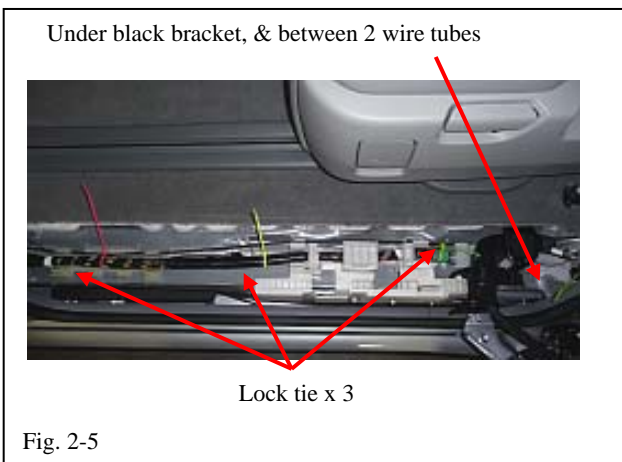


(c) Route antenna extension cable along corrugated wire harness, and secure with 4 lock ties. (Fig. 2-3)

 Route extension cable behind any brackets or mechanism located in this area.



(d) Secure extension cable to existing vehicle harness with an additional 5 lock ties as shown. (Fig. 2-4)

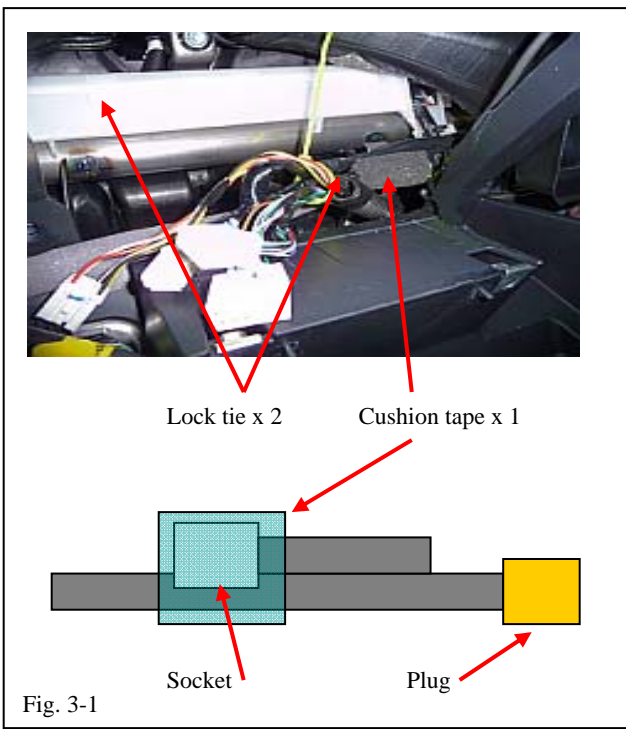


(e) Route extension cable along vehicle harness, and secure with 3 lock ties. (Fig. 2-5)

- (1) Route cable under black bracket, and between the black and white wire tubes.
- (2) Pass extension cable through white clips to follow existing harness.

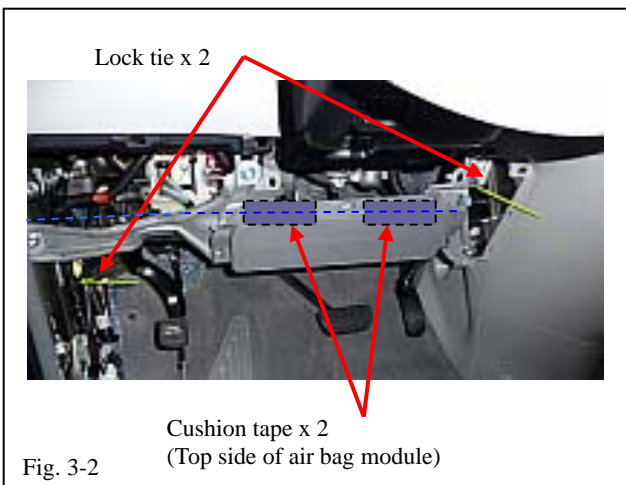


- (f) Route the antenna extension cable under the B pillar trim using a feeder tool, and secure with 1 lock tie. (Fig. 2-6)

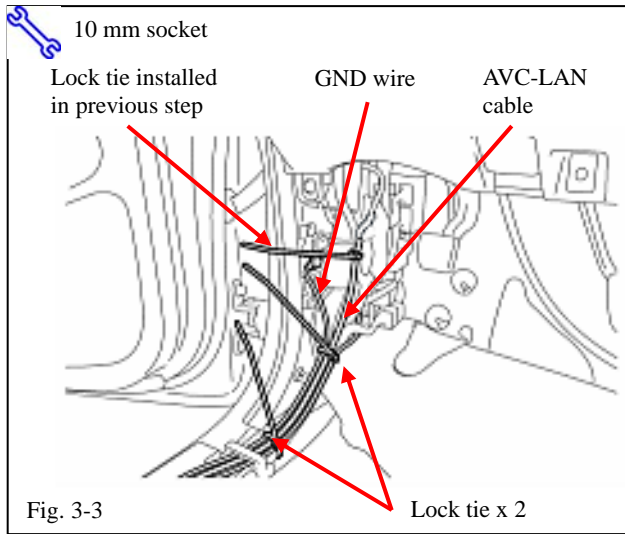


3. AVX-LAN Harness Installation

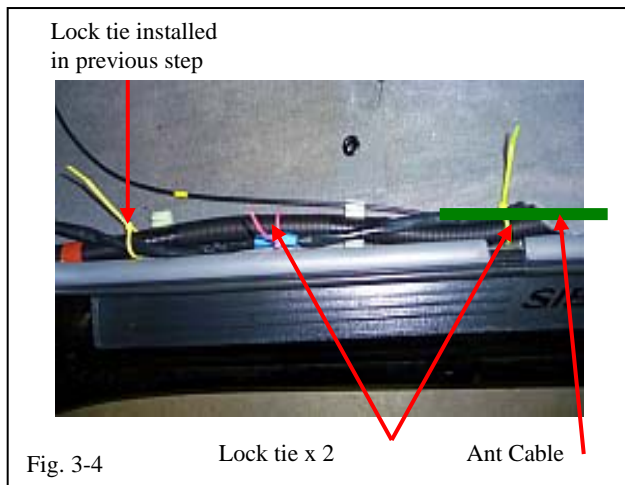
- (a) Wrap the socket portion of the AVX-LAN cable with cushion tape to secure the socket to the main part of the harness.
- (b) Secure the new harness to existing radio wiring with 2 lock ties. Use vehicle wiring to estimate length and route wire towards driver side lower dash area. (Fig. 3-1)



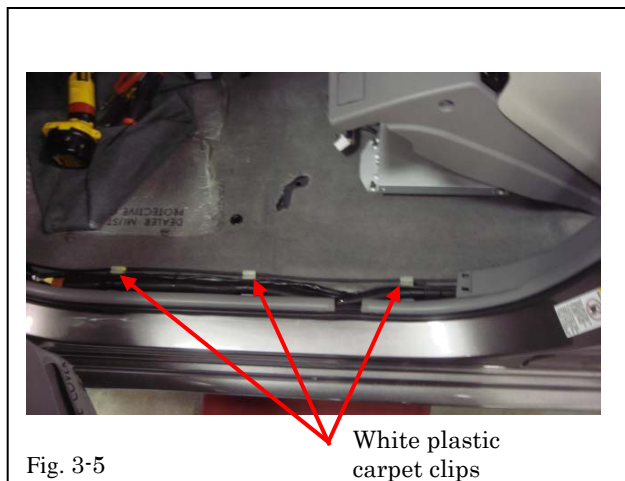
- (c) Route AVX-LAN cable along top side of knee bolster air bag, towards cowl panel, and secure with 2 lock ties & 2 cushion tapes. Cushion tape should not be visible when the vehicle is assembled. (Fig. 3-2)
- (1) Apply cushion tape to top side of air bag module to secure cable.



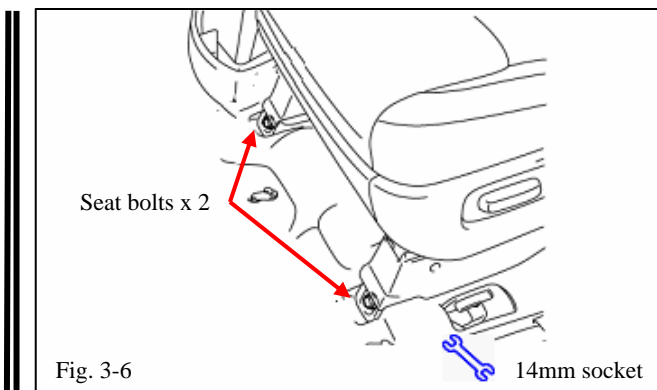
- (d) Install ground wire hook behind existing bolt in cowl area.
- (e) Secure both AVC-LAN cable and ground wire with an additional 2 lock ties. (Fig. 3-3)



- (f) Route AVC-LAN cable and ground wire along driver door, and secure both with 2 lock ties. (Fig. 3-4)
- (1) Include the antenna extension cable in the second lock tie.

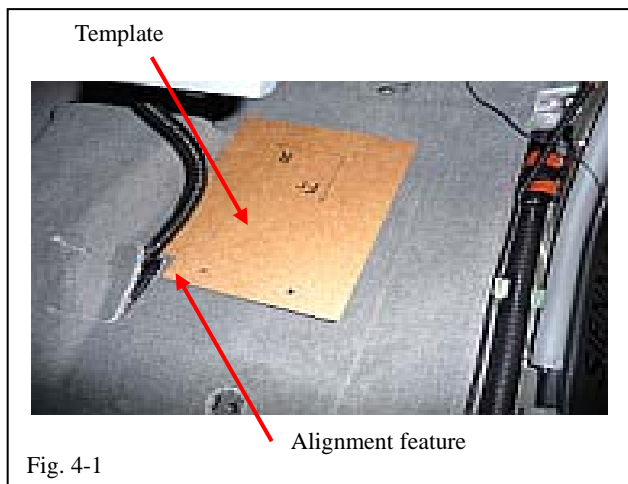


- (g) Remove the three (3) white plastic carpet clips to allow wire harnesses to pass underneath the carpet. (Fig. 3-5)



(h) Lean back driver seat. (Fig. 3-6)

- (1) Open plastic access panels to expose 2 forward seat bolts, and remove bolts.
- (2) Repeat process for 2 bolts on the back side of the driver seat.
- (3) Insert seat brace tool, and lean seat back slightly.
- (4) Disconnect white wire harness clip, lean seat back, and rest on the center seat.

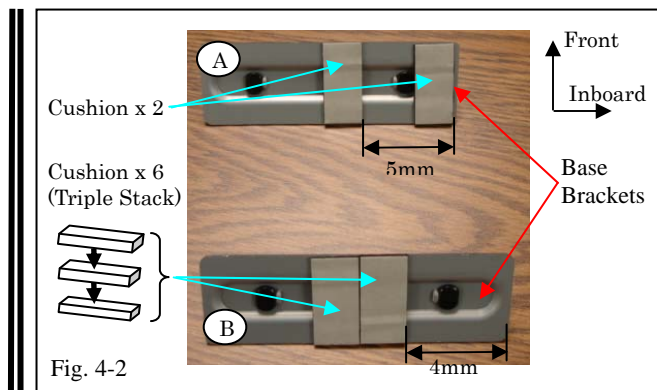


4. Tuner Install

- (a) Align template cutout with carpet cutout to position template under driver seat. (Fig. 4-1)
- (b) Transfer the 4 hole locations to the carpet, remove the template, and then use a carpet punch to create 4 holes.



Always dry fit before installing or cutting.



- (c) Install 8 butyl cushions to the base brackets as shown. (Fig. 4-2)

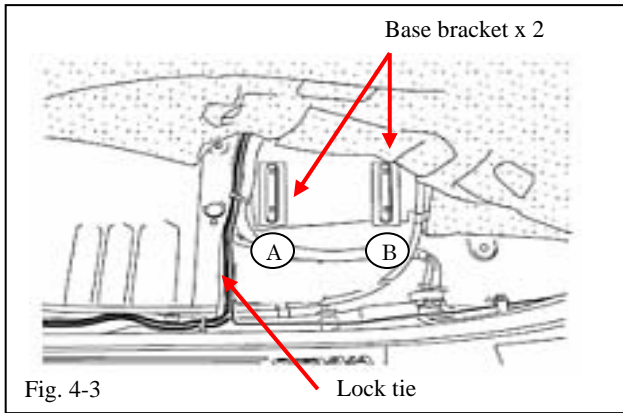


Fig. 4-3

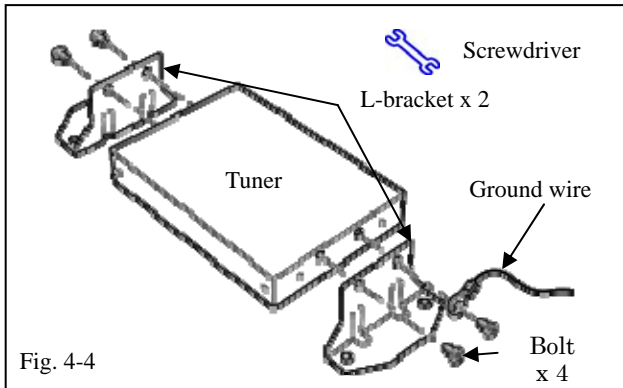


Fig. 4-4

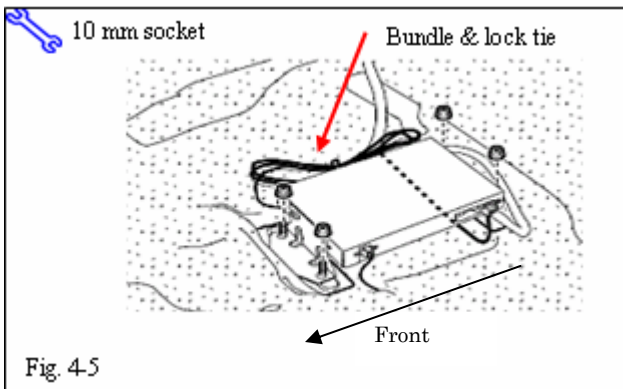


Fig. 4-5

- (d) Lift carpet, and pass secure antenna extension, AVC-LAN, ground cables through the carpet cutout. The AVC-LAN, ground cable, and antenna extension cable should be routed under the "E-Brake" cable and fuel door release cable.
- (e) Lock tie the AVC-LAN, ground cable, and antenna extension together with a lock tie. (Fig. 4-3)
- (f) Insert base brackets through cut holes, remove the release paper, and press the carpet down to install the base brackets.
- (g) Lift the carpet, and verify the brackets are properly mounted.
- (h) Install tuner brackets and attach ground wire to tuner. (Fig. 4-4)
- (i) Install tuner assembly over base brackets, and secure with supplied nuts.
- (j) Plug in AVC-LAN & Antenna extension cables; then bundle excess, secure with a lock tie, and tuck under carpet through carpet cutout. Insure XM harness is inboard of vehicle seat harness. (Fig. 4-5)

5. In Process Functional Test.

- (a) Temporarily reconnect negative battery cable.
- (b) Press the engine switch to "ACC" position.
- (c) Press the power button on the receiver/player head unit.
- (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 negative battery cable.



Fig. 6-1

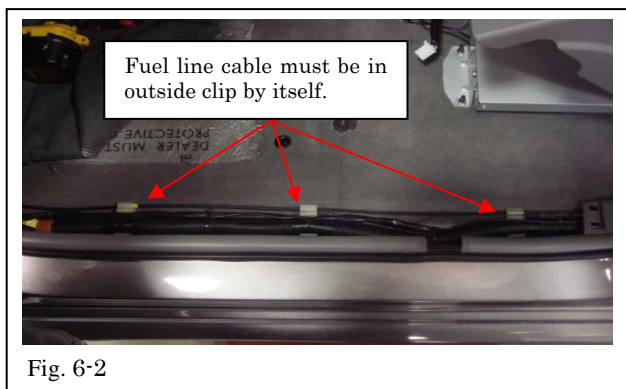


Fig. 6-2

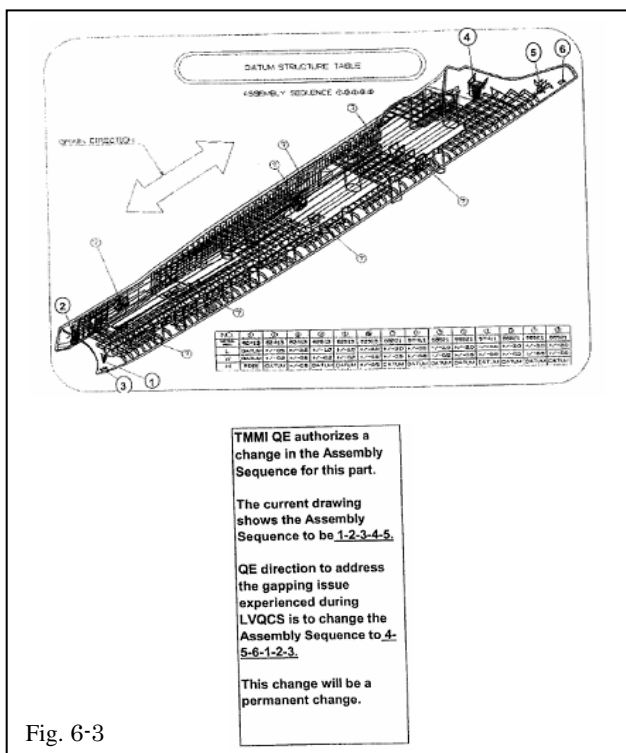


Fig. 6-3

6. Complete the Reassembly of Vehicle.

- (a) Reinstall all vehicle components.
- ⚠ (b) Tighten seat bolts to 37 N•m (27 lbf•ft).
- ⚠ (c) Tighten seat belt anchors to 42 N•m (31 lbf•ft). (Fig. 6-1)
- ⚠ (d) Verify that the fuel door release cable is properly installed into the white plastic carpet clips. (Fig. 6-2)
- ⚠ (e) Reconnect any disconnected electrical connectors.
- ⚠ (f) Re-install the drivers' side middle door scuff plate. Follow Engineering memo issued on 1/02/2010. (Fig. 6-3)
- ⚠ (g) Verify the panels fit together properly with no uneven gaps between them.
- (h) Clean up and remove any trash.
- (i) Place the owner "XM Satellite Radio" brochure in the glove box.

7. Reconnect Negative Battery Cable.

- (a) Reconnect the vehicle's negative battery cable. (Fig. 8-1)
 - (1) Tighten the nut to 4.1 N•m (36 lbf•in).
 - ⊕ (2) Do not touch the positive terminal with any tool when installing the negative battery cable.

TOYOTA SIENNA 2010 - XM SATELLITE RADIO
Checklist - these points **MUST** be checked to ensure a quality installation.

<u>Check:</u>	<u>Look For:</u>
<p><u>Accessory Function Checks</u></p> <ul style="list-style-type: none"><input type="checkbox"/> Satellite Radio Tuner <input type="checkbox"/> Receiver/player Assembly	<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 assy and radio owner's manuals.)</p>
<p><u>Vehicle Function Checks</u></p> <ul style="list-style-type: none"><input type="checkbox"/> Driver's seat belt reminder light <input type="checkbox"/> Removed seat <input type="checkbox"/> Proper operations of the removed seat lock mechanism <input type="checkbox"/> SRS warning light <input type="checkbox"/> Lower dash functions <input type="checkbox"/> Hood release and fuel door levers <input type="checkbox"/> HVAC <input type="checkbox"/> Shifter light <input type="checkbox"/> Dash controls	<p>Verify the proper operation of the driver's seat belt reminder light.</p> <p>Verify the removed seat is securely fastened.</p> <p>Verify the proper operation of the removed seat lock mechanism.</p> <p>Verify the proper operation of the SRS warning light.</p> <p>Verify the proper operation of all lower dash panel switches and controls.</p> <p>Verify the proper operation of the hood release & fuel door levers.</p> <p>Verify the proper operation of HVAC controls.</p> <p>Verify the proper function of the light on shifter panel.</p> <p>Verify the proper operation of any other disconnected dash controls.</p>