

Part Number: Mounting Kit: PT546-42090
Tuner Assy: 86180-0W031 or PT546-00090
Tuner Assy Kit Contents (86180-0W031 or PT546-00090)

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

Mounting Kit Contents (PT546-42090)

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
6	4	Butyl Cushion
7	3	Hardware Bags
8	1	XM Satellite Radio Brochure

Hardware Bag Contents – 1 (PT546-42090)

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

Hardware Bag Contents – 2 (PT546-42090)

Item #	Quantity Req'd.	Description
1	28	Lock Tie
2	2	Cushion Tape (50 x 100)

Hardware Bag Contents – 3 (PT546-42090)

Item #	Quantity Req'd.	Description
1	1	Antenna Cable

Additional Items Required For Installation

Item #	Quantity Req'd.	Description
1	1	PT218-52071 Receiver Cover
1	1	PT546-42090-DC, Data Cable required w/ PT546-00090

Conflicts

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

Recommended Tools

Personal & Vehicle Protection	Notes
Safety Goggles	
Seat Protectors	
Floor Protectors	
Protective Tape	Masking Tape
Protective Blanket	
Special Tools	Notes
None	
Installation Tools	Notes
Ratchet	
Extensions	
Sockets	10mm, 14mm
Torque wrench	4 N•m (3 lbf•ft), 36 N•m (27 lbf•ft), 42 N•m (31 lbf•ft)
Screwdriver	#2 Phillips
Panel removal tool	e.g. Panel Pry Tool #1 Toyota SST # 00002-06001-01
Needle nose pliers	
Carpet punch	7mm (5/16 inch)
Side cutters	
Special Chemicals	Notes
Cleaner	VDC approved cleaner

General Applicability

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Recommended Sequence of Application







Item #	Accessory
1	

*Mandatory

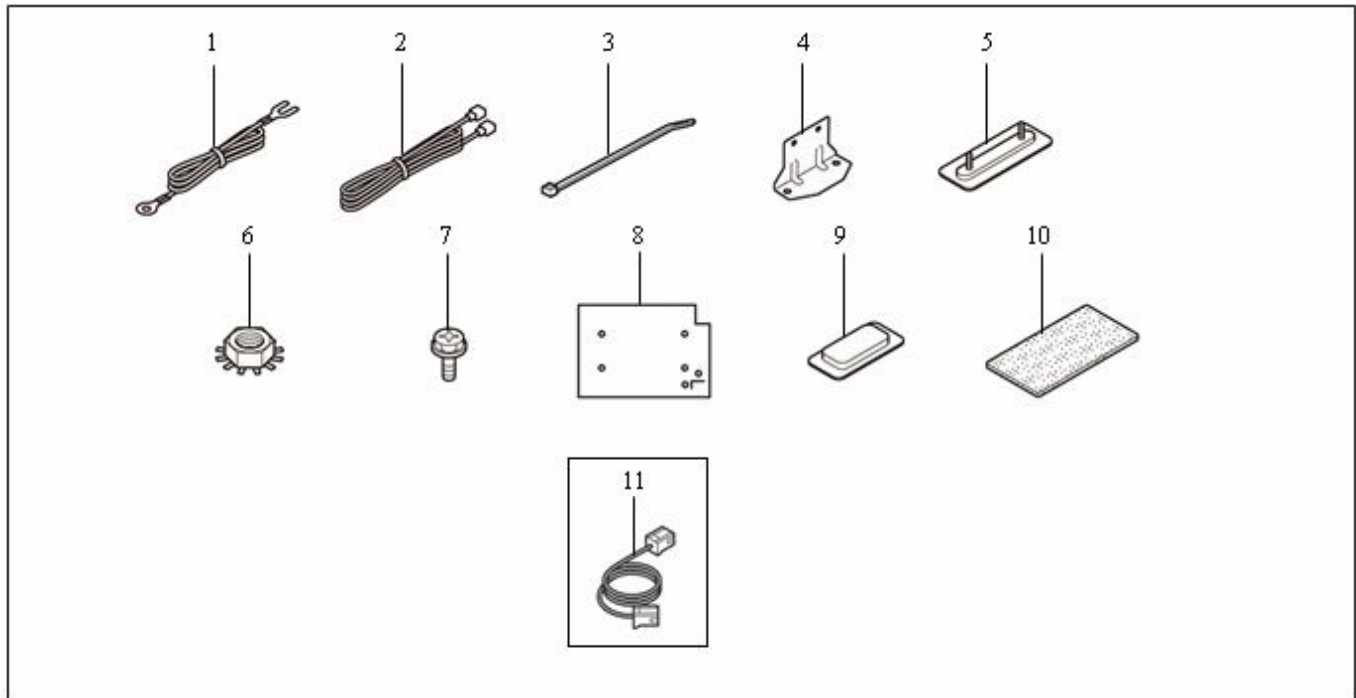
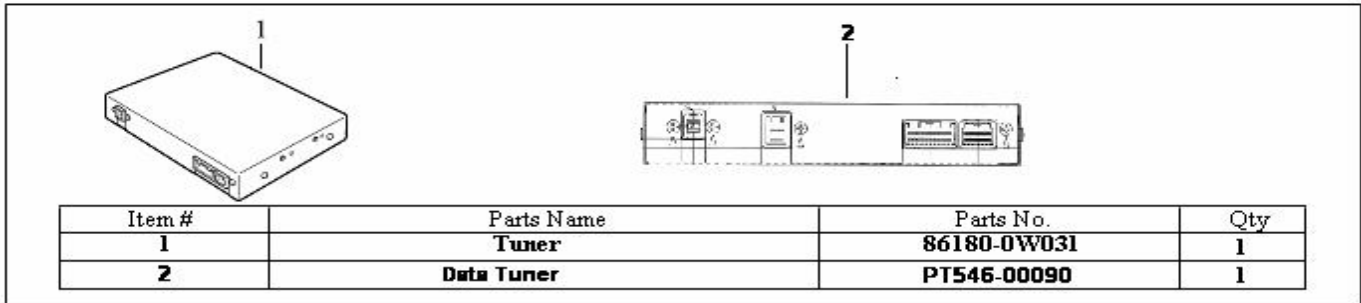
Vehicle Service Parts (may be required for reassembly)

Item #	Quantity Req'd.	Description
1		

Legend

	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 Tuner Assy (86180-0W031 or PT546-00090)



Parts Description of Mounting Kit (PT546-42090)

Item #	Parts Name	Qty
1	Ground Cable	1
2	Wire, To Radio Installation	1
3	Lock Tie (AVC-LAN)	28
4	Tuner Bracket	2
5	Base Bracket	2
6	Nut (M6)	4
7	Screw (M5 x L8)	4
8	Template (to locate bracket)	1
9	Butyl Cushion	4
10	Cushion Tape (50 x 100)	2
11	Antenna cable	1

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.

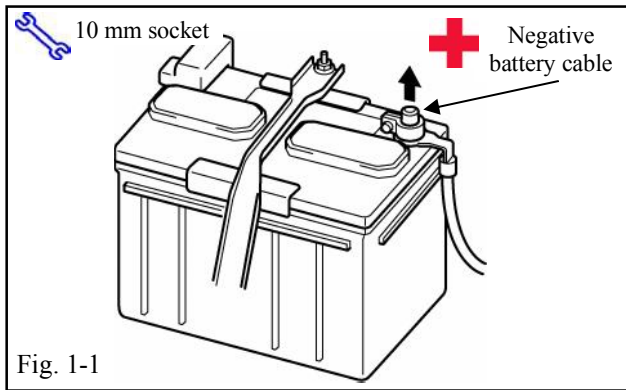


Fig. 1-1

1. Remove the negative (-) battery cable

(Fig. 1-1)



(a) Protect fender before starting.



(b) Place removed vehicle components on protective blanket.

(c) Remove the negative (-) battery cable.



CAUTION: Do not touch the positive terminal with any tool during removal.

2. Vehicle Disassembly

(a) Disengage two (2) claws and six (6) clips and remove the right side front door scuff plate. (Fig. 2-1)

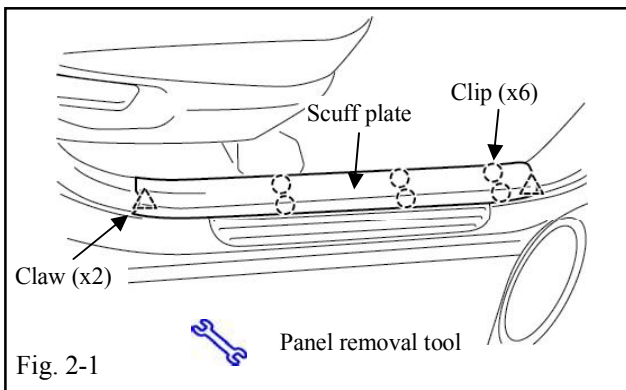


Fig. 2-1

(b) Remove right side cowl side trim. (Fig. 2-2)

(1) Remove plastic nut.

(2) Use a nylon pry tool to disengage the clip and the claw; then remove the cowl side trim.

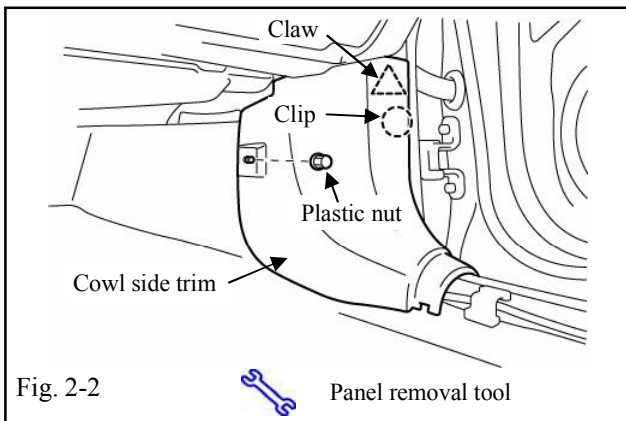


Fig. 2-2

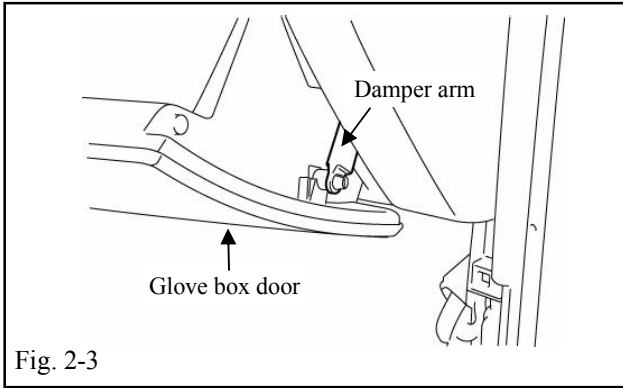


Fig. 2-3

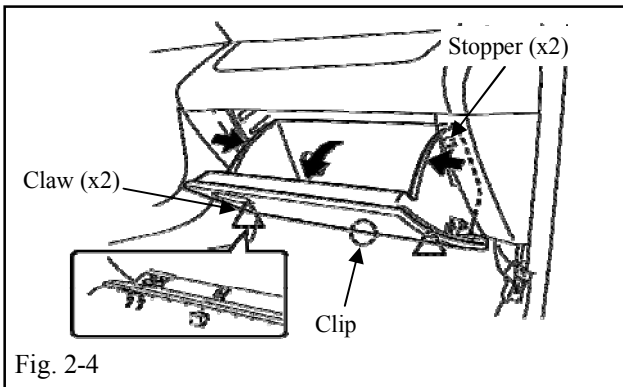


Fig. 2-4

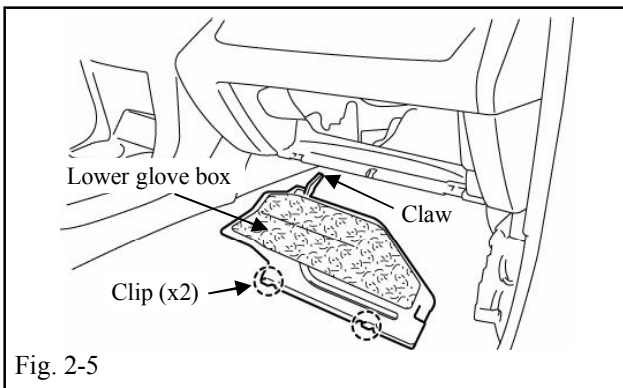


Fig. 2-5

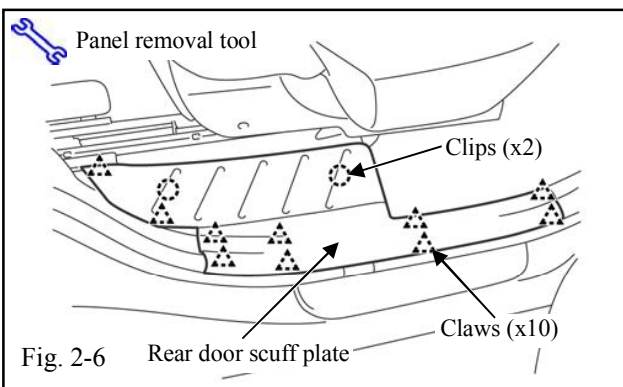


Fig. 2-6

(c) Remove glove box door as follows:

(1) Remove damper arm from glove box door. (Fig. 2-3)

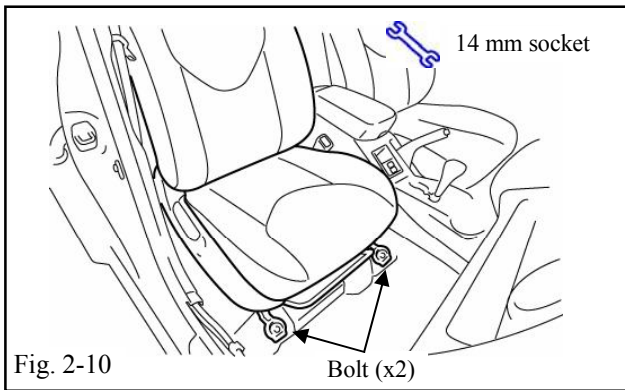
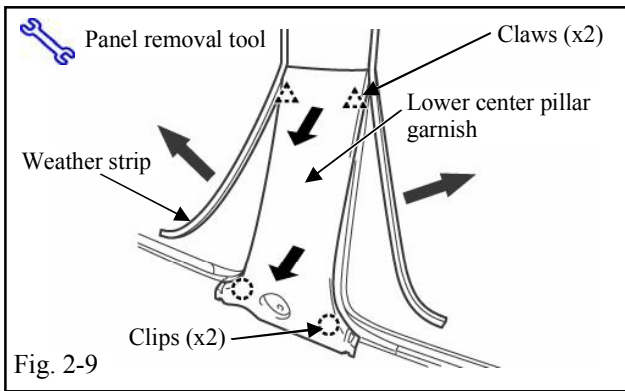
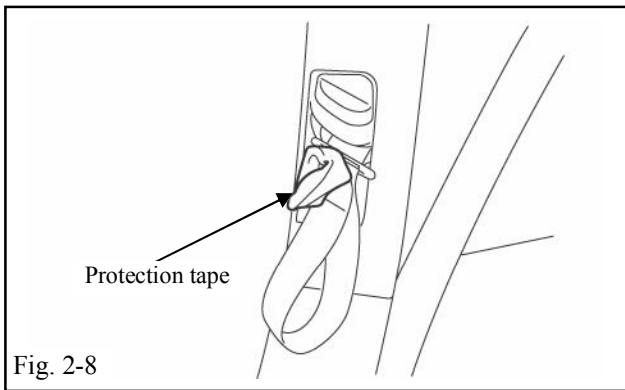
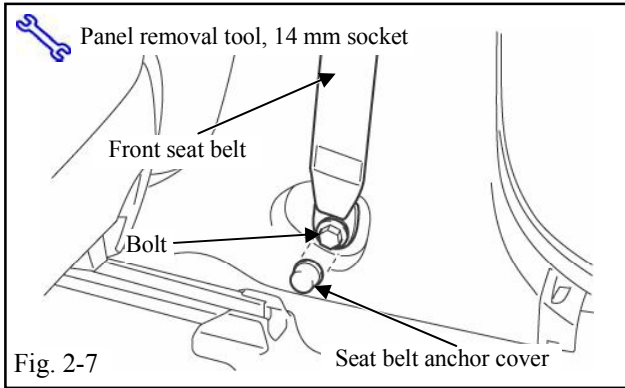
(2) Release glove compartment stoppers by pressing both glove box side panels inward. (Fig. 2-4)

(3) Swing glove box toward you; then remove glove box from two (2) claws and one (1) clip as shown. (Fig. 2-4)

(d) Remove lower glove box trim. (Fig. 2-5)

(1) Disengage the claw and two (2) clips to remove lower glove box trim.

(e) Disengage ten (10) claws and two (2) clips and remove the right side rear door scuff plate. (Fig. 2-6)

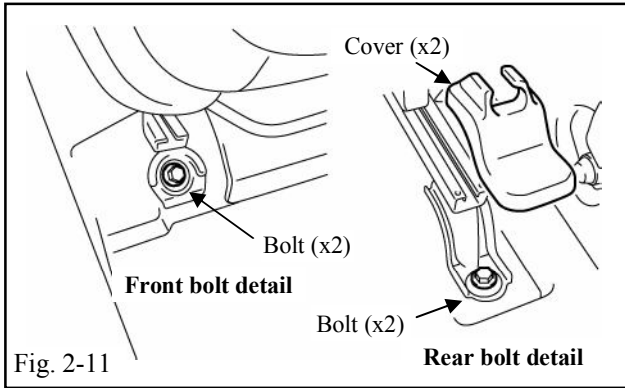


- (f) Remove the front seat belt as follows.
(Fig. 2-7)
 - (1) Disengage the front seat belt anchor cover.
 - (2) Remove the bolt and disconnect the seat belt floor anchor.

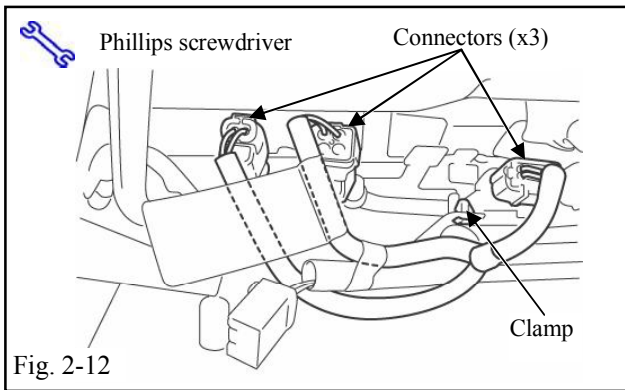
- (g) In order to prevent scratches to the panels, apply protection tapes around the anchor plate and installation bolt. (Fig. 2-8)

- (h) Remove the right side lower center pillar garnish. (Fig. 2-9)
 - (1) Remove the right side front door opening trim weather strip from the passenger center pillar.
 - (2) Remove the right side rear door opening trim weather strip.
 - (3) Disengage the two (2) clips and two (2) claws, then remove the right side lower center pillar garnish in the direction of the arrows.

- (i) Remove front passenger seat bolts.
 - (1) Remove two (2) front seat bolts. (Fig. 2-10)



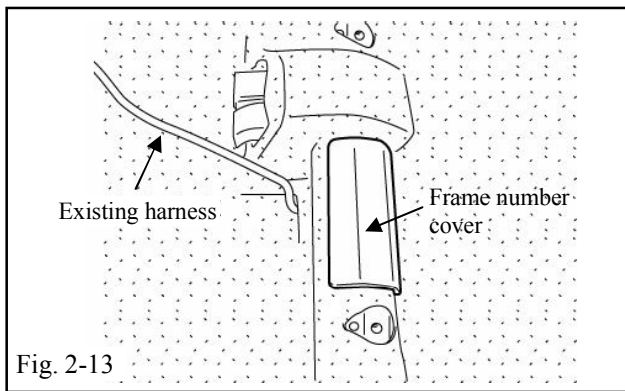
- (j) Remove two (2) rear bolt covers and two (2) bolts. (Fig. 2-11)



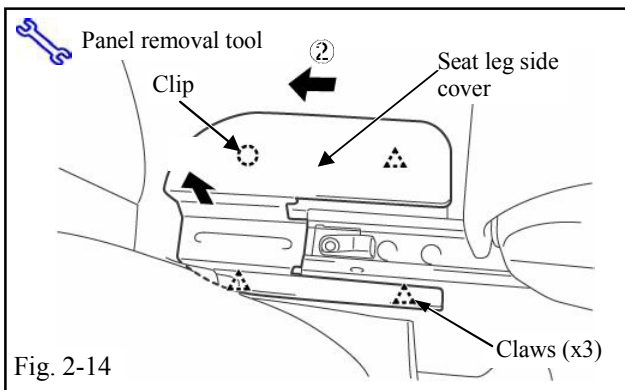
- (k) Remove passenger seat. (Fig. 2-12)
 - (1) Disengage the clamp underneath the passenger seat while the other person slightly pulls and lifts the passenger seat from behind.
 - (2) Disconnect the three (3) electrical connectors underneath the passenger seat.



NOTE: Wait 90 seconds or more after disconnecting the negative battery cable to prevent the airbag from deploying.



- (l) Remove the frame number cover. (Fig. 2-13)



- (m) Disengage the clip and three (3) claws, then remove the right side rear seat leg side cover in the direction of arrow. (Fig. 2-14)

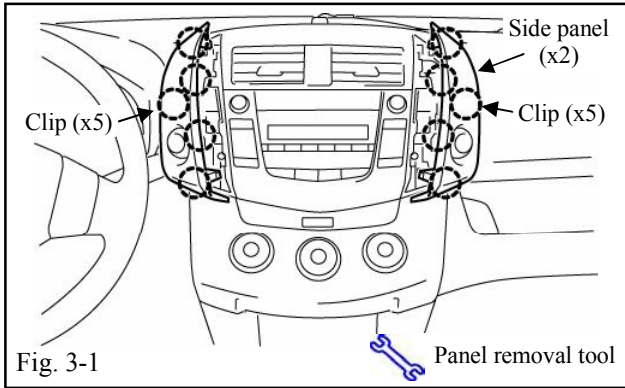


Fig. 3-1

3. Remove the Radio/Player Head Unit.

(a) Remove the side trim panels.

- (1) Using a nylon pry tool, disengage five (5) clips on each side and remove the side trim panels. (Fig. 3-1)
- (2) Disconnect electrical connectors from each side trim panel.

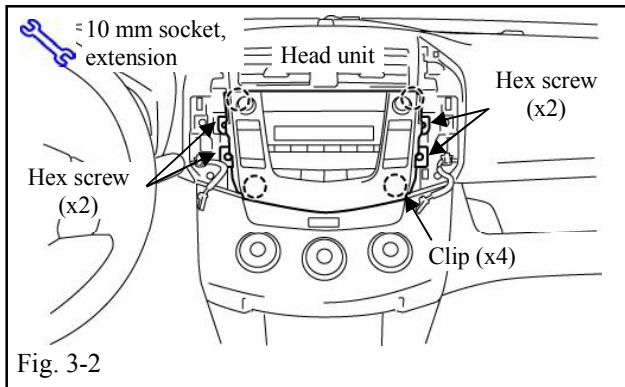


Fig. 3-2

(b) Remove head unit



- (1) Remove four (4) head unit hex screws, disengage four (4) clips; then pull the head unit toward you to remove. (Fig. 3-2)

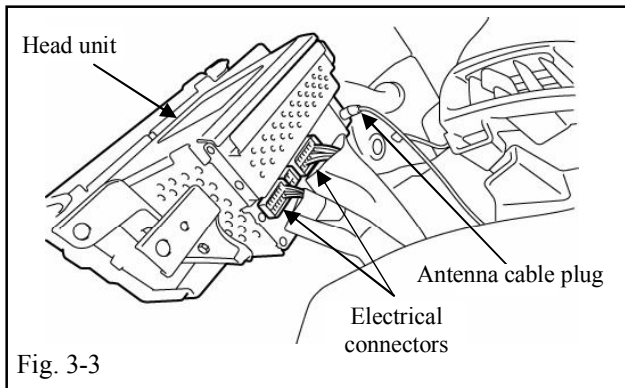
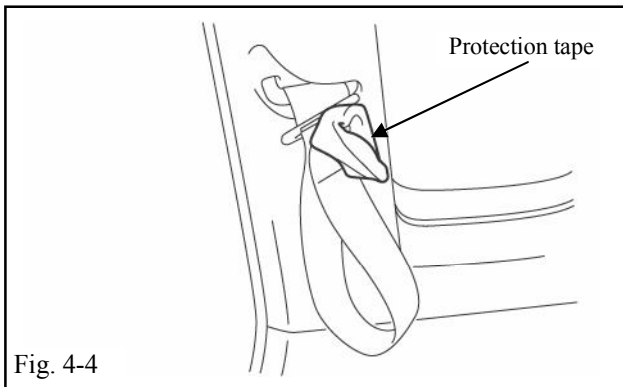
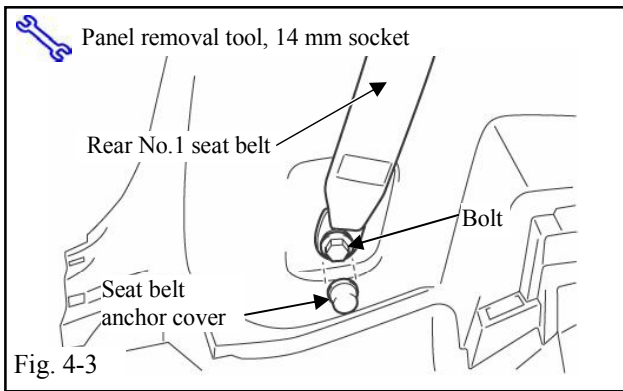
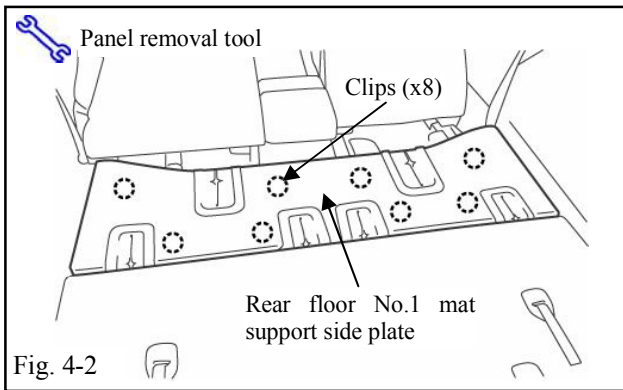
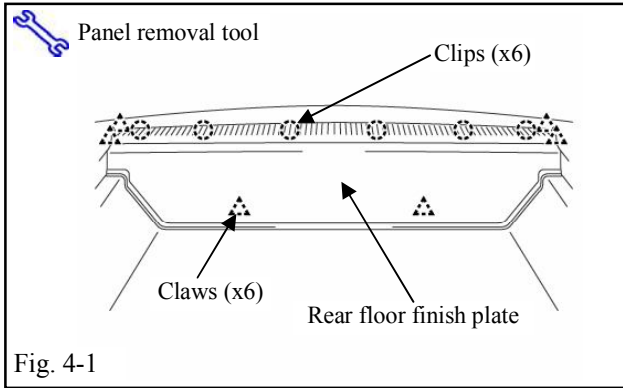


Fig. 3-3



- (2) Remove the electrical connectors and antenna cable plug from rear of head unit. (Fig. 3-3)



4. Remove Inner Roof Side Garnish Assembly (Model with Seven Person Seating Capacity)

(a) After set the rear No.2 seat to the seating position, disengage the six (6) clips and six (6) claws of the rear floor finish plate, and remove it. (Fig. 4-1)

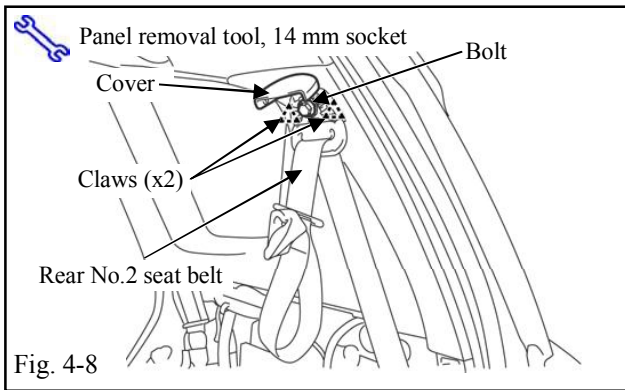
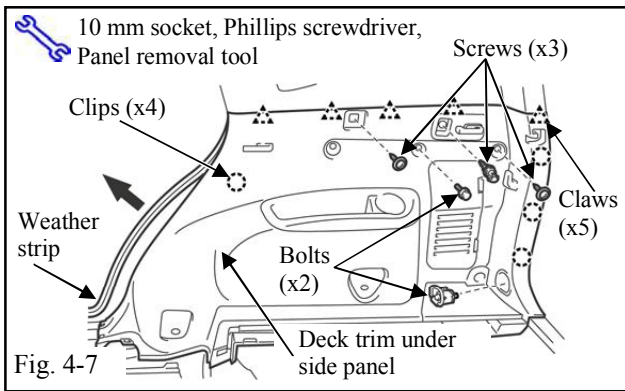
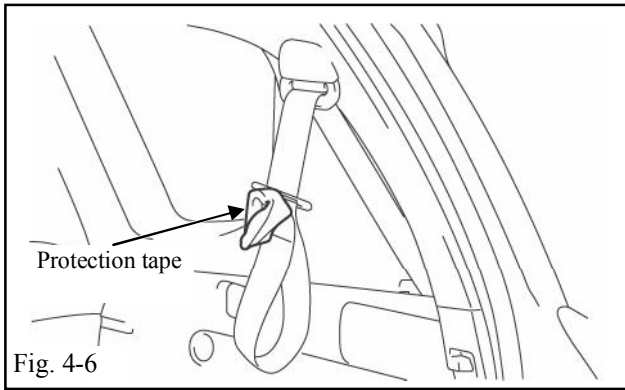
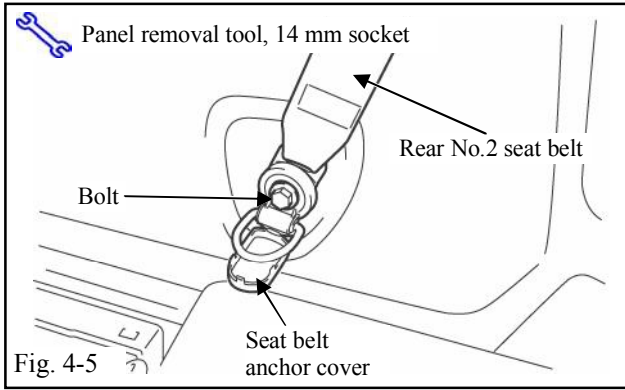
(b) Disengage eight (8) clips and remove the rear floor No.1 mat support side plate. (Fig. 4-2)

(c) Remove right side rear No.1 seat belt as follows. (Fig. 4-3)

(1) Disengage the right side rear No.1 seat belt anchor cover.

(2) Remove the bolt and disconnect the seat belt floor anchor.

(d) In order to prevent scratches to the panels, apply protection tapes around the anchor plate. (Fig. 4-4)

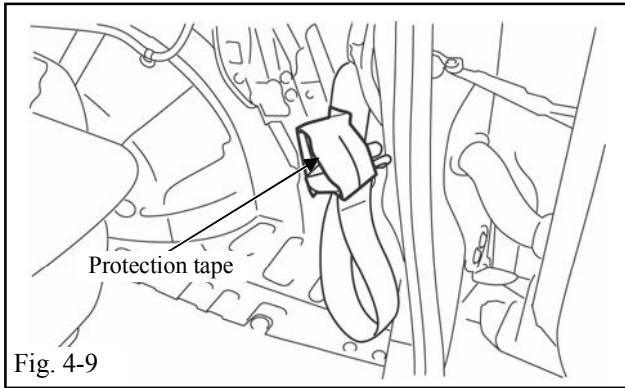


- (e) Remove right side rear No.2 seat belt as follows. (Fig. 4-5)
 - (1) Disengage the right side rear No.2 seat belt anchor cover.
 - (2) Remove the bolt and disconnect the seat belt floor anchor.

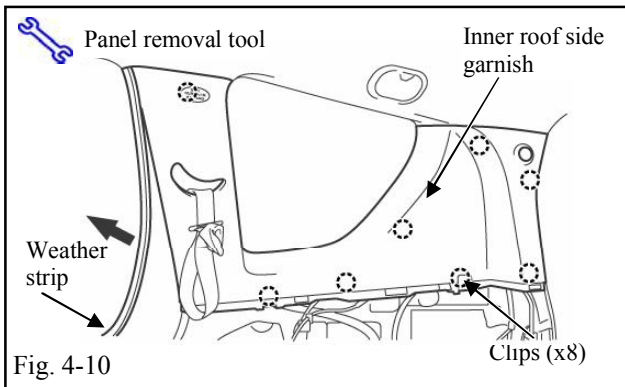
- (f) In order to prevent scratches to the panels, apply protection tapes around the anchor plate and installation bolt. (Fig. 4-6)

- (g) Remove right side deck trim under side panel. (Fig. 4-7)
 - (1) Remove the right side rear door opening trim weather strip.
 - (2) Remove two (2) bolts and three (3) screws.
 - (3) Disengage four (4) clips and five (5) claws, then remove the right side deck trim under side panel.

- (h) Remove right side rear No.2 seat belt as follows. (Fig. 4-8)
 - (1) Disengage two (2) claws, then open the cover.
 - (2) Remove the bolt and disconnect the seat belt shoulder anchor.

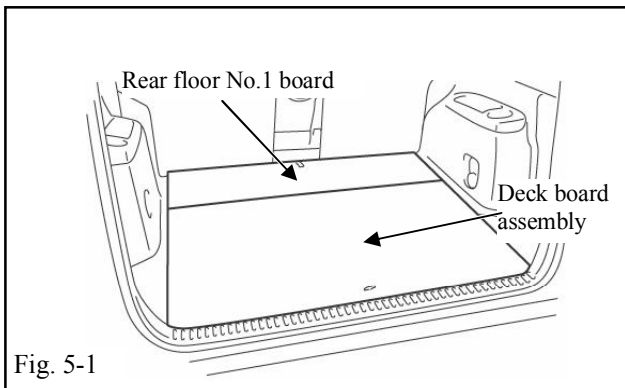


- (i) In order to prevent scratches to the panels, apply protection tapes around the shoulder anchor plate and installation bolt.
(Fig. 4-9)

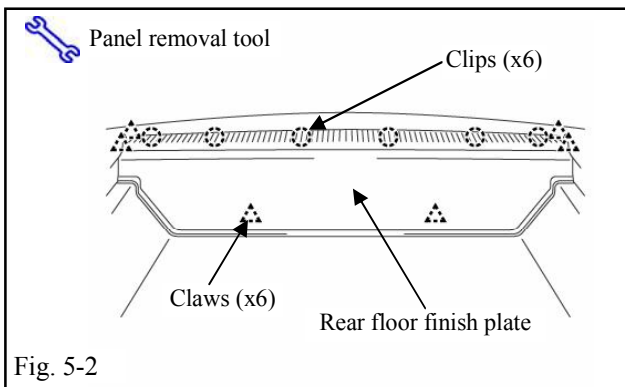


- (j) Remove the right side inner roof side garnish. (Fig. 4-10)
 - (1) Remove the right side rear door opening trim weather strip.
 - (2) Disengage eight (8) clips and remove the right side inner roof side garnish.

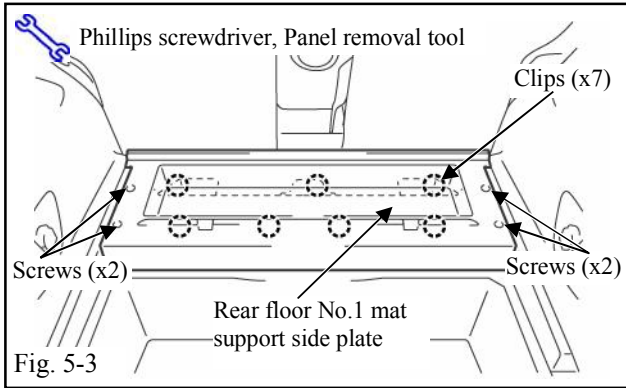
5. Remove Inner Roof Side Garnish Assembly (Model with Five Person Seating Capacity)



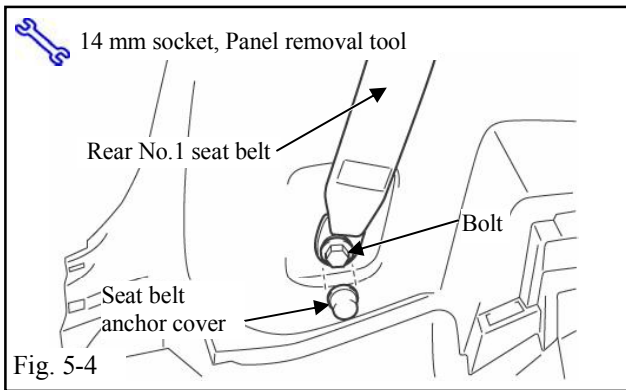
- (a) Remove the rear floor No.1 board and deck board assembly from the cargo area.
(Fig. 5-1)



- (b) Disengage six (6) clips, six (6) claws and remove the rear floor finish plate.
(Fig. 5-2)

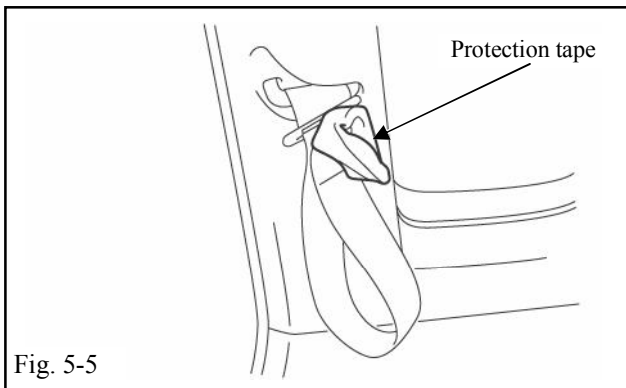


(c) Remove four (4) screws and seven (7) clips, then remove the rear floor No.1 mat support side plate. (Fig. 5-3)

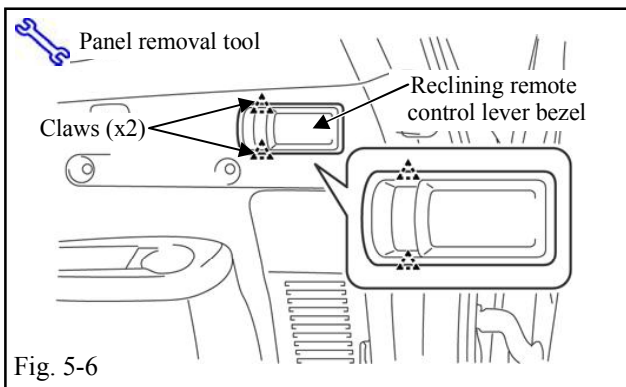


(d) Remove the right side rear No.1 seat belt as follows. (Fig. 5-4)

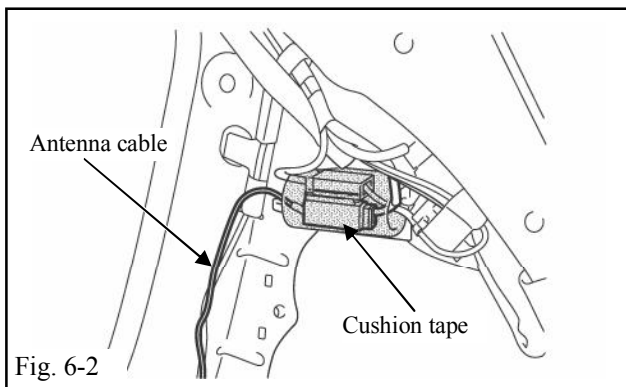
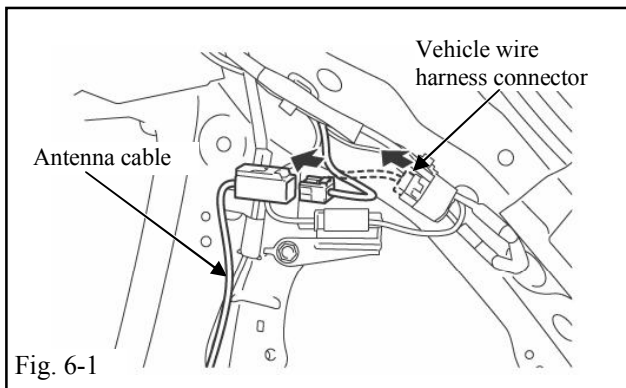
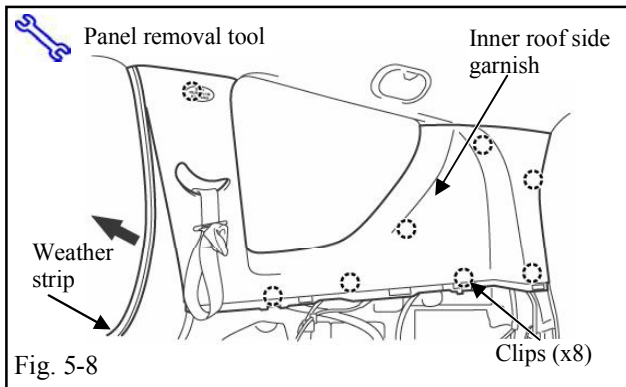
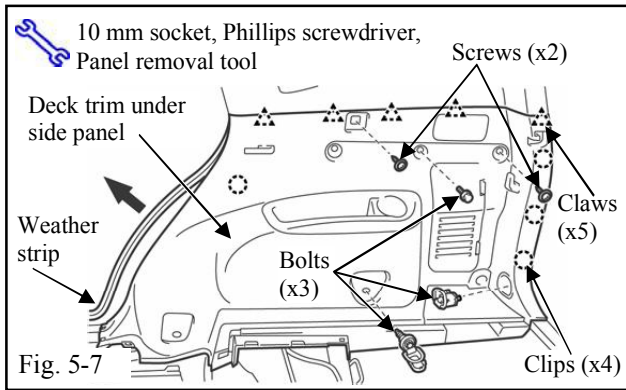
- (1) Disengage the right side rear No.1 seat belt anchor cover.
- (2) Remove the bolt and disconnect the seat belt floor anchor.



(e) In order to prevent scratches to the panels, apply protection tapes around the anchor plate. (Fig. 5-5)



(f) Disengage two (2) claws and remove the reclining remote control lever bezel. (Fig. 5-6)



(g) Remove right side deck trim under side panel. (Fig. 5-7)

- (1) Remove the right side rear door opening trim weather strip.
- (2) Remove tether anchor bracket bolt, three (3) bolts and two (2) screws.
- (3) Disengage four (4) clips and five (5) claws then remove the right side deck trim under side panel.

(h) Remove the right side inner roof side garnish. (Fig. 5-8)

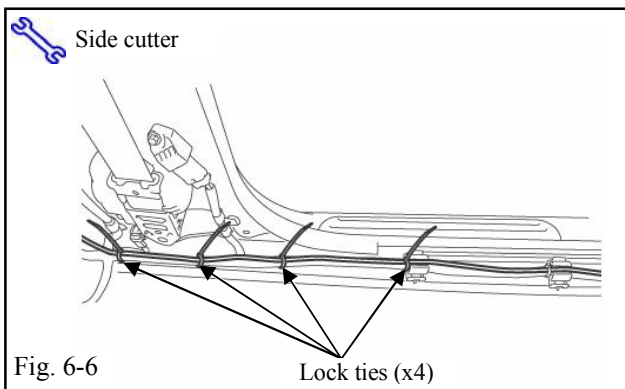
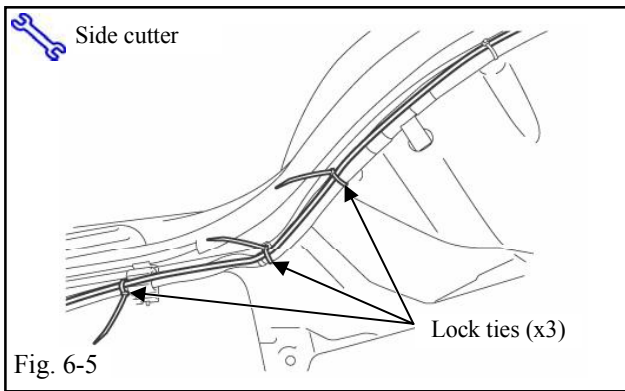
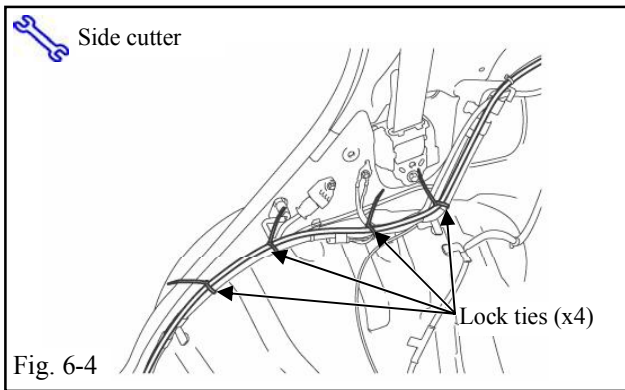
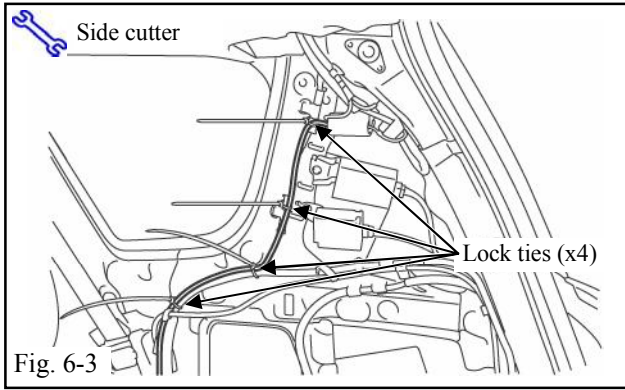
- (1) Remove the right side rear door opening trim weather strip.
- (2) Disengage eight (8) clips and remove the right side inner roof side garnish.

6. Antenna, Tuner and Data Cables Installation

(a) Install antenna cable.

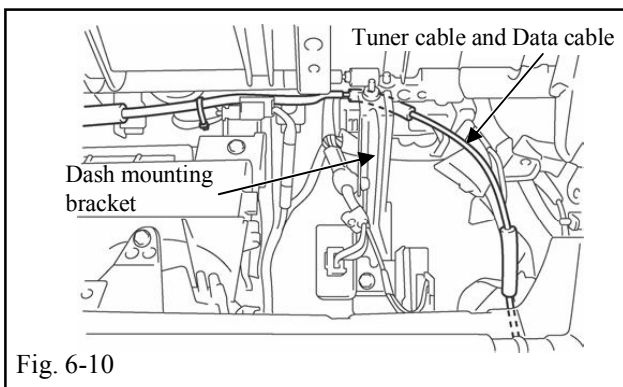
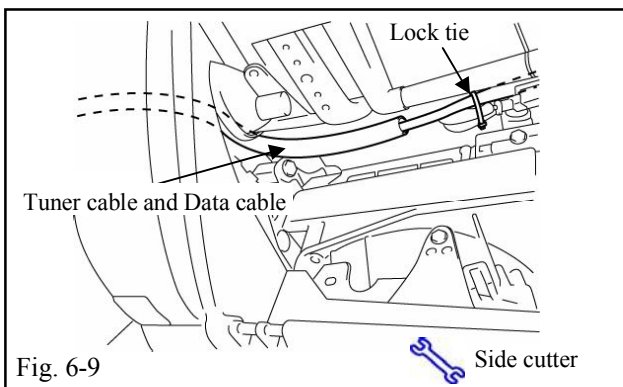
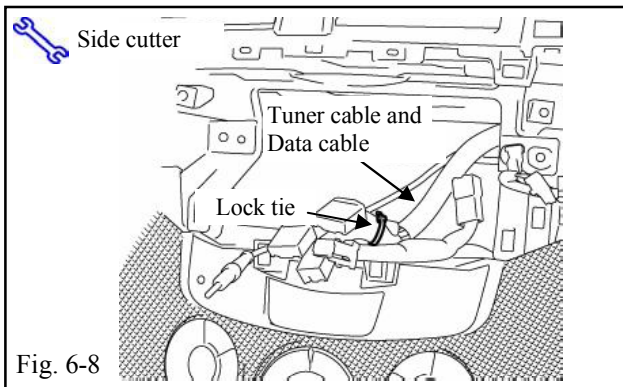
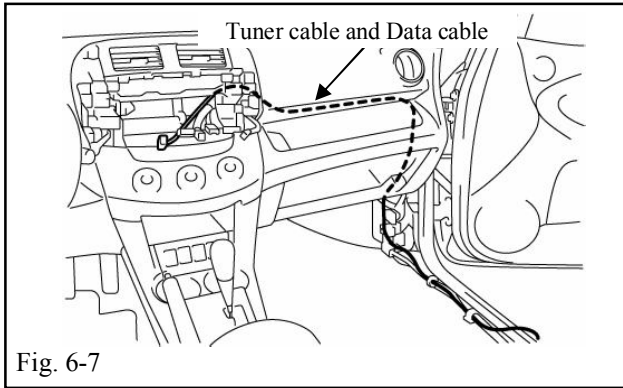
- (1) Disconnect the vehicle wire harness connector as shown in the figure. (Fig. 6-1)
- (2) Connect the antenna cable connector to the vehicle wire harness connector detached by (1).

(b) Wrap the cushion tape around the connector that connected at step (a) and gray color connector with connector stay as shown in the figure. (Fig. 6-2)



(c) Route antenna cable.

- (1) Route the antenna cable as shown, and then secure them with the four (4) lock ties. (Fig. 6-3)
- (2) Use the side cutter to cut off the excess lock tie length.
- (3) Route the antenna cable as shown, and then secure them with the four (4) lock ties. (Fig. 6-4)
- (4) Use the side cutter to cut off the excess lock tie length.
- (5) Route the antenna cable as shown, and then secure them with the three (3) lock ties. (Fig. 6-5)
- (6) Use the side cutter to cut off the excess lock tie length.
- (7) Route the antenna cable as shown, and then secure them with the four (4) lock ties. (Fig. 6-6)
- (8) Use the side cutter to cut off the excess lock tie length.



(d)) Install tuner cable and data cables.

(1) Install and route the tuner cable and data cable from the center cluster, along the reinforcement bar, over the dash mounting bracket, then downward toward the cowl side area.

(Fig. 6-7

(2) Provide approximately 6 inches cable slack near the tuner cable connector and data cable connector; then secure the tuner cable and data cable to the existing wire harness with a lock tie.

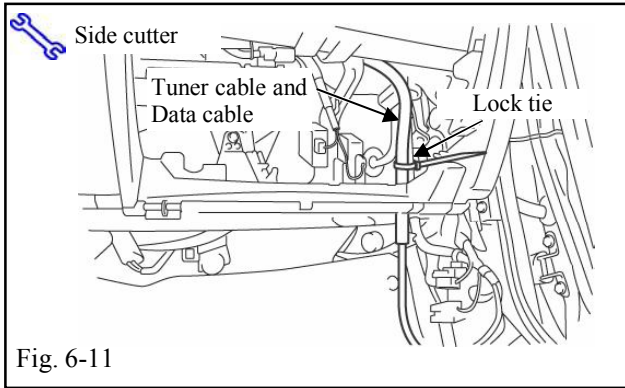
(Fig. 6-8)

(3) Cut excess lock tie length with side cutter.

(4) Secure the tuner cable and data cable in the glove box onto the existing harness using one (1) lock tie.

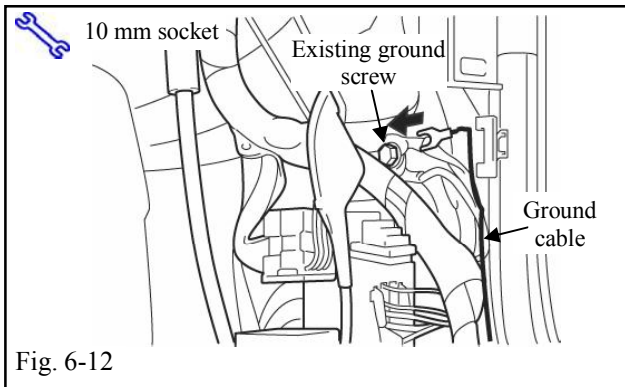
(Fig. 6-9, Fig. 6-10)

(5) Cut excess lock tie length with side cutter.



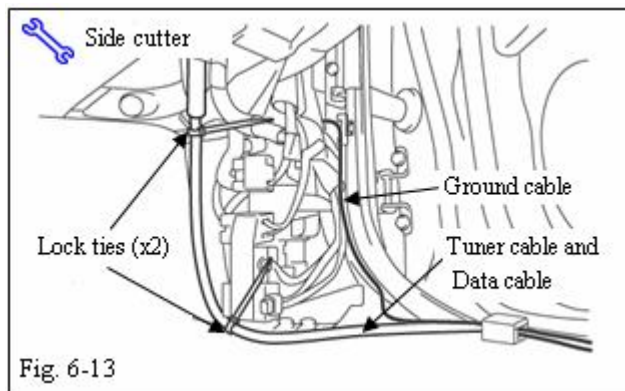
(e) Secure the tuner cable and data cable to existing vehicle harness using one (1) lock tie. (Fig. 6-11)

(f) Cut excess lock tie length with side cutter.



(g) Install the ground cable.

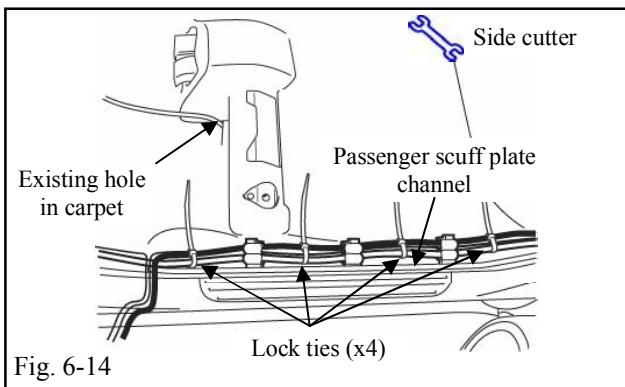
(1) Install the ground cable onto the existing ground screw; secure; then route the wire along the door sill. (Fig. 6-12)



(h) Route tuner cable and data cable.

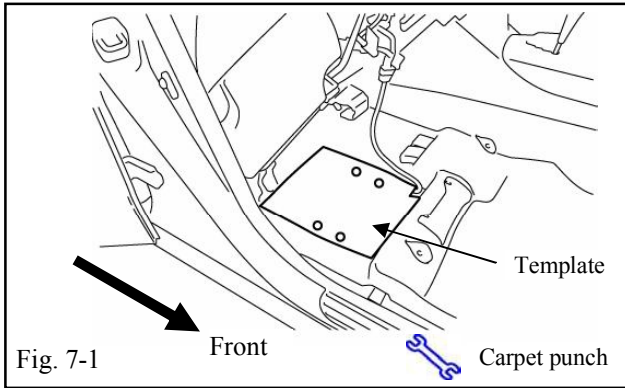
(1) Route the tuner cable and data cable as shown; then install two (2) lock ties to secure them. (Fig. 6-13)

(2) Cut excess lock ties length with side cutter.



(i) Route the tuner, data and ground cables along the passenger scuff plate channel. Secure tuner cable, data cable and ground cable to existing wire harness with four (4) lock ties. (Fig. 6-14)

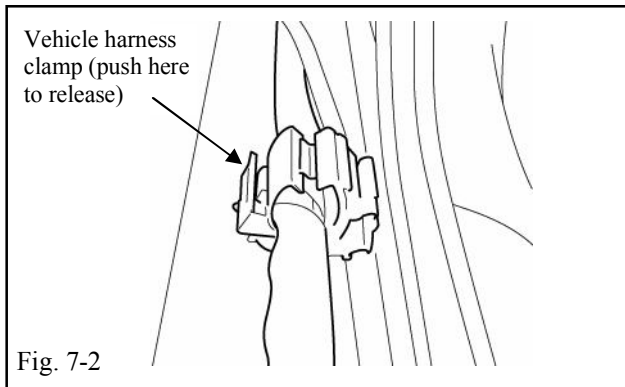
(j) Cut excess lock ties length with side cutter.



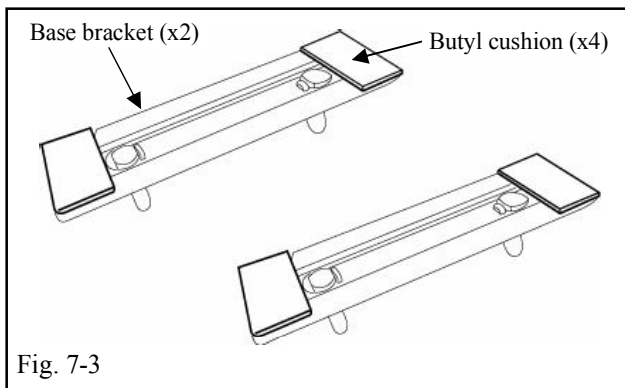
7. Install Tuner

- (a) Position the supplied template as shown under front passenger seat. (Fig. 7-1)
 - (1) Mark the carpet at the four hole locations.
 - (2) Verify the location of the holes; then remove the template and cut the four (4) through-holes in the carpet using a carpet punch.

NOTE: Always dry fit before cutting.

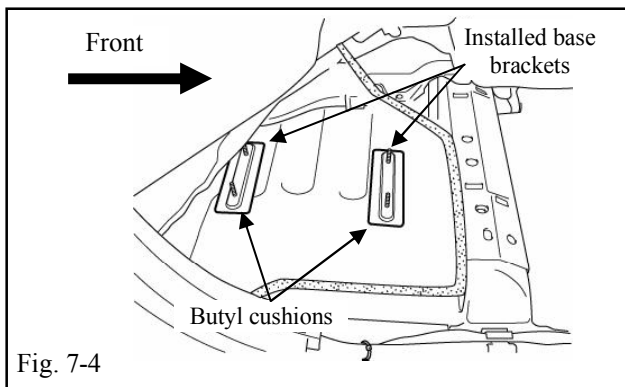


- (b) To lift the carpet, release the tabs of the three (3) vehicle clamps at the door sill as shown. (Fig. 7-2)

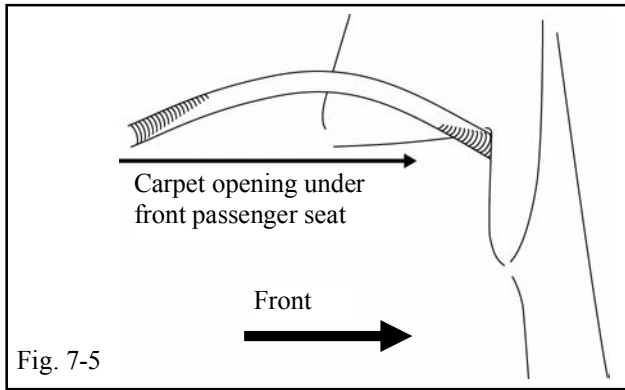


- (c) Install four (4) butyl cushions onto the base brackets. (Fig. 7-3)

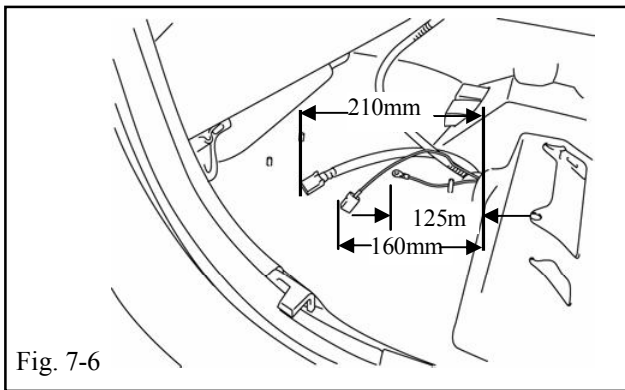
NOTE: Clean the base brackets and base bracket mounting area (using a VDC approved cleaner).



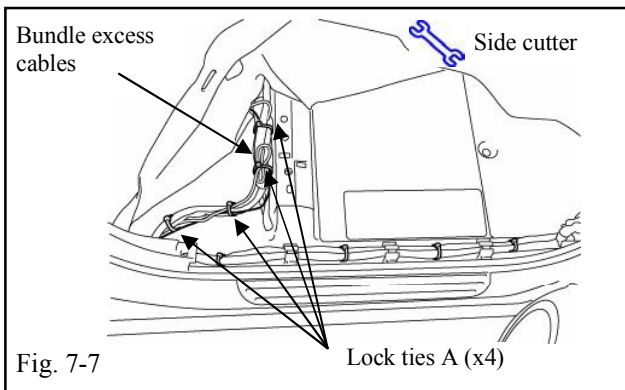
- (d) Insert the base bracket studs under the carpet and through the cut holes; remove the release paper from the butyl pads; then press the carpet downward to install the base brackets onto the floor. (Fig. 7-4)
- (e) Reinstall the carpet so the base bracket studs show through. (Fig 7-4)



- (f) Locate the carpet opening under the front passenger seat. (Fig. 7-5)

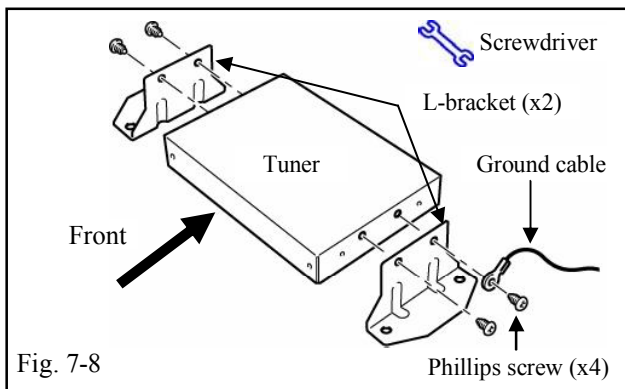


- (g) Route the tuner cable, data cable, antenna cable and ground cable under the carpet and through the existing opening in the carpet as shown. Set the length of the cables over the carpet as required; 125 mm (4.92 in.) of the tuner ground cable, 210 mm (8.27 in.) of the tuner cable, 190 mm (7.48 in.) of the data cable and 160 mm (6.30 in.) of the antenna cable. (Fig 7-6)

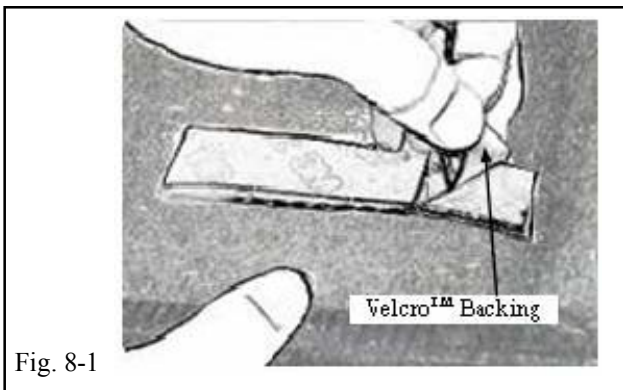
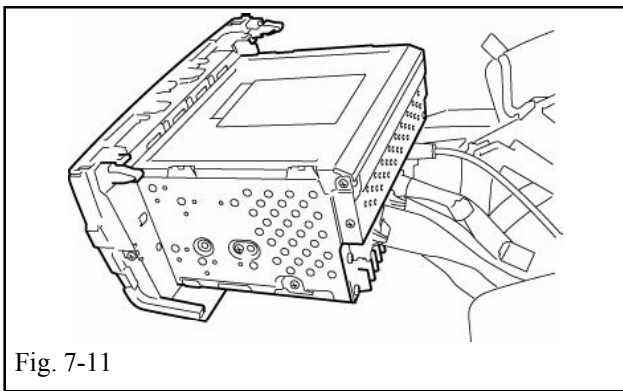
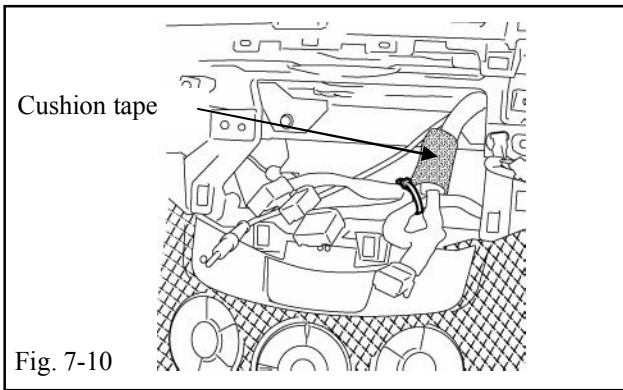
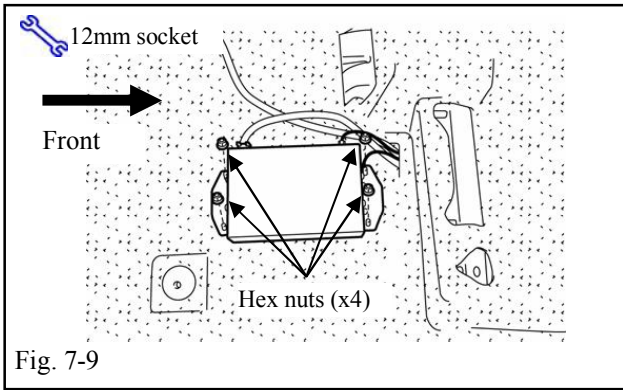


- (h) Bundle the excess tuner cable, data cable, antenna cable and ground cable under the carpet and secure to the existing vehicle harness with four (4) lock ties. (Fig. 7-7)

NOTE: Cut excess lock ties length with side cutters.



- (i) Install the L-brackets onto the tuner using the supplied Phillips screws (M5 x L8). (Fig. 7-8)
- (j) Install the ground cable onto the tuner as shown. (Fig. 7-8)



- (k) Plug the tuner, data and antenna connectors into the tuner.
- (l) Install the tuner onto the base brackets using the supplied nuts (M6 x4). (Fig. 7-9)

- (m) Vehicles without RSE present will require securing of extra Y connector. Secure with Cushion Tape as shown. (Fig. 7-10)

- (n) Plug the tuner cable and data cable into the head unit, reconnect the factory harness and antenna; then reinstall the audio head unit. (Fig. 7-11)

8. Installing Receiver Cover

- (a) Remove the satellite receiver cover (P/N PT218-52071) 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. 8-1).
 - (1) Do not separate the Velcro™.

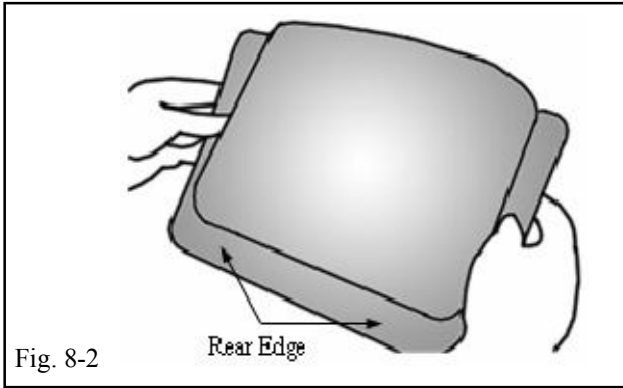


Fig. 8-2

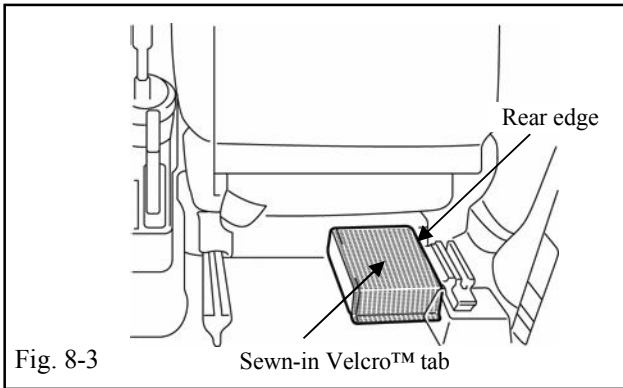


Fig. 8-3

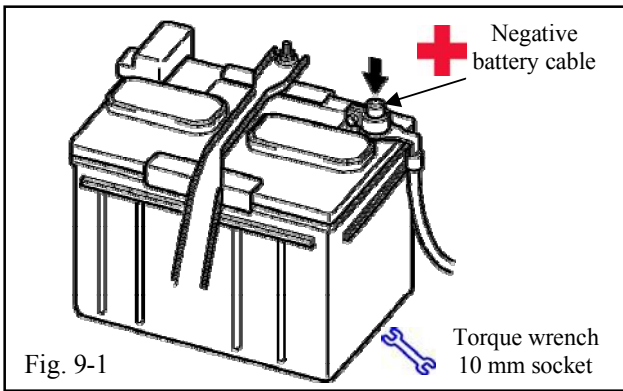


Fig. 9-1

- (d) Clean the top of satellite receiver box with VDC approved cleaner.
- (e) Align the rear edge of the cover with the rear edge of the satellite receiver. (Fig. 8-2).
- (f) Center cover to ensure satellite receiver mounting bolts are covered. Press Velcro™ to the floor carpet around the perimeter.
- (g) Press the sewn-in Velcro™ tab on the top underside of the cover firmly to the satellite receiver. (Fig. 8-3).



9. Test SDARS functionality

- (a) Temporarily reconnect the negative battery cable. (Fig. 9-1)



CAUTION: Do not touch the positive terminal with any tool.



- (b) Test for SDARS functionality.



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



10. Airbag Diagnostic Check



- (1) Connect the Techstream to the vehicle's diagnostic connector.
- (2) Turn the ignition switch to the ON position.
- (3) Check for Airbag ECU Trouble codes – if present then clear the DTC's.


11. Zero Point Calibration & Sensitivity Check

(a) Connect the Techstream connector to the vehicle’s diagnostic connector in the lower dash area.


- (1) Turn ignition switch to ON position.
- (2) Perform the Occupancy Classification Zero Point Calibration and Sensitivity checks as described in the vehicle repair manual.

12. Vehicle Reassembly

- (a) Reconnect any disconnected connectors.
- (b) Verify that panels fit together properly with no uneven gaps between them.

 (c) Specified tightening torque

Part	Torque
Front seat	37 N·m (27 lbf-ft)
Front seat belt	42 N·m (31 lbf-ft)
Rear No.1 seat belt	
Rear No.2 seat belt anchor	
Rear No.2 seat belt shoulder anchor	
Tether anchor bracket	
Negative battery cable	4.1 N·m (36 lbf-in)

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

- (d) Place the XM brochure in the glove box.
- (e) Clean up and remove any trash.
- (f) Proceed to Functional Verification.

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

Check:

Accessory Function Checks

- Satellite Radio Tuner.

- Receiver/player Assembly.

Look For:

- *Verify the proper operation of the Satellite Radio Tuner.

- *Verify the proper operation of the Receiver/player Assembly

- *(Refer to the receiver assembly and radio owner's manuals.)

Vehicle Function Checks

- Hazard switch

- Passenger's seat belt reminder light

- Removed seat
- Proper operation of the removed seat locks mechanism

- HVAC (heating ventilation and air conditioning system)

- Electronic wheel lock mechanism

- Proper operation of the hazard switch

- Proper operation of the passenger's seat belt reminder light

- Verify the removed seat is securely fastened

- Verify the proper operation of the removed seat lock mechanism

- Verify proper operation of the air conditioning system

- Verify proper operation of 4-wheel drive wheel lock mechanism