

Part Number: PTS31-52050

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

Kit Contents

Item #	Quantity Req'd.	Description
1	1	Antenna, Exterior
2	1	Wire Harness
3	1	Bracket, Floor
4	3	Hardware Bags
5	1	Template DO NOT USE
6	1	SIRIUS Satellite Radio Brochure

Tape Measure Scissors	Metric
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Special Chemicals Cleaner	Notes 3M™ Prep Sol-70
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Hardware Bag Contents – 1

Item #	Quantity Req'd.	Description
1	6	Foam Pads
2	7	Lock Ties
3	4	Double Sided Tape

General Applicability

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Recommended Sequence of Application

Item #	Accessory
1	Rear Wind Deflector
2	Audio
3	Satellite Radio

*Mandatory

Hardware Bag Contents – 2

Item #	Quantity Req'd.	Description
1	8	Screw (6-32x5/16)
2	3	Nut (Hex 6-32) DO NOT USE

Vehicle Service Parts (may be required for reassembly)

Item #	Quantity Req'd.	Description
1		
2		
3		

Hardware Bag Contents – 3

Item #	Quantity Req'd.	Description
1	1	Edge Guard

Additional Items Required For Installation

Item #	Quantity Req'd.	Description
1	1	Receiver Assembly, P/N PTS31-53060

Conflicts

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Recommended Tools

Personal & Vehicle Protection	Notes
Safety Goggles	
Seat Covers	
Floor Protectors	
Special Tools	Notes
None	
Installation Tools	Notes
Ratchet	
Extension	
Sockets	10 mm, 14mm
Torque Wrench	
Screwdriver	Philips, #2
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST # 00002-06001-01
Masking Tape	(2" wide)
Side Cutter	
Carpet Cutting Knife	Matt Knife

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.

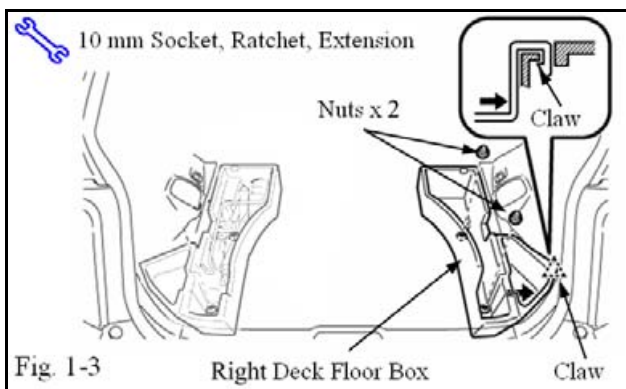
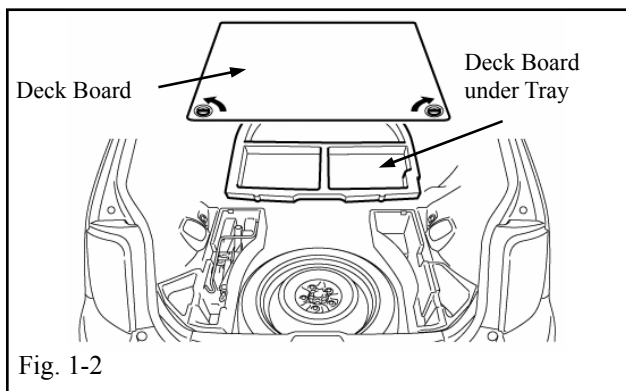
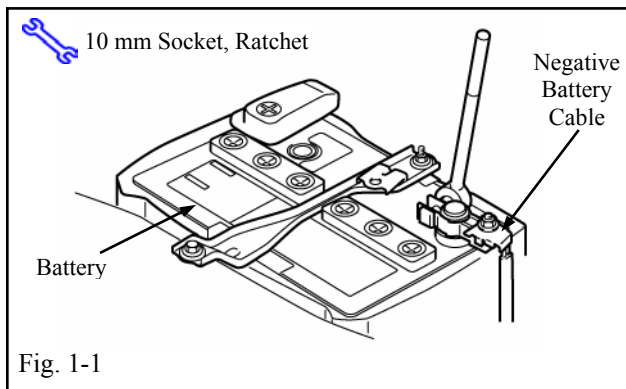
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

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.

Back door lock cannot be released without reconnecting negative battery cable.

1. Vehicle Disassembly

STOP (a) Set Parking brake.

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

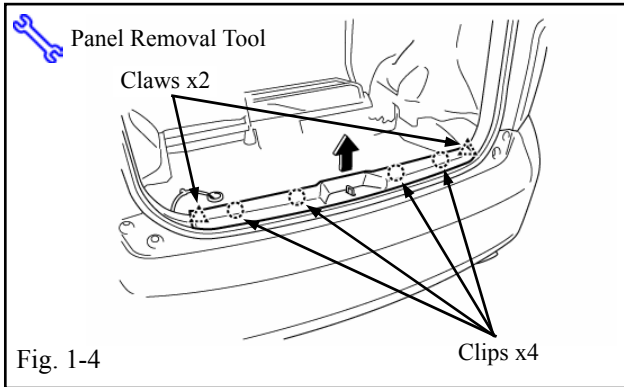
STOP (1) Protect the fender before starting.

+ (2) Do not touch the positive terminal with any tool when removing cable.

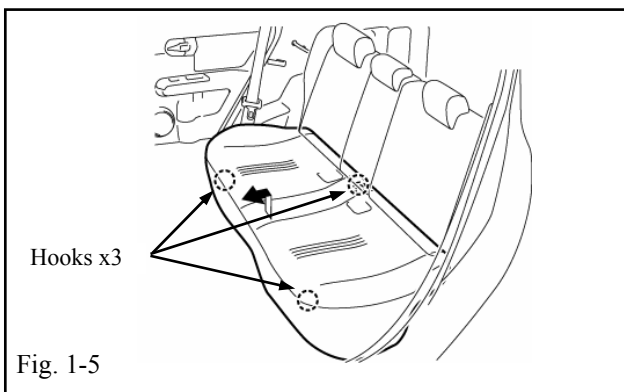
(c) Remove the deck board and under tray from the cargo area. (Fig. 1-2)

(d) Remove the two (2) nuts and then remove the right deck floor box. (Fig. 1-3)

STOP **NOTE:** A claw is attached to the right deck floor box. When removing the box, detach the claw by pushing the lower part of the box outward as shown in the illustration.



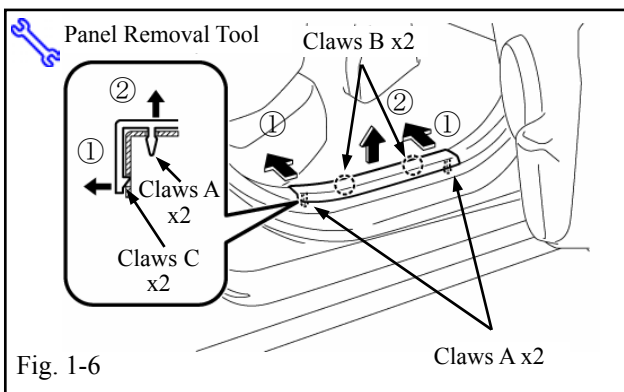
(e) Disengage two (2) claws and four (4) clips, then pull upward and remove the deck trim cover. (Fig. 1-4)



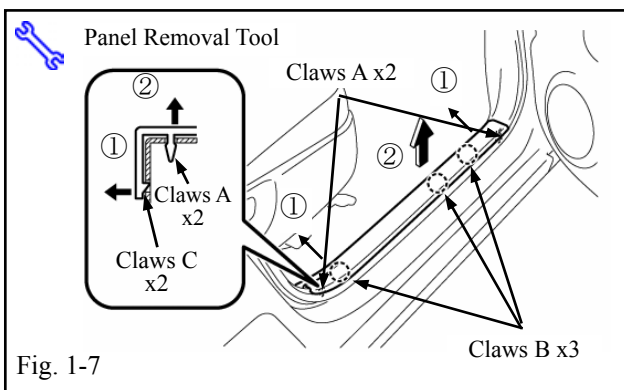
(f) Remove the rear bottom seat as follows:

- (1) Disengage the three (3) hooks and remove the rear bottom seat cushion. (Fig. 1-5)

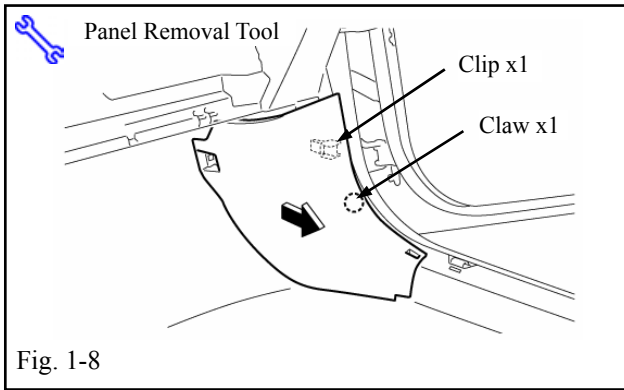
STOP NOTE: Be careful not to damage the seat, the door, and other vehicle parts when removing the seat from the vehicle.



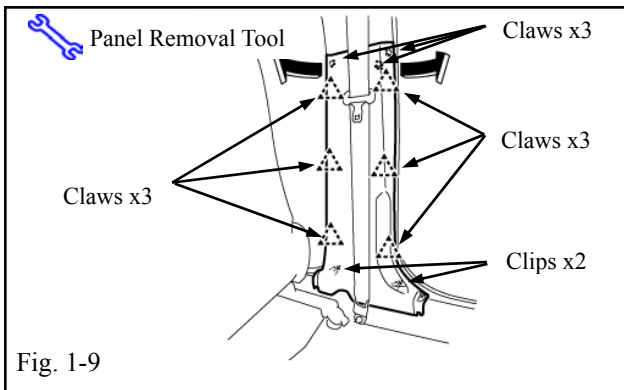
(g) Disengage the six (6) claws and remove the rear passenger side door scuff plate. (Fig. 1-6)



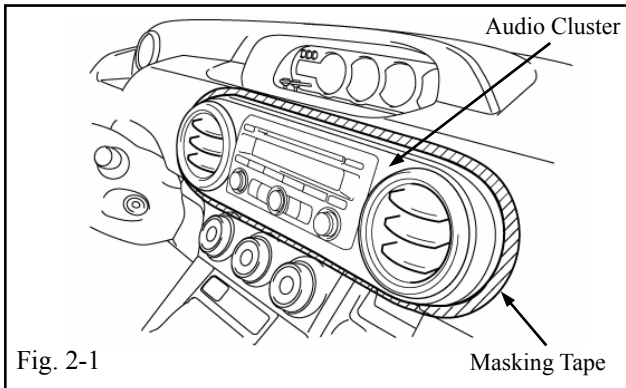
(h) Disengage the seven (7) claws and remove the front passenger side door scuff plate. (Fig. 1-7)



- (i) Disengage the clip and the claw then remove the passenger side cowl side trim. (Fig. 1-8)

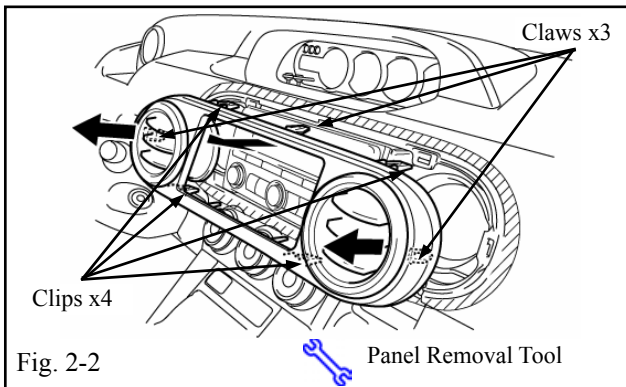


- (j) Disengage the nine (9) claws and two (2) clips then remove the passenger side lower center pillar garnish. (Fig. 1-9)

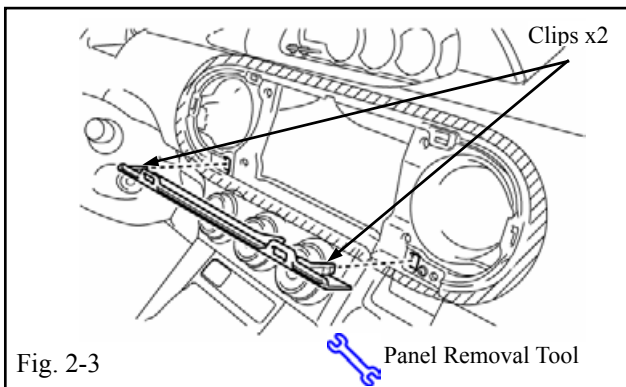


2. Remove the Radio/Player Head Unit

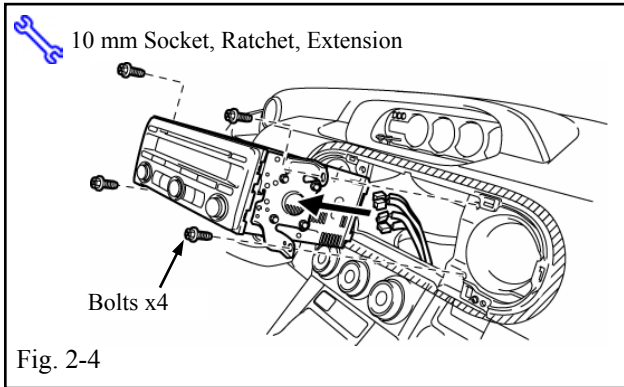
(a) In order to prevent scratches, apply masking tape around the audio cluster (shaded areas in the figure) before removing the audio cluster. (Fig. 2-1)



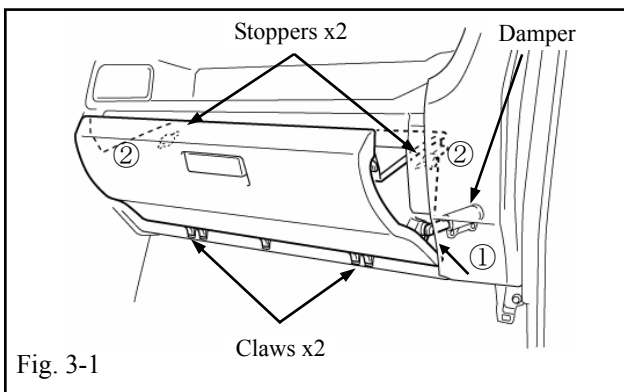
(b) Disengage the four (4) clips and the three (3) claws, and remove the audio cluster. (Fig. 2-2)



(c) Disengage the two (2) clips and remove the audio cluster under plate. (Fig. 2-3)

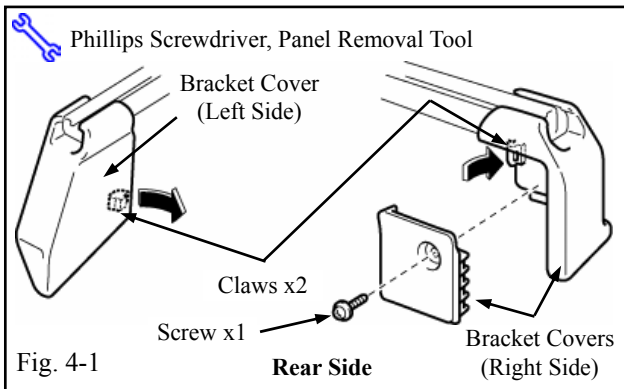


- (d) Remove the four (4) bolts and remove the head unit (Fig. 2-4).
- (e) Disconnect the connectors.




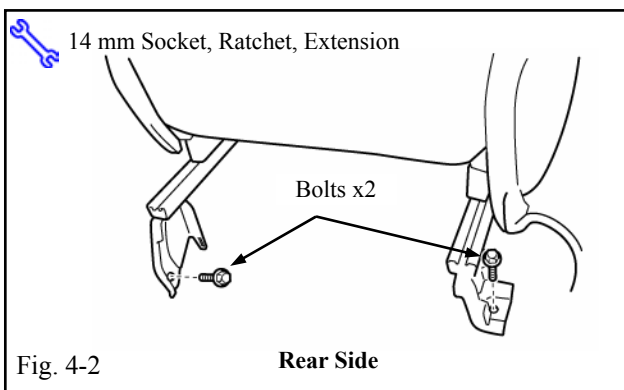
3. Remove the Glove Compartment Door

- (a) Disconnect the damper from the glove compartment door. (Fig.3-1)
- (b) Squeeze both ends of the box together to fully extend the box, and then remove the stoppers. (Fig.3-1)
- (c) Disengage the two (2) claws, and then remove the glove compartment door. (Fig. 3-1)

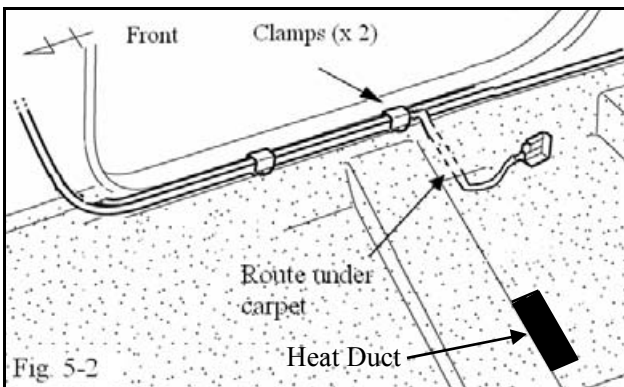
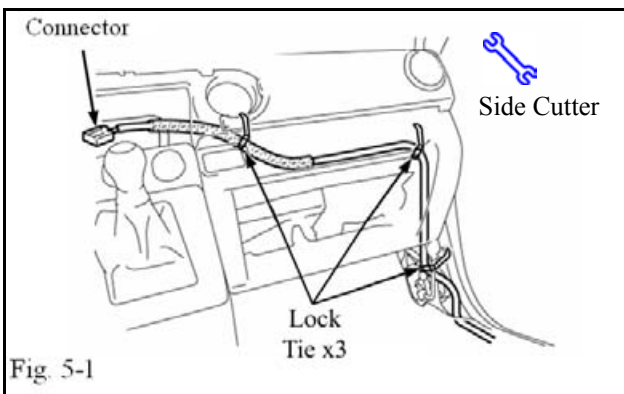
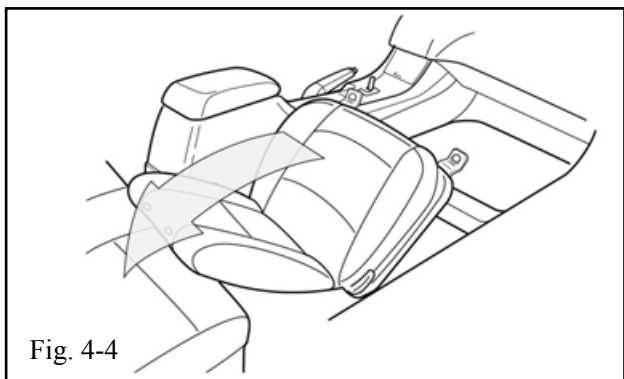
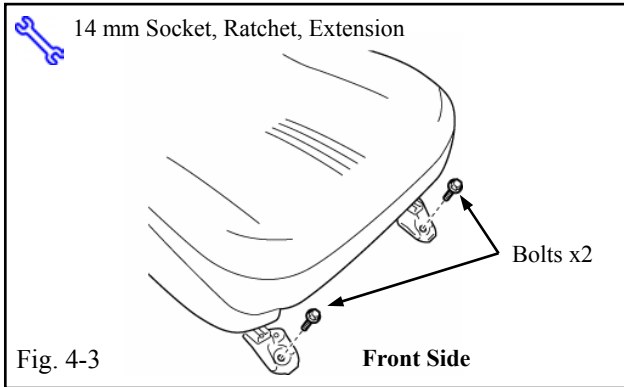


4. Remove Front Passenger Seat

-  (a) Protect the rear seat area, the floor, and the center console area.
- (b) Remove the screw and then disengage the claws and remove the seat track bracket covers. (Fig. 4-1)



- (c) Remove the two (2) seat rear bolts. (Fig. 4-2)
- (d) Slide the seat backward.



- (e) Remove the two (2) seat front bolts. (Fig. 4-3)
- (f) Disconnect the wire harness clamp and connectors.

- (g) Tilt the seat rearwards, exposing the floor under the front passenger seat, and lay the seat in the rear seat area. (Fig. 4-4)
- (h) Secure the seat to keep it from falling (optional).

5. Install and Route the Receiver Harness

- (a) Route the receiver harness from the cowl side trim to the head unit as shown. (Fig. 5-1)
- (b) Secure the receiver harness with the vehicle wire harness. Install three (3) lock ties as shown. (Fig. 5-1)



STOP **NOTE:** Match the position of the connector and the length of the cable to other connectors connected with the head unit.

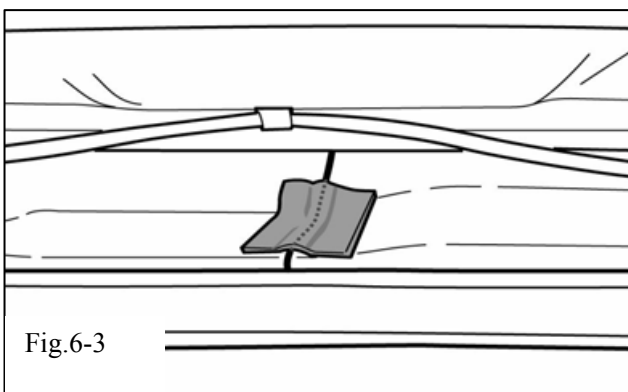
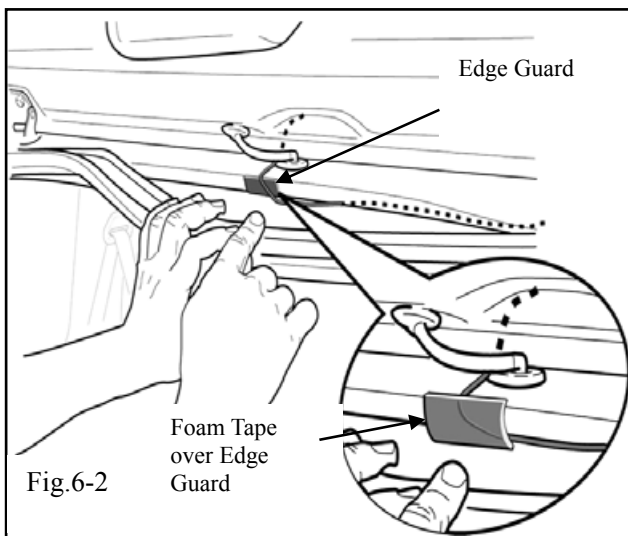
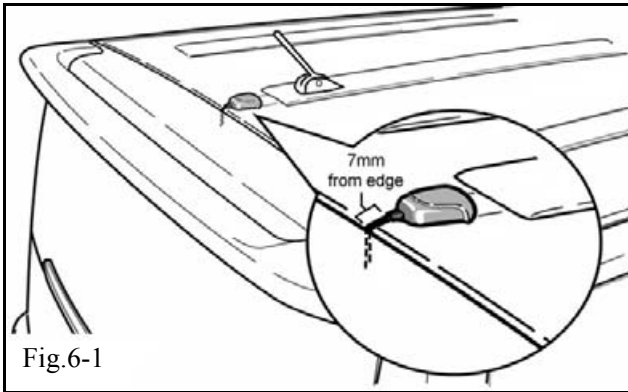
- (c) Use a side cutter to cut off the excess lock tie length.
- (d) Route the receiver harness back along the passenger door through the existing wire clamps along the doorsill and under the carpet and then up through the opening for the heat duct. (Fig. 5-2)
 - (1) Make sure you pull enough harness through to reach the receiver connector.


6. Install the Antenna


- (a) Clean the mounting area with 3M™ Prep Sol-70.

When cleaning with 3M™ Prep Sol-70.


-  (1) Always use a clean (lint free scratch resistant) soft cloth (or wipe), and clean a small area at a time (~ 3 ft. x 3 ft. max.).
-  (2) Shake well and apply 3M™ Prep Sol-70 to cloth or wipe. Do not spray cleaning solution directly on any vehicle surfaces.
- (3) Clean surface thoroughly and wipe dry immediately with a new clean cloth. Do not allow cleaner to air dry.




-  (b) Remove the release paper from the bottom of antenna then position it 7mm from the rear hatch edge directly behind the vehicle antenna, pressing down to affix the antenna onto the roof. (Fig. 6-1)

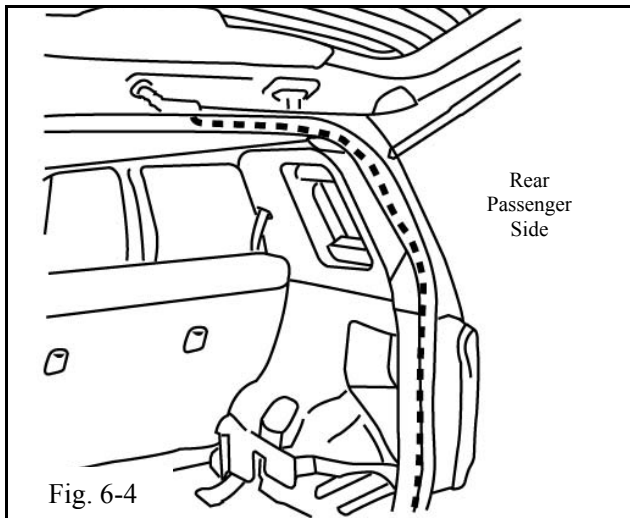
 Once attached, the antenna cannot be easily removed.

- (c) Pull back the rubber door seal and install the Edge Guard provided in the kit over the door opening directly behind the window washer line as shown. (Fig. 6-2)

 (d) Route the antenna cable diagonally over the Edge Guard and then place a piece of foam tape over the antenna wire as shown. (Fig. 6-2)

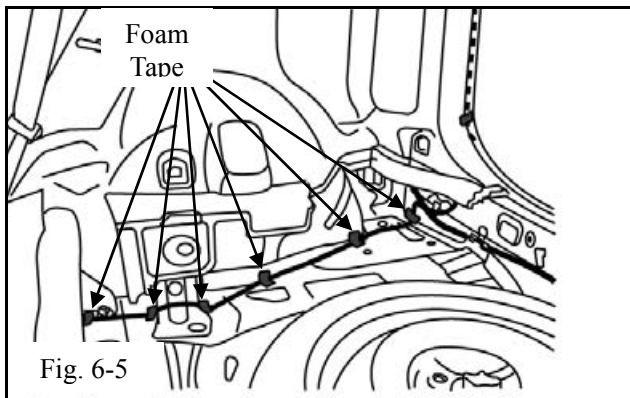
- (e) Route the antenna cable through the rear hatch opening and under the rubber window harness. (Fig. 6-2)

 (f) Lower the rear hatch slightly and place a piece of foam tape over the antenna cable as close to the forward (top) edge of the door opening as possible. (Fig. 6-3)

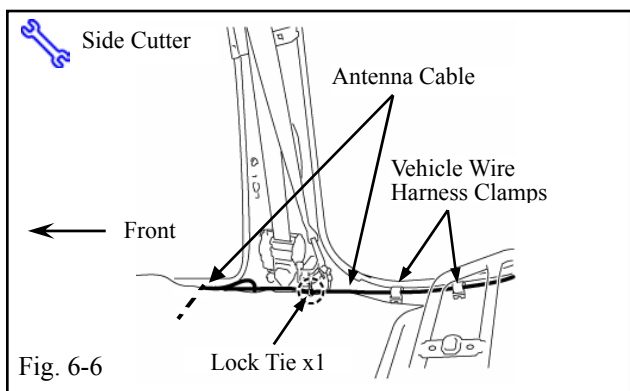


(g) Route the antenna cable under the headliner toward the right side of the vehicle.
(Fig. 6-4)

(h) Continue routing the antenna cable tucking it behind the right rear side door seal.
(Fig. 6-4)



(i) Route the antenna cable toward the front of the vehicle along the passenger side trunk edge securing it using pieces of foam tape.
(Fig. 6-5)

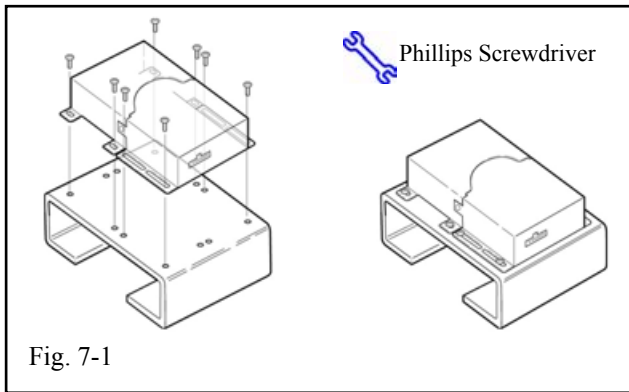


(j) From the rear passenger door, secure the antenna cable to the vehicle wire harness using the vehicle wire harness clamps and one (1) lock tie at the bottom of the B-Pillar.
(Fig. 6-6)

(k) Use a side cutter to cut off the excess lock tie length.

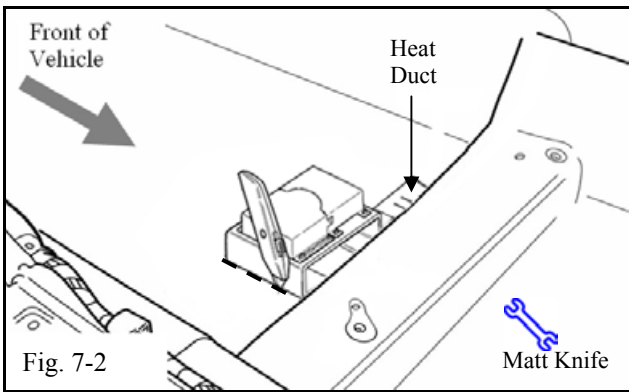
(l) Continue routing the antenna cable under the carpet and then up through the opening for the heat duct. (Fig. 5-2)

(1) Make sure you pull enough cable through to reach the receiver antenna connector.



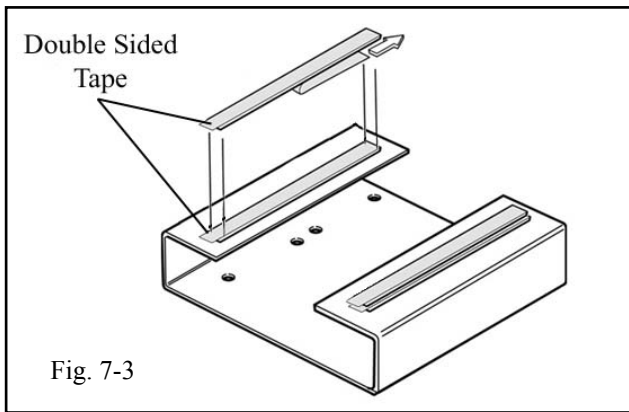
7. Install the Receiver.

- (a) Install the receiver onto the bracket using the eight (8) screws supplied in the kit. (Fig. 7-1)
- (b) Position the receiver/bracket assembly on the floor under the passenger seat up against the Heat Duct. (Fig. 7-2)

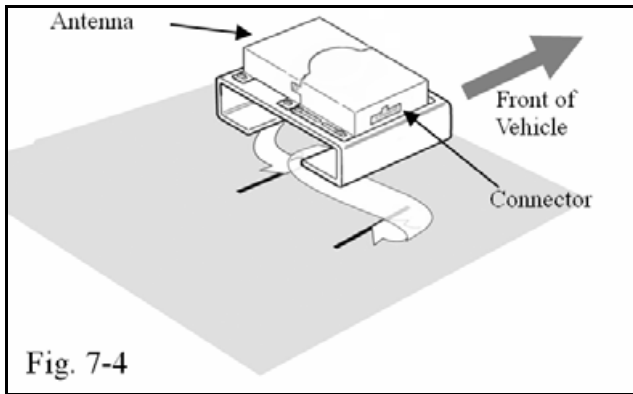


- STOP** (c) Using a carpet cutting knife cut the carpet on along the two sides of the receiver /bracket assembly making sure you cut all the way through to the floor. (Fig 7-2)

- (1) Make sure there are no wires under the carpet where the cuts will be made.
- (2) Cut the full length along the each edge of the receiver/bracket assembly.
- (3) Make sure the carpet is cut all the way through to the floor the full length of the cut lines.

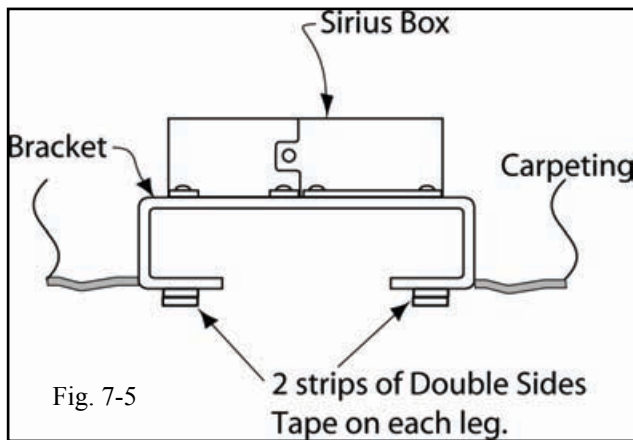


- (d) Apply four (4) pieces of double sided tape onto the receiver/bracket assembly legs (two on either side one on top of the other) as shown. (Fig. 7-3)



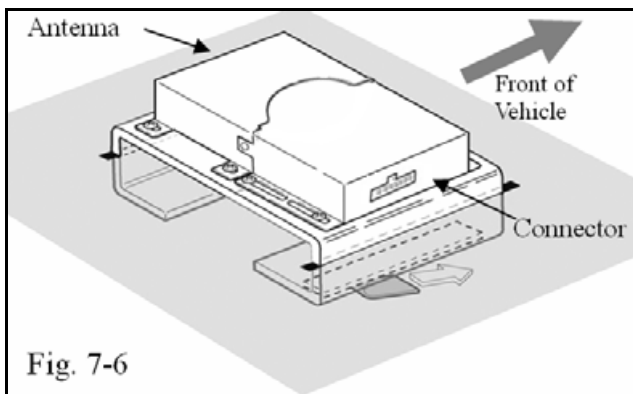
(e) Place the bracket/receiver assembly through the carpet as shown (Fig. 7-4)

- (1) Make sure the bracket goes all the way through the carpet so that the feet can be mounted to the floor pan. (Fig. 7-5)



(f) Remove the 2 release tabs from the bottom of the bracket and mount the bracket to the floor pan. (Fig. 7-5 & 7-6)

- (1) Make sure the bracket is firmly attached to the floor pan by firmly applying pressure down on the receiver/bracket assembly.

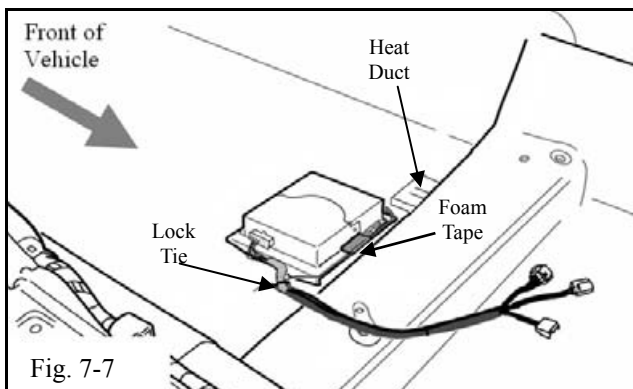


(g) Plug the connector and antenna into the receiver module. (Fig. 7-7)

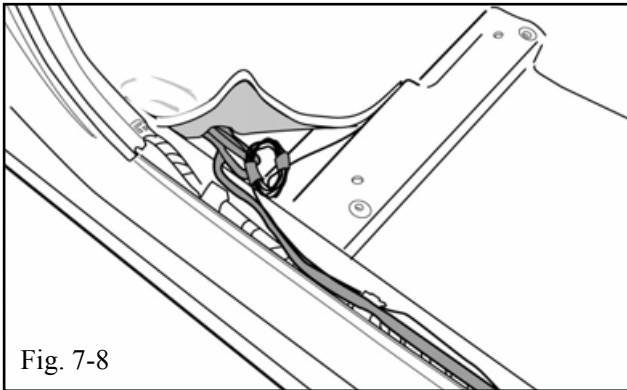
- (1) Tape the antenna cable down to the bracket with a piece of foam tape and lock tie the harness and antenna together as shown.

(h) Bundle up and secure any excess harness or antenna cable. (Fig. 7-8)

- (1) Bundle up & lock tie extra harness.
- (2) Coil up and place foam tape on extra antenna cable.
- (3) Place extra harness and cable under the carpet as shown.



STOP NOTE: Clip all lock ties after tightening

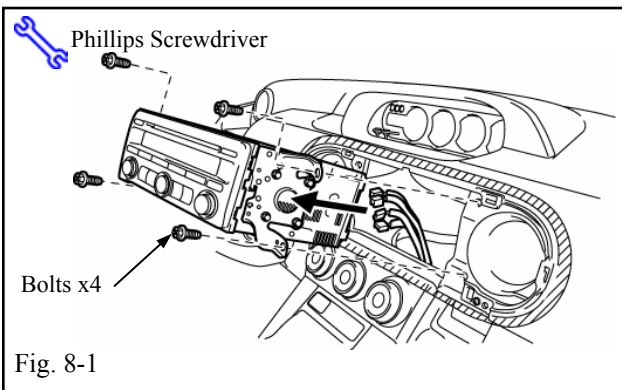


- (i) Bundle up and secure any excess harness or antenna cable. (Fig. 7-8)
 - (1) Bundle up & lock tie extra harness.
 - (2) Coil up and place foam tape on extra antenna cable and place extra harness and cable under the carpet as shown.

STOP NOTE: Clip all lock ties after tightening

8. Reinstall the Radio/Player Head Unit

- (a) Connect the satellite tuner cable and the connectors removed in Step 2(b) into the rear of the head unit. (Fig. 8-1)
- (b) Insert head unit into opening and re-install the bolts. (Fig. 8-1)



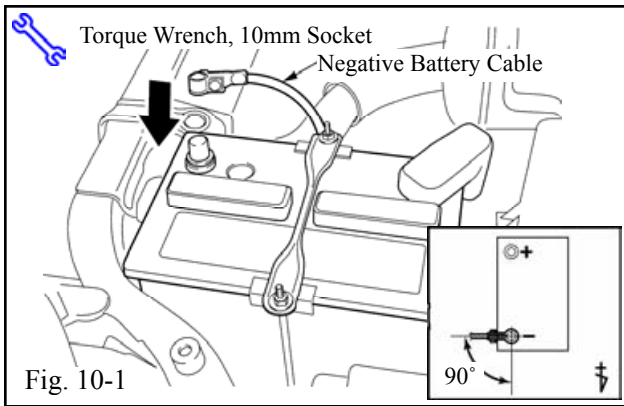
9. In Process Functional Test

- +** (a) Temporarily reconnect battery negative cable (Fig. 10-1).
- (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.



10. Complete the Reassembly of the Vehicle:

(a) Reinstall the front seat

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



(2) Tighten bolts to 40 N-m (30 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 doorsill.

(f) Reconnect the vehicle's negative battery cable. (Fig. 10-1)

(1) Position the negative terminal at an angle of $\sim 90^\circ$ (+/- 30) to the battery as shown.



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



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

(g) Clean up and remove any trash.



(h) Place the owner "SIRIUS 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"/> Removed seat</p> <p><input type="checkbox"/> Proper operation of the removed seat lock mechanism</p> <p><input type="checkbox"/> Rear combination lamp Assembly</p> <p><input type="checkbox"/> SRS warning light</p> <p><input type="checkbox"/> HVAC (heating ventilation and air conditioning system)</p> <p><input type="checkbox"/> SSP function</p>	<p>Proper operation of the hazard switch.</p> <p>Proper operation of the passenger'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 proper operation of the removed rear combination lamp Assy.</p> <p>Verify the 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 "xB" by pressing the "SSP" button on the head unit for 5 seconds. (If not, press the volume control and set to "xB".)</p>