

Part Number: PTS31-52050

Kit Contents

Item #	Quantity Reqd.	Description
1	1	Antenna, Exterior
2	1	Antenna Tape Pad
3	1	Wire Harness
4	1	Bracket, Floor
5	3	Hardware Bags
6	3	Templates
7	1	SIRIUS Satellite Radio Brochure

Hardware Bag Contents - 1

Item #	Quantity Reqd.	Description
1	6	Foam Pads
2	7	Lock Ties
3	4	Double-Sided Tape

Hardware Bag Contents - 2

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

Hardware Bag Contents - 3

Item #	Quantity Reqd.	Description
1	1	Edge Guard
2		

Conflicts

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Recommended Tools

Personal & Vehicle Protection	Notes
Safety Goggles	
Seat Covers	
Floor Protector	When cutting carpet
Special Tools	Notes
None	
Installation Tools	Notes
Ratchet	
Extension	
Sockets	10 mm, 14 mm
Screwdriver	Phillips, #2

Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST # 00002-06001-01
Torque Wrench	
Side Cutter	

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

Carpet Cutting Knife	Matt Knife
Tape Measure	Metric
Scissors	
Special Chemicals	Notes
Cleaner	Windex or Approved Cleaner

General Applicability

Note:-

Recommended Sequence of Application






Item #	Accessory
1	
2	
3	

*Mandatory

Vehicle Service Parts (may be required for reassembly)

Item #	Quantity Reqd.	Description
1		
2		
3		

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.

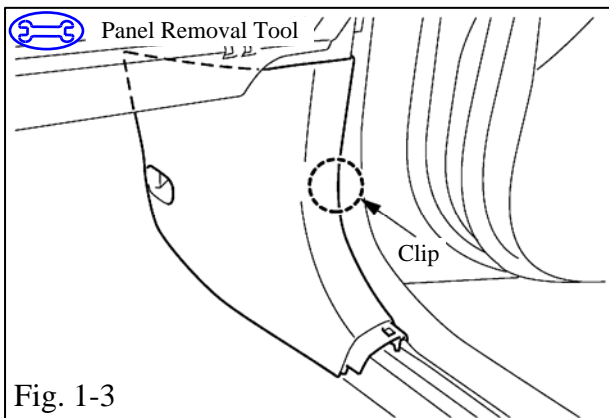
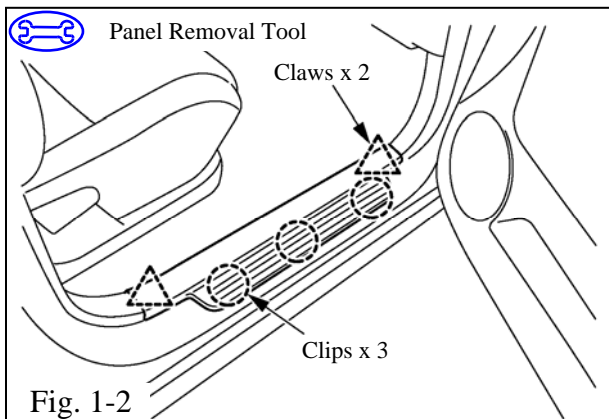
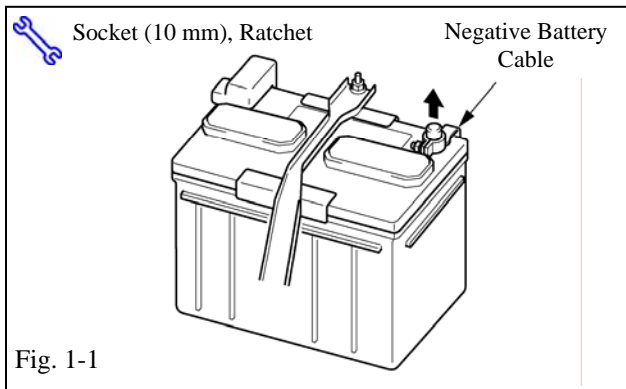
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

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.



1. Vehicle Disassembly.



- (a) Set parking brake.
- (b) Remove the negative battery cable.
(Fig. 1-1)

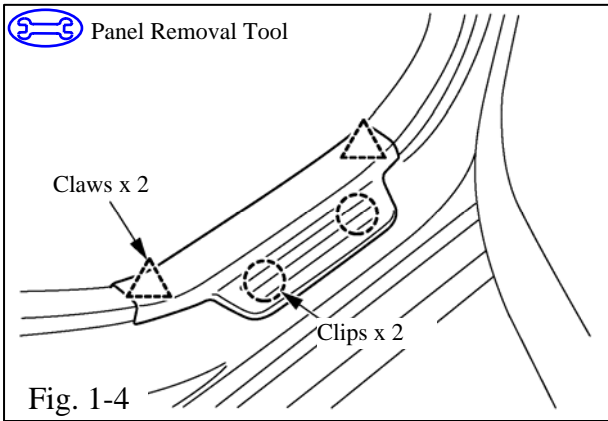


- (1) Protect the fender before starting.
- (2) Do not touch the positive terminal with any tool when removing cable.

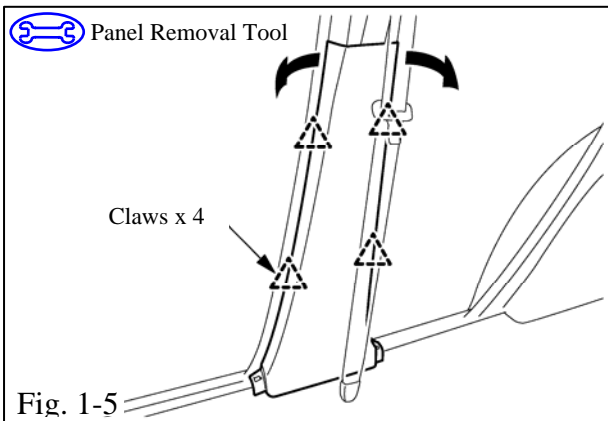
- (c) Disengage the clips and claws and remove the front passenger side door scuff plate.
(Fig. 1-2)

- (d) Remove the passenger side cowl side trim as follows: (Fig. 1-3)

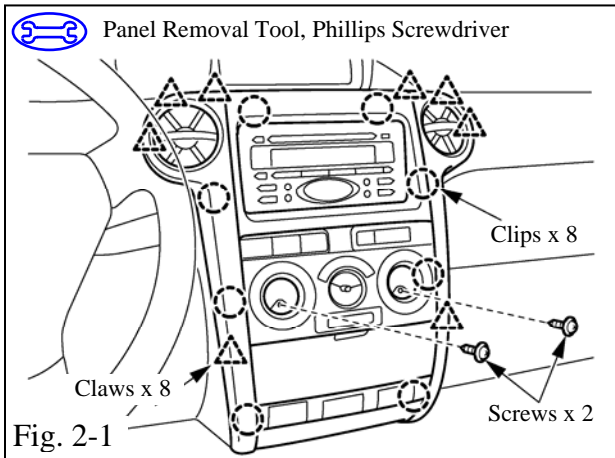
- (1) Disengage clip and remove the cowl side trim.



- (e) Disengage the clips and claws and remove the rear passenger side door scuff plates. (Fig. 1-4)

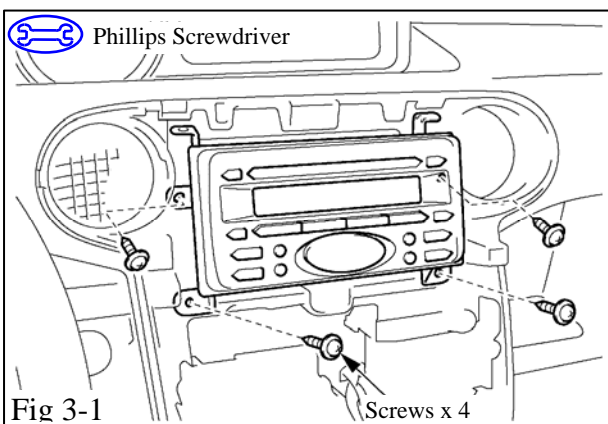


- (f) Disengage the claws and remove the passenger side center pillar garnish lower (Fig. 1-5)



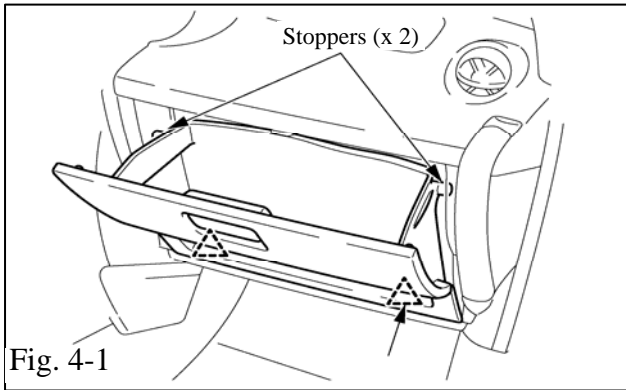
2. Remove the center cluster as follows:

- (a) Disconnect the heater control knobs and remove the screws.
- (b) Disengage the clips and claws and remove the instrument cluster finish panel. (Fig. 2-1)
- (c) Disconnect the connectors.



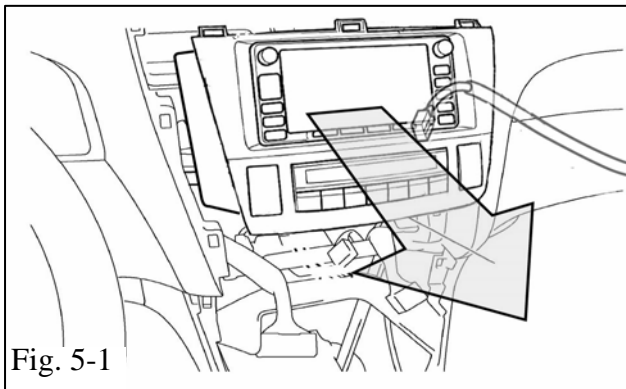
3. Loosen the Head Unit.

- (a) Remove the four (4) screws. (Fig. 3-1)
- (b) Do not remove head unit.



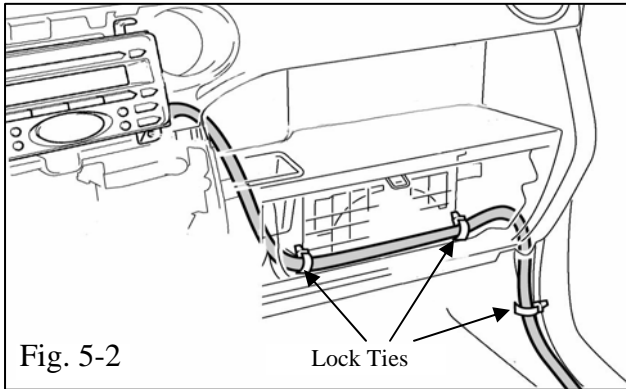
4. Remove the Glove Box.


- (a) Squeeze both ends of the box together to pull in the stoppers which will allow you to fully open the glove box for removal. (Fig. 4-1)
- (b) Disengage the claws on the bottom and then remove the glove compartment door.

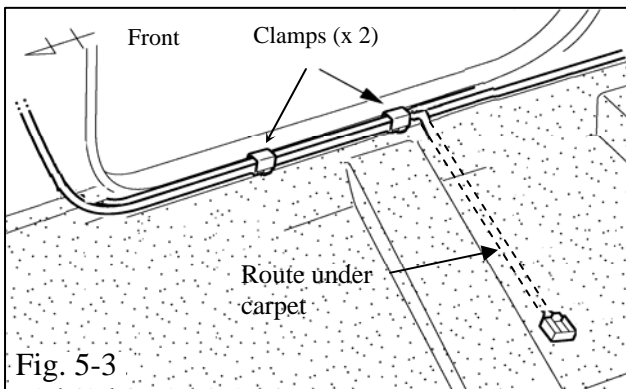


5. Install and Route the Receiver Harness.

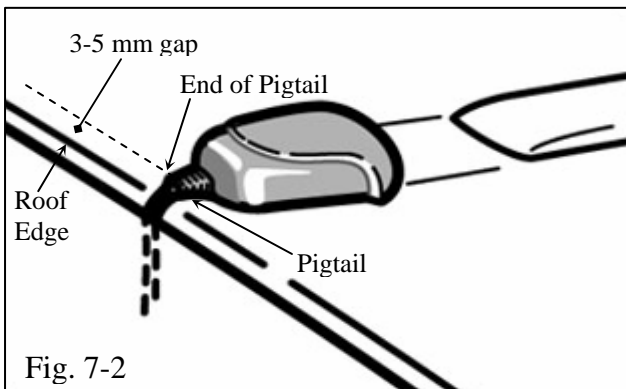
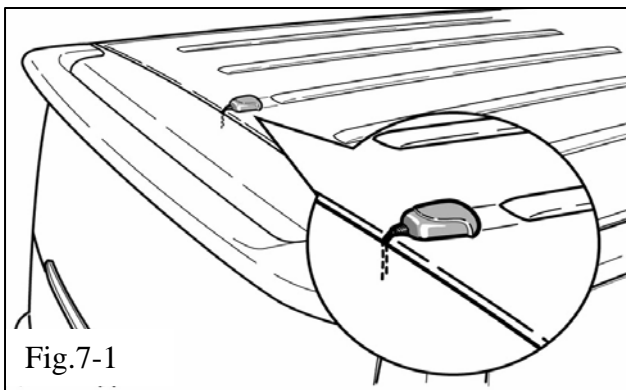
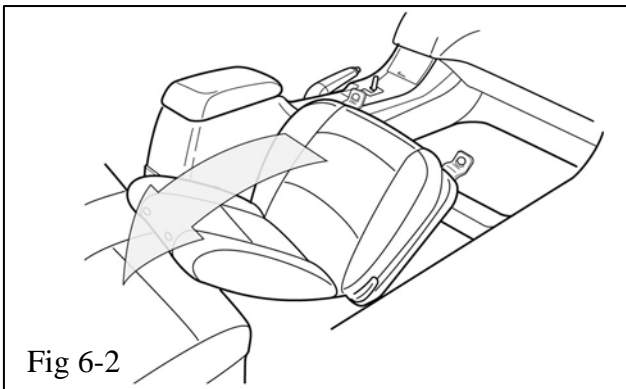
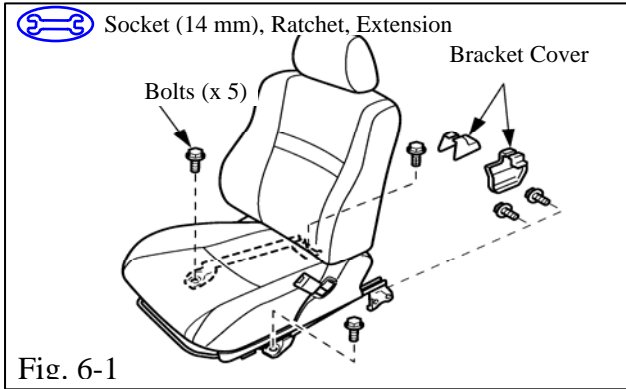
- (a) Install and route the receiver harness from the center cluster and along the front support bar. (Fig. 5-1)
 - (1) Gently pull out the radio cluster in order to access the plug-in location.
 - (2) Route the receiver harness through the opening in the glove box up to the radio and plug in the connector.





-  (3) Provide sufficient cable slack to connect to the audio head unit as shown. Adjust the slack of the cable to match slack of other cables. (Fig. 5-1)
- (4) Place the radio cluster back into position.




- (b) Secure the receiver harness with the vehicle wire harness. (Fig. 5-2)
 - (1) Install 3 lock ties as shown. (Fig. 5-2)
- (c) Route the receiver harness back along the passenger door through the existing wire clamps along the doorsill. (Fig. 5-3)





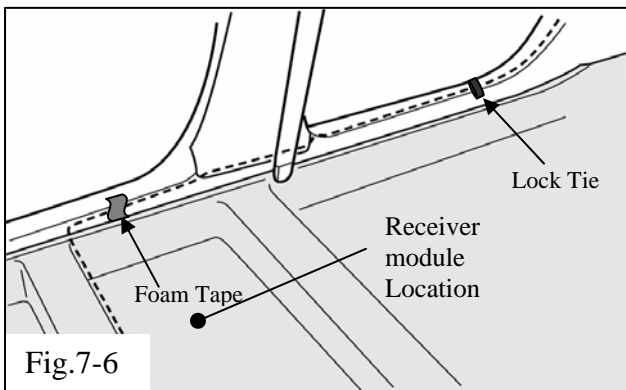
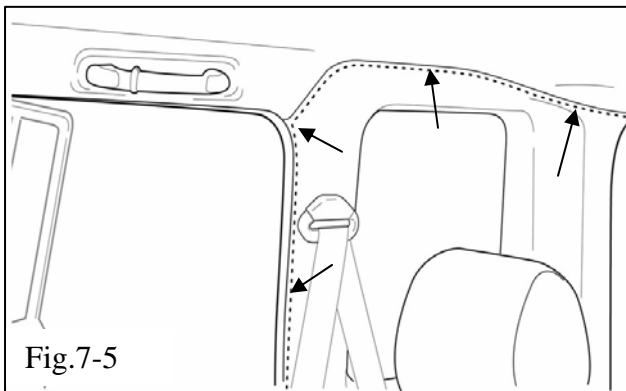
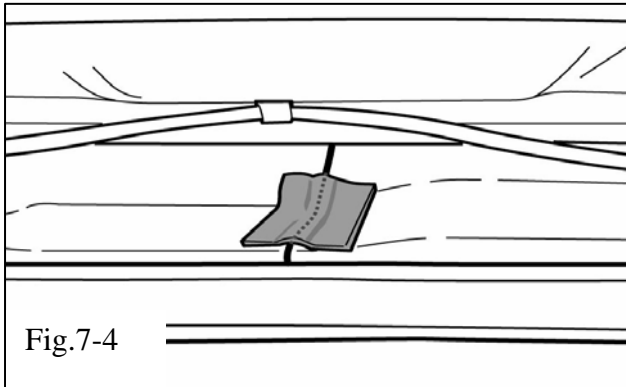
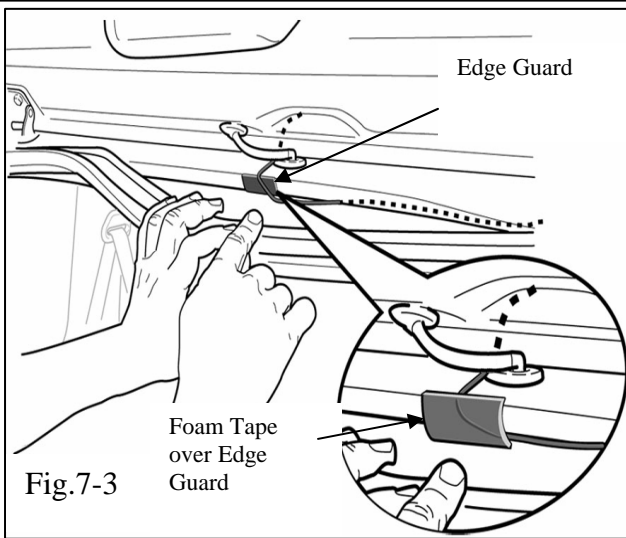
6. Access the Receiver Mounting Location.

-  (a) Protect the center console area before loosening the seat.
- (b) Slide the seat forward and remove the two (2) plastic covers on the rear seat rails. Remove the three (3) bolts under the plastic covers. (Fig. 6-1)
- (c) Slide the seat backwards and remove the two (2) bolts that hold the front end of the seat rails. (Fig. 6-1)
-  (d) Tilt the seat back being careful not to put too much tension on the wire harness connected under the seat.
- (e) Position the seat so it remains tilted back to access the receiver mounting area. (Fig 6-2)

 **NOTE:** Be careful not to damage the seat or put too much tension on the seat wire harness when tilting the seat in the vehicle.

7. Install the Antenna.

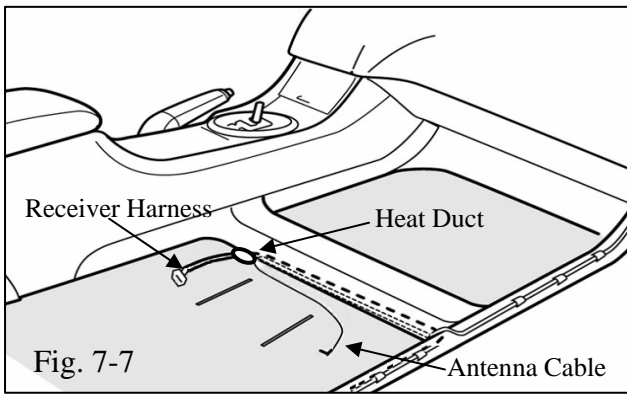
- (a) Clean the antenna mounting location with warm soap and water. (Fig. 7-1)
-  (1) The mounting location must be completely dry & installation temperature must be between 60° - 100° F before mounting the tape pad.
- (2) Remove the protective cover from the bottom of the antenna and center the antenna behind the center roof slat as shown. (Fig. 7-1)
-  (3) In order to prevent the rear door from interfering with the pigtail on the antenna make sure there is approximately a 3-5mm gap between the end of the pigtail on the antenna and the roof edge as shown. (Fig. 7-2)



- (b) Route the antenna wire through the rear hatch opening and under the rubber window washer line as shown. (Fig. 7-3)
- (c) Place a piece of foam tape over the antenna wire in the top of the door opening as shown. (Fig. 7-4)
- (d) 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. 7-3)



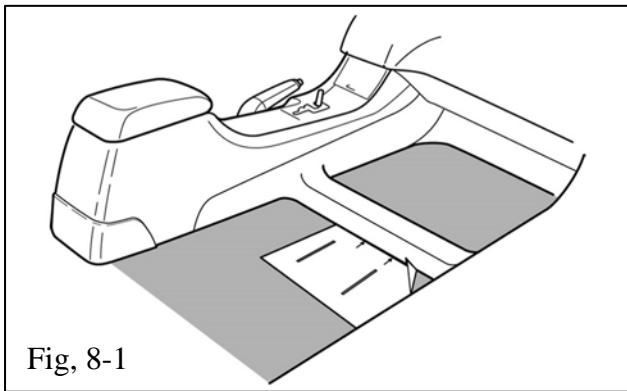
- (e) Route the antenna wire diagonally over the Edge Guard and then place a piece of foam tape over the antenna wire as shown. (Fig. 7-3)
 - (1) Replace the rubber door seal.
- (f) Route the antenna wire under the headliner toward the right side of the vehicle. (Fig. 7-3)
 - (1) Replace the rubber door seal.
- (g) Continue routing the antenna wire behind the right rear side quarter panel as shown. (Fig. 7-5)
- (h) Remove the door seal rubber molding and continue routing the cable down the rear door opening under the door seal rubber molding as shown. (Fig. 7-5)
- (i) Continue routing the cable along the doorsill & "B" pillar to where the receiver module will be installed. (Fig. 7-6)
 - (1) Apply foam tape and lock tie as shown. (Fig. 7-6)



- (j) Route both the cable and receiver harness under the carpet up through the opening in the carpet where the heater duct is located. (Fig. 7-7)


- (1) Make sure you pull enough cable through to reach the receiver connection.

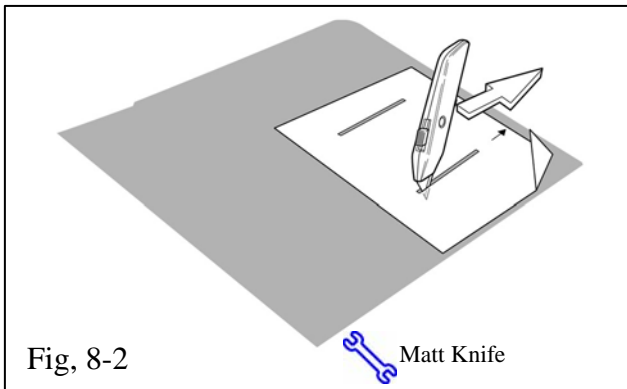
8. Install the Receiver.



- (a) Position the carpet-cutting template on the floor under the passenger seat as shown. (Fig. 8-1)

-  (1) Place a hard flat floor protector under the carpet & pad to protect the floor from the cutting tool.

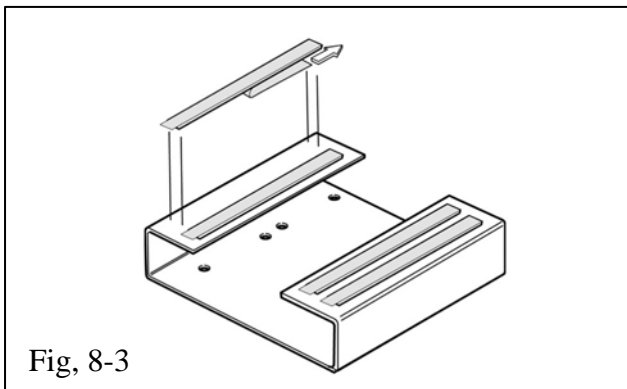
 **NOTE:** Make sure there are no wires under the carpet where the cuts will be made.




- (b) Using a carpet cutting knife cut the carpet all the way through to the floor. (Fig 8-2)

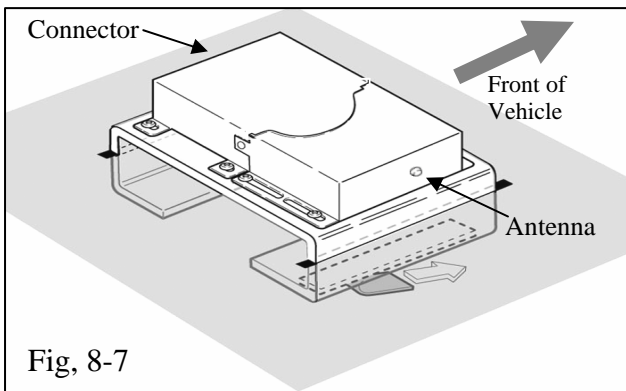
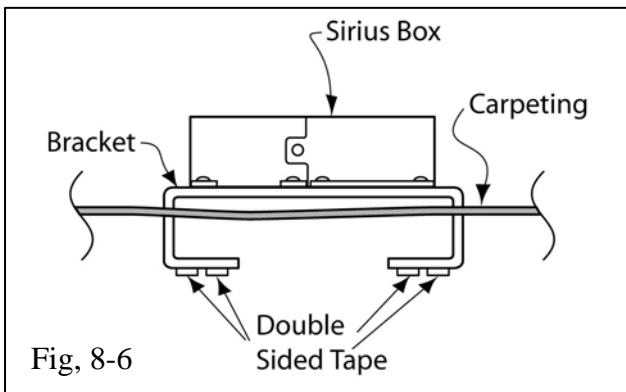
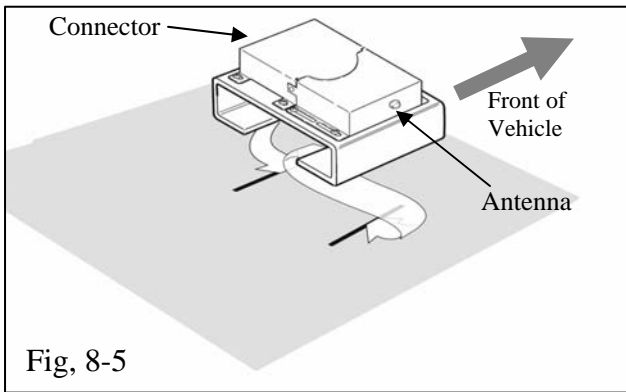
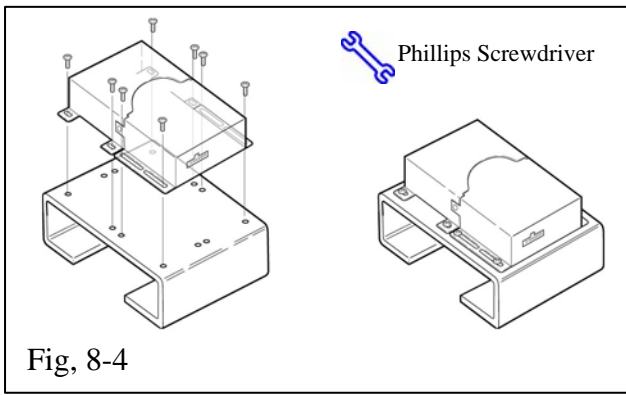
- (1) Cut the full length along the cutting lines on the template.
- (2) Make sure the carpet is cut all the way through to the floor the full length of the cut lines.

Note: Installer may choose to cut an additional 1/2" longer cut forward in order to ease installation of the bracket.



- (c) Apply 4 pieces of double sided tape onto the bracket as shown. (Fig. 8-3)

-  **Note:** All tape mounting surfaces must be cleaned & completely dry and installation temp must be between 60° - 100° F.




(d) Install the receiver onto the bracket using the 8 screws supplied in the kit. (Fig. 8-4)


(e) Place the bracket/receiver assembly through the carpet as shown (Fig. 8-5)

(1) Make sure the bracket goes all the way through the carpet so that the feet can be mounted to the floor pan. (Fig. 8-6)

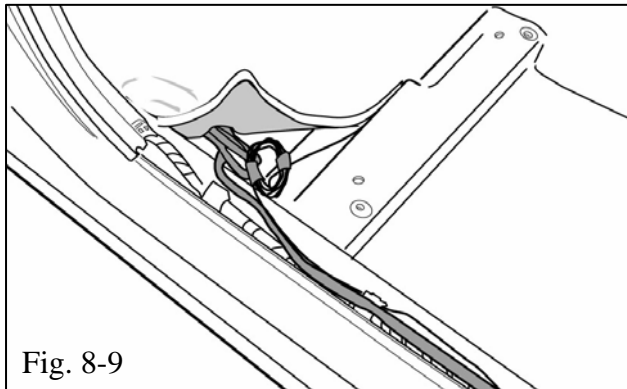
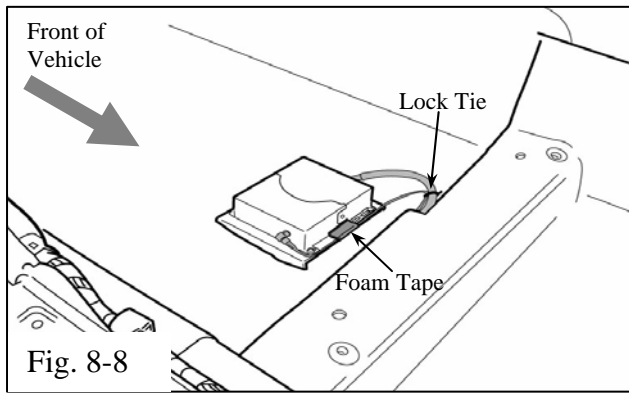
(f) Clean the mounting surface with approved cleaner.

(g) Remove the 4 release tabs from the bottom of the bracket and mount the bracket to the floor pan. (Fig. 8-6 & 8-7)

 Note: All tape mounting surfaces must be completely dry and installation temp must be between 60° - 100° F.

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

(h) Plug the connector and antenna into the receiver module. (Fig. 8 -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. (Fig. 8 -8)

- (i) Bundle up and secure any excess harness or antenna cable. (Fig. 8 -9)

- (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.



NOTE: Clip all lock ties after tightening

9. Retighten the Radio/Player Head Unit.

- (a) Re-install the four (4) screws.

10. In Process Functional Test.



- (a) Temporarily reconnect battery negative cable.
- (b) Turn ignition key to ACC position.
- (c) Press the power button on the receiver/player head unit. Verify the backlighting illuminates.
- (d) Press and release the "SAT" button on the head unit.
 - (1) Verify that a satellite channel is received, or a "NO SIGNAL" message appears on the display.

NOTE: If "ANTENNA" appears (flashing) on the display - then one or both of the antenna cables are disconnected from the satellite tuner.

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

(e) Disconnect battery negative cable.

11. Complete the Reassembly of the Vehicle:

(a) Re-install the front seat

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



(2) Tighten bolts to 43 N-m (32 lbf-ft)

(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. 11-1)

(1) Position the negative terminal at an angle of ~90° (+- 30) to the battery as shown.



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

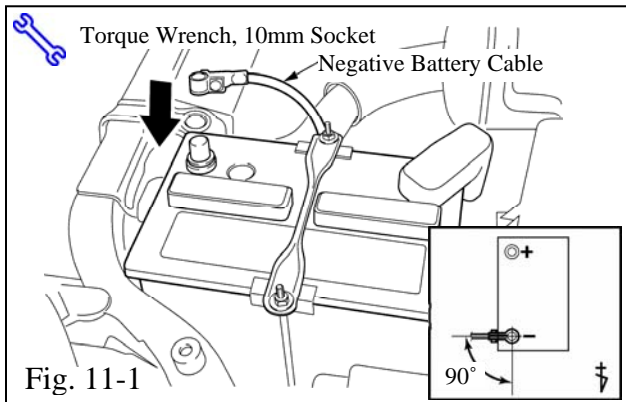


(3) Be careful not to touch the positive battery terminal.

(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>*Verify both AM & FM have good reception.</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"/> Proper operation of the removed seat lock mechanism.</p> <p><input type="checkbox"/> HVAC.</p> <p><input type="checkbox"/> Multi-information displays. (Clock, Temp., and MPG meter)</p> <p><input type="checkbox"/> Operation of the 12V outlet switch.</p>	<p>Proper operation of the hazard switch.</p> <p>Proper operation of the removed seat lock mechanism.</p> <p>Proper operation of the air conditioning system.</p> <p>Verify the proper operation of the multi-information displays.</p> <p>Verify the proper operation of the 12V outlet switch.</p>