

Part Number: PTS31-07050

Kit Contents

Item #	Quantity Reqd.	Description
1	1	Antenna, Interior
2	1	Antenna Tape Pad
3	1	Wire Harness
5	1	Hardware Bag
6	1	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

Conflicts

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Recommended Tools

Personal & Vehicle Protection	Notes
Safety Goggles	
Seat Covers	
Floor Protectors	
Non Intrusive IR Temperature Probe Gun	
Special Tools	Notes
None	
Installation Tools	Notes
Ratchet	
Extension	
Sockets	10 mm

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

Screwdriver	Phillips, #2
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Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST # 00002-06001-01
Torque Wrench	
Side Cutter	
Scissors	
Tape Measure	Metric
Plastic Spreader	6 ¼" Plastic Bondo Spreader
Special Chemicals	Notes
Cleaner	Windex or Approved Cleaner
Silicone Sealer	

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.

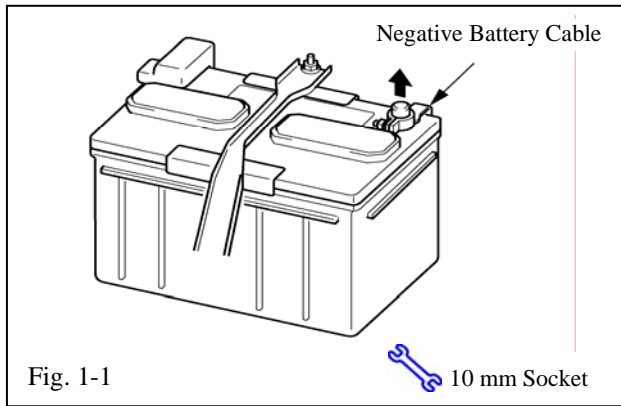
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

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.

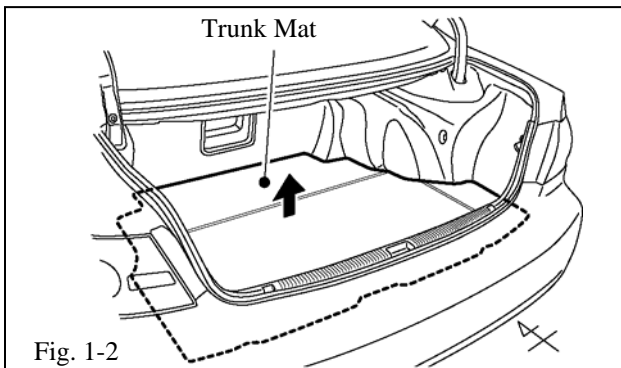


1. Vehicle Disassembly.

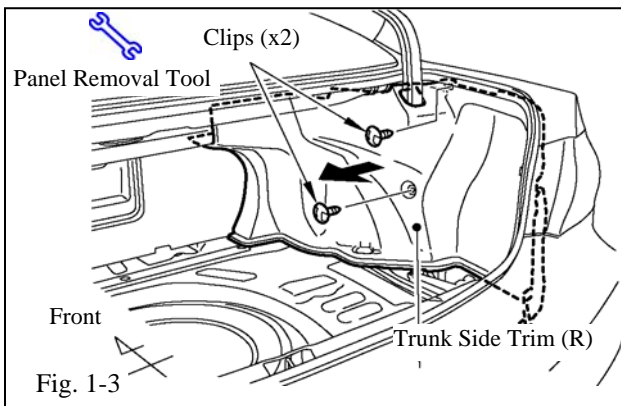
- (a) Open hood.
- (b) Remove the negative battery cable. (Fig. 1-1)



- (1) Protect fender before starting.
- (2) For vehicles equipped with automatic transmission set the parking brake prior to disconnecting the battery.
- (3) Do not touch the positive terminal with any tool when removing cable.



- (c) Remove the trunk mat. (Fig. 1-2)



- (d) Remove the trunk right side trim. (Fig. 1-3)
- (1) Remove and retain the two (2) clips. Pull the side trim in the direction of the arrow.

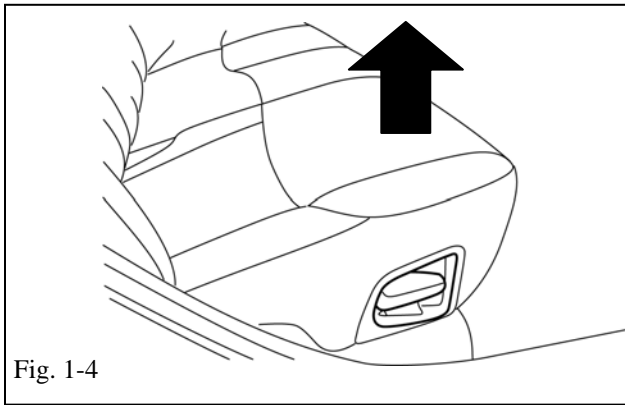


Fig. 1-4

(e) Rear seat access.

- (1) Pull up on the rear seat to disengage the seat & slide the seat slightly forward.

(Fig. 1-4)

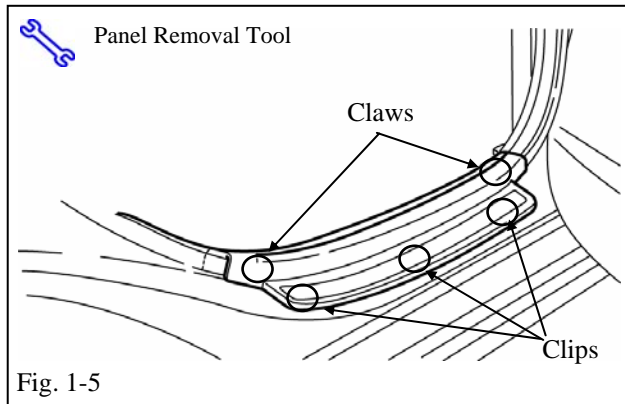


Fig. 1-5

(f) Remove rear passenger side doorsill.

(Fig. 1-5)

NOTE: If a clip remains on the vehicle, remove it and replace it into the plastic doorsill cover.

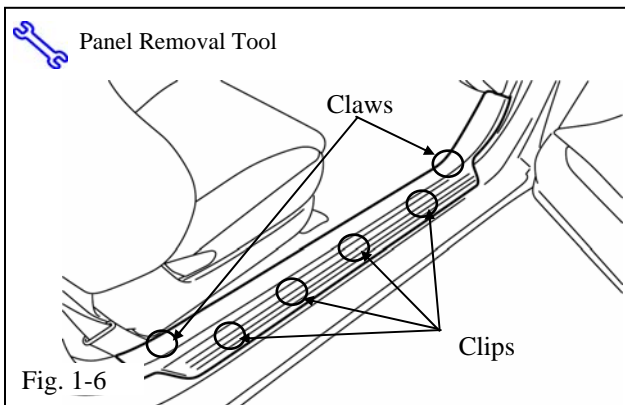


Fig. 1-6

(g) Remove the front passenger side doorsill

(Fig. 1-6)

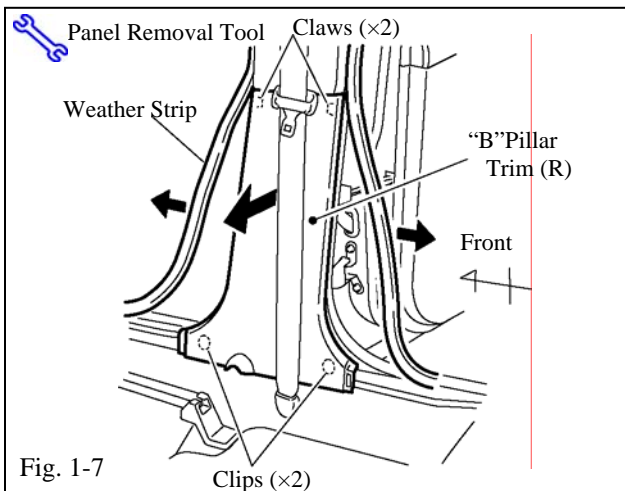
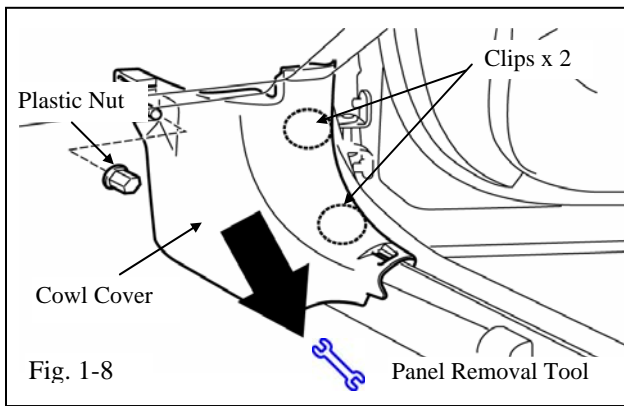


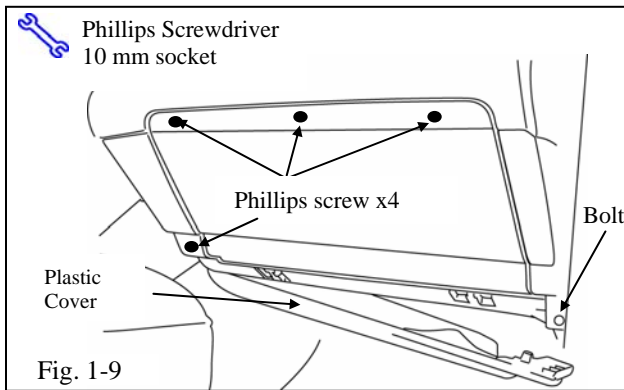
Fig. 1-7

(h) Remove the “B” pillar trim (R) (Fig. 1-7).

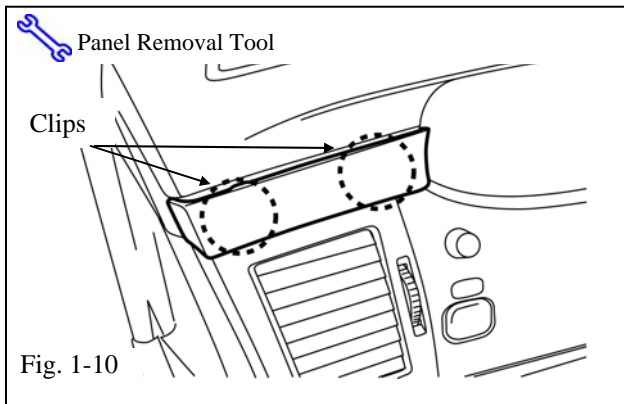
- (1) Peel off the front and rear weather strip.
- (2) Pull the trim in the direction of the arrow, and remove the clips and claws.




- (i) Remove cowl cover. (Fig. 1-8)
 - (1) Remove the plastic nut
 - (2) Pull on the cover in the direction shown to remove.



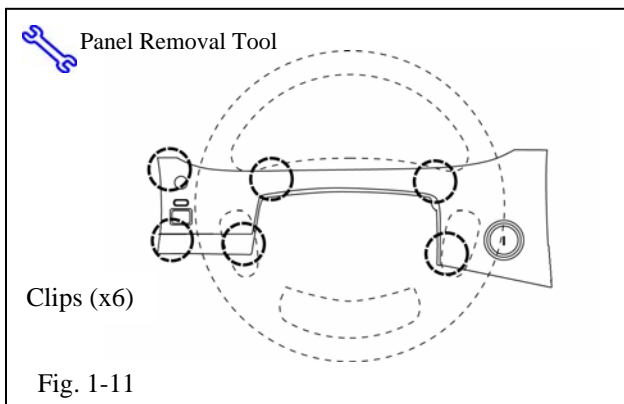
- (j) Remove the glove box. (Fig. 1-9)
 - (1) Remove the plastic cover
 - (2) Open the glove box.
 - (3) Remove 4 screws and 1 bolt.
 - (4) Pull the glove box straight out to remove.
 - (5) Disconnect the trunk opener cancel switch.



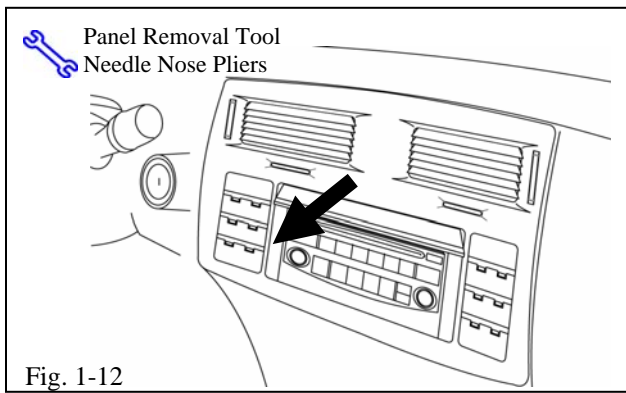
NOTE: Some installers may be able and choose to access the connector behind the radio through the opening in the glove box without removing the dash and head unit in step K.

-  (k) Remove the dash and head unit.

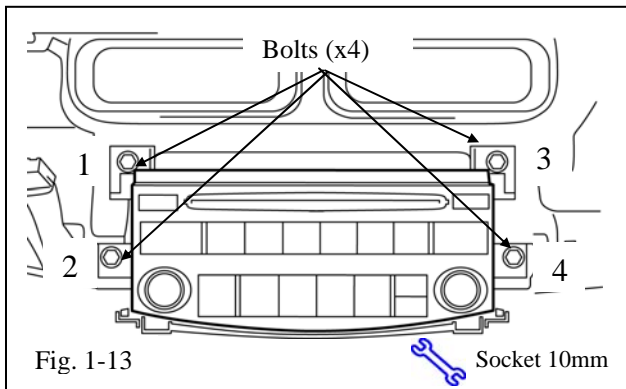
Note: Installer may choose not to remove the trim pieces in the following steps 1 – 3. The head unit faceplate in step 4 may be removed by lifting up the right side of the trim piece around the steering wheel and then carefully removing the head unit faceplate.



- (1) Remove the trim piece to the left of the steering wheel. (Fig 1-10)
- (2) Remove the trim piece around the steering wheel. (Fig 1-11)
- (3) Disconnect the connectors to the steering wheel trim piece.



- (4) Place a box with a protective cover on it in front of the front passenger seat.
- (5) Remove the head unit faceplate. (Fig. 1-12)
- (6) Disconnect the connectors on the left side of the faceplate and rest it on the box with the protective cover.

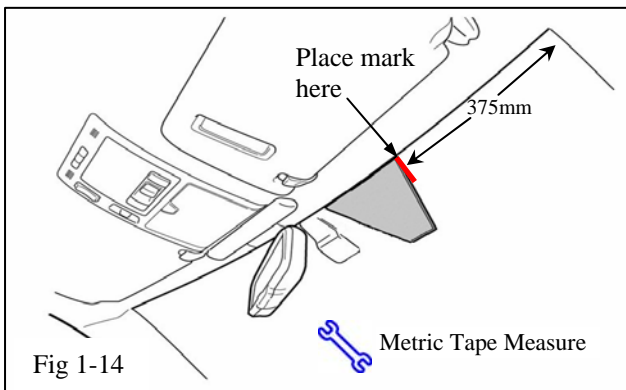


- (7) Remove the 4 head unit bolts and unplug & remove the radio. (Fig. 1-13)



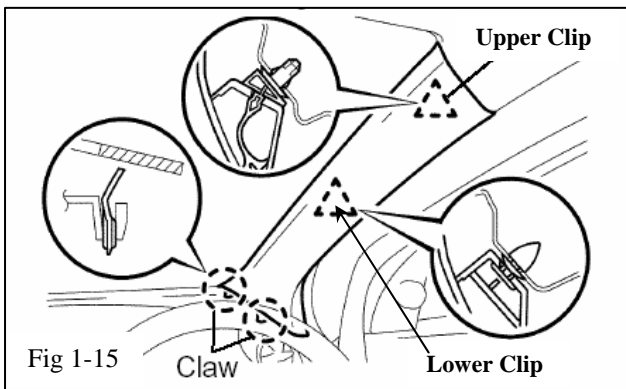
NOTE: During re-installation, bolts 1 and 2 are to be secured first.

- (1) Measure for mounting the antenna tape pad.



Note: Before removing the garnish you must clean the antenna mounting area with Windex and then mark the mounting location of the tape pad.

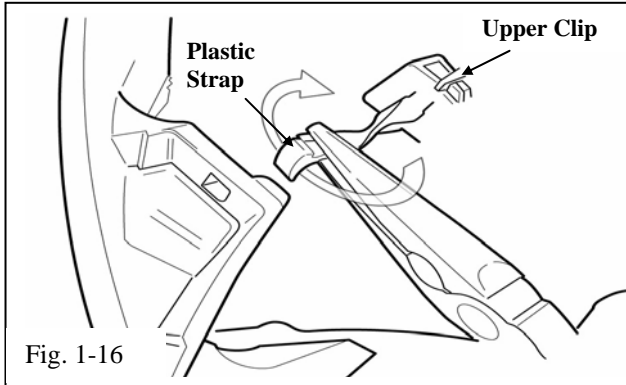
- (1) Measure from the right side of the tape pad over to the right side "A" pillar 375mm and place a mark on the window as shown. (Fig. 1-14)



- (m) Remove "A" Pillar Garnish.

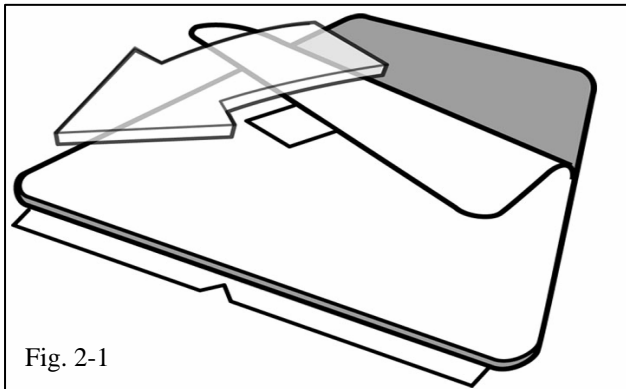


- (1) Insert a nylon removal tool under the garnish and pry outward to release both the upper and lower clips. (Fig. 1-15)



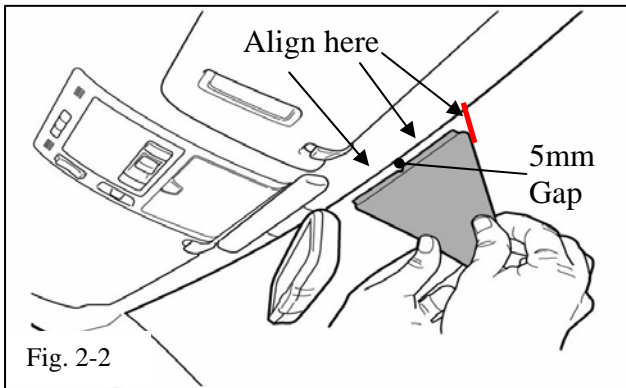
- (2) Using needle nose pliers grab the plastic strap on the upper clip and turn it 90° to release it from the garnish as shown. (Fig. 1-16)
- (3) If vehicle has a speaker in the garnish remove the connector behind the speaker.
- (4) Pull garnish up and out to remove.

2. Install the Antenna.



Note: Mounting location must be completely dry & installation temperature must be between 60° - 100° F before mounting the tape pad.

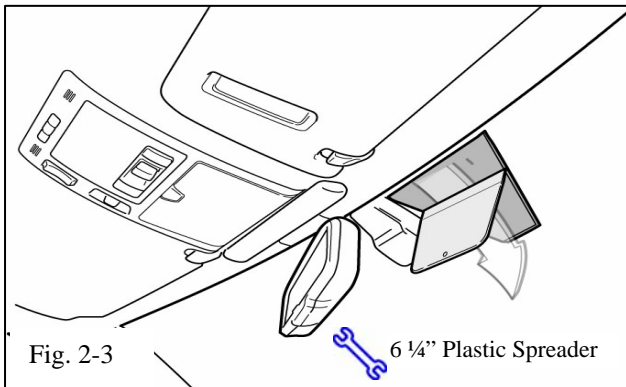
- (a) Place the pad in the correct mounting location.



- (1) At this point only remove the white release paper from the mounting pad. (Fig. 2-1)
- (2) When placing the pad on the window, align the red release paper pull-tab with approximately 5mm gap from the front of the headliner and then align with the mark on the window as shown. (Fig 2-2)

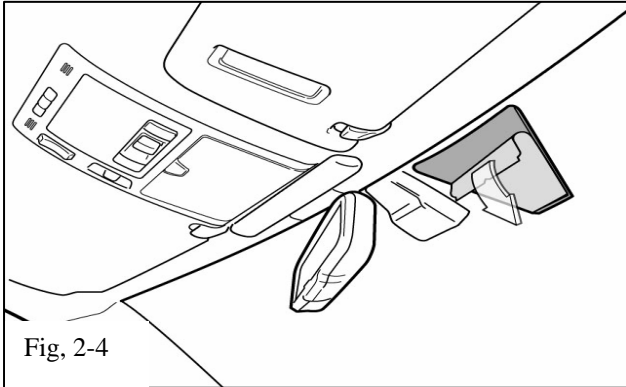


- (3) Initially only stick the very top edge of the tape pad onto the window.

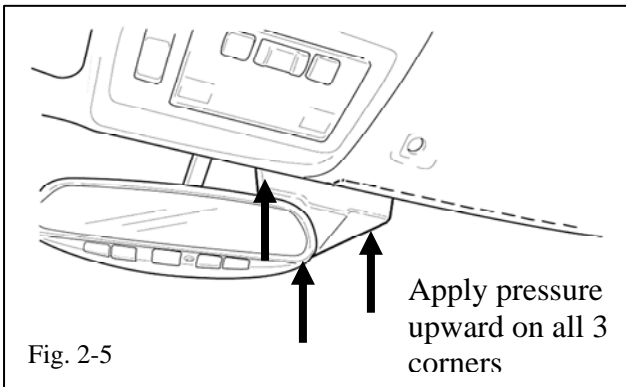



- (b) Complete the installation of the tape pad. (Fig 2-3)
- (1) Using a 6 1/4" Plastic Spreader start from the top of the tape pad and evenly squeegee down the pad to assure complete wet-out of the tape.

NOTE: Spreader must completely cover the width of the tape pad in one downward stroke in order to assure complete wet-out of the tape.

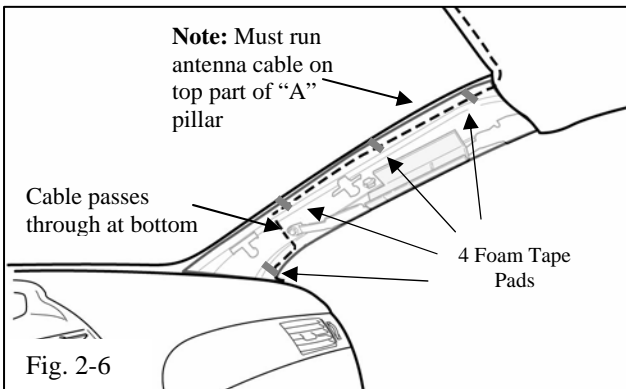


- (c) Remove the red release paper from the front of the antenna tape pad. (Fig. 2-4)
- (d) Remove the release tabs from the back of the antenna, and place the antenna in the proper position over the mounting pad. (Fig. 2-5)




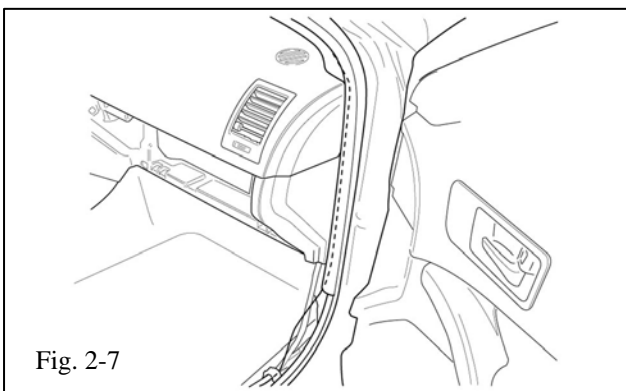
-  (1) By hand firmly apply pressure upward and massage all 3 corners of the antenna to assure complete wet-out of the tape pads. (Fig. 2-5)



- (e) Route the antenna cable up underneath the front of the headliner as shown. (Fig. 2-5)
 - (1) By hand pull down the front of the headliner and position the antenna cable up underneath the headliner as shown.

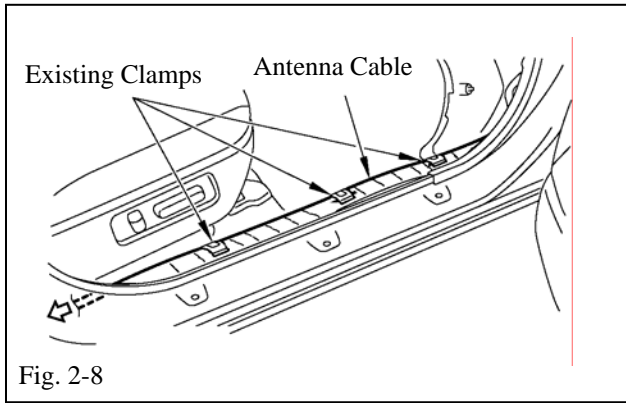


- (f) Route the cable down the upper part of the "A" pillar as shown. (Fig. 2-6)
 - (1) Cut 2 of the foam tape pads supplied in the kit into three pieces and place 4 strips along the cable to hold in position as shown. (The 2 remaining pieces will be used in step 4-f) (Fig. 2-6)

-  **Note:** If there is a sunroof vent tube running down the "A" pillar, installer may choose to place the foam tape pads on the vent tube.



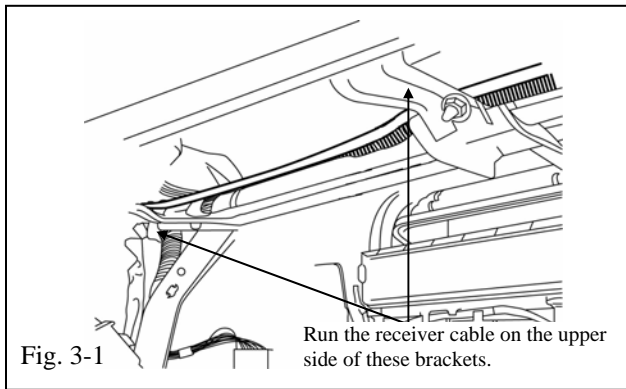
-  (2) Make sure the cable does not interfere with the airbag system.
-  (3) Make sure the cable passes over at the bottom part of the "A" pillar so it does not interfere with the airbag system. (Fig. 2-6)
- (g) Continue routing the cable down the door opening under the door seal rubber molding as shown. (Fig. 2-7)



(h) Route the cable inside the factory harness wire clamps along the doorsill and then under the carpet to where the receiver module will be installed. (Fig. 2-8)

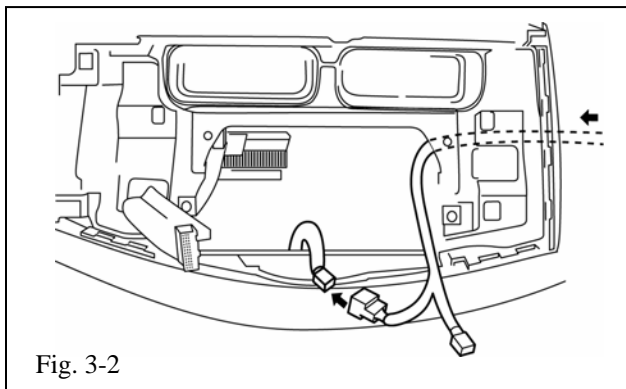
(1) Run the cable through the center of the factory wire clamps as shown in the figure. (Fig. 2-8)

Note: The antenna cable will continue to the trunk of the vehicle. To ease installation, complete the routing of the antenna cable along with the receiver cable in steps 3-h through 3-l.

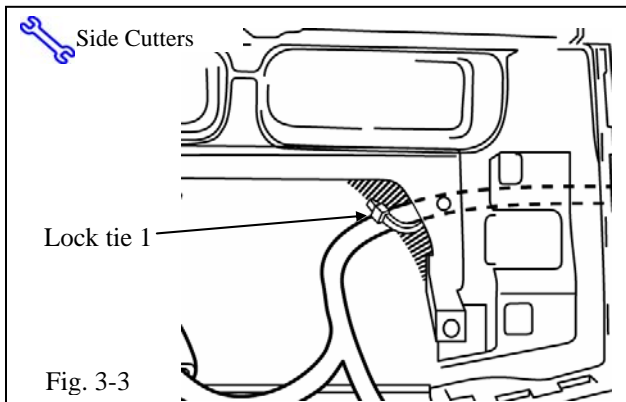


3. Installation of the Receiver Cable.

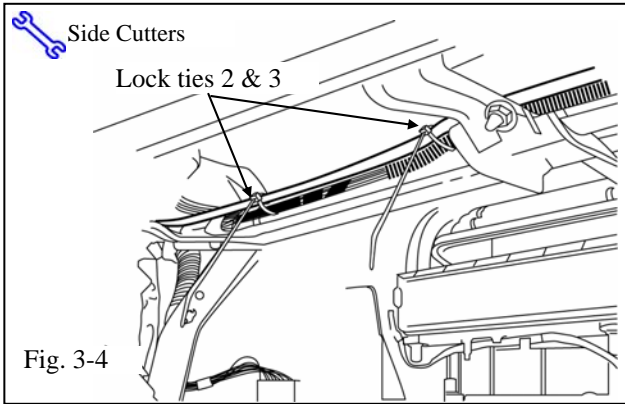
(a) Route the receiver cable through the glove box as shown in the figure. (Fig. 3-1)



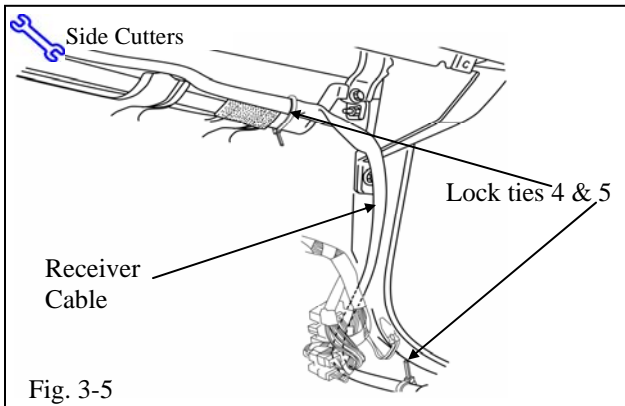
(b) Connect the receiver cable to the radio harnesses. (Fig. 3-2).



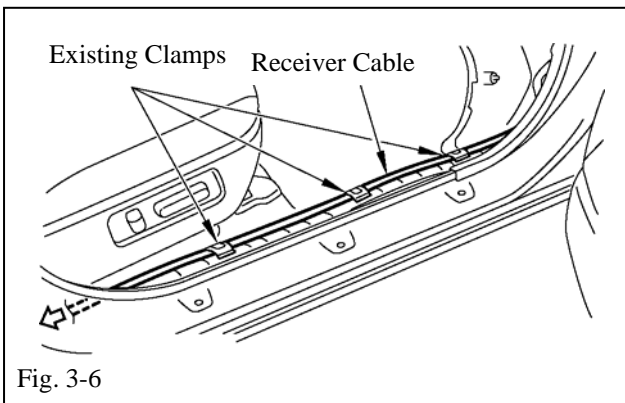
(c) Secure the receiver cable to the existing cable bundle in the head unit area with one (1) lock tie. Allow sufficient slack equivalent to the vehicle harness. (Fig. 3-3)



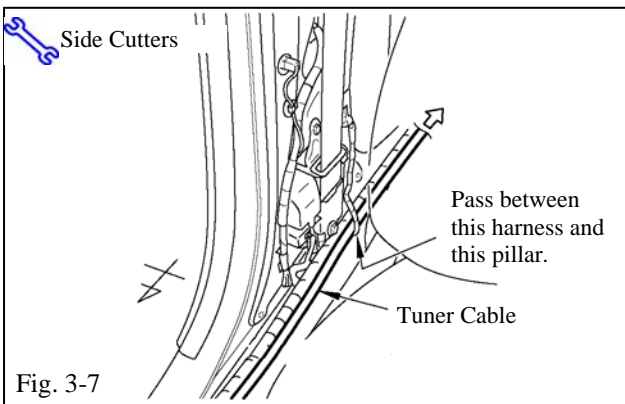
- (d) Secure the receiver cable in the glove box area with two (2) lock ties as shown. (Fig. 3-4)



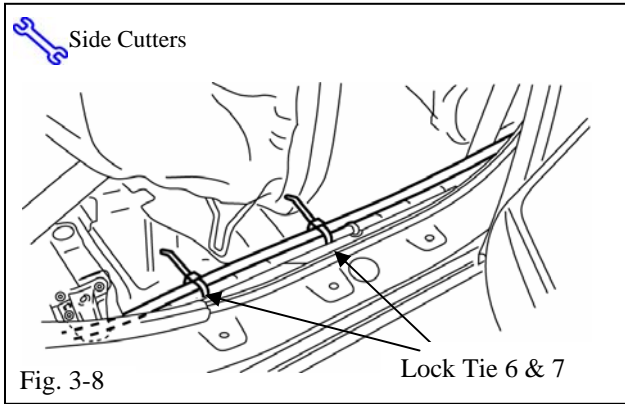
- (e) Secure the receiver cable in the right corner of the glove box area with two lock ties. (Fig. 3-5)
 - (1) Lock-tie the antenna cable with the receiver harness when using lock tie 5. (Fig. 3-5)



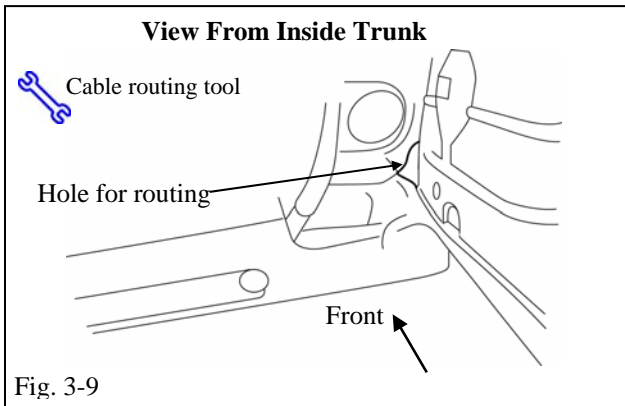
- (f) Route the receiver cable through the existing harness clamps as shown. (Fig. 3-6)



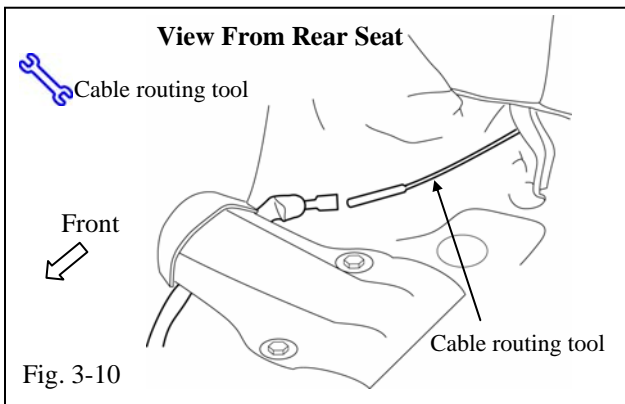
- (g) Route the receiver cable along the “B” pillar through the existing cables as shown. (Fig. 3-7)



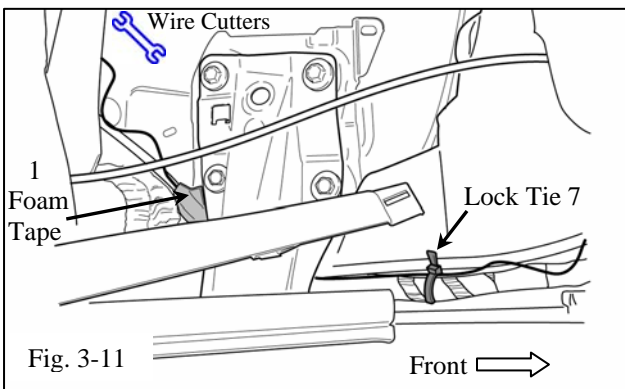
- (h) Continue routing the cable along the rear door opening and under the bracket under the seat and secure with lock ties as shown. (Figs. 3-8, 3-10 & 3-11)

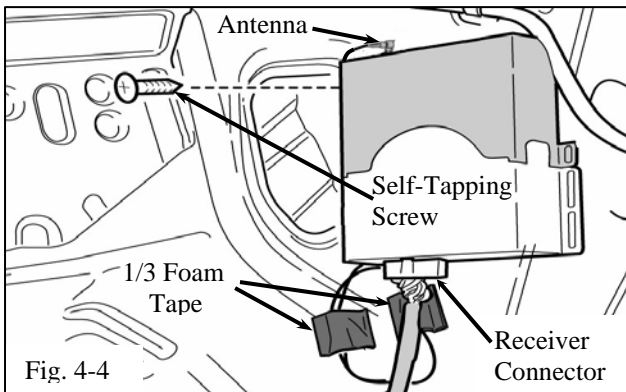
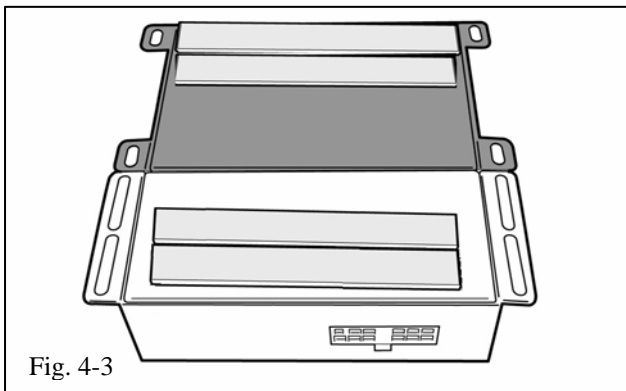
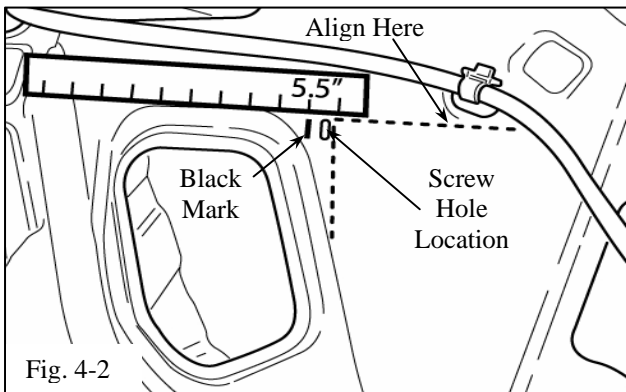
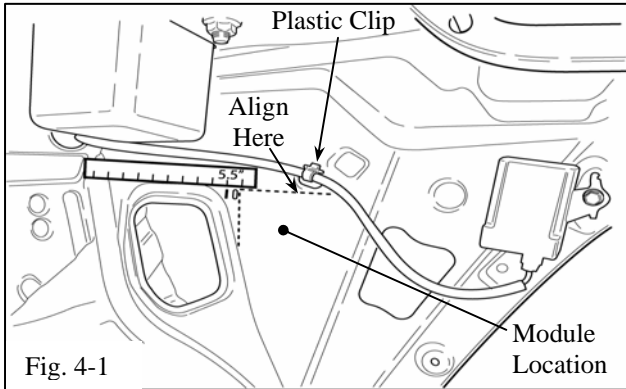


- (i) Place cable routing tool through the hole in the right bottom of the trunk area. (Fig. 3-9)
- (j) Reach through the bottom of the rear seat and pull both the antenna cable and receiver cable into the trunk area with the cable routing tool. (Fig. 3-10)



- (k) Secure the antenna cable & receiver cable to the vehicle in the back seat area using 1 cushion tape & lock tie as shown. (Fig. 3-11)





4. Install the Receiver.


(a) The receiver will install in the trunk on the right side interior panel under the parcel shelf as shown. (Fig. 4-1)

(1) The receiver will be positioned just to the right of the large opening in the interior panel & just under the plastic clip (or plastic clip hole). (Fig. 4-1 & 4-2)

(2) The top of the receiver will run parallel with the line above the large opening as shown. (Fig. 4-1 & 4-2)


(3) Measure 5.5” from the back wall and place a black mark on the interior panel as shown. (Fig. 4-2)

(4) Place the upper left screw tab on the receiver next to the black mark and outline the area where the self-tapping screw will be installed. (Fig. 4-2)

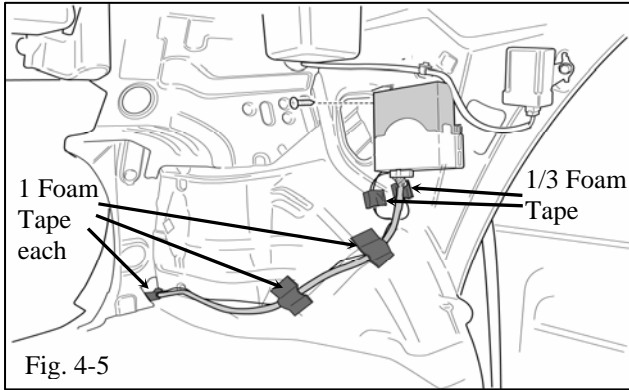
 Note: All tape mounting surfaces must be cleaned with approved cleaner and completely dry and installation temp must be between 60° - 100° F.

(b) Remove the tape pads and place the 4 double-sided tape pads supplied in the kit on the bottom of the receiver as shown. (Fig. 4-3)

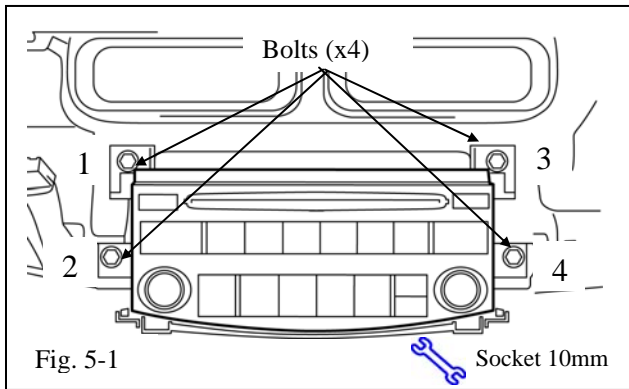
(c) Pull the release tabs on the double-sided tape and install the receiver module into position. (Fig. 4-4)

 (1) Apply firm pressure to the receiver to assure complete wet-out of the tape and a secure fit.


(d) Plug the receiver harness and antenna cable into the receiver as shown. (Fig. 4-4)



- (e) Apply silicone sealer to threads on self-tapping screw and install self-tapping screw into upper left tab on receiver as shown. (Fig. 4-4 & 4-5)
- (f) Coil up any extra antenna cable and apply 2 pieces of 1/3rd foam tape pads to the cable below the receiver as shown. (Fig. 4-4 & 4-5)
- (g) To complete the installation, apply 3 full pieces of foam tape to both the antenna cable and receiver harness as shown. (Fig. 4-5)




5. Reinstall the Radio/Player Head Unit.

- (a) Connect the satellite tuner receiver cable and connectors into the rear of the head unit.
-  (b) Insert head unit into opening and re-install the four bolts. Be sure to install the bolts on the left side (1 & 2) before installing the bolts on the right side (3 & 4). (Fig. 5-1)

 **NOTE: Clip all lock ties before reassembly.**

6. 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 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.

7. Complete the Reassembly of the Vehicle.

- (a) Reinstall glove box.
- (b) Reinstall console panel.
 - (1) Reconnect any disconnected connectors.
- (c) Reinstall trim pieces around steering column.
 - (1) Reconnect any disconnected connectors.
- (d) Reinstall kick plate.
- (e) Reinstall front doorsill.
- (f) Reinstall rear doorsill.
- (g) Reinstall B-pillar column cover and weather strip.
- (h) Reinstall rear passenger seat.
- (i) Reinstall trunk trim piece and trunk mat.
- (j) Verify the panels fit together properly with no uneven gaps between them.

8. Reconnect Battery Cable.

- (a) Reconnect the vehicle's negative battery cable. (Fig. 8-1)
 - (1) Reconnect the negative terminal back to its original position.
 - (2) Tighten the nut with 4.1 N-m (36 lbf-in) of torque.
 - (3) Be careful not to touch the positive battery terminal.
- (b) Clean up and remove any trash.

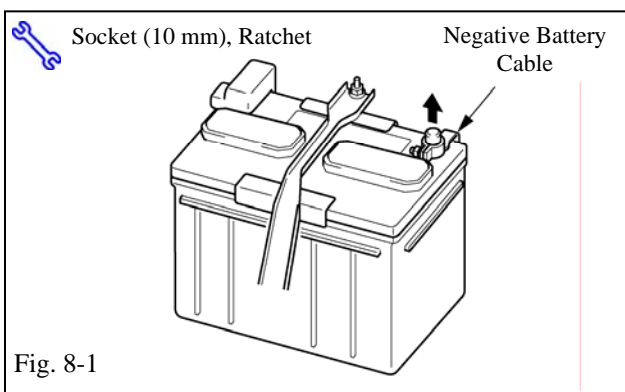


Fig. 8-1





(c) Perform functional checks.



(d) Place Sirius Satellite Radio brochure in the glove box.

9. For Accessory fitted after Pre Delivery Service Only.

(a) Reset the power windows.

(1) Turn ignition key to ON position.

(2) Push down the power window switches of each door, and lower the windows halfway.

(3) Pull up the switches until the windows close and hold switches up for a further one (1) second (minimum.)

(b) Reset the power moon roof.

(1) Push and hold moon roof switch to close side until moon roof closes. Hold for a further 2 seconds.

SCION AVALON 2005 - SATELLITE RADIO TUNER
 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"/> Rear Seat recliner</p> <p><input type="checkbox"/> HVAC</p> <p><input type="checkbox"/> Rear Sun Screen</p> <p><input type="checkbox"/> IP dimmer control</p> <p><input type="checkbox"/> Outside mirrors</p> <p><input type="checkbox"/> Ignition</p>	<p>Proper operation of the hazard switch</p> <p>Rear Seat reclines and returns</p> <p>Proper operation of the air conditioning system</p> <p>Functioning rear sun screen</p> <p>Functioning IP illumination dimmer</p> <p>Functioning outside mirrors</p> <p>Functioning ignition</p>