

Preparation

Part Number: Mounting Kit PT546-33100 Tuner Assembly 86180-0W031

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

Tuner Assembly Kit Contents (86180-0W031)

Item #	Quantity Req'd.	Description
1	1	Tuner Assembly

Mounting Kit Contents (PT546-33100)

Item #	Quantity Req'd.	Description
1	1	Tuner Cable
2	6	Cushion Tape (50x100)
3	1	Cushion Tape (50x180)
4	2	Protective Sheet (15x20)
5	2	Protective Sheet (15x30)
6	1	Protective Sheet (15x55)
7	1	Protective Sheet (15x85)
8	17	Lock Tie
9	1	Template

Hardware Bag Contents-1 (PT546-33100)

Item #	Quantity Req'd.	Description
1	2	Tuner Bracket
2	4	Screw (M5 x 8)
3	2	Flanged Nut

Hardware Bag Contents-2 (PT546-33100)

Item #	Quantity Req'd.	Description
1	1	Antenna Cable
2	10	Sheet Tape
3	1	Lock Tie
4	6	Cushion Tape (50x100)
5	1	Protective Sheet (15x30)
6	4	Protective Sheet (30x30)

Additional Items Required For Installation

Item #	Quantity Req'd.	Description

Conflicts/Requirements

Conflicts: Sirius Sat Radio, iPod Interface, audio with premium 6CD, JBL, NAV.
Requirements: Base grade audio

Recommended Tools

Personal & Vehicle Protection	Notes
Safety Goggles	
Seat cover	
Floor Protectors	
Special Tools	Notes
None	

Installation Tools	Notes
Ratchet	
Extension	

Socket	10mm, 12mm
Phillips Screwdriver	
Nylon Removal Tool	
Torque Wrench	18 N•m (13 lbf•ft) 4.1 N•m (36 lbf•in)
Side Cutter	
Electric Drill	Φ 10mm (0.39 in)
Special Chemicals	Notes
Cleaner	3M™ Prep Sol-70

General Applicability

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Recommended Sequence of Application






Item #	Accessory

*Mandatory

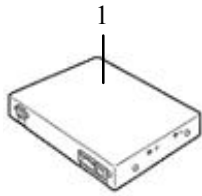
Vehicle Service Parts (may be required for reassembly)

Item #	Quantity Req'd.	Description
1	2	Cowl cover clip P/N 90467-09212
2	3	FR scuff plate clip P/N 90467-A0006
3	3	Lwr "B" pillar trim clip P/N 90467-A0006
4	2	RR scuff plate clip P/N 90467-A0006
5	2	"C" pillar clip P/N 90467-10188
6	8	"C" pillar clip P/N 90467-A0006
7	7	Trunk trim clip P/N 90467-A0006
8	2	Luggage trim clip P/N 90467-08186-CO

Legend

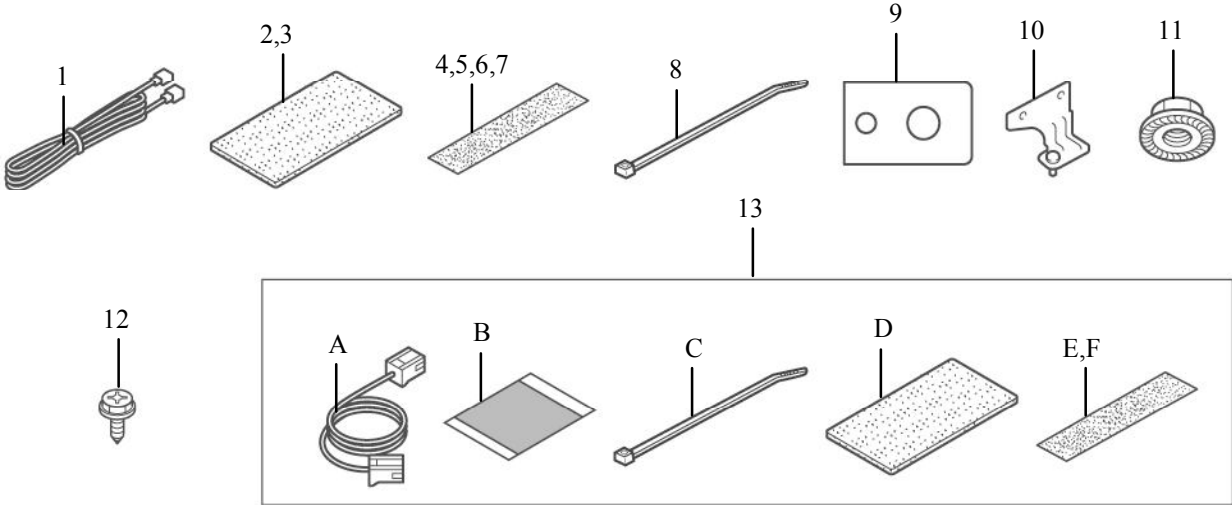
	STOP: Damage to the vehicle may occur. Do not proceed until process has been complied with.
	OPERATOR SAFETY: Use caution to avoid risk of injury.
	CAUTION: A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.
	TOOLS & EQUIPMENT: Used in Figures calls out the specific tools and equipment recommended for this process.
	SAFETY TORQUE: This mark indicates that torque is related to safety.

Parts Description of Tuner Assembly (86180-0W031)



Item #	Parts Name	Parts No.	Qty
1	Tuner Assembly	86180-0W031	1

Parts Description of Mounting Kit (PT546-33100)



Item #	Parts Name	Qty
1	Tuner Cable	1
2	Cushion Tape (50x100)	6
3	Cushion Tape (50x180)	1
4	Protective Sheet (15x20)	2
5	Protective Sheet (15x30)	2
6	Protective Sheet (15x55)	1
7	Protective Sheet (15x85)	1
8	Lock Tie	17
9	Template	1
10	Tuner Bracket	2
11	Flanged Nut	2
12	Screw (M5x8)	4
13	A Antenna Cable	1
	B Sheet Tape	10
	C Lock Tie	1
	D Cushion Tape (50x100)	6
	E Protective Sheet (15x30)	1
	F Protective Sheet (30x30)	4

Procedure

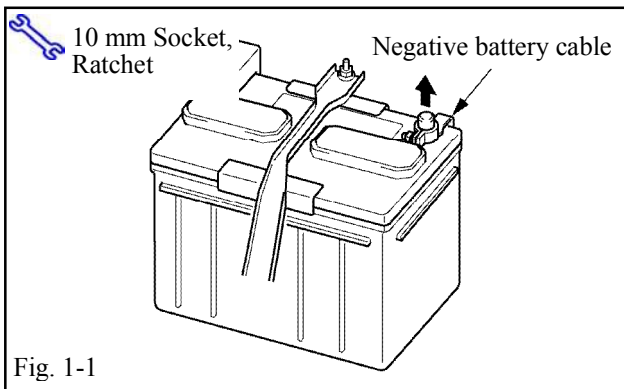
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

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.



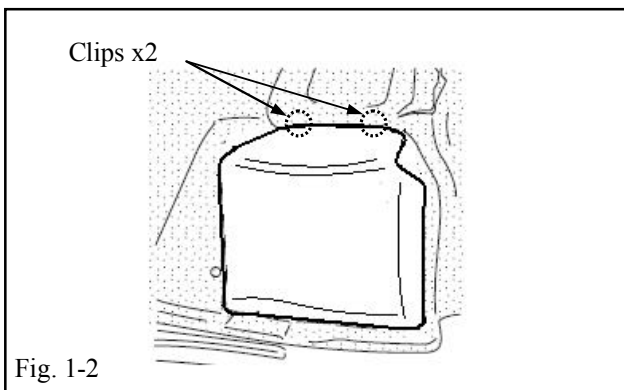
1. Vehicle Protection

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



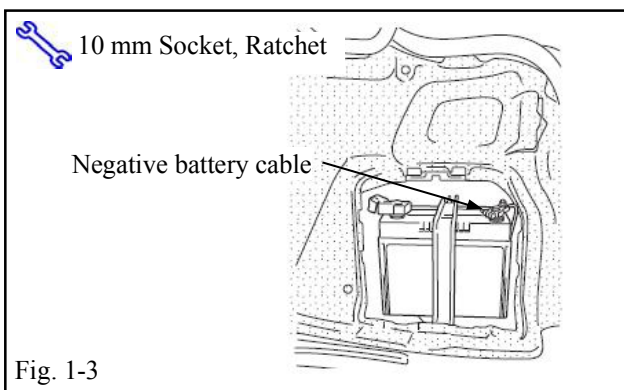
NOTE: Protect the fender before removing the battery cable.

NOTE: Be careful not to touch the positive terminal.

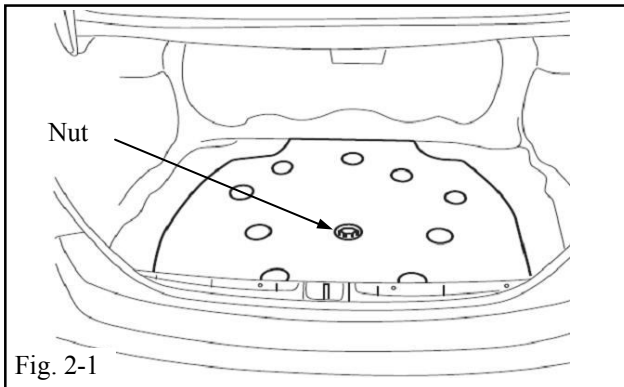


FOR CAMRY HYBRID (steps 1. (b) – 1. (e))

- (b) Open trunk.
(c) Locate battery access Panel.
(d) By pressing two (2) clips remove the battery access panel. (Fig. 1-2)

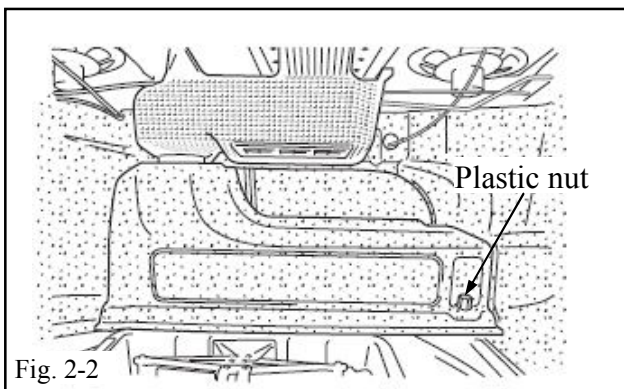


- (e) Remove the negative (-) battery cable.
(Fig. 1-3)



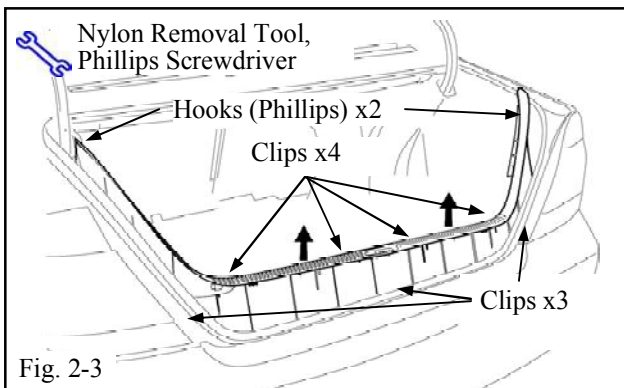
2. Disassembly of Vehicle.

- (a) Remove the trunk mat and accessories.
- (b) Move spare tire cover.
 - (1) Remove nut. (Fig. 2-1)
 - (2) Slide cover forward to allow trunk trim to be removed.



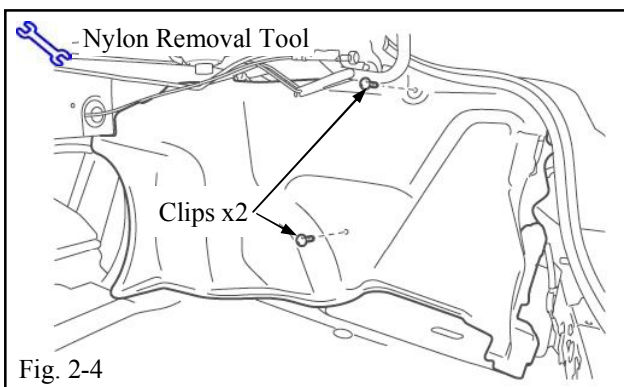
FOR CAMRY HYBRID (step 2. (c))
(c) Remove the trunk plastic trim cover.

- (1) Remove plastic nut. (Fig. 2-2)
- (2) Remove cover panel. (Fig. 2-2)



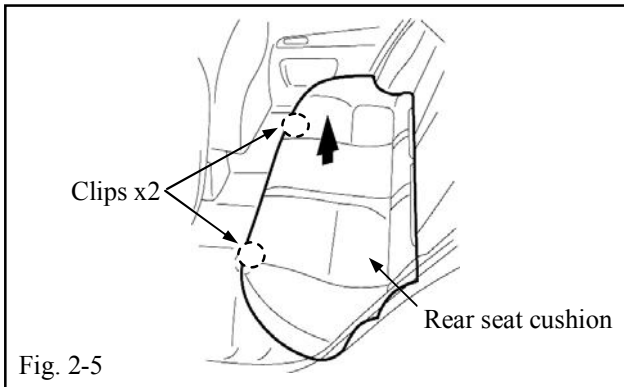
(d) Remove the trunk plastic trim piece.
(Fig. 2-3)

- (1) Remove two (2) plastic hooks with a Phillips screwdriver.
- (2) Detach seven (7) clips and pull upward on trim to remove.

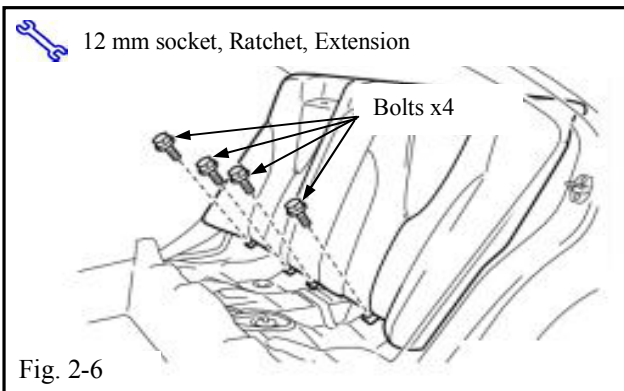


(e) Remove the trim cover in the luggage compartment. (Fig. 2-4)

- (1) Remove two (2) clips.




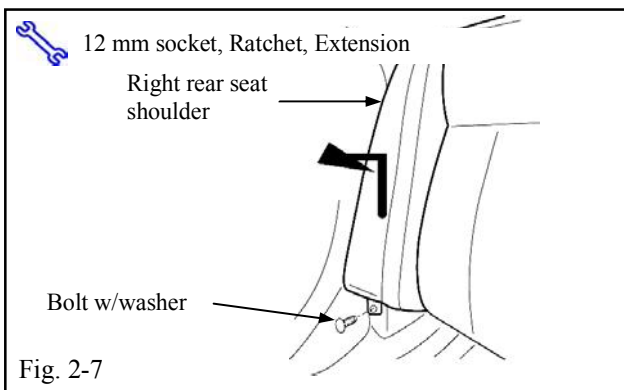
- (f) Remove the rear seat cushion.
 - (1) Lift rear seat cushion straight up disengage two (2) clips located beneath. (Fig. 2-5)
 - (2) Push female seat belt receptacles through seat cushion holes.



FOR VEHICLES WITH FIXED REAR SEAT


- (g) Remove the RT rear seat headrest assembly.
- (h) Remove the RT rear seat belt from the seat shoulder belt guide.
- (i) Remove four (4) bolts and the rear seat back assembly. (Fig. 2-6)

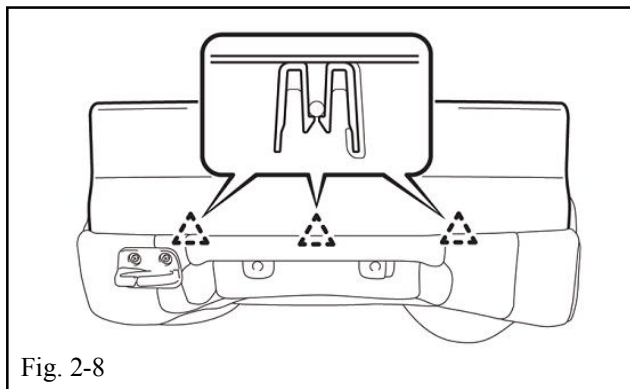
-  (1) Use 12 mm socket and extension to remove four (4) bolts located on the rear seat back assembly. Torque on reassembly 18 N•m (13 lbf•ft).



FOR VEHICLES WITH FOLD DOWN REAR SEAT

- (j) Remove the right rear seat shoulder.

-  (1) Use 12 mm socket and extension to remove one (1) bolt located on the right rear seat shoulder. (Fig. 2-7) Torque on reassembly 18 N•m (13 lbf•ft).
- (2) Slide the right rear seat shoulder up to remove.



FOR VEHICLES WITH RECLINING REAR SEAT (Steps 2. (k) and 2. (l))

NOTE: Be sure rear seat is in the fully reclined position.

(k) Remove the passenger's side rear seat.

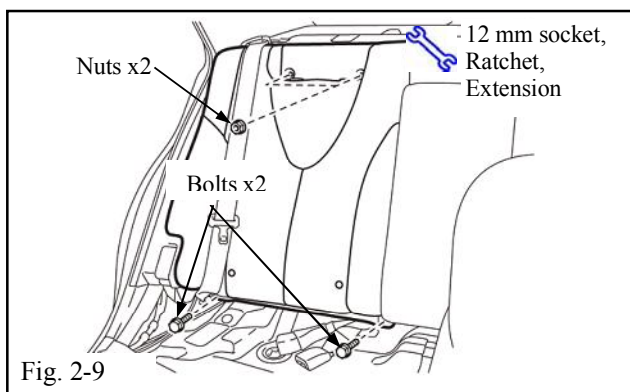
(1) Remove passenger side rear seat headrest.

(2) Separate the rear seat belt.

(3) Disengage three (3) clamps and then separate the cover. (Fig. 2-8)

(4) Remove two (2) covers, two (2) bolts and two (2) nuts and separate rear seat back assembly RH.

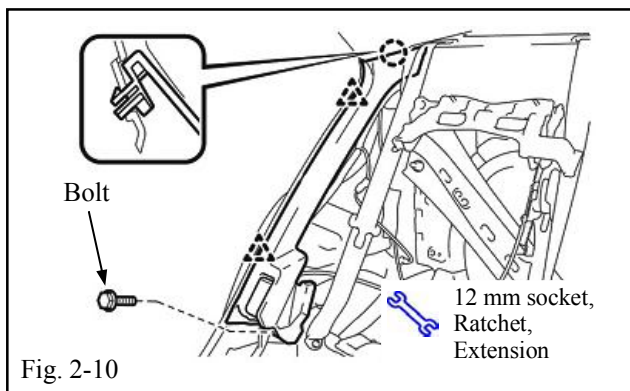
S (5) Use 12 mm socket and extension to remove two (2) bolts shown. (Fig. 2-9)
 Torque on reassembly to 18 N•m (13 lbf•ft).



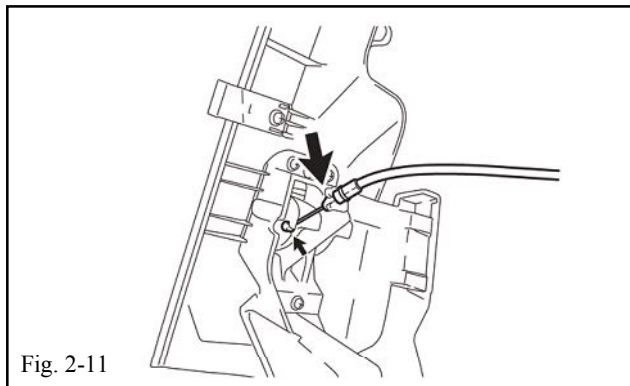
(l) Remove reclining remote control lever sub-assembly.

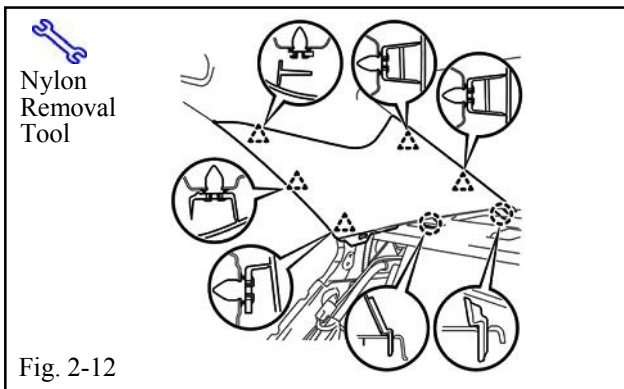
(1) Remove one (1) bolt.

(2) Disengage two (2) clips and the claw and then separate the reclining remote control lever sub-assembly. (Fig. 2-10)

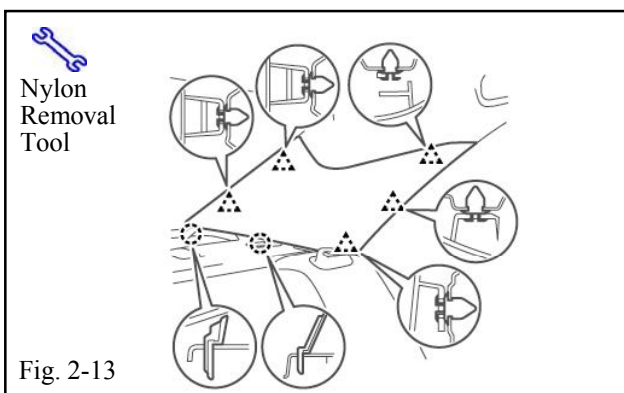


(3) Separate the rear seat reclining control cable and remove the reclining remote control lever sub-assembly. (Fig. 2-11)

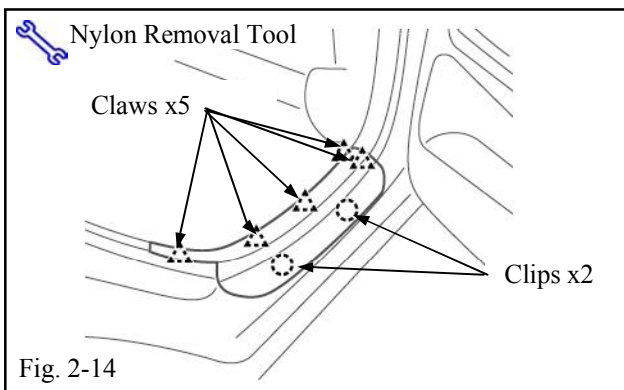




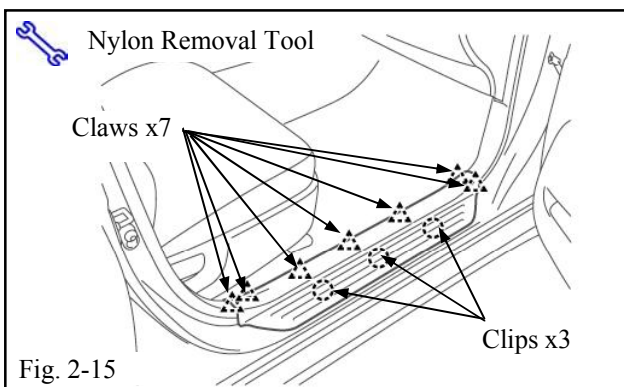
- (m) Remove the passenger side C pillar trim.
 - (1) Partially remove the body weather strip.
 - (2) Use the nylon removal tool to disengage five (5) clips. (Fig. 2-12)
 - (3) Remove C pillar trim RH.



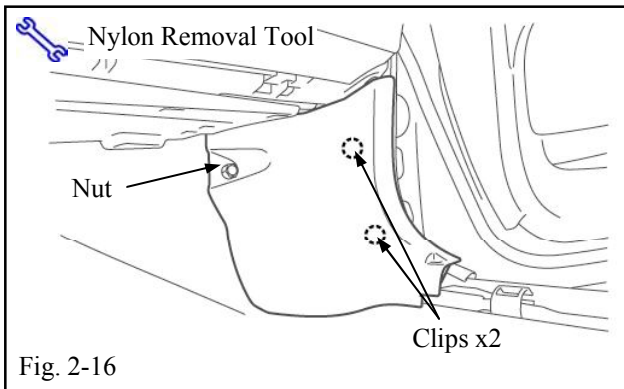
- (n) Remove the driver side C pillar trim.
 - (1) Partially remove the body weather strip.
 - (2) Use the nylon removal tool to disengage five (5) clips. (Fig. 2-13)
 - (3) Remove C pillar trim LH.



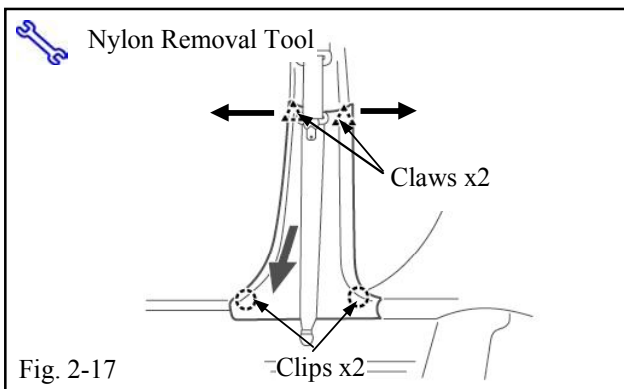
- (o) Remove the passenger's side rear scuff plate.
 - (1) Use nylon removal tool to disengage two (2) clips and five (5) claws on the right rear scuff plate. (Fig. 2-14)



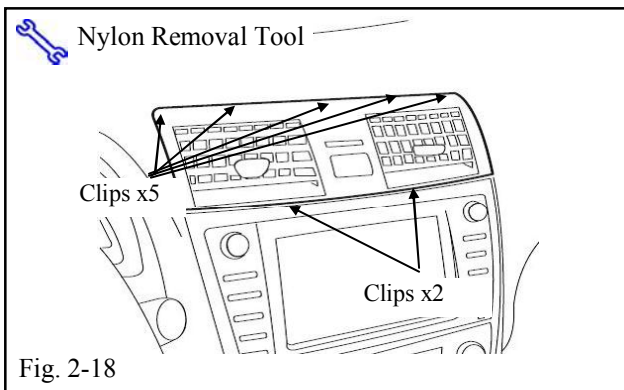
- (p) Remove the front passenger side scuff plate and cowl side trim.
 - (1) Use nylon removal tool to disengage three (3) clips and seven (7) claws on the right front scuff plate. (Fig. 2-15)
 - (2) Remove the right front scuff plate.



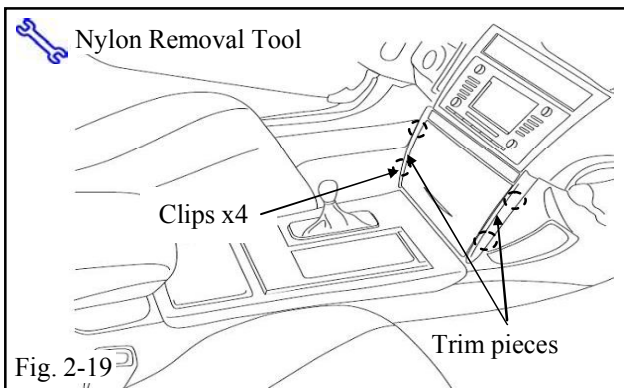
- (3) Remove the right cowl side trim nut.
- (4) Use nylon removal tool to disengage two (2) clips, then remove the cowl side trim. (Fig. 2-16)



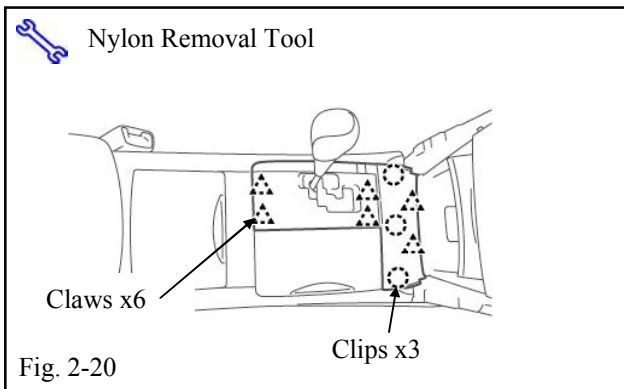
- (q) Remove the passenger's side B pillar cover.
 - (1) Partially remove the door weather strip.
 - (2) Use nylon removal tool to disengage two (2) claws and two (2) clips on right B pillar cover. (Fig. 2-17)



- (r) Disassemble Center Cluster and Radio.
 - (1) Use nylon removal tool to disengage seven (7) clips and remove air vent. Disconnect any electrical connectors. (Fig. 2-18)



- (2) Disengage four (4) clips, then remove two (2) side trim pieces. (Fig. 2-19)



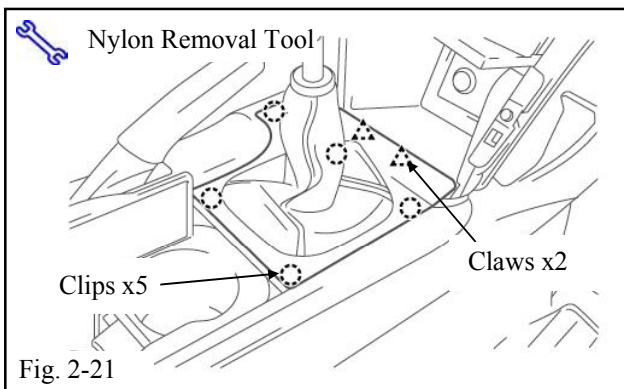
FOR AUTOMATIC TRANSAXLE

(Steps (3) - (5))

(3) Remove shift lever knob.

(4) Disengage three (3) clips and six (6) claws, then remove center console cover. (Fig. 2-20)

(5) Disconnect each connector. (For seat heater system)

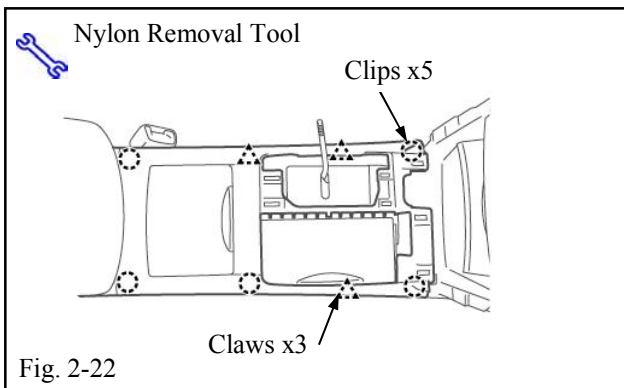


FOR MANUAL TRANSAXLE

(Steps (6) and (7))

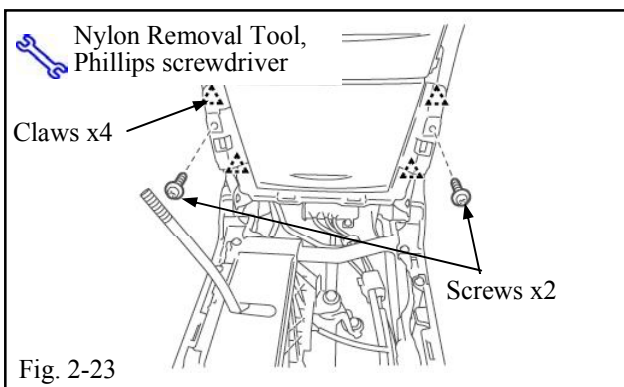
(6) Remove shift lever knob.

(7) Disengage five (5) clips and two (2) claws, then remove center console cover. (Fig. 2-21)



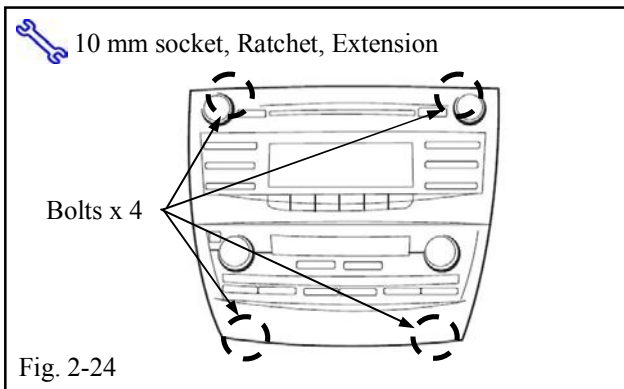
(8) Disengage five (5) clips and three (3) claws, then remove the upper console rear panel. (Fig. 2-22)

(9) Disconnect the electrical connector.



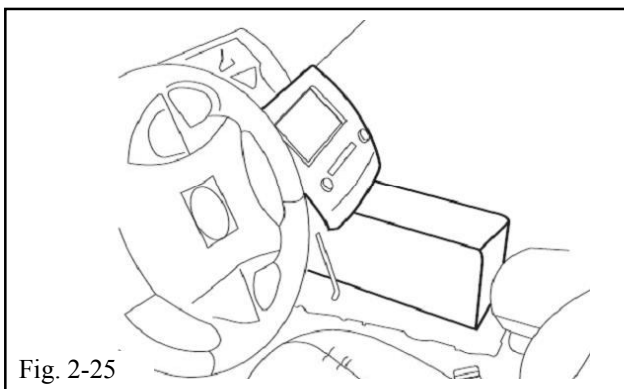
(10) Disengage two (2) screws and four (4) claws, then remove the center console storage compartment. (Fig. 2-23)

(11) Disconnect the electrical connectors.



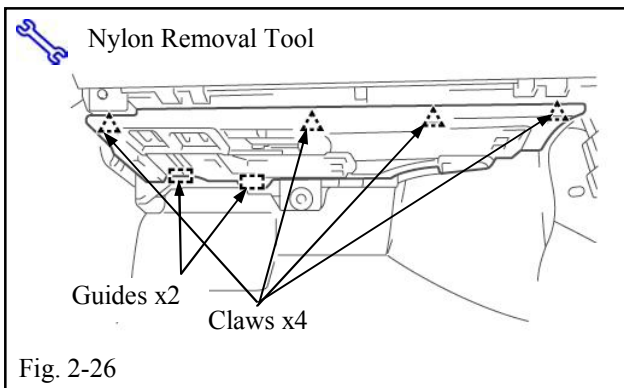
(s) Remove the radio/combo.

- (1) Use 10 mm socket and extension to remove four (4) bolts located on the radio/combo. (Fig. 2-24)



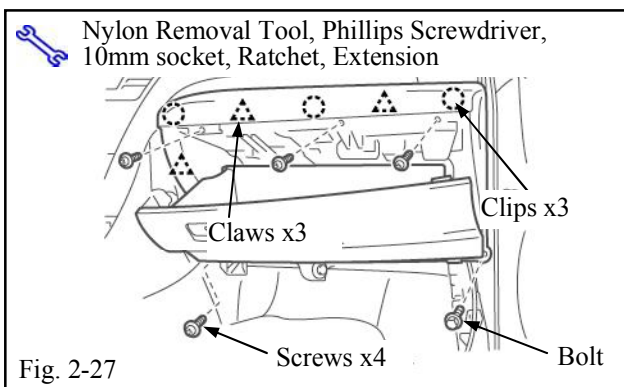
- (2) Remove the radio/combo and place onto box. (Fig. 2-25)

NOTE: Do not disconnect the electrical connections. Place a protective cover between the box and center console.



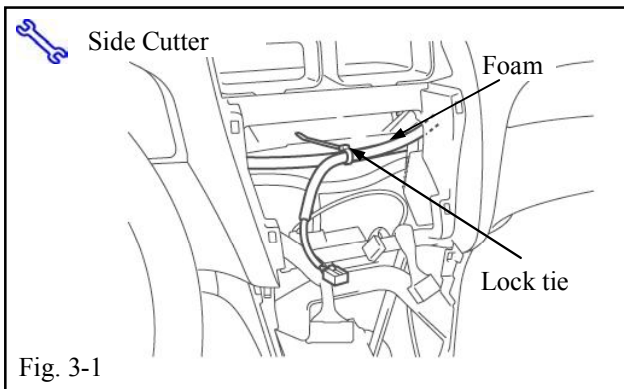
(t) Remove the Under Dash Cover.

- (1) Remove the under dash cover. Use nylon removal tool to disengage four (4) claws and two (2) guides on under dash cover. (Fig. 2-26)



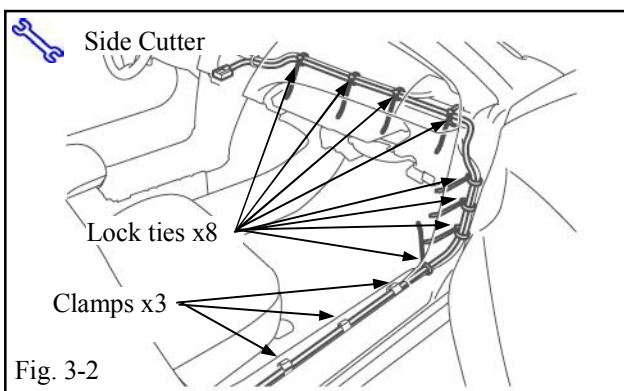
(u) Remove the entire glove box assembly.

- (1) Disengage four (4) screws and one (1) bolt. (Fig. 2-27)
- (2) Pull to disengage three (3) clips and three (3) claws, then remove the glove box. Disconnect any electrical connections. (Fig. 2-27)

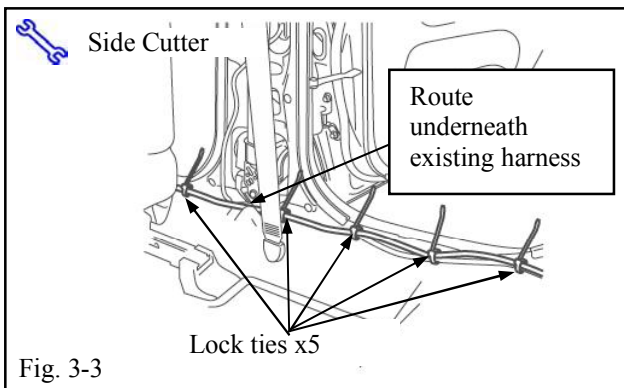


3. Cable Routing and Installation

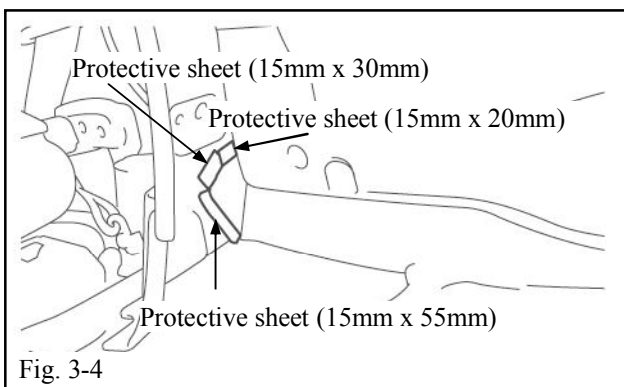
- (a) Install and route the tuner cable from the center cluster and along the front support bar. (Fig. 3-1)
- (b) Provide sufficient cable slack to connect to the tuner, and then secure the cable to the existing wire harness with one (1) lock tie. Cut excess off lock tie. Connect wire harness to head unit.



- (c) Using eight (8) lock ties attach to existing wire harness. Trim lock ties excess. (Fig. 3-2)
- (d) Route tuner cable as shown and secure with three (3) clamps. (Fig. 3-2)

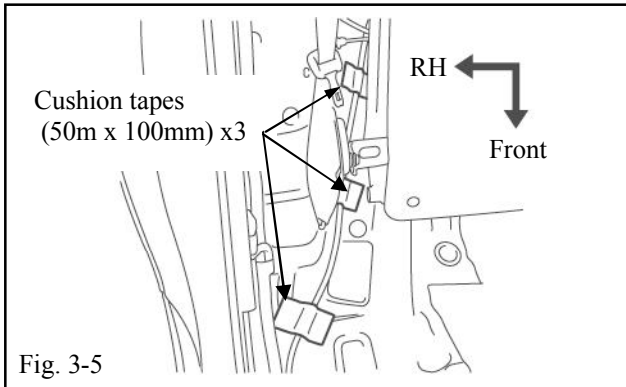


- (e) Route tuner cable as shown and secure with five (5) lock ties. Trim lock ties excess. (Fig. 3-3)



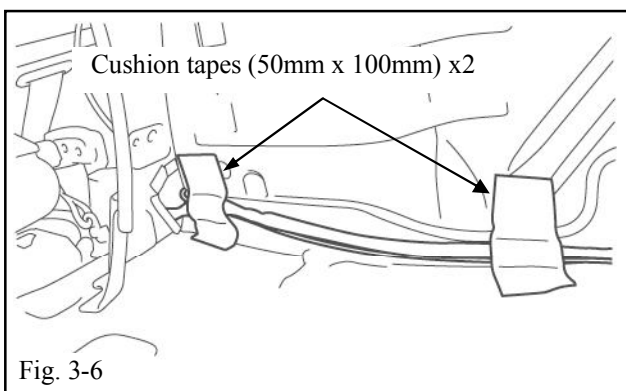
- (f) Apply three (3) protective sheets to the vehicle panel as shown in the figure. (Fig. 3-4)

NOTE: Clean the area for the protective sheets with 3M™ Prep Sol-70.



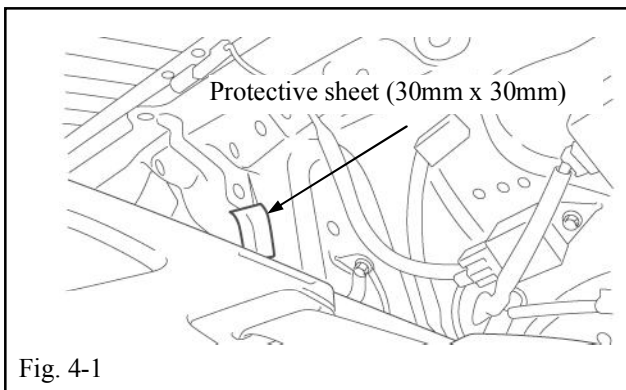
- (g) Route the tuner cable under the rear passenger seat and secure with three (3) cushion tapes. (Fig. 3-5)

NOTE: Clean the area for the cushion tapes with 3M™ Prep Sol-70.



- (h) Route the tuner cable as shown and secure with two (2) cushion tapes. (Fig. 3-6)

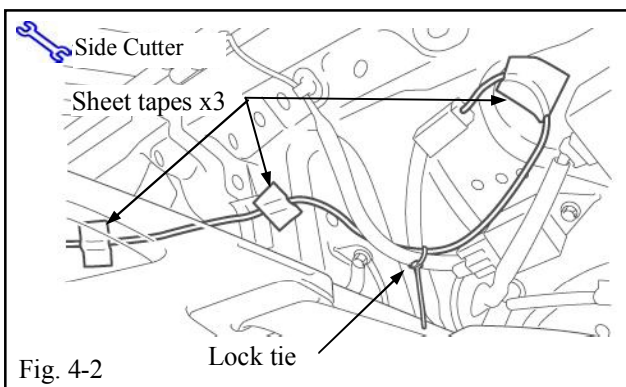
NOTE: Clean the area for the cushion tapes with 3M™ Prep Sol-70.



4. Antenna Installation.

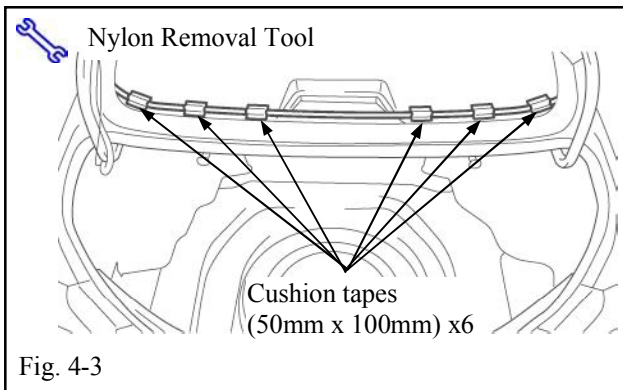
- (a) Apply one (1) protective sheet to the vehicle panel as shown in the figure. (Fig. 4-1)

NOTE: Clean the area for the protective sheet with 3M™ Prep Sol-70.



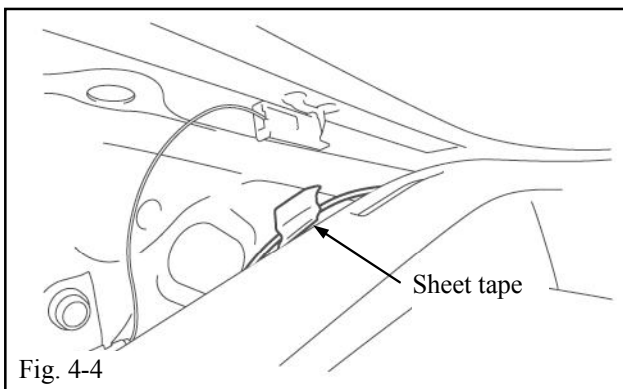
- (b) Connect the antenna cable connector to the vehicle connector.
- (c) Route the antenna cable as shown and secure with three (3) sheet tapes and one (1) lock tie. Trim lock tie excess. (Fig. 4-2)

NOTE: Clean the area for the sheet tapes with 3M™ Prep Sol-70.



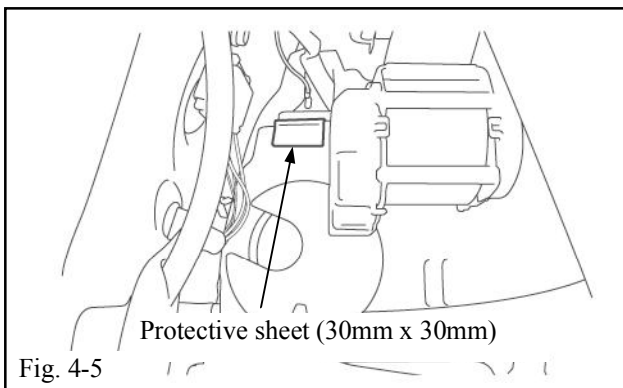
(d) Temporarily route the antenna cable, and wrap six (6) cushion tapes to the positions as shown in the figure around the antenna cable. (Fig. 4-3)

(e) Secure the antenna cable between the rear windshield and rear package tray by pressing the cable cushions with a nylon removal tool.



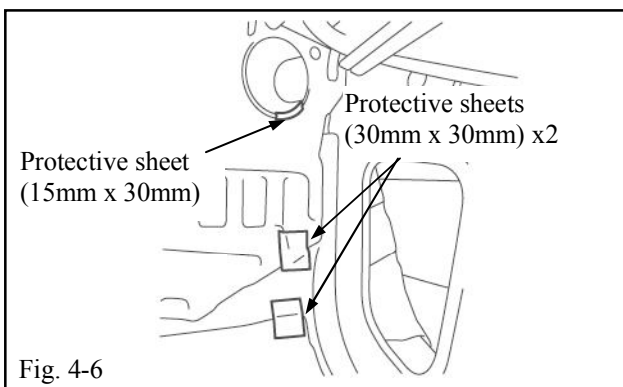
(f) Route the antenna cable as shown and secure with one (1) sheet tape. (Fig. 4-4)

NOTE: Clean the area for the sheet tape with 3M™ Prep Sol-70.



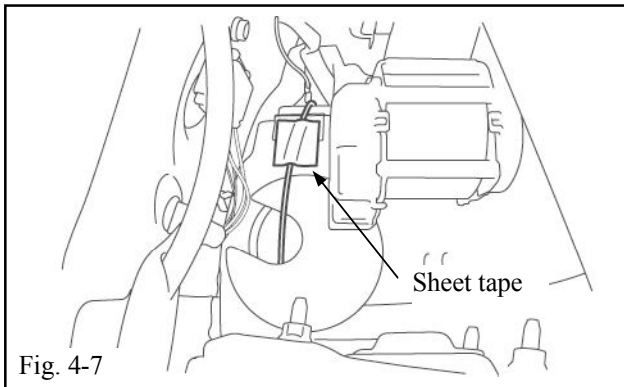
(g) Apply one (1) protective sheet to the vehicle panel as shown in the figure. (Fig. 4-5)

NOTE: Clean the area for the protective sheet with 3M™ Prep Sol-70.



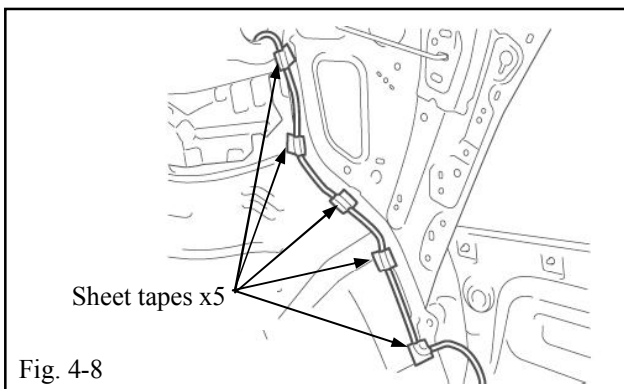
(h) Apply three (3) protective sheets to the vehicle panel as shown in the figure. (Fig. 4-6)

NOTE: Clean the area for the protective sheets with 3M™ Prep Sol-70.



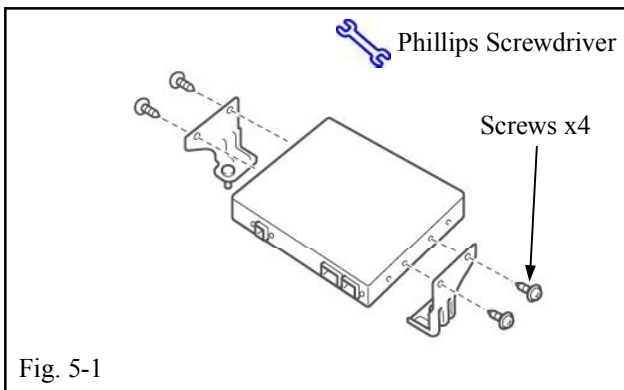
- (i) Route the antenna cable as shown and secure with one (1) sheet tape. (Fig. 4-7)

NOTE: Clean the area for the sheet tapes with 3M™ Prep Sol-70.



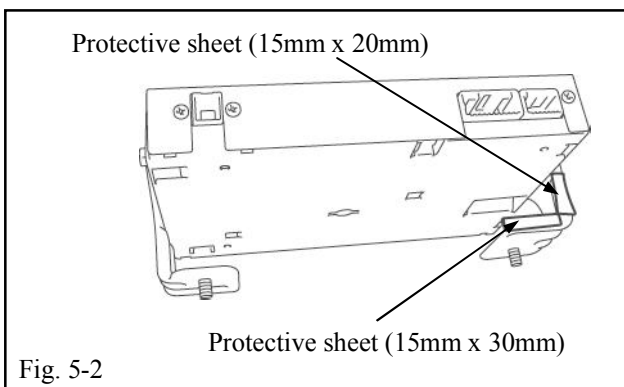
- (j) Route the antenna cable as shown and secure with five (5) sheet tapes. (Fig. 4-8)

NOTE: Clean the area for the sheet tapes with 3M™ Prep Sol-70.



5. Tuner Installation

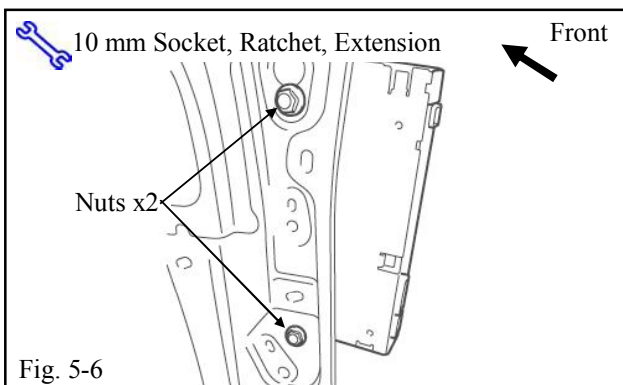
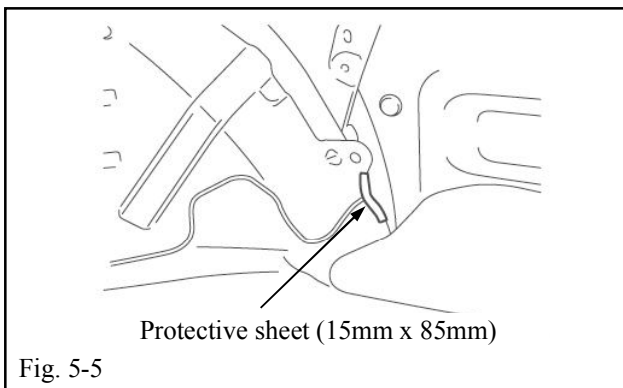
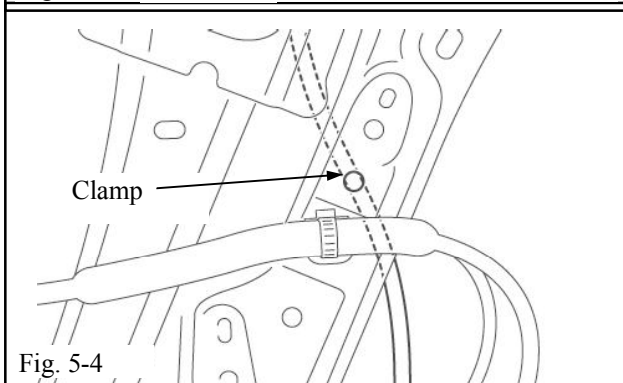
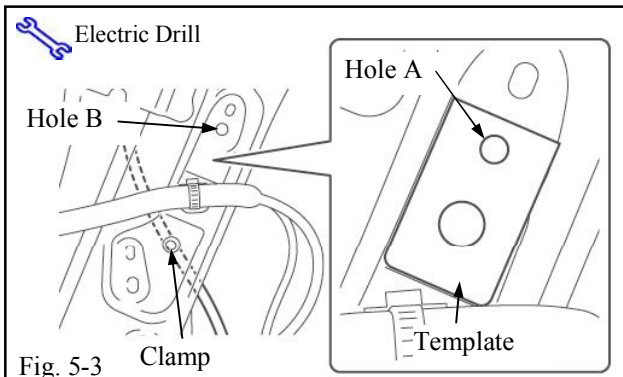
- (a) Install the mounting brackets onto the tuner. (Fig. 5-1)



FOR SLIDING ROOF (Steps 5. (b) – 5. (e))

- (b) Apply two (2) protective sheets to the bracket as shown in the figure. (Fig. 5-2)

NOTE: Clean the area for the protective sheets with 3M™ Prep Sol-70.



- (c) Remove the drain hose clamp. (Fig. 5-3)
- (d) Align the hole A of the template with the hole B of the vehicle panel and position the supplied template. (Fig. 5-3)
- (e) Use electric drill ($\Phi 10\text{mm}$) to make a hole to the vehicle panel as shown in the figure. (Fig. 5-3)

⚠ NOTE: Do not pinch the sliding roof drain hose.

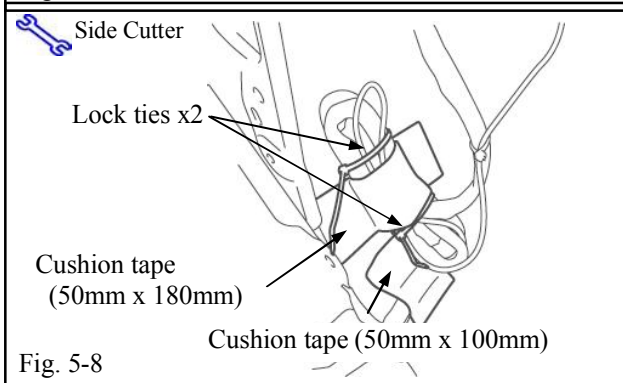
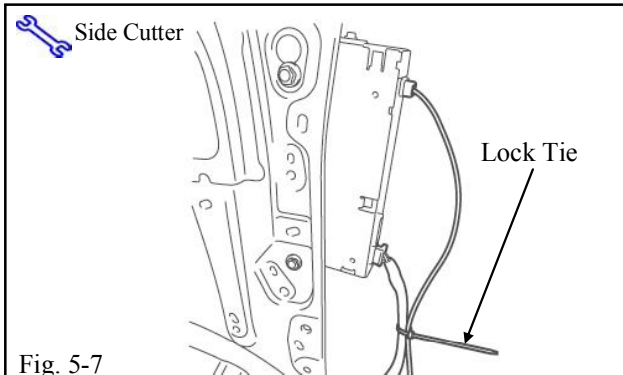
- (f) Slide the clamp of the drain hose upward, and install it to the drilled hole. (Fig. 5-4)

- (g) Apply one (1) protective sheet to the vehicle panel as shown in the figure. (Fig. 5-5)

NOTE: Clean the area for the protective sheet with 3M™ Prep Sol-70.

- (h) Install the tuner on the right side of the luggage compartment using two (2) nuts. Orient the tuner so the tuner connectors can be accessed from the rear as shown. (Fig. 5-6)

⚠ NOTE: Do not pinch the sliding roof drain hose.



- (i) Connect the tuner cable and the antenna cable. Finish routing the antenna cable as shown and secure with one (1) lock tie. Trim lock tie excess. (Fig. 5-7)

- (j) If there is excessive slack, bundle and secure the excess cable to the bulkhead using two (2) cushion tapes and two (2) lock ties. Trim lock ties excess. (Fig. 5-8)


NOTE: Clean the area for the cushion tapes with 3M™ Prep Sol-70.

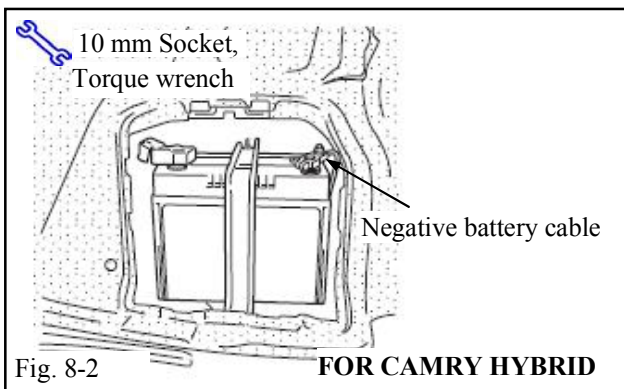
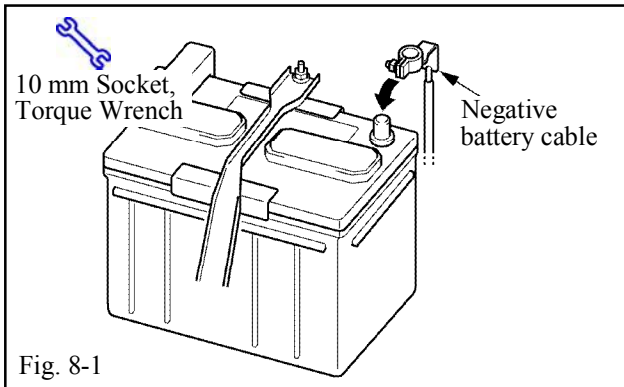
6. Verify SDARS functionality.

- (a) Install the short pin fuse to function check all electrical items.

7. Complete the reassembly of the vehicle.

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

-  (c) Torque the reclining rear seat (18 N•m) (13 lbf•ft).



8. Completing the Installation.

(a) Reconnect the vehicle's negative battery cable. (Fig. 8-1) (Fig. 8-2)

(1) Position the negative terminal at the original factory 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.



(c) Place the owner "XM Satellite Radio" brochure in the glove box.

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

<p><u>Check:</u></p>	<p><u>Look For:</u></p>
<p><u>Accessory Function Checks</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Verify the proper operation of the satellite radio tuner. <input type="checkbox"/> Verify the proper operation of the tuner assembly and radio. 	<p>Refer to the tuner assembly and radio owner's manuals.</p> <p>Refer to the tuner assembly and radio owner's manuals</p>
<p><u>Vehicle Function Checks</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Verify the proper operation of the hazard switch. <input type="checkbox"/> Verify the rear passenger seat back is in the upright position and the latch secured. <input type="checkbox"/> Verify the proper operation of the air conditioning system. <input type="checkbox"/> Verify the proper operation of the multi-information displays. (Clock, Temp., and MPG meter) <input type="checkbox"/> Verify the proper operation of the L & R seat heater switch. <input type="checkbox"/> Verify the proper operation of the 12V outlet switch. <input type="checkbox"/> Verify the proper operation of the rear seat reclining feature. (where applicable) <input type="checkbox"/> Verify the proper operation of the tire pressure warning function. 	<p>Hazard switch operates properly.</p> <p>Rear passenger seat back positioning.</p> <p>Cold air emits from vents properly.</p> <p>Multi-information display lights up and is readable.</p> <p>L & R seats heat up properly.</p> <p>Power is provided through the 12V outlet switch properly.</p> <p>Rear seat reclines and returns to upright position.</p> <p>The tire pressure warning reset switch operates properly.</p>