

Part Number: PT398-12090

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

Conflicts

Do not install into Manual Transmission Vehicle or Vehicles without RKE system.

Recommended Sequence of Application

Item #	Accessory	Description
1	TVIP V5	RS3200 Plus
2	TVIP V4	Remote Engine Starter (RES)

*Mandatory

Kit Contents

Item #	Quantity	Description
1	1	Wire Harness (Main)
2	1	Wire Harness (Hood Switch)
4	1	RES ECU Mounting Bracket
5	1	Butyl Tape

Hardware Bag Contents

Item #	Quantity	Description
1	1	RES ECU
2	1	Gateway ECU
3	1	Gateway ECU Mounting Bracket
4	1	Hood Switch
5	2	Harness Clamp
6	2	Screws (for Hood Switch)
7	2	M6 Screw
8	1	Splicing Connector
9	1	Foam Tape (x2)
10	35	Wire Ties
11	4	Window Label <i>English/Spanish</i>
12	2	Engine Compartment Warning Label <i>English/Spanish</i>
13	4	Key Tags <i>English/Spanish</i>
14	4	Key Label <i>English/Spanish</i>
15	1	Owners Manual






Additional Items For Installation (may be equipped)

Item #	Quantity	Description
1	1	Black Electrical Tape

Recommended Tools

Personal & Vehicle Protection	Notes
Safety Glasses	
Safety Gloves	(Optional)
Vehicle Protection	Blankets, Part Boxes
Special Tools	Notes
Cable Wire Routing Tool	
Installation Tools	Notes
Phillips Screwdriver	#2 or tip, Jewelers
Flat Blade Screwdriver	Jewelers
Socket	10mm, Extension, 10mm Deep
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST # 00002-06001-01
Side Cutters	
Wrench	10mm (ratchet type)
Utility Knife	
Pliers	
Torque Wrench	·For Battery 36 in•lbf (4.07 N•m) ·For Hood Lock Assembly Center: 66.4 in•lbf (7.5N•m) Side: 70.8 in•lbf (8.0N•m)
Special Chemicals	Notes
Cleaner	3M™ Prep Sol-70
Glass Cleaner	Household Glass Cleaner

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.

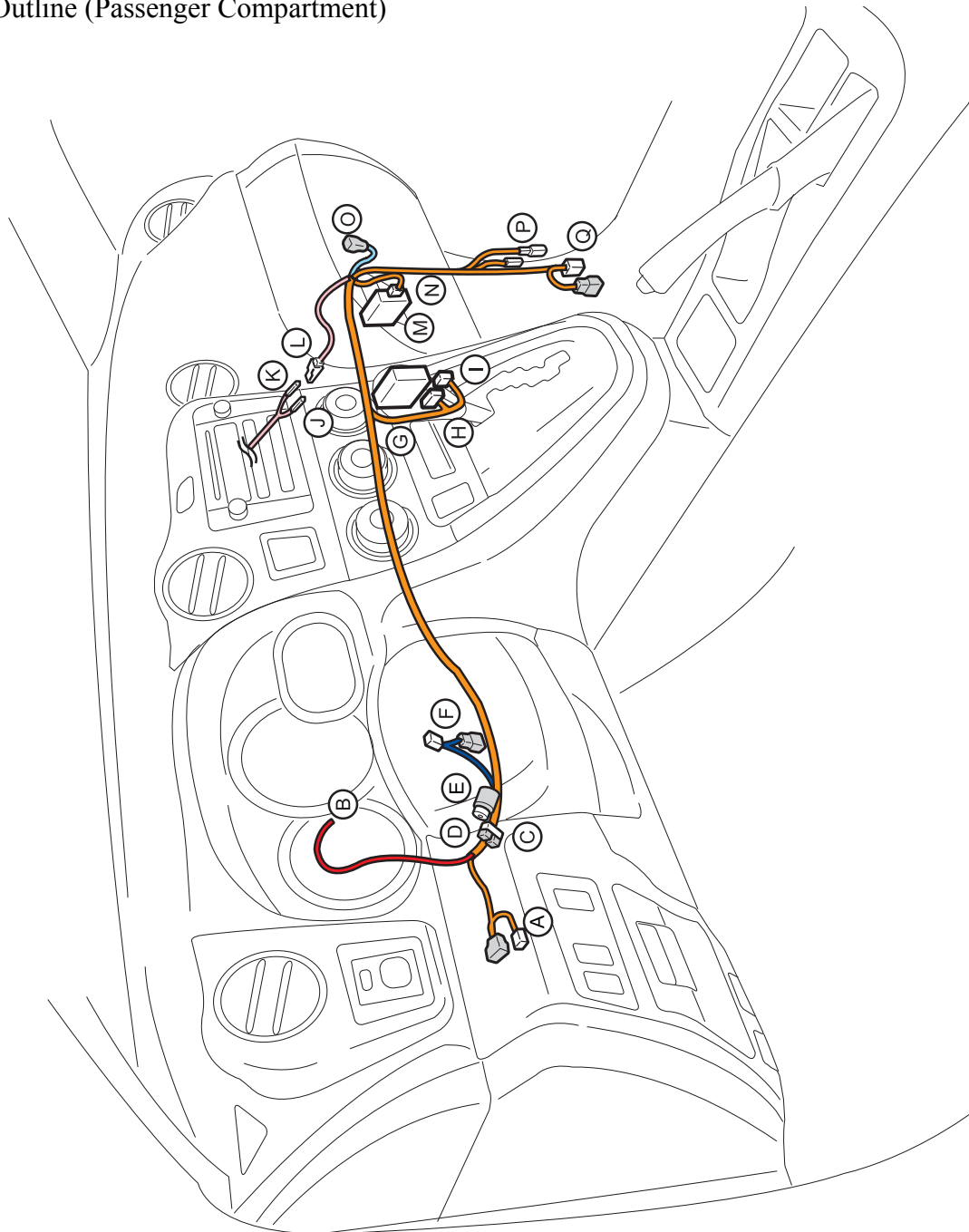
This document covers such items as:

- 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

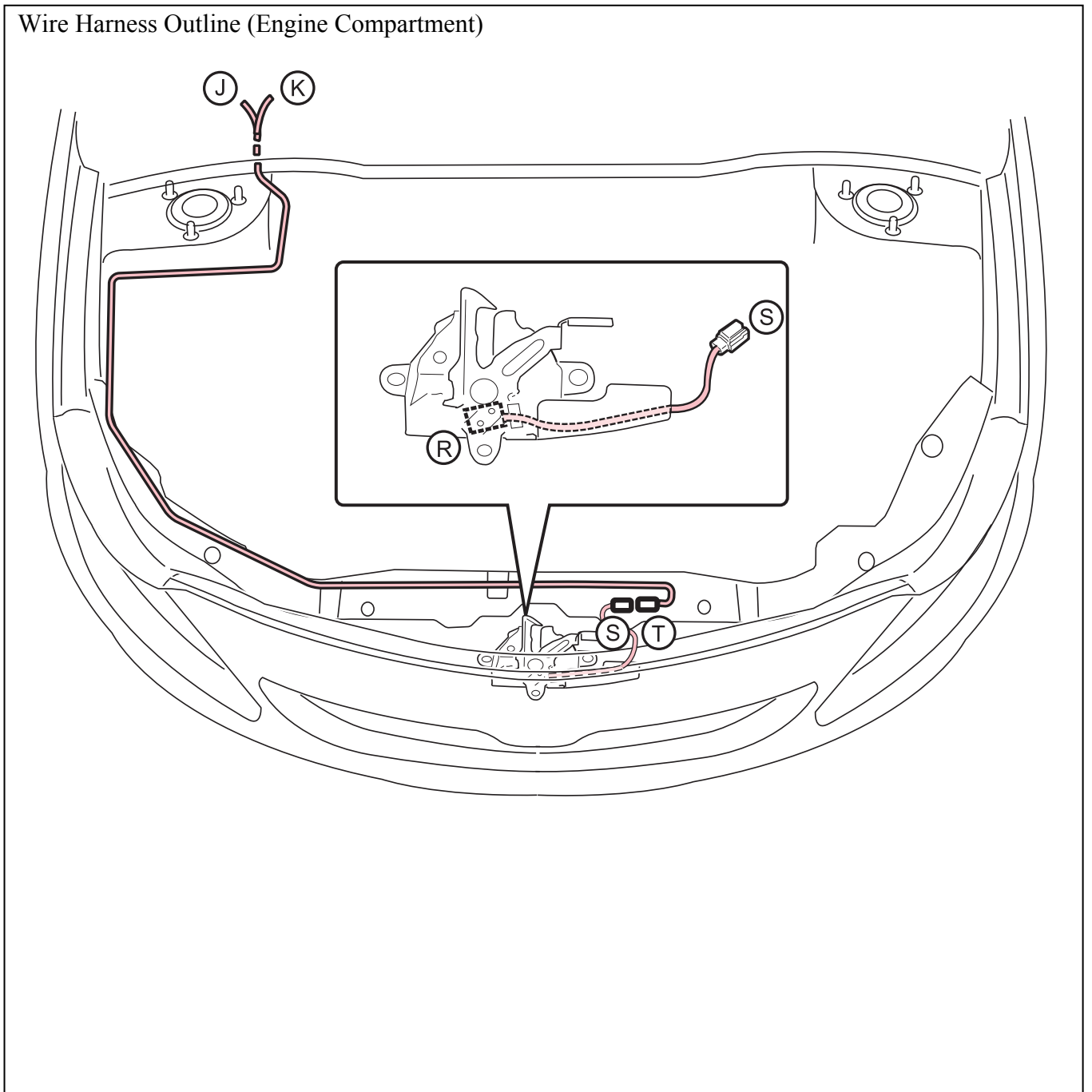
(A)	14P WHITE
(B)	WIRE TERMINAL (Red Wire)
(C)	White Tape
(D)	FUSE
(E)	RELAY
(F)	8P WHITE
(G)	RES ECU
(H)	20P WHITE (for RES ECU)
(I)	8P WHITE (for RES ECU)
(J)	WIRE TERMINAL (GREEN/RED Wire)
(K)	WIRE TERMINAL (WHITE/BLACK Wire)
(L)	2P WHITE (for HOOD Switch)
(M)	Gateway ECU
(N)	5P WHITE (for Gateway ECU)
(O)	2P WHITE (Male)
(P)	1P WHITE (for Registration)
(Q)	13P WHITE

Wire Harness Outline (Passenger Compartment)



WIRE TERMINAL (GREEN/RED Wire)	WIRE TERMINAL (WHITE/BLACK Wire)	HOOD Switch	2P BLACK (Female)	2P BLACK (Male)									
(J)	(K)	(R)	(S)	(T)									

Wire Harness Outline (Engine Compartment)



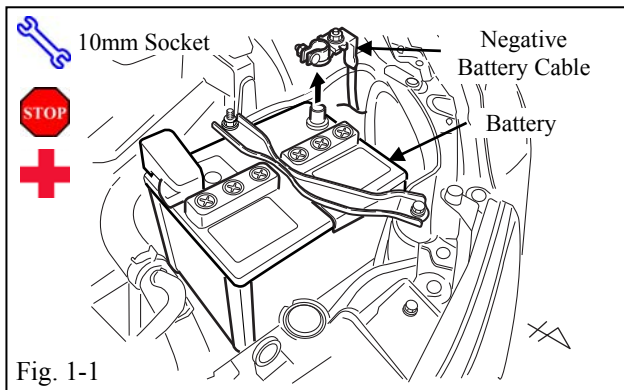


Fig. 1-1

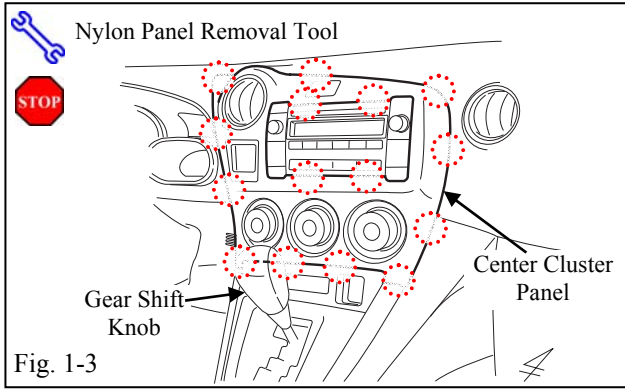
1. Vehicle Disassembly.

- +** (a) Place the Vehicle in Park with the Parking Brake set.
- +** (b) Remove the Negative Battery Cable. (Fig. 1-1)
 - STOP** (1) Protect the Fender before starting.
 - STOP** (2) Note the Battery Cable position, as it will be re-installed in the same position.
- +** **CAUTION:** Do not touch the positive terminal.

Disassembly Overview

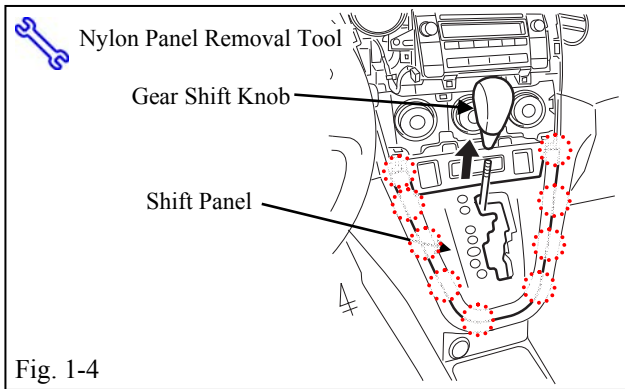
1	Center Cluster Panel
2	Gear Shift Knob
3	Shift Panel
4	Console Box Top Cover
5	Floor Console Front Panel
6	Floor Console Box
7	Driver's Center Cluster Under Cover
8	Passenger's Center Cluster Under Cover
9	Center Cluster Under Panel
10	Driver's Cluster Panel
11	Lower Dash Cover
12	Metal Substructure
13	Column Under Cover
14	Driver's Cluster Panel
15	Meter Cluster Trim
16	Meter Panel
17	Step Cover
18	Cowl Cover
19	Glove Box
20	Engine Cover

Fig. 1-2



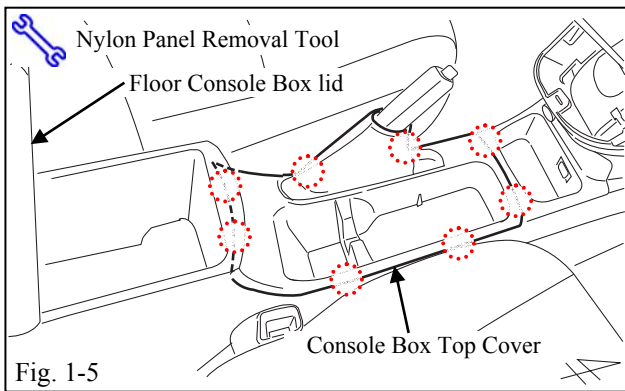
(c) Remove the Center Cluster Panel. (Fig. 1-3)

(1) Begin by protecting the Vehicle Interior.



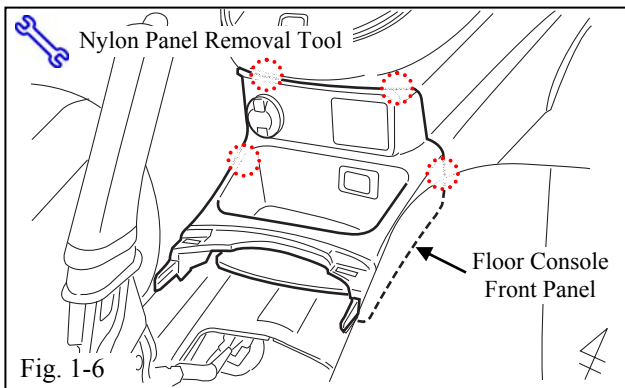
(d) Remove the Gear Shift Knob. (Fig. 1-4)

(e) Remove the Shift Panel. (Fig. 1-4)



(f) Remove the Console Box Top Cover. (Fig. 1-5)

(1) Open the Floor Console Box Lid.



(g) Remove the Floor Console Front Panel. (Fig. 1-6)

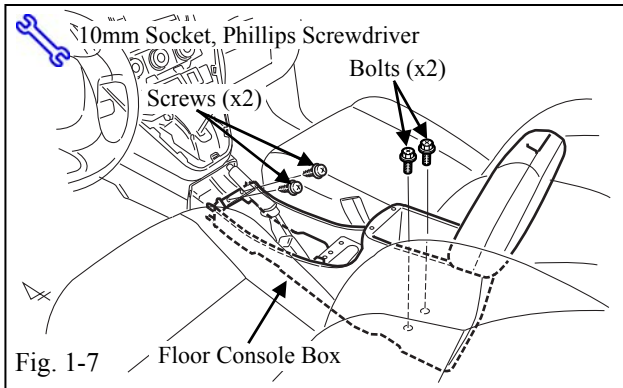


Fig. 1-7

(h) Remove the Floor Console Box. (Fig. 1-7)

(1) Remove 2 Bolts and 2 Screws.

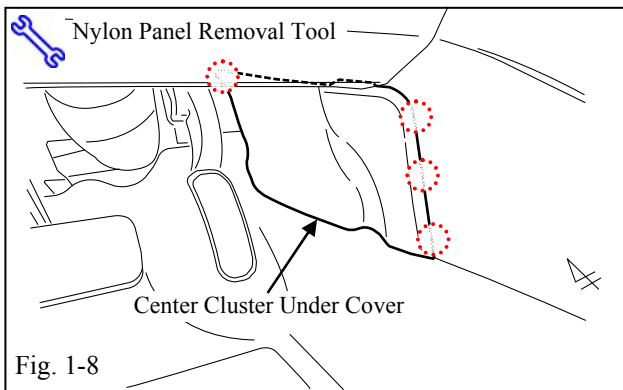


Fig. 1-8

(i) Remove the Driver's Center Cluster Under Cover. (Fig. 1-8)

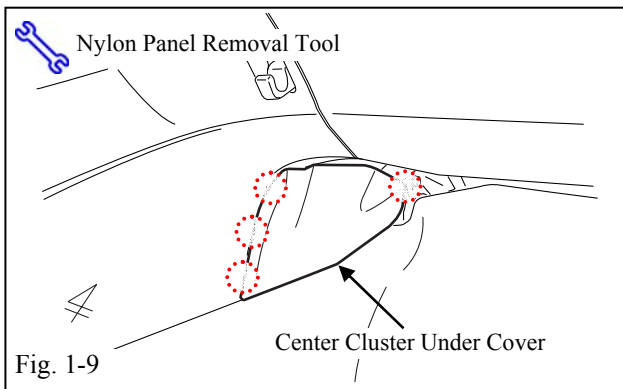


Fig. 1-9

(j) Remove the Passenger's Center Cluster Under Cover. (Fig. 1-9)

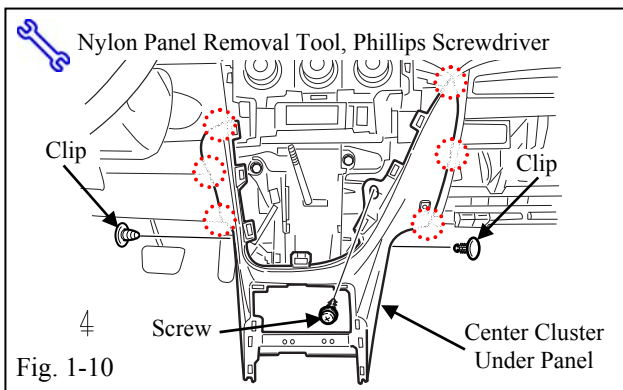
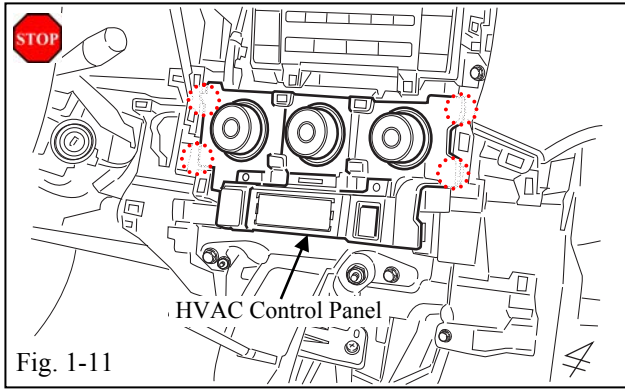


Fig. 1-10

(k) Remove the Center Cluster Under Panel. (Fig. 1-10)

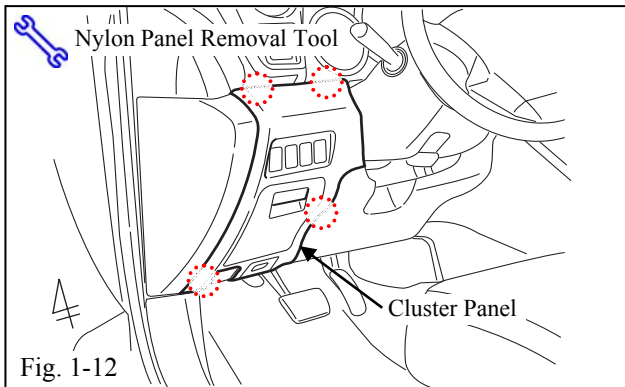
(1) Remove 1 screw and 2 Clips.



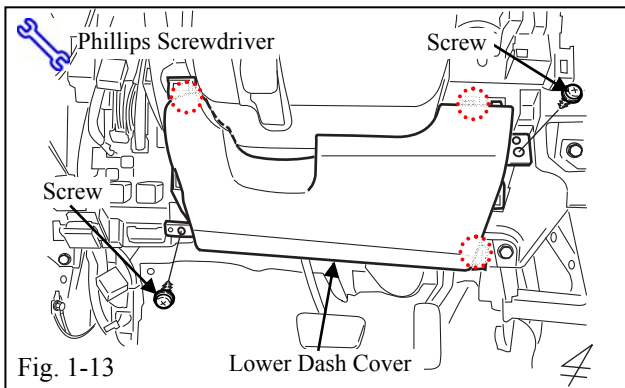
(l) Loosen the HVAC Control Panel from the Dash Panel. (Fig. 1-11)



(1) Do not remove the HVAC Control Panel.

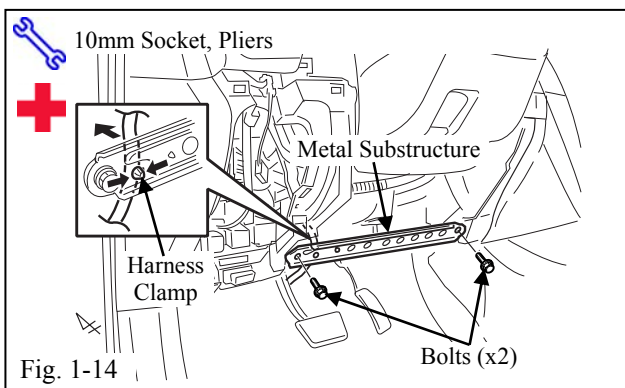


(m) Remove the Driver's Cluster Panel. (Fig. 1-12)



(n) Remove the Lower Dash Cover. (Fig. 1-13)

(1) Remove 2 Screws.



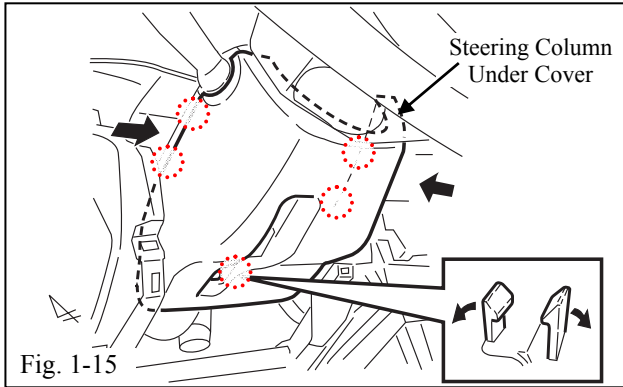
(o) Remove the Vehicle's Harness Clamp. (Fig. 1-14)

(p) Remove the Metal Substructure. (Fig. 1-14)

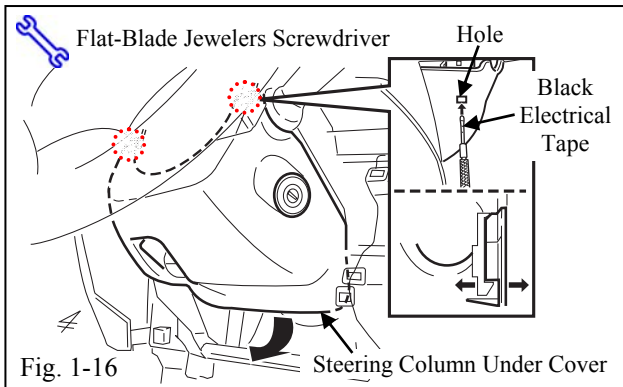
(1) Remove 2 Bolts.



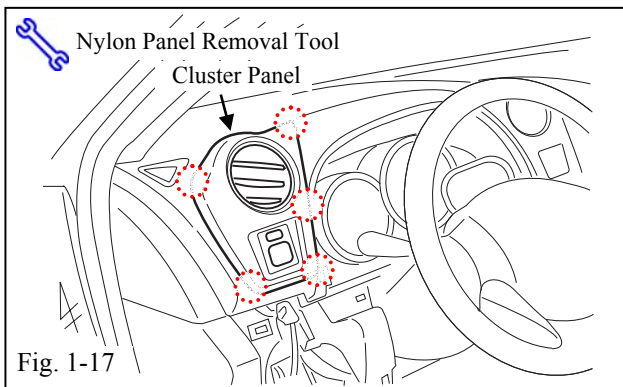
CAUTION: Sharp metal edges.



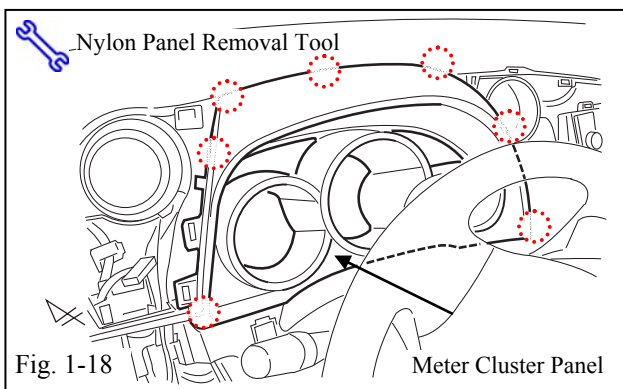
- (q) Loosen the Steering Column Under Cover as shown. (Fig. 1-15)
 - (1) Insert fingers into the opening of the Tilt Lever of the Steering Column Under Cover to disengage the 1 Claw.
 - (2) Push the right and left side of the Steering Column Under Cover, and disengage the 4 Claws.



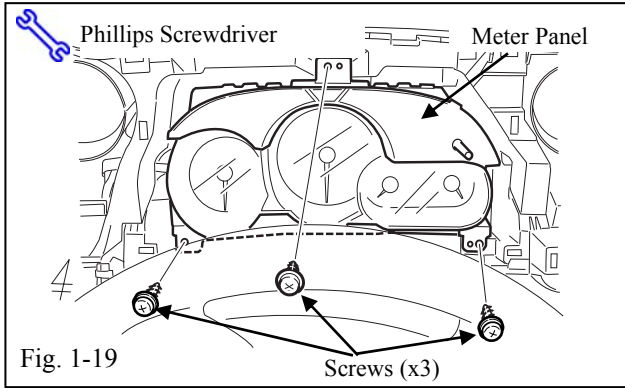
- (r) Remove the Steering Column Under Cover as shown. (Fig. 1-16)
 - (1) Insert the key into the Ignition and turn it to ON.
 - (2) Turn the Steering Wheel from Left to Right to gain access to the Clip Access holes.
 - (3) Wrap the tip of the Flat Blade Jewelers Screwdriver in the Black Electrical Tape.
 - (4) Insert it in the rectangular hole of the Steering Column Under Cover front, and release the inside 2 claws.



- (s) Remove the Driver's Cluster Panel. (Fig. 1-17)

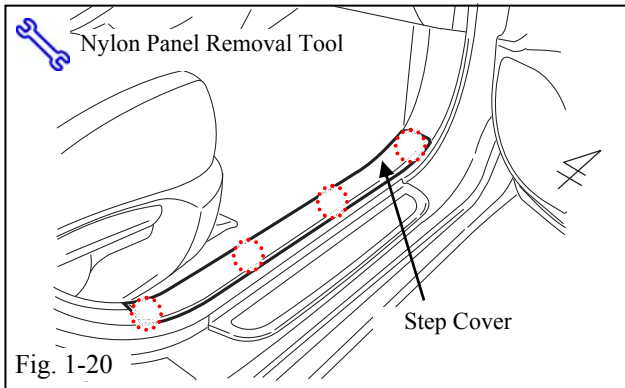


- (t) Remove the Meter Cluster Trim. (Fig. 1-18)

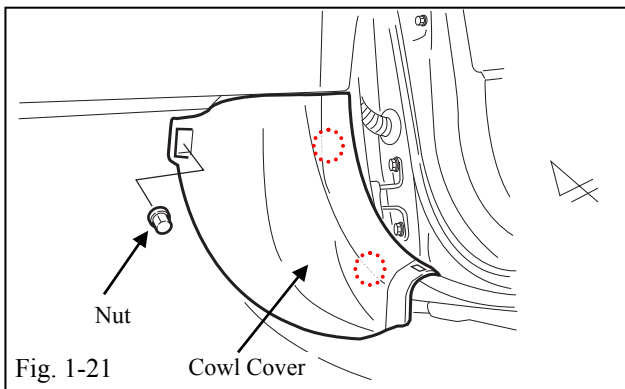


(u) Remove the Meter Panel. (Fig. 1-19)

(1) Remove 3 Screws.

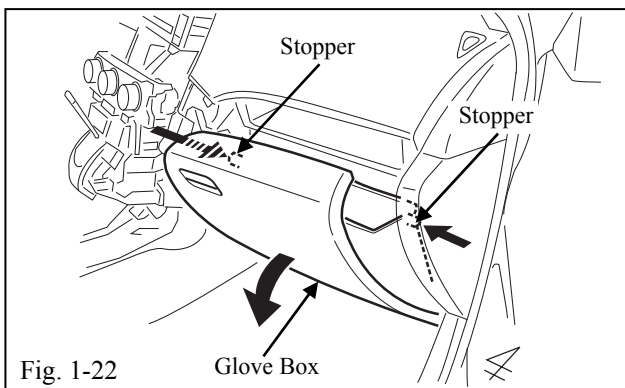


(v) Remove the Passenger's Step Cover.
(Fig. 1-20)

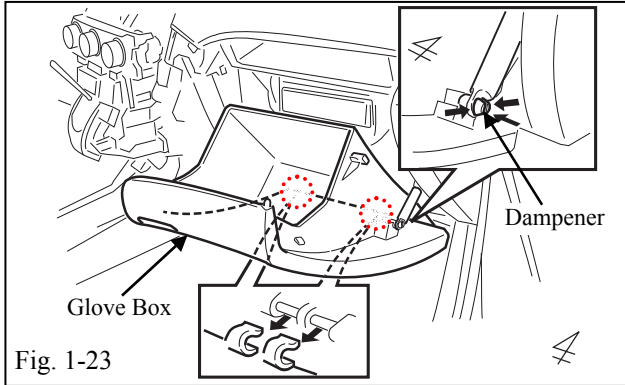


(w) Remove the Passenger's Cowl Cover.
(Fig. 1-21)

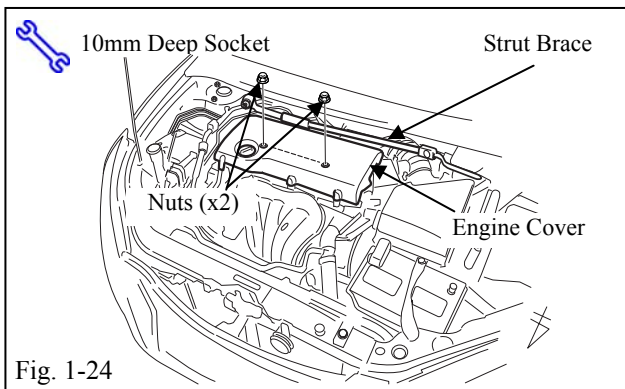
(1) Remove 1 Nut.



(x) Open the Glove Box Door, push the right and the left side of the Stopper inward.
(Fig. 1-22)

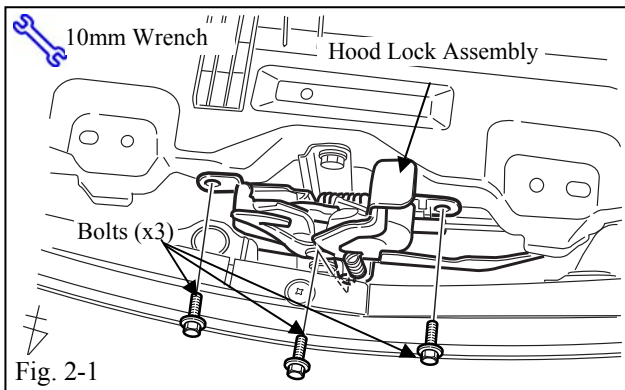


- (y) Remove the Glove Box. (Fig. 1-23)
 - (1) Release the Dampener from the Glove Box.



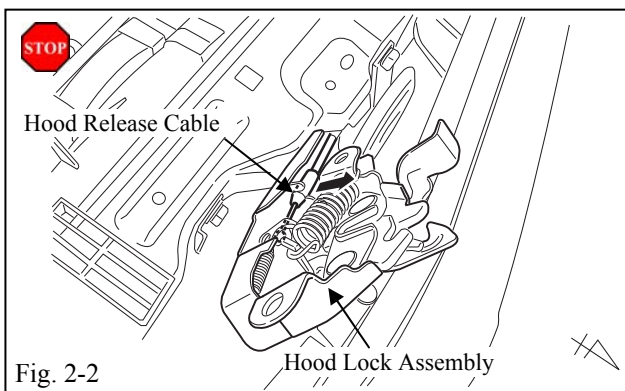
IF THE VEHICLE IS EQUIPED WITH STRUT BRACE (Step y)

- (z) Remove the Engine Cover to gain access routing V4 Harness. (Fig. 1-24)
 - (1) Remove the 2 Nuts.
 - (2) Do not discard the Nuts.

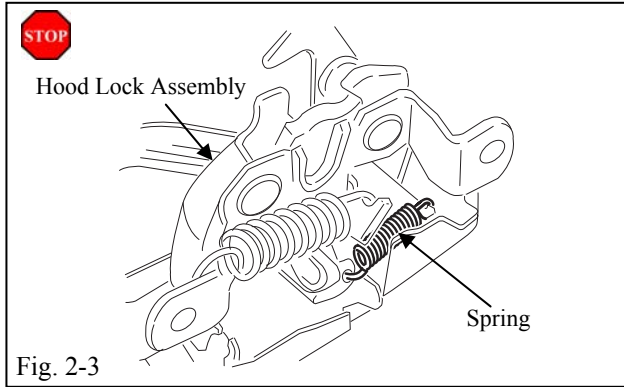


2. Hood Switch Installation.

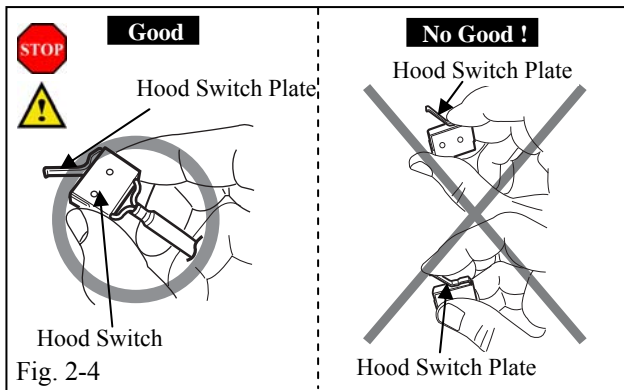
- (a) Dislodge the Hood Lock Assembly in the Engine Compartment. (Fig. 2-1)
 - (1) Remove 3 Bolts.



- (b) Remove the Hood Release Cable from the Hood Lock Assembly. (Fig. 2-2)
 - (1) Take care not to bend the Hood Release Cable during removal.

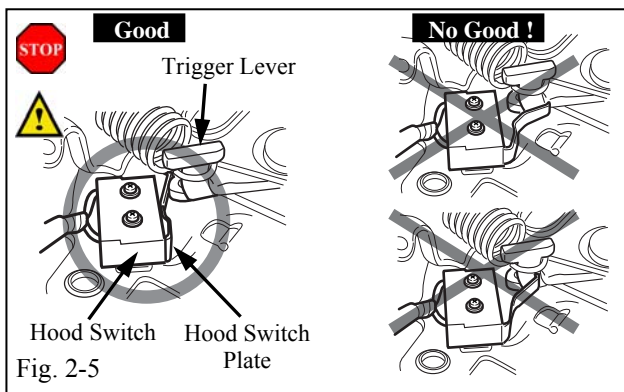


- (c) Remove the Spring from the Hood Lock Assembly. (Fig. 2-3)
- (1) Take care not to bend the Spring during removal.

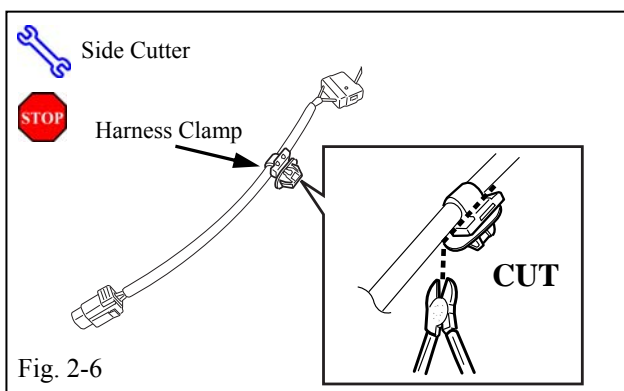


CAUTION: Carefully read before installing the Hood Switch.

- (d) Grip and hold both sides of the Hood Switch body. (Fig. 2-4)
- (1) Do not hold or press down the Hood Switch Plate by its Top Part or by its Sloped Part. Otherwise the Hood Switch Plate will be deformed.
 - (2) If the Hood Switch is broken or deformed, the vehicle will not be able to Remote Start.



- (e) When installing the Hood Switch to the Hood Lock Assembly, the Hood Switch Plate comes under the Hood Lock Trigger Lever. (Fig. 2-5)
- (1) The Hood Switch Plate must not press against the edge of the Hood Lock Lever.
 - (2) The Hood Switch Plate must not go on top of the Hood Lock Trigger Lever.
 - (3) If the Hood Switch is broken or deformed, the vehicle will not be able to Remote Start.



- (f) Cut the Harness Clamp on Hood Switch's Wire Harness. (Fig. 2-6)
- (1) Do not cut the Protective Tube or any Wires.

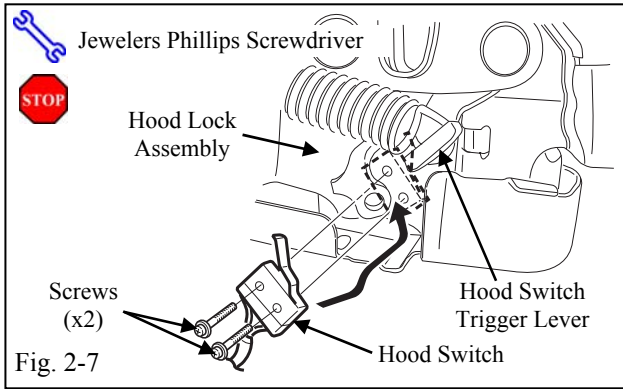


Fig. 2-7

- (g) Position the Hood Switch Plate so that it makes contact with the Hood Lock Trigger Lever underneath as shown. (Fig. 2-7)
- (h) Using 2 Screws from the kit, install the Hood Switch. (Fig. 2-7)
 - (1) Verify the Screws are tightened securely.

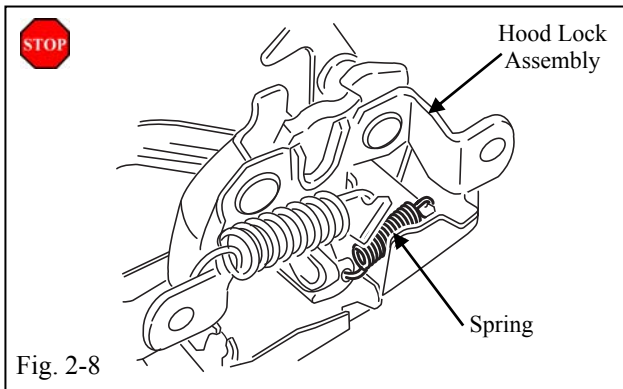


Fig. 2-8

- (i) Reinstall the Spring to the Hood Lock Assembly. (Fig. 2-8)
 - (1) Take care not to bend the spring during reinstalling.

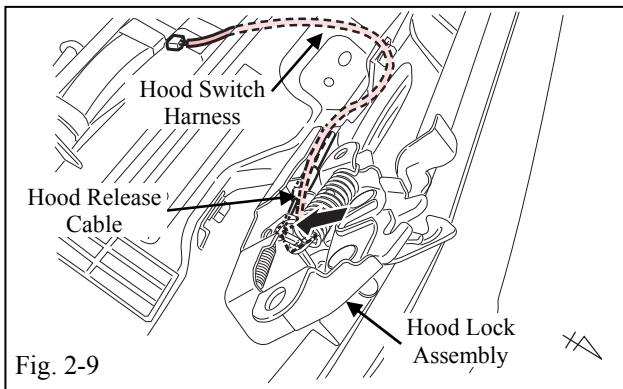


Fig. 2-9

- (j) Connect the Hood Release Cable to the Hood Lock Assembly. (Fig. 2-9)
 - (1) Fit the Braided Cable Ball into the Hood Lock Lever.
 - (2) Affix the Shielding Cable of the Hood Release Cable to the Hood Lock Assembly by pressing it down into the notch in the Hood Lock Assembly.

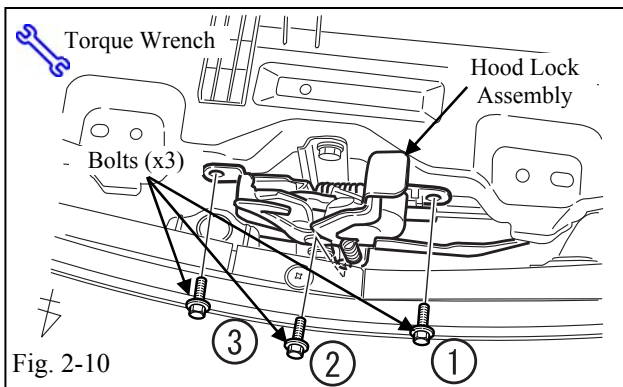
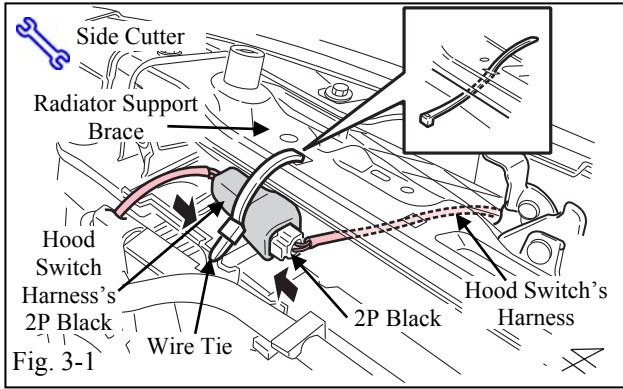


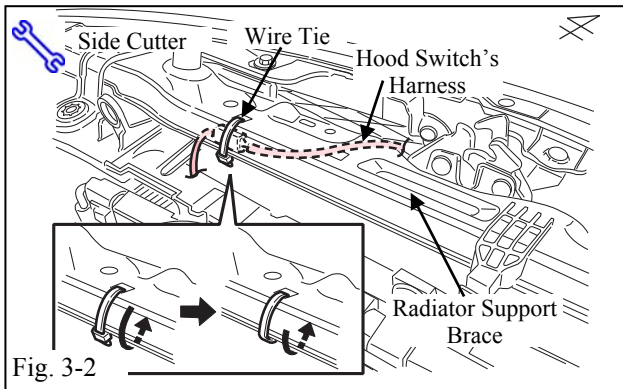
Fig. 2-10

- (k) Secure the Hood Lock Assembly to the Vehicle Brace with 3 Bolts (Fig. 2-10)
 - (1) Tighten these Bolts from driver's side to passenger side.
 - (2) Tighten the Bolts to,
 - Center: 66.4 in•lbf (7.5 N•m)
 - Side: 70.8 in•lbf (8.0 N•m)

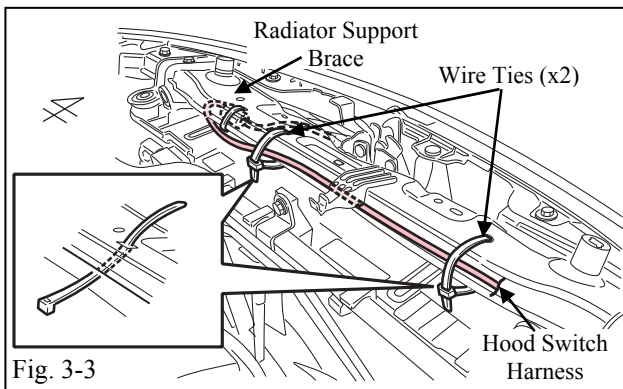


3. Hood Switch Wire Harness Installation.

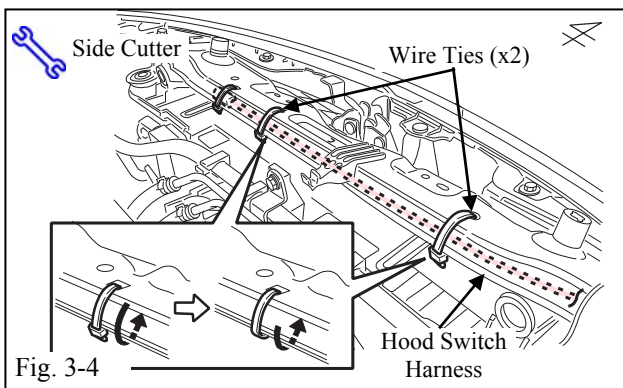
- (a) Connect the Hood Switch's Black 2P Connector and the Hood Switch Harness's Black 2P Connector. (Fig. 3-1)
- (b) Secure the 2P Connectors to the Radiator Support Brace with 1 Wire Tie. (Fig. 3-1)
 - (1) The Wire Tie should be placed as shown.



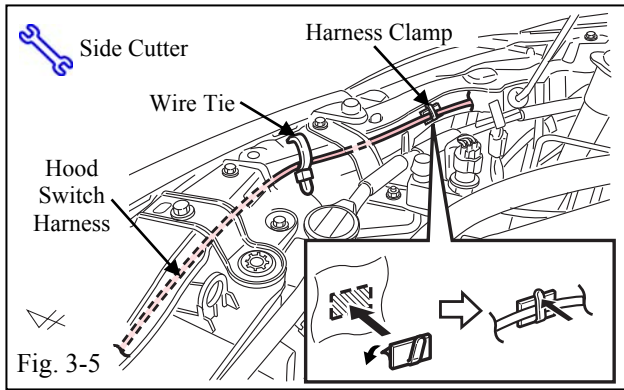
- (c) Rotate the Wire Tie as shown. (Fig. 3-2)



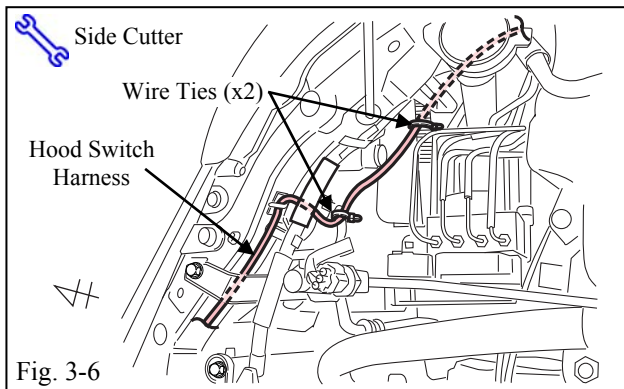
- (d) Route the Hood Switch Harness along with Radiator Support Brace. (Fig. 3-3)
- (e) Tighten 2 Wire Ties loosely. (Fig. 3-3)



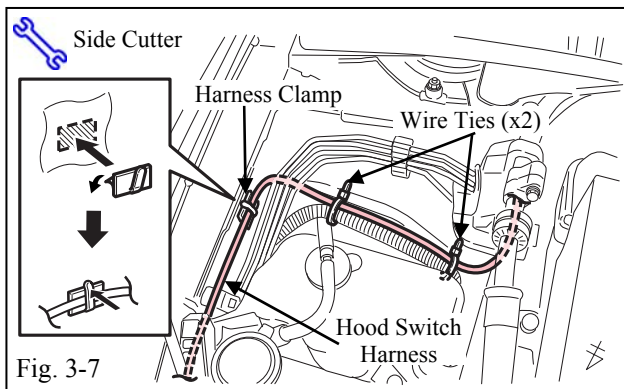
- (f) Push the Hood Switch Harness under the Radiator Support Brace. (Fig. 3-4)
- (g) Tighten 2 Wire Ties. (Fig. 3-4)
- (h) Rotate the Wire Ties as shown. (Fig. 3-4)



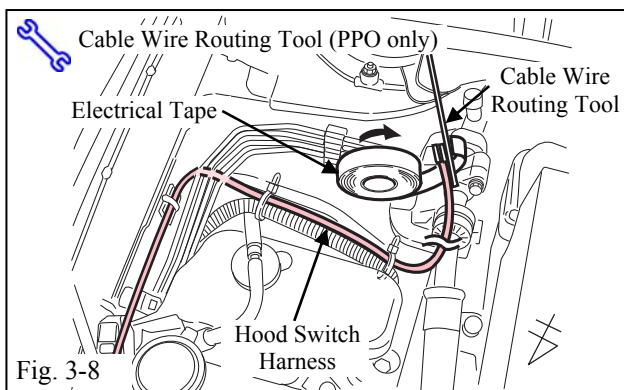
- (i) Route the Hood Switch Harness toward the Engine Compartment Wall. (Fig. 3-5)
- (j) Secure the Hood Switch Harness to the Engine Compartment Wall with 1 Wire Tie and 1 Harness Clamp. (Fig. 3-5)



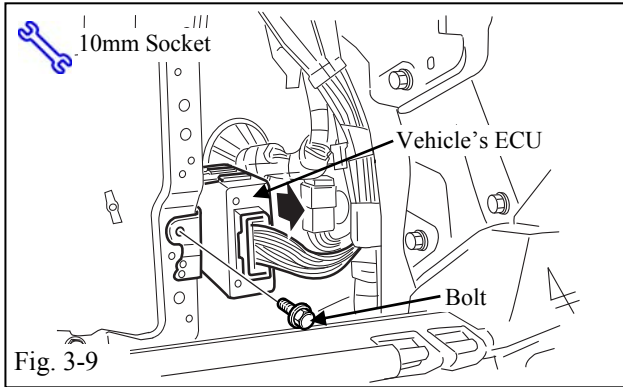
- (k) Route the Hood Switch Harness as shown. (Fig. 3-6)
- (l) Secure the Hood Switch Harness to the Vehicle Harness with 2 Wire Ties. (Fig. 3-6)



- (m) Route the Hood Switch Harness toward the Engine Compartment Wall. (Fig. 3-7)
- (n) Secure the Hood Switch Harness to the Engine Compartment Wall with 1 Harness Clamp. (Fig. 3-7)
- (o) Secure the Hood Switch Harness to the Vehicle Harness with 2 Wire Ties. (Fig. 3-7)

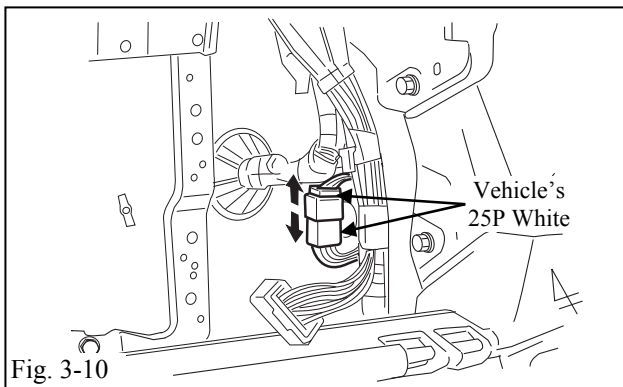


- (p) Secure the Hood Switch Harness and the Cable Wire Routing Tool or like with the Electrical Tape. (Fig. 3-8)

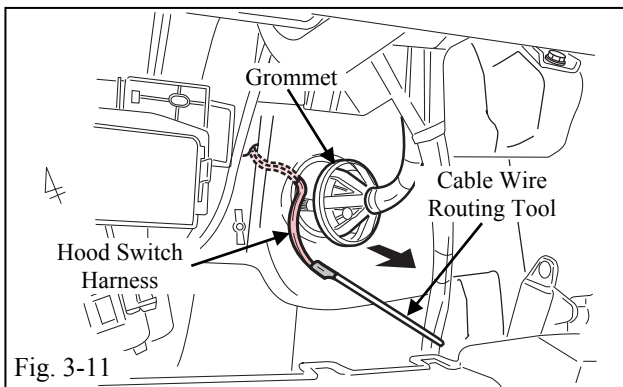


(q) Remove the Vehicle's ECU in the Glove Box area. (Fig. 3-9)

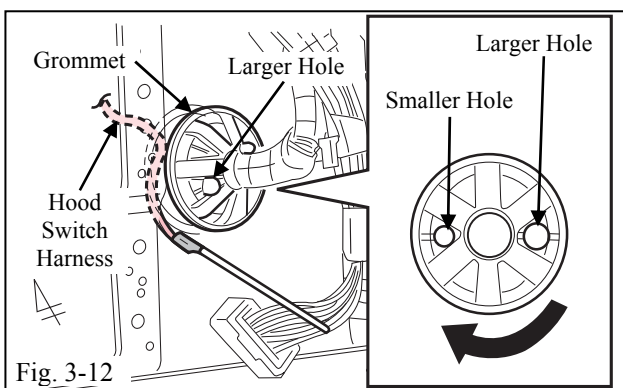
- (1) Disconnect the Vehicle's White Connector.
- (2) Remove the 1 Bolt.
- (3) Do not discard the Bolt.



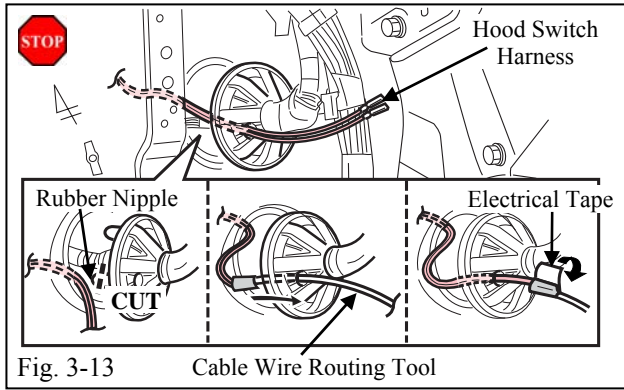
(r) Disconnect the Vehicle's White 25P Connectors to gain access to the Grommet. (Fig. 3-10)



- (s) Dislodge the Grommet to gain access to the Cable Wire Routing Tool or like with the Hood Switch Harness. (Fig. 3-11)
- (t) Pull the Cable Wire Routing Tool and the Hood Switch Harness into the Passengers Compartment through the opening. (Fig. 3-11)



(u) Rotate the Grommet clockwise until the Large Grommet Hole is accessible. (Fig. 3-12)



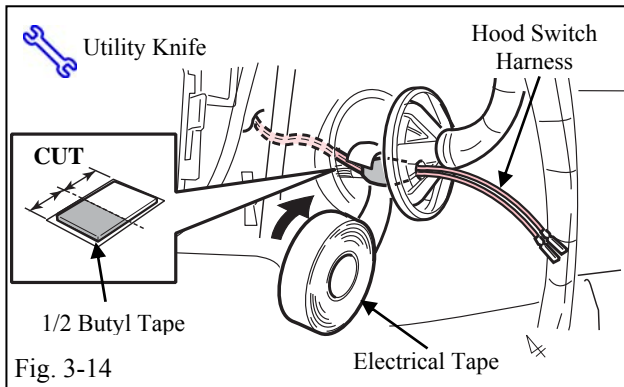
(v) Locate and cut the Large Rubber Nipple on the Grommet. (Fig. 3-13)



CAUTION: Do not cut smaller Rubber Nipple.

(w) Pull The Cable Wire Routing Tool into Passenger Compartment through the Large Grommet Hole. (Fig. 3-13)

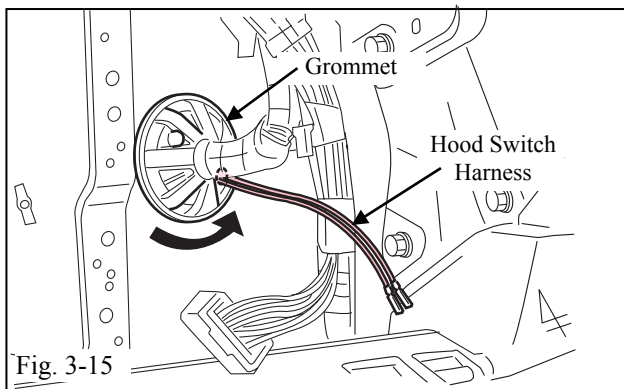
(x) Remove the Tape securing the Cable Wire Routing Tool and the Hood Switch Harness. (Fig. 3-13)



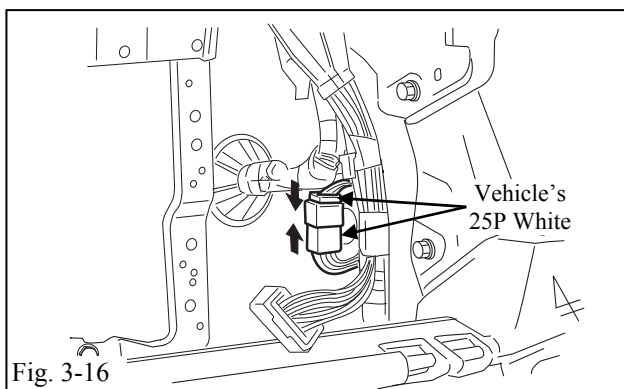
(y) Use 1/2 Butyl Tape to fill the opening of Grommet. (Fig. 3-14)

(1) Discard the excess Butyl Tape.

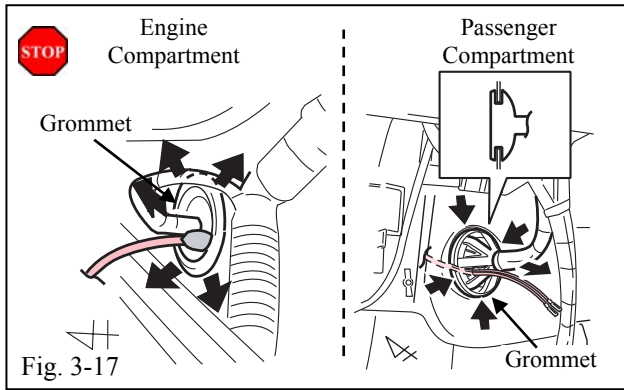
(z) Wrap the Grommet with the Electrical Tape as shown. (Fig. 3-14)



(aa) Re-rotate the Grommet counterclockwise to the original position. (Fig. 3-15)

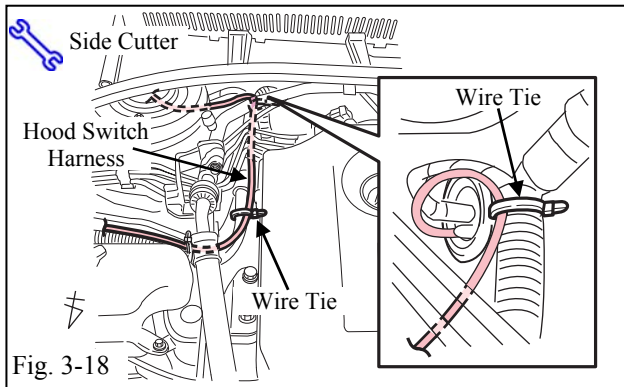


(bb) Reconnect the Vehicle's White 25P Connectors. (Fig. 3-16)

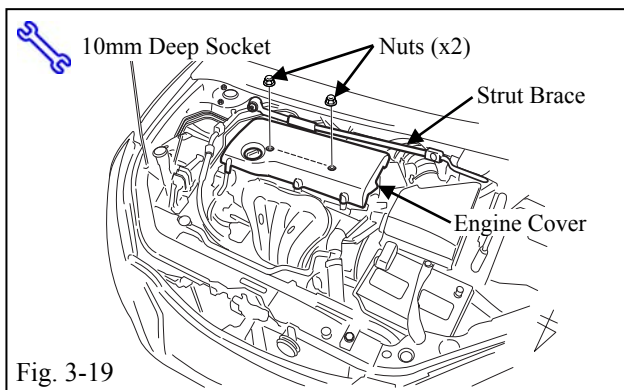


(cc) From the Engine Compartment, lightly pull the Vehicle Harness, and fit the Grommet into the Firewall of the Engine Compartment. (Fig. 3-17)

STOP **VERIFY:** That the Grommet is installed properly. If the Grommet does not fit into the Firewall water will come into the Passenger Compartment.



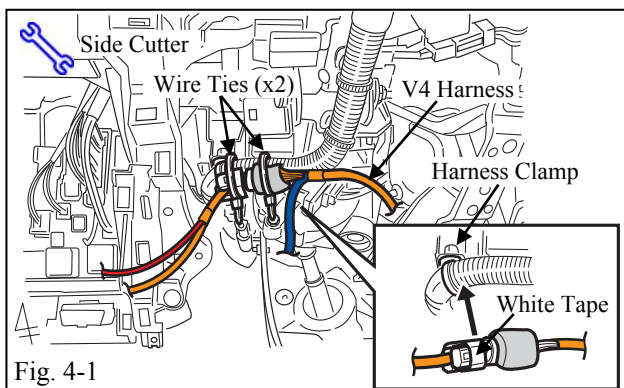
(dd) Secure the Hood Switch Harness to the Vehicle Harness in the Engine Compartment with 2 Wire Ties. (Fig. 3-18)



IF THE VEHICLE IS EQUIPED WITH STRUT BRACE (Step ee)

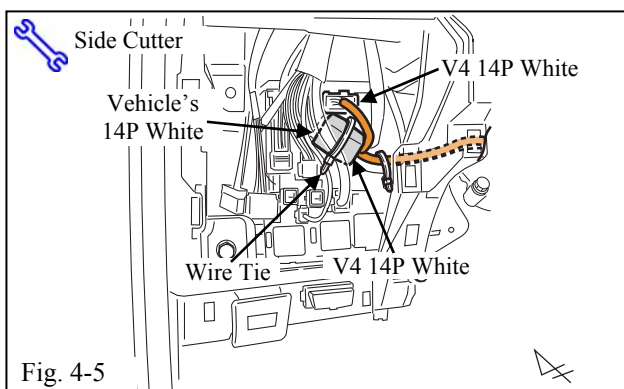
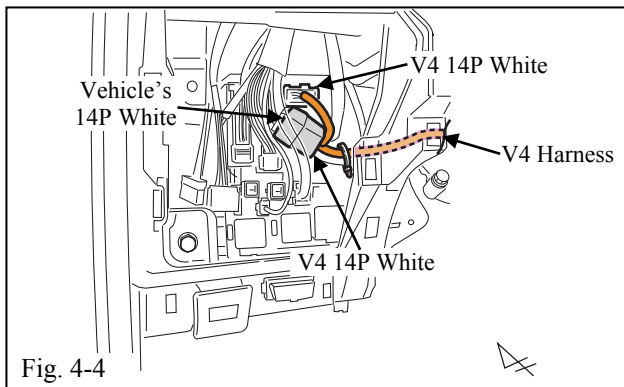
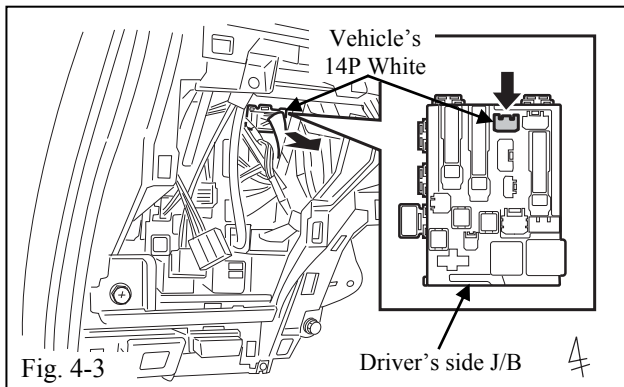
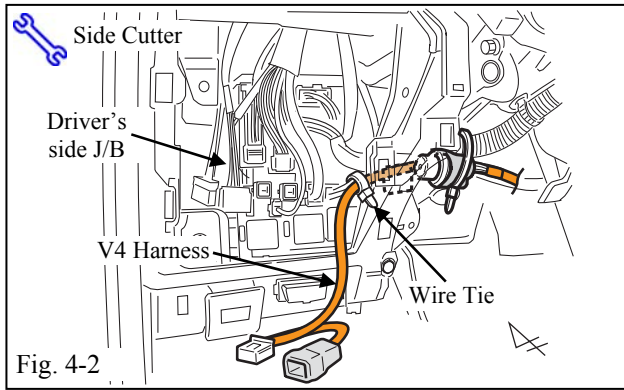
(ee) Install the Engine Cover. (Fig. 3-19)
(1) Tighten 2 Nuts.

GO TO THE DRIVER SIDE AREA.



4. V4 Wire Harness installation.

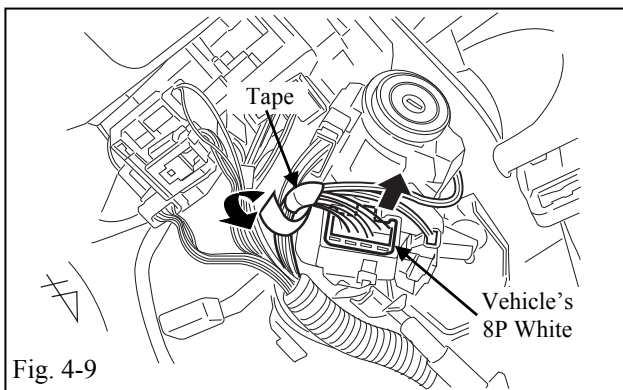
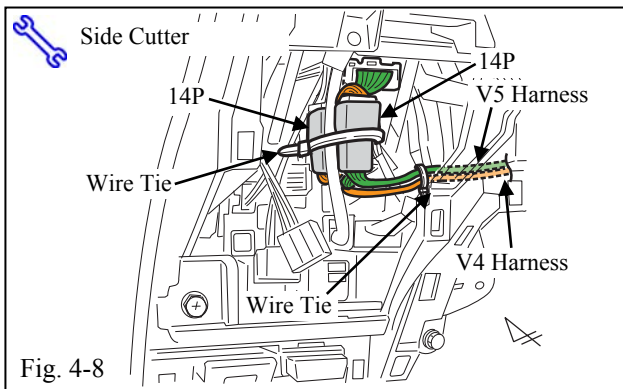
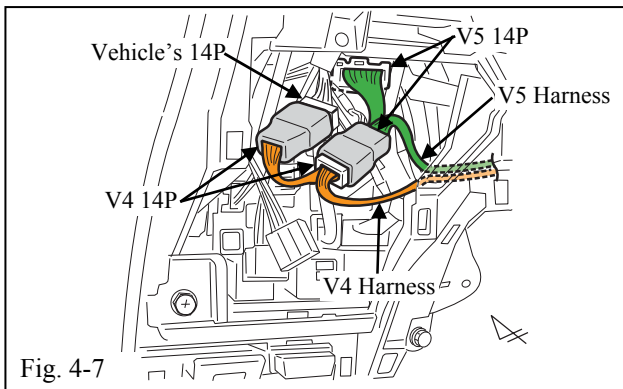
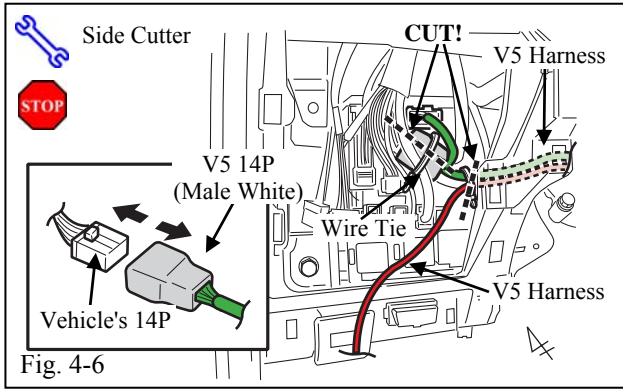
- (a) Secure the V4 Harness's White Tape on the Fuse to the Vehicle's Harness with 1 Wire Tie. (Fig. 4-1)
- (b) Secure the V4 Harness's Relay to the Vehicle's Harness with 1 Wire Tie. (Fig. 4-1)



• **V4 Only**

-If vehicle is equipped with V5 Harness, skip to step h.

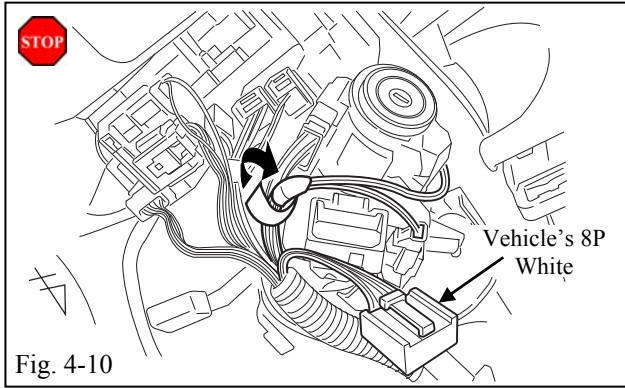
- (c) Route the V4 Harness toward the Driver's side J/B area. (Fig.4-2)
- (d) Secure the V4 Harness to the Vehicle Harness with 1 Wire Tie. (Fig. 4-2)
- (e) Disconnect the Vehicle Harness's White 14P Connector from the Driver's side J/B. (Fig. 4-3)
- (f) Insert the V4 Harness's White 14P Connector between the Vehicle's White 14P Connector. (Fig. 4-4)
- (g) Secure the 14P Connectors to the Vehicle's Harness with 1 Wire Tie. (Fig. 4-5)



• **V4 onto V5**

-Add on Installation, steps h-l.

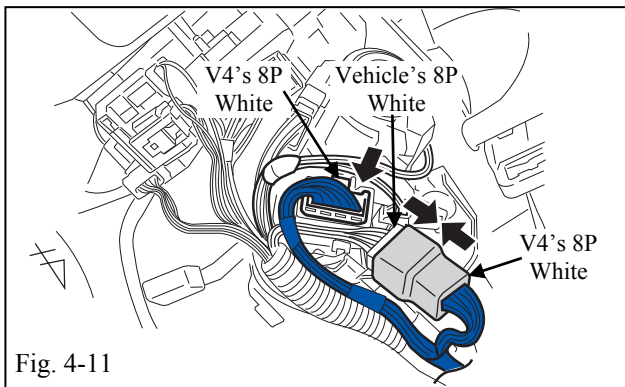
- (h) Cut the 2 Wire Ties as shown. (Fig. 4-6)
 - (1) Do not cut any wires.
- (i) Disconnect the Vehicle's 14P Connector from the V5 14P Connector. (Fig. 4-6)
- (j) Connect the V4's 14P Connectors inbetween the V5 Connector and the Vehicle Connector that were disconnected in step i. (Fig. 4-7)
- (k) Secure the 14P Connectors to the Vehicle Harness with 1 Wire Tie. (Fig. 4-8)
- (l) Secure both the V4 and V5 Harnesses to the Vehicle Harness with 1 Wire Tie. (Fig. 4-8)
- (m) Remove the Tape securing the Vehicle Harness's White 8P Connector and the Black 2P Connector. (Fig. 4-9)
- (n) Disconnect the Vehicle Harness's White 8P Connector from the Key Cylinder. (Fig. 4-9)



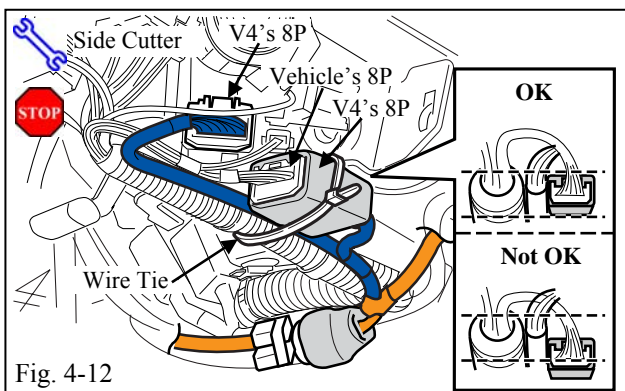
(o) Secure the Vehicle Harness with the Electrical Tape as shown. (Fig. 4-10)



(1) Do not secure the White 8P Connector Harness with the Tape.



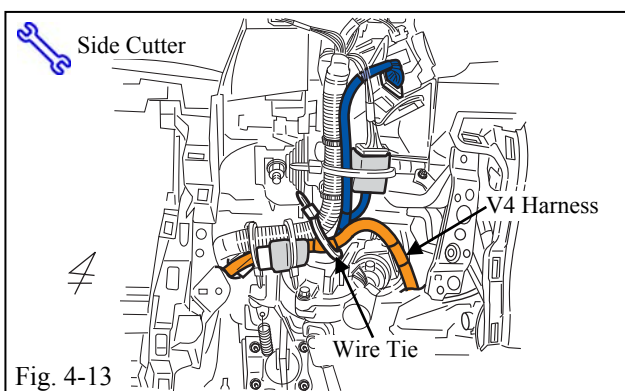
(p) Plug in the V4 Harness's White 8P Connectors between the Vehicle Harness's White 8P Connectors from the Key Cylinder. (Fig. 4-11)



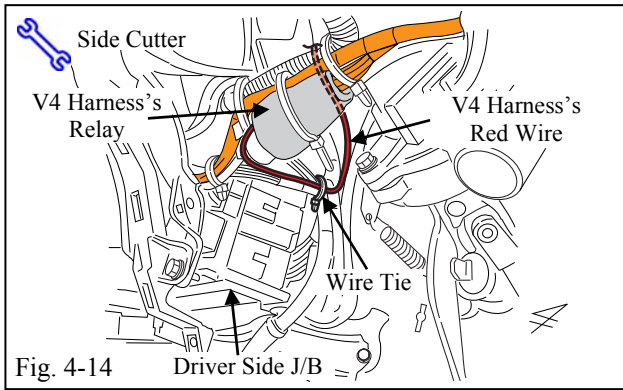
(q) Secure the 8P Connectors to the Vehicle Harness with 1 Wire Tie. (Fig. 4-12)



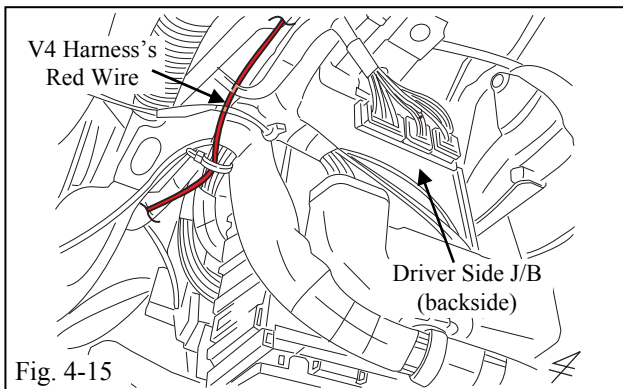
VERIFY: That the Connectors are aligned as shown. Otherwise, Steering Column Under Cover will NOT be installed due to the interference.



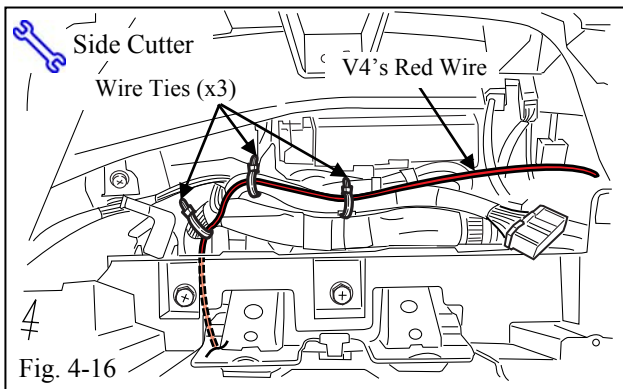
(r) Secure the V4 Harness to the Vehicle Harness with 1 Wire Tie. (Fig. 4-13)



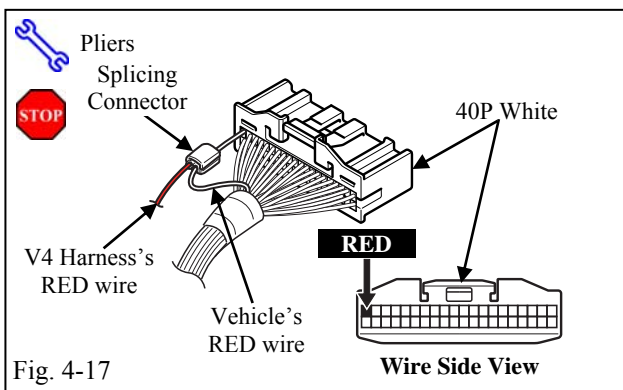
- (s) Use 1 Wire Tie, secure the V4 Harness's Red Wire to the Vehicle Harness on the right side of the Driver side J/B. (Fig. 4-14)



- (t) Route the V4 Harness's RED Wire to upward into the Meter area. (Fig. 4-15)



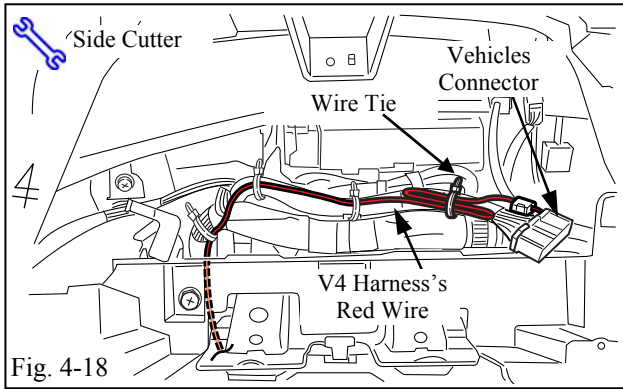
- (u) Secure the V4's Red Wire to the Vehicle Harness with 3 Wire Ties in the Meter area. (Fig. 4-16)



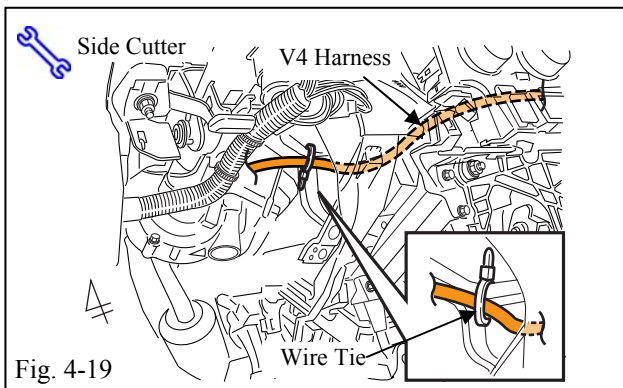
- (v) Locate the Vehicle Harness's White 40P Connector in the Meter area. (Fig. 4-17)
- (w) Attach the V4 Harness's Red Wire with 1 Splicing Connector as shown. (Fig. 4-17)



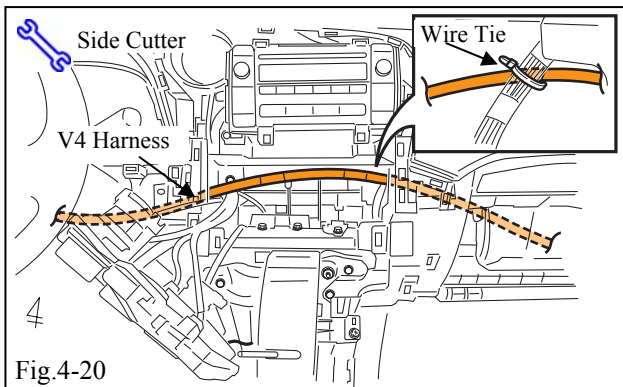
VERIFY: That the Wire is spliced properly.



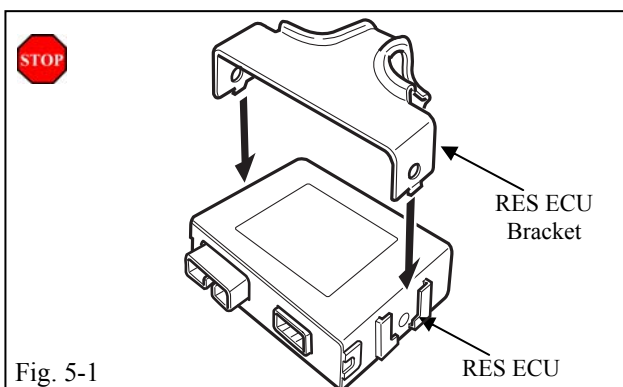
- (x) Secure the excess Red Wire to the Vehicle Harness with 1 Wire Tie. (Fig. 4-18)




- (y) Route the V4 Harness toward Passenger's side through the Vehicle's Brace. (Fig. 4-19)
- (z) Secure the V4 Harness with 1 Wire Tie to the Vehicle's Brace. (Fig. 4-19)

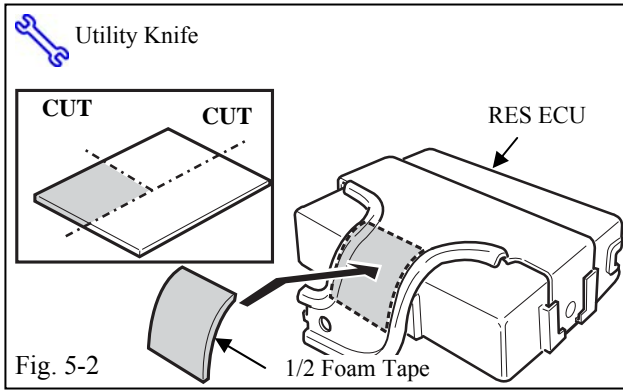


- (aa) Secure the V4 Harness to the Vehicle Harness with 1 Wire Tie in Passenger area. (Fig. 4-20)

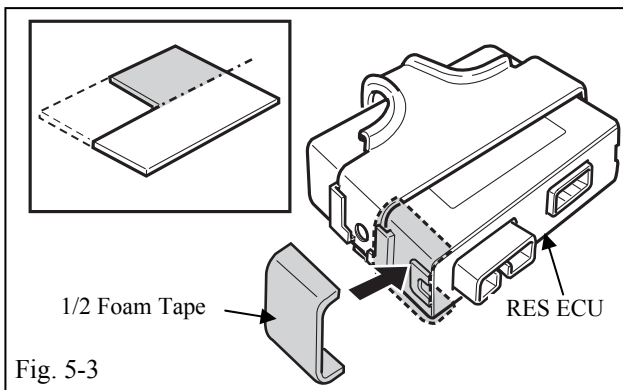


5. RES ECU Preparation and Installation.

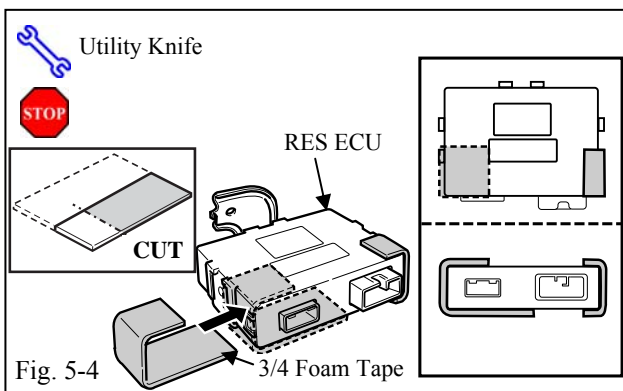
- (a) Install the RES ECU Bracket into the indicated Bracket Slots of the RES ECU. (Fig. 5-1)
-  (1) Ensure the Bracket is firmly attached to the ECU.



- (b) Cut the Foam Tape into 2 pieces.
- (c) Use 1/2 of 1 Foam Tape, attach it to the RES ECU Bracket. (Fig. 5-2)



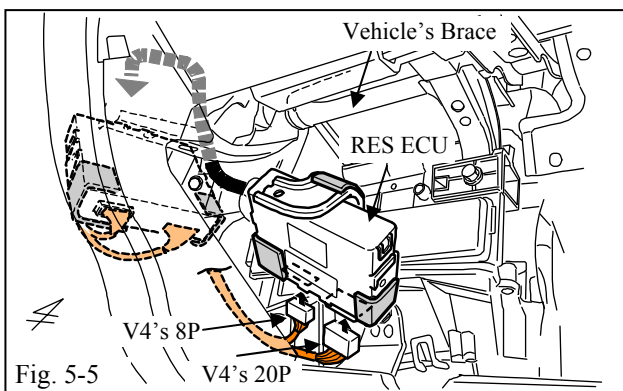
- (d) Using the other 1/2 Foam Tape, attach that to the RES ECU. (Fig. 5-3)



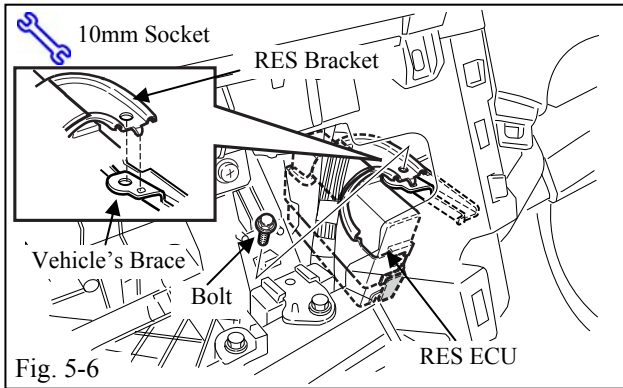
- (e) Apply 3/4 Foam Tape to the RES ECU as shown. (Fig. 5-4)



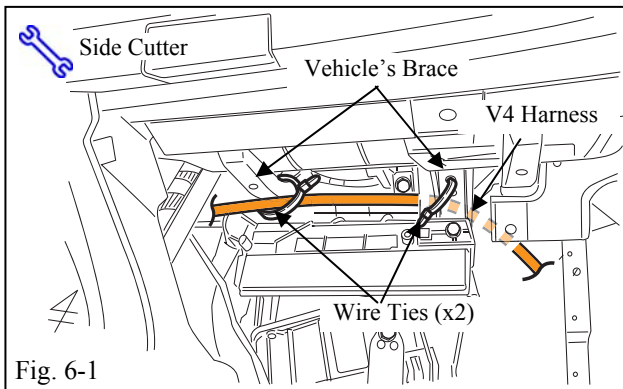
- (1) Don't discard the 1/4 Foam Tape remaining.



- (f) Connect the V4 Harness's 8P and 20P Connectors into the RES ECU. (Fig. 5-5)
- (g) Place the RES ECU behind the Vehicle's Brace in the Passenger's side area as shown. (Fig. 5-5)

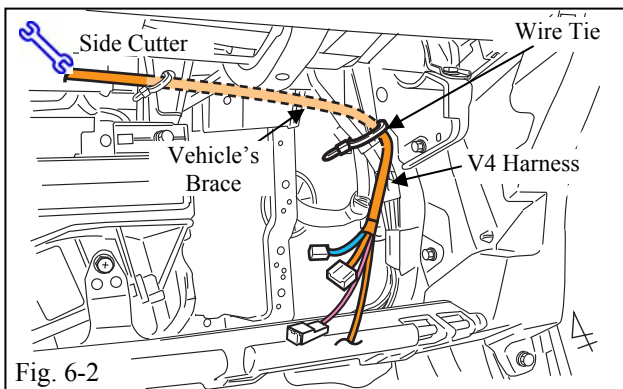


- (h) Using 1 Bolt from the kit, install the RES Bracket on the Vehicle's Brace. (Fig. 5-6)
 - (1) Make sure that the pin seats properly.

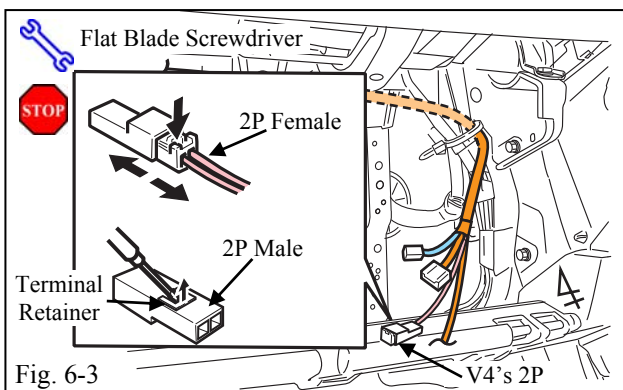


6. V4 Harness installation. (Continued)

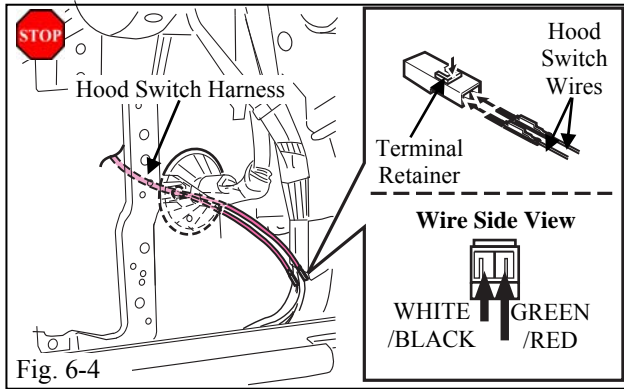
- (a) Route and secure the V4 Harness with 2 Wire Ties as shown. (Fig. 6-1)



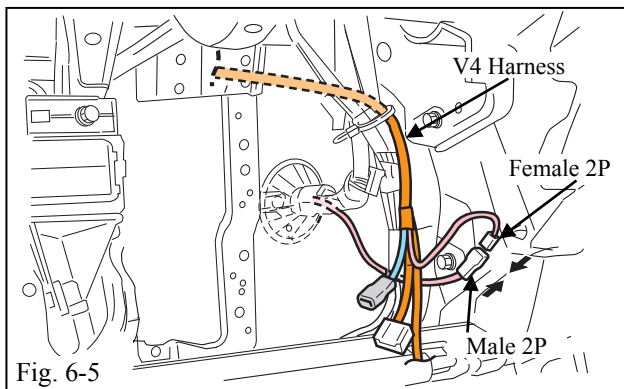
- (b) Secure the V4 Harness to the Vehicle Harness with 1 Wire Tie. (Fig. 6-2)



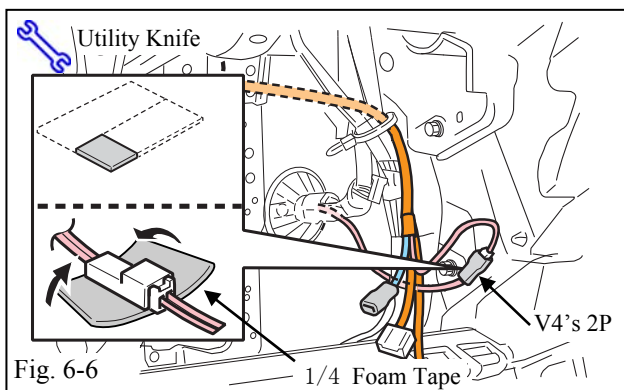
- (c) Disconnect the White 2P Male Connector Plugged into the V4 Harness. (Fig. 6-3)
- (d) Using a Jeweler's Flat Blade Screwdriver, release the Terminal Retainer on the back of the empty 2P Connector. (Fig. 6-3)
 - (1) Do not pull out the retainer.



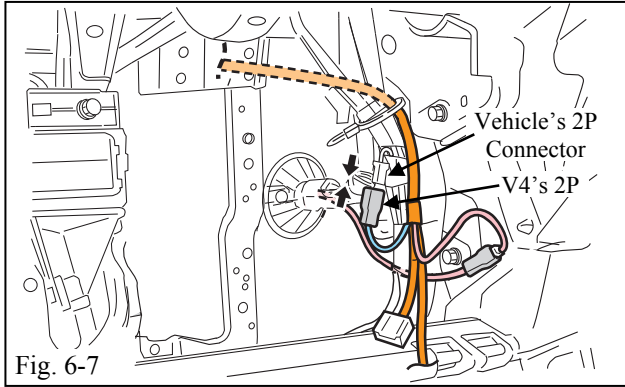
- (e) Locate the Hood Switch Harness in the Glove Box area. (Fig. 6-4)
- (f) Insert the Terminal at the end of the Hood Switch Harness's GREEN/RED Wire into empty 2P Connector's right side opening. (Fig. 6-4)
 - (1) Turn the connector so the wires face you and the Terminal Retainer is on top.
 - (2) Verify the correct wire is chosen.
- (g) Insert the Terminal at the end of the Hood Switch Harness's WHITE/BLACK Wire into empty 2P Connector's left side opening. (Fig. 6-4)
 - (1) Turn the connector so the wires face you and the Terminal Retainer is on top.
 - (2) Verify the correct wire is chosen.
- (h) Close the retainer.(Fig. 6-4)
 - (1) The Terminals should not come out when pulled lightly. If they come out push them in further.



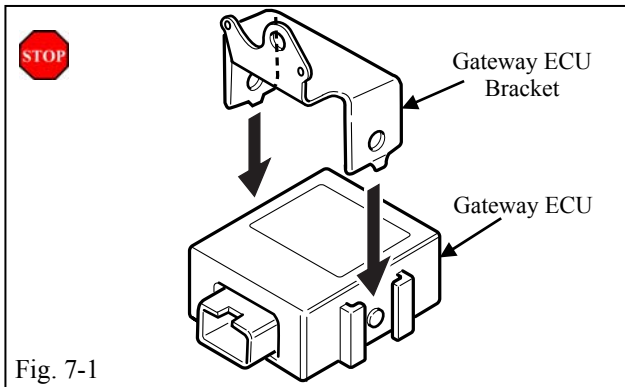
- (i) Re-connect the 2P Connectors. (Fig. 6-5)



- (j) Using the remaining 1/4 of Foam Tape, wrap the 2P Connectors. (Fig. 6-6)

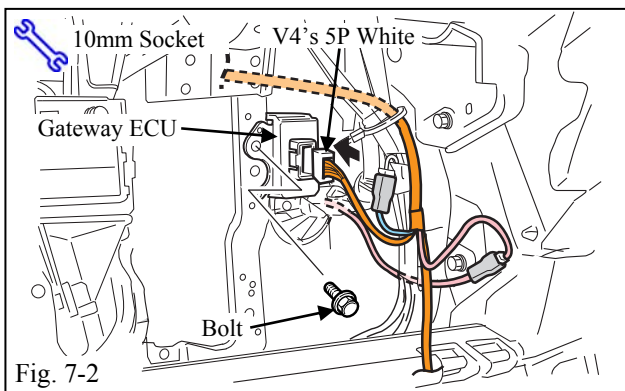


- (k) Locate the Vehicle Pre-wire White 2P Connector. (Fig. 6-7)
- (l) Connect the V4 Harness's White 2P Connector to the Vehicle's 2P Pre-wire White 2P Connector. (Fig. 6-7)

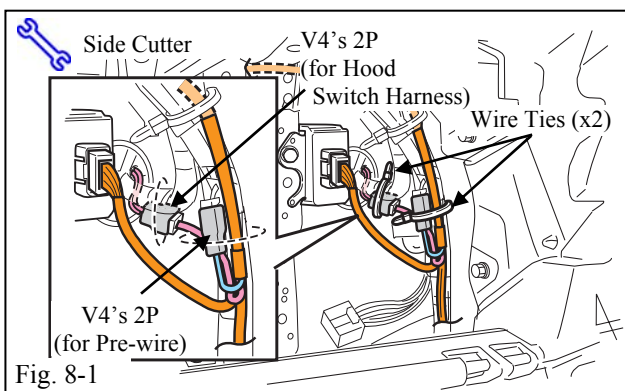


7. Gateway ECU Preparation and Installation.

- (a) Install the Gateway ECU Bracket into the indicated Bracket Slots on the Gateway ECU. (Fig. 7-1)
 - (1) Ensure the Bracket is firmly attached to the ECU.

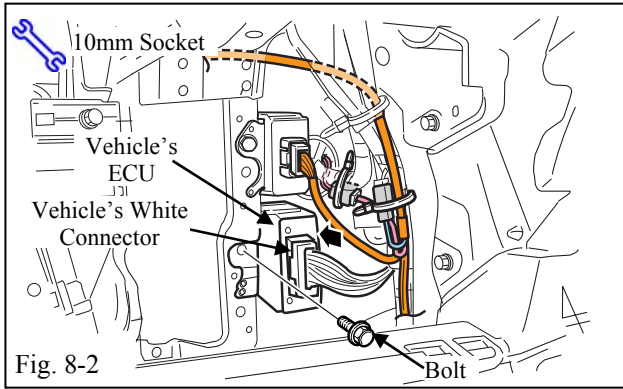


- (b) Using 1 Bolt from the kit, install the Gateway ECU to the Vehicle's Brace. (Fig. 7-2)
 - (1) Make sure that the Bracket Pin seats properly.
- (c) Route the V4 Harness's White 5P Connector behind the Vehicle's Pre-wire Connection, and plug into the Gateway ECU. (Fig. 7-2)

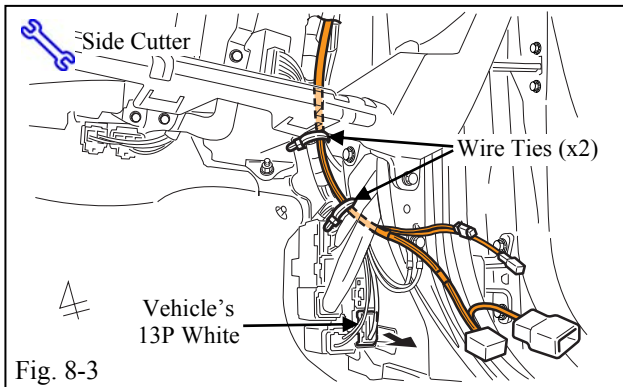


8. V4 Harness Installation (Continued).

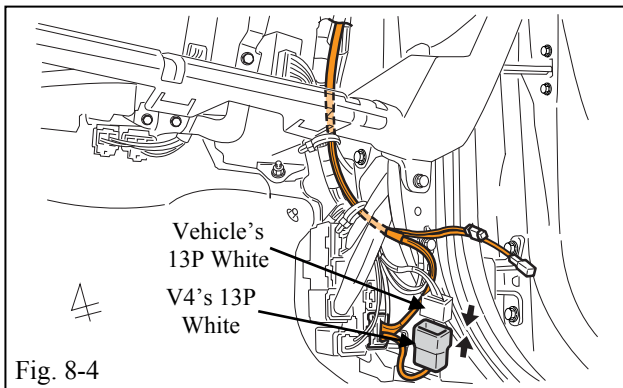
- (a) Secure the Pre-wire Connectors, and the Hood Switch Harness's Connector to the Vehicle's Harness with 2 Wire Ties. (Fig. 8-1)
- (b) Route the V4 Harness toward the Passengers Cowl area. (Fig. 8-1)



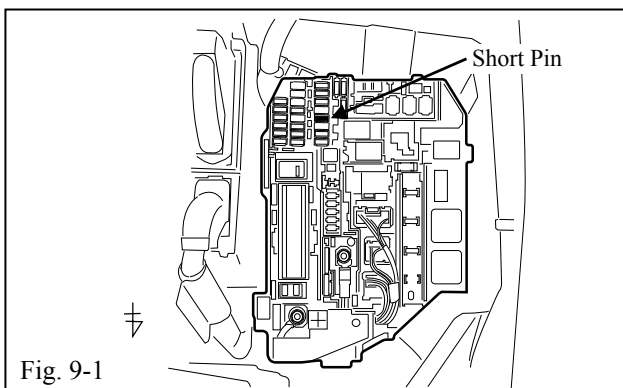
- (c) Reinstall the Vehicle's ECU.
(Fig. 8-2)
- (d) Connect the Vehicle's White Connector to the Vehicle's ECU. (Fig. 8-2)
 - (1) Verify secure connection.



- (e) Route the V4 Harness as shown securing it to the Vehicle Harness with 2 Wire Ties.
(Fig. 8-3)
- (f) Locate and disconnect the Vehicle's White 13P Connector from the Passenger Side Cowl area. (Fig. 8-3)

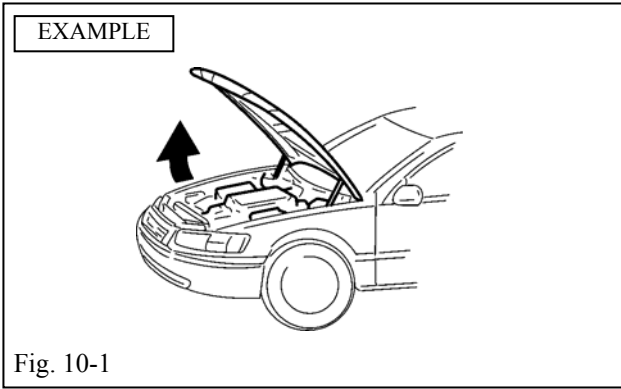


- (g) Plug in the V4 Harness's White 13P Connectors between the Passenger Side Connector Block and the Vehicle's White 13P Connector. (Fig. 8-4)



9. Partial Reassembly

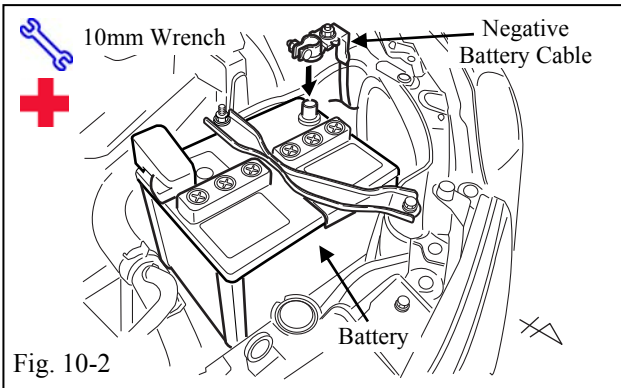
- (a) Reassemble the Vehicle, except for the Passenger's Cowl Cover, and the Step Cover.
 - (1) Reconnect any disconnected connectors.
- (b) Verify that the Short Pin is installed.
(Fig. 9-1)
 - (1) If not, install the Short Pin.



10. Registration (Step a-bb)

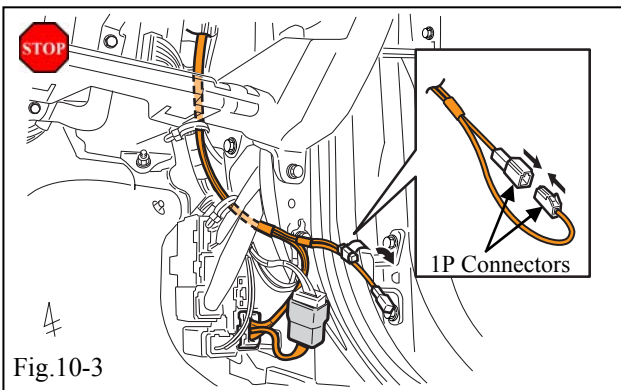
**REFER TO ADDENDUM I FOR
ADDITIONAL INFORMATION.**

(a) Open the Hood. (Fig. 10-1)



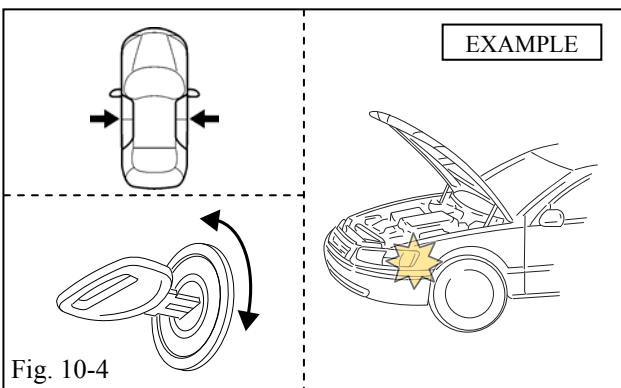
(b) Temporarily reconnect the Vehicle's
Negative Battery Cable. (Fig. 10-2)

+ **CAUTION:** Do not touch the positive terminal.



(c) Locate and disconnect the Tape securing the
V4 Harness's White 1P Connectors in the
Passengers Side Cowl area and connect
them. (Fig. 10-3)

STOP **ONCE CONNECTED YOU WILL HAVE
10 MINUTES TO COMPLETE STEPS d-x.**



(d) Close all Doors. (Fig. 10-4)

(1) Do not close the Hood.

(e) Insert the Key into the Ignition. (Fig. 10-4)

(f) Turn it from "OFF" to "ON" 5 times.

(Fig. 10-4)

(1) The Hazard Lights flash 1 time.

(g) Turn the Key to the "OFF" position.

(Fig. 10-4)

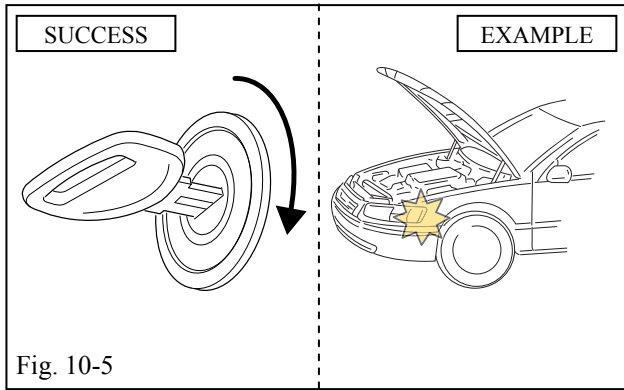


Fig. 10-5

- (h) Start the Engine. (Fig. 10-5)
- (i) After 10 seconds stop the Engine (Fig. 10-5)
 - (1) The Hazard Lights flash 1 time.

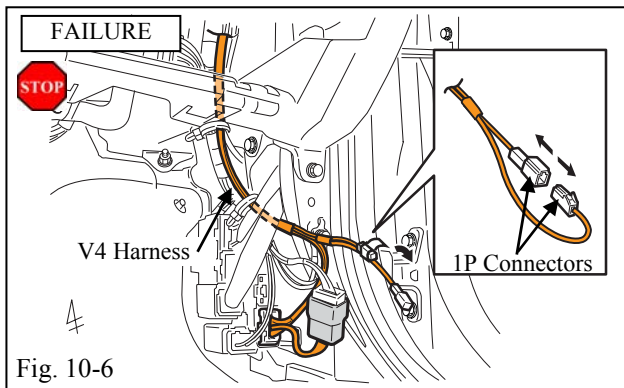


Fig. 10-6



If this procedure failed, the Hazard Lights flash 2 times.

- (j) Disconnect the V4 Harness's White 1P Connectors in the Passengers Side Cowl area. (Fig. 10-6)

Start again from step c.

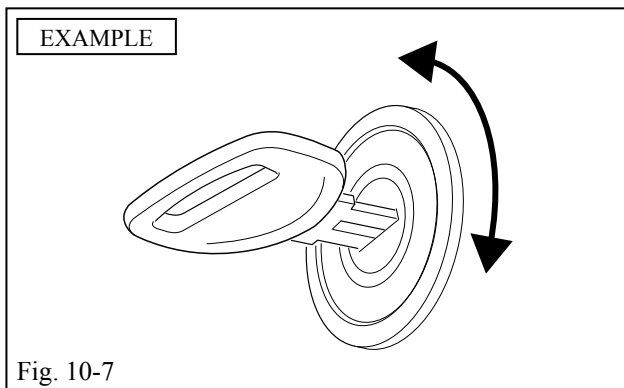


Fig. 10-7

- (k) Insert the Key into the Ignition and turn it to the "ON" position. (Fig. 10-7)
- (l) Turn the Key to the "OFF" position and remove it from the Ignition. (Fig. 10-7)

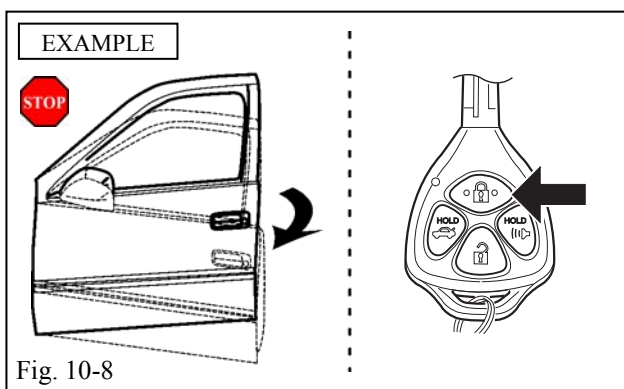
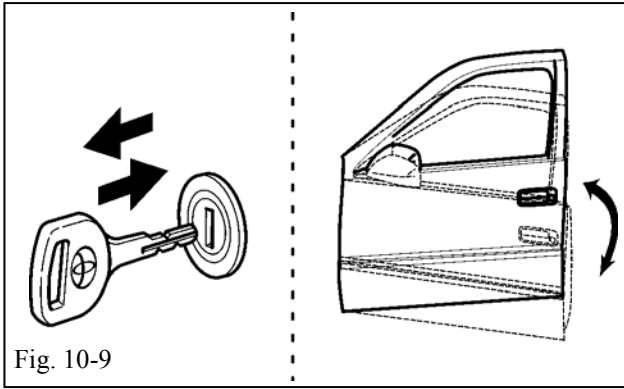


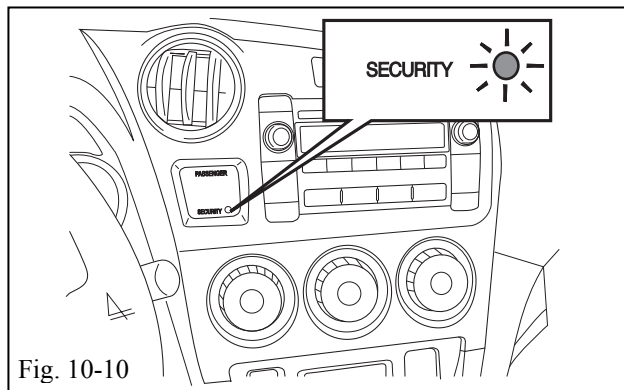
Fig. 10-8



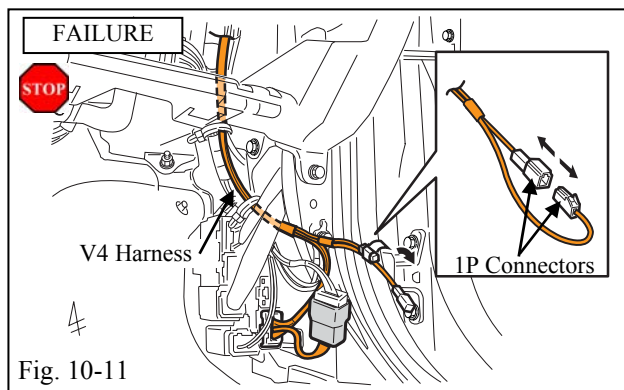
- (m) Open the Driver's Door. (Fig. 10-8) ONCE OPEN, YOU HAVE 20 SECONDS TO COMPLETE STEPS m-o.
- (n) Using the Remote, press the Lock Button twice within 2 seconds. (Fig. 10-8)
- (o) Press and hold the Lock Button for 4 seconds. (Fig. 10-8)



- (p) Insert the Key into the Ignition. (Fig. 10-9)
- (q) Remove and insert the Key into the Ignition 6 times. (Fig. 10-9)
- (r) Close the Driver's Door. (Fig. 10-9)
- (s) Open, and close the Driver's Door 7 times. (Fig. 10-9)
 - (1) Complete this step within 35 seconds.

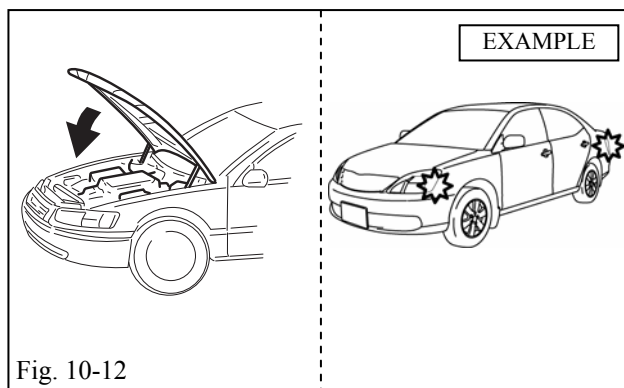


- (t) If registration was successful, the Security LED will light up for 1 second, and turn off. (Fig. 10-10)
- (u) After the light is off for 1 second, the LED will light up again and stay on until the Key is removed from the Ignition. (Fig. 10-10)

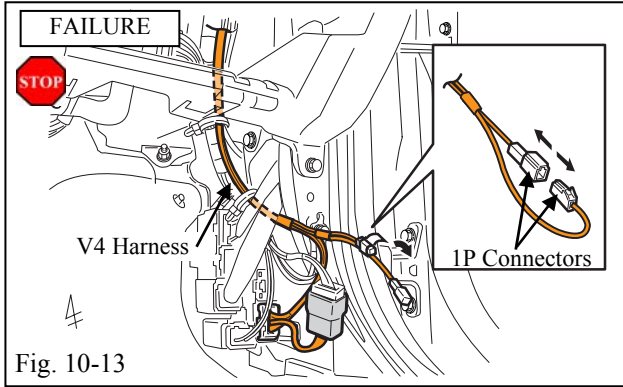


- If this procedure failed, registration has failed.
- (v) Disconnect the V4 harness's White 1P Connectors from the Passenger Side Cowl area. (Fig. 10-11)

Start again from step c.



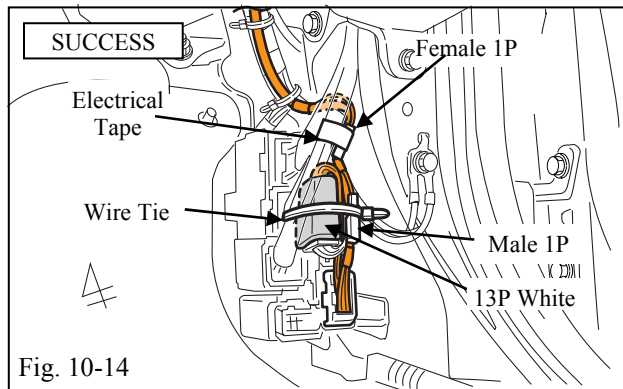
- (w) Remove the Key from the Ignition.
- (x) Close the Hood. (Fig. 10-12)
 - (1) The Hazard Lights flash twice. Registration is complete.



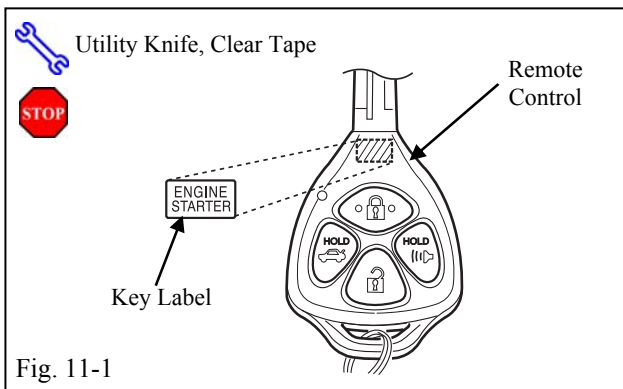
If this procedure failed, the Hazard Lights flash 3 times.

- (y) Disconnect the V4 Harness's White 1P Connector in the Passenger's Side Cowl area. (Fig. 10-13)

Start again from Step c



- (z) Disconnect the V4 Harness's White 1P Connectors. (Fig. 10-14)
- (aa) Secure the V4 Harness's Female 1P Connector and V4 Harness to the Vehicle's Harness with Electrical Tape as shown. (Fig. 10-14)
- (bb) Secure the V4 Harness's Male 1P Connector and the 13P Connectors to the Vehicle Harness with 1 Wire Tie. (Fig. 10-14)



11. Tags and Label Installation.



- For US Vehicles use the English Tags and Labels and discard the Spanish Tags and Labels.



- For Mexico Vehicles use the Spanish Tag and Labels and discard the English Tags and Labels.

- (a) Remove 2 of the Remote Controls from their protective bag. (Fig. 11-1)

(1) Use a utility knife, to cut a slit in each bag.

- (b) Using 3M™ Prep Sol-70 and Cleaning Method, clean the area indicated on the Remote Controls. (Fig. 11-1)

- (c) Attach the Key Labels to the Remote Controls as shown. (Fig. 11-1)

(1) Use a piece of the clean adhesive tape to lift the labels off their protective backing.



CAUTION: Do not touch the adhesive surface.

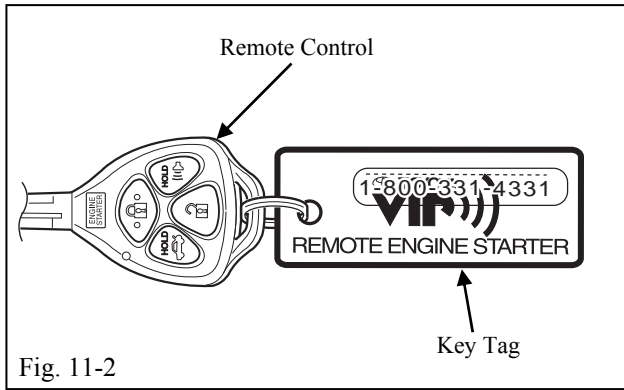


Fig. 11-2

(d) Attach the Remote Engine Starter Tags to the Remote Controls. (Fig. 11-2)

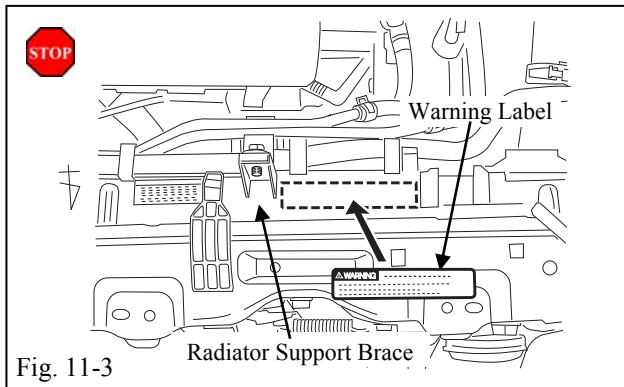


Fig. 11-3

(e) Using 3M™ Prep Sol-70 and Cleaning Method, clean the area indicated on the Radiator Support Brace. (Fig. 11-3)

(f) Attach the Warning Label to the Radiator Support Brace as shown. (Fig. 11-3)



CAUTION: Do not touch the adhesive surface.

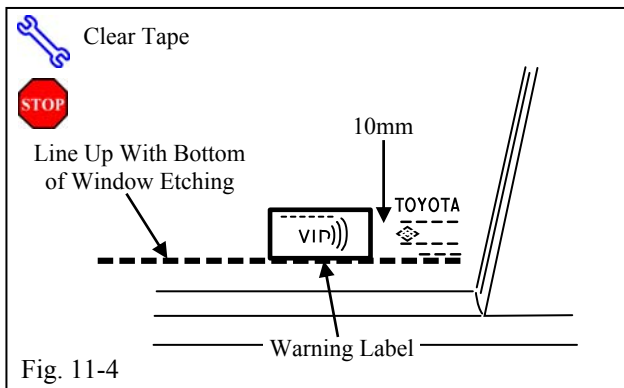


Fig. 11-4

(g) Using Household Glass Cleaner, clean the inside of the Front Door Windows. (Fig. 11-4)

(h) Place the Window Labels on the inside of the Front Door Windows as shown. (Fig. 11-4)

(1) Use a piece of clean adhesive tape to lift the Labels off their protective backing.



CAUTION: Do not touch the adhesive surface.

(2) Line up the Labels properly and place on the Glass. Do not attempt to reposition the Labels once they are placed.

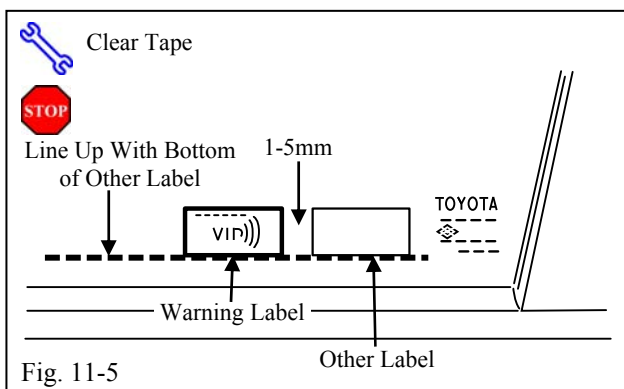
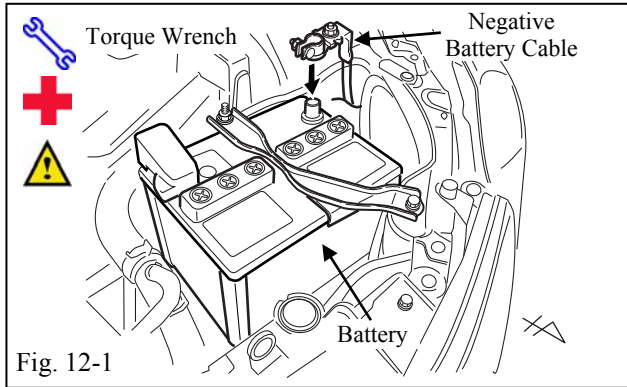



Fig. 11-5



NOTE: If Labels are being installed with other Window Label's align them as shown in Fig. 11-5.



12. Completing the Installation.

- (a) Complete the reassembly of the vehicle.
 - (1) Reconnect any disconnected connectors.
 - (2) Verify the panels fit together properly with no uneven gaps between them.
 - (b) Position the Negative Battery Cable at the original factory position. (Fig. 12-1)
 - (1) Tighten the Nut to 36 in•lbf (4.07 N•m)
-  **CAUTION:** Do not touch the positive terminal.
- (c) Clean up and remove any trash.
 - (d) Place the Owner's Manual, left in its protective bag, in the Glove Box.
 - (e) Reset the Power Windows.
 - (1) Turn Ignition Key to the "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 minimum of 1 additional second.
 - (f) Reset the Power Moon Roof. (if equipped)
 - (1) Turn Ignition Key into the "ON" position.
 - (2) Open the Moon Roof halfway.
 - (3) Push and hold the Moon Roof Switch to close until the Moon Roof closes.
 - (4) Continue to hold the switch for a minimum of 1 second.

Accessory Function Checks

Close the hood, place the shift lever in the “P” (parking) position, set the parking brake, remove the key from the ignition, close all doors, and exit the vehicle.

	Procedure	Look for:
1	Press the remote control's lock button twice within 2 seconds, then press and hold the lock button 3 seconds.	The hazard lights flash after 3 seconds. The engine starts. The hazard lights flash repeatedly for 20 seconds.
2	Press the remote control's unlock button.	The engine stops. The hazard lights flash twice.
3	Start the Vehicle again using the remote. With the engine running, press and hold the remote control's lock button 2 seconds.	Refer to Step 1. The engine stops. The hazard lights flash once.
4	Start the Vehicle again using the remote. Unlock the doors with the key.	Refer to Step 1. The engine stops. The hazard lights flash once.

Enter the vehicle and close all doors.

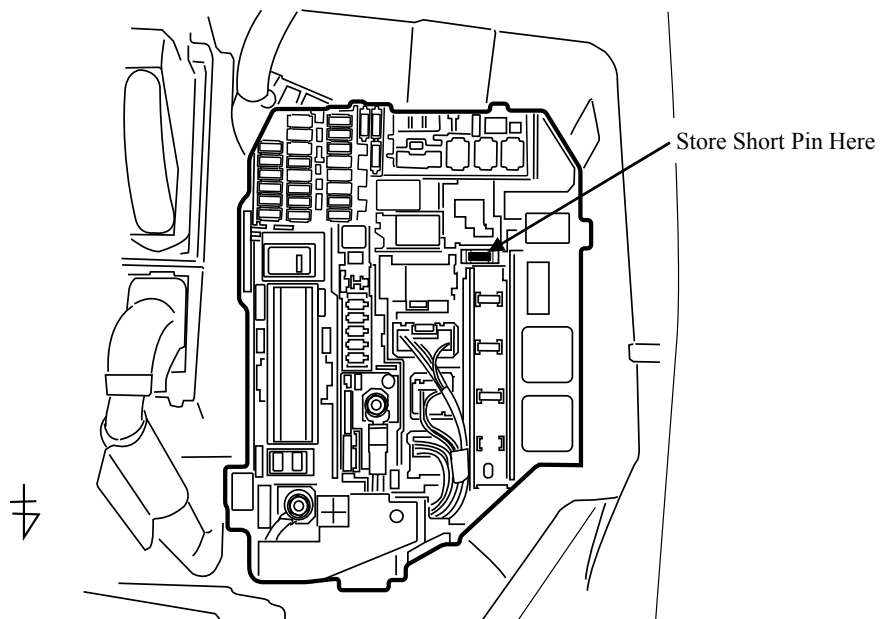
5	Start the Vehicle again using the remote. With the engine running, manually unlock any door with the inside lock switch.	Refer to Step 1. The engine stops. The hazard lights flash once. The security alarm triggers. (if equipped)
6	Start the Vehicle again using the remote. With the engine running, push down on the accelerator until the engine speed exceeds 3000 RPMs.	Refer to Step 1. The engine stops. The hazard lights flash once.
7	Start the Vehicle again using the remote. With the engine running, push down on the foot brake.	Refer to Step 1. The engine stops. The hazard lights flash once.
8	Start the Vehicle again using the remote. With the engine running, insert the key into the ignition switch.	Refer to Step 1. The engine stops. The hazard lights flash once
9	Move the shift lever out of “P” (Park). Attempt to start the Vehicle using the remote.	The engine does not start.
10	Start the Vehicle again using the remote. With the engine running, pull the hood release handle. If engine does not stop immediately, have an assistant open the hood and verify that the engine stops.	Refer to Step 1. The engine stops. The hazard lights flash once. The security alarm triggers. (if equipped)

Vehicle Function Check

	Function		Function
<input type="checkbox"/>	Head Light	<input type="checkbox"/>	ABS Light (if equipped) <i>If the warning light remains on, it may indicate a system malfunction.</i>
<input type="checkbox"/>	High Beams	<input type="checkbox"/>	Rear Wiper/Washer (if equipped)
<input type="checkbox"/>	Turn Signal Lights	<input type="checkbox"/>	Clock (if equipped)
<input type="checkbox"/>	Tail Lights	<input type="checkbox"/>	Accessory Power Socket (if equipped)
<input type="checkbox"/>	Stop Lights	<input type="checkbox"/>	Starter
<input type="checkbox"/>	Backup Lights	<input type="checkbox"/>	Audio/Video (if equipped)
<input type="checkbox"/>	Hazard Lights	<input type="checkbox"/>	Power Sliding Door (if equipped)
<input type="checkbox"/>	Marker Lights	<input type="checkbox"/>	Convenience Memory Settings (if equipped)
<input type="checkbox"/>	Dome/Courtesy Lights	<input type="checkbox"/>	Heated Seats (if equipped)
<input type="checkbox"/>	Panel/Switch Illumination	<input type="checkbox"/>	Massage Seats (if equipped)
<input type="checkbox"/>	Accessory Controls/Illumination (if equipped)	<input type="checkbox"/>	Rear Window Defogger (if equipped)
<input type="checkbox"/>	Key Sensor Buzzer	<input type="checkbox"/>	Power Side Mirrors (if equipped)
<input type="checkbox"/>	Fog Lights (if equipped)	<input type="checkbox"/>	Side Mirror Defogger (if equipped)
<input type="checkbox"/>	Daytime Running Lights (if equipped)	<input type="checkbox"/>	Front Windshield Defogger (if equipped)
<input type="checkbox"/>	Trunk/Tailgate/Bed Lights (if equipped)	<input type="checkbox"/>	Navigation System (if equipped)
<input type="checkbox"/>	Glove Box Light (if equipped)	<input type="checkbox"/>	Rear Sunshade (if equipped)
<input type="checkbox"/>	Cruise Control Light (if equipped)	<input type="checkbox"/>	Steering Wheel Audio Control (if equipped)
<input type="checkbox"/>	Seat Belt Warning Light <i>If the warning light remains on, it may indicate a system malfunction.</i>	<input type="checkbox"/>	Steering Wheel Column Adjusts Without Interference

	Function		Function
<input type="checkbox"/>	Air Bag Warning Light <i>If the warning light remains on, it may indicate a system malfunction.</i>	<input type="checkbox"/>	Lamp Failure Sensor <i>If the warning light remains on, it may indicate a system malfunction.</i>
<input type="checkbox"/>	Track/Skid Control Light (if equipped) <i>If the warning light remains on, it may indicate a system malfunction.</i>	<input type="checkbox"/>	Front Wiper/Washer
<input type="checkbox"/>	HVAC	<input type="checkbox"/>	Hood Latch Release
<input type="checkbox"/>	Power Locks (if equipped)	<input type="checkbox"/>	Passenger Air Bag Switch (if equipped)
<input type="checkbox"/>	Power Windows (if equipped)	<input type="checkbox"/>	Rollover Side Curtain Air Bag Switch (RSCA) (if equipped)
<input type="checkbox"/>	Power Seats (if equipped)	<input type="checkbox"/>	Tire Pressure Monitoring System (TPMS). <i>Prior to TPMS activation and Pre-delivery Service (PDS) of the Vehicle the TPMS light will blink when IG is turned on.</i> <i>After TPMS activation and PDS of the Vehicle the TPMS light will illuminate for a few seconds and go off when IG is turned on.</i>
<input type="checkbox"/>	Horn		
<input type="checkbox"/>	Gauges		
<input type="checkbox"/>	Power Moon Roof (if equipped)		

Remove the short pin after Function Check.
Check with your port/dealer to find out if this step is needed.



REMOTE ENGINE STARTER (RES) REGISTRATION PROCEDURE
 -----For vehicles w/o Smart Entry and w/Immobilizer-----

1. OPEN the Hood
2. VERIFY that the Short Pin is in the Appropriate location (*disconnect the Battery if you need to move the Short Pin*)
3. Temporarily CONNECT the Negative Battery Terminal
4. OPEN the Passenger Front Door
5. LOCATE the 1P RES Diagnostic Connectors in the Right Kick Panel.
6. CONNECT the 1P RES Diagnostic Connectors together
7. CLOSE all Doors (LEAVE THE HOOD OPEN)
8. INSERT a MASTER (Black) Immobilizer Key into the Ignition Switch (*use this key for the entire process*)
9. TURN the Key from LOCK to ON five (5) times, ending in the ON position
10. LOOK for the Hazard Lights to flash ONCE
11. TURN the Ignition Switch to the OFF position
12. START the Engine and allow to idle for at least 10 seconds
13. TURN the Ignition Switch to the OFF position.
14. LOOK for the Hazard lights to flash ONCE. *If they do not flash or they flash TWICE, disconnect the 1P RES Diagnostic Connectors and start over from Step 6.*
15. TURN the Key to the ON position and back to the OFF position
16. REMOVE the Key from the Ignition Switch
17. OPEN the Driver's Door
18. Using a Remote Control, PRESS the LOCK button TWICE and then a THIRD time and HOLD it for 4 seconds
19. INSERT the key into the Ignition Switch.
20. REMOVE and INSERT the Key 6 times.
21. CLOSE the Driver's Door
22. OPEN and CLOSE the Driver's Door seven (7) times, ending in the CLOSED position. THIS STEP NEEDS TO BE COMPLETED WITHIN 35 SECONDS OF INSERTING THE KEY INTO THE IGNITION (step 21)
23. LOOK for the IMMOBILIZER LED to turn on for one (1) second then go OFF
24. WAIT one (1) second
25. LOOK for the IMMOBILIZER LED to turn ON again and stay on
26. REMOVE the Ignition Key.
27. LOOK for the IMMOBILIZER LED to turn OFF
28. CLOSE the Hood
29. LOOK for the Hazard lights to flash TWICE to confirm Registration. *If the Hazard lights flash THREE times Registration was NOT successful (Start over from step 6)*
30. UNPLUG the 1P RES Diagnostic Connector.

TIPS FOR REMOTE ENGINE STARTER (RES) REGISTRATION PROCEDURE

1. SLOW DOWN this is the best thing you can do. The procedure is difficult and long but there is plenty of time to do everything. When turning the key, inserting the key or pressing the remote make your action rhythmic like a clock. Slow and deliberate.
2. READ these instructions and the instructions supplied in the *Vehicles V4 Installation Instructions* completely before attempting Registration.
3. ASK someone else to read these steps to you while you perform the procedure. This will help you remember what needs to be done next without having to look back at the Instructions.
4. PROBLEMS if you've failed to Register the Vehicle several times RESET the Vehicle. Start by disconnecting the RES Diagnostic Connectors. Then disconnect the Vehicle Battery. Next turn the Vehicles Ignition Switch to ON and then back to OFF.
 Now TAKE A BREAK let you and the Vehicle de-stress for about 10 minutes. This will allow the RES ECU's to completely RESET and give you a fresh start to try Registration.

