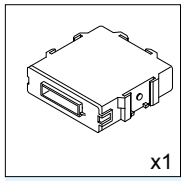
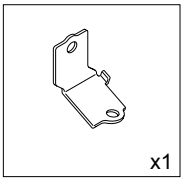
Part #: PT398-47150

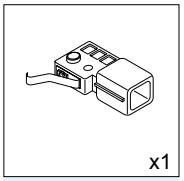
Conflicts:

Kit Contents

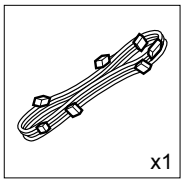
RES ECU


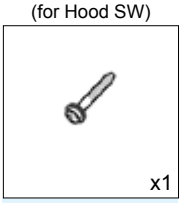
PT398-0T097

RES ECU Bracket


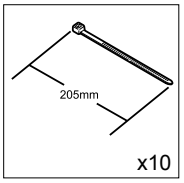
Hood Switch


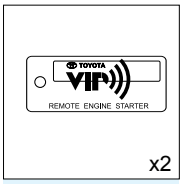
PT398-52080-HS

V4 Harness


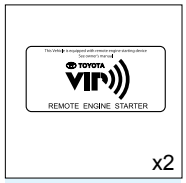
Screw (for Hood SW)


90167-T120A

Wire Tie


Key Tag


PT398-4209E

Window Label


08192-07810

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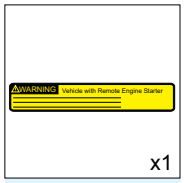
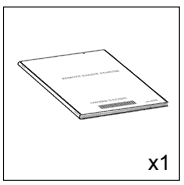


PT398-00070-EL

Owner's Guide


Service Part #'s

Additional Items

(may be required)

Item#	Description

Recommended Sequence of Application

Item#	Description
1	V5 RS3200+
2	V4 RES (Remote Engine Starter)

Recommended Tools

Personal & Vehicle Protection	Description
Safety Glasses	
Safety Gloves	(Optional)
Vehicle Protection	Blankets, Parts Boxes
Special Tools	
Techstream	Use latest version on TIS
1/4" Drive Torque Screwdriver (Req'd for Hood Switch Kit)	Included in the TPMS Tool Kit# 00002-TTPWS Toyota SST# 00002-TTPWS-03, #0 Phillips Hood Switch: 3.1 in•lbf (0.35 N•m)
Installation Tools	
Screwdriver	#2 Phillips, Phillips Jeweler's
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST# 00002-06001-01
Side Cutters	
Torque Wrench	Battery: 48 in•lbf (5.4 N•m), Hood Latch: 70.8 in•lbf (8.0 N•m),
Tape	Clear, Electrical
Socket	10mm, Extension
Pliers	Needle Nose
Special Chemicals	
Cleaner	VDC Approved Cleaner
Glass Cleaner	Household Glass Cleaner

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Legend

Do not proceed until process has been completed.

Follow steps carefully to avoid damaging the Vehicle or Accessory

Use caution to avoid injury.

Used in Figures to call attention to specific tools recommended for the process.

Highlights a change in installation with respect to previous issue.

Indicates that torque is related to safety.

Video available; click to play.

Wire Tie location and number.

Accessory Installation Practice (read before installation)

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.

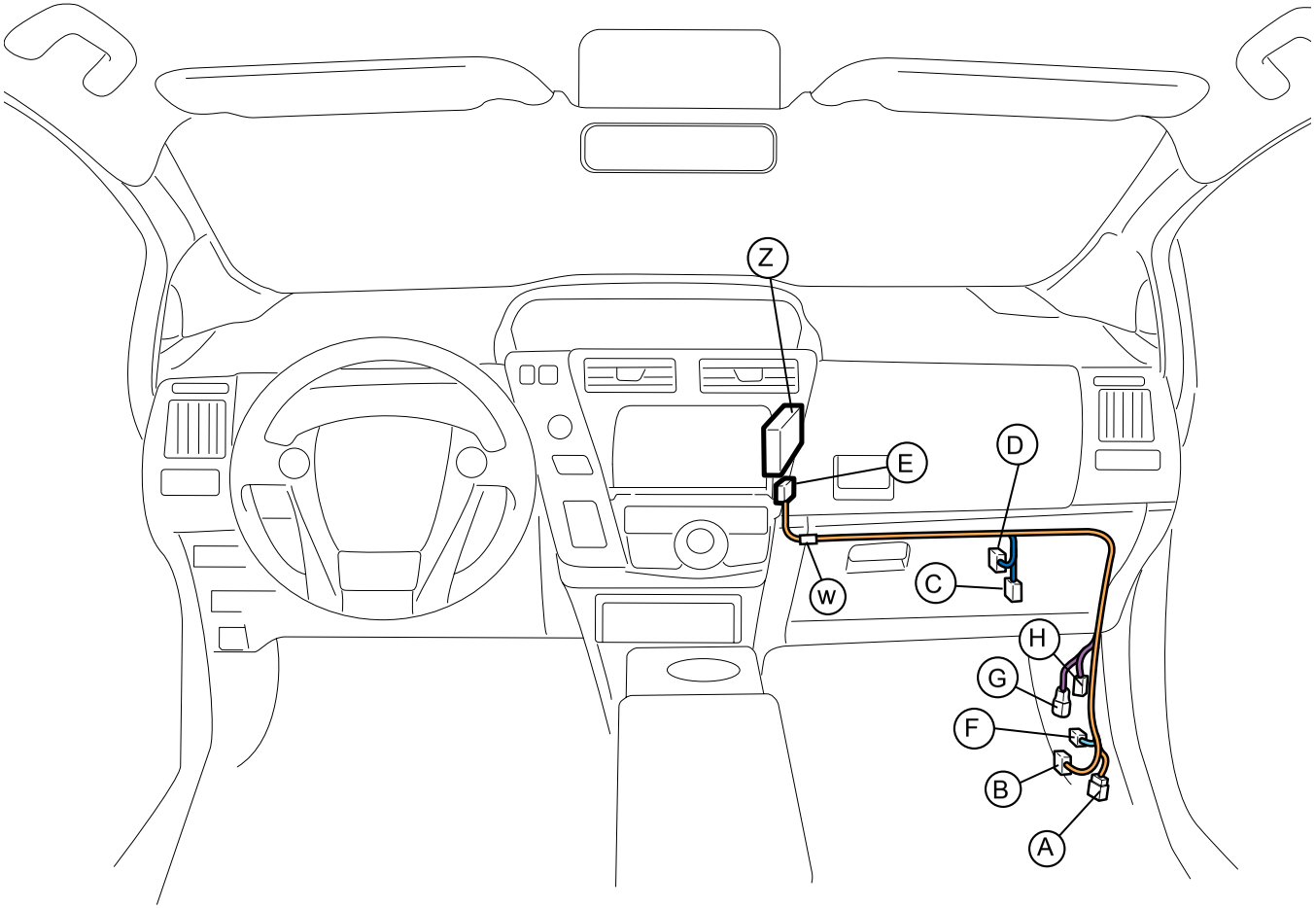
This document covers such items as:

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.)
- Safety (eye protection, checking 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.

TOYOTA PRIUS V RES

Wire Harness Outline* (Vehicle Interior)

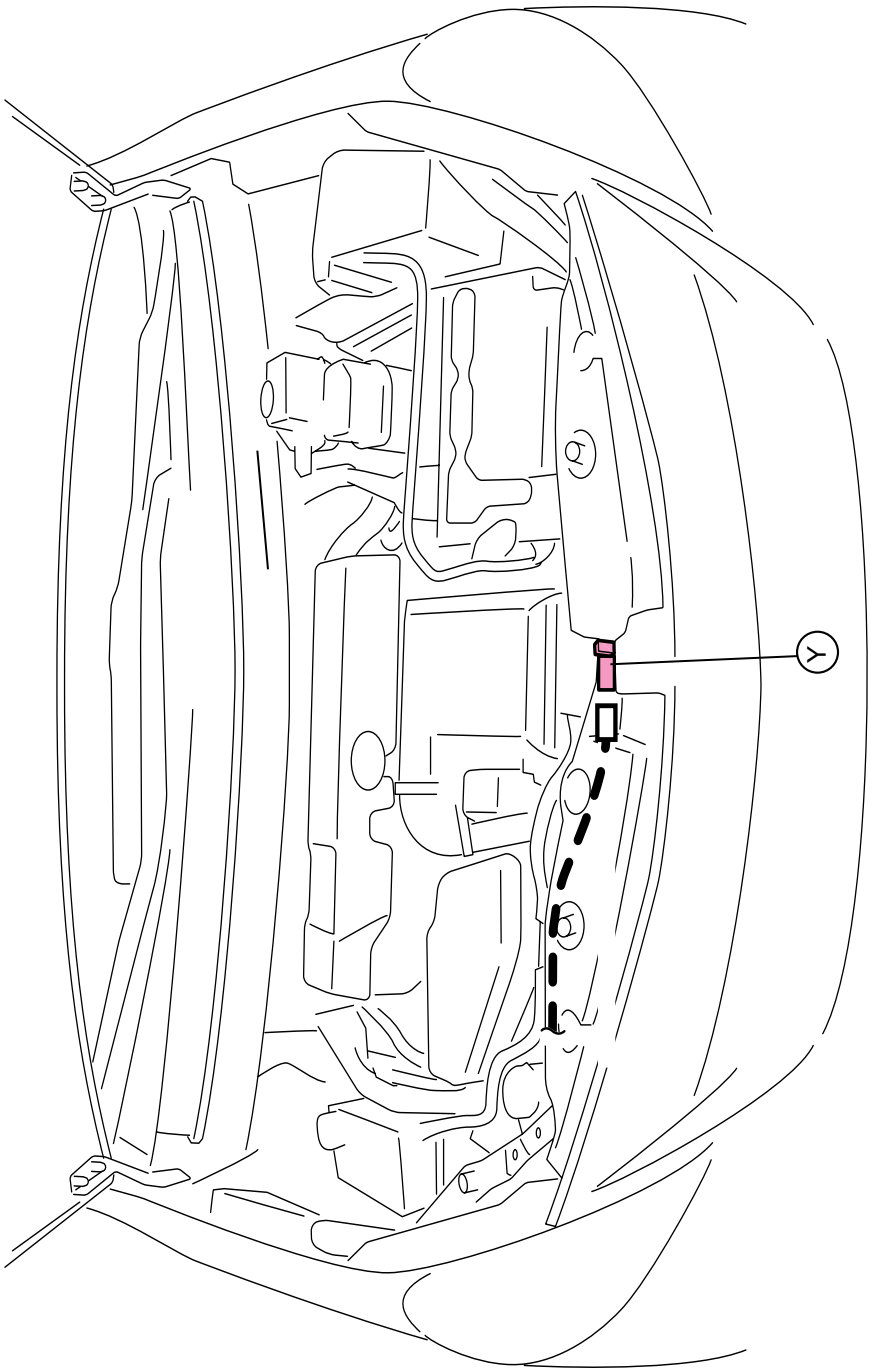


TVIP	Vehicle	Description
A	L4	12P White
B	L4	12P White
C	—	12P White
D	—	12P Black
E	—	24P White (for RES ECU)
F	L79	8P White
G	—	1P White (for Registration)
H	—	1P White (for Registration)
W	—	White Tape Marker
Z	—	RES ECU

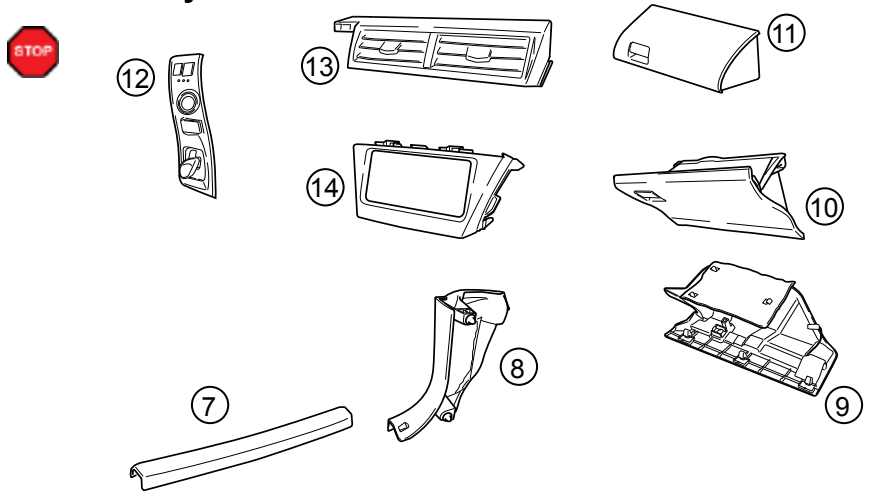
*Color of Harness on Overview corresponds with Colored Tape near Connectors on Harness.

TVIP	Vehicle	Description
Y	A47	2P Black Hood Switch

TOYOTA PRIUS V RES
Wire Harness Outline* (Engine Compartment)

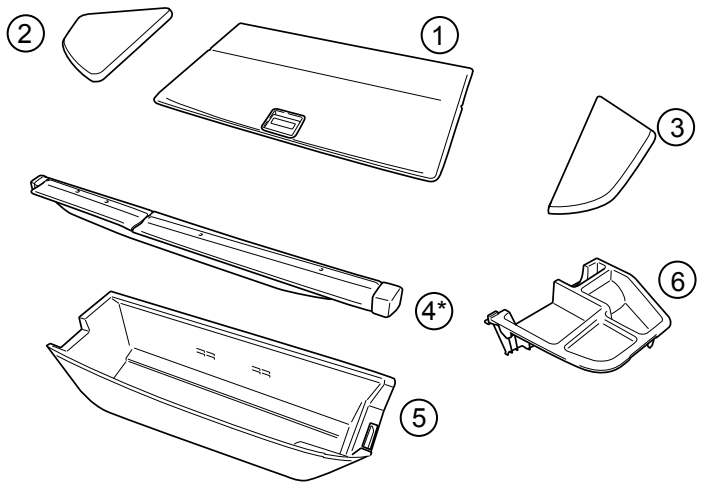


Disassembly Overview



VEHICLE INTERIOR(PASSENGER'S SIDE)

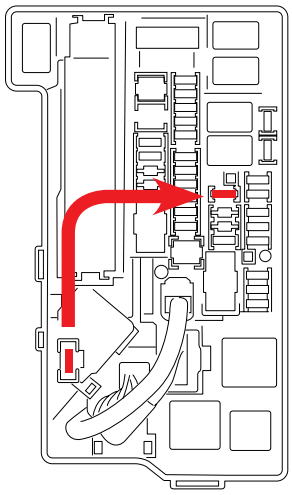
LUGGAGE COMPARTMENT



1	Luggage Board
2	DS Luggage Side Board
3	PS Luggage Side Board
4*	Tonneau Cover (if equipped)
5	Luggage Storage Box
6	PS Luggage Side Storage Box
7	PS Step Cover
8	PS Cowl Cover
9	Glove Box Under Cover
10	Glove Box
11	Upper Glove Box
12	Cluster Side Panel
13	Center Air Conditioner Vent
14	Audio Unit

STOP Disconnect all Corresponding Connectors.

Fig. 1-1



1. Preparation.

a. Place the Vehicle in Park with the Parking Brake set.

b. Verify that the Short Pin is installed.

- If not install now.

Fig. 1-2

c. Remove the Luggage Board.

Fig. 1-3

d. Remove the DS and PS Luggage Side Boards.

Fig. 1-4

e. Remove the Tonneau Cover (if equipped).

Fig. 1-5

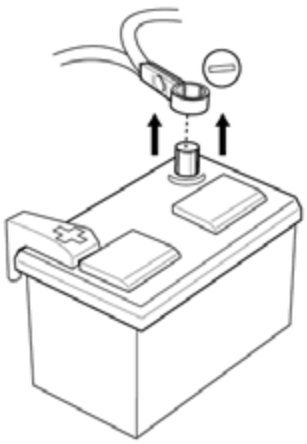
f. Remove the Luggage Storage Box.

Fig. 1-6

g. Remove the PS Luggage Side Storage Box.

10mm Socket

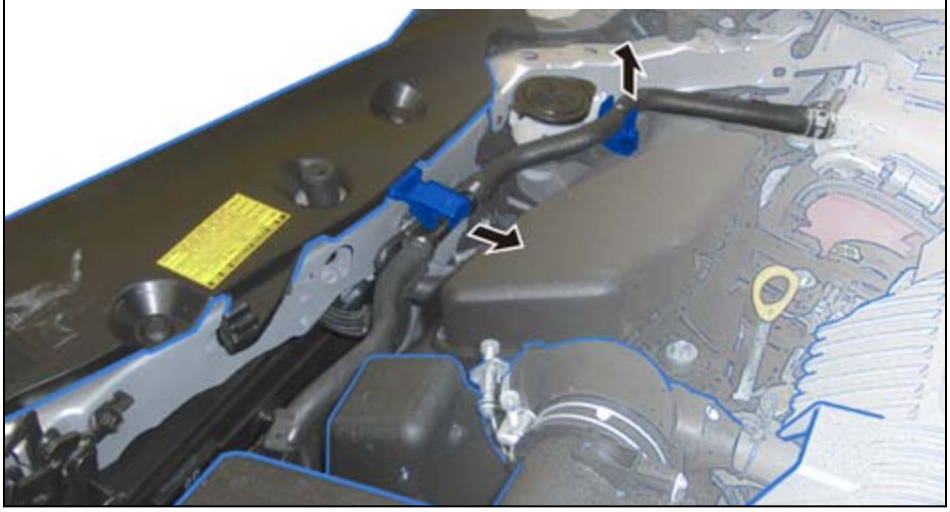
Fig. 1-7



h. Disconnect the Negative Battery Terminal.
   - Note the Battery Cable Position as it will be re-installed in the same position.

CAUTION: Do not touch the Positive Terminal.

Fig. 2-1



2. Hood Switch Installation.

a. Dislodge the Radiator Hose from its Clamps.

Fig. 2-2

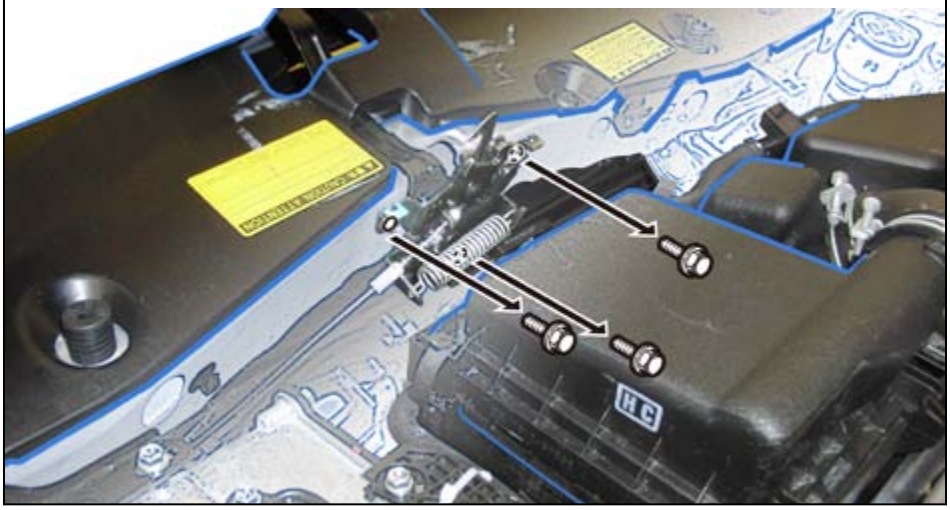
b. Dislodge the Radiator Hose from its Clamps.

Fig. 2-3

c. Move the Radiator Hose downwards to gain access to the Hood Lock Assembly.

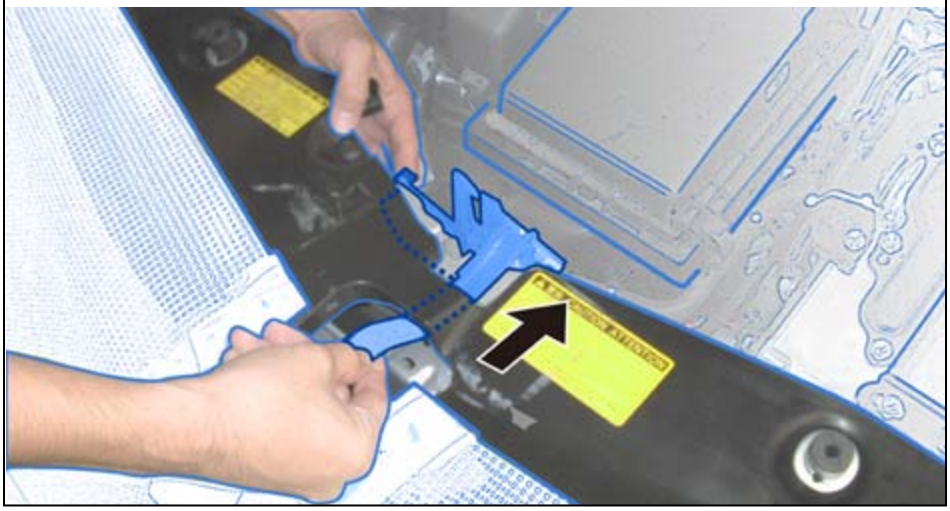
10mm Socket

Fig. 2-4



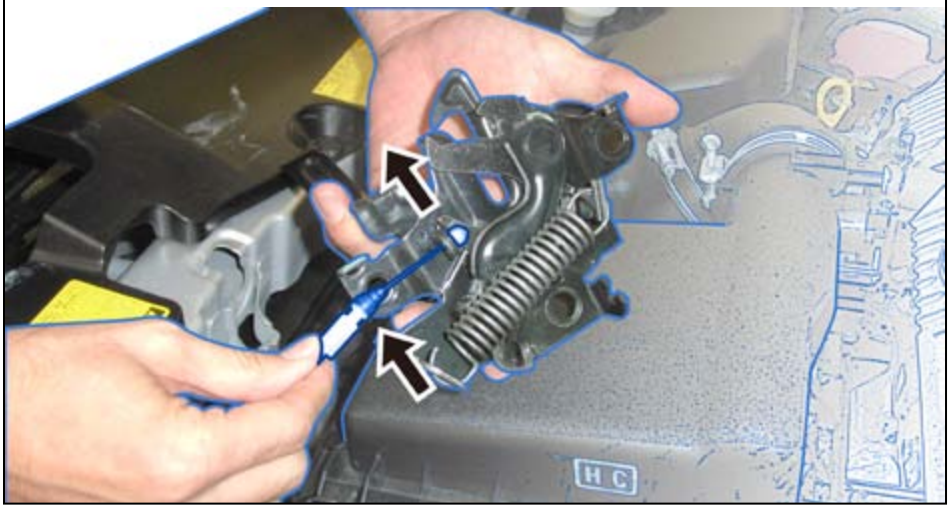
d. Dislodge the Hood Lock Assembly.
   - Remove 3 Bolts.

Fig. 2-5



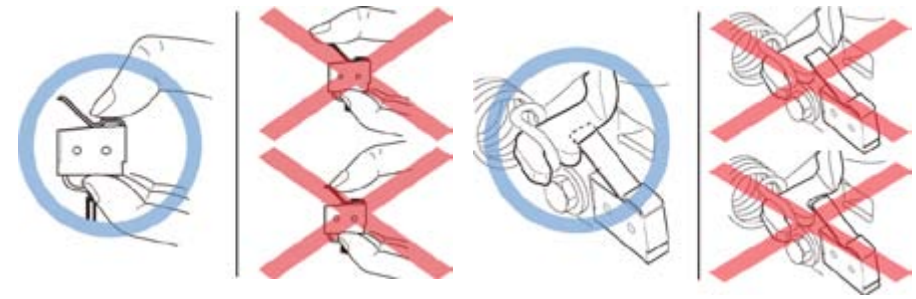
e. Remove the Hood Lock Assembly.

Fig. 2-6



f. Remove the Hood Lock Cable from the Hood Lock Assembly.

Fig. 2-7

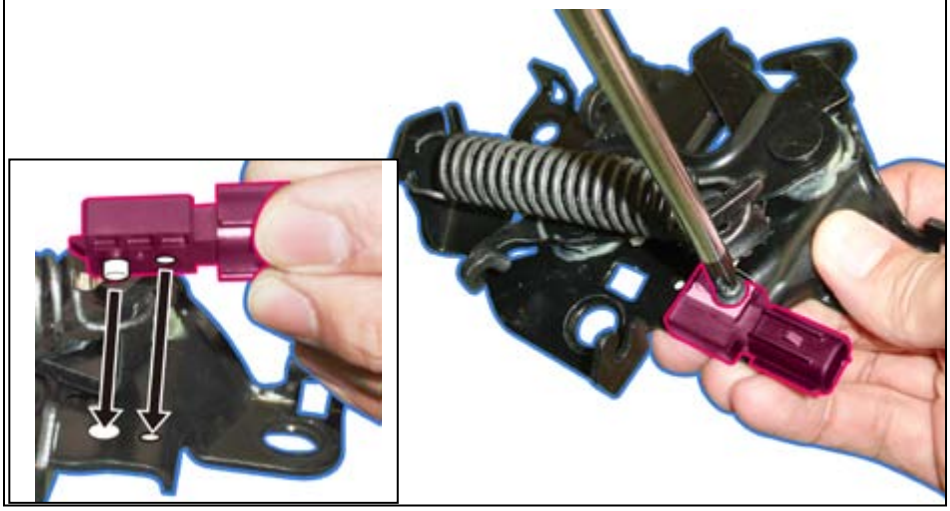


Make sure to hold the Hood Switch by its sides.

Make sure the Hood Switch Lever is positioned properly.

If the Hood Switch is Broken RES will not function.

Phillips Jeweler's Screwdriver, Torque Screwdriver Fig. 2-8

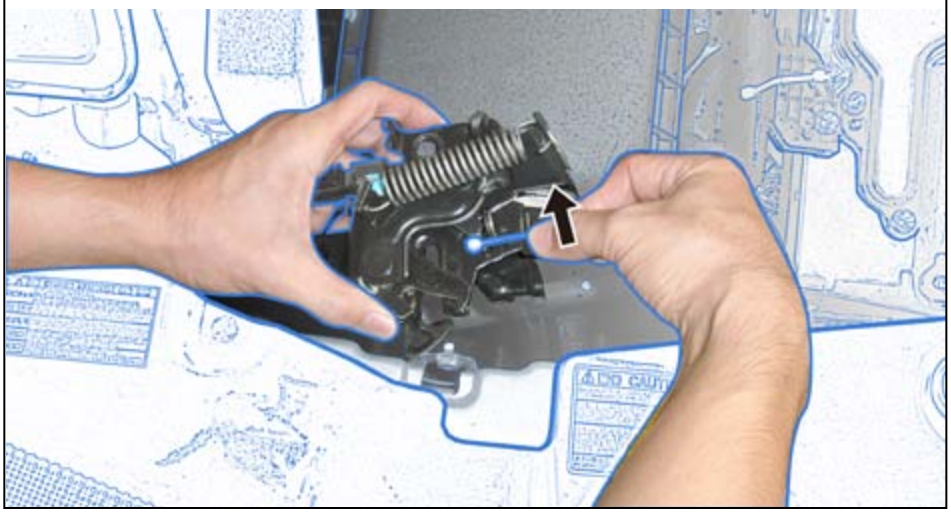


g. Install the Hood Switch with the Switch Lever underneath the Hood Lock Trigger Lever.

NOTE: Torque the Screw to 3.1 in•lbf (0.35 N•m).

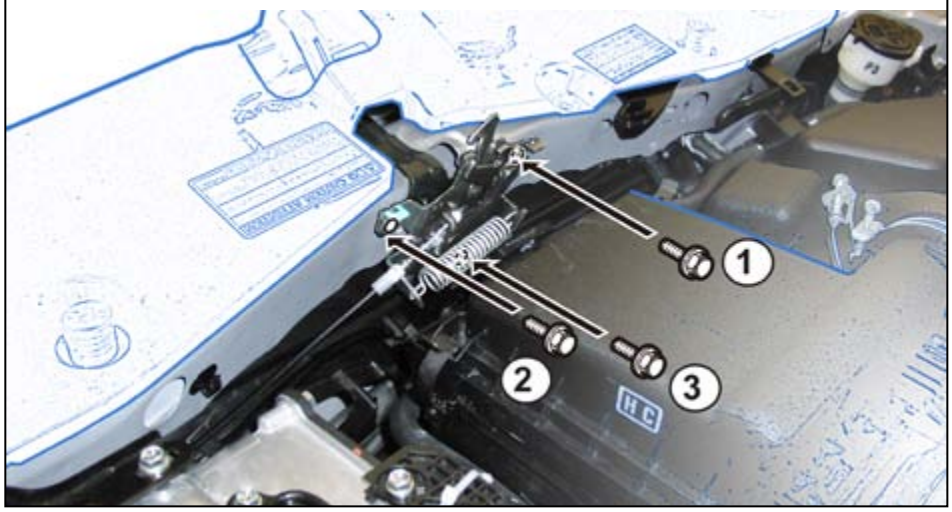
NOTE: Do not reuse the Screw once it is already installed. The effect of the adhesive becomes weak if used again.

Fig. 2-9



h. Reinstall the Hood Lock Cable to the Hood Lock Assembly.

Torque Wrench Fig. 2-10



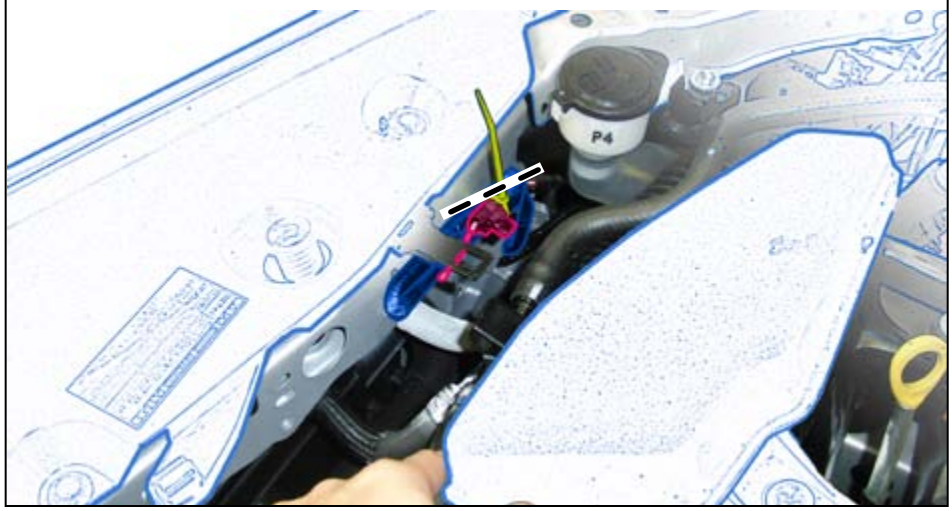
i. Reinstall the Hood Lock Assembly.
   - Reinstall 3 Bolts..

NOTE: Torque the Bolts to 70.8 in•lbf (8.0 N•m) in the sequence shown.

Fig. 2-11

j. Remove the Tape securing the Vehicle's Hood Switch Pre-Connector Harness.
   - Remove 3 Tapes.

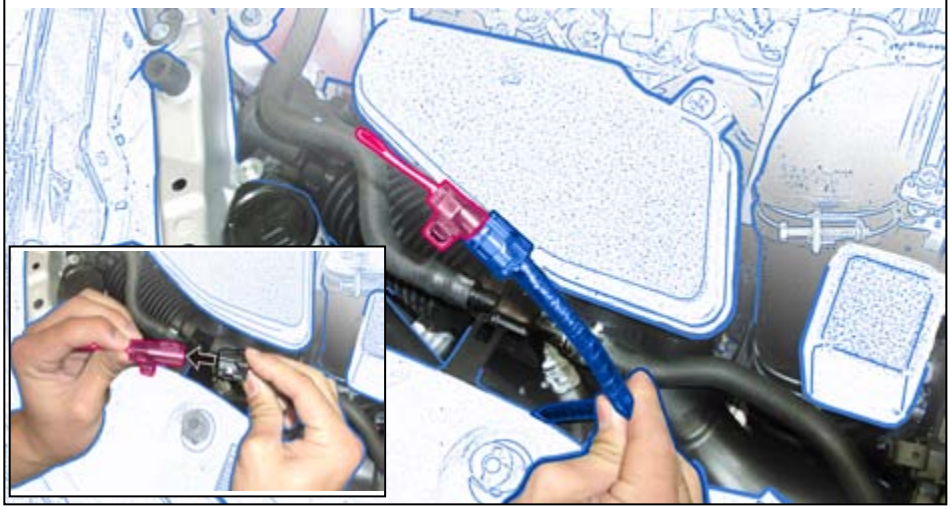
Side Cutters Fig. 2-12



V4/V5 Add-on ONLY

k. Cut the Wire Tie securing the Jumper Connector.

Fig. 2-13

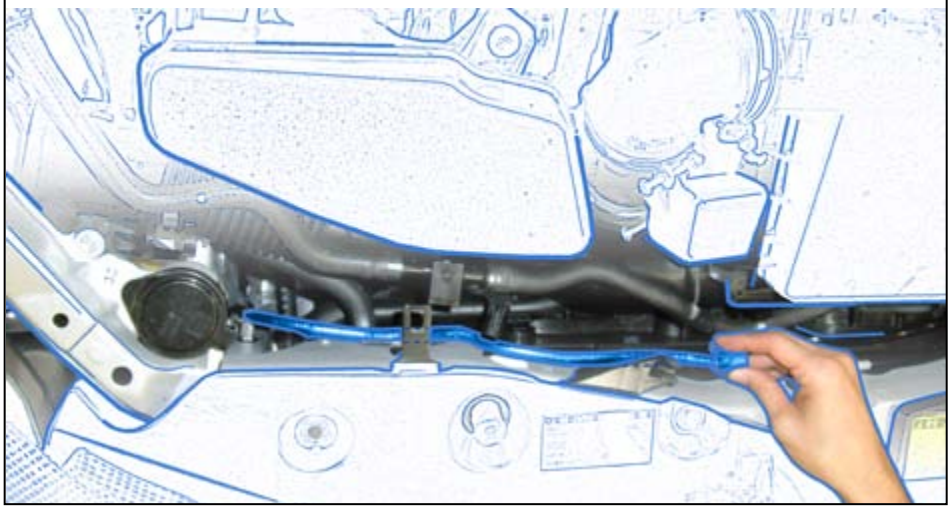


V4/V5 Add-on ONLY

l. Disconnect the Jumper Connector from the Vehicle's 2P Pre-Connector.

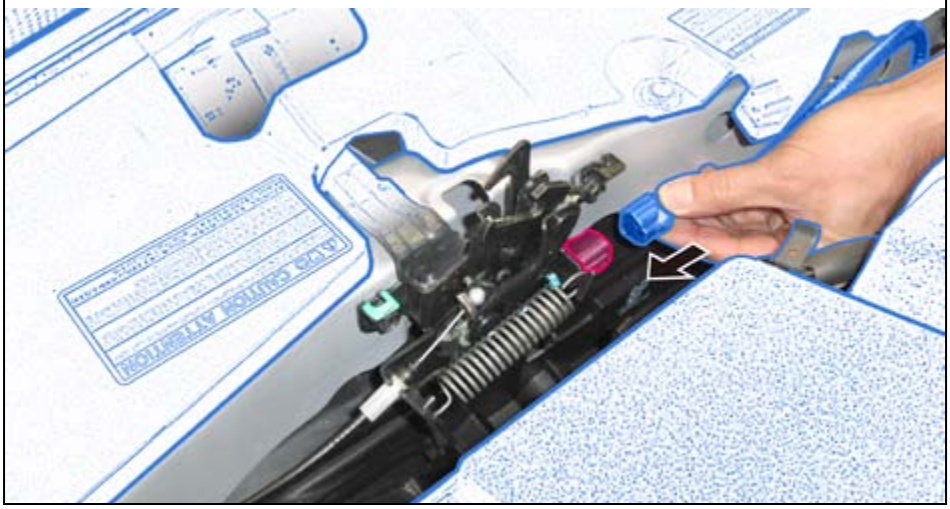
- Discard the Jumper Connector.

Fig. 2-14



m. Route the Vehicle's Hood Switch Harness toward the hood lock assembly.

Fig. 2-15



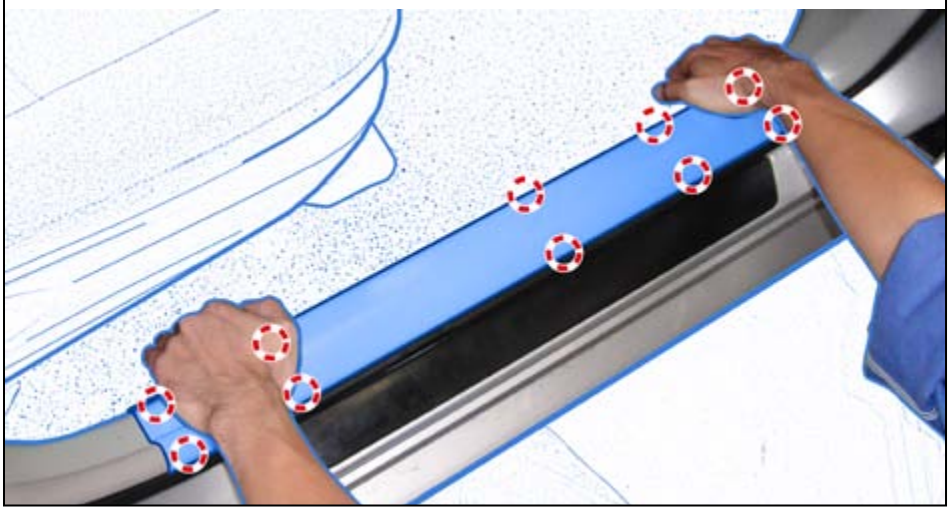
n. Connect the Vehicle's 2P Pre-Connector to the V4 Hood Switch Connector.

Side Cutters Fig. 2-16

o. Secure the Hood Switch Harness to the Vehicle's Brace with 1 Wire Tie.

p. Reinstall the Radiator Hose to its corresponding clamps.

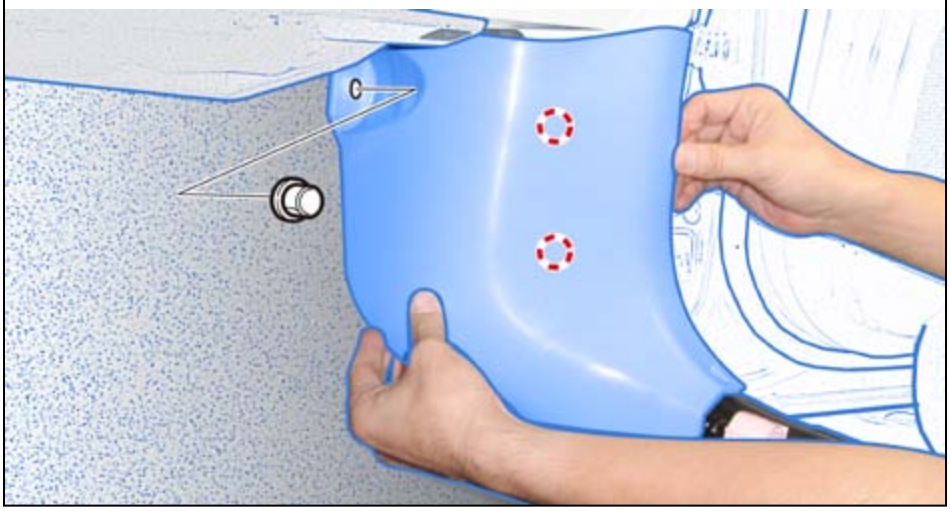
Nylon Panel Removal Tool Fig. 3-1



3. Disassembly.

a. Remove the Passenger's Side Step Cover.

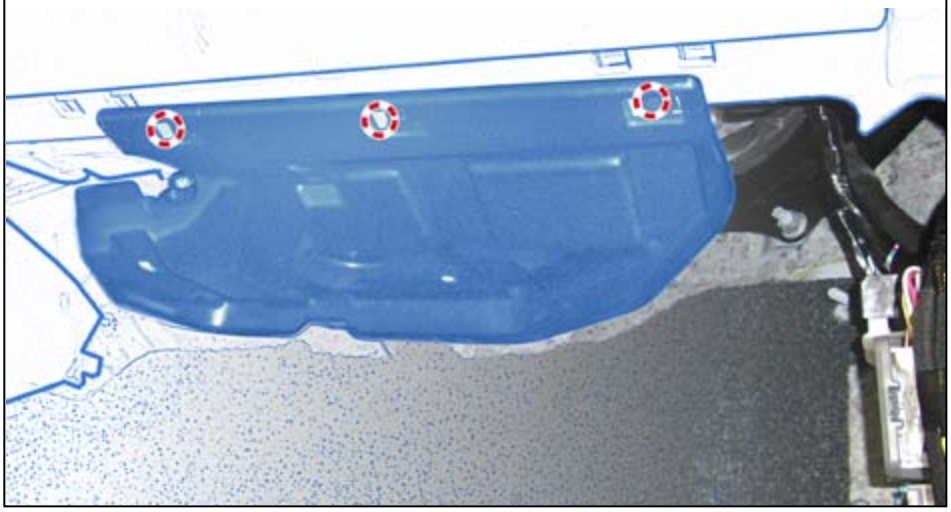
Nylon Panel Removal Tool Fig. 3-2



b. Remove the Passenger's Side Cowl Cover.

- Remove 1 Nut.

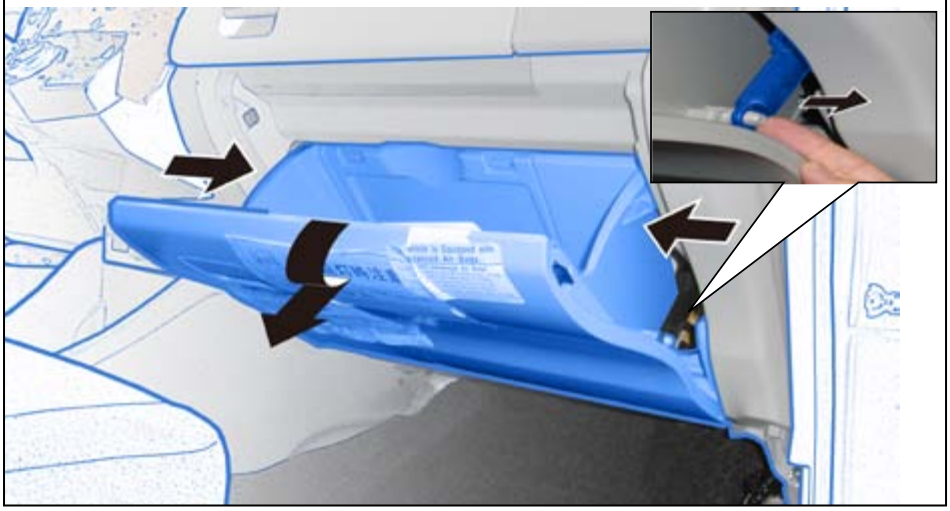
Nylon Panel Removal Tool Fig. 3-3



c. Remove the Glove Box Under Cover.
   - Disconnect the Under Cover Light Connector.

Note: The V5 Microphone might be installed in the back of the Glove Box Under Cover.

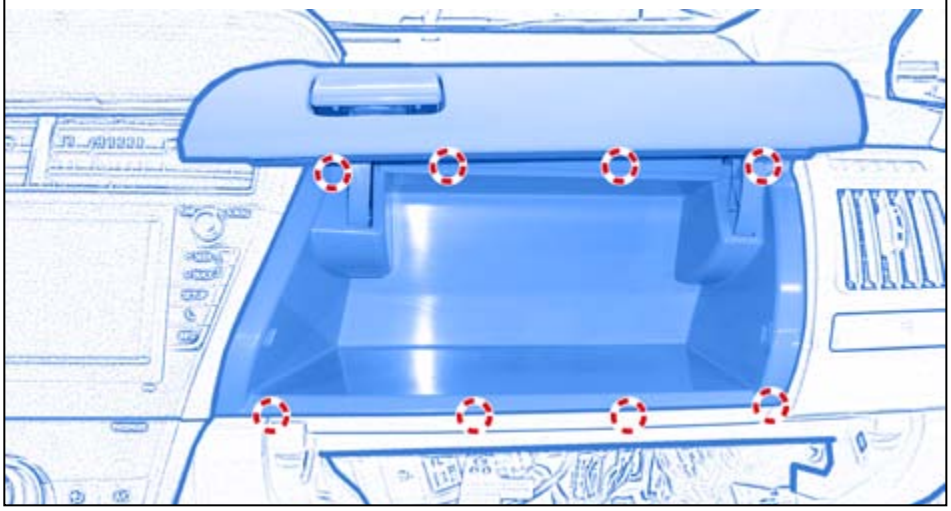
Fig. 3-4



d. Disconnect the Dampener from the Glove Box.

e. Remove the Glove Box.

Nylon Panel Removal Tool Fig. 3-5



f. Open then remove the Upper Glove Box.

Note: Add protective Tape to any pry area(s).

Nylon Panel Removal Tool Fig. 3-6

g. Remove the Cluster Side Panel.

Note: Add protective Tape to any pry area(s).

Nylon Panel Removal Tool Fig. 3-7

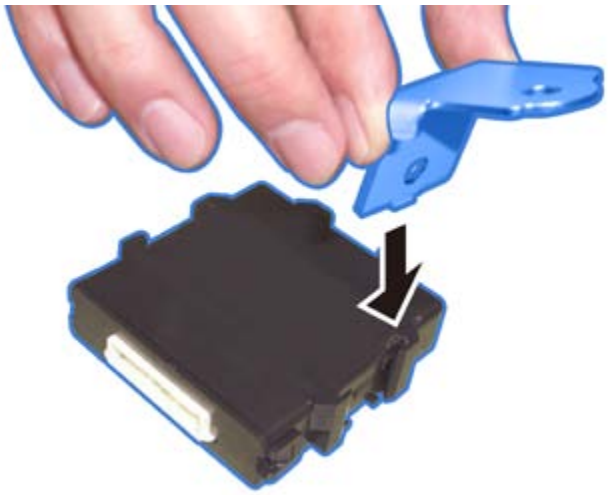
h. Remove the Center Air Conditioner Vent.

Note: Add protective Tape to any pry area(s).

10mm Socket Fig. 3-8

i. Remove the Audio Unit.
   - Remove 4 Bolts.

Fig. 4-1

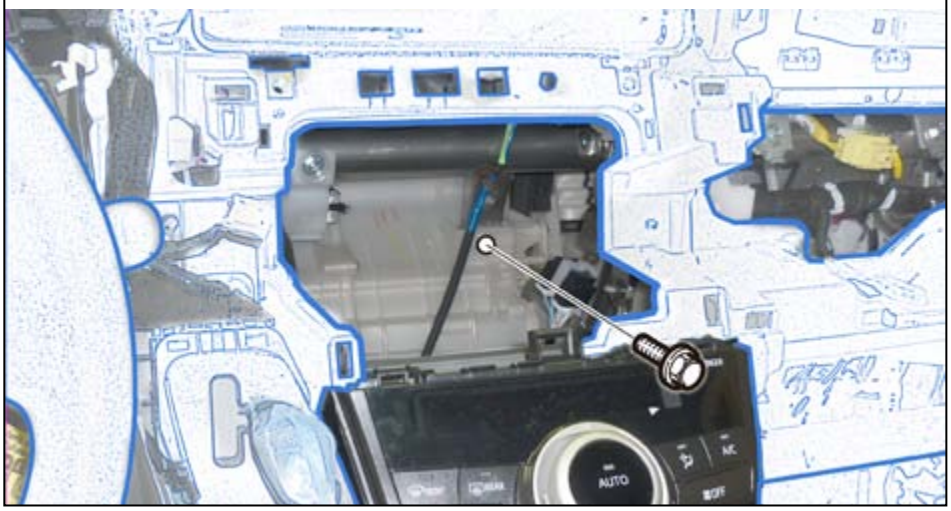


4. RES ECU Preparation and Installation.

a. Attach the RES ECU Bracket to the RES ECU.

10mm Socket, Extension

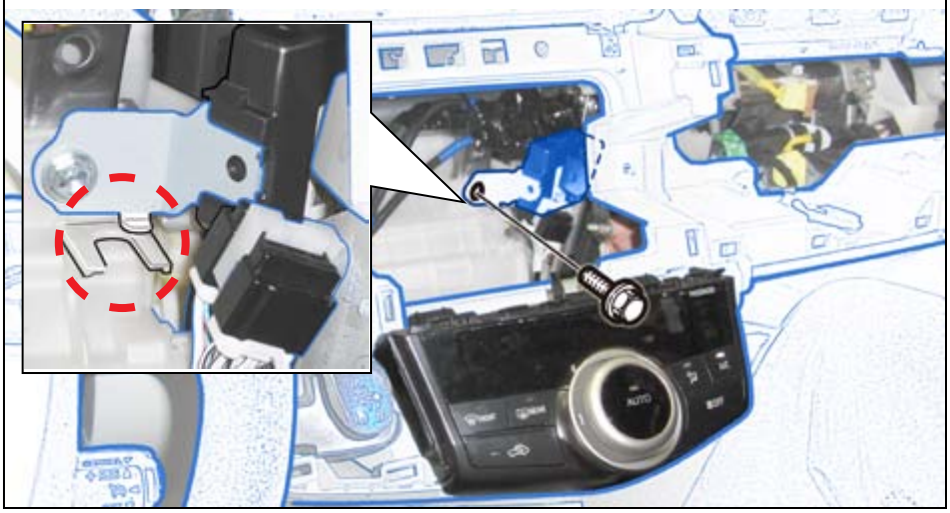
Fig. 4-2



b. Remove the Bolt from the Vehicle's Brace.

10mm Socket, Extension

Fig. 4-3



c. Position the RES ECU in the location shown.

d. Install the RES ECU to the Vehicle's Brace using the same Bolt removed.

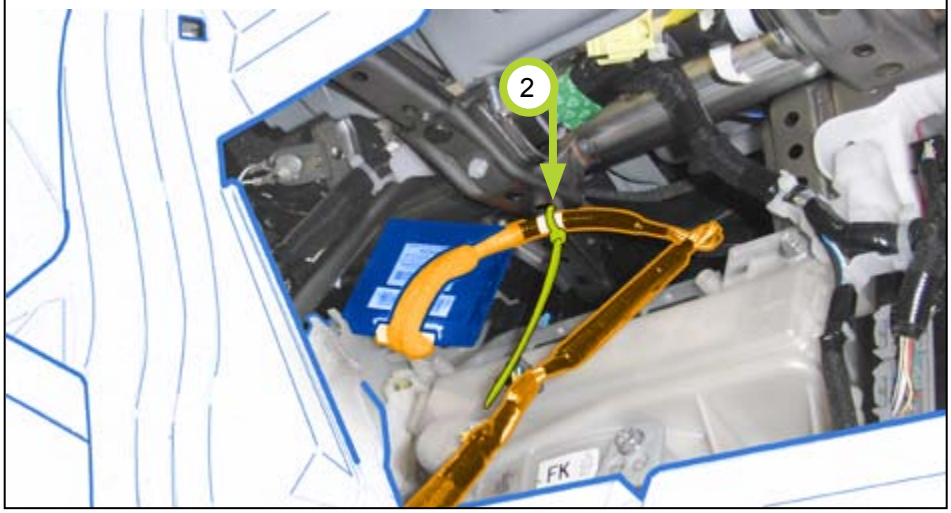
Note: Make sure the Guide Pin is seated correctly.

Fig. 4-4

e. Plug in the V4 24P Connector to the RES ECU.

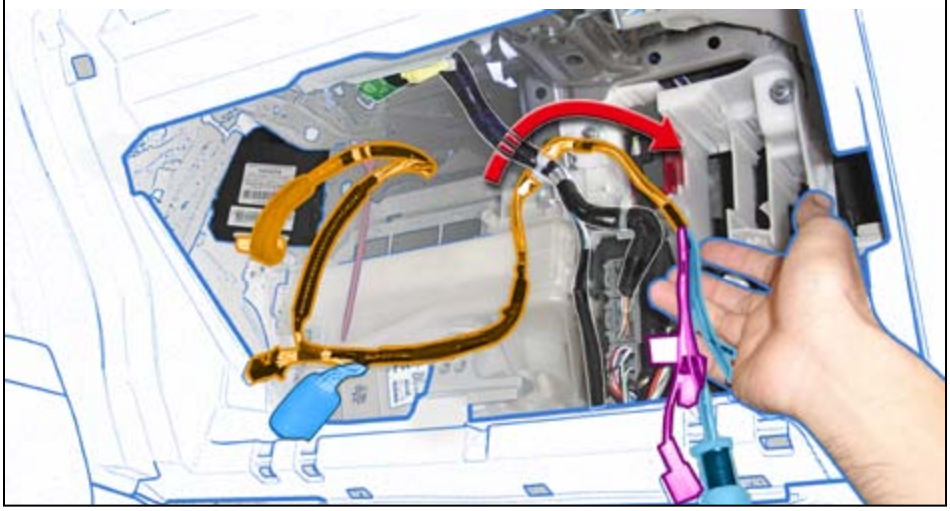
Side Cutters

Fig. 4-5



f. Secure the V4 Harness White Tape Marker to the Vehicle's Brace with 1 Wire Tie.

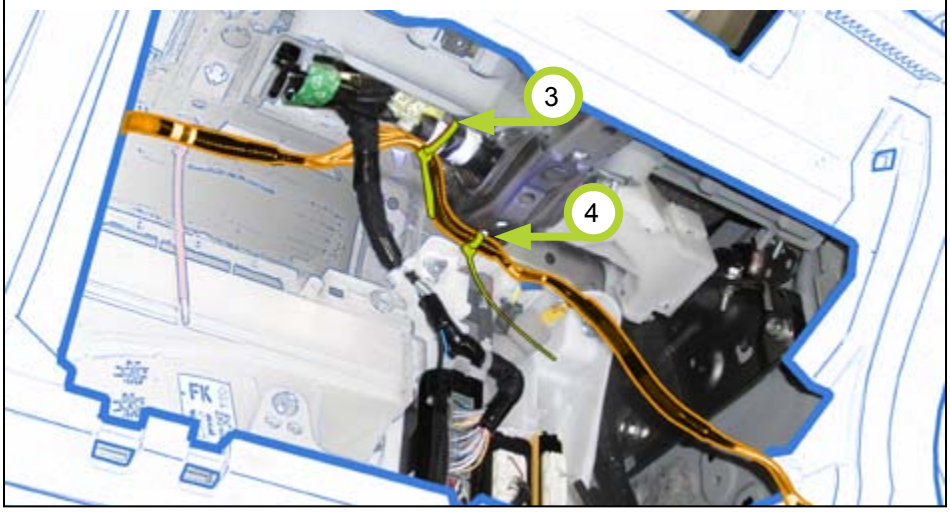
Fig. 4-6



g. Route the V4 Harness over the Vehicle's Harness.

Side Cutters

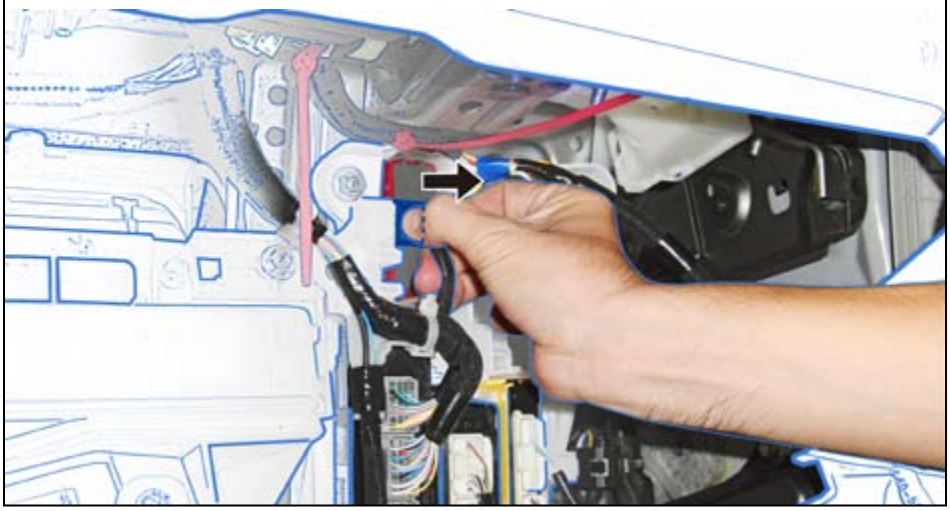
Fig. 4-7



h. Secure the V4 Harness to the Vehicle Harness using 1 Wire Tie.

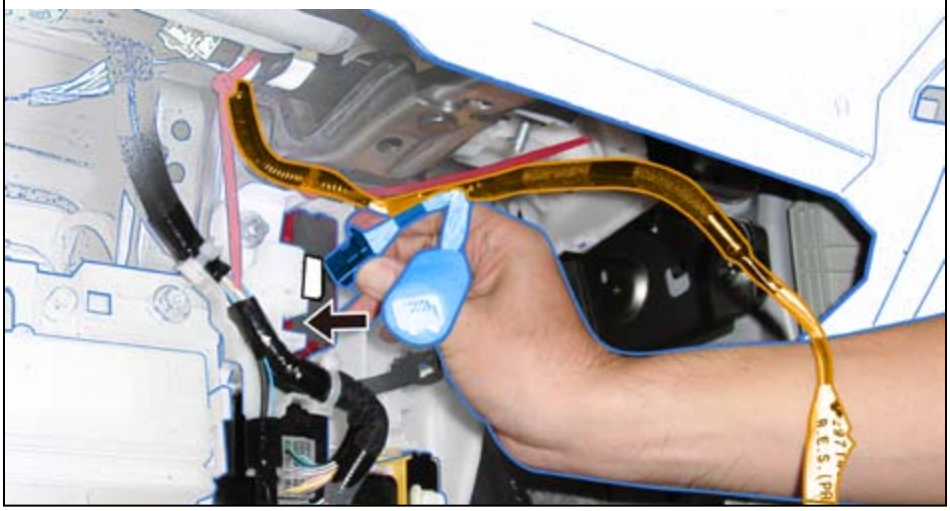
i. Secure the V4 Harness to the Vehicle's Brace using 1 Wire Tie.

Fig. 4-8



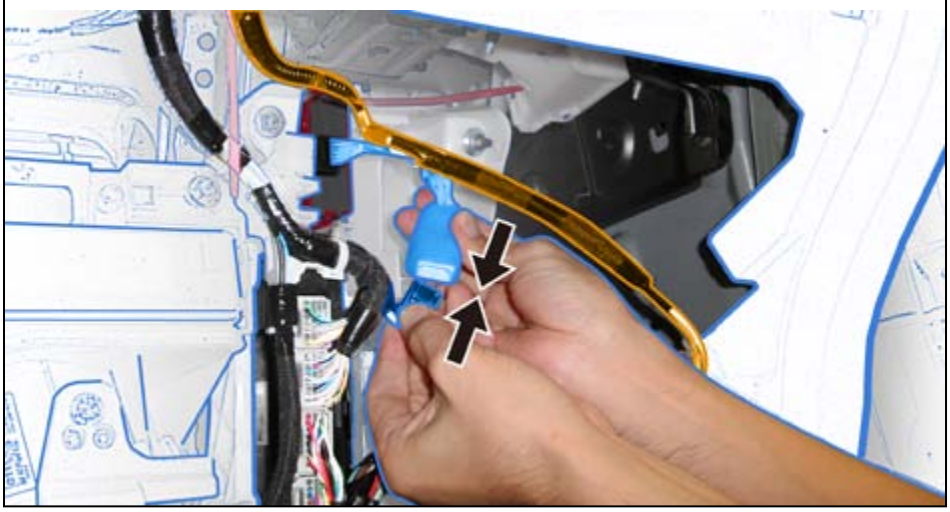
j. Disconnect the Vehicle's Black 12P Connector from the Vehicle's TPMS ECU.

Fig. 4-9



k. Connect the V4 Black 12P Connector to the Vehicle's TPMS ECU.

Fig. 4-10

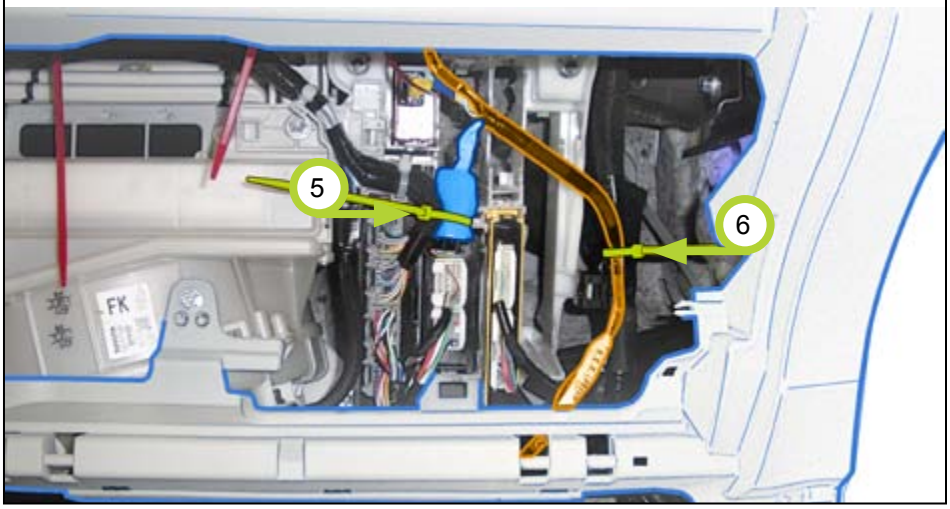


l. Connect the Vehicle's Black 12P Connector to the V4 White 12P Connector.

VERIFY: That Vehicle's 12P Black Connector is connected to the V4 White 12P connector as this is for the TPMS ECU.

Side Cutters

Fig. 4-11

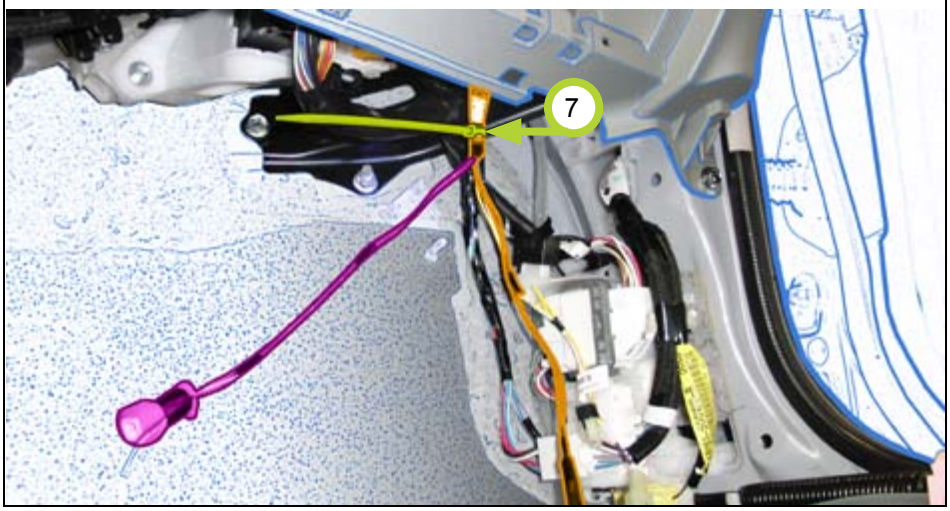


m. Secure the V4 White 12P Connector to the Vehicle Harness using 1 Wire Tie.

n. Secure the V4 Harness to the Vehicle Harness using 1 Wire Tie.

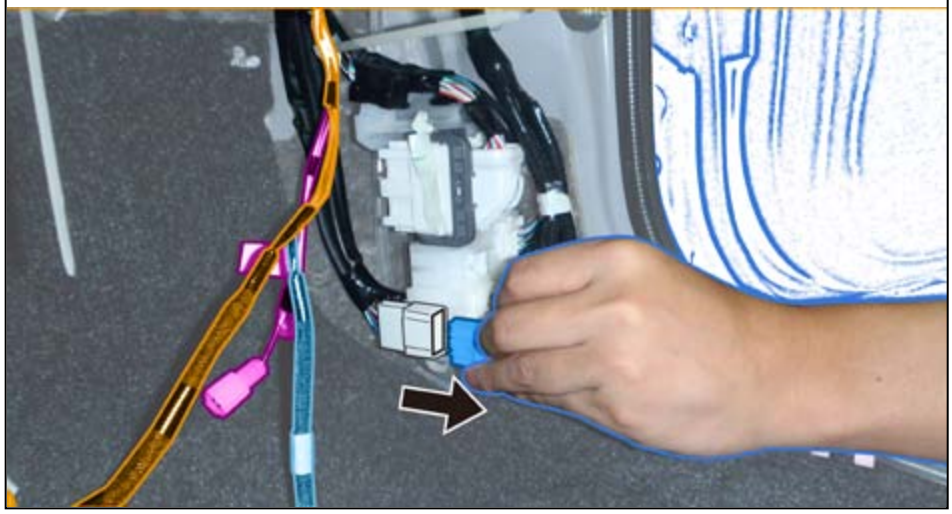
Side Cutters

Fig. 4-12



o. Secure the V4 Harness to the Vehicle Harness using 1 Wire Tie.

Side Cutters Fig. 4-13



Side Cutters Fig. 4-14

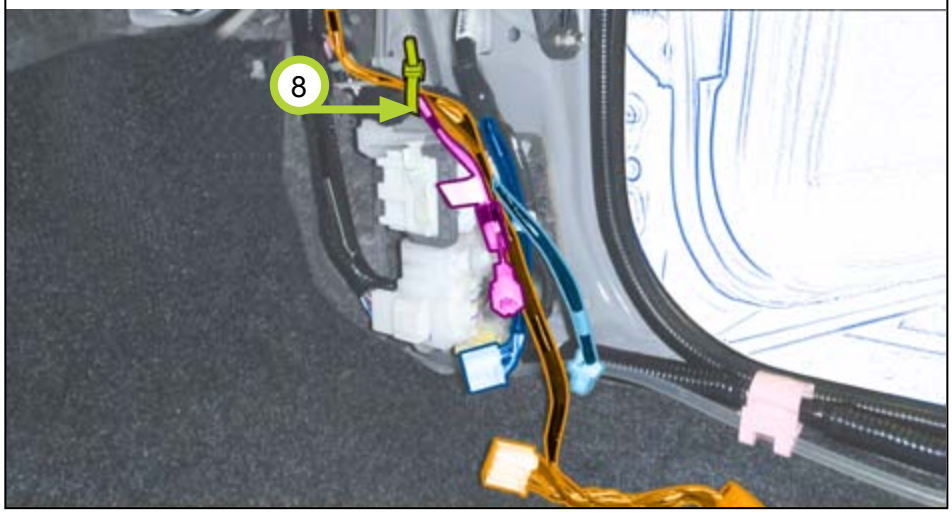
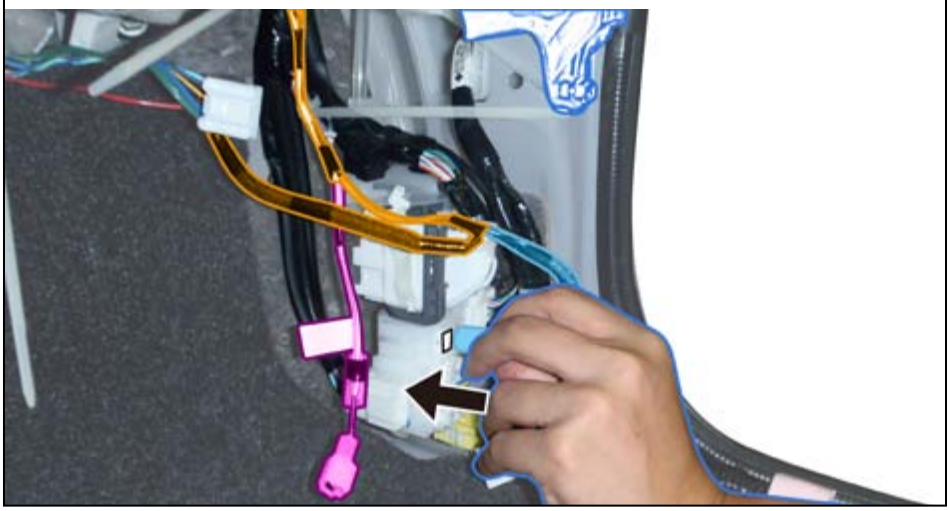


Fig. 4-15



V4 ONLY

p. Disconnect the Vehicle's 12P White Connector from the Vehicle's Connector Block.

q. Secure the V4 Harness to the Vehicle Harness using 1 Wire Tie.

r. Connect the V4 White 8P Connector to the Vehicle's 8P Pre-Connector.

Fig. 4-16

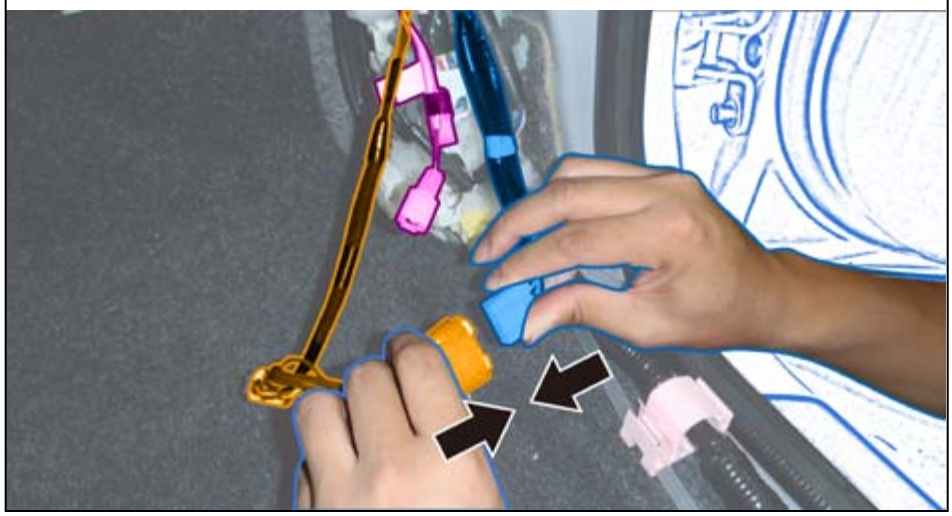
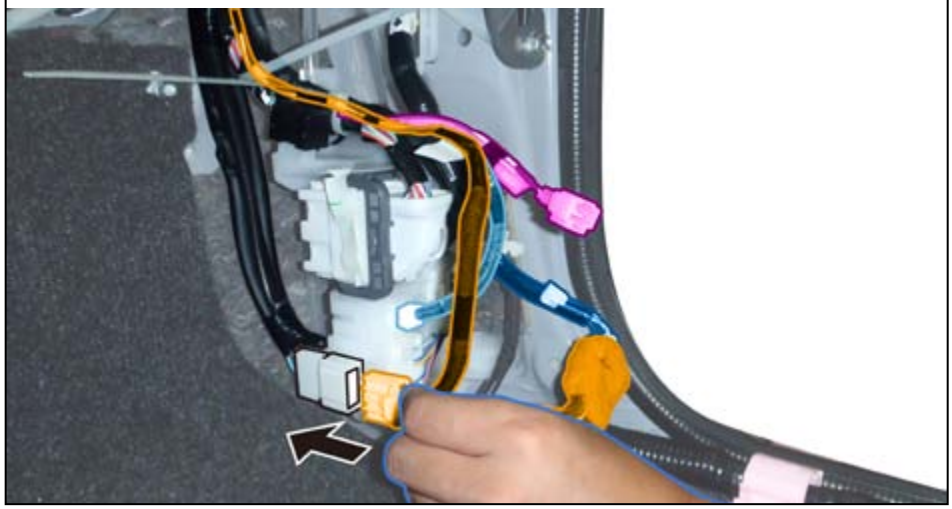
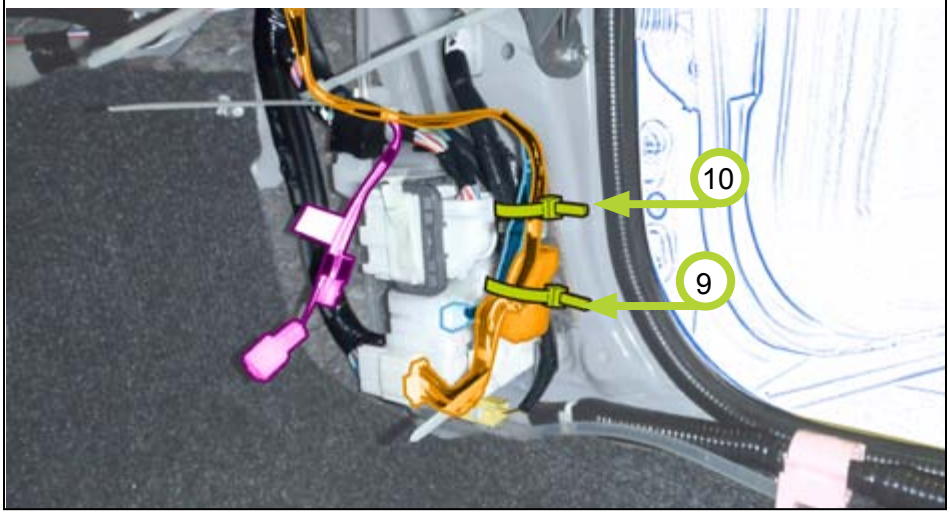


Fig. 4-17



Side Cutters

Fig. 4-18



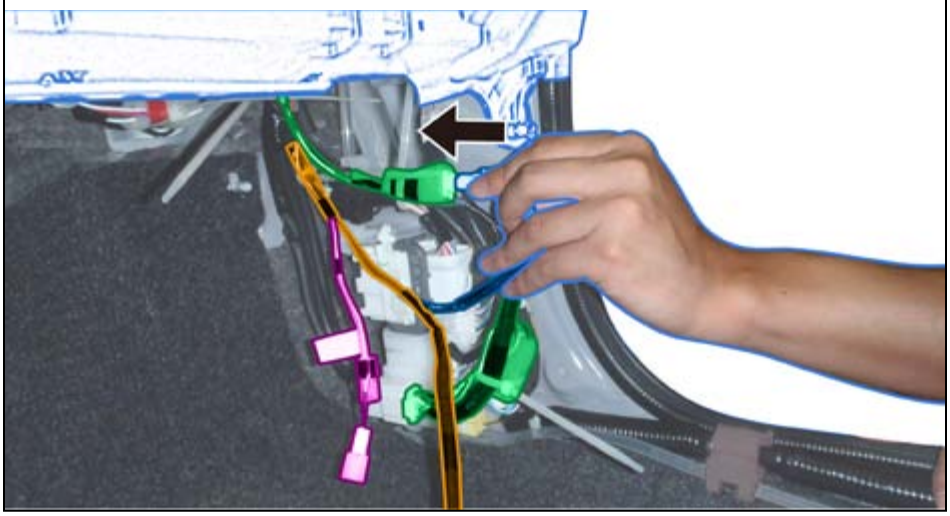
V4 ONLY

s. Connect the Vehicle's 12P Connector to the V4 White 12P Connector.

t. Connect the V4 White 12P Connector to the Vehicle's Connector Block.

u. Secure the V4 12P Connector and V4 8P Harness to the Vehicle Harness using 2 Wire Ties.

Fig. 4-19

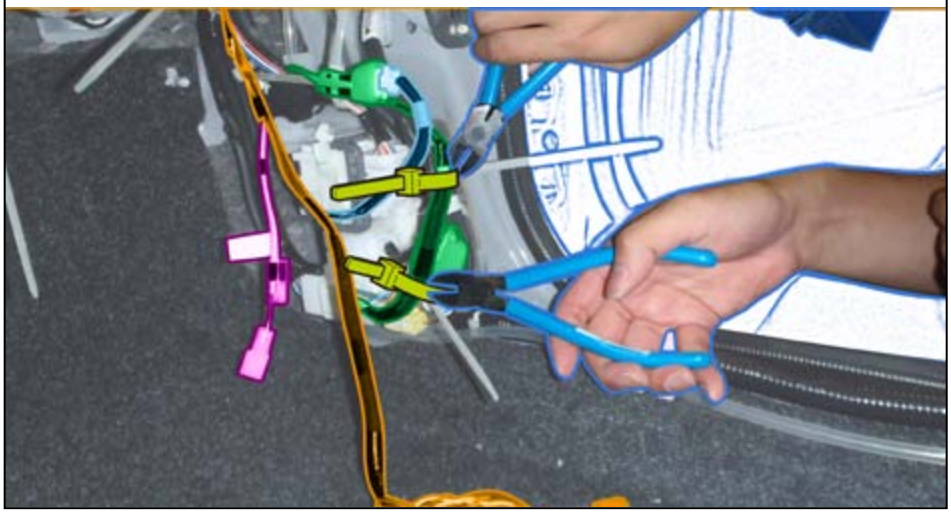


V4/V5 Add-on ONLY

v. Connect the V4 White 8P Connector to the V5 8P Connector.

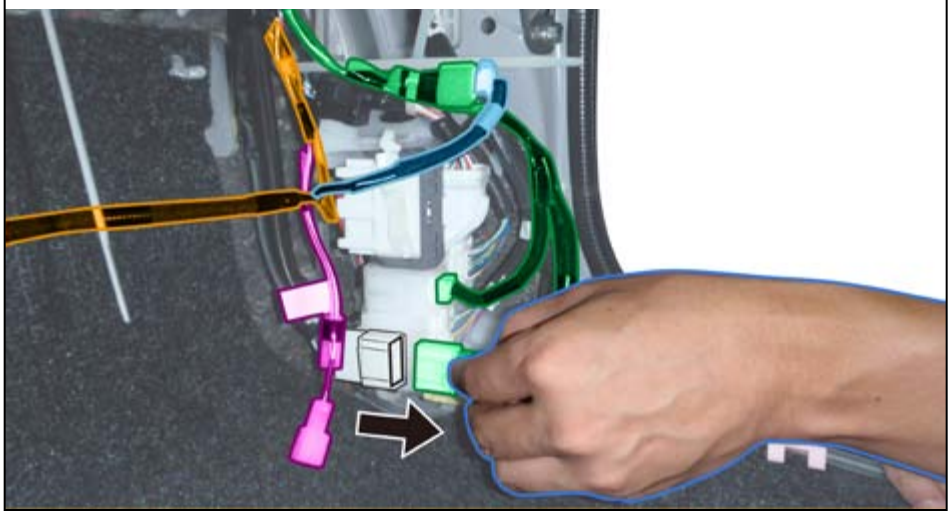
Side Cutters

Fig. 4-20



w. Cut the 2 Wire Ties securing the V5 Harness.

Fig. 4-21



x. Disconnect the V5 White 12P Connector from the Vehicle's Connector Block.

Fig. 4-22

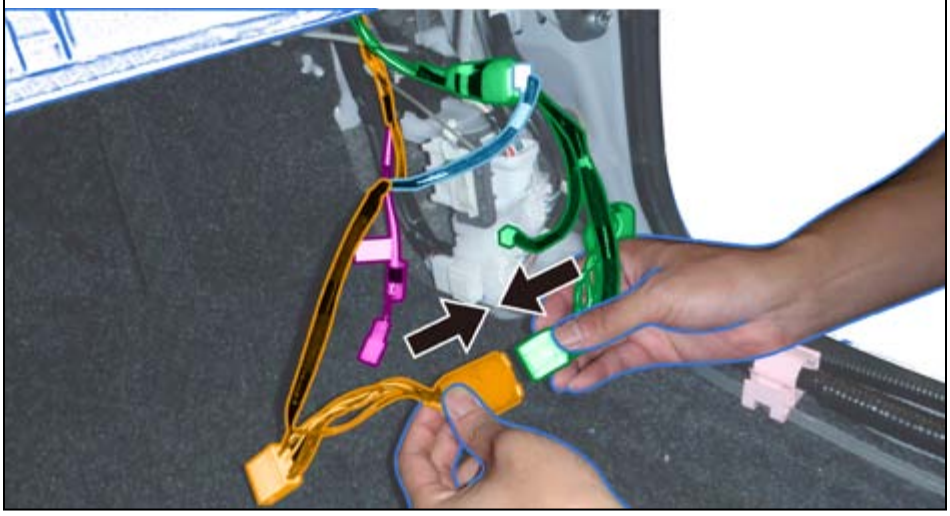
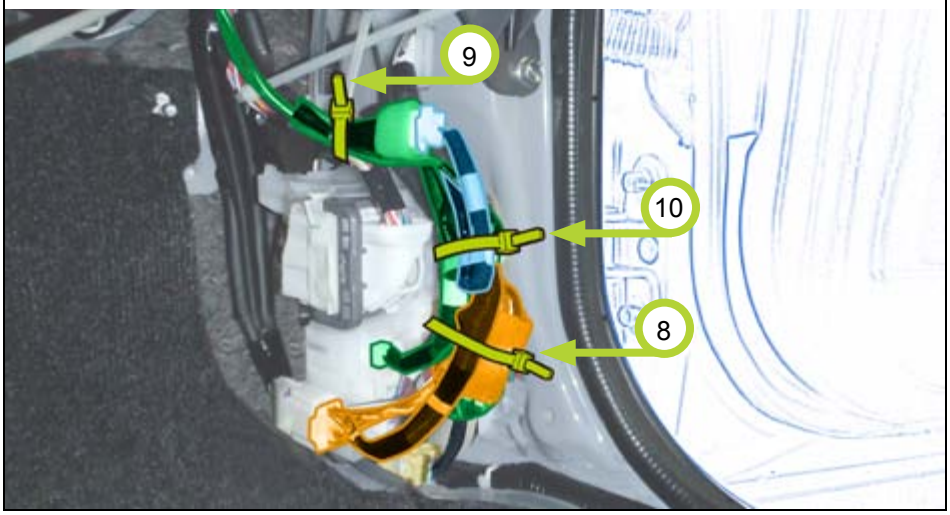


Fig. 4-23

Side Cutters

Fig. 4-24



V4/V5 Add-on ONLY

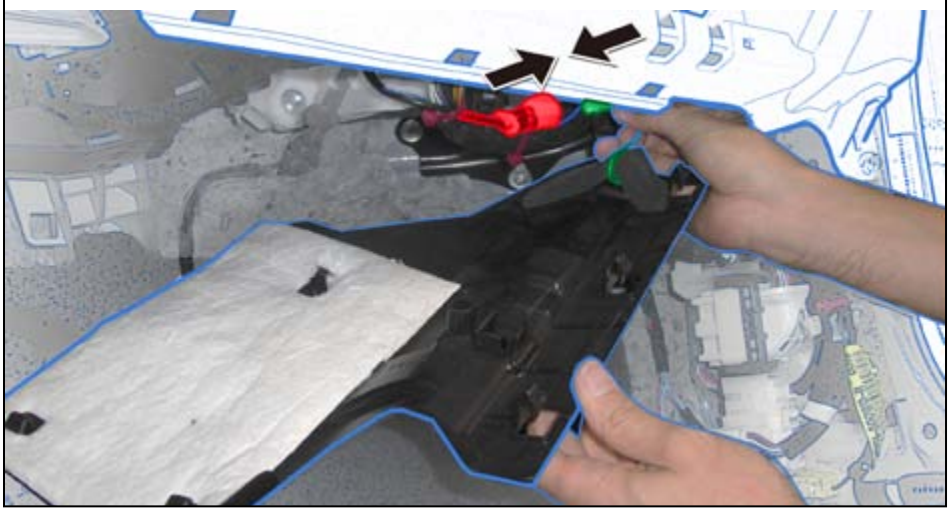
y. Connect the V5 White 12P Connector to the V4 White 12P Connector.

z. Connect the V4 White 12P Connector to the Vehicle Connector Block.

aa. Secure the V4 and V5 12P Connectors to the Vehicle Harness and V5 8P Harness with 1 Wire Tie.

ab. Secure the V4/V5 Harness to the Vehicle Harness with 2 Wire Ties.

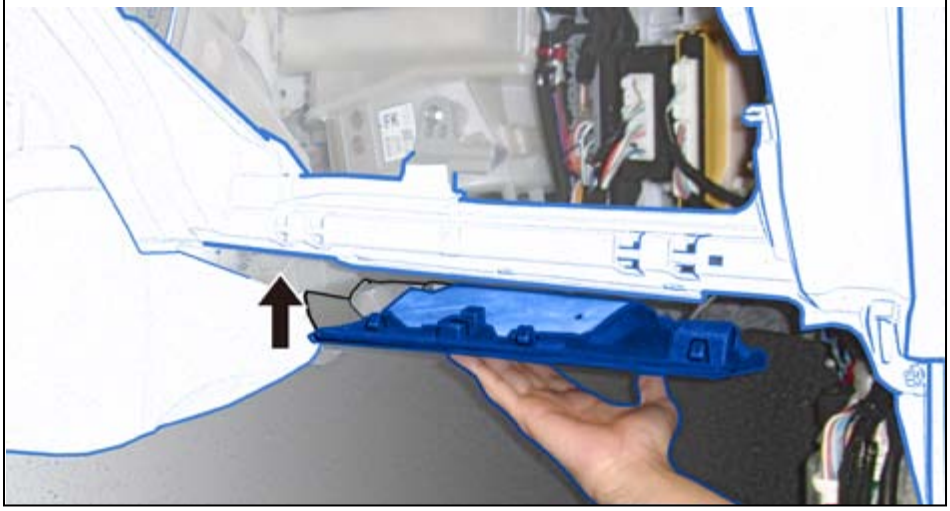
Fig. 4-25



V4/V5 Add-on ONLY

ac. Reconnect the GBS Mic 2P Connector to the V5 2P Connector.

Fig. 4-26

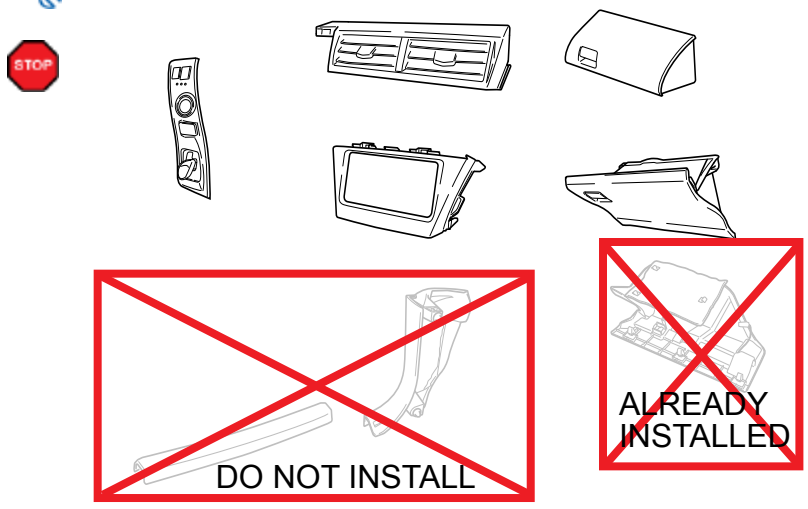


ad. Reinstall the Glove Box Under Cover.

- Reconnect the Under Cover's Light Connector.

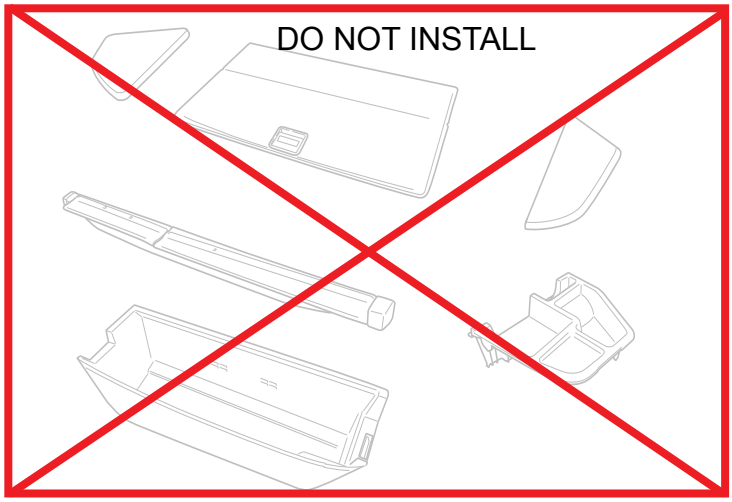
10mm Socket

Fig. 5-1



VEHICLE INTERIOR (PASSENGER'S SIDE)

LUGGAGE COMPARTMENT



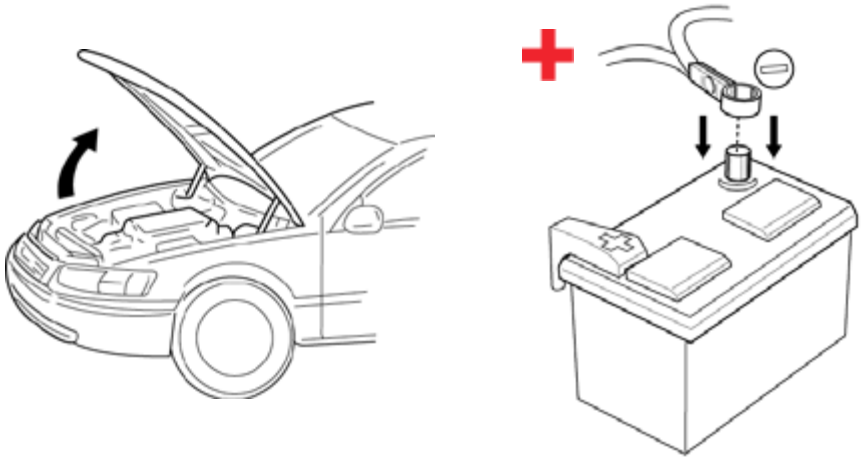
5. Registration Preparation.

a. Reassemble the Vehicle except for the PS Cowl and Step Covers, Luggage Compartment Panels.

VERIFY: That all Connectors are plugged in.

VERIFY: That panels fit together properly, with no uneven gaps.

Fig. 6-1



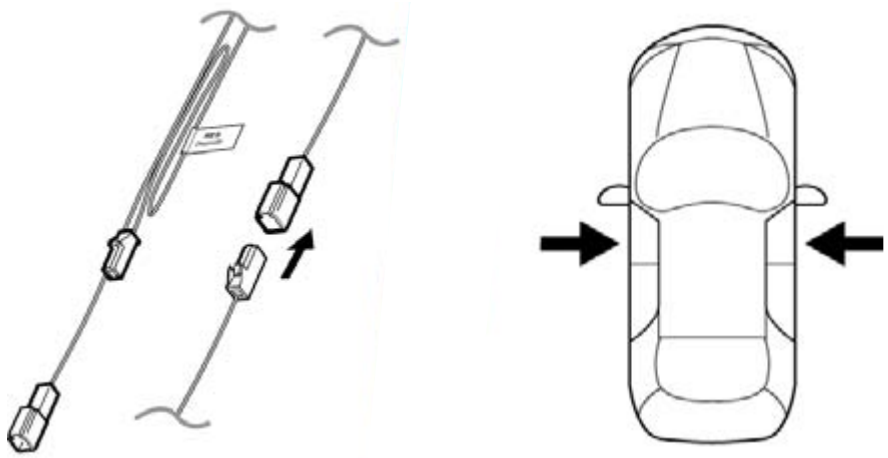
6. Registration.

a. Open the Hood.

b. Temporarily reconnect the Negative Battery Cable.

CAUTION: Do not touch the Positive Terminal.

Fig. 6-2

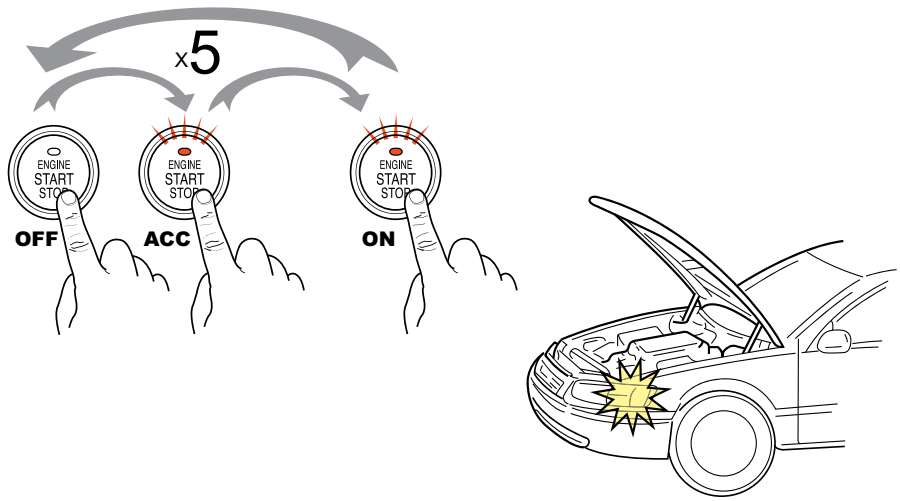


c. Locate the 1P RES Diagnostic Connectors in the Passenger's Side Cowl Area and connect them.

NOTE: Once connected you will have 10 minutes to complete this section, steps d–ab.

d. Close all doors.

Fig. 6-3



e. Place the Vehicle in Park (P) or Neutral (N) position.

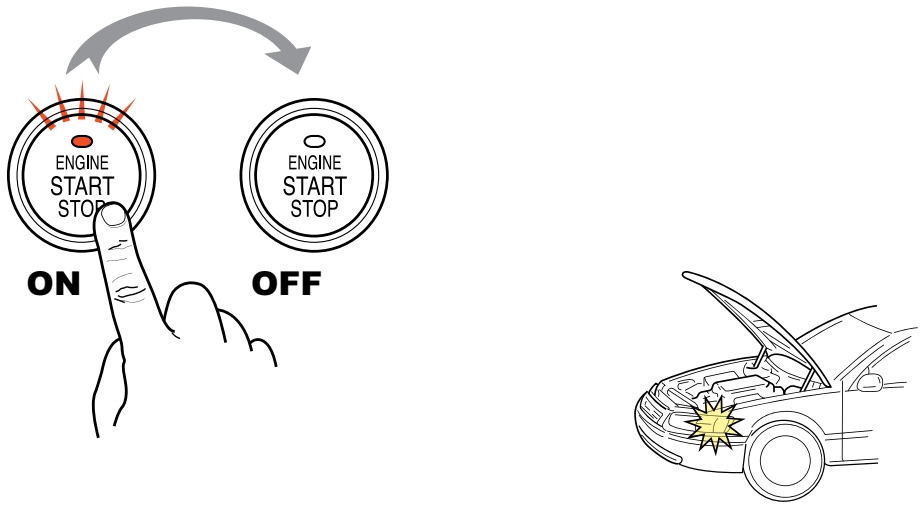
f. Cycle the Power Button from OFF to ON 5 times.

NOTE: One cycle consists of: OFF → Accessory → ON. This is equivalent to pressing the Power Button 14 times.

NOTE: Do not apply Brake pedal.

LOOK: For the Hazard Lights to Flash Once.

Fig. 6-4



g. Start the Engine.

h. After 10 seconds stop the Engine.

LOOK: For the Hazard Lights to Flash Once.

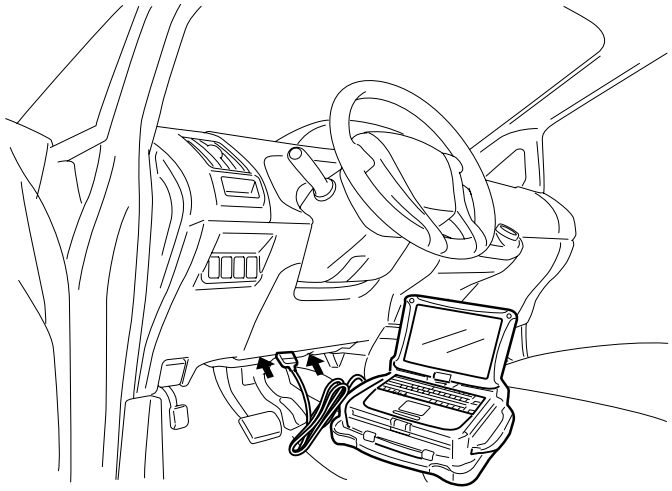
IF THIS PROCEDURE FAILED

The Hazard Lights flash Three Times.

- Disconnect the V4 Harness's 1P RES Diagnostic Connectors.
- Start again from step c.

Techstream

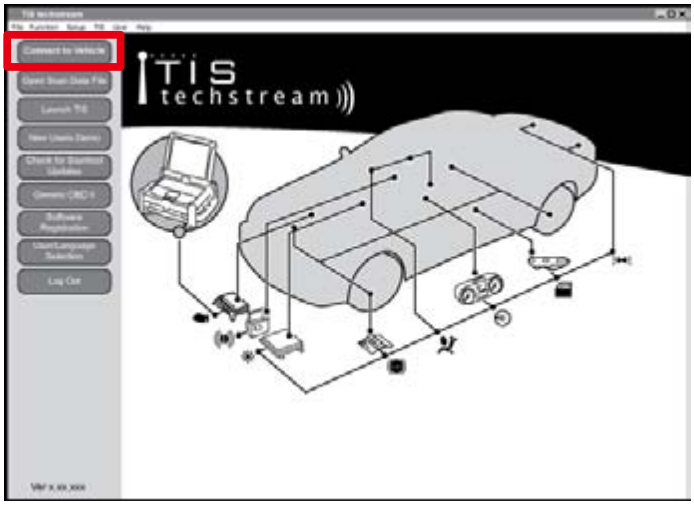
Fig. 6-5



i. Connect the Techstream Notebook to the Vehicle's Diagnostic Port.

j. With the Smart Key in your possession, press the Power Button twice to select the Ignition "ON" position.

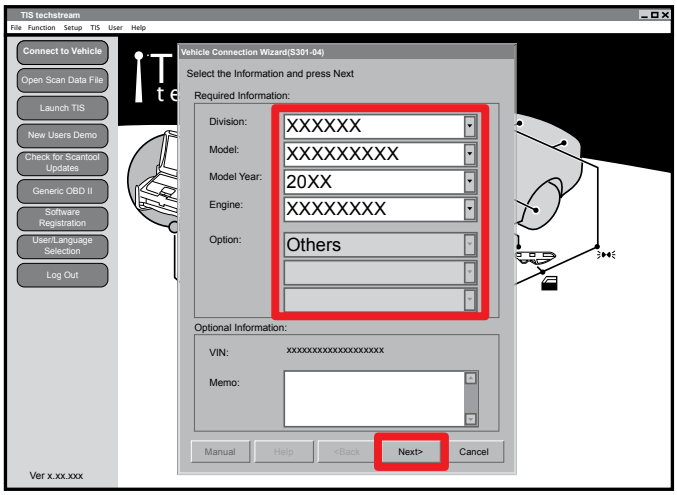
Fig. 6-6



k. Start the TIS Techstream Application by clicking on the shortcut located on the Desktop.

l. Click "Connect to Vehicle."

Fig. 6-7

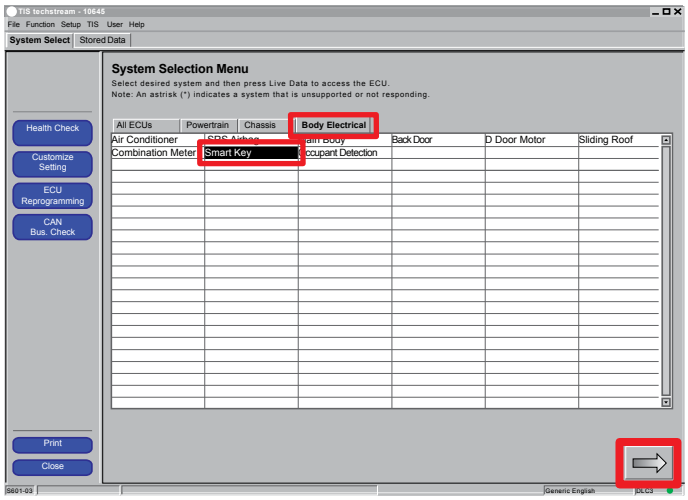


m. Confirm that the information displayed on the Vehicle Connection Wizard is correct for the vehicle. If not verify that the Techstream is properly connected.

n. Select options that applies to the vehicle.

o. Click “Next>.”

Fig. 6-8

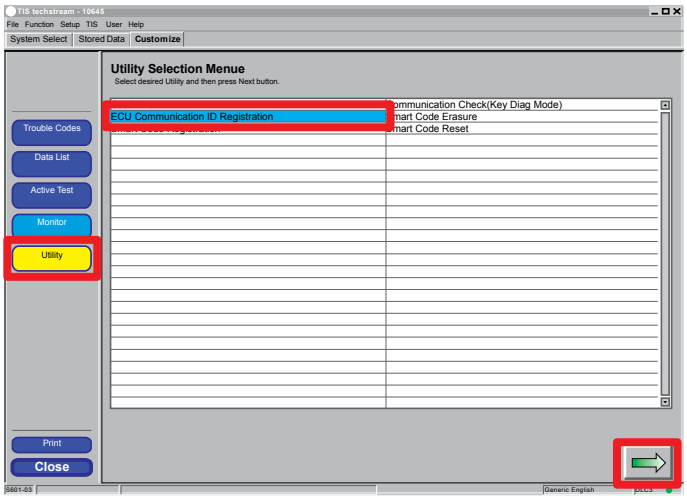


p. Make sure that the “Body Electrical” tab is selected.

q. Select “Smart Key.”

r. Click .

Fig. 6-9

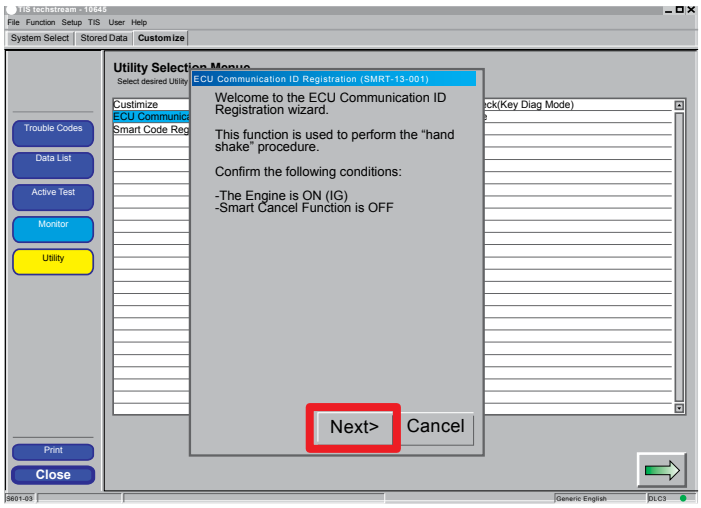


s. Click on “Utility.”

t. Select “ECU Communication ID Registration.”

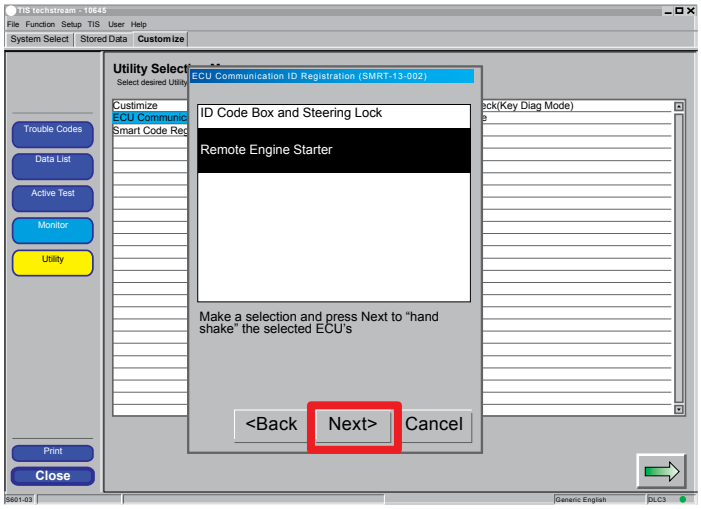
u. Click .

Fig. 6-10



v. Click "Next>."

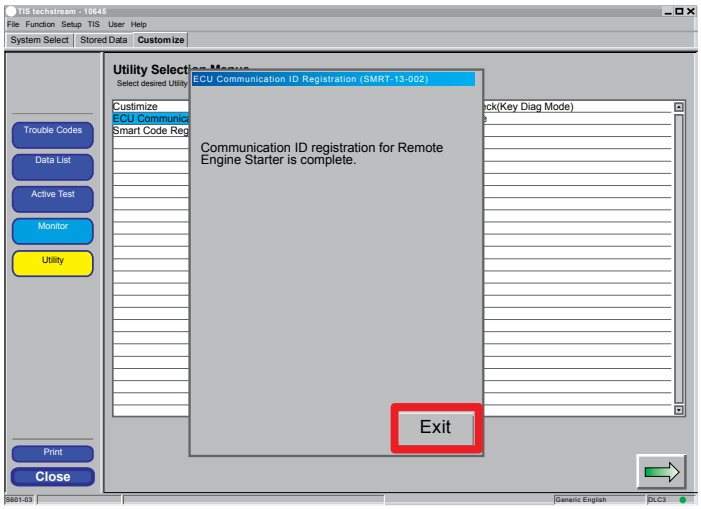
Fig. 6-11



w. Select "Remote Engine Starter."

x. Click "Next>."

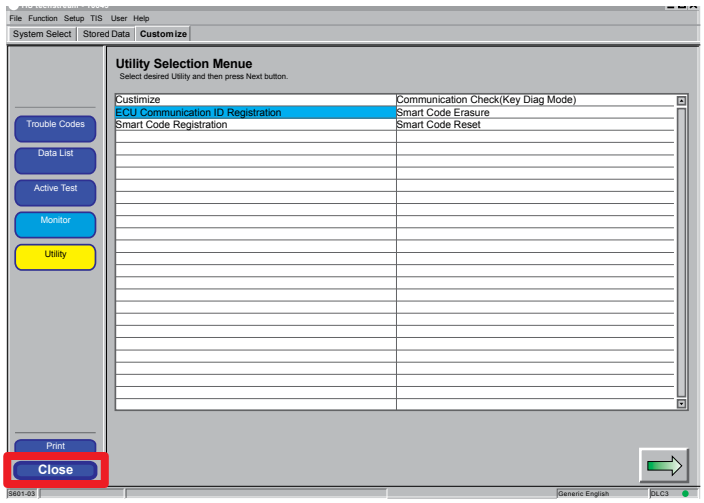
Fig. 6-12



CONFIRM: That the ECU Communication ID was completed successfully.

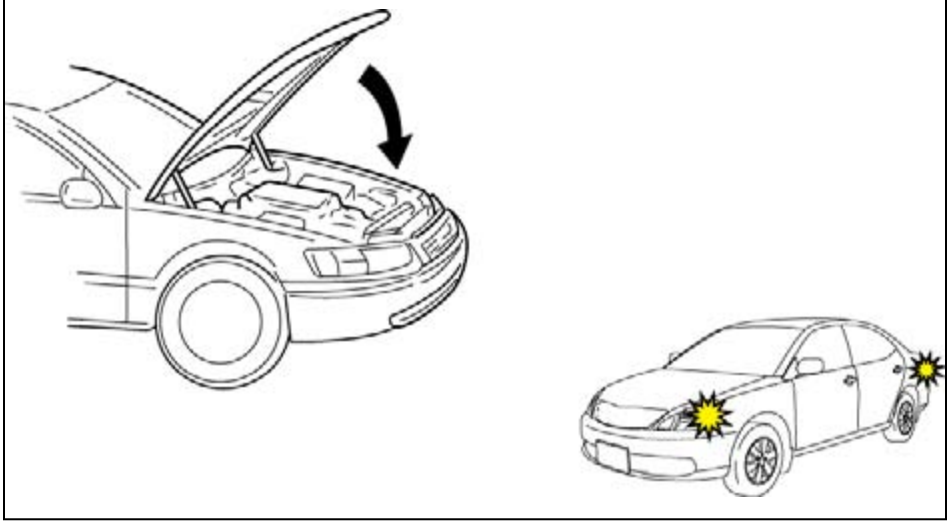
y. Click "Exit".

Fig. 6-13



z. Click Close.

Fig. 6-14



aa. Exit the vehicle.

ab. Close the Hood.

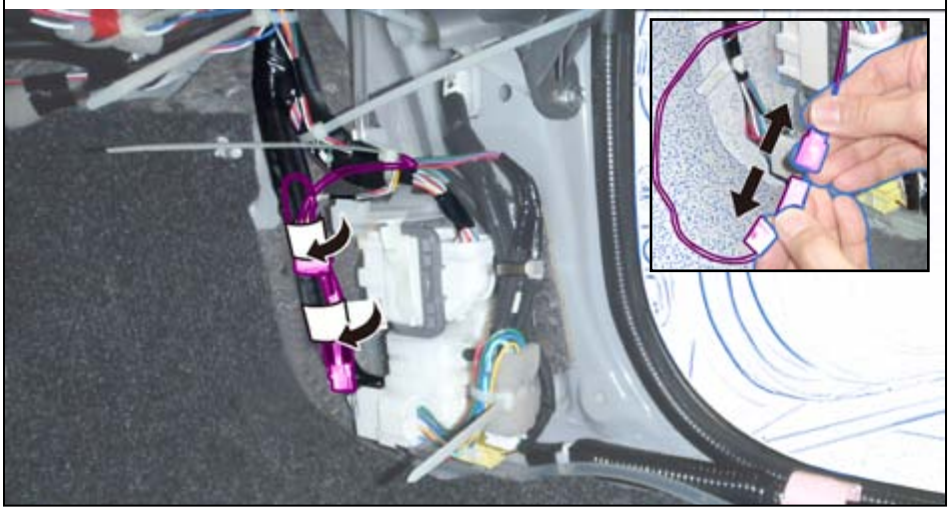
ac. Look for the Hazard Lights to flash Twice.

IF THIS PROCEDURE FAILED

The Hazard Lights flash Three Times.

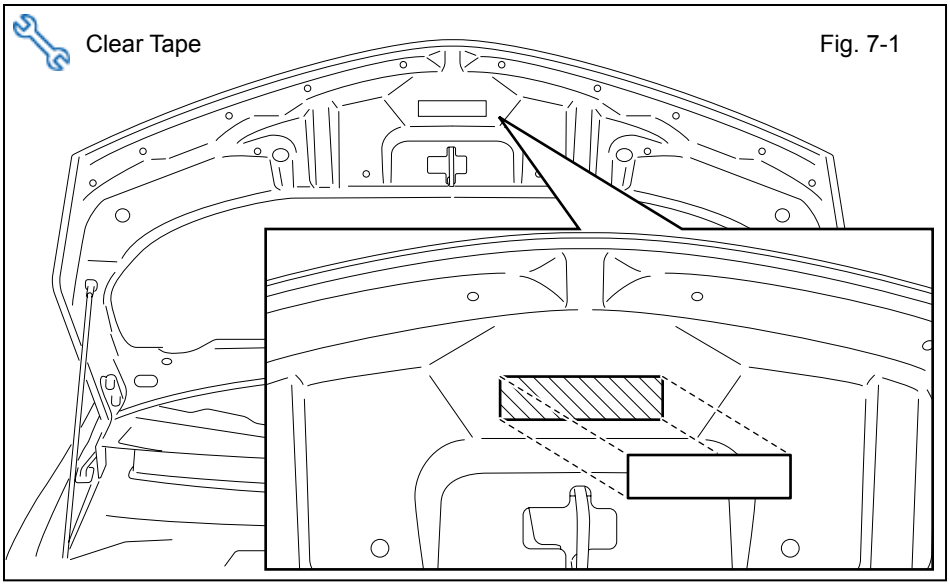
- Disconnect the V4 Harness's 1P RES Diagnostic Connectors.
- Start again from step c.

Fig. 6-15



ad. After a successful Registration, disconnect the 1P RES Diagnostic Connectors.

ae. Secure the RES Diagnostic Connectors and Harness to the Vehicle Harness using Electrical Tape.

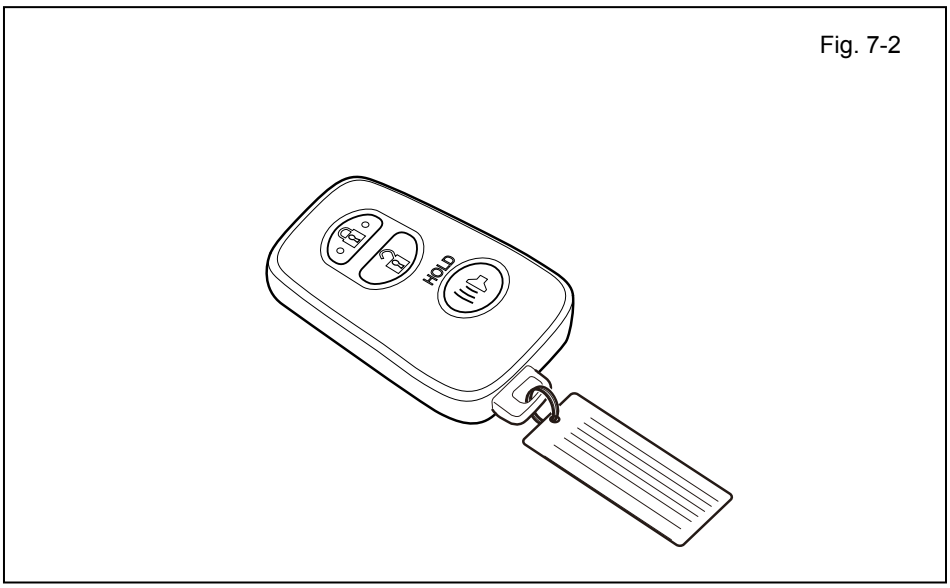


7. Tags and Labels.

a. Using VDC approved cleaner and cleaning method, clean the area indicated in the Engine Compartment.

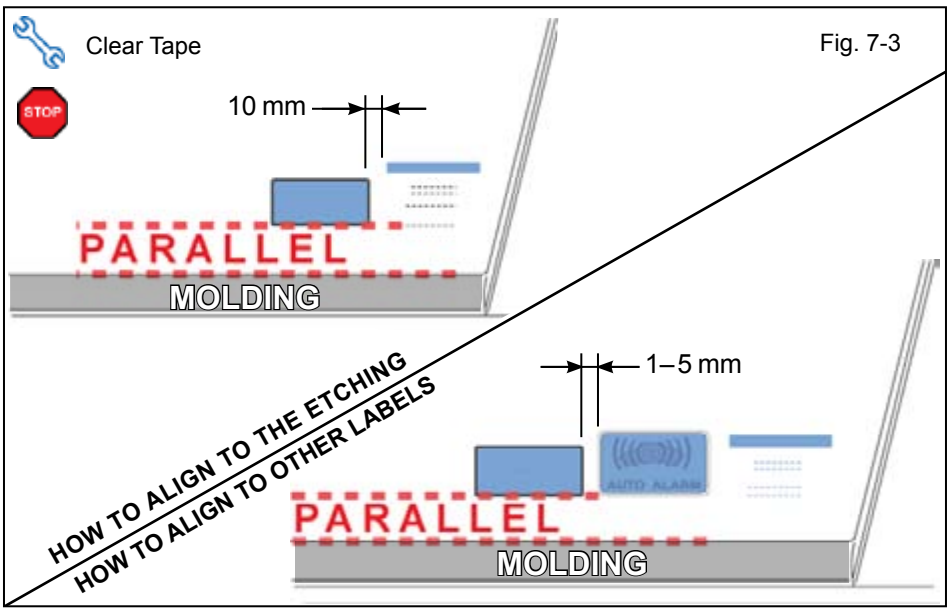
b. Attach the Engine Room Warning Label as shown.

CAUTION: Do not touch the adhesive surface.



c. Attach the Key Tag.

REPEAT: with other Smart Key.



d. Use Household Glass Cleaner to clean the inside of the Front Door Window.

e. Use a piece of Clear Tape to lift the Label off its protective backing.

CAUTION: Do not touch the adhesive surface.

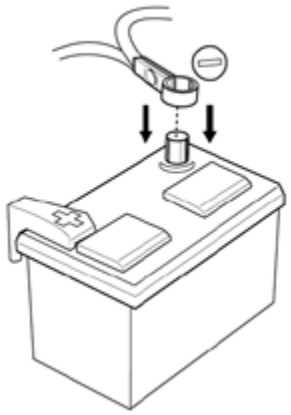
f. Attach the Label as shown.

NOTE: Make sure to Align the Label according to Etching or Other Label.

REPEAT: steps d-f with the other Front door Window.

Torque Wrench

Fig. 8-1



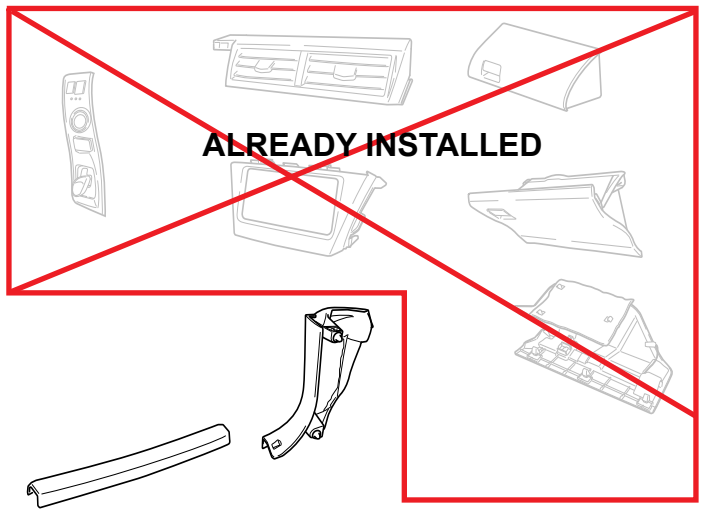
8. Complete the Installation.

a. Position the Negative Battery Cable at the original factory position.

- Tighten the Nut to 48 in•lbf (5.4 N•m)

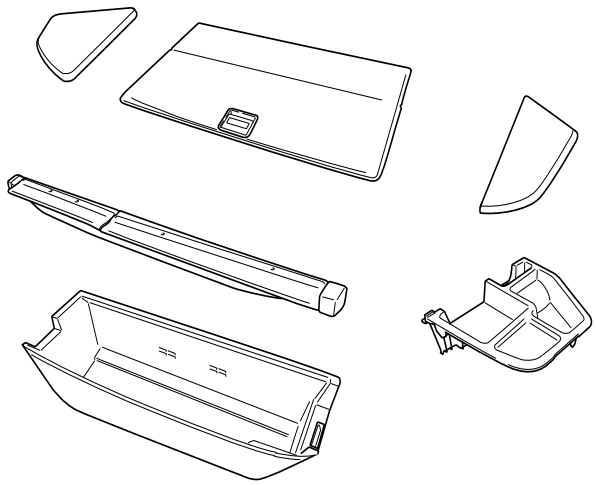
CAUTION: Do not touch the Positive Terminal.

Fig. 8-2



VEHICLE INTERIOR (PASSENGER'S SIDE)

LUGGAGE COMPARTMENT



b. Finish reassembling the Vehicle.

VERIFY: That panels fit together properly, with no uneven gaps.

VERIFY: That all Connectors are plugged in.

c. Clean up and Remove trash.

d. Sealed in its protective bag, place the Owner's Manual in the Glove Box.

Accessory Function Checks

Close the hood, enter the vehicle and close all doors. Place the shift lever in the “N” (Neutral) position, set the parking brake and make sure the Vehicle is off.

	Perform	Look For
1	Press the remote control’s lock button twice within 2 seconds, then press and hold the lock button for 3 seconds.	The hazard lights flash after 3 seconds. The engine starts. The hazard lights flash repeatedly for 10 seconds.
2	With the engine running, pull the hood release handle.	The engine stops. The hazard lights flash once. The security alarm triggers. (Only if equipped with OE Factory Alarm, not Genuine Accessory alarm, and only if armed)

NOTE: If V5 (RS3200 plus) is installed, make sure to perform V5 Function Checks as well.

Vehicle Appearance Check

	Perform	Look For
☐	After accessory installation and removal of protective cover(s), perform a visual inspection of the vehicle.	Ensure no damage (including scuffs and scratches) was caused during the installation process. (For PPO installations, refer to TMS Accessory Quality Shipping Standard.)

Vehicle Function Checks

	Function		Function
Enter the Vehicle			
☐	Dome/Courtesy Lights	☐	Horn
Start the Vehicle			
☐	Panel/Switch Illumination	☐	Gauges
☐	Check Engine Light *If the warning light remains on, it may indicate a system malfunction.*	☐	ABS Light (if equipped) *If the warning light remains on, it may indicate a system malfunction.*
☐	Lamp Failure Sensor *If the warning light remains on, it may indicate a system malfunction.*	☐	Track/Skid Control Light (if equipped) *If the warning light remains on, it may indicate a system malfunction.*
☐	Seat Belt Warning Light *If the warning light remains on, it may indicate a system malfunction.*	☐	Tire Pressure Monitoring System (TPMS). *Prior to TPMS activation and Pre-delivery Service (PDS) of the Vehicle the TPMS light will blink when IG is turned on.* *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.*
☐	Air Bag Warning Light *If the warning light remains on, it may indicate a system malfunction.*		
☐	Cruise Control Light (if equipped)		

Using a Mirror or Assistant check the following.

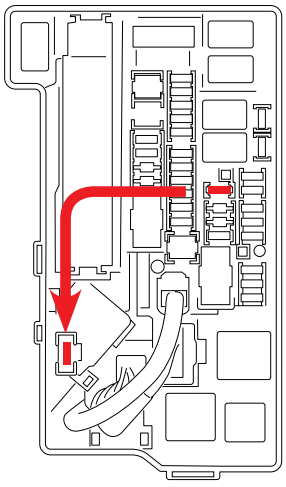
☐	Trunk/Tailgate/Bed Lights (if equipped)	☐	Tail Lights
☐	Brake Lights	☐	Daytime Running Lights (if equipped)
☐	Backup Lights	☐	Marker Lights
☐	Clearance Sonar (if equipped)		

Stop the Engine, Place the Vehicle's IG in the ON position.

☐	Hazard Lights	☐	Turn Signal Lights
☐	Head Light	☐	Fog Lights (if equipped)
☐	High Beams	☐	Accessory Controls/Illumination (if equipped)
☐	Power Side Mirrors (if equipped)	☐	Convenience Memory Settings (if equipped)
☐	Power Sliding Door (if equipped)	☐	Rear Sunshade (if equipped)

	Function		Function
☐	Front Wiper/Washer	☐	Rear Wiper/Washer (if equipped)
☐	Power Sun/Moon Roof (if equipped)	☐	Rollover Side Curtain Air Bag Switch (RSCA) (if equipped)
☐	Clock (if equipped)	☐	Navigation System (if equipped)
☐	Audio/Video (if equipped)	☐	HVAC
☐	Steering Wheel Audio Control (if equipped)	☐	Rear Window Defogger (if equipped)
☐	Front Windshield Defogger (if equipped)	☐	Accessory Power Socket (if equipped)
☐	Side Mirror Defogger (if equipped)	☐	Heated/Vented Seats (if equipped)
☐	Massage Seats (if equipped)		

☐	Glovebox Light (if equipped)	☐	Passenger Air Bag Switch (if equipped)

☐	Power Locks (if equipped)	☐	Power Windows (if equipped)
☐	Power Seats (if equipped)	☐	Key Sensor Buzzer

Remove the short pin after Function check.
Check with your Port/Dealer to see if this step is necessary.