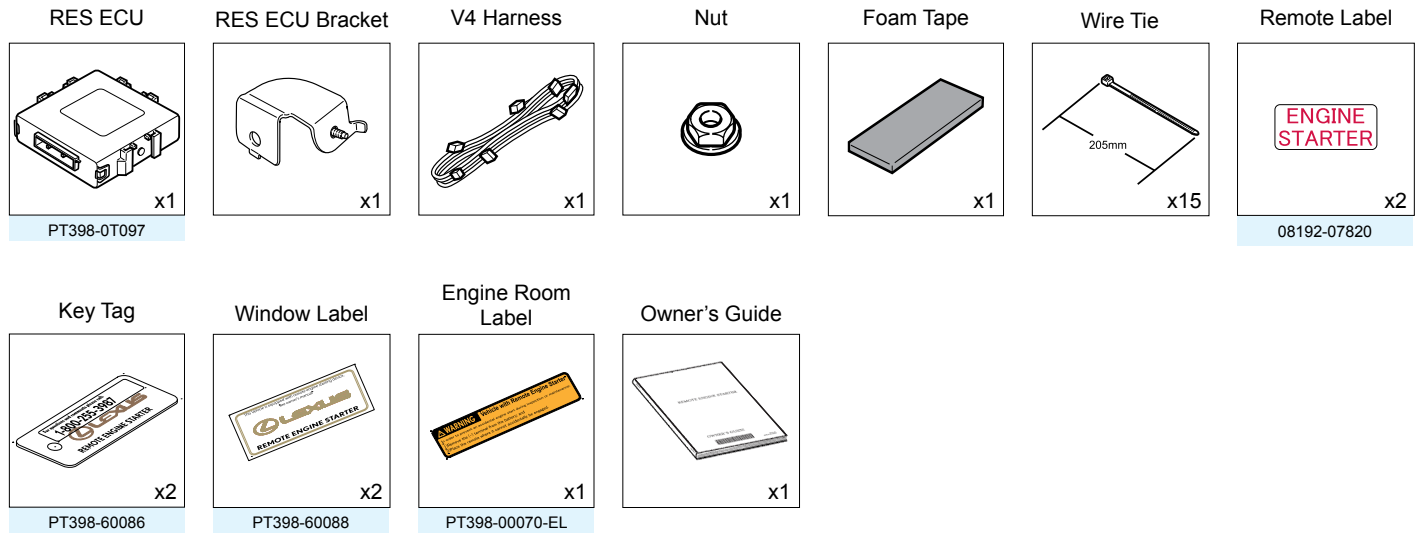


**Part #: PT398-76111**

**Conflicts:**

Will not program with Techstream Lite.

**Kit Contents**



Service Part #'s

**Additional Items**

(may be required)

Item#	Description

**Recommended Sequence of Application**

Item#	Description
1	Illuminated Door Sills
2	TVIP V2 Glass Breakage Sensor
3	TVIP V4 Remote Engine Starter









**Recommended Tools**

Personal & Vehicle Protection	Description
Safety Glasses	
Safety Gloves	(Optional)
Vehicle Protection	Blankets, Parts Boxes
<b>Special Tools</b>	
Techstream	Use latest version on TIS (Do not use Techstream Lite)
<b>Installation Tools</b>	
Screwdriver	#2 Phillips, Flat Blade 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), Passenger's Knee Airbag: 88.5 in•lbf (10 N•m)
Tape	Clear, Electrical
Socket	10mm, extension
Pliers	Needle Nose
<b>Special Chemicals</b>	
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.

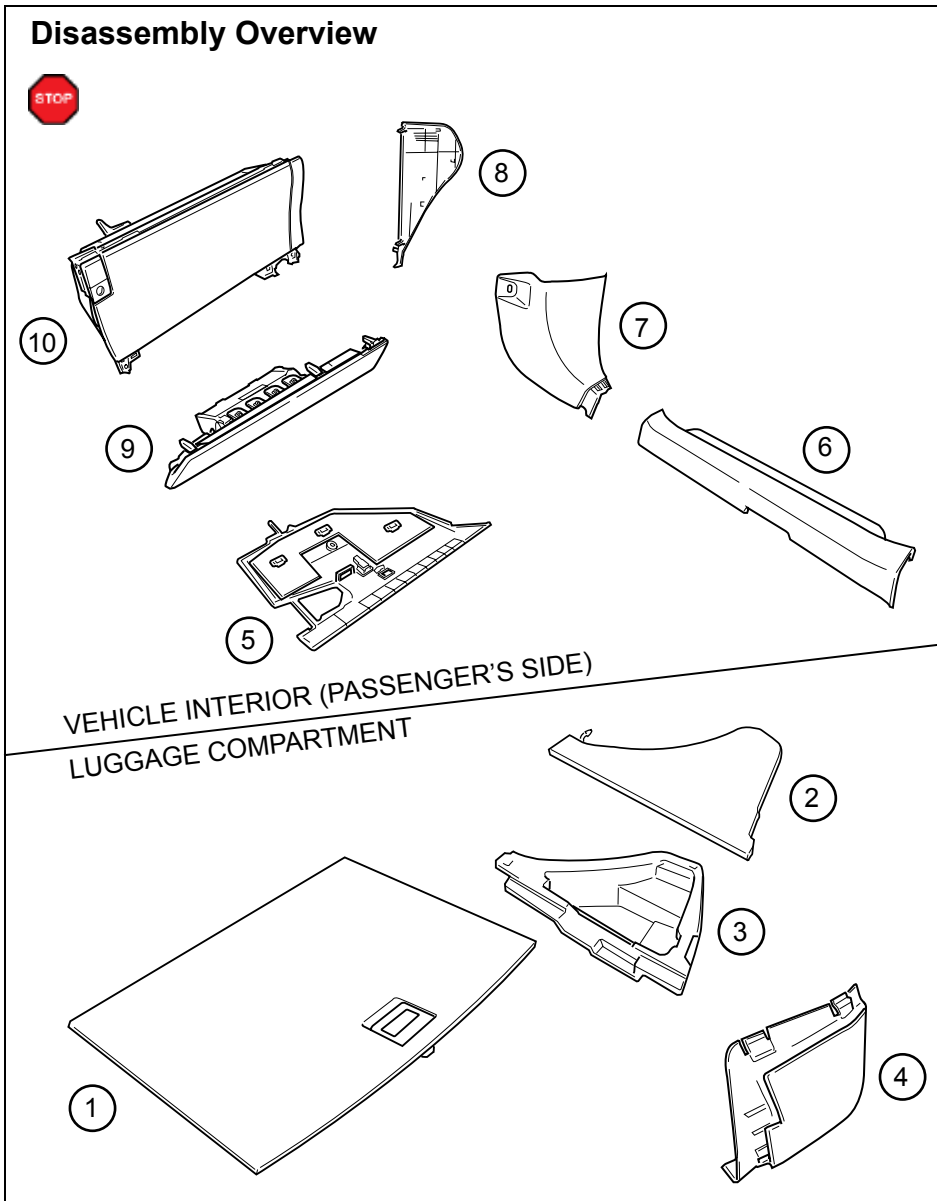
These guidelines can be found in the “Accessory Installation Practices” document.

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 Lexus dealer for a copy of this document.





1	Luggage Board
2	PS Luggage Side Board
3	PS Luggage Side Storage Box
4	Rear Trim
5	Glove Box Under Cover
6	PS Step Cover
7	PS Cowl Cover
8	PS Dash Side Cover
9	PS Knee Airbag <i>(Do not disconnect connectors)</i>
10	Glove Box
<b>STOP</b>	Disconnect all Corresponding Connectors.

- 1. Vehicle Disassembly (Luggage Compartment).**
- a. Place the vehicle in Park with the Parking Brake set.
  - b. Remove the Luggage Board.

c. Remove the PS Luggage Side Board.

d. Remove the Luggage Storage Box.

e. Remove the PS Luggage Side Storage Box.

- Remove 1 Nut.

f. Remove the Rear Trim.

- g. 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.

## 2. Vehicle Disassembly (Passenger Compartment).

- a. Remove the Glove Box Under Cover.

- b. Disconnect the Vehicle Connector (s).
  - Remove 1 Clip.

**V4/V2 Add-on ONLY**


- c. Disconnect the Microphone's 2P Connector.
- d. Disconnect the Vehicle Connector (s).
  - Remove 1 Clip.

- e. Remove the Passenger's Side Step Cover.


- f. Remove the Passenger's Side Cowl Cover.
  - Remove 1 Nut.

- g. Remove the Passenger's Side Dash Cover.
- || • Apply Protection tape on pry area.

- h. Dislodge the Passenger's Knee Airbag carefully.
- || • Add Protection tape to center panel.  
• Remove 3 Bolts

 **CAUTION:** Do not disconnect the Vehicle's Connector.

- i. Wrap the Airbag in a Blanket or the like as shown.
- j. Place the Airbag on top of the TVIP box.

 **CAUTION:** Prevent stress on the Airbag Wire.



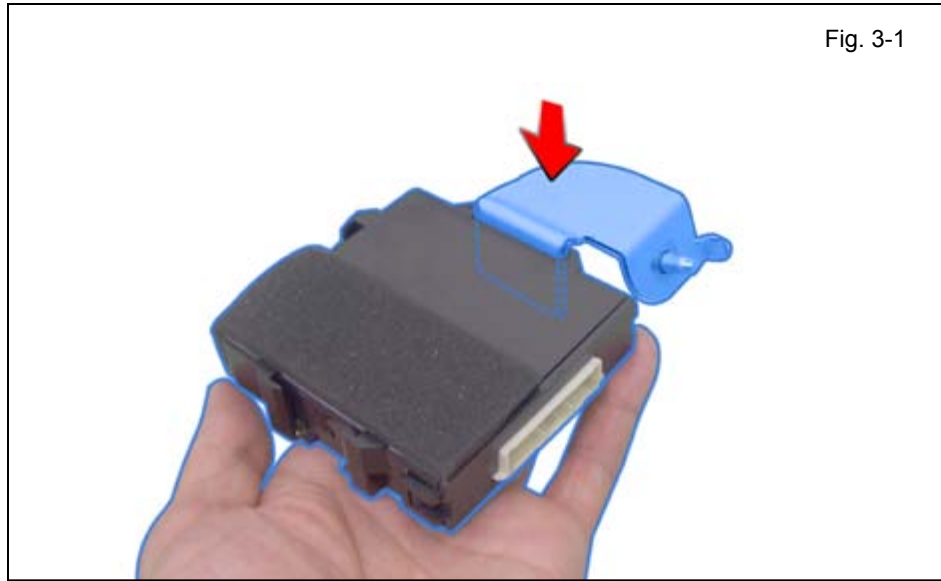
- k. Remove 2 Screws from the bottom of the Glove Box.
- l. Open the Glove Box.

- m. Dislodge the Glove Box.
  - Remove 2 Screws.

- n. Remove the Glove Box.
  - Disconnect the Vehicle Connector.
  - Remove the Vehicle's Clamp.

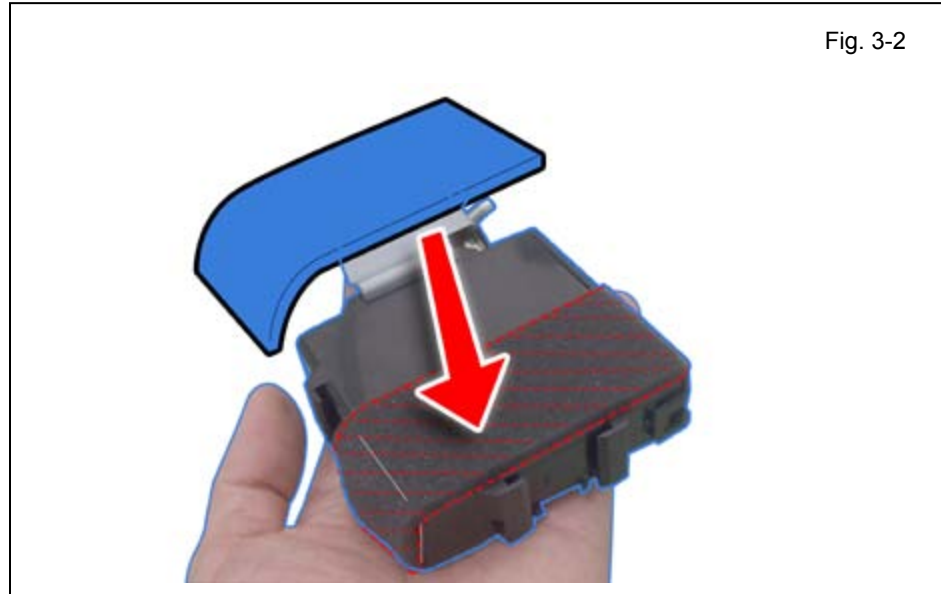


**CAUTION:** Do not remove Glove Box Light.



### 3. RES ECU Preparation and Installation.

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



- b. Attach 1 Foam Tape to the RES ECU.

- c. Place the RES ECU on the Vehicle's Brace in the Glove Box Area.

- d. Install the RES ECU using the Nut from the kit.



**NOTE:** Make sure the Guide Pin is seated correctly and Verify that the Nut is tightened securely.

#### 4. V4 Harness Installation.

- a. Route the V4 Harness over the Vehicle's Harness and Brace.
- b. Plug in the V4 24P Connector to the RES ECU.

- c. Secure the V4 Harness's White Tape Marker to the Vehicle's Brace using 1 Wire Tie.
- d. Secure the V4 Harness to the Vehicle Harness using 1 Wire Tie.

- e. Route the V4 Harness toward the Passenger's Cowl Area.
- f. Secure the V4 Harness to the Vehicle's Brace with 2 Wire Ties.

- g. Secure the V4 Harness to the Vehicle Harness with 1 Wire Tie.

- h. Secure the V4 Harness to the Vehicle Harness with 1 Wire Tie.
  - Place the V4 Harness's Orange Tape marker parallel to the Vehicle's Brace as shown.



- I. Secure the V4 Harness to the Vehicle Harness with 2 Wire Ties.

- m. Secure the 12P Connectors to the Vehicle Harness with 1 Wire Tie.

**V4/V2 Add-on ONLY**

- n. Secure the V4 Harness to the Vehicle Harness with 1 Wire Tie.
- o. Plug the V4 8P Connector to the V2 8P Connector.

p. Secure the V4 Harness to the Vehicle Harness with 1 Wire Tie.

q. Unplug the V2 12P connector from the Passenger's Cowl Connector Block.

r. Plug the V4 12P Connectors in between the V2's and the Vehicle's 12P Connectors.

- s. Secure the 12P Connectors to the Vehicle Harness with 1 Wire Tie.



**CAUTION:** Do not secure the 12P Connectors to the Yellow Airbag Harness.

- t. Route the V4 Harness along the Vehicle Harness under the Glove Box Area.
- u. Secure the V4 Harness to the Vehicle Harness with 1 Wire Tie.

- v. Secure the V4 Harness to the Vehicle Harness with 3 Wire Ties.
  - Arrange the V4 Harness's Black Tape marker to the Vehicle Harness's White (or Black) Tape.

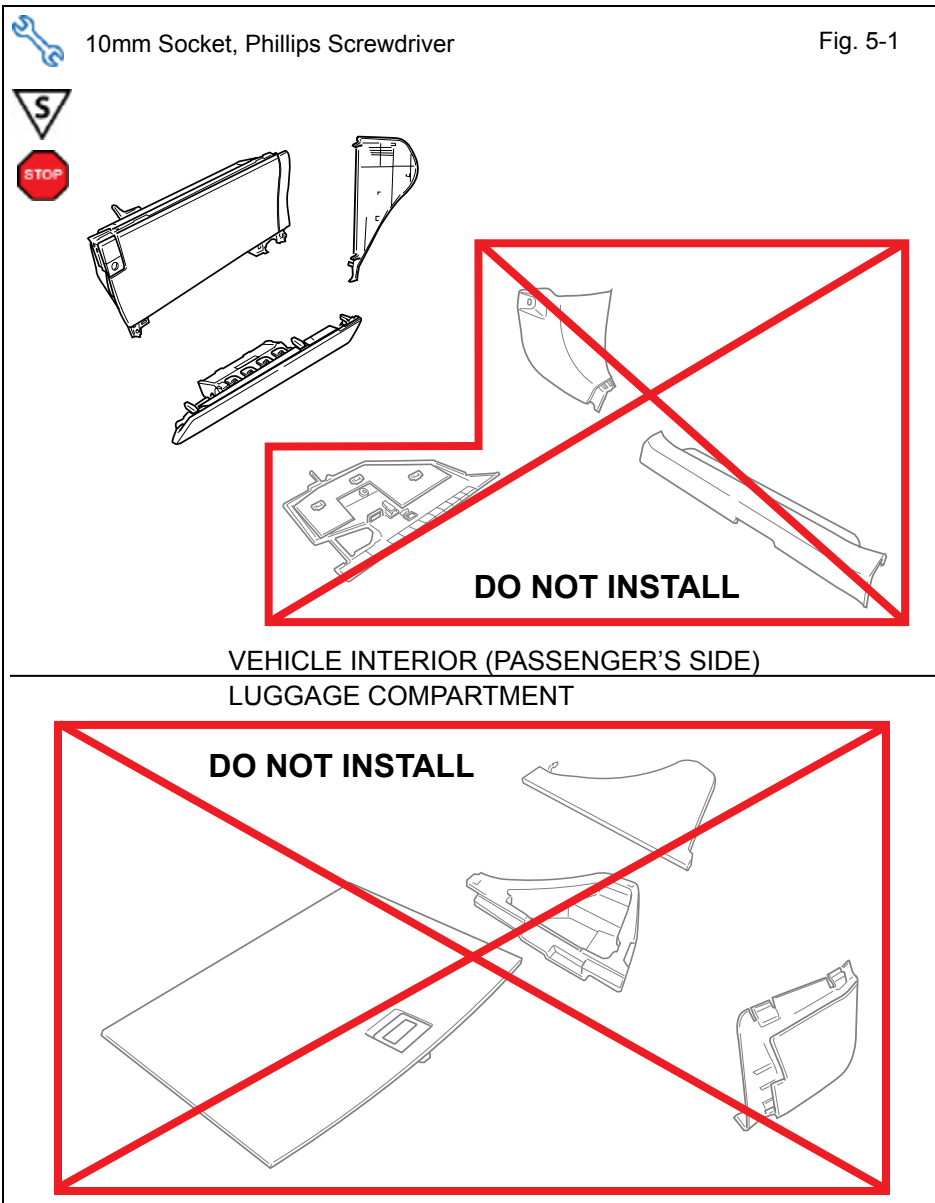


**V4 ONLY**

- w. Plug the Vehicle's Gray 2P Connector to the V4 White 2P Connector.

**V4/V2 Add-on ONLY**

- x. Connect the V2 Gray 2P Connector to the V4 White 2P Connector.



### 5. Registration Preparation.

- a. Reassemble the Vehicle except for the PS Cowl and Step Covers; Glove Box Under Cover and Luggage Compartment Panels.



**NOTE:** When reinstalling Knee Airbag, make sure to tighten the Bolts to 88.5 in•lbf (10 N•m).

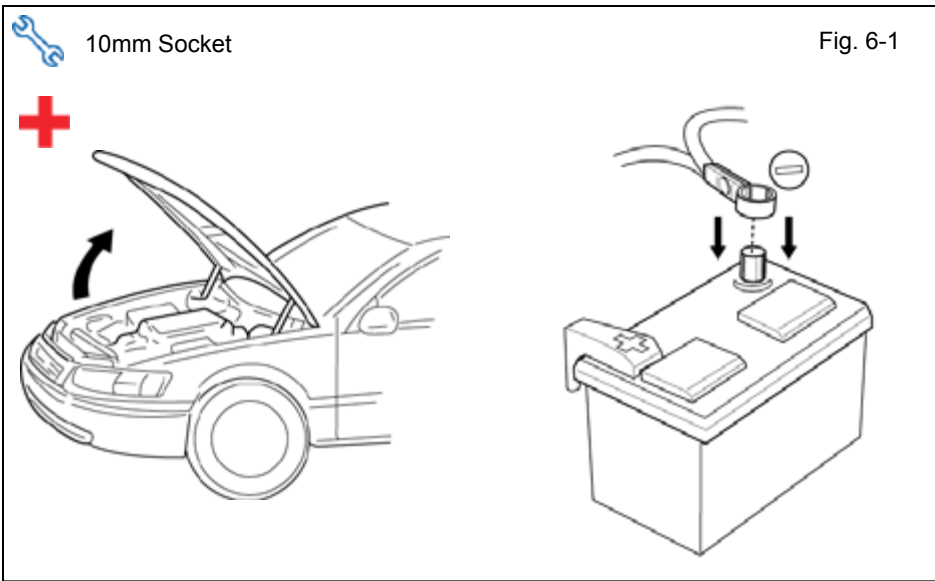


**VERIFY:** That all Connectors are reconnected.



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

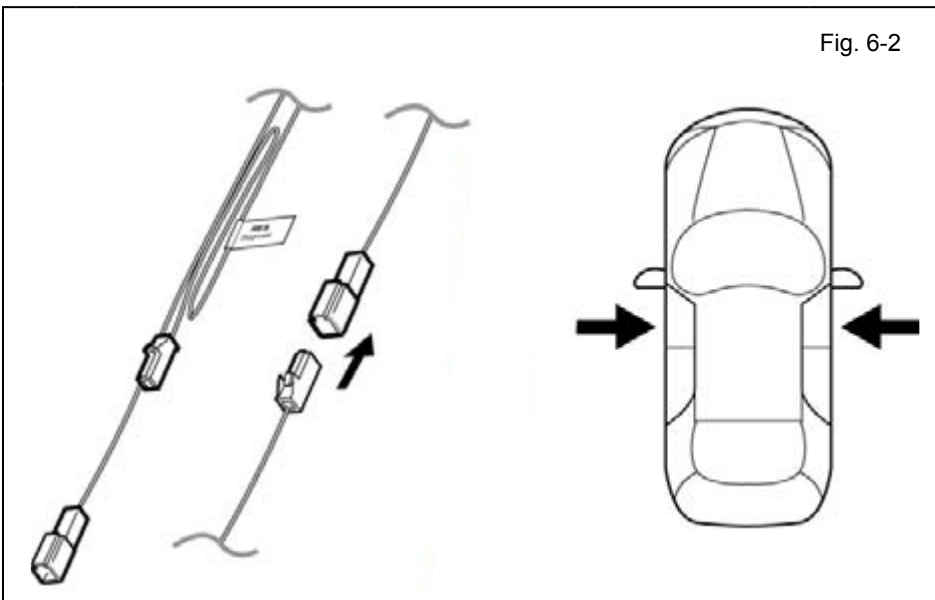
- b. Verify that the Short Pin is installed.
  - If not install now.



**6. Registration.**

- a. Open the Hood.
- b. Temporarily reconnect the Negative Battery Cable.

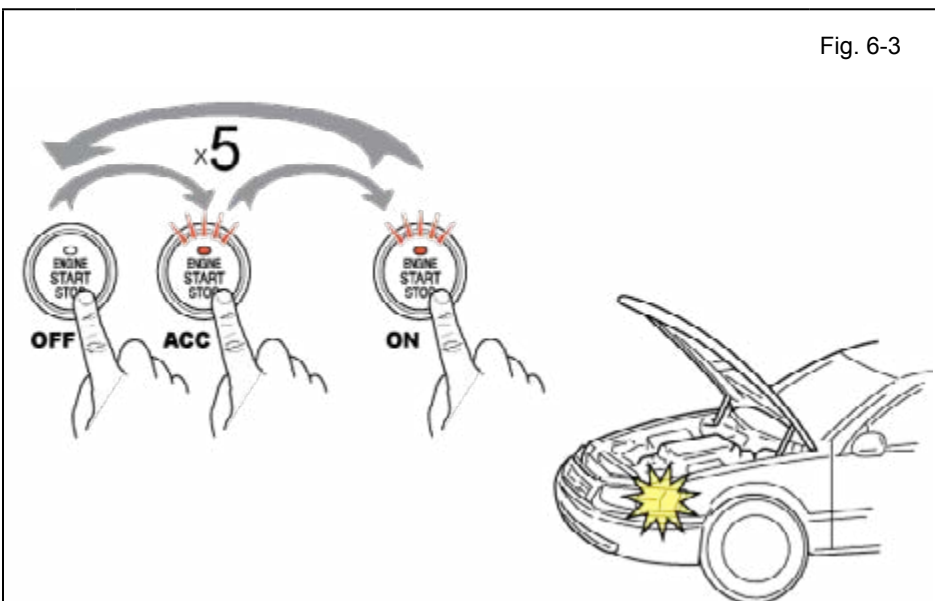
**+** **CAUTION:** Do not touch the Positive Terminal.



- 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-aa.

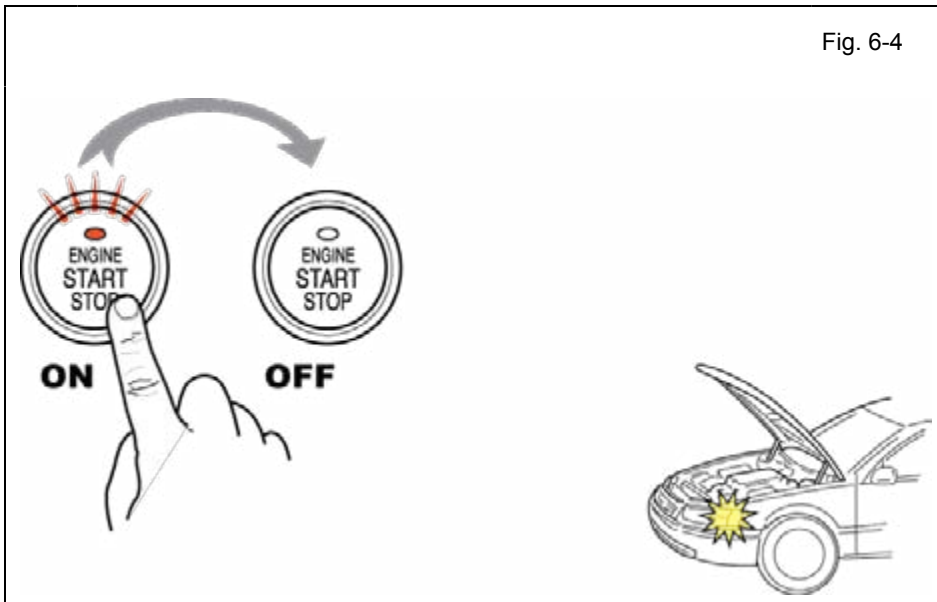
- d. Close all doors.



- e. Place the Vehicle in Park (P) or Neutral (N) position.
- f. Cycle the "ENGINE START STOP" Button from OFF to ON 5 times.

**NOTE:** One cycle consists of: OFF → Accessory → ON. This is equivalent to pressing the "ENGINE START STOP" Button 14 times.

**LOOK:** For the Hazard Lights to Flash Once.



- g. Start the Engine.
- h. After 10 seconds stop the Engine.

**IF THIS PROCEDURE FAILED**

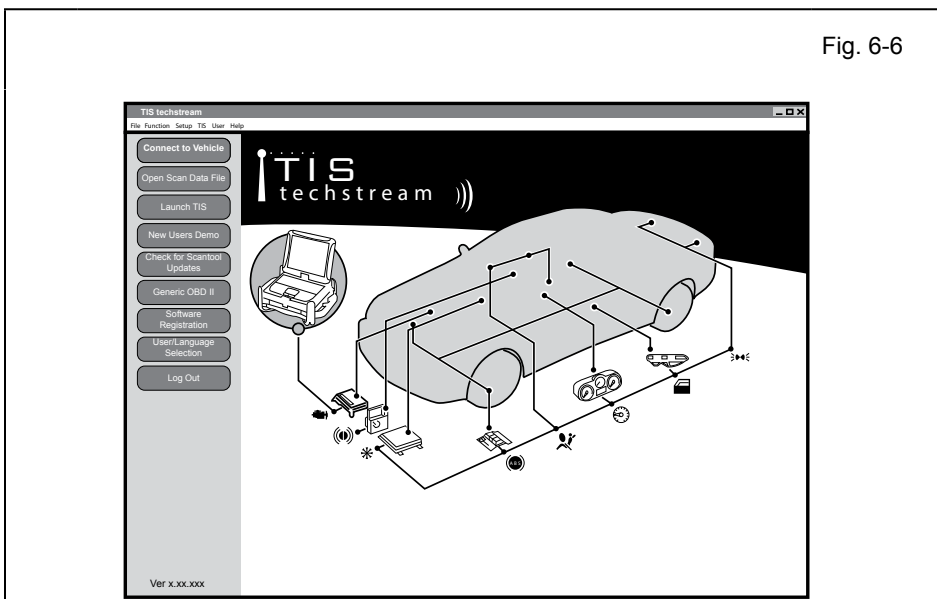
The Hazard Lights don't flash or flash Three Times.

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

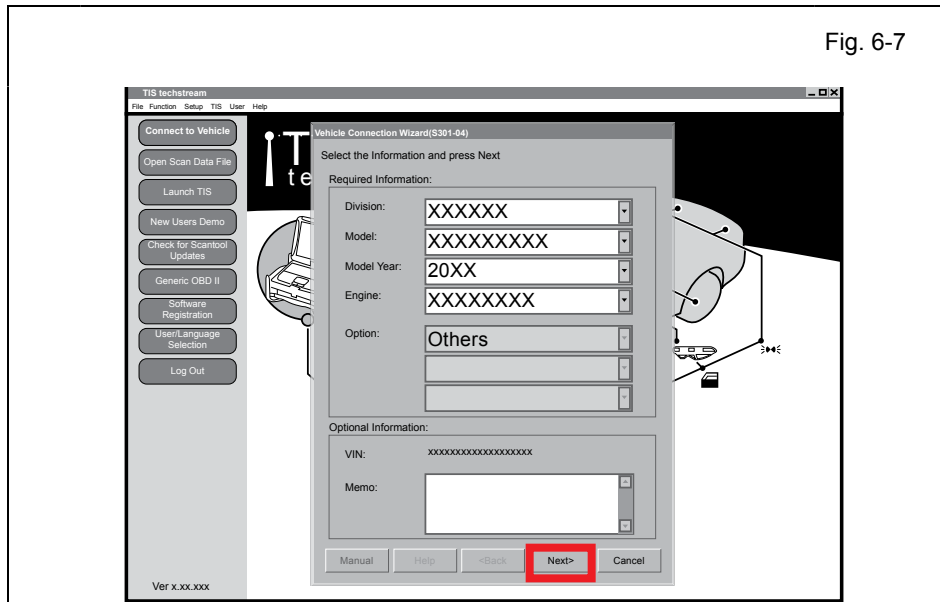


**CAUTION:** Techstream Lite will not work for this section, use the Techstream Notebook ONLY.

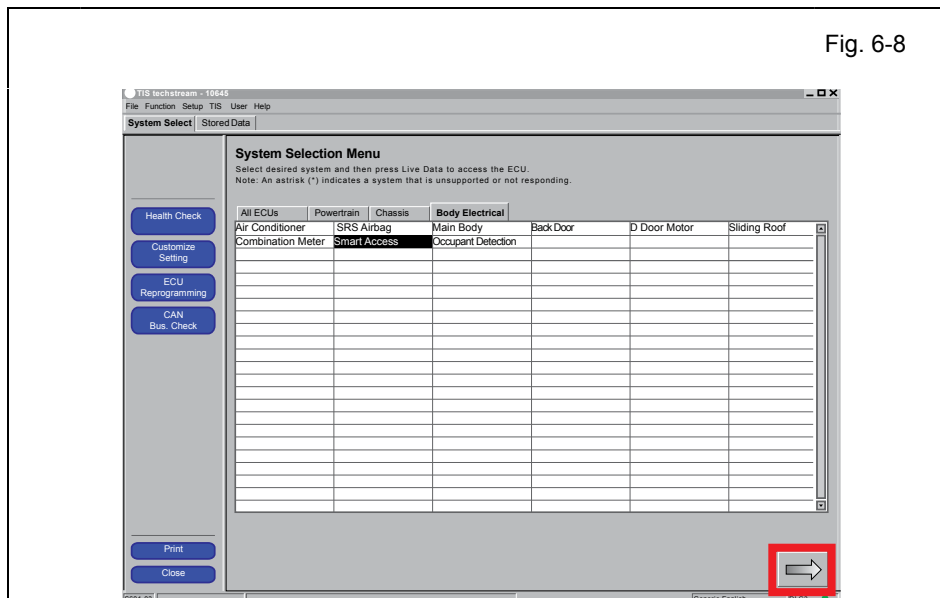
- i. Connect the Techstream Notebook to the Vehicle's Diagnostic Port.
- j. With the Smart Key in your possession, press the "ENGINE START STOP" Button twice to select the Ignition "ON" position.



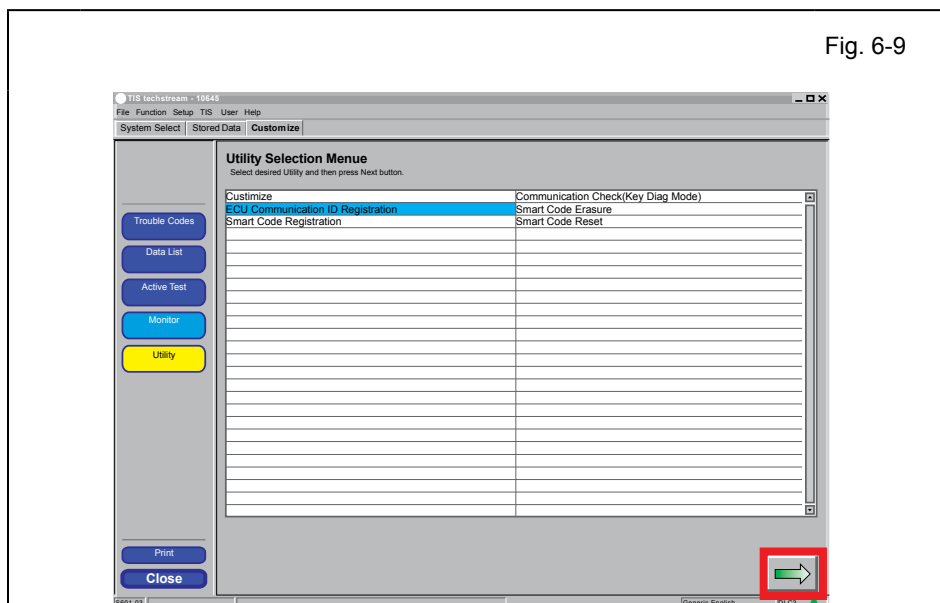
- k. Start the TIS Techstream Application by clicking on the shortcut located on the Desktop.
- l. Click "Connect to Vehicle."




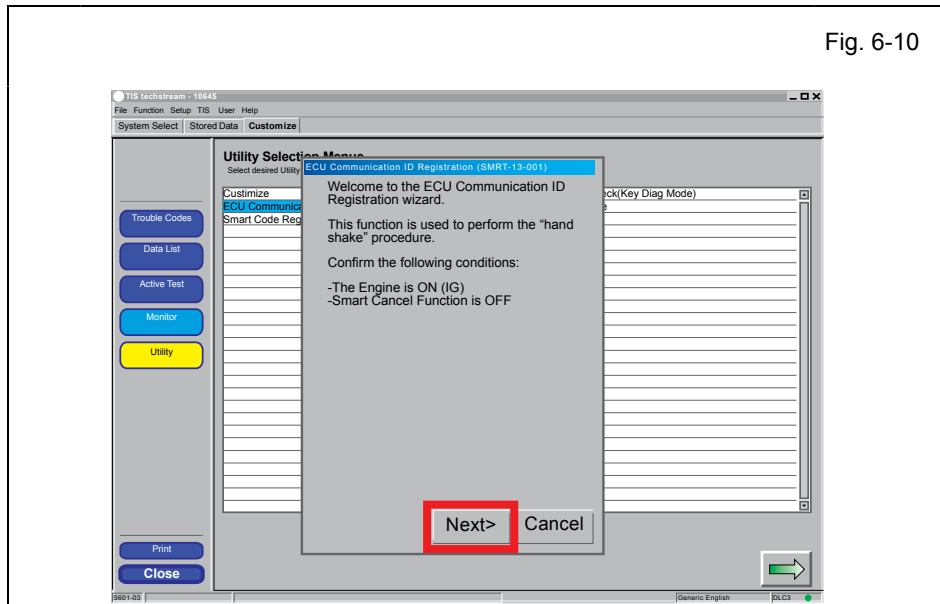
- m. Confirm that the information displayed on the Vehicle Connection Wizard is correct for the vehicle. If not verify that the Techstream is properly connected.
- n. Select "Others."
- o. Click "Next>."



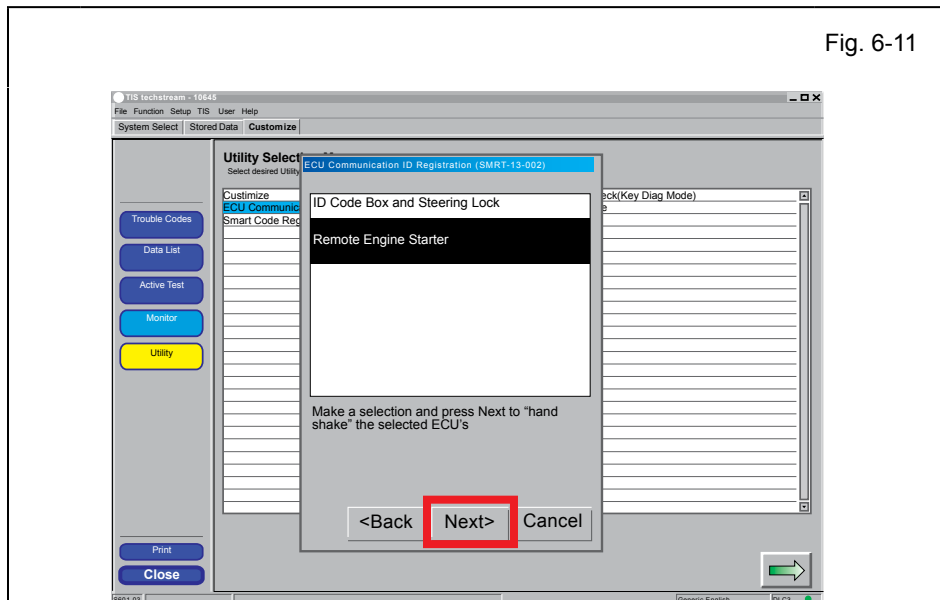
- p. Select "Smart Access."
- q. Click .



- r. Click on "Utility."
- s. Select "ECU Communication ID Registration."
- t. Click .

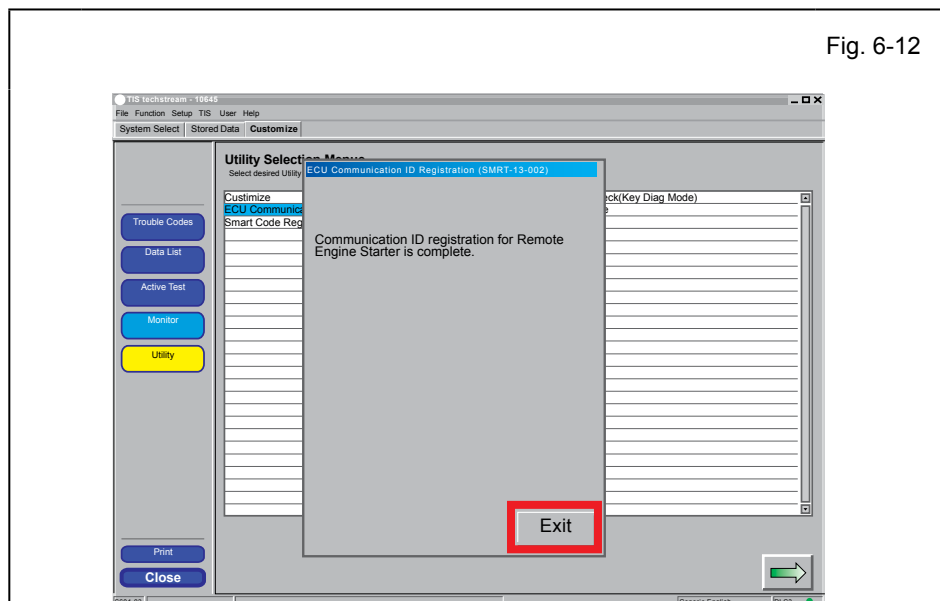


u. Click "Next>."



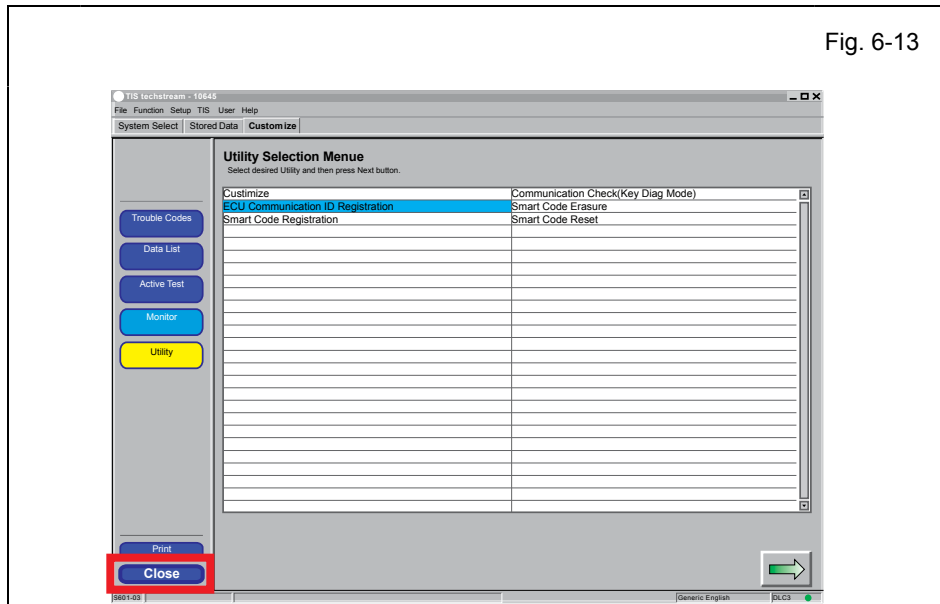
v. Select "Remote Engine Starter."

w. Click "Next>."

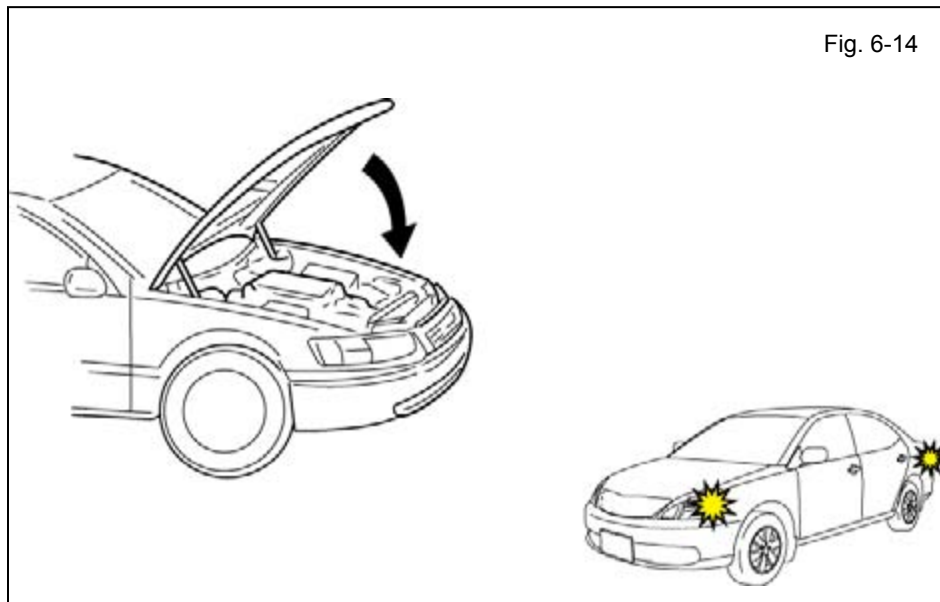


**CONFIRM:** That the ECU Communication ID was completed successfully.

x. Click "Exit."



y. Click 



- z. Exit the vehicle.
- aa. Close the Hood.
- ab. Look for the Hazards 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.

- ac. After a successful Registration, disconnect the 1P RES Diagnostic Connectors.
- ad. Using Electrical Tape secure the RES Diagnostic Connectors and Harness to the Vehicle Harness.

### 7. V4 Harness Installation.

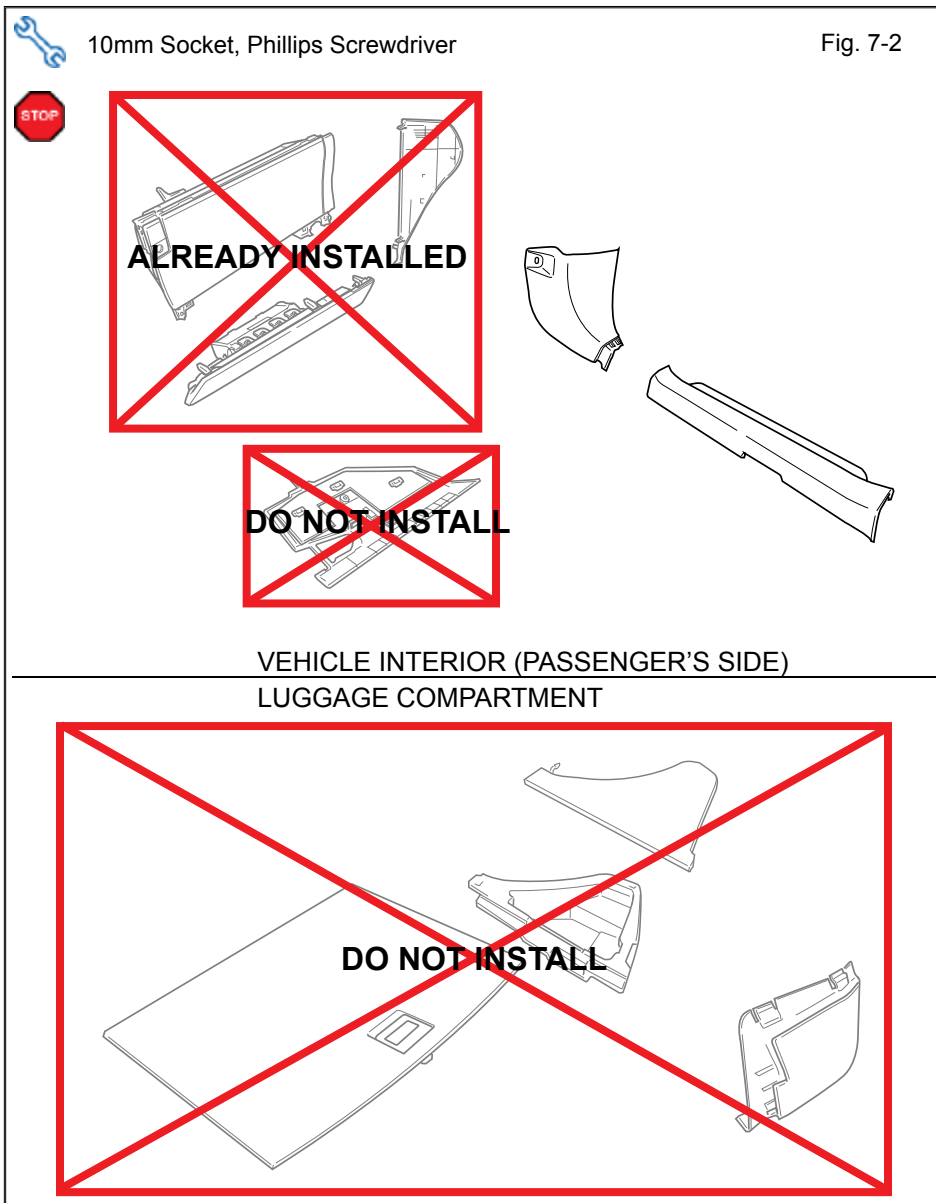
- a. Roll up the front door windows.
- b. Open the Trunk Lid.
- c. Disconnect the Negative Battery Terminal.

**+** **CAUTION:** Do not touch the Positive Terminal.

- d. Reassemble the Vehicle except for the Glove Box Under Cover and Luggage Compartment Panels.

**STOP** **Note:** Make sure that all Connectors are reconnected.

**STOP** **Note:** Verify that panels fit together properly, with no uneven gaps.





**V4 ONLY**

- e. Connect the V4 Gray 2P Connector to the Vehicle's Gray 2P Connector.
  - Reinstall the Vehicle's Clamp

- f. Secure the 2P Connectors to the Vehicle Harness with 1 Wire tie.



- Make sure to secure the 2P Connectors as shown.

**V4/V2 ADD-ON**

- g. Connect the Microphone's 2P Connector to the V2 Harness 2P Connector.

- h. Connect the V4 Gray 2P Connector to the Vehicle's Gray 2P Connector.
  - Reinstall the Vehicle's Clamp

- i. Secure the 2 2P Connectors to the Vehicle Harness with 1 Wire tie.



- Make sure to secure the two 2P Connectors as shown.

- j. Reinstall the Glove Box Under Cover.

## 8. 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. Using VDC approved cleaner and cleaning method, clean the indicated area on the key.
- d. Use a piece of Clear Tape to lift the label off its protective backing.



**CAUTION:** Do not touch the adhesive surface.

- e. Attach the Key Label as shown.
- f. Attach the Key Tag.

**REPEAT:** steps c–f with the other Smart Key.

- g. Use Household Glass Cleaner to clean the inside of the Front Door Window.
- h. Use a piece of Clear Tape to lift the Label off its protective backing.



**CAUTION:** Do not touch the adhesive surface.

- i. Use a piece of Clear Tape to attach the Label as shown.



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

**REPEAT:** steps g-i with the other Window.

### 9. Complete the Installation.

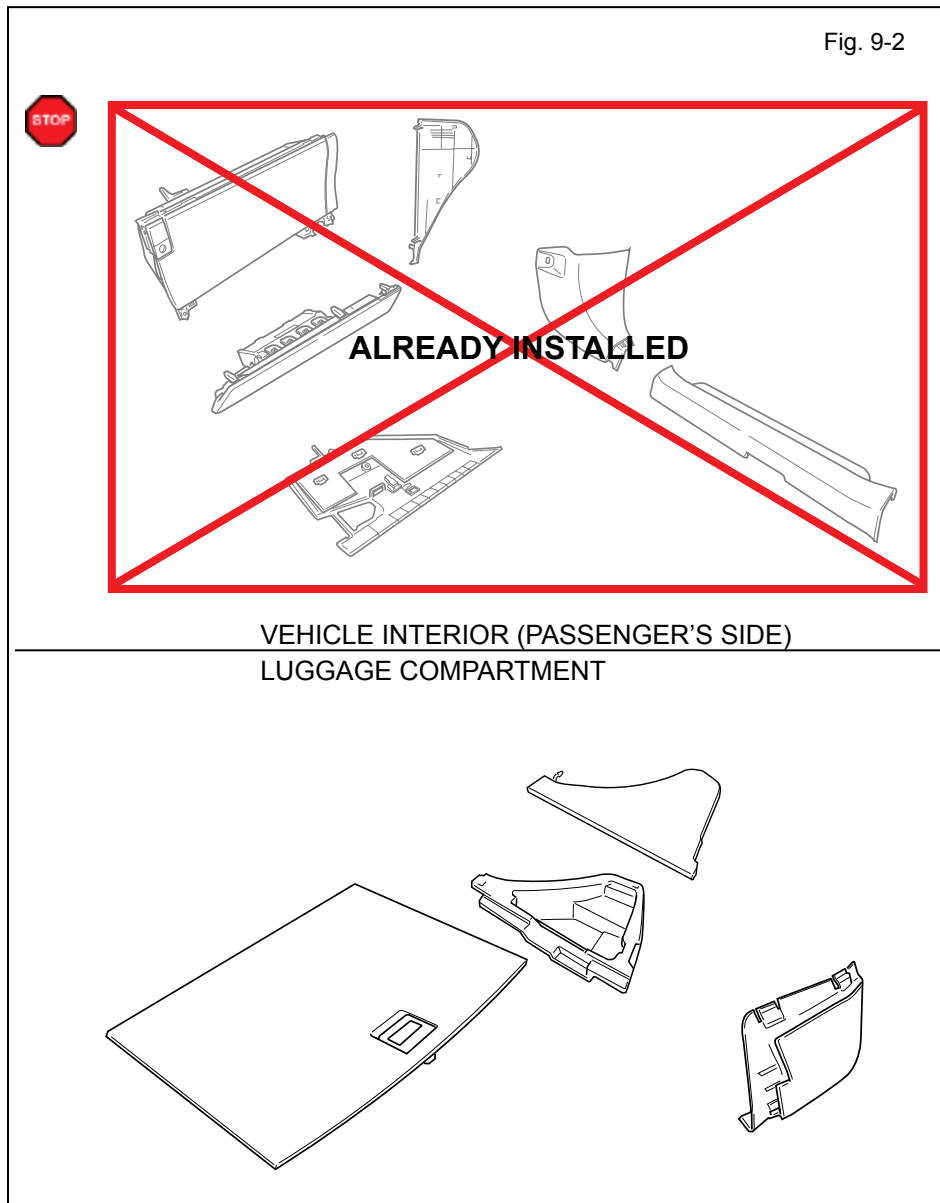
- a. Position the Negative Battery Cable at the original factory position and torque the nut.



**Torque: 5.4 N•m (48 in•lbf)**



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



- 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 “P” (Park) 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.  <b>NOTE:</b> <i>Wait 30 seconds before pulling the hood release handle for the security alarm to trigger.</i>	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)

### Vehicle Appearance Check

Perform		Look For
<input type="checkbox"/>	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**

<input type="checkbox"/> Dome/Courtesy Lights	<input type="checkbox"/> Horn
---	-------------------------------

**Start the Vehicle**

<input type="checkbox"/> Starter	<input type="checkbox"/> Gauges
<input type="checkbox"/> Check Engine Light <i>If the warning light remains on, it may indicate a system malfunction.</i> 	<input type="checkbox"/> ABS Light (if equipped) <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"/> Seat Belt Warning Light <i>If the warning light remains on, it may indicate a system malfunction.</i> 	<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"/> Air Bag Warning Light <i>If the warning light remains on, it may indicate a system malfunction.</i> 	
<input type="checkbox"/> Cruise Control Light (if equipped) 	

**Using a Mirror or Assistant check the following.**

<input type="checkbox"/> Trunk/Tailgate/Bed Lights (if equipped)	<input type="checkbox"/> Tail Lights
<input type="checkbox"/> Brake Lights	<input type="checkbox"/> Daytime Running Lights (if equipped)
<input type="checkbox"/> Backup Lights	<input type="checkbox"/> Marker Lights
<input type="checkbox"/> Clearance Sonar (if equipped)	

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

<input type="checkbox"/> Hazard Lights	<input type="checkbox"/> Turn Signal Lights
<input type="checkbox"/> Head Light	<input type="checkbox"/> Fog Lights (if equipped)
<input type="checkbox"/> High Beams	<input type="checkbox"/> Accessory Controls/Illumination (if equipped)
<input type="checkbox"/> Power Side Mirrors (if equipped)	<input type="checkbox"/> Convenience Memory Settings (if equipped)
<input type="checkbox"/> Power Sliding Door (if equipped)	<input type="checkbox"/> Rear Sunshade (if equipped)

Function		Function	
<input type="checkbox"/>	Front Wiper/Washer	<input type="checkbox"/>	Rear Wiper/Washer (if equipped)
<input type="checkbox"/>	Power Sun/Moon Roof (if equipped)	<input type="checkbox"/>	Rollover Side Curtain Air Bag Switch (RSCA) (if equipped)
<input type="checkbox"/>	Clock (if equipped)	<input type="checkbox"/>	Navigation System (if equipped)
<input type="checkbox"/>	Audio/Video (if equipped)	<input type="checkbox"/>	USB Connections (if equipped)
<input type="checkbox"/>	Steering Wheel Audio Control (if equipped)	<input type="checkbox"/>	HVAC
<input type="checkbox"/>	Front Windshield Defogger (if equipped)	<input type="checkbox"/>	Rear Window Defogger (if equipped)
<input type="checkbox"/>	Side Mirror Defogger (if equipped)	<input type="checkbox"/>	Accessory Power Socket (if equipped)
<input type="checkbox"/>	Massage Seats (if equipped)	<input type="checkbox"/>	Heated/Vented Seats (if equipped)
<input type="checkbox"/>	Glove box Light (if equipped)	<input type="checkbox"/>	Passenger Side Foot Lamp
<input type="checkbox"/>	Power Locks (if equipped)	<input type="checkbox"/>	Power Windows (if equipped)
<input type="checkbox"/>	Power Seats (if equipped)	<input type="checkbox"/>	Key Sensor Buzzer

