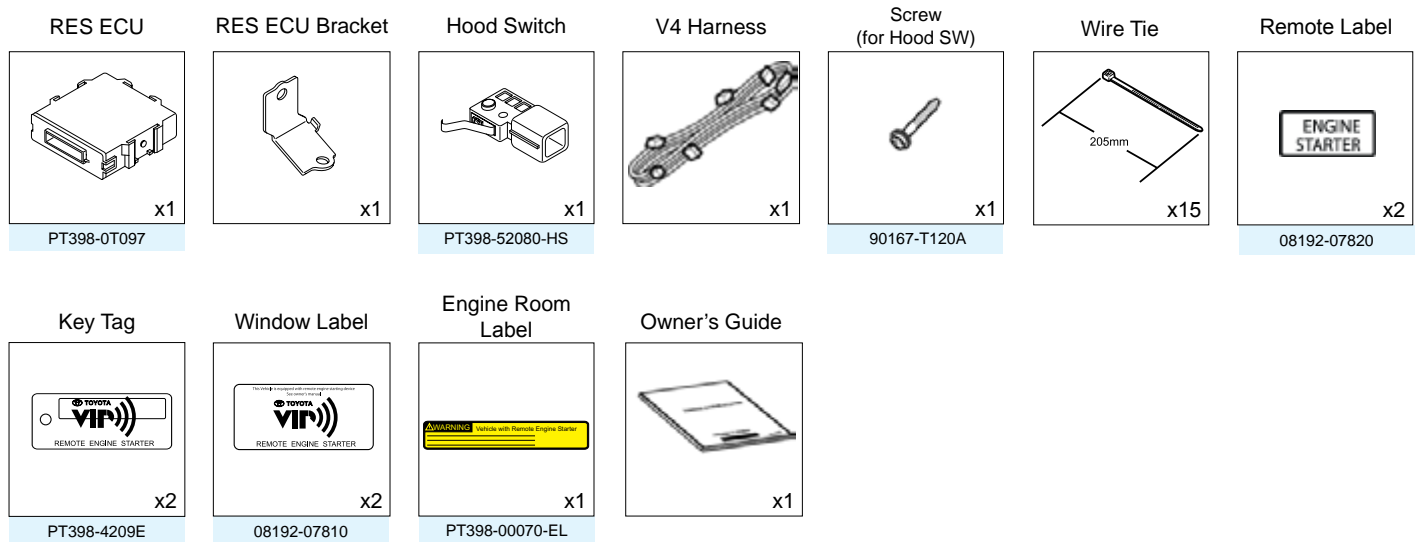


Part #: PT398-47121

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 |
|-------|-------------|
|       |             |
|       |             |
|       |             |
|       |             |
|       |             |

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, 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  |
| <b>Special Chemicals</b>      |  |
| Cleaner                       | VDC Approved Cleaner   |
| Glass Cleaner                 | Household Glass Cleaner  |

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



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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.







c. Remove the Luggage Board.

d. Remove the DS Luggage  
Side Board.

e. Remove the PS Luggage  
Side Board.

f. Remove the Luggage Storage Box.

g. Remove the PS Luggage Side Storage Box.

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.

**2. Hood Switch Installation.**

a. Dislodge the Radiator Hose from its Clamps.

b. Dislodge the Radiator Hose from its Clamps.

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



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

- e. Remove the Hood Lock Assembly.

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

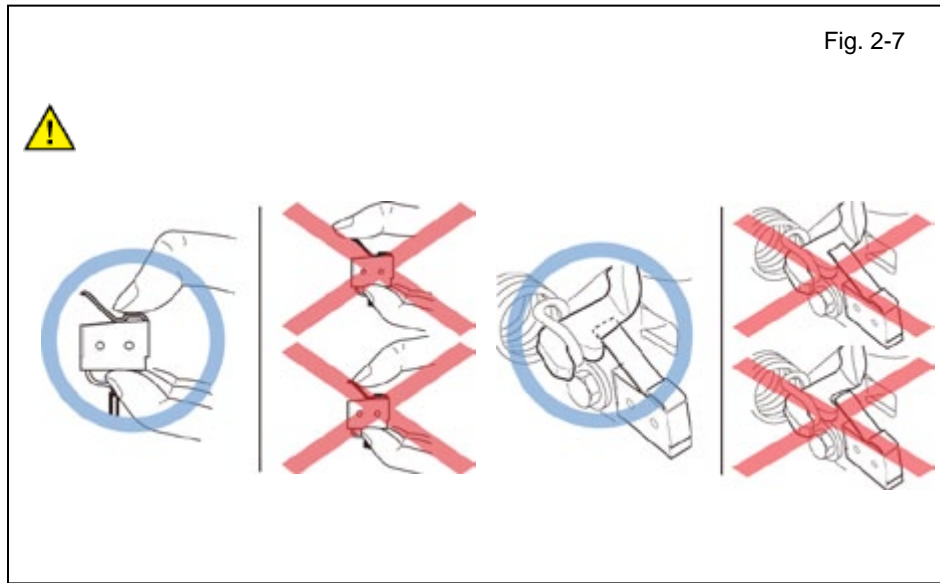



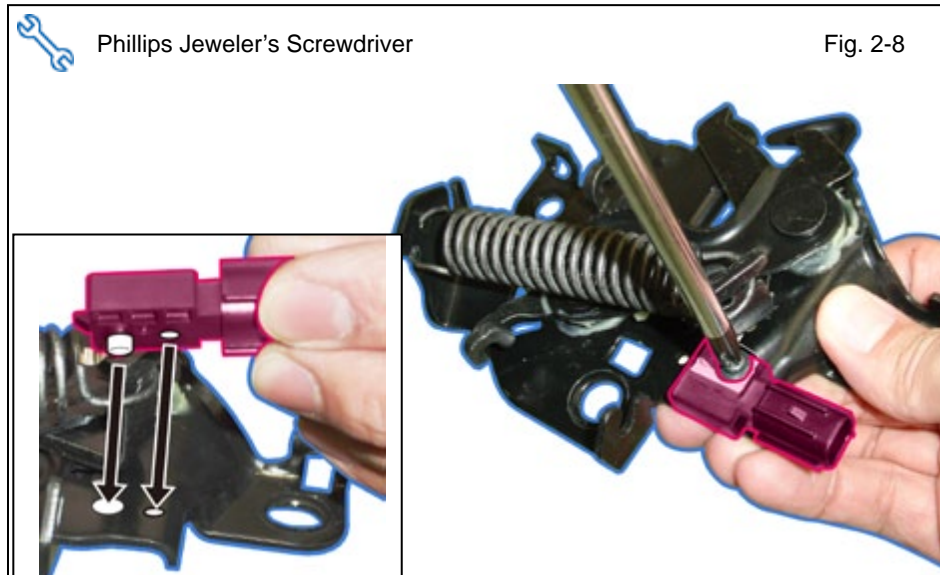


Fig. 2-7

-  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

Fig. 2-8

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

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

- 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.

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

**V4/V5 Add-on ONLY**

- k. Cut the Wire Tie securing the Jumper Connector.

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

- m. Route the Vehicle's Hood Switch Harness as shown.

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

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

- || p. Reinstall the Radiator Hose to its corresponding clamps.

### **3. Disassembly.**

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

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

- 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.

- d. Disconnect the Dampener from the Glove Box.

- e. Remove the Glove Box.

- f. Open then remove the Upper Glove Box.



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

- g. Remove the Cluster Side Panel.



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

- h. Remove the Center Air Conditioner Vent.



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

- i. Remove the Audio Unit.

- Remove 4 Bolts.

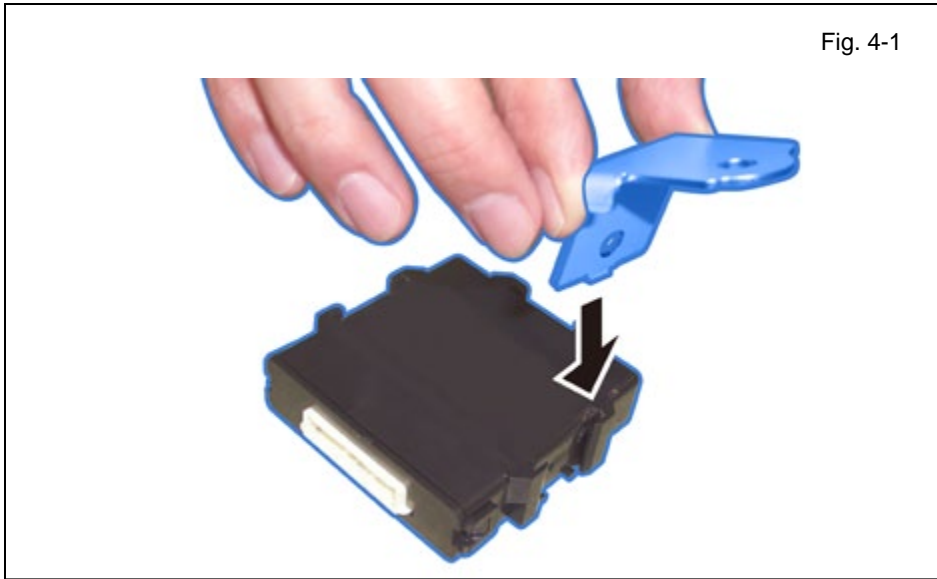


Fig. 4-1

#### 4. RES ECU Preparation and Installation.

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

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

- 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.



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

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

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

- 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.

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

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



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

- 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.

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

- p. Secure the V4 Harness to the Vehicle Harness using 1 Wire Tie.

**V4 ONLY**

- q. Connect the V4 White 8P Connector to the Vehicle's Connector Block.

- r. Secure the V4 Harness to the Vehicle Harness using 1 Wire Tie.

**V4/V5 Add-on ONLY**

- s. Connect the V4 White 8P Connector to the V5 8P Connector.

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

**V4 ONLY**

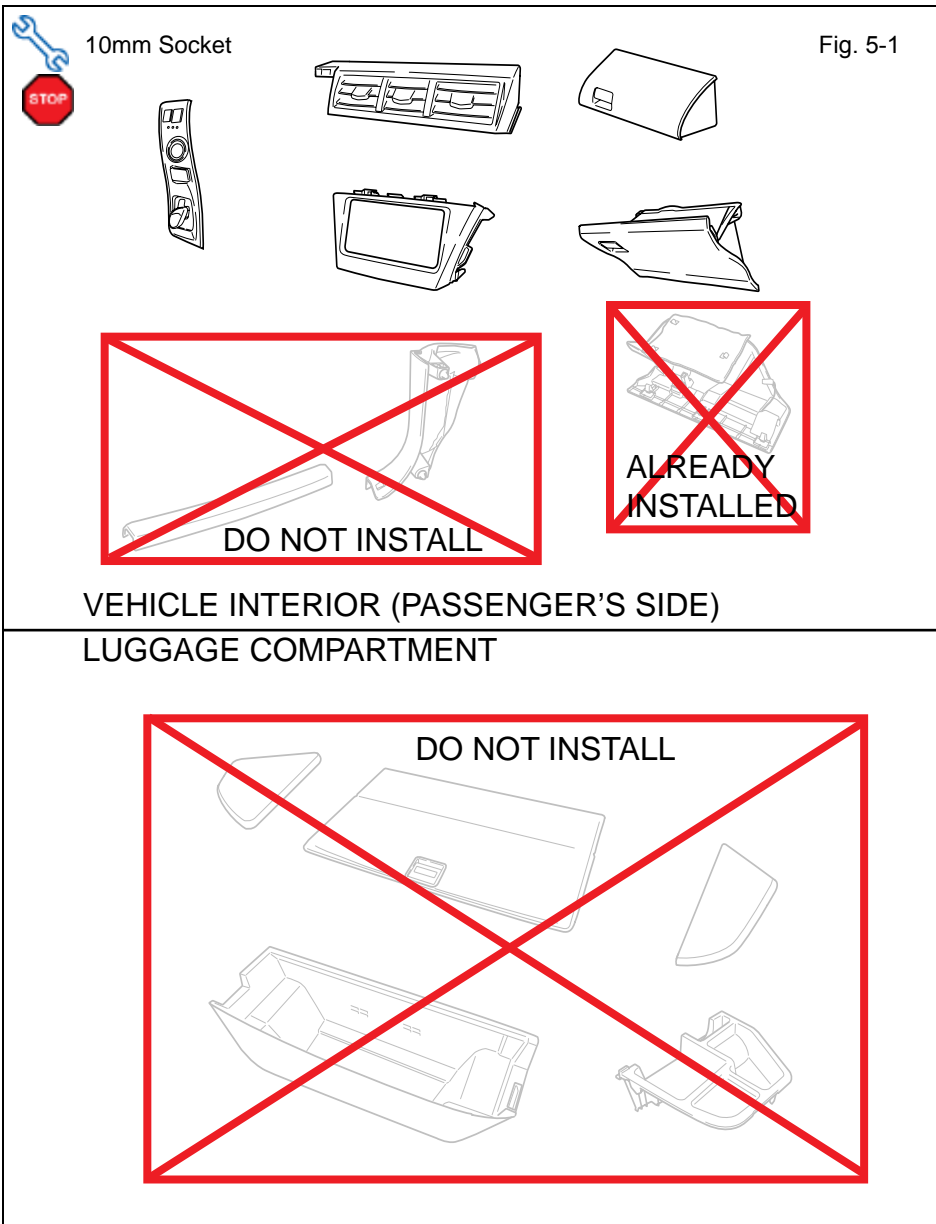
- u. Connect the Vehicle's Black 2P Connector to the V4 Black 2P Connector.



ab. Connect the Microphone's  
2P Connector to the V5  
2P Connector.

ac. Connect the V4 Black 2P  
Connector to the Glove  
Box Under Cover Black  
2P Connector.

ad. Reinstall the Glove Box  
Under Cover.



**5. Registration Preparation.**

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

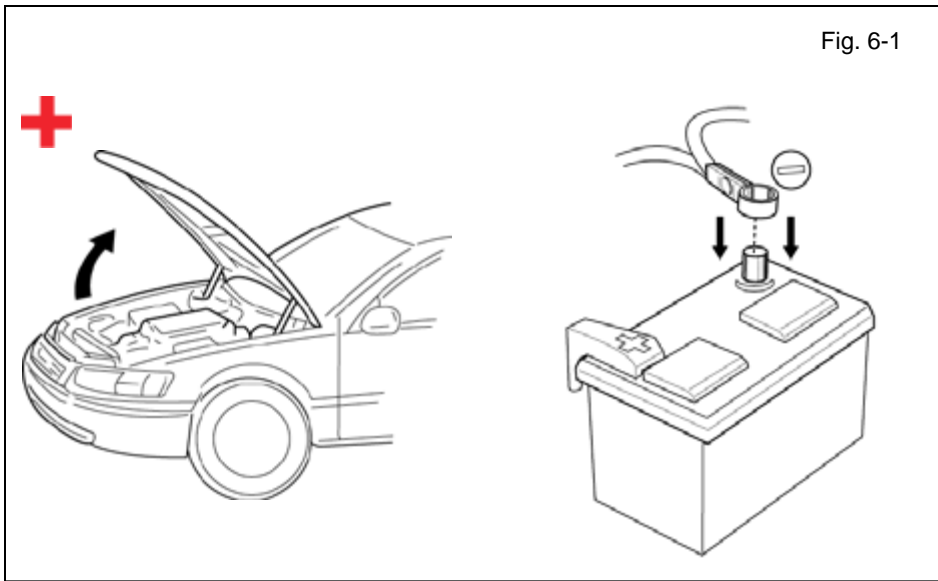


**VERIFY:** Make sure that all Connectors are reconnected.



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

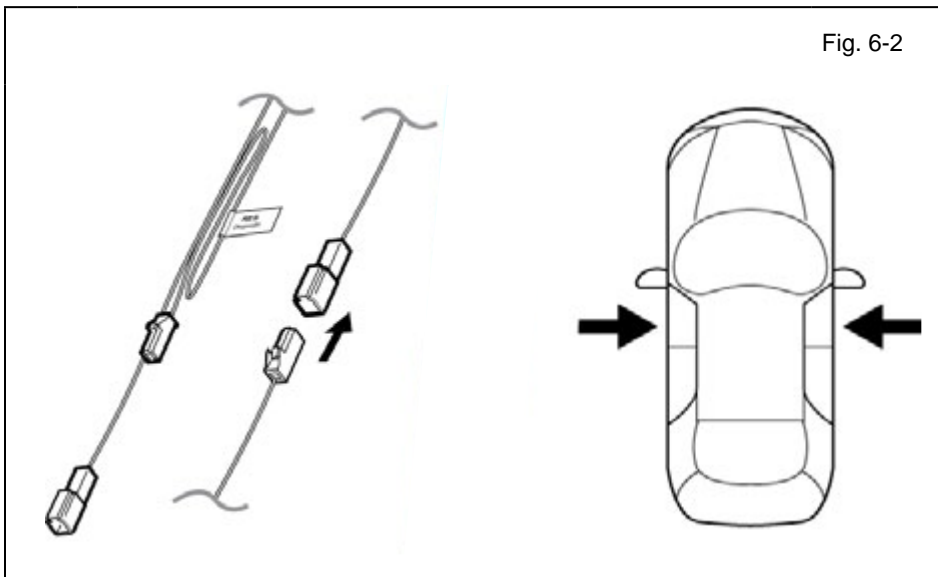




**6. Registration.**

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

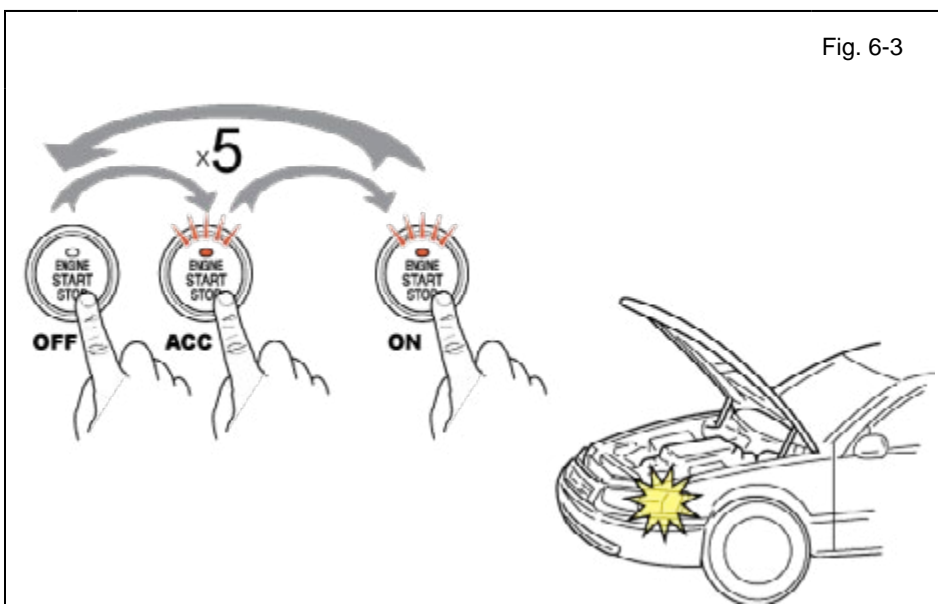
**+** **CAUTION:** Do not touch the Positive Terminal.



- 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 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.

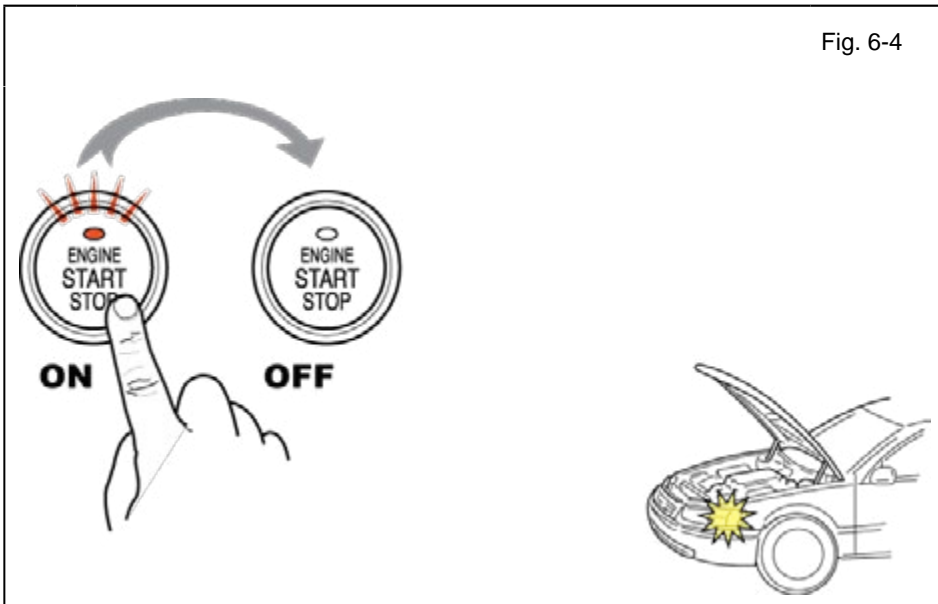


Fig. 6-4

- 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.

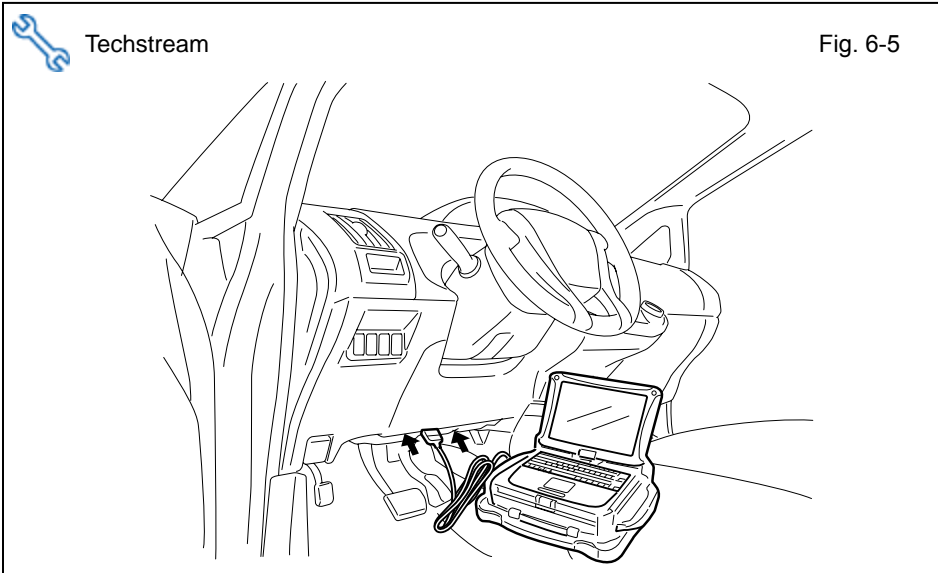


Fig. 6-5



**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 Remote Control Key in your possession, press the Power Button twice to select the Ignition "ON" position.

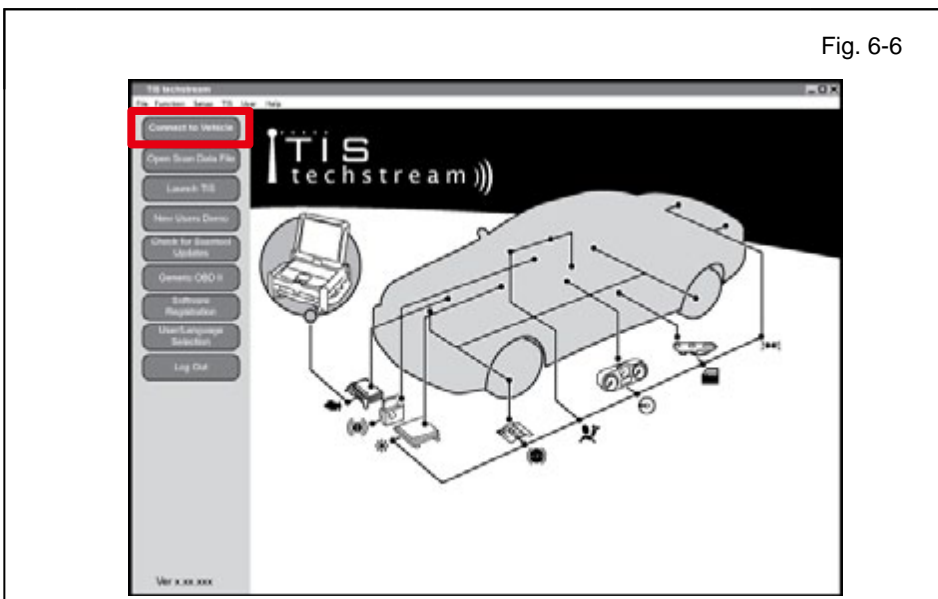
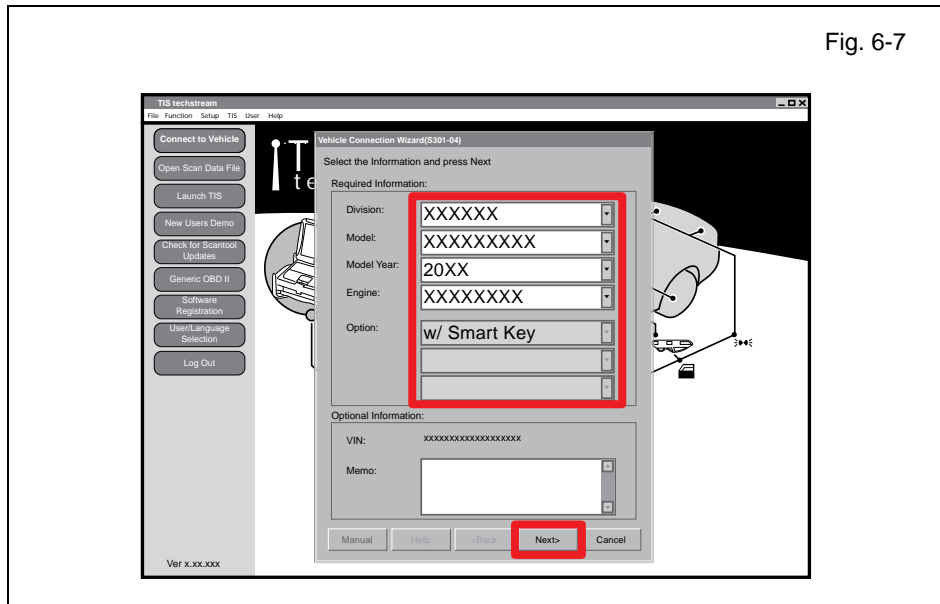
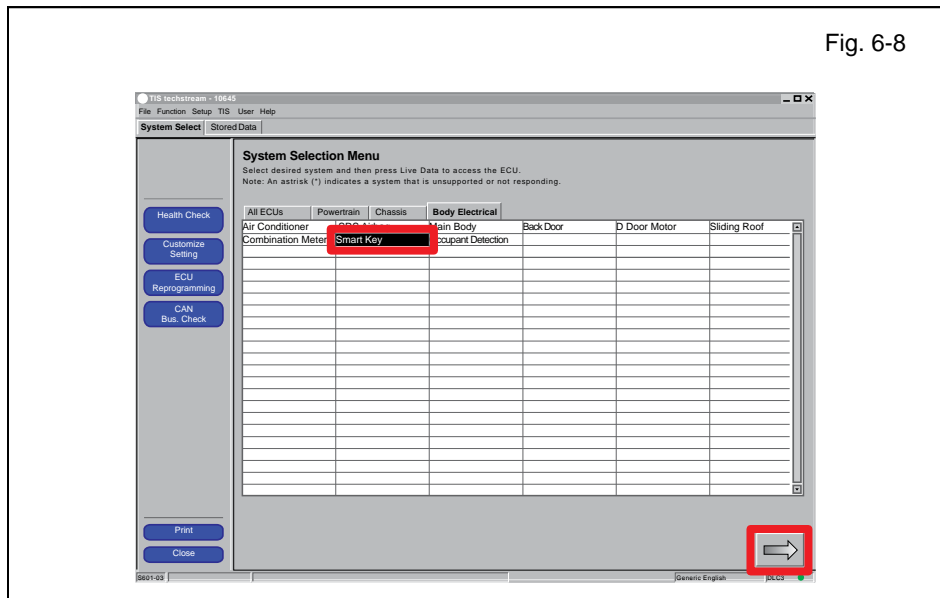


Fig. 6-6

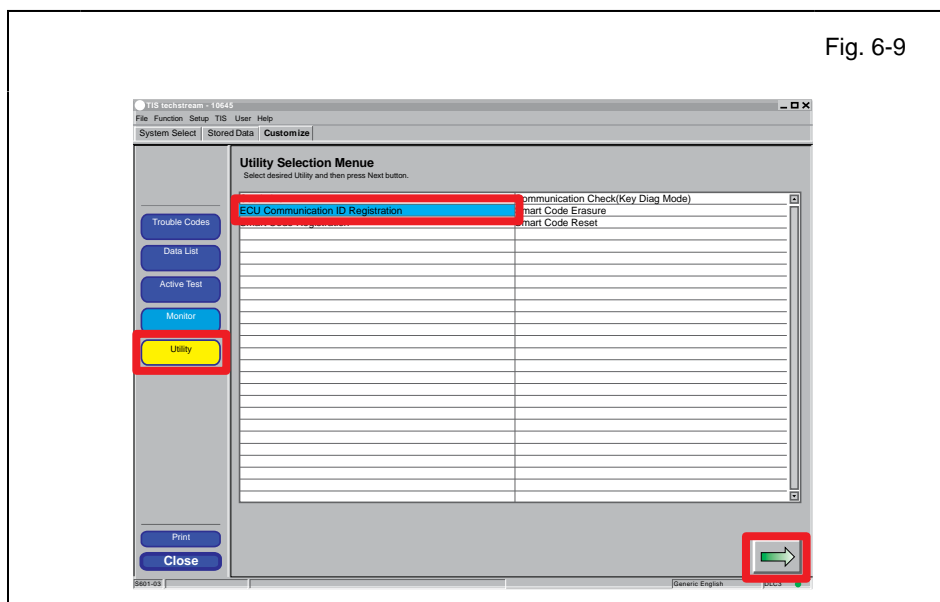
- k. Start the TIS Techstream Application by clicking on the shortcut located on the Desktop.
- l. Click "Connect to Vehicle."




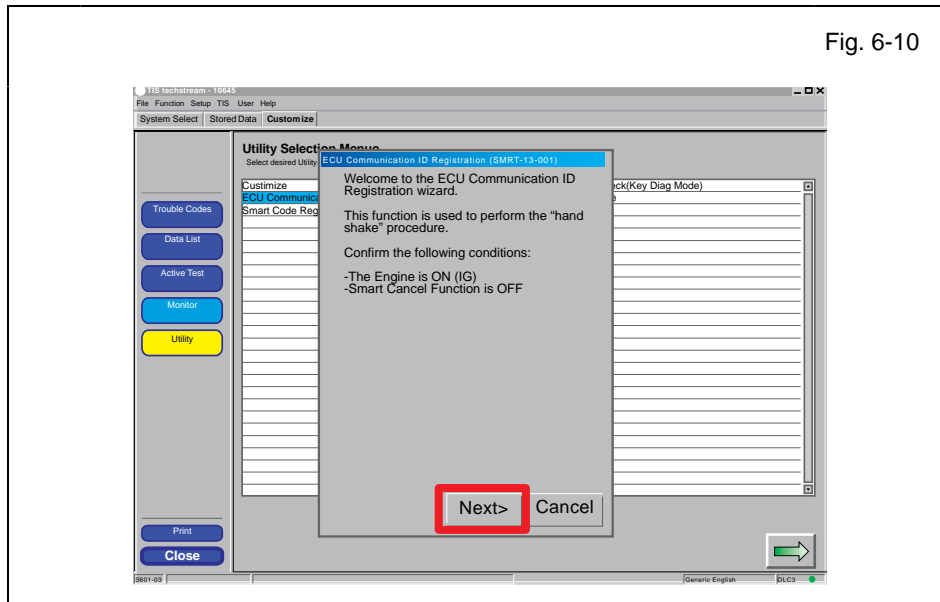
- m. Confirm that the information displayed on the Vehicle Connection Wizard is correct for the vehicle. If not verify that the Techstream is properly connected.
- n. Select “w/ Smart Key.”
- o. Click “Next>.”



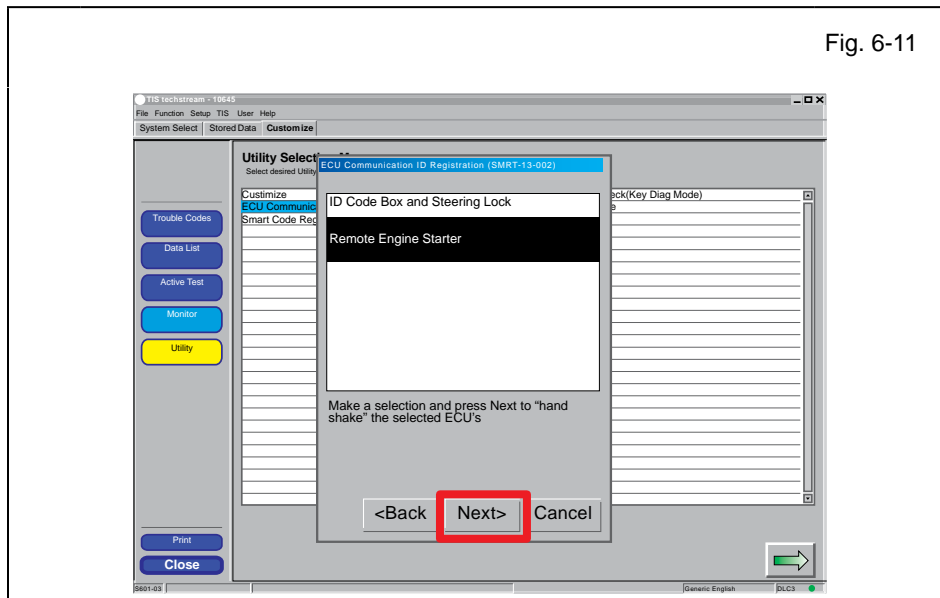
- p. Select “Smart Key.”
- q. Click 



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

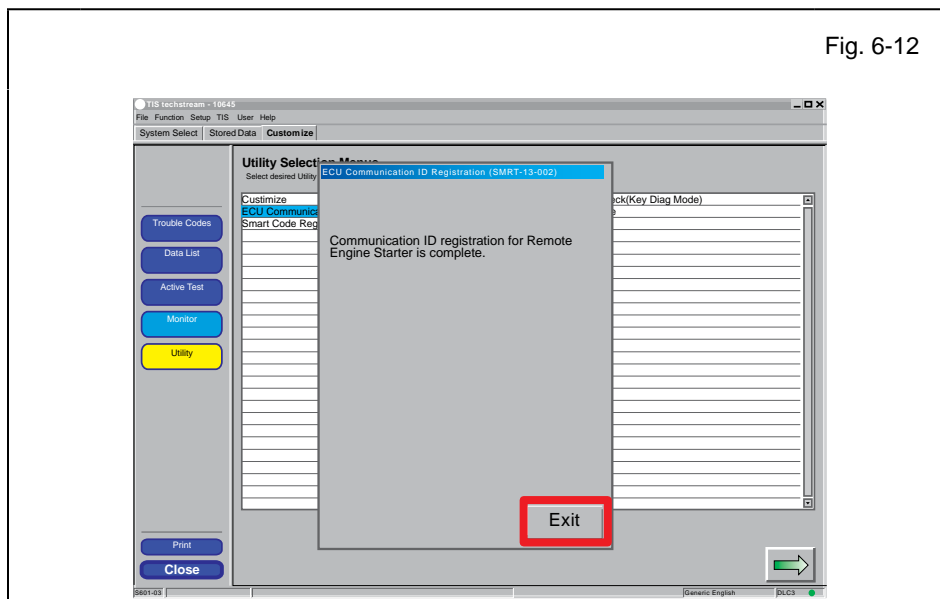


u. Click "Next>."



v. Select "Remote Engine Starter."

w. Click "Next>."



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

x. Click "Exit".

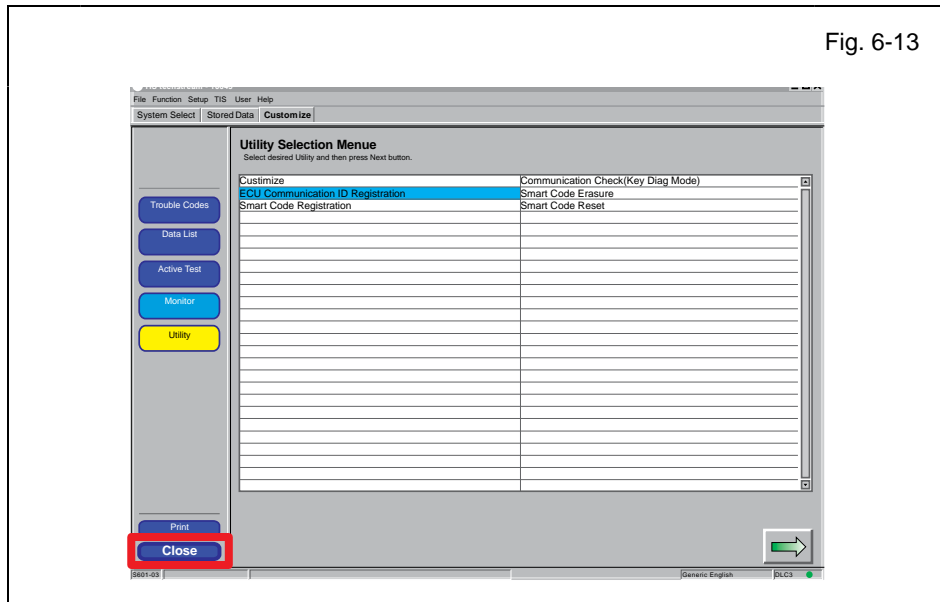


Fig. 6-13

y. Click 

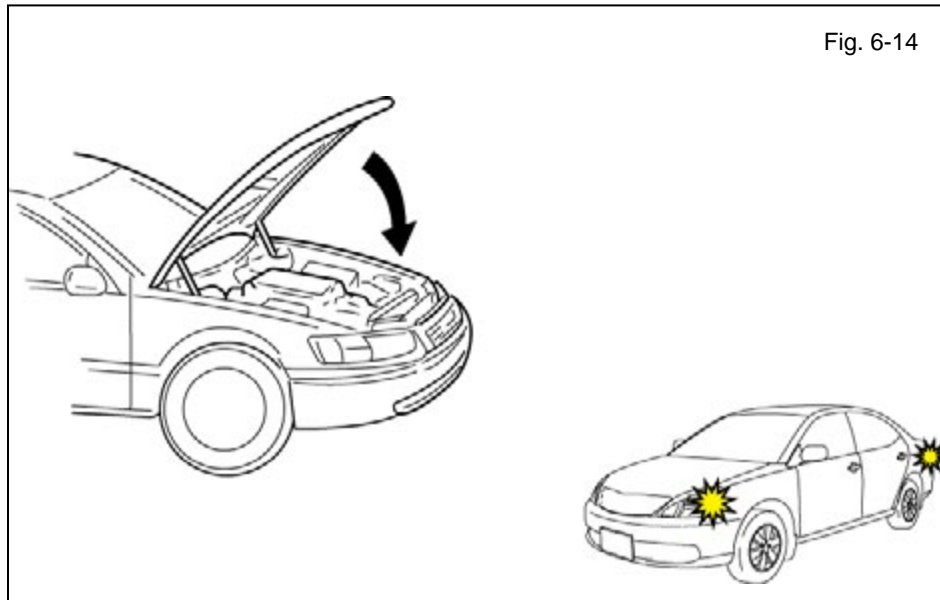


Fig. 6-14

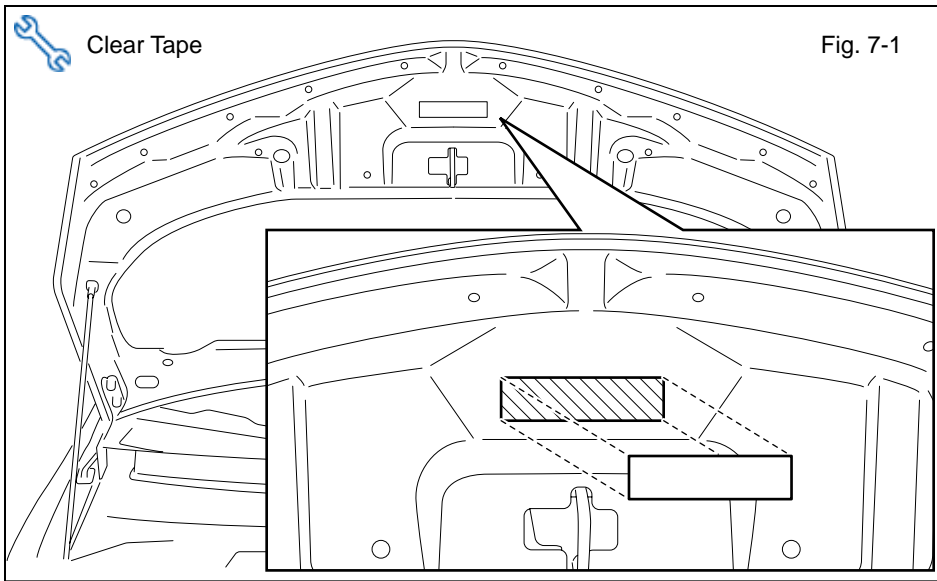
- z. Exit the vehicle.
- aa. Close the Hood.
- ab. Look for the Hazard Lights to flash Twice.

**IF THIS PROCEDURE FAILED**

The Hazard Lights flash Three Times.

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

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

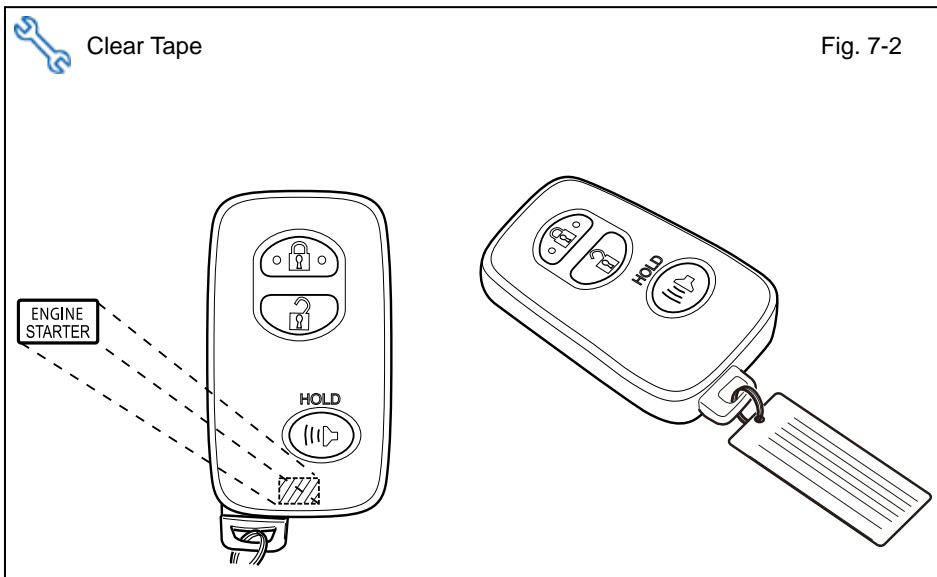


**7. Tags and Labels.**

- 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. 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 Windows.
- h. Use a piece of Clear Tape to lift the Label off its protective backing.



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

- i. 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.

**8. Complete the Installation.**

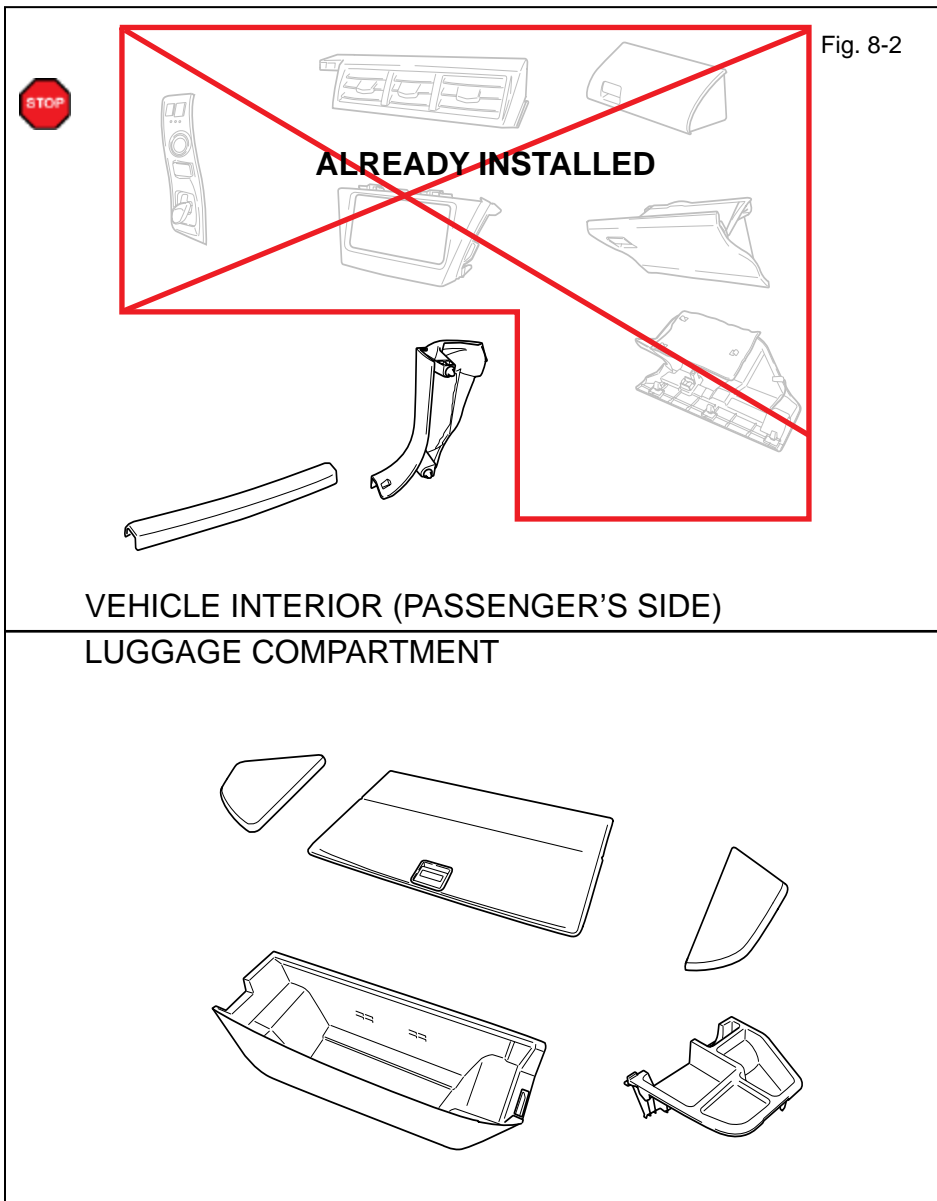
- a. Position the Negative Battery Cable at the original factory position.



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



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



- 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.
- e. Reset the Power Windows.
  - Turn the ignition "ON."
  - Lower the Windows halfway.
  - Pull up on the Power Window Switches until the windows close.
  - Continue to hold up on the switches for a minimum of 1 Second.
- f. Reset the Moon Roof. (if equipped)
  - Turn the ignition "ON."
  - Open the Moon Roof halfway.
  - Push and hold the Moon Roof Switch to close until the Moon Roof closes.
  - Continue to hold the switch for a minimum of 1 Second.

**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.<br>The engine starts.<br>The hazard lights flash repeatedly for 10 seconds.  |
| 2       | With the engine running, pull the hood release handle.<br><br><b>NOTE:</b> <i>Some Vehicles may require you to exit the Vehicle and pull up on the Hood.</i> | The engine stops.<br>The hazard lights flash once.<br>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 Function Checks**

| Function | Function |
|----------|----------|
|----------|----------|

**Enter the Vehicle**

|   |   |
|---|---|
| <input type="checkbox"/> Dome/Courtesy Lights | <input type="checkbox"/> Steering Wheel Column Adjusts Without Interference |
| <input type="checkbox"/> Horn                 |   |

**Start the Vehicle**

|   |   |
|---|---|
| <input type="checkbox"/> Starter  | <input type="checkbox"/> Gauges   |
| <input type="checkbox"/> Panel/Switch Illumination  | <input type="checkbox"/> ABS Light (if equipped)<br><i>If the warning light remains on, it may indicate a system malfunction.</i>    |
| <input type="checkbox"/> Lamp Failure Sensor<br><i>If the warning light remains on, it may indicate a system malfunction.</i>      | <input type="checkbox"/> Track/Skid Control Light (if equipped)<br><i>If the warning light remains on, it may indicate a system malfunction.</i>   |
| <input type="checkbox"/> Seat Belt Warning Light<br><i>If the warning light remains on, it may indicate a system malfunction.</i>  | <input type="checkbox"/> Tire Pressure Monitoring System (TPMS)<br><br><i>Prior to TPMS activation and Pre-delivery Service (PDS) of the Vehicle the TPMS light will blink when IG is turned on.</i><br><br><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<br><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 Lights                      | <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 Air Bag Switch (if equipped)                    |
|                          |  |                          |   |
| <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   |

