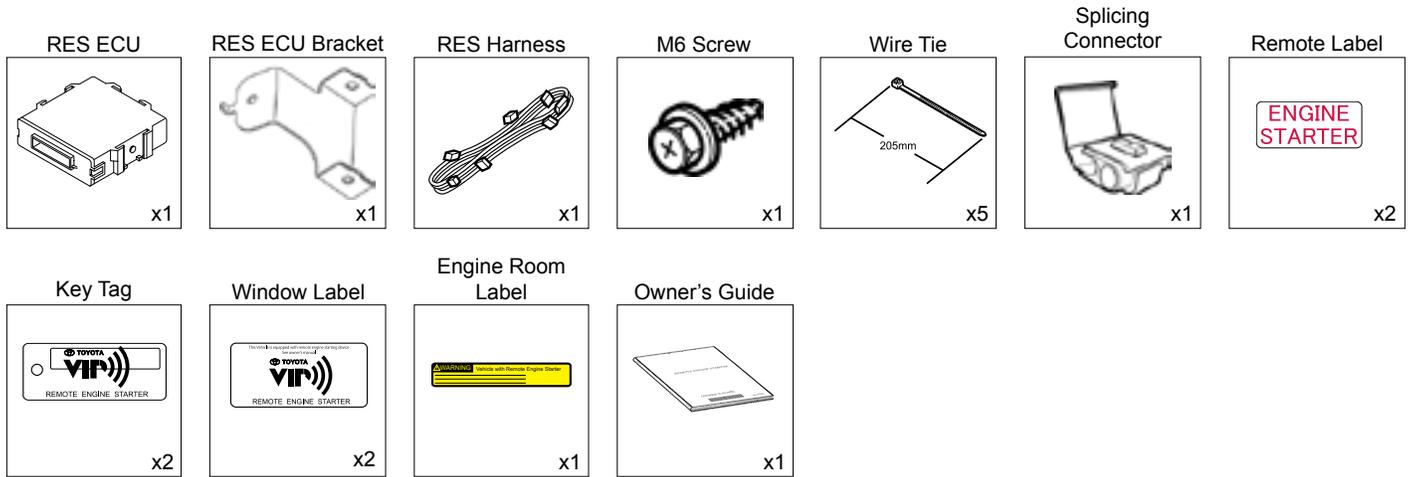


**Part #: PT398-0T110**

**Conflicts:**

Will not program with Techstream Lite.

**Kit Contents**



**Hood Switch Sub Harness Kit: PT398-0T095 for Vehicles without Factory Alarm**



**Additional Items**

(may be required)

Item#	Description

**Recommended Sequence of Application**

Item#	Description
1	V2 Glass Breakage Sensor (GBS)
2	V4 Remote Engine Starter (RES)

**Recommended Tools**

Personal & Vehicle Protection	Description
Safety Glasses	
Safety Gloves	(Optional)
Vehicle Protection	Blankets, Parts Boxes
<b>Special Tools</b>	
Techstream	Do not use Techstream Lite
<b>Installation Tools</b>	
Screwdriver	#2 Phillips, Phillips Jeweler's, Flat Blade Jeweler's
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST# 00002-06001-01
Side Cutters	
Torque Wrench	61 in•lbf (6.9 N•m); 66.4 in•lbf (7.5 N•m); 70.8 in•lbf (8.0 N•m)
Tape	Clear, Electrical
Socket	10mm, extension
Pliers	Needle Nose, Pliers
<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.

**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.

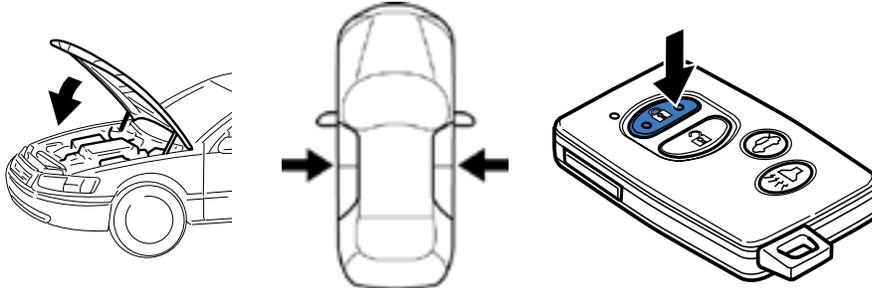




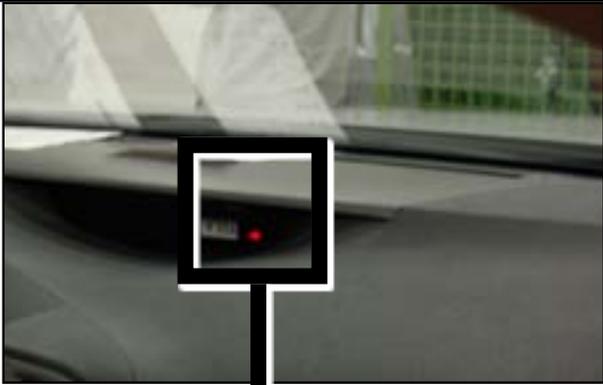


## Confirm the following:

Before beginning, close the Hood and the all Doors.  
Press the remote control's lock button.



See Security LED on the console



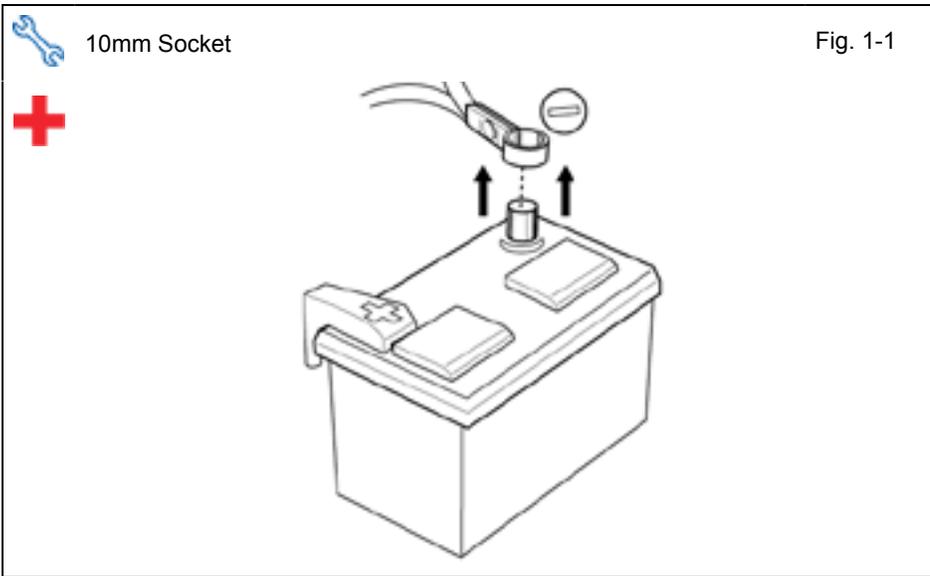
Security LED Turns ON solid for 30 Seconds  
then starts blinking

**WITH ALARM**



Security LED start blinking Immediately

**WITHOUT ALARM**



### 1. Hood Switch Installation.

- a. Place the Vehicle in Park with the Parking Brake set.
- b. Disconnect the Negative Battery Terminal.
  - Protect the Fender.
  - Note the Battery Cable Position as it will be re-installed in the same position.

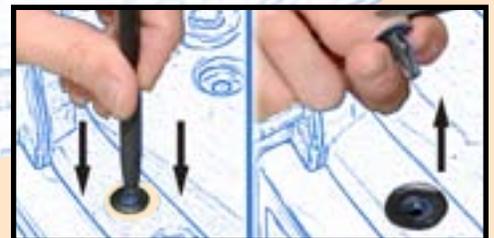
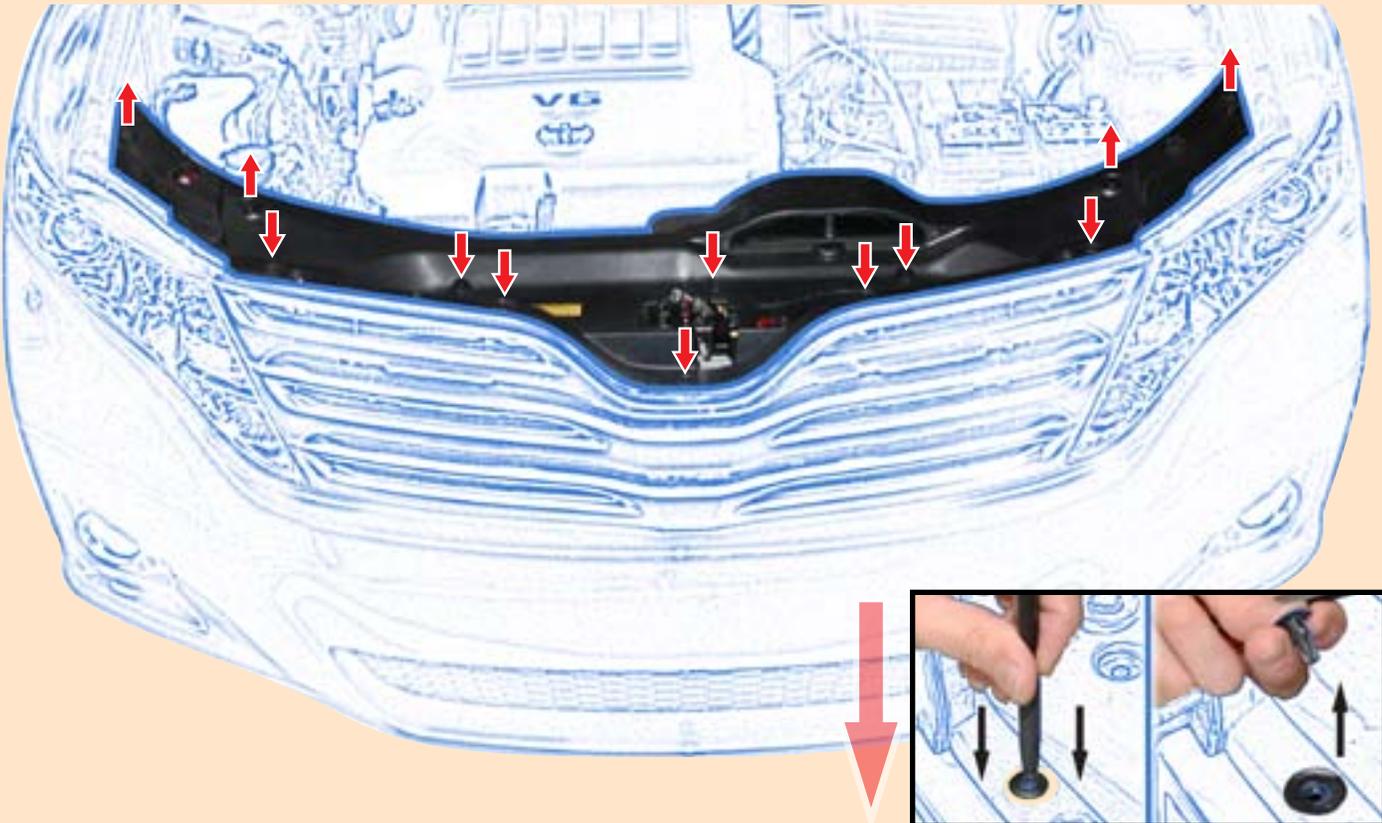
**+** **CAUTION:** Do not touch the Positive Terminal.

### Non-Alarm Vehicles Only

 Nylon Panel Removal Tool

Fig. 1-2

- c. Remove the Engine Cover.
  - Remove 12 Clips.



**Non-Alarm Vehicles only**

- d. Remove the Nut Cover from the Hood Lock Assembly.
  - Discard the Nut Cover.
  
- e. Dislodge the vehicle's Hood Lock Assembly.
  - Remove 3 Bolts.
  
- f. Remove the Hood Lock Cable from the Hood Lock.
- g. Release the Spring from the Hood Lock.



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



Make sure to hold the Hood Switch by the its sides.



Make sure the Hood Switch Lever is positioned properly.



If the Hood Switch is Broken RES will not function.

- i. Attach the Hood Switch Clip to the Hood Lock Assembly.

- j. Reinstall the Spring.

- k. Connect the Hood Switch Connector to the Vehicle's Pre-Connector.

- I. Install the Hood Lock Cable to the Hood Lock Assembly.

- m. Reinstall the Hood Lock.



Make sure to Torque the Bolts.

- ② 66.4 in•lbf (7.5 N•m)
- ① ③ 70.8 in•lbf (8.0 N•m)

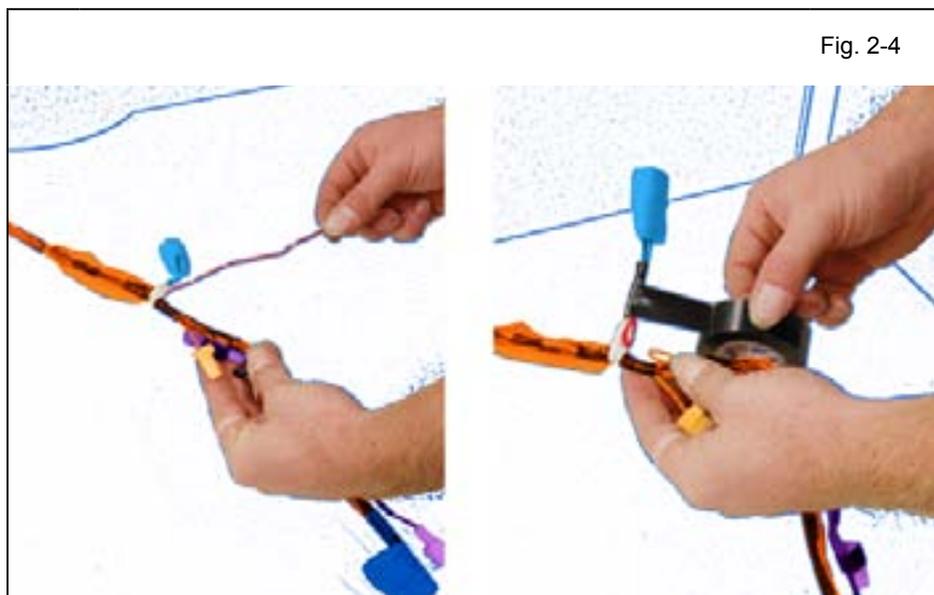
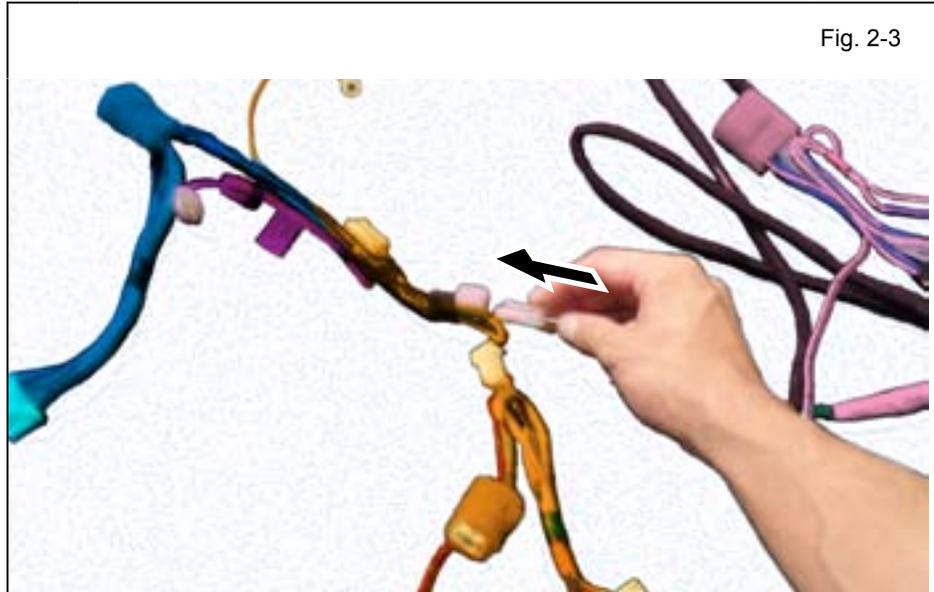
## 2. V4 Harness Preparation.

- a. Disconnect the 1P Connector.



- b. Secure the disconnected 1P Connector to the V4 Harness with Electrical Tape.

- c. Connect the V4 Sub Harness's 1P Connector to the V4 1P Connector.



**Harnesses with Red Wire ONLY**

- d. Locate the Red Wire near the White Tape marker.
- e. Bundle it up and secure it to the V4 Harness with Electrical Tape as shown.



b. Remove Driver's side Cowl Cover.



c. Remove the Clip if it stays in the vehicle.

- Carefully remove otherwise it will fall inside the vehicle.

d. Attach the Clip on the Cowl Cover.

e. Remove the Lower Dash.

- Remove 1 Bolt and 1 Screw.

f. Remove the Glove Box Under Cover.



- g. Remove the Passenger's Step Cover.

- h. Remove the Passenger's side Cowl Cover.



- i. Remove the Clip if it stays in the vehicle.
  - Carefully remove otherwise it will fall inside the vehicle.
- j. Attach the Clip on the Cowl Cover.

- k. Remove the Glove Box.
  - Remove 4 Screws and 1 Bolt.









**V4/V2 ADD-ON ONLY**

k. Cut the Wire Tie securing the V2 22P Connector.

l. Disconnect the Vehicle's 22P Connector from the V2 Connector.

m. Plug the V4 22P Connector to the V2 22P Connector.



- n. Connect the Vehicle's 22P Connector to the V4 22P Connector.

- o. Remove the Vehicle's Ground Terminal Bolt.
- p. Secure the V4 Ground Terminal to the Vehicle's Ground Terminal with the same Bolt.

- q. Secure the V4 Connector to the Vehicle Harness with 1 Wire Tie.
- r. Secure the Male 1P RES Diagnostic Connector to the Vehicle Harness with 1 Wire Tie.

**CAUTION:** Do not secure the Female 1 Pin Connector or its bundled excess wire. Secure the RES Harness to the Vehicle Harness with 1 Wire Tie.



## 5. RES ECU Preparation and Installation.

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

- b. Plug the V4 24P Connector into the RES ECU.

- c. Install RES ECU on the Vehicle's Reinforce.
  - Tighten the M6 Tapping Screw.



**CAUTION:** Do not over tighten the Screw.





## 6. V4 Harness Installation. (Driver's Side)



**CAUTION:** Sharp metal edges.

- a. Route the V4 Harness through the Passenger's Brace and secure with 1 Wire Tie.
- b. Route the V4 Harness through the Center Console.
- c. Route the V4 Harness through the Driver's Brace and secure with 1 Wire Tie.
  
- d. Route and secure the V4 Harness along the Vehicle Harness under the Column cover with 2 Wire Ties.
- e. Route and secure the V4 Harness along the Vehicle Harness in front of the Driver's J/B with 2 Wire Ties.



### 7. Registration Preparation.

- a. Reassemble the Vehicle.



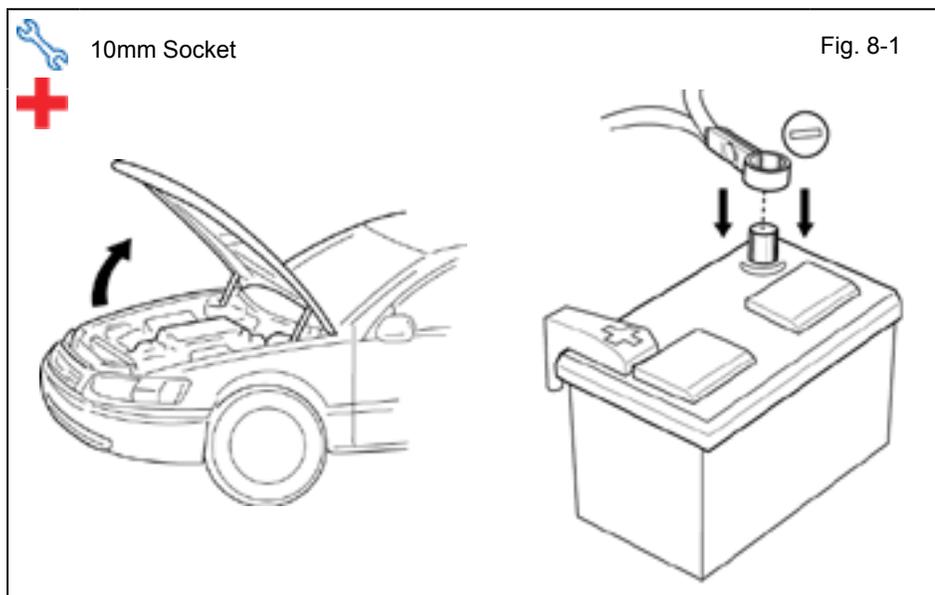
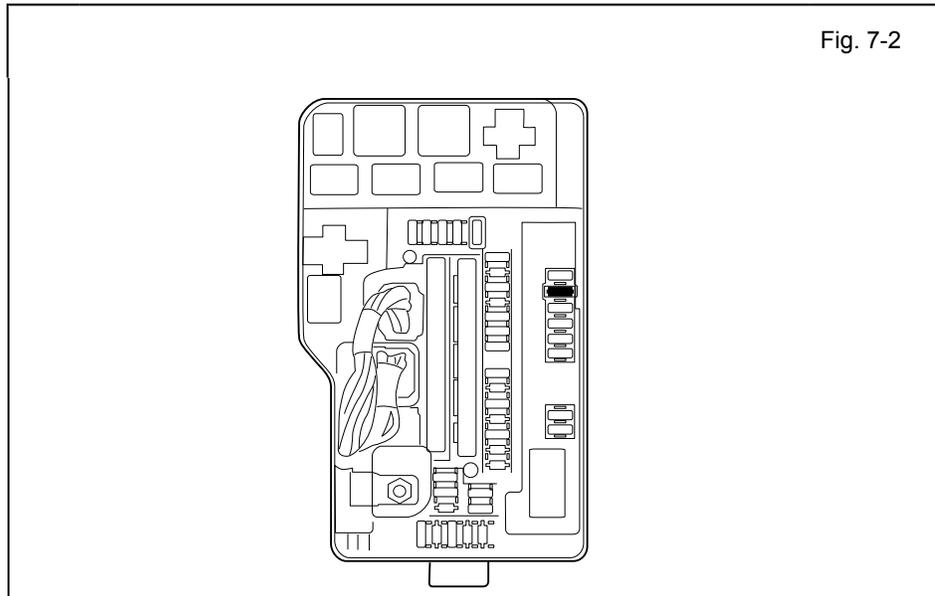
**VERIFY:** Make sure that all Connectors are reconnected.



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

- b. Verify that the Short Pin is Installed.

- If not Install now.

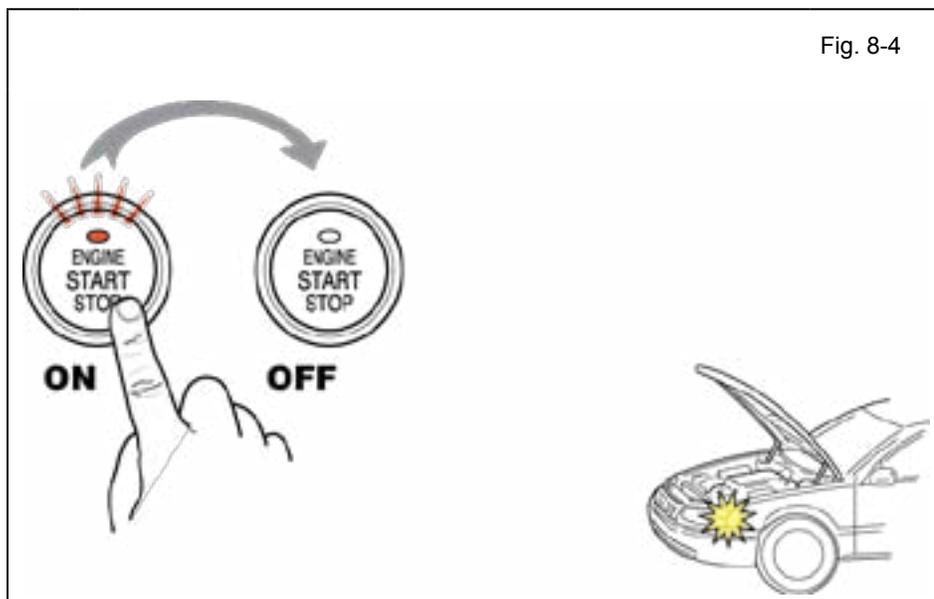
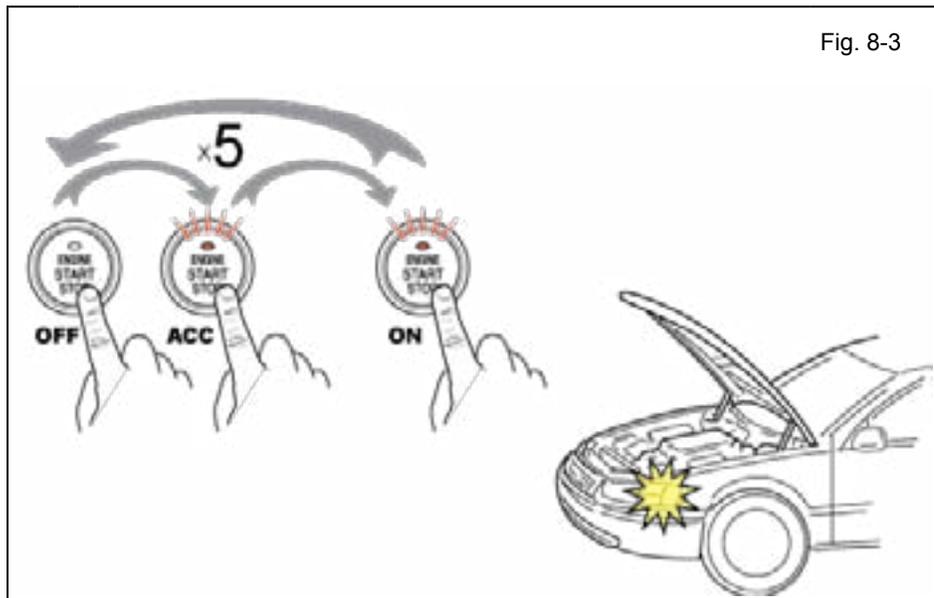
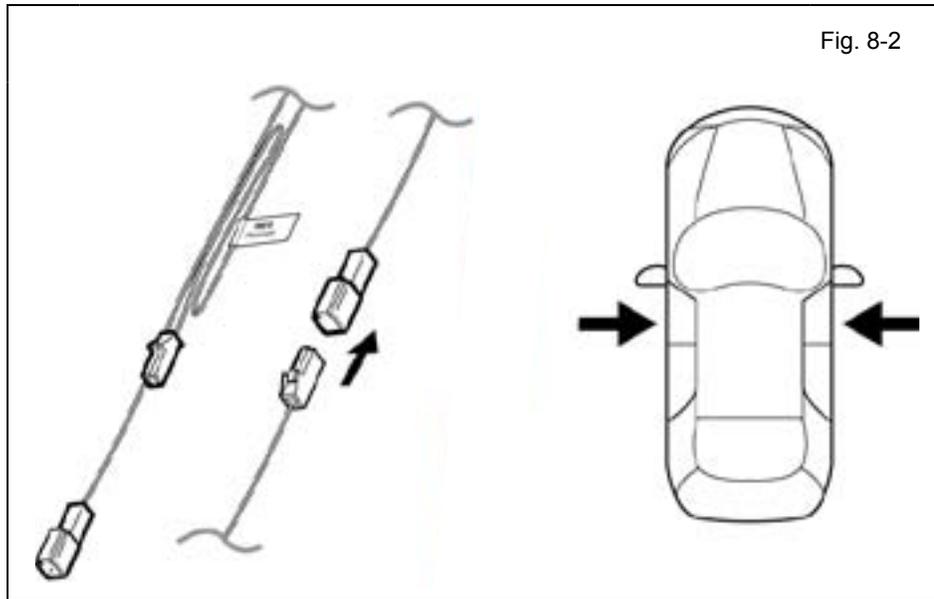


### 8. Registration.

- 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-x.

- d. Close all doors.

- e. Place the Vehicle in Park (P).
- 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.

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

**IF THIS PROCEDURE FAILED**

The Hazard Lights won't flash or flashes Twice.

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

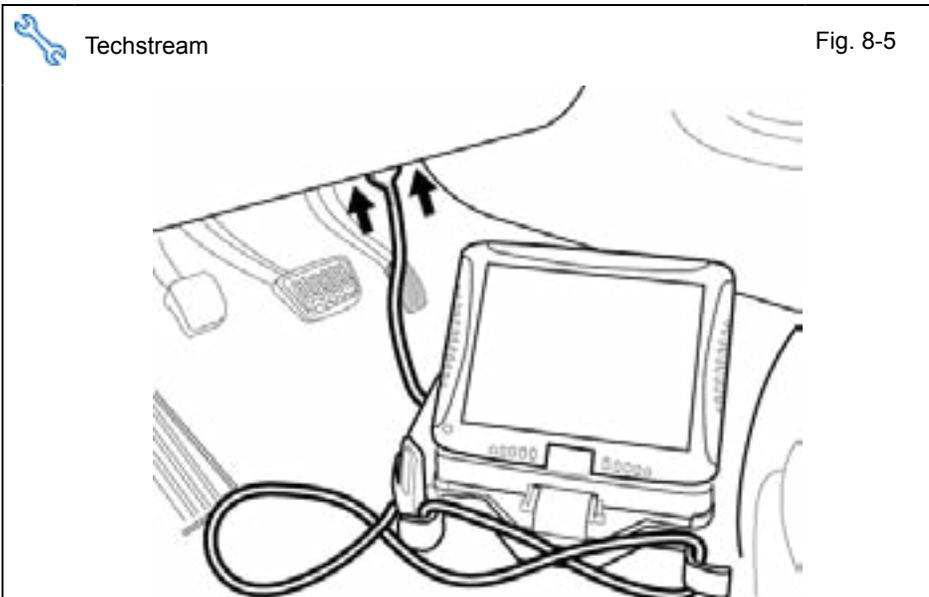


Fig. 8-5



**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 Smart Key in your possession, press the "Engine Start Stop" button twice to select the Ignition "ON" position.

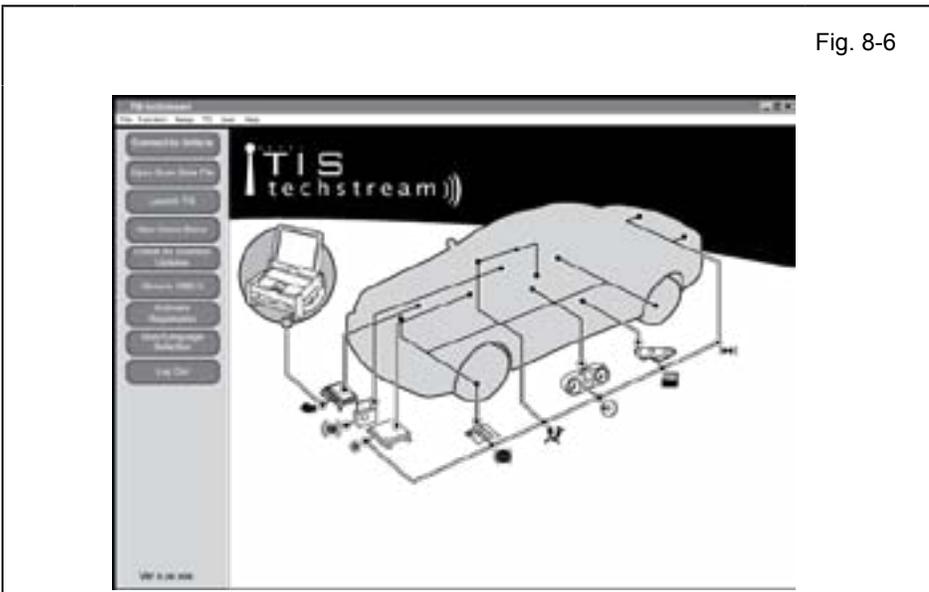


Fig. 8-6

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

- l. Click "Connect to Vehicle."

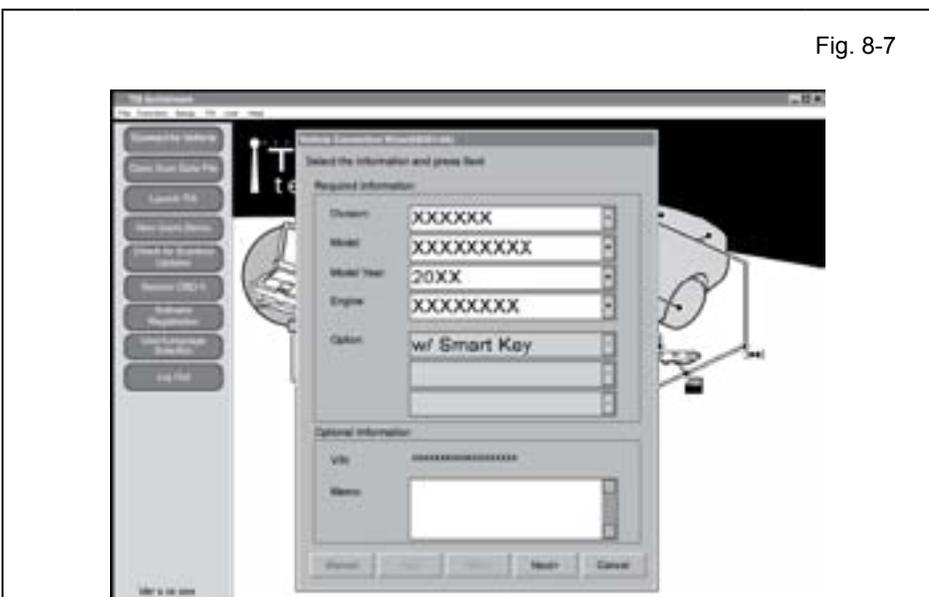


Fig. 8-7

- 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 w/Smart Key.
- o. Click "Next>."

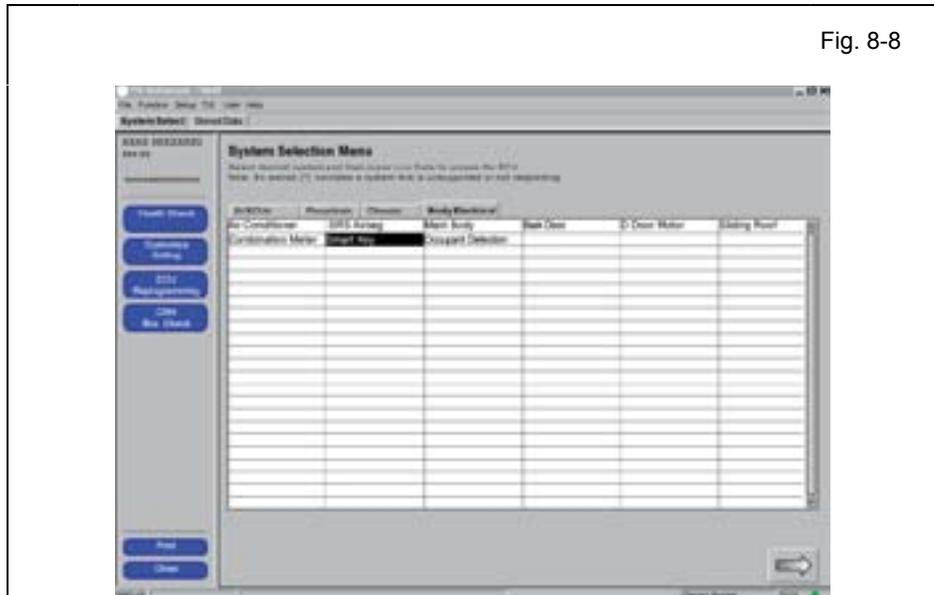


Fig. 8-8

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

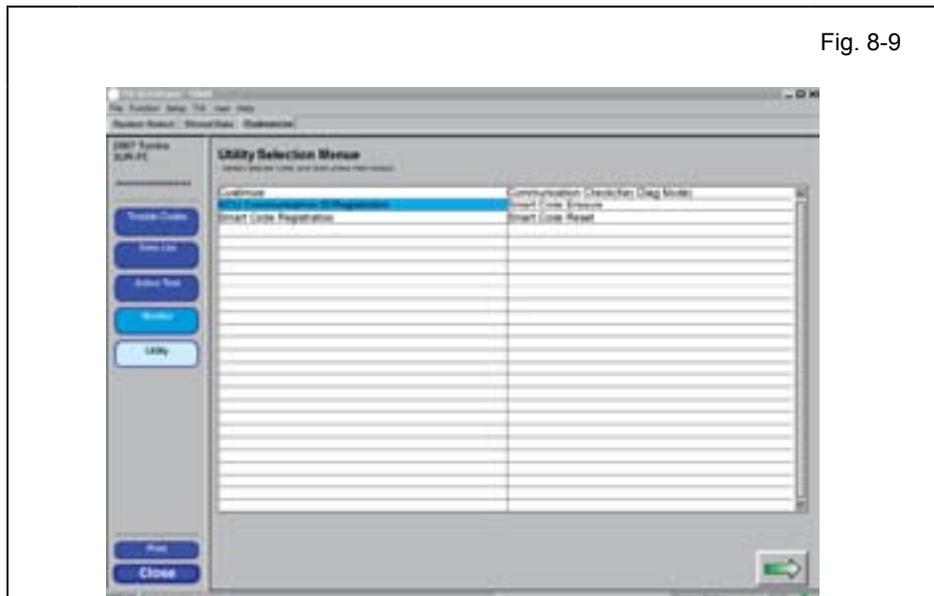


Fig. 8-9

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

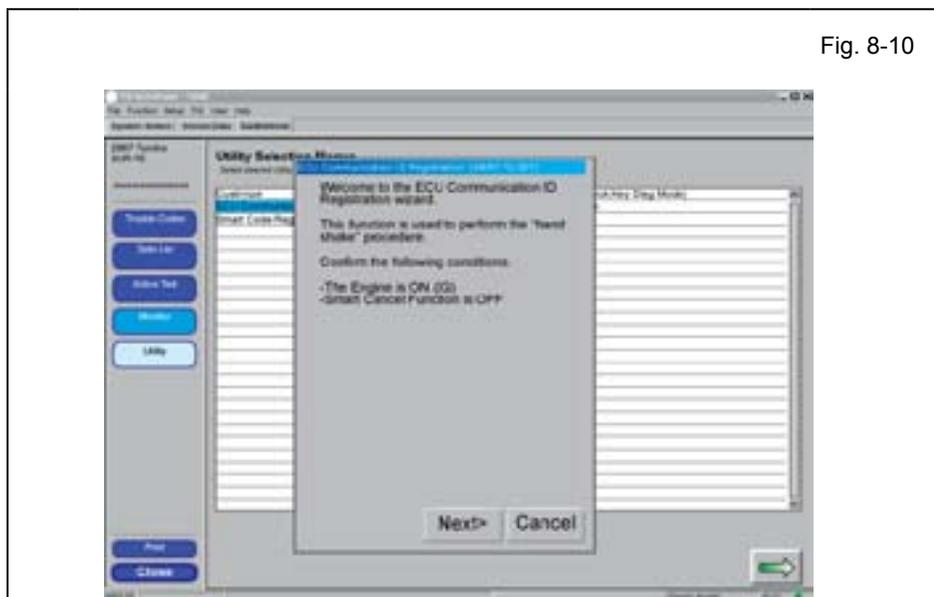


Fig. 8-10

- u. Click "Next>."

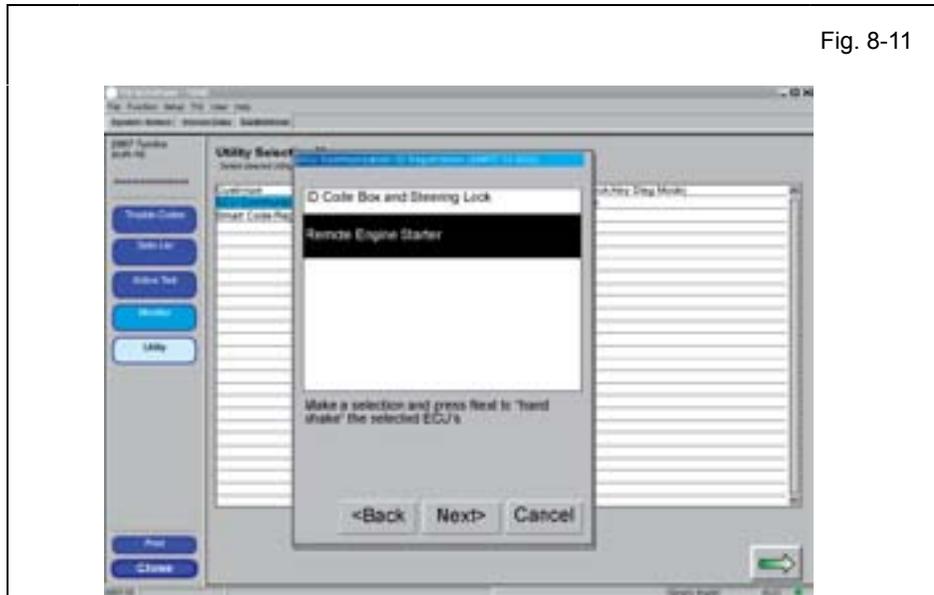


Fig. 8-11

- v. Select "Remote Engine Starter."
- w. Click "Next>."

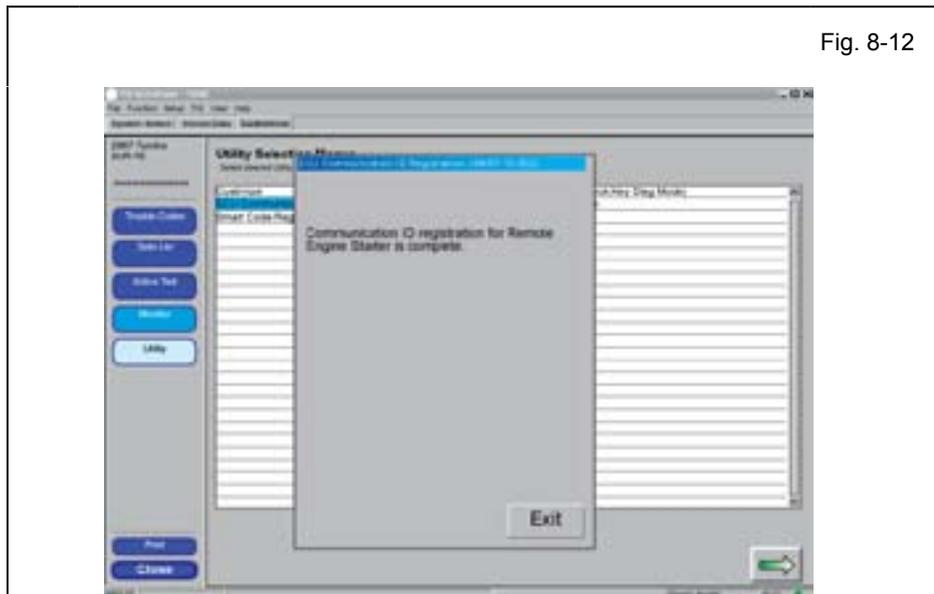


Fig. 8-12

- x. **CONFIRM:** That the ECU Communication ID was completed successfully.
- y. Click "Exit."

**IF THIS PROCEDURE FAILED**

- Start again from step n.

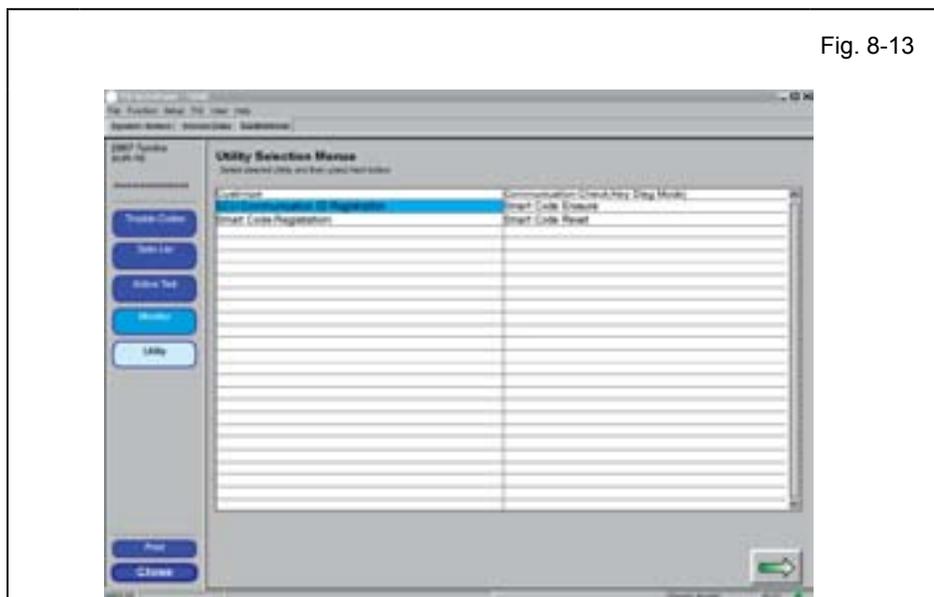
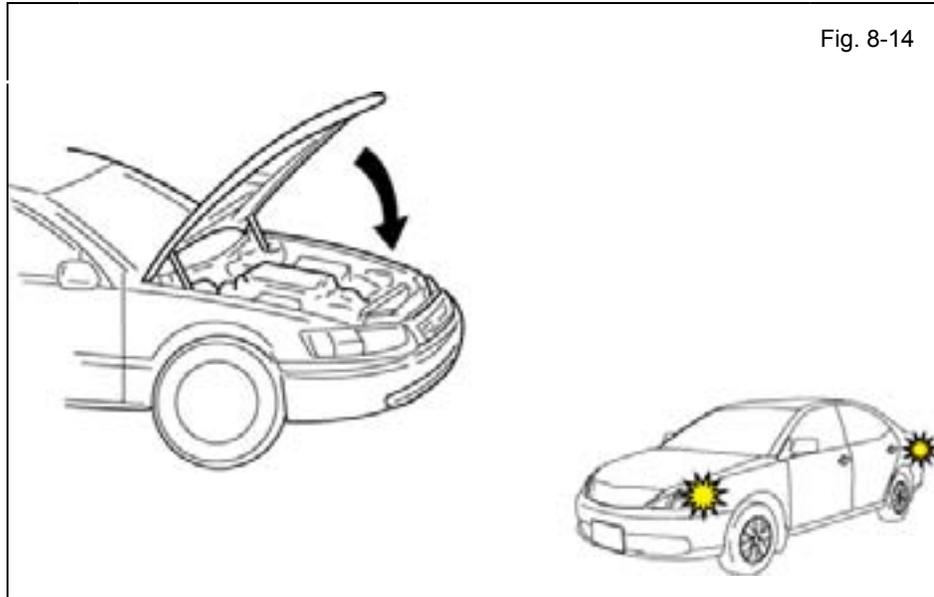


Fig. 8-13

- z. Click 



- aa. Exit the vehicle.
- ab. Close the Hood.
- ac. Look for the Hazards to flash Twice.

**IF THIS PROCEDURE FAILED**

The Hazard Lights flashes Three Times.

- Disconnect the V4 Harness's 1P RES Diagnostic Connectors.
  - Start again from step c.
- 
- ad. After a successful registration, disconnect the 1P RES Diagnostic Connectors.
  - ae. Secure the Female 1P Connector and Harness to the Vehicle Harness using Electrical Tape.

## 9. Tags and Labels.

- a. Using VDC approved cleaner and cleaning method, clean the area indicated in the Engine Compartment Cover.
- b. Attach the Engine Room Warning Label centered horizontally with the hole in the Hood and vertically in the flat space.



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

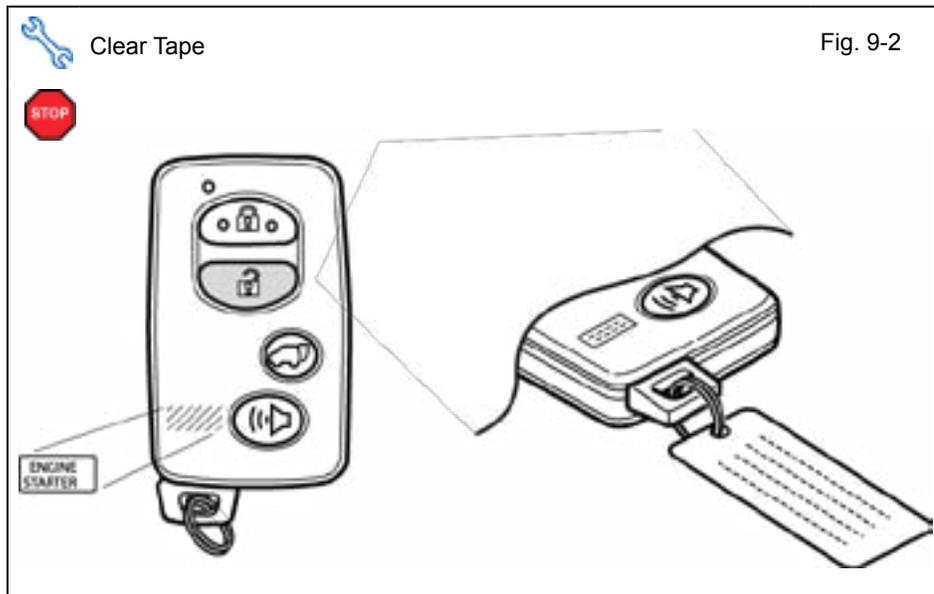


Fig. 9-2

- 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.
- f. Attach the Key Tag.

**REPEAT:** steps c–f with the other 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 from the protective backing.



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

- i. Attach the Label as shown.



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

**REPEAT:** steps g–i with the other Front Window.

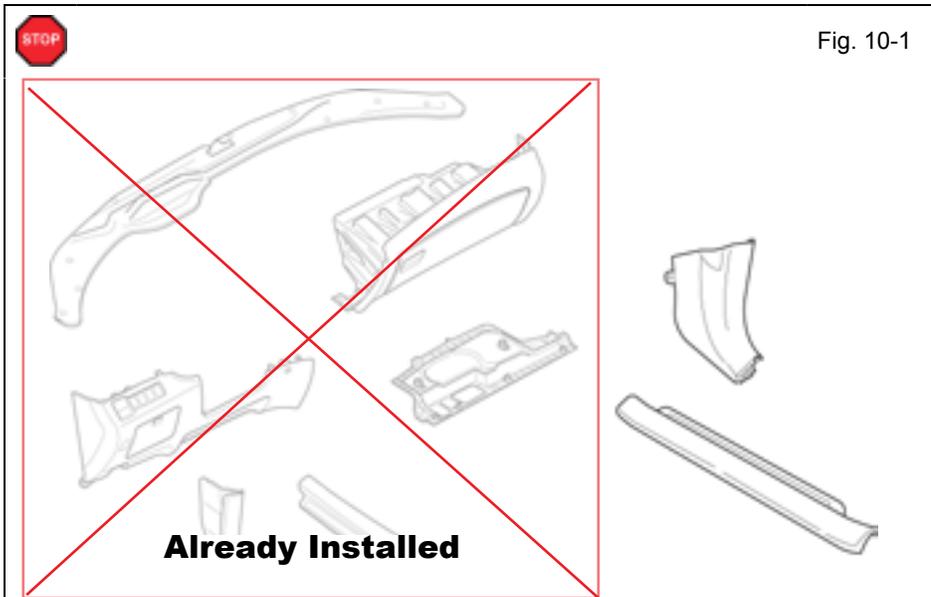


Fig. 10-1

**10. Complete the Installation.**

- a. Finish reassembling the Vehicle.



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



**VERIFY:** That all Connectors are plugged in.

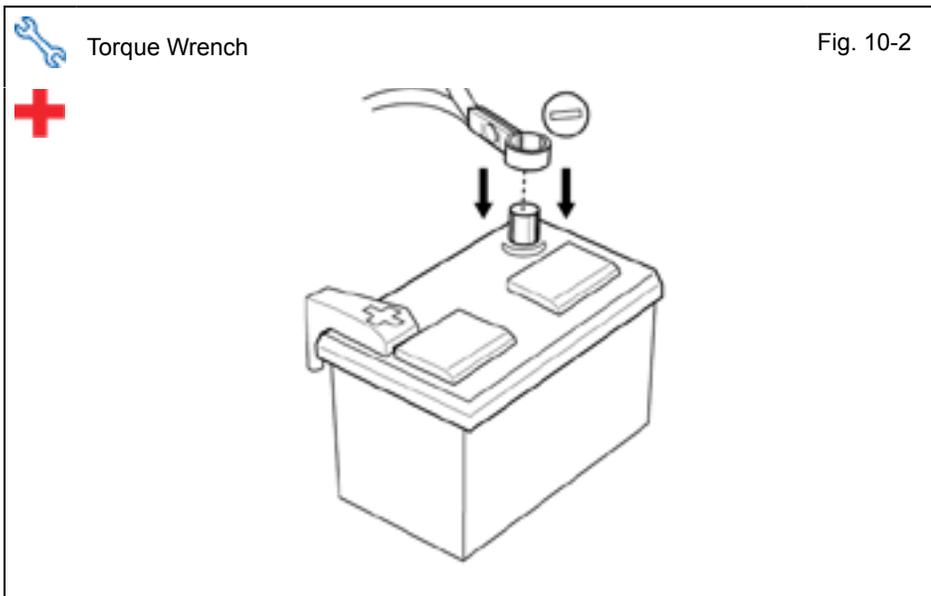


Fig. 10-2

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



- Tighten the Nut to 61 in•lbf (6.9 N•m)



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

- 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.
  - 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. 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>Some Vehicles may require you to exit the Vehicle and pull up on the Hood.</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)
3	Move the shift lever out of “P” (Park). Attempt to start the Vehicle using the remote.	The engine does not start.

## 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"/> 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) <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"/>	HVAC
<input type="checkbox"/>	Steering Wheel Audio Control (if equipped)	<input type="checkbox"/>	Rear Window Defogger (if equipped)
<input type="checkbox"/>	Front Windshield Defogger (if equipped)	<input type="checkbox"/>	Accessory Power Socket (if equipped)
<input type="checkbox"/>	Side Mirror Defogger (if equipped)	<input type="checkbox"/>	Heated/Vented Seats (if equipped)
<input type="checkbox"/>	Massage 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

**Remove the short pin after Function check.**

Check with your Port/Dealer to see if this step is necessary.

