

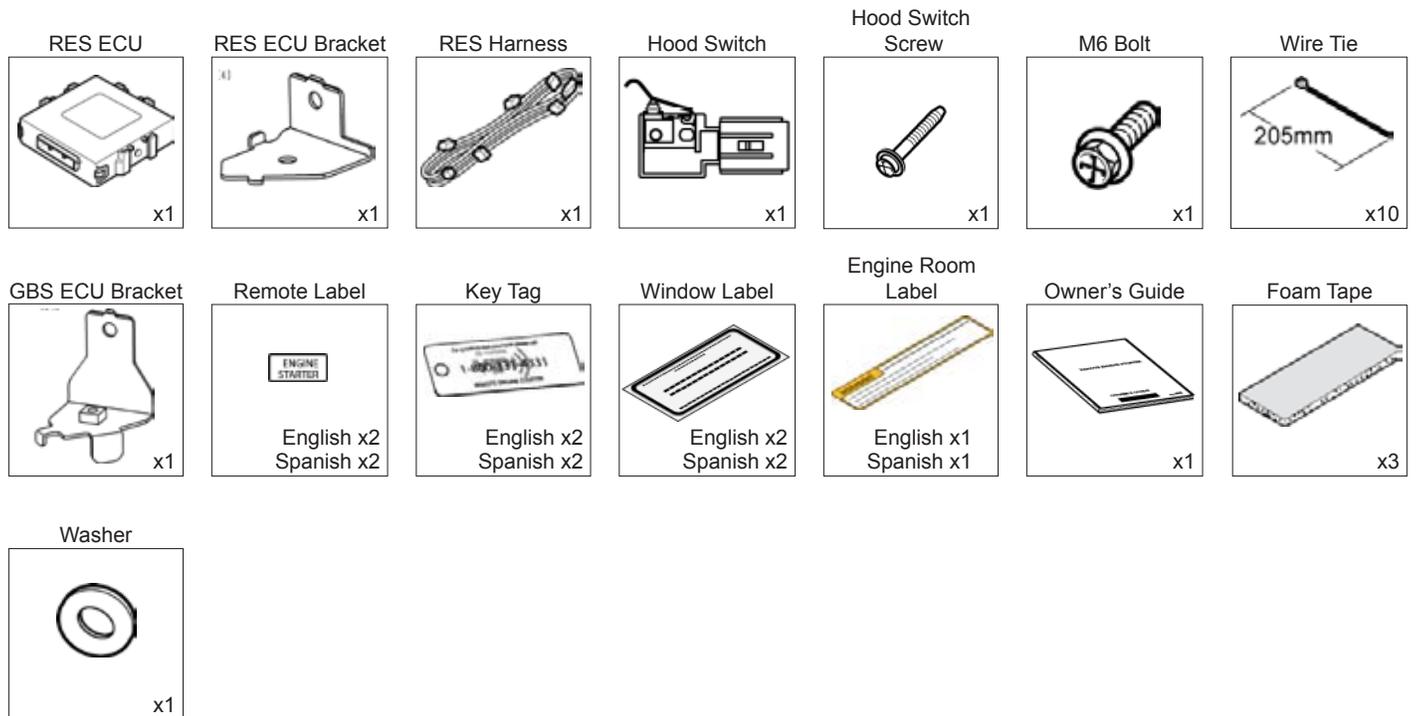
Part #: PT398-47091

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

**Conflicts:**

Do not install into Manual Transmission Vehicles or Vehicles without RKE systems.

**Kit Contents**



**Additional Items**

(may be required)

Item#	Description

**Recommended Sequence of Application**

Item#	Description
1	TVIP V5 RS3200 plus
2	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	Software version 4.1 or later
<b>Installation Tools</b>	
Screwdriver	#2 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	36 in•lbf (4.07 N•m); 66.4 in•lbf (7.5 N•m)
Tape	Clear, Electrical
Socket	10mm, extension
<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.

**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.







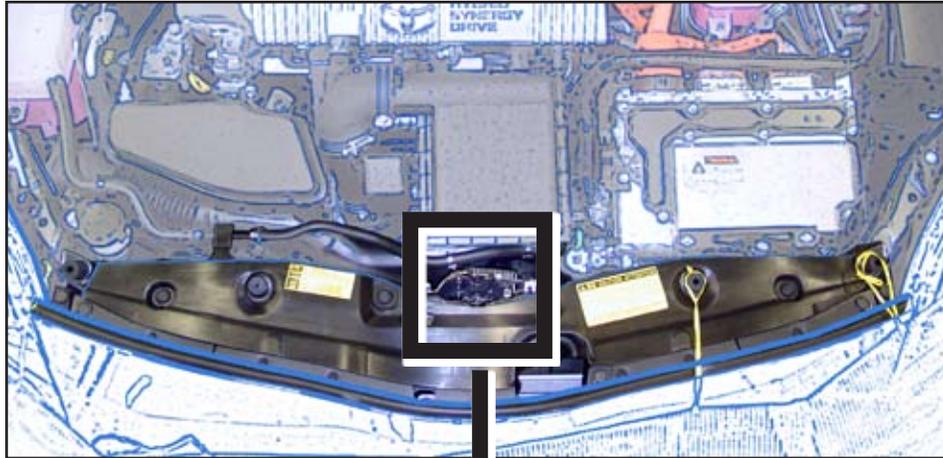
c. Remove the Rear Box.

d. Remove the Rear Trims to gain access to the Battery.

- e. 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.

### Check if Hood Switch is installed



YES

NO

**WITH**  
**Hood Switch**  
(Go to Next Section, Page 11)

**WITHOUT**  
**Hood Switch**

g. Dislodge the Hood Latch Assembly.

- Remove 3 Bolts.

h. Remove the Hood Release Cable from the Hood Latch.



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.

- i. Install the Hood Switch with the Switch Lever underneath the Hood Latch Trigger Lever.



**CAUTION:** Make sure the Hood Switch Lever is under the Latch Lever.

- j. Tighten 1 Screw.

- k. Connect the Vehicle's Hood Switch Connector to V4 Hood Switch Connector.



Disconnect the Jumper Connector if installed.

l. Reinstall the Hood Release Cable.

m. Reinstall the Hood Latch Assembly.



n. Torque the Hood Latch Bolts to 66.4 in•lbf (7.5 N•m).

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

## 2. Disassembly (Driver's Area)

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

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

- c. Remove the Lower Dash Cover.
- Remove 1 Screw.
  - Remove Hood Release Cable.

- d. Remove the Driver's Side Under Cover.
- Remove 2 Screws.
  - Dislodge the Cable Clamp.

- e. Dislodge the Steering Column's Center Clip.



**CAUTION:** Do not force this clip as it is very easy to break.



**V4/V5 ADD ON ONLY**

- c. Dislodge the GBS ECU Bracket.



**CAUTION:** Do not drop the Bolt and Washer.

- Remove 1 Bolt and Washer.
- Disconnect GBS Connector.

**4. V4 Wire Harness  
Installation (Driver's J/B  
Area)**

- |||
- a. Disconnect the Vehicle Connectors on the right side of the Junction Box.

- b. Disconnect 36P White Vehicle Connector.
- Release Black Connector Lever.

- c. Using Flat Blade Jeweler's Screwdriver remove the Black Connector Lever.



- Do not force the Lever.

- d. Lift up the Terminal Retainer Clip.



- Do not pull out the Retainer.



- e. Insert the V4 Red Wire Terminal into the indicated location on the 36P Vehicle Connector.



- VERIFY:** Terminal Pins are properly inserted and do not come out.

- Close the Terminal Retainer Clip.

- f. Re-attach the Black Connector Lever.
- g. Reconnect the Vehicle Connectors.

**V4 ONLY**

- h. Install RES ECU using the Bolt and Washer from the Kit.



**CAUTION:** Do not drop the Bolt and Washer.

- Attach GBS Bracket and RES Bracket.
- Install the RES ECU with RES/ GBS Bracket.

**V4/V5 ADD ON ONLY**

- i. Attach GBS Bracket and RES Bracket.
- j. Install the RES ECU with GBS Bracket.



**CAUTION:** Do not drop the Bolt and Washer.

- k. Plug the V5 8P Connector to the GBS ECU.

- l. Plug the V4 RES Connector to RES ECU.
- m. Secure the V4 Harness to Vehicle Harness with 2 Wire Ties.

- n. Dislodge the Vehicle's Harness Shielding.
  - Release 1 Clip.
- o. Route the V4 Harness along the Vehicle Harness towards the Driver's Cowl Area.
- p. Reinstall the Vehicle's Harness Shielding.
- q. Secure the V4 Harness to the Vehicle Harness Shielding with 1 Wire Tie.

### 5. V4 Wire Harness Installation (Driver's Cowl Area)

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

#### V4 ONLY

- b. Connect the V4 3P Connector to the Vehicle's 3P Pre-connector.



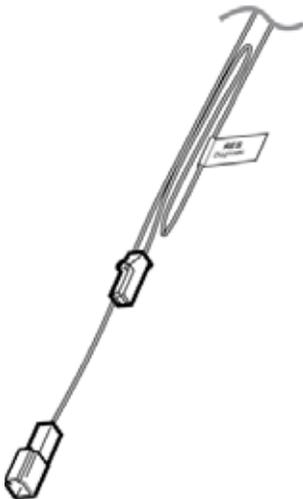
**V4 ONLY**

- f. Plug the V4 26P Connectors in between the Vehicle's Connectors.

- g. Remove the Tape securing the RES Diagnostic Connectors.
- h. Secure the V4 26P Connectors to the Vehicle Harness with 1 Wire Tie.
- i. Secure the V4 12P, 3P and 1P Connectors to the Vehicle Harness with 1 Wire Tie.
- j. Secure the V4 Harness to the Vehicle Harness with 1 Wire Tie.

**V4/V5 ADD ON ONLY**

- k. Connect the V4 3P Connector to V5 3P Connector.



**V4/V5 ADD ON ONLY**

l. Cut 2 Wire Ties securing the V5 Harness.

m. Disconnect the V5's and Vehicle's 12P Connectors.

n. Plug the V4 12P Connectors in between the Vehicle's and V5 Connectors.



## 6. Registration Preparation.

- a. Using VDC approved cleaner and cleaning method, clean the area indicated on the Lower Dash Cover.
- b. Attach 2 Foam Tapes as shown.



- c. Reassemble the Vehicle.



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



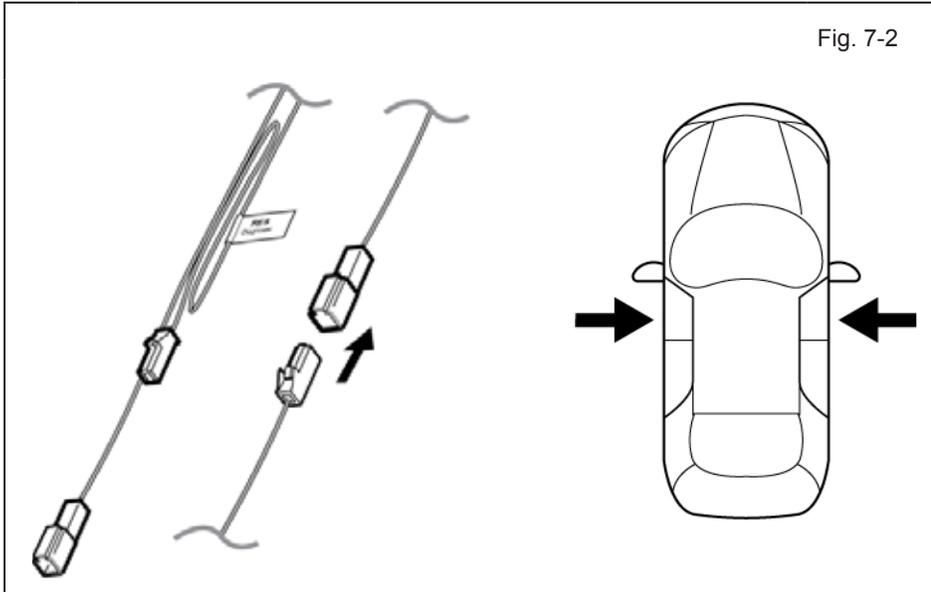
**Note:** Make sure that all Connectors are reconnected.

- d. Verify that the Short Pin is Installed.
  - If not Install now.

## 7. Registration

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

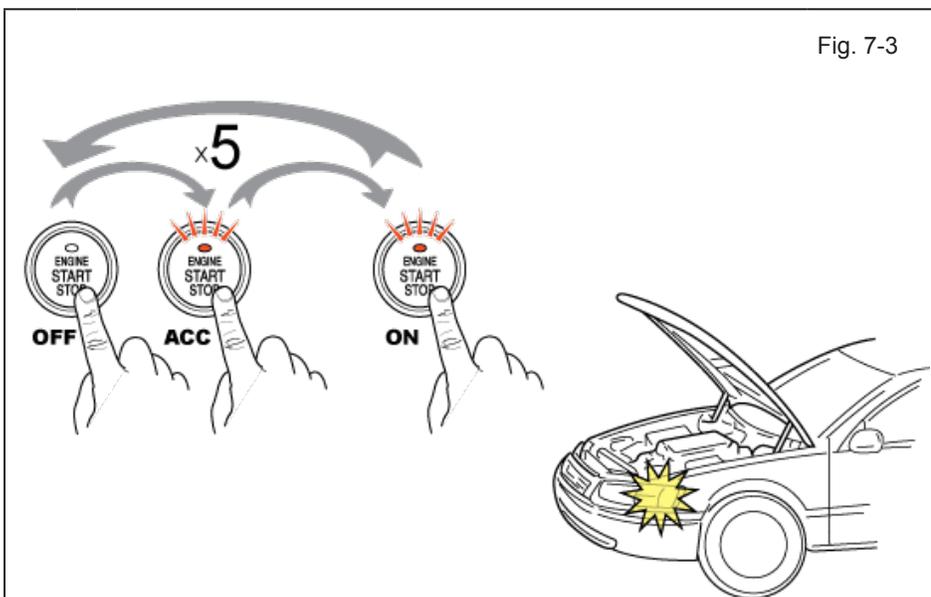
**+** **CAUTION:** Do not touch the Positive Terminal.



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

**NOTE:** Once connected you will have 10 minutes to complete this section, steps d-x.

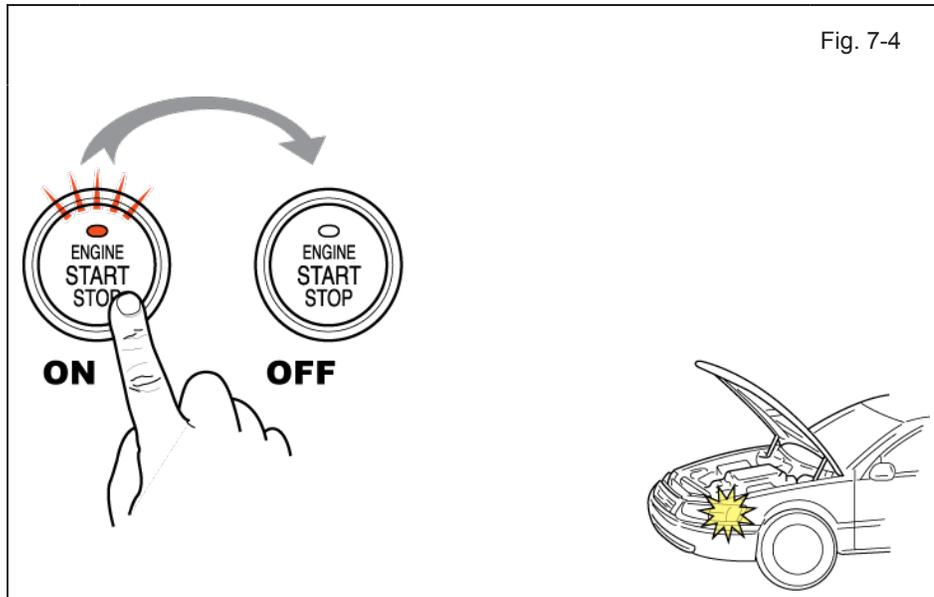
- d. Close all doors.



- e. Place the Vehicle in Park (P) or Neutral (N) position.
- f. Cycle the Smart Key Ignition Button from OFF to ON 5 times.

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

**LOOK:** for the Hazard Lights to Flash once.



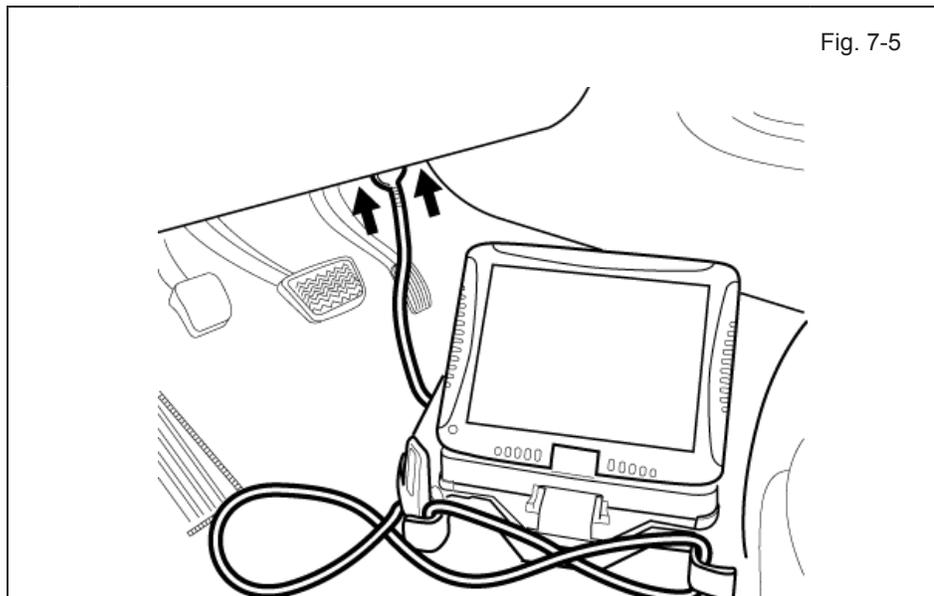
- g. Start the Engine.
- h. After 10 seconds stop the Engine.

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

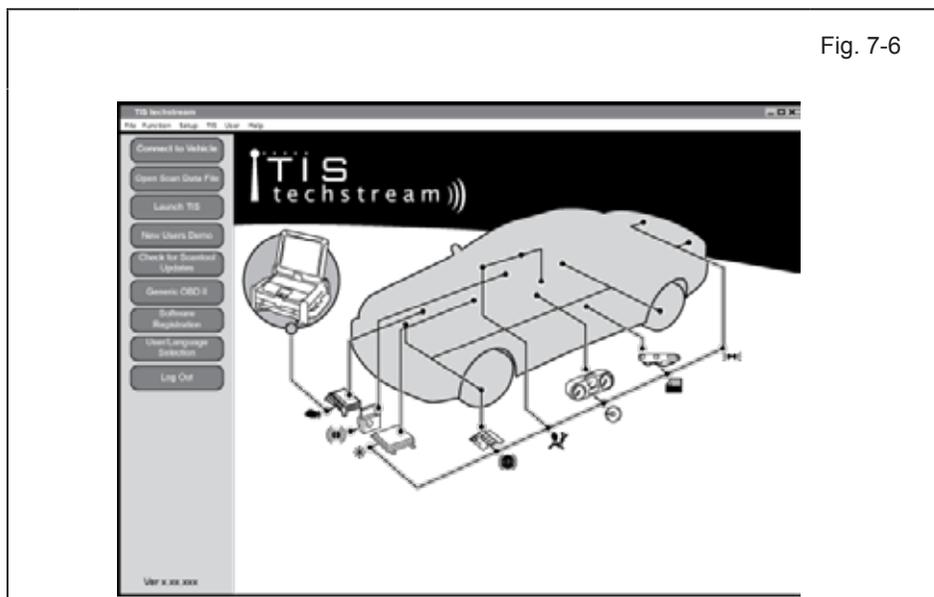
**IF THIS PROCEDURE FAILED**

The Hazard Lights flash Three Times.

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



- 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.



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

- l. Click "Connect to Vehicle."

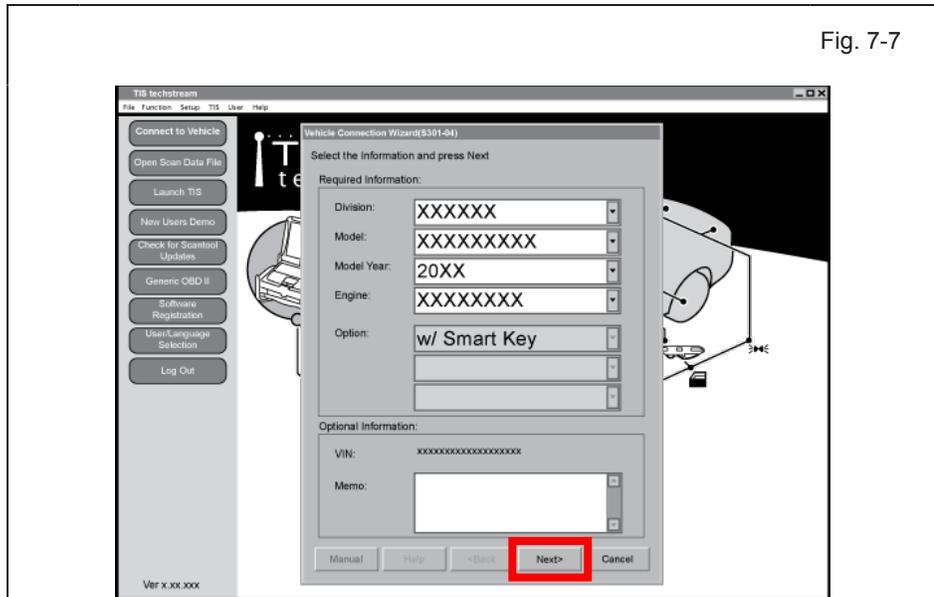


Fig. 7-7

- 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>."

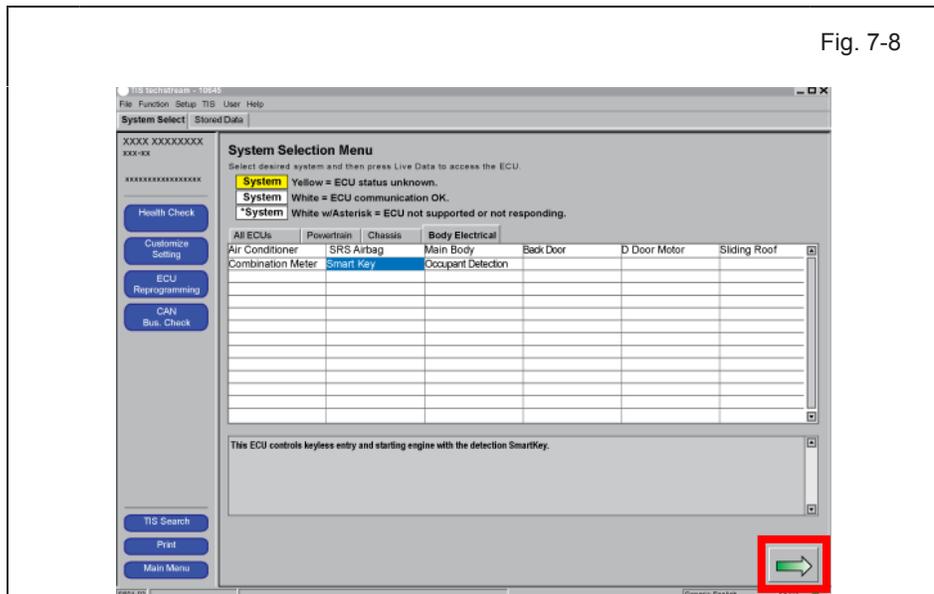


Fig. 7-8

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

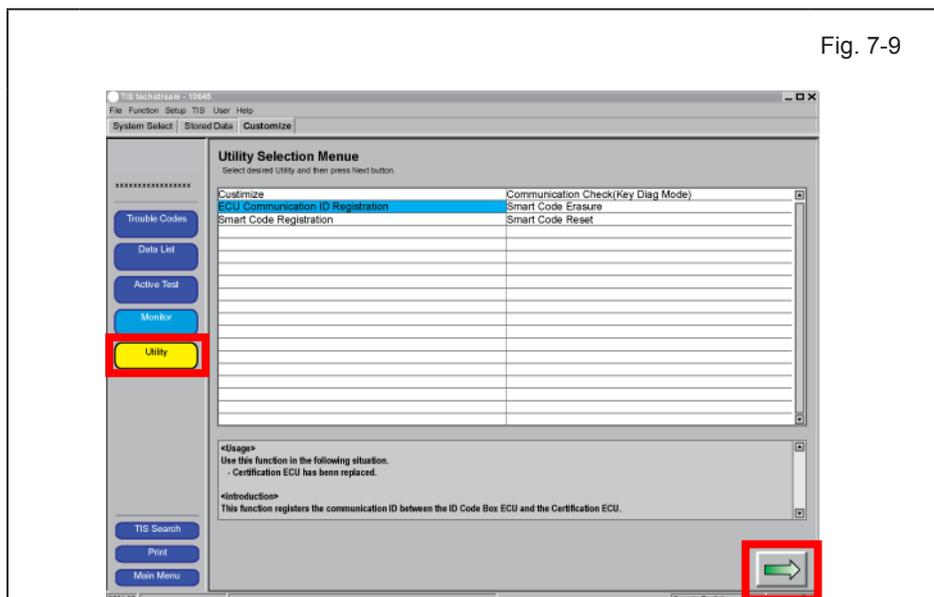


Fig. 7-9

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

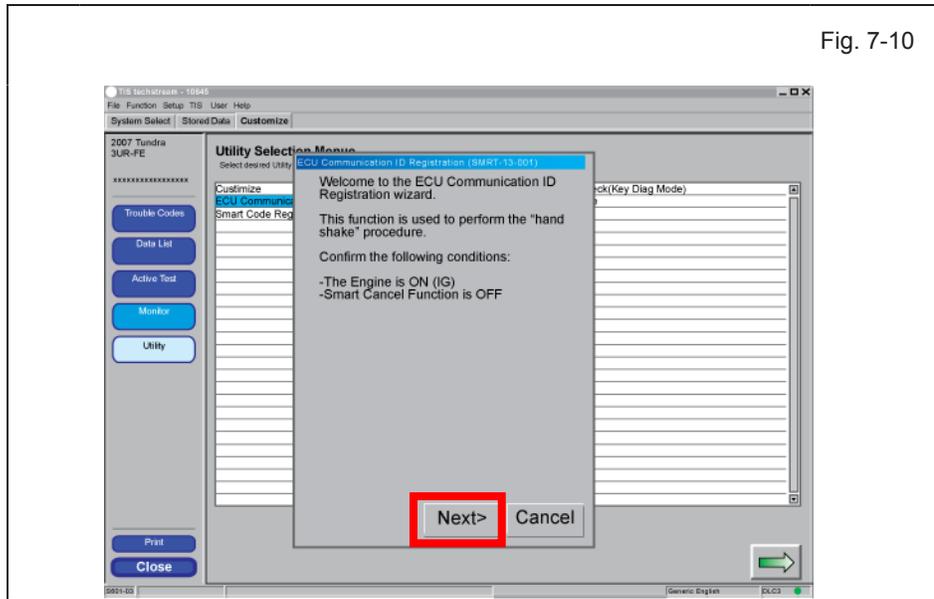


Fig. 7-10

u. Click "Next>."

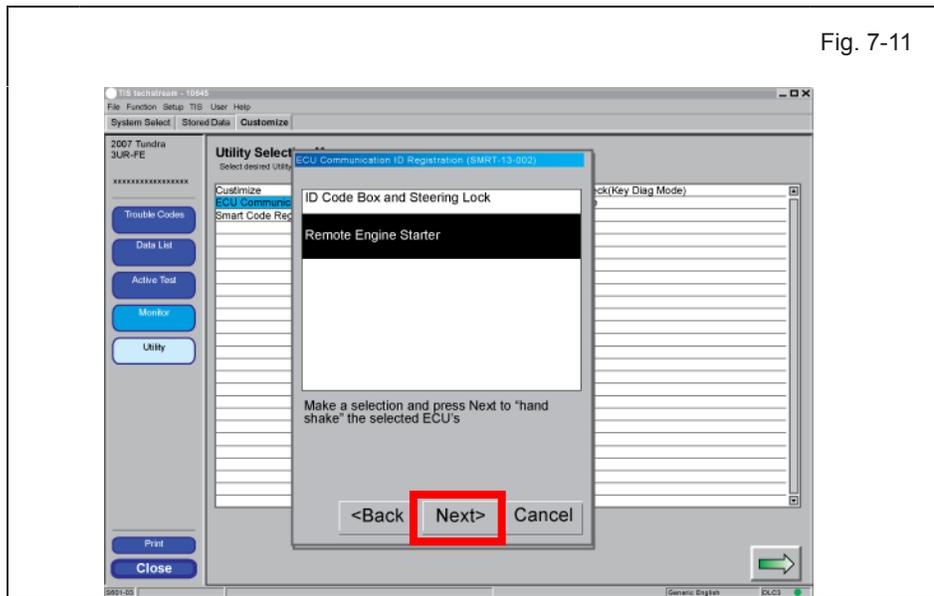


Fig. 7-11

v. Select "Remote Engine Starter."

w. Click "Next>."

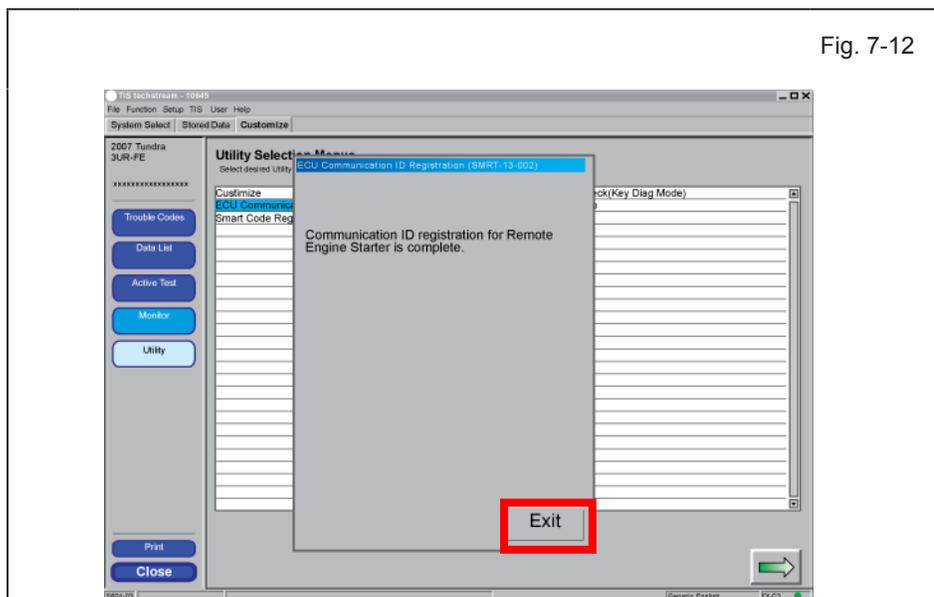


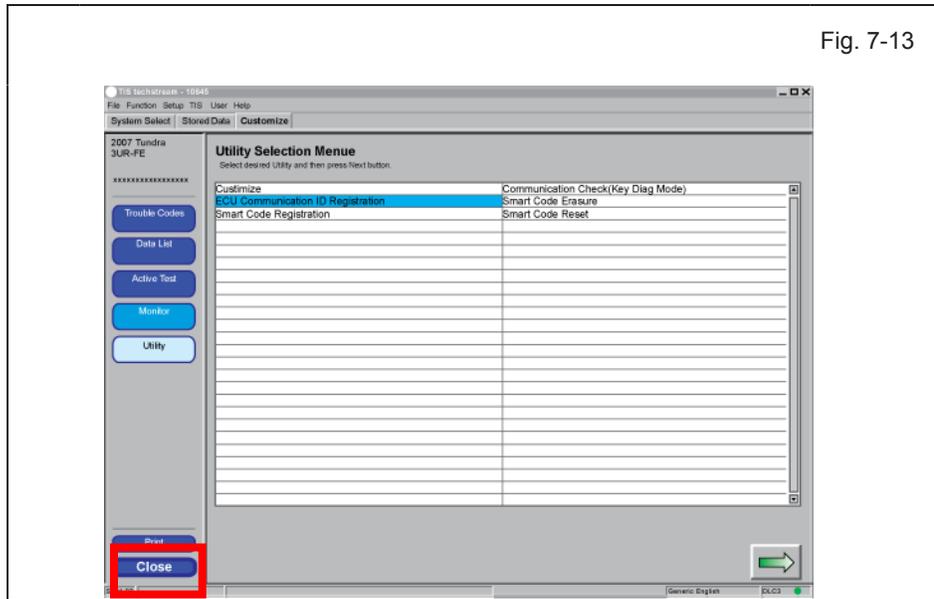
Fig. 7-12

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

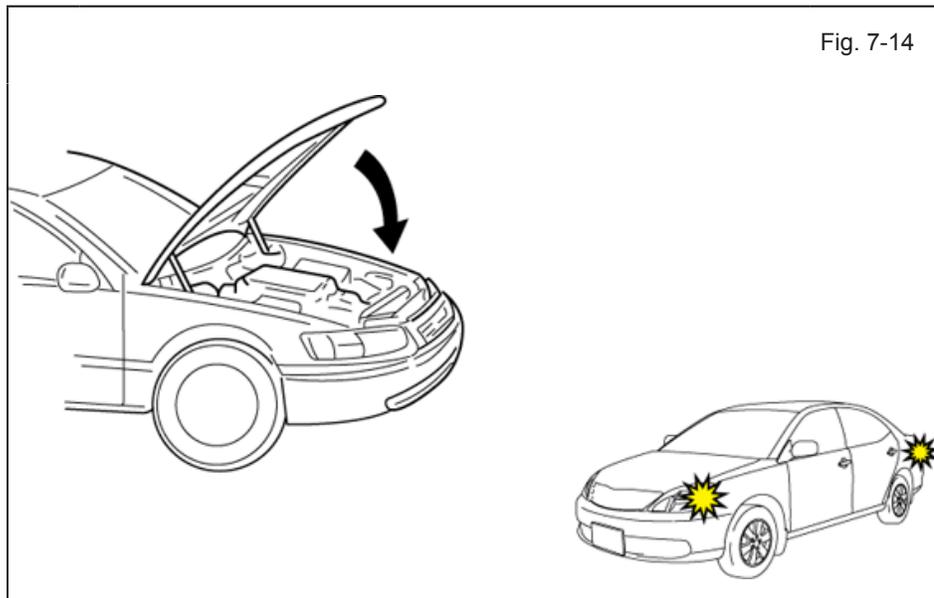
x. Click "Exit."

**IF THIS PROCEDURE FAILED**

- Start again from step p.



y. Click 



- 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. Using Electrical Tape secure the Female Connector and Harness to the Vehicle Harness.

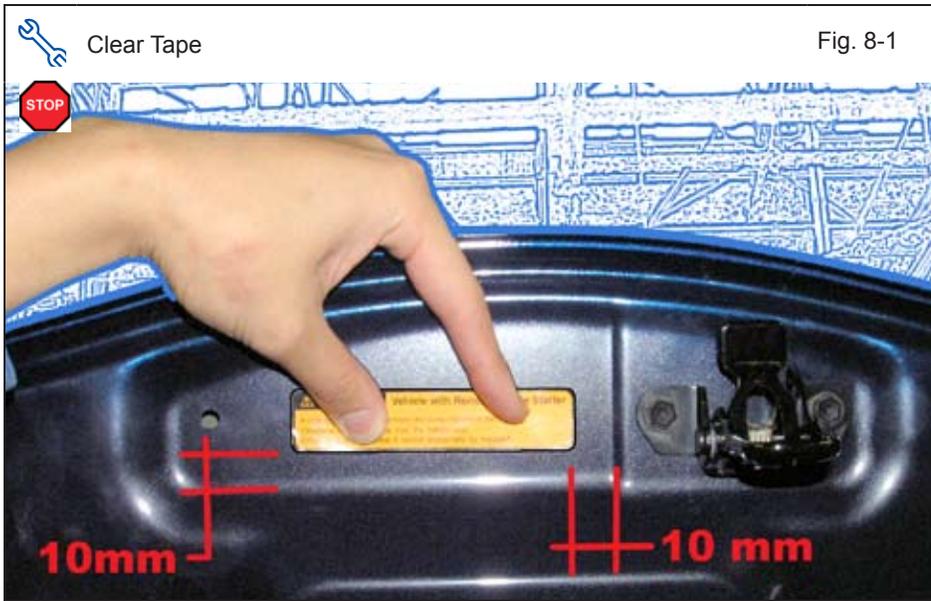


Fig. 8-1

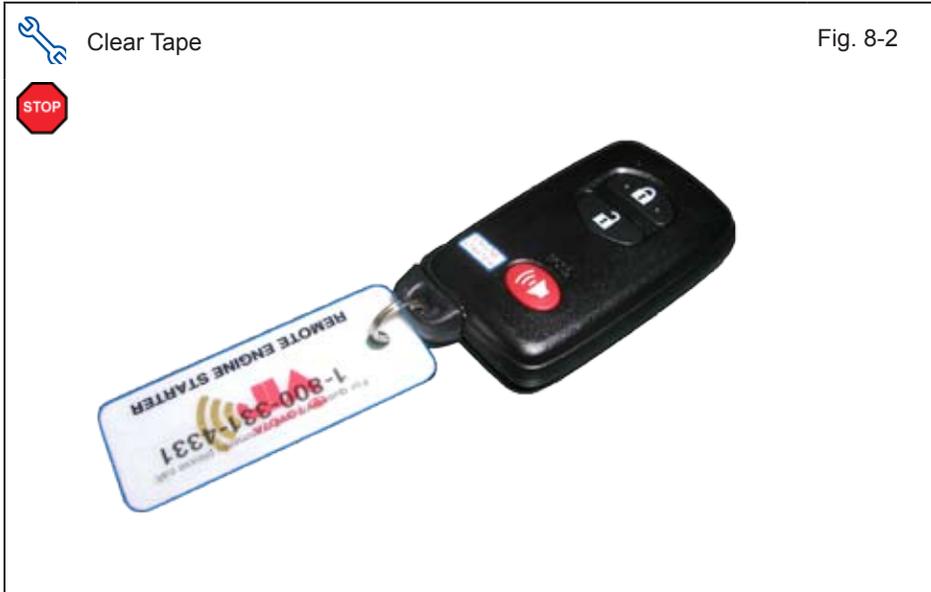


Fig. 8-2

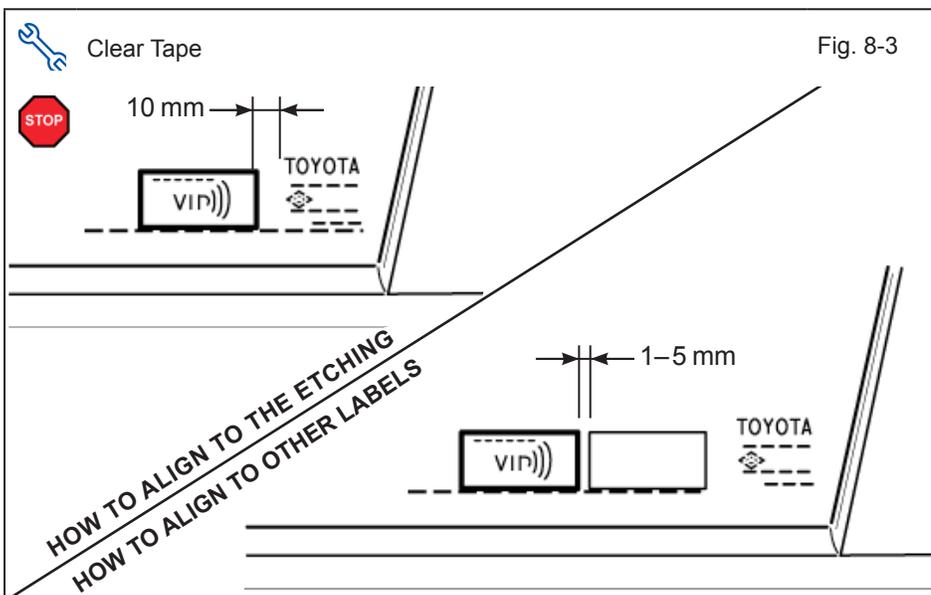


Fig. 8-3

## 8. Tags and Labels.

- For US Vehicles use the English Tags and Labels, and discard the Spanish Tags and Labels.
- For Mexico Vehicles use the Spanish Tags and Labels, and discard the English 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 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 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.
  - Tighten the Nut to 36 in•lbf (4.07 N•m).

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

- b. Finish reassembling the Vehicle.

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

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

Clean up and Remove trash.

- c. Sealed in its protective bag, place the Owner's Manual in the Glove box.
- d. 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.
- e. 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.

 Torque Wrench

Fig. 9-1



**STOP** Fig. 9-2



## Accessory Function Checks

Close the hood, place the shift lever in the “P” (park) position, set the parking brake and turn off Pre-Air Conditioning System. With the smart key in your possession, turn the vehicle off, exit the vehicle and close all doors.

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 20 seconds.
2	Press the remote control's unlock button.	The engine stops. The hazard lights flash twice.
3	Start the Vehicle again using the remote. With the engine running, press and hold the remote control's lock button for 2 seconds.	Refer to Step 1. The engine stops. The hazard lights flash once.
4	Start the Vehicle again using the remote. With the remote in your possession pressing the button on the driver's exterior door handle to unlock the vehicle.	Refer to Step 1. The engine stops. The hazard lights flash once.

Enter the vehicle and close all doors.

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

**Vehicle Function Check**

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

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

