

Part #: PT398-0T100

Conflicts: Do not install into Manual Transmission Vehicles or Vehicles without RKE systems.
Will not program with Techstream Lite.

Kit Contents



Additional Items

(may be required)

Item#	Description

Recommended Sequence of Application

Item#	Description
1	TVIP V2 Glass Breakage Sensor
2	TVIP V4 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 (Do not use Techstream Lite)
Installation Tools	
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
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.

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.

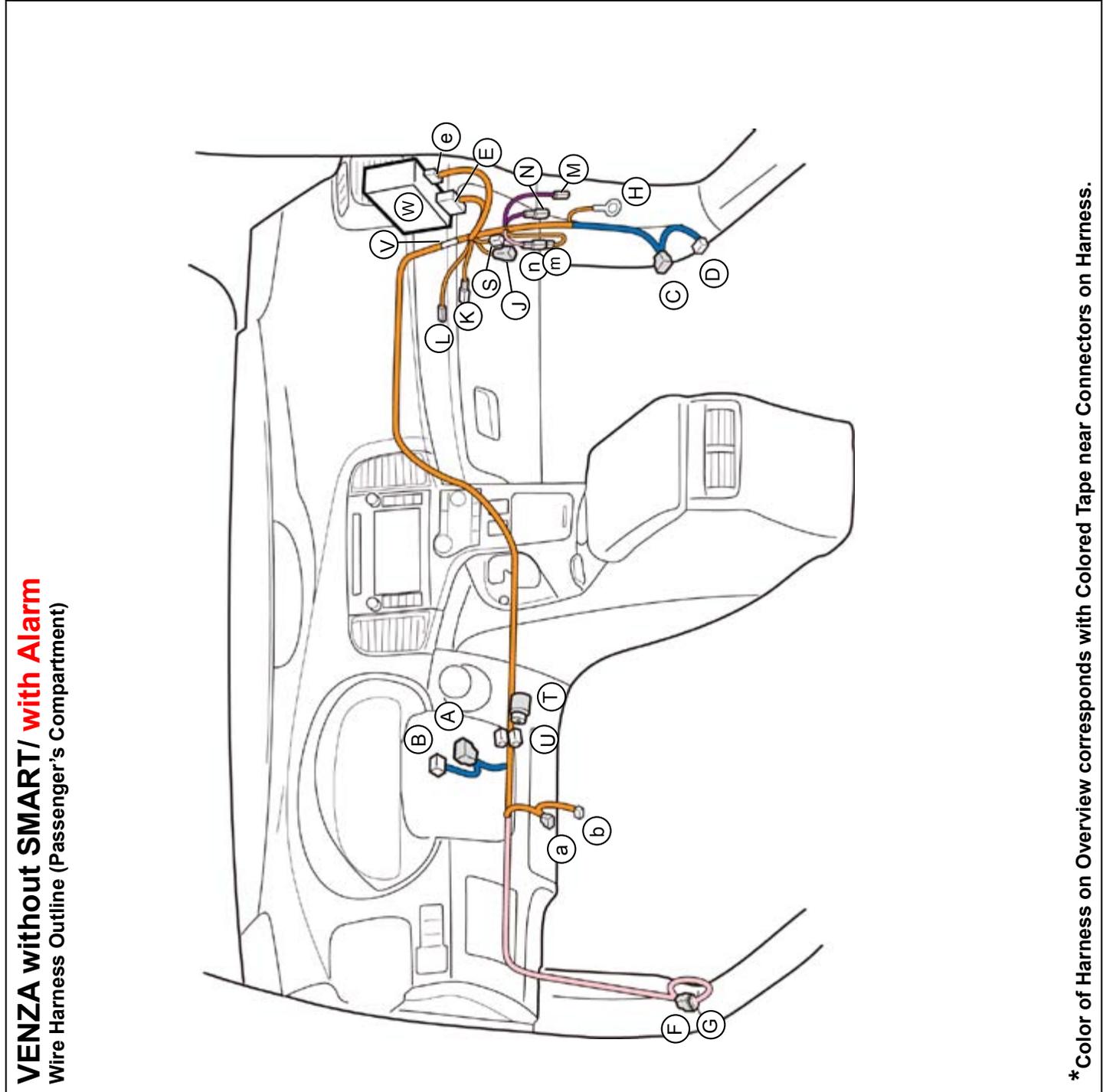
These guidelines can be found in the “Accessory Installation Practices” document.

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.

TVIP	Vehicle	Description
a	A35	4P White
b	A35	4P Blue
A	D12	8P White
B	D12	8P White
C	DM2	22P White
D	DM2	22P White
e	-	8P White (for RES ECU)
E	-	24P White (for RES ECU)
F	DA2	18P Black
G	DA2	18P Black
H	D5	Ground Terminal
J	-	5P White
K	DD1	1P White
L	DD1	1P White
m	-	1P White
n	-	1P White
M	-	1P White (for Registration)
N	-	1P White (for Registration)
S	-	5P White (for V2/V4 Overlay)
T	-	Relay
U	-	Fuse
V	-	White Tape
W	-	RES ECU

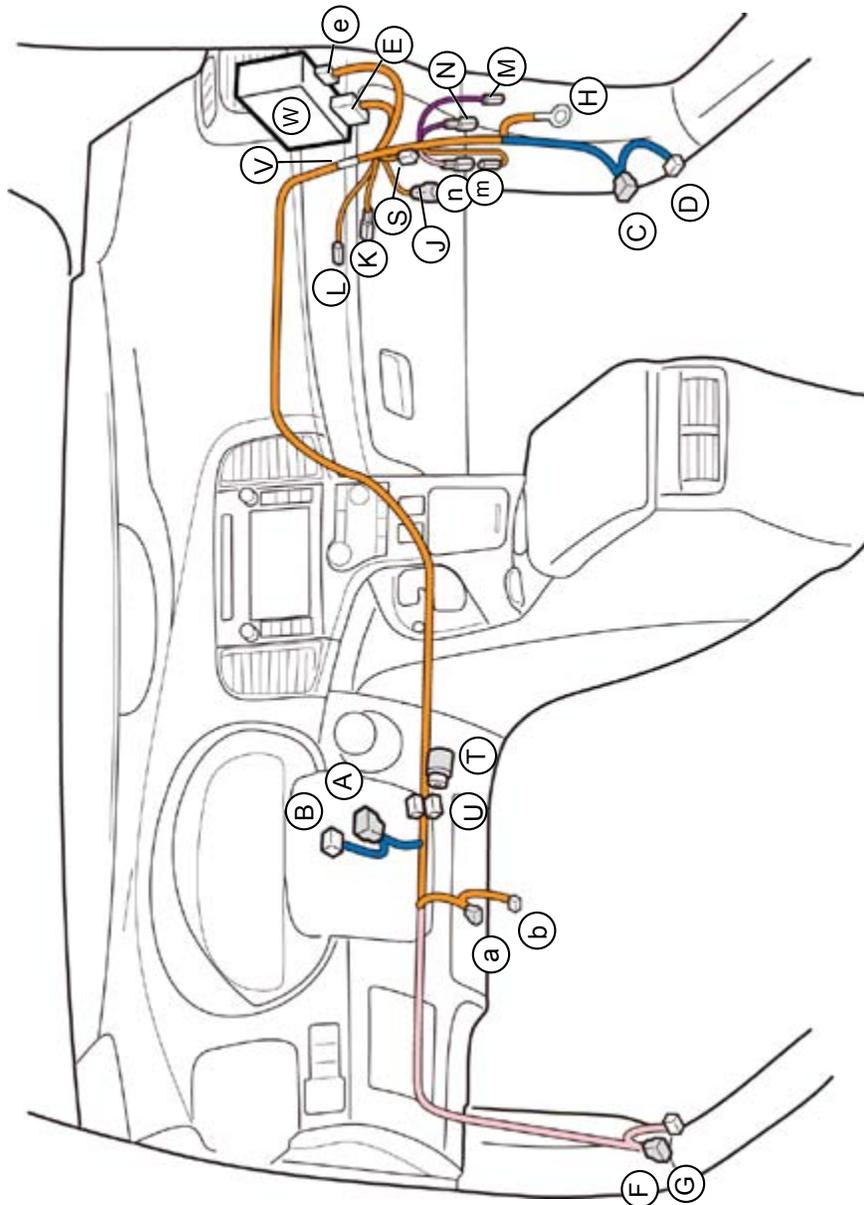


VENZA without SMART/ with Alarm
Wire Harness Outline (Passenger's Compartment)

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

TVIP	Vehicle	Description
a	A35	4P White
b	A35	4P Blue
A	D12	8P White
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C	DM2	22P White
D	DM2	22P White
e	-	8P White (for RES ECU)
E	-	24P White (for RES ECU)
F	DA2	18P Black
G	DA2	18P Black
H	D5	Ground Terminal
J	-	5P White
K	DD1	1P White
L	DD1	1P White
m	-	1P White
n	-	1P White
M	-	1P White (for Registration)
N	-	1P White (for Registration)
S	-	5P White (for V2/V4 Overlay)
T	-	Relay
U	-	Fuse
V	-	White Tape
W	-	RES ECU

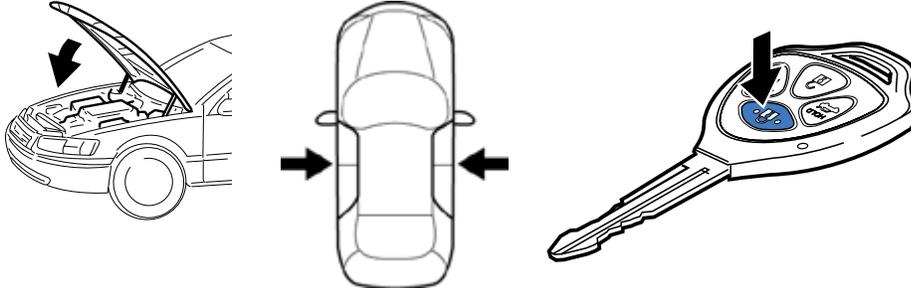
VENZA without SMART/ without Alarm
Wire Harness Outline (Passenger's Compartment)



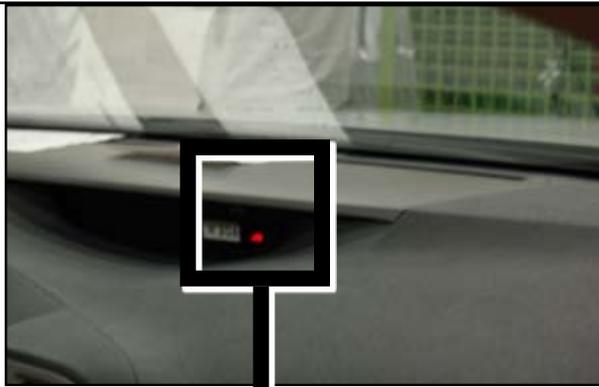
*Color of Harness on Overview corresponds with Colored Tape near Connectors on Harness.

Confirm the following:

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



Observe the Security LED on the console



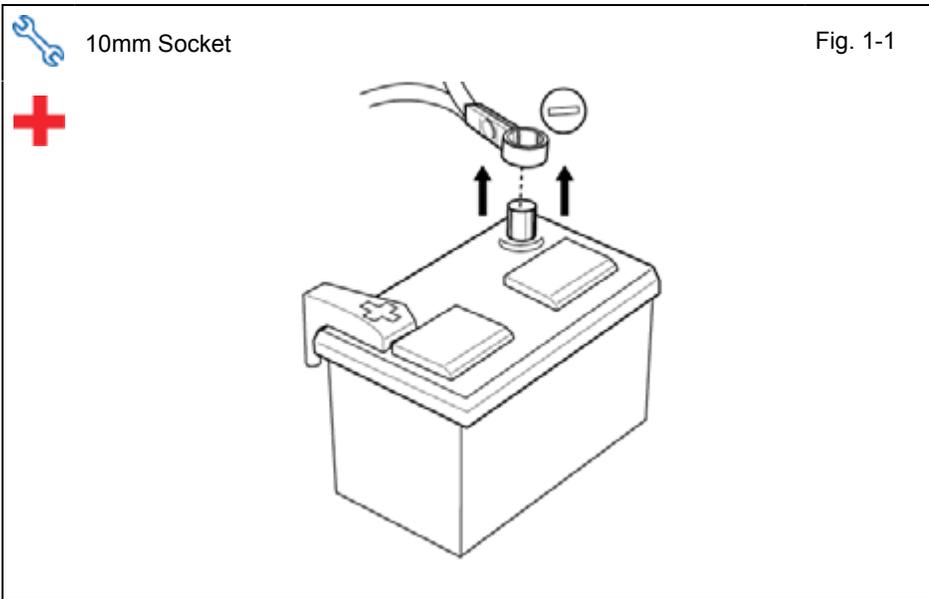
Security LED Turns ON solid for 30 Seconds
then starts blinking

WITH ALARM



Security LED starts blinking Immediately

WITHOUT ALARM

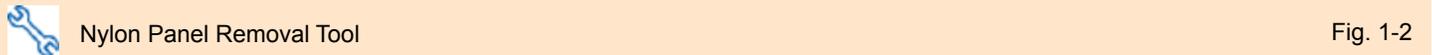


1. Hood Switch Installation.

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

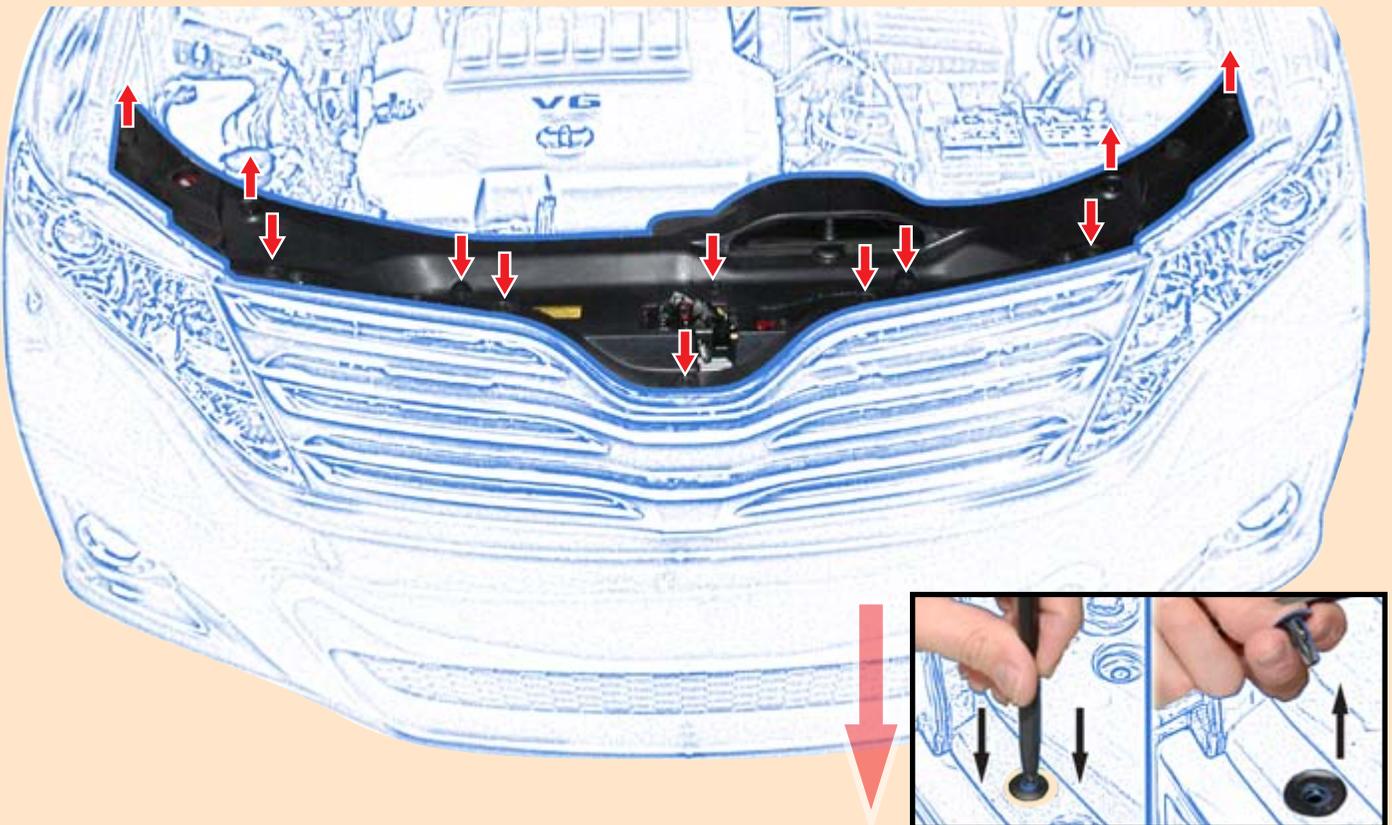
+ CAUTION: Do not touch the Positive Terminal.

Non-Alarm Vehicles Only



c. Remove the Engine Cover.

- Remove 12 Clips.



d. Remove the Nut Cover on Hood Lock Assembly.

- Discard the Nut Cover.

e. Dislodge the 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 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 on 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)

Alarm Vehicles Only

2. V4 Harness Preparation.

- a. Remove the Electrical Tape securing the 1P Connectors.

- b. Connect the 1P Connectors as shown, and secure using Electrical Tape.

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 Cover.

- Remove 1 Bolt and 1 Screw.

f. Release the Steering Column's Tilt and Telescope Lock.

g. Dislodge the Center Clip.



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

- h. Dislodge the Back Clips on both sides.
- i. Remove the Screws on both sides.
 - Insert the Key into the Ignition and turn it to ON.
 - Turn the Steering wheel from Right to Left to access the Screws.
 - Remove the Key from the Ignition.

- j. Remove the Glove Box Under Cover.

- k. Remove the Passenger's Step Cover.

- I. Remove Passenger's side Cowl Cover.



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

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

4. V4 Harness Installation. (Passenger's Side)

- a. Route the V4 Harness through the Vehicle Brace as shown. (Refer to the Vehicle Harness Overview)
- b. Secure the White Tape Marker to the Vehicle Harness near the Vehicle Harness Clamp with 1 Wire Tie.

h. Connect the Vehicle's 22P Connector to the V4 22P Connector.

i. Remove the Bolt.

j. Secure the V4 Ground Terminal to the Vehicle's Ground Terminal with the Bolt.

k. Secure the V4 Connector to the Vehicle Harness with 1 Wire Tie.

l. Secure the Male 1 Pin 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.

m. Secure the RES Harness to the Vehicle Harness with 1 Wire Tie.

V4 ONLY

- n. Connect the V4 5P Connector to the Vehicle's 5P Connector.

V4/V2 ADD-ON ONLY

- o. Cut the Wire Tie securing the V2 5P Connector.
- p. Disconnect the V2 5P Connector and the Vehicle's 5P Connector.

- q. Remove Electrical Tape securing the V4 5P Connector.

- r. Connect the V4 5P Connector to the Vehicle's 5P Connector.
- s. Connect the V4 5P Connector to V2 5P Connector.

- t. Disconnect the Vehicle's 1P Connector.

- u. Connect the V4 1P Connector to the Vehicle's 1P Connector.
- v. Connect the V4 1P Connector to the Vehicle's 1P Connector.

- w. Secure the 1P Connectors and the 5P Connectors to the Vehicle Harness with 1 Wire Tie.

5. V4 ECU Preparation and Installation.

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

- b. Plug the V4 8P and 24P Connectors into the RES ECU.

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



CAUTION: Do not over tighten the Screw.

- d. Disconnect the Vehicle's Harness from behind the Passenger's Glove Box.

- e. Route the V4 Harness along the Passenger's Reinforcement.
- f. Secure the V4 Harness on Vehicle Harness with 4 Wire Ties.
- g. Reconnect the Vehicle's Harness.



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 to the Vehicle Harness with 1 Wire Tie.

- d. Compress the Steering Columns Tilt and Telescope.
- e. Disconnect the Vehicle's 8P IG Connector.

- f. Plug the V4 8P Connectors in between the Vehicle's 8P IG Connectors.

- g. Secure the 8P Connectors to the Vehicle harness with 1 Wire Tie.
- h. Secure the V4 Harness to the Vehicle Harness with 2 Wire Ties.



CAUTION: Make sure the Connectors and Harness align properly.

- i. Fully extend the Steering Column's Tilt and Telescope Function.
- j. Secure the V4 Harness to the Vehicle Harness with 2 Wire Ties.



NOTE: Verify that the Steering Column Tilts and Telescopes without interference and there is no tension on the connectors.

k. Disconnect the Vehicle's
4P Connector.

l. Plug the V4 4P Connectors
in between the Vehicle's
4P Connectors.

m. Secure the 4P Connectors
to the Vehicle Harness with
1 Wire Tie.

n. Route and secure the V4
Harness along the Vehicle
Harness in front of the
Driver's J/B with 1 Wire Tie.

o. Route and secure the V4
Harness along the Vehicle
Harness near the Driver's
side Cowl with 2 Wire Ties.

Non-Alarm Vehicles Only

p. Disconnect the Vehicle's
BLACK 18P Connector.

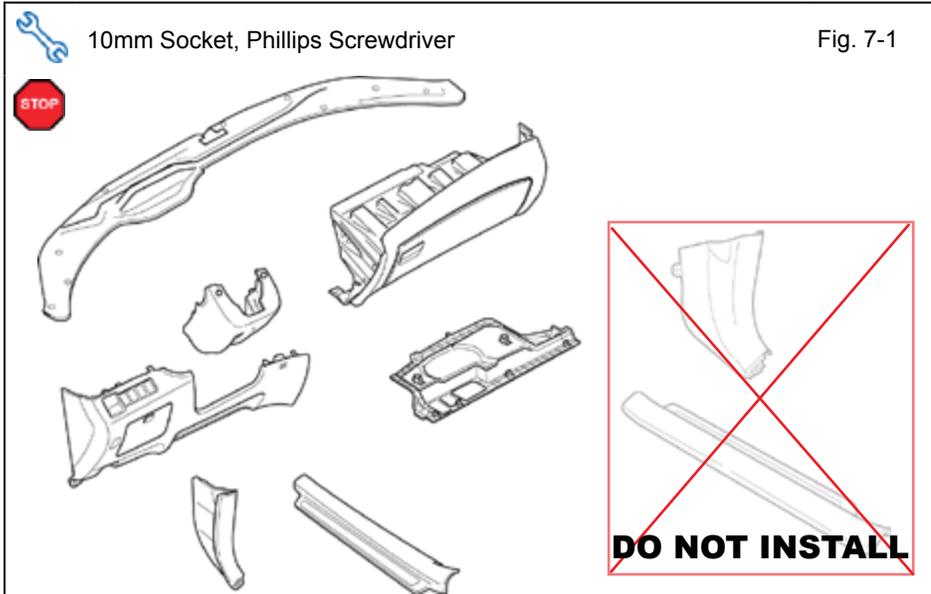
q. Connect the V4 18P
Connectors in between the
Vehicle's 18P Connectors.

r. Secure the 18P Connectors
to the Vehicle Harness with
1 Wire Tie.

Alarm Vehicles Only

s. Connect V4 Male and Female
18P Connectors.

- t. Bundle up the excess V4 Harness and secure to the Vehicle Harness using 1 Wire Tie.



7. Registration Preparation.

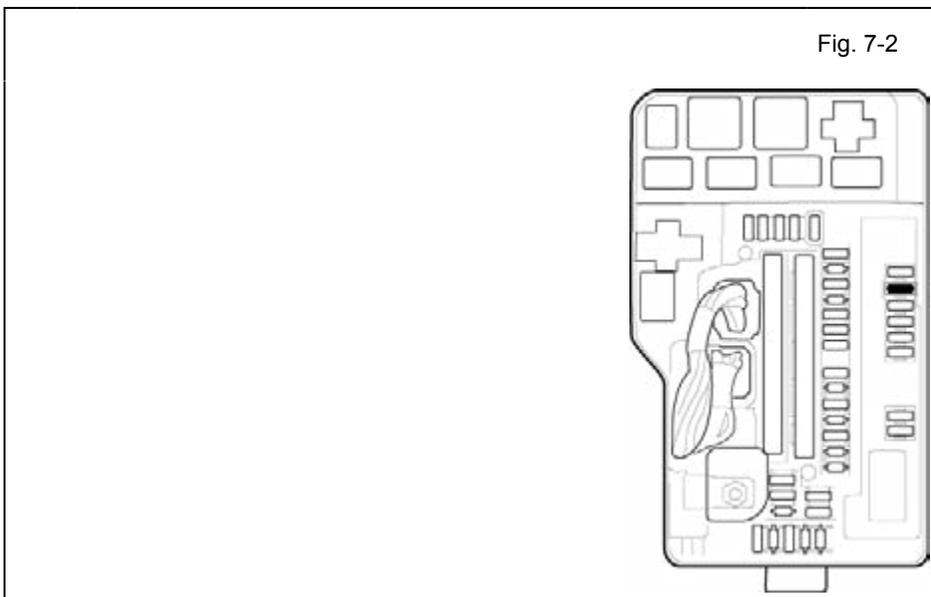
- a. Reassemble the Vehicle.



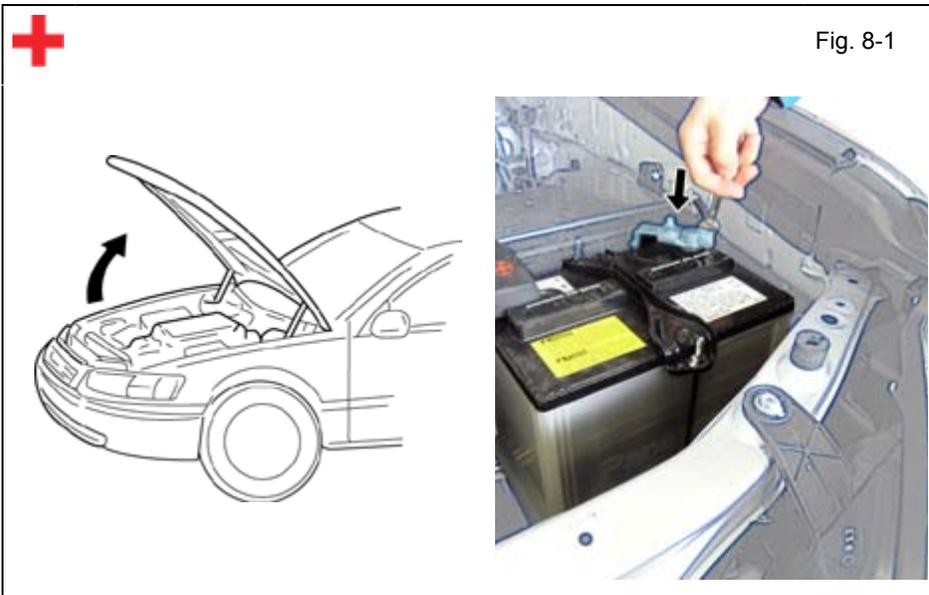
Note: Make sure that all Connectors are reconnected.



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



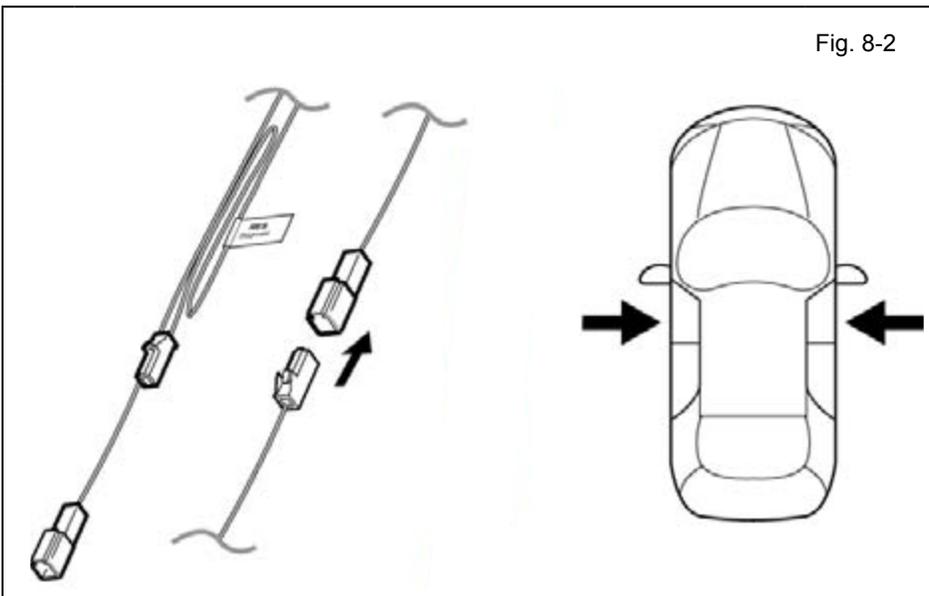
- b. Verify that the Short Pin is Installed.
 - If not Install now.



8. Registration.

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

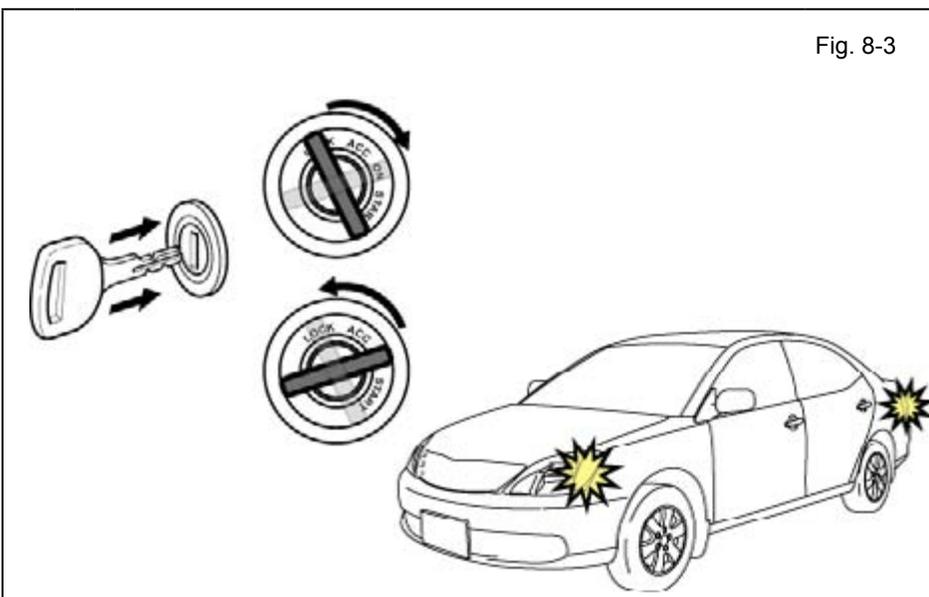
+ **CAUTION:** do not touch the Positive Terminal.



- c. Locate the V4 Harness's 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-ac.

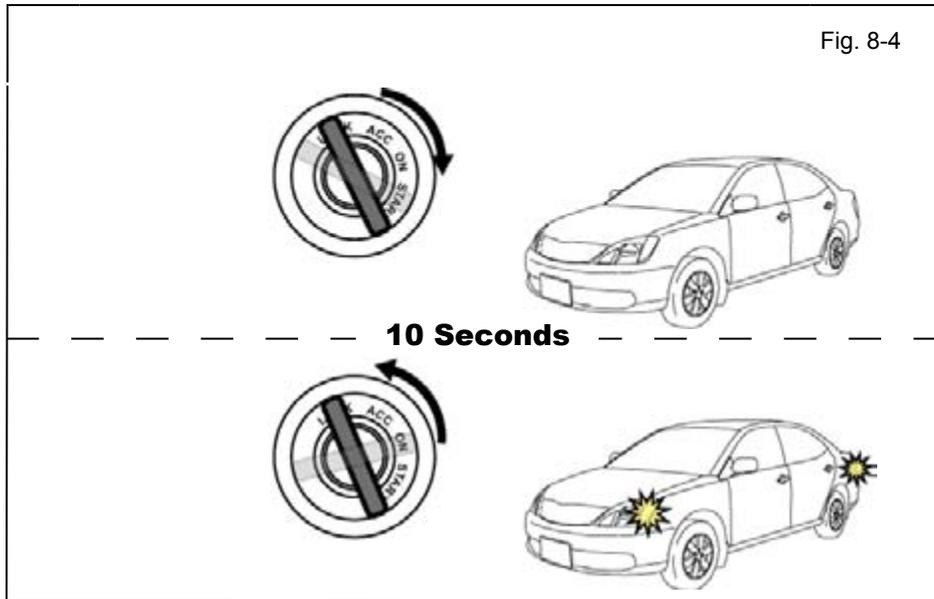
- d. Close all doors.



- e. Insert the key into the Ignition.
- f. Turn it from "OFF" to "ON" 5 times.

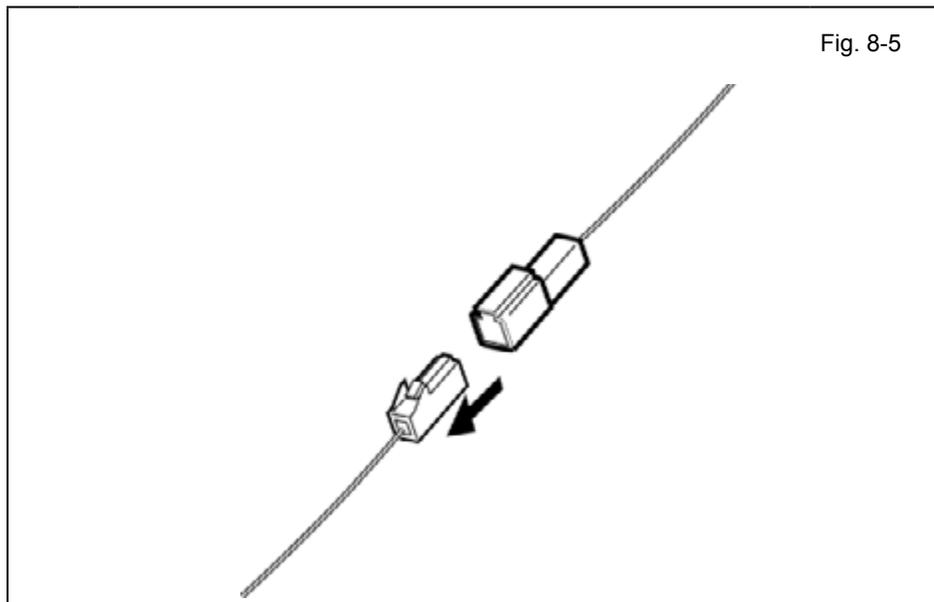
LOOK: For the Hazard Lights to flash Once.

- g. Turn the key to the "OFF" position.



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

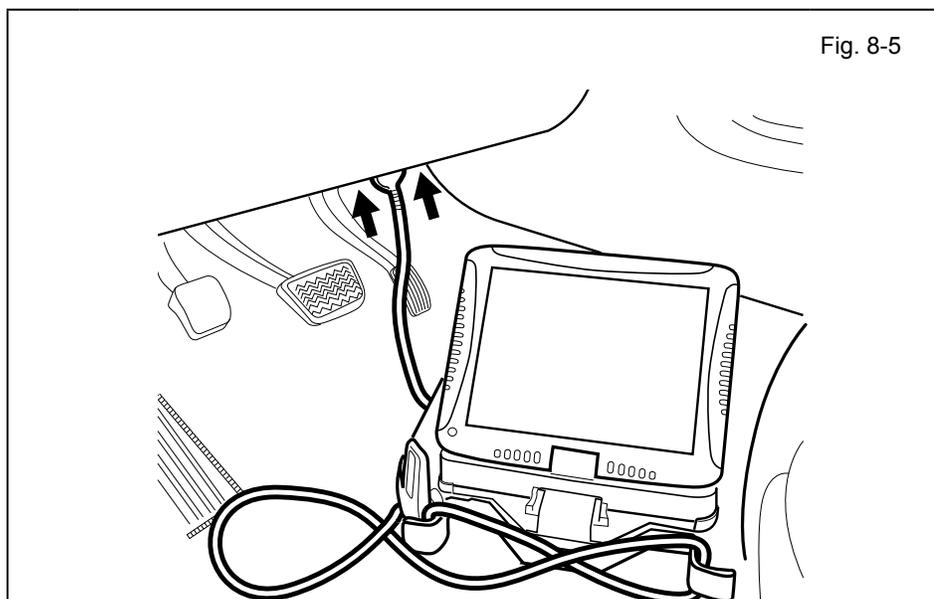
LOOK: For the Hazard Lights to flash Once.



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.



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

- j. Connect the Techstream Notebook to the Vehicle's Diagnostic Port.
- k. Using the Master Key turn the Vehicle's Ignition to the ON position.

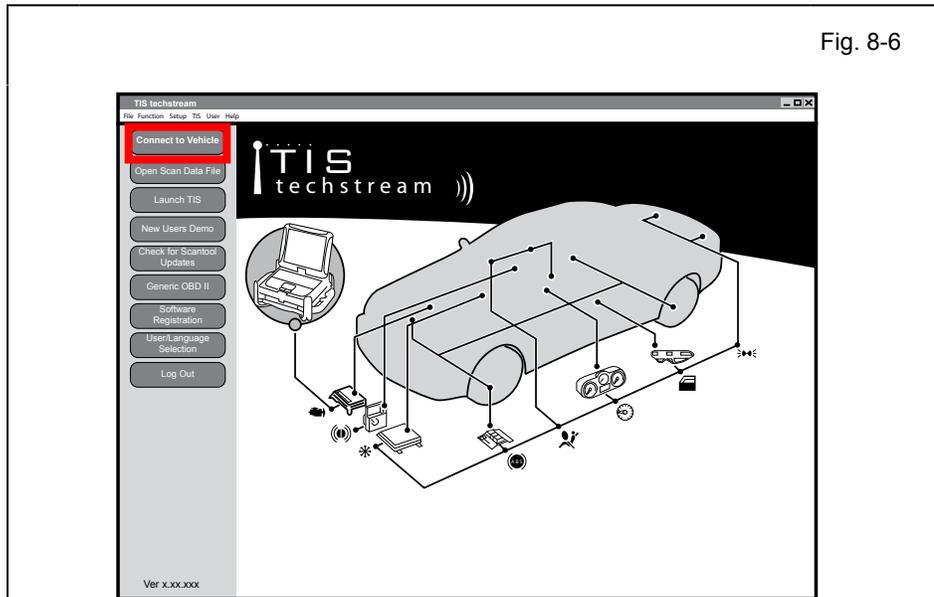


Fig. 8-6

- l. Start the TIS Techstream Application by clicking on the shortcut located on the Desktop. (Fig. 8-5)
- m. Click “Connect to Vehicle”

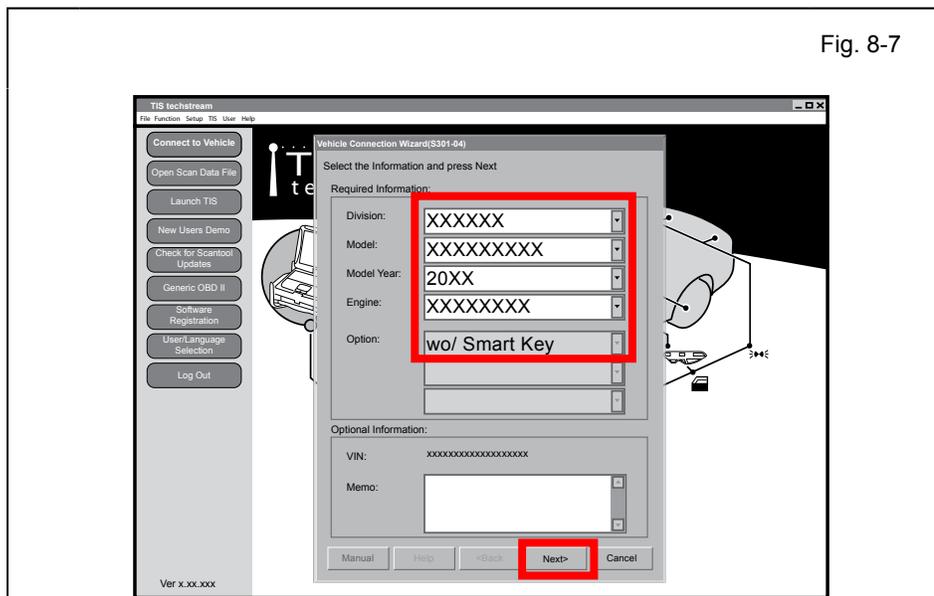


Fig. 8-7

- n. Verify that the information displayed on the Techstream matches the Vehicle. If not you will need to manually input the information.
- o. Select wo/Smart Key.
- p. Click “Next>.”

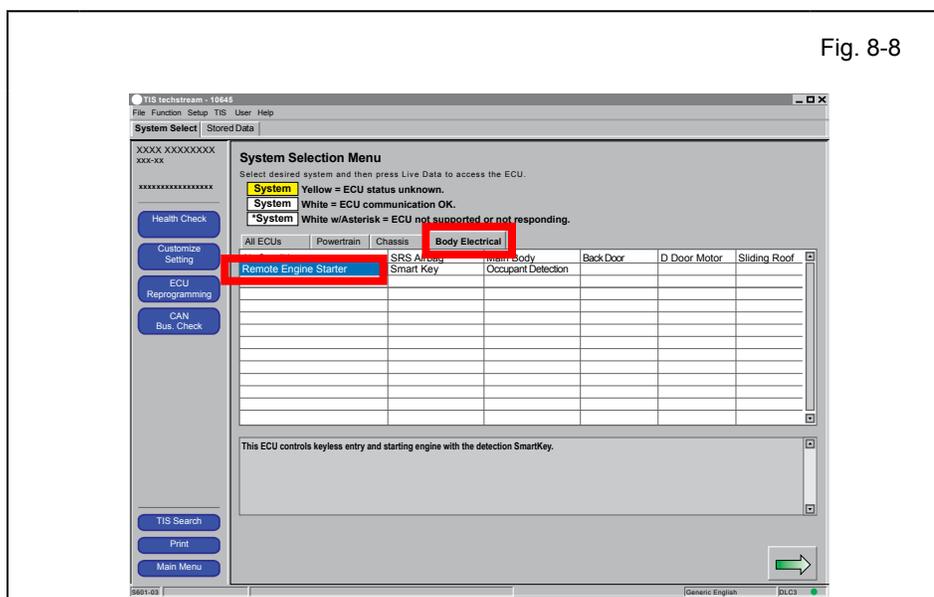


Fig. 8-8

- q. Select tab “Body Electrical”
- r. Select “Remote Engine Starter”
- s. Click  .

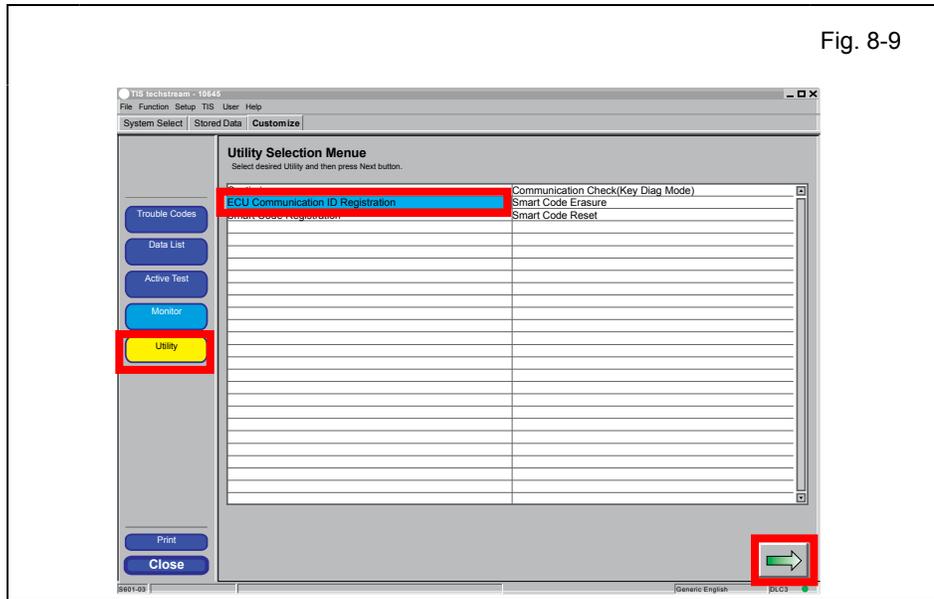


Fig. 8-9

- t. Select "Utility."
- u. Select "ECU Communication ID Registration."
- v. Click .

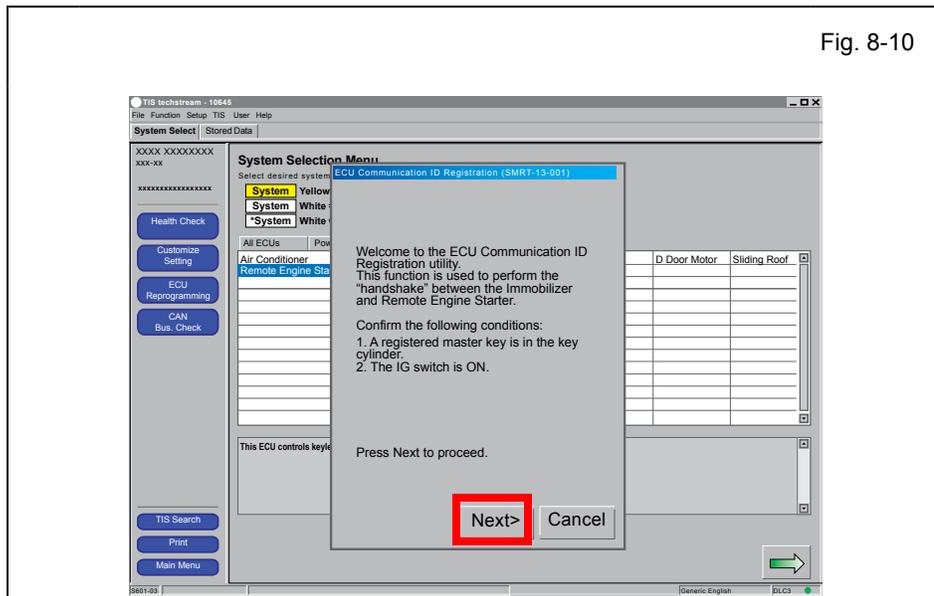


Fig. 8-10

- w. Verify the on screen instructions.
- x. Click "Next>."

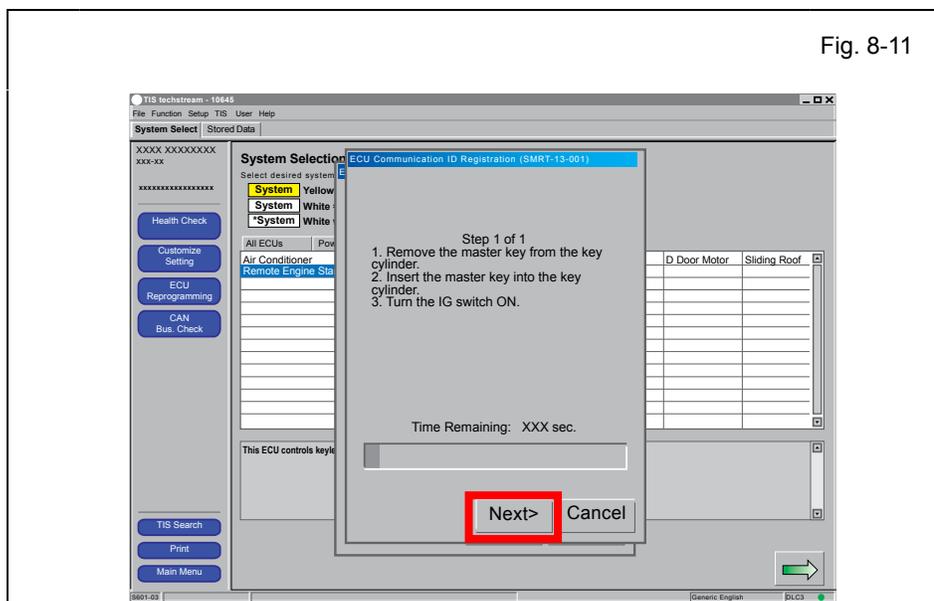
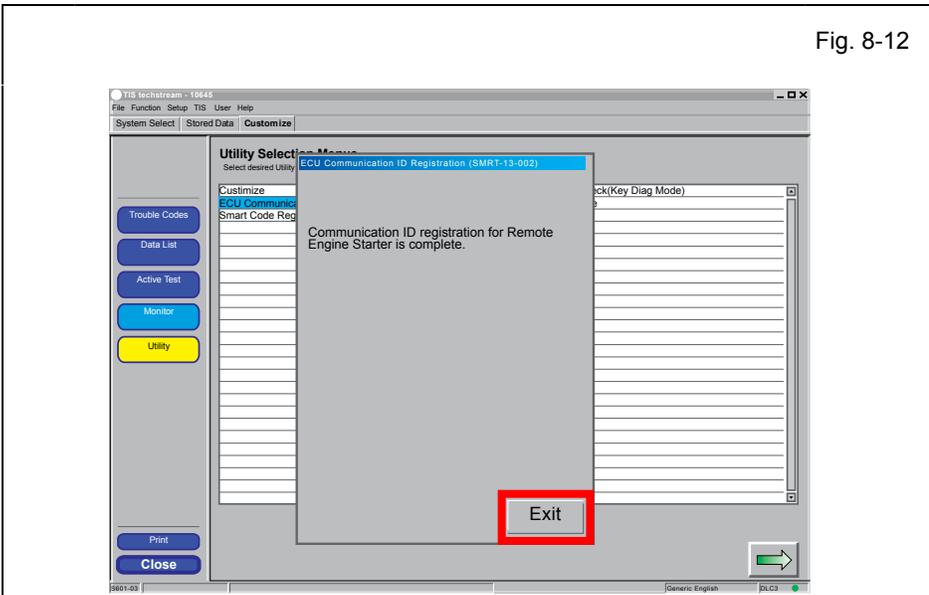


Fig. 8-11

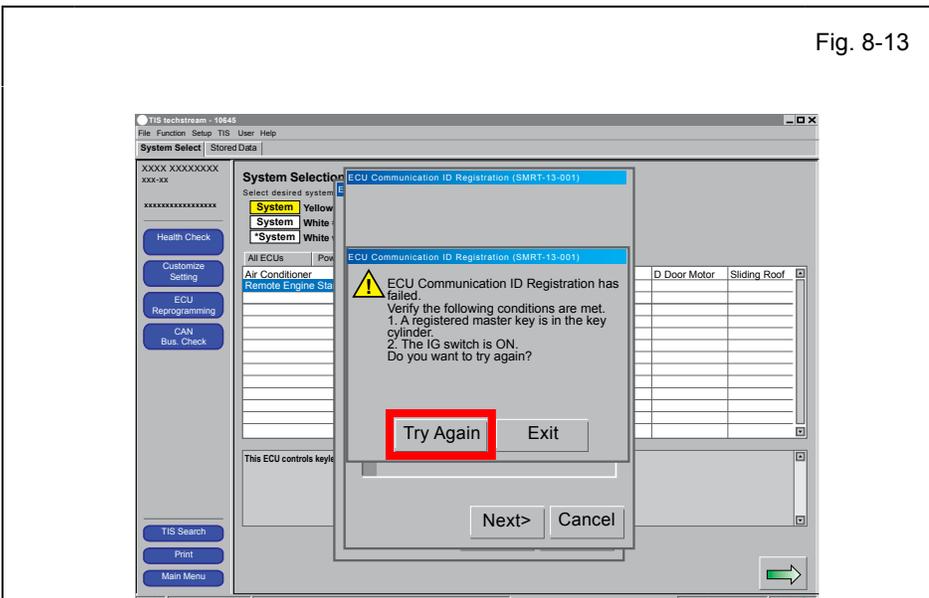
- y. Follow the steps on the Techstream.
- z. Click "Next>."

Fig. 8-12



CONFIRM: That the ECU Communication ID was completed successfully.
aa. Click "Exit."

Fig. 8-13



IF THIS PROCEDURE FAILED

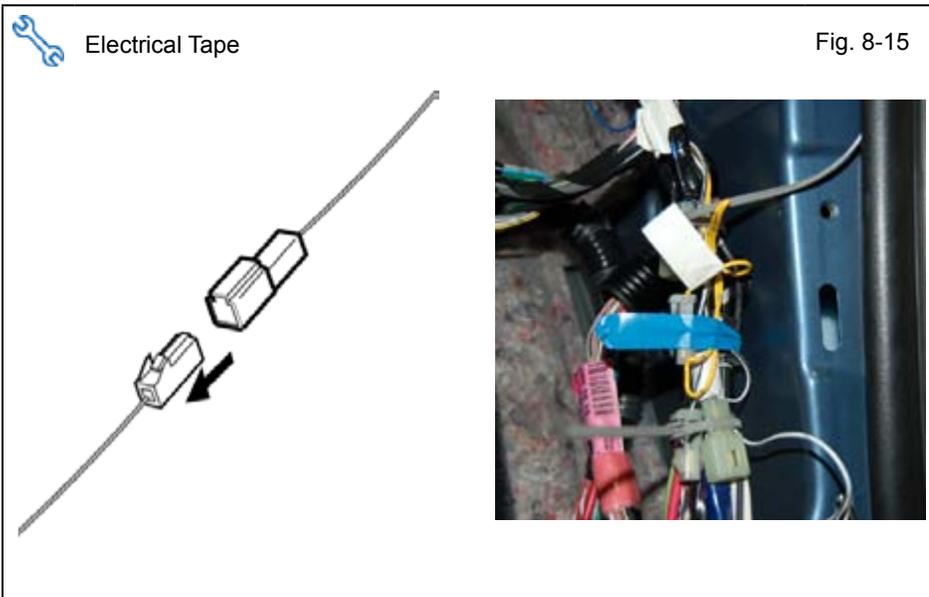
- Click "Try Again"
- Start again from step w.

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

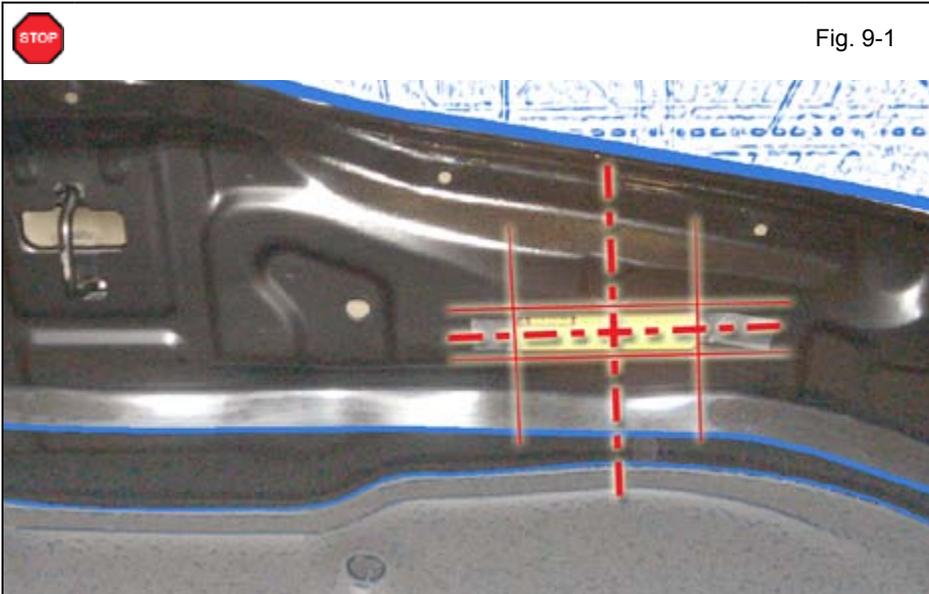
IF THIS PROCEDURE FAILED

The Hazard Lights flash Three Times.

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



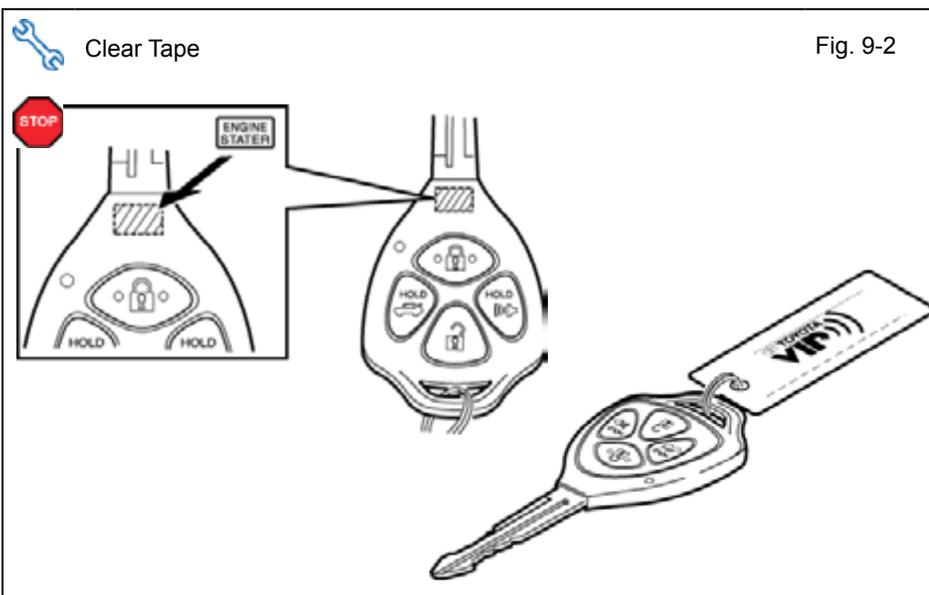
- ae. After a successful Registration Disconnect the 1P RES Diagnostic Connectors.
- af. Secure the Female 1P RES Connector and Harness to the Vehicle Harness using Electrical Tape.



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.

STOP 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.

STOP CAUTION: Do not touch the adhesive surface.

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

STOP CAUTION: Do not touch the adhesive surface.

REPEAT: steps c–f with the other Key.

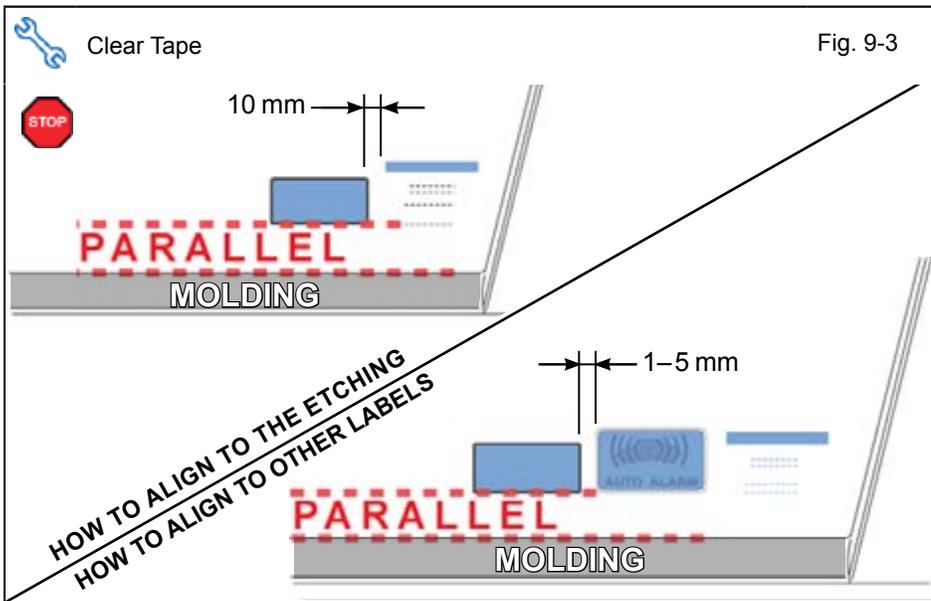


Fig. 9-3

- 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 Labels.

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

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.

- 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 Glovebox.
- 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.

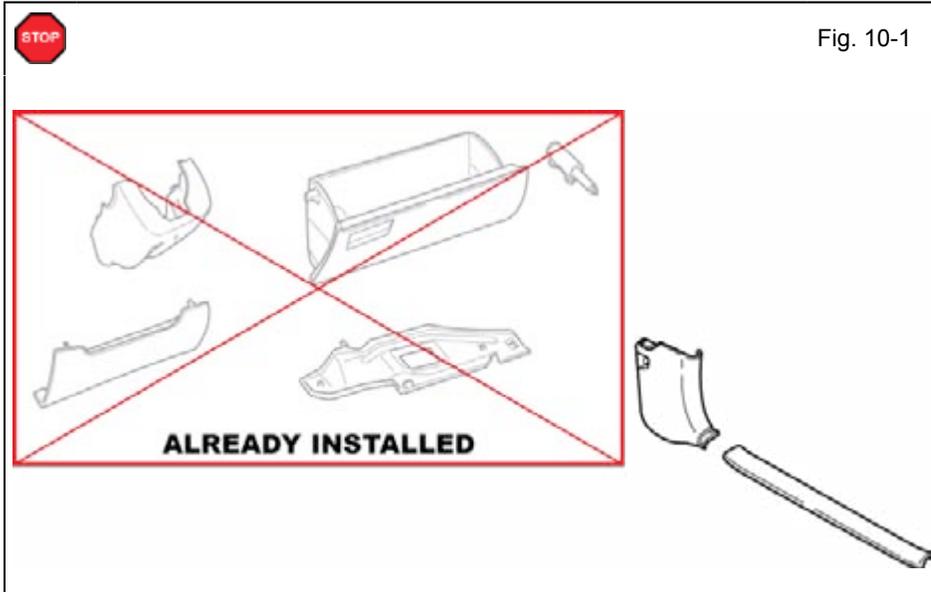


Fig. 10-1

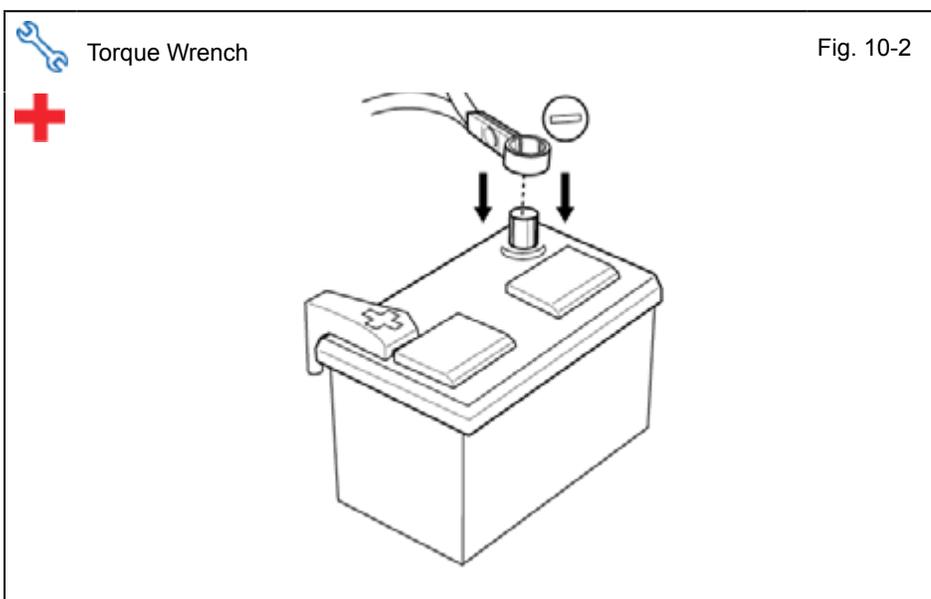


Fig. 10-2

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. NOTE: <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"/>	Glovebox 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.

