Part Number: PT398-60160

Kit Contents

Item #	Quantity	Description
1	1	RES ECU
2	1	RES Bracket
3	1	Wire Harness

Hardware Bag Contents Additional

Item#	Quantity	Description
1	10	Wire Ties
2	1	Extra Large Wire Tie
3	1	Waterproof Sheet
4	1	Double Sided Tape
5	1	Foam Tape
6	2	Foam Tape (Large)
7	2	Window Label (English)
8	2	Window Label (Spanish)
9	2	Key Tag (English)
10	2	Key Tag (Spanish)
11	1	Engine Room Label (English)
12	1	Engine Room Label (Spanish)
13	1	V4 Owner's Guide

Additional Items Required For Installation

Item#	Quantity	Description

Conflicts

Recommended Tools

Personal & Vehicle Protection	Description
Safety Glasses	
Safety Gloves	(Optional)
Vehicle Protection	Blankets
Special Tools	
Techstream	Use latest version on TIS
Installation Tools	
Screwdriver	#2 Phillips
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), Airbag: 108 in•lbf (12 N•m)
Tape	Clear
Socket	10mm, extension
Special Chemicals	
Cleaner	VDC Approved Cleaner

General Applicability

2016- MY Land Cruiser

Recommended Sequence of Application

Item#	Quantity	Description

Vehicle Service Parts

Item#	Quantity	Description

Legend

STOP: Damage to the vehicle may occur. Do not proceed until process has been complied with

OPERATOR SAFETY: Use caution to avoid risk of injury.

CAUTION: A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.

TOOLS & EQUIPMENT: Used in Figures calls out the specific tools and equipment recommended for this process.

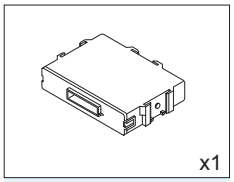
REVISION MARK : This mark highlights a change in installation with respect to previous issue.

SAFETY TORQUE: This mark indicates that torque is related to safety.

Kit Contents

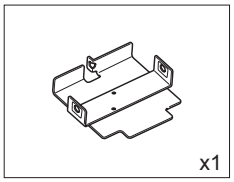
Service Part #'s

RES ECU

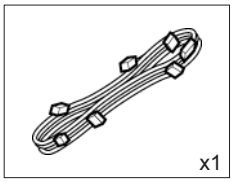


PT398-60160-AA

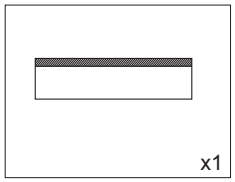
RES ECU Bracket



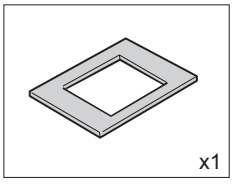
V4 Harness



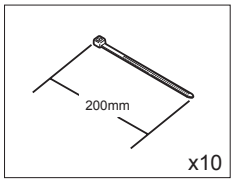
Waterproof Sheet



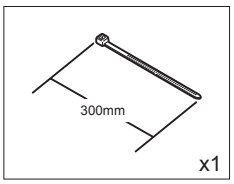
Double Sided Tape



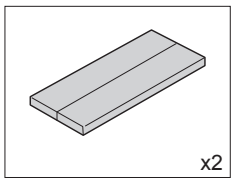
Wire Tie



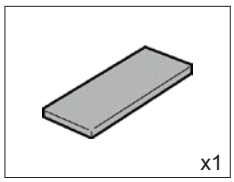
Extra Large Wire Tie



Foam Tape (Large)



Foam Tape



Key Tag



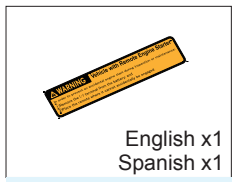
(E) PT398-4209E
(S) PT398-4209S

Window Label



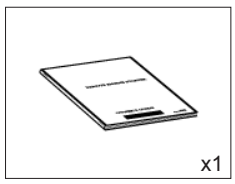
(E) 08192-07810
(S) PT398-00071-SL

Engine Room Label



(E) PT398-00070-EL
(S) PT398-00070-SL

Owner's Guide



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.

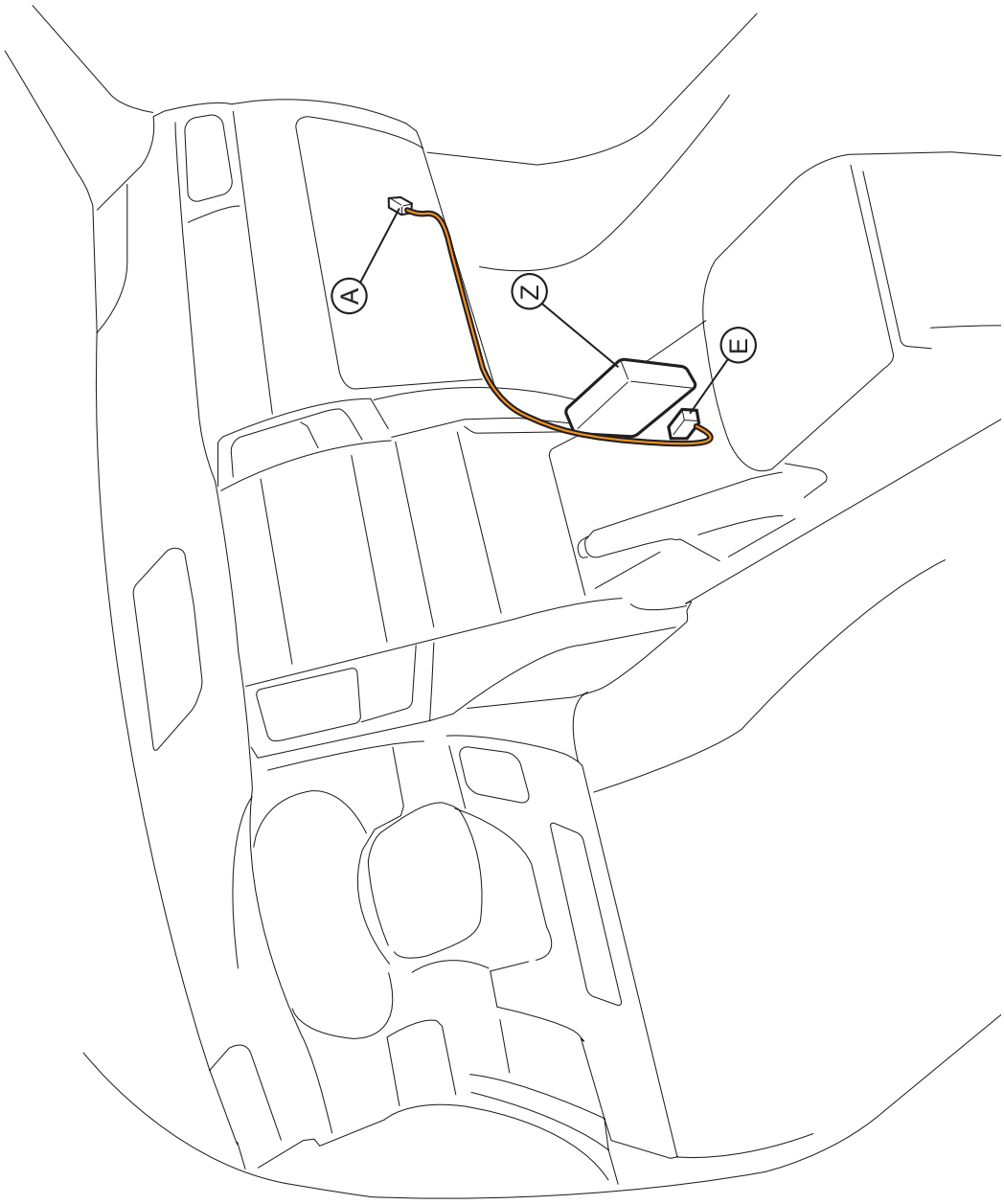
These guidelines can be found in the "Accessory Installation Practices" document.

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.)

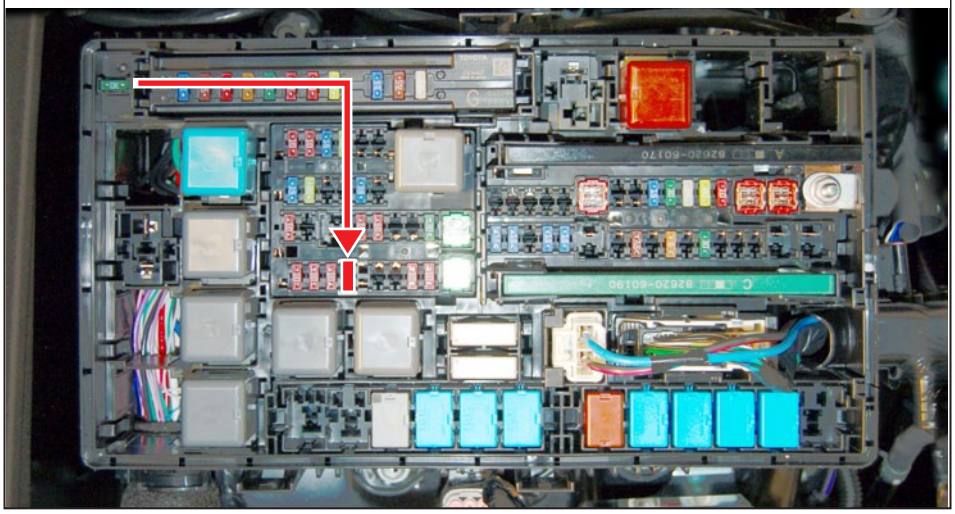
Please see your TOYOTA dealer for a copy of this document.

TVIP	Vehicle	Description
A		5P White
E	—	24P White
Z	—	RES ECU



TOYOTA LAND CRUISER RES
Wire Harness Outline

Fig. 1-1

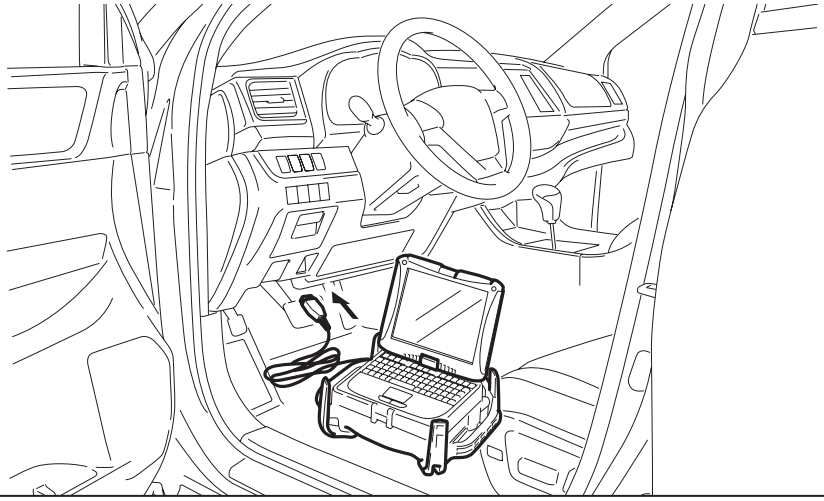


1. VI-DCM Setting Procedure

a. Verify the D/C Cut Fuse (30A) is installed.
- If not, install in the location shown.

Techstream

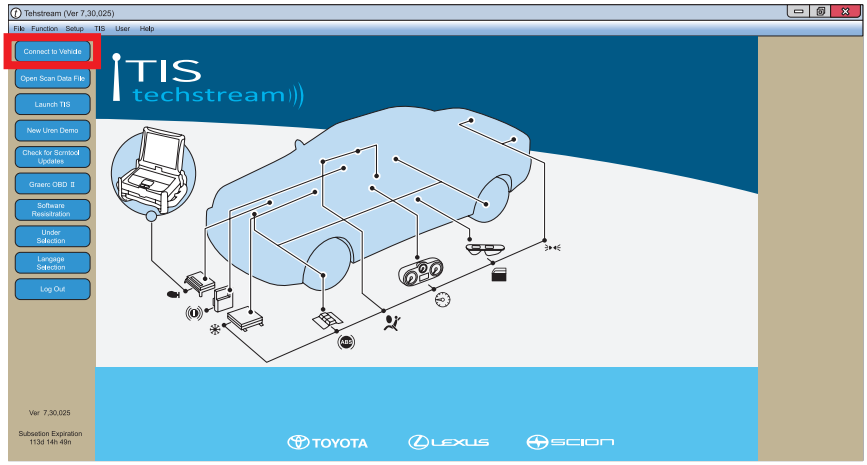
Fig. 1-2



b. Connect the Techstream Notebook to the Vehicle's Diagnostic Port.

c. Turn the Ignition Switch to "ON" position.

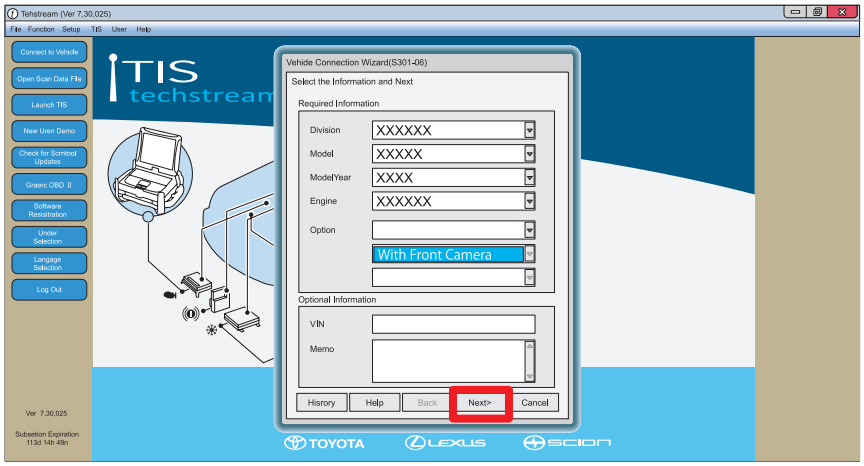
Fig. 1-3



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

e. Click "Connect to Vehicle."

Fig. 1-4

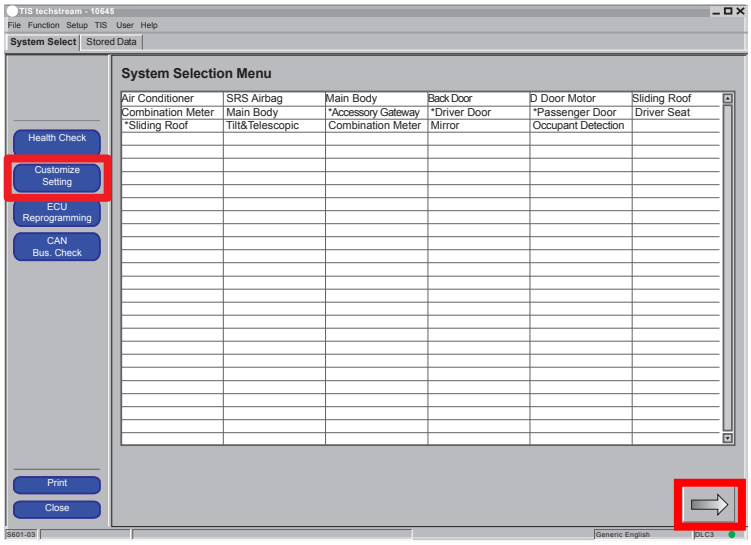


f. Confirm that the information displayed on the Vehicle Connection Wizard is correct for the vehicle. If not, verify that the Techstream is properly connected.

g. Select option that applies to the Vehicle.

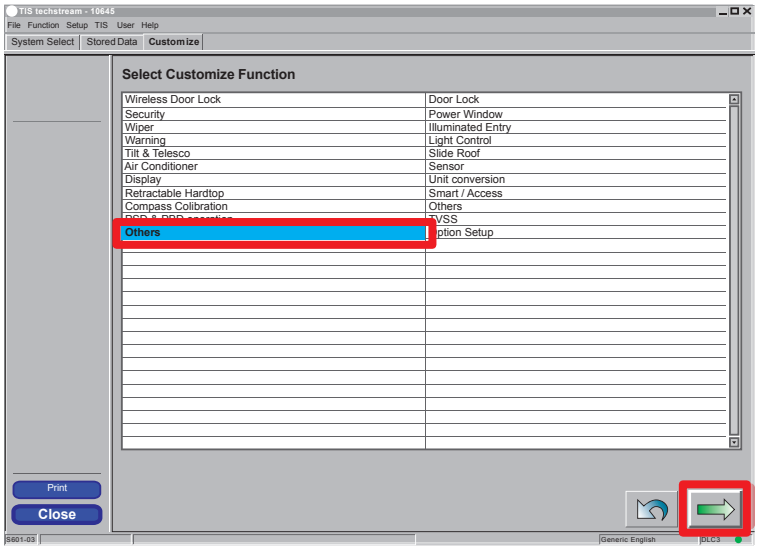
h. Click “Next>.”

Fig. 1-5

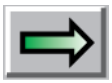


i. Click “Customize Setting.”

Fig. 1-6



j. Select “Others.”

k. Click 

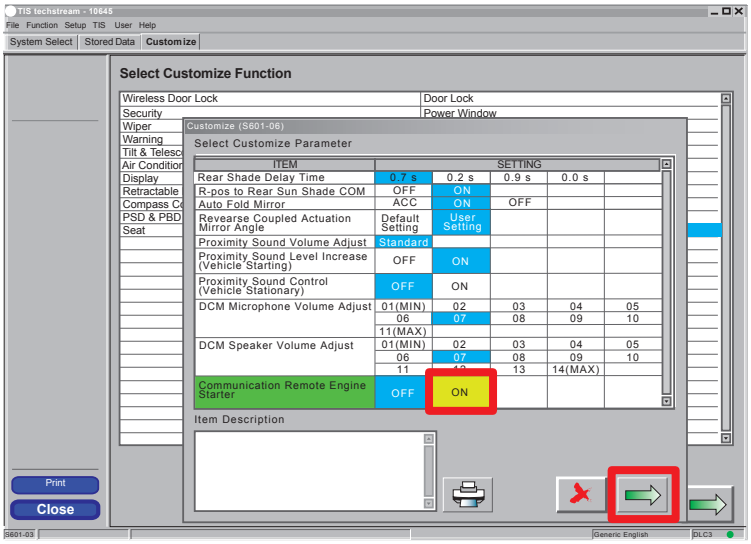
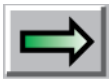


Fig. 1-7

l. Locate “Communication Remote Engine Starter”

- If this parameter is not available, skip to Step 1p.

m. Select “ON.”

n. Click 

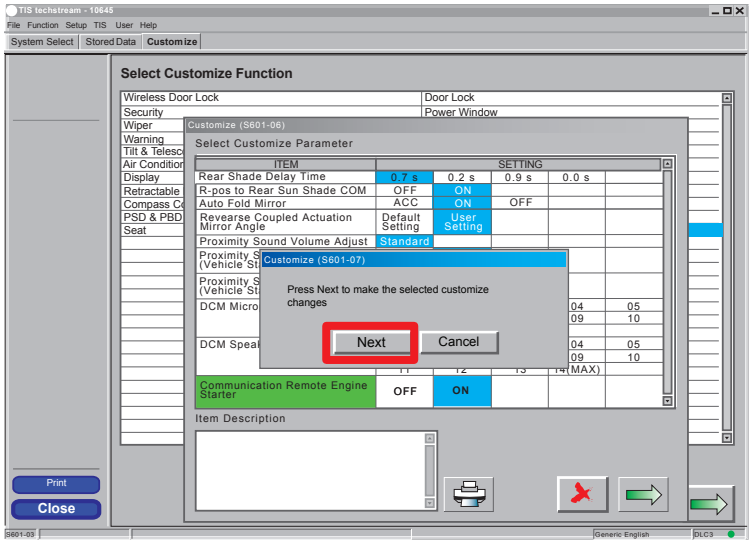


Fig. 1-8

o. Click “Next” to accept the changes to the Vehicle.

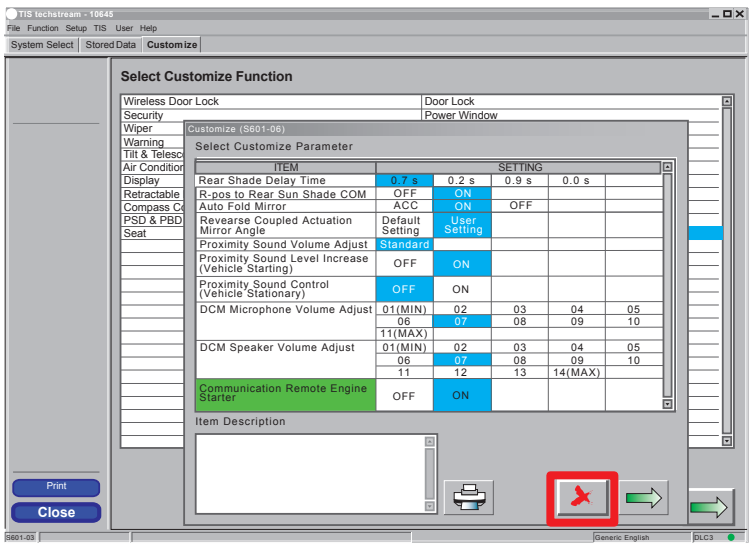


Fig. 1-9

p. Click .

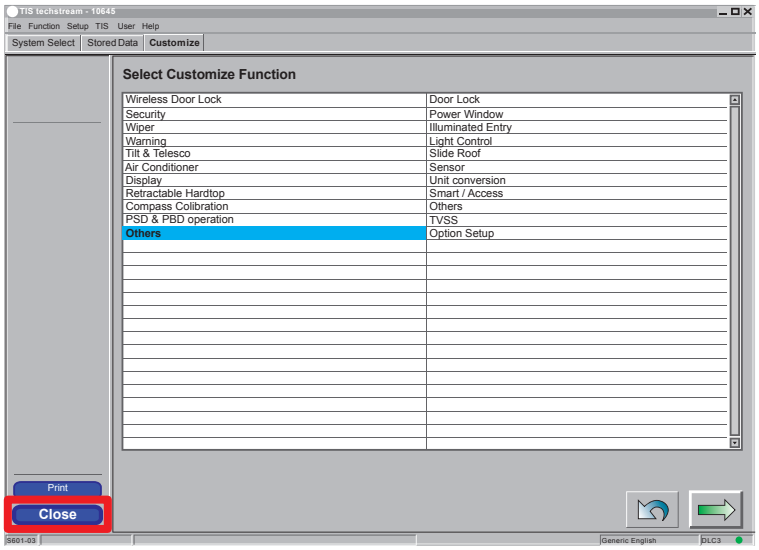


Fig. 1-10

q. Click “Close.”

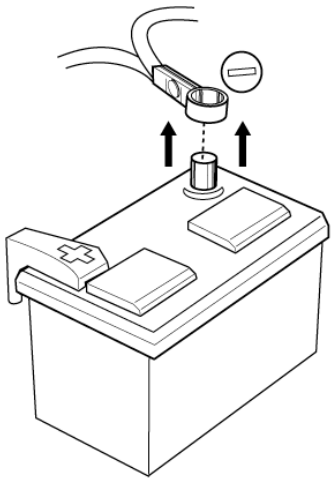
r. Disconnect the Negative Battery Terminal for more than 5 seconds.

- Note the Battery Cable Position as it will be re-installed in the same position.

CAUTION: Do not touch the Positive Terminal.

10mm Socket

Fig. 2-1



2. Preparation.

NOTE: Ensure VI-DCM Setting Procedure was completed.

a. Place the Vehicle in Park with the Parking Brake set.

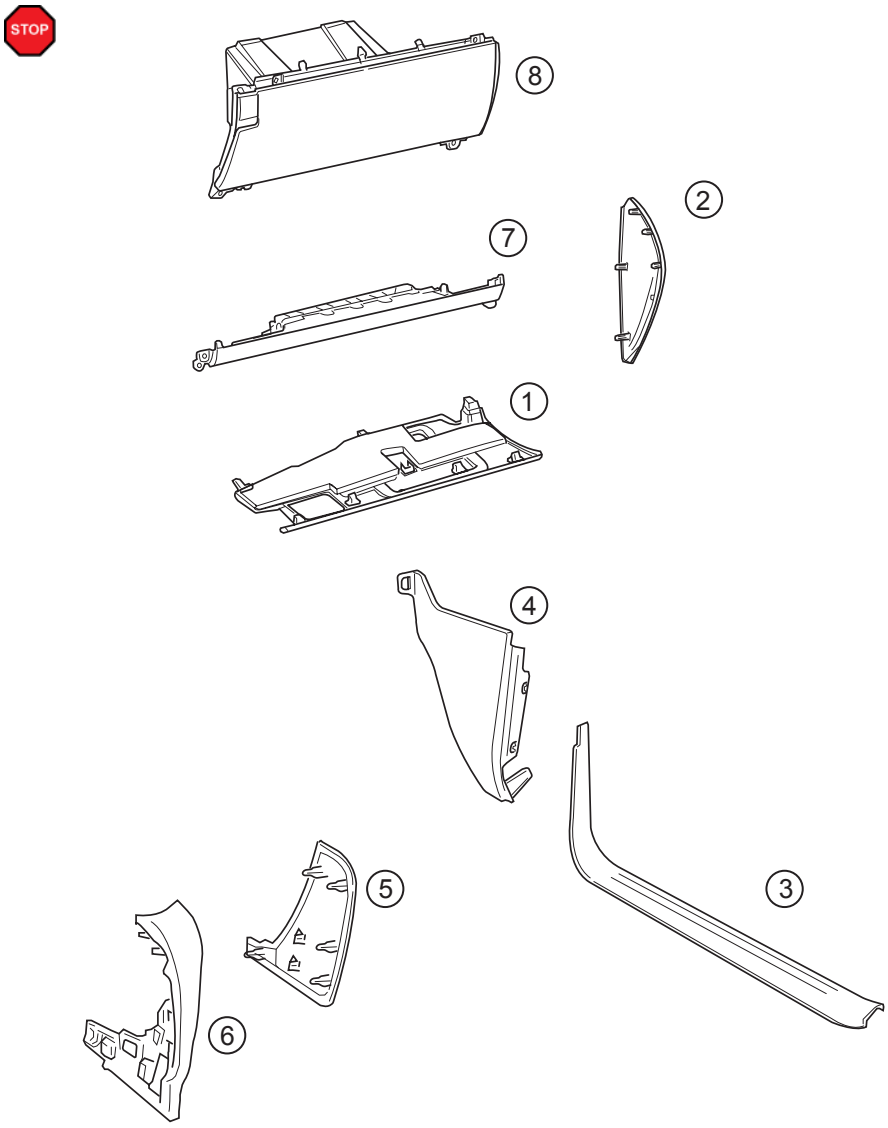
b. Disconnect the Negative Battery Terminal.

- Note the Battery Cable Position as it will be re-installed in the same position.

CAUTION: Do not touch the Positive Terminal.

NOTE: Ensure all disassembled Vehicle Parts are thoroughly inspected.

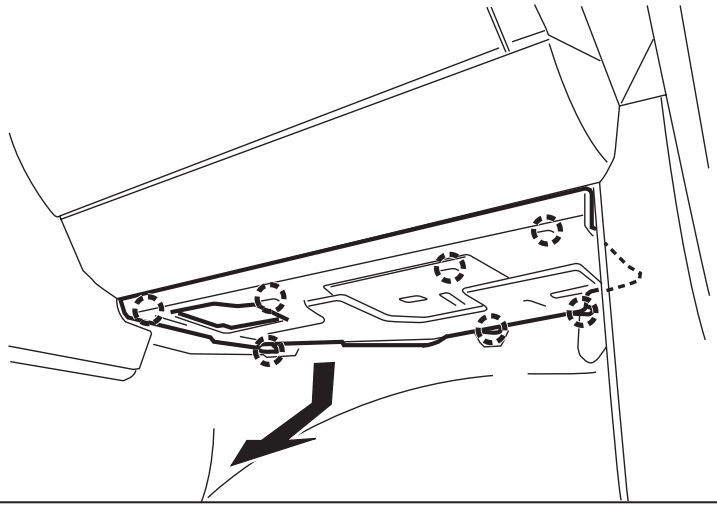
Disassembly Overview



1	Glove Box Under Cover
2	PS Dash Cover
3	PS Step Cover
4	PS Cowl Cover
5	PS Knee Panel
6	PS Cluster Side Panel
7	PS Knee Airbag
8	Glove Box

STOP Disconnect all Corresponding Connectors.

Nylon Panel Removal Tool Fig. 3-1



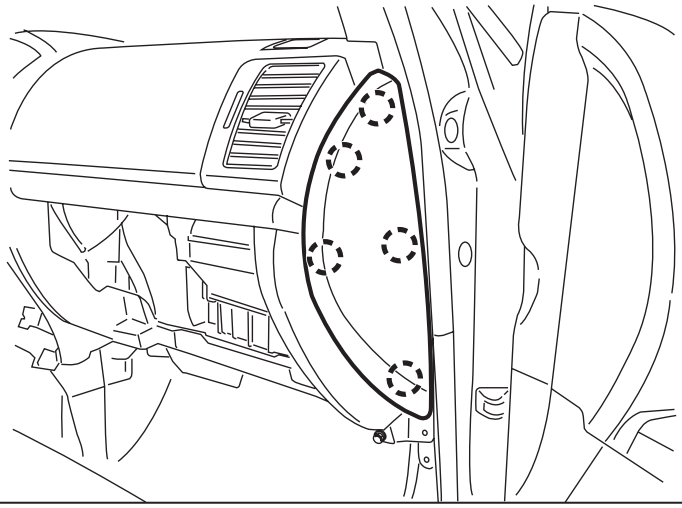
3. Vehicle Disassembly.

a. Dislodge the Glove Box Under Cover.

- Disconnect all Connectors.

Nylon Panel Removal Tool

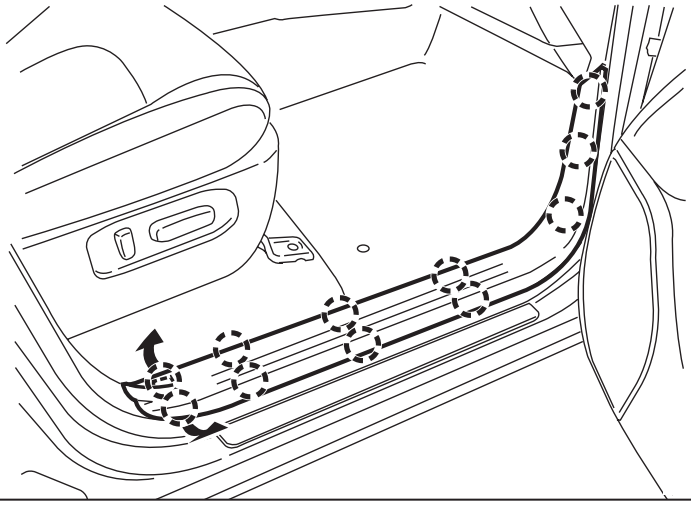
Fig. 3-2



b. Remove the Passenger's Side Dash Cover.
   - Apply protective Tape on pry area.

Nylon Panel Removal Tool

Fig. 3-3

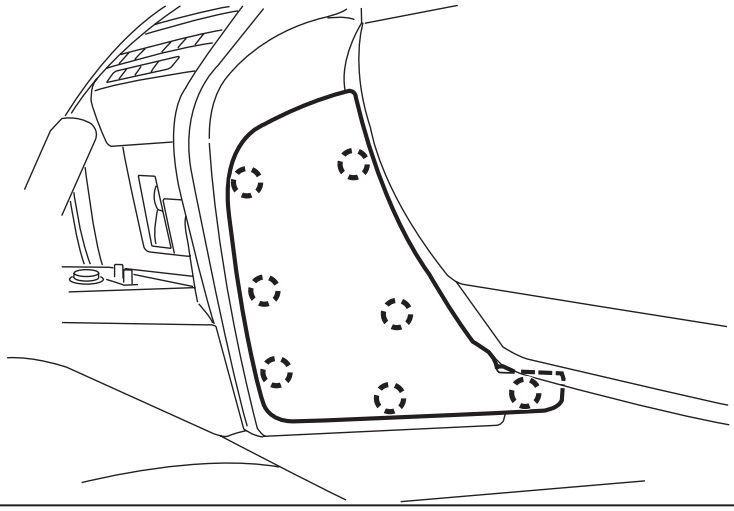


c. Remove the Passenger's Side Step Cover.
   - Disconnect All Connectors.

NOTE: Prevent bending the Passenger's Side Step Cover.

NOTE: Ensure Illuminator connectors are disconnected if present.

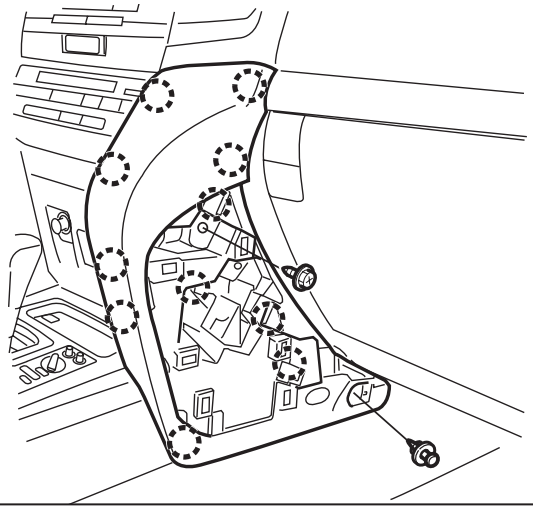
Fig. 3-4



d. Using your hands, remove the Passenger's Side Knee Panel.

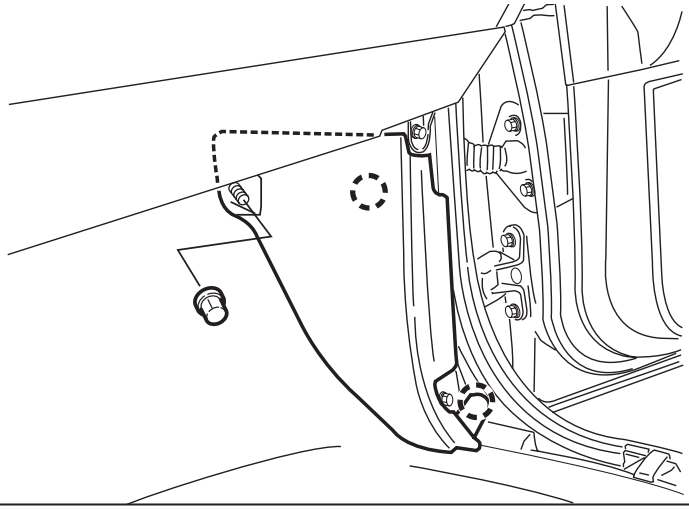
CAUTION: Avoid using excessive force when removing the Passenger's Side Knee Panel to prevent damage.

Phillips Screwdriver, Nylon Panel Removal Tool Fig. 3-5



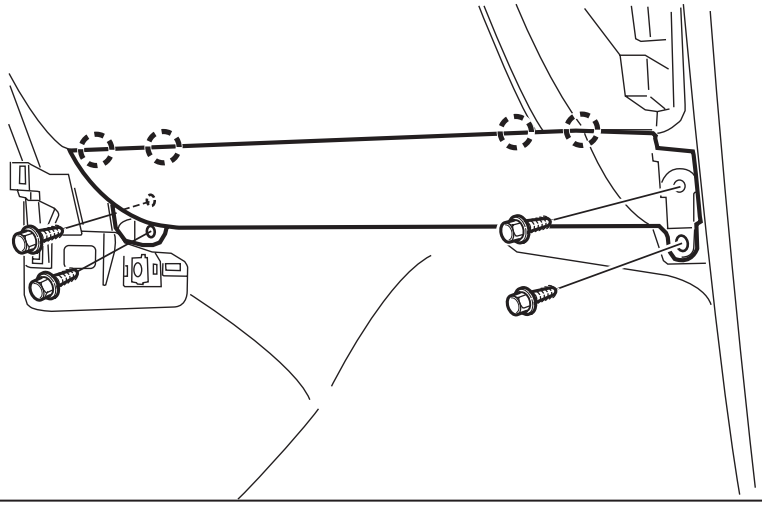
e. Remove the Passenger's Cluster Side Panel.
   - Remove 1 Screw and 1 Clip.

Nylon Panel Removal Tool Fig. 3-6



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

10mm Socket, Extension, Nylon Panel Removal Tool Fig. 3-7



g. Dislodge the Passenger's Knee Airbag carefully.
   - Remove 4 Bolts.

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

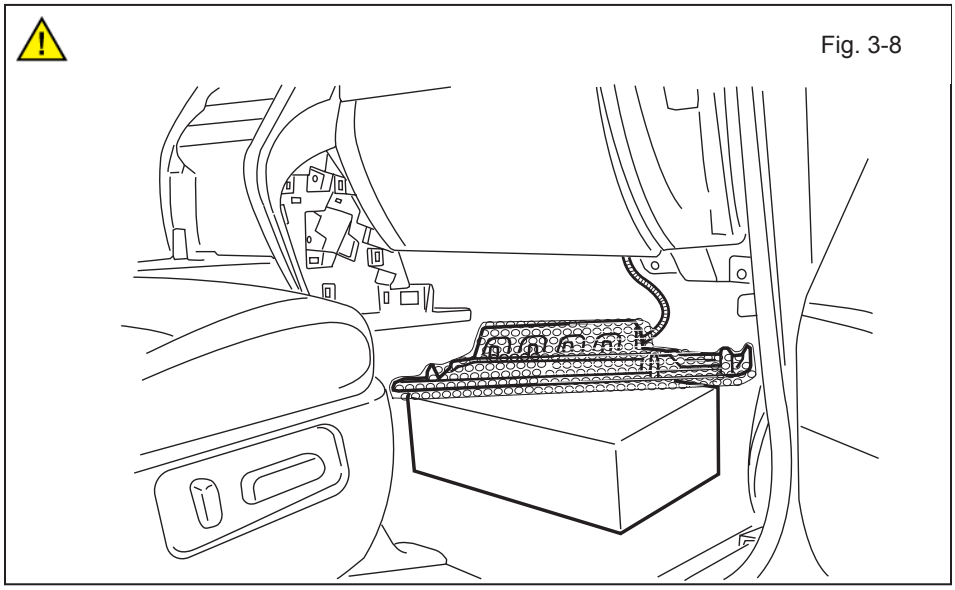


Fig. 3-8

h. Wrap the Airbag in a Blanket or the like and place it on top of the TVIP box.

CAUTION: Prevent stress on the Airbag Harness.

10mm Socket, Extension

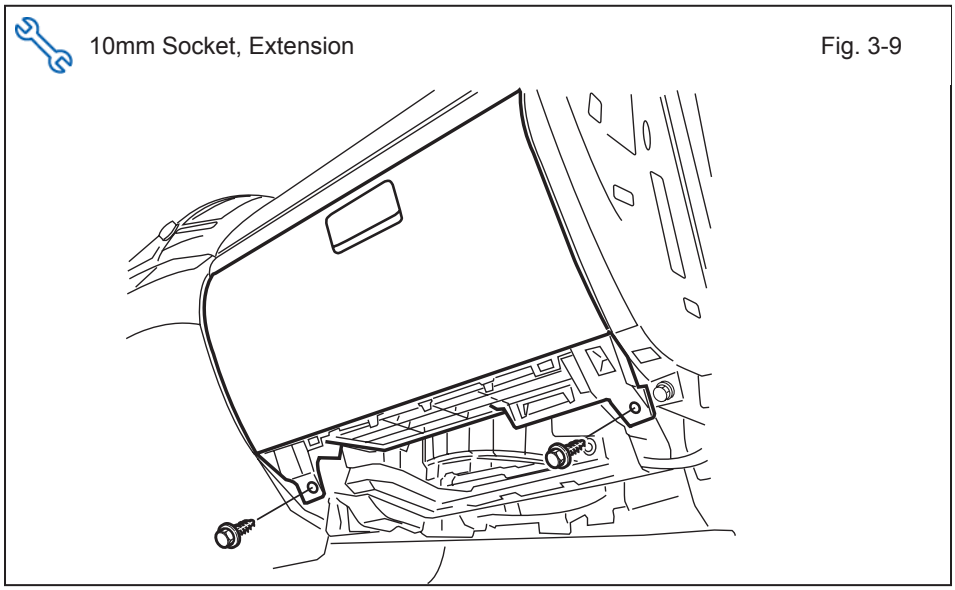


Fig. 3-9

i. Remove 2 Bolts from the bottom of the Glove Box.

Nylon Panel Removal Tool, 10mm Socket

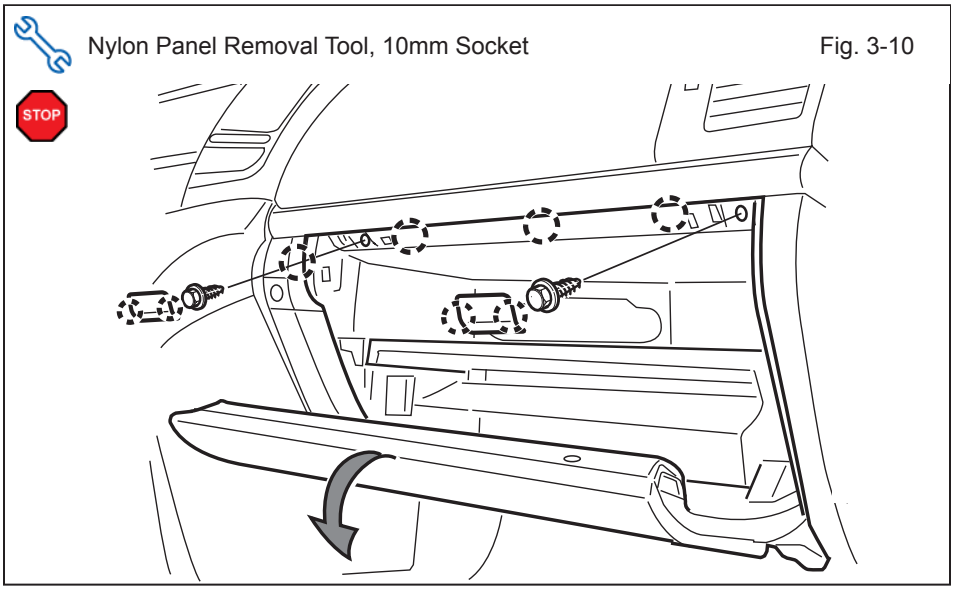


Fig. 3-10

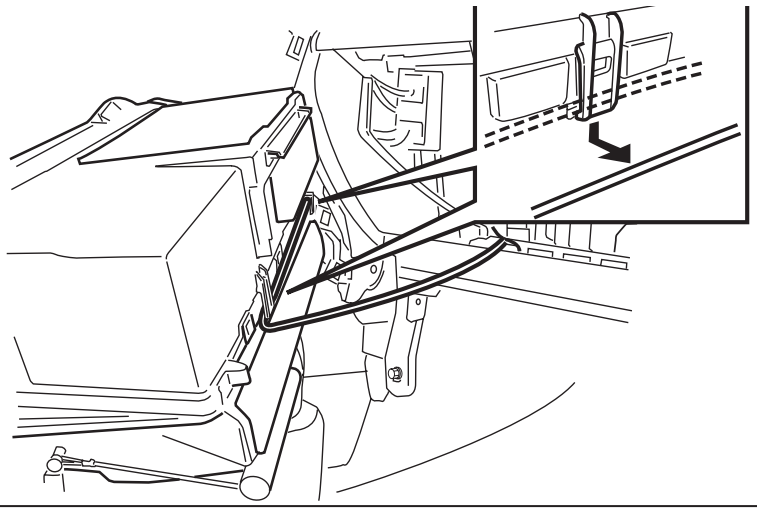
j. Open the Glove Box Door, then remove 2 Bolt Covers.

NOTE: Temporarily remove contents inside of Glove Box and ensure contents are put back in Fig. 6-1.

k. Dislodge the Glove Box.

- Remove 2 Bolts.

Fig. 3-11



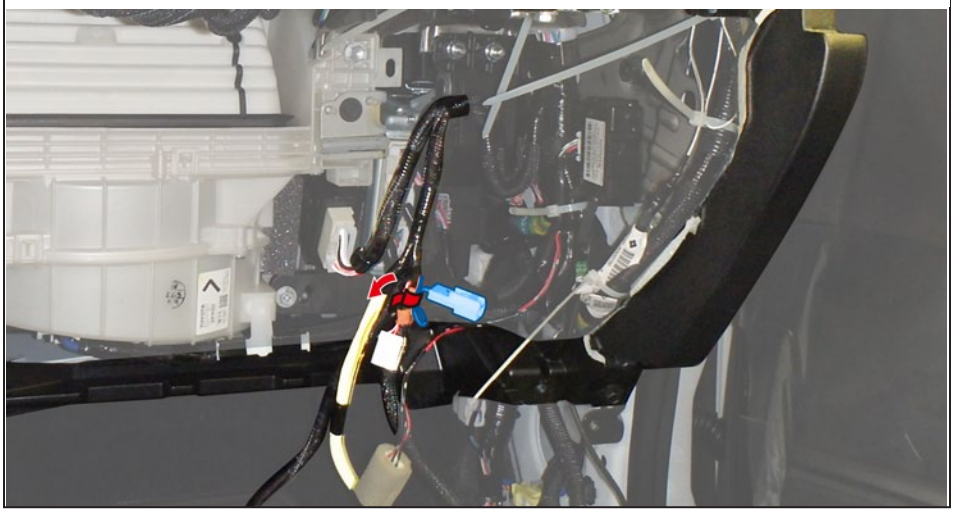
l. Remove the Vehicle Harness from the backside of the Glove Box, remove the Glove Box.
   - Disconnect any Connectors.

4. V4 Harness Installation.

NOTE: Ensure all RES Kit Contents are thoroughly inspected.

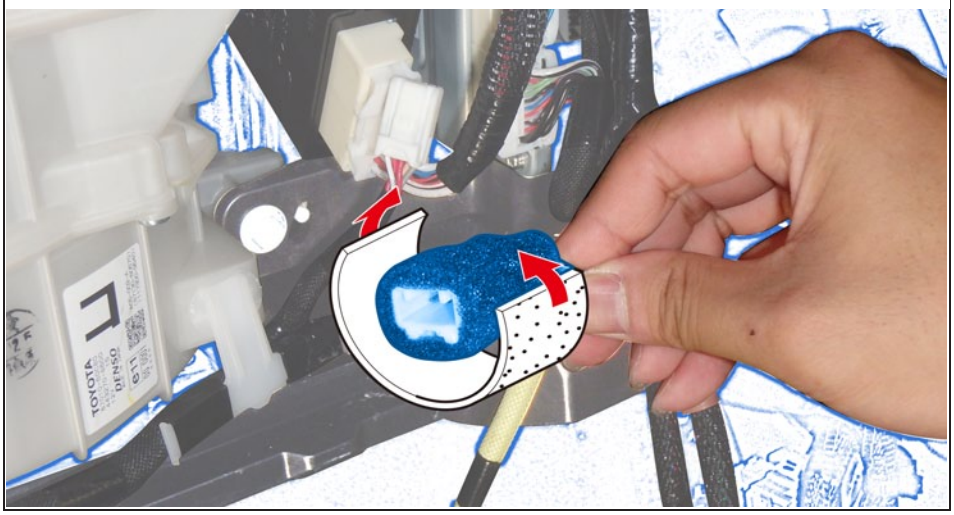
a. Locate the Vehicle's 5P White Pre-Connector and remove the tape securing it.

Fig. 4-1



Utility Knife

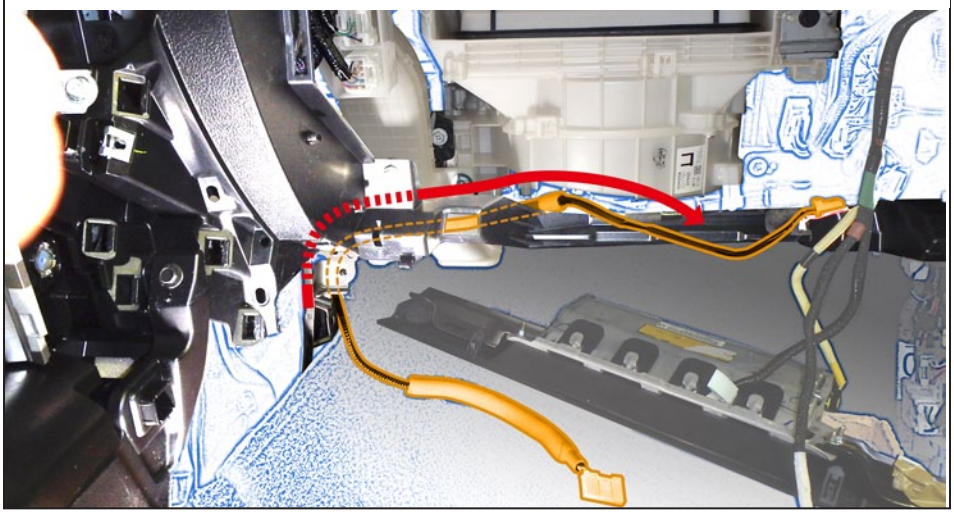
Fig. 4-2



b. Cut Small Foam Tape in Half.

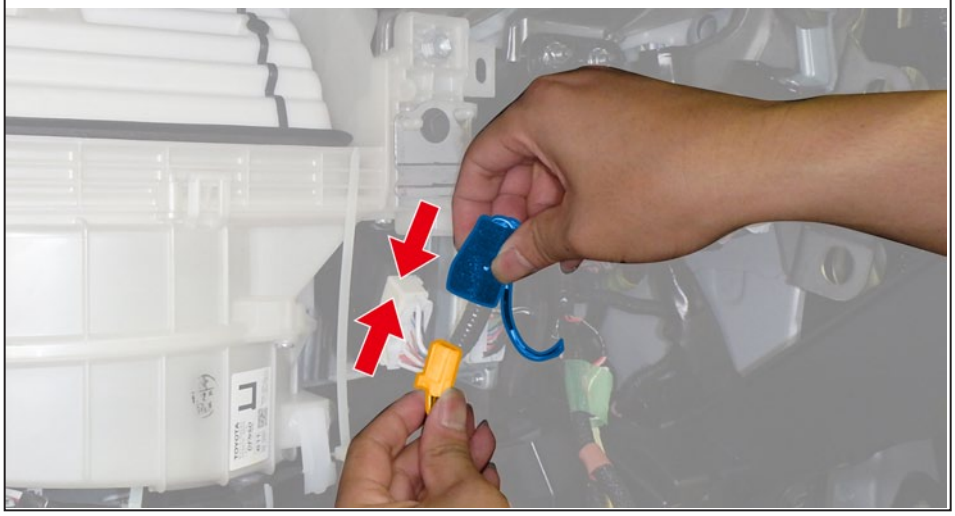
c. Use the Half Small Foam Tape to wrap the Vehicle's 5P Pre-Connector.

Fig. 4-3



d. Route the V4 Harness toward the Glove Box area.

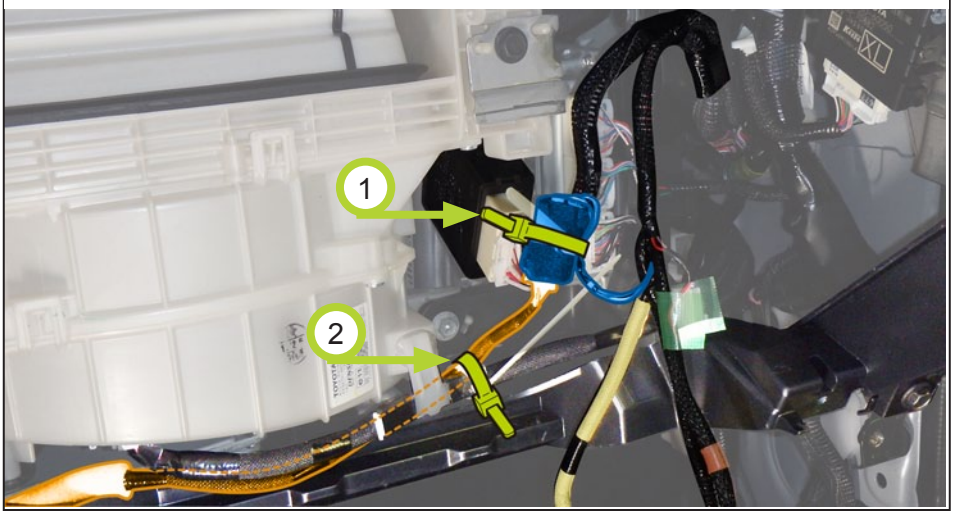
Fig. 4-4



e. Connect the V4 5P White Connector to the Vehicle's 5P Pre-Connector.

Side Cutters

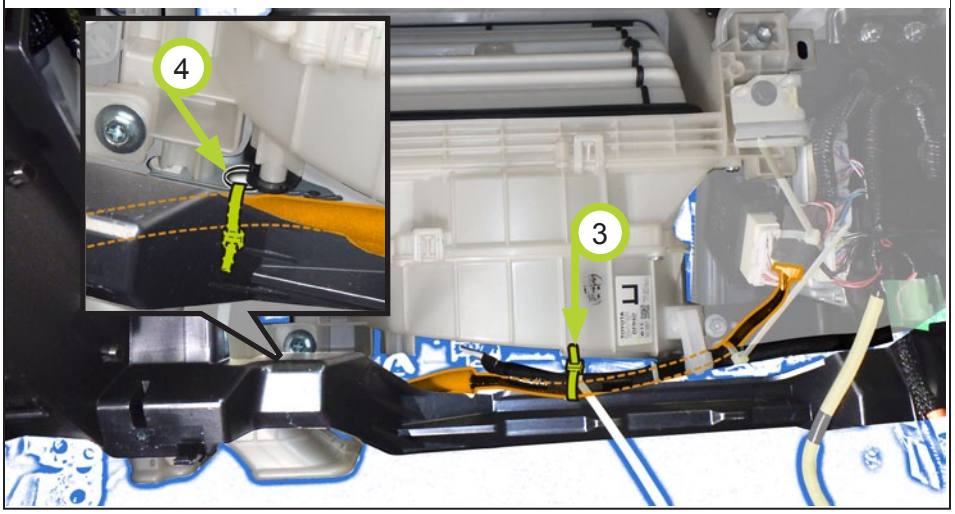
Fig. 4-5



f. Secure the 5P White Connectors to the Vehicle Harness with 1 Wire Tie.

g. Secure the V4 Harness to the Vehicle Harness using 1 Wire Tie.

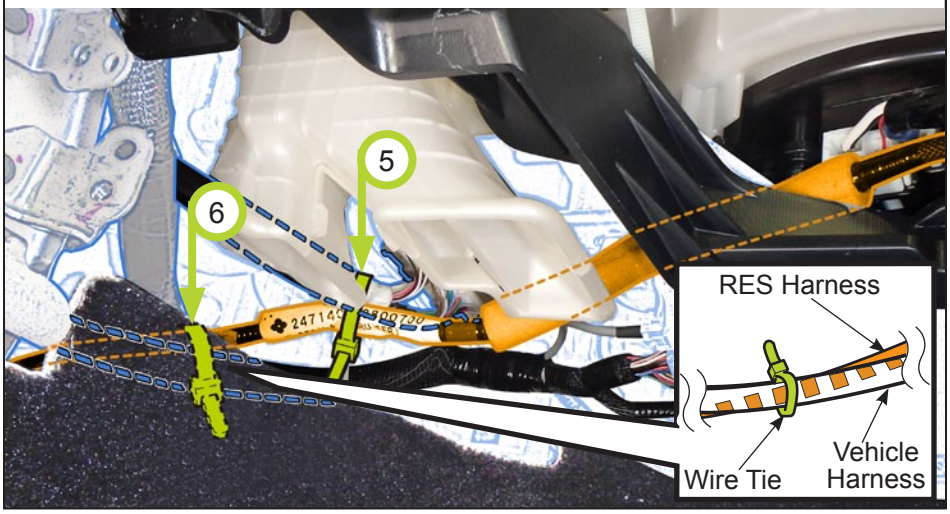
Side Cutters Fig. 4-6



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

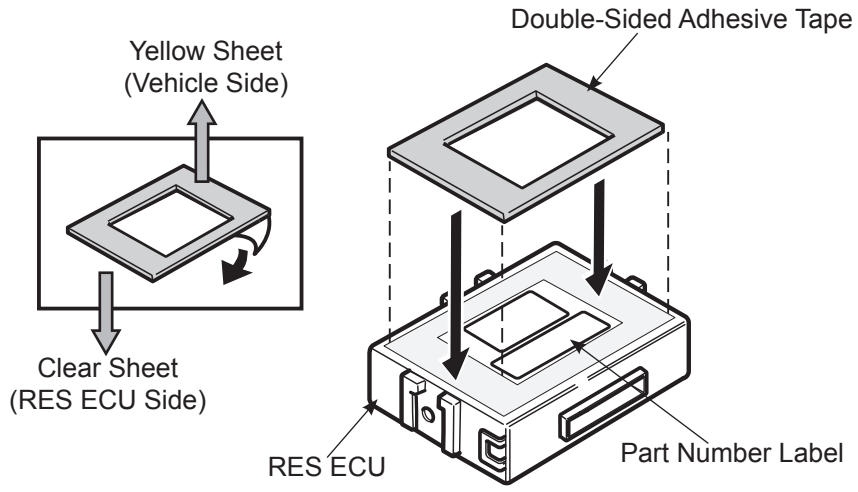
i. Secure the V4 Harness to the Vehicle Bracket Hole with 1 Wire Tie.

Side Cutters Fig. 4-7



j. Secure the V4 Harness to the Vehicle Harness using 2 Wire Ties as shown.

Fig. 5-1



5. RES ECU Preparation and Installation.

a. Remove the Clear Protective Sheet from the Double Sided Tape.

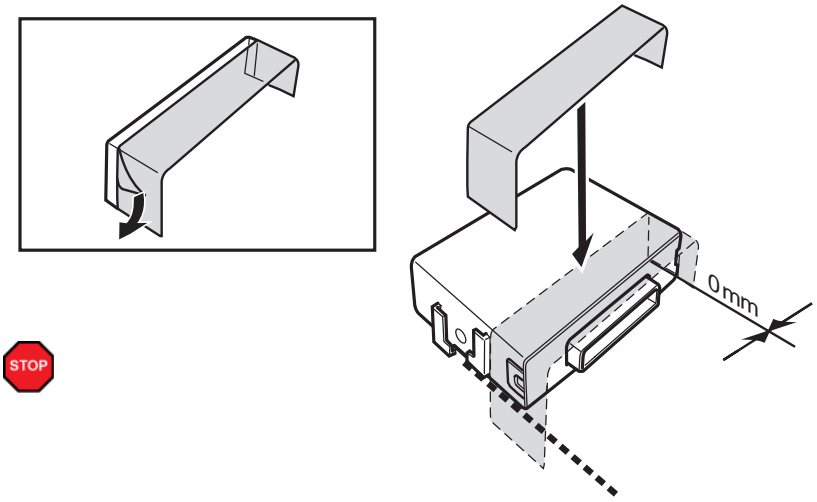
b. Attach Double Sided Tape to the Part Number Label side of the RES ECU as shown.

- Apply the Clear Sheet side on the RES ECU.
- Attach adhesive tape on the part number label side of the RES ECU. Make sure not to cover the Part Number Label with the adhesive tape.

CAUTION: Do not touch the adhesive surface.

Utility Knife

Fig. 5-2

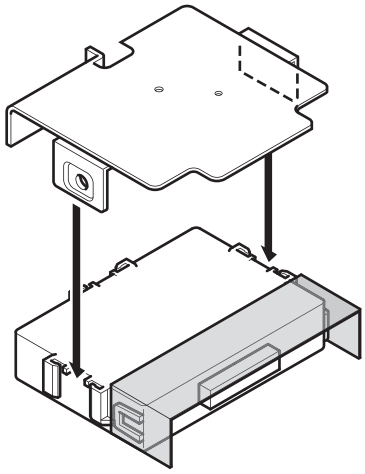


c. Remove the Backing Sheet from the Waterproof Sheet.

d. Attach Waterproof Sheet to one corner of the RES ECU near the connector as shown, then cut the excess Waterproof Sheet.

CAUTION: Do not touch the adhesive surface.

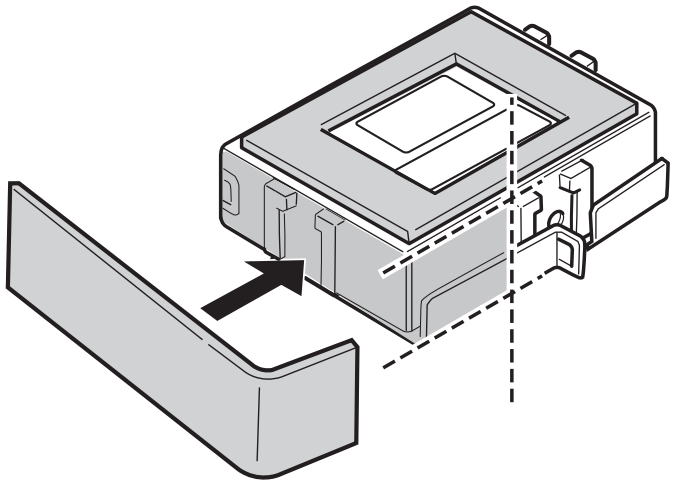
Fig. 5-3



e. Insert the RES ECU Bracket into the indicated Bracket Slots on the RES ECU.

- Ensure the Bracket is firmly attached to the ECU.

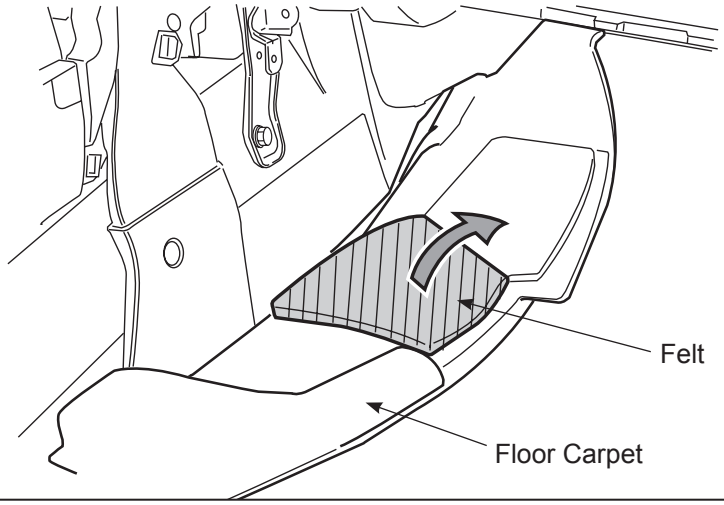
Fig. 5-4



f. Apply Large Foam Tape Piece to the RES ECU as shown.

- Ensure Large Foam Tape corners line up with the RES ECU Bracket Slot corner.

Fig. 5-5

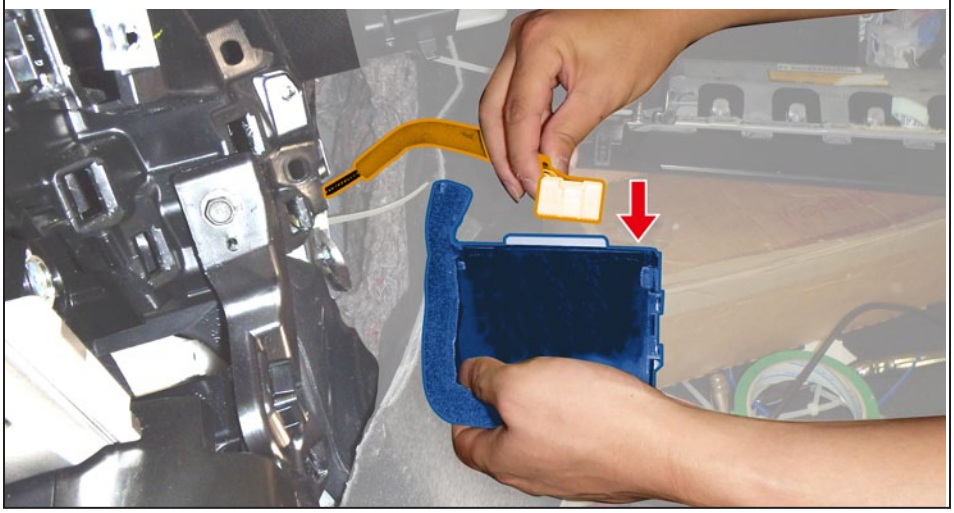


g. Turn over the Floor Carpet on the left side of the Passenger's Side Area.

h. Pull back the Felt on the backside of the Floor Carpet as shown.

- Do not remove or cut off the Felt.

Fig. 5-6



i. Connect the V4 Harness 24P White Connector to the RES ECU.

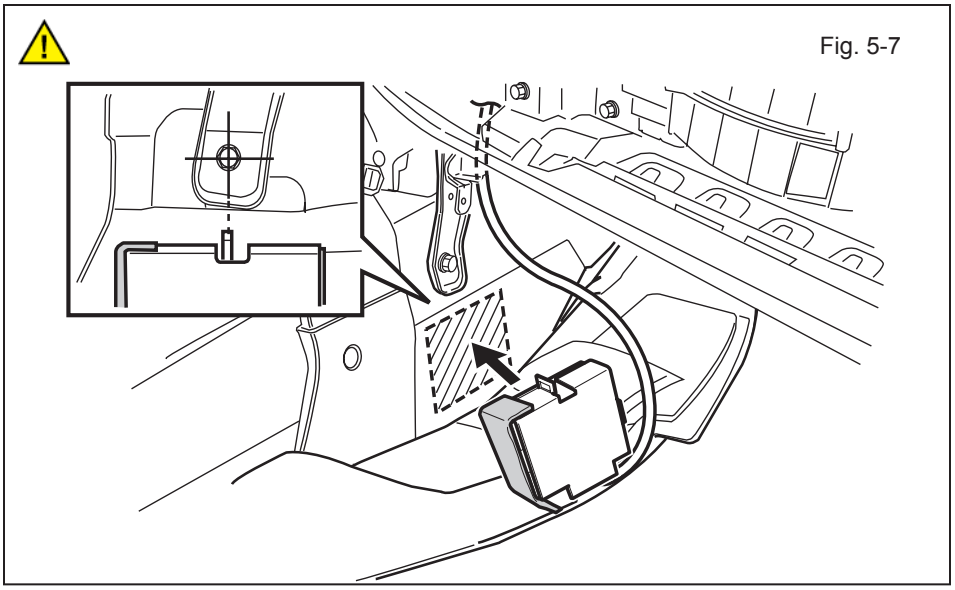


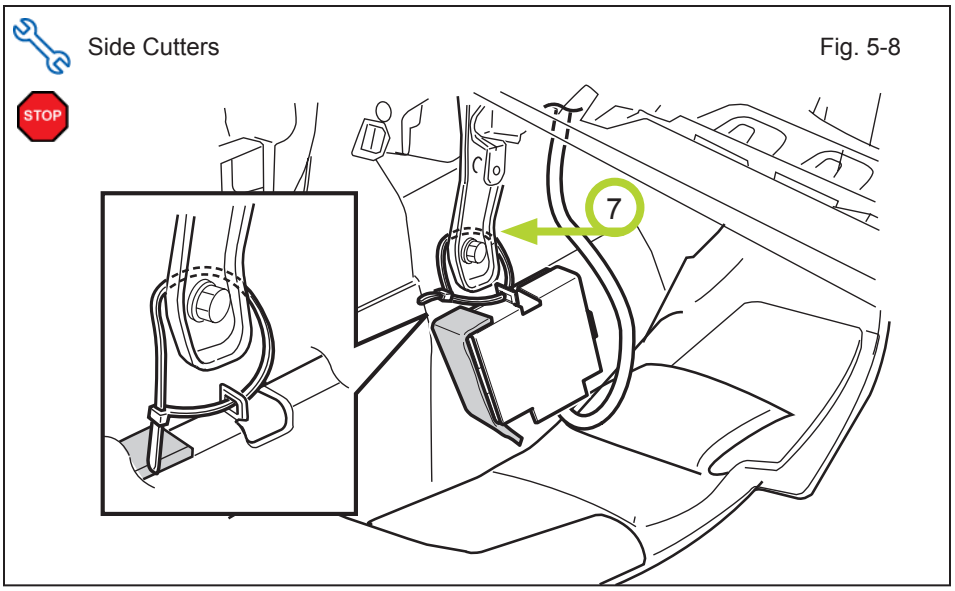
Fig. 5-7

j. Using the VDC approved cleaner and Cleaning Method, clean the area indicated on the left side of the Passenger's Lower Console area.

k. Remove the Protective Sheet of the Double Sided Tape.

l. Center the RES ECU Bracket to Vehicle's Bolt as shown. Then press the RES ECU firmly to the Vehicle.

NOTE: Do not attempt to reposition the ECU once placed.

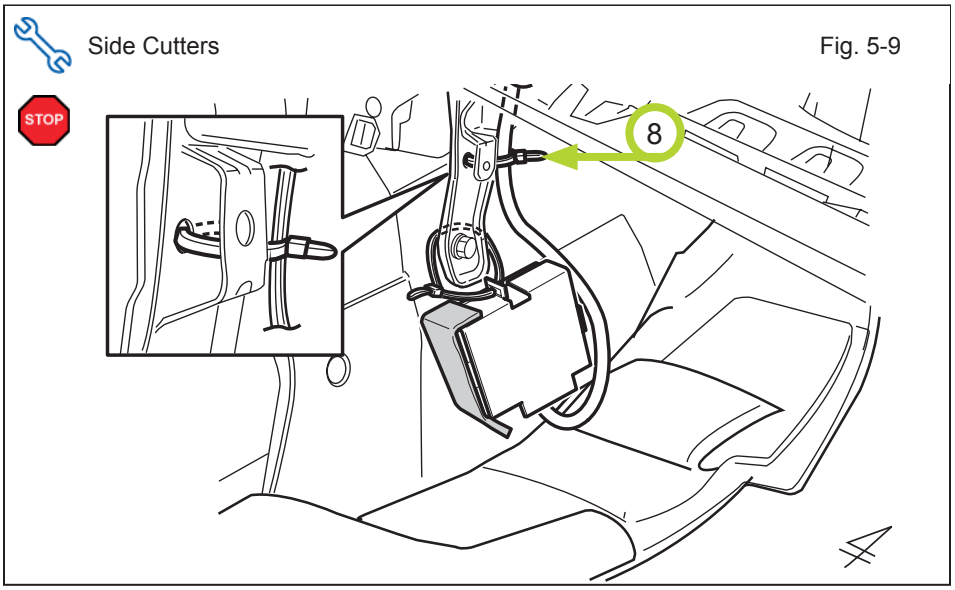


Side Cutters

Fig. 5-8

m. Run an Extra Large Wire Tie through the RES ECU's rectangular hole and behind the Vehicle Brace to secure it.

NOTE: Do not tighten the Wire Tie, it should hang freely.



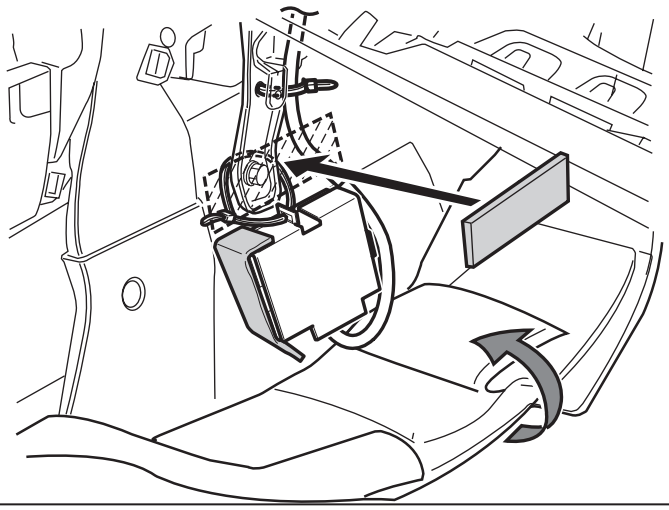
Side Cutters

Fig. 5-9

n. Secure the V4 Harness to the inner Vehicle Brace with 1 Wire Tie.

NOTE: Do not use the front hole of the Vehicle Brace.

Fig. 5-10

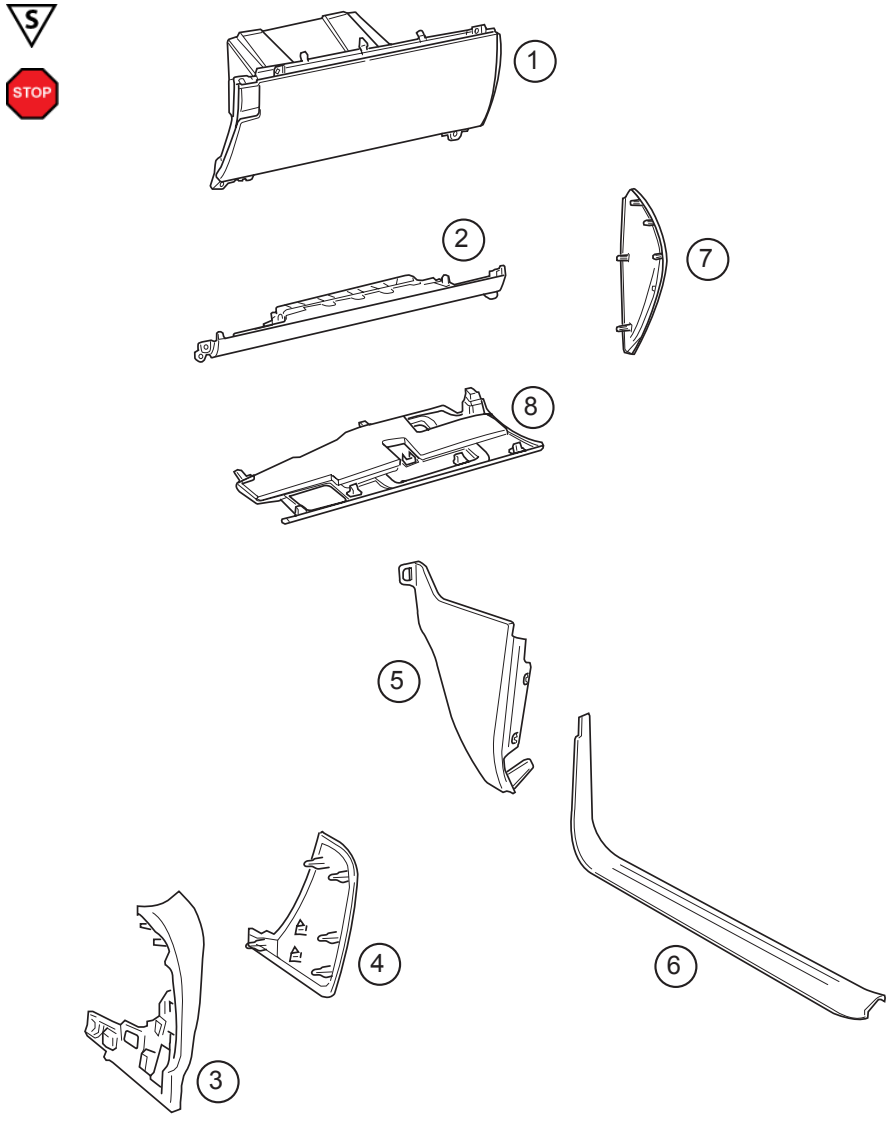


o. Attach 1 Large Foam Tape to the Vehicle's Brace and the V4 Harness as shown.

p. Put the Floor Carpet back.

10mm Socket, Extension, Torque Wrench

Fig. 6-1



6. Registration Preparation.

a. Finish reassembling the Vehicle.

STOP **NOTE:** When reinstalling Knee Airbag, make sure to torque the Bolts.

S **Torque: 12 N•m (108 in•lbf)**

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

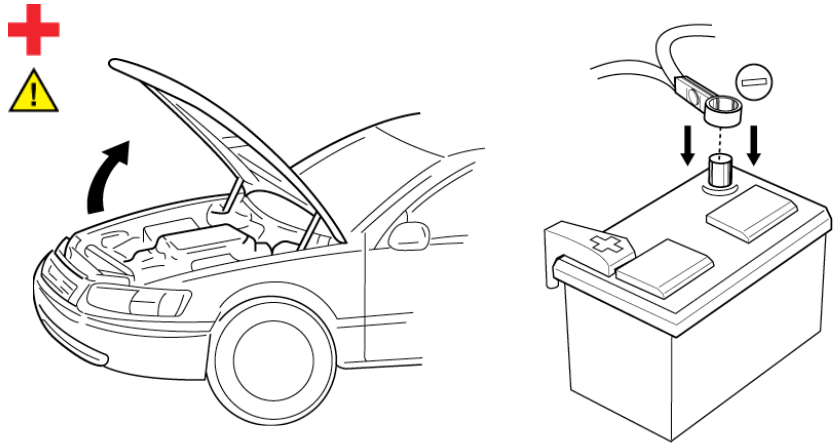
STOP **NOTE:** Put back removed contents inside Glove Box.

1	Glove Box
2	PS Knee Airbag
3	PS Cluster Side Panel
4	PS Knee Panel
5	PS Cowl Cover
6	PS Step Cover
7	PS Dash Cover
8	Glove Box Undercover

STOP Reconnect all Corresponding Connectors.

10mm Socket

Fig. 7-1



7. Registration.

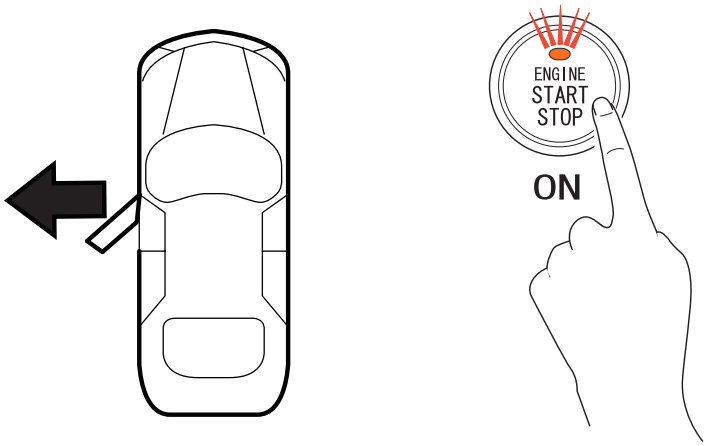
a. Open the Hood.

b. Temporarily reconnect the Negative Battery Cable.

CAUTION: Do not touch the Positive Terminal.

NOTE: Position the Negative Battery Cable and Torque the Negative Battery Terminal after the registration is completed.

Fig. 7-2



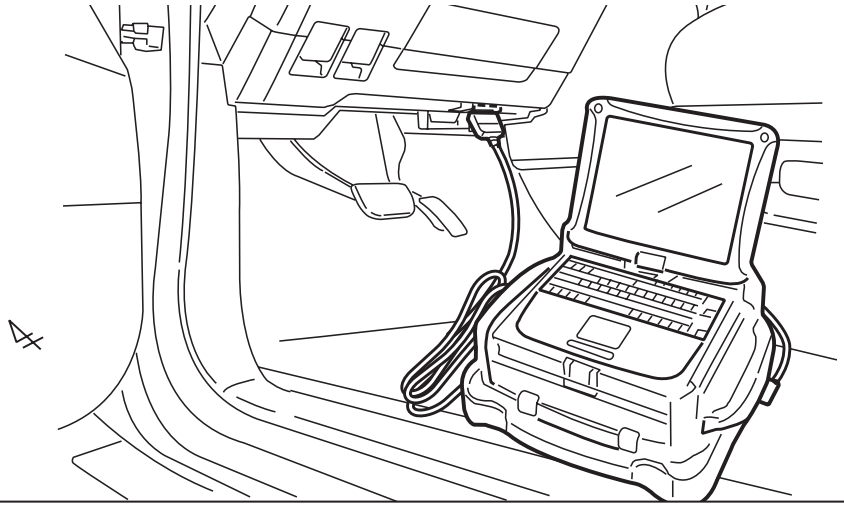
c. Open the Driver's Side Door.

CAUTION: Leave the Door open until the registration is completed.

d. With the Smart Key in your possession, press the "Engine Start Stop" Button twice to select the Ignition "ON" position.

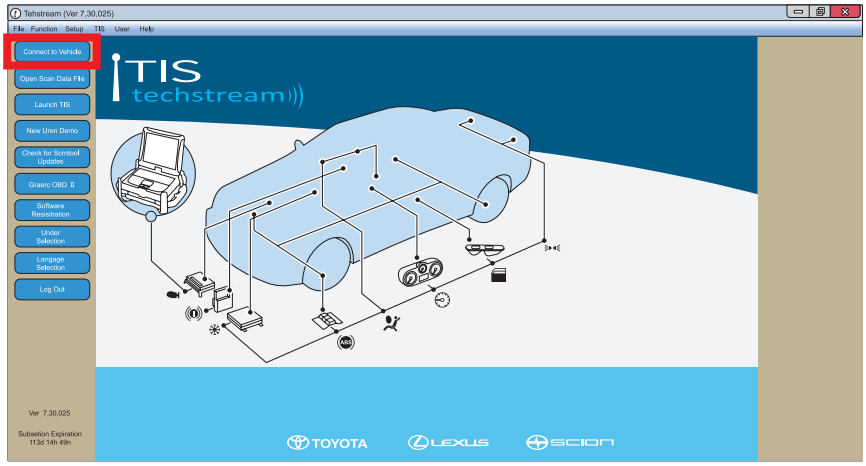
Techstream

Fig. 7-3



e. Connect the Techstream Notebook to the Vehicle's Diagnostic Port.

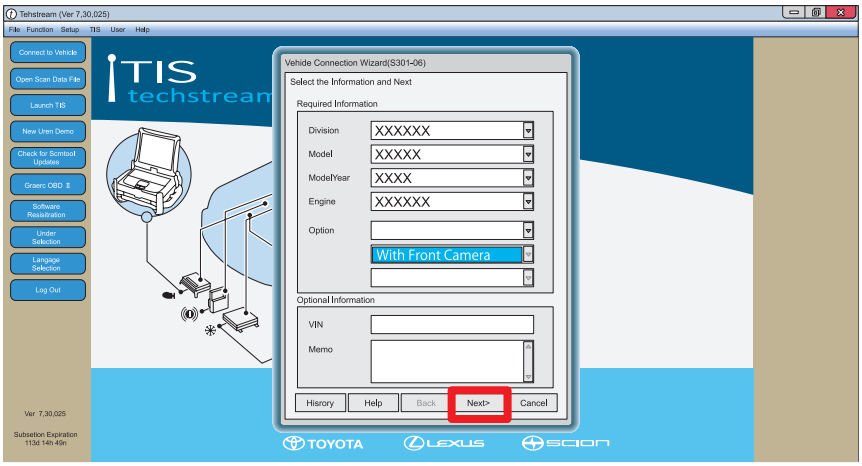
Fig. 7-4



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

g. Click “Connect to Vehicle.”

Fig. 7-5

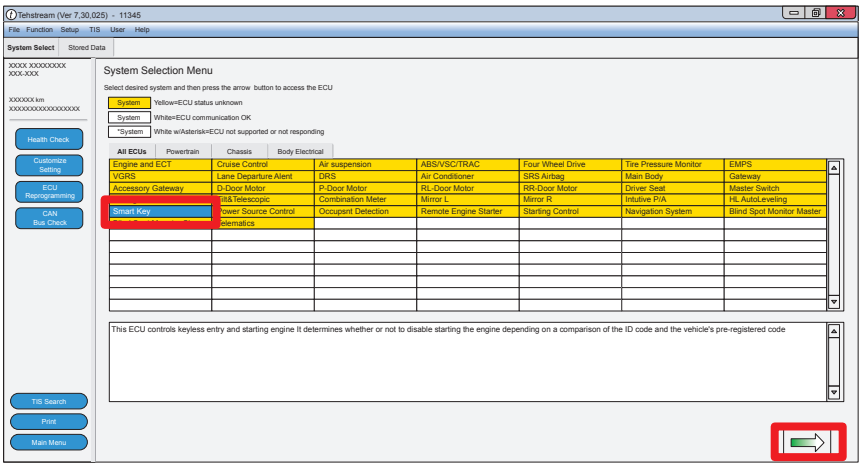


h. Confirm that the information displayed on the Vehicle Connection Wizard is correct for the vehicle. If not verify that the Techstream is properly connected.

i. Select option that applies to the Vehicle.

j. Click “Next>.”

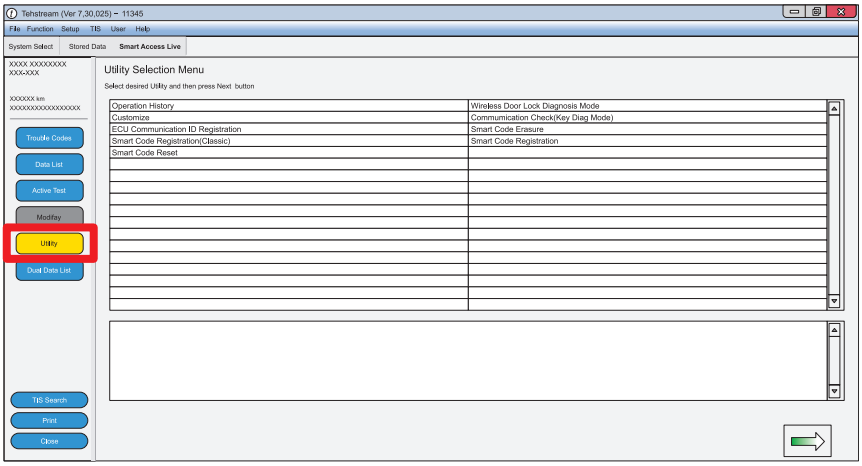
Fig. 7-6



k. Select “Smart Key”.

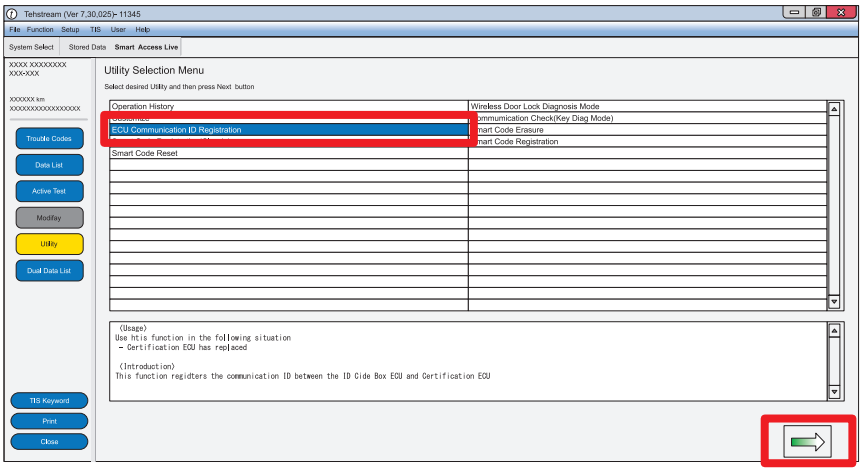
l. Click .

Fig. 7-7



m. Click on “Utility.”

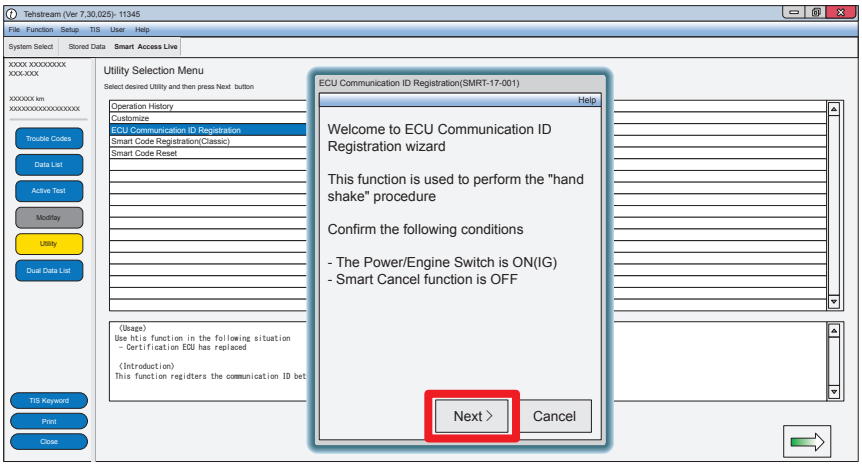
Fig. 7-8



n. Select “ECU Communication ID Registration.”

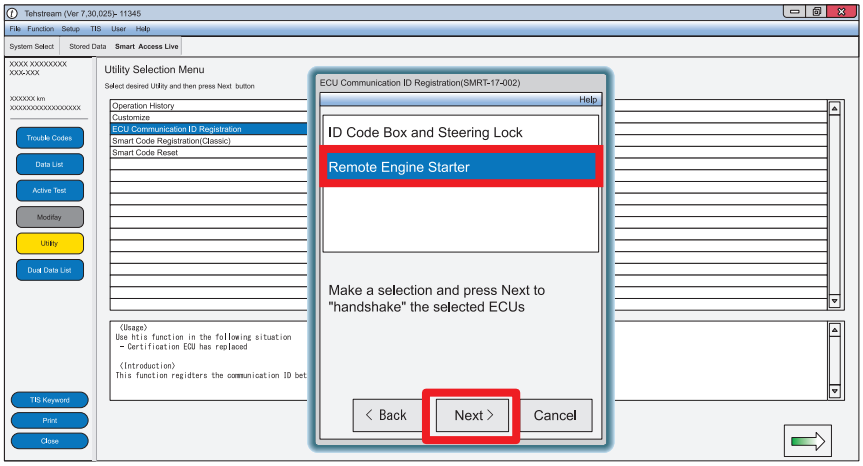
o. Click .

Fig. 7-9



p. Click “Next>.”

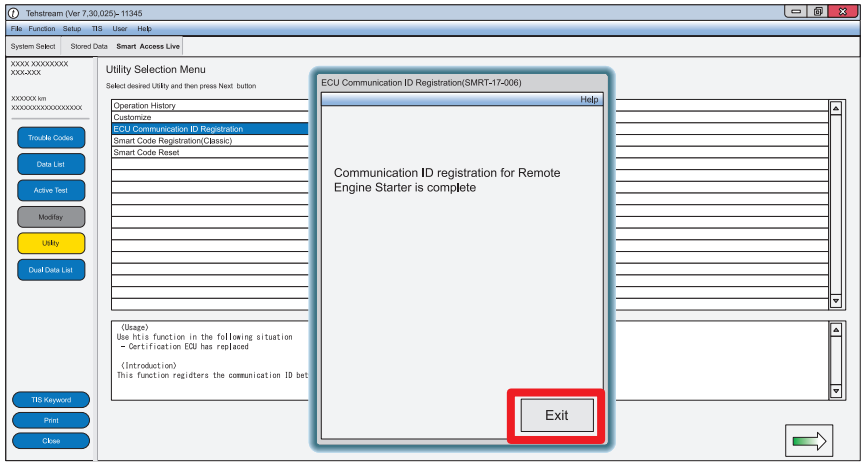
Fig. 7-10



q. Select “Remote Engine Starter.”

r. Click “Next>.”

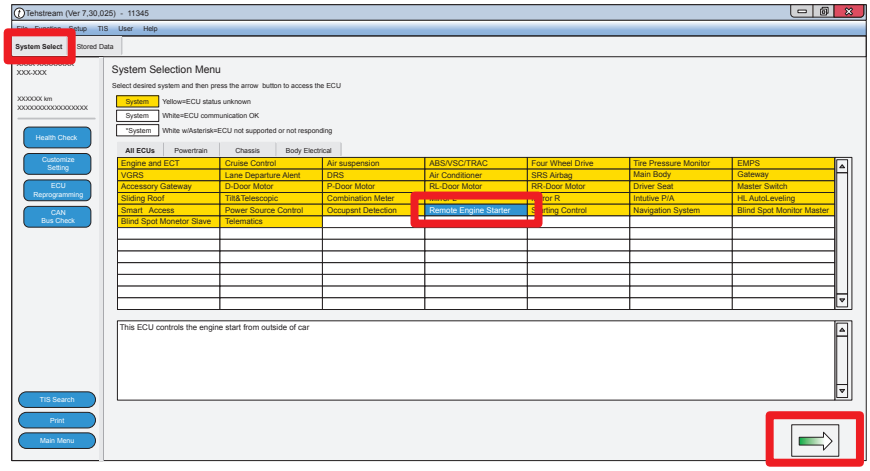
Fig. 7-11



CONFIRM: That the ECU Communication ID was completed successfully.

s. Click “Exit.”

Fig. 7-12

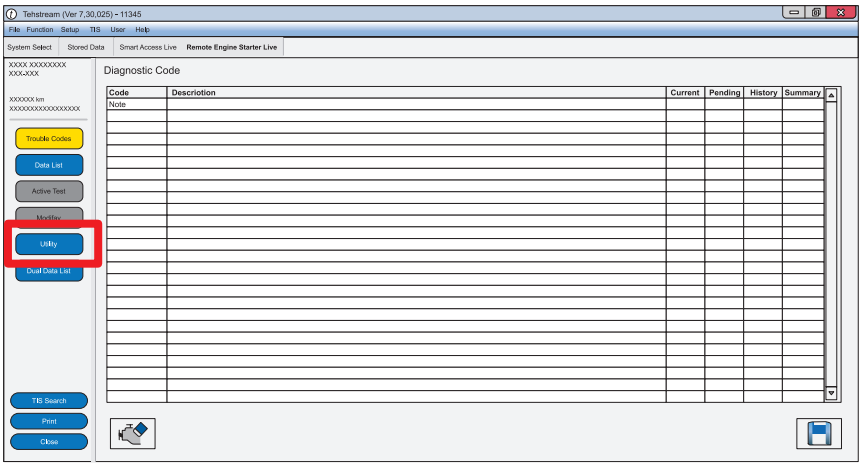


t. Click on “System Select” tab.

u. Select “Remote Engine Starter.”

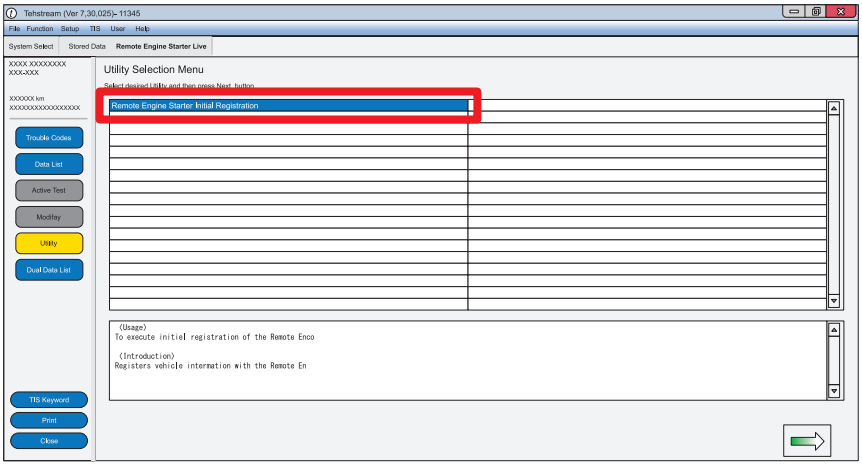
v. Click .

Fig. 7-13



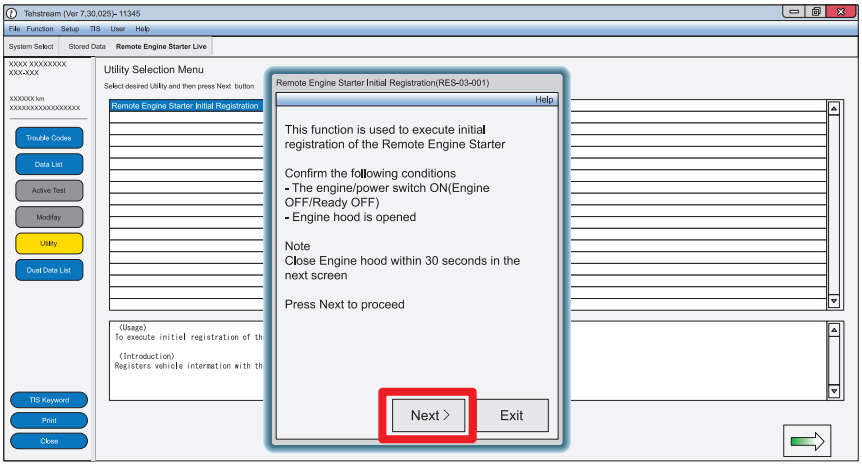
w. Click on “Utility.”

Fig. 7-14



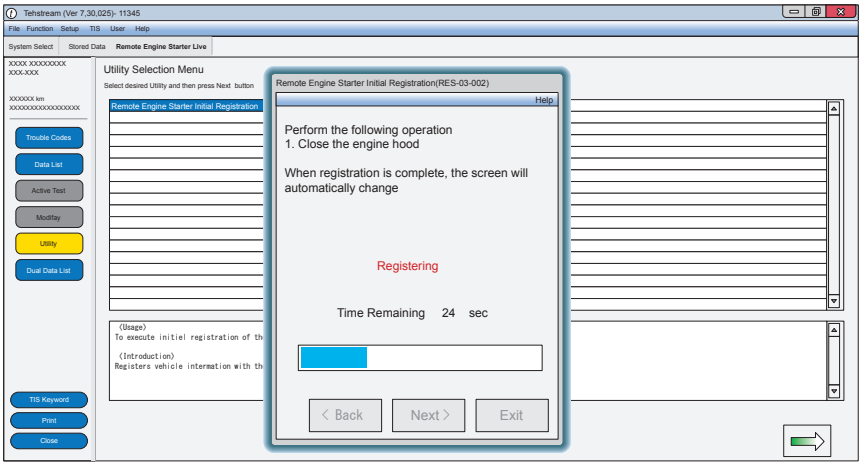
x. Select “Remote Engine Starter Initial Registration.”

Fig. 7-15



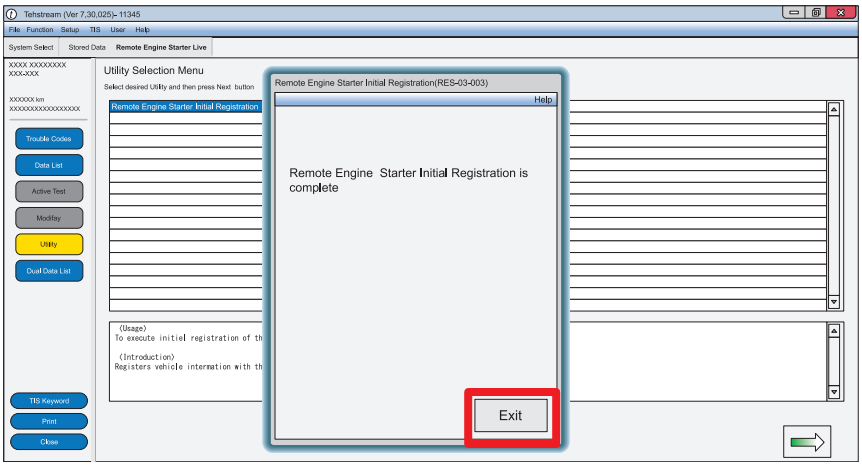
y. Click “Next>.”

Fig. 7-16



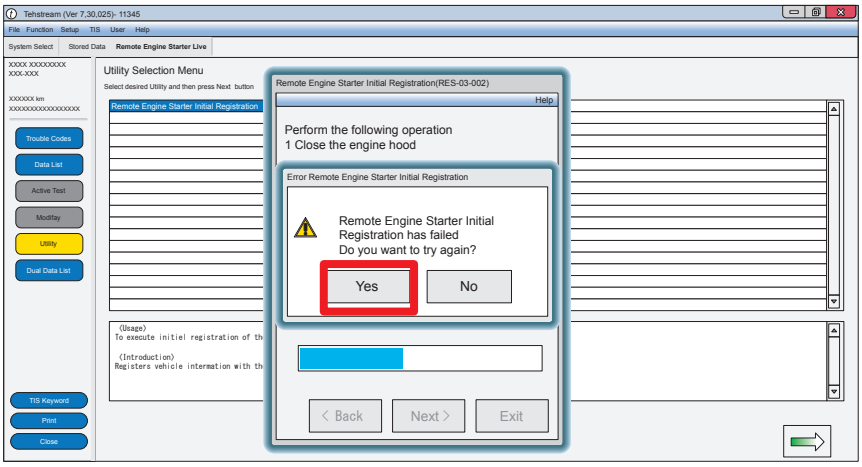
z. Close the Hood within 30 seconds.

Fig. 7-17



aa. Click “Exit.”

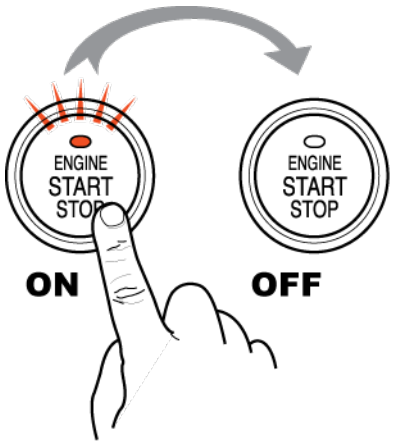
Fig. 7-18



IF THIS PROCEDURE FAILED

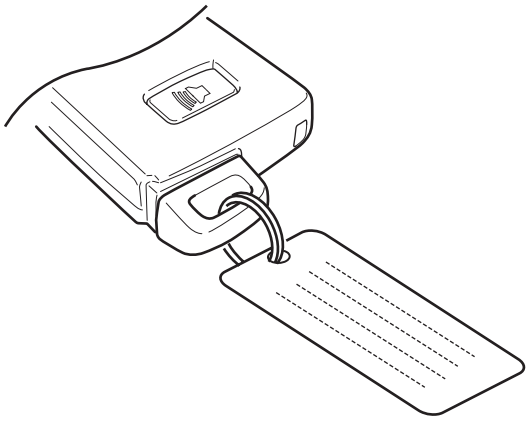
- Click “Yes.”
- Start again from step y.

Fig. 7-19



ab. Press the “ENGINE START STOP” Button once to switch the ignition off.

Fig. 8-1



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. Attach the Key Tag.

REPEAT: Step a with the other Smart Key.

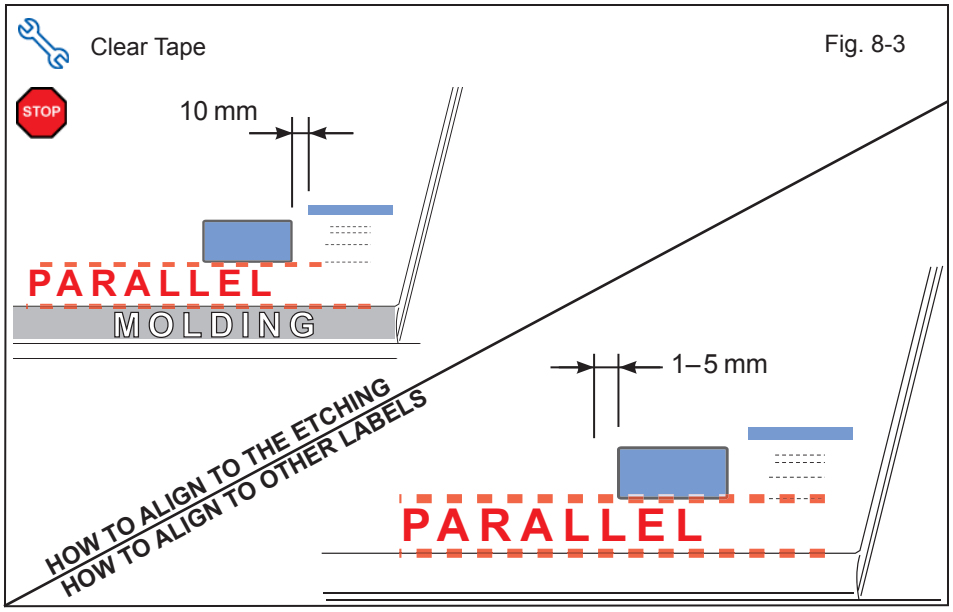
Fig. 8-2

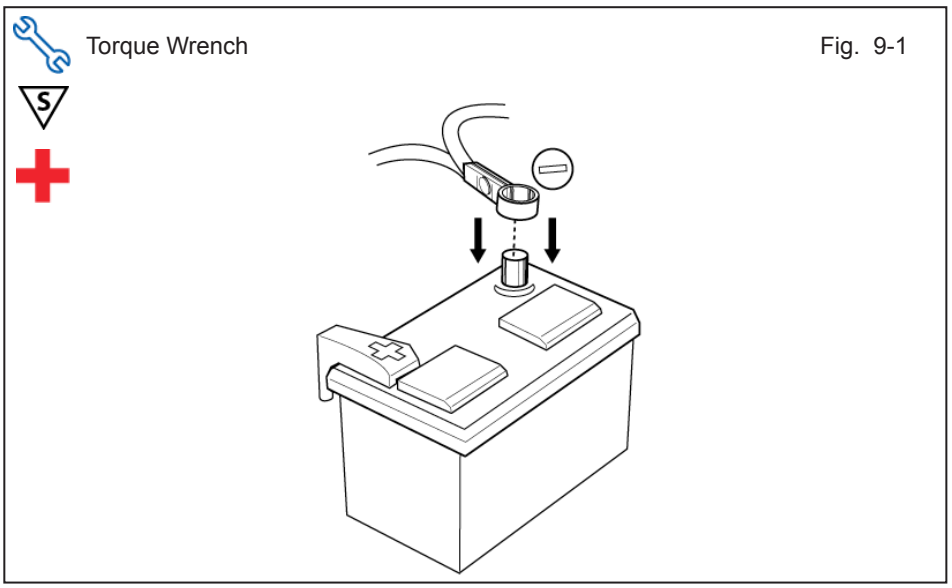


b. Using VDC approved cleaner and Cleaning Method, clean the area indicated on the Engine Compartment.

c. Attach the Warning Label to the Engine Compartment Cover as shown.

CAUTION: Do not touch the adhesive surface.





d. Use Household Glass Cleaner to clean the inside of the Front Door Window.

e. Use a piece of Clear Tape to lift the Label off its protective backing.

CAUTION: Do not touch the adhesive surface.

f. Attach the Label as shown.

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

REPEAT: steps d-f with the other Front Door Window.

9. Complete the Installation.

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

Torque: 5.4 N•m (48 in•lbf)

CAUTION: Do not touch the Positive Terminal.

b. Clean up and Remove trash.

c. Sealed in its protective bag, place the Owner's Manual in the Glove Box.

Accessory Function Checks

Close the hood, enter the vehicle and close all doors. Place the shift lever in the “P” (Park) position, set the parking brake and make sure the Vehicle is off.

	Perform	Look For
1	Press the remote control’s lock button twice within 2 seconds, then press and hold the lock button for 3 seconds.	The hazard lights flash after 3 seconds. The engine starts. The hazard lights flash repeatedly for 10 seconds.
2	With the engine running, pull the hood release handle. **NOTE**: *Wait 30 seconds before pulling the hood release handle for the Security Alarm to trigger*.	The engine stops. The hazard lights flash once. The security alarm triggers.

Vehicle Appearance Check

	Perform	Look For
☐	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
☐	Dome/Courtesy Lights	☐	Illuminated Door Sill

Start the Vehicle

☐	Panel/Switch Illumination	☐	Gauges
☐	Check Engine Light *If the warning light remains on, it may indicate a system malfunction.*	☐	ABS Light (if equipped) *If the warning light remains on, it may indicate a system malfunction.*
☐	Lamp Failure Sensor *If the warning light remains on, it may indicate a system malfunction.*	☐	Track/Skid Control Light (if equipped) *If the warning light remains on, it may indicate a system malfunction.*
☐	Seat Belt Warning Light *If the warning light remains on, it may indicate a system malfunction.*	☐	Tire Pressure Monitoring System (TPMS) *Prior to TPMS activation and Pre-delivery Service (PDS) of the Vehicle the TPMS light will blink when IG is turned on.* *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.*
☐	Air Bag Warning Light *If the warning light remains on, it may indicate a system malfunction.*		
☐	Cruise Control Light (if equipped)		

Using a Mirror or Assistant check the following.

☐	Trunk/Tailgate/Bed Lights (if equipped)	☐	Tail Lights
☐	Brake Lights	☐	Daytime Running Lights (if equipped)
☐	Backup Lights	☐	Marker Lights
☐	Clearance Sonar (if equipped)	☐	Turn Signal Lights

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

☐	Hazard Lights	☐	Fog Lights (if equipped)
☐	Head Light	☐	Accessory Controls/Illumination (if equipped)
☐	High Beams	☐	Convenience Memory Settings (if equipped)
☐	Power Side Mirrors (if equipped)	☐	Rear Sunshade (if equipped)
☐	Power Sliding Door (if equipped)	☐	Power Back Door/Hatch (if equipped)

	Function		Function
☐	Front Wiper/Washer	☐	Rear Wiper/Washer (if equipped)
☐	Power Sun/Moon Roof (if equipped)	☐	Rollover Side Curtain Air Bag Switch (RSCA) (if equipped)
☐	Clock (if equipped)	☐	Navigation System (if equipped)
☐	Audio/Video (if equipped)	☐	USB Connections (if equipped)
☐	Steering Wheel Audio Control (if equipped)	☐	HVAC
☐	Front Windshield Defogger (if equipped)	☐	Rear Window Defogger (if equipped)
☐	Side Mirror Defogger (if equipped)	☐	Accessory Power Socket (if equipped)
☐	Horn	☐	Heated/Vented Seats (if equipped)

☐	Glove Box Light (if equipped)	☐	Trunk or Back Door/Hatch Cancel Switch (if equipped)
☐	Passenger Side Foot Lamp		

☐	Power Seats (if equipped)	☐	Key Sensor Buzzer

Remove the D/C Cut Fuse (30A) after Function Check.
Check with your Port/Dealer to see if this step is necessary.

