

Part Number: PT398-60161**Kit Contents**

Item #	Quantity	Description
1	1	GBS ECU
2	1	GBS Bracket
3	1	GBS Microphone
4	1	Wire Harness

Hardware Bag Contents Additional

Item#	Quantity	Description
1	10	Wire Ties
2	1	Custom Nut
3	1	Bolt
4	1	Foam Tape
5	2	Window Label (English)
6	2	Window Label (Spanish)
7	1	V2 Owner's Guide

Additional Items Required For Installation

Item#	Quantity	Description

Conflicts

Do not install into Vehicles without Factory Alarm.

Recommended Tools

Personal & Vehicle Protection	Description
Safety Glasses	
Safety Gloves	(Optional)
Vehicle Protection	Blankets
Special Tools	
Striker Tool	CAD-E IADS P/N ALL 02-016-01
Installation Tools	
Screwdriver	#2 Phillips, Flat Blade Jeweler's
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST# 00002-06001-01
Side Cutters	
Torque Wrench	Battery: 48 in•lbf (5.4 N•m), Airbag: 108 in•lbf (12 N•m), GBS Bracket: 71 in•lbf (8 N•m)
Tape	Clear, Electrical
Socket	10mm, extension
Special Chemicals	
Cleaner	VDC Approved Cleaner

General Applicability

2016 and newer LX 570 with Factory Alarm.

Recommended Sequence of Application

Item#	Quantity	Description

*Mandatory

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.



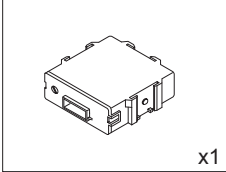
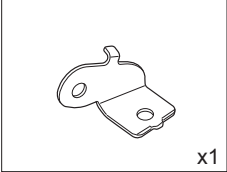
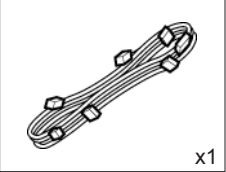
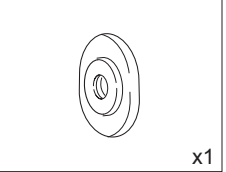
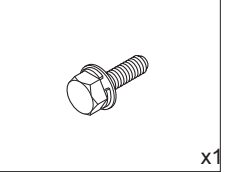
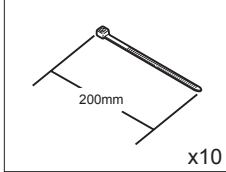
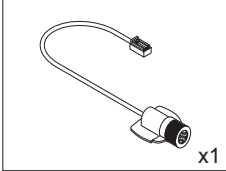
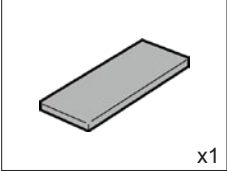


REVISION MARK : This mark highlights a change in installation with respect to previous issue.



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

Kit Contents

Service Part #s

GBS ECU  x1 08190-0C820	GBS ECU Bracket  x1	V2 Harness  x1	Custom Nut  x1	Bolt  x1 91651-60618	Wire Tie  x10
GBS Microphone  x1 08192-6C810	Foam Tape  x1	V2 Window Label  English x2 Spanish x2 (E) PT398-60084 (S) PT398-60085	V2 Owner's Guide  x1		

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.

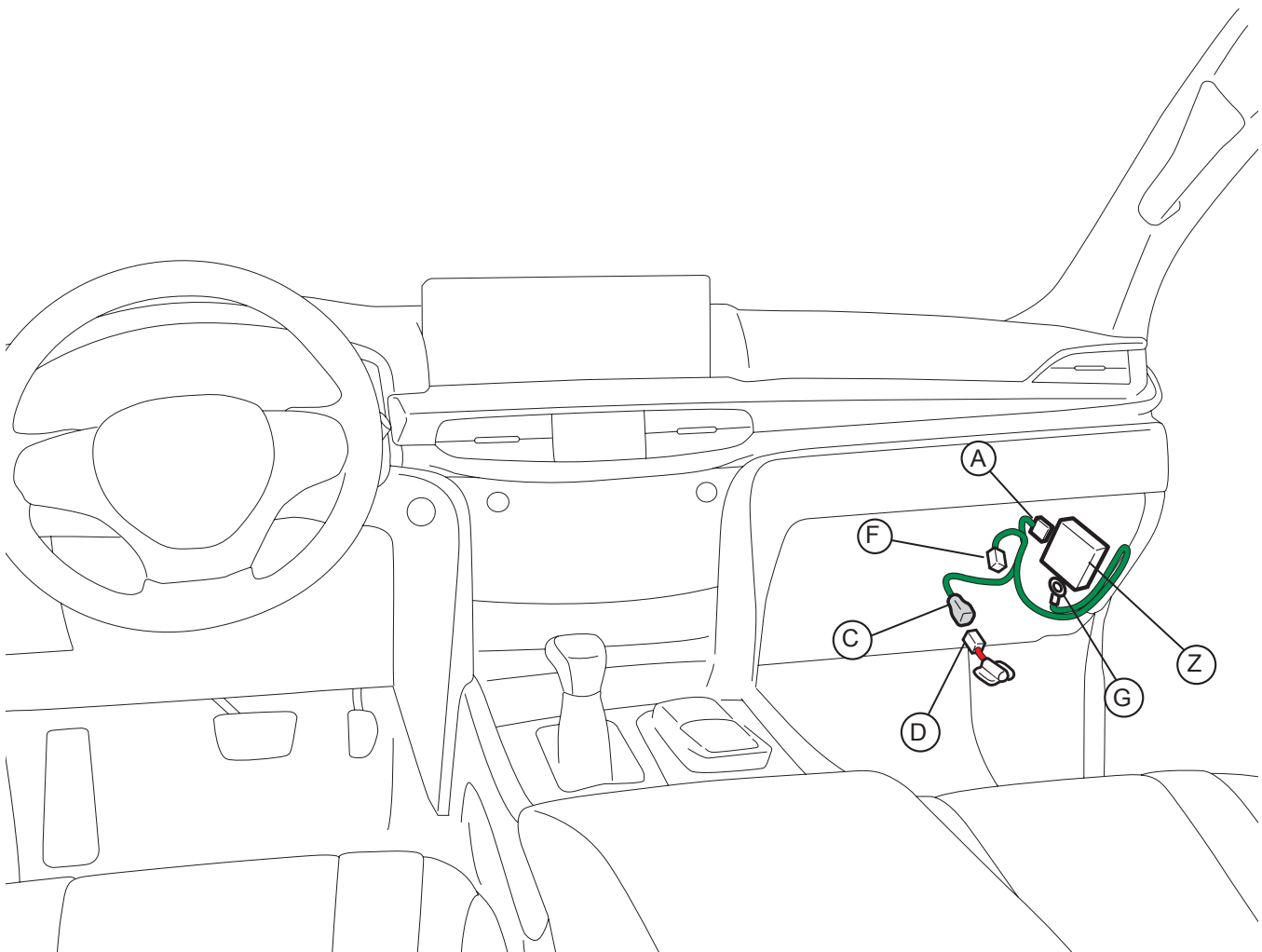
These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:

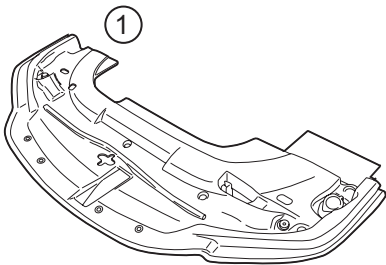
- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.)
- Safety (eye protection, checking torque procedure, etc.)
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.)
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.)

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

Issue: B 11/02/15

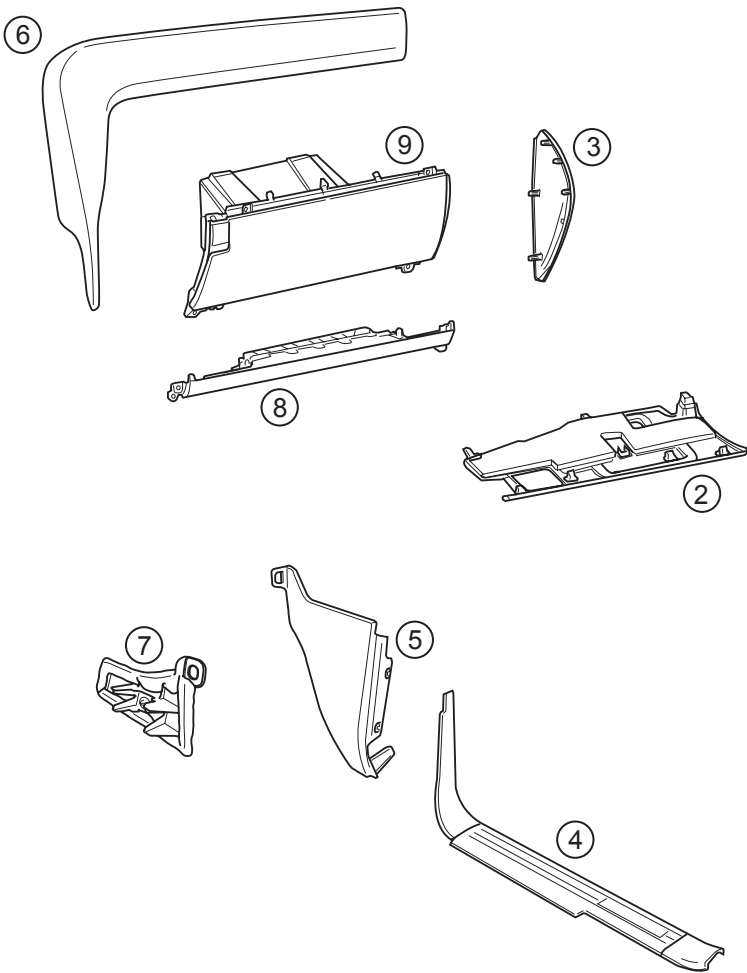
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Disassembly Overview



ENGINE ROOM

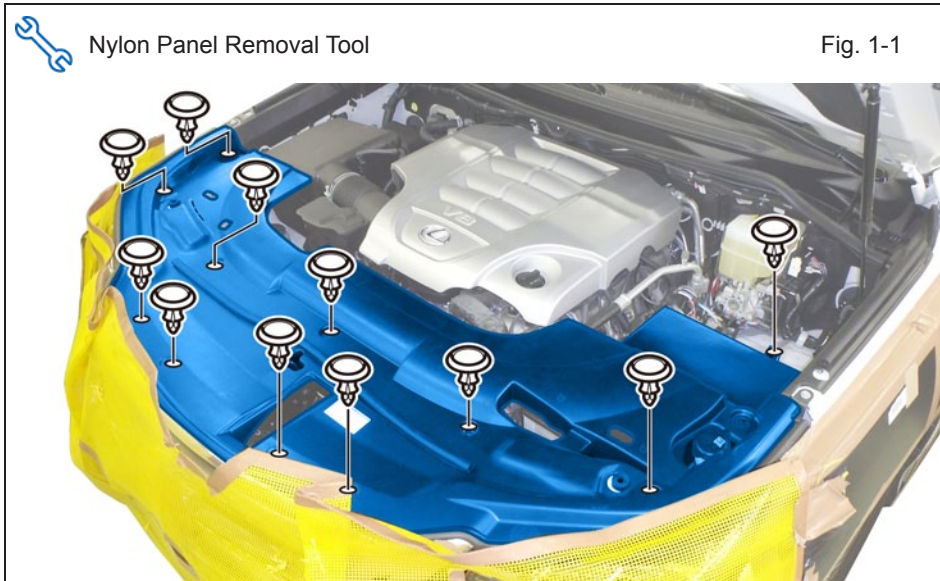
VEHICLE INTERIOR (PASSENGER'S SIDE)



- | | |
|---|-----------------------|
| 1 | Engine Cover |
| 2 | Glove Box Under Cover |
| 3 | PS Dash Cover |
| 4 | PS Step Cover |
| 5 | PS Cowl Cover |
| 6 | PS Cluster Panel |
| 7 | PS Console Box Panel |
| 8 | PS Knee Airbag |
| 9 | Glove Box |

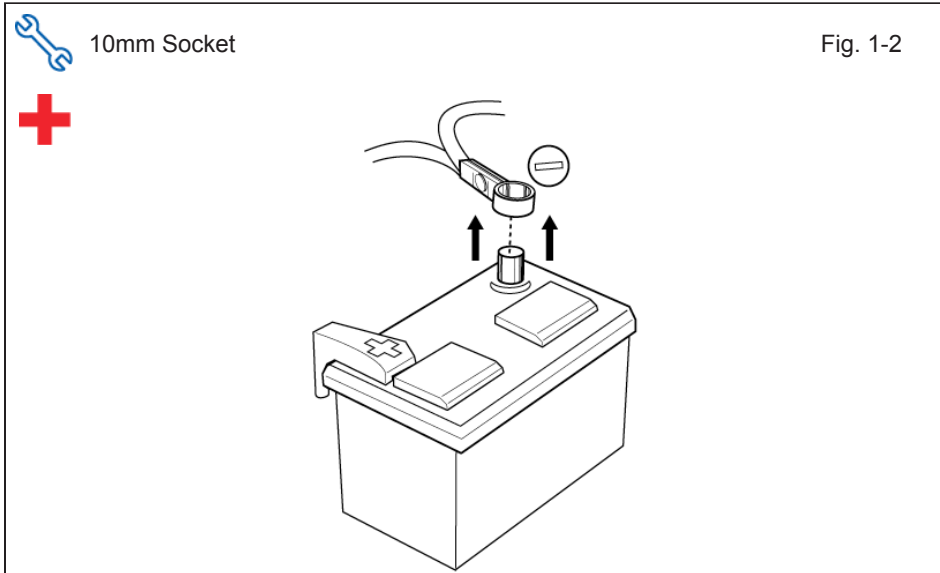


Disconnect all Corresponding Connectors.




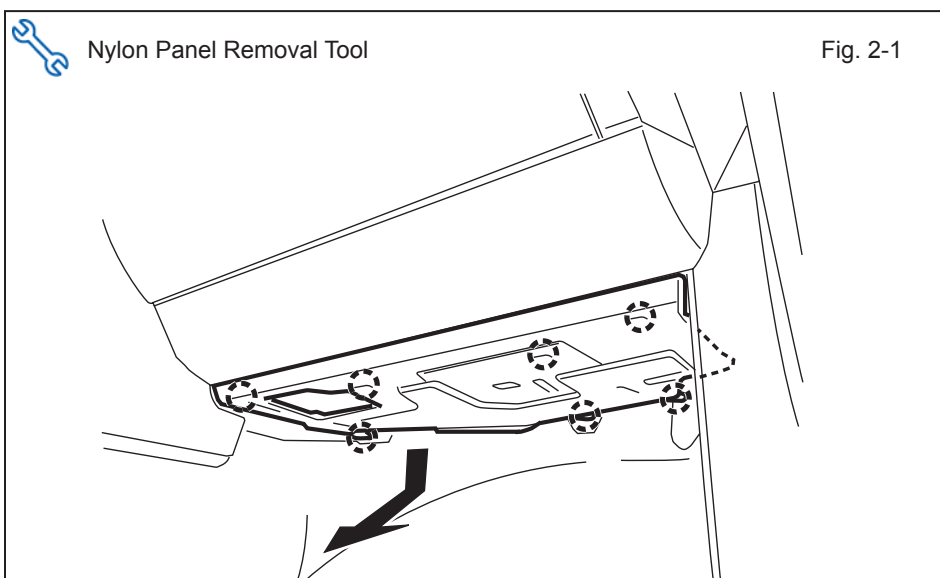
1. Preparation.

- Place the Vehicle in Park with the Parking Brake set.
- Remove the Engine Cover Push Pins.
- Remove the Engine Cover.
 - Remove 11 Clips.



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

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



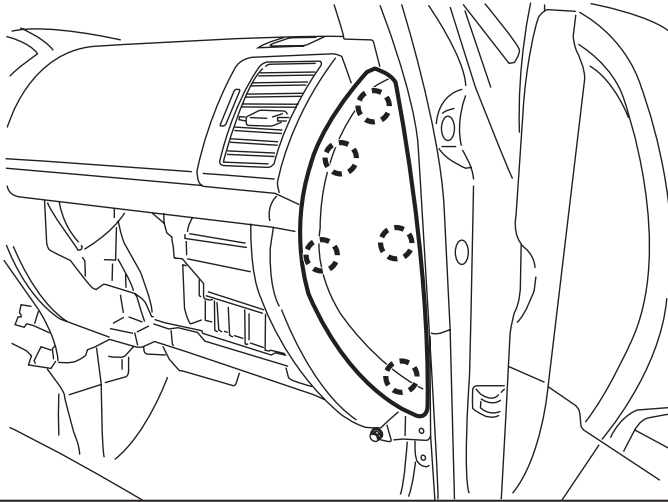
2. Vehicle Disassembly.

- Dislodge the Glove Box Under Cover.
 - Disconnect all Connectors.



Nylon Panel Removal Tool

Fig. 2-2

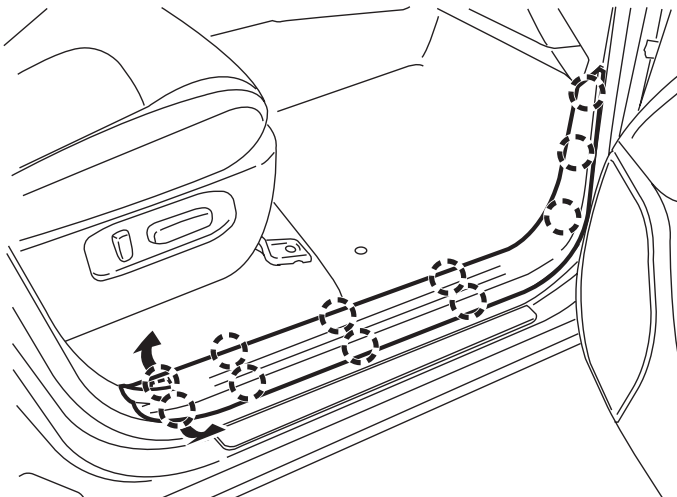


- b. Remove the Passenger's Side Dash Cover.
- Apply protective Tape on pry area.



Nylon Panel Removal Tool

Fig. 2-3

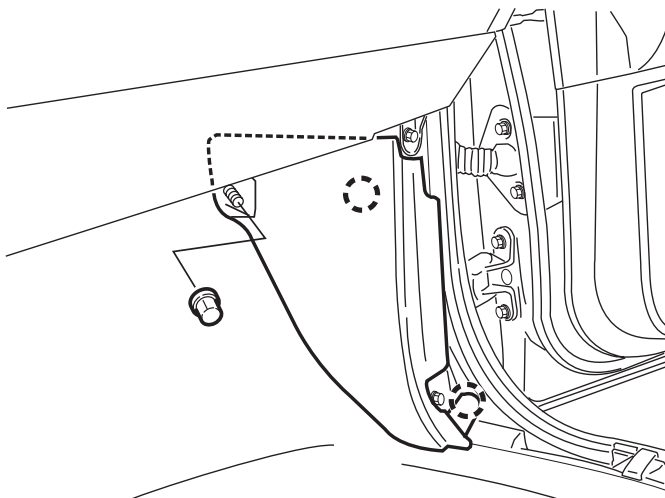


- c. Remove the Passenger's Side Step Cover.
- Disconnect all Connectors.



Nylon Panel Removal Tool

Fig. 2-4



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



Nylon Panel Removal Tool

Fig. 2-5



- e. Remove the Passenger's Side Cluster Panel.



Nylon Panel Removal Tool

Fig. 2-6

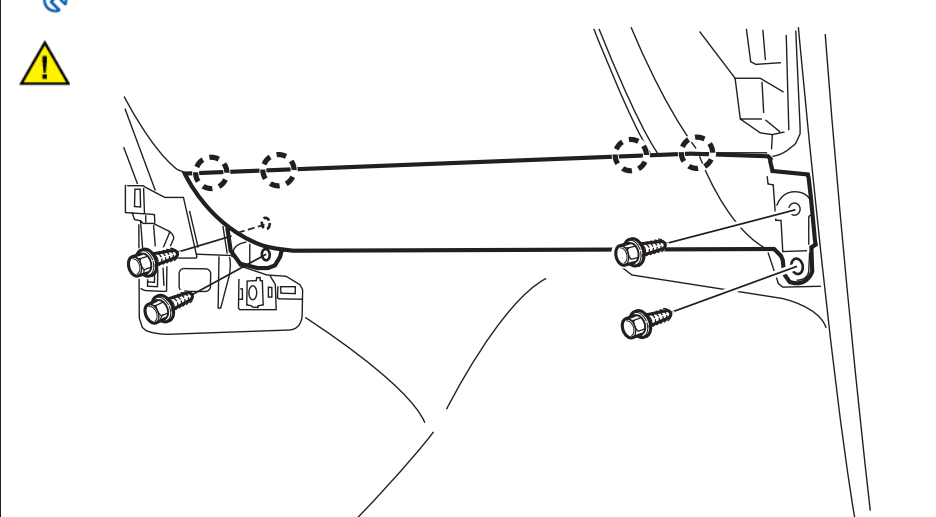


- f. Remove the Passenger's Side Console Box Panel.
- Remove 1 Clip.



10mm Socket, Extension, Nylon Panel Removal Tool

Fig. 2-7



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



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

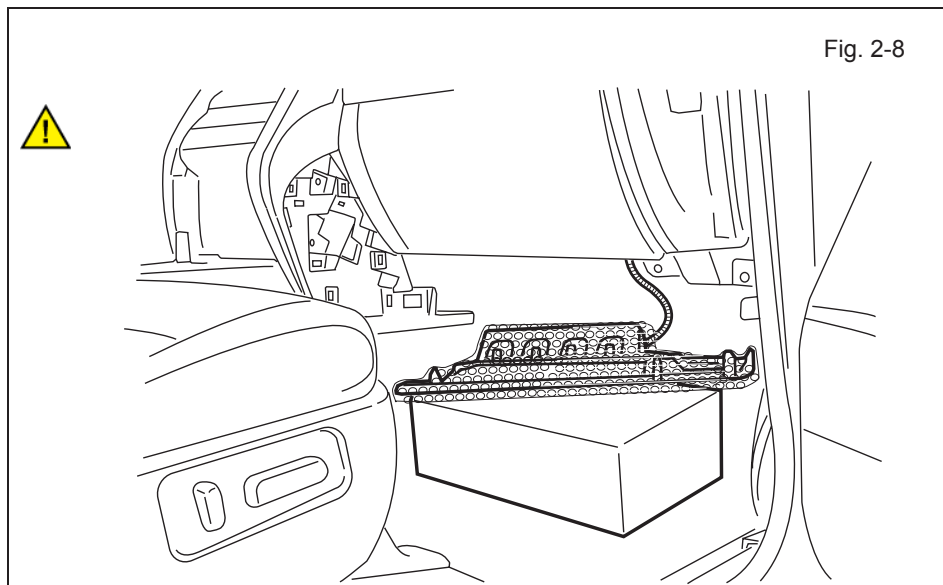


Fig. 2-8

- 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.

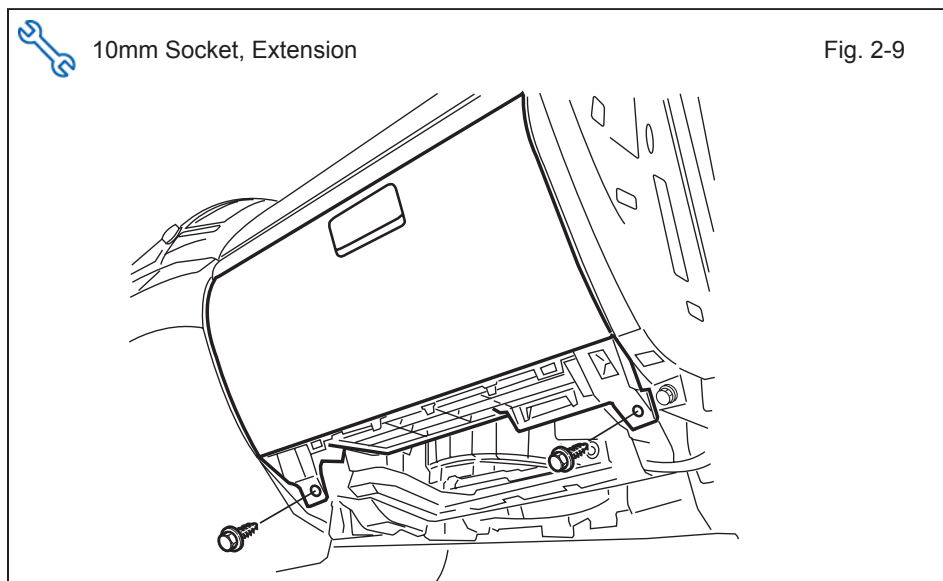


Fig. 2-9

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

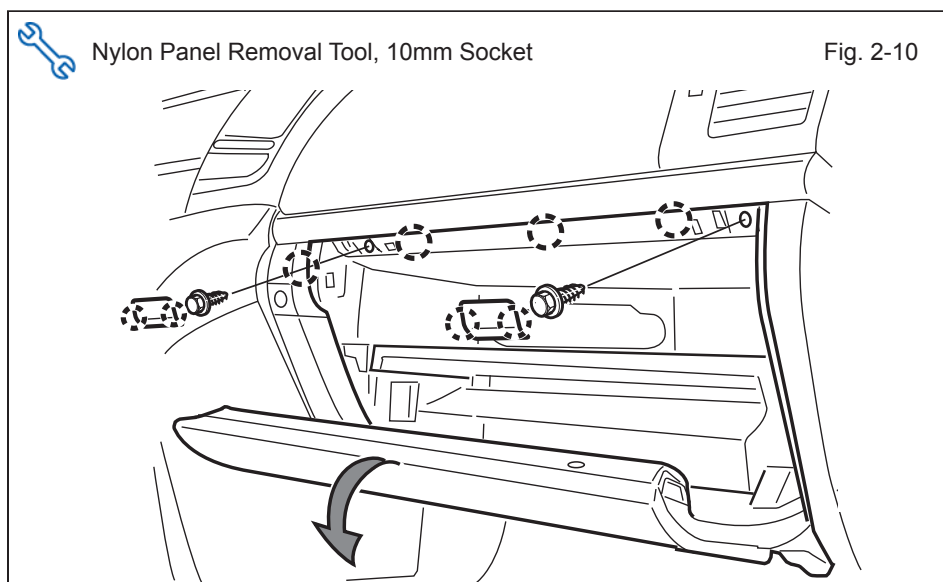
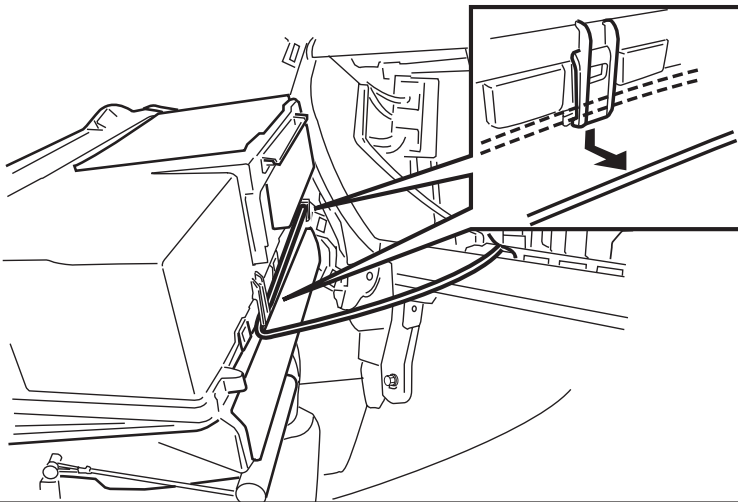


Fig. 2-10

- j. Open the Glove Box Door, then remove 2 Bolt Covers.
- k. Dislodge the Glove Box.
- Remove 2 Bolts.

Fig. 2-11

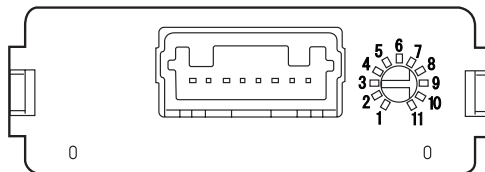
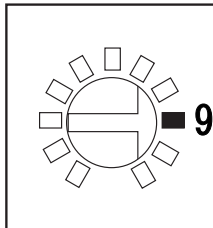


- I. Remove the Vehicle Harness from the backside of the Glove Box, remove the Glove Box.
 - Disconnect any Connectors.



Flat Blade Jeweler's Screwdriver

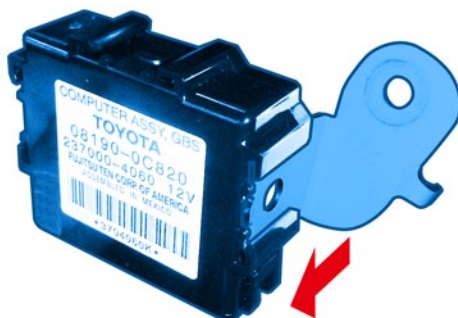
Fig. 3-1



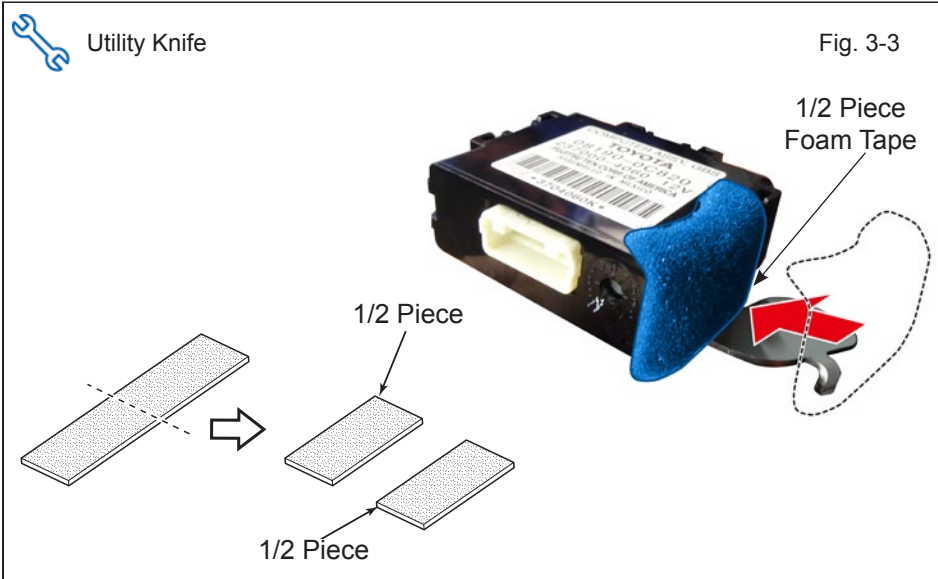
3. V2 ECU and Harness Preparation.

- a. Set the GBS Sensitivity Value to "9".

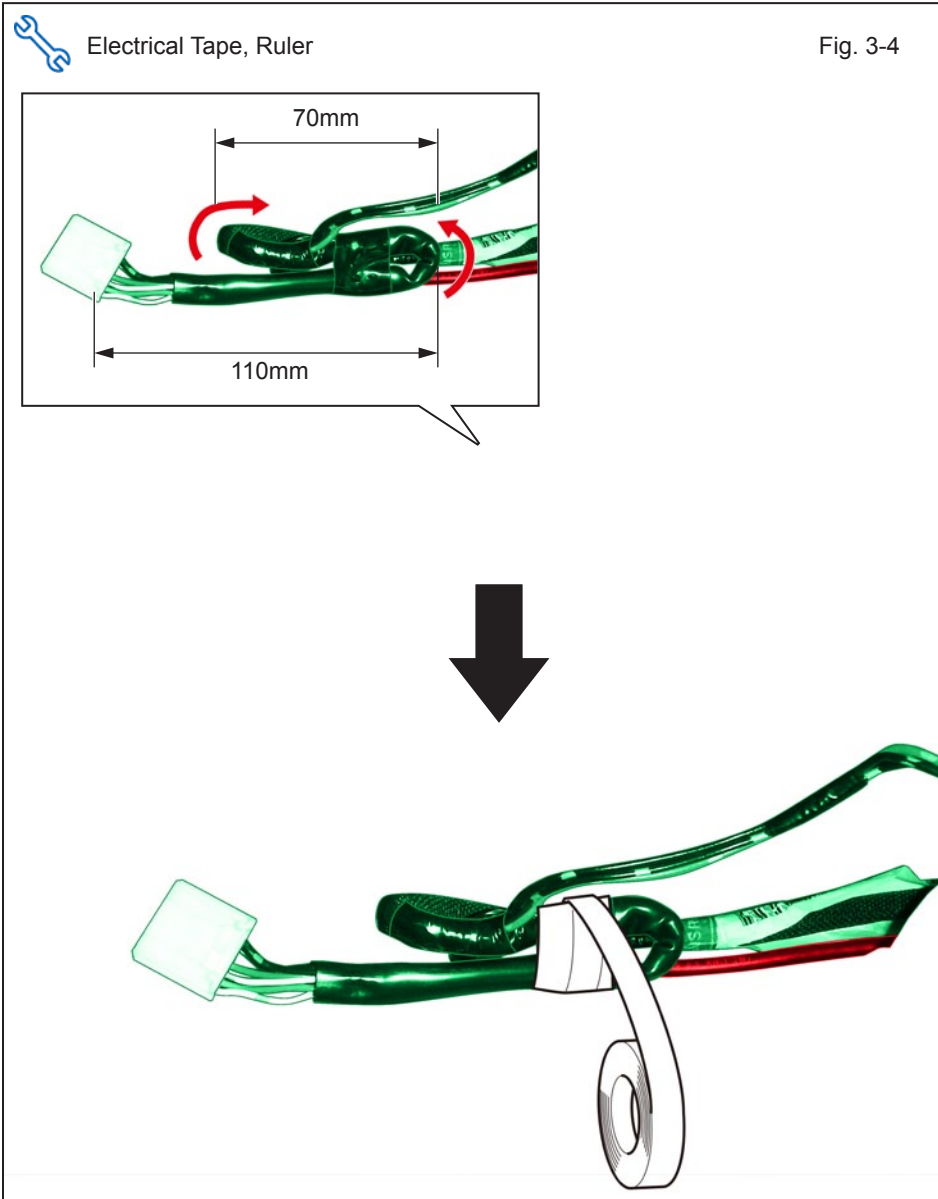
Fig. 3-2



- b. Attach the GBS ECU Bracket to the GBS ECU as shown.

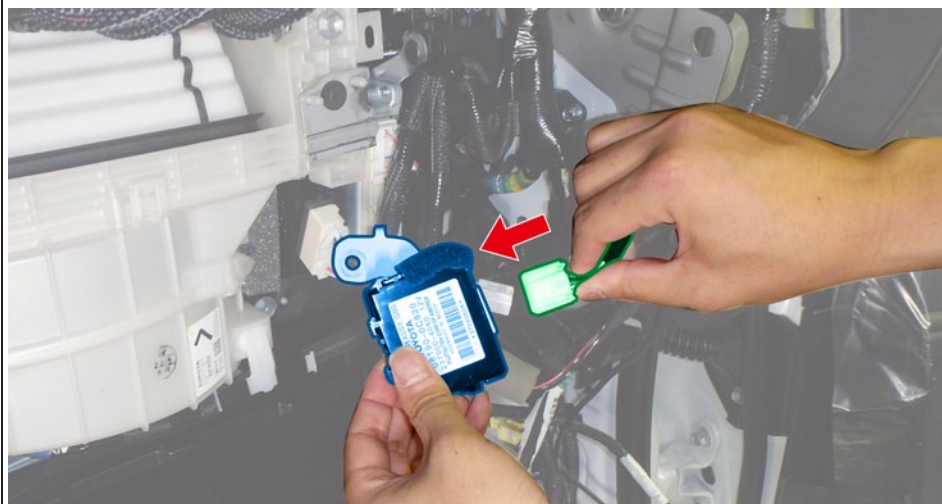


- c. Cut Foam Tape in Half.
- d. Apply 1/2 Piece of Foam Tape to the GBS ECU as shown.



- e. Bundle the excess V2 Harness and use Electrical Tape to secure the Bundle as shown.

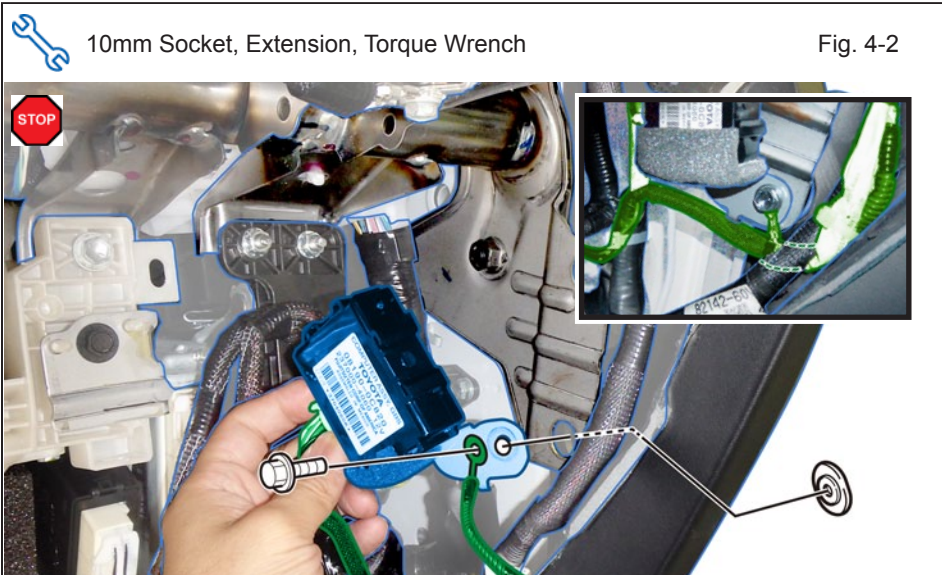
Fig. 4-1



4. V2 ECU and Harness Installation.

- a. Plug in the V2 White 8P Connector to the GBS ECU.

Fig. 4-2



10mm Socket, Extension, Torque Wrench

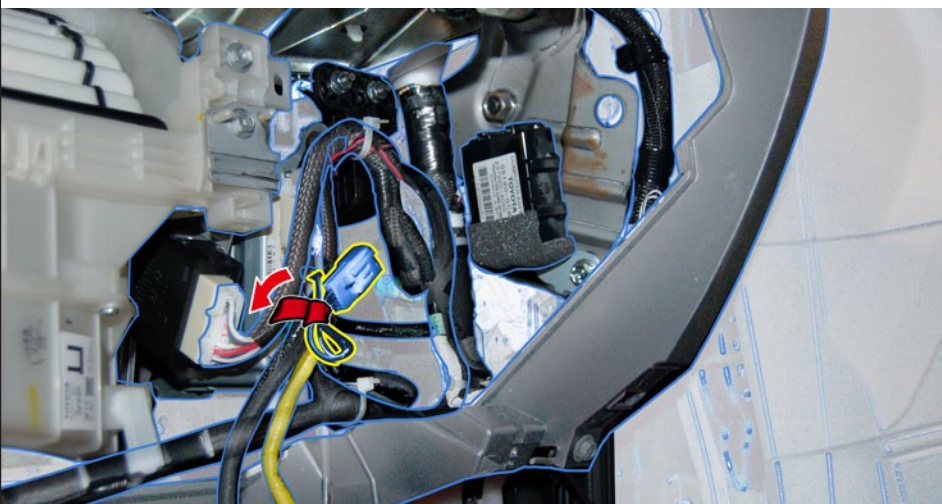
- b. Install the GBS ECU and the V2 Ground Wire Terminal using the Supplied Bolt and Custom Nut as shown.

Torque: 8 N•m (71 in•lbf)

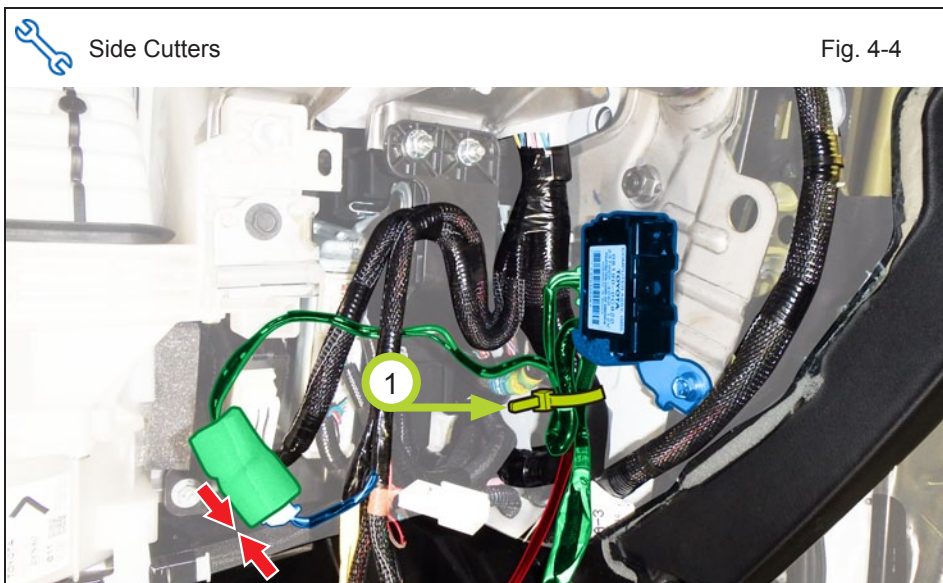
STOP **NOTE:** Make sure the Guide Pin is seated correctly.

STOP **NOTE:** Make sure the ground wire is secured facing downward with no stress at crimp.

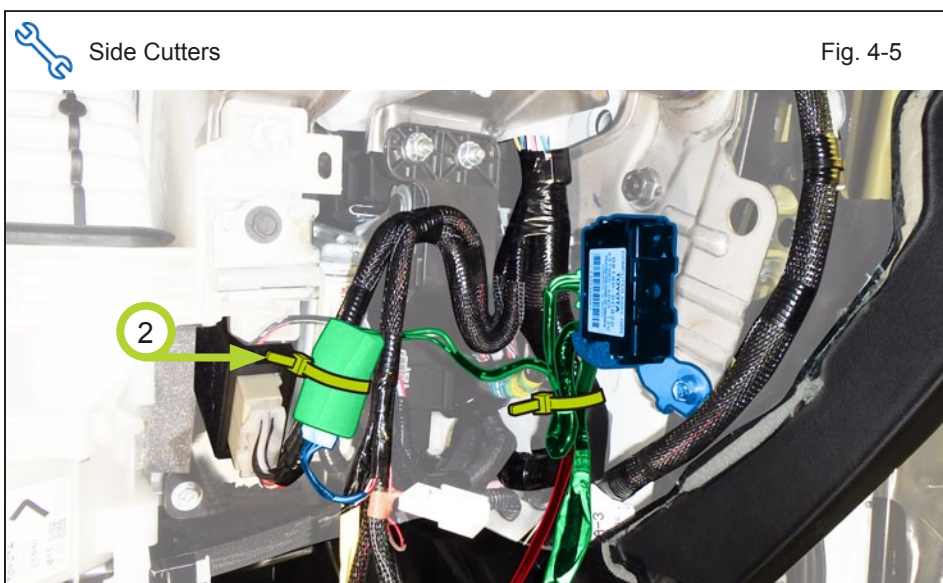
Fig. 4-3



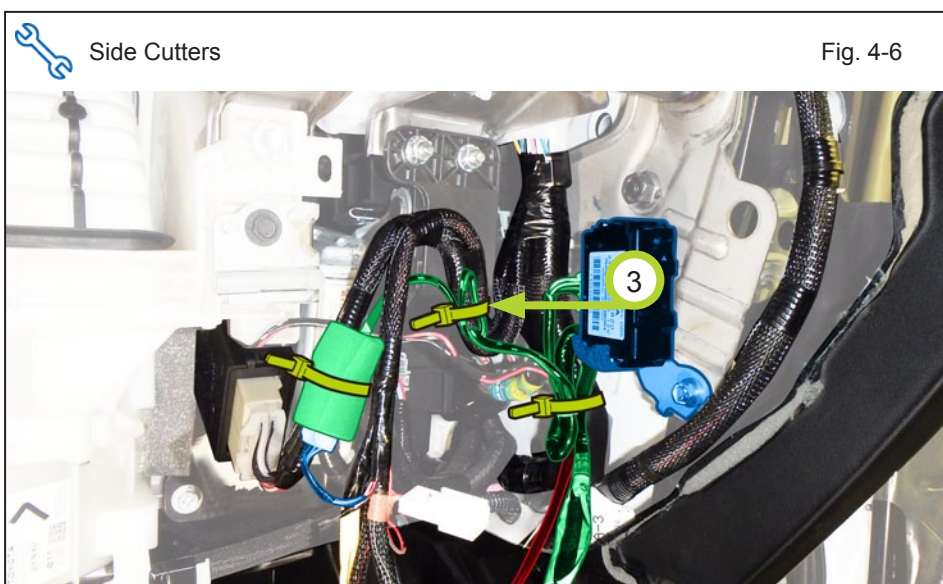
- c. Locate the Vehicle's 3P White Pre-Connector and remove the tape securing it.



- d. Connect the V2 3P White Connector to the Vehicle's 3P Pre-Connector.
- e. Secure the V2 Harness Bundle to the Vehicle Harness with 1 Wire Tie.



- f. Secure the 3P White Connectors to the Vehicle Harness using 1 Wire Tie.

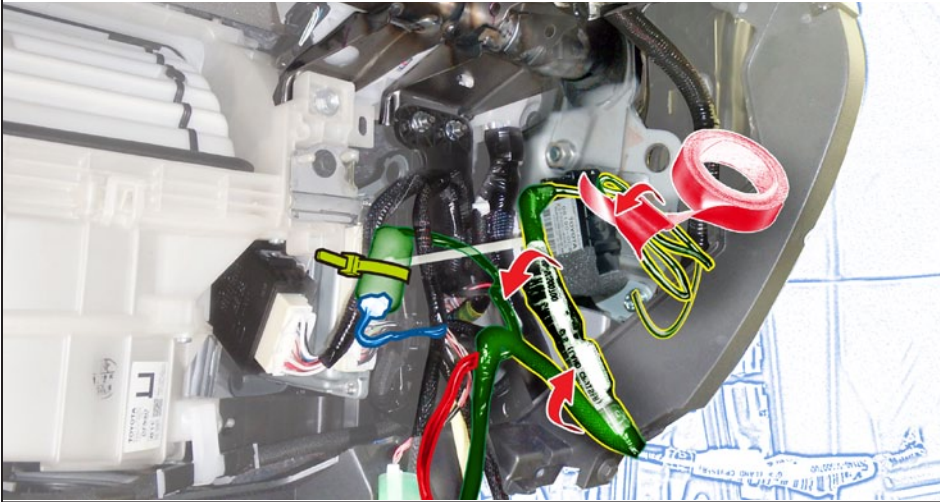


- g. Secure the excess V2 Harness slack to the Vehicle Harness using 1 Wire Tie.



Electrical Tape

Fig. 4-7



- h. Secure the excess V2 Ground Terminal Wire bundle using Electrical Tape.
- i. Fold the excess V2 Harness as shown.



Side Cutters

Fig. 4-8

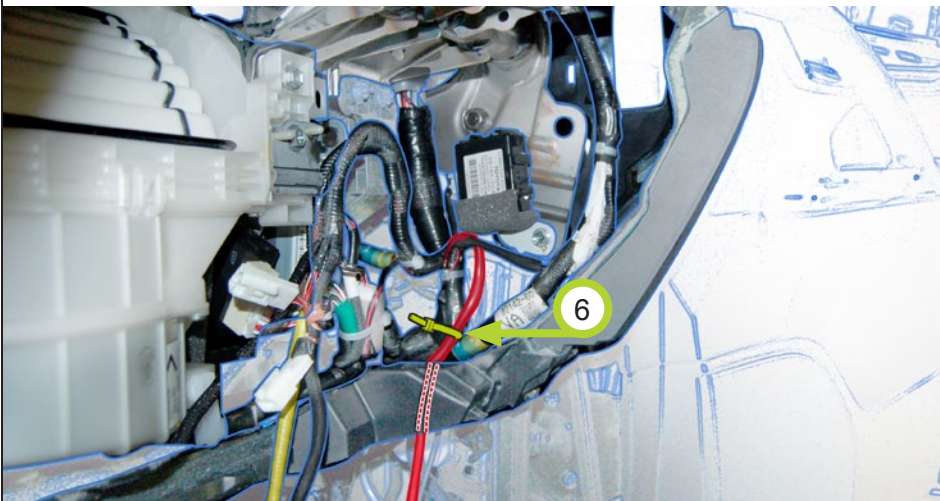


- j. Secure the excess V2 Harness and V2 Ground Terminal Wire Bundle to the Vehicle Harness using 2 Wire Ties as shown.

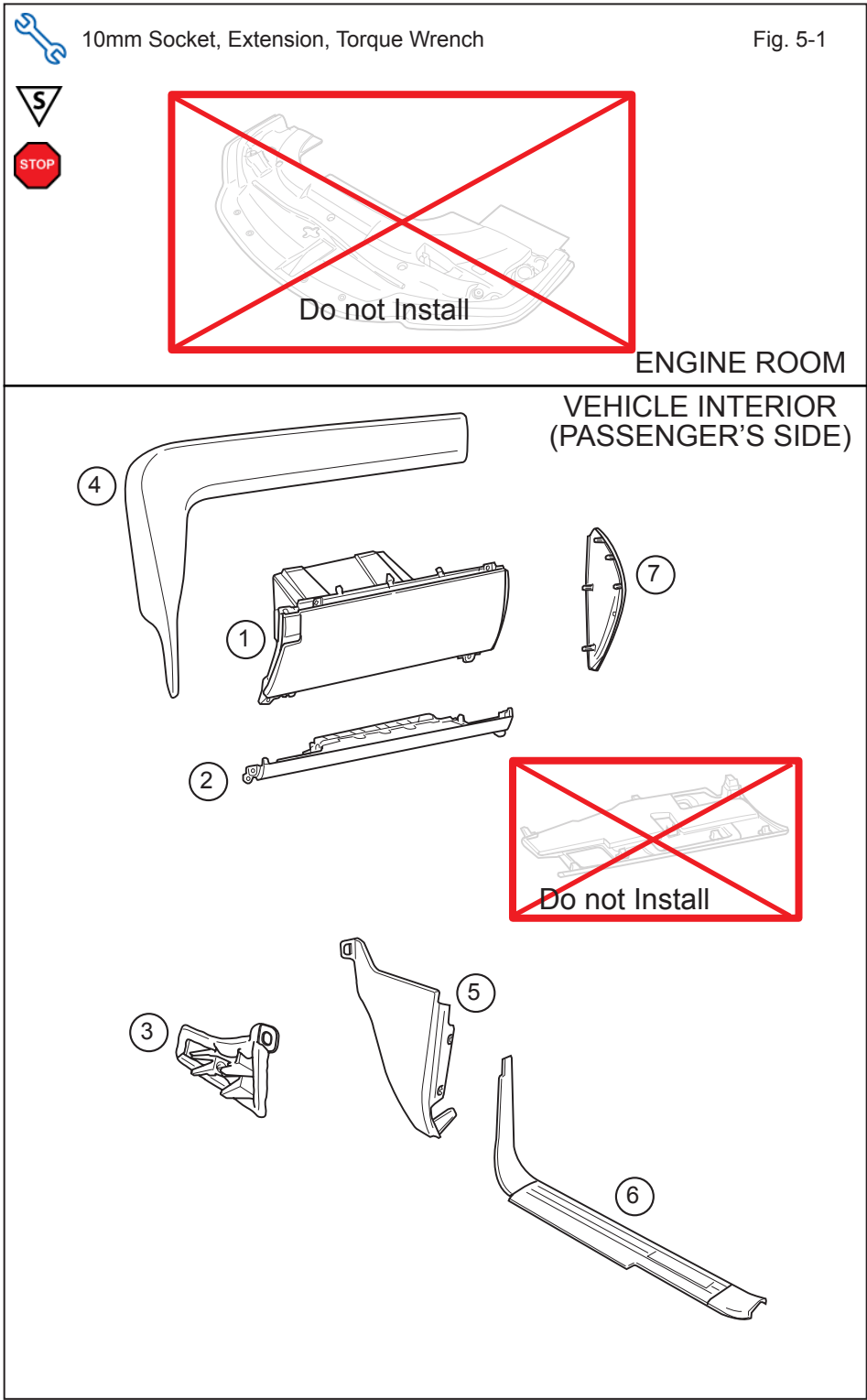


Side Cutters

Fig. 4-9



- k. Secure the V2 Harness to the Vehicle Harness using 1 Wire Tie



5. Microphone Installation.

- a. Partially reassemble the Vehicle.

NOTE: When reinstalling Knee Airbag, make sure to securely tighten the Bolts.

Torque: 12 N•m (108 in•lbf)

NOTE: Make sure that all Connectors are reconnected.

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

1	Glove Box
2	PS Knee Airbag
3	PS Console Box Panel
4	PS Cluster Panel
5	PS Cowl Cover
6	PS Step Cover
7	PS Dash Cover
Reconnect all Corresponding Connectors.	

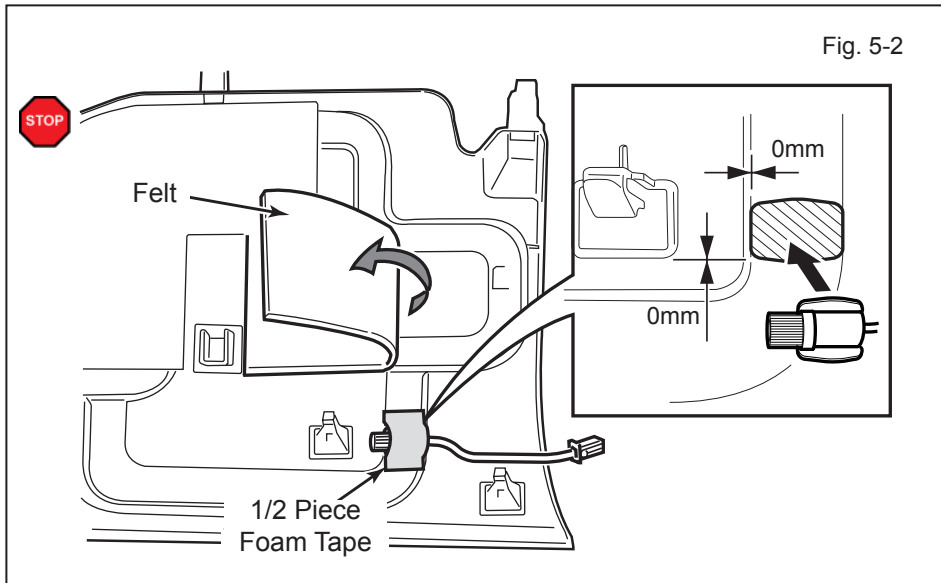


Fig. 5-2

b. Using the VDC approved cleaner and Cleaning Method, clean the area indicated on the backside of the Glove Box Under Cover.

c. Attach the GBS Microphone to the backside of the Glove Box Under Cover as shown.



NOTE: Make sure to align GBS Mic in reference to the Illustration.

d. Apply 1/2 Piece of Foam Tape to the GBS Microphone as shown.



NOTE: Make sure not cover the Mic's opening with the Foam Tape.

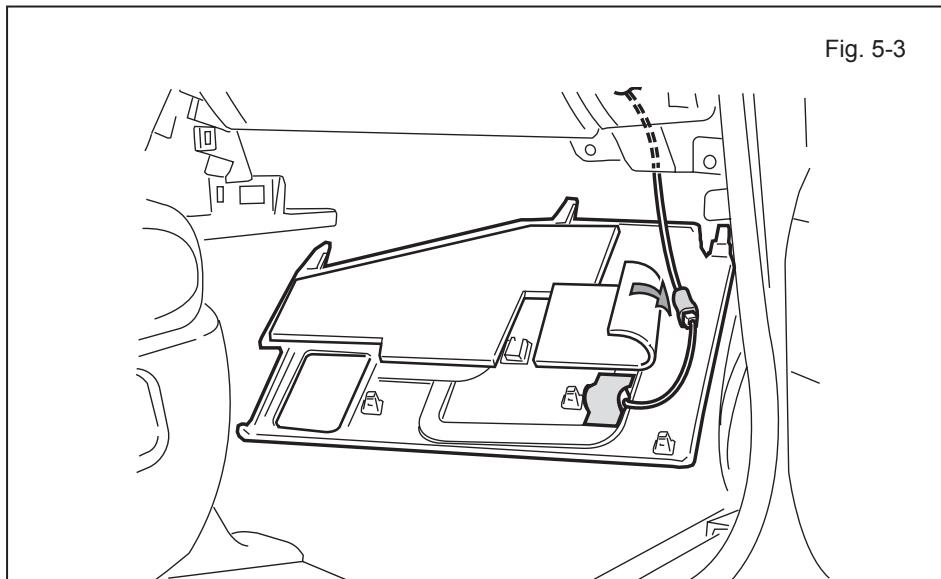


Fig. 5-3

e. Pull back Felt.

f. Connect the V2 Harness's 2P White Connector to the GBS Microphone's 2P White Connector.

g. Refit the Felt to the Glove Box Under Cover.

- Reconnect all connectors.

h. Reinstall the Glove Box Under Cover.

6. Window Label Installation.

- For US Vehicles use the English Labels, and discard the Spanish Labels.

- For Mexico Vehicles use the Spanish Labels, and discard the English Labels.

a. Use Approved VDC Glass Cleaner to clean the inside of the Front Door Window.

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



CAUTION: Do not touch the adhesive surface.

c. Attach the Label as shown.



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

REPEAT: Steps a-c with the other Front Door Window.

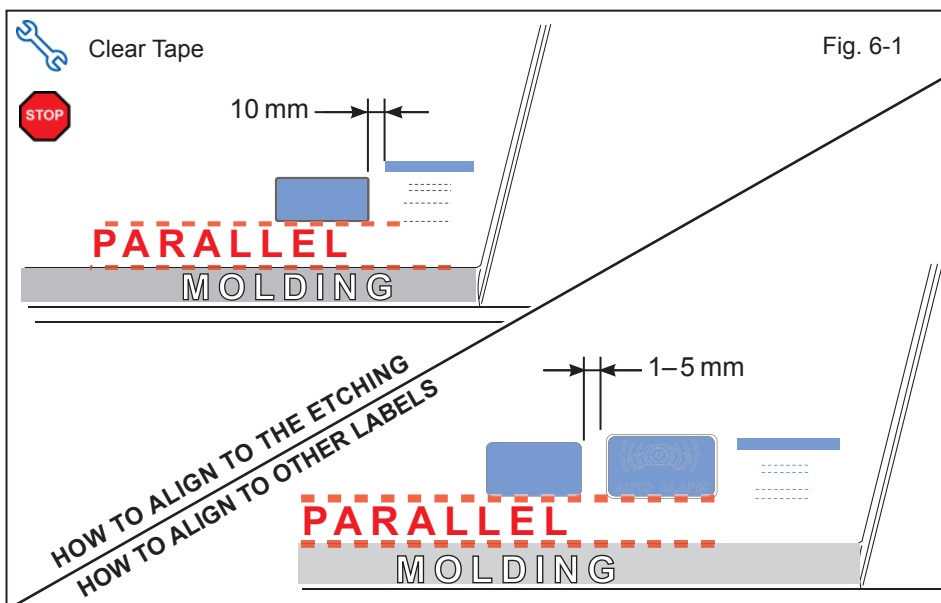
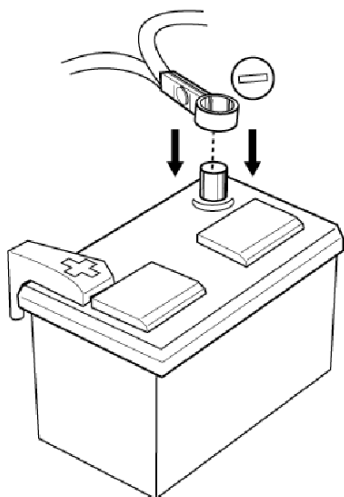


Fig. 6-1

 Torque Wrench

Fig. 7-1



7. Complete the Installation.

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

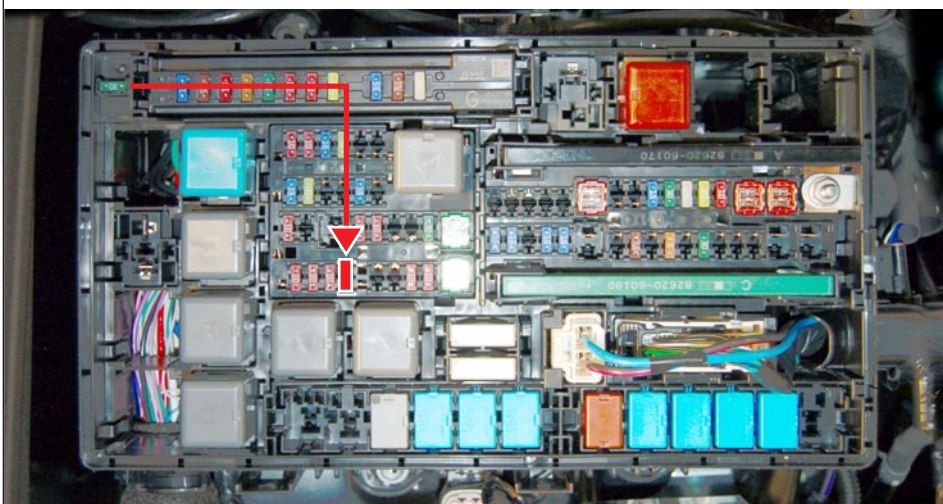


Torque: 5.4 N•m (48 in•lbf)



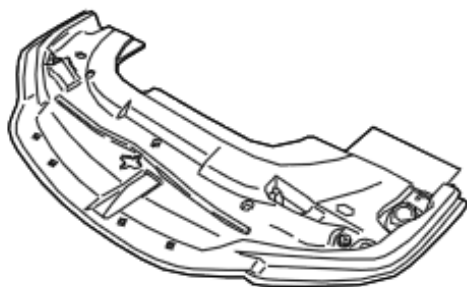
CAUTION: Do not touch the Positive Terminal.

Fig. 7-2



- Install the D/C Cut Fuse (30A) in the location shown.

Fig. 7-3



- Reinstall the Engine Cover.
- Clean up and Remove trash.
- Sealed in its protective bag, place the Owner's Guide in the Glove Box.



Accessory Function Checks

This procedure will require an assistant. Close the hood. With the installer inside the vehicle, roll up all windows.



Have the assistant take out the Smart Key from the Vehicle, and place them 15 feet (4.5 meters) or more away from the Vehicle.

	Perform	Look For
1	Have the assistant press the smart key's lock button to start the system's arming process.	The turn signal lights flash once. All doors lock. The Security LED lights up.
2	Wait 30 seconds.	Security LED starts flashing; the system is now armed.

Perform the following check in a temperature controlled environment (50°- 90° F)

3	With the tip of a key, or Striker Tool pulled all the way out (PPO only), have installer tap the center of the driver's door window from the inside to trigger the alarm.	The horn sounds repeatedly. The headlights flash repeatedly. The turn signal lights flash repeatedly. The Security LED lights up.
4	Assistant must insert the key into the driver's door key cylinder and turn it toward the back of the vehicle to stop the alarm.	The horn stops sounding. All the lights stop flashing and/ or turn off. The Security LED lights up.



NOTE: If the alarm does not trigger during functional verifications the Smart Key and Smart Card Key might be too close. Move them farther from the vehicle and test the system again.

NOTE: If the alarm still does not trigger during the section test, increase the GBS sensitivity to the next setting and test again.

NOTE: If you do not disarm the system, the alarm will last 20 seconds. It is not necessary to check the alarm duration.

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
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Enter the Vehicle

<input type="checkbox"/> Dome/Courtesy Lights	<input type="checkbox"/> Illuminated Door Sill
---	--

Start the Vehicle

<input type="checkbox"/> Panel/Switch Illumination	<input type="checkbox"/> Gauges
<input type="checkbox"/> Check Engine Light <i>If the warning light remains on, it may indicate a system malfunction.</i> 	<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)	<input type="checkbox"/> Power Back Door/Hatch (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)

CHECKLIST – these points MUST be checked to ensure a quality installation **GLASS BREAKAGE SENSOR (GBS)**

Function		Function	
<input type="checkbox"/>	Front Wiper/Washer	<input type="checkbox"/>	Rear Wiper/Washer (if equipped)
<input type="checkbox"/>	Power Sun/Moon Roof (if equipped)	<input type="checkbox"/>	Rollover Side Curtain Air Bag Switch (RSCA) (if equipped)
<input type="checkbox"/>	Clock (if equipped)	<input type="checkbox"/>	Navigation System (if equipped)
<input type="checkbox"/>	Audio/Video (if equipped)	<input type="checkbox"/>	USB Connections (if equipped)
<input type="checkbox"/>	Steering Wheel Audio Control (if equipped)	<input type="checkbox"/>	HVAC
<input type="checkbox"/>	Front Windshield Defogger (if equipped)	<input type="checkbox"/>	Rear Window Defogger (if equipped)
<input type="checkbox"/>	Side Mirror Defogger (if equipped)	<input type="checkbox"/>	Accessory Power Socket (if equipped)
<input type="checkbox"/>	Horn	<input type="checkbox"/>	Heated/Vented Seats (if equipped)
<input type="checkbox"/>	Glove Box Light (if equipped)	<input type="checkbox"/>	Trunk or Back Door/Hatch Cancel Switch (if equipped)
<input type="checkbox"/>	Passenger Side Foot Lamp		
<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 D/C Cut Fuse (30A) after Function Check.

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

