

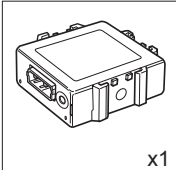
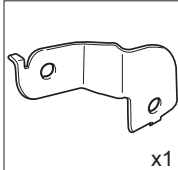
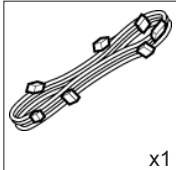


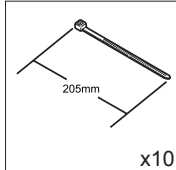
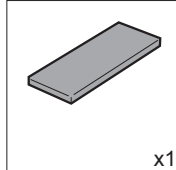


Part #: PT398-60111

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

**Conflicts:**

Do not install into Vehicles without Factory Alarm System.

**Kit Contents**

<p>GBS ECU</p>  <p>x1</p> <p>08190-0C820</p>	<p>GBS ECU Bracket</p>  <p>x1</p>	<p>GBS Harness</p>  <p>x1</p>	<p>GBS Microphone</p>  <p>x1</p> <p>08192-6C820</p>	<p>Nut</p>  <p>x1</p>	<p>Wire Tie</p>  <p>x10</p> <p>205mm</p>	<p>Foam Tape</p>  <p>x1</p>
<p>Window Label</p>  <p>English x2 Spanish x2</p> <p>(E) PT398-60084 (S) PT398-60085</p>	<p>Owner's Manual</p>  <p>x1</p>					

Service Part #'s

**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
<b>Special Tools</b>	
GBS Striker Tool	CAD-E IADS P/N ALL 02-016-01
<b>Installation Tools</b>	
Screwdriver	#2 Phillips, Flat Blade Jeweler's
Nylon Panel Removal Tool	e.g. Panel Pry Tool SST# 00002-06001-01
Side Cutters	
Torque Wrench	Battery: 36 in•lbf (4.07 N•m), Passenger's Knee Airbag: 88.5 in•lbf (10 N•m)
Tape	Clear, Electrical, Protective
Socket	10mm, Extension, 10mm Deep
Pliers	Needle Nose
Wrench	10mm
<b>Special Chemicals</b>	
Cleaner	VDC Approved Cleaner
Glass Cleaner	Household Glass Cleaner

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**Legend**

-  Do not proceed until process has been completed.
-  Follow steps carefully to avoid damaging the Vehicle or Accessory
-  Use caution to avoid injury.
-  Used in Figures to call attention to specific tools recommended for the process.
-  Highlights a change in installation with respect to previous issue.
-  Indicates that torque is related to safety.
-  Video Available; click to play.

**Accessory Installation Practice (read before installation)**

Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

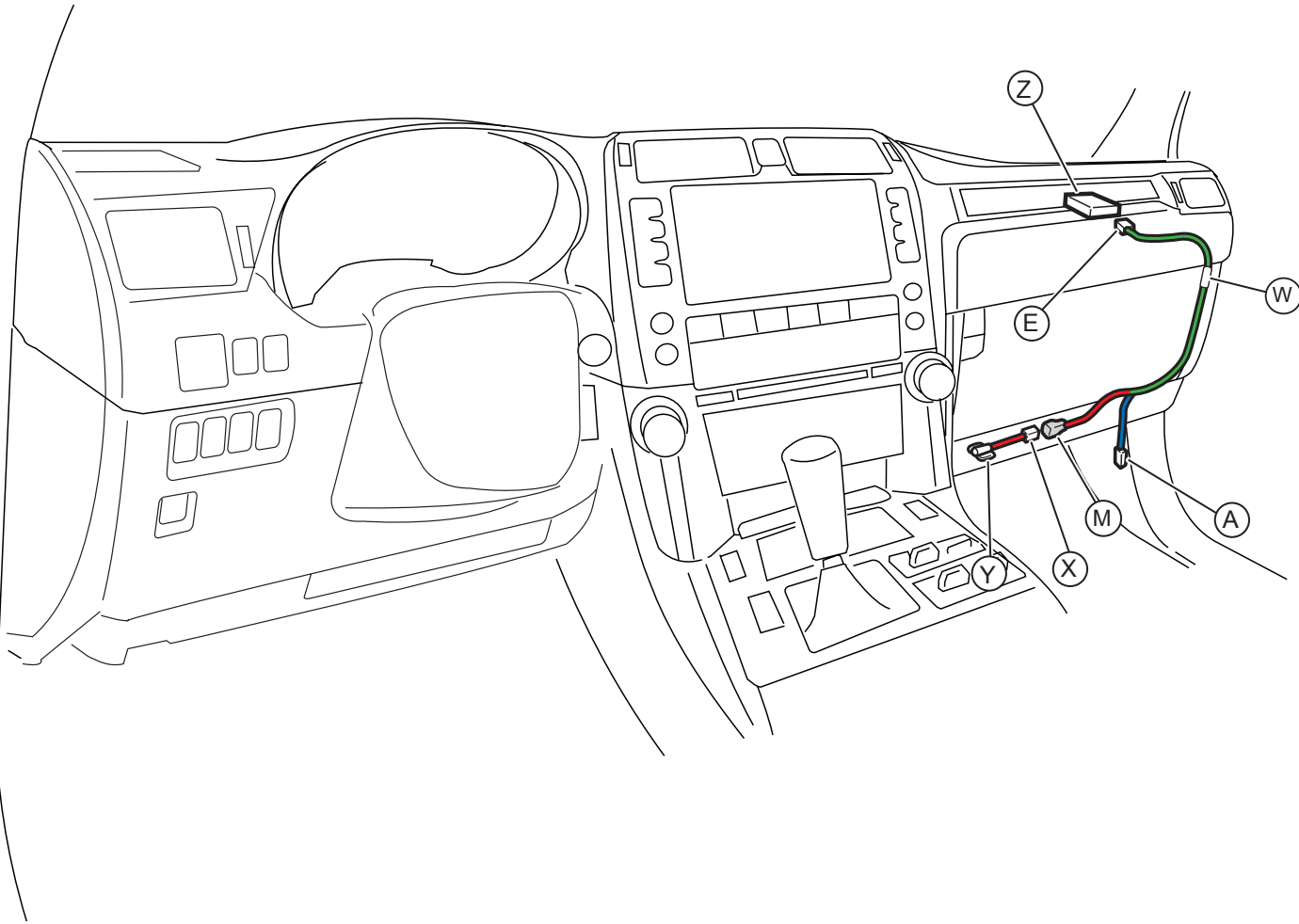
These guidelines can be found in the “Accessory Installation Practices” document.

This document covers such items as:

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

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

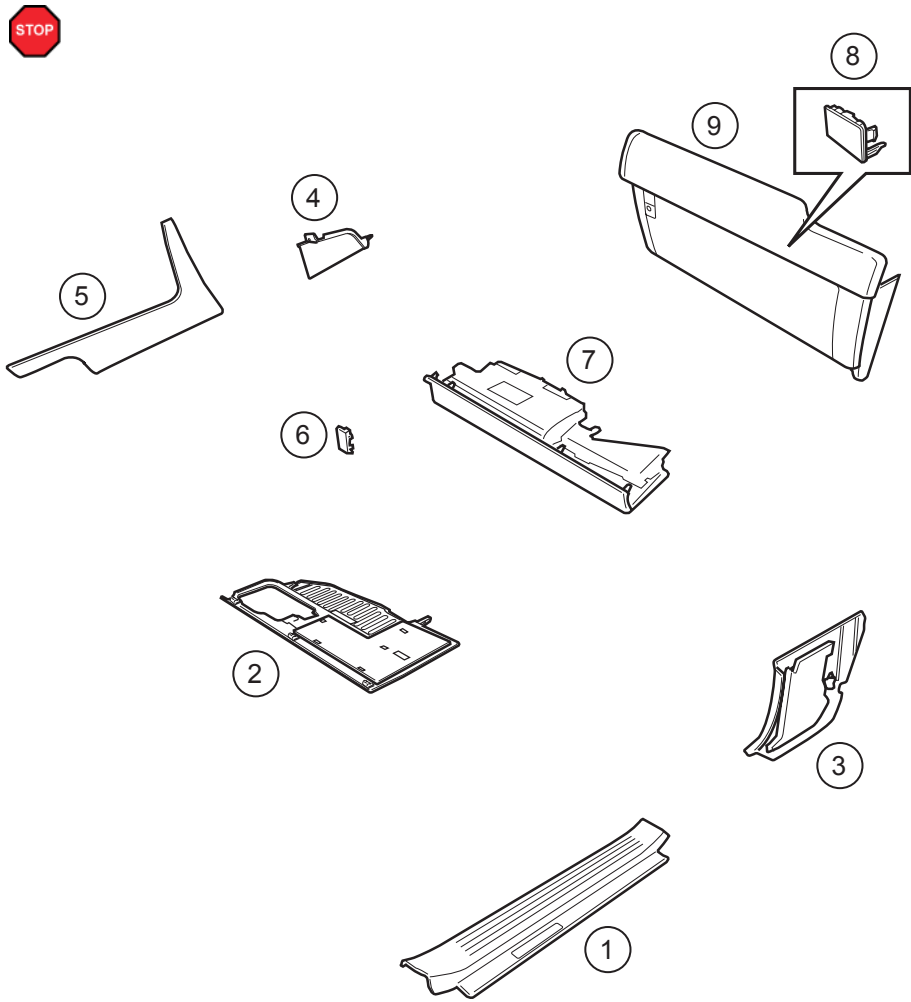
**Wire Harness Outline \***



TVIP	Vehicle	Description
A		4P White
E	-	8P White (for GBS ECU)
M	-	2P White (for Microphone)
X	-	2P White (Microphone)
Y	-	GBS Microphone
W	-	White Tape Marker
Z	-	GBS ECU

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

Disassembly Overview

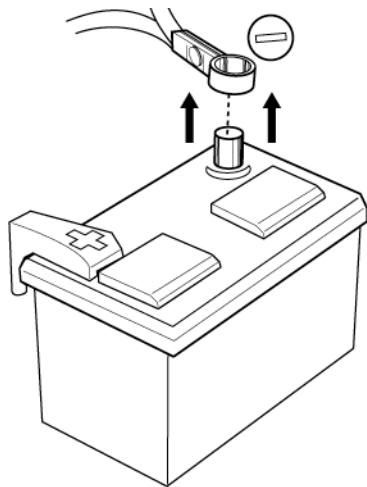


1	PS Step Cover
2	Glovebox Under Cover
3	PS Cowl Cover
4	Console Box Panel
5	Instrument Lower Panel
6	Airbag Side Cover
7	PS Knee Airbag
8	Screw Cover
9	Glovebox

**STOP** Disconnect all Corresponding Connectors

 10mm Socket

Fig. 1-1



1. Vehicle Disassembly

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

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


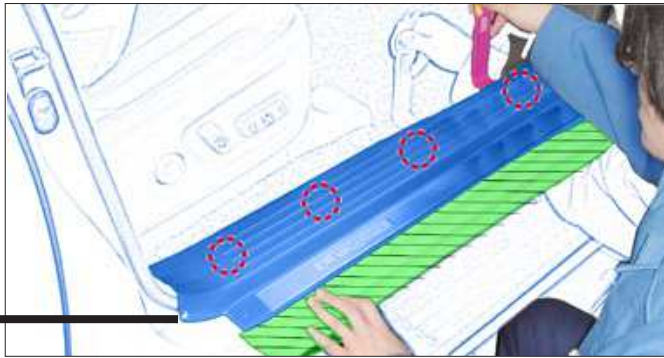
 Nylon Panel Removal Tool, Protective Tape

Fig. 1-2

Incorrect Way



Correct Way



c. Remove the Passenger's Side Step Cover.



- Use the Protective Tape to protect the vehicle panels while performing the following procedures.



**CAUTION:** Do not pry from the outside edge of the Step Cover as this may damage the Metal Plate.



**CAUTION:** Avoid damaging the connector.


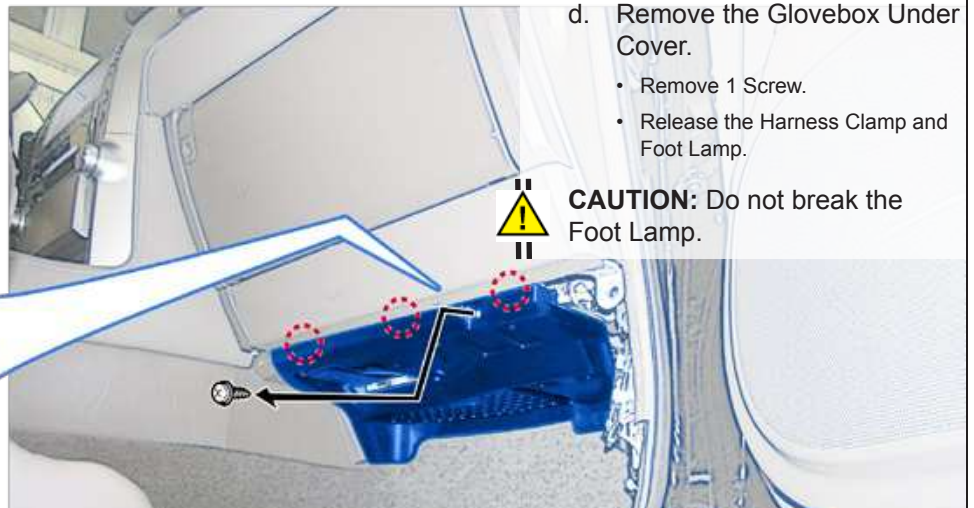
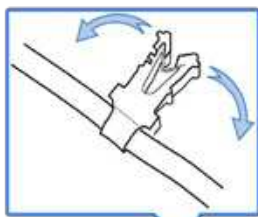
 Nylon Panel Removal Tool, Phillips Screwdriver

Fig. 1-3



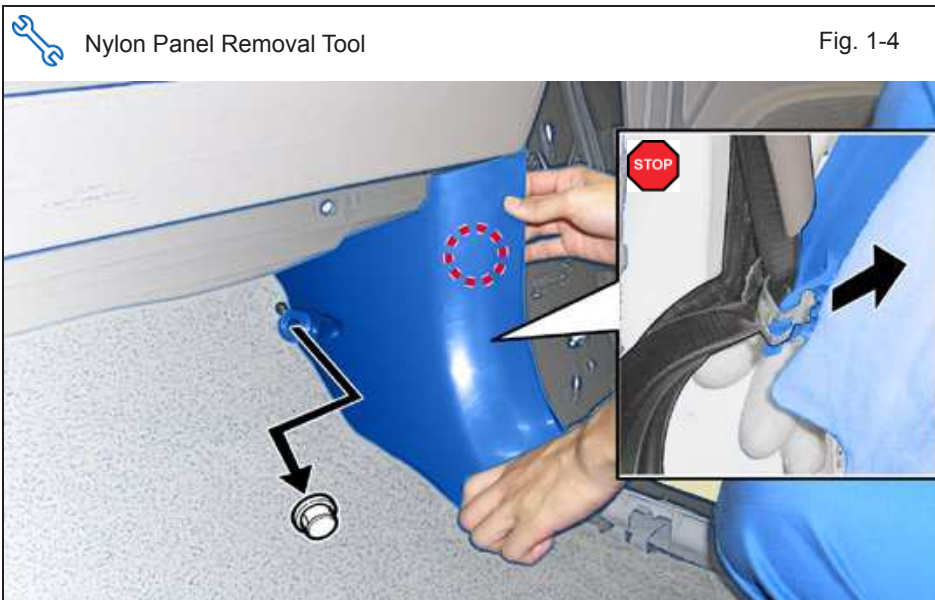
d. Remove the Glovebox Under Cover.

- Remove 1 Screw.
- Release the Harness Clamp and Foot Lamp.



**CAUTION:** Do not break the Foot Lamp.



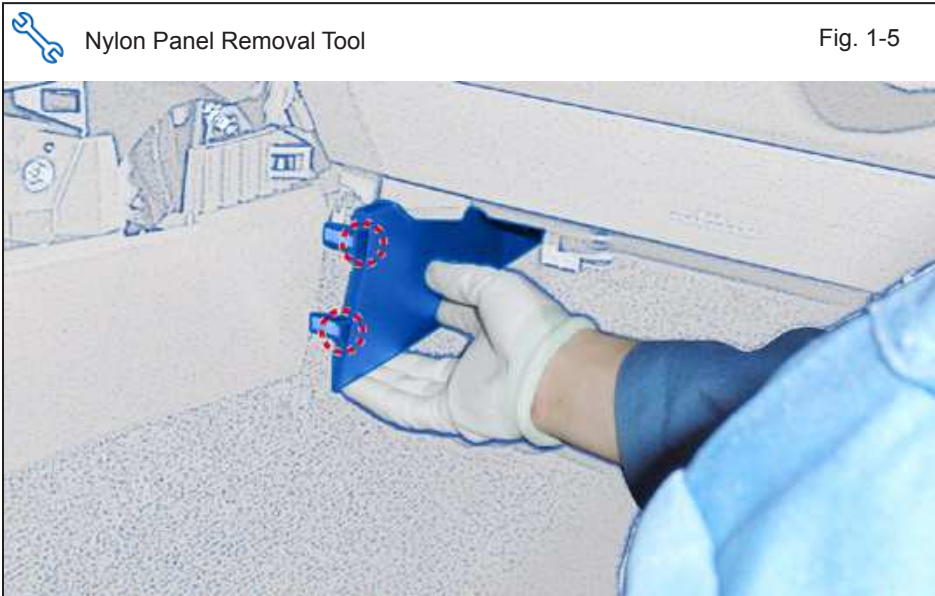


e. Remove the Passenger's Side Cowl Cover.

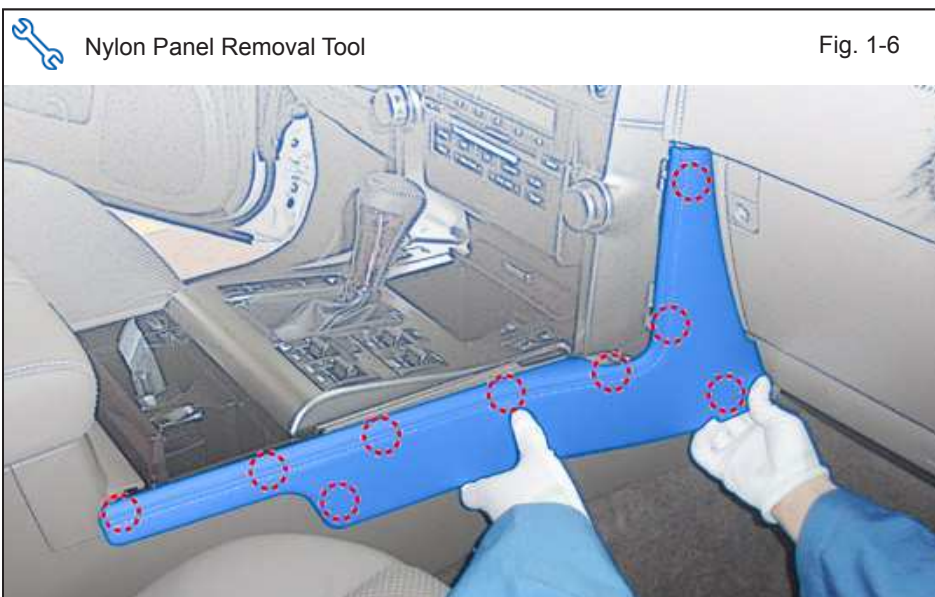
- Remove 1 Nut.



**NOTE:** The Metal Clip may be difficult to remove. Re-secure it to the Vehicle if it comes off.



f. Remove the Passenger's Side Console Box Panel.



g. Remove the Passenger's Side Instrument Lower Panel.

- h. Remove the Passenger's Airbag Side Cover.

 Nylon Panel Removal Tool

Fig. 1-7




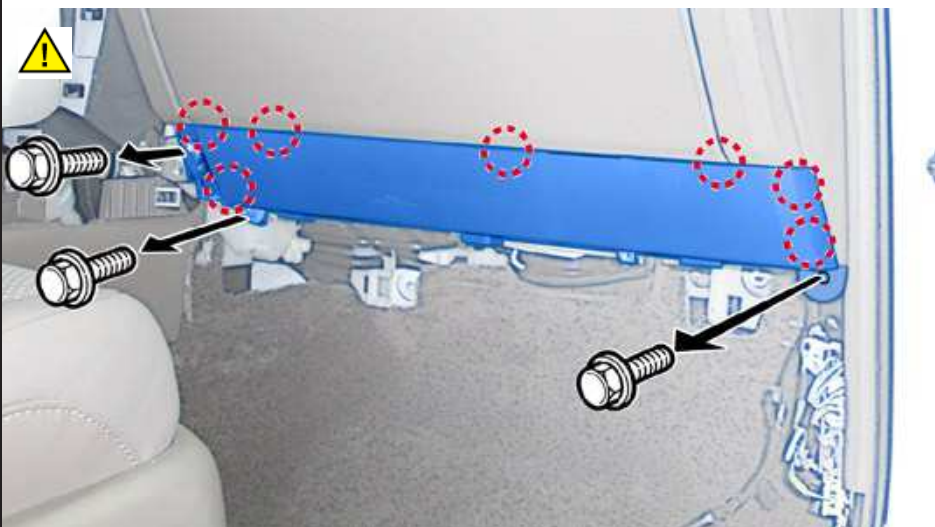
 10mm Socket, Extension, Nylon Panel Removal Tool

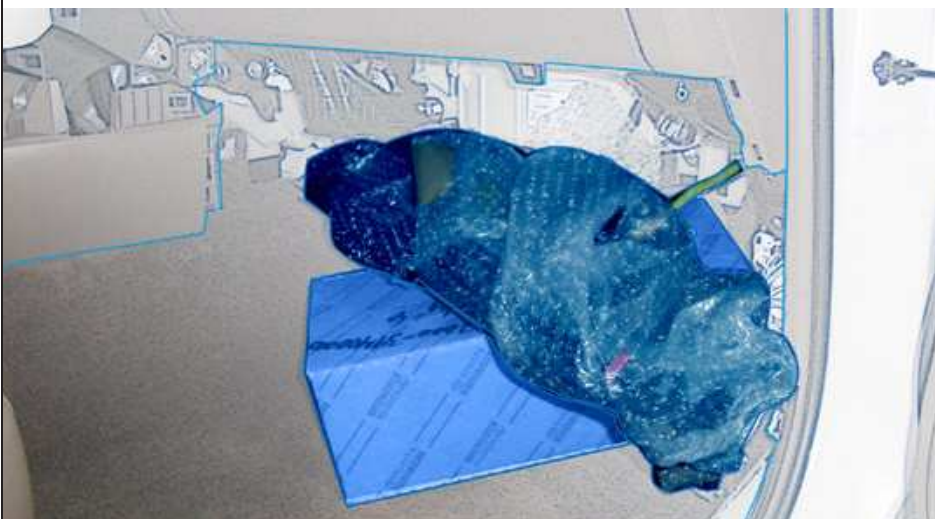
Fig. 1-8



- i. Dislodge the Passenger's Side Knee Airbag.
  - Remove 3 Bolts.

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

Fig. 1-9



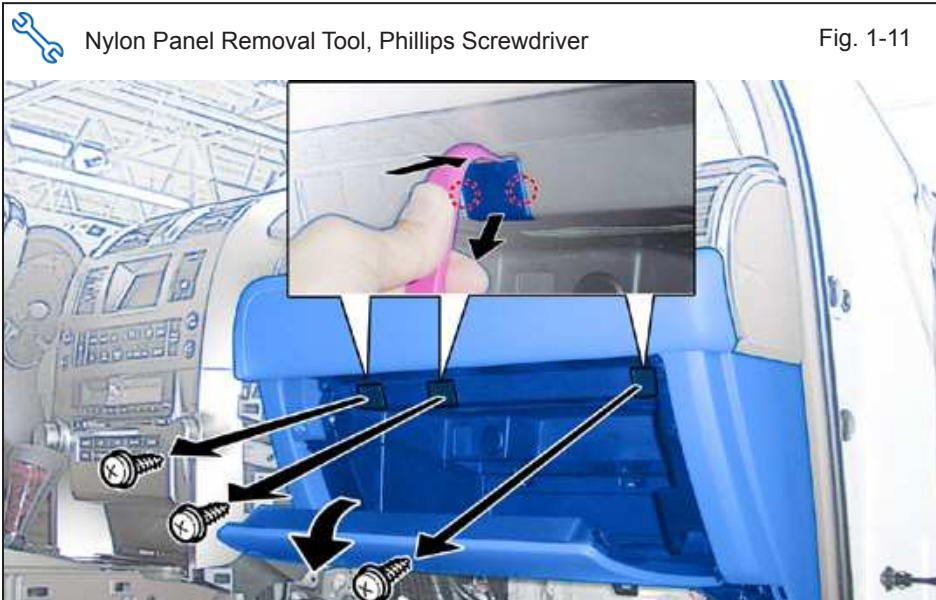
- j. Wrap up the Airbag.
- k. Temporarily place the Knee Airbag on any object that will prevent stress on the Airbag Wire.



- I. Remove 2 Bolts from the Glovebox.



- m. Remove 3 Screws from the Glovebox.
  - Open the Glovebox.
  - Remove 3 Screw Covers.



- n. Dislodge the Glovebox.





 Needle Nose Pliers

Fig. 1-13



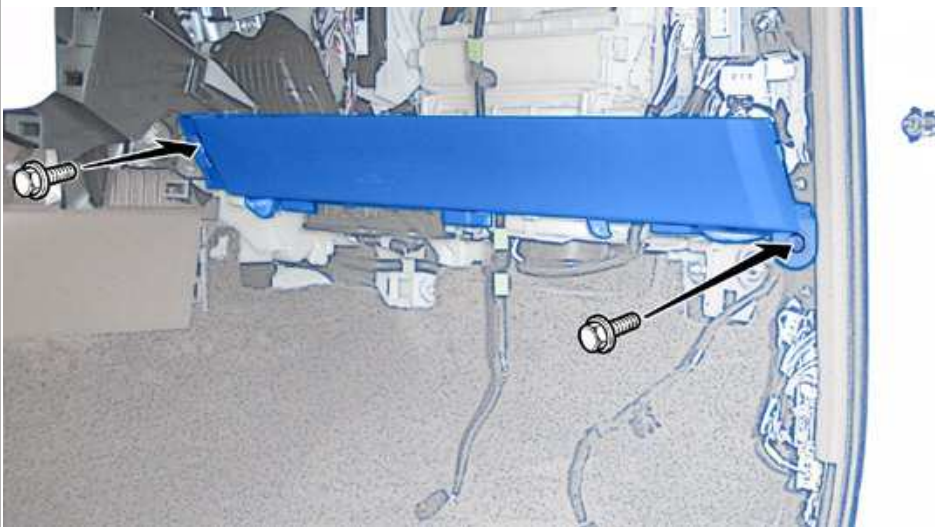
- o. Remove the Glovebox Lamp Assembly and Harness from backside of the Glovebox.
  - Remove 2 Harness Clamps.



**CAUTION:** Do not break the Glovebox Lamp.

 10mm Socket, Extension

Fig. 1-14



- p. Temporarily install the Passenger's Side Knee Airbag.


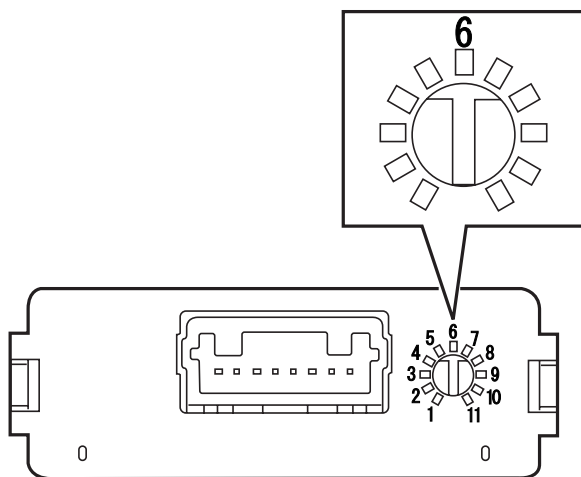
 Jeweler's Flat Blade Screwdriver

Fig. 2-1



## 2. GBS ECU Preparation and Installation

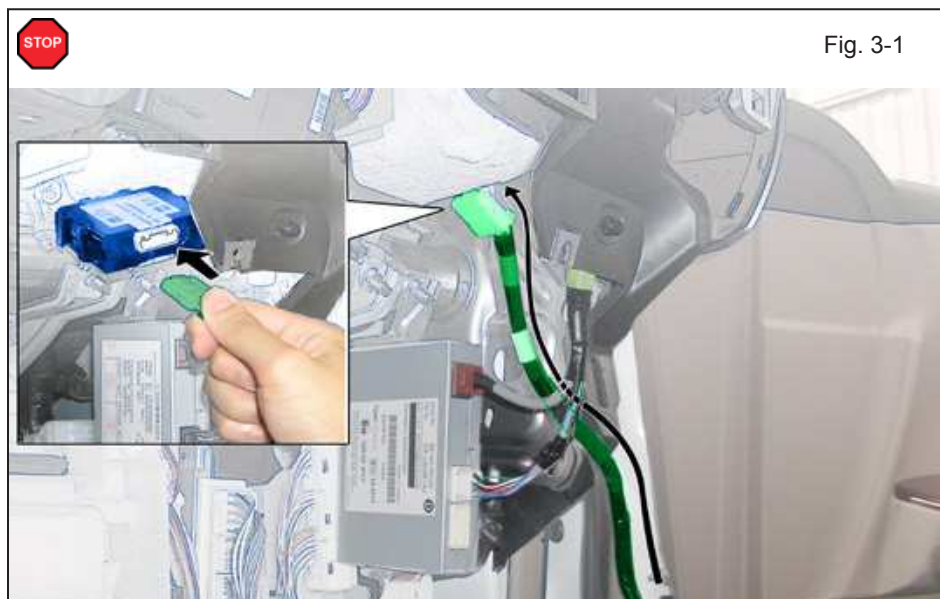
- a. Set the GBS sensitivity value to "6".



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



- c. Install the GBS ECU using the supplied Nut.
  - Tighten 1 Nut.



### 3. V2 Harness Installation

- STOP a. Route the V2 Harness behind the Vehicle Harness as shown.
- b. Connect the V2 White 8P Connector to the GBS ECU.



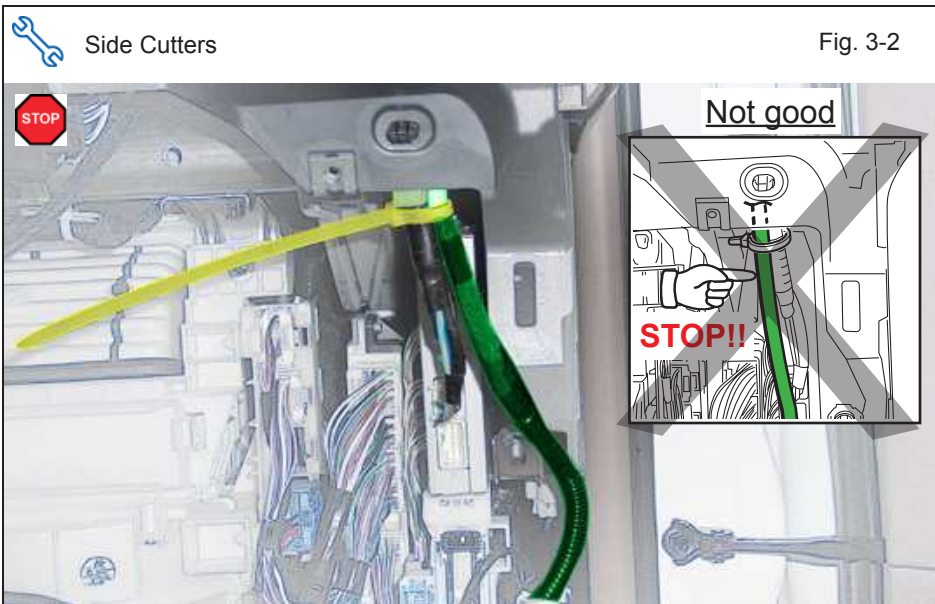


Fig. 3-2



- c. Confirm that the V2 Harness is positioned as shown.
- d. Secure the V2 Harness's White Tape Maker to the Vehicle Harness with 1 Wire Tie.

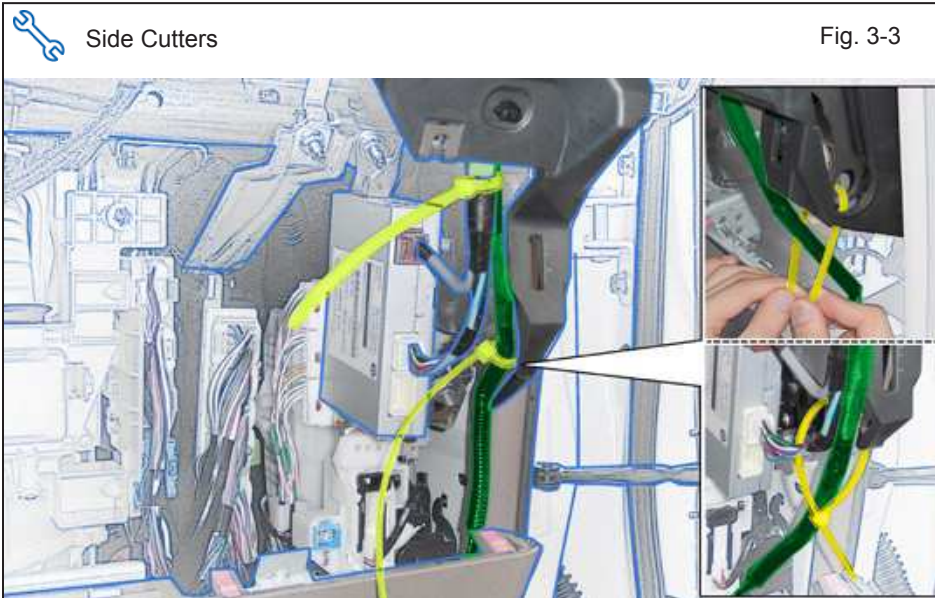


Fig. 3-3

- e. Using 1 Wire Tie secure the V2 Harness to the Vehicle Brace as shown.

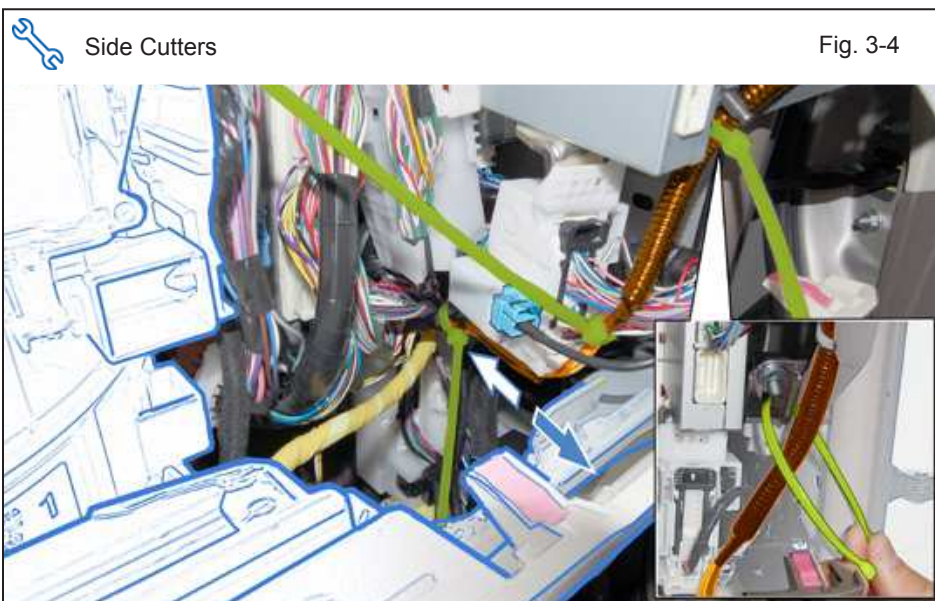


Fig. 3-4

- f. Using 1 Wire Tie secure the V2 Harness to the Vehicle Brace as shown.
- g. Route the V2 Harness as shown.
  - For Vehicles with a Blue 2P Connector disconnect the connector while routing and then reconnect.
- h. Secure the V2 Harness to the Vehicle Harness with 2 Wire Ties.

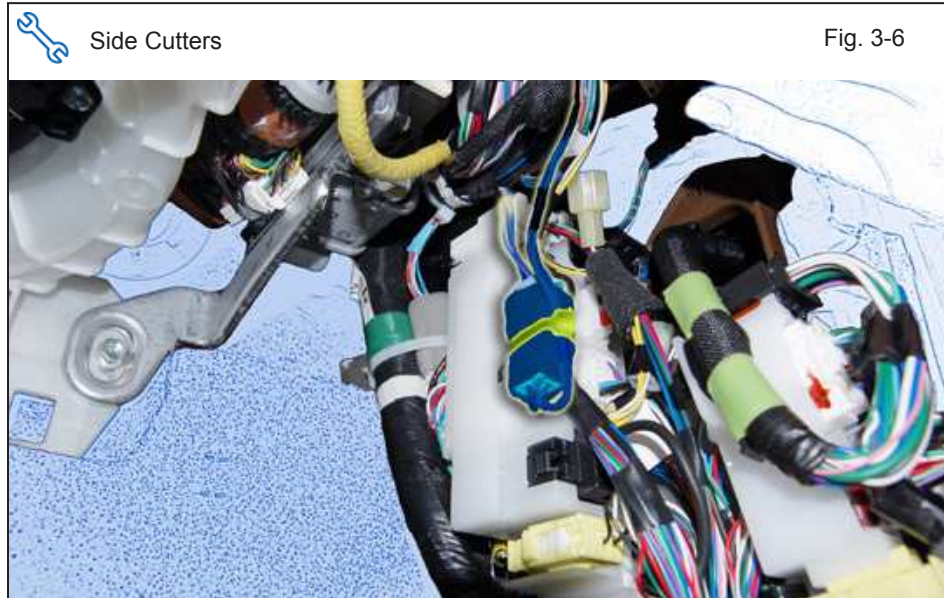




Fig. 3-5

**V2 ONLY**

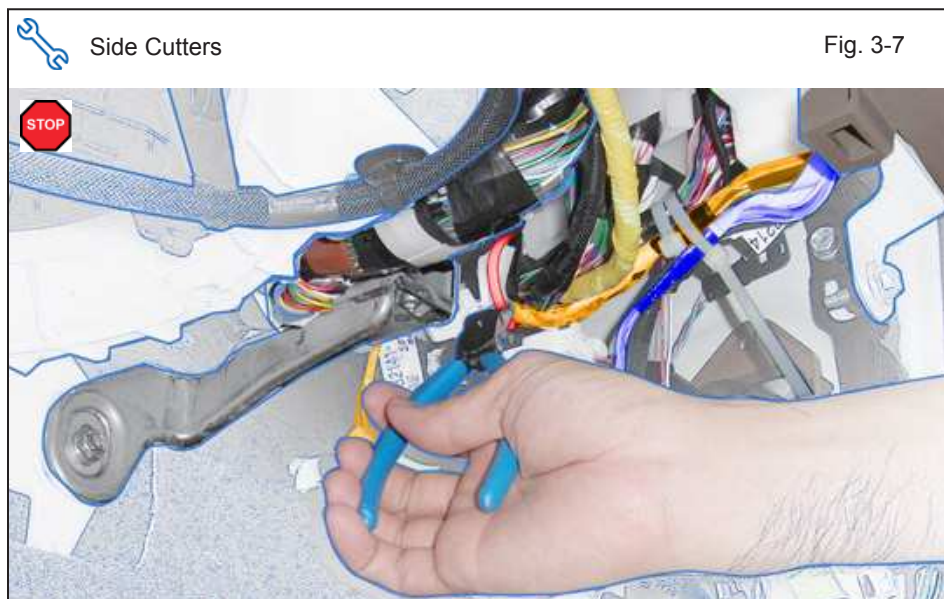
- i. Locate the Vehicle's White 4P Pre-connector in the Passenger's Side Connector Block area.
- j. Remove the Tape securing the Vehicle's White 4P Pre-connector.



 Side Cutters

Fig. 3-6

- k. Connect the V2 Harness's 4P Connector to the Vehicle's 4P Pre-connector.
- l. Secure the 4P Connectors to the Vehicle Harness with 1 Wire Tie.



 Side Cutters

Fig. 3-7

**V2/V4 ADD-ON ONLY**

- m. Cut the Wire Tie Securing the V4 Harness to the Vehicle Harness in the Passenger's Side Connector Block Area.



**CAUTION:** Do not cut any of the Vehicle's Wires.





Fig. 3-8

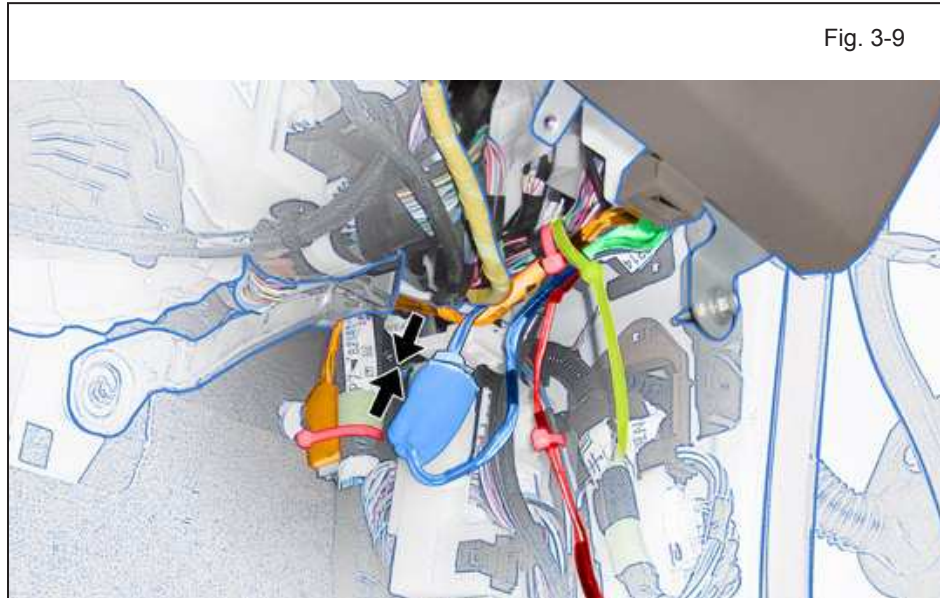
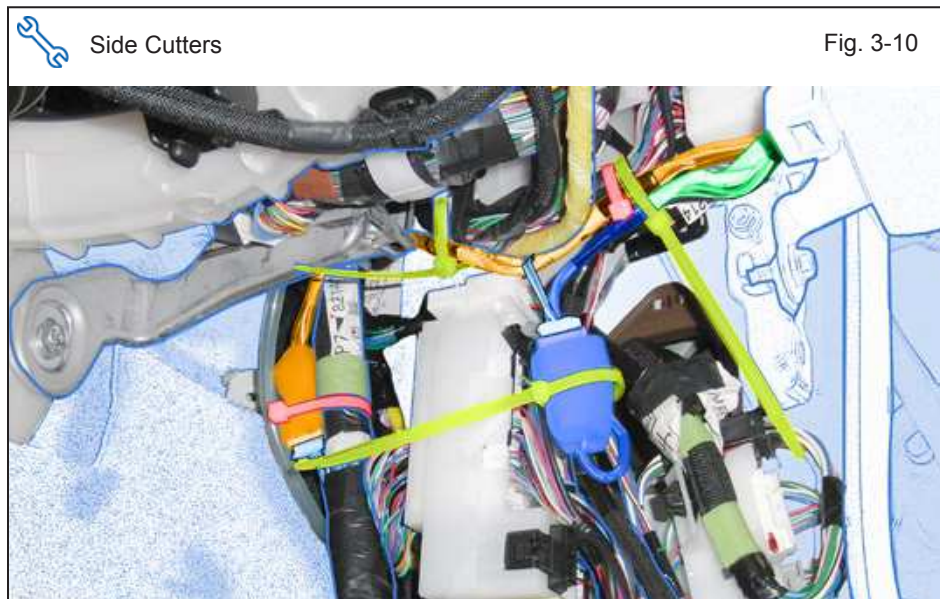


Fig. 3-9



 Side Cutters

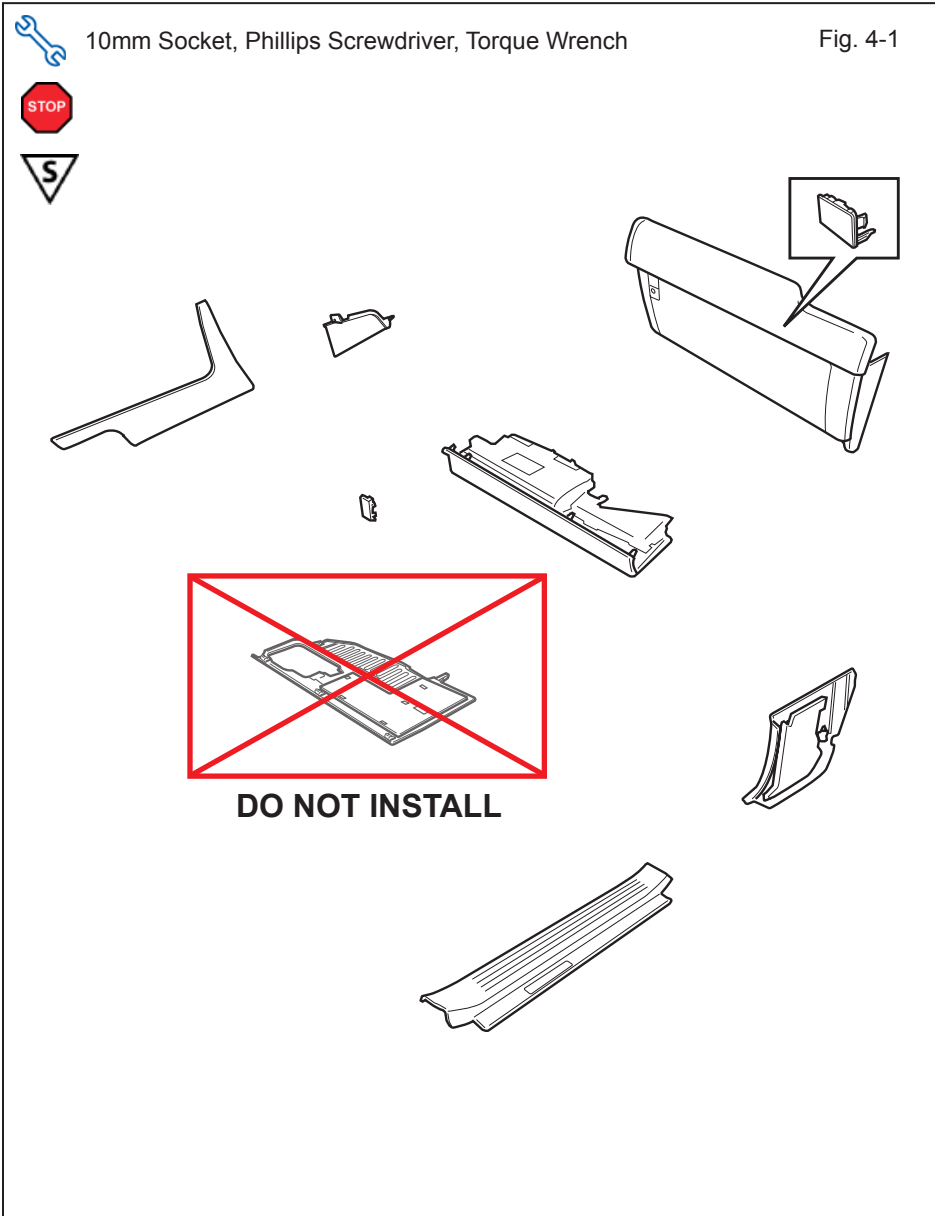
Fig. 3-10

**V2/V4 ADD-ON ONLY**

- n. Locate the Vehicle's White 4P Pre-connector in the Passenger's Side Connector Block area.
- o. Remove the Tape securing the Vehicle's White 4P Pre-connector.
  
- p. Connect the V2 Harness's 4P Connector to the Vehicle's 4P Pre-connector.
  
  
  
  
  
  
  
  
  
  
- q. Secure the 4P Connectors to the Vehicle Harness with 1 Wire Tie.
- r. Re-secure the V4 Harness to the Vehicle Harness with 1 Wire Tie.



- s. Secure the V2 Harness's Red Tape Maker to the Foot Lamp Harness Clamp with 1 Wire Tie.
- t. Secure the V2 Harness and the Microphone's White 2P Connector to the Foot Lamp Harness with 2 Wire Ties.



#### 4. GBS Microphone Installation

- a. Reassemble the Vehicle.

- S** **NOTE:** When reinstalling Knee Airbag, make sure to tighten the Bolts to 88.5 in•lbf (10 N•m).
- STOP** **VERIFY:** That panels fit together properly, with no uneven gaps.
- STOP** **VERIFY:** That all Connectors are plugged in.



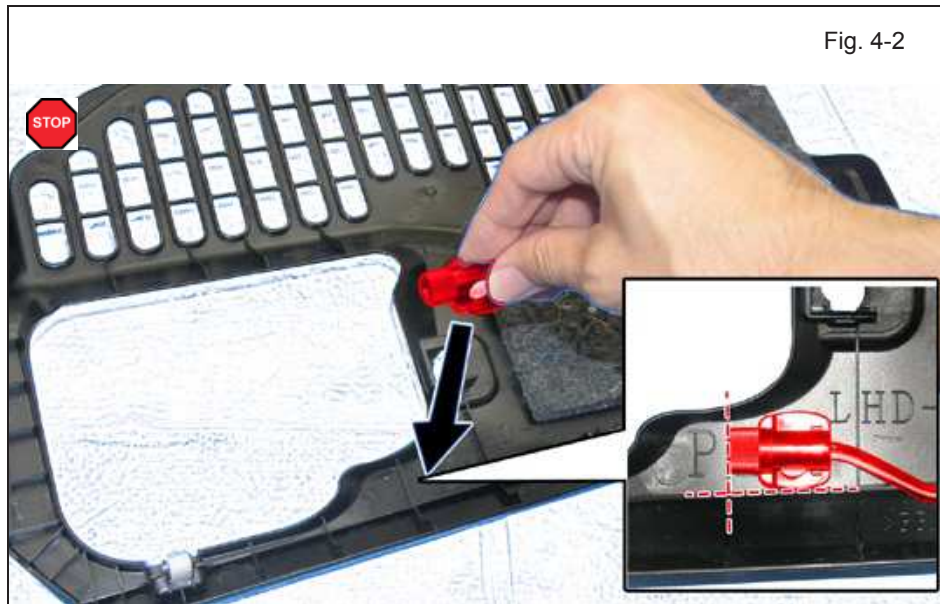


Fig. 4-2

- b. Using VDC approved Cleaner and Cleaning Method, clean the area indicated on the Glovebox Under Cover.
- c. Remove the Protective Backing from the GBS Microphone.



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

- d. Attach the Microphone to the Glovebox Under Cover.

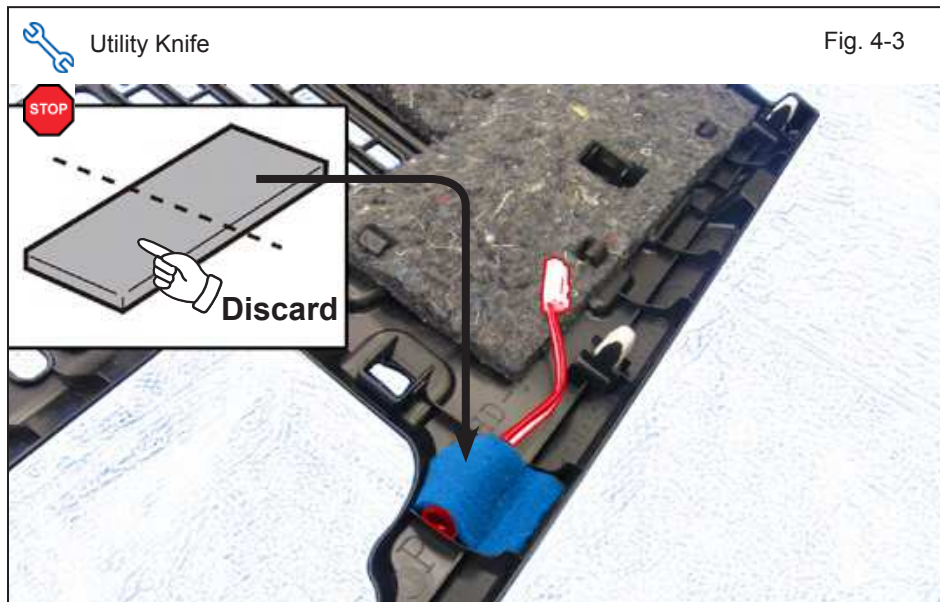


Fig. 4-3

- e. Cut 1 Foam Tape in half.
- f. Use 1/2 Foam Tape to secure the Microphone to the Glovebox Under Cover.



**CAUTION:** Do not cover the Microphone opening with the Foam Tape.

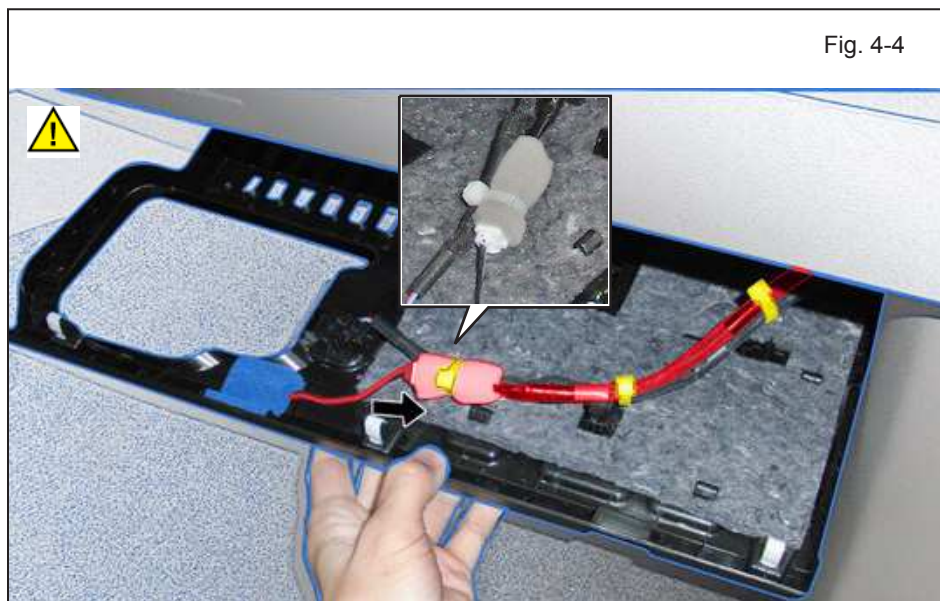


Fig. 4-4

- g. Re-install the Foot Lamp Harness to the Glovebox Under Cover.
- h. Connect the V2 Harness's White 2P Connector to the Microphone's 2P Connector.



**CAUTION:** Place the GBS Microphone's 2P Connector as shown. If the Connector is put in a different place, the Microphone Harness might be damaged.


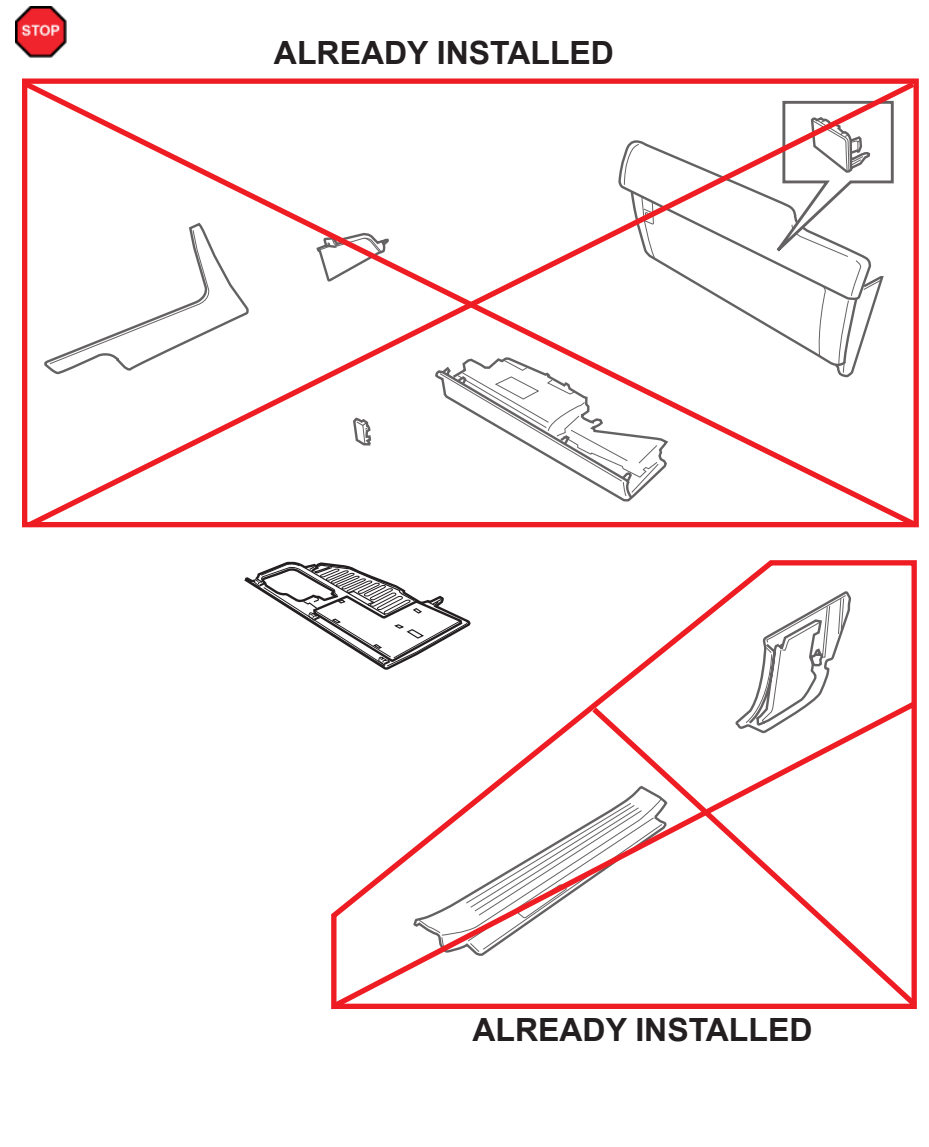
 Phillips Screwdriver

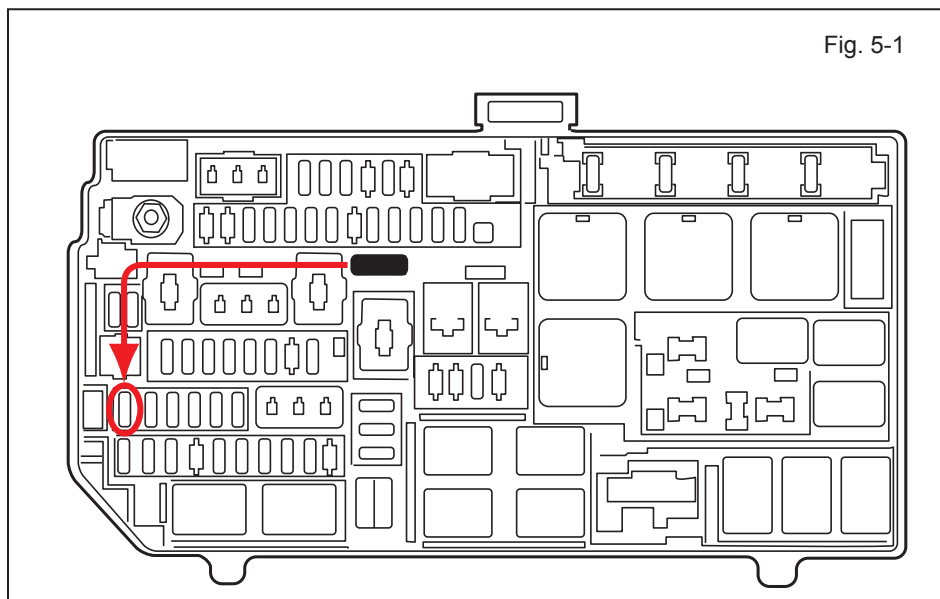
Fig. 4-5



i. Reinstall the Glovebox Under Cover.

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

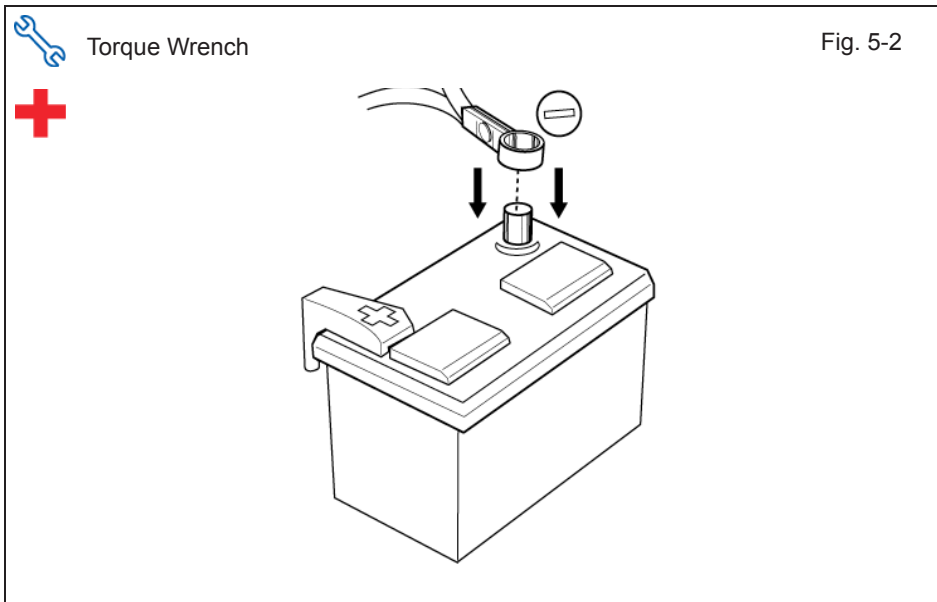
**STOP** **VERIFY:** That all Connectors are plugged in.



## 5. Complete the Installation

- a. Verify that the Short Pin is Installed.
  - If not install now.

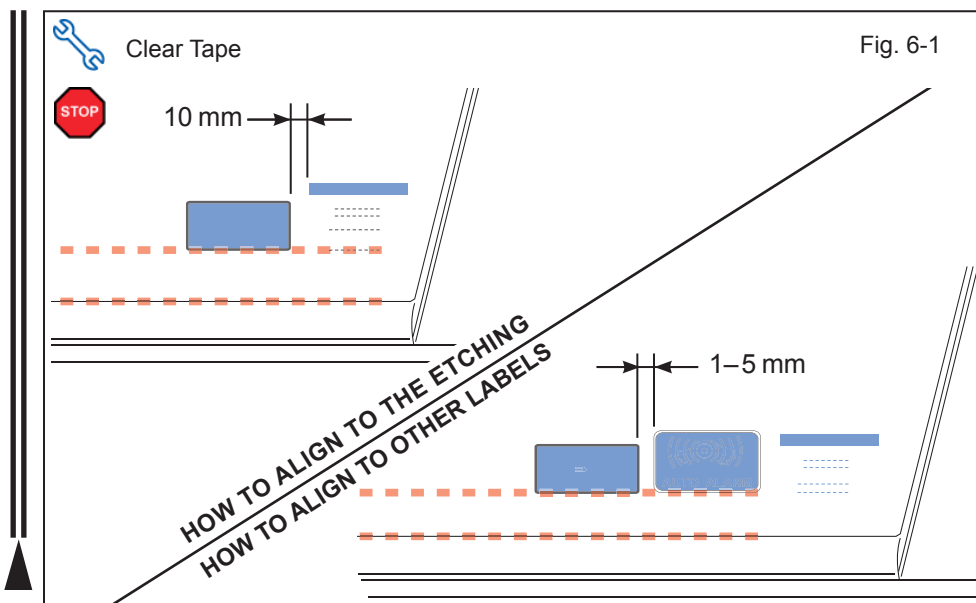




- b. Position the Negative Battery Cable at the original factory position.
  - Tighten the Nut to 36 in•lbf (4.07 N•m)

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

- c. Clean up and remove trash.
- d. Sealed in its protective bag, place the Owner's Guide 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.
  - 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.



## 6. Window Label Installation

- a. Use Household Glass Cleaner to clean the inside of the Front Door Window.
- b. Use a piece of Clear Tape to lift the Label from the protective backing.

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

- c. Attach the Label as shown.

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

**REPEAT:** steps a-c with the other Window.

**Accessory Function Checks**

Roll up all windows, and exit the vehicle with the remote.



**Take out the Smart Key and the Smart Card Key from the Vehicle. Place them 7 ft. (2 meters) or more away from the Vehicle.**

	Perform	Look For
1	Lock the doors 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), tap the center of the driver’s door window to trigger the alarm.  <b>NOTE:</b> Make sure that the Smart Key and Smart Card are at least 7 ft. (2 meters) away.	The horn sounds repeatedly. The headlights flash repeatedly. The turn signal lights flash repeatedly. The Security LED lights up.
4	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 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)

Function		Function	
<input type="checkbox"/>	Power Sliding Door (if equipped)	<input type="checkbox"/>	Rear Sunshade (if equipped)
<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.

