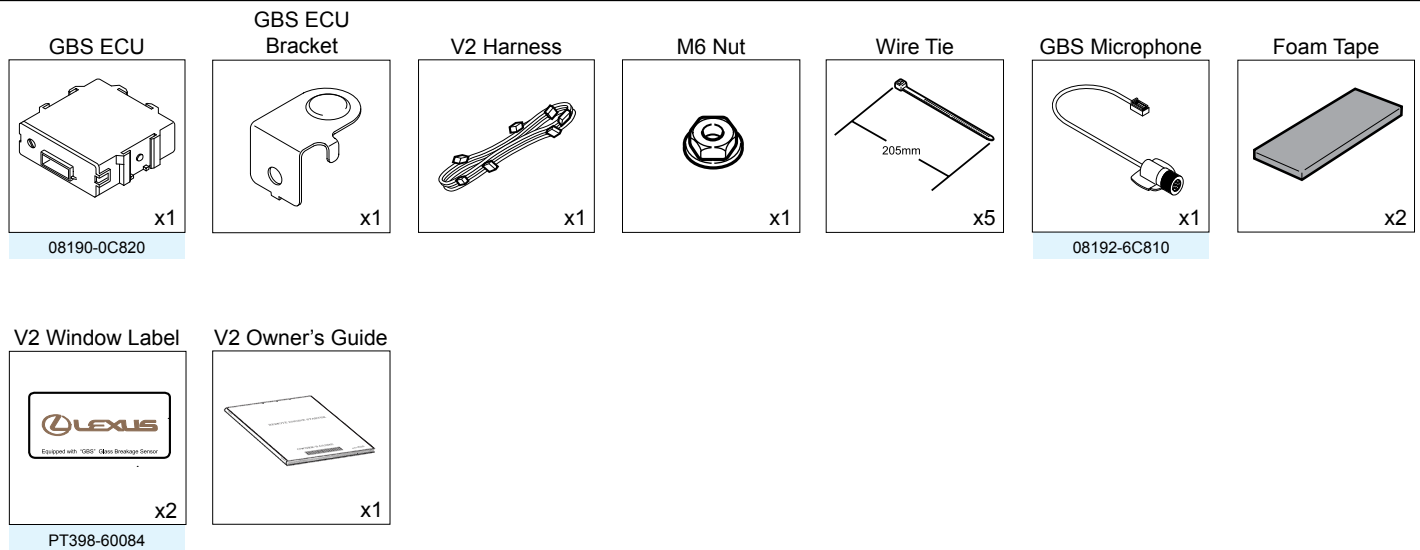


Part #: PT398-53140

Conflicts:

Kit Contents



Service Part #'s

Additional Items

(may be required)

Item#	Description

Recommended Sequence of Application

Item#	Description
1	Remote Engine Starter (RES)
2	Glass Breakage Sensor (GBS)









Recommended Tools

Personal & Vehicle Protection	Description
Safety Glasses	
Safety Gloves	(Optional)
Vehicle Protection	Blankets, Parts Box
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	
Socket	10mm, Extension
Pliers	45° Angled Needle Nose
Torque Wrench	Battery: 48 in•lbf (5.4 N•m), Passenger's knee Airbag: 88.5 in•lbf (10 N•m)
Tape	Clear
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.
-  Wire Tie location and number.

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.

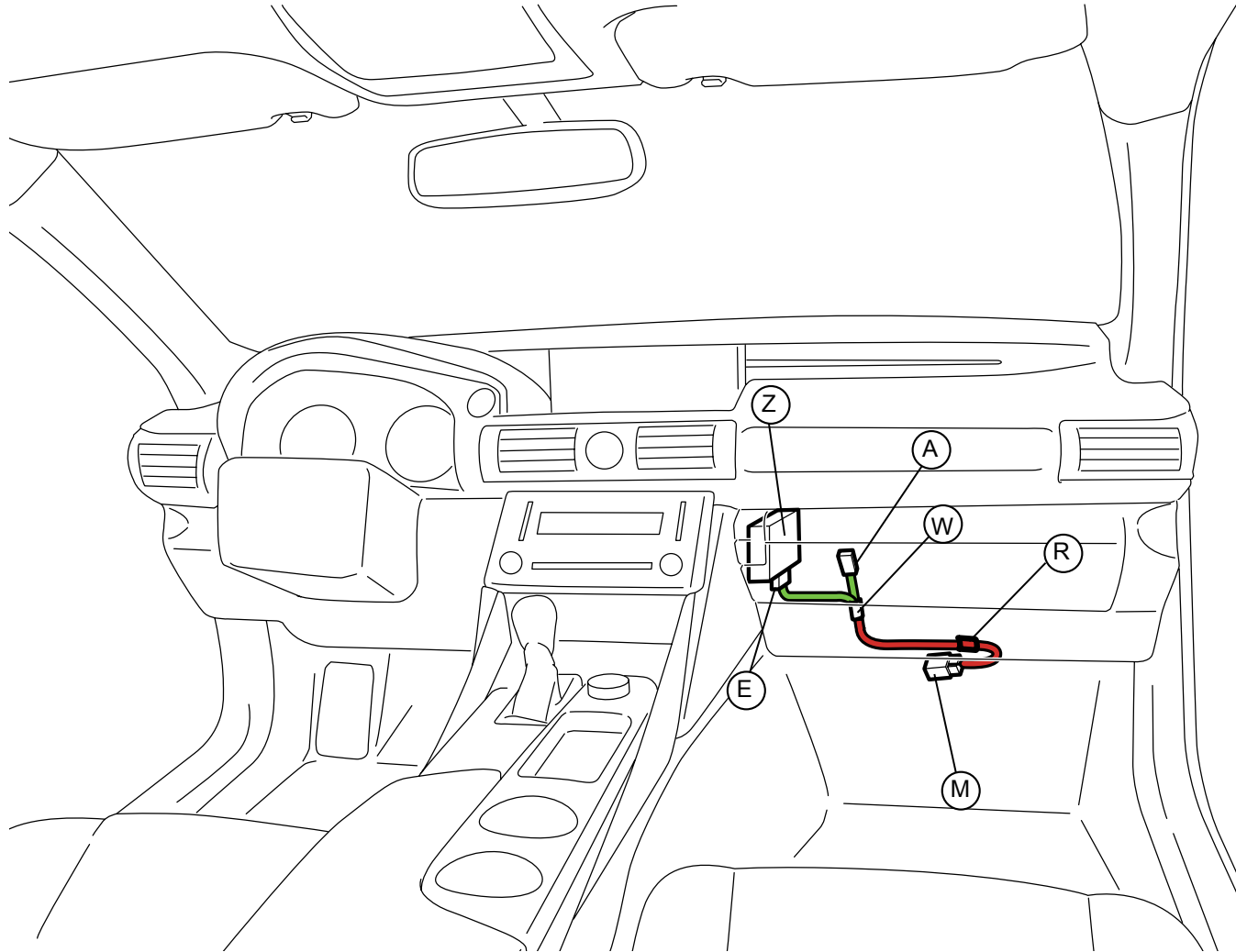
These guidelines can be found in the “Accessory Installation Practices” document.

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.

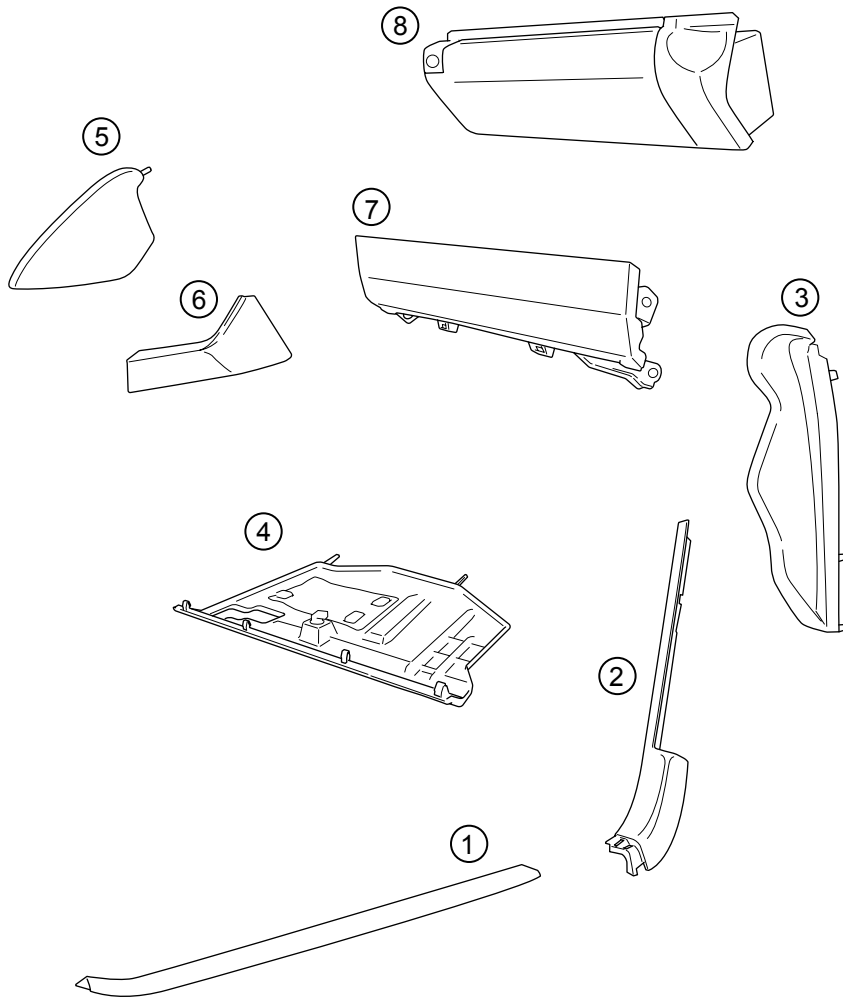
LEXUS IS 250/350 GBS Wire Harness Outline*



TVIP	Vehicle	Description
A		8P White
E	—	8P White <i>(for GBS ECU)</i>
M	—	2P White <i>(for GBS MIC)</i>
R	—	Red Tape Marker
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	PS Cowl Cover
3	PS Dash Cover
4	PS Under Cover
5	Center Console PS Panel #1
6	Center Console PS Panel #2
7	PS Knee Airbag
8	Glove Box
Disconnect all Corresponding Connectors, except for the PS Knee Airbag Connector.	

1. Vehicle Disassembly.

- 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.

c. Remove the Passenger Side Step Cover.

d. Remove the Passenger Side Cowl Cover.

e. Remove the Passenger Side Dash Cover.



f. Dislodge the Passenger Side Under Cover.

g. Disconnect the Under Cover Foot Lamp connector.

h. Remove the Under Cover.

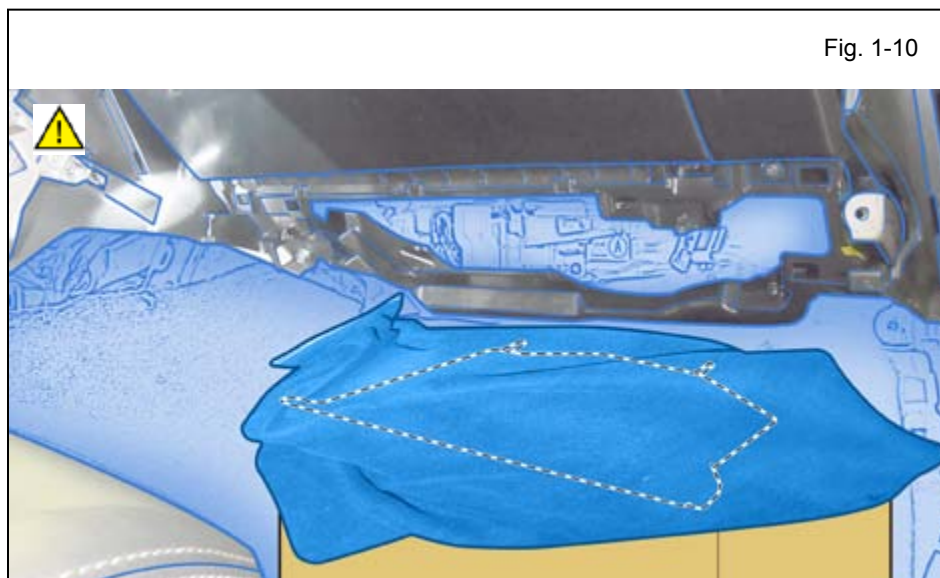
i. Remove the Center Console's Passenger Side Panel #1.

- j. Remove the Center Console's Passenger Side Panel #2.

- k. Dislodge the Passenger's Knee Airbag carefully.
 - Remove 3 Bolts.



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



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

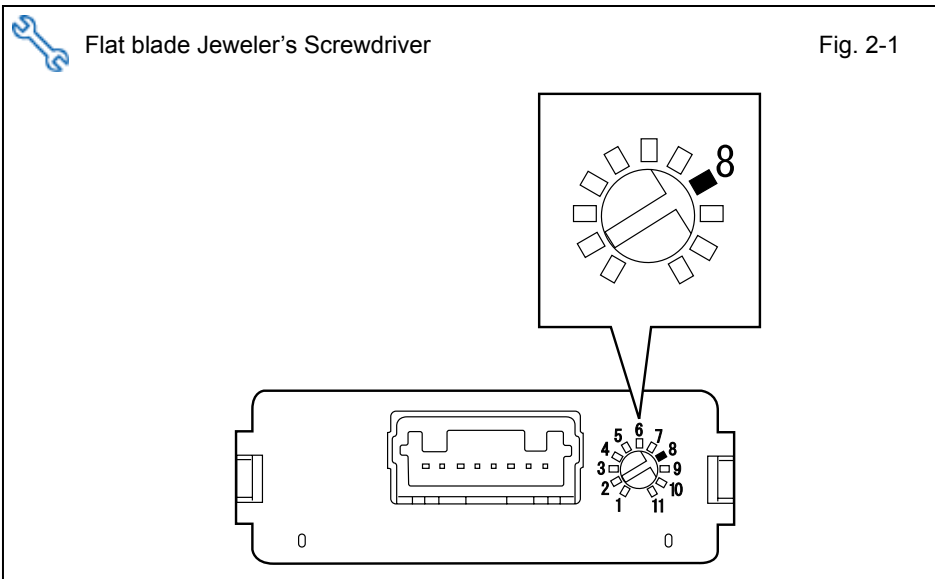


CAUTION: Prevent stress on the Airbag Harness.

- m. Remove 2 Screws from the bottom of the Glove Box.

- || n. Open the Glove Box and remove 3 Screws.
- o. Dislodge the Glove Box.

- p. Disconnect the Vehicle Connectors.
- || q. Pinch the Vehicle Harness Clamp to remove from the Glove Box.
- r. Remove the Glove Box.

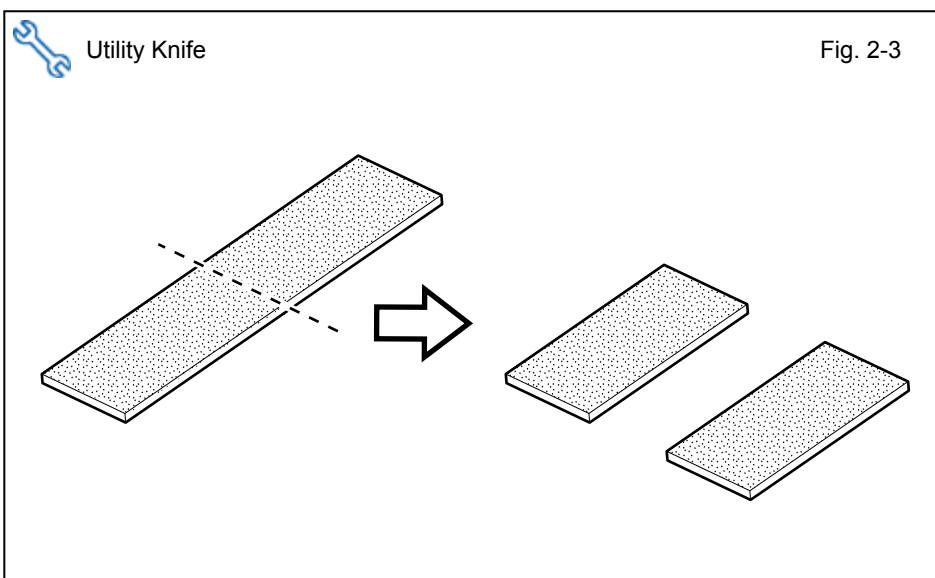


2. V2 ECU Preparation and Installation.

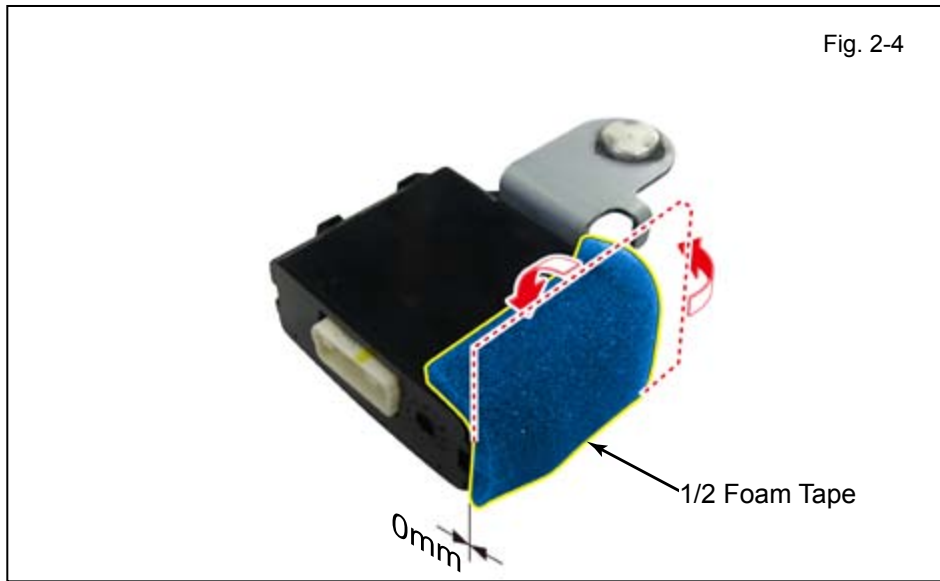
- a. Set the GBS Sensitivity Value to "8."



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



- c. Cut the Foam Tape in half.
 - Discard the other half.



- d. Attach 1/2 Foam Tape to the GBS ECU as shown.

- e. Install the GBS ECU using the supplied Nut.



NOTE: Make sure the Guide Pin is seated correctly, and verify that the Nut is tightened securely.

3. V2 Harness Installation.

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



NOTE: If V4 (RES) is installed in the vehicle, skip to page 12 for V2/V4 Add-on (steps f-g).

V2 ONLY

b. Locate and remove the Tape securing the Vehicle's White 8P Pre-Connector.

c. Connect the V2 White 8P Connector to the Vehicle's White 8P Pre-Connector.

d. Secure the 8P Connectors behind the Vehicle Harness using 1 Wire Tie.

- Rotate the ratchet end of the Wire Tie toward center of the vehicle.

- e. Secure the V2 Harness's White Tape Marker to the Vehicle Harness using 1 Wire Tie.
- Rotate the ratchet end of the Wire Tie toward center of the vehicle.



NOTE: Skip to step h (page 13).

V2/V4 Add-on ONLY

- f. Connect the V2 White 8P Connector to the V4 White 8P Connector.
- g. Secure the V2 Harness's White Tape Marker to the Vehicle Harness using 1 Wire Tie.
- Rotate the ratchet end of the Wire Tie toward center of the vehicle.

- h. Route the V2 Harness behind the HVAC bracket toward the Glove Box Under Cover area.

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

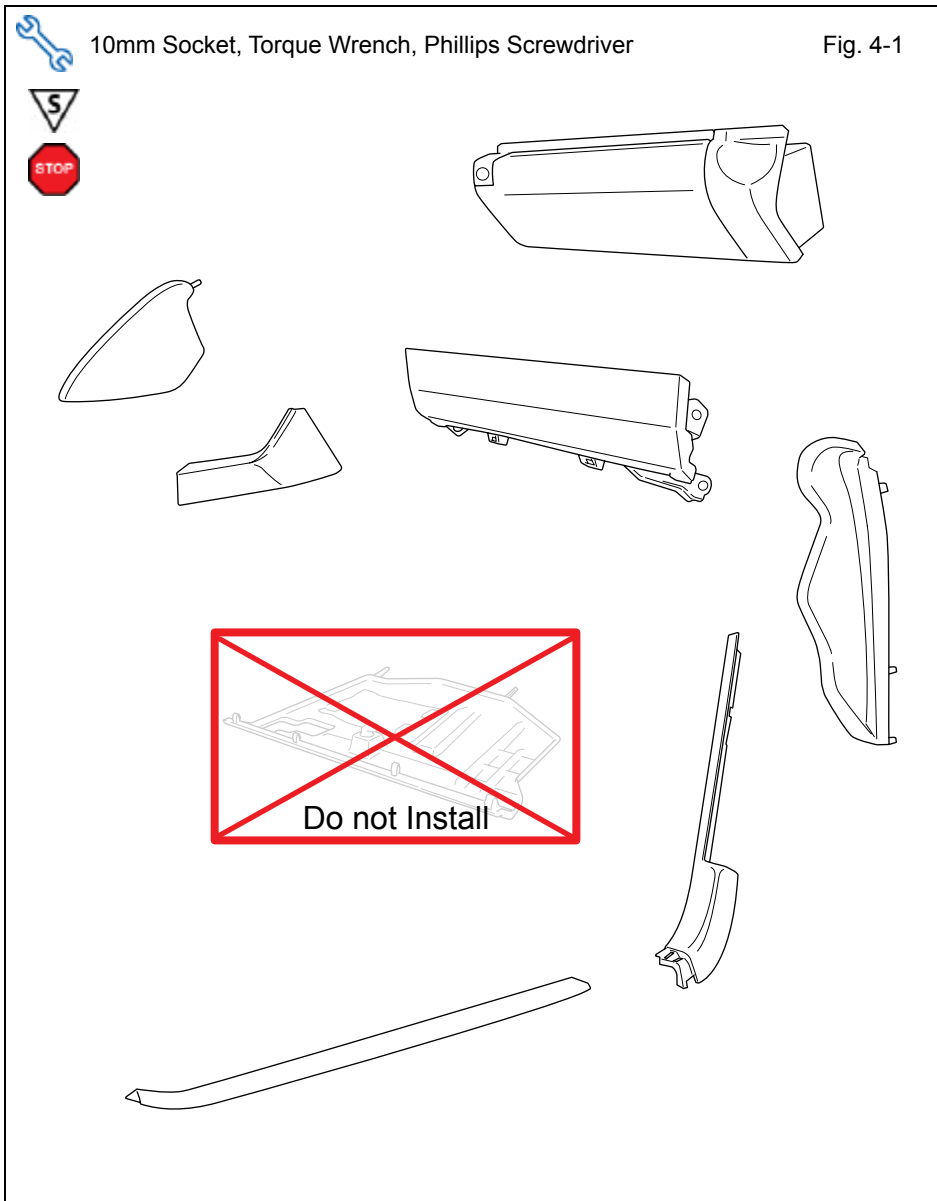
(For V2/V4 Add-on will be Wire Tie#2 instead of #3)

- j. Secure the V2 Harness to the HVAC bracket using 1 Wire Tie.

(For V2/V4 Add-on will be Wire Tie#3 instead of #4)

- k. Secure the V2 Harness to the Vehicle Harness near the HVAC Unit's Pin with 1 Wire Tie.

(For V2/V4 Add-on will be Wire Tie#4 instead of #5)



4. Microphone Installation.

- a. Reassemble the Vehicle except for the Under Cover.



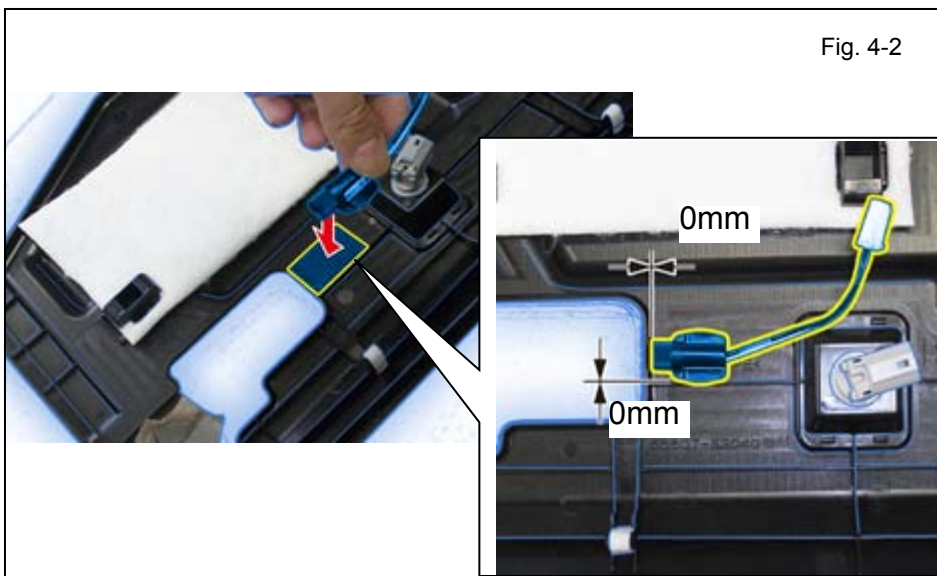
NOTE: When reinstalling Knee Airbag, make sure to tighten the Bolts to 88.5 in·lbf (10 N·m).



VERIFY: That all Connectors are plugged in.



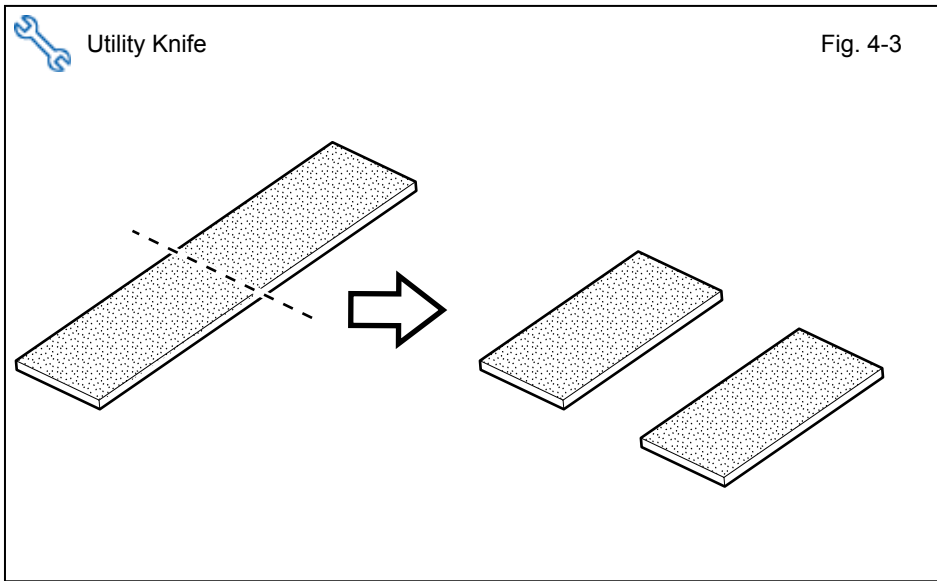
VERIFY: That Panels fit together properly, with no uneven gaps.



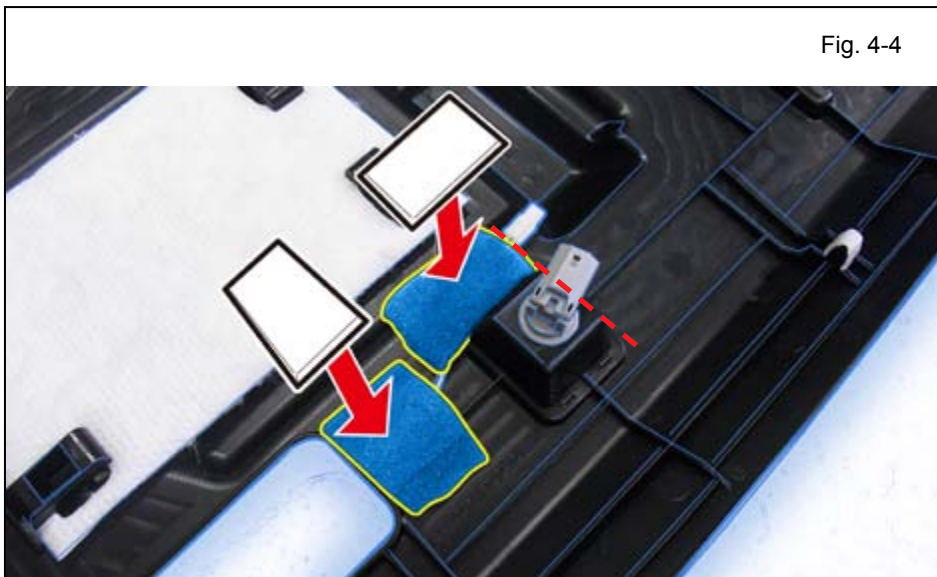
- b. Using the VDC approved cleaner and Cleaning Method, clean the area indicated on the backside of the Under Cover.
- c. Attach the GBS Microphone to the backside of the Under Cover as shown.



NOTE: Make sure to align GBS Microphone to the edge of the Under Cover opening.



d. Cut the Foam Tape in half.



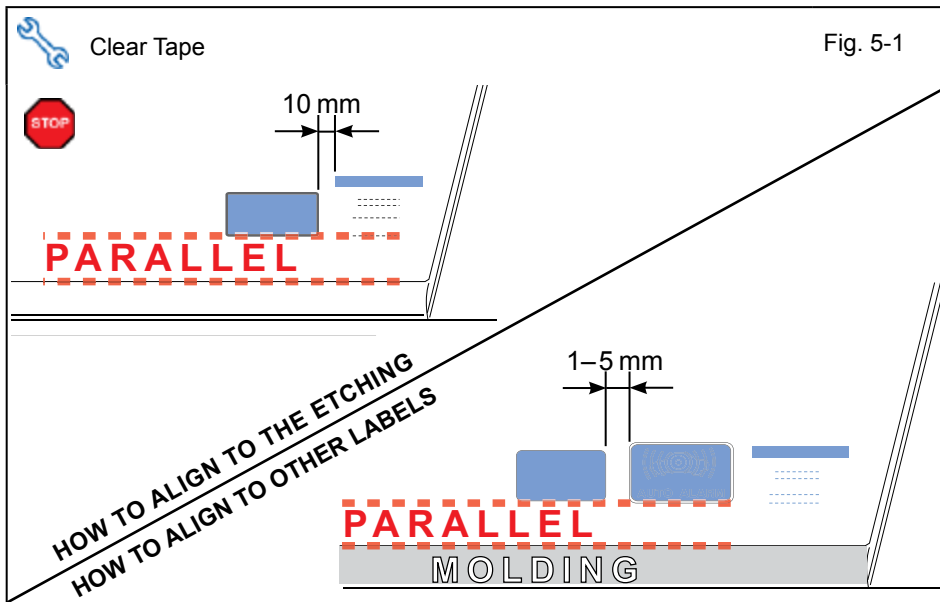
e. Apply the Foam Tapes to the GBS Microphone as shown.



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

- f. Connect the V2 White 2P Connector to the GBS Microphone's Connector.
- g. Reconnect the Foot Lamp connector to the under cover.

h. Reinstall the Under Cover.



5. Complete the Installation.

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



CAUTION: Do not touch the adhesive surface.

- 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.

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



- Tighten the Nut to 48 in•lbf (5.4 N•m)



CAUTION: Do not touch the Positive Terminal.

- Verify that the 30 Amp D/C Cut Fuse is installed.
 - If not, install now.
- Clean up and Remove trash.
- Sealed in its protective bag, place the Owner's Manual in the Glove Box.

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 15 feet (4.5 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.	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 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"/> Horn
---	-------------------------------

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)

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"/>	Massage Seats (if equipped)	<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

