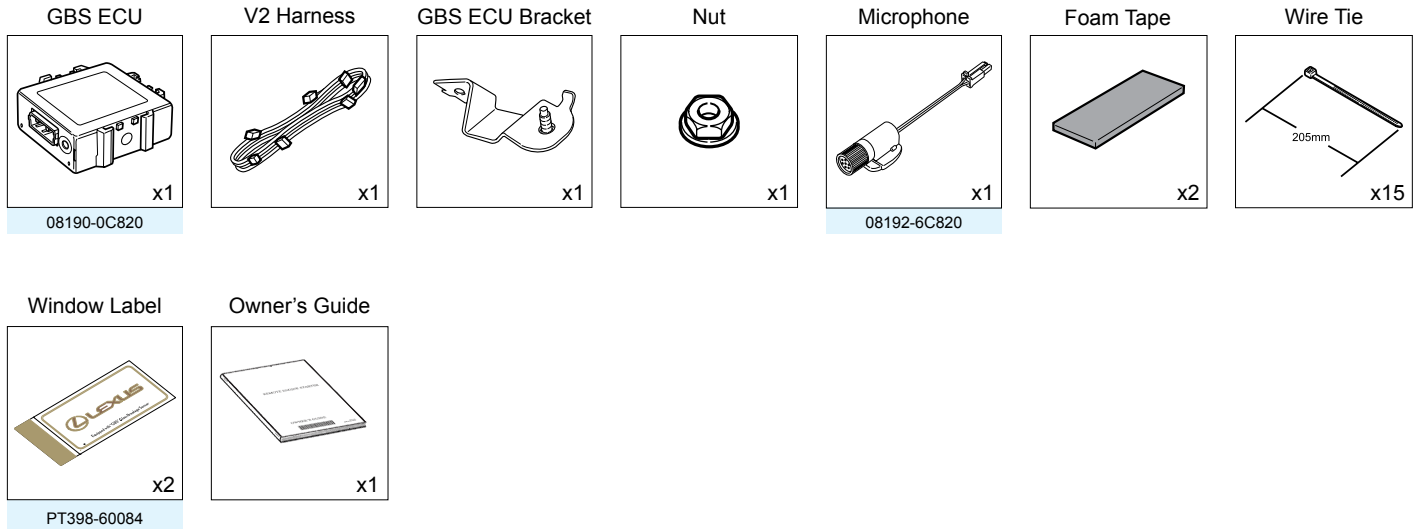


Part #: PT398-76110

Conflicts:

Kit Contents



Service Part #'s

Additional Items

(may be required)

Item#	Description

Recommended Sequence of Application

Item#	Description
1	Illuminated Door Sills
2	TVIP V2 Glass Breakage Sensor
3	TVIP V4 Remote Engine Starter









Recommended Tools

Personal & Vehicle Protection	Description
Safety Glasses	
Safety Gloves	(Optional)
Vehicle Protection	Blankets, Parts Boxes
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	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, Electrical
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.

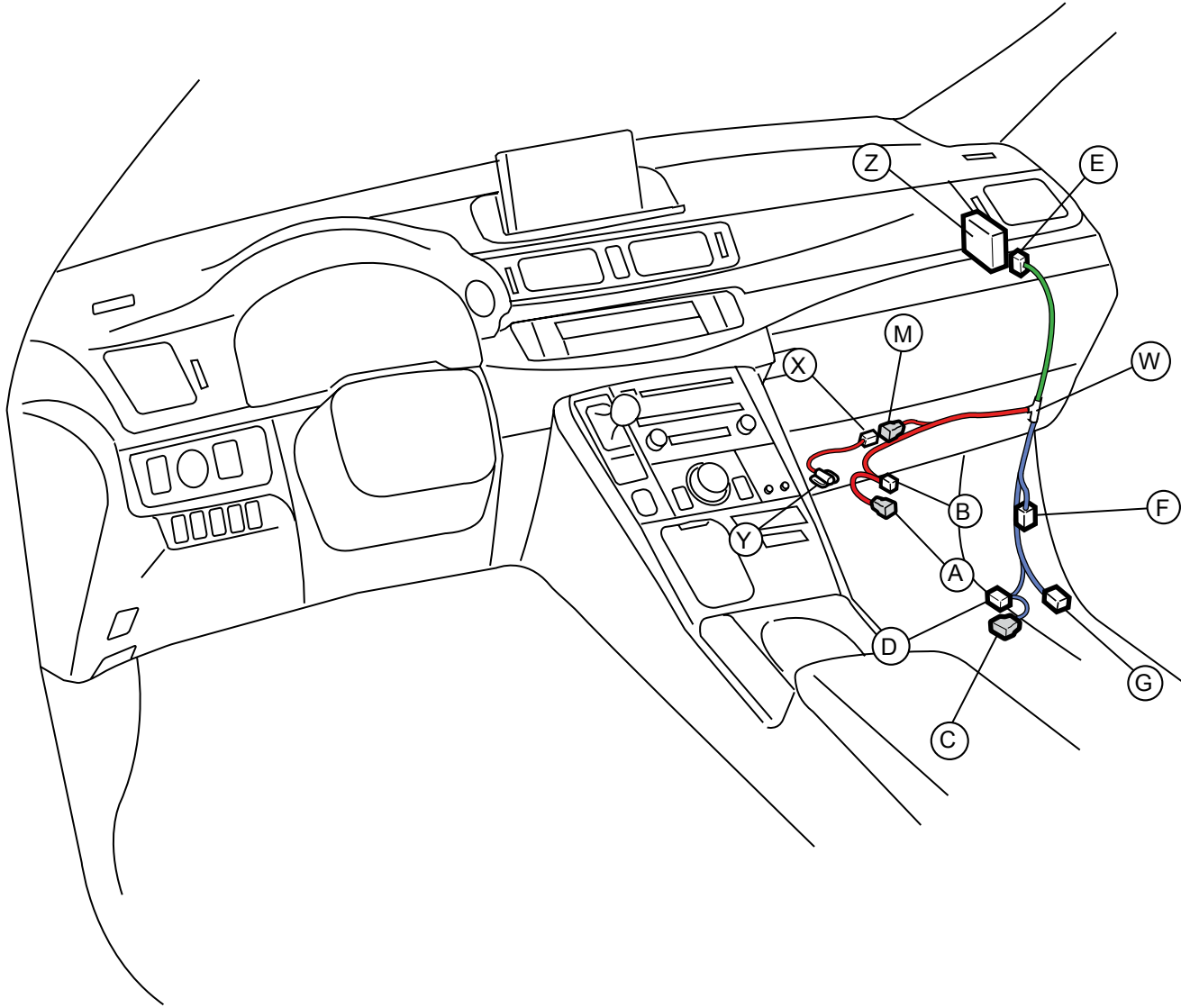
These guidelines can be found in the “Accessory Installation Practices” document.

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.)

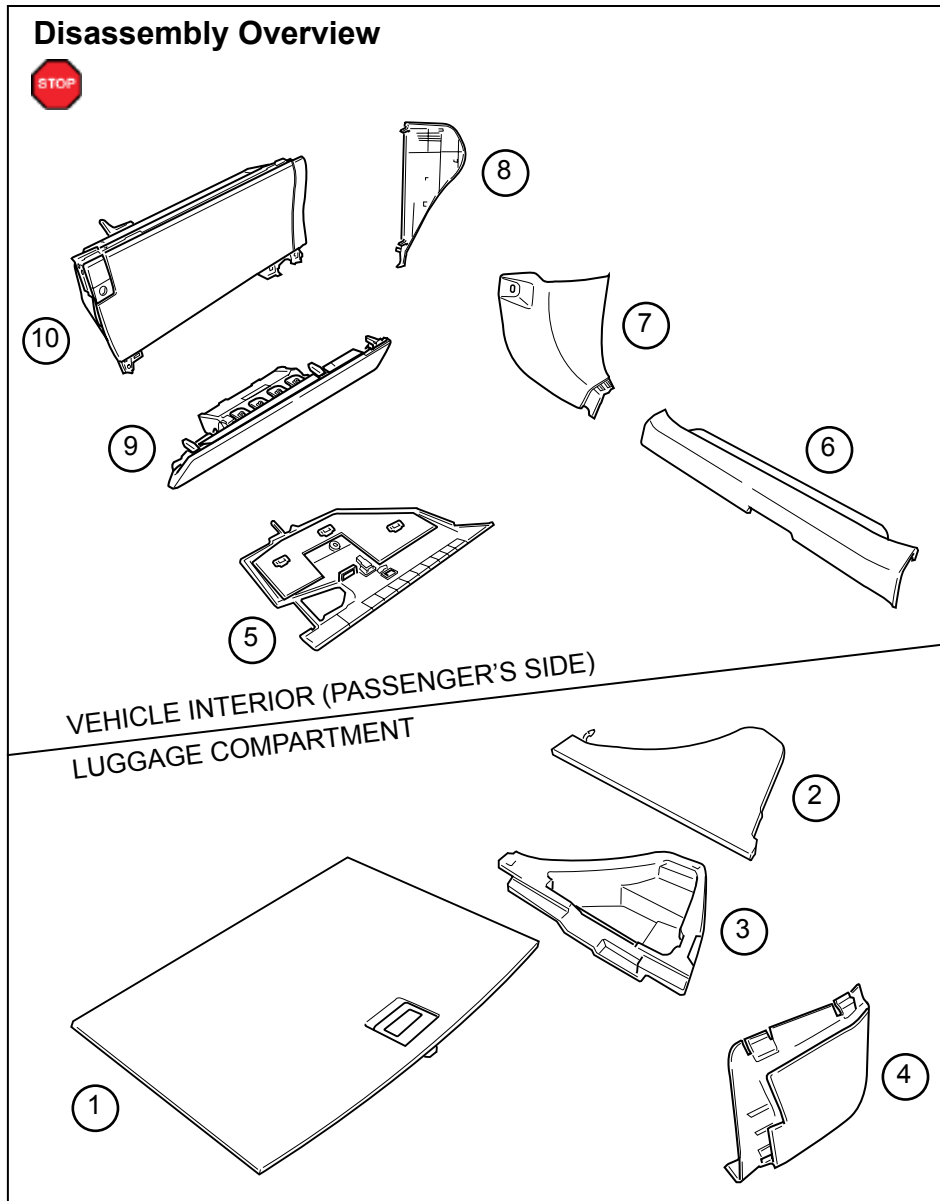
Please see your Lexus dealer for a copy of this document.

CT 200h GBS Wire Harness Outline*



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

TVIP	Vehicle	Description
A	H34	2P White
B	H34	2P Gray
C	JH2	12P White
D	JH2	12P White
E	-	8P White <i>(for GBS ECU)</i>
F	H90	8P White
G	-	8P White
M	-	2P White <i>(for GBS Microphone)</i>
W	-	White Tape Marker
X	-	2P White <i>(GBS Microphone)</i>
Y	-	GBS Microphone
Z	-	GBS ECU



1	Luggage Board
2	PS Luggage Side Board
3	PS Luggage Side Storage Box
4	Rear Trim
5	Glove Box Under Cover
6	PS Step Cover
7	PS Cowl Cover
8	PS Dash Side Cover
9	PS Knee Airbag <i>(Do not disconnect connectors)</i>
10	Glove Box

Disconnect all Corresponding Connectors.

- 1. Vehicle Disassembly (Luggage Compartment).**
- a. Place the vehicle in Park with the Parking Brake set.
 - b. Remove the Luggage Board.

c. Remove the PS Luggage
Side Board.

d. Remove the Luggage
Storage Box.

e. Remove the PS Luggage
Side Storage Box.
• Remove 1 Nut.

f. Remove the Rear Trim.

V2/V4 Add-on ONLY


- c. Disconnect the V4 2P Connector from the Vehicle Connector.
- d. Disconnect the Vehicle Connector (s).
 - Remove 1 Clip.
- e. Remove the Passenger's Side Step Cover.

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




- g. Remove the Passenger's Side Dash Cover.
- Apply Protection tape on pry area.

- h. Dislodge the Passenger's Knee Airbag carefully.
- Add Protection tape to center panel.
 - Remove 3 Bolts

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

- i. Wrap the Airbag in a Blanket or the like as shown.
- j. Place the Airbag on top of the TVIP box.

 **CAUTION:** Prevent stress on the Airbag Wire.

- k. Remove 2 Screws from the bottom of the Glove Box.
- l. Open the Glove Box.

- m. Dislodge the Glove Box
 - Remove 2 Screws.

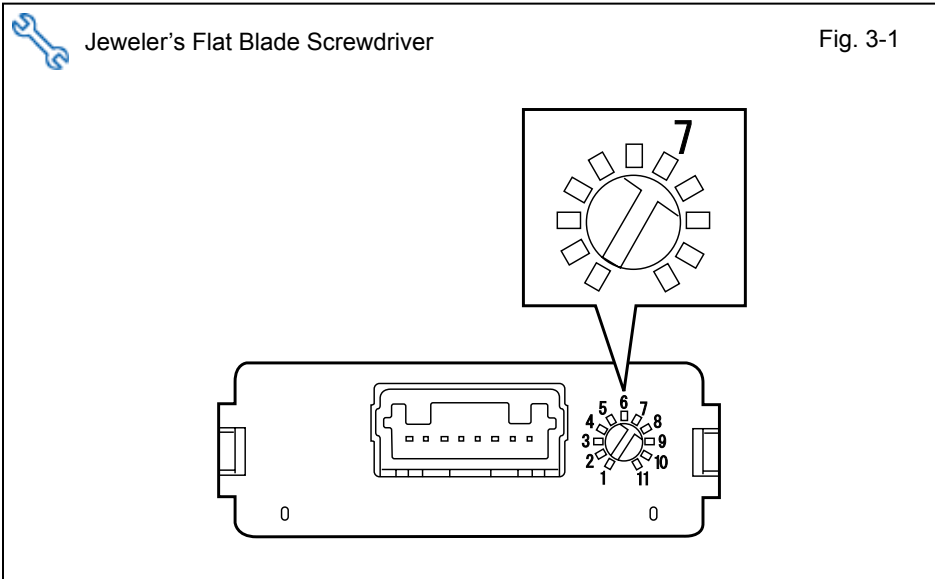
- n. Remove the Glove Box.
 - Disconnect the Vehicle Connector.
 - Remove the Vehicle's Clamp.



CAUTION: Do not remove Glove Box Light

3. GBS ECU Preparation and Installation.

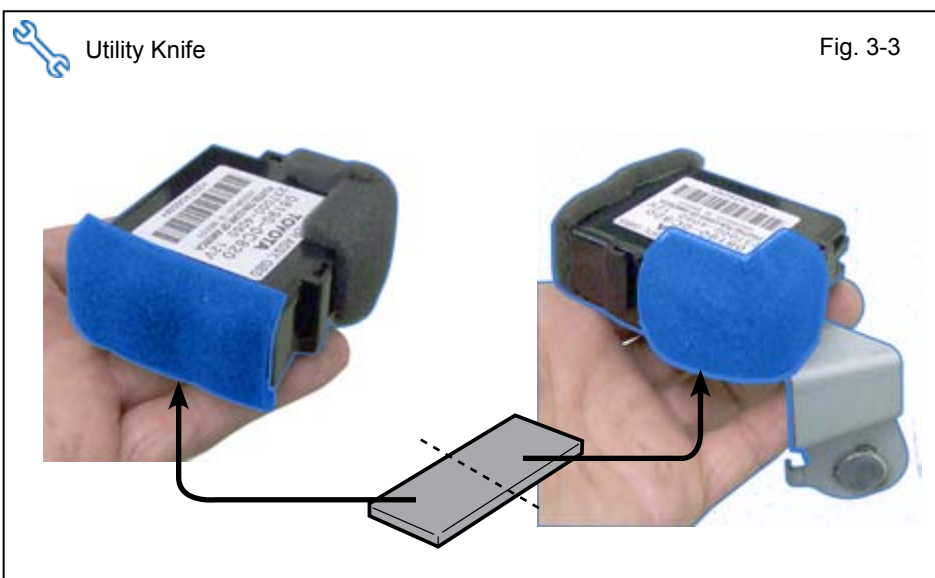
- a. Set the GBS sensitivity value to "7."



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



- c. Cut 1 Foam Tape in half.
- d. Apply 1/2 piece of the Foam Tape to the GBS ECU.
- e. Apply 1/2 piece of the Foam Tape to the GBS ECU Bracket and the GBS ECU.



- f. Place the GBS ECU on the Vehicle's Brace in the Glove Box Area.

- g. 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.

4. V2 Harness Installation.

- a. Connect the V2 White 8P Connector to the GBS ECU.
- b. Route the V2 Harness toward the Passenger's Cowl Area.

- c. Secure the V2 Harness to the Vehicle Harness with 2 Wire Ties.

- d. Secure the V2 Harness to the Vehicle Harness with 1 Wire Tie.
 - Place the V2 Harness's White Tape marker parallel to the Vehicle's Brace as shown.

V2 ONLY

- e. Secure the V2 8P Connector and Harness to the Vehicle Harness with 2 Wire Ties.

f. Disconnect the Vehicle's White 12P Connector from the Passenger's Side Cowl Connector Block.

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

h. Plug the V2 12P Connectors in between the Vehicle's 12P Connectors.

- i. Secure the 12P Connectors to the Vehicle Harness with 1 Wire Tie.

V2/V4 Add-on ONLY

- j. Cut the Wire Tie securing the V4 12P Connector.

- k. Disconnect the V4 12P and 8P Connectors from the Passenger's Cowl Connector Block.

l. Plug the V4 8P Connector to the V2 8P Connector.

m. Secure the 8P Connectors to the Vehicle Harness with 1 Wire Tie.

n. Plug the V2 8P Connector to the Passenger's Side Connector Block.

- o. Plug the V2 12P Connectors in between the V4's and Vehicle's 12P Connectors.

- p. Secure both 12P Connectors to the Vehicle Harness with 2 Wire Ties.



CAUTION: Do not secure the 12P Connectors to the Airbag Harness.

- q. Route the V2 Harness along the Vehicle Harness under the Glove Box Area.
- r. Secure the V2 Harness to the Vehicle Harness with 1 Wire Tie.

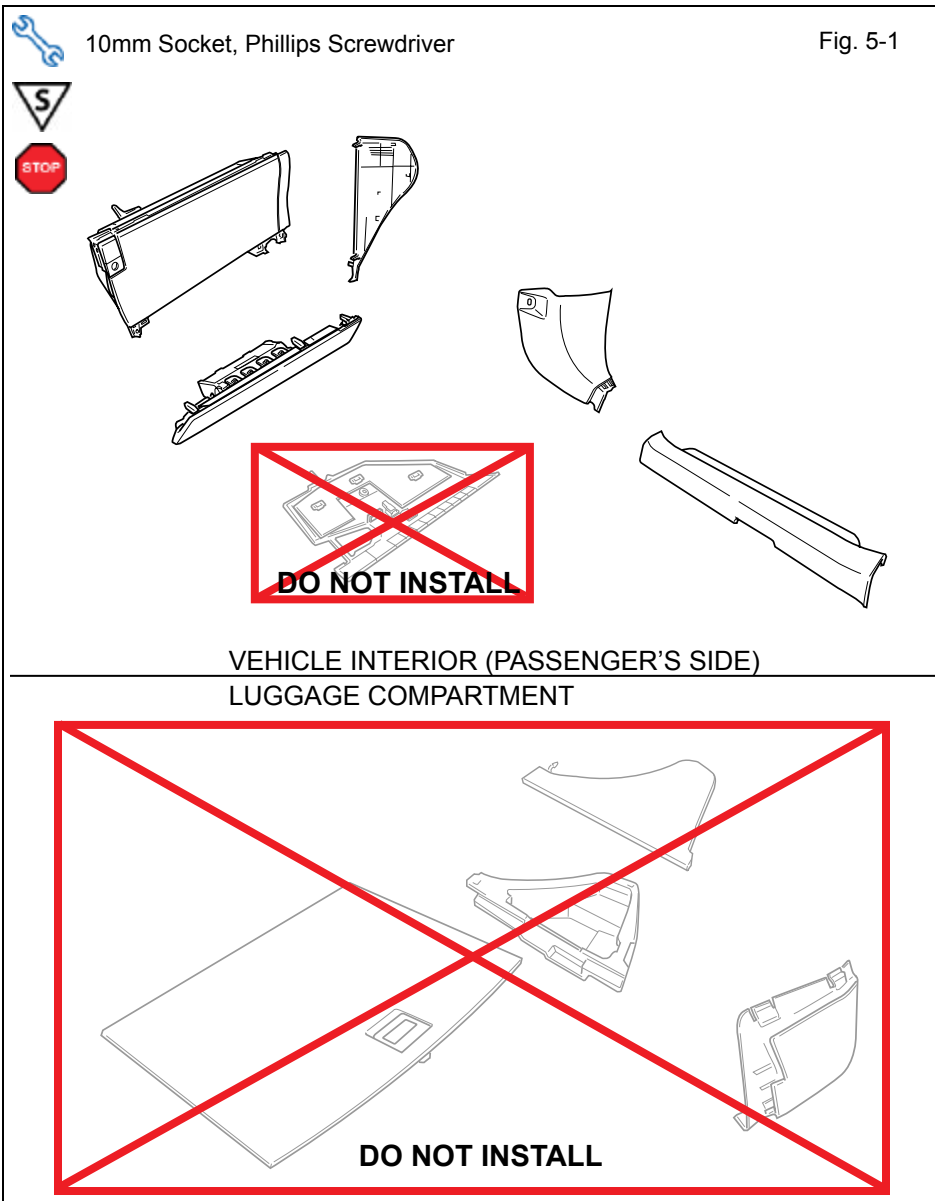
- s. Secure the V2 Harness to the Vehicle Harness with 1 Wire Tie.
 - Arrange the V2 Harness's Black Tape marker to the Vehicle Harness's White (or Black) Tape.

V2 ONLY

- t. Secure the V2 Harness to the Vehicle Harness with 3 Wire Ties.
- u. Plug the Vehicle's Gray 2P Connector to the V2 White 2P Connector.

V2/V4 Add-on ONLY

- v. Secure the V2 Harness to the Vehicle Harness with 3 Wire Ties.
- w. Connect the V4 Gray 2P Connector to the V2 White 2P Connector.



5. Microphone Installation.

- a. Reassemble the Vehicle except for the Glove Box Under Cover and Luggage Compartment Panels.



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



VERIFY: That all Connectors are reconnected.



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 Glove Box Under Cover.
- c. Remove the protective backing from the GBS Microphone.



CAUTION: Do not touch the Adhesive surface.

- d. Attach the Microphone to the Glove Box Under Cover.



- Make sure to align with the edge of the hole.

- e. Use 1 Foam Tape to secure the GBS Microphone.



CAUTION: Do not cover the Microphone's Opening.

V2 ONLY

- f. Connect the Microphone's 2P Connector to the V2 2P Connector.
- Reinstall the Vehicle's Clamp.

- g. Plug the V2 Gray 2P Connector to the Vehicle's Gray 2P Connector.

- h. Secure the 2P Connectors to the Vehicle Harness with 1 Wire Tie.



- Make sure to secure the 2P Connectors as shown.

V2/V4 Add-on ONLY

- i. Plug the GBS Microphone's 2P Connector to the V2 2P Connector.

- j. Connect the V2 Gray 2P Connector to Vehicle's Gray 2P Connector.
 - Reinstall the Vehicle's Clamp.

- k. Use 1 Wire Tie to secure the two 2P connectors to the Vehicle Harness.



- Make sure to secure the two 2P Connectors as shown.

- I. Reinstall the Glove Box Under Cover.

6. Complete the Installation.

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



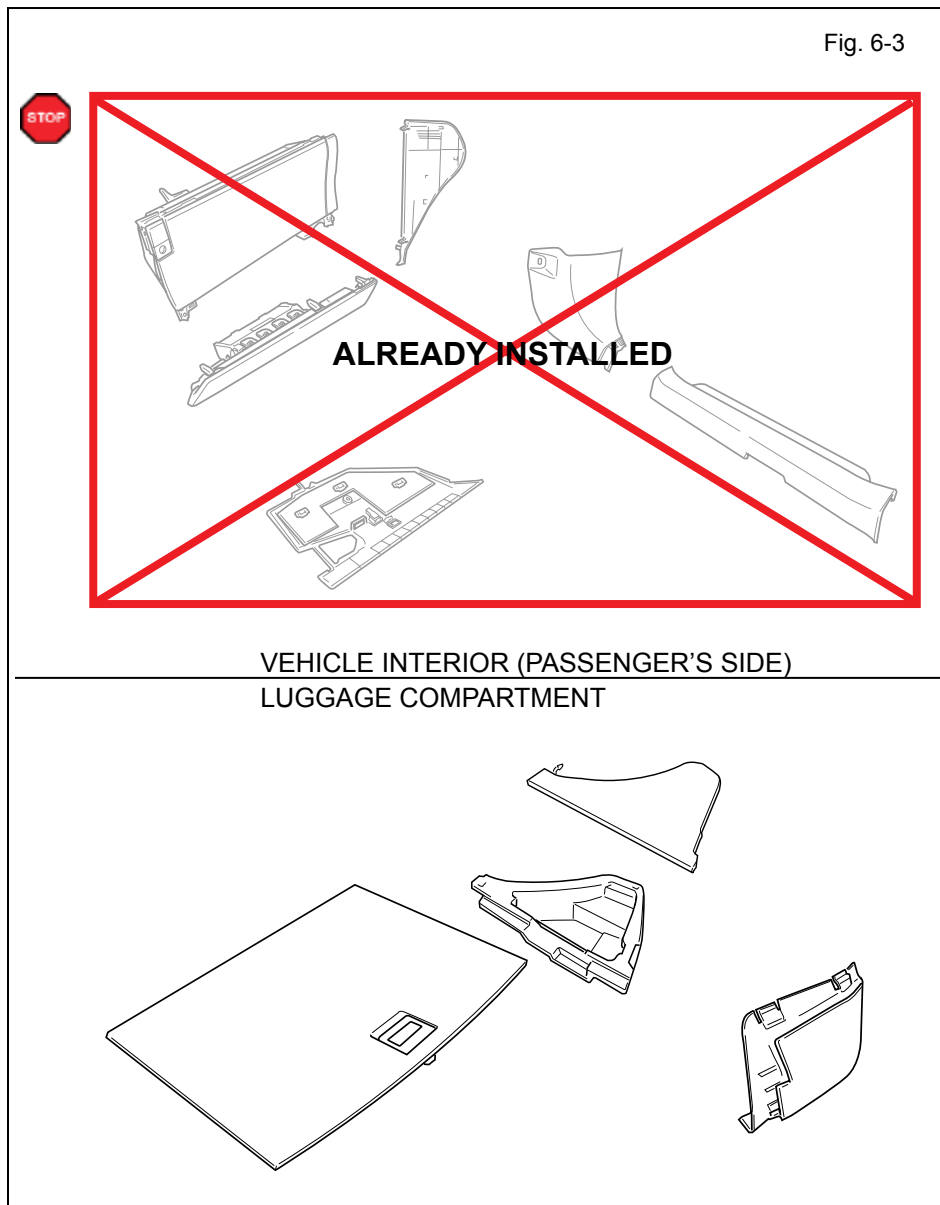
- b. Position the Negative Battery Cable at the original factory position and torque the nut.





Torque: 5.4 N•m (48 in•lbf)



CAUTION: Do not touch the positive terminal.



- c. Reassemble the Luggage Compartment Panels.
-  **VERIFY:** That panels fit together properly, with no uneven gaps.
-  **VERIFY:** That all Connectors are plugged in.
- d. Clean up and Remove trash.
- e. Sealed in its protective bag, place the Owner's Manual in the Glove Box.

7. 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 off its protective backing.



CAUTION: Do not touch the adhesive surface.

- c. Use a piece of Clear Tape to 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 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 15 ft. (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 windows 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"/> Starter	<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)	

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"/>	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