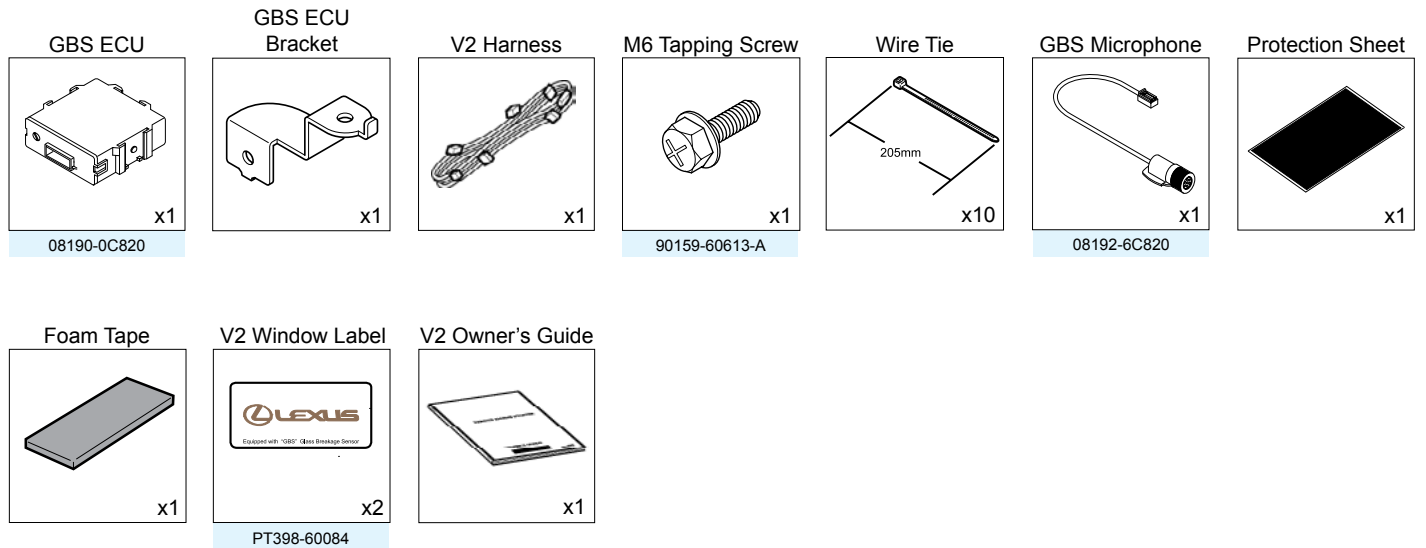


Part #: PT398-30120

Conflicts:

Do not install into Vehicles without Factory Alarm System.

Kit Contents



Service Part #'s

Additional Items

(may be required)

Item#	Description

Recommended Sequence of Application

Item#	Description








Recommended Tools

Personal & Vehicle Protection	Description
Safety Glasses	
Safety Gloves	(Optional)
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	
Socket	10mm, Extension
Pliers	Needle Nose
Torque Wrench	Battery: 48 in•lbf (5.4 N•m), Glove Box: 88.5 in•lbf (10 N•m)
Utility Knife or Scissors	
Ruler	
Tape	Clear, Electrical
Special Chemicals	
Cleaner	VDC Approved Cleaner

Table of Contents

I. Preparation	1–4
1. Table of Contents	2
2. Wire Routing Overview	3
3. Determine Type of Window Glass.....	4
II. Procedure	5–18
1. Vehicle Disassembly	5
2. V2 ECU Preparation and Installation	10
3. V2 Harness Installation	12
4. Microphone Installation	14
5. Complete the Installation	17
III. Checklist	19-21
1. Accessory Function Checks.....	19
2. Vehicle Appearance Check	19
3. Vehicle Function Checks.....	20

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.
-  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.



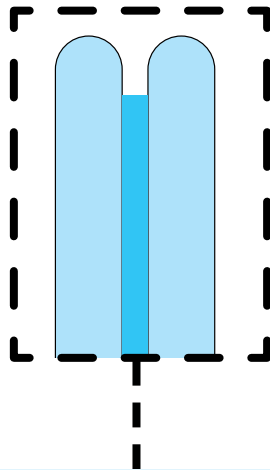
CAUTION: There are two Sensitivity Value for the GBS ECU.



You must first determine which Glass your vehicle has.

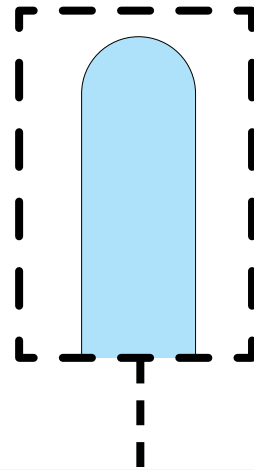
Perform the Following.

- a. Roll down the Front door Window partway.
- b. Look at the edge of the window.



THIS VEHICLE HAS ACOUSTIC WINDOWS

You will need to use sections highlighted in BLUE for this Vehicle.



THIS VEHICLE HAS UV WINDOWS

You will need to use sections highlighted in YELLOW for this Vehicle.

- c. 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.

- d. Remove the Passenger Side Step Cover.

- e. Remove the Passenger Side Cowl Cover.
 - Apply Protective Tape on Pry area.

- f. Remove the Passenger Side Dash Cover.
 - Apply Protective Tape on Pry area.

- g. Remove the Center Cluster Panel.
 - Apply Protective Tape on Pry area.
 - Disconnect “Engine Start Stop” button connector.

- h. Remove the Center Console Passenger Side Panel.

- i. Dislodge the Glove Box Under Cover.




CAUTION: Vehicle Connectors attached to Under Cover, see next step for removal.

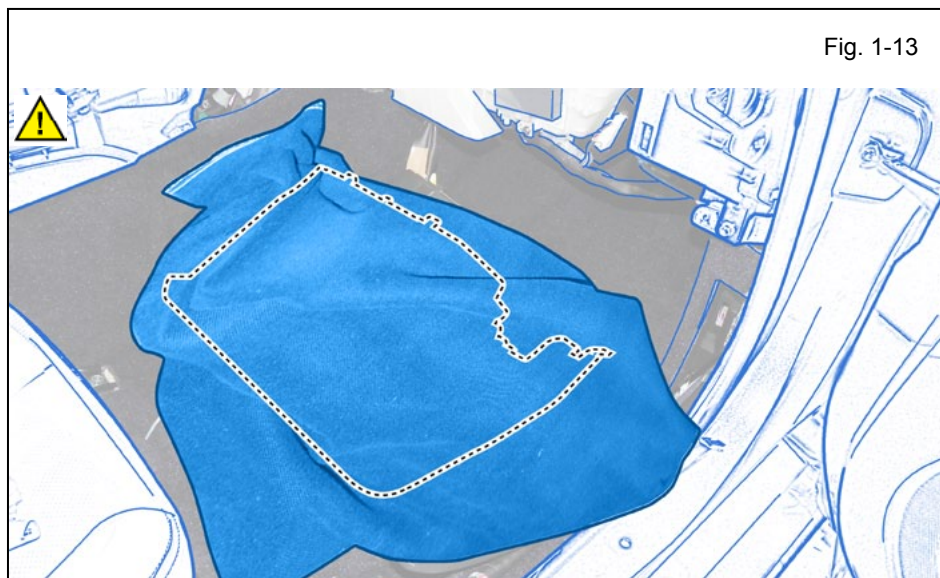
- j. Remove the Foot Lamp from the Glove Box Under Cover.
- k. Remove the Vehicle Harness Clamps from the Glove Box Under Cover.
 - Remove 2 Clamps.

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


- m. Open the Glove Box.
 - Remove 3 Screws.
- n. Dislodge the Glove Box.

- o. Remove the Vehicle Harness clamp on the top left side of the Glove Box.
- p. Disconnect the Vehicle's Connector.
- q. Remove the Glove Box Lamp.

 **CAUTION:** The Knee Airbag is part of the Glove Box Assembly. Do not disconnect the Airbag Connectors.



- r. Wrap the Glove Box in a Blanket or the like and place on the floor.

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

2. V2 ECU Preparation and Installation.

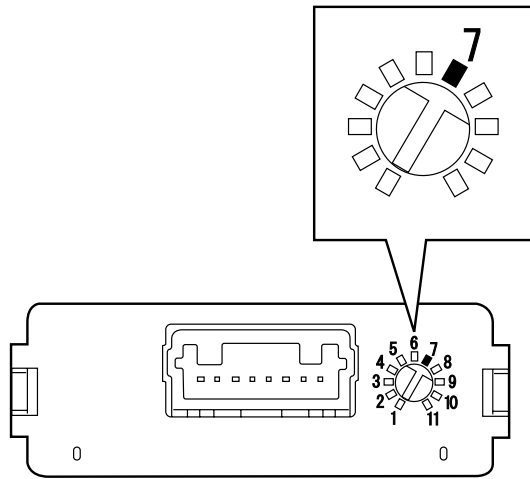
Vehicles with UV windows ONLY

- a. Set the GBS Sensitivity Value to "7."



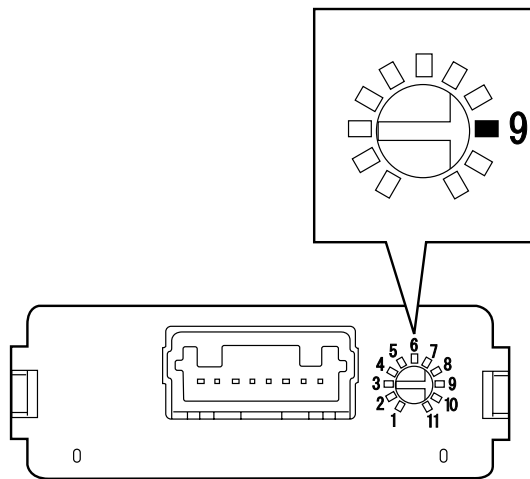
Flatblade Jeweler's Screwdriver

Fig. 2-1



Flatblade Jeweler's Screwdriver

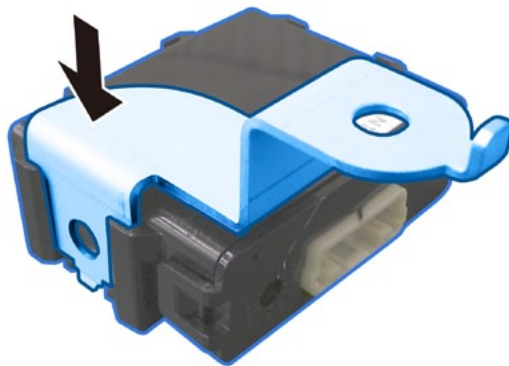
Fig. 2-2



Vehicles with Acoustic windows ONLY

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

Fig. 2-3



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

- d. Connect the V2 White 5P Connector to the Vehicle's 5P Pre-Connector.

- e. Secure the V2 Harness's White Tape Marker to the Vehicle Harness using 1 Wire Tie.

- f. Install the GBS ECU onto the Vehicle Brace using the supplied Screw.



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

3. V2 Harness Installation.

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

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



CAUTION: Keep the V2 Harness from touching the Vehicle Brace.

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



CAUTION: Make sure to route the V2 Harness away from touching the Ground Bolt and the Vehicle Harness Clip's sharp edge.

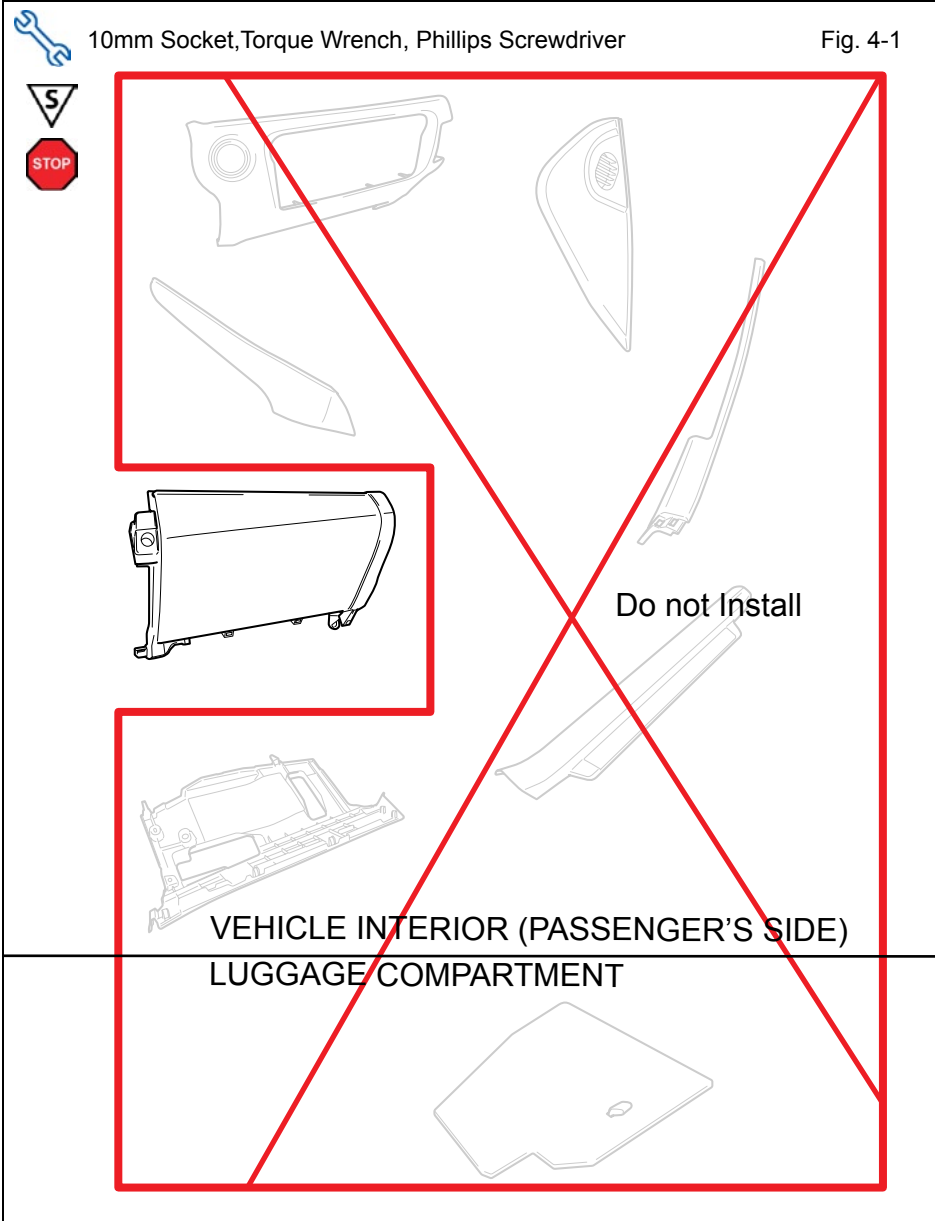
- d. Secure the V2 Harness to the Vehicle Harness using 2 Wire Ties.



NOTE: Make sure the V2 Harness is routed along the right side the Vehicle Harness.

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

- f. Secure the V2 2P Connector to the Vehicle's Harness before the Harness Clamp using 1 Wire Tie.



4. Microphone Installation.

- a. Install the Glove Box.

NOTE: When reinstalling Glove Box, make sure to torque the Bolts.



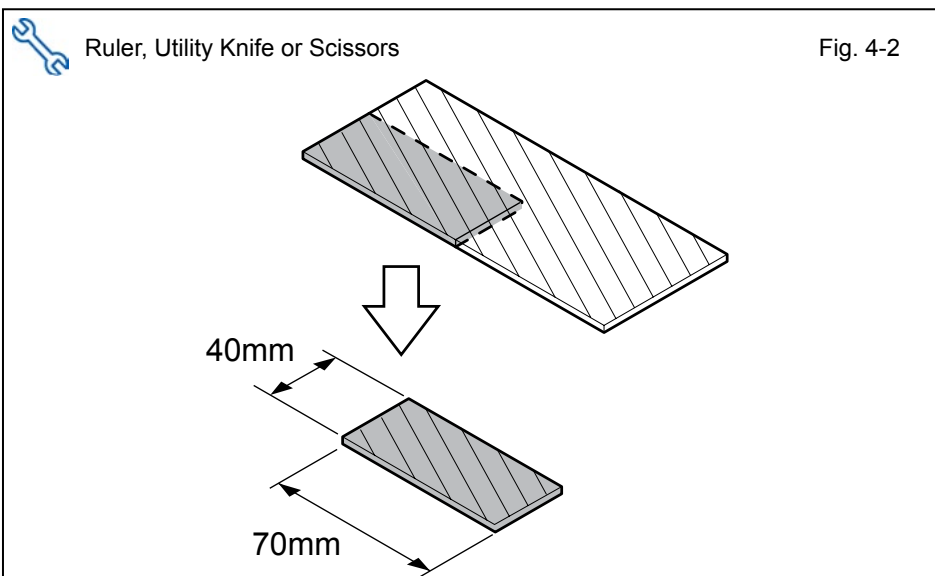
Torque: 10 N•m (88.5 in•lbf)



VERIFY: That all Connectors are plugged in.



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



- b. Cut the Protection Sheet as shown.

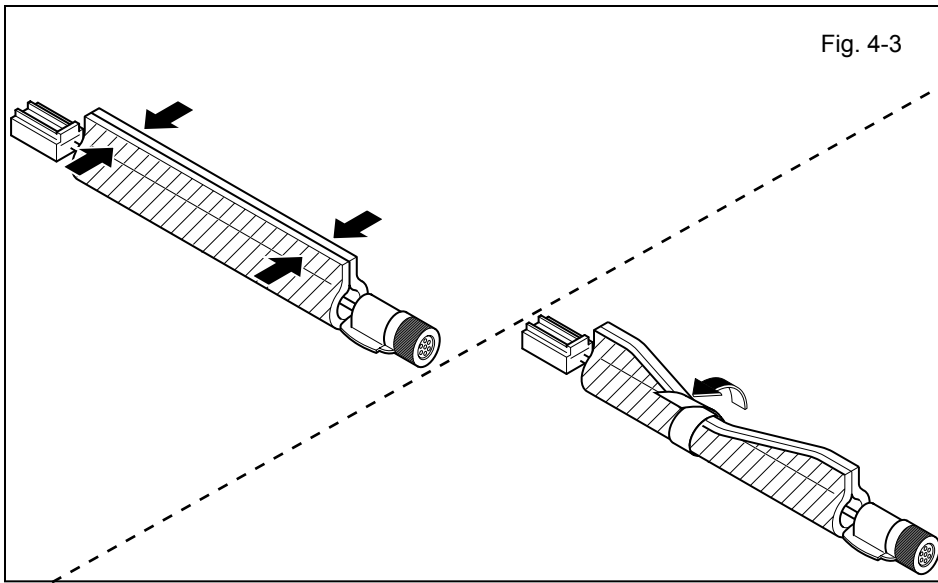


Fig. 4-3

- c. Attach the Protection Sheet to the GBS Microphone Harness as shown.
- d. Secure the Protection Sheet using Electrical Tape.

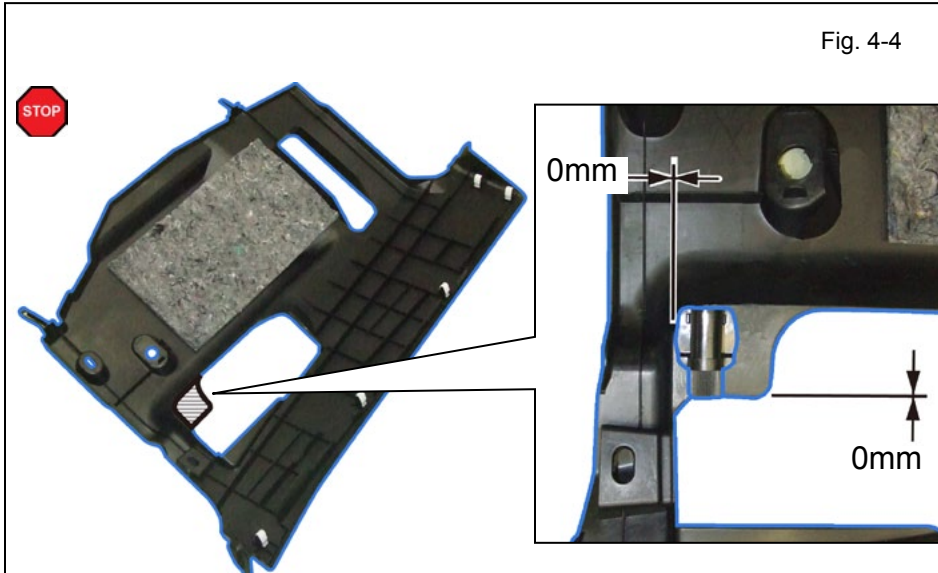
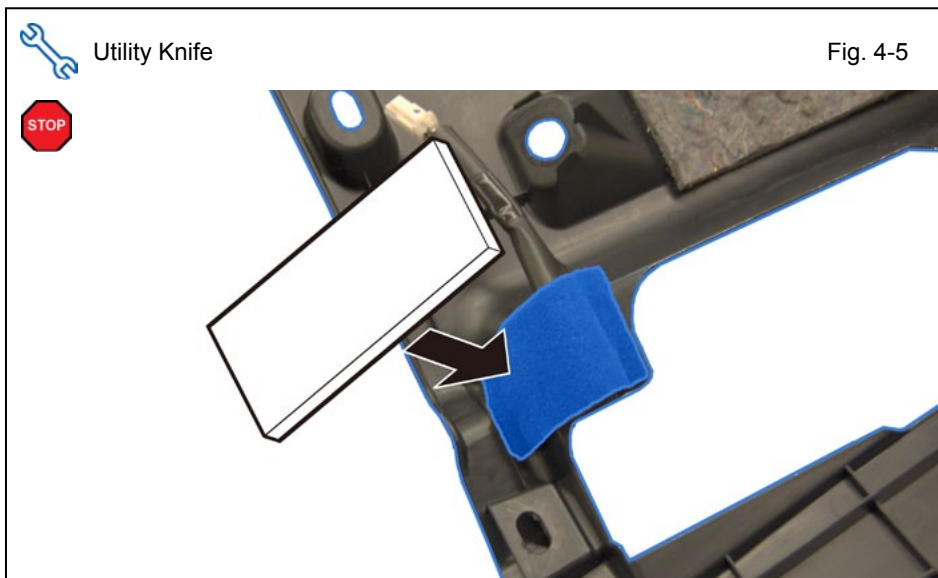


Fig. 4-4

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



NOTE: Make sure to align GBS Microphone to the Glove Box Under Cover.



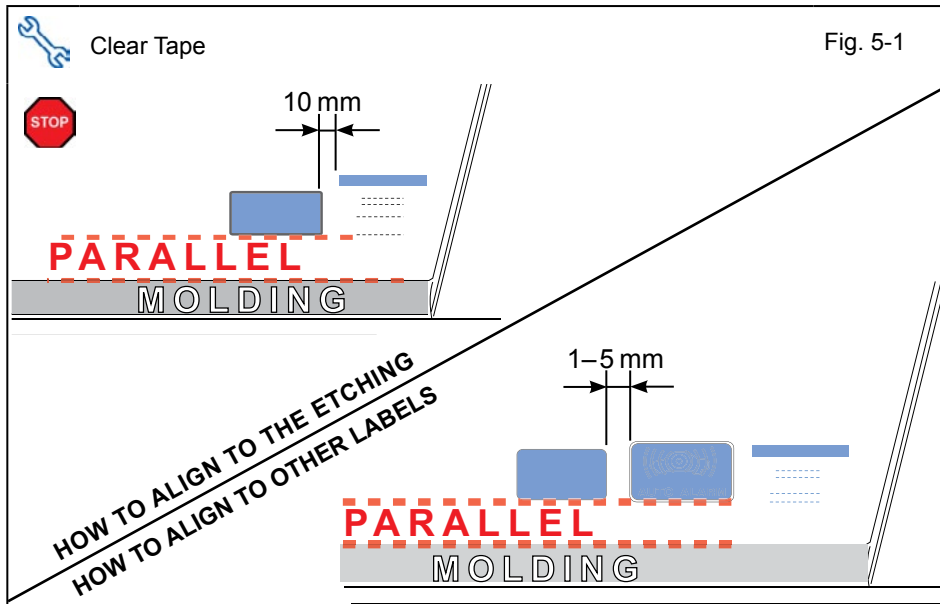
Utility Knife

Fig. 4-5

- g. Cut 2/3 piece of Foam Tape.
 - Discard the 1/3 piece Foam Tape.
- h. Apply the 2/3 piece of Foam Tape to the GBS Microphone as shown.



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



5. Complete the 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 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. 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.

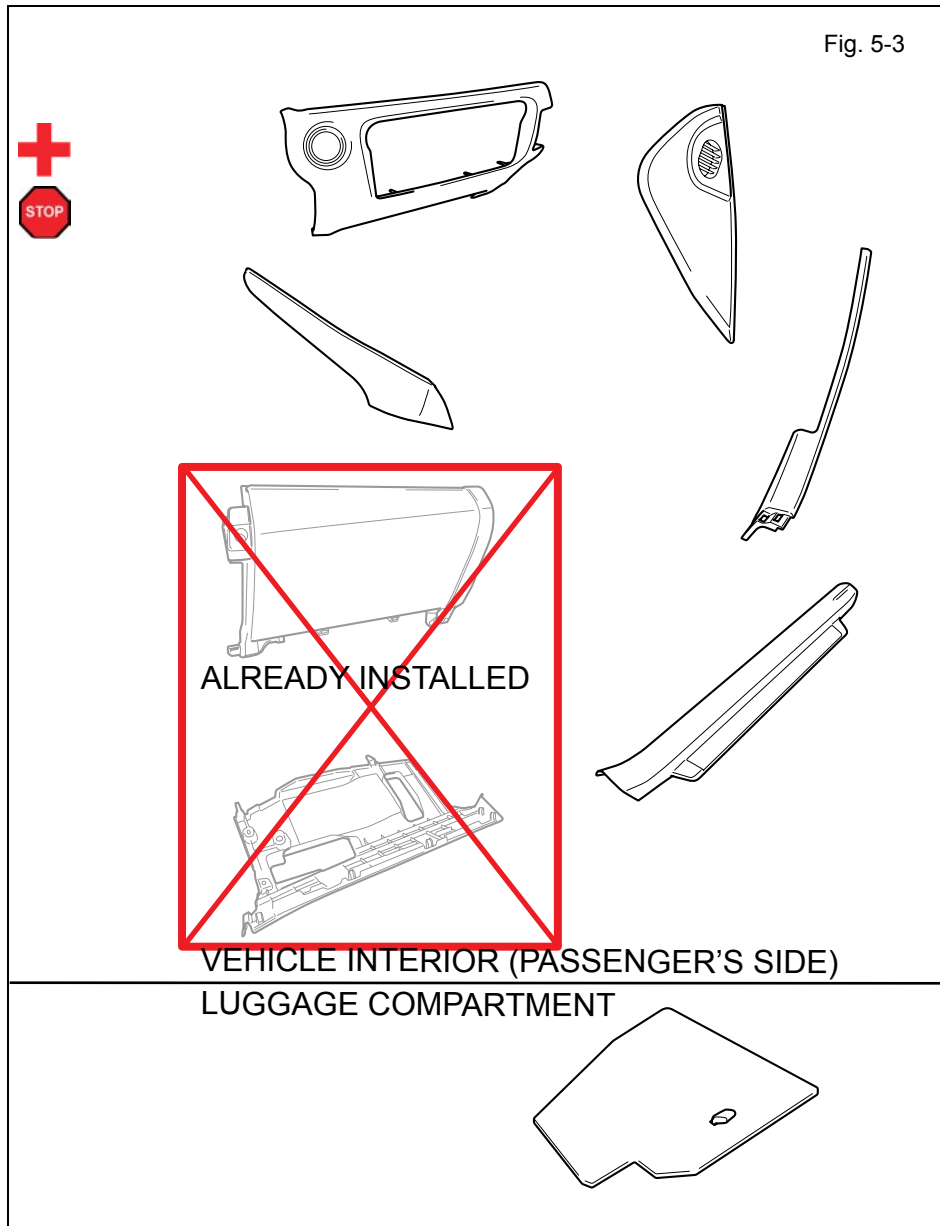
- d. Position the Negative Battery Cable at the original factory position.



Torque: 5.4 N•m (48 in•lbf)



CAUTION: Do not touch the Positive Terminal.



e. Finish reassembling the Vehicle.



VERIFY: That all Connectors are plugged in.



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

f. Clean up and remove trash.

g. 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	<p>With the tip of a key, or Striker Tool pulled all the way out (PPO only):</p> <ul style="list-style-type: none"> For UV Windows: Tap the center of the <i>Driver's door window</i> to trigger the alarm. For Accoustic Windows: Tap the center of the <i>Passenger's door window</i> 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"/>	Steering Wheel Heater (if equipped)
<input type="checkbox"/>	Blind Spot Monitor (BSM) (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

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