

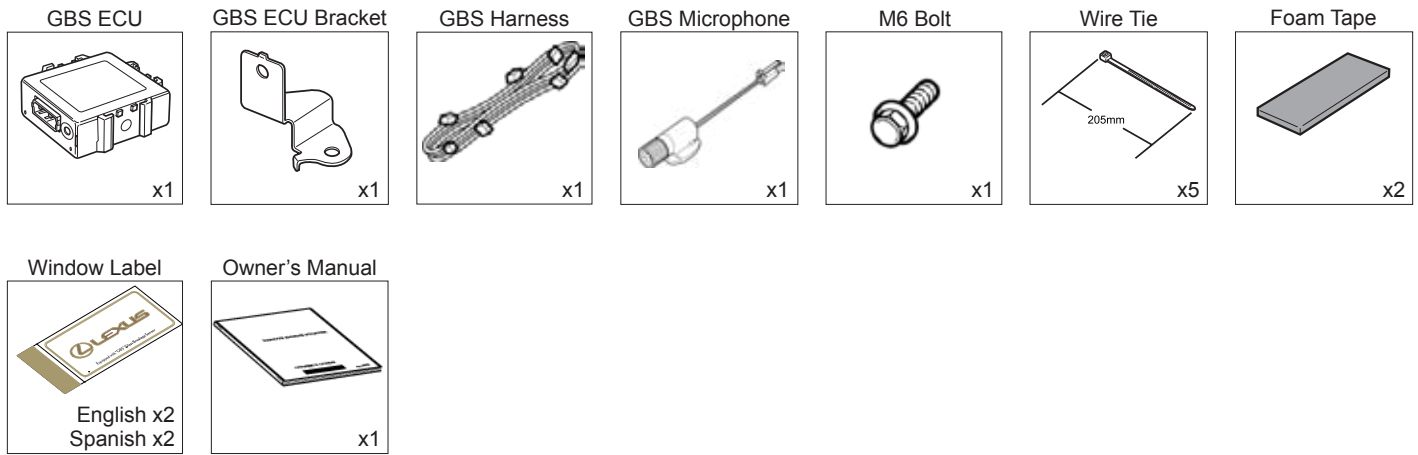
Part #: PT398-24100

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



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
Special Tools	
GBS 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 SST# 00002-06001-01
Side Cutter	
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
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.

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.



- e. 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. (Vehicle Interior)

- a. Remove the Passenger's Dash Side Trim.

- b. Remove the Glovebox Under Cover.
 - Release the Harness Clamp.



- c. Remove the Passenger's side Step Cover.



- Use Protective Tape.

- d. Remove the Passenger's side Cowl Cover.

- Remove 1 Nut.

- e. Remove the Passenger's Dash Side Cover.



- Use Protective Tape.

- f. Remove the Protective Tape.



- g. Dislodge the Passenger's Knee Airbag carefully.

- Remove 3 Bolts.



CAUTION: Do not disconnect the Vehicle's Connector.

- h. Wrap the Airbag in a Blanket.
- i. Place the Knee Airbag on the TVIP box to prevent stress on the Airbag Wire.

- j. Remove 2 Screws from the bottom of the Glovebox.

- k. Open the Glovebox Door,
then remove 2 Screws.

- l. Remove the Glovebox.
 - Remove the Vehicle's Harness
Clamp from the left back side of
the Glovebox.

- m. Temporarily install the
Passenger's Knee Airbag.



3. GBS ECU Preparation and Installation.

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

b. Attach the 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.



**VEHICLES without
CLEARANCE SONAR**

- f. Connect the V2 White 8P Connector to the GBS ECU.
- g. Install the GBS ECU using the supplied Bolt.
 - Verify that the Bolt is tightened securely.



**VEHICLES with
CLEARANCE SONAR**

- h. Remove 1 Bolt and 1 Clip securing the Clearance Sonar to the Vehicle.
 - Do not disconnect the Clearance Sonar ECU connector.
 - Do not discard the Bolt and Clip.
 - Do not break the Clip.
- i. Connect the V2 White 8P Connector to the GBS ECU.
- j. Install the GBS ECU using the supplied Bolt.
 - Verify that the Bolt is tightened securely.



**VEHICLES with
CLEARANCE SONAR**

- k. Reinstall the Clearance Sonar ECU using the existing Bolt and Clip.
 - Verify that the Bolt and Clip are tightened securely.



4. V2 Harness Installation.

- a. Route the V2 Harness toward the Passenger's Cowl Area.
- b. Secure the V2 Harness's White Tape Maker to the Vehicle Harness's Black Tape Maker with 1 Wire Tie.
- c. Secure the V2 Harness to the Vehicle Harness with 1 Wire Tie.

V2 ONLY

- d. Connect the V2 Harness's White 8P Connector to the Vehicle's 8P Pre-Connector in the Passenger's Side Cowl Connector Block.



V2 ONLY

- e. Secure the V2 Harness's 8P Connectors to the Vehicle Harness with 1 Wire Tie.
- f. Secure the V2 Harness to the Vehicle Harness with 1 Wire Tie.

V2/V4 ADD-ON ONLY

- g. Disconnect the V4 Harness's White 8P Connector from the Passenger's Side Cowl Connector Block.

- h. Connect the V4 Harness's White Female 8P Connector to the V2 Harness's White Male 8P Connector.



5. GBS Microphone Installation.

- a. Using the VDC approved Cleaner and Cleaning Method clean the area indicated on the Glovebox Under Cover.
- b. Remove the Protective Backing from the V2 Microphone.



CAUTION: Do not touch the Adhesive surface.

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

- d. Use 1 Foam Tape to secure the GBS Microphone to the Glovebox Under Cover.



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

- e. Connect the V2 Harness's White 2P Connector to the Microphone's 2P Connector.



6. Complete the Installation

- a. Reassemble the Vehicle.



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



NOTE: When reinstalling the Knee Airbag, install 3 Bolts in the correct order as shown.



NOTE: When reinstalling the Dash Side Trim, put the Dash Side Trim underneath the Weather Strip.



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



VERIFY: That all Connectors are plugged in.

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



- c. 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.

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

7. Window Label Installation.

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



CAUTION: Do not touch the adhesive surface.

- c. Attach the Label as shown.



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 windows to trigger the alarm. NOTE: 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
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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)
<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"/>	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

