
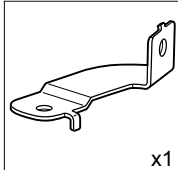
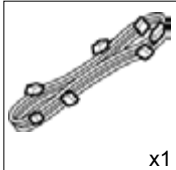
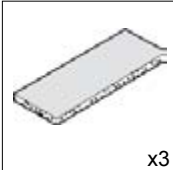
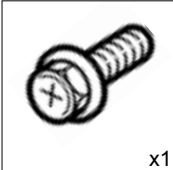
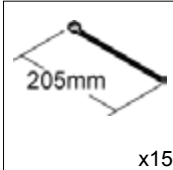
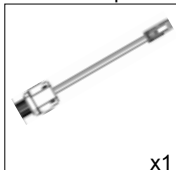

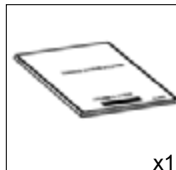



Part #: PT398-08151

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>V2 Harness</p>  <p>x1</p>	<p>Shorting Pin</p> <p>DISCARD</p> <p>x1</p>	<p>Foam Tape</p>  <p>x3</p>	<p>M6 Screw</p>  <p>x1</p> <p>91651-60618</p>	<p>Wire Tie</p>  <p>205mm</p> <p>x15</p>
<p>GBS Microphone</p>  <p>x1</p> <p>08192-6C810</p>	<p>V2 Window Label</p>  <p>English x2 Spanish x2</p> <p>(E) 08192-009A0 (S) PT398-42091</p>	<p>V2 Owner's Guide</p>  <p>x1</p>	<p>V5 Window Label</p> <p>DISCARD</p> <p>English x2 Spanish x2</p>	<p>V5 Owner's Guide</p>  <p>x1</p>		

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)
Vehicle Protection	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	
Torque Wrench	48 in•lbf (5.4 N•m)
Utility Knife	
Tape	Clear
Socket	10mm
Special Chemicals	
Cleaner	VDC Approved Cleaner
Glass Cleaner	Household Glass Cleaner

Table of Contents

I. Preparation 1–3

 1. Table of Contents 2

 2. Wire Routing Overview 3

II. Procedure 4–17

 1. Disassembly 4

 2. V2 Harness Installation 6

 3. GBS ECU Preparation 13

 4. V2 Harness Installation (Continued) 14

 5. GBS Microphone Installation 15

 6. Complete the Installation 16








III. Checklist 18–20

 1. Accessory Function Checks 18

 2. Vehicle Appearance Checks 18

 3. Vehicle Function Checks 19

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.

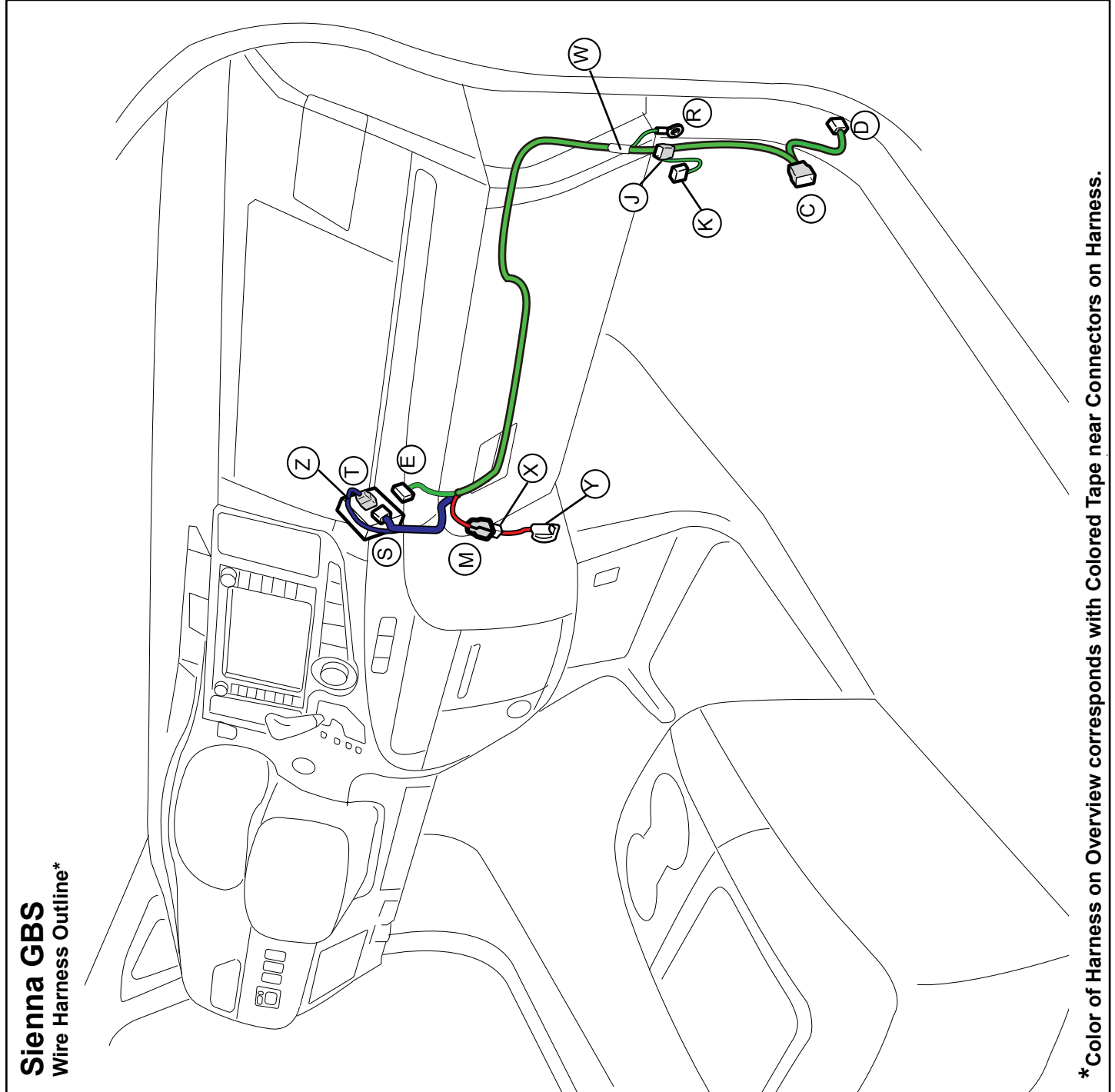
These guidelines can be found in the “Accessory Installation Practices” document.

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.)

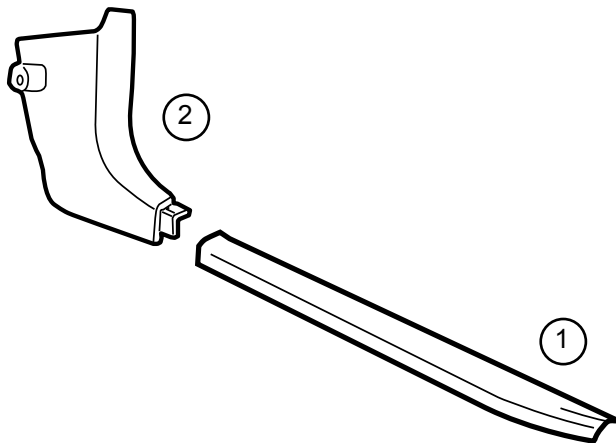
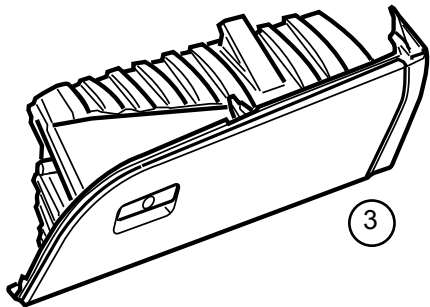
Please see your Toyota dealer for a copy of this document.

TVIP	Vehicle	Description
C	-	12P Black
D	-	12P Black
E	-	8P White (for GBS ECU)
J	-	5P White
K	-	5P White (for V2/V4 Add-on)
M	-	2P White (for GBS Mic)
R	-	Ground Terminal
S	-	8P White
T	-	8P Black
W	-	White Tape Marker
X	-	2P White (GBS Mic)
Y	-	GBS Microphone
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	Glove Box



Disconnect all Corresponding Connectors.



Re-attach Panel Clips that falls off during disassembly.

1. 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's Side Step Cover.
- Disengage front inner sill clip and front step plate clip.
 - Disengage rear inner sill clip and rear step plate clip.
 - Hold ends up keeping guide pins up and slide sill forward to disengage remaining clips.



NOTE: Make sure to follow steps above to avoid breaking sill plate clips.

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

- Remove 1 Nut.



- e. If the Clip stays in the vehicle remove it.

- Carefully remove otherwise it will fall inside the vehicle.
- Reattach the Clip on the Cowl Cover.

- f. Remove 2 Bolts from the bottom of the Glove box.

- g. Open the Glove Box and Remove 2 Screws.
- h. Remove the Glove box.

2. V2 Harness Installation.



NOTE: If V4 (RES) is already installed in the vehicle, skip to step m (p. 9) for V2/V4 Add-on.

V2 ONLY

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

- b. Remove the Vehicle's Ground Terminal Bolt.
 - Use Top Ground Terminal on the PS Cowl Area.
- c. Secure the V2 Ground Terminal to the Vehicle using the same Bolt.

- d. Locate the Vehicle's 5P Pre-Connector.
- e. Remove the Tape securing the Pre-Connector Wire.
- f. Disconnect the Vehicle's 5P Pre-Connector.

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

- h. Using 2 Wire Ties, secure the V2 Harness and the 5P Connectors to the Vehicle Harness.

- i. Disconnect the Vehicle's Black 12P Connector from the Passenger's Side Cowl Area.



- Ensure Connector Lock is fully released prior to pulling on Connector.

- j. Connect the V2 Black 12P Connector to the Vehicle's Connector Block.

- k. Connect the Vehicle's Black 12P Connector to the V2 12P Connector.



- Ensure the Connectors are routed behind the Vehicle harness branch.

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

Skip to Section 3 (page 13).

V2/V4 Add-on ONLY

- m. Secure the V2 Harness's White Tape Marker to the Vehicle Harness using 1 Wire Tie.
- n. Remove the Vehicle's Ground Terminal Bolt.
 - Use Top Ground Terminal on the PS Cowl Area.
- o. Secure the V2 Ground Terminal to the Vehicle using the same Bolt.
- p. Disconnect the Vehicle's 5P Pre-Connector from the V4 Connector.

q. Plug the V2 5P Connectors in between the V4 5P Connector and Vehicle 5P Pre-Connector.

r. Secure the 5P Connectors to the Vehicle Harness with 1 Wire Tie.

V2/V4 Add-on to w/o Smart Vehicles ONLY (steps s-w)



NOTE: For V2/V4 Add-on to with Smart Vehicles, skip to step x (p. 12).

- s. Secure the V2 Harness to the Vehicle Harness using 1 Wire Tie.
- t. Cut the Wire Tie securing the V4 12P Connector.

u. Disconnect the Vehicle's 12P Connector from the V4 12P Connector.

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

w. Secure the V2 and V4 12P Connectors to the Vehicle Harness with 1 Wire Tie.

Skip to Section 3 (page 13).

**V2/V4 Add-on to w/Smart
Vehicles ONLY (steps x-ab)**

- x. Disconnect the Vehicle's Black 12P Connector from the Passenger's Side Cowl Area.



- Ensure that Connector Lock is fully released prior to pulling on Connector.

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

- z. Connect the V2 Black 12P Connector to the Vehicle's Connector Block.

- aa. Connect the Vehicle 12P Connector to the V2 12P Connector.



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

3. GBS ECU Preparation.

- a. Set the GBS Sensitivity Value to 7.

- b. Attach GBS Bracket to the GBS ECU.
- c. Attach 1/2 Piece of Foam Tape to the Bracket.
- d. Plug the V2 White 8P Connector to the GBS ECU.

- e. Attach 1/2 Piece of Foam Tape to the GBS ECU.
- f. Place 8P connectors on top of the Foam Tape.
- g. Attach 1/2 Piece of Foam Tape over the 8P Connectors.

- h. Secure the 8P Connectors to the GBS ECU using 1 Wire Tie.

4. V2 Harness Installation (Continued)

- a. Route the V2 Harness across the Glove box area and secure to the Vehicle Harness using 2 Wire Ties.
- b. Secure the V2 Harness using the HVAC Wire Clamps.
- c. Secure V2 Harness to the Vehicle's Harness with 1 Wire Tie.

- d. Install the GBS ECU using the supplied Bolt.



NOTE: Make sure the Guide Pin is seated correctly.

- e. Secure the V2 Harness to the GBS ECU's Bracket using 1 Wire Tie.
- f. Secure the excess V2 Harness to the Vehicle Brace using 1 Wire Tie.

5. GBS Microphone Installation.

- a. Using VDC approved Cleaner and Cleaning Method, clean the area indicated on the Vehicle Brace.
- b. Remove the Protective backing from the GBS Microphone.



CAUTION: Do not touch the Adhesive surface.

- c. Attach the GBS Mic to the Vehicle Brace.



NOTE: Align GBS Mic to the Vehicle Bracket.

- d. Attach 1 Foam Tape to the GBS Microphone and secure with 1 Wire Tie.



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

- e. Plug the 2P Connectors and secure to the Vehicle Ground Wire with 1 Wire Tie.

- f. Secure the V2 Harnesses together using 1 Wire Tie.

6. Complete the Installation.

- a. Reassemble the Vehicle.



NOTE: Make sure that all Connectors are reconnected.



NOTE: Verify that panels fit together properly, with no uneven gaps.

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

- For US Vehicles use the English Tags and Labels, and discard the Spanish Tags and Labels.
- For Mexico Vehicles use the Spanish Tags and Labels, and discard the English Tags and Labels.
- c. Use Household Glass Cleaner to clean the inside of the Front Door Window.
- d. Use a piece of Clear Tape to lift the Label off its protective backing.



CAUTION: Do not touch the adhesive surface.

- e. Attach the Label as shown.



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

REPEAT: steps c–e with the other Front Door Window.

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



Torque: Tighten Nut to 48 in•lbf (5.4 N•m).



CAUTION: Do not touch the Positive Terminal.

- g. Clean up and remove trash.
- h. 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.



For Smart Vehicles: 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 turns off.



For Smart Vehicles: 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)	

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

