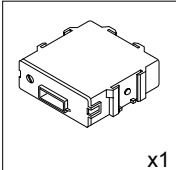
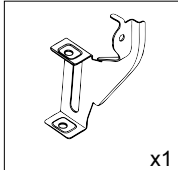
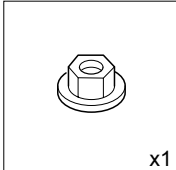
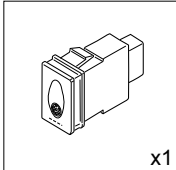
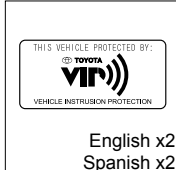
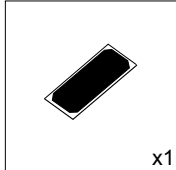
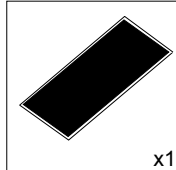



Part #: PT398-42131

Conflicts: Do not install into Vehicles with starting VIN# JT*****

Kit Contents

| | | | | | | |
|--|--|--|---|---|---|---|
| <p>V5 ECU</p>  <p>x1</p> <p>PT398-21100</p> | <p>V5 ECUBracket</p>  <p>x1</p> | <p>M6 Nut</p>  <p>x1</p> <p>90179-06216-A</p> | <p>GBS Microphone</p>  <p>x1</p> <p>PT398-42131-AA</p> | <p>V5 Window Label</p>  <p>English x2 Spanish x2</p> <p>(E) 00107-VIPWS (S) 08190-34084</p> | <p>Protection Sheet 1</p>  <p>x1</p> | <p>Protection Sheet 2</p>  <p>x1</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 |
| Torque Wrench | Battery: 48 in•lbf (5.4 N•m), |
| Tape | Clear |
| Socket | 10mm, extension |
| Special Chemicals | |
| Cleaner | VDC Approved Cleaner |
| Glass Cleaner | Household Glass Cleaner |

Table of Contents

I. Preparation 1–3

 1. Table of Contents 2

 2. Installation Overview 3

II. Procedure 4–10

 1. Vehicle Disassembly. 4

 2. V5 ECU Preparation and Installation. 6

 3. GBS Microphone Installation. 8

 4. Complete the Installation. 10









III. Checklist 11–14

 1. Accessory Function Checks..... 11

 2. Vehicle Appearance Check 12

 3. Vehicle Function Checks..... 13

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.)

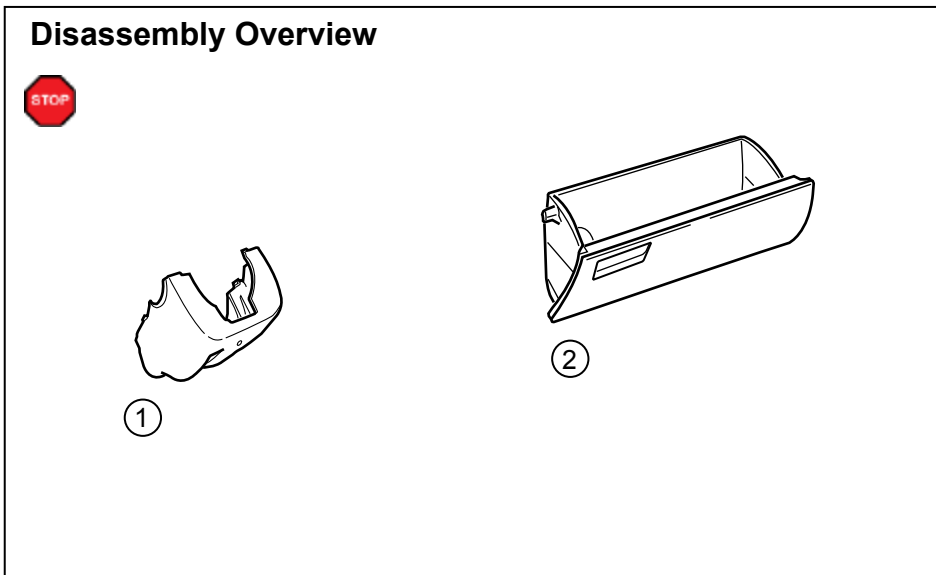
Please see your TOYOTA dealer for a copy of this document.

1. Vehicle Disassembly.

- a. Place the Vehicle in Park with the Parking Brake set.
- b. Remove 2 Screws securing the Lower Steering Column Cover.
 - Apply Protective Tape as shown.
 - Turn the Steering wheel left and right to gain access to the Screws.

- 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.



| | |
|---|-----------------------------|
| 1 | Lower Steering Column Cover |
| 2 | Glove Box |
| | |
| | |
| | |
| | |
| | |
| | |

- d. Remove the Lower Steering Column Cover.

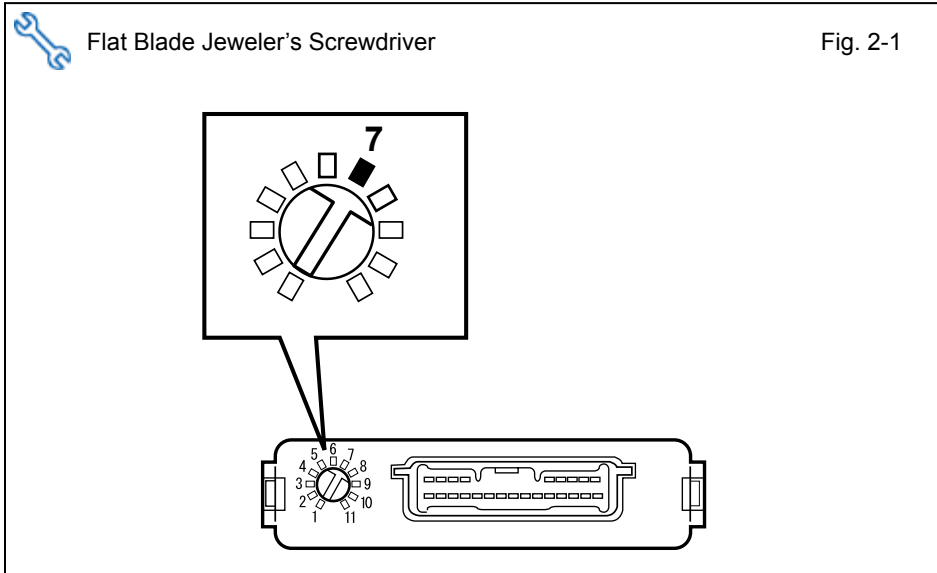


- Apply pressure between the clip locations, on both side of the lower steering cover to disengage clips

- e. Remove the Vehicle's Knock Out Cover.

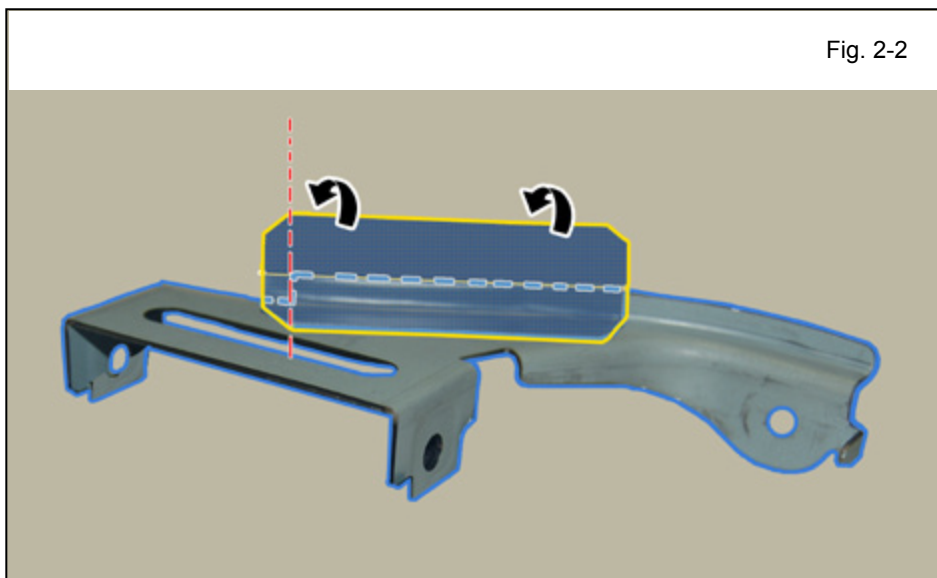
- f. Dislodge the Glove Box.
- Disconnect the Dampener.

- g. Remove the Glove Box.



2. V5 ECU Preparation and Installation.

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



- b. Fold the Protection Sheet 1 in Half to make a Crease mark.
- Do not peel the Protection Sheet's Protective Backing.
- c. Using VDC approved cleaner and cleaning method, clean the V5 ECU Bracket.
- d. Wrap the Edge of the ECU Bracket using the Protection Sheet as shown.
- Use the Crease as guide to Place on the Edge of ECU Bracket.

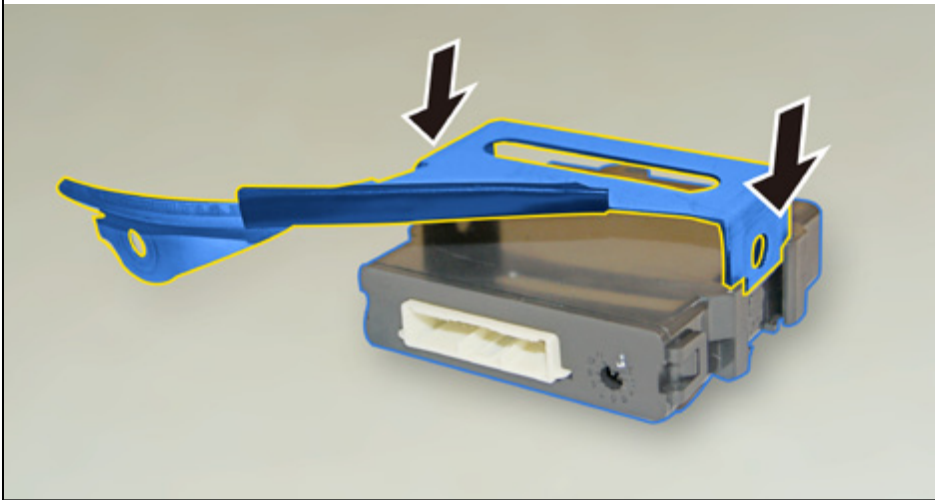


CAUTION: Do not touch the adhesive surface.



VERIFY: That the Protection Sheet Adheres to the ECU Bracket properly.

Fig. 2-3



- e. Attach the V5 ECU Bracket to the V5 ECU.

Fig. 2-4



- f. Using VDC approved cleaner and cleaning method, clean the V5 ECU Assembly.
- g. Wrap the V5 ECU Assembly using the Protection Sheet as shown.



CAUTION: Do not touch the adhesive surface and do not cover the ECU Label.



VERIFY: That the Protection Sheet Adheres to the ECU Assembly properly.

- h. Locate the Vehicle's 24P White Pre-Connector in the Glove Box Area and remove the Tape securing it.

- i. Install the V5 ECU using the supplied Nut.



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

- j. Connect the Vehicle's 24P White Pre-Connector to the V5 ECU.

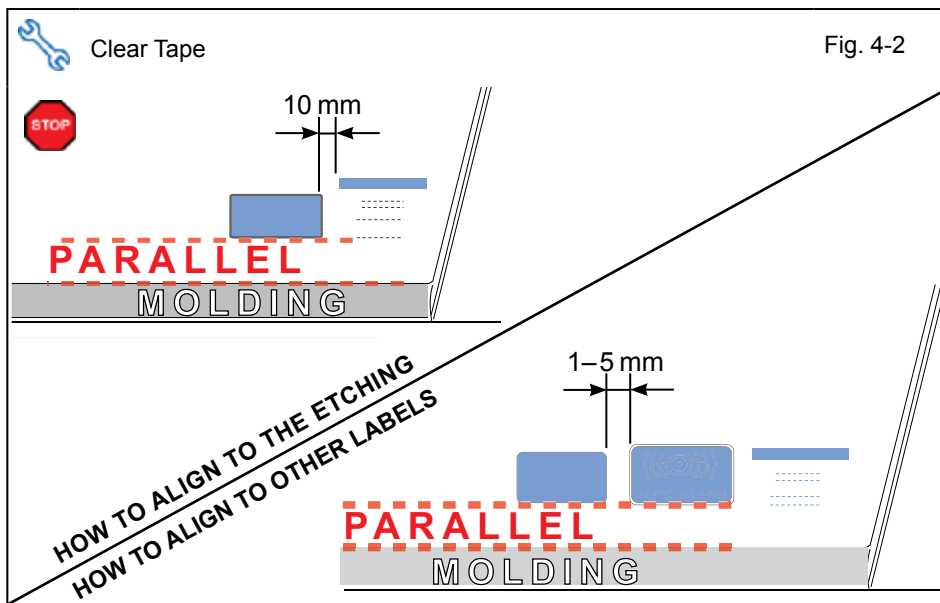
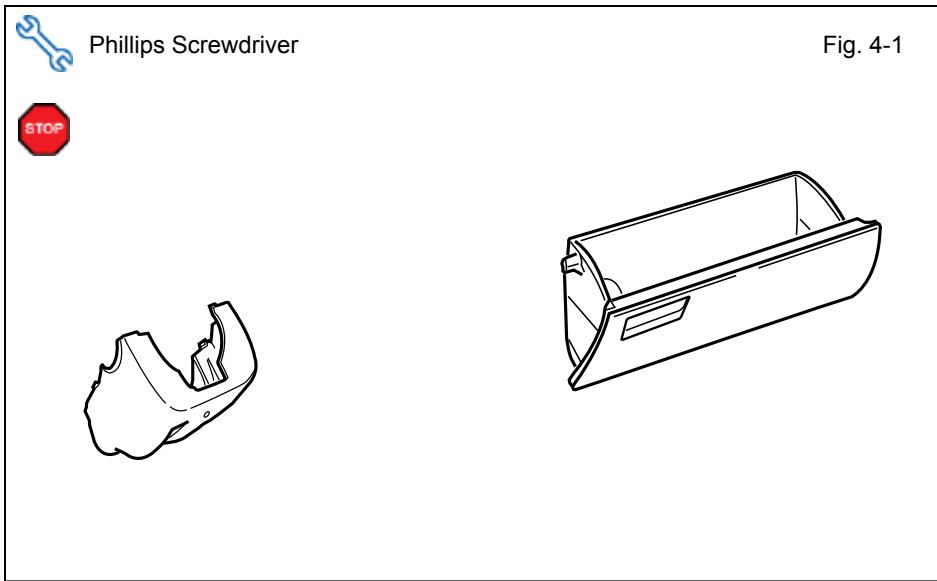
3. GBS Mic Installation.

- a. Locate the Vehicle's 4P White Pre-Connector behind the Open Knockout Location.
- b. Pull the Pre-Connector's Harness to break the Tape securing it.

c. Route the Vehicle's 4P White Pre-connector through the Open Knockout Location.

d. Connect the Vehicle's 4P White Pre-Connector to the GBS Microphone.

e. Install the GBS Microphone into the Open Knockout until it snaps in place.



4. Complete the Installation.

a. Reassemble the Vehicle.

STOP **VERIFY:** That all Connectors are plugged in.

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

b. Sealed in its protective bag, place the Owner's Manual in the Glove Box.

c. Use Household Glass cleaner to clean the inside of the Front Door Windows.

d. Use a piece of Clear Tape to lift the Label off its protective backing.

STOP **CAUTION:** Do not touch the adhesive surface.

e. Attach the Label as shown.

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

REPEAT: steps c-e with the other Front Window.

f. 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.

g. Clean up and Remove trash.

CHECKLIST – these points **MUST** be checked to ensure a quality installation.

Accessory Function Checks

Roll up all windows, and exit the vehicle with the remote.



Vehicles w/Smart Key: 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 | Press and release the remote control lock button 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. |
| 3 | Press and release the remote control’s unlock button to disarm the system. | The turn signal lights flash twice. The driver’s door unlocks. The Security LED stops flashing. |

Open the driver’s door, with the smart key in your possession, press the power button to “ON.” Roll down all the windows, remove the key and exit the vehicle.

| | | |
|----|---|--|
| 4 | Arm and disarm the system with the remote again, then wait 60 seconds. | The doors automatically relock. The system automatically starts the arming process. |
| 5 | Press and release the remote control’s unlock button again to stop the arming process. | Refer to step 3 |
| 6 | Press the lock button on the driver’s exterior door handle to start the arming process. | All doors lock. The Security LED lights up. |
| 7 | Wait 30 seconds. | Security LED starts flashing; the system is now armed. |
| 8 | Reach inside and manually unlock the driver’s door to trigger an alarm. | The driver’s door automatically relocks. The horn sounds repeatedly. The headlights flash repeatedly. The turn signal lights flash repeatedly. The Security LED lights up. |
| 9 | Manually unlock the driver’s door again and hold it unlocked, open the door, then sit in the driver’s seat. | The driver’s door lock attempts to lock repeatedly. The horn continues to sound repeatedly. The headlights and turn signal lights continue flashing. The Security LED remains on. |
| 10 | The smart key in your possession, step on the brake and press the power button twice to “START” to start the vehicle. | The horn stops sounding. All the lights stop flashing and/or turn off. The Security LED turns off. The starter cranks and the engine starts. |

Press the power button to turn the vehicle off, and then exit the vehicle.

| | | |
|----|--|--|
| 11 | With the door open, press the lock switch on the door to lock the doors, then close the door to start the system’s arming process. | All doors lock. The Security LED lights up. |
| 12 | Wait 30 seconds. | Security LED starts flashing; the system is now armed. |

CHECKLIST – these points **MUST** be checked to ensure a quality installation.

| | | |
|----|--|---|
| 13 | Reach inside and manually unlock the front passenger's door to trigger an alarm. | The front passenger's door automatically relocks. The horn sounds repeatedly. The headlights flash repeatedly. The turn signal lights flash repeatedly. The SECURITY LED lights up. |
| 14 | Press and release the remote control's unlock button to stop the alarm. | The horn stops sounding. All the lights stop flashing. The Security LED stops flashing. |
| 15 | Press and release the remote control's lock button to start the system's arming process, then wait 30 seconds until the system is armed. | Refer to steps 1 and 2. |
| 16 | Unlock and open one of the rear passenger doors to trigger an alarm. (if available). | Refer to step 13. |
| 17 | Press and release the remote control's unlock button to stop the alarm. | Refer to Step 14 |
| 18 | Repeat the above steps with the other rear passenger door. (if available) | Refer to steps 1, 2, and 13. |

Roll up all windows, remove the key and exit the vehicle.

| | | |
|----|---|--|
| 19 | Press and release the remote control's lock button to start the arming process. | Refer to step 1. |
| 20 | Wait 30 seconds. | After 30 seconds, the Security LED starts flashing; the system is now armed. |

Perform the following check in a temperature-controlled environment. (50° - 90° F)

| | | |
|----|--|--|
| 21 | 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. |
| 22 | Insert the key into the driver's door key cylinder and turn it toward the back of the vehicle to stop the alarm. | Refer to Step 14 |



Vehicles w/Smart Key: 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 does not trigger during the Glass Breakage 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.) |

CHECKLIST – these points **MUST** be checked to ensure a quality installation.








Vehicle Function Checks

| Function | Function |
|----------|----------|
|----------|----------|

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) |

CHECKLIST – these points **MUST** be checked to ensure a quality installation.

| 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"/> | 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 |

