

Part Number: PT398-52081

NOTE: Part number of this accessory may not be the same as the part number shown

Conflicts

Do not install into vehicles without RKE, or with factory Security.

Recommended Sequence of Application

Item #	Accessory	
1	V4	
2	V5	
3	Interior lights	
4	Strut Tie Bar	

Kit Contents

Item #	Quantity	Description
1	1	Wire Harness
2	1	GBS ECU Mounting Bracket
3	1	V5 ECU Mounting Bracket

Hardware Bag Contents

Item #	Quantity	Description
1	1	GBS ECU
2	1	V5 ECU
3	1	Status Monitor w/Microphone
4	3	Small Foam Tape
5	1	Nut
6	1	Screw (M6)
7	20	Wire Ties
8	2	Window Warning Label
9	1	Owner's Manual
10	1	Warranty Card

Additional Items Required For Installation

Item #	Quantity	Description

Recommended Tools

Personal & Vehicle Protection	Notes
Safety Glasses	
Safety Gloves	(Optional)
Vehicle Protection	Blankets, Parts Boxes
Special Tools	Notes
Installation Tools	Notes
Phillips Screwdriver	#2 screwdriver or tip
Flat Blade Screwdriver	Jeweler's screwdriver
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST # 00002-06001-01
Side Cutters	
Torque Wrench	36 in•lbf (40.67 n•cm)
Utility Knife	
Tape	Clear
Socket	10mm, Extension
Special Chemicals	Notes
Cleaner	VDC Approved Cleaner
Glass Cleaner	Household Glass Cleaner

Legend

 **STOP:** Damage to the vehicle may occur. Do not proceed until process has been complied with.

 **OPERATOR SAFETY:** Use caution to avoid risk of injury.

 **CAUTION:** A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.

 **TOOLS & EQUIPMENT:** Used in Figures calls out the specific tools and equipment recommended for this process.

 **REVISION MARK:** This mark highlights a change in installation with respect to previous issue.

 **SAFETY TORQUE:** This mark indicates that torque is related to safety.

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

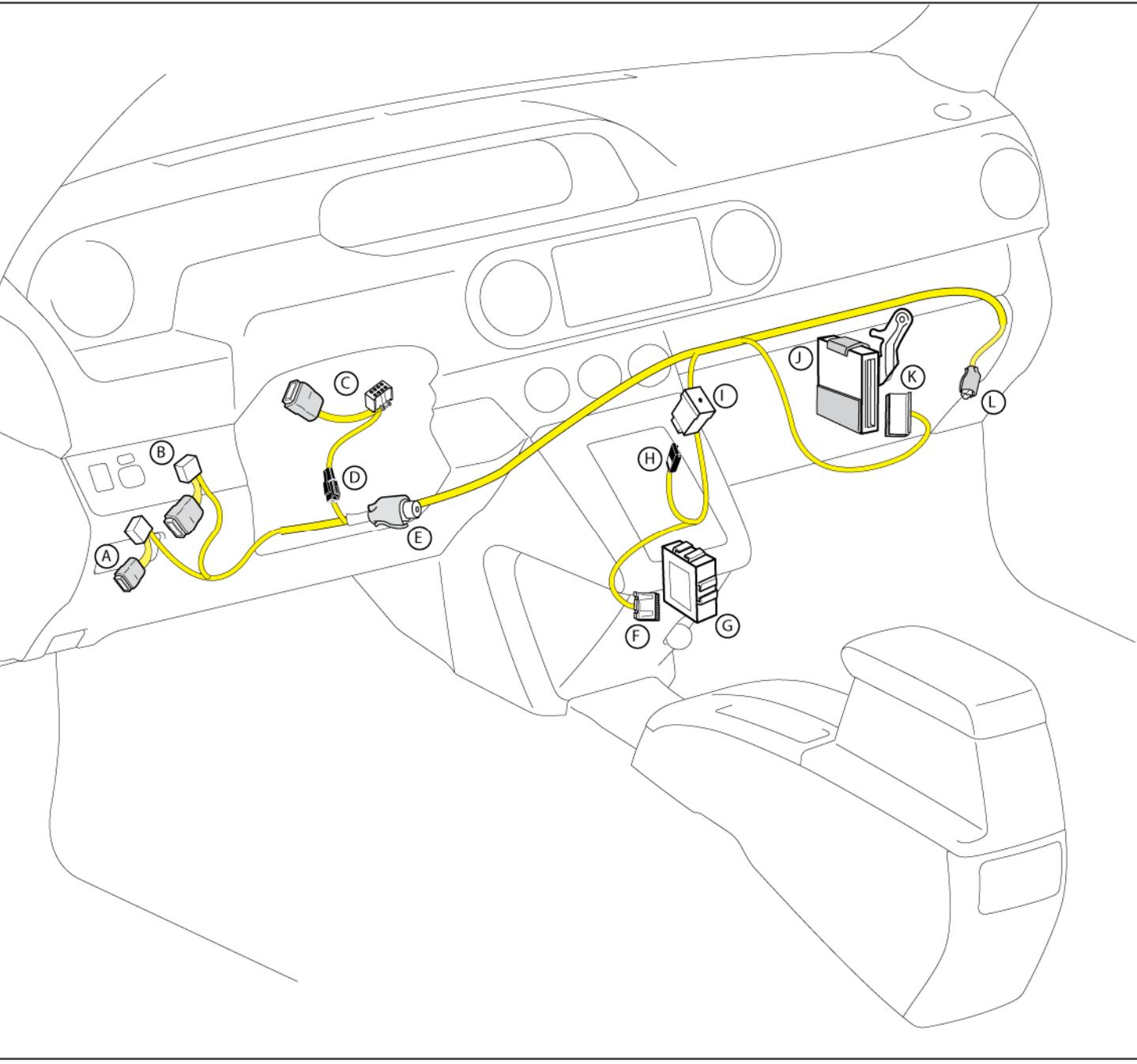
These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.)
- Safety (eye protection, rechecking torque procedure, etc.)
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.)
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.)

Please see your Scion dealer for a copy of this document

Ⓐ 14 Pin Connector
Ⓑ 18 Pin Connector
Ⓒ 8 Pin Connector
Ⓓ 2 Pin Connector (black)
Ⓔ Relay
Ⓕ 8 Pin Connector
Ⓖ GBS ECU
Ⓗ 4 Pin Connector (black)
Ⓘ Status Monitor
Ⓙ V5 Security ECU
Ⓚ 36 Pin Connector
Ⓛ 2 Pin Connector



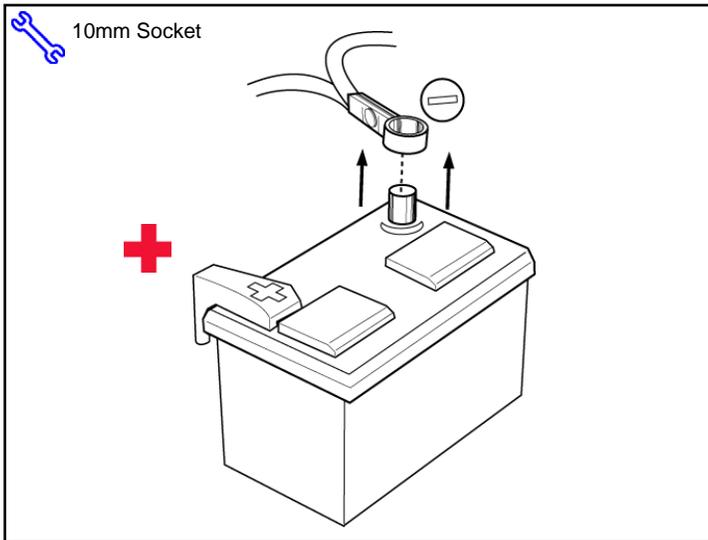


Fig. A-1

A. Vehicle Disassembly

1. Vehicles with Automatic Transmission should be placed in Park and have the Parking brake set before disconnecting the Battery.
2. Remove the Negative battery cable.
 - (a) Note the battery cable position, as it will be reinstalled in the same position

+

DO NOT TOUCH THE POSITIVE BATTERY TERMINAL.

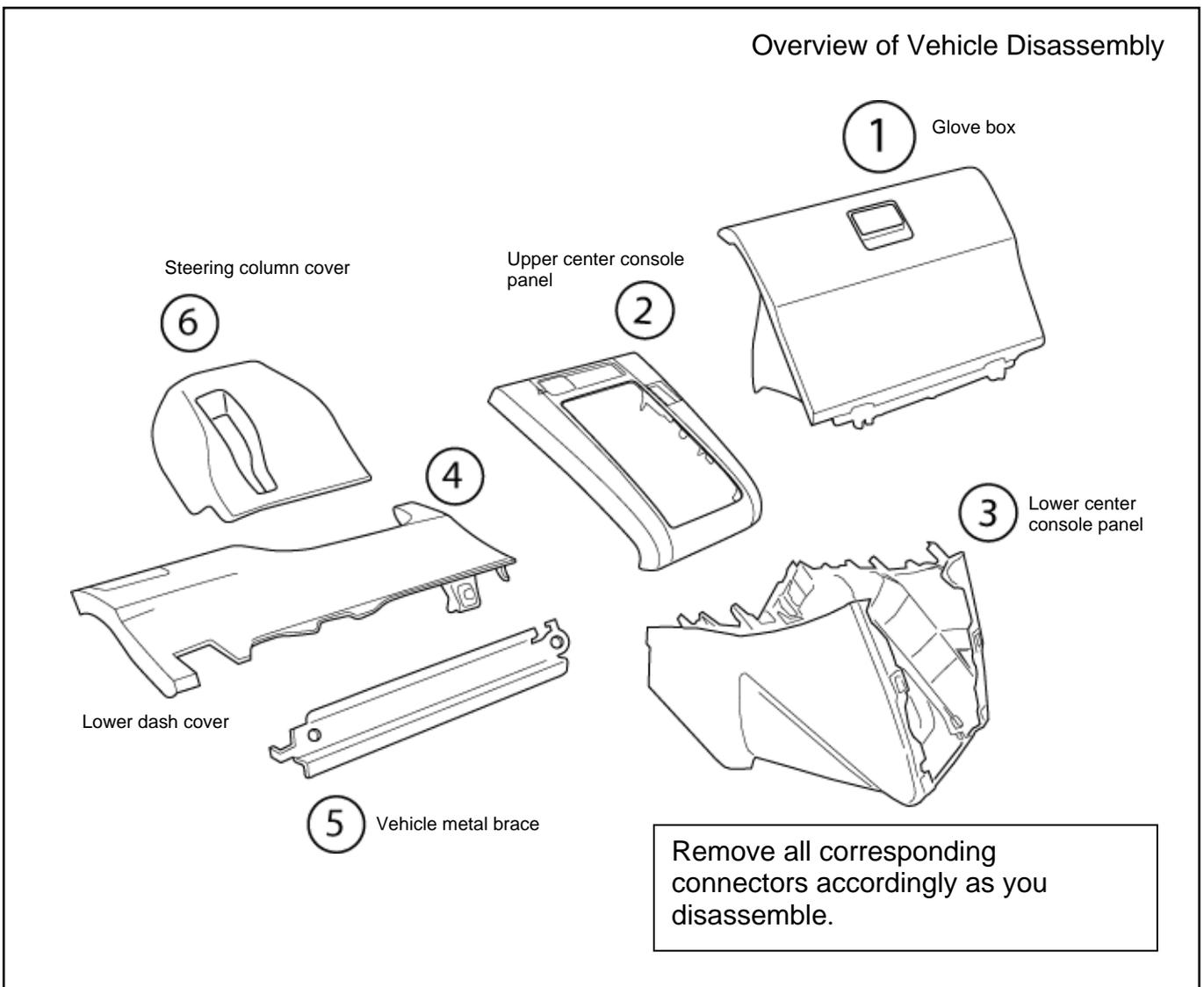


Fig. A-2

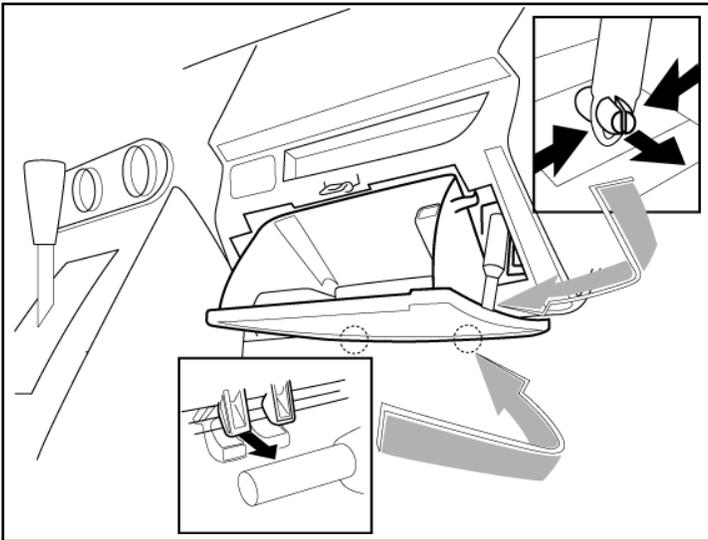


Fig. A-3

3. Disconnect the Dampener from the glove box.
4. Remove the Glove box.

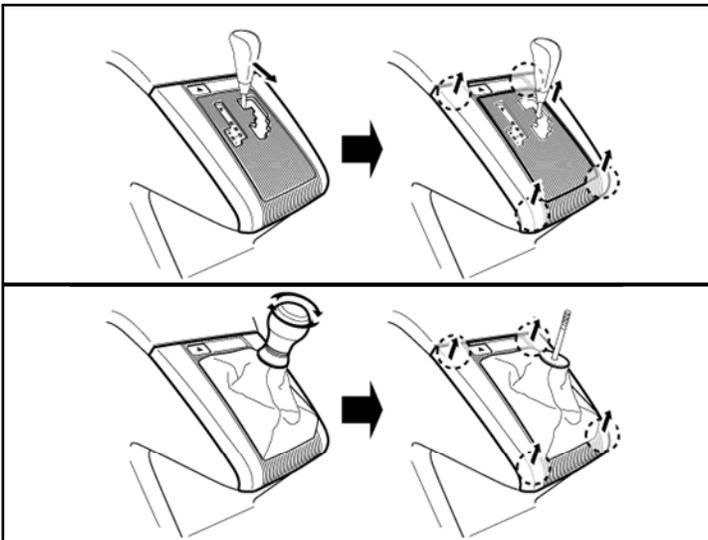


Fig. A-4

Automatic Transmission vehicle

5. Place gear in Neutral.
Remove the Upper center console panel. Return gear to Park.

Manual Transmission vehicle

6. Unscrew the stick shift knob,
and remove the Upper center console panel.

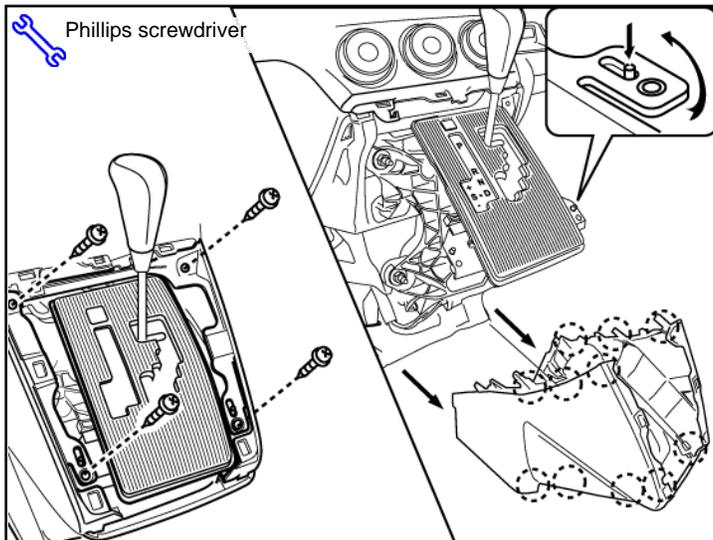


Fig. A-5

7. Remove 4 screws. (top 2 screws only for manual transmission vehicle)
8. Remove the lower panel of the center console.

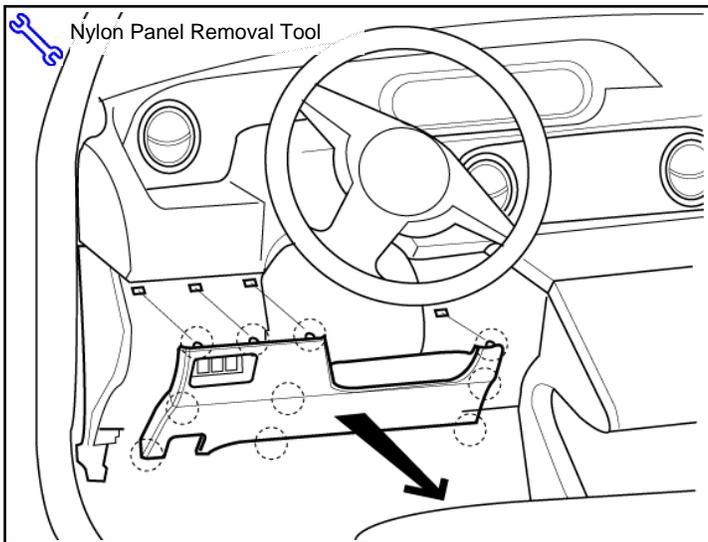


Fig. A-6

9. Remove the Lower dash cover.

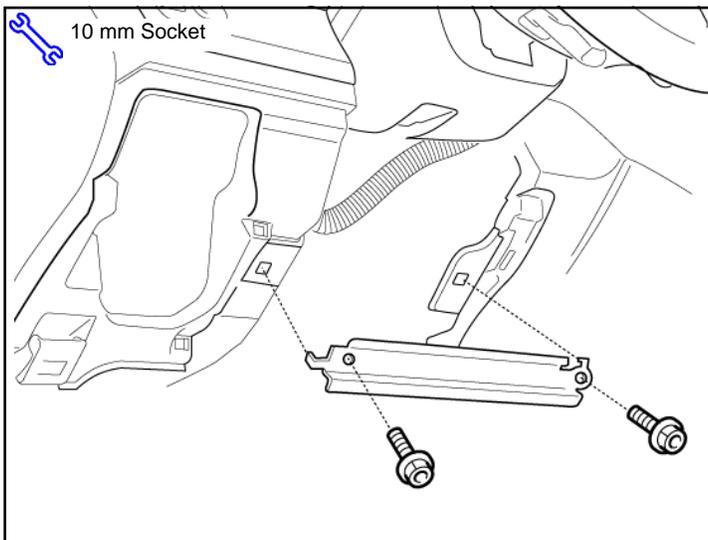


Fig. A-7

10. Remove 2 bolts, and remove the vehicle metal brace.

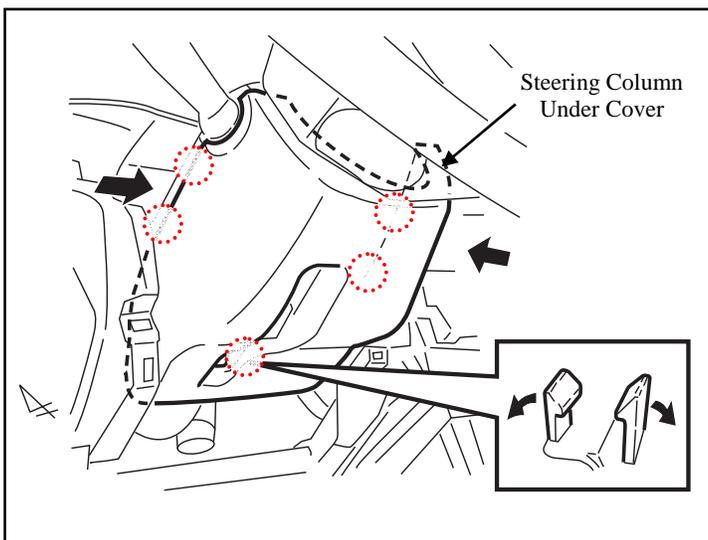


Fig. A-8

11. Loosen the Steering Column Under Cover as shown.

- (a) Insert fingers into the opening of the Tilt Lever of the Steering Column Under Cover to disengage the 1 Claw.
- (b) Push the right and left side of the Steering Column Under Cover, and disengage the 4 Claws.

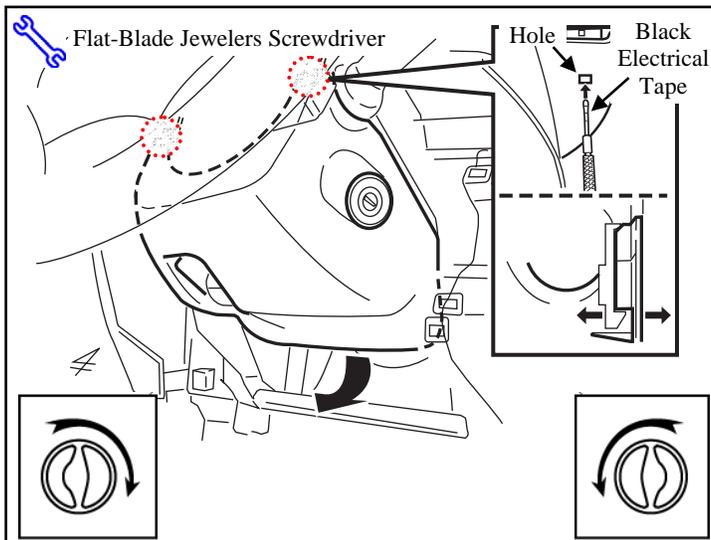


Fig. A-9

12. Remove the Steering Column Under Cover as shown.

- (a) Insert the key into the Ignition and turn it to ON.
- (b) Turn the Steering Wheel from Left to Right to gain access to the Clip Access holes.
- (c) Wrap the tip of the Flat Blade Jewelers Screwdriver in the Black Electrical Tape.
- (d) Insert it in the rectangular hole of the Steering Column Under Cover front, and release the inside 2 claws.

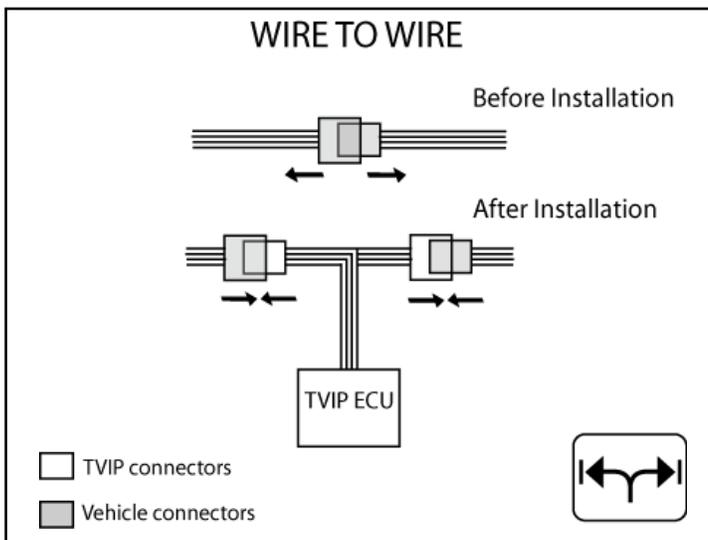


Fig.B-1



“Wire To Wire” is a process of inserting TVIP connectors between vehicle connectors in order to obtain appropriate electronic signals.

It will be repeated throughout the installation.

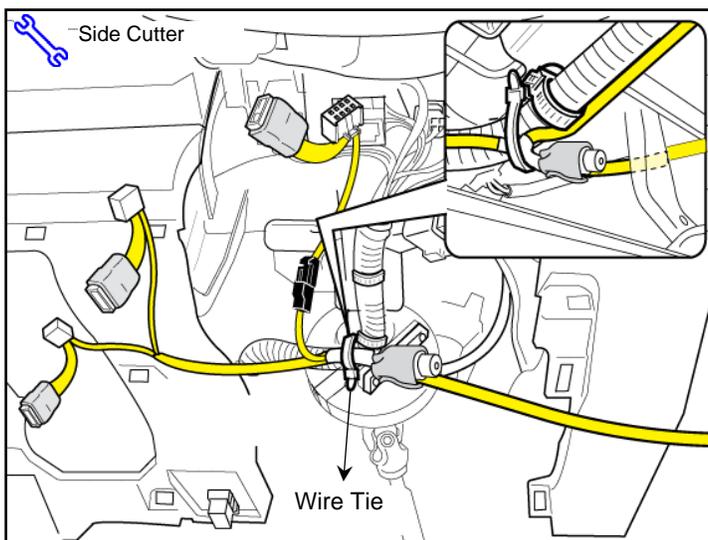


Fig. B-2

B. Wire Harness Installation (Driver's Side)

1. Secure the V5 Harness's White Tape Marker to the vehicle harness with 1 Wire Tie.

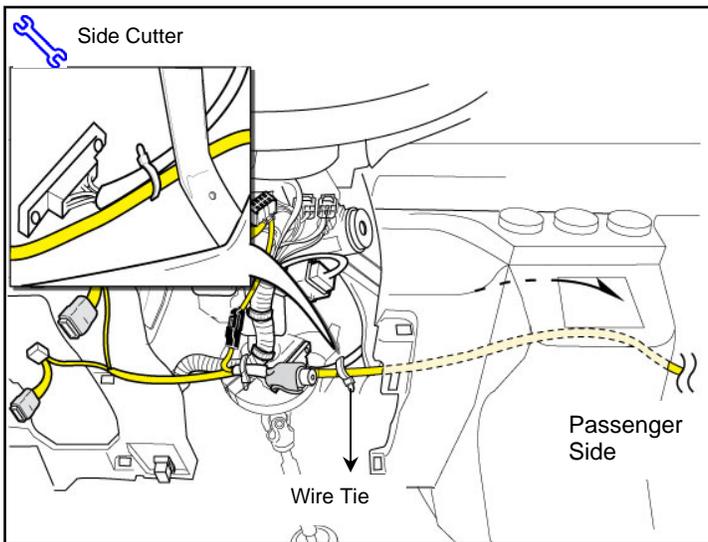


Fig. B-3

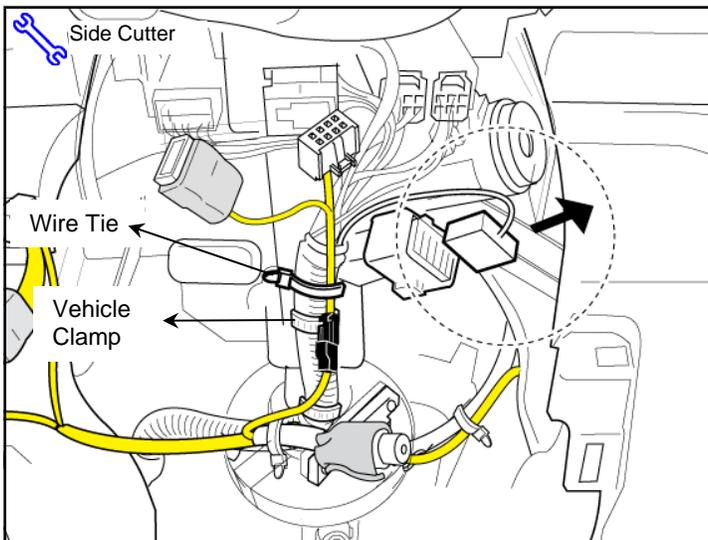


Fig. B-4

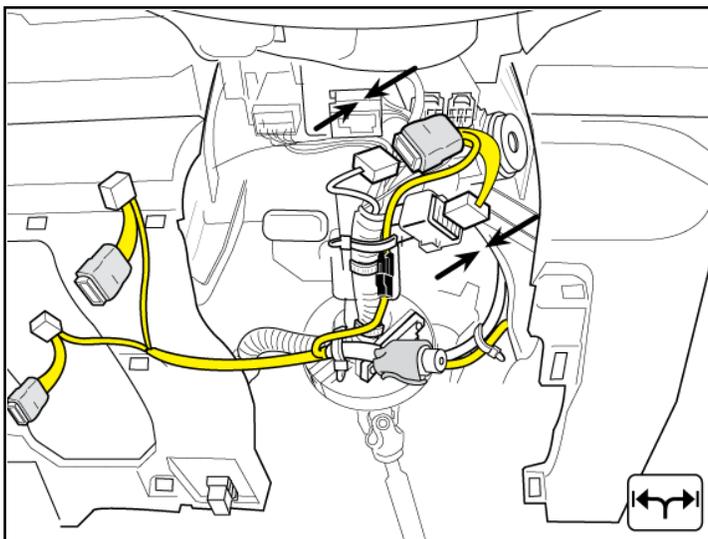


Fig. B-5

V5 only

-If vehicle is equipped with V4 Harness already, skip to step 8

2. Secure V5 Harness to the vehicle harness with 1 Wire Tie.
3. Route the V5 Harness to the passenger's side by running it behind the vehicle metal brace in the center console area.

+ Be Careful: Sharp Metal Edges

4. Disconnect the vehicle 8 pin connector located under the ignition switch.
5. Locate the vehicle clamp on the steering column. Secure the V5 Harness to vehicle harness with 1 Wire Tie.

6. Proceed with "Wire To Wire" by plugging TVIP 8 Pin connectors to vehicle 8Pin connectors.

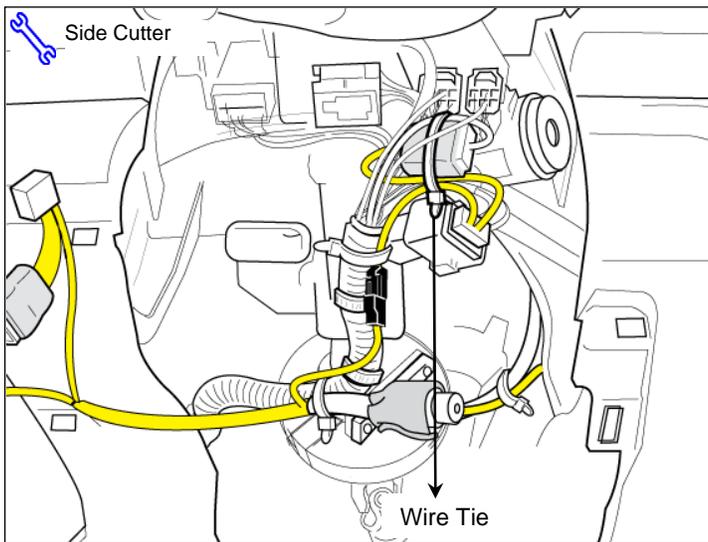


Fig. B-6

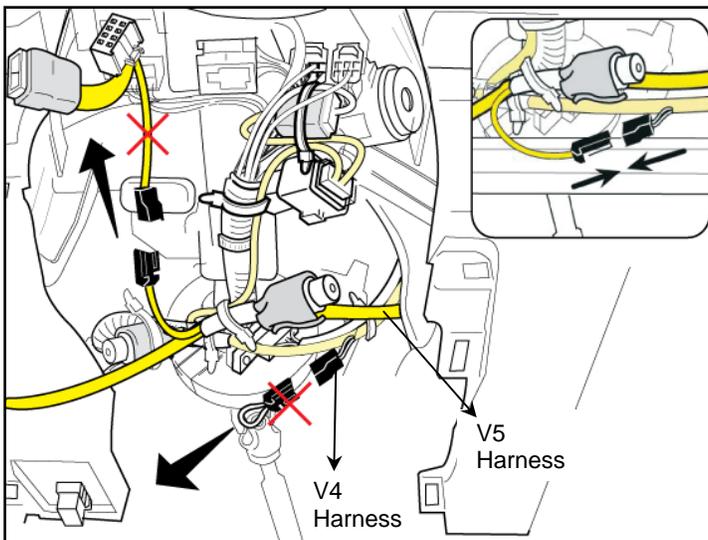


Fig. B-7

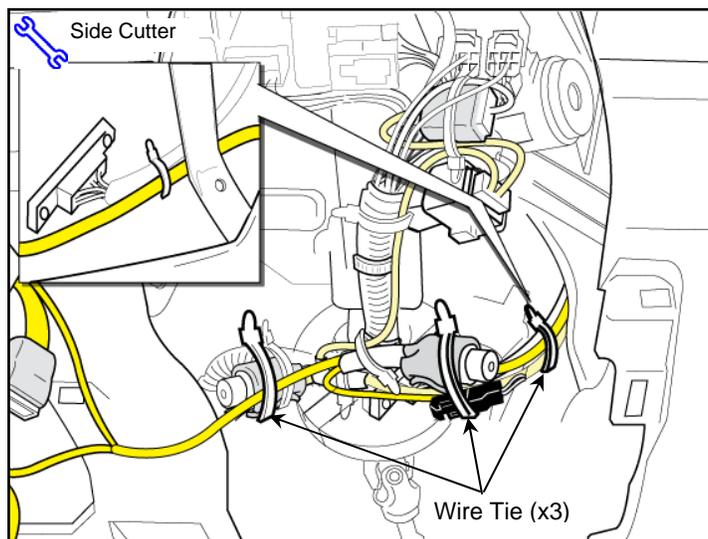


Fig. B-8

7. Secure the joint 8 Pin connectors onto vehicle harness with 1 Wire Tie.

move onto step 13

V5 onto V4

-Add On installation

8. If Vehicle is already equipped with V4 Harness, V5 Harness rides onto V4 Harness.

Unplug 2 Pin Connectors (black) on each of V4 and V5 Harnesses.

9. Insert V5 2 Pin Connector (black) into V4 2Pin Connector (black).
10. Route the V5 Harness to the passenger's side by running it behind the vehicle metal brace in the center console.

11. Secure V5 Harness to V4 Relay and V5 Relay to V4 Harness with 2 Wire Ties.
12. Secure the V5 Harness onto the vehicle harness with 1 Wire Tie.

move onto step 20

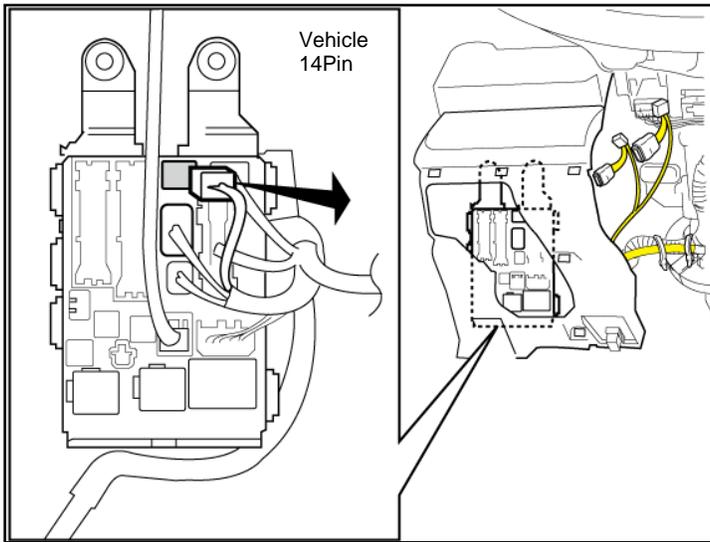


Fig. B-9

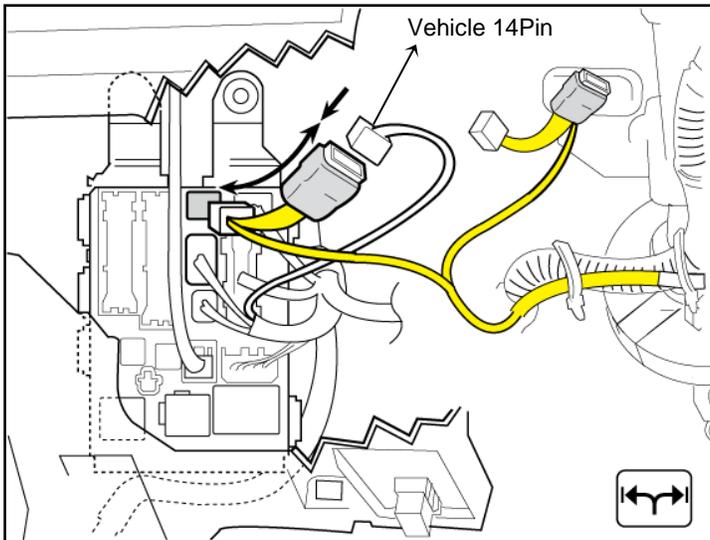


Fig.B-10

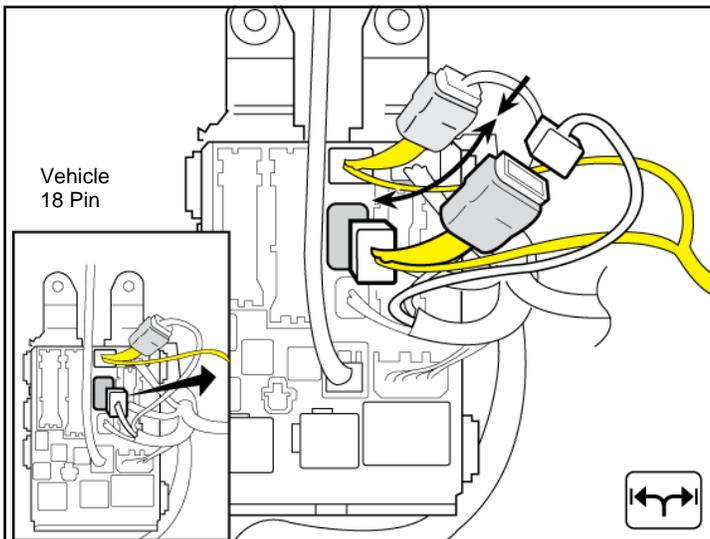


Fig.B-11

V5 only

-If vehicle is equipped with V4
Harness already, skip to step 8

13. Locate and disconnect the vehicle 14 Pin connector on junction box.

14. Proceed with "Wire to Wire," plugging V5 14 Pin Connectors to vehicle 14 Pin connectors.

15. Locate and disconnect vehicle 18 Pin connector on junction box.

16. Proceed with "Wire To Wire," plugging V5 18 Pin Connectors to vehicle 18 Pin connectors.

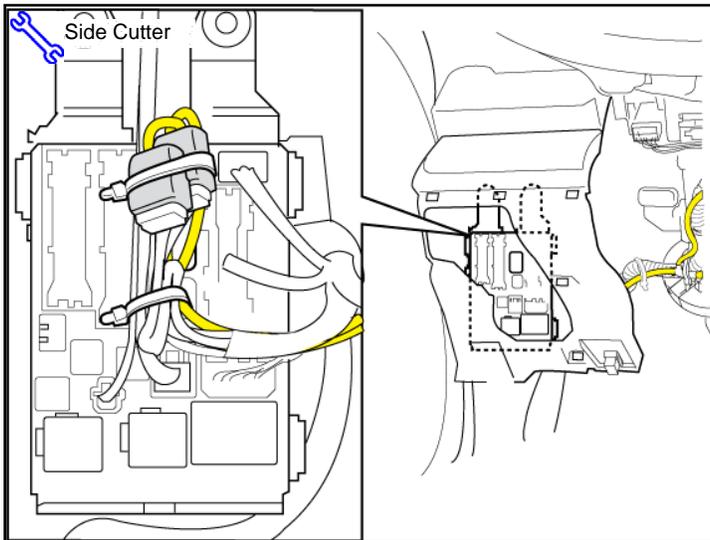


Fig.B-12

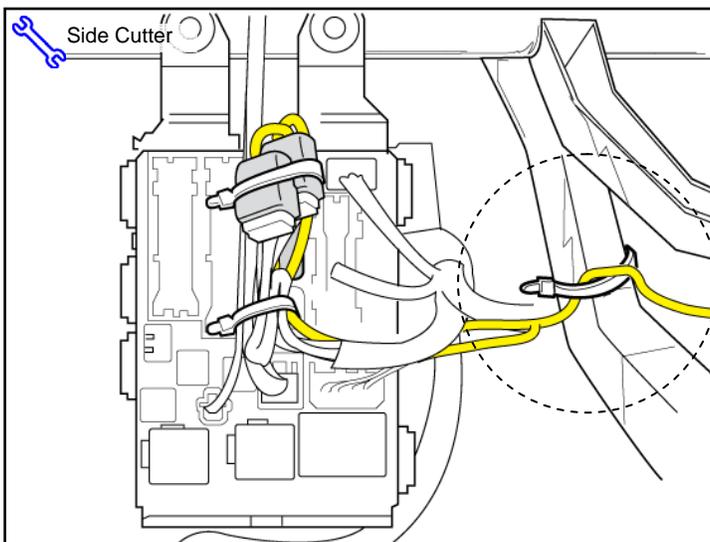


Fig.B-13

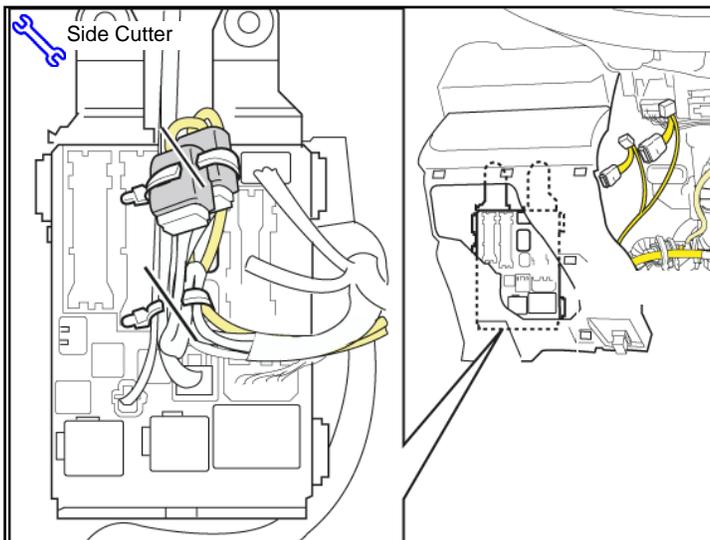


Fig.B-14

17. Secure the joint 14 Pin Connectors and 18 Pin Connectors with 1 Wire Tie.
18. Bundle and secure wires and harness together with 1 Wire Tie.

19. Secure the V5 Harness onto the vehicle metal brace with 1 Wire Tie.

V5 onto V4
-Add On installation

20. If vehicle is already equipped with V4 Harness, Clip off the 2 Wire Ties holding V4 connectors and the bundled wires.

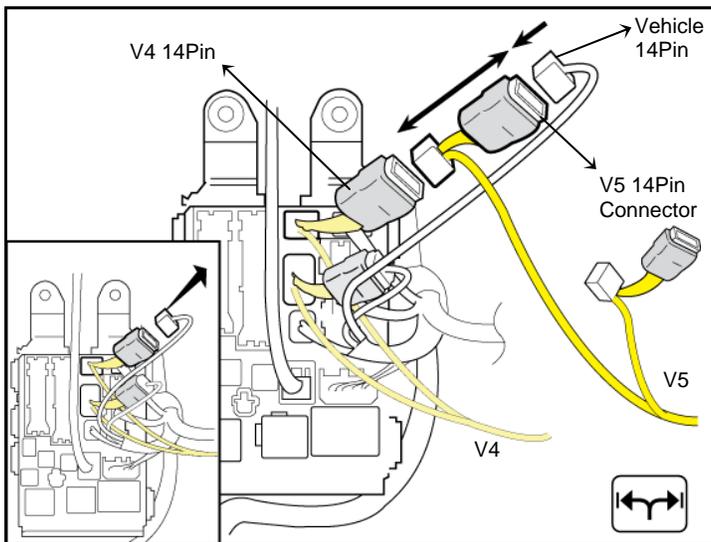


Fig.B-15

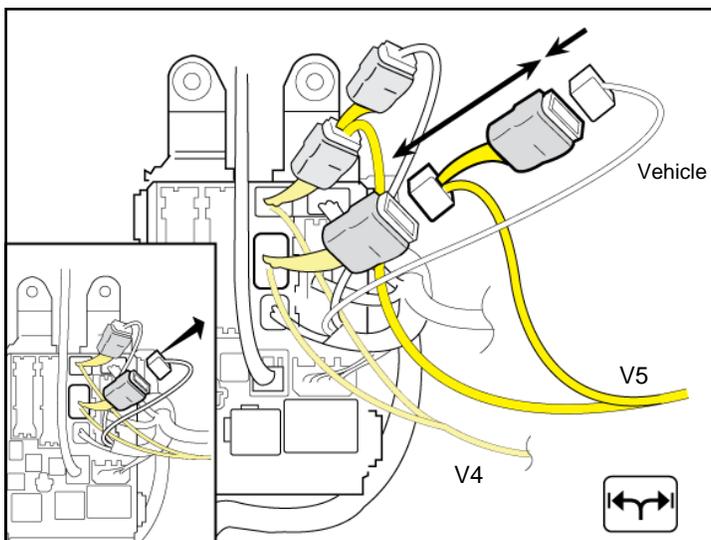


Fig.B-16

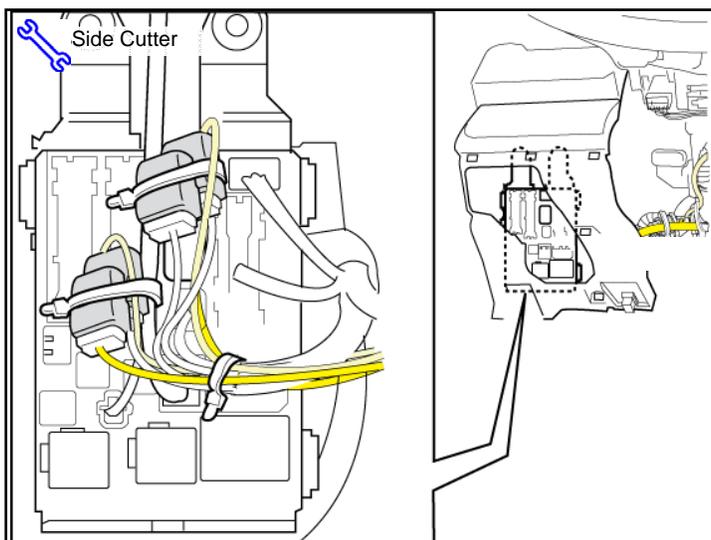


Fig.B-17

21. Unplug the vehicle 14 pin connector from V4 14 Pin Connector.

22. Proceed with "Wire To Wire;" Insert V5 14 Pin Connectors in between the V4 14 Pin Connector and the vehicle 14 pin connector.

23. Unplug the vehicle 18 pin connector from V4 18 Pin Connector.

24. Proceed with "Wire To Wire;" Insert V5 18 Pin Connectors In between the V4 18 Pin Connector and the vehicle 18 Pin connector.

25. Secure the joint 14 Pin Connectors with 1 Wire Tie.

26. Secure the joint 18 Pin Connectors with 1 Wire Tie.

27. Bundle and secure wires and harness together with 1 Wire Tie.

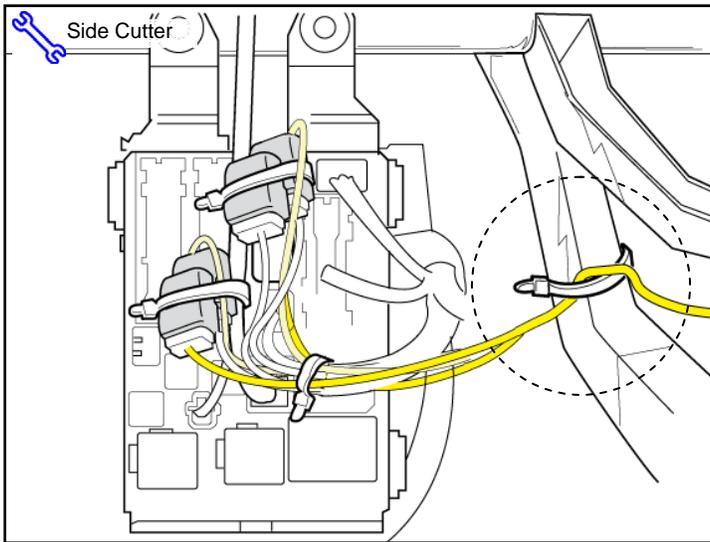


Fig.B-18

28. Secure the V5 Harness, onto the vehicle metal brace with 1 Wire Tie.

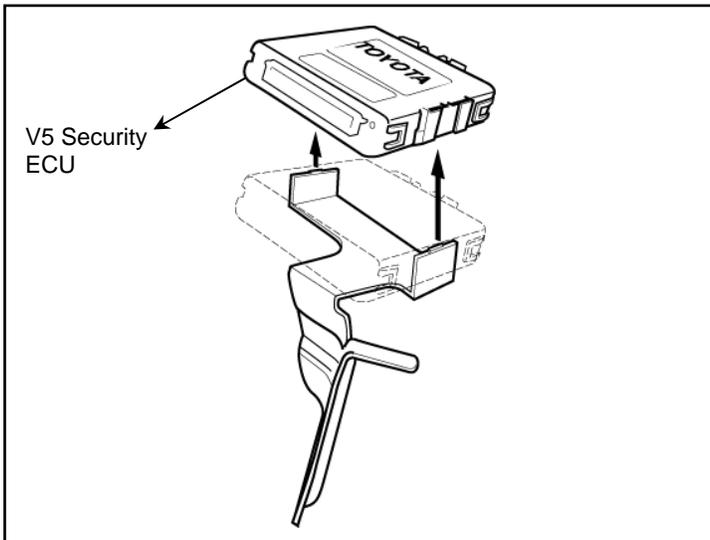


Fig.C-1

C. TVIP ECU Preparation

1. Insert Mounting Bracket into indicated slot of V5 Security ECU.



Make sure correct slot is selected. Bracket attachment is permanent once installed.

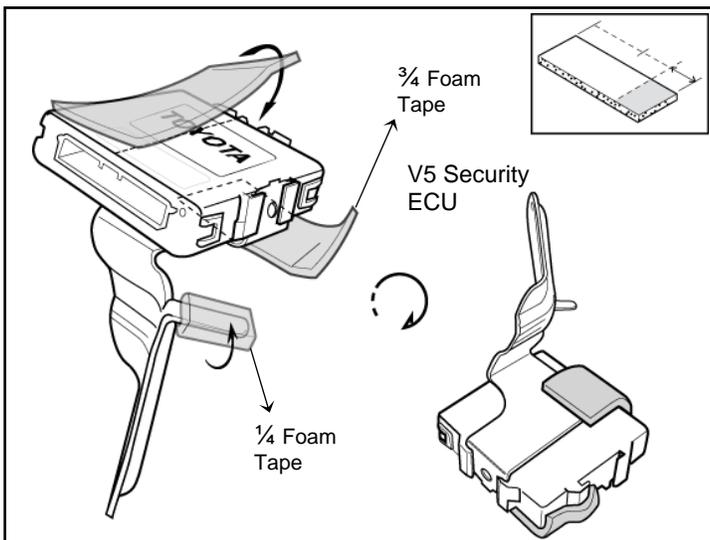


Fig.C-2

2. Cut 1 small Foam Tape as shown.
3. Apply 1 small Foam Tape and the $\frac{3}{4}$ piece Foam Tape on V5 Security ECU.
4. Apply remaining $\frac{1}{4}$ piece Foam Tape on the Mounting Bracket.

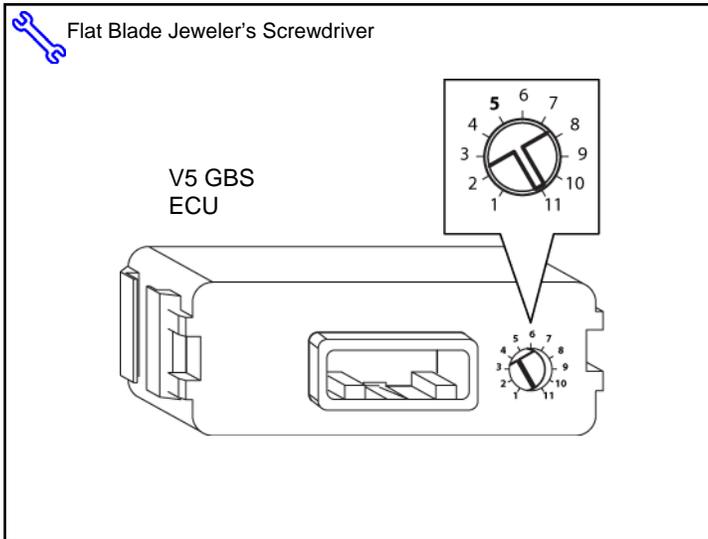


Fig.C-3

5. Set the GBS ECU's sensitivity to 5.

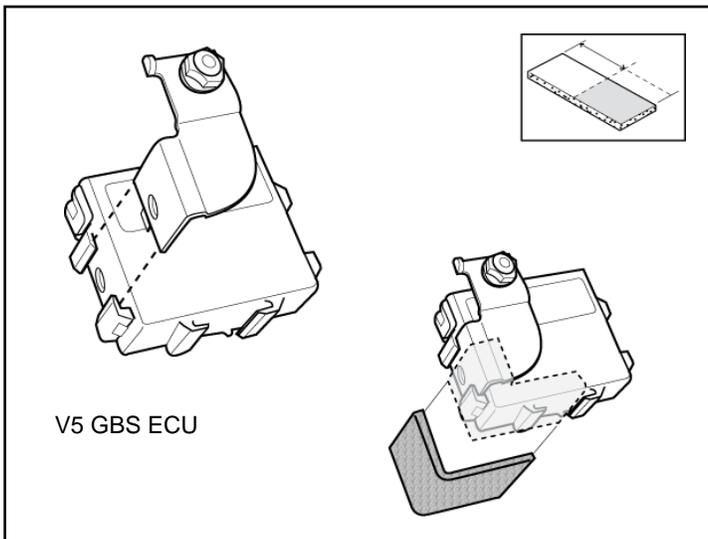


Fig.C-4

6. Insert the Mounting Bracket into indicated slot of GBS ECU.

 Make sure correct slot is selected.

7. Apply ½ small Foam Tape as shown.

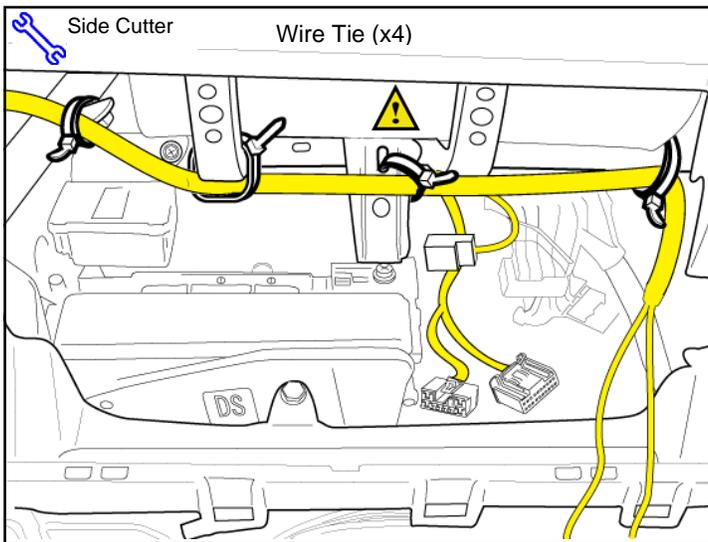


Fig.D-1

D. Wire Harness Installation (Passenger's side)

1. In passenger side, secure the V5 Harness to vehicle metal clip and reinforcement with 4 Wire Ties.

 Air Bag Connector is near above the Harness. Use Caution when pulling the Wire Ties.

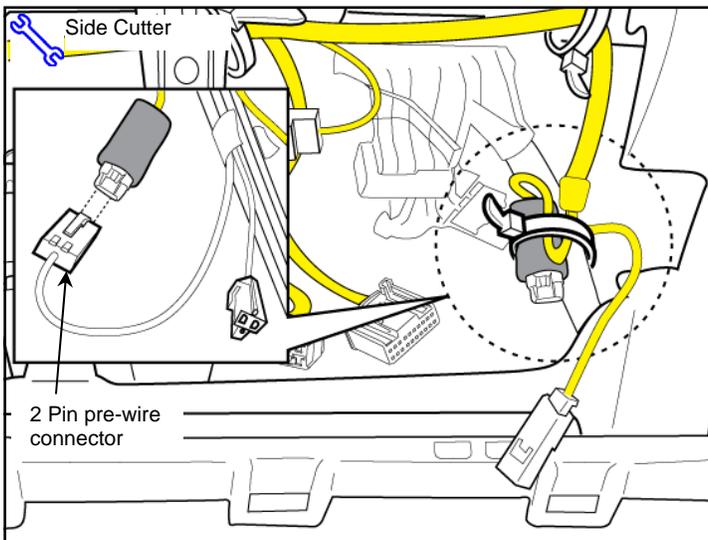


Fig.D-2

2. Plug V5 2 Pin Connector and vehicle 2 Pin pre-wire connector.

3. Secure the joint connectors onto vehicle harness with 1 Wire Tie.

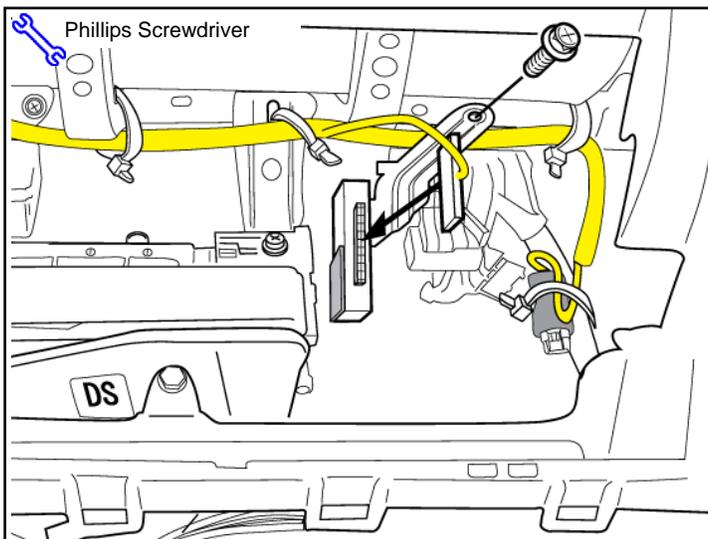


Fig.D-3

4. Plug 36 Pin Connector into V5 Security ECU.

5. Mount the ECU onto metal vehicle reinforcement with the M6 Screw supplied.

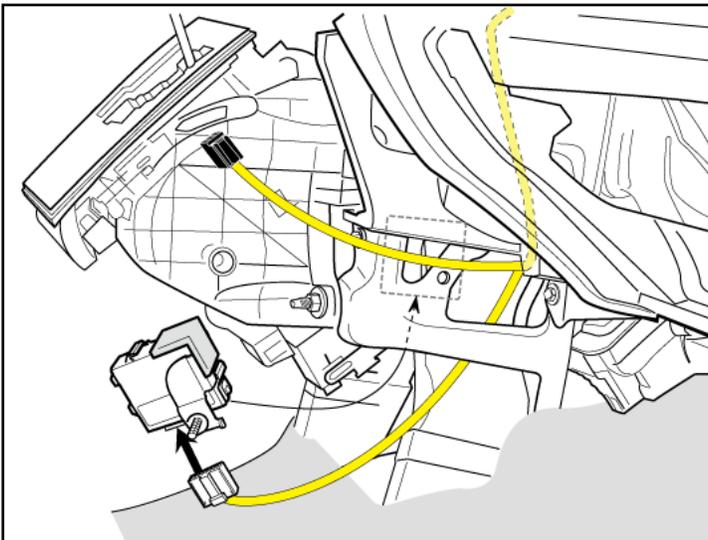


Fig.E-1

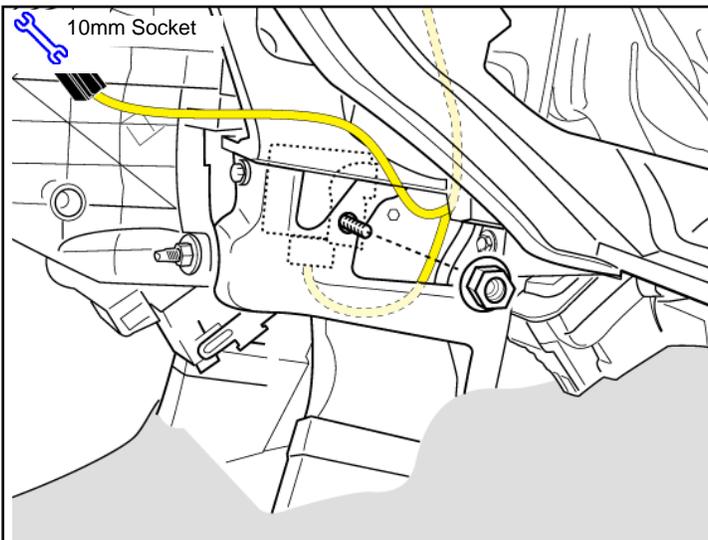


Fig.E-2

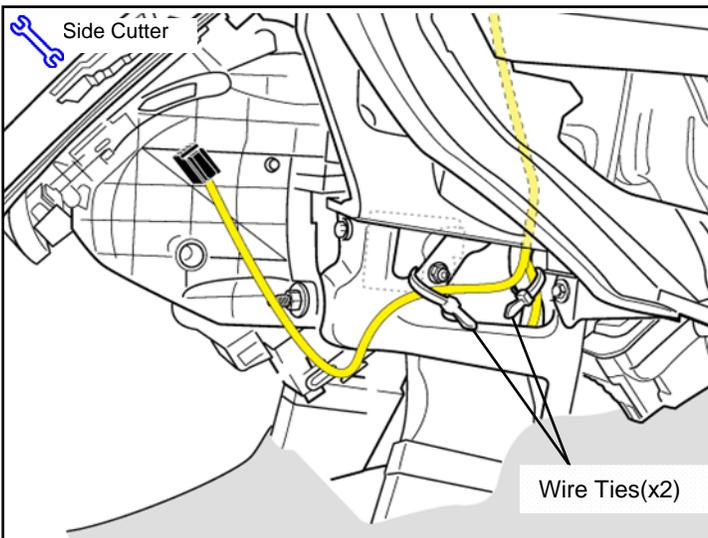


Fig.E-3

E. Status Monitor and GBS ECU Installation

1. Route the V5 Harness down to center console area as shown.
2. Plug V5 8 Pin Connector into V5 GBS ECU.
3. Mount the GBS ECU onto vehicle metal brace with the 1 Nut supplied.
4. Secure V5 Harness onto vehicle harness and metal brace with 2 Wire Ties.

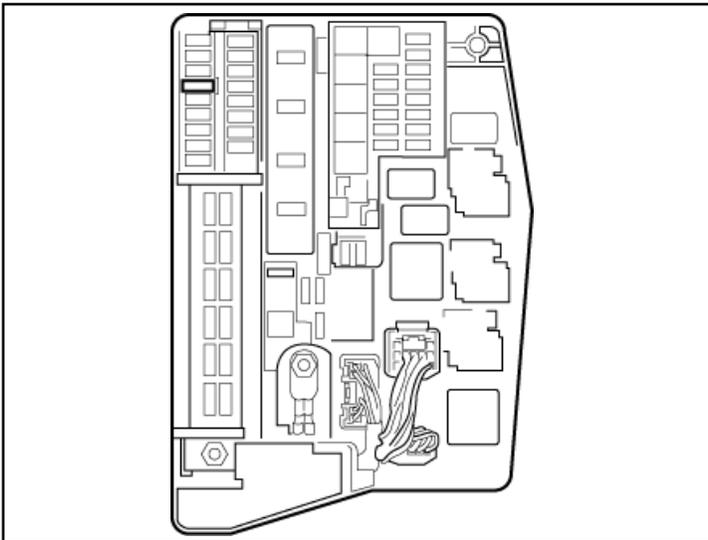


Fig.G-1

G. Completion of Installation

1. Verify the short pin is installed.

2. Reassemble the vehicle.

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

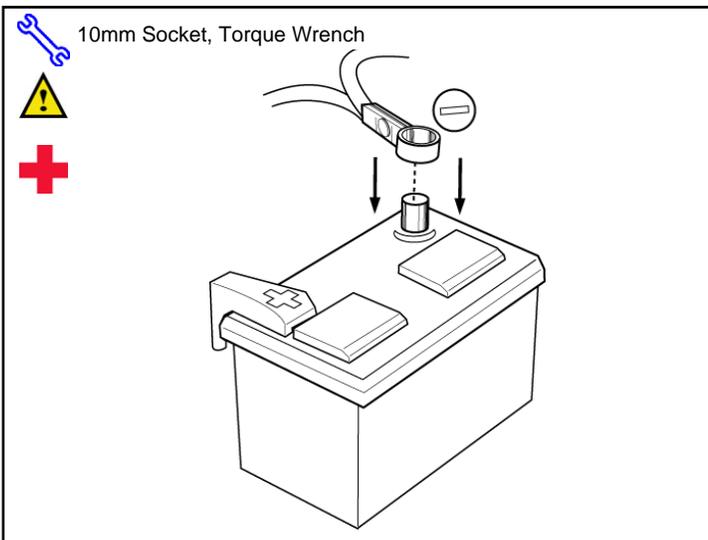


Fig.G-2

3. Position the Negative Battery Cable at the original factory position.

4. Tighten the Nut to 36 in•lb.
(40.67n•cm)

  **DO NOT TOUCH THE POSITIVE BATTERY TERMINAL.**

5. Clean up and remove trash.

6. Place the owner's manual, sealed in its protective bag, in the glove box.

Accessory Function Checks

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, insert the key into the ignition switch and turn it 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 30 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	Insert the key into the driver's door key cylinder and turn it toward the front of the vehicle 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	Press and release the remote control's unlock button to disarm the system.	The horn stops sounding. All the lights stop flashing and/or turn off. The Security LED turns off. The turn signal lights flash twice. The driver's door unlocks.

Turn the key back to "LOCK", remove it, 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.

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 turns off.
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.	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 10



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 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) (if equipped) <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

Remove the short pin after Function check.
Check with your Port/Dealer to see if this step is necessary.

