

**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.
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**Recommended Sequence of Application**

Item #	Accessory	
1	V4	
2	V5	

**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	Warning Label (Window)
9	1	Owners 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 Windex

**Legend**

	<b>STOP:</b> Damage to the vehicle may occur. Do not proceed until process has been complied with.
	<b>OPERATOR SAFETY:</b> Use caution to avoid risk of injury.
	<b>CAUTION:</b> 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.
	<b>TOOLS &amp; EQUIPMENT:</b> Used in Figures calls out the specific tools and equipment recommended for this process.
	<b>REVISION MARK:</b> This mark highlights a change in installation with respect to previous issue.

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 Toyota dealer for a copy of this document

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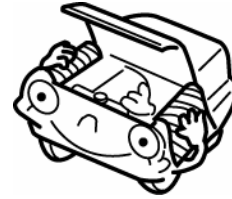
# PRECAUTIONS

Please Follow These Precautions During Installation

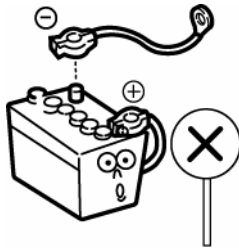
Confirm that lamps, horn, wiper and other car accessories operate normally before and after installation.



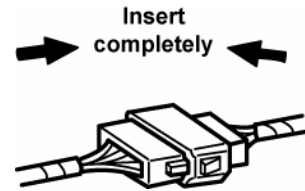
Protect your car surfaces from scratches, cover work area with blankets.



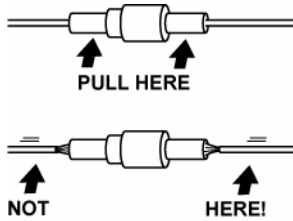
Do not touch the positive battery terminal when removing the negative cable



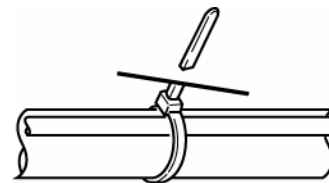
Verify secure connections.



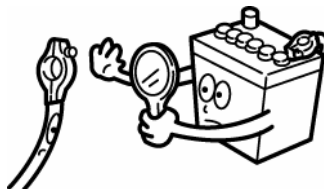
When disconnecting the connectors, be sure to grip the connector body. Do not tug on the wiring.



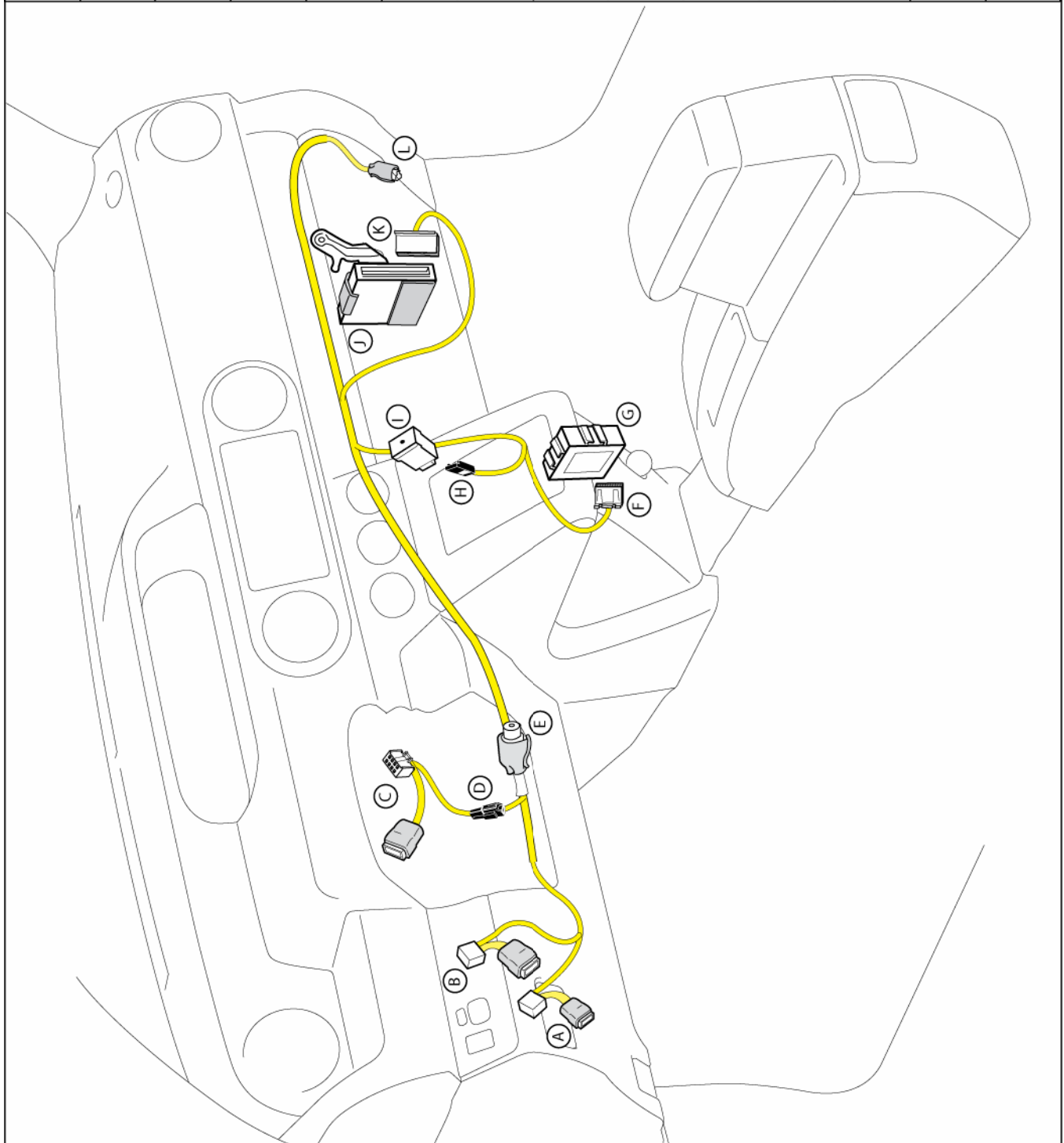
Clip all excess wire ties.



Before reconnecting the negative battery cable to the battery, check the wiring connections, harness, etc. to see that they are properly secure.



Ⓐ 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
⓵ V5 Security ECU
Ⓚ 36 Pin Connector
Ⓛ 2 Pin Connector



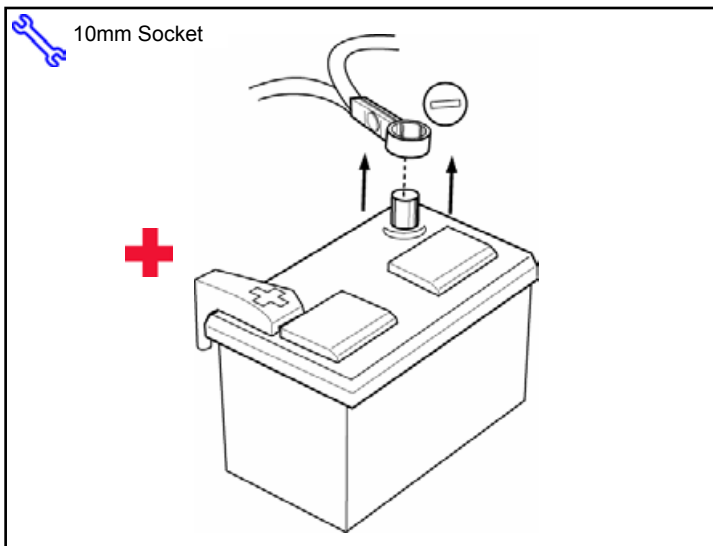


Fig. A-1

### 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.**

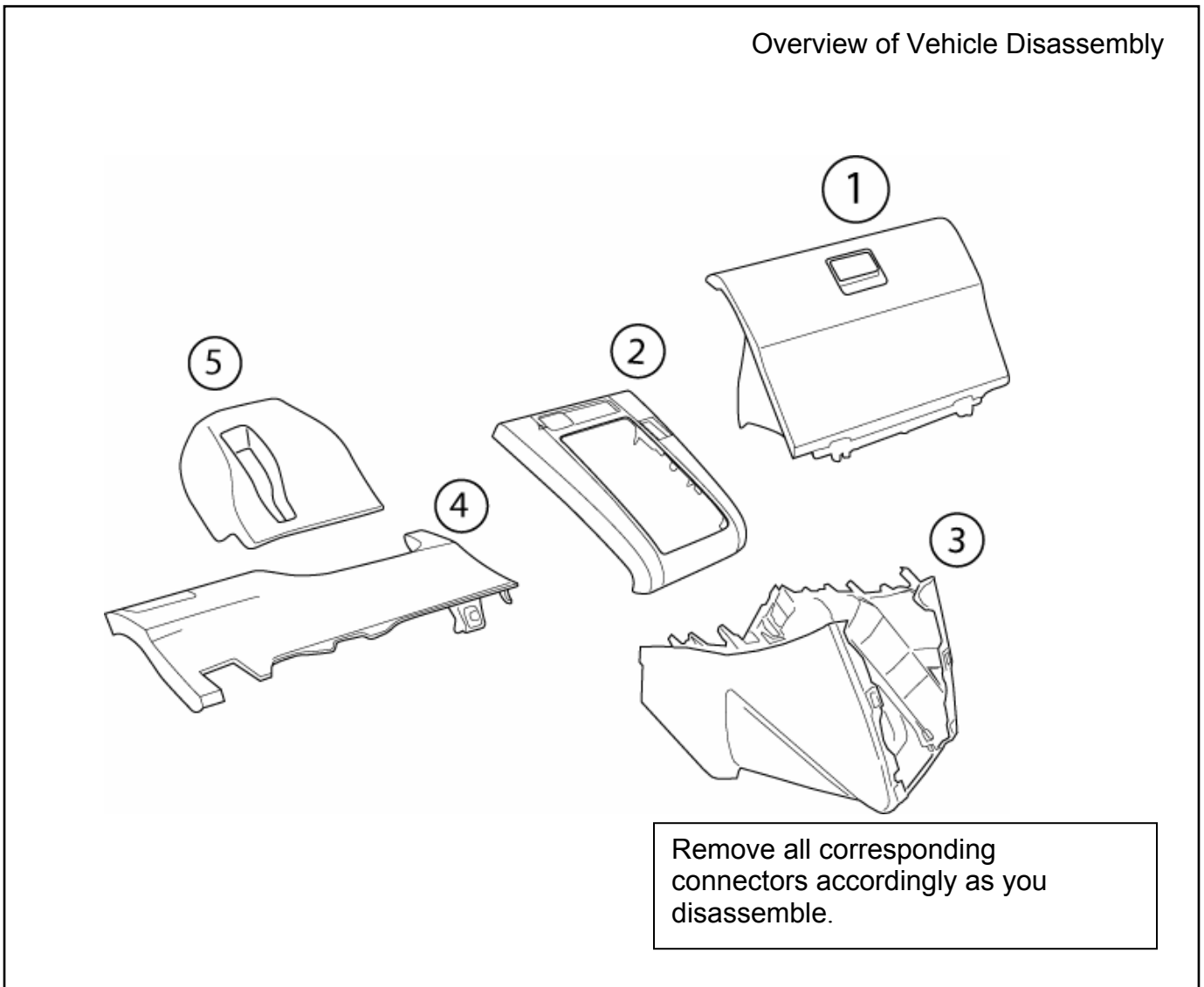


Fig. A-2

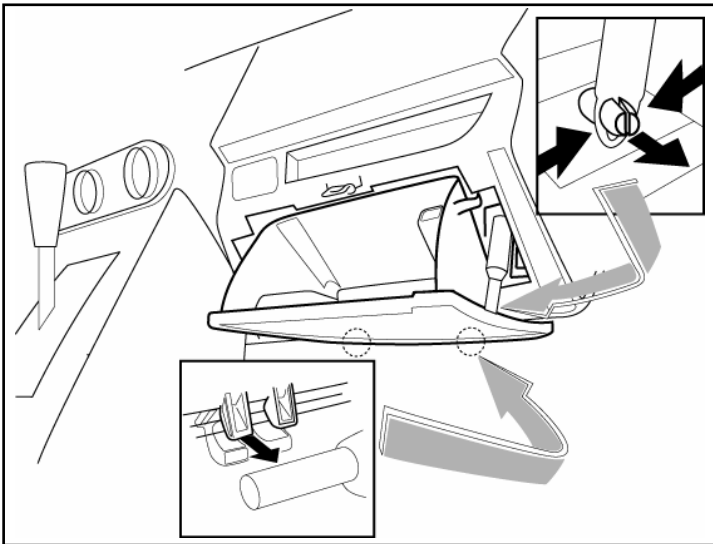


Fig. A-3

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

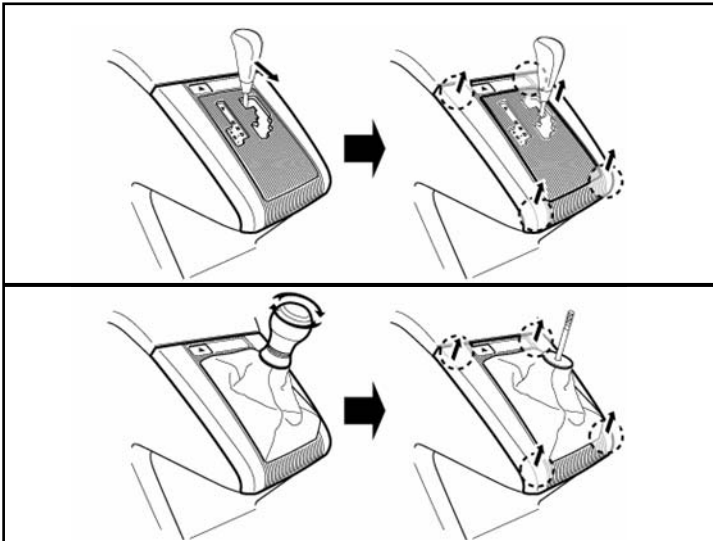


Fig. A-4

**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.

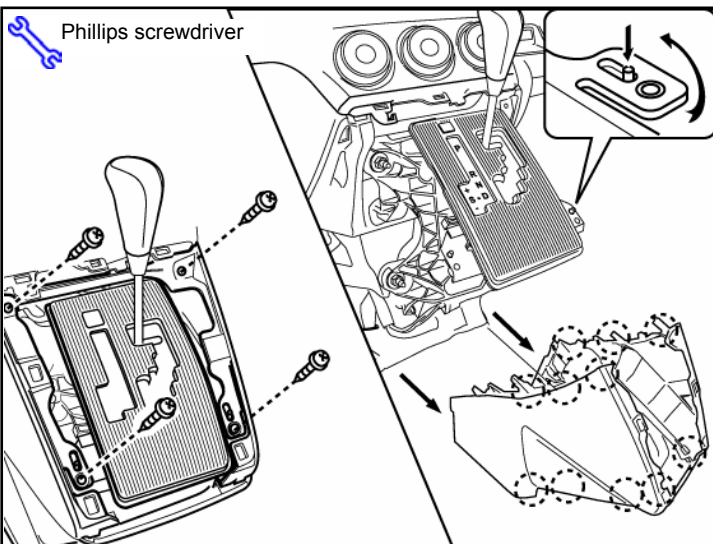


Fig. A-5

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

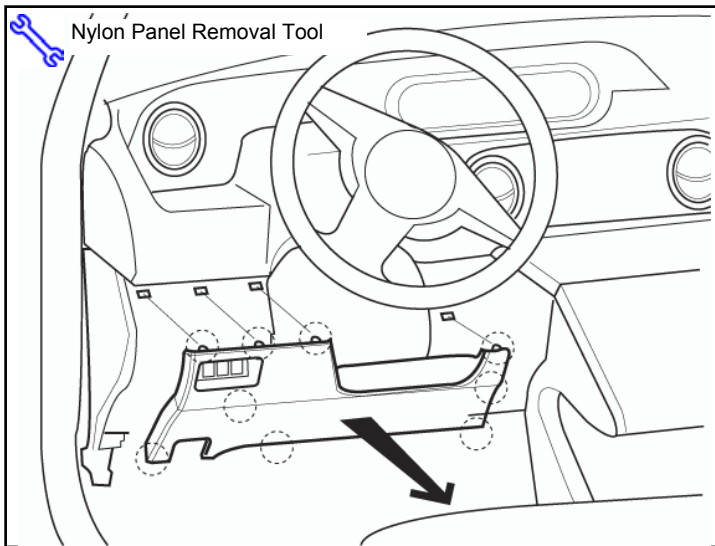


Fig. A-6

9. Remove the Lower dash cover.

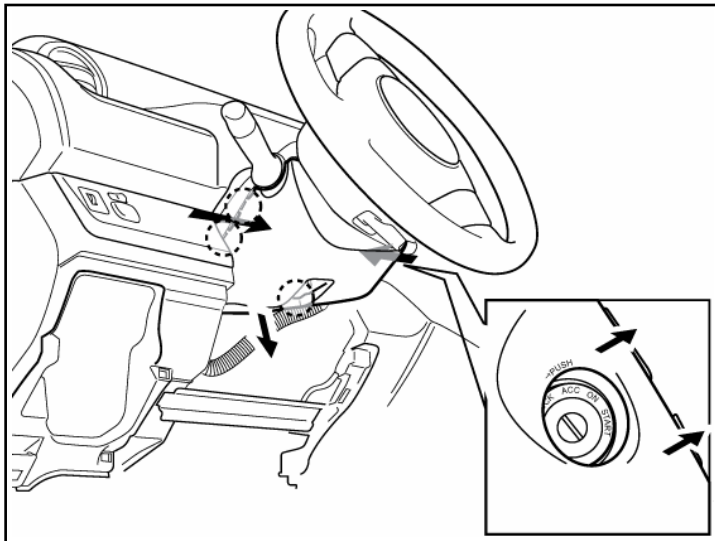


Fig. A-7

10. Loosen the Steering column cover.

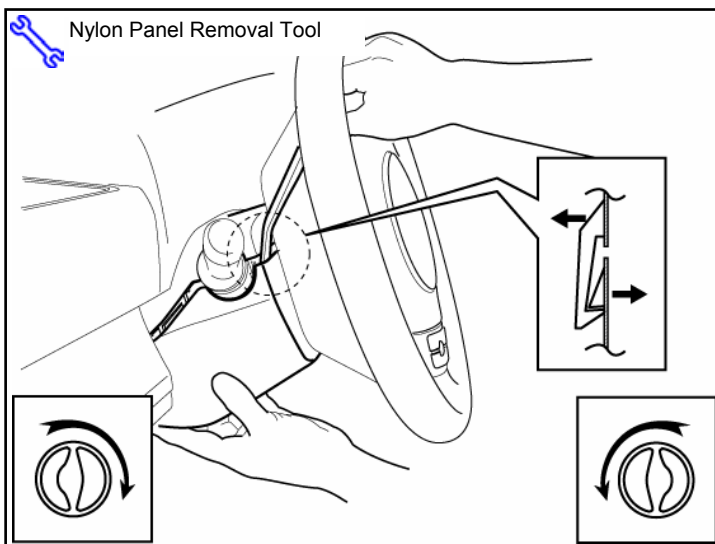


Fig. A-8

11. Release the inner clip lock, using Nylon panel removal tool.

12. Remove the Steering column cover.

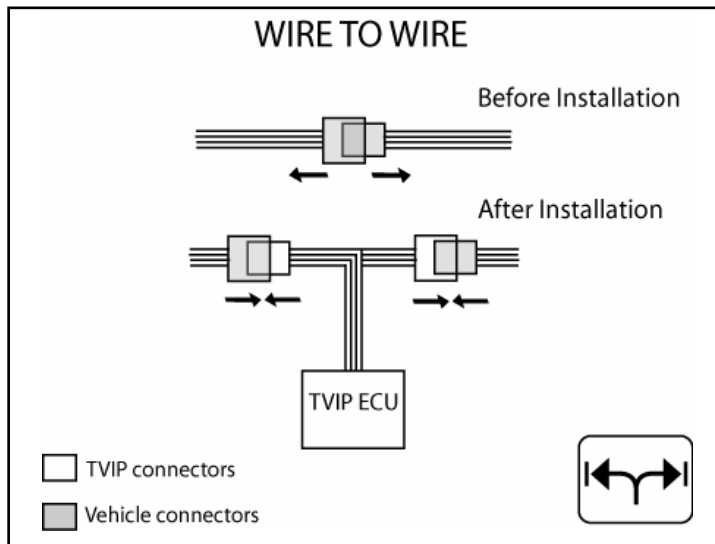


Fig.B-1



“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 installation.

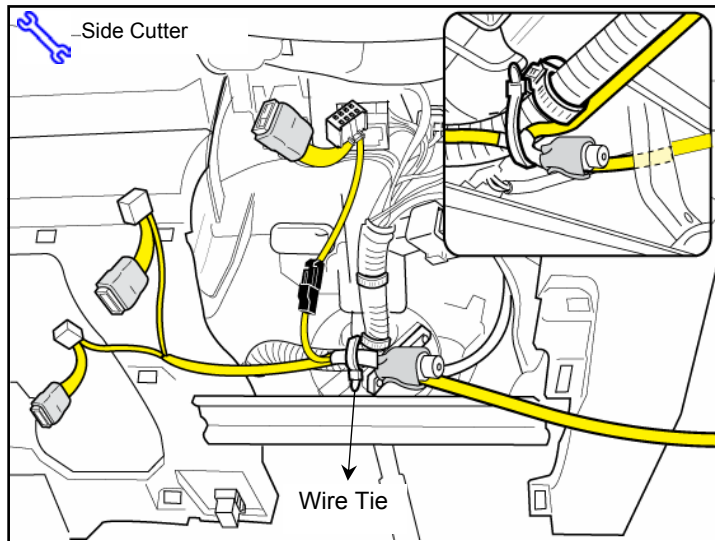


Fig. B-2

### B. Wire Harness Installation (Driver's Side)

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

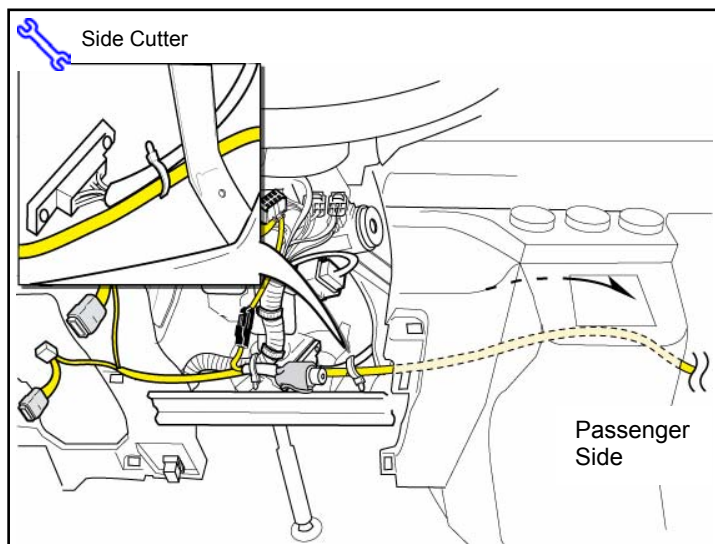


Fig. B-3

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

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



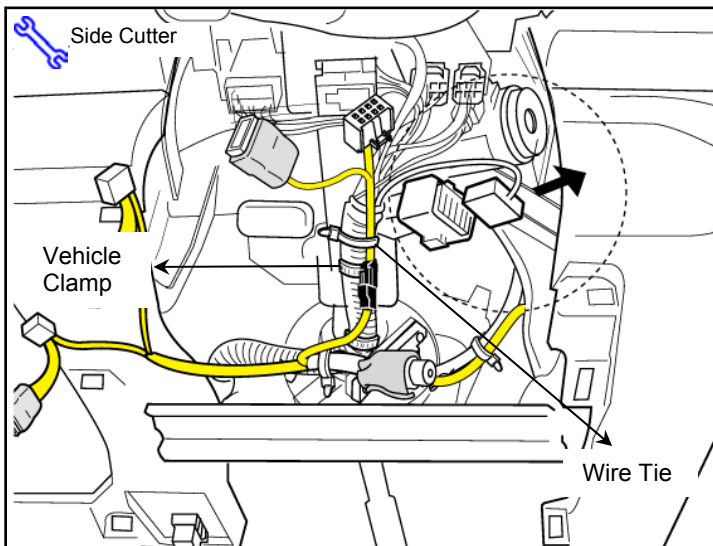


Fig. B-4

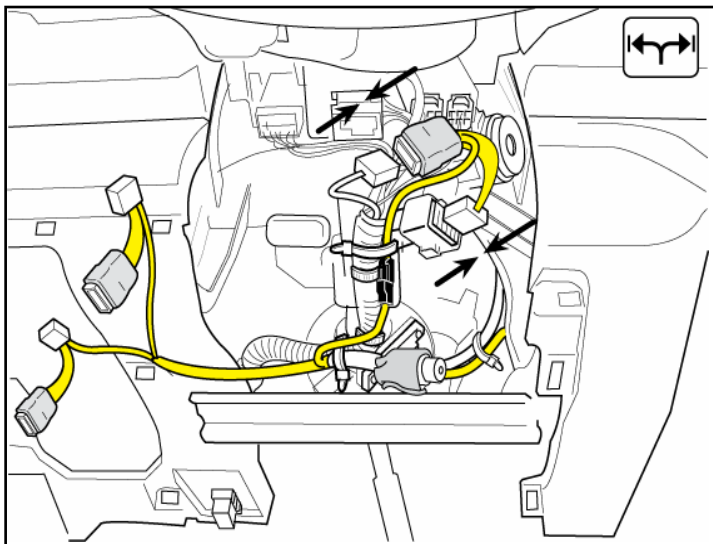


Fig. B-5

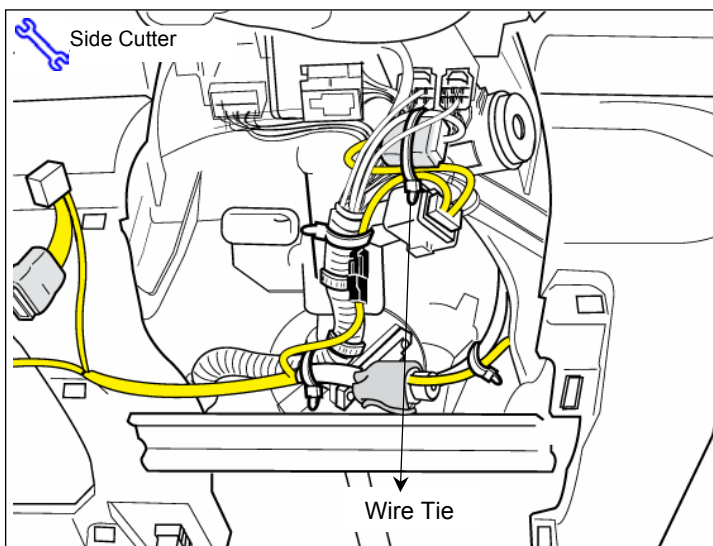


Fig. B-6

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.

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

move onto step 13

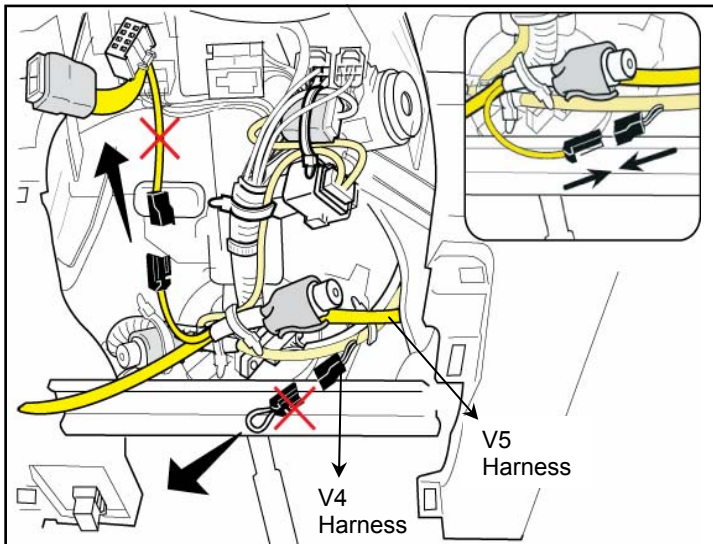


Fig. B-7

**ADD ON installation of V5 onto V4**

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.

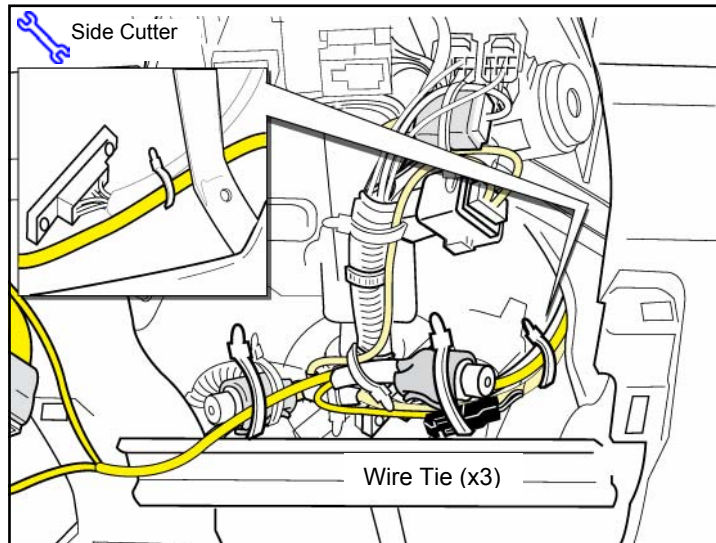


Fig. B-8

**ADD ON installation of V5 onto V4**

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

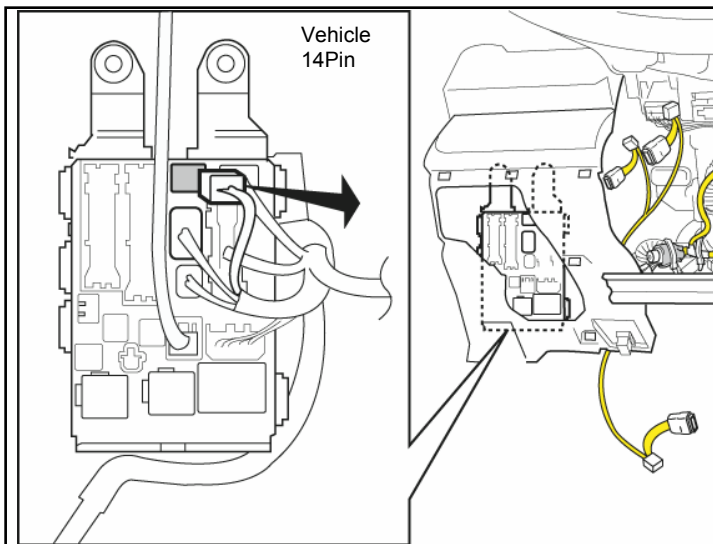


Fig. B-9

**If vehicle is equipped with V4 Harness already, skip to step 20**

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

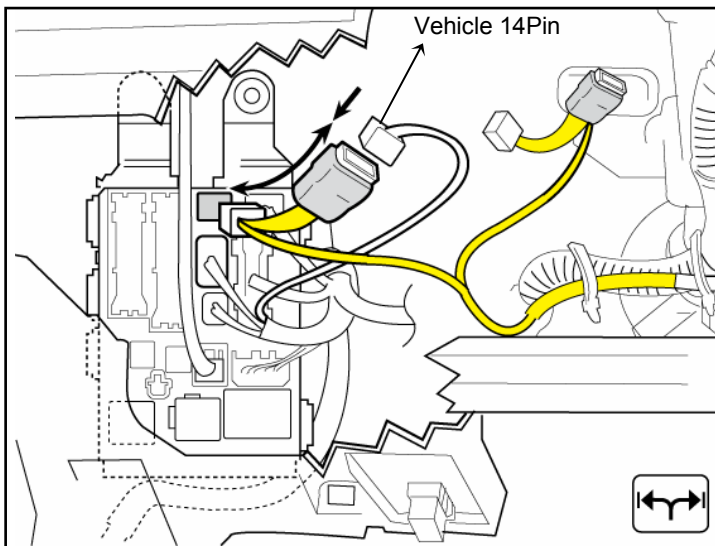


Fig.B-10

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

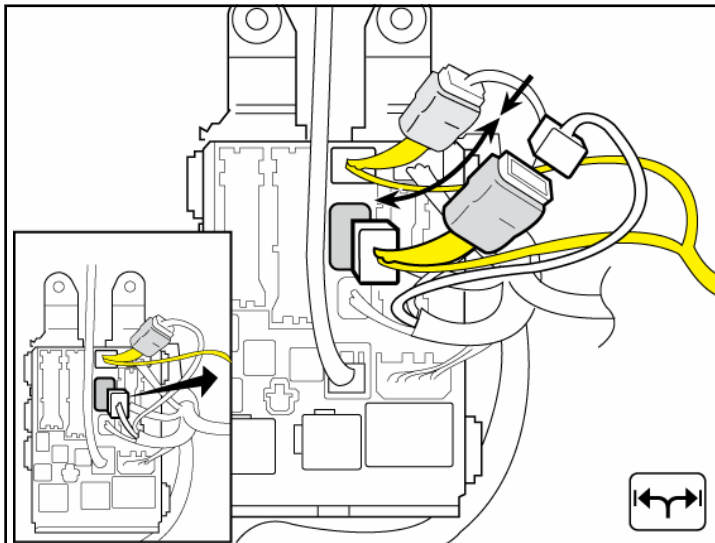


Fig.B-11

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.

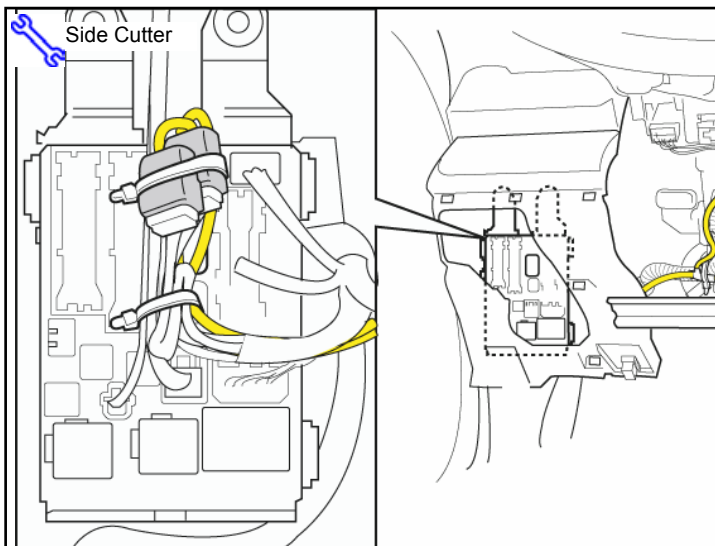


Fig.B-12

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.

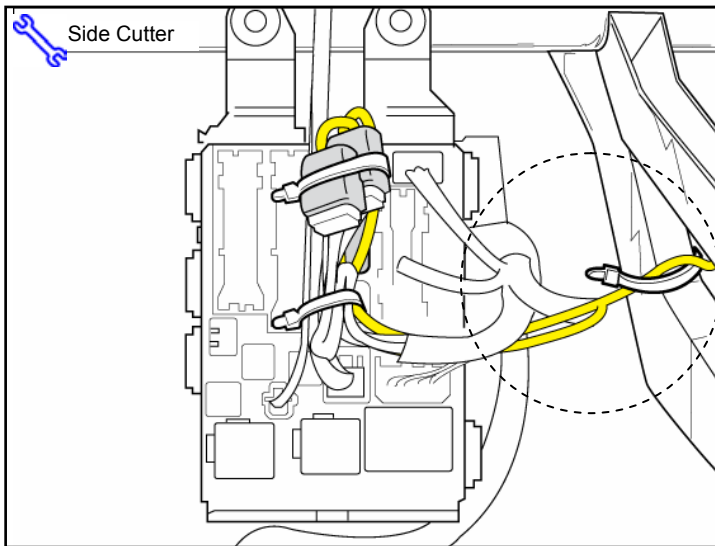


Fig.B-13

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

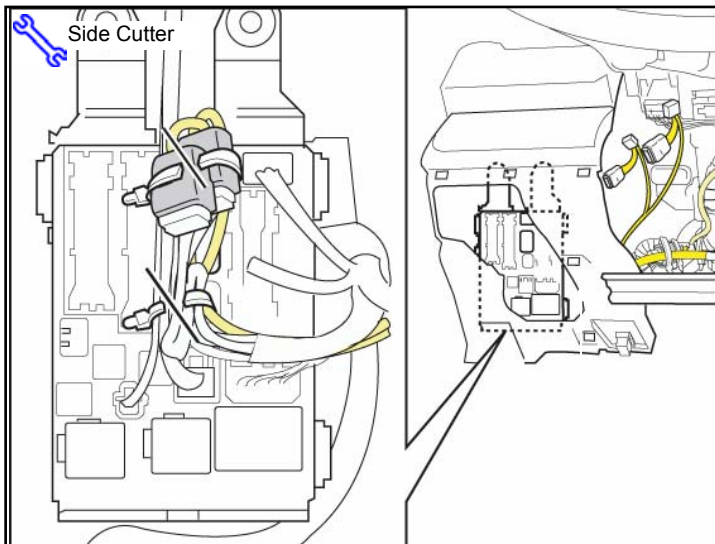


Fig.B-14

**ADD ON installation of V5 onto V4**

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

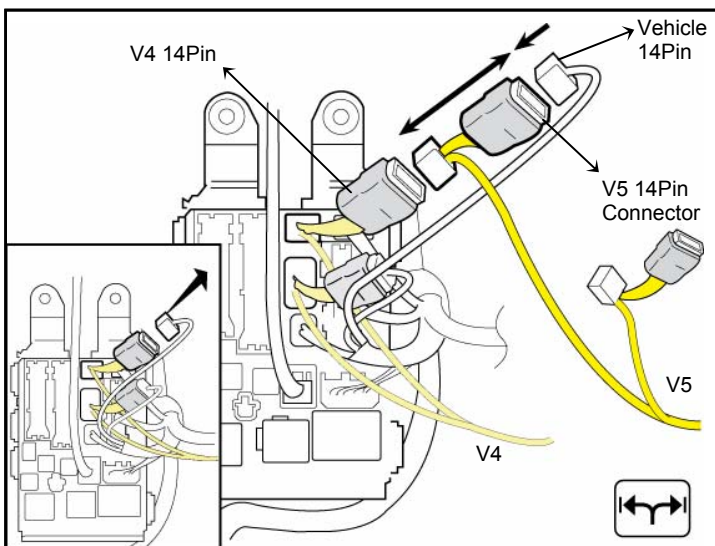


Fig.B-15

**ADD ON installation of V5 onto V4**

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 V4 14 Pin Connector and the vehicle 14 pin connector.

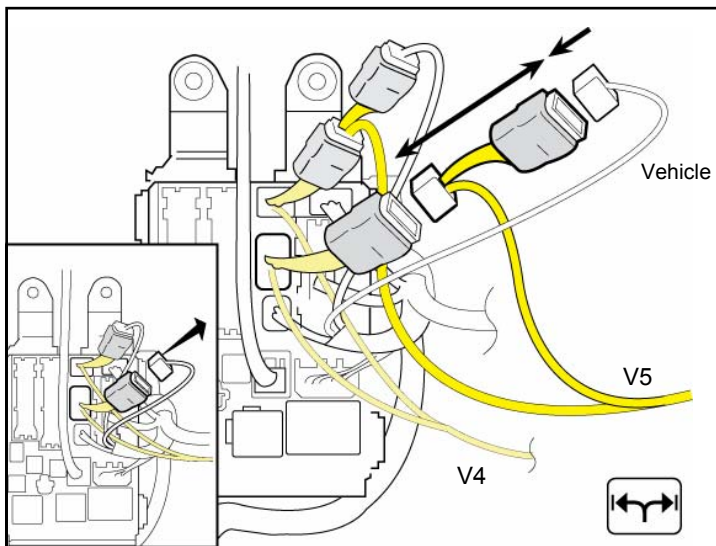


Fig.B-16

**ADD ON installation of V5  
onto V4**

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 V4 18 Pin Connector and the vehicle 18 Pin connector.

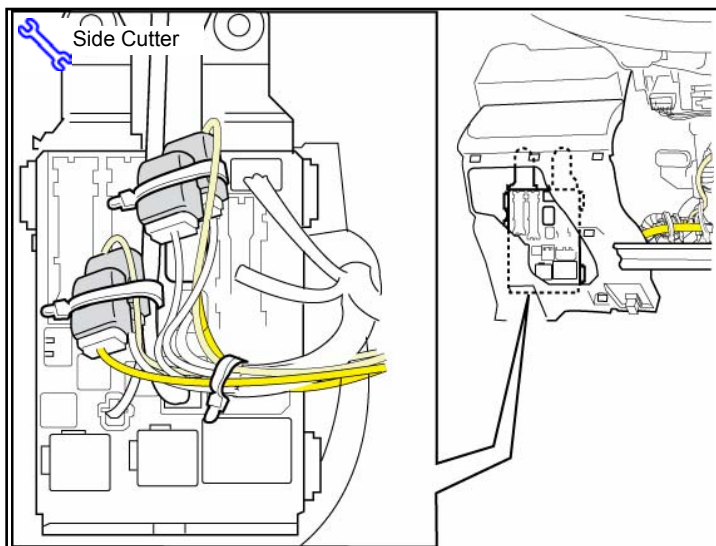


Fig.B-17

**ADD ON installation of V5  
onto V4**

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.

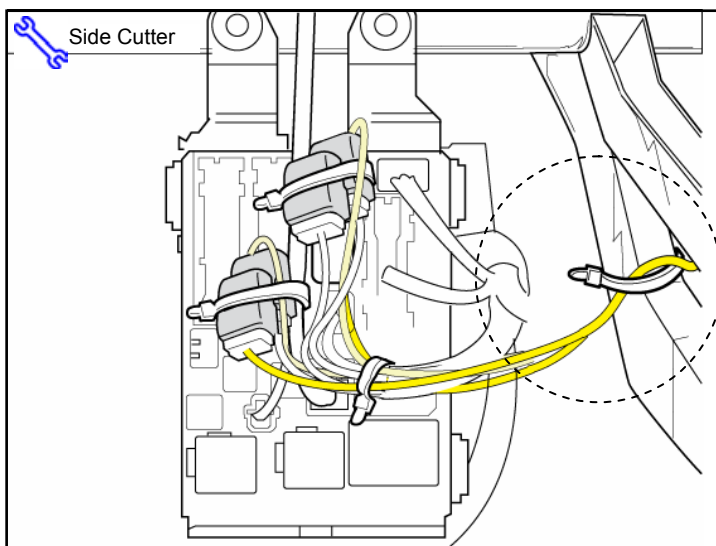


Fig.B-18

**ADD ON installation of V5  
onto V4**

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

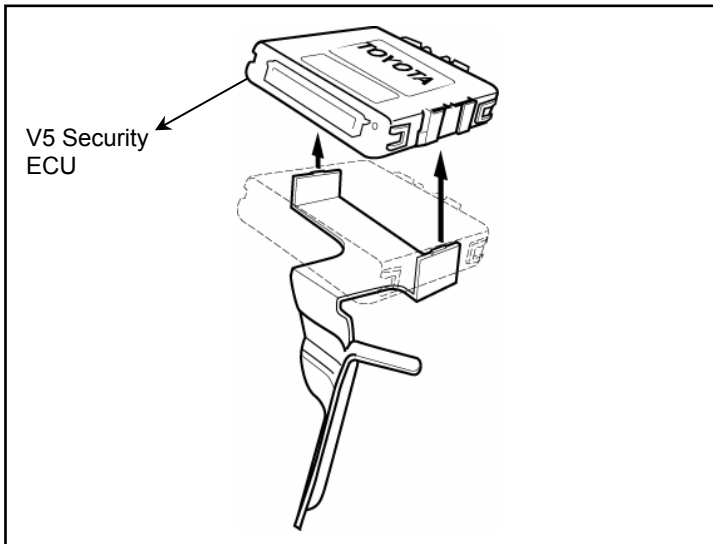


Fig.C-1

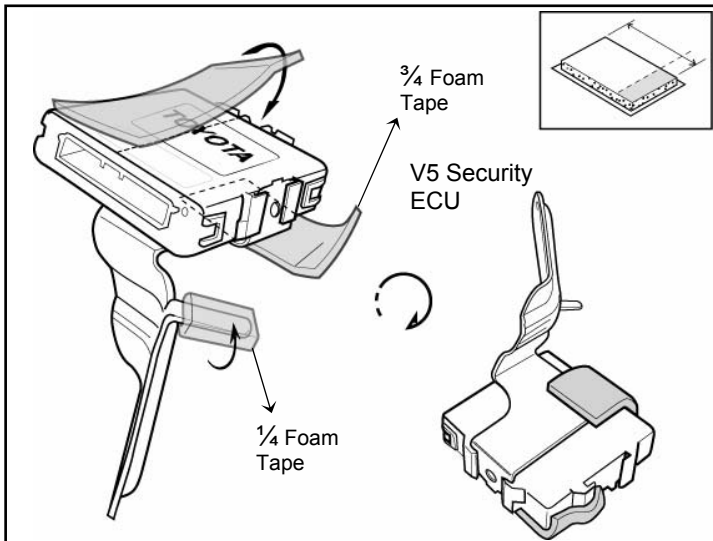


Fig.C-2

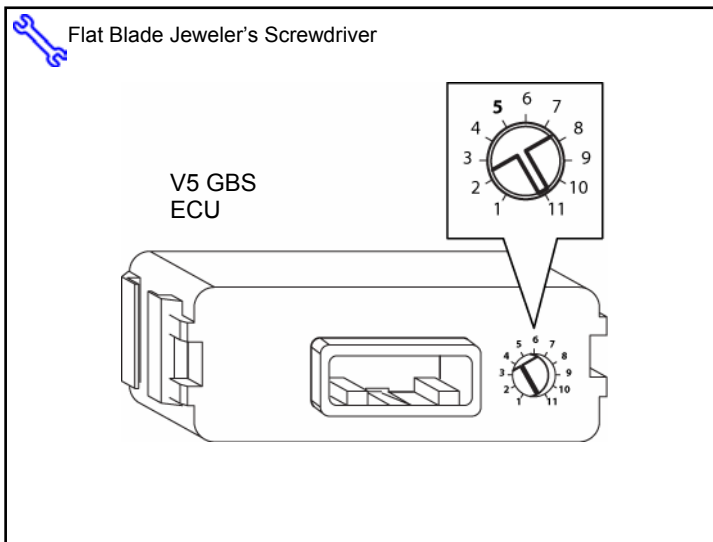


Fig.C-3

### 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.

2. Cut 1 small Foam Tape as shown.
3. Apply 1 small Foam Tape and the 3/4 piece Foam Tape on V5 Security ECU.
4. Apply remaining 1/4 piece Foam Tape on the Mounting Bracket.

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

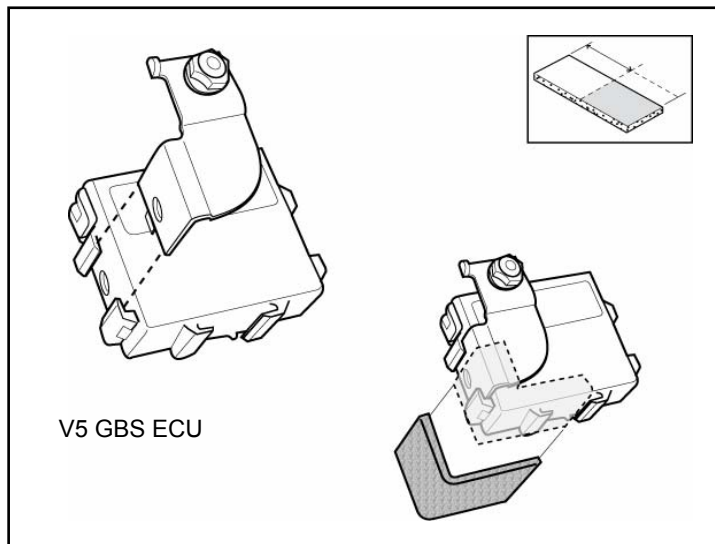


Fig.C-4

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.

### D. Wire Harness Installation (Passenger's side)

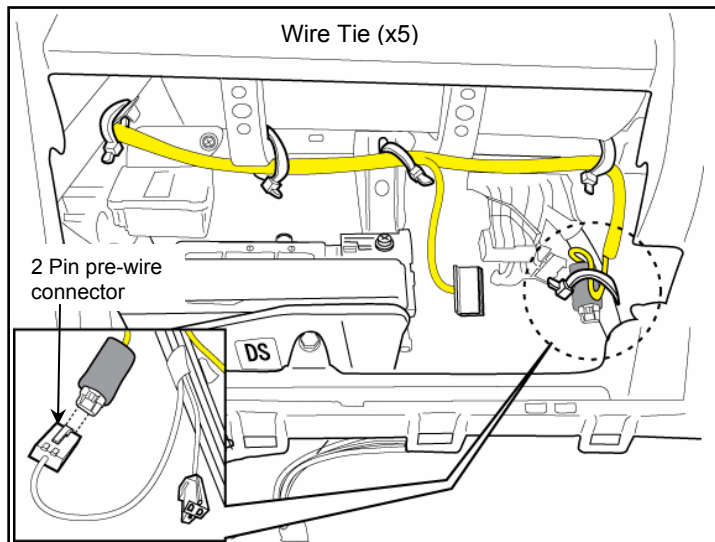


Fig.D-1

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

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.

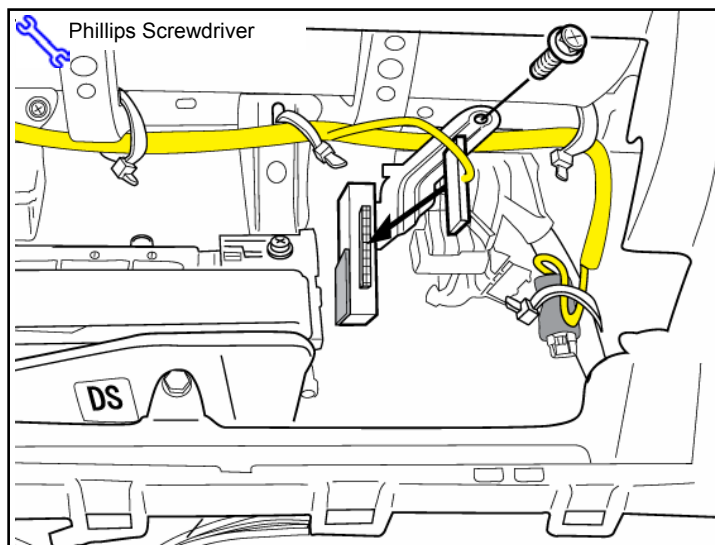


Fig.D-2

4. Plug 36 Pin Connector into V5 Security ECU.

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

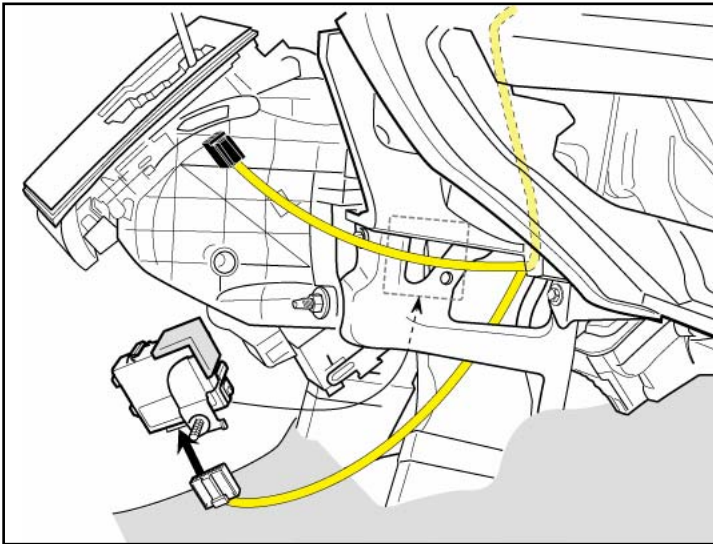


Fig.E-1

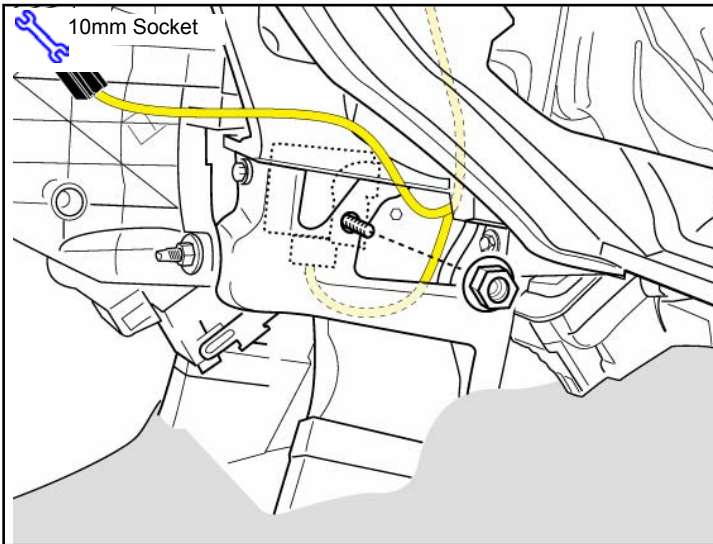


Fig.E-2

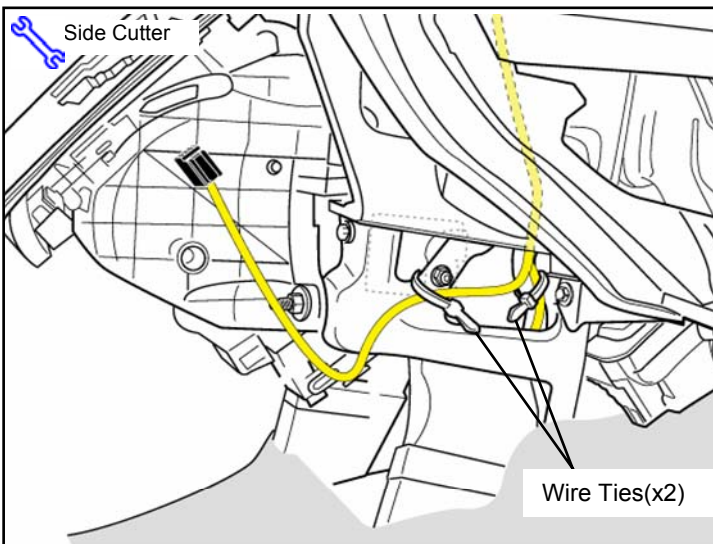


Fig.E-3

## 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.



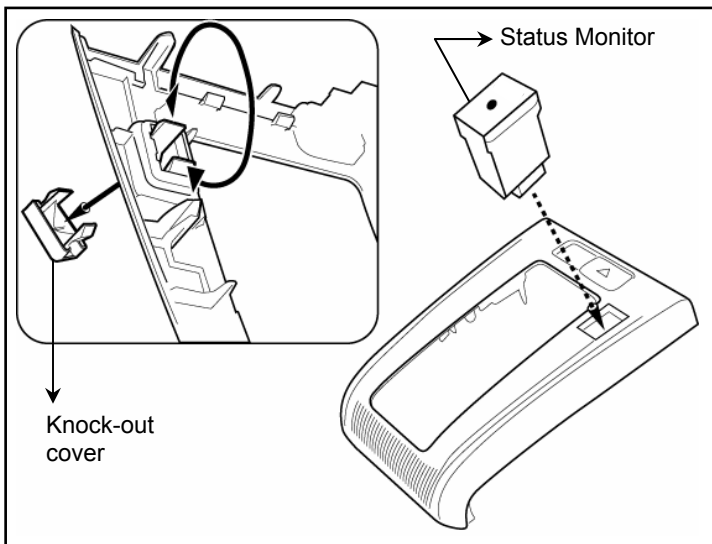


Fig.E-4

5. Remove the knockout cover from Center console upper panel.
6. Insert V5 Status Monitor in place.

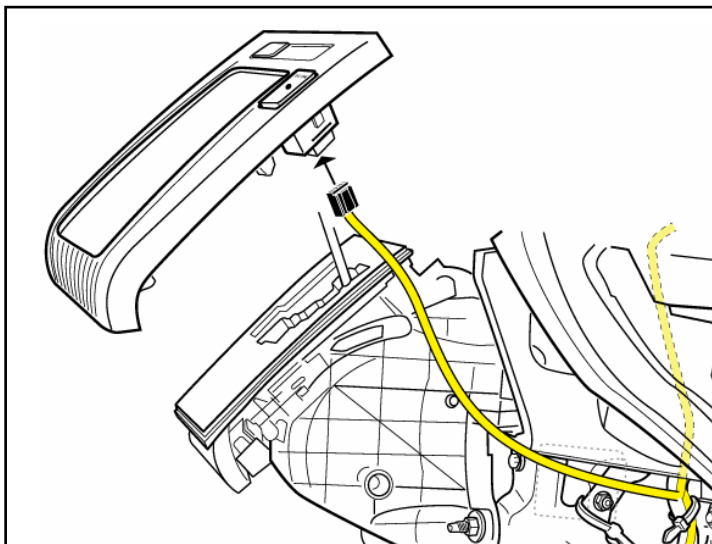


Fig.E-5

7. Insert 8 Pin Connector(black) into the Status Monitor.

Rest the center console upper panel on top of center console temporarily.

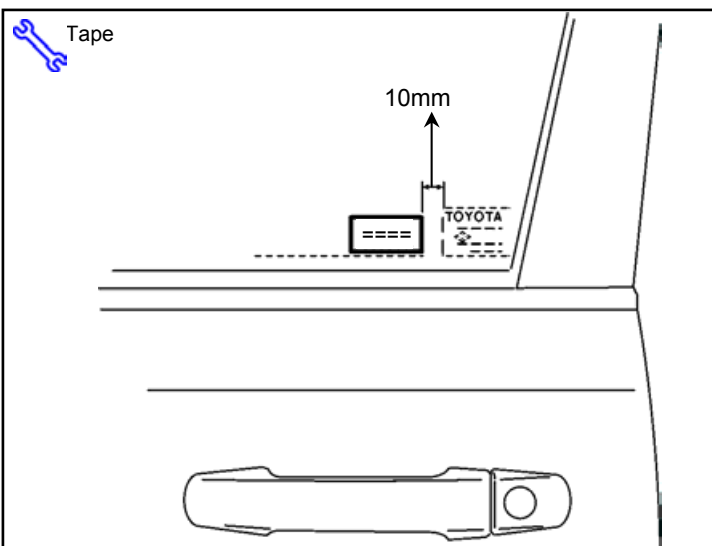


Fig.F-1

### F. Attaching the Labels

1. Using Household Windex, clean the inside of the both front door windows.
2. Use a piece of Clear Tape to life the label off its protective backing.
3. Attach the Warning Labels on the inside of front door windows as shown.

**!** Line up Labels properly. Do not attempt to reposition the Labels once they are placed. Align it 10mm from the last label, if there is one.

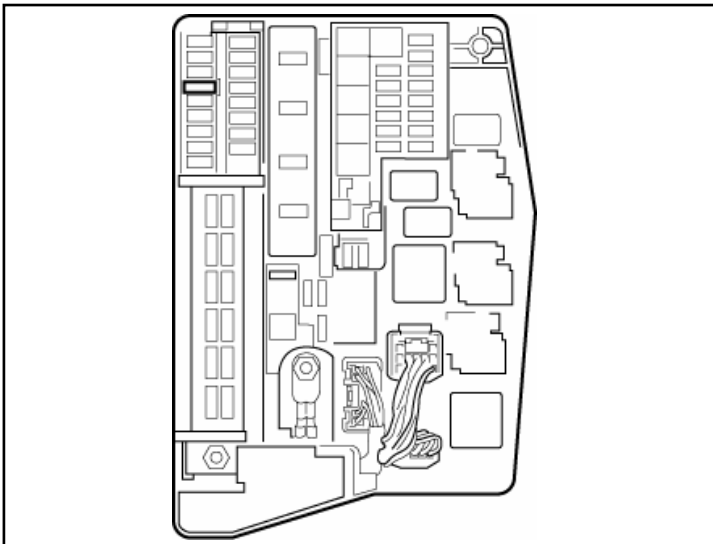


Fig.G-1

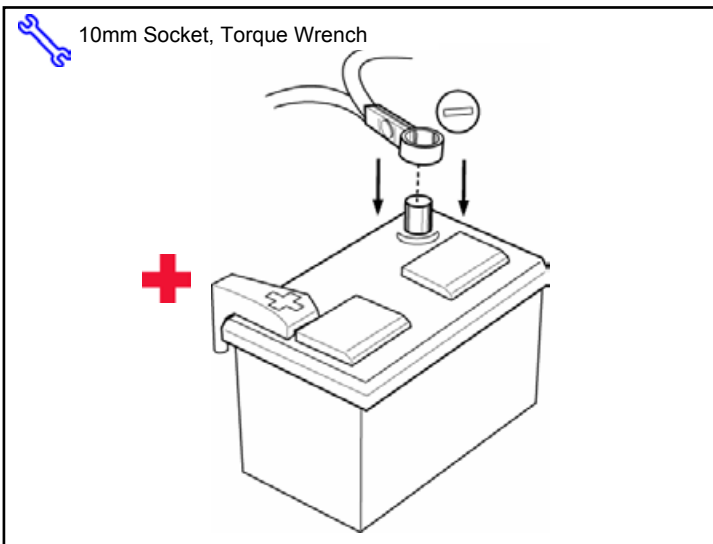


Fig.G-2

## 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.

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

4. Tighten the Nut to 36 in•lbf.  
(40.67 n•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**

	Procedure	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, 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	Insert the key into the ignition switch and turn it to "START" to stop the alarm.	<p>The horn stops sounding.</p> <p>All the lights stop flashing and/or turn off.</p> <p>The Security LED turns off.</p> <p>The starter cranks and the engine starts.</p>
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**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.	<p>All doors lock.</p> <p>The Security LED lights up.</p>
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.	<p>The front passenger's door automatically relocks.</p> <p>The horn sounds repeatedly.</p> <p>The headlights flash repeatedly.</p> <p>The turn signal lights flash repeatedly.</p> <p>The SECURITY LED lights up.</p>
14	Press and release the remote control's unlock button to stop the alarm.	<p>The horn stops sounding.</p> <p>All the lights stop flashing.</p> <p>The LED turns off.</p>
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.**

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

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

22	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 LED lights up.
23	Insert the key into the driver's door key cylinder and turn it toward the back of the vehicle to stop the alarm.	

**NOTE: If the alarm does not trigger during functional verifications, increase the GBS sensitivity to the next setting.**

**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 Check**

	Function		Function
<input type="checkbox"/>	Head Light	<input type="checkbox"/>	ABS Light (if equipped) <i>If the warning light remains on, it may indicate a system malfunction.</i>
<input type="checkbox"/>	High Beams	<input type="checkbox"/>	Rear Wiper/Washer (if equipped)
<input type="checkbox"/>	Turn Signal Lights	<input type="checkbox"/>	Clock (if equipped)
<input type="checkbox"/>	Tail Lights	<input type="checkbox"/>	Accessory Power Socket (if equipped)
<input type="checkbox"/>	Stop Lights	<input type="checkbox"/>	Starter
<input type="checkbox"/>	Backup Lights	<input type="checkbox"/>	Audio/Video (if equipped)
<input type="checkbox"/>	Hazard Lights	<input type="checkbox"/>	Power Sliding Door (if equipped)
<input type="checkbox"/>	Marker Lights	<input type="checkbox"/>	Convenience Memory Settings (if equipped)
<input type="checkbox"/>	Dome/Courtesy Lights	<input type="checkbox"/>	Heated Seats (if equipped)
<input type="checkbox"/>	Panel/Switch Illumination	<input type="checkbox"/>	Massage Seats (if equipped)
<input type="checkbox"/>	Accessory Controls/Illumination (if equipped)	<input type="checkbox"/>	Rear Window Defogger (if equipped)
<input type="checkbox"/>	Key Sensor Buzzer	<input type="checkbox"/>	Power Side Mirrors (if equipped)
<input type="checkbox"/>	Fog Lights (if equipped)	<input type="checkbox"/>	Side Mirror Defogger (if equipped)
<input type="checkbox"/>	Daytime Running Lights (if equipped)	<input type="checkbox"/>	Front Windshield Defogger (if equipped)
<input type="checkbox"/>	Trunk/Tailgate/Bed Lights (if equipped)	<input type="checkbox"/>	Navigation System (if equipped)
<input type="checkbox"/>	Glove Box Light (if equipped) I	<input type="checkbox"/>	Rear Sunshade (if equipped)
<input type="checkbox"/>	Cruise Control Light (if equipped)	<input type="checkbox"/>	Steering Wheel Audio Control (if equipped)
<input type="checkbox"/>	Seat Belt Warning Light <i>If the warning light remains on, it may indicate a system malfunction.</i>	<input type="checkbox"/>	Steering Wheel Column Adjusts Without Interference
<input type="checkbox"/>	Air Bag Warning Light <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>

	Function		Function
<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"/>	Front Wiper/Washer
<input type="checkbox"/>	HVAC	<input type="checkbox"/>	Hood Latch Release
<input type="checkbox"/>	Power Locks (if equipped)	<input type="checkbox"/>	Passenger Air Bag Switch (if equipped)
<input type="checkbox"/>	Power Windows (if equipped)	<input type="checkbox"/>	Rollover Side Curtain Air Bag Switch (RSCA) (if equipped)
<input type="checkbox"/>	Power Seats (if equipped)	<input type="checkbox"/>	
<input type="checkbox"/>	Horn	<input type="checkbox"/>	
<input type="checkbox"/>	Gauges	<input type="checkbox"/>	

**Remove the short pin after Function Check.**

Check with your port/dealer to find out if this step is needed.

