

Preparation

**Part Number: 08586-3T940-AA**

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

**Kit Contents**

Item #	Quantity Req'd.	Description
1	1	Wire Harness
3	1	ECU Mounting Bracket

Special Chemicals	Notes
Cleaner	3M Prep Sol-70
Glass Cleaner	Household Windex

**Hardware Bag Contents**

Item #	Quantity Req'd.	Description
1	1	Security ECU
2	1	GBS ECU
3	1	Microphone
4	3	Foam Tape
5	15	Wire Ties
6	1	Self-tapping Screw
7	1	Nut
8	1	Splicing Connector
9	2	Warning Labels
10	1	Owner's Manual
11	1	Warranty Card
12	1	Key Tag

**General Applicability**

Note: Camry Hybrid with factory keyless entry system only.

**Recommended Sequence of Application**

Item #	Accessory	

\*Mandatory

**Vehicle Service Parts** (may be required for reassembly)

Item #	Quantity Req'd.	Description

**Additional Items Required For Installation**

Item #	Quantity Req'd.	Description

**Conflicts**

Note: Must not be installed in vehicles with factory Anti-theft alarm.

**Recommended Tools**

Personal & Vehicle Protection	Notes
Safety Glasses	
Safety Gloves	(Optional)
Vehicle Protection	Blankets, Part Boxes
Special Tools	Notes
Striker Tool (PPO only)	CAD-E IADS P/N: ALL 02-016-01
Installation Tools	Notes
Phillips Head Screwdriver	#2, screwdriver or tip
Flat Blade Screwdriver	Jewelers Screwdriver
Socket	10 mm
Pliers	
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST # 00002-06001-01
Pneumatic/Electric Wrench	
Wrench	10 mm
Torque Wrench	36 in•lbf (40.67 N•cm)
Side Cutters	

**Legend**



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

Procedure

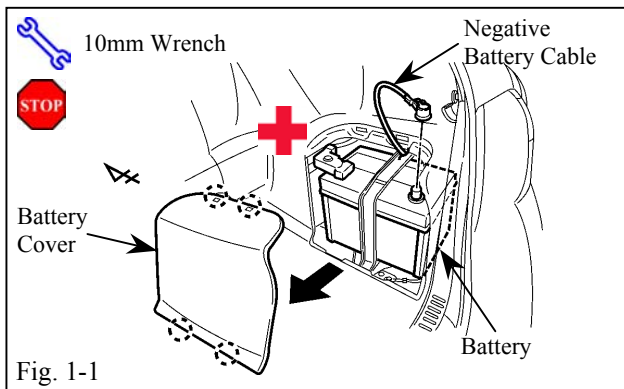
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

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.

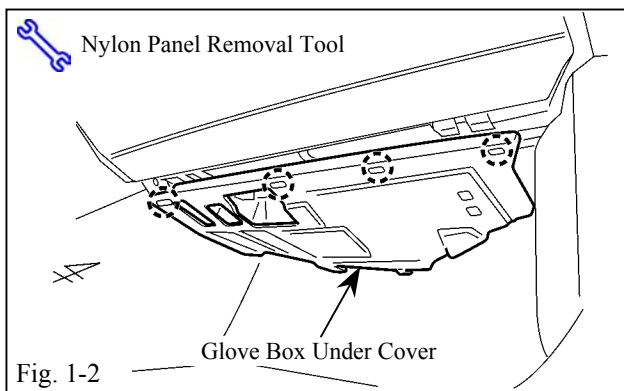


**NOTE:** This installation instruction covers both V5 harness and V4 harness installation.

The differences are highlighted in the procedure as follows:

- Plain text used for V5 system installation (no text box).
- Shaded text box used for both V5 harness and V4 harness installation.

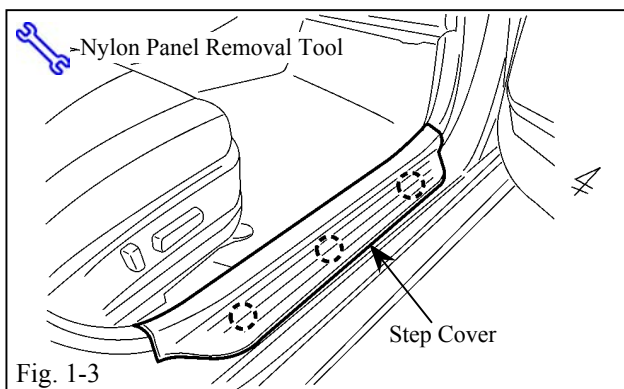
**1. Vehicle Disassembly.**



(a) Remove the battery cover from the passenger side luggage compartment, then remove the negative battery cable. (Fig. 1-1)

**STOP** (b) Take note of the battery cable installation position, as this will need to be re-installed in the same position after installation completion.

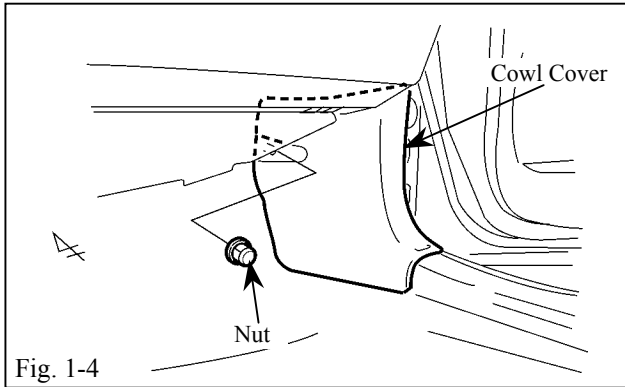
**+** (1) Do not touch the positive terminal with any tool removing the cable.



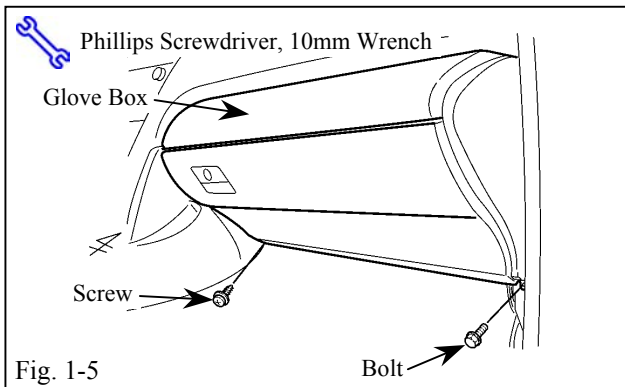
(c) Remove the glove box under cover. (Fig. 1-2)

**STOP** (1) Protect the fender before starting.

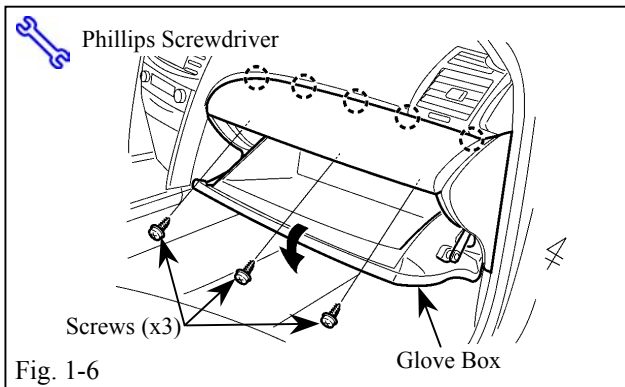
(d) Remove the passenger's step cover. (Fig. 1-3)



- (e) Remove the passenger's cowl cover.  
(Fig. 1-4)
- (1) Remove one nut securing the cowl cover.

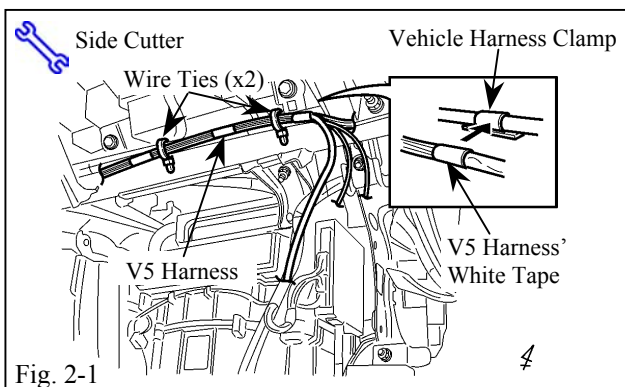


- (f) Remove the one screw and one bolt from the glove box. (Fig. 1-5)



- (g) Open the glove box door, then remove three screws securing the glove box. (Fig. 1-6)
- (h) Remove the glove box. (Fig. 1-6)

## 2. V5 Harness Installation.



- (a) Locate the vehicle harness clamp in the glove box area. Secure the white taped marker of the V5 harness to the vehicle harness clamp with one wire tie. (Fig. 2-1)
- (1) Line up the V5 harness' white tape marker to the vehicle harness clamp.
- (b) Route the V5 harness toward the center cluster area, secure it to the vehicle harness with one wire tie. (Fig. 2-1)

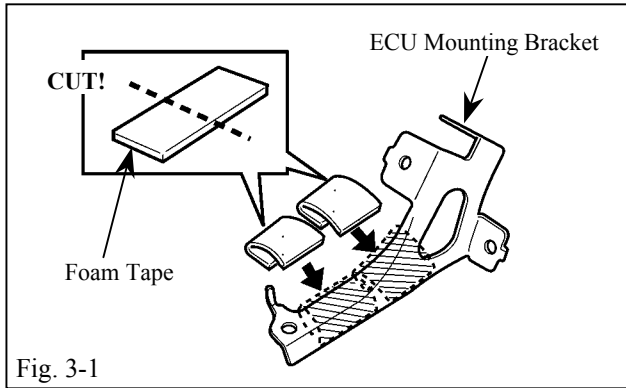


Fig. 3-1

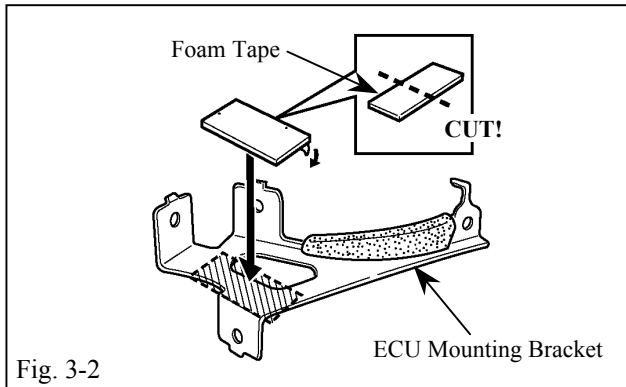


Fig. 3-2

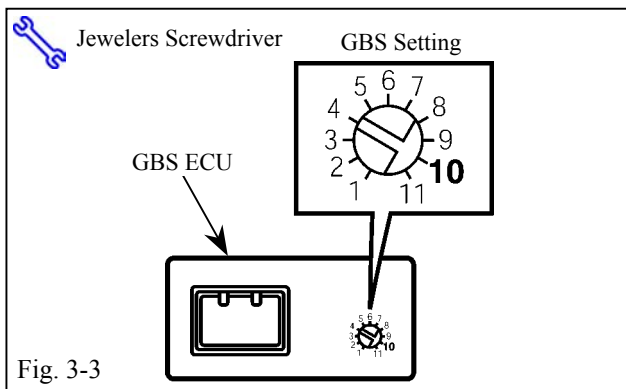


Fig. 3-3

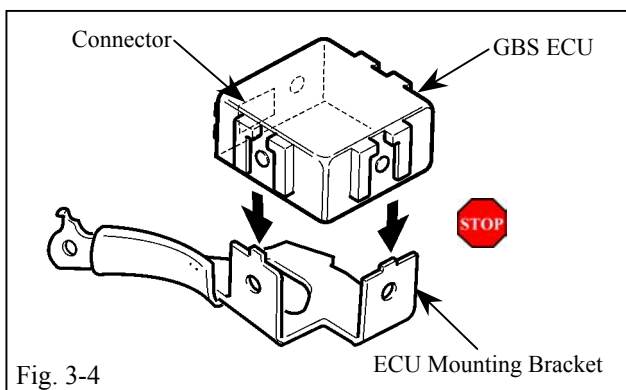


Fig. 3-4

### 3. V5 ECU and GBS ECU Preparation and Installation.

(a) Cut one foam tape in half, apply the foam tapes to the ECU mounting bracket as shown. (Fig. 3-1)

(b) Apply ½ piece of foam tape to the ECU bracket as shown. (Fig. 3-2)

(1) Do not discard the remaining piece of foam tape

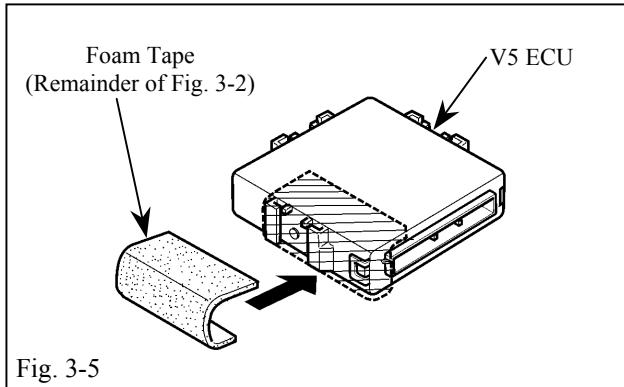
(c) Turn the GBS adjustment screw on the GBS ECU to the "10" position. (Fig. 3-3)

(d) Insert the GBS ECU to the ECU mounting bracket. (Fig. 3-4)

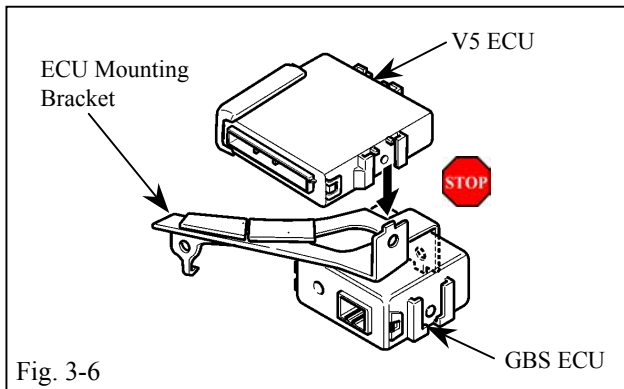
(1) Insert the mounting bracket into the correct ECU's slot.

(2) The bracket is permanently attached once installed.

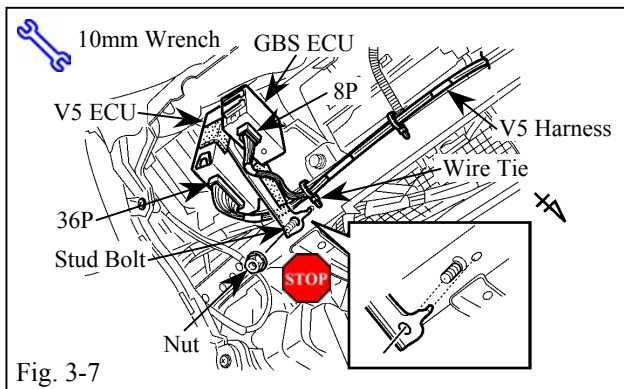
(3) Ensure the bracket is firmly attached to the ECU.



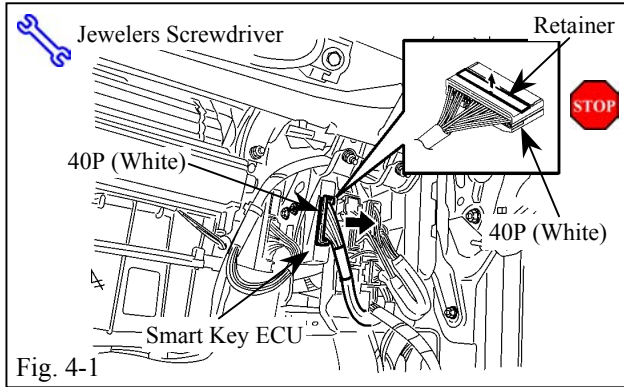
- (e) Use the piece of foam tape that was previously cut (remainder of Fig. 3-2), and apply to the edge of the V5 ECU. (Fig. 3-5)



- (f) Insert the V5 ECU to the ECU mounting bracket. (Fig. 3-6)
- (1) Insert the mounting bracket into the correct ECU's slot.
  - (2) The bracket is permanently attached once installed.
  - (3) Ensure the bracket is firmly attached to the ECU.



- (g) Install the ECU mounting bracket onto the reinforcement in the left side of the glove box area, as shown. (Fig. 3-7)
- (1) Verify that the bracket pin seat properly.
  - (2) Secure the bracket to the reinforcement with either the nut (Vehicles w/stud bolt) or the self-tapping screw (Vehicles wo/stud bolt).
  - (3) Verify the nut/screw is tightened securely.
- (h) Route the V5 harness' white 36P connector behind the ECU mounting bracket, then connect the V5 harness' white 36P and 8P connector to the V5 ECU and GBS ECU. (Fig. 3-7)
- (i) Secure the V5 harness to the vehicle harness with one wire tie. (Fig. 3-7)

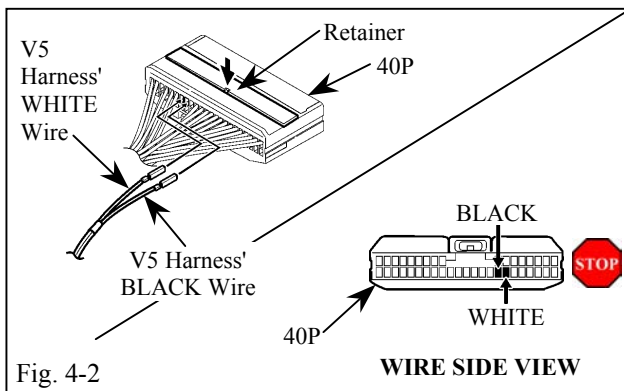


#### 4. V5 Harness Installation. (Continued)

- (a) Locate and disconnect the white 40P connector from Smart Key ECU in the right side of the glove box area. (Fig. 4-1)
- (b) Use a small jeweler's screwdriver to lift up the terminal retainer on the back of the 40P connector. (Fig. 4-1)



(1) Do not pull out the retainer.



- (c) Insert the terminal at the end of the V5 harness' WHITE wire into the bottom row, seventeenth space from the left of the vehicle harness' 40P connector. (Fig. 4-2)
- (d) Insert the terminal at the end of the V5 harness' BLACK wire into the bottom row, sixteenth space from the left of the vehicle harness' 40P connector. (Fig. 4-2)

(1) Turn the connector so the wires face you and the tab is on top.



(2) Verify the correct wire is chosen.



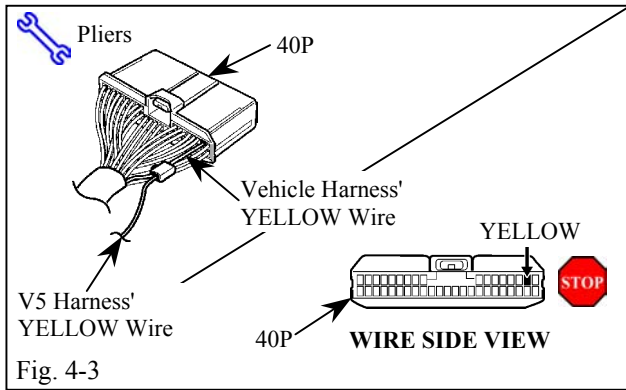
(3) Verify the terminal is inserted and seated properly.



(4) The terminal should not come out when pulled lightly from the back. If it does, push it in again, until securely seated.

(e) Close the retainer. (Fig. 4-2)



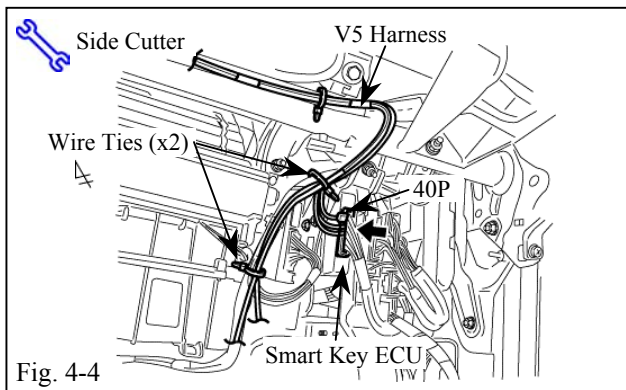


(f) Locate the white 40P connector's **YELLOW** wire in the top row, sixteenth space from the left, and attach the V5 harness' **YELLOW** wire with a splicing connector. (Fig. 4-3)

(1) Turn the connector so the wires face you and the tab is on top.

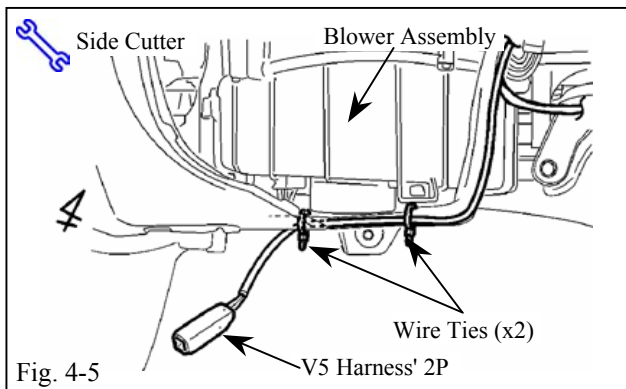
(2) Verify the correct wire is chosen for splicing.

(3) Verify the splicing connector is applied properly.

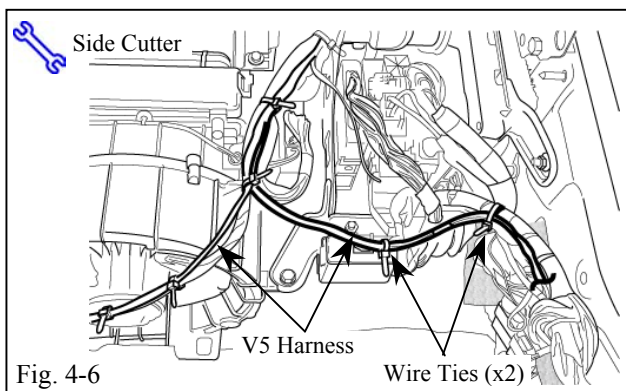


(g) Reconnect the white 40P connector to Smart Key ECU. (Fig. 4-4)

(h) Route the V5 harness toward the blower assembly area, securing it to the vehicle harness with two wire ties. (Fig. 4-4)



(i) Secure the V5 harness' 2P connector to the vehicle harness with two wire ties. (Fig. 4-5)



(j) Route the V5 harness towards the passenger side cowl area, securing it to the vehicle harness with two wire tie. (Fig. 4-6)

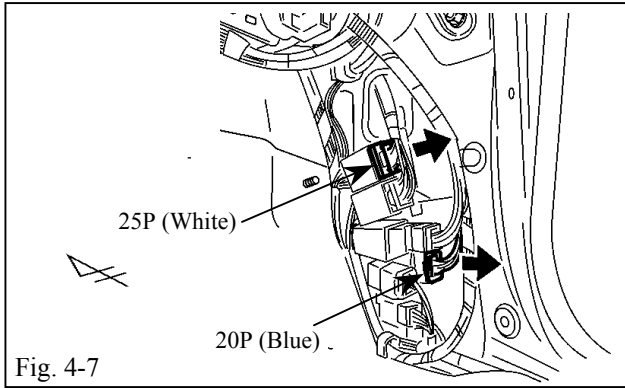


Fig. 4-7

- (k) Locate and disconnect the vehicle harness' white 25P connector and blue 20P connector from the passenger side cowl area. (Fig. 4-7)

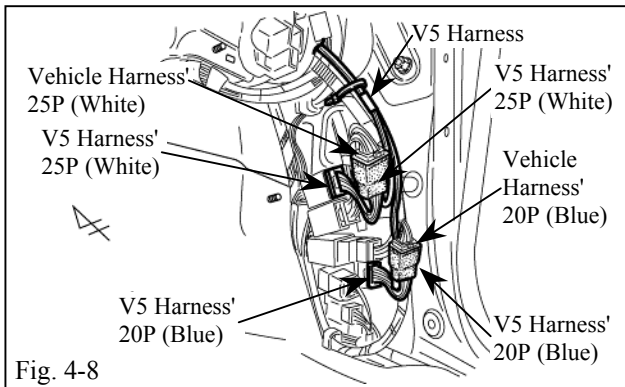


Fig. 4-8

- (l) Plug in the V5 harness' white 25P connectors between the vehicle harness' white 25P connector and the passenger side cowl area. (Fig. 4-8)

(1) Verify the connectors are plugged in securely.

- (m) Plug in the V5 harness' blue 20P connectors between the vehicle harness' blue 20P connector and the passenger side cowl area. (Fig. 4-8)

(1) Verify the connectors are plugged in securely.

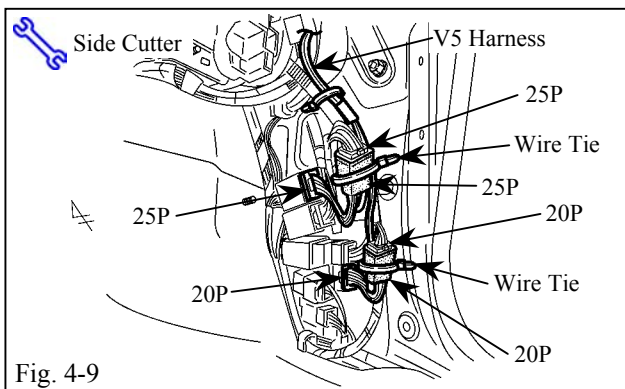
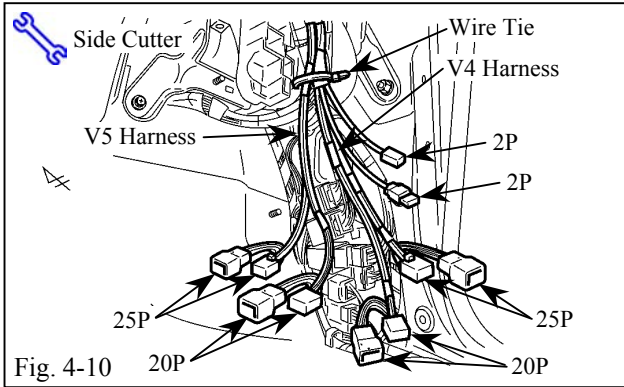


Fig. 4-9

- (n) Secure the white 25P connector and blue 20P connector to the vehicle harness with two wire ties. (Fig. 4-9)

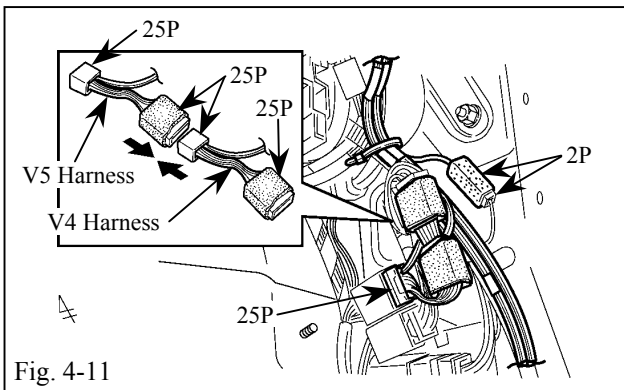
**Go to Section 5.**





**NOTE:** Perform this step if both V5 harness and V4 harness are being installed. (Steps o-u)

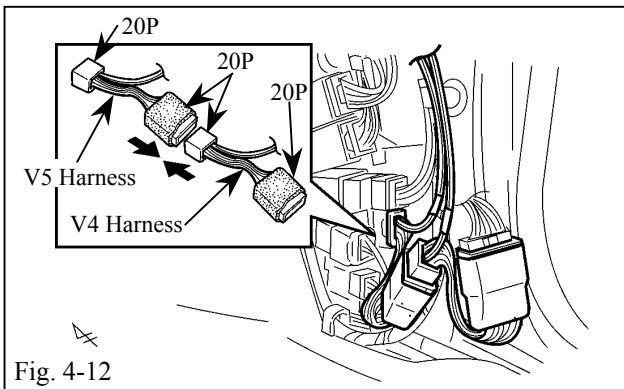
(o) Route the V5 harness and V4 harness to the passenger side cowl area. (Fig. 4-10)



(p) Connect the V5 harness' white 25P male connector to the V4 harness' white 25P female connector. (Fig. 4-11)

(q) Plug in the V5 harness' white 25P connector into the passenger side cowl area. Then connect the V4 harness' white 25P connector to the vehicle harness' white 25P connector. (Fig. 4-11)

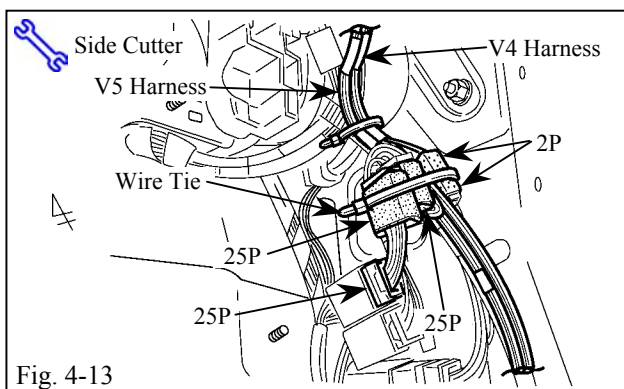
(1) Verify the connectors are plugged in securely.



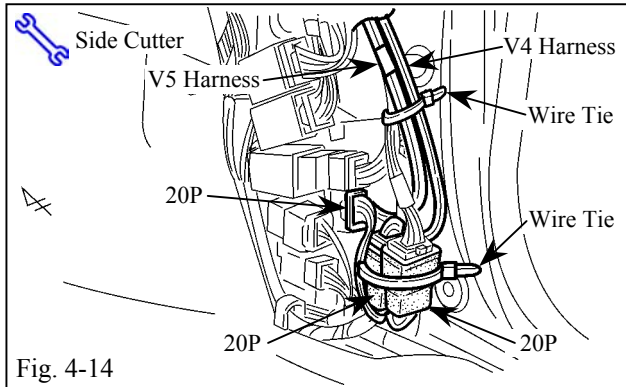
(r) Connect the V5 harness' blue 20P male connector to the V4 harness' blue 20P female connector. (Fig. 4-12)

(s) Plug in the V5 harness' blue 20P connector into the passenger side cowl area. Then connect the V4 harness' blue 20P connector to the vehicle harness' blue 20P connector. (Fig. 4-12)

(1) Verify the connectors are plugged in securely.

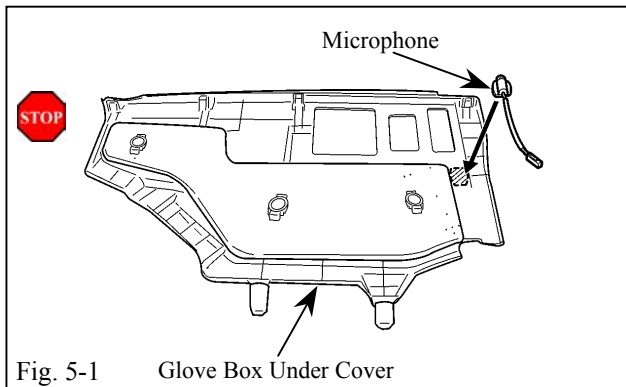


(t) Secure the white 25P connectors and V4 harness' white 2P connectors to the vehicle harness with one wire tie. (Fig. 4-13)



**NOTE:** Perform this step if both V5 harness and V4 harness are being installed. (Step u)

- (u) Secure the V5 harness and V4 harness to the vehicle harness with one wire tie. Secure the blue 20P connectors to the vehicle harness with one wire tie. (Fig. 4-14)



**5. Microphone Installation.**

- (a) Using 3M Prep Sol-70 and cleaning method, clean the area indicated on the backside of the glove box under cover. (Fig. 5-1)
- (b) Remove the backing sheet and secure the microphone to the backside of the glove box under cover. (Fig. 5-1)

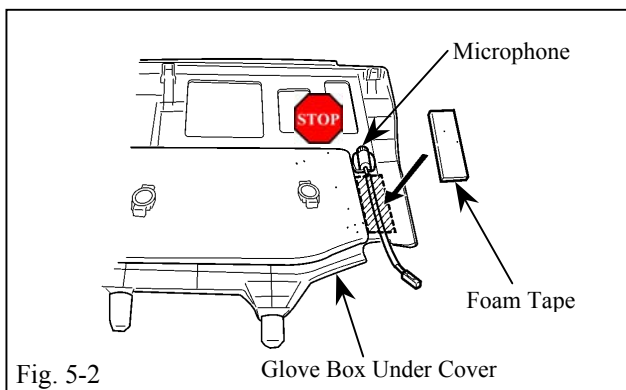
(1) Secure the microphone as shown.



(2) Do not touch the adhesive surface of the microphone.



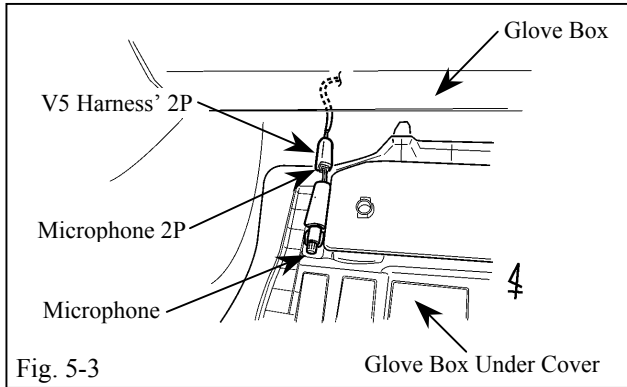
(3) Press the microphone to the glove box under the panel firmly.



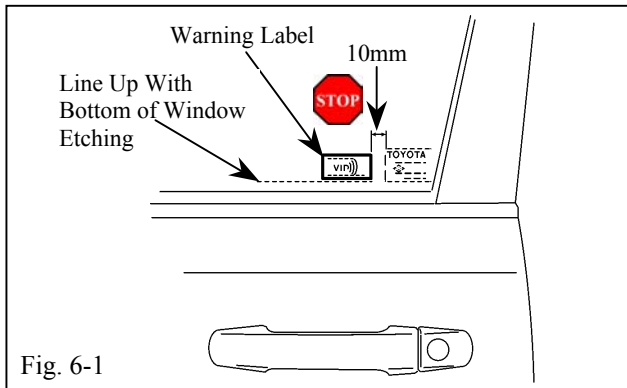
(c) Secure the microphone with one foam tape. (Fig. 5-2)



(1) Do not cover the opening of the microphone with the foam tape.



- (d) Refit the glove box assembly. (Fig. 5-3)
- (e) Plug in the microphone's 2P connector to the V5 harness' 2P connector. (Fig. 5-3)
  - (1) Verify the connectors are plugged in securely.
- (f) Refit the glove box under cover. (Fig. 5-3)



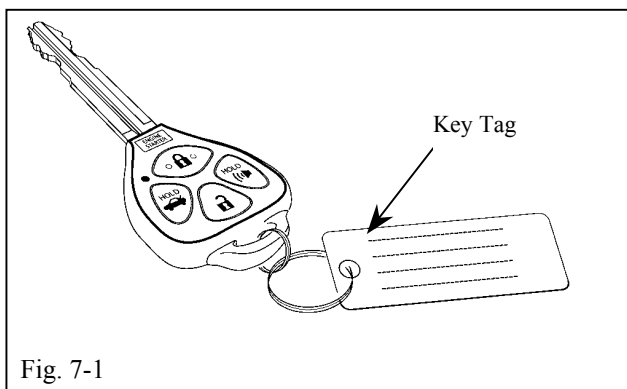
**6. Warning Label Installation.**

- (a) Using household Windex, clean the inside surface of the front door windows. (Fig. 6-1)
- (b) Place the warning label on the inside surface of the front door's windows as shown. (Fig. 6-1)

(1) Use a piece of clean adhesive tape to lift the labels off their protective backing sheet.



- (2) Do not touch the adhesive surface of the warning labels.
- (3) Line up the labels properly and place on the glass once; do not use a label that was pulled off of the glass.
- (4) If the label is being installed with other Window Labels align it horizontally with the other labels and 10mm from the last label.

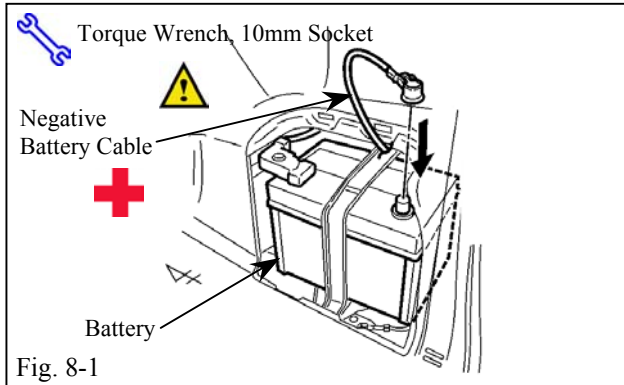


**7. Key Tag Installation.**

- (a) Attach the key tag to the remote control key's ring. (Fig. 7-1)

## 8. Completing the Installation.

- (a) Complete the vehicle reassembly.
  - (1) Reconnect any disconnected connectors.
  - (2) Verify the panels fit together properly with no uneven gaps between them.
- (b) Clean up and remove any trash.
- (c) Reconnect the vehicle's negative battery cable. (Fig. 8-1)
  - (1) Position the negative battery cable at the original factory position.
  - (2) Tighten the nut to 36 in•lbf (40.67 N•cm).
  - (3) Do not touch the positive terminal with any tool when replacing the cable.
- (d) Refit the battery cover to the passenger side of the luggage compartment.
- (e) Reset the power moon roof.
  - (1) Push and hold moon roof switch to close side until moon roof closes. Hold for a further two (2) seconds.
- (f) Place the owner's manual, and warranty card, left in their protective bags, in the glove box.



Check:

Accessory Function Checks

**Fit appropriate fuse before beginning.**

- Press and release the remote control's lock button to start the system's arming process.
- Wait 30 seconds.
- Press and release the remote control's unlock button to disarm the system.

**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.**

- Arm and disarm the system with the remote again, then wait 30 seconds.
- Press and release the remote control's unlock button again to stop the arming process.
- Insert the key into the driver's door key cylinder and turn it toward the front of the vehicle to start the arming process.
- Wait 30 seconds.

Look For:

1. The turn signal lights flash once.  
All doors lock.  
The security LED lights up.
2. After 30 seconds, the LED starts flashing; the system is now armed.
3. The turn signal lights flash twice.  
The driver's door unlocks.  
The LED stops flashing.
4. The doors automatically relock.  
The system automatically starts the arming process.
5. Refer to step 3.
6. All doors lock.  
The LED lights up.
7. After 30 seconds, the LED starts flashing; the system is now armed.

Check:

- Reach inside and manually unlock the driver's door to trigger an alarm.
  
- Manually unlock the driver's door again and hold it unlocked, open the door, then sit in the driver's seat.
  
- Press and release the remote control's unlock button to disarm the system.
  
- 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.
  
- Wait 30 seconds.
  
- Reach inside and manually unlock the front passenger's door to trigger an alarm.

Look For:

- 8. The driver's door automatically relocks.  
The horn sounds repeatedly.  
The headlights flash repeatedly.  
The turn signal lights flash repeatedly.  
The LED lights up.
  
- 9. The driver's door lock attempts to lock repeatedly.  
The horn continues to sound repeatedly.  
The headlights and turn signal lights continue flashing.  
The LED remains on.
  
- 10. The horn stops sounding.  
All the lights stop flashing and/or turn off.  
The LED turns off.  
The turn signal lights flash twice.  
The driver's door unlocks.
  
- 11. All doors lock.  
The LED lights up.
  
- 12. After 30 seconds, the LED starts flashing; the system is now armed.
  
- 13. The front passenger's door automatically relocks.  
The horn sounds repeatedly.  
The headlights flash repeatedly.  
The turn signal lights flash repeatedly.  
The LED lights up.



Check:

- Press and release the remote control's unlock button to stop the alarm.
- 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.
- Unlock and open one of the rear passenger doors to trigger an alarm.
- Repeat the above steps with the other rear passenger door and trunk.

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

- Press and release the remote control's lock button to start the arming process.
- Wait 30 seconds.

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



- With the tip of key (or Striker Tool pulled all the way out (PPO only)), tap the center of the driver's door window to trigger the "warn away" alarm.

Look For:

- 14. The horn stops sounding.  
All the lights stop flashing.  
The LED turns off.
- 15. Refer to steps 1 and 2.
- 16. Refer to step 13.
- 17. Refer to steps 15 and 16.
- 18. Refer to step 1.
- 19. After 30 seconds, the LED starts flashing; the system is now armed.
- 20. The horn sounds repeatedly.  
The headlights flash repeatedly.  
The turn signal lights flash repeatedly.  
The LED lights up.

**NOTE:** Adjust as necessary by increasing the GBS setting to the next level if the alarm does not trigger during functional verifications.

**NOTE:** If you do not disarm the system, the alarm will last 20 seconds. *It is not necessary to check the alarm duration.*

**TOYOTA CAMRY HYBRID 2007 - TVIP V5 (RS3200PLUS)**  
 Checklist - these points **MUST** be checked to ensure a quality installation.

<u>Check:</u>	<u>Look For:</u>
<input type="checkbox"/> Insert the key into the driver's door key cylinder and turn it toward the back of the vehicle to stop the alarm.	21. The horn stops sounding. All the lights stop flashing and/ or turn off. The security LED turns off.
<hr/>	
<u>Vehicle Function Checks</u>	
<input type="checkbox"/> Head Lights	Functioning Head Lights
<input type="checkbox"/> High Beams	Functioning High Beams
<input type="checkbox"/> Turn Signal Lights	Functioning Turn Signal Lights
<input type="checkbox"/> Tail Lights	Functioning Tail Lights
<input type="checkbox"/> Stop Lights	Functioning Stop Lights
<input type="checkbox"/> Backup Lights	Functioning Backup Lights
<input type="checkbox"/> Hazard Lights	Functioning Hazard Lights
<input type="checkbox"/> Marker Lights	Functioning Marker Lights
<input type="checkbox"/> Dome/Courtesy Lights	Functioning Dome/Courtesy Lights
<input type="checkbox"/> Panel/Switch Illumination	Functioning Controls/Illumination
<input type="checkbox"/> Accessory Controls/Illumination (if equipped)	Functioning Accessory
<input type="checkbox"/> Key Sensor Buzzer	Functioning Key Sensor
<input type="checkbox"/> Fog Lights (if equipped)	Functioning Fog Lights
<input type="checkbox"/> Daytime Running Lights (if equipped)	Functioning DR Lights
<input type="checkbox"/> Trunk/Tailgate/Bed Lights (if equipped)	Functioning Lights
<input type="checkbox"/> Glove Box Light (if equipped)	Functioning Glove Box Light
<input type="checkbox"/> Cruise Control Light (if equipped)	Functioning Cruise Control Light

**TOYOTA CAMRY HYBRID 2007 - TVIP V5 (RS3200PLUS)**  
 Checklist - these points **MUST** be checked to ensure a quality installation.

Check:

- Seat Belt Warning Light
- Air Bag Warning Light
- ABS Light (if equipped)
- Lamp Failure Sensor (if equipped)
- Track/Skid Control Light (if equipped)
- HVAC
- Power Locks (if equipped)
- Power Windows (if equipped)
- Power Seats (if equipped)
- Power Sunroof (if equipped)
- Horn
- Gauges
- Front Wiper/Washer
- Rear Wiper/Washer (if equipped)
- Clock (if equipped)

Look For:

- Functioning Seatbelt Warning Light. If the warning light remains "ON", it may indicate a system malfunction.
- Functioning Air Bag Warning Light. If the warning light remains "ON", it may indicate a system malfunction.
- Functioning ABS Light. If the warning light remains "ON," it may indicate a system malfunction.
- Functioning Lamp Failure Light. If the warning light remains "ON," it may indicate a system malfunction.
- Functional Track/VSC Light. If the warning light remains "ON," it may indicate a system malfunction.
- All HVAC Controls Function
- Functioning Power Locks
- Functioning Power Windows
- Functioning Power Seats
- Functioning Sunroof
- Functioning Horn
- Functioning Gauges
- Functioning Front Wiper/Washer
- Functioning Rear Wiper/Washer
- Functioning Clock

**TOYOTA CAMRY HYBRID 2007 - TVIP V5 (RS3200PLUS)**  
 Checklist - these points **MUST** be checked to ensure a quality installation.

Check:

- Accessory Power Socket (if equipped)
- Starter
- Audio/Video (if equipped)
- Power Sliding Door (if equipped)
- Convenience Memory Settings (if equipped)
- Heated Seats (if equipped)
- Massage Seats (if equipped)
- Rear Window Defogger (if equipped)
- Power Side Mirrors (if equipped)
- Side Mirror Defogger (if equipped)
- Front Windshield Defogger (if equipped)
- Navigation System (if equipped)
- Power Back Door (if equipped)
- Steering Wheel Audio Control (if equipped)

**Remove the appropriate fuse after checks are completed.**

Look For:

- Functioning Power Socket
- Functioning Starter
- Functioning Audio/Video
- Functioning Power Sliding Door
- Functioning Memory Settings
- Functioning Heated Seats
- Functioning Massage Seats
- Functioning Rear Window Defogger
- Functioning Power Side Mirrors
- Functioning Side Mirror Defogger
- Functioning Front Windshield Defogger
- Functioning Navigation System
- Functioning Power Back Door
- Functioning Steering Wheel Audio control