

Part Number: 08586-3D871**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
2	1	V5 Security ECU
3	1	ECU Mounting Bracket
4	1	GBS ECU
5	1	GBS ECU Mounting Bracket
6	1	Microphone

Hardware Bag Contents

Item #	Quantity Req'd.	Description
1	15	Medium Wire Ties
2	5	Large Wire Ties
3	2	Small Foam Tape Strip
4	2	Large Foam Tape Strip
5	2	Splicing Connector
6	1	Bolt
7	1	Nut
8	1	Butyl Tape
9	1	Key Tag
10	2	Warning Label
11	1	Owner's Guide
12	1	Warranty Card

Additional Items Required For Installation

Item #	Quantity Req'd.	Description

Conflicts

Note: Must not be installed in vehicles with factory TDS.

Recommended Tools

Personal & Vehicle Protection	Notes
Safety Glasses	
Safety Gloves	(Optional)
Vehicle Protection	Blankets, Part Boxes
Special Tools	Notes
Striker Tool	CAD-E IADE P/N ALL 02-016-01
Installation Tools	Notes
Phillips Head Screwdriver	#2, screwdriver or tip
Flat Blade Screwdriver	Small, Flat Blade
Socket	10mm
Socket Extension	3"
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST # 00002-06001-01
Wrench	10mm
Side Cutters	

Torque Wrench	4.1 N·m (36 lbf·in)
Pliers	Slip-joint
Pliers	Needle Nose
Pneumatic/Electric Wrench	
Special Chemicals	Notes
Cleaner	3M™ Prep Solvent-70
Glass Cleaner	Household Windex

General Applicability

Note: 4Runner with factory keyless entry, only.

Recommended Sequence of Application

Item #	Accessory	
1	V5	
2	Audio	

*Mandatory

Vehicle Service Parts (may be required for reassembly)

Item #	Quantity Req'd.	Description

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.

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.

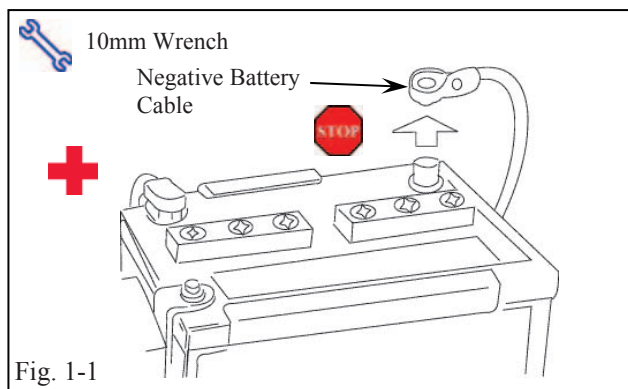
These guidelines can be found in the "Accessory Installation Practices" document.

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.

1. Vehicle Disassembly.

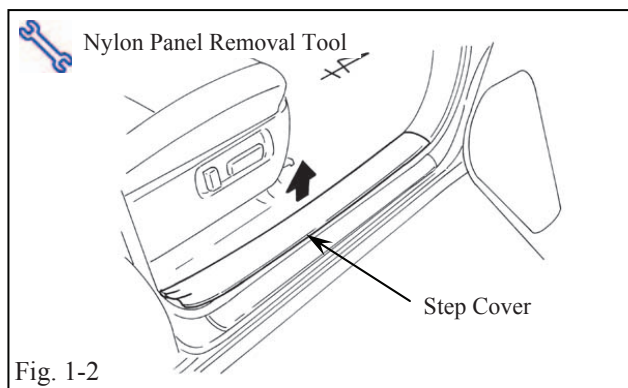


(a) Remove the negative battery cable. (Fig. 1-1)

(1) Protect the fender before starting.

(2) For automatic equipped vehicles, place the shifter in low gear and set the parking brake prior to disconnecting the battery.

(3) Do not touch the positive terminal with any tool when removing cable.

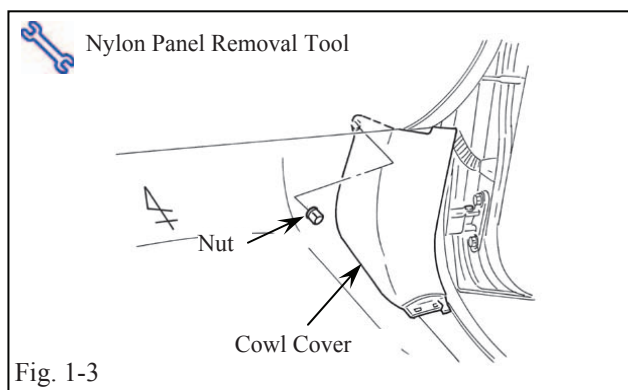


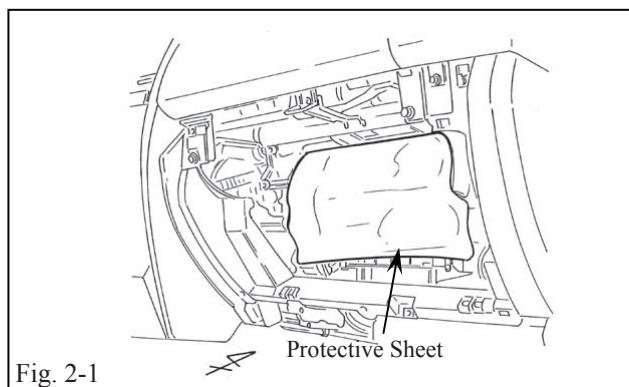
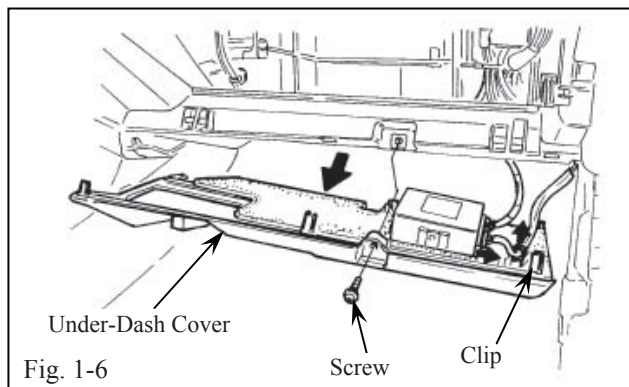
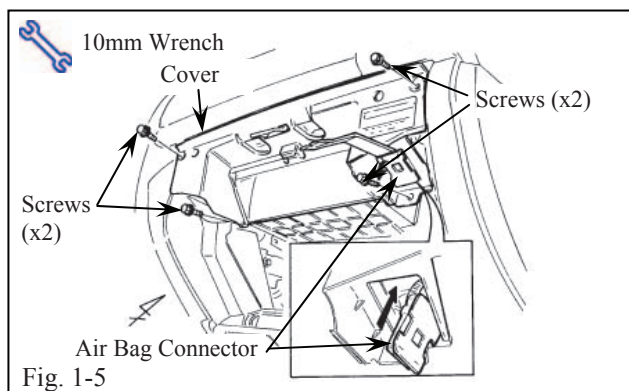
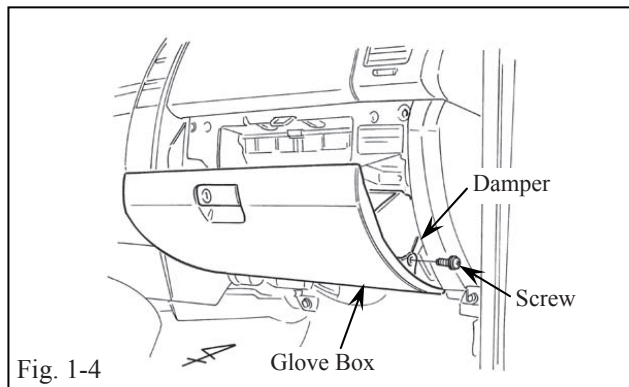
(b) Remove the passenger side step cover. (Fig. 1-2)

(1) Cover the floor and seats before starting.

(c) Remove the passenger side cowl cover. (Fig. 1-3)

(1) Remove the nut securing the cover.





(d) Remove the glove box assembly. (Fig. 1-4)

(1) Remove the screw securing the glove box assembly.

(2) Remove the glove box damper.

(e) Remove the cover from the upper glove box area. (Fig. 1-5)

(1) Remove the four screws securing the cover.

(2) Remove the air bag connector holder from the cover.

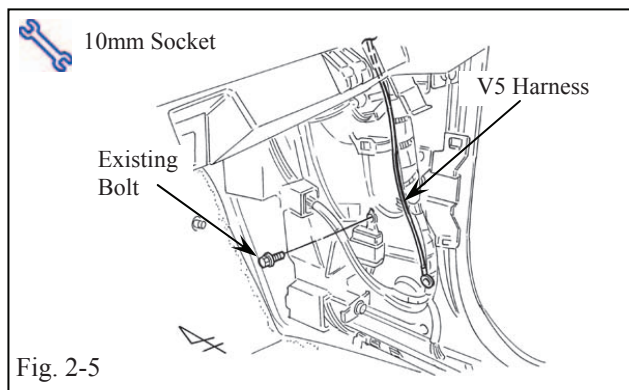
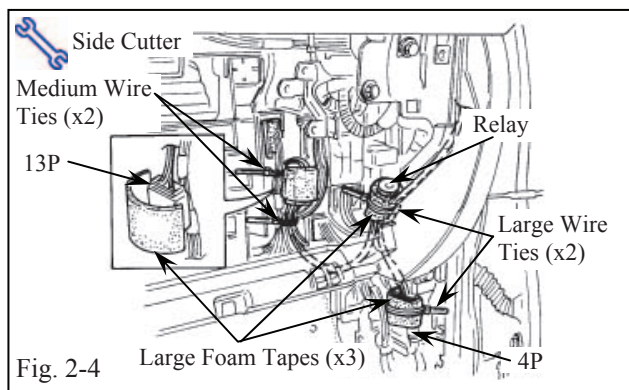
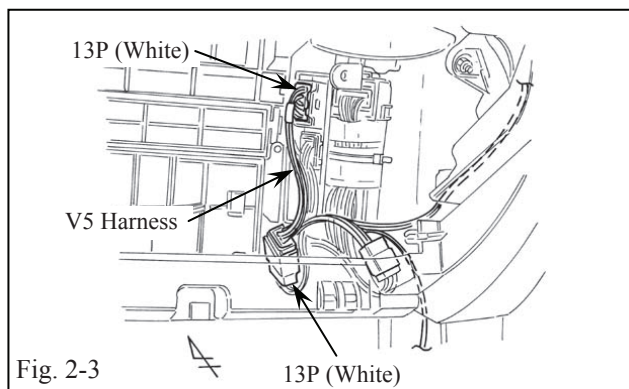
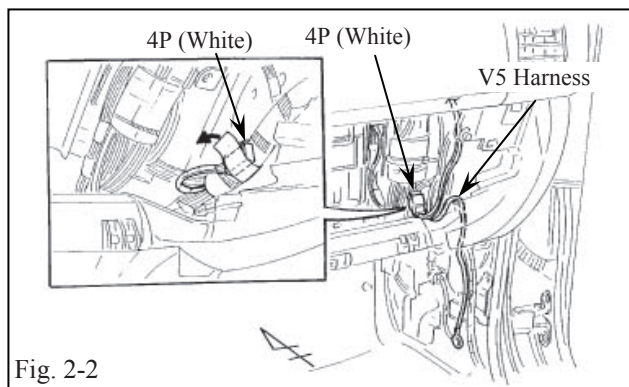
(f) Remove the under-dash cover below the glove box area. (Fig. 1-6)

(1) Remove the one screw.

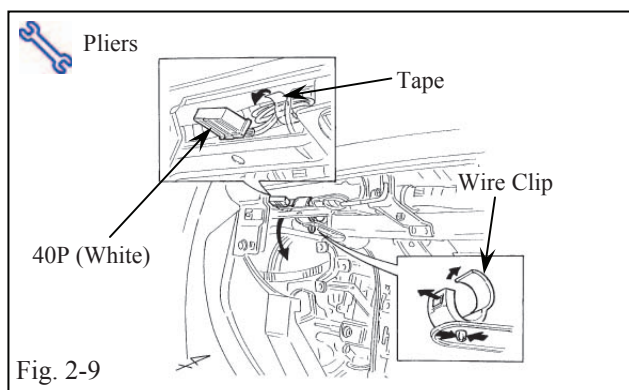
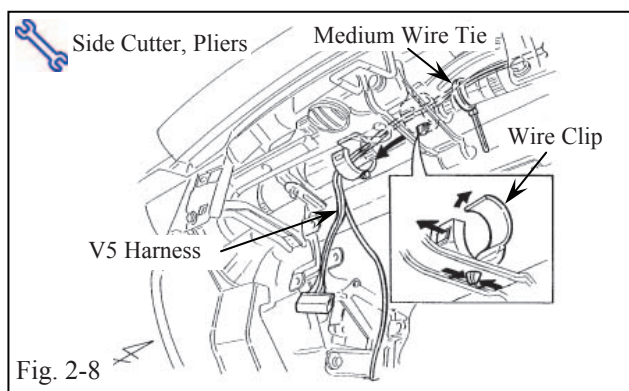
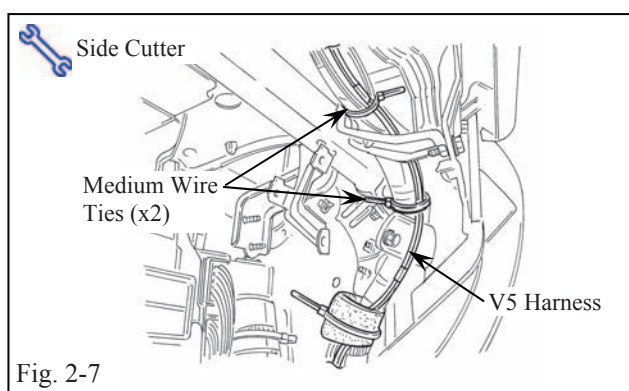
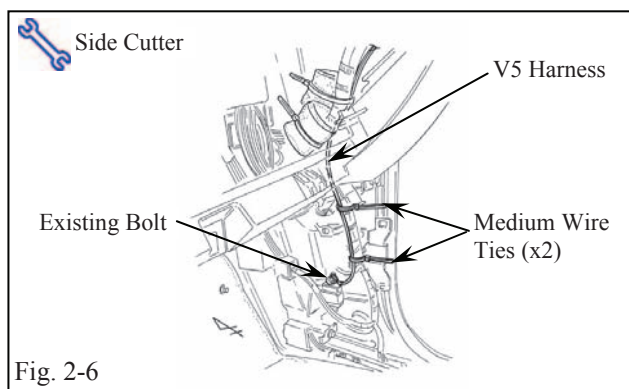
(2) Disconnect the two connectors on the 4WD control ECU (if equipped), and remove the one vehicle wire harness clip.

2. V5 Wire Harness Installation.

(a) Prepare a protective sheet (blanket), and cover the blower assembly in the glove box area with the sheet as shown. (Fig. 2-1)



- (b) Locate the vehicle harness' white 4P connector from the glove box area. (Fig. 2-2)
- (c) Plug in the V5 harness' white 4P connector to the vehicle harness' white 4P connector. (Fig. 2-2)
 - (1) Verify the connectors are plugged in securely.
- (d) Locate and disconnect the white 13P connector from the connector block in the glove box area. Plug in the V5 harness' white 13P connectors between the vehicle harness' white 13P connector and the connector block. (Fig. 2-3)
 - (1) Verify the connectors are plugged in securely.
- (e) Wrap the white 4P connectors with one large strip of foam tape. (Fig. 2-4)
- (f) Wrap the white 13P connectors, V5 harness and vehicle harness with one large strip of foam tape. (Fig. 2-4)
- (g) Wrap the V5 harness relay with one large strip of foam tape. (Fig. 2-4)
- (h) Secure the V5 harness relay to the vehicle harness with one large wire tie. (Fig. 2-4)
- (i) Secure the 4P connectors to the vehicle harness with one large wire tie. (Fig. 2-4)
- (j) Secure the V5 harness to the vehicle harness with two medium wire ties. (Fig. 2-4)
- (k) Locate and remove the existing bolt from the ground point in the passenger-side cowl area. (Fig. 2-5)



(l) Secure the V5 harness ground wire terminal, along with the vehicle harness ground wire terminal, using the existing bolt. (Fig. 2-6)

(1) Use the vehicle's ground bolt to secure the V5 harness ground wire.

(2) Verify the bolt is tight.

(m) Secure the V5 harness with two medium wire ties. (Fig. 2-6)

(n) Route the V5 harness toward the upper glove box area, and secure it to the vehicle harness with two medium wire ties. (Fig. 2-7)

(o) Route the V5 harness toward the left side of the glove box area, and secure it to the vehicle harness with one medium wire tie and the existing vehicle wire clip. (Fig. 2-8)

(1) Remove the vehicle wire clip on the center brace and open the vehicle wire clip.

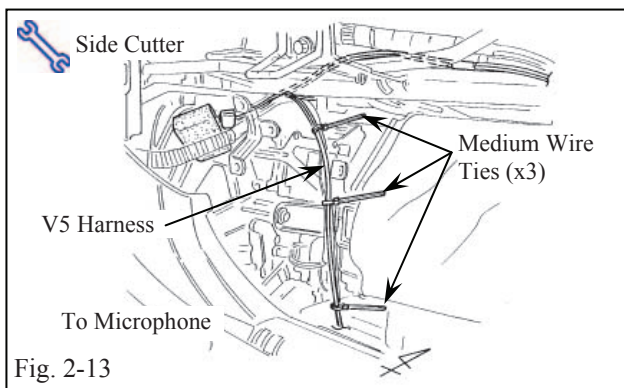
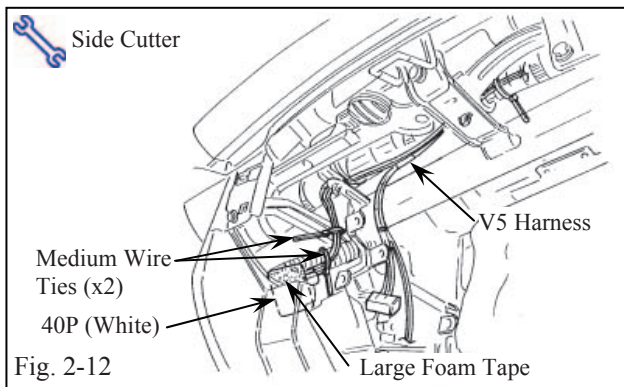
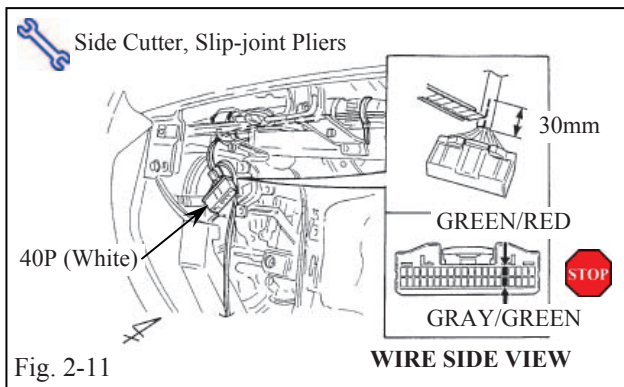
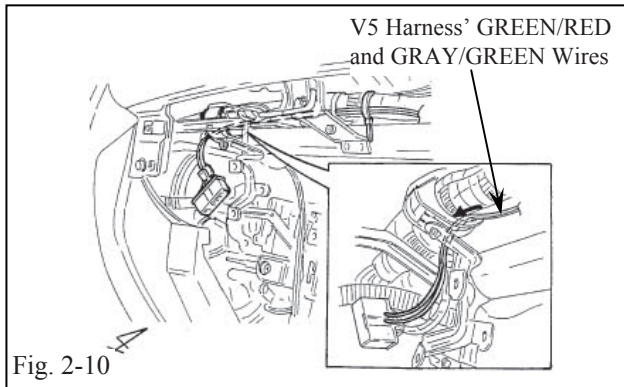
(2) Route the V5 wire harness through the open vehicle wire clip.

(3) Close and reinstall the vehicle wire clip to the brace.

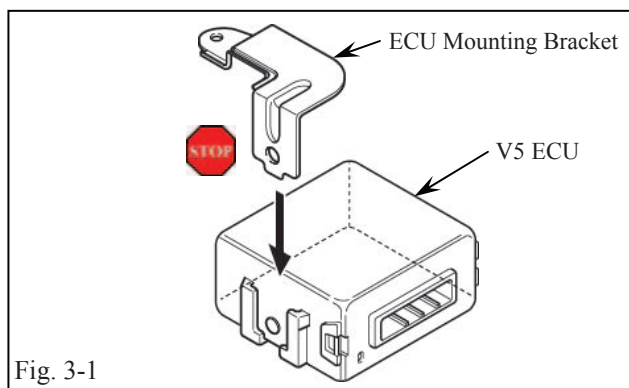
(p) Locate the vehicle harness' white 40P connector in the upper left side of the glove box area. (Fig. 2-9)

(1) Remove the adjacent vehicle wire clip and tape to loosen the 40P connector.

(2) Reinstall the vehicle wire clip without the 40P connector.

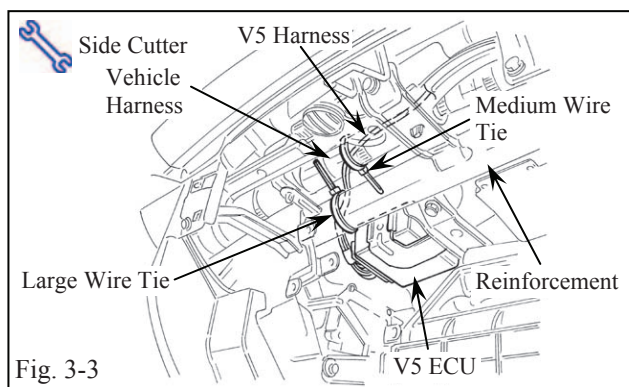
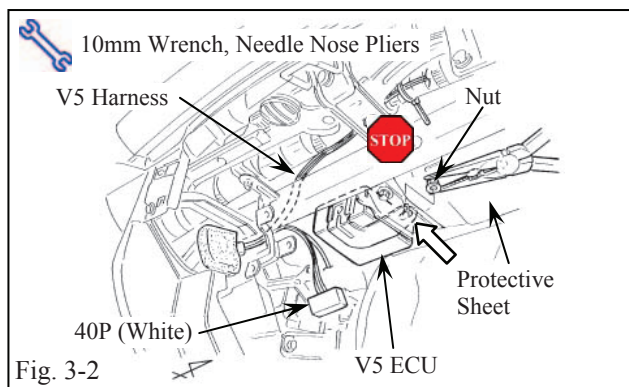


- (q) Route the V5 harness' GREEN/RED and GRAY/GREEN wires inside the vehicle wire clip. (Fig. 2-10)
- (r) Locate the wire on the white 40P connector (top row, sixteenth space from the left) and attach the V5 harness' GREEN/RED wire with a splicing connector. Then locate the wire on the bottom row (sixteenth space from the left) and attach the V5 harness' GRAY/GREEN wire with a splicing connector. (Fig. 2-11)
 - (1) Using a side cutter, cut 30 mm of tape from the 40P connector wire harness to expose the wires for splicing.
 - (2) Verify the correct wire and connector openings are chosen for splicing.
- (s) Wrap the V5 harness' white 40P connector with one large piece of foam tape. (Fig. 2-12)
- (t) Secure the V5 harness' GREEN/RED and GRAY/GREEN wires to the vehicle harness with two medium wire ties. (Fig. 2-12)
- (u) Secure the V5 harness' microphone wire to the vehicle harness with three medium wire ties. (Fig. 2-13)



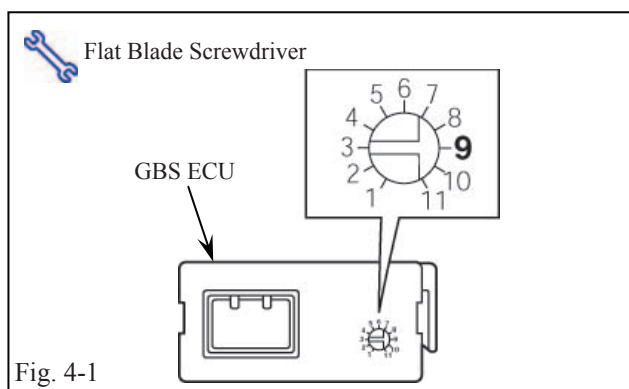
3. V5 ECU Preparation and Installation.

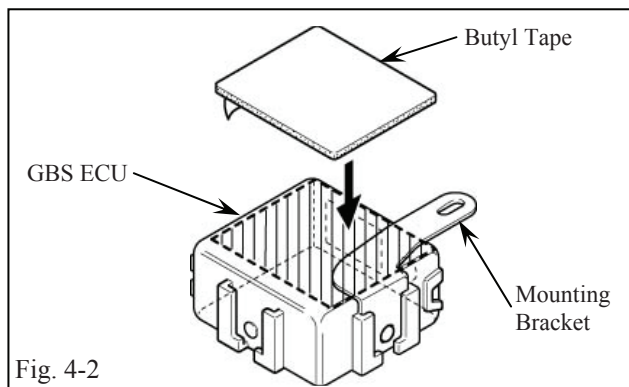
- (a) Insert the ECU mounting bracket into the indicated bracket slot on the V5 ECU. (Fig. 3-1)
 - (1) Before beginning this section, verify the protective sheet covering the blower assembly is still fully in place.
- (b) Plug the V5 harness' white 40P connector into the V5 ECU. (Fig. 3-2)
 - (1) Verify the connectors are plugged in securely.
- (c) Install the V5 ECU on the metal substructure of the reinforcement tube with the nut supplied in the kit. (Fig. 3-2)
 - (1) Locate the existing stud bolt on top of the metal substructure.
 - (2) Use needle nose pliers to place the nut over the stud bolt. Start the nut by hand, and finish tightening with a 10mm wrench.
 - (3) Be careful not to drop and lose the nut.
- (d) Secure the V5 harness to the vehicle harness with one medium wire tie and secure the V5 harness to the reinforcement tube with one large wire tie. (Fig. 3-3)



4. GBS ECU Preparation and Installation.

- (a) Turn the adjustment screw on the GBS ECU to the "9" position. (Fig. 4-1)





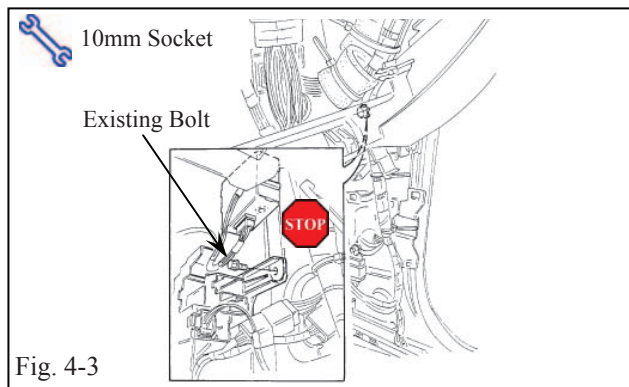
(b) Insert the GBS ECU mounting bracket into the indicated bracket slot on the GBS ECU. (Fig. 4-2)

(1) Attach the bracket as shown.

(2) Make sure the bracket is firmly attached to the ECU.

(c) Apply the butyl tape to the GBS ECU as shown. (Fig. 4-2)

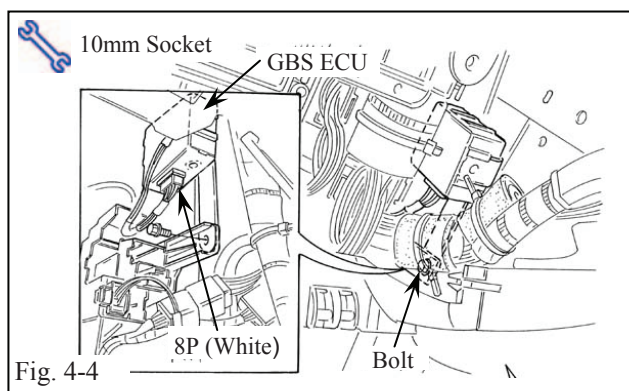
(d) Locate and remove the existing bolt from the connector block in the passenger side cowl area. (Fig. 4-3)



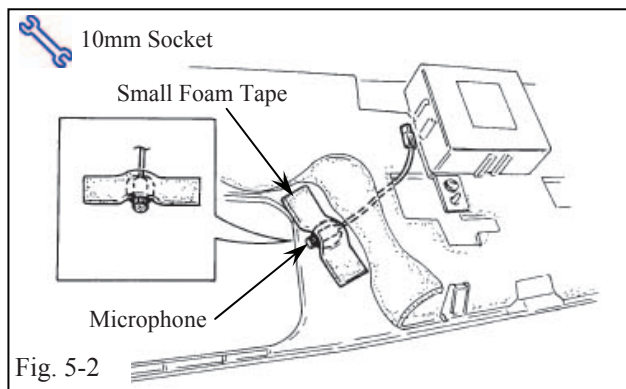
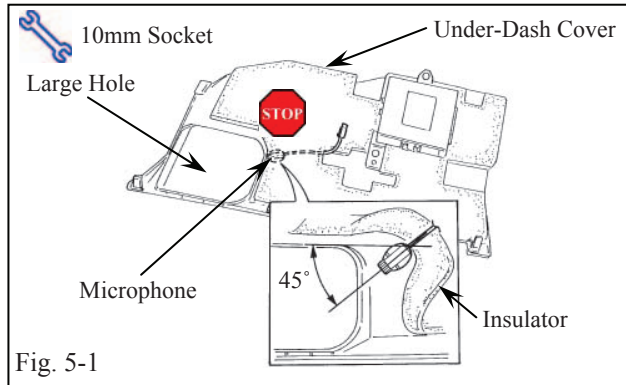
(1) Discard the existing bolt.

(e) Mount the GBS ECU on the right side of the connector block with the bolt supplied in the kit. (Fig. 4-4)

(f) Plug the V5 harness' white 8P connector into the GBS ECU. (Fig. 4-4)



(1) Verify the connectors are plugged in securely.



5. Microphone Installation.

(a) Using 3M™ Prep Solvent-70, clean the area indicated on the back side of the under-dash cover. (Fig. 5-1)

(b) When cleaning with 3M™ Prep Solvent-70:

(1) Always use a clean (lint free scratch resistant) soft cloth (or wipe), and clean a small area at a time (3x3-ft. max.).

(2) Shake well.

(3) Apply 3M™ Prep Solvent-70 to cloth or wipe. Do not spray cleaning solution directly on any vehicle surfaces.

(4) Clean the surface thoroughly and wipe dry immediately with a new clean cloth. Do not allow cleaner to air dry.

(c) Remove the backing sheet and secure the microphone to the back side of the under-dash cover. (Fig. 5-1)

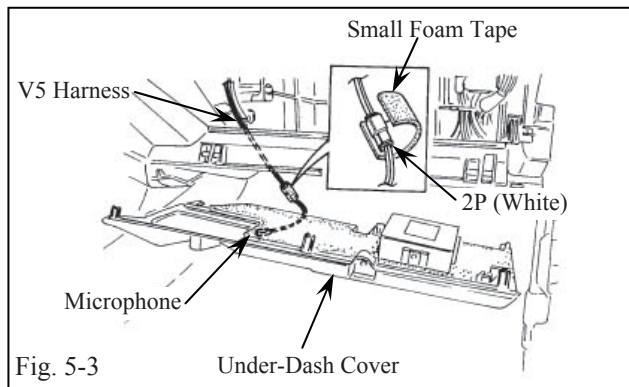
(1) Secure the microphone under the insulator at a 45° angle with the back of the microphone lined up with the front edge of the large hole as shown. (Fig. 5-1)

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

(3) Press the microphone to the under-dash cover firmly.

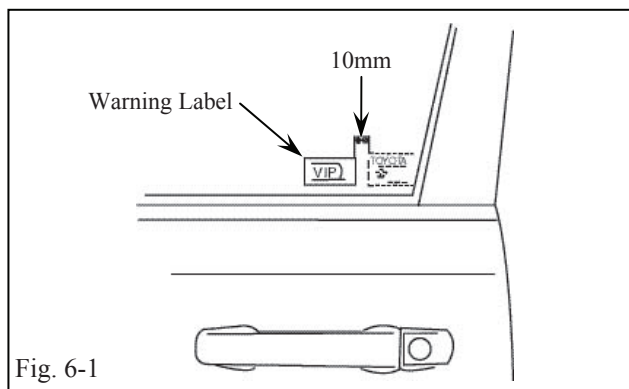
(d) Secure the microphone with a small strip of foam tape. (Fig. 5-2)

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

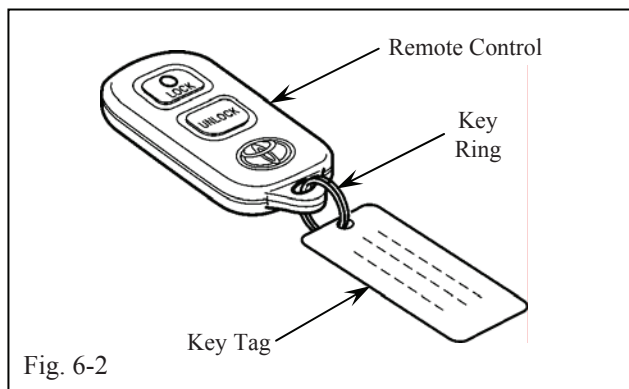


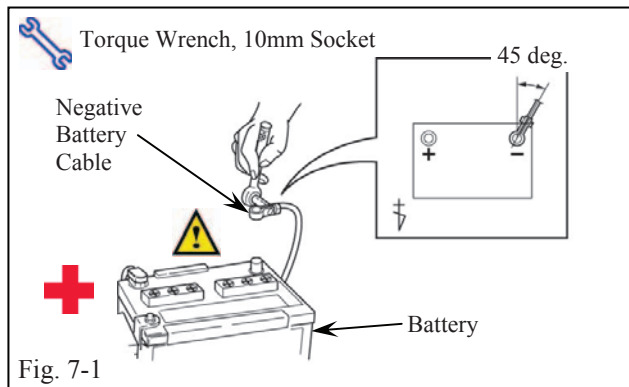
- (e) Plug the microphone's 2P connector into the V5 harness' 2P connector. (Fig. 5-3)
- (1) Verify the connectors are plugged in securely.
- (f) Wrap the 2P connectors with a small strip of foam tape. (Fig. 5-3)
- (g) Reinstall the under-dash cover. (Fig. 5-3)

6. Warning Label and Key Tag Installation.



- (a) Clean the inside surface of the front door's windows using 3M™ Prep Solvent-70 and the method in Step 5(b). (Fig. 6-1)
- (b) Place the warning label on the inside surface of the front door's window as shown. (Fig. 6-1)
 - (1) Use a piece of clear adhesive tape to lift the labels off the protective backing sheet.
 - (2) Do not touch the adhesive surface of the warning labels.
- (c) Attach the key tag to the remote control key's ring. (Fig. 6-2)





7. Completing the Installation

- (a) Complete the reassembly of the vehicle.
 - (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. 7-1)
 - (1) Position the negative terminal at an angle of 30° to the battery as shown.
 - (2) Tighten the nut to 4.1 N•m (36 lbf•in).
 - (3) Do not touch the positive terminal with any tool when replacing the cable.
- (d) Place the owner's manual and warranty card, left in their protective bags, in the glove box.



Checklist - these points **MUST** be checked to ensure a quality installation.

Check:	Look For:
<p><u>Accessory Function Checks</u></p> <p><input type="checkbox"/> Press and release the remote control's lock button to start the system's arming process.</p> <p><input type="checkbox"/> Wait 30 seconds.</p> <p><input type="checkbox"/> Press and release the remote control's unlock button to disarm the system.</p> <p>Open the driver's door, insert the key into the ignition switch and turn it to "ON."</p> <p>Roll down all the windows, remove the key and exit the vehicle.</p> <p><input type="checkbox"/> Arm and disarm the system with the remote again, then wait 30 seconds.</p> <p><input type="checkbox"/> Press and release the remote control's unlock button again to stop the arming process.</p> <p><input type="checkbox"/> Insert the key into the driver's door key cylinder and turn it toward the front of the vehicle to start the arming process.</p> <p><input type="checkbox"/> Wait 30 seconds.</p>	<p>1. The turn signal lights flash once. All doors lock. The Security LED lights up.</p> <p>2. After 30 seconds, the LED starts flashing; the system is now armed.</p> <p>3. The turn signal lights flash twice. The driver's door unlocks. The LED stops flashing.</p> <p>4. The doors automatically relock. The system automatically starts the arming process.</p> <p>5. Refer to Step 3.</p> <p>6. All doors lock. The LED lights up.</p> <p>7. After 30 seconds, the LED starts flashing; the system is now armed.</p>

Checklist - these points **MUST** be checked to ensure a quality installation.

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.

- ☐ Insert the key into the ignition switch and turn it to "START" to stop the alarm.

Turn the key back to "LOCK," remove it, then exit the vehicle.

- ☐ 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 starter cranks and the engine starts.

- 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.

Checklist - these points **MUST** be checked to ensure a quality installation.

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 back door (if equipped).

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)



- ☐ Pull the striker tool all the way out to tap the center of the drivers door window to trigger an 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 the 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 4RUNNER 2006 - 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.
<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 Switch/Illumination
<input type="checkbox"/> Accessory Controls/Illumination (if equipped)	Functioning Accessory Controls/Illumination
<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

TOYOTA 4RUNNER 2006 - TVIP V5 (RS3200PLUS)

Checklist - these points **MUST** be checked to ensure a quality installation.

Check:

- ☐ Trunk/Tailgate/Bed Lights (if equipped)
- ☐ Glove Box Light (if equipped)
- ☐ Cruise Control Light (if equipped)
- ☐ 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

Look For:

- Functioning Lights
- Functioning Glove Box Light
- Functioning Cruise Control Light
- Functioning Seat Belt 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.

- Functioning Track/VSC Light. If the warning light remains on, it may indicate a system malfunction.

- Functioning HVAC Controls
- Functioning Power Locks
- Functioning Power Windows
- Functioning Power Seats
- Functioning Sunroof
- Functioning Horn
- Functioning Gauges
- Functioning Front Wiper/Washer

TOYOTA 4RUNNER 2006 - TVIP V5 (RS3200PLUS)

Checklist - these points **MUST** be checked to ensure a quality installation.

Check:

- ☐ Rear Wiper/Washer (if equipped)
- ☐ Clock (if equipped)
- ☐ 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)

Remove the appropriate fuse after checks are completed.

Look For:

- Functioning Rear Wiper/Washer
- Functioning Clock
- 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