

Part Number: PT398-48081

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

Conflicts

| |
|--|
| Do not install into vehicles with TDS or Vehicles without Immobilizer. |
|--|

Recommended Sequence of Application

| Item # | Accessory | |
|--------|-----------|--|
| | | |

Kit Contents

| Item # | Quantity | Description |
|--------|----------|--------------------------|
| 1 | 1 | Wire Harness |
| 2 | 1 | Sub Wire |
| 3 | 1 | GBS ECU Mounting Bracket |

Hardware Bag Contents

| Item # | Quantity | Description |
|--------|----------|--|
| 1 | 1 | GBS ECU |
| 2 | 1 | M6 Self-Tapping Screw |
| 3 | 1 | GBS Microphone |
| 4 | 2 | Foam Tape |
| 5 | 10 | Wire Ties |
| 6 | 2 | V2 Window Label w/ red tag (discard) |
| 7 | 2 | V2 Window Label w/ red tag SPANISH (discard) |
| 8 | 2 | V5 Window Label |
| 9 | 2 | V5 Window Label SPANISH |
| 10 | 1 | V2 Owner's Guide (discard) |
| 11 | 1 | V5 Owner's Guide |
| 12 | 1 | Warranty Card |

Additional Items Required For Installation

| Item # | Quantity | Description |
|--------|----------|-----------------------|
| 1 | 1 | Black Electrical Tape |

Recommended Tools

| Personal & Vehicle Protection | Notes |
|-------------------------------|---|
| Safety Glasses | |
| Safety Gloves | (Optional) |
| Vehicle Protection | Blankets, Parts Boxes |
| Special Tools | Notes |
| Striker Tool (PPO only) | CAD-E IADS P/N ALL 02-016-01 |
| Tech Stream | |
| Installation Tools | Notes |
| Screwdriver | #2 Phillips, Flat Blade Jewelers |
| Nylon Panel Removal Tool | e.g. Panel Pry Tool #1 Toyota SST # 00002-06001-01 |
| Side Cutters | |
| Torque Wrench | 36 in•lbf (4.06 N•m) |
| Utility Knife | |
| Tape | Clear |
| Pick Tool | |
| Socket | 10mm, Extension |
| Special Chemicals | Notes |
| Cleaner | VDC Approved Cleaner |
| Glass Cleaner | Household Windex |

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. |

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

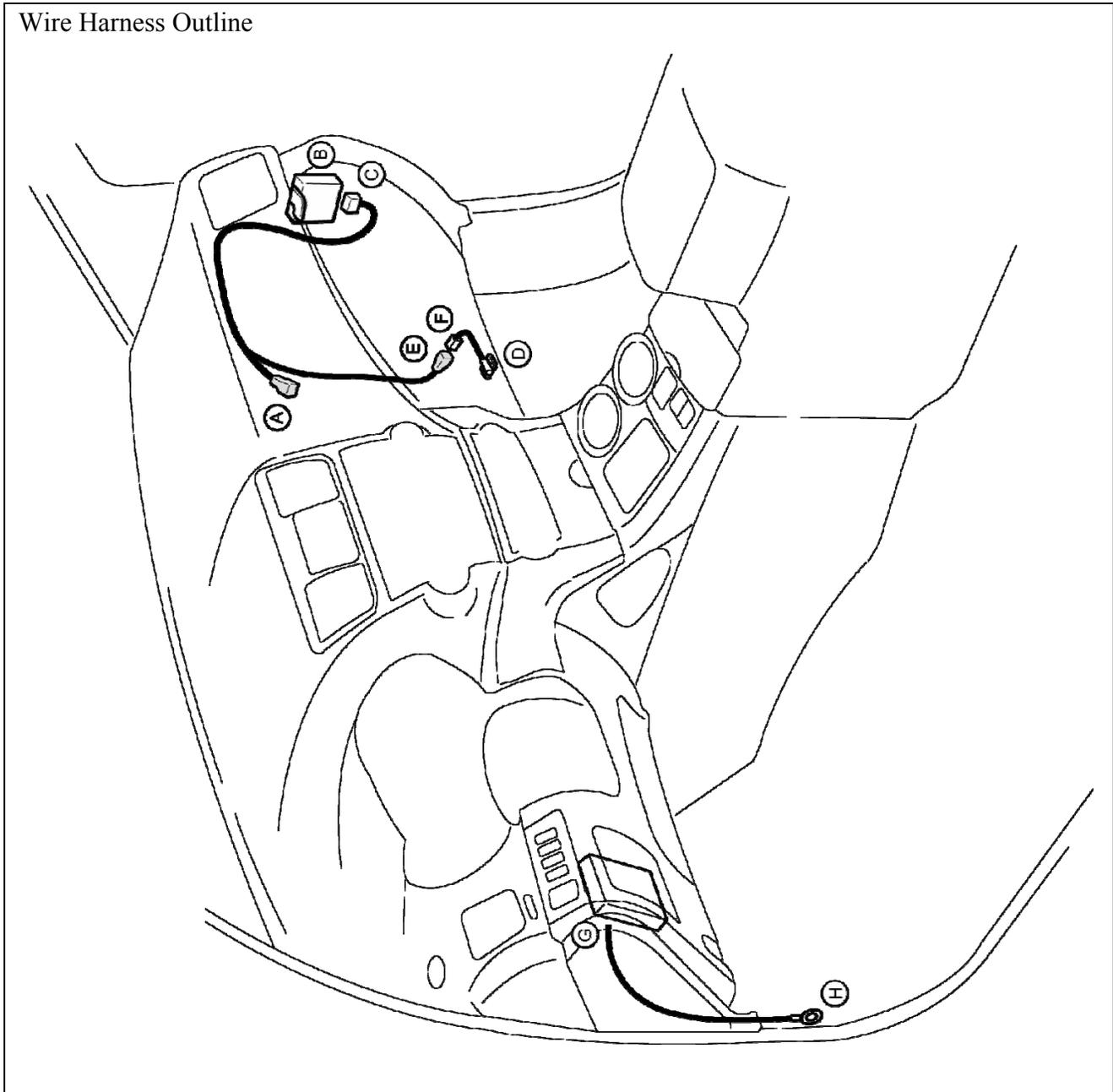
These guidelines can be found in the "Accessory Installation Practices" document.

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

| | | | | | | | | | | | | | |
|---------------------------|---------|----------|-------------------|---------------------------|----------|------------------|--------------------|--|--|--|--|--|--|
| 4P WHITE <i>(Male)</i> | GBS ECU | 8P WHITE | GBS MICROPHONE | 2P WHITE <i>(Male)</i> | 2P WHITE | WIRE TERMINAL | GROUND TERMINAL | | | | | | |
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | | | | | | |



1. Vehicle Disassembly.

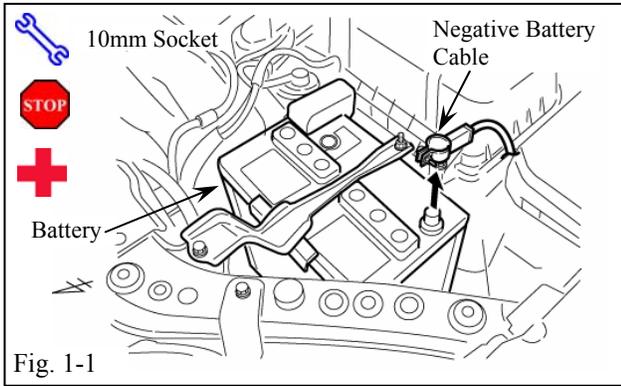
+ (a) Vehicles with Automatic Transmission should be placed in Park and have the Parking Brake Set before disconnecting the Battery.

(b) Remove the Negative Battery Cable (Fig. 1-1)

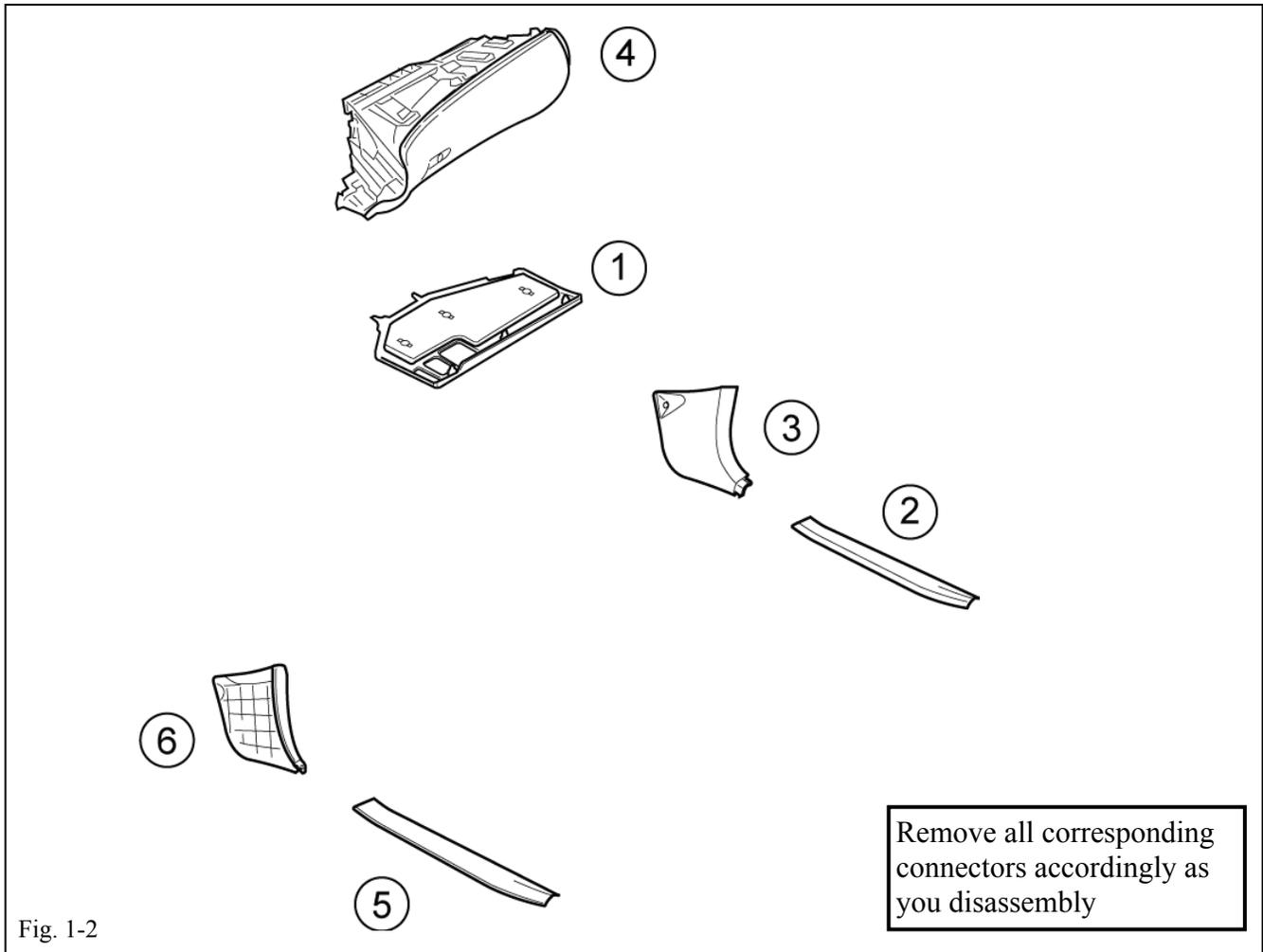
(1) Protect the Fender before starting.

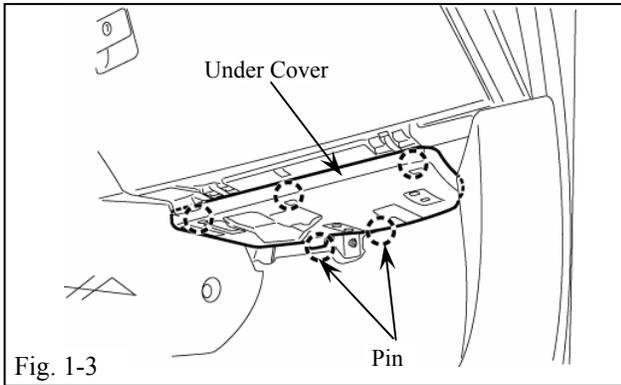
STOP (2) Note the Battery Cable position, as it will be re-installed in the same position.

+ **CAUTION:** Do not touch the positive terminal.



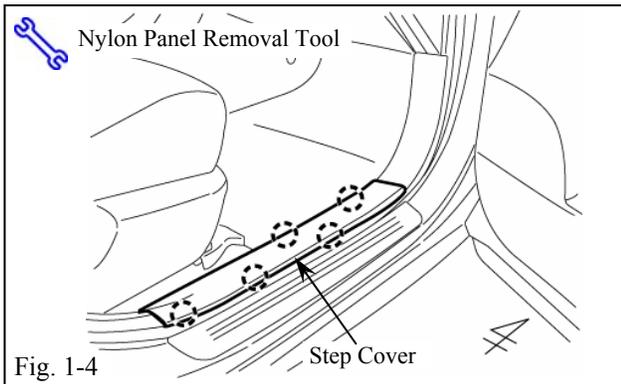
Disassembly Overview



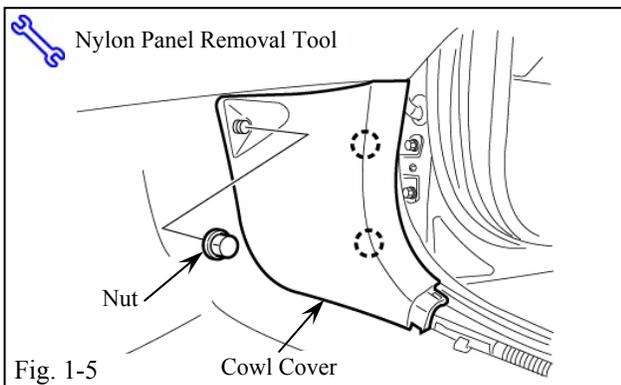


(d) Remove the Glove Box Under Cover.
(Fig. 1-3)

(1) Begin by protecting the Vehicle Interior with Blankets.

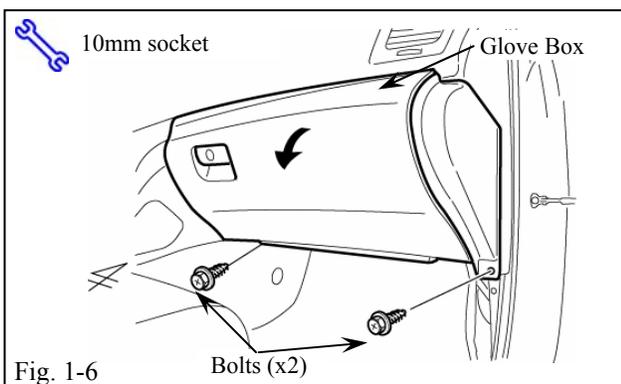


(e) Remove the Passenger's Step Cover
(Fig. 1-4)

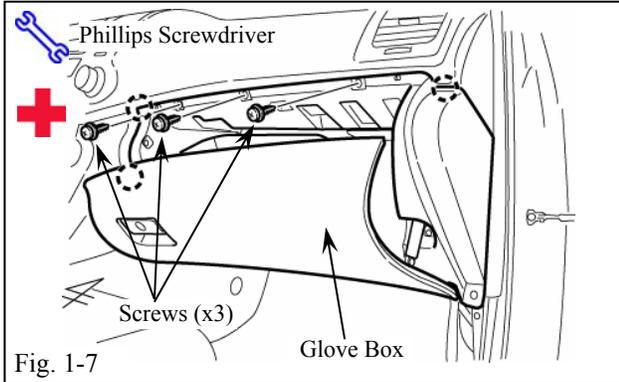


(f) Remove the Passenger's Cowl Cover.
(Fig. 1-5)

(1) Remove 1 Nut.



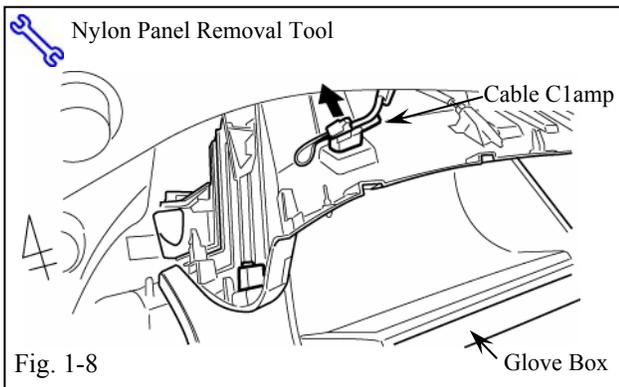
(g) Remove 2 Bolts from the Glove Box, then open the Glove Box Door. (Fig. 1-6)



(h) Remove 3 Screws from the Glove Box.
(Fig. 1-7)

(i) Dislodge the Glove Box

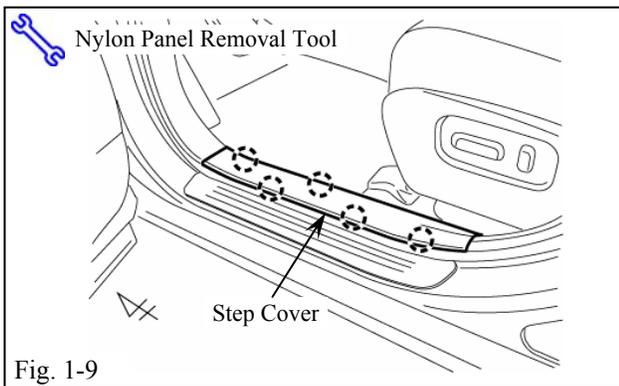
+ CAUTION: Sharp metal edges.



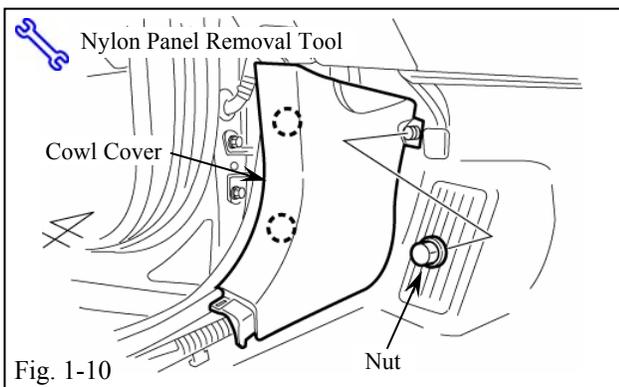
(j) Disconnect all Connectors from the Glove Box. (Fig. 1-8)

(k) Remove the Cable Clamp from the Glove Box. (Fig. 1-8)

(l) Remove the Glove Box

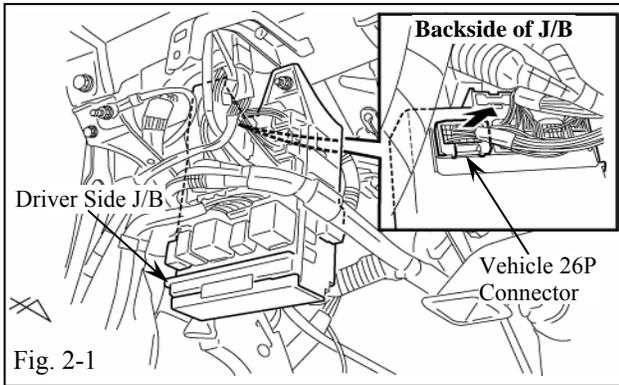


(m) Remove the Driver's Step Cover. (Fig. 1-9)



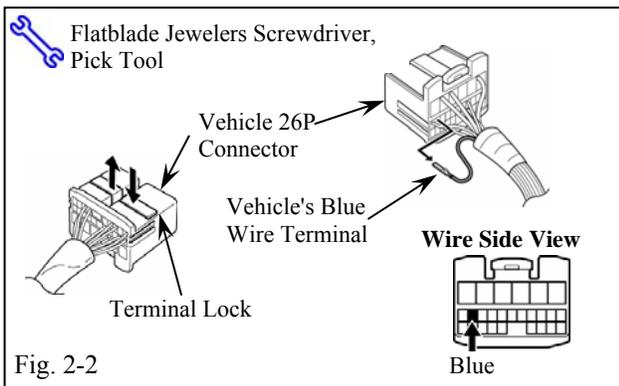
(n) Remove the Driver's Cowl Cover.
(Fig. 1-10)

(1) Remove 1 Nut.

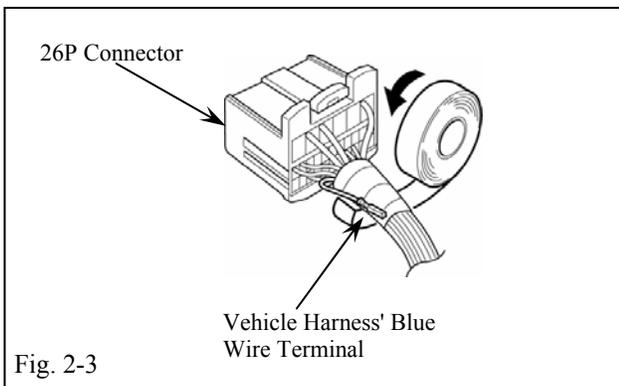


2. V5 Wire Harness Installation.
(Driver's Side Area)

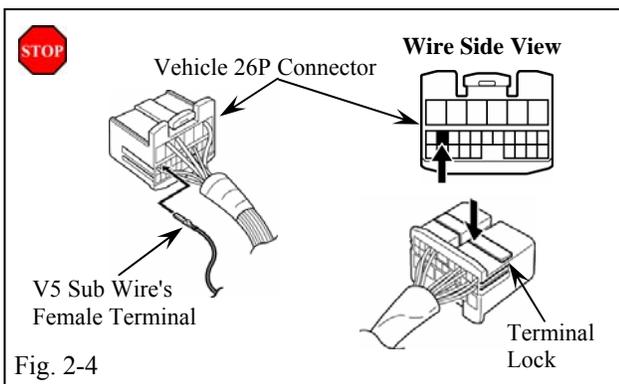
- (a) Locate and disconnect the Vehicle's White 26P Connector from the backside of the Driver's Side J/B. (Fig. 2-1)



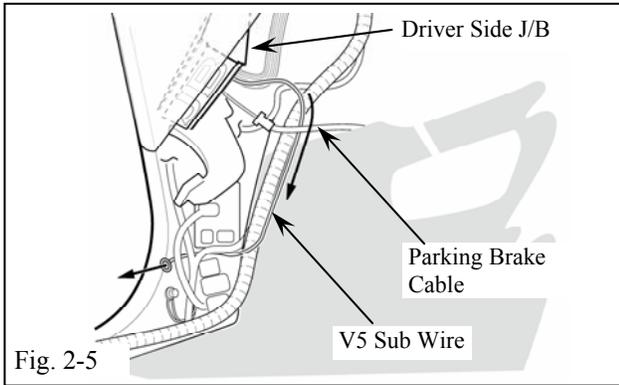
- (b) Release the Terminal Lock on the Vehicle's 26P Connector. (Fig. 2-2)
 - (1) Do not remove the terminal lock.
- (c) Locate the Vehicle Harness' Blue Wire. Using the Pick Tool or like, release and pull out the terminal for the Blue Wire. (Fig. 2-2)



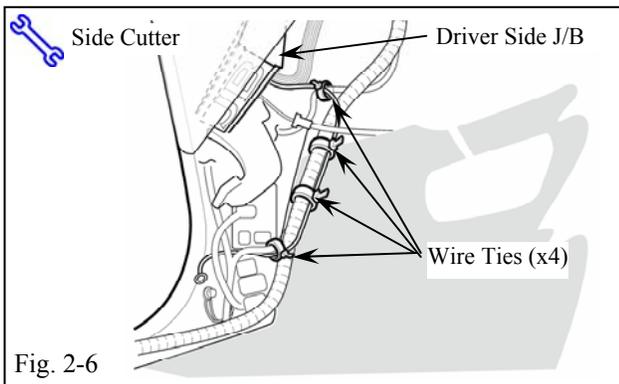
- (d) Turn the Vehicle's Blue Wire as shown. Secure the Blue Wire with Electrical Tape as shown. (Fig. 2-3)
 - (1) Make sure to cover the terminal with the electrical tape.



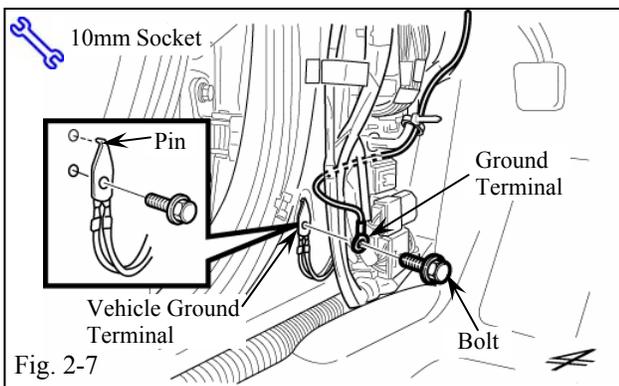
- (e) Insert the V5 Sub Wire's Female Terminal into the 26P Connector as shown. (Fig. 2-4)
 - (1) Verify the terminal is inserted and seated properly.
- (f) Close the Terminal Lock. (Fig. 2-4)
- (g) Reconnect the Vehicle 26P Connector to the Backside of the Driver Side J/B.



- (h) Route the V5 Sub Wire back towards the Vehicle's Firewall and then along the Vehicle Harness toward the Driver Side Cowl Area. (Fig. 2-5)



- (i) Secure the V5 Sub Wire to the Vehicle Harness with 4 Wire Ties. (Fig. 2-6)



- (j) Locate and remove 1 Bolt securing the Vehicle Ground Terminal. (Fig. 2-7)
- (k) Use the existing Vehicle's Bolt to secure the V5 Sub Wire's Ground Terminal to the Vehicle Ground Terminal. (Fig. 2-7)
- (l) Make sure that the vehicle ground terminal pin seats properly.

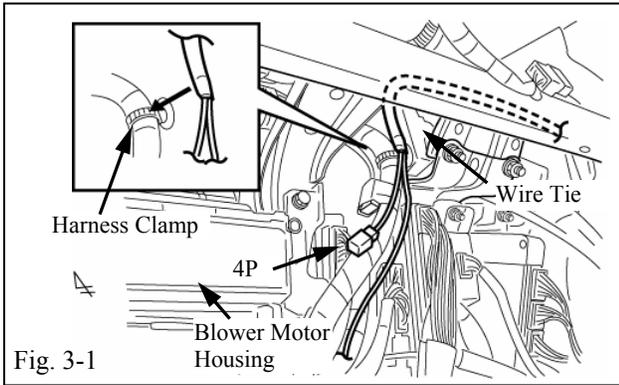


Fig. 3-1

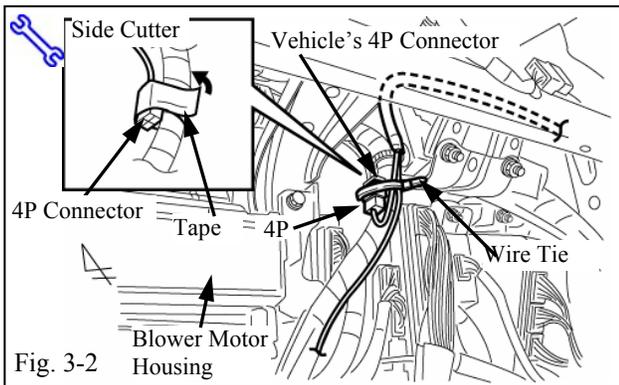


Fig. 3-2

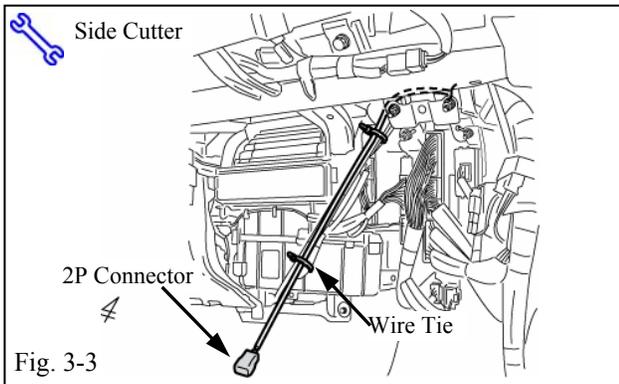


Fig. 3-3

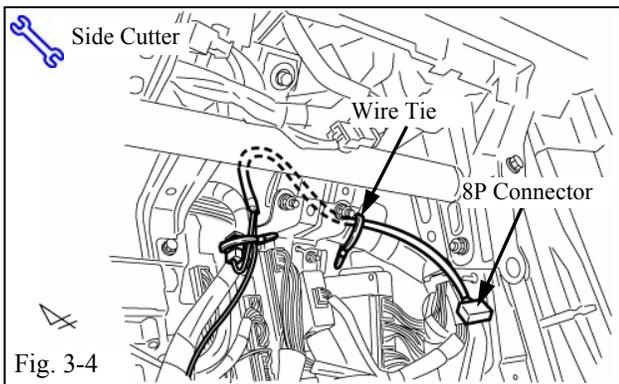
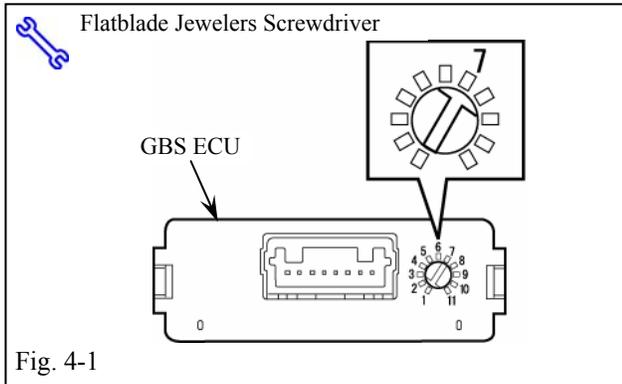


Fig. 3-4

3. V5 Wire Harness Installation.

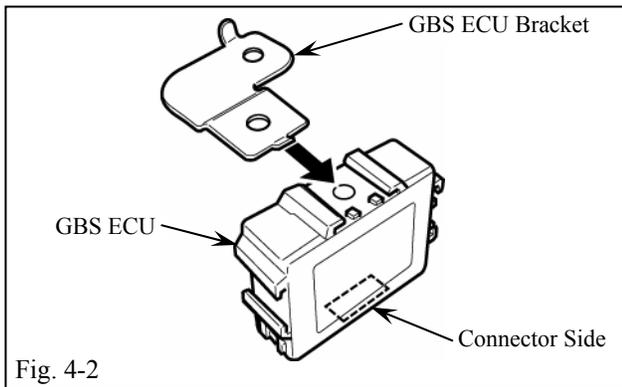
(Passenger's Side Area)

- (a) Route the V2 Harness above the Reinforcement Brace. Align the branch in the V2 Harness with the vehicle Harness Clamp. (Fig. 3-1)
 - (b) Locate the Vehicle's pre-wire White Female 4P connector on the right side of the Blower Motor Housing. (Fig. 3-2)
 - (c) Remove the Tape securing the 4P connector. (Fig. 3-2)
 - (d) Connect the V5 Harness' 4P Connector to the Vehicle Harness' 4P connector. (Fig. 3-2)
 - (1) Verify secure connection.
 - (e) Use 1 Wire Tie to secure the 4P Connectors to the Vehicle Harness. (Fig. 3-2)
 - (f) Route the V5 Harness downward to the Passenger's Floor, securing it to the Vehicle Harness with 1 Wire Tie. (Fig. 3-3)
-
- GO BACK TO THE V5 HARNESS' BRANCH PART.**
-
- (g) Route the V5 Harness toward the right side of the Glove Box area, securing it to the Vehicle harness with 1 Wire Tie. (Fig. 3-4)

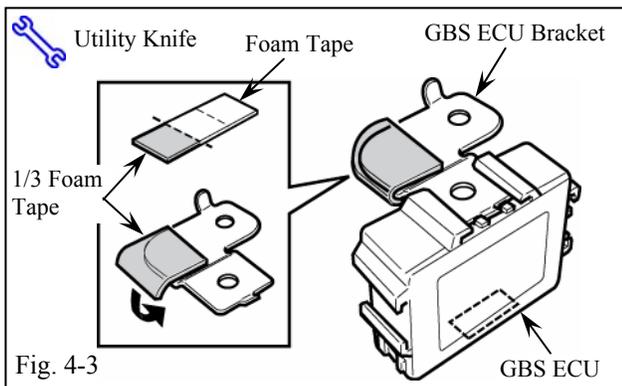


4. GBS ECU Preparation and Installation.

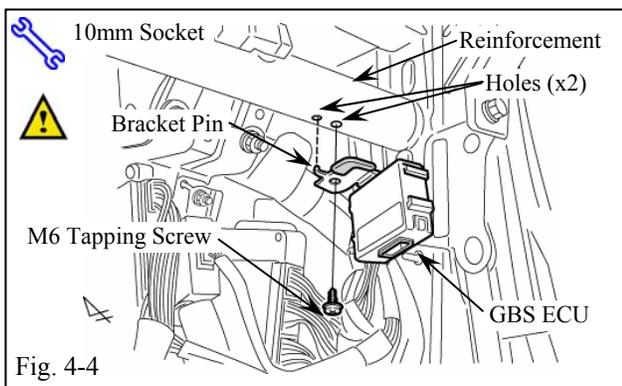
- (a) Turn the sensitivity screw on the GBS ECU to the "7" position. (Fig. 4-1)
 - (1) Verify the sensitivity.



- (b) Insert the GBS ECU Bracket into the indicated bracket slot on the GBS ECU. (Fig. 4-2)
 - (1) Ensure the bracket is firmly attached to the ECU.

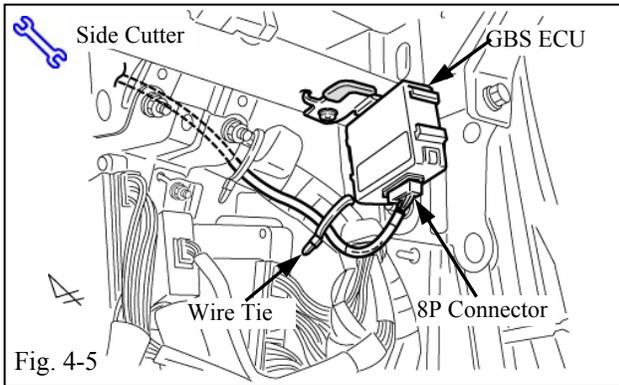


- (c) Cut and apply 1/3 piece of Foam Tape to the GBS ECU Bracket as shown. (Fig. 4-3)
 - (1) Do not discard the Extra Foam Tape.

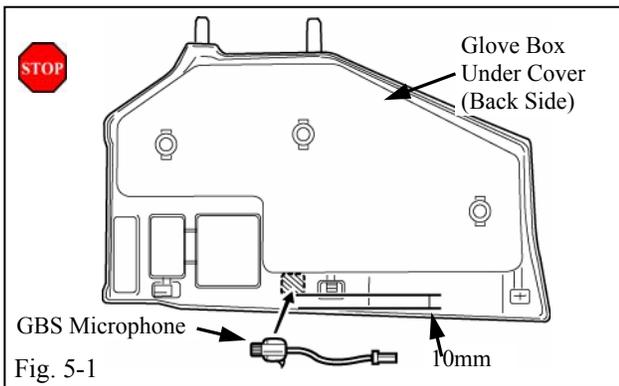


- (d) Use 1 M6 Tapping Screw to install the Bracket and GBS ECU to the Reinforcement in the upper right of Glove Box area. (Fig. 4-4)
 - (1) Make sure that the bracket pin seats properly.

⚠ CAUTION: Do not over tighten the screw.



- (e) Connect the V5 Harness' White 8P Connector to the GBS ECU. (Fig. 4-5)
 - (1) Verify secure connection.
- (f) Use 1 Wire Tie to secure the V5 Harness to the Vehicle Harness. (Fig. 4-5)

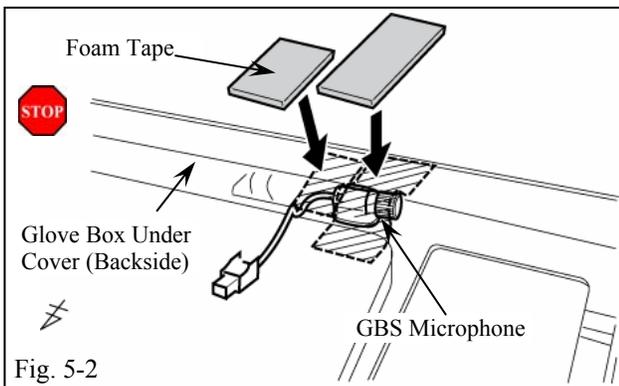


5. GBS Microphone Installation.

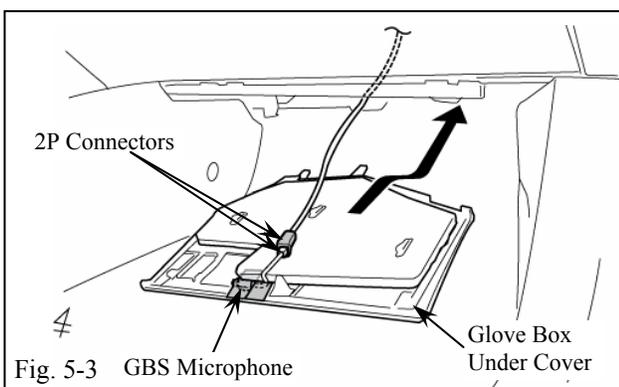
- (a) Using the VDC approved cleaner and Cleaning Method, clean the area indicated on the backside of the Glove Box Under Cover. (Fig. 5-1)
- (b) Attach the GBS Microphone to the backside of the Glove Box Under Cover as shown. (Fig. 5-1)



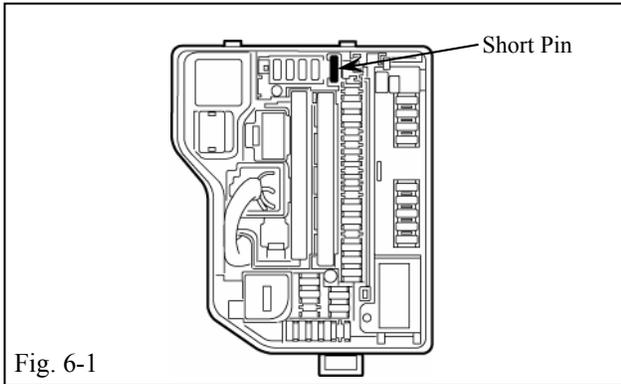
- (1) Do not touch the Microphone adhesive surface.



- (c) Apply 1 piece of Foam Tape onto the GBS Microphone as shown. (Fig. 5-2)
 - (1) Do not cover the Microphone opening.
- (d) Route the GBS Microphone Wires as shown and secure with 2/3 Foam Tape from Fig 4-3. (Fig. 5-2)



- (e) Reinstall the Glove Box.
- (f) Connect the V5 Harness' White 2P Connector to the GBS Microphone's 2P Connector. (Fig. 5-3)
 - (1) Verify secure connection.
- (g) Reinstall the Glove Box Under Cover.



6. Registration Preparation.

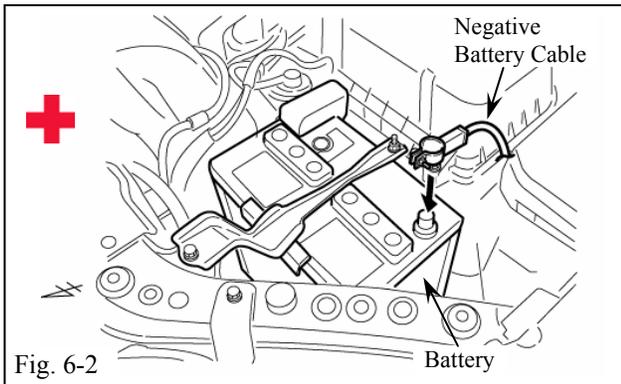
(a) Complete the reassembly of the vehicle.

- (1) Reconnect any disconnected connectors.
- (2) Verify the panels fit together properly with no uneven gaps between them.

(b) Verify that the Short Pin is installed.

(Fig. 6-1)

- (1) If not, Install the Short Pin.



(c) Temporarily reconnect the Negative Battery Terminal. (Fig. 6-2)

+ CAUTION: Do not touch the positive terminal.

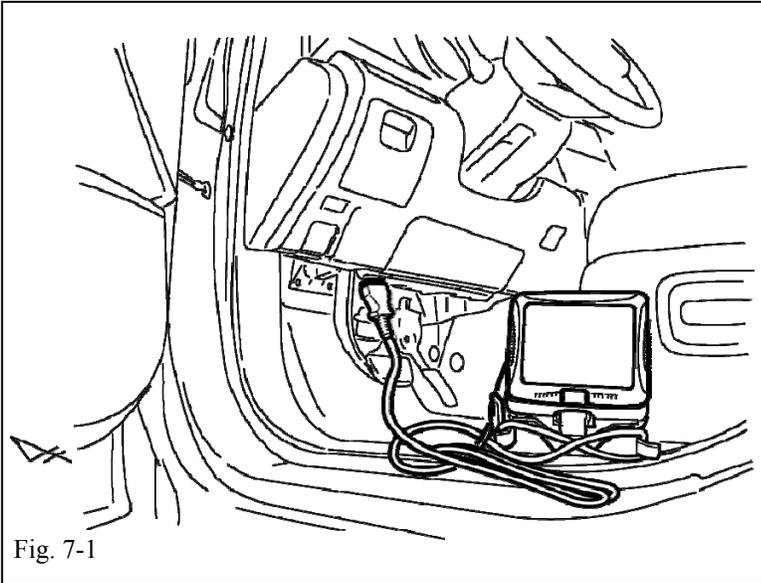


Fig. 7-1

7. Registration w/ Techstream Notebook.

- (a) Connect the Techstream Notebook to the Vehicles Diagnostic Port. (Fig. 7-1)
- (b) Start the TIS Techstream Application by clicking on the shortcut located on the Desktop.

VEHICLE WITHOUT SMART KEY.

- (c) Use the Vehicle Key turn the Vehicle Ignition Switch to “ON”.

VEHICLE WITH SMART KEY.

- (d) With the Remote Control Key in your possession, press the Power Button twice to select the Ignition “ON” position.

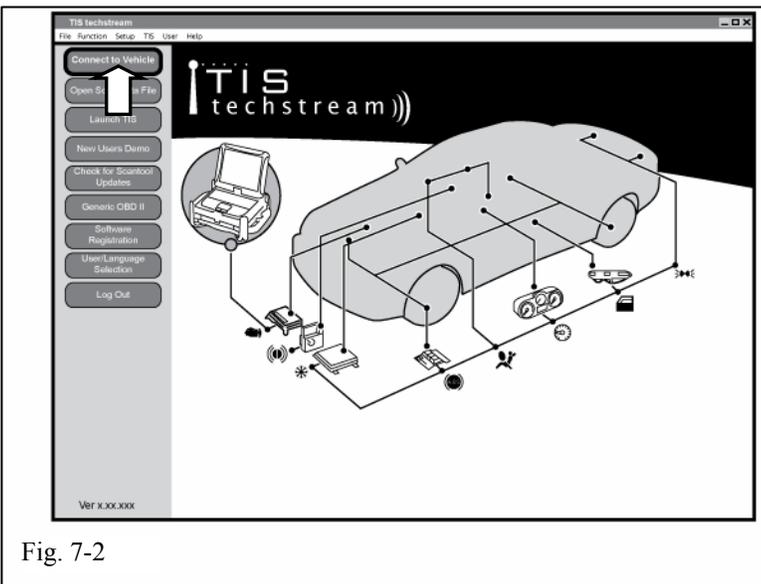


Fig. 7-2

- (e) Click “Connect to Vehicle” (Fig. 7-2)

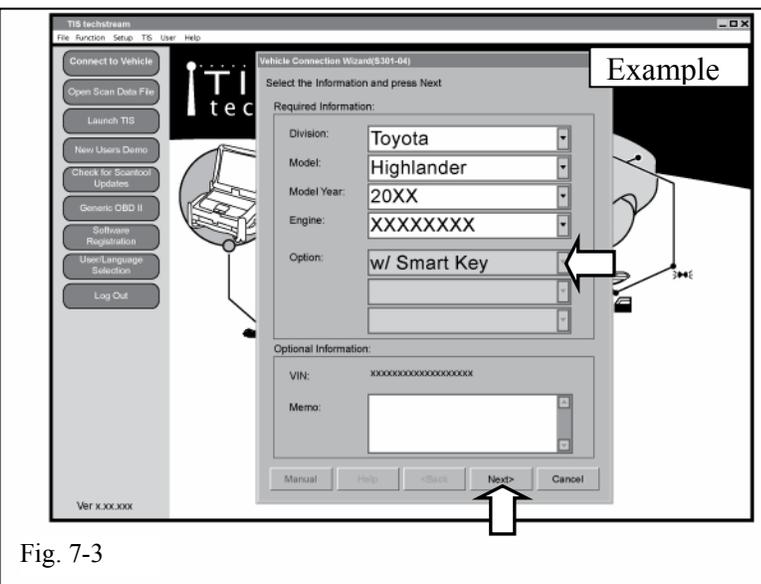


Fig. 7-3

- (f) Confirm that the information displayed on the Vehicle Connection Wizard is correct for the vehicle. If not verify that the Techstream is properly connected. (Fig. 7-3)

- (g) Slect w/smart or wo/smart based on vehicle spec. (Fig. 7-3)

- (h) Click “Next>.” (Fig. 7-3)

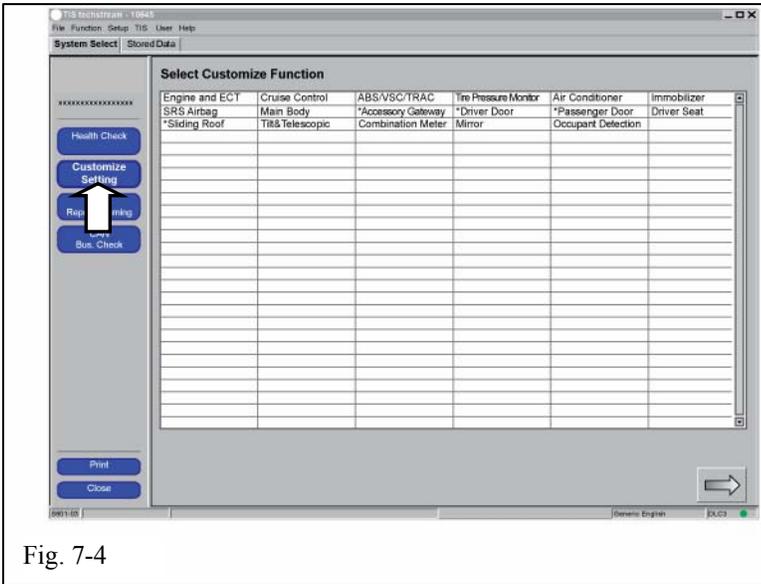


Fig. 7-4

(i) Click “Customize Setting.”
(Fig. 7-4)

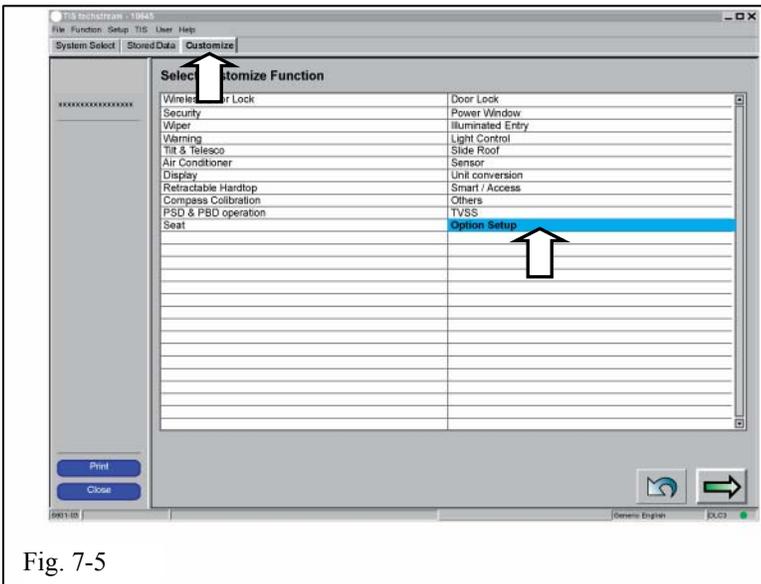


Fig. 7-5

(j) Make sure that the
“Customize” tab is selected.
(Fig. 7-5)

(k) Select “Option Setup.”
(Fig. 7-5)

(l) Click . (Fig. 7-5)

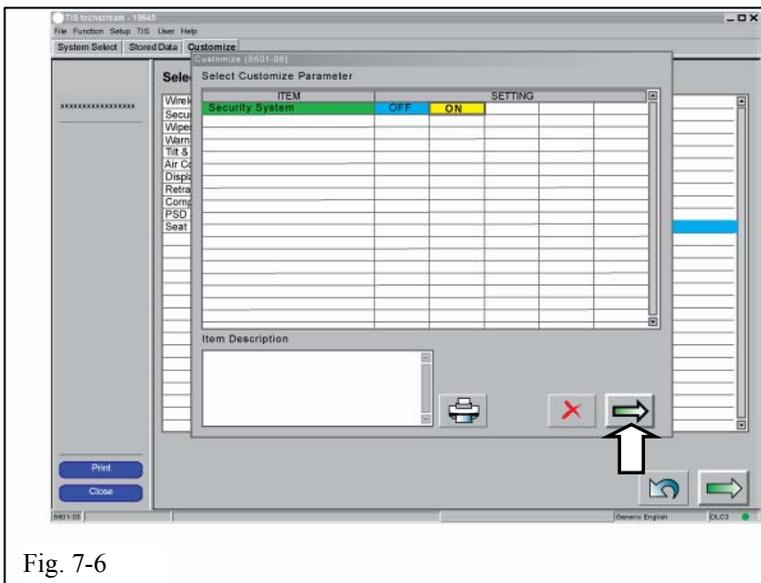


Fig. 7-6

(m) Select “ON.” (Fig. 7-6)

(n) Click  (Fig 7-6)

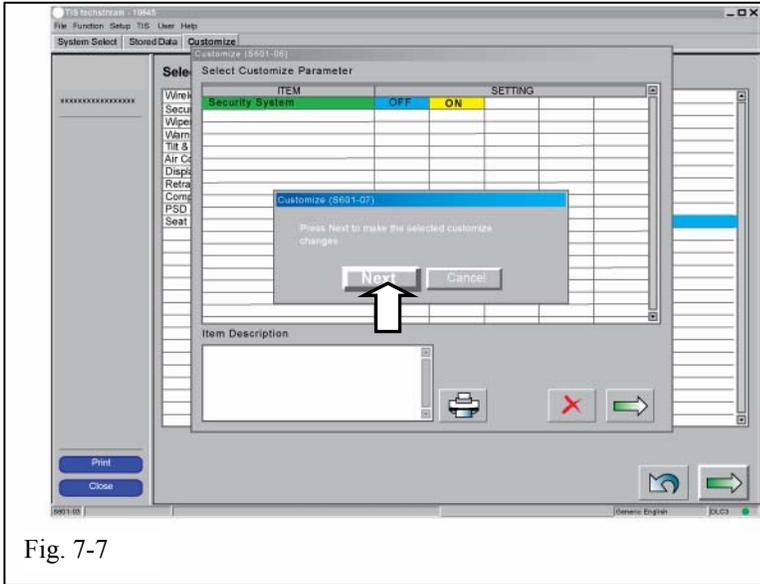


Fig. 7-7

(o) Click “Next” to accept the changes to the Vehicle.
(Fig. 7-7)

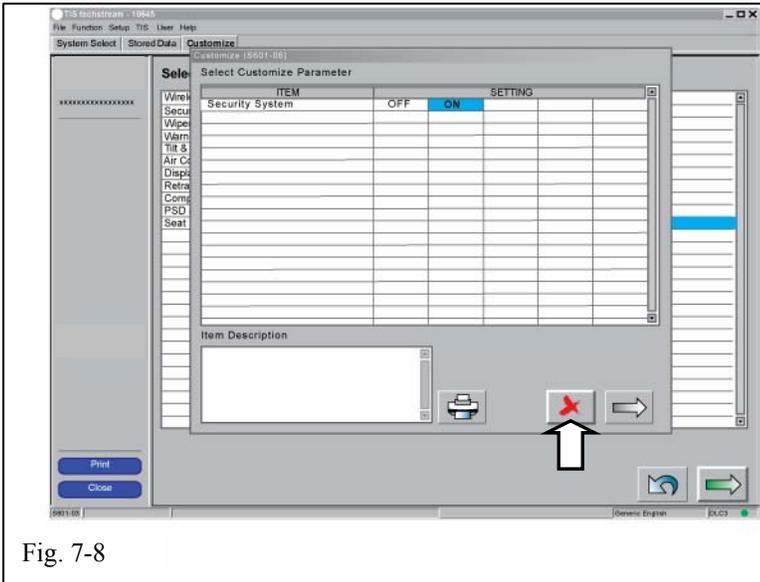


Fig. 7-8

(p) Click . (Fig. 7-8)

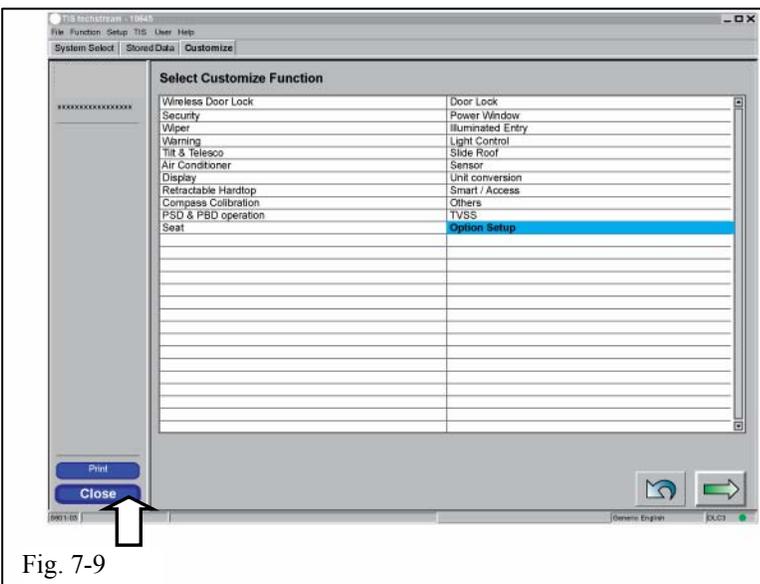
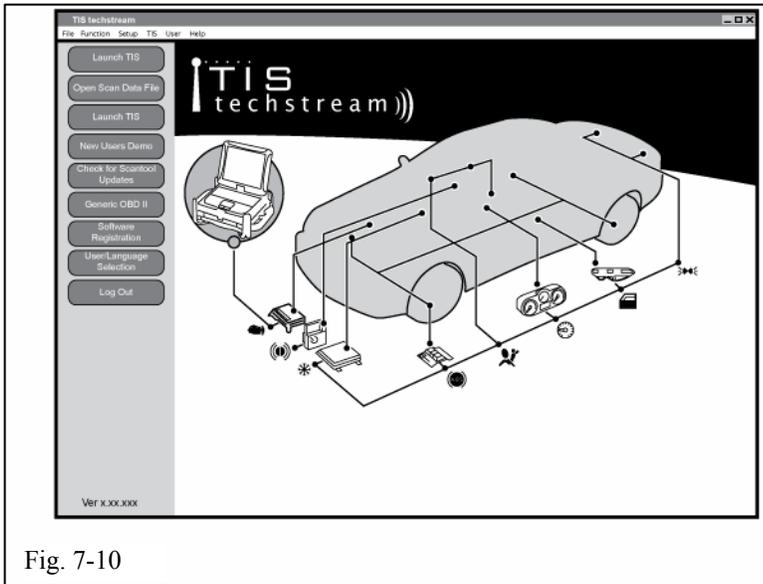


Fig. 7-9

(q) Click “Close.” (Fig. 7-9)



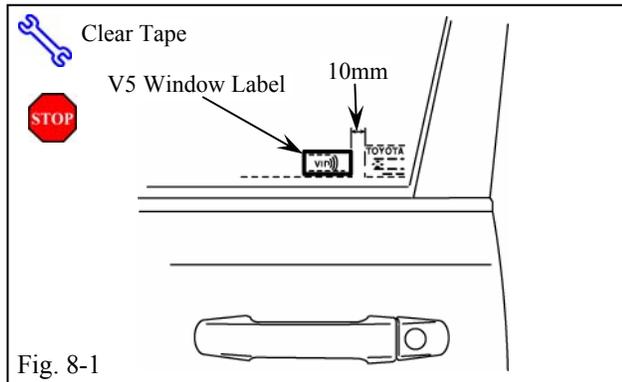
(r) Click . (Fig. 7-10)

Fig. 7-10

8. Warning Label Installation.

 For US Vehicles use the English Labels and discard the Spanish Labels.

 For Mexico Vehicles use the Spanish Labels and discard the English Labels.



(a) Using Household Windex, clean the inside of the Front Door Windows. (Fig. 8-1)

(b) Place the Warning Labels (without the Red Tags) on the inside of the Front Door Windows as shown. (Fig. 8-1)

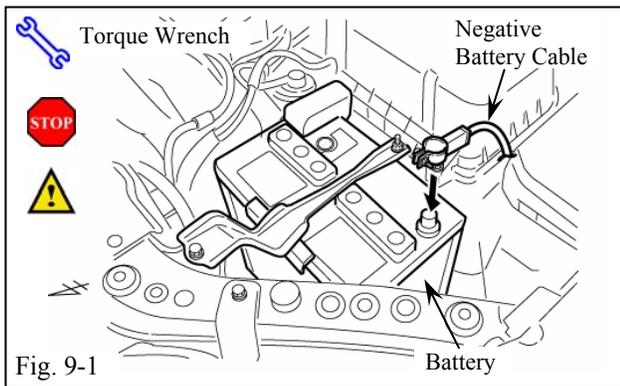
(1) Discard the Labels with the Red Tags

(2) Use a piece of clean adhesive tape to lift the Labels off their protective backing.

CAUTION: Do not touch the adhesive surface.

(3) Line up the labels properly and place on the glass. Do not attempt to reposition the Labels once they are placed.

(4) If the Labels are being installed with other Window Labels align them horizontally with the other Labels and 1-5mm from the last Label.



9. Completing the Installation.

(a) Position the Negative Battery Cable at the original factory position. (Fig. 9-1)

(1) Tighten the Nut to 36 in•lbf (4.06 N•m).



CAUTION: Do not touch the positive terminal.

(b) Clean up and remove any trash.

(c) Place the V5 Owner's Guide and Warranty Card, sealed in the bag, in the Glove Box.

(d) Discard V2 Owner's Guide.

(e) Reset the Power Windows.

(1) Turn Ignition Key to the "ON" position.

(2) Push down the Power Window switches, and lower the windows halfway.

(3) Pull up the switches until the windows close.

(4) Continue holding up on the switches for a minimum of 1 second.

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

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. | The horn stops sounding. All the lights stop flashing and/or turn off. The Security LED turns off. The starter cranks and the engine starts. |

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

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 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.

| | | |
|----|---|---|
| 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. |

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

**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.

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

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> |

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

| | 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.

