Section I - Installation Preparation

**Part Number: 08586-52960** Section I - Installation Preparation

#### **Kit Contents**

| Item # | Quantity Reqd. | Description      |
|--------|----------------|------------------|
| 1      | 1              | Wire Harness     |
| 2      | 1              | Mounting Bracket |
| 3      | 1              | GBS ECU          |
| 4      | 1              | Security ECU     |
| 5      | 1              | Butyl Tape       |
|        |                |                  |

**Hardware Bag Contents** 

| Item # | Quantity Reqd. | Description                     |
|--------|----------------|---------------------------------|
| 1      | 2              | Small Foam Tape Strips (1 per.) |
| 2      | 10             | Large Wire Ties                 |
| 3      | 15             | Medium Wire Ties                |
| 4      | 1              | Status Monitor                  |
| 5      | 2              | Warning Labels                  |
| 6      | 1              | Owner's Manual                  |
| 7      | 1              | Warranty Card                   |
|        |                |                                 |

#### **Additional Items Required For Installation**

| Item # | Quantity Reqd. | Description |
|--------|----------------|-------------|
|        |                |             |

#### **Conflicts**

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

## **Recommended Tools**

| Safety Tools              |                             |
|---------------------------|-----------------------------|
| Safety Glasses            |                             |
| Safety Gloves             | Optional                    |
| Vehicle Protection        | Blankets, Part Boxes        |
|                           |                             |
| Special Tools             |                             |
| None                      |                             |
|                           |                             |
| <b>Installation Tools</b> |                             |
| Screwdriver               | Phillips Head, #2           |
| Screwdriver               | Flat Blade, Small           |
| Screwdriver               | Jewelers                    |
| Socket                    | 8 mm, 10 mm                 |
| Wrench                    | Pneumatic/Electric          |
| Torque Wrench             | 36 lbf-in                   |
| Wrench                    | 10 mm                       |
| Nylon Panel Removal Tool  | e.g. Panel Pry Tool #1      |
|                           | Toyota SST # 00002-06001-01 |
| Side Cutters              |                             |
| Pliers                    |                             |
|                           |                             |

| <b>Special Chemicals</b> |                                  |
|--------------------------|----------------------------------|
| Cleaner                  | 3M <sup>TM</sup> Prep Solvent-70 |
| Glass Cleaner            | Household Windex                 |
|                          |                                  |

#### **General Applicability**

2004 - xB with factory keyless entry system, only.

**Recommended Sequence of Application** 

|        |                         | Tr ····     |
|--------|-------------------------|-------------|
| Item # | Quantity Reqd.          | Description |
| 1      | TVIP                    |             |
| 2      | Satellite Receiver      |             |
| 3      | Audio                   |             |
| 4      | Door Sill Applique (SB) |             |
|        |                         |             |

\*Mandatory

## 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.



<u>CRITICAL PROCESS:</u> Proceed with caution to ensure a quality installation.



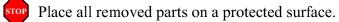
**GENERAL PROCESS:** This highlights specific processes to ensure a quality installation.



**TOOLS & EQUIPMENT:** Calls out the specific tools and equipment recommended for this process.

#### **NOTES**

Removed Parts:-



Connectors:-

When disconnecting connectors, do not pull on the wires; pull on the connectors.

Wire Ties:-

When using wire ties to secure harness, clip the wire ties after securing them.

#### A. Vehicle Disassembly

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



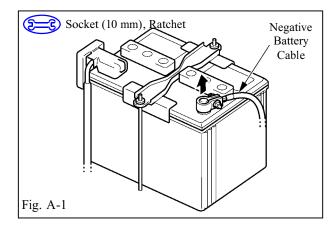
i. Protect the fender before starting.

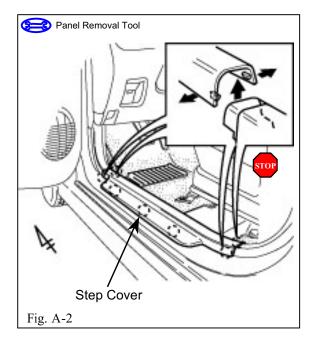


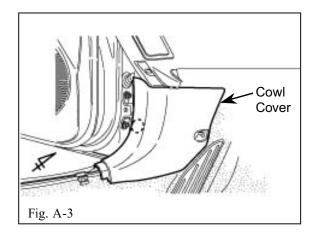
- ii. Do not touch the positive terminal with any tool when removing the cable.
- 2. Using the Nylon Panel Removal Tool, remove the driver side step cover. (Fig. A-2)



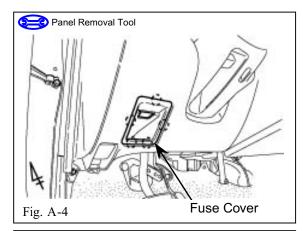
- i. Cover the floor and seats before starting.
- 3. Remove the driver side cowl cover. (Fig. A-3)

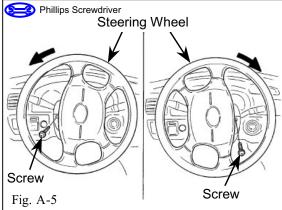


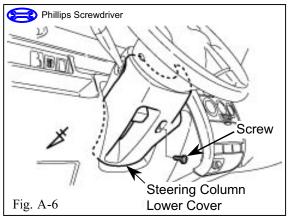


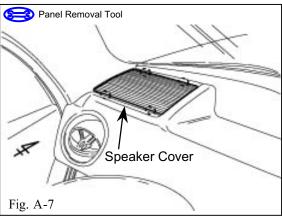


- 4. Remove the driver side fuse cover. (Fig. A-4)
- 5. Remove the two screws securing the lower steering column cover behind the steering wheel. (Fig. A-5)
  - i. Insert the key into the ignition switch and turn it to ON to unlock the steering wheel.
  - ii. Turn the steering wheel left and right to gain access to the screws.
- 6. Remove the lower steering column cover. (Fig. A-6)
  - i. Remove the bottom screw securing the cover.
- 7. Remove the driver side speaker cover. (Fig. A-7)

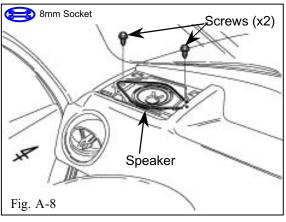


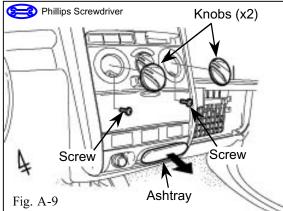


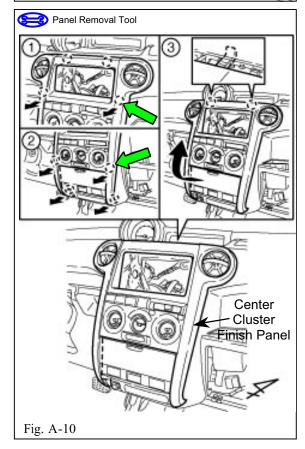




- 8. Remove the driver side speaker. (Fig. A-8)
  - i. Remove the two (2) screws securing the speaker, then disconnect the speaker connector from the speaker.
- 9. Remove the two heater control knobs shown. (Fig. A-9)
  - i. Remove the two screws from the heater control unit.
  - ii. Remove the ashtray.
- 10. Remove the center cluster finish panel. (Fig. A-10)
- i. Slightly pull out the center cluster finish panel to loosen the four (4) upper clips securing the panel.
  - ii. Loosen the four clips securing the lower part of the center cluster finish panel.
    - iii. Disengage the two (2) hooks on top of the center cluster finish panel from the instrument panel.
    - iv. Disconnect all connectors from the center cluster.



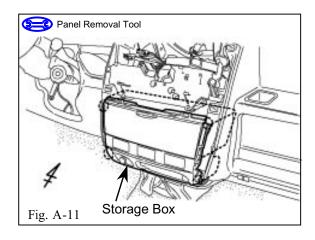


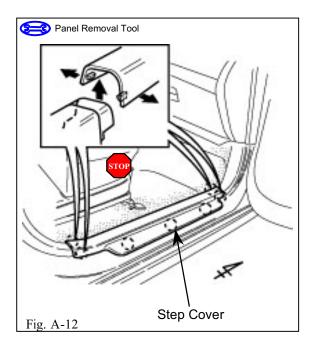


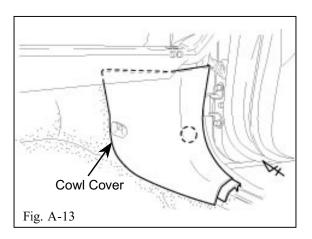
- 11. Remove the center storage box. (Fig. A-11)
  - i. Disconnect all connectors from the center storage box.
- 12. Using the Nylon Panel Removal Tool, remove the passenger side step cover.(Fig. A-12)



- i. Cover the floor and seats before starting.
- 13. Remove the passenger side cowl cover. (Fig. A-13)



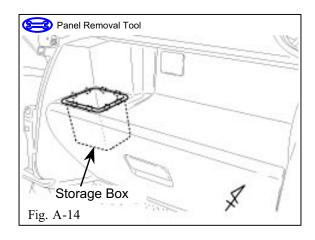


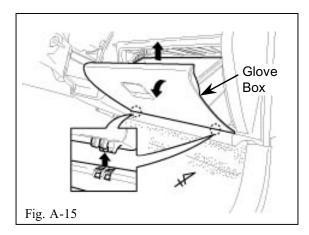


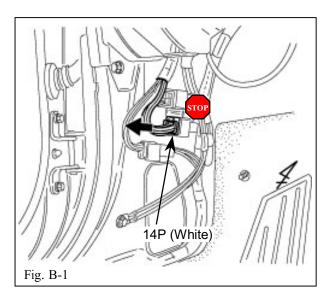
- Section II Installation Procedure
  - 14. Remove the passenger side storage box. (Fig. A-14)
  - 15. Remove the glove box. (Fig. A-15)

# **B.** V5 Harness Installation

 Locate and disconnect the white 14P connector from the driver side cowl area.
 (Fig. B-1)





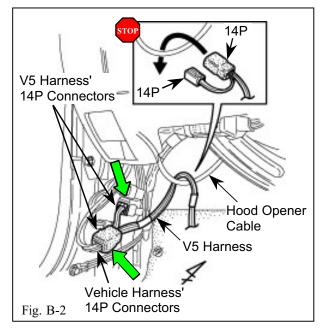


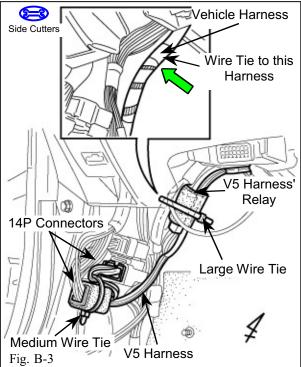
2. Plug in the V5 harness' white 14P connectors between the vehicle harness' white 14P connector and the driver side cowl area. (Fig. B-2)



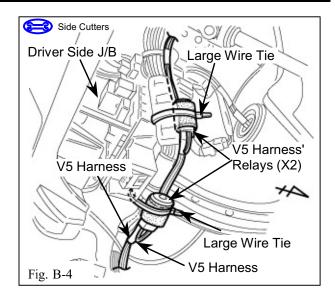
**SCION** 

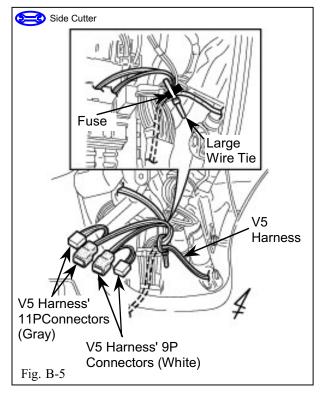
- i. Route the V5 harness' 14P connectors between the dashboard and hood opener cable.
- ii. Verify the connectors are plugged in securely.
- 3. Secure the 14P connectors to the vehicle harness with one medium wire tie. (Fig. B-3)
- 4. Route the V5 harness toward the driver side J/B area, and then secure the first (lower) relay and V5 harness to the vehicle harness with one large wire tie. (Fig. B-3)





- 5. Route the V5 harness up toward the right side of the driver side J/B, then secure the two (2) relays and V5 harness to the vehicle harness with two large wire ties. (Fig. B-4)
- 6. Route the V5 harness up the right side of the driver side J/B area, then secure it to the vehicle's harness with one large wire tie. (Fig. B-5)
  - i. Secure V5 fuse in large wire tie.

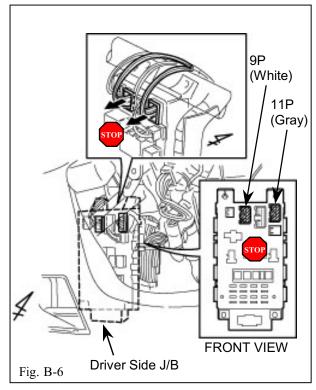


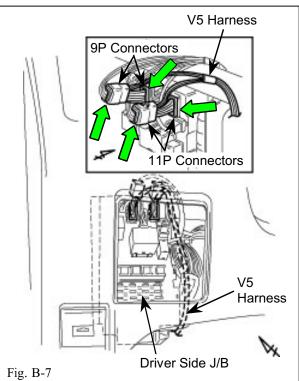


Issue: B 02/24/04 Page 8 of 28 pages Supplier Ref #: DIO

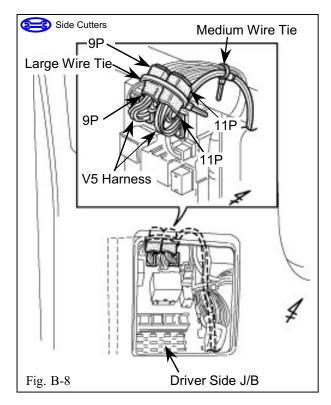


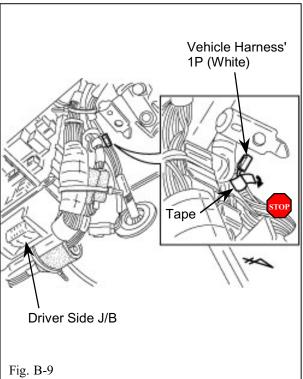
- 7. Locate and disconnect the white 9P and gray 11P connectors from the front of the driver side J/B. (Fig. B-6)
- 8. Route the V5 harness' white 9P and gray 11P connectors up to the front upper area of the driver side J/B. (Fig. B-7.)
  - i. Plug in the V5 harness' white 9P connector between the vehicle harness' white 9P connector and the driver side J/B.
- ii. Verify the connectors are plugged in securely.
- 9. Plug in the V5 harness' gray 11P connector between the vehicle harness' gray 11P connector and the driver side J/B. (Fig. B-7)
- i. Verify the connectors are plugged in securely.





- 10. Secure the white 9P and gray 11P connectors to the vehicle's harness with one large wire tie. (Fig. B-8)
- 11. Secure the V5 harness to the vehicle harness with one medium wire tie. (Fig. B-8)
- 12. Look up at the backside of the driver side J/B, then locate the vehicle harness white 1P connector near the reinforcement. (Fig. B-9)
- STOP
  - 13. Remove the tape securing the 1P connector harness. (Fig. B-9)

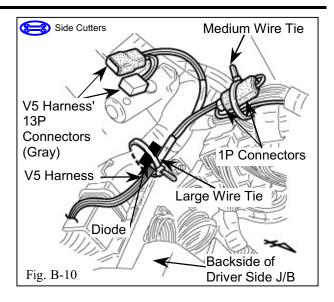


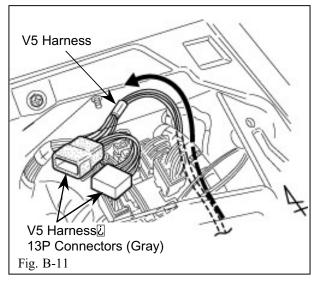


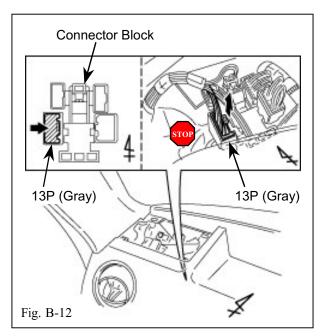
14. Plug in the V5 harness' white 1P connector to the vehicle harness' 1P connector.(Fig. B-10)



- i. Verify connectors are plugged in securely.
- 15. Secure the 1P connectors to the vehicle harness with one medium wire tie. (Fig. B-10)
- 16. Secure the V5 harness to the vehicle harness with one large wire tie. (Fig. B-10)
  - i. Secure the V5 harness diode in the large wire tie.
- 17. Route the V5 harness gray 13P connectors up the instrument panel to the driver side speaker opening. (Fig. B-11)
- 18. Locate and disconnect the gray 13P connector from the connector block above the driver side J/B through the driver side speaker opening. (Fig. B-12)





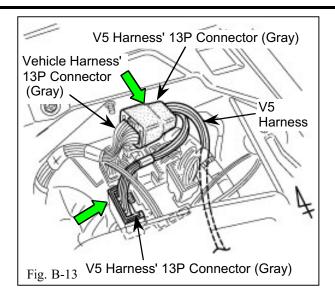


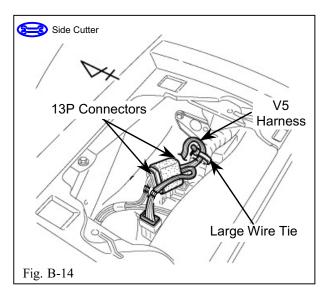
19. Plug in the V5 harness' gray 13P connectors between the vehicle harness' gray 13P connector and connector block. (Fig. B-13)

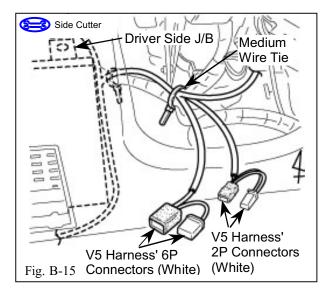


- Verify the connectors are plugged in securely.
- 20. Secure the V5 harness to the vehicle harness with one (1) large wire tie. (Fig. B-14)
- 21. Route the V5 harness toward the steering column area, then secure it to the vehicle harness with one medium wire tie.

  (Fig. B-15)







- 22. Locate and disconnect the white 2P and white 6P connector from the ignition switch.(Fig. B-16)
- 23. Plug in the V5 harness' white 2P connectors between the vehicle harness' white 2P connector and the ignition switch.

  (Fig. B-17)
- i. Verify the connectors are plugged in securely.
- 24. Plug in the V5 harness' white 6P connectors between the vehicle harness' white 6P connector and the ignition switch.

  (Fig. B-17)



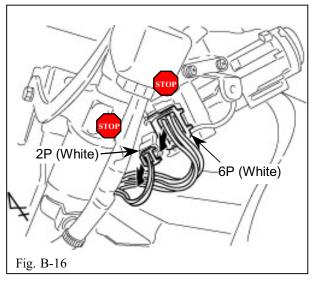
- i. Verify the connectors are plugged in securely.
- 25. Secure the 2P and 6P connectors and V5 harness to the vehicle harness with one large wire tie. (Fig. B-18)

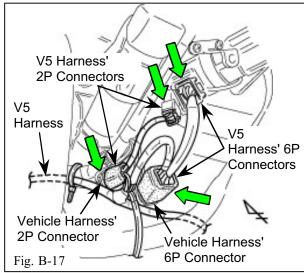


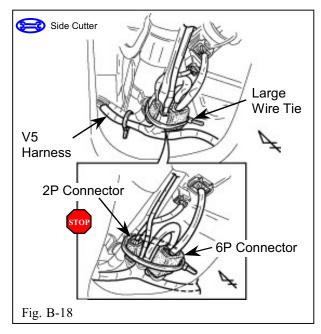
i. Place the 2P connector against the left side and the 6P connector against the right side of the vehicle harness prior to securing the wire tie.



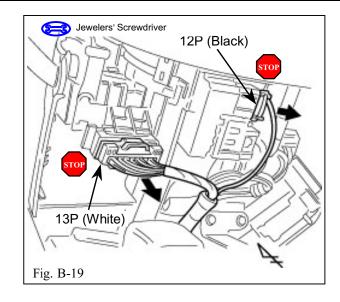
**NOTE:** If these connectors are not arranged correctly, when reinstalling the steering column cover, the column cover will come in contact with the connectors.

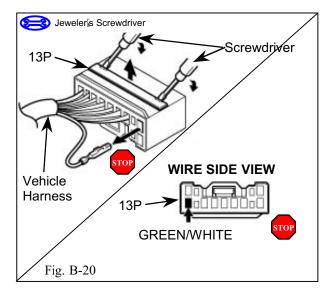


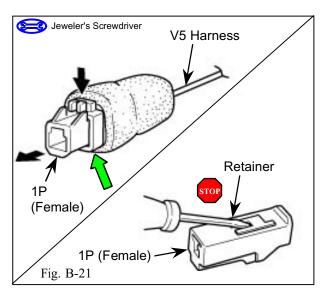




- 26. Locate and disconnect the white 13P and black 12P connector from the lower part of the steering wheel area. (Fig. B-19)
- 27. Using a small jeweler's screwdriver lift up the terminal retainer on the back of the white 13P connector. (Fig. B-19)
- 28. Locate the GREEN/WHITE wire in the bottom row, first space from the left. Using a jeweler is screwdriver, release and pull out the terminal for the GREEN/WHITE wire. (Fig. B-20)
- STOP
- i. Do not damage the terminal.
- STOP
- ii. Do not damage the connector.
- STOP
- iii. Turn the connector so the wire faces you and the tab is on top.
- 29. Disconnect the empty 1P female connector plugged into the V5 harness' 1P male connector. (Fig. B-21)
  - 30. Using a small jeweler's screwdriver lift up the terminal retainer on the back of the empty connector. (Fig. B-21)
- STOP
- i. Do not damage the terminal.
- STOP
- ii. Do not damage the connector.







- 31. Insert the terminal at the end of the vehicle harness' GREEN/WHITE wire into the empty 1P connector. (Fig. B-22)
- 32. Close the retainer of the 1P connector. (Fig. B-22)



- i. The terminal should not come out when pulled lightly from the back. If the terminal comes off, then push it in further until securely seated.
- 33. Insert the terminal at the end of the V5 harness' GREEN/WHITE wire into the bottom row, first space from the left of the vehicle harness' 13P connector. (Fig. B-23)



i. Turn the connector so the wire faces you and the tab is on top.



ii. Verify the correct opening is chosen.



iii. Verify the terminal is inserted and seated properly.



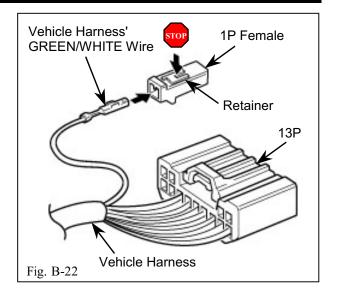
- iv. The terminal should not come out when pulled lightly from the back. If the terminal comes off, then push it in further until securely seated.
- 34. Close the retainer of the 13P connector. (Fig. B-23)
- 35. Reconnect the white 13P connector to the steering wheel area. (Fig. B-24)

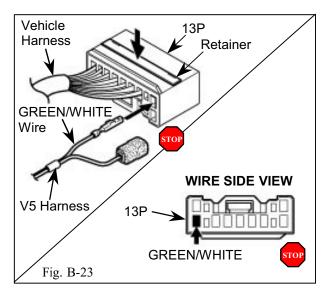


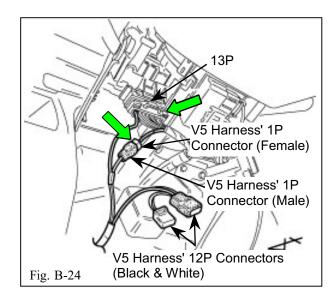
- i. Verify the connector is plugged in securely.
- 36. Plug in the V5 harness' white 1P male connector into the V5 harness' white 1P female connector. (Fig. B-24)



 Verify the connectors are plugged in securely.







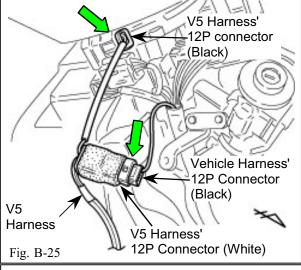
37. Plug in the V5 harness' white 12P male connector to the vehicle harness' black 12P female connector. (Fig. B-25)

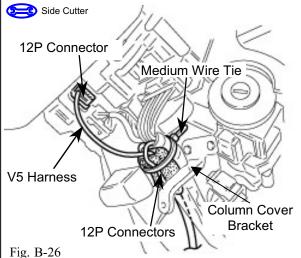


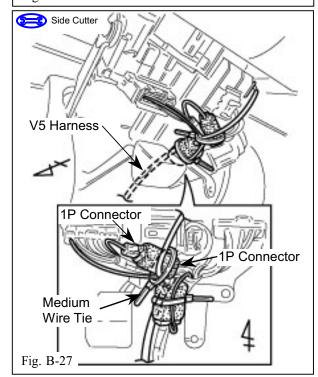
- Verify the connectors are plugged in securely.
- 38. Plug in the V5 harness' black 12P female connector to the steering wheel area. (Fig. B-25)



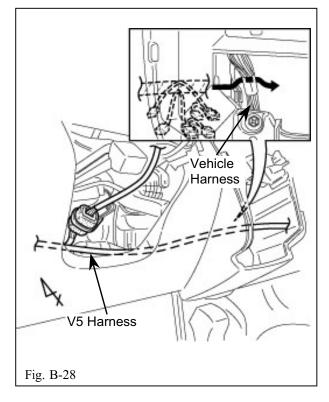
- i. Verify the connector is plugged in securely.
- 39. Secure the 12P connectors and V5 harness to the vehicle harness with one medium wire tie. (Fig. B-26)
  - i. Ensure that the 12P connectors are wire tied right next to (and behind (left of)) bottom mounting bracket of the lower steering column cover. (See inset of Fig. B-27)
- 40. Secure the 1P connectors and V5 harness to the vehicle harness with one medium wire tie. (Fig. B-27)

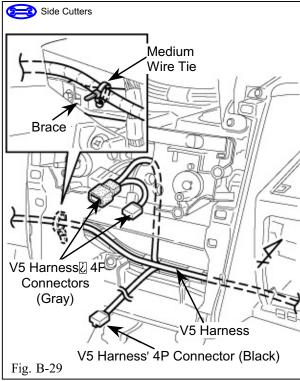






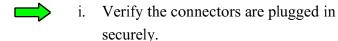
- 41. Route the V5 harness toward the center cluster area. (Fig. B-28)
  - i. Route the V5 harness between the vehicle harness and the air-conditioner unit in the center cluster area as shown. (Fig. B-28)
- 42. Secure the V5 harness to the vehicle's brace with one medium wire tie. (Fig. B-29)
  - i. Pass the wire tie through the hole of the vehicle sbrace. (Fig. B-29)



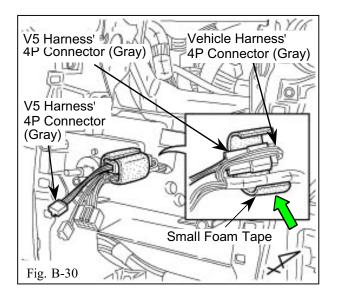


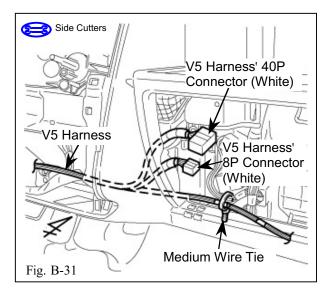
43. Plug in the vehicle's hazard switch gray 4P connector to the V5 harness' gray 4P connector in the center cluster area.

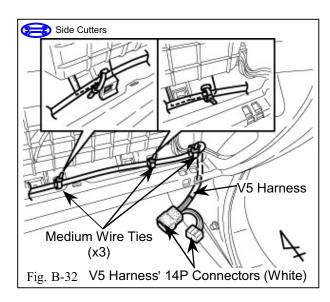
(Fig. B-30)



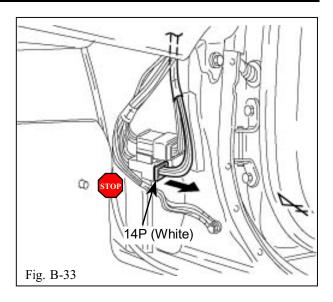
- ii. Be sure to connect the remaining V5
  harness gray 4P connector to the hazard
  switch during reassembly of the center
  cluster finish panel.
- 44. Secure the gray 4P connectors and vehicle harness with one small strip of foam tape. (Fig. B-30)
  - 45. Route the V5 harness toward the glove box area, then secure the V5 harness to the vehicle harness with one medium wire tie.. (Fig. B-31)
  - 46. Route the V5 harness from the glove box area to the passenger side cowl area, then secure the V5 harness to the air-conditioner unit with three (3) medium wire ties. (Fig. B-32)

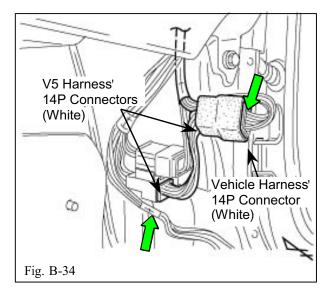


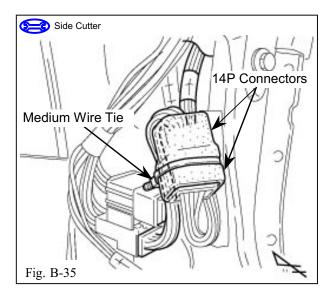




- 47. Locate and disconnect the white 14P connector from the passenger side cowl area. (Fig. B-33)
- 48. Plug in the V5 harness' white 14P connectors between the vehicle harness' white 14P connector and the passenger side cowl area. (Fig. B-34)
- i. Verify the connectors are plugged in securely.
  - 49. Secure the white 14P connectors to the vehicle harness with one medium wire tie. (Fig. B-35)

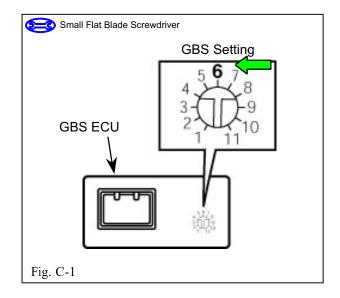


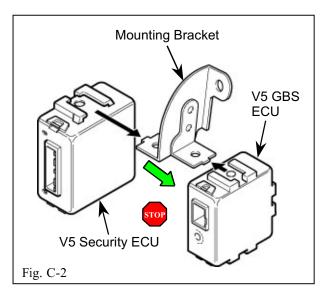


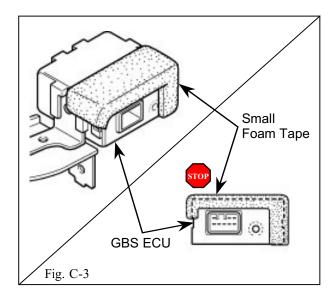


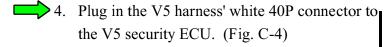
# C. V5 Security ECU and GBS ECU Preparation and Installation

- 1. Turn the adjustment screw on the GBS ECU to the "6" position. (Fig. C-1)
- 2. Insert the mounting bracket into the indicated bracket slots on the V5 Security ECU and GBS ECU. (Fig. C-2)
- i. Insert the mounting bracket into the correct slot; you have only one chance to install it properly.
  - 3. Apply one strip of small foam tape to the GBS ECU. (Fig. C-3)
- i. Do not cover the GBS ECU connector with the foam tape.

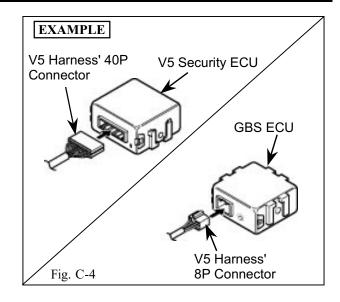


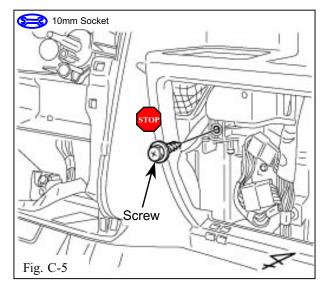


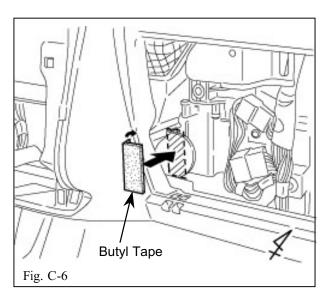


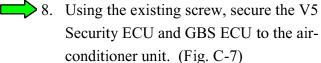


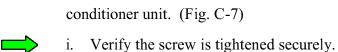
- i. Verify the connector is plugged in securely.
- 5. Plug in the V5 harness' white 8P connector to the GBS ECU. (Fig. C-4)
- i. Verify the connector is plugged in securely.
  - 6. Locate and remove the screw from the airconditioner unit in the glove box area. (Fig. C-5)
- i. Do not discard the screw.
  - 7. Attach the butyl tape to the air-conditioner unit in the glove box area as shown.(Fig. C-6)











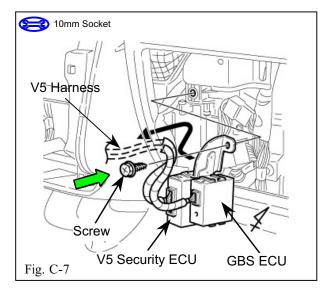
9. Secure the V5 harness with two large foam tapes to the air-conditioner unit in the center cluster area. (Fig. C-8)

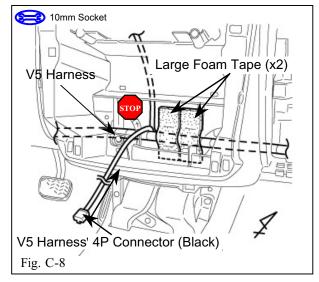


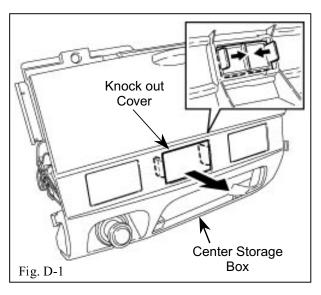
i. Do not secure the V5 harness' black 4P connector harness.

#### **D.** Status Monitor Installation

1. Remove the knockout cover from the middle space of the center storage box. (Fig. D-1)

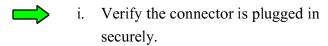


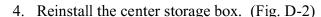


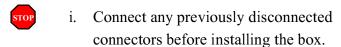


**SCION** 

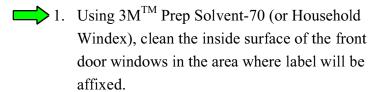
- 2. Insert the status monitor into the knockout opening of the center storage box with the Scion legend oriented correctly. (Fig. D 2)
- 3. Connect the V5 harness' black 4P connector to the status monitor. (Fig. D-2)

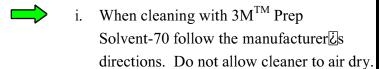


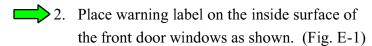


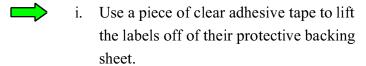


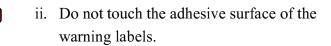
#### E. Warning Label Installation











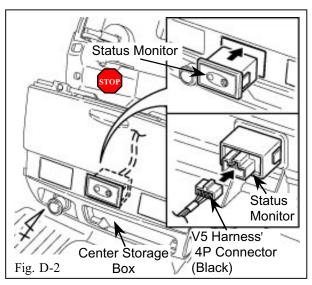
iii. Line up the labels properly and place them on the glass once; do not use a label that was pulled off the glass.

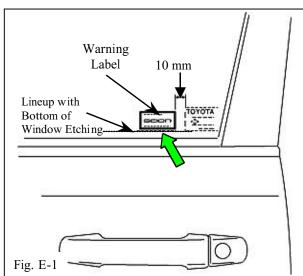
## F. Completing the Installation

1. Complete the reassembly of the vehicle.

i. Reconnect any disconnected connectors.

ii. Verify the panels fit together properly with no uneven gaps between them.







- 2. Clean up and remove any trash.
- 3. Reconnected the vehicle's negative battery cable. (Fig. F 1)



i. Position the negative terminal to the battery as shown (~45 deg.).



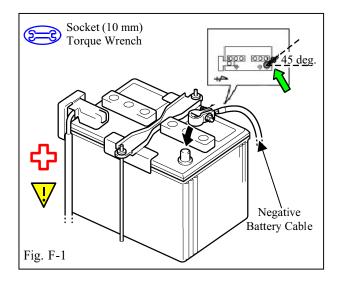
ii. Tighten the nut to 4.1 Nan (36 lbfan).



iii. Do not touch the positive terminal with any tool when replacing the cable.



4. Place the owner's manual and warranty card left in their protective bags, in the glove box.





| V  |   |
|--|---|
| Check:                                       | Look For:                                     |
| Accessory Function Checks                    |   |
| Fit appropriate fuse before beginning.       |   |
| Press and release the remote control los     | ck 1. The turn signal lights flash once.      |
| button to start the system's arming proces   | ss. All doors lock.                           |
|  | The Status Monitor's LED lights up.           |
| Wait 30 seconds.                             | 2. After 30 seconds, the LED starts flashing; |
| _  | the system is now armed.                      |
| Press and release the remote control's unl   | ock 3. The turn signal lights flash twice.    |
| button to disarm the system.                 | The driver door unlocks.                      |
|  | The LED stops flashing.                       |
| Open the driver's door, insert the key       | into  |
| the ignition switch and turn it to $\[200\]$ | <b>].</b>                                     |
| Roll down all the windows, remove the        |   |
| key and exit the vehicle.                    |   |
| Arm and disarm the system with the reme      | ote 4. The doors automatically relock.        |
| again, then wait 30 seconds.                 | The system automatically starts the arming    |
|  | process.                                      |
| Press and release the remote control's unl   | lock 5. Refer to step # 3.                    |
| button again to stop the arming process.     |   |
| Insert the key into the driver door key      |   |
| cylinder and turn it toward the front of th  | e 6. All doors lock.                          |
| vehicle to start the arming process.         | The LED lights up.                            |
| Wait 30 seconds.                             |   |
|  | 7. After 30 seconds, the LED starts flashing; |
|  | the system is now armed.                      |



Section III - Functional Verifications

|   | 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 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.



Section III - Functional Verifications

|        | 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   |
| $\cup$ | •  |
|        | passenger door.  |
|        | •  |
|        | passenger door.  |
|        | passenger door.  Roll up all windows, remove the key and   |
|        | passenger door.  Roll up all windows, remove the key and exit the vehicle.   |
|        | passenger door.  Roll up all windows, remove the key and exit the vehicle.  Press and release the remote control's lock  |
|        | passenger door.  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.  |
|        | passenger door.  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.  |
|        | passenger door.  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  |
|        | passenger door.  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   |
|        | passenger door.  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° 290° F.)   |
|        | passenger door.  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° 290° F.)  With moderate force, tap the center of the |

Look For:

14. The horn stops sounding. All the lights stop flashing. The LED turns off

- 15. Refer to step #1 and #2.
- 16. Refer to step #13.
- 17. Refer to step #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.



xB

| Check:                                      | Look For:                                     |
|---|---|
| Insert the key into the driver's door key   | 21. The horn stops sounding.                  |
| cylinder and turn it toward the back of the | All the lights stop flashing and/or turn off. |
| vehicle to stop the alarm.                  | The status monitor's LED turns off.           |
| Vehicle Function Checks                     |   |
| Perform standard electrical system function | Confirm electrical system is functioning      |
| checks                                      | correctly.                                    |