

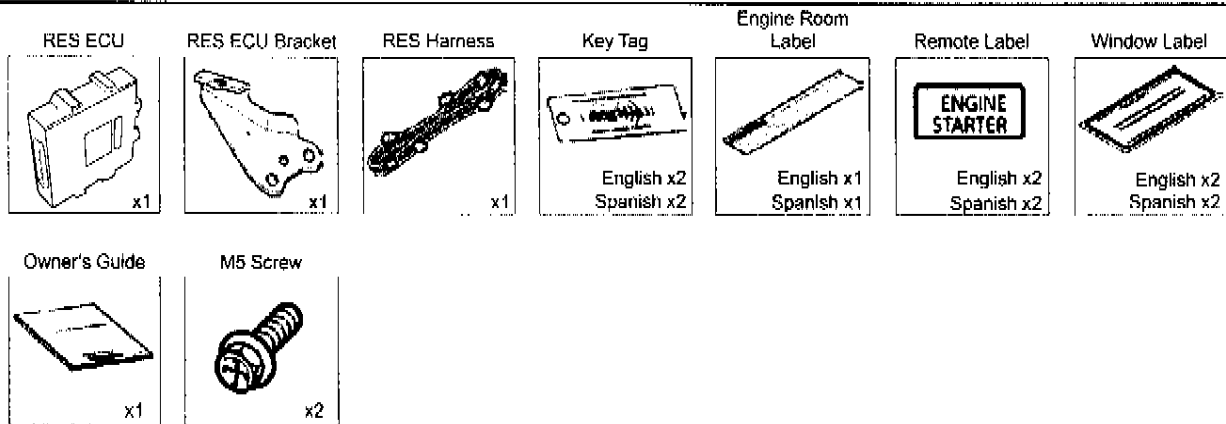
Part #: PT398-48091

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

Conflicts:

Do not install into Manual Transmission Vehicles or Vehicles without RKE systems.

Kit Contents



Additional Items

(may be required)

Item#	Description

Recommended Sequence of Application

Item#	Description

Issue C : 03/27/09







Recommended Tools

Personal & Vehicle Protection	Description
Safety Glasses	
Safety Gloves	(Optional)
Vehicle Protection	Blankets, Parts Boxes
Special Tools	
Techstream	Version 4.10.045
Installation Tools	
Screwdriver	#2 Phillips
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST# 00002-06001-01
Side Cutters	
Torque Wrench	36 in-lbf (4.07 N·m), 88.5 in-lbf (10 N·m)
Tape	Clear, Electrical
Socket	8mm, 10mm, extension
Special Chemicals	
Cleaner	VDC Approved Cleaner
Glass Cleaner	Household Glass Cleaner

Table of Contents

I. Preparation	1-4
1. Table of Contents	2
2. Wire Routing Overview	3
3. Disassembly Overview.....	4
II. Procedure	5-21
1. Disassembly (Engine Compartment)	5
2. Disassembly (Passenger's Side)	6
3. RES ECU Installation	11
4. V4 Wire Harness Installation	12
5. Registration Preparation	14
6. Registration.....	14
7. Tags and Labels.....	19
8. Complete the Installation	21
III. Checklist.....	22-24
1. Accessory Function Checks.....	22
2. Vehicle Function Checks.....	23

Legend

-  Do not proceed until process has been completed.
-  Follow steps carefully to avoid damaging the Vehicle or Accessory
-  Use caution to avoid injury.
-  Used in Figures to call attention to specific tools recommended for the process.
-  Highlights a change in installation with respect to previous issue.
-  Indicates that torque is related to safety.

Accessory Installation Practice (read before installation)

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.

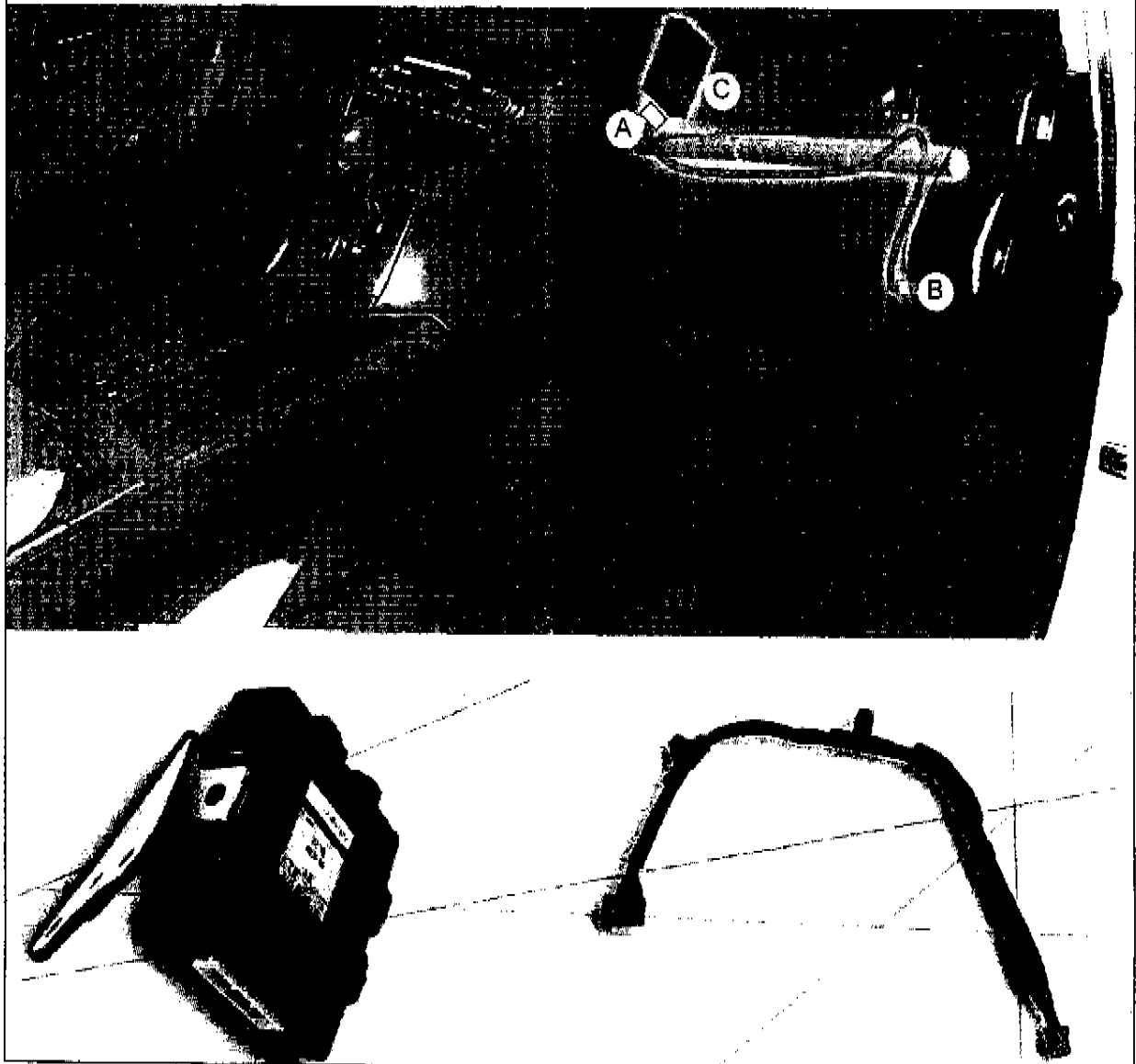
This document covers such items as:

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.)
- Safety (eye protection, checking 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.

TVIP	Vehicle	Description
A	-	24P White (for RES ECU)
B	eF1	12P White
C	-	RES ECU

Wire Harness Outline (Passenger's Compartment)

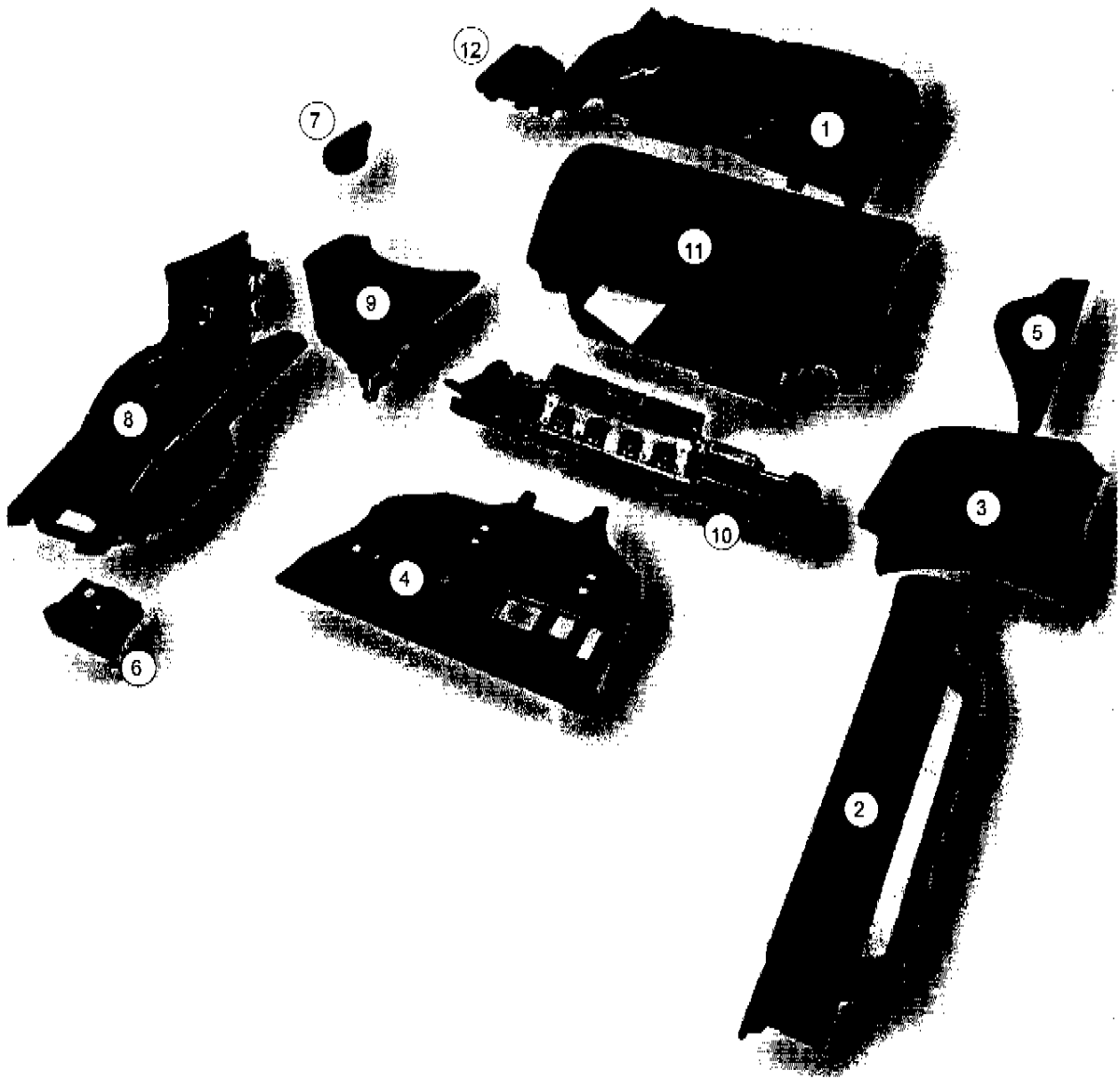


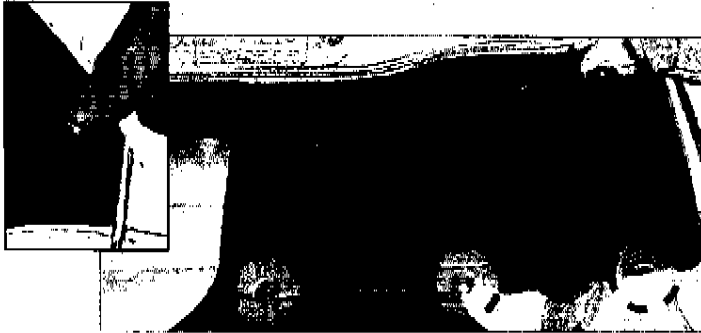
Issue C : 03/27/09

1	Engine Cover	6	Seat Temperature Control Unit	11	Glovebox
2	PS Step Cover	7	Shift Knob	12	Fuse Box Cover
3	PS Cowl Cover	8	Center Console		
4	Glovebox Under Cover	9	Center Console Side Trim		
5	Glovebox Side Trim	10	PS Knee Airbag		

NOTE Disconnect all Corresponding Connectors.

Disassembly Overview






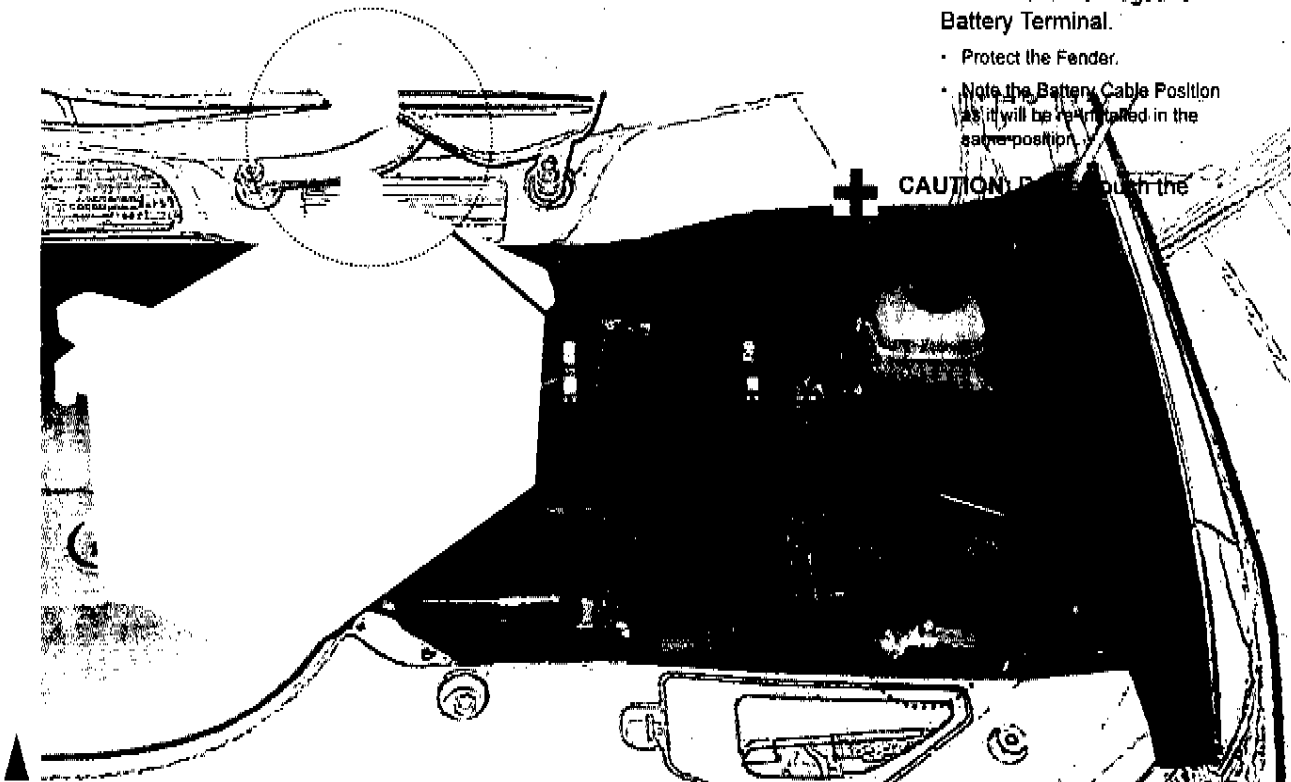
**1. Disassembly.
(Engine Compartment)**

- a. Place the Vehicle in Park with the Parking Brake set.
- b. Remove the Engine Cover.
 - Press then remove 4 Clips.



 10mm Socket

- c. Disconnect the Negative Battery Terminal.
 - Protect the Fender.
 - Note the Battery Cable Position as it will be re-installed in the same position.



CAUTION: Do not touch the



Nylon Panel Removal Tool

Fig. 2-1

**2. Disassembly.
(Passenger's Side)**

- a. Remove the Passenger's Side Step Cover.



Nylon Panel Removal Tool

Fig. 2-2

- b. Remove the Passenger's Side Cowl Cover

Fig. 2-3

- c. Remove the Glove Box Under Cover.



Nylon Panel Removal Tool

Fig. 2-4

- d. Remove the Glove Box Side Trim.

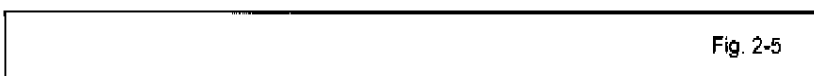
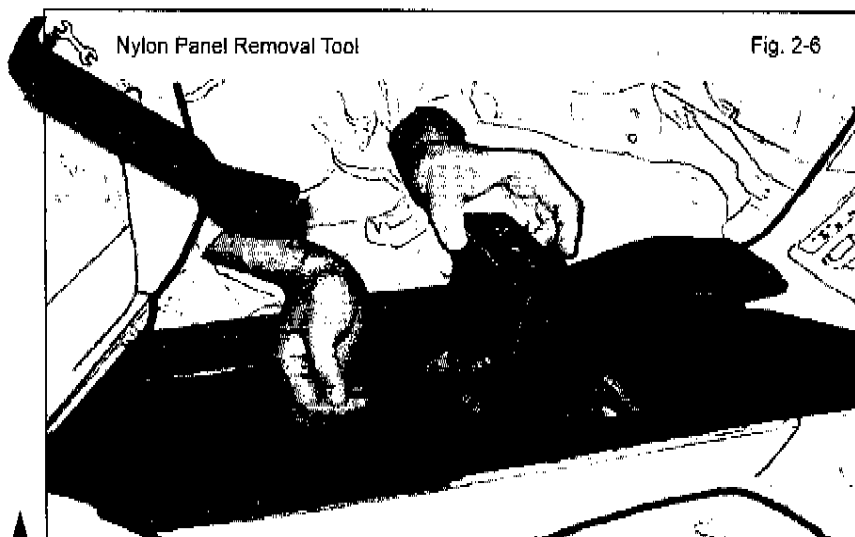


Fig. 2-5

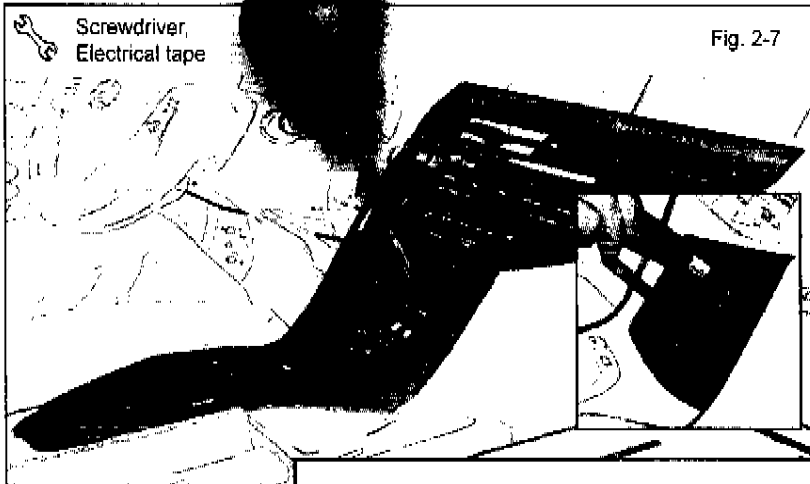
- e. Open Center Console Compartment.



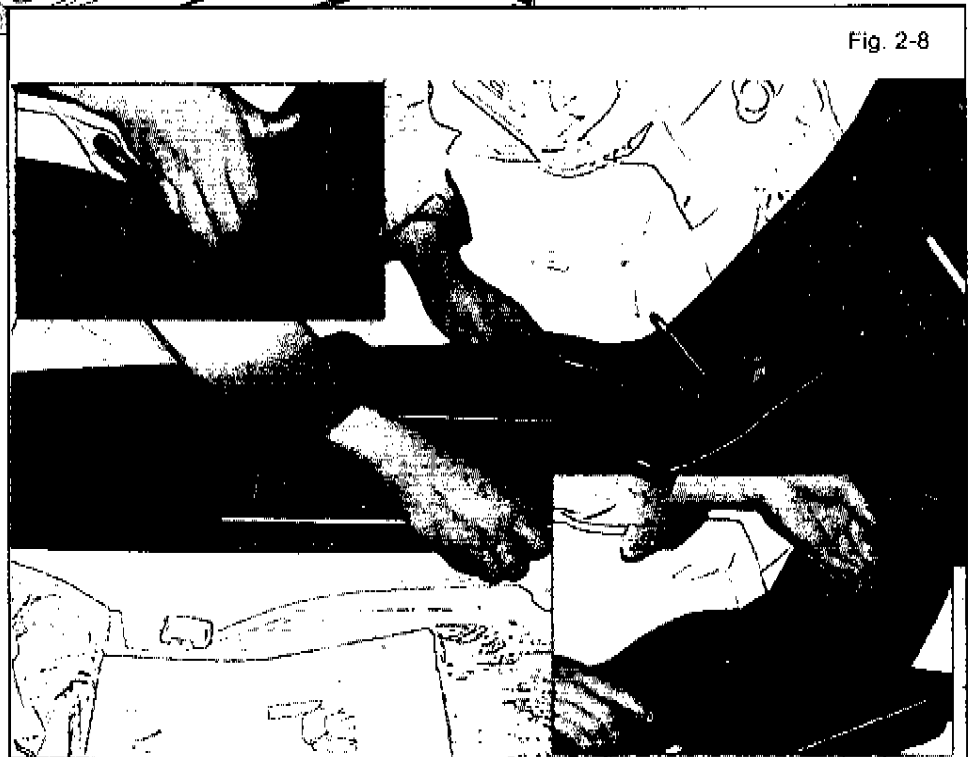
Nylon Panel Removal Tool

Fig. 2-6

- f. Remove Seat Temperature Control Unit.



- g. Remove the Shift knob by turning counter-clockwise.
- h. Push on the Shift Release with taped screwdriver and Shift to Neutral.



- i. Pull on the Left side Stick Shift Cover, then pull the Center Console up and pull on the Right side Stick Shift Cover.



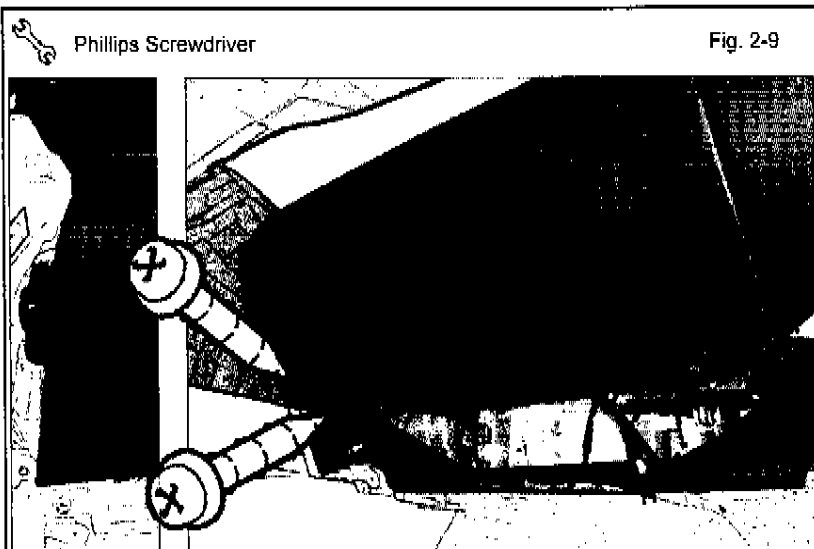
 10mm Socket, Extension



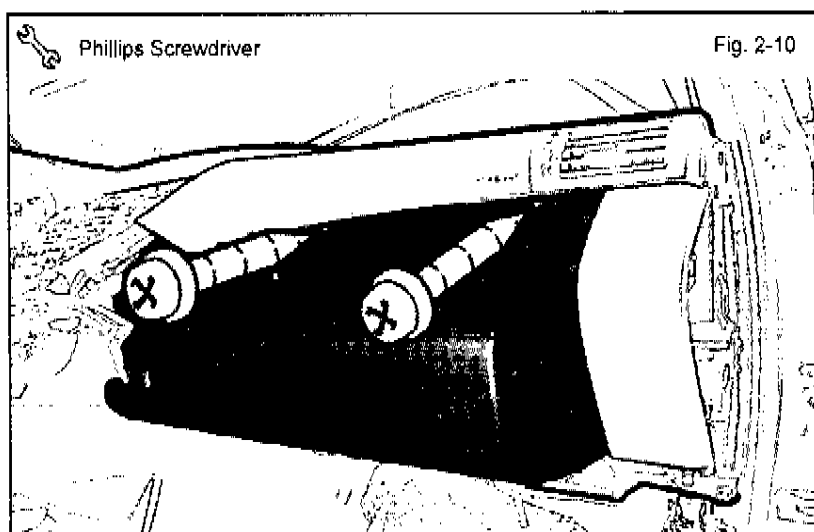
l. Remove 3 Bolts.



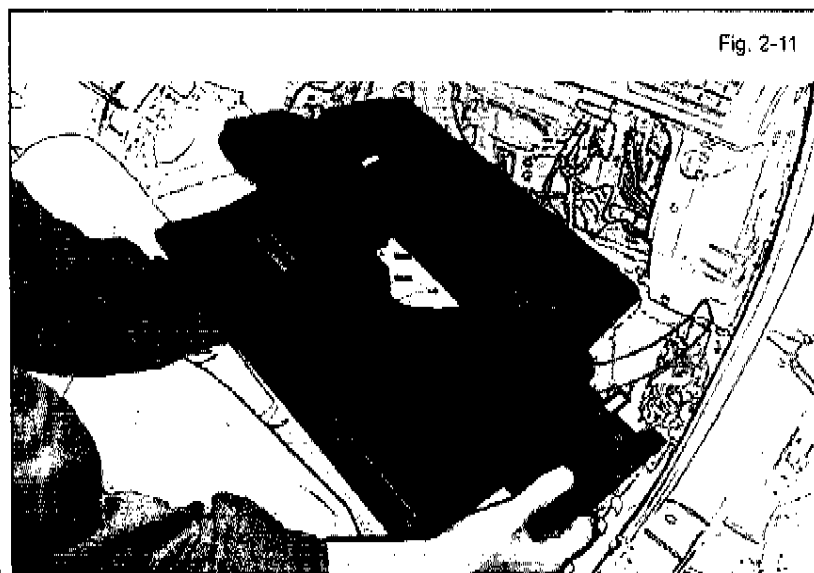
m. Remove Knee Airbag carefully then wrap it and stack on any object to lift it high enough to prevent tension on the Airbag wire.



n. Remove 3 screws from the bottom of the Glovebox.



o. Open the Glovebox and remove 2 Screws.



p. Remove the Glovebox by pulling it towards the left side.



Fig. 3-1

3. RES ECU Installation.

- a. Navigate the RES ECU on the vehicle location shown.



Fig. 3-2

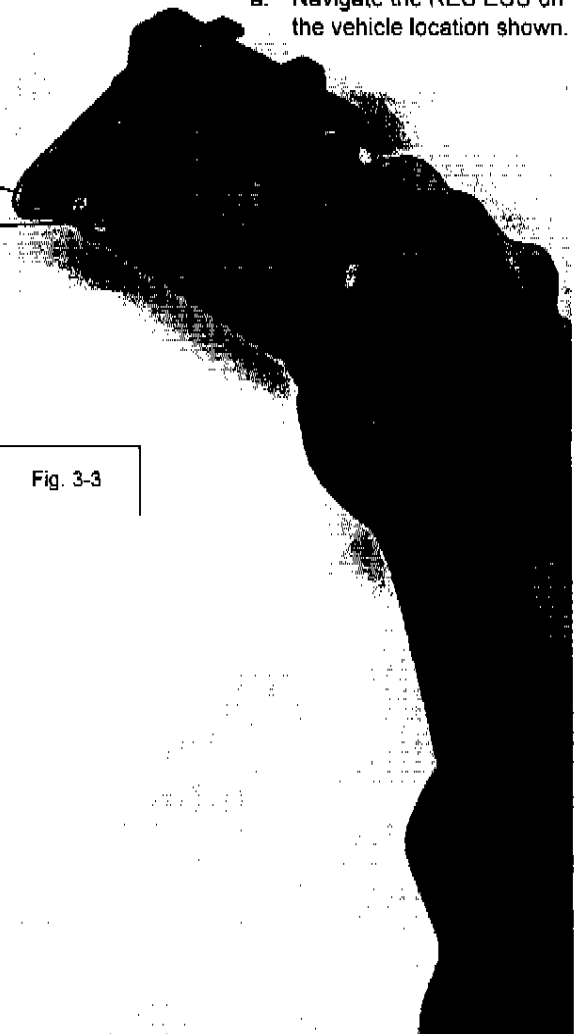


Fig. 3-3

- b. Install the RES ECU to the vehicle using 2 Bolts.



Fig. 3-5



Fig. 4-1

4. V4 Harness Installation.

- a. Connect V4 Harness to the RES ECU.
- b. Use V4 Harness Clamp to secure it to the Vehicle's Harness.
 - Attach clamp over foam tape.

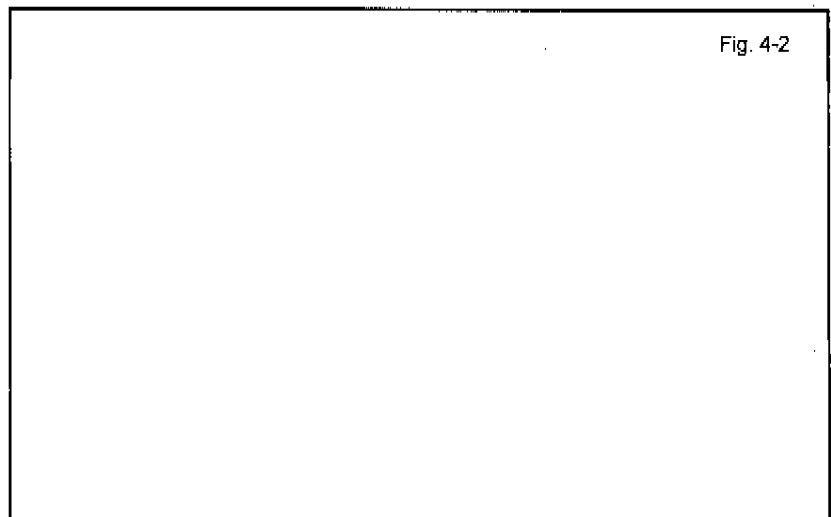


Fig. 4-2

- c. Route the V4 Harness along the Vehicle's Harness, then route the end of the V4 Harness behind the Vehicle's Reinforce.

- d. Plug the V4 Connector to the Vehicle's Pre-Connector in the location shown.



Fig. 4-5

- e. Use V4 Harness Clamp to secure it to the Vehicle's Harness.
 - Attach clamp over foam tape.

5. Registration Preparation.

a. Reassemble the Vehicle.



NOTE: When reinstalling Knee Airbag, make sure to tighten the Bolts to 88.5 in•lbf (10 N•m).



VERIFY: That all Connectors are reconnected.



VERIFY: That panels fit together properly, with no uneven gaps.

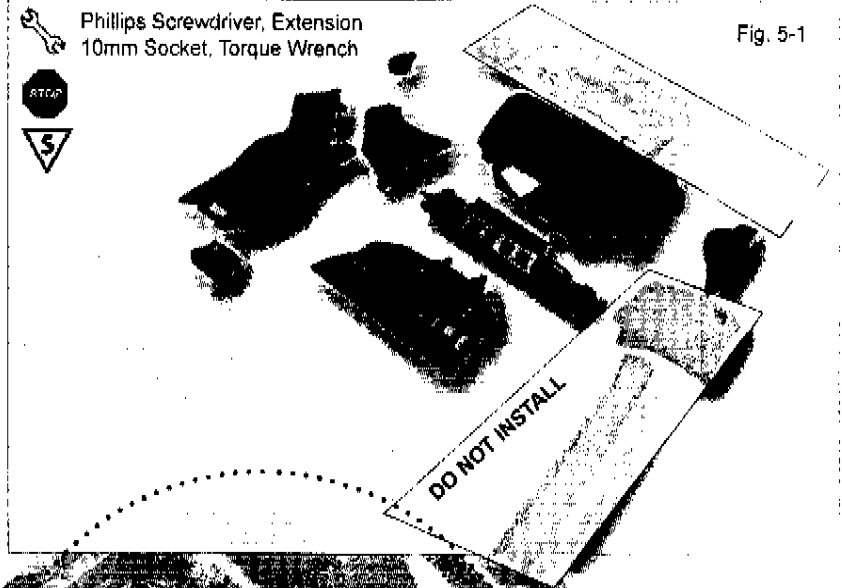


Fig. 5-1



b. Verify that the Short Pin is Installed.

• If not, install now.

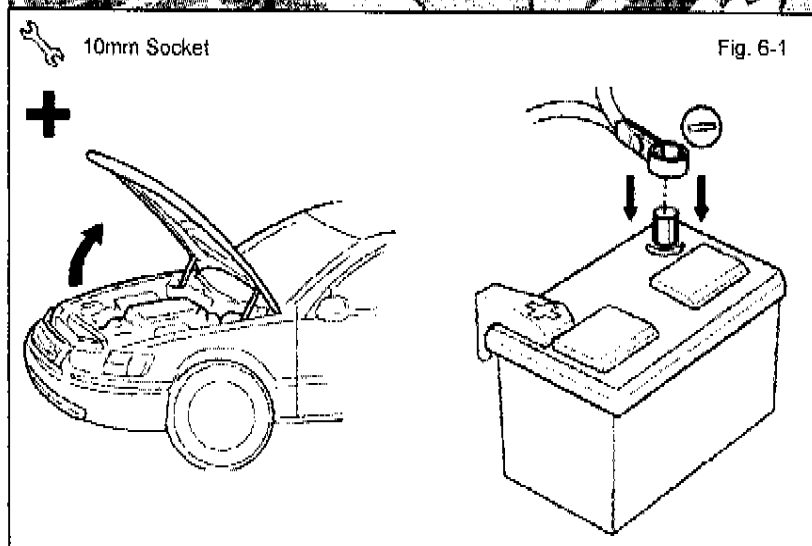


Fig. 6-1

Registration

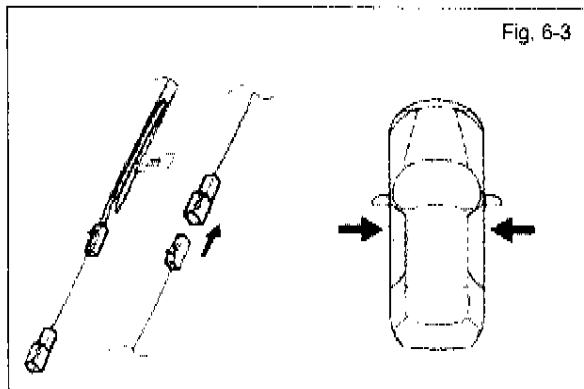
1. Open the Hood.
2. Temporarily reconnect the Negative Battery Cable.



CAUTION: Do not touch the Positive Terminal.

3. Place the Vehicle in Park (P) Neutral (N) position.

- d. Locate the 1P RES Diagnostic Connectors in the Passenger's Side Cowl Area, and remove the tape securing it.



- e. Connect the 2 RES Diagnostic Connectors.

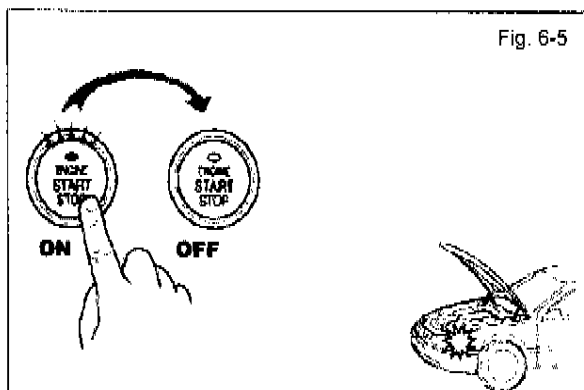
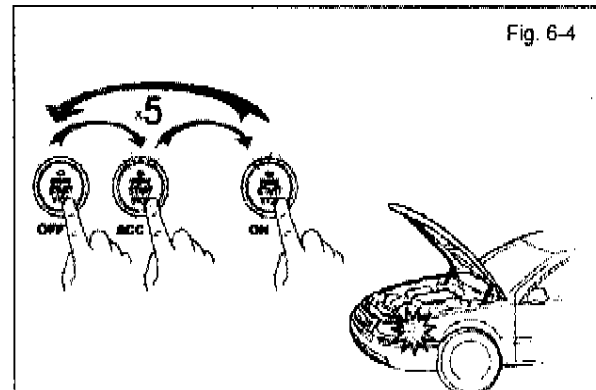
NOTE: Once connected you will have 10 minutes to complete this section, steps f-z.

- f. Close all doors.

- g. With the Remote Control Key in your possession, cycle the Smart Key Ignition Button from OFF to ON 5 times.

NOTE: One cycle consists of: OFF → Accessory → ON. This is equivalent to pressing the Smart Key Ignition Button 14 Times.

LOOK: For the Hazard Lights to flash Once.



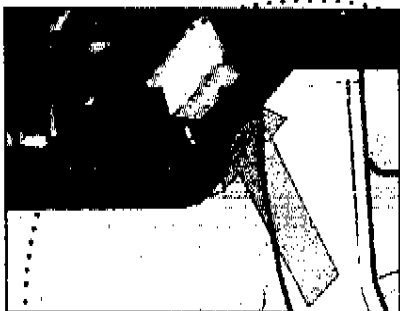
- h. Start the Engine.
i. After 10 seconds stop the Engine.

LOOK: For the Hazard Lights to flash Once.

IF THIS PROCEDURE FAILED

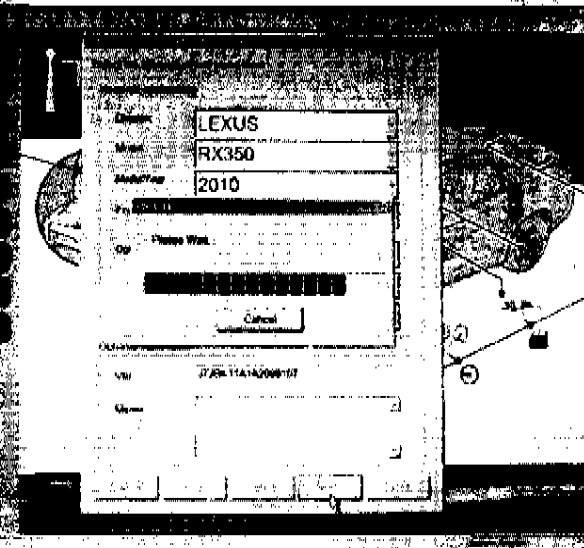
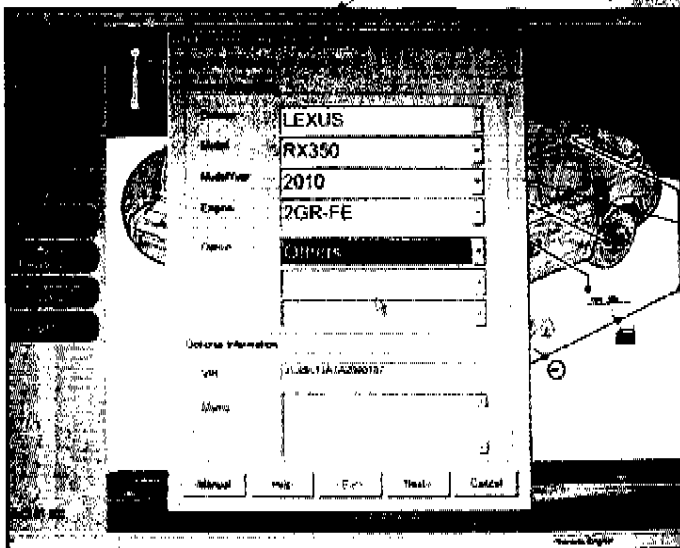
The Hazard Lights flash 3 Times.

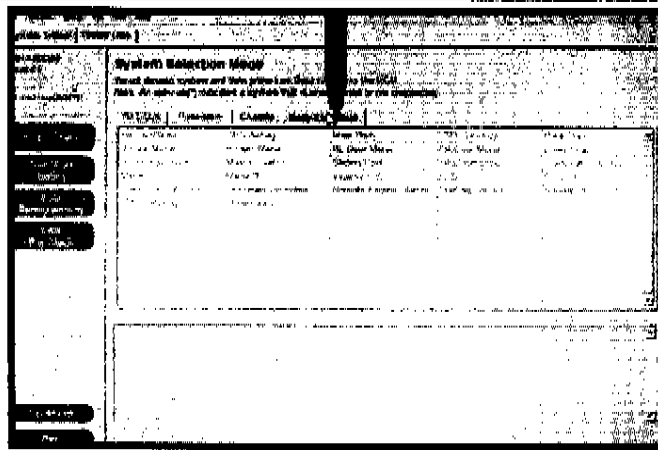
- Disconnect the V4 Harness's 1P RES Diagnostic Connectors.
- Start again from step e.



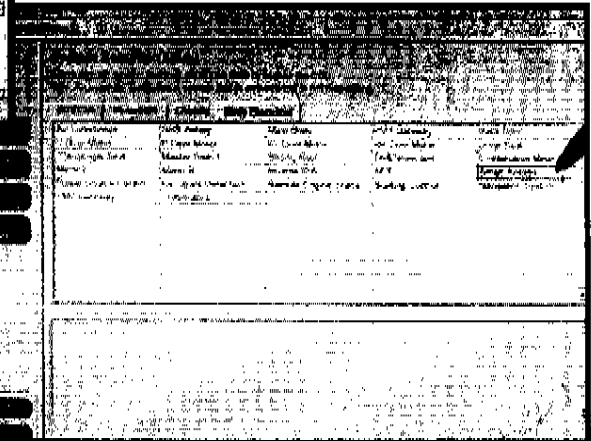
- j. Connect the Techstream Notebook to the Vehicle's Diagnostic Port.
- k. With the Remote Control Key in your possession, press the Power Button twice to select the Ignition "ON" position.

- l. Start the TIS Techstream Application by clicking on the shortcut located on the Desktop.
- m. Click "Connect to Vehicle."
- n. Confirm that the information displayed on the Vehicle Connection Wizard is correct for the Vehicle. If not verify that the Techstream is properly connected.
- o. Select "Others."
- p. Click "Next>."

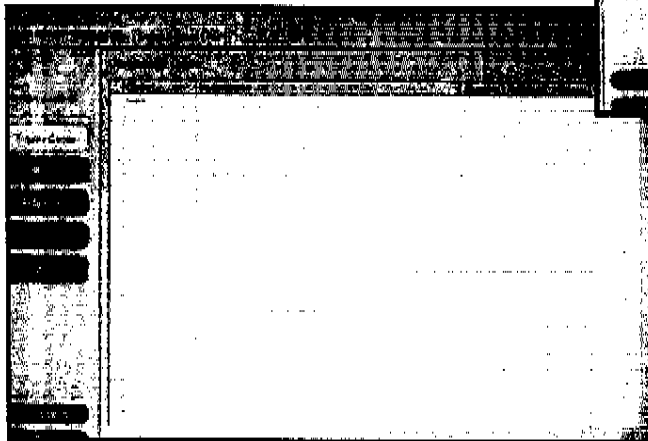




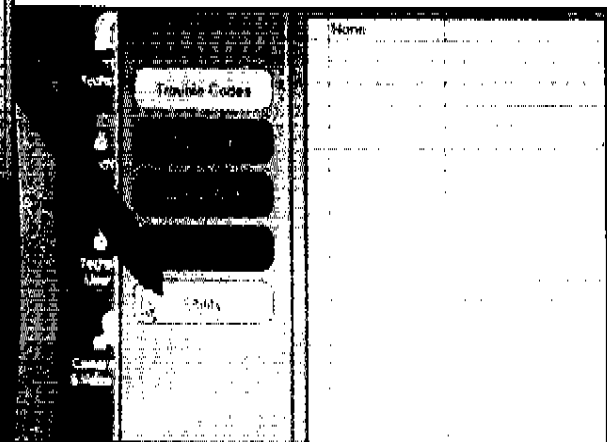
q. Click on "Body Electrical" Tab.



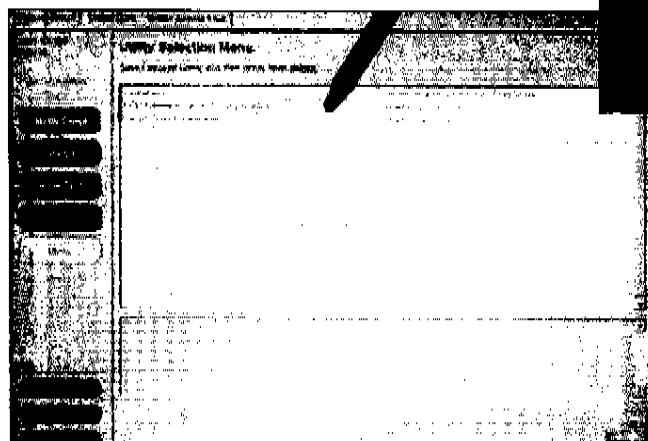
r. Click on "Smart Access."




s. This Screen shows up.

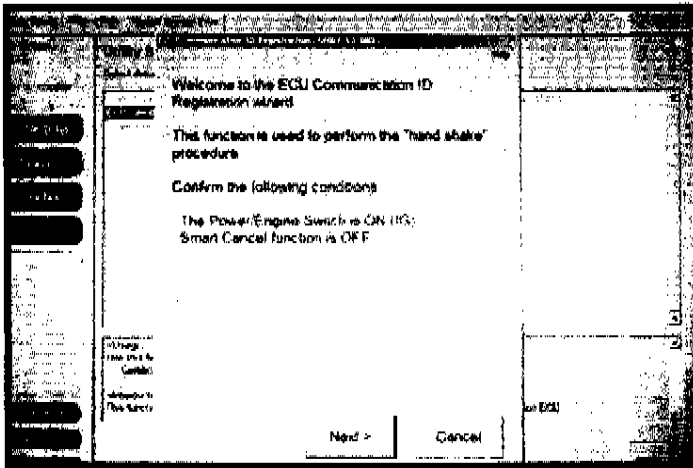


t. Click on "Utility."



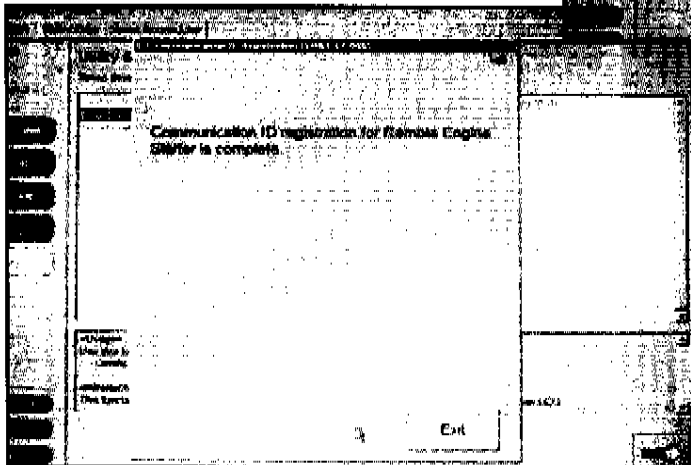
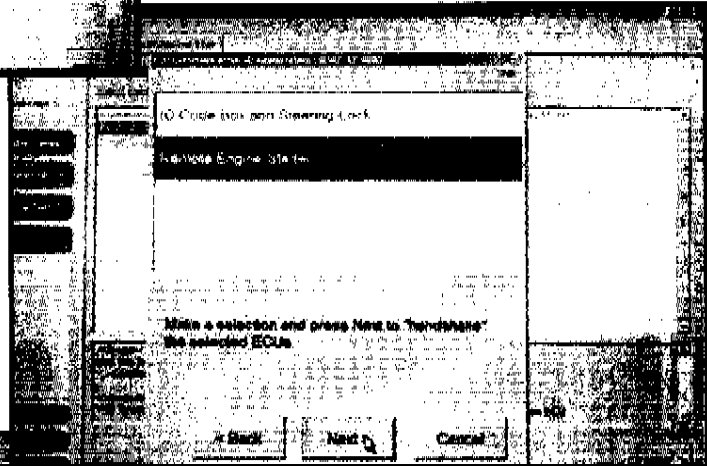
u. Select "ECU Communication ID Registration."

v. Click on 



w. Click on "Next>."

- x. Select "Remote Engine Starter."
- y. Click "Next>."



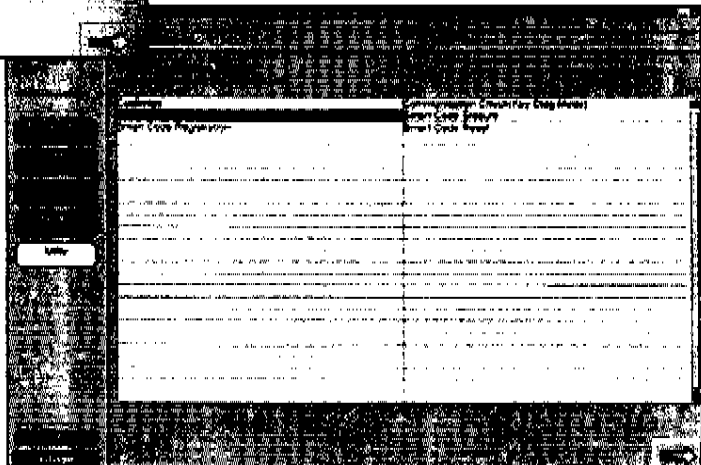
CONFIRM: That the ECU Communication ID was completed successfully.

z. Click "Exit."

IF THIS PROCEDURE FAILED

- Start again from step p.

aa. Click 



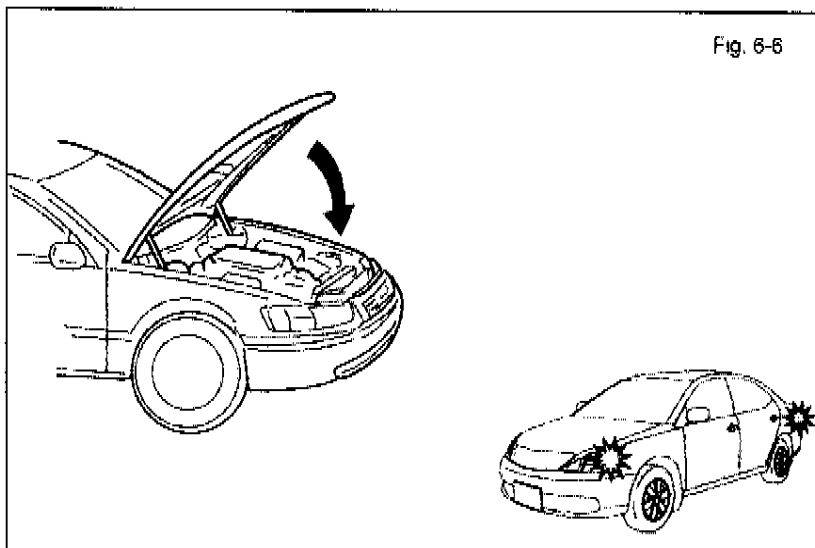


Fig. 6-6

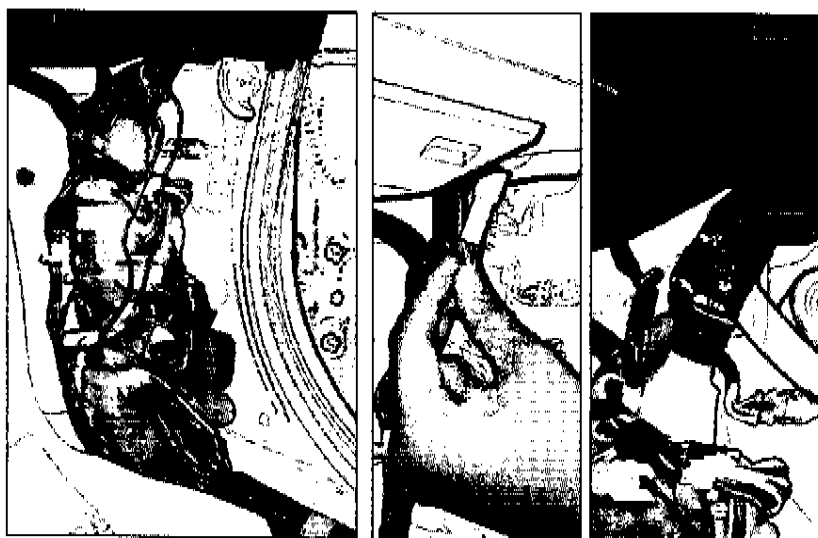
- ab. Exit the vehicle.
- ac. Close the Hood.

LOOK: For the Hazards to flash 2 Times.

IF THIS PROCEDURE FAILED

The Hazard Lights flash 3 Times.

- Disconnect the V4 Harness's 1P RES Diagnostic Connectors.
- Start again from step e.



- ad. After a successful Registration, Disconnect the 1P RES Diagnostic Connectors.
- ae. Using Electrical Tape secure the 1P RES Connectors and Harness to the Vehicle Harness.

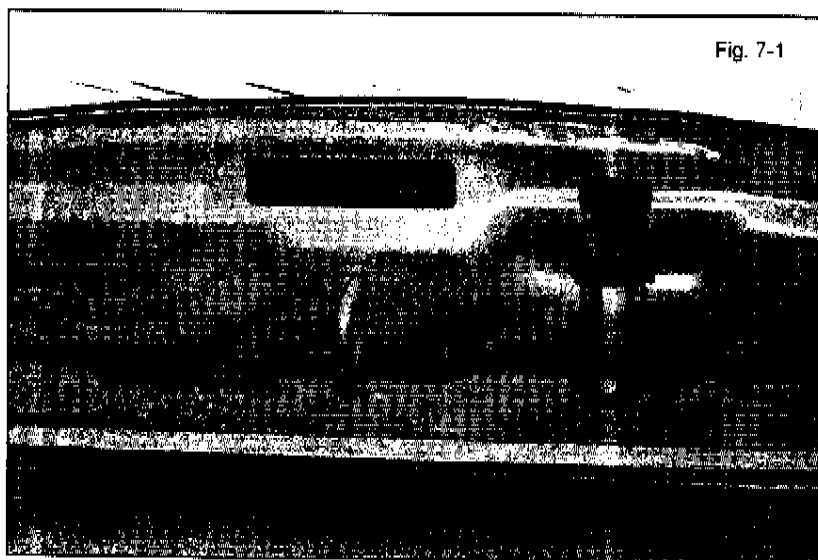


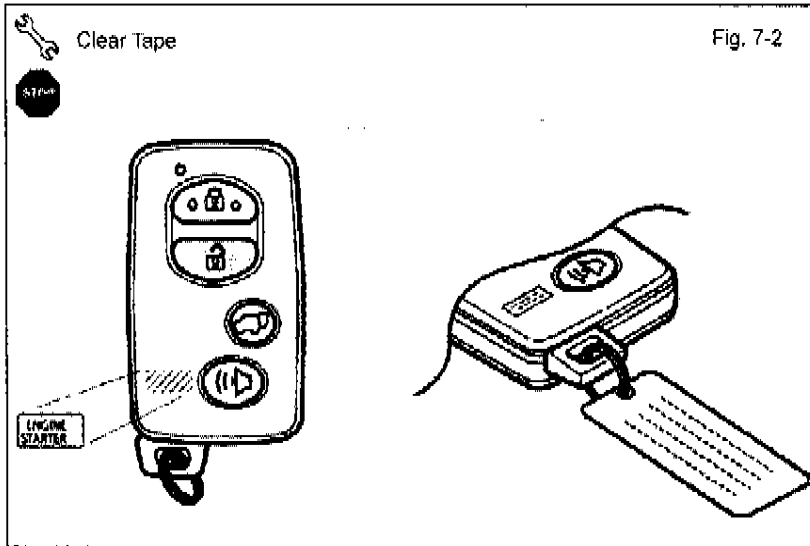
Fig. 7-1

7. Tags and Labels

- For US Vehicles use the English Tags and Labels, and discard the Spanish Tags and Labels.
- For Mexico Vehicles use the Spanish Tags and Labels, and discard the English Tags and Labels.
 - a. Using VDC approved cleaner and cleaning method, clean the area indicated in the Engine Compartment.
 - b. Attach the Engine Room Warning Label as shown.



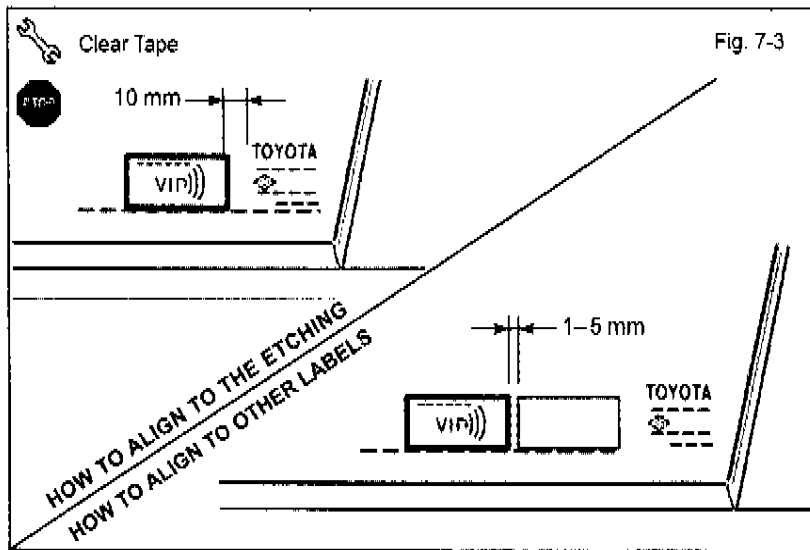
CAUTION: Do not touch the adhesive surface.



- c. Using VDC approved cleaner and cleaning method, clean the indicated area on the key.
- d. Use a piece of Clear Tape to lift the label off its protective backing.

- CAUTION:** Do not touch the adhesive surface.
- e. Attach the Key Label as shown.
- f. Attach the Key Tag.

REPEAT: steps c-f with the other Key.

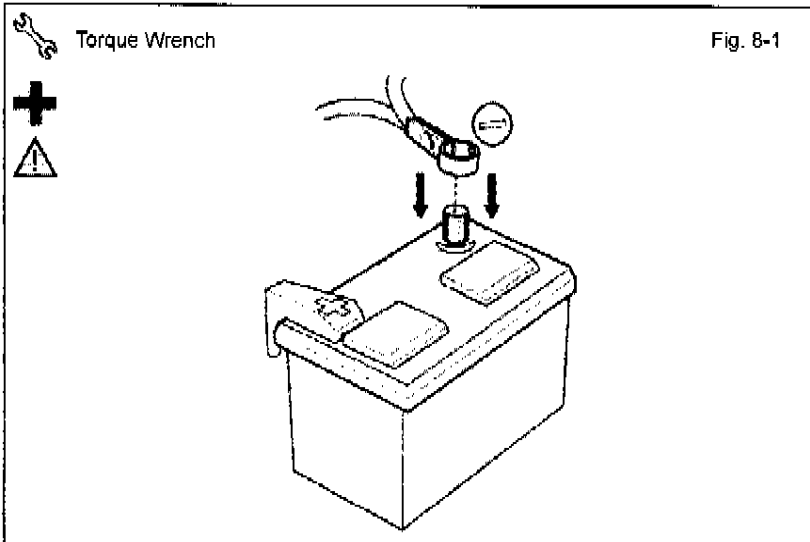


- g. Use Household Glass Cleaner to clean the inside of the Front Door Windows.
- h. Use a piece of Clear Tape to lift the Label from the protective backing.

- CAUTION:** Do not touch the adhesive surface.
- i. Attach the Label as shown.

- NOTE:** Make sure to Align according to Etching or Other Label.

REPEAT: steps g-i with the other Window.



8. Complete the Installation.

- a. Position the Negative Battery Cable at the original factory position.



- Tighten the Nut to 36 in·lb (4.07 N·m)



CAUTION: Do not touch the positive terminal.

- b. Clean up and Remove trash.
- c. Sealed in its protective bag, place the Owner's Manual in the Glovebox.

- d. Reset the power windows.

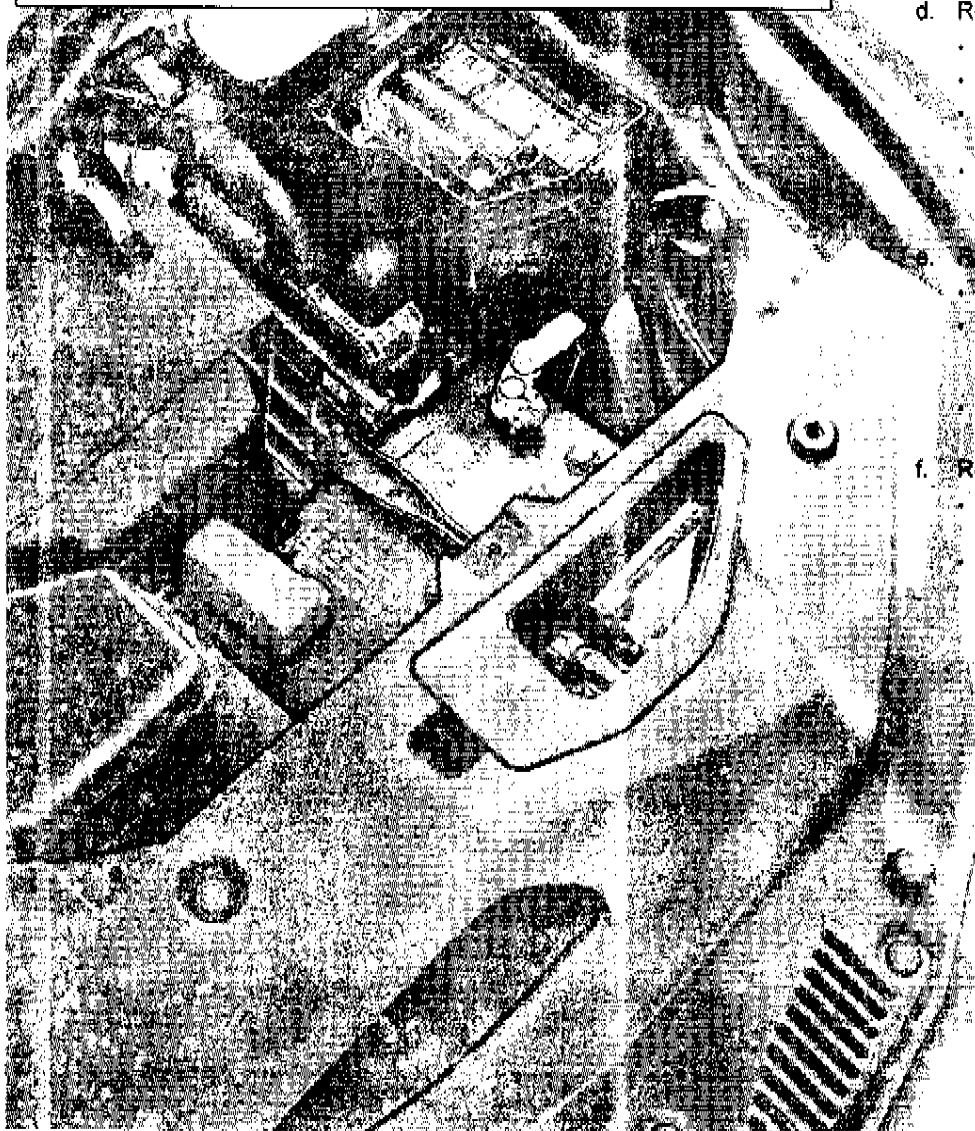
- Turn the ignition "ON."
- Lower the Windows halfway.
- Pull up on the Power Window Switches until the windows close.
- Continue to hold up on the switches for a minimum of 1 Second.

- e. Reset the Moon Roof.

- Open the Moon Roof halfway.
- Push and hold the Moon Roof Switch to close until the Moon Roof closes.
- Continue to hold the switch for a minimum of 1 Second.

- f. Reset the tailgate door.

- Push door lock control switch to the "unlock" side.
- Pull up tailgate door handle.



Accessory Function Checks

Close the hood, place the shift lever in the "P" (parking) position, set the parking brake. With the smart key in your possession: turn the Vehicle off, exit the vehicle, and close all doors.

1	Press the remote control's lock button twice within 2 seconds, then press and hold the lock button for 3 seconds.	The hazard lights flash after 3 seconds. The engine starts. The hazard lights flash repeatedly for 20 seconds.
2	Press the remote control's unlock button.	The engine stops. The hazard lights flash twice.
3	Start the Vehicle again using the remote. With the engine running, press and hold the remote control's lock button for 2 seconds.	Refer to Step 1. The engine stops. The hazard lights flash once.
4	Start the Vehicle again using the remote. With the remote in your possession pressing the lock button on the driver's door to unlock the vehicle.	Refer to Step 1. The engine stops. The hazard lights flash once.

Enter the vehicle and close all doors.

5	Start the Vehicle again using the remote. With the engine running, manually unlock any door with the inside lock switch.	Refer to Step 1. The engine stops. The hazard lights flash once. The security alarm triggers. (if equipped)
6	Start the Vehicle again using the remote. With the engine running, push down on the accelerator until the engine speed exceeds 3000 RPMs.	Refer to Step 1. The engine stops. The hazard lights flash once.
7	Start the Vehicle again using the remote. With the engine running, push on the foot brake.	Refer to Step 1. The engine stops. The hazard lights flash once.
8	Start the Vehicle again using the remote. With the engine running, press the ignition button on the dash.	Refer to Step 1. The engine stops. The hazard lights flash once.
9	Move the shift lever out of "P" (Park). Attempt to start the Vehicle using the remote.	The engine does not start.
10	Start the Vehicle again using the remote. With the engine running, pull the hood release handle.	Refer to Step 1. The engine stops. The hazard lights flash once. The security alarm triggers. (if equipped)



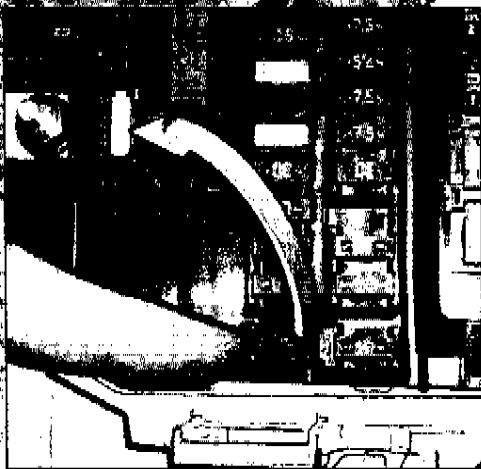
Vehicle Function Check

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)	<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



Function	Function
<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>
<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"/> Tire Pressure Monitoring System (TPMS). <i>Prior to TPMS activation and Pre-delivery Service (PDS) of the Vehicle the TPMS light will blink when IG is turned on.</i> <i>After TPMS activation and PDS of the Vehicle the TPMS light will illuminate for a few seconds and go off when IG is turned on.</i>

After installation, perform a function check.*
Check with your dealer if this step is necessary.



Finish reassembling the Vehicle.

VERIFY: That panels fit together properly, with no uneven gaps.

