# Attachment 7

Copies of SSC 40A and 40D owner notifications and TSB (EG047-04)

# SSC 40A HAS BEEN <u>SUPERSEDED</u> BY SSC 40D

**Please refer to the SSC 40D Campaign Documents for further information.**

**NOTE:**

**Performance of SSC 40D cancels the need to complete any open SSC 40A repairs, which may be applicable to these vehicles. Dealers must submit any SSC 40A claims that were completed prior to the launch of 40D to TMS Warranty within 30 days. Warranty will debit all warranty claims for SSC 40A that are submitted with a repair date after the launch of SSC 40D.**

PRIUS

**SSC 40A**
**2004 MODEL YEAR PRIUS HYBRID VEHICLE**
**ELECTRONIC CONTROL UNIT REPROGRAMMING**
**SPECIAL SERVICE CAMPAIGN**

Dear Prius Customer:

Thank you very much for your patronage of Toyota. We are dedicated to providing vehicles of outstanding quality and value. As part of our continuing efforts to provide superior customer satisfaction, Toyota is announcing a Special Service Campaign Program, which includes your Prius vehicle.

**What is the potential problem?**

On certain 2004 Model Year Toyota Prius vehicles, if the vehicle's Hybrid Vehicle Electronic Control Unit detects a system fault, the master warning light and/or the hybrid system warning light may illuminate, depending upon the error identified. If this should occur, the vehicle will enter a "fail–safe" mode. Due to a programming error, if the vehicle is restarted in the "fail–safe" mode, a secondary condition may occur where the vehicle transmission may not operate smoothly.

**What is included in this Special Service Campaign?**

Before you are inconvenienced by this condition, Toyota would like to reprogram the HV ECU in your vehicle. Any Toyota dealer will conduct this service at **NO COST** to you.

**How do you take advantage of this Service Campaign?**

Please contact your authorized Toyota dealer to make an appointment to reprogram the HV ECU as soon as possible. The labor time necessary to reprogram the HV ECU is approximately one hour. However, depending upon the dealer's work schedule, it may be necessary to make your vehicle available for a longer period of time. The Toyota dealer will make every effort to assure your utmost convenience during this service.

**Please present this notice to the Toyota Dealer when you bring the vehicle in for your service appointment.**

If you no longer own the vehicle, please indicate so on the enclosed postage paid form, providing us with the name and address of the new owner.

**What if you have other questions?**

Please contact any Toyota dealer or call the Toyota Customer Assistance Center at 1–800–331–4331.

We have sent this notice in the interest of your continued satisfaction with our products, and we sincerely regret any inconvenience this condition may have caused you.

Thank you for driving the Toyota Prius.

Sincerely,

TOYOTA MOTOR SALES, U.S.A., INC.

PRIUS

**SSC 40D – 2004 MODEL YEAR PRIUS HYBRID VEHICLE ON–BOARD DIAGNOSTIC SPECIAL SERVICE CAMPAIGN**

Dear Prius Customer:

Thank you very much for your patronage of Toyota. We are dedicated to providing vehicles of outstanding quality and value. As part of our continuing efforts to provide superior customer satisfaction, Toyota is announcing a Special Service Campaign Program, which includes your Prius vehicle.

**What is the condition?**

On certain 2004 Model Year Toyota Prius vehicles, the Hybrid Vehicle Electronic Control Unit (HV ECU) and Battery Electronic Control Unit (Battery ECU) may not conform to some portions of the diagnostic tool communication standard due to a programming error. If a repair facility's On–Board Diagnostic (OBD) scantool is used to diagnose a condition where the hybrid system warning light and/or master warning light is illuminated, the OBD scantool may not recognize the system fault.

**What will Toyota do?**

Before you are inconvenienced by this condition, Toyota would like to reprogram the ECUs in your vehicle. Any Toyota dealer will conduct this service at **NO COST** to you.

**What should you do?**

***Please contact your authorized Toyota dealer to make an appointment to reprogram the ECUs as soon as possible.*** The labor time necessary to reprogram the ECUs is approximately one hour. However, depending upon the dealer's work schedule, it may be necessary to make your vehicle available for a longer period of time. The Toyota dealer will make every effort to assure your utmost convenience during this service.

***Please present this notice to the Toyota Dealer when you bring the vehicle in for your service appointment.***

In order to assure your full protection under the emission warranty provisions, it is recommended that you have your vehicle serviced as soon as possible. Failure to do so could be determined as lack of proper maintenance of your vehicle.

If you no longer own the vehicle, please indicate so on the enclosed postage paid form, providing us with the name and address of the new owner.

**What if you have other questions?**

***Your local Toyota dealer would be more than happy to answer any of your questions and set up an appointment to perform the repair.*** If you require further assistance, you may contact the Toyota Customer Experience Center at 1–866–270–9371 Monday through Friday, 5:00 am to 9:30 pm, Saturday and Sunday 7:00 am through 3:00 pm Pacific Standard Time.

**What if you live in California and don't have this Special Service Campaign performed?**

The State of California requires the completion of Special Service Campaigns on emission related parts prior to vehicle registration renewal. In addition, the State requires that every vehicle must pass an emission test (SMOG Check) every two years and before it is sold. Without the completion of this no cost Special Service Campaign, your vehicle may be more likely to fail this test. State of California regulations require Toyota to provide the Department of Motor Vehicles with a record of all vehicles that have not had the Special Service Campaign completed.

Your Toyota dealer will provide you with a Vehicle Emissions Recall Proof of Correction Form after the campaign has been completed. Please ensure you retain this form since the DMV may require that you supply proof that the campaign has been completed during your vehicle registration renewal process.

We have sent this notice in the interest of your continued satisfaction with our products, and we sincerely regret any inconvenience this condition may have caused you.

Thank you for driving the Toyota Prius.

Sincerely,

TOYOTA MOTOR SALES, U.S.A., INC.

TOYOTA

*Technical Service*
***BULLETIN***
*October 18, 2004*

Title:
**M.I.L. "[illegible]" DTC [illegible]191, P31[illegible]**
**AND/OR [illegible]0A0F**
Models:
**'04 – '05 [illegible]us**

# TSB

ENGINE
EG047-04
REVISED

**TSB REVISION NOTICE:**
- **February 22, 2005: Applicable Vehicles has been updated to include 2005 model year.**
- **November 19, 2004: The Caution in Repair Procedure B Step 1 was updated.**

**The previous TSB should be discarded.**

**TSB UPDATE NOTICE:**
**The information contained in this TSB supercedes TSB No. EG027–04.**
**TSB No. EG027–04 is now obsolete and should be discarded.**

**Introduction**

Some customers may report a M.I.L. and Master Warning Light "ON" condition that may occur after slowing down and stopping, and when attempting to restart. The vehicle may experience abnormally low power output condition or inability to "Ready On." The following Diagnostic Trouble Codes may be found: P3191 "Engine Does Not Start," P3190 "Poor Engine Power," and/or P0A0F "Engine Failed To Start." Reprogram the Engine and HV Hybrid ECU to improve this condition.

**NOTE:**
**Updating the HV ECU as part of Special Service Campaign (SSC) 40D is required to fully correct the P3191, P3190 and/or P0A0F condition. Verify that SSC 40D has been performed prior to reprogramming of the Engine Control Module (ECM) (SAE term: Powertrain Control Module/PCM).**

**Applicable Vehicles**

- **All 2004** model year **Prius** vehicles.
- **2005** model year **Prius** vehicles produced **BEFORE** the Production Change Effective VINs shown on the following page.

**Warranty Information**

| OP CODE | DESCRIPTION | TIME | OPP | T1 | T2 |
|---|---|---|---|---|---|
| EG4017 | Reprogram Prius Engine ECU | 0.8 | 89661–47070<br>89661–47071<br>89661–47100 | 8A | 99 |

**Applicable Warranty*:**
**This repair is covered under the Toyota Specified Major Emission Control Component Warranty. This warranty is in effect for 96 months or 80,000 miles, whichever occurs first, from the vehicle's in-service date.**

* Warranty application is limited to correction of a problem based upon a customer's specific complaint.

**Production Change Information**

| MODEL | PLANT | PRODUCTION CHANGE EFFECTIVE VIN |
|---|---|---|
| Prius | Plant 1 | JTDKB2#U#50133248 |
| | | JTDKB2#U#53013255 |
| | Plant 2 | JTDKB2#U#57003414 |

**Parts Information**

| PREVIOUS PART NUMBER | CURRENT PART NUMBER | PART NAME | QTY |
|---|---|---|---|
| N/A | 00451–00001–LBL | Authorized Modification Label | 1 |
| 89661–47070<br>89661–47071<br>89661–47100 | 89661–47101* | Computer, Engine Control | N/A |

* The Engine ECU should **NOT** be replaced as a part of this repair procedure.

**NOTE:**
**Authorized Modification Labels may be ordered in packages of 25 from the Materials Distribution Center (MDC) through the Dealer Daily Dealer Support Materials System, or by calling the MDC at 1–800–622–2033.**

**Calibration ID Information**

| CURRENT CALIBRATION ID | NEW CALIBRATION ID |
|---|---|
| 34702000<br>34702100<br>34702200<br>34705000 | 34705100 |

**Required SSTs**

| SPECIAL SERVICE TOOLS (SSTs) | PART NUMBER | QUANTITY |
|---|---|---|
| Toyota Diagnostic Tester Kit* | 01001271 | 1 |
| CAN Interface Module Kit* | 01002744 | 1 |
| 12 Megabyte Diagnostic Tester Program Card with version 12.01a (R040, 11/19/04) Software (or later)* | 01002593-005 | 1 |
| Prius Automatic Charger** | 00002–YA122–01 | 1 |
| Midtronics Battery Tester* | 00002–MP616–T | 1 |

* Essential SSTs.
** Essential SST. Supercedes 00002–YA121–01. P/N 00002–YA121–01 may still be used (with switch in 10 AMP position).

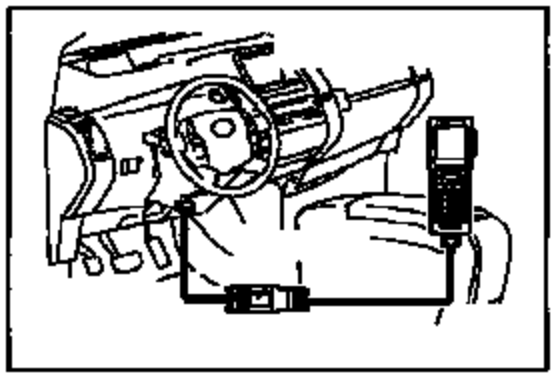
**NOTE:**
**Additional Diagnostic Tester Kits, CAN Interface Modules, Program Cards or other SSTs may be ordered by calling SPX/OTC at 1-800-933-6336.**

**Repair Procedure A**

**CAUTION:**
**USING ANY PREVIOUS VERSIONS OF VERSION 12.01a SOFTWARE FOR REPROGRAMMING MAY RESULT IN IRREPARABLE DAMAGE TO THE ENGINE ECU (you MUST use R040, dated 11/19/04 release, or newer)! Please refer to the verification procedure in step 6 below.**

**Confirming the Current Engine ECU Calibration**

1. Confirm that the vehicle has undergone Pre–Delivery Service (PDS).
2. Connect the Midtronics Tester and check the condition of the 12 volt auxiliary battery. Charge if necessary before proceeding.



**Repair Procedure A** (Continued)

3. Attach the 12 volt Prius Automatic Charger (P/N 00002–YA122–01).

> **NOTE:**
> **If Prius Automatic Battery Charger P/N 00002–YA122 is used, ensure that the charger is set to the "HIGH" current setting.**

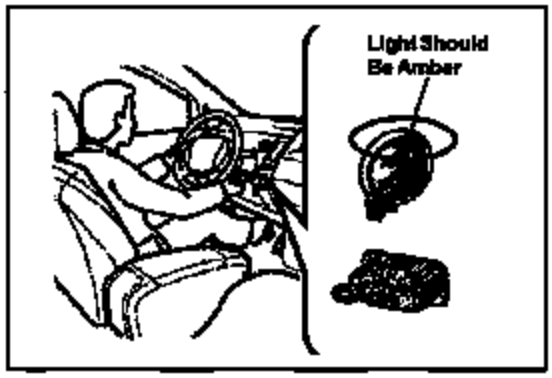
4. Connect the Diagnostic Tester with the CAN Interface Module to the DLC3 connector.
5. Turn on the Diagnostic Tester.
6. Press the "YES" button on the Diagnostic Tester.

   The number "040," or greater, should appear in the upper right–hand corner.

> **CAUTION:**
> **Confirm that the correct version of the software (12.01a) and calibration update is loaded into the Diagnostic Tester, otherwise, IRREPARABLE DAMAGE WILL OCCUR TO THE ENGINE ECU.**
> **The date shown under "Version 12.01a" MUST be "11/19/04" or more recent.**

> **IF NOT: STOP!!!**
> **Update Diagnostic Tester with the newest version of software – 12.01a.**
> **The date shown must be "11/19/04" or newer.**

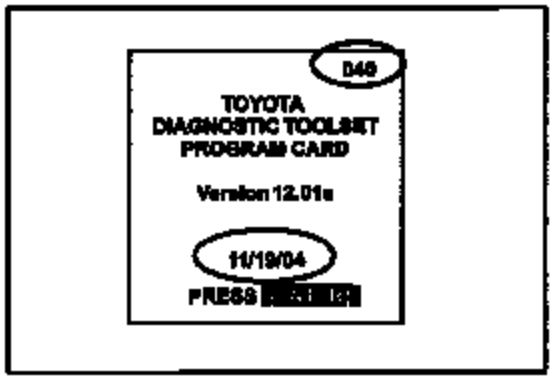
7. Insert key into key slot.
8. Push the "POWER" switch twice without depressing the brake pedal and confirm that the hybrid system is "IG–ON."



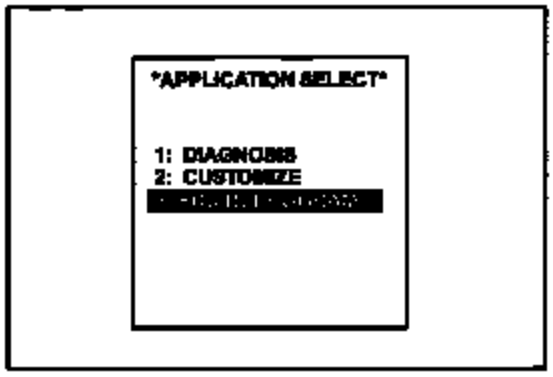

> **NOTE:**
> - **Do not the start the hybrid system. If the "READY" light is on, turn off and repeat step 7.**
> - **Confirm that the "POWER" switch indicator is amber in color.**

**Repair Procedure A (Continued)**

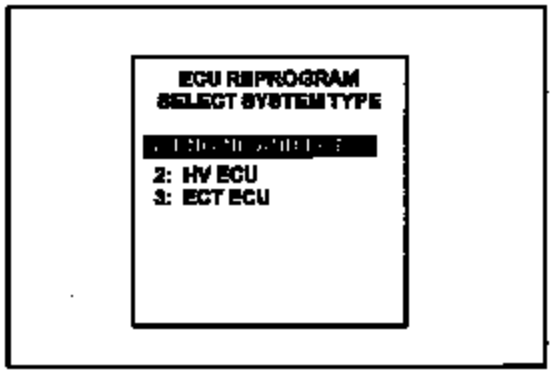
9. Press the "ENTER" key on the Diagnostic Tester (after the screen is displayed and the newest version of software, 12.01a, is confirmed, as shown in step 6 on previous page).




10. Select "3: ECU REPROGRAM" from the "APPLICATION SELECT" menu.



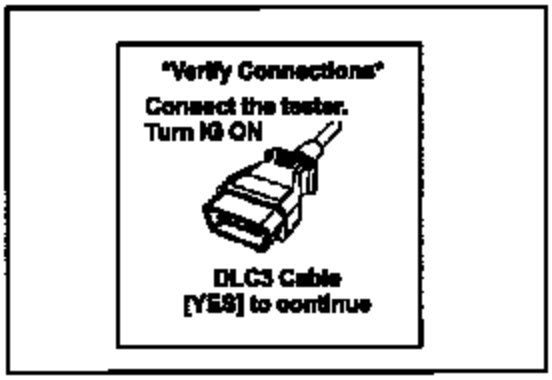

11. Select "1. ENGINE AND ECT" from the "ECU REPROGRAM SELECT SYSTEM TYPE" menu.



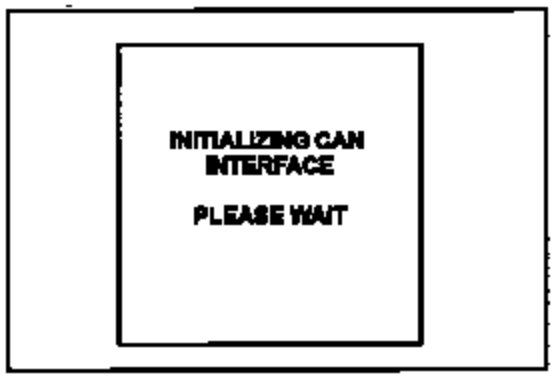

12. Select "2. CURRENT ECU CAL" from the "ECU REPROGRAM MAIN MENU."

**Repair Procedure A (Continued)**

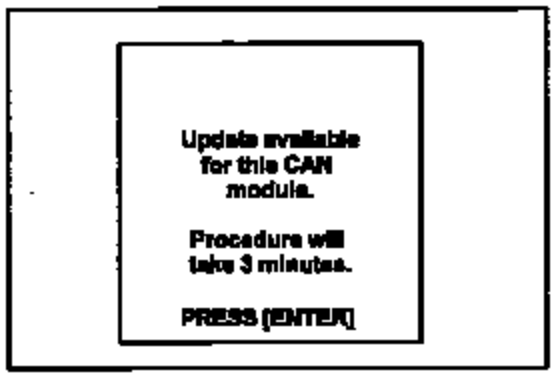
13. Press the "YES" key.



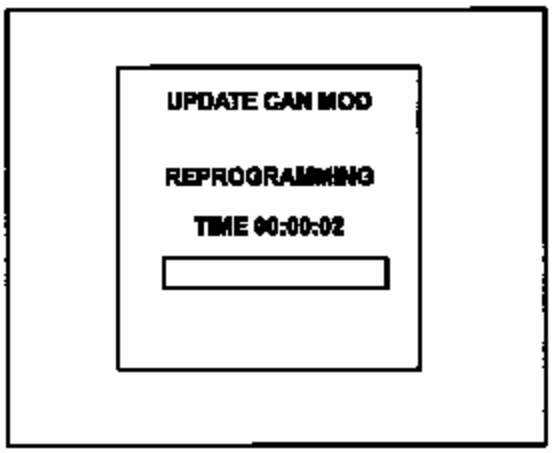

14. The Diagnostic Tester is currently confirming that the CAN Interface Module has been updated. If not, the next three screens will be displayed. If the CAN Interface Module has been updated, proceed to Step 18.




15. Press the "ENTER" key.

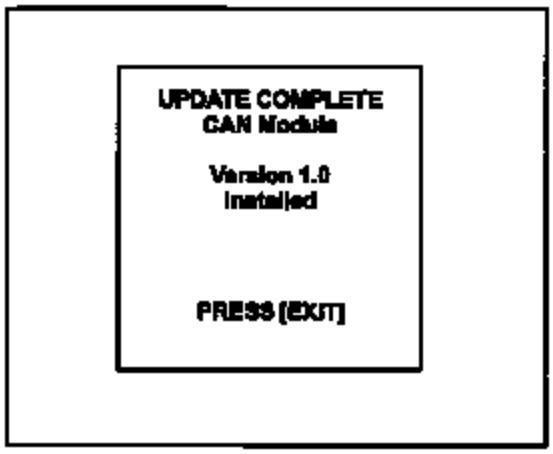



16. The CAN Interface Module update takes approximately 3 minutes.

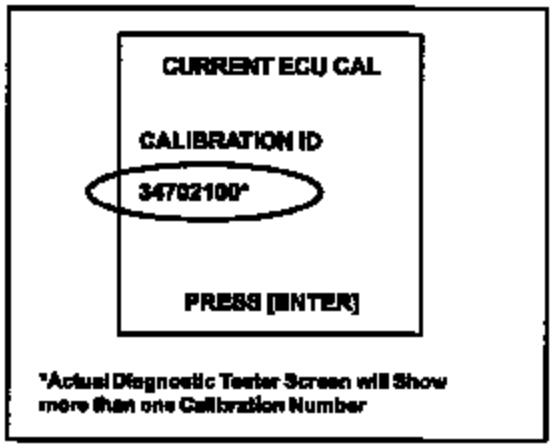


**Repair Procedure A (Continued)**

17. Press the "EXIT" key.




18. Confirm that the Diagnostic Tester displays one of the following calibration IDs:
    - 34702200, 34702100, 34702000, or 34705000.




**NOTE:**
**If the display shows a calibration ID of 34705100 or later, then the ENGINE ECU has already been reprogrammed. Press the "EXIT" key and turn off the Diagnostic Tester. Proceed to Recalibration Label Installation (page 12 of this TSB).**

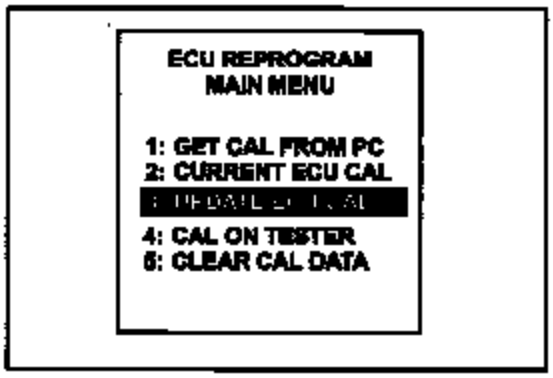
19. Press the "ENTER" key to return the main menu.

**Repair Procedure B**

**Reprogramming the Engine ECU**

1. Confirm that the auxiliary battery is fully charged using the Midtronics Battery Tester before proceeding. The Prius Automatic Charger **MUST** be connected during reprogramming.

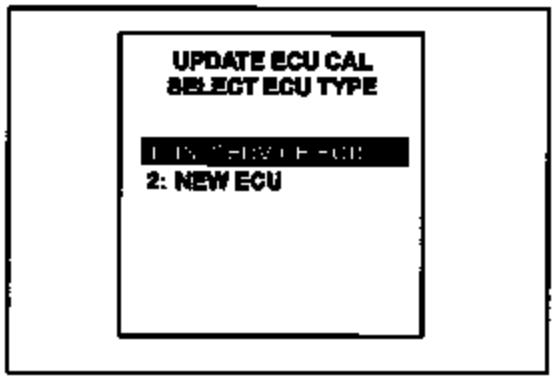
**CAUTION:**
**Do not use a jumper battery in place of the Prius Automatic Charger or IRREPARABLE DAMAGE TO THE ENGINE ECU MAY RESULT.**



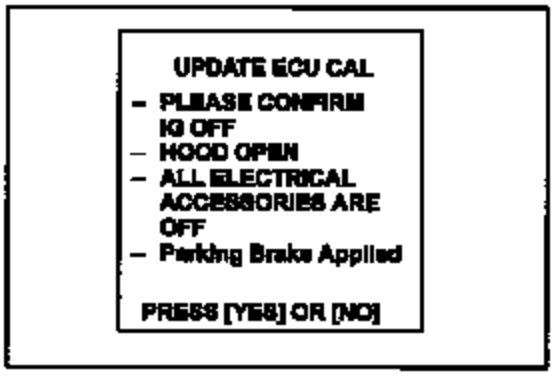

2. Select "3. UPDATE ECU CAL" from the "ECU REPROGRAM MAIN MENU."

**Repair Procedure B (Continued)**

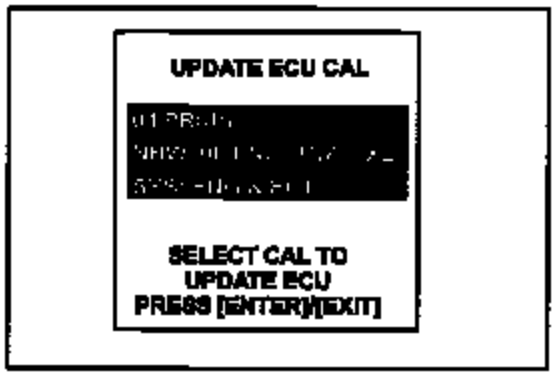
3. Select "1: IN–SERVICE ECU" from "UPDATE ECU CAL SELECT ECU TYPE" menu.




4. Confirm the following before proceeding:
   - IG is "OFF." Push the "POWER" switch once **without** depressing brake pedal until the indicator lamp turns off.
   - Engine hood is opened.
   - All electrical accessories are OFF (i.e., audio systems, dome lamp, navigation system, air conditioner, etc.).
   - The parking brake is applied.

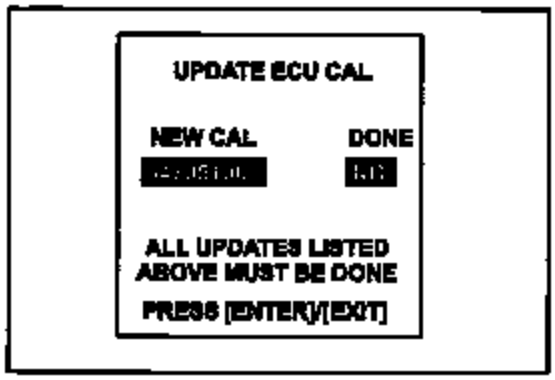



5. Press the "YES" key.
6. Confirm that the Diagnostic Tester displays the appropriate vehicle type. If it is not the correct vehicle, please refer to TSB No. SS002–01 "ECU Flash Reprogramming Process" to update the Diagnostic Tester.
7. Press the "ENTER" key.




8. Confirm that the Diagnostic Tester displays "34705100" or later.

**NOTE:**
**If the Diagnostic Tester displays "YES" instead of "NO," the Engine ECU has been reprogrammed already. Press the "EXIT" key and turn off the Diagnostic Tester. Proceed to Recalibration Label Installation (page 12 of this TSB).**

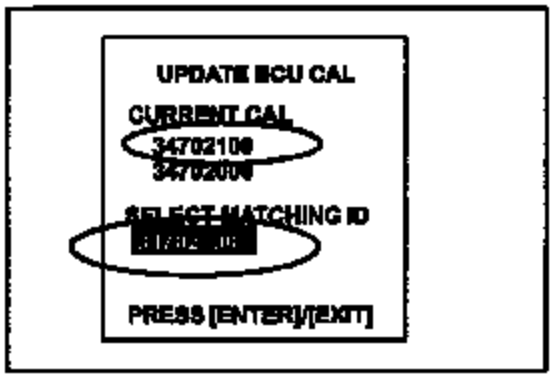


**Repair Procedure B (Continued)**

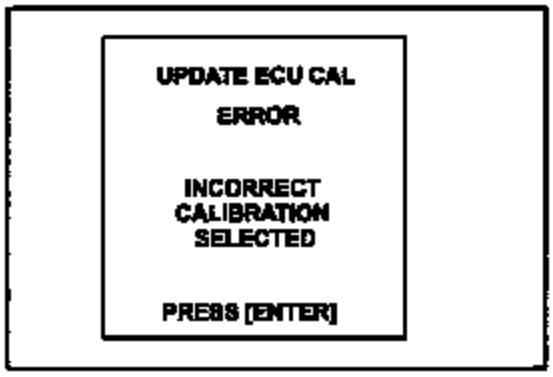
9. Press the "ENTER" key.

10. Select the current matching calibration ID that is currently on the vehicle.

11. Press the "ENTER" key.

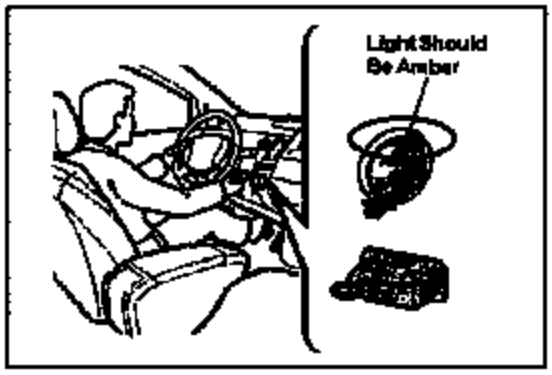



**NOTE:**
**If you select the wrong calibration ID, the Diagnostic Tester will display the screen shown to the right. Please select the correct calibration ID again after pressing the "ENTER" key.**




12. Push the "POWER" switch twice **without** depressing the brake pedal and confirm that the hybrid system is "IG–ON."

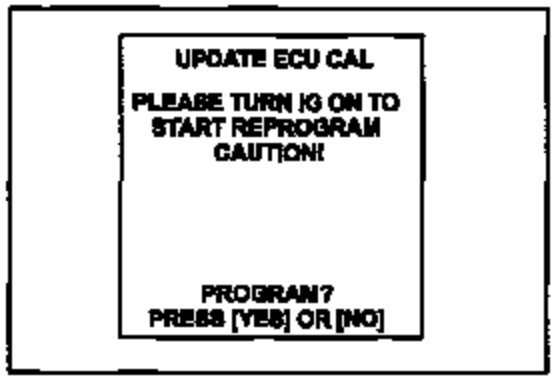
**NOTE:**
- **Do not start the hybrid system if the "READY" light is on. You will need to turn the vehicle OFF and repeat step 12.**
- **Confirm that the power switch indicator is amber in color.**



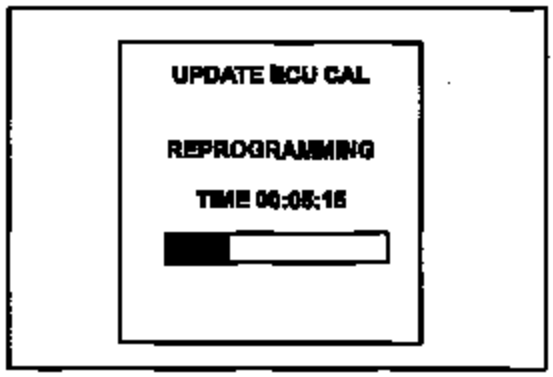
**Repair Procedure B** (Continued)

13. Press the "YES" key.

**NOTE:**
**Do not do anything that will increase an electrical load to the vehicle after pressing the "YES" key.**

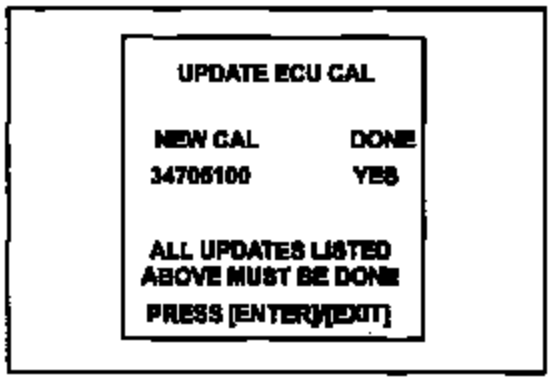



**CAUTION:**
- **The progress bar will display after approximately one minute.**
- **It will take approximately 24 minutes to complete the reprogramming.**
- **During the reprogramming, do not touch the Diagnostic Tester and the cable in order to avoid reprogramming failures.**
- **After reprogramming, warning lights may be displayed on the dash and multi-display. DTCs may be set in the memory of various ECUs. This is normal and the codes must be cleared prior to release of the vehicle.**




14. After approximately 24 minutes, the Diagnostic Tester will display the screen shown at right.
15. Push the "POWER" switch until the indicator lamp turns off without depressing the brake pedal.
16. Press the "ENTER" key.

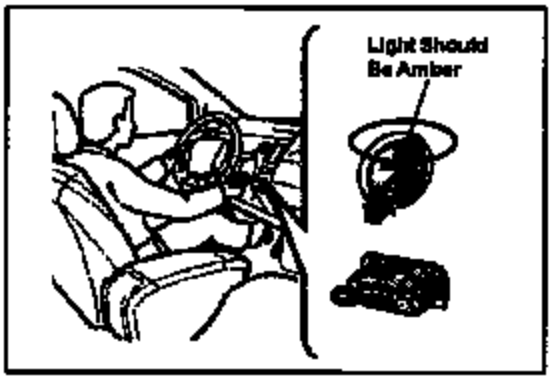
17. Confirm that the Diagnostic Tester displays "34705100" (or a newer calibration) and "YES."
18. Press the "EXIT" key.



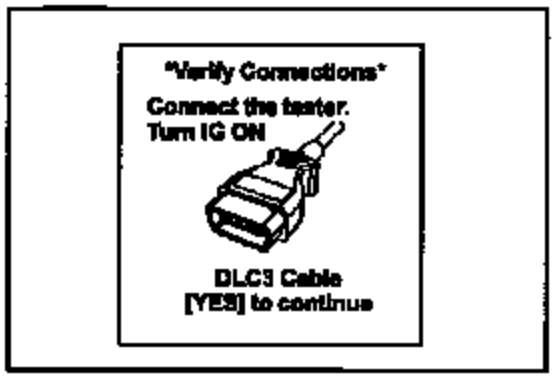
**Repair Procedure B** (Continued)

19. Push the "POWER" switch twice without the brake pedal depressed and confirm that the hybrid system is "IG–ON."

> **NOTE:**
> - **Do not start the hybrid system in "READY" mode.**
> - **Power switch indicator must be amber in color.**

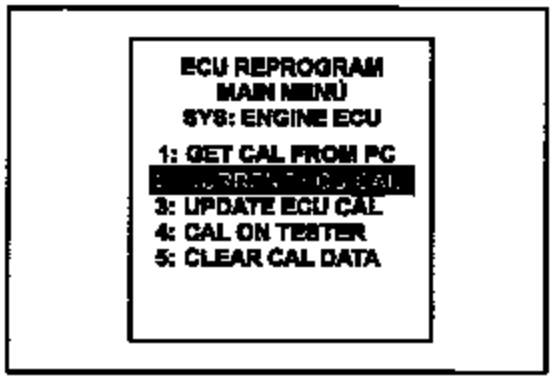



20. Press the "YES" key.



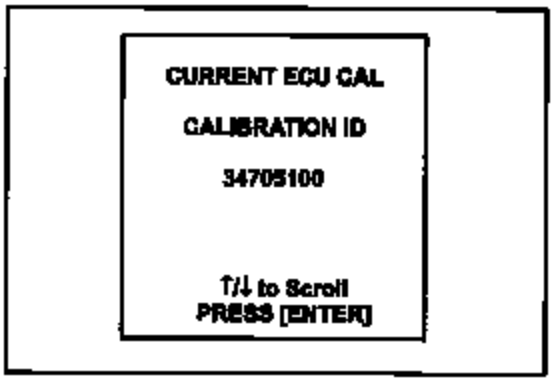

21. The Diagnostic Tester is establishing communication with the Engine ECU.

22. Select "2. CURRENT ECU CAL" from the "ECU REPROGRAM MAIN MENU."

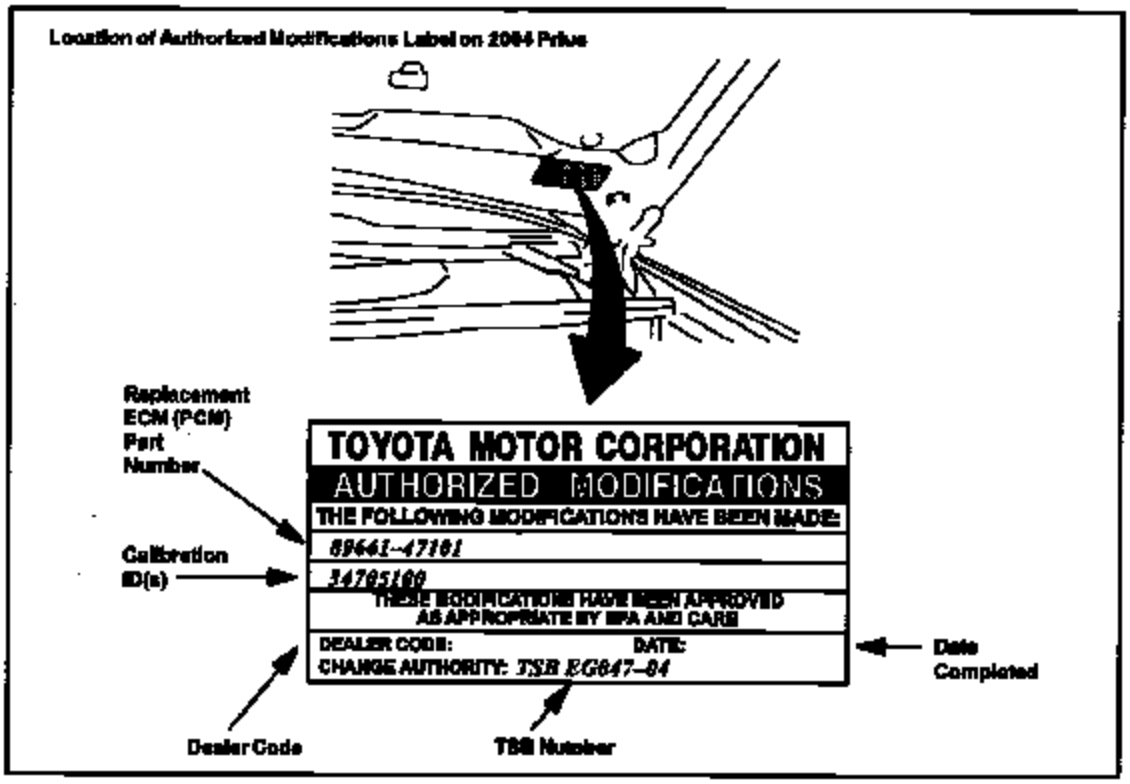


**Repair Procedure B (Continued)**

23. Confirm that the Diagnostic Tester displays the correct calibration ID: 34705100 (or a newer calibration).
24. Press the "ENTER" key.
25. Turn off the Diagnostic Tester.
26. Push the "POWER" switch once without depressing the brake pedal to turn ignition off.
27. Clear any DTC codes that have been set.




**Recalibration Label Installation**

1. Install the Recalibration (Authorized Modifications) Label.
   A. Using a permanent marker, write the following information on the recalibration label:
      - ECU part number 89661–47101 (or newer part number).
      - Calibration number 34705100 (or newer calibration).
      - Dealer code.
      - Repair date.
      - Change authority (this TSB No.).

   B. Install the Recalibration Label on the underside of the hood in front of the driver (see illustration).