July 13, 2012



MIL "ON" DTC P0A80 due to Dust or Debris in HV Battery Cooling Fan

Service

Category Engine/Hybrid System

Section Hybrid/Battery Control System

Market USA



Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2010	Prius	

Introduction

Some 2010 model year Prius vehicles may exhibit a MIL "ON" condition with Diagnostic Trouble Code (DTC) P0A80 stored due to dust or debris build-up in the HV Battery Cooling Fan. Use the following repair procedure to address this condition.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EL1209	Clean HV Battery Cooling Fan, Replace HV Battery Assembly, Install HV Battery Cooling Fan Intake Filter, and Reprogram Power Management ECU	2.2	G9510-47060	8A	99

APPLICABLE WARRANTY

- This repair is covered under the Toyota Hybrid System Warranty. This warranty is in effect for 96 months or 100,000 miles, whichever occurs first, from the vehicle's in-service date.
- For California specification Prius vehicles sold, registered, and operated in California, Connecticut, Maine, Massachusetts, New Jersey, New Mexico, New York, Oregon, Rhode Island, and Vermont, this repair is covered under the California Emission Warranty, which is in effect for 120 months or 150,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

Calibration Information

MODEL YEAR	ECM (CPU)	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID
2010	Power Management ECU	896B34701000 896B34701100 896B34701200 896B34701300 896B34701400 896B34701500	<u>896B34701600</u>
		896B54701000	<u>896B54701100</u>

Parts Information

PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
-	G92DH-47010	Filter, HV Battery Intake, No. 1	1
89681-47080 89681-47081 89681-47082 89681-47083 89681-47084 89681-47085	89681-47086	Computer, Power Management Control	_
G9510-47060	Same	Battery Assy, HV Supply	1
00451-00001-LBL	Same	Authorized Modification Labels	1

NOTE

- The Power Management ECU should NOT be replaced as part of the repair procedure.
- Authorized Modification Labels may be ordered in packages of 25 from the Materials Distribution Center (MDC) through Dealer Daily Dealer Support Materials Orders.

Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
TIS Techstream* or Techstream Lite NOTE: Software version 7.10.030 or later is required.	ADE	TSPKG1 or TSLITEDLR01	1

NOTE

- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- The Diagnostic Tester is NOT recommended for flash reprogramming with this calibration file. Please use TIS Techstream or an approved J2534 interface to perform this update. Visit <u>techinfo.toyota.com</u> for more information regarding J2534 reprogramming.



SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
GR8 Battery Diagnostic Station*	00002-MCGR8	1
	<u>00002-03100-S</u> (Small)	
Electrical Insulating Gloves*	<u>00002-03200-M</u> (Medium)	1
	<u>00002-03300-L</u> (Large)	

NOTE

Additional SSTs may be ordered by calling 1-800-933-8335.

* Essential SST.

Repair Procedure

1. Inspect the HV Battery Cooling Fan for dust or debris build-up.

Refer to the Technical Information System (TIS), 2010 Prius Repair Manual:

 Engine/Hybrid System – Hybrid/Battery Control System – "Hybrid/Battery Control: Battery Blower: <u>Removal</u>"

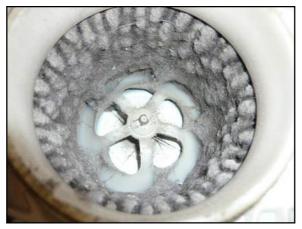
Is the HV Battery Cooling Fan clogged with dust or debris build-up? Refer to Figure 1 for an example of a clogged cooling fan.

- **YES** Proceed to step 2.
- **NO** This bulletin does NOT apply. Troubleshoot the vehicle using the Repair Manual procedure.

Refer to TIS, 2010 Prius Repair Manual:

Engine/Hybrid System – Hybrid/Battery Control System – "Hybrid/Battery Control: Hybrid Battery System: <u>P0A80-123: Replace Hybrid Battery Pack</u>"

Figure 1.



2. Clean dust and debris build-up from the HV Battery Cooling Fan with compressed air.

NOTICE

Do NOT allow the cooling fan to spin freely during cleaning. This may damage the cooling fan motor.

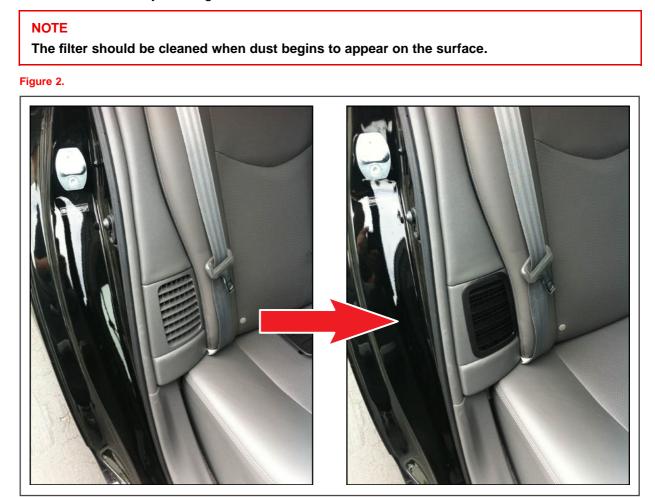
3. Replace the HV Battery Assembly.

Refer to TIS, 2010 Prius Repair Manual:

 Engine/Hybrid System – Hybrid/Battery Control System – "Hybrid/Battery Control: HV Battery: <u>Removal</u> / <u>Installation</u>"

Repair Procedure (Continued)

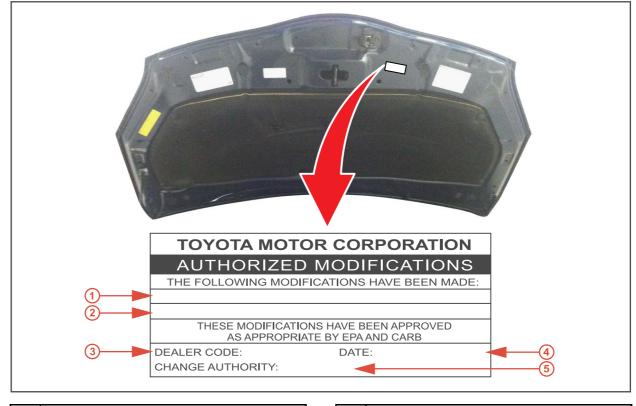
4. Install the HV Battery Cooling Fan Intake Filter as shown.



Repair Procedure (Continued)

 Check for the Authorized Modifications Label affixed to the vehicle in the location shown in Figure 3. Confirm if the Power Management ECU calibration has been updated. If the calibration ID listed is NOT the latest Power Management ECU calibration — go to step 6.

Figure 3. Location of Authorized Modifications Label on 2010 Prius



1	Replacement ECU Part Number (i.e., 89681-47086)
2	New Calibration ID(s) (i.e., 896B34701600)
3	Dealer Code

4	Date Completed
5	This SB Number

Repair Procedure (Continued)

6. Flash reprogram the Power Management ECU.

NOTE

- The GR8 Battery Diagnostic Station MUST be used in Power Supply Mode to maintain battery voltage at 13.5 volts while flash reprogramming the vehicle.
- For details on how to use the GR8 Battery Diagnostic Station, refer to the <u>GR8 Instruction</u> <u>Manual</u> located on the Technical Information System (TIS), *Diagnostics – Tools & Equipment – Battery Diagnostics.*

Follow the procedures outlined in Service Bulletin <u>T-SB-0064-10</u>, *"Techstream ECU Flash Reprogramming Procedure"*, and flash the Power Management ECU with the NEW calibration file update.

- 7. Install the Authorized Modifications Label.
 - A. Using a permanent marker, enter the following information on the label:
 - ECU part number [Refer to the **Parts Information** section for the **CURRENT PART NUMBER**]
 - Calibration ID(s) [Refer to the Calibration Identification Chart for the NEW CALIBRATION ID]
 - Dealer Code
 - Repair Date
 - Change Authority [This SB number]
 - B. Affix the Authorized Modifications Label to the vehicle at the location shown in Figure 3. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.
- 8. Clear any DTCs that have set during the repair procedure and test drive the vehicle to confirm normal operation.
- For severe usage vehicles, refer to Service Bulletin <u>T-SB-0198-11</u>, "HV Battery Cooling Fan Maintenance for Severe Usage Vehicles", for additional HV Battery Cooling Fan maintenance recommendations.