T-SB-0088-13

July 26, 2013



# MIL "ON" DTC P0A80 or P0A7F due to Dust or Debris in HV Battery Cooling Fan

Service

Category Engine/Hybrid System

Section Hybrid/Battery Control System Market USA

Toyota Supports

#### Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION	
2012	Camry HV	이 없는 것 같아. 아파 집에 가지 않는 것이 없다.	

#### Introduction

Some 2012 model year Camry HV vehicles may exhibit a MIL "ON" condition with Diagnostic Trouble Code (DTC) P0A80 or P0A7F 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
EL1308	Clean HV Battery Cooling Fan, Replace HV Battery Assembly, Install HV Battery Cooling Fan Intake Filter, and Reprogram Power Management ECU	2.6	G9510-33050	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 vehicles sold, registered, and operated in Arizona, California, Connecticut, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Rhode Island, or Vermont, this repair is covered under the California Emission Warranty, 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		CALIBRATION ID		VDS
MODEL	ECM (CPU)	PREVIOUS	NEW	V03
Camry HV LE		896B30601000 896B30601100	896B30601200 896B53301100	BD1FK
•	Power Management ECU	896B53301000		
Camry HV XLE		896B30603000	896B30603100	BD1FK

#### **Parts Information**

PART N	IUMBER	PART NAME	
PREVIOUS	NEW		
89690-06010 89690-06011 89690-06030	89690-06012 89690-06031	Power Management Control ECU	-
G92DF	I-33020	Filter, HV Battery Intake, No. 1	1
G9510	-33050	Battery Assembly, HV Supply	1
00451-00	0001-LBL	Authorized Modification Label	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**

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
GR8 Battery Diagnostic Station*	agnostic Station* 00002-MCGR8	
	00002-03100-S (Small)	1.1.1
Electrical Insulating Gloves*	00002-03200-M (Medium)	1
	<u>00002-03300-L</u> (Large)	

#### NOTE

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

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*		TS2UNIT	
TIS Techstream	ADE	TSPKG1	1
Techstream Lite	A CONTRACTOR OF THE OWNER	TSLITEDLR01	1 and and

#### NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 8.20.019 or later is required.
- 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. Please use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit <u>techinfo.toyota.com</u> for more information regarding J2534 reprogramming.



\* Essential SST.

#### **Repair Procedure**

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

Refer to the Technical Information System (TIS), 2012 Camry HV Repair Manual:

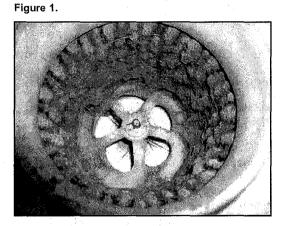
 Engine/Hybrid System – Hybrid/Battery Control System – "Hybrid/Battery Control: Battery Blower: <u>Removal</u>"

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, 2012 Camry HV Repair Manual:

Engine/Hybrid System – Hybrid/Battery Control System – "Hybrid/Battery Control: Hybrid Battery System: <u>P0A80-123:</u> Replace Hybrid Battery Pack / <u>P0A7F-123:</u> Hybrid Battery Pack Deterioration"



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

#### 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, 2012 Camry HV Repair Manual:

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

© 2013 Toyota Motor Sales, USA

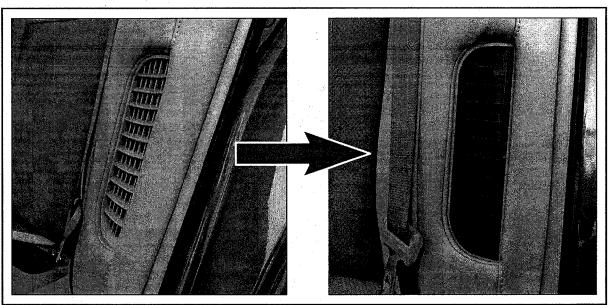
#### **Repair Procedure (Continued)**

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

The filter should be cleaned when dust begins to appear on the surface.

Figure 2.

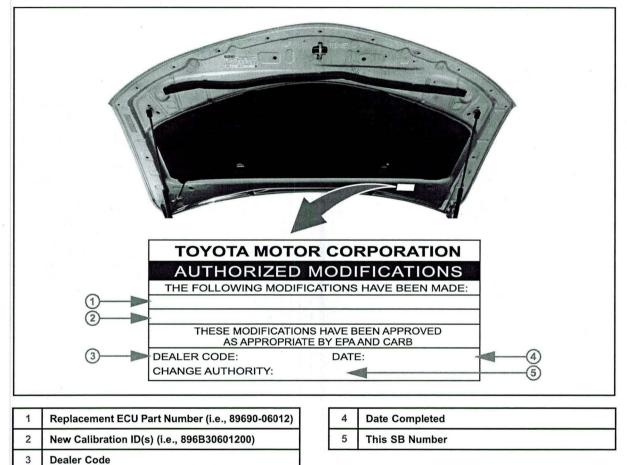
NOTE



#### **Repair Procedure (Continued)**

5. 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 2012 Camry HV



© 2013 Toyota Motor Sales, USA

#### **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 GR8 Instruction Manual located on the Technical Information System (TIS), Diagnostics – Tools & Equipment – Battery Diagnostics.

Follow the procedures outlined in Service Bulletin <u>T-SB-0012-13</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 NEW PART NUMBER]
- Calibration ID(s) [Refer to the Calibration Information section 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-0087-13</u>, "HV Battery Cooling Fan Maintenance for Severe Usage Vehicles," for additional HV Battery Cooling Fan maintenance recommendations.