Last Modified: 12-04-2024	6.11:8.1.0	<b>Doc ID:</b> RM100000002BEI2			
Model Year Start: 2023   Model: Prius Prime   Prod Date Range: [03/2023 - ]					
<b>Title:</b> HYBRID / BATTERY CONTROL U010087,U015587,U029387; Lost C [03/2023 - ]		OL SYSTEM (for PHEV Model): CM "A" Missing Message; 2023 - 2024 MY Prius Prime			

DTC	U010087	Lost Communication with ECM/PCM "A" Missing Message
DTC	UU1558/	Lost Communication with Instrument Panel Cluster (IPC) Control Module Missing Message
DTC	U029387	Lost Communication with Hybrid/EV Powertrain Control Module Missing Message

# **DESCRIPTION**

The plugin charge control ECU assembly communicates with the ECM, combination meter assembly and hybrid vehicle control ECU via CAN communication.

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	MIL	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	NOTE
U010087	Lost Communication with ECM/PCM "A" Missing Message	A CAN communication error between the ECM and plugin charge control ECU assembly (CAN communication system malfunction) occurs (1 trip detection logic)	CAN communication system	Comes	Master Warning: Comes on	Plug-in Control	В	SAE Code: U0100
U015587	Lost Communication with Instrument Panel Cluster (IPC) Control Module Missing Message	A CAN communication error between the combination meter assembly and plugin charge control ECU assembly (CAN communication system malfunction) occurs (1 trip detection logic)	CAN communication system	Does not come on	Master Warning: Does not come on	Plug-in Control	В	SAE Code: U0155

DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	MIL	WARNING INDICATE	DTC OUTPUT FROM	PRIORITY	NOTE
U029387	Lost Communication with Hybrid/EV Powertrain Control Module Missing Message	A CAN communication error between the hybrid vehicle control ECU and plugin charge control ECU assembly (CAN communication system malfunction) occurs (1 trip detection logic)	CAN communication system	Comes	Master Warning: Comes on	Plug-in Control	В	SAE Code: U0293

### **MONITOR DESCRIPTION**

• U010087:

If the plug-in charge control ECU detects a problem with CAN communication with the ECM, it will illuminate the MIL and store a DTC.

• U015587:

If the plug-in charge control ECU detects a problem with CAN communication with the hybrid vehicle control ECU, it will illuminate the MIL and store a DTC.

## **MONITOR STRATEGY**

Related DTCs	U0100: Lost Communication With ECM/PCM U0293: Lost Communication with Hybrid Control Module		
Required sensors/components	<ul> <li>U0100:         <ul> <li>ECM, Plug-in charge control ECU</li> </ul> </li> <li>U0293:         <ul> <li>Hybrid vehicle control ECU, Plug-in charge control ECU</li> </ul> </li> </ul>		
Frequency of operation	Continuous		
Duration	TMC's intellectual property		
MIL operation	Immediately		
Sequence of operation	None		

### **TYPICAL ENABLING CONDITIONS**

The monitor will run whenever the following DTCs are not stored	TMC's intellectual property
Other conditions belong to TMC's intellectual property	-

# **TYPICAL MALFUNCTION THRESHOLDS**

TMC's intellectual property -

### **COMPONENT OPERATING RANGE**

Plug-in charge control ECU	DTC U010087 is not detected
Trug in charge control Leo	DTC U029387 is not detected

### **CONFIRMATION DRIVING PATTERN**

#### HINT:

• After repair has been completed, clear the DTC and then check that the vehicle has returned to normal by performing the following All Readiness check procedure.

Click here NFO

• When clearing the permanent DTCs, refer to the "CLEAR PERMANENT DTC" procedure.

Click here NFO

### U010087, U029387:

- 1. Clear the DTCs (even if no DTCs are stored, perform the clear DTC procedure).
- 2. Turn the ignition switch off and wait for 2 minutes or more.
- 3. With ignition switch ON and wait for 2 minutes or more. [\*1]

#### HINT:

[\*1]: Normal judgment procedure.

The normal judgment procedure is used to complete DTC judgment and also used when clearing permanent DTCs.

- 4. Enter the following menus: Powertrain / Plug-in Control / Utility / All Readiness.
- 5. Check the DTC judgment result.

#### HINT:

- If the judgment result shows NORMAL, the system is normal.
- If the judgment result shows ABNORMAL, the system has a malfunction.
- If the judgment result shows INCOMPLETE or N/A, perform the normal judgment procedure again.

#### U015587:

- 1. Clear the DTCs (even if no DTCs are stored, perform the clear DTC procedure).
- 2. Turn the ignition switch off and wait for 2 minutes or more.
- 3. With ignition switch ON and wait for 2 minutes or more.
- 4. Enter the following menus: Powertrain / Plug-in Control / Utility / All Readiness.
- 5. Check the DTC judgment result.

#### HINT:

- If the judgment result shows NORMAL, the system is normal.
- $\circ\ \ \,$  If the judgment result shows ABNORMAL, the system has a malfunction.
- If the judgment result shows INCOMPLETE or N/A, perform driving pattern again.

### **CAUTION / NOTICE / HINT**

### NOTICE:

Be sure to check that the applicable DTC is output from the Plug-in Charge Control System.

### **PROCEDURE**

## 1. | CHECK DTC OUTPUT (PLUG-IN CONTROL)

Pre-procedure1

(a) None

Procedure1

(b) Check for DTCs.

**Powertrain > Plug-in Control > Trouble Codes** 

Post-procedure1

(c) Turn the ignition switch off.





