| | | |
|---|---|---|
| **Last Modified:** 12-04-2024 | 6.11:8.1.0 | **Doc ID:** RM100000002BIYC |
| **Model Year Start:** 2023 | **Model:** Prius Prime | **Prod Date Range:** [03/2023 - ] |
| **Title:** HYBRID / BATTERY CONTROL: PLUG-IN CHARGE CONTROL SYSTEM (for PHEV Model): P0E619E; Hybrid/EV Battery Charger Enable Circuit Stuck On; 2023 - 2024 MY Prius Prime [03/2023 - ] | | |

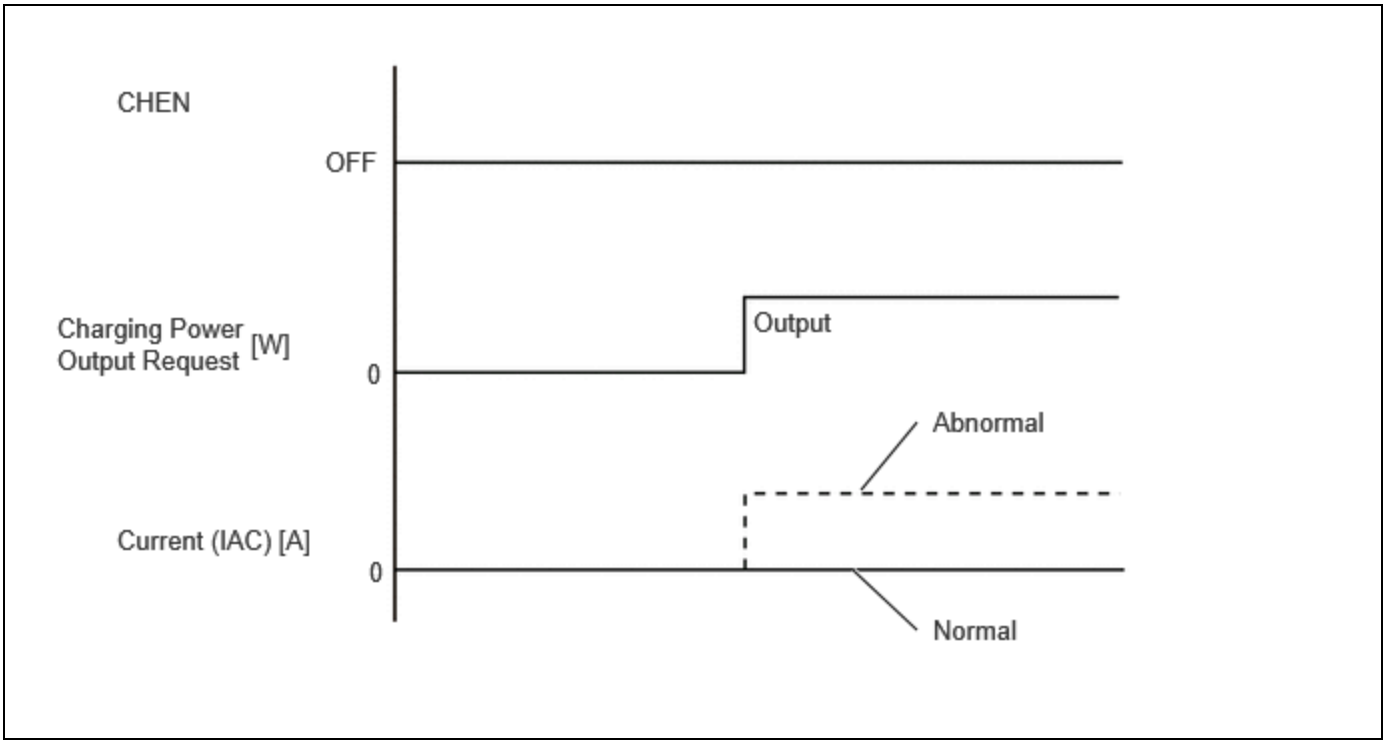
| | | |
|---|---|---|
| **DTC** | **P0E619E** | **Hybrid/EV Battery Charger Enable Circuit Stuck On** |

# DTC SUMMARY

### MALFUNCTION DESCRIPTION

Plugin charge control ECU assembly confirms the CHEN function between plugin charge control ECU assembly and electric vehicle charger assembly when plug-in AC charging starts to health check for mechanical shutdown (SDWN) function due to CHEN signal.

Even if CHEN requests shutdown, electrical current (IAC) is output in conjunction with charging power output request signal, and the state in which CHEN cannot be shutdown is determined to be CHEN function abnormality (electric vehicle charger gate permission signal shutdown impossible).




# DESCRIPTION

Plugin charge control ECU assembly checks CHEN function. When a malfunction is detected, the plugin charge control ECU assembly output the DTC.

| DTC NO. | DETECTION ITEM | DTC DETECTION CONDITION | TROUBLE AREA | MIL | WARNING INDICATE | DTC OUTPUT FROM | PRIORITY | NOTE |
|---|---|---|---|---|---|---|---|---|
| P0E619E | Hybrid/EV Battery Charger Enable Circuit Stuck On | When CHEN status is prohibit and power output request signal from electric vehicle charger assembly is higher than determined value, electric current (IAC) output.<br><br>(1 trip detection logic) | • Plugin charge control ECU assembly<br>• Electric vehicle charger assembly<br>• Wire harness or connector | Comes on | Master Warning:<br><br>Comes on | Plug-in Control | B | SAE Code: P0E64 |

## MONITOR DESCRIPTION

When current (IAC) is output in accordance with the charging power command despite a cut-off (OFF) command during the CHEN function check, and cut-off by CHEN is not possible, the plugin charge control ECU assembly stores a DTC and illuminates the MIL.

## MONITOR STRATEGY

| | |
|---|---|
| Related DTCs | P0E64: Battery Charger Enable Circuit Range/Performance |
| Required sensors/components | Plugin charge control ECU assembly<br>Electric vehicle charger assembly |
| Frequency of operation | - |
| Duration | TMC's intellectual property |
| MIL operation | 1 driving cycle |
| 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 P0E619E 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 INFO
- When clearing the permanent DTCs, refer to the "CLEAR PERMANENT DTC" procedure.

  Click here INFO

1. Connect the GTS to the DLC3.
2. Turn the ignition switch to ON and turn the GTS on.
3. Clear the DTCs (even if no DTCs are stored, perform the clear DTC procedure).
4. Turn the ignition switch off and wait for 2 minutes or more.
5. Connect the electric vehicle charger cable assembly, and plug-in charge the vehicle for 30 seconds or more. [*1]
6. Disconnect the electric vehicle charger cable assembly and wait for 10 seconds or more. [*2]

**HINT:**

[*1] to [*2]: Normal judgment procedure.

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

7. Turn the ignition switch to ON and turn the GTS on.
8. Enter the following menus: Powertrain / Plug-in Control / Utility / All Readiness.
9. 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.

# PROCEDURE

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

Pre-procedure1

(a) Enter the following menus:

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

Procedure1

(b) Check for DTCs.

| RESULT | PROCEED TO |
|---|---|
| P0E619E only is output, or DTCs except the ones in the table below are also output. | A |
| DTCs of plug-in charge control system in the tables below are output. | B |

| MALFUNCTION CONTENT | RELEVANT DTC | |
|---|---|---|
| Microcomputer malfunction | P060B49 | Plug-in Control Module A/D Processing Internal Electronic Failure |

| MALFUNCTION CONTENT | RELEVANT DTC | |
|---|---|---|
| | P06881F | DC Quick Charging Control Module Power Relay Sense Circuit Intermittent |
| | P1C1F49 | Hybrid/EV Battery Charger Control Module A/D Processing Internal Electronic Failure |
| Communication system malfunction | P0E5E87 | Plug-in Control Module Processor from Hybrid/EV Battery Charger Control Module Processor Missing Message |
| | U01BB87 | Lost Communication with Battery Charger Control Module "B" Missing Message |
| Sensor and actuator circuit malfunction | P0D3812 | Hybrid/EV Battery Charger Input Current Sensor Circuit Circuit Short to Auxiliary Battery |
| | P0D3814 | Hybrid/EV Battery Charger Input Current Sensor Circuit Circuit Short to Ground or Open |
| | P0D3828 | Hybrid/EV Battery Charger Input Current Sensor Circuit Signal Bias Level Out of Range / Zero Adjustment Failure |
| | P1BD812 | Hybrid/EV Battery Charger Input Current Sensor "B" Circuit Short to Auxiliary Battery |
| | P1BD814 | Hybrid/EV Battery Charger Input Current Sensor "B" Circuit Short to Ground or Open |

**HINT:**

- P0E619E may be output as a result of the malfunction indicated by the DTCs above.

  a. The chart above is listed in inspection order of priority.
  b. Check DTCs that are output at the same time by following the listed order. (The main cause of the malfunction can be determined without performing unnecessary inspections.)

Post-procedure1

(c) Turn the ignition switch off.

**A** ▶ **REPLACE ELECTRIC VEHICLE CHARGER ASSEMBLY**

**B** ▶ **GO TO DTC CHART (PLUG-IN CHARGE CONTROL SYSTEM)**