

<b>DTC</b>	<b>P0A1D/615</b>	<b>HYBRID POWERTRAIN CONTROL MODULE</b>
------------	------------------	---

## CIRCUIT DESCRIPTION

The HV control ECU performs self-checks to detect an internal operating malfunction in the ECU.

DTC No.	INF Code	DTC Detection Condition	Trouble Area
P0A1D	615	HV control ECU internal error	• HV control ECU

## MONITOR DESCRIPTION

The HV control ECU performs diagnostic monitoring to verify proper operation of internal and external ECU systems. In this diagnostics monitor, the HV control ECU checks the communication bus off count and the message register of the CAN (Controller Area Network) controller.

If the HV control ECU detects an error in the communication bus off count or message register, it will conclude that there is a malfunction in the HV control ECU. The HV control ECU illuminates the MIL and sets a DTC.

## MONITOR STRATEGY

Related DTCs	P0A1D (INF 615): Hybrid vehicle control ECU/CAN communication malfunction
Required sensor/components	Hybrid vehicle control ECU
Frequency of operation	Continuous
Duration	TOYOTA's intellectual property
MIL operation	Immediately
Sequence of operation	None

## TYPICAL ENABLING CONDITIONS

The monitor will run whenever the following DTCs are not present	TOYOTA's intellectual property
Other conditions belong to TOYOTA's intellectual property	–

## TYPICAL MALFUNCTION THRESHOLDS

### Case 1:

Message register of the CAN controller	Read/write check error
--	------------------------

### Case 2:

Communication bus off count	Designed number or more
-----------------------------	-------------------------

## COMPONENT OPERATING RANGE

Hybrid vehicle control ECU	DTC P0A1D (INF 615) is not detected
----------------------------	-------------------------------------

## INSPECTION PROCEDURE

If the above information (INF) code is present, replace the HV control ECU.

<b>REPLACE HYBRID VEHICLE CONTROL ECU (See page 21-124)</b>
---