

DTC	P0A1D/163	HYBRID POWERTRAIN CONTROL MODULE
DTC	P0A1D/164	HYBRID POWERTRAIN CONTROL MODULE
DTC	P0A1D/511	HYBRID POWERTRAIN CONTROL MODULE
DTC	P0A1D/512	HYBRID POWERTRAIN CONTROL MODULE

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	163 164 511 512	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 one of these monitors, the HV control ECU monitors the power supply for the motor main CPU. If the HV control ECU detects a failure in the power supply for the motor main CPU, it will illuminate the MIL and set a DTC.

MONITOR STRATEGY

Related DTCs	P0A1D (INF 163/164/511/512): Hybrid vehicle control ECU/Motor ECU power 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

Hybrid vehicle control ECU	Internal error
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COMPONENT OPERATING RANGE

Hybrid vehicle control ECU	DTC P0A1D (INF 163/164/511/512) is not detected
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INSPECTION PROCEDURE

If any of the above information (INF) codes is present, replace the HV control ECU.

REPLACE HYBRID VEHICLE CONTROL ECU (See page 21-124)
