

DTC	P0A1D/166	HYBRID POWERTRAIN CONTROL MODULE
DTC	P0A1D/167	HYBRID POWERTRAIN CONTROL MODULE
DTC	P0A1D/197	HYBRID POWERTRAIN CONTROL MODULE
DTC	P0A1D/200	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	166 167 197 200	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 diagnostic monitor, the HV control ECU checks for an R/D (Resolver/Digital Converter) malfunction involving the generator resolver.

If the HV control ECU detects an R/D error, it will conclude that there is an internal malfunction involving the generator resolver. The HV control ECU will illuminate the MIL and set a DTC.

MONITOR STRATEGY

Related DTCs	P0A1D (INF 166/167/197/200): Hybrid vehicle control ECU/Generator R/D 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 166/167/197/200) 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)
