

<b>Last Modified:</b> 12-04-2024	6.11:8.1.0	<b>Doc ID:</b> RM10000002BHRI
<b>Model Year Start:</b> 2023	<b>Model:</b> Prius Prime	<b>Prod Date Range:</b> [03/2023 - ]
<b>Title:</b> HYBRID / BATTERY CONTROL: MOTOR GENERATOR CONTROL SYSTEM (for PHEV Model): VEHICLE BEHAVIOR CHART; 2023 - 2024 MY Prius Prime [03/2023 - ]		

## VEHICLE BEHAVIOR CHART

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(a) Vehicle behavior categorized by DTC

If a DTC is output, the vehicle behaves as follows.

DTC NO.	DETECTION ITEM	VEHICLE BEHAVIOR WHEN DTC IS OUTPUT
P033506	Crankshaft Position Sensor "A" Algorithm Based Failure	Normal driving
P033516	Crankshaft Position Sensor "A" Circuit Voltage Below Threshold	Normal driving
P033517	Crankshaft Position Sensor "A" Circuit Voltage Above Threshold	Normal driving
P033523	Crankshaft Position Sensor "A" Signal Stuck Low	Normal driving
P033524	Crankshaft Position Sensor "A" Signal Stuck High	Normal driving
P033562	Crankshaft Position Sensor "A" Signal Compare Failure	Normal driving
P034006	Camshaft Position Sensor "A" Circuit Bank 1 or Single Sensor Algorithm Based Failure	Normal driving
P034016	Camshaft Position Sensor "A" Circuit Bank 1 or Single Sensor Circuit Voltage Below Threshold	Normal driving
P034017	Camshaft Position Sensor "A" Circuit Bank 1 or Single Sensor Circuit Voltage Above Threshold	Normal driving
P034023	Camshaft Position Sensor "A" Circuit Bank 1 or Single Sensor Signal Stuck Low	Normal driving
P034024	Camshaft Position Sensor "A" Circuit Bank 1 or Single Sensor Signal Stuck High	Normal driving
P034062	Camshaft Position Sensor "A" Circuit Bank 1 or Single Sensor Signal Compare Failure	Normal driving
P062F44	Internal Control Module EEPROM Data Memory Failure	Normal driving
P062F46	Generator Control Module (EEPROM Learning Value) Calibration / Parameter Memory Failure	Reduced output power
P06B01C	Generator Control Module Position Sensor REF Power Source Circuit Voltage Out of Range	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P06D61C	Generator Control Module Offset Power Circuit Voltage Out of Range	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> </ul>

DTC NO.	DETECTION ITEM	VEHICLE BEHAVIOR WHEN DTC IS OUTPUT
		<ul style="list-style-type: none"> <li>Engine used while driving and engine speed becomes high</li> </ul>
P0A0011	Motor Electronics Coolant Temperature Sensor Circuit Short to Ground	Normal driving
P0A0015	Motor Electronics Coolant Temperature Sensor Circuit Short to Battery or Open	Normal driving
P0A001C	Motor Electronics Coolant Temperature Sensor Circuit Voltage Out of Range	Normal driving
P0A1A47	Generator Control Module Watchdog / Safety MC Failure	<ul style="list-style-type: none"> <li>Greatly reduced output power</li> <li>Driving range is limited</li> <li>Engine always stopped</li> </ul>
P0A1A49	Generator Control Module Internal Electronic Failure	<ul style="list-style-type: none"> <li>Greatly reduced output power</li> <li>Driving range is limited</li> <li>Engine always stopped</li> </ul>
P0A1B1F	Generator Control Module Circuit Intermittent	<ul style="list-style-type: none"> <li>Greatly reduced output power</li> <li>Driving in reverse not possible</li> <li>Driving range is limited</li> <li>Engine used while driving and engine speed becomes high</li> </ul>
P0A1B47	Drive Motor "A" Control Module Watchdog / Safety MC Failure	<ul style="list-style-type: none"> <li>Greatly reduced output power</li> <li>Driving in reverse not possible</li> <li>Driving range is limited</li> <li>Engine used while driving and engine speed becomes high</li> </ul>
P0A1B49	Drive Motor "A" Control Module Internal Electronic Failure	<ul style="list-style-type: none"> <li>Greatly reduced output power</li> <li>Driving in reverse not possible</li> <li>Driving range is limited</li> <li>Engine used while driving and engine speed becomes high</li> </ul>
P0A1B94	Drive Motor "A" Control Module Unexpected Operation	<ol style="list-style-type: none"> <li>Normal driving</li> <li>Hybrid system stopped when malfunction continues</li> </ol>
P0A2A11	Drive Motor "A" Temperature Sensor Circuit Short to Ground	Normal driving
P0A2A15	Drive Motor "A" Temperature Sensor Circuit Short to Auxiliary Battery or Open	Normal driving
P0A2A1C	Drive Motor "A" Temperature Sensor Voltage Out of Range	Normal driving
P0A2A1F	Drive Motor "A" Temperature Sensor Circuit Intermittent	Normal driving
P0A3611	Generator Temperature Sensor Circuit Short to Ground	Normal driving

DTC NO.	DETECTION ITEM	VEHICLE BEHAVIOR WHEN DTC IS OUTPUT
P0A3615	GeneratorTemperature Sensor Circuit Short to Auxiliary Battery or Open	Normal driving
P0A361C	GeneratorTemperature Sensor Voltage Out of Range	Normal driving
P0A361F	GeneratorTemperature Sensor Circuit Intermittent	Normal driving
P0A3F16	Drive Motor "A" Position Sensor Circuit Voltage Below Threshold	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0A3F1F	Drive Motor "A" Position Sensor Circuit Intermittent	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0A3F21	Drive Motor "A" Position Sensor Signal Amplitude < Minimum	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0A3F22	Drive Motor "A" Position Sensor Signal Amplitude > Maximum	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0A4B16	Generator Position Sensor Circuit Voltage Below Threshold	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P0A4B1F	Generator Position Sensor Circuit Intermittent	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P0A4B21	Generator Position Sensor Signal Amplitude < Minimum	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P0A4B22	Generator Position Sensor Signal Amplitude > Maximum	<ul style="list-style-type: none"> <li>• Reduced output power</li> </ul>

DTC NO.	DETECTION ITEM	VEHICLE BEHAVIOR WHEN DTC IS OUTPUT
		<ul style="list-style-type: none"> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P0A6012	Drive Motor "A" Phase V Current (High Resolution) Circuit Short to Battery	Normal driving
P0A6014	Drive Motor "A" Phase V Current (High Resolution) Circuit Short to Ground or Open	Normal driving
P0A601C	Drive Motor "A" Phase V Current (High Resolution) Circuit Voltage Out of Range	Normal driving
P0A601F	Drive Motor "A" Phase V Current (High Resolution) Circuit Intermittent	-
P0A6312	Drive Motor "A" Phase W Current (High Resolution) Circuit Short to Battery	Normal driving
P0A6314	Drive Motor "A" Phase W Current (High Resolution) Circuit Short to Ground or Open	Normal driving
P0A631C	Drive Motor "A" Phase W Current (High Resolution) Circuit Voltage Out of Range	Normal driving
P0A631F	Drive Motor "A" Phase W Current (High Resolution) Circuit Intermittent	-
P0A7872	Drive Motor "A" Inverter Actuator Stuck Open	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0A7873	Drive Motor "A" Inverter Actuator Stuck Closed	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0A789E	Drive Motor "A" Inverter Stuck On	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0A7A72	Generator Inverter Actuator Stuck Open	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P0A7A73	Generator Inverter Actuator Stuck Closed	<ol style="list-style-type: none"> <li>1. Normal driving</li> <li>2. Malfunction continues <ul style="list-style-type: none"> <li>◦ Reduced output power</li> </ul> </li> </ol>

DTC NO.	DETECTION ITEM	VEHICLE BEHAVIOR WHEN DTC IS OUTPUT
		<ul style="list-style-type: none"> <li>◦ Driving range is limited</li> <li>◦ Engine always stopped</li> </ul> <p>3. Hybrid system stopped when malfunction continues</p>
P0A7A9E	Generator Inverter Stuck On	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P0A9000	Drive Motor "A" Performance	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0A9200	Hybrid/EV Generator Performance	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P0A949E	DC/DC Converter Stuck On	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> <li>• Engine not stopped</li> </ul>
P0AED11	Drive Motor Inverter Temperature Sensor "A" Circuit Short to Ground	Normal driving
P0AED15	Drive Motor Inverter Temperature Sensor "A" Circuit Short to Battery or Open	Normal driving
P0AED1C	Drive Motor Inverter Temperature Sensor "A" Circuit Voltage Out of Range	Normal driving
P0BCC11	Generator Inverter Temperature Sensor Circuit Short to Ground	Normal driving
P0BCC15	Generator Inverter Temperature Sensor Circuit Short to Battery or Open	Normal driving
P0BCC1C	Generator Inverter Temperature Sensor Circuit Voltage Out of Range	Normal driving
P0BE512	Drive Motor "A" Phase U Current Sensor Circuit Short to Battery	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0BE514	Drive Motor "A" Phase U Current Sensor Circuit Short to Ground or Open	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> </ul>

DTC NO.	DETECTION ITEM	VEHICLE BEHAVIOR WHEN DTC IS OUTPUT
		<ul style="list-style-type: none"> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0BE51F	Drive Motor "A" Phase U Current Sensor Circuit Intermittent	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0BE528	Drive Motor "A" Phase U Current Sensor Signal Bias Level Out of Range / Zero Adjustment Failure	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0BE912	Drive Motor "A" Phase V Current Sensor Circuit Short to Battery	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0BE914	Drive Motor "A" Phase V Current Sensor Circuit Short to Ground or Open	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0BE91F	Drive Motor "A" Phase V Current Sensor Circuit Intermittent	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0BE928	Drive Motor "A" Phase V Current Sensor Signal Bias Level Out of Range / Zero Adjustment Failure	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0BED12	Drive Motor "A" Phase W Current Sensor Circuit Short to Battery	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0BED14	Drive Motor "A" Phase W Current Sensor Circuit Short to Ground or Open	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> </ul>

DTC NO.	DETECTION ITEM	VEHICLE BEHAVIOR WHEN DTC IS OUTPUT
		<ul style="list-style-type: none"> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0BED1F	Drive Motor "A" Phase W Current Sensor Circuit Intermittent	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0BED28	Drive Motor "A" Phase W Current Sensor Signal Bias Level Out of Range / Zero Adjustment Failure	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0BFD62	Drive Motor "A" Phase U-V-W Current Sensor Signal Compare Failure	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0BFF1D	Drive Motor "A" Circuit Current Out of Range	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0C1900	Drive Motor "A" Execution Torque Performance	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0C3811	DC/DC Converter Temperature Sensor "A" Circuit Short to Ground	Normal driving
P0C3815	DC/DC Converter Temperature Sensor "A" Circuit Short to Battery or Open	Normal driving
P0C381C	DC/DC Converter Temperature Sensor "A" Circuit Voltage Out of Range	Normal driving
P0C3D11	DC/DC Converter Temperature Sensor "B" Circuit Short to Ground	Normal driving
P0C3D15	DC/DC Converter Temperature Sensor "B" Circuit Short to Battery or Open	Normal driving
P0C3D1C	DC/DC Converter Temperature Sensor "B" Circuit Voltage Out of Range	Normal driving
P0C5013	Drive Motor "A" Position Sensor Circuit "A" Circuit Open	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> </ul>

DTC NO.	DETECTION ITEM	VEHICLE BEHAVIOR WHEN DTC IS OUTPUT
		<ul style="list-style-type: none"> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0C5016	Drive Motor "A" Position Sensor Circuit "A" Circuit Voltage Below Threshold	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0C5017	Drive Motor "A" Position Sensor Circuit "A" Circuit Voltage Above Threshold	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0C501F	Drive Motor "A" Position Sensor Circuit "A" Circuit Intermittent	-
P0C5A13	Drive Motor "A" Position Sensor Circuit "B" Circuit Open	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0C5A16	Drive Motor "A" Position Sensor Circuit "B" Circuit Voltage Below Threshold	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0C5A17	Drive Motor "A" Position Sensor Circuit "B" Circuit Voltage Above Threshold	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0C5A1F	Drive Motor "A" Position Sensor Circuit "B" Circuit Intermittent	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P0C6413	Generator Position Sensor Circuit "A" Circuit Open	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P0C6416	Generator Position Sensor Circuit "A" Circuit Voltage Below Threshold	<ul style="list-style-type: none"> <li>• Reduced output power</li> </ul>



DTC NO.	DETECTION ITEM	VEHICLE BEHAVIOR WHEN DTC IS OUTPUT
		<ul style="list-style-type: none"> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P0C6417	Generator Position Sensor Circuit "A" Circuit Voltage Above Threshold	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P0C641F	Generator Position Sensor Circuit "A" Circuit Intermittent	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P0C6913	Generator Position Sensor Circuit "B" Circuit Open	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P0C6916	Generator Position Sensor Circuit "B" Circuit Voltage Below Threshold	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P0C6917	Generator Position Sensor Circuit "B" Circuit Voltage Above Threshold	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P0C691F	Generator Position Sensor Circuit "B" Circuit Intermittent	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P0C7917	Drive Motor "A" Inverter Voltage Sensor (VH) Circuit Voltage Above Threshold	<ol style="list-style-type: none"> <li>1. Normal driving</li> <li>2. Hybrid system stopped when malfunction continues</li> </ol>
P0CA300	DC/DC Converter Step Up Voltage Performance	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>

DTC NO.	DETECTION ITEM	VEHICLE BEHAVIOR WHEN DTC IS OUTPUT
P0D2D16	Drive Motor "A" Inverter Voltage Sensor (VH) Circuit Voltage Below Threshold	Reduced output power
P0D2D17	Drive Motor "A" Inverter Voltage Sensor (VH) Circuit Voltage Above Threshold	Reduced output power
P0D2D1F	Drive Motor "A" Inverter Voltage Sensor (VH) Circuit Intermittent	-
P0D3319	DC/DC Converter Circuit Current Above Threshold	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> <li>• Engine not stopped</li> </ul>
P0DFA62	Generator Phase U-V-W Current Sensor Signal Compare Failure	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P0E0012	Generator Phase U Current Sensor Circuit Short to Battery	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P0E0014	Generator Phase U Current Sensor Circuit Short to Ground or Open	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P0E001F	Generator Phase U Current Sensor Circuit Intermittent	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P0E0028	Generator Phase U Current Sensor Signal Bias Level Out of Range / Zero Adjustment Failure	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P0E0412	Generator Phase V Current Sensor Circuit Short to Battery	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P0E0414	Generator Phase V Current Sensor Circuit Short to Ground or Open	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P0E041F	Generator Phase V Current Sensor Circuit Intermittent	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P0E0428	Generator Phase V Current Sensor Signal Bias Level Out of Range / Zero Adjustment Failure	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> </ul>

DTC NO.	DETECTION ITEM	VEHICLE BEHAVIOR WHEN DTC IS OUTPUT
		<ul style="list-style-type: none"> <li>• Engine always stopped</li> </ul>
P0E0812	Generator Phase W Current Sensor Circuit Short to Battery	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P0E0814	Generator Phase W Current Sensor Circuit Short to Ground or Open	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P0E081F	Generator Phase W Current Sensor Circuit Intermittent	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P0E0828	Generator Phase W Current Sensor Signal Bias Level Out of Range / Zero Adjustment Failure	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P0E3116	DC/DC Converter Voltage Sensor "A" (VL) Circuit Voltage Below Threshold	Reduced output power
P0E3117	DC/DC Converter Voltage Sensor "A" (VL) Circuit Voltage Above Threshold	Reduced output power
P0E311F	DC/DC Converter Voltage Sensor "A" (VL) Circuit Intermittent	-
P0E5111	DC/DC Converter Current Sensor Circuit Short to Ground	Reduced output power
P0E5115	DC/DC Converter Current Sensor Circuit Short to Battery or Open	Reduced output power
P0E511F	DC/DC Converter Current Sensor Circuit Intermittent	-
P0E5128	DC/DC Converter Current Sensor Signal Bias Level Out of Range / Zero Adjustment Failure	Reduced output power
P0E5717	DC/DC Converter Voltage Sensor "A" (VL) Circuit Voltage Above Threshold	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P0E7100	Generator Execution Torque Performance	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P0E9B11	DC/DC Converter Current Sensor "B" Circuit Low Circuit Short to Ground	Reduced output power
P0E9B15	DC/DC Converter Current Sensor "B" Circuit High Circuit Short to Battery or Open	Reduced output power
P0E9B1F	DC/DC Converter Current Sensor "B" Circuit Intermittent/Erratic Circuit Intermittent	-

DTC NO.	DETECTION ITEM	VEHICLE BEHAVIOR WHEN DTC IS OUTPUT
P0E9B28	DC/DC Converter Current Sensor "B" Circuit Range/Performance Signal Bias Level Out of Range / Zero Adjustment Failure	Reduced output power
P0EA011	DC/DC Converter Current Sensor "C" Circuit Low Circuit Short to Ground	Reduced output power
P0EA015	DC/DC Converter Current Sensor "C" Circuit High Circuit Short to Battery or Open	Reduced output power
P0EA028	DC/DC Converter Current Sensor "C" Circuit Range/Performance Signal Bias Level Out of Range / Zero Adjustment Failure	Reduced output power
P0EA59E	DC/DC Converter "B" Stuck On	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• A driving range is limited</li> <li>• Engine not stopped</li> </ul>
P19F81C	Generator Control Module Offset Power Circuit Voltage Out of Range	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P1C2A1C	Generator A/D Converter Circuit Circuit Voltage Out of Range	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P1C2A49	Generator A/D Converter Circuit Internal Electronic Failure	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P1C2A71	Generator A/D Converter Circuit Actuator Stuck	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P1C2B1C	Drive Motor "A" Control Module A/D Converter Circuit Voltage Out of Range	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P1C2B49	Drive Motor "A" Control Module A/D Converter Circuit Internal Electronic Failure	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P1C2B71	Drive Motor "A" Control Module A/D Converter Circuit Actuator Stuck	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> </ul>

DTC NO.	DETECTION ITEM	VEHICLE BEHAVIOR WHEN DTC IS OUTPUT
		<ul style="list-style-type: none"> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P1C5D19	Drive Motor "A" Inverter Circuit Current Above Threshold	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P1C5F19	Generator Inverter Circuit Current Above Threshold	<ol style="list-style-type: none"> <li>1. Normal driving</li> <li>2. Malfunction continues <ul style="list-style-type: none"> <li>◦ Reduced output power</li> <li>◦ Driving range is limited</li> <li>◦ Engine always stopped</li> </ul> </li> <li>3. Hybrid system stopped when malfunction continues</li> </ol>
P1C601F	Generator Control Module Position Sensor REF Power Source Circuit Intermittent	-
P1C621F	Generator Control Module Offset Power Circuit Intermittent	-
P1C641F	Generator Control Module Circuit Intermittent	-
P1C651F	Generator Control Module Circuit Intermittent	-
P1C671F	Drive Motor "A" Phase U-V-W Current Sensor Circuit Intermittent	-
P1C691F	Generator Phase U-V-W Current Sensor Circuit Intermittent	-
P1CA51D	Hybrid/EV Generator Circuit Current Out of Range	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P1CAC49	Generator Position Sensor Internal Electronic Failure	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P1CAD49	Drive Motor "A" Position Sensor Internal Electronic Failure	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P1CAF38	Generator Position Sensor REF Signal Cycle Malfunction Signal Frequency Incorrect	<ul style="list-style-type: none"> <li>• Reduced output power</li> </ul>

DTC NO.	DETECTION ITEM	VEHICLE BEHAVIOR WHEN DTC IS OUTPUT
		<ul style="list-style-type: none"> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P1CB038	Drive Motor "A" Position Sensor REF Signal Frequency Incorrect	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving in reverse not possible</li> <li>• Driving range is limited</li> <li>• Engine used while driving and engine speed becomes high</li> </ul>
P1CB59E	DC/DC Converter Voltage Sensor "A" (VL) Stuck On	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Driving range is limited</li> <li>• Engine not stopped</li> </ul>
P1CB69E	Drive Motor "A" Inverter Voltage Sensor (VH) Stuck On	Reduced output power
P1F2F19	DC/DC Converter "B" Circuit Current Above Threshold	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• A driving range is limited</li> <li>• Engine not stopped</li> </ul>
P1F7011	DC/DC Converter Current Sensor "D" Circuit Low Circuit Short to Ground	Reduced output power
P1F7015	DC/DC Converter Current Sensor "D" Circuit High Circuit Short to Battery or Open	Reduced output power
P1F7028	DC/DC Converter Current Sensor "D" Circuit Range/Performance Signal Bias Level Out of Range / Zero Adjustment Failure	Reduced output power
P1F7562	DC/DC Converter Current Sensor A/C Correlation Signal Compare Failure	Reduced output power
P1F7662	DC/DC Converter Current Sensor B/D Correlation Signal Compare Failure	Reduced output power
P26DF1C	Generator Control Module Position Sensor REF Power Source Circuit Voltage Out of Range	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine used while driving and engine speed becomes high</li> <li>• Driving range is limited when driving with engine stopped</li> </ul>
P26DF1F	Generator Control Module Position Sensor REF Power Source Circuit Intermittent	-
P274A11	Transmission Fluid Temperature Sensor "C" Circuit Short to Ground	Normal driving
P274A15	Transmission Fluid Temperature Sensor "C" Circuit Short to Auxiliary Battery or Open	Normal driving
P274A1C	Transmission Fluid Temperature Sensor "C" Voltage Out of Range	Normal driving

DTC NO.	DETECTION ITEM	VEHICLE BEHAVIOR WHEN DTC IS OUTPUT
P274A1F	Transmission Fluid Temperature Sensor "C" Circuit Intermittent	Normal driving
P2C8C11	DC/DC Converter Temperature Sensor "D" Circuit Low Circuit Short to Ground	Normal driving
P2C8C15	DC/DC Converter Temperature Sensor "D" Circuit High Circuit Short to Battery or Open	Normal driving
P2C8C1C	DC/DC Converter Temperature Sensor "D" Circuit Range/Performance Circuit Voltage Out of Range	Normal driving
P2CA511	DC/DC Converter Temperature Sensor "E" Circuit Low Circuit Short to Ground	Normal driving
P2CA515	DC/DC Converter Temperature Sensor "E" Circuit High Circuit Short to Battery or Open	Normal driving
P2CA51C	DC/DC Converter Temperature Sensor "E" Circuit Range/Performance Circuit Voltage Out of Range	Normal driving
P31241F	Lost Communication between Drive Motor "A" and HV/EV ECU Circuit Intermittent	-
P313383	Communication Error from Generator to Drive Motor "A" Value of Signal Protection Calculation Incorrect	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P313386	Communication Error from Generator to Drive Motor "A" Signal Invalid	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P313387	Communication Error from Generator to Drive Motor "A" Missing Message	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P313483	Communication Error from Drive Motor "A" to Generator Value of Signal Protection Calculation Incorrect	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P313486	Communication Error from Drive Motor "A" to Generator Signal Invalid	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P313487	Communication Error from Drive Motor "A" to Generator Missing Message	<ul style="list-style-type: none"> <li>• Greatly reduced output power</li> <li>• Driving range is limited</li> <li>• Engine always stopped</li> </ul>
P314F1F	DC/DC Converter Voltage Sensor "A" (VL) Circuit Intermittent	Reduced output power
P31531D	DC/DC Converter Current Sensor Circuit Current Out of Range	Reduced output power
U010087	Lost Communication With ECM/PCM "A" Missing Message	Normal driving

DTC NO.	DETECTION ITEM	VEHICLE BEHAVIOR WHEN DTC IS OUTPUT
U029387	Lost Communication With Hybrid Powertrain Control Module Missing Message	Normal driving
U117008	Lost Communication with Brake System Control Module (ch2) Bus Signal / Message Failure	Normal driving
U117087	Lost Communication With Brake System Control Module(ch2) Missing Message	Normal driving
U11B300	Lost Communication with Hybrid/EV Powertrain Control Module (ch5) (System 2) Missing Message	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine not stopped</li> </ul>
U11B387	Lost Communication with Hybrid/EV Powertrain Control Module (ch5) Missing Message	<ul style="list-style-type: none"> <li>• Reduced output power</li> <li>• Engine not stopped</li> </ul>

