

Caution

- Vehicle specifications differ depending on the vehicle identification number (VIN).

- Type A VIN:
 JM0 KE***** 100001—
 JM6 KE***** 100001—
 JM7 KE***** 100001—
 JM8 KE***** 100001—
 JMZ KE***** 100001—
 KE10** 100001—
- Type B VIN:
 JM0 KE***** 200001—
 JM6 KE***** 200001—
 JM8 KE***** 200001—
 JMZ KE***** 200001—
 KE10** 200001—

DTC No.	Condition	Detection condition
P0010:00	Electric variable valve timing control circuit range/performance problem	<ul style="list-style-type: none"> • A malfunction is detected in the results of the on-board diagnostic test received from the electric variable valve timing driver. • The motor speed signal received from the electric variable valve timing driver is in error.
P0011:00	Electric variable valve timing control system: over-advanced	<ul style="list-style-type: none"> • A condition in which the actual intake valve timing advances (excess advance) compared to the target intake valve timing continues for the specified period.
P0012:00	Electric variable valve timing control system: over-retarded	<ul style="list-style-type: none"> • A condition in which the actual intake valve timing retards (excess retard) compared to the target intake valve timing continues for the specified period.
P0014:00	Hydraulic variable valve timing control system: over-advanced	<ul style="list-style-type: none"> • A condition in which the actual exhaust valve timing advances (excess advance) compared to the target exhaust valve timing continues for the specified period.
P0015:00	Hydraulic variable valve timing control system: over-retarded	<ul style="list-style-type: none"> • A condition in which the actual exhaust valve timing retards (excess retard) compared to the target exhaust valve timing continues for the specified period.
P0031:00	A/F sensor heater control circuit low input	<ul style="list-style-type: none"> • The PCM monitors the A/F sensor heater output voltage. If the PCM turns the A/F sensor heater off but the A/F sensor heater circuit remains low voltage, the PCM determines that the A/F sensor heater circuit has a malfunction.
P0032:00	A/F sensor heater control circuit high input	<ul style="list-style-type: none"> • The PCM monitors the A/F sensor heater output voltage. If the PCM turns the A/F sensor heater on but the A/F sensor heater circuit remains high voltage, the PCM determines that the A/F sensor heater circuit has a malfunction.
P0037:00	HO2S heater control circuit low input	<ul style="list-style-type: none"> • The PCM monitors the HO2S heater output voltage. If the PCM turns the HO2S heater off but the HO2S heater circuit remains low voltage, the PCM determines that the HO2S heater circuit has a malfunction.
P0038:00	HO2S heater control circuit high input	<ul style="list-style-type: none"> • The PCM monitors the HO2S heater output voltage. If the PCM turns the HO2S heater on but the HO2S heater circuit remains high voltage, the PCM determines that the HO2S heater circuit has a malfunction.
P0069:00	Manifold absolute pressure/atmospheric pressure correlation problem	<ul style="list-style-type: none"> • The PCM monitors the difference between intake manifold vacuum and atmospheric pressure. If the difference is below -12 kPa {-0.12 kgf/cm², -1.7 psi} or above 12 kPa {0.12 kgf/cm², 1.7 psi} when the following conditions are met, the PCM determines that there is a MAP sensor performance problem. MONITORING CONDITIONS <ul style="list-style-type: none"> — 12—15 s from when ignition is switched off.
P0072:00*5	Ambient temperature sensor circuit low input	Type A VIN <ul style="list-style-type: none"> • The PCM monitors the input signal from the ambient temperature sensor. If the voltage from the ambient temperature sensor is below 0.2 V for 5 s, the PCM determines that the ambient temperature sensor circuit has a malfunction. Type B VIN <ul style="list-style-type: none"> • The PCM monitors the input signal from the ambient temperature sensor. If the voltage from the ambient temperature sensor is below 0.18 V, the PCM determines that the ambient temperature sensor circuit has a malfunction.

DTC No.	Condition	Detection condition
P0073:00*5	Ambient temperature sensor circuit high input	Type A VIN <ul style="list-style-type: none"> The PCM monitors the input signal from the ambient temperature sensor. If the voltage from the ambient temperature sensor is above 4.8 V for 5 s, the PCM determines that the ambient temperature sensor circuit has a malfunction. Type B VIN <ul style="list-style-type: none"> The PCM monitors the input signal from the ambient temperature sensor. If the voltage from the ambient temperature sensor is above 4.88 V, the PCM determines that the ambient temperature sensor circuit has a malfunction.
P0089:00	Spill valve control solenoid valve control circuit range/performance problem	<ul style="list-style-type: none"> The average fuel pressure on the high pressure side, measured by the fuel pressure sensor, exceeds the specified value.
P0091:00	Fuel pressure regulator control circuit low input	<ul style="list-style-type: none"> When the PCM turns the spill valve control solenoid valve off but the spill valve control solenoid valve control circuit voltage is low for 5 s, the PCM determines that the spill valve control solenoid valve control circuit has a malfunction. MONITORING CONDITIONS <ul style="list-style-type: none"> The following conditions are met: <ul style="list-style-type: none"> Engine speed: 5,700 rpm or less Battery voltage: 10.5 V or more
P0092:00	Fuel pressure regulator control circuit high input	<ul style="list-style-type: none"> When the PCM turns the spill valve control solenoid valve on but the spill valve control solenoid valve circuit voltage is high for 5 s, the PCM determines that the spill valve control solenoid valve control circuit has a malfunction. MONITORING CONDITIONS <ul style="list-style-type: none"> The following conditions are met: <ul style="list-style-type: none"> Engine speed: 5,700 rpm or less Battery voltage: 10.5 V or more
P0096:00*7	IAT sensor No.2 circuit range/performance problem	<ul style="list-style-type: none"> IAT sensor No.1 and IAT sensor No.2 are compared after the engine is started* and correlation error occurs. <p>*: Ignition switch on when 6 h or more has passed since the ignition was switched off.</p>
P0097:00	IAT sensor No.2 circuit low input	<ul style="list-style-type: none"> If the PCM detects that the IAT sensor No.2 voltage at the PCM terminal 1CE is 0.33 V or less for 5 s, the PCM determines that the IAT sensor No.2 circuit voltage is low.
P0098:00	IAT sensor No.2 circuit high input	<ul style="list-style-type: none"> If the PCM detects that the IAT sensor No.2 voltage at the PCM terminal 1CE is 4.96 V or more for 5 s, the PCM determines that the IAT sensor No.2 circuit voltage is high.
P0101:00	MAF sensor circuit range/performance problem	Type A VIN <ul style="list-style-type: none"> When the conditions are as follows, the PCM compares the intake airflow amount with the estimated intake airflow amount (calculated from the barometric pressure, MAP sensor and throttle opening angle). MONITORING CONDITIONS <ul style="list-style-type: none"> Engine speed: above 500 rpm Intake manifold absolute pressure divided by barometric pressure: below 0.93 Throttle position (before 0.02 s): below 10 % Amount of fluctuation in intake camshaft position for 0.04 s: below 10 °CA Battery voltage: above 8 V <ul style="list-style-type: none"> The difference between the intake air amount measured by the MAF sensor and the estimated intake air amount estimated by the MAP sensor is outside of the specified value. Type B VIN <ul style="list-style-type: none"> The difference between the intake air amount measured by the MAF sensor and the estimated intake air amount estimated by the MAP sensor is outside of the specified value.
P0102:00	MAF sensor circuit low input	<ul style="list-style-type: none"> The PCM monitors input voltage from the MAF sensor when the engine is running. If the input voltage at the PCM terminal 2BC is below 0.2 V for 5 s, the PCM determines that the MAF sensor circuit has a malfunction.
P0103:00	MAF sensor circuit high input	<ul style="list-style-type: none"> The PCM monitors the input voltage from the MAF sensor when the engine is running. If the input voltage at the PCM terminal 2BC is above 4.94 V for 5 s, the PCM determines that the MAF sensor circuit has a malfunction.
P0107:00	MAP sensor circuit low input	<ul style="list-style-type: none"> The PCM monitors the input voltage from the MAP sensor. If the input voltage at the PCM terminal 1BW is below 0.08 V for 5 s, the PCM determines that the MAP sensor circuit has a malfunction.

DTC No.	Condition	Detection condition
P0108:00	MAP sensor circuit high input	<ul style="list-style-type: none"> The PCM monitors the input voltage from the MAP sensor. If the input voltage at the PCM terminal 1BW is above 4.89 V for 5 s, the PCM determines that the MAP sensor circuit has a malfunction.
P0112:00	IAT sensor No.1 circuit low input	<ul style="list-style-type: none"> The PCM monitors the IAT sensor No.1 signal. If the PCM detects that the IAT sensor No.1 voltage at the PCM terminal 2U is below 0.19 V for 5 s, the PCM determines that the IAT sensor No.1 circuit has a malfunction.
P0113:00	IAT sensor No.1 circuit high input	<ul style="list-style-type: none"> The PCM monitors the IAT sensor No.1 signal. If the PCM detects that the IAT sensor No.1 voltage at the PCM terminal 2U is above 4.62 V for 5 s, the PCM determines that the IAT sensor No.1 circuit has a malfunction.
P0116:00	ECT sensor circuit range/performance problem	<ul style="list-style-type: none"> During the 5 min after the engine is started, the engine coolant temperature does not increase above 6 °C {11 °F}.
P0117:00	ECT sensor circuit low input	<ul style="list-style-type: none"> The PCM monitors the ECT sensor signal. If the PCM detects that the ECT sensor voltage at the PCM terminal 1AK is below 0.2 V for 5 s, the PCM determines that the ECT sensor circuit has a malfunction.
P0118:00	ECT sensor circuit high input	<p>Type A VIN</p> <ul style="list-style-type: none"> The PCM monitors the ECT sensor signal. If the PCM detects that the ECT sensor voltage at the PCM terminal 1AK is above 4.6 V for 5 s, the PCM determines that the ECT sensor circuit has a malfunction. <p>Type B VIN</p> <ul style="list-style-type: none"> The PCM monitors the ECT sensor signal. If the PCM detects that the ECT sensor voltage at the PCM terminal 1AK is above 4.9 V for 5 s, the PCM determines that the ECT sensor circuit has a malfunction.
P0122:00	TP sensor No.1 circuit low input	<ul style="list-style-type: none"> If the PCM detects that the TP sensor No.1 voltage at the PCM terminal 1BP is below 0.1 V, the PCM determines that the TP sensor No.1 circuit has a malfunction.
P0123:00	TP sensor No.1 circuit high input	<ul style="list-style-type: none"> If the PCM detects that the TP sensor No.1 voltage at the PCM terminal 1BP is above 4.9 V, the PCM determines that the TP sensor No.1 circuit has a malfunction.
P0130:00	Voltage problem between PCM terminal 1AB and PCM terminal 1AG	<ul style="list-style-type: none"> A condition in which the voltage between PCM terminals 1AB and 1AG exceeds the specified range continues for the specified period or more.
P0131:00	A/F sensor circuit low input	<ul style="list-style-type: none"> Any one of the following conditions is met: <ul style="list-style-type: none"> — Voltage of A/F sensor terminal F is less than specified value — Voltage of A/F sensor terminal D is less than specified value — Voltage of A/F sensor terminal B is less than specified value
P0132:00	A/F sensor circuit high input	<ul style="list-style-type: none"> Any one of the following conditions is met: <ul style="list-style-type: none"> — Voltage of A/F sensor terminal F is more than specified value — Voltage of A/F sensor terminal D is more than specified value — Voltage of A/F sensor terminal B is more than specified value
P0133:00*7	A/F sensor circuit slow response	<ul style="list-style-type: none"> The response speed of the A/F sensor input signal when the air/fuel ratio is fluctuated is slow.
P0134:00	A/F sensor circuit no activity detected	<ul style="list-style-type: none"> The condition in which the A/F sensor element impedance is the specified value or more continues for 35 s.
P0137:00*7	HO2S circuit low input	<ul style="list-style-type: none"> A condition in which the HO2S input voltage is less than the specified value continues for the specified period.
P0138:00	HO2S circuit high input	<ul style="list-style-type: none"> A condition in which the HO2S input voltage exceeds the specified value continues for the specified period.
P013A:00*7	HO2S: Slow response (during transition from rich to lean)	<ul style="list-style-type: none"> The response speed of the HO2S input signal when the air/fuel ratio is fluctuated from rich to lean is slow.
P013B:00*7	HO2S circuit slow response	<ul style="list-style-type: none"> During recovery from deceleration fuel cut, the HO2S voltage is 0.2 V or less, and the following condition is met: <ul style="list-style-type: none"> — When the elapsed time for the HO2S voltage to transition from 0.3 V to 0.55 V is greater than the specification 2 out of 3 times or more. <p>MONITORING CONDITIONS</p> <ul style="list-style-type: none"> — Drive Mode 03 (Variable Valve Timing, A/F Sensor Heater, HO2S Heater, A/F Sensor, HO2S and TWC Repair Verification Drive Mode) — Following conditions are met: <ul style="list-style-type: none"> • During deceleration fuel cut • Estimated temperature of the zirconia element inside the HO2S: above 450 °C {842 °F} • Intake airflow amount: above 8 g/s {1 lb/min}

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P0140:00	HO2S circuit no activity detected	<ul style="list-style-type: none"> With the estimated temperature of the HO2S element exceeding the specified value, a condition in which the HO2S signal voltage is less than the specified value continues for the specified period.
P0171:00	Fuel trim system too lean	<ul style="list-style-type: none"> Any one of the following conditions is met: <ul style="list-style-type: none"> While the engine is idling or the vehicle is driven, the fuel feedback correction amount (30 %) is the threshold or more, and the fuel learning correction amount is the specified value (15 %) or more for 10 s or more. While the engine is idling or the vehicle is driven, the fuel feedback correction amount reaches the upper limit (25 % or more) for 20 s or more.
P0172:00	Fuel trim system too rich	<ul style="list-style-type: none"> Any one of the following conditions is met: <ul style="list-style-type: none"> While the engine is idling or the vehicle is driven, the fuel feedback correction amount (SHRTFT1) is the threshold (-25 %) or less, and the fuel learning correction amount (LONGFT1) is the threshold (-15 %) or less for 10 s or more. While the engine is idling or the vehicle is driven, the fuel feedback correction amount reaches the lower limit (-25 % or less) for 20 s or more.
P0191:00	Fuel pressure sensor circuit range/performance problem	<ul style="list-style-type: none"> The difference between the actual and target fuel pressure is equal to or more than the specification, even though the fuel pressure feedback amount is maintained low or high.
P0192:00	Fuel pressure sensor circuit low input	<p>Type A VIN</p> <ul style="list-style-type: none"> If the input voltage at the PCM terminal 1CA is less than 0.156 V for 5 s, the PCM determines that the fuel pressure sensor circuit is low. <p>Type B VIN</p> <ul style="list-style-type: none"> If the input voltage at the PCM terminal 1CA is less than 0.16 V for 5 s, the PCM determines that the fuel pressure sensor circuit is low.
P0193:00	Fuel pressure sensor circuit high input	<ul style="list-style-type: none"> If the input voltage at the PCM terminal 1CA is more than 4.86 V for 5 s, the PCM determines that the fuel pressure sensor circuit is high.
P0201:00	Fuel injector circuit/open cylinder No.1	<ul style="list-style-type: none"> If the fuel injection verification signal is not input at 25 times continuously even though the PCM drives the fuel injector No.1, the PCM determines that there is an open circuit in the fuel injector No.1 control circuit. <p>MONITORING CONDITIONS</p> <ul style="list-style-type: none"> The following conditions are met: <ul style="list-style-type: none"> Battery voltage: 10.5 V or more Fuel injection control: except during fuel cut
P0202:00	Fuel injector circuit/open cylinder No.2	<ul style="list-style-type: none"> If the fuel injection verification signal is not input at 25 times continuously even though the PCM drives the fuel injector No.2, the PCM determines that there is an open circuit in the fuel injector No.2 control circuit. <p>MONITORING CONDITIONS</p> <ul style="list-style-type: none"> The following conditions are met: <ul style="list-style-type: none"> Battery voltage: 10.5 V or more Fuel injection control: except during fuel cut
P0203:00	Fuel injector circuit/open cylinder No.3	<ul style="list-style-type: none"> If the fuel injection verification signal is not input at 25 times continuously even though the PCM drives the fuel injector No.3, the PCM determines that there is an open circuit in the fuel injector No.3 control circuit. <p>MONITORING CONDITIONS</p> <ul style="list-style-type: none"> The following conditions are met: <ul style="list-style-type: none"> Battery voltage: 10.5 V or more Fuel injection control: except during fuel cut
P0204:00	Fuel injector circuit/open cylinder No.4	<ul style="list-style-type: none"> If the fuel injection verification signal is not input at 25 times continuously even though the PCM drives the fuel injector No.4, the PCM determines that there is an open circuit in the fuel injector No.4 control circuit. <p>MONITORING CONDITIONS</p> <ul style="list-style-type: none"> The following conditions are met: <ul style="list-style-type: none"> Battery voltage: 10.5 V or more Fuel injection control: except during fuel cut
P0222:00	TP sensor No.2 circuit low input	<ul style="list-style-type: none"> If the PCM detects that the TP sensor No.2 voltage at the PCM terminal 1BU is below 0.1 V, the PCM determines that the TP sensor No.2 circuit has a malfunction.
P0223:00	TP sensor No.2 circuit high input	<ul style="list-style-type: none"> If the PCM detects that the TP sensor No.2 voltage at the PCM terminal 1BU is above 4.9 V, the PCM determines that the TP sensor No.2 circuit has a malfunction.
P025B:00	Fuel pump control module circuit range/performance problem	<ul style="list-style-type: none"> When any of the following conditions is met: <ul style="list-style-type: none"> Engine overheating is detected. Output duty ratio signal received from PCM is in error. Output signal from fuel pump control module is erratic (noise overlap).

DTC No.	Condition	Detection condition
P025C:00	Fuel pump control module result of on-board diagnostic test low input	<ul style="list-style-type: none"> Result of on-board test cannot be received from fuel pump control module (voltage is too low).
P025D:00	Fuel pump control module result of on-board diagnostic test high input	<ul style="list-style-type: none"> Result of on-board test cannot be received from fuel pump control module (voltage is too high).
P0300:00	Random misfire detected	<ul style="list-style-type: none"> Any one of the following conditions is met: <ul style="list-style-type: none"> The misfire rate for every 200 rotations of the crankshaft exceeds the specified value (misfire which may damage catalytic converter). The misfire rate for every 1,000 rotations of the crankshaft exceeds the specified value (misfire going against emission regulations).
P0301:00	Cylinder No.1 misfire detected	<ul style="list-style-type: none"> Any one of the following conditions is met: <ul style="list-style-type: none"> The misfire rate of specific cylinders for every 200 rotations of the crankshaft exceeds the specified value (misfire which may damage catalytic converter). The misfire rate of specific cylinders for every 1,000 rotations of the crankshaft exceeds the specified value (misfire going against emission regulations).
P0302:00	Cylinder No.2 misfire detected	
P0303:00	Cylinder No.3 misfire detected	
P0304:00	Cylinder No.4 misfire detected	
P0327:00	KS circuit low input	<ul style="list-style-type: none"> The PCM monitors input signal from the KS. If the input voltage is below specified value for 5 s, the PCM determines that the KS circuit has a malfunction.
P0328:00	KS circuit high input	<ul style="list-style-type: none"> The PCM monitors input signal from the KS. If the input voltage is above specified value for 5 s, the PCM determines that the KS circuit has a malfunction.
P0335:00	CKP sensor circuit problem	<ul style="list-style-type: none"> There is no CKP sensor signal input while the exhaust camshaft rotates 5 times. CKP sensor input signal pattern, received while crankshaft rotates 10 times, is incorrect.
P0340:00	Intake CMP sensor circuit problem	<ul style="list-style-type: none"> Intake CMP sensor input signal pattern, received while crankshaft rotates 24 times, is incorrect.
P0365:00	Exhaust CMP sensor circuit problem	<p>Type A VIN</p> <ul style="list-style-type: none"> Exhaust CMP sensor input signal pattern, received while crankshaft rotates 24 times, is incorrect. Cylinder identification is not completed while the crankshaft rotates 13 times. <p>Type B VIN</p> <ul style="list-style-type: none"> The exhaust CMP sensor input signal pattern, received while the crankshaft rotates 24 times, is incorrect. Cylinder identification is not completed while the crankshaft rotates 15 times.
P0421:00*7	Catalytic converter system	<ul style="list-style-type: none"> The amount^{*1} of fuel supplied to the catalyst, from the period of recovery by fuel cut control until the HO2S indicates rich output (0.2 V), decreases below the specified value. <p>^{*1}: The estimated value is calculated based on the A/F sensor signal.</p>
P0443:00	Purge solenoid valve circuit problem	<p>Type A VIN</p> <ul style="list-style-type: none"> The PCM monitors the purge solenoid valve control signal voltage and current. If the following conditions are met, the PCM determines that there is the purge solenoid valve control circuit problem. <ul style="list-style-type: none"> The PCM turns the purge solenoid valve off, but the voltage of the purge solenoid valve control signal remains low. The PCM turns the purge solenoid valve on, but the current of the purge solenoid valve control signal remains high. <p>Type B VIN</p> <ul style="list-style-type: none"> The purge control voltage at the PCM terminal 1A1 exceeds the specification or the purge control voltage is less than the specification relative to the PCM control condition.
P0461:00	Fuel gauge sender unit circuit range/performance problem	<ul style="list-style-type: none"> The PCM monitors the fuel tank level difference before and after the PCM-calculated fuel consumption has reached more than 25 L {26 US qt, 22 Imp qt}. If the difference is less than 5 %, the PCM determines that there is a fuel gauge sender unit circuit range/performance problem.
P0462:00	Fuel gauge sender unit circuit low input	<ul style="list-style-type: none"> The PCM monitors the fuel level signal and fuel gauge sender unit output voltage from the instrument cluster. If the PCM detects a fuel level or fuel gauge sender unit output voltage that is too low, the PCM determines that the fuel gauge sender unit circuit has a malfunction.

DTC No.	Condition	Detection condition
P0463:00	Fuel gauge sender unit circuit high input	<ul style="list-style-type: none"> The PCM monitors the fuel level signal and fuel gauge sender unit output voltage from the instrument cluster. If the PCM detects a fuel level or fuel gauge sender unit output voltage that is too high, the PCM determines that the fuel gauge sender unit circuit has a malfunction.
P0480:00	Cooling fan relay No.1 control circuit malfunction	<p>Type A VIN</p> <ul style="list-style-type: none"> The PCM monitors the cooling fan relay No.1 control signal voltage and current. If the following conditions are met, the PCM determines that there is the cooling fan relay No.1 control circuit problem. <ul style="list-style-type: none"> The PCM turns the cooling fan relay No.1 off, but the voltage of the cooling fan relay No.1 control signal remains low for 5 s. The PCM turns the cooling fan relay No.1 on, but the current of the cooling fan relay No.1 control signal remains high for 5 s. <p>Type B VIN</p> <ul style="list-style-type: none"> The cooling fan relay No.1 control voltage is less than the specification or cooling fan relay No.1 control current is the specification or more for a continuous 5 s relative to the PCM control signal.
P0482:00	Cooling fan relay No.2 and No.3 control circuit malfunction	<p>Type A VIN</p> <ul style="list-style-type: none"> The PCM monitors the cooling fan relay No.2 and No.3 control signal voltage and current. If the following conditions are met, the PCM determines that there is the cooling fan relay No.2 and No.3 control circuit problem. <ul style="list-style-type: none"> The PCM turns the cooling fan relay No.2 and No.3 off, but the voltage of the cooling fan relay No.2 and No.3 control signal remains low for 5 s. The PCM turns the cooling fan relay No.2 and No.3 on, but the current of the cooling fan relay No.2 and No.3 control signal remains high for 5 s. <p>Type B VIN</p> <ul style="list-style-type: none"> The cooling fan relay No.2 and No.3 control voltage is less than the specification or cooling fan relay No.2 and No.3 control current is the specification or more for a continuous 5 s relative to the PCM control signal.
P0500:00	VSS circuit problem	<ul style="list-style-type: none"> If an error in the wheel speed signal from the DSC HU/CM is detected by CAN when the following conditions are met: <ul style="list-style-type: none"> Neutral switch No.1, neutral switch No.2 and CPP switch: OFF (MTX) Shift position: except P or N position (ATX) Absolute load: above 40 % Engine speed: above 2,000 rpm Brake switch: OFF
P0506:00	IAC system RPM lower than expected	<ul style="list-style-type: none"> The actual idle speed is lower than expected by 100 rpm for 14 s, when the brake pedal is depressed (brake switch is on). <p>Note</p> <ul style="list-style-type: none"> If the atmospheric pressure is less than 72.2 kPa {0.736 kgf/cm², 10.5 psi} or the intake air temperature is below -10 °C {14 °F}, the PCM cancels the diagnosis of DTC P0506:00.
P0507:00	IAC system RPM higher than expected	<ul style="list-style-type: none"> The actual idle speed is higher than expected by 200 rpm for 14 s, when the brake pedal is depressed (brake switch is on). <p>Note</p> <ul style="list-style-type: none"> If the atmospheric pressure is less than 72.2 kPa {0.736 kgf/cm², 10.5 psi} or the intake air temperature is below -10 °C {14 °F}, the PCM cancels the diagnosis of DTC P0507:00.
P0520:00	Oil pressure switch circuit problem	<ul style="list-style-type: none"> The oil pressure switch is off for a continuous 5 s even though the engine is stopped.
P0524:00	Engine oil pressure too low	<ul style="list-style-type: none"> The oil pressure switch is on for a continuous 5 s with the following condition met: (engine oil warning light illuminates when 1 s has elapsed) <ul style="list-style-type: none"> When engine speed is above 650 rpm and engine coolant temperature is 30 °C {86 °F} or less When engine speed is above 1,500 rpm and engine coolant temperature is 68 °C {154 °F} or less When engine speed is above 2,500 rpm and engine coolant temperature is 68 °C {154 °F} or more
P0532:00*5	Refrigerant pressure sensor circuit low input	<ul style="list-style-type: none"> The PCM monitors input voltage from the refrigerant pressure sensor. If the input voltage at the PCM terminal 2AX is below 0.1 V for 5 s, the PCM determines that the refrigerant pressure sensor circuit has a malfunction.

DTC No.	Condition	Detection condition
P0533:00 *5	Refrigerant pressure sensor circuit high input	<ul style="list-style-type: none"> The PCM monitors input voltage from the refrigerant pressure sensor. If the input voltage at the PCM terminal 2AX is above 4.9 V for 5 s, the PCM determines that the refrigerant pressure sensor circuit has a malfunction.
P0555:00 *4	Power brake unit vacuum sensor circuit problem	<ul style="list-style-type: none"> The PCM monitors the power brake unit vacuum sensor signal voltage while the ignition switch is ON. If the PCM detects the power brake unit vacuum sensor voltage is below 0.15 V or above 4.8 V for 5 s, the PCM determines that the power brake unit vacuum sensor circuit has problem.
P0571:00	Brake switch circuit problem	<p>Type A VIN</p> <ul style="list-style-type: none"> The PCM monitors switching in conjunction with brake switches No.1 and No.2. If either No.1 or No.2 do not switch for a continuous five times even though either No.1 or No.2 is switched from off to on or from on to off, P0571:00 is detected. <p>Type B VIN</p> <ul style="list-style-type: none"> The brakes are repeatedly released 5 times under the condition in which the brake switch No.1 and brake switch No. 2 signals are both on and off for 3 s or more.
P057F:00 *4	Power system: Battery deterioration	<ul style="list-style-type: none"> The battery charge/discharge flow exceeds the specification.
P058A:00 *4	Current sensor: Function malfunction	<ul style="list-style-type: none"> Error signal from the current sensor is received.
P0600:00	Serial communication link	<ul style="list-style-type: none"> PCM internal malfunction.
P0601:00	PCM memory check sum error	<ul style="list-style-type: none"> PCM internal memory check sum error.
P0602:00	PCM programming error	<ul style="list-style-type: none"> No configuration data in the PCM. <p>Note</p> <ul style="list-style-type: none"> If the "PCM CONFIGURATION" is successful, the PCM stores the DTC P0602:00 and illuminates the check engine light (system is normal). Clear the DTC P0602:00 using the M-MDS after the "PCM CONFIGURATION". The check engine light goes out after three drive cycles with no failure (the DTCs remain in PCM).
P0604:00	PCM RAM error	<ul style="list-style-type: none"> PCM internal RAM malfunction.
P0606:00	PCM processor error	<ul style="list-style-type: none"> PCM internal CPU malfunction.
P0607:00	Control module performance problem	<ul style="list-style-type: none"> PCM internal malfunction.
P0610:00	PCM vehicle configuration error	<ul style="list-style-type: none"> PCM data configuration error.
P0615:00 *4	Starter/starter relay operation amount	<ul style="list-style-type: none"> The PCM records DTCs when the number of times the engine has been started reaches the warranted performance frequency for the starter or starter relay.
P061B:00	Internal control module torque calculation performance problem	<ul style="list-style-type: none"> Indicates an error occurred in the PCM. There is a malfunction in the sensor input signal to the PCM.
P061D:00	Internal control module engine air mass performance problem	<ul style="list-style-type: none"> Indicates an error occurred in the PCM.
P061F:00	Internal control module throttle valve actuator controller performance problem	<ul style="list-style-type: none"> When any of the following conditions is met: <ul style="list-style-type: none"> Start stop unit internal malfunction CAN communication line malfunction between start stop unit and PCM PCM internal malfunction
P0628:00	Fuel pump control module circuit low input	<ul style="list-style-type: none"> When the PCM outputs a duty signal to the fuel pump control module, the difference in voltage between fuel pump unit terminals B and D is less than 1.5 V for a continuous 5 s.
P0629:00	Fuel pump control module circuit high input	<ul style="list-style-type: none"> Over-current is detected.
P0638:00	Throttle valve actuator control range/performance problem	<ul style="list-style-type: none"> The PCM compares the actual TP with the target TP. If the difference is more than the threshold value, the PCM determines that there is a throttle valve actuator control range/performance problem.
P064D:00	Internal control module A/F sensor processor performance problem	<ul style="list-style-type: none"> Malfunction in A/F sensor signal circuit in PCM occurs.
P0685:00	Main relay control circuit open	<ul style="list-style-type: none"> The period of time in which the PCM power supply remains on after the ignition is switched off is not within the specified time.
P06B8:00	Internal control module non-volatile RAM error	<ul style="list-style-type: none"> PCM internal EEPROM malfunction.

DTC No.	Condition	Detection condition
P06DA:00	Engine oil solenoid valve circuit problem	<ul style="list-style-type: none"> The engine oil solenoid valve control current exceeds the specification or the control voltage at the PCM terminal 1AS is less than the specification relative to the PCM control condition.
P0703:00	Brake switch input circuit problem	<p>Type A VIN</p> <ul style="list-style-type: none"> The PCM monitors the input signal from the brake switch No.1. If the input signal does not change while following decelerating 8 times, the PCM determines that there is a brake switch No.1 input circuit problem. <p>MONITORING CONDITIONS</p> <ul style="list-style-type: none"> Vehicle speed: from above 30 km/h {19 mph} to 30 km/h {19 mph} or less Deceleration rate: exceeds 2.4 km/h {1.5 mph} per sec <p>Type B VIN</p> <ul style="list-style-type: none"> The brake switch does not switch even though the vehicle is stopped 8 times repeatedly from a vehicle speed of 30 km/h {19 mph} or more.
P0704:00*2	CPP switch input circuit problem	<ul style="list-style-type: none"> The PCM monitors changes in input voltage from the CPP switch. If the PCM does not detect a voltage change while the vehicle runs with vehicle speed above 30 km/h {19 mph} and stops 8 times alternately, the PCM determines that the CPP switch circuit has a malfunction.
P07BE:00*6	Transmission indeterminate failure (failed to neutral)	<ul style="list-style-type: none"> Correlation malfunction between neutral switches No.1 and No.2.
P0850:00*2	Neutral switch No.1 input circuit problem	<ul style="list-style-type: none"> The PCM monitors changes in input voltage from the neutral switch No.1. If the PCM does not detect a voltage change while driving the vehicle at a vehicle speed above 30 km/h {19 mph} and clutch pedal is pressed and released 10 times repeatedly, the PCM determines that the neutral switch No.1 circuit has a malfunction.
P0A0F:00*4	Engine failed to restart	<ul style="list-style-type: none"> Any of following conditions occurs: <ul style="list-style-type: none"> When the engine should restart after it is stopped by the i-stop control, it does not start even though it is cranked for 3 s or more. When the engine should restart after it is stopped by the i-stop control, it does not cranked.
P0A8D:00*4	Power supply system circuit low input	<ul style="list-style-type: none"> Any one of the following conditions is met: <ul style="list-style-type: none"> Battery voltage is 7.25 V or less when engine restarts from i-stop. DC-DC converter terminal voltage is 6 V or less when engine restarts from i-stop. PCM terminal voltage is 6.2 V or less when engine starts. Battery internal resistance is specified value or more.
P0A8F:00*7	Power system: Low input	<ul style="list-style-type: none"> Any one of the following conditions is met: <ul style="list-style-type: none"> Battery voltage is 11 V or less when ignition is switched off after leaving vehicle for 30 days or more. Battery voltage is 11 V or less for a continuous 5 days when ignition is switched off.
P0A94:00*4	DC-DC converter: control circuit signal error	<ul style="list-style-type: none"> Internal malfunction signal from DC-DC converter via front body control module (FBCM) is received.(CAN/LIN communication). Input signal from the DC-DC converter limits the pressure increase time. Input signal from the DC-DC converter does not implement pressure increase after a pressure increase command to the DC-DC converter.
P111A:00	Engine coolant temperature is high	<ul style="list-style-type: none"> The engine coolant temperature is 122 °C {252 °F} or more.
P117A:00	Engine oil temperature is high	<p>Type A VIN</p> <ul style="list-style-type: none"> With the transmission in 4th gear or lower gear, an engine speed of 6,100 rpm continues for 6 min. <p>Type B VIN</p> <ul style="list-style-type: none"> With the transmission in 5th gear or lower gear, an engine speed of 6,100 rpm (SKYACTIV-G 2.0)/5,800 rpm (SKYACTIV-G 2.5) continues for 6 min.
P1260:00	Immobilizer system problem	<ul style="list-style-type: none"> The start stop unit detects an immobilizer system malfunction.
P1380:00	Electric variable valve timing control circuit problem	<ul style="list-style-type: none"> A malfunction is detected in the results of the on-board diagnostic test received from the electric variable valve timing driver.
P151B:00*1	IAC system problem	<ul style="list-style-type: none"> The PCM cannot control the idle speed toward the target idle speed during the KOER self test.

DTC No.	Condition	Detection condition
P176E:00*6	Clutch stroke sensor/ Starter interlock switch correlation problem	<ul style="list-style-type: none"> Correlation malfunction between clutch stroke sensor and starter interlock switch. <ul style="list-style-type: none"> If the clutch stroke sensor circuit voltage above 4.9 V or below 0.1 V for 10 s, the PCM determines that the clutch stroke sensor circuit has a malfunction. CPP switch stuck ON or OFF. Starter interlock switch stuck ON.
P2090:00	OCV circuit low input	<p>Type A VIN</p> <ul style="list-style-type: none"> The PCM monitors the OCV voltage. If the PCM detects the OCV control voltage (calculated from the OCV) is below the specification voltage (calculated from the battery positive voltage), the PCM determines that the OCV circuit has a malfunction. <p>Type B VIN</p> <ul style="list-style-type: none"> The OCV control voltage relative to the PCM control is too low.
P2091:00	OCV circuit high input	<p>Type A VIN</p> <ul style="list-style-type: none"> The PCM monitors the OCV current. If the PCM detects that the OCV control current (calculated from the OCV) is above the specification current, the PCM determines that the OCV circuit has a malfunction. <p>Type B VIN</p> <ul style="list-style-type: none"> The OCV control voltage relative to the PCM control is too high.
P2096:00	HO2S fuel injection control system: Air fuel too lean	<ul style="list-style-type: none"> Depending on the correction deviation of the A/F sensor, a condition in which the fuel feedback correction amount (SHRTFT12) for the HO2S is the specified value (2 %) or more and the sum (SHRTFT12+LONGFT12) of the fuel feedback correction amount and the fuel learning correction amount is the specified value (2.5 %) or more continues for a period of 25 s.
P2097:00	HO2S fuel injection control system: Air fuel too rich	<ul style="list-style-type: none"> Depending on the correction deviation of the A/F sensor, a condition in which the fuel feedback correction amount (SHRTFT12) for the HO2S is the specified value (-2 %) or less and the sum (SHRTFT12+LONGFT12) of the fuel feedback correction amount and the fuel learning correction amount is the specified value (-2.5 %) or less continues for a period of 25 s.
P2101:00	Throttle valve actuator control motor circuit range/ performance problem	<ul style="list-style-type: none"> The PCM turns the main relay on, but if the input voltage is 6.0 V or less, then the PCM determines that the main relay control circuit voltage is low. There is a system error in the electrical throttle control system of the PCM.
P2107:00	Throttle valve actuator control module processor error	<ul style="list-style-type: none"> PCM internal malfunction.
P2109:00	TP sensor minimum stop range/performance problem	<ul style="list-style-type: none"> If the fully-close throttle position is 5.1 ° or lower, or 15.9 ° or more (even though the fully-close throttle position learning is finished), the PCM determines there is a malfunction.
P2110:00	Throttle valve actuator control system-forced limited RPM	<ul style="list-style-type: none"> PCM internal malfunction.
P2112:00	Throttle valve actuator motor current range/ performance problem	<ul style="list-style-type: none"> If the duty ratio is 95 % or more, the PCM determines that there is a throttle valve actuator control system range/performance problem.
P2119:00	Throttle valve actuator control throttle body range/ performance problem	<ul style="list-style-type: none"> The PCM compares the actual TP with initial setting TP when the ignition is switched off. If the TP is higher than the initial setting TP, the PCM determines that there is a throttle valve return spring malfunction.
P2122:00	APP sensor No.1 circuit low input	<ul style="list-style-type: none"> The PCM monitors the input voltage from APP sensor No.1. If the input voltage at the PCM terminal 2AN is less than 0.1 V, the PCM determines that the APP sensor No.1 circuit input voltage is low.
P2123:00	APP sensor No.1 circuit high input	<ul style="list-style-type: none"> The PCM monitors the input voltage from APP sensor No.1 when the engine is running. If the input voltage at the PCM terminal 2AN is above 4.9 V, the PCM determines that the APP sensor No.1 circuit input voltage is high.
P2127:00	APP sensor No.2 circuit low input	<ul style="list-style-type: none"> The PCM monitors the input voltage from APP sensor No.2 when the engine is running. If the input voltage at the PCM terminal 2AS is less than 0.1 V, the PCM determines that the APP sensor No.2 circuit has a malfunction.
P2128:00	APP sensor No.2 circuit high input	<ul style="list-style-type: none"> The PCM monitors the input voltage from APP sensor No.2 when the engine is running. If the input voltage at the PCM terminal 2AS is more than 4.9 V, the PCM determines that the APP sensor No.2 circuit has a malfunction.
P2135:00	TP sensor No.1/No.2 voltage correlation problem	<ul style="list-style-type: none"> The PCM compares the input voltage from TP sensor No.1 with the input voltage from TP sensor No.2. If the difference is more than the specification, the PCM determines that there is a TP sensor No.1/No.2 voltage correlation problem.

DTC No.	Condition	Detection condition
P2138:00	APP sensor No.1/No.2 voltage correlation problem	<ul style="list-style-type: none"> The PCM compares the input voltage from APP sensor No.1 with the input voltage from APP sensor No.2. If the difference is more than the specification, the PCM determines that there is an APP sensor No.1/No.2 angle correlation problem.
P2199:00	IAT sensor No.2 circuit range/performance problem	<ul style="list-style-type: none"> IAT sensor No.1 and IAT sensor No.2 are compared after the engine is started* and correlation error occurs. <p>*: Ignition switch on when 6 h or more has passed since the ignition was switched off.</p>
P2228:00	BARO sensor circuit low input	<ul style="list-style-type: none"> The PCM monitors input voltage from the BARO sensor. If the input voltage is below the specified value for 5 s, the PCM determines that the BARO sensor circuit has a malfunction.
P2229:00	BARO sensor circuit high input	<ul style="list-style-type: none"> The PCM monitors input voltage from the BARO sensor. If the input voltage is above the specified value for 5 s, the PCM determines that the BARO sensor circuit has a malfunction.
P2237:00	Open circuit between A/F sensor terminal B and PCM terminal 1AG	<ul style="list-style-type: none"> After A/F sensor activation, a condition in which PCM terminal 1AB voltage is within the specified range continues for the specified period or longer.
P2243:00	A/F sensor reference voltage circuit open	<ul style="list-style-type: none"> A condition in which the PCM terminal 1W voltage is the specified value or more continues for 30 s.
P2251:00	Open circuit between A/F sensor terminal D and PCM terminal 1AB	<ul style="list-style-type: none"> The following conditions are met: <ul style="list-style-type: none"> A/F sensor element impedance is specified value or more A/F sensor terminal F voltage (B+ terminal) is less than specified value or unstable.
P2299:00	Accelerator pedal: spring back malfunction	<p>Type A VIN</p> <ul style="list-style-type: none"> Brake override system operates. <p>Type B VIN</p> <ul style="list-style-type: none"> When under the following conditions it is detected that the brake pedal is depressed during driving for the specified time* . <ul style="list-style-type: none"> Racing Engine speed: 875 rpm or more <p>*: Specified time is 0.6—10 s according to braking force calculated in PCM.</p>
P2302:00	Ion sensor No.1 circuit problem	<ul style="list-style-type: none"> After the engine is started, when the engine speed is 2,000 rpm or less, the signal input to the PCM from ion sensor No.1 is in error.
P2305:00	Ion sensor No.2 circuit problem	<ul style="list-style-type: none"> After the engine is started, when the engine speed is 2,000 rpm or less, the signal input to the PCM from ion sensor No.2 is in error.
P2308:00	Ion sensor No.3 circuit problem	<ul style="list-style-type: none"> After the engine is started, when the engine speed is 2,000 rpm or less, the signal input to the PCM from ion sensor No.3 is in error.
P2311:00	Ion sensor No.4 circuit problem	<ul style="list-style-type: none"> After the engine is started, when the engine speed is 2,000 rpm or less, the signal input to the PCM from ion sensor No.4 is in error.
P2502:00	Generator system: Malfunction in voltage generated by generator	<ul style="list-style-type: none"> The voltage generated by the generator is 17 V or higher and the battery voltage is 11 V or less for a continuous specified time.
P2503:00	Generator system: Voltage generated by generator is low	<ul style="list-style-type: none"> The target current generated by the generator, which the PCM outputs, is 20 A or higher and the voltage generated by the generator is 8.5 V or less for a continuous specified time.
P2504:00	Generator system: Voltage generated by generator is high	<ul style="list-style-type: none"> The voltage generated by the generator is 18.5 V or higher or the battery voltage is 16 V or higher for a continuous specified time.
P2507:00	PCM battery voltage low input	<ul style="list-style-type: none"> The PCM monitors the voltage of backup battery positive terminal. If the PCM detects that the battery positive terminal voltage is below 6 V for 5 s, the PCM determines that the backup voltage circuit has a malfunction.
P2610:00	<p>Type A VIN</p> <ul style="list-style-type: none"> Instrument cluster internal engine off timer performance problem <p>Type B VIN</p> <ul style="list-style-type: none"> Malfunction in instrument cluster 	<p>Type A VIN</p> <ul style="list-style-type: none"> Instrument cluster internal engine off timer is damaged. <p>Type B VIN</p> <ul style="list-style-type: none"> Malfunction detected in instrument cluster.
U0073:00	CAN system communication error (HS CAN)	<ul style="list-style-type: none"> Malfunction in CAN bus communication line.

DTC No.	Condition	Detection condition
U0074:00*3	CAN system communication error (local CAN between PCM and TCM)	<ul style="list-style-type: none"> Malfunction in CAN bus communication line.
U0101:00*3	CAN communication: communication error to TCM	<ul style="list-style-type: none"> Communication error between the TCM continues for 5 s or more.
U0121:00	CAN communication: communication error to DSC HU/CM	<ul style="list-style-type: none"> Communication error between the DSC HU/CM continues for 5 s or more.
U0131:00	CAN communication: communication error to EPS control module	<ul style="list-style-type: none"> Communication error between the EPS control module continues for 5 s or more.
U0140:00	CAN communication: communication error to front body control module (FBCM)	<ul style="list-style-type: none"> Communication error between the front body control module (FBCM) continues for 5 s or more.
U0151:00	CAN communication: communication error to SAS control module	<ul style="list-style-type: none"> Communication error between the SAS control module continues for 5 s or more.
U0155:00	CAN communication: communication error to instrument cluster	<ul style="list-style-type: none"> Communication error between the instrument cluster continues for 5 s or more.
U0214:00	CAN communication: communication error to start stop unit	<ul style="list-style-type: none"> Communication error between the start stop unit continues for 5 s or more.
U0235:00	CAN communication: communication error to laser sensor	<ul style="list-style-type: none"> Communication error between the laser sensor continues for 5 s or more.
U0298:00*4	CAN/LIN communication system: DC-DC converter information communication error with front body control module (FBCM)	<ul style="list-style-type: none"> PCM detects a DC-DC converter information communication error from front body control module (FBCM).
U0302:00*3	TCM processor error	<ul style="list-style-type: none"> When any of the following conditions is met: <ul style="list-style-type: none"> CAN communication line malfunction between PCM and TCM TCM internal malfunction
U0315:00	DSC HU/CM error	<ul style="list-style-type: none"> When any of the following conditions is met: <ul style="list-style-type: none"> CAN communication line malfunction between PCM and DSC HU/CM DSC HU/CM internal malfunction
U0320:00	EPS control module error	<ul style="list-style-type: none"> When any of the following conditions is met: <ul style="list-style-type: none"> CAN communication line malfunction between PCM and EPS control module EPS control module internal malfunction
U0323:00	Instrument cluster error	<ul style="list-style-type: none"> When any of the following conditions is met: <ul style="list-style-type: none"> CAN communication line malfunction between PCM and instrument cluster Instrument cluster internal malfunction
U0336:00	SAS control module error	<ul style="list-style-type: none"> When any of the following conditions is met: <ul style="list-style-type: none"> CAN communication line malfunction between PCM and SAS control module SAS control module internal malfunction
U0338:00	Start stop unit error	<ul style="list-style-type: none"> When any of the following conditions is met: <ul style="list-style-type: none"> CAN communication line malfunction between PCM and start stop unit Start stop unit internal malfunction
U0433:00	Abnormal message from rear body control module (RBCM)	<ul style="list-style-type: none"> Correct data cannot be received from rear body control module (RBCM).
U1007:00*4	CAN/LIN communication system: current sensor information communication error with front body control module (FBCM)	<ul style="list-style-type: none"> PCM detects a current sensor information communication error from front body control module (FBCM).

DTC No.	Condition	Detection condition
U2300:00	Global central configuration error	<ul style="list-style-type: none"> • Any of following conditions occurs: <ul style="list-style-type: none"> — No configuration of instrument cluster — The configuration signal with the estimated CAN ID is not sent from the instrument cluster. — The configuration signal value sent via CAN from the instrument cluster is unknown or invalid. — The configuration signal value sent via CAN from the instrument cluster is a value other than the estimated value. — The configuration signal value sent via CAN from the instrument cluster does not match the PCM value.
U3000:41	PCM processor error	<ul style="list-style-type: none"> • PCM internal EEPROM malfunction.

*1 : KOER self test only

*2 : MTX

*3 : ATX

*4 : With i-stop system

*5 : With air conditioner

*6 : With i-stop system (MTX)

*7 : If equipped