054JD–1

DIAGNOSTIC TROUBLE CODE CHART

HINT:

Parameters listed in the chart may not be exactly the same as your readings due to the type of instrument or other factors.

If a malfunction code is displayed during the DTC check in the check mode, check the circuit for the codes listed in the table below. For details of each code, refer to the ”See page” under the respective ”DTC No.” in the DTC chart.

DTC No. (See Page)	Detection Item	Trouble Area	CHK ENG*1	Memory
P0010 (05–33)	Camshaft Position ”A” Actuator Circuit (Bank 1)	• Open or short in OCV circuit • OCV • ECM	○	○
P0011 (05–37)	Camshaft Position ”A” –Timing Over–Advanced or System Performance (Bank 1)	• Valve timing • OCV • Camshaft timing gear assy • ECM	—	○
P0012 (05–37)	Camshaft Position ”A” –Timing Over– Retarded (Bank 1)		—	○
P0016 (05–41)	Crankshaft Position – Camshaft Position Correlation (Bank 1 Sensor A)	• Mechanical system (Timing belt has jumped a tooth, belt stretched) • ECM	○	○
P0018 (05–41)	Crankshaft Position – Camshaft Position Correlation (Bank 2 Sensor A)		○	○
P0020 (05–33)	Camshaft Position ”A” Actuator Circuit (Bank 2)	• Same as DTC No. P0010	○	○
P0021 (05–37)	Camshaft Position ”A” –Timing Over–Advanced or System Performance (Bank 2)	• Same as DTC No. P0011	—	○
P0022 (05–37)	Camshaft Position ”A” –Timing Over– Retarded (Bank 2)	• Same as DTC No. P0012	—	○
P0031*2 (05–42)	Oxygen (A/F) Sensor Heater Control Circuit Low (Bank 1 Sensor 1)	• Open or short in heater circuit of A/F sensor • A/F sensor heater • A/F sensor heater relay • ECM	○	○
P0032*2 (05–42)	Oxygen (A/F) Sensor Heater Control Circuit High (Bank 1 Sensor 1)	• Short in heater circuit of A/F sensor • A/F sensor heater • A/F sensor heater relay • ECM	○	○
P0037 (05–47)	Oxygen Sensor Heater Control Circuit Low (Bank 1 Sensor 2)	• Open or short in heater circuit of heated oxygen sensor • Heated oxygen sensor heater • EFI relay • ECM	○	○
P0038 (05–47)	Oxygen Sensor Heater Control Circuit High (Bank 1 Sensor 2)	• Short in heater circuit of heated oxygen sensor • Heated oxygen sensor heater • EFI relay • ECM	○	○
P0051*2 (05–42)	Oxygen (A/F) Sensor Heater Control Circuit Low (Bank 2 Sensor 1)	• Same as DTC No. P0031	○	○
P0052*2 (05–42)	Oxygen (A/F) Sensor Heater Control Circuit High (Bank 2 Sensor 1)	• Same as DTC No. P0032	○	○
P0057 (05–47)	Oxygen Sensor Heater Control Circuit Low (Bank 2 Sensor 2)	• Same as DTC No. P0037	○	○
P0058 (05–47)	Oxygen Sensor Heater Control Circuit High (Bank 2 Sensor 2)	• Same as DTC No. P0038	○	○

DTC No. (See Page)	Detection Item	Trouble Area	CHK ENG*1	Memory
P0100 (05–51)	Mass or volume Air Flow Circuit	• Open or short in mass air flow meter circuit • Mass air flow meter • ECM	○	○
P0101 (05–57)	Mass or volume Air Flow Circuit Range/Performance Problem	• Mass air flow meter	○	○
P0102 (05–51)	Mass or volume Air Flow Circuit Low Input	• Open in mass air flow meter circuit • Short in ground circuit • Mass air flow meter • ECM	○	○
P0103 (05–51)	Mass or volume Air Flow Circuit High Input	• Short in mass air flow meter circuit (to +B circuit) • Mass air flow meter • ECM	○	○
P0110 (05–58)	Intake Air Temperature Circuit	• Open or short in intake air temp. sensor circuit • Intake air temp. sensor (built in mass air flow meter) • ECM	○	○
P0112 (05–58)	Intake Air Temperature Circuit Low Input	• Short in intake air temp. sensor circuit • Intake air temp. sensor (built in mass air flow meter) • ECM	○	○
P0113 (05–58)	Intake Air Temperature Circuit High Input	• Open in intake air temp. sensor circuit • Intake air temp. sensor (built in mass air flow meter) • ECM	○	○
P0115 (05–62)	Engine Coolant Temperature Circuit	• Open or short in engine coolant temp. sensor circuit • Engine coolant temp. sensor • ECM	○	○
P0116 (05–66)	Engine Coolant Temperature Circuit Range/Performance Problem	• Engine coolant temp. sensor	○	○
P0117 (05–62)	Engine Coolant Temperature Circuit Low Input	• Short in engine coolant temp. sensor circuit • Engine coolant temp. sensor • ECM	○	○
P0118 (05–62)	Engine Coolant Temperature Circuit High Input	• Open in engine coolant temp. sensor circuit • Engine coolant temp. sensor • ECM	○	○
P0120 (05–67)	Throttle/Pedal Position Sensor/ Switch "A" Circuit	• Throttle position sensor (built in throttle body) • ECM	○	○
P0121 (05–73)	Throttle/Pedal Position Sensor/ Switch "A" Circuit Range/Performance Problem	• Throttle position sensor (built in throttle body)	○	○
P0122 (05–67)	Throttle/Pedal Position Sensor/ Switch "A" Circuit Low Input	• Throttle position sensor (built in throttle body) • Short in VTA1 circuit • Open in VC circuit • ECM	○	○
P0123 (05–67)	Throttle/Pedal Position Sensor/ Switch "A" Circuit High Input	• Throttle position sensor (built in throttle body) • Open in VTA1 circuit • Open in E2 circuit • VC and VTA1 circuit are short–circuited • ECM	○	○
P0125 (05–74)	Insufficient Coolant Temperature for Closed Loop Fuel Control	• Cooling system • Engine coolant temp. sensor • Thermostat	○	○
P0136 (05–76)	Oxygen Sensor Circuit Malfunction (Bank 1 Sensor 2)	• Open or short in heated oxygen sensor circuit • Heated oxygen sensor • Heated oxygen sensor heater • EFI relay	○	○
P0156 (05–76)	Oxygen Sensor Circuit Malfunction (Bank 2 Sensor 2)		○	○
P0220 (05–67)	Throttle/Pedal Position Sensor/ Switch "B" Circuit	• Throttle position sensor (built in throttle body) • ECM	○	○

DTC No. (See Page)	Detection Item	Trouble Area	CHK ENG*1	Memory
P0222 (05–67)	Throttle/Pedal Position Sensor/ Switch "B" Circuit Low Input	• Throttle position sensor (built in throttle body) • Short in VTA2 circuit • Open in VC circuit • ECM	○	○
P0223 (05–67)	Throttle/Pedal Position Sensor/ Switch "B" Circuit High Input	• Throttle position sensor (built in throttle body) • Open in VTA2 circuit • Open in E2 circuit • VC and VTA2 circuit are short–circuited • ECM	○	○
P0325 (05–84)	Knock Sensor 1 Circuit (Bank 1 or Single Sensor)	• Knock sensor 1 • Knock sensor 1 (loose) • ECM	○	○
P0327 (05–84)	Knock Sensor 1 Circuit Low Input (Bank 1 or Single Sensor)	• Short in knock sensor 1 circuit • Knock sensor 1 • ECM	○	○
P0328 (05–84)	Knock Sensor 1 Circuit High Input (Bank 1 or Single Sensor)	• Open in knock sensor 1 circuit • Knock sensor 1 • ECM	○	○
P0330 (05–84)	Knock Sensor 2 Circuit (Bank 2)	• Knock sensor 2 • Knock sensor 2 (loose) • ECM	○	○
P0332 (05–84)	Knock Sensor 2 Circuit Low Input (Bank 2)	• Short in knock sensor 2 circuit • Knock sensor 2 • ECM	○	○
P0333 (05–84)	Knock Sensor 2 Circuit High Input (Bank 2)	• Open in knock sensor 2 circuit • Knock sensor 2 • ECM	○	○
P0335 (05–90)	Crankshaft Position Sensor "A" Circuit	• Open or short in crankshaft position sensor circuit • Crankshaft position sensor • Crankshaft timing pulley • ECM	○	○
P0339 (05–90)	Crankshaft Position Sensor "A" Circuit Intermittent		—	○
P0340 (05–94)	Camshaft Position Sensor "A" Circuit (Bank 1 or Single Sensor)	• Open or short in VVT sensor circuit • VVT sensor • Camshaft timing pulley • Timing belt has jumped a tooth • ECM	○	○
P0341 (05–94)	Camshaft Position Sensor "A" Circuit Range/Performance (Bank 1 or Single Sensor)		○	○
P0345 (05–94)	Camshaft Position Sensor "A" Circuit (Bank 2)		○	○
P0346 (05–94)	Camshaft Position Sensor "A" Circuit Range/Performance (Bank 2)		○	○
P0351*3 (05–97)	Ignition Coil "A" Primary/Secondary Circuit	• Ignition system • Open or short in IGF1 or IGT circuit from ignition coil with igniter to ECM (ignition coil circuit 1 through 6) • Ignition coil with igniter (ignition coil 1 through 6) • ECM	○	○
P0352*3 (05–97)	Ignition Coil "B" Primary/Secondary Circuit		○	○
P0353*3 (05–97)	Ignition Coil "C" Primary/Secondary Circuit		○	○
P0354*3 (05–97)	Ignition Coil "D" Primary/Secondary Circuit		○	○
P0355*3 (05–97)	Ignition Coil "E" Primary/Secondary Circuit		○	○
P0356*3 (05–97)	Ignition Coil "F" Primary/Secondary Circuit		○	○

DTC No. (See Page)	Detection Item	Trouble Area	CHK ENG*1	Memory
P0500 (05–106)	Vehicle Speed Sensor "A"	• Open or short in speed sensor circuit • Speed sensor • Combination meter • ECM • Skid control ECU	○	○
P0503 (05–106)	Vehicle Speed Sensor "A" Intermittent/Erratic/High	• Open or short in speed sensor circuit • Speed sensor • Combination meter • ECM • Skid control ECU	—	○
P0504 (05–109)	Brake Switch "A"/"B" Correlation	• Short in stop lamp switch signal circuit • Stop lamp fuse • Stop lamp switch • ECM	—	○
P0560 (05–113)	System Voltage	• Open in back–up power source circuit • ECM	○	○
P0571 (05–1243)	Brake Switch "A" Circuit	• Cruise control system	—	○
P0604 (05–116)	Internal Control Module Random Access Memory (RAM) Error	• ECM	○	○
P0606 (05–116)	ECM/PCM Processor		○	○
P0607 (05–116)	Control Module Performance		○	○
P0617 (05–117)	Starter Relay Circuit High	• Short in Park/Neutral position switch circuit • Park/Neutral position switch • Ignition switch • ECM	○	○
P0657 (05–116)	Actuator Supply Voltage Circuit / Open	• ECM	○	○
P0705 (05–121)	Transmission Range Sensor Circuit Malfunction (PRNDL Input)	• Short in Park/Neutral position switch circuit • Park/Neutral position switch • ECM	○	○

DTC No. (See Page)	Detection Item	Trouble Area	CHK ENG*1	Memory
P0710 (05–383)	Transmission Fluid Temperature Sensor "A" Circuit	• Electronic controlled automatic transmission (ECT)	○	○
P0712 (05–383)	Transmission Fluid Temperature Sensor "A" Circuit Low Input		○	○
P0713 (05–383)	Transmission Fluid Temperature Sensor "A" Circuit High Input		○	○
P0717 (05–386)	Input/Turbine Speed Sensor "A" Circuit No Signal		○	○
P0724 (05–389)	Brake Switch "B" Circuit High		○	○
P0748 (05–391)	Pressure Control Solenoid "A" Electrical (Shift Solenoid Valve SL1)		○	○
P0778 (05–394)	Pressure Control Solenoid "B" Electrical (Shift Solenoid Valve SL2)		○	○
P0793 (05–397)	Intermediate Shaft Speed Sensor "A" Circuit No Signal		○	○
P0798 (05–400)	Pressure Control Solenoid "C" Electrical (Shift Solenoid Valve SL3)		○	○
P0982 (05–403)	Shift Solenoid "D" Control Low		○	○
P0983 (05–403)	Shift Solenoid "D" Control High		○	○
P0985 (05–406)	Pressure Control Solenoid "E" Performance (Shift Solenoid Valve SR)		○	○
P0986 (05–406)	Pressure Control Solenoid "E" Electrical (Shift Solenoid Valve SR)		○	○
P2102 (05–122)	Throttle Actuator Control Motor Circuit Low	• Open in throttle control motor circuit • Throttle control motor • ECM	○	○
P2103 (05–122)	Throttle Actuator Control Motor Circuit High	• Short in throttle control motor circuit • Throttle control motor • ECM	○	○
P2111 (05–125)	Throttle Actuator Control System – Stuck Open	• Throttle control motor circuit • Throttle control motor • Throttle body • Throttle valve	○	○
P2112 (05–125)	Throttle Actuator Control System – Stuck Closed		○	○
P2118 (05–127)	Throttle Actuator Control Motor Current Range/Performance	• Open in ETCS power source circuit • ECM	○	○
P2119 (05–130)	Throttle Actuator Control Throttle Body Range/Performance	• Electric throttle control system • ECM	○	○
P2120 (05–132)	Throttle/Pedal Position Sensor/ Switch "D" Circuit	• Accelerator pedal position sensor • ECM	○	○
P2121 (05–138)	Throttle/Pedal Position Sensor/ Switch "D" Circuit Range/Performance	• Accelerator pedal position sensor circuit • Accelerator pedal position sensor • ECM	○	○
P2122 (05–132)	Throttle/Pedal Position Sensor/ Switch "D" Circuit Low Input	• Accelerator pedal position sensor • VCP1 circuit open • VPA1 circuit open or ground short • ECM	○	○

DTC No. (See Page)	Detection Item	Trouble Area	CHK ENG*1	Memory
P2123 (05–132)	Throttle/Pedal Position Sensor/ Switch "D" Circuit High Input	• Accelerator pedal position sensor • EPA circuit open • ECM	○	○
P2125 (05–132)	Throttle/Pedal Position Sensor/ Switch "E" Circuit	• Accelerator pedal position sensor • ECM	○	○
P2127 (05–132)	Throttle/Pedal Position Sensor/ Switch "E" Circuit Low Input	• Accelerator pedal position sensor • VCP2 circuit open • VPA2 circuit open or ground short • ECM	○	○
P2128 (05–132)	Throttle/Pedal Position Sensor/ Switch "E" Circuit High Input	• Accelerator pedal position sensor • EPA2 circuit open • ECM	○	○
P2135 (05–67)	Throttle/Pedal Position Sensor/ Switch "A"/"B" Voltage Correlation	• VTA1 and VTA2 circuit are short–circuited • Throttle position sensor (built in throttle body) • ECM	○	○
P2138 (05–132)	Throttle/Pedal Position Sensor/ Switch "D"/"E" Voltage Correlation	• VPA1 and VPA2 circuit are short circuited • Accelerator pedal position sensor • ECM	○	○
P2238*2 (05–140)	Oxygen Sensor Pumping Current Circuit Low (for A/F sensor) (Bank 1 Sensor 1)	• Open or short in A/F sensor (bank 1, 2 sensor 1) circuit • A/F sensor (bank1, 2 sensor 1) • A/F sensor heater • A/F sensor heater relay • A/F sensor heater and relay circuit • ECM	○	○
P2239*2 (05–140)	Oxygen Sensor Pumping Current Circuit High (for A/F sensor) (Bank 1 Sensor 1)		○	○
P2241*2 (05–140)	Oxygen Sensor Pumping Current Circuit Low (for A/F sensor) (Bank 2 Sensor 1)		○	○
P2242*2 (05–140)	Oxygen Sensor Pumping Current Circuit High (for A/F sensor) (Bank 2 Sensor 1)		○	○
P2252*2 (05–140)	Oxygen Sensor Reference Ground Circuit Low (for A/F sensor) (Bank 1 Sensor 1)		○	○
P2253*2 (05–140)	Oxygen Sensor Reference Ground Circuit High (for A/F sensor) (Bank 1 Sensor 1)		○	○
P2255*2 (05–140)	Oxygen Sensor Reference Ground Circuit Low (for A/F sensor) (Bank 2 Sensor 1)		○	○
P2256*2 (05–140)	Oxygen Sensor Reference Ground Circuit High (for A/F sensor) (Bank 2 Sensor 1)		○	○
P2716 (05–409)	Pressure Control Solenoid "D" Electrical	• Electronic controlled automatic transmission (ECT)	○	○
P2769 (05–412)	DSL Solenoid Circuit Low		○	○
P2770 (05–412)	DSL Solenoid Circuit High		○	○

*1: Check Engine Warning Light (CHK ENG) is illuminated

*2: This DTC is related to A/F sensor, although the caption is oxygen sensor.

*3: This DTC indicates a malfunction related to primary circuit.