054S5–06

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 (test) mode, check the circuit for the codes listed in the table below. For details of each code, turn to the page referred to under the ”See page ” for the respective ”DTC No.” in the DTC chart.

DTC No (See Page)	Detection Item	Trouble Area	*1 CHE ENG	Memory
12 (05–446)	ENGINE SPEED SENSOR CIRCUIT MALFUNCTION 1 (TDC OR G1 CIRCUIT)	• Open or short in crank position sensor circuit • Camshaft position sensor • Pump drive shaft pulley • ECM	○	○
13 (05–449)	ENGINE SPEED SENSOR CIRCUIT MALFUNCTION 2 (NE CIRCUIT)	• Open or short in crankshaft position sensor circuit • Crankshaft position sensor • Crank angle sensor plate • ECM	○	○
15 (05–451)	THROTTLE MOTOR CIRCUIT MALFUNCTION	• Open or short in throttle control motor circuit • Throttle control motor • Throttle valve • Throttle drive gear • Diesel throttle body • ECM	○	○
17	INTERIOR IC MALFUNCTION	• ECM	○	○
19 (1) (05–454)	ACCEL. POSITION SENSOR CIRCUIT (OPEN/SHORT)	• Open or short in accelerator pedal position sensor circuit • Accelerator pedal position sensor • ECM	○	○
19 (2) (05–460)	ACCEL. POSITION SENSOR CIRCUIT (IDL S/W/RANGE)	• Open or short in accelerator pedal position sensor circuit • Accelerator pedal position sensor • ECM	○	○
22 (05–464)	WATER TEMPERATURE SENSOR CIRCUIT MALFUNCTION	• Open or short in engine coolant temp. sensor circuit • Engine coolant temperature sensor • ECM	○	○
23 (05–470)	AIR TEMPERATURE CIRCUIT MALFUNCTION	• Open or short in inlet air temp. sensor circuit • Inlet air temperature sensor • ECM	–	○
24 (05–476)	AIR TEMPERATURE CIRCUIT MALFUNCTION	• Open or short in intake air temp. sensor circuit • Intake air temperature sensor (built into air flow meter) • ECM	–	○
31 (05–482)	AIR FLOW METER CIRCUIT MALFUNCTION	• Open or short in air flow meter circuit • Mass air flow meter • ECM	○	○
32 (05–490)	INJECTION PUMP SYSTEM MALFUNCTION	• Open or short in injector correction resistance circuit • Injector correction resistance • ECM	–	○
34 (1) (05–491)	STEP MOTOR FOR TURBOCHARGER CONTROL CIRCUIT MALFUNCTION (OPEN/SHORT)	• Step motor • Wire harness • ECM	○	○
34 (2) (05–493)	TURBOCHARGER SYSTEM MALFUNCTION	• Turbocharger • EGR valve • Mass air flow meter • ECM	○	○
34 (3) (05–493)	TURBOCHARGER STICK DETECTED (CLOSE)	• Turbocharger • EGR valve • Mass air flow meter • ECM	○	○

34 (4) (05–493)	TURBOCHARGER STICK DETECTED (OPEN)	• Turbocharger • EGR valve • Mass air flow meter • ECM	–	○
35 (05–495)	MANIFOLD ABSOLUTE PRESSURE/BAROMTRIC PRESSURE CIRCUIT MALFUNCTION	• Open or short in manifold absolute pressure sensor circuit • Manifold absolute pressure sensor • Open or short in VSV for manifold absolute pressure sensor circuit • VSV for manifold absolute pressure sensor • Vacuum hose disconnected or blocked • Turbocharger • EGR valve • Mass air flow meter • ECM	○	○
39 (05–506)	FUEL TEMPERATURE SENSOR CIRCUIT MALFUNCTION	• Open or short in fuel temp. sensor circuit • Fuel pressure sensor • ECM	○	○
42 (05–512)	VEHICLE SPEED SENSOR SIGNAL CIRCUIT MALFUNCTION	• Open or short in vehicle speed sensor circuit • Vehicle speed sensor • Combination meter • ECM	○	○
49 (05–515)	COMMON RAIL PRESSURE SENSOR CIRCUIT MALFUNCTION	• Open or short in fuel pressure sensor circuit for common rail • Fuel pressure sensor for common rail • ECM	○	○
51 (05–517)	STOP LIGHT SWITCH CIRCUIT MALFUNCTION	• Open or short in stop light switch signal circuit • Stop light switch • ECM	–	○
78 (1) (05–521)	FUEL LINE MALFUNCTION	• Open or short in EDU circuit • EDU • Open or short in injector circuit • Injector • Open or short in common rail pressure sensor circuit • Common rail pressure sensor • Fuel line between supply pump and common rail • Fuel line between common rail and injector • Pressure limiter • ECM	○	○
78 (2) (05–526)	FUEL PUMP SYSTEM MALFUNCTION (SHORT)	• Open or short in SCV circuit • SCV • Supply pump • ECM	○	○
78 (3) (05–526)	FUEL PUMP SYSTEM MALFUNCTION (OVER PRESSURE)	• Open or short in SCV circuit • SCV • Supply pump • ECM	○	○
89	INTERIOR IC MALFUNCTION	• ECM	○	○
97 (05–531)	EDU CIRCUIT MALFUNCTION	• Open or short in EDU circuit • EDU • Open or short in SCV circuit • SCV • Injector • ECM	○	○
99 *2	ENGINE IMMOBILIZER SYSTEM MALFUNCTION	• Open or short in engine immobilizer system circuit • Trasponder key amplifier • Trasponder key computer • Trasponder key coil • ECM	–	○

*1: – Check engine warning light does not lights up.
○ Check engine warning light lights up.
*2:See Page 05–1787 Engine Immobilizer Section