

# DIAGNOSTIC TROUBLE CODE CHART

## HINT:

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

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

DTC No. (See Page)	Detection Item	Trouble Area	* <sup>1</sup> CHK ENG	* <sup>2</sup> Memory
P0100/31* <sup>3</sup> (DI-25)	Air Flow Meter Circuit	<ul style="list-style-type: none"> <li>• Open or short in air flow meter circuit</li> <li>• Air flow meter</li> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
P0105/35 (DI-32)	Manifold Absolute Pressure/ Barometric Pressure Circuit	<ul style="list-style-type: none"> <li>• Open or short in turbo pressure sensor circuit</li> <li>• Turbo pressure sensor</li> <li>• Open or short in VSV for turbo pressure sensor circuit</li> <li>• VSV for turbo pressure sensor</li> <li>• Vacuum hose disconnected or blocked</li> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
P0110/24* <sup>3</sup> (DI-40)	Intake Air Temperature Circuit	<ul style="list-style-type: none"> <li>• Open or short in intake air temp. sensor circuit</li> <li>• Intake air temp. sensor (built into air flow meter)</li> <li>• Engine ECU</li> </ul>	–	<input type="checkbox"/>
P0115/22 (DI-46)	Water Temperature Sensor Circuit	<ul style="list-style-type: none"> <li>• Open or short in water temp. sensor circuit</li> <li>• Water temp. sensor</li> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
P0180/39 (DI-51)	Fuel Temperature Sensor Circuit	<ul style="list-style-type: none"> <li>• Open or short in fuel temp. sensor circuit</li> <li>• Fuel temp. sensor</li> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
P0335/13 (DI-56)	Engine Speed Sensor Circuit 2 (NE Circuit)	<ul style="list-style-type: none"> <li>• Open or short in engine speed sensor circuit</li> <li>• Engine speed sensor</li> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
P0340/12 (DI-59)	Engine Speed Sensor Circuit 1 (TDC or G 1 Circuit)	<ul style="list-style-type: none"> <li>• Open or short in crankshaft position sensor circuit</li> <li>• Crankshaft position sensor</li> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
P0500/42 (DI-61)	Vehicle Speed Sensor Signal Circuit	<ul style="list-style-type: none"> <li>• Open or short in vehicle speed sensor circuit</li> <li>• Vehicle speed sensor</li> <li>• Combination meter</li> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
P0605/17 (DI-63)	Interior IC Malfunction	<ul style="list-style-type: none"> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
P1115/23 (DI-64)	Atmospheric Temperature Circuit	<ul style="list-style-type: none"> <li>• Open or short in atmospheric temp. sensor circuit</li> <li>• Atmospheric temp. sensor</li> <li>• Engine ECU</li> </ul>	–	<input type="checkbox"/>
P1120/19 (DI-67)	Accel. Position Sensor Circuit (Open/Short)	<ul style="list-style-type: none"> <li>• Open or short in accelerator pedal position sensor circuit</li> <li>• Accelerator pedal position sensor</li> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
P1121/19 (DI-74)	Accel. Position Sensor Circuit (IDL SW/Range)	<ul style="list-style-type: none"> <li>• Accelerator pedal position sensor</li> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
P1122/19 (DI-80)	Accel. Closed Position SW Circuit (Short)	<ul style="list-style-type: none"> <li>• Short in accelerator pedal closed position switch circuit</li> <li>• Accelerator pedal closed position switch</li> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>

P1123/19 (DI-80)	Accel. Closed Position SW Circuit (Open)	<ul style="list-style-type: none"> <li>• Open in accelerator pedal closed position switch circuit</li> <li>• Accelerator pedal closed position switch</li> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
P1215/97 (DI-82)	EDU Circuit	<ul style="list-style-type: none"> <li>• Open or short in EDU circuit</li> <li>• EDU</li> <li>• Spill control valve</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
P1220/14 (DI-87)	Timing Control System Malfunction	<ul style="list-style-type: none"> <li>• Open or short in timing control valve circuit</li> <li>• Timing control valve</li> <li>• Fuel filter (Clogging)</li> <li>• Fuel (Freezing, air in)</li> <li>• Injection pump (Internal pressure and timing control valve)</li> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
P1222/15 (DI-91)	Throttle Motor Circuit	<ul style="list-style-type: none"> <li>• Open or short in throttle control motor circuit</li> <li>• Open or short in diesel throttle position switch circuit</li> <li>• Throttle control motor</li> <li>• Throttle valve</li> <li>• Throttle drive gear</li> <li>• Diesel throttle body</li> <li>• Diesel throttle position</li> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
P1250/34* <sup>3</sup> (DI-96)	Turbocharger System Malfunction	<ul style="list-style-type: none"> <li>• VNT valve</li> <li>• Turbocharger</li> <li>• EGR valve</li> <li>• Vacuum hose</li> <li>• E-VRV for intake pressure charge</li> <li>• VSV for turbo pressure sensor</li> <li>• Air flow meter</li> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
P1255/34* <sup>3</sup> (DI-96)	Turbocharger Stick Detected (Close)	<ul style="list-style-type: none"> <li>• VNT valve</li> <li>• Turbocharger</li> <li>• EGR valve</li> <li>• Vacuum hose</li> <li>• E-VRV for intake pressure charge</li> <li>• VSV for turbo pressure sensor</li> <li>• Air flow meter</li> <li>• Engine ECU</li> </ul>	-	<input type="checkbox"/>
P1256/34* <sup>3</sup> (DI-96)	Turbocharger Stick Detected (Open)	<ul style="list-style-type: none"> <li>• VNT valve</li> <li>• Turbocharger</li> <li>• EGR valve</li> <li>• Vacuum hose</li> <li>• E-VRV for intake pressure charge</li> <li>• VSV for turbo pressure sensor</li> <li>• Air flow meter</li> <li>• Engine ECU</li> </ul>	-	<input type="checkbox"/>
P1416/58* <sup>3</sup> (DI-105)	SCV Control Circuit	<ul style="list-style-type: none"> <li>• SCV valve</li> <li>• VSV for SCV</li> <li>• Air flow meter</li> <li>• Vacuum hose</li> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
P1520/52 (DI-113)	Stop Light Switch Circuit	<ul style="list-style-type: none"> <li>• Short in stop light switch signal circuit</li> <li>• Stop light switch</li> <li>• Engine ECU</li> </ul>	-	<input type="checkbox"/>
P1633/89 (DI-63)	Interior IC Malfunction	<ul style="list-style-type: none"> <li>• Engine ECU</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>

P1670/32 (DI-117)	Injection Pump System Malfunction	<ul style="list-style-type: none"> <li>• Injection pump correction unit circuit</li> <li>• Injection pump correction unit</li> <li>• Engine ECU</li> </ul>	–	□
B2799/99 (□)	Engine Immobiliser System Malfunction	<ul style="list-style-type: none"> <li>• Open or short in engine immobilizer system circuit</li> <li>• Transponder key amplifier</li> <li>• Transponder key computer</li> <li>• Transponder key coil</li> <li>• Engine ECU</li> </ul>	–	□

**HINT:**

<sup>1</sup>\* : "□" displayed in the diagnosis mode column indicates that the check engine warning light (CHK ENG) lights up when a malfunction is detected.

"–" indicates that the CHK ENG does not light up during malfunction diagnosis, even if a malfunction is detected.

<sup>2</sup>\* : "□" in the memory column indicates that a diagnostic trouble code is recorded in the engine ECU memory when a malfunction occurs. Accordingly, output of diagnostic results in normal or test mode is done with the ignition switch ON.

<sup>3</sup>\* : Only for Europe

□ : See Pub. No. RM 970E