

# 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 Diagnostic Trouble Code (DTC) is displayed, check the trouble area for the DTC listed in the table below. For details of each DTC, refer to the “see page”.

DTC No. (See Page)	Detection Item	Trouble Area	*1 MIL	*2 Memory
P0010 (05-61)	Camshaft Position "A" Actuator Circuit Bank 1 [VVT OCV (Bank 1) open/short]	<ul style="list-style-type: none"> <li>Variable Valve Timing (VVT) Oil Control Valve (OCV) (bank 1) circuit</li> <li>ECM</li> </ul>	○	○
P0011 (05-66)	Camshaft Position "A" Timing Over Advanced or System Performance (Bank 1) [Camshaft timing stuck advanced]	<ul style="list-style-type: none"> <li>Valve timing (bank 1)</li> <li>VVT OCV (bank 1)</li> <li>VVT actuator</li> </ul>	○	○
P0012 (05-66)	Camshaft Position "A" Timing Over Retarded (Bank 1) [Camshaft timing stuck retarded]	<ul style="list-style-type: none"> <li>Valve timing (bank 1)</li> <li>VVT OCV (bank 1)</li> <li>VVT actuator</li> </ul>	○	○
P0016 (05-72)	Camshaft Position – Crankshaft Position Correlation (Bank 1 Sensor A) [Misalignment of camshaft (bank 1) position and crankshaft position]	<ul style="list-style-type: none"> <li>Timing belt</li> <li>Valve timing (bank 1)</li> </ul>	○	○
P0018 (05-72)	Camshaft Position – Crankshaft Position Correlation (Bank 2 Sensor A) [Misalignment of camshaft (bank 2) position and crankshaft position]	<ul style="list-style-type: none"> <li>Timing belt</li> <li>Valve timing (bank 2)</li> </ul>	○	○
P0020 (05-61)	Camshaft Position "A" Actuator Circuit Bank 2 [VVT OCV (Bank 2) open/short]	<ul style="list-style-type: none"> <li>VVT OCV (bank 2) circuit</li> <li>ECM</li> </ul>	○	○
P0021 (05-66)	Camshaft Position "A" Timing Over Advanced or System Performance (Bank 2) [Camshaft timing stuck advanced]	<ul style="list-style-type: none"> <li>Valve timing (bank 2)</li> <li>VVT OCV (bank 2)</li> <li>VVT actuator</li> </ul>	○	○
P0022 (05-66)	Camshaft Position "A" Timing Over Retarded (Bank 2) [Camshaft timing stuck retarded]	<ul style="list-style-type: none"> <li>Valve timing (bank 2)</li> <li>VVT OCV (bank 2)</li> <li>VVT actuator</li> </ul>	○	○
P0031 (05-76)	Oxygen Sensor Heater Control Circuit Low (Bank 1 Sensor 1) [Heated Oxygen Sensor (HO2S) (bank 1 sensor 1) heater current is low]	<ul style="list-style-type: none"> <li>HO2S (bank 1 sensor 1) heater circuit</li> <li>ECM</li> </ul>	○	○
P0032 (05-76)	Oxygen Sensor Heater Control Circuit High (Bank 1 Sensor 1) [HO2S (bank 1 sensor 1) heater current is high]	<ul style="list-style-type: none"> <li>HO2S (bank 1 sensor 1) heater circuit</li> <li>ECM</li> </ul>	○	○
P0037 (05-76)	Oxygen Sensor Heater Control Circuit Low (Bank 1 Sensor 2) [HO2S (bank 1 sensor 2) heater current is low]	<ul style="list-style-type: none"> <li>HO2S (bank 1 sensor 2) heater circuit</li> <li>ECM</li> </ul>	○	○
P0038 (05-76)	Oxygen Sensor Heater Control Circuit High (Bank 1 Sensor 2) [HO2S (bank 2 sensor 1) heater current is high]	<ul style="list-style-type: none"> <li>HO2S (bank 1 sensor 2) heater circuit</li> <li>ECM</li> </ul>	○	○
P0051 (05-76)	Oxygen Sensor Heater Control Circuit Low (Bank 2 Sensor 1) [HO2S (bank 2 sensor 1) heater current is low]	<ul style="list-style-type: none"> <li>HO2S (bank 2 sensor 1) heater circuit</li> <li>ECM</li> </ul>	○	○
P0052 (05-76)	Oxygen Sensor Heater Control Circuit High (Bank 2 Sensor 1) [HO2S (bank 2 sensor 1) heater current is high]	<ul style="list-style-type: none"> <li>HO2S (bank 2 sensor 1) heater circuit</li> <li>ECM</li> </ul>	○	○

DTC No. (See Page)	Detection Item	Trouble Area	*1 MIL	*2 Memory
P0057 (05-76)	Oxygen Sensor Heater Control Circuit Low (Bank 2 Sensor 2) [HO2S (bank 2 sensor 2) heater current is low]	<ul style="list-style-type: none"> <li>• HO2S (bank 2 sensor 2) heater circuit</li> <li>• ECM</li> </ul>	○	○
P0058 (05-76)	Oxygen Sensor Heater Control Circuit High (Bank 2 Sensor 2) [HO2S (bank 2 sensor 2) heater current is high]	<ul style="list-style-type: none"> <li>• HO2S (bank 2 sensor 2) heater circuit</li> <li>• ECM</li> </ul>	○	○
P0100 (05-83)	Mass or Volume Air Flow Circuit [Mass Air Flow (MAF) meter voltage is chattering]	<ul style="list-style-type: none"> <li>• MAF meter circuit</li> <li>• ECM</li> </ul>	○	○
P0101 (05-90)	Mass or Volume Air Flow Circuit Range/Performance Problem [MAF meter voltage is out of normal range]	MAF meter	○	○
P0102 (05-83)	Mass or Volume Air Flow Circuit Low Input [MAF meter voltage is low]	<ul style="list-style-type: none"> <li>• MAF meter circuit</li> <li>• ECM</li> </ul>	○	○
P0103 (05-83)	Mass or Volume Air Flow Circuit High Input [MAF meter voltage is high]	<ul style="list-style-type: none"> <li>• MAF meter circuit</li> <li>• ECM</li> </ul>	○	○
P0110 (05-94)	Intake Air Temperature Circuit [Intake Air Temperature (IAT) sensor resistance is out of normal range]	<ul style="list-style-type: none"> <li>• IAT sensor circuit</li> <li>• ECM</li> </ul>	○	○
P0112 (05-94)	Intake Air Temperature Circuit Low Input [IAT sensor resistance is low]	<ul style="list-style-type: none"> <li>• IAT sensor circuit</li> <li>• ECM</li> </ul>	○	○
P0113 (05-94)	Intake Air Temperature Circuit High Input [IAT sensor resistance is high]	<ul style="list-style-type: none"> <li>• IAT sensor circuit</li> <li>• ECM</li> </ul>	○	○
P0115 (05-99)	Engine Coolant Temperature Circuit [Engine Coolant Temperature (ECT) sensor resistance is out of normal range]	<ul style="list-style-type: none"> <li>• ECT sensor circuit</li> <li>• ECM</li> </ul>	○	○
P0116 (05-72)	Engine Coolant Temperature Circuit Range/Performance Problem [ECT sensor resistance stuck]	<ul style="list-style-type: none"> <li>• ECT sensor</li> <li>• Cooling system</li> </ul>	○	○
P0117 (05-99)	Engine Coolant Temperature Circuit Low Input [ECT sensor resistance is low]	<ul style="list-style-type: none"> <li>• ECT sensor circuit</li> <li>• ECM</li> </ul>	○	○
P0118 (05-99)	Engine Coolant Temperature Circuit High Input [ECT sensor resistance is high]	<ul style="list-style-type: none"> <li>• ECT sensor circuit</li> <li>• ECM</li> </ul>	○	○
P0120 (05-107)	Throttle/Pedal Position Sensor/Switch "A" Circuit [Throttle position sensor voltage is chattering]	<ul style="list-style-type: none"> <li>• Throttle position sensor (VTA1) circuit</li> <li>• ECM</li> </ul>	○	○
P0121 (05-114)	Throttle/Pedal Position Sensor/Switch "A" Circuit Range/Performance Problem [Throttle position sensor voltage is out of normal range]	Throttle position sensor	○	○
P0122 (05-107)	Throttle/Pedal Position Sensor/Switch "A" Circuit Low Input [Throttle position sensor voltage is low]	<ul style="list-style-type: none"> <li>• Throttle position sensor (VTA1) circuit</li> <li>• ECM</li> </ul>	○	○
P0123 (05-107)	Throttle/Pedal Position Sensor/Switch "A" Circuit High Input [Throttle position sensor voltage is high]	<ul style="list-style-type: none"> <li>• Throttle position sensor (VTA1) circuit</li> <li>• ECM</li> </ul>	○	○
P0125 (05-118)	Insufficient Coolant Temperature for Closed Loop Fuel Control	<ul style="list-style-type: none"> <li>• ECT sensor</li> <li>• Cooling system</li> <li>• Coolant thermostat</li> </ul>	○	○
P0128 (05-121)	Coolant Thermostat	<ul style="list-style-type: none"> <li>• Coolant thermostat</li> <li>• Cooling system</li> </ul>	○	○

## DIAGNOSTICS – SFI SYSTEM

DTC No. (See Page)	Detection Item	Trouble Area	*1 MIL	*2 Memory
P0130 (05-124)	Oxygen Sensor Circuit (Bank 1 Sensor 1)	<ul style="list-style-type: none"> <li>• HO2S circuit (bank 1 sensor 1)</li> <li>• Fuel pressure</li> <li>• ECM</li> </ul>	○	○
P0133 (05-135)	Oxygen Sensor Circuit Slow Response (Bank 1 Sensor 1)	<ul style="list-style-type: none"> <li>• HO2S circuit (bank 1 sensor 1)</li> <li>• Fuel pressure</li> <li>• ECM</li> </ul>	○	○
P0134 (05-146)	Oxygen Sensor Circuit No Activity Detected (Bank 1 Sensor 1)	<ul style="list-style-type: none"> <li>• HO2S circuit (bank 1 sensor 1)</li> <li>• Fuel pressure</li> <li>• ECM</li> </ul>	○	○
P0136 (05-156)	Oxygen Sensor Circuit Malfunction (Bank 1 Sensor 2)	<ul style="list-style-type: none"> <li>• HO2S circuit (bank 1 sensor 2)</li> <li>• ECM</li> </ul>	○	○
P0138 (05-156)	Oxygen Sensor Circuit High Voltage (Bank 1 Sensor 2)	<ul style="list-style-type: none"> <li>• HO2S circuit (bank 1 sensor 2)</li> <li>• ECM</li> </ul>	○	○
P0150 (05-124)	Oxygen Sensor Circuit (Bank 2 Sensor 1)	<ul style="list-style-type: none"> <li>• HO2S circuit (bank 2 sensor 1)</li> <li>• Fuel pressure</li> <li>• ECM</li> </ul>	○	○
P0153 (05-135)	Oxygen Sensor Circuit Slow Response (Bank 2 Sensor 1)	<ul style="list-style-type: none"> <li>• HO2S circuit (bank 2 sensor 1)</li> <li>• Fuel pressure</li> <li>• ECM</li> </ul>	○	○
P0154 (05-146)	Oxygen Sensor Circuit No Activity Detected (Bank 2 Sensor 1)	<ul style="list-style-type: none"> <li>• HO2S circuit (bank 2 sensor 1)</li> <li>• Fuel pressure</li> <li>• ECM</li> </ul>	○	○
P0156 (05-156)	Oxygen Sensor Circuit Malfunction (Bank 2 Sensor 2)	<ul style="list-style-type: none"> <li>• HO2S circuit (bank 2 sensor 2)</li> <li>• ECM</li> </ul>	○	○
P0158 (05-156)	Oxygen Sensor Circuit High Voltage (Bank 1 Sensor 2)	<ul style="list-style-type: none"> <li>• HO2S circuit (bank 2 sensor 2)</li> <li>• ECM</li> </ul>	○	○
P0171 (05-168)	System Too Lean (Bank 1)	<ul style="list-style-type: none"> <li>• HO2S (bank 1 sensor 1)</li> <li>• Fuel pressure</li> <li>• PCV valve and hose</li> <li>• Air induction system</li> <li>• Exhaust gas leak</li> <li>• MAF meter</li> <li>• ECT sensor</li> </ul>	○	○
P0172 (05-168)	System Too Rich (Bank 1)	<ul style="list-style-type: none"> <li>• HO2S (bank 1 sensor 1)</li> <li>• Fuel pressure</li> <li>• PCV valve and hose</li> <li>• Air induction system</li> <li>• Exhaust gas leak</li> <li>• MAF meter</li> <li>• ECT sensor</li> </ul>	○	○
P0174 (05-168)	System Too Lean (Bank 2)	<ul style="list-style-type: none"> <li>• HO2S (bank 2 sensor 1)</li> <li>• Fuel pressure</li> <li>• PCV valve and hose</li> <li>• Air induction system</li> <li>• Exhaust gas leak</li> <li>• MAF meter</li> <li>• ECT sensor</li> </ul>	○	○
P0175 (05-168)	System Too Rich (Bank 2)	<ul style="list-style-type: none"> <li>• HO2S (bank 2 sensor 1)</li> <li>• Fuel pressure</li> <li>• PCV valve and hose</li> <li>• Air induction system</li> <li>• Exhaust gas leak</li> <li>• MAF meter</li> <li>• ECT sensor</li> </ul>	○	○

DTC No. (See Page)	Detection Item	Trouble Area	*1 MIL	*2 Memory
P0220 (05-107)	Throttle/Pedal Position Sensor/Switch "B" Circuit	<ul style="list-style-type: none"> <li>• Throttle position sensor (VTA2) circuit</li> <li>• ECM</li> </ul>	○	○
P0222 (05-107)	Throttle/Pedal Position Sensor/Switch "B" Circuit Low Input	<ul style="list-style-type: none"> <li>• Throttle position sensor (VTA2) circuit</li> <li>• ECM</li> </ul>	○	○
P0223 (05-107)	Throttle/Pedal Position Sensor/Switch "B" Circuit High Input	<ul style="list-style-type: none"> <li>• Throttle position sensor (VTA2) circuit</li> <li>• ECM</li> </ul>	○	○
P0230 (05-179)	Fuel Pump Primary Circuit	<ul style="list-style-type: none"> <li>• F/PMP relay circuit</li> <li>• ECM</li> </ul>	-	○
P0300 (05-183)	Random/Multiple Cylinder Misfire Detected	<ul style="list-style-type: none"> <li>• Vacuum hose connection</li> <li>• Valve timing</li> <li>• Fuel pressure</li> <li>• Compression pressure</li> <li>• PCV hose and PCV valve</li> <li>• Spark plug</li> <li>• Injector</li> <li>• Valve clearance</li> <li>• MAF meter</li> <li>• ECT sensor</li> <li>• ECM</li> </ul>	○	○
P0301 (05-183)	Cylinder 1 Misfire Detected	Same as DTC No. P0300	★*3	○
P0302 (05-183)	Cylinder 2 Misfire Detected	Same as DTC No. P0300	★*3	○
P0303 (05-183)	Cylinder 3 Misfire Detected	Same as DTC No. P0300	★*3	○
P0304 (05-183)	Cylinder 4 Misfire Detected	Same as DTC No. P0300	★*3	○
P0305 (05-183)	Cylinder 5 Misfire Detected	Same as DTC No. P0300	★*3	○
P0306 (05-183)	Cylinder 6 Misfire Detected	Same as DTC No. P0300	★*3	○
P0307 (05-183)	Cylinder 7 Misfire Detected	Same as DTC No. P0300	★*3	○
P0308 (05-183)	Cylinder 8 Misfire Detected	Same as DTC No. P0300	★*3	○
P0325 (05-198)	Knock Sensor 1 Circuit	<ul style="list-style-type: none"> <li>• Knock sensor (bank 1) (looseness)</li> <li>• ECM</li> </ul>	○	○
P0327 (05-198)	Knock Sensor 1 Circuit low input	<ul style="list-style-type: none"> <li>• Knock sensor (bank 1)</li> <li>• ECM</li> </ul>	○	○
P0328 (05-198)	Knock Sensor 1 Circuit high input	<ul style="list-style-type: none"> <li>• Knock sensor (bank 1)</li> <li>• ECM</li> </ul>	○	○
P0330 (05-198)	Knock Sensor 2 Circuit	<ul style="list-style-type: none"> <li>• Knock sensor (bank 2) (looseness)</li> <li>• ECM</li> </ul>	○	○
P0332 (05-198)	Knock Sensor 2 Circuit low input	<ul style="list-style-type: none"> <li>• Knock sensor (bank 2)</li> <li>• ECM</li> </ul>	○	○
P0333 (05-198)	Knock Sensor 2 Circuit high input	<ul style="list-style-type: none"> <li>• Knock sensor (bank 2)</li> <li>• ECM</li> </ul>	○	○
P0335 (05-205)	Crankshaft Position Sensor "A" Circuit	<ul style="list-style-type: none"> <li>• Crankshaft position sensor circuit</li> <li>• Crankshaft timing pulley</li> <li>• ECM</li> </ul>	○	○

## DIAGNOSTICS – SFI SYSTEM

DTC No. (See Page)	Detection Item	Trouble Area	*1 MIL	*2 Memory
P0339 (05-205)	Crankshaft Position Sensor "A" Circuit Intermittent	<ul style="list-style-type: none"> <li>• Crankshaft position sensor circuit</li> <li>• Crankshaft timing pulley</li> <li>• ECM</li> </ul>	-	○
P0340 (05-210)	Camshaft Position Sensor "A" Circuit (Bank 1) [VVT sensor (Bank 1)]	<ul style="list-style-type: none"> <li>• VVT sensor circuit (bank 1)</li> <li>• Camshaft timing gear</li> <li>• Timing belt</li> <li>• ECM</li> </ul>	○	○
P0341 (05-210)	Camshaft Position Sensor "A" Circuit Range/ Performance (Bank 1) [VVT sensor (Bank 1)]	<ul style="list-style-type: none"> <li>• VVT sensor circuit (bank 1)</li> <li>• Camshaft timing gear</li> <li>• Timing belt</li> <li>• ECM</li> </ul>	○	○
P0345 (05-210)	Camshaft Position Sensor "A" Circuit (Bank 2) [VVT sensor (Bank 2)]	<ul style="list-style-type: none"> <li>• VVT sensor circuit (bank 2)</li> <li>• Camshaft timing gear</li> <li>• Timing belt</li> <li>• ECM</li> </ul>	○	○
P0346 (05-210)	Camshaft Position Sensor "A" Circuit Range/ Performance (Bank 2) [VVT sensor (Bank 2)]	<ul style="list-style-type: none"> <li>• VVT sensor circuit (bank 2)</li> <li>• Camshaft timing gear</li> <li>• Timing belt</li> <li>• ECM</li> </ul>	○	○
P0351 (05-215)	Ignition Coil "A" Primary Circuit [Ignition Coil No.1 Primary Circuit]	<ul style="list-style-type: none"> <li>• No. 1 ignition coil (igniter) circuit</li> <li>• ECM</li> </ul>	○	○
P0352 (05-215)	Ignition Coil "B" Primary Circuit [Ignition Coil No.2 Primary Circuit]	<ul style="list-style-type: none"> <li>• No. 2 ignition coil (igniter) circuit</li> <li>• ECM</li> </ul>	○	○
P0353 (05-215)	Ignition Coil "C" Primary Circuit [Ignition Coil No.3 Primary Circuit]	<ul style="list-style-type: none"> <li>• No. 3 ignition coil (igniter) circuit</li> <li>• ECM</li> </ul>	○	○
P0354 (05-215)	Ignition Coil "D" Primary Circuit [Ignition Coil No.4 Primary Circuit]	<ul style="list-style-type: none"> <li>• No. 4 ignition coil (igniter) circuit</li> <li>• ECM</li> </ul>	○	○
P0355 (05-215)	Ignition Coil "E" Primary Circuit [Ignition Coil No.5 Primary Circuit]	<ul style="list-style-type: none"> <li>• No. 5 ignition coil (igniter) circuit</li> <li>• ECM</li> </ul>	○	○
P0356 (05-215)	Ignition Coil "F" Primary Circuit [Ignition Coil No.6 Primary Circuit]	<ul style="list-style-type: none"> <li>• No. 6 ignition coil (igniter) circuit</li> <li>• ECM</li> </ul>	○	○
P0357 (05-215)	Ignition Coil "G" Primary Circuit [Ignition Coil No.7 Primary Circuit]	<ul style="list-style-type: none"> <li>• No. 7 ignition coil (igniter) circuit</li> <li>• ECM</li> </ul>	○	○
P0358 (05-215)	Ignition Coil "H" Primary Circuit [Ignition Coil No.8 Primary Circuit]	<ul style="list-style-type: none"> <li>• No. 8 ignition coil (igniter) circuit</li> <li>• ECM</li> </ul>	○	○
P0420 (05-226)	Catalyst System Efficiency Below Threshold (Bank 1)	<ul style="list-style-type: none"> <li>• Catalyst converter (bank 1)</li> <li>• Front exhaust pipe (rear catalyst converter)</li> <li>• HO2S (bank 1 sensor 1)</li> <li>• HO2S (bank 1 sensor 2)</li> <li>• Exhaust gas leak</li> </ul>	○	○
P0430 (05-226)	Catalyst System Efficiency Below Threshold (Bank 2)	<ul style="list-style-type: none"> <li>• Catalyst converter (bank 2)</li> <li>• Front exhaust pipe (rear catalyst converter)</li> <li>• HO2S (bank 2 sensor 1)</li> <li>• HO2S (bank 2 sensor 2)</li> <li>• Exhaust gas leak</li> </ul>	○	○
P0441 (05-235)	Evaporative Emission Control System Incorrect Purge Flow [Evaporative emissions Vacuum Switching Valve (EVAP VSV)]	<ul style="list-style-type: none"> <li>• EVAP VSV circuit</li> <li>• Canister closed valve (CCV) circuit</li> <li>• Fuel cap</li> <li>• EVAP large leak from fuel tank EVAP canister and EVAP line</li> <li>• ECM</li> </ul>	○	○
P0442 (05-235)	Evaporative Emission Control System Leak Detected (small leak) [EVAP 0.04 inch leak]	<ul style="list-style-type: none"> <li>• Fuel cap</li> <li>• EVAP small leak from fuel tank EVAP canister and EVAP line</li> </ul>	○	○

DTC No. (See Page)	Detection Item	Trouble Area	*1 MIL	*2 Memory
P0446 (05-235)	Evaporative Emission Control System Vent Control Circuit [Canister closed valve (CCV)]	<ul style="list-style-type: none"> <li>• EVAP VSV circuit</li> <li>• Canister closed valve (CCV) circuit</li> <li>• Fuel cap</li> <li>• EVAP large leak from fuel tank EVAP canister and EVAP line</li> <li>• ECM</li> </ul>	○	○
P0451 (05-253)	Evaporative Emission Control System Pressure Sensor/Switch Range/Performance [Fuel tank pressure (FTP) sensor]	FTP sensor circuit	○	○
P0452 (05-253)	Evaporative Emission Control System Pressure Sensor/Switch Low Input [FTP sensor voltage is low]	<ul style="list-style-type: none"> <li>• FTP sensor circuit</li> <li>• ECM</li> </ul>	○	○
P0453 (05-253)	Evaporative Emission Control System Pressure Sensor/Switch High Input [FTP sensor voltage is high]	<ul style="list-style-type: none"> <li>• FTP sensor circuit</li> <li>• ECM</li> </ul>	○	○
P0455 (05-235)	Evaporative Emission Control System Leak Detected (gross leak)	<ul style="list-style-type: none"> <li>• Fuel cap</li> <li>• EVAP gross leak from fuel tank EVAP canister and EVAP line</li> </ul>	○	○
P0456 (05-235)	Evaporative Emission Control System Leak Detected (very small leak)	<ul style="list-style-type: none"> <li>• Fuel cap</li> <li>• EVAP very small leak from fuel tank EVAP canister and EVAP line</li> </ul>	○	○
P0500 (05-259)	Vehicle Speed Sensor "A"	<ul style="list-style-type: none"> <li>• Vehicle speed sensor circuit</li> <li>• ECM</li> </ul>	○	○
P0503 (05-259)	Vehicle Speed Sensor "A" Intermittent/Erratic/High	<ul style="list-style-type: none"> <li>• Vehicle speed sensor circuit</li> <li>• ECM</li> </ul>	-	○
P0504 (05-264)	Brake Switch "A"/"B" Correlation	<ul style="list-style-type: none"> <li>• Stop lamp switch circuit</li> <li>• ECM</li> </ul>	-	○
P0505 (05-269)	Idle Air Control System	<ul style="list-style-type: none"> <li>• Throttle body assy</li> <li>• Air induction system</li> <li>• PCV hose and PCV valve</li> <li>• ECM</li> </ul>	○	○
P0560 (05-272)	System Voltage	<ul style="list-style-type: none"> <li>• ECM power source circuit</li> <li>• ECM</li> </ul>	○	○
P0571 (05-3630)	Brake Switch "A" Circuit	<ul style="list-style-type: none"> <li>• Stop lamp switch assy</li> <li>• Stop lamp switch assy circuit</li> <li>• Driver side J/B ECU</li> <li>• ECM</li> </ul>	○	○
P0604 (05-275)	Internal Control Module Random Access Memory (RAM) Error	ECM	○	○
P0606 (05-275)	ECM/PCM Processor	ECM	○	○
P0607 (05-275)	Control Module Performance	ECM	○	○
P0617 (05-277)	Starter Relay Circuit High	<ul style="list-style-type: none"> <li>• STARTER relay</li> <li>• Ignition switch</li> <li>• ECM</li> </ul>	○	○
P0630 (05-281)	VIN Not Programmed or Mismatch - ECM/PCM	ECM	○	○
P0657 (05-275)	Actuator Supply Voltage Circuit / Open	ECM	○	○
P1340 (05-282)	Camshaft Position Sensor "A"	<ul style="list-style-type: none"> <li>• Camshaft position sensor</li> <li>• Camshaft timing gear</li> <li>• ECM</li> </ul>	○	○

## DIAGNOSTICS – SFI SYSTEM

DTC No. (See Page)	Detection Item	Trouble Area	*1 MIL	*2 Memory
P1341 (05-282)	Camshaft Position Sensor "A"	<ul style="list-style-type: none"> <li>• Camshaft position sensor</li> <li>• Camshaft timing gear</li> <li>• ECM</li> </ul>	○	○
P2102 (05-288)	Throttle Actuator Control Motor Circuit Low	<ul style="list-style-type: none"> <li>• Throttle actuator circuit</li> <li>• ECM</li> </ul>	○	○
P2103 (05-288)	Throttle Actuator Control Motor Circuit High	<ul style="list-style-type: none"> <li>• Throttle actuator circuit</li> <li>• ECM</li> </ul>	○	○
P2111 (05-292)	Throttle Actuator Control System – Stuck Open [Throttle valve stuck open]	<ul style="list-style-type: none"> <li>• Throttle actuator</li> <li>• Throttle body assy</li> </ul>	○	○
P2112 (05-292)	Throttle Actuator Control System – Stuck Closed [Throttle valve stuck close]	<ul style="list-style-type: none"> <li>• Throttle actuator</li> <li>• Throttle body assy</li> </ul>	○	○
P2118 (05-295)	Throttle Actuator Control Motor Current Range/Performance [ETCS power source]	<ul style="list-style-type: none"> <li>• Open in ETCS power source circuit</li> <li>• ECM</li> </ul>	○	○
P2119 (05-300)	Throttle Actuator Control Throttle Body Range/Performance [ETCS malfunction]	<ul style="list-style-type: none"> <li>• Throttle actuator</li> <li>• ECM</li> </ul>	○	○
P2120 (05-303)	Throttle/Pedal Position Sensor/Switch "D" Circuit [Accelerator pedal position sensor voltage (VPA1) is chattering]	<ul style="list-style-type: none"> <li>• Accelerator pedal position sensor (VPA1) circuit</li> <li>• ECM</li> </ul>	○	○
P2121 (05-310)	Throttle/Pedal Position Sensor/Switch "D" Circuit Range/Performance [Accelerator pedal position sensor voltage is out of range]	Accelerator pedal position sensor (VPA1) circuit	○	○
P2122 (05-303)	Throttle/Pedal Position Sensor/Switch "D" Circuit Low Input [Accelerator pedal position sensor voltage (VPA1) is low]	<ul style="list-style-type: none"> <li>• Accelerator pedal position sensor (VPA1) circuit</li> <li>• ECM</li> </ul>	○	○
P2123 (05-303)	Throttle/Pedal Position Sensor/Switch "D" Circuit High Input [Accelerator pedal position sensor voltage (VPA1) is high]	<ul style="list-style-type: none"> <li>• Accelerator pedal position sensor (VPA1) circuit</li> <li>• ECM</li> </ul>	○	○
P2125 (05-303)	Throttle/Pedal Position Sensor/Switch "E" Circuit [Accelerator pedal position sensor voltage (VPA2) is chattering]	<ul style="list-style-type: none"> <li>• Accelerator pedal position sensor (VPA2) circuit</li> <li>• ECM</li> </ul>	○	○
P2127 (05-303)	Throttle/Pedal Position Sensor/Switch "E" Circuit Low Input [Accelerator pedal position sensor voltage (VPA2) is low]	<ul style="list-style-type: none"> <li>• Accelerator pedal position sensor (VPA2) circuit</li> <li>• ECM</li> </ul>	○	○
P2128 (05-303)	Throttle/Pedal Position Sensor/Switch "E" Circuit High Input [Accelerator pedal position sensor voltage (VPA2) is high]	<ul style="list-style-type: none"> <li>• Accelerator pedal position sensor (VPA2) circuit</li> <li>• ECM</li> </ul>	○	○
P2135 (05-121)	Throttle/Pedal Position Sensor/Switch "A"/"B" Voltage Correlation [Throttle position sensor malfunction]	<ul style="list-style-type: none"> <li>• Throttle position sensor</li> <li>• ECM</li> </ul>	○	○
P2138 (05-303)	Throttle/Pedal Position Sensor/Switch "D"/"E" Voltage Correlation [Accelerator pedal position sensor malfunction]	<ul style="list-style-type: none"> <li>• Accelerator pedal position sensor</li> <li>• ECM</li> </ul>	○	○
P2195 (05-124)	Oxygen Sensor Signal Stuck Lean (Bank 1 Sensor 1) [HO2S (bank 1 sensor 1) voltage stuck Lean]	<ul style="list-style-type: none"> <li>• HO2S (bank 1 sensor 1) circuit</li> <li>• ECM</li> </ul>	○	○
P2196 (05-124)	Oxygen Sensor Signal Stuck Rich (Bank 1 Sensor 1) [HO2S (bank 1 sensor 1) voltage stuck Rich]	<ul style="list-style-type: none"> <li>• HO2S (bank 1 sensor 1) circuit</li> <li>• ECM</li> </ul>	○	○

DTC No. (See Page)	Detection Item	Trouble Area	*1 MIL	*2 Memory
P2197 (05-124)	Oxygen Sensor Circuit Signal Stuck Lean (Bank 2 Sensor 1) [HO2S (bank 2 sensor 1) voltage stuck Lean]	<ul style="list-style-type: none"> <li>•HO2S (bank 2 sensor 1) circuit</li> <li>•ECM</li> </ul>	○	○
P2198 (05-124)	Oxygen Sensor Circuit Signal Stuck Rich (Bank 2 Sensor 1) [HO2S (bank 2 sensor 1) voltage stuck Rich]	<ul style="list-style-type: none"> <li>•HO2S (bank 2 sensor 1) circuit</li> <li>•ECM</li> </ul>	○	○
P2418 (05-235)	Evaporative Emission System Switching Valve Control Circuit/Open [By-pass VSV malfunction]	<ul style="list-style-type: none"> <li>•By-pass VSV circuit</li> <li>•EVAP line</li> <li>•ECM</li> </ul>	○	○
U0001 (05-313)	High Speed CAN Communication Bus	ECM	○	○

## HINT:

\*1: "○": MIL (Malfunction Indicator Lamp) illuminates, "–": MIL does not illuminate.

\*2: "○": DTC is stored in the ECM, "–": DTC is not stored in the ECM.

\*3: "★": MIL flashes while catalyst-deterioration-misfire is detected.

2004-2006 Diagnostic Trouble Code Chart



# DIAGNOSTIC TROUBLE CODE CHART

## HINT:

- If an abnormality is not found when the parts are inspected, inspect the suspension control ECU.
- If a trouble code is displayed during the DTC check, check the circuit listed for that code. For details of each code, turn to the page mentioned below "DTC No." in the DTC chart.

DTC No. (See Page)	Detection Item	Trouble Area	Indicator Light*1 ( )*2
C1711 (05-358)	Right front height control sensor circuit	<ul style="list-style-type: none"> <li>• Right front height control sensor</li> <li>• Right front height control sensor circuit</li> <li>• Suspension control ECU</li> </ul>	○ (○)
C1712 (05-358)	Left front height control sensor circuit	<ul style="list-style-type: none"> <li>• Left front height control sensor</li> <li>• Left front height control sensor circuit</li> <li>• Suspension control ECU</li> </ul>	○ (○)
C1713 (05-358)	Right rear height control sensor circuit	<ul style="list-style-type: none"> <li>• Right rear height control sensor</li> <li>• Right rear height control sensor circuit</li> <li>• Suspension control ECU</li> </ul>	○ (○)
C1714 (05-358)	Left rear height control sensor circuit	<ul style="list-style-type: none"> <li>• Left rear height control sensor</li> <li>• Left rear height control sensor circuit</li> <li>• Suspension control ECU</li> </ul>	○ (○)
C1715 (05-369)	Right front acceleration sensor circuit	<ul style="list-style-type: none"> <li>• Right front acceleration sensor assy (Right front acceleration sensor is a built-in right front height control sensor)</li> <li>• Right front acceleration sensor circuit</li> <li>• Suspension control ECU</li> </ul>	○ (-)
C1716 (05-369)	Left front acceleration sensor circuit	<ul style="list-style-type: none"> <li>• Suspension control ECU (Left front acceleration sensor is a built-in suspension control ECU)</li> </ul>	○ (-)
C1717 (05-369)	Rear acceleration sensor circuit	<ul style="list-style-type: none"> <li>• Rear acceleration sensor</li> <li>• Rear acceleration sensor circuit</li> <li>• Suspension control ECU</li> </ul>	○ (-)
C1725 (05-375)	Right front absorber control actuator circuit	<ul style="list-style-type: none"> <li>• Absorber control actuator front RH</li> <li>• Absorber control actuator circuit</li> <li>• Suspension control ECU</li> </ul>	○ (-)
C1726 (05-375)	Left front absorber control actuator circuit	<ul style="list-style-type: none"> <li>• Absorber control actuator front LH</li> <li>• Absorber control actuator circuit</li> <li>• Suspension control ECU</li> </ul>	○ (-)
C1727 (05-375)	Right rear absorber control actuator circuit	<ul style="list-style-type: none"> <li>• Absorber control actuator rear RH</li> <li>• Absorber control actuator circuit</li> <li>• Suspension control ECU</li> </ul>	○ (-)
C1728 (05-375)	Left rear absorber control actuator circuit	<ul style="list-style-type: none"> <li>• Absorber control actuator rear LH</li> <li>• Absorber control actuator circuit</li> <li>• Suspension control ECU</li> </ul>	○ (-)
C1735 (05-381)	Exhaust solenoid valve circuit	<ul style="list-style-type: none"> <li>• Exhaust solenoid valve</li> <li>• Exhaust solenoid valve circuit</li> <li>• Suspension control ECU</li> </ul>	○ (○)
C1737 (05-384)	Right front height control solenoid valve circuit	<ul style="list-style-type: none"> <li>• Right front height control solenoid valve No.1</li> <li>• Right front height control solenoid valve circuit</li> <li>• Suspension control ECU</li> </ul>	○ (○)
C1738 (05-384)	Left front height control solenoid valve circuit	<ul style="list-style-type: none"> <li>• Left front height control solenoid valve No.1</li> <li>• Left front height control solenoid valve circuit</li> <li>• Suspension control ECU</li> </ul>	○ (○)
C1739 (05-384)	Right rear height control solenoid valve circuit	<ul style="list-style-type: none"> <li>• Right rear height control solenoid valve No.2</li> <li>• Right rear height control solenoid valve circuit</li> <li>• Suspension control ECU</li> </ul>	○ (○)

DTC No. (See Page)	Detection Item	Trouble Area	Indicator Light*1 ( )*2
C1740 (05-384)	Left rear height control solenoid valve circuit	<ul style="list-style-type: none"> <li>• Left rear height control solenoid valve No.2</li> <li>• Left rear height control solenoid valve circuit</li> <li>• Suspension control ECU</li> </ul>	○ (○)
C1741 (05-391)	AIR SUS relay circuit	<ul style="list-style-type: none"> <li>• AIR SUS relay</li> <li>• AIR SUS relay circuit</li> <li>• Suspension control ECU</li> </ul>	○ (○)
C1742 (05-395)	Height control compressor circuit	<ul style="list-style-type: none"> <li>• Height control compressor motor</li> <li>• Height control compressor circuit</li> <li>• Suspension control ECU</li> <li>• Height control solenoid valve is stuck</li> </ul>	○ (○)
C1751*3 (05-403)	Continuous electric current to height control compressor	<ul style="list-style-type: none"> <li>• Height control compressor motor</li> <li>• Height control compressor circuit</li> <li>• Height control sensor link</li> <li>• Height control sensor</li> <li>• Relief valve</li> <li>• AIR SUS control relay comes off</li> <li>• Air leakage from the air tube or each valve</li> <li>• Clogging in the air tube or each valve</li> <li>• Suspension control ECU</li> </ul>	○ (-)
C1752*4 (05-403)	Continuous electric current to height control exhaust solenoid valve	<ul style="list-style-type: none"> <li>• Height control link</li> <li>• Height control sensor</li> <li>• Clogging in the air tube or each valve</li> <li>• Suspension control ECU</li> </ul>	○ (-)
C1761 (05-408)	ECU malfunction	<ul style="list-style-type: none"> <li>• height control sensor power source circuit</li> <li>• Suspension control ECU</li> </ul>	○ (-)
C1774 (05-411)	Power source circuit	<ul style="list-style-type: none"> <li>• Battery</li> <li>• Power source circuit</li> <li>• Suspension control ECU</li> </ul>	- (-)
C1776 (05-415)	Speed sensor circuit	<ul style="list-style-type: none"> <li>• Speed sensor</li> <li>• Speed sensor circuit</li> <li>• Skid control ECU with actuator</li> <li>• Suspension control ECU</li> </ul>	○ (-)
C1777 (05-417)	Steering angle sensor circuit	<ul style="list-style-type: none"> <li>• Steering angle sensor</li> <li>• Steering angle sensor circuit</li> <li>• Suspension control ECU</li> </ul>	○ (-)

\*1: For codes in the "Indicator Light" column with a "○" mark, the absorber control indicator lamp blinks at 1 second intervals.

\*2: For codes in the "Indicator Light" column with a "(○)" mark, when trouble occurs, "HEIGHT HI" is displayed on the multi-information display. Also, the master warning light is lit on the combination meter and an alarm sounds.

\*3: Since the relief pressure of the compressed air is 980 kPa (10 kgf/cm<sup>2</sup>, 142 psi), if vehicle height control is attempted on a steeply sloping road, when the vehicle is overloaded, or when the vehicle height is jacked up with the engine running, code "C1751" may be output and vehicle height control may be suspended. (This is not abnormal.) In this case, however, when detecting the first error, approximately 10 minutes after the ignition switch was turned to the ON position, vehicle height control is resumed. When the following errors are detected, it takes 70 minutes until the control is resumed.

\*4: If vehicle height control is operated while the wheels are removed or the vehicle is jacked up, code "C1752" may be output, but this is not abnormal. When code "C1752" is output, vehicle height control is not carried out. However, control is resumed if the ignition switch is turned off, then to the ON position again.

## DIAGNOSTICS – AIR SUSPENSION SYSTEM

DTC No. (See Page)	Detection Item	Trouble Area
U0100 (05-3350)	Malfunction in CAN communication with engine	<ul style="list-style-type: none"> <li>• Open circuit in ECM sub bus line or connector</li> <li>• ECM</li> </ul>
U0101 (05-3350)	Malfunction in CAN communication with AT	<ul style="list-style-type: none"> <li>• Open circuit in ECM sub bus line or connector</li> <li>• ECM</li> </ul>
U0122 (05-3340)	Malfunction in CAN communication with VSC	<ul style="list-style-type: none"> <li>• Open circuit in skid control ECU sub bus line or connector</li> <li>• Skid control ECU</li> </ul>
U0126 (05-3342)	Malfunction in CAN communication with steering sensor	<ul style="list-style-type: none"> <li>• Open circuit in steering sensor sub bus line or connector</li> <li>• Steering sensor</li> </ul>
U0124 (05-3344)	Malfunction in CAN communication with yaw rate sensor	<ul style="list-style-type: none"> <li>• Open circuit in yaw rate sensor sub bus line or connector</li> <li>• Yaw rate sensor</li> </ul>
U0132 (05-3344)	Malfunction in CAN communication with air suspension	<ul style="list-style-type: none"> <li>• Open circuit in suspension control sub bus line or connector</li> <li>• Suspension control ECU</li> </ul>

2004-2006 Diagnostic Trouble Code Chart

# DIAGNOSTIC TROUBLE CODE CHART

## HINT:

If a malfunction code is displayed during the DTC check, check the circuit indicated by the DTC. For details of each code, turn to the page for the respective "DTC No." in the DTC chart.

## DTC chart of ABS:

DTC No. (See Page)	Detection Item	Trouble Area
C0200/31*1 (05-500)	Right front wheel speed sensor signal malfunction	<ul style="list-style-type: none"> <li>• Right front speed sensor</li> <li>• Speed sensor circuit</li> <li>• Sensor rotor</li> <li>• Sensor installation</li> </ul>
C0205/32*1 (05-500)	Left front wheel speed sensor signal malfunction	<ul style="list-style-type: none"> <li>• Left front speed sensor</li> <li>• Speed sensor circuit</li> <li>• Sensor rotor</li> <li>• Sensor installation</li> </ul>
C0210/33*1 (05-508)	Right rear wheel speed sensor signal malfunction	<ul style="list-style-type: none"> <li>• Right rear speed sensor</li> <li>• Speed sensor circuit</li> <li>• Sensor rotor</li> <li>• Sensor installation</li> </ul>
C0215/34*1 (05-508)	Left rear wheel speed sensor signal malfunction	<ul style="list-style-type: none"> <li>• Left rear speed sensor</li> <li>• Speed sensor circuit</li> <li>• Sensor rotor</li> <li>• Sensor installation</li> </ul>
C0226/21 (05-514)	Open or short circuit in brake actuator solenoid circuit (SFR circuit)	<ul style="list-style-type: none"> <li>• ABS &amp; TRAC actuator</li> <li>• SFRH or SFRR circuit</li> </ul>
C0236/22 (05-514)	Open or short circuit in brake actuator solenoid circuit (SFL circuit)	<ul style="list-style-type: none"> <li>• ABS &amp; TRAC actuator</li> <li>• SFLH or SFLR circuit</li> </ul>
C0246/23 (05-514)	Open or short circuit in brake actuator solenoid circuit (SRR circuit)	<ul style="list-style-type: none"> <li>• ABS &amp; TRAC actuator</li> <li>• SRRH or SRRR circuit</li> </ul>
C0256/24 (05-514)	Open or short circuit in brake actuator solenoid circuit (SRL circuit)	<ul style="list-style-type: none"> <li>• ABS &amp; TRAC actuator</li> <li>• SRLH or SRLR circuit</li> </ul>
C0273/13*1 (05-517)	Open circuit in ABS MTR relay circuit	<ul style="list-style-type: none"> <li>• ABS 2 fuse</li> <li>• ABS MTR relay</li> <li>• ABS MTR relay circuit</li> <li>• Engine room No.3 R/B</li> <li>• ABS cut relay</li> <li>• ABS cut relay circuit</li> </ul>
C0274/14 (05-517)	Short circuit in ABS MTR relay circuit	<ul style="list-style-type: none"> <li>• ABS 2 fuse</li> <li>• ABS MTR relay</li> <li>• ABS MTR relay circuit</li> <li>• Engine room No.3 R/B</li> <li>• ABS cut relay</li> <li>• ABS cut relay circuit</li> </ul>
C0278/11 (05-522)	Open circuit in ABS SOL relay circuit	<ul style="list-style-type: none"> <li>• ABS 1 fuse</li> <li>• ABS SOL relay</li> <li>• ABS SOL relay circuit</li> <li>• ABS &amp; TRAC actuator</li> </ul>
C0279/12 (05-522)	Short circuit in ABS SOL relay circuit	<ul style="list-style-type: none"> <li>• ABS 1 fuse</li> <li>• ABS SOL relay</li> <li>• ABS SOL relay circuit</li> <li>• ABS &amp; TRAC actuator</li> </ul>
C1225/25 (05-514)	Open or short circuit in brake actuator solenoid circuit (SM circuit)	<ul style="list-style-type: none"> <li>• SM1 or SM2 circuit</li> <li>• ABS &amp; TRAC actuator</li> </ul>

C1235/35 (05-539)	Foreign matter is attached on the tip of the right front sensor	<ul style="list-style-type: none"> <li>• Right front speed sensor</li> <li>• Sensor rotor</li> <li>• Sensor installation</li> </ul>
C1236/36 (05-539)	Foreign matter is attached on the tip of the left front sensor	<ul style="list-style-type: none"> <li>• Left front speed sensor</li> <li>• Sensor rotor</li> <li>• Sensor installation</li> </ul>
C1238/38 (05-539)	Foreign matter is attached on the tip of the right rear sensor	<ul style="list-style-type: none"> <li>• Right rear speed sensor</li> <li>• Sensor rotor</li> <li>• Sensor installation</li> </ul>
C1239/39 (05-539)	Foreign matter is attached on the tip of the left rear sensor	<ul style="list-style-type: none"> <li>• Left rear speed sensor</li> <li>• Sensor rotor</li> <li>• Sensor installation</li> </ul>
C1241/41 (05-542)	Low battery positive voltage	<ul style="list-style-type: none"> <li>• Battery</li> <li>• Charging system</li> <li>• Power source circuit</li> </ul>
C1243/43*1 (05-535)	Malfunction in deceleration sensor (constant output)	<ul style="list-style-type: none"> <li>• Yaw rate (Deceleration sensor) sensor</li> <li>• Yaw rate sensor (Deceleration sensor) circuit</li> </ul>
C1244/44 (05-535)	Malfunction in deceleration sensor	<ul style="list-style-type: none"> <li>• Yaw rate (Deceleration sensor) sensor</li> <li>• Yaw rate sensor (Deceleration sensor) circuit</li> </ul>
C1245/45*1 (05-535)	Malfunction in deceleration sensor	<ul style="list-style-type: none"> <li>• Yaw rate (Deceleration sensor) sensor</li> <li>• Yaw rate sensor (Deceleration sensor) circuit</li> </ul>
C1246/46*2 (05-545)	Malfunction in master cylinder pressure sensor	<ul style="list-style-type: none"> <li>• Master cylinder pressure sensor</li> <li>• Master cylinder pressure sensor circuit</li> <li>• Stop lamp circuit</li> </ul>
C1249/49 (05-547)	Open circuit in stop light switch circuit	<ul style="list-style-type: none"> <li>• Stop lamp bulb</li> <li>• Stop lamp switch circuit</li> </ul>
C1251/51*1 (05-553)	ABS pump motor is locked Open circuit in pump motor circuit	<ul style="list-style-type: none"> <li>• ABS &amp; TRAC actuator</li> </ul>
C1267/67 (05-556)	Malfunction in brake pedal load sensing switch	<ul style="list-style-type: none"> <li>• Brake pedal load sensing switch</li> <li>• Brake pedal load sensing switch circuit</li> </ul>
C1361/91 (05-517)	Short circuit in ABS motor fail safe relay circuit	<ul style="list-style-type: none"> <li>• ABS 2 fuse</li> <li>• ABS MTR relay</li> <li>• ABS MTR relay circuit</li> <li>• Engine room No.3 R/B</li> <li>• ABS cut relay</li> <li>• ABS cut relay circuit</li> </ul>
C1381/97 (05-535)	Malfunction in power supply voltage yaw/deceleration sensor	<ul style="list-style-type: none"> <li>• Yaw rate sensor (Deceleration sensor)</li> <li>• Yaw rate (Deceleration sensor)- sensor power source circuit</li> </ul>
U0073/94 (05-3333)	Malfunction in CAN communication	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Skid control ECU</li> </ul>
U0124/95 (05-3333)	Malfunction in CAN communication with deceleration sensor	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Yaw rate sensor (Deceleration sensor)</li> </ul>

\*1, \*2:

Even after the troubled areas are repaired, ABS warning light will not go off unless the following operations are performed.

- \*1:
  - (1) Drive the vehicle at 12 mph (20 km/h) for 30 seconds or more and check that the ABS warning light goes off.
  - (2) Clear the DTC (see page 05-488).
- \*2:
  - (1) Keep the vehicle in the stationary condition for 5 seconds or more and depress the brake pedal lightly 2 or 3 times.

- (2) Drive the vehicle at the vehicle speed of 31 mph (50 km/h) and keep depressing the brake pedal strongly for approximately 3 seconds.
- (3) Repeat the above operation 3 times or more and check that the ABS warning light goes off.
- (4) Clear the DTC (see page 05-488).

**HINT:**

In some cases, the hand-held tester cannot be used when ABS warning light remains on.

**DTC chart of VSC:**

DTC No. (See Page)	Detection Item	Trouble Area
C1201/51 (05-526)	Malfunction in ECM	Engine control system
C1203/53 (05-527)	Malfunction in ECM communication circuit	• ECM
C1210/36 (05-528)	Zero point calibration of yaw rate sensor undone	• Yaw rate sensor (Deceleration sensor) • Zero point calibration not done
C1223/43 (05-530)	Malfunction in ABS control system	ABS control system
C1231/31 (05-531)	Malfunction in steering angle sensor	• Steering angle sensor • Steering angle sensor power supply • Steering angle sensor circuit • CAN communication system
C1232/32 (05-535)	Malfunction in deceleration sensor	• Yaw rate sensor (Deceleration sensor) • Yaw rate sensor (Deceleration sensor) circuit
C1234/34 (05-535)	Malfunction in yaw rate sensor	• Yaw rate sensor (Deceleration sensor) • Yaw rate sensor (Deceleration sensor) circuit
C1336/39 (05-528)	Zero point calibration of deceleration sensor undone	• Yaw rate sensor (Deceleration sensor) • Zero point calibration not done
U0100/65 (05-3333)	Malfunction in CAN communication with ECU	• Wire harness • Skid control ECU
U0123/62 (05-3333)	Malfunction in CAN communication with yaw rate sensor	• Wire harness • Yaw rate sensor (Deceleration sensor)
U0126/63 (05-3333)	Malfunction in CAN communication with angle position sensor	• Wire harness • Skid control ECU

**HINT:**

In some cases, the hand-held tester cannot be used when VSC warning light is always on.

## DIAGNOSTIC TROUBLE CODE CHART

If a DTC is displayed during the DTC check, check the parts listed in the table below and proceed to the page given.

HINT:

- \*1 : ● ... MIL (Malfunction Indicator Lamp) light up
- \*2 : "○" mark means ECM memorizes the malfunction code if the ECM detects the DTC detection condition.
- This DTC may be output when the clutch, brake and gear components etc. inside the automatic transmission are damaged.

DTC No. (See Page)	Detection Item	Trouble Area	MIL *1	Memory *2
P0500 (05-259)	Vehicle Speed Sensor "A"	<ul style="list-style-type: none"> <li>• Open or short in speed sensor (SP2) circuit</li> <li>• Speed sensor (SP2)</li> <li>• ECM</li> </ul>	●	○
P0705 (05-653)	Transmission Range Sensor Circuit Malfunction (PRNDL Input)	<ul style="list-style-type: none"> <li>• Open or short in park/neutral position switch circuit</li> <li>• Park/neutral position switch</li> <li>• ECM</li> </ul>	●	○
P0710 (05-660)	Transmission Fluid Temperature Sensor "A" Circuit	<ul style="list-style-type: none"> <li>• Open or short in ATF temperature sensor circuit</li> <li>• Transmission wire (ATF temperature sensor)</li> <li>• ECM</li> </ul>	●	○
P0711 (05-665)	Transmission Fluid Temperature Sensor "A" Performance	<ul style="list-style-type: none"> <li>• Open or short in ATF temperature sensor circuit</li> <li>• Transmission wire (ATF temperature sensor)</li> <li>• ECM</li> </ul>	●	○
P0712 (05-660)	Transmission Fluid Temperature Sensor "A" Circuit Low Input	<ul style="list-style-type: none"> <li>• Short in ATF temperature sensor circuit</li> <li>• Transmission wire (ATF temperature sensor)</li> <li>• ECM</li> </ul>	●	○
P0713 (05-660)	Transmission Fluid Temperature Sensor "A" Circuit High Input	<ul style="list-style-type: none"> <li>• Open in ATF temperature sensor circuit</li> <li>• Transmission wire (ATF temperature sensor)</li> <li>• ECM</li> </ul>	●	○
P0717 (05-668)	Turbine Speed Sensor Circuit No Signal	<ul style="list-style-type: none"> <li>• Open or short in speed sensor (NT) circuit</li> <li>• Speed sensor (NT)</li> <li>• ECM</li> <li>• Automatic transmission (clutch, brake or gear, etc.)</li> </ul>	●	○
P0724 (05-672)	Brake Switch "B" Circuit High	<ul style="list-style-type: none"> <li>• Short in stop light switch signal circuit</li> <li>• Stop light switch</li> <li>• ECM</li> </ul>	●	○
P0729 (05-674)	Gear 6 Incorrect Ratio	<ul style="list-style-type: none"> <li>• Valve body is blocked up or stuck (reverse sequence valve)</li> <li>• Automatic transmission (clutch, brake or gear, etc.)</li> <li>• ECM</li> </ul>	●	○
P0748 (05-679)	Pressure Control Solenoid "A" Electrical (Shift Solenoid Valve SL1)	<ul style="list-style-type: none"> <li>• Open or short in shift solenoid valve SL1 circuit</li> <li>• Shift solenoid valve SL1</li> <li>• ECM</li> </ul>	●	○
P0751 (05-682)	Shift Solenoid "A" Performance (Shift Solenoid Valve S1)	<ul style="list-style-type: none"> <li>• Shift solenoid valve S1 remains open or closed</li> <li>• Valve body is blocked</li> <li>• No.2 brake malfunction (Driving is difficult.)</li> <li>• Automatic transmission (clutch, brake or gear, etc.)</li> <li>• ECM</li> </ul>	●	○
P0756 (05-688)	Shift Solenoid "B" Performance (Shift Solenoid Valve S2)	<ul style="list-style-type: none"> <li>• Shift solenoid valve S2 remains open or closed</li> <li>• Valve body is blocked</li> <li>• Automatic transmission (clutch, brake or gear, etc.)</li> <li>• ECM</li> </ul>	●	○

P0761 (05-693)	Shift Solenoid "C" Performance (Shift Solenoid Valve S3)	<ul style="list-style-type: none"> <li>• Shift solenoid valve S3 remains open or closed</li> <li>• Valve body is blocked</li> <li>• Automatic transmission (clutch, brake or gear, etc.)</li> <li>• ECM</li> </ul>	●	○
P0766 (05-699)	Shift Solenoid "D" Performance (Shift Solenoid Valve S4)	<ul style="list-style-type: none"> <li>• Shift solenoid valve S4 remains open or closed</li> <li>• Shift solenoid valve SL2 remains open or closed</li> <li>• Valve body is blocked (Brake control valve)</li> <li>• Automatic transmission (clutch, brake or gear, etc.)</li> <li>• ECM</li> </ul>	●	○
P0778 (05-704)	Pressure Control Solenoid "B" Electrical (Shift Solenoid Valve SL2)	<ul style="list-style-type: none"> <li>• Open or short in shift solenoid valve SL2 circuit</li> <li>• Shift solenoid valve SL2</li> <li>• ECM</li> </ul>	●	○
P0781 (05-707)	1-2 Shift (1 –2 Shift Valve)	<ul style="list-style-type: none"> <li>• Valve body is blocked up or stuck (1-2 shift valve)</li> <li>• Automatic transmission (clutch, brake or gear, etc.)</li> <li>• ECM</li> </ul>	●	○
P0850 (05-653)	Park/Neutral Switch Input Circuit	<ul style="list-style-type: none"> <li>• Short in park/neutral position switch circuit</li> <li>• Park/neutral position switch</li> <li>• ECM</li> </ul>	●	○
P0973 (05-712)	Shift Solenoid "A" Control Circuit Low (Shift Solenoid Valve S1)	<ul style="list-style-type: none"> <li>• Short in shift solenoid valve S1 circuit</li> <li>• Shift solenoid valve S1</li> <li>• ECM</li> </ul>	●	○
P0974 (05-712)	Shift Solenoid "A" Control Circuit High (Shift Solenoid Valve S1)	<ul style="list-style-type: none"> <li>• Open in shift solenoid valve S1 circuit</li> <li>• Shift solenoid valve S1</li> <li>• ECM</li> </ul>	●	○
P0976 (05-715)	Shift Solenoid "B" Control Circuit Low (Shift Solenoid Valve S2)	<ul style="list-style-type: none"> <li>• Short in shift solenoid valve S2 circuit</li> <li>• Shift solenoid valve S2</li> <li>• ECM</li> </ul>	●	○
P0977 (05-715)	Shift Solenoid "B" Control Circuit High (Shift Solenoid Valve S2)	<ul style="list-style-type: none"> <li>• Open in shift solenoid valve S2 circuit</li> <li>• Shift solenoid valve S2</li> <li>• ECM</li> </ul>	●	○
P0979 (05-718)	Shift Solenoid "C" Control Circuit Low (Shift Solenoid Valve S3)	<ul style="list-style-type: none"> <li>• Short in shift solenoid valve S3 circuit</li> <li>• Shift solenoid valve S3</li> <li>• ECM</li> </ul>	●	○
P0980 (05-718)	Shift Solenoid "C" Control Circuit High (Shift Solenoid Valve S3)	<ul style="list-style-type: none"> <li>• Open in shift solenoid valve S3 circuit</li> <li>• Shift solenoid valve S3</li> <li>• ECM</li> </ul>	●	○
P0982 (05-721)	Shift Solenoid "D" Control Circuit Low (Shift Solenoid Valve S4)	<ul style="list-style-type: none"> <li>• Short in shift solenoid valve S4 circuit</li> <li>• Shift solenoid valve S4</li> <li>• ECM</li> </ul>	●	○
P0983 (05-721)	Shift Solenoid "D" Control Circuit High (Shift Solenoid Valve S4)	<ul style="list-style-type: none"> <li>• Open in shift solenoid valve S4 circuit</li> <li>• Shift solenoid valve S4</li> <li>• ECM</li> </ul>	●	○
P0985 (05-724)	Shift Solenoid "E" Control Circuit Low (Shift Solenoid Valve SR)	<ul style="list-style-type: none"> <li>• Short in shift solenoid valve SR circuit</li> <li>• Shift solenoid valve SR</li> <li>• ECM</li> </ul>	●	○
P0986 (05-724)	Shift Solenoid "E" Control Circuit High (Shift Solenoid Valve SR)	<ul style="list-style-type: none"> <li>• Open in shift solenoid valve SR circuit</li> <li>• Shift solenoid valve SR</li> <li>• ECM</li> </ul>	●	○
P2714 (05-727)	Pressure Control Solenoid "D" Performance (Shift Solenoid Valve SLT)	<ul style="list-style-type: none"> <li>• Shift solenoid valve SLT remains open or closed</li> <li>• Valve body is blocked</li> <li>• Automatic transmission (clutch, brake or gear, etc.)</li> <li>• ECM</li> </ul>	●	○



P2716 (05-731)	Pressure Control Solenoid "D" Electrical (Shift Solenoid Valve SLT)	<ul style="list-style-type: none"> <li>• Open or short in shift solenoid valve SLT circuit</li> <li>• Shift solenoid valve SLT</li> <li>• ECM</li> </ul>	●	○
P2757 (05-734)	Torque Converter Clutch Pressure Control Solenoid Performance (Shift Solenoid Valve SLU)	<ul style="list-style-type: none"> <li>• Shift solenoid valve SLU remains open or closed</li> <li>• Valve body is blocked</li> <li>• Shift solenoid valve SLU</li> <li>• Torque converter clutch</li> <li>• Automatic transmission (clutch, brake or gear, etc.)</li> <li>• Line pressure is too low</li> <li>• ECM</li> </ul>	●	○
P2759 (05-740)	Torque Converter Clutch Pressure Control Solenoid Control Circuit Electrical (Shift Solenoid Valve SLU)	<ul style="list-style-type: none"> <li>• Open or short in shift solenoid valve SLU circuit</li> <li>• Shift solenoid valve SLU</li> <li>• ECM</li> </ul>	●	○

2004-2006 Diagnostic Trouble Code Chart

## DIAGNOSTIC TROUBLE CODE CHART

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

DTC No. (See Page)	Detection Item	Trouble Area
B2602 (05-790)	Key un-lock warning switch circuit malfunction	<ul style="list-style-type: none"> <li>• Un-lock warning switch assy</li> <li>• Un-lock warning switch circuit</li> <li>• Transponder key ECU *1 (Steering lock ECU *2)</li> <li>• Multiplex tilt &amp; telescopic ECU</li> </ul>
B2610 (05-795)	Tilt position sensor or tilt motor circuit malfunction	<ul style="list-style-type: none"> <li>• Power tilt motor (w/ tilt position sensor)</li> <li>• Actuator power source circuit</li> <li>• Tilt position sensor or tilt motor circuit</li> <li>• Multiplex tilt &amp; telescopic ECU</li> </ul>
B2611 (05-801)	Telescopic position sensor or telescopic motor circuit malfunction	<ul style="list-style-type: none"> <li>• Power telescopic motor (w/ telescopic position sensor)</li> <li>• Actuator power source circuit</li> <li>• Telescopic position sensor or telescopic motor circuit</li> <li>• Multiplex tilt &amp; telescopic ECU</li> </ul>
B2620 (05-807)	ECU power source circuit malfunction	<ul style="list-style-type: none"> <li>• Battery</li> <li>• ECU power source circuit</li> <li>• Multiplex tilt &amp; telescopic ECU</li> </ul>
B2621 (05-810)	Communication interruption	<ul style="list-style-type: none"> <li>• Multiplex communication system</li> <li>• Driver side J/B</li> <li>• Position control ECU &amp; switch assy (Driver seat ECU)</li> <li>• Turn signal switch assy</li> <li>• Steering column assy (Steering lock ECU)</li> <li>• Multiplex tilt &amp; telescopic ECU</li> </ul>

\*1: w/o Smart key

\*2: w/ Smart key

2004-2006 Diagnostic Trouble Code Chart

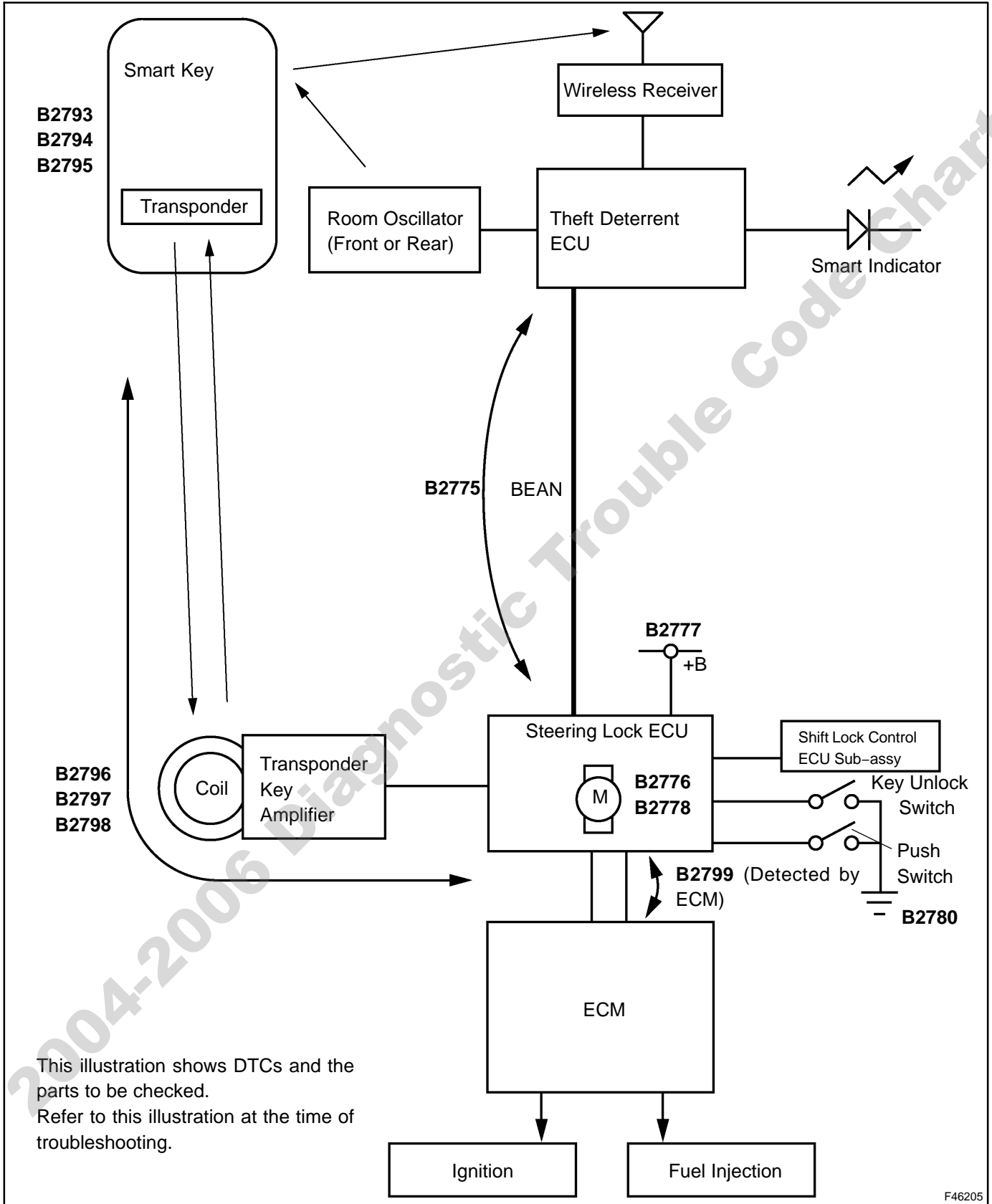
## DIAGNOSTIC TROUBLE CODE CHART

If a trouble code is displayed during the DTC check, check the circuit listed for that code in the table below and proceed to the appropriate page.

DTC No. (See Page)	Circuit Inspection	Trouble Area
B2775 (05-835)	Interior verification abnormal (to theft deterrent ECU)	<ul style="list-style-type: none"> <li>• Smart Key</li> <li>• Wire harness</li> <li>• Theft deterrent ECU</li> <li>• Steering lock ECU</li> </ul>
B2776 (05-838)	Steering lock motor malfunction	<ul style="list-style-type: none"> <li>• Steering lock ECU</li> </ul>
B2777 (05-839)	+B circuit malfunction	<ul style="list-style-type: none"> <li>• STR LOCK Fuse</li> <li>• Wire harness</li> </ul>
B2778 (05-842)	Interlock cable malfunction	<ul style="list-style-type: none"> <li>• Installation failure of the interlock cable</li> <li>• Interlock cable position sensor failure</li> <li>• Steering Lock ECU</li> </ul>
B2780 (05-844)	Push switch/key unlock warning switch malfunction	<ul style="list-style-type: none"> <li>• Starter switch</li> <li>• Wire harness</li> </ul>
B2793 (05-3007)	Transponder chip malfunction	<ul style="list-style-type: none"> <li>• Smart key</li> </ul>
B2794 (05-3008)	Unmatched encryption code	<ul style="list-style-type: none"> <li>• Smart key</li> <li>• Transponder key amplifier</li> </ul>
B2795 (05-3009)	Unmatched key code	<ul style="list-style-type: none"> <li>• Smart key</li> <li>• Unregistered key inserted before</li> </ul>
B2796 (05-3010)	No communication in immobilizer system	<ul style="list-style-type: none"> <li>• Smart key</li> <li>• Transponder key amplifier</li> <li>• Wire harness</li> <li>• Steering lock ECU</li> </ul>
B2797 (05-3013)	Communication malfunction No. 1	<ul style="list-style-type: none"> <li>• Communication contents</li> <li>• Unregistered key inserted before</li> </ul>
B2798 (05-3010)	Communication malfunction No. 2	<ul style="list-style-type: none"> <li>• Smart key</li> <li>• Transponder key amplifier</li> <li>• Wire harness</li> <li>• Steering lock ECU</li> </ul>
B2799 (05-847)	Engine immobilizer system malfunction	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Steering lock ECU</li> <li>• ECM</li> </ul>

### HINT:

- DTCs B2793, B2794, B2795, B2796, B2797 and/or B2798 are detected for troubles found when the smart key is inserted into the starter switch.
- DTCs B2793, B2794, B2795, B2796, B2797 and/or B2798 indicate troubles in the steering lock ECU and the transponder key ECU, and the same troubleshooting method is applied to both ECUs. Therefore, if these DTCs are detected, refer to the immobilizer section to conduct troubleshooting (see page 05-3003).



## DIAGNOSTIC TROUBLE CODE CHART

If a malfunction code is displayed during the DTC check (sensor check), check the circuit listed for that code in the table below (proceed to the page given for that circuit).

DTC No. (See Page)	Detection Item	Trouble Area	Memory*6
B1400/00	Normal		
B1411/11*1 (05-889)	Room temperature sensor circuit (Open or short)	<ul style="list-style-type: none"> <li>• Cooler (room temperature sensor) thermistor</li> <li>• Harness or connector between cooler (room temperature sensor) thermistor and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	○ (8.5 min. or more)
B1412/12*2 (05-894)	Ambient temperature sensor circuit (Open or short)	<ul style="list-style-type: none"> <li>• A/C ambient temperature sensor</li> <li>• Harness or connector between A/C ambient temperature sensor and ECM</li> <li>• ECM</li> </ul>	○ (8.5 min. or more)
B1413/13 (05-899)	Evaporator temperature sensor circuit (Open or short)	<ul style="list-style-type: none"> <li>• A/C evaporator temperature sensor</li> <li>• Harness or connector between A/C evaporator temperature sensor and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	○ (8.5 min. or more)
B1415/15 (05-904)	Air duct sensor circuit (Driver side) (Open or short)	<ul style="list-style-type: none"> <li>• Air duct sensor</li> <li>• Harness or connector between duct sensor and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	○ (8.5 min. or more)
B1416/16 (05-908)	Air duct sensor circuit (Passenger side) (Open or short)	<ul style="list-style-type: none"> <li>• Air duct sensor</li> <li>• Harness or connector between duct sensor and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	○ (8.5 min. or more)
B1418/18 (05-912)	Emission gas sensor circuit (HC, CO) (Open or short)	<ul style="list-style-type: none"> <li>• Exhaust gas sensor (Emission gas sensor)</li> <li>• Harness or connector between exhaust gas sensor (Emission gas sensor) and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	-
B1421/21*3 (05-916)	Solar sensor circuit (Passenger side) (Open or short)	<ul style="list-style-type: none"> <li>• A/C solar sensor</li> <li>• Harness or connector between A/C solar sensor and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	-
B1423/23 (05-921)	Pressure switch circuit (open or short)	<ul style="list-style-type: none"> <li>• A/C Pressure sensor</li> <li>• Harness or connector between A/C pressure sensor and A/C amplifier</li> <li>• Refrigerant pipe line</li> <li>• A/C amplifier</li> </ul>	-
B1424/24*4 (05-926)	Solar sensor circuit (Driver side) (Open or short)	<ul style="list-style-type: none"> <li>• A/C solar sensor</li> <li>• Harness or connector between A/C solar sensor and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	-
B1428/28*5 (05-931)	Rear solar sensor circuit (Rear side) (Open or short)	<ul style="list-style-type: none"> <li>• A/C solar sensor (Rear solar sensor)</li> <li>• Harness or connector between A/C solar sensor (Rear solar sensor) and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	○ (8.5 min. or more)
B1432/32 (05-936)	Air inlet damper position sensor circuit (Open or short)	<ul style="list-style-type: none"> <li>• Air inlet servomotor</li> <li>• Harness or connector between air inlet servomotor and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	○ (1 min. or more)
B1434/34 (05-941)	Max cool bypass damper position sensor circuit (Driver side) (Open or short)	<ul style="list-style-type: none"> <li>• Cool air bypass servomotor (Max cool damper servomotor)</li> <li>• Harness or connector between cool air bypass servomotor (Max cool damper servomotor) and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	○ (1 min. or more)
B1435/35 (05-946)	Max cool bypass damper position sensor circuit (Passenger side) (Open or short)	<ul style="list-style-type: none"> <li>• Cool air bypass servomotor (Max cool damper servomotor)</li> <li>• Harness or connector between cool air bypass servomotor (Max cool damper servomotor) and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	○ (1 min. or more)

B1442/42 (05-951)	Air inlet damper control servomotor circuit (Open or short)	<ul style="list-style-type: none"> <li>• Air inlet servomotor</li> <li>• Harness or connector between air inlet servomotor and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	○ (15 secs. or more)
B1451/51 (05-954)	Solenoid of the externally changeable compressor circuit (Open or short)	<ul style="list-style-type: none"> <li>• Cooler compressor assy</li> <li>• Harness and connector between A/C amplifier and solenoid of the externally changeable compressor</li> <li>• A/C amplifier</li> </ul>	○ (1 min. or more)
B1461/61 (05-957)	Emission gas Nox sensor circuit (Open or short)	<ul style="list-style-type: none"> <li>• Exhaust gas sensor (Emission gas Nox sensor)</li> <li>• Harness or connector between exhaust gas sensor (Emission gas Nox sensor) and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	—

## HINT:

- \*1 If the room temperature is approximately  $-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ ) or lower, DTC B1411/11 may be output even though the system is normal.
- \*2 If the ambient temperature is approximately  $-50^{\circ}\text{C}$  ( $-58^{\circ}\text{F}$ ) or lower, a DTC may be output even though the system is normal.
- \*3 If the check is being performed in a dark place, DTC B1421/21 (solar sensor circuit abnormal) could be displayed. In this case, perform DTC check again while shining a light, such as inspection light, on the solar sensor. If DTC B1421/21 is still displayed, there could be trouble in the solar sensor circuit.
- \*4 If the check is being performed in a dark place, DTC B1424/24 (solar sensor circuit abnormal) could be displayed. In this case, perform DTC check again while shining a light, such as inspection light, on the solar sensor. If DTC B1424/24 is still displayed, there could be trouble in the solar sensor circuit.
- \*5 If the check is being performed in a dark place, DTC B1421/21 (solar sensor circuit abnormal) could be displayed. In this case, perform DTC check again while shining a light, such as inspection light, on the solar sensor. If DTC B1421/21 is still displayed, there could be trouble in the solar sensor circuit.

# DIAGNOSTIC TROUBLE CODE CHART

## 1. DTCS FOR SUPPLEMENTAL RESTRAINT SYSTEM

If a trouble code is displayed during the DTC check, check the circuit listed for the code in the table below (refer to the appropriate page).

HINT:

- When the SRS warning light remains on and the DTC output is the normal system code, a voltage source drop is likely to occur. This malfunction is not stored in the memory by the airbag sensor assy center. If the power source voltage returns to normal, the SRS warning light will automatically go off.
- When 2 or more codes are indicated, the code with the lower number appears first.
- If a code is not listed on the display chart, the airbag sensor assy center may have failed.
- In the case of any malfunction concerning an open circuit, short to ground, or short to B+ due to a squib, other trouble codes may not be detected. In this case, repair the malfunction currently indicated and then perform malfunction diagnosis again.
- Mark in the check mode column:  
 "○": DTC is corresponding to the check mode.  
 "—": DTC is not corresponding to the check mode.

DTC No. (See Page)	Detection Item	Trouble Area	Check Mode	SRS Warning Light
B1000/31 (05-1049)	• Airbag sensor assy center malfunction	• Airbag sensor assy center • Instrument panel wire • Engine room main wire • Airbag sensor front LH • Airbag sensor front RH	-	ON
B1610/13 (05-1058)	• Front airbag sensor RH circuit malfunction	• Airbag sensor front RH • Airbag sensor assy center • Instrument panel wire • Engine room main wire	-	ON
B1615/14 (05-1062)	• Front airbag sensor LH circuit malfunction	• Airbag sensor front LH • Airbag sensor assy center • Instrument panel wire • Engine room main wire	-	ON
B1620/21 (05-1066)	• Side airbag sensor assy RH circuit malfunction	• Side airbag sensor assy RH • Airbag sensor assy center • Floor wire	-	ON
B1625/22 (05-1071)	• Side airbag sensor assy LH circuit malfunction	• Side airbag sensor assy LH • Airbag sensor assy center • Floor wire No.2	-	ON
B1630/23 (05-1076)	• Airbag sensor rear RH circuit malfunction	• Airbag sensor rear RH • Airbag sensor assy center • Floor wire	-	ON
B1635/24 (05-1081)	• Airbag sensor rear LH circuit malfunction	• Airbag sensor rear LH • Airbag sensor assy center • Floor wire No.2	-	ON
B1650/32 (05-1086)	• Occupant detection sensor circuit malfunction	• Occupant detection sensor • Airbag sensor assy center • Floor wire	-	ON
B1653/35 (05-1092)	• Seat position airbag sensor circuit malfunction	• Seat position airbag sensor • Airbag sensor assy center • Floor wire No.2	-	ON
B1655/37 (05-1098)	• Seat belt buckle switch RH circuit malfunction	• Front seat inner belt assy RH • Airbag sensor assy center • Floor wire	-	ON
B1656/38 (05-1104)	• Seat belt buckle switch LH circuit malfunction	• Front seat inner belt assy LH • Airbag sensor assy center • Floor wire No.2	-	ON

## DIAGNOSTICS – SUPPLEMENTAL RESTRAINT SYSTEM

B1800/51 (05-110)	• Short in D squib circuit	• Horn button assy (D squib) • Spiral cable sub-assy • Airbag sensor assy center • Instrument panel wire	○	ON
B1801/51 (05-115)	• Open in D squib circuit	• Horn button assy (D squib) • Spiral cable sub-assy • Airbag sensor assy center • Instrument panel wire	○	ON
B1802/51 (05-1120)	• Short in D squib circuit (to ground)	• Horn button assy (D squib) • Spiral cable sub-assy • Airbag sensor assy center • Instrument panel wire	○	ON
B1803/51 (05-1125)	• Short in D squib circuit (to B+)	• Horn button assy (D squib) • Spiral cable sub-assy • Airbag sensor assy center • Instrument panel wire	○	ON
B1805/52 (05-1130)	• Short in P squib circuit	• Front passenger airbag assy (P squib) • Airbag sensor assy center • Instrument panel wire	○	ON
B1806/52 (05-1134)	• Open in P squib circuit	• Front passenger airbag assy (P squib) • Airbag sensor assy center • Instrument panel wire	○	ON
B1807/52 (05-1138)	• Short in P squib circuit (to ground)	• Front passenger airbag assy (P squib) • Airbag sensor assy center • Instrument panel wire	○	ON
B1808/52 (05-1142)	• Short in P squib circuit (to B+)	• Front passenger airbag assy (P squib) • Airbag sensor assy center • Instrument panel wire	○	ON
B1810/53 (05-1146)	• Short in D squib (Dual stage – 2nd step) circuit	• Horn button assy (D squib, Dual stage – 2nd step) • Spiral cable sub-assy • Airbag sensor assy center • Instrument panel wire	○	ON
B1811/53 (05-1150)	• Open in D squib (Dual stage – 2nd step) circuit	• Horn button assy (D squib, Dual stage – 2nd step) • Spiral cable sub-assy • Airbag sensor assy center • Instrument panel wire	○	ON
B1812/53 (05-1155)	• Short in D squib (Dual stage – 2nd step) circuit (to ground)	• Horn button assy (D squib, Dual stage – 2nd step) • Spiral cable sub-assy • Airbag sensor assy center • Instrument panel wire	○	ON
B1813/53 (05-1160)	• Short in D squib (Dual stage – 2nd step) circuit (to B+)	• Horn button assy (D squib, Dual stage – 2nd step) • Spiral cable sub-assy • Airbag sensor assy center • Instrument panel wire	○	ON
B1815/54 (05-1165)	• Short in P squib (Dual stage – 2nd step) circuit	• Front passenger airbag assy (P squib, Dual stage – 2nd step) • Airbag sensor assy center • Instrument panel wire	○	ON
B1816/54 (05-1169)	• Open in P squib (Dual stage – 2nd step) circuit	• Front passenger airbag assy (P squib, Dual stage – 2nd step) • Airbag sensor assy center • Instrument panel wire	○	ON
B1817/54 (05-1173)	• Short in P squib (Dual stage – 2nd step) circuit (to ground)	• Front passenger airbag assy (P squib, Dual stage – 2nd step) • Airbag sensor assy center • Instrument panel wire	○	ON
B1818/54 (05-1177)	• Short in P squib (Dual stage – 2nd step) circuit (to B+)	• Front passenger airbag assy (P squib, Dual stage – 2nd step) • Airbag sensor assy center • Instrument panel wire	○	ON
B1820/55 (05-1181)	• Short in side squib RH circuit	• Front seat airbag assy RH (Side squib RH) • Airbag sensor assy center • Floor wire	○	ON



B1821/55 (05-1185)	• Open in side squib RH circuit	• Front seat airbag assy RH (Side squib RH) • Airbag sensor assy center • Floor wire	○	ON
B1822/55 (05-1189)	• Short in side squib RH circuit (to ground)	• Front seat airbag assy RH (Side squib RH) • Airbag sensor assy center • Floor wire	○	ON
B1823/55 (05-1193)	• Short in side squib RH circuit (to B+)	• Front seat airbag assy RH (Side squib RH) • Airbag sensor assy center • Floor wire	○	ON
B1825/56 (05-1197)	• Short in side squib LH circuit	• Front seat airbag assy LH (Side squib LH) • Airbag sensor assy center • Floor wire No.2	○	ON
B1826/56 (05-1201)	• Open in side squib LH circuit	• Front seat airbag assy LH (Side squib LH) • Airbag sensor assy center • Floor wire No.2	○	ON
B1827/56 (05-1205)	• Short in side squib LH circuit (to ground)	• Front seat airbag assy LH (Side squib LH) • Airbag sensor assy center • Floor wire No.2	○	ON
B1828/56 (05-1209)	• Short in side squib LH circuit (to B+)	• Front seat airbag assy LH (Side squib LH) • Airbag sensor assy center • Floor wire No.2	○	ON
B1830/57 (05-1213)	• Short in curtain shield squib RH circuit	• Curtain shield airbag assy RH (Curtain shield squib RH) • Airbag sensor assy center • Floor wire	○	ON
B1831/57 (05-1217)	• Open in curtain shield squib RH circuit	• Curtain shield airbag assy RH (Curtain shield squib RH) • Airbag sensor assy center • Floor wire	○	ON
B1832/57 (05-1221)	• Short in curtain shield squib RH circuit (to ground)	• Curtain shield airbag assy RH (Curtain shield squib RH) • Airbag sensor assy center • Floor wire	○	ON
B1833/57 (05-1225)	• Short in curtain shield squib RH circuit (to B+)	• Curtain shield airbag assy RH (Curtain shield squib RH) • Airbag sensor assy center • Floor wire	○	ON
B1835/58 (05-1229)	• Short in curtain shield squib LH circuit	• Curtain shield airbag assy LH (Curtain shield squib LH) • Airbag sensor assy center • Floor wire No.2	○	ON
B1836/58 (05-1233)	• Open in curtain shield squib LH circuit	• Curtain shield airbag assy LH (Curtain shield squib LH) • Airbag sensor assy center • Floor wire No.2	○	ON
B1837/58 (05-1237)	• Short in curtain shield squib LH circuit (to ground)	• Curtain shield airbag assy LH (Curtain shield squib LH) • Airbag sensor assy center • Floor wire No.2	○	ON
B1838/58 (05-1241)	• Short in curtain shield squib LH circuit (to B+)	• Curtain shield airbag assy LH (Curtain shield squib LH) • Airbag sensor assy center • Floor wire No.2	○	ON
B1860/64 (05-1245)	• Short in knee airbag (D side) squib circuit	• Instrument panel airbag assy lower No.1 (Knee airbag (D side) squib) • Airbag sensor assy center • Instrument panel wire	○	ON
B1861/64 (05-1249)	• Open in knee airbag (D side) squib circuit	• Instrument panel airbag assy lower No.1 (Knee airbag (D side) squib) • Airbag sensor assy center • Instrument panel wire	○	ON
B1862/64 (05-1253)	• Short in knee airbag (D side) squib circuit (to ground)	• Instrument panel airbag assy lower No.1 (Knee airbag (D side) squib) • Airbag sensor assy center • Instrument panel wire	○	ON

## DIAGNOSTICS – SUPPLEMENTAL RESTRAINT SYSTEM

B1863/64 (05-1257)	• Short in knee airbag (D side) squib circuit (to B+)	• Instrument panel airbag assy lower No.1 (Knee airbag (D side) squib) • Airbag sensor assy center • Instrument panel wire	○	ON
B1865/65 (05-1261)	• Short in knee airbag (P side) squib circuit	• Instrument panel airbag assy lower No.2 (Knee airbag (P side) squib) • Airbag sensor assy center • Instrument panel wire	○	ON
B1866/65 (05-1265)	• Open in knee airbag (P side) squib circuit	• Instrument panel airbag assy lower No.2 (Knee airbag (P side) squib) • Airbag sensor assy center • Instrument panel wire	○	ON
B1867/65 (05-1269)	• Short in knee airbag (P side) squib circuit (to ground)	• Instrument panel airbag assy lower No.2 (Knee airbag (P side) squib) • Airbag sensor assy center • Instrument panel wire	○	ON
B1868/65 (05-1273)	• Short in knee airbag (P side) squib circuit (to B+)	• Instrument panel airbag assy lower No.2 (Knee airbag (P side) squib) • Airbag sensor assy center • Instrument panel wire	○	ON
B1900/73 (05-1277)	• Short in front P/T squib RH circuit	• Front seat outer belt assy RH (Front P/T squib RH) • Airbag sensor assy center • Floor wire	○	ON
B1901/73 (05-1281)	• Open in front P/T squib RH circuit	• Front seat outer belt assy RH (Front P/T squib RH) • Airbag sensor assy center • Floor wire	○	ON
B1902/73 (05-1285)	• Short in front P/T squib RH circuit (to ground)	• Front seat outer belt assy RH (Front P/T squib RH) • Airbag sensor assy center • Floor wire	○	ON
B1903/73 (05-1289)	• Short in front P/T squib RH circuit (to B+)	• Front seat outer belt assy RH (Front P/T squib RH) • Airbag sensor assy center • Floor wire	○	ON
B1905/74 (05-1293)	• Short in front P/T squib LH circuit	• Front seat outer belt assy LH (Front P/T squib LH) • Airbag sensor assy center • Floor wire No.2	○	ON
B1906/74 (05-1297)	• Open in front P/T squib LH circuit	• Front seat outer belt assy LH (Front P/T squib LH) • Airbag sensor assy center • Floor wire No.2	○	ON
B1907/74 (05-1301)	• Short in front P/T squib LH circuit (to ground)	• Front seat outer belt assy LH (Front P/T squib LH) • Airbag sensor assy center • Floor wire No.2	○	ON
B1908/74 (05-1305)	• Short in front P/T squib LH circuit (to B+)	• Front seat outer belt assy LH (Front P/T squib LH) • Airbag sensor assy center • Floor wire No.2	○	ON
B1920/77 (05-1309)	• Short in rear P/T squib RH circuit	• Rear seat 3 point type outer belt assy (Rear P/T squib RH) • Airbag sensor assy center • Floor wire	○	ON
B1921/77 (05-1313)	• Open in rear P/T squib RH circuit	• Rear seat 3 point type outer belt assy (Rear P/T squib RH) • Airbag sensor assy center • Floor wire	○	ON
B1922/77 (05-1317)	• Short in rear P/T squib RH circuit (to ground)	• Rear seat 3 point type outer belt assy (Rear P/T squib RH) • Airbag sensor assy center • Floor wire	○	ON
B1923/77 (05-1321)	• Short in rear P/T squib RH circuit (to B+)	• Rear seat 3 point type outer belt assy (Rear P/T squib RH) • Airbag sensor assy center • Floor wire	○	ON
B1925/78 (05-1325)	• Short in rear P/T squib LH circuit	• Rear seat 3 point type outer belt assy (Rear P/T squib LH) • Airbag sensor assy center • Floor wire No.2	○	ON

B1926/78 (05-1329)	• Open in rear P/T squib LH circuit	• Rear seat 3 point type outer belt assy (Rear P/T squib LH) • Airbag sensor assy center • Floor wire No.2	○	ON
B1927/78 (05-1333)	• Short in rear P/T squib LH circuit (to ground)	• Rear seat 3 point type outer belt assy (Rear P/T squib LH) • Airbag sensor assy center • Floor wire No.2	○	ON
B1928/78 (05-1337)	• Short in rear P/T squib LH circuit (to B+)	• Rear seat 3 point type outer belt assy (Rear P/T squib LH) • Airbag sensor assy center • Floor wire No.2	○	ON
Normal (05-1341)	• Voltage source drop	• Battery • Airbag sensor assy center	-	ON
Normal	• System normal	-	-	OFF

2004-2006 Diagnostic Trouble Code Chart

# DIAGNOSTIC TROUBLE CODE CHART

## HINT:

If a trouble code is displayed during the DTC check, check the circuit listed for the code in the table below (Proceed to the page listed for that circuit).

DTC No. (See Page)	Detection Item	Trouble Area	Code recording
B2000 (05-1428)	• Right side motor line malfunction Hi	• Front seat outer belt assy RH • Wire harness (seat belt control ECU – front seat outer belt assy RH) • Seat belt control ECU	○
B2001 (05-1430)	• Right side motor line malfunction Lo	• Front seat outer belt assy RH • Wire harness (seat belt control ECU – front seat outer belt assy RH) • Seat belt control ECU	○
B2002 (05-1432)	• Right side motor line malfunction Open	• Front seat outer belt assy RH • Wire harness (seat belt control ECU – front seat outer belt assy RH) • Seat belt control ECU	○
B2005 (05-1434)	• Left side motor line malfunction Hi	• Front seat outer belt assy LH • Wire harness (seat belt control ECU – front seat outer belt assy LH) • Seat belt control ECU	○
B2006 (05-1436)	• Left side motor line malfunction Lo	• Front seat outer belt assy LH • Wire harness (seat belt control ECU – front seat outer belt assy LH) • Seat belt control ECU	○
B2007 (05-1438)	• Left side motor line malfunction Open	• Front seat outer belt assy LH • Wire harness (seat belt control ECU – front seat outer belt assy LH) • Seat belt control ECU	○
B2015 (05-1440)	• Right side upper MOS malfunction Open	• Seat belt control ECU	○
B2016 (05-1440)	• Right side lower MOS malfunction Open	• Seat belt control ECU	○
B2020 (05-1440)	• Left side upper MOS malfunction Open	• Seat belt control ECU	○
B2021 (05-1440)	• Left side lower MOS malfunction Open	• Seat belt control ECU	○
B2025 (05-1440)	• Right side current detection circuit malfunction Hi	• Seat belt control ECU	○
B2026 (05-1440)	• Right side current detection circuit malfunction Lo	• Seat belt control ECU	○
B2027 (05-1440)	• Right side over-current malfunction	• Seat belt control ECU	○
B2030 (05-1440)	• Left side current detection circuit malfunction Hi	• Seat belt control ECU	○
B2031 (05-1440)	• Left side current detection circuit malfunction Lo	• Seat belt control ECU	○
B2032 (05-1440)	• Left side over-current malfunction	• Seat belt control ECU	○
B2035 (05-1440)	• Power supply relay adherence malfunction	• Seat belt control ECU	○
B2036 (05-1440)	• Power supply relay malfunction Open	• Seat belt control ECU	○
B2040 (05-1440)	• EEPROM malfunction	• Seat belt control ECU	○

B2041 (05-1440)	• Fall of the Raised voltage	• Seat belt control ECU	○
B2043 (05-1442)	• Fall of the +B voltage	• Seat belt control ECU • Wire harness (seat belt control ECU - Battery) • Battery	○
B2047 (05-1440)	• Pre-collision safety ECU inner circuit malfunction	• Seat belt control ECU	○
B2055 (82-11)	• Radar sensor malfunction	• Millimeter wave radar sensor (replacement)	○
B2056 (82-11)	• Axial gap of the radar sensor	• Millimeter wave radar sensor (installation condition check)	○
B2059 (05-1444)	• Vehicle speed malfunction of Distance Control ECU	• Combination meter ECU • ECM • Cruise control ECU assy (Distance control ECU) • ABS & Traction actuator assy (Skid control ECU) • Seat belt control ECU	○
B2060 (05-460)	• ABS malfunction	• Steering angle sensor • Yaw rate sensor • Stop lamp switch • ABS & TRACTION actuator assy (Skid control ECU)	○
B2063 (05-1017)	• Buckle switch malfunction	• Front seat inner belt assy RH • Front seat inner belt assy LH • Airbag sensor assy center	○
B2064 (05-1446)	• Vehicle type signal malfunction	• Network gateway ECU • Seat belt control ECU	○
B2065 (05-3595)	• Malfunction of Distance Control ECU	• Cruise control ECU assy (Distance control ECU) • Seat belt control ECU	○
U0100 (05-3333)	• Lost Communication With ECM/PCM "A"	• CAN communication system • ECM • Cruise control ECU assy (Distance control ECU)	○
U0122 (05-3595)	• Lost Communication With Vehicle Dynamics Control Module	• CAN communication system • ABS & TRACTION actuator assy (Skid control ECU) • Yaw rate sensor • Steering angle sensor	○
U0145 (05-3152)	• Lost Communication With Body Control Module "E"	• Airbag sensor assy center • Network gateway ECU • Seat belt control ECU • BEAN communication system • CAN communication system	○
U0235 (05-3595)	• Lost Communication With Cruise Control Front Distance Range Sensor	• Millimeter wave radar sensor • Wire harness (Cruise control ECU assy (Distance control ECU) - Millimeter wave radar sensor) • Cruise control ECU assy (Distance control ECU)	○
U1101 (05-3333)	• Lost Communication With Distance Control ECU	• CAN communication system • Cruise control ECU assy (Distance control ECU)	○
U1102 (05-3595)	• Lost Communication With Radar Sensor	• Cruise control ECU assy (Distance control ECU) • Wire harness (Cruise control ECU assy (Distance control ECU) - Millimeter wave radar sensor) • Millimeter wave radar sensor	○

## HINT:

- "Check PCS system" is displayed on the multi-information display in the combination meter assy when the above DTCs are output. The fail-safe function of the pre-collision safety system is operating (see page 05-2000) if "PCS not Available Now" is displayed on the multi-information display.
- When DTC B2060 is output there may be a malfunction in the ABS WITH EBD & BA & TRAC & VSC system. Check the DTCs on the ABS & TRACTION actuator assy (skid control ECU).
- When the DTC B2055, B2056, B2065, U0235, or U1102 is output there may be a malfunction in the dynamic laser cruise control system. Check the DTCs on the cruise control ECU assy (distance control ECU) (see page 05-3595). DTCs for the dynamic laser cruise control system may not be output when the set speed of the cruise control is 40 km/h or less.
- When DTC B2063 is output there may be a malfunction in the SRS airbag system. Check the DTCs on the airbag sensor assy center (see page 05-1017).
- When DTC U0145 is output, DTC B1266 or B1267, which indicated malfunction in BEAN communication, may be output simultaneously. If these DTCs are output simultaneously there may be a malfunction in the multiplex communication system. Check the DTCs on the multiplex communication system (see page 05-3152).

2004-2006 Diagnostic Trouble Code Chart

# DIAGNOSTIC TROUBLE CODE CHART

## 1. DTC CHECK

If a malfunction code is displayed during the DTC check, check the suspected area listed for that code in the table below, and proceed to the appropriate page.

DTC No. (See Page)	Symptom	Suspect Area
B1244 (05-1507)	Light sensor circuit malfunction	<ul style="list-style-type: none"> <li>• Automatic light control sensor</li> <li>• Wire harness or connector</li> <li>• Driver side junction block ECU</li> </ul>
B1268 (05-1513)	Back-up communication bus malfunction (Between combination switch ECU and driver side J/B ECU, driver side J/B ECU and Luggage room J/B ECU)	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• Combination switch ECU</li> <li>• Driver side junction block ECU</li> <li>• Luggage room junction block ECU</li> </ul>
B2402 (05-1520)	Transistor relay overload malfunction	<ul style="list-style-type: none"> <li>• Luggage room junction block ECU</li> <li>• Wire harness or connector</li> </ul>
B2403 (05-1520)	Transistor relay overload malfunction	<ul style="list-style-type: none"> <li>• Luggage room junction block ECU</li> <li>• Wire harness or connector</li> </ul>
B2412 (05-1522)	Headlight swivel motor LH malfunction	<ul style="list-style-type: none"> <li>• Headlight swivel actuator LH</li> <li>• Wire harness or connector</li> <li>• AFS ECU</li> </ul>
B2413 (05-1522)	Headlight swivel motor RH malfunction	<ul style="list-style-type: none"> <li>• Headlight swivel actuator RH</li> <li>• Wire harness or connector</li> <li>• AFS ECU</li> </ul>
B2414 (05-1529)	Steering position sensor malfunction	<ul style="list-style-type: none"> <li>• Steering sensor</li> <li>• Wire harness or connector</li> <li>• AFS ECU</li> </ul>
B2415 (05-1533)	Vehicle speed sensor malfunction	<ul style="list-style-type: none"> <li>• Skid control ECU</li> <li>• Wire harness or connector</li> <li>• AFS ECU</li> </ul>
B2416 (05-1536)	Height control sensor malfunction	<ul style="list-style-type: none"> <li>• Suspension control ECU (w/ Air suspension)</li> <li>• Height control sensor (w/o Air suspension)</li> <li>• Wire harness or connector</li> <li>• AFS ECU</li> </ul>
B2417 (05-1547)	Headlight beam level control motor LH malfunction	<ul style="list-style-type: none"> <li>• Headlamp beam level control motor LH</li> <li>• Wire harness or connector</li> <li>• AFS ECU</li> </ul>
B2418 (05-1547)	Headlight beam level control motor RH malfunction	<ul style="list-style-type: none"> <li>• Headlamp beam level control motor RH</li> <li>• Wire harness or connector</li> <li>• AFS ECU</li> </ul>
B2419 (05-1551)	Beam communication malfunction	<ul style="list-style-type: none"> <li>• Multiplex communication system</li> <li>• Wire harness or connector</li> <li>• AFS ECU</li> </ul>
B2420 (05-1552)	AFS ECU malfunction	<ul style="list-style-type: none"> <li>• AFS ECU</li> </ul>

## DIAGNOSTIC TROUBLE CODE CHART

Terms	Description
Physical address	3-digit, hexadecimal code assigned to all components connected to the AVC-LAN. Individual symbols are specified based on function. Units whose names are unknown or relevant units are displayed with physical addresses.
Logical address	2-digit, hexadecimal code assigned to all the functions in the AVC-LAN system.

### HINT:

Titles for each unit are stated in the following order: parts name (physical address) [Name indicated by DTC]

### 1. RADIO RECEIVER ASSY (Physical address: 190) [AUDIO H/U]

(a) Logical address: 01 (Communication control)

### HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
D5 *1 *5	Absence of registration unit	A device that the sub code shows is (was) disconnected from the system when turning the ignition switch to the ACC or ON position. The communication condition with the device that the code shows cannot be obtained when the engine starts.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 7
D8 *2 *5	No response for connection check	The device indicated by the sub code is (was) disconnected from the system after engine start	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 7
D9 *1 *5	Last mode error	The device (for audio visual system) that had functioned before the engine stopped is (was) disconnected from the system when the ignition switch is (was) in the ACC or ON position.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 7
DA *5	No response against ON/OFF command	No response is identified when changing mode (audio and visual mode change). Detected when sound and image do not change by switch operation.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 7
DB *1 *5	Mode status error	This code detects a dual alarm.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 7
DC *3 *5	Failure in transmission	This code indicates a transmission failure to the device indicated by the sub code. NOTE: This DTC may have no direct relationship with the malfunction.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 7
DE *4 *5	Slave reset	This code is stored when a slave device has been disconnected after engine start.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 7

### HINT:

- \*1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- \*2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- \*3: This code may be stored if the ignition key is turned again after the engine starts.
- \*4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- \*5: If the device is reported as not existing during verification, check the power source circuit and AVC-LAN circuit for the device.



(b) Logical address: 62 (CD): 63 (CD changer)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
10	CD player mechanical error	A mechanical error in the CD player is detected while the CD is not being inserted or ejected.	Replace radio receiver assy	67-5
11	CD insertion & eject error	CD insertion or ejection is failed.	Replace radio receiver assy	67-5
12	CD reading abnormal	CD read problem occurs.	Replace radio receiver assy	67-5
40	No disc	No disc is inserted.	1. Check whether the CD is inserted or not. If the CD is inserted, check whether it can be ejected or not. If it cannot be ejected, replace radio receiver assy. 2. Inspect CD. 3. If the same code is detected, replace the radio receiver assy	67-5 05-1764 67-5
41	Wrong disc	An unsuitable disc is inserted.	1. Inspect CD. 2. If the same code is detected, replace the radio receiver assy	05-1764 67-5
42	Disc cannot be read	The disc cannot be read.	1. Inspect CD. 2. If the same code is detected, replace the radio receiver assy	05-1764 67-5
43	CD-ROM abnormal	CD-ROM operation is abnormal.	Replace radio receiver assy	67-5
44	CD abnormal	Operation error in the CD mechanism (except for code 10).	1. After clearing the DTC, check the malfunction symptom. 2. If the same code is detected, replace the radio receiver assy	- 67-5
45	EJECT error	Magazine cannot be ejected.	Replace radio receiver assy	67-5
46	Disc has scratches in the reverse surface	CD has a dirt or scratches in the reverse side.	1. Inspect CD. 2. If the same code is detected, replace the radio receiver assy	05-1764 67-5
47	CD temperature is high	The sensor detects that the CD unit temperature is high.	1. Park the vehicle in a cool place. Turn the engine off. After checking that the temperature of the radio and navigation assy becomes sufficiently low, turn the engine on in order to verify the malfunction symptom. 2. If the same code is detected, replace the radio receiver assy	- 67-5
48	Excess current	Excess current is applied disc player changer.	Replace radio receiver assy	67-5
50	Tray insertion/ejection error	Malfunction insertion/ejection system.	Replace radio receiver assy	67-5
51	Elevator error	Mechanical error occurred during elevator operation.	Replace radio receiver assy	67-5
52	Clamp error	Clamp unusually generating.	Replace radio receiver assy	67-5

(c) Logical address: 61 (Cassette)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
10	Belt cut	The inside belt is cut or come off.	Replace radio receiver assy	67-5
40	Mechanical error of media	A malfunction due to mechanical problem, cassette tape is cut or entangled.	1. Replace the cassette tape and recheck the symptom. 2. If the same code is detected, replace the radio receiver assy	- 67-5
41	EJECT Error	A malfunction due to mechanical problem.	Replace radio receiver assy	67-5
42	Tape tangling	Cassette tape is tangled.	Replace radio receiver assy	67-5
43	Head dirt	Head is dirty.	1. Clean the head and recheck the symptom. 2. If the same code is detected, replace the radio receiver assy	- 67-5
44	Device power supply problem	A short or open in the power circuit.	1. Power source circuit (radio receiver assy) 2. Replace radio receiver assy	05-1771 67-5

**2. TELEPHONE TRANSCIVER AND SPEAKER RELAY (Physical address: 17D) [TEL]**

(a) Logical address: 01 (Communication control)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
D6 *1	No master	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stores (stored) the code has (had) been disconnected when the ignition switch is in ACC or ON position.</li> <li>• The master device has (had) been disconnected when this code is stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (radio receiver assy)</li> <li>2. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>3. AVC-LAN circuit (stereo component amplifier assy - stereo component tuner)</li> <li>4. Replace radio receiver assy</li> <li>5. Replace telephone transceiver and speaker relay</li> </ol>	<a href="#">05-1771</a> <a href="#">05-1804</a> <a href="#">05-1798</a> 67-5 -
D7	Connection check error	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stored this code has (had) been disconnected after the engine starts (started).</li> <li>• The master device has (had) been disconnected when this code is (was) stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (radio receiver assy)</li> <li>2. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>3. AVC-LAN circuit (stereo component amplifier assy - stereo component tuner)</li> <li>4. Replace radio receiver assy</li> <li>5. Replace telephone transceiver and speaker relay</li> </ol>	<a href="#">05-1771</a> <a href="#">05-1804</a> <a href="#">05-1798</a> 67-5 -
DC *2 *5	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 7
DD *3	Master reset	When the device that should be the master has been disconnected after engine starts.	<ol style="list-style-type: none"> <li>1. Power source circuit (radio receiver assy)</li> <li>2. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>3. Replace radio receiver assy</li> </ol>	<a href="#">05-1771</a> <a href="#">05-1804</a> 67-5
DF *4	Master error	When the device with a display fails and the master is switched to the audio device. Also when a communication error between sub master (audio) and master occurs, this code is stored.	<ol style="list-style-type: none"> <li>1. Power source circuit (radio receiver assy)</li> <li>2. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>3. Replace radio receiver assy</li> </ol>	<a href="#">05-1771</a> <a href="#">05-1804</a> 67-5
E0 *1	Registration complete indication error	When "Registration complete" command from the master device cannot be received.	This code will be detected when signal receiving time is delayed.	-
E1 *1	Voice processing device ON error	When the AMP device records that the AMP output does not function even while the source device operates.	<ol style="list-style-type: none"> <li>1. Power source circuit (radio receiver assy)</li> <li>2. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>3. Replace radio receiver assy</li> </ol>	<a href="#">05-1771</a> <a href="#">05-1804</a> 67-5
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace radio receiver assy	67-5
E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	-	-
E4	Multiple frame incomplete	When the multiple frame transmission ends incomplete	-	-

## DIAGNOSTICS – AUDIO SYSTEM

21	ROM error	This code is output when a malfunction exists in ROM.	Replace telephone transceiver and speaker relay	–
22	RAM error	This code is output when a malfunction exists in RAM.	Replace telephone transceiver and speaker relay	–

## HINT:

- \*1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- \*2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- \*3: This code may be stored if the ignition key is turned again after the engine starts.
- \*4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- \*5: If the device is reported as not existing during verification, check the power source circuit and AVC-LAN circuit for the device.

(b) Logical address: 57 (telephone information drawing): 68 (TEL)

## HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
10	TEL ECU malfunction	Malfunction in TEL ECU is detected.	Replace telephone transceiver and speaker relay	–
40	Communication line serial line malfunction	Communication malfunction with TEL ECU is detected.	1. AVC-LAN circuit (stereo component amplifier assy – stereo component tuner) 2. Replace telephone transceiver and speaker relay	05-1798 –
41	Telephone power line malfunction	TEL ECU detects a malfunction with cellular phone power.	1. Inspect telephone 2. Replace telephone	– –

**3. AUDIO AND REAR A/C CONTROL SW (Physical address: 1C0) [Rr-CONT]**

(a) Logical address: 01 (Communication control)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
D6 *1	No master	When either of the following conditions meets. <ul style="list-style-type: none"> <li>• The device that stores (stored) the code has (had) been disconnected when the ignition switch is in ACC or ON position.</li> <li>• The master device has (had) been disconnected when this code is stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (radio receiver assy)</li> <li>2. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>3. Power source circuit (audio and rear A/C control SW)</li> <li>4. AVC-LAN circuit (stereo component amplifier assy - audio and rear A/C control SW)</li> <li>5. Replace radio receiver assy</li> <li>6. Replace audio and rear A/C control SW</li> </ol>	<a href="#">05-1771</a> <a href="#">05-1804</a> <a href="#">05-1777</a> <a href="#">05-1800</a> <a href="#">67-5</a> <a href="#">67-11</a>
D7	Connection check error	When either of the following conditions meets. <ul style="list-style-type: none"> <li>• The device that stored this code has (had) been disconnected after the engine starts (started).</li> <li>• The master device has (had) been disconnected when this code is (was) stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (radio receiver assy)</li> <li>2. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>3. Power source circuit (audio and rear A/C control SW)</li> <li>4. AVC-LAN circuit (stereo component amplifier assy - audio and rear A/C control SW)</li> <li>5. Replace radio receiver assy</li> <li>6. Replace audio and rear A/C control SW</li> </ol>	<a href="#">05-1771</a> <a href="#">05-1804</a> <a href="#">05-1777</a> <a href="#">05-1800</a> <a href="#">67-5</a> <a href="#">67-5</a>
DC *2 *5	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 7
DD *3	Master reset	When the device that should be the master has been disconnected after the engine starts.	<ol style="list-style-type: none"> <li>1. Power source circuit (radio receiver assy)</li> <li>2. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>3. Replace radio receiver assy</li> </ol>	<a href="#">05-1771</a> <a href="#">05-1804</a> <a href="#">67-5</a>
DF *4	Master error	When the device with a display fails and the master is switched to the audio device. Also when a communication error between sub master (audio) and master occurs, this code is stored.	<ol style="list-style-type: none"> <li>1. Power source circuit (radio receiver assy)</li> <li>2. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>3. Replace radio receiver assy</li> </ol>	<a href="#">05-1771</a> <a href="#">05-1804</a> <a href="#">67-5</a>
E0 *1	Registration complete indication error	When "Registration complete" command from the master device cannot be received.	This code will be detected when signal receiving time is delayed.	-
E1 *1	Voice processing device ON error	When the AMP device records that the AMP output does not function even while the source device operates.	<ol style="list-style-type: none"> <li>1. Power source circuit (radio receiver assy)</li> <li>2. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>3. Replace radio receiver assy</li> </ol>	<a href="#">05-1771</a> <a href="#">05-1804</a> <a href="#">67-5</a>
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace radio receiver assy	<a href="#">67-5</a>

E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	-	-
E4	Multiple frame incomplete	When the multiple frame transmission ends incomplete	-	-

## HINT:

- \*1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- \*2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- \*3: This code may be stored if the ignition key is turned again after the engine starts.
- \*4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- \*5: If the device is reported as not existing during verification, check the power source circuit and AVC-LAN circuit for the device.

**4. GATEWAY ECU (Physical address: 1C6) [G/W]**

(a) Logical address: 01 (Communication control)

## HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
D4	Regular Communication Error	Component in which this code is recorded has been disconnected from system with ignition in the ACC or ON position. Either that, or the radio receiver assy was disconnected when this code was recorded.	<ol style="list-style-type: none"> <li>1. Power source circuit (radio receiver assy)</li> <li>2. AVC-LAN circuit (radio receiver assy – stereo component tuner)</li> <li>3. AVC-LAN circuit (radio receiver assy – gateway ECU)</li> <li>4. Replace radio receiver assy</li> <li>5. Replace gateway ECU</li> </ol>	<a href="#">05-1771</a> <a href="#">05-1804</a> <a href="#">05-1802</a> <a href="#">67-5</a> -

## HINT:

This code is stored 210 seconds after the power supply connector of the master component is disconnected with the ignition switch in the ACC or ON position.

**5. STEREO COMPONENT TUNER (Physical address: 1F0) [RADIO TUNER]**

(a) Logical address: 01 (Communication control)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
D6 *1	No master	When either the following condition meets. • The device that stores (stored) the code has (had) been disconnected when the ignition switch is in ACC or ON position. • The master device has (had) been disconnected when this code is stored.	1. Power source circuit (radio receiver assy) 2. Power source circuit (stereo component tuner) 3. AVC-LAN circuit (radio receiver assy - stereo component tuner) 4. Replace radio receiver assy 5. Replace stereo component tuner	05-1771 05-1773 05-1804 67-5 67-12
D7	Connection check error	When either the following condition meets. • The device that stored this code has (had) been disconnected after the engine starts (started). • The master device has (had) been disconnected when this code is (was) stored.	1. Power source circuit (radio receiver assy) 2. Power source circuit (stereo component tuner) 3. AVC-LAN circuit (radio receiver assy - stereo component tuner) 4. Replace radio receiver assy 5. Replace stereo component tuner	05-1771 05-1773 05-1804 67-5 67-12
DC *2 *5	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 7
DD *3	Master reset	When the device that should be the master has been disconnected after engine starts.	1. Power source circuit (radio receiver assy) 2. AVC-LAN circuit (radio receiver assy - stereo component tuner) 3. Replace radio receiver assy	05-1771 05-1804 67-5
DF *4	Master error	When the device with a display fails and the master is switched to the audio device. Also when a communication error between sub master (audio) and master occurs, this code is stored.	1. Power source circuit (radio receiver assy) 2. AVC-LAN circuit (radio receiver assy - stereo component tuner) 3. Replace radio receiver assy	05-1771 05-1804 67-5
E0 *1	Registration complete indication error	When "Registration complete" command from the master device cannot be received.	This code will be detected when signal receiving time is delayed.	-
E1 *1	Voice processing device ON error	When the AMP device records that the AMP output does not function even while the source device operates.	1. Power source circuit (radio receiver assy) 2. AVC-LAN circuit (radio receiver assy - stereo component tuner) 3. Replace radio receiver assy	05-1771 05-1804 67-5
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace radio receiver assy	67-5
E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	-	-
E4	Multiple frame incomplete	When the multiple frame transmission ends incomplete	-	-

HINT:

- \*1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.

- \*2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- \*3: This code may be stored if the ignition key is turned again after the engine starts.
- \*4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- \*5: If the device is reported as not existing during verification, check the power source circuit and AVC-LAN circuit for the device.

(b) Logical address: 60 (Radio)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
10	AM tuner PLL does not lock	The PLL circuit in the AM tuner is abnormal.	1. After clearing the DTC, check the antenna wiring. 2. If the same code is detected, replace the stereo component tuner.	– 67-12
11	FM tuner PLL does not lock	The PLL circuit in the FM tuner is abnormal.	1. After clearing the DTC, check the antenna wiring. 2. If the same code is detected, replace the stereo component tuner.	– 67-12
40	Antenna is not connected	The antenna is disconnected.	1. After clearing the DTC, check the antenna wiring. 2. If the same code is detected, replace the stereo component tuner.	– 67-12
41	Antenna power source error	The power source system of the antenna is abnormal.	1. After clearing the DTC, check the antenna wiring. 2. If the same code is detected, replace the stereo component tuner.	– 67-12
42	Tuner power source error	The power source of the tuner is abnormal.	1. Power source circuit (stereo component tuner) 2. Replace stereo component tuner	05-1773 67-12
43	AM tuner error	The AM tuner is abnormal.	Replace stereo component tuner	67-12
44	FM tuner error	The FM tuner is abnormal.	Replace stereo component tuner	67-12
45	SW tuner error	The SW tuner is abnormal.	Replace stereo component tuner	67-12



**6. STEREO COMPONENT AMPLIFIER ASSY (Physical address: 440) [DSP AMP]**

(a) Logical address: 01 (Communication control)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
D6 *1	No master	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stores (stored) the code has (had) been disconnected when the ignition switch is in ACC or ON position.</li> <li>• The master device has (had) been disconnected when this code is stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (radio receiver assy)</li> <li>2. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>3. Power source circuit (stereo component amplifier assy)</li> <li>4. AVC-LAN circuit (stereo component amplifier assy - stereo component tuner)</li> <li>5. Replace radio receiver assy</li> <li>6. Replace stereo component amplifier assy</li> </ol>	<a href="#">05-1771</a> <a href="#">05-1804</a> <a href="#">05-1775</a> <a href="#">05-1798</a> <a href="#">67-5</a> <a href="#">67-16</a>
D7	Connection check error	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stored this code has (had) been disconnected after the engine starts (started).</li> <li>• The master device has (had) been disconnected when this code is (was) stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (radio receiver assy)</li> <li>2. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>3. Power source circuit (stereo component amplifier assy)</li> <li>4. AVC-LAN circuit (stereo component amplifier assy - stereo component tuner)</li> <li>5. Replace radio receiver assy</li> <li>6. Replace stereo component amplifier assy</li> </ol>	<a href="#">05-1771</a> <a href="#">05-1804</a> <a href="#">05-1775</a> <a href="#">05-1798</a> <a href="#">67-5</a> <a href="#">67-16</a>
DC *2 *5	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DD *3	Master reset	When the device that should be the master has been disconnected after engine starts.	<ol style="list-style-type: none"> <li>1. Power source circuit (radio receiver assy)</li> <li>2. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>3. Replace radio receiver assy</li> </ol>	<a href="#">05-1771</a> <a href="#">05-1804</a> <a href="#">67-5</a>
DF *4	Master error	When the device with a display fails and the master is switched to the audio device. Also when a communication error between sub master (audio) and master occurs, this code is stored.	<ol style="list-style-type: none"> <li>1. Power source circuit (radio receiver assy)</li> <li>2. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>3. Replace radio receiver assy</li> </ol>	<a href="#">05-1771</a> <a href="#">05-1804</a> <a href="#">67-5</a>
E0 *1	Registration complete indication error	When "Registration complete" command from the master device cannot be received.	This code will be detected when signal receiving time is delayed.	-
E1 *1	Voice processing device ON error	When the AMP device records that the AMP output does not function even while the source device operates.	<ol style="list-style-type: none"> <li>1. Power source circuit (radio receiver assy)</li> <li>2. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>3. Replace radio receiver assy</li> </ol>	<a href="#">05-1771</a> <a href="#">05-1804</a> <a href="#">67-5</a>
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace radio receiver assy	<a href="#">67-5</a>

E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	-	-
E4	Multiple frame incomplete	When the multiple frame transmission ends incomplete	-	-

**HINT:**

- \*1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- \*2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- \*3: This code may be stored if the ignition key is turned again after the engine starts.
- \*4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- \*5: If the device is reported as not existing during verification, check the power source circuit and AVC-LAN circuit for the device.

**7. THE INSPECTION LIST FOR THE DEVICE INDICATED BY THE SUB CODE****HINT:**

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

Sub code address (Device name)	Verification	See page
190 (Radio receiver assy)	1. Power source circuit (radio receiver assy) 2. AVC-LAN circuit (radio receiver assy – stereo component tuner) 3. Replace radio receiver assy	05-1771 05-1804 67-5
17D (Telephone Transceiver and Speaker Relay)	1. AVC-LAN circuit (stereo component amplifier assy – stereo component tuner) 2. Replace telephone transceiver and speaker relay	05-1798 -
1C0 (Audio and Rear A/C Control SW)	1. Power source circuit (audio and rear A/C control SW) 2. AVC-LAN circuit (stereo component amplifier assy – audio and rear A/C control SW) 3. Replace audio and rear A/C control SW	05-1777 05-1800 67-11
1C6 (Gateway ECU)	1. AVC-LAN circuit (radio receiver assy – gateway ECU) 2. Replace gateway ECU	05-1802 -
1F0 (Stereo Component Tuner)	1. Power source circuit (stereo component tuner) 2. AVC-LAN circuit (radio receiver assy – stereo component tuner) 3. Replace stereo component tuner	05-1773 05-1804 67-12
440 (Stereo Component Amplifier Assy)	1. Power source circuit (stereo component amplifier assy) 2. AVC-LAN circuit (stereo component amplifier assy – stereo component tuner) 3. Replace stereo component amplifier assy	05-1775 05-1798 67-16

# DIAGNOSTIC TROUBLE CODE CHART

Terms	Description
Physical address	3-digit, hexadecimal code assigned to all components connected to the AVC-LAN. Individual symbols are specified based on function. Units whose names are unknown or relevant units are displayed with physical addresses.
Logical address	2-digit, hexadecimal code assigned to all the functions in the AVC-LAN system.

## HINT:

Titles for each unit are stated in the following order: parts name (physical address) [Name indicated by DTC]

### 1. MULTI-DISPLAY (physical address: 110) [EMV]

#### (a) Logical address: 01 (Communication control)

DTC	Name	Diagnosis	Verification	See page
D5 *1 *5	Absence of registration unit	A device that the sub code shows is (was) disconnected from the system when turning the ignition switch to the ACC or ON position. The communication condition with the device that the code shows cannot be obtained when the engine starts.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
D8 *2 *5	No response for connection check	The device indicated by the sub code is (was) disconnected from the system after engine start.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
D9 *1 *5	Last mode error	The device (for audio visual system) that had functioned before the engine stopped is (was) disconnected from the system when the ignition switch is (was) in the ACC or ON position.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DA *5	No response against ON/OFF command	No response is identified when changing mode (audio and visual mode change). Detected when sound and image do not change by switch operation.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DB *1 *5	Mode status error	This code detects a dual alarm.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DC *3 *5	Failure in transmission	This code indicates a transmission failure to the device indicated by the sub code. NOTE: This DTC may have no direct relationship with the malfunction.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DE *4 *5	Slave reset	This code is stored when a slave device has been disconnected after engine start.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
21	ROM error	This code is output when a malfunction exists in ROM.	Replace multi-display	67-8
22	RAM error	This code is output when a malfunction exists in RAM.	Replace multi-display	67-8

## HINT:

- \*1: This code may be recorded depending on the battery condition or engine start voltage even if no failure is detected.
- \*2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- \*3: This code may be stored if the ignition key is turned to the START position again with the engine running.
- \*4: This code may be stored if the ignition key is held in the START position for 1 minute or more before returning to the ON position.
- \*5: If the device is reported as not existing during verification, check the power source circuit and AVC-LAN circuit for the device.

(b) Logical address: 21 (SW): 23 (SW with name): 24 (SW converting): 25 (command SW)

DTC	Name	Diagnosis	Verification	See page
10	Panel switch error	The panel SW detection circuit has a failure.	Replace multi-display	<a href="#">67-8</a>

**2. NAVIGATION ECU (Physical address: 178) [NAVI]**

(a) Logical address: 01 (Communication control)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
D6 *1	No master	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stores (stored) the code has (had) been disconnected when the ignition switch is in ACC or ON position.</li> <li>• The master device has (had) been disconnected when this code is stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Power source circuit (navigation ECU)</li> <li>4. AVC-LAN circuit (navigation ECU - stereo component tuner)</li> <li>5. Replace multi-display</li> <li>6. Replace navigation ECU</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">05-1912</a> <a href="#">05-1950</a> <a href="#">67-8</a> <a href="#">67-9</a>
D7	Connection check error	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stored this code has (had) been disconnected after the engine starts (started).</li> <li>• The master device has (had) been disconnected when this code is (was) stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Power source circuit (navigation ECU)</li> <li>4. AVC-LAN circuit (navigation ECU - stereo component tuner)</li> <li>5. Replace multi-display</li> <li>6. Replace navigation ECU</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">05-1912</a> <a href="#">05-1950</a> <a href="#">67-8</a> <a href="#">67-9</a>
DC *2 *5	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DD *3	Master reset	When the device that should be the master has been disconnected after engine starts.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
DF *4	Master error	When the device with a display fails and the master is switched to the audio device. Also when a communication error between sub master (audio) and master occurs, this code is stored.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
E0 *1	Registration complete indication error	When "Registration complete" command from the master device cannot be received.	This code will be detected when signal receiving time is delayed.	-
E1 *1	Voice processing device ON error	When the AMP device records that the AMP output does not function even while the source device operates.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace multi-display	<a href="#">67-8</a>
E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	-	-
E4	Multiple frame incomplete	When the multiple frame transmission ends incomplete.	-	-

## HINT:

- \*1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- \*2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- \*3: This code may be stored if the ignition key is turned again after the engine starts.
- \*4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- \*5: If the device is reported as not existing during verification, check the power source circuit and AVC-LAN circuit for the device.

(b) Logical address: 58 (Navigation): 80 (GPS)

## HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
10	Gyro error	Ground short, power supply short, or open circuit in the gyro signal, gyro failure.	1. Inspect the gyro error 2. Replace GPS antenna 3. Replace navigation ECU	05-1896 67-33 67-9
11	GPS receiver error	RTC, ROM, and RAM of the GPS receiver and TCXO errors. GPS receiver is failed.	Replace navigation ECU	67-9
40	GPS antenna error	GPS antenna error	1. Replace GPS antenna 2. Replace navigation ECU	67-33 67-9
41	GPS antenna power source error	Error of the power source to the GPS antenna	1. Replace GPS antenna 2. Replace navigation ECU	67-33 67-9
42	Map disc read error	Player error. A scratch or dirt on the disc. Access to an invalid address due to software error.	1. Inspect map disc read error 2. Replace map disc 3. Replace navigation ECU	05-1897 - 67-9
43	SPD signal error	The difference between the GPS speed and SPD pulse is detected.	1. Inspect speed signal error 2. Speed signal circuit 3. Replace navigation ECU	05-1898 05-1924 67-9

**3. RADIO RECEIVER ASSY (Physical address: 190) [AUDIO H/U]**

(a) Logical address: 01 (Communication control)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
D6 *1	No master	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stores (stored) the code has (had) been disconnected when the ignition switch is in ACC or ON position.</li> <li>• The master device has (had) been disconnected when this code is stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Power source circuit (radio receiver assy)</li> <li>4. Replace multi-display</li> <li>5. Replace radio receiver assy</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">05-1916</a> <a href="#">67-8</a> <a href="#">67-5</a>
D7	Connection check error	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stored this code has (had) been disconnected after the engine starts (started).</li> <li>• The master device has (had) been disconnected when this code is (was) stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Power source circuit (radio receiver assy)</li> <li>4. Replace multi-display</li> <li>5. Replace radio receiver assy</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">05-1916</a> <a href="#">67-8</a> <a href="#">67-5</a>
DC *2 *5	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DD *3	Master reset	When the device that should be the master has been disconnected after engine starts.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
DF *4	Master error	When the device with a display fails and the master is switched to the audio device. Also when a communication error between sub master (audio) and master occurs, this code is stored.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
E0 *1	Registration complete indication error	When "Registration complete" command from the master device cannot be received.	This code will be detected when signal receiving time is delayed.	-
E1 *1	Voice processing device ON error	When the AMP device records that the AMP output does not function even while the source device operates.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace multi-display	<a href="#">67-8</a>
E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	-	-
E4	Multiple frame incomplete	When the multiple frame transmission ends incomplete	-	-

## (b) Logical address: 01 (Communication control)

DTC	Name	Diagnosis	Verification	See page
D5 *1 *5	Absence of registration unit	A device that the sub code shows is (was) disconnected from the system when turning the ignition switch to the ACC or ON position. The communication condition with the device that the code shows cannot be obtained when the engine starts.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
D8 *2 *5	No response for connection check	The device indicated by the sub code is (was) disconnected from the system after engine start	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
D9 *1 *5	Last mode error	The device (for audio visual system) that had functioned before the engine stopped is (was) disconnected from the system when the ignition switch is (was) in the ACC or ON position.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DA *5	No response against ON/OFF command	No response is identified when changing mode (audio and visual mode change). Detected when sound and image do not change by switch operation.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DB *1 *5	Mode status error	This code detects a dual alarm.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DC *3 *5	Failure in transmission	This code indicates a transmission failure to the device indicated by the sub code. NOTE: This DTC may have no direct relationship with the malfunction.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DE *4 *5	Slave reset	This code is stored when a slave device has been disconnected after engine start.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10

## HINT:

- \*1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- \*2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- \*3: This code may be stored if the ignition key is turned again after the engine starts.
- \*4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- \*5: If the device is reported as not existing during verification, check the power source circuit and AVC-LAN circuit for the device.



(c) Logical address: 62 (CD): 63 (CD changer)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
10	CD player mechanical error	A mechanical error in the CD player is detected while the CD is not being inserted or ejected.	Replace radio receiver assy	67-5
11	CD insertion & eject error	CD insertion or ejection is failed.	Replace radio receiver assy	67-5
12	CD reading abnormal	CD read problem occurs.	Replace radio receiver assy	67-5
40	No disc	No disc is inserted.	1. Check whether the CD is inserted or not. If the CD is inserted, check whether it can be ejected or not. If it cannot be ejected, replace radio receiver assy. 2. Inspect CD. 3. If the same code is detected, replace the radio receiver assy	67-5 05-1764 67-5
41	Wrong disc	An unsuitable disc is inserted.	1. Inspect CD. 2. If the same code is detected, replace the radio receiver assy	05-1764 67-5
42	Disc cannot be read	The disc cannot be read.	1. Inspect CD. 2. If the same code is detected, replace the radio receiver assy	05-1764 67-5
43	CD-ROM abnormal	CD-ROM operation is abnormal.	Replace radio receiver assy	67-5
44	CD abnormal	Operation error in the CD mechanism (except for code 10).	1. After clearing the DTC, check the malfunction symptom. 2. If the same code is detected, replace the radio receiver assy	- 67-5
45	EJECT error	Magazine cannot be ejected	Replace radio receiver assy	67-5
46	Disc has scratches in the reverse surface	CD has a dirt or scratches in the reverse side	1. Inspect CD. 2. If the same code is detected, replace the radio receiver assy	05-1764 67-5
47	CD temperature is high	The sensor detects that the CD unit temperature is high.	1. Park the vehicle in a cool place. Turn the engine off. After checking that the temperature of the radio and navigation assy becomes sufficiently low, turn the engine on in order to verify the malfunction symptom. 2. If the same code is detected, replace the radio receiver assy	- 67-5
48	Excess current	Excess current is applied to the disc player changer	Replace radio receiver assy	67-5
50	Tray insertion/ejection error	Malfunction insertion/ejection system	Replace radio receiver assy	67-5
51	Elevator error	Mechanical error occurred during elevator operation	Replace radio receiver assy	67-5
52	Clamp error	Clamp unusually generating	Replace radio receiver assy	67-5

(d) Logical address: 61 (Cassette)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
10	Belt cut	The inside belt is cut or come off.	Replace radio receiver assy	67-5
40	Mechanical error of media	A malfunction due to mechanical problem, cassette tape is cut or entangled.	1. Replace the cassette tape and recheck the symptom. 2. If the same code is detected, replace the radio receiver assy	- 67-5
41	EJECT error	A malfunction due to mechanical problem.	Replace radio receiver assy	67-5
42	Tape tangling	Cassette tape is tangled.	Replace radio receiver assy	67-5
43	Head dirt	Head is dirty.	1. Clean the head and recheck the symptom. 2. If the same code is detected, replace the radio receiver assy	- 67-5
44	Device power supply problem	A short or open in the power circuit.	1. Power source circuit (radio receiver assy) 2. Replace radio receiver assy	05-1916 67-5

**4. TELEPHONE TRANSCIVER AND SPEAKER RELAY (Physical address: 17D) [TEL]**

(a) Logical address: 01 (Communication control)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
D6 *1	No master	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stores (stored) the code has (had) been disconnected when the ignition switch is in ACC or ON position.</li> <li>• The master device has (had) been disconnected when this code is stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display – radio receiver assy)</li> <li>3. AVC-LAN circuit (stereo component amplifier assy – stereo component tuner)</li> <li>4. Replace multi-display</li> <li>5. Replace telephone transceiver and speaker relay</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">05-1958</a> 67-8 –
D7	Connection check error	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stored this code has (had) been disconnected after the engine starts (started).</li> <li>• The master device has (had) been disconnected when this code is (was) stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display – radio receiver assy)</li> <li>3. AVC-LAN circuit (stereo component amplifier assy – stereo component tuner)</li> <li>4. Replace multi-display</li> <li>5. Replace telephone transceiver and speaker relay</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">05-1958</a> 67-8 –
DC *2 *5	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DD *3	Master reset	When the device that should be the master has been disconnected after engine starts.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display – radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> 67-8
DF *4	Master error	When the device with a display fails and the master is switched to the audio device. Also when a communication error between sub master (audio) and master occurs, this code is stored.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display – radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> 67-8
E0 *1	Registration complete indication error	When "Registration complete" command from the master device cannot be received.	This code will be detected when signal receiving time is delayed.	–
E1 *1	Voice processing device ON error	When the AMP device records that the AMP output does not function even while the source device operates.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display – radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> 67-8
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace multi-display	67-8
E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	–	–
E4	Multiple frame incomplete	When the multiple frame transmission ends incomplete	–	–

21	ROM error	This code is output when a malfunction exists in ROM.	Replace telephone transceiver and speaker relay	–
22	RAM error	This code is output when a malfunction exists in RAM.	Replace telephone transceiver and speaker relay	–

## HINT:

- \*1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- \*2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- \*3: This code may be stored if the ignition key is turned again after the engine starts.
- \*4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- \*5: If the device is reported as not existing during verification, check the power source circuit and AVC-LAN circuit for the device.

(b) Logical address: 57 (Telephone information drawing): 68 (TEL)

## HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
10	TEL ECU malfunction	Malfunction in TEL ECU is detected.	Replace telephone transceiver and speaker relay	–
40	Communication line serial line malfunction	Communication malfunction with TEL ECU is detected.	1. AVC-LAN circuit (stereo component amplifier assy – stereo component tuner) 2. Replace telephone transceiver and speaker relay	05-1958 –
41	Telephone power line malfunction	TEL ECU detects a malfunction with cellular phone power.	1. Inspect telephone 2. Replace telephone	– –

**5. AUDIO AND REAR A/C CONTROL SW (Physical address: 1C0) [Rr-CONT]**

(a) Logical address: 01 (Communication control)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
D6 *1	No master	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stores (stored) the code has (had) been disconnected when the ignition switch is in ACC or ON position.</li> <li>• The master device has (had) been disconnected when this code is stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Power source circuit (audio and rear A/C control SW)</li> <li>4. AVC-LAN circuit (stereo component amplifier assy - audio and rear A/C control SW)</li> <li>5. Replace multi-display</li> <li>6. Replace audio and rear A/C control SW</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">05-1922</a> <a href="#">05-1960</a> <a href="#">67-8</a> <a href="#">67-11</a>
D7	Connection check error	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stored this code has (had) been disconnected after the engine starts (started).</li> <li>• The master device has (had) been disconnected when this code is (was) stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Power source circuit (audio and rear A/C control SW)</li> <li>4. AVC-LAN circuit (stereo component amplifier assy - audio and rear A/C control SW)</li> <li>5. Replace multi-display</li> <li>6. Replace audio and rear A/C control SW</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">05-1922</a> <a href="#">05-1960</a> <a href="#">67-8</a> <a href="#">67-11</a>
DC *2 *5	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DD *3	Master reset	When the device that should be the master has been disconnected after engine starts.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
DF *4	Master error	When the device with a display fails and the master is switched to the audio device. Also when a communication error between sub master (audio) and master occurs, this code is stored.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
E0 *1	Registration complete indication error	When "Registration complete" command from the master device cannot be received.	This code will be detected when signal receiving time is delayed.	-
E1 *1	Voice processing device ON error	When the AMP device records that the AMP output does not function even while the source device operates.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace multi-display	<a href="#">67-8</a>

E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	-	-
E4	Multiple frame incomplete	When the multiple frame transmission ends incomplete	-	-

## HINT:

- \*1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- \*2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- \*3: This code may be stored if the ignition key is turned again after the engine starts.
- \*4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- \*5: If the device is reported as not existing during verification, check the power source circuit and AVC-LAN circuit for the device.

**6. GATEWAY ECU (Physical address: 1C6) [G/W]**

(a) Logical address: 01 (Communication control)

## HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
D4	Regular Communication Error	Component in which this code is recorded has been disconnected from system with ignition in the ACC or ON position. Either that, or the multi-display was disconnected when this code was recorded.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display – radio receiver assy)</li> <li>3. AVC-LAN circuit (radio receiver assy – gateway ECU)</li> <li>4. Replace multi-display</li> <li>5. Replace gateway ECU</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">05-1954</a> <a href="#">67-8</a> -

## HINT:

This code is stored 210 seconds after the power supply connector of the master component is disconnected with the ignition switch in the ACC or ON position.

**7. STEREO COMPONENT TUNER (Physical address: 1F0) [RADIO TUNER]**

(a) Logical address: 01 (Communication control)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
D6 *1	No master	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stores (stored) the code has (had) been disconnected when the ignition switch is in ACC or ON position.</li> <li>• The master device has (had) been disconnected when this code is stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Power source circuit (stereo component tuner)</li> <li>4. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>5. Replace multi-display</li> <li>6. Replace stereo component tuner</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">05-1918</a> <a href="#">05-1956</a> <a href="#">67-8</a> <a href="#">67-12</a>
D7	Connection check error	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stored this code has (had) been disconnected after the engine starts (started).</li> <li>• The master device has (had) been disconnected when this code is (was) stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Power source circuit (stereo component tuner)</li> <li>4. AVC-LAN circuit (radio receiver assy - stereo component tuner)</li> <li>5. Replace multi-display</li> <li>6. Replace stereo component tuner</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">05-1918</a> <a href="#">05-1956</a> <a href="#">67-8</a> <a href="#">67-12</a>
DC *2 *5	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DD *3	Master reset	When the device that should be the master has been disconnected after engine starts.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
DF *4	Master error	When the device with a display fails and the master is switched to the audio device. Also when a communication error between sub master (audio) and master occurs, this code is stored.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
E0 *1	Registration complete indication error	When "Registration complete" command from the master device cannot be received.	This code will be detected when signal receiving time is delayed.	-
E1 *1	Voice processing device ON error	When the AMP device records that the AMP output does not function even while the source device operates.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace multi-display	<a href="#">67-8</a>
E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	-	-
E4	Multiple frame incomplete	When the multiple frame transmission ends incomplete	-	-

## HINT:

- \*1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- \*2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- \*3: This code may be stored if the ignition key is turned again after the engine starts.
- \*4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- \*5: If the device is reported as not existing during verification, check the power source circuit and AVC-LAN circuit for the device.

(b) Logical address: 60 (Radio)

## HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
10	AM tuner PLL does not lock	The PLL circuit in the AM tuner is abnormal.	1. After clearing the DTC, check the antenna wiring. 2. If the same code is detected, replace the stereo component tuner.	– <a href="#">67-12</a>
11	FM tuner PLL does not lock	The PLL circuit in the FM tuner is abnormal.	1. After clearing the DTC, check the antenna wiring. 2. If the same code is detected, replace the stereo component tuner.	– <a href="#">67-12</a>
40	Antenna is not connected	The antenna is disconnected.	1. After clearing the DTC, check the antenna wiring. 2. If the same code is detected, replace the stereo component tuner.	– <a href="#">67-12</a>
41	Antenna power source error	The power source system of the antenna is abnormal.	1. After clearing the DTC, check the antenna wiring. 2. If the same code is detected, replace the stereo component tuner.	– <a href="#">67-12</a>
42	Tuner power source error	The power source of the tuner is abnormal.	1. Power source circuit (stereo component tuner) 2. Replace stereo component tuner	<a href="#">05-1918</a> <a href="#">67-12</a>
43	AM tuner error	The AM tuner is abnormal.	Replace stereo component tuner	<a href="#">67-12</a>
44	FM tuner error	The FM tuner is abnormal.	Replace stereo component tuner	<a href="#">67-12</a>
45	SW tuner error	The SW tuner is abnormal.	Replace stereo component tuner	<a href="#">67-12</a>



**8. TELEVISION CAMERA ECU (Physical address: 280) [CAMERA]**

(a) Logical address: 01 (Communication control)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
D6 *1	No master	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stores (stored) the code has (had) been disconnected when the ignition switch is in ACC or ON position.</li> <li>• The master device has (had) been disconnected when this code is stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display – radio receiver assy)</li> <li>3. Power source circuit (television camera ECU)</li> <li>4. AVC-LAN circuit (navigation ECU – television camera ECU)</li> <li>5. Replace multi-display</li> <li>6. Replace television camera ECU</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">05-1914</a> <a href="#">05-1952</a> <a href="#">67-8</a> <a href="#">67-15</a>
D7	Connection check error	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stored this code has (had) been disconnected after the engine starts (started).</li> <li>• The master device has (had) been disconnected when this code is (was) stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display – radio receiver assy)</li> <li>3. Power source circuit (television camera ECU)</li> <li>4. AVC-LAN circuit (navigation ECU – television camera ECU)</li> <li>5. Replace multi-display</li> <li>6. Replace television camera ECU</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">05-1952</a> <a href="#">05-1952</a> <a href="#">67-8</a> <a href="#">67-15</a>
DC *2 *5	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DD *3	Master reset	When the device that should be the master has been disconnected after engine starts.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display – radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
DF *4	Master error	When the device with a display fails and the master is switched to the audio device. Also when a communication error between sub master (audio) and master occurs, this code is stored.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display – radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
E0 *1	Registration complete indication error	When "Registration complete" command from the master device cannot be received.	This code will be detected when signal receiving time is delayed.	-
E1 *1	Voice processing device ON error	When the AMP device records that the AMP output does not function even while the source device operates.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display – radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace multi-display	<a href="#">67-8</a>
E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	-	-
E4	Multiple frame incomplete	When the multiple frame transmission ends incomplete	-	-

## HINT:

- \*1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- \*2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- \*3: This code may be stored if the ignition key is turned again after the engine starts.
- \*4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- \*5: If the device is reported as not existing during verification, check the power source circuit and AVC-LAN circuit for the device.

(b) Logical address: 5C (Camera)

## HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
40	Camera Picture Error	Synchronous signal from the camera cannot be transmitted.	1. AVC-LAN circuit (television camera assy – television camera ECU) 2. Replace television camera assy 3. Replace television camera ECU	<a href="#">05-1992</a>  <a href="#">67-14</a> <a href="#">67-15</a>

**9. STEREO COMPONENT AMPLIFIER ASSY (Physical address: 440) [DSP AMP]**

(a) Logical address: 01 (Communication control)

HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

DTC	Name	Diagnosis	Verification	See page
D6 *1	No master	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stores (stored) the code has (had) been disconnected when the ignition switch is in ACC or ON position.</li> <li>• The master device has (had) been disconnected when this code is stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Power source circuit (stereo component amplifier assy)</li> <li>4. AVC-LAN circuit (stereo component amplifier assy - stereo component tuner)</li> <li>5. Replace multi-display</li> <li>6. Replace stereo component amplifier assy</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">05-1920</a> <a href="#">05-1958</a> <a href="#">67-8</a> <a href="#">67-16</a>
D7	Connection check error	When either the following condition meets. <ul style="list-style-type: none"> <li>• The device that stored this code has (had) been disconnected after the engine starts (started).</li> <li>• The master device has (had) been disconnected when this code is (was) stored.</li> </ul>	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Power source circuit (stereo component amplifier assy)</li> <li>4. AVC-LAN circuit (stereo component amplifier assy - stereo component tuner)</li> <li>5. Replace multi-display</li> <li>6. Replace stereo component amplifier assy</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">05-1920</a> <a href="#">05-1958</a> <a href="#">67-8</a> <a href="#">67-16</a>
DC *2 *5	Transmission error	The device stores the fact that transmission to the device indicated by the sub code has failed.	Inspection for the device indicated by the sub code. (Refer to the inspection list for the device indicated by the sub code.)	Refer to step 10
DD *3	Master reset	When the device that should be the master has been disconnected after engine starts.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
DF *4	Master error	When the device with a display fails and the master is switched to the audio device. Also when a communication error between sub master (audio) and master occurs, this code is stored.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
E0 *1	Registration complete indication error	When "Registration complete" command from the master device cannot be received.	This code will be detected when signal receiving time is delayed.	-
E1 *1	Voice processing device ON error	When the AMP device records that the AMP output does not function even while the source device operates.	<ol style="list-style-type: none"> <li>1. Power source circuit (multi-display)</li> <li>2. AVC-LAN circuit (multi-display - radio receiver assy)</li> <li>3. Replace multi-display</li> </ol>	<a href="#">05-1910</a> <a href="#">05-1962</a> <a href="#">67-8</a>
E2	ON/OFF indication parameter error	When the command for ON/OFF control from the master device has a problem.	Replace multi-display	<a href="#">67-8</a>

E3 *1	Registration demand transmission	When the registration demand command from the slave device is output, or when the registration demand command is output by receiving connection confirmation command from the sub master device.	-	-
E4	Multiple frame incomplete	When the multiple frame transmission ends incomplete	-	-

## HINT:

- \*1: Even if no failure is detected, a trouble code may be recorded depending on the battery condition or engine start voltage.
- \*2: If the power connector is disconnected after the engine starts, this code is recorded after 180 seconds.
- \*3: This code may be stored if the ignition key is turned again after the engine starts.
- \*4: This code may be stored if the ignition key is held in the START position for one minute or more before returning to the ON position.
- \*5: If the device is reported as not existing during verification, check the power source circuit and AVC-LAN circuit for the device.

**10. THE INSPECTION LIST FOR THE DEVICE INDICATED BY THE SUB CODE**

## HINT:

Methods used to verify the cause of the problem are listed in order of probability in the verification column.

Sub code address (Device name)	Verification	See page
110 (Multi-display)	1. Power source circuit (multi-display) 2. AVC-LAN circuit (multi-display – radio receiver assy) 3. Replace multi-display	05-1910 05-1962 67-8
178 (Navigation ECU)	1. Power source circuit (navigation ECU) 2. AVC-LAN circuit (stereo component tuner – navigation ECU) 3. Replace navigation ECU	05-1912 05-1958 67-9
190 (Radio receiver assy)	1. Power source circuit (radio receiver assy) 2. AVC-LAN circuit (multi-display – radio receiver assy) 3. Replace radio receiver assy	05-1916 05-1962 67-5
17D (Telephone Transceiver and Speaker Relay)	1. AVC-LAN circuit (stereo component amplifier assy – stereo component tuner) 2. Replace telephone transceiver and speaker relay	05-1958 -
1C0 (Audio and Rear A/C Control SW)	1. Power source circuit (audio and rear A/C control SW) 2. AVC-LAN circuit (stereo component amplifier assy – audio and rear A/C control SW) 3. Replace audio and rear A/C control SW	05-1922 05-1960 67-11
1C6 (Gateway ECU)	1. AVC-LAN circuit (radio receiver assy – gateway ECU) 2. Replace gateway ECU	05-1954 -
1F0 (Stereo Component Tuner)	1. Power source circuit (stereo component tuner) 2. AVC-LAN circuit (radio receiver assy – stereo component tuner) 3. Replace stereo component tuner	05-1918 05-1958 67-12
280 (Television Camera ECU)	1. Power source circuit (television camera ECU) 2. AVC-LAN circuit (navigation ECU – television camera ECU) 3. Replace television camera ECU	05-1914 05-1952 67-15
440 (Stereo Component Amplifier Assy)	1. Power source circuit (stereo component amplifier assy) 2. AVC-LAN circuit (stereo component amplifier assy – stereo component tuner) 3. Replace stereo component amplifier assy	05-1920 05-1958 67-16

# DIAGNOSTIC TROUBLE CODE CHART

HINT:

DTC is displayed on the multi-display (see page 05-1982).

## 1. TELEVISION CAMERA ECU (Physical address: 1AC)

HINT:

- \*1: Even if no failure is detected, this code may be stored depending on the battery condition or voltage for starting the engine.
- \*2: This code may be stored when the ignition switch is turned to the START position again 1 minute after the engine start.
- \*3: This code may be stored when the ignition switch is turned to the START position again after the engine start.
- \*4: When 210 seconds have elapsed after pulling out the power supply connector of the master component with the ignition switch in the ACC or ON position, this code is stored.

### (a) Logical address: 01 (Communication control)

DTC	Diagnosis item	Condition	Countermeasure and inspected parts
D6 *1	Absence of Master	Component in which this code is recorded was disconnected from system with ignition switch in ACC or ON. Or, when this code was recorded, multi-display was disconnected.	<ul style="list-style-type: none"> <li>• Check harness for power supply of multi-display (see page 05-1910).</li> <li>• Check harness for communication system of multi-display (see page 05-1962).</li> <li>• Check harness for power supply of television camera ECU (see page 05-1990).</li> <li>• Check harness for communication system of television camera ECU (see page 05-1992).</li> </ul>
D7 *4	Communication Check Error	Component in which this code is recorded is or was disconnected from system after engine start. Or, when recording this code, multi-display was disconnected.	<ul style="list-style-type: none"> <li>• Check harness for power supply of multi-display (see page 05-1910).</li> <li>• Check harness for communication system of multi-display (see page 05-1962).</li> <li>• Check harness for power supply of television camera ECU (see page 05-1990).</li> <li>• Check harness for communication system of television camera ECU (see page 05-1992).</li> </ul>
DC *2	Transmission Error	Transmission to component shown by sub-code failed. (Detecting this DTC does not always mean actual failure.)	If the same sub-code is recorded in other components, check harness for power supply and communication system of all components shown by code.
DD *3	Master Reset (Momentary Interruption)	After engine start, multi-display was disconnected from system.	<ul style="list-style-type: none"> <li>• Check harness for power supply of multi-display (see page 05-1910).</li> <li>• Check harness for communication system of multi-display (see page 05-1962).</li> <li>• If this error occurs frequently, replace multi-display.</li> </ul>
DF *4	Master Error	Due to defective condition of component with a display, master function is switched to audio equipment. Error occurs in communication between sub-master (audio) and master component.	<ul style="list-style-type: none"> <li>• Check harness for power supply of multi-display (see page 05-1910).</li> <li>• Check harness for communication system of multi-display (see page 05-1962).</li> <li>• Check harness for communication system between multi-display and radio receiver assy (see page 05-1962).</li> </ul>
E0 *1	Registration Completion Instruction Error	"Registration Completion Instruction" command from master cannot be received.	Since this DTC is provided for engineering purposes, it may be detected when no actual failure exists.

## DIAGNOSTICS – REAR VIEW MONITOR SYSTEM

DTC	Diagnosis item	Condition	Countermeasure and inspected parts
E2	ON/OFF Instruction Parameter Error	Error occurs in ON/OFF controlling command from multi-display.	Replace multi-display.
E3 *1	Registration Request Transmission	<ul style="list-style-type: none"> <li>• "Registration Request" command is output from slave component.</li> <li>• "Registration Connection Check Instruction" or "Registration Request" command is output from sub-master component.</li> </ul>	Since this DTC is provided for engineering purposes, it may be detected when no actual failure exists.

## (b) Logical address: 5C (Camera unit)

DTC	Diagnosis item	Condition	Countermeasure and inspected parts
40	Camera Picture Error	Synchronous signal from the camera cannot be transmitted.	Check the wire harness between television camera assy and television camera ECU (see page 05-1996).

2004-2006 Diagnostic Trouble Code Chart

## DIAGNOSTIC TROUBLE CODE CHART

### 1. DTC CHECK

If a malfunction code is displayed during the DTC check, check the suspected area listed for that code in the table below and proceed to the appropriate page.

DTC No. (See Page)	Detection Item	Trouble Area
B1221 (05-2098)	Power Window Switch Circuit on Driver Door	<ul style="list-style-type: none"> <li>• Power window regulator master switch assy</li> <li>• Driver door ECU</li> <li>• Wire harness</li> </ul>
B1223 (05-2100)	Power Window Switch Circuit on Passenger Door	<ul style="list-style-type: none"> <li>• Power window regulator switch assy (passenger side)</li> <li>• Passenger door ECU</li> <li>• Wire harness</li> </ul>
B1226 (05-2103)	Power Window Switch Circuit on Rear Left Door	<ul style="list-style-type: none"> <li>• Power window regulator switch assy (rear LH)</li> <li>• Rear door LH ECU</li> <li>• Wire harness</li> </ul>
B1225 (05-2105)	Power Window Switch Circuit on Rear Right Door	<ul style="list-style-type: none"> <li>• Power window regulator switch assy (rear RH)</li> <li>• Rear door RH ECU</li> <li>• Wire harness</li> </ul>
B1231 (05-2107)	Jam Protection Limit Switch Circuit on Driver Door	<ul style="list-style-type: none"> <li>• Power window regulator motor (driver side)</li> <li>• Driver door ECU</li> <li>• Wire harness</li> </ul>
B1232 (05-2107)	Jam Protection Pulse Switch Circuit on Driver Door	<ul style="list-style-type: none"> <li>• Power window regulator motor (driver side)</li> <li>• Driver door ECU</li> <li>• Wire harness</li> </ul>
B1233 (05-2110)	Jam Protection Limit Switch Circuit on Passenger Door	<ul style="list-style-type: none"> <li>• Power window regulator motor (passenger side)</li> <li>• Passenger door ECU</li> <li>• Wire harness</li> </ul>
B1234 (05-2110)	Jam Protection Pulse Switch Circuit on Passenger Door	<ul style="list-style-type: none"> <li>• Power window regulator motor (passenger side)</li> <li>• Passenger door ECU</li> <li>• Wire harness</li> </ul>
B1237 (05-2113)	Jam Protection Limit Switch Circuit on Rear Left Door	<ul style="list-style-type: none"> <li>• Power window regulator motor (rear LH)</li> <li>• Rear door LH ECU</li> <li>• Wire harness</li> </ul>
B1238 (05-2113)	Jam Protection Pulse Switch Circuit on Rear Left Door	<ul style="list-style-type: none"> <li>• Power window regulator motor (rear LH)</li> <li>• Rear door LH ECU</li> <li>• Wire harness</li> </ul>
B1235 (05-2116)	Jam Protection Limit Switch Circuit on Rear Right Door	<ul style="list-style-type: none"> <li>• Power window regulator motor (rear RH)</li> <li>• Rear door RH ECU</li> <li>• Wire harness</li> </ul>
B1236 (05-2116)	Jam Protection Pulse Switch Circuit on Rear Right Door	<ul style="list-style-type: none"> <li>• Power window regulator motor (rear RH)</li> <li>• Rear door RH ECU</li> <li>• Wire harness</li> </ul>

## DIAGNOSTIC TROUBLE CODE CHART

If a trouble code is displayed during the DTC check, check the circuit listed for that code in the table below and proceed to the appropriate page.

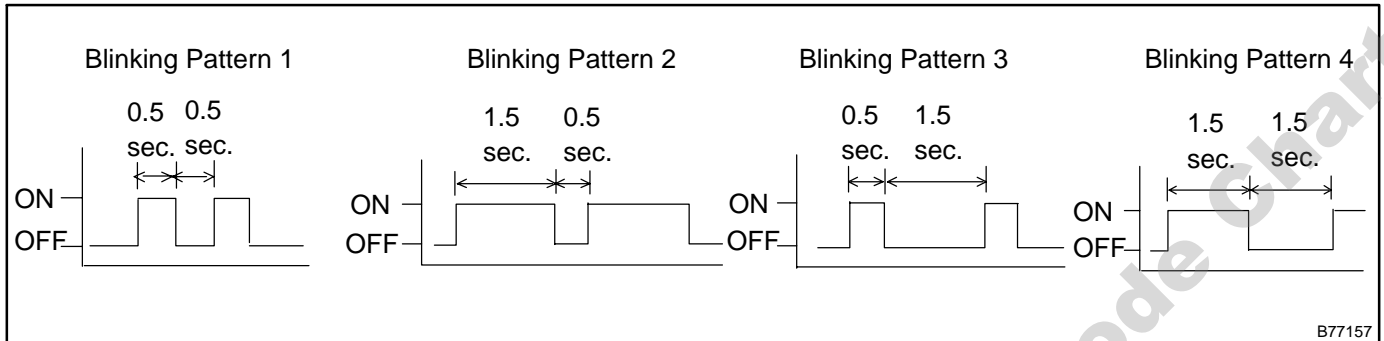
DTC No. (See page)	Circuit Inspection	Trouble Area
B2231 (05-2259)	Front left side sensor malfunction	<ul style="list-style-type: none"> <li>• Ultrasonic sensor No.1</li> <li>• Wire harness</li> <li>• Clearance warning ECU assy</li> </ul>
B2232 (05-2261)	Front left sensor malfunction	<ul style="list-style-type: none"> <li>• Ultrasonic sensor No.1</li> <li>• Wire harness</li> <li>• Clearance warning ECU assy</li> </ul>
B2233 (05-2263)	Front left center sensor malfunction	<ul style="list-style-type: none"> <li>• Ultrasonic sensor No.2</li> <li>• Wire harness</li> <li>• Clearance warning ECU assy</li> </ul>
B2234 (05-2265)	Front right center sensor malfunction	<ul style="list-style-type: none"> <li>• Ultrasonic sensor No.2</li> <li>• Wire harness</li> <li>• Clearance warning ECU assy</li> </ul>
B2235 (05-2267)	Front right sensor malfunction	<ul style="list-style-type: none"> <li>• Ultrasonic sensor No.1</li> <li>• Wire harness</li> <li>• Clearance warning ECU assy</li> </ul>
B2236 (05-2269)	Front right side sensor malfunction	<ul style="list-style-type: none"> <li>• Ultrasonic sensor No.1</li> <li>• Wire harness</li> <li>• Clearance warning ECU assy</li> </ul>
B2237 (05-2271)	Rear left sensor malfunction	<ul style="list-style-type: none"> <li>• Ultrasonic sensor No.1</li> <li>• Wire harness</li> <li>• Clearance warning ECU assy</li> </ul>
B2238 (05-2273)	Rear left center sensor malfunction	<ul style="list-style-type: none"> <li>• Ultrasonic sensor No.2</li> <li>• Wire harness</li> <li>• Clearance warning ECU assy</li> </ul>
B2239 (05-2275)	Rear right center sensor malfunction	<ul style="list-style-type: none"> <li>• Ultrasonic sensor No.2</li> <li>• Wire harness</li> <li>• Clearance warning ECU assy</li> </ul>
B2241 (05-2277)	Rear right sensor malfunction	<ul style="list-style-type: none"> <li>• Ultrasonic sensor No.1</li> <li>• Wire harness</li> <li>• Clearance warning ECU assy</li> </ul>



# DIAGNOSTIC TROUBLE CODE CHART

## HINT:

While the climate control seat is operated, if the indicator of the climate control switch blinks in any of the patterns shown in the illustration, the climate control ECU will enter fail-safe mode.



## HINT:

After identifying the blinking pattern, troubleshoot according to the flow chart below.

DTC (See Page )	Diagnosis	Symptoms	Countermeasure
Blinking pattern 1 (05-2467)	<ul style="list-style-type: none"> <li>• Seat climate controller excess current</li> <li>• Fan motor excess current</li> <li>• Seat heater excess current (only to rear seat)</li> </ul>	Climate control does not operate	Turn climate control switch OFF and ON.
Blinking pattern 2 (05-2478)	Open or short in climate control switch circuit	Climate control does not operate	<ul style="list-style-type: none"> <li>• Turn ignition switch OFF and ON (front seat)</li> <li>• Turn climate control switch OFF (rear seat)</li> </ul>
Blinking pattern 3 (05-2482)	<ul style="list-style-type: none"> <li>• Open thermistor circuit</li> <li>• Open climate control switch circuit</li> </ul>	Climate control does not operate	<ul style="list-style-type: none"> <li>• Turn ignition switch OFF and ON. (front seat)</li> <li>• Turn climate control switch ON and OFF.</li> </ul>
Blinking pattern 4 (05-2492)	Open or short climate control circuit	Climate control does not operate	Turn climate switch OFF and ON.

## DIAGNOSTIC TROUBLE CODE CHART

If a malfunction code is displayed during the DTC check, check the circuit listed for that code in the table below. Then proceed to the page given for that circuit.

DTC No. (See Page)	Detection Item	Trouble Area
B1222 (05-2547)	Door Lock Switch Circuit on Driver Door	<ul style="list-style-type: none"><li>• Door control switch assy</li><li>• Door key lock and unlock switch</li><li>• Wire harness</li><li>• Driver door ECU</li></ul>
B1224 (05-2553)	Door Lock Switch Circuit on Passenger Door	<ul style="list-style-type: none"><li>• Door control switch assy</li><li>• Wire harness</li><li>• Passenger door ECU</li></ul>

2004-2006 Diagnostic Trouble Code Chart

## DIAGNOSTIC TROUBLE CODE CHART

If a malfunction code is displayed during the DTC check, check the circuit listed for that code in the table below, and then proceed to the page given for that circuit.

DTC No. (See Page)	Detection Item	Trouble Area
B1242 (05-2657)	Wireless Door Lock Tuner Circuit Malfunction	<ul style="list-style-type: none"><li>• Wire harness</li><li>• Door control receiver (inner mirror)</li><li>• Door control receiver (luggage)</li><li>• Theft warning ECU assy</li></ul>

2004-2006 Diagnostic Trouble Code Chart

## DIAGNOSTIC TROUBLE CODE CHART

If a malfunction code is displayed during the DTC check, check the circuit listed for that code in the table below, and then proceed to the page given for that circuit.

DTC No. (See Page)	Detection Item	Trouble Area
B1242 (05-2713)	Wireless Door Lock Tuner Circuit Malfunction	<ul style="list-style-type: none"><li>• Wire harness</li><li>• Door lock receiver (inner mirror)</li><li>• Theft warning ECU assy</li></ul>

2004-2006 Diagnostic Trouble Code Chart

## DIAGNOSTIC TROUBLE CODE CHART

If a malfunction code is displayed during the DTC check, check the circuit listed for that code in the table below. Then proceed to the page given for that circuit.

DTC No. (See Page)	Detection Item	Trouble Area
B2211 (05-2757)	Door Closer Motor Malfunction on Driver Side Door	<ul style="list-style-type: none"> <li>• Cam position switch</li> <li>• Wire harness</li> <li>• Driver door ECU</li> </ul>
B2212 (05-2759)	Door Closer Motor Malfunction on Passenger Side Door	<ul style="list-style-type: none"> <li>• Cam position switch</li> <li>• Wire harness</li> <li>• Passenger door ECU</li> </ul>
B2213 (05-2761)	Door Closer Motor Malfunction on Rear Right Side Door	<ul style="list-style-type: none"> <li>• Cam position switch</li> <li>• Wire harness</li> <li>• Rear door LH ECU</li> </ul>
B2214 (05-2763)	Door Closer Motor Malfunction on Rear Left Side Door	<ul style="list-style-type: none"> <li>• Cam position switch</li> <li>• Wire harness</li> <li>• Rear door RH ECU</li> </ul>

2004-2006 Diagnostic Trouble Code Chart

## DIAGNOSTIC TROUBLE CODE CHART

If a malfunction code is displayed during the DTC check, check the circuit listed for that code in the table below, and then proceed to the page given for that circuit.

DTC No. (See Page)	Detection Item	Trouble Area
B1242 (05-2657)	Wireless door lock tuner circuit malfunction	<ul style="list-style-type: none"><li>• Wire harness</li><li>• Door control receiver (inner mirror)</li><li>• Door control receiver (luggage)</li><li>• Theft warning ECU assy (theft deterrent ECU)</li></ul>

2004-2006 Diagnostic Trouble Code Chart

**DIAGNOSTIC TROUBLE CODE CHART****1. STEERING LOCK ECU DTC CHART**

DTC No. (See Page)	Detection Item	Trouble Area
B2780 (05-3004)	Push Switch/Key Unlock Warning Switch Malfunction	<ul style="list-style-type: none"> <li>• Unlock warning switch assy</li> <li>• Wire harness</li> <li>• Steering lock ECU</li> </ul>
B2793 (05-3007)	Transponder Chip Malfunction	Smart key
B2794 (05-3008)	Unmatched Encryption Code	Smart key
B2795 (05-3009)	Unmatched Key Code	Smart key
B2796 (05-3010)	No Communication in Immobiliser System	<ul style="list-style-type: none"> <li>• Smart key</li> <li>• Transponder key amplifier</li> <li>• Wire harness</li> <li>• Steering lock ECU</li> </ul>
B2797 (05-3013)	Communication Malfunction No. 1	<ul style="list-style-type: none"> <li>• Smart key</li> <li>• Wire harness</li> <li>• Transponder key amplifier</li> <li>• Steering lock ECU</li> </ul>
B2798 (05-3010)	Communication Malfunction No. 2	Smart key

**2. ECM DTC CHART****NOTICE:**

The DTCs for the immobilizer system are specified above. If the other codes are output, check the DTC(s) chart for the SFI system.

DTC No. (See Page)	Detection Item	Trouble Area
B2799 (05-3016)	Engine Immobiliser System Malfunction	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• ECM</li> </ul>

**DIAGNOSTIC TROUBLE CODE CHART****1. TRANSPONDER KEY ECU DTC CHART**

DTC No. (See Page)	Detection Item	Trouble Area
B2780 (05-3044)	Push Switch/Key Unlock Warning Switch Malfunction	<ul style="list-style-type: none"> <li>• Unlock warning switch assy</li> <li>• Wire harness</li> <li>• Transponder key ECU assy</li> </ul>
B2793 (05-3047)	Transponder Chip Malfunction	Key
B2794 (05-3048)	Unmatched Encryption code	Key
B2795 (05-3049)	Unmatched Key Code	Key
B2796 (05-3050)	No Communication in Immobiliser System	<ul style="list-style-type: none"> <li>• Key</li> <li>• Transponder key amplifier</li> <li>• Wire harness</li> <li>• Transponder key ECU assy</li> </ul>
B2797 (05-3053)	Communication Malfunction No. 1	<ul style="list-style-type: none"> <li>• Key</li> <li>• Wire harness</li> <li>• Transponder key amplifier</li> <li>• Transponder key ECU assy</li> </ul>
B2798 (05-3050)	Communication Malfunction No. 2	Key

**2. ECM DTC CHART****NOTICE:**

The DTCs for the immobilizer system are specified above. If the other codes are output, check the DTC(s) chart for the SFI system.

DTC No. (See Page)	Detection Item	Trouble Area
B2799 (05-3056)	Engine Immobiliser System Malfunction	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• ECM</li> </ul>



## DIAGNOSTIC TROUBLE CODE CHART

If a malfunction code is displayed during DTC check, check the circuit corresponding to the code in the table below. Proceed to the page given for the circuit.

DTC No. (See Page)	Detection Item	Trouble Area
B1205 (05-3176)	AFS ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• AFS ECU</li> </ul>
B1211 (05-3180)	Driver Door ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Driver door ECU</li> </ul>
B1212 (05-3184)	Passenger Door ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Passenger door ECU</li> </ul>
B1213 (05-3188)	Tilt and Telescopic ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Tilt and telescopic ECU</li> </ul>
B1214, B1215 (05-3192)	<ul style="list-style-type: none"> <li>• Door System Communication Bus Malfunction (+B short)</li> <li>• Door System Communication Bus Malfunction (GND short)</li> </ul>	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• ECUs (Door system bus)</li> </ul>
B1217 (05-3204)	Rear Left Door ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Rear door LH ECU</li> </ul>
B1219 (05-3208)	Rear Seat Switch Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Rear seat control switch</li> </ul>
B1248 (05-3212)	AVC-LAN Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• ECU (AVC-LAN system bus)</li> </ul>
B1262 (05-3215)	A/C ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• A/C ECU</li> </ul>
B1263 (05-3219)	Luggage Room Junction Block ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Luggage room J/B ECU</li> </ul>
B1266, B1267 (05-3223)	<ul style="list-style-type: none"> <li>• Instrument Panel System Communication Bus Malfunction (+B short)</li> <li>• Instrument Panel System Communication Bus Malfunction (GND short)</li> </ul>	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• ECUs (Instrument system bus)</li> </ul>
B1269 (05-3231)	Theft Deterrent ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Theft warning ECU</li> </ul>
B1271 (05-3235)	Combination Meter ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Combination meter</li> </ul>
B1272 (05-3238)	Power Seat ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Driver seat ECU</li> </ul>
B1273 (05-3242)	Sliding Roof ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Moon roof control ECU</li> </ul>
B1275 (05-3245)	Accessory Bus Buffer Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Accessory bus buffer</li> </ul>
B1277 (05-3249)	Center Cluster Integration Panel Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Center cluster integration control panel</li> </ul>
B1278 (05-3253)	Combination Switch ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Combination switch assy</li> </ul>
B1279 (05-3257)	Rain Sensor Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Rain sensor</li> </ul>
B1281 (05-3259)	Airbag ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Airbag sensor assembly</li> </ul>
B1283 (05-3262)	Driver Side Junction Block ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Driver side J/B ECU</li> </ul>

## DIAGNOSTICS – MULTIPLEX COMMUNICATION SYSTEM

B1284 (05-3267)	Passenger Side Junction Block ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Passenger side J/B ECU</li> </ul>
B1285 (05-3271)	Steering Pad Switch Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Steering pad switch</li> </ul>
B1291, B1292 (05-3274)	<ul style="list-style-type: none"> <li>• Light Control System Communication Bus Malfunction (+B short)</li> <li>• Light Control System Communication Bus Malfunction (GND short)</li> </ul>	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• ECUs (Light control system bus)</li> </ul>
B1294 (05-3282)	Immobilizer ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Transponder key ECU</li> </ul>
B1296 (05-3289)	Front Light ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Front light ECU</li> </ul>
B1297 (05-3294)	Clearance Sonar ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Clearance sonar ECU</li> </ul>
B1298 (05-3298)	Rear Right Seat ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Rear RH seat ECU</li> </ul>
B1299 (05-3302)	Rear Left Seat ECU Communication Stop	<ul style="list-style-type: none"> <li>• Wire harness</li> <li>• Rear LH seat ECU</li> </ul>

When "+B or GND short malfunction of communication bus" DTCs (B1214, B1215, etc.) and detected at the same time as "communication stop" DTCs (B1211, B1212, etc.), please repair the "+B or GND short malfunction of communication bus" DTCs first.

## DIAGNOSTIC TROUBLE CODE CHART

### 1. DTC TABLE BY ECU

#### HINT:

- If CAN communication system DTCs are output, trouble cannot be determined only by the DTCs. Perform troubleshooting according to "HOW TO PROCEED WITH TROUBLESHOOTING" (see page 05-3314).

#### (a) ECM

#### HINT:

- DTC communication uses the CAN communication system.
- Distance control ECU data is also output.

DTC No.	Detection Item
U0001	High Speed CAN Communication Bus (*1)
U0100	Lost Communication With ECM/PCM "A" (*2)
U0122	Lost Communication With Vehicle Dynamics Control Module (*2)
U0123	Lost Communication With Yaw Rate Sensor Module (*2)
U0126	Lost Communication With Steering Angle Sensor Module (*2)
U1101	Lost Communication With Distance Control ECU (*2)

- \*1: The engine control computer is malfunctioning if U0001 is output. Replace the ECM.
- \*2: Dynamic radar/laser cruise DTC.

#### (b) SKID CONTROL ECU

#### HINT:

DTC communication uses the SIL line.

DTC No.	Detection Item
U0073	Control Module Communication Bus Off
U0100	Lost Communication With ECM/PCM "A"
U0123	Lost Communication With Yaw Rate Sensor Module
U0124	Lost Communication With Lateral Acceleration Sensor Module
U0126	Lost Communication With Steering Angle Sensor Module

#### (c) SUSPENSION CONTROL ECU

#### HINT:

DTC communication uses the SIL line.

DTC No.	Detection Item
U0100	Lost Communication With ECM/PCM "A"
U0101	Lost Communication With TCM
U0122	Lost Communication With Vehicle Dynamics Control Module
U0124	Lost Communication With Lateral Acceleration Sensor Module
U0126	Lost Communication With Steering Angle Sensor Module
U0132	Lost Communication With Ride Level Control Module

#### (d) TELEVISION CAMERA ECU

#### HINT:

The television camera ECU is connected to the CAN communication system but CAN communication system DTCs are not output.

#### (e) GATEWAY ECU

#### HINT:

The gateway ECU is connected to the CAN communication system but CAN communication system DTCs are not output.

## (f) SEAT BELT CONTROL ECU

HINT:

DTC communication uses the SIL line.

DTC No.	Detection Item
U0100	Lost Communication With ECM/PCM "A"
U0122	Lost Communication With Vehicle Dynamics Control Module
U0145	Lost Communication With Body Control Module "E"
U1101	Lost Communication With Distance Control ECU

2004-2006 Diagnostic Trouble Code Chart

## DIAGNOSTIC TROUBLE CODE CHART

### HINT:

If a trouble code is displayed during the DTC check, check the circuit listed for that code. For details of each code, refer to the "See page" under respective "DTC No." in the DTC chart.

DTC No. (See Page)	Circuit Inspection	Trouble Area
P0500 (05-3500)	Vehicle Speed Sensor Circuit Malfunction	<ul style="list-style-type: none"> <li>• Vehicle speed sensor</li> <li>• Vehicle speed sensor signal circuit</li> <li>• ECM</li> </ul>
P0503 (05-3500)	Vehicle Speed Sensor Circuit Malfunction	<ul style="list-style-type: none"> <li>• Vehicle speed sensor</li> <li>• Vehicle speed sensor circuit</li> <li>• ECM</li> </ul>
P0571 (05-3501)	Stop Light Switch Circuit Malfunction	<ul style="list-style-type: none"> <li>• Stop lamp switch assy</li> <li>• Stop lamp switch assy circuit</li> <li>• Driver side J/B ECU</li> <li>• ECM</li> </ul>
P0607 (05-3507)	Input Signal Circuit Malfunction	<ul style="list-style-type: none"> <li>• ECM</li> </ul>

## DIAGNOSTIC TROUBLE CODE CHART

### HINT:

If a trouble code is displayed during the DTC check, check the circuit listed for that code. For details of each code, refer to the "See page" under the respective "DTC No." in the DTC chart.

DTC No. (See Page)	Circuit Inspection	Trouble Area
P0500 (05-3551)	Vehicle speed sensor circuit malfunction	<ul style="list-style-type: none"> <li>• Combination meter</li> <li>• Vehicle speed sensor</li> <li>• Vehicle speed sensor signal circuit</li> <li>• ECM</li> </ul>
P0503 (05-3551)	Vehicle speed sensor circuit malfunction	<ul style="list-style-type: none"> <li>• Combination meter</li> <li>• Vehicle speed sensor</li> <li>• Vehicle speed sensor signal circuit</li> <li>• ECM</li> </ul>
P0571 (05-3552)	Stop light switch circuit malfunction	<ul style="list-style-type: none"> <li>• Stop lamp switch assy</li> <li>• Stop lamp switch signal assy circuit</li> <li>• Driver side J/B ECU</li> <li>• ECM</li> </ul>
P0607 (05-3558)	Input signal circuit malfunction	<ul style="list-style-type: none"> <li>• ECM (This DTC indicates a malfunction in the ECM. When this DTC is output, it is necessary to replace the ECM.)</li> </ul>
P1615 (05-3559)	Communication error from distance control ECU to ECM	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• Cruise control ECU (Distance control ECU)</li> <li>• ECM</li> </ul>
P1616 (05-3560)	Communication error from ECM to distance control ECU	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• Cruise control ECU (Distance control ECU)</li> <li>• ECM</li> </ul>
P1617 (05-3561)	Distance control ECU malfunction	<ul style="list-style-type: none"> <li>• Cruise control ECU (Distance control ECU)</li> </ul>
P1630 (05-3562)	Communication error from VSC to ECM	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• ABS &amp; traction actuator assy (Skid control ECU)</li> <li>• ECM</li> </ul>
P1631 (05-3563)	Communication error from ECM to VSC	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• ABS &amp; traction actuator assy (Skid control ECU)</li> <li>• ECM</li> </ul>
P1575 (05-3564)	Warning buzzer malfunction	<ul style="list-style-type: none"> <li>• Skid control buzzer assy</li> <li>• Skid control buzzer circuit</li> <li>• ABS &amp; traction actuator assy (Skid control ECU)</li> </ul>
P1578 (*1) (05-3565)	Brake system malfunction	<ul style="list-style-type: none"> <li>• VSC system</li> </ul>
U0235 (05-3566)	Lost communication with cruise control front distance range sensor	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• Laser sensor</li> <li>• Cruise control ECU (Distance control ECU)</li> </ul>
U1102 (05-3569)	Lost communication with radar sensor	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• Laser sensor</li> <li>• Cruise control ECU (Distance control ECU)</li> </ul>
P1570 (05-3572)	Radar sensor malfunction	<ul style="list-style-type: none"> <li>• Laser sensor</li> </ul>
P1572 (05-3573)	Improper aiming of radar sensor beam axis	<ul style="list-style-type: none"> <li>• Laser sensor</li> </ul>
U0100 (05-3560)	Lost communication with ECM/PCM "A"	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• Cruise control ECU (Distance control ECU)</li> <li>• ECM</li> </ul>

U0100 (05-3563)	Lost communication with ECM/PCM "A"	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• ABS &amp; traction actuator assy (Skid control ECU)</li> <li>• ECM</li> </ul>
U0126 (05-3574)	Lost communication with steering angle sensor module	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• Steering sensor</li> <li>• Cruise control ECU (Distance control ECU)</li> <li>• ECM</li> </ul>
U0123 (05-3575)	Lost communication with yaw rate sensor module	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• Yaw rate sensor</li> <li>• Cruise control ECU (Distance control ECU)</li> <li>• ECM</li> </ul>
U1101 (05-3559)	Lost communication with distance control ECU	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• Cruise control ECU (Distance control ECU)</li> <li>• ECM</li> </ul>
U0122 (05-3562)	Lost communication with vehicle dynamic control module	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• ABS &amp; traction actuator assy (Skid control ECU)</li> <li>• ECM</li> </ul>

**HINT:**

\*: When DTC P1578 is output, check for DTCs on the skid control ECU in the diagnosis mode. Only when any code is output, inspect the trouble area based on the DTC.

2004-2006 Diagnostic Trouble Code Chart

## DIAGNOSTIC TROUBLE CODE CHART

### HINT:

If a trouble code is displayed during the DTC check, check the circuit listed for that code. For details of each code, refer to the "See page" under the respective "DTC No." in the DTC chart.

DTC No. (See Page)	Circuit Inspection	Trouble Area
P0500 (05-3629)	Vehicle speed sensor circuit malfunction	<ul style="list-style-type: none"> <li>• Combination meter</li> <li>• Vehicle speed sensor</li> <li>• Vehicle speed sensor signal circuit</li> <li>• ECM</li> </ul>
P0503 (05-3629)	Vehicle speed sensor circuit malfunction	<ul style="list-style-type: none"> <li>• Combination meter</li> <li>• Vehicle speed sensor</li> <li>• Vehicle speed sensor signal circuit</li> <li>• ECM</li> </ul>
P0571 (05-3630)	Stop light switch circuit malfunction	<ul style="list-style-type: none"> <li>• Stop lamp switch assy</li> <li>• Stop lamp switch assy circuit</li> <li>• Driver side J/B ECU</li> <li>• ECM</li> </ul>
P0607 (05-3636)	Input signal circuit malfunction	<ul style="list-style-type: none"> <li>• ECM (This DTC indicates a malfunction in the ECM. When this DTC is output, it is necessary to replace the ECM.)</li> </ul>
P1615 (05-3637)	Communication error from distance control ECU to ECM	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• Cruise control ECU (Distance control ECU)</li> <li>• ECM</li> </ul>
P1616 (05-3638)	Communication error from ECM to distance control ECU	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• Cruise control ECU (Distance control ECU)</li> <li>• ECM</li> </ul>
P1617 (05-3639)	Distance control ECU malfunction	<ul style="list-style-type: none"> <li>• Cruise control ECU (Distance control ECU)</li> </ul>
P1630 (05-3640)	Communication error from VSC to ECM	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• ABS &amp; traction actuator assy (Skid control ECU)</li> <li>• ECM</li> </ul>
P1631 (05-3641)	Communication error from ECM to VSC	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• ABS &amp; traction actuator assy (Skid control ECU)</li> <li>• ECM</li> </ul>
P1575 (05-3642)	Warning buzzer malfunction	<ul style="list-style-type: none"> <li>• Skid control buzzer assy</li> <li>• Skid control buzzer circuit</li> <li>• ABS &amp; traction actuator assy (Skid control ECU)</li> </ul>
P1578 (*1) (05-3643)	Brake system malfunction	<ul style="list-style-type: none"> <li>• VSC system</li> </ul>
U0235 (05-3644)	Lost communication with cruise control front distance range sensor	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• Millimeter wave radar sensor</li> <li>• Cruise control ECU (Distance control ECU)</li> </ul>
U1102 (05-3647)	Lost communication with radar sensor	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• Millimeter wave radar sensor</li> <li>• Cruise control ECU (Distance control ECU)</li> </ul>
P1570 (05-3650)	Radar sensor malfunction	<ul style="list-style-type: none"> <li>• Millimeter wave radar sensor</li> </ul>
P1572 (05-3651)	Improper aiming of radar sensor beam axis	<ul style="list-style-type: none"> <li>• Millimeter wave radar sensor</li> </ul>
U0100 (05-3638)	Lost communication with ECM/PCM "A"	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• Cruise control ECU (Distance control ECU)</li> <li>• ECM</li> </ul>



U0100 (05-3641)	Lost communication with ECM/PCM "A"	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• ABS &amp; traction actuator assy (Skid control ECU)</li> <li>• ECM</li> </ul>
U0126 (05-3652)	Lost communication with steering angle sensor module	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• Steering sensor</li> <li>• Cruise control ECU (Distance control ECU)</li> <li>• ECM</li> </ul>
U0123 (05-3653)	Lost communication with yaw rate sensor module	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• Yaw rate sensor</li> <li>• Cruise control ECU (Distance control ECU)</li> <li>• ECM</li> </ul>
U1101 (05-3637)	Lost communication with distance control ECU	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• Cruise control ECU (Distance control ECU)</li> <li>• ECM</li> </ul>
U0122 (05-3640)	Lost communication with vehicle dynamic control module	<ul style="list-style-type: none"> <li>• Communication circuit</li> <li>• ABS &amp; traction actuator assy (Skid control ECU)</li> <li>• ECM</li> </ul>

**HINT:**

\*: When DTC P1578 is output, check for DTCs on the skid control ECU in the diagnosis mode. Only when any code is output, inspect the trouble area based on the DTC.

2004-2006 Diagnostic Trouble Code Chart