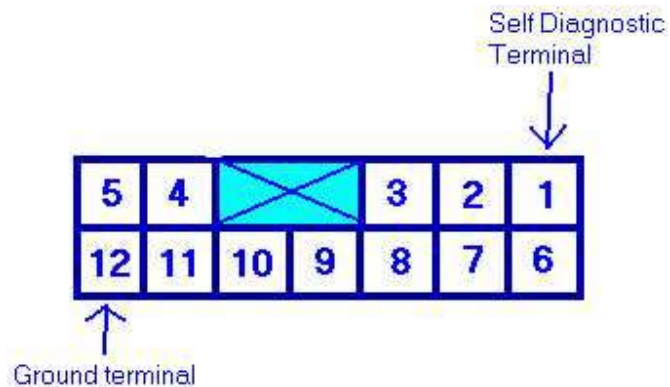


MITSUBISHI ERROR CODE and Self DIAGNOSTIC



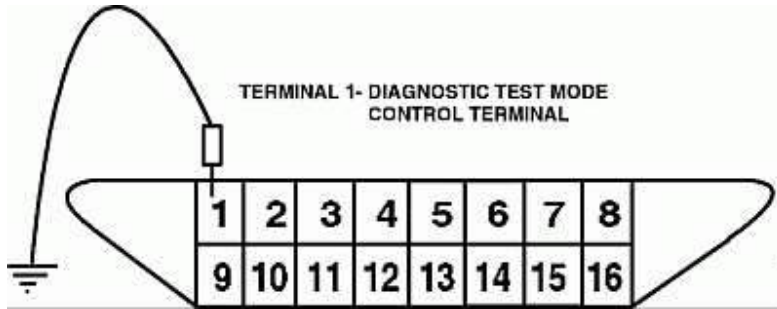
OBD 1 DLC

By DiTECH INJECTION™

96 & later are OBD2 systems and require a scanner.

Accessing Diagnostic Trouble Codes

Turn ignition switch to OFF position
Locate Data Link Connector (DLC), next to fuse box.
Connect voltmeter positive lead to DLC terminal #1 and Negative lead to terminal #12
(ground).
Turn Ignition switch to ON position.
codes are read out by 12 volt pulses of voltmeter.
A constant repetition of short pulses is normal.
Signals will appear on voltmeter a long and short 12 volt pulses.
long pulses represent tens
short pulses represent ones (4 long pulses and 3 short pulses indicates code 43)



OBD 2 DLC

Ground Data Link Connector terminal # 1.

DiTECH INJECTION™

Set the ignition switch to "ON", the Malfunction Indicator (check engine) Lamp will illuminate for a particular duration and a certain number of times.

Clear the trouble codes by disconnecting the vehicle battery negative terminal for 16 seconds or longer

EXAMPLES

No Codes--normal

The Lamp will illuminate for 0.5 seconds, then stay Off for 0.5 seconds, this pattern will repeat until the ignition is turned OFF.

Code 13

The Lamp will illuminate one time for approximately 0.5 second. This will represent one unit of ten. There will be approximately a one second delay and then the Lamp will illuminate three times for approximately 0.2 seconds with 0.2 second delay between deflections. This will represent three units of one.

Code 23

The Lamp will illuminate two times for approximately 0.5 second with approximately 0.3 second delay between deflections. This will represent two units of ten. There will be approximately a one second delay and then the Lamp will illuminate three times for approximately 0.2 seconds with 0.2 second delay between deflections. This will represent three units of one..

Clearing Trouble Codes

Diagnostic trouble codes may be cleared by disconnecting the battery ground cable for at least 20 seconds. Reconnect negative battery cable and recheck codes to confirm the repair.

Diagnostic Codes Mitsubishi Without OBD-II

DITECH INJECTION™

- 11 Oxygen sensor fault.
- 12 Airflow sensor fault.
- 13 Intake air temp sensor fault.
- 14 Throttle position sensor (TPS) fault.
- 15 Idle speed control (ISC) motor position sensor fault.
- 21 Coolant temp sensor fault.
- 22 Crankshaft position (CKP) sensor fault.
- 23 Camshaft position (CMP) sensor fault.
- 24 Vehicle speed sensor (VSS) fault.
- 25 Barometric (BARO) pressure sensor fault.
- 31 Knock sensor fault.
- 32 MAP sensor faulty.
- 36 Ignition timing adjustment signal fault.
- 39 Oxygen (O2) sensor fault.
- 41 Injector(s) fault
- 42 Fuel pump fault.
- 43 EGR fault.
- 44 Ignition coil (cylinders #1 & #4) fault.
- 52 Ignition coil (cylinders #2 & #5) fault.
- 53 Ignition coil (cylinders #3 & #6) fault.
- 55 Idle air control (IAC) valve position sensor fault.
- 59 Rear Oxygen (O2) sensor fault.
- 61 Transaxle control module torque reduction signal fault.
- 62 Variable Induction control (VIC) valve position sensor fault.

- 71 Traction control (TC) vacuum valve solenoid fault.
- 72 Traction Control (TC) vent valve solenoid fault.

ECI
Voltmeter or Test Light

DiTECH INJECTION™

- 1 Oxygen Sensor.
- 2 Ignition Signal.
- 3 Air Flow Sensor.
- 4 Pressure Sensor.
- 5 Throttle Position Sensor.
- 6 Idle Speed Control Motor Position Switch.
- 7 Engine Coolant Temperature Sensor.

MPFI
86-88 4 Cyl.
Voltmeter or Test Light

DiTECH INJECTION™

- 10000 Oxygen Sensor.
- 01000 Crank Angle Sensor.
- 11000 Air Flow Sensor.
- 00100 Atmospheric Pressure Sensor.
- 10100 Throttle Position Sensor.
- 01100 Motor Position Sensor.
- 11100 Engine Coolant Temperature Sensor.
- 00010 No. 1 Cylinder TDC Sensor.

MPFI
V6 and 89-95 4 Cyl.
(Exc. 95 Eclipse)
Voltmeter or Test Light

DiTECH INJECTION™

- 11 Oxygen Sensor.
- 12 Air Flow Sensor.
- 13 Intake Air Temperature Sensor.
- 14 Throttle Position Sensor.
- 15 Motor Position Sensor.
- 21 Engine Coolant Temperature Sensor.
- 22 Crank Angle Sensor.
- 23 TDC/CMP Sensor.
- 24 Vehicle Speed Sensor.
- 26 BARO Sensor.
- 31 Knock Sensor.
- 32 Manifold Absolute Pressure Sensor.
- 36 Ignition Timing Adjustment Signal.
- 39 Oxygen Sensor.
- 41 Injector.
- 42 Fuel Pump.
- 43 EGR.
- 44 Ignition Coil, 4 Cylinder.
- 44 Ignition Coil Power Transistor Unit, V6 Cylinders 1 & 4.
- 52 Ignition Coil Power Transistor Unit, V6 Cylinders 2 & 5.
- 53 Ignition Coil Power Transistor Unit, V6 Cylinders 3 & 6.
- 55 Idle Air Control Valve/Servo Valve Position Sensor.
- 59 Oxygen Sensor (Rear), 4 Cylinder.
- 59 Left hand Bank Heated Oxygen Sensor, V6.
- 61 Cable from Transaxle Control Unit, For Transmission
- 61 Torque Reduction Signal (A/T).
- 62 Induction Control Valve Position Sensor (Non Turbo).
- 69 Right hand Bank Heated Oxygen Sensor.
- 71 Traction Control Vacuum Solenoid.
- 72 Traction Control Ventilation Solenoid.

95-98 Eclipse (Non-Turbo) Retrieval Without Scan Tool

Cycle the ignition key On-Off-On-Off-On within 5 seconds.

Count the number of times the malfunction indicator lamp (check engine lamp) on the instrument panel flashes on and off. The number of flashes represents the trouble code.

There is a slight pause between the flashes representing the first and second digits of the code. Longer pauses (approx. 4 seconds) separate individual trouble codes.

Repair the malfunction while referring to the inspection chart for diagnostic trouble codes.

After disconnecting the battery cable from the battery (-) terminal for 10 seconds or more, reconnect the cable.

Start the engine and run it at idle for about 15 minutes after the engine has warmed up.

MPFI
95-98 Eclipse (Non-Turbo)
Check Engine/Light Scan Tool

DiTECH INJECTION™

- 11 Intermittent Loss Of Crankshaft Position Sensor.
- 11 Misfire Adaptive Numerator at Limit.
- 11 No Crankshaft Reference Signal at PCM.
- 11 Timing Belt Skipped 1 Tooth or More.
- 13 No Change In Manifold Absolute Pressure (MAP) From Start To Run.
- 14 5-Volt Supply Output Too Low.
- 14 Manifold Absolute Pressure (MAP) Sensor Voltage Too High.
- 14 Manifold Absolute Pressure (MAP) Sensor Voltage Too Low.
- 14 No 5 Volts To Manifold Absolute Pressure (MAP) Sensor.
- 15 No Vehicle Speed Sensor Signal.
- 16 Knock Sensor No. 1 Circuit.
- 17 Closed Loop Temperature Not Reached.
- 17 Engine Is Cold Too Long.
- 21 Downstream Heated Oxygen Sensor Heater Failure.
- 21 Downstream Heated Oxygen Sensor Shorted To Voltage.
- 21 Downstream Heated Oxygen Sensor Stays at Center.
- 21 Downstream Heated Oxygen Sensor Stays at Center.
- 21 Downstream Heated Oxygen Sensor Voltage Grounded.
- 21 Slow Upstream Heated Oxygen Sensor Circuit during Catalyst Monitor.
- 21 Upstream Heated Oxygen Sensor Heater Failure.
- 21 Upstream Heated Oxygen Sensor Response.
- 21 Upstream Heated Oxygen Sensor Shorted To B+.
- 21 Upstream Heated Oxygen Sensor Stays at Center.
- 21 Upstream Heated Oxygen Sensor Voltage Grounded.
- 22 Engine Coolant Temperature Sensor Voltage High.
- 22 Engine Coolant Temperature Sensor Voltage Low.
- 23 Intake Air Temperature Sensor Voltage High.
- 23 Intake Air Temperature Sensor Voltage Low.
- 24 No 5 Volts To Throttle Position Sensor.
- 24 Throttle Position Sensor Voltage Disagrees With Manifold Absolute Pressure.

24 Throttle Position Sensor Voltage High.
24 Throttle Position Sensor Voltage Low.
25 Idle Air Control Motor Circuits.
25 Target Idle Not Reached (plus or minus 200 RPM).
27 Injector No. 1 Control Circuit.
27 Injector No. 2 Control Circuit.
27 Injector No. 3 Control Circuit.
27 Injector No. 4 Control Circuit.
31 EVAP Leak Monitor Pinched Hose found.
31 EVAP Purge Flow Monitor Failure.
31 EVAP Solenoid Circuit.
31 EVAP Solenoid Switch or Mechanical Fault.
31 EVAP System Large Leak.
31 EVAP System Small Leak.
31 EVAP Vent Solenoid Circuit.
31 Engine Coolant Temp sensor voltage too high.
32 EGR Solenoid Circuit.
32 EGR System Failure.
33 A/C Clutch Relay Circuit.
35 High Speed Fan Control Relay Circuit.
35 High Speed Radiator Fan Relay Circuit.
35 Low Speed Fan Control Relay Circuit.
36 PAIR Solenoid Circuit - M/T.
36 Too Little or Too Much Secondary Air.
37 Park/Neutral Position Switch Failure.
41 Alternator Field Not Switching Properly.
42 Fuel Level Sensing Unit Voltage Too High.
42 Fuel Level Sensing Unit Voltage Too Low.
42 Fuel Level Unit No Change Over Miles.
42 Fuel Pump Relay Control Circuit.
42 MFI (ASID) Relay Control Circuit.
42 No MFI (ASD) Relay Output Voltage at PCM.
43 Cylinder No. 1 Misfire.
43 Cylinder No. 2 Misfire.
43 Cylinder No. 3 Misfire.
43 Cylinder No. 4 Misfire.
43 Ignition Coil No. 1 Primary Circuit.
43 Ignition Coil No. 2 Primary Circuit.
43 Multiple Cylinder Misfire.
44 Battery Temperature Sensor Voltage Too High.
44 Battery Temperature Sensor Voltage Too Low.
44 Battery Temperature Voltage out of limit.
45 EATX Controller Trouble Code Present.
46 Charging System Voltage Too High.
47 Charging System Voltage Too Low.
51 Fuel System Lean.

52 Fuel System Rich.
53 Internal Controller Failure.
53 PCM Failure - Serial Peripheral Interface Communications.
54 No Cam Signal at PCM.
61 BARO Pressure Out Of Range.
62 PCM Failure - Service Reminder Indicator Mile Not Stored.
63 PCM Failure - EEPROM Write Denied.
64 Catalytic Converter Efficiency Failure.
65 Power Steering Pressure Switch Failure.
66 No CCD Messages From TCM - A/T.

95 Eclipse (Turbo)
96-98 Vehicles
OBD2

DITECH INJECTION™

P0100 Volume Air Flow circuit.
P0105 BARO Pressure circuit.
P0110 Intake Air Temperature circuit.
P0115 Engine Coolant Temperature circuit.
P0120 Throttle Position circuit.
P0125 Excessive Time to Enter Closed Loop Fuel Control.
P0130 Heated Oxygen Sensor circuit Bank 1 Sensor 1.
P0135 Heated Oxygen Sensor Heater circuit Bank 1 Sensor 1.
P0136 Heated Oxygen Sensor circuit Bank 1 Sensor.
P0141 Heated Oxygen Sensor Heater circuit Bank 1 Sensor 2.
P0150 Heated Oxygen Sensor circuit Bank 2 Sensor 1.
P0155 Heated Oxygen Sensor Heater circuit Bank 2 Sensor 1.
P0156 Heated Oxygen Sensor circuit Bank 2 Sensor 2.
P0161 Heated Oxygen Sensor Heater circuit Bank 2 Sensor 2.
P0170 Fuel Trim Bank 1.
P0173 Fuel Trim Bank 2.
P0201 Injector circuit - Cylinder 1.
P0202 Injector circuit - Cylinder 2.
P0203 Injector circuit - Cylinder 3.
P0204 Injector circuit - Cylinder 4.
P0205 Injector circuit - Cylinder 5.
P0206 Injector circuit - Cylinder 6.
P0300 Random Misfire Detected.
P0301 Misfire Detected - Cylinder 1.
P0302 Misfire Detected - Cylinder 2.
P0303 Misfire Detected - Cylinder 3.
P0304 Misfire Detected - Cylinder 4.

P0305 Misfire Detected - Cylinder 5.
P0306 Misfire Detected - Cylinder 6.
P0325 Knock Sensor 1 circuit.
P0335 Crankshaft Position Sensor circuit.
P0340 Crankshaft Position Sensor circuit.
P0400 EGR Flow.
P0403 EGR Solenoid.
P0420 Catalytic Efficiency below threshold (Bank 1).
P0421 Warm-Up Catalyst Efficiency below threshold (Bank 1).
P0431 Warm-Up Catalyst Efficiency below threshold (Bank 2).
P0440 EVAP System.
P0442 EVAP System Leak Detected.
P0443 EVAP System Purge Control Valve circuit.
P0446 EVAP System Vent Control.
P0450 EVAP System Pressure Sensor.
P0455 EVAP Control System Leak Detected.
P0500 Vehicle Speed Sensor.
P0505 Idle Control System.
P0510 Closed Throttle Position Switch.
P0551 Power Steering Pressure Sensor circuit Range/Performance.
P0700 Transaxle Control System.
P0705 Transmission Range Sensor circuit (PRNDL - Input).
P0710 Transmission Fluid Temperature Sensor circuit.
P0715 Input/Turbine Speed Sensor circuit.
P0720 Output Speed Sensor circuit.
P0725 Engine Speed Input circuit.
P0740 Torque Converter Clutch System.
P0750 Shift Solenoid "A".
P0755 Shift Solenoid "B".
P0760 Shift Solenoid "C".
P0765 Shift Solenoid "D".
P1103 Turbocharger Wastegate Actuator.
P1104 Turbocharger Wastegate Solenoid.
P1105 Fuel Pressure Solenoid.
P1300 Ignition Timing Adjustment circuit.
P1400 Manifold Differential Pressure Sensor circuit.
P1500 Alternator FR Terminal circuit.
P1600 Serial Communication Link.
P1715 Pulse Generator Assembly.
P1750 Solenoid Assembly.
P1751 A/T Control Relay.
P1791 Engine Coolant Temperature Level Input circuit.
P1795 Throttle Position Input circuit to TCM.