

| Component                  | Fault code | Description of DTC   | Description  |
|----------------------------|------------|--|--|
| Crankshaft Position Sensor | P 0335     | Crankshaft Position Sensor "A" Circuit                         | Engine Power loss                                      |
| Ignition Coil 1 Cylinder   | P 2300     | Ignition Coil "A" Primary Control Circuit Low / Open Circuit   | Engine Power loss                                      |
| Throttle Position Sensor   | P 0123     | Throttle Position Sensor/Switch "A" Circuit High               | Default value of TPS, Engine Torque reduction or stall |
|                            | P 0122     | Throttle Position Sensor/Switch "A" Circuit Low / Open Circuit |  |
| Fuel Pump                  | P 0232     | Fuel Pump circuit short High                                   | Engine Power loss                                      |
|                            | P 0231     | Fuel Pump circuit short Low / Open Circuit                     |  |
| ECM                        | P 0601     | Internal Control Module Memory Checksum Error                  | No fuel injection,Engine Power loss                    |
| Fuel Injector 1 Cylinder   | P 0262     | Cylinder 1 Fuel Injector "A" Circuit High                      | No fuel injection,Engine Power loss                    |
|                            | P 0261     | Cylinder 1 Fuel Injector "A" Circuit Low / Open Circuit        |  |
| Ignition Coil 2Cylinder    | P 2303     | Ignition Coil "A" Primary Control Circuit Low / Open Circuit   | Engine Power loss                                      |
| Fuel Injector 2 Cylinder   | P 0265     | Cylinder 1 Fuel Injector "B" Circuit High                      | No fuel injection,Engine Power loss                    |
|                            | P 0264     | Cylinder 1 Fuel Injector "B" Circuit Low / Open Circuit        |  |

| PID | Description   | Size in Byte | Units, Scaling   |
|-----|---|--------------|--|
| 00  | Supported Mode 1 PIDS \$ 01-\$20  | 4            | PIDs = N   |
| 01  | MIL, # of DTC's<br>Number of Emission D.T.C.(s)<br>MIL Status   | 1            | Result = N<br>Bit 0 – bit 6<br>Bit 7                             |
|     | Continuous Diagnostic Test Supported<br>Misfire Monitoring<br>Fuel System Monitoring<br>Comprehensive Component Monitoring<br>Reserved/J1979<br>Misfire Monitoring Tests Complete = 0<br>Fuel System Monitoring Tests Complete = 0<br>Comprehensive Component Monitoring Tests Complete = 0<br>Reserved/J1979 | 1            | Result = N   |
|     | Non-Continuous Test Supported<br>Catalyst<br>Heated Catalyst<br>Enhanced Evaporative Purge System<br>Secondary Air System<br>A/C System Refrigerant<br>Oxygen Sensor<br>Oxygen Sensor Heater<br>EGR System  | 1            | Result = N   |
|     | Non-Continuous Test Results<br>Catalyst Test Complete<br>Heated Catalyst Test Complete<br>Enhanced Evaporative Purge System<br>Secondary Air System Test Complete<br>A/C System Refrigerant Test Complete<br>Oxygen Sensor Test Complete<br>Oxygen Sensor Heater Test Complete<br>EGR System Test Complete    | 1            | Result = N   |
| 03  | Current Fuel System Status (Fuel System 1)<br>Current Fuel System Status (Fuel System 2)  | 1<br>1       | OL/CL<br>OL/CL   |
| 04  | Current Calculated Load value   | 1            | %=N/2.55   |
| 05  | Current Undefaulted Coolant Temperature   | 1            | °C=N-40  |
| 06  | Current Short Term Fuel Trim (Bank 1)   | 1            | %=(N-128)/1.28   |
| 07  | Current Long Term Fuel Trim (Bank 1)  | 1            | %=(N-128)/1.28   |
| 08  | Current Short Term Fuel Trim (Bank 2)   | 1            | %=(N-128)/1.28   |
| 09  | Current Long Term Fuel Trim (Bank 2)  | 1            | %=(N-128)/1.28   |
| 0B  | Current Undefaulted Manifold Absolute Pressure  | 1            | kPa = N  |
| 0C  | Current Undefaulted Engine RPM  | 2            | RPM=N*0.25   |
| 0D  | Current Undefaulted Vehicle Speed   | 1            | KPH = N  |
| 0E  | Current Commanded Ignition timing advance Cyl#1   | 1            | Deg=(N/2)-64   |
| 0F  | Current Undefaulted Intake Air Temperature  | 1            | °C=N-40  |
| 11  | Current Undefaulted Absolute Throttle Position A  | 1            | %=N/2.55   |
| 13  | Location of Manufacturer equipped O2 sensors  | 1            | Bank1-Sensor1<br>Bank1-Sensor2<br>Bank2-Sensor1<br>Bank2-Sensor2 |
| 14  | (B1-S1) Undefaulted O2 Voltage<br>(B1-S1) Short Term Fuel Trim  | 1<br>1       | Volts= N*0.005<br>%=(N-128)/1.28                                 |
| 15  | (B1-S2) Undefaulted O2 Voltage<br>(B1-S2) Short Term Fuel Trim  | 1<br>1       | Volts= N*0.005<br>%=(N-128)/1.28                                 |
| 16  | (B2-S1) Undefaulted O2 Voltage<br>(B2-S1) Short Term Fuel Trim  | 1<br>1       | Volts= N*0.005<br>%=(N-128)/1.28                                 |
| 17  | (B2-S2) Undefaulted O2 Voltage<br>(B2-S2) Short Term Fuel Trim  | 1<br>1       | Volts= N*0.005<br>%=(N-128)/1.28                                 |
| 1C  | On-board Diagnostic System type   | 1            | EOBD   |
| 1F  | Time Since Engine Start   | 2            | Seconds=N  |
| 21  | MIL On Odometer   | 2            | Km=N   |
| 2F  | Fuel Level Input  | 1            | %=N*100/255  |
| 33  | Barometric Pressure   | 1            | kPa=N  |
| 4D  | Time run by the engine while MIL is activated   | 2            | 1 min per count  |
| 51  | Type of fuel currently being<br>utilized by the vehicle   | 1            | GAS  |
| 7F  | Support of Engine Run Time<br>Total Engine Run Time   | 1<br>4       | Seconds=N  |

| PID | Description                                      | Size in Byte | Units, Scaling |
|-----|--|--------------|----------------|
| 02  | Failure ID                                       | 2            | BCD = N        |
| 03  | Current Fuel System Status (Fuel System. 1)      | 1            | See Detailed   |
|     | Current Fuel System Status (Fuel System. 1)      | 1            | Table Below    |
| 04  | Current Calculated Load value                    | 1            | %=N/2.55       |
| 05  | Current Undefaulted Coolant Temperature          | 1            | °C=N-40        |
| 07  | Current Long Term Fuel Trim - (Bank 1)           | 1            | %=(N-128)/1.28 |
| 09  | Current Long Term Fuel Trim - (Bank 2)           | 1            | %=(N-128)/1.28 |
| 0B  | Current Undefaulted Manifold Absolute Pressure   | 1            | kPa=N          |
| 0C  | Current Undefaulted Engine RPM                   | 2            | RPM=N*0.25     |
| 0D  | Current Undefaulted Vehicle Speed                | 1            | KPH = N        |
| 11  | Current Undefaulted Absolute Throttle Position A | 1            | % = N/2.55     |
| 7F  | <u>Support of Engine Run Time</u>                | 1            |                |
|     | <u>Total Engine Run Time</u>                     | 4            | Seconds=N      |