

# FUEL AND ENGINE CONTROL

## Specifications

### General Information

Idle Speed	975 + or - 125 RPM
Spark plug	Bosch 7955/fr7dc +
Spark Plug gap	0.36"/0.90mm
Ignition Coil Primary resistance at room temp	XXX ohms
Ignition Coil Secondary resistance at room temp	XXX ohms
Fuel Tank Capacity Reserve	5.0 gallons/ 18.92 liters 0.5 gallons/ 1.89 liters

## General

The engine management system is as follows:

- Engine Control Unit (ECU)
- Body Control Module (BCM)
- Crank Position Sensor (CPS)
- Ignition Coil
- Manifold Absolute Pressure sensor (MAP)
- Throttle Position Sensor (TPS)
- Idle Air Control Valve( IAC)
- Air Temp Sensor (IAT)
- Vehicle Speed Sensor (VSS)
- Oxygen Sensor (O2)
- Engine Temperature Sensor (ETS)

The ECU is located inside the center fairings. It computes the ignition timing and fuel mapping based on sensor inputs (CPS, MAP, TPS, ATS and O2 sensors)

The ECU is fully enclosed to protect all internal components and is non-repairable. In the event that the ECU itself fails, it must be replaced.

The BCM is located inside the left center fairing next to the fuse block. The BCM is a module that acts like a circuit breaker on some occasions and a fuse on others. In the event that the BCM fails, it must be replaced.

The crank position sensor (CPS) is located at the left rear of the crankcase. The CPS produces a signal that is sent to the ECU.

The MAP sensor is located on the intake manifold. The MAP sensor monitors the intake manifold pressure and sends the signal to the ECU.

The TPS, MAP, ETS and ATS are sensors are input information to the ECU that aid in control of the fuel delivery and ignition curves.

The O2 sensor monitors the exhaust gas for oxygen content. The fuel/air mixture is adjusted accordingly to maintain an optimal air/fuel ratio.

The VSS is located at the rear engine side of the inner primary. The VSS information is used by the ECU to maintain idle speed control, gear information, and fuel delivery and ignition curves