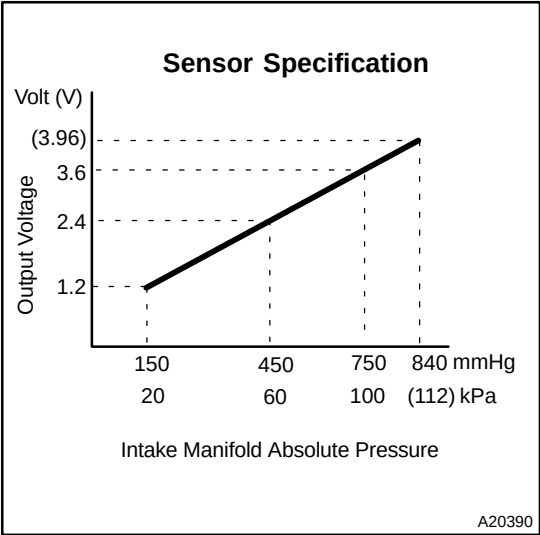


MAP Sensor

Ce02S-01

MAP Sensor Monitor Description

MONITOR SUMMARY



The manifold air pressure (MAP) sensor detects the air pressure in the intake manifold. The ECM uses this sensor to calculate the engine load. Engine load is one of the factors the ECM uses to determine the fuel injector ON time, i.e. the fuel injection quantity. The sensor always indicates a “pressure” in the intake manifold as a complete vacuum is interpreted as “zero” pressure. Manifold pressures vary from a low values during idle or deceleration conditions to “atmospheric” pressure at wide–open throttle. Supercharged or turbocharged engines will achieve pressure above atmospheric pressure. The ECM supplies a regulated 5 V reference–voltage to the MAP sensor. The MAP sensor varies its outputs signal voltage between 1.2 V and 3.96 V in response to the pressure variations in the intake manifold. When the pressure in the intake manifold is low, the output voltage of the MAP sensor is low. When the pressure is high, the output voltage is high. If the ECM detects a MAP sensor output voltage that is out of the specified range, the ECM interprets this as a malfunction in the MAP sensor and sets a DTC.

RELATED DTC

|              |       |                                    |
|--------------|-------|------------------------------------|
| Related DTCs | P0105 | MAP sensor circuit is open/shorted |
|--------------|-------|------------------------------------|

MODEL YEAR CHART

|               |                       |
|---------------|-----------------------|
| Model Year    | See Page              |
| 1996 and 2001 | <a href="#">Ce-13</a> |