

**“It’s all part of
the service”**

with Motors’ Burnie Service
Manager, Peter Dixon



Computers and your car

**These days don't be surprised by the fact that
a computer manages your car engine.**

The way it works is that a central processing unit gathers various inputs to calculate the needed orders or outputs that signal to your engine just what to do.

In today's cars, the inputs to the processor, or powertrain control module (PCM), are known as sensors. In turn, the outputs are called actuators. The actuators are what make things happen. The PCM is programmed to control the actuators under any condition that the sensors feel is needed. To get an idea of the range of the PCM, the key sensory inputs of most engine management systems include the following:

- Engine speed
- Coolant temperature
- Crankshaft position
- Intake inflow
- Manifold vacuum
- Throttle position and exhaust
- Oxygen content

- Intake inflow
- Camshaft positions
- Barometric pressure
- Intake air temperature
- Detonation detection
- EGR valve position
- Misfire detection
- Engine-oil temperature
- Power-steering pressure
- Air-conditioning pressures
- Gear-level position
- Vehicle speed
- Automatic-transmission-temperature
- Catalytic converter efficiency system voltage.

Meanwhile, the actuators usually include the fuel injectors, idle speed control motor, EGR valve, evaporative canister purge, ignition coil timing and saturation time, torque converter clutch, smog pump diverter valve, cooling fan, alternator output and fuel pump.

If you have a motoring requirement or query, feel free to phone me, Peter on 6430 2432, or to call into our dealership at Marine Terrace for friendly assistance.

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