TECHNICAL FEATURES

O₂ SENSOR

- O₂ sensor detects the amount of oxygen in exhaust gas.
- O₂ sensor consists of a cylindrical-shaped, white gold-coated zirconia device. The inside of the device is exposed to atmosphere, whereas its outside is exposed to exhaust gas.
 - Zirconia device: produces electromotive force by difference of oxygen concentration between atmosphere and exhaust gas when temperature is higher than certain.
- O₂ sensor detects changes of oxygen concentration in exhaust gas by measuring the electromotive force. ECM receives the values as voltages.
- The output voltage of O₂ sensor is about 0 V when the difference of oxygen concentration between the atmosphere and the exhaust gas is very small (when air/fuel ratio is lean), whereas about 1 V when the difference is very big (when air/fuel ratio is rich).
- Depending on output voltage, ECM corrects discharge duration corresponding with oxygen concentration in exhaust gas.

