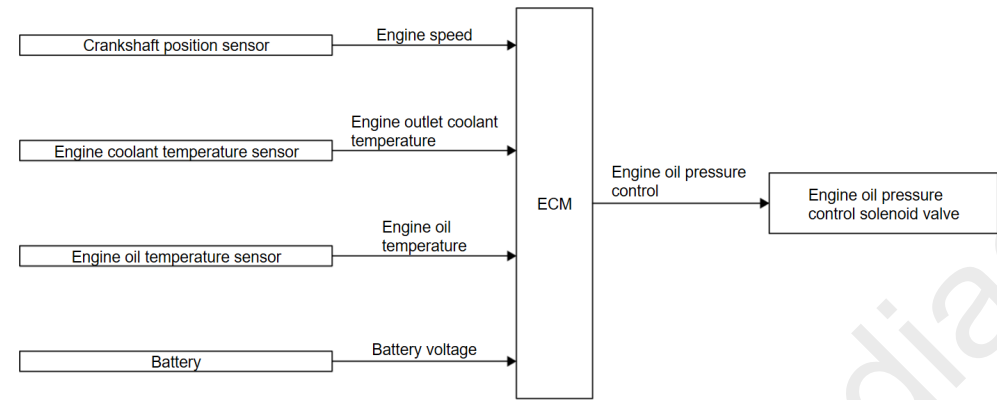







System Description

SYSTEM DIAGRAM



Component parts	Function
Crankshaft position sensor	Crankshaft Position Sensor 
Engine coolant temperature sensor	Engine Coolant Temperature Sensor 
Engine oil temperature sensor	Engine Oil Temperature

Component parts	Function
	Sensor 
Battery	ECM receives the battery voltage signal.
ECM	ECM 
Engine oil pressure control solenoid valve	Engine Oil Pressure Control Solenoid Valve 

SYSTEM DESCRIPTION

ECM performs the variable hydraulic control (low oil pressure control and high oil pressure control) based on signals from each sensor according to oil temperature and engine load. ECM activates the engine oil pressure control solenoid valve and switches to the low oil pressure control and high oil pressure control. ECM uses the low oil pressure control for 80-90 % of the operating area to maintain low oil pressure and stops piston cooling jet (i.e. achievement of less than or equal to jet injection valve opening pressure).

High oil pressure control start condition

- High oil pressure control start condition
- High engine speed
- Coolant temperature is 60°C (140°F) or more under high engine load condition

Low oil pressure control start condition

- Coolant temperature is less than 60°C (140°F) under low engine speed condition
- Coolant temperature is 60°C (140°F) or more under low engine load and low engine speed conditions