

PCM FUNCTION [ZJ, Z6]

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Function List

- The control descriptions are as shown below.

Function	Description
IAC	The PCM controls the IAC valve by driving it with the duty cycle so that an optimum opening angle is obtained according to engine operation conditions, ensuring idling stability.
Variable intake-air control (Z6)	Switches energization of the variable intake-air shutter valve actuator according to engine speed to enhance the inertia charging effect.
Variable tumble control	At cold engine start, the following effects occur due to the closing of the variable tumble shutter valve for improved cold engine emission performance. <ul style="list-style-type: none"> • Improved intake airflow speed near injectors • Strong air tumble occurs in the combustion chamber, promoting vaporization mixture of intake air and fuel
Variable valve timing control	Changes the intake valve timing according to engine operation conditions to improve engine output, fuel economy and exhaust emission performance.
Fuel injection control	Performs optimum fuel injection according to engine operation conditions.
Fuel pump control	Performs energization of the fuel pump relay only when the engine is running (operates fuel pump) to improve stability and durability.
ESA control	Controls ignition to optimum timing according to engine operation conditions.
Evaporative purge control	An appropriate amount of evaporative gas is fed into the dynamic chamber by the driving of the purge solenoid valve according to the engine operation conditions to ensure driveability and prevent release of fuel vapor gas into the atmosphere.
EGR control	Adjusts the EGR to the optimum opening angle according to engine operation conditions.
HO2S heater control	Based on the control of the front and rear HO2S heater, a stabilized oxygen concentration is detected even at low exhaust gas temperature and feedback control of fuel injection even during cold engine start is made possible for improved cold temperature emission performance.
A/C cut-off control	The current application (energize/non-energize) to the A/C relay (magnetic clutch) is controlled according to the engine operation conditions to prevent deterioration of engine performance, damage to the engine, and deterioration of the A/C function.
Electrical fan control	Through cooling of the radiator and condenser by operation of the cooling fan according to vehicle conditions, engine reliability and cooling performance have been improved.
Starter cut-off control	Theft deterrence has been improved by controlling energization to the starter relay according to an engine stop request signal from the immobilizer system.
Generator control	Generator output is optimized according to the engine operation and electrical load conditions, ensuring idling stability and anti-load performance.
CAN	Used for communication with the DSC HU/CM, ABS HU/CM, instrument cluster and DLC-2.