

## VARIABLE TUMBLE SYSTEM FUNCTION [ZJ, Z6]

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- The variable tumble system functions to lower emissions at cold-engine start.
- At cold-engine start, the variable tumble system increases intake airflow speed by closing the shutter valve to narrow the intake passage. As a result, the air-fuel mixture quality from the injector is improved. Additionally, the creation of a powerful air tumble in the combustion chamber promotes the atomization of the air-fuel mixture. Due to this, emission efficiency is improved.
- For variable tumble control, refer to CONTROL SYSTEM, Variable Tumble Control. (See [VARIABLE TUMBLE CONTROL OUTLINE \[ZJ, Z6\]](#).)