

VARIABLE TUMBLE CONTROL OPERATION [LF]

B3E014018881T18

Operation conditions

• When all of the following conditions are met, the PCM energizes the coil of variable tumble solenoid valve. As a result, negative pressure is introduced to the diaphragm chamber of the variable tumble shutter valve actuator, pulling the actuator rod and closing the variable tumble shutter valve.

- Engine speed **less than 3,750 rpm**
- Engine coolant temperature **less than 63 °C {145 °F}**
- Throttle valve opening angle is at the specified value or less (changes according to engine speed)

Inhibition conditions

• When a DTC for the engine coolant temperature sensor or throttle position sensor has been stored, the variable tumble control is inhibited and the variable tumble shutter valve is constantly open.