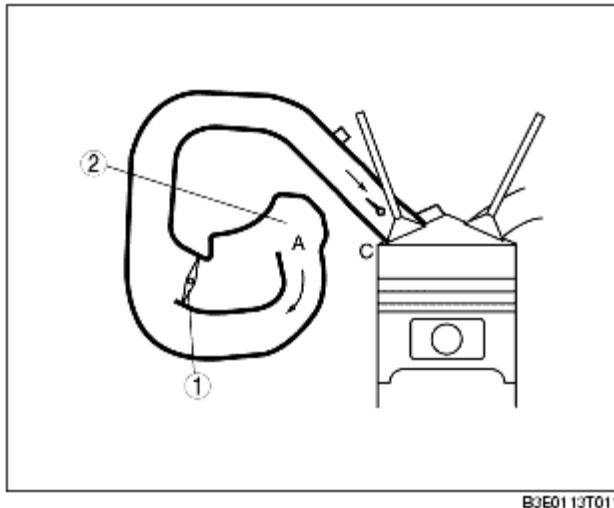


VARIABLE INTAKE-AIR SYSTEM OPERATION [Z6]

B3E011300113T07

At engine speed less than 4,100 rpm (variable intake-air shutter valve is closed)

- The variable intake-air shutter valve is closed by variable intake-air shutter valve actuator operation.



1	Variable intake-air shutter valve (closed)
2	Dynamic chamber

- Under this condition, the effective intake manifold length is from the intake valve to the dynamic chamber (A-C). An inertia charging effect is obtained due to this elongated intake manifold length, air intake volume in the cylinder increases, and higher torque is obtained at low to medium engine speeds.

At engine speed of 4,100 rpm or more (variable intake-air shutter valve is open)

- The variable intake-air shutter valve is opened by variable intake-air shutter valve actuator operation.

1	Variable intake-air shutter valve (open)
2	Dynamic chamber

- Under this condition, the effective intake manifold length is from the intake valve to the chamber (B-C). The intake air inertia effect is obtained at high engine speeds due to this shortened intake passage, increasing intake airflow amount in the cylinder, and higher torque at high engine speeds is obtained.