

WASTEGATE VALVE [SKYACTIV-G 2.5T]

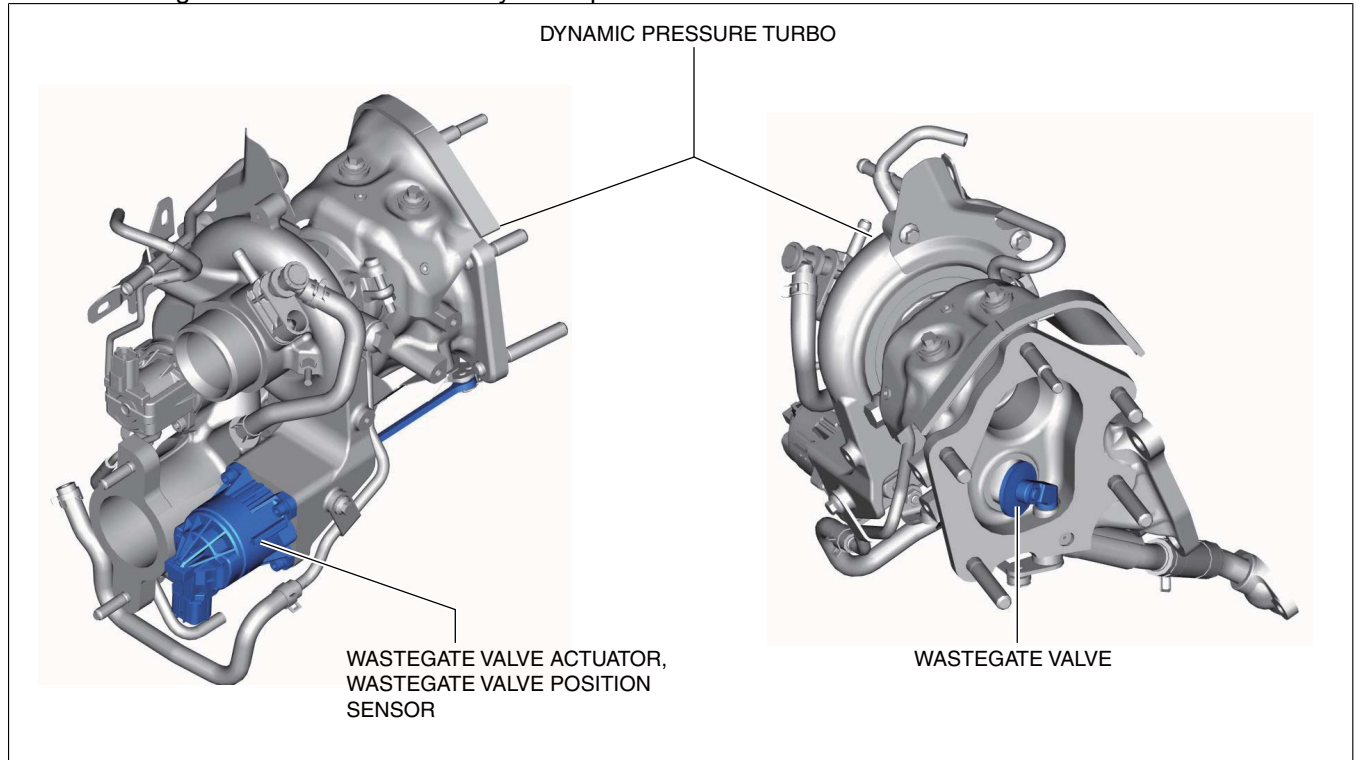
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Purpose, Function

- The wastegate valve controls the exhaust gas flow amount applied to the turbine wheel to achieve optimum boost pressure and to prevent the excessive rotation of the turbine wheel of the dynamic pressure turbo and excessive boost.

Construction

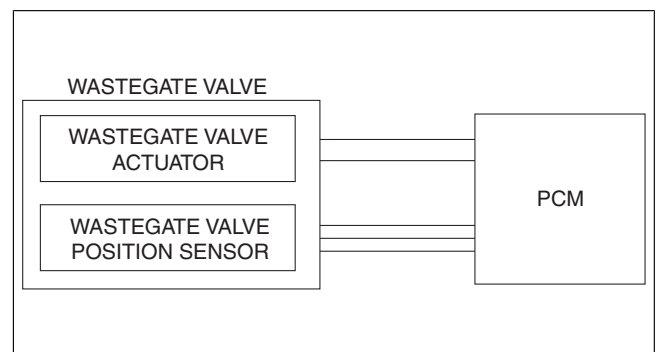
- The wastegate valve is built into the dynamic pressure turbo.



- A wastegate valve position sensor, which is equipped on the wastegate valve actuator, detects the wastegate valve opening angle.
- For details on the wastegate valve position sensor, refer to the CONTROL SYSTEM. (See WASTEGATE VALVE POSITION SENSOR [SKYACTIV-G 2.5T].)

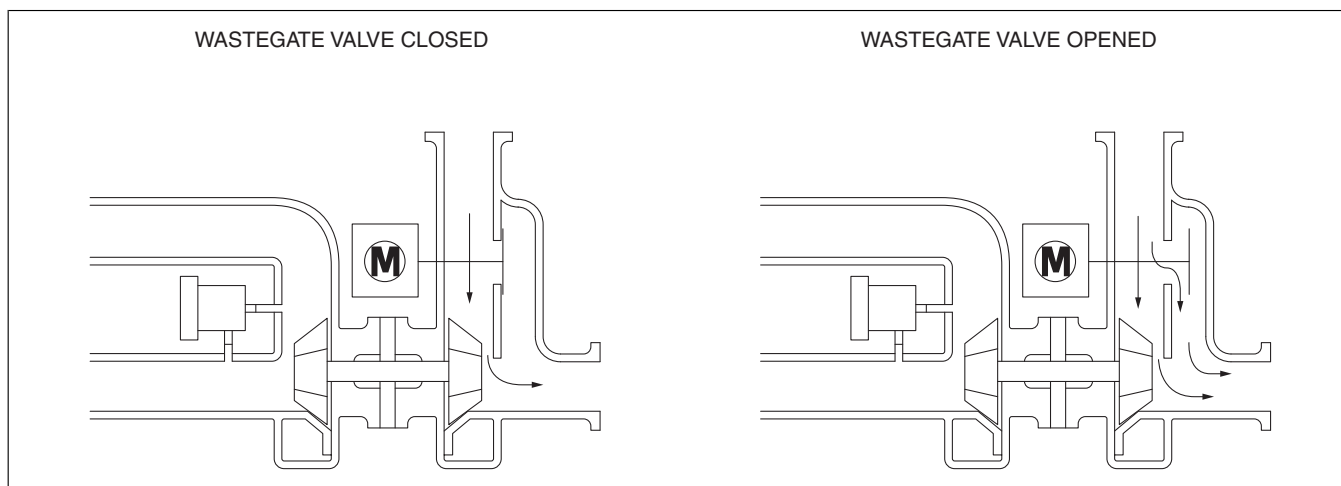
Operation

- The wastegate valve actuator, which opens/closes the wastegate valve, operates based on the duty signal from the PCM.



- Because the wastegate valve actuator drives and the wastegate valve opens, the exhaust gas path is bypassed and the exhaust gas flow amount applied to the turbine wheel is reduced.

WASTEGATE VALVE OPENED/CLOSED SCHEMATIC DIAGRAM



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- For the boost control, refer to CONTROL SYSTEM. (See BOOST CONTROL [SKYACTIV-G 2.5T].)

Fail-safe

DTC	Fail-safe
P0045:00 P0046:00	• Stop the supercharging pressure control. (fully open the wastegate valve)