

POWER METAL OXIDE SEMICONDUCTOR FIELD EFFECT TRANSISTOR (POWER MOS FET) [FULL-AUTO AIR CONDITIONER]

id0740a1321000

Purpose

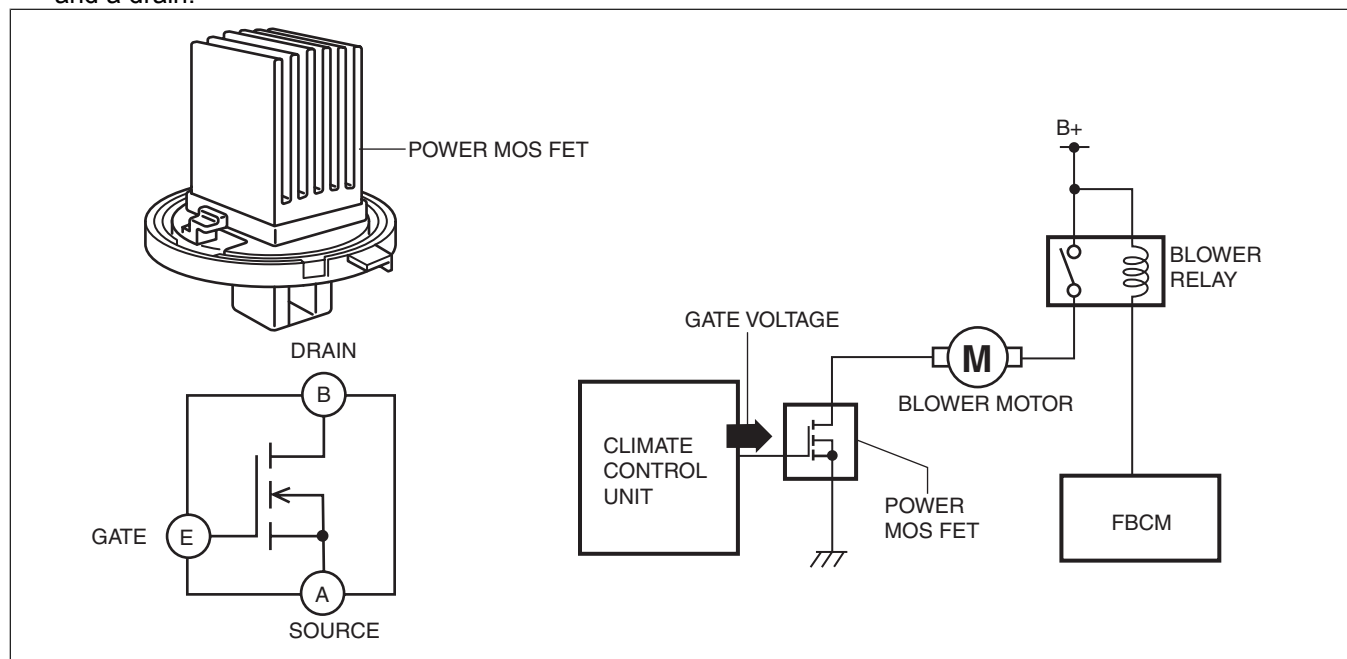
- The power MOS FET controls the blower motor rotation speed.

Function

- The power MOS FET controls the supply voltage to the blower motor based on the gate voltage sent from the climate control unit, and adjusts the fan rotation speed (airflow volume)

Construction

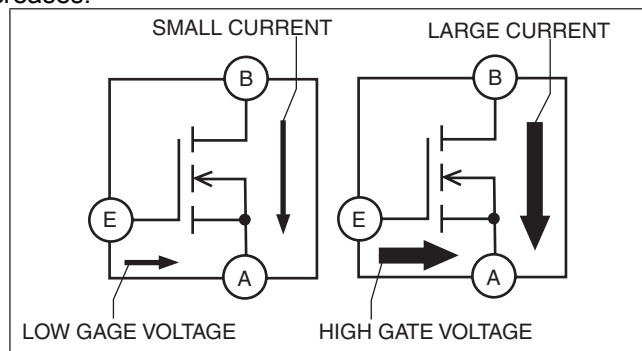
- The power MOS FET is installed to the A/C unit.
- A transistor-type power MOS FET has been adopted and it is equipped with three electrodes, a source, a gate, and a drain.



ac5wzn00000724

Operation

- The resistance between terminals B and A (between drain and source) changes according to the voltage (gate voltage) applied to terminal C (gate).
- When the gate voltage increases, the resistance between terminals B and A decreases, allowing the current to flow easily. Therefore, the blower motor rotation speed increases.
- When the gate voltage decreases, the resistance between terminals B and A increases, making current flow difficult. Therefore, the blower motor rotation speed decreases.



ac5wzn00000725

Fail-safe

- Function not equipped.