REFRIGERANT PRESSURE SENSOR [FULL-AUTO AIR CONDITIONER]

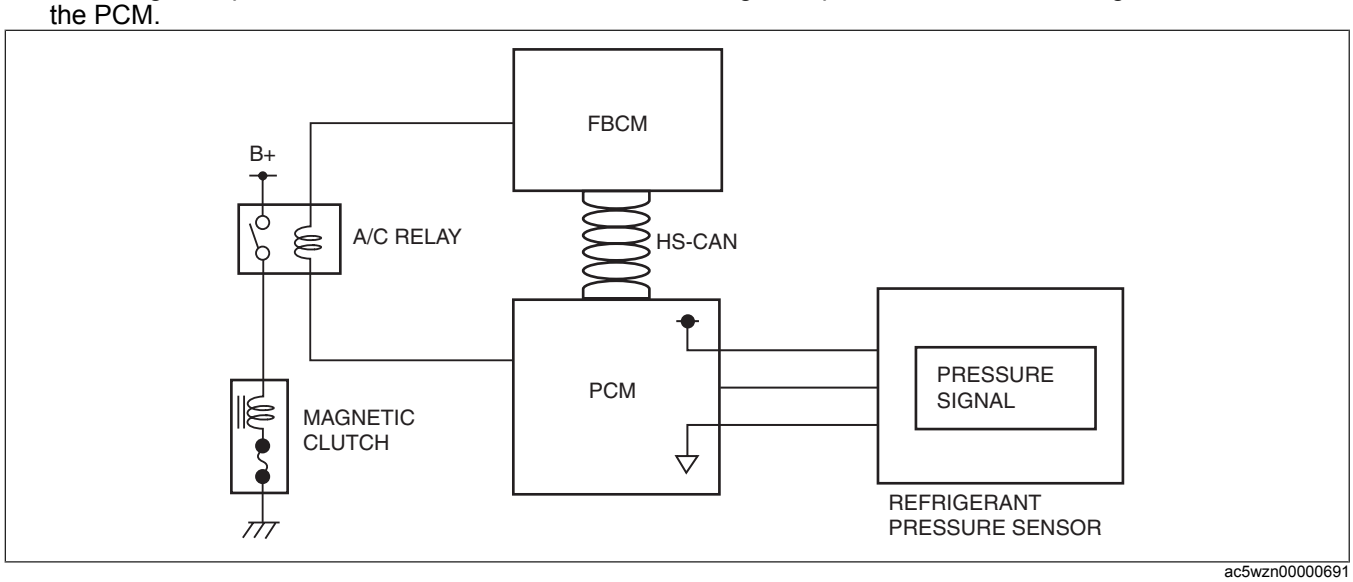
id0740a1126200

Purpose

- The refrigerant pressure sensor detects the refrigerant pressure in the refrigerant cycle.

Function

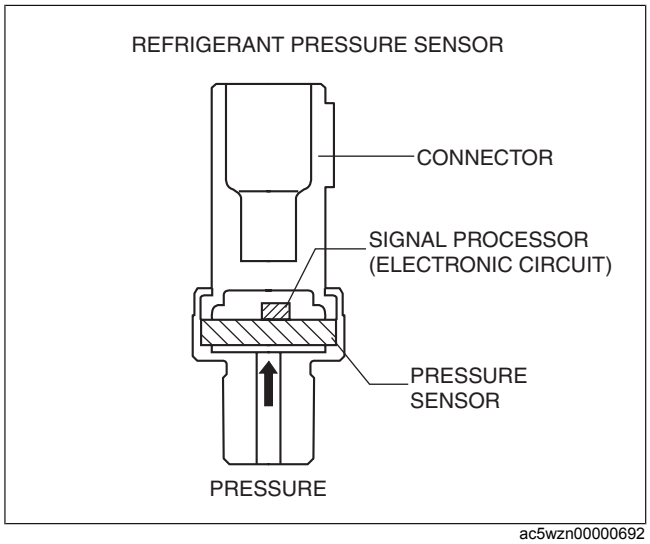
- The refrigerant pressure sensor converts the detected refrigerant pressure to an electric signal and sends it to the PCM.



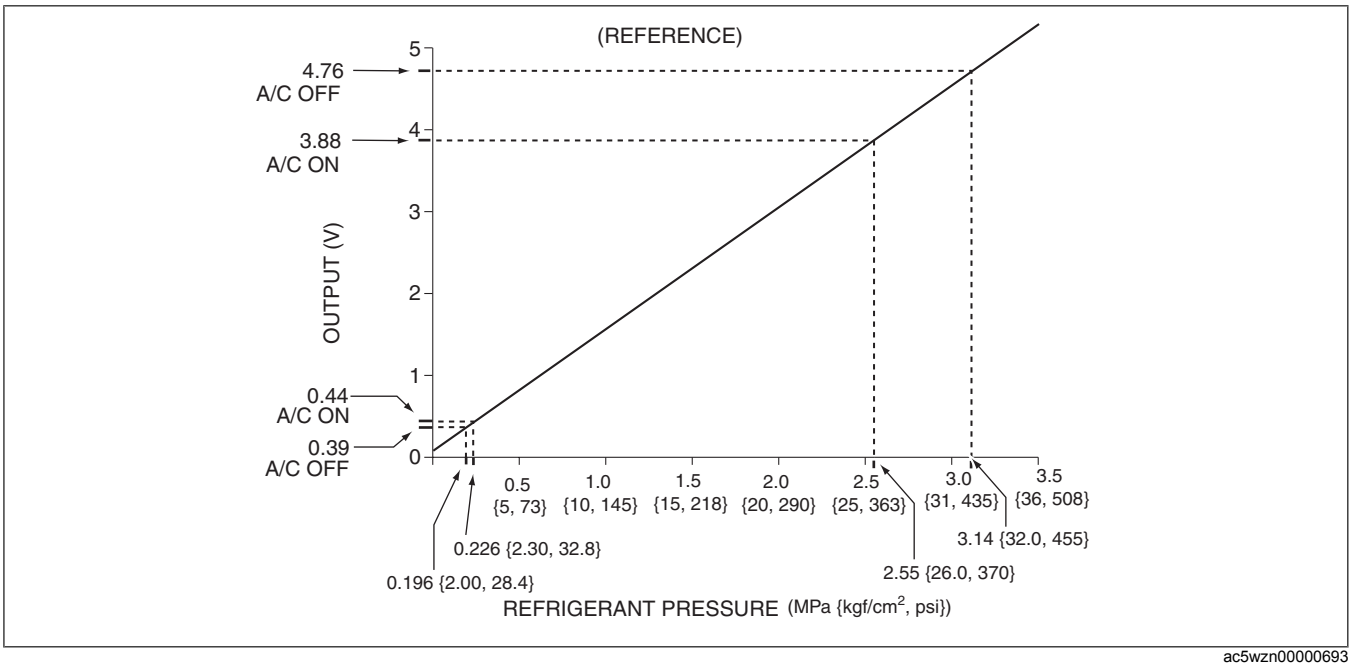
ac5wzn00000691

Construction

- The refrigerant pressure sensor is installed on the cooler pipe.
- A capacitance type refrigerant pressure sensor, which converts refrigerant pressure into a linear electric signal, has been adopted.
- Consists of a pressure detecting part and signal processing part.
- The pressure detecting part is a variable capacity condenser, which changes capacitance according to the pressure.
- The signal processing part detects the capacitance of pressure detecting part, converts it to voltage, then outputs it to the climate control unit.



ac5wzn00000692

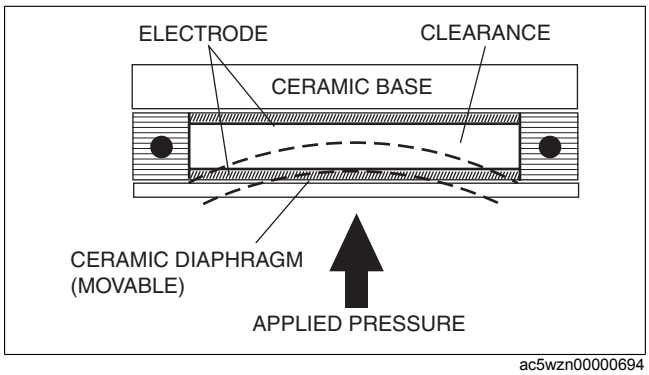


ac5wzn00000693

Operation

Capacitance type

- There is a clearance between the movable ceramic diaphragm and the ceramic base, and each side has an electrode.
- When pressure is applied from the ceramic diaphragm side, the ceramic diaphragm deforms, and the clearance between the electrodes changes. As a result, capacitance is changed and pressure is detected.



ac5wzn00000694

Fail-safe

- Function not equipped.