

AIR FUEL RATIO (A/F) SENSOR [SKYACTIV-D 2.2]

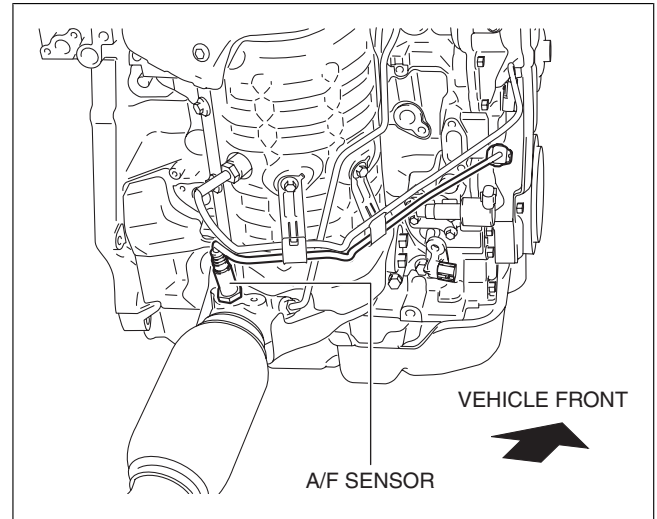
id0140z7004800

Purpose/Function

- Detects the oxygen concentration (all-range air/fuel ratio) in the exhaust gas as basic information for mainly determining the EGR amount.
- Detects the oxygen concentration (all-range air/fuel ratio) in the exhaust gas and sends it to the PCM as an oxygen concentration (all-range air/fuel ratio) signal.

Construction

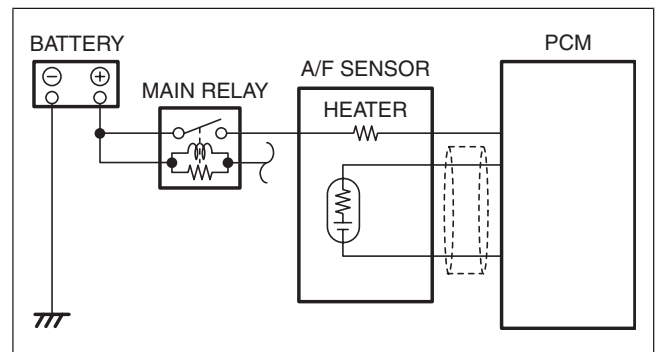
- Installed on the rear side of the catalytic converter.
- A zirconia element has been adopted as the detecting element for detecting the oxygen concentration (all-range air/fuel ratio).



ac5wzn00002554

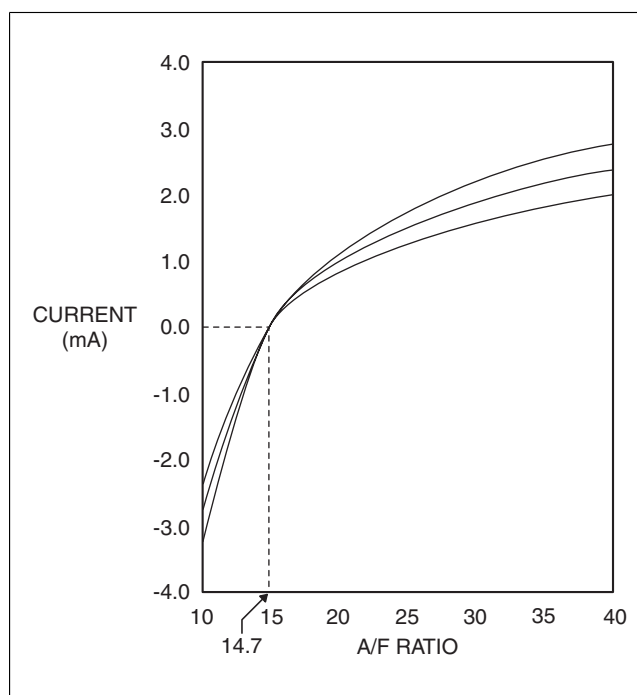
Operation

- Sends the signal, which fluctuates according to the oxygen concentration (all-range air/fuel ratio), to the PCM.



ac5wzn00002555

A/F sensor characteristic



ac5wzn00002556

Fail-safe

DTC No.	Fail-safe function
P0030:00	<ul style="list-style-type: none"> • PCM restricts engine torque. • Inhibits the EGR control. • Inhibits the diesel particulate filter regeneration control. • Inhibits engine-stop by operating the i-stop function.
P0131:00	<ul style="list-style-type: none"> • PCM restricts engine torque. • Inhibits the EGR control. • Inhibits the diesel particulate filter regeneration control. • Inhibits engine-stop by operating the i-stop function.
P0132:00	<ul style="list-style-type: none"> • PCM restricts engine torque. • Inhibits the EGR control. • Inhibits the diesel particulate filter regeneration control. • Inhibits engine-stop by operating the i-stop function.
P0133:00	<ul style="list-style-type: none"> • PCM restricts engine torque. • Inhibits the EGR control. • Inhibits the diesel particulate filter regeneration control. • Inhibits engine-stop by operating the i-stop function.
P0134:00	<ul style="list-style-type: none"> • PCM restricts engine torque. • Inhibits the EGR control. • Inhibits the diesel particulate filter regeneration control. • Inhibits engine-stop by operating the i-stop function.