## MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR [SKYACTIV-D 2.2]

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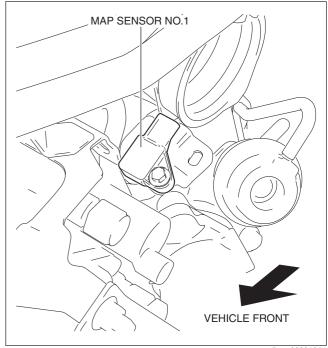
## **MAP Sensor No.1**

# **Purpose/Function**

- Detects the intake air pressure between the large and small-type turbos as basic information for mainly controlling the air charging pressure.
- Detects the intake air pressure between the large and small-type turbos and sends to the PCM as an intake air pressure signal.

#### Construction

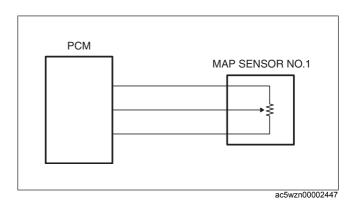
- · Installed on the turbocharger.
- A semiconductor strain gauge has been adopted as the detecting element for detecting the intake air pressure.



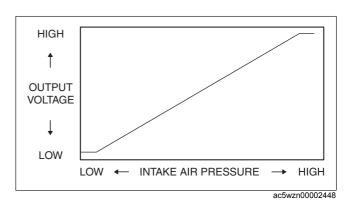
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# Operation

• Sends the signal, which fluctuates according to the intake air pressure, to the PCM.



MAP sensor No.1 characteristic



#### Fail-safe

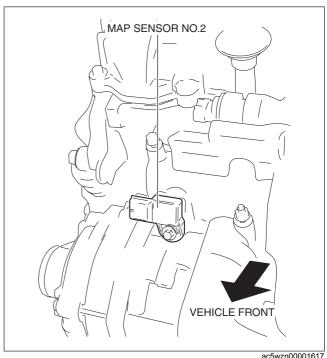
DTC No.	Fail-safe function
PU2.37 'UU	Inhibits engine-stop by operating the i-stop function.
	PCM restricts engine-transaxle integration control.
P0238:00	Inhibits engine-stop by operating the i-stop function.
	PCM restricts engine-transaxle integration control.

## **MAP Sensor No.2 Purpose/Function**

- Detects the intake air pressure introduced into the cylinder as basic information for mainly determining the fuel injection amount.
- Detects the intake air pressure introduced into the cylinder and sends it to the PCM as an intake air pressure signal.

#### Construction

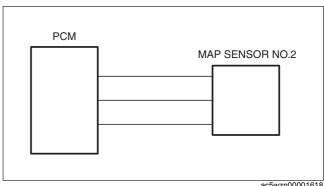
- Installed on the intake manifold.
- A semiconductor strain gauge has been adopted as the detecting element for detecting the intake air pressure.



#### ac5wzn00001617

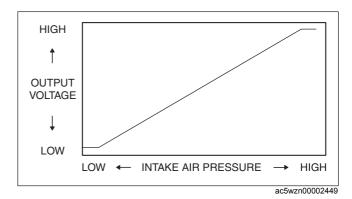
# Operation

Sends the signal, which fluctuates according to the intake air pressure, to the PCM.



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## MAP sensor No.2 characteristic



## Fail-safe

DTC No.	Fail-safe function	
	PCM restricts engine torque.	
P0107:00	Inhibits the EGR control.	
	Inhibits the diesel particulate filter regeneration control.	
	Inhibits engine-stop by operating the i-stop function.	
	PCM restricts engine-transaxle integration control.	
P0108:00	PCM restricts engine torque.	
	Inhibits the EGR control.	
	Inhibits the diesel particulate filter regeneration control.	
	Inhibits engine-stop by operating the i-stop function.	
	PCM restricts engine-transaxle integration control.	