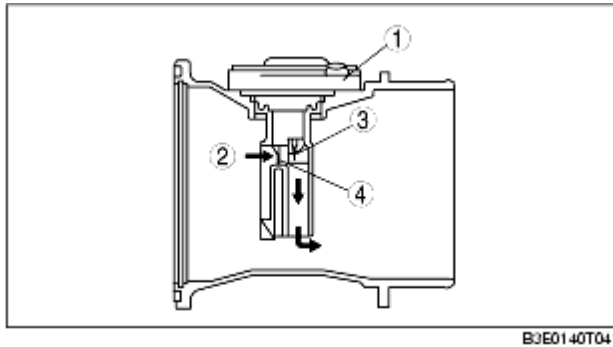


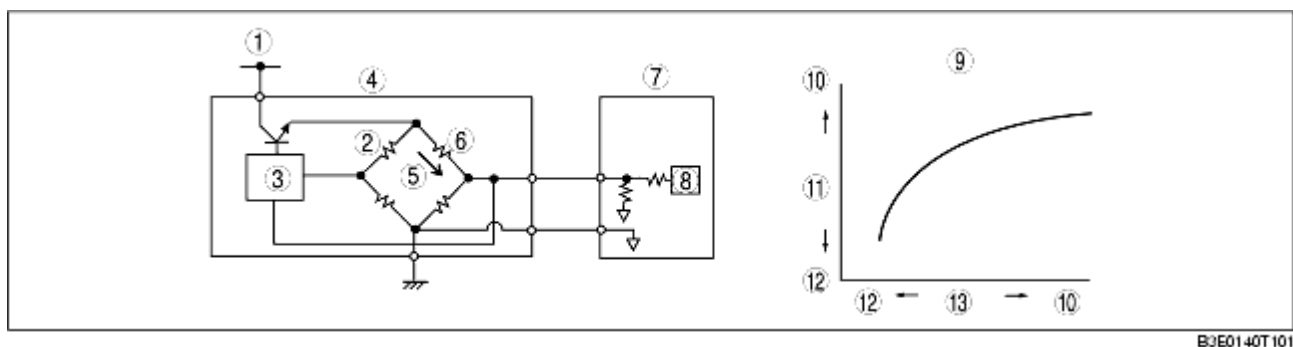
MASS AIR FLOW (MAF) SENSOR CONSTRUCTION/OPERATION [LF]

B3E014013211T02



| | |
|---|------------|
| 1 | MAF sensor |
| 2 | Intake air |
| 3 | Cold wire |
| 4 | Hot wire |

- Built into the intake air temperature sensor.
- Converts the mass intake airflow amount to voltage.
- When the temperature of the metal decreases, the resistance decreases. Using this characteristic, the hot wire captures heat from the flow of intake air and converts the intake airflow amount to voltage.
- The cold wire converts intake air density to voltage from the ambient temperature of the cold wire, using the characteristic of air whereby the intake air density decreases due to the increase in intake air temperature.
- The voltages obtained by the hot wire (intake airflow amount) and the cold wire are compared and the electric potential becomes stable by supplying the difference in voltage to the transistor. The voltage supplied to the hot wire is output as the mass intake airflow amount.



B3E0140T101

| | |
|---|----|
| 1 | B+ |
|---|----|

| | |
|----|--|
| 2 | Air thermometer |
| 3 | Control circuit |
| 4 | MAF sensor |
| 5 | Current |
| 6 | Hot wire |
| 7 | PCM |
| 8 | CPU |
| 9 | MAF sensor output voltage characteristic |
| 10 | High |
| 11 | Voltage |
| 12 | Low |
| 13 | Intake air amount |