

2012 - Mazda6 - Engine

MASS AIR FLOW (MAF) SENSOR INSPECTION [MZR 2.5]

NOTE:

- The MAF sensor and IAT sensor cannot be removed as a single unit. When replacing the MAF sensor or IAT sensor, replace it together with the MAF/IAT sensor as a single unit.

1. Verify the connection condition of the MAF sensor/IAT sensor connector.

- If a connector has poor contact, install it correctly and then go to the next step.
- If the connector connection is normal, go to the next step.

2. Verify the MAF sensor voltage under no airflow conditions using the following procedure:

- Connect the M-MDS to the DLC-2.

CAUTION:

- Do not create suction in the exhaust pipe by cranking the engine and causing air to flow through the exhaust duct. It could cause a measurement error because the MAF sensor voltage is measured under no airflow conditions.
- Switch the ignition to ON (engine off) and wait for 30 s.
- Verify that the MAF/IAT sensor output voltage (PID: MAF).

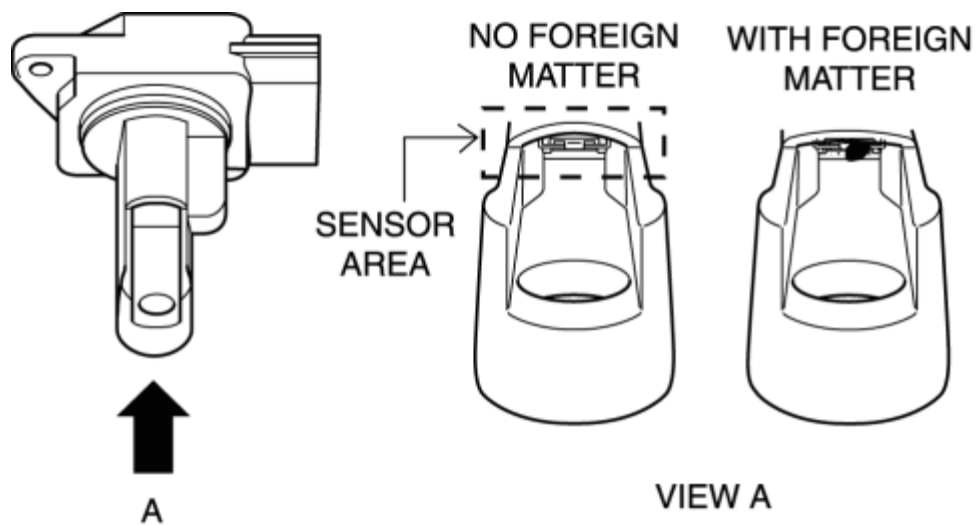
Specification

- 0.68 V
- If it is the specification or more, replace the MAF/IAT sensor. (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
- If it is less than the specification, go to the next step.

3. Remove the MAF/IAT sensor. (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)

4. Verify that there is no foreign matter in the MAF/IAT sensor.

- Shine light on the sensor (Direction A in figure below) in the flow path and verify visually.
 - If there is visible, large foreign matter, replace the MAF/IAT sensor. (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
 - If there is no foreign matter, go to the next step.



5. Verify that there is no damage, cracks, or dirt on the MAF sensor part of the MAD/IAT sensor.

- If a malfunction can be verified, repair or replace the MAF/IAT sensor. (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
- If a malfunction cannot be verified, go to the next step (MAF sensor is normal).

NOTE:

- Install the removed MAF/IAT sensor because the MAF sensor is normal.

6. Install the MAF/IAT sensor. (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)

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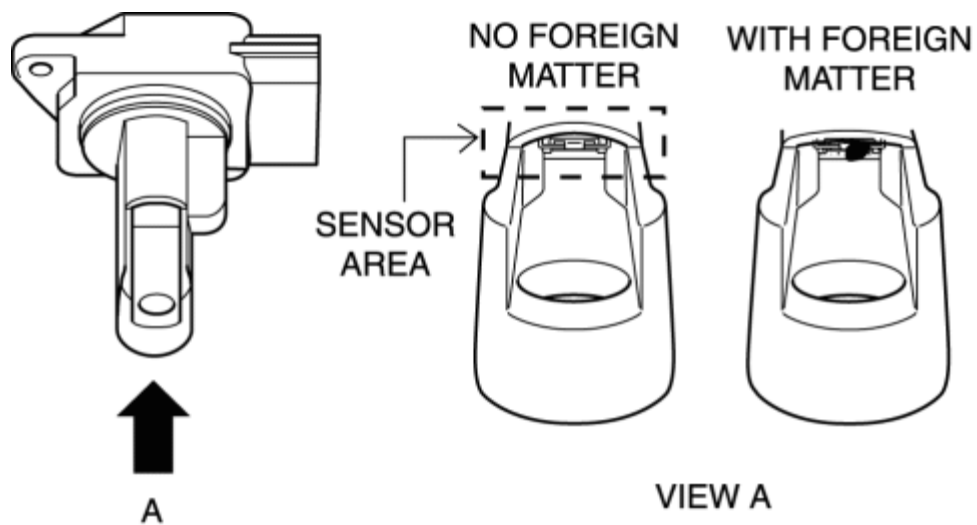
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