JZA80 Air Flow Meter (22204-20010, 22204-46010) Maintenance Procedure

To JZA80 Supra customers, repair shops, and dealers

When considering replacing the air flow meter due to MIL lighting, idle malfunction, defective drivability, etc, by air-blowing the sensor part of the air flow meter, it may return to normal without replacement. We recommend to check the procedure below.

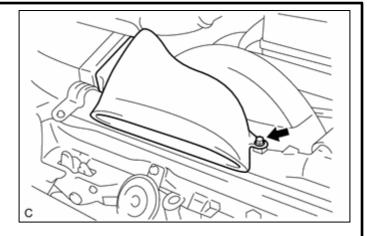
In addition, if the following diagnosis is shown, it will not recover even if the sensor part is air blowed, so please replace it. <Diagnosis Code>

P0110 : Intake air temperature sensor signal system abnormality.

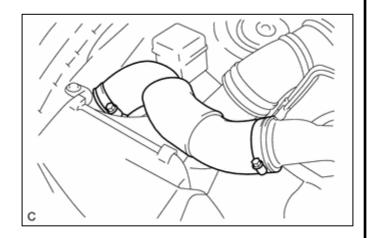
P0100 : Air flow meter signal system error. (air flow meter circuit damage)

Please check the electrical connection of the air flow meter and ECU connector, and the disconnection / short circuit of the wire harness.

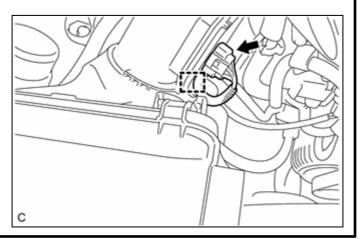
a. Remove the bolt and remove the air cleaner inlet.



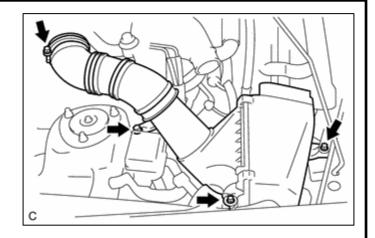
b. Loosen the two hose clamps and remove the air hose No. 1.



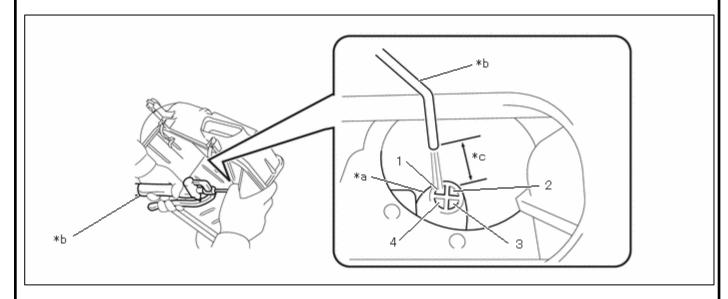
- c. Remove air cleaner assembly.
 - i. Separate the air flow meter connecter.



ii. Loosen the hose clamp and disconnect the air cleaner hose.



- iii. Remove the 3 bolts and remove the air cleaner assembly w/air cleaner hose.
- iv. Loosen the hose clamp and remove the air cleaner assembly.
- v. Remove the two clamps and remove the air cleaner cap SUB-ASSY.
- vi. Remove the air cleaner filter element SUB-ASSY.
- d. Air flow meter cleaning
 - vii. Using an air duster, blow air into holes 1 to 4 for about 3 seconds each as shown in the illustration, and perform the work of cleaning the air flow meter twice.
 - Caution
 - Use the air duster nozzle and air flow meter about 50 mm apart.
 - Do not use cleaning agents such as spray cleaners.

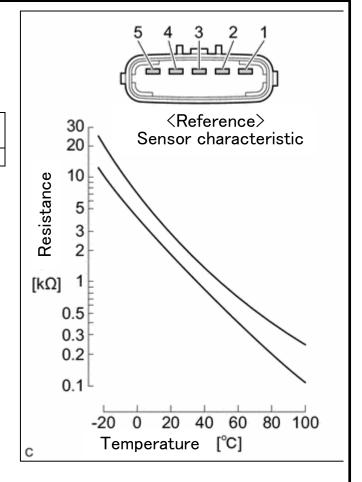


*a	Air flow meter	*b	Air duster
*c	About 50mm	-	-

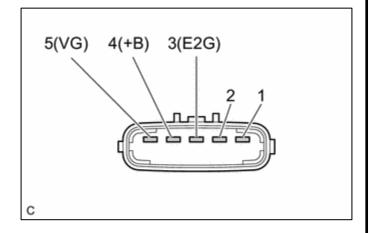
- e. Air flow meter inspection (intake air temperature sensor)
 - i. Measure the resistance between the terminals.

Resistance value:

Inspection terminal	Inspection condition	Standard value
1(THA) - 2(E2)	20° C	2.2 to 2.7 kΩ



- f. Air flow meter inspection (air flow meter section)
 - i. Connect the battery (+) to the 4 (+ B) terminal of the air flow meter and the battery (-) to the 3 (E2G) terminal.



ii. Measure the voltage between the 5 (VG) -3 (E2G) terminals when air is blown into the air flow meter.

Standard:

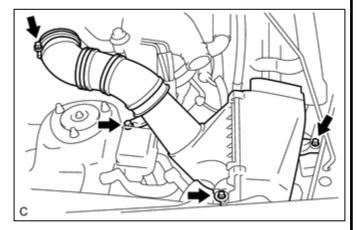
Voltage value change

- g. If the inspection results in (e) and (f) are outside the standard values, replace the air flow meter.
- h. Air cleaner assembly installation
 - i. Install the air cleaner filter element SUB-ASSY.
 - ii. Install the air cleaner cap SUB-ASSY.
 - iii. Attach the air cleaner hose to the air cleaner assembly.
 - iv. Tighten the hose clamp.

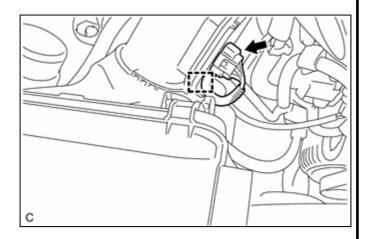
v. Install the air cleaner assembly $\ensuremath{w/}$ air cleaner hose with 3 bolts and hose clamp.

Torque:

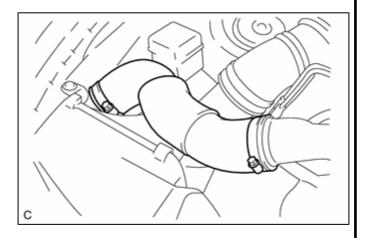
50 kg•cm



vi. Connect the connector of the air flow meter.



i. Attach air hose No. 1 with two hose clamps.



j. Install the air cleaner inlet with bolt.

Torque:

50 kg cm

