

# VOLUME AIR FLOW (VAF) METER ON-VEHICLE INSPECTION

### MEASURE RESISTANCE OF VOLUME AIR FLOW METER

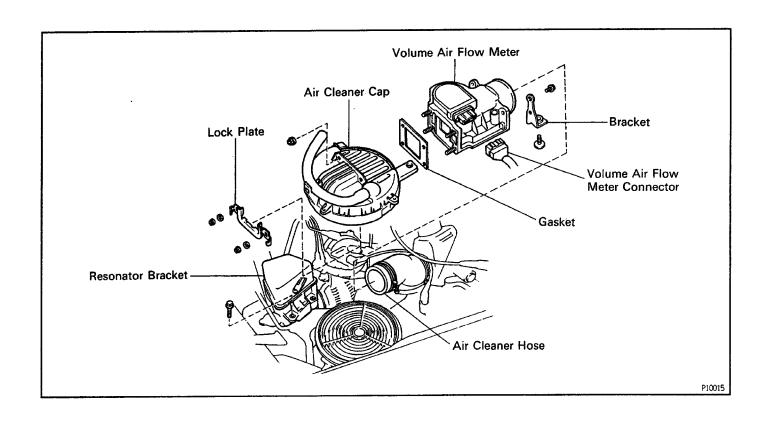
- (a) Disconnect the connector from the volume air flow meter.
- (b) Using an ohmmeter, measure the resistance between each terminal.

Between terminals	Resistance	Temperature
VS – e2	200-600C)	
VC – e2	200-400C)	<del>-</del>
THA – E2	10–20kΩ	−20°C (4°F)
THA – E2	4 –7kΩ	O° C (32°F)
THA – E2	2 –3kΩ	20°C (68°F)
THA – E2	0.9 – 1.3 kΩ	46°C (104° F)
THA – E2	0.4–0.7kΩ	60°C (140°F)
FC-E1	Infinity	_

If not within specification, replace the volume air flow meter.

(c) Reconnect the volume air flow meter connector.

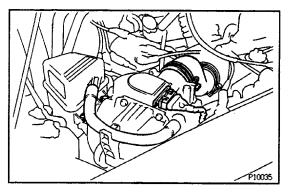
## COMPONENTS FOR REMOVAL AND INSTALLATION



#### VOLUME AIR FLOW METER REMOVAL

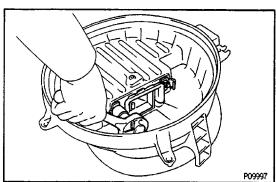
(See Components for Removal Installation)

1. DISCONNECT CABLE FROM NEGATIVE TERMINAL OF BATTERY

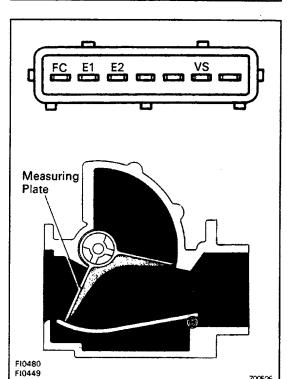


#### 2. DISCONNECT RESONATOR BRACKET

- (a) Disconnect the air hose.
- (b) Remove the two bolts and resonator bracket.
- 3. DISCONNECT VOLUME AIR FLOW METER CONNECTOR
- 4. DISCONNECT AIR CLEANER HOSE



- 5. REMOVE AIR CLEANER CAP WITH VOLUME AIR FLOW METER ASSEMBLY
- 6. REMOVE VOLUME AIR FLOW METER FROM AIR CLEANER CAP
- (a) Remove the bolt, two screws and bracket.
- (b) Pry oft the lock plate, and remove the four nuts and washers, lock plate, volume air flow meter and gasket.



# VOLUME AIR FLOW METER INSPECTION MEASURE RESISTANCE OF VOLUME AIR FLOW METER

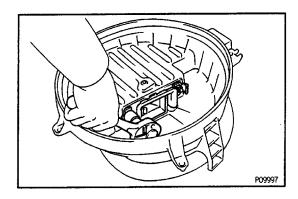
Using an ohmmeter, measure the resistance between each terminal by moving the measuring plate.

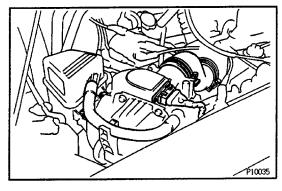
Between terminals	Resistance (Ω)	Measuring plate opening
E1 – FC	Infinity	Fully closed
E 1 – FC	Zero	Other than closed position
E2 – VS	200–600	Fully closed
E2 – VS	20-1,200	Fully open

HINT: Resistance between terminals E2 and VS will change in a wave pattern as the measuring plate slowly opens.

If not within specification, replace the volume air flow meter.







### VOLUME AIR FLOW METER INSTALLATION

(See Components for Removal and Installation)

- 1. INSTALL VOLUME AIR FLOW METER TO AIR CLEANER CAP
- (a) Install the volume air flow meter with the gasket, lock plate, washers and four nuts. Pry the lock plate on the nut.
- (b) Install the bracket with the bolt and two screws.
- 2. INSTALL AIR CLEANER CAP AND VOLUME AIR FLOW METER ASSEMBLY
- 3. INSTALL AIR CLEANER HOSE
- 4. CONNECT VOLUME AIR FLOW METER CONNECTOR
- 5. INSTALL RESONATOR BRACKET
- (a) Install the resonator bracket with the two bolts.
- (b) Connect the air hose.
- 6. CONNECT CABLE TO NEGATIVE TERMINAL OF BATTERY

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