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
E ₂ -Vs	20–400 Ω	-
E ₂ -Vc	100–300 Ω	-
E ₂ –V _B	200–400 Ω	-
E ₂ -THA	10–20 kΩ	−20°C (−4°F)
	4–7 kΩ	0°C (32°F)
	2–3 kΩ	20°C (68°F)
	0.9–1.3 kΩ	40°C (104°F)
	0.4–0.7 kΩ	60°C (140°F)
E ₁ –Fc	Infinity	-

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





VAF METER REMOVAL

- 1. DISCONNECT INTAKE AIR CONNECTOR
- 2. REMOVE AIR CLEANER CAP WITH VOLUME AIR FLOW METER
- (a) Disconnect the volume air flow meter connector.
- (b) Remove the air cleaner cap with volume air flow meter.
- 3. REMOVE VOLUME AIR FLOW METER

Remove the bolt, 4 nuts, washers, volume air flow meter and gasket.

VAF METER INSPECTION

MEASURE RESISTANCE OF VAF METER

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

Between Terminals	Resistance (Ω)	Measuring plate opening
E ₁ –Fc	Infinity	Fully closed
	Zero	Other than closed position
E ₂ -Vs	20-400	Fully closed
	20–1,000	Fully open

HINT: Resistance between terminals E_2 and Vs will change in a wave pattern as the measuring plate slowly opens.

VAF METER INSTALLATION

- 1. INSTALL VOLUME AIR FLOW METER Install the gasket, volume air flow meter, washers, nuts and bolt. Torque the nuts and bolt.
- 2. INSTALL AIR CLEANER CAP WITH VAF METER
- (a) Install the air cleaner cap with VAF meter to the air cleaner case.
- (b) Connect the VAF meter connector.
- 3. INSTALL INTAKE AIR CONNECTOR