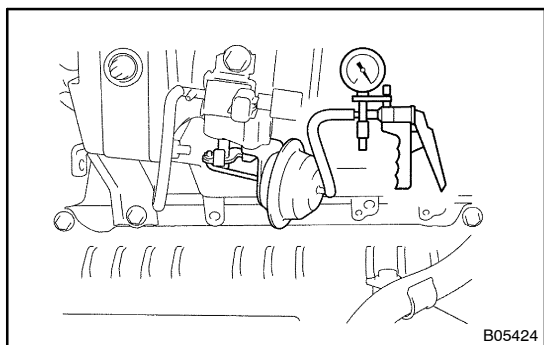


INTAKE SHUTTER (1HD-FTE) ON-VEHICLE INSPECTION

EM0W8-01

1. INSPECT INTAKE SHUTTER

- (a) Check that the intake shutter linkage moves smoothly.



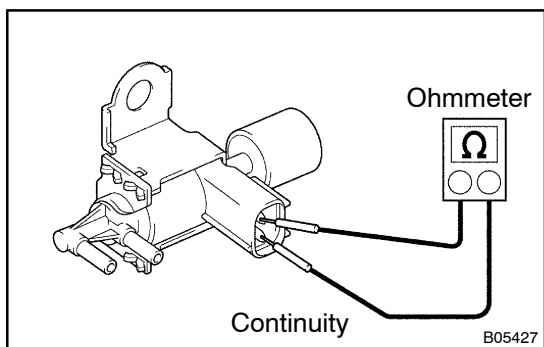
- (b) Check that the diaphragm rod is pulled up when a vacuum of approx. 60 kPa (450 mmHg, 17.72 in.Hg) is applied to the actuator.
- (c) Apply approx. 60 kPa (450 mmHg, 17.72 in.Hg) of vacuum directly to the actuator with the engine idling.
- (d) Check that the engine runs rough or dies.

NOTICE:

Connect the actuator vacuum hose.

- (e) Reconnect the hoses to the proper locations.

2. REMOVE VSV FOR INTAKE SHUTTER

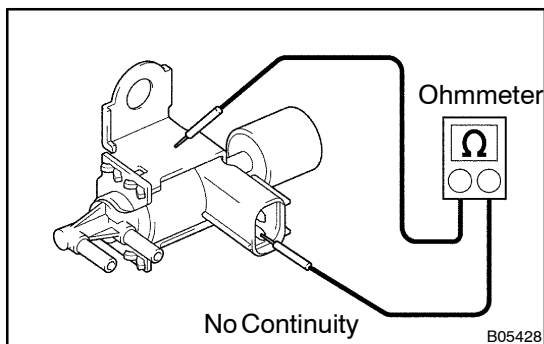


3. INSPECT VSV FOR OPEN CIRCUIT

Using an ohmmeter, measure the resistance between the terminals.

Resistance: 33 – 39 Ω at 20 °C (68 °F)

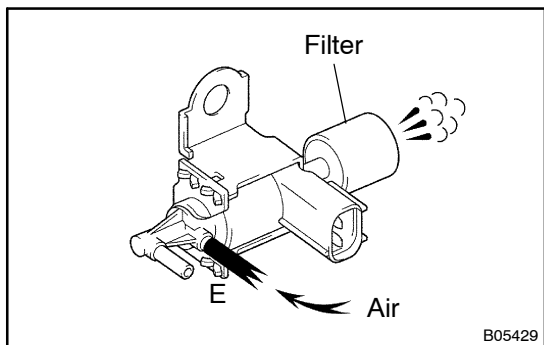
If the resistance is not within specification, replace the VSV.



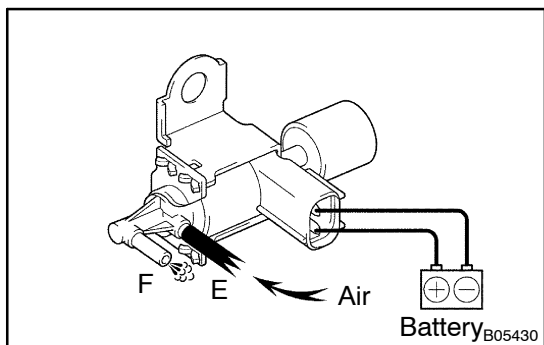
4. INSPECT VSV FOR GROUND

Using an ohmmeter, check that there is no continuity between the terminals and VSV body.

If there is continuity, replace the VSV.

**5. INSPECT VSV OPERATION**

- (a) Check that air flows from port E to the filter.



- (b) Apply battery voltage across the terminals.

- (c) Check that air flows from port E to F.

If operation is not as specified, replace the VSV.