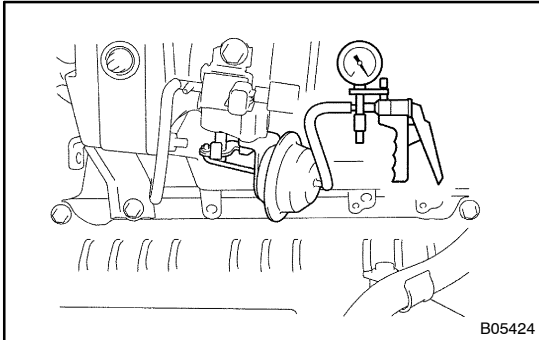


## INTAKE SHUTTER (1HD-FTE) ON-VEHICLE INSPECTION

EM0W8-01

### 1. INSPECT INTAKE SHUTTER

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



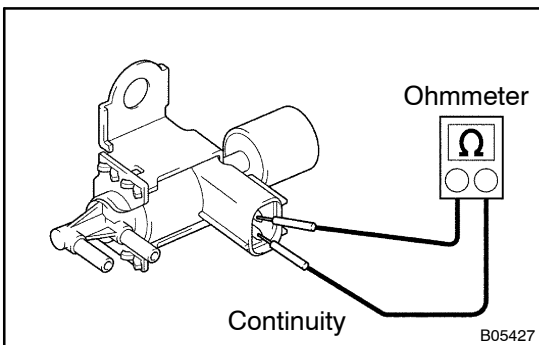
- (b) Check that the diaphragm rod is pulled up when a vacuum of approx. 60 kPa (450 mmHg, 17.72 in.Hg) is applied to the actuator.
- (c) Apply approx. 60 kPa (450 mmHg, 17.72 in.Hg) of vacuum directly to the actuator with the engine idling.
- (d) Check that the engine runs rough or dies.

#### NOTICE:

**Connect the actuator vacuum hose.**

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

### 2. REMOVE VSV FOR INTAKE SHUTTER

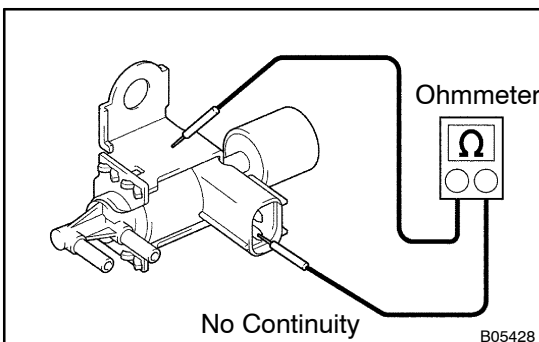


### 3. INSPECT VSV FOR OPEN CIRCUIT

Using an ohmmeter, measure the resistance between the terminals.

**Resistance: 33 – 39  $\Omega$  at 20°C (68°F)**

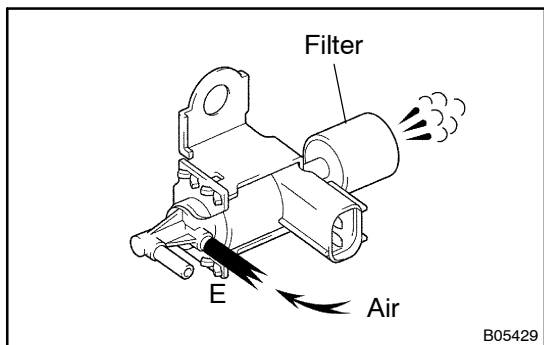
If the resistance is not within specification, replace the VSV.



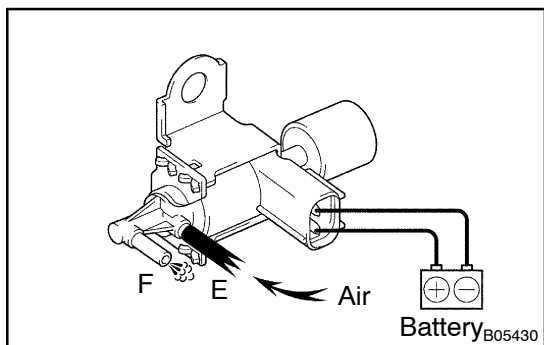
### 4. INSPECT VSV FOR GROUND

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.