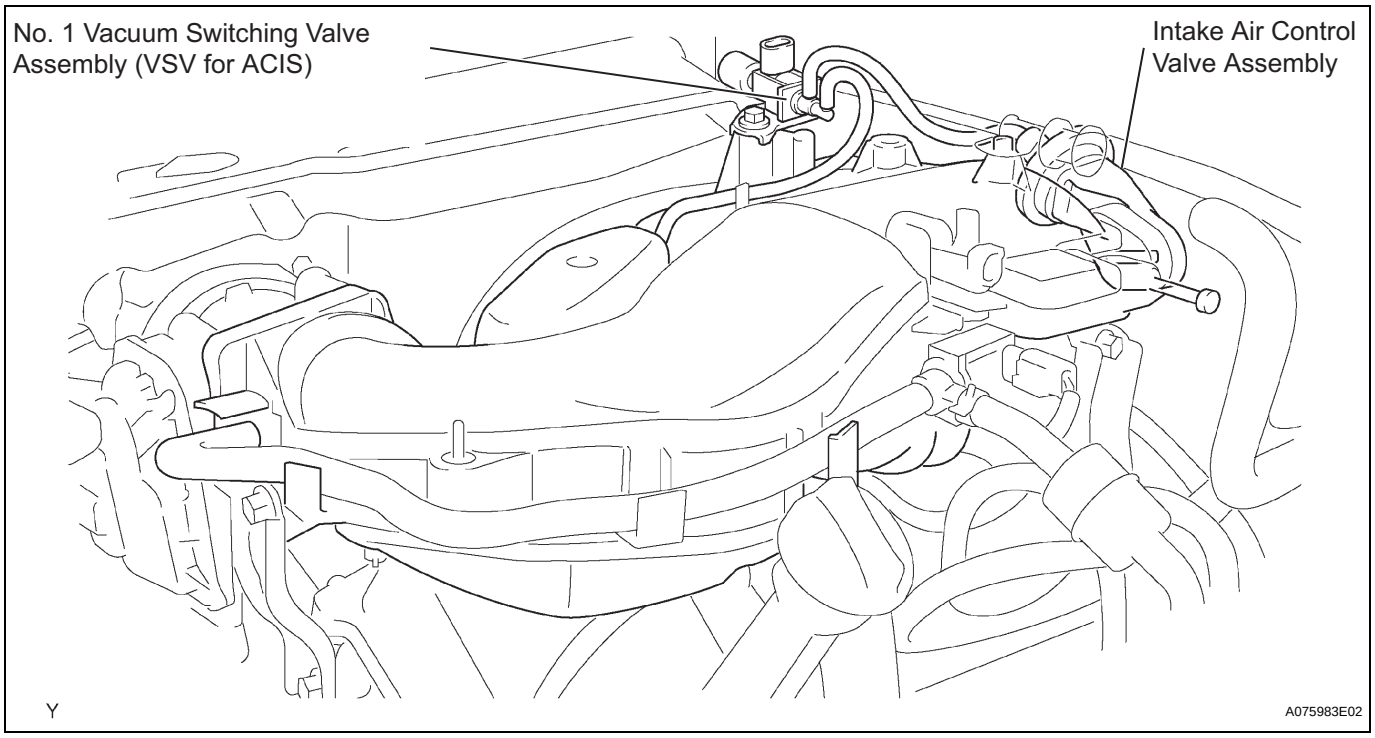
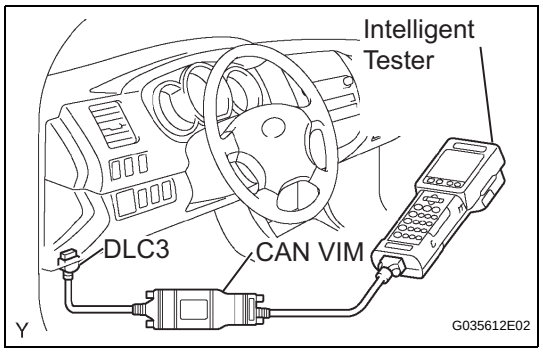
ON-VEHICLE INSPECTION

1. INSPECT INTAKE AIR CONTROL FUNCTION



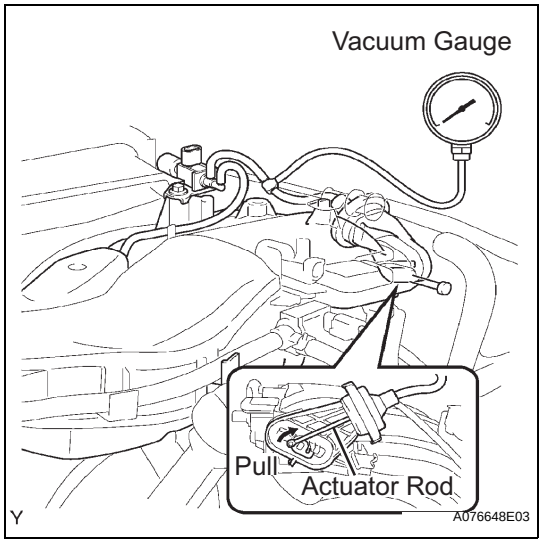
(a) Remove the V-bank cover.
(b) Warm up the engine.
(c) Turn the ignition switch to OFF.



(d) Connect the intelligent tester to the DLC3.
(e) Start the engine and allow it to idle.
(f) Turn the intelligent tester ON.
(g) Select the following menu items: DIAGNOSIS / ENHANCED OBD II / ACTIVE TEST / INTAKE CTL VSV1 / ON.
    (1) Check that the intake air control valve is pulled out.
    If the intake air control valve does not operate, replace the VSV for ACIS or intake air surge tank.
(h) Select the following menu items: DIAGNOSIS / ENHANCED OBD II / ACTIVE TEST / INTAKE CTL VSV1 / OFF.
    (1) Check that the intake air control valve is returned to its original position.
    If the intake air control valve does not operate, replace the VSV for ACIS or intake air surge tank.

(i) Select the following menu items: DIAGNOSIS / ENHANCED OBD II / DATA LIST / ENGINE SPD, THROTTLE POS, INTAKE CTL VSV1, and INTAKE CTL VSV2.
   (1) When depressing the accelerator pedal to the 60 % accelerator opening angle and running the engine at a speed of 2,200 to 4,100 rpm, check that the VSV is ON.
   If the intake air control valve does not operate, replace the Vacuum Switching Valve No. 1.

(j) Release the accelerator pedal when in the condition in step (1) or when the engine is idling, and check that the VSV is OFF.
If the intake air control valve does not operate, replace the Vacuum Switching Valve No. 1.



2. INSPECT INTAKE AIR CONTROL VALVE

(a) Remove the V-bank cover.
(b) Using a 3-way connector, connect a vacuum gauge to the actuator hose.
(c) Start the engine.
(d) While the engine is idling, check that the vacuum gauge needle momentarily fluctuates up to approximately. 39.9 kPa (300 mmHg, 11.8 in.Hg). (The actuator rod is pulled out.)
If the intake air control valve does not operate, replace the intake air surge tank.
(e) Rapidly depress the accelerator pedal to the fully open position and check that the vacuum gauge needle points to 0 kPa (0 mmHg, 0 in.Hg). (The actuator rod is returned to its original position.)
If the intake air control valve does not operate, replace the intake air surge tank.

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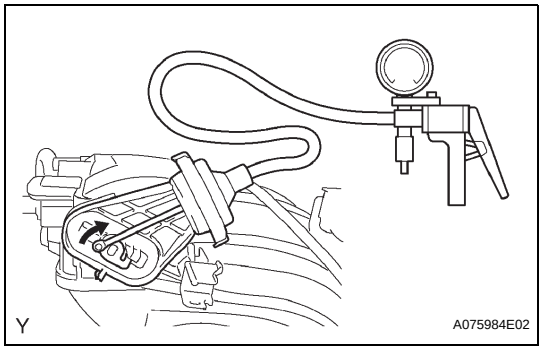
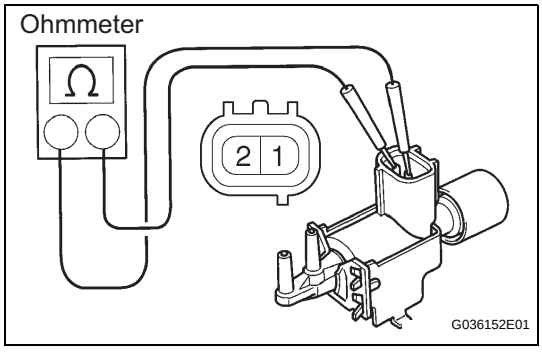


INSPECTION

1. INSPECT INTAKE AIR SURGE TANK

(a) Inspect the diaphragm.
   (1) Check that the lever moves when a vacuum of 26.6 kPa (200 mmHg) is applied with the Vacuum gage on.
   (2) Check that the vacuum of 26.6 kPa (200 mmHg) is sustained for 1 minute in the above state.

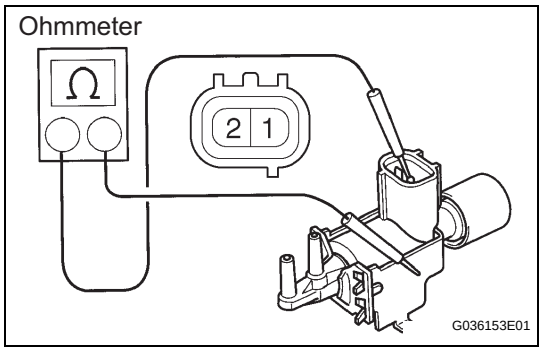


2. INSPECT NO. 1 VACUUM SWITCHING VALVE ASSEMBLY

(a) Check the resistance.
   (1) Using an ohmmeter, measure the resistance between the terminals.
   Standard

Tester Connection	Specified Condition
1 - 2	37 to 44 Ω at 20°C (68°F)

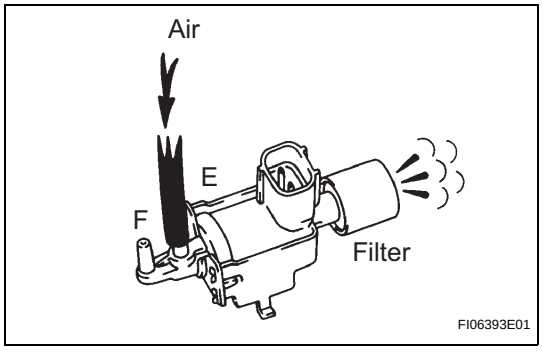
If the result is not as specified, replace the vacuum switching valve No. 1.



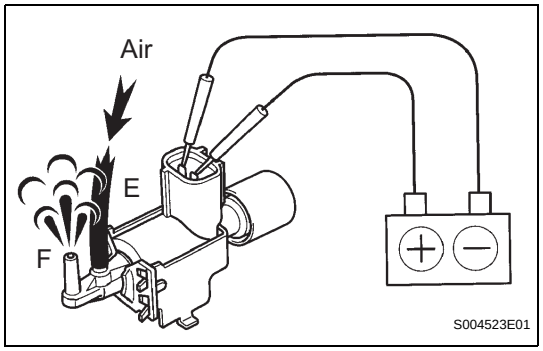
(b) Check the vacuum switching valve No. 1 for ground.
(1) Using an ohmmeter, measure the resistance between each terminal and the body.
Standard

Tester Connection	Specified Condition
1 - Body	10 kΩ or higher
2 - Body	10 kΩ or higher

If the result is not as specified, replace the vacuum switching valve No. 1.



(c) Check the operation.
(1) Check that air does not flow from port E to port F.
If the operation is not as specified, replace the vacuum switching valve No. 1.



(2) Apply battery voltage across the terminals.
(3) Check that air flows from port E to port F.
If the operation is not as specified, replace the vacuum switching valve No. 1.