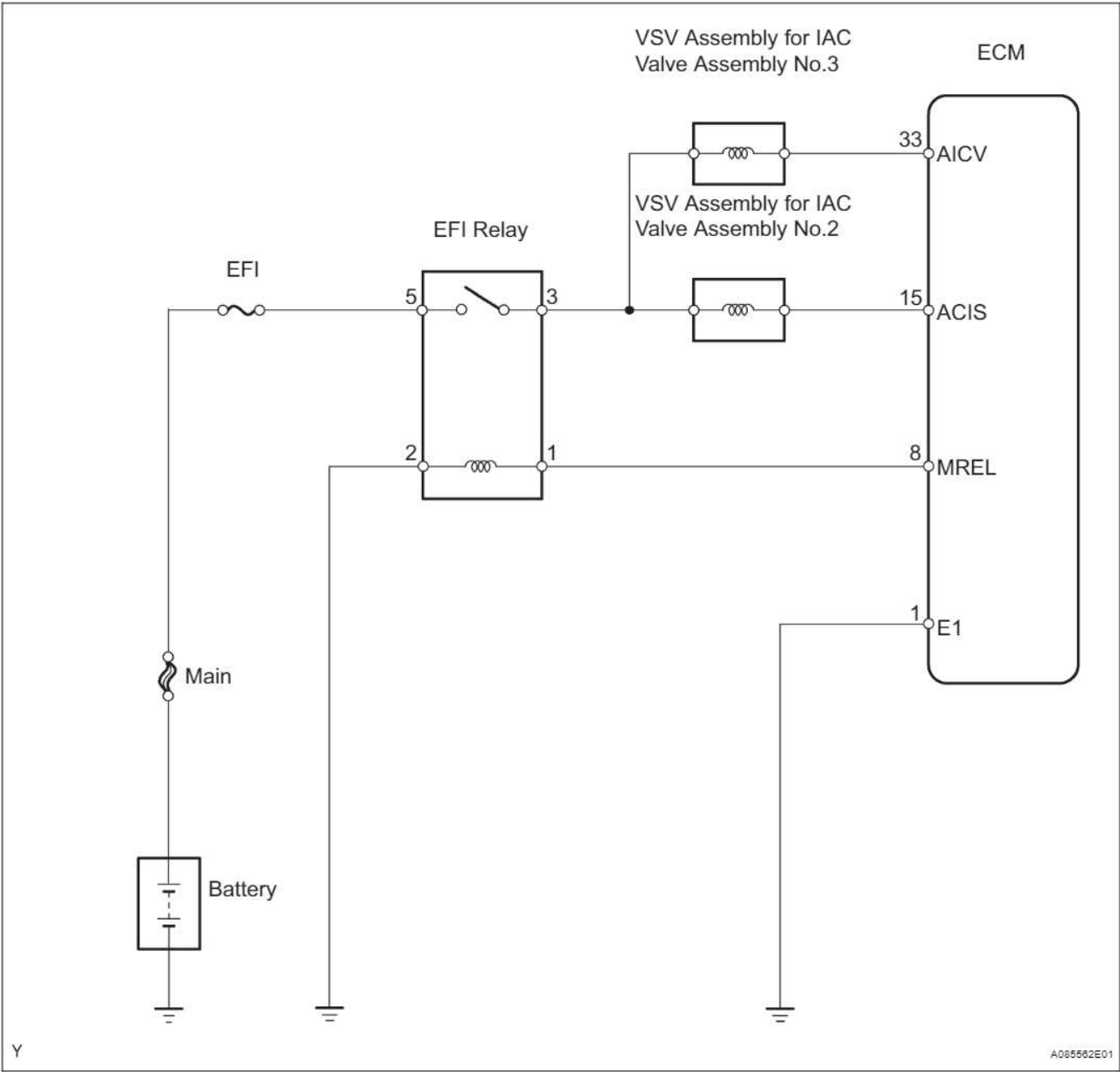
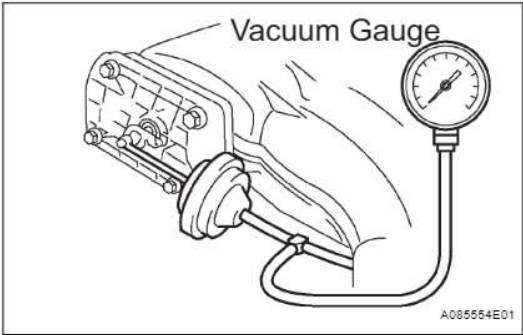


3MZ-FE INTAKE – INTAKE AIR CONTROL SYSTEM

IT-3



IT



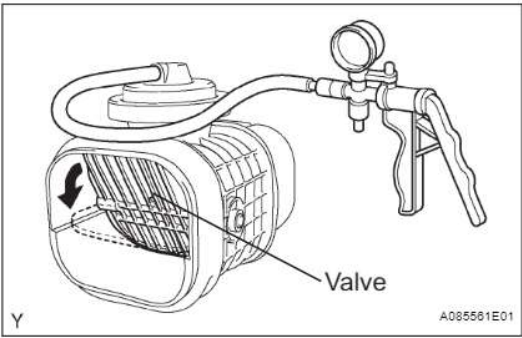
ON-VEHICLE INSPECTION

1. INSPECT INTAKE AIR CONTROL SYSTEM

- (a) Using a 3-way connector, connect vacuum gauge to the actuator hose.
- (b) Connect the intelligent tester to the DLC3.
- (c) Start the engine.
- (d) On the intelligent tester, enter the ACTIVE TEST mode.

Standard

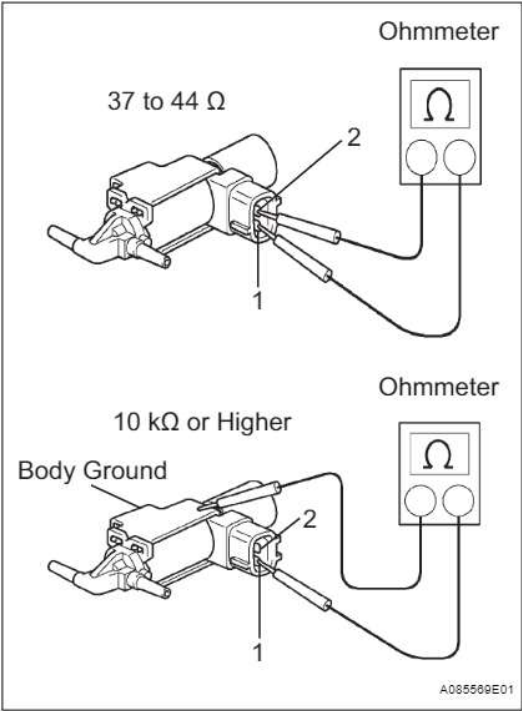
Switch Condition	Switch Condition
VSV ON	Approx. 27.6 kPa (200 mmHg, 7.9 in.Hg)
VSV OFF	0 kPa (0 mmHg, 0 in.Hg)



INSPECTION

1. INSPECT INTAKE AIR CONTROL VALVE ASSEMBLY NO.3

- (a) Apply 26.7 kPa (200 mmHg, 7.9 in.Hg) of vacuum to the actuator. Check if the valve rotates open, as shown in the illustration.
- (b) Apply the vacuum for 1 minute. The actuator should continue to be keeping the valve open. If the result is not as specified, replace the IAC valve assembly No. 3.

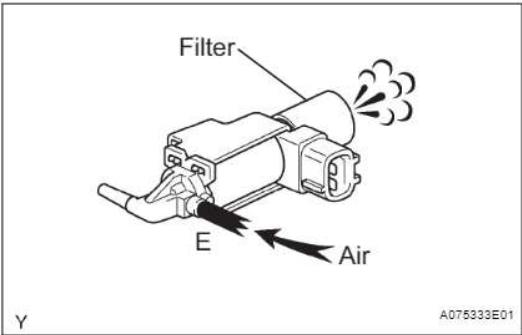


2. INSPECT VACUUM SWITCHING VALVE FOR IAC VALVE ASSEMBLY NO.3

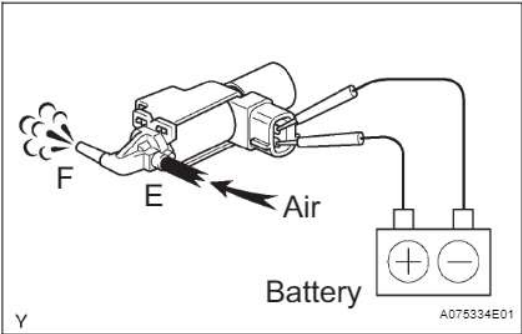
- (a) Check the VSV resistance.
Resistance

Tester Connection	Specified Condition
1 - 2	37 to 44 Ω at 20°C (68°F)
1 - Body ground 2 - Body ground	10 kΩ or higher

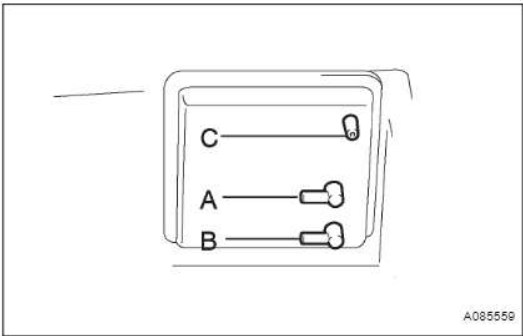
If the result is not as specified, replace the VSV assembly No. 3.



- (b) Check VSV operation.
(1) Check that air flows from port E to the filter.

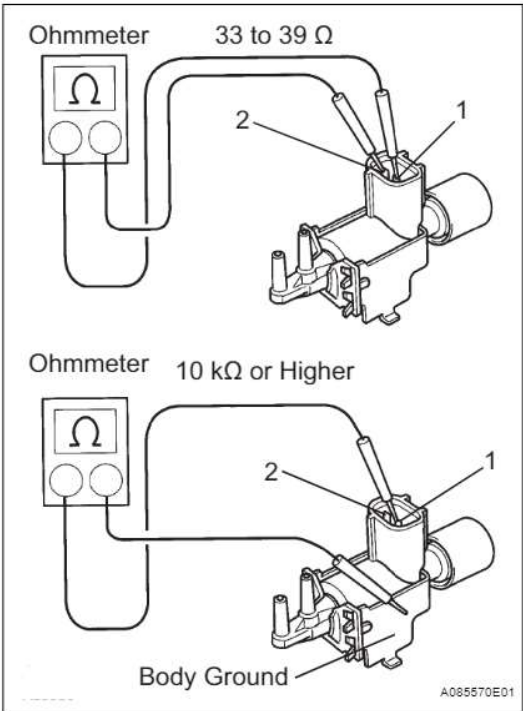


- (2) Apply battery voltage across the terminals. Check that air flows from port E to port F. If the result is not as specified, replace the VSV assembly No. 3.



3. INSPECT AIR CLEANER CAP SUB-ASSEMBLY

- (a) Cover port C with your finger, and check that air flows from port B to port A.
- (b) Cover port C with your finger, and check that air does not flow from port A to port B.
- (c) Cover ports A and C with your fingers, and apply 60 kPa (450 mmHg, 18 in.Hg) of vacuum to port B for 1 minute. Check that there is no change in the vacuum after 1 minute. If the result is not as specified, replace the air cleaner cap.



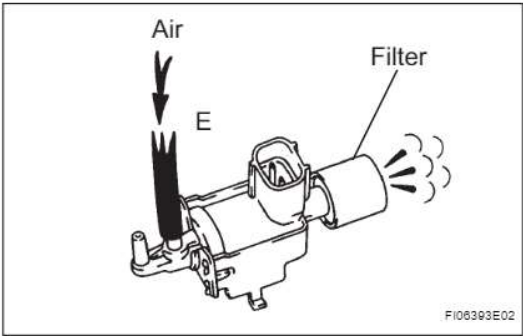
4. INSPECT VACUUM SWITCHING VALVE FOR IAC VALVE ASSEMBLY NO.2

- (a) Check the VSV resistance.

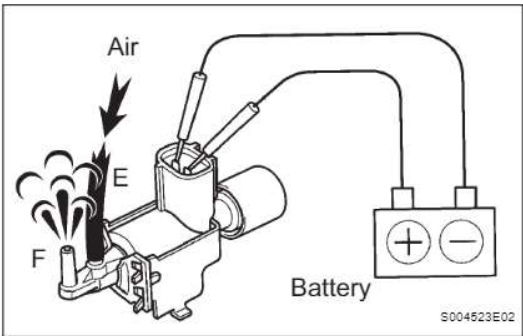
Resistance

Tester Connection	Specified Condition
1 - 2	33 to 39 Ω at 20°C (68°F)
1 - Body ground 2 - Body ground	10 kΩ or higher

If the result is not as specified, replace the VSV assembly.

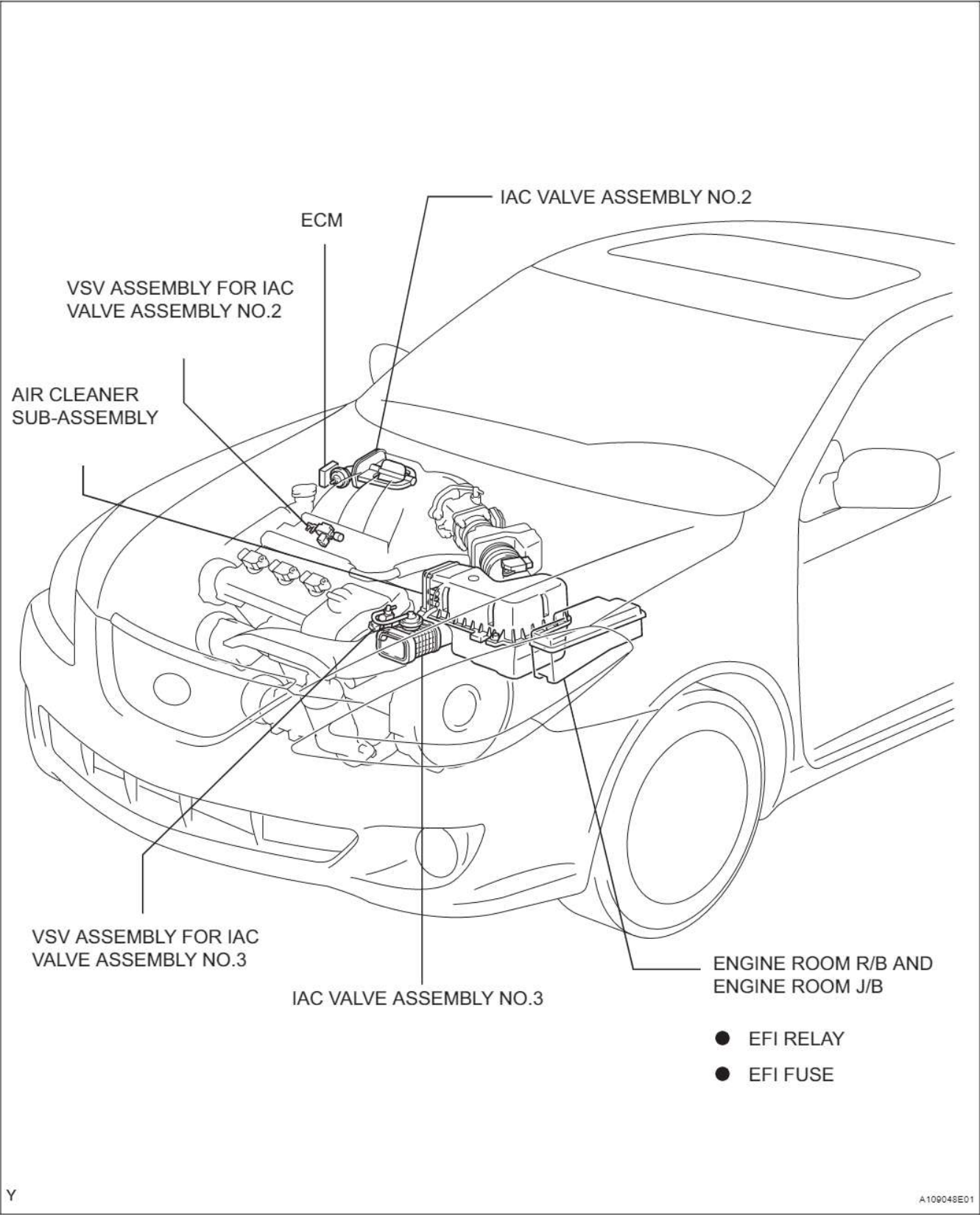


- (b) Check VSV operation.
 - (1) Check that air flows from port E to the filter.



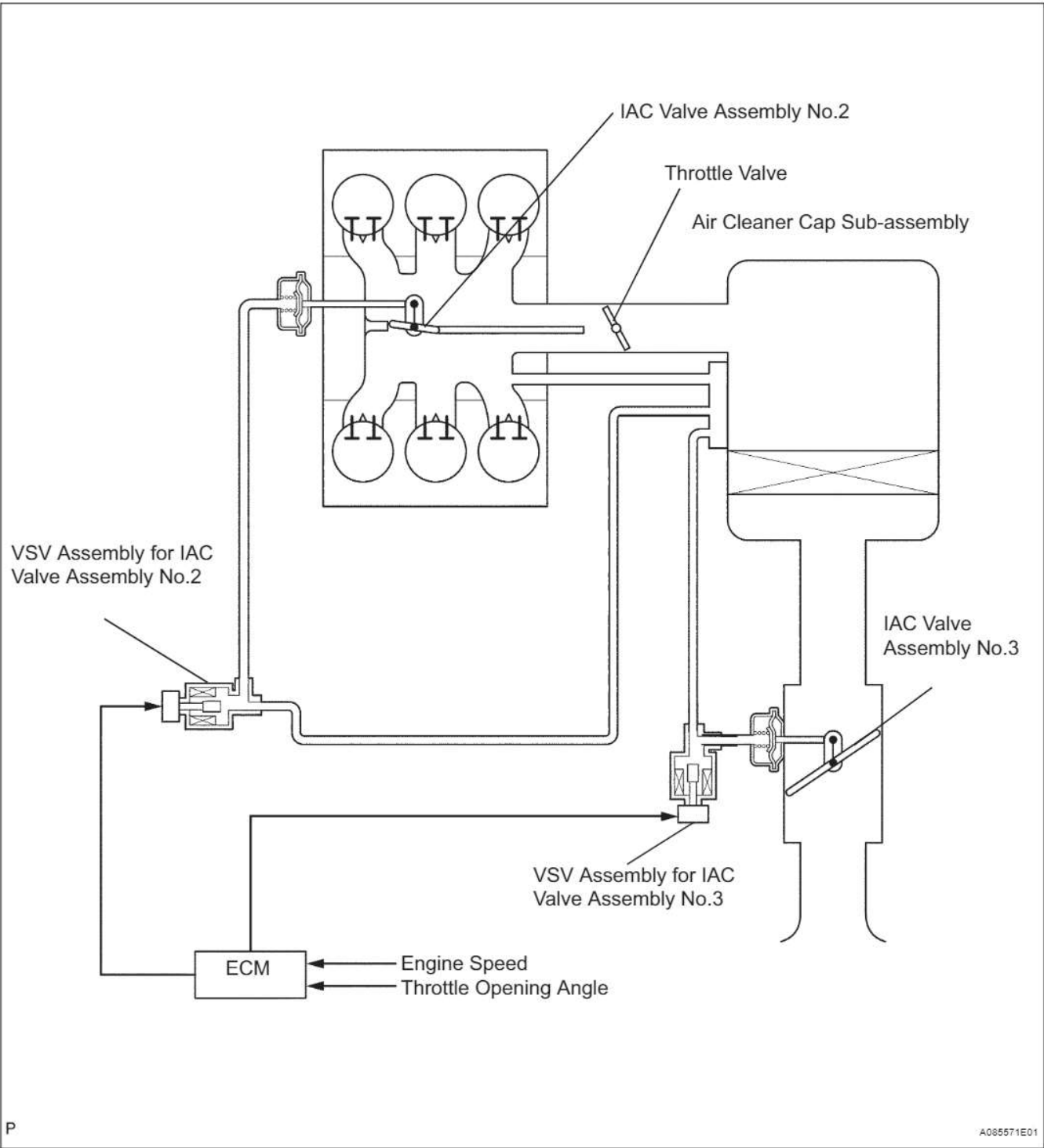
- (2) Apply battery voltage across the terminals.
 - (3) Check that air flows from port E to port F. If the result is not as specified, replace the VSV assembly.

INTAKE AIR CONTROL SYSTEM
PARTS LOCATION



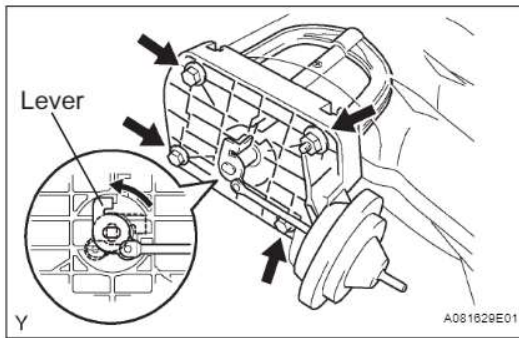
IT

SYSTEM DIAGRAM



IT-6

3MZ-FE INTAKE – INTAKE AIR CONTROL VALVE

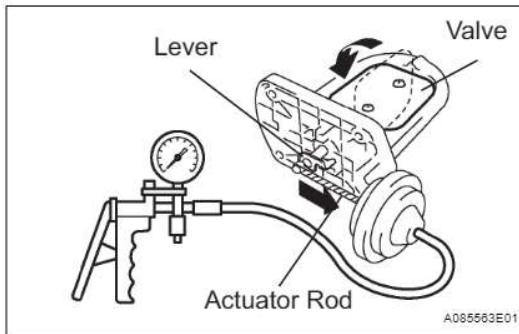


INTAKE AIR CONTROL VALVE

REMOVAL

1. REMOVE INTAKE AIR CONTROL VALVE ASSEMBLY NO.2

- (a) Remove the 3 bolts and nut.
- (b) Rotate the lever to the closed position as shown in the illustration and pull out the IAC valve.
- (c) Remove the gasket from the intake air surge tank.



INSPECTION

1. INSPECT INTAKE AIR CONTROL VALVE ASSEMBLY NO.3

- (a) Apply 26.7 kPa (200 mmHg, 7.9 in.Hg) of vacuum to the actuator. Check if the actuator rod pulls the lever and causes the valve to rotate open, as shown in the illustration.
- (b) Apply the vacuum for 1 minute. Check that the actuator rod does not return.
If the result is not as specified, replace the IAC valve assy No. 2.

INSTALLATION

1. INSTALL INTAKE AIR CONTROL VALVE ASSEMBLY NO.2

- (a) Install a new gasket to the intake air surge tank.
- (b) Install the IAC valve with the 3 bolts and nut.

Torque: 10 N*m (102 kgf*cm, 7 ft.*lbf)