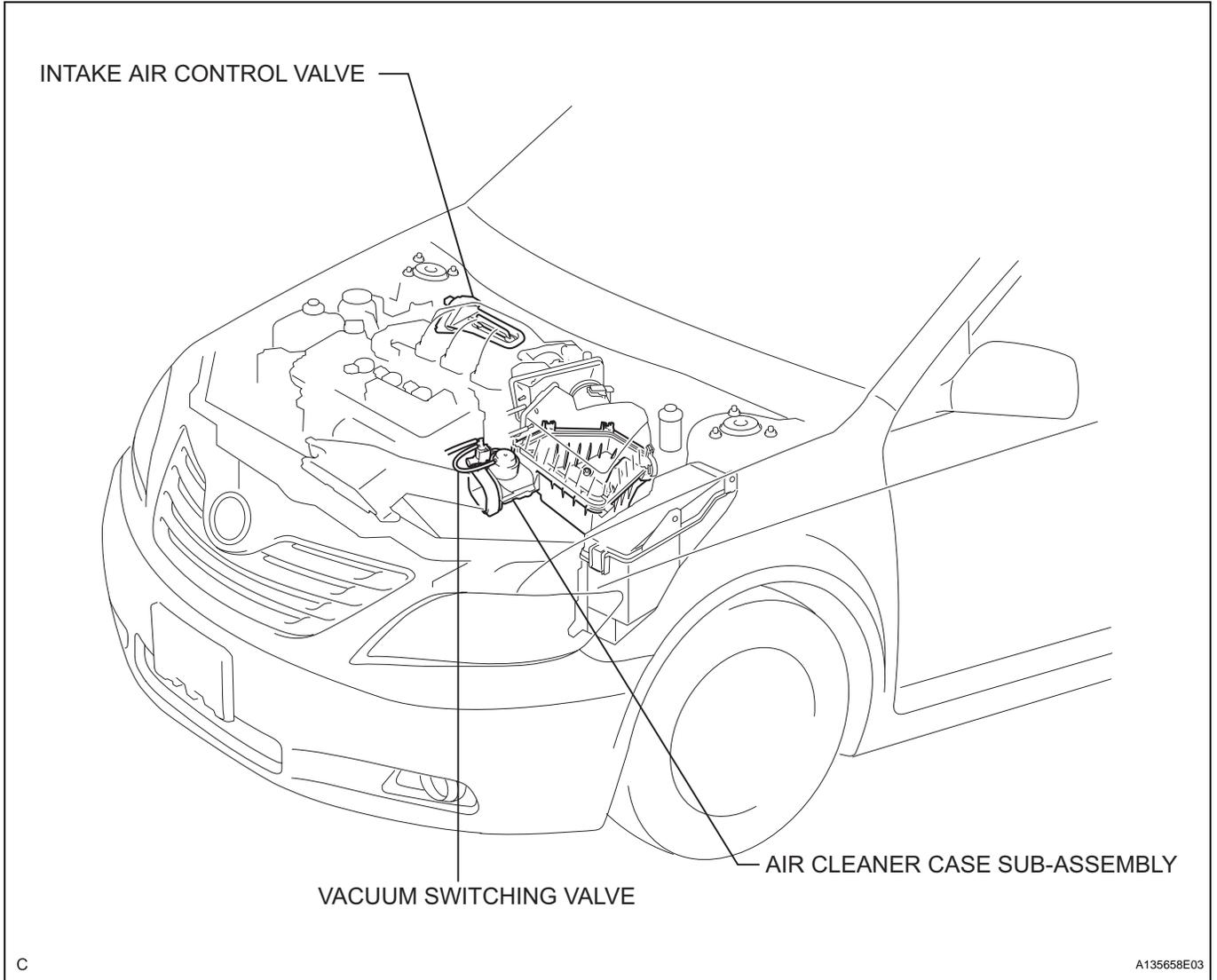
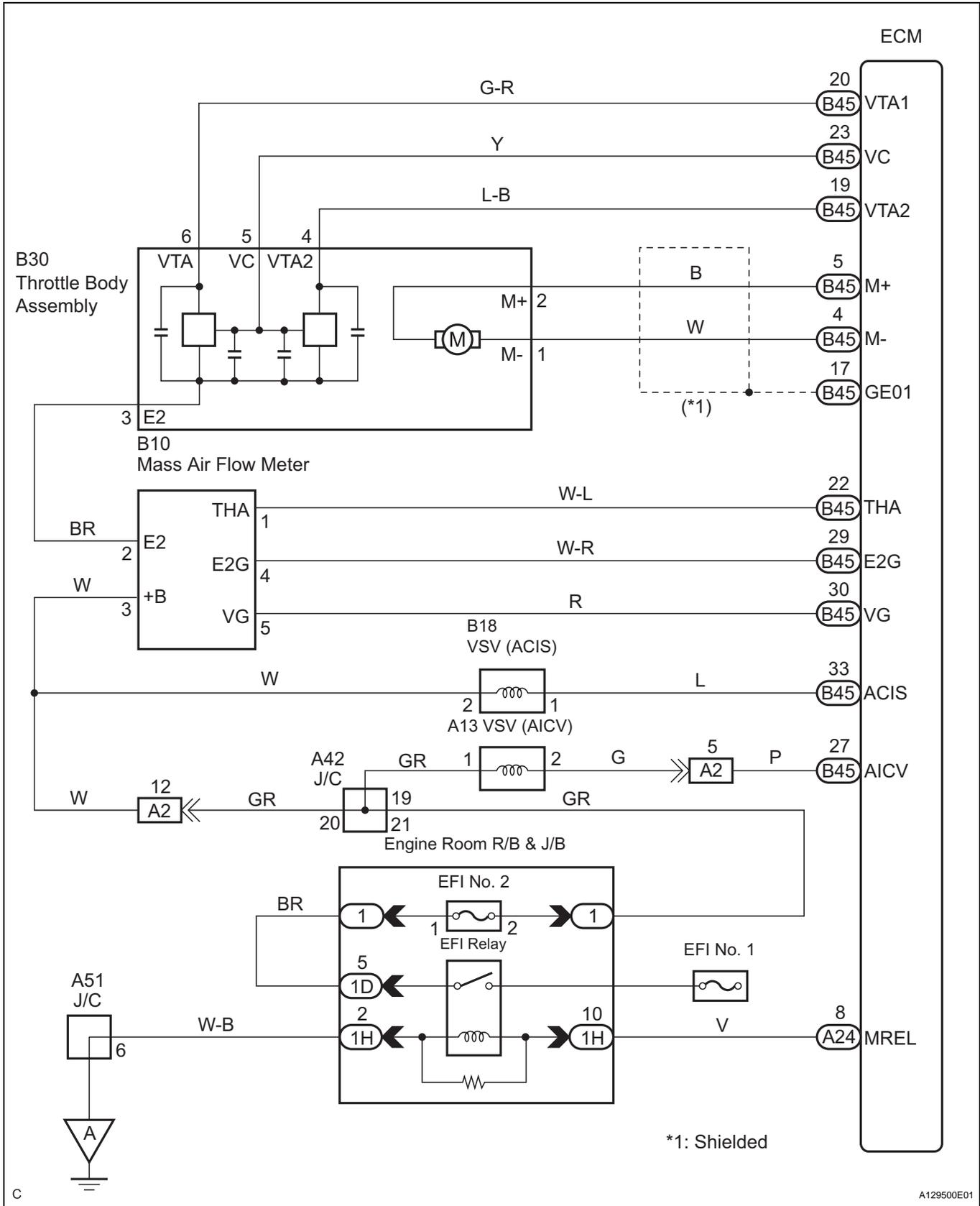


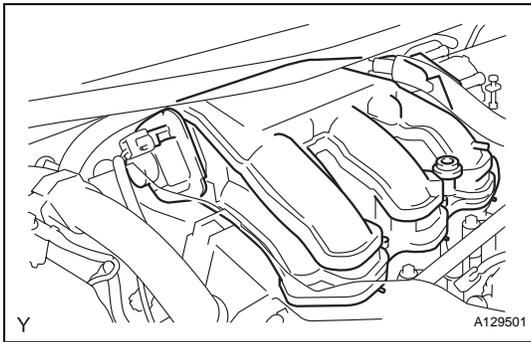
# INTAKE AIR CONTROL SYSTEM

## PARTS LOCATION



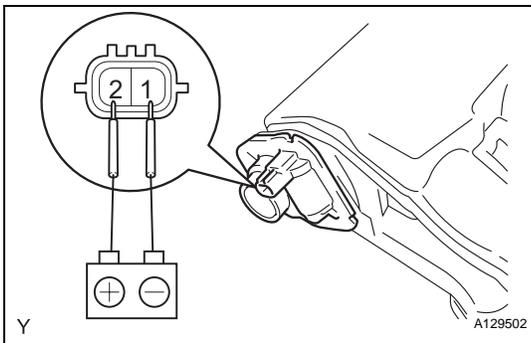
# SYSTEM DIAGRAM





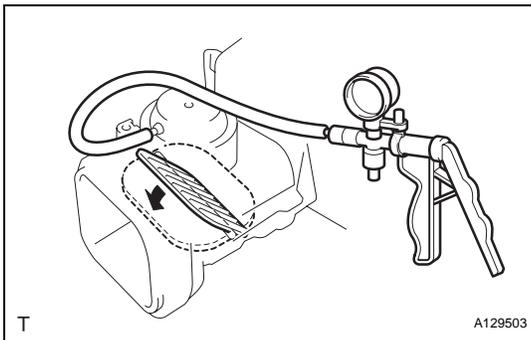
## ON-VEHICLE INSPECTION

1. **INSPECT INTAKE AIR CONTROL VALVE ASSEMBLY**
  - (a) Inspection procedure when using the intelligent tester:
    - (1) Warm up the engine.
    - (2) Stop the engine.
    - (3) Connect the intelligent tester to the DLC3.
    - (4) Turn the ignition switch on (IG).
    - (5) Turn the tester on.
    - (6) Select the following menu items: DIAGNOSIS / ENHANCED OBD II / ACTIVE TEST / INTAKE CTL VSV1. Press the right or left button.
    - (7) Make sure that a clicking sound is heard from the intake air control valve when current flows. If the result is not as specified, replace the intake air surge tank.



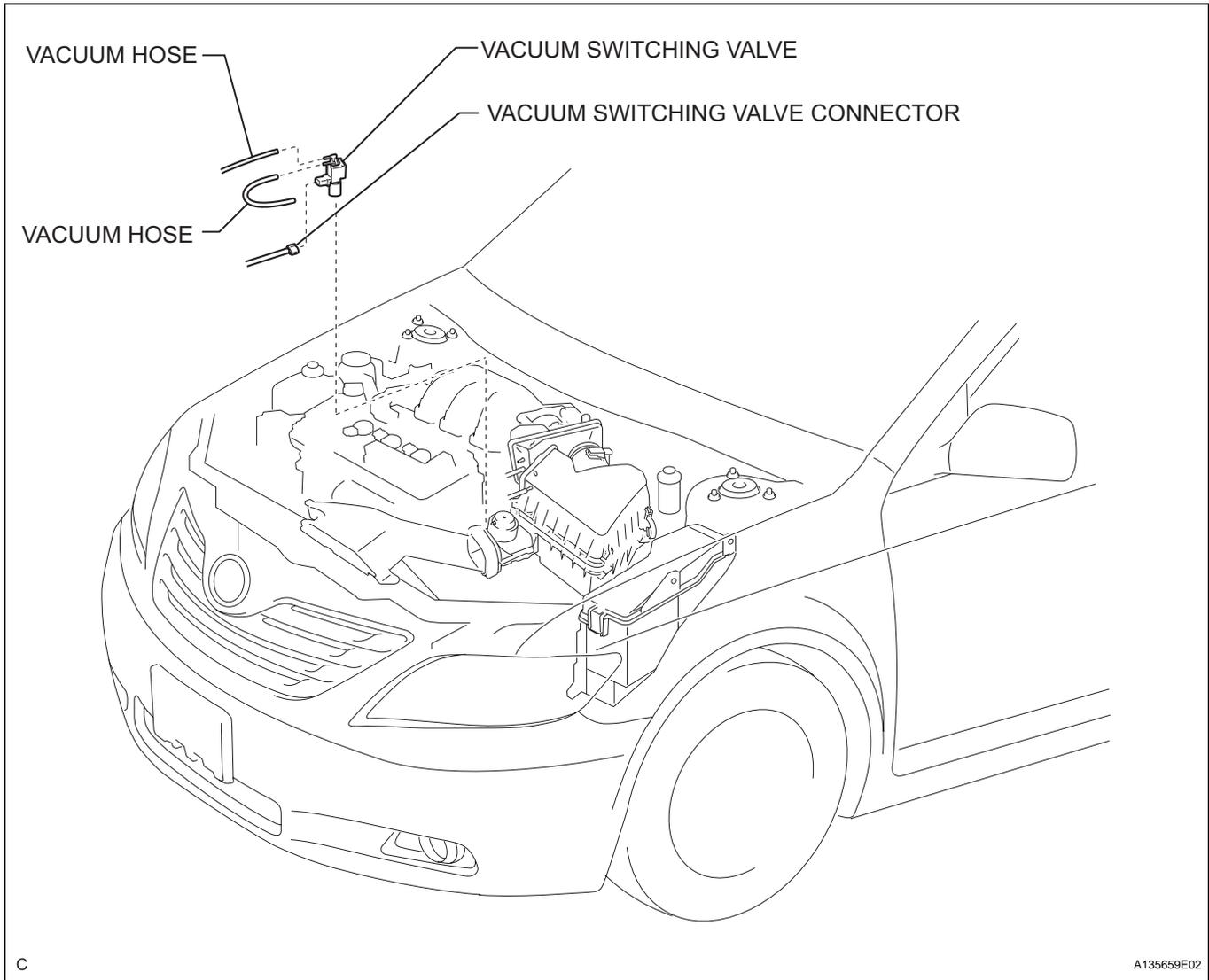
## INSPECTION

1. **INSPECT INTAKE AIR CONTROL VALVE**
  - (a) Inspection procedure when applying voltage between the terminals:
    - (1) Disconnect the connector from the intake air control valve.
    - (2) Apply battery voltage between terminals 1 (-) and 2 (+) of the intake air control valve. Check that a clicking sound is heard from the intake air control valve. If the result is not as specified, replace the intake air surge tank.
2. **INSPECT AIR CLEANER ASSEMBLY**
  - (a) Apply 26.6 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 vacuum for 1 minute. The actuator should continue to keep the valve open. If the result is not as specified, replace the air cleaner assembly.



# VACUUM SWITCHING VALVE

## COMPONENTS

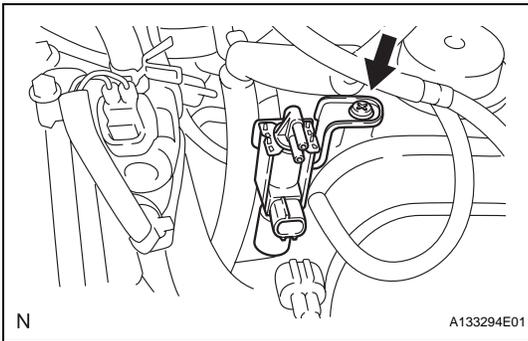


IT

## REMOVAL

### 1. REMOVE VACUUM SWITCHING VALVE

- Remove the 2 vacuum hoses and vacuum switching valve connector.
- Remove the screw and vacuum switching valve.



## INSPECTION

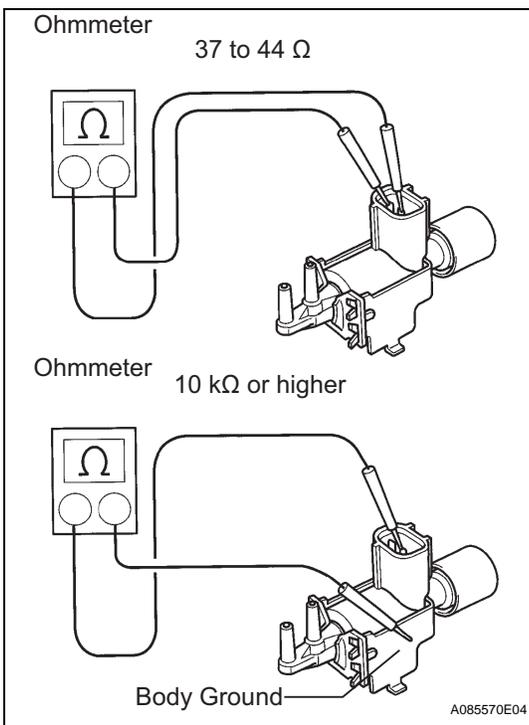
### 1. INSPECT VACUUM SWITCHING VALVE

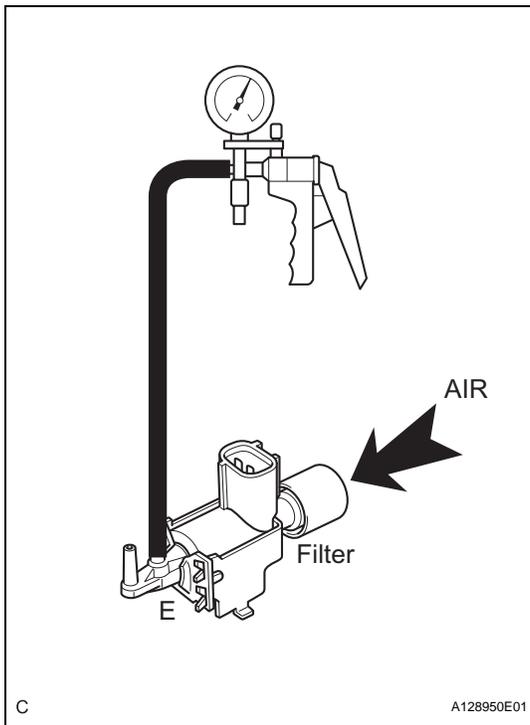
- Measure the VSV resistance.

#### Standard resistance

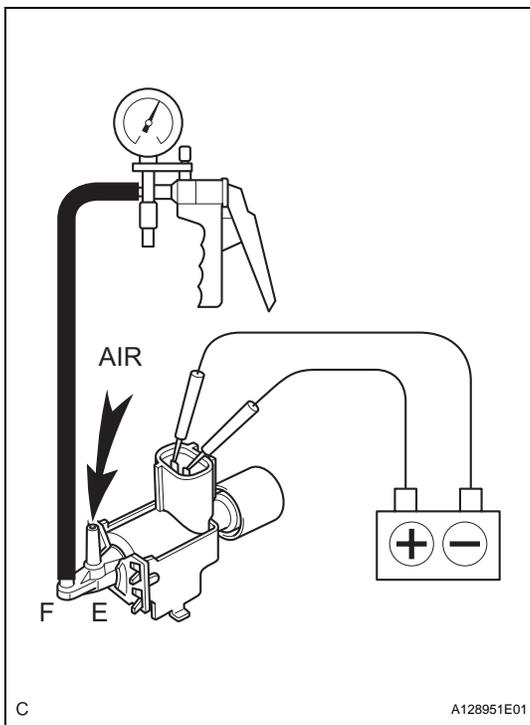
Tester Connection	Specified Condition
1-2	37 to 44 $\Omega$ at 20 °C (68°F)
1 - Body ground 2 - Body ground	10 k $\Omega$ or higher

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

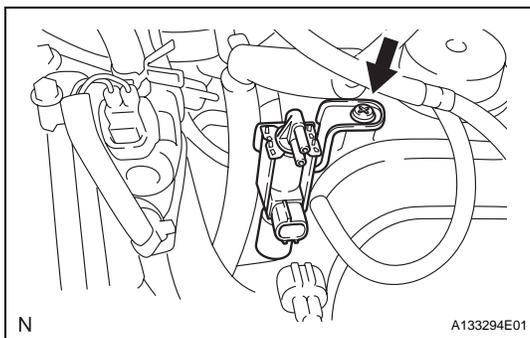




- (b) Check VSV operation.
- (1) When vacuum is applied to the E port, check that air is sucked into the filter.  
If the result is not as specified, replace the VSV.



- (2) Apply battery voltage across the terminals.  
When vacuum is applied to the F port, check that air is sucked into the E port.  
If the result is not as specified, replace the VSV.



## INSTALLATION

1. REMOVE VACUUM SWITCHING VALVE
  - (a) Install the vacuum switching valve with the screw.
  - (b) Install the 2 vacuum hoses and vacuum switching valve.