# INTAKE AIR CONTROL SYSTEM

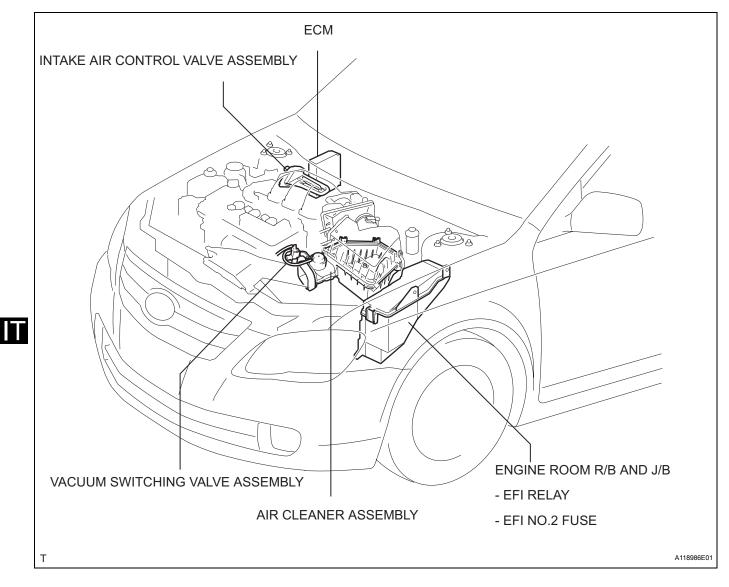
# PRECAUTION

#### 1. EXPRESSIONS OF IGNITION SWITCH

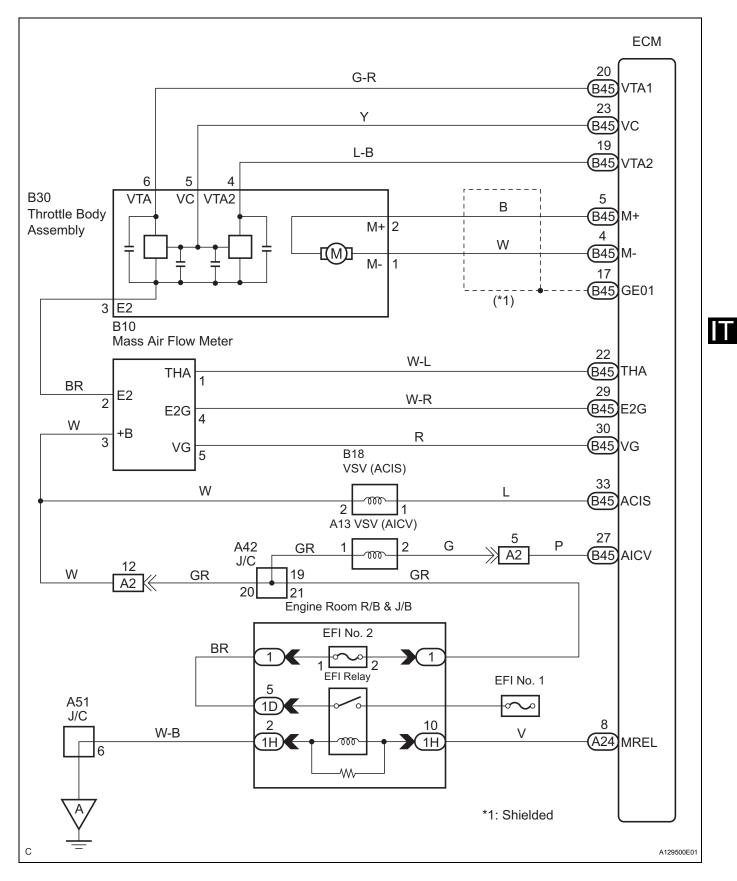
The type of ignition switch used on this model differs according to the specifications of the vehicle. The expressions listed in the table below are used in this section.

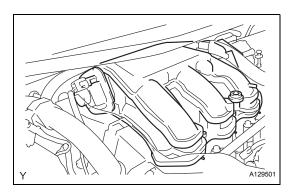
Switch Type		Ignition Switch (position)	Engine Switch (condition)
Expression	Ignition Switch off	LOCK	Off
	Ignition Switch on (IG)	ON	On (IG)
	Ignition Switch on (ACC)	ACC	On (ACC)
	Engine Start	START	Start

## 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.
  - 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 intake air surge tank.

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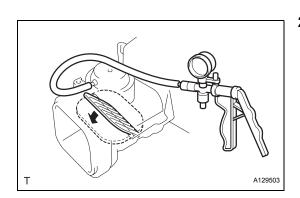
**INSPECTION** 1. INSPECT INTAKE AIR CONTROL VALVE

- (a) Inspection procedure when applying voltage between 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 enseified, replace the

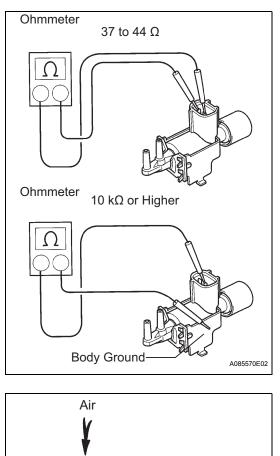
If the result is not as specified, replace the intake air surge tank.

#### 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 the 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.



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# VACUUM SWITCHING VALVE

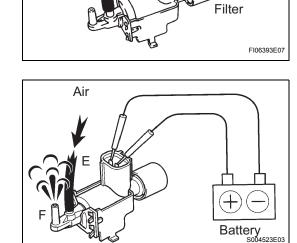
# **INSPECTION**

- 1. INSPECT VACUUM SWITCHING VALVE
  - (a) Check the VSV resistance. **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) 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.

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