

# Secondary Air Combination Valve

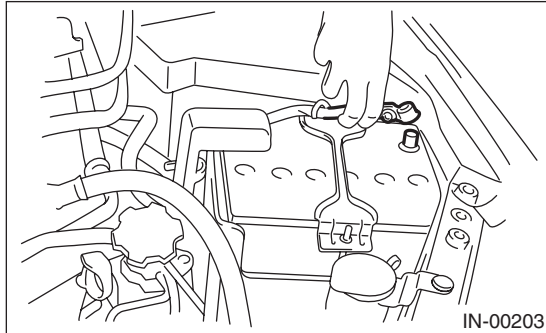
EMISSION CONTROL (AUX. EMISSION CONTROL DEVICES)

## 16. Secondary Air Combination Valve

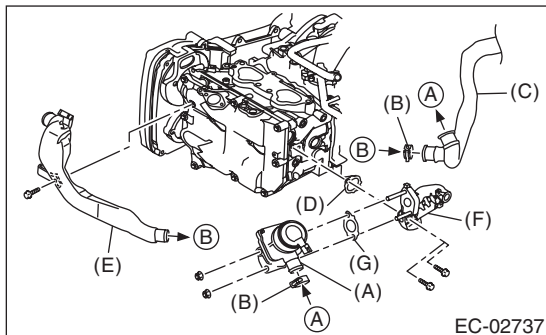
### A: REMOVAL

#### 1. SECONDARY AIR COMBINATION VALVE LH

- 1) Disconnect the ground cable from battery.



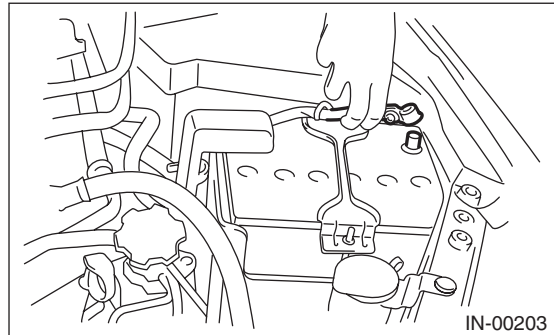
- 2) Remove the intercooler. <Ref. to IN(w/o STI)-12, REMOVAL, Intercooler.>
- 3) Disconnect the connector from the secondary air combination valve LH.
- 4) Disconnect the air duct A.
- 5) Remove the secondary air pipe LH.
- 6) Remove the secondary air combination valve LH.



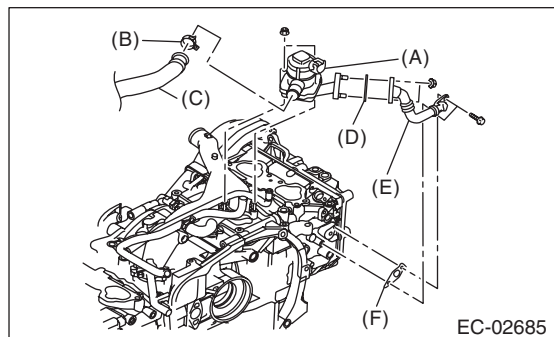
- (A) Secondary air combination valve LH
- (B) Clip
- (C) Air duct A
- (D) Gasket
- (E) Air duct B
- (F) Secondary air pipe LH
- (G) Gasket

#### 2. SECONDARY AIR COMBINATION VALVE RH

- 1) Disconnect the ground cable from battery.



- 2) Remove the intercooler. <Ref. to IN(w/o STI)-12, REMOVAL, Intercooler.>
- 3) Remove the intake manifold. <Ref. to FU(w/o STI)-18, REMOVAL, Intake Manifold.>
- 4) Disconnect the air duct A.
- 5) Disconnect the secondary air pipe RH.
- 6) Remove the secondary air combination valve RH.



- (A) Secondary air combination valve RH
- (B) Clip
- (C) Air duct A
- (D) Gasket
- (E) Secondary air pipe RH
- (F) Gasket

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## B: INSTALLATION

### 1. SECONDARY AIR COMBINATION VALVE LH

Install in the reverse order of removal.

NOTE:

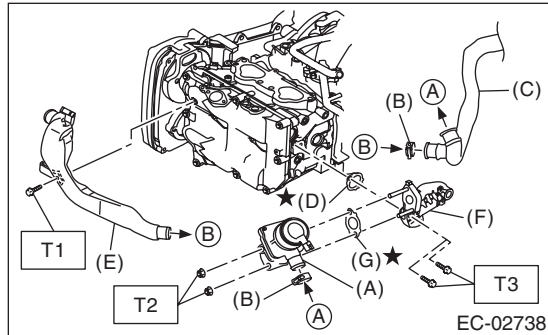
Use a new gasket.

**Tightening torque:**

**T1: 6.4 N·m (0.7 kgf-m, 4.7 ft-lb)**

**T2: 9 N·m (0.9 kgf-m, 6.6 ft-lb)**

**T3: 19 N·m (1.9 kgf-m, 14.0 ft-lb)**



- (A) Secondary air combination valve LH
- (B) Clip
- (C) Air duct A
- (D) Gasket
- (E) Air duct B
- (F) Secondary air pipe LH
- (G) Gasket

### 2. SECONDARY AIR COMBINATION VALVE RH

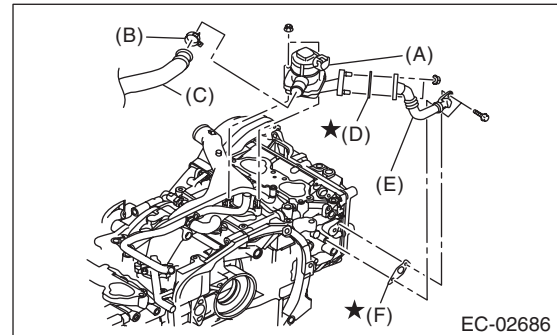
Install in the reverse order of removal.

NOTE:

Use a new gasket.

**Tightening torque:**

**9 N·m (0.9 kgf-m, 6.6 ft-lb)**



- (A) Secondary air combination valve RH
- (B) Clip
- (C) Air duct A
- (D) Gasket
- (E) Secondary air pipe RH
- (F) Gasket

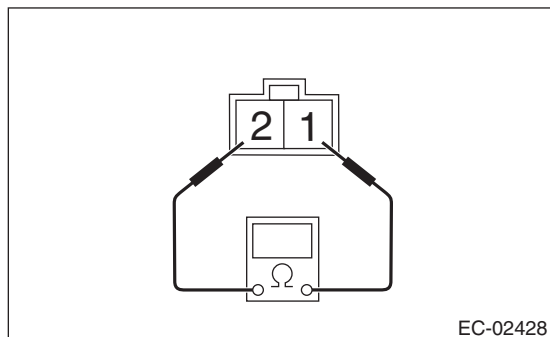
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## C: INSPECTION

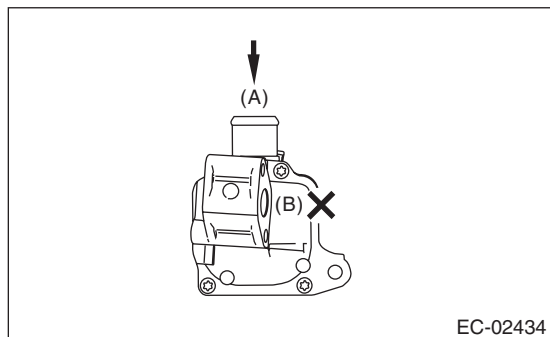
### 1. SECONDARY AIR COMBINATION VALVE LH

- 1) Check that the secondary air combination valve LH has no deformation, cracks or other damages.
- 2) Check the resistance between the terminals of secondary air combination valve LH.

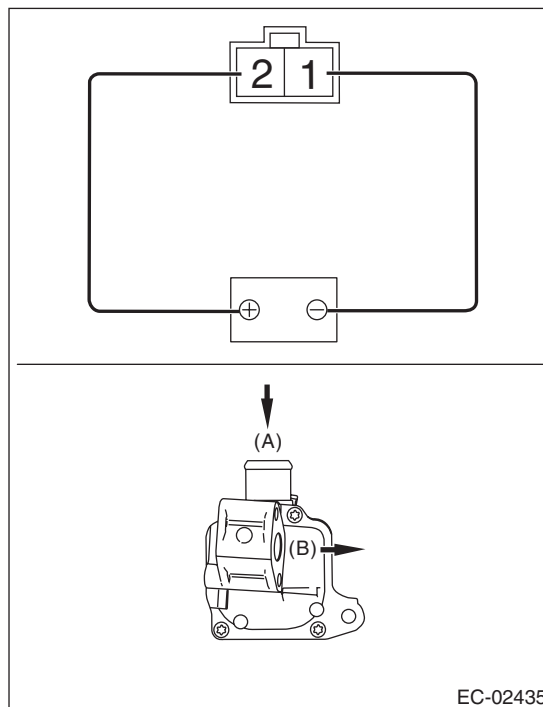


Terminal No.	Standard
1 and 2	$5.0 \pm 0.5 \Omega$ (when 20°C (68°F))

- 3) Check that air does not come out from (B) when air is blown into (A).

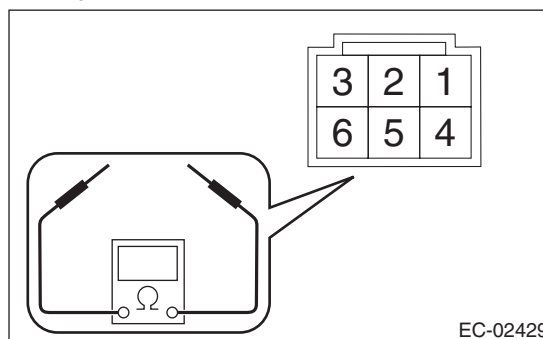


- 4) Connect the battery positive terminal to the terminal No. 2 and the battery negative terminal to the terminal No. 1. Check that air is discharged from (B), when supplying air to (A).



### 2. SECONDARY AIR COMBINATION VALVE RH

- 1) Check that the secondary air combination valve RH has no deformation, cracks or other damages.
- 2) Check the resistance between the terminals of secondary air combination valve RH.

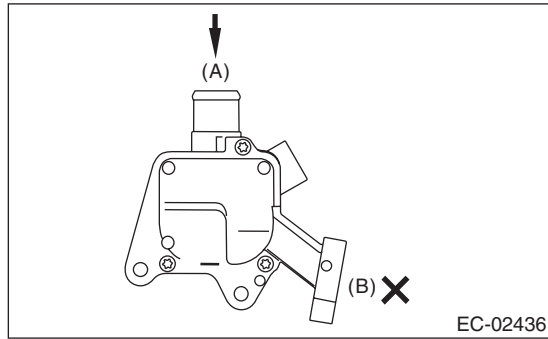


Terminal No.	Standard
4 and 6	$5.0 \pm 0.5 \Omega$ (when 20°C (68°F))
2 and 3	15 k $\Omega$ or less
1 and 2	4.5 k $\Omega$ or less

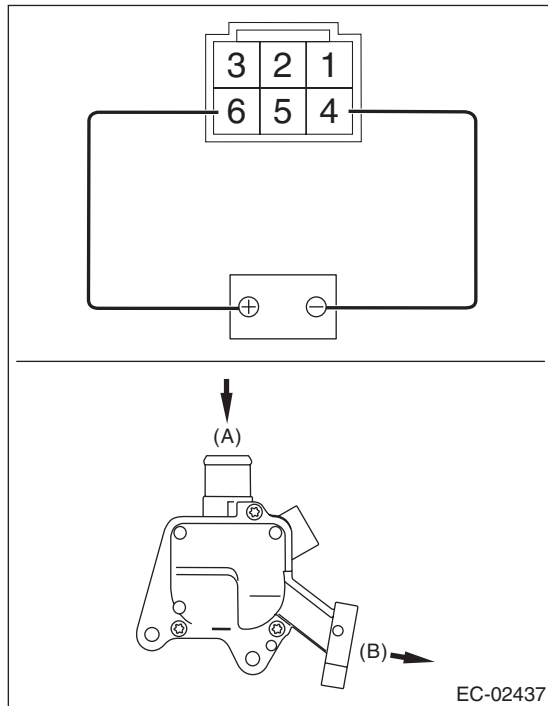
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3) Check that air does not come out from (B) when air is blown into (A).



4) Connect the battery positive terminal to the terminal No. 6 and the battery negative terminal to the terminal No. 4. Check that air is discharged from (B), when supplying air to (A).



### 3. OTHER INSPECTIONS

- 1) Check that the secondary air pipe has no deformation, cracks or other damages.
- 2) Check that the air duct has no cracks, damage or loose part.

## **Secondary Air Combination Valve**

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INTAKE (INDUCTION)

*IN(w/o STI)*

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