

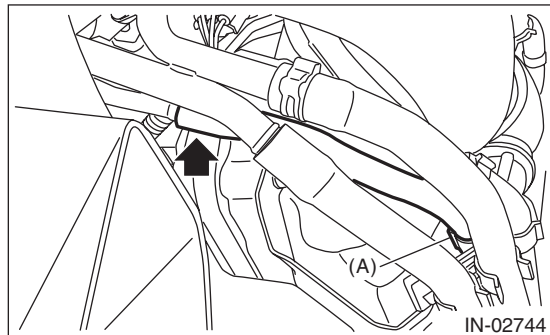
# Air By-pass Valve

INTAKE (INDUCTION)

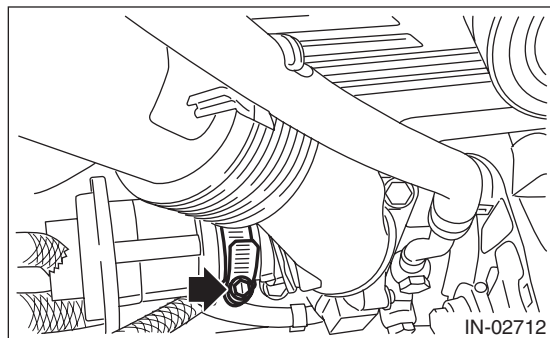
## 11. Air By-pass Valve

### A: REMOVAL

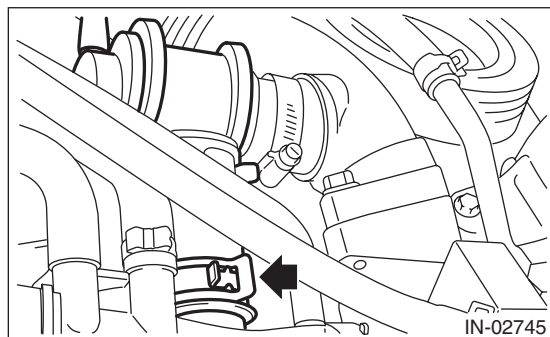
- 1) Remove the collector cover.
- 2) Disconnect the vacuum control hose from the PCV pipe, and remove the vacuum control hose from the clip (A).



- 3) Loosen the clamp which holds the air by-pass valve to the intake duct.



- 4) Lift up the vehicle.
- 5) Remove the under cover. <Ref. to EI-35, REMOVAL, Front Under Cover.>
- 6) Remove the air by-pass valve from the intake duct.

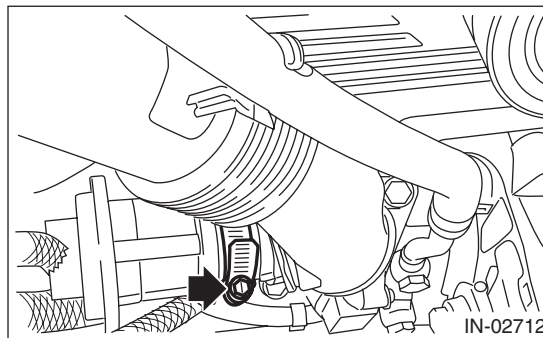


### B: INSTALLATION

Install in the reverse order of removal.

**Tightening torque:**

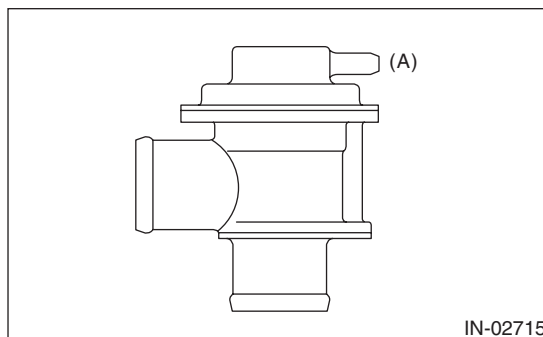
**3 N·m (0.3 kgf-m, 2.2 ft-lb)**



### C: INSPECTION

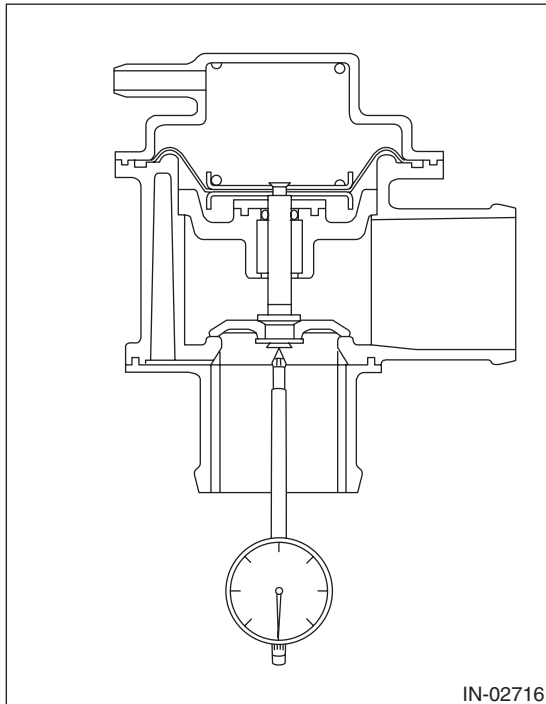
#### 1. AIR BY-PASS VALVE

- 1) Check that the air by-pass valve has no deformation, cracks or other damages.
- 2) Connect the Mighty Vac to the nipple (A) of the air by-pass valve.



- 3) Using the Mighty Vac, generate the negative pressure to  $-93.3 \text{ kPa}$  ( $-0.95 \text{ kgf/cm}^2$ ,  $-13.5 \text{ psi}$ ). Check that the Mighty Vac gauge needle holds 10 seconds without falling by  $-92.6 \text{ kPa}$  ( $-0.94 \text{ kgf/cm}^2$ ,  $-13.4 \text{ psi}$ ).

- 4) Set a dial gauge to the end of valve rod of the air by-pass valve.



- 5) Using the Mighty Vac, generate the negative pressure, and check the pressure when dial gauge needle (valve stroke) shows 0.5 mm (0.02 in). If it is not within the standard, replace the air by-pass valve.

**Opening pressure (valve stroke 0.5 mm (0.02 in)):**

**Standard**

**-49.3 — -57.3 kPa (-0.50 — -0.58 kgf/cm<sup>2</sup>,  
-7.15 — -8.31 psi)**

## 2. OTHER INSPECTIONS

Check that the vacuum hose and air by-pass pipe have no cracks, damage or loose part.