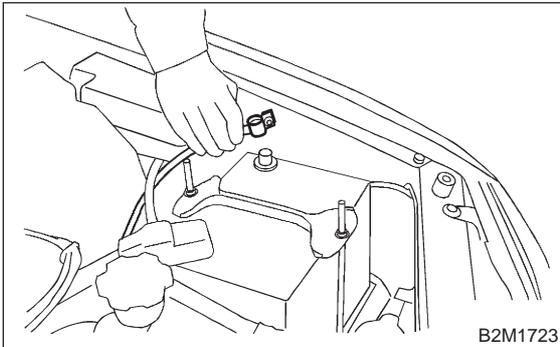


12. Idle Air Control Solenoid Valve

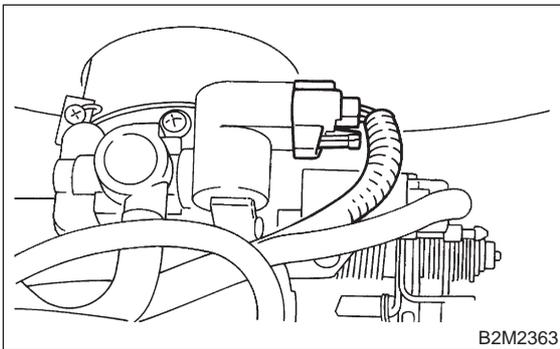
A: REMOVAL AND INSTALLATION

1. 2200 cc CALIFORNIA SPEC. VEHICLES

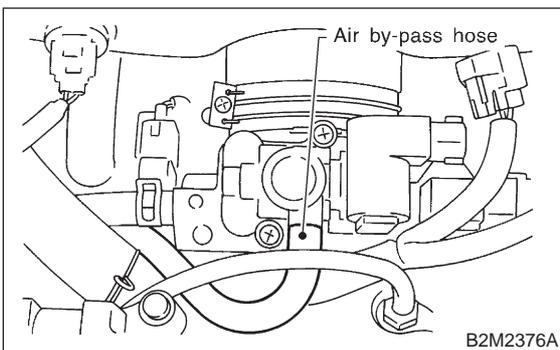
- 1) Disconnect battery ground cable.



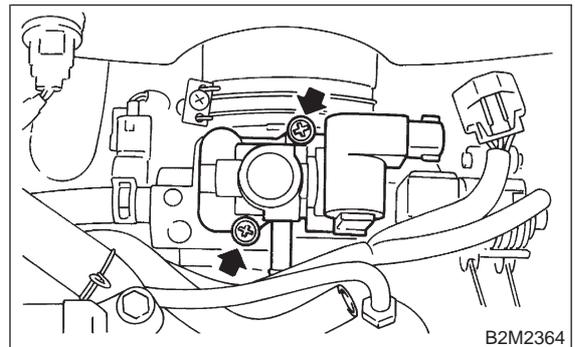
- 2) Disconnect connector from idle air control solenoid valve.



- 3) Disconnect air by-pass hose from idle air control solenoid valve.



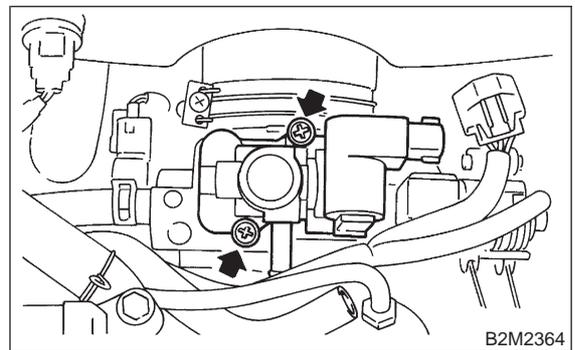
- 4) Remove idle air control solenoid valve from throttle body.



- 5) Installation is in the reverse order of removal.

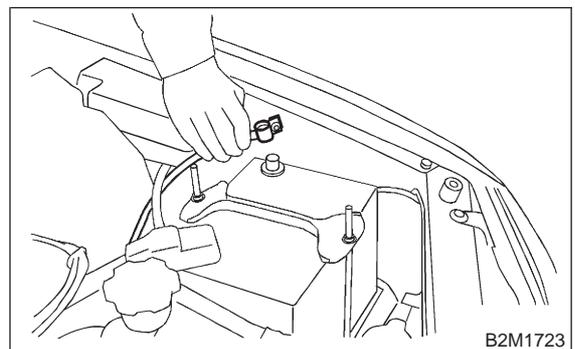
CAUTION:
Replace gasket with a new one.

Tightening torque:
 $6.0 \pm 0.8 \text{ N-m}$ ($0.61 \pm 0.08 \text{ kg-m}$, $4.4 \pm 0.6 \text{ ft-lb}$)



2. 2200 cc EXCEPT CALIFORNIA SPEC. VEHICLES

- 1) Disconnect battery ground cable.

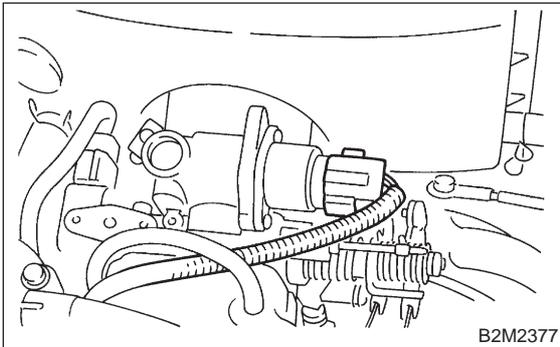


2-7 [W12A3]

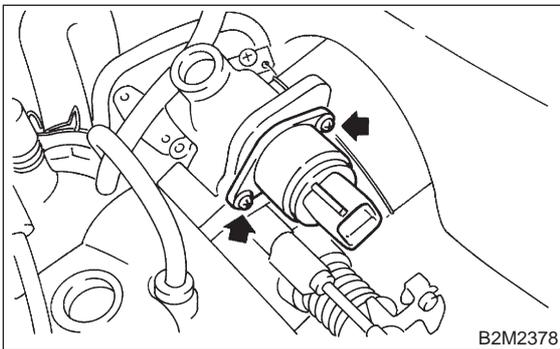
12. Idle Air Control Solenoid Valve

SERVICE PROCEDURE

- 2) Disconnect connector from idle air control solenoid valve.



- 3) Remove idle air control solenoid valve from throttle body.



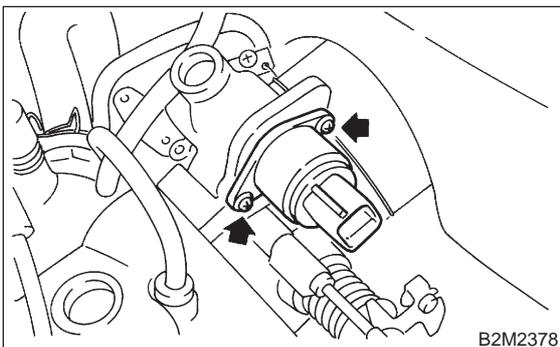
- 4) Installation is in the reverse order of removal.

CAUTION:

Replace gasket with a new one.

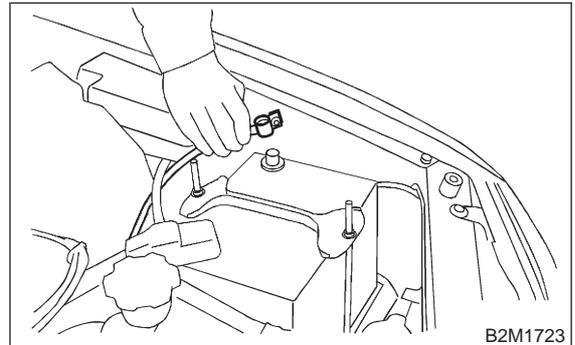
Tightening torque:

$6.0 \pm 0.8 \text{ N}\cdot\text{m}$ ($0.61 \pm 0.08 \text{ kg}\cdot\text{m}$, $4.4 \pm 0.6 \text{ ft}\cdot\text{lb}$)

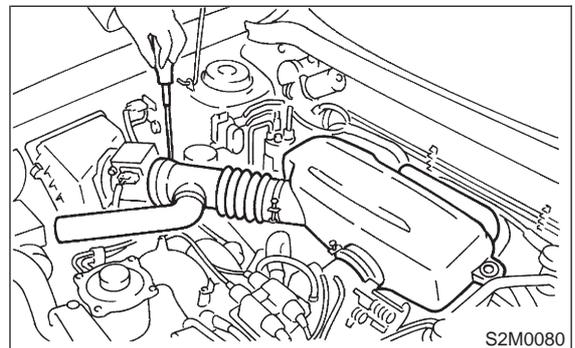


3. 2500 cc MODEL

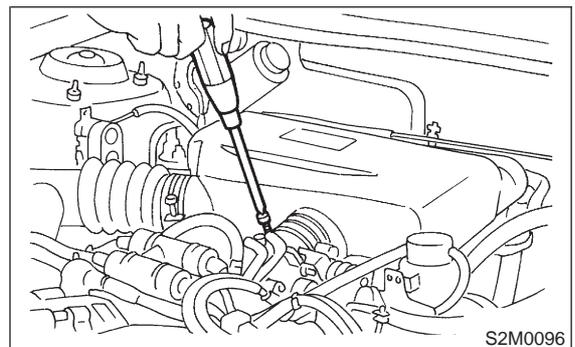
- 1) Disconnect battery ground cable.



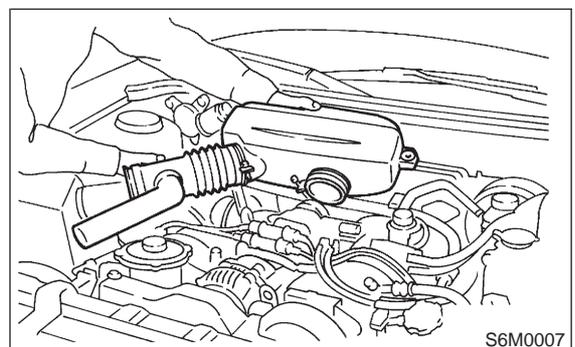
- 2) Loosen clamp which connects air intake duct to mass air flow sensor.



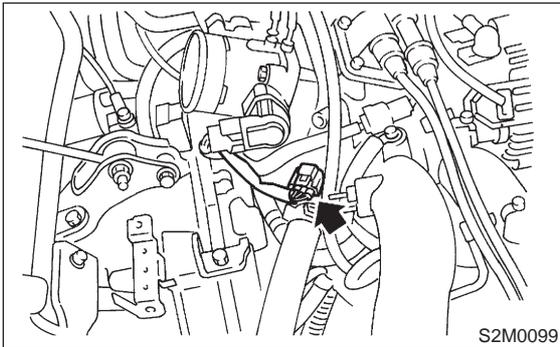
- 3) Loosen clamp which connects air intake chamber to throttle body.



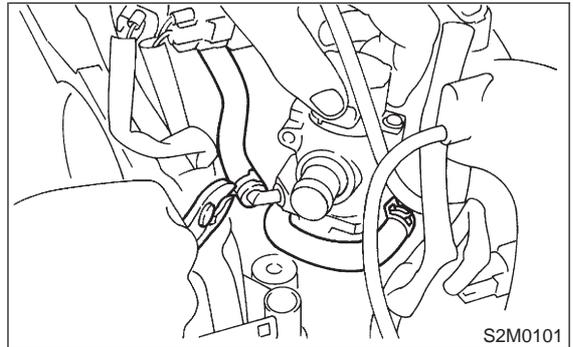
- 4) Disconnect blow-by hose and air hose, and remove air intake chamber and air intake duct as a unit.



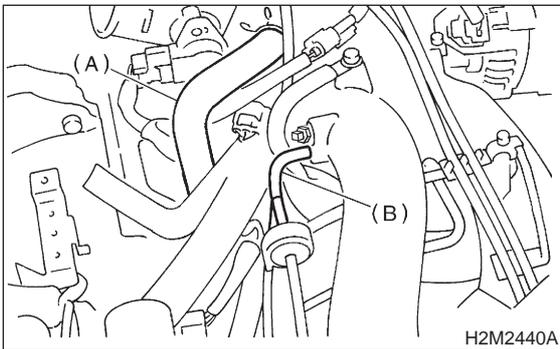
5) Disconnect connector from idle air control solenoid valve.



9) Disconnect engine coolant hoses from idle air control solenoid valve, and take them off.



6) Disconnect PCV hose (A) and pressure regulator vacuum hose (B).

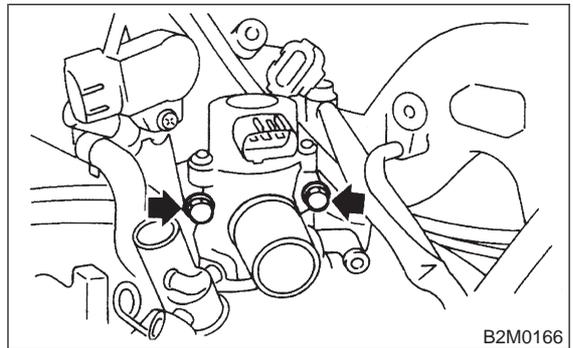
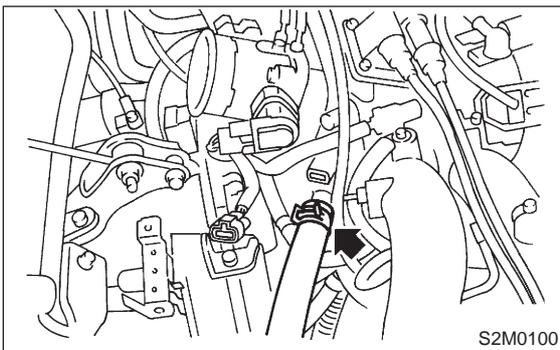


10) Installation is in the reverse order of removal.

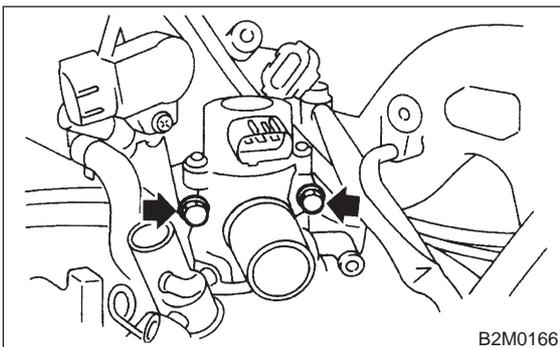
CAUTION:
Replace gasket with a new one.

Tightening torque:
 $6.4 \pm 0.5 \text{ N}\cdot\text{m}$ ($0.65 \pm 0.05 \text{ kg}\cdot\text{m}$, $4.7 \pm 0.4 \text{ ft}\cdot\text{lb}$)

7) Disconnect air by-pass hose from idle air control solenoid valve.

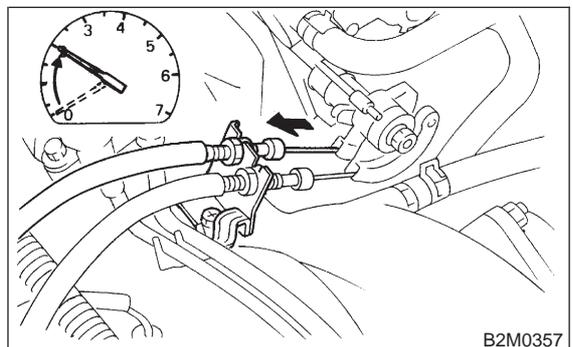


8) Remove bolts which install idle air control solenoid valve to throttle body.



B: CLEANING (2500 cc MODEL ONLY)

- 1) Start and warm-up the engine until radiator fan operates.
- 2) Hold throttle valve to keep the engine speed at 2,000 rpm.

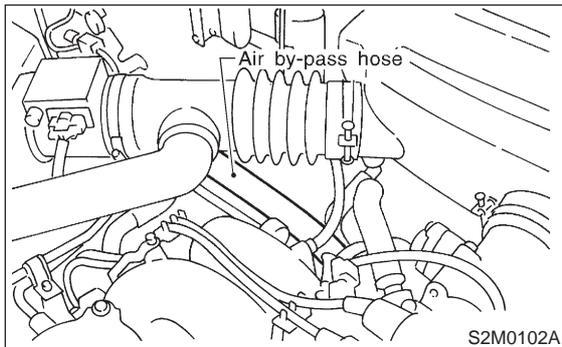


2-7 [W12B0]

12. Idle Air Control Solenoid Valve

SERVICE PROCEDURE

- 3) Disconnect air by-pass hose from air intake duct.

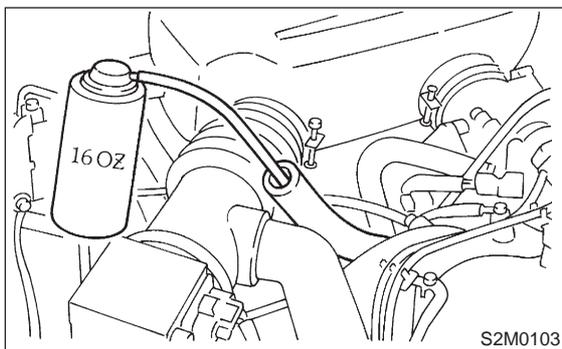


- 4) Slowly pour one can (16 oz) of cleaner into by-pass air hole.

Cleaner:

Part No. 1050002 GM Top Engine Cleaner

**Part No. X66-A AC Delco Carburetor
Tune-up Conditioner**

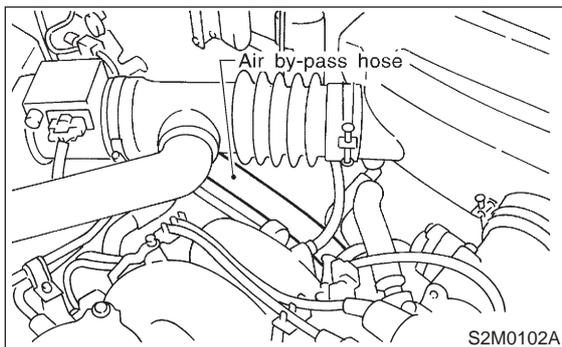


- 5) Leave the engine running for five minutes.

NOTE:

Let white smoke come out from muffler until the cleaner is used up.

- 6) Stop the engine.
7) Release the throttle valve.
8) Connect air by-pass hose to air intake duct.



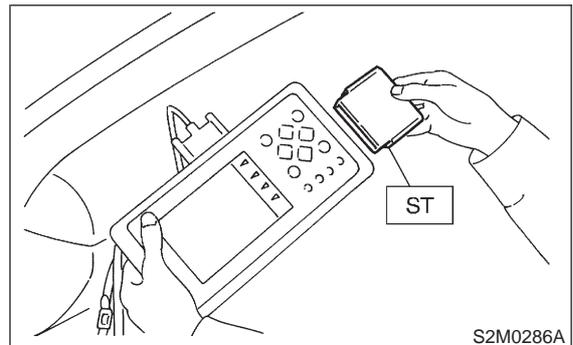
- 9) Check duty ratio of idle air control solenoid valve using Subaru Select Monitor.

NOTE:

For detailed operation procedures, refer to the Subaru Select Monitor Operation Manual.

- (1) Insert the cartridge to Subaru Select Monitor.

ST 24082AA090 CARTRIDGE



- (2) Connect Subaru Select Monitor to the data link connector.

- (3) Turn ignition switch to ON, and Subaru Select Monitor switch to ON.

- (4) Select {2. Each System Check} in Main Menu.

- (5) Select {EGI/EMPI} in Selection Menu.

- (6) Select {1. Current Data Display & Save} in EGI/EMPI Diagnosis.

- (7) Select {1.12 Data Display} in Data Display Menu.

- (8) Adjust throttle position sensor to the proper position to match with the following specification.

ISC valve duty ratio: 25 — 40%

