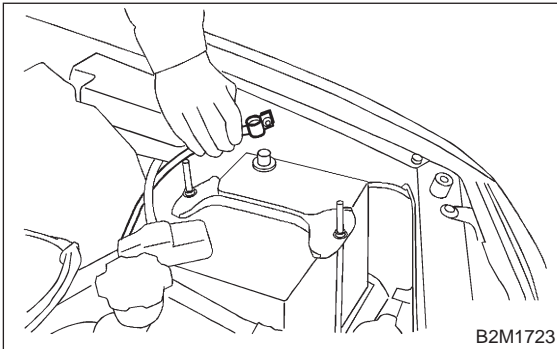


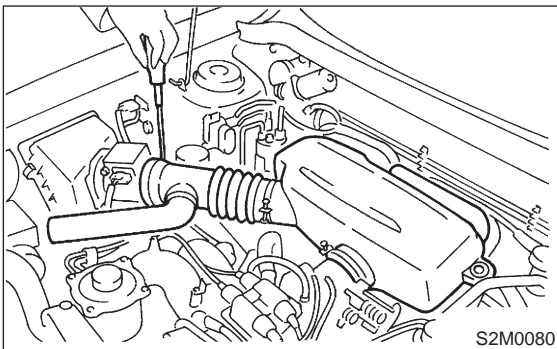
12. Idle Air Control Solenoid Valve

A: REMOVAL AND INSTALLATION

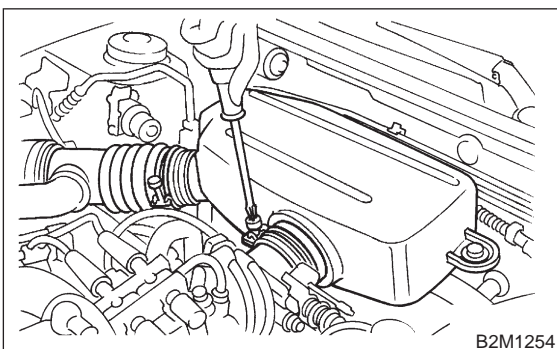
- 1) Disconnect battery ground cable.



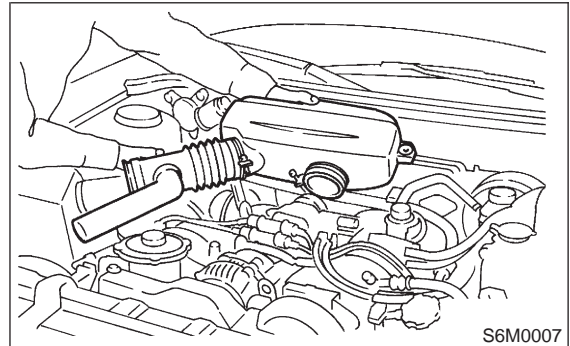
- 2) Loosen clamp which connects air intake duct to mass air flow sensor.



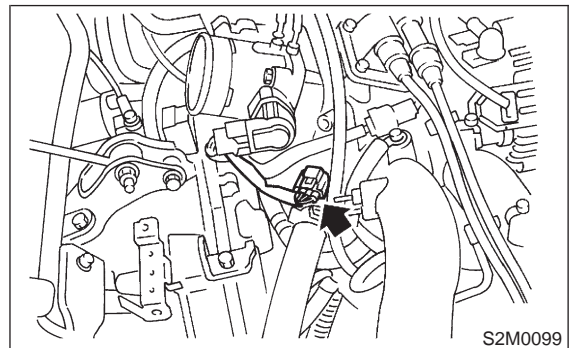
- 3) Loosen clamp which connects air intake chamber to throttle body.



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

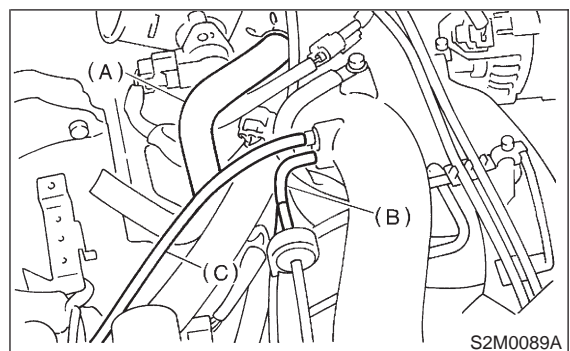


- 5) Disconnect connector from idle air control solenoid valve.



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

- 7) Disconnect vacuum hose (C) from cruise control diaphragm. (With cruise control models)

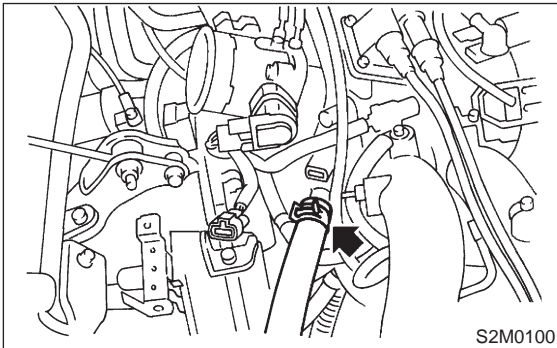


2-7 [W12B0]

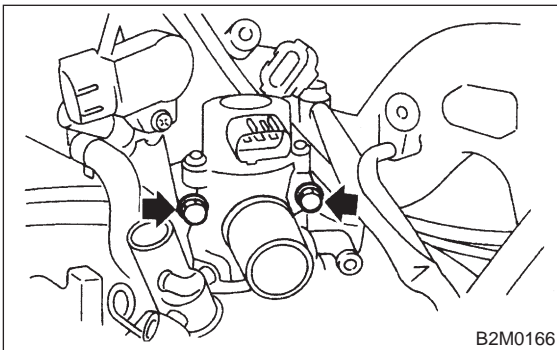
12. Idle Air Control Solenoid Valve

SERVICE PROCEDURE

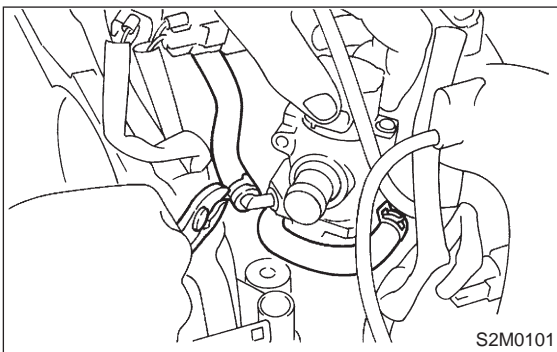
8) Disconnect air by-pass hose from idle air control solenoid valve.



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



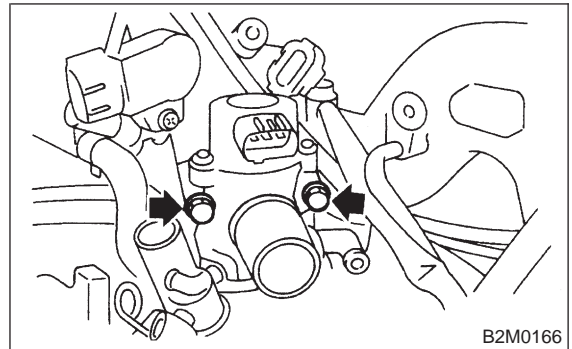
10) Disconnect engine coolant hoses from idle air control solenoid valve, and take them off.



11) Installation is in the reverse order of removal.

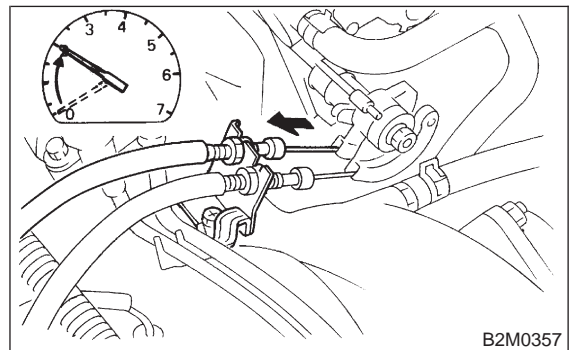
CAUTION:
Replace gasket with a new one.

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

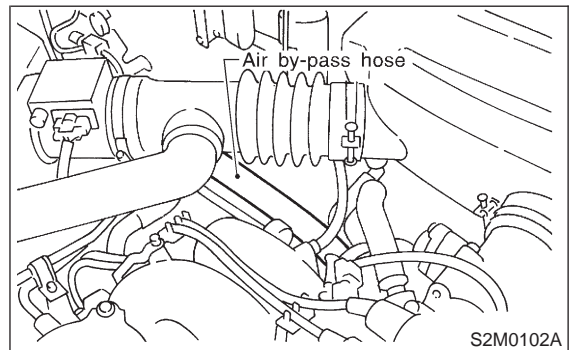


B: CLEANING

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



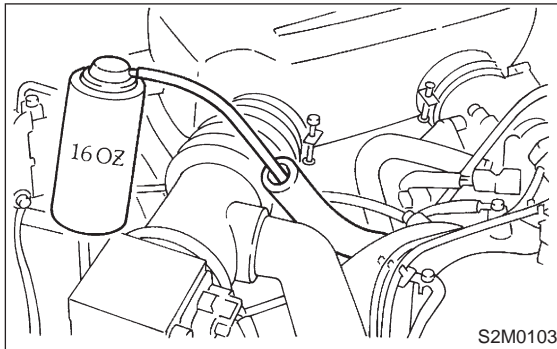
3) Disconnect air by-pass hose from air intake duct.



- 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

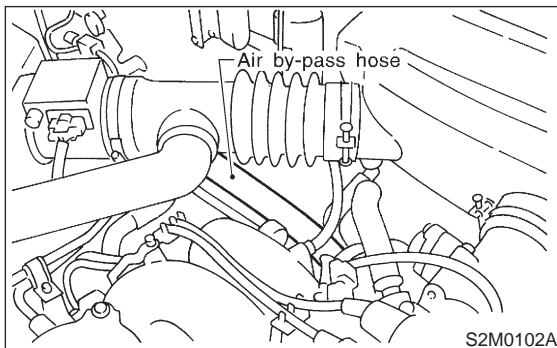


- 5) Leave the engine running for five minutes.

NOTE:

White smoke comes out of the 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.
- (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 following specification.

ISC valve duty ratio: 25 — 40%