THROTTLE BODY (THROTTLE VALVE AREA) CLEANING

(1) Start the engine, warm it up until engine coolant temperature rises to 80°C (176°F), and stop the engine.

(2) Disconnect the air intake hose at the throttle body side.

(3) Put a plug in the inlet of bypass passage in the throttle body.

Caution
Never allow cleaning agent to flow into the bypass passage.

(4) Spray cleaning agent from the intake port of the throttle body to the valve and leave as it is for 5 minutes or so.

(5) Start the engine and race it several times. Then, run it idle for approx. one minute.
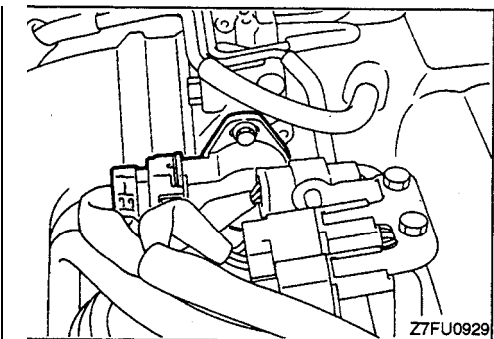
NOTE
If the engine idle speed becomes unstable (and fails in the worst case) after plugging the bypass passage, run the engine with the throttle valve slightly opened.

(6) If the deposit cannot be removed from the throttle valve, repeat steps (4) and (5).

(7) Disconnect the plug from the inlet of the bypass passage.

(8) Install the air intake hose.

(9) Use a scan tool to erase the diagnostic trouble code or disconnect the battery ground cable for more than 10 seconds and then connect it again.

(10) Adjust the basic idle speed (speed adjusting screw). (Refer to P. 13A-55.)
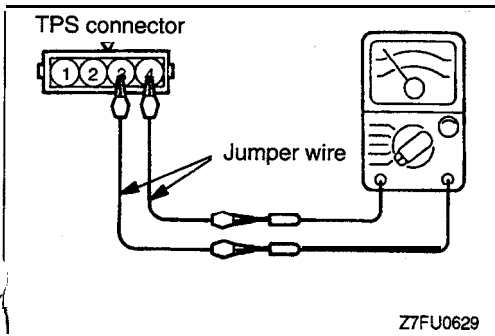
NOTE
If the engine hunts while it is idling after adjustment of the basic idle speed, disconnect the negative cable from the battery terminal for more than 10 seconds and then idle the engine again.
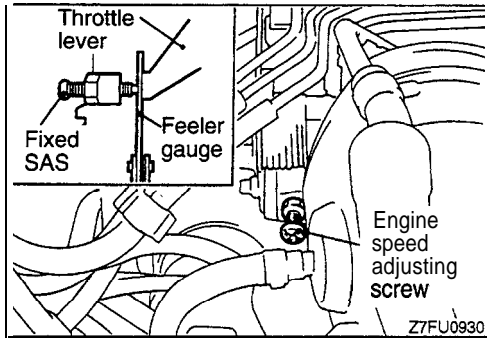
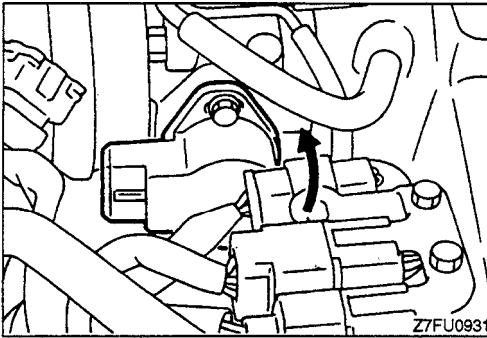## CLOSED THROTTLE POSITION SWITCH AND THROTTLE POSITION SENSOR (TPS) ADJUSTMENT

(1) Connect the MUT-II to the diagnosis tester. If the MUT-II is not used, carry out the following.

a. Disconnect the throttle position sensor connector.

b. Using jumper wires, connect an ohmmeter across terminal (3) (closed throttle position switch) and terminal (4) (sensor ground) of the throttle position sensor.
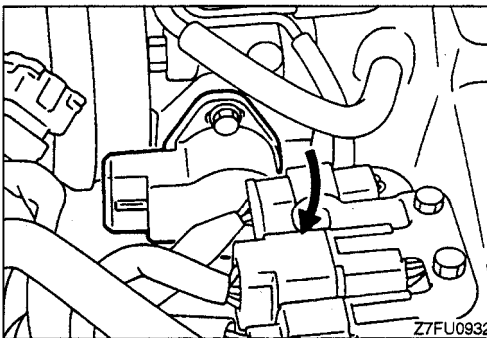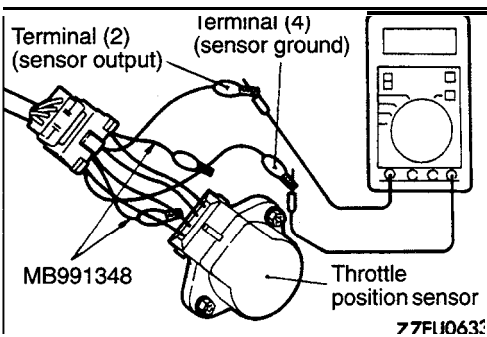
(2) Insert a 0.65-mm (.025 in.)-thick feeler gauge between the fixed SAS and throttle lever.

(3) If the MUT-II is used, turn the ignition switch to ON position. (Do not start the engine.)
(4) Loosen the throttle position sensor mounting bolts and turn the throttle position sensor body fully counterclockwise.
(5) In this condition, check that the idle switch is ON (continuity exists between terminals (3) and (4)).
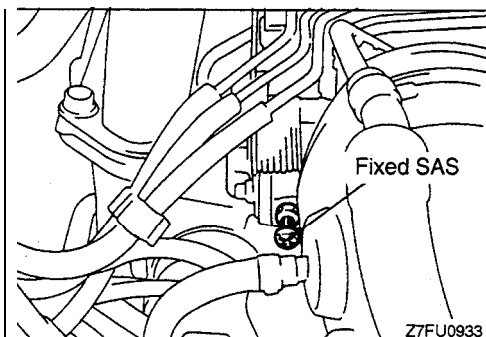

(6) Slowly turn the throttle position sensor clockwise until the idle switch is turned OFF (continuity between terminals (3) and (4) disappears). Then, tighten the throttle position sensor mounting bolt securely.

(7) If not using the scan tool, proceed as follows:
    a. Disconnect the throttle position sensor connectors and connect the special tool, Test Harness Set, between the disconnected connectors.
    b. Connect a digital voltmeter between the throttle position sensor terminal (2). (sensor output) and terminal (4) (sensor ground).
    c. Turn the ignition switch ON (but do not start the engine).
(8) Check the throttle position sensor output voltage.

Standard value: 400–1,000 mV

(9) If the voltage is out of specification, check the throttle position sensor and associated harnesses.
(lO) Remove the feeler gauge.
(ll) Turn the ignition switch OFF.

FIXED SAS ADJUSTMENT

NOTE
(1) The fixed SAS has been factory-adjusted. Never attempt to move it.
(2) Should it be out of proper adjustment, adjust by following the procedure given below.

(1) Sufficiently slacken the accelerator cable.
(2) Loosen the lock nut on the fixed SAS.
(3) Sufficiently loosen the fixed SAS by turning it counterclockwise to fully close the throttle valve. '
(4) Tighten the fixed SAS slowly to find a point at which it contacts the throttle lever (where the throttle valve starts opening). From that point, tighten the fixed SAS further $1\,^1/_4$ turns.
(5) Holding the fixed SAS to prevent it from turning, tighten the lock nut securely.
(6) Adjust the accelerator cable tension. (Refer to P.17-4.)
(7) Adjust the basic idle speed. (Refer to P.13A-55.)
(8) Adjust the closed throttle position switch and throttle position sensor (TPS). (Refer to P.13A-57.)

Fixed SAS

Z7FU0933

TSB Revision