

FUEL VAPOR SEPARATOR/HIGH PRESSURE FUEL PUMP REMOVAL/INSTALLATION

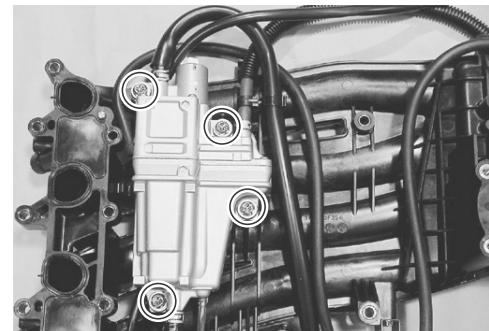
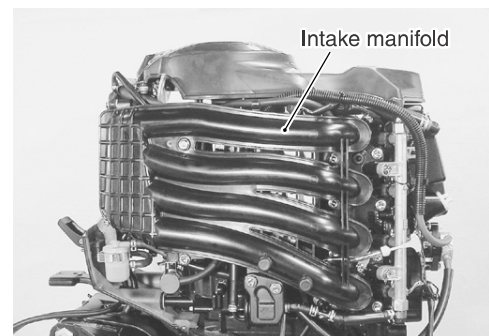
⚠ WARNING

The components after the high pressure fuel pump remain pressurized at all times.

To protect against fuel spray, relieve fuel line pressure before disconnecting or removing the components.
(See the page 5-2.)

REMOVAL

1. Remove the intake manifold assembly. (See the page 6-2.)
2. Remove the four bolts and the fuel vapor separator assembly from the intake manifold.
3. Disconnect all hoses from the fuel vapor separator.



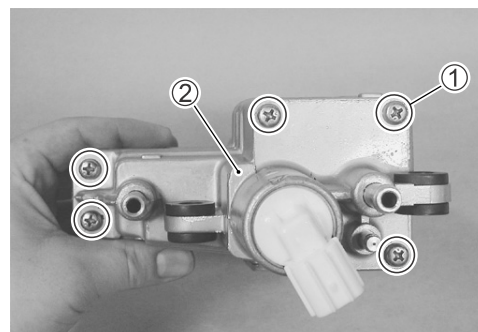
INSTALLATION

Installation is reverse order of removal.

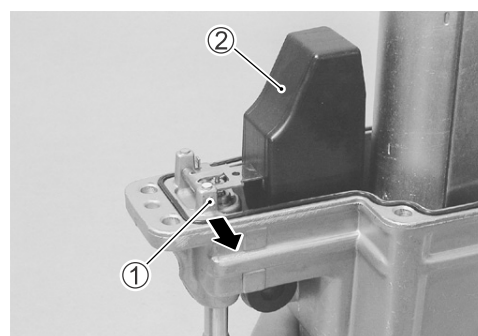
See the page 6-5 for installation of the intake manifold assembly.

DISASSEMBLY

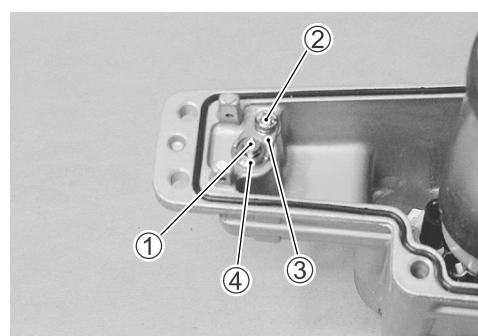
1. Remove the five screws ①.
2. Remove the separator cover ② with the high pressure fuel pump from the separator case.



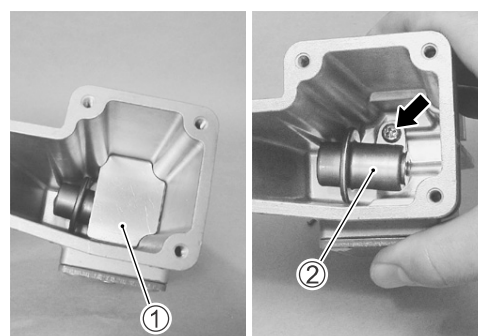
3. Remove the float pin ① and the float ②.



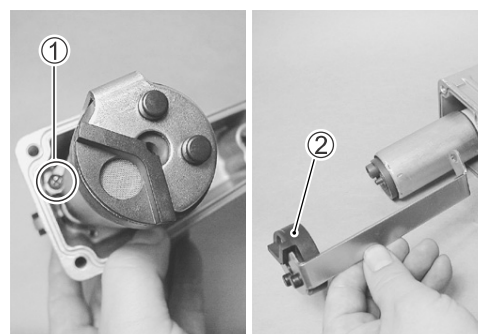
4. Remove the needle valve ①, the screw ②, the plate ③ and the valve seat ④.



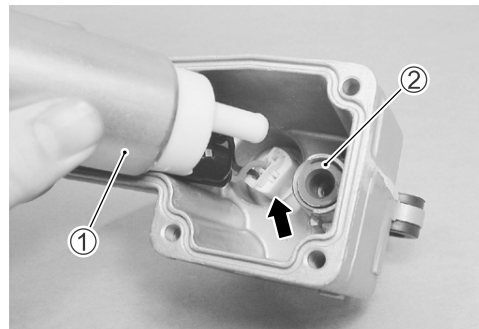
5. Remove the plate ①.
6. Remove the screw and the fuel pressure regulator ② from the separator case.



7. Remove the screw ①.
8. Remove the suction filter ② with the bracket.



9. Remove the high pressure fuel pump ① and the grommet ② from the separator cover and then disconnect the pump lead wire connector.



INSPECTION

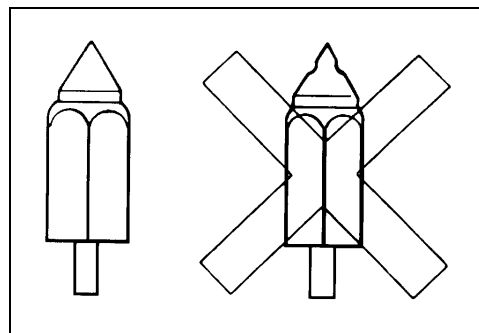
NOTE:

If cracks, excessive wear or other damage is found on any component, replace component.

Needle valve/Valve seat

Inspect the needle valve and the valve seat for groove, other damage or dirt.

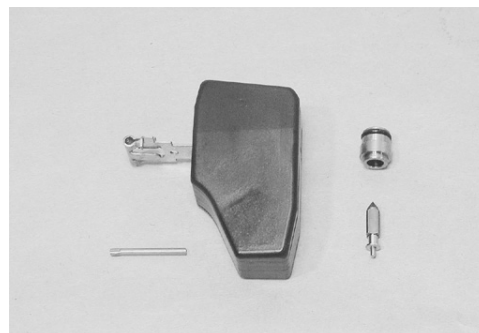
Replace or clean if necessary.



Float

Inspect the float for crack or other damage.

Replace if necessary.



Filter

Inspect the pump suction filter for clog or other damage.

Replace or clean if necessary.



Fuel pressure regulator

Check the fuel pressure regulator operation.

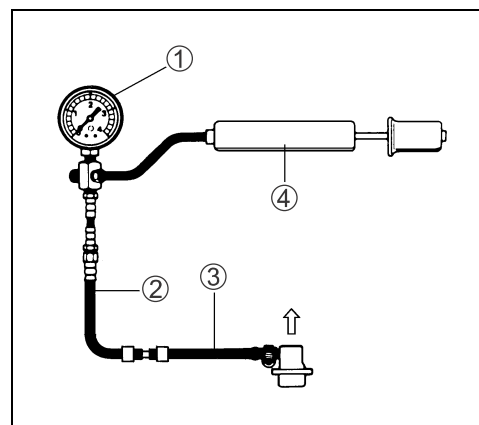
TOOL 09940-44121: Air pressure gauge – ①

09940-44130: Attachment – ②

09912-58490: Hose – ③

09952-99310: Hand air pump – ④

1. Connect the special tools to the inlet side of the regulator as shown in the figure.
2. Pump air into the regulator using a hand air pump ④ until air is released through the outlet side.
3. Read pressure on the gauge ① when air is released.



Regulator operating pressure:

240 – 270 kPa (2.4 – 2.7 kg/cm², 34.1 – 38.4 psi)

If the result is out of the specification, replace the regulator.

REASSEMBLY

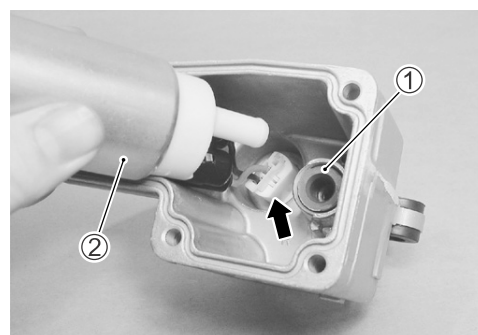
Assembly is reverse order of disassembly with the special attention to the following steps.

High pressure fuel pump

Connect the pump lead wire connector, then install the grommet ① and fuel pump ②.

NOTE:

Apply fuel to the grommet before installing.



Float/Float pin

Install the float and the float pin.

NOTE:

After assembling, check for smooth and free float movement.



Checking float height

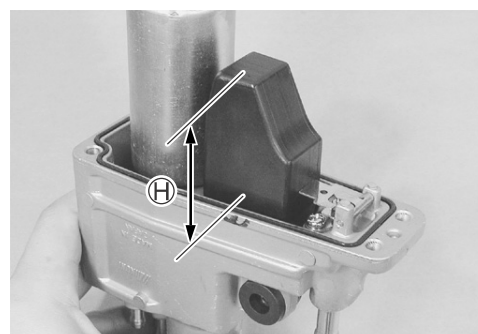
Measure the float height.

TOOL 09900-20101: Vernier calipers

Float height (H): 43 ± 1 mm

NOTE:

Make sure that the float weight is not applied to the needle valve.

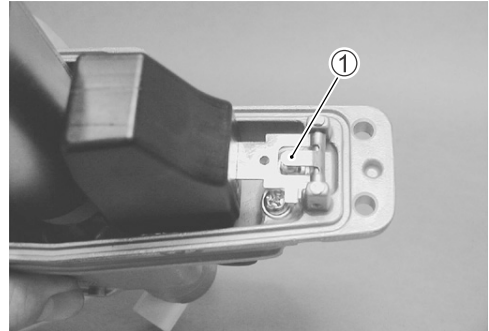


Setting float height

To correct specification, bend only the adjustment tab ①.

CAUTION

When adjusting tab, do not bend to the point that it applies pressure to the needle and seat.



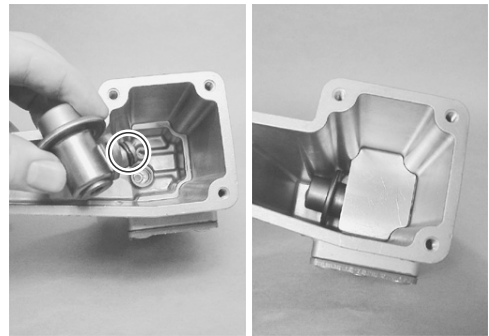
Fuel pressure regulator

1. Install the fuel pressure regulator and tighten the screw securely.

NOTE:

Apply fuel to the O-ring before installing the regulator.

2. Install the plate.



Separator cover/Separator case

1. Install the seal ring, then apply the Suzuki Bond evenly to only the outside mating surface of the separator case as shown in the figure.

1207B 99000-31140: SUZUKI BOND "1207B"

NOTE:

- Clean the mating surfaces before applying the bond.
- Do not apply the bond to the seal ring, the groove and the inside mating surface.

2. Install the separator case, then tighten the screws securely.

NOTE:

The separator cover and the case are a set.

Make sure the paint marks on both items are matched when assembling.

