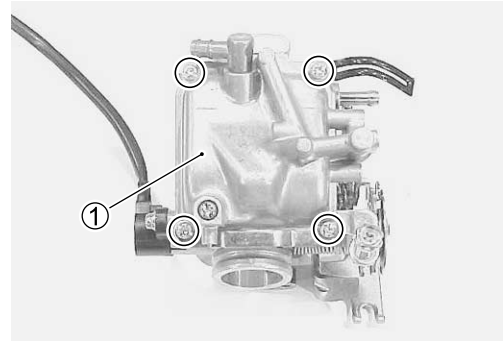
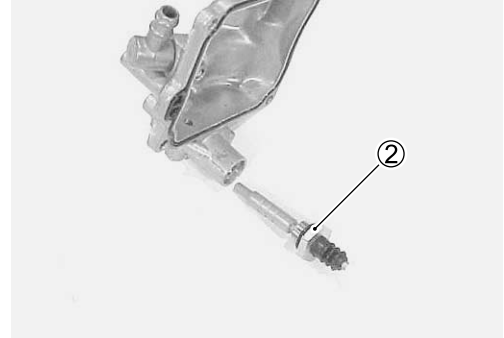


- Remove the float chamber body ①.



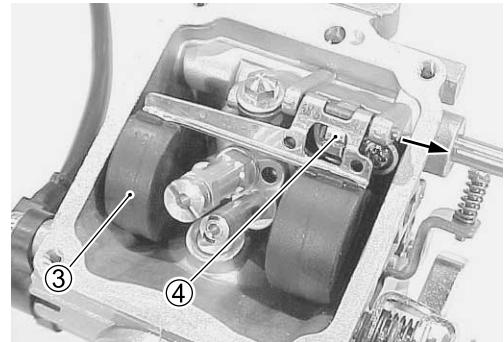
- Remove the accelerator pump plunger ②.



- Remove the float assembly ③ along with the needle valve ④ by removing the pin.

▲ CAUTION

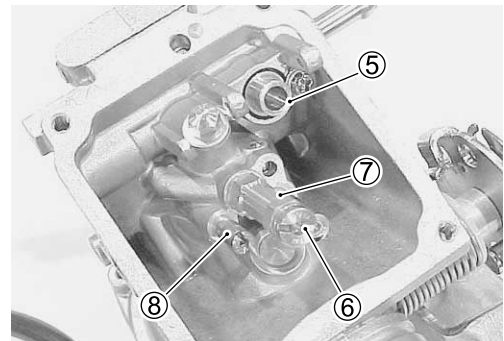
Do not use a wire to clean the valve seat.



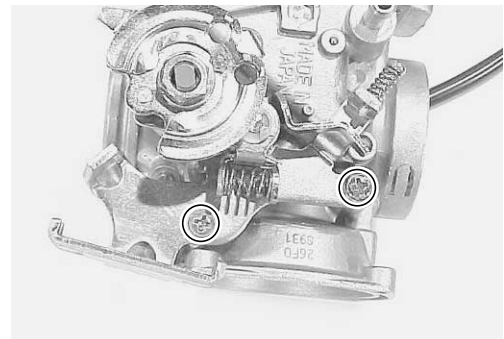
- Remove the valve seat ⑤.
- Remove the main jet ⑥, jet holder ⑦ and pilot jet ⑧.

▲ CAUTION

Do not use a wire to clean the passage and jets.



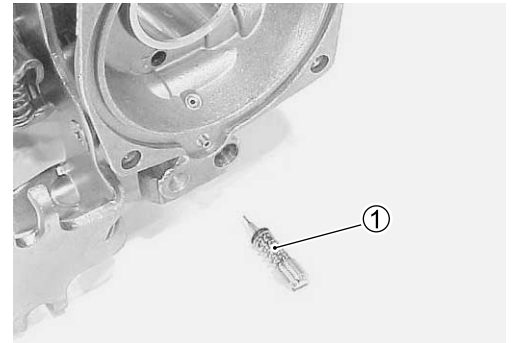
- Remove the throttle cable bracket.



- Remove the pilot screw ①.
(Except for E-18.)

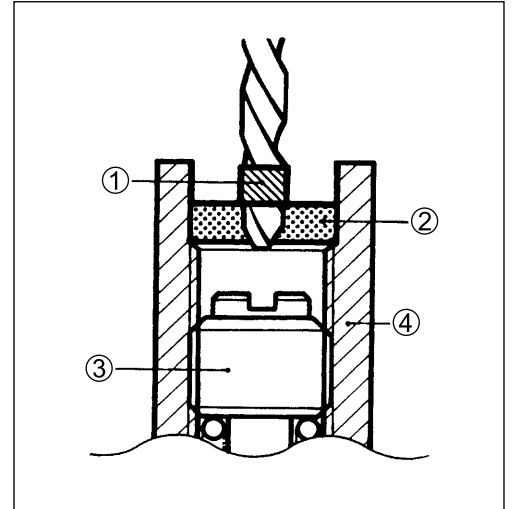
NOTE:

Before removing the pilot screw, determine the setting by slowly turning it clockwise and count the number of turns required to lightly seat the screw. This counted number is important when reassembling pilot screw to original position.

**PILOT SCREW REMOVAL (Only for E-18)**

Because harsh cleaning solvents can damage the O-ring seals in the pilot system, the pilot system components should be removed before cleaning.

- Use a 1/8" size drill bit with a drill-stop to remove the pilot screw plug. Set the drill-stop 6 mm from the end of the bit to prevent drilling into the pilot screw. Carefully drill through the plug.
- Thread a self-tapping sheet metal screw into the plug. Pull on the screw head with pliers to remove the plug. Carefully clean any metal shavings from the area.
- Slowly turn the pilot screw clockwise and count the number of turns until the screw is lightly seated. Make a note of how many turns were made so the screw can be reset correctly after cleaning.
- Remove the pilot screw along with the spring, washer, and O-ring.
- After cleaning, reinstall the pilot screw to the original setting by turning the screw in until it lightly seats, and then backing it out the same number of turns counted during disassembly.
- Install a new plug by tapping it into place with a punch.



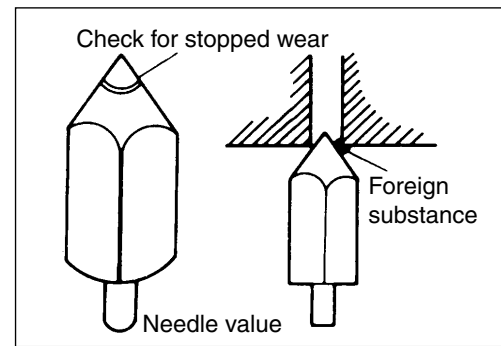
- ① Drill-stop
- ② Plug
- ③ Pilot screw
- ④ Carburetor body

INSPECTION

Check the following parts for damage and clogging.

- | | |
|---------------------|-----------------------------|
| * Pilot jet | * Piston valve |
| * Main jet | * Starter jet |
| * Main air jet | * Gaskets and O-rings |
| * Pilot air jet | * Pilot outlet and bypass |
| * Needle jet holder | * Coasting enrichment valve |
| * Float | * Needle valve |
| * Jet needle | * Valve seat |

If any abnormal condition is found, wash the part clean. If damage or clogging is found, replace the part with a new one.

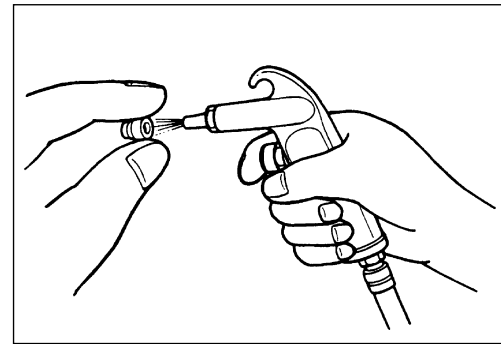


CARBURETOR CLEANING

⚠ WARNING

Some carburetor cleaning chemicals, especially diptype soaking solutions, are very corrosive and must be handled carefully. Always follow the chemical manufacturer's instructions on proper use, handling and storage.

- Clean all jets with a spray-type carburetor cleaner and dry them using compressed air.
- Clean all circuits of the carburetor thoroughly-not just the perceived problem area. Clean the circuits in the carburetor body with a spray-type cleaner and allow each circuit to soak, if necessary, to loosen dirt and varnish. Blow the body dry using compressed air.



⚠ CAUTION

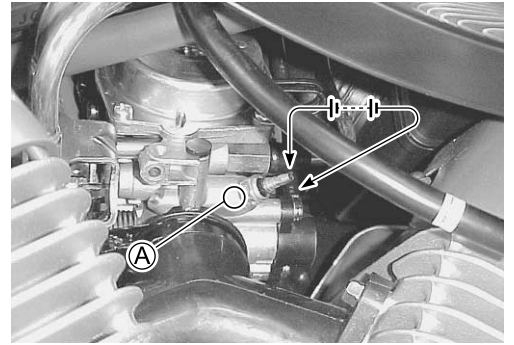
Do not use a wire to clean the jets or passageways. A wire can damage the jets and passageways. If the components cannot be cleaned with a spray cleaner it may be necessary to use a dip-type cleaning solution and allow them to soak. Always follow the chemical manufacturer's instructions for proper use and cleaning of the carburetor components.

- After cleaning, reassemble the carburetor with new seals and gaskets.

CARBURETOR HEATER

(Only for E-02)

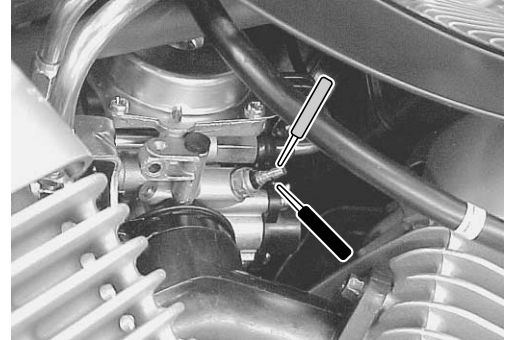
- Disconnect the carburetor heater terminal lead wires.
- Connect the positive \oplus terminal of a 12V battery to the terminal of the carburetor heater and the battery negative \ominus terminal to the terminal.
- Check that the heater section \textcircled{A} is heated in 5 minutes after the battery has been connected.



- Measure the resistance between the terminals.

TOOL 09900-25008: Multi-circuit tester

DATA Carburetor heater resistance: STD: 12 – 18 Ω



THERMO-SWITCH INSPECTION

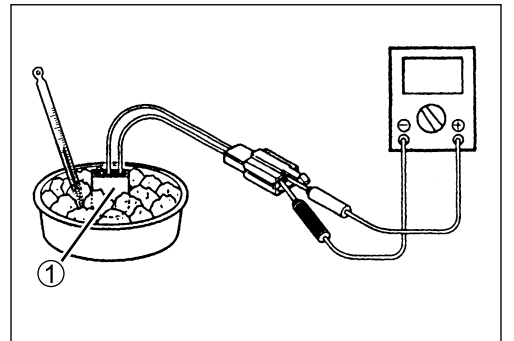
(Only for E-02)

- Cool the thermo-switch $\textcircled{1}$ with ice water and check for continuity.

TOOL 09900-25008: Multi-circuit tester

DATA Thermo-switch continuity:

Below 8 – 14°C	Yes
Above 15 – 21°C	No



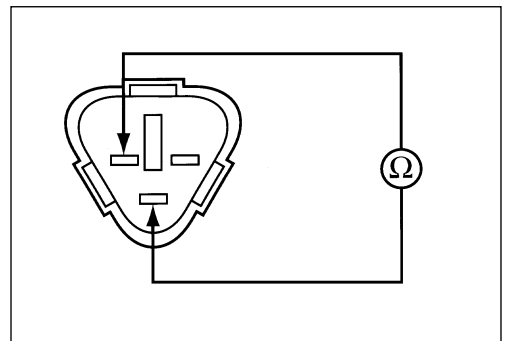
THROTTLE POSITION SENSOR

Measure the resistance between the terminals as shown in the illustration.

DATA Throttle position sensor resistance: Approx. 5 k Ω

NOTE:

When performing this test, it is not necessary to remove the throttle position sensor.



FUEL LEVEL

⚠ WARNING

This inspection must be performed in an area well ventilated, away from fire or sparks since gasoline, an explosive fluid, is used in this operation.

- Remove the carburetor.
- Install the special tool to the carburetor drain outlet.
- Loosen the drain bolt ①.

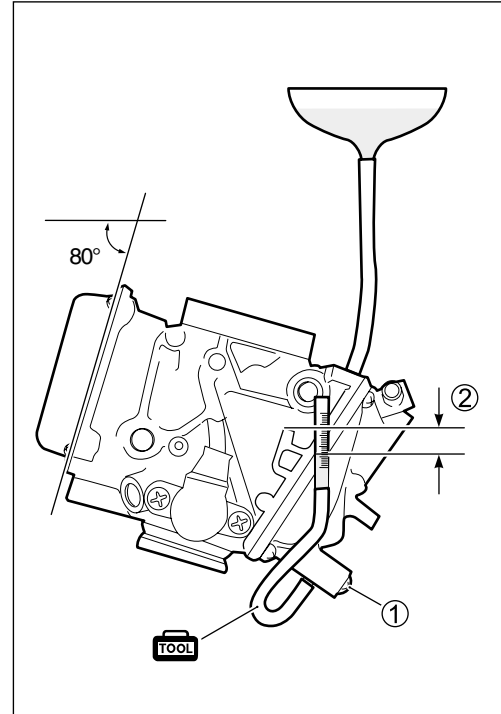
09913-10760: Fuel level gauge

- Adjust the carburetor to the proper angle holding the body with a vice or the like.

Carburetor set position: Lateral direction : Horizontal
Longitudinal direction: 80°

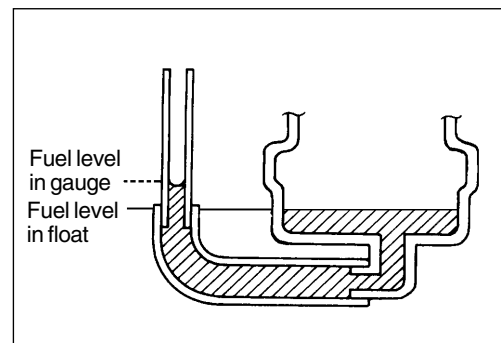
- Fill gasoline in the carburetor.
- Remove air completely from the fuel level gauge.
- With the level gauge held vertical, lower the gauge slowly and align the datum point ② with the gauge graduation.
- Wait until the fuel level stabilizes.
- Determine the zero point on the gauge graduation and after waiting again for level stabilization, measure the height from the datum point.

DATA Fuel level: 11 ± 1 mm under from datum point



NOTE:

The apparent fuel level measured in the level gauge is higher than the actual level in the float chamber because of meniscus effect. (Meniscus is approximately 1 mm.)



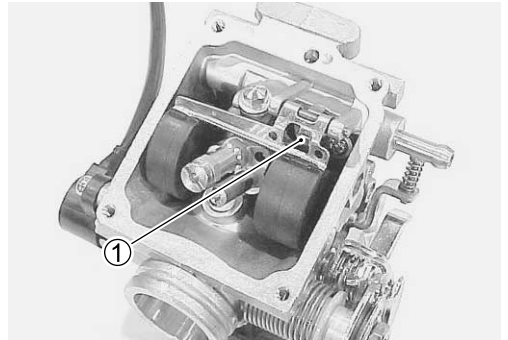
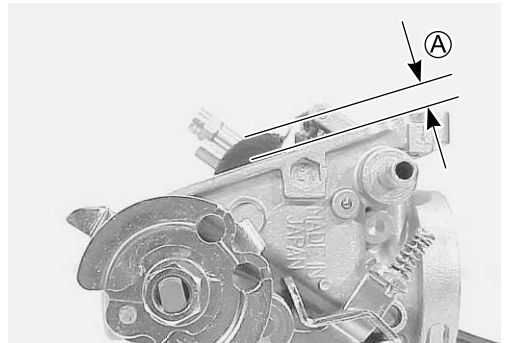
FLOAT HEIGHT ADJUSTMENT

To check the float height, turn the carburetor upside down. Measure the float height \textcircled{A} while the float arm is just contacting the needle valve using vernier calipers.

TOOL 09900-20102: Vernier calipers

DATA Float height \textcircled{A} : 9.9 ± 1.0 mm

- Bend the float arm $\textcircled{1}$ as necessary to bring the float height \textcircled{A} to the specified level.
- After adjustment, check the float height and the fuel level again.



REASSEMBLY AND REINSTALLATION

Carburetor reassembly can be performed in the reverse order of disassembly. When reassembling, carefully observe the following instructions.

▲ CAUTION

- * Assemble the parts taking consideration of their function.
- * Replace O-rings (A) with new ones.

- After cleaning, reinstall the pilot screw to the original setting by turning the screw in until it lightly seats, and then backing it out the same number of turns counted during disassembly.

▲ CAUTION

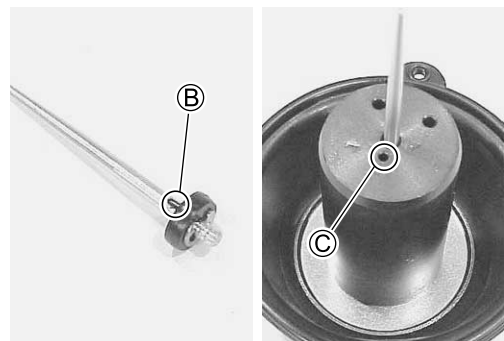
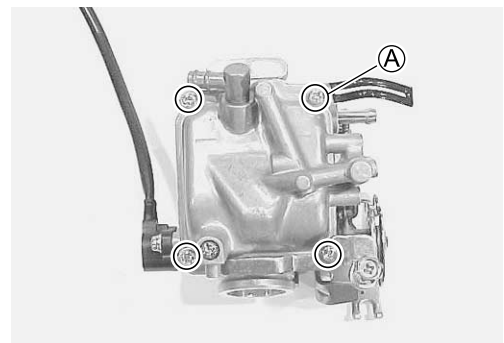
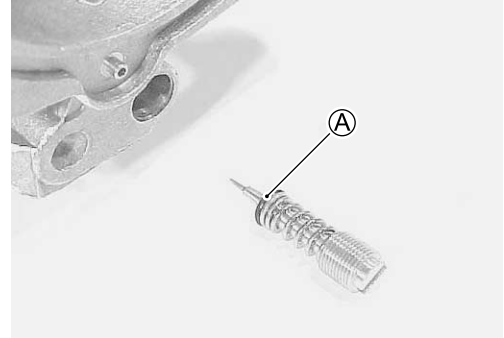
Replace the O-ring (A) with a new one.

- Apply grease to the O-ring and install the accelerating plunger.

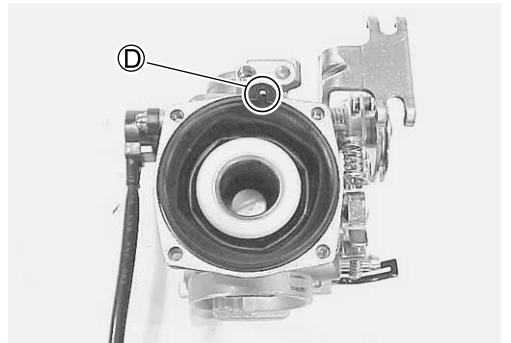
 99000-25010: SUZUKI SUPER GREASE "A"

- Fit the seal rings securely to the float chamber and install the float chamber to the throttle body.
- Install the clamp to the screw (A) and tighten the screws.

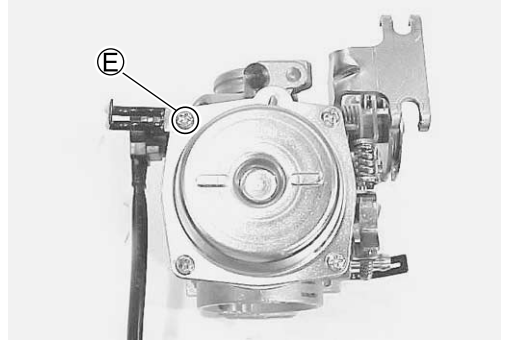
- Install the jet needle with the pin (B) on the spacer securely engaged with the hole (C) on the piston valve.




- Align the hole ① of the diaphragm with the passage way on the carburetor body.



- Install the clamp to the screw ② and tighten the screws.



- Apply thermo-grease to the threads and tighten the carburetor heater. (Only for E-02)

 99000-59029: THERMO-GREASE

 Carburetor heater: 3 N·m (0.3 kgf·m)



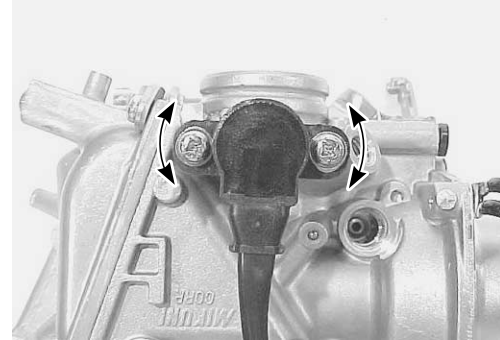
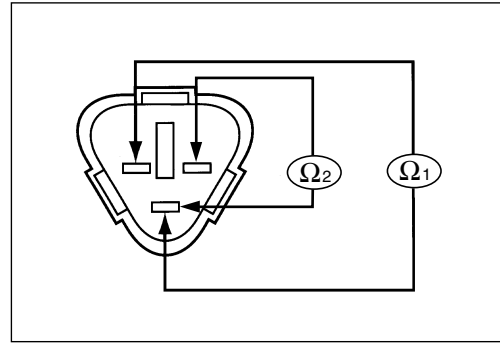
THROTTLE POSITION SENSOR POSITIONING

- Install the throttle position sensor with the flats on the throttle shaft end securely engaged with the slot on the throttle position sensor.
- Measure the resistance Ω_1 between the throttle position sensor terminals as shown in the illustration.

DATA Throttle position sensor resistance Ω_1 : **Approx. 5 k Ω**

- Measure the resistance Ω_2 between the throttle position sensor terminals as shown in the illustration.
- Fully open the throttle valve with the throttle lever.
- Position the throttle position sensor until resistance Ω_2 is 3.09 – 4.63 k Ω .
- When the resistance Ω_2 is within specification, tighten the throttle position sensor mounting screws.

DATA Throttle position sensor resistance Ω_2 :
3.09 – 4.63 k Ω



- After the assembly and installation on the engine have been completed, perform the following adjustment.
 - * Throttle cable adjustment (☞ 2-9)
 - * Idle speed adjustment (☞ 2-9)

LUBRICATION SYSTEM

