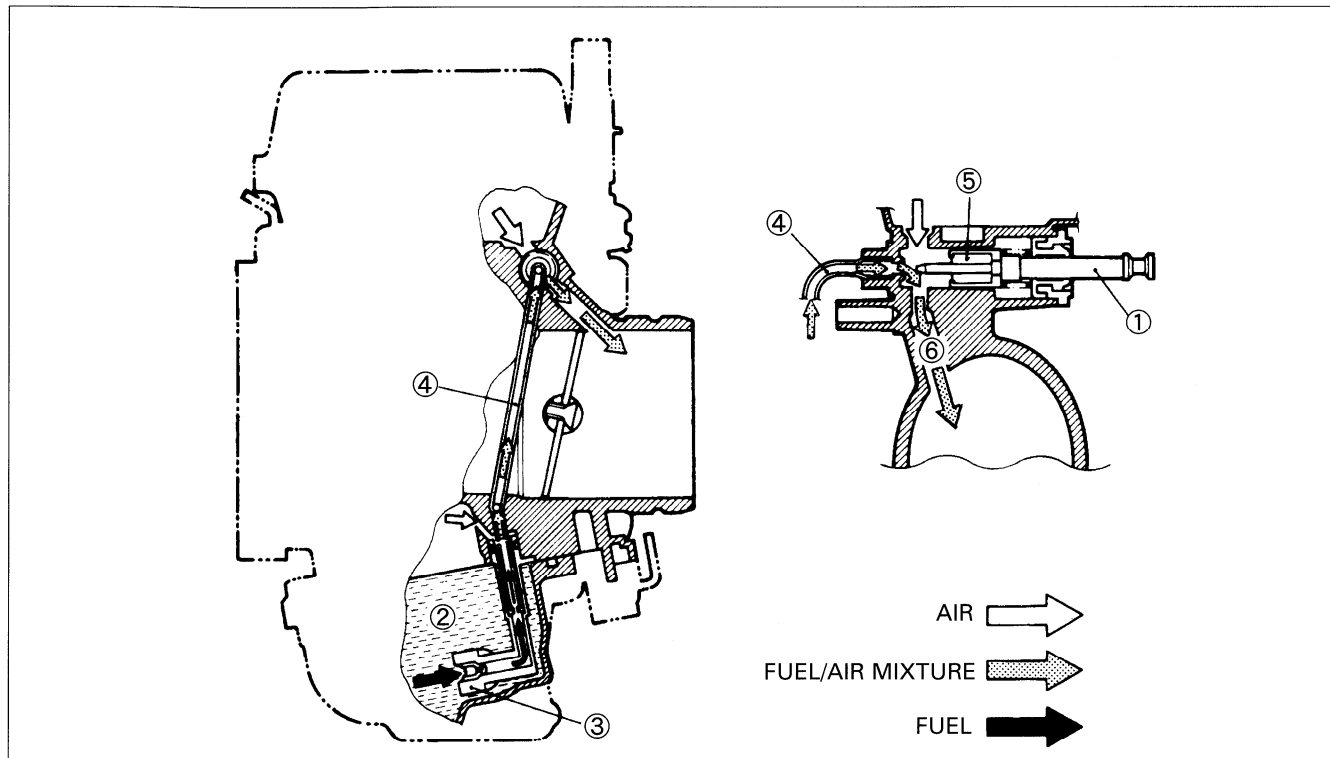


STARTER (ENRICHENER) SYSTEM

Pulling up the starter shaft ①, fuel is drawn into the starter circuit from the float chamber ②. Starter jet ③ meters this fuel, which then flows into fuel pipe ④ and mixes with the air coming from the float chamber ②. The mixture, rich in fuel content, reaches starter plunger ⑤ and mixes again with the air coming through a passage extending from behind the diaphragm. The two successive mixings of fuel with air are such that proper fuel/air mixture for starting is produced when the mixture is sprayed out through starter outlet port ⑥ into the main bore.

NOTE:

An enricher (starter) is operated almost the same way as a choke.



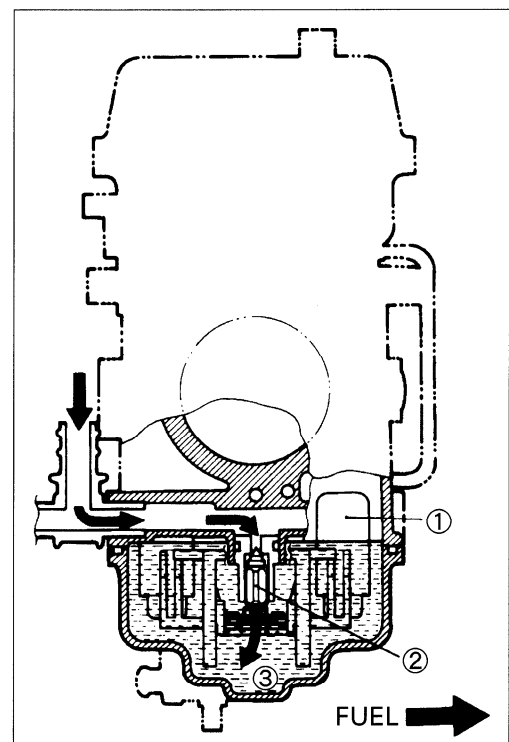
FLOAT SYSTEM

Floats ① and needle valve ② are associated with the same mechanism, so that, as the floats ① move up and down, the needle valve ② too moves likewise.

When fuel level is up in float chamber ③, floats ① are up and needle valve ② remains pushed up against valve seat.

Under this condition, no fuel enters the float chamber ③. As the fuel level falls, floats ① go down and needle valve ② unseats itself to admit fuel into the chamber ③.

In this manner, needle valve ② admits and shuts off fuel alternately to maintain a practically constant fuel level inside the float chamber ③.



REMOVAL

- Remove the carburetor assembly. (Refer to page 3-5.)

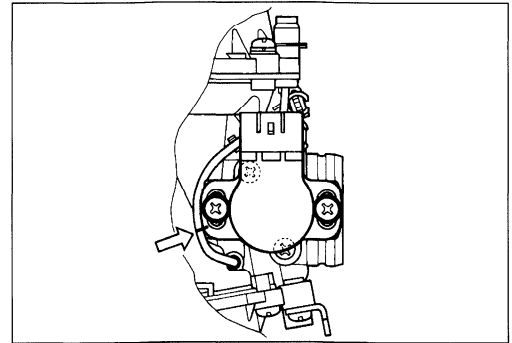
DISASSEMBLY

Before disassembly, prepare a clean and well lit work place where carburetor components can be laid out neatly and will not get lost. Study the service manual carburetor diagram and familiarize yourself with component locations and the different fuel circuits and their routing through the carburetor.

- Disassemble the carburetor as shown in the illustration on page 4-4.

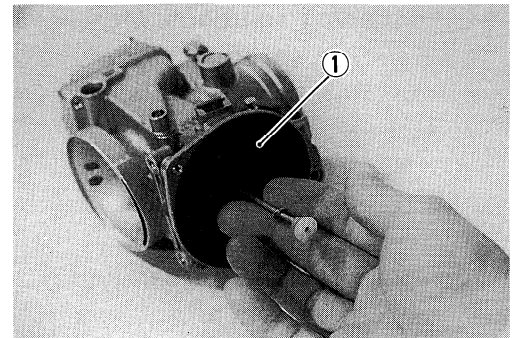
▲ CAUTION

Prior to disassembly, mark with a paint or notch the initial position of the throttle sensor which is PRE-SET accurately at the factory.
Avoid removing the throttle position sensor from the carburetor body unless you really need to do so.



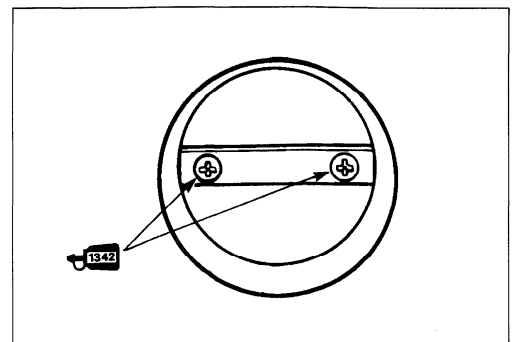
▲ CAUTION

Do not blow the carburetor body with compressed air, before removing the diaphragm ①. It may cause a damage to the diaphragm ①.



▲ CAUTION

These two screws are locked by punching these ends. Once removing the screws, they will be damaged.



NOTE:

Apply a small quantity of *THREAD LOCK "1342"* to the screws, when installing the throttle valve to its shaft.

 **99000-32050: THREAD LOCK "1342"**

▲ CAUTION

Face the stamped side of throttle valve to outside.

(For E-18 model)

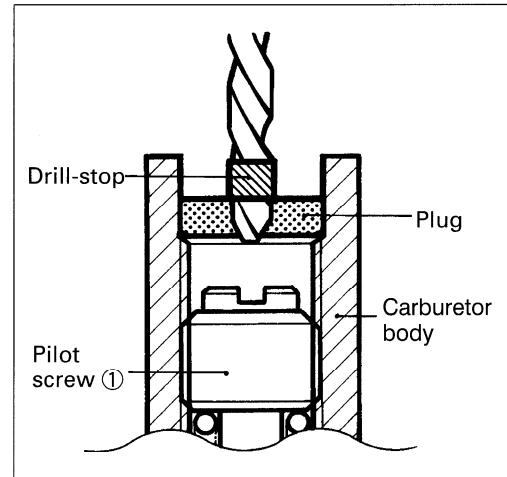
- Use a 1/8" size drill bit with a drill-stop to remove the pilot screw plug. Set the drill-stop 6 mm from the end of the bit to prevent drilling into the pilot screw. Carefully drill through the plug.

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.

▲ CAUTION

Replace the plug with a new one.

- Slowly turn the pilot screw ① in 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 ① with the spring, washer and O-ring.



CARBURETOR CLEANING

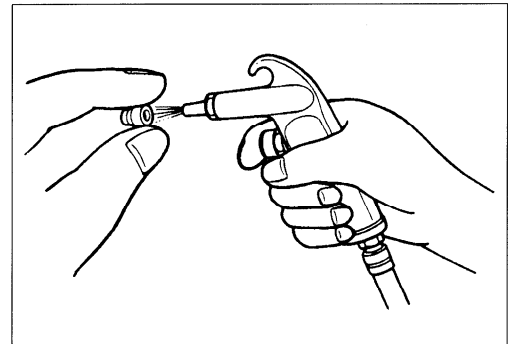
▲ WARNING

Some carburetor cleaning chemicals, especially dip-type 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 blow dry with 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 with compressed air.

▲ CAUTION

Do not use wire to clean jets or passageways. Wire can damage 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 JET INSPECTION

Check following items for any damage or clogging.

- * Pilot jet
- * Main jet
- * Main air jet
- * Pilot air jet
- * Needle jet air bleeding hole
- * Float
- * Needle valve
- * Starter (Enrichener) jet
- * Gasket and O-ring
- * Throttle shaft oil seal
- * Diaphragm
- * Pilot outlet and by-pass holes

THROTTLE POSITION SENSOR INSPECTION

Using pocket tester, measure the resistance between the terminals as shown in the right illustration.

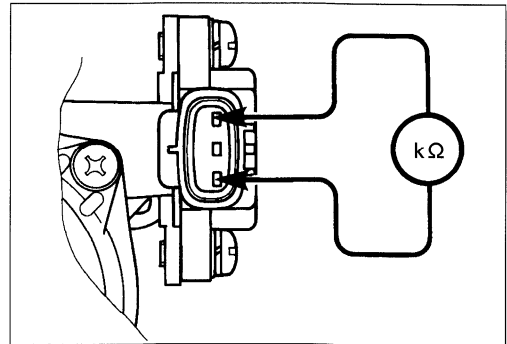
TOOL 09900-25002: Pocket tester

Tester knob indication: ×1kΩ range

Throttle position sensor resistance: 3.5–6.5 kΩ

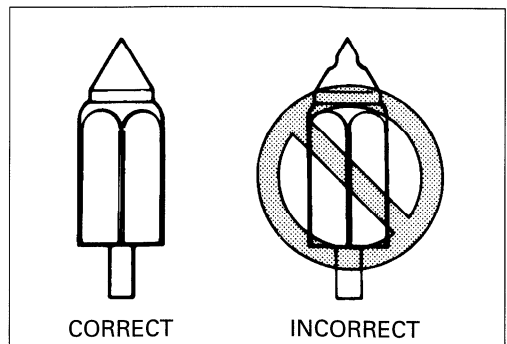
NOTE:

When making above test, it is not necessary to remove the throttle position sensor.



NEEDLE VALVE INSPECTION

If foreign matter is caught between the valve seat and the needle, the gasoline will continue flowing and cause it to overflow. If the seat and needle are worn beyond the permissible limits, similar trouble will occur. Conversely, if the needle sticks, the gasoline will not flow into the float chamber. Clean the float chamber and float parts with gasoline. If the needle is worn as shown in the illustration, replace it together with a valve seat. Clean the fuel passage of the mixing chamber with compressed air.

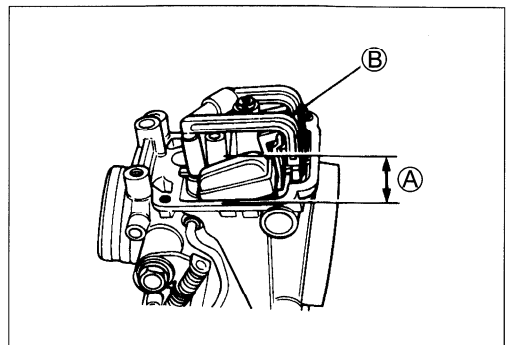


FLOAT HEIGHT ADJUSTMENT

To check the float height, invert the carburetor body, with the float arm kept free, measure the height **A** while float arm is just in contact with needle valve by using calipers. Bend the tongue **B** as necessary to bring the height **A** to this value.

Float height **A :** 14.6 ± 1.0 mm (0.58 ± 0.04 in)

TOOL 09900-20102: Vernier calipers

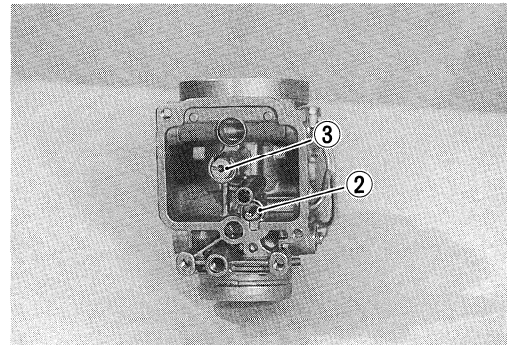
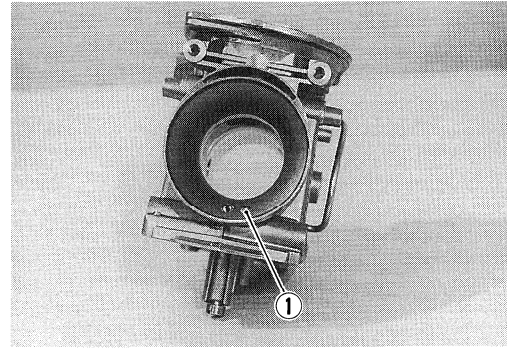


REASSEMBLY AND REMOUNTING

Reassemble and remount the carburetor assembly in the reverse order of disassembly and removal.
Pay attention to the following points:

PILOT AIR JET, PILOT JET AND MAIN JET

- Tighten the pilot air jet ①, pilot jet ② and main jet ③ to the specified torque.
- 🔧 **Pilot air jet ① : 0.7 N·m (0.07 kg-m, 0.5 lb-ft)**
Pilot jet ② : 1.0 N·m (0.1 kg-m, 0.7 lb-ft)
Main jet ③ : 1.8 N·m (0.18 kg-m, 0.8 lb-ft)

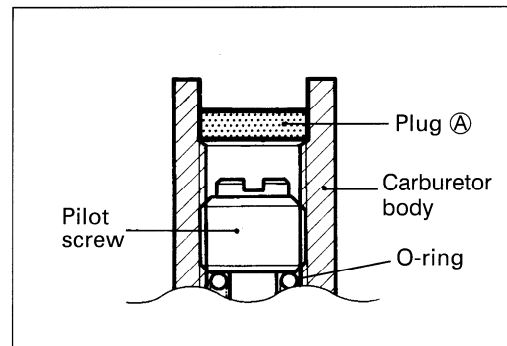


PILOT SCREW

- 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 new plug ① by tapping it into place with a punch.
(For E-18 model)

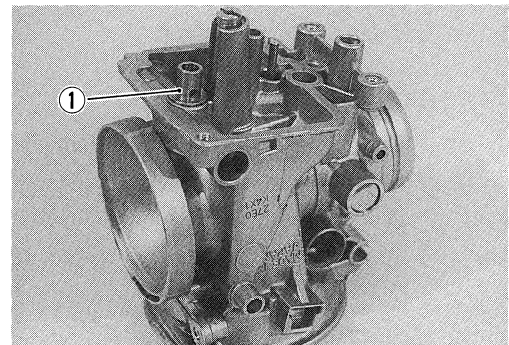
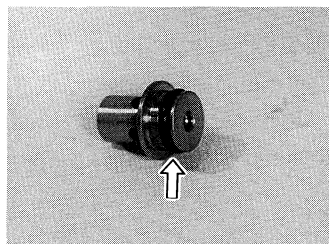
⚠ CAUTION

Replace the O-ring with a new one.



VALVE SEAT AND NEEDLE VALVE

- Press-fit the valve seat ①.



- Install the needle valve ② to the float arm properly.
- Install the O-ring ③.

⚠ CAUTION

Replace the O-rings with new ones.

