• Mount the right crankcase cover positioning bolt.
• Mount the trigger winding and the stator coil.
• Tighten the right crankcase cover positioning bolt.

The bolt should be gradually diagonally tightened in two to three steps. After finishing the installation, inspect for any oil leaks.

**FUEL SUPPLY SYSTEM INSPECTION AND SERVICING**

CV CARBURETOR
The CV carburetor is a constant vacuum carburetor. The picture shows the structure of the CV carburetor.

1. Gasket set
2. Float valve set
3. Needle jet set
4. Float set
5. Float chamber set
6. Screw set A
7. Screw set B
8. Valve plate set
9. Starter valve set
10. Air cut valve set
11. Compression coil spring
12. Screw
13. Carburetor assy.
14. Top comp.
15. Vacuum piston comp.
16. Needle jet holder
17. Plate clip
18. Holder cap
19. Tube A
20. Tube B
21. Screw
22. Screw
23. Washer screw
24. Washer screw
25. Washer screw
26. Clip
27. Clip
28. Tube
29. Main jet
30. Slow jet
CARBURETOR IDLING ADJUSTMENT

AIR ADJUSTING SCREW ADJUSTMENT

**Step one:** Turn on the air adjusting screw in the turn out by the prescribed number of turns.

| Turn out number of turns | 2 3/4 – 2 1/4 |

**Step two:** Adjust the throttle by adjusting the screw to the prescribed idle rpm.

**Step three:** Left and right, adjust the air adjusting screw slightly to find the highest position of the rpm.

Increase throttle quickly and gently (the rpm is from low to high), and return throttle immediately, then observe 10 to 15 minutes, to observe if the idle remains the same.

VACUUM CHAMBER

The picture shows the structure of the vacuum chamber of the CV carburetor.

VACUUM CHAMBER REMOVAL

- Remove the body cover. Remove the automatic choke lead wire.
- Loosen the fuel drain bolt, and drain the fuel in the float chamber. Remove the fuel line and the vacuum pipe.
- Loosen the throttle cable adjusting nut and positioning nut; remove the throttle cable.
- Loosen the carburetor air inlet vent clip and the inlet manifold clip; remove the carburetor.
- Remove the vacuum cover bolt, and remove the vacuum cover. Notice: move slowly to prevent the spring from ejecting.
- Take out the spring, the vacuum membrane and the plunger.
- Press down the holding clamp of the needle valve top, and turn left to take out the clamp.
- Take out the spring and needle valve.

Do not damage the vacuum membrane.

- Inspect the needle valve for wear.
- Inspect the vacuum membrane for damage.
- Inspect the plunger for damage.
VACUUM CHAMBER INSTALLATION

- Mount the plunger and the vacuum membrane into the carburetor body.
- Push the plunger upwards in the direction of the vacuum chamber cover to open the carburetor jet tube. Insert the spring.
- Align the bulge part of the vacuum membrane with the fillister of the carburetor body; mount the vacuum chamber cover.
- Tighten the bolt.

AUTOMATIC SIDE STARTER (CHOKE)

AUTOMATIC SIDE STARTER INSPECTION

- Remove the fuel hose from the carburetor.
- Turn out the carburetor float chamber drain screw, and drain the fuel in the carburetor.
- Remove the automatic side starter lead wire, and remove the clip.
- Remove the carburetor clamp, and remove the carburetor.
- Check the condition of the connection between the two lead wires.

The choke value should be below 10V. If it exceeds the specific value, it should be replaced. When the engine is cold, link a hose on the reserve supply fuel line and blow very gently. If it is obstructed or the auto side starter is not good, it should be replaced.

- Remove the auto side starter cover.
- Remove its positioning bolts and pieces.
- Remove the auto side starter.
- Inspect the auto side starting valve and fuel injection needle for wear.
- Inspect the O-ring for wear.

FLOAT CHAMBER

FLOAT CHAMBER REMOVAL

- Remove the carburetor.
- Remove the clamp, and remove the float chamber.
- Remove the O-ring; turn out the float chamber screw; remove the float pin; and remove the float and float valve.
- Remove the choke adjusting screw and air adjusting screw.
Before removing first tighten the two screws gently, counting the number of turns. Remove screws. Do not use excessive force to avoid damaging the air adjusting screw head surface.

• Remove the main fuel injection nozzle and fuel injection needle seat.

FLOAT CHAMBER INSTALLATION
Inspect the float for any damage and for fuel in the float. Inspect the float valve and float valve seat for wear. If there is wear, it should be replaced.

Clear every fuel line and air line on the carburetor body with compressed air.

FLOAT CHAMBER INSTALLATION
• Install the main fuel injection nozzle and fuel injection needle seat.
• Install the air adjusting screw and choke adjusting screw, and turn them to the proper position according to the noted number of turns while removing.
• Mount the float valve, the float, and the float pin.
• Tighten the float pin positioning screw.

FUEL LEVEL INSPECTION
• Measure the fuel level height.

Fuel level height 18.5mm

• Inspect the float for any damage and inspect the float valve for excess wear.
• Confirm that the up and down movement of the float is normal.

CARBURETOR INSTALLATION
• Inspect the float for any damage and inspect the float valve for excess wear.
• Confirm that the up and down movement of the float is normal.

CARBURETOR INSTALLATION
• Reverse the removal procedure for installation.
• After installing, confirm that all carburetor linkage and cables are in correct position. Verify that carburetor is in idle position.
AIR CUT VALVE (ACV)

The air cut valve can avoid some abnormalities when the throttle closes too quickly. The structure of the air cut valve is shown in the picture.

AIR CUT VALVE REMOVAL

- Remove the air inlet manifold of the cut valve.
- Remove the bolt. Remove the vacuum membrane cover, the spring, and the vacuum membrane.

AIR CUT VALVE INSTALLATION

- Mount the vacuum membrane on the carburetor.
- Mount the spring, the vacuum membrane cover, and the lock bolt.

The bottom side of the vacuum membrane should be aligned with the carburetor. The top side should be aligned with the vacuum membrane.

AIR CHECK VALVE

The air check valve starts working under 31mph (50 km/h), and opens the second air inlet to reduce CO$_2$ displacement.

AIR CHECK VALVE INSTALLATION

Reverse the procedure for removal

When installing, make sure all the connecting pipes are connected properly, and that they are not squeezed, bent, or clogged up.