

# 5.FUEL SYSTEM

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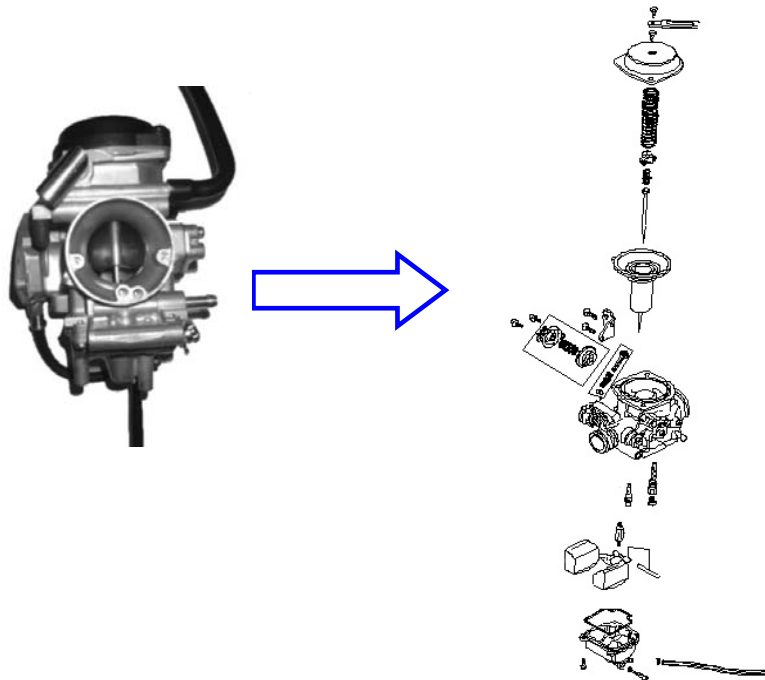
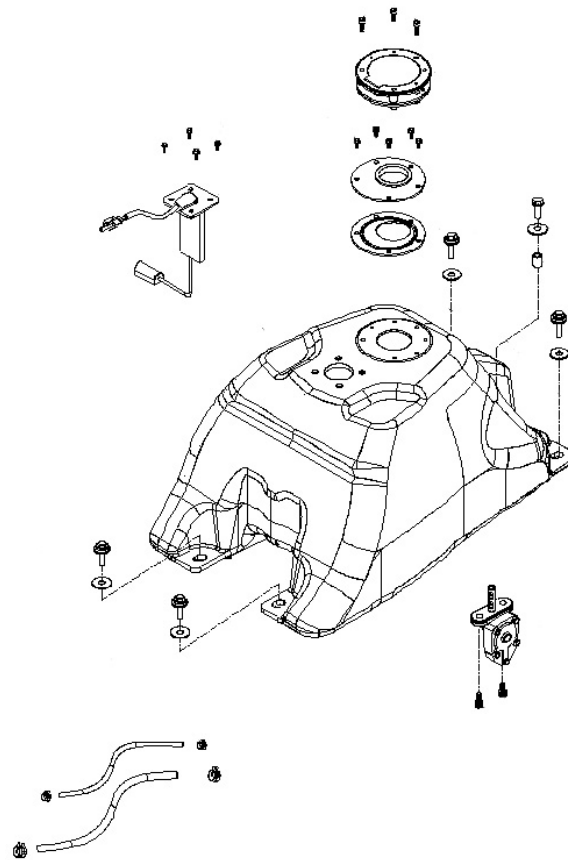
## FUEL SYSTEM

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## SERVICE INFORMATION

### GENERAL INSTRUCTIONS



Gasoline is very dangerous. When working with gasoline, keep sparks and flames away from the working area.

Gasoline is extremely flammable and is explosive under certain conditions. Be sure to work in a well-ventilated area.

- Do not bend or twist control cables. Damaged control cables will not operate smoothly.
- When disassembling fuel system parts, note the locations of O-rings. Replace them with new ones during reassembly.
- Before float chamber disassembly, loosen the drain screw to drain residual gasoline into a clean container.
- After the carburetor is removed, plug the intake manifold side with a clean shop towel to prevent foreign matters from entering.
- When cleaning the carburetor air and fuel jets, the O-rings and diaphragm must be removed first to avoid damage. Then, clean with compressed air.
- When the ATV is not used for over one month, drain the residual gasoline from the float chamber to avoid erratic idling and clogged slow jet due to deteriorated fuel.

### SPECIFICATIONS

Item	Standard
Type	CV
Venturi dia.	$\phi$ 33
Float level	31.5 mm
Main jet No.	127.5
Idle speed	1600 $\pm$ 100rpm
Throttle grip free play	1~4 mm
Air screw opening	1/2~1

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## TROUBLESHOOTING

### Engine cranks but won't start

- No fuel in tank
- No fuel to carburetor
- Cylinder flooded with fuel
- No spark at plug
- Clogged air cleaner
- Intake air leak
- Improper throttle operation

### Engine idle roughly, stalls or runs poorly

- Excessively used choke
- Ignition malfunction
- Faulty carburetor
- Poor quality fuel
- Lean or rich mixture
- Incorrect idle speed

### Misfiring during acceleration

- Faulty ignition system
- Faulty carburetor

### Backfiring at deceleration

- Float level too low
- Incorrectly adjusted carburetor
- Faulty exhaust muffler

### Engine lacks power

- Clogged air cleaner
- Faulty carburetor
- Faulty ignition system

### Lean mixture

- Clogged carburetor fuel jets
- Float level too low
- Intake air leak
- Clogged fuel tank cap breather hole
- Kinked or restricted fuel line

### Rich mixture

- Float level too high
- Clogged air jets
- Clogged air cleaner

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## FUEL TANK

### REMOVAL



#### Warning

- Keep sparks and flames away from the work area.
- Wipe off any spilled gasoline.

Remove the seat (See page 2-3), and front fender.

The fuel valve “OFF” when engine off.  
And fuel valve “ON” when engine running.  
Disconnect the fuel tube from carburetor.

Disconnect the fuel unit connectors.  
Remove the four bolts , then remove the fuel tank.

### INSTALLATION

Reverse the “FUEL TANK REMOVAL” procedures.

## FUEL VALVE

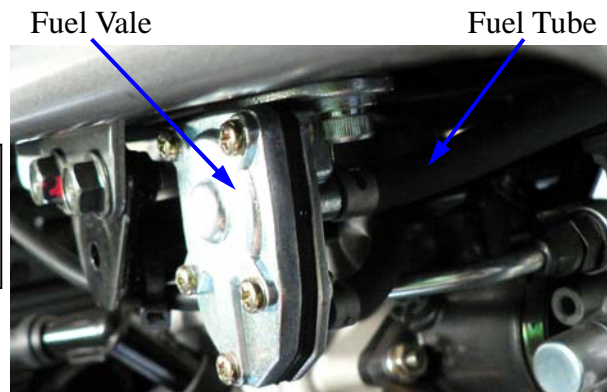
### REMOVAL

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- Keep sparks and flames away from the work area.
- Drain gasoline into a clean container.

Disconnect all fuel tubes and remove the two bolts, then remove fuel valve.

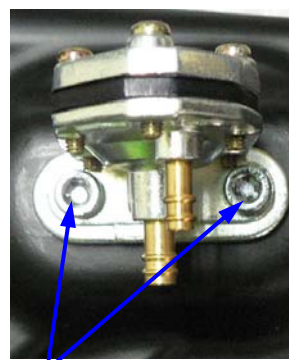
Replace the O-rings with new ones if they are damaged or deteriorated.



Bolts



Bolts



Bolts



O-ring

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## THROTTLE CABLE

### DISASSEMBLY

Remove the fuel tank. (Refer to “FUEL TANK” section in the chapter 5)

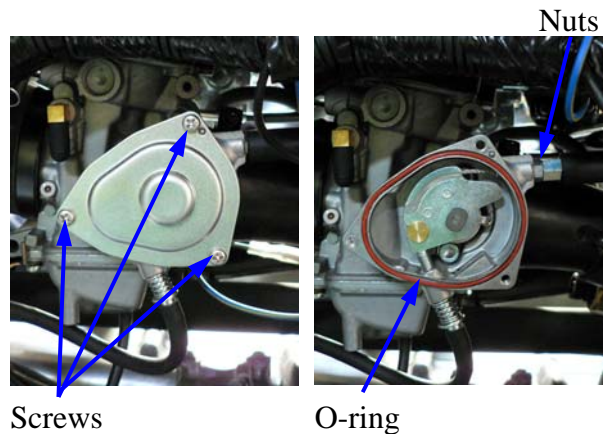
Remove the throttle cable cover.

Remove the throttle cable.

### ASSEMBLY

Reverse the “DISASSEMBLY” procedures.

Install the throttle cable into the carburetor body.



## CARBURETOR

### REMOVAL

Remove the fuel tank and carburetor cap. (Refer to “FUEL TANK” section in the Chapter 5)

Loosen the drain screw to drain the gasoline from the float chamber.

- \* Keep sparks and flames away from the work area.
- \* Drain gasoline into a clean container.



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Remove three screw and remove the throttle cable cover.

Remove the throttle cable.

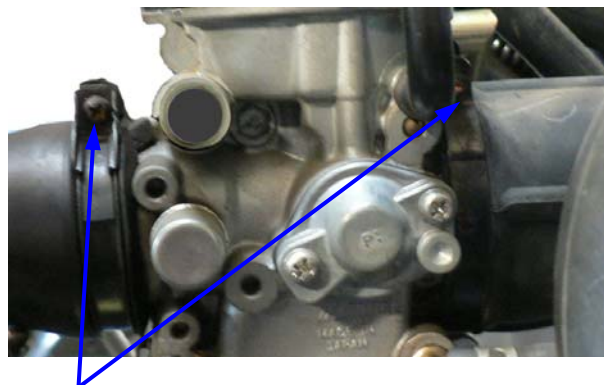


Remove the chock cable.



Loosen the air cleaner connecting tube and Intake manifold band screw.

Remove the carburetor.



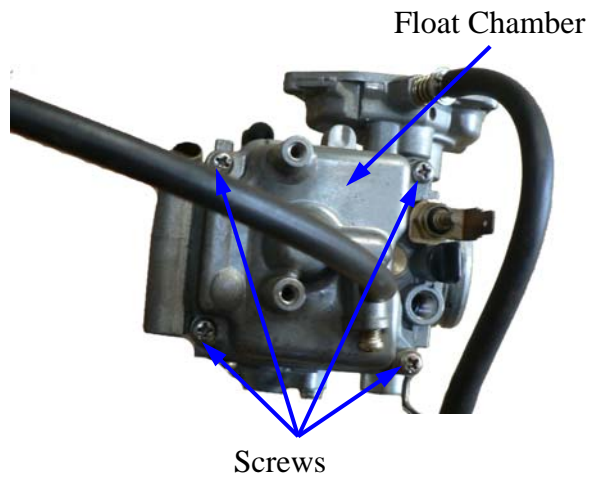
Band Screw

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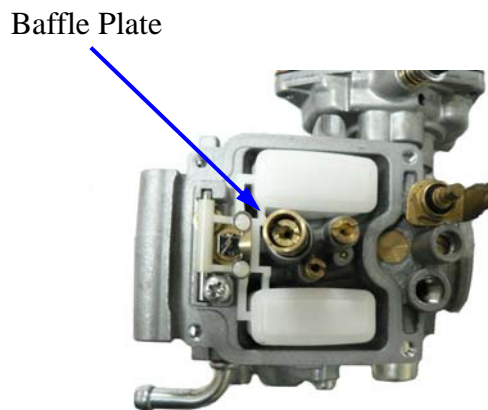
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## DISASSEMBLY

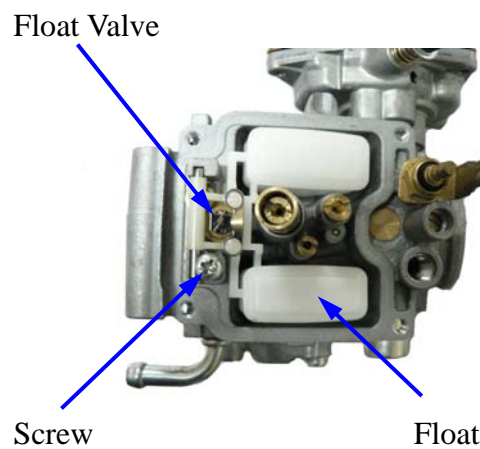
Remove the float chamber attaching four Screw and remove the float chamber.



Remove the baffle plate.



Remove the screw, then remove float and float valve.  
Inspect the float for deformation or damage.

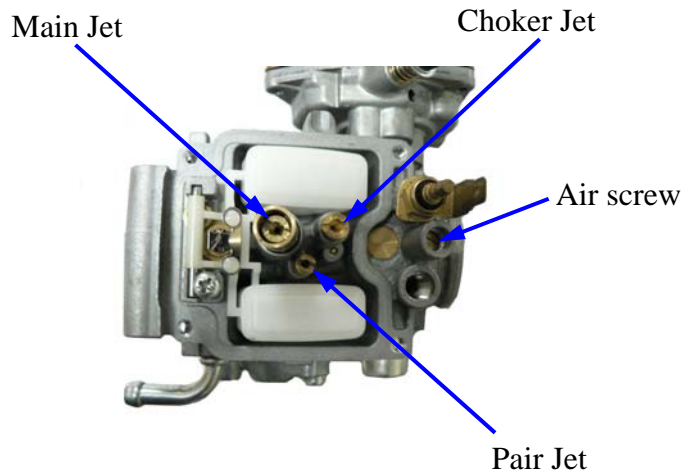




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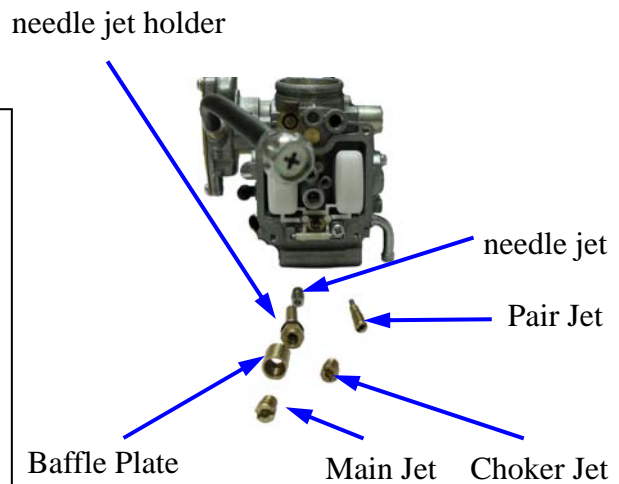
Remove the main jet, needle jet holder, and needle jet.  
Remove the slow jet.  
Remove the air screw.



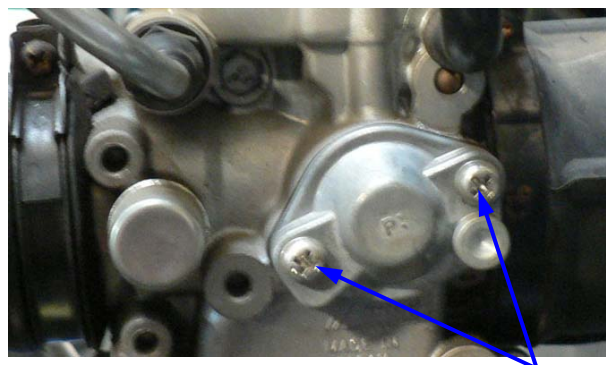
## CAUTIONS!

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- Be careful not to damage the jets and jet holder when removing them.
- Before removal, turn the throttle stop screw and air screw in and count the number of turns until they seat lightly and then make a note of this.
- Do not force the screw against its seat to avoid seat damage.
- Be sure to install the O-ring in the reverse order of removal.



Remove the two screws and the air cut-off valve cover.

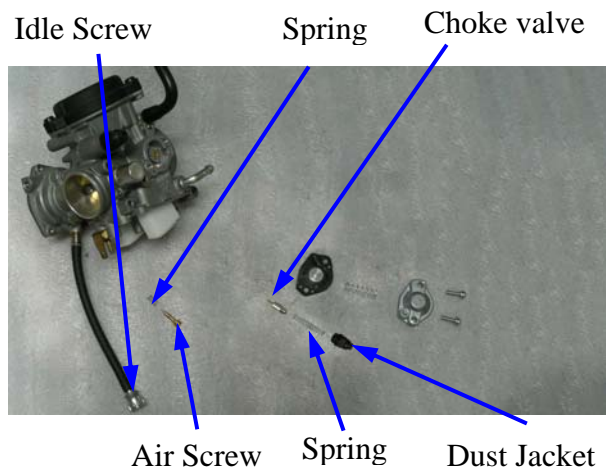
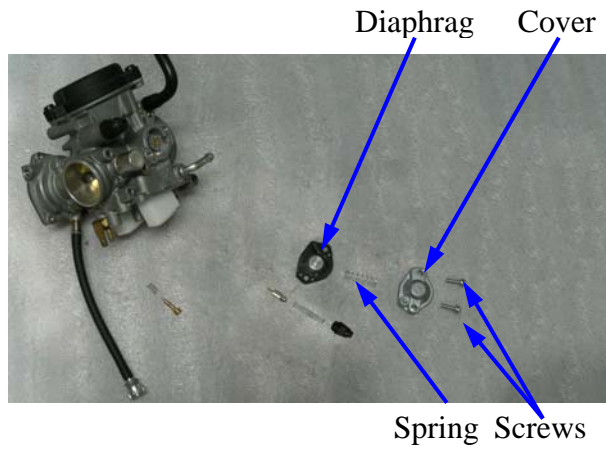


Screws

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Remove the spring, diaphragm and O-rings. Inspect the diaphragm and spring for wear or damage.



Remove two screws and diaphragm Cover.  
Remove spring and diaphragm.



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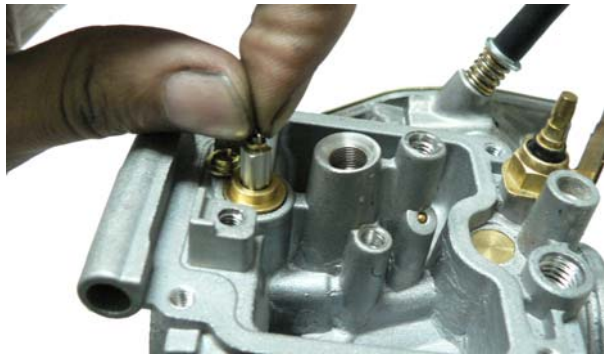
## **CARBURETOR CLEANING**

Blow compressed air through all passages of the carburetor body.

## **FLOAT/FLOAT VALVE INSPECTION**

Inspect the float valve for seat wear or damage.

Inspect the float for damage or fuel level inside the float chamber.



## **FUEL RESERVOIR O-RING CHECK**

Remove the O-ring.

**INSPECTION**

Inspect the check the O-ring for damage.

Replace with new ones if necessary



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## ASSEMBLY

Install the needle jet, needle jet holder, pair jet, choke jet and main jet.

Install the air screw

Install the spring, diaphragm and O-rings.

- \* • When installing the air screw, return it to the original position as noted during removal
- After the carburetor is installed, be sure to perform the Exhaust Emission

Install the float valve, float and float pin holder screw.

## FLOAT LEVEL INSPECTION

Turn the carburetor upside down so that the float will go down to make the float valve contact the float valve seat.

Then slowly level with the float level gauge while the float pin just contacts with float valve.

**Float Level:** 31.5 mm

When adjusting, carefully bend the float pin. Check the float for proper operation.

Install the float chamber.

## INSTALLATION

Reverse the “CARBURETOR REMOVAL” procedures.

## AIR CLEANER

Refer to the “AIR CLEANER” section in the chapter 3 for air cleaner replacement and cleaning.

