

## 5. FUEL SYSTEM

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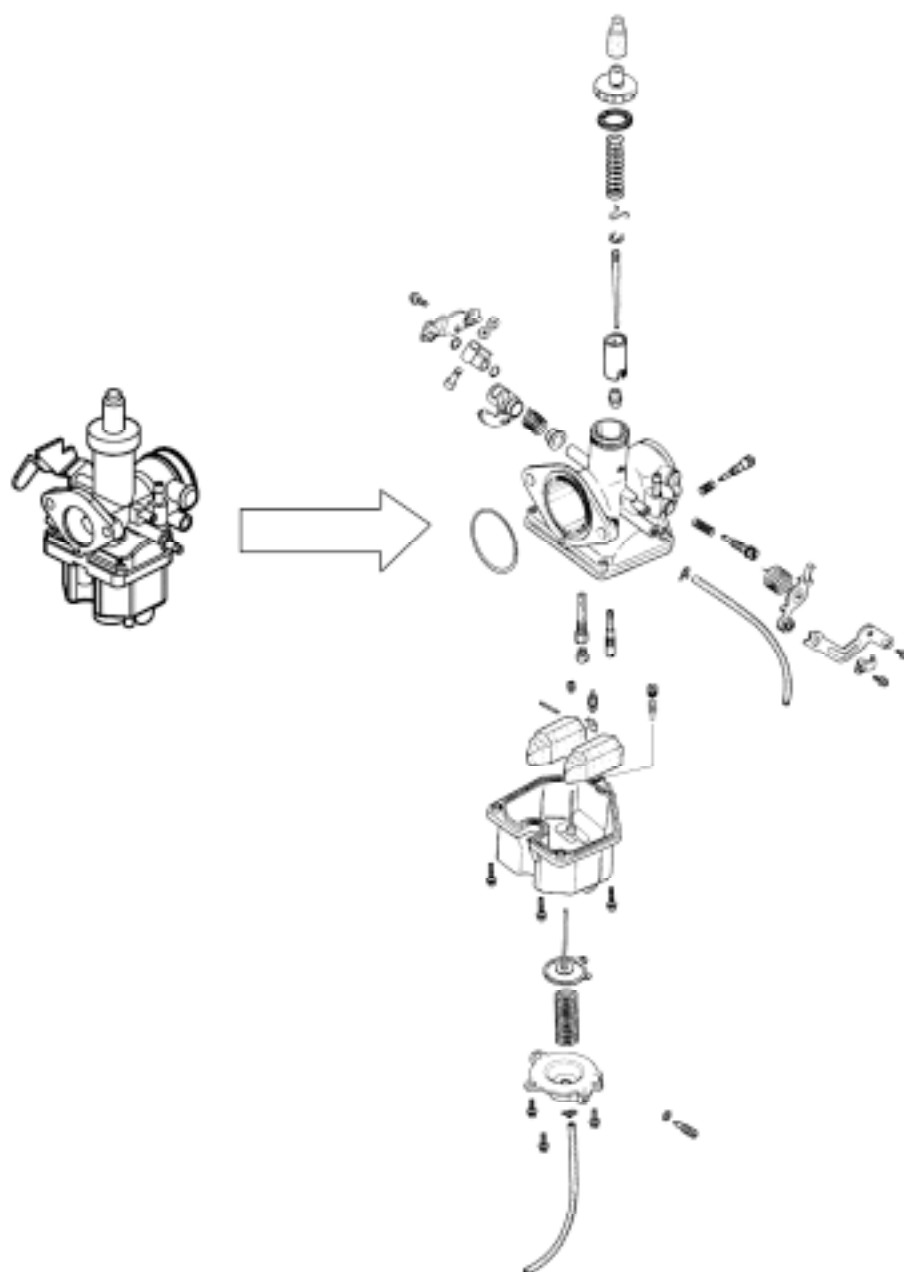
### FUEL SYSTEM

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## 5. 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 the 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 motorcycle 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

|                         | MX'er 150   | MX'er 125   |
|-------------------------|-------------|-------------|
| Item                    | Standard    | Standard    |
| Type                    | PD          | PD          |
| Venturi dia.            | □25         | □25         |
| Float level             | 14.8mm      | 14.8mm      |
| Main jet No.            | 95          | 95          |
| Adjust method           | Piston      | Piston      |
| Idle speed              | 1700±100rpm | 1700±100rpm |
| Throttle grip free play | 1_ 4mm      | 1_ 4mm      |
| Air screw opening       | 2±1/2       | 2±1/2       |

## 5. FUEL SYSTEM

### **SPECIAL TOOL**

Float level gauge

### **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 idles 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

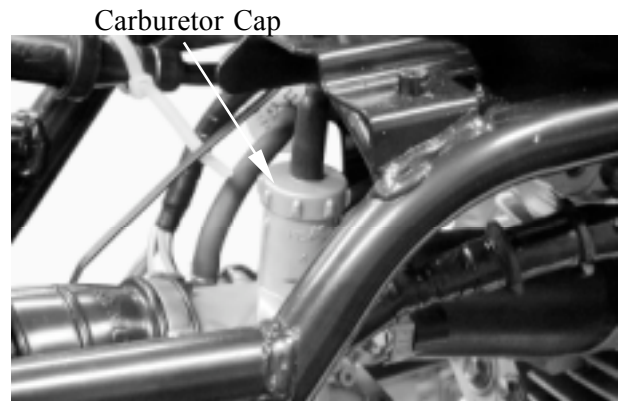
#### **Rich mixture**

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

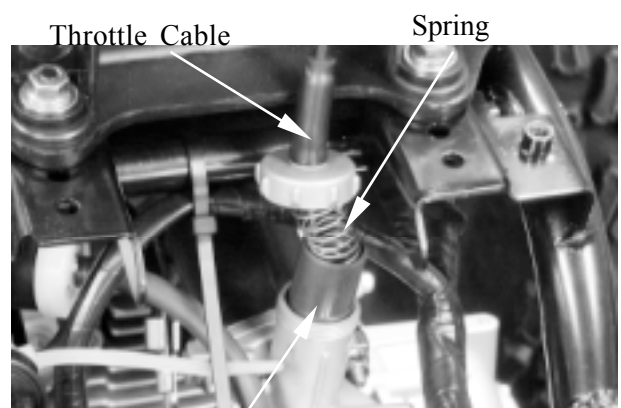
## 5. FUEL SYSTEM

### THROTTLE VALVE DISASSEMBLY

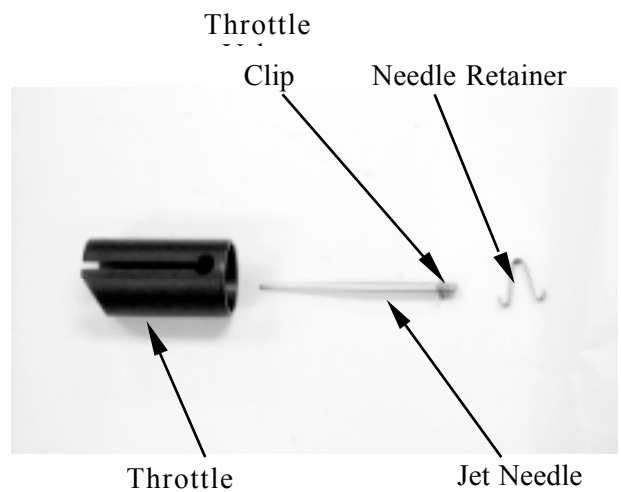
Remove the front cover.  
Remove the front fender.  
Remove the carburetor cap.  
Pull out the throttle valve.  
Disconnect the choke knob cable.



Disconnect the throttle cable and remove the spring from the throttle valve.



Pry off the needle retainer and remove the jet needle.  
Check the throttle valve and jet needle for wear or damage.

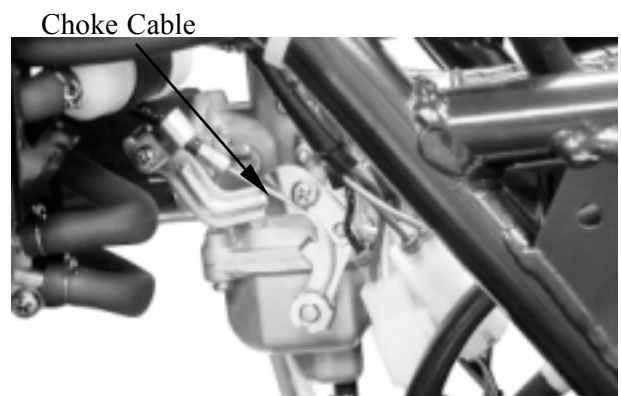


### CARBURETOR REMOVAL

Switch the fuel valve OFF.  
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.

Disconnect the fuel inlet tube and the choke cable.

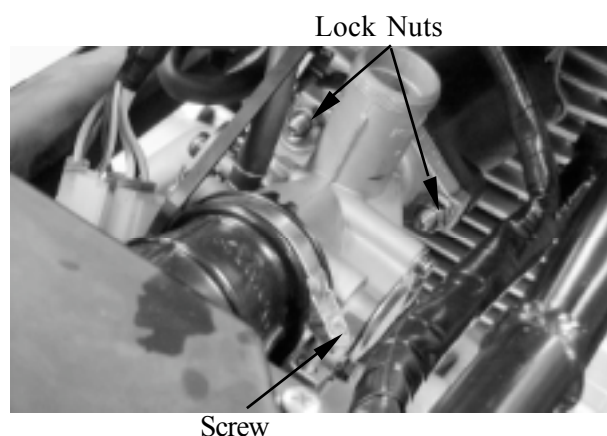


## 5. FUEL SYSTEM

Loosen the air cleaner connecting tube band screw.

Remove the two carburetor lock nuts.

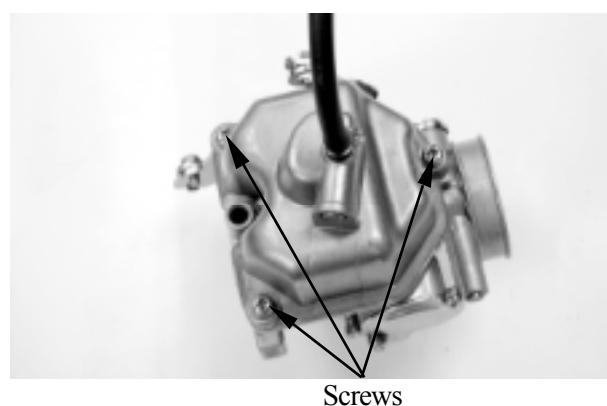
Remove the carburetor



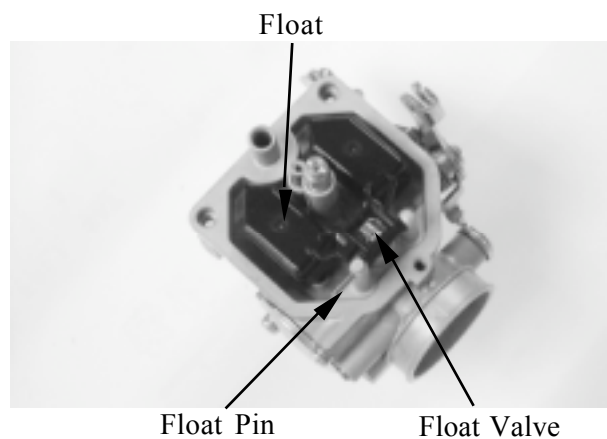
### FLOAT/FLOAT VALVE/JETS

#### FLOAT/FLOAT VALVE DISASSEMBLY

Remove the float chamber attaching three screws and remove the float chamber.



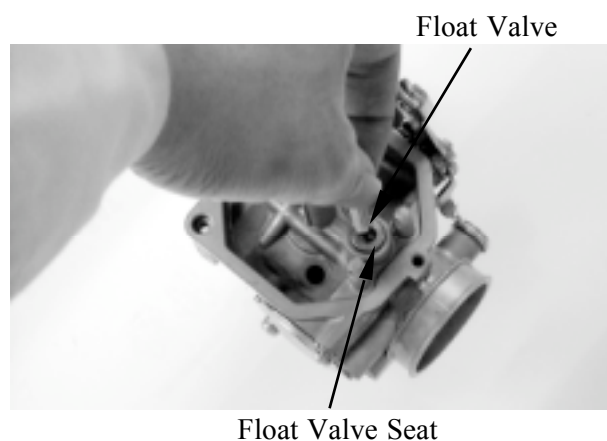
Remove the float pin, float and float valve.



#### FLOAT/FLOAT VALVE INSPECTION

Inspect the float valve seat for wear or damage.

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



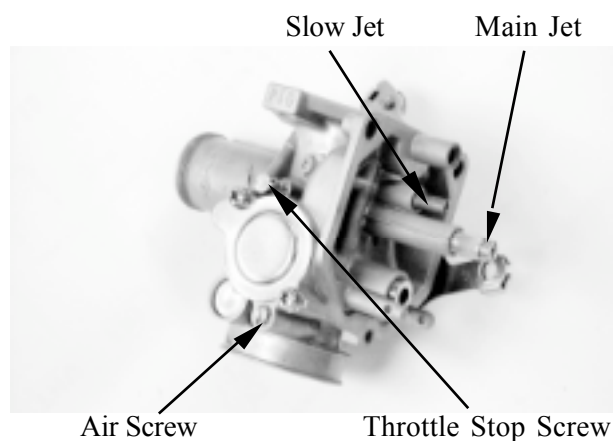
## 5. FUEL SYSTEM

### JETS/AIR SCREW/THROTTLE STOP SCREW REMOVAL

Remove the main jet, needle jet holder, and needle jet.

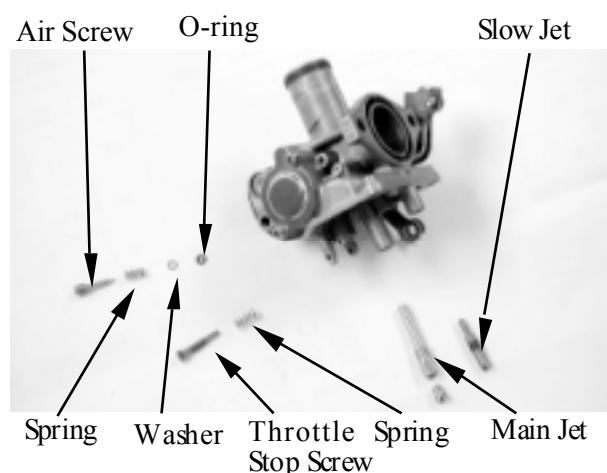
Remove the slow jet.

Remove the air screw and throttle stop screw.



### CAUTIONS !

- 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.

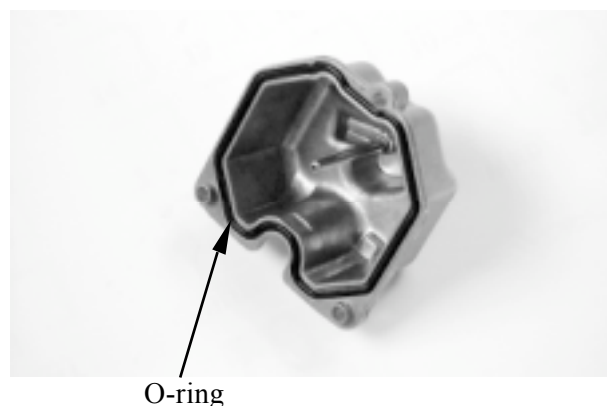


### FUEL RESERVOIR O-RING CHECK

Remove the O-ring.

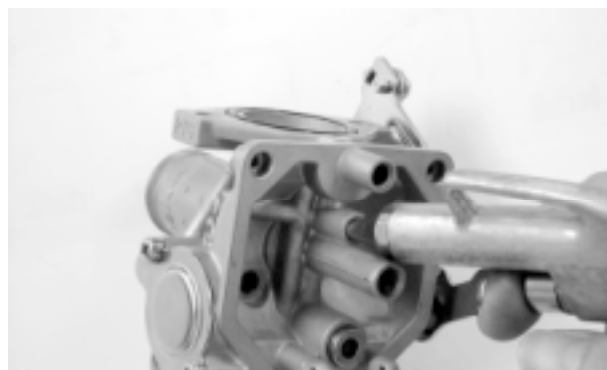
### INSPECTION

Inspect the check the O-ring for damage. Replace with new ones if necessary



### CARBURETOR CLEANING

Blow compressed air through all passages of the carburetor body.



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### SLOW/MAIN JET INSTALLATION

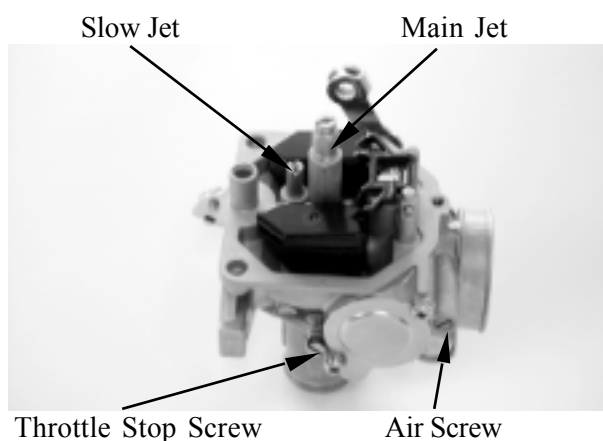
Install the slow jet.

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

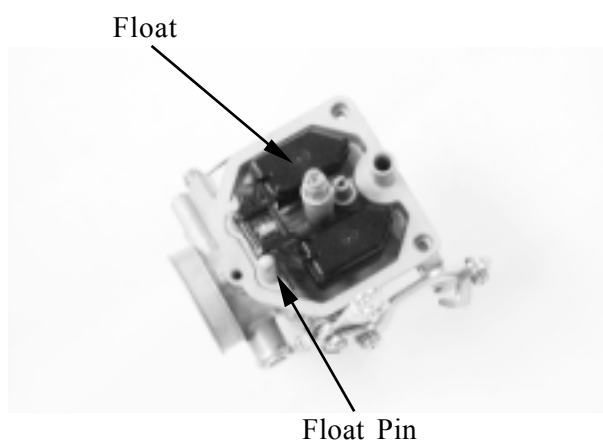
Install the throttle stop screw and air screw

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- 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 Test.



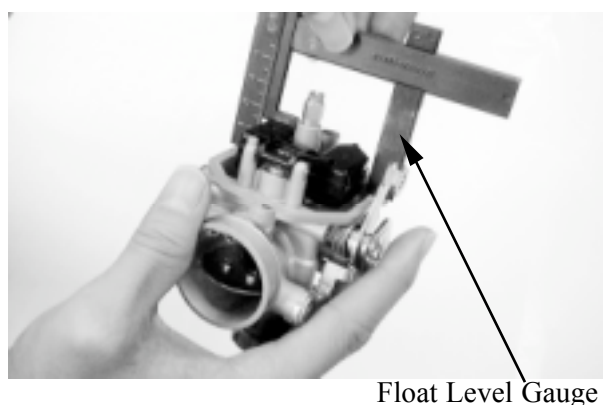
Install the float valve, float and float pin.



### 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 tilt the carburetor and measure the float level with the float level gauge while the float pin just contacts with float valve.



#### Float Level:

|           |        |
|-----------|--------|
| MX'er 150 | 14.8mm |
| MX'er 125 |        |

When adjusting, carefully bend the float pin. Check the float for proper operation and then install the float chamber.



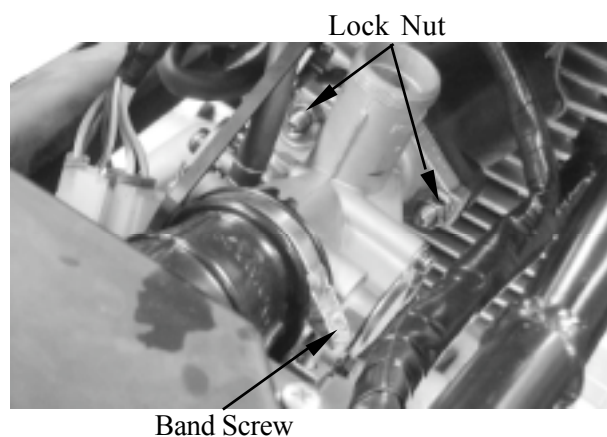
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### CARBURETOR INSTALLATION

Install the carburetor onto the intake manifold and tighten the two lock nuts.

**Torque:** 0.8\_ 1.2kgf-m

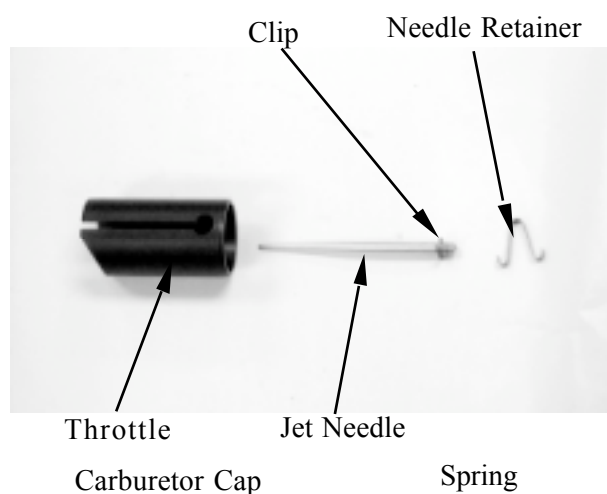
Install the air cleaner connecting tube and tighten the band screw.



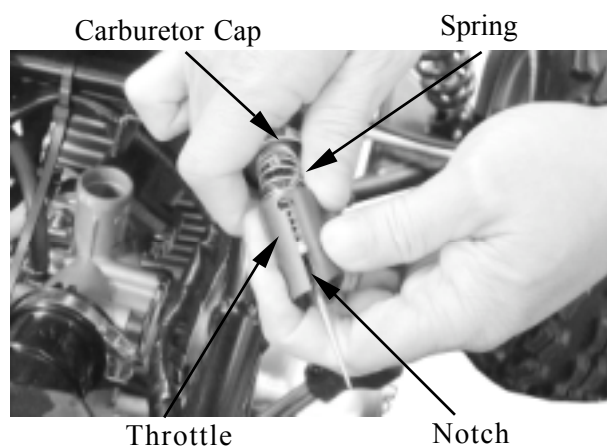
### THROTTLE VALVE ASSEMBLY

Install the jet needle into the throttle valve and secure with the needle retainer.

**Jet Needle Notch:** 4th Notch  
(Counted from top to bottom)



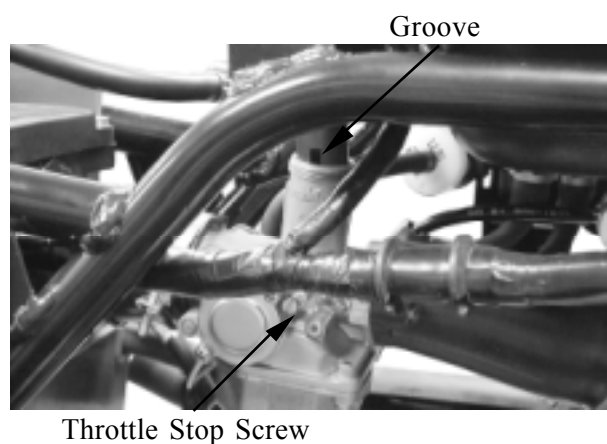
Assemble the rubber cover, carburetor cap and throttle valve spring.  
Connect the throttle cable to the throttle valve.



Install the throttle valve into the carburetor body.

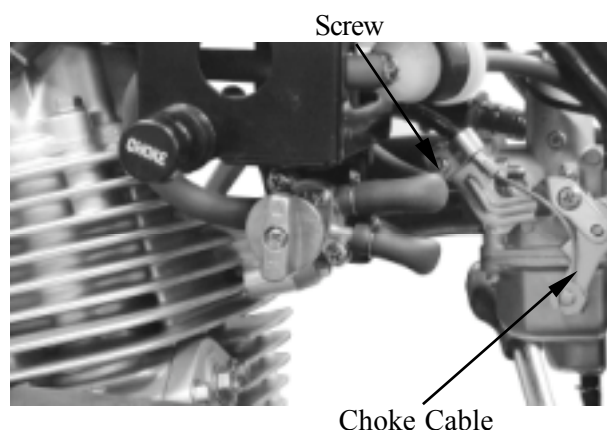
- \* Align the groove in the throttle valve with the throttle stop screw on the carburetor body.

Connect the accelerating pump cable.  
Fully open the throttle and adjust the accelerating pump cable to align the punch mark on the accelerating pump arm with the punch mark on the set plate.



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Tighten the choke cable.



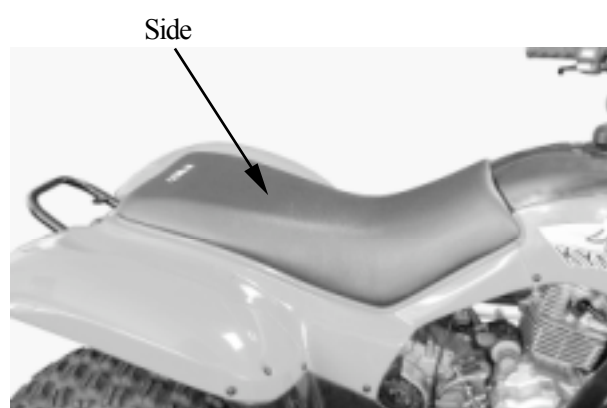
### FUEL TANK

#### FUEL TANK REMOVAL

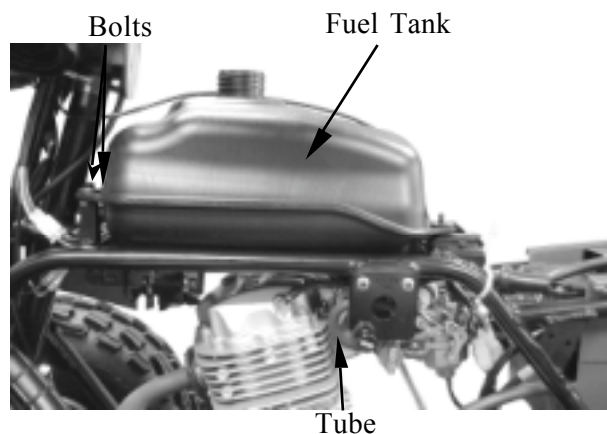
##### Warning

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

Remove the seat.  
Remove the center cover.  
Remove the right and left front fender.

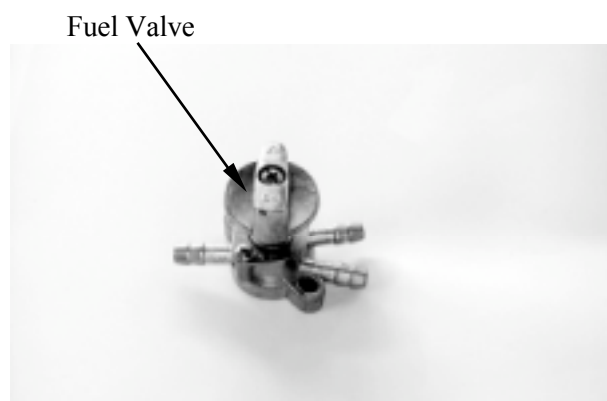


Switch the fuel valve "OFF".  
Disconnect the fuel tube and remove two bolts on the end of the fuel tank.  
Remove the fuel tank.



#### FUEL VALVE REMOVAL

Remove the fuel valve and fuel cup.



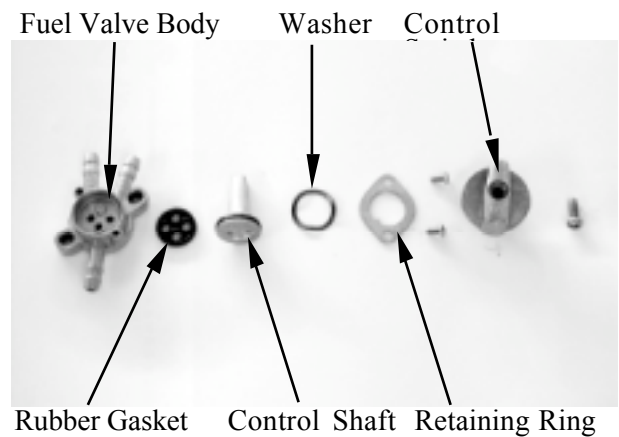
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Remove the screw on the fuel valve control switch.  
Remove the two screws on the fuel valve body.

### INSPECTION

Inspect the fuel valve strainer for dirt and clog. Clean if necessary.

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



### AIR CLEANER

#### REMOVAL

Remove the seat.  
Remove the four screws on the air cleaner case cover and the cover.  
Remove the air cleaner screen and element.

