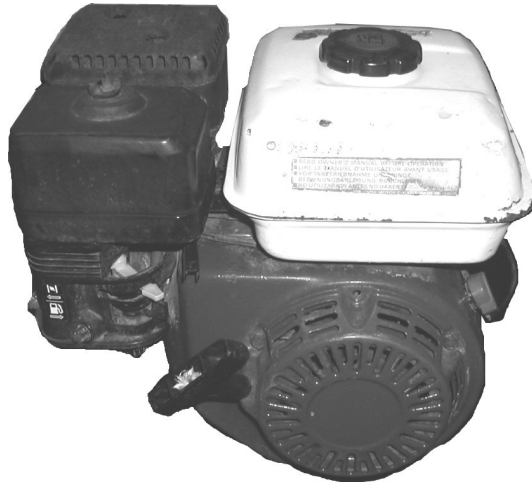


#### **9.4 Pump Motor**



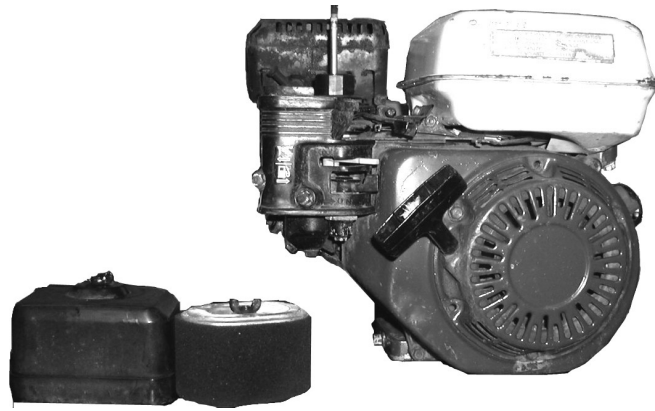
### **Pump Motor Disassembly and Rebuild**

If the pump motor will not start you should:

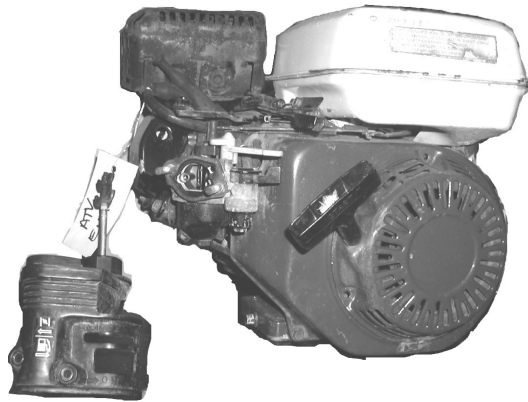
- Check the fuel to make sure there is no water in it.
- Check the oil for sufficient level.
- Check the spark plug for fouling.
- Check the on/off switch for good connection.
- If all else fails, check the carburetor jets to make sure they are not clogged (will be explained below).

### **Motor Disassembly and Carburetor Cleaning**

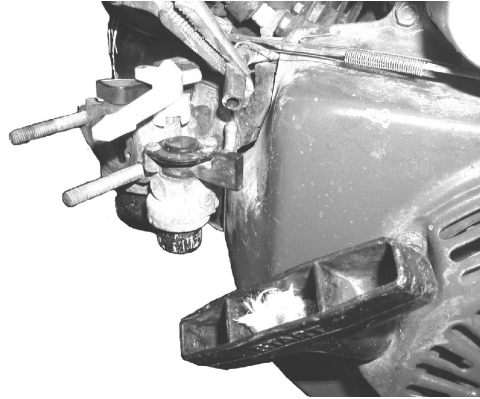
1. Remove the air filter cover and air filter.



2. Remove the screws 10mm screws and nuts,  $\frac{1}{4}$  inch rubber hose to the valve cover, and carb gasket from the choke and fuel control plate.



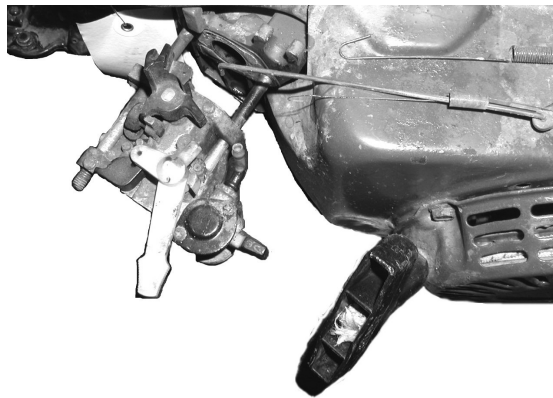
3. Remove the two 10mm bolts and two 10mm nuts from the bottom of the gas tank (be careful of all choke and throttle springs!)
4. Remove the throttle control (has the big spring on it).
5. Clamp the gas line with vice grips or similar to prevent gas spill and remove the hose from the carb.



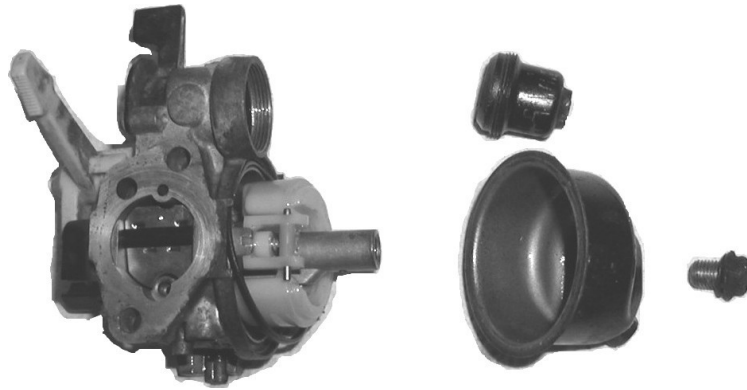
6. Remove the tank and clamp further up the hose.
7. Replace the nuts and bolts on the tank and motor to prevent losing them.

## Carb Disassembly and Cleaning

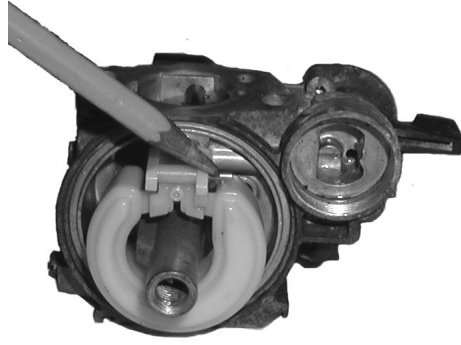
8. Pull the carb out half way and carefully remove springs then remove the carb.



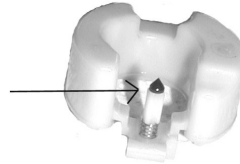
9. Remove the sediment and fuel bowls (this can be done without removing fuel tank). Check to make sure there isn't any water in the bowls.



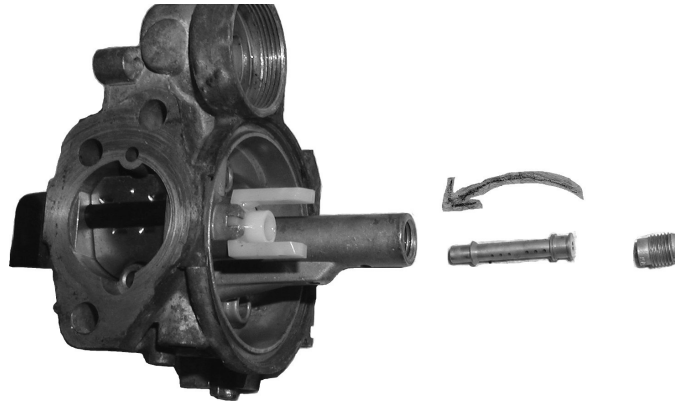
10. Remove the O-rings from both bowls and inspect for wear.
11. Remove the float pin (shown here by the pencil). When removing the float, be careful to keep the fuel needle attached to the float.



Fuel Needle



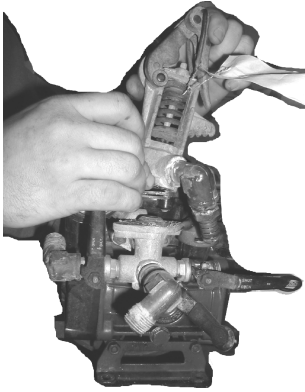
12. Remove the choke lever and 2 screws for the gas on/off switch.
13. Remove the brass jet. Push down hard when unscrewing to make sure you do not strip it.



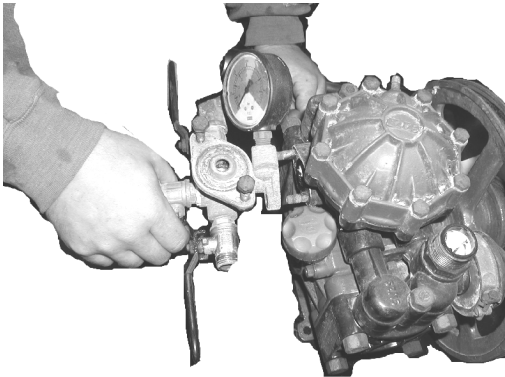
14. Inspect the jets to make sure they are not clogged (should be able to see a pin of light through them when they are held up to light).
15. If jets are clogged, place them in parts cleaner for 15 minutes or, if in field, spray starter fluid through jets until unclogged.

## Hypro Pump Rebuild

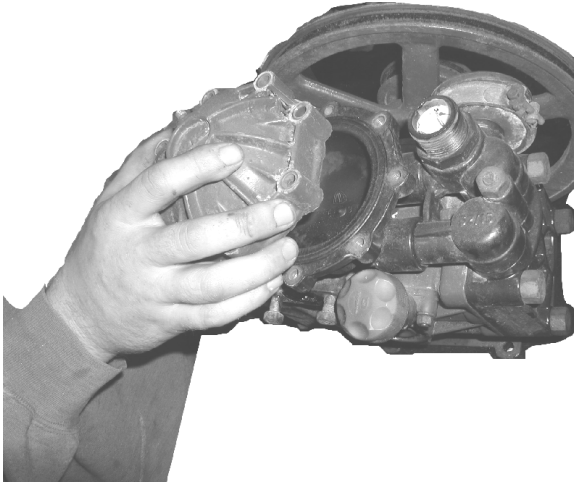
1. Drain the oil from pump.
2. Remove the pressure lever control (two ½ inch bolts).



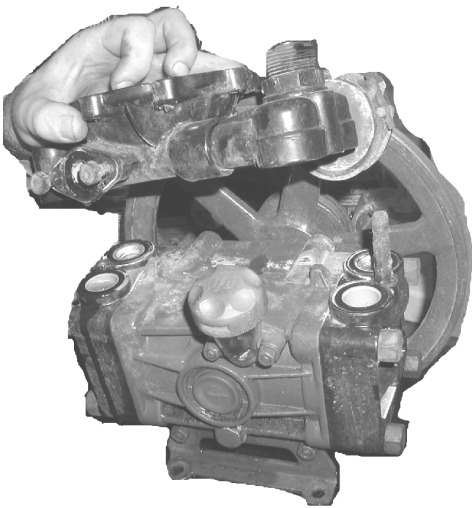
3. Remove the pressure gauge and outflow control assembly (two ½ inch bolts).



4. Remove the pressure head (eight ½ inch bolts).

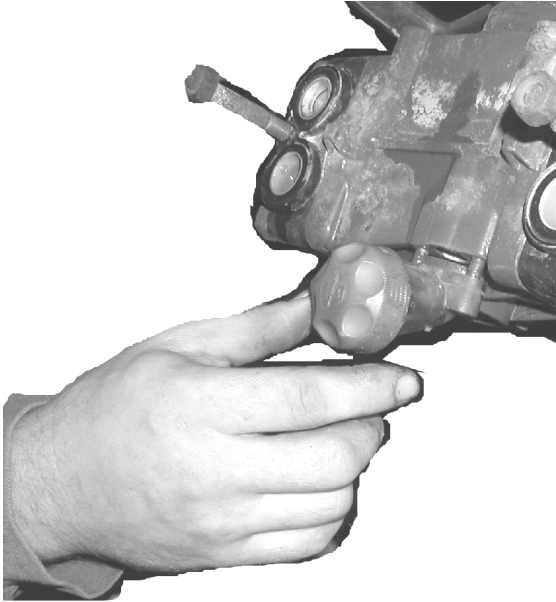


5. Remove the accumulator manifold (two 11/16 nuts).

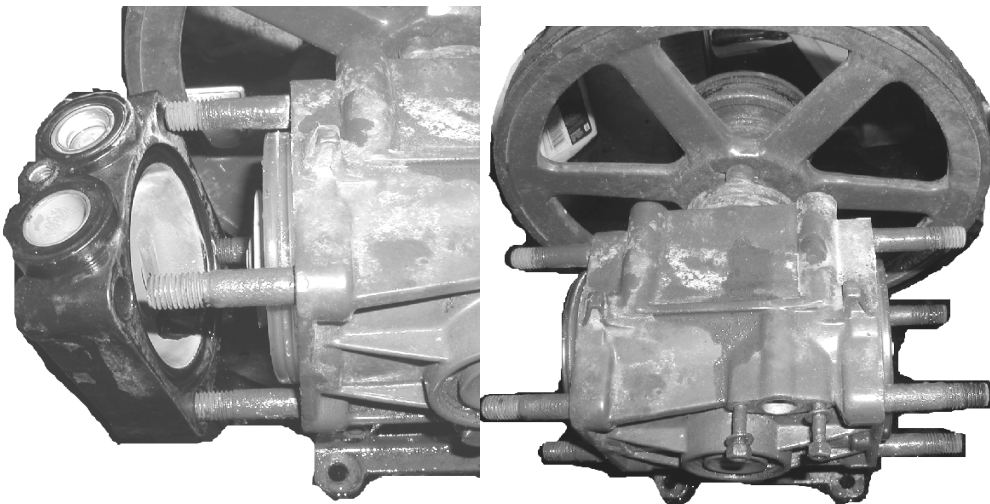


6. Remove the oil sight glass (two 10 mm nuts).

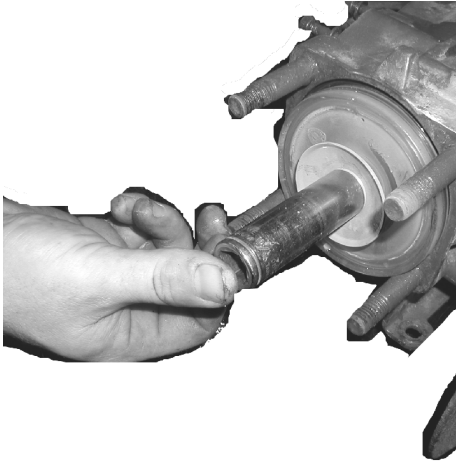




7. Remove side heads (4 X  $\frac{3}{4}$  inch nuts per side).



8. Remove back rims from both sides



## **Rebuild**

Before rebuilding, make sure that all valves, check valves, and chambers are free of obstructions.

1. Replace diaphragm on both sides.
2. Replace all four check valves.