

If the machine is slow or stops flushing, but the motor and air still operate, please follow these procedures.

**Clean the filter(s):**

**Note: Cleaning the filters should be done as a normal part of machine maintenance to prevent problems from occurring.**

1. Locate the external filter at the end of the black service hose where it attaches to the machine.
2. Unscrew the cup portion from the filter housing.
3. This filter screen can be cleaned with tap water and then blown out with compressed air. The screen is permanently glued to the cup section of the filter housing; do not attempt to remove it.
4. Replace the cup taking care not to pinch the gasket.



**Some** of the older machines may also have an internal filter that can be cleaned or removed (current production machines do not use an internal filter).

**To access and clean the internal filter:**

1. Remove the bottom service panel on the back of the machine and see if there is a filter attached to the pump. It may be either a silver Y shaped filter, or a black canister type. The silver version can be opened and the screen cleaned; the black one may be back flushed **in the direction opposite the flow arrow**.
2. Clean either type with water or cleaner solvent and blow out with compressed air.





**Some machines do not contain an internal filter.**

**Check for possible restrictions in the quick disconnects at the ends of the hoses:**

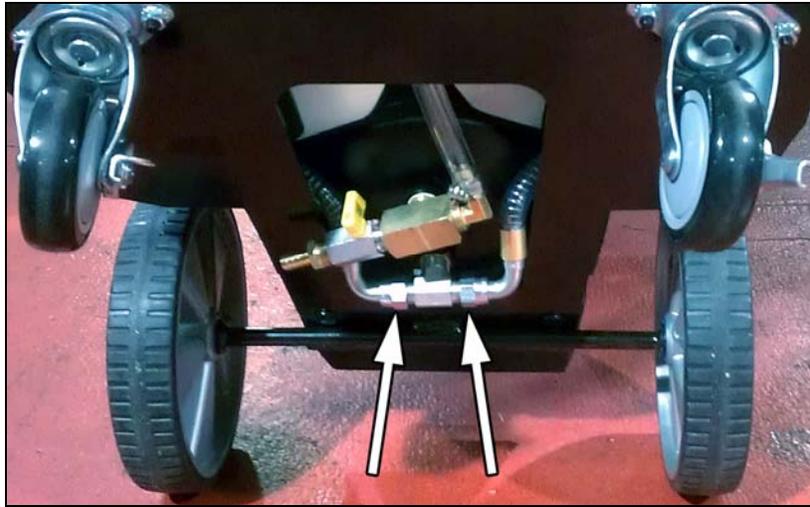
1. Unscrew the quick disconnect from the shut off valve at the end of the hose.
2. Inspect and clean valve and fitting if necessary.



**Drain valve on the bottom of the used tank:**

On newer machines (serial number 11921 and on), there is a drain valve at the **BOTTOM** of the machine. Carefully tilt the machine back, and have another person open this valve over an area where the coolant can be safely drained. Opening this valve will drain fluid from the waste tank and *should* clear the “T” fitting at the bottom of the tank of accumulated debris. *Older machines without the drain valve can be cleared by removing the lines from the “T” Fitting.*

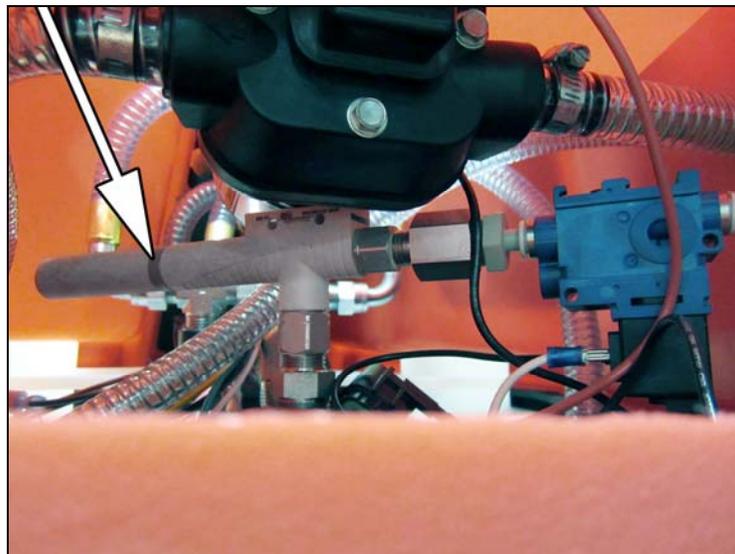
It may be necessary to also remove the lines on a newer machine if opening the drain valve does not clear the “T” fitting completely. Repeated issues with weak suction or problems draining the waste tank can be an indicator that the “T” fitting needs to be cleaned out more thoroughly.



**Bottom of machine**

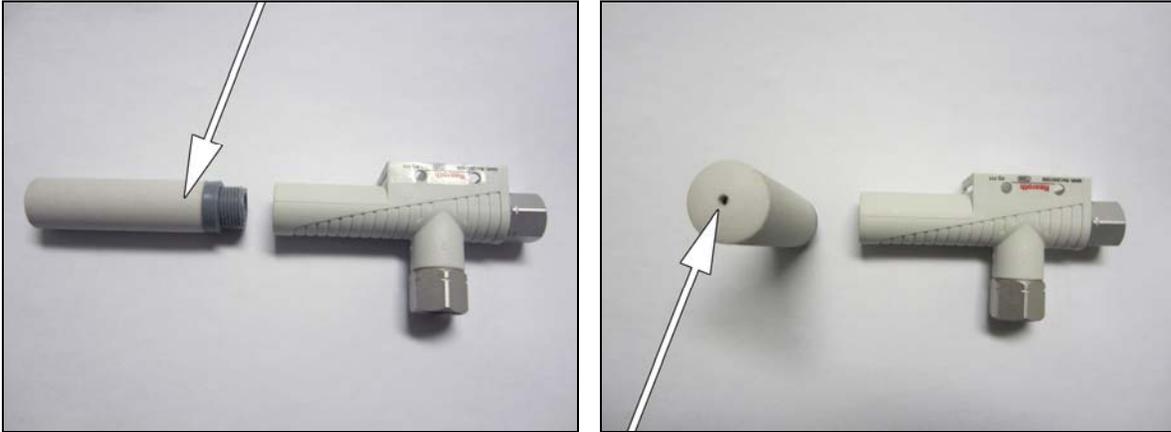
**If the machine is not developing suction or the suction is weak, check the vacuum generator**

The vacuum generator is accessed through the bottom service panel located on the back of the machine. The generator is mounted to the top of the waste tank.



## **It is not necessary to remove the generator from the machine**

Unscrew the **muffler** from the vacuum generator as shown.



Inspect the vent hole and interior of the muffler. Clean out any foreign material.

While the muffler is removed, and the air line connected to the machine, briefly move the vacuum switch on the front of the machine to the "ON" position. This will cause air to blow through the generator which can help clear any remaining blockage.

### **To power flush the machine:**

1. Confirm there is new fluid in both the red & green tanks so the machine will operate.
2. Connect the red & black service hoses together using the step adapters and the short section of radiator hose provided with the machine.
3. Connect shop air and a battery to the battery cables.



4. Turn the top knob on the control panel so it is pointing up to the “REMOVE FLUID” setting.
5. Turn the bottom knob to **either** the “FLUSH RED” or “FLUSH GREEN” position. Be sure there are at least 4 quarts of fluid in the chosen new fluid tank.



6. Turn on the “PUMP ON” and “VACUUM ON” switches and watch for fluid flow in the hoses.



7. New fluid will be pumped through the machine, while the vacuum will pull new fluid through the system into the used tank. If there is any foreign material in the lines, this should force it out after a minute or so.

**Occasionally it is helpful to rotate each one of the knobs around a few times while the flush is running if no flow is seen, then return them to their previous position.**