

## **Problem:** Clamping Bar Returns Very Slowly or Erratically- Sputtering Sound From Quick Exhaust

Every machine leaves our facility fully assembled and tested. After several months of operation you might notice that the clamping or stretching bar retracts very slowly. You might also hear a sputtering sound when the air escapes through the quick-exhausts under your machine.

Your air compressor pulls air from your shop and even though it has a filter it will pick-up airborne dust and oil. Your compressors tank also accumulates a lot of moisture as the once warm air cools and condenses inside the tank. This moisture, if not removed with a moisture trap or drained periodically will travel to your machine. This can cause your quick-exhaust to become clogged. It also effects other components.

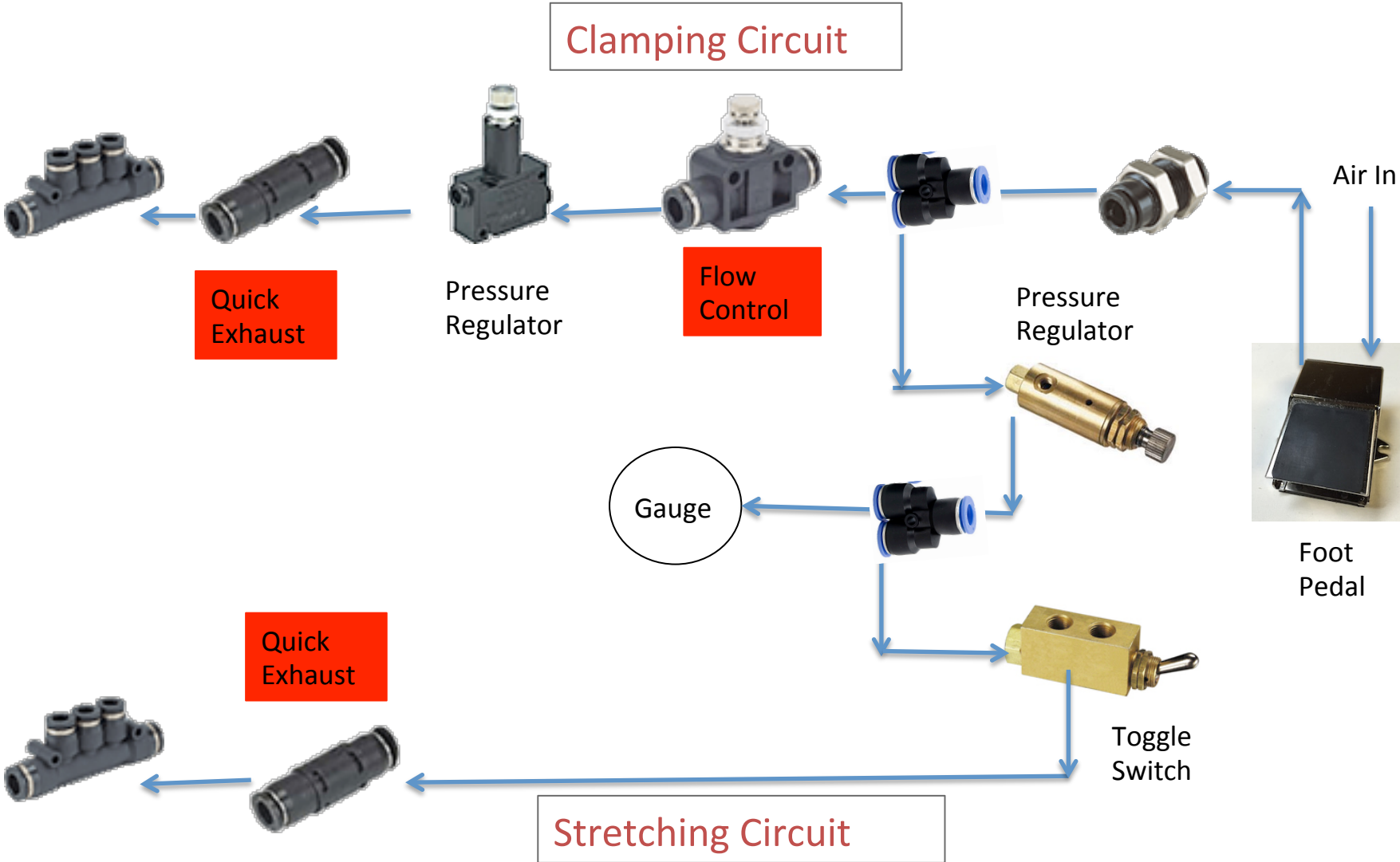
The moisture, oil and dirt that accumulates in your compressor's tank can cause the relatively sensitive quick-exhaust to become clogged and even to fail. Another component that is likely to clog is the Flow Control.

The following steps should help you identify and resolve this problem.

The quick exhaust is pictured below just right of center. Please note that the outlet hose has already been disconnected. The desired effect is to force dirt & moisture out this side.

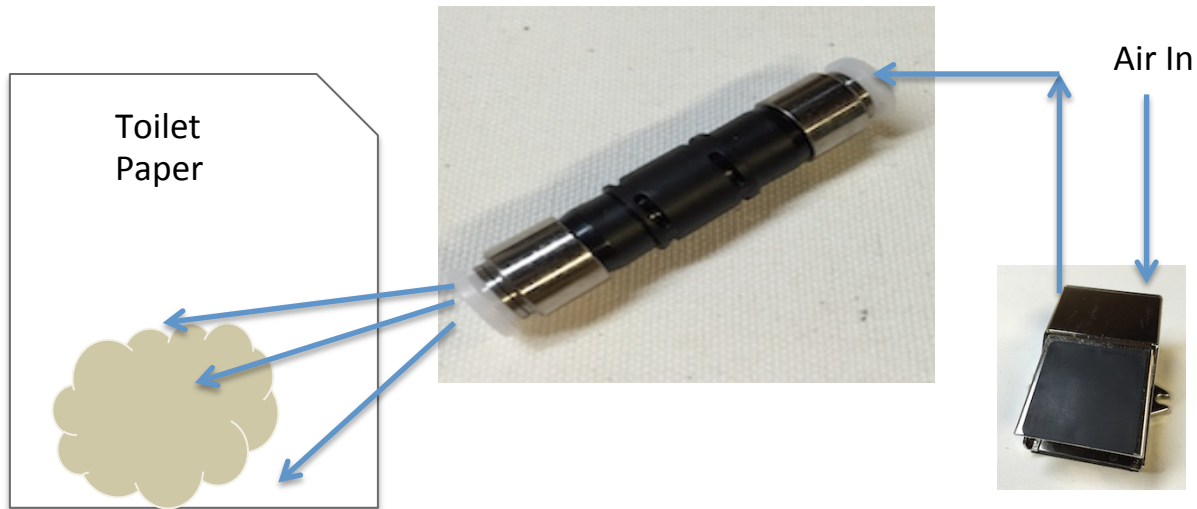


The drawing below depicts the Clamping Circuit and Stretching Circuit. The items in red are the most common problems and are susceptible to moisture and dirt build-up. These items can best be seen by turning your machine on it's side. The location is approximately the same as the drawing.



## CLEANING THE QUICK EXHAUST:

Remove air to your machine and locate the “Quick Exhaust” for the Clamping Circuit. There is an “IN” and an “OUT” label on the device. Disconnect the “Outlet” tube by depressing white ring while pulling on tube. It is very difficult to remove a hose when air is applied and it is not safe so please disconnect the air supply first.

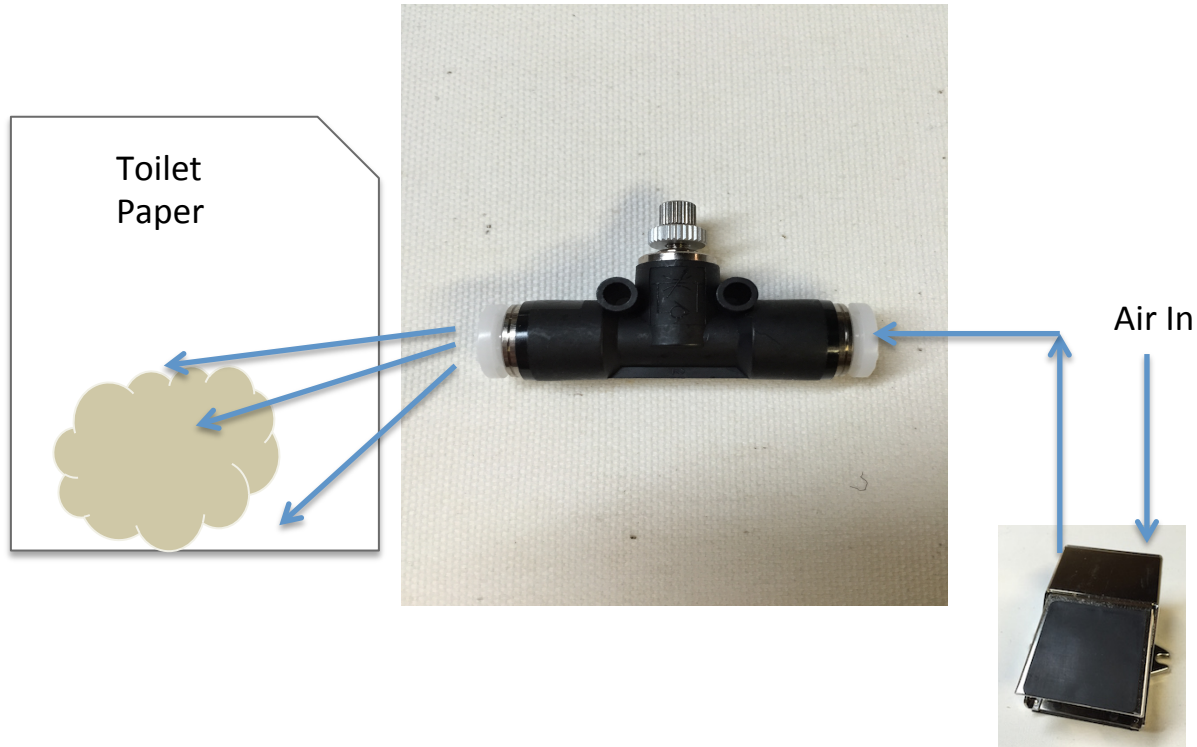


With the output hose removed apply air to the machine and force the air into a piece of toilet paper. Check for dirt, debris, oil and moisture. In most cases this will clean out the quick exhaust, if this does not resolve the problem than purchase a Quick Exhaust here: <https://gallerystretcher.com/product/quick-exhaust/>

If this corrects the problem than reconnect the hose, put air back to the machine and consider installing an In-line Water Separator: <https://gallerystretcher.com/product/in-line-water-separator/> to avoid this problem in the future.

## CLEANING THE FLOW CONTROL:

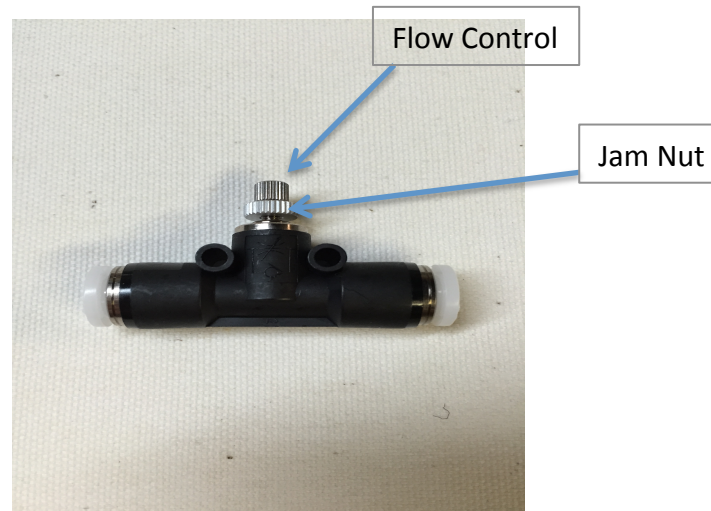
The other component that can become clogged is the “Flow Control”, it is located just to the right of the Pressure Regulator and Quick Exhaust.



With the output hose removed apply air to the machine and force the air into a piece of toilet paper. Check for dirt, debris, oil and moisture. In most cases this will clean out the Flow Control.

## ADJUSTING THE QUICK EXHAUST:

The Flow Control has a very small orifice with a “needle valve” constricting the air flow. The purpose of the Flow Control is to slow the supply of air to the Clamping Cylinders. Without the Flow Control the Clamping Bar would “slam” forward very quickly and can cause injury to the operator. By constricting the air a little we give the operator some time to remove their fingers from harms way.



If the Clamping Bar is still moving sluggishly after cleaning then loosen the jam nut by turning it counter-clockwise as viewed from the top. Then turn the flow control knob counter-clockwise about  $\frac{1}{2}$  turn. Test the Clamping Bar and if that solves the problem retighten the jam nut.

If this corrects the problem than reconnect the hose, put air back to the machine and consider installing an In-line Water Separator:

<https://gallerystretcher.com/product/in-line-water-separator/> to avoid this problem in the future.