Many SRI gas chromatographs (GC) are equipped with a built-in air compressor option to supply combustion air for FID detectors. If your GC has this option there will be an air compressor on/off switch mounted in the GC’s front panel.

To prevent particulates from the air compressor reaching the air EPC (electronic pressure controller) there is a 20 micron frit (metal filter) in the jumper tube from the air compressor out fitting to the air EPC in fitting. This 20 micron frit may clog over time preventing the air EPC from working properly. If the air EPC actual pressure is not able to supply more than 4 psi the clogged filter is usually the reason.

As of June 2010 all SRI GCs with a built-in air compressor (BIAC) are now equipped with a larger capacity air filter mounted inside the GC chassis.
The Air Line Filter replacement kit is SRI part# 8670-0075 and includes:

- Filter
- 6 inches copper tube and sleeve
- Swagelok nuts and ferrules
- Two pieces 3/16” silicone tube
- Two pieces 1/8” silicone tube

Snip the existing copper tubing inside the GC which runs from the air compressor to the air out fitting. Take out a 3 inch section of the tubing. The cutter tool supplied with every SRI GC works nicely for this.

Slide the smaller silicone tube over the end of the copper, then slide the larger silicone tube over the smaller silicone tube to adapt the 1/8” copper to the larger tube size on the filter. A little water or saliva makes it easier to slide the silicone.

The copper tube should be almost touching the filter tube to provide for some rigidity. If there is a large gap the soft silicone allows too much movement.
Adjust the position of the filter so it does not touch anything and make sure the copper tubing is insulated completely with the beige fabric (varglass).

Replace the jumper tubing on the outside of the GC with the new tubing supplied.

Use the swagelok nuts and ferrules provided to make a secure connection.