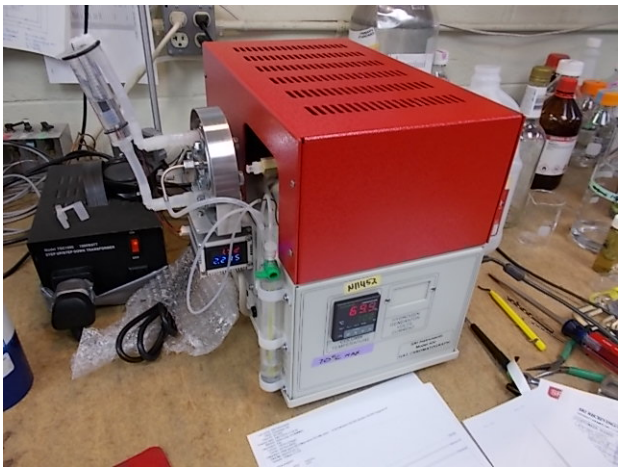
Model 88 Methane/non-Methane GC

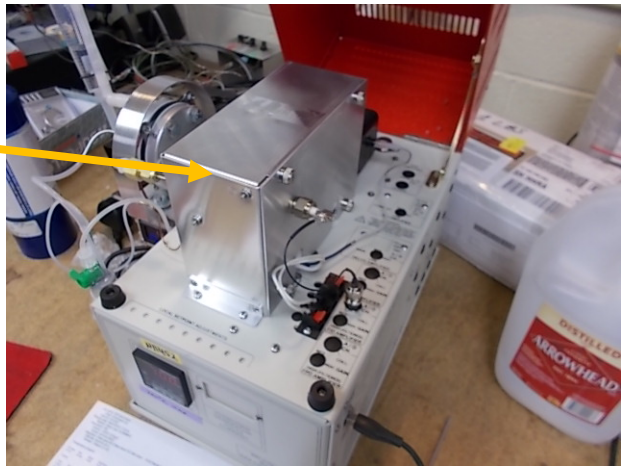
April 2019

The SRI Model 88 GC is intended for measuring methane and non-methane hydrocarbons.

It can optionally be configured with a built-in hydrogen generator and air compressor like the one shown in the photo. This allows for completely gasless operation, a big convenience in some circumstances.

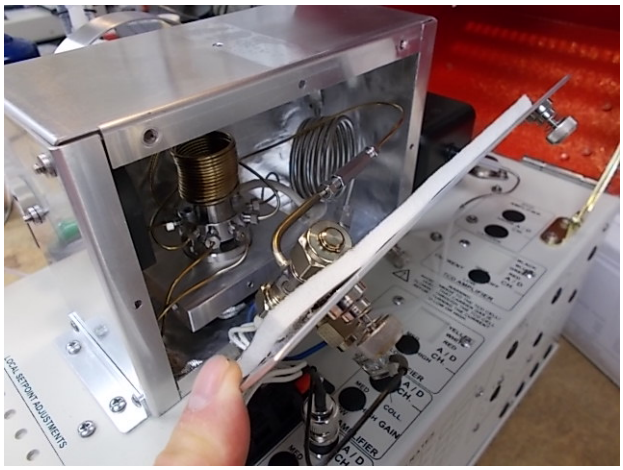


The valve oven, column and FID detector are mounted in this heated enclosure which can be set from ambient to 70C.



The oven can NOT temperature program, it must be set to some isothermal temperature using the temperature controller mounted on the front panel.

The right side of the oven is removable for access to the parts inside.



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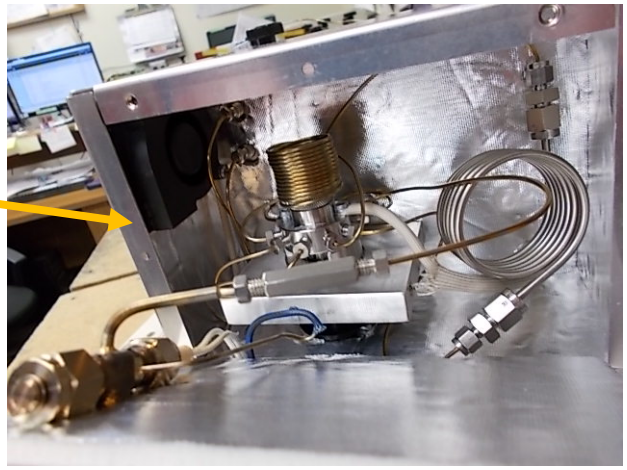
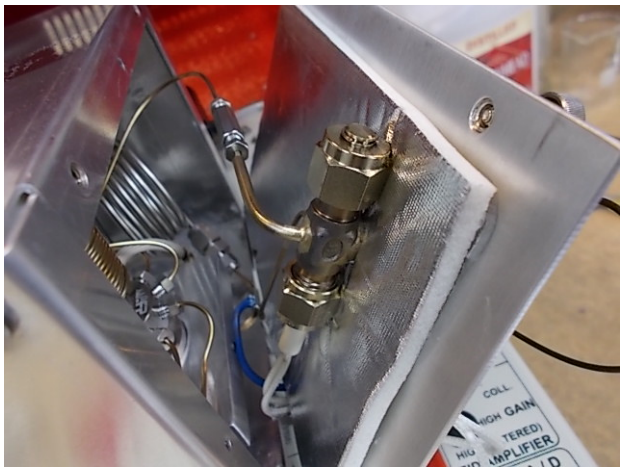
Inside the oven is the 10 port gas sampling valve with a 1ml loop, the 3 foot column, a circulation fan an FID detector and a heater block.

The circulation fan is what limits the oven temperature to 70C but it makes the temperature inside the oven more uniform.



The FID detector mounts to the removable side plate.



The collector electrode is on the right side, just above the connections for the ignitor and amplifier.

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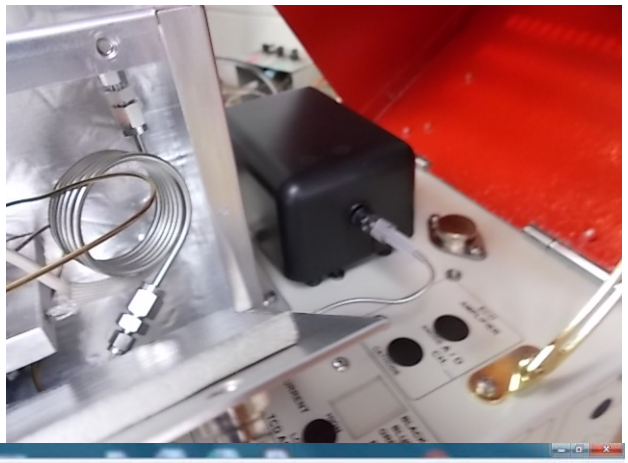
The built-in hydrogen generator is mounted on the left and produces a steady 20ml/minute of H2 carrier gas. The H2 carrier is what also provides the H2 for the FID detector.

A small air compressor provides combustion air for the FID detector.



The chromatogram looks like this.

The first peak is methane. The 2nd peak is ethane. The third large and wide peak is all the C3 plus peaks after the valve was back-flushed at about 1.7 minutes.

You can also back-flush after methane for the C2 plus in-stead of the C3 plus.