

Replacing the Valve Actuator circuit boards in the SRI 8610C (March 2009)

If the Valco (VICI) Electrically Operated Gas Sampling Valve (GSV) in your SRI 8610C Gas Chromatograph does not operate, the problem can sometimes be fixed by replacing the circuit boards inside the valve actuator. This is simpler and less expensive than replacing the entire actuator.



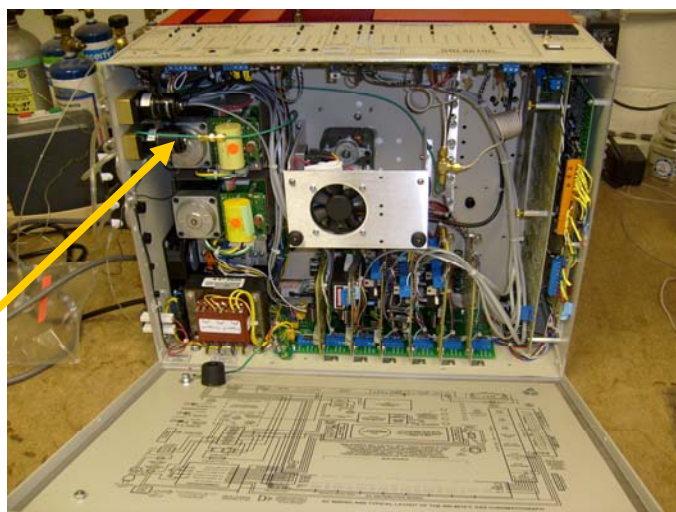
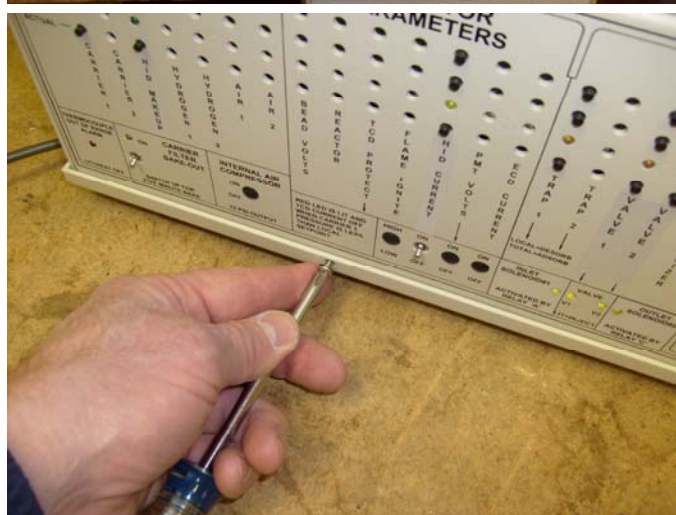
The board set is
SRI part#8670-0066-120volts or
#8670-0066-220volts
\$295.00

***Un-plug the GC from
mains power***

Remove the six screws holding the bottom plate of the GC.

Tilt the GC on its back so you can see the valve actuator. The GC in this photo has two actuators

Valve actuator



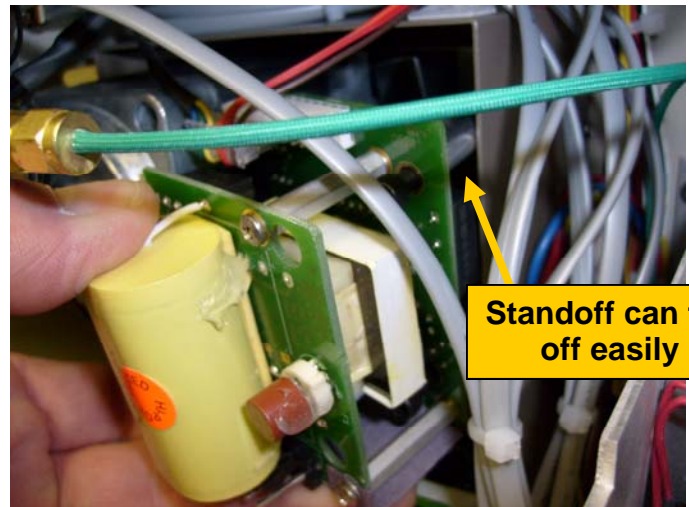
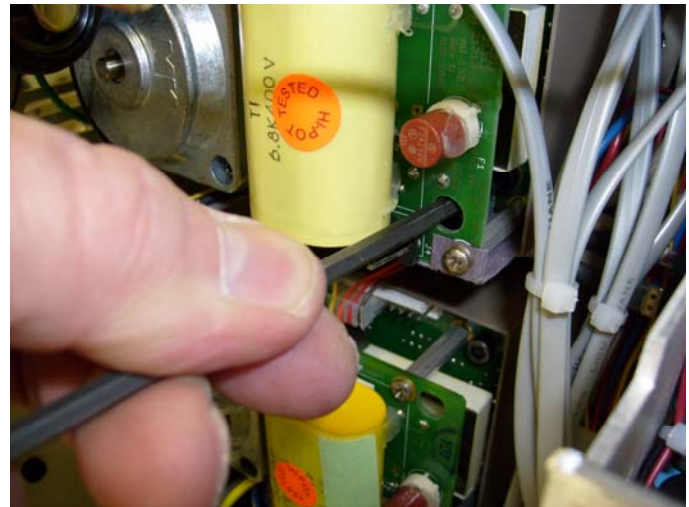
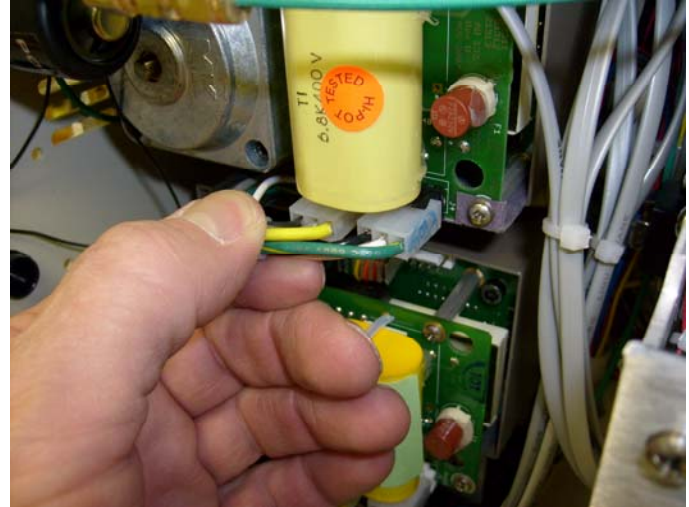
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Verify the GC is un-plugged from the wall power and also switched OFF.

Remove the two connectors at the bottom of the circuit board set. Just pull gently and the connectors will dis-engage.

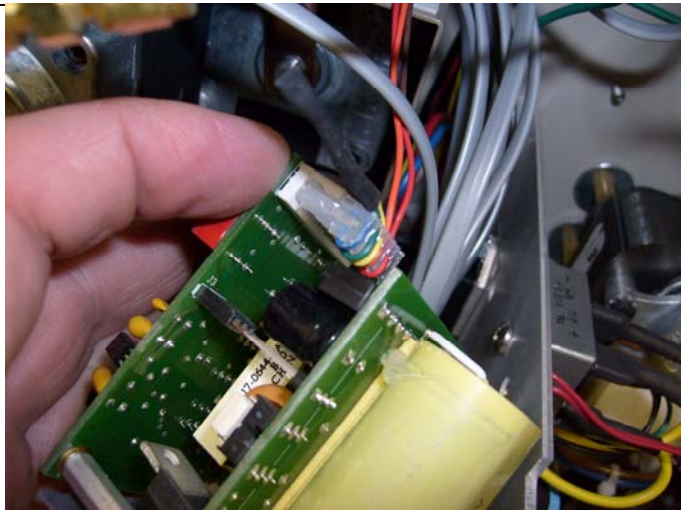
Insert a 9/64 inch hex wrench (3.5mm) through the hole in the closest circuit board to engage and then loosen the hex head screw further in. There are two hex head screws.

Be careful not to drop or lose the two standoffs which can slide off the hex head screws as you remove the boards from the actuator.



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Carefully wiggle out and remove the six pin connector along the top edge of the board. Note that it connects to the leftmost six pins on the board before removing it. Also note the orientation (brown wire on right side).



Note how the standoff slides over the hex head nuts. It is easy for the standoffs to slip off when you are installing the new circuit boards.



**Standoffs slide
over hex head
screws**

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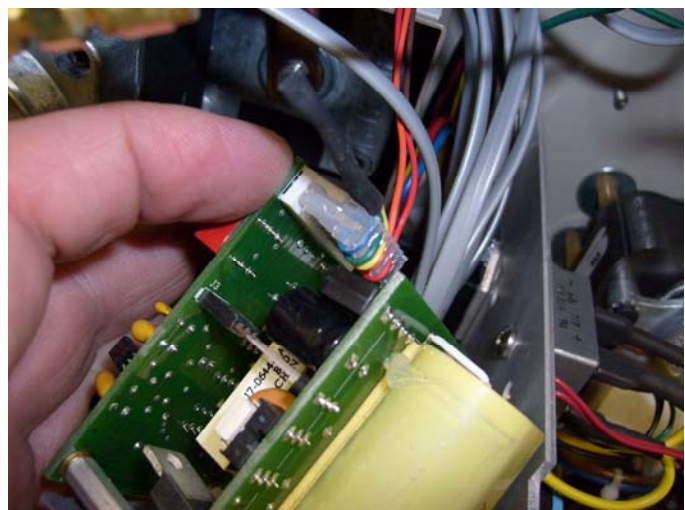
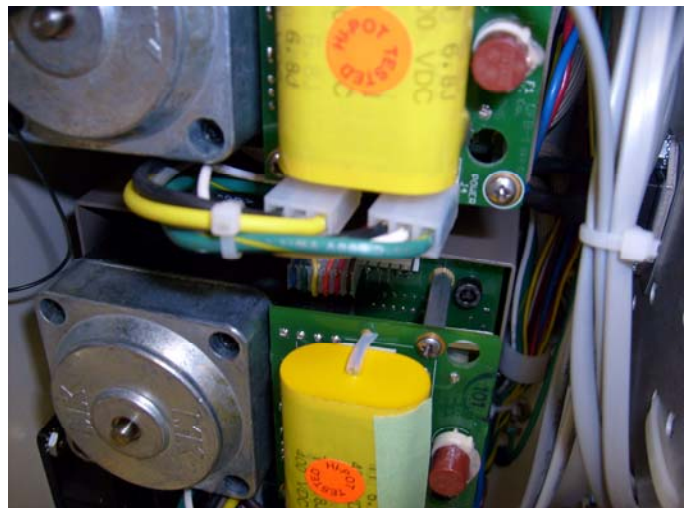
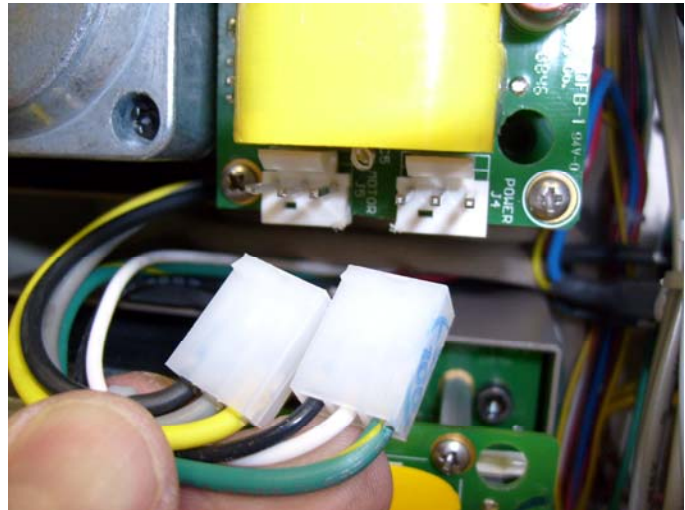
Install the new circuit board set. It is helpful to tilt the board slightly so the standoffs don't fall off while you are wiggling the boards into position.

Once installed and secure, replace the connectors.

Be careful to orient the connectors the way they were.

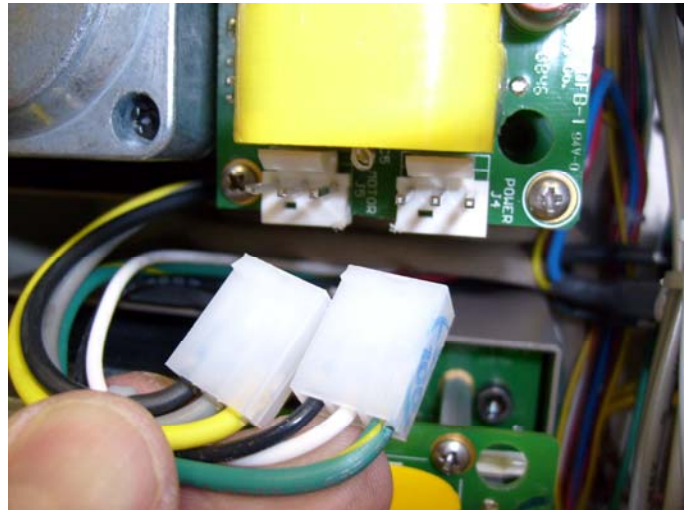
Be especially careful to reconnect the small connector since there is nothing to prevent you from shifting it over onto the wrong small pins. This could damage the boards if reconnected to the wrong place. The blue wire in the connector should line up with the pin farthest to the left.

Reconnect the mains wall power and test the actuator to see if it now works properly.

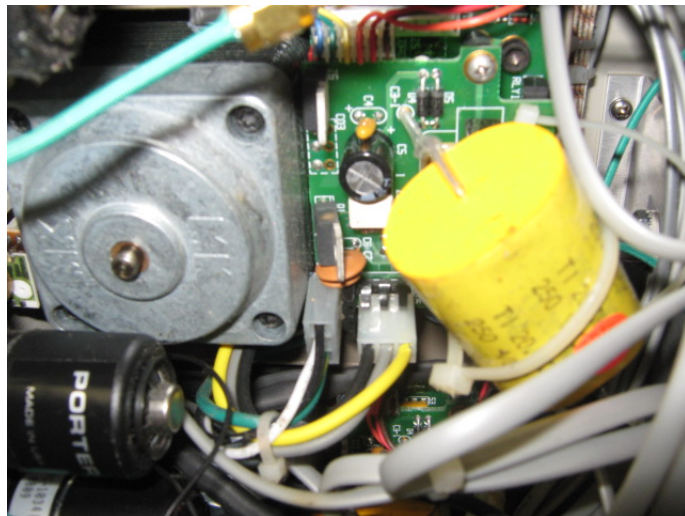


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The most recent Valco board set look like this. Note the cable connections.



The older style of Valco boards look like this.



IMPORTANT:
The cable are connected like this.
Don't mix them up.

