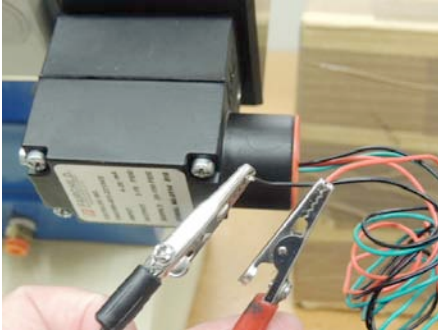


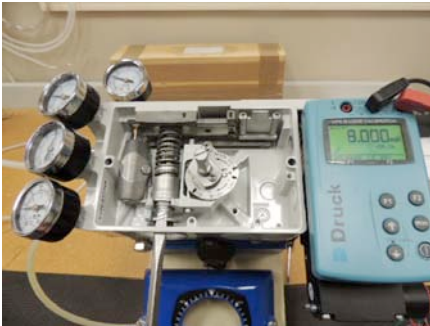
## VAC V100 or V200 FF (Fail Freeze) Ip Calibration

Due to the orientation sensitivity of the Fairchild 6100 series Fail Freeze Ip, the Ip may require re-calibration when installed in the field. A 0 to 30 test gauge MUST be on the I port of the positioner in order to make this calibration. "Ideally" there should be a full set of gauges on the positioner but the Ip gauge is a must.

To Calibrate:



Connect loop-powered generator to 6100 leads- black/negative, red/positive. Make sure the positioner has at least 60-PSI air to the supply port of the positioner. No air should be connected to 6100 Ip as it receives air through internal porting of the positioner.



Calibrate the positioner following the instructions in the VAC IOM manuals, using the zero and span on the positioner. 4-8-12-16-20 mAs should equal 3-6-9-12-15 PSI on the positioner I port gauge.



4 mA = 3 PSI on gauge



20 mA = 15 PSI on gauge

**These readings were taken with positioner in horizontal position.**

When the positioner was shifted 90 degrees to a vertical position the Ip output shifted and so did the positioner setting. The 4 mA and 20 mA signal drop to approximately 30% PSI and 20, thus causing a position shift along with the actuator package.



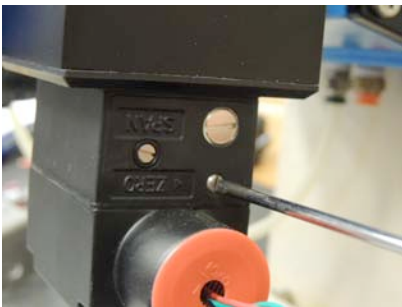
4 mAs



20 mAs

**Vertical position-90 degree rotation-20 degree shift**

To correct this shift you need to re-calibrate the Fairchild 6100 IP-**do not attempt to adjust the positioner.**



On the side of the Ip (next to wiring) is the Zero screw and span screw. With at least 60 PSI on the positioner adjust the zero screw (clockwise to increase) until the 4 mA input once again reads 3 PSI on the positioner I port gauge.



I port gauge reads 3 PSI with 4 mA input.

Once the zero is set so that the 4 mA equals 3 PSI, you can double check the 20 mA input. If necessary adjust the span to have 20 mA equal 15 psi.

This document takes into account the fact that the positioner with FF Ip and actuator is rotated a full 90 degree from where it was first calibrated. Should the movement be less, then less adjustment should be needed on the Ip zero screw. Should the orientation be greater, then more adjustment is needed.