# **BUILDING A PNEUMATIC CIRCUIT**

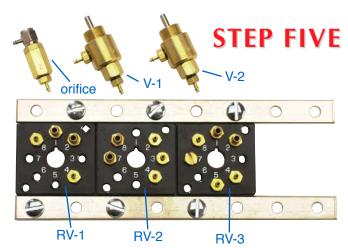


### **Subplate and Fitting Installation**

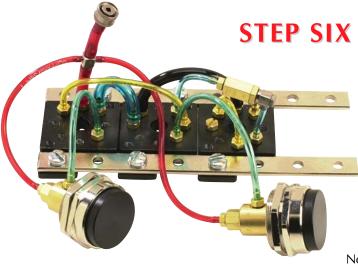
The next step is to install the fittings into the <u>R-101/R-101-M5</u> subplates using the octoport, octoport port coding, and pneumatic circuit diagrams. Generally, 1/16" hose is used for pilot ports and their adjoining lines and 1/8" hose are for supply lines and cylinders.

Looking at the two hand no tie down circuit:

- 1. Valve RV-1 has fitting 11752-5 (#10-32 to 1/16" ID hose fitting) installed in ports 4 and 8
- 2. Fitting 1752-4 (#10-32 thd. to 1/8" ID hose fitting) installed in ports 1 and 2 because port 1 is the main air supply for the circuit and port 2 is the outlet.
- 3. On valves V-1 and V-2, fitting 11752-5 was installed in both the inlet and outlet of each valve because both valves are used for pilot actuation of valves RV-1 and RV-2.



4. Being in a pilot line, the inline fixed orifice air choke N-1 was fitted with an 11752-5 on one end and a UTO-2 universal "L" fitting on the other.



### **Connecting Hose**

With the fittings installed, the circuit is ready for hose. The color coding we use at Clippard is quite simple. Red hose is used for all supply lines. For all other hose as many different colors as possible are used in order to facilitate circuit trouble shooting.

- 1. Supply lines Red hose
- 2. The 1/16" ID fittings require URH1-0402 hose
- 3. The 1/8" ID fittings require URH1-0804 hose
- 4. The main supply line was fitted with a MIQC-CB4 which can be attached to any of the MJQC valve bodies.

Note: The MJQC series is not compatible with the MQC series.

## **STEP SEVEN**

#### **Modular Valve Hook-Up**

The final assembly step is installing the modular valves and mounting gasket to the subplates.



Hose and barb sizes were picked with this particular application in mind. Both may vary to meet your needs. Feel free to contact our facility for technical support.