

## FALMOUTH PRODUCTS VAPOR CONTROL VALVE (VCV)

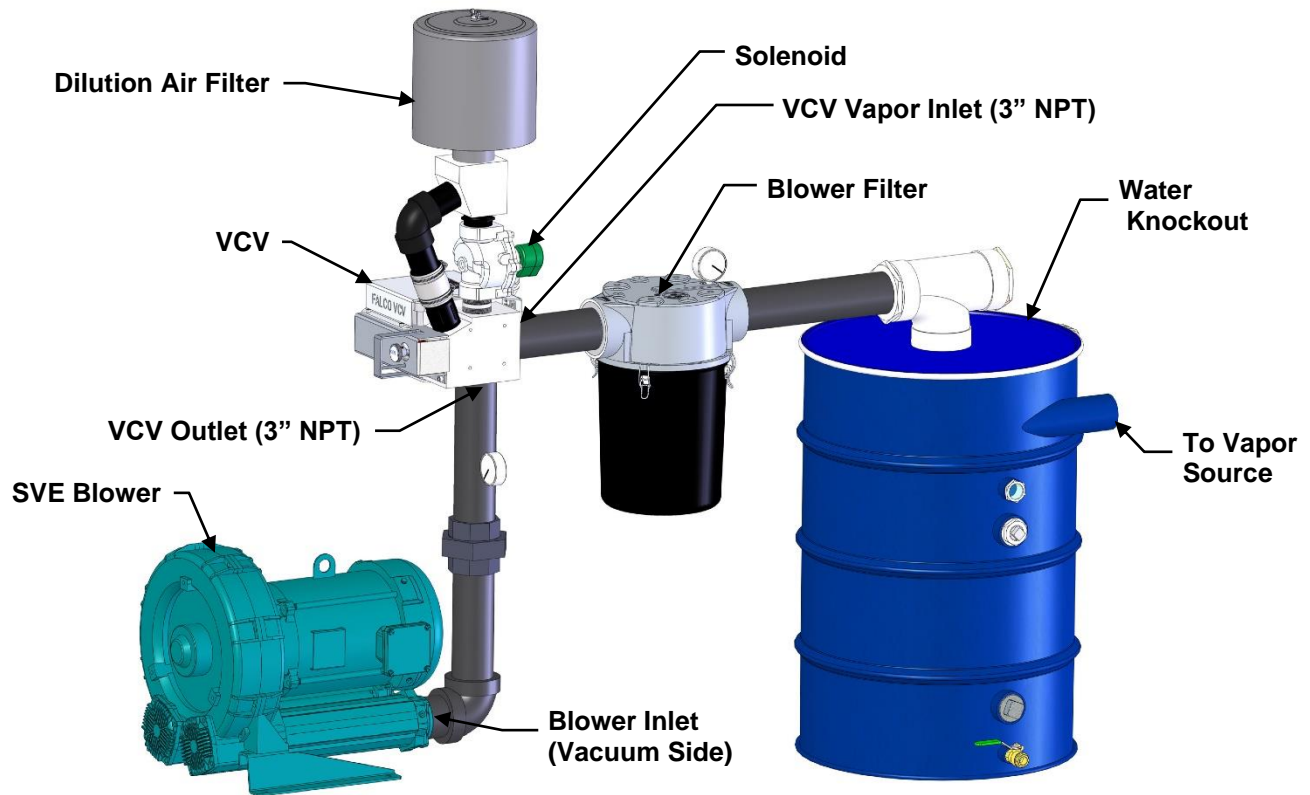
### INSTALLATION INSTRUCTIONS

The Vapor Control Valve (VCV) regulates input vapors to the FALCO oxidizer by mixing source vapors with dilution air.

The VCV is an integral component of the FALCO oxidizer, may be installed indoors or outdoors and is approved for use in Class I, Division 2, Group D Hazardous Locations.

Install the VCV in series in the vapor line **after** the water knockout with its dilution air filter vertical, vapor inlet horizontal, and the vapor discharge on the bottom of the valve. The VCV should be mounted so it can be accessed easily and removed for service. An in-line filter should be installed on the vacuum side of the blower.

**WARNING: Do not install the VCV close-coupled to the blower. Excess transmitted vibration may damage components.**



**Figure 1 - PREFERRED INSTALLATION**

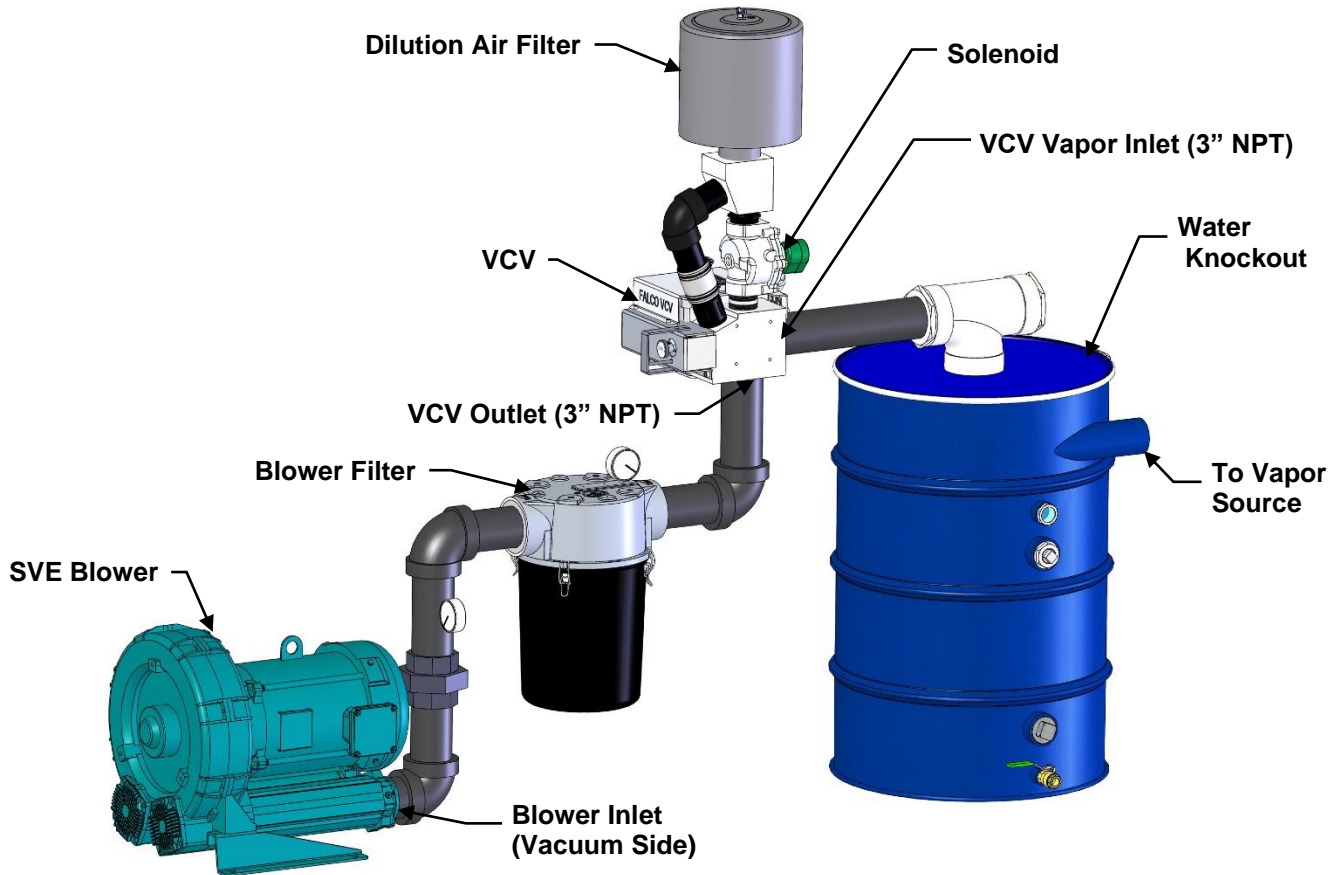
**CAUTION:** If the VCV is installed inside a building or trailer with a ventilation system, the VCV Dilution Air Filter must be piped to the outside of the building to prevent the building ventilation system from pulling vapors out of the Dilution Air Filter and into the building when the S.V.E blower shuts down.

If piping alone is not adequate to support the VCV, the included mounting bracket may be used to attach the VCV to a fence or wall (**Figure 3**).

It is preferable to locate the VCV between the in-line filter and the blower (**Figure 1**).

If existing piping restricts the preferred installation, the VCV may be located between the blower filter and the water knockout (**Figure 2**).

**NOTE:** *The VCV may require more frequent reconditioning if the VCV inlet is not filtered.*



**Figure 2 - ALTERNATIVE (LESS DESIRABLE) INSTALLATION**

## **BLOWER TESTING**

If testing of blower vacuum is required, please do not manually adjust the VCV. Remove the *Dilution Air Filter* from the top of the VCV dilution tee, and manually control inlet flow with a flat plate to reach desired blower vacuum.

## VCV TEMPORARY INSTALLATION / WALL MOUNTING

If a temporary installation is required, the VCV may be mounted to a fence or wall and attached to the inlet piping using hoses, camlock fittings, pipe tees, and an isolation valve (**Figure 3**).

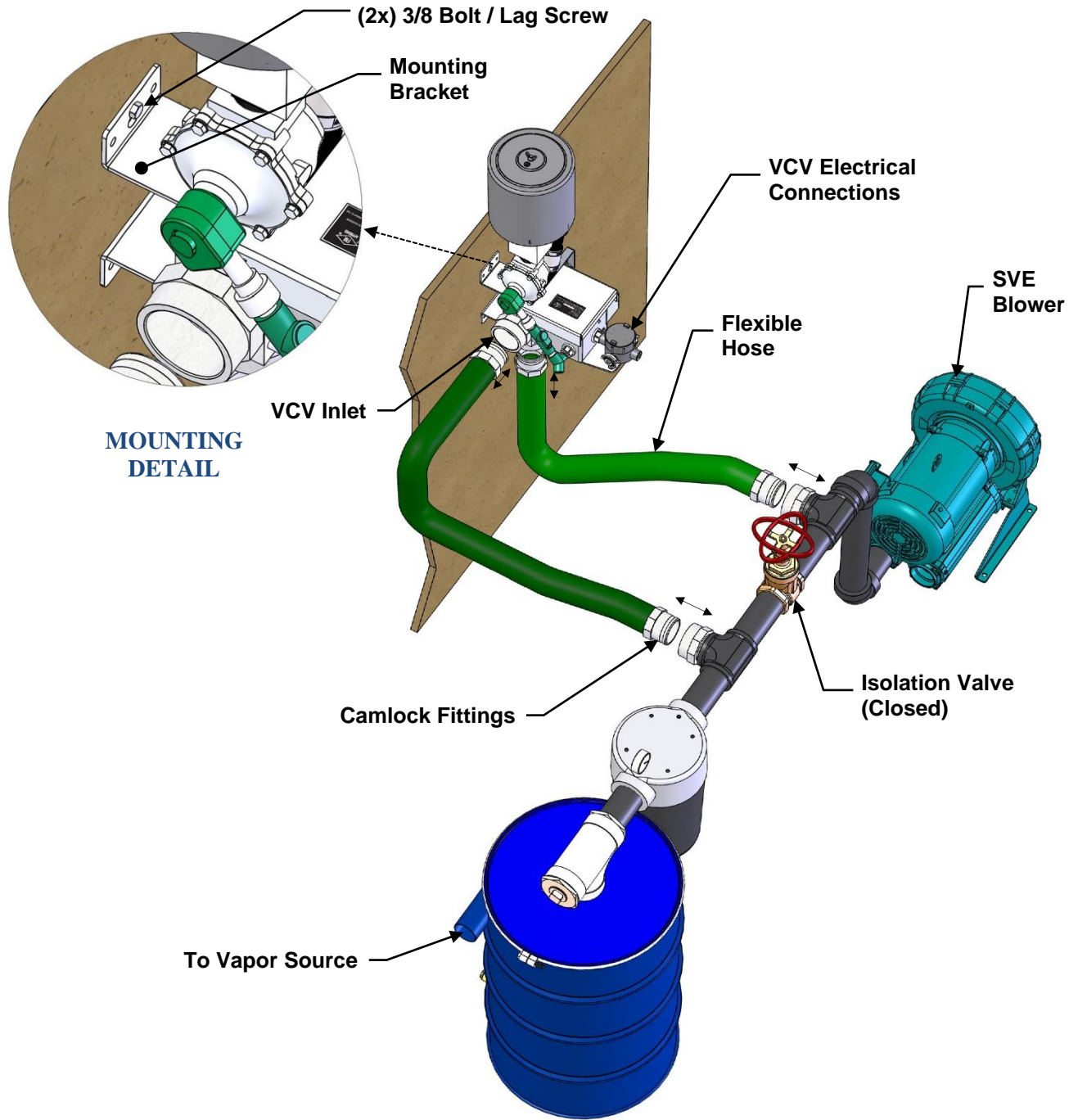


Figure 3 – TEMPORARY INSTALLATION

## VCV ELECTRICAL INSTALLATION

Install 1/2" rigid conduit with a seal fitting between the FALCO control box and the VCV conduit body.  
*NOTE: VCV conduit body hubs are 3/4". A 3/4 - 1/2" reducer bushing is required.*

Pull seven #14 gauge wires (two red, one white, one yellow, one brown, one blue, and one green) through the 1/2" rigid conduit.

In the FALCO control box (lower right hand side), make the following terminations:  
Connect the six wires (two red, white, yellow, brown, and blue) to the corresponding terminal blocks: # 51, 52, 53, 54, 55, and 56. See Figure 4.

Connect the ground wire to the grounding bar in the FALCO control box.

Inside the round VCV conduit body, locate the white, reds, yellow, brown, blue and green wires that were previously pulled into the box through the 1/2" conduit (Figure 5). Connect these wires to the corresponding terminal blocks inside the VCV conduit body.

Do not open the PVC VCV enclosure.

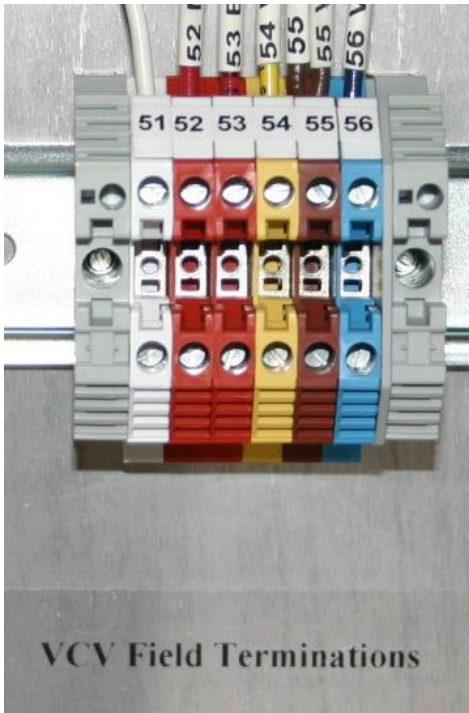


Figure 4 – FALCO Control Box Terminations

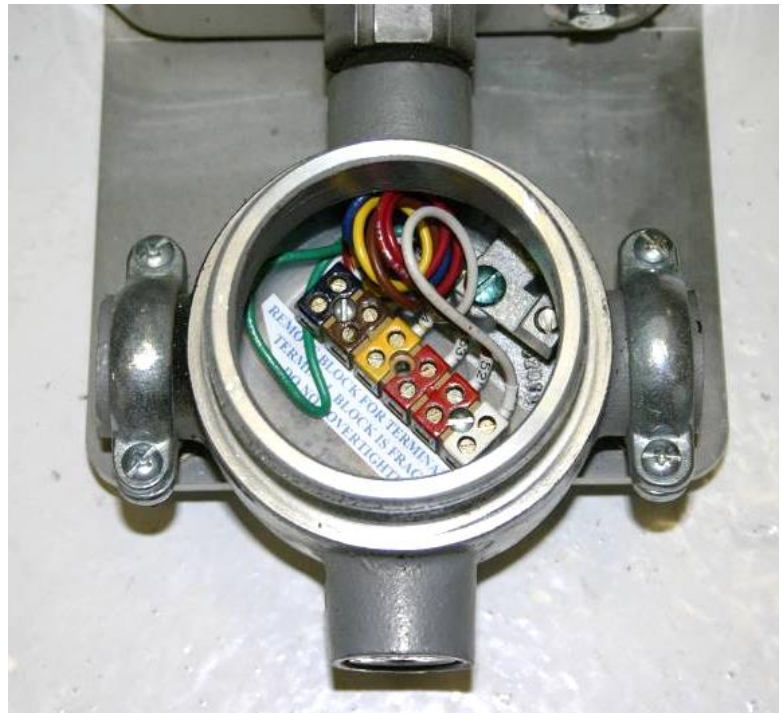


Figure 5 - VCV Conduit Body Terminations