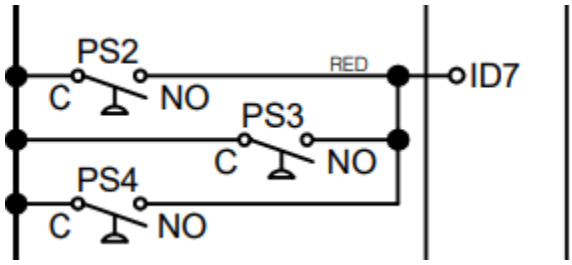
# Frequently Asked Questions

## How do I calibrate a dirty filter pressure switch?

A dirty filter alarm is triggered when the digital input on your unit controller receives feedback from a filter pressure switch that it has tripped. The filter pressure switches are installed by the factory to monitor the pressure drop across filter racks in the unit. A normal part of unit startup will include setting the trip points on all filter pressure switches installed.

### Determining Which Switch Is Tripped

Your unit design may have one or multiple filter pressure switches depending on how it was ordered. This can be verified using the unit's schematic. For this example, the schematic shows three filter pressures switches. The pressure switches' naming conventions can be read using the schematic's legend.

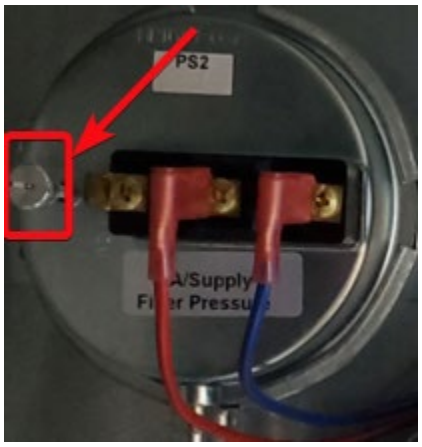



The filter pressure switches are wired in parallel with each other so that any one switch closing will trigger a dirty filter alarm. The unit controller is looking for this switch closure on its input. In this example, the controller is looking for switch closure on digital input ID7. The unit's supply fan should be running while troubleshooting.

1. If the filter pressure switches are wired between Terminal Block R and an input, then the controller is looking for 24VAC to trigger a dirty filter alarm.
    a. Check for a 24VAC signal on the input. If the dirty filter alarm is active, you should see ~24VAC on this terminal. If you do not, call technical support.
    b. Determine which switch is closed by unplugging the "NO" terminal wires and checking for 24VAC leaving the "NO" terminal on the switches. Reinstall the wires once the switch in question has been identified.
        i. If no switch is closed, inspect the unit wiring. The wiring in the unit should match the schematic exactly. If it does not, call technical support.
2. If the filter pressure switches are wired between Terminal Block C and an input, then the controller is looking for dry contact closure (continuity) to trigger a dirty filter alarm.
    a. Determine which switch is closed by unplugging the "NO" terminal wires and checking for continuity across each switch. Reinstall the wires once the switch in question has been identified.
        i. If no switch is closed, inspect the unit wiring. The wiring in the unit should match the schematic exactly. If it does not, call technical support.

## Switch Calibration

1. Once the closed switch has been identified, find the adjustment knob located on the switch's face plate.




2. Rotate the knob until the dirty filter alarm clears. The direction of rotation may vary depending on switch model. Once the alarm has cleared, verify that the switch is now open across its terminals. Once the alarm clears and the switch opens, rotate the knob one more full turn to increase the trip point.