

3.5 Connect Pressure Tubing for Minneapolis Duct Blaster®



Minneapolis
Duct Blaster®

Figure 8: View of Retrotec gauge tubing when used with Duct Blaster (no need for green in Pressurize)

In both Pressurize and Depressurize set ups with a Retrotec gauge, the yellow tube goes to the brass tap on the Duct Blaster fan.

When using the Retrotec gauge in a Depressurize setup, the Green tube goes to the plastic port on the Flow Conditioner which **MUST** be used when depressurizing and must include the piece of rigid foam with holes that looks like a piece of packing material but is essential to allowing the Duct Blaster to measure in the depressurization direction accurately.

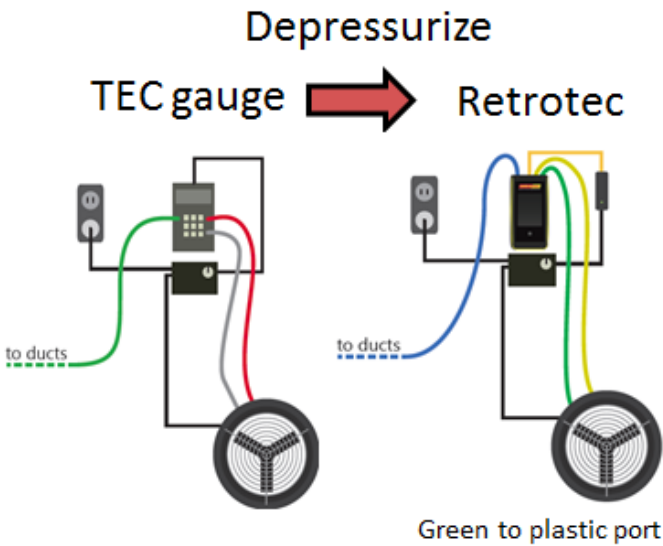


Figure 9: Flow conditioner installed for Depressurize*



Figure 10: Duct Blaster Flow conditioner plastic tap*

*Flow conditioner pictures courtesy of The Energy Conservatory, Inc.

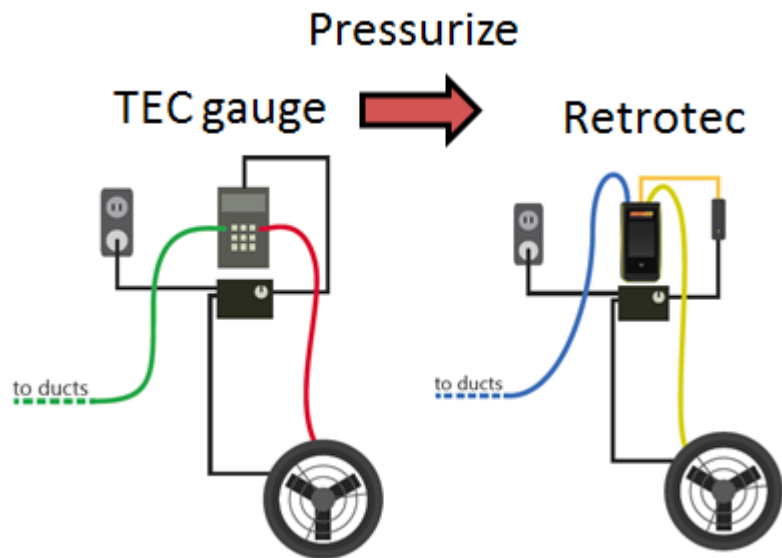


Figure 11: Comparison of connections using a Retrotec gauge instead of the TEC gauge using Duct Blaster

Note that in Pressurize set up, the gauge green tube is not required as the Flow Conditioner will be removed from the Duct Blaster.

4. Adapter Technical Details

4.1 Fan Compatibility

The Speed Control Adapter (for TEC fans) (Retrotec part number FN275) is designed to convert the fan speed control output from Retrotec gauges to a Pulse Width Modulation (PWM) scheme required by the cruise input on TEC fan speed control unit.

The Adapter thus works with any fans that use the TEC fan speed control unit, or a compatible PWM speed control scheme.

4.2 Gauge Compatibility

The Speed Control Adapter is designed to work with the fan speed control output from Retrotec gauges, including the DM32 and the DM-2. Given that DM-2 are reaching end of lifecycle, it would be prudent for Speed Control Adapter users to use the DM32 to control their TEC fans.

4.3 LED Power Status Indicator

The LED on the front indicates the status of power internal to the Adapter. The Adapter uses an AA battery to supplement the power provided by the Speed Control Output. A green light when plugged in means that the Adapter battery has adequate charge.

When the battery voltage falls to +5.4V, the red light will come on as a 'low battery' indication, meaning the internal battery needs to be changed (9V battery).

Battery life when used with the DM32 gauge is expected to be unlimited, since power from the battery is only required when the fan is running at 90-100% speed.

When used with a DM-2 gauge, the battery will need to be changed at regular intervals, since the DM-2 speed control output needs more boosting.