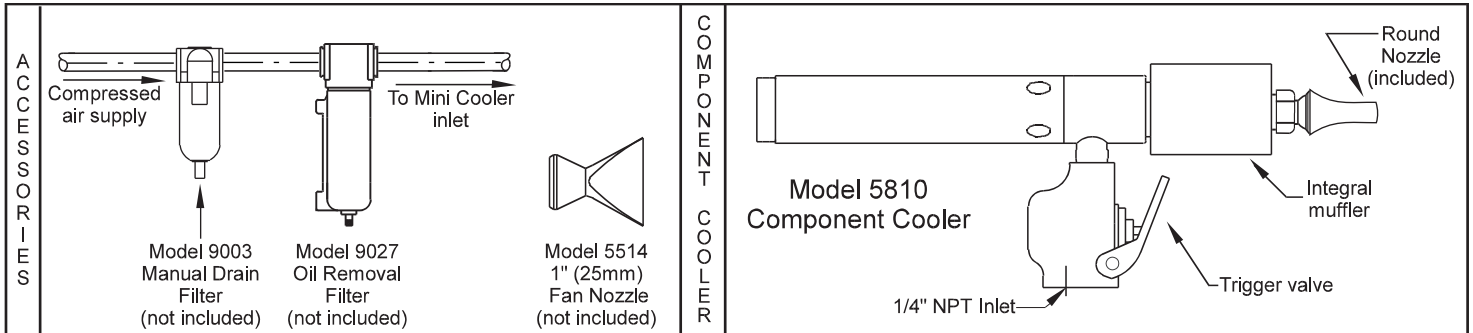




## COMPONENT COOLER™ INSTALLATION & MAINTENANCE



### COMPRESSED AIR LINE SIZES

Compressed air lines should be sized to hold pressure drops to a minimum. Compressed air hose (not included) should be 3/8" I.D. up to 25' (7.6m) long, 1/2" I.D. hose up to 50' (15.2m) long. Do not use restrictive fittings such as quick connects. They can "starve" the Component Cooler by causing excessive line pressure drop.

### COMPRESSED AIR SUPPLY

For best performance, use line pressure 80 to 100 PSIG (5.5 to 6.9 BAR). A Component Cooler uses 10 SCFM (283 SLPM) at 80 PSIG (5.5 BAR) supply pressure. Lower pressure will cause less airflow and warmer cold end temperatures.

With proper filtration and separation of dirt, moisture and oil from the compressed air supply, the Component Cooler will operate for years with no maintenance required. Use a 25 micron or smaller filter separator on the compressed air supply (Model 9003 Manual Drain Filter not included). If a filter separator is not used, dirt contamination in the Component Cooler will deteriorate performance.

A filter separator will remove liquid water from the compressed air but not humidity. Due to the low temperature of the Component Cooler, it may cause humidity to freeze and plug the cold end with ice or snow when operated continuously. The amount of moisture in the compressed air line determines the time it will operate before freezing up. It usually takes 10 to 20 minutes of continuous operation before performance is affected.

Replacement filter elements are available.

**For replacement or repair filter and regulator parts, contact EXAIR at 1-800-903-9247 or [techhelp@exair.com](mailto:techhelp@exair.com). Call (513) 671-3322 for outside the US and Canada.**

To prevent problems associated with oil, use an oil removal filter (Model 9027 Oil Removal Filter not included) with a micron rating of 0.03 or less. The oil removal filter should be used downstream from the manual drain filter. Filters should be close to the Component Cooler, within 10 to 15' (3 to 4.6m) is best.

### USING THE COMPONENT COOLER

Direct the cold air at the suspect component. The exhaust from the nozzle should be as close as possible to the component. The closer the nozzle is to the component, the colder the air temperature striking it. For larger components, a Model 5514 1" (25mm) Fan Nozzle (not included) can be used to spread the cold air.

**WARNING! Do Not Aim The Cold Air At Fingers Or Any Other Part Of The Body! The Air Is -40°C**

Another method to make the component as cold as possible is to make a shroud that covers the component. The shroud should exhaust air through slots at the bottom. This will totally surround the component in the cold air and eliminate entrainment of room air that could warm the cold airstream.

For continuous operation (extended use) the trigger valve can be removed. A manual valve can be mounted to the workbench for on/off control. (Model 9012 Manual Valve not included.)

While cold airflow from the Component Cooler is virtually instantaneous, the warm metal parts act as a heat sink if it has not been used for a period of time. It takes about one minute of use before the maximum cold temperature is achieved.

If freezing occurs, you will notice reduced or no cold airflow. See "5" below to correct the problem.

**TROUBLESHOOTING & MAINTENANCE**

If the Component Cooler Does Not Perform Properly, check the four common problems listed below:

1. **Inlet Pressure** - Low inlet pressure supply will cause poor performance. Measure the pressure at the compressed air inlet of the Component Cooler while it is operating. Line pressure must be 80 to 100 PSIG (5.5 to 6.9 BAR) to achieve best results. Restrictions in the compressed air supply line can cause excessive pressure drops and deteriorate performance.
2. **Loose Cold Muffler** - A loose cold muffler will cause poor performance. Make sure it is tight.
3. **Inlet Temperature** - A Component Cooler provides a temperature drop from supply air temperature. In some cases, the supply air is warmer than ambient air due to compressed air lines running across ceilings, near furnaces, direct sun, etc. In this case, the cold air may be warmer than anticipated and adequate refrigeration may not be available.
4. **Back Pressure** - The performance of a Component Cooler deteriorates with back pressure on the cold end exhaust. Use only the nozzles supplied for best results.
5. **No Cold Flow** - The filter should be drained regularly to keep moisture out of the Component Cooler that might cause internal freezing. Low temperature airflow exhausted in a humid environment can freeze, reducing or even stopping the cold airflow. If internal freezing occurs, any one of the following will correct the problem:
  - (a) Blow air (use an air gun) into the cold muffler with the Component Cooler off.
  - (b) Turn the Component Cooler off for a few minutes. It will thaw.
  - (c) Put a dryer on the compressed air supply. Dry air with an atmospheric dew point of -40°C works best.

If you have any questions or problems, please contact an EXAIR Application Engineer at:

Toll Free: 1-800-903-9247 (U.S. & Canada)

Telephone: 513 671-3322 outside of U.S. & Canada

Toll Free Fax: 866-329-3924 (U.S. & Canada)

FAX: 513 671-3363 outside of U.S. & Canada

E-mail: [techhelp@exair.com](mailto:techhelp@exair.com)

Website: [www.exair.com](http://www.exair.com)

For more information about this product, visit  
 "Frequently Asked Questions" at [www.exair.com](http://www.exair.com)  
**FAQ at [www.EXAIR.com](http://www.EXAIR.com)**