

For use with Bullard Airline Respirators

Includes: CT Cool Tube, nylon belt and heat shield.

Function: The CT is designed to supply a continuous flow of cool air to certain Bullard supplied air respirators. Please consult the NIOSH approval matrix in your respirator user manual to verify that the CT is NIOSH approved for your specific configuration. All Bullard parts must be present and properly assembled to constitute a NIOSH-approved respirator.

NOTE
CT cannot be used with a low pressure air source such as an ambient air pump or Bullard Free-Air® Pump.



▲ WARNING

Before using this product, read and follow all directions and warnings, including those in the respirator instruction manual. Failure to follow these instructions could result in death or serious injury.

▲ WARNING

This climate control system is not recommended for cooling the air supply when the air temperature is less than 77°F (25°C). Since the system may cool the incoming air by more than 45°F (25°C), it is possible for ice to form in the breathing tube and reduce the airflow. Failure to observe this warning could result in death or serious injury.

Air Quality Requirements

▲ WARNING

The respirator's air source must supply clean, breathable air, Grade D or better, at all times. The respirator does not purify air or filter out contaminants.

Connecting the respirator to a line supplying nitrogen or other harmful gases could cause death or serious injury.

Failure to follow these instructions could result in death or serious injury.

Respirable air must be supplied to the point-of-attachment of the APPROVED BULLARD air supply hose. The point-of-attachment is where the air supply hose connects to the fitting that contains a pressure gauge used to monitor the pressure of the air provided to you.

Locate the source of supplied air in a clean environment far enough from your work site to ensure the air remains contaminant-free. Always use an inlet filter on your air source and any monitors and alarms as necessary to assure clean, breathable air at all times.

Supplied breathing air **MUST** meet or exceed the requirements for Type 1 gaseous air described in the Compressed Gas Association Commodity Specification G-7.1 (Grade D or higher quality) as specified by Federal Law 42 CFR, Part 84, Subpart J, 84.141(b) and 29 CFR 1910.134(i)(1)(ii). The requirements for Grade D breathable air include:

Oxygen.....	19.5-23.5%
Hydrocarbons in mg/m ³ of gas.....	5 mg/m ³ max.
Carbon monoxide.....	10 ppm max.
Carbon dioxide.....	1,000 ppm max.
Odor.....	No pronounced odor*
No toxic contaminants at levels that make air unsafe to breathe.	

* Specific measurement of odor in gases is impractical. Air normally may have a slight odor. The presence of a prolonged odor should render the air unsatisfactory.

Refer to C.G.A. Commodity Specification G-7.1 for complete details, or contact the Compressed Gas Association (1235 Jefferson Davis Highway, Arlington, VA 22202 or www.cganet.com).

Air Pressure

Continually monitor the air pressure at the point-of-attachment while operating the respirator. A reliable air pressure gauge must be present to monitor the pressure.

▲ WARNING

Failure to supply the minimum required pressure at the point-of-attachment for your hose length will reduce airflow and could result in death or serious injury.

It is important to operate the Bullard climate control device in the prescribed pressure range for the particular Bullard respirator you are using. Operating the correct pressure range will insure that the proper air flow is delivered to the respirator and will maintain the NIOSH approval. Refer to your respirator user manuals' Breathing Air Pressure Table to determine the correct pressure that should be used with the climate control device. This table defines the pressure ranges necessary to provide the respirator with a volume of Grade D air that falls within the U.S. Government required range of 6-15 cfm (or 170-425 lpm). (See 42 CFR, Part 84, Subpart J, 84.150)

The **Breathing Air Pressure Table** found in your respirator user instruction manual defines the air pressure ranges necessary to provide the respirator with a volume of air that falls within the required range of 6-15 cubic feet per minute (cfm) or 170-425 liters per minute (lpm) for loose-fitting hoods and 4-15 cfm (115-425 lpm) for tight-fitting face pieces.

Be sure you understand the information in the BREATHING AIR PRESSURE TABLE before using the respirator. To use the table, follow the steps identified below:

1. Confirm the air source and climate control device.
2. Confirm your choice of approved Bullard air supply hose(s) to use with your Cool Tube.
3. Determine that your air supply hose does not exceed the maximum approved hose length or number of hose sections.
4. Set the air pressure at the point-of-attachment within the required pressure range for your air supply hose length.

Air Supply Hose

To maintain your Bullard respirator's NIOSH approval, use only approved Bullard V10 Series hose(s) in lengths of 25 to 300 feet, or Bullard V5 Series hose in lengths of 25 or 50 feet, between the CT's quick-disconnect fitting and the point-of-attachment to the hose. Bullard V11 hose-to-hose adaptors **MUST** be used to connect V10 hose lengths together. Secure connection(s) until wrench tight and leak free.

▲ WARNING

Use of any other air supply hose voids NIOSH approval on the entire respirator assembly and could reduce the airflow to the respirator. Failure to observe this warning could result in death or serious injury.

Preparation and Use of the CT

1. In an uncontaminated atmosphere screw the black connector on the end of the breathing tube to the fitting on the CT. Tighten hose connectors firmly (**Figure 1**).
2. Lace the belt supplied with the Cool Tube through the belt slots. See Heat Shield instructions.
3. With the approved Bullard air supply hose connected to the air source and with air flowing into the hose, connect the quick-disconnect coupler on the air supply hose to the quick-disconnect nipple on the CT Cool Tube.
4. Adjust the air pressure at the point-of-attachment to within the approved pressure range (**Figure 2**). See the Air Pressure section on the front page.

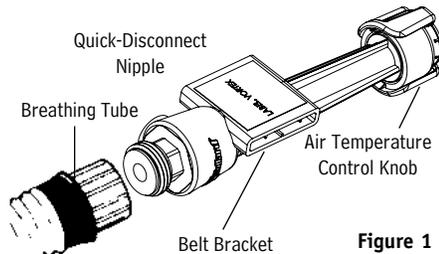


Figure 1

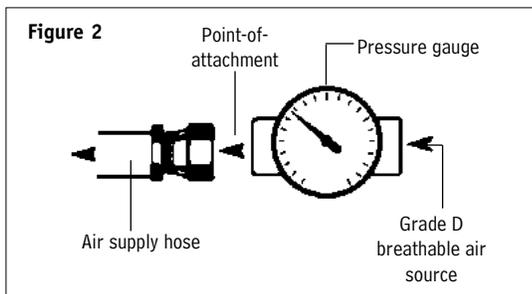


Figure 2

5. Don the respirator by following the directions in your respirator instruction manual. If you do not have instructions, contact Bullard Customer Service at the address or phone numbers given below. Manuals may be downloaded on the Resources webpage at www.bullard.com.
6. To obtain cooler air, turn the air temperature control knob counterclockwise (**Figure 1**).
Maximum cooling is attained when knob is fully open and when there is maximum airflow out of the CT exhaust port.
To obtain air that is closer to ambient temperature, turn air temperature control knob clockwise. If knob is fully closed, your respirator will receive air close to ambient temperature.
7. When finished working, leave the work area wearing the respirator. With the air still flowing into the hood, remove the hood and then disconnect the air supply hose using the quick-disconnect coupler attached to the CT Cool Tube.

Heat Shield Instructions

The climate control heat shield is designed to work with the Bullard CT, AC1000, HCT, HC2400, or ACL99 climate control devices.

Assembly

The heat shield is designed to work with the standard nylon belt (part # 4612, or optional vinyl belt 36501) supplied with the climate control devices. CT Series climate control is designed to direct exhaust air away from the user. The head shield is optional protection.

1. Align the tube on the heat shield as shown in (**Figure 3**).
2. Lace the belt supplied with your climate control device through both the heat shield slots and the climate control belt bracket slots.
3. Use plastic zip tie to secure the climate control unit to the heat shield.

Paint Spray Exhaust Filter Cap

The exhaust end of the CT has a knob that is covered by a foam filter and cap (**Figure 4**).

This will help prevent paint over spray from entering the CT device.

Remove the cap and replace the foam as often as necessary or when restricted by paint.



Figure 3

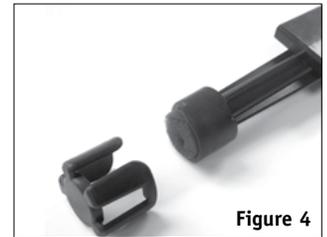


Figure 4

Assembly

1. The CT has an opening at the bottom of the tube where air is exhaust away from the leg. The widest portion of the filter cap must be lined up with the exhaust opening before attaching (**Figure 5**).
2. The two clamps on the filter cap must fit precisely in the slots on the opposite side of the air exhaust opening (**Figure 6**).
3. Once both air exhaust and key slots are lined up the filter cap can be attached properly.



NOTE

If installed incorrectly the filter cap is more susceptible to detaching from the CT.

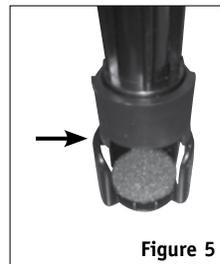


Figure 5

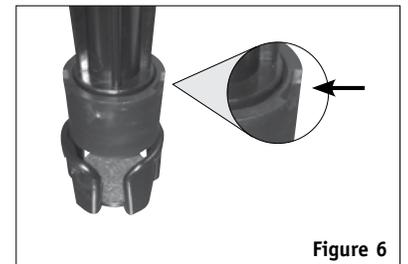


Figure 6



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