

# DC50 Series Dual-Cool Climate Control Tube and DC70 Vest Instruction Sheet

## For optional use with Bullard Airline Respirators



#### **A** CAUTION

DC50 Dual-Cool cannot be used with a low pressure air source such as an ambient air pump.

#### **A WARNING**

The DC50 Dual-Cool climate control system is not recommended for cooling the air supply when the air temperature is less than 70°F (21°C). Because the DC50 Dual-Cool may cool the incoming air by more than 30°F (17°C), it is possible for ice to form in the breathing tube and reduce the airflow. Failure to observe these warnings could result in death or serious injury or lifethreatening delayed lung disease including but not limited to silicosis, pneumoconiosis, or asbestosis.

The DC50 Dual-Cool tube is designed to supply a continuous flow of cool air to certain Bullard supplied air respirators and body vests.

### **Air Pressure**

Air pressure must be continually monitored at the point-ofattachment while operating the respirator. A reliable air pressure gauge must be present to monitor the pressure during respirator operation.

### **A WARNING**

Failure to supply the minimum required pressure at the pointof-attachment for your hose length and type will reduce airflow and could result in death or serious injury or life-threatening delayed lung disease including but not limited to silicosis, pneumoconiosis, or asbestosis.

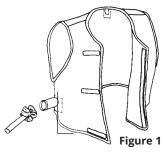
You must always operate the Bullard climate control device within the required pressure range for the specific Bullard supplied air respirator you are using. Using the correct pressure range will ensure that the air flow delivered to the respirator meets the NIOSH airflow requirements. Refer to the Supplied Air Pressure Tables located in the Bullard respirator user manuals to determine the correct pressure that should be used with the climate control device. Make certain that your breathing air compressor has sufficient capacity to deliver a minimum of 30 cfm per respirator wearer at all times. Because Dual-Cool has two cool tubes, it requires a higher than normal volume of air.

## **Assembly and Use**

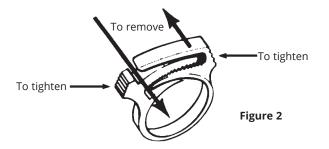
Assembly must be conducted in an uncontaminated atmosphere.

# Assembling the Cooling Vest

- 1. Insert the muffler end of the cooling vest connector hose well into the air entry sleeve of the vest (Figure 1).
- Secure the cooling vest hose using the clamp (Figure 2) around the entry sleeve of the vest.



Vest "V" or notch



# DC50 Series Dual-Cool Climate Control Tube and DC70 Vest Instruction Sheet

### **Head Shield Assembly Instructions**

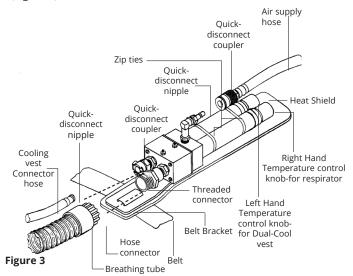
The HSDC climate control heat shield is designed to work with the Bullard DC50 Dual-Cool climate control device.

### **Assembly**

- 1. Lace the belt supplied with your climate control device through both the heat shield slots and the climate control belt bracket slots.
- Use plastic zip ties (2 included) to secure the climate control to the heat shield. (Figure 3)

# **Donning the Dual-Cool Tube and Cooling Vest**

 Screw the hose connector that is on the end of the breathing tube to threaded connector on Dual-Cool. Lace the belt through the slots in the belt bracket (Figure 3).



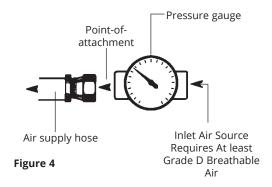
- 2. Don the belt, belt bracket, and Dual-Cool. Adjust belt comfortably, but loosely, around your waist, insuring that the Dual-Cool assembly is on your right-hand side.
- 3. Don the vest. Use the Hook and Loop Type closure strips to adjust loosely for size.



The vest should mount over the belt with the Dual-Cool unit positioned in the "V" of the vest found on the right-hand side (Figure 1).

- Snap the quick-disconnect nipple found on the end of the cooling vest connector hose into the quick-disconnect coupler on the Dual-Cool (Figure 3).
- 5. Don the respirator by following the directions in your respirator user manual. If you do not have the respirator's user manual, contact Bullard Customer Service at the address or phone number given below.

- 6. With the approved Bullard air supply hose connected to the breathing 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 Dual-Cool (Figure 3).
- Adjust the air pressure at the point-of-attachment to within the approved pressure range found in the respirator user manual (Figure 4).



### **Operating the Dual-Cool Tube**

1. To obtain cooler air, turn the air temperature control knobs counterclockwise (Figure 3). Maximum cooling is obtained when knobs are open completely and when there is maximum airflow out of the Dual-Cool tube's exhaust ports. To obtain air that is closer to ambient temperature, turn air temperature control knobs clockwise. If knobs are closed completely, your respirator will receive air that is essentially at ambient temperature.



There are separate controls to adjust the temperature of the air that is distributed to the vest and the breathing zone. The one knob controls the air temperature to the respirator; the other knob controls the air temperature to the cooling vest (Figure 3).

2. When finished working, leave the work area wearing the respirator until you are in a clean air environment containing at least Grade D breathable air. With the air still flowing, remove the hood, and then disconnect the air supply hose using the quick-disconnect coupler attached to the Dual-Cool.

### **Cleaning**

Machine wash the vest in warm water using a gentle cycle. Use a mild laundry detergent. Air-dry only. After cleaning, carefully inspect the vest for any signs of damage. If any damage is detected, remove the vest from service.

©2024 Bullard. All rights reserved.

Bullard Center 2421 Fortune Drive Lexington, KY 40509 • USA 877-BULLARD (285-5273) Tel: +1-859-234-6616 Fax: +1-859-246-0243 Americas Operations 1898 Safety Way Cynthiana, KY 41031 • USA 877-BULLARD (285-5273) Tel: +1-859-234-6616 Fax: +1-859-234-8987

Bullard GmbH Dieselstrasse 8a 53424 Remagen • Germany Tel: +49-2642 999980 Fax: +49-2642 9999829 Bullard AsiaPacific Pte. Ltd. 51 Changi Business Park Central 2 #03-04 The Signature Singapore 486066 Tel: +65 6745 0556