Supplied-Air Respirator, Type C Continuous Flow

NOTE
For technical assistance or questions contact Bullard Customer Service at:
Toll-Free 877-BULLARD (285-5273) or 859-234-6616
Online at www.bullard.com or e-mail info@bullard.com

Cautions and Limitations
For HMX Series Supplied Air Respirators
A. Not for use in atmospheres containing less than 19.5% oxygen.
B. Not for use in atmospheres immediately dangerous to life or health (IDLH).
   IDLH is defined in 29 CFR 1910.134(b).
C. Do not exceed maximum use concentrations established by regulatory standards.
D. Airline respirators can be used only when respirators are supplied with respirable air meeting the requirements of CGA G-7.1 Grade D or higher quality.
E. Use only the pressure ranges and hose lengths specified in this User Manual.
J. Failure to properly use and maintain this product could result in injury or death.
M. All approved respirators shall be selected, fitted, used, and maintained in accordance with MSHA, OSHA, and other applicable regulations.
N. Never substitute, modify, add, or omit parts. Use only exact replacement parts in the configuration as specified by the manufacturer.
O. Refer to user's instructions, and/or maintenance manuals for information on use and maintenance of these respirators.
S. Special or Critical User's Instructions and/or specific use limitations apply. Refer to User's Instructions before donning.

⚠️ WARNING – HMX Series Respirator Helmets

- Check your helmet for physical damage before every use. If your helmet is damaged DO NOT USE – replace or repair immediately.
- NEVER open the outer door in a contaminated area when an inner lens is not present. Dusts, aerosols and vapors can remain in the air for hours before settling or ventilating.
- ALWAYS leave the contaminated area before reaching into the helmet or doffing the respirator.
- ONLY use genuine HMX replacement lenses and parts for health and safety, regulatory compliance and warranty coverage.
- DO NOT USE for abrasive (Type – CE) blasting.
Failure to follow these warnings could result in death or serious injury.

⚠️ WARNING
Read all instructions and warnings before using this product. Failure to use and maintain this product in strict accordance with the instructions, labels, and limitations provided throughout this document could result in death or serious injury.
- Consult and comply with all applicable respiratory regulations (OSHA, MSHA, and others) including; respirator selection for the hazard.
- HMX Series respirator helmets and components are designed for protection against fumes, vapors, gases, and dusts. For direct chemical contact or splash, additional evaluation of product selection is required for helmet and shroud options.
- Never connect a respirator to a non-breathable air source. Prevent accidental connection by selecting unique and incompatible fittings from other airlines.
- Leave contamination area immediately if:
  o Breathing becomes difficult
  o Vision becomes impaired
  o Pressure is felt in the ears
  o Dizziness or other distress occurs
  o You see, taste, or smell contaminants inside the hood
  o Any part of the respirator assembly becomes damaged
  o Airflow into the respirator slows or stops
  o Air pressure gauge drops below the minimum specified in the Breathing Air Pressure Table
Breathing Air Pressure Table

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Respirator System Components

HMX Series
Bullard HMX Series supplied-air respirators consist of four components (Fig. 1):

- Respirator Helmet and Shroud
- Breathing Tube
- Flow Control Device
- Air Supply Hose

Respirator Operation

Protection

- Head: HMX Series respirators meet ANSI Standard Z89.1-2014 Type 1, Class E & G for protective head wear for industrial workers. The helmet is designed to provide limited head protection by reducing the force of falling objects striking the top of the head.
- Face: The use of the respirator’s inner or outer lenses (windows) meets ANSI Z87.1-2015 (High Impact Z87+ Face Protection) requirements for face protection. The use of both lenses provides limited face protection from flying particles, spray or hazardous liquids, but the lenses are not shatterproof.
- EARS: HMX Series respirators DO NOT provide hearing protection. Use properly fitted earmuffs, earplugs and/or other hearing protection when exposed to high noise levels.

Air Source

Follow all applicable regulations for supplied air quality. Supplied air must at minimum meet requirements for Type 1, gaseous air described in the ANSI/Compressed Gas Association Commodity Specification G-7.1 for Grade D or higher quality as specified by Federal regulations 42 CFR, Part 84.133(b) and 29 CFR 1910.134(b). Locate the air source of supplied air, whether it is a breathing air compressor or ambient air pump, such as Bullard Free-Air® pump, in a clean air environment where air is contaminant free.

Follow compressor or pumps manufacturer’s instructions for supplying Grade D air including the use of inlet-to-line filters, air dryers, carbon monoxide monitors and alarms, and periodic testing and maintenance.

Breathe Air Supply Hoses and Hose Fittings

For OSHA compliance, only Bullard air supply hoses and fittings approved for use in this system by NIOSH can be used between the breathing tube connection fitting on the wearer’s belt and the point of attachment to the air supply.

Body Attachment

The flow control device connecting the breathing tube to the air supply hose MUST be secured to the user with the belt provided. Securing the breathing tube connection helps prevent the air supply hose from snagging, disconnecting, or pulling the respirator hood off the user’s head.

Pressure

Air pressure should be measured at the point of attachment while operating this respirator. Pressure must be in accordance with the approved range in the HMX Series Respirator Breathing Air Pressure Table. A reliable air pressure gauge must be present to allow monitoring pressure during actual respirator operation.

Point of Attachment (POA)

Per 42 CFR Part 84 Subpart I 84.149, a pressure gage, regulator, relieving valve, and conformance fitting are necessary to be considered a POA.

Air Supply Hose

The maximum allowable total hose length is 300’ (91.4m) from the Point of Attachment. See the HMX Series Breathing Air Pressure Table for maximum allowable hose lengths that can be connected to attain the operating length.

Hose Connections

Only use Bullard hose-to-hose adapters for connecting hoses together.

Non-Breathable Gas Safety

If the work environment includes non-breathable gases and airlines – select a hose color and fitting connection that ensures respirator users cannot accidentally connect to unsafe air. The fitting connection or coupling for breathing air should always be unique and dedicated.

Configuration Examples:

- Outer Door and Inner Lens
- Outer Door - No Inner Lens
- Inner Lens, No Outer Door
- Inner Lens, No Outer Door
Special or Critical User’s Instructions

The HMX Series Breathing Air Pressure Table defines the air pressure ranges necessary to provide HMX Series respirators with a volume of air that falls within the required range of 6-15 cfm or 170-425 lpm (42 CFR, Part 84, Subpart J, 84.150).

**WARNING**

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

To use the table and identify the proper air flow range; 1) select the air source (Compressed Air or Ambient/Free Air), 2) the use mode, 3) the exact part number of the flow control device; and 4) the length of the air supply hose. Note the maximum hose segments that are approved. Only use or select a configuration that is specified and has a pressure range provided.

### HMX Series Respirator Breathing Air Pressure Table

<table>
<thead>
<tr>
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<th>Flow Control Device Part Number</th>
<th>Coupling Design</th>
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<th>50' Max 2 Hose Lengths</th>
<th>75' Max 3 Hose Lengths</th>
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1 PROTECTION
CF = CONTINUOUS FLOW
SA = SUPPLIED-AIR

2 CAUTIONS AND LIMITATIONS
A - Not for use in atmosphere containing less than 19.5 percent oxygen.
B - Not for use in atmospheres immediately dangerous to life or health.
C - Do not exceed maximum use concentrations established by regulatory standards.
D - Air-line respirators can be used only when the respirators are supplied with respirable air meeting the requirements of CSA G-7.1 Grade D or higher quality.
E - Use only the pressure ranges and hose lengths specified in the User's Instructions.
J - Failure to Φ properly use and maintain this product could result in injury or death.
M - All approved respirators shall be selected, fitted, used, and maintained in accordance with MSHA, OSHA, and other applicable regulations.
N - Never substitute, modify, add, or omit parts. Use only exact replacement parts in the configuration specified by the manufacturer.
O - Refer to User's Instructions and/or maintenance manuals for information on use and maintenance of these respirators.
S - Special or critical User's Information and/or specific use limitations apply. Refer to User's Instructions before donning.
2 CAUTIONS AND LIMITATIONS

A. This respirator is not approved for use in atmospheres containing less than 19.5% oxygen.

B. Do not use in atmospheres containing dangerous concentrations of dust, fumes, or fumes.

C. Use only with respirable air meeting the requirements of the applicable regulatory standards.

D. Air-line respirators can be used only when the respirator is supplied with respirable air meeting the requirements of the applicable regulatory standards.

E. Use only the pressure ranges and hose lengths specified in the User's Instructions.

F. Air supplied to the airline respirator shall meet the requirements of the applicable regulatory standards.

G. Do not exceed maximum use concentrations established by regulatory standards.

H. Never substitute, modify, add, or omit parts. Use only exact replacement parts in the configuration specified by the manufacturer.

J. Failure to properly use and maintain this product could result in injury or death.

K. Use only the pressure ranges and hose lengths specified in the User's Instructions.

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M. All approved respirators shall be selected, fitted, used, and maintained in accordance with MSHA, OSHA, and other applicable regulations.

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O. Refer to User's Instructions and/or maintenance manuals for information on use and maintenance of these respirators.

P. Use only the pressure ranges and hose lengths specified in the User's Instructions.

Q. Air supplied to the airline respirator shall meet the requirements of the applicable regulatory standards.

R. Do not exceed maximum use concentrations established by regulatory standards.

S. Special or critical User's Information and/or specific use limitations apply. Refer to User's Instructions before donning.

This respirator is approved only in the following configurations:

- TYPE C CONTINUOUS FLOW SUPPLIED-AIR RESPIRATOR

- TYPE C CONTINUOUS FLOW SUPPLIED-AIR RESPIRATOR
### HMX Series Helmet Respirator System - HC2400 Series Flow Control Devices

**TYPE C CONTINUOUS FLOW SUPPLIED-AIR RESPIRATOR**

**THIS RESPIRATOR IS APPROVED ONLY IN THE FOLLOWING CONFIGURATIONS:**

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<th>Configuration</th>
<th>ID</th>
<th>Cautions and Limitations</th>
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<td><strong>GENERAL CAUTIONS AND LIMITATIONS</strong></td>
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HMX Series Helmet Respirator System - F40 Series Flow Control Devices

TYPE C CONTINUOUS FLOW SUPPLIED-AIR RESPIRATOR

THIS RESPIRATOR IS APPROVED ONLY IN THE FOLLOWING CONFIGURATIONS:

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<th>ALTERNATE AIR HOSES</th>
<th>ALTERNATE FILTER SIZES</th>
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1 PROTECTION

CF = CONTINUOUS FLOW
SA = SUPPLIED-AIR

2 CAUTIONS AND LIMITATIONS

A - Not for use in atmosphere containing less than 19.5 percent oxygen.
B - Not for use in atmospheres immediately dangerous to life or health.
C - Do not exceed maximum use concentrations established by regulatory standards.
D - Air-line respirators can be used only when the respirators are supplied with respirable air meeting the requirements of CGA G-7.1 Grade D or higher quality.
E - Use only the pressure ranges and hose lengths specified in the user's Instructions.
J - Failure to properly use and maintain this product could result in injury or death.
M - All approved respirators shall be selected, fitted, used, and maintained in accordance with MSHA, OSHA, and other applicable regulations.
N - Never substitute, modify, add, or omit parts. Use only exact replacement parts in the configuration specified by the manufacturer.
O - Refer to User's Instructions and/or maintenance manuals for information on use and maintenance of these respirators.
S - Special or critical User's Information and/or specific use limitations apply. Refer to User's Instructions before donning.

E.D. BULLARD CO.
1898 Safety Way
Cynthiana, KY 41031 USA
877-BULLARD (285-5273)
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## HMX Series Helmet Respirator System - Frigitron 2000 Series Flow Control Devices

**TYPE C CONTINUOUS FLOW SUPPLIED-AIR RESPIRATOR**

THIS RESPIRATOR IS APPROVED ONLY IN THE FOLLOWING CONFIGURATIONS:

### RESPIRATOR COMPONENTS

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<td>SA/CF</td>
<td>HMXS2000</td>
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<td>HMXS4000</td>
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S - Special or critical User's Information and/or specific use limitations apply. Refer to User's Instructions before donning.
Assemble the HMX Series Respirator Helmet

NOTE

For your own protection, safety and to ensure the maximum service life of your new helmet please read this manual carefully before use.

Failure or abuse may result in injury or reduced protection and may also void your warranty.

Respirator Assembly

Before assembling this respirator, read the warning labels on the inside of the respirator shroud and the helmet shell and this manual in full. Remove and read the warning cards packaged with the helmet.

Installing Headband into Helmet

Installing and aligning the headband suspension is made easier without the shroud in place on the helmet, or unsnap the shroud retainer at the back and carefully pull the right side of the retainer from the helmet shell stopping near the door hinge. Carefully unsnap the tab and repeat for left side.

1. Turn helmet and headband suspension upside down.
2. Place headband inside helmet with brow pad facing front of shell.
3. Insert keys into respective key slots. Push firmly until keys snap into place.

Adjusting the Suspension

To adjust the size of the Flex-Gear® Ratchet-style suspension:

Turn ratchet knob counterclockwise until headband opens to largest size. Place helmet on head and turn ratchet knob clockwise until it fits comfortably, DO NOT OVERTIGHTEN.

Adjust Crown Straps for Vertical Fit

To improve suspension comfort, adjust crown straps vertically by reproposing the crown strap posts in the crown straps. Vertical adjustment makes the headband ride higher or lower on the wearer’s head.

To adjust, push crown strap post from slot, move to new slot, and snap in to secure. Repeat for either crown strap post (see Figure 2).

Using the Optional Chin Strap

1. Place chin strap to headband by sliding chin strap keyway slot over plastic head inside the helmet shell. Refer to chin strap installation instructions for more details.
2. With helmet on, adjust chin strap length with the plastic slide.

WARNING:

FAILURE TO FOLLOW THE INSTRUCTIONS BELOW AS WELL AS ALL OTHER INSTRUCTIONS CONTAINED HEREIN MIGHT RESULT IN DEATH OR SEVERE, DISABLING AND PERMANENT INJURIES.

The HMX-O (no inner lens) version of this helmet is designed with an outer door that can be raised to communicate with your supervisor or other employees before entering and after leaving the contaminated atmosphere.

The outer door MUST BE LOWERED completely and snapped shut before entering the contaminated area and MUST BE KEPT in the LOWERED position until you are sure that you are no longer in an atmosphere that contains any contaminants. If there is ANY DOUBT as to whether or not you are in a contaminated free atmosphere KEEP the outer door LOWERED.

The Air Source must be turned On before entering the contaminated atmosphere and must be kept On until you leave the contaminated environment. If there is ANY DOUBT as to whether or not you are in a contaminated free environment, leave the Air Source On.

Failure to heed these instructions will allow the contaminants the respirator is designed to keep out, to enter your breathing zone which may result in DEATH or SEVERE, DISABLING and PERMANENT INJURIES.

Installing the HMX Shroud

Shroud Retainer

• Begin with top of helmet facing your body, and front of helmet facing up (Figure 3).
• Line up notched center in shroud retainer with the center of the retainer groove at the bottom of the helmet. Installation must begin with notch in the center of the helmet (Figure 4).
• Ease shroud retainer completely into the groove along the bottom of the helmet edge, starting on the left side of the helmet, working your way to the back.
• Insert retainer tabs into tab holes, located near the temple of the helmet. Check that retainer is completely in place at every point along helmet’s bottom edge.
• At the back of the helmet, make sure that shroud retainer end with the hole is placed behind the helmet flange, located underneath the breathing tube connection (Figure 5).
• Return to the front of the helmet and repeat the above 3 steps for the right side.
• At the rear of the helmet, place right side of shroud retainer behind helmet flange, on top of the left side of the retainer (Figure 5).
• Line up snap tab on retainer end with hole on opposite end, and press together. There will be an audible and tactile snap to ensure retainer is secured (Figure 6).

Shroud Installation on Retainer

• Orient shroud so that the nose cut is situated facing the inside of the helmet, and black attachment strip is facing the open edge of the shroud retainer.
• Begin attaching shroud to shroud retainer by pressing attachment strip onto retainer, starting at the raised section of the retainer, approximately 2 inches from the center of the helmet (Figure 7).

• Press attachment strip onto shroud retainer, working around the entire helmet, until reaching the back of the helmet on the opposite side of where you started.
• Check that attachment strip is securely attached all the way around the shroud retainer.

NOTE

Ensure that retainer ends tabs are on the inside of the shroud.

Inner Lens and Outer Door Inspection

Be sure the plastic inner lens (HMX, HMX-I) and outer door (HMX, HMX-O) fits securely in the helmet frame. Remove any grit or dust from the mating edges. Inspect the inner lens and outer door for cracks, wear or damage that could prevent a tight fit against the helmet frame.

Removing Outer Door (For HMX, HMX-O)

To remove the outer door, first remove the shroud retainer from the helmet shell.

1. Grasping threaded nut on inside of helmet, turn threaded nuts on the outside of the helmet counter clockwise to loosen. Remove both parts from helmet. Repeat on opposite side.
2. Gently pull hinge connection part of outer door on both sides simultaneously away from helmet, ideally, detaching door from helmet shell.
3. Using the threaded nut already removed, remove the rubber gasket from the raised portion of the nut. Insert the tip of the threaded nut into the inside of the door hinge, and with even pressure with your thumbs, press the cam cap out of the door hinge. Repeat on opposite side.

HMX Series Respirator Helmet

User Manual for use with Supplied-Air Respirators
Installing the HMX Respirator

Before using your HMX Series respirator, assemble the helmet, breathing tube and flow control using the instructions provided.

1. Connect Bullard air supply hose to an air source supplying Grade D breathable air. 7xm or breathing air source.
2. With air flowing, connect the helmet assembly to the air supply hose (see Figure 16). Pull back the sleeve on the hose coupler and insert the quick-disconnect nipple on the flow control. Once the fitting is secured, release the coupling sleeve to lock the fitting together. Pull on the coupling to make sure they are attached securely.

Optional Lens Covers

1. If desired, apply optional lens covers designed to protect the respirator's outer door or inner lens. Apply up to 3 lens covers at a time.
2. When lens becomes soiled, remove by pulling tab at edge of lens cover to clear lens.

Cleaning

To clean the lenses, hand-sponge with warm water and mild detergent, rinse and air dry.

Optional Welding Shade Outer Doors

Fixed shade outer doors for welding are available to provide eye protection. To convert to a fully secured, user will hear and feel an audible and tactile click. Before entering a contaminated environment, user must check the condition of the outer door by gently lifting the front door tab to ensure door is secured. The respirator door is intended to be raised to a maximum open position for inspecting work, or other visual requirements. To open door, lift upwards on door tab, located in the bottom center of the outer door. It may be necessary to simultaneously use the opposite hand to gently pull helmet shell towards user’s chest, to facilitate the door releasing from its locked position.

WARNING

Never open the outer door in a hazardous area if an inner lens is not secured in place and in good condition. Hazards can remain airborne for hours until settled or ventilated. Failure to follow this requirement could subject user to serious injury or death.

Installing the Breathing Tube in HMX Series Respirator Helmets (Thread Style)

1. Align male end of breathing tube to female threaded insert on the back of the helmet (see Figure 15). Do not remove foam from inside the breathing tube used with HMX Series Airline Respirators. The foam helps to reduce the noise level of incoming air.
2. Twist the breathing tube into hood turning clockwise. Hand tighten only, until firmly seated.
3. Attach other end of the breathing tube to the flow control device on belt by screwing nylon hose connector onto flow control device.

WARNING

Do not put on or remove these respirators in a hazardous atmosphere except for emergency escape purposes. Failure to heed these warnings could result in death or serious injury.

Donning the HMX Series Respirator

Before using your HMX Series respirator, assemble the helmet, breathing tube and flow control using the instructions provided.

1) Connect Bullard air supply hose to an air source supplying Grade D breathable air. 7xm or breathing air source.
2) With air flowing, connect the helmet assembly to the air supply hose (see Figure 16). Pull back the sleeve on the hose coupler and insert the quick-disconnect nipple on the flow control. Once the fitting is secured, release the coupling sleeve to lock the fitting together. Pull on the coupling to make sure they are attached securely.
3) Adjust the air pressure at the point-of-attachment to the approved pressure range. See the Breathing Air Pressure Table (page 4) for approved pressure ranges.
4) With the air still flowing, put on the HMX Series helmet. Pull the hood over your head until the neck cuff is securely around your neck. If wearing eyewear, put your face in the hood opening first and pull over your head.
5) Make sure that the breathing tube is not twisted after donning. If so, remove hood, untwist and redon.
6) Tuck inner bib of hood into shirt or protective clothing (see Figure 17).
7) Pull the outer bib over collar of shirt or protective clothing. Pull the long outer bib down on the outside of clothing. Use Velcro side straps to secure bib from flapping loose.
8) Fasten belt at waist or hip level and adjust for comfort.
9) Recheck air pressure and adjust if necessary.
10) With air flowing into the respirator, you are now ready to enter work area.

Outer Door (HMX, HMX-O models)
The outer door should be kept in a fully closed and locked position for maximum protection. When fully closed and secured, user will hear and feel an audible and tactile click. Before entering a contaminated environment, user must check the condition of the outer door by gently lifting on the front door tab to ensure door is secured.

The respirator door is intended to be raised to a maximum open position for inspecting work, or other visual requirements. To open door, lift upwards on door tab, located in the bottom center of the outer door. It may be necessary to simultaneously use the opposite hand to gently pull helmet shell towards user’s chest, to facilitate the door releasing from its locked position. User will feel a tactile set when the outer door reaches its fully up position.
Doffing the HMX Series Respirator

When finished working, leave the work area wearing the respirator with air still flowing. Once outside of the contaminated area, depending on the hazard or contaminant, a decontamination shower BEFORE removal might be necessary to prevent secondary respiratory exposure or contact with skin and eyes.

Doffing the Respirator

• Remove the helmet.
• Remove the waist belt.
• Disconnect the helmet from the breathing tube.
• Disconnect the breathing tube from the flow control.
• Clean and inspect components as necessary.
• Place components in storage.

Inspection, Cleaning, and Storage

Bullard HMX Series respirators have a limited service life. Therefore, a regular inspection and replacement program must be conducted. Bullard HMX Series respirators and all component parts and assemblies should be inspected for damage or excessive wear before and after each use to ensure proper function. Immediately remove the respirator from service and replace parts or assemblies that show any sign of failure or excessive wear that might reduce the degree of protection originally provided.

Use only Bullard HMX Series respirator components and replacement parts manufactured by Bullard and approved for use by NIOSH with these respirators. Since respirator use and wear varies with each job site, it is impossible to provide a specific time frame for respirator replacement. Respirators used by more than one person must be cleaned, inspected, and sanitized after each use.

Breathing Tube

Cleaning

Inspect the breathing tube for tears, cracks, holes, or excessive wear that might reduce the degree of protection originally provided. If any signs of excessive wear are present, remove the breathing tube from service and discard immediately.

Inspect the gasket seal on the flow control end, if missing or worn, remove the respirator from service until replaced – there is no gasket seal on the hood-end of threaded connections.

Cleaning

To clean the breathing tube, hand-sponge with warm water and mild detergent, being careful not to get water inside. Rinse and air-dry. Avoid solvents and harsh cleansers.

Flow Control Device

Inspection

Inspect the flow control device including adjustable knobs and tubes for cracks, holes, or excessive wear that might reduce the degree of protection originally provided. If any signs of excessive wear are present, remove the flow control device from service. Replacement belts are available for all flow controls.

Cleaning

To clean, hand-sponge with warm water and mild detergent, being careful not to get water inside. Avoid solvents and harsh cleansers.

Air Supply Hoses

Inspection

Air supply hose(s) should be inspected closely for abrasions, corrosion, cuts, cracks, and blistering. Be sure the hose fittings are crimped tightly to the hose so that no air can escape. Make sure the hose has not been kinked or crushed by any equipment that may have rolled over it.

If any of the above signs are present or any other signs of excessive wear are detected, replace the hose(s) immediately and remove from service.

Cleaning

The air supply hose(s) should be hand-sponged with warm water and mild detergent, rinsed and air dried. Do not get water inside the air supply hose. Avoid solvents and harsh cleaners.

Flow Control Device

Inspection

Inspect the flow control device including adjustable knobs and tubes for cracks, holes, or excessive wear that might reduce the degree of protection originally provided. If any signs of excessive wear are present, remove the flow control device from service. Replacement belts are available for all flow controls.

Flow Control Device

Inspection

Inspect the flow control device including adjustable knobs and tubes for cracks, holes, or excessive wear that might reduce the degree of protection originally provided. If any signs of excessive wear are present, remove the flow control device from service. Replacement belts are available for all flow controls.

Cleaning

To clean, hand-sponge with warm water and mild detergent, being careful not to get water inside. Avoid solvents and harsh cleansers.

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Cleaning

The air supply hose(s) should be hand-sponged with warm water and mild detergent, rinsed and air dried. Do not get water inside the air supply hose. Avoid solvents and harsh cleaners.

Flow Control Device

Inspection

Inspect the flow control device including adjustable knobs and tubes for cracks, holes, or excessive wear that might reduce the degree of protection originally provided. If any signs of excessive wear are present, remove the flow control device from service. Replacement belts are available for all flow controls.

Cleaning

To clean, hand-sponge with warm water and mild detergent, being careful not to get water inside. Avoid solvents and harsh cleansers.

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Air supply hose(s) should be inspected closely for abrasions, corrosion, cuts, cracks, and blistering. Be sure the hose fittings are crimped tightly to the hose so that no air can escape. Make sure the hose has not been kinked or crushed by any equipment that may have rolled over it.

If any of the above signs are present or any other signs of excessive wear are detected, replace the hose(s) immediately and remove from service.

Cleaning

The air supply hose(s) should be hand-sponged with warm water and mild detergent, rinsed and air dried. Do not get water inside the air supply hose. Avoid solvents and harsh cleaners.

Flow Control Device

Inspection

Inspect the flow control device including adjustable knobs and tubes for cracks, holes, or excessive wear that might reduce the degree of protection originally provided. If any signs of excessive wear are present, remove the flow control device from service. Replacement belts are available for all flow controls.

Cleaning

To clean, hand-sponge with warm water and mild detergent, being careful not to get water inside. Avoid solvents and harsh cleansers.

Air Supply Hoses

Inspection

Air supply hose(s) should be inspected closely for abrasions, corrosion, cuts, cracks, and blistering. Be sure the hose fittings are crimped tightly to the hose so that no air can escape. Make sure the hose has not been kinked or crushed by any equipment that may have rolled over it.

If any of the above signs are present or any other signs of excessive wear are detected, replace the hose(s) immediately and remove from service.

Cleaning

The air supply hose(s) should be hand-sponged with warm water and mild detergent, rinsed and air dried. Do not get water inside the air supply hose. Avoid solvents and harsh cleaners.

Flow Control Device

Inspection

Inspect the flow control device including adjustable knobs and tubes for cracks, holes, or excessive wear that might reduce the degree of protection originally provided. If any signs of excessive wear are present, remove the flow control device from service. Replacement belts are available for all flow controls.

Cleaning

To clean, hand-sponge with warm water and mild detergent, being careful not to get water inside. Avoid solvents and harsh cleansers.

Air Supply Hoses

Inspection

Air supply hose(s) should be inspected closely for abrasions, corrosion, cuts, cracks, and blistering. Be sure the hose fittings are crimped tightly to the hose so that no air can escape. Make sure the hose has not been kinked or crushed by any equipment that may have rolled over it.

If any of the above signs are present or any other signs of excessive wear are detected, replace the hose(s) immediately and remove from service.

Cleaning

The air supply hose(s) should be hand-sponged with warm water and mild detergent, rinsed and air dried. Do not get water inside the air supply hose. Avoid solvents and harsh cleaners.
CATALOG NUMBER DESCRIPTION

HMX Series Helmet
HMX-O–Helmet with Outer Door, No Inner Lens* * Upgrade to HMX by installation of Inner Lens.
HMXWOD10–  HXM, HMX-O Outer Door, Welding Shade 10
HMXWOD5–  HXM, HMX-O Outer Door, Welding Shade 5
HMXWD– HMX Replacement Shroud Retainer
Breathing Tube
HMXSARHBTS–   HMX Breathing Tube Short 27”
HMXSARHBT–   HMX Breathing Tube Standard 34”
HMXSRHB–   HMX Breathing Tube, Very Short 21”

Standard Flow Controls & Belts (includes QD Nipple to Air Supply Hose and 4612 Nylion Belt)

04012  Replacement 5/4” x 1 1/2” Nylon Belt (All Flow Controls)
36501  Replacement 5/4” x 1 1/2” Nylon Belt (All Flow Controls)
F30  1/4” Industrial Interchange Continuous Flow Control Fitting, Compressed Air
F33  1/4” Snap-Tite Brass Continuous Flow Control Fitting, Compressed Air
F34  1/4” Snap-Tite Stainless Steel Continuous Flow Control Fitting, Compressed Air
F35  1/4” Industrial Interchange Stainless Steel Continuous Flow Control Fitting, Compressed Air
F31  1/4” Schrader Continuous Flow Control Fitting, Compressed Air
F32  1/4” Snap-Tite Continuous Flow Control Fitting, Compressed Air
F34  1/4” Snap-Tite Stainless Steel Continuous Flow Control Fitting, Compressed Air
F35  1/2” Industrial Interchange Continuous Flow Control Fitting, Free Air Pumps
F318  1/2” Industrial Interchange Continuous Flow Control Fitting, Free Air Pumps
F318  1/2” Industrial Interchange Continuous Flow Control Fitting, Free Air Pumps
F35S  1/2” Industrial Interchange Stainless Steel Continuous Flow Control Fitting, Free Air Pumps
F37  1/4” CEJN Continuous Flow Control Fitting, Compressed Air
F38  1/4” Bayonet Continuous Flow Control Fitting, Compressed Air

SAR Air Supply Hoses
V5 Series – Self Cooling Hose, 3/8” ID for Compressed Air, Includes QD Coupler and Nipple
XXX denotes color.  RED=Red, BLU=Blue, BLK=Black, YLW=Yellow
V5S001XXX  V5 3/8” ID Starter Interchange GD Coupling, 25’
V5S300XXX  V5 3/8” ID Starter Snap-Tite GD Coupling, 25’
V5S500XXX  V5 3/8” ID Starter Snap-Tite GD Coupling, 50’
V5C000XXX  V5 3/8” ID Starter Interchange GD Coupling, 25’
V5C300XXX  V5 3/8” ID Starter Snap-Tite GD Coupling, 25’
V5C500XXX  V5 3/8” ID Starter Snap-Tite GD Coupling, 50’
VG5S100XXX  V5 Kit Free 3/8” ID Starter Interchange GD Coupling, 25’
VG5S300XXX  V5 Kit Free 3/8” ID Starter Snap-Tite GD Coupling, 25’
VG5S500XXX  V5 Kit Free 3/8” ID Starter Snap-Tite GD Coupling, 50’
VG5C100XXX  V5 Kit Free 3/8” ID Starter Interchange GD Coupling, 25’
VG5C300XXX  V5 Kit Free 3/8” ID Starter Snap-Tite GD Coupling, 25’
VG5C500XXX  V5 Kit Free 3/8” ID Starter Snap-Tite GD Coupling, 50’

V10 Series, 3/8” ID for Compressed Air – Starter Kit - Includes QD Coupler
4696 V10 3/8” ID Starter Interchange 25’ Black with V13 hose to pipe adapter and V17 nipple
469650 V10 3/8” ID Starter Interchange 50’ Black with V13 hose to pipe adapter and V17 nipple
4696100 V10 3/8” ID Starter Interchange 100’ Black with V13 hose to pipe adapter and V17 nipple
46913 V10 3/8” ID Starter Schrader 25’ Black with V13 hose to pipe adapter, no nipple
46915 V10 3/8” ID Starter Snap-Tite 25’ Black with V13 hose to pipe adapter and V17 nipple
46916 V10 3/8” ID Starter Snap-Tite 25’ Green, with V13 hose to pipe adapter, no nipple
46917 V10 3/8” ID Starter Snap-Tite 50’ Green, with V13 hose to pipe adapter, no nipple
46918 V10 3/8” ID Starter Snap-Tite 25’ Blue with 314431 Nipple
46919 V10 3/8” ID Starter Snap-Tite 50’ Blue with 314431 Nipple

Extension/Custom Assembly – No QD Coupler, Includes V13 hose to pipe adapter and V11 hose to hose adapter
4546 V10 3/8” ID Extension 25’ Black
4547 V10 3/8” ID Extension 50’ Black
4548 V10 3/8” ID Extension 100’ Black
4559 V10 3/8” ID Extension 25’ Blue
45510 V10 3/8” ID Extension 25’ Green
45511 V10 3/8” ID Extension 50’ Green
45515 V10 3/8” ID Extension 100’ Green
V5 Breathing Air Supply Hose Installation Instructions

Bullard V5 Hose Kits

- Include one V5 Coupler and hose assembly with female quick-disconnect coupling on one end and quick-disconnect nipple on the other.

Installation Instructions

1. Connect the respirator’s breathing tube fitting to the female quick-disconnect coupling on the V5 hose.
2. Connect the quick-disconnect nipple on the hose to the point-of-attachment on your breathing air source.

Respirable Breathing Air

Respirable breathing air must be supplied to the point-of-attachment of the approved breathing air supply hose. Government regulations require that all breathing air meet the specifications for Grade D breathing air as described in Compressed Gas Association Commodity Specification G-7.1-1989 and specified by Federal Law 30 CFR, Part II Subpart J, 11.121(b).

Point-of-Attachment

Air pressure at the point-of-attachment must be regulated within the ranges specified in the respirator user’s manual Breathing Air Pressure Table.

WARNING

Do not connect your Bullard breathing air supply hose to nitrogen, toxic gases, inert gases, or other non-breathable, non-grade D air sources. Breathing air hose connection fittings must be incompatible with fittings for other industrial gases as described by the Compressed Gas Association. Failure to observe this warning may result in death or serious injury.

V10 Starter Hose Instructions

Starter hoses include female quick-disconnect coupling crimped on one end and V13 hose-to-pipe (3/8" NPT) adapter.

1. If the air source has a threaded attachment, use the supplied V12 hose-to-pipe (3/8" NPT) adapter to connect the threaded female fitting on the hose to the air source.
2. If the air source is a coupling attachment, refer to matching QD nipple specifications and use either a V12 (3/8") or V13 (3/8") to connect the nipple to the hose (nipple and adapter may be included with certain part numbers). Attach QD nipple to QD coupling on the air source.
3. Connect the respirator’s breathing tube fitting to the female quick-disconnect coupling on the V10 hose.

NOTE:

Threaded seal tape should be used on all threaded attachments. Bewitched end adapters are for hose side of connections.

WARNING

DO NOT connect your Bullard breathing air supply hose to nitrogen, toxic gases, inert gases, or other non-breathable, non-grade D air sources. Breathing air hose connection fittings must be incompatible with fittings for other industrial gases as described by the Compressed Gas Association.

Point-of-attachment

Air pressure at the point-of-attachment must be regulated with the ranges specified on your respirator’s MSHA/NIOSH approval label.

NOTE:

You may need to extend the hose connection legs using Bullard V10 hoses. However, do not exceed the lengths specified on the approval label or in the instruction manual for your specific respirator.
Bullard V20 Hose Kits

include one V20 rubber starter hose with female quick-disconnect coupler on one end and quick-disconnect nipple on the other.

Installation Instructions

1. Connect the respirator’s breathing tube fitting to the female quick-disconnect coupler on the V20 hose.
2. Connect the quick-disconnect nipple on the hose to the point-of-attachment on your breathing air source.

Respirable Breathing Air

Respirable breathing air must be supplied to the point-of-attachment of the approved breathing air supply hose. Government regulations require that all breathing air meet the specifications for Grade D breathing air as described in Compressed Gas Association Commodity Specification G-7.1-1989 and specified by Federal Law 30 CFR, Part II Subpart J, 11.121(b).

Point-of-Attachment

Air pressure at the point-of-attachment must be regulated within the ranges specified on your respirator’s NIOSH approval label.

V20 Breathing Air Supply Hose Assembly

- V10 (3/8”) & V20 (3/8”) Breathing Air Supply Hose Installation Instructions
  - Air pressure at the point-of-attachment must be regulated within the ranges specified on your respirator’s NIOSH approval label.
  - Air pressure at the point-of-attachment must be regulated within the ranges specified on your respirator’s NIOSH approval label.

For optional use with Bullard Airline Respirators

- Includes: AC1000 Cool Tubes, belt bracket, nylon belt and heat shield.
- Function: The AC1000 is designed to supply a continuous flow of cool air to certain Bullard supplied air respirators.

WARNING

This climate control system is not recommended for cooling the air supply when the air temperature is less than 70°F (21ºC). Since the system may cool the incoming air by more than 30°F (21ºC), 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 Pressure

Continuously 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. Refer to the user manuals’ Breathing Air Pressure Table to determine the correct pressure that should be used with the climate control device.

Preparation and Use of the AC1000

1. Determine whether the climate control device will be worn vertically or horizontally on the waist.
2. If the device will be worn in the horizontal position, align the tube on the heat shield as shown in Figure 3. If the tube will be worn in the vertical position, align the tube on the heat shield as shown in Figure 4.
3. Lace the belt supplied with your climate control device through both the heat shield slots and the climate control belt bracket slots.
4. Adjust the air pressure at the point-of-attachment to within the approved pressure range (Figure 2). See the Air Pressure Table on page 3.
5. Do not expose your Bullard breathing air supply hose to nitrogen, toxic gases, inert gases, or other non-breathable, non-grade D air sources. Breathing air hose connection fittings must be incompatible with fittings for other industrial gases as described by the Compressed Gas Association. Failure to observe this warning could result in death or serious injury.

Heat Shield Instructions

- Assembly
  - 1. Determine whether the climate control device will be worn vertically or horizontally on the waist.
  - 2. If the device will be worn in the horizontal position, align the tube on the heat shield as shown in Figure 3. If the tube will be worn in the vertical position, align the tube on the heat shield as shown in Figure 4.
  - 3. Lace the belt supplied with your climate control device through both the heat shield slots and the climate control belt bracket slots.
  - 4. Use plastic zip tie to secure the climate control unit to the heat shield.
HC2400 Hot/Cold Climate Control Tube

HC2400 Hot/Cold Climate Control Tube Instruction Sheet

Preparation and Use of the HC2400

1. For Warm Air:
   (a) In an uncontaminated atmosphere, screw the nylon hose connector on the end of the breathing tube onto the RED side of the HC2400 Tube.
   (b) Screw the flow control valve and muffler onto the blue side of the HC2400 Tube (Figure 1). Tighten both connections firmly.

For Cool Air:
(a) In an uncontaminated atmosphere, screw the nylon hose connector on the end of the breathing tube onto the BLUE side of the HC2400 Tube.
(b) Screw the flow control valve and muffler onto the RED side. Tighten firmly.

For optional use with Bullard Airline Respirators

Excludes: Hot/Cold Tube, Flow Control Valve, Belt Bracket, and Heat Shield

Function
The HC2400 is designed to supply a continuous flow of warm or cool air to certain Bullard Supplied-Air Respirators.

NOTE
HC2400 cannot be used with a low pressure air source such as an ambient air pump.

WARNING
HC2400 cannot be used with Bullard Supplied-Air Respirators.

For adequate air flow, attach the muffler and flow control valve to the end of the hot/cold tube that is opposite the breathing tube end.

Failure to observe this warning could result in death or serious injury.

Do not use the HC2400 without the muffler and flow control valve.

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 ensure that the correct air flow is delivered to the respirator and will maintain the NIOSH approval. Refer to the user manual’s Breathing Air Pressure Table to determine the correct pressure that should be used with the climate control device.

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

Heat Shield Instructions

Assembly
1. Determine whether the climate control device will be worn vertically or horizontally on the waist.
2. If the device will be worn in the horizontal position, align the tube on the heat shield as shown in Figure 3. If the tube will be worn in the vertical position, align the tube on the heat shield as shown in Figure 4.
3. Lace the belt supplied with your climate control device through both the heat shield slots and the climate control belt bracket slots.

Heat Shield Instructions

Assembly
1. Determine whether the climate control device will be worn vertically or horizontally on the waist.
2. If the device will be worn in the horizontal position, align the tube on the heat shield as shown in Figure 3. If the tube will be worn in the vertical position, align the tube on the heat shield as shown in Figure 4.
3. Lace the belt supplied with your climate control device through both the heat shield slots and the climate control belt bracket slots.

Heat Shield Instructions

Assembly
1. Determine whether the climate control device will be worn vertically or horizontally on the waist.
2. If the device will be worn in the horizontal position, align the tube on the heat shield as shown in Figure 3. If the tube will be worn in the vertical position, align the tube on the heat shield as shown in Figure 4.
3. Lace the belt supplied with your climate control device through both the heat shield slots and the climate control belt bracket slots.

Heat Shield Instructions

Assembly
1. Determine whether the climate control device will be worn vertically or horizontally on the waist.
2. If the device will be worn in the horizontal position, align the tube on the heat shield as shown in Figure 3. If the tube will be worn in the vertical position, align the tube on the heat shield as shown in Figure 4.
3. Lace the belt supplied with your climate control device through both the heat shield slots and the climate control belt bracket slots.
For optional use with Bullard Airline Respirators

The DC50 Dual-Cool tube is designed to supply a continuous flow of cool air to certain Bullard supplied air respirators and body vests. The DC50 Dual-Cool tube cannot be used with a low pressure air source such as an ambient air pump.

Air Pressure

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

**WARNING**

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

The Breathing Air Pressure Table in the user 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). (See 42 CFR, Part 84, Subpart J, 84.150)

Breathing air pressure must be continually monitored at the point-of-attachment while operating the respirator. A reliable air pressure gauge must be present to monitor the pressure during respirator operation. The Breathing Air Pressure Table in the user manual defines the air pressure ranges found in the respirator user manual (Figure 4).

**NOTE**

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

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.

2. When finished working, leave the work area wearing the respirator. With the air still flowing, remove the hood, and then disconnect the air supply hose using the quick-disconnect coupler on the Dual-Cool (Figure 3).

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.

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.

2. When finished working, leave the work area wearing the respirator. 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.

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.

2. When finished working, leave the work area wearing the respirator. 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.

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.

2. When finished working, leave the work area wearing the respirator. 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.
**Frigitron 2000 Cool Climate Control Tube**

**Instruction Sheet**

**For optional use with Bullard Airline Respirators**

**INCLUDES:** Frigitron 2000 and Belt

**FUNCTION:** The Frigitron 2000 is designed to supply a continuous flow of cool air as part of certain Bullard supplied air respirator systems.

**NOTE:** Frigitron 2000 CAN be used with a low pressure air source such as Bullard ambient air pump models ADP20, EDP30, and ICEPUMP11.

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**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 may expose you to life threatening conditions, disease or death.

The BREATHING AIR PRESSURE TABLE in the user 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).

**Preparation and Use of the Frigitron 2000**

1. In an uncontaminated atmosphere, screw the end of the breathing tube to the fitting on the climate control device. Tighten hose connectors firmly.
2. Lace the belt supplied with the Cool Tube through the belt bracket.
3. With the approved Bullard V20 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 Frigitron 2000.
4. Adjust the air pressure at the point-of-attachment to within the approved pressure range (Figure 2).
5. Put the hood on 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.
6. To obtain cooler air, turn either or both of the air temperature control knobs clockwise (Figure 1). Maximum cooling is attained when either or both knobs are fully open and when there is maximum airflow out of the Frigitron exhaust ports. To obtain air that is closer to ambient temperature, turn either or both air temperature control knobs counterclockwise. If both knobs are fully closed, your respirator will receive air at 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 Frigitron 2000.
One Year Limited Warranty

Bullard warrants to the original purchaser that the HMX Series Respirator Helmet will be free of defects in material and workmanship under normal use and service for a period of one (1) year from the date of purchase. Bullard’s obligation under this warranty is limited to repairing or replacing, at its option, articles that are returned within the warranty period and that are, after examination, shown to Bullard’s satisfaction to be defective, subject to the following limitations:

a) The HMX Series Respirator Helmet must be returned to the Bullard factory with shipping charges prepaid.

b) The HMX Series Respirator Helmet must not be altered from its original factory configuration.

c) The HMX Series Respirator Helmet must not have been misused, subjected to negligent use, or damaged in transport.

d) The date of purchase is within the one year warranty period. (A copy of the purchaser’s original invoice showing the date of purchase is required to validate warranty coverage.)

In no event shall Bullard be responsible for damages for loss of use or other indirect, incidental, consequential or special costs, expenses or damages incurred by the purchaser, notwithstanding that Bullard has been advised of the possibility of such damages.

ANY IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO ONE (1) YEAR FROM THE DATE OF PURCHASE OF THIS PRODUCT.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

Return Authorization

The following steps must be completed before Bullard will accept any returned goods. Please read carefully.

Follow the steps outlined below to return goods to Bullard for repair or replacement under warranty or for paid repairs:

1. Contact Bullard Customer Service by telephone or in writing at:

   Bullard
   1898 Safety Way
   Cynthiana, KY 41031-9303
   Toll-free: 877-BULLARD (285-5273)
   Phone: 859-234-6616

   In your correspondence or conversation with Customer Service, describe the problem as completely as possible. For your convenience, your Customer Service specialist will try to help you correct the problem over the phone.

2. Verify with your Customer Service specialist that the product should be returned to Bullard. Customer Service will provide you with written permission and a return authorization number as well as the labels you will need to return the product.

3. Before returning the product, decontaminate and clean it to remove any hazardous materials which may have settled on the product during use. Laws and/or regulations prohibit the shipment of hazardous or contaminated materials. Products suspected to be contaminated will be professionally discarded at the customer’s expense.

4. Ship returned products, including those under warranty, with all transportation charges pre-paid. Bullard cannot accept returned goods on a freight collect basis.

5. Returned products will be inspected upon return to the Bullard facility. Bullard Customer Service will telephone you with a quote for required repair work which is not covered by warranty. If the cost of repairs exceeds stated quote by more than 20%, your Customer Service specialist will call you for authorization to complete repairs. After repairs are completed and the goods have been returned to you, Bullard will invoice you for actual work performed.