

THE FOLLOWING USER MANUAL APPLIES TO TSUNAMI BREATHING AIR SYSTEMS



21999-0265 / 21999-0265-CA



21999-0980 / 21999-0980-CA

WARNING!!!

- Failure to understand and follow the warnings and instructions may cause Injury or Death.
- Failure to read and understand all warning and instructions on the products you are using (paints, solvents, epoxy resins, pesticides, etc.) may cause Injury, Disease, or Death.
- Not for use with petroleum based powered air compressors.
- All maintenance and operational instructions must be followed. Failure to follow these instructions may result in injury or loss of life.
- All instructions for the carbon monoxide (CO) monitor must be followed exactly.
- Do not attempt to use the respirator without reading and understanding the instructions of the product.
- Never wear supplied air respirators in any atmosphere that may contain levels of contamination which are unknown or may be Immediately Dangerous to Life or Health (IDLH).
- You must use a supplied air respirator that adheres to the guidelines set by the ANSI Z88.2
- Your breathable air system MUST comply with OSHA 29 CFR 1910.134 and CSA Z180.1-13
- All respirable hoses, masks, and hoods MUST be NIOSH approved.
- You must use a supplied air respirator that adheres to the statutes set forth by your federal, state, and local Occupational Safety and Health Administrations.
- This breathing air system reduces but does not eliminate your exposure to inhaled chemicals or contaminants. It Does Not provide total protection.
- If you have ever experienced breathing complications while around or after exposure to paint, isocyanates, solvents, etc. DO NOT USE this breathing air system.
- If you are sensitized to paint, isocyanates, solvents, etc., DO NOT USE this breathing air system, it WILL NOT protect you.
- DO NOT USE this product if you cannot understand the warnings or instructions contained within this manual.
- If these warnings and instructions lead you to believe that you should not use this breathing air system or that it will not protect you, DO NOT USE IT, regardless of any instructions or statements from another source such as an employer, a parts supplier, product manufacturer, etc., that indicate you will be protected.
- YOU ARE SOLELY RESPONSIBLE for any injury, disease, damage, or death caused by failure to follow these warnings and instructions.
- Do not use filtered air from panel to run air tools or spray guns.

DESCRIPTION

Congratulations on the purchase of your Tsunami Breathing Air System! By adhering to the specifications and maintenance schedule listed in the manual, your air system will provide years of service with minimal maintenance.

Incoming air enters the 1st stage water separator where water and particulates are removed down to 10 micron. The air then travels through the 2nd stage oil coalescing filter where oil aerosols are filtered down to .001 ppm and particulates are trapped down to .01 micron. Then it passes through an activated carbon filter to remove oil vapors down to .003 ppm and progresses downstream to your NIOSH approved supplied air breathing apparatus.

A small amount of this filtered breathing air is sampled through the carbon monoxide monitor to accurately measure carbon monoxide levels contained in you air stream and will emit an audible alarm should the levels exceed OSHA or CSA permissible limits.

United States: 10ppm
Canada: 5ppm

All water separators and oil coalescing filters come standard with automatic float drains to assure proper discharge of all contaminants captured in the water separator and oil coalescing filter. The activated carbon filter should not see any liquid contaminants so therefore requires no drain. You can add your own manual drain to the bottom of the activated carbon filter if you so choose.

FILTER SPECIFICATIONS

<u>Part Number</u>	<u>Maximum Pressure</u>	<u>Maximum Flow (CFM)</u>	<u>Maximum Temperature</u>	<u>Inlet (NPT)</u>	<u>Outlet (NPT)</u>
21999-0265	175	50	122	1/2"	1/4"
21999-0265-CA	175	50	122	1/2"	1/4"
21999-0980	175	20	122	1/4"	1/4"
21999-0980-CA	175	20	122	1/4"	1/4"

INSTALLATION & SERVICE REQUIREMENTS

Breathing Air System Installation pg. 2

Monthly Service pg. 2

- Calibrate CO Monitor

6 Month Service pg. 3

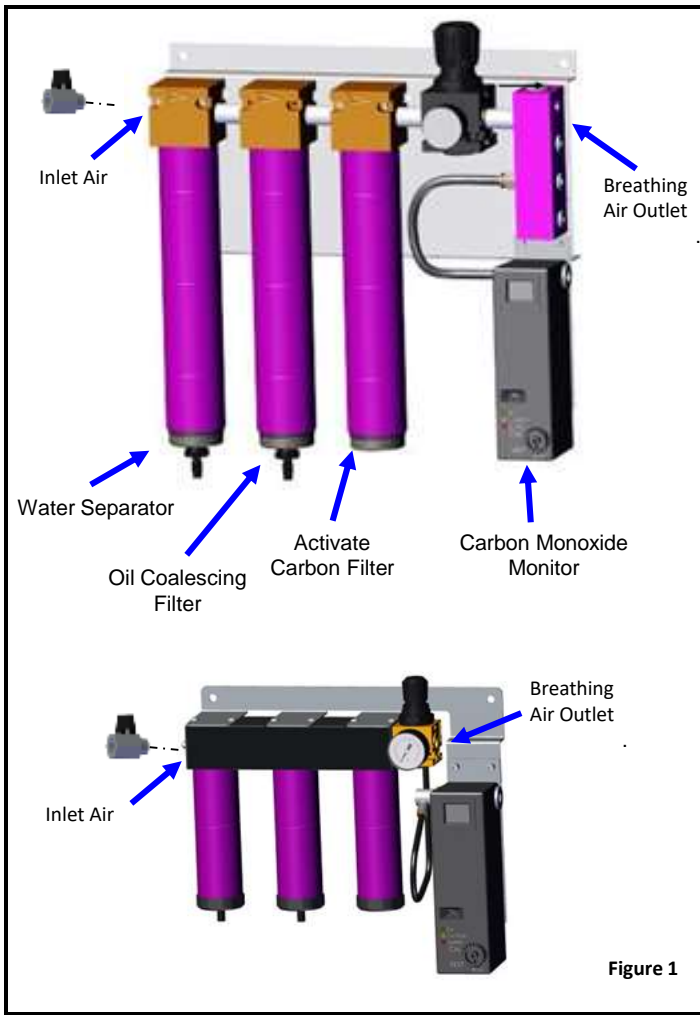
- Inspect Water Separator Element
- Replace Oil Coalescing Filter Element
- Replace Activated Carbon Filter Element; earlier replacement may be necessary in some applications

Drain Replacement pg. 3

Parts Breakdown – Service Parts pg. 3

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BREATHING AIR SYSTEM INSTALLATION



BREATHING AIR SYSTEM INSTALLATION cont.

- Set respirator to respective manufacture's specifications.
Note: Inlet and Outlet Air locations specified above. Outlet air is for breathing equipment only.
- Verify monitor is on when in use and system has air pressure present; Alarm will sound if no pressure is present.

CALIBRATION OF CARBON MONOXIDE MONITOR

- Follow calibration procedure laid out in the GFG RAM 744 manual
Note: GFG manual can be accessed using the QR code below



WARNING

Your safety is important. System pressure must be released prior to any installation or service. Failure to follow instructions could result in operating failure or product damage. Always install filtration with the arrows indicating the direction of airflow. Use only appropriate thread sealant on all connection fittings unless otherwise specified. Do not alter the filtration from its original design as this may cause failure in its operation parameters.

- Read supplied GFG Carbon Monoxide Monitor manual.
- Send in warranty registration for CO monitor as directed in manual
- Mount panel to wall using appropriate hardware to properly secure a weight of 25 pounds
- Mount the filters in an upright position; allow a minimum clearance of 10" below the filters to allow for the removal of the housing during required service of the water separator, oil coalescing filter, and activated carbon filter.
- When plumbing your filters into your air system, it is recommended to install an isolation ball valve (not supplied).
- Once mounted, route drain tubing from the first two filters to an appropriate water/oil condensate collection tank or other location.
Note: Multi-User systems come with supplied barbed fittings and clear drain tubing; single-user systems do not. For single-user systems, you can purchase 5/16" I.D. clear vinyl tubing and gently secure to float drain tip with a band clamp. **Caution:** band clamps do not guarantee your tubing is effectively and properly secured.
- Wire in the wall pack adaptor to the CO Monitor. (a skilled electrician should be used with any electrical procedure)

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SERVICE REQUIREMENTS

IMPORTANT: The following maintenance schedule is recommended for all Tsunami Breathing Air Systems

- Water Separator - No Maintenance Required. Clean as needed
- Oil Coalescing Filter - Mandatory Every 6 Months
- Activated Carbon - Mandatory Every 6 Months, earlier replacement may be necessary in some applications
- Calibrate Carbon Monoxide Monitor - Every Month
Calibration Kit for CO Monitor is: **21999-0264**

Important:. Calibration procedures should be followed as detailed in the GFG owners manual.

WATER SEPARATOR ELEMENT

1. Release system pressure.
2. Remove tube from filter head by holding filter head and turning the tube counter-clockwise.
3. Using a 5/16" wrench, remove the baffle from threaded rod below the element.
4. Remove bottom baffle, filter element, and O-ring.
5. Clean stainless steel mesh with soapy water or replace entire element with service kit. Refer to Service Chart shown above.
6. Replace filter element and hardware in reverse order from previous steps. Tighten baffle until filter element can no longer spin freely. **DO NOT OVER TIGHTEN!**
7. Reinstall outer tube by rotating clockwise onto filter head.
8. Slowly pressurize the unit.

OIL COALESCING ELEMENT / ACTIVATED CARBON ELEMENT

1. Release system pressure.
2. Remove tube from filter head by holding filter head and turning the tube counter-clockwise.
3. Using a 5/16" wrench, remove the baffle from threaded rod below the element.
4. Remove bottom baffle, filter element, element gaskets, top adaptor, and O-ring.
5. Replace filter element and hardware in reverse order from previous steps. Tighten baffle until filter element can no longer spin freely. **DO NOT OVER TIGHTEN!**
6. Reinstall outer tube by turning clockwise onto filter head.
7. Slowly pressurize the unit.

FLOAT DRAIN REPLACEMENT

1. Release system pressure.
2. Remove bottom cap by holding filter tube and turn bottom cap counter-clockwise.
3. Grasp the float drain by stem and turn counter-clockwise.
4. Reinstall new float drain by turning clockwise direction until O-ring contacts the end cap. Tighten an additional 1/4 turn. **DO NOT OVER TIGHTEN!**
5. Reinstall end cap on filter tube.
6. Slowly pressurize system.

Figure #1: Water Separator



Figure #2: Oil Coalescing Filter



Figure #3: Activated Carbon



SERVICE PARTS

Part Number	Water Separator	Oil Coalescing Filter	5-Pack Coalescing Elements	Activated Carbon Filter	5-Pack Activated Carbon Elements	3-Pack Float Drains
21999-0265 21999-0265-CA	21999-0227	21999-0202	21999-0825	21999-0200	21999-0826	21999-0868
21999-0980 21999-0980-CA	21999-0846	21999-0394	21999-0823	21999-0395	21999-0824	21999-0868