# 3M Half Facepiece Respirator Assembly 5000 Series, Dual Cartridge, Disposable

*User Instructions* for 3M<sup>™</sup> Organic Vapor Respirator Assembly 5101/5201/5301;

3M<sup>™</sup> Organic Vapor/Acid Gas Respirator Assembly 5103/5203/5303;

3M<sup>™</sup> Multi Gas and Vapor Respirator Assembly 5106/5206/5306.

Important: Keep these *User Instructions* for reference.

#### **GENERAL SAFETY INFORMATION**

#### **Intended Use**

The 3M<sup>TM</sup> 5000 Series Half Facepiece Respirators are NIOSH approved and designed to help provide respiratory protection against certain airborne contaminants when used in accordance with all use instructions and limitations and applicable safety and health regulations.

This product contains no components made from natural rubber latex.



# **WARNING**

This respirator helps protect against certain airborne contaminants. **Misuse may result in sickness or death.** For proper use, see supervisor, or *User Instructions*, or call 3M in U.S.A., 1-800-243-4630. In Canada, call Technical Service at 1-800-267-4414.

#### USE INSTRUCTIONS AND LIMITATIONS

3M<sup>™</sup> 5000 Series Respirators are manufactured as integral assemblies and the chemical cartridges are not replaceable. Do not use if the cartridges have been removed. **Failure to follow** *User Instructions* may result in sickness or death.

## **Important**

Before use, wearer must read and understand these *User Instructions*. Keep these *User Instructions* for reference.

#### Use For

Respiratory protection from certain airborne contaminants according to NIOSH approvals, OSHA standards, in Canada CSA standard Z94.4-93 requirements, other applicable regulations and 3M instructions.

#### Do Not Use For

Concentrations of contaminants which are immediately dangerous to life and health, are unknown or when concentrations exceeds 10 times the permissible exposure limit (PEL) or according to specific OSHA standards or applicable government regulations, whichever is lower.

#### **Use Instructions**

- 1. Failure to follow all instructions and limitations on the use of these respirators and/or failure to wear the respirator during all times of exposure can reduce respirator effectiveness and may result in sickness or death.
- 2. Before occupational use of these respirators, a written respiratory protection program must be implemented meeting all the requirements of OSHA 29 CFR 1910.134 such as medical evaluation, training and fit testing and applicable OSHA substance specific standards. In Canada, CSA standard Z94.4-93 requirements must be met.
- 3. The airborne contaminants which can be dangerous to your health include those so small that you may not be able to see or smell them.
- 4. Leave the contaminated area immediately and contact supervisor if you smell or taste contaminants or if dizziness, irritation, or other distress occurs.
- 5. Store the respirator away from contaminated areas when not in use.
- 6. Dispose of used product in accordance with applicable regulations.

#### **Use Limitations**

- 1. This respirator does not supply oxygen. Do not use in atmospheres containing less than 19.5% oxygen.
- 2. Do not use when concentrations of contaminants are immediately dangerous to life and health, are unknown or when concentration exceeds 10 times the permissible exposure limit (PEL) or according to specific OSHA standards or applicable government regulations, whichever is lower.
- 3. Do not alter, abuse or misuse this respirator. Do not clean using destructive methods such as vacuum, wash, compressed air, etc.

4. Do not use with beards or other facial hair or other conditions that prevent a good seal between the face and the faceseal of the respirator.

#### **Time Use Limitation**

- 1. If respirator becomes damaged, leave contaminated area immediately and replace the respirator.
- 2. Replace respirator in accordance with an established change schedule or earlier if smell, taste or irritation from contaminants is detected.

#### **NIOSH Cautions and Limitations**

The following restrictions may apply. See NIOSH approval label.

- A- Not for use in atmospheres 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.
- H– Follow established cartridge and canister change schedules or observe ESLI to ensure that cartridge and canisters are replaced before breakthrough occurs.
- J- Failure to properly use and maintain this product **could result in injury or death**.
- K- The Occupational Safety and Health Administration regulations require gas-proof goggles to be worn with this respirator when used against formaldehyde.
- L- Follow the manufacturer's *User's Instructions* for changing cartridges, canister and/or filters.
- 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.
- P- NIOSH does not evaluate respirators for use as surgical masks.

# **Respirator Assembly Selection and Approvals**

Before using any of these products, the user must read the specific use for, use limitations and warning information in the *User Instructions* and product packaging. For questions, visit www.3m.com/occsafety, or call OH&ESD Technical Service at 1-800-243-4630. In Canada, call Technical Service at 1-800-267-4414. Do not exceed maximum use concentrations established by local regulatory agencies. For NIOSH approval, refer to approval label.

# **Cleaning and Storage Instructions**

- 1. Clean respirator after each use (excluding cartridges), with 3M<sup>TM</sup> 504 Respirator Wipes (or equivalent).
- 2. Air dry in a non-contaminated atmosphere.
- 3. Respirator components should be inspected prior to each use. A respirator with any damaged or deteriorated components should be discarded.
- 4. The cleaned respirator should be stored in the bag, away from contaminated areas when not in use.

# **Service Life of Respirator Assemblies**

3M<sup>TM</sup> 5000 Series Respirators should be used before the expiration date on respirator packaging. The useful service life of these respirators will depend upon the activity of the wearer (breathing rate), specific type, volatility and concentration of contaminants and environmental conditions such as humidity, pressure, and temperature. Respirators must be replaced in accordance with an established change schedule, or replaced earlier if smell, taste or irritation from the contaminant is detected.

# 3M<sup>™</sup> 5000 Series Dual Cartridge Respirator Assemblies

Number	Description	NIOSH Approval for respiratory protection against the following contaminants up to ten times the permissible exposure limit (PEL).
5101/5201/5301	Organic Vapor	Certain organic vapors
5103/5203/5303	Organic Vapor/Acid Gas	Certain organic vapors, chlorine, hydrogen chloride, and sulfur dioxide or hydrogen sulfide or hydrogen fluoride
5106/5206/5306	Multi-Gas/Vapor	Certain organic vapors, chlorine, hydrogen chloride, chlorine dioxide, sulfur dioxide, hydrogen sulfide, ammonia/methylamine, formaldehyde or hydrogen fluoride <sup>1</sup>

<sup>&</sup>lt;sup>1</sup>OSHA regulations require gas proof goggles be worn with half facepiece respirators when used against formaldehyde.

#### Caution

Failure to properly dispose of spent respirators contaminated by hazardous materials can result in environmental harm. Handling, transportation and disposal of spent cartridges, filters, or respirators must comply with all applicable federal, state, and local laws and regulations.

# FITTING INSTRUCTIONS

Must be followed each time respirator is worn.

# **Donning Respirator**

1. Place the respirator over the mouth and nose, then pull the head harness over the crown of the head. (Fig. 1.)



Fig. 1

2. Take the bottom straps in both hands, place them in back of the neck, and hook them together. (Fig. 2)

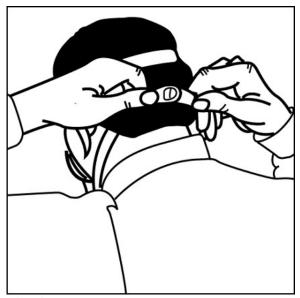


Fig. 2

3. Position the facepiece low on the bridge of your nose for optimal visibility and the best possible fit. (Fig. 3)



Fig. 3

- 4. Adjust top straps first, then the lower neck straps by pulling on the ends. DO NOT pull too tight! (Strap tension may be decreased by pushing out on back side of buckles.)
- 5. Perform a positive pressure and/or negative pressure user seal check. The positive pressure method is recommended. (See instructions below)

# INSTRUCTIONS FOR POSITIVE AND NEGATIVE PRESSURE USER SEAL CHECKS

• Do not use with beards or other facial hair or other conditions that prevent direct contact between the face and the faceseal of the respirator.

#### **Positive Pressure User Seal Check**

Place the palm of your hand over the exhalation valve cover and exhale gently, see Fig. 4. If the facepiece bulges slightly and no air leaks are detected between your face and the faceseal, a proper fit has been obtained. If faceseal air leakage is detected, reposition the respirator on your face and/or readjust the tension of the elastic straps to eliminate the leakage. Repeat the above steps. If you cannot achieve a proper fit, do not enter the contaminated area. See your supervisor.



Fig. 4

# **Negative Pressure User Seal Check**

Place the palms of the hands to cover the face of the cartridge or open area of 3M<sup>TM</sup> 501 Filter Retainer, when the retainer is attached to the cartridge, to restrict airflow, see Fig. 5. Inhale gently. If you feel the facepiece collapse slightly and pull closer to your face with no leaks between the face and the faceseal, a proper fit has been obtained. If faceseal air leakage is detected, reposition the respirator on the face and/or readjust the tension of the elastic straps to eliminate the air leakage. Repeat the above steps. If you cannot achieve a proper fit, do not enter the contaminated area. See your supervisor.



Fig. 5

Note: Before assigning any respirator to be worn in a contaminated area, a qualitative or quantitative fit test must be performed per OSHA Standard 1910.134 or CSA Standard Z94.4.

#### **FIT TESTING**

The effectiveness of a respirator will be reduced if it is not fitted properly. Therefore, either quantitative or qualitative fit testing must be conducted prior to the respirator being issued. Note: Fit testing is a U.S. Occupational Safety and Health Administration (OSHA) and Canadian CSA requirement.

# **OUANTITATIVE FIT TESTING**

Quantitative Fit Testing (QNFT) can be conducted using a  $3M^{TM}$  6000 Series Quantitative Fit Test Respirator Assembly.

# **QUALITATIVE FIT TESTING**

Qualitative Fit Testing (QLFT) with the  $3M^{TM}$  FT-10 or FT-30 Qualitative Fit Test Apparatus can be conducted using the  $3M^{TM}$  5000 Series Respirator Assembly equipped with  $3M^{TM}$  5N11 or  $3M^{TM}$  5P71 Particulate filters and  $3M^{TM}$  501 Retainers.

Fit testing should be conducted while wearing the personal protective equipment (PPE) the wearer may use in their work environment that may affect the fit of the respirator (e.g. hoods, hardhats, safety glasses, hearing protections, etc.).

**Note:** For further information concerning fit testing, visit www.3m.com/OccSafety or contact 3M OH&ESD Technical Service at 1-800-243-4630 or a 3M location in your region. In Canada call Technical Service at 1-800-267-4414.

# NIOSH approval label will be placed on User Instructions.

### FOR MORE INFORMATION

**In United States, contact:** 

Website: www.3M.com/OccSafety Technical Assistance: 1-800-243-4630

For other 3M products:

1-800-3M-HELPS or 1-651-737-6501

# 3M Occupational Health and Environmental Safety Division

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