Headgear Assembly 9000 HWR

User Instructions for 3M™ Speedglas™ Headgear Assembly 9000 HWR 14-0099-35, and 3M™ Speedglas™ Headgear Assembly 9000 HWR with SideWindows 14-0099-35SW

Important: Keep these User Instructions for reference.

WARNING
This product 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

Fig. 1
GENERAL SAFETY INFORMATION

Intended Use

The 3M™ Speedglas™ Headgear Assembly 9000 HWR, 14-0099-35 and 3M™ Headgear Assembly 9000 HWR with SideWindows, 14-0099-35SW are the headcover components of a series of NIOSH-approved positive pressure respirator systems which help provide respiratory protection against certain particulates, organic vapors, acid gases and other inorganic gases. The headgear assembly must be used in conjunction with one of the 3M™ Speedglas™ Auto-Darkening Filters, series 9000 or 9002 (User Instructions provided separately). A Speedglas SideWindows option is also available. The 3M™ Headgear Assembly 9000 HWR is classified as a loose fitting facepiece and has an "Assigned Protection Factor" (APF) of 25 (may be used in environments of up to 25 times the applicable occupational exposure limit). A complete 9000 HWR respirator system must be assembled with one of the NIOSH approved belt-mounted, air delivery devices listed below. Refer to the User Instructions provided with each belt-mounted air delivery device.

<table>
<thead>
<tr>
<th>Powered Air Purifying Respirator (PAPR) System</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 3M™ Adflo™ Turbo Assembly 15-5401-01</td>
</tr>
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<tr>
<th>3M™ Supplied Air System - Cool-Air:</th>
</tr>
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<tbody>
<tr>
<td>1. Fresh-air Cool-air Valve Assembly 18-0099-47</td>
</tr>
<tr>
<td>2. Fresh-air II Supplied Air Breathing Tube 18-0099-63</td>
</tr>
<tr>
<td>3. Speedglas™ Comfort Belt 18-0099-16</td>
</tr>
<tr>
<td>4. Fresh-air II supplied air hose options:</td>
</tr>
<tr>
<td>Breather Hose with Couplings 18-0099-40, 25 ft (7.62 m)</td>
</tr>
<tr>
<td>Breather Hose with Couplings 18-0099-41, 50 ft (15.24 m)</td>
</tr>
<tr>
<td>Breather Hose with Couplings 18-0099-42, 100 ft (30.48 m)</td>
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<th>3M™ Supplied Air System - Temp-air:</th>
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<tr>
<td>1. Fresh-air II Temp-air Valve Assembly 18-0099-48</td>
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<tr>
<td>2. Fresh-air II Supplied Air Breathing 18-0099-63</td>
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<td>3. Speedglas™ Comfort Belt 18-0099-16</td>
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List of Warnings and Cautions within these User Instructions

⚠️ WARNING ⚠️

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

Each person using this respirator must read and understand the information in these User Instructions and other applicable User Instructions before use. Use of these respirators by untrained or unqualified persons, or use that is not in accordance with these User Instructions, may adversely affect respirator performance and result in sickness or death.
Do not repair or modify any component of this system. Do not use with parts or accessories other than those manufactured by 3M as described in these User Instructions or on the NIOSH approval label for this respirator. Failure to do so may adversely affect respirator performance and result in sickness or death.

Use of this respirator in atmospheres for which it was not NIOSH certified or designed may result in sickness or death. Do not wear this respirator where:

- Atmospheres are oxygen deficient
- Contaminant concentrations are unknown
- Contaminant concentrations are Immediately Dangerous to Life or Heath (IDLH)
- Contaminant concentrations exceed the assigned protection factor (APF) recommended for the applicable headpiece or the APF mandated by specific government standards, whichever is lower. Refer to the User Instructions provided with the applicable headpiece.

Do not enter a contaminated area until properly donning the respirator system. Do not remove the respirator before leaving the contaminated area. Doing so may result in sickness or death.

Contaminants that are dangerous to your health include those that you may not be able to see or smell. Leave the contaminated area immediately if any of the following conditions occur. Failure to do so may result in sickness or death.

- Airflow decreases or stops
- Any part of the system becomes damaged
- Breathing becomes difficult
- You feel dizzy or your vision is impaired
- You taste or smell contaminants
- Your face, eyes, nose or mouth become(s) irritated
- You suspect that the concentration of contaminants may have reached levels at which this respirator may no longer provide adequate protection.

Failure to conduct a pre-use inspection and complete all necessary repairs before use may adversely affect respirator performance and result in sickness or death.

Always wear ANSI Z87.1-2003 compliant safety glasses in addition to any welding headgear. Failure to do so may result in permanent eye injury and vision loss. In Canada, follow CSA Z94.3 and/or the requirements of the authority having jurisdiction in your region.

To avoid the disconnection of the breathing tube, be certain that the breathing tube end connector is fully inserted and twisted so it is locked into place at the end of the “J” channel found on the 9000 HWR headgear assembly’s air duct. Failure to do so may result in sickness or death.

USE INSTRUCTIONS AND LIMITATIONS

Use For
Respiratory protection against certain airborne contaminants including particulates (dusts, welding fumes, mists, radionuclides and asbestos); organic vapors; acid gases; and other inorganic gases.

Do Not Use For
- Oxygen deficient atmospheres
- Contaminant concentrations that are unknown or immediately dangerous to life or health (IDLH)
- Contaminant concentrations that exceed the assigned protection factor (APF) recommended for the applicable headpiece or the APF mandated by specific government standards, whichever is lower.

Refer to the User Instructions provided with the applicable belt-mounted air delivery device and to additional limitations and cautions under NIOSH Cautions and Limitations.
Respirator Selection and Training
Use of these respirators must be in accordance with applicable health and safety standards, respirator selection tables contained in such publications as American National Standards Institute (ANSI) standard Z88.2-1992, Canadian Standards Association (CSA) Z94.4 or pursuant to the recommendations of an industrial hygienist. Before occupational use of this respirator, a written respiratory protection program must be implemented meeting all the requirements of OSHA 29 CFR 1910.134 such as training, medical evaluation, and applicable OSHA substance specific standards. In Canada, CSA standard Z94.4 requirements must be met and/or requirements of the applicable jurisdiction, as appropriate.

Before use, the employer must assure that each respirator user has been trained by a qualified person in the proper use and maintenance of the respirator and air supply components according to the instructions contained in these User Instructions and other applicable User Instructions.

**WARNING**
Each person using this respirator must read and understand the information in these User Instructions before use. Use of these respirators by untrained or unqualified persons, or use that is not in accordance with these User Instructions, may adversely affect respirator performance and result in sickness or death.

NIOSH Cautions and Limitations
This headgear is one component of a NIOSH approved respirator system. Refer to User Instructions provided with the approved powered air or air supply device(s) for the listing of the appropriate Cautions and Limitations.

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Eye and face protection</th>
<th>Meets ANSI Z87.1-2003, high impact requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head top impact</td>
<td>None- does not offer head top impact protection</td>
</tr>
<tr>
<td>Faceshield material</td>
<td>Polyamide nylon</td>
</tr>
<tr>
<td>Face seal material</td>
<td>Nylon fabric</td>
</tr>
<tr>
<td>Operating Temperatures</td>
<td>23° to 131°F (-5° to 55°C)</td>
</tr>
<tr>
<td>Weight, Headgear w/9002X ADF</td>
<td>1.79 lbs (0.81 kg)</td>
</tr>
<tr>
<td>Headgear Headband Size</td>
<td>21.65-24.80 inches (55-63 cm)</td>
</tr>
</tbody>
</table>

**SYSTEM COMPONENTS AND REPLACEMENT PARTS**

**3M™ Speedglas™ Replacement Parts**

| 14-0099-35 | Headgear Assembly 9000 HWR Complete (no ADF) |
| 14-0099-35SW | Headgear Assembly 9000 HWR with SideWindows Complete (no ADF) |
| 18-0099-27 | Fresh-air Elastic Retainer (pair) |
| 14-0099-28 | Faceseal [two words in Formal names list] |
| 14-0099-29 | Headband Assembly with Air Duct |
| 18-0099-30 | Head Cover |
| 14-0099-32 | Headgear 9000 HWR Inner Shell with Velcro® Fasteners and Foam |
| 14-0099-32SW | Headgear 9000 HWR Inner Shell with SideWindows with Velcro® Fasteners and Foam |
| 14-0099-70 | Headgear Assembly Hardware Kit 9000 HWR |
| 04-0212-00/373131(AAD) | Speedglas™ Silver Front Panel |
| 04-0000-10 | Auto-Darkening Filter 9000F Shade 10 |
| 04-0000-11 | Auto-Darkening Filter 9000F Shade 11 |
| 04-0000-12 | Auto-Darkening Filter 9000F Shade 12 |
| 04-0000-10X | Auto-Darkening Filter 9000XF Shade 10 |
WARNING

Do not use with parts or accessories other than those manufactured by 3M as described in these User Instructions or on the NIOSH approval label for this respirator. Failure to do so may adversely affect respirator performance and result in sickness or death.

SYSTEM ASSEMBLY, DONNING

Assembly
Connecting the Breathing Tube
To connect, fully insert and then twist the breathing tube connector until it locks into place at the end of the “J” channel on the headpiece assembly’s air duct (Fig 4). To disconnect, carefully twist the breathing tube end connector so it unlocks from the “J” channel.
To avoid the disconnection of the breathing tube, be certain that the breathing tube end connector is fully inserted and twisted so it is locked into place at the end of the “J” channel found on the headgear assembly’s air duct. Failure to do so may result in sickness or death.

Replacing The 3M™ Speedglas™ Head Cover
The head cover must be replaced when it shows any signs of holes, tears or other damage.
- Release the nylon strain relief strap that retains the breathing tube on the back of the head cover.
- Unfasten the Velcro® seal located at the rear of the air duct (Fig 5).
- Remove the elastic loops from the thumbnuts on the outside of the headgear.
- Detach the head cover from the Velcro® tab at the top of the headgear.
- Match the Velcro® tab of the new head cover with the tab at the top of the headgear.
- Attach the elastic loops to the thumbnuts on the outside of the headgear.
- Fasten the rear Velcro® seal around the air duct.
- Fasten the nylon strain relief strap on the back of the head cover so it retains the breathing tube (Fig. 6).

Replacing the Faceseal
- Unfasten the crown adjustment at the top of the headband and remove the elastic loops (Fig. 7).
- Unbutton the faceseal from the buttons on the side of the headband.
- Detach the faceseal Velcro® strip from the welding headgear.
- With the pulltab facing outward, match the Velcro® strip of the new faceseal around the welding headgear, starting at the bottom center and work outward. The ends of the faceseal should fit up against the foam seal/air deflector inside the headgear. Make certain that the “fangs” from the headgear’s silver front panel don’t interfere with the headgear Velcro®/faceseal Velcro® attachment.
- Place the buttonholes of the faceseal over the buttons on the headband.
- Place the ends of the headband crown adjustment through the elastic loops on the faceseal and refasten the crown adjustment.
Replacing the 3M™ Suspension Assembly
Should the suspension assembly need replacement, it can be removed by unscrewing the thumbnuts on the outside of the headgear. Be sure to retain all hardware. Install the new headgear assembly as shown in Fig. 3.

Donning
- Assemble the 3M™ Speedglas™ Headgear Assembly 9000 HWR respirator system and turn on the belt-mounted, air delivery device according to these and all other applicable User Instructions.
- Place the headgear assembly on the user’s head, being careful not to twist the breathing tube.
- The headgear must be pulled down fully over the user’s head. If the headgear assembly is riding high, adjust the overhead band accordingly (Fig 8).
- Adjust the tightness of the headgear suspension by turning ratchet knob to increase or decrease its circumference. The ratchet should be adjusted as tightly as possible, without causing discomfort, so the headgear assembly stays in position on the user’s head.
- Lower the headgear into the down position; the headgear must come fully down to cover the user’s face. Then pull the faceseal over the chin and into position.
- The faceseal must be adjusted to fit comfortably, with a light and even pressure along the entire perimeter of the face. There must be no hair between the elastic faceseal and the user’s skin. The faceseal must make a continuous seal along the face; avoid any twists or bunching which may cause a gap between the elastic and the user’s skin.

CLEANING AND STORAGE
Clean the welding shield with mild soap and lukewarm water. Do not use solvents. Clean the welding filter with a clean, lint-free tissue or cloth. Do not immerse ADFs in water or spray directly with liquids. Store equipment in a clean dry and dust-free environment at room temperature.
IMPORTANT NOTICE

WARRANTY: In the event any 3M OH&ESD product is found to be defective in material, workmanship, or not in conformation with any express warranty for a specific purpose, 3M’s only obligation and your exclusive remedy shall be, at 3M's option, to repair, replace or refund the purchase price of such parts or products upon timely notification thereof and substantiation that the product has been stored, maintained and used in accordance with 3M’s written instructions.

EXCLUSIONS TO WARRANTY: THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHER WARRANTY OF QUALITY, EXCEPT OF TITLE AND AGAINST PATENT INFRINGEMENT.

LIMITATION OF LIABILITY: Except as provided above, 3M shall not be liable or responsible for any loss or damage, whether direct, indirect, incidental, special or consequential, arising out of sale, use or misuse of 3M OH&ESD products, or the user’s inability to use such products. THE REMEDIES SET FORTH HEREIN ARE EXCLUSIVE.

FOR MORE INFORMATION
In United States, contact:
Internet: 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
3M Center, Building 0235-02-W-70
St. Paul, MN 55144-1000

In Canada, contact:
Internet: www.3M.com/CA/occsafety
Technical Assistance: 1-800-267-4414

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