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Speedglas 25-0099-35SW

3M Speedglas 9100-Air Welding Helmet User Manual

Model: 25-0099-35SW

INTRODUCTION

This manual provides essential information for the safe and effective use of the 3M Speedglas 9100-Air Welding Helmet, model 25-0099-35SW. It is designed to help users understand the product's features, proper setup, operation, maintenance, and troubleshooting.

The 3M Speedglas 9100-Air Welding Helmet is engineered for professional welders, offering enhanced peripheral vision through SideWindows and an ergonomic, adjustable head suspension for superior comfort and stability. This model is supplied without an Auto-Darkening Filter (ADF) and meets ANSI Z87.1-2010 standards.

PRODUCT OVERVIEW



Image: The 3M Speedglas 9100-Air Welding Helmet, showing its overall design and the integrated headcover.

The Speedglas 9100-Air Welding Helmet is designed with user comfort and safety in mind. Key features include:

- **9100-Air Headtop:** The primary head protection component, designed for integration with powered air purifying respirators (PAPR) systems (PAPR system not included).
- **No ADF Included:** This helmet is sold without an Auto-Darkening Filter, allowing users to select and install their preferred ADF separately.
- **Adjustable Head Suspension:** Ergonomically designed for increased comfort, helmet stability, and balanced weight distribution during prolonged use.
- **Side Windows:** Equipped with Shade 5 side filters that significantly increase peripheral vision, enhancing situational awareness in the workspace.



Image: A welder wearing a 3M Speedglas helmet while working at a welding station, demonstrating the helmet in an operational environment.

SETUP

Proper setup of your 3M Speedglas 9100-Air Welding Helmet is crucial for safety and performance. While this model does not include an ADF, the following general steps apply to the helmet assembly:

1. **Inspect Components:** Before assembly, ensure all parts are present and undamaged. Check the helmet shell, head suspension, and any included accessories.
2. **Install Head Suspension:** Carefully attach the adjustable head suspension into the helmet shell according to the markings or slots provided. Ensure it clicks securely into place.
3. **Adjust Head Suspension:** Place the helmet on your head and adjust the top strap and headband ratchet for a snug, comfortable fit. The helmet should sit securely without excessive pressure points.
4. **Install ADF (Sold Separately):** If you have purchased a compatible 3M Speedglas Auto-Darkening Filter, follow its specific instructions for installation into the helmet's viewing area. Ensure it is correctly seated and secured.
5. **Check Side Windows:** Verify that the Shade 5 SideWindows are clean and properly positioned.
6. **Connect to PAPR (If Applicable):** If using with a Powered Air Purifying Respirator system, connect the air hose to the helmet's air duct as per the PAPR system's instructions.

Refer to the specific instructions provided with your chosen Auto-Darkening Filter and any associated PAPR system for detailed installation and adjustment procedures.

OPERATING INSTRUCTIONS

The 3M Speedglas 9100-Air Welding Helmet is designed for use in welding and grinding applications, providing head and eye protection. Proper operation ensures maximum safety and comfort.

1. **Pre-Use Check:** Before each use, inspect the helmet for any signs of damage, cracks, or loose parts. Ensure the head suspension is secure and the viewing area (with ADF installed) is clean.
2. **Donning the Helmet:** Place the helmet firmly on your head, ensuring the head suspension is properly adjusted for a stable and comfortable fit. The helmet should not wobble or obstruct vision.
3. **Visibility:** The SideWindows provide enhanced peripheral vision. Be aware of your surroundings, but always prioritize direct vision through the main viewing area during welding.
4. **Welding/Grinding:** Lower the helmet into the working position. If an ADF is installed, it will automatically

darken upon arc ignition. If using a passive filter, ensure it is in place before striking an arc.

5. **Breathing Air (If PAPR Connected):** If connected to a PAPR system, ensure the system is turned on and providing a steady flow of filtered air.
6. **Post-Use:** After use, clean the helmet as described in the Maintenance section. Store the helmet in a clean, dry place away from direct sunlight and extreme temperatures.

Always follow all applicable safety regulations and guidelines for welding and personal protective equipment.

MAINTENANCE

Regular maintenance extends the life of your 3M Speedglas 9100-Air Welding Helmet and ensures continued protection.

- **Cleaning:**
 - Clean the helmet shell and head suspension with a soft cloth dampened with mild soap and water. Avoid abrasive cleaners or solvents.
 - For the main viewing area and SideWindows, use a clean, soft cloth and a non-abrasive lens cleaning solution. Do not use paper towels or rough materials that could scratch the surfaces.
- **Inspection:**
 - Periodically inspect the helmet for cracks, deep scratches, or signs of wear, especially on the shell and head suspension.
 - Check the integrity of the SideWindows and ensure they are securely in place.
 - If an ADF is installed, inspect its outer and inner protection plates for scratches or damage. Replace them as needed.
- **Storage:** Store the helmet in a cool, dry place, away from direct sunlight, chemicals, and extreme temperatures. Protect it from physical damage when not in use.
- **Replacement Parts:** Replace any damaged or worn parts immediately with genuine 3M Speedglas replacement parts to maintain the helmet's protective capabilities.

TROUBLESHOOTING

This section addresses common issues you might encounter with your 3M Speedglas 9100-Air Welding Helmet. Note that issues related to Auto-Darkening Filters (ADFs) should be addressed by the specific ADF's manual.

Problem	Possible Cause	Solution
Helmet feels uncomfortable or unstable.	Head suspension not properly adjusted.	Adjust the top strap and the headband ratchet until the helmet fits snugly and comfortably without excessive pressure.
Side Windows are scratched or unclear.	Accumulated dirt or physical damage.	Clean with a soft cloth and lens cleaner. If severely scratched, replace the SideWindows.
Helmet shell appears damaged (cracks, deep scratches).	Impact or wear and tear.	Discontinue use immediately. The helmet's protective integrity may be compromised. Replace the helmet shell.

If you experience issues not covered here, or if problems persist, contact 3M customer support or your authorized

dealer.

SPECIFICATIONS

Attribute	Detail
Model Number	25-0099-35SW
Product Dimensions	15.12 x 11.5 x 11.12 inches
Item Weight	13.28 ounces
Manufacturer	3M
ASIN	B00I98K3AW
Compliance	Meets ANSI Z87.1-2010
Included Components	9100-Air Headtop, Side Windows, Extended Headcover (No ADF Included)

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WARRANTY AND SUPPORT

For information regarding product warranty, please refer to the documentation provided with your purchase or visit the official 3M website. 3M stands behind its products and offers support for industrial and occupational users. For technical assistance, replacement parts, or further inquiries, please contact 3M customer service or your local authorized 3M distributor. Always ensure you are using genuine 3M replacement parts to maintain product integrity and safety standards.



Image: The official 3M logo, representing the manufacturer of the Speedglas helmet.
For more information, visit the [Speedglas Store on Amazon](#).

Related Documents - 25-0099-35SW

	<p>3M™ Speedglas™ Welding Safety Catalogue 2018: Take Control of Your Personal Environment</p> <p>Explore the 3M™ Speedglas™ Welding Safety Catalogue 2018, featuring a comprehensive range of auto-darkening welding helmets, filters, and respiratory protection designed to enhance welder safety, comfort, and productivity. Discover solutions for precise grinding, fresh air, clarity, and head protection.</p>
	<p>3M™ Speedglas™ 9100/9100-Air Welding Helmets User Manual</p> <p>Instruction manual for 3M™ Speedglas™ 9100 and 9100-Air welding helmets, providing safety, usage, maintenance, and technical specifications. Learn about system description, approvals, limitations, and operation.</p>
	<p>3M™ Speedglas™ Welding Helmets 9100/9100-Air User Manual</p> <p>Comprehensive user manual for 3M™ Speedglas™ Welding Helmets 9100 and 9100-Air series, detailing system description, safety warnings, operating instructions, maintenance, and technical specifications.</p>
	<p>3M Speedglas Series 9002 with Fresh-Air C System Technical Bulletin</p> <p>Technical bulletin detailing the 3M Speedglas Series 9002 welding helmet with the Fresh-Air C supplied air respirator system. Includes product description, features, technical specifications, approvals, and exploded views of components.</p>
	<p>3M™ Speedglas™ Welding Helmet G5-03 Pro and G5-03 Pro Air Technical Data Sheet</p> <p>Technical specifications, applications, approvals, limitations of use, materials, and spare parts for the 3M™ Speedglas™ G5-03 Pro and G5-03 Pro Air welding helmets, designed for occupational welding safety.</p>

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Series 100



[3M™ Speedglas™ Welding Helmet Series 100 User Manual](#)

Comprehensive user manual for the 3M™ Speedglas™ Welding Helmet Series 100, detailing features, operation, maintenance, and safety guidelines for welders.