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Lincoln Electric K3446-1

Lincoln Electric Auto-Darkening Welding Helmet User Manual

Model Number: K3446-1

1. PRODUCT OVERVIEW

The Lincoln Electric Auto-Darkening Welding Helmet with Grind Mode (Model K3446-1) is designed to provide eye and face protection during various welding and grinding operations. This helmet features an auto-darkening lens that automatically adjusts to the arc's brightness, eliminating the need to manually flip the helmet up and down. It includes a dedicated grind mode for clear visibility during grinding tasks.



Image: Lincoln Electric Auto-Darkening Welding Helmet, featuring a black shell with a distinctive red steel flame pattern and an auto-darkening lens.

2. KEY FEATURES

- **Auto-Darkening Lens:** Automatically adjusts shade level upon arc strike.
- **Variable Shade Lens:** Offers adjustable shade levels (9-13) for different welding processes.
- **Grind Mode:** Provides clear vision for grinding tasks without removing the helmet.
- **Adjustable Headgear:** Features a 5-position tilt for customized fit and comfort.
- **Lightweight Design:** Weighs approximately 1.7 pounds for reduced neck strain.
- **Impact-Resistant Lenses:** Includes 2 extra outside clear polycarbonate lenses for durability.
- **Compliance:** ANSI approved and meets CSE/CE standard EN 379.

3. SETUP

1. **Unpacking:** Carefully remove the welding helmet and all accessories from the packaging. Verify

that all components, including the extra lenses and operator's manual, are present.

2. **Headgear Adjustment:** Place the helmet on your head. Adjust the top strap and the rear knob to ensure a snug yet comfortable fit. The 5-position tilt feature allows you to position the helmet for optimal viewing angle.
3. **Protective Film Removal:** Remove any protective films from both sides of the inner and outer lenses before first use.
4. **Initial Check:** Before welding, perform a quick test by exposing the lens to a bright light source (not direct sunlight or a welding arc) to ensure the auto-darkening function is active. The lens should briefly darken.

4. OPERATING INSTRUCTIONS

4.1 Welding Mode

- Ensure the helmet is securely fitted and comfortable.
- Adjust the shade knob on the side of the helmet to the desired shade level (9-13) based on your welding process and amperage. Refer to standard welding shade charts for guidance.
- When the welding arc is struck, the lens will automatically darken to the selected shade. When the arc ceases, the lens will return to its light state.

4.2 Grind Mode

- To activate grind mode, locate the 'Grind' knob on the side of the helmet and turn it to the 'Grind' position.
- In grind mode, the auto-darkening function is deactivated, allowing for clear, unobstructed vision for grinding or cutting tasks.
- **Important:** Always switch back to a welding shade setting before initiating any welding operations.

5. MAINTENANCE

- **Cleaning:** Regularly clean the helmet shell with a mild soap and water solution. Avoid harsh abrasives or solvents.
- **Lens Care:** Clean the inner and outer protective lenses with a soft, clean cloth and a non-abrasive lens cleaner. Replace scratched or damaged lenses immediately.
- **Storage:** Store the helmet in a dry, clean environment away from direct sunlight and extreme temperatures.
- **Battery Check:** The auto-darkening lens is solar-powered with a backup battery. Ensure the solar cells are clean and exposed to light regularly to maintain charge.

6. TROUBLESHOOTING

- **Lens Not Darkening:** Check if the helmet is in grind mode. Ensure the solar cells are clean and

exposed to light. Verify the ambient temperature is within the operating range.

- **Poor Visibility:** Clean the protective lenses. Ensure the correct shade level is selected for the welding process. Replace scratched or damaged lenses.
- **Uncomfortable Fit:** Adjust the headgear straps and tilt mechanism until a comfortable and secure fit is achieved.

7. SPECIFICATIONS

Feature	Detail
Model Number	K3446-1
Product Dimensions	9.25 x 9.25 x 13.25 inches
Weight	1.7 Pounds
Manufacturer	Lincoln Electric
Lens Shade Range	9-13 (Variable)
Grind Mode	Yes
Power Source	Solar Powered
Color	Red Steel Flame Pattern

8. WARRANTY AND SUPPORT

This Lincoln Electric product is backed by the manufacturer's warranty. For specific warranty terms and conditions, please refer to the documentation included with your product or visit the official Lincoln Electric website. For technical support, replacement parts, or service inquiries, please contact Lincoln Electric customer service directly.

Contact Information:

Website: www.lincolnelectric.com

Phone: 1-888-236-0044 (as per general Lincoln Electric contact information)