



WELDLINE™

by Lincoln Electric

EUROSPEED LS - W000403824



Instructions for Safety, Use and Maintenance

SAFETY PRECAUTIONS - Read before using



WARNING: This equipment must be used by qualified personnel. Be sure that all installation, operation, maintenance and repair procedures are performed only by qualified person. Read and understand this manual before operating this equipment. Failure to follow the instructions in this manual could cause serious personal injury, loss of life, or damage to this equipment. Read and understand the following explanations of the warning symbols. Lincoln Electric is not responsible for damages caused by improper installation, improper care or abnormal operation.



WARNING: This symbol indicates that instructions must be followed to avoid serious personal injury, loss of life, or damage to this equipment. Protect yourself and others from possible serious injury or death.



READ AND UNDERSTAND INSTRUCTIONS: Read and understand this manual before operating this equipment. Arc welding can be hazardous. Failure to follow the instructions in this manual could cause serious personal injury, loss of life, or damage to this equipment.



ELECTRIC SHOCK CAN KILL: Welding equipment generates high voltages. Do not touch the electrode, work clamp, or connected work pieces when this equipment is on. Insulate yourself from the electrode, work clamp, and connected work pieces.



ELECTRICALLY POWERED EQUIPMENT: Turn off input power using the disconnect switch at the fuse box before working on this equipment. Ground this equipment in accordance with local electrical regulations.



ELECTRICALLY POWERED EQUIPMENT: Regularly inspect the input, electrode, and work clamp cables. If any insulation damage exists replace the cable immediately. Do not place the electrode holder directly on the welding table or any other surface in contact with the work clamp to avoid the risk of accidental arc ignition.



ELECTRIC AND MAGNETIC FIELDS MAY BE DANGEROUS: Electric current flowing through any conductor creates electric and magnetic fields (EMF). EMF fields may interfere with some pacemakers, and welders having a pacemaker shall consult their physician before operating this equipment.



CE COMPLIANCE: This equipment complies with the European Community Directives.



ARTIFICIAL OPTICAL RADIATION: According with the requirements in 2006/25/EC Directive and EN 12198 Standard, the equipment is a category 2. It makes mandatory the adoption of Personal Protective Equipments (PPE) having filter with a protection degree up to a maximum of 15, as required by EN169 Standard.



FUMES AND GASES CAN BE DANGEROUS: Welding may produce fumes and gases hazardous to health. Avoid breathing these fumes and gases. To avoid these dangers the operator must use enough ventilation or exhaust to keep fumes and gases away from the breathing zone.



ARC RAYS CAN BURN: Use a shield with the proper filter and cover plates to protect your eyes from sparks and the rays of the arc when welding or observing. Use suitable clothing made from durable flame-resistant material to protect you skin and that of your helpers. Protect other nearby personnel with suitable, non-flammable screening and warn them not to watch the arc nor expose themselves to the arc.



WELDING SPARKS CAN CAUSE FIRE OR EXPLOSION: Remove fire hazards from the welding area and have a fire extinguisher readily available. Welding sparks and hot materials from the welding process can easily go through small cracks and openings to adjacent areas. Do not weld on any tanks, drums, containers, or material until the proper steps have been taken to insure that no flammable or toxic vapors will be present. Never operate this equipment when flammable gases, vapors or liquid combustibles are present.



WELDED MATERIALS CAN BURN: Welding generates a large amount of heat. Hot surfaces and materials in work area can cause serious burns. Use gloves and pliers when touching or moving materials in the work area.



SAFETY MARK: This equipment is suitable for supplying power for welding operations carried out in an environment with increased hazard of electric shock.



Materials which may come into contact with the wearer's skin could cause allergic reactions to susceptible individuals.



This is not a safety helmet! This helmet has been designed only to protect against the risks of welding processes.



WARNING: Severe personal injury could occur if the user fails to follow the above mentioned warnings and/or fails to follow the operating instructions.

COMMON PROBLEMS AND REMEDIES

Irregular Darkening Dimming

Headgear has been set unevenly and there is an uneven distance from the eyes to the filter lens (Reset the headgear to reduce the difference to the filter).

Auto-Darkening filter does not darken or flickers

- ① Front cover lens is soiled or damaged (Change the cover lens).
- ② Sensors are soiled (Clean the sensors surface).
- ③ Welding current is too low (Reset the sensitivity level to higher).
- ④ Check battery and verify they are in good condition and installed properly. Also, check battery surfaces and contacts and clean if necessary. Please refer to the "BATTERY INSTALLATION".

Slow response

Operating temperature is too low (Do not use at temperatures below -5 °C or 23 °F).

Poor vision

- ① Front / inside cover lens and / or the filter is soiled (Change lens).
- ② There is insufficient ambient light.
- ③ Shade number is incorrectly set (Reset the shade number).
- ④ Check if removing the film on the front cover lens.

Welding helmet slips

Headgear is not properly adjusted (Readjust the headgear).

WELDING USING THE EUROSPEED LS HELMET

Battery installation for EUROSPEED LS

Install batteries into helmet properly, according to positive and negative terminal marking on battery jar (See fig.1).

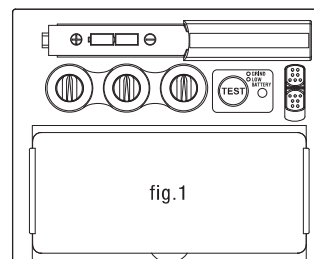


fig.1

Test

Press and hold "TEST" to preview shade selection before welding (See fig.1). When released then viewing window will automatically return to the light state (3.5 Shade). Press "TEST" if viewing window does not turn to dark state, replace batteries and try again.

Power

This ADF cartridge is powered by solar cell and 2 AAA Alkaline batteries. When the indicator located on the lens starts to come to red (See fig.1), it is a warning for the battery to be replaced.

Selecting the operating mode

Use the switch button on the back of shade cartridge to select the mode appropriate for the work activity.

Weld mode - Used for most welding applications. In this mode the shade function is turned on when it optically senses a welding arc. Select shade level, delay time and sensitivity as required (See fig.2).
Grind Mode - Used for metal grinding applications. In this mode, the shade function is turned off. The shade is fixed shade DIN 3.5 that allowing a clear view to grind a weld with the helmet providing face protection (See fig.2). Under this situation, the indicator would turn green and flash every 3 seconds(see fig.1).

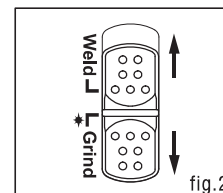


fig.2

Selecting shade level

Select the shade level you require according to the welding process you will use by referring to the "Shade Guide Table" below for settings. Turn the shade control knob to the shade number required.

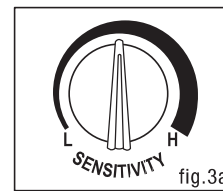


fig.3a

Sensitivity

The sensitivity can be set to "H" (high) or "L" (low) by using the infinitely dial knob on the back of the shade cartridge. The "Mid-High" setting is the normal setting for everyday use. The maximum sensitivity level is appropriate for low welding current work, TIG, or special applications. Higher sensitivity setting is necessary if lens

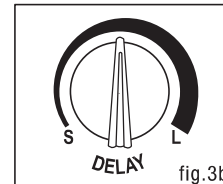


fig.3b

WARNING

- The ADF shall only be used in conjunction with the inner cover lens.
- The eye-protectors against high speed particles worn over standard ophthalmic spectacles may transmit impacts, thus creating a hazard to the wearer.
- Toughened mineral filter oculars shall only be used in conjunction with a suitable backing ocular.
- If the symbols F or B are not common to both the ocular and the frame then it is the lower level which shall be assigned to the complete eye-protector.
- If the impact letter followed by letter "T", you can use it for protection against high speed particles at extremes of temperature. If the impact letter does not followed by letter "T", you should only use the eye protector for protection against high speed particles at room temperature.
- We recommend a use for a period of 5 years. The duration of use depends on various factors such as use, cleaning storage and maintenance. Frequently inspections and replacement if it is damaged are recommended.
- The product is in conformity with Directive 2001/95/EG and Regulation (EU) 2016/425, and the harmonized standards EN 166:2001, EN 175:1997, EN379:2003+A1:2009 necessary.
- The user shall contact the health and safety representative to ensure he is given the proper protection by the personal eyewear during working conditions.
- The sensors should kept clean and unobscured.

MARKING

- The shell and the auto darkening filter are marked accordingly. Classification for eye and face protection is following EN 166:2001, EN 175:1997, EN379:2003+A1:2009.

Notified bodies:

DIN CERTCO Gesellschaft fuer Konformitaetsbewertung mbH, Alboinstrasse 56, 12103 Berlin, Germany - Notified body number 0196 (Shield)

ADF model ADF720SLE marking explanation: CE 4/9-13 LE 1/1/1/2/379

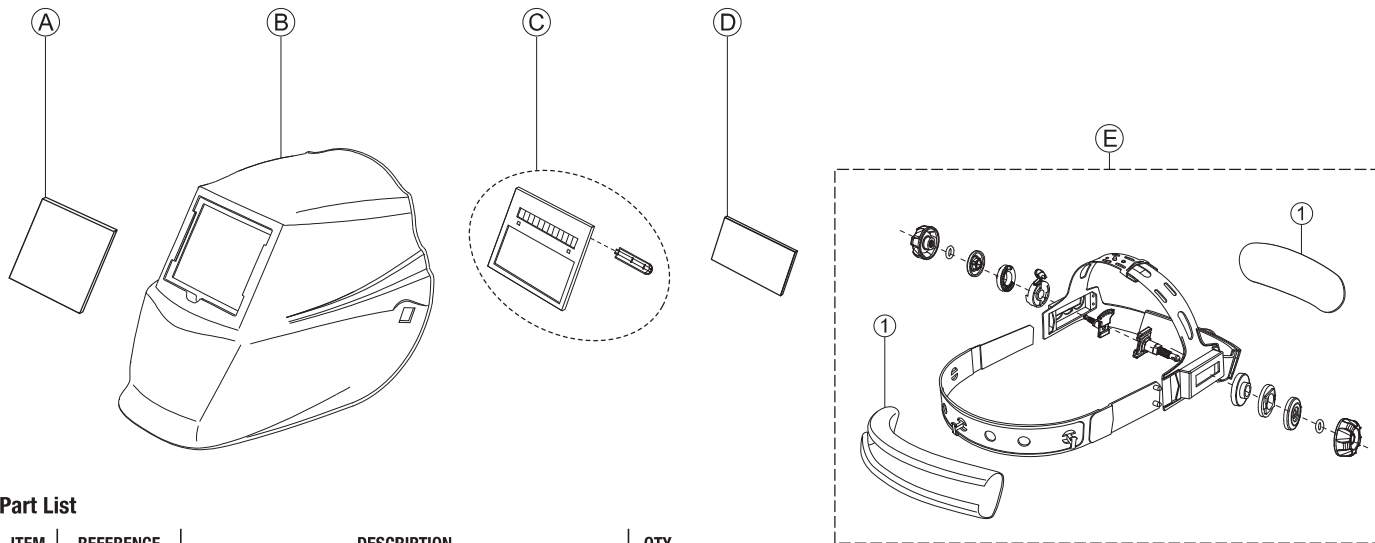
4 : light state scale number	1 : optical class
9 : lightest dark state scale number	1 : diffusion of light class
13 : darkest state scale number	1 : variations in luminous transmittance class
LE : filter manufacturer identification	2 : angle dependence of luminous transmittance class
	379 : number of the standard

Marking on shield, model TM9LE: "LE EN 175 B CE". LE : manufacturer's identification. EN 175: number of this standard. B: resistance to medium energy impact

Marking on front cover lens: "LE 1 B CE". LE : lens manufacturer's identification. 1: optical class. B: resistance to medium energy impact

Marking on Inside cover lens: "LE 1 B CE". LE : lens manufacturer's identification. 1: optical class. B: resistance to medium energy impact

PARTS LIST & ASSEMBLY



Part List

ITEM	REFERENCE	DESCRIPTION	QTY
A	W000404065	Front Cover Lens (111.9×91.0×1.5 mm)	1
B	W000404096	Shell (Welding Mask TM9LE)	1
C	W000404097	Auto-Darkening Filter (ADF720SLE)	1
D	W000404068	Inside Cover Lens (95.9×47.2×1.0 mm)	1
E*	W000404098	Headgear Assembly (Including Sweatband)	1

Part List of E*

ITEM	REFERENCE	DESCRIPTION	QTY
1	W000404073	Sweatband	1