

SOLDATECH



TYPE
EWH5



Read this manual before using the auto-darkening welding helmet.

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Storing the User Manual

- Store the user manual near the auto-darkening welding helmet in an easily accessible location.
- Keep the user manual in a place where it remains dry.
- Use the manual carefully to avoid any damage.
- The use of the auto-darkening welding helmet by individuals unfamiliar with the instructions and procedures outlined in this manual is strictly prohibited.

This user manual is an integral part of the auto-darkening welding helmet and must therefore be stored carefully with the helmet.

If the auto-darkening welding helmet is transferred to another user, the user manual must be included.

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NLD 1. Symbolen label

ENG 1. Symbols label



NLD Lees voor gebruik de gebruikershandleiding.

ENG Read the user manual before use.



NLD Draag altijd een veiligheidsbril bij het gebruik van de lashelm.

ENG Always wear safety glasses when using the welding helmet.



NLD Draag veiligheidshandschoenen.

ENG Wear safety gloves.



NLD Zorg ervoor dat er voldoende ventilatie is tijdens het lassen.

ENG Ensure there is adequate ventilation during welding.



NLD Vervang versleten of beschadigde onderdelen onmiddellijk.

ENG Replace worn or damaged parts immediately.



NLD Vervang de laslens onmiddellijk als deze beschadigd is.

ENG Replace the welding filter immediately if it is damaged.



NLD Zorg dat de tintinstelling voldoende oogbescherming biedt voor het type werk dat u gaat uitvoeren.

ENG Ensure that the shade level provides adequate eye protection for the type of work you are going to perform.



NLD De lashelm is niet geschikt voor laserlassen.

ENG The welding helmet is not suitable for laser welding.

2. General

Every Soldatech auto-darkening welding helmet is manufactured in accordance with European Directive EU-2016/425. Each auto-darkening helmet is supplied with a user manual and a declaration of conformity, which must be carefully preserved and maintained.

Due to ongoing improvements to the equipment, the holder of the “Soldatech” brand reserves the right to modify the specifications of the equipment described in this manual.

3. Safety instructions

1. This auto-darkening welding helmet is not suitable for laser welding or oxy-fuel welding and cutting processes.
2. Never place the helmet or the auto-darkening filter on a hot surface.
3. Never open or modify the auto-darkening filter.
4. This welding helmet does not provide protection against impact or collision hazards.
5. The helmet does not protect against explosive materials or corrosive liquids.
6. Do not modify the helmet or the filter unless otherwise specified in this manual.
7. Only use replacement parts specified in this manual.
8. Unauthorized modifications and replacement parts will void the warranty and may result in personal injury.
9. Immediately stop welding if the helmet fails to darken upon striking an arc, and contact your supervisor or dealer.
10. Do not immerse the filter in water.
11. Do not use solvents on the filter screen or any other helmet components.
12. Use the helmet only at temperatures between -10°C and +55°C.
13. Storage temperature: -20°C to +70°C.
14. Store the helmet in a cool, dry, and dark place; remove the battery for long-term storage.
15. Protect the filter from contact with liquids and dirt.
16. Clean the filter surface regularly with a clean, lint-free cloth; do not use harsh cleaning agents.
17. Keep the sensors and solar cells clean.
18. Regularly replace cracked, scratched, or damaged front lenses.
19. Materials in contact with the skin may cause allergic reactions under certain conditions.

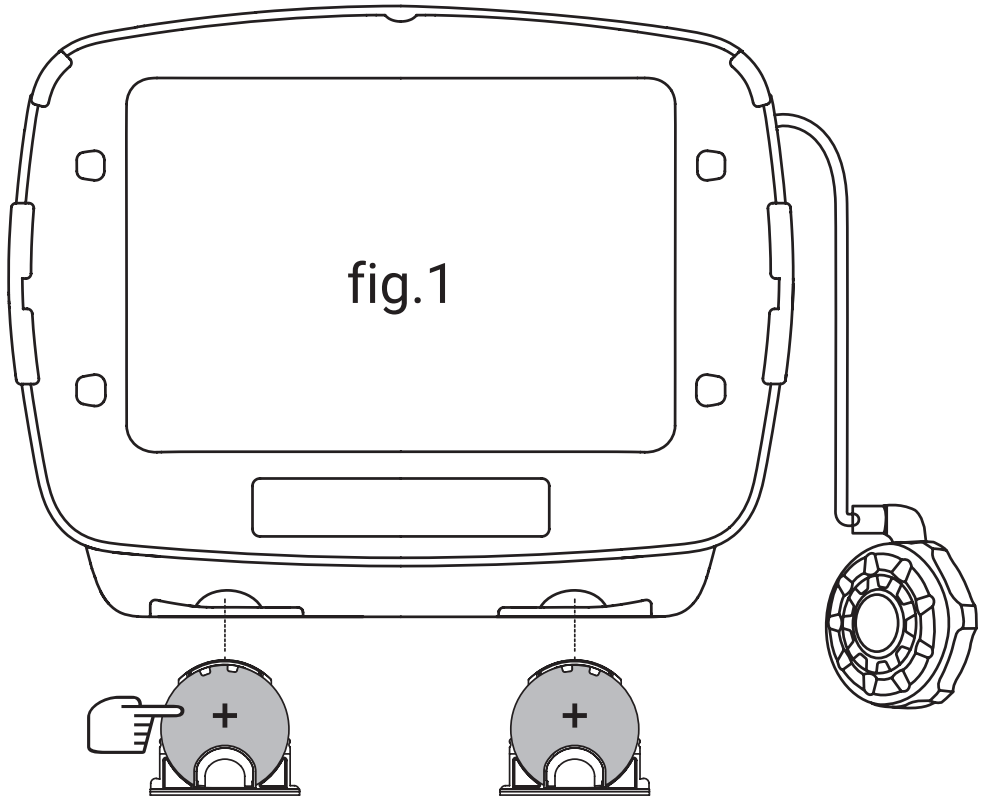
4. Use

BATTERY INSTALLATION

Slide the battery holder out of the auto-darkening filter (remove the old battery when replacing it), insert new CR2450 batteries into the battery holder, and then slide the battery holder back into the auto-darkening filter. Ensure that the battery's positive and negative terminals are correctly installed (see Fig. 1).

ON/OFF

To activate the display, press any button. The auto-darkening filter will automatically turn off after a period of inactivity.



ACTIVATING THE DIGITAL DISPLAY

Press one of the four buttons to activate the digital display (see Fig. 2a). After 15 seconds, the digital display will automatically switch to standby mode. Press the button briefly to reactivate the screen; previous settings will be retained.

MODE SELECTION

Press the “ON/MODE” button briefly to select the appropriate mode for the work activity (see Fig. 2a):

- Welding Mode - Used for most welding applications. Press the “FUNC” button to adjust the welding filter’s protection level, sensitivity, and delay before welding. In this mode, the filter darkens immediately when you start welding.
- Cutting Mode - Used for cutting applications. Press the “FUNC” button to properly set the cutting filter before cutting. In this mode, the filter darkens when you start cutting.
- Grinding Mode - Used for grinding applications. In this mode, the filter is set to shade level 4. The protection level, sensitivity, and delay cannot be adjusted in this mode.

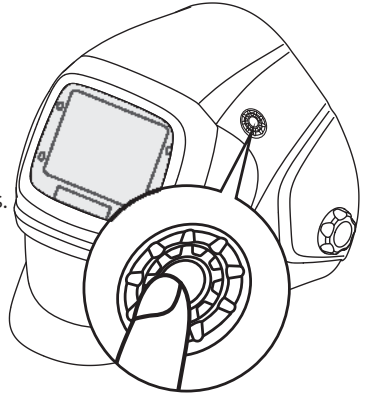


fig.1b

USING THE EXTERNAL GRINDING HEAD

The user can also switch to Grinding Mode using the external grinding head (located at the upper right of the helmet when worn) by pressing and holding the “GRIND” button for 2 seconds. Pressing the “GRIND” button again for 2 seconds will return to the previous mode. After use, switch back to the WELD/CUT mode to conserve battery life.

BATTERY INDICATOR

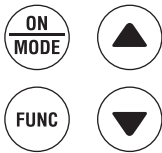


fig.2a

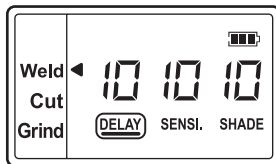


fig.2b

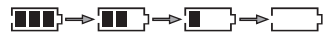


fig.2c

The “Battery” symbol indicates the current battery status (see Fig. 2b). Battery capacity is displayed in four levels (see Fig. 2c). The “Low Battery” symbol will appear on the display when there is 1-2 days of battery life remaining; the CR2450 lithium batteries should be replaced promptly. The battery symbol does not update in real time and should be refreshed by briefly pressing the “ON/MODE” button.

VARIABLE SHADE LEVEL

After the filter is activated, press the “FUNC” button briefly to select “SHADE” and adjust the filter’s protection level. Use the “UP” and “DOWN” buttons to select the shade level in the dark state.

The shade levels for each mode are as follows:

Cutting Mode – Shade 5 ~ 8 (see Fig. 3a)

Welding Mode – Shade 9 ~ 13 (see Fig. 3b)

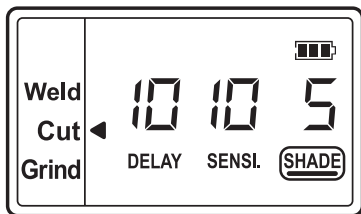


fig.3a

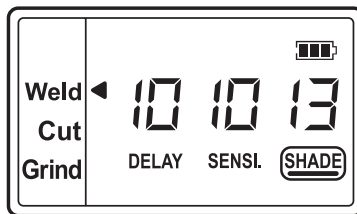


fig.3b

Grinding Mode – Shade 4 only (see Fig. 3c). Lift the front part of the helmet for grinding work; the auto-darkening filter also has a grinding mode setting.

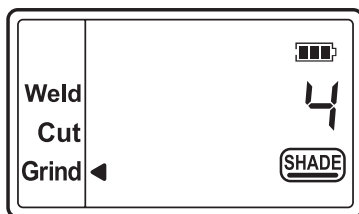


fig.3c

Select the appropriate shade level for your welding or cutting process by referring to the Shade Guide Table.

SENSITIVITY SETTING

Press the “FUNC” button to select “SENSITIVITY.” Use the “UP” and “DOWN” buttons to adjust the filter’s sensitivity to the light from various welding processes. Sensitivity settings 5-10 are typical for daily use. The sensitivity ranges for each mode are as follows: Cutting Mode (Shade 5 ~ 8) / Welding Mode (Shade 9 ~ 13) – Sensitivity 0 ~ 10 (see Fig. 4a / 4b)

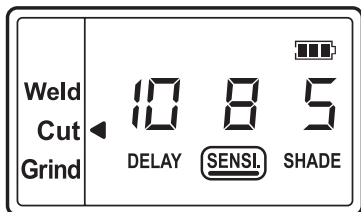


fig.4a

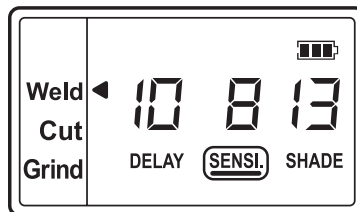


fig.4b

Grinding Mode – No sensitivity adjustment

As a general guideline for optimal performance, it is recommended to initially set the sensitivity to maximum and then gradually decrease it until the filter responds only to the welding light without unwanted triggering from ambient light (direct sunlight, intense artificial light, arcs from nearby welders, etc.). It may be necessary to adjust the helmet's sensitivity according to different lighting conditions or if the filter flickers. Adjust the helmet's sensitivity as follows:

- Press the "DOWN" button to lower the setting to 0.
Aim the helmet in the direction of use and expose it to the ambient light conditions.
- Press the "UP" button repeatedly until the filter darkens, then press the "DOWN" button until the filter returns to clear. The helmet is now ready for use. You may need to make slight adjustments to the settings for specific applications or if the filter flickers.

DELAY CONTROL

Press the "FUNC" button to select "DELAY" and begin adjusting the filter's delay time. Use the "UP" and "DOWN" buttons to set the time it takes for the filter to return to clear after welding or cutting.

Cutting Mode (Shade 5 ~ 8) / Welding Mode (Shade 9 ~ 13) – Delay 0 ~ 10 (see Fig. 5a / 5b)

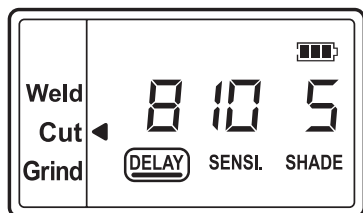


fig.5a

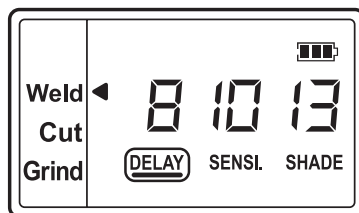


fig.5b

Grinding Mode – No delay adjustment

The delay is especially useful for eliminating intense afterglow in high-amp applications where the molten weld pool remains bright shortly after welding. Use the delay settings to adjust the delay from 0 to 10 (0.1 to 1.0 seconds). When welding stops, the viewing window automatically transitions from dark to light, but with a preset delay to compensate for afterburn on the workpiece. The delay time can be set from level 0 to level 10. It is recommended to use a shorter delay for spot welding and a longer delay for higher-current applications. Longer delays can also be used for low-current welding such as TIG and TIG/MIG/MAG pulse welding.

ADJUSTING THE HELMET FIT

The overall circumference of the headband can be increased or decreased by turning the knob at the back of the headband (see adjustment "Y" in Fig. 6). This can be done while wearing the helmet and ensures the correct tension to keep the helmet securely on your head without being too tight.

If the headband is positioned too high or too low on your head, adjust the strap that runs over the top of your head. To do this, loosen the end of the strap by pushing the locking pin out of the hole in the strap. Slide the two parts of the strap to the desired width and push the locking pin through the nearest hole (see adjustment “W” in Fig. 6).

The front and rear straps automatically adjust to the shape of your head, and the soft cushions fit comfortably on your forehead and the back of your head, providing additional comfort (see Fig. 7a). Test the fit of the headband by lifting and lowering the helmet a few times while wearing it. If the headband moves during tilting, readjust it until it is stable.

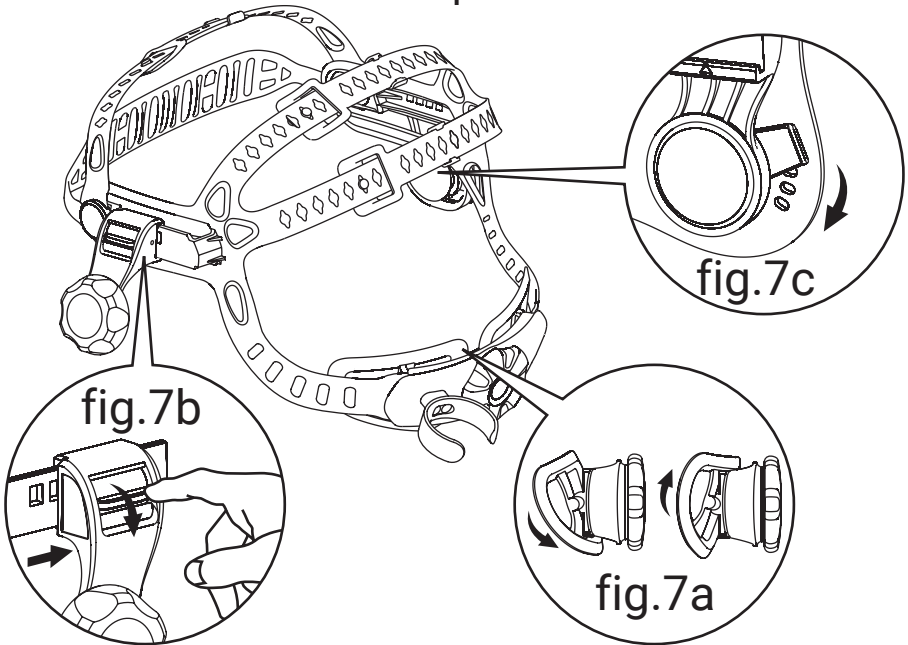
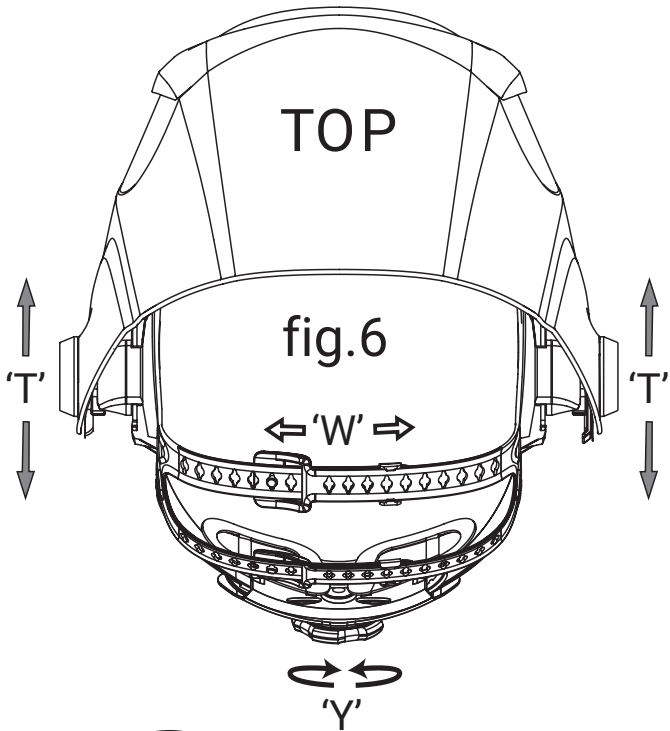
ADJUSTING THE DISTANCE BETWEEN THE HELMET AND THE FACE

Step 1: Press down and hold the “LOCK” mechanism on both sides (see Fig. 7b) and slide it back and forth.

Step 2: Release the “LOCK” mechanism and ensure it clicks into the slots. Make sure the distance between the lens and both eyes is equal to prevent uneven shading.

ADJUSTING VIEWING ANGLE POSITIONS

The tilt adjustment is located on the right side of the helmet. Loosen the right tension knob on the headband and adjust the lever to the correct forward or backward position. Tighten the right tension knob on the headband again (see Fig. 7c).



Shade Guide Table

SHADE NUMBER GUIDE				
WELDING PROCESS	ELECTRODE SIZE 1/32 in. (mm)	ARC CURRENT (A)	MINIMUM PRO- TECTIVE SHADE	SUGGESTED ¹ SHADE NO (COMFORT)
Covered Electrode Welding	Less than 3 (2.5)	Less than 60	7	-
	3-5 (2.5-4)	60-160	8	10
	5-8 (4-6.4)	160-250	10	12
	More than 8 (6.4)	250-550	11	14
MIG/MAG WELDING FLUX WELDING		Less than 60	7	-
		60 - 160	10	11
		160 - 250	10	12
		250 - 500	10	14
TIG WELDING		Less than 50	8	10
		50 - 150	8	12
		150 - 500	10	14
AIR-ACETYLENE CUTTING	(LIGHT)	Less than 500	10	12
	(HEAVY)	500 - 1000	11	14
PLASMA WELDING		Less than 20	6	6 tot 8
		20 - 100	8	10
		100 - 400	10	12
		400 - 800	11	14
PLASMA CUTTING	(LIGHT) ²	Less than 300	8	8
	(MEDIUM) ²	300 - 400	9	12
	(HEAVY) ²	400 - 800	10	14
FLAME HARD SOLDERING		-	-	3 tot 4
OXY-FUEL WEL- DING		-	-	2
CARBON ARCADES (CAW)		-	-	14
PLATE THICKNESS				
GAS WELDING: LIGHT MEDIUM HEAVY	Under 1/8 In.	Under 3.2 mm		4 of 5
	1/8 to 1/2 In.	3.2 tot 12.7 mm		5 of 6
	Above 1/2 In.	Boven 12.7 mm		6 of 8
OXYGEN CUTTING LIGHT MEDIUM HEAVY	Under 1 In.	Below 25 mm		3 of 4
	1 to 6 In.	25 to 150 mm		4 of 5
	Above 6 In.	Above 150 mm		5 of 6

¹ Start with a filter lens that is too dark, then adjust to a lighter shade that provides sufficient visibility of the welding area without going below the minimum level. When welding or cutting, where there is a lot of yellow light, use a filter lens that absorbs this yellow light.

² These values apply when the arc is clearly visible. Lighter filters can be used if the arc is obscured by the workpiece.

5. Maintenance

REPLACING THE FRONT LENS HOLDER

Disassemble: Remove the front lens holder according to fig.8a / 8b.

Assemble: Insert one side into the slot, then press and lock the other side (See fig.8c).

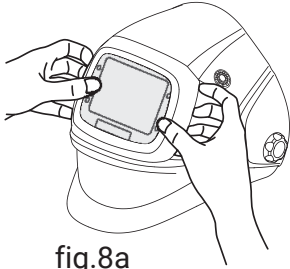


fig.8a

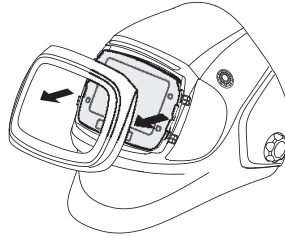


fig.8b

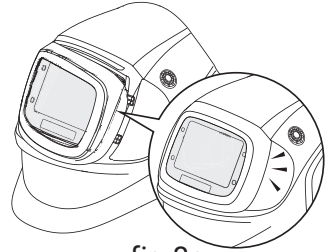


fig.8c

REPLACING THE AUTOMATIC DARKENING FILTER

Disassemble: Hold the helmet so that the inside faces you. Grab the wire connection end of the auto-darkening filter (which is connected to the external grinding head) and gently pull it out of the round socket (See fig.9a). Press the bottom of the auto-darkening filter with your thumb and push it up (See fig.9b), remove the filter from the helmet (See fig.9c). Fitting: First insert the auto-darkening filter into the slots on the left and right sides. Then push the filter down until the latches engage (See fig.9d). Take the threaded connection end of the auto-darkening filter and make sure it is firmly connected in the external grinding head socket (See fig.9e).

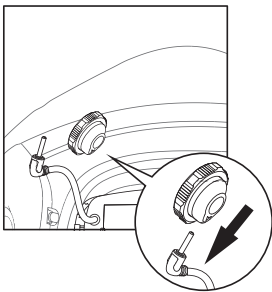


fig.9a

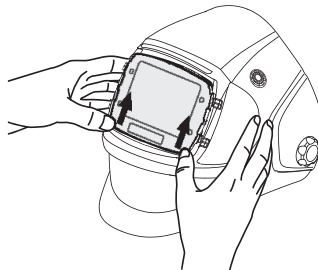


fig.9b

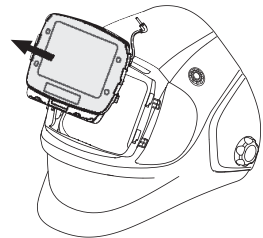


fig.9c

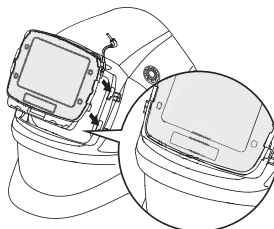


fig.9d

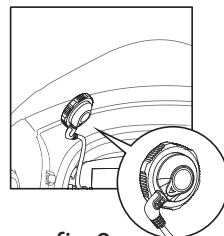


fig.9e

REPLACING THE FRONT LENS

Replace the front lens if it is damaged.

Disassemble: Remove the front lens holder according to fig.8a / 8b. Place your fingernail in the recess above the filter window and bend the lens upwards until it detaches from the edges of the window (See fig.10a).

Mounting: Insert one side into the slot and then attach the other side.

REPLACING THE INNER LENS

Replace the inner lens if it is damaged.

Disassemble: Place your fingernail in the recess above the filter window and bend the lens upwards until it detaches from the edges of the window (See fig.10b). Mounting: Mount the inner lens in the same way as it was removed.

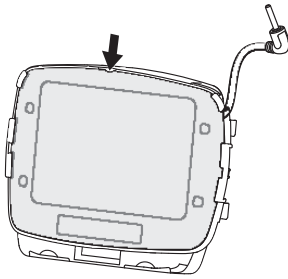


fig.10a

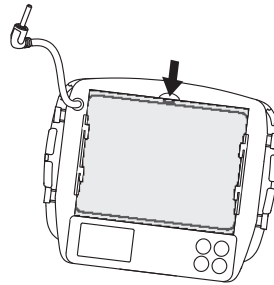


fig.10b

CLEANING

Clean the helmet by wiping it with a soft cloth. Clean the filters regularly. Do not use strong detergents. Clean the sensors and solar cells with denatured alcohol and a clean cloth, and dry with a lint-free cloth.

COMMON PROBLEMS AND SOLUTIONS**Irregular darkening or dimming:**

- The headband may be unevenly adjusted, resulting in an uneven distance between the eyes and the filter lens.
- Readjust the headband to minimise the difference.

Auto-darkening filter does not darken or flicker:

- The front lens cover is dirty or damaged (Replace the lens cover).
- The sensors are dirty (Clean the surface of the sensors).
- The welding current is too low (Adjust the sensitivity higher).

Slow response:

- Operating temperature is too low (Do not use at temperatures below -10°C).

Poor visibility:

- The front/inner cover of the lens and/or the filter is dirty (Replace the lens).
- There is insufficient ambient light.
- The shadow number is incorrectly set (Reset the shadow number).
Check that the protective film of the front cover has been removed.

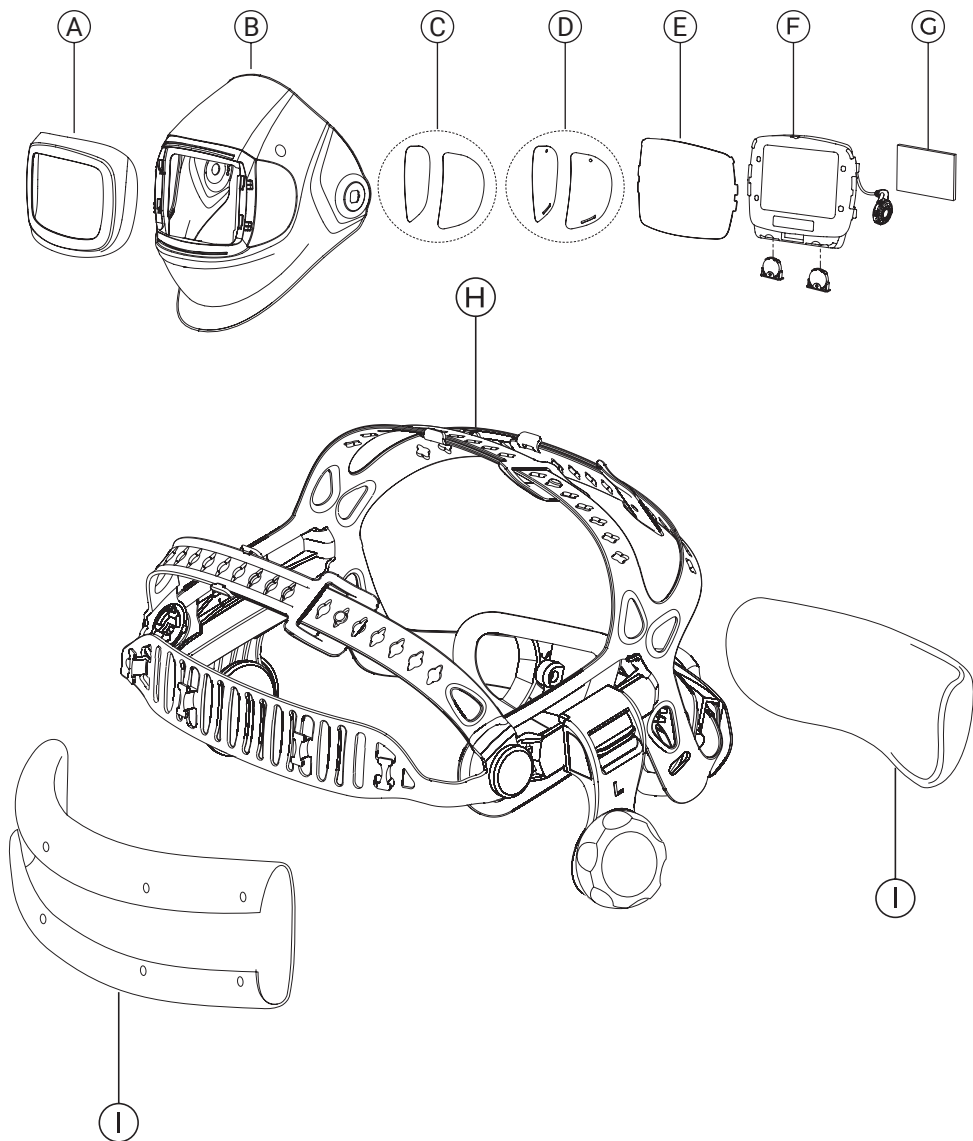
Welding helmet slips off:

- The headband is not properly adjusted (Readjust the headband).

6. Specifications

Optical class:	1/1/1/1
Field of view:	107 x 75 mm (4.21' x 2.95')
Size pattern:	156 x 123 x 33 mm (6.14' x 4.84' x 1.30")
Arc Sensor:	4
Light status:	DIN 4
Sharpening mode:	DIN 4
Cutting shade:	Shade no. from 5 to 8
Welding protection:	Shade no. from 9 to 13
Shadow control:	Internal, digital display control
On/off:	Automatic on/off
Sensitivity control:	Low ~ High, digital display control
UV / IR protection:	Always up to Shade DIN16
Power supply:	Solar cell. Battery replaceable, 2 × CR2450 lithium battery
Switching time:	1/25,000 s. from light to dark
Grinding:	Yes
Delay (dark to light):	0.1 ~ 1.0 s, digital display control
Low-power TIG:	≥ 2 amps (DC); ≥ 2 amps (AC)
Operating Temp:	- 10 °C ~ +55 °C (14 °F ~ 131 °F)
Storage Temp:	- 20 °C ~ +70 °C (- 4 °F ~ 158 °F)
Material helmet:	Nylon with high impact resistance
Overall weight:	778 g
Application range:	Electrode Welding (SMAW); TIG DC&AC; TIG Pulse DC; TIG Pulse AC; MIG/MAG/CO ₂ ; MIG/MAG Pulse; Plasma Arc Cutting (PAC); Plasma Arc Welding (PAW); Air Carbon Arc Cutting (CAC-A); Oxyacetylene Welding (OFW); Oxygen Cutting (OC); Grinding CE, ANSI Z87.1, Z94.3, AS/NZS 1338.1
Approved:	

7. Parts



- A PEWH5-A Front lens holder
- B PEWH5-B Welding helmet
- C PEWH5-C Side lens
- D SL2WH5 Side lens cover
- E LVE5WH5 Front lens

- F PEWH5-F Darkening filter
- G LVI5WH5 Inner lens
- H PEWH5 Headgear
- I PEWH5-G Sweatband/soft pad

8. Warranty

1. The guarantee takes effect on the date indicated on the purchase invoice and is valid for 12 months.
2. The guarantee is not transferable without a written statement of consent from Your supplier.
3. No warranty claims can be made without the purchase invoice.
4. Warranty is only applicable if the product is used according to the instructions provided and only for the purpose for which it was designed.
5. No modifications may be made to the product.
6. The guarantee does not apply in case of improper use.
7. Any shipping costs are not covered by the warranty provision.
8. Repairs should only be carried out by Your supplier. Any repair(s) carried out by third parties will invalidate the warranty claim.
9. Repairs during the warranty period will not extend the validity. However, a three-month warranty on the repair will be issued should the regular warranty period expire.
10. Any maintenance work to be carried out, described in the user manual, should be carried out in good time.
11. For warranty, please contact only the point of sale where you purchased the article.

EG-verklaring van overeenstemming - Declaration of conformity – EG- Konformitätserklärung - Declaration de conformité - Dichiarazione di conformità- Declaración de conformidad

Wij, We, Wir, Nous, Noi, La empresa,

Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Nederland,

verklaren geheel onder eigen verantwoordelijkheid dat het product

declare under our sole responsibility that the product

erklären in alleiniger Verantwortung, dass das Produkt

déclarons sous notre seule responsabilité que le produit

dichiariamo sotto la nostra responsabilità che il prodotto

declaramos bajo nuestra exclusiva responsabilidad que el producto

Type Model Type Type Tipo Tipo	Beschrijving Description Beschreibung Description Descrizione Descripción	Merk Brand Marke Marque Marca Marca
EWHS5	Auto. verduisterende lashelm Auto-darkening welding	Soldatech

Waarop deze verklaring betrekking heeft, in overeenstemming zijn met de volgende normen:

To which this declaration relates is in conformity with the following document:

Auf welches sich diese Erklärung bezieht, den folgenden Normen entspricht:

Auquel se réfère cette déclaration est conforme à le document suivant:

A cui si riferisce dichiarazione, corrisponde ai seguenti documenti:

Al que se refiere la presente declaración, corresponde a los siguientes documentos:

Europese Verordening, European Regulation, Europäische Verordnung, Règlement Européen, Regulamento Europeo, Reglamento Europeo:

EU 2016/425

Nederland, Maasbracht, 26-07-2024

Directeur Valkenpower

Serienummer
Serial number:



Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Nederland

