

SOLDATECH



CE

TYPE
EWH5F-1/2



**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 accessible location.
- Keep the user manual in a dry place.
- Use the user manual properly without damaging it.
- 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 part of the auto-darkening welding helmet and must therefore be stored carefully with the helmet. If the helmet is transferred to another person, 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

Each Soldatech auto-darkening welding helmet is produced in accordance with European Directive EU-2016/425. Each auto-darkening welding helmet comes with a user manual and a declaration of conformity, which must be kept and maintained properly.

As continuous improvements are made to the equipment, the holder of the "Soldatech" brand reserves the right to change the specifications of the equipment described in the 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 and the auto-darkening filter on a hot surface.
3. Do not open or modify the auto-darkening filter.
4. This welding helmet does not provide protection against impact and crushing hazards.
5. The helmet does not protect against explosive substances or corrosive liquids.
6. Do not make modifications to the helmet or filter unless otherwise specified in this manual.
7. Use only replacement parts specified in this manual.
8. Unauthorized modifications and replacement parts will void the warranty and may cause personal injury.
9. Stop welding immediately if the helmet does not darken when an arc is struck and contact your supervisor or dealer.
10. Do not immerse the filter in water.
11. Do not use solvents on the filter screen or 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 dry, cool, and dark place; remove the battery during extended storage.
15. Protect the filter from contact with liquids and dirt.
16. Regularly clean the filter surface with a clean, lint-free cloth; do not use strong cleaning agents.
17. Keep the sensors and solar cells clean.
18. Regularly replace any cracked, scratched, or damaged front lens.
19. Materials that come into contact with the skin may cause allergic reactions under certain conditions.

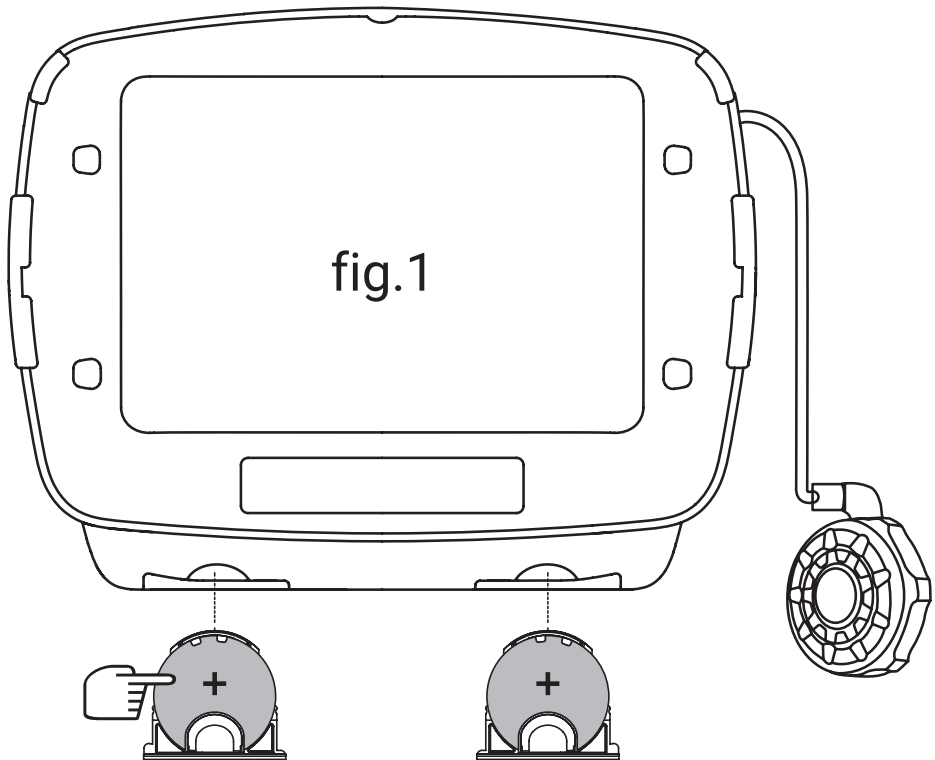
4. Use

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 slide the battery holder back into the auto-darkening filter. Ensure that the battery's anode and cathode are installed correctly (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 SCREEN

Press one of the four buttons to activate the digital screen (see fig.2a). After 15 seconds, the digital screen will automatically switch to standby mode. Press the button briefly to reactivate the screen; the 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 for 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 set the cutting filter correctly 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. Protection level, sensitivity, and delay cannot be adjusted in this mode. Switch back to welding or cutting mode after use.

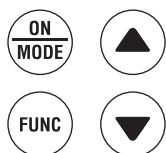


fig.2a

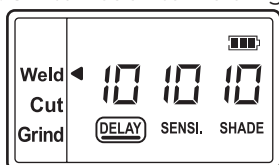


fig.2b



fig.2c

BATTERY INDICATOR

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 appears 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 must be refreshed by briefly pressing the “ON/MODE” button.

VARIABLE SHADE LEVEL

After the filter is turned on, 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) Grinding Mode - Only Shade 4 (see fig.3c). Flip the front part of the helmet up for grinding work; the auto-darkening filter also has a grinding mode setting.

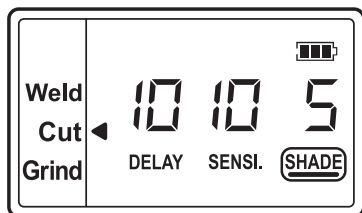


fig.3a

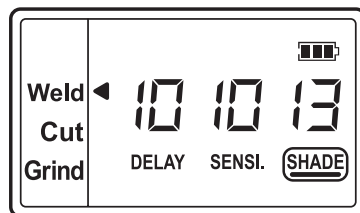


fig.3b

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

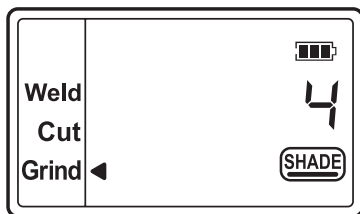


fig.3c

GEVOELIGHEIDSINSTELLING

Press the "FUNC" button to select "SENSITIVITY." Use the "UP" and "DOWN" buttons to adjust the filter to be more or less sensitive to light from different welding processes. The sensitivity setting 5-10 is normal 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)

Grinding Mode - No sensitivity adjustment

As a general rule for optimal performance, it is recommended to initially set the sensitivity to maximum and then gradually lower it until the filter only responds to welding light without unwanted triggering from ambient light

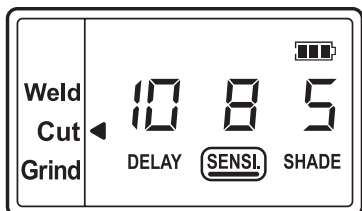


fig.4a

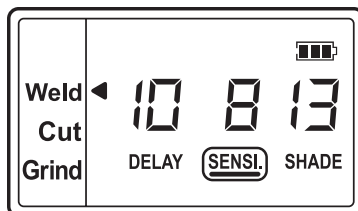


fig.4b

(direct sunlight, intense artificial light, arcs from neighboring welders, etc.). It may be necessary to adjust the helmet's sensitivity to different lighting conditions or if the filter flickers. Adjust the sensitivity of the helmet as follows:

- Press the "DOWN" button to lower the setting to 0. Orient the helmet in the working direction and expose it to ambient lighting conditions.
- Press the "UP" button repeatedly until the filter darkens, then press the "DOWN" button until the filter becomes clear again. The helmet is now ready for use. You may need to fine-tune the settings for specific applications or if the filter flickers.

DELAY CONTROL

Press the "FUNC" button to select "DELAY" and start 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)

Grinding Mode – No sensitivity adjustment

The delay is particularly useful to eliminate bright afterglows in high-amperage applications where the molten puddle remains bright shortly after welding.

Use the delay controls to adjust the delay from 0 to 10 (0.1 to 1.0 seconds).

When welding stops, the viewing window automatically switches from dark to light, but with a preset delay to compensate for post-burn on the workpiece.

The delay time can be set from level 0 to level 10. A shorter delay is recom-

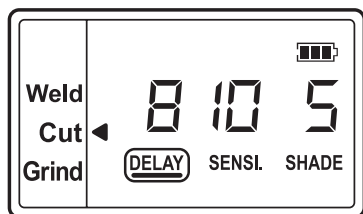


fig.5a

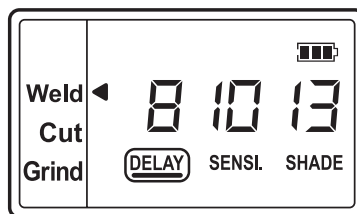


fig.5b

mended 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.

ADJUSTING THE HELMET FIT

The overall circumference of the headband can be increased or decreased by turning the knob on 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 the head without being too tight. If the headband sits too high or too low on your head, adjust the band that runs over the top of your head. To do this, release the end of the band by pushing the locking pin out of the hole in the band. Slide the two parts of the band wider or narrower as needed and push the locking pin through the nearest hole (See adjustment “W” in fig.6). The front and rear bands automatically adjust to the shape of the head, and soft cushions fit perfectly on the forehead and the back of the head, providing more 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 shifts while tilting, readjust it until it is stable.

ADJUSTING THE DISTANCE BETWEEN THE HELMET AND FACE

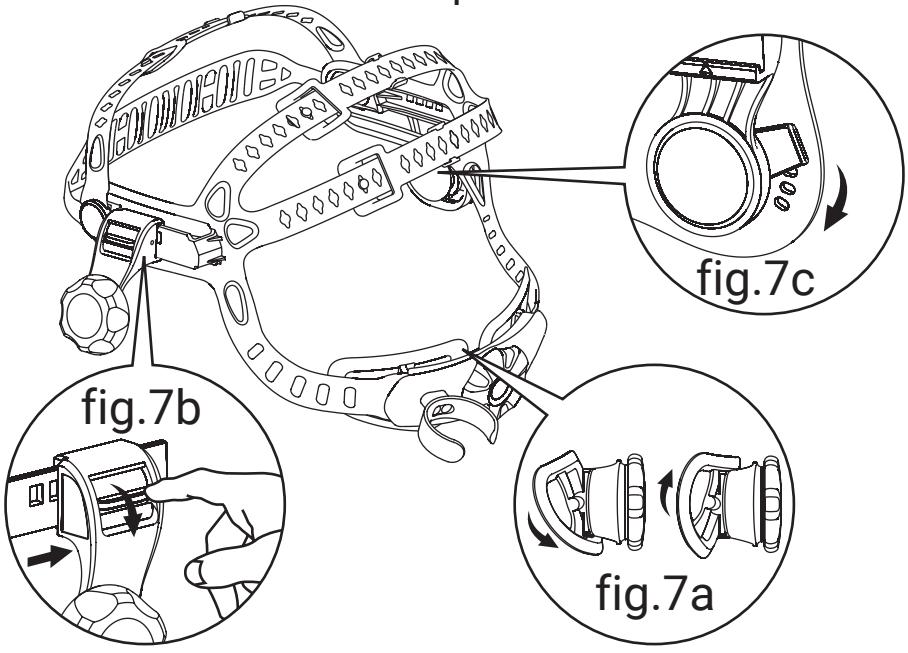
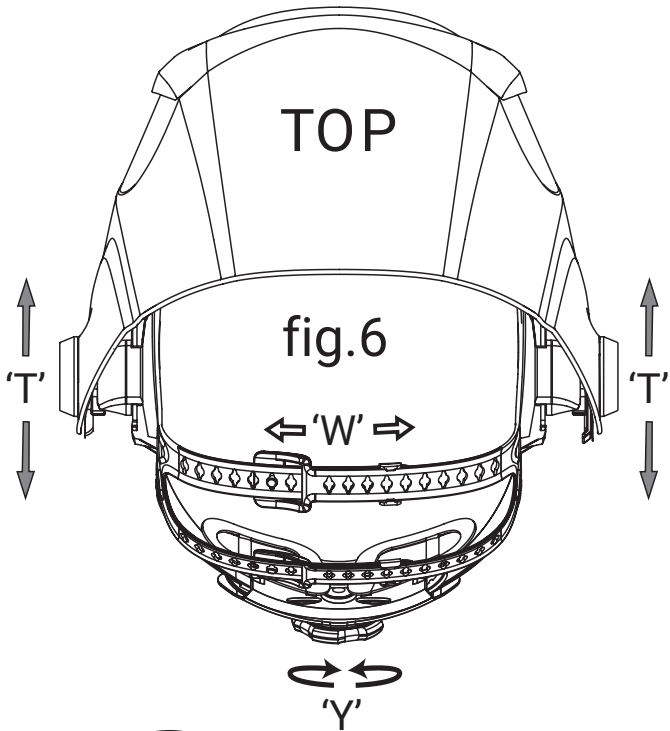
Step 1: Press down and hold the “LOCK” latch on both sides (See fig.7b) and slide it back and forth. Step 2: Release the “LOCK” latch and ensure it clicks into the slots. Make sure the distance between the lens and both eyes is equal to prevent uneven shading.

ADJUSTING VIEWING ANGLE POSITIONS

The tilt adjustment is located on the right side of the helmet. Loosen the right adjustment knob on the headband and set the lever to the desired forward or backward position. Tighten the right adjustment knob on the headband again (See fig.7c).

ASSEMBLING THE RESPIRATOR HOSE

Insert the pin of the respirator hose into the air channel of the visor, turn 1/4 turn in the anti-"open" direction, and then click the respirator hose into the holder on the rear cap of the headgear to lock it in place (See fig.8).



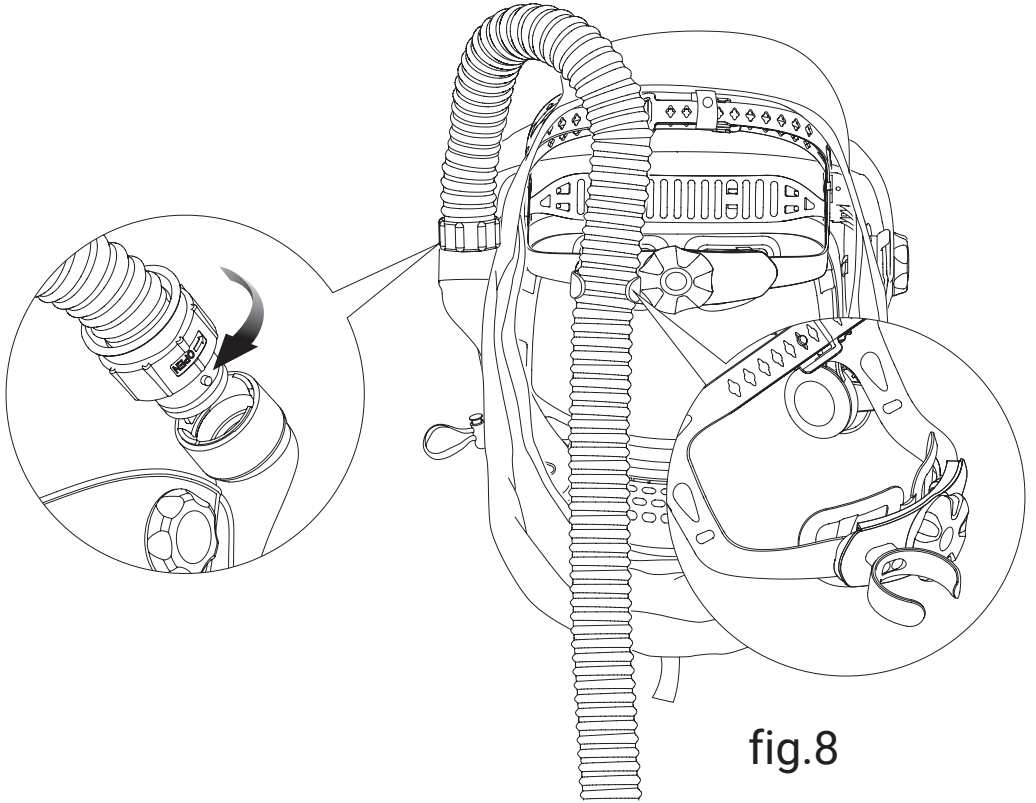


fig.8

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

Disassembly: Remove the front lens holder as shown in fig.9a / 9b. Assembly: Insert one side into the slot, then press and lock the other side (See fig.9c).

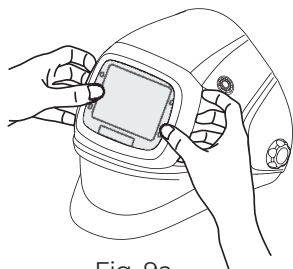


Fig. 9a

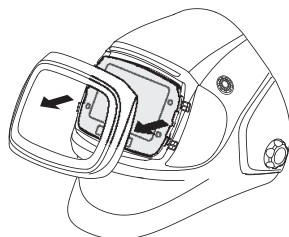


Fig. 9b

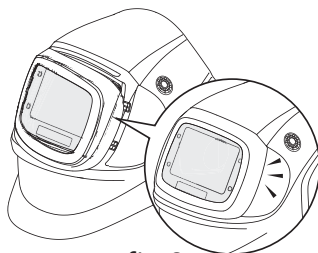


Fig. 9c

REPLACING THE AUTO-DARKENING FILTER

Disassembly: Press with your thumb on the bottom of the auto-darkening filter and push it upwards (See fig.10a), then remove the filter from the helmet (See fig.10b). Assembly: First, insert the auto-darkening filter into the slots on the left and right sides. Then push the filter down until the locks click into place (See fig.10c).

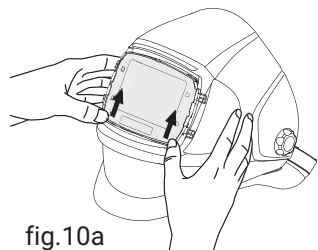


fig.10a

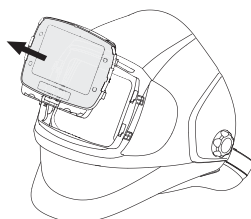


fig.10b

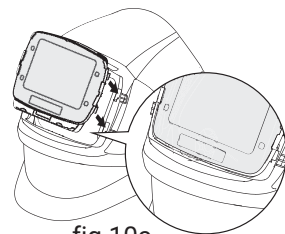


fig.10c

REPLACING THE FRONT LENS

Replace the front lens if it is damaged. Disassembly: Remove the front lens holder as shown in fig.9a / 9b. Place your fingernail in the notch above the filter window and bend the lens upwards until it detaches from the edges of the window (See fig.11a). Assembly: Insert one side into the slot, then attach the other side.

REPLACING THE INNER LENS

Replace the inner lens if it is damaged. Disassembly: Place your fingernail in the notch above the filter window and bend the lens upwards until it detaches from the edges of the window (See fig.11b). Assembly: Install the inner lens in the same manner as it was removed.

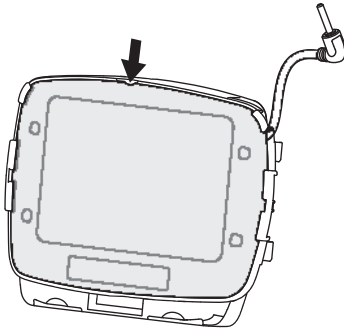


Fig. 11a

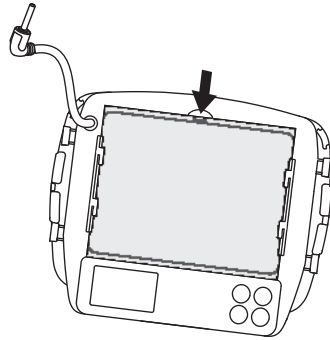


Fig. 11b

REPLACING THE GRINDING LENS HOLDER AND GRINDING LENS

Disassembly: Remove the grinding lens holder as shown in fig.12a / 12b. Remove the grinding lens as shown in fig.12c. Assembly: Insert one side of the grinding lens holder into the slot, then insert the other side into the slot.

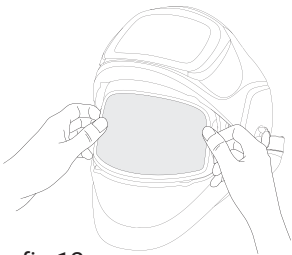


fig.12a



fig.12b

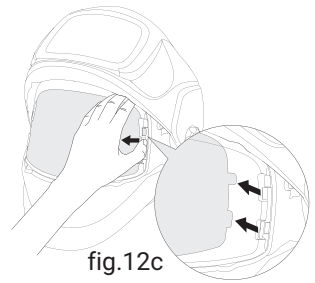


fig.12c

REPLACING THE FACE SEAL

Press the "LOCK" button and push the headband in the direction of the arrow to detach the headband from the helmet (See fig.13a). Follow the sequence A-D in the figure to align the face seal with the Velcro inside the helmet, ensuring the face seal is securely attached (See fig.13b). Then press the "LOCK" button to reattach the headband to the helmet (See fig.13c), and secure the face seal according to points 1-7 (See fig.13d).

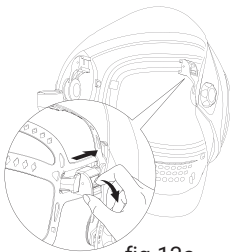


fig.13a

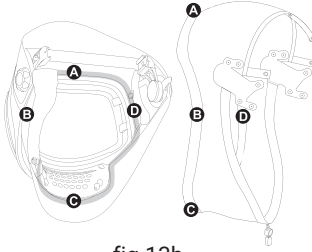


fig.13b

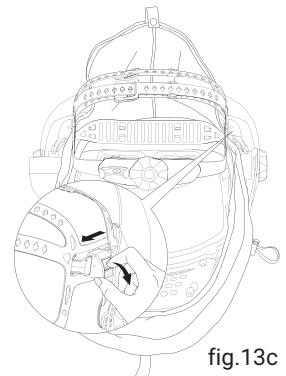


fig.13c

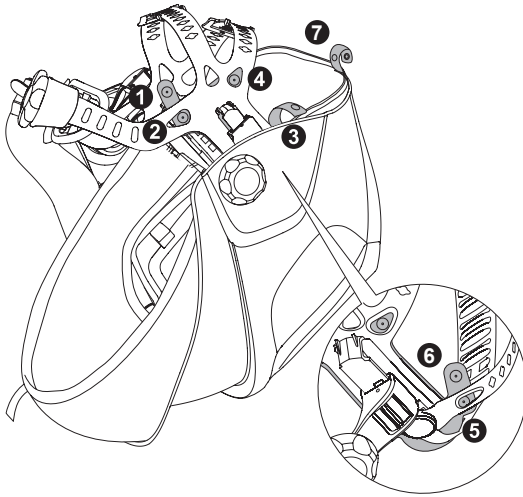
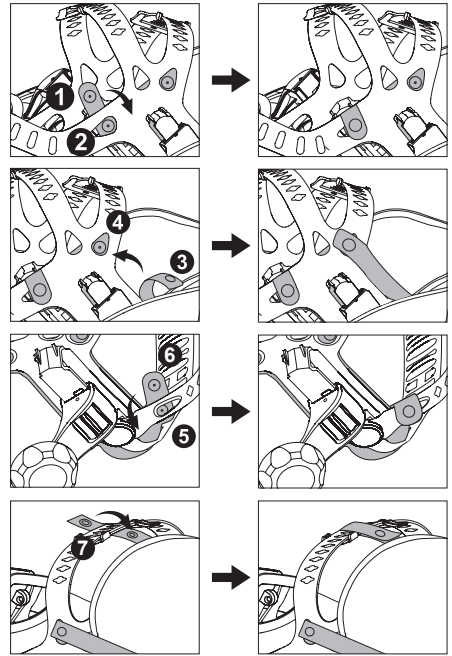


fig.13d



CLEANING

Wipe the helmet with a soft cloth. Regularly clean the filters. Do not use strong cleaning agents. 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:

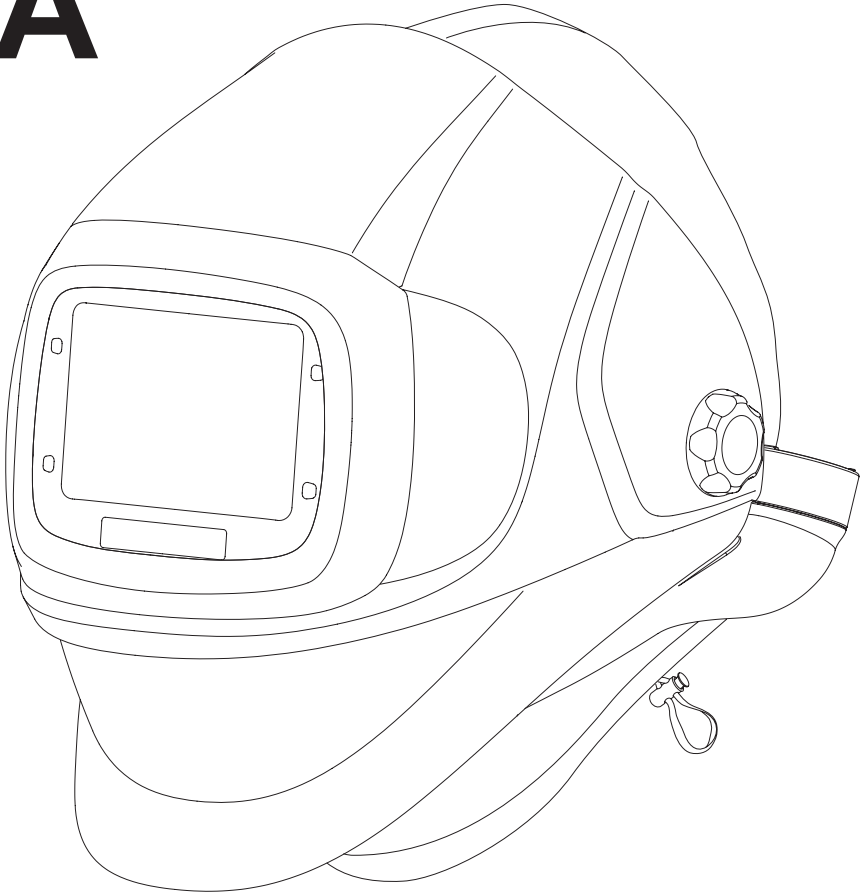
- The headband is not properly adjusted (Readjust the headband).

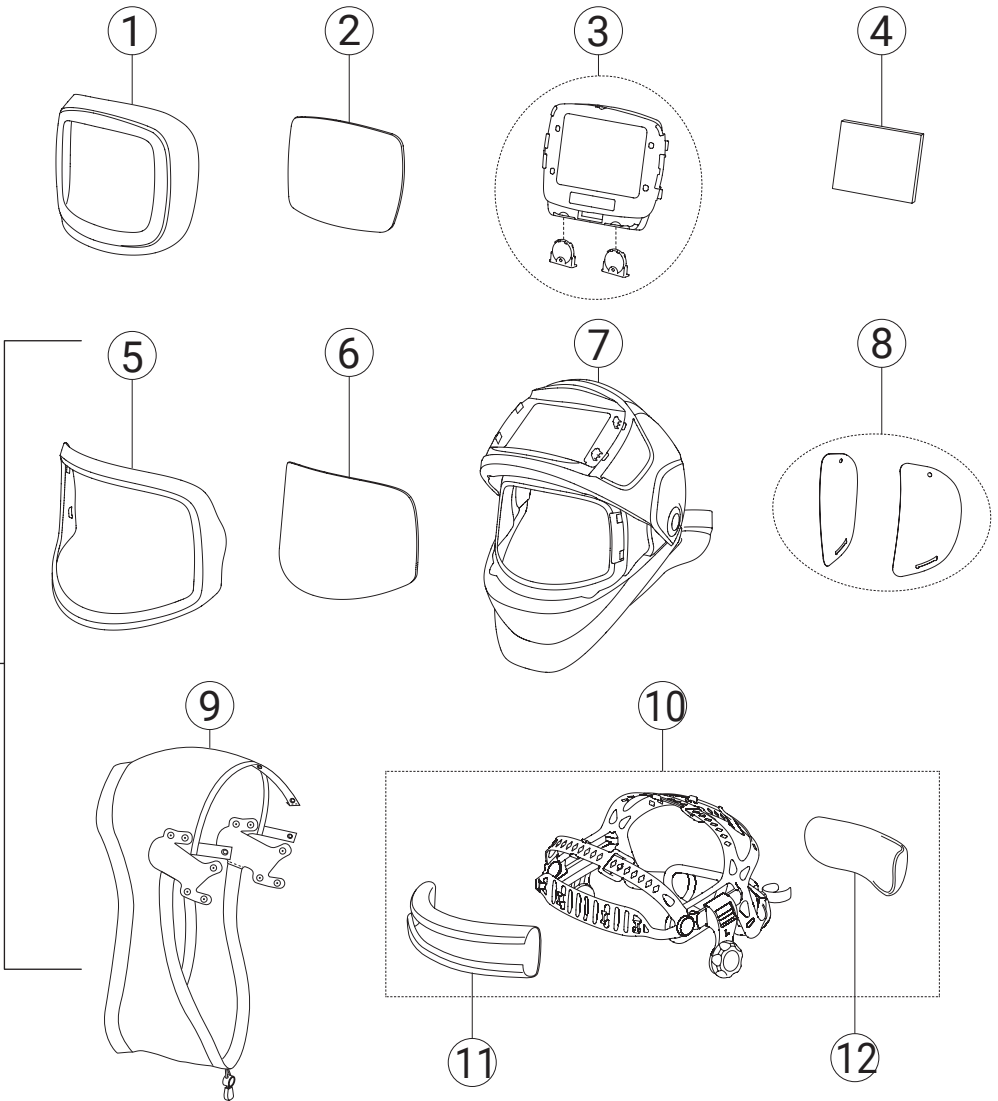
6. Specifications

Optical Class:	1/1/1/1
Field of View:	107 x 75 mm (4.21" x 2.95")
Pattern Size:	156 x 123 x 33 mm (6.14" x 4.84" x 1.30")
Arc Sensor:	4
Light Status:	DIN 4
Grinding Mode:	DIN 4
Cutting Shade:	Shade No. 5 to 8
Welding Protection:	Shade No. 9 to 13
Shade Control:	Internal, digital display control
On/Off:	Automatic on/off
Sensitivity Adjustment:	Low ~ High, digital display control
UV/IR Protection:	Always up to Shade DIN16
Power Supply:	Solar cell. Replaceable battery, 2 × CR2450 lithium batteries
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 ampere (DC); ≥ 2 ampere (AC)
Operating Temperature:	-10 °C ~ +55 °C (14 °F ~ 131 °F)
Storage Temperature:	-20 °C ~ +70 °C (-4 °F ~ 158 °F)
Helmet Material:	High impact nylon
Application Range:	Stick welding (SMAW); TIG DC&AC; TIG Puls DC; TIG Puls AC; MIG/MAG/CO ₂ ; MIG/MAG Puls; Plasma Arc Cutting (PAC); Plasma Arc Welding (PAW); Air Carbon Arc Cutting (CAC-A); Oxy-fuel welding (OFW); Oxygen cutting (OC); Grinding
Approved:	CE, EN ISO 16321-1:2022, EN ISO 16321-2:2021, ANSI Z87.1, Z94.3, AS/NZS 1338.1, EAC

7. Parts

A





- A1 PEWH5F-A1 Front lens holder
- A2 LVE5WH5 Front lens
- A3 PEWH5F-A3 Darkening filter
- A4 LVI5WH5 Inner lens
- A5 PEWH5F-A5 Grinding lens holder
- A6 GL5WH5F Grinding lens

- A7 PEWH5F-A7 Helmet with air channel
- A8 SL2WH5 Side lens cover
- A9 PEWH5F-A9 Face seal
- A10 PEWH5F-A10 Headband
- A11 PEWH5F-A11 Sweatband
- A12 PEWH5F-A12 Soft cushions

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 conformite - Dichiarazion di conformita- Declaracion 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
EWH5F-1/2	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

B.A.H. Valkenburg

