

# AUTO-DARKENING WELDING HELMET User's Manual

WH5617L-BLU

### **Product Features**

- · Equipped with LED Light
- Low temperature resistant, corrosion resistant, flame retardant
- TRUE COLOR vision on the work piece both before and during welding, results in a color realistic perception.
- Overall-process protection against ultraviolet (UV) and infrared (IR) radiation. WH5617L is equipped with lithium battery and solar cells that extend the life of the battery.
- The product is in full conformity with related ANSI, CE, CSA, AS/NZS safety standards.



# Technical **Specifications**

Optical Rating:	1/1/1/1						
Cartridge Size:	33 x 114 x 9 mm						
Viewing Area:	100 x 67 mm						
Sensors:	4						
Clear Shade:	3						
Dark Shade:	5-9/9-13						
Switching Time:	< 0.05ms at Room Temperature						
UV/IR Protection:	Up to DIN 16						

Shade Cont	rol:	Inside Inside					
Sensitivity Co	ntrol:						
Delay Cont	rol:	Inside 0.15-0.90s by dial knob					
Tig Amps Ra	ited:	≥ 2 amps					
Grinding	:	YES, Outside					
Power Supp	oly:	Solar Panel & Replaceable Lithium Batteries					
Batteries	:	2x CR2032					

#### **LED Headlamp Specifications**

Light Source:	High Power LED					
Capacity:	1100mAh					
Charging Time:	2 Hours					
Charging Input:	USB Type-C 5V 1A					
Operating Temperature:	14°F то 140°F					

Brightness	100 Lumen (High Power Mode) 50 Lumen (Low Power Mode) 100/50 Lumen (Auto Mode)
Run Time:	4 Hours (High Power Mode) 11 Hours (Low Power Mode)

# Warning

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WH5617L-BLU welding helmets are designed to protect the eyes and face from sparks, spatter and harmful radiation during welding. The welding helmets may only be used for welding and not for other purposes except oxy-acetylene, laser and gas welding procedures. Will not protect against severe impact hazards, including fragments from grinding disks, explosive devices or corrosive liquids.

Machine guards and appropriate protection must be used. Avoid work positions that could expose unprotected areas of the body to sparks spatter, direct and/or reflected radiation. Use adequate protection if exposure cannot be avoided.

If the auto-darkening filter is cracked, stop using the helmet: UV/IR protection is compromised, resulting in burns to the eyes and skin.

During the welding process, heat and radiation are being released.

FUMES AND GASES can be hazardous to your health.

- · Keep your head out of fumes.
- Provide proper ventilation. Keep fumes and gases away from your helmet area.

ARC RAYS can cause eye injury and sunburn.

- Always inspect helmet and filter lens to ensure they are working properly.
- · Check to see that the clear lens is clean and securely attached to the helmet.
- Always wear safety glasses/goggles under the welding helmet and protective clothing to protect
  your skin from UV radiation, burns and spatter.

Welding produces sparks and drops of molten metal that can spatter in all directions.



• Appropriate additional safety clothing must be worn to protect the rest of the body.

#### SHADE NUMBER

Recommended Shade Number According to EN169. Adopt a greater or smaller shade number pursuant to the field condition.

Welding Process		Arc Current(Amperes)															
	0.5 1 2.5 5 10 15 20 30 40 60 80 100 125 150 175 200 225 250 275 300 350 400 450 50								50 500								
SMAW							9	10			11		12			13	14
MIG(heavy)								10			11		12			13	14
MIG(Light)								10			11	12		1	3	14	15
TIG,GTAW					9		10	1	1		12	13	i	1	4		
MAG/CO <sub>2</sub>								10	1	1	12		13	3		14	15
SAW											10	11	1	2	13	14	15
PAC		11							12	12			13				
PAW	2.5 3 4 5 6 7 8 9 10 11 12						13 14			14		15					

#### MAINTENANCE

- Regularly inspect the helmet and replace any damaged parts.
- Replace the external/internal clear lensa if it is damaged.
- Do not immerse the filter in water or other liquids.
- Do not use solvents to clean the filter.
- Do not place any heavy tools/objects in or on the helmet.
- Keep the helmet away from flames.
- The helmet must not be dropped, filter lens may crack/damage
- Temperature range:
   In use: -5°C (+23°F) ÷ +55°C (+131°F)
  - In storage:  $-20^{\circ}$ C  $(-4^{\circ}$ F)  $\div +70^{\circ}$ C  $(+158^{\circ}$ F).
- Remove batteries when the helmet is NOT in use for prolong periods.
- Store the helmet in a way that does not allow its shape to deform.
- Do not disassemble the filter lens.
- · Use only original replacement parts, modifications will void the warranty and expose the operator to the risk of personal injury.

#### **CLEANING**

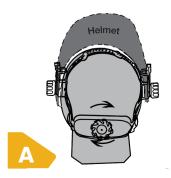
- Keep the filter, the sensors and the solar cell clean.
- To clean the lens and filter use a clean, soft cloth with mild detergent or neutral disinfectant.
- Do not use strong cleaning agents or solvents.

Failure to comply with the safety precautions can result in exposure to health risk or bodily injuries.

## **OPERATING INSTRUCTION**

- Check the front clear lens to make sure that they are clean, and that no dirt is covering the sensors.
- Inspect the welding helmet before each use for signs of wear or damage. Any scratched, cracked, or pitted parts should be replaced immediately before using to avoid personal injury.
- · Adjust headband so that the helmet is mounted as low as possible on the head and close to your face. Adjust helmet's angle when in the lowered position by pressing the side adjust button.
- Do not make any modifications to either the welding lens or helmet, other than those specified in this manual.

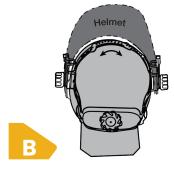
# Headgear Adjustment



#### **Headgear Adjustment**

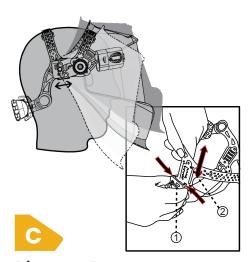
The helmet should be adjusted to cover the eyes and face effectively while welding. The position of the forehead band and rear headband can be adjusted to fit. Rotate the knob to adjust the tightness until it feels snug.

The front and rear headbands should be adjusted to cover the forehead and the backside of head. See figure A.



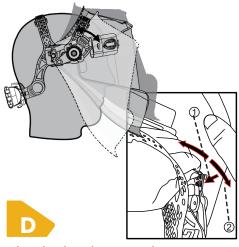
#### **Headgear Depth**

The depth of the headgear can be adjusted to the position that the headgear sits above your eyebrow. Tighten/loosen the two slotted straps to fit the top of your head. See figure B.



#### Distance Between Lens and Face

The distance from the lens can be adjusted by pinching the top and bottom of the sliders and move it simultaneously. There are 5 distance positions available for adjustment. See figure C.



#### **Tilt Limitation Setting**

The ideal helmet position is where your eyes are at 90° angle behind the lens. There are 5 settings available for adjustment. Adjust the pin to allow the helmet obtain the required tilt position. See figure D.

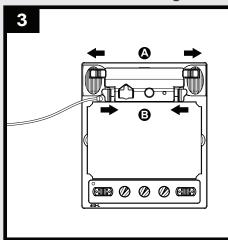
# STEPS TO DISASSEMBLE/ASSEMBLE THE HELMET

#### Removing the Frame



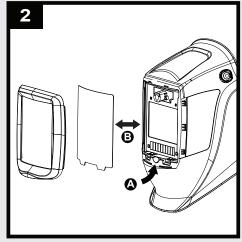
- Arrow indicates clip locations.
- Lift the raised edge with fingers to remove the frame.

#### Remove the LED Light



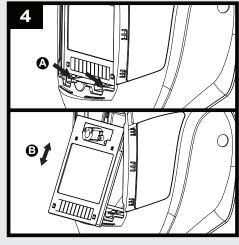
- Slide the 2 locking tabs outward, then push the lower 2 tabs inward.
- You can charge the battery while the light is in place, or remove the light to charge elsewhere. To continue using the helmet without the light, install the blank cover provided.

#### Replace the Clear Lens

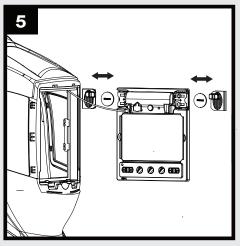


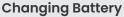
- Lift the old lens by using the bottom half-circle tab. (A)
- Install the new lens by inserting the left and right edge. (B)

#### Remove Filter Lens

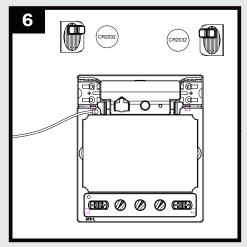


- Press the clip and remove the filter.
- To remove the lens, pull down on the 2 tabs below the solar cell. The filter lens should pop off easily.
- To install the filter lens, simply reverse the process.





Press and slide the battery cover simultaneously until open.



Install the mew CR2032 batteries, and replace the battery cover.



## **TROUBLESHOOTING**

#### **PROBLEM**

#### **POSSIBLE CAUSE**

#### SOLUTION

	The external clear lens of the filter is dirty or damaged	Change the external transparent protection					
The filter does not darken or is unstable when switching from light to dark and vice versa	The sensors are dirty	Clean the sensor surface					
	The level of the welding current level (sensitivity) is too low	Increase sensitivity					
	The batteries are low or not properly inserted	Replace the batteries or remove them and re-insert them properly					
	Battery terminals and the contact surfaces of the filter are dirty or oxidized	Clean both					
	The switch "WELD-GRIND" on the filter is in position "GRIND"	Place the switch in the "WELD"					
Slow switching	The ambient temperature is too low	Do not use at temperatures under -5°C (+23°F).					
	The clear lens of the filter is dirty or damaged	Clean the dirty components and replace the damaged ones					
Poor visibility	Not enough light in the surrounding area	Turn on LED light					
	The scale number is not set correctly, or the fixed scale number is not suitable	Where possible, select the correct number					
Filter darkening without arc being struck	Sensitivity is too high	Adjust sensitivity to the proper level					
Filter remains dark after completing a weld	Delay set too high Ambient light is too bright	Adjust delay. Reduce light level					

# Warranty

Jackco warrants all tools to the original purchaser against any manufacturing defect in material or workmanship for a period of one (1) year from the original date of purchase. If the defective equipment or tool is determined to be covered under this warranty, it shall be repaired or replaced at manufacturer's discretion without charge, provided that the equipment or tool must be returned with proof of purchase. This warranty shall not apply to damage due to accident, negligent use, lack of maintenance, abuse or applications other than the specific function the equipment or tool is designed for.