

AH7-220-0000

Auto-Darkening Welding Helmet

User Manual

AH7-220-0000 Auto-Darkening Welding Helmet

2016

WARNING

Please read all instructions before using the AH7-220-0000 Auto-Darkening Welding Helmet.

GENERAL INFORMATION

AH7-220-0000 Series Auto-Darkening Welding Helmets DO NOT protect against severe impact hazards, such as broken grinding wheels or abrasive discs, explosive devices or corrosive liquids. Machine guards or eye splash protection must be used when these hazards are present.

The auto-darkening welding filter is suitable for all Arc welding processes such as MIG, MAG, TIG, SMAW, Plasma Arc, and Carbon Arc.

This auto-darkening welding helmet is NOT recommended for "Overhead" welding applications, Laser welding or Laser cutting applications.

In the event of electronic failures, the welder remains protected against UV and IR radiation according to shade 16.

The auto-darkening welding filter should ALWAYS be used with original inner and outer cover lenses.

We are not responsible for any failure due to modifications of the welding.

Protection will be seriously impaired if unapproved modifications are made.

TECHNICAL SPECIFICATIONS

Model	AH7-220-0000
ADF Model	AF 220i
Viewing Field	92 x 42 mm /3.62" x 1.65"
Shade Control	Internal
Cartridge Size	110 x 90 x 9mm / 4.33" x 3.54" x 0.35"
UV/IR Protection	Permanent Shade DIN 16
Light State	Shade DIN 4
Dark State	Variable Shade 9 ~ 13
Sensors	2
Grinding	Shade DIN 4
Sensitivity Control	Knob Adjustable
Reaction Time	0.00004 sec (1/25,000)
Dark to Light	0.2/0.5 Seconds
Solar Cell	Yes
Battery Type	2 x CR 2032 (Replaceable)
Power On/Off	Fully Automatic
Operation Temp	-5°C to +55°C (23° F to 131° F)
Storage Temp	-20°C to +70°C (-4° F to 158° F)
Optical class	1/2/1/2
Standards	EN379 CE / ANSI Z87.1 / CSA Z94.3

*ATC Technology: Advanced Temperature Compensation Technology

*Power Off Delay: It can work normally in dark

Note: When stored in extremely cold temperature, the helmet should be warmed up to ambient temperature before welding.

DO

Ensure the front cover lens is mounted before using and the protective film on the lens cover is removed.

Ensure that the lens is clean and there is no dirt or spatter covering the 2 sensors at the front of the filter cartridge.

Inspect all parts for signs of wear or damage. Any scratched or cracked parts should be replaced prior to use.

DON'T

NEVER place the helmet on a hot surface.

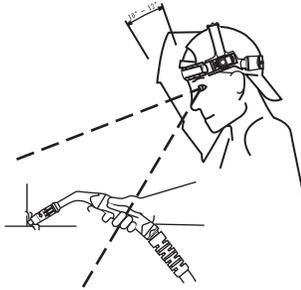
NEVER open or tamper with the filter cartridge.

OPERATION

1. ADJUST THE WELDING HELMET ACCORDING TO YOUR INDIVIDUAL REQUIREMENTS

The headband should be adjusted both in circumference and height.

The angle between face and helmet should also be adjusted and recommended to be 10°-12°.



2. ON/OFF

The solar unit automatically switches ON when exposed to light.

3. SELECT THE SHADE NUMBER

Rotate knob, select the dark state from 9 to 13.

The shade number can be selected by turning the knob on the side of the helmet.

The arrow on the knob indicates the shade setting.

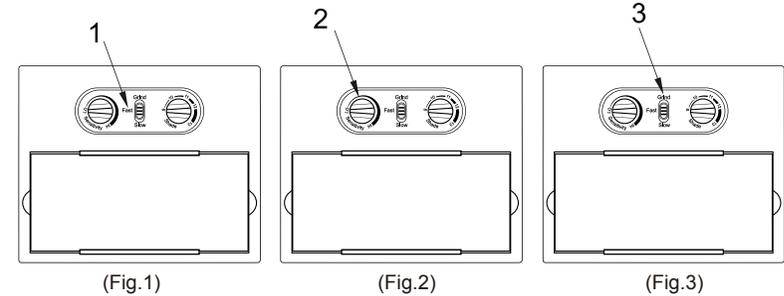
RECOMMENDED SETTINGS

WELDING PROCESS	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	500	
Covered Electrode						Shade 9		Shade 10		Shade 11			Shade 12			Shade 13		14							
MIG Plate Welding						Shade 10			Shade 11			Shade 12			Shade 13		14								
MIG Sheet Metal						Shade 10		Shade 11		Shade 12		Shade 13		Shade 14		15									
TIG	Shade 8		Shade 9		Shade 10		Shade 11		Shade 12		Shade 13		Shade 14												
MAG				Shade 8		Shade 9		Shade 10		Shade 11		Shade 12		Shade 13		Shade 14									
Arc Gouging						Shade 10			Shade 11		Shade 12		Shade 13		Shade 14		Shade 15								
Plasma Cutting						Shade 5		6		7		8		9		10		Shade 11		Shade 12		Shade 13		Shade 14	
Plasma Welding	4		5		6		7		8		9		Shade 10		Shade 11		Shade 12		Shade 13		Shade 14		Shade 15		

REFERENCE ANSI Z49.1-2005

4. LENS DELAY CONTROL

The lens delay control is used to adjust the time for the lens to switch to the clear state after welding. The delay is particularly useful in eliminating bright after-rays present in higher amperage applications where the molten puddle remains bright momentarily after welding. delay adjusting has two settings: slow (0.5 second) and fast(0.2 second) (Fig.1)



5. LENS SENSITIVITY CONTROL

Weld Mode (Fig.2)

Use control to make the lens more responsive to different light levels in various welding processes.

It may be necessary to adjust helmet sensitivity to accommodate different light conditions or if lens is flashing on and off. Adjust helmet sensitivity as follows:

Turn sensitivity control to lowest setting.

Move the toggle switch and make sure the switch is not at "Grind", then the helmet lens will darken.

Face the helmet in the direction of use, exposing it to the surrounding light conditions.

Gradually turn sensitivity setting clockwise until the lens darkens, then turn sensitivity control counterclockwise until slightly past setting where lens clears. Helmet is ready for use. Slight readjustment may be necessary for certain applications or if lens is flashing on and off.

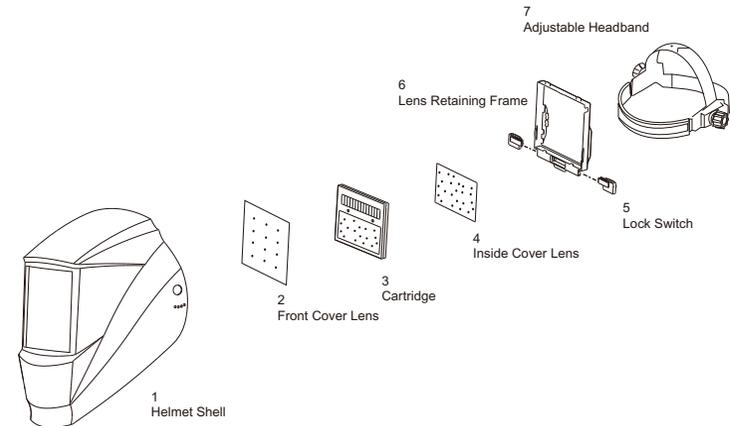
Note: Adjust helmet sensitivity in lighting conditions helmet will be used in.

Grind Mode(Fig.3)

To use in the Grind Mode, move the toggle switch to "Grind".

Note: Do not weld in the Grind mode; the lens will not darken

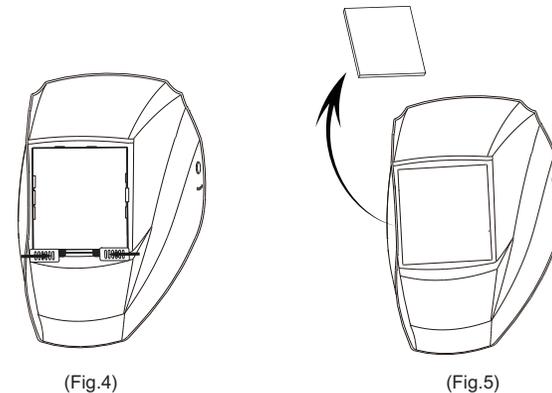
PARTS LIST



MAINTENANCE

Remove the front lens by pulling out the retaining frame by move the lock switch from the helmet. (Fig.4)

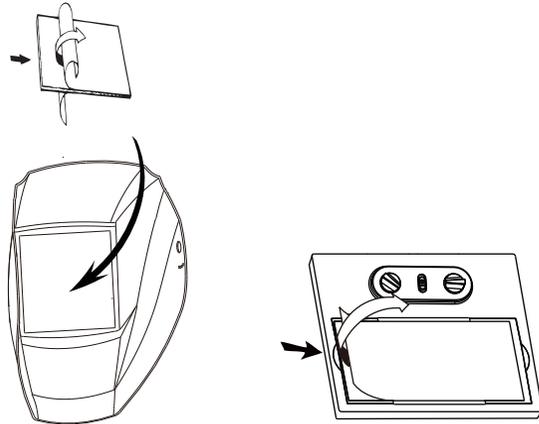
Take out the old cover lens.(Fig.5)



Make sure that the protective film is removed from the new cover lens. Place the new cover lens in the recess at the front of the helmet. (Fig.6)

Note: Do Not Use the helmet without the cover lens in place.

(Fig.7)

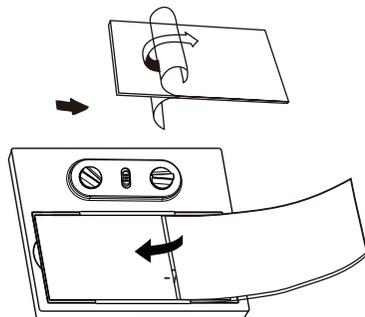


(Fig.6)

(Fig.7)

The new inner cover lens is assembled after the protective film is removed. Locate one of the sides inserting the edge under the hook at the side and bend the lens in the middle part and locate the lens under the hook at the other side.

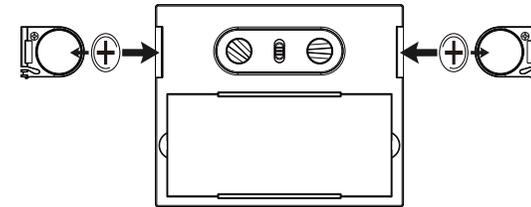
(Fig.8)



(Fig.8)

REPLACEMENT OF BATTERIES

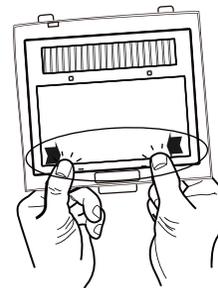
Carefully open battery compartments. Always replace both batteries at the same time. The compartments snap close. (Fig.9)



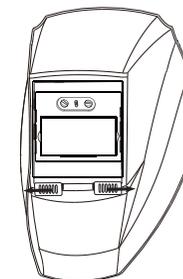
(Fig.9)

Install

Insert tabs of the front lens retaining frame under the two slots of the back lens retaining frame. Push the two corners on front lens retaining frame until it snaps into place. (Fig.10)



(Fig.10)



(Fig.11)

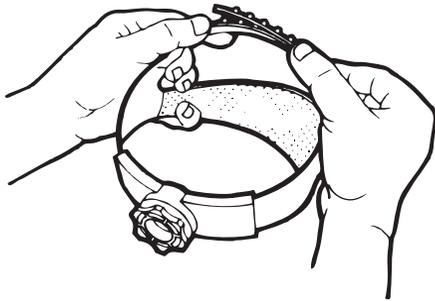
Insert tabs of the back lens retaining frame under the two slots of the helmet.
Push the lock switch until it snaps into right place. (Fig.11)

WARNING! Do not use the helmet and lens unless they are fully assembled.

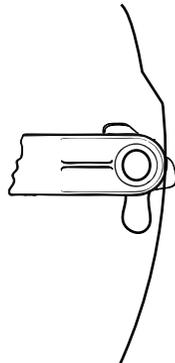
OPERATION

Adjust headband per personal preference. (Fig.12)

Adjust helmet's headband stop to get desired viewing angle. (Fig.13)

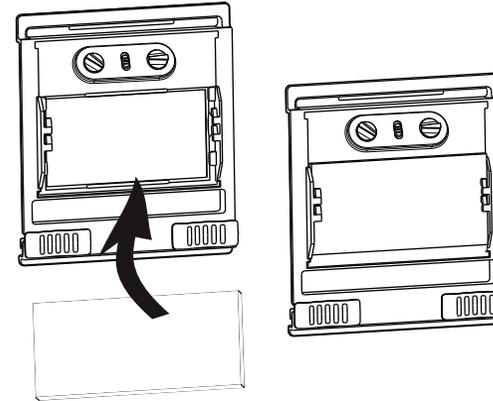


(Fig.12)



(Fig.13)

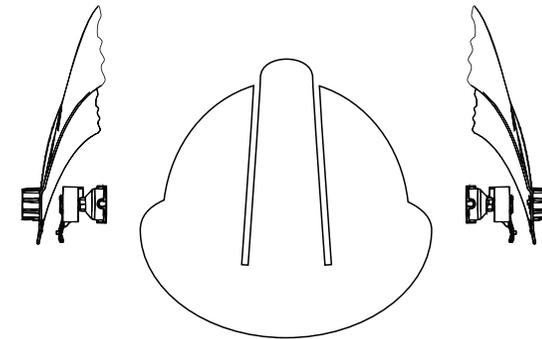
Insert the magnifying lens. (Fig.14)



(Fig.14)

NEW FUNCTIONS

Connect welding helmet with safety helmet. (Fig.15)



(Fig.15)

INSPECTION

1. Carefully inspect your Auto-Darkening Welding Filter regularly.
2. Cracked, pitted or scratched filter glass or vague cover lenses will badly impair protect function and they should be replaced immediately to avoid injury to the eyes.
4. Inspect the helmet frequently and replace worn or damaged parts.

CLEANING

Clean the helmet with mild soap and lukewarm water.

Clean the welding filter with a clean lint-free tissue or cloth,

Do not immerse the helmet into water.

Do not use solvents.

TROUBLE SHOOTING

IRREGULAR DARKENING

Headband has been set unevenly so the distance between the eyes and the lens is different from the left to the right side.

AUTO DARKENING FILTER DOES NOT DARKEN OR FLICKERS

Make sure that the toggle switch is at the right position.

Front cover lens is soiled, clean or replace it.

Photo sensors are dirty, wipe them clean with a soft lint-free cloth.

Welding current is too low, select the slow position on the filter and ensure the view of the weld is unobstructed.

Change to high sensitivity.

Replace the two Lithium Batteries.

POOR VISION

Ensure the cover lens and the filter cartridge is clean.

Ensure the shade number is correct and adjust accordingly.

Ensure ambient light is not too low.

WARRANTY

We warrants to the purchaser that the product will be free from defects in material and workmanship for the period of one year from the date of purchase. Our sole obligation under this warranty is limited to replacement or repairs.

This warranty does not cover product malfunctions or damages, which result from the product being tampered, misused or abused. We are not responsible for any indirect damages or injury, which arises out of the use of the product.