ArcOne®

USER INSTRUCTION MANUAL
Python Helmet and Variable Shade Auto-Darkening Filters

Python Welding Helmet

Variable Shade Filters

4000V

5000V

6000V

iDF48

ArcOne®

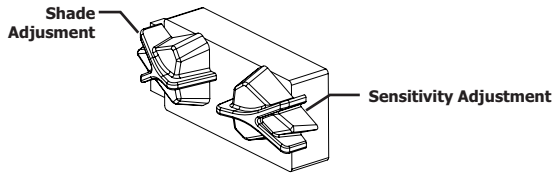## Products Which Improve Quality, Productivity, Safety & Performance

ArcOne® Auto-Darkening filters protect against harmful ultra-violet and infrared rays. All shades have maximum UV/IR protection. You can never burn your eyes due to optical radiation passing through the filter. User's eyes can be severely burned if welding with a damaged lens (cracked, pitted, etc.).

ANSI defines all welding helmets as secondary eye protection from optical radiation and impact. For complete safety, primary protection, such as spectacles or goggles, should be used in conjunction with welding helmets. Protective clothing and accessories such as leather bibs attached to the welding helmet will protect the user from spatter and optical radiation indirectly entering from areas behind the helmet.

ACGIH (American Conference of Governmental Industrial Hygienists) has established a TLV-TWA of 5mg/m3 for welding fumes. Welding fumes cannot be classified simply. The composition and quantity of both are dependent on the alloy being welded and the process and electrodes used.

Shade

Manually control dark shade with the shade knob located on the outside of the helmet. (See Figure 1)

Figure 1: External Controls

Sensitivity and Delay

These filters have arc detection sensitivity and delay. Delay mode normally used in most welding applications except spot welding. Longer delay can be used at very low amps (<20A) to ensure filter stays dark.

4000V, 4500V, 5500V and 5000V: Change sensitivity with external analog control (See Figure 1). Press Delay button +/- to change delay bars from 0.1 to 3.5 seconds (See Figure 2).

Fig. 2: LCD Readout
(4000V, 4500V, 5500V and 5000V)

6000V: Change sensitivity with external analog control (See Figure 1). Press Delay button to change delay bars from 0.1 to 2 seconds.

iDF81: Change sensitivity with external analog control. Sensitivity Level is not displayed on iDF81 LCD readout. Press Delay button to change delay bars from 0.1 to 3.5 seconds (See Figure 3).

Fig. 3: LCD Readout
(iDF81)

Grind Mode

4000V, 4500V, 5500V and 5000V: Turn the Sensitivity knob down until the LCD readout indicates Grind.
iDF81: Turn sensitivity knob counter-clockwise until it clicks and the LCD readout displays Grind. (***NOTE: Other modes will not work when in Grind Mode).
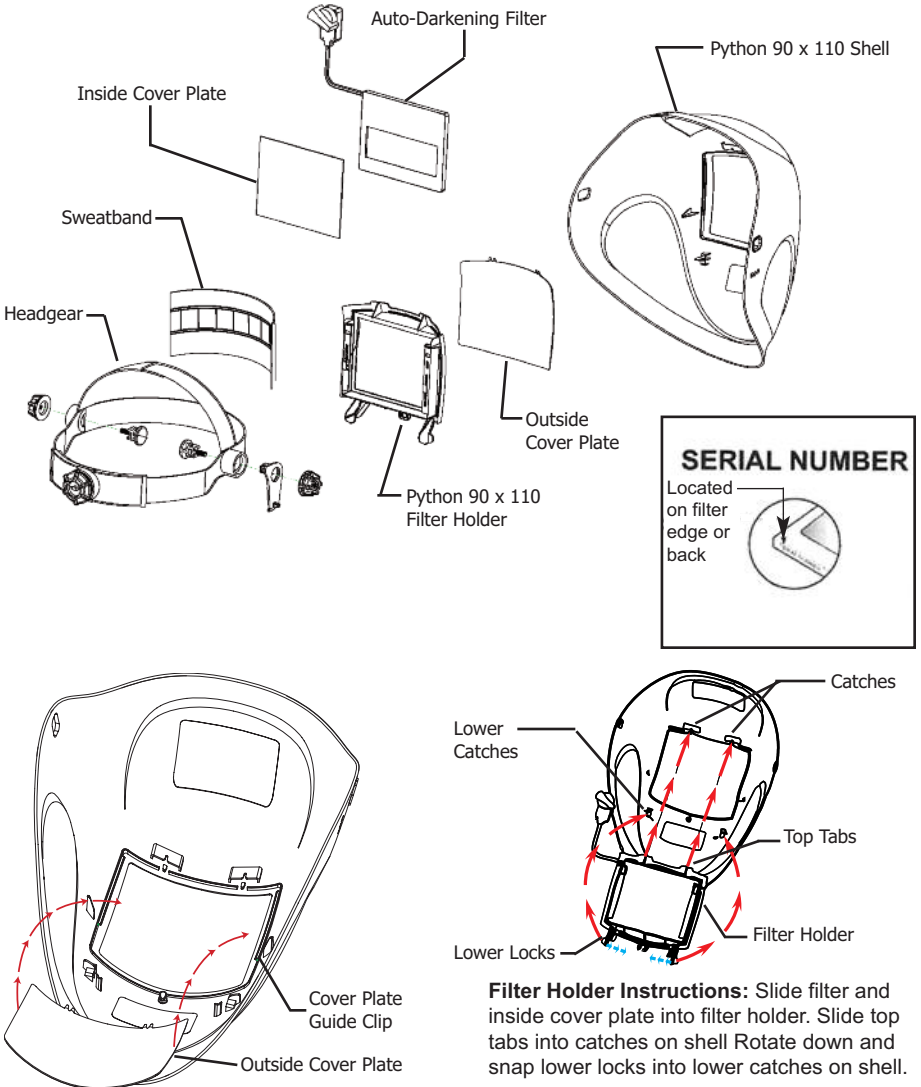
Intelligent Darkening Filter (iDF) Modes

There are three modes: Normal, Auto-Variable, & iTig. Switch modes by Pressing AND Holding down Mode button for two seconds. To Cycle modes continue depressing the Mode button.

Auto-Variable Mode: LCD displays "AUTO" (Fig. 4). Filter automatically responds to the intensity of the welding arc and sets the filter to the appropriate dark shade. The user can further adjust the dark shade up or down for comfort while the "(•)" flashes. The setting will be saved in a memory slot. This mode has 8 memory slots, one for each shade number 7 thru 14; i.e. shade 7 = memory 1, shade 8 = memory 2, etc. The user can reset all memory slots by Pressing and holding both Mode and Delay buttons for two seconds.

iTIG Mode: Upon entering iTIG mode, where LCD displays "TIG" icon and flashing "(•)" (Fig. 4) user first sets the lower desired shade while the "(•)" flashes. After approximately 5 seconds of not turning the shade knob the flashing stops and the user can then set the desired upper shade. The user can reset memory by Pressing and holding both Mode and Delay buttons for two seconds.

Python Helmet Assembly

Auto-Darkening Filter

Python 90 x 110 Shell

Inside Cover Plate

Sweatband

Headgear

Outside Cover Plate

Python 90 x 110 Filter Holder

SERIAL NUMBER

Located on filter edge or back

Catches

Lower Catches

Top Tabs

Filter Holder

Lower Locks

Cover Plate Guide Clip

Outside Cover Plate

Filter Holder Instructions: Slide filter and inside cover plate into filter holder. Slide top tabs into catches on shell Rotate down and snap lower locks into lower catches on shell.

- 2 -

Care and Maintenance

Your new filter requires virtually no maintenance other than periodic cleaning when lens becomes dirty or clouded from smoke. *ArcOne*® Auto-Darkening Filters are water-resistant and may be cleaned by using a soft cloth with soapy water solution, or standard window cleaner. Welding helmet may be cleaned with soft cloth and soapy water. By changing cover plates frequently you will extend the life of your filter and guarantee the best operation possible. Additional front and rear cover plates are available from your *ArcOne*® distributor. Do not submerge filter or welding helmet in water or solution. Store in original or similar packaging and store in a safe dry place away from direct heat between 14 - 100°F (-10 - 38°C).

iDF81: battery, located in the external control center will last 3-6 months depending on usage. Replace with AAA battery of same voltage (1.5 V).

WARNING! Using the wrong cover plates may damage your product, compromise UV/IR protection, and VOID WARRANTY. Use genuine *ArcOne*® replacement parts to ensure quality and fit.

Make sure there is no damage to the helmet shell including, but not limited to cracks, holes, and melting. Ensure that the springs holding the filter are not broken or corroded. Do not use the helmet if any of these conditions exist and contact your distributor for replacement parts. Use only replacement components as specified for each welding helmet in accordance with this user manual.

SPATTER DAMAGE IS NOT COVERED BY WARRANTY

Please use only *ArcOne*® 0.040" cover plates in these products.

NOTE: Change your cover plate when it loses its flexibility and/or becomes bowed or distorted. Clean any build-up from the area where the cover plate is retained.

LIMITED WARRANTY

ArcOne® warrants all auto-darkening filters listed in this manual against all manufacturing defects resulting from materials or workmanship for a period of 2 years from the date of purchase. Proof of purchase establishing the date of sale and filter serial number must be provided, should a warranty claim be submitted. The purchaser's only remedy under this limited warranty shall be limited to *ArcOne*® sole operation to repair, replace or refund (not to exceed the purchase price). This limited warranty is not transferable from the original purchaser to a secondary owner. *ArcOne*® shall in no event be liable or responsible for any injury, damage or loss resulting either directly or indirectly from the use or misuse of this product. This limited warranty is exclusive and is in lieu of any other warranty implied either oral or written. Please read the instruction manual carefully to avoid certain situations which may void this limited warranty.

In the unlikely event that the auto-darkening filter malfunctions, the following procedures are to be used to receive efficient service and repair: Determine if the product is damaged from abuse or misuse. Any pitted marks on the filter possibly from spatter, chips, dents, or cracks, etc., are some indications of operator abuse. In the case of operator abuse the warranty is void.

If you need to return your filter, follow the Return procedure below.

RETURN PROCEDURE

Please do not contact the distributor or retailer from whom you purchased the filter

1. Remove the Auto-Darkening filter from the helmet. Record the model number and serial number which are located on the filter edge or back. Also record the date of purchase from your sales receipt.
2. Contact *ArcOne*® Customer Service (800-223-4685) for a Return Tag Number.

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