

AUTO DARKENING WELDING HELMET SHADE 9-13 MODEL NO: S01001.V3

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



instruction manual

1. SAFETY

- **WARNING!** This helmet is not suitable for use with laser welding or cutting or for overhead welding applications.
- Ensure all workshop safety rules, regulations and conditions are complied with when using welding equipment. The helmet will not
 offer protection against misuse of workshop tools, equipment, or accessories.
- Maintain the helmet in good condition and protect cartridge from liquid and dirt contact. Regularly replace the protective lens and replace any damaged or worn parts. Use genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
 Ensure the front cover window is securely in place before use.
- ✓ Fit the helmet and adjust the head band so the helmet will sit as low and near to your face as possible.
- ✓ Use helmet only in temperatures ranging from -5°C to 55°C.
- Remove ill fitting clothing, remove ties, watches, rings and other loose jewellery.
- ✓ Maintain correct balance and footing.
- Ensure the floor is clear from obstructions, not slippery and wear non-slip shoes.
- ✓ Keep children and unauthorised persons away from the working area.
- WARNING! The helmet will only protect the eyes and face from radiation and sparks. It will not protect against explosive devices or corrosive liquids.
- **X DO NOT** use helmet for any purpose for which it is not designed.
- **X DO NOT** use helmet unless you have been instructed in its use by a qualified person.
- **X DO NOT** open or tamper with the shade cartridge.
- **X DO NOT** get the helmet wet or use in damp or wet locations.
- X DO NOT leave work place with helmet in lowered position, as bright light source may darken cartridge unexpectedly.
- **X DO NOT** place the helmet on a hot surface.
- X DO NOT use helmet without front cover window fitted. To do so will invalidate your warranty.
- ✓ Clean helmet (see section 5.4) and store the helmet in a safe, dry, childproof location.
- WARNING! Before welding always inspect the cartridge filter to ensure that it is not damaged. To test the filter prior to welding, direct the front of the cartridge filter to a bright light source which will cause the lens to darken. Then using your hand rapidly cover and uncover the sensor. The filter should lighten momentarily then return to a dark state.
- WARNING! DO NOT use the helmet if damaged or you suspect it may be faulty. (Contact Sealey Stockist).
- ▲ DANGER! DO NOT use if, at any time, the face plate in the cartridge FAILS to darken when exposed to a welding spark. Remove cartridge and return to your Sealey stockist for checking.
- ▲ Continued use of the product knowing that the auto darkening feature is NOT FUNCTIONING may DAMAGE YOUR EYES and CAUSE BLINDNESS.

2. INTRODUCTION

Welding helmet with infinitely adjustable shade control between 9-13. Complies with BS EN 379, BS EN 175 and DIN standards. Fully automatic switching from light to dark on striking arc. Shade is selected by a rotary knob on side of helmet. Grinding function enables user to grind without removing mask. Solar panel power supply - no batteries required. Features sensitivity and delay controls for switching light to dark. Contoured design helmet with adjustable headband for added comfort. Suitable for MIG, TIG and arc welding.

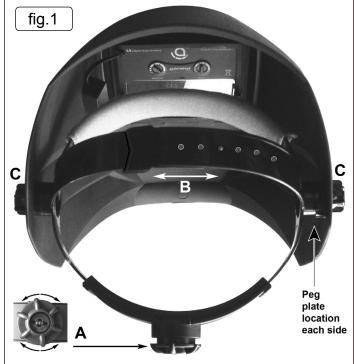
3. SPECIFICATIONS

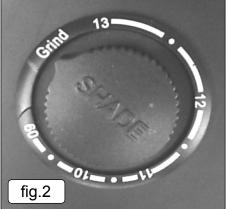
Model No:	S01001.V3
Shade Active:	9-13 Variable
Shade Inactive:	4
Viewing Area:	92 x 42mm
Grinding Function:	Yes
Operating Time light/dark:	0.1ms
Operating Temperature:	5°C to +55°C
Power:	Solar Cells

4. ASSEMBLY

4.1. Headband assembly needs to be fitted into the helmet. Refer to fig.A below. Ensure orientation is correctly followed.







5. INSTRUCTIONS

WARNING! Before using the helmet for welding ensure you have read and understood the safety instructions in Section 1.
 IMPORTANT: Before the mask can be used the headband must be adjusted to fit the user properly.

5.1. ADJUSTING THE FIT OF THE HELMET

- 5.1.1. The overall circumference of the headband can be made larger or smaller by pushing in and rotating the knob on the back of the headband (fig.1.A). This can be done whilst wearing the helmet and allows just the right tension to be set to keep the helmet firmly on the head without it being too tight.
- 5.1.2. If the headband is riding too high or too low on your head adjust the strap which passes over the top of your head. To do this release the end of the band by pushing the locking pip out of the hole in the band. Slide the two portions of the band to a greater or lesser width as required and push the locking pip through the nearest hole (fig.1.B).
- 5.1.3. Test the fit of the headband by lifting up and closing down the helmet a few times whilst wearing it. If the headband moves whilst tilting, re-adjust it until it is stable.

5.2. ADJUSTING HELMET TILT

5.2.1. Loosen knob C (fig.1) on both sides and gently pull up tabs to pull locating pins out of location holes (fig.1). Adjust angle of tilt by placing each one back in desired location hole. Ensure same hole is selected each side. Tighten knobs C (fig.1).

5.2.2. SELECTING SHADE LEVEL

5.2.3. Refer to the shade guide in Section 8 and adjust the knob on the side of the helmet to the correct setting (fig.2).

5.3. GRIND POSITION

5.3.1. Turn the shade knob (fig.2) anti-clockwise until it clicks into the grind position. When grinding is finished the knob must be turned back to the appropriate shade position before welding again. Failure to do this could result in damage to your eyes.

5.4. SELECTING DELAY TIME/RESPONSE TIME

5.4.1. The delay time in which it takes the lens to change from dark to light or vice versa can be varied from 0.1sec to 0.9 sec, this adjustment is carried out by turning the delay time knob on the cartridge (fig.3).

5.5. SENSITIVITY

- 5.5.1. For normal ambient light conditions set the sensitivity knob to the high setting (fig.3).
- 5.5.2. For conditions where there is an excess of light, which may affect the performance of the lens, turn the knob to the low setting.

6. MAINTENANCE

- 6.1. FITTING NEW CARTRIDGE (Refer to fig.3)
- 6.1.1. Pull off shade knob and undo potentiometer securing nut.
- 6.1.2. Remove 4 screws and frame.
- 6.1.3. Push the outer frame out of the front of the helmet to release the cartridge.
- 6.1.4. Fit new cartridge and refit parts in reverse order (see above).
- 6.2. REPLACING OUTER PROTECTIVE COVER LENS
- 6.2.1. Carefully unclip outer protective cover from the outside of the helmet.
- 6.2.2. Clip the new lens into the helmet.
- 6.3. REPLACING INNER PROTECTIVE COVER LENS
- 6.3.1. From inside the helmet, use finger recess in the top edge of the filter to lever up the lens and replace.

6.4. CLEANING

- 6.4.1. Clean helmet by wiping with a soft cloth. Clean cartridge surfaces regularly. Do not use solvent based cleaners.
- 6.4.2. Clean sensors and solar cells with methylated spirit using a clean cloth and wipe dry with a lint-free cloth.

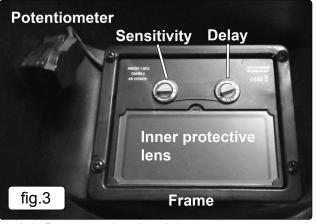
7. TROUBLESHOOTING

PROBLEM	ROBLEM CAUSE					
Irregular darkening or dimming.	The headband may have been unevenly set on the two sides of the helmet (unequal distances from the eyes to the shade cartridge).	Readjust the distance of the shade cartridge.				
Shade cartridge does	The sensors are soiled or obstructed.	Clean.				
not darken or flickers.	Front cover lens oiled or damaged.	Clean or replace.				
	Welding current too low.	Adjust weld amps.				
Poor vision.	Operative lenses and/or shade cartridge soiled.	Check, clean or replace.				
	Insufficient background lighting.	Adjust light.				
Slow response.	Operating temperature too low.	Do not use at temperatures below -5°C (14°F).				
Welding helmet slips.	Headband adjustments incorrect.	Refer to section 4.				

8. SHADE GUIDE

	CURRENT (AMPERES)																
WELDING	0.5	2.5	10	20	40		60	125		17	75 225 275 350		0	450			
PROCESS		1.0	5.0	15	30	5	0	100	1	50	200	250	3	00	400		500
Covered Electrode	Shade 9 S10 Shade 11 Shade 12 Shade 13							de 13	S14								
MIG Plate Welding	Shade 10 Shade 11 Shade 12 Shade 13 S1									S14							
MIG Sheet Welding	Shade 10 Shade 11 Shade 12 S13 S14								S15								
TIG	Shade 9 S10 Shade 11 S12 Shade 13 Shade 14																
MAG	Shade 10 S11 S12 Shade 13 S14 S15									S15							
Arc Gouging	Shade 10 S11 S12 S13 S14 S15									S15							
Plasma Cutting	Shade 11 Shade 12 Shade 13																
Plasma Welding	4	5	6 7	7 8	9	10	11	S12 Shade 13 Shade 14 S						S15			

Meaning of the markings on the filter:											
4	9	13	SEALEY	1	3	1	379				
Light state scale no.	Lightest dark state scale no.	Darkest state scale no.	Manufacturers identification.	Optical class.	Diffusion of light class.	Variation in luminence transmittance class.	Number of the applied standard.				



Parts support is available for this product. Please log on to www.sealey.co.uk, email sales@sealey.co.uk or telephone 01284 757500



ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.

Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. Please note that other versions of this product are available. If you require documentation for alternative versions, please email or call our technical team on technical@sealey.co.uk or 01284 757505.

Important: No Liability is accepted for incorrect use of this product.

Warranty: Guarantee is 12 months from purchase date, proof of which is required for any claim.

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