



INSTRUCTIONS FOR:
**WELDING HELMETS AUTO DARKENING
 SHADE 9-13**

MODEL NO'S: **PWH598 SERIES**

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions and maintained properly, 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.



Refer to instruction
Manual

1. SAFETY

- ❑ **WARNING! THIS HELMET IS NOT SUITABLE FOR USE WITH LASER OR GAS-WELDING.**
 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.
 The helmet will not protect against harmful gasses generated by the welding process.
 Maintain the helmet in good condition and protect cartridge from liquid and dirt contact.
 Replace the protective lens regularly and replace any damaged or worn parts. *Use genuine parts only. Non authorised parts may be dangerous and will invalidate the warranty.*
NEVER open or tamper with the shade cartridge.
 Select the shade level before use.
 Ensure the front cover lens is securely in place before use.
 Fit the helmet and adjust the head band so the helmet will sit as low and near to the face as possible.
 Use helmet only in temperatures ranging from -5°C to 55°C (23°F to 131°F).
 The eye protective plate in the helmet is **NOT** unbreakable. The helmet will not protect you against severe impact hazards
 The helmet will only protect the eyes and face from radiation and sparks.
 Remove ill fitting clothing, remove ties, watches, rings, and other loose jewellery.
 Maintain correct balance and footing. Ensure the floor is not slippery and wear non slip shoes.
 Keep children and unauthorised persons away from the working area.
- ❑ **WARNING! DO NOT** use the helmet if damaged or you suspect it may be faulty.
DO NOT use helmet unless you have been instructed in its use by a competent person.
DO NOT get the helmet wet or use in damp or wet locations.
DO NOT leave work place with helmet in lowered position, as bright light source may darken cartridge unexpectedly.
DO NOT place the helmet on a hot surface.
DO NOT use helmet without front cover lens and frame fitted. To do so will invalidate the warranty.
 Clean helmet (see section 5.4) and store the helmet in a safe, dry, childproof location.
 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 the hand rapidly cover and uncover the sensor. The filter should lighten momentarily then return to a dark state.
- ▲ **DANGER!** If, at any time, the face plate in the cartridge fails to darken when exposed to a welding spark, **DO NOT USE.** Remove cartridge and return to the dealer for checking. Continued use of the product knowing that the auto darkening feature is not functioning may damage the eyes and cause blindness.

2. INTRODUCTION

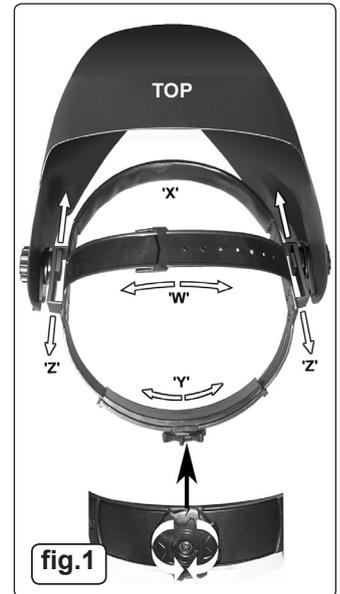
Welding helmet with infinitely adjustable shade control between 9-13. Complies with BS EN 379, BS EN 175 and DIN standards. Fully automatic switching from light to dark on striking arc. Shade is selected by a rotary knob on side of helmet. Grinding function enables user to grind without removing mask.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

3. SPECIFICATION

Model No:	PWH598
Shade Active:	9-13 Variable
Shade Inactive:	4
Grinding Function:	Yes
Viewing Area:	92 x 42mm
Operating Time Light/Dark:	0.04ms
Operating Temperature:	-5° to 55°C
Power:	Solar Cells
Weight:	490g

4 OPERATION

- ❑ **WARNING!** Before using the helmet for welding ensure you have read and understood the safety instructions in Section 1.
- 4.1. The helmet comes ready assembled but before it can be used it must be adjusted to fit the user properly and set up for response time, sensitivity and shade level.
- 4.2. **ADJUSTING THE FIT OF THE HELMET.** The overall circumference of the headband can be made larger or smaller by rotating the knob on the back of the headband. (See adjustment 'Y' in fig.1) 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.
- 4.3. If the headband is riding too high or too low on the head adjust the strap which passes over the top of the 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 (See adjustment 'W' in fig.1)
- 4.4. 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.
- 4.5. **ADJUSTING DISTANCE BETWEEN HELMET AND FACE.** To adjust the distance between the helmet and the face in the down position loosen the tilt knobs on either side of the helmet and slide it nearer to or further from the face (see adjustment 'Z' in fig.1) It is important that the eyes are each the same distance from the lens otherwise the darkening effect may appear uneven. Re-tighten the tilt knobs when adjustment is complete.
- 4.6. **SELECTING SHADE LEVEL.** Select the shade level required according to the welding process used by referring to the "Shade Guide" below for settings. Turn the shade control knob on the side of the helmet to the shade number required.

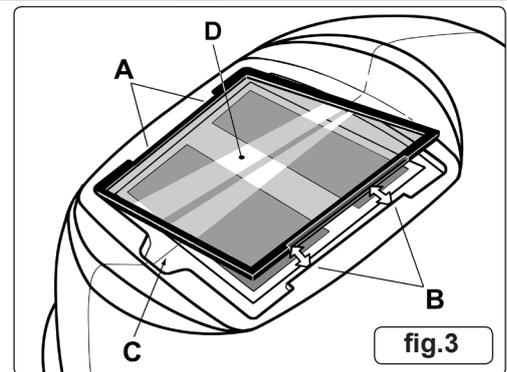


SHADE GUIDE	ARC CURRENT (AMPS)													
	0.5	2.5	10	20	40	80	125	175	225	275	350	450		
WELDING PROCESS	1	5	15	30	60	100	150	200	250	300	400	500		
SMAW shielded metal arc welding					9	10	11		12		13			
MIG on heavy metals								10	11	12	13			
MIG on light alloys								10	11	12	13			
TIG,GTAW gas tungsten arc welding			9	10	11	12	13							
MAG/CO ₂ metal active gas						10	11	12	13					
SAW shielded semi-automatic arc welding								10	11	12	13			
PAC plasma arc cutting								11	12		13			
PAW plasma arc welding			9	10	11	12	13							

- 4.7. **SELECTING DELAY TIME.** When welding ceases the viewing window changes back automatically but with a pre-set delay to compensate for any bright afterglow on the workpiece. The delay time/response can be adjusted using the control on the back of the shade cartridge. (fig.2)
- 4.8. **SENSITIVITY.** The sensitivity can be adjusted using the control on the back of the shade cartridge. The 'high' setting is the normal setting for everyday use. Where the operation of the mask is disturbed by excess light or another welding machine close by, use the 'low' setting (fig.2).
- 4.9. The helmet is now ready to use. The shading may be adjusted during use by means of the shade control situated on the outside of the helmet.

5. MAINTENANCE

- 5.1. **REPLACING FRONT COVER LENS.** Prise the bottom edge of the cover lens frame and flex the frame upwards until it releases from one edge (fig.3.C). Remove the protective film from the new lens (fig 3.D) and press it into the lens frame. Hook the frame under the side retaining lip (fig.3.A) making sure that it is the right way up. Press on the other side of the frame to snap it under the edge (fig.3.B).
- 5.2. **REPLACING THE CARTRIDGE.**
 - 5.2.1. Pull the knob from the shade control and remove the nut from the spindle. Withdraw the switch unit from the helmet.
 - 5.2.2. Release the cartridge by removing the four screws holding the frame (fig.4).
 - 5.2.3. Refitting is the reverse of 5.2.1 and 5.2.2.

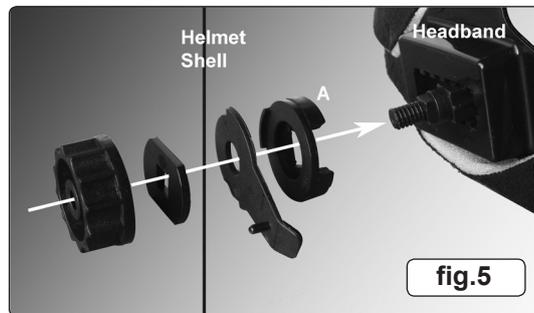


5.3. REPLACING THE HEADBAND ASSEMBLY.

- 5.3.1. Take note of the order in which the headband lock components are removed .
- 5.3.2. Note that the bushes 5.A. are handed, with their orientation marked on them.
- 5.3.3. Reassemble as in fig.5.

5.4. CLEANING

DO NOT use abrasive or solvent cleaners; clean with a damp, soapy cloth.



Environmental 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 dispose of it according to local regulations.

Parts support is available for this product. To obtain a parts listing and/or diagram, please log on to www.sealey.co.uk, email sales@sealey.co.uk or telephone 01284 757500.

NOTE: It is our policy to improve products continually and as such we reserve the right to alter data, specifications and component parts without prior notice.

IMPORTANT: No liability is accepted for incorrect use of this product.

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



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