



INSTRUCTIONS FOR: AUTOMATIC WELDING HELMET

Model: **SWH189**

Thank you for purchasing a Sealey Safety 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 AND CAUTIONS. USE THIS 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. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.

1. SAFETY INSTRUCTIONS

1.1. GENERAL SAFETY

- WARNING!** Ensure the front lens, filter(s) and rear lens are securely in place before use.
- WARNING!** *This helmet is not suitable for use when laser or gas welding.*
- WARNING! DO NOT** use the helmet if damaged or thought to be faulty. (Contact Service Agent).
- WARNING!** The helmet will not offer protection against mis-use of workshop tools, equipment or accessories.
- WARNING!** The eye protection plate in the helmet is **NOT** unbreakable. Helmet will not protect against severe impact hazards such as, (**but not limited to**), fragmenting abrasive discs/grinding wheels, stones and other grinding tools, explosive devices or corrosive fluids.
- WARNING!** The helmet will only protect the eyes and face from radiation and sparks.
- DO NOT** use helmet unless you have been instructed in its use by a qualified person.
- DO NOT** open or tamper with the automatic cartridge.
- DO NOT** get the helmet wet or use in damp or wet locations.
- DO NOT** leave work area with helmet in lowered position, as bright light source may darken cartridge unexpectedly.
- DO NOT** place the helmet on a hot surface.
- Ensure all workshop safety rules, regulations, and conditions are complied with when using welding equipment.
- Maintain the helmet in good condition and protect cartridge from liquid and dirt contact.
- Regularly replace the protective front and rear lenses and replace any damaged or worn parts. *Use genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.*
- 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 -10° C (+14°F) to + 70°C (+158°F).
- 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.

1.2. PERSONAL PRECAUTIONS

- Remove ill fitting clothing, remove ties, watches, rings, and other loose jewellery.
- Clean helmet (see Section 6) and store in a safe, dry, childproof location.
- Ensure there is another person within sight close enough to come to your aid should a problem arise when working
- DANGER! If, at any time, the automatic cartridge FAILS to darken when exposed to a welding arc, DO NOT USE. Remove cartridge and return to your dealer for service/inspection. Continued use of the product knowing that the auto darkening feature is not functioning may damage your eyes and cause blindness. Continued use of the helmet which is not functioning will invalidate the warranty and could prohibit a successful claim on any insurance policy.**

2. INTRODUCTION & SPECIFICATION

2.1. Introduction

The SWH189 Automatic Welding Helmet is supplied with an automatic cartridge. With the electronic cartridge installed solar cells will automatically darken the eye shade when the arc is struck.

2.2. Specification


Light transmittance, automatic cartridge	Light state - shade 3. Dark state - shade 10
plus optional shade 1 filter	Light state - shade 4. Dark state - shade 11
Operating temperature	-10° C (+14°F) to + 70°C (+158°F).
Helmet material	High-impact plastic, stability of shape up to 220°C/428°F
UV/IR protection (all cartridge states)	Maximum
Auto. response (light to dark @ room temp)	0.8ms
Auto. response (light to dark @ +55°C/131°F)	0.3ms
Auto. response (dark to light)	0.2 to 0.3 s
Viewing area	92 x 35mm (3.62 x 1.38")
Cartridge size	50.8 x 108 x 5.3mm (2 x 4.25 x 0.21")
Weight	0.3kg
Energy source	Solar cells



Declaration of Conformity We, the sole importer into the UK, declare that the product listed here is in conformity with the following standards and directives. The construction file for this product is held by the Manufacturer and may be inspected, by a national authority, upon request to Jack Sealey Ltd.

Automatic Welding Helmet
Model SWH189

BS EN 175 : 1997
BS EN 169 : 2002
BS EN 379 : 1994

Signed by Mark Sweetman  16th July 2003

For Jack Sealey Ltd. Sole importer into the UK of Sealey Safety Products

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.

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

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

INFORMATION: For a copy of our latest catalogue and promotions call us on 01284 757525 and leave your full name and address including your postcode.

3. CONTENT & ASSEMBLY

3.1. Contents

- 3.1.1. Check contents against the list below and in the case of missing or damaged items contact your supplier immediately.
- Face mask with automatic cartridge filter, front and clear rear cover lens fitted, fig.1.
 - Headband/harness assembly, fig.2. • Square section pivot bolt (2), fig.3. • Spacer(2), fig.4.
 - Adjustment back plate, fig.5. •Nut (2), fig.6. •Shade 1 Filter (not shown).

Fig 1



Fig 2



Fig 3



Fig 4



Fig 5



Fig 6



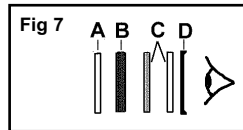
3.2. Assembly

- ❑ **WARNING!** Ensure the automatic cartridge is fitted with the solar cells and sensor facing toward the front of the face mask and towards the top.

- 3.2.1. The face mask is supplied with the front cover lens, automatic filter and rear cover lens in place, which will provide shade 10 protection. If shade 11 protection is required, release the wire retaining clip at the base of the filter stack, remove the rear cover lens, fit the shade 1 filter and secure the lens stack using the wire retaining clip.

Note: For reference, fig.7. shows the lens/filter stack.

- A - Front Cover Lens
- B - Automatic Cartridge
- C - Shade 1 Filter or Rear Cover Lens
- D - Retaining Clip

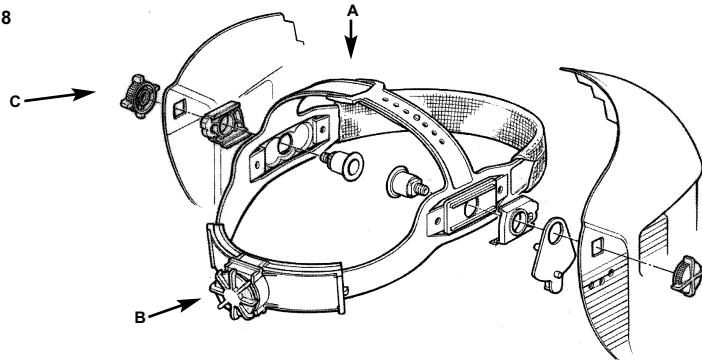


- 3.2.2. Assemble the helmet as shown in, fig.8.

- 3.2.3. Ensure the right hand spacer is fitted with the cutout facing the front of the mask and the left hand spacer is fitted facing the rear of the mask.

- 3.2.4. Ensure the locating pin on the adjustment back plate locates in one of the three angle adjustment holes in the helmet and that the adjustment tab faces away from the side of the helmet.

Fig 8



4. INSTRUCTIONS FOR USE

- ❑ **WARNING!** Before use, ensure that you read, understand and apply Section 1 safety instructions.

- 4.1. Check that the front cover lens, automatic filter and rear cover lens are correctly installed and that the retaining clip is securely in place. See Section 3.2.
- 4.2. Adjust the headband, fig.8.A. so the helmet is seated on the head as low as possible.
- 4.3. Push in and then rotate the headband knob at the rear, fig.8.B. until the headband and sweat band sit firmly but comfortably in place. Release knob to lock selected adjustment.
- 4.4. Adjust left hand pivot knob fig.8.C so helmet will stay in any position, but can be easily rotated by hand.
- 4.5. Face mask angle may be altered by lifting the adjustment tab and relocating the pin in one of the other holes in the side of the face mask.

5. PROBLEM SOLVING

- ▲ **DANGER!** If, at any time, the automatic cartridge **FAILS** to darken when exposed to a welding arc, **DO NOT USE.** Remove cartridge and return to your dealer for service/inspection. Continued use of the product knowing that the auto darkening feature is not functioning may damage your eyes and cause blindness. Continued use of the helmet which is not functioning will invalidate the warranty and could prohibit a successful claim on any insurance policy.

PROBLEM	CAUSE(S)	CORRECTION
SHADE CARTRIDGE DOES NOT DARKEN OR FLICKERS.	The sensors are soiled or obstructed. Front cover lens soiled or damaged. Welding current too low. Solar cells inactive	Clean Clean or replace Adjust welding current Expose to daylight for 10 mins. and retest
POOR VISION	Lenses and/or filters soiled. Insufficient ambient light.	Check, clean or replace Illuminate work place
SLOW RESPONSE	Operating temperature too low	Do not use at temperatures below -10° C (+14°F)
WELDING HELMET SLIPS	Headband not adjusted correctly.	Readjust helmet, refer to Section 4.

6. MAINTENANCE

6.1 Replacing front/rear lens/filters/cartridge.

- ❑ **WARNING!** Ensure the automatic cartridge is fitted with the solar cells and sensor facing forward of the face mask and towards the top.

- 6.1.1. Release the spring retaining clip and remove lens stack.
- 6.1.2. Replace damaged/faulty items ensuring the filter stack conforms to fig.7.
- 6.1.3. Refit the lens stack into recess of helmet and engage spring retaining clip.
- 6.1.4. If required, place shade1 filter behind cartridge.

Note: If shade 1 filter is not used clear rear cover lens **must** be fitted.

6.2. Cleaning

- 6.2.1. Clean the helmet by wiping with a soft clean cloth. Clean the cartridge surfaces regularly but do not use strong cleaning solutions.
- 6.2.2. Clean the sensors and solar cells with methylated spirit and a clean cloth and wipe dry with a lint-free cloth.

7. PARTS LIST

MIG/EW200R	Cover lens, front
MIG/EW201R	Shade 1 filter (for use with automatic cartridge)
SWH099/ICL	Cover lens, rear (for use with automatic cartridge)
SWH189	Automatic cartridge plus shade 1 filter and rear cover lens.