



DRAPER[®]

SOLAR POWERED AUTO-VARIOSHADE WELDING & GRINDING HELMET

19730



CE

These instructions accompanying the product are the original instructions. This document is part of the product, keep it for the life of the product passing it on to any subsequent holder of the product. Read all these instructions before assembling, operating or maintaining this product.

This manual has been compiled by Draper Tools describing the purpose for which the product has been designed, and contains all the necessary information to ensure its correct and safe use. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product.

Whilst every effort has been made to ensure the accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

1. TITLE PAGE

1.1 INTRODUCTION:

USER MANUAL FOR: Solar Powered Auto-Variosshade Welding & Grinding Helmet

Stock No: 19730

Part No: WSP684

1.2 REVISIONS:

Date first published April 2018.

As our user manuals are continually updated, users should make sure that they use the very latest version.

Downloads are available from: <http://drapertools.com/manuals>

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1.3 UNDERSTANDING THIS MANUALS SAFETY CONTENT:

WARNING! – Information that draws attention to the risk of injury or death.

CAUTION! – Information that draws attention to the risk of damage to the product or surroundings.

1.4 COPYRIGHT © NOTICE:

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DECLARATION OF CONFORMITY	ENCLOSED

3. GUARANTEE

3.1 GUARANTEE

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact:

Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England.

Telephone Sales Desk: (023) 8049 4333 or:

Product Helpline (023) 8049 4344.

A proof of purchase must be provided.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee period covering parts/labour is 12 months from the date of purchase except where tools are hired out when the guarantee period is 90 days from the date of purchase. The guarantee is extended to 24 months for parts only. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

Note: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the guarantee period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights.

Draper Tools Limited.

4. INTRODUCTION

4.1 SCOPE

Welding helmet with solar powered automatic shading facilities when arc is struck. Also features a dedicated grinding setting.

4.2 SPECIFICATION

Stock no	19730
Part no	WSP684
Welding/Grinding filter	Permanent protection against UV and IR radiation
Viewing area	110 x 90mm
Power supply	Solar cells - plus 2x AAA battery
Shades	9 - 13EW
Response time - (Light to dark)	1/200000sec (0.4ms)
(Dark to light) Short	0.1s
Long.....	1.0s
Sensitivity control	Rotary dial
Operating temperature	-5°C to +55°C
Weight (nett)	480g

4.3 HANDLING AND STORAGE

Care must still be taken when handling and lifting. Dropping this product will have an effect on the accuracy and may also result in personal injury. This product is not a toy and must be respected.

The environment will have a negative result on its operation if you are not careful. If the air is damp, components will rust. If the product is unprotected from dust and debris; components will become clogged: And if not cleaned and maintained correctly or regularly the product will not perform at its best.

5. HEALTH AND SAFETY INFORMATION

5.1 GENERAL SAFETY INSTRUCTIONS FOR WELDING HELMETS

- Severe burns are possible with a damaged lens (cracks, pits and holes etc.). Do not use damaged lenses.
- Optical radiation can possibly enter in from behind the helmet from other welders welding in the immediate area.
- This helmet is not designed for oxyacetylene, laser or very low amperage welding applications. (Arc detection may be impaired due to amperage, distance from the arc, welding copper, frequency, electrode type, shielding gasses and lighting conditions).
- This helmet is not designed to protect against severe impact, explosives or fragments from spinning wheels on abrasive discs.
- Do not weld in the light state.
- If filter fails to turn dark. Immediately stop welding.
- Do not use in an excessive heat environment.
- Ensure that the sensors are kept clean.

6. TECHNICAL DESCRIPTION

6.1 IDENTIFICATION



7. UNPACKING AND CHECKING

7.1 PACKAGING

Carefully remove the product from the packaging and examine it for any sign of damage that may have happened during shipping. Lay the contents out and check them against the parts shown below. If any part is damaged or missing; please contact the Draper Helpline (the telephone number appears on the Title page) and do not attempt to use the product.

The packaging material should be retained at least during the guarantee period: in case the product needs to be returned for repair.

Warning! Some of the packaging materials used may be harmful to children. Do not leave any of these materials in the reach of children.

If any of the packaging is to be thrown away, make sure they are disposed of correctly; according to local regulations.

8. PREPARING THE HELMET

8.1 COMFORT AND FIT ADJUSTMENTS - FIG. 1

Push and move strap (5) to obtain correct height.

Turn (4) for helmet angle adjustment.

Push and turn (7) to vary head size, pull knob again to lock position.

Loosen knob (4) to adjust distance from face/eyes.

8.2 BEFORE FIRST USE

Tear off the cover lens' screen film on both sides of the filter cartridge before using the helmet.

Adjust and select the desired shade no. according to the type of welding and current of weld to suit your requirements.

Adjust the upper head band (5) and retaining band (7) to achieve a stable fit remembering to pull out the locking knob on the retaining band to fix the position.

The helmet face shield can be adjusted further away or closer to the users face, this is achieved by loosening knobs (4) and sliding the face shield forwards or backwards. When tightening these knobs back up adjust the tension just enough to allow the face shield to remain in the raised position due to the friction of these knobs.

8.3 PRODUCT CHARACTERISTICS

When arc is struck, Auto-darkening filter will turn from a clear state to a dark state, response time is less than 0.4ms.

The high performance of the Auto-Darkening filter provides the user's eyes and face full protection against UV and IR radiation during the entire welding process. The UV/IR protection level is up to shade 16 (DIN), welding shade for electric welding is 9 - 13EW. This product is in full conformity with related DIN & EN safety standards.

This helmet has a dedicated grind setting on it's selection dial to provide protection during grinding operations.

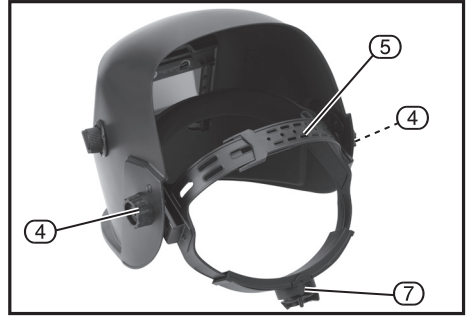


FIG.1

8. PREPARING THE HELMET

8.4 DARKER SHADE SELECTION - FIG. 2

Select the shade level according to the welding process and the value of welding current by turning the potentiometer knob on the left side of the helmet.

The shade number can be manually set between DIN9 to DIN13. Select a shade number by turning the shade adjustment knob until the arrow points to the required setting, see shade guide table below. For protection during grinding operations, set the selection dial to "grind".

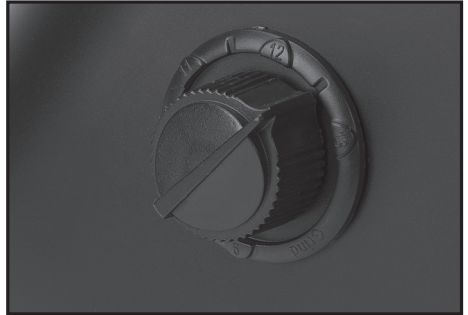


FIG.2

8.5 SENSITIVITY SELECTION - FIG. 3

According to your operational conditions, you can select suitable setting to meet your requirements at the TIG welding or other small electric ARC welding can choose high sensitivity.



FIG.3

8.6 TEST BUTTON - FIG. 4

Press the test button to check the welding filter is functioning correctly before use.

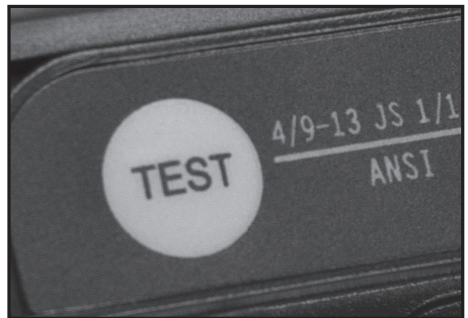


FIG.4

8. PREPARING THE HELMET

8.7 SHADE GUIDE TABLE:

Welding Process	ARC Current (Amperes)														
	0.5	2.5	10	20	40	80	125	175	225	275	350	450			
SMAW						9	10	11	12	13					
MIG (heavy)							10	11	12	13					
MIG (light)							10	11	12	13	14				
TIG, GTAW			9	10	11	12	13	14							
MAG/CO2						10	11	12	13	14	15				
SAW								10	11	12	13	14	15		
PAC								11	12	13					
PAW			8	9	10	11	12	13	14	15					

Note:

- SMAW - Shielded Metal Arc Welding.
- MIG (heavy) - MIG on heavy metals.
- MIG (light) - MIG on light alloys.
- TIG, GTAW - Gas Tungsten Arc Welding.
- SAW - Shielded Semi-automatic Arc Welding.
- PAC - Plasma Arc Cutting.

9. MAINTENANCE

Regular inspection and cleaning reduces the necessity for maintenance operations and will keep the product in good working condition.

If the replacement of the part is necessary, this has to be done by the manufacturer or his agent in order to avoid a safety hazard.

All servicing and maintenance not listed in this manual must be carried out by an approved Draper service agent (see back for contact details).

Filters require virtually no maintenance other than periodic cleaning when the lens, solar panel, and/or sensor(s) become dirty or clouded from smoke. Clean your filter by using window cleaner or a mild soapy solution and a soft cloth or paper towel (do not immerse in water or solution).

Change the cover plates frequently.

Welding helmets require virtually no maintenance other than periodic cleaning when dirty. Clean your helmet by using a mild soapy solution and a soft cloth or paper towel (do not immerse in water or solution). Do not throw or abuse the helmet. Doing so may crack the helmet shell and compromise the protection.

Change cover plates when they lose flexibility and/or become bowed or distorted. Clean with mild soapy solution including any build-up from the area where the cover plate is retained. Discard if cleaning fails to improve visibility. Use an internal cover plate to provide additional protection.

10. DISPOSAL

10.1 DISPOSAL

- At the end of the product's working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.
- Contact your local authority for details of collection schemes in your area.

In all circumstances:

- Do not dispose of power tools with domestic waste.
- Do not incinerate.
- Do not abandon in the environment.
- Do not dispose of WEEE* as unsorted municipal waste.



■
* Waste Electrical & Electronic Equipment.

11. EXPLANATION OF SYMBOLS

11.1 EXPLANATION OF SYMBOLS



Read the instruction manual.



WEEE –

Waste Electrical &
Electronic Equipment.

*Do not dispose of Waste Electrical
& Electronic Equipment in with
domestic rubbish.*

CONTACTS

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Chandler's Ford, Eastleigh, Hampshire. SO53 1YF. U.K.

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E-mail: sales@drapertools.com

General Enquiries: (023) 8026 6355

Service/Warranty Repair Agent:

For aftersales servicing or warranty repairs, please contact the
Draper Tools Helpline for details of an agent in your local area.

YOUR DRAPER STOCKIST

KCKC0418

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