

Clarifire®



PLASTIC STAPLER/WELDER KIT

MODEL NO: PSW1

PART NO: 3400771

USER INSTRUCTIONS



ORIGINAL INSTRUCTIONS

GC06/23

INTRODUCTION

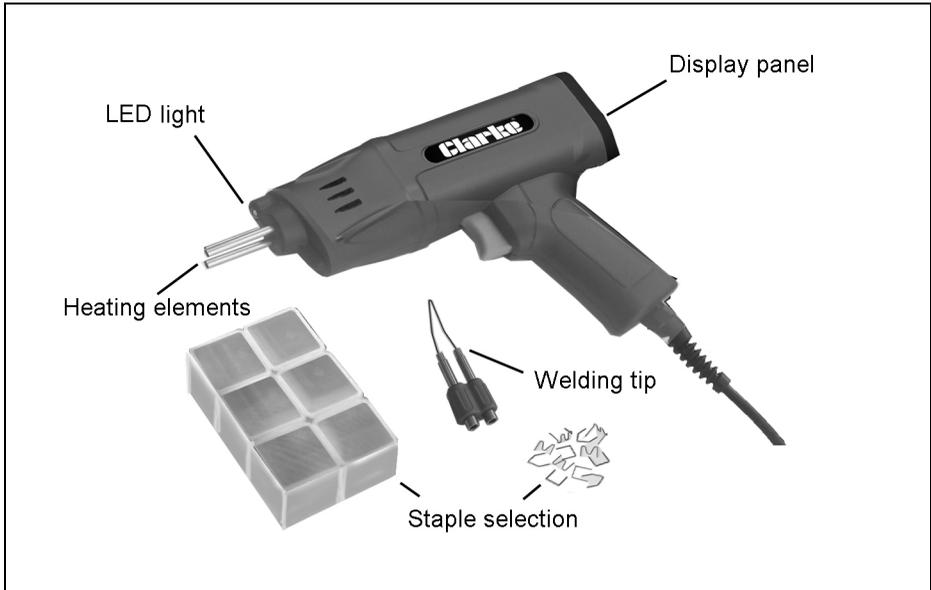
Thank you for purchasing this CLARKE product. Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

This product has been designed to give long and trouble free service. If, however, having followed the instructions in this booklet carefully, you encounter problems take the unit to your local CLARKE dealer.

The PSW1 Stapler/Welder is ideal for plastic crack repairs and reinforcement with different staples used in various situations.

Staples are supplied in different sizes and after implanting, the exposed staple parts can be easily broken off after the plastic parts are melted. The staples are stainless steel so will not corrode in the future, thereby compromising the strength of the repair.

The PSW1 Stapler/Welder incorporates a built-in microprocessor, controlling three different heating settings with overheating/overloading protection, built in buzzer and high-brightness LED light.



SPECIFICATIONS

Item	Specification
Dimensions (L x W x H)	220 x 55 x 235 mm - product 330 x 275 x 80mm - carry case
Weight	620 g (stapler only)
Operating voltage & frequency	230V ~ 50 Hz
Heater rated input wattage	75W
Heater rated input current	<1A
Plug fuse rating	10A
Ingress protection	IP20
Power cable length	1.8m
Duty cycle	15 sec on/10 sec off

GUARANTEE

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

GENERAL SAFETY WARNINGS



WARNING: READ ALL SAFETY WARNINGS AND ALL INSTRUCTIONS. FAILURE TO FOLLOW THE WARNINGS AND INSTRUCTIONS MAY RESULT IN ELECTRIC SHOCK, FIRE AND/OR INJURY.

WORK AREA SAFETY

1. **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
2. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.
3. To prevent fire, **DO NOT** use this device in an flammable and explosive environment.
4. Due to the gasses given off by the melting of the plastic, the device should be used in a well ventilated workplace.
5. If you need to use the device in the car paint booth always extract the contaminated air in the paint booth in advance.

ELECTRICAL SAFETY

1. **Power tool plugs must match the outlet. NEVER modify the plug in any way. DO NOT use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
2. **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
3. **DO NOT expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
4. **DO NOT abuse the power cable. NEVER use the cable for carrying, pulling or unplugging the power tool. Keep the cable away from heat, oil, sharp edges or moving parts.** Damaged or entangled cables increase the risk of electric shock.
5. **When operating a power tool outdoors, use an extension cable suitable for outdoor use.** Use of a cable suitable for outdoor use reduces the risk of electric shock.
6. **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

PERSONAL SAFETY

1. **Stay alert, watch what you are doing and use common sense when operating a power tool. DO NOT use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in personal injury.
2. **DO NOT overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
3. **Dress properly. DO NOT wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.

GENERAL POWER TOOL USE AND CARE

1. **DO NOT force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
2. **DO NOT use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
3. **Store idle power tools out of the reach of children and DO NOT allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
4. **Use the power tool, accessories etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

STAPLER/WELDER USE AND CARE

1. Make sure to unplug the power cable when you leave the device.
2. ALWAYS ensure this device is kept out of children's reach.
3. The staples used with this device are made of special materials, not ordinary steel wire. When the staples are used up, please contact your CLARKE dealer, otherwise any malfunction caused by the use of staples of other materials will not be covered by the warranty.
4. Please wear gloves in operation to prevent burns and wear protective glasses to protect your eyes from flying staple ends if end cutting pliers are used
5. Wear protective glasses and dust mask during the any sanding operations when finishing off the repair.
6. The product is not suitable for pipeline products that require waterproof and sealing requirements for conveying liquids or gases.

7. Cleaning and user maintenance shall not be made by children without supervision.
8. Please release the trigger immediately to stop heating once the heated staple turns red in the operation.

SAFETY SYMBOLS

	Read instruction manual before use
	Hot Surfaces
	Wear protective gloves
	Wear eye protection
	Keep dry
	Wear a dust mask when sanding

ENVIRONMENTAL RECYCLING POLICY



Through purchase of this product, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery and environmentally sound disposal of the WEEE.

In effect, this means that this product must not be disposed of with general household waste. It must be disposed of according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

ELECTRICAL CONNECTIONS



WARNING: READ THESE ELECTRICAL SAFETY INSTRUCTIONS FULLY BEFORE CONNECTING THE PRODUCT TO THE MAINS SUPPLY.

This product is provided with a standard 13 amp, 230 volt (50Hz), BS 1363 plug, for connection to a standard, domestic electrical supply. Should the plug need changing, make sure that a plug of identical specification is used.

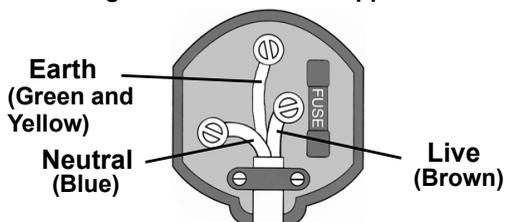


**WARNING: THE WIRES IN THE CABLE ARE COLOURED AS FOLLOWS:
BLUE = NEUTRAL BROWN = LIVE YELLOW AND GREEN = EARTH**

If the colours of the wires in the power cable do not correspond with the markings on the terminals of your plug, proceed as follows.

- Connect the **blue** wire to the terminal which is marked **N**.
- Connect the **brown** wire to the terminal which is marked **L**.
- Connect the **yellow and green** wire to the terminal which is marked **E** or \perp .
- See the specification table for the correct fuse size.

Plug must be BS1363/A approved.



make sure that the outer sheath of the cable is firmly held by the clamp



This is a Class II product with a functional earth.

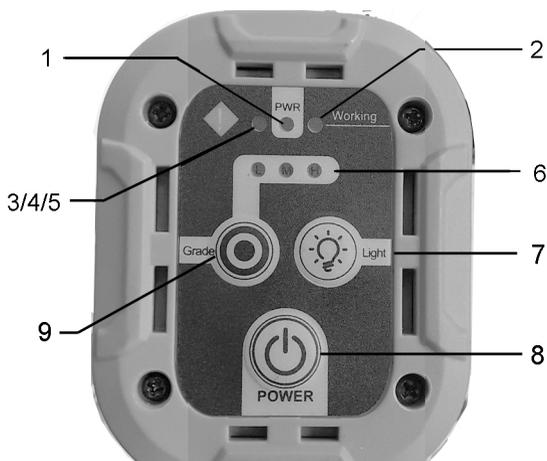
If you are not sure, consult a qualified electrician. **DO NOT** try to do any repairs.

AN APPROVED RESIDUAL CURRENT DEVICE (RCD) WHICH HAS A TRIPPING CURRENT OF LESS THAN 30MA MUST BE USED.

EXTENSION CABLES

Always use an approved cable extension suitable for the power rating of this tool (see specifications), the conductor size should also be at least the same size as that on the machine or larger.

CONTROLS & DISPLAY



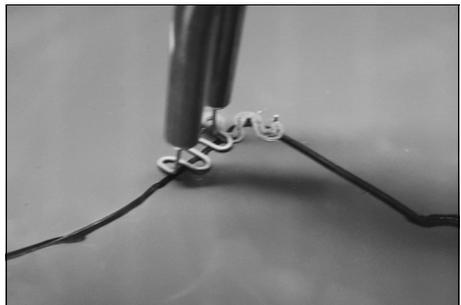
1	Power supply indicator	Yellow light on/single blue LOW heating light on
2	Normal operation	Green light comes on
3	Overheating protection	Red light flashes quickly (0.2sec) and the buzzer sounds. The device will recover automatically. (In general, it will recover within 5 minutes)
4	Overload/short circuit	Red light flashes quickly (0.5sec) and the buzzer sounds. Re-start the device to recover.
5	Open circuit protection	Red light on
6	Grade selection	Low, Medium or High, according to the hardness of the plastic being welded.
7	LED light	Turns the LED light on/off
8	Power button	Turns the machine on/off
9	Heating/temperature level	Selects low/medium/high heat

OPERATION

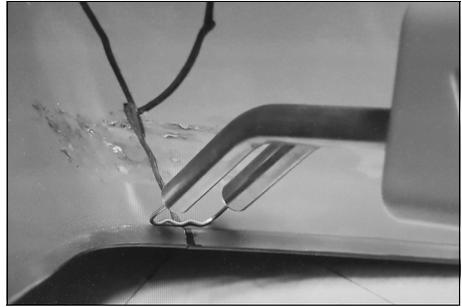
1. Push fit the welding tip onto the heating elements.
2. Plug into the power supply and press the POWER button. Ensure the yellow PWR and a single blue LED status indicator are on.
3. According to the shape of the damage to be repaired, select the corresponding staple from the selection on page 12 and insert into the welding tips of the device.
4. If the plastic to be repaired has a long crack which is likely to extend over time, drill a small hole at the end of the crack to prevent this happening before beginning the stapled repair.



5. Press the 'Grade' button to select the desired heating level (**Low, Medium or High**) according to the type and thickness of plastic being welded.
6. Use the LED lamp if required by pressing the "Light" button.
7. Holding the device handle, align the staple with the crack to be repaired and squeeze the trigger.
 - The green "working" LED will light up. (A red LED shows a fault or open circuit).
 - The staple will be heated up and melt into the plastic within a few seconds.
8. Begin working at the beginning of any long crack or split and add more staples, progressing outward.
9. Position the device so that the transverse part of the staple sinks into the plastic to be repaired until completely covered.
 - Take care not to push the staple in too far, so as to risk breaking through the whole thickness of the plastic component.

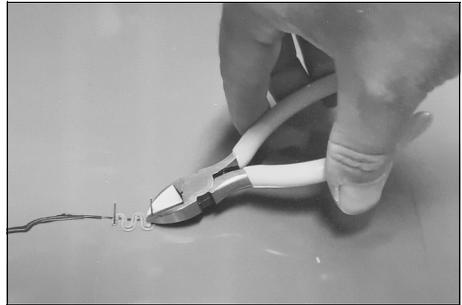


10. Give the device a very slight twist to help the staple become completely embedded under plastic to prevent any chance of it pulling out.
11. Use a straight staple when repairing along the edge of the workpiece.



12. Cut off the exposed part of the staple or rock it back and forth with your hands until it breaks off.

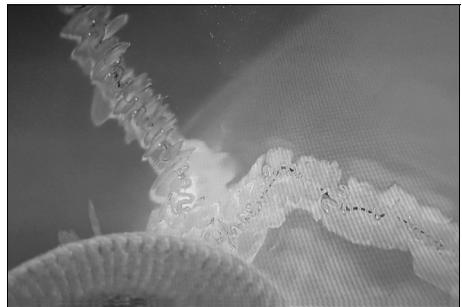
- A pair of end cutting pliers may be very useful for this. If using these, wear safety glasses to protect from flying staple ends.



13. Use the welding tip to heat the welds and any protruding plastic next to it wrapping and levelling with melted plastic to strengthen the connection.

NOTE: the underside of the repair may become hot while working.

14. Once the repair is completed, the staple ends and rough plastic can be cleaned off using a sanding disc or similar tool but taking care not to remove any significant material from the repaired plastic component.



NOTE: If operated continuously on its maximum heat setting the thermal cut-out may be triggered. The device will shut down with the alarm sounding an intermittent tone until the device cools down enough to reset the cutout.

CARE AND MAINTENANCE



WARNING: BEFORE COMMENCING ANY MAINTENANCE PROCEDURES, ALWAYS ENSURE THE MACHINE IS ISOLATED FROM THE ELECTRICAL SUPPLY BY SWITCHING OFF AND REMOVING THE PLUG FROM THE POWER SOCKET.

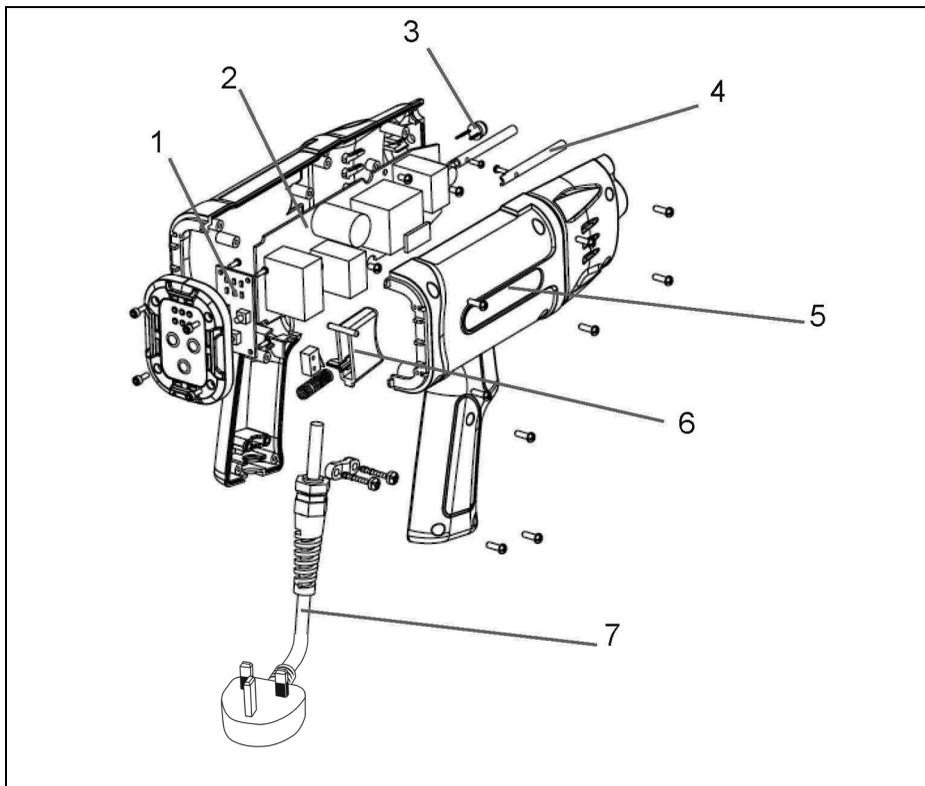
1. The device should be stored in a dry and cool place. When it is used outdoors, avoid prolonged exposure to the sun.
2. Ensure all air ventilation slots are clear, DO NOT store it in a dusty place for a long time. (Use compressed air to clean the machine if possible. ALWAYS wear protective goggles when cleaning with compressed air).
3. Check the power cable to ensure it is sound and free from cracks, bare wires etc. Avoid using solvents when cleaning plastic parts, (most plastics are susceptible to damage from the various types of commercial solvents).
4. In order to ensure good contact with staples, keep the small holes of copper heating rods clean.
5. Refer to your CLARKE dealer if any repairs are required.

STANDARD ACCESSORIES SUPPLIED

No	Qty	Staple type	
1	50	0.6 mm outside corner staples for repairing outside corners. Part No;-1800208	 
2	50	0.8 mm inside corner staples for repairing inside corners. Part No;-1800209	 
3	50	0.6 mm flat staples for repairing flat plastic surfaces Part No;-1800211	 
4	50	0.8 mm flat staples for repairing flat plastic surfaces Part No;-1800212	 
5	50	0.6 mm Wave staples for repairing flat plastic surfaces that need extra reinforcement Part No;-1800213	 
6	50	8 mm Wave staples for repairing flat plastic surfaces that need extra reinforcement Part No;-1800214	 
7	1	Welding Tip	

Please re-order from your CLARKE dealer.

COMPONENT PARTS



No	Description
1	Control Panel
2	Printed Circuit Board
3	LED
4	Copper Rod

No	Description
5	Housing
6	Trigger
7	Power Cable

Consumable items listed on page 12 are available from your Clarke dealer.

DECLARATION OF CONFORMITY-UK



Clarke[®]
INTERNATIONAL

Hemnall Street, Epping, Essex, CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following legislation:

The Electromagnetic Compatibility Regulations 2016

The Electrical Equipment (Safety) Regulations 2016

The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

The following standards have been applied to the product(s):

BS EN 60335-1:2012+A11+A13+A14+A2+A15, BS EN 60335-2-45:2002+A1+A2,

BS EN 62233:2008, BS EN IEC 55014-1:2021, BS EN IEC 55014-2:2021, BS EN 61547:2009,

BS EN IEC 55015:2019+A11, BS EN 61000-3-3:2013+A1, BS EN IEC 61000-3-2:2019+A1,

IEC 62321-3-1:2013, IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-6:2015,

IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-8:2017

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned legislation has been compiled and is available for inspection by the relevant enforcement authorities.

The UKCA mark was first applied in: 2023

Product Description: Hot Stapler
Model Number(s): PSW1
Serial/Batch Number: Refer to product/packaging label
Date of Issue: 21/04/2023

Signed:

J.A Clarke

Director

DECLARATIONS OF CONFORMITY-CE



Clarke[®]
INTERNATIONAL

Fitzwilliam Hall, Fitzwilliam Place, Dublin 2

DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following legislation:

2014/30/EU *Electromagnetic Compatibility Directive*
2014/35/EU *Low Voltage Directive*
2011/65/EU *Restriction of Hazardous Substances (RoHS) Directive*

The following standards have been applied to the product(s):

*EN 60335-1:2012+A11+A13+A14+A2+A15, EN 60335-2-45:2002+A1+A2, EN 62233:2008,
EN IEC 55014-1:2021, EN IEC 55014-2:2021, EN IEC 55015:2019+A11, EN 61000-3-3:2013+A1,
EN 61547:2009, IEC 62321-3-1:2013, IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013,
IEC 62321-6:2015, IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-8:2017*

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned legislation has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2023

Product Description: Hot Stapler
Model Number(s): PSW1
Serial/Batch Number: Refer to product/package label
Date of Issue: 21/04/2023

Signed:

J.A Clarke
Director

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