

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. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.**

## 1. SAFETY INSTRUCTIONS


### 1.1. ELECTRICAL SAFETY

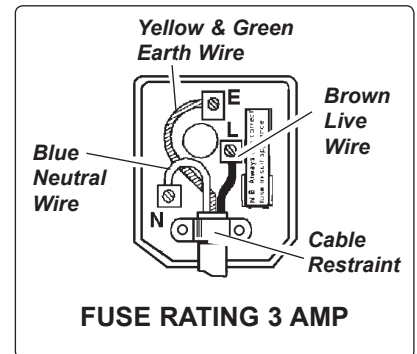
**WARNING!** It is the responsibility of the owner and the operator to read, understand and comply with the following:

You must check all electrical products, before use, to ensure that they are safe. You must inspect power cables, plugs, sockets and any other connectors for wear or damage. You must ensure that the risk of electric shock is minimised by the installation of appropriate safety devices. A Residual Current Circuit Breaker (RCCB) should be incorporated in the main distribution board. We also recommend that a Residual Current Device (RCD) is used. It is particularly important to use an RCD with portable products that are plugged into a supply which is not protected by an RCCB. If in any doubt consult a qualified electrician. You may obtain a Residual Current Device by contacting your Sealey dealer.

**You must** also read and understand the following instructions concerning electrical safety.

- 1.1.1. The **Electricity at Work Act 1989** requires that all portable electrical appliances, if used on business premises, are tested by a qualified electrician, using a Portable Appliance Tester (PAT), at least once a year.
- 1.1.2. The **Health & Safety at Work Act 1974** makes owners of electrical appliances responsible for the safe condition of those appliances and the safety of the appliance operators. **If in any doubt about electrical safety, contact a qualified electrician.**
- 1.1.3. Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply. See 1.1.1. and 1.1.2. and use a Portable Appliance Tester.
- 1.1.4. Ensure that cables are always protected against short circuit and overload.
- 1.1.5. Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that none is loose.
- 1.1.6. **Important:** Ensure that the voltage marked on the appliance matches the power supply to be used and that the plug is fitted with the correct fuse - see fuse rating at right.
- 1.1.7. **DO NOT** pull or carry the appliance by the power cable.
- 1.1.8. **DO NOT** pull the plug from the socket by the cable.
- 1.1.9. **DO NOT** use worn or damaged cables, plugs or connectors. Immediately have any faulty item repaired or replaced by a qualified electrician. When a BS 1363/A UK 3 pin plug is damaged, cut the cable just above the plug and **dispose of the plug safely.** Fit a new plug according to the following instructions (UK only).
  - a) **Connect the GREEN/YELLOW earth wire to the earth terminal 'E'.**
  - b) **Connect the BROWN live wire to the live terminal 'L'.**
  - c) **Connect the BLUE neutral wire to the neutral terminal 'N'.**
  - d) **After wiring, check that there are no bare wires, that all wires have been correctly connected, that the cable outer insulation extends beyond the cable restraint and that the restraint is tight.**

Double insulated products, which are always marked with this symbol , are fitted with live (brown) and neutral (blue) wires only. To rewire, connect the wires as indicated above - **DO NOT** connect either wire to the earth terminal.
- 1.1.10. Products which require more than 13 amps are supplied without a plug. In this case you must contact a qualified electrician to ensure that a suitably rated supply is available. We recommend that you discuss the installation of an industrial round pin plug and socket with your electrician.
- 1.1.11. If an extension reel is used it should be fully unwound before connection. A reel with an RCD fitted is preferred since any appliance plugged into it will be protected. The cable core section is important and should be at least 1.5mm<sup>2</sup>, but to be absolutely sure that the capacity of the reel is suitable for this product and for others which may be used in the other output sockets, we recommend the use of 2.5mm<sup>2</sup> section.



### 1.2 GENERAL SAFETY

- WARNING!** Ensure Health & Safety, local authority, and general workshop practice regulations are adhered to when using this equipment.
- ✓ Familiarise yourself with the application, limitations and potential hazards of the soldering iron/gun.
- ✓ Replace or repair damaged parts. *Use genuine parts only. Non-authorized parts may be dangerous and will invalidate the warranty.*
- ✓ Locate soldering iron/gun in a suitable working area, keep area clean and tidy and free from unrelated materials.
- ✓ Keep the work area clean, uncluttered and ensure there is adequate lighting.
- ✓ Keep the soldering iron/gun clean for best and safest performance.
- ✓ Ensure there are no flammable or combustible materials near the work area.
- ✓ Wear approved safety eye protection (standard spectacles are not adequate).
- ✓ Wear appropriate protective clothing.
- ✓ Ensure the workpiece is adequately held before operating the soldering iron/gun.
- ✓ Always lay the soldering gun on its side so that the tip cannot make contact with the work surface.
- ✓ Always use the stand provided for the soldering iron so that the tip cannot make contact with the work surface.
- ✓ Remove excess solder from the soldering iron/gun by wiping the tip on a damp, natural sponge.
- ✓ Ensure that when the soldering iron or gun is put down during use that the tip is not near to or in contact with any material that may burn or melt including the products own supply lead.
- x **DO NOT** attempt to remove excess solder from the soldering iron/gun by shaking it as hot solder may become airborne and land on your skin causing burns and blisters.
- x **DO NOT** allow children or pets into the area where the soldering is taking place.
- x **DO NOT** attempt to cool the iron or gun with water.

- **WARNING!** Disconnect the soldering iron/gun from the mains power and allow it to cool before changing tips.
- x **DO NOT** operate the soldering iron/gun when you are tired, under the influence of alcohol, drugs or intoxicating medication.
- x **DO NOT** leave a hot soldering iron or gun unattended.  
( If you are leaving the work area even for a short period of time switch it off and allow to cool.)
- x **DO NOT** use the soldering iron or gun for any purpose other than that for which they have been designed.
- x **DO NOT** allow untrained persons to operate the soldering iron/gun.
- x **DO NOT** touch the workpiece as it will be very hot. Allow to cool.
- x **DO NOT** operate the soldering iron/gun if damaged.
- x **DO NOT** hold the workpiece by hand.
- x **DO NOT** allow children to operate the soldering iron/gun.



## 2. SDS300K CONTENTS

- 2.1 ● Instant heat soldering gun (100Watt)
- Soldering iron with stand (30Watt)
- Soldering stand
- Solder-sucker,
- Scraper/probe,
- Spare soldering tip
- Roll of flux cored solder wire.

## 3. SET UP AND OPERATION

### 3.1 USING THE 30WATT SOLDERING IRON.

The 30Watt soldering iron is primarily intended for the soldering of electrical joints such as the attachment of components to printed circuit boards and the connection of leads to plugs and sockets used in electronics. (Where delicate electronic components are concerned that may be damaged by excessive heat, the wire being soldered should be held with a pair of thin nosed pliers on the opposite side of the board so that some of the heat generated by the soldering process is transferred to the pliers.)

3.2 **Preparing the iron stand.** Before using the soldering iron, set up the metal stand provided by bending the centre section upwards so that it is nearly vertical to the rest of the stand as shown in fig.2. Rest the soldering iron on the stand. Plug the iron into the mains and switch on leaving the iron on the stand to heat up.

3.3 **Preparation of iron.** When the iron is up to temperature, "tin" the tip by melting a thin layer of solder all over the flattened part of it. If any difficulty is experienced in getting the solder to take to the tip use a proprietary tip cleaner/tinning product.

3.4 **Preparation of parts.** The items to be soldered must be perfectly clean and free from grease. Ideally, the two items to be joined (such as the end of a wire and a switch terminal) should be individually tinned before being brought together to ensure a good joint.

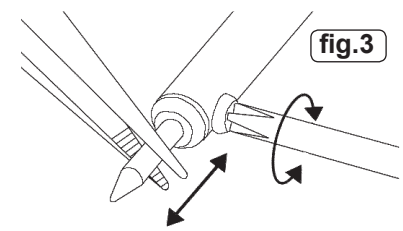
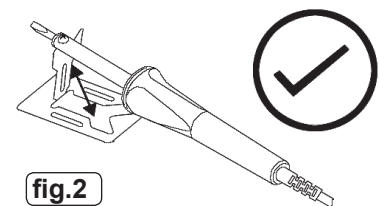
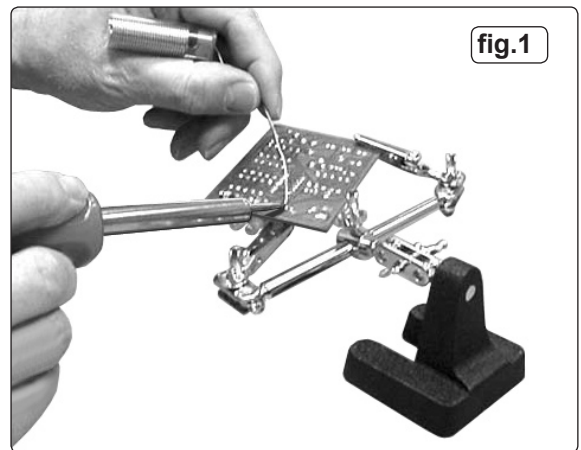
3.5 **Holding the work.** Ensure that the items to be soldered are readily accessible and firmly held. The stand provided can be used to hold two items together for soldering leaving both hands free to manipulate the iron and the solder. (See fig.1)

3.6 **Soldering.** Bring the soldering iron and the solder to the joint simultaneously. (See fig.1) Leave the iron on the joint just long enough to melt the solder so that it flows onto the two parts to be joined. Remove the iron and place it on the stand. Leave the joint to cool.

3.7 **Changing tips.** After a prolonged period of service the tip may become pitted and need replacing. Wait till the iron is completely cool. Loosen the tip retaining nut and pull out the old tip with a pair of pliers. Insert the new tip and twist it into the orientation you require. Lock the tip in place by tightening the the retaining screw. See fig.3.

3.8 **Maintenance.** Do not allow solder to accumulate where the tip enters the iron as this may make the tip difficult to remove. Do not get solder deposits on the tip retaining screw as it may prevent a screwdriver fitting into the cross head. Periodically loosen the tip retaining screw and rotate the tip in the iron to prevent it seizing into the body. Use a proprietary tip cleaner/tinner to keep the tip clean and correctly tinned.

3.9 Spare soldering tips : - Model No. SD30/ST (straight tip), Model No. SD30/CT (curved tip)



### 3.10 USING THE 100WATT SOLDERING GUN.

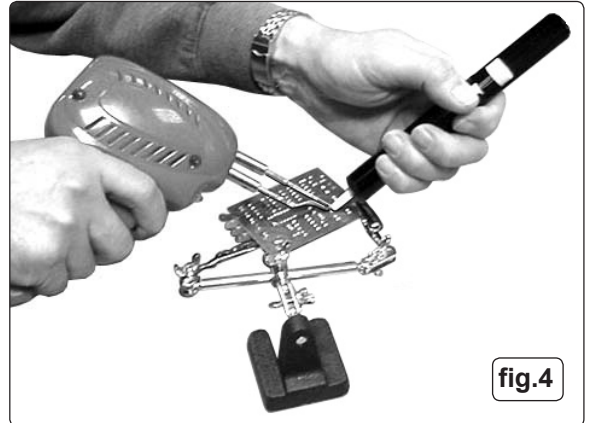
The 100 Watt soldering gun is primarily intended for electrical and electronic use. Its main advantage is its ability to heat up within 20 seconds of pressing the trigger. The tip temperature will reach 300°C so care must be taken with delicate electronic components that may be damaged if excessively heated.

3.11 **Duty cycle.** The gun has a duty cycle of 12 seconds continuous soldering which should be followed by a 48 second rest. If the trigger is held for less than 12 seconds the necessary rest period needed will be correspondingly less.

□ **WARNING!** Do not try to lock the trigger by any means as this will overheat the tip and the transformer causing permanent damage which will invalidate your guarantee.

3.12 **Preparing the gun.** Prepare the gun by 'tinning' the tip with a thin layer of solder. If any difficulty is experienced getting the solder to take to the tip use a proprietary tip tinner/cleaner.

- 3.13 **Holding/preparing the work.** Ensure that the items to be joined are clean and securely held together. The stand provided can be used for this purpose (See fig.1) Where possible a good joint will more easily be obtained if the items to be joined are tinned separately first.
- 3.14 **Soldering.** Press and hold the trigger for approximately 20 seconds to get the tip to full temperature. Bring the tip of the gun and the solder to the joint simultaneously. Leave the iron on the joint just long enough to melt the solder so that it flows onto the two parts to be joined. Remove the gun and release the trigger. Leave the joint to cool. When the gun is not in use but still hot ensure that when it is put down the tip is not touching or close to any material that will melt or is inflammable.
- 3.15 **Changing tips.** Disconnect the gun from the mains and wait until the gun is completely cold. Loosen the two screws holding the tip. Remove the tip and insert the new one. Tighten the screws. (If the old tip is difficult to remove, grip it with a pair of pliers and pull it out. Do not use pliers to insert the new tip as the plating may be damaged.)
- 3.16 **Maintenance.** Do not allow solder to accumulate where the tip enters the gun as this may make the tip difficult to remove. Do not get solder deposits on the tip retaining screws as this may prevent a screwdriver fitting into the cross head. Periodically, use a proprietary tip cleaner/tinner to keep the gun clean and correctly tinned.
- 3.17 Spare tips for gun: - Model No. SD02 (Card of two.)



**3.18 USING THE SOLDER SUCKER.**

- The solder sucker can be used where a joint has to be unsoldered or where excess solder has been deposited and needs to be reduced.
- 3.19 'Prime' the sucker by pushing the plunger down until it latches. Bring the soldering iron or gun to the joint and melt the solder. As soon as the solder is liquid place the tip of the sucker into the solder or as close as possible and press the button on the body of the sucker. (See fig.4). The plunger will rise by spring action giving a sucking action at the tip. Remove the sucker immediately to avoid being in contact with the hot tip of the soldering iron/gun.
  - 3.20 Empty the excess solder from the body of the sucker by unscrewing the tip and tapping/shaking to dislodge the solder particles.

**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 product.

**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 postcode.



**Sole UK Distributor, Sealey Group,**  
 Kempson Way, Suffolk Business Park,  
 Bury St. Edmunds, Suffolk,  
 IP32 7AR



01284 757500

01284 703534



www.sealey.co.uk

sales@sealey.co.uk