

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.

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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.

# 1. SAFETY INSTRUCTIONS

- 1.1. **A LEAD PAINT WARNING!** Paint once contained lead as a traditional ingredient. Contact with the dust from the removal of such paint is toxic and must therefore be avoided. The following action must be taken before using this tool:
- 1.1.1 User must determine potential hazard relating to age of paint to be removed (modern paints do not have lead content).
- 1.1.2. DANGER! Keep all persons and pets away from the working area. The following persons are particularly vulnerable to the effects of lead paint dust: expectant women, babies and children.
- We recommend personal protection by using the following safety items: Paint Spray Respirator (Our ref SSP16EN), PE Coated Hooded Coverall (Our ref SSP266), Latex Gloves (Our ref SSP24).
- 1.1.4. Take adequate measures to contain the paint dust, flakes, and scrapings.
- 1.1.5. Continue to wear safety equipment as in (1.1.3) above and thoroughly clean all areas when task is complete. Ensure the paint waste is disposed of in sealed bags or containers.

# 1.2. 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 (PCCP) should be incorrected in the main distribution heard. We also recommend that a Residual Current Device (PCD) is

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.

- 1.2.1. The Electricity at Work Act 1989 requires all portable electrical appliances, if used on business premises, to be tested by a qualified electrician, using a Portable Appliance Tester (PAT), at least once a year.
- 1.2.2. 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.
- 1.2.3. Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply. See 1.2.1. and 1.2.2. and use a Portable Appliance Tester.
- 1.2.4. Ensure that cables are always protected against short circuit and overload.
- 1.2.5. Regularly inspect power supply cables and plugs for wear or damage and check all
- connections to ensure that none is loose.
- 1.2.6. 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.
- 1.2.7. **DO NOT** pull or carry the appliance by the power cable.
- 1.2.8. **DO NOT** pull the plug from the socket by the cable.
- 1.2.0. DO NOT put the plug from the socket by the cable.
  1.2.9. DO NOT use worn or damaged cables, plugs or connectors. Immediately have any faulty item repaired or replaced by a qualified electrician. When an ASTA/BS approved 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'.

BLUE NEUTRAL CABLE RESTRAINT A FUSE RATING OF 10 AMP IS RECOMMENDED

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. 1.2.10. 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. 1.2 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
- 1.2 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 cable. If extension reel is to be used outdoors, ensure it is marked for outdoor use.

# 1.3. GENERAL SAFETY

- Disconnect the system from the mains power before changing accessories, servicing or performing other maintenance.
   Lise correctly rated extension lead
- Use correctly rated extension lead.
- Maintain the gun in good condition (use an authorised service agent).
- ✓ Use recommended accessories only (non-recommended accessories can be hazardous and will invalidate your warranty).
- ✓ Wear appropriate protective clothing and equipment. Work gloves and eye protection are mandatory. Also wear non-slip shoes and protective hair covering to contain long hair. Remove loose fitting garments and jewellery.
- Evaluate your working area before using the gun. i.e. ceiling, floors and enclosures may contain flammable materials.
- Keep the work area clean, uncluttered and well lit. Use the gun only in a well-ventilated area. Ensure that small or irregular shaped objects are secured in a vice or clamps before you work on them.
- Clean working surface before using the gun in a free standing vertically position (dust or dirt will be taken up into the air inlet).
   Avoid unintentional starting (if the gun stops during operation, disconnect it from the power supply and have it serviced
- by an authorised service agent).
- Stay alert! Always pay attention to the work at hand when operating this gun.
- ✓ Guard against electric shock by not contacting grounded surfaces (i.e. pipes, radiators, etc.)

- Maintain correct balance and footing. 1
- 1 Keep the gun handle dry, clean and free from oil and grease. Clean dry paint or varnish from the nozzle and scrapers after use.
  - Allow the gun to cool before storing (only store away when cold). Store the gun in a safe, dry place out of reach of children.
- DO NOT allow children to operate the gun.
- ~~~~~~~~~~~~ DO NOT direct the hot airflow toward people (including yourself), animals, or plants.
- DO NOT use the gun in a wet environment, or areas of high humidity (i.e. bathrooms, steam rooms, etc.).
- **DO NOT** use the gun in the rain or on extremely damp days.
- DO NOT obstruct the hot airflow by blocking or covering the air outlet.
- DO NOT touch the hot air nozzle as it becomes extremely hot.
- DO NOT place the heat gun on any surface whilst running, except when using the gun by standing on end in an upright position.
- DO NOT allow the gun to fall over whilst operating free standing in an upright position.
- DO NOT leave the heat gun running unattended. Always turn the power supply OFF and do not leave until the gun has cooled.
- DO NOT use the gun for a task it is not designed to perform.
- DO NOT use the gun in combination with chemical strippers.
- DO NOT operate the gun when you are tired, under the influence of alcohol, drugs or intoxicating medication.
- DANGER! DO NOT USE THE HEAT GUN AS A HAIR DRYER

#### 2. POWER INFORMATION

- Be sure the power supply being used agrees with the plate marking on the Heat Gun. The gun is designed to run on 230V / 50Hz AC. 2.1. Voltage decreases greater than 10% can cause loss of power and possible overheating.
- 2.2. The gun is double insulated for added safety
- WARNING: Double insulation does not take the place of normal safety precautions, but acts as a safeguard against injury resulting A from a possible electrical insulation failure inside the gun.

#### **TECHNICAL DATA** 3.

MODEL NO. HS102 (Model HS102K includes welding kit - see Fig.1). Optional Nozzles (Fig.2). Fig.1 1 230V 2000Watts 50°C - 600°C Power: Temp Range: 150/300/500 ltr/min Air Volume Temperature 3 Speed Regulator Optional Welding Kit Accessories: Reference data for above Welding Kit: 1. HS102K/1 Plastic Welding Rods (ABS) HS102K/2 Plastic Welding Nozzle 2. 3. HS102K/3 9mm Reduction Nozzle On/Off & Fan Speed Switch Optional nozzles for HS102 and HS102K 1. HS100/1 Fish Tale Nozzle May be handled or 2. HS100/2 Window Nozzle Fig.2 stood vertically on a 3. HS102/3 Deflector Nozzle non-slip base. 4. HS102/4 Reduction Nozzle

#### 4. **USE AND INFORMATION**

- Preparing the hot air gun for use. 4.1.
- 4.1.1. Before plugging into the mains ensure the gun is in the OFF position.
- When ready to commence work set power switch to desired temperature setting. Allow one and a half minutes. 412
- STANDING THE GUN ON END: Gun may be stood on end in an upright (vertical) position. 4.1.3.
- Ensure the surface on which you will stand the gun is flat, level, and free from dirt. 4.1.4.
- 4.1.5. HS102 balances on the end of its main body and the rubber stop on the end of the handle.
- WARNING! KEEP HANDS AWAY FROM THE IMMEDIATE NOZZLE AREA. IF LEAD PAINT IS BEING REMOVED FOLLOW THE SAFETY A WARNING AT THE BEGINNING OF THIS MANUAL. ALWAYS WEAR GLOVES AND EYE PROTECTION.

#### 4.2. Paint and varnish removal.

- The easy removal of paint and varnish requires practice. Follow these simple working techniques to achieve the required result. NOTE: The heat gun is designed to remove both oil and latex based paints and varnishes from surfaces. It will not remove stains or primer coats that have impregnated the surface of the wood.
- Switch the gun on and allow it to reach its operating temperature. 421
- Always test on a small unobtrusive area first. If satisfactory, proceed with the task in hand. 4.2.2.
- Hold the gun nozzle 3" to 4" from the paint to be removed. 4.2.3.
- 4.2.4. After a short time paint will soften and begin to blister.
- 4.2.5. Do not overheat the paint as this will cause it to burn making it more difficult to remove. Wear eye protection, especially when
- stripping paint from overhead. If lead paint is being removed, refer to the warning at the beginning of this manual. Begin scraping the paint off. Work from top to bottom. Use a scraper with smooth even strokes, warming the surface in front 4.2.6. of the scraper by moving the gun slightly from side to side.
- If the correct temperature has been applied to the paint, thick even layers can be removed in a single pass (paint should 4.2.7. be removed in strips equal in width to the scraper blade).
- 4.2.8. Keep the scraper blade edge clean and sharp preventing paint peelings from building up.
- 4.2.9. Scrape paint as soon as it becomes soft, as it will re-harden very quickly.
- 4.2.10. After softening, shaped or profiled surfaces may be stripped by using a wire brush.
- 4.2.11. To protect surrounding surfaces from the heat gun cover with non-flammable material.

IMPORTANT: Do not concentrate the heat gun on windows or glass surfaces as the glass may crack.

# 5. PLASTIC WELDING TOOL

HS102 may be adjusted for use as a Plastic Welding Tool (welding kits available as described in part 3 - included with HS102K).

- 5.1. Testing materials to be welded: Most adhesion failures are due to the incorrect matching of materials. The welding rod therefore must be of the same material as the item to be welded. For instance, most car body parts are made of ABS material. Some manufacturers however, use different plastics in their products. To test, snip off a piece of material from the work to be welded and proceed as follows:
- 5.1.1. Set light to the sample with a naked flame. If the flame gives off black smoke it is (almost) certain to be ABS.
- 5.1.2. By sample, take a strip of material from an unobtrusive part of the component and use it as your welding rod.
- 5.1.3. If in doubt, contact the item manufacturer.

A DANGER: Step 5.1.1 must be performed in a well ventilated area (out of doors if possible). Never perform task in a domestic building. Safeguard fire. Wear safety gloves and face mask. DO NOT inhale smoke.

### 5.2. Welding the material:

- 5.2.1. Remove any paint or other covering from the entire adjoining surface areas of the pieces to be welded.
- 5.2.2. Cut a chamfer on adjoining pieces to form a groove that can be filled with weld.
- 5.2.3. Using the hot air gun (without any welding rod loaded) thoroughly pre-heat both surfaces to be welded (they should be soft but not tacky).
- 5.2.4. Fit the 9mm reduction nozzle to the gun and the welding nozzle to the reduction nozzle.
  5.2.5. Select a low to medium heat by turning the temperature regulator at rear of the gun (fig A). Experience will determine the setting, but we suggest position 6 which gives 330-340°C as a starting position for most commonly used plastics.
- 5.2.6. Select the fan speed setting on the hot air gun according to the size and thickness of material being welded (i.e. Thin = Two, Thick = Three).
- 5.2.7. Now position the nozzle over the material to be welded and feed the welding rod through the slot at the same time moving the gun along the groove at a speed according to the melt/ adhesion rate (fig B).
- 5.2.8. A good connection is made when a small dome forms (a trial is always recommended using an odd piece of material). With practice, a good flat weld can be achieved by applying pressure on the nozzle as the rod is drawn along. A roller is available as an optional extra.
  5.2.9. Overlapping materials can be removed with a sharp knife.
- 5.3. Welding problem checklist. If a weld fails ask yourself the following questions:
- 5.3.1. Do the materials match?
- 5.3.2. Are both surfaces clean?
- 5.3.3. Are surfaces chamfered?
- 5.3.4. Have surfaces been pre-heated correctly?
- 5.3.5. Did the welding rod melt to the correct consistency?

### 5.4. Important notes.

- 5.4.1. To weld over cracks in the material, drill approximately 1/16" diameter holes at each end of the crack to prevent running during welding and sanding.
- 5.4.2. Handling the welding nozzles The nozzle becomes very hot and should only be removed with pliers or allowed to cool if removing by hand.

## 6. CARE & MAINTENANCE

- Unplug gun from power supply and allow to cool before performing any maintenance.
- 6.1. Keep the air intake and outlet openings clean and free from dirt and peelings.
- **6.2.** Only use a damp cloth and mild household cleaning agent to wipe the gun clean. **DO NOT** use turpentine, paint thinner, gasoline, or similar substance to clean the gun.
- 6.3. Check the gun, power lead and nozzles for damage before storage.
- **6.4.** Store the gun in a safe, dry, childproof location.

# 7. OTHER TASKS

**The gun may also be used for the following:** Removing self-adhesive stickers and trim Thawing frozen pipes, frozen doors, padlocks, etc.

Fast drying of paint or varnish

Softening old putty

Shrinking PVC shrink-wrap sheeting

Soldering

Removing candle wax and restoring candles

- Repair of tarpaulin or PVC
- Liquifying pewter, tar, bitumen or wax Moulding PVC, Copper, Plexiglass into shape
- Roofing repairs
- Control of garden path weeds

Chemistry: use as a bunsen-burner and more.

Loosening rusted or over-tightened nuts and metal screws Defrosting ice-compartments Highlighting natural woodgrain before staining, or varnishing Drying wet timber prior to repairs or finishing Shrinking polyvinyl wire joints Sterilisation (500°C) Binding of engine parts Joining garden hose Model making Plumbing tasks Applying veneer strips Waxing and de-waxing skis

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*Important:* Safety is a key principle when endeavouring to use the gun for different tasks. When approaching a new task, consider the potential dangers that may arise, take any necessary precautions, and practice before attempting the job.

**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.

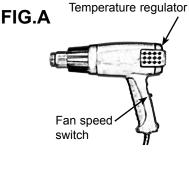
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Insert welding rod

through the upper

nozzle

FIG.B

tube of the welding

Draw the welding head with the rod along the join.