



# 30W LITHIUM-ION RECHARGEABLE PLASTIC WELDING REPAIR KIT

MODEL NO: **SDL14**

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. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to instructions



Wear eye protection



Wear protective gloves



Hot surfaces



Keep Dry

## 1. SAFETY

### 1.1. 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 device.
- ✓ Replace or repair damaged parts. Use genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
- ✓ Locate device 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 device 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 heat resistant gloves and appropriate protective clothing.
- ✓ Ensure the workpiece is adequately held before operating the device.
- ✓ Always use the stand provided when not using the hot tool so that the tip cannot make contact with the work surface.
- ✓ Always use device in a well ventilated atmosphere or alternatively wear respiratory protection.
- ✓ Ensure that when the device is put down during use that the tip is not near to or in contact with any material that may burn or melt.
- ✓ After use always keep the plastic welder in its original package in a safe place away from children.
- ✗ **DO NOT** touch the staple or tip during its warm up phase.
- ✗ **DO NOT** use in wet or damp conditions.
- ✗ **DO NOT** operate the device when you are tired or under the influence of alcohol, drugs or intoxicating medication.
- ✗ **DO NOT** leave the device hot and unattended. (If you are leaving the work area even for a short period of time switch it off and allow to cool.)
- ✗ **DO NOT** use the device for any purpose other than that for which it has been designed.
- ✗ **DO NOT** allow untrained persons to operate the device.
- ✗ **DO NOT** touch the workpiece as it will be very hot. Allow to cool.
- ✗ **DO NOT** operate the device if damaged.

### 1.2. BATTERY SAFETY

- WARNING!** To reduce the risk of burns or fire:
- ✗ **DO NOT** attempt to open, disassemble, modify or service the battery pack.
- ✗ **DO NOT** crush, puncture, short external contacts or dispose of in fire or water.
- ✗ **DO NOT** expose to temperatures above 60°C (140°F).
- ✓ Recycle or dispose of used battery as stipulated by local regulation.

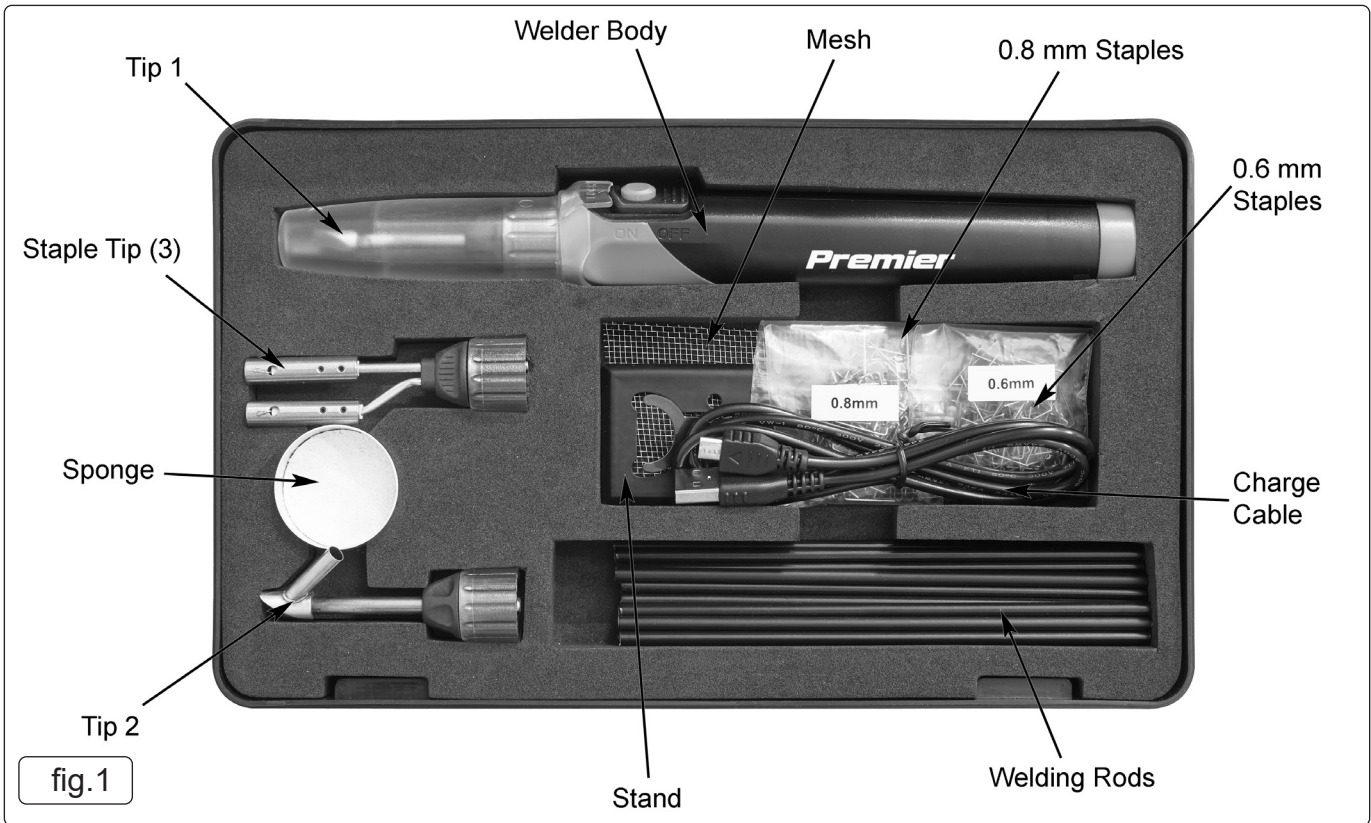
## 2. INTRODUCTION

Cordless and lightweight welding iron. Inbuilt LED to illuminate welding area in low light areas such as engine bays. Kit includes plastic welding tip, plastic welding with pipe guide tip, hot staple tip, plastic welding rods in ABS/PP/PE/PS, reinforcing mesh (x3), 0.8mm flat staples (x50), 0.6mm flat staples (x50), USB charging lead and safety stand. Heats up to a maximum temperature of 500°C.

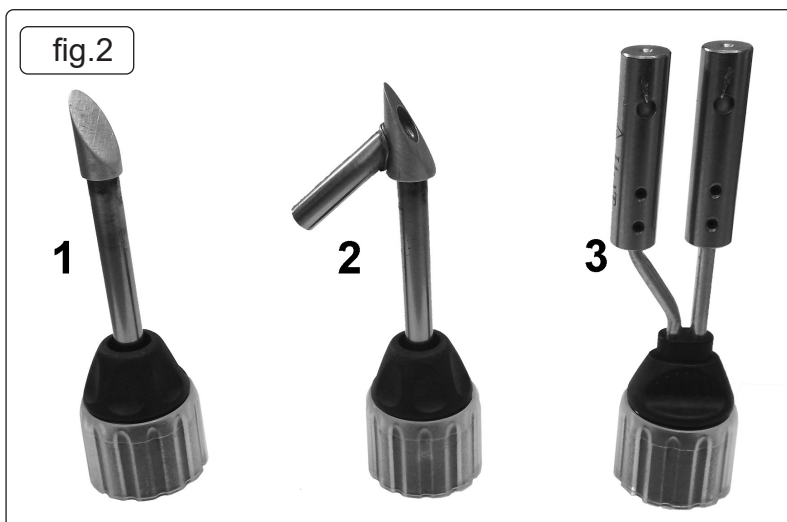
### 3. SPECIFICATION

**MODEL NO:**.....SDL14  
**Battery:** .....3.7V 2.4Ah Lithium-ion  
**Input:**.....5V - 1A  
**Charging Time:**.....3.5hr  
**Maximum Temperature:** .....500°C  
**Operating Time:** .....40min  
**Power:**.....30W  
**Staple Size:**.....0.6mm & 0.8mm

### 4. CONTENTS



### 5. OPERATION



#### 5.1. TESTING MATERIALS TO BE WELDED:

5.1.1. 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:

▲ **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 against fire. Wear safety gloves and face mask. **DO NOT** inhale smoke.

5.1.2. Set light to the sample with a naked flame. If the flame gives off black smoke it is (almost) certain to be ABS.

5.1.3. By sample, take a strip of material from an unobtrusive part of the component and use it as your welding rod.

5.1.4. If in doubt, contact the item manufacturer.

## 5.2. WELDING THE MATERIAL

- 5.2.1. Remove any paint or other covering from the entire adjoining surface areas of the piece 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. Thoroughly pre-heat both surfaces to be welded (they should be soft but not tacky).
- 5.2.4. Attach tip 2 (fig.1.2) to position the tip over the material to be welded and feed the welding rod through the slot at the same time moving the device along the groove at a speed according to the melt/adhesion rate.
- 5.2.5. 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. 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.

- 5.3.1. 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.
- 5.3.2. Handling the welding tips - The tips get very hot and should only be removed by the plastic base when cool enough to do so.

## 5.5. USING THE STAPLE ATTACHMENT (FIG 1.3)

- 5.5.1. Choose a suitable heating repair pin and place it in the tip of the stapler.
- 5.5.2. Keep the stapler perpendicular to the damaged surface.
- 5.5.3. Press the switch button on the grip for 5 to 10 seconds until the pin is hot enough to weld. Then press the pin gently against the damaged surface.
- 5.5.4. When the pin is half way into the plastic material stop pressing and release the power button. Wait for a few seconds until the repair becomes firm.
- 5.5.5. Once plastic has cooled and staple is fully secure, pull stapler gun gently back to release.
- 5.5.6. If the damaged surface is very long or wide, insert extra pins, 1/2 inch apart.
- 5.5.7. Cut off the pins with a side cutter, then grind the remains of the pin with a sander/grinder.
  - × **DO NOT** press the repair pins too hard as it may penetrate the plastic too far.

## 6. MAINTENANCE

- ✓ When cold store in a safe dry place away from the reach of children.



### ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



### WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.



### BATTERY REMOVAL

Under the Waste Batteries and Accumulators Regulations 2009, Jack Sealey Ltd are required to inform potential purchasers of products containing batteries (as defined within these regulations), that they are registered with Valpak's registered compliance scheme. Jack Sealey Ltd Batteries Producer Registration Number (BPRN) is BPRN00705.

**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 is required for any claim.



REGISTER YOUR PURCHASE HERE

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