



STUD WELDING KIT 230V

MODEL NO: **SR2000**

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 instruction manual



Wear protective gloves



Wear eye protection



Wear face mask



Wear ear protection



Wear protective clothing



Wear welding mask



Do not use in the vicinity of a pacemaker

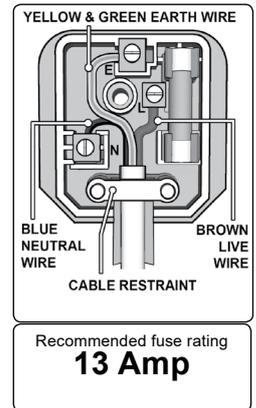


Indoor use only

1. SAFETY

1.1. ELECTRICAL SAFETY

- WARNING!** It is the user's responsibility to check the following:
 - Check all electrical equipment and appliances to ensure that they are safe before using. Inspect power supply leads, plugs and all electrical connections for wear and damage. Sealey recommend that an RCD (Residual Current Device) is used with all electrical products. You may obtain an RCD by contacting your local Sealey dealer. If the kit is used in the course of business duties, it must be maintained in a safe condition and routinely PAT (Portable Appliance Test) tested.
 - ✓ Electrical safety information, it is important that the following information is read and understood.
 - ✓ Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply.
 - ✓ Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that they are secure.
 - ✓ Ensure that the voltage rating on the appliance suits the power supply to be used and that the plug is fitted with the correct fuse - see fuse rating in these instructions.
 - ✗ **DO NOT** pull or carry the appliance by the power cable.
 - ✗ **DO NOT** pull the plug from the socket by the cable.
 - ✗ **DO NOT** use worn or damaged cables, plugs or connectors.
 - ✓ This product is fitted with a BS1363/A 13 Amp 3 pin plug. If the cable or plug is damaged during use, switch off the electricity supply and remove from use.
 - ✓ Replace a damaged plug with a BS1363/A 13 Amp 3 pin plug. If in doubt contact a qualified electrician.
 - 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'.
 - Ensure that the cable outer sheath extends inside the cable restraint and that the restraint is tight.
 - ✓ Sealey recommend that repairs are carried out by a qualified electrician.
 - ✓ Only use one single extension cable at a one time. **DO NOT** daisy chain extension cables. Unwind the extension cable fully.



1.2. GENERAL

- ✗ **DO NOT** touch heating parts with bare hands.
- ✗ **DO NOT** touch live electrical parts or electrodes with bare skin or wet clothing.
- ✗ **DO NOT** operate in the vicinity of containers under pressure, or in the presence of explosive dust, gases or fumes.
- ✗ **DO NOT** cover or stick objects into any of the ventilation holes on the equipment.
- WARNING!** The magnetic fields created by high currents may affect the operation of pacemakers. Wearers of vital electronic equipment or those who have metallic surgical implant should consult their Doctor before using equipment.
- ✗ **DO NOT** wear clothing with metallic components e.g. belt buckles, buttons, zips when working with the equipment as it can cause such items to heat up.
- ✓ Remove any metallic components e.g. keys, chains, tools etc. while you operate the equipment and **DO NOT** wear any metallic objects such as jewellery, watches, piercings etc. on your body.
- ✗ **DO NOT** use the equipment in the rain or in humid conditions or immerse it in water.
- ✗ **DO NOT** leave the equipment unattended whilst turned on.
- ✗ **DO NOT** attempt to repair or service the equipment.
- ✓ Ensure area is adequately ventilated and dry.
- ✓ Ensure ambient temperature is between -10 to 40 °C
- ✓ Avoid using in bright sunshine or rain.
- ✗ **DO NOT** use the equipment in an environment where the air is polluted with conductive dust or gases.
- WARNING!** Fumes and smoke from hot/burning paints, adhesives etc. are toxic. Wear a suitable mask in such circumstances.

2. INTRODUCTION

Supply: 230V-13A (13A Plug fitted). Professional quality stud welder for fast, efficient body repairs. Removes dents quickly, without holes or the need to remove interior trim. No burn through means that removal of studs and washers is easy and preparation work before repainting is minimised. Suitable for use on steel or aluminium and can weld studs, washers and tabs. Patented quick puller attachment allows removal of smaller dents without the need for studs or washers. Supplied in heavy-duty storage case.

3. SPECIFICATION

Model no:.....	SR2000
Input power.....	230V 50Hz
Input current.....	3A
Output max. current.....	5000A
Duty cycle:.....	100% @8~15 Al studs/min
Consumables:	
Al-Mg Studs pack of 10.....	SR2000.AM
Al-Mg-Si Studs pack of 10.....	SR2000.AMS
Electrode kit.....	SR2000.E
Pull washer pack of 10.....	SR2000.PW
Start washer pack of 10.....	SR2000.SW
Tabs pack of 10.....	SR2000.T
Triangle washers.....	SR2000.TW

4. OPERATION

4.1. GENERAL GUIDELINES

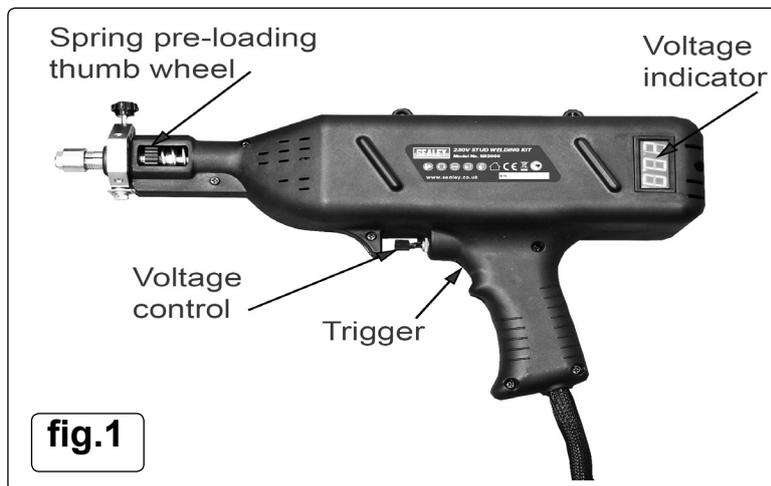
- 4.1.1. When welder is not in use switch off and disconnect from power supply.
- 4.1.2. Welder must be switched off and disconnected from power supply for a minimum of 5 minutes before any maintenance is carried out to ensure complete discharge of capacitors.
- 4.1.3. Good contact between studs, tabs and the collet is required to ensure good welds. A loose fit will result in melting of the stud surface.
- 4.1.4. Welding might cause welding arc and slight metal spatter so protective safety garments and eye protection are required at all times.
- 4.1.5. Ensure there are no flammable materials or liquids in the work area.
DO NOT modify the cable or any part of the welding unit in any way.

4.2. USAGE GUIDELINES

- 4.2.1. Ensure surfaces to be worked on are bare of all coatings, corrosion and grease.
- 4.2.2. All welding components (studs, tabs, ground pins etc.) must be clean and corrosion free.
- 4.2.3. Ensure that adequate downward pressure is applied to the stud gun in use as good contact for both ground pins and welding attachments is essential to the welding process. Downward pressure adjustment is provided by altering the pre-load on the collet spring by rotating the thumb wheel in the barrel (fig.1).
- 4.2.4. Voltage adjustment is provided by the rotating knob near the trigger. Voltage setting indication is provided by the LED display in the stock handle of the welder.

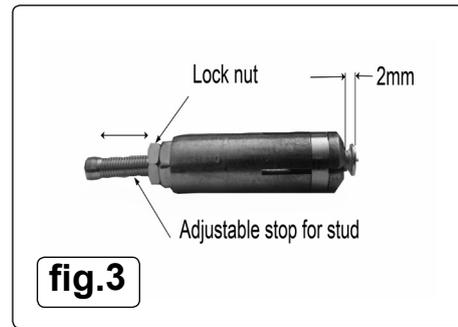
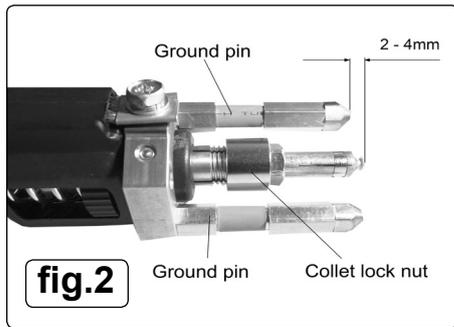
4.3. POWER SETTINGS

- 4.3.1. For aluminium stud welding an initial voltage of 28 is recommended, adjusting up or down as required depending on weld results. **DO NOT** make an adjustment of more than 3 volts at a time before re-testing.
- 4.3.2. For steel tab welding an initial voltage of 22 is recommended, adjusting up or down dependant on results. **DO NOT** make an adjustment of more than 3 volts at a time before re-testing.
- WARNING! DO NOT** alter voltage settings rapidly in a short period of time as power must be allowed to dissipate from the welder. Frequent power changes in a short period of time will damage the unit.



4.4. STUD WELDING FIG.2, FIG.3.

- 4.4.1. Disconnect equipment from power supply.
- 4.4.2. In normal use the collet will wear and loosen its grip on the welding studs. This can be corrected by gently squeezing the jaws of the collet together using a pair of pliers or an alternative form of controlled pressure. **DO NOT** hit with a hammer.
- 4.4.3. Stud heads must protrude 2mm beyond the end of the collet (fig.3). Turn adjustable stop in and out to set stud height. The stud must fit up against stop. Tighten lock nut to fix position.
- 4.4.4. Install the two ground pins on opposite corners of the mounting plate (fig.2).
- 4.4.5. Insert the collet into the collet holder. The flat surface of the tip of the stud should extend 2-4mm past the tips of the ground pins(fig.2).
- 4.4.6. Set power level as guided in section 4.3.



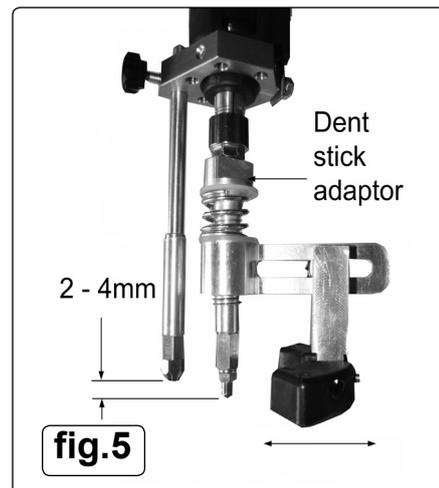
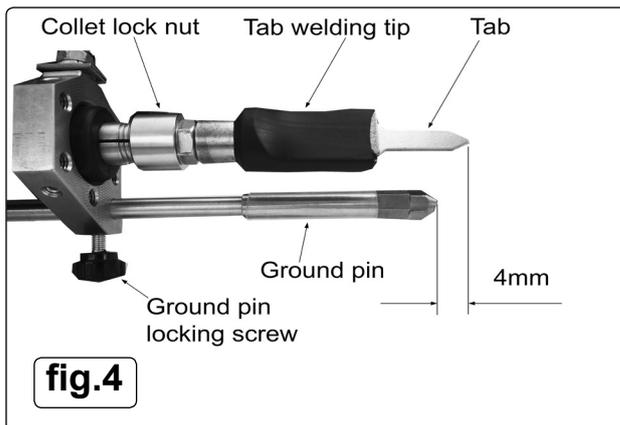
4.5. TAB WELDING FIG.4.

- 4.5.1. Disconnect equipment from power supply.
- 4.5.2. Insert tab welding tip into collet of machine and secure with collet lock nut.
- 4.5.3. Insert tab into tab welding tip. Push fit is required.
- 4.5.4. Adjust the ground pin such that the tip of the tab protrudes 4mm past the end of the ground pin (fig.4).
- 4.5.5. Set power level as guided in section 4.3.

4.6. DENT STICK PULLING ADAPTOR. FIG.5

- 4.7. Insert adaptor into welder collet and tighten collet nut to hold it.
- 4.7.1. Insert ground pin into base plate using screw knob to clamp it. The ground pin head should be 2 to 4mm behind the tip of the adaptor.
- 4.7.2. Set power level as guided in section 4.3.

NOTE: The Dent Stick Adapter is designed to be used on small dents or finishing work only. It is not designed for large damage repair. Over welding and over pulling could result in damage to the welding tip, the panel or the welder.



4.8. RECOMMENDED VOLTAGE SETTING

Function	Recommended voltage (V)
Al. stud Ø4.0	30 - 32
	22 - 20
Dent Stick	22 - 20
	18 - 20
	18 - 20

5. TROUBLESHOOTING

P1, P2, P3 indicator lights on the power supply are not lit.	<ol style="list-style-type: none"> 1) Check the power supply. 2) Check the input cable. 3) Check the main switch. 4) There is a failure. Please contact the manufacturer.
Voltage meter display “.000”, when the welder is turned on.	<ol style="list-style-type: none"> 1) Adjust the voltage control knob on the Welder. 2) Restart the Welder. 3) Trigger on and off several times. 4) There is a failure. Please contact to the manufacturer.
P1 indicator light is not lit.	<ol style="list-style-type: none"> 1) Check the power supply, 2) Check the input cable. 3) Check the main switch. 4) Over heat protection, wait for welder to cool and restart.
Sparks. While steel tab welding	<ol style="list-style-type: none"> 1) Check the ground pin for good connection. 2) Check the work panel for oxidation or dirt. 3) Lower power setting. 4) Increase pressure on ground pins & tabs when welding.
The stud did not weld properly. It can be easily pulled off of the panel.	<ol style="list-style-type: none"> 1) Check Stud height adjustment. Stud head should be 2-4 mm past the head of the ground pin. 2) Check the ground pin is making good connection. 3) Check the work panel for oxidation or dirt. 4) Increase output voltage.
The stud burns through the panel.	<ol style="list-style-type: none"> 1) Reduce output voltage. 2) Check the work panel for oxidation or contamination. 3) Adjust the gun, reduce pressure.
No output when the trigger is pulled.	<ol style="list-style-type: none"> 1) Check P1, P2, P3 indicator lights. All lights should be on. 2) Check the off/on switch. 3) Check the power supply to the welder. 4) Check the welding stud/tab and the ground pin have good connection to the panel. 5) There is a failure. Please contact Sealey stockist.



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.

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.

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