



INSTRUCTIONS FOR

# **SUPERMIG WELDER**

Models:

**SUPERMIG185**

**SUPERMIG195/9**


Thank you for purchasing a Sealey Welder. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.

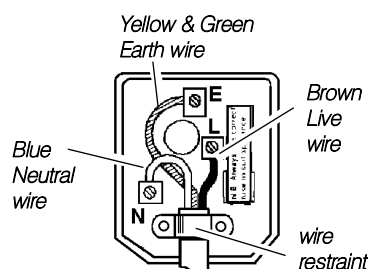
**IMPORTANT: BEFORE USING THIS PRODUCT, PLEASE READ THE INSTRUCTIONS CAREFULLY. MAKE CAREFUL NOTE OF SAFETY INSTRUCTIONS, WARNINGS AND CAUTIONS. THIS PRODUCT SHOULD ONLY BE USED FOR ITS INTENDED PURPOSE. FAILURE TO DO SO MAY CAUSE DAMAGE OR PERSONAL INJURY, AND WILL INVALIDATE THE WARRANTY. RETAIN THESE INSTRUCTIONS FOR FUTURE USE.**

## 1. SAFETY INSTRUCTIONS

### 1.1. ELECTRICAL SAFETY. **WARNING!** It is the user's responsibility to read, understand and comply with the following:

You must check all electrical equipment and appliances to ensure they are safe before using. You must inspect power supply leads, plugs and all electrical connections for wear and damage. You must ensure the risk of electric shock is minimised by the installation of appropriate safety devices. An RCCB (Residual Current Circuit Breaker) should be incorporated in the main distribution board. We also recommend that an RCD (Residual Current Device) is used with all electrical products. It is particularly important to use an RCD together with portable products that are plugged into an electrical supply not protected by an RCCB. If in doubt consult a professional 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 all portable electrical appliances, if used on a business premises, to be tested by a qualified Electrician at least once a year by using a Portable Appliance Tester (PAT).
- 1.1.2. The **Health & Safety at Work Act 1974** makes owners of electrical appliances responsible for the safe condition of the appliance, and the safety of the appliance operator. **If in any doubt about electrical safety, contact a qualified electrician.**
- 1.1.3. Ensure the insulation on all cables and the product itself is safe before connecting to the mains power supply. See 1.1.1. & 1.1.2. above and use a Portable appliance Tester (PAT).
- 1.1.4. Ensure that cables are always protected against short circuit and overload.
- 1.1.5. Regularly inspect power supply, leads, plugs and all electrical connections for wear and damage, especially power connections, to ensure that none are loose.
- 1.1.6. **Important:** Ensure the voltage marked on the product is the same as the electrical power supply to be used, and check that plugs are fitted with the correct capacity fuse. A 13Amp plug may require a fuse smaller than 13Amps for certain products (subject to 1.1.10. below) see fuse rating at right.
- 1.1.7. DO NOT pull or carry the powered appliance by its power supply lead. Products such as welders must not be pulled or carried by their output cables.
- 1.1.8. DO NOT pull power plugs from sockets by the power cable.
- 1.1.9. DO NOT use worn or damage leads, plugs or connections. Immediately replace or have repaired by a qualified Electrician. A U.K. 3 pin plug with ASTA/BS approval is fitted. In case of damage, cut off and fit a new plug according to the following instructions (discard old plug safely).  
(UK only - see diagram at right). **Ensure the unit is correctly earthed via a three-pin plug.**  
**a) Connect the GREEN/YELLOW earth wire to the earth terminal 'E'.**  
**b) Connect the BROWN live wire to live terminal 'L'.**  
**c) Connect the BLUE neutral wire to the neutral terminal 'N'.**  
**After wiring, check there are no bare wires, that all wires have been correctly connected and that the wire restraint is tight.**  
Double insulated products are often fitted with live (BROWN) and neutral (BLUE) wires only. Double insulated products are marked with this symbol . **To re-wire, connect the brown & blue wires as indicated above. DO NOT connect the brown or blue to the earth terminal.**
- 1.1.10. Some products require more than a 13Amp electrical supply. In such a case, NO plug will be fitted. **You must** contact a qualified Electrician to ensure a 30 amp fused supply is available. We recommend you discuss the installation of a industrial round pin plug & socket with your electrician.
- 1.1.11. **Cable extension reels.** When a cable extension reel is used it should be fully unwound before connection. A cable reel with an RCD fitted is recommended since any product which is plugged into the cable reel will be protected. The section of the cable on the cable reel is important. We recommend that at least 1.5mm<sup>2</sup> section cable but to be absolutely sure that the capacity of the cable reel is suitable for this product and for others that may be used in the other output sockets, we recommend the use of 2.5mm<sup>2</sup> section cable.



**FUSE RATING**  
THIS PRODUCT MUST BE FITTED  
WITH A:  
**13 Amp FUSE**

### 1.2. GENERAL SAFETY

- ▲ **DANGER!: unplug the welder from the mains power supply before performing maintenance or service.**
- ✓ Keep the welder and cables in good working order and condition. (Take immediate action to repair or replace damaged parts).
- ✓ Use genuine parts and accessories only. (Non recommended parts may be dangerous and will invalidate the warranty).
- ✓ Use an air hose to regularly blow out any dirt from the liner, and keep the welder clean for best and safest performance.
- ✓ Check and spray the gas cup and contact tip regularly with anti-spatter spray available from your Sealey dealer.
- ✓ Locate welder in adequate working area for its function. Ensure area has adequate ventilation as welding fumes are harmful.
- ✓ Keep working area clean, tidy and free from unrelated materials. Also ensure the working area has adequate lighting, and that a fire extinguisher is at hand.
- ☐ **WARNING: use welding head shield to protect eyes and avoid exposing skin to ultraviolet rays given off by electric arc. Wear safety welding gauntlets.**
- ✓ Remove ill fitting clothing, remove ties, watches, rings, and other loose jewellery, and contain long hair.
- ✓ Ensure the workpiece is correctly secured before operating the welder.
- ✓ Avoid unintentional contact with workpiece. Accidental or uncontrolled use of the torch may be dangerous and will wear the nozzle.
- ✓ Keep unauthorised persons away from the working area. Any persons working within the area must protective head shield and gloves.
- ✓ Operators must receive adequate training before using the welder. The welder must only be operated under supervision.
- ✓ Stand correctly keeping a good footing and balance, and ensure the floor is not slippery, and wear non-slip shoes.
- ✓ Turn voltage switch to "0" (off) when not in use.
- x DO NOT operate the welder if it or its cables are damaged and DO NOT attempt to fit any non genuine torches, components, or parts to the welder unit.
- x DO NOT get welder wet or use in damp or wet locations or areas where there is condensation.
- ▲ **DANGER! DO NOT weld near inflammable materials, solids, liquids, or gases, and DO NOT weld containers or pipes which have held flammable materials or gases, liquids or solids. Avoid operating on materials cleaned with chlorinated solvents or near such solvents.**
- x DO NOT stand welder on a metal workbench, car bodywork or similar object.
- x DO NOT touch any live metal parts of the torch or electrode while the machine is switched on.
- x DO NOT pull the welder by the cable, or the torch, and DO NOT bend or strain cables, protect from sharp or abrasive items, and DO NOT stand on cables or leads. Protect from heat. Long lengths of slack must be gathered & neatly coiled. DO NOT place cables where they endanger others.
- x DO NOT touch the torch or workpiece immediately after welding as they will be very hot. Allow to cool.
- x DO NOT operate welder while under the influence of drugs, alcohol or intoxicating medication, or if fatigued.
- ✓ When not in use store the welder in a safe, dry, childproof area.

### 1.3. GAS SAFETY

- ✓ Store gas cylinders in a vertical position only and ensure the storage area is correctly secured.
- x DO NOT store gas cylinders in areas where temperature exceeds 50°C. DO NOT use direct heat on a cylinder. Always keep gas cylinders cool.
- x DO NOT attempt to repair or modify any part of a gas cylinder or valve, and DO NOT puncture or damage a cylinder.
- x DO NOT obscure or remove any official labels from a cylinder. Always check the gas identity before use. Avoid getting gas cylinders oily or greasy.
- x DO NOT lift a cylinder by its cap, guard or valve. Always keep caps and guards in place and close valve when not in use.

## 2. INTRODUCTION & DESCRIPTION

**IMPORTANT:** These instructions contain information you require to prepare your machine for welding, together with maintenance and a trouble shooting section. If you have no previous experience the instructions are not intended to show you how to become a welder. Should you have no experience, we recommend that you seek training from an expert source. Mig welding is relatively easy to perform, but does require a steady hand and time practising under supervision with scrap metal as it is only with continued practice that you will achieve the desired results.

**These Supermigs** are compact power sources, that operate on a forced air cooling system to slow transformer heating in order to increase the duty cycle. They also have a non live torch to prevent the risk of accidentally striking an arc. Your Supermig is designed to operate with two diameters of welding wire: 0.6mm, & 0.8mm. The 185 will accommodate 5kgs wire spool, and the 195/9 will accommodate 5 to 15kgs wire spools.

ALL MODELS ARE EQUIPPED WITH: ✓ Torch, ✓ Mini reel of 0.6mm wire, ✓ Regulator, ✓ Gas hose.

**Welding  
Capability  
Chart:**

Model Number	SUPERMIG 185	SUPERMIG 195/9	
Welding Current	30-185 Amps	30-195 Amps	
Duty Cycle	100% @ 60A	100% @ 60A	
	60% @ 80A	60% @ 80A	
	20% @ 140A	20% @ 140A	
	10% @ 160A	10% @ 165A	
Power efficiency	5.9 Kva	6.0 Kva	

## 3. ASSEMBLY

To fit the mains power plug see safety instructions (Chapter 1.).

### 3. 1. Wheel Assembly

3. 1. 1. Turn machine upside down, and remove the screws attached to the bottom front, use these screws to attach the front castor wheels.
3. 1. 2. Take the rear axle and fit a wheel to one end by placing a washer, then the wheel, a second washer and then insert a split pin.
3. 1. 3. Pass the axle through the tube under the gas cylinder carrier, then fit the other washer, wheel, washer, split pin.

### 3. 2. Connecting the gas cylinder

3. 2. 1. When using Argon or Argon mixtures, you will need to use the Bull Nose Adaptor. If you intend to use CO2 gas, the regulator will fit directly onto the cylinder. Fit the Bull Nose Adaptor to the cylinder with a spanner.
3. 2. 2. Fit the gas regulator on the Bull Nose Adaptor and connect it to the machine gas hose (fig.1).
3. 2. 3. Set the regulator flow rate to 5-8 litres/min depending on the material to be welded, and whether there are draughts which are strong enough to disturb the gas flow.

### 3. 3. Fitting a reel of wire

- Wire capacity: (Mild Steel). Models: SM185 .....5 kilos, SM195/9, & 210/10, ..... 5 - 15 kilos.
3. 3. 1. Push reel of wire over reel holder end springs and onto reel holder ensuring the spool rotates clockwise, with the wire drawing off reel from the top (see white arrow in fig 2). Large spools of wire have a guide hole which must be pushed onto plastic pin located at the end of the reel holder. This pin will stop larger reels from free wheeling.
  3. 3. 2. To secure the reel of wire take the plastic spacer and identify the two cut outs at one end (fig 2a). Place the spacer over the holder end springs and onto the reel holder ensuring the two cut outs are facing inward toward the reel of wire (fig. 2).
  3. 3. 3. Undo the wire lock screw and lift the wire feed lever up to the right (fig 2).
  3. 3. 4. Straighten about 40-50mm of spool wire (*do not allow wire to uncoil*), and gently push wire through the plastic guide and through the 6 or 8mm roller groove (see 6.3), and through to the torch (fig. 3).
  3. 3. 5. Carefully return the tension arm and secure wire with the wire lock screw.
  3. 3. 6. Remove gas cup (fig 3.3.6.a) and contact tip (b) from end of torch as follows:
    - a) Take torch in left hand with the torch tip facing to the right.
    - b) Grasp gas cup firmly in your right hand.
    - c) Turn gas cup **clockwise only (c)** and pull cup out to the right.

❑ **WARNING!** do not turn gas cup anti-clockwise, as this will damage the internal spring.

  - d) Unscrew the copper contact tip (*right hand thread*) to remove.
  3. 3. 7. Check welder is switched off "0", and that the earth clamp is away from the torch tip. Connect the welder to the mains power supply and set the voltage switch to one.
  3. 3. 8. Set the wire speed knob to position 5 or 6. Keeping the torch cable as straight as possible and press the torch switch. The wire will feed through the torch.
  3. 3. 9. When wire has fed through, switch welder off, unplug from mains.
    - a) Take torch in left hand and screw contact tip back into place.
    - b) Grasp gas cup in right hand, push onto torch head and turn **clockwise only**.

❑ **WARNING!** do not turn gas cup anti-clockwise, as this will damage the internal spring.

  - c) Cut wire so that it is just protruding the cup.



fig 1.

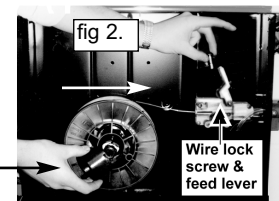


fig 2.

fig 2a.

SPACER

Wire lock screw & feed lever

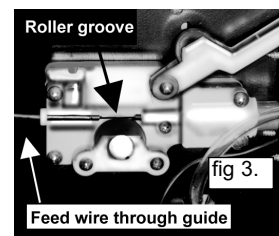


fig 3.

Feed wire through guide

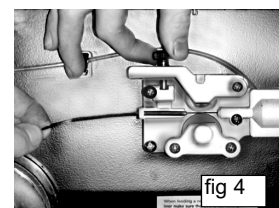


fig 4

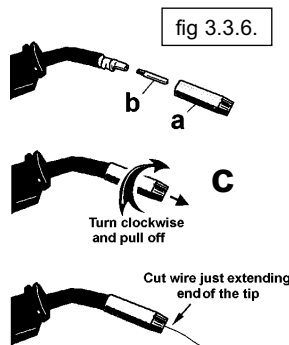


fig 3.3.6.

Turn clockwise and pull off

Cut wire just extending end of the tip



fig 5

### 3. 4. Setting wire tension.

**IMPORTANT:** You must set the correct tension, too little or too much tension will cause problematic wire feed and result in poor welding.

3. 4. 1. For 0.6mm wire in mild steel the wire lock screw must be tightened fully and undone approximately two complete turns (fig 4).
3. 4. 2. Tension between rollers is checked by slowing down the wire between your fingers. If top feed roller skids the tension is correct. Use as low a tension as possible, too high a tension will disfigure wire and result in a blown fuse.

### 3. 5. Clutch adjustment. Note: It is essential that the clutch is adjusted correctly.

3. 5. 1. Once the wire is fed through the torch, switch on the machine and set the wire speed to maximum.
3. 5. 2. Depress torch switch and release quickly. If the spool overruns it indicates that the clutch is too loose.
3. 5. 3. Tighten the clutch (located in the centre of the wire spool holder fig 2) with a screwdriver and test the machine as above until the wire stops over running.

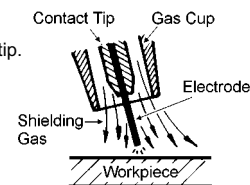
**Note:** DO NOT over tighten the clutch as this will cause wire feed problems.

### 3. 6. Euro Connection.

Your welder has a Euro Connection. Line up pins in the torch with the appropriate holes in the machine, push in and tighten knurled knob (fig. 5 A). When welding is finished remove torch and store in a safe place. **Note:** damage to torches and cables is not covered by warranty.

## 4. MIG/MAG WELDING PRINCIPLES

A spool of welding wire is positioned on the welder's spool holder and automatically fed through an insulated liner in the torch to the tip. The torch assembly consists of a switch, liner, gas hose, and control cable. The switch activates the wire feed roller and the gas flow. Conversely, releasing the switch stops the wire feed and gas flow. The weld current is transferred to the electrode (the wire) from the contact tip at the end of the torch. A gas cup fits over the contact tip to direct the gas flow towards the weld ensuring that the arc welding process is shielded from oxidising air contaminants. The shielding gas also assists heating of the weld materials. The torch is connected to the positive side of a DC rectifier, and the negative clamp is attached to the workpiece.



### 4. 1. PREPARATION FOR WELDING

**IMPORTANT: BEFORE YOU COMMENCE, MAKE SURE THE MACHINE IS SWITCHED OFF AT THE MAINS. IF WELDING A CAR, DISCONNECT THE BATTERY OR FIT AN ELECTRONIC CIRCUIT PROTECTOR. WE STRONGLY RECOMMEND THE USE OF SEALEY "PROSAF/12V OR 24V IN ORDER TO PROTECT SOPHISTICATED ELECTRONICS. ENSURE YOU HAVE READ & UNDERSTOOD THE ELECTRICAL SAFETY INSTRUCTIONS IN CHAPTER 1.**

#### 4. 1. 1. Connecting the Earth Lead

To ensure a complete circuit, the earth lead must be securely attached to the work piece that is to be welded.

a) Best connection is obtained by grinding clean the point of contact on the workpiece before connecting the earth clamp.

b) The weld area must also be free of paint, rust, grease, etc.

c) When welding a vehicle, be sure the vehicle battery is disconnected or fit a PROSAF/12 Electronic Circuit Protector available from your Sealey dealer.

#### 4. 1. 2. Setting the welder controls.

In principle, the lower the amperage required, the slower the wire speed.

See setting chart for voltage and corresponding wire speeds.

*Note: these settings are only a guide and will vary according to the operators experience.*

#### 4. 1. 3. Welding mild steel

To weld mild steel you use CO2 gas for most tasks where spatter and the high build up of weld do not pose a problem.

To achieve a spatter free and flat weld, **you must** use an **Argon/CO2 mixture**.

#### 4. 1. 4. Welding aluminium

To weld aluminium use: ✓ Argon gas, ✓ 0.8mm Contact Tip (AK957), ✓ 0.8mm Aluminium Wire, (MIG/2/KAL08).

### SETTING CHARTS

Spot Welding		
Wire Speed	Voltage	Timer
10	6	10

0.6mm Argon /CO2 Mix						
Wire Speed:	5	6	7	8	9	10
Voltage Step:	1	2	3	4	5	6

### MEANINGS OF MARKINGS, AND SYMBOLS

Single-Phase transformer & rectifier

Flat Characteristic

MIG/MAG welding

**...A/ ... V to ...A/ ... V** Range of output, rated min & max welding current and their corresponding conventional load voltage.

Rated on-load voltage  $U_o$  in V  
a) Peak value in case of direct current;  
b) Peak & r.m.s. value in case of alternating current.

Direct current

Duty cycle (Factor)

Rated weld current

Conventional load voltage

Mains supply and number of phases (i.e. 1 or 3) with symbol for alternating current.

(1)3 ~

Alternating current & the rated frequency in hertz i.e. ~ 50Hz

$P_{max}$  ... kW Maximum power consumption in case of a rotating welding power source. This value will only be given when it is not combined with a prime mover.

$U_1$  ... V/...Hz Rated values of the supply voltage and the frequency.

$I_1$  Rated supply current.

IP Degree of protection, i.e. 21 or 23.

Welding power sources which are suitable for supplying power to welding operations carried out in an environment with increased hazard of electric shock.

## 5. WELDING

### IMPORTANT.

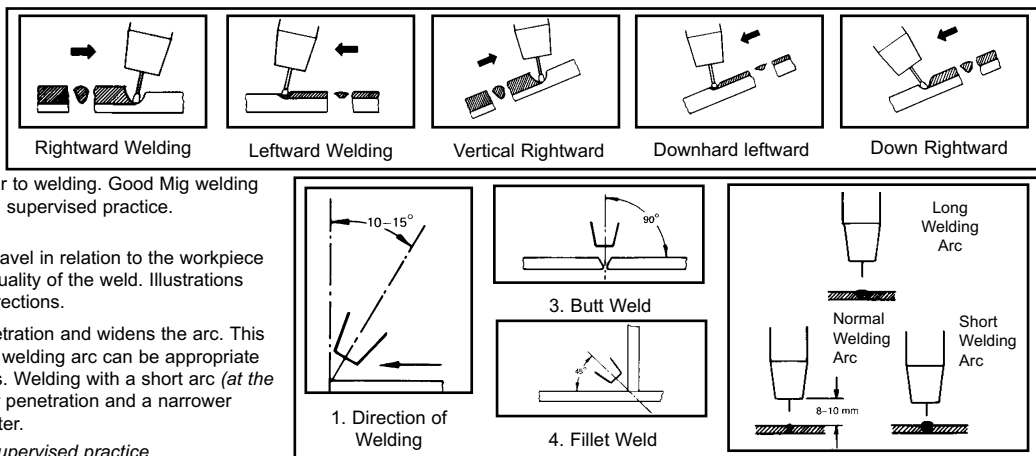
Should you have no welding experience, we recommend you seek training from an expert source to ensure your personal health & safety. You must familiarise yourself with welding applications and limitations, and specific potential hazards peculiar to welding. Good Mig welding may be achieved only with continued, supervised practice.

For example:

Correct torch angle and direction of travel in relation to the workpiece is essential for the appearance and quality of the weld. Illustrations demonstrate various positions and directions.

Welding with a long arc reduces penetration and widens the arc. This in turn results in more spatter. A long welding arc can be appropriate for welding butt joints in thin materials. Welding with a short arc (at the same weld settings) results in greater penetration and a narrower weld and reduces the amount of spatter.

*We recommend expert training and supervised practice.*



## 6. MAINTENANCE

### 6. 1. Wire feed unit

Check the wire feed unit at regular intervals. The feed roller wire guide plays an important part in obtaining consistent results. Poor wire feeding affects welding. Clean the rollers weekly, especially the feed roller groove, removing all dust deposits.

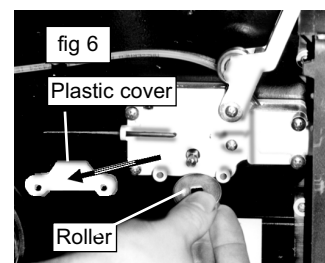
### 6. 2. Torch

Protect the torch cable assembly from mechanical wear. Clean the liner from the machine forwards by using compressed air. If the liner is clogged it must be replaced.

### 6. 3. Changing Feed Roller

**IMPORTANT: Adjust the feed roller to the corresponding wire size.**

There are two grooves on the feed roller, 0.6mm and 0.8mm. Always use the groove on the outside of the roller, (the groove nearest to you). To remove the feed roller, undo the two screws and remove the plastic cover (fig 6). Clean and turn, or if damaged change the feed roller and replace the plastic cover accordingly.



#### 6. 4. Contact Tip (to remove tip follow steps in 3.3.6. and to replace 3.3.9. a & b very carefully).

The contact tip is a consumable item and must be replaced when the hole becomes enlarged or oval. The contact tip **MUST** be kept free from spatter to ensure an unimpeded flow of gas.

#### 6.5. Gas Cup (to remove cup follow steps in 3.3.6. and to replace 3.3.9. a & b very carefully).

The gas cup must also be kept clean and free from spatter. Build up of spatter inside the gas cup can cause a short circuit at the contact tip which will result in either the fuse blowing on the printed circuit card, or expensive machine repairs. To keep the contact tip free from spatter, we recommend the use of Sealey anti-spatter spray (MIG/722307) available from your Sealey Dealer.

#### 6. 6. Replacing the Liner

Wind the wire back on to the spool and secure it. Unscrew the torch from the machine and undo the brass nut. The liner should now be visible. Pull it out and replace with a new one.

#### 6. 7. Changing gears

An inexperienced welder can allow spatter to build up in the tip and shroud. In severe cases this can block the feed causing gear stripping in the drive motor. To check if the gears are worn depress the button on the torch with the set switched on. If the gears are worn, a grating sound will be heard coming from the wire feed motor, you may also observe the feed roller vibrating instead of rotating. Should this be the case, open the gearbox, remove the worn or damaged gears and replace with new ones.

#### 6. 8. Changing Fuses

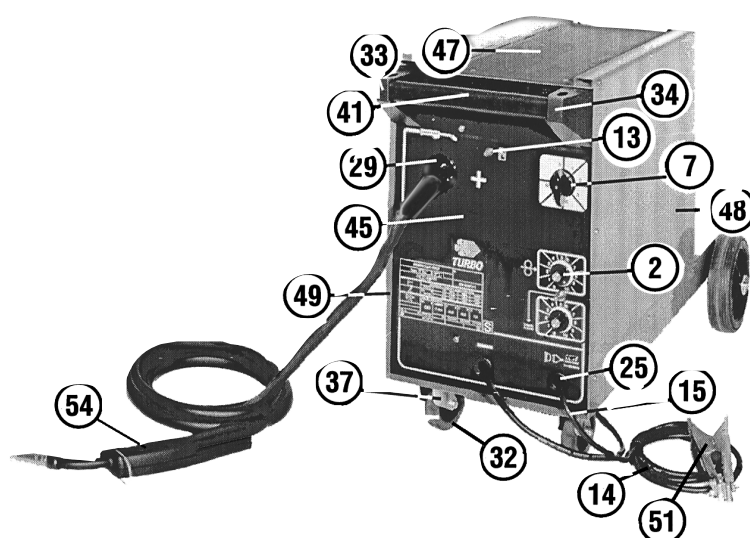
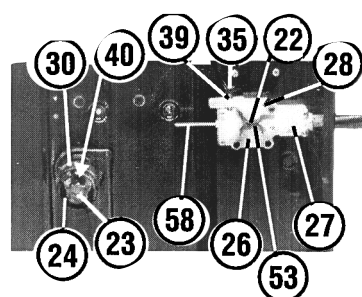
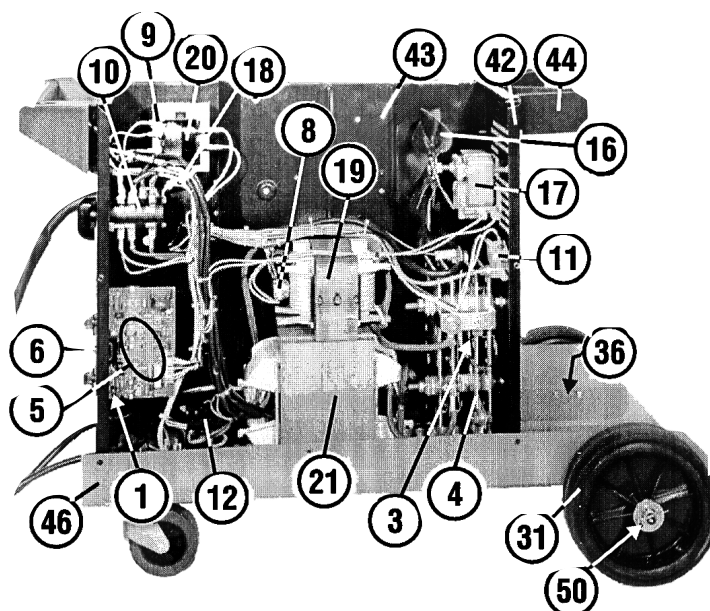
The fuse is located on the circuit board and is mainly blown for the following reasons:

✓ Spatter collecting in the gas cup, causing contact tip to short circuit.    ✓ Wire tension is too great.    ✓ A sudden surge of current.

## 7. TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	REMEDY (Numbers refer to chapter and item heading)
1. Power source stops	Overheating protection activated due to overload	Protection automatically resets when transformer has cooled (about 15 min).
2. No weld current, fuse blowing in 13amp plug	Rectifier blown	Replace rectifier.
3. No weld current	Bad connection between clamp & workpiece Break in earth lead Break in torch lead	Clean or grind contact surface and weld area. Repair or replace earth lead. Repair or replace torch.
4. Feed motor not working, lamp is on	Fuse blown Gear damaged or worn Motor defective	Replace fuse 1.5 amp. (6.8). Replace gears. (6.7). Replace motor (Contact service agent).
5. Wire does not feed, feed roller rotates	Pressure roller improperly adjusted Dirt, copper, dust, etc, have collection in torch liner Gas cup (Nozzle) or tip defective Deformed wire	Adjust tension. Clean the liner from the machine forward. Use compressed air. If too much dirt, replace the liner. (6.6). Replace gas cup (nozzle) and/or tip. (6.4. & 6.5). Check roller tension and adjust it if necessary (3.4).
6. Wire feeds unevenly.	Dirt, etc, in liner Gas cup (Nozzle) or Tip defective Gas cup (Nozzle) spattered Feed roller groove clogged Feed roller groove deformed Pressure roller tension improper	Clean the liner from the machine forward. Use compressed air. Replace gas cup (nozzle) and/or tip. (6.4 & 6.5). Clean or replace gas cup (nozzle) (6.5). Clean feed roller. (6.3). Replace feed roller. (6.3). Adjust tension. (3.4).
7. Unstable arc.	Incorrect settings Impurities in weld area Worn or defective gas cup (nozzle)	Use recommended settings. (4.1.2). Clean and/or grind workpiece. (4.1.1). Replace gas cup (nozzle). (6.5).
8. Porous weld	No gas Gas cup clogged Draft blowing away shielding gas Rusty or dirty joints Torch too far from or at wrong angle to work Gas leak	Open gas cylinder, regulate gas flow. Clean or replace cup. (6.5). Screen off welding site or increase gas flow. Clean or grind the workpiece (4.1.1). The distance from gas cup to workpiece should be 8-10mm and torch angle 60°. (Chapter 5). Check hoses, connections and torch assembly. (6.2). Press the gas cup in correction position.
9. Electrode sticking in gas cup (nozzle)	Worn or defective gas cup (nozzle) Electrode deformed Wire speed too slow	Replace gas cup (nozzle). (6.5). Check roller tension. (3.4). See recommendations for wire speed. (4.1.2).
10. Irregular weld head	Torch incorrectly held Wire weaving in weld pool	Use torch angle 60°. (chapter 5). Check roller tension and adjust as needed. (3.4).
11. Weld bead too narrow and raised	Weld current too high Weld speed too low	Increase voltage and wire speed. (see 4.1.2.). Move torch slower and weave a little more.
12. Weld bead too wide	Weld current too high Weld speed too low Arc too long	Decrease voltage and wire speed. (see 4.1.2.). Move torch faster and weave less. Bring torch closer to workpiece.
13. Poor penetration	Weld current too high Arc too long	Increase voltage and wire speed. (see 4.1.2.). Bring torch closer to workpiece.
14. Excessive penetration	Weld current too high weld speed too slow incorrect distance of torch to workpiece	Decrease voltage and wire speed. (see 4.1.2.). Move torch faster. Torch distance should be 8-10mm.
15. Fuse blowing	Tension too great Gas cup contact tip clogged	Release tension. (3.4). Clean gas cup and contact tip. (6.4. & 6.5).

## PARTS LIST SUPERMIG185 & 195/10.



Item	Part No	Description
1	120/112079	Potentiometer
2	120/112125	Potentiometer Knob
3	120/112183	Rectifier Protection
4	120/112230	Rectifier
5	120/114177	Regulation Card
6	120/122051	Trigger
7	120/122058	Switch Knob
8	120/122525	Thermostat
9	120/122432	Fuse
10	120/122567	Switch
11	120/122682	Electro Valve
12	120/122694	Contactors
13	120/122703	Lamp
14	120/713135	Work Cable
15	120/132230	Feed Cable
16	120/152054	Fan Blade
17	120/152110	Fan Motor
18	120/153007	Wire Feed Motor
19	120/164145	Reactance
20	120/164270	Aux. Transformer
21	120/164750	Transformer, 230V
22	120/232105	Pressure Roll
23	120/312137	Reel Handwheel
24	120/322081	Reel
25	120/322112	Cable Bushing
26	120/322126	Roll Support
27	120/322127	Torch Fixing Casing
28	120/322128	Pressure Roll Bracket
29	120/723051	Torch Connection
30	120/322180	Spacer
31*	120/322201	Wheel
32*	120/322245	Wheel
33	120/322248	Handle Rt. Casing
34	120/322249	Handle Lft. Casing
35	120/422257	Wire Feed Knob
36	120/422817	Support
37*	120/422820	Swivel Support
38	120/432102	Gas Bottle Adaptor
39	120/452022	Spring
40	120/452057	Reel Spring
41	120/644056	Handle
42*	120/644069	Back Panel
43*	120/644176	Diaphragm
44	120/644606	Bracket for Bottle
45*	120/648461	Front
46	120/650019	Chassis
47	120/650025	Cover
48*	120/655762	Side Panel
49*	120/655763	Door
50	120/681092	Wheel Axle
51	120/712030	Work Clamp
53	120/722019	Wire Feed Roller
54	120/722838	Torch
55	120/722119	Gauge Regulator
58	120/990097	Gas Hose
59	120/990257	Gear Kit
60	120/990264	Reel Kit

**\*195/9**  
**exceptions to the above list:**

Item	Part No	Description
31	120/322200	Fixed Wheel
32	120/322246	Wheel
37	120/422969	Swivel Support
42	120/644077	Back Panel
43	120/644078	Diaphragm
45	120/648462	Front Panel
48	120/655764	Side Panel
49	120/655765	Door

Sealey Group  
Bury St. Edmunds,  
Suffolk.

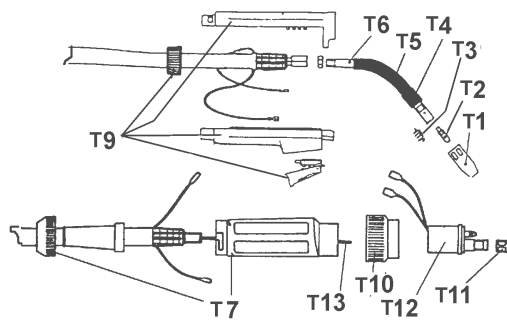
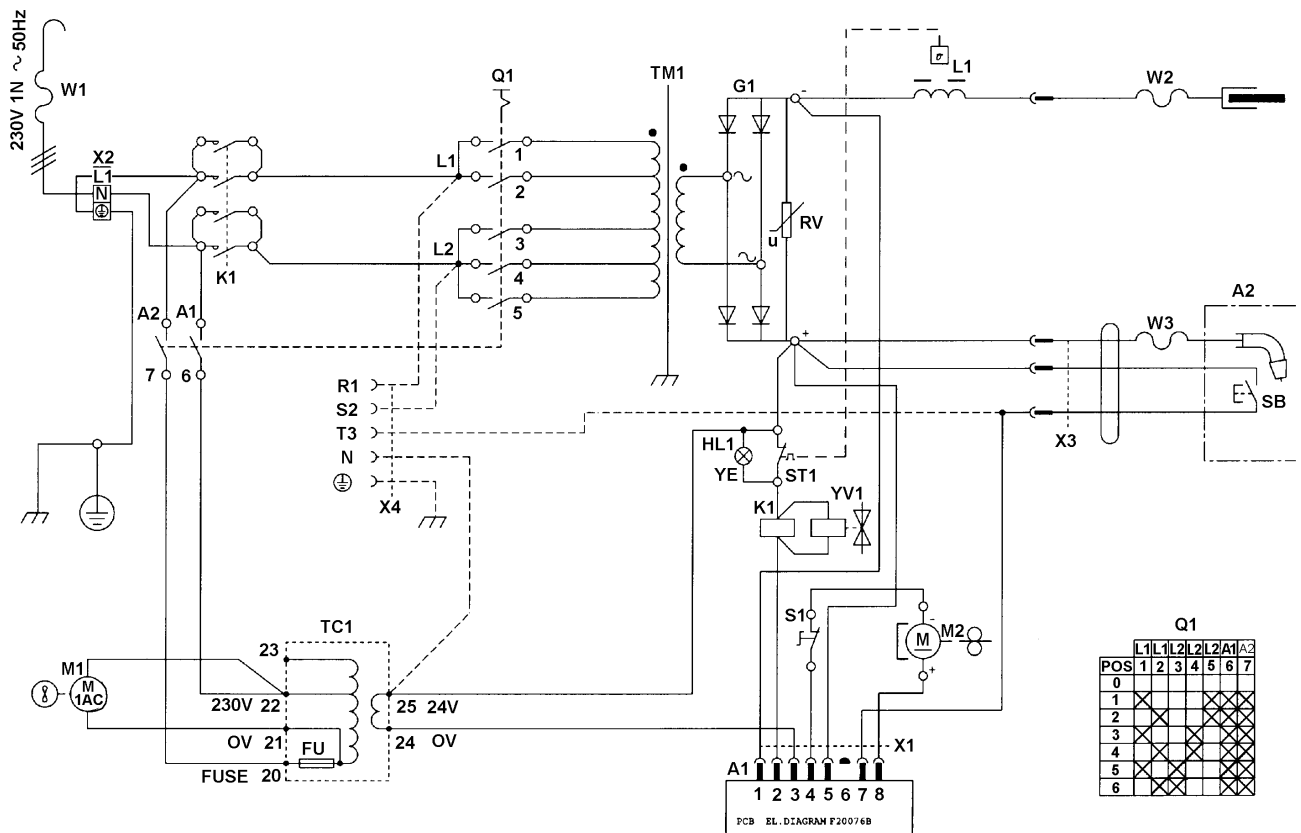


01284 757500

01284 703534



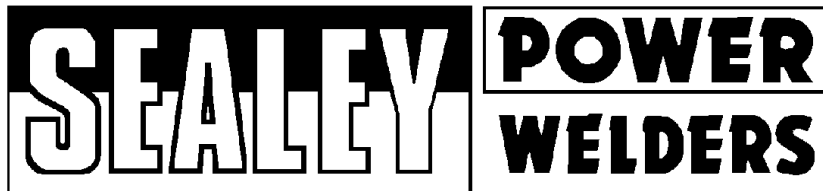
## WIRING DIAGRAM FOR SUPERMIG MODELS 185, & 195/9.



**TORCH PART No's**

Item	Part No	Description
T1	722423	Conical Nozzle
T2	722415	Contact Tip D.0.6
T3	722416	Contact Tip D.0.8
T4	722319	Nozzle Spring
T5	722326	Diffuser Insulation
T6	722823	Swan Neck Insulation
T7	722822	Swan Neck Diffuser
T8	722819	Gun Plug Housing
T9	722665	Complete Handle
T10	722007	Ring Nut
T11	722013	Liner Nut
T12	722441	Gun Plug Body
T13	722671	Wire Guide Hose
----	722838	Complete Torch

Origin Date: 11/6/96  
Issue Date: 11/6/96  
Version No: 2  
Modified Date: 18/09/00



**Declaration of Conformity** We, the sole importer into the UK, declare that the products listed below are in conformity with the following EEC standards and directives.

**Models:**  
**SUPERMIG185, SUPERMIG195/9.**

Low Voltage Directive (S.I. 1994/3260) 73/23/EEC  
EMC Directive (S.I. 1992/2372 & Amendments).  
89/336/EEC



The construction files for these products are held by the Manufacturer and may be inspected by a national authority upon request to Jack Sealey Ltd

Signed by Mark Sweetman

*For Jack Sealey Ltd. Sole importer into the UK of Sealey as Power Welders*

**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 equipment

**WARRANTY:** Guarantee is 12 months from purchase date, proof of which will be required for any claim.

**INFORMATION:** Call us for a copy of our latest catalogue on 01284 757525 and leave your full name and address including your postcode.



**Sealey Group,**  
Bury St. Edmunds,  
Suffolk.



01284 757500



01284 703534

**E-mail:** [sales@sealey.co.uk](mailto:sales@sealey.co.uk)