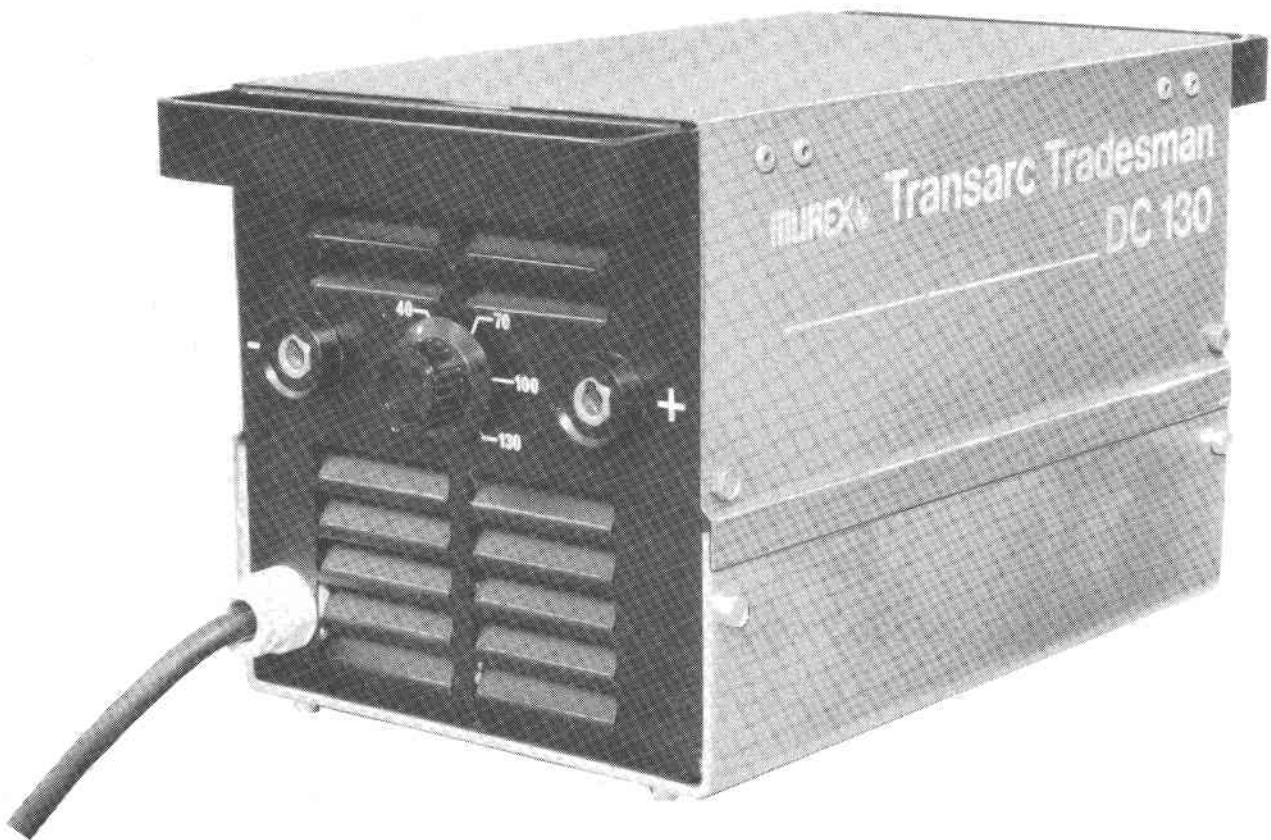


# Transarc Tradesman DC 130



At the rear of this manual is a pull-out technical broadsheet and parts list. Please pass these documents to your Maintenance Department.

## INTRODUCTION

### Specially Designed Unit

The Transarc Tradesman is specially designed to run low Hydrogen, Stainless Steel, Cast Iron, Bronze and Aluminium electrodes.

This new product will prove particularly useful in the maintenance and repair workshops.

### Good Performance

Despite its small size, the Transarc Tradesman is capable of handling electrodes up to 3.25mm (10 gauge) in size giving excellent welding performance even in the hands of a non-professional operator.

With the use of a scratch start kit the Tradesman can be used for TIG welding.

### Light and Compact

The Transarc Tradesman weighs a mere 29Kg(64lb), thus making it extremely easy to transport.

With 450mm (17 $\frac{3}{4}$ in.) as its largest dimension it will probably be the smallest welding unit in the workshop.

## SAFETY

Read safety leaflet D/GN/AA/7.1/1 and any other appropriate leaflets available to you.

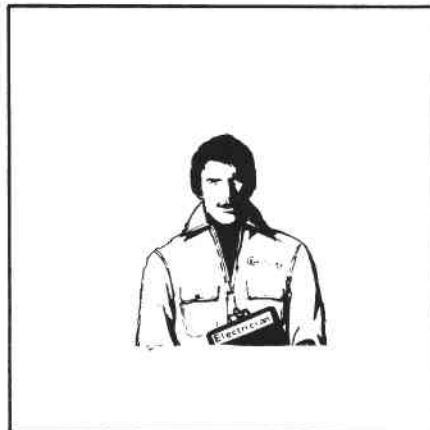


**Note:** Use only DRY air.

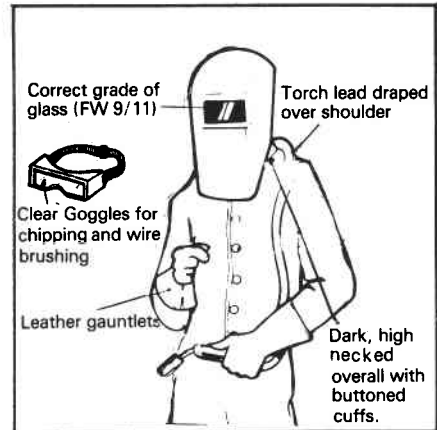
Wear goggles and mask when removing dust with an airline.

### Warning

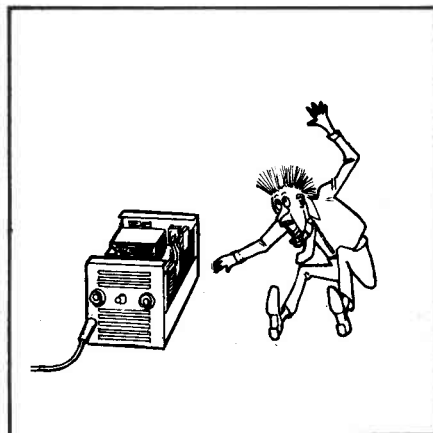
When changing tungsten electrodes or when converting the unit for manual welding, the unit must be isolated from the mains supply.



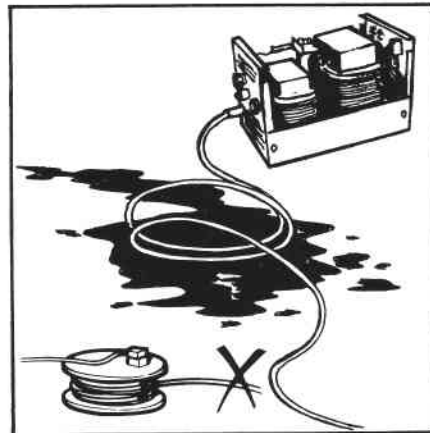
Call in the experts if you don't know what to do



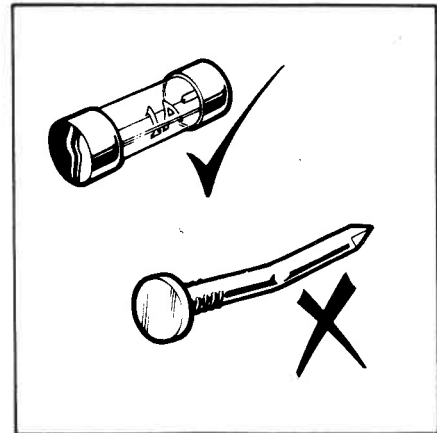
Dress correctly when welding and preparing the weld.



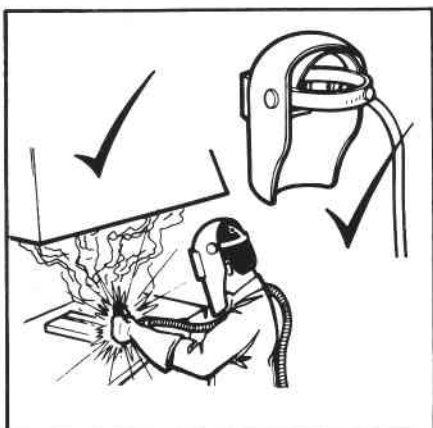
Don't work with the cover off. Leave it to the experts.



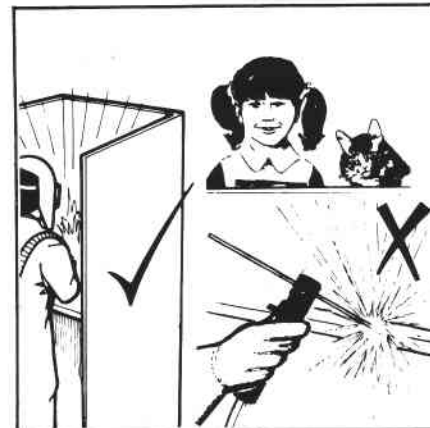
Don't allow leads to lie in oil, water or corrosive liquid or extend them with extension leads - fit a longer cable.



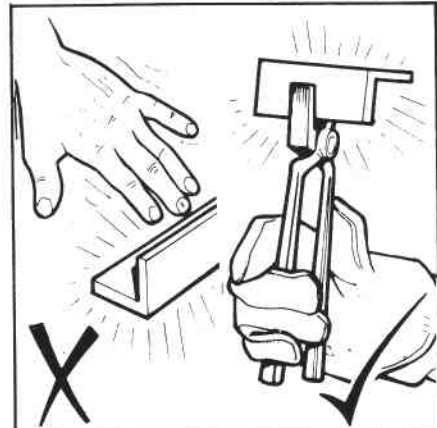
Don't replace a fuse with the wrong value (especially too high a value).



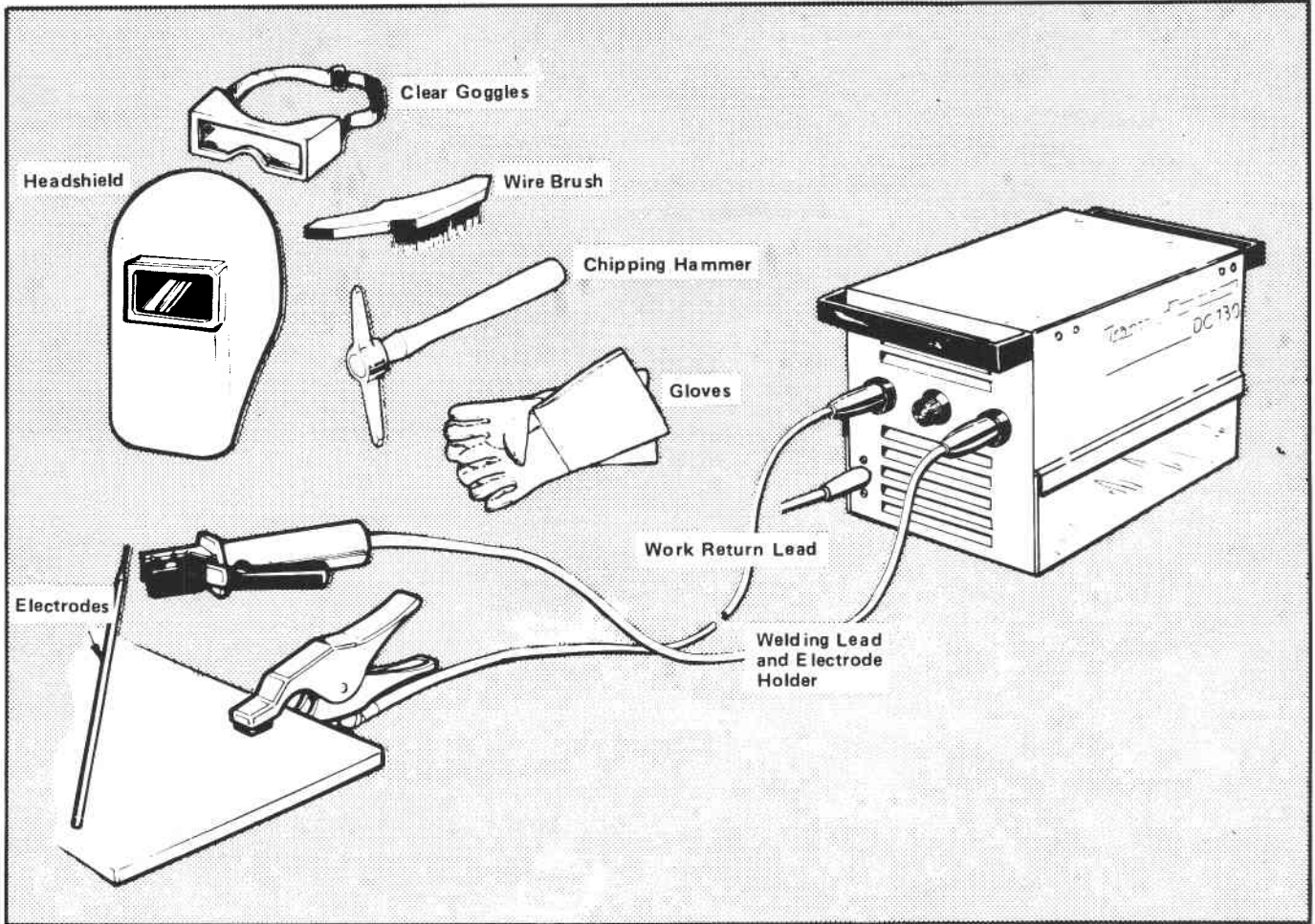
Ventilate the welding area to prevent a build-up of gas and fumes.



Wear your headshield (or face screen and screen the welding area.

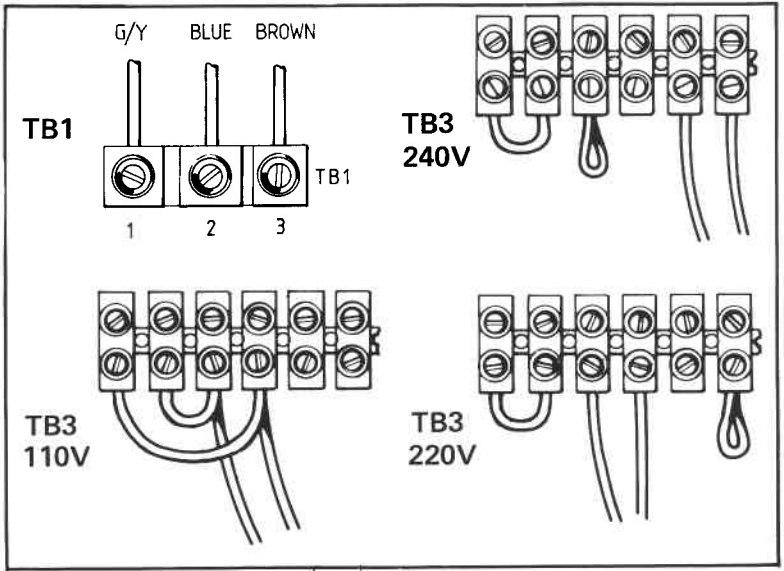
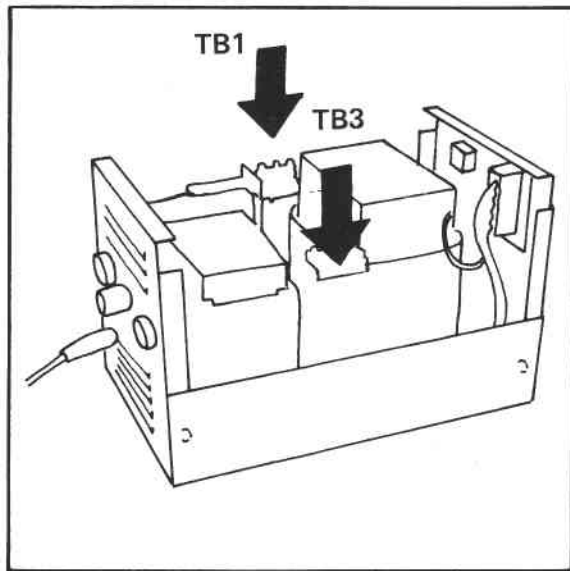


Don't burn yourself!  
Wear gauntlets and use tongs.



## INSTALLATION

It is recommended that installation of the Transarc Tradesman is undertaken only by a competent electrician or suitable trained person.

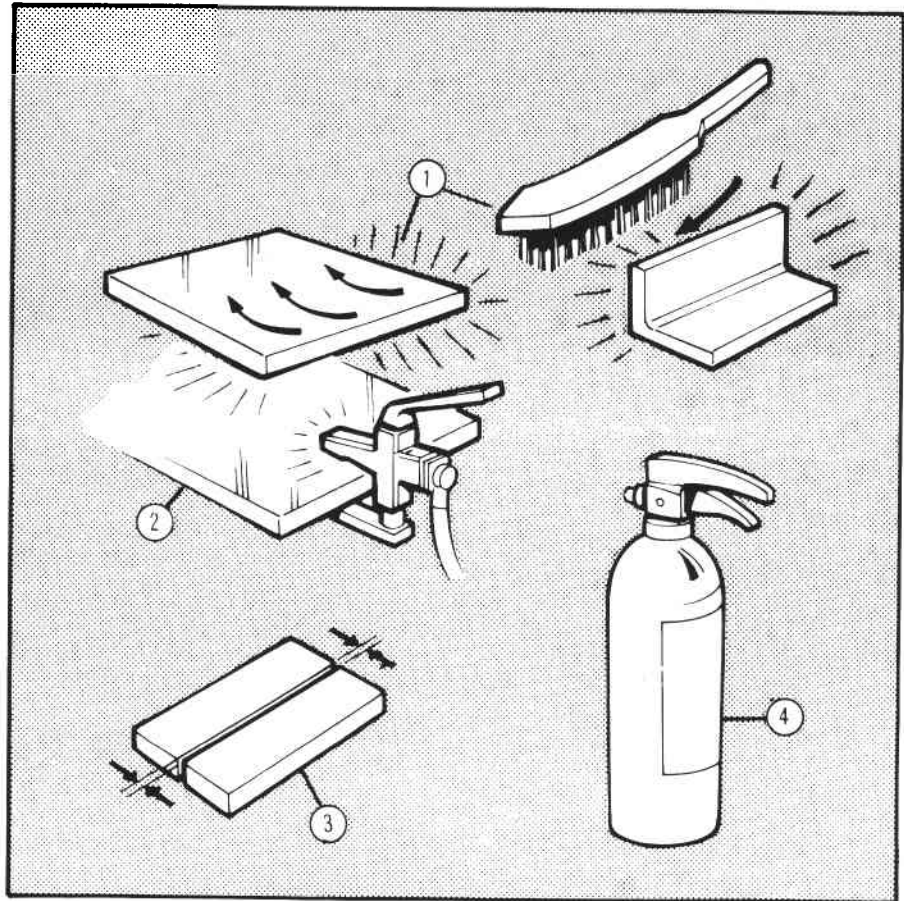


1. Remove the cover and locate TB1 and TB3.
2. Connect the mains cable to TB1.
3. On TB3 connect the two wires and links as shown.
4. Remove all inflammable material from the welding area.
5. Connect the welding leads as shown.

## PREPARATION

Read again the safety notes on Page 2.

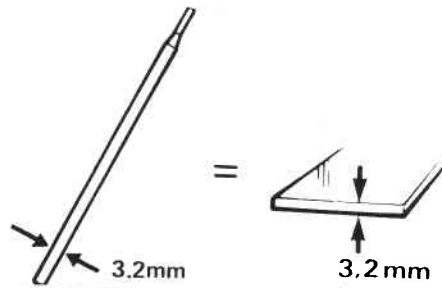
1. Connect the welding cables to the 'electrode work' terminals (as shown on page 3).
2. Fit an appropriate size electrode (see Manual Metal Arc 'Stick' ELECTRODE SECTION below).
3. Clean the material to be welded with a wire brush.
4. Clamp the work return cable to a clean area of the workpiece.
5. Keep the gap between pieces to be welded to a minimum.
6. Clear the welding area and check that a fire extinguisher is available.



## MANUAL METAL ARC ('Stick') ELECTRODES

As a rough guide, select the electrode which is approximately the same size as the material thickness.

Start with a 2.5mm electrode (at 70-120A) for satisfactory results.



Electrode Type	dia. (mm)	a.c. (min ocv)	Materials
Zodian Universal or Satinex	2.5 to 6.3	ac (50v) dc +	Mild Steel Medium tensile steels and mild steels
Fortrex 7018	2.5 to 6.0	ac (80v) dc +	Carbon and low alloy Mild steel and medium tensile steels
Ferrex 7018 LT	2.5 to 6.0	dc +/- (-preferred)	Medium tensile steels and mild steels
Nicrex E 316L-16	2.0 to 5.0	ac (60v) dc +	Stainless Steel

Electrode Type	dia (mm)	a.c. (min ocv)	Materials
Bronzoid 1			Bronzes, Brass & Copper
Armoid 1	2.5 to 6.0	ac (75) dc +	High tensile Stainless Steels Dissimilar metals
Cinex or Ferroloid 3	2.5 to 5 2.5 to 4	ac (80v) dc + ac (60v) dc -	Cast Iron—normal grades Cast Iron—high duty grades
Alunoid 3	2.5 to 4	dc +	Wrought and cast aluminium and its alloys
Hardex 80	4.0 & 5.0	ac (70v) dc +	Hardfacing

This chart is given as a general guide to the MUREX electrodes. For more detailed information, contact your local MUREX branch.



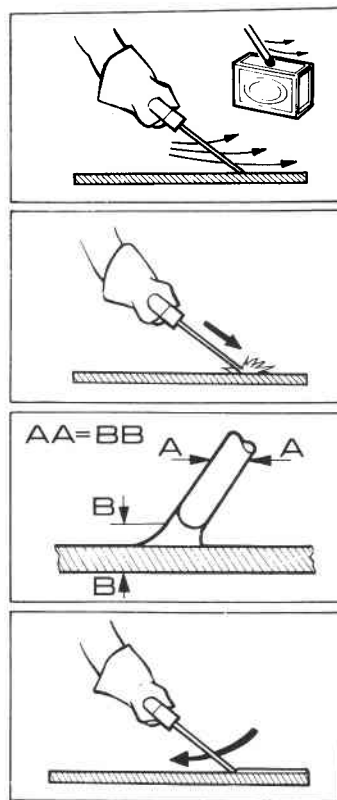
## WELDING TECHNIQUE

Whilst welding try to adopt a relaxed attitude.

1. **Always** commence with a last minute check for safety and protection.
2. Set the welding current on the scale of the current control (See Table ).
3. Hold the electrode away from the work, trailing the welding lead over the shoulder to reduce the weight on the hand doing the welding.
4. Keeping the electrode clear of any exposed metal surface, switch on the unit.
5. Position the electrode close to the point where welding is to commence, without actually touching the work.
6. Cover the eyes with a headscreen or handshield and warn bystanders.

7.
  - a. Scrape the electrode on the work surface near the start point (as though striking a match). The arc should strike.
  - b. Carry on scraping the electrode across the surface of the workpiece until the arc is almost continuous, then feed the electrode into the hot pool of molten metal keeping the electrode at approximately 65-80° to the workpiece.
  - c. Once the arc is successfully struck adjust the arc length to about the size of the electrode diameter.
  - d. The correct length of arc, (size of weld 'bead') is acquired by feeding the electrode backwards and downwards into the weld.

This combination of backward and downwards movement requires a little skill which will be acquired after a few practice welds.



At the end of the weld, switch off the mains supply and allow the weld to cool.

Approx. Material Thickness	Electrode size	Current Setting (Mild Steel)
1,0 to 2,0 mm	2,0 mm (14G)	35-50A
2,0 to 2,5 mm	2,5 mm (12G)	50-70A
2,5 to 3,0 mm	3,2 mm (10G)	70-160A