

## Preparation for welding (continued)

- 3) Attach the earth/ground clamp (diagram 1, item H) to bare metal to be welded, making sure of a good contact.
- 4) Make sure that the wire roller (diagram 2, item M) is set so that the groove corresponds to the 0.9 mm. flux cored wire being used. Note that each roller has 2 grooves, one of 0.9 mm. and one of 0.7 mm. Your machine should be factory set for no-gas welding with the 0.9 mm. groove in position.

### GAS WELDING

- 1) Plug the machine into a correct outlet\*.
- 2) **IMPORTANT:** Ensure that the polarity is correctly set up (see diagram on front panel of machine). For Gas Welding the earth clamp lead should be plugged into negative (—) socket on the front panel of the machine, whilst the torch lead should be plugged into the positive (+) socket on the front of the machine.
- 3) Attach the earth/ground clamp (diagram 1, item H) to the bare metal to be welded, making sure of a good contact.

- 4) Make sure that the wire roller (diagram 2, item M) is set so that the groove corresponds to the wire being used. The 0.9 mm. groove can be used for 0.8 mm. Aluminium and Stainless steel wire. The 0.7 mm. groove can be used for all 0.6 mm. and 0.8 mm. wires. To change the grooves simply unscrew the Allen screw that holds the roller in place, reverse the roller and replace and retighten the Allen screw.
- 5) Open the gas tap on the regulator and adjust for correct flow. (note: Gas flow may need adjustment to obtain best weld according to type and thickness of metal used).

### WELDING PROCEDURES

- 1) A) The MIG 85 NO GAS has a two position switch to regulate current and a two position switch for wire speed adjustment.  
B) The MIG 90 NO GAS and MIG 100 NO GAS have four positions in which to regulate current for various conditions, obtainable through 2 two position switches placed on the front panel.  
C) The MIG 150 NO GAS has 6 positions in which to regulate current, obtainable through 3 two position switches.
- 2) The selection of a welding position is determined by the thickness of the metal to be welded. The thicker it is, the higher the current must be.
- 3) According to the thickness to be welded, the amount of gas regulated to the work also varies and must be adjusted to comply.
- 4) For welding adjustments please refer to the wire size specification charts on pages 10-13.

\* For United Kingdom

MIG 85 EN - 240 V., 50 Hz  
MIG 90 EN - 240 V., 50 Hz  
MIG 100 EN - 240 V., 50 Hz  
MIG 150 EN - 240 V., 50 Hz

\* For North America

MIG 90 EN - 110 V., 60 Hz  
MIG 100 EN - 110 V., 60 Hz  
MIG 150 EN - 220 V., 60 Hz

## MIG 85 EN NO GAS WIRE SIZE SPECIFICATION CHART NO GAS WELDING MILD STEEL (FLUX CORED WIRE ONLY)

Workpiece Thickness (millimetre)	Welding Wire 0.9 mm	
	Welding Pos.	Wire Spd. Adjust.
0.8 - 1.0	Min.	Min.
1.0 - 1.5	Min.	Max.
1.5 - 2.0	Max.	Min.
2.0 - 3.0	Max.	Max.

## MIG 90 EN NO GAS WIRE SIZE SPECIFICATION CHART NO GAS WELDING MILD STEEL (FLUX CORED WIRE ONLY)

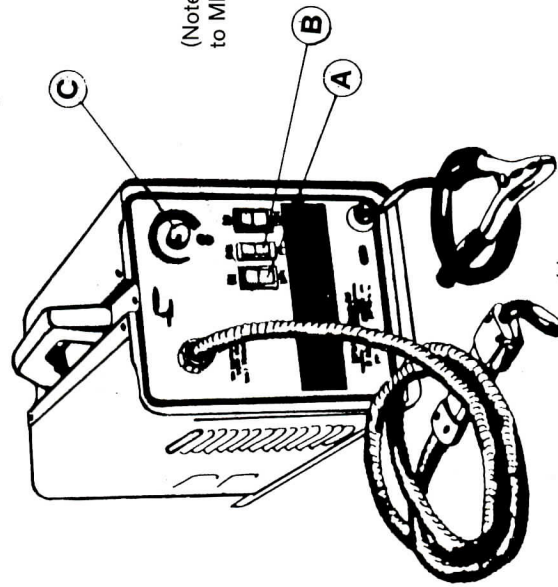
Workpiece Thickness (millimetre)	Welding Wire 0.9 mm.	
	Welding Pos.	Wire Spd. Adjust.
0.6 - 0.8	A	C
0.8 - 1.0	1 - Min.	Low
1.0 - 2.0	2 - Min.	Med.
2.0 - 3.0	2 - Max.	High

## GAS WELDING STEEL

Workpiece Thickness (millimetre)	Welding Wire 0.6 mm.		Welding Wire 0.8 mm.	
	Welding Pos.	Wire Spd. Adjust.	Welding Pos.	Wire Spd. Adjust.
0.6 - 0.8	A	C	A	C
0.8 - 1.0	1 - Min.	Low	1 - Min.	Low
1.0 - 2.0	1 - Max.	Med.	2 - Min.	Med.
2.0 - 3.0	2 - Min.	Med.	2 - Max.	Med.
	2 - Max.	High	2 - Max.	High

## GAS WELDING ALUMINIUM

Workpiece Thickness (millimetre)	Welding Wire 0.8 mm.		Welding Wire 0.8 mm.	
	Welding Pos.	Wire Spd. Adjust.	Welding Pos.	Wire Spd. Adjust.
0.8	A	C	A	C
1.0 - 2.0	1 - Min.	Med.	2 - Min.	Med.
2.0 - 3.0	2 - Min.	Med.	2 - Max.	High



(Note: Diagram also refers to MIG 100 EN).