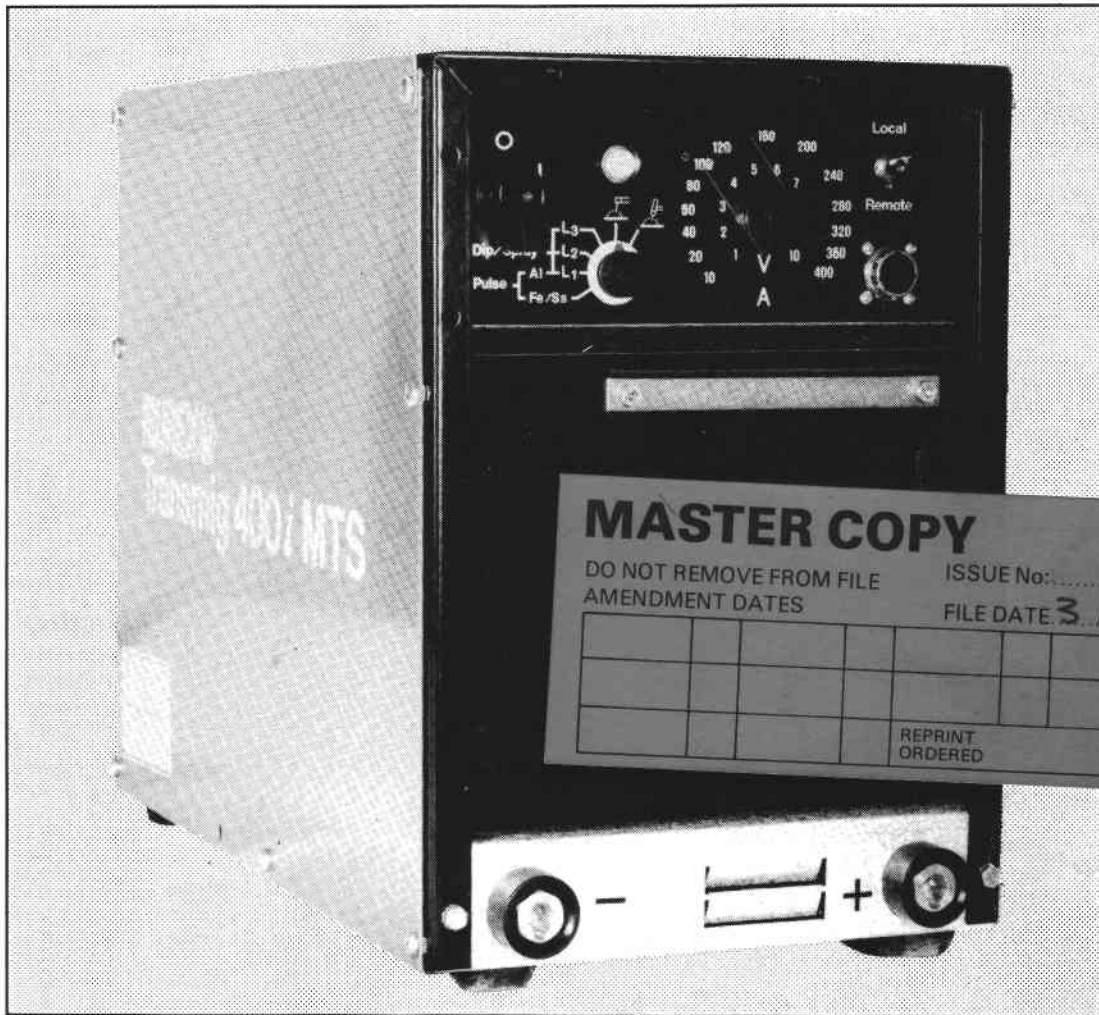


Transmig 400i MTS



**Please ensure that this
Instruction Manual
is made available
to the user
of the equipment.**

WARNING

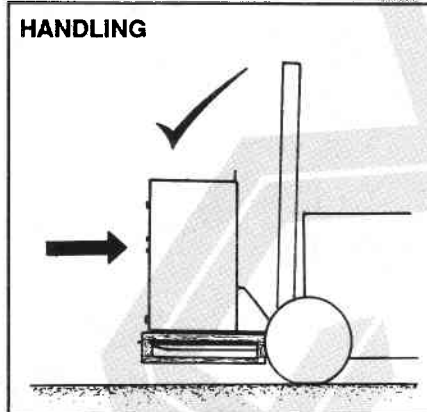
This welding equipment has been designed, manufactured and tested to the highest quality standards to ensure long and trouble free life. However, regular maintenance is an essential part of keeping the machine operating in a reliable and safe manner and your attention is drawn to any maintenance instructions contained in this manual. In general, all welding equipment should be thoroughly inspected, tested and serviced at least annually. More frequent checking may be required when the equipment is heavily used. Wear and tear are gradual processes. When caught in time, repair costs are small and the benefits in performance, reliability and safety are significant, left alone they can put the equipment, and you, at risk. Have the equipment regularly inspected and maintained by an approved service centre.

SAFETY

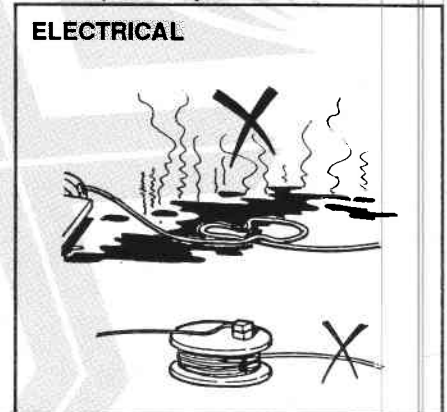
Operators of electric arc welding equipment must always be aware of the inherent risks involved in the arc welding process. Your attention is therefore drawn to the Safety Leaflets available from the Welding Institute, particularly Publications 236 and 237.



Call in your local Murex Service Centre if you don't know what to do.



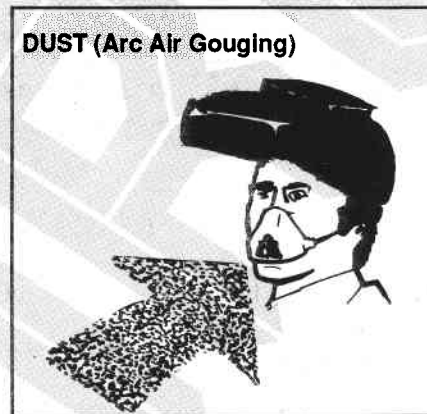
Most of the weight of this unit is at the rear, therefore transport it with the front panel facing forward.



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



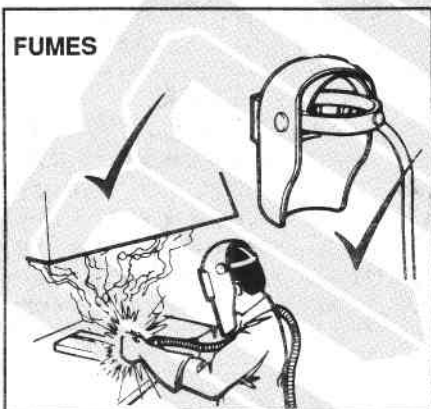
Wear goggles and mask when removing dust with an airline.



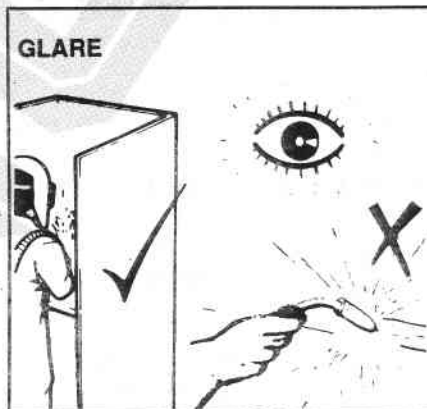
Arc air gouging creates large volumes of dust.



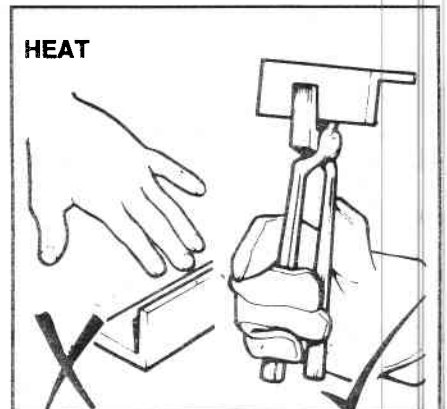
Before commencing welding, clear the area of flammable materials.



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

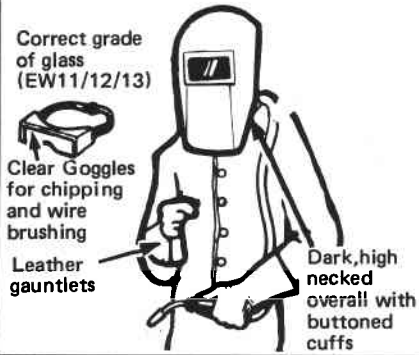


Wear your headshield (or face screen) and screen the welding area.



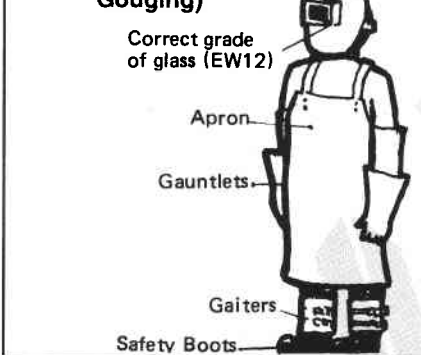
Don't burn yourself. Wear gauntlets and use tongs.

DRESS (MMA MIG and TIG)



Dress correctly when welding and preparing the weld

DRESS (Arc Air Gouging)



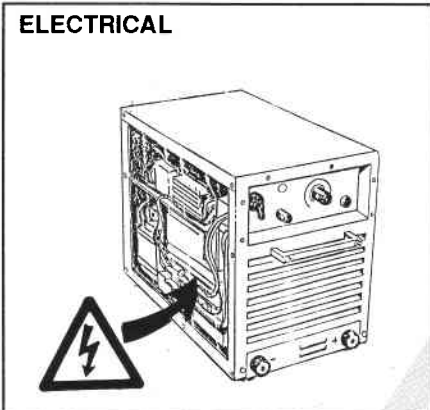
Special attention should be paid to protection from radiation, heat and spatter when arc-air gouging.

NOISE (Arc Air Gouging)



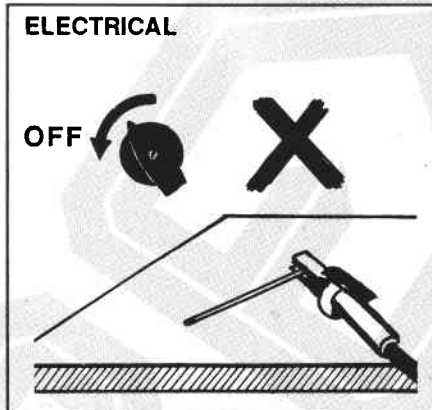
Do not underestimate the dangers of noise - wear ear defenders

ELECTRICAL



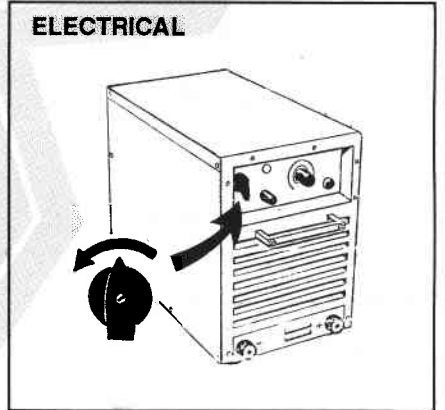
Don't work with the covers off. Leave it to the experts.

ELECTRICAL



Don't switch on with the electrode touched down on the metal surface.

ELECTRICAL



Switch off power before leaving the equipment unattended.

INTRODUCTION

This variable characteristic power source is designed for use with Murex wire feed units as a MIG/MAG welding system for dip/spray transfer techniques.

Inductance output selection (L1, L2, & L3) is provided by a selector switch on the front panel.

The unit is also designed for MMA, TIG (scratch start) and Arc Air Gouging - (for electrodes size 5mm max.) See CAUTION Note.

The power source is a fan-cooled, thyristor controlled welding rectifier, using inverter technology and is fitted with thermal overload protection.

Remote control is selected by means of a switch on the front panel. The switch transfers control of welding Current or Voltage from the front panel control to a remote control unit.

If the unit ceases to weld stop, and allow the fan to continue to run, cooling the unit until the thermostat resets.

In the event of a current overload the circuit breaker on the rear panel will trip. Repeated tripping must be investigated by a qualified person.

A 240 Volt output is provided to supply power to the Ancilliary units.

The wire feed unit is supplied and controlled from a socket on the rear panel.

Arc-Air Gouging

In addition to the power source a gouging torch and compressed air supply are required.

This process is particularly dusty and noisy, therefore care must be taken to protect both operator and equipment - See CAUTION Note below

CAUTION

When the unit is used for Arc-Air gouging, it is recommended that the power source be sited as far as possible from the workpiece. This will reduce the amount of dust drawn into the air inlets and prevent a build-up of dust deposits within the equipment.

INSTALLATION

WARNING

Before installation and upon receipt, inspect the unit for any signs of physical or transit damage. Installation must be undertaken only by a qualified or suitably trained person.

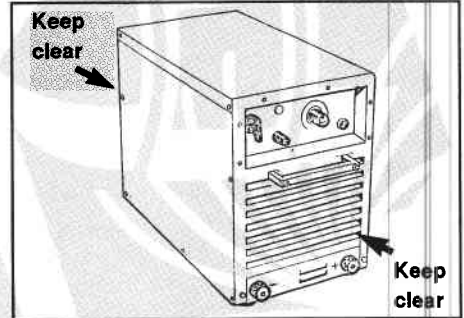
Location

Position the unit so that the louvres (front and rear) are free from obstruction.

Leave sufficient slack in the earth wire so that, in the event of undue strain, the earth wire is the last to be affected:- see illustration below.

Note
Arc-air gouging creates large volumes of dust, therefore place a screen between the unit and workpiece when arc air-gouging.

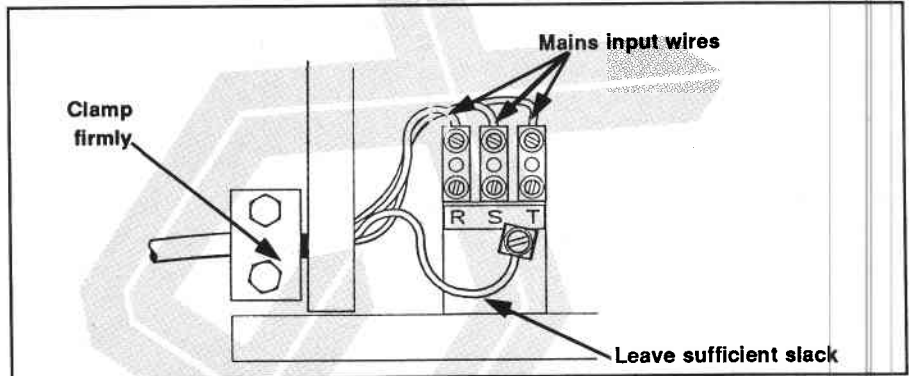
Ensure that the cable is clamped firmly at the entry part on the back panel.



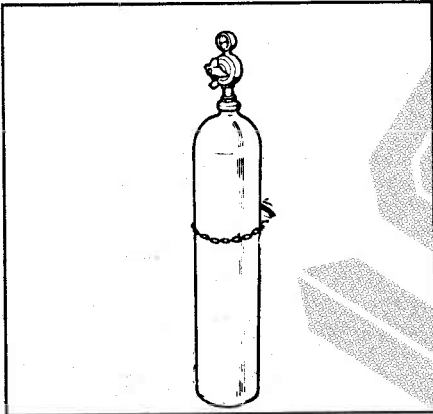
Electrical Connection

On receipt, or after periods of non use, carry out an insulation and continuity test to ensure complete isolation of all metal parts from potentially lethal voltages.

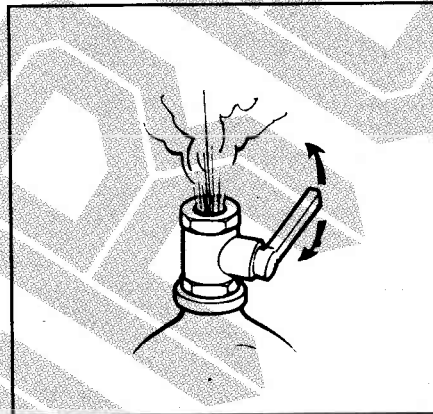
Connect the mains input wires to the terminals marked 'R', 'S' & 'T' and the earth wire to the earthing point.



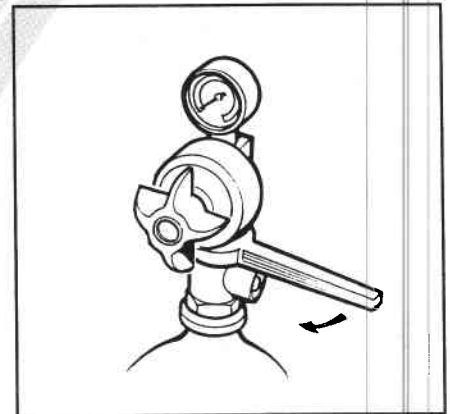
Gas



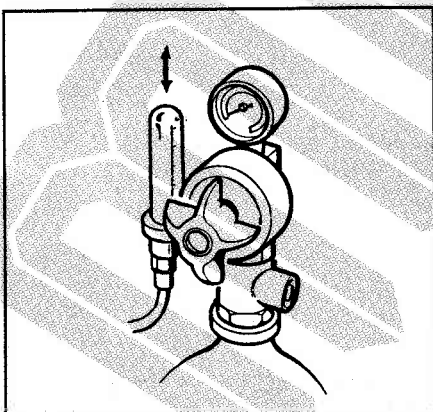
Never use an unsupported cylinder.



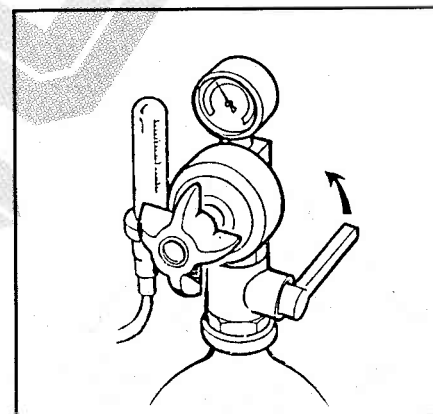
Protect the eyes and open the cylinder valve to remove any dirt in valve socket.



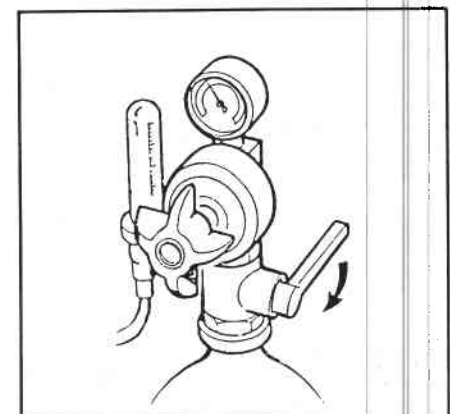
Fit the gas regulator to the cylinder and hand tighten using the correct size spanner. (A sharp blow with the hand at the end of the spanner will ensure a gas tight seal).



Fit the flowmeter and gas hose to the regulator. Ensure that the flowmeter is positioned vertically.

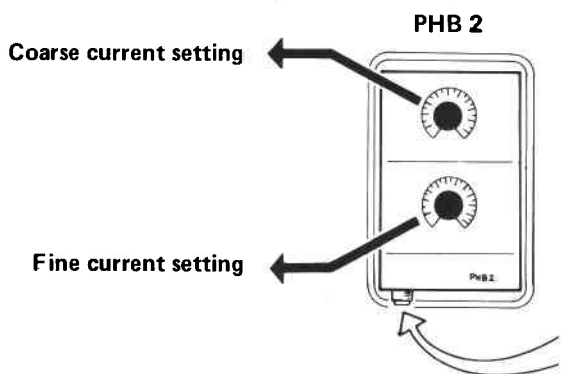


Open the cylinder valve and check the cylinder pressure. (Must be greater than 10 bar (150lb/in²))

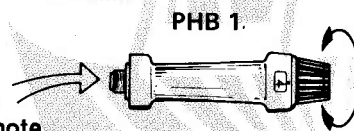


Close the cylinder valve.

Remote Control Units PHB1 and PHB2



Window indicates proportional current value (0-10)



Rotate clockwise to increase.
Anti-clockwise to decrease.

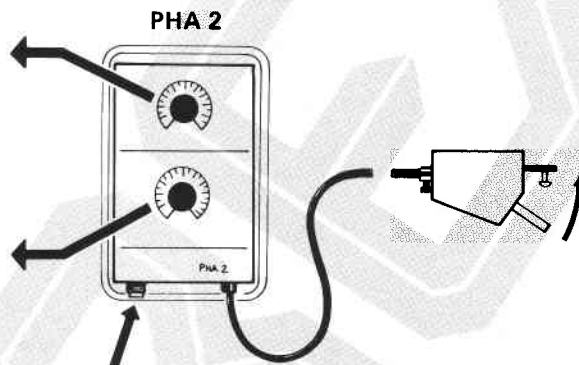
The control units are connected to the remote control socket on the power source front panel via an optional connection cable.

Hot Start Unit PHA 2

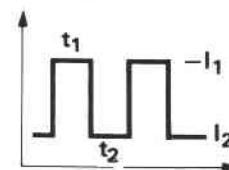
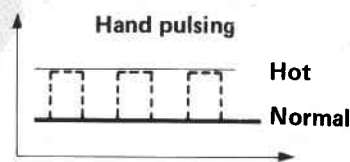
'Hot Start' facilities are particularly useful when 'one-sided' welding. The high heat input (when the trigger is pressed) clears welding faults which may occur after electrode changing. Using the trigger, output current may be 'hand-pulsed' between the two preset levels.

When the trigger is pressed the current rises to a level set by this control.

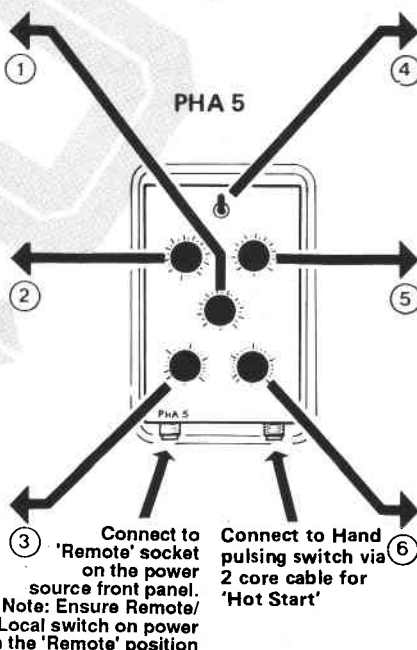
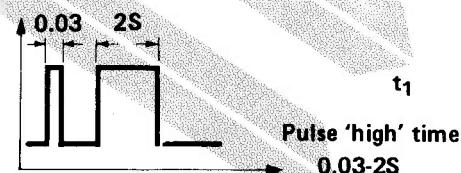
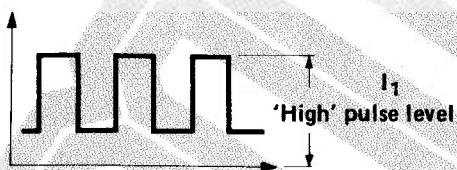
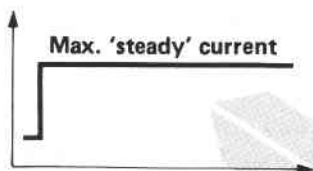
This control sets the normal (Lower) current level.



Connected to the remote control socket on the power source.



Pulsing Unit PHA5



Pulsing

Remote Control (low) (using I_1)

Remote Control (high) (Using I_2)

Set high level current/time (I_1/t_1)

Set low level current/time (I_2/t_2)

Set 'hot start' level

