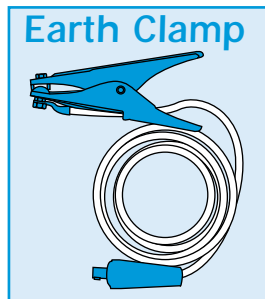


DO NOT use the unit in the rain or in extremely damp environments.

Set the units ON/OFF switch to the '0' OFF position and plug the unit into its power supply.

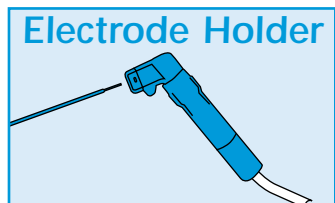
Connect the electrode holder cable to the positive (+) terminal and the earth clamp cable to the negative (-) terminal (see illustration).

Clamp workpieces securely in their final positions to stop them moving during welding.



Clip the earth clamp onto the work piece, choosing an area of clean, bright metal close to the proposed weld to ensure a good electrical connection.

Now, insert a welding rod into the notch in the electrode holder's jaws. Squeeze the lever to open them; release to close.



Switch the unit ON by moving the ON / OFF switch to the 'I' ON position.

Turn the welding current selector dial to give the required welding current,

displayed on the LED. The LED indicates either voltage or current depending on the position of the display selector switch.

There is a hot start facility built into this unit and it is fully automatic.

Control the MMA dynamics by adjusting the arc force dial. At minimum the arc is softer with less penetration and splatter. At maximum, the arc is rougher with deeper penetration but more splatter. Note also that the maximum end of the force range is ideal for use with cellulosic and low hydrogen electrodes.

BASIC TECHNIQUES

Holding the welding rod/electrode holder at an angle of 60-70 degrees to the surface, move it towards the work until it strikes an arc.

Now, keeping the arc about 3mm long, work slowly along the weld in a series of semicircular sweeps across the line of the joint.

Chip off any slag build-up on the weld before making a second pass along the joint.

Note that recommended settings are merely guides. Changing them slightly may give better results. So, always make a test weld.

EQUIPMENT CARE

Never push the equipment beyond its design limits. If it will not do what you want with reasonable ease and speed, assume you have the wrong type or size of welder for the job. Ask at your local HSS Hire Weld Depot for advice.

When not in use, store the equipment somewhere clean, dry and safe from thieves.

Keep the equipment clean. You will find this less of a chore if you clean it up regularly rather than wait until the end of the hire period.

FINISHING OFF

Switch OFF and unplug the unit. Leave everything to cool then take the earth clamp off the work.

Where applicable remove the welding rod; Disconnect all leads and coil them up neatly ready for return to your local HSS Hire Weld Depot.



...any comments?

If you have any suggestions to enable us to improve the information within this guide please fax your comments or write to the Product Manager at the address below

Fax: 020 8687 5001

©HSS Hire Service Group Plc 2000 No. HW001/01

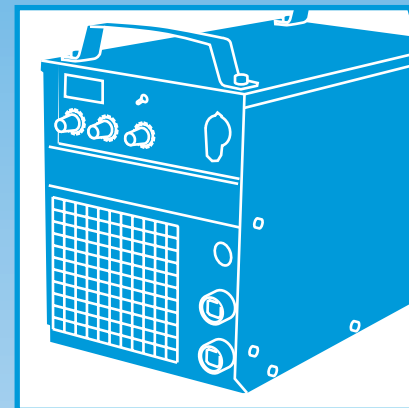
Group Office: 25 Willow Lane, Mitcham, Surrey CR4 4TS

Web Site: <http://www.hss.co.uk/hireweld>

Operating & Safety Guide HW001/01

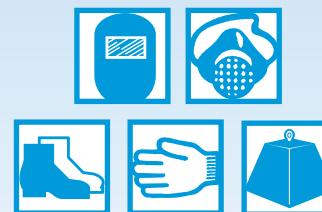
HW001/01

HSS Hire-Weld



Multi Process Power Unit

A 450amp welding power unit for MMA, MIG and TIG control units.



Code 55910

GENERAL SAFETY

For advice on the safety and suitability of this equipment contact your local HSS Hire Weld Depot.

There is a serious risk of personal injury if you do not follow all instructions laid down in this guide.

The hirer has a responsibility to ensure that all necessary risk assessments have been completed prior to the use of this equipment.

Most welding tasks may be considered as hot work in site situations and may be subject to specific permits to work.

This equipment should only be used by an operator who has been deemed competent to do so by his/her employer.

This equipment should be used by an able bodied, competent adult who has read and understood these instructions. Anyone with either a temporary or permanent disability, should seek expert advice before using it.

Keep children, animals and bystanders away from the work area. Cordon off a NO GO area using cones and either barriers or tape, available for hire from your local HSS Hire Weld Depot.

Welding screens are also available for hire from your local HSS Hire Weld Depot.



Never use this equipment if you are ill, feeling tired, or under the influence of alcohol or drugs.

Warning

If you are wearing an electronic life support device (a heart pacemaker) you must consult your doctor before going near or working with this equipment. Magnetic fields associated with high currents may affect these devices.



Fumes produced by the welding process, if inhaled, can be harmful to health. A suitable mask must be worn when using this equipment. Respiratory protective equipment is available for hire, contact your local HSS Hire Weld Depot for details.



Skin must be covered – wear practical, protective clothing, gloves and footwear.



This equipment is heavy (37kg), never attempt to lift it on your own, always get help.



A head shield with an 11 EW shade MUST be worn by anyone in the work area – goggles are not suitable. Avoid loose garments and jewellery that could interfere with the work.

If the headshield or lens becomes damaged, return it to your local HSS Hire Weld Depot.

Never use welding equipment near computers or any sensitive electronic equipment.

Let It Cool

Handle welding equipment and work with care – it will be hot. Leave equipment to cool before changing welding rods, moving earth clamps, and so on.

Always transport, store and operate the unit in an upright position.

Keep the power units air vents clear of all obstructions.

Always switch equipment OFF before making any adjustments to it. Never leave it switched ON and unattended.

Ensure the work area is well lit and ventilated, a fume extractor or smoke eliminator should be used. If in doubt, ask about lighting and ventilation equipment at your local HSS Hire Weld Depot.

Do not work near flammable gases or liquids, petrol or paint thinner fumes for example. Keep combustible materials at a safe distance – at least 5m.

Make sure you know how to switch this machine OFF before you switch it ON in case you get into difficulty.

Vehicle Safety

Before carrying out welding work on cars/lorries and similar vehicles...

Remove the vehicle's battery and disconnect the alternator.

Remove all combustible material and other fire/explosion hazards.

Check the condition of the equipment before use. If it shows signs of damage or excessive wear, return it to your local HSS Hire Weld Depot.

COSHH information sheets are available from your local HSS Hire Weld Depot.

ELECTRICAL SAFETY

The HSS Welding power unit must be powered from a 415V-3 Phase NO neutral mains supply, and all mains connections may only be made by a qualified Electrician.

Extension leads MUST ALWAYS be protected by ARMoured CABLE.

Keep flexes and leads out of harm's way. Never run them through water, over sharp edges, or where they could trip someone.

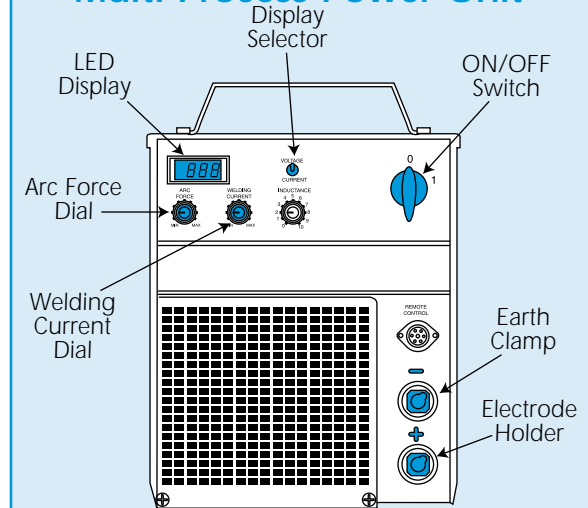
If the tool fails, or if its flex or plug (if fitted) gets damaged, return it. Never try to repair it yourself.

Do not use electrical equipment in very damp or wet conditions, it can be dangerous.

The ON/OFF switch (front panel) is the main circuit breaker. The LED display illuminates when the power switch is in the ON position.

GETTING STARTED

Multi Process Power Unit



This guide is designed to help the user to safely set up and dismantle the welder. It is not intended as a guide to welding techniques as it is assumed that the user already has the necessary training/knowledge and experience.

Duty Cycle

450A	35%
400A	60%
300A	100%

It is important that the equipment duty cycle is taken into consideration when in use.

If you exceed the duty cycle, the units

thermostatic control will switch the welding current OFF and the LED will show 'OL' (overload). If the unit does overload you will have to wait until the LED display returns to normal.

Place the power unit on a suitable surface capable of bearing its weight and any attachments you may be using. Make sure that there is a minimum of 200mm clearance around the unit to allow a good circulation of air.