

Switch the unit ON by moving the ON / OFF switch to the 'I' ON position. The red 'POWER' lamp will illuminate.

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

There is a hot start facility built into this unit and it is fully automatic, giving a 20% boost of the selected welding current for 1.5 seconds.

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.

You are now ready to weld.

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 and adjust the settings as necessary.

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.

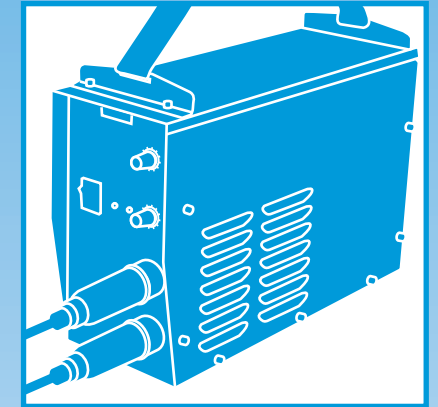
Keep the equipment clean. You will find this less of a chore if you clean it up regularly rather than wait until the end of the hire period.

FINISHING OFF

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

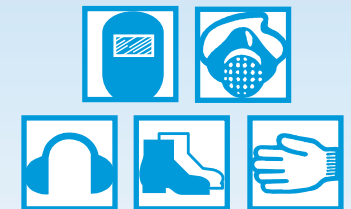
Remove the welding rod and disconnect all leads and coil them up neatly ready for return to your local HSS Hire Weld Depot.

HSS Hire-Weld



150AMP MMA Inverter

An inverter based MMA welding unit giving a maximum 150amp when MMA welding.



...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

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Code 55304

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.

 This equipment generates potentially harmful noise levels. To comply with health and safety at work regulations, ear defenders must be worn by everyone in the vicinity.

 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.

 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 machine in an upright position.

Keep the power unit's 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 150A MMA inverter welder can be plugged into a standard 230V 13amp power socket, or a 110V generated supply. Where a transformer is used to step the voltage down from 230V to 110V, the transformer MUST be a minimum 5kVA continuous rated.

The unit is fitted with a voltage sensor, which determines the supply voltage. When the unit is switched ON, the set defaults automatically to 230V operation. If the supply voltage is 230V the set will work correctly. If the supply voltage is 110V, the set will not work until the red button on the rear panel is pressed.

If a break in the power supply occurs the unit will revert to 230V operation and the red light next to the red button will flash. To return to 110V operation, the red button must be pressed twice, once to clear the fault situation when the red light will extinguish and the second time to reset to 110V operation.

Is a supply fault condition keeps occurring it may be due to a problem with the mains installation. Either too small a transformer or an extension cable that is too long or of the wrong thickness of wire.

If the equipment fails, or if its power supply cable or plug becomes damaged, return it. Never try to repair it yourself.


Keep cables out of harms way, and clear of the work area.

Extension leads should be fully unwound and loosely coiled, away from the equipment. Never run them through water, over sharp edges or where they could trip someone.

Cable Length	Cable Diameter
5M	4mm ²
10M	6mm ²
20M	10mm ²
30M	16mm ²

If running the unit from a 110V supply, it is important that any extension cable is of the correct size, see chart.

Keep the equipment dry, using electrical equipment in very damp or wet conditions can be dangerous.

 To reduce the risk of electric shock, always use a suitable RCD (Residual Current-Operated Device) available from your local HSS Hire Shop. Or power the equipment from a mains circuit with a built in RCD.

Ensure the welder and power socket are switched OFF before plugging into the power supply.

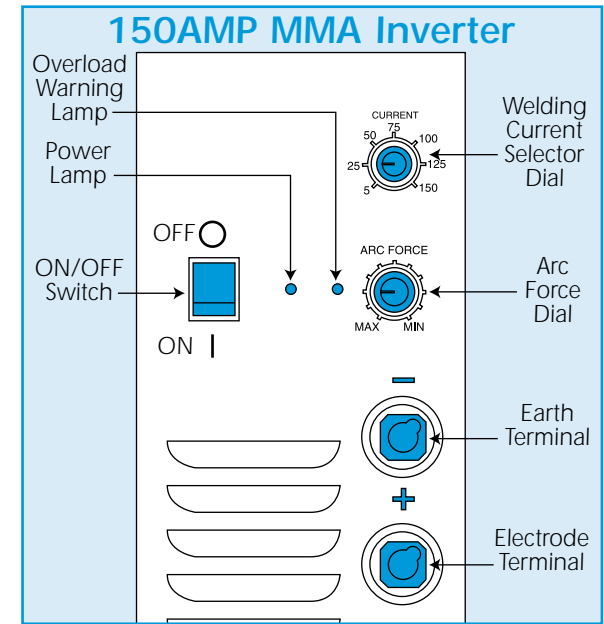
GETTING STARTED

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	
150A	60%
125A	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 amber overload warning lamp will illuminate. If the unit does overload you



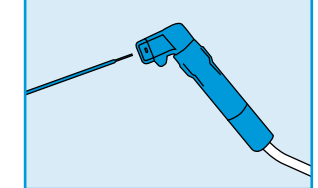
will have to wait for the warning lamp to go out before you can use the unit.

Place the unit on a suitable surface and make sure that there is a minimum of 200mm clearance around the unit to allow a good circulation of air.

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

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

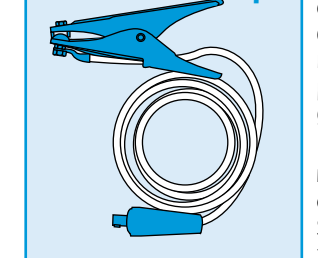
Electrode Holder



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.

Earth Clamp



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.