

Manual Set up...

The manual set up allows for two operation modes.

With output voltage set at 39.5Vac.rms (where each process would be fixed at that setting and no fusion voltage would be required).

With output voltage selected by the user (between 8 and 44Vac.rms. the user would also need to input fusion time and voltage information).

Manual 39.5Vac.rms. setting...

With the unit switched OFF, press and hold the No 3 keypad and switch the main unit ON.

The LCD will display 'MANUAL MODE 39.5', you can now release the No 3 key and proceed with the set-up.

The LCD will then display 'VERSION 5.0' then 'ENT.OP-CODE 000'. The latter is asking you to input your operator code and should NOT be used unless the unit is to be used by more than one person. If you input a new three-digit code, make sure you don't forget it.

The LCD will prompt the user to connect the output leads to the fitting. Connect the leads ensuring a firm positive connection is achieved.

The unit will then ask for the electro-fusion time for the particular joint. The time information will be found on the joint, enter the value using the numerical keypads then press enter.

Finally, press the green START button to activate the weld, the LCD will display remaining time. Once the weld is complete, the buzzer will sound and the LCD will display a joint reference number for your records.

You should now switch the main unit OFF before disconnecting the output leads and proceed to the next joint.

Manual Variable 8 – 44Vac.rms. setting...

With the unit switched OFF, press and hold the No 4 keypad and switch the main unit ON.

The LCD will display 'MANUAL MODE 8/44', you can now release the No 4 key and proceed with the set-up.

The LCD will then display 'VERSION 5.0' then 'ENT.OP-CODE 000'. The latter is asking you to input your operator code and should NOT be used unless the unit is to be used by more than one person. If you input a new three-digit code, make sure you don't forget it.

The LCD will prompt the user to connect the output leads to the fitting. Connect the leads ensuring a firm positive connection is achieved.

The unit will ask for the electro-fusion time for the particular joint. The time information will be found on the joint, enter the value using the numerical keypads then press enter.

The unit will then ask for the fusion set voltage for the particular joint. Again, the voltage information will be found on the joint, enter the value using

the numerical keypads then press enter. If the joint is a 39.5Vac.rms. joint you can weld in this mode by entering a voltage of 99.

Finally, press the green START button to activate the weld, the LCD will display remaining time. Once the weld is complete, the buzzer will sound and the LCD will display a joint reference number for your records.

You should now switch the main unit OFF before disconnecting the output leads and proceed to the next joint.

It is recommended that you turn OFF the generator if you have some distance to move the trolley to the next location.

When you have finished the work session turn OFF the generator at the engine ON/OFF switch.

Barcode Set Up...

With the unit switched OFF, press and hold the No 5 keypad and switch the main unit ON.

The LCD will display 'BARCODE MODE', you can now release the No 5 key and proceed with the set-up.

The LCD will then display 'VERSION 5.0' then 'ENT.OP-CODE 000'. The latter is asking you to input your operator code and should NOT be used unless the unit is to be used by more than one person. If you input a new three-digit code, make sure you don't forget it.

The LCD will prompt the user to connect the output leads to the fitting. Connect the leads ensuring a firm positive connection is achieved.

The unit will ask for the barcode for the particular joint. The barcode will be found on the joint, simply hold the scanner over the barcode and depress the trigger until the LCD displays the 24 bit code read.

If the barcode cannot be read the LCD will display a fault and you will have to enter the code manually.

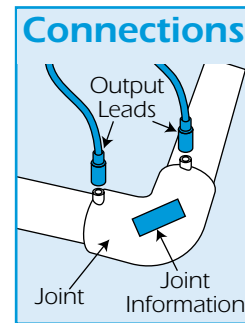
Enter the code using the numerical keypads then press enter.

You will then be prompted to press the green START button to activate the weld, the LCD will display remaining time. Once the weld is complete, the buzzer will sound and the LCD will display a joint reference number for your records.

You should now switch the main unit OFF before disconnecting the output leads and proceed to the next joint.

It is recommended that you turn OFF the generator if you have some distance to move the trolley to the next location.

When you have finished the work session turn OFF the generator at the engine ON/OFF switch.



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.

Regularly check the fuel level and top as required using the correct fuel: unleaded petrol.

Check the engine oil level daily. Let the engine cool, stand it on level ground, withdraw the dipstick and wipe it clean. Now, replace the dipstick, withdraw it a second time and verify that the oil level is between MIN and MAX. Top up as required.

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.

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

FINISHING OFF

Switch OFF the electro fusion unit. Switch OFF the generators engine and close the fuel tap. 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 2002 No. HW825/01

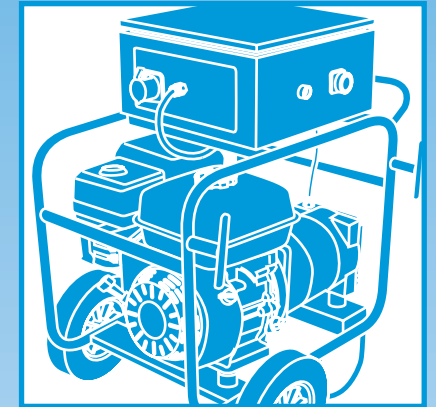
Group Office: 25 Willow Lane, Mitcham, Surrey CR4 4TS

Web Site: <http://www.hireweld.com>

Operating & Safety Guide HW825

HW825/01

HSS Hire-Weld



Electro-Fusion Pipe Welder & Generator

A pipe-welding device completed with own generator for use with specialist polyethylene pipe systems.



Code 55026

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.

Warning!

During electric/electronic welding/cutting operations, intense magnetic & electrical fields are produced and these may interfere with other electronically sensitive equipment.

All personnel wearing Heart Pacemakers or other electronically controlled medical devices must be kept away from any electric/electronic welding/cutting operations.

The welding/cutting equipment should be installed at least 5metres away from any computer equipment to minimise any possible interaction.

Cables carrying signals between electronic devices are capable of picking up interference from electric/electronic welding/cutting operations. This interference may prejudice the way in which these devices function and therefore all signal carrying cables should also be sited outside the 5metre zone.

Do not place objects that are sensitive to magnetism (wristwatches, credit cards, computer discs etc) near the welding or cutting zone. They may be rendered useless.

The welding/cutting equipment is itself electronically sensitive and its position relative to other radiation emitting equipment (mobile phones, remote controls, motor speed controllers etc.) must be considered.



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



Wear practical, protective clothing, gloves and footwear. Avoid loose garments and jewellery that could catch in moving parts, tie back long hair.



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

Take all necessary precautions to protect yourself and others against the possibility of contracting infectious diseases in your work environment.

Always switch OFF and unplug the equipment when not in use.

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

Exhaust Danger

NEVER operate petrol engines indoors or in a confined space.

The exhaust contains gases that can Kill.

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.

FUEL SAFETY

NEVER refuel while the engine is hot or running. Never smoke or allow naked lights into the area while refuelling.

Never inhale fuel vapour.

ALWAYS mop up spillage's as quickly as possible, and change your clothes if you get fuel on yourself.

ALWAYS store fuel in a purpose-made sealed container, in a cool, safe place well away from the work area.

Always switch OFF the equipment before moving it to another site or servicing it.

Engines, especially the exhausts, get very hot so switch off and allow to cool before touching them. Keep flammable materials well away from engine and exhaust.

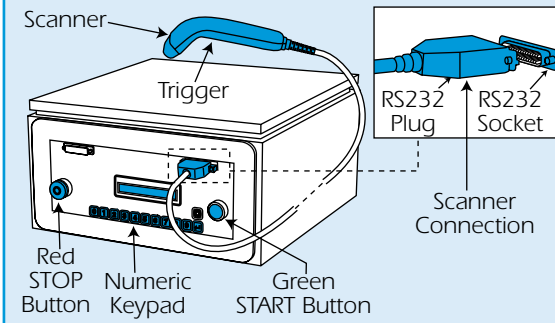
Never leave the engine running and unattended.

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.

ELECTRICAL SAFETY

The HSS Electro-Fusion Pipe Welder is powered by its own generator.

Control Box & Scanner



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

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

GETTING STARTED

This guide is designed to help the user to safely set up and dismantle the welder and start and stop the generator. 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.

Position the main unit close to the pipe joint.

Connect the output lead 5-pin plug to the connection socket on the side of the welder control box (see illustration). Push the plug in then lock in place by turning the lock collar clockwise until the yellow dot on the plug lines up with the yellow dot on the socket.

If using the barcode system, connect the readers' RS232 plug to the RS232 socket marked 'BAR CODE'. It is essential to familiarise yourself with all the controls before starting.

Starting The Generator Engine: Move to the rear of the trolley and check the engine and fuel levels, and refill as required.

Close the choke (if starting from cold), **turn on the fuel,** and switch the engine **ON** at the engine ON/OFF switch. Grasp the trolley with one hand and give two or three pulls on the starter with the other. If the engine does not start adjust choke setting.

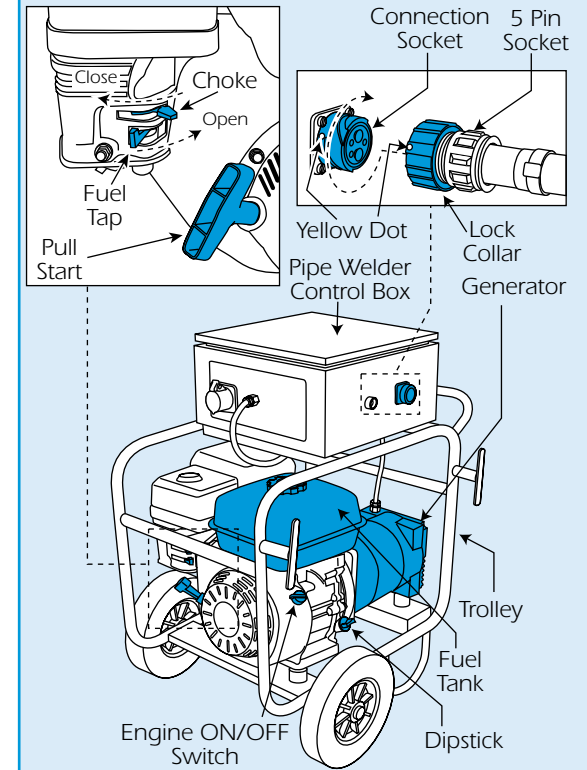
When the engine runs, open choke and let the engine tick over for a few moments to warm up.

Once the engine has warmed up then the unit is ready to use. Note that the unit will automatically set the throttle as power demand varies.

Move to the front of the unit.

On the control panel **there is a red emergency STOP button which also acts as the ON/OFF master switch** for the pipe welder control box. **To switch the**

Generator



welder ON, turn the STOP button anticlockwise until it pops out.

If you get into difficulty at any time, press the STOP button to switch the pipe welder OFF and stop any welding process.

The green button to the right of the unit is the START button. Press this to begin the electro-fusion process and timer.

The key buttons marked 0 through to 9 are used to input values where required and are also used to select different functions (as described in BASIC TECHNIQUES).

The LCD display will show various information, depending on the situation.

BASIC TECHNIQUES

The Electro-Fusion Pipe Welder can be set up in either manual or barcode mode depending on the type of fittings you are using.

Start the engine as described in GETTING STARTED.

If no barcode is available, follow the 'manual set up' instructions. If a barcode is available, follow the 'barcode set up' instructions.