

HSS Hire



200amp Petrol Welder Generator

Portable 200amp Petrol unit producing up to 5Kva of power and able to weld with 5mm rods.



Code 55726

Welding Currents & Rods

Total Welded Metal Thickness	Welding Current	Welding Rod Size
3 - 5mm	50 - 70A	2.00mm (14swg)
3 - 6mm	70 - 95A	2.50mm (12swg)
6 - 10mm	100 - 130A	3.25mm (10swg)
10 - 13mm	150 - 180A	4.00mm (8swg)
13 - 16mm	200 - 240A	5.00mm (6swg)

FINISHING OFF

To switch the generator OFF, set the engine speed control dial fully anti-clockwise then switch the engines ON/OFF switch into the OFF position and wait for the engine to die, finally turn off the fuel tap.

Disconnect all leads and neatly coil them ready for return to your local HSS Hire.



... have you been trained

The law requires that personnel using this type of equipment must be competent and qualified to do so. Training is available at HSS Training Solutions
0845 766 7799

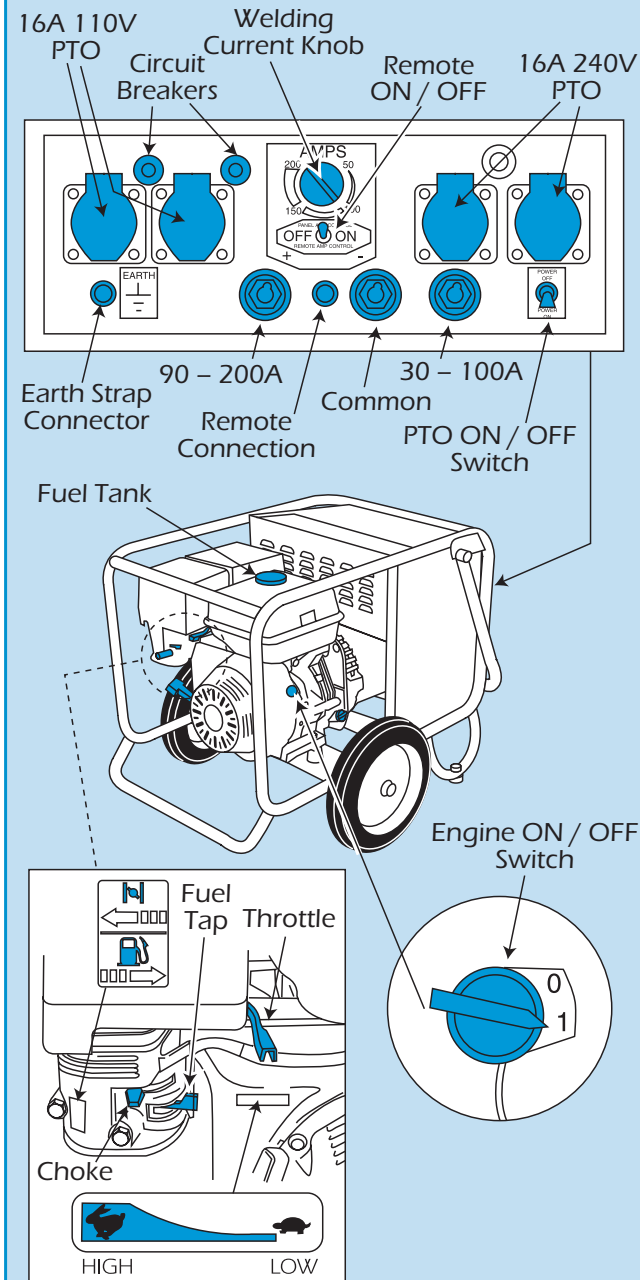
...any comments?

If you have any suggestions to enable us to improve the information within this guide please e-mail your comments or write to the Safety Guide Manager at the address below
e-mail: safety@hss.com

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Brook Thompson



When first set up, you chose the + socket to suit the welding current range you need. This range is now controlled by the engines speed and it is the operators job to find the correct setting for the work in hand, by increasing or decreasing the engine RPM.

Try the weld on a test piece of scrap if you are not sure of the setting. Simply increase or decrease as required.

Before striking an arc, ensure your vision is protected by the welding mask lens.

Holding the welding rod at about 3mm (1/8in), simply move the rod slowly along the weld in a series of semicircular sweeps, across the line of the joint.

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

To Use As A Generator...

If you wish to use the generator, you may power either 110v up to a max. of 2kVA (2,000w), or 240v up to a max. of 5kVA. However you can't take power from the generator whilst welding as the units windings will overheat and fail.

To set the unit for generating, set the engine speed dial fully clockwise to increase the engine speed. Check the volt meter reading is at 250V, at this setting the unit will produce 250V or 110V Centre Tap to Earth (CTE) power.

Never overload the generator. To calculate the running load, add up the power ratings of everything to be connected to it in kilowatts 1kW (kilowatt) = 1000 W (Watts). Depending on the equipment being powered this should be between half and two - thirds the generator's kVA rating but, if in doubt, ask your local HSS Hire for advice.

When you need to use the welder again, switch OFF whatever you are powering and reset the engine speed to suit the weld.

EQUIPMENT CARE

Never push the equipment beyond its design limits. If it will not do what want you want with reasonable ease assume you have the wrong size welder/generator for the job. Ask at your local HSS Hire for advice.

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

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

Keep the engine upright at all times. If it should be tipped over, mop up oil and fuel spillages and contact your local HSS Hire for advice.

Regularly check the fuel level and top up as required using the correct fuel: lead-free petrol.

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

GENERAL SAFETY

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

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

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.



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.



A head shield with a 10 EW shade must be worn by everyone in the work area. Goggles are NOT suitable. Ensure that the welding mask is protecting your vision BEFORE striking an arc.



A suitable welding mask must be worn by any person operating this equipment. Powered respiratory protective equipment is available for hire, contact your local HSS Hire for advice.



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.



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

If the head shield or lens become damaged, return it to your local HSS Hire for exchange.

Check the equipment before use. If it shows signs of damage or excessive wear, return it.

Exhaust Danger

NEVER operate petrol engines indoors or in a confined space.

The exhaust contains gases that can Kill.

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 spillages 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 when not in use.

Engines, especially the exhausts, get very hot so switch OFF and allow to cool before touching them. Handle welding equipment and work with care, it will be hot.

Leave equipment to cool before changing electrodes, moving earth clamps or handling the work.

Keep flammable materials well away from engine and exhaust.

Never leave the engine running and unattended.

ELECTRICAL SAFETY

This equipment is capable of supplying up to 5kVA of 240V power or 2kVA of 110V power (not both), continuously (MAX. Total tool wattage 5000W). However, you cannot weld at the same time as you are using the generator.

Before you use the unit as a generator, STOP welding and move the welding current knob clockwise to full engine speed.



To reduce the risk of electric shock when using as a generator, use a suitable RCD (Residual Current-Operated Device) available from your local HSS Hire.

Ensure the tool is switched OFF before plugging into the PTO.

Next, plug the tool into the power take off (PTO) socket and switch the tool ON.

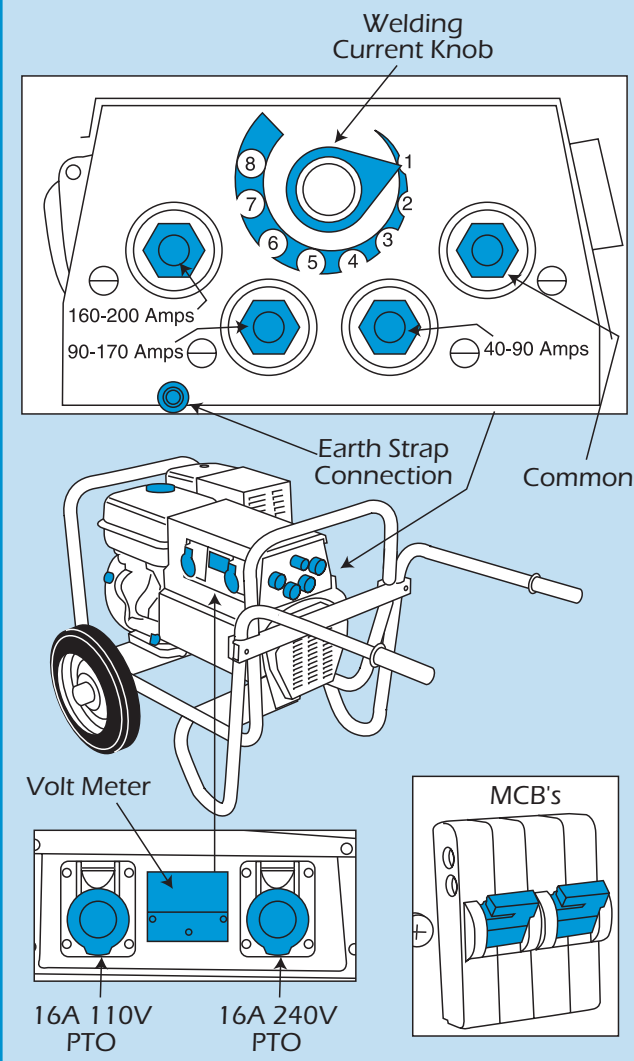
Keep flexes out of harm's way, and clear of the work area.

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.

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

Keep the Welder/Generator and other electrical equipment dry at all times, providing it with adequate

Genset



shelter from the weather. Operating in wet or very damp conditions can be dangerous.

If powering equipment that requires an earth, connect the generator's earth terminal to a suitable earthing point.

Always turn OFF all electrical switches before making or breaking connections or servicing equipment powered by the generator.

Never use a generator to power computers, and similar electronic equipment. It will damage them!

Always turn OFF the Welder/Generator's engine when not in use and before servicing the engine itself.

All HSS Welder/Generators have circuit breakers that cut OFF the power if the electrics become overloaded (due to a fault in the generator or the equipment being powered by it). If a circuit breaker trips, unplug

everything, then reset the switch to restore the power. Never start or stop the Welder/Generator 'on load'. Always switch OFF and unplug all equipment powered by it.

GETTING STARTED

If appropriate, connect the Welder/Generator's earth terminal (a grounding point on the generator chassis, not to be confused with an earth cable used for welding) to an earthing point using suitable cable. This should be made by a qualified electrician.

If Welding...

Connect the earth welding lead to the '-' socket and the electrode holder welding lead to the '+' socket which is marked with the current range you require.

To fit the connections, insert the connector aligning the pin with the slot on the socket. Push the connector fully in then turn clockwise as far as it will go.

Before welding motor vehicles, remove the vehicles battery and disconnect the alternator.

Remove all combustible materials and hazards. Remove the fuel tank.

Ensure the metal to be welded is clean, dry and free from rust, paint, grease etc. Aim to weld only bright, bare metal.

Securely clamp the work pieces in their final positions to stop them moving during welding.

Refer to the table for the welding current and rod size appropriate to the total thickness of metal being welded.

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.

Set the engines ON/OFF switch to ON, open the fuel tap and set the choke- fully closed if starting from cold, half closed if the engine is warm.

Turn the engine speed dial fully clockwise, this dial controls the engine speed and is also used to control generator output and welding current.

Two or three brisk pulls on the starter cord, should now start the engine.

Once the engine has warmed up, fully open the choke and switch the engine OFF.

BASIC TECHNIQUES

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.