

If the engine stops or the **Oil Alert indicator (red)** comes on when you pull the starter grip, check the engine oil level before troubleshooting in other areas.



BEFORE OPERATION

Before beginning operation **check the oil level**. A low oil level will cause the Oil Alert system to shut down the engine. Make sure **you have enough fuel for your work**. Starting with a full tank will help to eliminate or reduce operating interruptions for refueling.

Once oil level and fuel is checked place the generator on a level surface and make sure the engine switch is in the OFF position.

BASIC TECHNIQUES

STARTING THE ENGINE

To prevent a possible fire, keep the generator at least **3 feet (1 meter)** away from building walls and other equipment during operation. Do not place flammable objects close to the engine.

Make sure that all appliances connected to the generator are turned off. The generator may be hard to start if a load is connected.

ON Turn the fuel tank cap vent lever to the ON position.

Make sure the Eco Throttle Switch is in the OFF position, or more time will be required for warm-up.

To start a cold engine, move the choke lever to the CLOSED position. To restart a warm engine, leave the choke lever in the OPEN position.

Turn the engine switch to the ON position.

Pull the starter grip lightly until you feel resistance, then pull briskly.

Notice: Do not allow the starter grip to snap back against the generator. Return it gently to prevent damage to the starter.

If the choke lever was moved to the CLOSED position to start the engine, gradually move it to the OPEN position as the engine warms up.

If you wish to use the Eco Throttle system, turn on the Eco Throttle after the engine has warmed up for 2 or 3 minutes.

STOPPING THE ENGINE

To stop the engine in an emergency, simply turn the engine switch to the OFF position.

Under normal conditions turn off or disconnect all appliances connected to the generator.

Turn the generator's engine off and allow it to cool. Then turn the fuel tank cap vent lever to the OFF position.

AC OPERATION

Before connecting an appliance to the generator, make sure that it is in good working order and that its electrical rating does not exceed that of the receptacle. Most motorized appliances require more than their electrical rating for startup. When an electric motor is started, the overload indicator (red) may come on. This is normal if the overload indicator (red) goes off within 4 seconds. If the overload indicator (red) stays on, contact Thermaright.

Start the engine and make sure the output indicator (green) comes on.

Plug an appliance into the 110V Yellow Socket then turn on the appliance.

If the generator is overloaded, or if there is a short circuit in a connected appliance, the overload indicator (red) will go ON. The overload indicator (red) will stay ON, and after about four seconds, current to the connected appliance(s) will shut off, and the output indicator (green) will go OFF. Stop the engine and investigate the problem.

Determine if the cause is a short circuit in a connected appliance or an overload. Correct the problem and restart the generator.

AC APPLICATIONS

Before connecting an appliance or power cord to the generator **make sure that it is in good working order**. A faulty appliance or power cord can create a potential for electrical shock.

If an appliance begins to operate abnormally, becomes sluggish, or stops suddenly, **turn it off immediately**. Disconnect the appliance, and determine whether the problem is the appliance or the rated load capacity of the generator has been exceeded.

Make sure that the combined electrical rating of the tools or appliances do not exceed that of the generator. **Never exceed the maximum power rating of the generator**. Power levels between rated and maximum may be used for no more than 30 minutes.

Note: Substantial overloading will open the circuit protector. Exceeding the time limit for maximum power operation or slightly overloading the generator may not switch the circuit protector OFF, but will shorten the service life of the generator.

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 equipment for the job. Contact your Thermaright for advice.

Keep the equipment clean - you will find this less of a chore if you clean it 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.

Keep the engine upright at all times. If it should become tipped over, mop up oil and fuel spillage's and contact your

local HSS Hire for advice.

Regularly check the fuel level and top up as necessary with unleaded petrol.

Regularly check the oil level - when the engine is cold and on level ground. Where appropriate, open the side panel to gain access to the engine compartment. Withdraw the dipstick, wipe it clean, then replace it, remove it a second time and verify that the oil level is between the min and max lines, **top up as necessary**. Suitable oils are available on sale or return from Thermaright.

Oil Alert

All Thermaright Generators switch OFF automatically if the engine oil level falls below a safe level a warning light will flicker if you try to restart. If this happens, simply leave the engine to cool and top up the oil level before attempting to restart.

FINISHING OFF

Switch OFF all equipment powered by the generator. Set the engine's ON/OFF switch to OFF and wait for the engine to stop. Allow generator to cool down.

Finally, **disconnect all leads ready for return** to Thermaright.

... have you been trained

The law requires that personnel using this type of equipment in the workplace must be competent and qualified to do so.

...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: info@thermaright.co.uk

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655/01

Operating & Safety Guide 655



Thermaright
Hire Solutions



110V Portable Generator

Petrol driven, 110V portable generator.
Ideal for powering small on site tools up to 2000W



Code 41112

GENERAL SAFETY

For advice on the safety and suitability of this equipment contact Thermaright.

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.

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 Thermaright

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

Ensure the work area is well lit and ventilated, if in doubt, ask about lighting and ventilation equipment at Thermaright.

Do not work near flammable gases or liquids, petrol or paint thinner fumes for example. Keep combustible materials at a safe distance - at least 1m.

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

Never operate petrol engines indoors or in a confined space (i.e. inside a garage, house, or near open windows or doors). The gases produced by this equipment can cause loss of consciousness and may lead to death.

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 any spillage 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 the engine off and wait for moving parts to come to rest before making adjustments to it.

Some parts of the generator get very hot, so switch off the machine and allow to cool down before touching it.

Hot parts become hot enough to ignite some materials, so Keep the generator at least 1 meter away from buildings and

other equipment during operation.

Make sure everyone is warned of what you are doing.

Check the condition of the equipment before use.

If it shows signs of damage or excessive wear, don't try to repair, return it to Thermaright.

ELECTRICAL SAFETY

The generator produces enough electric power to cause a serious shock or electrocution if misused.

Keep the generator and other electrical equipment dry at all times, providing it with adequate shelter from the weather. Operating in wet or very damp conditions can be dangerous.

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

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

And always turn off the generator's engine when not in use and before servicing the engine itself.

Safety Cut Outs

All Thermaright 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 generator 'on load'. Always switch OFF and unplug all equipment powered by it.

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

GETTING STARTED

110V Portable Generator 1600W (2000W intermittent) is designed for use with electrical equipment that has suitable power requirements.

Never use the 110V Portable Generator 1600W until you have fully read and understood this User Guide and the machine has been properly set up using the information it contains.

CONTROLS

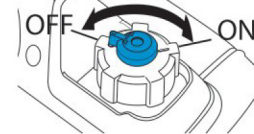
The engine switch controls the ignition system and the fuel valve. Moving the engine switch to OFF position, stops the engine and closes the fuel valve. Switching to ON opens the fuel valve and allows the engine to be started.



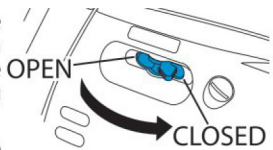
Pulling the starter grip operates the recoil starter to crank the engine.

The vent lever must be in the ON position for the engine to run.

When the engine is not in use, leave the vent lever in the OFF position to reduce the possibility of fuel leakage. Allow the engine to cool well before turning the vent lever to the OFF position.



The choke is used to provide proper starting mixture when the engine is cold. It can be opened and closed by operating the choke lever manually.



Move the choke lever to the CLOSED position to enrich the mixture for cold starting.

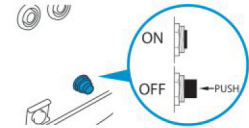
The Eco Throttle system automatically reduces engine speed when loads are turned off or disconnected. When appliances are turned on or reconnected, the engine returns to the proper speed to power the electrical load.

If high electrical loads are connected simultaneously, turn the throttle switch to the OFF position to reduce voltage changes.

When the Eco Throttle is switched on, the fuel consumption is minimized and further reduce noise levels when less than a full load is applied to the generator.

The AC circuit protector will automatically switch OFF if there is a short circuit or a significant overload of the generator at the 16A receptacle.

If the circuit protector switches OFF automatically, check that the appliance is working properly and does not exceed the rated load capacity of the circuit before resetting the circuit protector ON.



The generator ground terminal is connected to the frame of the generator, the metal non-current-carrying parts of the generator, and the ground terminals of each receptacle.

Before using the ground terminal, consult a qualified electrician, electrical inspector, or local agency having jurisdiction for local codes or ordinances that apply to the intended use of the generator.

The output indicator (green) is illuminated when the generator is operating normally. It indicates that the generator is producing electrical power at the receptacles.

If the generator is overloaded (in excess of 2000W), or if there is a short circuit in a connected appliance, the overload indicator (red) will come ON. The overload indicator will stay ON, and after about four seconds, current to the connected appliance(s) will shut off, and the output indicator (green) will go OFF. However, the engine will continue to run.

The Oil Alert system is designed to prevent engine damage caused by an insufficient amount of oil in the crankcase. Before the oil level in the crankcase can fall below a safe limit, the Oil Alert indicator (red) comes on and the Oil Alert system automatically will stop the engine (the engine switch will remain in the ON position).

Output Indicator



Overload Indicator



IDENTIFIER

