

Generators General

BASIC SAFETY

This guide is for general reference only and does not replace the manufacturers manual. For full operating instructions, refer to the original owners/operators manual.

Before using this equipment and to avoid personal injury, carefully read and understand these instructions. If there is anything you do not understand, DO NOT use this equipment; contact the hire company for advice.

This equipment must only be operated by the person or persons present at the point of handover.

Make sure you are aware of all safety requirements and that this equipment is suitable for the task you wish to undertake.



This equipment must only be used by persons who are medically fit to do so. If you have any medical condition, are recovering from any medical condition or suffer from any mental or physical disability, you MUST seek professional medical advice before using this equipment.

The work area must be cordoned off from the general public and bystanders.

This equipment must not be operated by persons who are under the influence of alcohol or drugs. Do not use this equipment if you are tired or unwell.

You MUST perform a risk assessment before using this equipment to ensure your safety and the safety of others.

Wear the correct Personal Protective Equipment for the task ahead.

  Wear gloves when handling this equipment. Protect your hearing, always wear ear defenders.

Do not wear loose jewellery or clothing that may get in the way or become trapped in the equipment.

Inform everyone in the work area of what you are doing.

Always operate, store and transport this equipment in an upright position.

Diesel DO'S and DON'TS

DO clear up diesel spillages immediately.

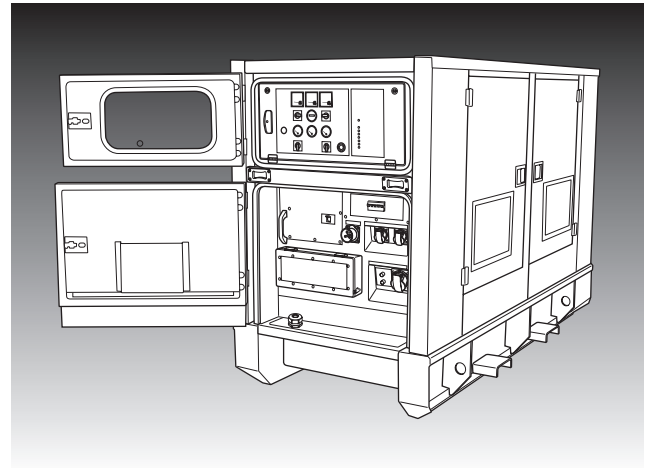
DO store spare fuel in a cool, safe place in an approved sealed container.

DO leave a one-inch air space in the fuel tank when refuelling.

DON'T refuel the engine when it is hot or running.

DON'T smoke or use a naked light when refuelling.

Always switch OFF the engine when cleaning, making adjustments or when left unattended.



The engine produces exhaust gasses that can kill so safeguard against the risk of carbon monoxide poisoning. Do not operate this equipment within a building or in a confined space, ensure adequate ventilation.

Diesel engines become hot in use so avoid contact with the engine until it has cooled. Only operate this equipment in a well lit and ventilated area.

GET FAMILIAR! You must understand how to switch this machine OFF quickly in case of an emergency.

Make sure that all guards are present and correctly fitted.

Do not operate the generator close to flammable or explosive materials.

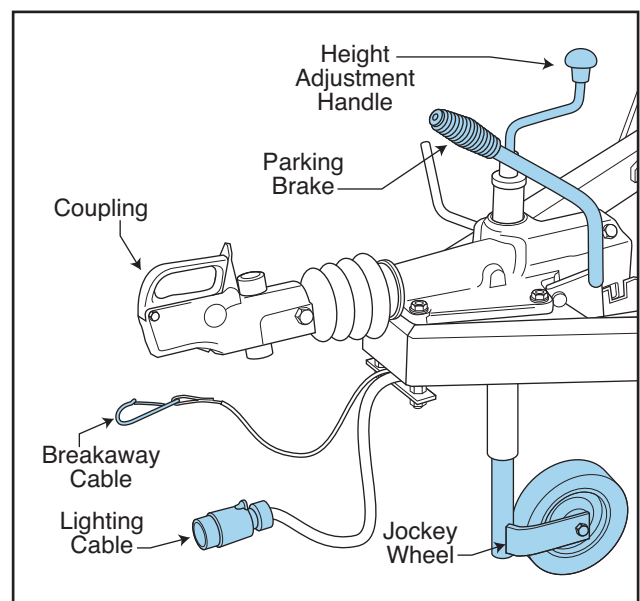
Carefully inspect the equipment before use, if there is any doubt about its condition, DO NOT USE IT.

If the equipment fails, or if any part becomes damaged, return it. DO NOT repair it yourself.

TOWING

The Generator may only be towed by a suitable vehicle driven by someone with the appropriate licence and experience.

Prior to towing, make sure that the Generators engine is switched OFF and all hoses are disconnected.



Always attach the breakaway cable and ensure that the jockey wheel is fully raised and locked.

When towing, do not exceed 50mph. Approach and negotiate turns, corners and traffic islands at greatly reduced speeds to prevent the unit from turning over.

Regularly check the tyres for condition and pressure.

When positioning the Generator, always take great care especially when reversing. Once in position, apply the parking brake and ensure that it is fully engaged. Unhitch the Generator from the towing vehicle then disconnect the breakaway cable. Where applicable, disconnect the cable to the tail board.

Use the jockey wheel to level the Generator. You can turn the adjuster handle anticlockwise to raise, or clockwise to lower the front and bring it level.

ELECTRICAL SAFETY

The unit is protected by an ELCB (Earth Leakage Circuit Breaker) however; the ELCB will ONLY WORK if the earthing facility is correctly connected.

The generator has the facility to connect an earthing ground stake to the earth attachment. However, an impedance test must be carried out once the connections have been made by a qualified electrician.

Depending upon model, you can wire a direct 415V supply (three phase earth and neutral) from the Generator.

Where a 415V direct wire set up is used, all connections may only be made and tested by a suitably qualified electrician.

Note: never start or stop the generator 'on load'.

Fully unwind and loosely coil all extension leads. Position them away from the equipment where they will be protected from water, sharp objects and where they will not pose a trip hazard.

Check the items you wish to power from the generator and add their total wattage together. For each 1,000W you will require 1.25kVA. DO NOT attempt to use a generator with an output lower than you require.

You must ensure that the 16A and 32A sockets are not overloaded, regardless of the generators capabilities. A 16A/230V socket can supply a maximum 3600W. Distribution boxes can be used provided the same cautions are used.

PREPARATION

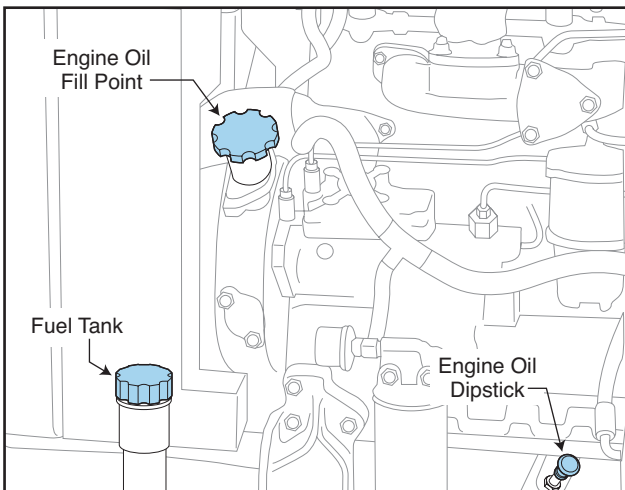
Choose a location for the unit where the ground is level and stable. You should also consider vehicle access for servicing and removal.

Ensure adequate room around the unit for the operator to work safely.

To position the generator, you can use either a suitably rated forklift or a suitable crane and correctly rated slings.

ONLY lift the Generator via the dedicated fork tubes or lifting eye/s.

Place the Generator on firm level ground then check the engine oil level and top up as necessary.

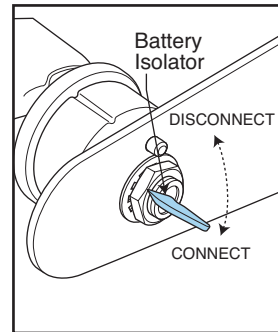


Open the engine compartment, remove the oil dipstick and check that the oil level is in line with the maximum marker. Top up as necessary with suitable engine oil then replace the dipstick.

FUEL OPTIONS

The Generator has a built in fuel tank for general use; however, you can connect a remote supply (a fuel bowser, tank or drum). For further information, contact the hire company.

CONNECTIONS



ALL Connections may ONLY be performed by a suitably qualified electrician and ALL connections must be tested prior to using the Generator.

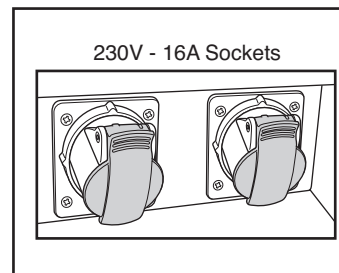
Before making any connections, ensure that the Generator is switched OFF and that the battery isolator key is in the disconnected position.

DO NOT work in the rain or in wet/muddy conditions.

First priority is to connect the Generator to an earthing point.

16A 230V Sockets...

The two 16A 230V sockets are used for connecting electrical items fitted with 16A 230V plugs. 230V 16A, plugs and sockets can only be connected one way.

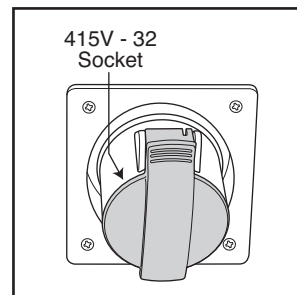


To make a connection raise the cover of the socket. Insert the plug into the socket ensuring the plugs tab lines up with the sockets groove.

Push the plug fully home then lower the socket lid so that it engages with the plugs lock tab.

Prior to switching ON the power supply, check all connections and cable routes.

415V 32A Socket...



The 32A 415V socket is for connecting electrical items fitted with a 32A 415 V three phase earth and neutral plug.

To make a connection raise the cover of the socket. Insert the plug into the socket ensuring the plugs tab lines up with the sockets groove.

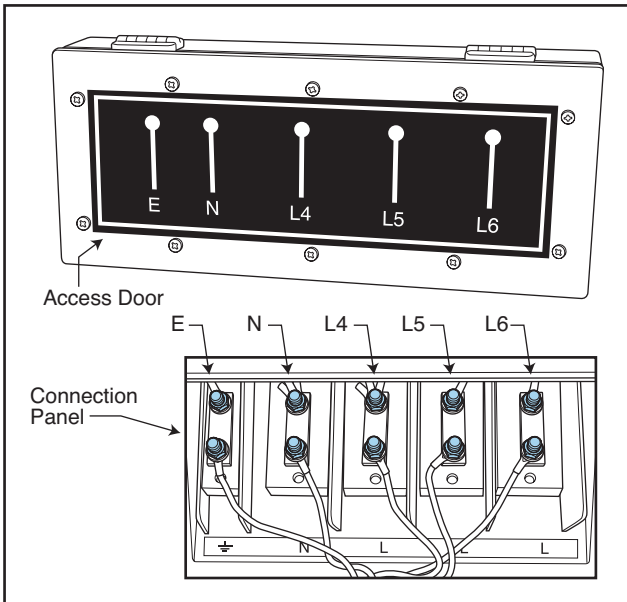
Push the plug fully home then lower the socket lid so that it engages with the plugs lock tab.

Prior to switching ON the power supply, check all connections and cable routes.

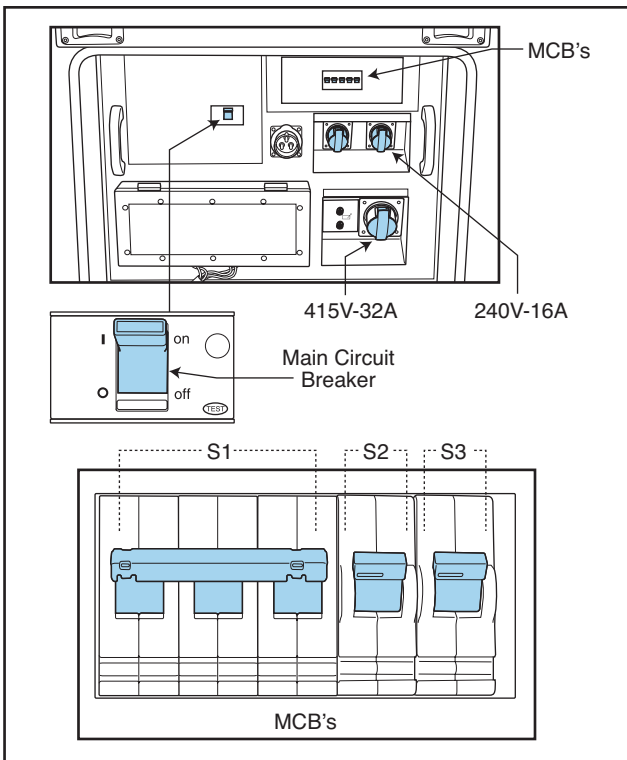
415V Three Phase, Neutral and Earth Direct Wiring...

The direct wiring facility offers 415V 3 phase. Connect the 3 phases to the L4, L5 and L6 terminals, neutral to the N terminal and Earth the E terminal.

When direct wiring is used, make sure the cables are correctly fitted and secured by the cable clamp. You must also ensure that the access door to the connection panel is closed and secured, as a safety trip breaker will not allow the Generator to start.

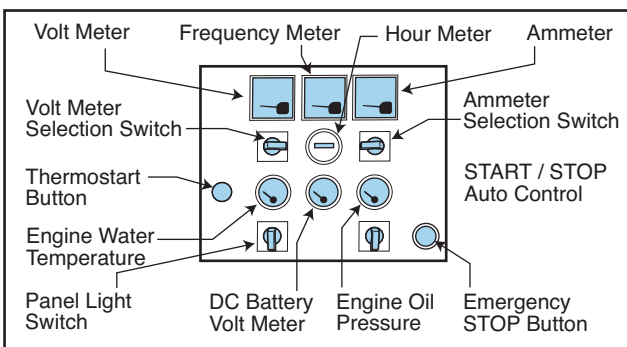


POWER OUTPUT



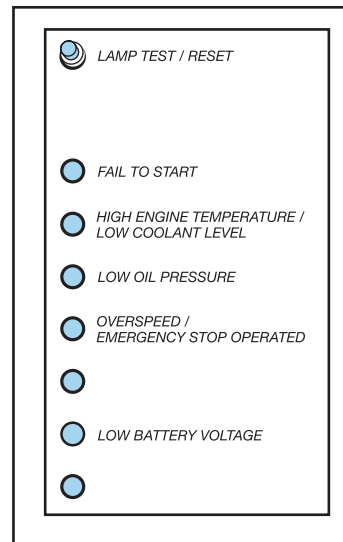
There are circuit breakers fitted, two for the 230V and a triple for the 415V circuit. In addition, all circuits are protected by an RCD.

THREE PHASE



There is Voltmeter Selector Switch on the control panel which should be set to 0 for normal running. If during normal use you need to check that the 3 phases are balanced, turn the switch to each of the 3 positions L1L2, L2L3, L3L1 and observe the Voltmeter readings. If the meter registers anything other than 450v the demand on the remaining phase is too great.

To correct this, reduce the overall power consumption.

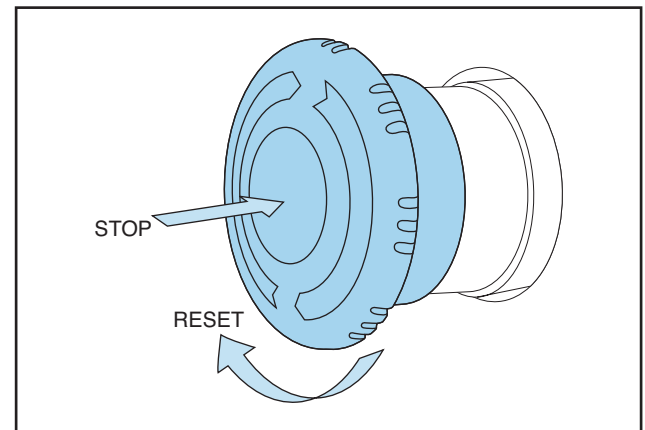


If you wish to check the amperage of each of the three phases, turn the Ammeter Selector Switch to the required circuit, L1, L2 or L3 and observe the Ammeter for a reading.

The frequency meter indicates the HZ output and should be checked occasionally to ensure correct operation of the Generator.

The Light Panel houses various warning lamps. Prior to starting the Generator it is prudent to press the lamp test button to make sure all are working.

EMERGENCY STOP BUTTON



The Generator is fitted with a red emergency stop button which stops the Generator if pressed. To re-set the button, turn it clockwise until it pops out.

DO NOT use the stop button to stop the Generator other than in an emergency. Failure to follow this instruction will cause significant damage to the Generator.

STARTING AND STOPPING THE UNIT

Before starting the generator, disconnect any leads plugged into the sockets, set the main circuit breaker to OFF (lever lowered) and make sure the earth is connected.

Check that the red emergency stop button is set to on, NOT DEPRESSED.

If the engine is cold, press and hold the thermo-start button for 15 seconds and continue holding until the engine starts. If starting a warm engine the thermo-start button is not required.

To start the Generator, follow the start procedure as shown on the instruction label.

If the engine fails to start after two attempts, stop and contact Speedy Generators for advice.

Once running, allow the engine to warm-up for at least 5 minutes before use.

Before stopping the Generator, firstly switch OFF all items being powered by it then set the main circuit breaker to OFF.

Wait a further 2 minutes to allow the Generator to cool then follow the stopping procedure as shown on the instruction label.

However, in an emergency situation, press the red STOP button to stop the engine immediately.

REMOTE START

This Generator can be set up as an auxiliary power supply, which will automatically start if the main power supply fails. For further information, contact the hire company.

OPERATING OPTIONS

Once running, connect the power supply lead (or extension lead) to the respective power outlet socket, making sure that anything connected to it is SWITCHED OFF.

EQUIPMENT MAINTENANCE

Regularly check oil, fuel and coolant levels and top up as required.

When not being used, store the unit in a clean condition and in a safe place where it will be protected from thieves and unauthorised users.

FINALLY

When you have finished, switch off anything being powered. Set the main circuit breaker to OFF. Allow the unit to cool before switching the Generator OFF. Disconnect all leads and give the unit a thorough clean ready for return to the hire company.

NOTE

Failure to clean the equipment thoroughly may make you liable to a cleaning charge.