

2300W
AVR PETROL
GENERATOR
WITH ELECTRIC KEY START
GEN2300ES
INSTRUCTION MANUAL



GMC[®]
GLOBAL MACHINERY COMPANY

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Warranty Generators

Whilst every effort is made to ensure your complete satisfaction with this tool, occasionally, due to the mass manufacturing techniques, a tool may not live up to our required level of performance and you may need the assistance of our service department.

This product is warranted for a 6-month period for home domestic use from the date of the original purchase. If found to be defective in materials or workmanship, the tool or the offending faulty component will be replaced free of charge with another of the same item.

A small freight charge may apply. Proof of purchase is essential. We reserve the right to reject any claim where the purchase cannot be verified.

This warranty does not include damage or defects to the tool caused by or resulting from abuse, accidents, alterations or commercial or business use. It also does not cover any bonus items or included accessories. Only the power tool is covered under this warranty.

Please ensure that you store your receipt in a safe place.

Conditions apply to the above warranty. For full details of the warranty terms and conditions please refer to our website – www.gmcompany.com

For prompt service we suggest you log your service request online - www.gmcservice.com.au. Should you not have access to the internet, please contact our service department on 1300 880 001 (Australia) or 0800 445 721 (New Zealand).

Introduction

Your new GMC power tool will more than satisfy your expectations. It has been manufactured under stringent GMC Quality Standards to meet superior performance criteria.

You will find your new tool easy and safe to operate, and, with proper care, it will give you many years of dependable service.

CAUTION. Carefully read through this entire Instruction Manual before using your new GMC Power Tool. Take special care to heed the Cautions and Warnings.

Your GMC power tool has many features that will make your job faster and easier. Safety, performance, and dependability have been given top priority in the development of this tool, making it easy to maintain and operate.

Environmental protection



Recycle unwanted materials instead of disposing of them as waste. All tools, hoses and packaging should be sorted, taken to the local recycling centre and disposed of in an environmentally safe way.

Scope of product

This product is suited for home, camping and caravan applications. It will allow you to power outdoor lights, power tools and recharges your car battery.

Note: For sensitive equipment like computers, sound systems, televisions, microwaves etc., it is highly recommended to have a surge protector connected to the generator.

Description of symbols

The rating plate on your tool may show symbols. These represent important information about the product or instructions on its use.



Wear eye protection.
Wear hearing protection.
Wear breathing protection.



Conforms to relevant standards for electromagnetic compatibility.

Specifications

AC output:	240Vac ~ 50Hz
Rated power:	2000W
Peak power:	2300W (2.4Kva)
Phase:	Single
Power factor:	cos ϕ =1
Displacement:	163cc
DC output:	12V, Maximum current 8A
Motor:	5.5HP, 4 stroke
No load speed:	3000 min ⁻¹
Fuel tank capacity:	16L
Fuel type:	Unleaded
Oil type:	4 Stroke
Operation noise level:	79.5dB/7m
Net weight:	42kg

Safety instructions

WARNING. Read and understand all instructions.

Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term “power tool” in all of the warnings below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Save these instructions

Work area

- **Keep work area clean and well lit.** Cluttered and dark areas invite accidents.
- **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

Electrical safety

- **Power tool plugs must match the outlet.** Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **Do not abuse the cord.** Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- **When operating a power tool outdoors, use an outdoor extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.

Personal safety

- **Stay alert, watch what you are doing and use common sense when operating a power tool.** Do not use a power tool while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- **Use safety equipment.** Always wear eye protection. Safety equipment such as a dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- **Avoid accidental starting.** Ensure the switch is in the off-position before plugging in. Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
- **Remove any adjusting key or wrench before turning the tool on.** A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.
- **Do not overreach.** Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- **Dress properly.** Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities ensure that these are connected and properly used.** Use of these devices can reduce dust-related hazards.

Power tool use and care

- **Do not force the power tool.** Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

- **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- **Maintain power tools.** Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- **Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from intended could result in a hazardous situation.

Service

- **Have your power tool serviced by a qualified repair personnel using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

Risk of electrocution and fire		
Hazard	What could happen	How to prevent it
Improper storage of extension cord.	Extension cord can come into contact with hot engine parts resulting in damage. Using a damaged extension cord can result in electrocution or death.	Remove extension cord from the generator and store separately away from generator.
Operation of generator in rain, wet, icy, or flooded conditions.	Water is an excellent conductor of electricity! Water which comes in contact with electrically charged components can transmit electricity to the frame and other surfaces, resulting in electrical shock to anyone contacting them.	Operate generator in a clean, dry, well ventilated area. Make sure hands are dry before touching unit.
Placing generator on or against highly conductive surface, such as a steel walkway or metal roof.	Accidental leakage of electrical current could charge conductive surfaces in contact with the generator.	Place generator on low conductivity surface such as a concrete slab. ALWAYS operate generator a minimum of 2 meters from any conductive surface.
Use of worn, damaged or ungrounded extension cords.	Contact with worn or damaged extension cords could result in electrocution. Use of ungrounded cordsets could prevent operation of circuit breakers and result in electrical shock.	Inspect extension cords before use and replace with new cord if required. Always use a cordset having a grounding wire with an appropriate grounding plug. DO NOT use an ungrounded plug.
Operation of unit when damaged, or with guards or panels removed.	Attempting to use the unit when it has been damaged, or when it is not functioning normally could result in fire or electrocution. Removal of guarding could expose electrically charged components and result in electrocution.	Do not operate generator with mechanical or electrical problem. Have unit repaired by an Authorised Service Centre. Do not operate generator with protective guarding removed.

Risk of fire		
Hazard	What could happen	How to prevent it
Attempting to fill the fuel tank while the engine is running.	Fuel and fuel vapours can become ignited by coming in contact with hot components such as the muffler, engine exhaust gases, or from an electrical spark.	Turn engine off and allow it to cool before adding fuel to the tank. Equip area of operation with a fire extinguisher certified to handle gasoline or fuel fires.
Sparks, fire, hot objects	Cigarettes, sparks, fires, or other hot objects can cause fuel or fuel vapours to ignite.	Add fuel to tank in well ventilated area. Make sure there are no sources of ignition near the generator.
Improper storage of fuel	Improperly stored fuel could lead to accidental ignition. Fuel improperly secured could get into the hands of children or other unqualified persons.	Store fuel in an approved container designed to hold fuel. Store container in secure location to prevent use by others.
Tampering with factory set engine speed settings.	Engine speed has been factory set to provide safe operation. Tampering with the engine speed adjustment could result in overheating of attachments and could cause a fire.	Never attempt to “speed-up” the engine to obtain more performance. Both the output voltage and frequency will be thrown out of standard by this practice, endangering attachments and the user.
Inadequate ventilation for generator	Materials placed against or near the generator or operating the generator in areas where the temperature exceeds 40°C. ambient (such as storage rooms or garages) can interfere with its proper ventilation features causing overheating and possible ignition of the materials or buildings.	Operate generator in a clean, dry, well ventilated area. DO NOT OPERATE UNIT INDOORS OR IN ANY CONFINED AREA.
Overfilling the fuel tank – fuel spillage.	Spilled fuel and its vapours can become ignited from hot surfaces or sparks.	Use care in filling the tank to avoid spilling fuel. Make sure fuel cap is secured tightly and check engine for fuel leaks before starting engine. Move generator away from refuelling area or any spillage before starting engine. Allow for fuel expansion. Never refuel with the engine running.

Risk of injury and property damage when transporting generator

Hazard	What could happen	How to prevent it
Fire, inhalation, damage to vehicle surfaces	Fuel or oil can leak or spill and could result in fire or breathing hazard, serious injury or death can result. Fuel or oil leaks can damage carpet, paint or other surfaces in vehicles or trailers.	The generator is equipped with a fuel drain valve, turn the valve to the off position before transporting to avoid fuel leaks. Transport fuel only in an approved fuel container. Always place generator on a protective mat when transporting to protect against damage to vehicle from leaks. Remove generator from vehicle immediately upon arrival at your destination.

Risk of breathing – inhalation hazard

Hazard	What could happen	How to prevent it
Gasoline engines produce toxic carbon monoxide exhaust fumes.	Breathing exhaust fumes will cause serious injury or death.	Operate generator in clean, dry, well ventilated area. Never operate unit in enclosed areas such as garages, basements, storage, sheds, or in any location occupied by humans or animals. Keep children, pets and others away from area of operating unit.

Risk of unsafe operation

Hazard	What could happen	How to prevent it
Operation of generator in careless manner.	All sources of energy include the potential for injury. Unsafe operation or maintenance of your generator could lead to serious injury or death to you or others.	<ul style="list-style-type: none"> • Review and understand all of the operating instructions and warnings in this manual. • Become familiar with the operation and controls of the generator. Know how to shut it off quickly. • Equip area of operation with a fire extinguisher certified to handle gasoline or fuel fires. • Keep children or others away from the generator at all times.
Operating generator while suspended	Generator will not operate properly and will cause damage to the generator and could cause serious injury or death to you or others.	Never operate generator while suspended or in an unlevel position. Always operate generate on a flat, level surface.

Risk of hot surfaces		
Hazard	What could happen	How to prevent it
Contact with hot engine and generator components.	Contact with hot surfaces, such as engines exhaust components, could result in serious burns.	During operation, touch only the control surfaces of the generator. Keep children away from the generator at all times. They may not be able to recognize the hazards of this product.

Risk of moving parts		
Hazard	What could happen	How to prevent it
Contact with moving parts can result in serious injury.	The generator contains parts which rotate at high speed during operation. These parts are covered by guarding to prevent injury.	Never operate generator with guarding or cover plates removed. Avoid wearing loose fitting clothing or jewellery which could be caught by moving parts.

Risk from lifting		
Hazard	What could happen	How to prevent it
Lifting a very heavy object.	Serious injury can result from attempting to lift too heavy an object.	When lifting, always keep the object you are lifting near the vertical axis of your body. DO NOT use your back to lift heavy loads. Both people should crouch down, grab the underside of unit and use your legs to carry the weight. Keep the object as near the centre of your body's gravity as possible. Avoid twisting your bodies when carrying the unit; instead, turn your whole body using your feet.

Additional safety rules for generators

- **Do not operate in a hazardous location.** Such areas include where there is a risk of explosion of petrol fumes, leaking gas or explosive dust.
- **Do not operate in a confined area.** Exhaust gases, smoke or fumes could reach dangerous concentrations.
- **The output of this generator is potentially lethal.** The generator should not be connected to a fixed electrical installation except by an appropriately licensed person.
- **Protect your generator.** This generator is NOT WEATHERPROOF and should not be exposed to direct sunlight, high ambient temperature and damp, wet or high humidity conditions.
- **Do not smoke while refuelling.** This is potentially dangerous as it may ignite the fuel and cause an explosion.
- **Take care not to spill fuel.** When refuelling the generator ensure that the motor has been switched off. Prevent the spilling of fuel as this may also ignite with the hot motor. Never refuel whilst the engine running.
- **Be careful where you store the generator.** Store the generator in a dry area away from inflammable liquids.
- **Keep your distance.** The generator emits exhaust fumes. As a safety precaution do not stand close to the unit whilst it is in operation. Ensure bystanders also keep their distance.
- **Ground (earth) your generator.** Ensure that the generator has been ground by using an earth lead. Simply connect one end of the Earth lead to the generator where marked and the other end should be pressed into the ground.
- **Ensure the generator has oil.** Before commencing the generator, ensure that the unit has been filled with SAE#30 4 stroke oil.
- **Never fill fuel tank indoors.** Never fill fuel tank when engine is running or hot. Do not smoke when filling fuel tank.

- **Engine speed has been factory set to provide safe operation.** Tampering with the engine speed adjustment could result in overheating of attachments and could cause a fire. Never attempt to “speed-up” the engine to obtain more performance. Both the output voltage and frequency will be thrown out of standard by this practice, endangering attachments and the user.

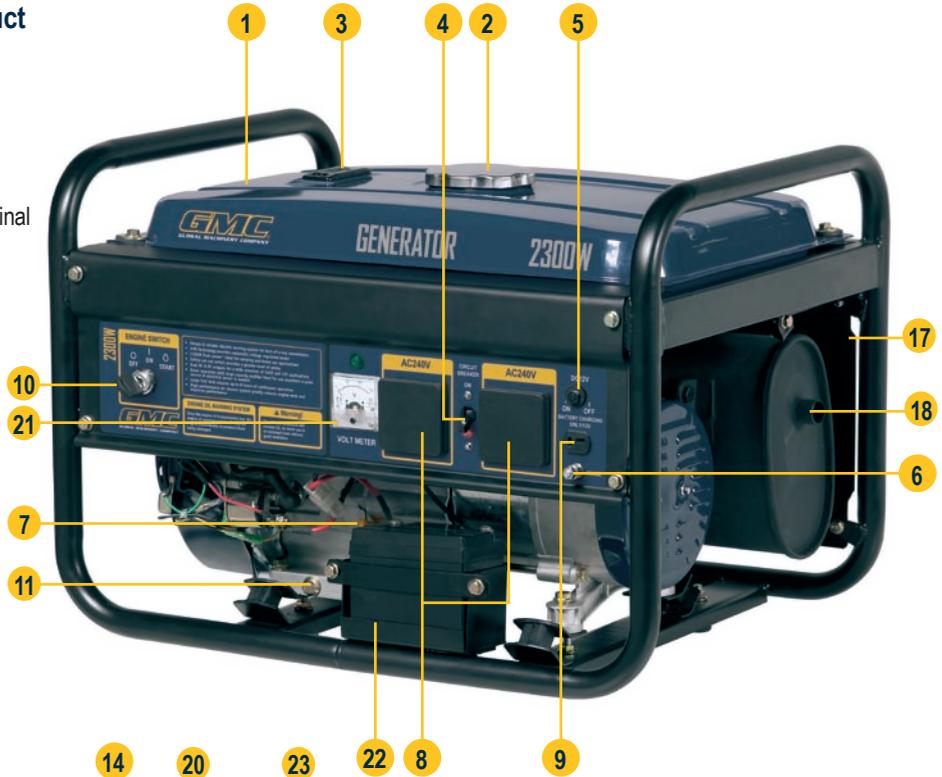
You MUST unplug any load from the generator before starting and stopping to prevent permanent damage to any appliances.

Unpacking

Due to modern mass production techniques, it is unlikely that your GMC generator is faulty or that a part is missing. If you find anything wrong, do not operate the tool until the parts have been replaced or the fault has been rectified. Failure to do so could result in serious personal injury.

Know your product

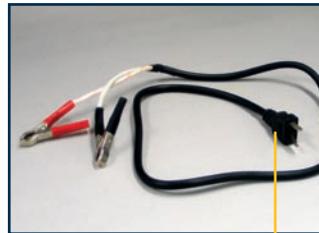
1. Fuel tank
2. Fuel tank cap
3. Fuel level gauge
4. AC safety switch
5. DC reset button
6. Ground (earth) terminal
7. Oil filler cap
8. AC sockets
9. DC socket
10. Key start ignition
11. Oil drain
12. Tap extension fuel filter
13. Air filter cover
14. Choke lever
15. Spark plug
16. Fuel drain
17. Muffler
18. Exhaust
19. DC plug
20. Fuel valve
21. Voltmeter
22. Battery
23. Recoil starter



15 16



13



19



12

20

Automatic voltage regulator (AVR)

This generator has been equipped with AVR technology which provides automatic voltage regulated power for continuous uninterrupted stable power supply.

The AVR maintains a regulated AC output and reacts substantially quicker to rapid surges in voltage, therefore, preventing the possibility of damage to the generator and attached equipment.

Preparing the generator

It is important to check the generator before you commence operating the unit.

IMPORTANT. Ensure that the engine has oil. When leaving the factory, this generator has NO OIL in the engine.

Note. The engine will not start if the generator has no oil.

Checking the engine fuel

1. Switch off engine by turning the ignition switch (10) to the 'off' position.
2. Check the fuel level by viewing the fuel level gauge (3).
3. If the fuel is low, remove the fuel cap (2) by turning anticlockwise.
4. Check to ensure the fuel filter screen is inside the fuel filter neck.
5. Pour the unleaded fuel from an approved fuel container into the fuel tank (1). Because fuel expands, DO NOT FILL to the lip of the tank.
6. Replace fuel cap (2) and turn clockwise to lock.

WARNING.

- Do not refill fuel tank (1) while engine is running or is hot.
- Check to ensure that the fuel drain (16) has been tightened and that fuel is not leaking.
- Be careful not to admit dust, dirt, water or other foreign objects into the fuel.
- Wipe off spilt fuel thoroughly before starting engine.
- Ensure you DO NOT fuel the generator in close proximity to any open flames.

Checking the engine oil

The motor of this generator is not filled with oil.

Prior to starting the motor ensure the crank case is filled with SAE #30 4 stroke oil.

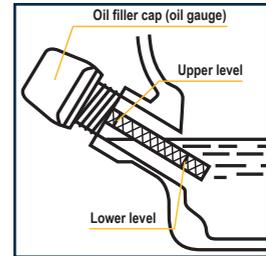
Damage to the motor is not covered under warranty if the motor is run without oil.

1. Before checking or refilling oil, be sure the generator is put on a stable and level surface, ensuring the engine has been switched OFF.
2. Remove the oil filler cap (7) by rotating the cap anti-clockwise and inspect to see the oil level.
3. If the oil level is below the lower level line, refill with SAE #30 4 stroke oil to the upper level line.

Note. Do not screw in the oil filler cap (7) when checking oil level, simply insert and pull the cap straight out.

4. If the oil is contaminated or has discoloured, ensure you change the oil. Refer to the 'Engine oil replacement' section for instructions.

Note. This motor is fitted with a low oil sensor. If the oil level is too low the motor will stop operating or the motor will not start. It is advised to check the oil level each time the generator is used.



Connecting the battery

Note. Before using the key start function of the generator you must connect the battery to the generator.

1. Firmly take hold of both plugs and insert one into the other until they 'click' into place (Fig. A).



Starting the engine with key start

WARNING. Before starting the motor, ensure you have filled the crank case to the correct level with oil.

Note. The crank case is not filled with oil from the factory.

1. Before starting, ensure that no electrical apparatus has been connected to the generator (Fig. B).



2. Turn the fuel valve (20) clockwise to the 'on' position (Fig. C).
3. Move the choke lever (14) to the position towards the rear of the generator (Fig. D). This is not necessary if the engine is already warm.



4. Turn the key start ignition (10) clockwise to the 'START' position (Fig. E).

Note. When the motor is started for the very first time, it may require a number of attempts to start until the fuel has travelled from the tank to the motor.

5. Once you hear the motor operating, release the key to allow the position to move from 'START' to 'ON' (Fig. F).
6. Push the choke lever (14) back to the position towards the front of the generator. This position will switch the choke 'off'.



Starting the engine manually

Note. Follow steps 1 to 3 of the 'Starting the engine with key start' section.

4. Turn the key start ignition (10) clockwise to the 'ON' (Fig. G).
5. Slowly pull the recoil starter (23) until you feel it engage and then pull it briskly.
6. Once you hear the motor operating, push the choke lever (14) back to the position towards the front of the generator. This position will switch the choke 'off'.



Stopping the engine

1. Before stopping, ensure that no electrical apparatus is connected to the generator.
2. Turn the key start ignition (10) to the 'OFF' position (Fig. H).
3. Turn the fuel lever anti clockwise to the 'off' position.



Connecting apparatus to the generator

1. Start the engine. Allow the motor to run for a couple of minutes to warm up prior to connecting any apparatus to the generator.
2. For AC current, ensure the safety switch (4) is turned OFF first, then plug the power cord into the AC output socket (8) (Fig. I).



3. Switch the AC safety switch (4) to the 'ON' position.
Note: ALWAYS use three-pronged plugs for AC apparatus.

CAUTION.

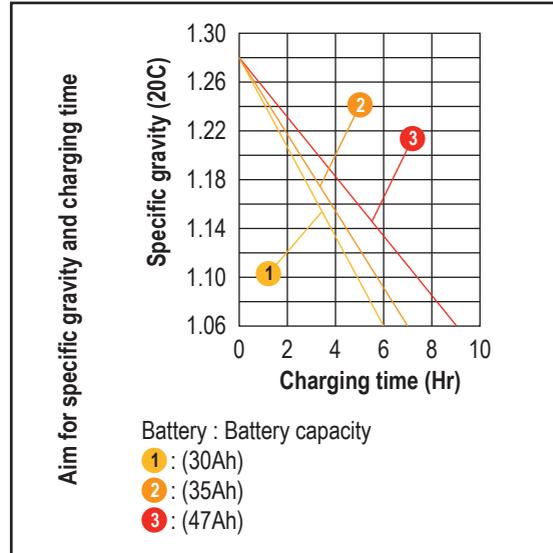
- Ensure the electric apparatus is turned off before plugging in.
 - Check to ensure that the total load is within the generator rated output.
3. For DC current, plug into the DC outlet socket (9) (Fig. J). To charge your car battery, connect the DC plug (19) which have alligator clips to the corresponding terminals on your battery. The red lead goes to the positive (+) terminal and the black lead goes to the negative (-) terminal. This DC cord has been supplied with the unit.



Note. This usage is applicable for charging only 12V batteries. Only use the DC plug (19) to charge lead acid type batteries. DO NOT charge Nicad or any other type of batteries.

Charging the battery

1. Disconnect the leads from the battery.
2. Fully loosen the battery fluid filler caps.
3. Fill the battery cells with distilled water to the upper limit if the battery is empty.



4. Measure the specific gravity fluid by using a hydrometer and calculate the charging time in accordance with the table shown.
5. For a fully charged battery, the specific gravity range shall be within 1.26 to 1.28. It is recommended to be checked and confirmed every hour.
6. Connect the DC plug lead (19) into the DC socket (9) and connect the alligator clips to the correct polarity.

Press the DC reset button (5) to reset in case the DC supply had previously been overloaded.

The generator will charge batteries up to 600CCA capacity provided the battery is in reasonable condition.

Batteries of larger capacity may charge but will depend on the condition and also the level of charge in the battery.

In cases where the current exceeds the rating of the generator, the circuit breaker on the DC side will open circuit, and will need to be reset to continue.

WARNING.

- The battery gives off explosive gases; keep sparks, flames and cigarettes away.
- Provide adequate ventilation when charging or using batteries in an enclosed space.
- The battery contains sulphuric acid (electrolyte). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield.
- If electrolyte gets on your skin, flush with water.
- If electrolyte gets in your eyes, flush with water for at least 15 minutes and call a physician immediately.
- Electrolyte is poisonous. If swallowed, drink large quantities of water or milk and follow with milk of magnesia or vegetable oil and call a physician.
- To prevent the possibility of creating a spark near the battery, connect charging cables first to the battery, then to the generator. Disconnect cables first at the generator.

Note. In most cases, operating the generator with both the 240Vac and the 12V DC at the same time, the DC Circuit breaker may open circuit.

When charging batteries, only use the 12V DC outlet and leave the plug removed from the 240Vac outlet.

WARNING. Prior to connecting any appliance to the generator, check the rating label of the appliance. The generator is rated at 2000W so if the appliance being connected is higher than 2000W, the protective cut out on the generator may operate to prevent over load damage to the generator. The generator will withstand short operation and spikes up to 2300W or the generator may stop.

Note. Motorised products will require more energy upon start up and products which are rated below 2000W may not start if the starting current is excessive.

It should also be very clearly understood that output voltage fluctuations will occur when various loads are connected and disconnected. **It is NOT recommended**

to connect any electronic equipment to the generator without a voltage or surge protector. Computers, televisions, and stereo equipment can be very sensitive to the input supply and could be damaged if protective equipment is not used in conjunction with this generator. This also includes caravans where electronic equipment is incorporated as part of the wiring.

AC safety switch

This generator has been equipped with an AC safety switch (4), designed to protect people against an electric shock.

Safety switch tripping

If the safety switch (4) has tripped and cuts off the power, it may be due to substantial overloading. Marginal overloading may not switch off the safety switch (4), but it will shorten the service life of the generator.

Be sure that all appliances are in good working order before connecting them to the generator. If an appliance begins to operate abnormally, becomes sluggish, or stops suddenly, turn "OFF" both the AC safety switch (4) and the generator engine switch (10) immediately. Then disconnect the appliance and examine it for signs of malfunction.

Resetting the safety switch (4) should restore the power and should be conducted as follows:

1. Unplug all electrical apparatus from the generator.
2. Let the safety switch (4) cool down.
3. Lift the safety switch (4) up to the "ON" position.
4. Commence to start your generator accordingly.
5. When re connecting appliances, reduce the load to that which previously overloaded the generator.

If the safety switch (4) does not reset due to a faulty electrical appliance or wiring, switch off and unplug the appliance which may be faulty. Any faulty electrical appliances will need to be repaired by a suitably qualified person. If the safety switch does not reset after unplugging the appliance, call a licensed electrician to find the fault.

DC overload cut out

IMPORTANT. Exceeding the rated capacity of your generator can result in serious damage to your generator and connected apparatus.

1. The DC circuit has a circuit breaker to protect the generator from over loading.
2. If the circuit breaker trips, unplug all electrical apparatus from the generator.
3. Let the overload cut out switch cool down.
4. Press the DC reset button (5). Commence to start your generator accordingly.
5. When re connecting appliances, reduce the load to that which previously overloaded the generator.

Generator maintenance

Your generator should be kept clean and dry at all times. The generator should not be stored or operated in environments that includes excessive moisture, dust or any corrosive vapours. If these substances are on the generator, clean with a cloth or soft bristle brush. Do not use a garden hose or anything with water pressure to clean the generator. Water may enter the cooling air slots and could possibly damage the rotor, stator and the internal windings of the generator head.

Periodic maintenance						
Item	Remarks	Pre-operation check (daily)	Initial 1 months or 20Hr	Every 3 months or 50Hr	Every 6 months or 100Hr	Every 12 months or 300Hr
Spark plug	Check condition, adjust gap and clean. Replace if necessary.			•		
Engine oil	Check oil level.	•				
	Replace.		•		•	
Air filter	Clean. Replace if necessary.			•		
Fuel filter	Clean fuel drain filter. Replace if necessary.				•	
Valve clearance	Check and adjust when engine is cold.					•
Fuel line	Check fuel hose for crack or damage. Replace if necessary.	•				
Exhaust system	Check for leakage. Retighten or replace gasket if necessary.	•				
	Check muffler screen. Clean/replace if necessary.				•	
Carburetor	Check choke operation.	•				
Starting system	Check key start ignition operation.	•				
Decarbonisation	More frequently if necessary.					•
Fittings/ fasteners	Check all fittings and fasteners correct if necessary.				•	

Regular maintenance is most important for the best performance and safe operation.

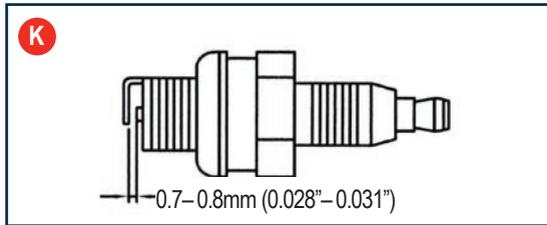
Storage

If you are going to store your generator for more than 30 days, use the following information as a guide to prepare the generator for storage.

Never store generator with fuel in the tank indoors or in enclosed, poorly ventilated areas, where fumes can reach an open flame, spark or pilot light as on a furnace, water heater, clothes dryer or other gas appliances.

Spark plugs

1. Remove spark plug (15) from the generator with the spark plug spanner socket supplied.
2. Remove carbon deposits using a wire brush.
3. Check for discoloration on the top of the spark plug. The standard colour should be a tan colour.
4. Check the spark plug gap. The acceptable gap should be between 0.7–0.8mm (Fig. K).



5. The recommended spark plugs are as follows:

BPR6ES (NGK)
RN9Y (Champion)
W20EPR-U (Denso)
WR6DC (Bosch)

Engine oil replacement

1. Place the generator on a level surface and warm up the engine for several minutes. The stop the engine.
2. Remove oil filler cap (7).
3. Place an oil pan under the generator and commence removing the oil drain cock (11) so that the oil can be completely drained.

4. Check the oil drain cock (11), gasket, oil filler cap (7) and O-ring. If damaged, have these replaced.
5. Reinstall the oil drain cock (11).
6. Add engine oil to the upper level. Recommended 4 stroke engine oil is SAE #30.

CAUTION. Check that no foreign material, debris, dust enters the crankcase.

Air filter

It is very important to maintain an air filter in proper condition. Damage to the generator may arise if the filter has:

- Improperly been serviced.
- Dirt and other foreign elements adhering to the filter due to improper installation and engine wear.

ALWAYS keep the filter clean at all times.

1. Remove the air filter cover (13) on the side of the generator by lifting the 2 clips on both the top and bottom of the air filter cover (13) (Fig. L).
2. Remove the air filter (Fig. M).
3. Wash the air filter in solvent or kerosene and allow to dry.
4. Lubricate the filter using motor oil (SAE #30).
5. Thoroughly squeeze the filter removing excess oil.
6. Replace air filter back into the engine.
7. Secure the cover back onto the side panel of the generator.



IMPORTANT. Never run the engine without the air filter element in place.

Petrol tank filter

1. Stop the engine.
 2. Turn the fuel lever to the 'off' position.
 3. The petrol tank filter is located directly under the petrol cap (2).
- This protects impurities entering the fuel tank during refuelling.



4. Remove the filter (Fig. N) and wash thoroughly in a solvent.
5. Re-assemble.

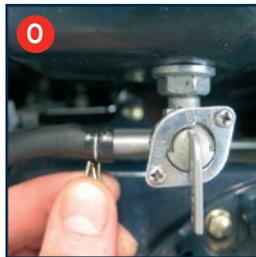
Tap extension fuel filter

A small fuel filter has been fitted to the inlet side of the fuel valve (20), inside the tank. This tap extension fuel filter (12) prevents any dirt in the fuel from entering the fuel system. The procedure for removing this filter in order to replace or clean it is given below.

Note: the following procedure should be performed in a well ventilated area, with no naked flames, sparks, or cigarettes.

Safety glasses should also be worn and engine switch (10) set to the OFF position.

1. Completely empty the tank of fuel. Ensure the fuel tap (20) is in the OFF position
2. Compress the two wire arms of the hose clamp on the outlet hose at the tap (20) and slide the clamp back from the end of the hose by approx. 25mm. Slide the fuel hose off the outlet of the tap (20) (Fig. O).



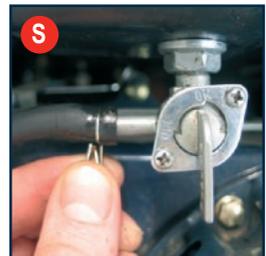
3. Loosen the lock nut locking the tap (20) on to the tank (Fig. P). Unscrew the tap from the tank and withdraw the tap from the tank. Be careful not to lose the small seal on the thread of the tap.
4. Unscrew the tap extension fuel filter (12) (Fig. Q).



Note. This filter can be cleaned in petrol to remove any build-up of dirt on the outside of the filter, or the filter can be replaced. Do not operate the generator without this filter in place. To replace the filter after cleaning, or with a new filter, simply screw the filter into the inlet side of the tap.



5. Ensuring the small seal is fitted to the tap thread, screw the tap back into the tank by a FULL 3–4 turns. Orientate the tap so the outlet of the tap is towards the rear of the tank, and the tap control is to the right hand side of the tank. Holding the tap firm, tighten the lock nut, ensuring the seal is clamped between the lock nut and the tank (Fig. R).
6. Refit the fuel hose to the outlet of the tap and with the wire arms compressed, slide the hose clamp up onto the connection of the hose and the tap (Fig. S).



7. Refill the tank with fuel and ensure there are no leaks between the tap and the tank, and with the fuel tap turned on, ensure there are no leaks where the fuel hose is fitted to the outlet of the tap.

Cleaning

1. Keep your machine clean. The outside of the machine can be cleaned using a damp soft cloth with a mild detergent if required. Never use water to clean the generator as it may cause damage to internal parts.
2. Some maintenance products and solvents may damage the plastic parts; these include products containing benzene, trichloroethylene, chloride and ammonia.
3. Use a vacuum to clean air inlet and outlet louvres of the alternator.
4. Take special care to keep the ventilation inlets/outlets free from obstruction; cleaning with a soft brush followed by a compressed air jet will usually be sufficient to ensure acceptable internal cleanliness.
5. Wear eye protection when carrying out cleaning.

Repairs

Only an authorised service centre should repair the generator.

Troubleshooting

Trouble	Possible cause	Suggested remedy
Engine will not start	1. Low on fuel or oil content	1. Add fuel or oil
	2. Ignition switch in "Off" position	2. Turn the ignition to the 'START' position if using key start, or 'ON' position if manually starting.
	3. Faulty spark plug	3. Replace spark plug
	4. Choke in wrong position	4. Adjust choke accordingly
	5. Fuel shut-off valve in closed position	5. Open fuel shut-off valve
	6. Unit loaded during start-up	6. Remove load from unit
	7. Spark plug wire loose	7. Attach wire to spark plug
No electrical output	1. Faulty receptacle	1. Have service centre replace receptacle
	2. Circuit breaker kicked out	2. Depress and reset
	3. Worn Brushes	3. Have service centre replace brushes
	4. Faulty power cord	4. Replace cord
Repeated circuit breaker tripping	1. Overload	1. Reduce load
	2. Faulty cords or equipment	2. Check for damaged, bare, or frayed wires on equipment. Replace.
Generator overheating	1. Generator overloaded	1. Reduce load
	2. Insufficient ventilation	2. Move to adequate supply of fresh air

GMC customer assist

If your product needs repairing, replacing, technical service or you simply need help or advice, please contact us on our Customer Assist Line 1300 880 001 (Australia) or 0800 445 721 (New Zealand).

For prompt service we suggest you log your service request online at www.gmcservice.com.au. Should you not have access to the Internet, please contact our service department on **1300 880 001 (Australia) or 0800 445 721 (New Zealand)**.
7am – 7pm, 7 days a week (AEST).

Please note that if repair or replacement is required, you must provide a valid original purchase receipt.

You will need the following details at hand to log your service request;

Personal details: First & Last name, address, pick up address, contact phone numbers, email address

Product details: Product number, date of purchase, retailer bought from, State & postcode, receipt number, reason for the request, copy of official purchase receipt

Attach your purchase receipt and save with this Manual for future reference.

Please refer to our website www.gmcompany.com for full GMC warranty Terms and Conditions.

Attach Your
Receipt Here

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