



# INVERTER GENERATOR



## User Manual

[Revision 1.0]

READ THIS MANUAL CAREFULLY BEFORE USE – FAILURE TO DO SO MAY RESULT IN INJURY, PROPERTY DAMAGE AND MAY VOID WARRANTY. • KEEP THIS MANUAL FOR FUTURE REFERENCE. • Products covered by this manual may vary in appearance, assembly, inclusions, specifications, description, and packaging.

The product is NOT supplied with engine oil, although traces of oil from the manufacturing process may be present. It is essential to add adequate engine oil of the correct type to the engine before use. **Failure to add engine oil will void the product warranty.**

# Safety

Safety messages are designed to alert you to possible dangers or hazards that could cause death, injury or equipment or property damage if not understood or followed. Safety messages have the following symbols:



You **WILL** be **KILLED** or **SERIOUSLY INJURED** if you do not follow instructions.



You **CAN** be **KILLED** or **SERIOUSLY INJURED** if you do not follow instructions.



You **CAN** be **INJURED** if you do not follow instructions or equipment damage may occur.

It is vital that you read and understand this user manual before using the product, including safety warnings, and any assembly and operating instructions. Keep the manual for future reference.

Safety precautions and recommendations detailed here must be fully understood and followed to reduce the risk of injury, fire, explosion, electrical hazard, and/or property damage.

Safety information presented here is generic in nature – some advice may not be applicable to every product. The term "equipment" refers to the product, be it electrical mains powered, battery powered or combustion engine powered.

- **Before Use** - If you are not familiar with the safe operation/handling of the equipment or are in any way unsure of any aspect of suitability or correct use for your application, you should complete training conducted by a person or organization qualified in safe use and operation of this equipment, including fuel/electrical handling and safety.
- Do NOT operate the equipment in flammable or explosive environments, such as in the presence of flammable liquids, gases, or dust. The equipment may create sparks or heat that may ignite flammable substances.
- Keep clear of moving parts.
- Equipment may be a potential source of electric shock or injury if misused.
- Do NOT operate the equipment if it is damaged, malfunctioning or is in an excessively worn state.
- Do NOT allow others to use the equipment unless they have read this manual and are adequately trained.
- Keep packaging away from children - risk of suffocation! Operators must use the equipment correctly. When using the equipment, consider conditions and pay due care to persons and property.

### General Work Area Safety

- Work areas should be clean and well lit.
- Do not operate the equipment if bystanders, animals etc are within operating range of the equipment or the general work area.
- If devices are provided for connecting dust extraction / collection facilities, ensure these are connected and used properly. Dust collection can reduce dust-related hazards.

### General Personal Safety

- Wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect from eye and ear injury, poisoning, burns, cutting and crush injuries. Protective equipment such as safety goggles, respirators, non-slip safety footwear, hard hat, hearing protection etc should be used for appropriate equipment / conditions. Other people nearby should also wear appropriate personal protective equipment. Do not wear loose clothing or jewellery, which can be caught in moving parts. Keep hair and clothing away from the equipment.
- Stay alert and use common sense when operating the equipment. Do not over-reach. Always maintain secure footing and balance.
- Do not use the equipment if tired or under the influence of drugs, alcohol, or medication.
- This equipment is not intended for use by persons with reduced physical, sensory, or mental capabilities.

### General Fuel Safety

- Petrol/fuel/gasoline is extremely flammable – keep clear of naked flames or other ignition sources.
- Do not spill fuel. If you spill fuel, wipe it off the equipment immediately – if fuel gets on your clothing, change clothing.
- Do NOT smoke near fuel or when refuelling.
- Always shut off the engine before refuelling.
- Do NOT refuel a hot engine.
- Open the fuel cap carefully to allow any pressure build-up in the tank to release slowly.
- Always refuel in well-ventilated areas.
- Always check for fuel leakage. If fuel leakage is found, do not start, or run the engine until all leaks are fixed.

### General Carbon-Monoxide Safety

- Using a combustion engine indoors **CAN KILL IN MINUTES**. Engine exhaust contains carbon-monoxide – a poison you cannot smell or see.
- Use combustion engines **OUTSIDE** only, and far away from windows, doors, and vents.

### General Equipment Use and Care

- Keep packaging away from children and pets, potential risk of suffocation or choking.
- The equipment is designed for domestic use only.
- Handle the equipment safely and carefully.
- Before use, inspect the equipment for misalignment or binding of moving parts, loose components, damage, or any other condition that may affect its operation. If damaged, have the equipment repaired by an authorised service centre or technician before use.
- Prevent unintentional starting of the equipment - ensure equipment and power switches are in the OFF position before connecting or moving equipment. Do not carry equipment with hands or fingers touching any controls. Remove any tools or other items that are not a part of the equipment from it before starting or switching on.
- Do not force the equipment. Use the correct equipment for your application. Equipment will perform better and be safer when used within its design and usage parameters.
- Use the equipment and accessories etc. in accordance with these instructions, considering working conditions and the work to be performed. Using the equipment for operations different from those intended could result in hazardous situations.
- Always keep equipment components (engines, hoses, handles, controls, frames, housings, guards etc) and accessories (cutting tools, nozzles, bits etc) properly maintained. Keep the equipment clean and, where applicable, properly lubricated.
- Store the equipment out of reach of children or untrained persons. To avoid burns or fire hazards, let the equipment cool completely before transporting or storing. Never place or store the equipment near flammable materials, combustible gases, or liquids etc.
- The equipment is not weather-proof, and should not be stored in direct sunlight, at high ambient temperatures or locations that are damp or humid.
- Do not clean equipment with solvents, flammable liquids, or harsh abrasives.
- For specific equipment safety use and care, see Equipment Safety.

**General Electrical Safety**

- Inspect electrical equipment, extension cords, power bars, and electrical fittings for damage or wear before each use. Repair or replace damaged equipment immediately.
- Ensure all power sources conform to equipment voltage requirements and are disconnected before connecting or disconnecting equipment.
- When wiring electrically powered equipment, follow all electrical and safety codes.
- Always use a Residual Current Device (RCD) (GFCI) / Earth Leakage Circuit Breaker / Safety Switch when operating this item (electrical items only).
- High voltage / high current power lines may be present. Use extreme caution to avoid contact or interference with power lines. Electrical shock can be fatal.

**General Electrical Safety**

- Electrically grounded equipment must have an approved cord and plug and be connected to a grounded electrical outlet.
- Do NOT bypass the ON/OFF switch and operate equipment by connecting and disconnecting the electrical cord.
- Do NOT use equipment that has exposed wiring, damaged switches, covers or guards.
- Do NOT use electrical equipment in wet conditions or in damp locations.
- Do NOT use electrical cords to lift, move or carry equipment.
- Do NOT coil or knot electrical cords, and ensure electrical cords are not trip hazards.

**General Service Information**

- The equipment must be serviced or repaired at authorised service centres by qualified personnel only.
- Replacement parts must be original equipment manufacturer (OEM) to ensure equipment safety is maintained.
- Do NOT attempt any maintenance or repair work not described in this manual.
- After use, the equipment and components may still be hot – allow the equipment to cool and disconnect spark plugs and/or electrical power sources and/or batteries from it before adjusting, changing accessories, or performing repair or maintenance.
- Do NOT adjust while the equipment is running.
- Perform service-related activities in suitable conditions, such as a workshop.
- Replace worn, damaged or missing warning/safety labels immediately.

**Child Choking Hazard!**



**• WARNING: CHOKING HAZARD - CHILDREN UNDER 8 YRS. CAN CHOKE OR SUFFOCATE ON SMALL PARTS. ADULT SUPERVISION REQUIRED.**

- Carefully inspect anything a baby or child could gain access to, including this product & packaging.
- Dangers include anything of a size that could become stuck or lodged in a baby or child's airway.
- Dangers include things like raw, hard fruit and vegetable pieces, large pieces of meat, bones or sausage skins, popcorn, nuts, hard lollies and corn chips, small magnets and batteries, coins, beads, marbles and small uninflated balloons, broken toys and smaller toys, buttons, keys, and coins. But there are also many more.
- Pay particular attention to accessories, nuts, bolts, screws, washers, caps, covers, loose parts, parts that could be removed or break off, pieces of packaging, staples, tape etc.
- In the case of any doubt, secure the item of concern in an appropriate manner, or completely remove the possibility of access by a baby or child.

**Inverter Generator Safety**

<b>DANGER</b>	
<p><b>Using an engine or wood/charcoal/gas fuelled appliance indoors CAN KILL YOU IN MINUTES. Engine exhaust and wood/charcoal/gas fumes contain carbon monoxide. This is a poison you cannot see or smell.</b></p>	
<p><b>NEVER use inside a building, home, garage, boat, caravan or tent EVEN IF doors and windows are open.</b></p>	<p><b>Only use OUTSIDE and far away from windows, doors, and vents.</b></p>
<p><b>Avoid other hazards - READ MANUAL BEFORE USE.</b></p>	
<p><b>GENERAL:</b></p> <ul style="list-style-type: none"> <li>• Do not operate in a hazardous location. Such areas include where there is a risk of explosion of petrol fumes, leaking gas or explosive dusts.</li> <li>• Do not operate in a confined area where exhaust gases or wood/charcoal/gas fumes could reach dangerous concentrations.</li> </ul> <p><b>PRODUCTS FEATURING AN ENGINE</b></p> <ul style="list-style-type: none"> <li>• Follow all warnings in the section titled "GENERAL".</li> <li>• Explosion hazard - never smoke while refuelling.</li> <li>• Take care not to spill fuel. When refuelling the engine, ensure that the engine has been allowed to cool. Prevent spilling of fuel as this may also ignite with a hot engine.</li> <li>• Never refuel while engine is running.</li> </ul> <p><b>GENERATORS</b></p> <ul style="list-style-type: none"> <li>• Follow all warnings in the sections titled "GENERAL" and "PRODUCTS FEATURING AN ENGINE".</li> <li>• 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.</li> <li>• Not weatherproof – protect your machine. This machine is not weatherproof and should not be exposed to direct sunlight, high ambient temperature, damp conditions, wet conditions or high humidity conditions.</li> </ul>	





















- The manufacturer cannot anticipate every possible hazardous circumstance that the user may encounter. Therefore, the warnings in this manual, on tags, and on affixed decals are not all-inclusive. To avoid accidents, the user must understand and follow all manual instructions and use common sense.
- Read and understand this manual in its entirety before operating. Improper use of this generator could result in serious injury or death.
- Engine exhaust contains chemicals known to cause cancer and birth defects.
- Always wash hands after handling the generator.
- Fuel is combustible and easily ignited. Do not refuel during operation. Do not refuel while smoking or near naked flames. Do not spill fuel.
- Exhaust gas is poisonous; do not operate in an unventilated area.
- Using a generator indoors CAN KILL YOU IN MINUTES!





## GF3500i Inverter Generator

- Carbon monoxide gas is a poisonous, odourless gas that can cause headaches, confusion, fatigue, nausea, fainting, illness, seizures, or death. If you start to experience any of these symptoms, IMMEDIATELY get fresh air and seek medical attention.
- Never use indoors, in a covered area, or in a confined space, even if doors and windows are open.
- Install a battery-operated carbon monoxide alarm near bedrooms.
- Keep exhaust from this unit from entering a confined area through windows, doors, vents, or other openings.
- When working in areas where vapours could be inhaled, use a respirator mask according to its instructions.
- Never exceed the generator's wattage/ampere capacity. This could damage the generator and/or connected electrical devices.
- Check the operating voltage and frequency requirements of all electrical devices prior to plugging them into the generator.
- Never start or stop the engine with electrical devices plugged into the receptacles. Failure to do so could damage the generator and/or electrical devices.
- Always start the engine and let it stabilise before connecting any electronic devices.
- Disconnect all electronic devices before stopping the engine.
- Starter and other moving parts can catch on clothing, jewellery, and hair.
- Do not wear loose clothing or gloves.
- Remove jewellery or anything else that could be caught in moving parts.
- Tie back or wear protective head covering to contain long hair.
- The pull cord recoils rapidly and pulls the arm towards the engine faster than you can let go, which could result in injury.
- To avoid the dangers of injury caused by the sudden change of rotation direction of the engine, pull the starter cord slowly until resistance is felt, then pull rapidly.
- Avoid contact with hot areas of this unit.
- Use caution around the muffler, cylinder, and other engine parts, as they can be extremely hot.
- Allow hot components to cool before touching them.
- The precautions to be observed by the user in the case of re-supply by generating sets of an installation depend on the existing protective measures in this installation and applicable regulations.
- The user must conform to the electrical safety regulations applicable to the place where the generating sets are used.
- This generator produces very high voltage, which could result in burns or electrocution, causing serious injury or death.
- Never handle the generator, electronic devices, or any cord while standing in water, barefoot, or when your hands or feet are wet.
- Always keep the generator dry. Never operate the generator in rain or under wet conditions.
- Never plug electronic devices into the generator if they have frayed, worn, or exposed wires. Never touch bare wires or make contact with receptacles.
- Never allow a child or unqualified person to operate the generator. Keep children a minimum of 10 feet (3 metres) away from the generator at all times.
- If using the generator for backup power, notify the utility company.
- If connecting the generator to a building's electrical system for standby power, you must use a qualified electrician to install a transfer switch. Failure to isolate the generator from the power utility could result in serious injury or death to utility workers.
- When using extension lines or mobile distribution networks, the total length of lines with a cross section of 1.5 mm<sup>2</sup> should not exceed 60 metres; for a cross section of 2.5 mm<sup>2</sup>, this should not exceed 100 metres.
- The generating set must not be connected to other power sources except with accessories recommended by the manufacturer or with other generators of the same model.
- Save these instructions. Refer to them frequently and use them to instruct others who may use this product. If you loan this product to someone, ensure you provide these instructions as well.
- Due to high mechanical stresses, only tough, rubber-sheathed flexible cables (in accordance with IEC 60245-4) or equivalent should be used.
- The generator must be properly grounded to prevent electrocution.
- Only operate the generator on a level surface.
- Always connect the nut and grounding terminal on the frame to an appropriate ground source.
- Only use this unit as intended, or serious injury or death could result.
- Do not bypass any safety device. Moving parts are covered with guards; make sure all protective covers are in place.
- Never transport or make adjustments to this unit while it is running.
- Never insert objects through cooling slots.
- Never operate this unit if there are any broken or missing parts. Only use replacement parts specifically designed for this unit.
- Improper treatment of the generator can damage the unit and shorten its lifespan.
- Always repair this unit as specified in this manual. If you have any questions, contact your dealer or consult a qualified service centre.
- Shut off the generator if electrical output is missing, if the unit vibrates excessively, or if it begins to smoke, spark, or emit flames.
- To reduce the risk of serious injury, avoid attempting to lift the generator alone.

# Safety Symbols

The product may have safety warning labels attached to it, explained below. Understand the symbols on your product and their meanings. If any stickers become unreadable, unattached etc., replace them.

 <p><b>Flammable Material Hazard</b> Flammable liquids, gases, or substances etc may present. Avoid ignition sources and open flames. Danger of fire.</p>	 <p><b>Read User Manual</b> Read and fully understand product safety warnings, operation, procedures etc before using the product.</p>	 <p><b>Use Hand Protection</b> Wear appropriate hand protection and take due care as the product or use of the product may present hand hazards.</p>	 <p><b>Carbon-Monoxide Hazard</b> Do not use the product in confined areas or without adequate ventilation. Carbon-monoxide poisoning can be fatal.</p>
 <p><b>Electrocution / Electrical Shock Hazard</b> High voltage or high current electricity may be present or required by the product. Take due care when handling electrical products, cables, plugs and leads. Electrical shock can be fatal.</p>	 <p><b>Toxic Fumes / Dust Hazard</b> Using the product or by-products from use may produce fumes, smoke or particles that could be harmful if inhaled. Wear appropriate breathing protection and have adequate ventilation.</p>	 <p><b>Explosive Material Hazard</b> Combustible liquids, gases, or substances etc may be present. Avoid ignition sources and open flames. Danger of explosion.</p>	 <p><b>Cutting / Amputation Hazard</b> The product may have blades, edges or mechanical devices that can cause severe cut injury to fingers, limbs etc. Take due care when handling and using the product.</p>
 <p><b>Crush Hazard</b> The product may have blades, edges or mechanical devices that can cause severe crush injury to fingers, limbs etc. Take due care when handling and using the product.</p>	 <p><b>Single Operator Only</b> The product must be operated by a single person only. More than one person operating the product may introduce additional hazards.</p>	 <p><b>Use Face Protection</b> Wear appropriate full-face protection and take due care as the product or use of the product may present face and eye hazards.</p>	 <p><b>Use Foot Protection</b> Wear appropriate foot protection and take due care as the product or use of the product may present foot hazards.</p>
 <p><b>Use Eye / Ear / Head Protection</b> Wear appropriate eye and / or ear and / or head protection and take due care as the product or use of the product may present eye, hearing, and head hazards.</p>	 <p><b>Running Hazard</b> Do not run on or near the product as doing so may present a fall hazard.</p>	 <p><b>Diving Hazard</b> Do not dive into the product as doing so may present a neck / head injury hazard.</p>	 <p><b>Adult Supervision Required</b> Always supervise children and other users of a product to prevent drowning or injury.</p>
 <p><b>Skin Penetration / Puncture Hazard</b> The product may produce pressure, emit liquids or objects that can cause severe injury to fingers, limbs, blood etc. Take due care when handling and using the product.</p>	 <p><b>Hot Surface Hazard</b> Be aware that the product may produce high temperatures and hot surfaces that can cause burn injuries.</p>	 <p><b>Flying Debris Hazard</b> Be aware that the product or use of the product may present hazards produced by flying debris. Wear appropriate clothing and protective devices.</p>	 <p><b>Moving Parts Hazard</b> Be aware that the product contains or uses mechanical devices that move or rotate. Always wait for moving parts to stop fully before handling the product, adjusting, maintenance etc.</p>

 <p><b>Carbon-Monoxide Hazard</b> Do not use the product in confined areas or without adequate ventilation. Carbon-monoxide poisoning can be fatal.</p>	 <p><b>Pull Hazard</b> Be aware that the product contains or uses mechanical devices that can pull in objects and can cause severe injury to fingers, limbs etc. Take due care when handling and using the product.</p>	 <p><b>Slope / Fall Injury Hazard</b> Be aware that using the product on sloping surfaces or in slippery conditions may present additional dangers from falls and contact with blades, moving parts, hot surfaces etc.</p>	 <p><b>"Slam Dunk" Warning</b> Do NOT attempt "slam dunk" manoeuvres as this may result in severe injury due to falling, product breakage or collapse etc.</p>
 <p><b>Electrocution / Electrical Shock Hazard - Outdoor</b> High voltage or high current electricity may be present or required by the product. Do NOT use in rain, damp, or wet conditions. Electrical shock can be fatal.</p>	 <p><b>Electrocution / Electrical Shock Hazard - Disconnect</b> High voltage or high current electricity may be present or required by the product. Always disconnect the product from the electrical supply before handling the product, adjusting, maintenance etc.</p>	 <p><b>Power Line Electrocution Hazard</b> High voltage / high current power lines may be present. Use extreme caution to avoid contact or interference with power lines. Electrical shock can be fatal.</p>	 <p><b>"Kick-Back" Hazard</b> High level of "kick-back" hazard that can cause the machine to suddenly rotate towards operator. Kick-back injury can be fatal.</p>
 <p><b>Winch Operator Position Hazard</b> Do NOT stand between winch and load. Do NOT use winch to move people.</p>	 <p><b>Winch Lift Hazard</b> Do NOT LIFT load vertically. Use machine to PULL only.</p>	 <p><b>Cable Hazard</b> Ensure that load bearing cable is not kinked or knotted.</p>	 <p><b>Winch Cable Hazard</b> Ensure that there is a minimum number of cable coils on winching mechanism.</p>
 <p><b>Winch Hook Hazard</b> Carry hook to load – do NOT throw or run.</p>	 <p><b>Flash / Blinding Hazard</b> Wear appropriate eye protection for welding. Direct exposure to weld arcs may cause permanent eye injury.</p>	 <p><b>Laser Hazard</b> Laser may be in use – do NOT look directly at laser or allow others to.</p>	 <p><b>Choking Hazard</b> Children under 8 yrs. Can choke or suffocate on small parts. Adult supervision required.</p>

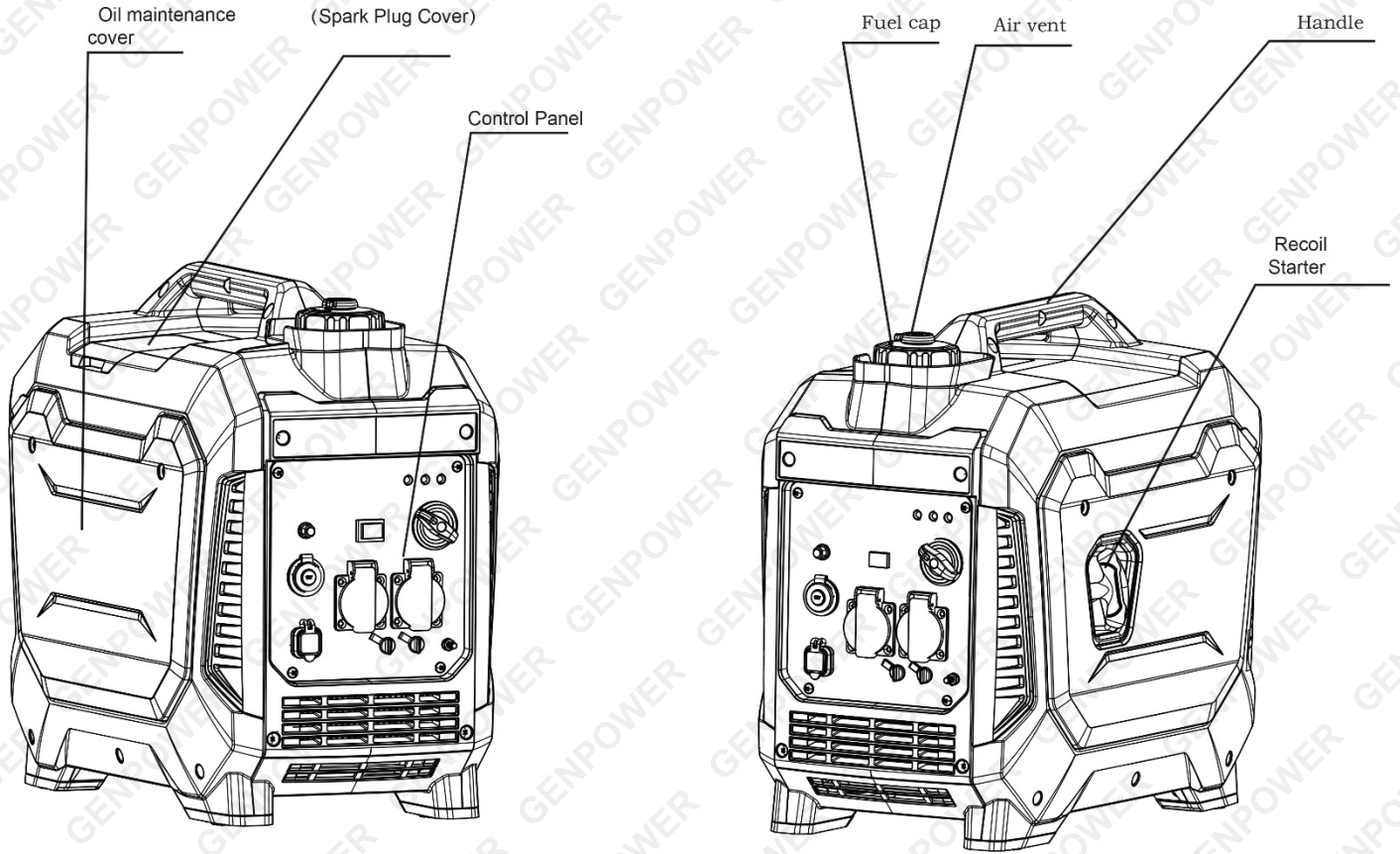
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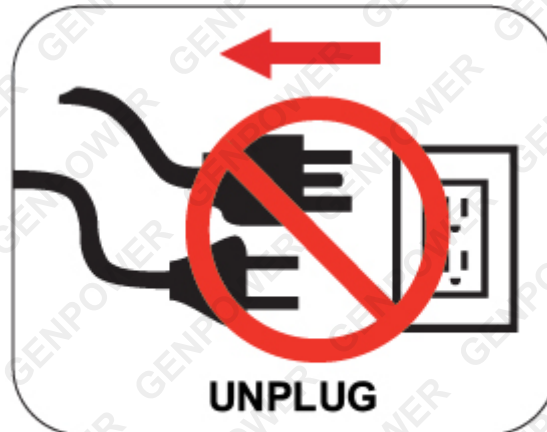
# Parts Identification



## Set-Up

### Connecting Generator to an Electrical System

If connecting the generator to a building's electrical system for standby power, you must use a qualified electrician to install a transfer switch. The power from the generator must be isolated from the circuit breaker or alternative power source. The connection must comply with all electrical codes and applicable laws.



Never directly connect generator to a household power source.

**WARNING:** This generator produces very high voltage, which could result in burns or electrocution, causing serious injury or death.

Never handle the generator, electronic devices, or any cords while standing in water, barefoot, or when your hands or feet are wet.

Always keep the generator dry. Never operate the generator in rain or under wet conditions.

Never plug electronic devices into the generator if they have frayed, worn, or exposed wires. Never touch bare wires or make contact with receptacles.

Never allow a child or unqualified person to operate the generator. Keep children a minimum of 10 feet (3 metres) away from the generator at all times.

If using the generator for backup power, notify the utility company.

If connecting the generator to a building's electrical system for standby power, you must use a qualified electrician to install a transfer switch. Failure to isolate the generator from the power utility could result in serious injury or death to utility workers.

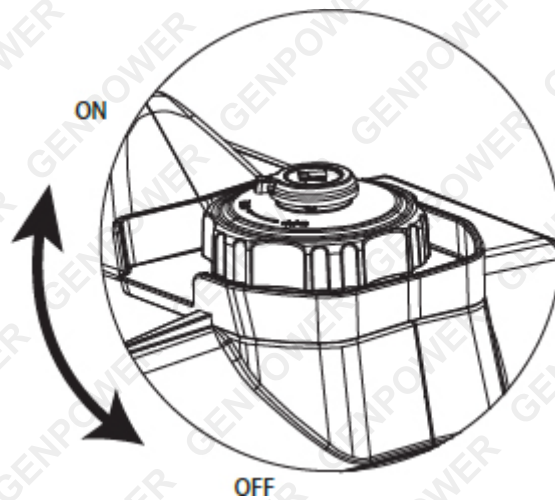
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The generating set must not be connected to other power sources except with accessories recommended by the manufacturer or with other generators of the same model.

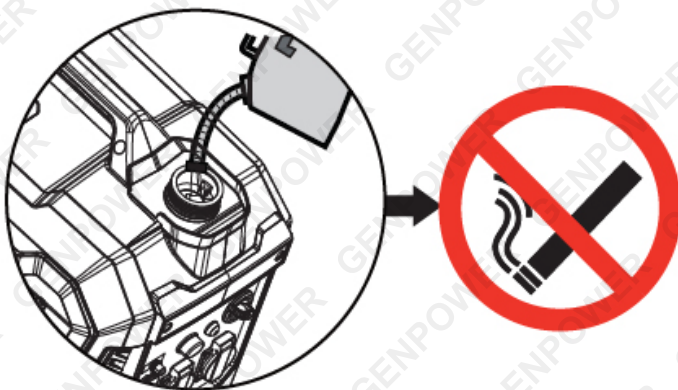
Save these instructions. Refer to them frequently and use them to instruct others who may use this product. If you loan this product to someone, provide these instructions as well.

Due to high mechanical stresses, only tough, rubber-sheathed flexible cables (in accordance with IEC 60245-4) or the equivalent should be used.

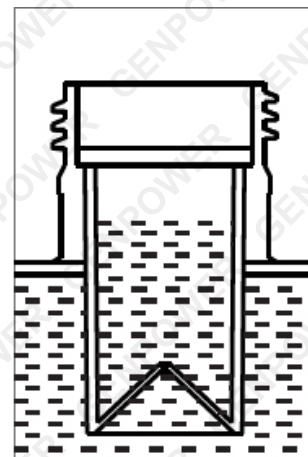
## Adding Fuel



1. Set the generator on a clean and level surface in a well-ventilated area.
2. Remove the fuel cap.
3. Insert a funnel into the fuel tank and carefully pour petrol into the tank until the fuel level reaches about 1 ½ inches (3.8 cm) below the top of the neck. Be careful not to overfill the tank to allow space for fuel expansion.
4. Replace the fuel cap and secure it tightly.

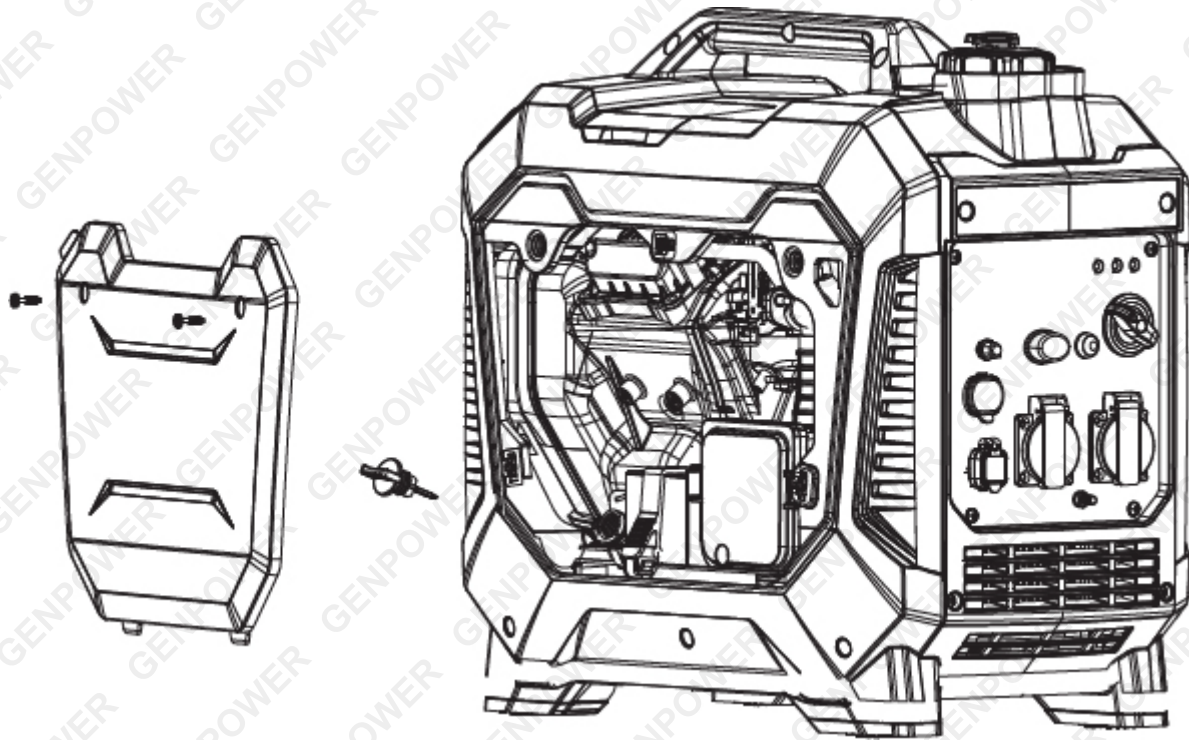


Do not smoke when adding fuel.



Do not to overfill the tank to provide space for fuel expansion.

## Adding / Checking Engine Oil



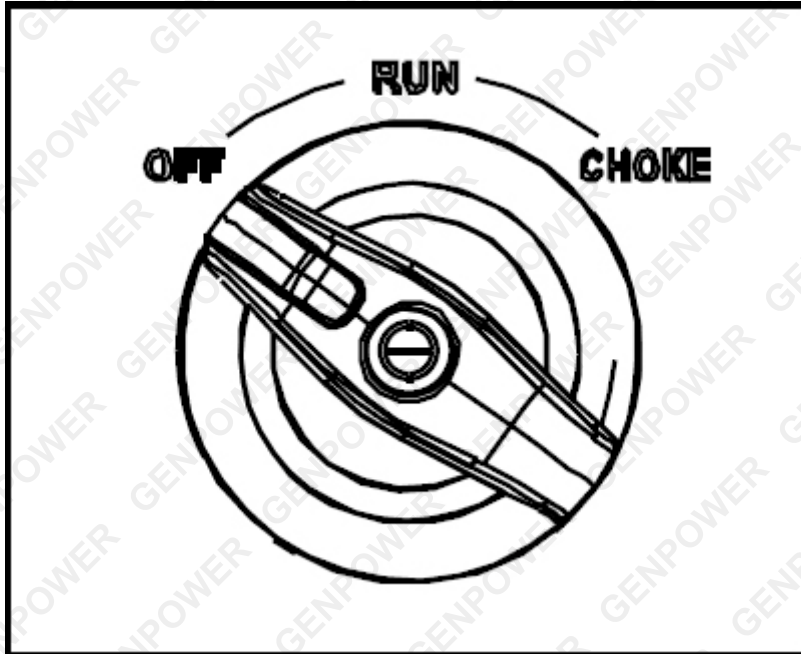
1. Place the generator on a level surface.
2. Remove the screws, then remove the outer casing cover. (You must remove the spark plug cover to push the side panel off from the inside.)
3. Remove the crankcase dipstick.
4. Insert a funnel into the crankcase dipstick hole and carefully add the specified amount of 4-cycle engine oil (SAE 10W-30) to the empty reservoir until the oil reaches the outer edge of the oil fill hole (crankcase dipstick hole).
5. Be sure to replace the dipstick and securely tighten it before attempting to start the engine.
6. To check the oil, set the generator on a level surface, wipe the dipstick clean, then reinsert the dipstick without re-threading.

### Recommended Oil: SAE 10W-30

**CAUTION:** The generator has been shipped without engine oil. You must add oil before first operating this generator. Always check the oil level before each use.

# Control Panel Functions

## ON/OFF Start Switch and RUN



### Start Switch “OFF”

When the Start Switch is in the “OFF” position, the fuel valve is switched off, and the engine will not run.

### Start Switch “RUN”

When the Start Switch is in the “RUN” position, the fuel valve is switched on, and the engine can be started.

### Start Switch “ON”

When the Start Switch is in the “ON” position, the fuel valve is switched on, and the engine can run.

**Note:** The choke is not required to start a warm engine.

## Oil Warning Indicator Light



When the oil falls below the minimum level, the oil warning indicator light comes on, and the engine stops automatically. The engine will not restart until the oil is refilled.

**Note:** If the oil warning indicator light does not come on and the engine stalls, turn the Start Switch to “ON” and pull the recoil starter.

## Engine Overload Indicator Light

If the engine overload indicator light comes on, the generator's wattage/amperage capacity has been exceeded by connected electrical devices or by a power surge. When this occurs, the green AC Pilot Indicator Light will turn off. The engine will continue to run, but the red Engine Overload Indicator Light will remain on, and power will no longer be supplied to connected electronic devices.

### How to Correct:

1. Disconnect all electronic devices and stop the engine.
2. Reduce the total wattage of connected electronic devices until it is within the generator's rated output.
3. Inspect the Air Inlet and Control Panel for any blockages. Remove any blockages found.
4. Restart the engine.

**Note: The engine overload indicator light may turn on for a few seconds when attaching a load due to a power surge. This is normal.**

## AC Pilot Indicator Light

The green AC Pilot Indicator Light comes on when the engine starts and generates power.

## DC Circuit Breaker

When the DC Circuit Breaker is in the "ON" position, the generator is able to supply power to connected electronic devices. When the DC Circuit Breaker is in the "OFF" position, the generator will no longer supply power. The DC Circuit Breaker automatically turns "OFF" when the connected electronic devices exceed the generator's rated output. If the DC Circuit Breaker turns off, reduce the load of connected devices until the load is within the specified rated output. To re-establish power, return the DC Circuit Breaker to the "ON" position.

**CAUTION: If the DC Circuit Breaker turns off again, stop using the generator immediately and consult our dealers.**

## Engine ECO Control

- When the Engine ECO switch is turned to the "ON" position, the economy control unit automatically adjusts the generator's engine speed based on the connected electronic load. This results in improved fuel economy and reduced noise.
- When the ECO switch is turned to the "OFF" position, the engine runs at the rated speed of 4,850 r/min.

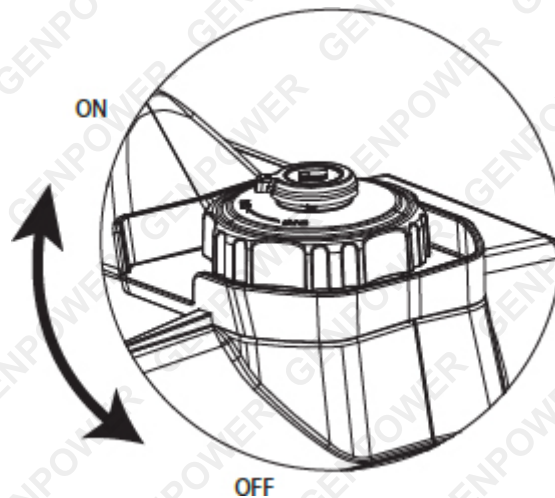
**Note: The ECO switch must be turned to the "OFF" position when using electronic devices that require a large starting current, such as a compressor.**

## Parallel Outlets

Located just above the Grounding Terminal, the generator's Parallel Outlets enable the user to run two GF3500i generators simultaneously. This operation requires special cables. When operating parallel generators, the rated output is 6.0 kVA, and the rated current is 30A/230V. For cables and instructions, consult a dealer for a Parallel Operation Cable Kit.

**WARNING!** Never connect generators of different models. Only connect this generator to another GF3500i Standard Generator or GF3500i Companion Generator. Only use an approved brand's Parallel Operation Cable Kit to connect generators.

## Fuel Cap

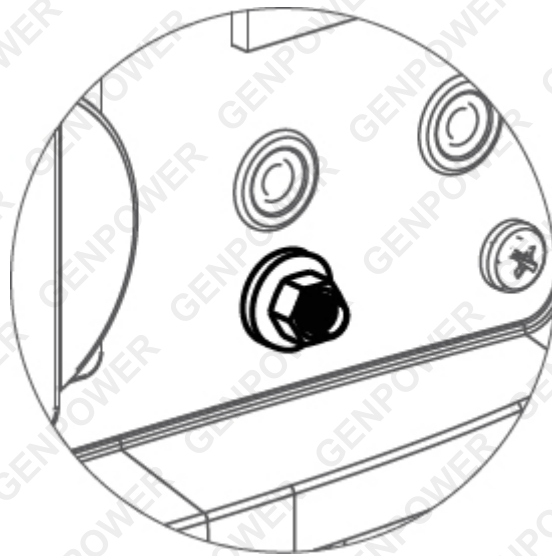


Turn counterclockwise to remove the fuel cap.

## Fuel Cap Air Vent

The fuel cap is equipped with an air vent to control fuel flow to the carburettor. The Air Vent must be in the "ON" position to allow fuel to flow so the engine can run. Turn the Air Vent to the "OFF" position to stop fuel flow.

## Grounding Terminal



The generator's grounding terminal must always be used to connect the generator to a driven ground rod. Connect the grounding terminal to the driven ground rod using a No. 8 AWG (American Wire Gauge) copper wire. The wire connects to the terminal between the lock washer and nut. Tighten the nut securely to ensure a good connection. Grounding the generator protects you from electric shock resulting from the build-up of static electricity or undetected ground faults.

**NOTE:** Grounding wire not included.

**WARNING:** The generator must be properly grounded to prevent electrocution. Only operate the generator on a level surface. Always connect the nut and grounding terminal on the frame to an appropriate ground source.

# Operation

## Grounding the Generator

To avoid electrocution, this generator must be properly grounded prior to use. For instructions, refer to the [Control Panel Functions](#).

## Standard Atmospheric Conditions

**Ambient Temperature: 25°C (77°F)**

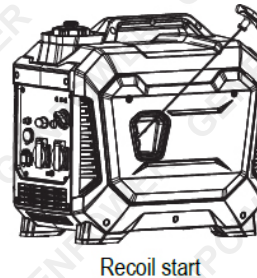
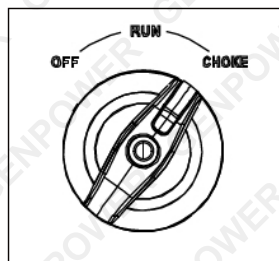
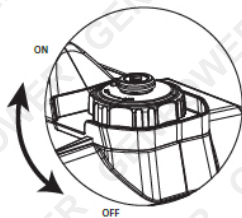
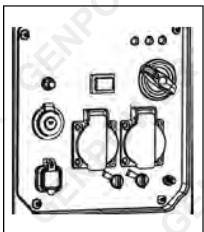
**Barometric Pressure: 100 kPa**

**Relative Humidity: 30%**

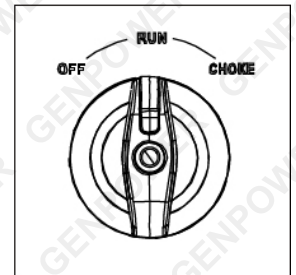
Generator output will vary due to changes in temperature, altitude, and humidity. If the temperature, humidity, or altitude is higher than standard atmospheric conditions, the generator's output will be reduced. The load attached to the generator must therefore be reduced.

## How to Start the Engine

1. Place the generator on a level surface. All electrical loads **MUST** be disconnected from the generator.
2. Turn the ECO switch to "OFF".
3. Turn the Air Vent to the "ON" position.
4. Turn the 3-in-1 Start Switch to the "CHOKE" position.
5. Pull the recoil handle (starter cord) slowly until resistance is felt.
6. Let the engine run for several seconds, and then, as the engine warms up, gradually turn the 3-in-1 Start Switch to the "ON" or "RUN" position.



Recoil start



**WARNING!** The pull cord recoils rapidly and pulls your arm towards the engine faster than you can let go, which could result in injury. To avoid recoil, pull the starter cord slowly until resistance is felt, then pull rapidly.

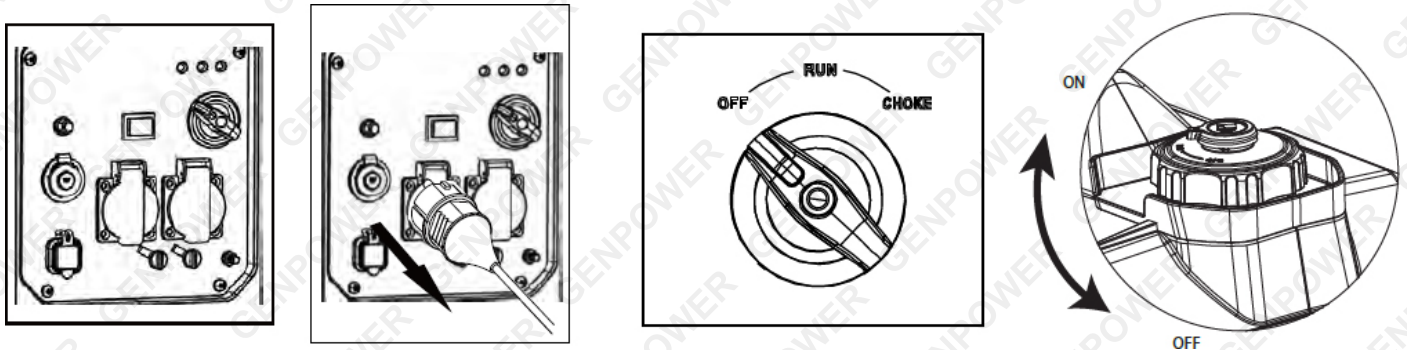
**Note:** To start the generator with the ECO switch in the "ON" position:

1. Disconnect all electrical loads from the generator.
2. If the ambient temperature is below 0°C (32°F), allow 3 minutes for the engine to warm up.
3. With the ECO switch in the "ON" position, the unit will return to normal operation after the above warm-up time.

4. The ECO switch must be turned to the “OFF” position when using electronic devices that require a large starting current, such as a compressor.

## How to Stop the Engine

1. Turn the ECO switch to the “OFF” position.
2. Disconnect all electronic devices. All loads **MUST** be disconnected from the generator. Never start or stop the engine with electrical devices plugged into the receptacles.
3. Turn the 3-in-1 Start Switch to the “OFF” position.
4. Turn the Air Vent to the “OFF” position.



**WARNING!** Never start or stop the engine with electrical devices plugged into the receptacles. Failure to do so could damage the generator and/or connected electrical devices. • Always start the engine and let it stabilise before connecting any electronic devices. • Disconnect all electronic devices before stopping the engine.

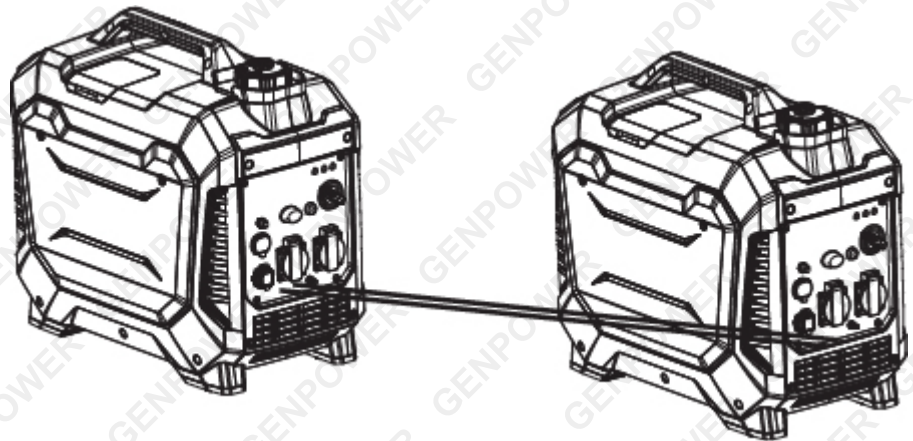
## How to Attach Electronic Devices

1. Before Starting the Generator
  - Ensure the generator is properly grounded (see page 10 for instructions).
  - Ensure the attached load is within the generator’s rated output and the receptacle’s rated current.
  - Check that all electrical cords and receptacles are in good condition.
  - Ensure all electronic devices are turned “OFF” before plugging them into the generator.
2. Start the Engine
3. If the attached load is small, turn the ECO switch to the “ON” position. For a larger load or when attaching multiple electronic devices, turn the ECO switch to the “OFF” position.
4. Ensure the green AC pilot indicator light is on.
5. When the engine has stabilised, plug in and turn on the first load. It is strongly recommended to plug in devices with the largest power requirements first, and those with the smallest last, to help prevent overloading the generator.
6. Allow the generator output to stabilise (engine and attached devices running smoothly) before plugging in the next load.

## AC Parallel Operation

The GF3500i generator has two models that are compatible with each other (Standard and Companion). It is possible to connect two GF3500i generators using a parallel cable kit.

1. Connect PARALLEL OPERATION CABLES to two GF3500i generators according to the instructions provided with the cable kit.
2. Ensure the ECO switch is in the same position on both generators.
3. All electronic devices should be turned "OFF" and disconnected from the generators prior to starting the engines.
4. Start the generator engines. Ensure the green output indicator light comes on for each generator.
5. When the engine has stabilised, plug in the electronic device to the AC receptacle and turn on the first load.
6. Allow the generator output to stabilise (engine and attached devices running smoothly) before plugging in the next load.



**Maximum Power in Parallel Operation: 6.4 kVA**

**Rated Power in Parallel Operation: 6.0 kVA**

**Note:** It is strongly recommended to plug in devices with the largest power requirements first, and those with the smallest last, to help prevent overloading the generator.

**Note:** Most electronic devices require power beyond their rated wattage to start. This additional power is referred to as surge watts and usually lasts between 2-3 seconds. When an electronic device is started, the red overload indicator may come on. This is normal. If the light stays on, disconnect all electronic devices and stop the engine. Refer to "Engine Overload Indicator Light."

**WARNING!** Only connect electronic devices to the generator that are in good working order and do not exceed the rated power supply of the parallel generators or the desired receptacle. A faulty appliance or power cord can create an electric shock. Do not use electronic devices that have a damaged cord or plug. If an appliance begins to operate abnormally, becomes sluggish, or stalls, turn off and disconnect the appliance immediately. The appliance may have a fault or its rated load capacity may exceed the power supply of the generator. To avoid damage to the generator or electronic device, do not connect a load to the generator if its electrical rating exceeds that of the receptacle.

**WARNING!** Never connect generators of different models. Only connect this generator to another GF3500i Standard Generator or GF3500i Companion Generator. Only use an approved brand's parallel operation cable kit to connect generators. The parallel cable must be removed if operating only one generator. Never disconnect or remove the parallel operation cable while the generator is still running.

## Don't Overload the Generator

Ensure the generator can supply enough rated watts for all electronic devices connected to it. Rated watts refer to the power a generator must supply to keep a device running. Surge watts refer to the power a generator must supply to start an electronic device. This power surge for starting a device usually lasts between 2-3 seconds, but this additional output must be taken into account when selecting the electronic devices you plan to connect to the generator.

### To prevent overloading the generator, follow these steps:

1. Add up the total rated wattage of all electronic devices that will be connected to the generator simultaneously.
2. Estimate surge watts by adding the item(s) with the highest surge output (it is unnecessary to calculate the surge output for all devices, as they should be connected one at a time).
3. Add the Surge Watts to the total Rated Watts from step 1. Keep the total load within the generator's power capacity.

## Wattage Reference Guide

Wattages listed are just approximations. Check electronic device for actual wattage.

	Rated Watts	Surge Watts
<b>Essentials</b>		
75W Light Bulbs	75 each	75 each
18 CU Ft Refrigerator / Freezer	800	2200
Furnace Fan (1/3 HP)	800	2350
Sump Pump (1/2 HP)	1000	2000
Water Pump (1/2 HP)	1000	3000
<b>Heating/Cooling</b>		
Dehumidifier	650	800
Table Fan	800	2000
Electric Blanket	400	400
Space Heater	1800	1800
<b>Kitchen</b>		
Blender	300	900
Toaster (2 slice)	1000	1600
Coffee Maker	1500	1500
Electric Range (1 element)	1500	1500
Dishwasher	1500	3000
<b>Laundry Room</b>		
Iron	1200	1200
Washing Machine	1150	3400

	Rated Watts	Surge Watts
Gas Clothes Dryer	700	2500
<b>Bathroom</b>		
Hair Dryer	1250	0
Curling Iron	1500	0
<b>Family Room</b>		
X-Box or Play Station	40	0
AM/FM Radio	100	100
VCR	100	100
Colour TV (27")	500	500
<b>Home Office</b>		
Fax Machine	65	0
Personal Computer (17" Monitor)	800	0
Laser Printer	950	0
Copy Machine	1600	0
<b>Power Tools</b>		
1000W Quartz Halogen Work Light	1000	0
Airless Sprayer (1/3 HP)	600	1200
Reciprocity Saw	960	0
Circular Saw (7 1/4")	1400	2300
Miter Saw (10")	1800	1800
Table/Radial Arm Saw	2000	2000
Electric Drill (1/2 HP, 5.4 Amps)	600	900

# Maintenance

Regular maintenance will extend the life of this generator and improve its performance. The warranty does not cover items resulting from operator negligence, misuse, or abuse. To receive full value from the warranty, the operator must maintain the generator as instructed in this manual, including proper storage.

**WARNING!** Before inspecting or servicing this machine, ensure the engine is off and no parts are moving. Disconnect the spark plug wire and move it away from the spark plug.

**CAUTION!** If you are unsure of how to perform a maintenance task, have the unit serviced by one of our authorised dealers.

**CAUTION!** Only use specified replacement parts from our brand.

## Maintenance Schedule

### Pre-Operation Steps

Before starting the engine, perform the following steps:

1. Check the engine oil level and the fuel tank level. Inspect for any leakage.
2. Check the fuel hose for cracks or damage. Replace if necessary.
3. Ensure the air filter is clean.
4. Remove any debris that has collected on the generator and around the muffler and controls. Use a vacuum cleaner to pick up loose debris. If dirt is caked on, use a soft bristle brush.
5. Inspect the work area for hazards.

### After Each Use

Follow this procedure after each use:

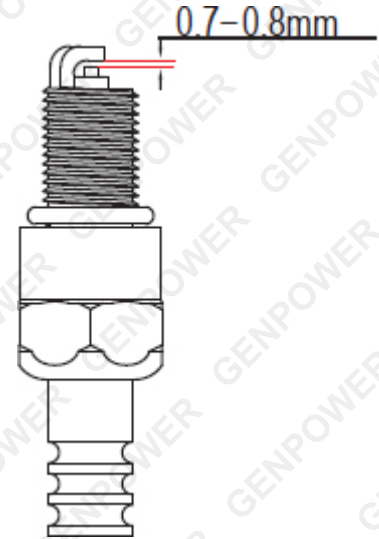
1. Shut off the engine.
2. Store the unit in a clean and dry area.

Interval	Task
<b>After First 5 Hours</b>	Change Oil.
<b>After 8 Hours or Daily</b>	Clean Debris.
	Check Engine Oil Level.
<b>6 Months (100 hr Use)</b>	Check and Clean Air Filter Element. (Service more often under wet or dusty conditions.)
	Change Engine Oil. (Service more often under dirty or dusty conditions.)
	Check Muffler Screen. Replace if necessary.
	Service Spark Plug.
	Inspect Muffler and Spark Arrester.
<b>12 Months (300 hr Use)</b>	Clean Fuel Filter. Replace if necessary.
	Check Crankcase Breather Hose for cracks or damage. Replace if necessary.
	De-carbonize Cylinder Head. Contact authorised service centre or a qualified technician.

Interval	Task
	Check and Adjust Valve Clearance. Contact authorised service centre or a qualified technician.
	Check all Fittings and Fasteners. Contact authorised service centre or a qualified technician.

## Checking the Spark Plug

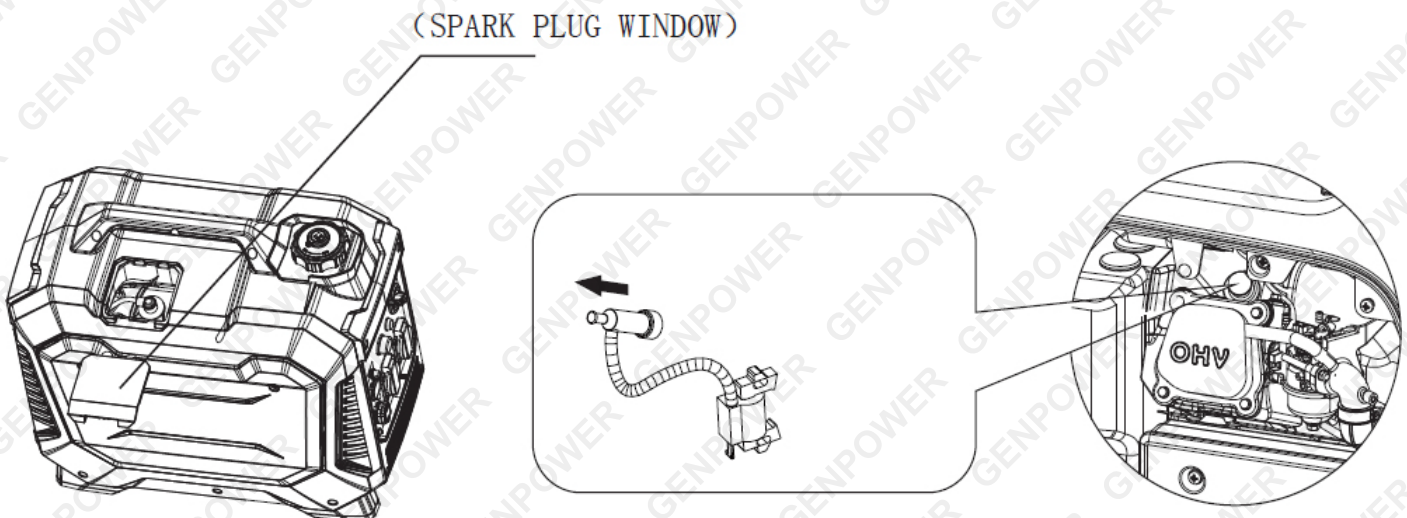
1. Remove the cap, then remove the spark plug cap.
2. Disconnect the spark plug wire from the spark plug.
3. Before removing the spark plug, clean the area around its base to prevent debris from entering the engine.
4. Insert a spark plug socket wrench through the opening on the outside of the cover. Turn the wrench counterclockwise to remove the spark plug.
5. Check for discolouration and clean carbon deposits off the electrode with a wire brush.
6. Check the electrode gap and adjust it slowly to 0.7 - 0.8 mm (0.028 - 0.031 in) if necessary.
7. Reinstall the spark plug and tighten it to a torque of 20.0 Nm (14.8 ft-lb).
8. If the spark plug is worn, replace it with an equivalent replacement part. The spark plug should be replaced annually.
9. Reconnect the spark plug wire.
10. Replace the spark plug cap, then replace the cap.



### Standard Spark Plug: A7RTC

**Spark Plug Gap: 0.7 - 0.8 mm (0.028 - 0.031 in)**

**Spark Plug Torque: 20.0 Nm (14.8 ft-lb)**



## Carburettor Adjustment

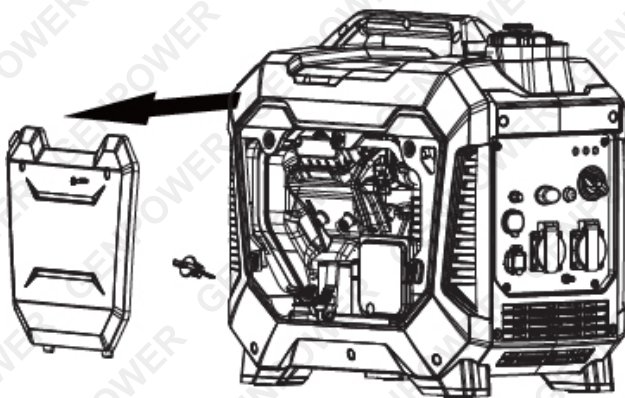
The carburettor is low emission and equipped with a non-adjustable idle mixture valve. If adjustment is required, contact an authorised dealer.

## Changing Oil

1. Place the generator on a level surface.
2. Run the generator for several minutes until the engine is warm, then turn off the generator.
3. Remove the screws and then remove the outer casing.
4. Remove the crankcase dipstick.
5. Place an oil pan underneath the engine. Tilt the generator slightly to allow the used oil to drain completely into the pan.
6. Return the generator to a level surface.
7. Carefully add 4-cycle engine oil (SAE 10W-30) to the empty reservoir until the oil reaches the outer edge of the oil fill hole (crankcase dipstick hole).
8. Use a clean rag to wipe up any spilled oil.
9. Replace the crankcase dipstick.
10. Reinstall the outer casing and tighten the screws.

**Recommended Engine Oil: SAE 10W-30**

**Recommended Engine Oil Grade: API Service SE type or higher quality engine oil**



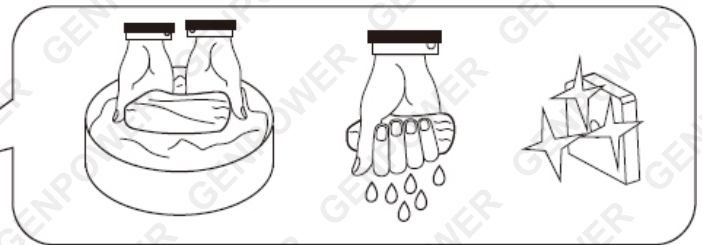
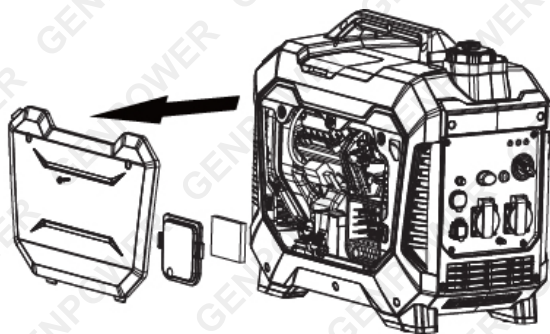
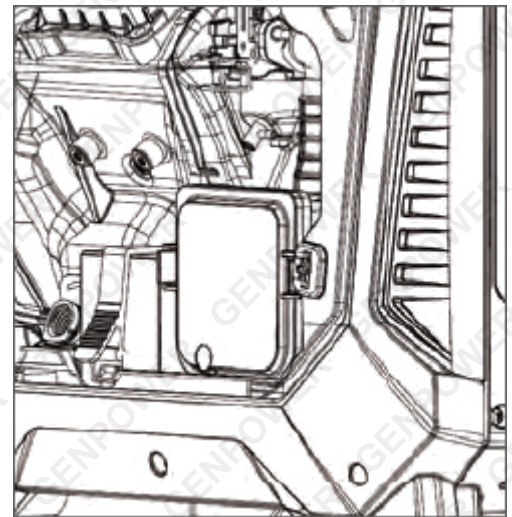
**CAUTION:** Do not tilt the generator when adding oil. This could result in overfilling, which may damage the engine.

**CAUTION:** Ensure no foreign matter enters the crankcase.

## Air Filter

A dirty air filter will reduce the engine's lifespan, make it difficult to start the engine, and reduce the unit's performance. Replace the filter annually.

1. To clean, remove the screws and then remove the outer casing.
2. Remove the screws, then remove the air filter cover.
3. Remove the foam element.
4. Wash the foam element in solvent and let it dry.
5. Pour a small amount of oil on the foam element, then squeeze out the excess oil without wringing it. The foam element should be damp, but not dripping.
6. Reinsert the foam element into the air filter case.

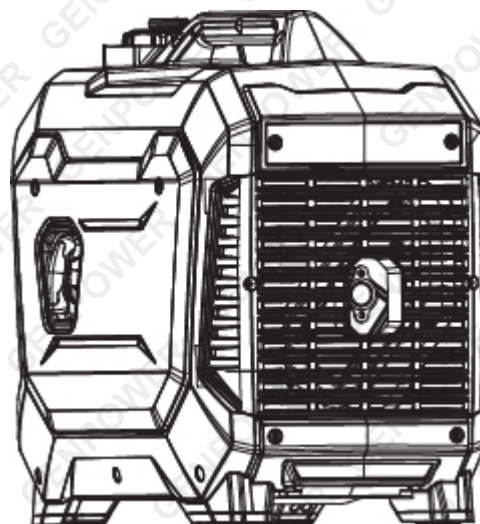


**CAUTION:** Do not run the generator without reinstalling the foam element, as this could cause excessive piston and cylinder wear.

## Checking Muffler and Spark Arrester

Inspect the muffler for cracks, corrosion, or other damage.

1. Loosen the bolt, then remove the muffler cap, muffler screen, and spark arrester.
2. Check the muffler screen and spark arrester for carbon deposits. Remove carbon deposits with a wire brush.
3. Check the muffler screen and spark arrester for damage. If damaged, replace with our replacement parts specifically designed for this unit.
4. Install the spark arrester, aligning the spark arrester projection with the hole in the muffler pipe.
5. Install the muffler screen and muffler cap.



**WARNING!** Avoid contacting hot areas of this unit. Use caution around the muffler, cylinder, and other engine parts, as they can be extremely hot. Allow hot components to cool before touching them.

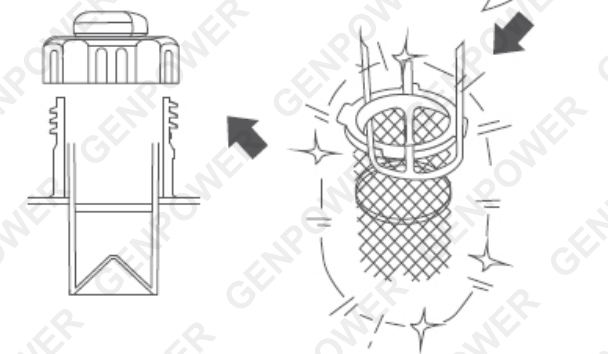
## Fuel Tank Filter

1. To clean, remove the fuel cap and filter.
2. Clean the filter with petrol.
3. Wipe the filter with a clean rag.
4. Reinstall the filter.
5. Reinstall the fuel cap.



## Fuel Filter

1. Remove the screws, remove the outer casing, and drain the fuel.
2. Lift and hold onto the clamp, then remove the hose from the tank.
3. Take out the fuel filter.
4. Clean the filter with petrol.
5. Wipe the filter with a clean rag and return the filter to the tank.
6. Reinstall the hose and clamp.
7. Open the fuel valve and inspect for leakage.
8. Reinstall the outer casing and tighten the screws.



## Storage

To protect your generator from deterioration during long-term storage, take the following preventative measures:

### EXTERIOR

- Remove any debris that has collected on the generator and around the muffler and controls. Use a vacuum cleaner to pick up loose debris. If dirt is caked on, use a soft bristle brush.
- Inspect air cooling slots. Remove any debris if they are obstructed.
- Store indoors and use a protective cover to guard against dust.

### FUEL

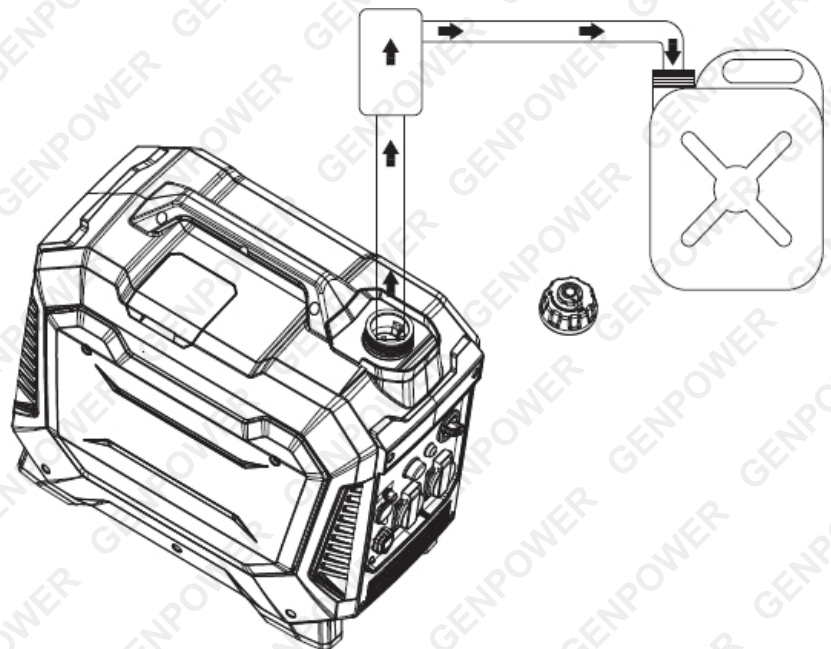
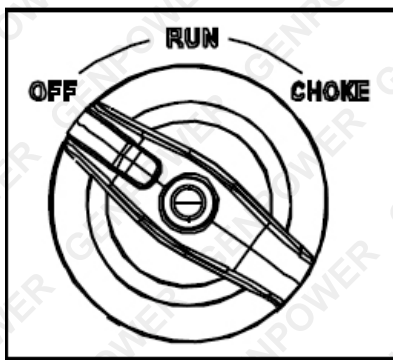
- For short-term storage, add a fuel stabiliser to prevent stale fuel from causing acid and gum deposits in the fuel system and carburettor.
- For long-term storage, drain the fuel.

### ENGINE

1. Remove the spark plug. Pour about 1 tablespoon of SAE 10W-30 engine oil into the spark plug hole, then reinstall the spark plug.
2. With the 3-in-1 switch in the "OFF" position, pull the recoil starter several times to coat the cylinder walls with oil.
3. Slowly pull the recoil starter until you feel the engine build compression (when you feel resistance). Leave the engine in this state. This will help prevent rust build-up in the cylinder walls.

## How to Drain Fuel

1. Turn the 3-in-1 switch to the "OFF" position.
2. Remove the fuel cap and the fuel tank filter.
3. Use a siphon to transfer petrol from the generator into a petrol-approved container.
4. Wipe up any spilled fuel with a clean rag.
5. Start the generator engine and let it run until it stops and all remaining fuel is consumed. Do not connect any electronic devices to the generator during this process.
6. Remove the outer casing screws, then remove the outer casing.
7. Drain fuel from the carburettor by loosening the drain screw on the carburettor float chamber.
8. Turn the 3-in-1 switch to "OFF".
9. Tighten the drain screw.
10. Reinstall the outer casing and tighten the screws.
11. Once the engine has completely cooled down, turn the Fuel Cap Air Vent to the "OFF" position.



# Troubleshooting

Problem	Cause	Solution
<b>Generator is running, but does not supply power</b>	DC Circuit Breaker is "OFF"	Turn DC Circuit Breaker "ON"
	Green AC Pilot Light Indicator is off.	Stop engine and restart.
	Poor connection	Check and repair
	Defective cord set	Check and repair
	Connected device is faulty	Connect a device that is working properly
	Fault in generator	Contact service department
<b>Engine runs good without load but bogs down when loads are connected</b>	Short circuit in connected device	Disconnect device
	Generator is overloaded	2. See <a href="#">Don't Overload Generator</a>
	Clogged fuel filter	Clean or replace fuel filter
	Engine speed is too slow	Contact service centre
	Short circuit in generator	Contact service centre
<b>Engine will not start, shuts down during operation, or starts and runs rough</b>	3-in-1 switch set to "OFF"	Turn switch to "CHOKE" then pull recoil starter
	Dirty Air filter	Clean or replace Air filter
	Clogged fuel filter	Clean or replace fuel filter
	Out of fuel or stale fuel	Replace fuel
	Spark plug wire disconnected from spark plug	Reconnect spark plug wire
	Bad spark plug	Clean or replace spark plug
	Water in fuel	Drain fuel tank and replace fuel
	Over choking	Turn off choke
	Low oil level	Add oil level
	Engine has flooded	Wait 5 minutes and re-crank engine
	Faulty ignition	Contact service centre
<b>Engine lacks power</b>	Generator is overloaded	See <a href="#">Don't Overload Generator</a>
	Clogged fuel filter	Clean or replace fuel filter
	Dirty Air filter	Replace Air filter
	Engine needs servicing	Contact service centre
<b>Engine "hunts" or falters</b>	Choke was removed too soon	Move to choke until engine runs evenly
	Clogged fuel filter	Clean or replace fuel filter
	Carburetor is running too rich or too lean	Contact service centre

# Specifications

<b>Power Type</b>	Petrol
<b>Peak Output</b>	3.5 kW
<b>Continuous Rated Output</b>	3.0 kW
<b>Fuel Capacity</b>	6.3 L
<b>Oil Capacity</b>	0.4 L
<b>Engine Displacement</b>	141 cc
<b>Engine Output</b>	6 hp / 4800 rpm
<b>Engine Oil Type</b>	SAE 10W-30
<b>Runtime</b>	25% Load: 8 hrs, 50% Load: 6 hrs, 100% Load: 3.5 hrs
<b>Noise Level</b>	50% Load: 68 dB, 100% Load: 71 dB
<b>Starting System</b>	Recoil start
<b>Power Outlets</b>	2x 15A Australian sockets
<b>USB Outlets</b>	2 x 5V (2.1A & 1.0A)
<b>DC Output</b>	1 x DC 12V 8A
<b>Warranty (Months)</b>	36 (based on typical non-commercial use)



**Some experts believe that the incorrect or prolonged use of almost any product may cause serious injury or death. To help reduce your risk of serious injury or death, refer to the information below. For more information, see [www.datastreamserver.com/safety](http://www.datastreamserver.com/safety)**

- Consult all documentation, packaging, and product labelling before use. Note that some products feature documentation available online. It is recommended to print and retain the documentation.
- Before each use, check the product for loose/broken/damaged/missing parts, wear, or leaks (if applicable). Never use a product with loose/broken/damaged/missing parts, wear, or leaks.
- Products must be inspected and serviced (if applicable) by a qualified technician every 6 months. This is based on average residential use by persons of average size and strength, and on a property of average metropolitan size. Use beyond these recommendations may require more frequent inspections/servicing.
- Ensure that all users of the product have completed a suitable industry recognised training course before being allowed access to the product.
- The product has been supplied by a general merchandise retailer that may not be familiar with your specific application or description of application. Be sure to attain third-party approval from a qualified specialist for your application before use, regardless of any assurances from the retailer or its representatives.
- This product is not intended for use where fail-safe operation is required. As with any product (for example, automobile, computer, toaster), there is the possibility of technical issues that may require the repair or replacement of parts, or the product itself. If the possibility of such failure and the associated time it may take to rectify could in any way inconvenience the user, business, or employee, or financially affect the user, business, or employee, then the product is not suitable for your requirements. This product is not intended for use where incorrect operation or a failure of any kind, including but not limited to, a condition requiring product return, replacement, parts replacement, or service by a technician may cause financial loss, loss of employee time or an inconvenience requiring compensation.
- If this product has been purchased in error when considering the information presented here, contact the retailer directly for details of their returns policy, if required.

