VALKENPOWER



User Manual Petrol Generator Type EMI4800

Read this manual carefully before using the generator.

CE

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Keeping the user manual

- Keep this manual in a safe place. The information in this document may be necessary for installation, use, maintenance, or troubleshooting. Keep this manual accessible for future reference.
- This user manual contains important safety instructions and legal information. Please retain this document for the entire life of the product. Always include this manual if the product is resold, transferred, or moved.
- It is mandatory to keep this user manual in a centrally accessible location. Employees who work with this product must have access to the most recent version of this documentation at all times.



Dispose of electrical appliances in an environmentally friendly manner. Do not dispose of electrical appliances with household waste. In accordance with European Directive 2012/19/EU on electronic appliances, they must be collected separately for recycling. Contact your local authorities for available disposal options for your worn-out appliance.

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1.1 Warning

- When connecting the generator to your home's electrical system, make sure this is done by a qualified electrician. An incorrect connection between the generator and the loads can cause damage, burns, or fire to the generator.
- Place the generator at least 1 meter away from buildings or other equipment during use.
- Never use the generator when it is hanging or tilted. The generator should only be used and stored in an upright position.
- Make sure you can turn off the generator quickly and know how to operate it.
- Keep away from cigarettes, smoke, hot objects and sparks when refueling.
- Always refuel in a well-ventilated area and when the engine is switched off.
- Gasoline is extremely flammable and explosive under certain conditions.
- Wipe up any spilled gasoline immediately.
- Improper use of the generator may result in electric shock; never use the generator with wet hands.
- Never use the generator in rain or snow and do not let it get wet.
- Disconnect all connected equipment before starting or stopping the generator to prevent equipment damage.
- Engine exhaust fumes are toxic. The generator should only be used outdoors.
- Protection against electrocution depends on fuses specifically designed for the generator. When a fuse needs to be replaced, the replacement fuse must have the same properties and performance characteristics as the fuse being replaced.
- Due to the high mechanical stresses, only use an extension cord that meets national requirements.
- When using extension cords or mobile distribution networks, a line with a cross-section of 1.5 mm^2 may not exceed 60 meters. A line with a cross-section of 2.5 mm^2 has a maximum length of 100 meters.
- Before starting the generator, make sure there are no loose tools and/or materials on the generator.
- To prevent electrical interference, you must ground the gasoline generator set.

1.2 Safety instructions

- Read all instructions in this manual carefully before using the product.
- Always follow indicated procedures and warning symbols.
- Use the product only for the purpose for which it was designed.
- Wear appropriate personal protective equipment where applicable.
- Never operate the product under the influence of alcohol, drugs or medications that reduce alertness.
- Do not allow persons lacking sufficient knowledge or experience to operate the product unless they are supervised by a competent person.
- Never make any adjustments or modifications not specified in the manual.
- Keep hands and other parts of the body away from moving, hot or pressurized parts.
- Use the product only in a clean, dry and well-lit environment.
- Ensure adequate ventilation during use.
- Keep the work area clear of obstacles and loose objects.
- Keep children and unauthorized persons away from the work area.
- Check that the supply voltage matches the product specifications.
- Use only original replacement parts.
- Turn off the product and disconnect it from the power or pressure source before making any adjustments, cleaning, or repairs.
- Have defects repaired only by an authorized technician.
- Stop use immediately if you notice any abnormal noise, odor, or vibration.
- Switch off the product immediately in the event of malfunctions or dangerous situations.
- Always ensure that a suitable fire extinguisher and first aid kit are nearby.
- Do not use electrical equipment in damp or wet environments, do not expose it to rain, and do not use it near flammable liquids or gases.
- When not in use, tools should be stored out of reach.
- Keep tool handles dry, clean and free from grease and oil.
- For outdoor use only due to risk of suffocation.

1.3 Symbols label



Before use: Read the instructions carefully.



Before use: Check the oil and fuel levels.



Fuel-related: Refueling / Cap closure / OFF position..



Do not use in closed spaces.

1. Do not use inside a house/closed space.



Exhaust fumes contain poisonous carbon monoxide.
Avoid inhalation.



Hot surface - May cause burns.

1.3 Symbols label

	Complies with the European emission standard Euro V.
	Hearing protection required.
	Fire hazard (petrol flammable).
	Electrical voltage / shock hazard.
	Prohibited: No smoking / no open fires.

1.4 General information

Before using this machine, you must first read and understand the operating instructions in full! This manual contains important information for the correct installation, operation, and maintenance of the equipment described herein. Using any generator involves various risks of personal injury or property damage. Anyone involved with the installation, maintenance, or operation of the generator must be fully familiar with the contents of this manual. To protect yourself from personal injury or property damage, you must follow the directions and instructions in this manual. Every Valkenpower generator is manufactured in accordance with the Machinery Directive 2006/42/CE. A manual, including a Declaration of Conformity, is supplied with every generator. This manual should be kept and maintained. Because quality is constantly being improved, Valkenpower b.v. reserves the right to change the specifications of the equipment described in this manual.

General safety instructions for power tools
To use this product correctly, you must be familiar with the safety regulations, assembly instructions, and operating instructions as described in this user manual. Anyone who uses or operates the appliance must be familiar with this manual and informed of any potential risks. Children and people with health problems must not use this appliance. Children must be supervised at all times when they are near the appliance. It is absolutely essential that you observe the safety regulations to prevent accidents. The same applies to regulations regarding health and safety at work.

Warning
Prevent the risk of fire, electric shock, and personal injury when using the generator. Always follow the safety instructions in this manual.

Warning
When connecting a generator to the mains supply at home, this must be done by a qualified electrician in accordance with NEN 1010 (safety regulations for low-voltage installations) and NEN 3140 (safe working on and with electrical installations).
An incorrect or unapproved connection between the generator and the home installation can cause serious injury, electric shock, fire and permanent damage to the generator and the installation.

2.1 Scope of application

The following table provides reference information for connecting electrical appliances to the generator.

Description	Wattage		peak load	
	assets	powerfactor	startup peak	continuous power assessment
	1000	x1	1000	1000
	1000	x1.5	1500	1000
	1000	x2	2000	1000

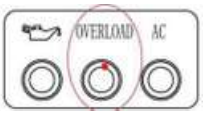
NOTIFICATION:

- Both AC and DC inputs can be used simultaneously, and the total output power cannot exceed the rated output power. When the total output power exceeds the rated output, the overload indicator light will illuminate.

Generator power

Nominal power of the generator AC	4000W
Peak power AC	3800W
Power DC output	12V/8A

NOTICE: Do not overload. The total wattage of the electrical equipment must not exceed
Do not exceed the generator output power, otherwise the generator will be damaged.
When using this generator to power precision instruments, electronic controllers, personal computers, electronic computers, microcomputers, etc., maintain sufficient distance between the equipment and the generator to prevent electromagnetic interference from the motor. This also ensures that the motor is shielded from surrounding electronics. If this generator is used to power medical equipment, it is recommended to consult the equipment manufacturer, professional, or hospital regarding the amount of current required to start certain electronic equipment or general motors, which may render them unusable. Even if the start-up parameters meet the conditions in the table above, you should still contact the equipment manufacturer.



2.2 Pre-use Inspection

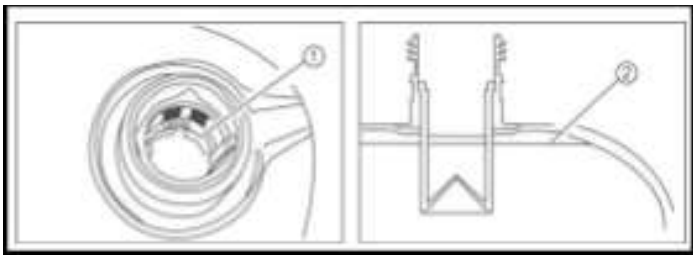
Warning: The engine and exhaust become very hot during use. Do not check or repair them until they have cooled sufficiently. Prevent any part of your body or clothing from coming into contact with the engine or exhaust.

NOTICE: Be sure to check this before inspecting the items listed below.

Fuel

DANGER: Do not overfill, or the tank will overflow when it warms up. After filling, make sure the cap is securely tightened.

NOTICE: After refueling, wipe off any remaining gasoline promptly with a clean, soft cloth to prevent damage to the plastic casing. Unleaded gasoline must be used. Leaded gasoline can severely damage internal engine components. Remove the fuel cap and add gasoline to the maximum level.②



① Rode indicator bit;
② Fuel level.

Recommended fuel: Unleaded petrol Full tank capacity: 6L

Engine oil

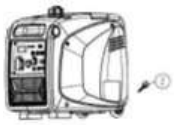
Place the engine on a horizontal surface.

2. Turn the oil port bulkhead locking lever and remove the outer plate (1).
2. Turn on the dipstick. (3).

Inject the specified amount of recommended oil and tighten the dipstick (2).

3. Replace the outer plate (1).







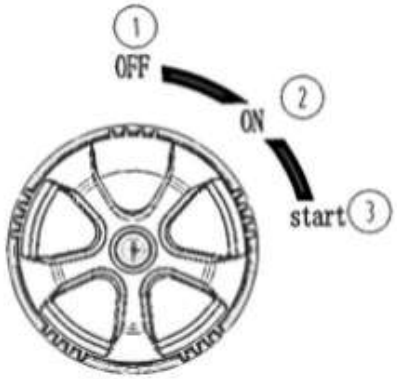
This generator is supplied without oil. Do not start the engine until it is sufficiently oiled.

Recommended oil: SAE SJ10W-40



2.3 Control function

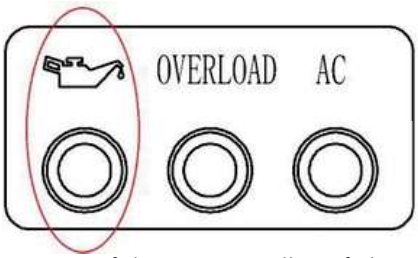
Three-in-one combination switch.



1. Engine and fuel switch in “OFF” position:
   The ignition circuit is closed, fuel switch is turned off and the engine will not start.
2. Engine, fuel switch and starter switch in “ON” position: The ignition line is in working order, the fuel switch is open, START is fully open and can work normally.
3. Engine, fuel switch and START switch in “START” position: The ignition line is in working order, the fuel switch is on, START is in a closed state, and the engine can start normally.

NOTICE: When the engine is warm, it does not need to be turned to the “START” position when starting.

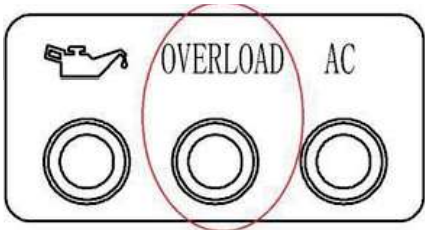
Oil alarm indicator (red)



When the crankcase oil drops below the safety line, the oil protection system automatically shuts down the engine and the oil warning light illuminates. Topping up the oil to the correct level will restart the engine.

NOTICE: If the engine stalls or fails to start, turn the ignition switch to the "ON" position and then pull the starter handle. If the oil warning light flashes for a few seconds, there is insufficient oil. Add oil and restart the engine.

Overload alarm indicator light (red)



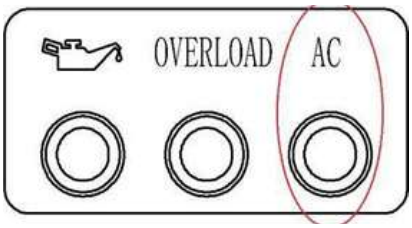
When the overload indicator lights up, it detects that the output of the connected loads is overloaded, causing the inverter to overheat. At this point, the AC protection activates and the generator stops operating to protect the generator and the connected electrical equipment. When the AC indicator light (green) is off and the overload indicator light (red) is on, the generator continues to operate.

When the overload indicator lights and the device has no output, take the following measures:

1. Disconnect and unplug the connected electrical equipment.
2. Reduce the total power of the connected electrical equipment to the rated output range.
3. Check for any foreign objects blocking the air intake and for any abnormalities in the relevant control components. If a problem exists, correct it immediately.
4. After checking, press the voltage recovery button for 1-3 seconds to restore the output voltage.

NOTICE: When using electrical equipment with high starting currents (such as compressors, submersible pumps, etc.), the overload indicator may initially light for a few seconds. However, this is not necessarily the fault mentioned above. Overload, short circuit, overheating, and low motor speed can all stop output.

AC indicator light (Green)



When the engine starts and performs normally, the AC indicator light will come on.

Indicator judgment:

1. Green light on: Indicates normal operation, generator output;
2. Green light on and red light flashing: Indicates overload, generator output;
3. When the green light is off and the red light flashes every 3 seconds, this indicates that the coil's front-end voltage is too low and the generator has no power.
4. When the green light is off and the red light flashes twice in 3 seconds: which indicates that the engine speed is also too low and the generator is not giving any output.
5. When the green light is off and the red light flashes three times in three seconds: This indicates that the generator temperature is too high and the generator has no power.
6. If the green light is off and the red light flashes 5 times in 3 seconds: This indicates that the coil voltage is too high and the generator has no power.
7. The green light is off and the red light flashes 6 times in 3 seconds: it indicates overload protection and no output.

DC protection

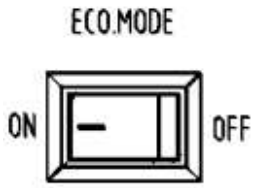


If the electronic equipment connected to the generator is operating, switch the rated current to the “ON” position when you want to use the generator again.

"ON": Normal DC output "OFF": No DC output.

NOTICE: If the DC protection is disabled, reduce the load of the connected electronic equipment to the generator's rated output. If the DC protection is still disabled, immediately stop using the electrical equipment and contact your dealer.

ECO switch



"1. ON", when the ECO switch is in the “ON” position, the generator will save less energy, consume less fuel and be quieter in sound.
2. “OFF”, when the ECO switch is in the “OFF” position, the engine will run at rated speed (4400rpm) regardless of whether the load is connected.
NOTICE; When using the following equipment such as air compressor, the ECO switch must be turned off due to the need for large starting current.

Voltage recovery button



When the generator's overload indicator light is on, the generator has no output voltage, but is still operating. Check and remove all loads, then press the voltage restore button for 1-3 seconds to restore output voltage.

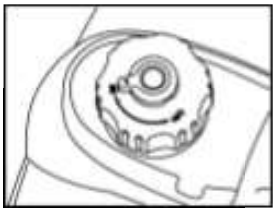
NOTICE: When the overload voltage recovers, make sure there is no load connection, no short circuit and other faults before pressing the recovery voltage button.

Fuel tank cap



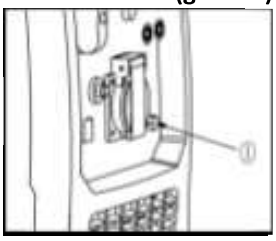
Turn counterclockwise and remove the fuel cap.

Toothed cap air vent button



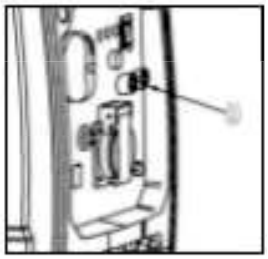
A vent knob is located on top of the fuel tank to stop the flow of fuel. When the generator is in use, the vent knob should be in the "ON" position so that fuel can be injected into the carburetor to keep the engine running. When the generator is not in use, turn the vent knob to the "OFF" position to stop the flow of fuel.

Earth terminal (ground)



Be careful when connecting the grounding terminal to the grounding wire to avoid electric shock. If the electrical equipment is grounded, the generator must also be grounded.

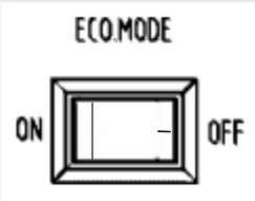
Parallel operation



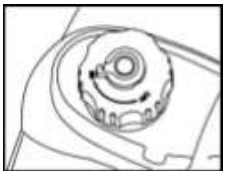
The parallel connector is used to connect two parallel dedicated cables from two 3800 devices with the same voltage and frequency. Parallel operation requires two 3800 devices and dedicated cables.
(Rated output power in parallel operation is 5.7kW, rated current of 120V generator is 47.5A and rated current of 230V generator is 24.8A)

3.1 Starting the engine starter cord

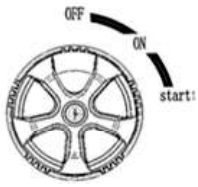
Before starting the engine, ensure the oil pan is filled to the correct level. NOTE: The generator is not factory-primed; you must top up the oil yourself before using it for the first time.



1.Set the ECO switch to "OFF".



2. Turn the fuel cap ventilation knob to "ON".



3. Turn the three-in-one switch to the “START” position.

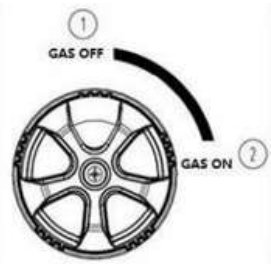
A) Turn on the fuel.
B) Turn on the ignition system.
C) Close the START in normal operating condition with cold engine.
D) Press the start button

NOTICE: When the engine starts, it is not necessary to close the START and turn the three-in-one switch to the “ON” position.



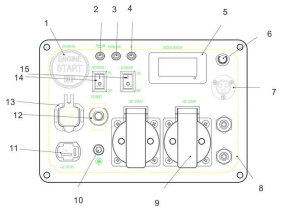
4. Pull the starter rope gently until you feel resistance, then pull firmly. Do not release the starter rope, but gently guide it back to the starting position. Turn the combination switch to "ON." When starting the engine for the first time, repeat this process several times until the fuel from the tank is pumped into the engine.

3.1.1 Starting the engine one-button starter unit



1. The fuel switch is turned off, cutting off the engine fuel.

2. The fuel switch is turned on, the on/off switch is on and the engine starts normally when the start button (1) or the start signal via the remote control (B) is given.

1 

2 

Note: If the fuel switch is turned to the “○2 ” position but not left in this position, insufficient fuel supply may occur and the engine may operate abnormally.

3.1.2 3-pins ATS uitgang (Automatic Transfer Switch)

Purpose of the ATS connection

The 3-pin ATS connector is intended for connecting an external ATS/auto-start controller for:
12V power supply for the ATS control

- Start signal to the generator



Important (gasoline): The 12V power comes from the generator battery. The ATS box taps into this 12V via the ATS cable and uses it to activate the start signal.

Operation in brief

The ATS receives +12V and GND from the generator/battery.

- In case of power failure, the ATS gives a start command (start line is connected to +12V).
- When mains power returns, the ATS switches back the load and automatically stops the generator after a short run-on time (no load).
- For gasoline, the “electric door lock” switch on the ATS box must be set to ON.

Connection logic (3 pins)

This 3-pin connector functionally contains:
GND (12V–)

- +12V (van generatoraccu)
- START (connected to +12V by ATS when starting)

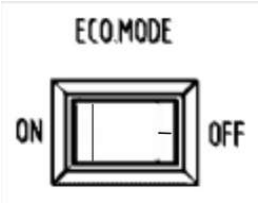
Warning:

- **The connection and commissioning of an ATS system may only be carried out by an authorised and recognised electrical installation company.**
- **An ATS system operates at hazardous voltages and, if incorrectly installed or adjusted, can result in: electrocution; fire or short circuit; damage to the generator; the ATS or connected equipment; backfeeding to the mains, posing a risk to the lives of technicians; and simultaneous switching on of the mains and generator, resulting in serious damage/hazard.**
- **The installer is responsible for correct connection, protection, earthing/PE, cable cross-sections, selectivity, and performing checks and measurements in accordance with applicable standards and regulations.**

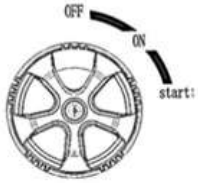
3.2 Switching off the engine

NOTICE: Turn off all connected electrical equipment.

1.Set the ECO switch to "OFF".



3. Select the three-in-one switch combination knob and turn it to the “OFF” position.



2. A) Turn off the fuel.
   B) Turn off the ignition system.

3. When the generator has cooled, turn the air vent knob to “OFF”.



3.3 AC applications

NOTICE: Make sure the appliance is grounded. All electrical equipment must be unplugged before plugging it into the wall socket.

1. Start the engine.
2. Set the ECO switch to “ON”.
3. Plug the power cord into the wall socket.
4. Check if the AC light is on.
5. Switch on the electrical equipment.



NOTICE: Before increasing engine speed, turn the ECO switch to the "OFF" position. If the generator is supplying power to multiple loads or electrical equipment, start from the highest setting, depending on the size of the electrical equipment.

3.4 Correct use of DC output

NOTIFICATION:

The nominal DC voltage of this generator is 12V.
After the generator has started, connect the battery to the generator.
Make sure the DC protection is turned on before you start charging
If the current exceeds the rated current during charging, the DC protector will shut off the output. Press the DC protector to the "ON" position to restart charging.
If the DC protector closes again, stop charging and contact your dealer.

⚠ *The generator's USB port is designed for low-power devices only. Before use, always check that the device's required input voltage and current level match the generator's USB specifications. 5V-1A / 5V-2.1A*

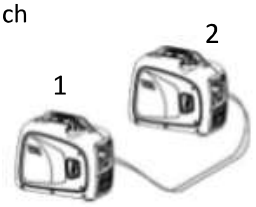
WARNING:

Do not smoke or connect or disconnect the battery while charging. The resulting spark will ignite the gas surrounding the battery. Battery electrolyte contains sulfuric acid, which is toxic and causes burns. Avoid contact with skin, eyes, and clothing.
Treatment: External contact - wash with plenty of water. Ingestion - drink plenty of water or milk, milk containing magnesium oxide, eggs or vegetable oil.
Call hospital immediately Eye penetrating --- Flush with water for 15 minutes, seek immediate medical advice.
Batteries can produce explosive gases. Keep away from sparks, flames, cigarettes, etc.
If you use batteries in an enclosed space, ensure adequate ventilation. Close your eyes when working near the battery.
Keep the battery away from children.

3.5 AC parallel operation

Before connecting an appliance to a generator, ensure the appliance is in good working order and that its electrical capacity does not exceed the total number of parallel generators. Most engines require more than their operating current to start. When the engine is started, the overload indicator (red light) will illuminate. Normally, the overload indicator (red light) disappears within 4 seconds. If the overload indicator (red light) remains illuminated, contact your generator dealer.
When using in parallel, it is necessary to ensure that the voltage and frequency of the parallel generator are the same and that the ESC energy saving switch of the two generators must be in the same position.

1. Provide generator 1 and generator 2 with the appropriate cable set according to the instructions and connect the parallel operating cable.
2. Start the engines alternately to check that the output indicator (green light) on each generator is lit.
3. Plug the appliance into the wall socket.
4. Turn on the appliance.



When the generator becomes overloaded or a short circuit occurs in connected equipment, the overload indicator (the red light) will illuminate. This light will remain on continuously, and after approximately four seconds, the connected circuit will shut down. The output indicator (the green light) will go out, and both the generator and the connected equipment will stop operating.
Then check whether the cause is a short circuit or overload of the connected device. Resolve the problem and then restart the generator.
Two 3800i generators (with the same voltage and frequency) can be connected together using a parallel cable set to increase the available current capacity. First, connect the equipment or power cord to the generator, as described in the instructions included with the parallel cable set.

NOTIFICATION:
Make sure the appliance is in good working order. An incorrect appliance or power cord can cause electric shock.If a device starts to operate abnormally, becomes slow, or stops suddenly, turn it off Immediately turn off the power, disconnect the appliance and determine whether the rated capacity of the appliance or generator has been exceeded.
Make sure the electrical capacity of the combined tools or equipment does not exceed that of the generator.
Do not exceed the maximum operating time of 30 minutes.
The variable frequency generator set with the same voltage and frequency can be connected in parallel if the load does not exceed the total power.In parallel use, only the cable set selected by our company can be connected in parallel and then the 3800i is connected in parallel to another 3800i generator.
Do not connect or disconnect parallel control cables while the generator is running.
When operating with one unit, the cable must be disconnected during parallel operation.

Warning: The overload indicator light (red) will remain on if a major overload condition exists.
Overload, which can damage the generator. The overload indicator light (red) will flash when there is a slight overload, which can shorten the life of the generator. The limit time for using the maximum power: 30 minutes Maximum power for parallel operation: 6.2 kW Rated power for parallel operation: 5.7 kW, continuous use, without exceeding the rated power.
The total power requirement of all connected equipment must be taken into account.
The list of manufacturers of electrical appliances and power tools usually lists the wattage for similar models or serial numbers.

4.1 Maintenance

Proper maintenance is the best guarantee for safe, economical, and trouble-free operation. It also contributes to environmental protection. The user must operate the machine safely. Periodic inspection, adjustment, and lubrication can ensure safe and efficient operation of the generator.

Note: Original parts must be used for replacement.
For more details, please contact your dealer.

Element	Action	Any use	First month or 10 o'clock	Every 3 months or 50 hours	Every 6 months or 100 hours	Every year or 300 hours
engine oil	check	X				
engine oil	replace		X(1)		X(1)	
air filter	check	X				
air filter	replace			X(1.2)		
bougie	cleaning & adjusting				X	
spark arrester	cleaning				X	
float chamber	cleaning				X	
valve clearance	check & adjust					X(3)
fuel tank & filter	check					X(3)

Notification:

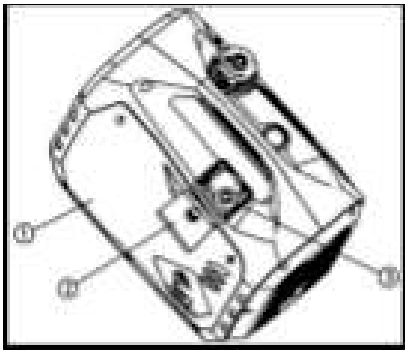
1. You should service the generator more often when the generator is used in a dusty or dirty work environment.
2. These parts should be serviced by your dealer unless you have the materials and skills to do so yourself.
3. For commercial use, track operating hours so you know when maintenance is required.

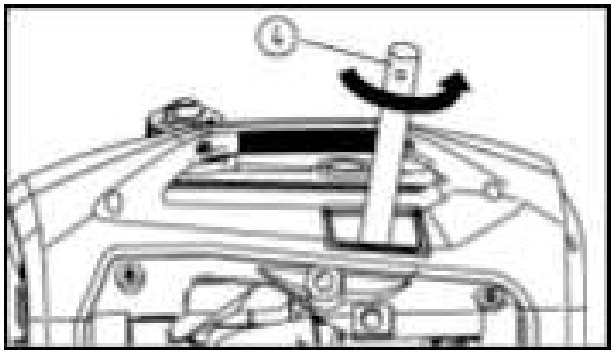
Warning: Turn off the engine before performing any maintenance work. The engine must be placed in a horizontal position and the spark plug cap must be separated from the spark plug to prevent the engine from starting. Do not use indoors or in poorly ventilated areas, such as tunnels and caves. Ensure the work area is well ventilated. Engine exhaust contains poisonous carbon monoxide, which, if inhaled, can cause shock, unconsciousness, and even death.

4.2 Spark plug maintenance

Spark plugs are an important part of the generator and should be checked regularly

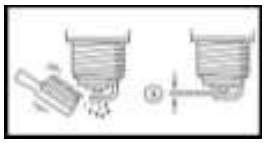
1. Remove the outer cover and spark plug cover ① Remove the spark plug cover ② Insert the cover ④ into the hole from the outside of the cover;
2. Insert the screwdriver ③ into the sleeve ④ and remove the spark plug by turning it counterclockwise;





3. Check if the color has faded and remove any carbon deposits. The porcelain core around the spark plug's center electrode should be a moderately light brown;
4. Check the spark plug type and clearance;

Standard spark plug：A5RTC Spark plug gap：0.7-0.8mm



Tip: The spark plug gap should be measured with a feeler gauge or thickness gauge and adjusted if necessary.

5. Install the spark plug;
6. Install the spark plug cap and cover

Tip: The spark plug should be tightened to the specified torque.

Torque : 22 N*m

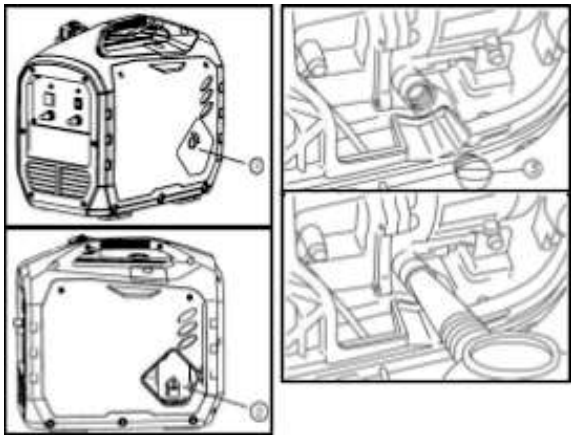
4.3 Adjusting the carburetor

The carburetor is an important part of the engine. It should be adjusted by a dealer using professional knowledge and equipment to ensure proper tuning.

4.4 Changing engine oil

Warning: Do not drain the oil immediately after the generator is turned off. The oil temperature is still very high. Use caution during operation to avoid burns.

1. Place the generator on a flat surface and run it for a few minutes to raise the temperature before turning off the engine. Turn the three-in-one combination knob. The fuel tank lid vent knob is set to "OFF."
2. Turn the oil port bulkhead lock lever and remove the oil port protector ① .
3. Remove the oil cap ② .
4. Place the oil pan under the engine, tilt the generator and quickly pour out the oil.



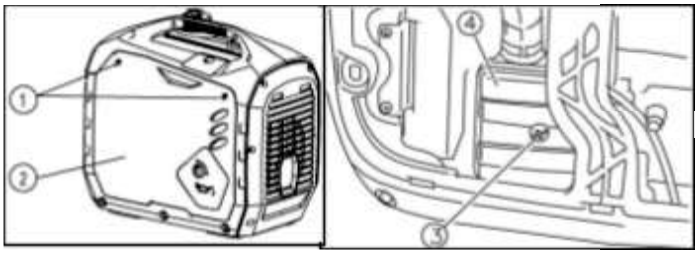
5. Place the generator back on a flat surface.
6. Fill the oil in place.
7. Clean the cap and wipe away any splashing oil.
8. Tighten the oil pan.
9. Cover the outer plate

Engine oil: SAE 10W-40
Engine oil: API standard SE or higher
Cubage: 0.35L

Note: Do not tilt the engine while adding oil to prevent excess oil from affecting the engine's performance. Ensure that no foreign objects enter the engine housing.

4.5 Air filter

1. Remove the screw ①, and outer plate ②.
2. Remove the screw ③ and air filter cover ④.
3. Remove the foam element ⑤

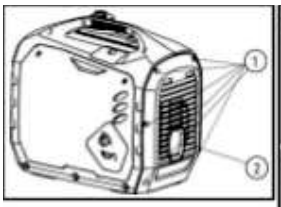


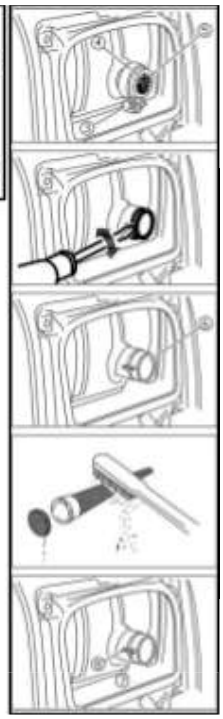
4. Clean the foam element with solvent and dry it.
5. Add oil to the foam element and squeeze out the excess. The foam element should be wet, but no oil should drip out.
   Caution: Do not rotate the foam element to avoid damage.
6. Place the foam element into the air filter.
   Tip: Make sure the surface of the foam element is close to the air filter, without any gaps. Do not start the engine without the filter in place, as excessive throttle and cylinder wear can occur.
7. Replace the air filter cover in its original position and tighten the screw.
8. Replace the outer cover plate and tighten the screw.



4.6 Exhaust mesh and spark arrester

Warning: The engine and muffler can become very hot after running. Keep your skin and clothing away from the engine and muffler during inspection and maintenance.





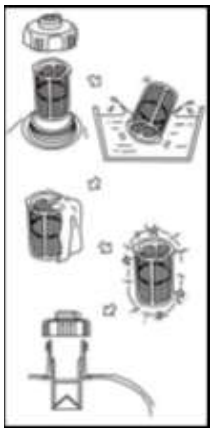
1. Remove the screw ①, remove the rear sunshades ②.
2. Remove the screw ③, remove the exhaust cover ④, exhaust mesh ⑤ and spark collector ⑥.
3. Use a wire brush to remove carbon deposits from the exhaust mesh cover and the spark collector.
4. Check the exhaust grille and spark collector and replace them immediately if they are damaged.
5. Reinstall the spark collector.
6. Install the exhaust mesh cover and the back of the muffler.
7. Replace the rear blinds and tighten the screw.

Remark:

- Clean carefully with steel wire to avoid damaging or scratching the exhaust grille and spark collector.
- To ensure the excellent point of the spark collector ⑦ and a small hole in the exhaust pipe ⑧ are located on a straight line.

4.7 Fuel tank filter

Warning: Do not use gasoline where smoke or flames are present.



1. Remove the fuel tank cover and filter.
2. Clean the fuel tank filter with gasoline.
3. Dry the strainer and place it back in the fuel tank.
4. Replace the fuel tank cover.

NOTE: Screw the lid on securely.

4.8 Replacing the carburetor for use at high altitudes

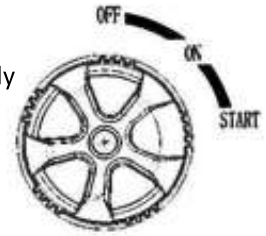
At high altitudes, the intake air volume of a standard carburetor will decrease due to air pressure, resulting in lower performance and higher fuel consumption. A rich mixture will also foul the spark plug, causing starting problems. Exhaust emissions may increase if the engine is operated at an altitude other than its rated altitude. If your engine always operates at high altitudes (>1500 m), contact your dealer to have the carburetor modified to improve engine performance. In this case, the modified carburetor will meet all emissions standards for the rest of its life.

5. Notice

If you plan to store this generator for an extended period of time, some storage precautions should be taken to prevent aging.

5.1 Draining fuel

1. Turn the three-in-one combination switch OFF.
2. Open the fuel cap and remove the filter. Transfer all the fuel from the tank to the dedicated tank and replace the fuel cap.



⚠ **Warning:** The fuel tank is highly volatile and toxic. Read the safety instructions carefully (see page 5).

Note: Use a clean, soft cloth to wipe away any spilled oil in a timely manner. Avoid damaging the plastic housing.

3. Start the engine (see page 19) and switch it off until the fuel runs out after approximately 20 minutes. ● Do not connect any electrical equipment ● Engine running time depends on the amount of fuel remaining in the tank
4. Remove the screw and the outer cover plate.
5. Loosen the intake plug on the carburetor and drain the fuel from the carburetor into the special tank.
6. Turn the three-in-one control switch to “START”.
7. Tighten the drain plug.
8. Replace the cover plate and tighten the screw.
9. After the engine has completely cooled, close the vent knob on the fuel tank cap.

5.2 Engine storage

Follow the steps below to protect the box, piston ring, and other corrosion-sensitive parts.

1. Remove the spark plug, pour in a spoonful of SAE10W40 oil, install the spark plug and pull the starter (close the combination switch) for a few minutes to lubricate the cylinder block with the oil.
2. Pull the manual starter until you feel tension (to prevent the cylinder housing and valve from rusting).
3. Clean the surface, place the engine in a ventilated and dry place and cover it with a cover.

6.1 Troubleshooting

Engine won't start

• Not enough gasoline or oil	• Top up gasoline or oil
• Ignition switch in “OFF” position	• Set to On position
• Broken spark plug	• Replace spark plug
• Choke in wrong position	• Set the choke in the correct position (cold engine = choke, warm engine = run)
• Devices connected at startup	• Disconnect devices
• Spark plug cap is loose or not connected	• Press the spark plug cap firmly
• Engine flooded	• Let it rest for 5-10 minutes and try again according to the instructions. If this doesn't help and the choke lever is in the Start position, try starting again with the choke lever in the Run position.
• Old gasoline	• Drain the gasoline and fill up with new gasoline.

DC power supply, No output

• Fuse has blown (only applies to DC)	• Press the reset button/fuse

Generator is running with difficulty

• Is the choke lever in the Run position?	• No - set the choke lever to the Run position
• Has the generator been idle for a while and is the gasoline perhaps old?	• If this is the case, drain the old gasoline and fill with fresh gasoline.

The generator has no voltage output

• Safety device (DC protector) in “OFF” position	• Press the DC protector to the “ON” position.
• AC indicator light (green) off	• Stop the engine and restart it. Or press and hold the voltage restore button for 1-3 seconds to restore the output voltage.

Generator overheats

• Generator overloaded	• Reduce the tax
• Insufficient ventilation	• Move the generator to a cooler location

6.2 Specifications

Generator

Type	Inverter
Rated frequency/Hz	50/60
Rated voltage/V	230
Rated output power/kW	3.8
Max. output power/kW	4.2
Power factor	1
DC output/V-A	12V-8A
AC output quality	ISO8528 G2
THD%	3
Noise/dB	61-70
Overload protection - DC	Not
Overload protection - AC	Checked by the Overload Protection inverter program

Motor

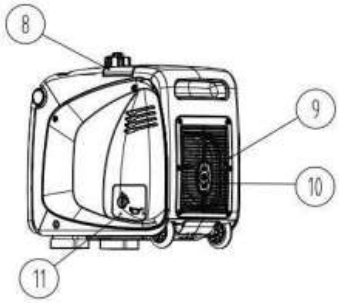
Engine Model Engine Type Displacement/cc	170F-3 Single cylinder, 4-stroke, forced air cooling, OHV
Fuel Type Fuel Tank Capacity/L Run	192 Unleaded gasoline
Time/continue Hour Engine Oil Capacity	10
Spark Model No.	8
Start mode	500ml F7RTC Manual/Electric Start

Generatorset

LXBXH/mm Net weight/kg	585*385*605
	32

6.3 Parts



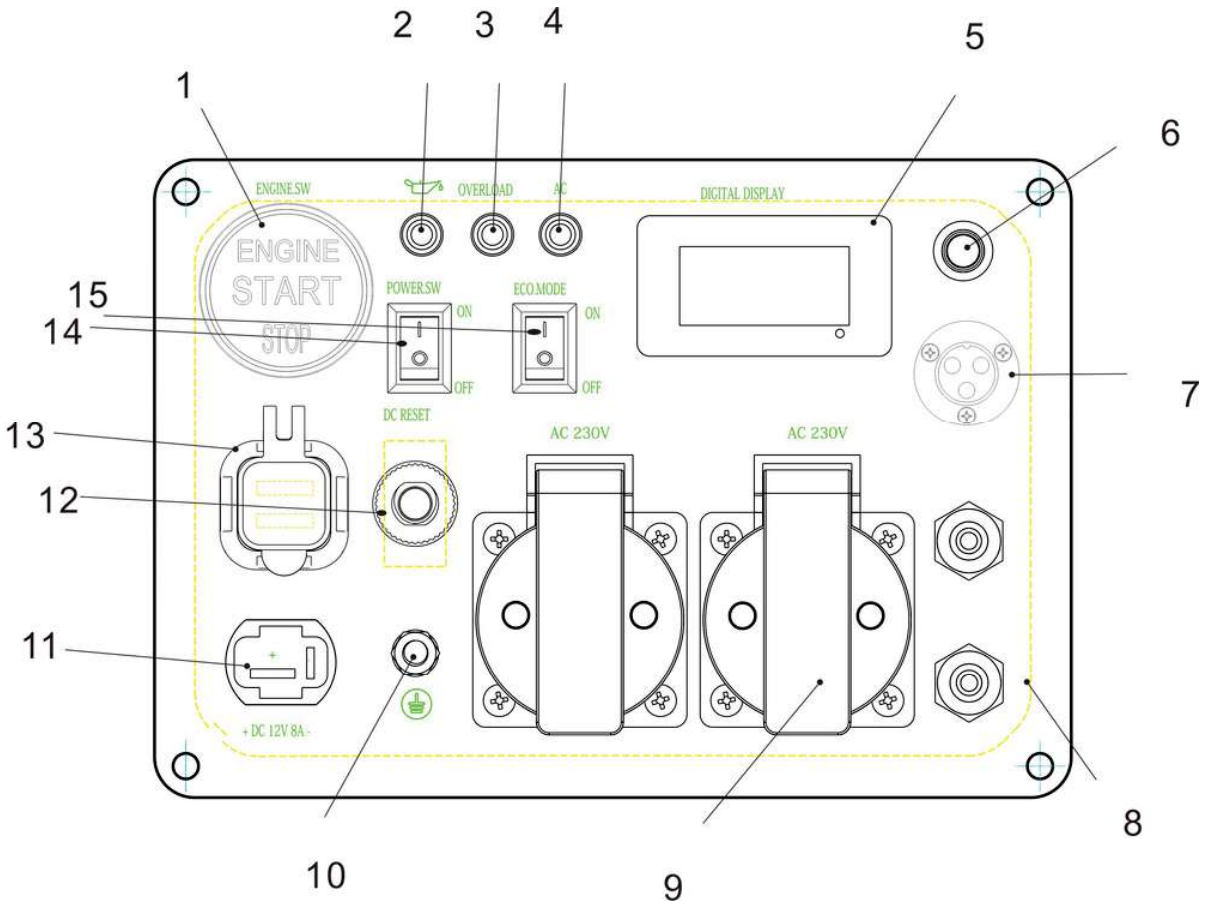


1. Fuel level viewing window
2. Fuel cap vent button
3. Fuel tank lock
4. Handle part
5. Control panel
6. Startgreep
7. 3-in-1 switch button
8. Spark Plug Service Cover Rear Cover
10. Exhaust Muffler
11. Silencer
11. Oil port protection plate

6.4 Parts list

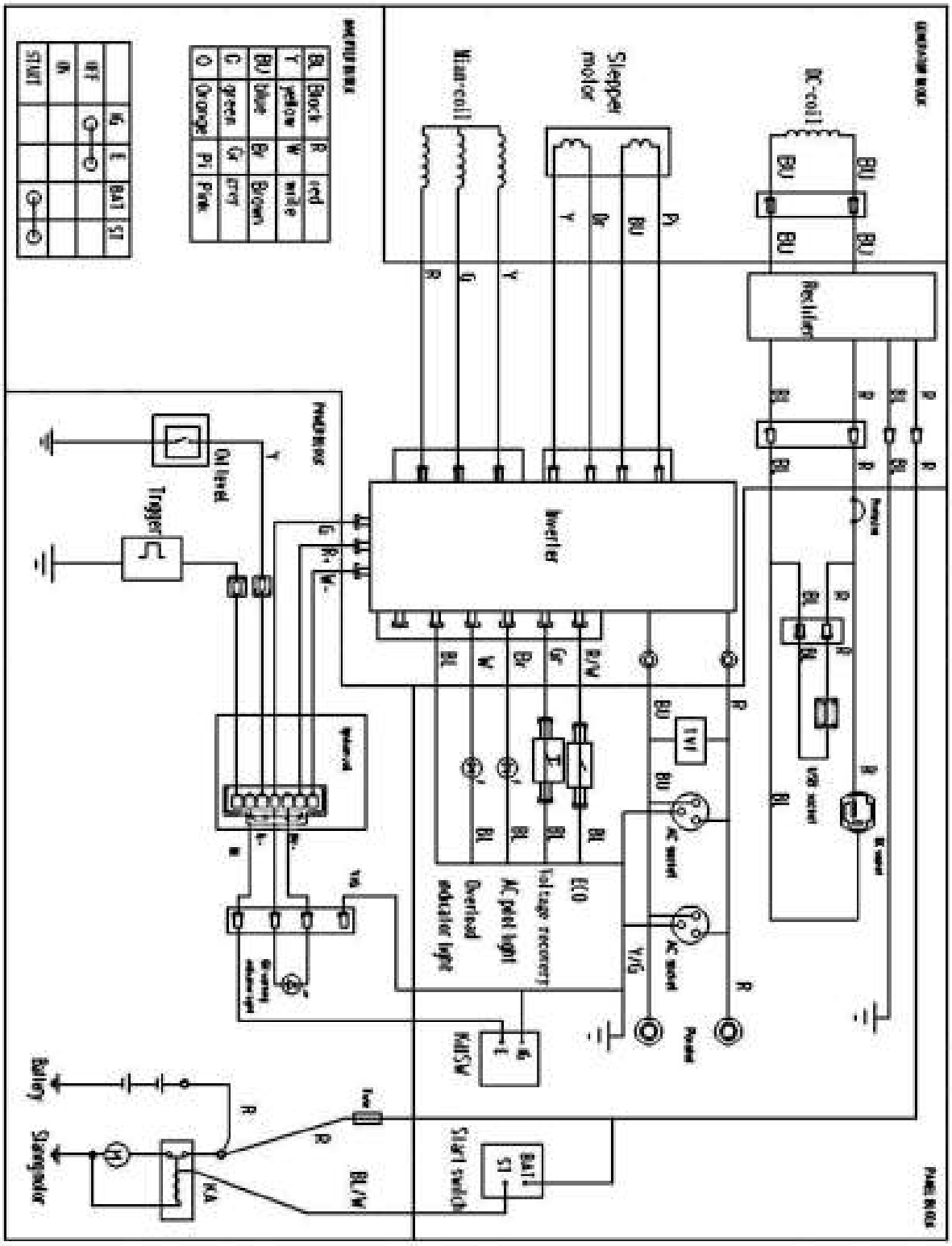
1.	PEMI4800-1	Fuel level inspection window
2.	PEMI4800-2	Fuel cap vent knob
3.	PEMI4800-3	Fuel tank lock
4.	PEMI4800-4	Handle section
5.	PEMI4800-5	Control Panel
6.	PEMI4800-6	Startgreep
7.	PEMI4800-7	3-in-1 toggle switch
8.	PEMI4800-8	Spark Plug Service Cover Rear Cover
9.	PEMI4800-9	Exhaust Muffler
10.	PEMI4800-10	Silencer
11.	PEMI4800-11	Oil port protection plate

7.1 Control panel 230V - 50Hz



1. Engine start/stop button
2. Oil warning
3. Overbalsting
4. Alternating current (AC)
5. Digital display
6. Voltage recovery
7. ATS connection
8. Parallel output
9. AC socket 16A
10. Earth connection
11. DC connection (12V 8A)
12. 8A DC thermal protection
13. USB connection
14. On/off switch
15. Eco mode

7.2 Alternating current diagram - 230V 50Hz



8.1 Warranty Term and Conditions

Warranty Terms and Conditions

1. This warranty shall enter into force on the date stated on the original purchase invoice and shall remain valid for a period of twelve (12) months.

2. This warranty is non-transferable unless prior written consent has been obtained from the supplier.

3. Warranty claims will not be accepted without presentation of the original purchase invoice.

4. This warranty shall apply exclusively provided that the product has been used in full compliance with the instructions contained in the user manual and solely for its intended purpose.

5. No alterations, modifications, or technical changes may be made to the product.

6. This warranty shall be void in the event of improper, negligent, or incorrect use of the product.

7. Transportation, shipping, and related costs are expressly excluded from this warranty.

8. Any repair work must be carried out exclusively by the supplier or an authorised service partner. Repairs performed by unauthorised third parties shall immediately void all warranty rights.

9. Repairs performed during the warranty period shall not result in an extension of the original warranty period. However, a separate warranty period of three (3) months shall apply to the repaired components, provided that the original warranty period has expired.

10. All maintenance and servicing operations described in the user manual must be performed in a timely and proper manner. Failure to do so may result in the warranty becoming void.

11. Warranty claims may only be submitted to the original point of sale at which the product was purchased.