

# Clarke®

## POWER



## 8.5KVA PETROL GENERATOR

MODEL NO: PG9500ADVES

PART NO: 8857860

## OPERATION & MAINTENANCE INSTRUCTIONS

UK  
CA | CE



DL1225

---

## INTRODUCTION

---

Thank you for purchasing this CLARKE Generator.

Before attempting to operate the machine, it is essential that you read this manual thoroughly and carefully follow all instructions given. In doing so you will ensure the safety of yourself and that of others around you, and you can also look forward to the product giving you long and satisfactory service.

Ensure the generator and its components suffered no damage during transit and that all components are present. Should any loss or damage be apparent, please contact your CLARKE dealer immediately.

---

## GUARANTEE

---

This CLARKE product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

---

## ENVIRONMENTAL RECYCLING POLICY

---



Through purchase of this product, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery and environmentally sound disposal of the WEEE.

In effect, this means that this product must not be disposed of with general household waste. It must be disposed of according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

If disposing of this product or any damaged components, do not dispose of with general waste. This product contains valuable raw materials. Metal products should be taken to your local civic amenity site for recycling of metal products.

# SPECIFICATIONS

CLARKE part no 8857860		PG9500ADVES
Engine	Engine Model	SC460
	Engine Power	16HP - 10.5kW
	Fuel Type	E10 Unleaded Petrol (87 Octane Rate)
	Displacement (cc)	459
	Starting system	Electric & Hand Recoil
	Fuel tank capacity (Litre)	20 L (Safe Capacity)
	Fuel consumption	3.3 L/Hr
	Maximum run time @75% Load	6 hours 30 mins
	Engine oil type	SAE10W-30
	Engine oil capacity (L)	1.1L
	Battery Type	12V,18Ah, SLA
Generator	Rated Frequency (Hz)	50
	AC Output Voltage (V)	230 & 110
	Rated Power (W)	8000
	Max. Rated Power (W)	8500
Dimensions	L x W x H (mm)	730 x 660 x 630
	Unpacked Weight (kg)	100
Environmental	IP Rating (Generator/Sockets)	IP23M/IP44
	Sound pressure level	74 dB
	Sound power level	94 dB
	Guaranteed sound power level	97 dB
	Uncertainty factor	2.8 dB

## GENERAL SAFETY RULES & SYMBOLS

### **⚠ DANGER**

Using a generator indoors **WILL KILL YOU IN MINUTES**. Exhaust contains carbon monoxide, a poison gas you cannot see or smell.












**NEVER** use in the home or in partly enclosed areas such as garages.



Only use **OUTSIDE** and far from open windows, doors, and vents.

Avoid other generator hazards.  
**READ MANUAL BEFORE USE.**

### SAFETY SYMBOLS

	Read Instruction manual before use		<b>DANGER</b> - highly flammable liquid.
	Caution - The user should be aware of a general hazard		Engine and exhaust become hot during use - <b>DO NOT</b> touch
	Dangerous voltage. Risk of electric shock		Poisonous fumes - <b>DO NOT</b> use in an enclosed space.
	Wear ear defenders		For outdoor use only. <b>DO NOT</b> expose to rain.
	<b>DO NOT</b> use in the wet.	<b>These symbols are to be found on the product.</b>	

## WORK AREA

1. **ALWAYS** use in a well ventilated area.
2. **ALWAYS** position the exhaust outlet away from people.
3. **NEVER** use indoors or in a confined space.
4. **ALWAYS** keep children away from the generator.

## POSITIONING THE GENERATOR

1. **ONLY** use the folding handles to wheel the generator into position. **NEVER** use them to lift the generator off the ground.
2. **ALWAYS** leave a least a 1m gap between the generator and any surrounding building or structure.
3. **ALWAYS** ensure the generator is on a dry, solid, flat surface.
4. **ALWAYS** ensure the surrounding area is free from any material that could burn or be damaged by heat.
5. **NEVER** move or tilt the generator whilst it is switched on.

## FIRE PREVENTION

1. **ALWAYS** switch the engine OFF when refuelling. Allow generator to cool for at least 2 minutes before removing the fuel cap. Loosen cap slowly to relieve pressure in the tank.
2. **ALWAYS** refuel away from any source of heat.
3. **ALWAYS** refuel in a well ventilated area.
4. **ONLY** use standard unleaded petrol.
5. **DO NOT** overfill the fuel tank. **DO NOT** fill to the very top of the tank and leave room for petrol expansion.
6. **NEVER** smoke whilst refuelling and avoid smoking or using a naked flame near the generator.
7. **DO NOT** operate near an open flame, heat or flammable materials. This generator may emit highly flammable and explosive petrol vapours.
8. **NEVER** start the engine if there is spilled fuel. Any spillage must be wiped clean and the generator allowed to dry before attempting to start the engine.

## PREVENTION OF ELECTRIC SHOCK

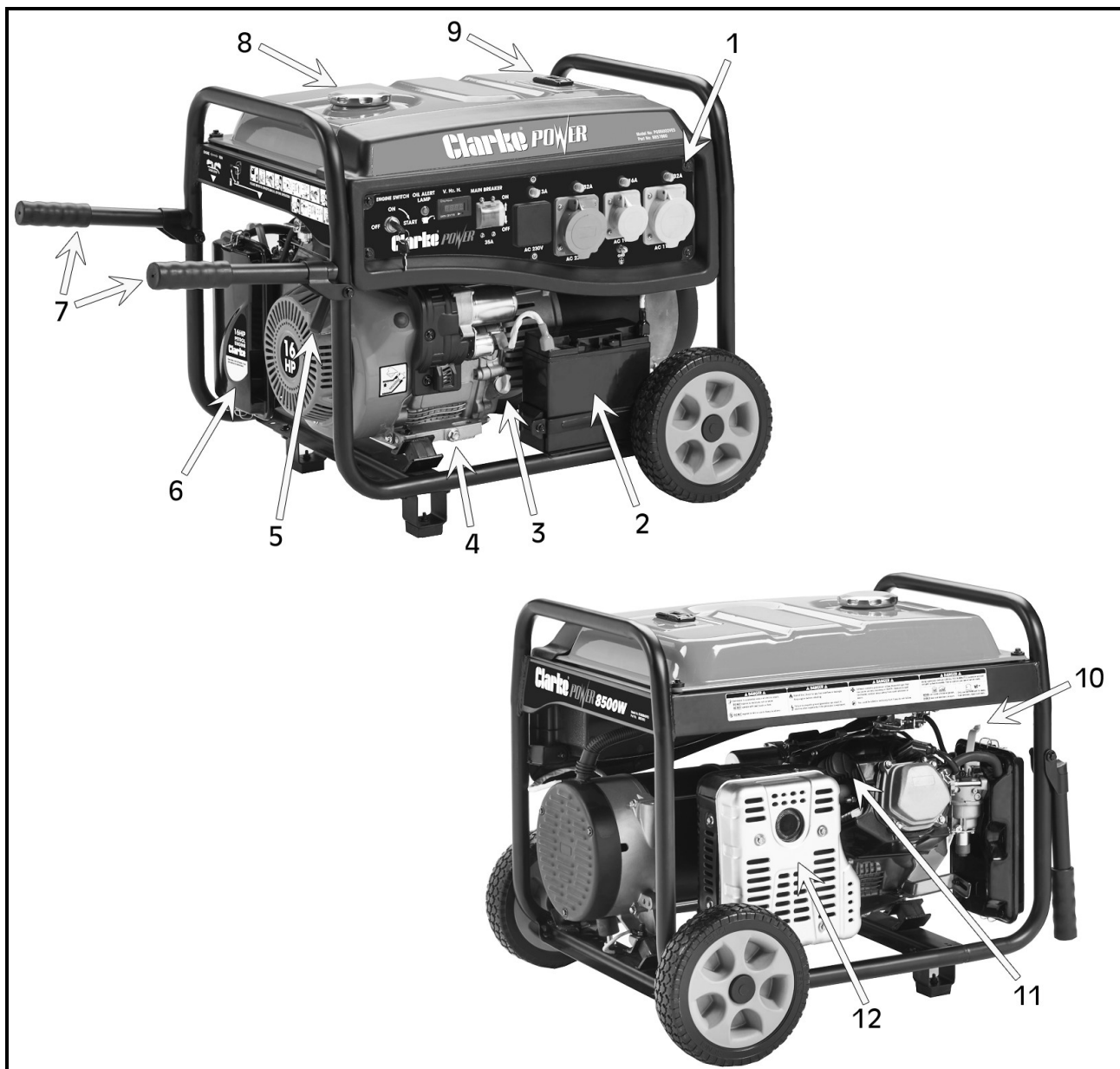
1. **NEVER** use the generator in wet conditions unless it is well protected/covered. Under these conditions, adequate ventilation **MUST** be provided.
2. **NEVER** operate the generator with wet hands.

3. **NEVER** use water or any other liquid to clean the generator.
4. **ALWAYS** ground the generator before using it to maximise safety, see 'Ground The Generator' section on page 14.
5. **ALWAYS** use a ground fault circuit interrupter (GFCI) (not included) in highly conductive areas such as metal decking or steel work. Extension cords with an in-line GFCI are recommended for these operations.

## **GENERAL SAFETY RULES FOR GENERATORS**

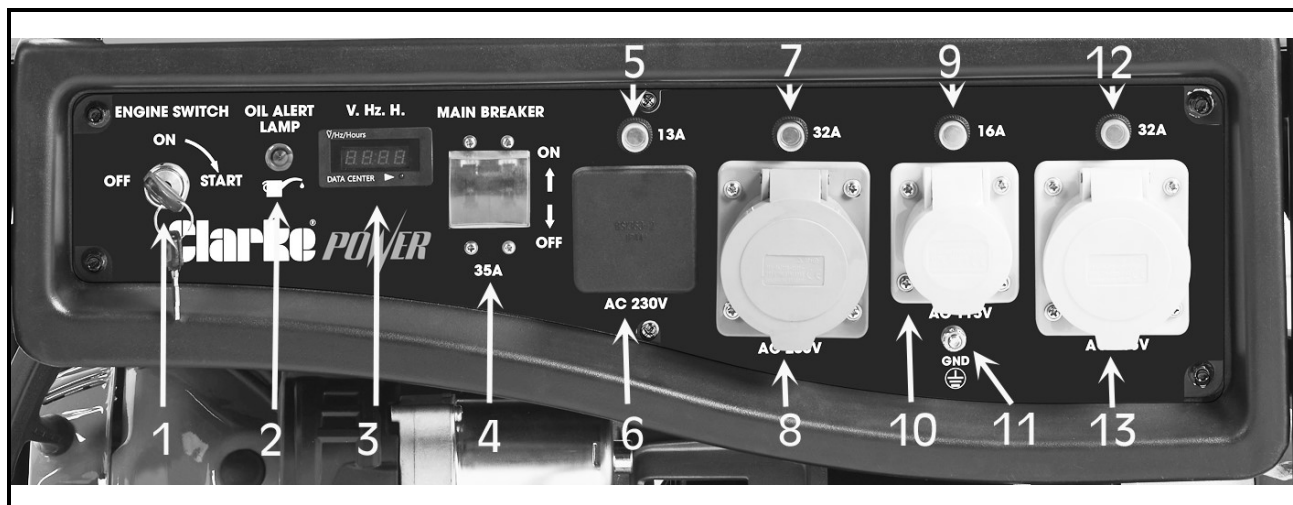
1. **ALWAYS** ensure the applied load does not exceed the generator rating. Overloading the generator is dangerous and could cause damage.
2. **ALWAYS** disconnect the generator when carrying out any maintenance.
3. **ALWAYS** ensure the generator reaches operating speed before connecting a load.
4. **NEVER** allow the generator to run out of fuel when a load is connected.
5. **NEVER** transport the generator with fuel in the tank.
6. **DO NOT** connect to a commercial or residential power supply; e.g. ring main.
7. **DO NOT** touch hot parts. This generator produces heat when running. Temperatures near the exhaust can exceed 150°F/65°C. Allow the generator to cool down after use before touching the engine or areas of the generator that become hot during use.
8. If any part of the generator, electrical device or power cable is broken, damaged or defective, make sure it is repaired or replaced before using. Service or repair of the generator should only be performed by a qualified technician.
9. **NEVER** modify the generator in any way. Modifying or using the generator for any other purpose for which it is not designed may result in serious injury, machine damage and voiding of the warranty.
10. **ALWAYS** turn off all connected electrical devices before stopping the generator.
11. **ALWAYS** turn the engine switch to the 'OFF' position when the engine is not running.

# GENERATOR OVERVIEW



NO	DESCRIPTION	NO	DESCRIPTION
1	Control Panel	7	Folding Handles
2	Battery	8	Fuel Cap
3	Oil Fill Cap/Dipstick	9	Fuel Gauge
4	Oil Drain Plug	10	Choke
5	Recoil Starter	11	Spark Plug
6	Air Filter	12	Muffler/Exhaust

## CONTROL PANEL OVERVIEW



NO	DESCRIPTION	NO	DESCRIPTION
1	Electric Start Ignition	8	32A, 240V Plug Socket
2	Oil Level Alert Lamp	9	16A Breaker Switch
3	Data Centre (Volts & Hertz per hour)	10	16A, 110V Plug Socket
4	Main Breaker Switch	11	Earth Grounding Terminal
5	13A Breaker Switch	12	32A Breaker Switch
6	AC 230V Plug Socket	13	32A, 110V Plug Socket
7	32A Breaker Switch		



---

## UNPACKING

---

Unpack your generator and check to ensure the following items are present. Should there be any deficiency or damage caused during transit contact your CLARKE dealer immediately.

1 x 8.5kW Petrol Generator	2 x Folding Handle c/w fixings
2 x Axle, Washer & R Clip	1 x Spark Plug Box Spanner & Pouch
2 x Wheel & Axle Cover	1 x Tommy Bar
2 x Foot Assembly c/w fixings	1 x Pair of Ignition keys
1 x Lead Acid Battery (Not Connected, see page 11)	

---

## BEFORE USING THE GENERATOR

---

Attach a suitable earth lead to a good earthing point (see page 14) - e.g. water pipe, ground spike etc., whenever you use this generator.

Before using your generator check that the generator is:

- In good condition and free from any damage.
- Clean and free from fuel or oil spillage and the fuel system is intact.
- Correctly located for use (see page 5).

**NOTE: ALWAYS** use a funnel to fill the fuel tank to avoid accidental spillage of fuel. If fuel is spilled it must be cleaned up before use.



**WARNING: ENSURE THERE IS ADEQUATE FUEL IN THE TANK WHEN USING THE GENERATOR. RUNNING OUT OF FUEL OR STOPPING THE ENGINE SUDDENLY WITH A LOAD CONNECTED COULD CAUSE SERIOUS DAMAGE.**



**WARNING: ALWAYS CHECK THE OIL LEVEL BEFORE STARTING SEE PAGE 12, FAILURE TO MAINTAIN THE CORRECT OIL LEVEL MAY SERIOUSLY DAMAGE THE ENGINE.**

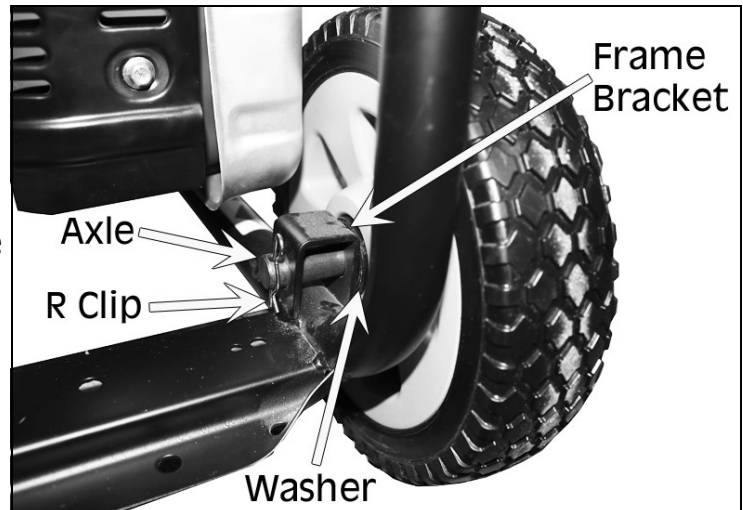
---

# ASSEMBLY

**CAUTION: DUE TO THE WEIGHT OF THE GENERATOR, IT IS RECOMMENDED THAT THE ASSEMBLY IS UNDERTAKEN BY 2 PERSONS.**

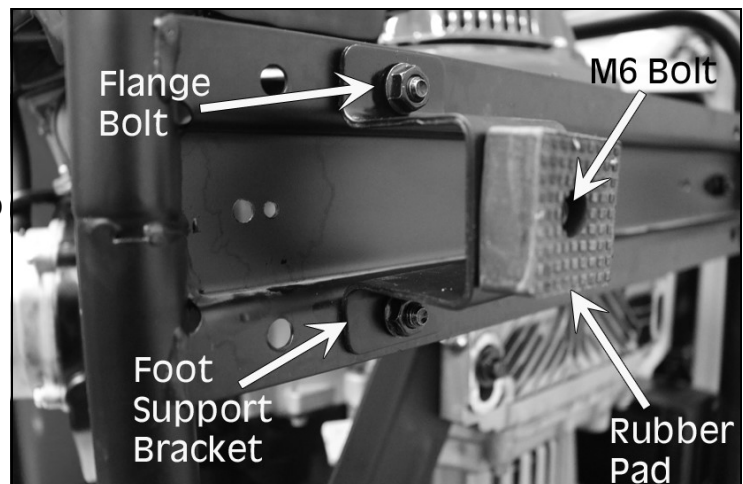
## FITTING THE WHEELS

1. Slide the axle through the wheel and place the washer on the axle on the frame side of the wheel.
2. Slide the axle assembly through the frame bracket and insert the R clip through the axle hole to secure in place.
3. Attach the wheel centre cap to the outside of the wheel.



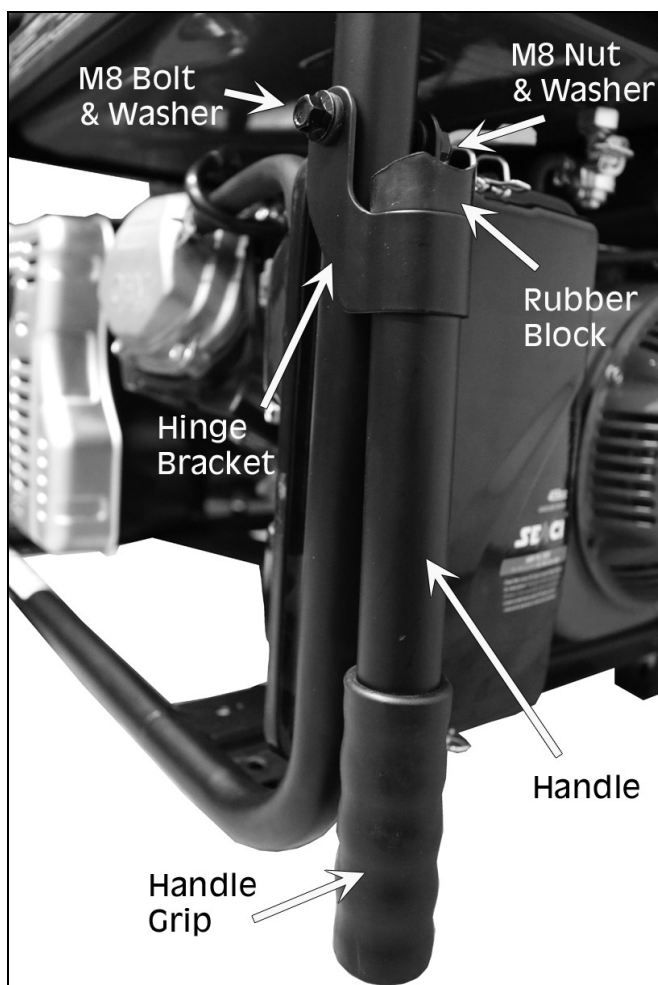
## FITTING THE FEET

1. Insert an M6 bolt through the rubber pad and secure to the bottom of the foot support bracket with M6 nut.
2. Place the foot support bracket to the underside of the frame and insert two flange nuts and bolts and tighten.



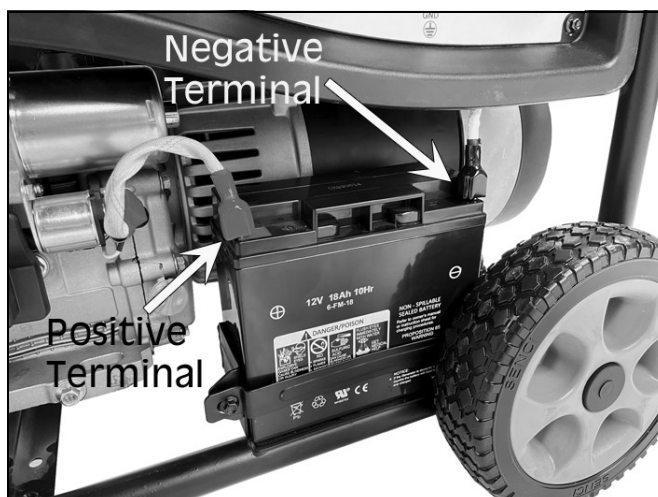
## FITTING THE FOLDING HANDLES

1. Insert the rubber block in the end of the handle with the hinge bracket.
2. Fit the hinge bracket to the generator frame and secure with M8 washers, nut and bolt.
3. Slide the handle grip onto the end of the handle.



## CONNECTING THE BATTERY

1. Connect the negative wire to the negative ('-' / Black) terminal on the battery as shown on the right.
2. Connect the positive wire to the positive ('+' / Red) terminal on the battery.
  - Ensure both terminals are covered by the plastic covers as shown.

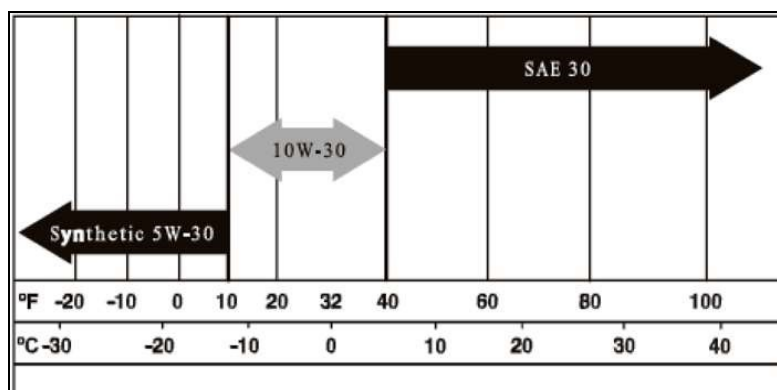


# PREPARATION BEFORE OPERATION

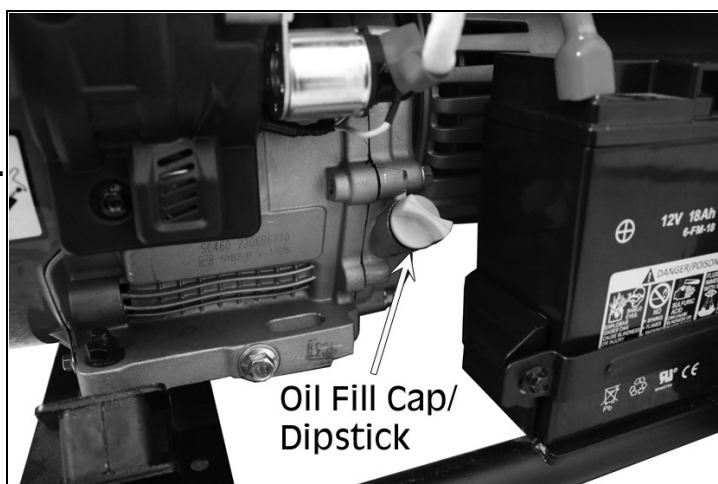
## ADDING ENGINE OIL

**WARNING: THIS GENERATOR IS SOLD WITHOUT OIL INCLUDED. DO NOT ATTEMPT START THE GENERATOR WITHOUT INSTALLING THE CORRECT OIL FIRST.**

Always check and add the correct engine oil before starting the generator. **DO NOT** use any special additives. Select the oil viscosity grade according to the expected operating temperature (see chart).



- Above 40°F (4°C), use SAE30 oil.
  - Between 10°F (-18°C) & 40°F (4°C), use 10W-30 oil.
  - Below 10°F (-18°C), use 5W-30 oil.
1. Place the generator on a flat, level surface.
  2. Clean the area around the oil fill cap and remove the cap/dipstick.
  3. Slowly fill the engine with the appropriate oil until it reaches the full mark on the dipstick.
    - Stop filling occasionally to check the oil level & be careful to not over fill.
  4. Replace the oil fill cap/dipstick and finger tighten securely.



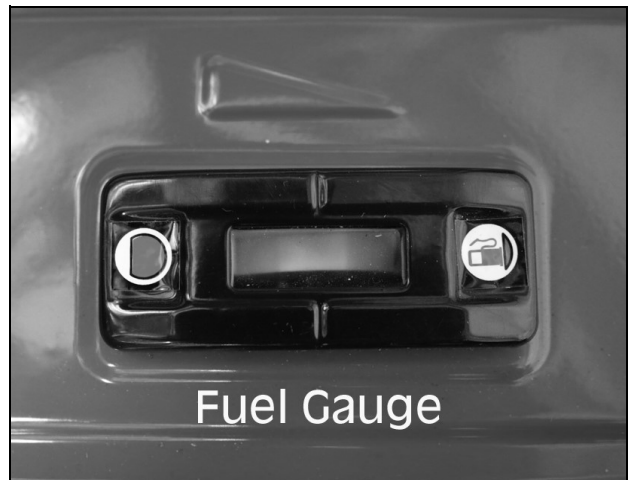
**NOTE:** Check engine oil level before starting each time thereafter.

**NOTE:** The engine is equipped with a low oil level sensor and the Oil Level Alert Lamp will light up (see Control Panel on Page 8). This will shut down the engine automatically when the oil level drops below a specified level. If the engine shuts down by itself and the fuel tank has enough petrol, check the engine oil level.

## ADDING FUEL

**RECOMMENDED FUEL:** Only use standard unleaded petrol. **DO NOT** mix with oil.

1. Check the fuel level on the fuel gauge. The fuel gauge will show as red when you have fuel in the tank turning white as the fuel level decreases.



2. To add fuel, open the fuel filler cap.



3. Just inside the fuel tank is a fuel filter which catches any contaminants as you refuel.
4. Slowly add fuel to the fuel tank (maximum 20L) watching the fuel level gauge as you do so.
5. Replace the fuel filler cap securely.



**NOTE: DO NOT** overfill the fuel tank.



**WARNING: ALWAYS REFUEL IN A WELL VENTILATED AREA AWAY FROM ANY HEAT SOURCES.**

**WARNING: ALLOW THE UNIT TO COOL DOWN BEFORE REFUELLING.**

**WARNING: DO NOT LEAVE FUEL WITHIN THE REACH OF CHILDREN.**

## GROUND THE GENERATOR

**WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK AND TO MAXIMISE SAFETY, THE GENERATOR SHOULD BE PROPERLY GROUNDED BEFORE USE.**

Ground the generator by tightening the earth grounding terminal on the front control panel against a grounding wire. A generally acceptable grounding wire is a No. 14 SWG (Standard Wire Gauge)(2.108mm) stranded copper wire.

This grounding wire should be connected at the other end to a copper, brass or steel grounding rod that is driven into the earth. Wire and grounding rods are not included with the generator

---

## USING YOUR GENERATOR

---

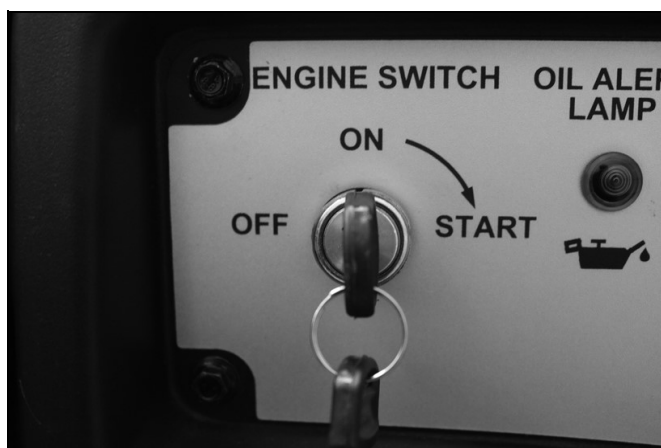


**WARNING: NEVER START OR STOP THE ENGINE WITH ELECTRICAL DEVICES PLUGGED IN AND TURNED ON. UNPLUG ALL ELECTRICAL LOADS FROM THE GENERATOR BEFORE STARTING THE ENGINE.**

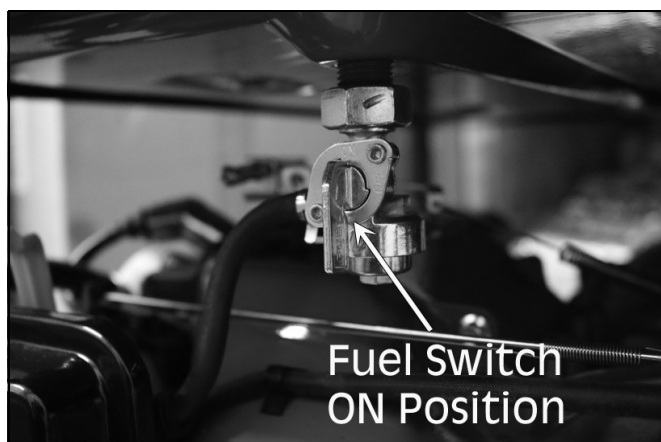
---

### STARTING THE ENGINE

1. Turn the Engine Switch to the 'ON' position.



2. Turn the Fuel Switch to the 'ON' position.



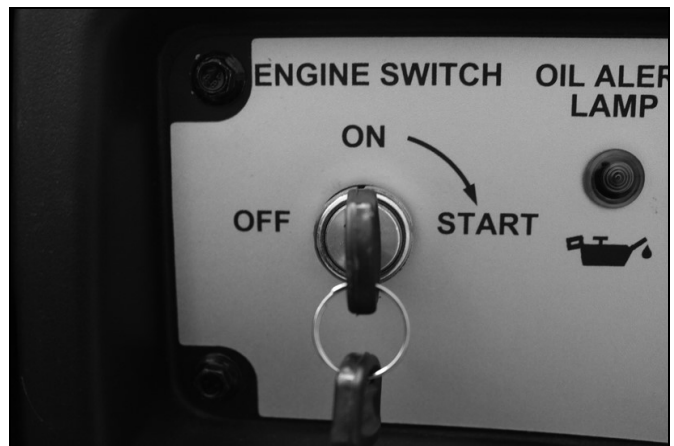
3. Move the Engine Choke Lever to the 'CHOKE' position.



### FOR ELECTRIC START

1. Insert the key into the ignition.
2. Turn and hold key in the start switch to the 'Start' position until the generator starts.

**NOTE:** To prolong the life of the starter components, DO NOT hold the key in the 'Start' position for more than 15 seconds, and pause for at least 1 minute between starting attempts.



3. Once the engine has started, move the choke lever to 1/2 CHOKE position until the engine runs smoothly and then fully to the 'RUN' position. If the engine falters, move the choke lever back to the 1/2 CHOKE position until the engine runs smoothly, then back to the 'RUN' position.

**NOTE:** If the battery is discharged, use the manual recoil start instructions on page 14-16.

**NOTE:** If the engine fires, but does not continue to run, move the choke lever to the 'OFF' position and repeat starting instructions.

## FOR MANUAL RECOIL START

1. Firmly grasp the recoil starter handle and pull slowly until increased resistant is felt.
2. Then pull rapidly up.
3. Once the engine has started, move the choke lever to 1/2 CHOKE position until engine runs smoothly and then fully to the 'RUN' position. If the engine falters, move the choke lever back to the 1/2 CHOKE position until engine runs smoothly, then back to the 'RUN' position.



**WARNING: STARTER CORD KICKBACK (RAPID RETRACTION) WILL PULL YOUR HAND AND ARM TOWARD THE ENGINE FASTER THAN YOU CAN LET GO, WHICH COULD CAUSE SERIOUS INJURY. WHEN STARTING THE ENGINE, PULL THE CORD SLOWLY UNTIL RESISTANCE IS FELT AND THEN PULL RAPIDLY TO AVOID KICKBACK.**

## CONNECTING ELECTRICAL DEVICES

Follow the steps below to properly connect your device(s) to the generator.

1. Before connecting electrical devices, allow the generator to run for a few minutes to stabilise the speed and voltage output.
2. Select the device with the highest wattage and make sure it is turned off. Plug the device into the generator and then turn the device on. Allow the engine to stabilise.
3. Repeat step 2 to plug in each additional device. **DO NOT** attempt to plug in and start multiple devices at the same time.

## GENERATOR CAPACITY

Make sure the generator can supply enough running (rated) and starting (max.) watts for the items you will power at the same time. Follow these simple steps.

1. Select the items you will want to power at the same time.
2. Add together the running (rated) watts of these items. This is the amount of power the generator must produce to keep the items running.
3. Estimate how many starting (max.) watts you will need. Starting wattage is the short burst of power needed to start electric motor driven tools such as a circular saw or refrigerator. Because not all motors start at the same time, total starting



(max.) watts can be estimated by adding only the items with the highest additional starting (max.) to the total rated watts.

**Example only:**

Tool/Appliance	Running Watts	Additional Starting Watts
Refrigerator	700	1350
Portable Fan	40	120
Laptop	250	250
46 in. Flat Screen TV	190	190
Light (75 Watts)	75	75
	1255 Total Running Watts	1350 Highest Starting Watts

Total Running Watts: 1255  
Highest Starting Watts: +1350  
Total Starting Watts Needed = **2605**

To prolong the life of the generator and attached devices, it is important to take care when adding electrical loads to the generator. There should be nothing connected to the generator outlets before starting its engine. The correct and safe way to manage the generator power is to sequentially add loads as follows:

1. With nothing connected to the generator, start the engine as described on pages 14-16 of this manual.
2. Plug in and turn on the first load, preferably the largest load you have.
3. Allow the generator output to stabilise (engine runs smoothly and any attached device operates properly).
4. Plug in and turn on the next load.
5. Again, allow the generator to stabilise.
6. Repeat steps 4 & 5 for each additional load.

**NEVER** add more loads than the generator capacity. Take special care to consider surge loads in generator capacity as previously described.

The chart below serves as a **reference only** for the estimated wattage requirements of common electrical devices. However, **DO NOT** solely rely on this chart as all appliances are built differently, **ALWAYS** check the wattage listed on the electrical device before consulting this chart:

Tool/Appliance	Rated (Running) Watts	Surge (Starting) Watts
Hot Plate	2500	0
Saw - Circular	1500	1500
Saw - Mitre	1200	1200
Microwave	1000	0
Well Water Pump	1000	1000
Sump Pump	800	1200
Refrigerator/Freezer	800	1200
Computer	800	0
Television	500	0
Box Fan	300	600
Light Bulb	75	0

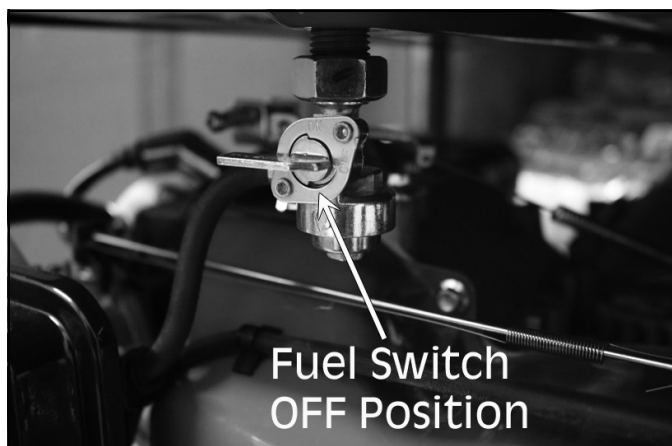
## SHUTTING DOWN THE GENERATOR

Shut off all loads then unplug the devices from the generator panel. **NEVER** start or stop the engine with electrical devices plugged in and turned on.

1. Let the engine run at no-load for several minutes to stabilise the internal temperature of the engine and generator.
2. Move the ON/OFF switch to the 'OFF' position.



3. Turn the fuel switch to the 'OFF' position.



---

## MAINTENANCE & TROUBLESHOOTING

---

### MAINTENANCE SCHEDULE

Proper routine maintenance of the generator will help prolong the life of the machine. Please perform maintenance checks and operations according to the Maintenance Schedule below. If there are any questions about the maintenance procedures listed in this manual, please contact the CLARKE service centre.



**WARNING: NEVER PERFORM MAINTENANCE OPERATIONS WHILE THE GENERATOR IS RUNNING. BEFORE MAINTENANCE OR SERVICING THE GENERATOR, TURN OFF THE GENERATOR, DISCONNECT ALL DEVICES AND ALLOW THE GENERATOR TO COOL DOWN**

<b>First 5 Hours of use</b>
<ul style="list-style-type: none"><li>• Change engine oil (see page 21)</li></ul>
<b>Every 8 Hours of use or Daily</b>
<ul style="list-style-type: none"><li>• Clean debris (see page 20)</li><li>• Check engine oil level (see page 12)</li><li>• Check fuel level (see page 13)</li></ul>
<b>Every 25 Hours or use or Yearly</b>
<ul style="list-style-type: none"><li>• Clean engine air filter (see page 23)</li></ul>
<b>Every 50 Hours or use or Yearly</b>

- Change engine oil (see page 21)

### Yearly

- Replace engine air filter (see page 23)
- Service fuel valve
- Clean and service spark plug and replace if necessary (see page 22)
- Inspect muffler (exhaust) and spark arrester (see page 23)
- Clean cooling system

## GENERATOR MAINTENANCE

Generator maintenance consists of keeping the unit clean and dry. Operate and store the unit in a clean dry environment where it will not be exposed to excessive dust, dirt, moisture or any corrosive vapours. Cooling air slots in the generator must not become clogged with snow, leaves, or any other foreign material. Check the cleanliness of the generator frequently and clean when dust, dirt, oil, moisture or other foreign substances are visible on its exterior surface.



**WARNING: NEVER INSERT ANY OBJECT OR TOOL THROUGH THE AIR COOLING SLOTS, EVEN IF THE ENGINE IS NOT RUNNING.**



**WARNING: DO NOT USE A GARDEN HOSE TO CLEAN THE GENERATOR. WATER CAN ENTER THE ENGINE FUEL SYSTEM AND CAUSE PROBLEMS. IN ADDITION, IF WATER ENTERS THE GENERATOR THROUGH THE COOLING AIR SLOTS, SOME WATER WILL BE RETAINED IN VOIDS AND CREVICES OF THE ROTOR AND STATOR WINDING INSULATION. WATER AND DIRT BUILD UP ON THE GENERATOR INTERNAL WINDINGS WILL EVENTUALLY DECREASE THE INSULATION RESISTANCE OF THE WINDINGS.**

## TO CLEAN THE GENERATOR

1. Use a damp cloth to wipe exterior surfaces clean.
2. A soft bristle brush may be used to loosen caked on dirt, oil etc.
3. A vacuum cleaner may be used to pick up loose dirt and debris.
4. Low pressure air (**DO NOT** exceed 25psi and **ALWAYS** wear eye protection) may be used to blow away dirt. Inspect the cooling air slots and openings on the generator. These openings must be kept clean and unobstructed.

## CHANGING THE OIL

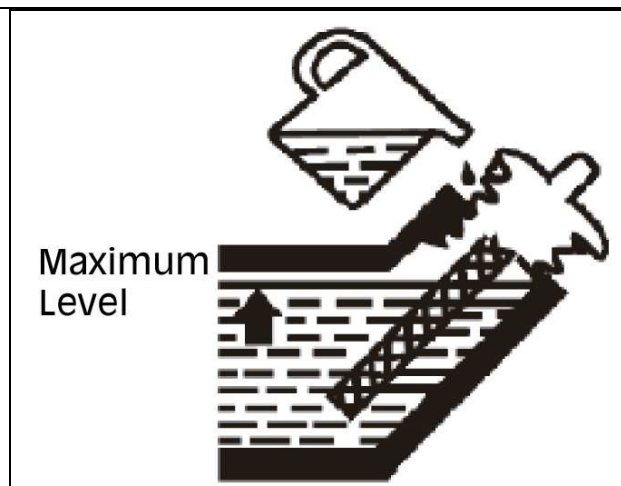
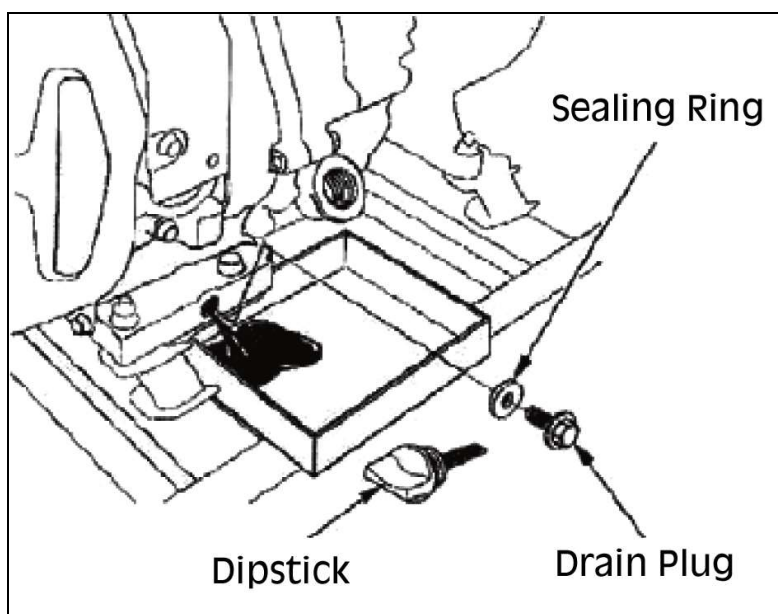
Change the oil after the first 5 hours of operation, then every 50 hours thereafter. If running this unit under dirty or dusty conditions, or in extremely hot weather, change the oil more often.



**WARNING: HOT OIL MAY CAUSE BURNS. ALLOW THE ENGINE TO COOL BEFORE DRAINING THE OIL. AVOID PROLONGED OR REPEATED SKIN EXPOSURE WITH OIL. THOROUGHLY WASH EXPOSED AREAS WITH SOAP.**

Use the following instructions to change the oil while the engine is still warm.

1. Clean area around the oil drain plug.
2. Place a suitable oil container under the oil drain plug.
3. Remove the dipstick and oil drain plug from the engine and drain oil into the container.
4. Once the oil has completely drained, re-install the oil drain plug and tighten securely.
5. Refill the engine with the recommended oil (see page 12).
6. Wipe up any spilled oil.
7. Dispose of used oil at an appropriate recycling centre.



## ENVIRONMENTAL PROTECTION

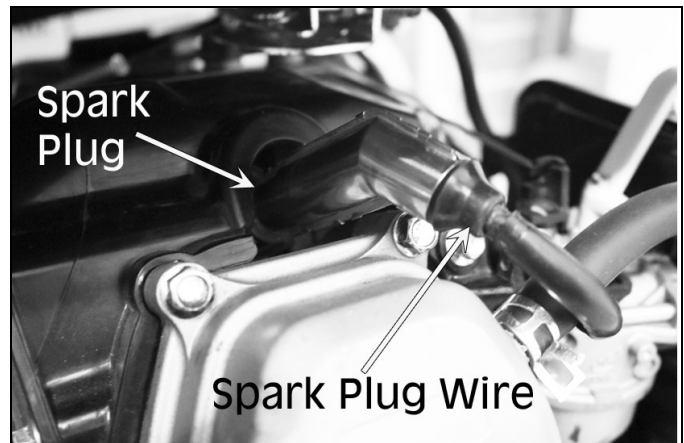
One of the most damaging sources of pollution is oil, **DO NOT** throw away used engine oil in with your domestic rubbish or pour it down drains or sinks. Place it in a leak proof container and take it to your local waste disposal site.

## INSPECTING OR REPLACING THE SPARK PLUG

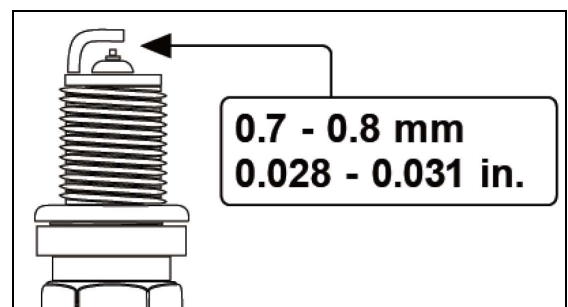
Use spark plug F6TC, BPR4ES or equivalent. Replace the spark plug once every year. This will help the engine start easier and run better.

1. Make sure the generator is off and remove the spark plug wire.
2. Use the spark plug spanner that is supplied to unscrew and then carefully remove the spark plug from the engine.

**NOTE:** There is limited space for the spanner to turn, use the spanner tommy bar to gain leverage to loosen the plug.

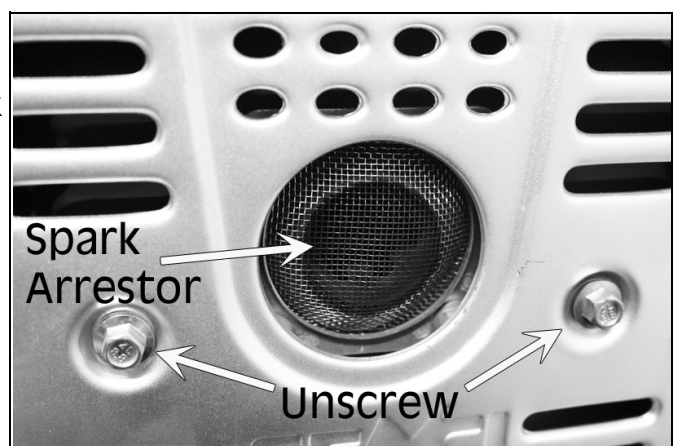


3. Visually inspect the spark plug. If it is cracked or chipped, or if the electrodes are worn or burned, discard it and replace with a new spark plug.
4. If re-using the spark plug, use a wire brush to clean any dirt from around the spark plug base, then re-gap the spark plug.
5. Measure the plug gap with a spark plug gap gauge. The gap should be 0.7 - 0.8mm (0.028 - 0.031in). Carefully adjust the gap if necessary.
6. Screw the spark plug back into the spark plug hole using the spark plug spanner. **DO NOT** over-tighten. Recommended tightening a spark plug is 1/2 to 3/4 of a turn (15ft/lb torque/20.33Nm) after the spark plug gasket contacts the spark plug hole.
7. Reinstall the spark plug wire and cap.



## INSPECTING OR REPLACING THE SPARK ARRESTOR

1. Shut off the generator and allow the muffler (exhaust) to cool down completely before servicing the spark arrestor.
2. Unscrew the spark arrestor screen.
3. Clean the spark arrestor screen with a small wire brush and reinstall.
4. Replace the spark arrestor if it is damaged.



## INSPECTING OR REPLACING THE AIR FILTER

The engine will not run properly and may be damaged if using a dirty air filter. Replace the air filter once a year. Clean or replace more often if operating under dusty conditions.

1. Remove air filter cover by unclipping the top and bottom.
2. Take the cover off and remove the foam air filter element from the casing. Wipe excessive oil and any dirt from inside the air filter casing.
3. Check and clean the foam air filter element. Good elements can be washed in soapy water. Dry the element in a clean cloth (**DO NOT** twist it). Add a few drops of engine oil to the air filter element and spread it evenly.
  - If the air filter element has been damaged, replace it with a new one. Contact the CLARKE service centre.
4. Reinstall the air filter element within the casing and reinstall the air filter cover.



## TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
The generator fails to start	Battery not charged	Charge battery
	Engine switch is in the OFF position	Turn engine switch to the ON position
	No Fuel	Fill fuel tank (see page 13)
	Stale petrol or water in petrol	Drain entire system and refill with fresh fuel (see page 25-26)
	Engine oil level is low	Engine is equipped with Low Oil Shutoff. If engine oil level is low, it must be filled before unit will start. Check engine oil level and fill if necessary (see page 12)
	Fuel switch is in the OFF position	Turn fuel switch to the ON position (see page 14)
	Spark plug faulty, fouled, or improperly gapped	Replace spark plug (see page 22)
	Engine stored without treating or draining petrol, or refueled with bad petrol	Drain fuel. Refuel with fresh petrol (see page 25-26)
Engine lacks power	Dirty fuel filter	Replace fuel filter or contact the CLARKE service department (see page 13)
	Dirty air filter	Check air filter element. Clean or replace as needed (see page 23)
Engine lacks power	Engine stored without treating or draining petrol, or refueled with bad petrol	Drain fuel. refuel with fresh petrol (see page 25-26). If problem continues, contact the CLARKE service department
	The air filter is dirty.	Clean the air filter (see page 23).
The generator is difficult to start	The air filter is dirty.	Clean the air filter (see page 23).



PROBLEM	POSSIBLE CAUSE	SOLUTION
AC receptacle does not work	OUTPUT indicator is OFF, and OVERLOAD indicator is ON	Check AC load (see page 16-18). Stop and restart the engine. Check the cooling air inlet. Stop and restart the engine.
	AC Circuit protector has tripped	Check AC load and reset AC circuit breakers (see Control Panel on page 8)
	GFCI (Ground Fault Circuit Interrupter) system has activated (if used)	Reset the GFCI
	Item plugged in is defective	Try a different device.

If this does not solve your problem contact the CLARKE service department.

## STORAGE

The generator should be started at least once every seven days and be allowed to run for at least 30 minutes. If this can't be done and the unit must be stored for more than 30 days, use the following information as a guide to prepare it for storage.



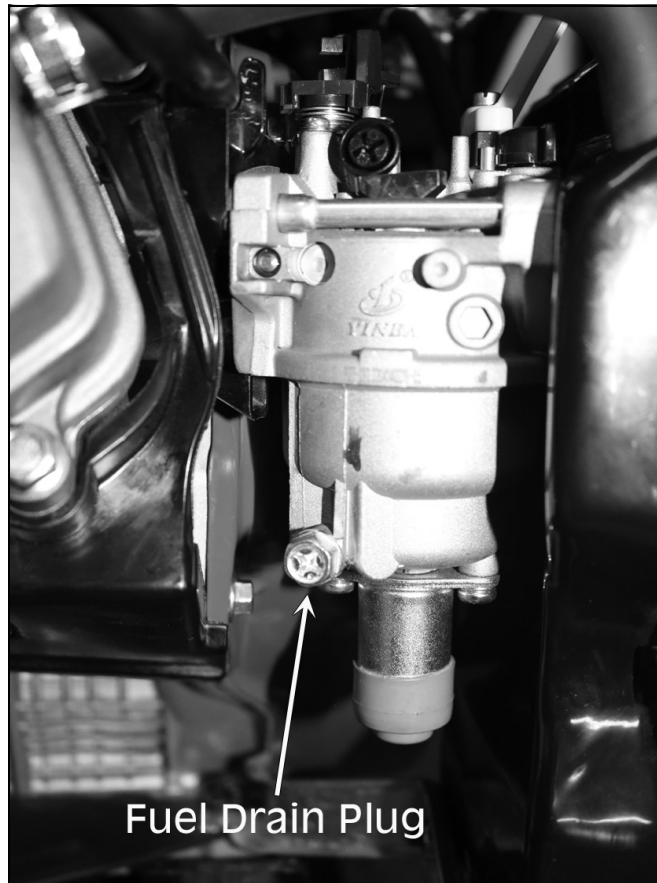
**WARNING: NEVER STORE THE ENGINE WITH FUEL IN THE TANK, INDOORS OR IN AN ENCLOSED, POORLY VENTILATED AREA. DRAIN FUEL INTO AN APPROVED CONTAINER OUTDOORS, AWAY FROM OPEN FLAME. BE SURE THE ENGINE IS COOL. DO NOT SMOKE.**

## DRAINING THE FUEL SYSTEM

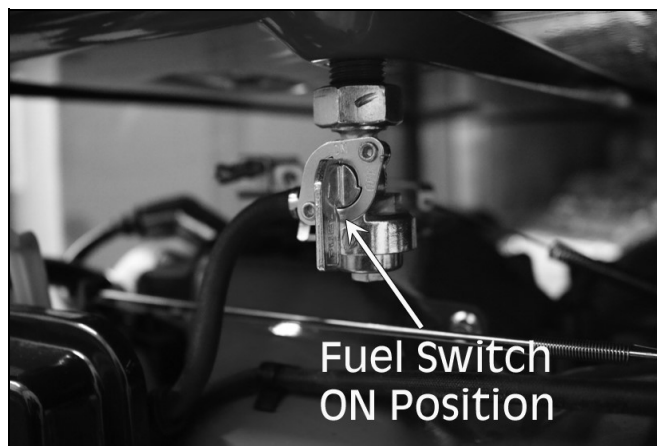
It is important to avoid gum deposits from forming in the essential fuel system parts such as the carburettor, fuel hose or tank during storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer, as follows:

1. Remove all fuel from the generator, by draining the fuel tank as follows:
  - Place a suitably sized fuel container under the fuel drain plug on the carburettor.

- Unscrew the fuel drain plug.



- Turn the fuel switch to the 'ON' position to open the drain.
- Once the fuel has drained, replace the drain plug and turn the fuel switch to the 'OFF' position.






2. Start and run the engine until the engine stops from lack of fuel.
3. While engine is still warm, drain the oil from the crankcase (see page 21)
4. Remove the spark plug (see page 22) and pour about 1/2 ounce (15ml) of engine oil into the cylinder. Cover the spark plug hole with a rag and pull the recoil starter handle a couple of times to lubricate the piston ring and cylinder bore.
5. Reinstall and tighten the spark plug. **DO NOT** connect the spark plug wire.
6. Clean the generator outer surfaces, using a non-abrasive cleaning solution.
7. Check that the cooling air slots and openings on the generator are open and unobstructed.

8. Store the unit in a clean dry place. If possible, store the unit indoors and cover it to give protection from dust and dirt, making sure the cover **DOES NOT** retain moisture.
9. **DO NOT** store petrol from one season to the next.
10. Replace the petrol container if it starts to rust. Rust and/or dirt in petrol will cause problems with the carburettor and fuel system.
11. If it is not practical to empty the fuel tank and the unit is to be stored for some time, use a commercially available fuel stabiliser added to the petrol to increase the life of the petrol.

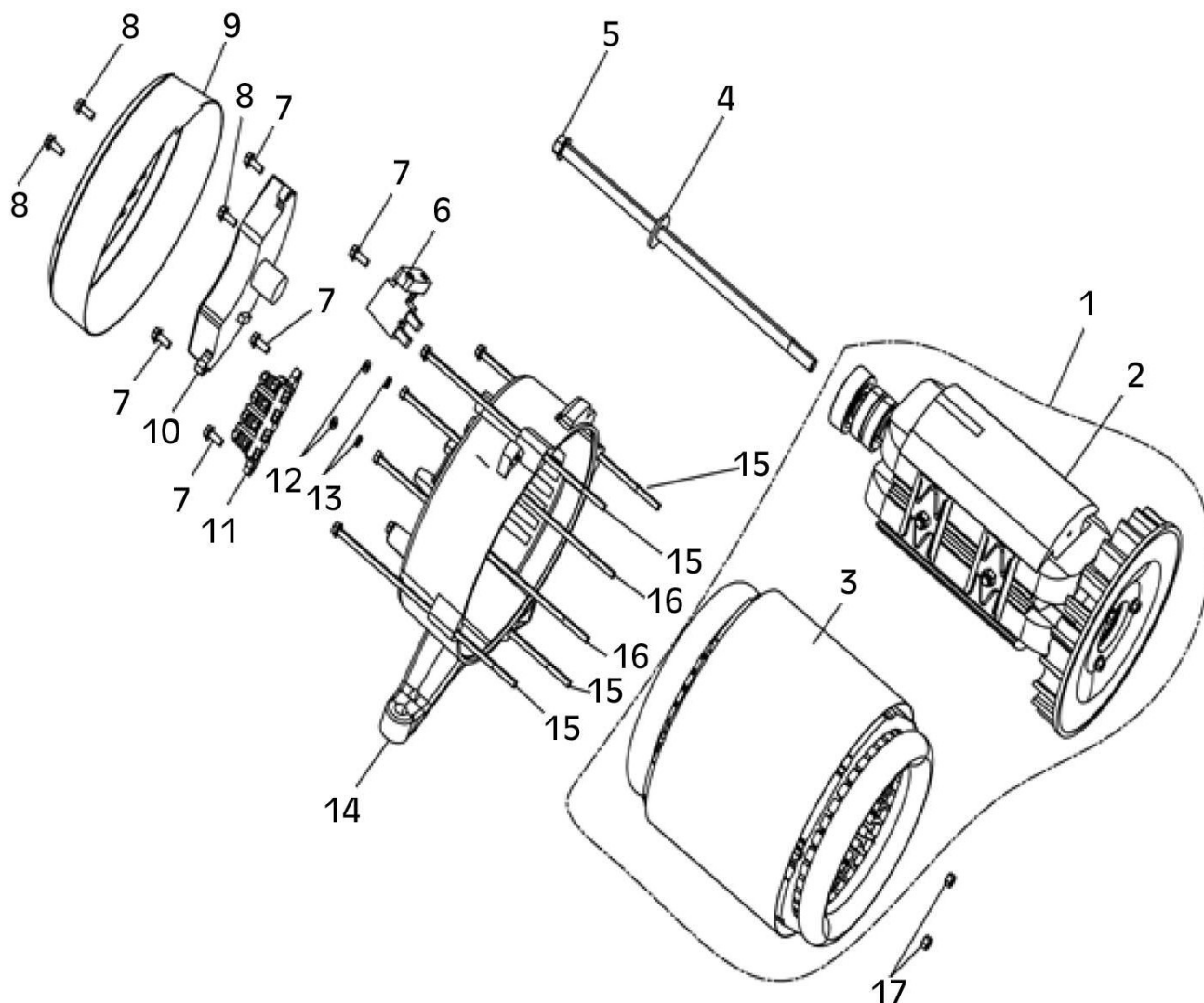
---

## CLARKE GENERATOR ACCESSORIES

---

Extension Lead - EL16	Generator Plug - GP32/2	20 Litre Jerry Can - UN20LC
		
<ul style="list-style-type: none"> <li>• 14m/1.52mm 230V Cable.</li> <li>• 16A Plug to 13A Socket</li> <li>• Part No. 3220847</li> </ul>	<ul style="list-style-type: none"> <li>• 230V 32A Generator Plug</li> <li>• Part No. 6160730</li> </ul>	<ul style="list-style-type: none"> <li>• 0.8mm Thick Steel Construction</li> <li>• Locking Pin on Cap</li> <li>• Part No. 7650220</li> </ul>

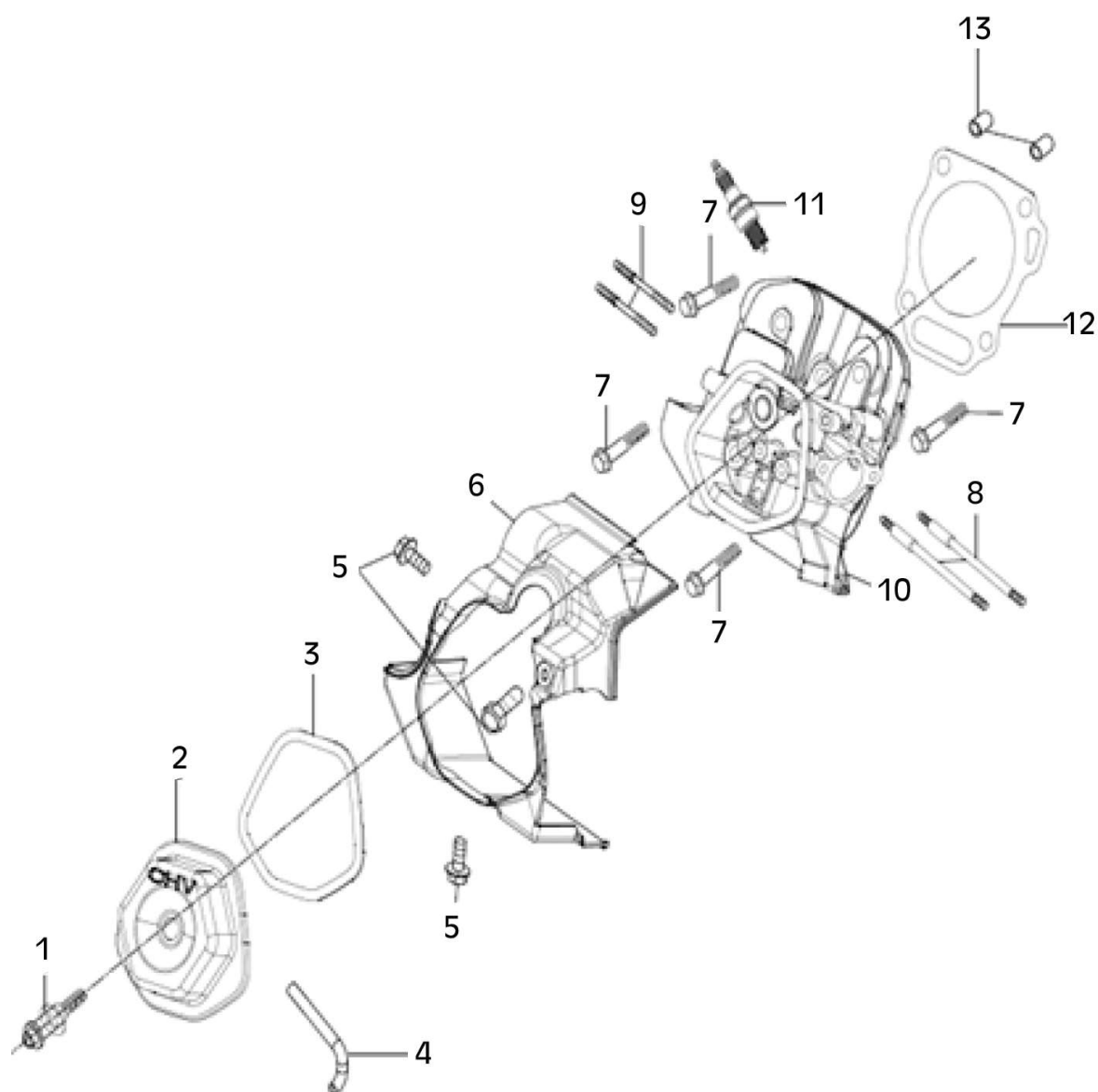
# ALTERNATOR DIAGRAM



No	Description
01	Alternator Assembly
02	Rotor
03	Stator
04	Plain Washer
05	Rotor Bar
06	Carbon Brush
07	Flange Bolt
08	Flange Bolt
09	Alternator End Cover

No	Description
10	Voltage Regulator
11	Wiring Board
12	Flat Washer
13	Spring Washer
14	Alternator Bracket
15	Flange Bolt
16	Flange Bolt
17	Lock Nut

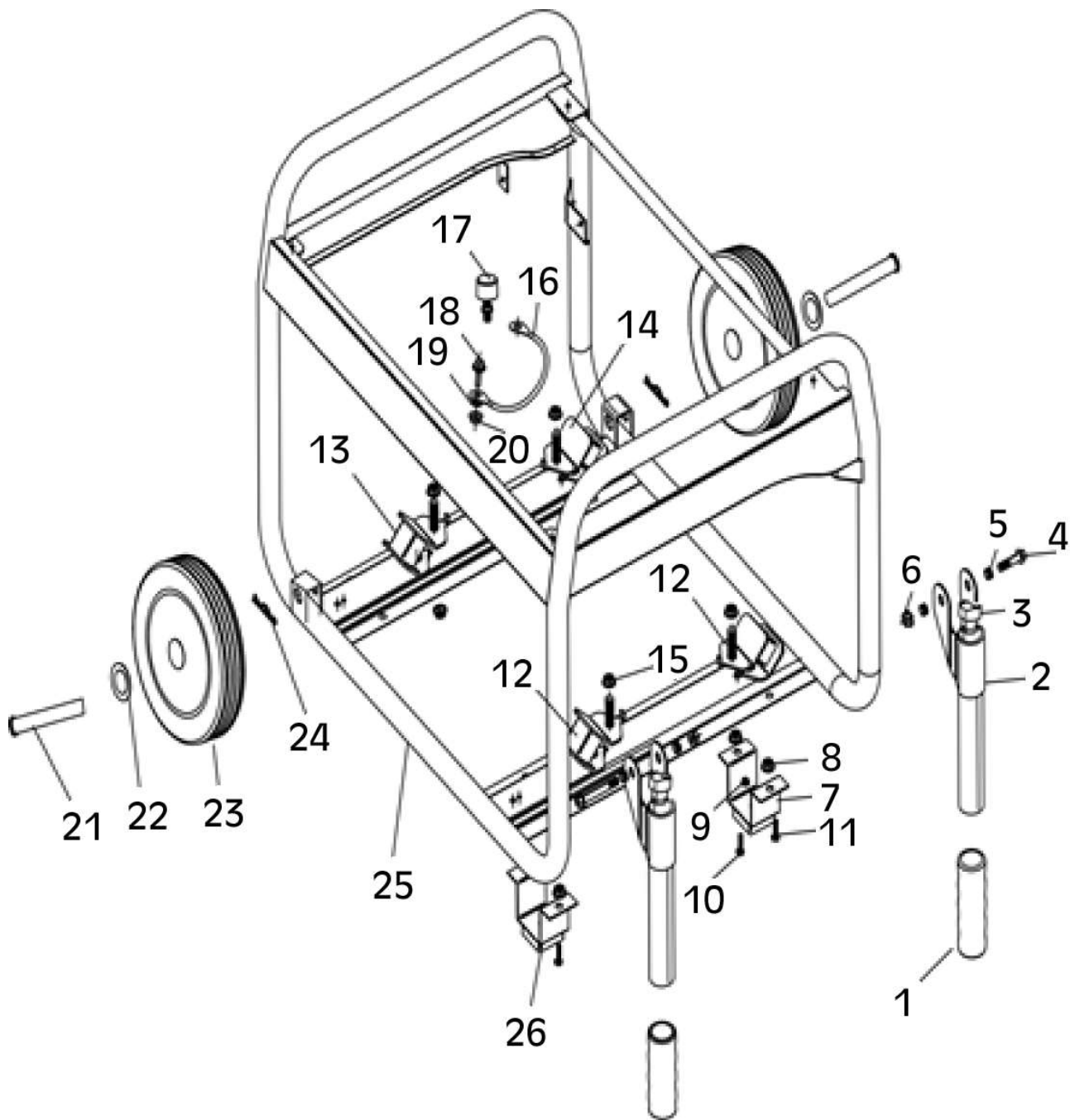
# ENGINE DIAGRAM



No	Description
01	Bolt, M6 x 60
02	Cover Comp. Head
03	Gasket, Head Cover
04	Breather Tube
05	Bolt, M6 x 12
06	Cover
07	Bolt, M10 x 87

No	Description
08	Bolt, Stud, Intake
09	Bolt, Stud, Exhaust
10	Cylinder Head Compartment
11	Spark Plug
12	Head Gasket, Cylinder
13	Dowel Pin

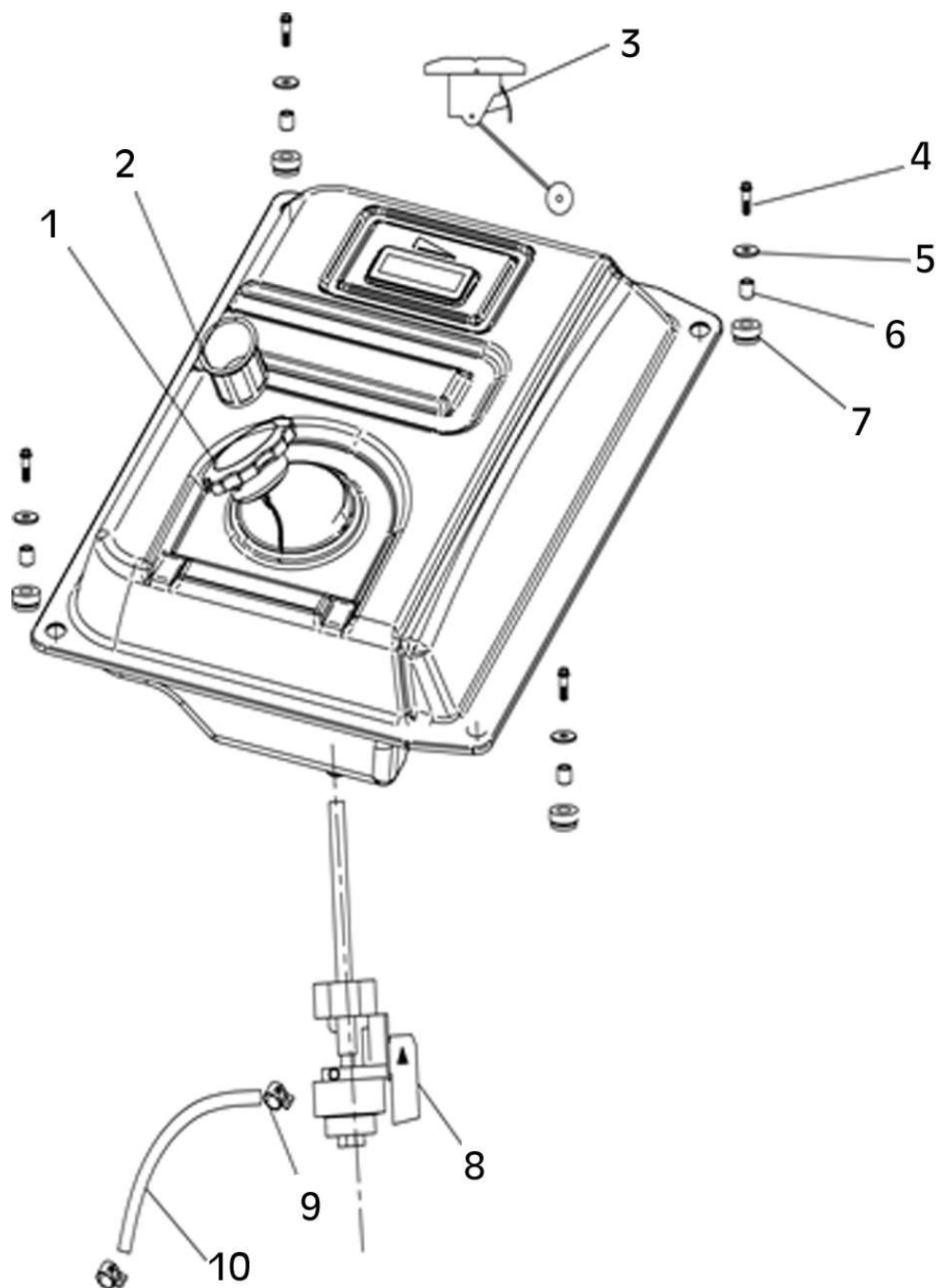
## FRAME DIAGRAM



<b>No</b>	<b>Description</b>
01	Handlebar Rubber Cover
02	Handlebar Arm
03	Handlebar Plastic Plug
04	Flange Bolt
05	Washer
06	Flange Bolt
07	Support
08	Flange Nut
09	Flange Nut
10	Flange Bolt
11	Flange Bolt
12	Vibration Absorber Front
13	Vibration Absorber Rear

<b>No</b>	<b>Description</b>
14	Vibration Absorber Rear
15	Flange Nut
16	Ground Terminal
17	Vibration Absorber
18	Flange Bolt
19	Washer
20	Flange Nut
21	Axle
22	Flat Washer
23	Wheel Assembly
24	R- Clip, Dowel Pin
25	Frame Components
26	Brackets, Rubber Foot Pad

# FUEL TANK DIAGRAM

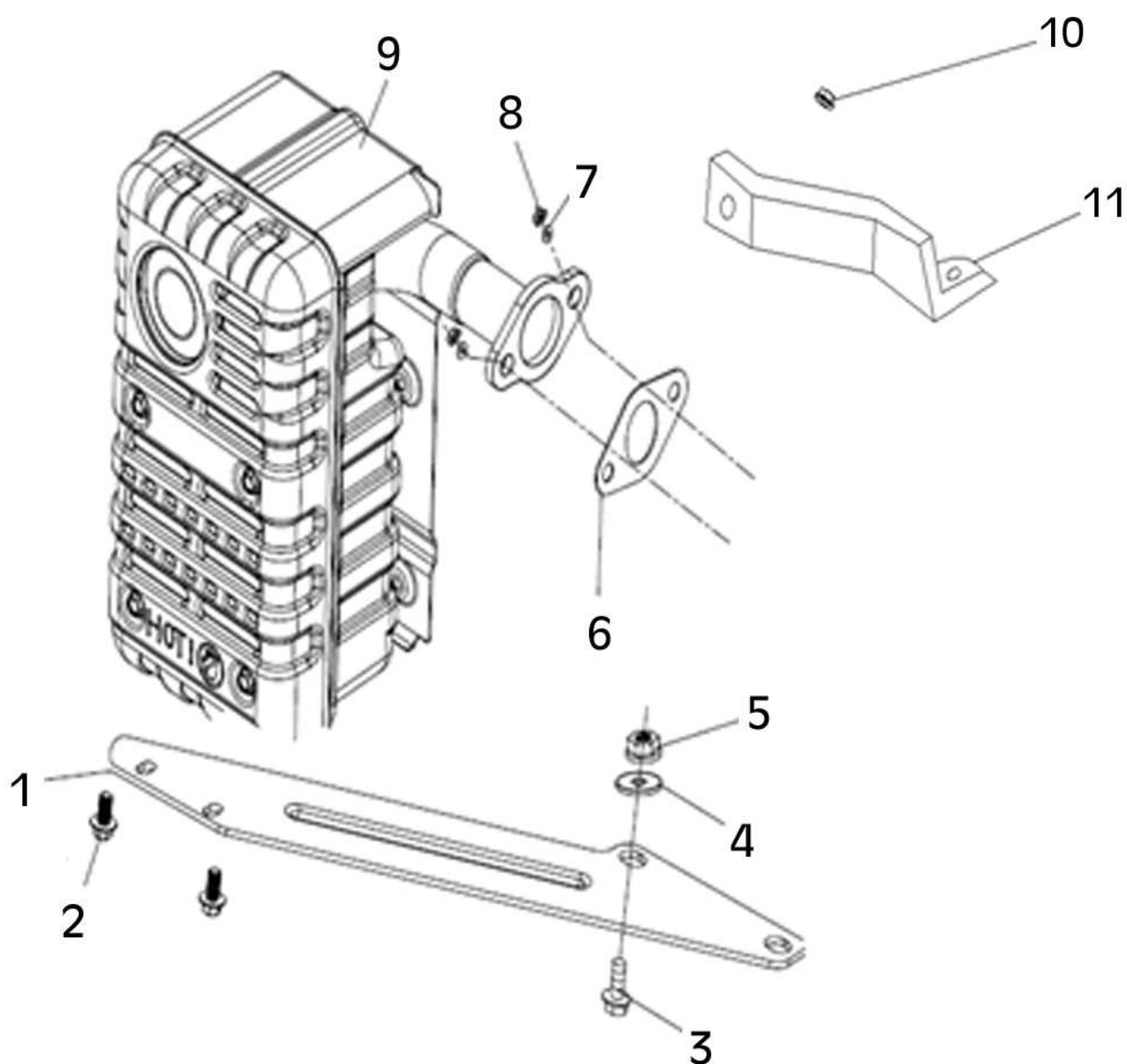


No	Description
01	Fuel Tank Cap
02	Fuel Filter
03	Fuel Level Gauge
04	Flange Bolt
05	Fuel Tank Washer

No	Description
06	Bushing
07	Fuel Tank Rubber Mat
08	Fuel Valve
09	Clamp
10	Fuel Pipe



## MUFFLER/EXHAUST DIAGRAM



No	Description
01	Support Bracket
02	Flange Bolt
03	Flange Bolt
04	Washer
05	Flange Nut
06	Muffler Gasket

No	Description
07	Spring Washer
08	Hex Nut
09	Muffler
10	Flange Nut
11	Air Cleaner Bracket
12	

# DECLARATION OF CONFORMITY - UKCA



## DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following legislation: The following standards have been applied to the product(s):

Noise Emission in the Environment by Equipment for use Outdoors Regulations 2001  
EN 55012:2007+A1:2009, IEC 62321-7-1:2015, IEC 62321-7-2:2017, EN ISO 8528-13:2016,  
The Batteries and Accumulators (Placing on the Market) Regulations 2008  
IEC 62321-3-1:2014, EN ISO 3744:1995, ISO 8528-10:1998, EN 60204-1:2018,  
The Electromagnetic Compatibility Regulations 2016  
IEC 62321-1:2013, IEC 62321-2:2014, IEC 62321-4:2014, IEC 62321-5:2014,  
The Supply of Machinery (Safety) Regulations 2008  
IEC 62321-6:2015, IEC 62321-8:2017  
The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic  
Equipment Regulations 2012

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned legislation has been compiled and is available for inspection by the relevant enforcement authorities.

The UKCA mark was first applied in: 2023

<b>Manufacturer:</b>	Clarke International Ltd, Hemnall Street, Epping, Essex, CM16 4LG, United Kingdom	<b>Notified Body:</b>	Vericert S.R.L. (ID Number: 1878), Via L. Masotti, 5 - Fornace Zarattini - 48124 Ravenna (RA), Italy
<b>Product Description:</b>	Generator	<b>Assessment Procedure:</b>	Annex VI of above noise legislation
<b>Model Number(s):</b>	PG9500ADVES	<b>Measured LWA:</b>	94 dB
<b>Serial/Batch Number:</b>	Refer to product/packaging label	<b>Guaranteed LWA:</b>	97 dB
<b>Document Holder:</b>	Alan Pond	<b>Signed:</b>	
<b>Date of Issue:</b>	05/09/2024		J.A. Clarke Director

PG9500ADVES UKCA Clarke DOC 090524

Page 1 of 1

# DECLARATION OF CONFORMITY - CE



## DECLARATION OF CONFORMITY


This is an important document and should be retained.

We hereby declare that this product(s) complies with the following legislation: The following standards have been applied to the product(s):

2000/14/EC	Outdoor Noise Directive	EN 55012:2007+A1:2009, IEC 62321-7-1:2015, IEC 62321-7-2:2017, EN ISO 8528-13:2016,
2006/66/EC	Battery Directive	IEC 62321-3-1:2014, EN ISO 3744:1995, ISO 8528-10:1998, EN 60204-1:2018,
2014/30/EU	Electromagnetic Compatibility Directive	IEC 62321-1:2013, IEC 62321-2:2014, IEC 62321-4:2014, IEC 62321-5:2014,
2006/42/EC	Machinery Directive	IEC 62321-6:2015, IEC 62321-8:2017
2011/65/EU	Restriction of Hazardous Substances (RoHS) Directive	

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned legislation has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2023

<b>Manufacturer:</b>	Clarke International Ltd, Fitzwilliam Hall, Fitzwilliam Place, Dublin 2, Republic of Ireland	<b>Notified Body:</b>	Vericert S.R.L. (ID Number: 1878), Via L. Masotti, 5 - Fornace Zarattini - 48124 Ravenna (RA), Italy
<b>Product Description:</b>	Generator	<b>Assessment Procedure:</b>	Annex VI of above noise legislation
<b>Model Number(s):</b>	PG9500ADYES	<b>Measured LWA:</b>	94 dB
<b>Serial/Batch Number:</b>	Refer to product/packaging label	<b>Guaranteed LWA:</b>	97 dB
<b>Document Holder:</b>	Alan Pond	<b>Signed:</b>	
<b>Date of Issue:</b>	05/09/2024		J.A. Clarke Director

# A SELECTION FROM THE VAST RANGE OF

# Clarke®

## QUALITY PRODUCTS



### AIR COMPRESSORS

From DIY to industrial, Plus air tools, spray guns and accessories.

### GENERATORS

Prime duty or emergency standby for business, home and leisure.

### POWER WASHERS

Hot and cold, electric and engine driven - we have what you need

### WELDERS

Mig, Arc, Tig and Spot. From DIY to auto/industrial.

### METALWORKING

Drills, grinders and saws for DIY and professional use.

### WOODWORKING

Saws, sanders, lathes, mortisers and dust extraction.

### HYDRAULICS

Cranes, body repair kits, transmission jacks for all types of workshop use.

### WATER PUMPS

Submersible, electric and engine driven for DIY, agriculture and industry.

### POWERTOOLS

Angle grinders, cordless drill sets, saws and sanders.

### STARTERS/CHARGERS

All sizes for car and commercial use.



## PARTS & SERVICE:

## 0208 988 7400

### Parts Enquiries

[Parts@clarkeinternational.com](mailto:Parts@clarkeinternational.com)

### Servicing & Technical Enquiries

[Service@clarkeinternational.com](mailto:Service@clarkeinternational.com)

SALES: UK 01992 565333 or Export 00 44 (0)1992 565335

**Clarke®** INTERNATIONAL Hemnall Street, Epping, Essex CM16 4LG  
[www.clarkeinternational.com](http://www.clarkeinternational.com)