

Clarke®



GENERATOR

MODEL NO: DG6000DVES

PART NO: 8675000

OPERATION & MAINTENANCE INSTRUCTIONS



LS1216

INTRODUCTION

Thank you for purchasing this CLARKE Generator.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

GUARANTEE

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required 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.

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GENERAL SAFETY

Read these safety instructions before using the generator.



WARNING: POISONOUS GAS. GENERATORS GIVE OFF CARBON MONOXIDE, A POISONOUS GAS THAT CAN KILL YOU QUICKLY. YOU CANNOT SMELL IT, SEE IT, OR TASTE IT.

- ONLY run the generator outdoors and away from air intakes, open windows and garages.
- Never use inside homes, garages, or sheds, EVEN IF you run a fan or open doors and windows.

If you start to feel sick, dizzy, or weak while using the generator, shut it off and get to fresh air RIGHT AWAY. See a doctor. You may have carbon monoxide poisoning.



WARNING: THE EXHAUST FROM THIS PRODUCT CONTAINS CHEMICALS KNOWN TO BE CARCINOGENIC



WARNING: THIS GENERATOR MAY EMIT HIGHLY FLAMMABLE FUEL VAPOURS, WHICH CAN CAUSE SEVERE BURNS OR EVEN DEATH. A NEARBY OPEN FLAME CAN LEAD TO EXPLOSION EVEN IF NOT DIRECTLY IN CONTACT WITH FUEL.

- Do not operate near open flame. Do not smoke near the generator.
 - Always operate on a firm, level surface.
 - Always turn the generator off before refueling and allow the generator to cool for at least 2 minutes before removing the fuel cap. Loosen cap slowly to relieve pressure in the tank.
 - Do not overfill the fuel tank. Diesel fuel may expand during operation. Do not fill to the top of the tank.
 - Always check for spilled fuel before operating.
 - Empty the fuel tank before storing or transporting the generator.
 - Before transporting, turn fuel valve to the off position.
-



WARNING: THIS GENERATOR PRODUCES HIGH VOLTAGES, WHICH CAN RESULT IN ELECTROCUTION.

- ALWAYS ground the generator before using it. (See “Step 5-Ground the Generator” on page 14.)
- Do not use in rainy or wet conditions.
- Do not touch bare wires or sockets (outlets).
- Do not allow children or non-qualified persons to operate.

WARNING: NEVER CONNECT A GENERATOR DIRECTLY TO ANY EXISTING ELECTRICAL BUILDING CIRCUIT. THE GENERATOR CAN BACKFEED INTO POWER LINES AND ELECTROCUTE NEARBY ELECTRICAL REPAIR WORKERS.



WARNING: THIS GENERATOR PRODUCES HEAT WHEN RUNNING. TEMPERATURES NEAR THE EXHAUST CAN EXCEED 150° F (65° C).

- Do not touch hot surfaces. Pay attention to warning labels on the generator denoting hot parts of the machine.
 - Allow the generator to cool for several minutes after use before touching the engine or areas which get hot during use.
-



CAUTION: MISUSE OF THIS GENERATOR CAN DAMAGE IT OR SHORTEN ITS LIFE.

- Use the generator only for its intended purpose.
 - Allow the generator to run for several minutes before connecting electrical devices.
 - Shut off and disconnect any malfunctioning devices from the generator.
 - Do not exceed the wattage capacity of the generator by plugging in more electrical devices than the unit can handle.
 - Do not turn on electrical devices until after they are connected to the generator.
 - Disconnect all electrical devices from the generator before stopping the generator.
-

POSITIONING THE GENERATOR

1. **Always** leave a least a 1M gap between the generator and any surrounding structures.
2. **Always** ensure the generator is on dry level surface.
3. **Always** ensure the surrounding area is free from any material that could burn or be damaged by heat.
4. **Never** move or tilt the generator whilst it is running.
5. **Always** make sure that the wheel brakes are engaged during use.










FIRE PREVENTION

1. **Always** switch the engine OFF when refuelling.
2. **Always** refuel away from any source of heat.
3. **Always** refuel in a well ventilated area.
4. **Never** overfill the tank, fill to the level specified.
5. **Never** smoke whilst refuelling, and avoid smoking or using a naked flame near the generator.
6. **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.

ADDITIONAL SAFETY RULES FOR GENERATORS

1. **Always** ensure the applied load does not exceed the generator rating. Overloading the generator is dangerous and could cause serious damage.
2. **Always** disconnect any plugs from the generator when carrying out any maintenance.
3. **Never** allow the generator to run out of fuel when a load is connected.
4. **Never** allow the generator air vents to become blocked.

SAFETY SYMBOLS

	<p>Caution - The user should be aware of a general hazard</p>		<p>Read Instruction manual before use</p>
	<p>Dangerous voltage</p>		<p>Corrosive material</p>
	<p>Flammable</p>		<p>Explosive risk</p>
	<p>Hot Surface - Do not touch</p>		<p>Always wear suitable ear protection</p>
	<p>Poisonous fumes - Do not use the generator in an enclosed space.</p>		

UNPACKING AND ASSEMBLY

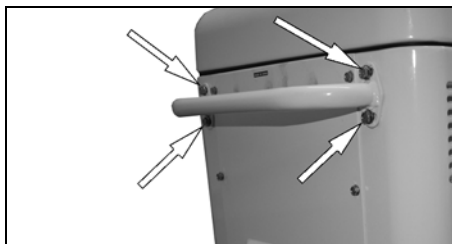
Unpack your generator and check to ensure the following items are present. Should there be any deficiency or damage caused during transit contact your Clarke dealer immediately.

1 x 5 kW Dual Voltage Diesel Generator	2 x Handles c/w fixings
1 x 32 Amp IEC 60309-2 Plug, Blue (230 V)	1 x Lead/Acid Battery (installed)
1 x 16 Amp IEC 60309-2 Plug, Yellow (115 V)	1 x 12 Volt Battery Charging Cable
1 x 32 Amp IEC 60309-2 Plug, Yellow (115 V)	1 x Filler Tube (for engine oil)
1 x 5 mm Hexagon key	2 x Ignition Key
1 x Double open-ended Spanner; 10/12 mm	1 x Cabinet Lid lock Key

FITTING THE HANDLES

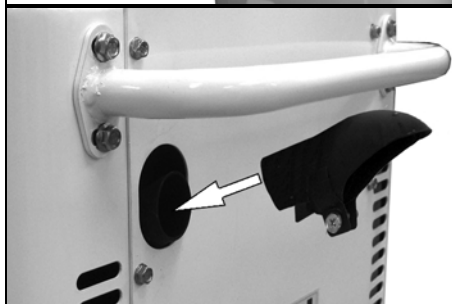
1. Secure each handle using four bolts and washers supplied.

NOTE: These handles are for moving the generator on it's wheels, not for lifting the generator.



FITTING THE EXHAUST OUTLET

1. Slide the exhaust deflector into position as shown.



2. Tighten the screw and nut to secure in place.

- Do not overtighten.



BEFORE USING THE GENERATOR

IMPORTANT: Generators should ALWAYS be earthed.

Attach a suitable earth lead to a good earth point - 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.
- The generator is clean and free from fuel or oil spillage.
- The fuel system and connectors are intact and there is no leakage.
- Always use a funnel to fill the fuel tank so as to avoid accidental spillage of fuel. If fuel is spilled it must be removed from the unit before attempting to start the engine.



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.

USING THE GENERATOR FOR THE FIRST TIME

If you are using the generator for the first time, there are a few steps you must take to prepare it for operation. Failure to perform these steps can damage the generator.

STEP 1- CONNECT THE BATTERY



WARNING: DO NOT CONNECT OR DISCONNECT THE BATTERY WHILE THE GENERATOR IS RUNNING.

WARNING: ONLY SERVICE THE BATTERY IN WELL VENTILATED AREAS.

WARNING: WEAR PROTECTIVE CLOTHING AND SAFETY GLASSES WHEN SERVICING THE BATTERY.

WARNING: KEEP OUT OF REACH OF CHILDREN.

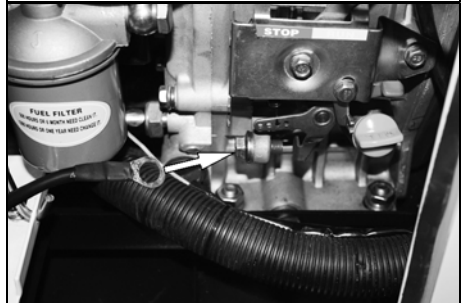
WARNING: DO NOT TILT THE GENERATOR WITH THE BATTERY INSTALLED.

The generator comes with the battery disconnected for safety, which must be reconnected before use as follows.

1. Open the front panel.
2. Remove the protective covering from the free end of the negative battery cable.



3. Attach the free end of the negative cable to the point indicated on the right and secure the connection.
4. If you do not plan to use the generator for some time, you should disconnect the negative battery cable before storage.
 - After disconnecting the cable, cover the free end with an insulator such as electrical tape.

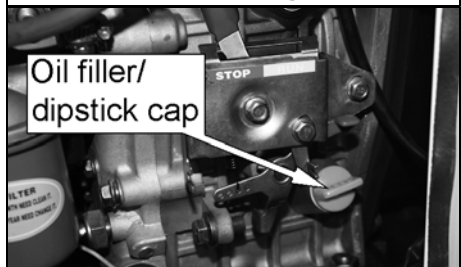


STEP 2- ADD OIL

The crankcase of the new generator engine contains no oil. The correct amount of oil must be added before operating the generator for the first time.

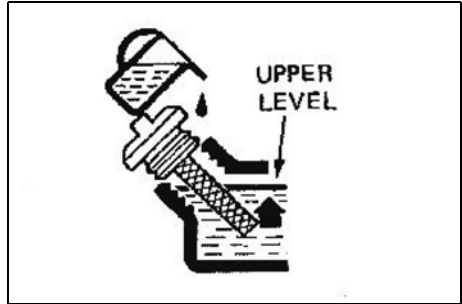
To add oil, follow these steps:

1. Make sure the generator is on a level surface and open the front panel.
2. Unscrew the oil filler/dipstick cap from the engine.
3. Using a funnel, add the appropriate amount of oil into the crankcase.
 - The oil capacity of the engine crankcase is approximately 1.65 litres.



- For general use, we recommend SAE 5W-40 oil.

4. The crankcase is full when the oil level reaches the lower lip of the opening of the oil filler hole.
5. Replace and tighten the oil filler cap.



STEP 3- ADD DIESEL FUEL



WARNING: DIESEL FUEL AND DIESEL FUMES ARE HIGHLY FLAMMABLE. A NEARBY OPEN FLAME CAN LEAD TO AN EXPLOSION EVEN IF NOT DIRECTLY IN CONTACT WITH THE FUEL.

- Do not operate near an open flame. Do not smoke near the generator.
- Always operate on a firm, level surface.
- Always turn the generator off before refueling. Allow the generator to cool for at least 2 minutes before removing the fuel cap. Loosen cap slowly to relieve any pressure in tank.
- Do not overfill the fuel tank. Fuel may expand during operation. Do not fill to the top of the tank.
- Always check for spilled fuel before operating.
- Before transporting, turn fuel valve to the off position.

This generator runs on regular diesel fuel. To add fuel:

1. Make sure the generator is on a level surface.
2. Lift open the top cover.



3. Unscrew fuel cap.

- Check that the strainer located in the mouth of the fuel tank, is free from contaminants.

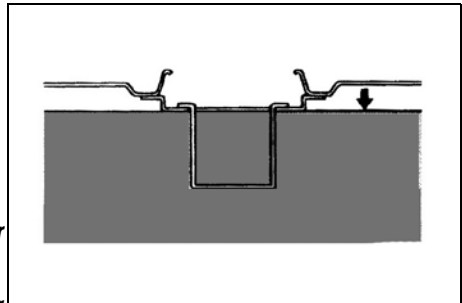
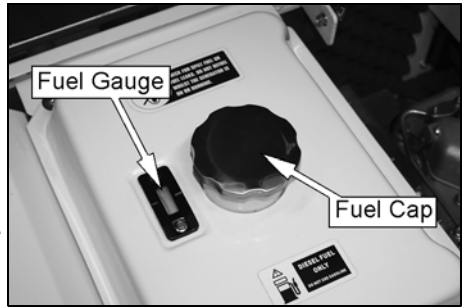
4. Slowly add diesel fuel to the fuel tank through the built-in strainer.

- Do not let dirt or water get in the fuel tank.
- Be careful not to overfill.
- The capacity of the fuel tank is 16 L.
- The fuel gauge on top of the tank indicates the fuel level.
- NOTE: Fuel can expand. Do not fill the fuel tank to the very top.

5. Refit the fuel cap and wipe up any spilled fuel with a dry cloth.

IMPORTANT: Use diesel fuel only. Never use petrol.

IMPORTANT: Avoid getting dirt or water in the fuel tank.

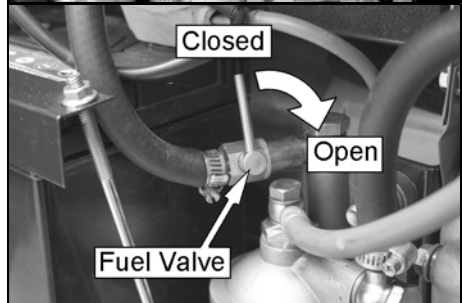
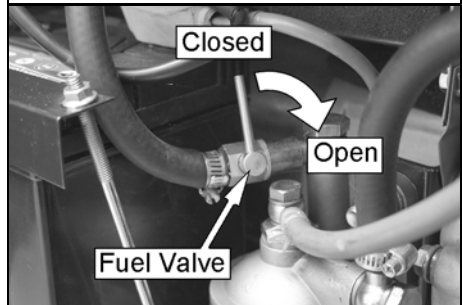


STEP 4- BLEED THE FUEL LINE

When adding diesel fuel for the first time or after the fuel tank has been emptied or drained, air can get trapped in the fuel line between the fuel tank and the engine. After adding fuel, you must bleed the fuel line of this trapped air. To bleed the fuel line:

1. Open the front panel.
2. Turn the fuel valve to the "closed" position.
3. Loosen the clamp that holds the fuel line to the engine.
4. Detach the fuel line from the engine and place the end of the detached fuel line over a bucket to catch fuel as it runs out.
5. Turn the fuel valve to the "open" position.
6. When fuel starts running out of the fuel line in a steady stream, reattach the fuel line to the engine.

NOTE: Do not close the fuel valve until you have reattached the fuel line.



7. After reattaching the fuel line to the engine, turn the fuel valve to the “closed” position until you are ready to start the generator.



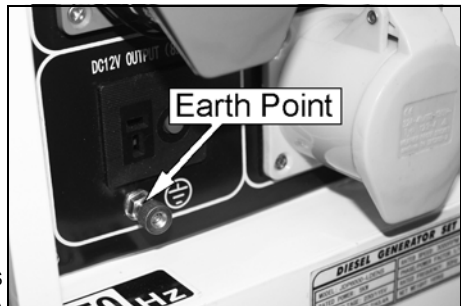
CAUTION: IF YOU ARE IN ANY REGARDING THIS PROCEDURE CONSULT A QUALIFIED DIESEL FITTER/MECHANIC.

STEP 5- GROUND THE GENERATOR



WARNING: FAILURE TO PROPERLY GROUND THE GENERATOR CAN RESULT IN ELECTROCUTION

1. Ground the generator by connecting a suitable grounding wire to the earth point.
 - A generally acceptable grounding wire is a No. 12 AWG (American Wire Gauge) stranded copper wire.
2. Connect the other end of the grounding wire to a copper or brass grounding rod that is driven into the earth.



SUBSEQUENT USE OF THE GENERATOR

If this generator has been used before,

Carry out the following steps.

1. “Step 2- Add Oil” on page 10
2. “Step 3- Add Diesel Fuel” on page 11
3. “Step 4- Bleed the Fuel Line” on page 13 (if the fuel tank has been emptied or allowed to run dry)
4. “Step 5- Ground the Generator” on page 14

IMPORTANT: At this point you should be familiar with the procedures described in “Using the Generator for the First Time” on page 9. If you have not yet read this section, go back and read it now.

STARTING THE GENERATOR

Before starting the generator, make sure you have read and performed the steps in the "Preparing the Generator for Use" section of this manual.



WARNING: GENERATORS GIVE OFF CARBON MONOXIDE, A POISONOUS GAS THAT CAN KILL YOU QUICKLY. YOU CANNOT SMELL IT, SEE IT, OR TASTE IT.

- ONLY run the generator outdoors and away from air intakes, open windows, and garages.
- Never use inside homes, garages, or sheds, EVEN IF you run a fan or open doors and windows.

If you start to feel sick, dizzy, or weak while using the generator, shut it off and get to fresh air RIGHT AWAY. See a doctor. You may have carbon monoxide poisoning.



WARNING: THIS GENERATOR PRODUCES HIGH VOLTAGES, WHICH CAN RESULT IN ELECTROCUTION.

- ALWAYS ground the generator before using it (See "Step 5-Ground the Generator" on page 14.)
- This generator should only be used to connect electrical devices, either directly or with an extension cable. NEVER connect the generator directly to a building's electrical system without a transfer switch. Such a connection must comply with local electrical laws, and should be done by a qualified electrician. Failure to comply can create a backfeed, which may result in serious injury or death to utility workers.
- Do not use in rainy or wet conditions.
- Do not allow children or non-qualified persons to operate.



CAUTION: DISCONNECT ALL ELECTRICAL LOADS FROM THE GENERATOR BEFORE ATTEMPTING TO START.

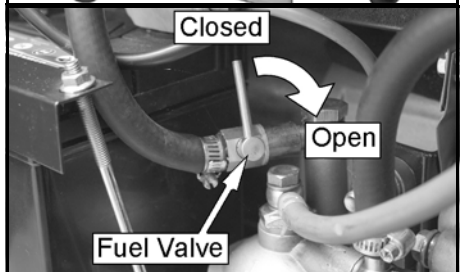
CAUTION: ALWAYS MAKE SURE THE WHEEL BRAKES ARE ENGAGED DURING USE.

TO START THE GENERATOR PERFORM THE FOLLOWING STEPS:

1. Make sure no electrical devices are connected to the generator.
 - Such devices can make it difficult for the engine to start.
2. Check that the generator is properly grounded (See "Step 5- Ground the Generator" on page 14.)
3. Check the oil and fuel levels See page 10 & page 11.
4. If the generator has run out of fuel or been emptied of fuel since the last use, or if this is the first time using the generator, be sure to bleed the fuel line (See "Step 4- Bleed the Fuel Line" on page 13.).
5. Open the front panel and locate the fuel valve.



6. Turn the fuel valve to the "open" position.



7. Make sure that the start/run lever is in the RUN position.

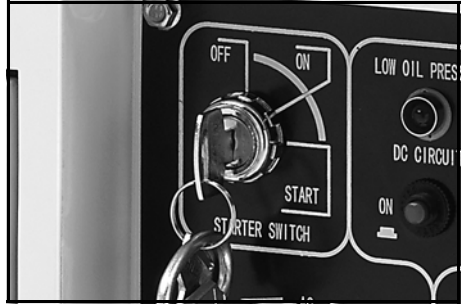


8. Set the engine switch key to the "on" position.
9. Turn the engine key to the "start" position for about 10 seconds or until the engine starts.

NOTE: If the engine does not start within 10 seconds, release the key and wait 15 seconds, then try again.

NOTE: After repeated unsuccessful attempts to start the engine, please consult the troubleshooting guide on page 30 before trying again.

10. Allow the generator to run for several minutes before attempting to connect any electrical devices.



USING THE GENERATOR



WARNING: NEVER CONNECT A GENERATOR DIRECTLY TO ANY EXISTING ELECTRICAL BUILDING CIRCUIT. THE GENERATOR CAN BACKFEED INTO POWER LINES AND ELECTROCUTE NEARBY UTILITY WORKERS.

Allow the generator to run several minutes before connecting electrical devices.

MAXIMUM WATTAGE

The total running wattage required by all of the electrical devices connected to a generator should not exceed the rated wattage of the generator.

To calculate the total wattage requirement of the electrical devices you wish to connect, find the rated (or running) wattage of each device and add them together.

If this number exceeds the rated wattage of the generator (5kW), DO NOT connect all these devices. Select a combination of electrical devices, which has a total rated wattage lower than or equal to the rated wattage of the generator.

Once the decision has been made on what electrical devices will be powered by the generator, connect these devices from highest power to lowest.

SOME NOTES ABOUT POWER CABLES

When using extension cables, allow for a slightly higher rated wattage requirement by the electrical device. See the table below for recommended cables based on the power requirement of the electrical device.

Device Requirements			Max. Cable Length (ft.) by Wire Gauge				
Amps	Watts (115V)	Watts (230 V)	#8 wire (3.26 mm)	#10 wire (2.5 mm)	#12 wire (2 mm)	#14 wire (1.6 mm)	#16 wire (1.3 mm)
5	600	1200	NR	500	300	200	125
7.5	900	1800	NR	350	200	125	100
10	1200	2400	NR	250	150	100	50
15	1800	3600	NR	150	100	65	NR
20	2400	4800	175	125	75	50	NR
25	3000	6000	150	100	60	NR	NR
30	3600	7200	125	65	NR	NR	NR

*NR = not recommended.



CAUTION: IF YOU ARE IN ANY DOUBT, PLEASE CONSULT A QUALIFIED ELECTRICIAN.

AC USAGE

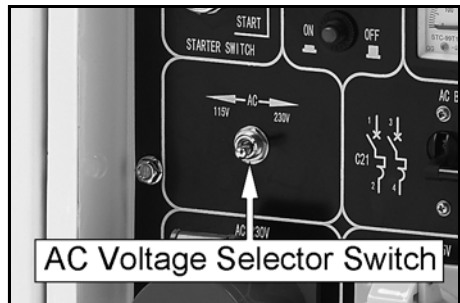


CAUTION: PLEASE FAMILIARISE YOURSELF WITH THE CONTROL PANEL BEFORE CONNECTING ELECTRICAL DEVICES.

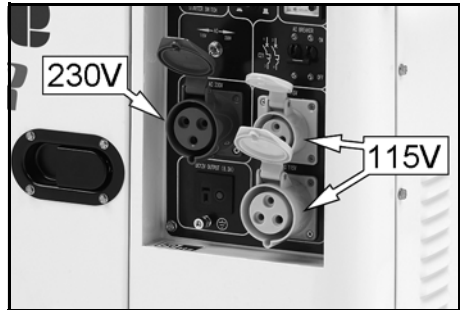
CAUTION: DO NOT CONNECT 60HZ OR 3-PHASE LOADS TO THE GENERATOR.

1. Move the voltage selector switch to the desired position.

- Move the switch to the left to use the 115 Volt sockets.
- Move the switch to the right to use the 230 Volt socket.



2. Turn off each device before plugging in.
 - Connect 115 Volt, single phase, 50 Hz loads to the 115 Volt sockets.
 - Connect 230 Volt, single phase, 50Hz loads to the 230 Volt socket.
 - Make sure that you attach appliances to the correct socket.



AC BREAKER

If the AC Breaker activates;

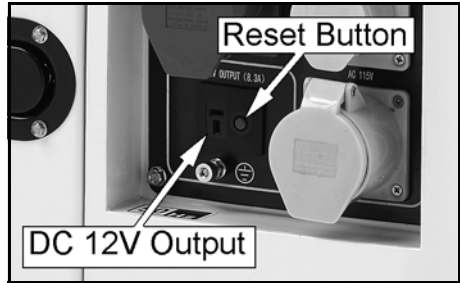
1. Remove the load from the generator.
2. Reset the breaker.
3. Make sure that the generator is not being overloaded.



DC USAGE

The generator is equipped with a DC terminal. This terminal is not intended to charge automotive batteries.

1. Start the generator. See page 16
2. Make sure any appliance is turned off before connecting it to the generator.
3. Connect the 12V appliance (max 8.3A) to the generator.

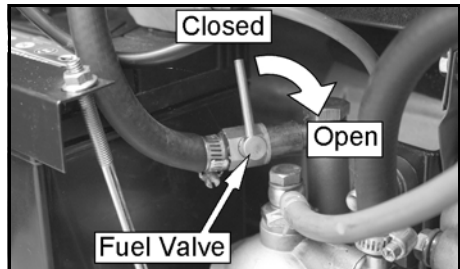


DC OVERLOAD PROTECTOR

If the DC overload protector activates, wait for a few minutes and then press the reset button shown on the right of the DC12V Output.

STOPPING THE GENERATOR

1. Turn off, then unplug all connected electrical devices.
2. Allow the generator to run for several more minutes with no electrical devices connected. This helps stabilize the temperature of the generator.
3. Turn the engine switch key to the "off" position. Remove the key.
4. Turn the fuel valve to the "closed" position.



WARNING: ALLOW THE GENERATOR TO COOL FOR SEVERAL MINUTES BEFORE TOUCHING AREAS THAT BECOME HOT DURING USE.

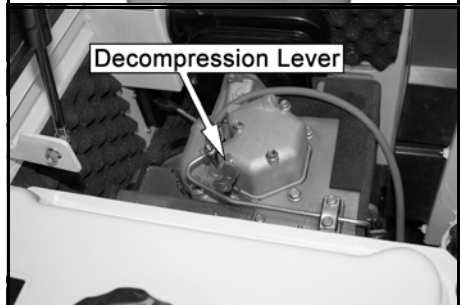


CAUTION: LEAVING THE BATTERY CONNECTED FOR LONG PERIODS OF TIME WITHOUT USING THE GENERATOR CAN CAUSE THE BATTERY TO DRAIN. DISCONNECT THE NEGATIVE BATTERY CABLE FROM THE BATTERY FOR STORAGE. AFTER DISCONNECTING THE CABLE, COVER THE FREE END WITH AN INSULATOR SUCH AS ELECTRICAL TAPE.

MANUAL STARTING

If for any reason the engine will not start using the above procedure, you can start your generator manually by carrying out the following.

1. Follow steps 1-7 on page 16.
2. Set the ignition key to the ON position.
3. Lift open the top cover.
4. Set the decompression lever to the down position.
5. Pull the starting handle lightly until you start to feel resistance. Then pull sharply to start the engine.
 - You may have to do this more than once.

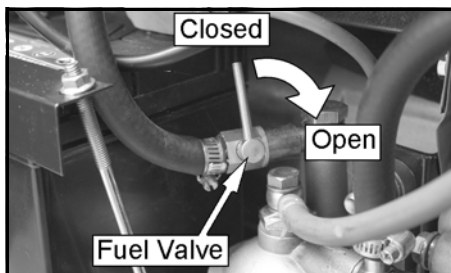


WARNING: ONCE THE GENERATOR HAS STARTED, RELEASE THE STARTING HANDLE SLOWLY TO AVOID INJURY/DAMAGE AS IT RECOILS.

- Once started, return the decompression lever to its raised position
6. Allow the generator to run for several minutes before attempting to connect any electrical devices.

MANUAL STOPPING

1. Turn off, then unplug all connected electrical devices.
2. Set the start/run lever to the STOP position.
3. Allow the generator to run for several more minutes with no electrical devices connected. This helps stabilize the temperature of the generator.
4. Turn the engine switch key to the "off" position. Remove the key.
5. Turn the fuel valve to the "closed" position.



WARNING: ALLOW THE GENERATOR TO COOL FOR SEVERAL MINUTES BEFORE TOUCHING AREAS THAT BECOME HOT DURING USE.

MAINTENANCE

Proper routine maintenance of the generator will help prolong its life. Please perform maintenance checks and operations according the schedules, See page 24.



CAUTION: NEVER PERFORM MAINTENANCE OPERATIONS WHILE THE GENERATOR IS RUNNING.

CLEANING THE GENERATOR

Always try to use the generator in a clean, cool, and dry place. When the generator becomes dirty, clean the exterior with one or more of the following:

- a damp cloth
- a soft brush
- a vacuum cleaner
- compressed air

Never clean the generator with a bucket of water or a hose. Water can get inside the generator, causing a short circuit or corrosion.

MAINTENANCE SCHEDULE

RECOMMENDED USER MAINTENANCE SCHEDULE

Operation	Before each use	First 20 hrs	Every 100 hrs	Every 500 hrs	Every 1000 hrs
Check fuel level	x				
Check oil level	x				
Check for oil leakage	x				
Check and tighten loose parts	x				
Change engine oil		x	x		
Clean fuel filter				x	replace
Clean oil filter				replace if necessary	
Replace air filter element			if using at dusty areas	x	
Check battery	Monthly, recharge if needed				

RECOMMENDED PROFESSIONAL MAINTENANCE SCHEDULE

NOTE: Special tools and skills are required, These maintenance operations should be done by professionals.

Maintenance	Every 6 months or 500hrs	Every year or 1000 hrs	Specification
Tighten engine cylinder head bolt	x		To 55-60 NM
Check fuel injection pump	x		
Check fuel injection nozzle	x		
Check fuel pipe	x (replace if necessary)		
Adjust valve clearance for intake and exhaust valves	x		To 0.10~0.15 mm
Lap intake and exhaust valves		x	
Replace piston rings		x	

CHECKING THE OIL

The generator is equipped with an automatic shutoff to protect it from running with low oil. Nonetheless, the oil level should be checked before each use to ensure that the engines crankcase has sufficient lubrication. To check the oil level:

1. Make sure the generator is on a level surface, and open the front panel



2. Locate the oil filler/dipstick cap. Unscrew the oil filler/dipstick cap.
3. With a dry cloth, wipe the oil off the stick on the inside of the cap.
4. Insert the dipstick as if you were reinstalling the cap then remove again.



- There should now be oil on the dipstick. If there is no oil on or oil only at the very end of the dipstick, you should add oil until the engine crankcase is filled (when the oil level has reached the lower lip of the oil fill opening).

5. Make sure that you refit and secure the oil filler cap tightly. Close the front panel when finished.

CHANGING/ ADDING OIL

Check the oil level before each use and change the oil according to the maintenance schedule See page 24. When the oil level is low, add oil until the crankcase is filled (the oil level reaches the lower lip of the oil filler opening). The oil capacity of the generator engine is 1.65 litres.

The engine oil should be changed after the first 20 hours of usage. After that, change oil every 100 hours of use or every three months, whichever comes first. To drain the oil from the generator, perform the following steps:

1. The generator case has an opening underneath it to allow oil to drain. Place a drain pan underneath this opening to catch the used oil.

- It is better to drain the oil when the engine is still warm.

2. Using a suitable wrench, remove the oil drain plug.

- Allow all the oil to drain from the generator.

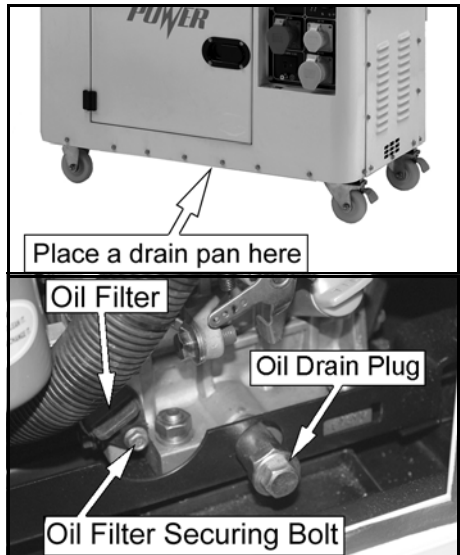
3. Refit the oil drain plug and tighten securely.

4. Remove the oil filter securing bolt then the oil filter.

5. Clean and refit the filter replacing the oil filter securing bolt to secure it in place.

NOTE: Never dispose of used motor oil with household rubbish or down a drain. Please call your local recycling center or auto garage to arrange oil disposal.

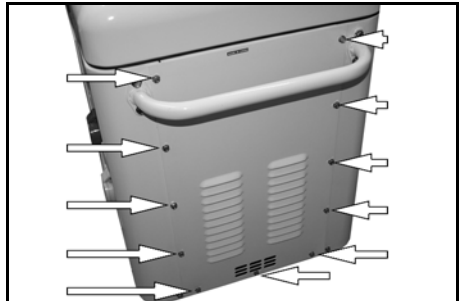
6. To refill the crankcase with oil, See "Step 2- Add Oil" on page 10.



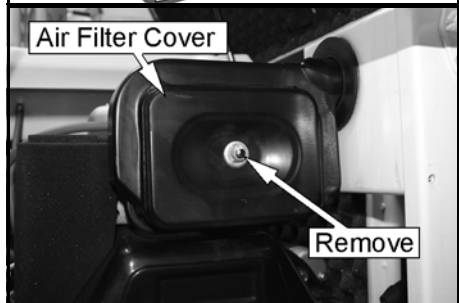
REPLACING THE AIR FILTER

Routine maintenance to the air filter helps maintain proper airflow. Replace the air filter according to the following steps every 250 or 500 hours or more often when using the generator in a dusty area.

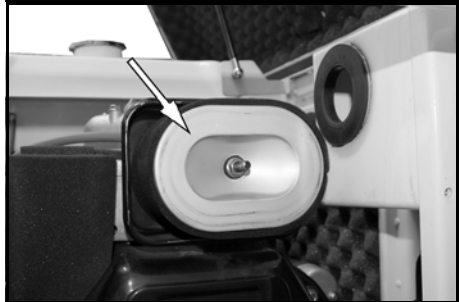
1. Remove the access panel shown by removing the bolts with a 10mm wrench.



2. Remove the nut holding the air filter cover.
3. Remove the air filter cover.



4. Remove the used air filter element and replace with a new element.
5. Refit the air filter cover, tighten the nut, then refit the access panel.

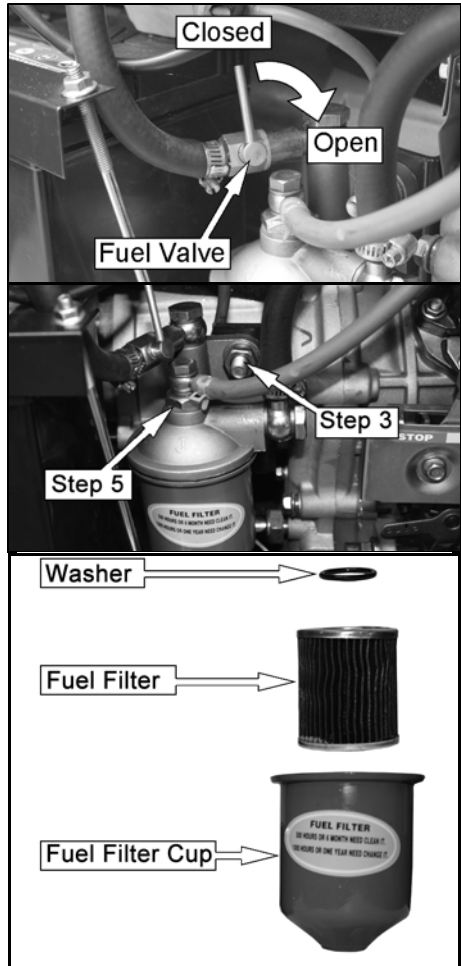


CAUTION: NEVER TRY TO WASH OR REUSE THE AIR FILTER ELEMENT. ALWAYS REPLACE WITH A NEW ONE. NEVER RUN THE ENGINE WITH BROKEN AIR FILTER ELEMENT OR WITHOUT ONE AT ALL. THIS CAN CAUSE SERIOUS DAMAGE TO THE ENGINE.

CLEAN THE FUEL FILTER

The fuel filter helps prevent dirt in the fuel from entering the engine. Clean the fuel filter every 500 hours, or sooner if necessary.

1. Open the front door panel.
2. Turn the fuel valve to the "off" position.
3. Remove the bolt holding the fuel filter to the frame using a 13 mm wrench.
4. Pull the fuel valve/filter assembly out of the enclosure.
 - Place a bucket under the assembly to catch any fuel.
5. Use a wrench to undo the nut that holds the fuel filter cup, and remove the fuel filter cup, fuel filter and washer.
6. Clean the cup of all sediment using a rag or brush.
7. Replace the fuel filter element, and washer if required.
8. Reinstall the fuel filter element, the filter cup, and the fuel-valve/filter assembly.
9. Add fresh fuel to the fuel tank if requires and bleed the fuel line as described See page 13.



WARNING: NEVER DRAIN FUEL WHILE THE ENGINE IS RUNNING. STORE FUEL ONLY IN APPROVED CONTAINERS. STORE FUEL IN A WELL-VENTILATED AREA FREE FROM OPEN FLAMES OR SPARKS.

CHANGING THE BATTERY

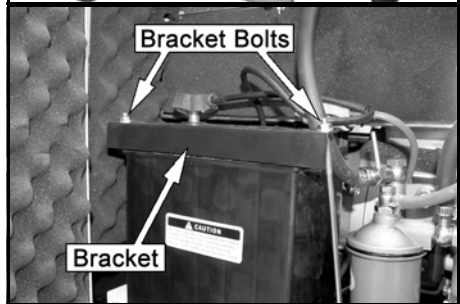


WARNING: KEEP OUT OF REACH OF CHILDREN.

WARNING: DO NOT CONNECT OR DISCONNECT THE BATTERY WHILE THE GENERATOR IS RUNNING.

If the generator will not start, the battery may be flat. The battery can be recharged. However, if your battery will no longer hold a charge, you may need to replace it. To replace the battery:

1. Open the front panel.
2. Disconnect the positive (+) and negative (-) cables from the battery.
3. Remove the metal bracket that secures the battery inside the generator.
4. Install the replacement battery and secure to the generator with the bracket.
 - Use a 12V battery which has an output of at least 24AH.
5. Connect the positive and negative cables to the new battery.



STORAGE / TRANSPORT PROCEDURES



CAUTION: NEVER PLACE ANY TYPE OF STORAGE COVER ON THE GENERATOR WHILE IT IS STILL HOT.

When transporting or storing the generator for extended periods of time:

- Empty the fuel tank (see steps 1-5 on "Clean the Fuel Filter" on page 28.
- Do not obstruct any ventilation openings.
- Keep the generator in a clean, cool, and dry area.

TROUBLESHOOTING

Problem	Cause	Solution
Engine will not start	No fuel in engine	Turn fuel valve to "open" position (handle pointing down)
	Air trapped in the fuel line	Bleed fuel line
	Generator is out of fuel	Add fuel
	Not enough oil in crankcase	Add or replace oil
	Low-oil sensor failure	Add oil, disconnect low-oil sensor, start engine and let run for several minutes, then reconnect the sensor
	Generator is not on level surface	Move generator to a level surface to prevent low oil shutdown from triggering
	Load was connected to the generator	Disconnect all load devices from the generator
	Air cleaner is dirty	Replace air cleaner element
	Battery is discharged	Charge the battery for 2 hours.
	Battery is dead	Replace the battery
	Engine needs maintenance	Get a professional engine tune-up
Engine stops automatically	Generator is out of fuel	Add fuel
	Fuel line is obstructed	Clean fuel tank and fuel filter. Bleed fuel line
	Air filter is dirty	Replace air filter element
	Sudden increase to electrical load.	Decrease the load
Black smoke from exhaust	Generator is overloaded	Decrease load
	Oil in cylinder	Check oil level, drain excessive oil from crankcase
	Not enough air or leaking air.	Replace air cleaner element, check and fix air leakage.
	Fuel injection malfunction	Check injection pressure and spray condition, change nozzle, or call technical support.
White Smoke from exhaust	There is water in diesel fuel	Clean the fuel tank and fuel filter. Change diesel fuel

Generator runs but does not support all electrical devices	Bad electrical device connected to generator.	Try connecting a different device.
	Generator is overloaded	Perform these steps: 1. Turn off all electrical devices. 2. Unplug all electrical devices. 3. Turn off generator. 4. Wait several minutes. 5. Restart generator. 6. Try connecting fewer electrical loads to the generator.
	Short circuit in one of the connected devices.	Try disconnecting any faulty electrical loads.
There is AC output but no DC output	Burnt DC fuse	Replace with 8A fuse
	Diode failure	Replace diode

SPECIFICATIONS

		DG6000DVES
Engine	Engine Model	186FA
	Type	Diesel
	Displacement (cm ³)	418
	Max. power output (HP/rpm)	8.8/3000
	Start system	(Hand Recoil / Electric)
	Fuel tank capacity (L)	16
	Fuel consumption (L/hr.)	1.4
	Maximum run time (h) @75% Load	8.5
	Engine oil capacity (L)	1.65
	Guaranteed sound power (L _{WA} dB)	96
Battery	Battery type	12V / 24Ah
Generator	Rated Frequency (Hz)	50
	AC Output Voltage (V)	230V AC ~1P-50Hz 115V AC ~1P-50Hz
	DC Output Voltage (V)	12V (Max 8.3A)
	Maximum Rated Output Power:	@ 230V AC - 5000W @ 115V AC - 4400W
Dimensions	Length (mm)	1110
	Width (mm)	565
	Height (mm)	770
	Unpacked Weight (kg)	165

DECLARATION OF CONFORMITY



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INTERNATIONAL

Hemnall Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

Product Description: DG6000DVES, Generator, Diesel, 5000W

Model number(s): DG6000DVES

Serial / batch Number: 8675000

Date of Issue: 08/06/2016

(Noise Conformity)

Notified Body: AV Technology Ltd
AVTECH House, Arkle Avenue
Stanley Green Trading Estate
Handforth Cheshire SK9 3 RW

Technical Documentation Holder: A.R. Pond
Clarke International
2a Shrubland Road
London E10 7RB
UK

Conformity Assessment Procedure: to 2000/14/EC Annex VI

Manufacturer: Clarke International

Noise Related Value: 5.0 kW

Measured Sound Power Level: 95 dB

Guaranteed Sound Power Level: 96 dB

DECLARATION OF CONFORMITY



Clarke[®]
INTERNATIONAL

Hemnall Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following directive(s):

- 2006/42/EC *Machinery Directive.*
- 2004/108/EC *Electromagnetic Compatibility Directive.*
- 2006/95/EC *Low Voltage Equipment Directive.*
- 2000/14/EC *Noise Emissions Directive, (amended by 2005/88/EC).*

The following standards have been applied to the product(s):

EN12601:2001, EN60204-1:2006/AC:2010, EN 55014:2007+A1:2009.

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

The CE mark was first applied in: 2010

Signed:



J.A. Clarke
Director

SPARE PARTS LIST

Below is a table of common spare parts. For a full parts list please contact our spare parts department on 020 8988 7400.

Air Filter Element	SJDG6000DVESG07
Recoil Starter	SJDG6000DVESM18
Circuit Breaker AC	SJDG6000DVES07
Circuit Breaker DC	SJDG6000DVES11
Outlet Socket AC	SJDG6000DVES09
Outlet Plug AC	SJDG6000DVES21
Engine Switch	SJDG6000DVES20
Voltmeter	SJDG6000DVES19
Dc Terminal	SJDG6000DVES15
Ignition Key	SJDG6000DVES20A
Oil Depth Gauge	SJDG6000DVESA07
Oil Filter	SJDG6000DVESH09
Fuel Tank Cap	SJDG6000DVESN17
Fuel Tank Inlet Filter	SJDG6000DVESN15
Fuel Filter Element	SJDG6000DVESN04

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PARTS & SERVICE: 0208 988 7400

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