

POWERTEC

PORTABLE POWER SOLUTIONS

PT6600ES PORTABLE GENERATOR

7000W



INSTRUCTION MANUAL

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Introduction

Your new POWERTEC Generator will more than satisfy your expectations. It has been manufactured under stringent quality standards to meet superior performance criteria. You will find your new tool easy and safe to operate, and, with proper care, it will give you many years of dependable service.

CAUTION:

Carefully read through this entire Instruction Manual before using your new POWERTEC Generator. Take special care to heed the Cautions and Warnings.

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

Environmental Protection

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



Scope Of Product

This product is suited for home, camping, emergency power and periodic duty commercial use applications. It will operate most powertools, appliances and lighting.

Description Of Symbols

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



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



Conforms to relevant standards for electromagnetic compatibility.

Specifications

AC Output:	230V AC ~ 50Hz
Rated Power:	6500W
Peak Power:	7000W
Phase:	Single
Power Factor:	COS ϕ = 1
Displacement:	420cc
Engine:	14HP, 4 stroke
No Load Speed:	3000 RPM
Fuel Tank Capacity:	25L
Fuel Type:	Unleaded petrol
Engine Oil Type:	SAE30
Operation Noise Level:	68dBA / 7m
Net Weight:	95kg

Safety Instructions for Power Tools

To use this tool properly, you must observe the safety regulations, the assembly instructions and the operating instructions to be found in this Manual. All persons who use and service the machine have to be acquainted with this Manual and must be informed about its potential hazards. Children and infirm people must not use this tool. Children should be supervised at all times if they are in the area in which the tool is being used. It is also imperative that you observe the accident prevention regulations in force in your area. The same applies for general rules of occupational health and safety.

WARNING:

When using power tools, basic safety precautions should always be taken to reduce the risk of fire, electric shock and personal injury. Also, please read and heed the advice given in the additional important safety instructions.

- 1. Keep the work area clean and tidy.** Cluttered work areas and benches invite accidents and injury.
- 2. Consider the environment in which you are working.** Do not use power tools in damp or wet locations. Keep the work area well lit. Do not expose power tools to rain. Do not use power tools in the presence of flammable liquids or gases.
- 3. Keep visitors away from the work area.** All visitors and onlookers, especially children and infirm persons, should be kept well away from where you are working. Do not let others in the vicinity make contact with the tool or extension cord.
- 4. Store tools safely.** When not in use, tools should be locked up out of reach.
- 5. Do not force the tool.** The tool will do the job better and safer working at the rate for which it was designed.
- 6. Use the correct tool for the job.** Do not force small tools or attachments to do the job best handled by a heavier duty tool. Never use a tool for a purpose for which it was not intended.

7. Dress correctly. Do not wear loose clothing or jewellery. They can be caught in moving parts. Rubber gloves and non-slip footwear are recommended when working outdoors. If you have long hair, wear a protective hair covering.

8. Use safety accessories. Safety glasses and earmuffs should always be worn. A face or dust mask is also required if the drilling operation creates dust.

9. Secure the work piece. Use clamps or a vice to hold the work piece. It is safer than using your hand and frees both hands to operate the tool.

10. Do not overreach. Keep your footing secure and balanced at all times.

11. Look after your tools. Keep tools sharp and clean for better and safer performance. Follow the instructions regarding lubrication and accessory changes. Inspect tool cords periodically and, if damaged, have them repaired by an authorised service facility. Inspect extension cords periodically and replace them if damaged. Keep tool handles dry, clean and free from oil and grease.

12. Remove adjusting keys and wrenches. Check to see that keys and adjusting wrenches are removed from the tool before switching on.

13. Stay alert. Watch what you are doing. Use common sense. Do not operate a tool when you are tired.

14. Check for damaged parts. Before using a tool, check that there are no damaged parts. If a part is slightly damaged, carefully determine if it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, proper mounting and any other conditions that may affect the operation of the tool. A part that is damaged should be properly repaired or replaced by an authorised service facility, unless otherwise indicated in this Instruction Manual.

15. Use only approved parts. When servicing, use only identical replacement parts. Use an authorised service facility to fit replacement parts.

WARNING:

The use of an accessory or attachment, other than those recommended in this Instruction Manual, may present a risk of personal injury.

Save these important safety instructions

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

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

Overfilling the fuel tank – fuel spillage.	Spilled fuel and its vapours can become ignited from hot surfaces or sparks.	Use care in filling the tank to avoid spilling fuel. Make sure fuel cap is secured tightly and check engine for fuel leaks before starting engine. Move generator away from refuelling area or any spillage before starting engine. Allow for fuel expansion. Never refuel with the engine running.
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Risk of injury and property damage when transporting generator		
Hazard	What could happen	How to prevent it
Fire, Inhalation, Damage to Vehicle Surfaces	Fuel or oil can leak or spill and could result in fire or breathing hazard, serious injury or death can result. Fuel or oil leaks can damage carpet, paint or other surfaces in vehicles or trailers.	The generator is equipped with a fuel tap, turn the lever of this valve to the off position before transporting to avoid fuel leaks. Transport fuel only in an approved fuel container. Always place generator on a protective mat when transporting to protect against damage to vehicle from leaks. Remove generator from vehicle immediately upon arrival at your destination.

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

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

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

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

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

- 1. Do not operate in a hazardous location.** Such areas include where there is a risk of explosion of petrol fumes, leaking gas or explosive dust.
- 2. Do not operate in a confined area.** Exhaust gases, smoke or fumes could reach dangerous concentrations.
- 3. The output of this generator is potentially lethal.** The generator should not be connected to a fixed electrical installation except by an appropriately licensed person.
- 4. Protect your generator.** This generator is NOT WEATHERPROOF and should not be exposed to direct sunlight, high ambient temperature and damp, wet or high humidity conditions.
- 5. Do not smoke while refuelling.** This is potentially dangerous as it may ignite the fuel and cause an explosion.

- 6. Take care not to spill fuel.** When refuelling the generator ensure that the engine has been switched off. Prevent the spilling of fuel as this may also ignite with the hot engine. Never refuel whilst the engine running.
- 7. Be careful where you store the generator.** Store the generator in a dry area away from inflammable liquids.
- 8. Keep your distance.** The generator emits exhaust fumes. As a safety precaution do not stand close to the unit whilst it is in operation. Ensure bystanders also keep their distance.
- 9. Never fill fuel tank indoors.** Never fill fuel tank when engine is running or hot. Do not smoke when filling fuel tank.

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

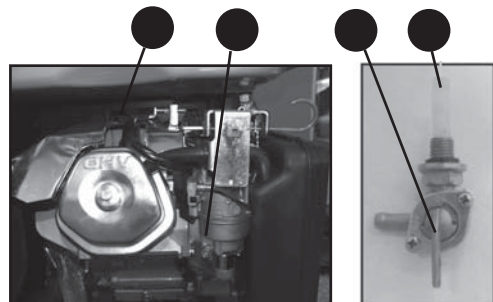
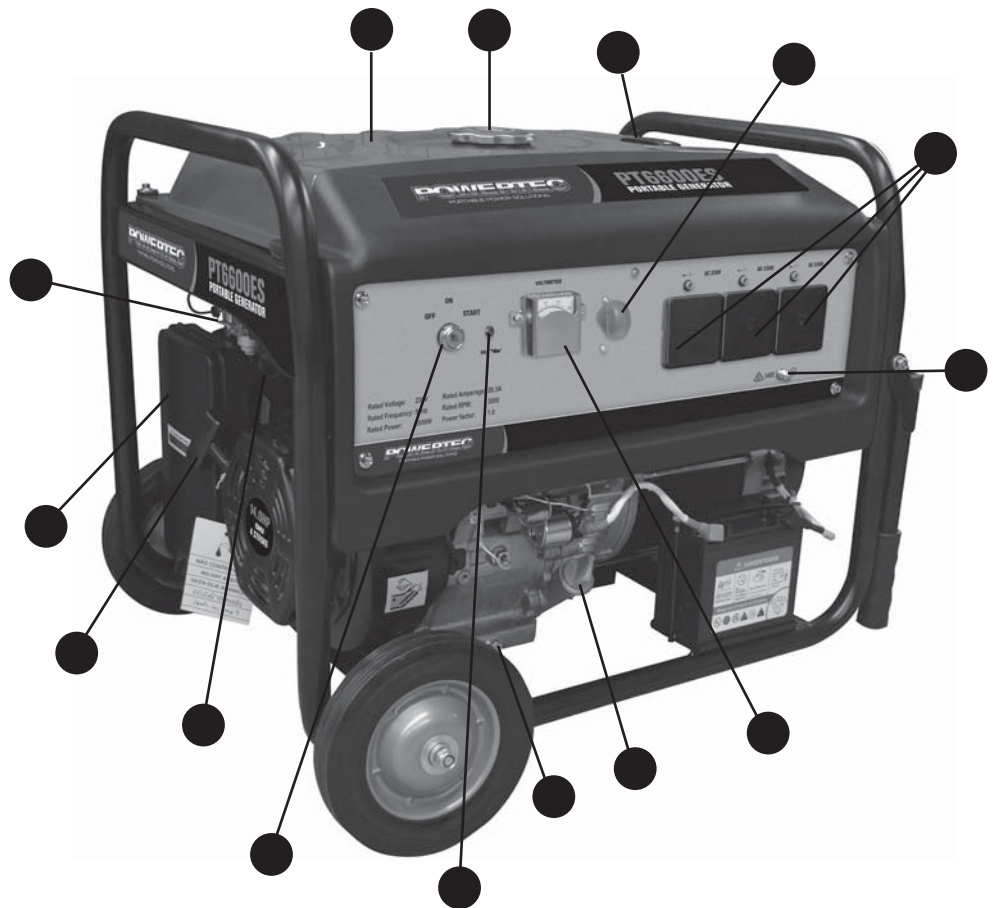
You MUST unplug any load from the generator before starting and stopping to prevent permanent damage to any appliances.

Unpacking

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

Know Your Product

1. Fuel Tank
2. Fuel Tank Cap
3. Fuel Lever Gauge
4. AC Safety Switch
5. AC Sockets
6. Ground (earth) Terminal
7. Volt Meter
8. Oil Filler Cap
9. Oil Drain
10. Low Oil Alert Light
11. Key Start Ignition
12. Fuel Valve
13. Air Filter Cover
14. Choke Lever
15. Recoil Start
16. Spark Plug
17. Fuel Drain
18. Tap Extension Fuel Filter



Approximate Wattage Requirements

IMPORTANT: Always check that the combined load of your appliances does not exceed the rated output of your generator. Always select a generator that has more capacity than your load requirements. The small amount extra you may invest to do this will be quickly recovered with the fuel saving and longer service life gained by not having to constantly run your generator at full load.

This chart lists average power requirements. Your particular tool or appliance may require more or less than the listed wattage.

* Where START wattage is the same as RUN wattage, this signifies no additional power is required for starting.

APPLIANCES / TOOLS	APPROX. RUN (W)	APPROX. START (W)	APPLIANCES / TOOLS	APPROX. RUN (W)	APPROX. START (W)
Microwave 750W	750	800	Central Air Conditioner:		
Coffee Maker	1750	1750	10,000 BTU	1500	2200
Electric Clothes Drier	5750	5750	24,000 BTU	3800	5000
Washing Machine	1150	2300	32,000 BTU	5000	6500
Refrigerator	700	2200	Room Air Conditioner:		
Lights	100	100	10,000 BTU	1500	2200
Colour Television	350	350	Circular Saw 7 1/4"	1400	2300
Electric Frypan	1500	1500	Chainsaw 2HP	1100	1100
Dehumidifier	400	400	Portable Air Compressor	1200	2300
Computer - Desktop	700	700	Hand Drill 1/2"	600	600
VCR	50	50	Drill 1/2"	600	900
Dishwasher - Cool Dry	700	1400	Battery Charger 15 amp	500	700
- Hot Dry	1450	2000	Electric Welder 200 amp AC	9000	9000
Toaster - 2 Slice	1250	1250	Jigsaw	300	300
- 4 Slice	1600	1600	Electric Weed Trimmer	500	500
Freezer	2200	2500	Router	1000	1000
Hair Dryer	800-1700	800-1700	Belt Sander	1000	1000
Steam Iron	1800	1800	Table Saw 10"	1750	4250
Garage Door Opener - 1/4 HP	550	1100	Bench Grinder	1400	2450
- 1/3 HP	725	1400	Concrete Mixer 3.5c/f	1900	2500
Radio	200	200	Band Saw	1100	1350
Blender	375	500	Power Drill - Medium	1000	1000
Sump Pump 1/2 HP	1050	2150	- Heavy Duty	1500	1500
Well Pump 1/2 HP	1000	2100	Angle Grinder - 100mm	1000	1000
Household Water Pump	1200	2700	- 230mm	2400	2700

NOTICE: Synchronous generators such as this model may not be suitable to power sensitive electronic equipment such as computers and other equipment with digital control circuitry. Operation of such equipment with this model generator may cause issues and/or permanent damage to the equipment. For powering sensitive electronic equipment, we recommend to use an inverter generator. Please contact your Powertec dealer for further details.

Preparing the Generator

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

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

NOTE: The generator will not start if the generator has no oil.

Checking the Engine Fuel

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

WARNING:

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

Checking the Engine Oil

The motor of this generator is not filled with oil when shipped.

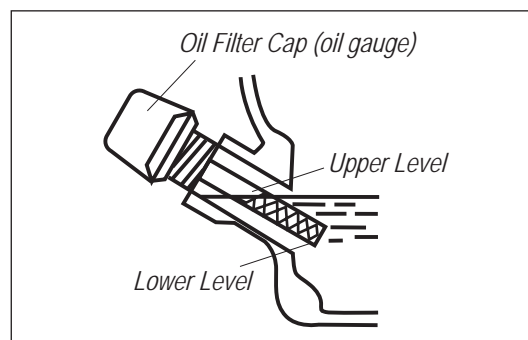
Prior to starting the motor ensure the crank case is filled with SAE #30 4 stroke oil (capacity 1100ml).

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

1. Before checking or refilling oil, be sure the generator is put on a stable and level surface, ensuring the engine has been switched OFF.
2. Remove the oil filler cap (8) by rotating the cap anti-clockwise and inspect to see the oil level.
3. If the oil level is below the lower level line, refill with SAE #30 4 stroke oil to the upper level line.

NOTE: Do not screw in the oil filler cap (8) when checking oil level, simply insert and pull the cap straight out.

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

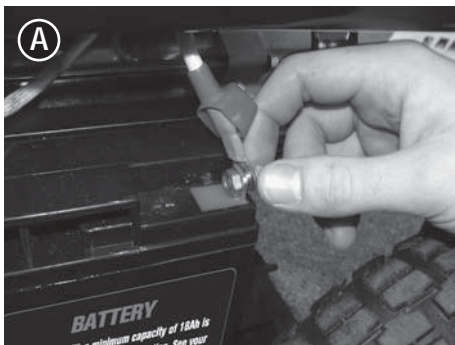


NOTE: This motor is fitted with a low oil sensor. If the oil level is too low, the motor will stop operating or the motor will not start. It is advised to check the oil level each time the generator is used. When the oil level is too low, the motor will stop operating or the motor will not start. It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

Connecting the Battery

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

1. Secure the battery to the battery tray with the provided battery clamp using the wingnuts (also included).



2. Secure the battery leads to the battery terminal with the nut and bolt provided. The red lead connects to the positive (+) terminal and the black lead connects to the negative (-) terminal (Fig. A).

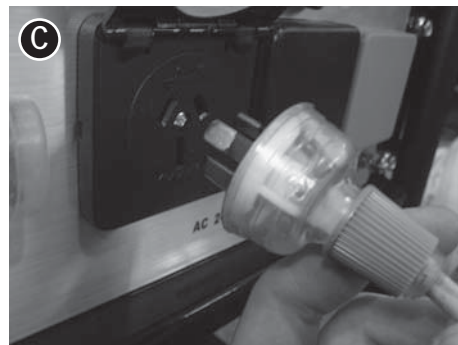


3. Ensure the leads are firmly tightened to the battery terminal (Fig. B).

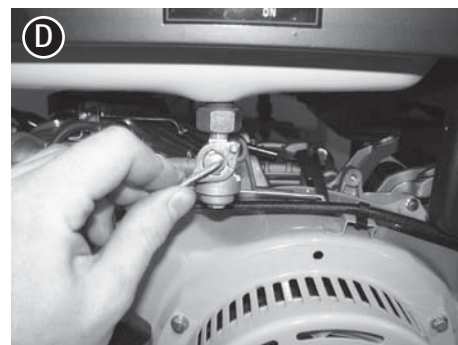
Starting the Engine with Key Start

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

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



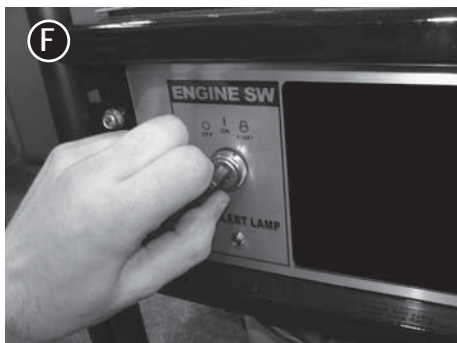
1. Before starting, ensure that no electrical apparatus has been connected to the generator (Fig. C).



2. Turn the fuel valve (12) anti-clockwise to the 'on' position (Fig. D).



3. Move the choke lever (14) towards the back of the generator (to the left). This is not necessary if the engine is already warm.



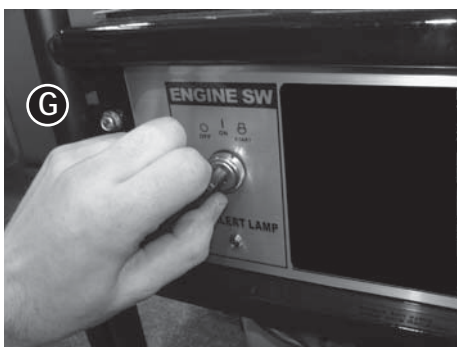
4. Turn the key start ignition (11) clockwise to the 'START' position (Fig. F).

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

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

Starting the Engine Manually

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



4. Turn the key start ignition (11) clockwise to the 'ON' (Fig. G).
5. Slowly pull the recoil starter until you feel it engage and then pull it briskly.
6. Once you hear the motor operating, push the choke lever (14) back in towards the generator. This position will switch the choke 'off'.

Stopping the Engine

1. Before stopping, ensure that no electrical apparatus is connected to the generator.



2. Turn the key start ignition (11) to the 'OFF' position (Fig. H).
3. Turn the fuel lever clockwise to the 'off' position.

Connecting Apparatus to the Generator

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



3. Switch the AC safety switch (4) to the "ON" position.

CAUTION:

- Ensure the electric apparatus is turned off before plugging in.
- Check to ensure that the total load is within the generator rated output.

WARNING: Prior to connecting any appliance to the generator, check the rating label of the appliance. The generator is rated at 6500W so if the appliance being connected is higher than 6500W, the protective cut out on the generator may operate to prevent over load damage to the generator. The generator will withstand short operation and loads up to 7000W or the generator may stop if loads in excess of 6500W are applied for more than a short period of time.

NOTE: Motorised products will require more energy upon start up and products which are rated above 30% of the peak power output of the generator. It should also be very clearly understood that output voltage fluctuations will occur when various loads are connected and disconnected. **It is NOT recommended to connect any electronic equipment to the generator without a voltage or surge protector.**

Computers, televisions, and stereo equipment can be very sensitive to the input supply and could be damaged if protective equipment is not used in conjunction with this generator. This also includes caravans where electronic equipment is incorporated as part of the wiring.

AC Safety Switch

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

Safety Switch Tripping

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

Be sure that all appliances are in good working order before connecting them to the generator. If an appliance begins to operate abnormally, becomes sluggish, or stops suddenly, turn "OFF" both the AC safety switch (4) and the generator engine switch (11) immediately. Then disconnect the appliance and examine it for signs of malfunction.

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

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

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

Generator Maintenance

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

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

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

Storage

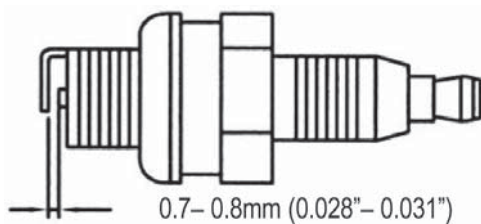
If you are going to store your generator for more than 30 days, use the following information as a guide to prepare the generator for storage.

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

Always drain the generator, tank and fuel system by opening the small drain valve (15) in the lower section of the carburetor bowl before storing.

Spark Plugs

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



5. The recommended sparkplugs are as follows:

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

Engine Oil Replacement

1. Place the generator on a level surface and warm up the engine for several minutes. Then stop the engine.
2. Remove oil filler cap (8).
3. Place an oil pan under the generator and commence removing the oil drain cock (9) so that the oil can be completely drained.
4. Check the oil drain cock (9), gasket, oil filler cap (8) and O-ring. If damaged, have these replaced.
5. Reinstall the oil drain cock (9).
6. Add engine oil to the upper level. Recommended 4 stroke engine oil is SAE #30. Refer to the "Checking the Engine Oil" section in this instruction manual.

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

Air Filter

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

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

ALWAYS keep the filter clean at all times.

1. Remove the air filter cover (13) on the side of the generator by releasing the metal clip.



IMPORTANT: Never run the engine without the air filter element in place!

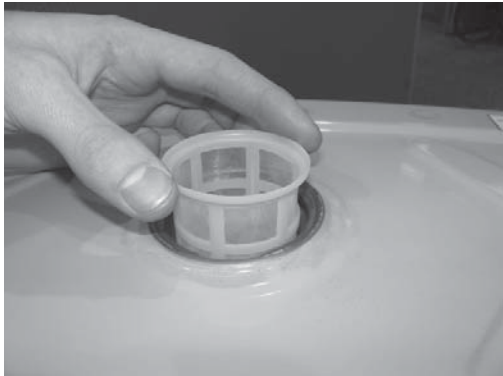
2. Remove the air filter.



3. Wash the air filter in solvent or kerosene and allow to dry.
4. Lubricate the filter using motor oil (SAE #30).
5. Thoroughly squeeze the filter removing excess oil.
6. Replace air filter back into the engine.
7. Secure the cover back onto the side panel of the generator.

Petrol Tank Filter

1. Stop the engine.
2. Turn fuel valve (12) to OFF position.
3. Petrol tank filter is located directly under petrol cap. This protects impurities entering fuel tank during refuelling.



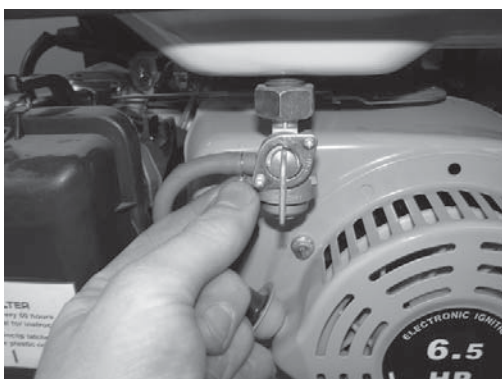
4. Remove the filter and wash thoroughly in a solvent.
5. Re-assemble.

Tap Extension Fuel Filter

A small fuel filter has been fitted to the inlet side of the fuel valve (12), inside the tank. This tap extension fuel filter (17) prevents any dirt in the fuel from entering the fuel system. The following procedure explains the removal of this filter in order to replace or clean it.

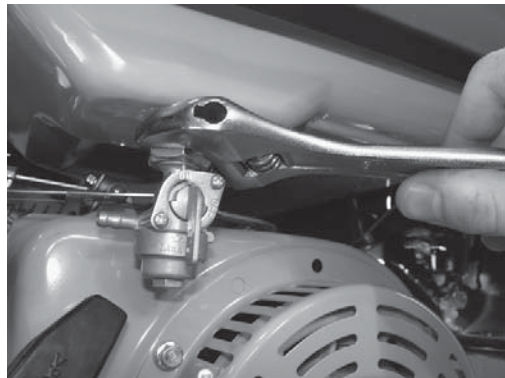
NOTE: The following procedure should be performed in a well ventilated area, with no naked flames, sparks, or cigarettes. Safety glasses should also be worn and engine switch (11) set to the OFF position.

1. Completely empty the tank of fuel. Ensure the fuel valve (12) is in the OFF position.



16.

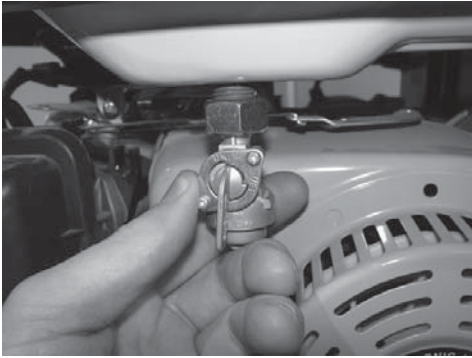
2. Compress the two wire arms of the hose clamp on the outlet hose at the fuel valve (12) and slide the clamp back from the end of the hose by approx. 25mm. Slide the fuel hose off the outlet of the fuel valve (12).
3. Loosen the lock nut locking the fuel valve (12) on to the tank. Unscrew the tap from the tank and withdraw the tap from the tank. Be careful not to lose the small seal on the thread of the tap.



4. Unscrew the tap extension fuel filter (17).

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

5. Ensuring the small seal is fitted to tap, thread the tap back into the tank by a FULL 3 - 4 turns. Orientate tap so outlet of tap is towards rear of tank, and tap control is to right hand side of tank. Holding tap firm, tighten lock nut, ensuring seal is clamped between lock nut and tank.



6. Refit fuel hose to outlet of the tap and with wire arms compressed, slide hose clamp up onto connection of hose and tap.
7. Refill tank with fuel. Ensure there are no leaks between tap and tank. With fuel tap turned on, ensure there are no leaks where fuel hose is fitted to outlet of tap.

Repairs

Only an authorised service centre should repair generator. See contact details for service under the warranty / service section on the following page.

Cleaning

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

Troubleshooting

Trouble	Possible Cause	Suggested Remedy
Engine will not start or will not keep running	1. Low on fuel	1. Add fuel / oil mix
	2. Low on oil	2. Check oil level and top up
	3. Faulty spark plug	3. Replace spark plug
	4. Choke in wrong position	4. Adjust choke accordingly
	5. Fuel tap in closed position	5. Open fuel tap
	6. Unit loaded during start-up	6. Remove load from unit
	7. Spark plug wire loose	7. Attach wire to spark plug
	8. Dirty fuel filters	8. Clean filters as per instructions
No electrical output	1. Faulty receptacle	1. Have service centre replace receptacle
	2. Circuit breaker kicked out	2. Depress and reset
	3. Defective AVR	3. Have service centre replace AVR
	4. Faulty power cord	4. Replace cord
Repeated circuit breaker tripping	1. Overload	1. Reduce load
	2. Faulty cords or equipment	2. Check for damaged, bare or frayed wires on equipment. Replace.
	3. Circuit breaker is faulty	3. Have service centre replace circuit breaker
Generator overheating	1. Generator overloaded	1. Reduce load
	2. Insufficient ventilation	2. Move to adequate supply of fresh air

Warranty

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

This product is warranted for 12 months use from the date of the original purchase. If found to be defective in materials or workmanship, the tool or the offending faulty component will be replaced free of charge with another of the same item. A small freight charge may apply. Proof of purchase is essential.

We reserve the right to reject any claim where the purchase cannot be verified. This warranty does not include damage or defects to the tool caused by or resulting from abuse, accidents, alterations or commercial or business use. It also does not cover any bonus items or included accessories. Only the generator is covered under this warranty.

Please ensure that you store your receipt in a safe place. Conditions apply to the above warranty.

1. DURATION:

The manufacturer warrants that it will repair or replace, at no charge for parts or labour, the POWERTEC Generator, if proven defective in material or workmanship, during the following time period(s) after date of original retail purchase:

For 12 months use -The POWERTEC PT6600ES Generator (excluding accessories)

2. WHO GIVES THIS WARRANTY (Warrantor):

EUROQUIP NZ	EUROQUIP AUSTRALIA
Service Line:	Service Line:
+ + 64 3 547 8409	1 - 800 040 947

3. WHO RECEIVES THIS WARRANTY (Purchaser):

The original purchaser of this POWERTEC Generator

4. WHAT IS COVERED UNDER THIS WARRANTY:

Defects in material and workmanship which occur within the duration of the warranty period.

5. WHAT IS NOT COVERED UNDER THIS WARRANTY:

- A. Implied warranties, including those of merchantability and FITNESS for a particular purpose are limited in duration to this express warranty. After this period, all risks of loss, from whatever reason, shall be on the purchaser.
- B. ANY INCIDENTAL, INDIRECT, OR CONSEQUENTIAL LOSS, DAMAGE, OR EXPENSE THAT MAY RESULT FROM ANY DEFECT, FAILURE OR MALFUNCTION OF THIS PRODUCT.
- C. This warranty does not apply to any accessory or consumable items included with the product which are subject to wear from usage; the repair or replacement of these items shall be at the expense of the owner. These items include, but are not limited to: sparkplugs, seals, o-rings, recoil starter parts, etc. In addition, this warranty does not extend to any damage caused by the untimely replacement or maintenance of any of the previously listed CONSUMABLE parts.
- D. Any failure that results from accident, purchaser's abuse, neglect or failure to operate products in accordance with instructions provided in the owner's manual(s) supplied with the product.
- E. Pre-delivery service, i.e. assembly and adjustment.

6. RESPONSIBILITIES OF WARRANTOR UNDER THIS WARRANTY: Repair or replace, at Warrantor's option, products or components which have failed within duration of the warranty period.

7. RESPONSIBILITIES OF PURCHASER UNDER THIS WARRANTY:

- A. Please call your re-seller or the number listed above for warranty assistance.
- B. Provide dated proof of purchase and maintenance records.
- C. All generators must be delivered or shipped to the nearest Service Agent or re-seller. Freight costs, if any, must be borne by the purchaser.
- D. Use reasonable care in the operation and maintenance of the products as described in the owner's manual(s).
- E. No warranty costs incurred will be considered for, or covered if Euroquip has not been contacted and prior permission for repair / replacement has been granted.

8. WHEN WARRANTOR WILL PERFORM REPAIR OR REPLACEMENT UNDER THIS WARRANTY:

Repair or replacement will be scheduled and serviced according to the normal work flow at the servicing location and depending on the availability of replacement parts.



Congratulations on your new POWERTEC product. We are proud to have you as our customer and will strive to provide you with the best service and reliability in the industry. This product is backed by our extensive warranty and world-wide service network. To locate your nearest distributor or service agency call **0800 387 678**, or email us at **info@euroquip.co.nz**.