



Owner's Manual

Inverter Generator



PREFACE

Thank you for purchasing products from EASTERN TOOLS & EQUIPMENT, INC. We appreciate your business. The following manual is only a guide to assist you and is not a complete or comprehensive manual of all aspects of maintaining and repairing your generator. The equipment you have purchased is a complex piece of machinery. We recommend that you consult with a dealer if you have doubts or concerns as to your experience or ability to properly maintain or repair your equipment. You will save time and the inconvenience of having to go back to the store if you choose to write or call us concerning missing parts, service questions, operating advice, and/or assembly questions. Our gasoline generators have some of the following features:

- Lightweight construction
- Air cooled
- Four-stroke gasoline internal combustion engine
- Recoil starter
- Large fuel tank
- Automatic voltage stabilizer
- Circuit protector
- AC and DC outputs
- Low oil level sensor

The ETQ air-cooled gasoline generators are widely used when electrical power is scarce. Our generators provide a portable mobile solution in supplying power for field operations during project construction.

This manual will explain how to operate and service your generator set.

If you have any questions or suggestions about this manual, please contact your local dealer or us directly. *Consumers should notice that this manual might differ slightly from the actual product as more improvements are made to our products. Some of the pictures in this manual may differ slightly from the actual product as well. Eastern Tools and Equipment, Inc. reserves the right to make changes at any time without notice and without incurring any obligation.*

WARNING

The engine exhaust from this product contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

Please read manual before operating this machine.

The generator is a source of electricity, and can cause electrical shocks that can cause severe injury or death if misused. Do not operate with wet hands and do not let the generator get wet. Keep away from rain and snow.

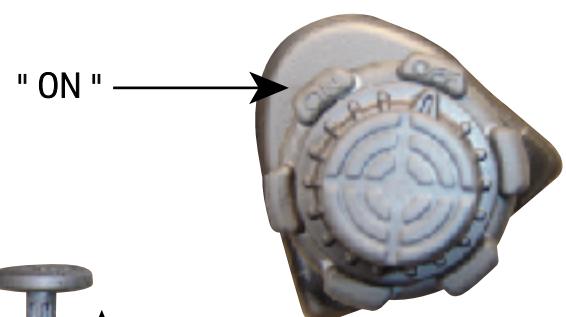
THE METHOD OF GASOLINE PRESSURE ADDING DEVICE:

When the gasoline inside the tank less half also meet the following situation need to use the pressure adding device.

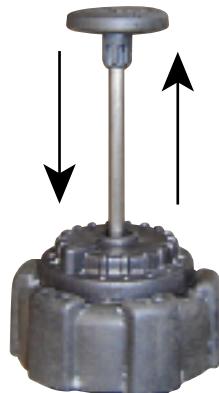
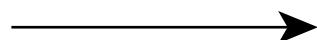
1. first time to use engine.
2. restart engine after a long time keeping.
3. engine working more than half hour then stop more than 10 minutes now need to restart.

Following steps need to do one by one:

1. turn the air intake switch to " off " position
2. after enging running, turn the air intake switch to " on " position



3. move " down-up " the pressure adding device several times, until you can feel the pressure appear when you moving down the device



4. wait 10-20 seconds, then you can start it.

***Remark: need to add: inverter products working environment
temperature: MAX 40 °c**

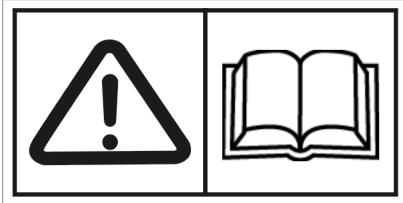


1. do not open the plastic cover to operate products.
2. as if open it will damage engine for the inner heat can not come out well.
3. can not use if any parts been disassembled.

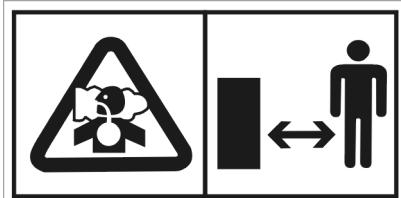
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1) SAFETY PRECAUTIONS



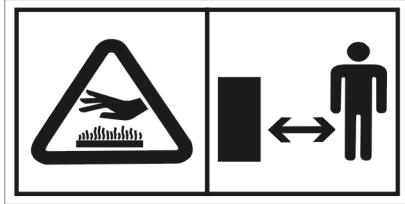
- Generator is designed to give safe and dependable service if operated according to instructions.
 - Read the Owner's Manual before operating the generator.
 - Failure to do so could result in personal injury or equipment damage.
-



- Operate the generator ONLY outdoors, and at least 3 feet away from open doors or windows.
 - Never run the generator indoors as the engine gives off poisonous carbon monoxide, an odorless and colorless gas.
 - Inhaling carbon monoxide will cause nausea, fainting or death.
 - Keep the generator at least 3 feet away from flammable matter for adequate ventilation.
-



- Be sure to stop the engine before refueling.
 - Do not overfill the fuel tank.
 - If fuel is spilled, wipe it away carefully and wait until the fuel has dried before starting the engine again.
 - When changing oil, make sure that the fuel cap is tightly secured to prevent fuel leakage.
-



- The muffler is very hot during operation, and remains hot for some time after the engine has stopped. Do not touch the muffler while it is hot.
 - Allow the engine to cool down before moving the generator (Pay attention to the warnings that are attached to the generator).
-

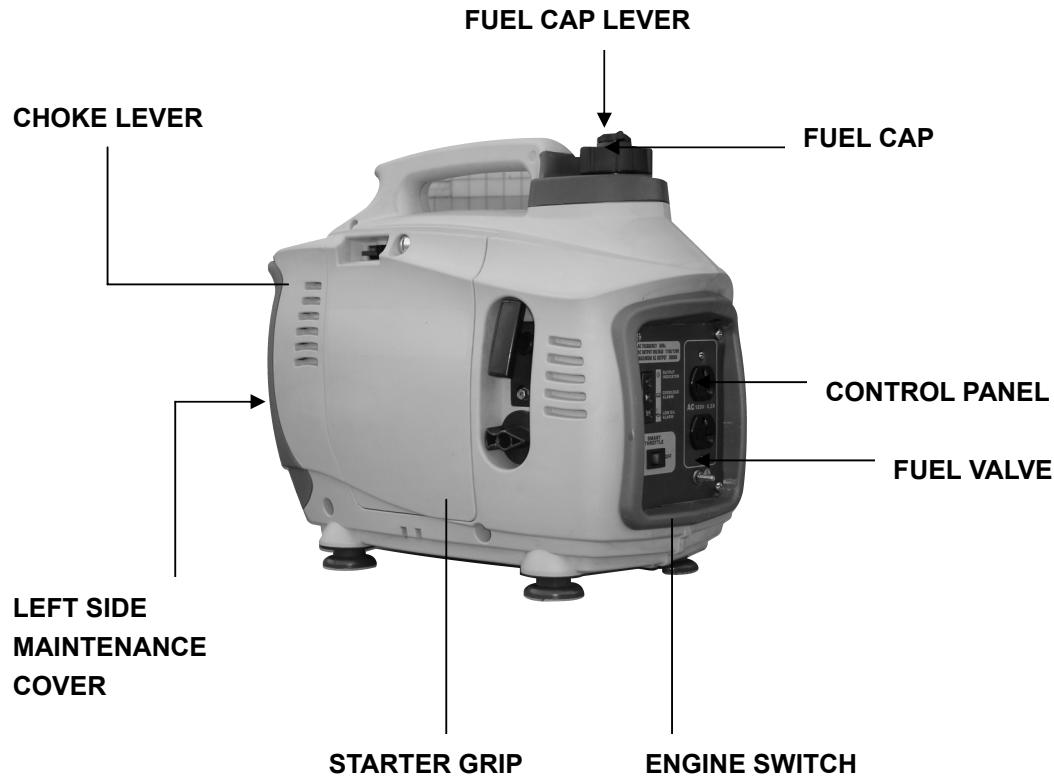


- Connections between standby power and a building's electrical system must be installed by a qualified electrician, and must comply with all applicable laws and electrical codes.
 - Improper installation may cause electrical current to run back into the electrical transmission lines, which may electrocute utility company workers or others who come into contact with these lines during a power outage.
 - If the generator is not installed properly, it may explode, burn, or cause a fire in the building's electrical system when the power is restored.
-

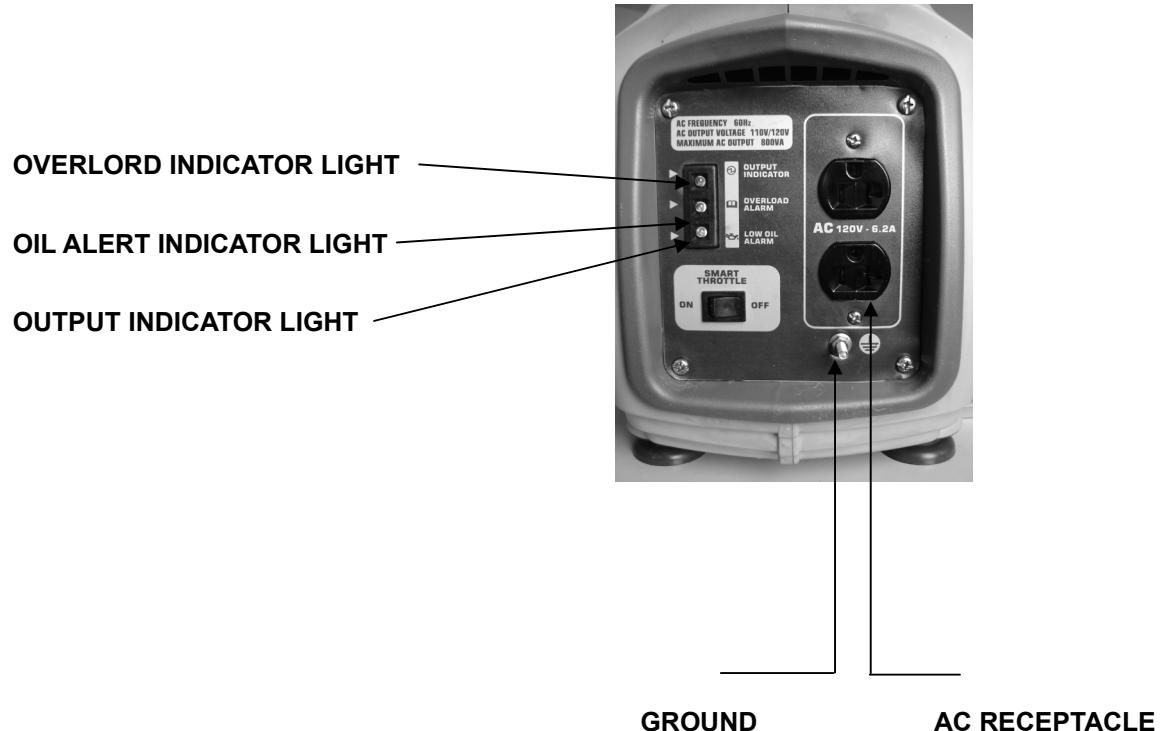
⚠ WARNING

- Always conduct a pre-operation inspection (see page 7) before starting the engine.
- Place the generator at least 1m (3ft) away from buildings or other equipment during operation.
- Operate the generator on a level surface. If the generator is tilted, fuel spillage may result.
- Know how to stop the generator quickly and understand the operation of all the controls. Never operate without proper instructions.
- Keep children and pets away from the generator when it is in operation.
- Keep away from rotating parts while the generator is running.
- The generator can cause electric shocks when misused; do not operate with wet hands.
- Do not operate the generator in rain or snow and do not let it get wet.

2) COMPONENT IDENTIFICATION



CONTROL PANEL

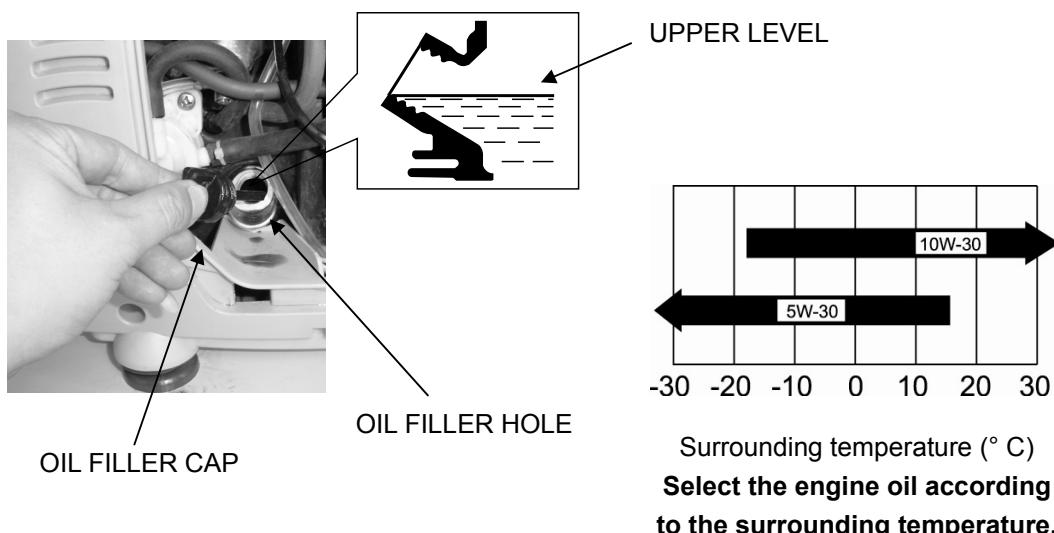


3) PRE-OPERATION CHECK

Be sure to check the generator on a level surface when the engine does not work.

1) Check oil level.

Open the left side maintenance cover by unscrewing the cover screw. Remove the oil filler cap, and wipe the dipstick with a clean rag. Check the oil level by inserting the dipstick in the filler hole without screwing it in. If the oil level is below the end of the dipstick, add the up to the recommended amount of 0.25 litre of SF 10W-30 oil to the crankcase.



CAUTION:

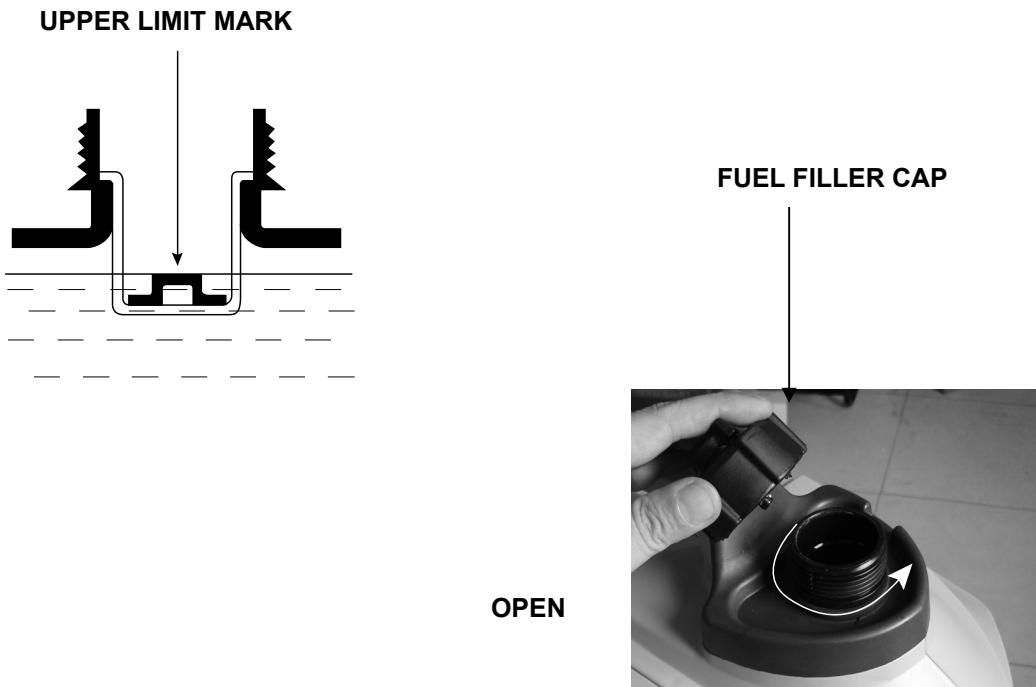
Use high-detergent, premium quality, 4-stroke engine oil. Using non-detergent oil or 2-stroke engine oil could shorten the service life of the engine. Running the generator with a low oil level could result in serious damage to the engine.

NOTE: The Oil Alert System will automatically stop the engine before the oil level falls below the safe limit. In order to avoid the inconvenience of an unexpected shutdown, it is recommended that the oil level be checked on a regular basis.

2) CHECKING THE FUEL LEVEL

- Verify that the generator has sufficient fuel before each use. When adding fuel after the generator has been used, verify that the generator is turned OFF, and allow it to cool down.
- If the fuel level is low, refill the fuel tank to the proper level, as specified. Unleaded or low-lead gasoline is recommended in order to minimize deposits in the combustion chamber. Use gasoline within 30 days of purchase. Using old gasoline may cause problems. Securely tighten the fuel filler cap after refueling.
- Verify that the generator is properly grounded in accordance with local requirements. Before adding fuel, all electrical loads must be disconnected and the generator must be turned off.

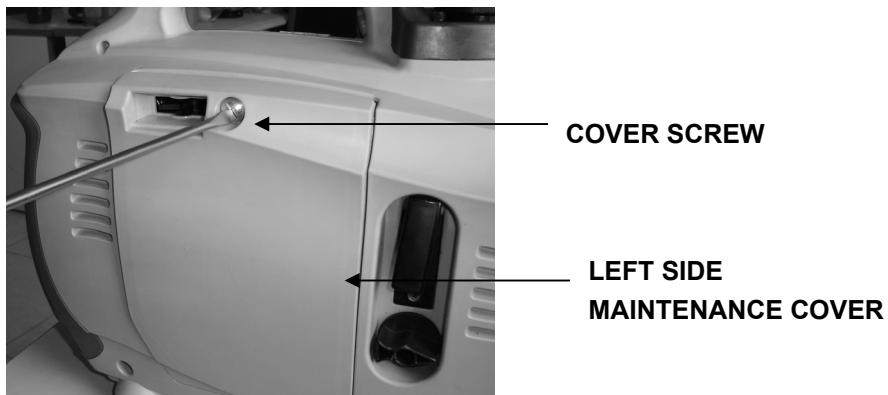
Fuel Tank Capacity: 1.8L



3) CHECKING THE AIR FILTER

Check the air filter in order to verify that it is clean and in good condition. Loosen the cover screw and remove the left side maintenance cover. Press the latch tab on the top of the air filter body, remove the air filter cover, and check the air filter. Clean or replace the air filter if necessary.

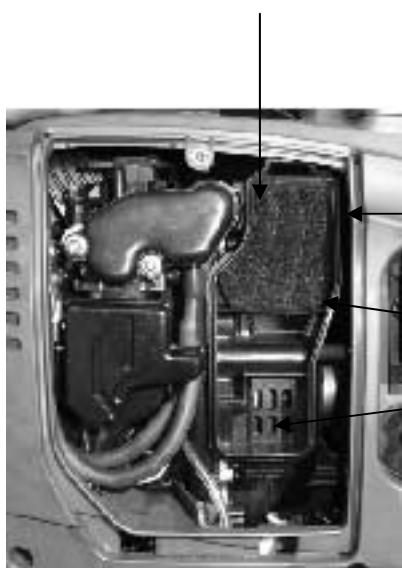
CAUTION: Do not run the engine without an air filter. Rapid engine wear will result from contaminants such as dust and dirt being drawn into the engine through the carburetor.



AIR CLEAN COVER



COVER SCREW HOLE



AIR CLEANER CASE

AIR CLEANER ELEMENTS

4) STARTING THE ENGINE

NOTE: Verify that no appliance(s) are plugged into the generator before starting the engine.

- 1) Turn the fuel cap lever the ON position (fully clockwise).

NOTE: Turn the fuel cap lever to the OFF position when transporting the generator.

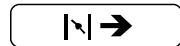
FUEL CAP LEVER



- 2) Turn the engine switch/fuel valve to the ON position.

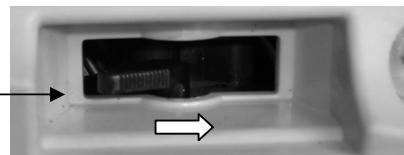
- 3) Move the choke lever to the CLOSED position.

Note: Do not use the choke when the engine is warm or the air temperature is high.



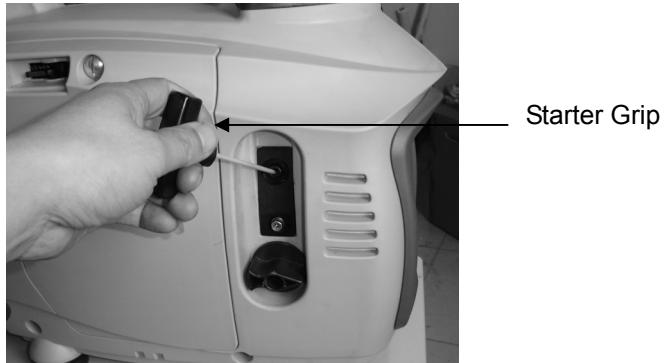
CLOSED

Move choke lever to the right to close.



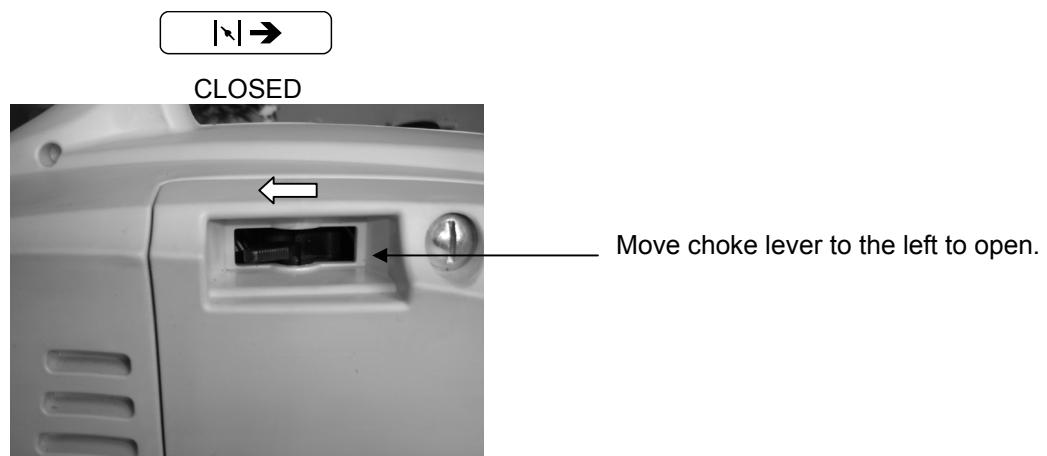
- 4) Pull the starter grip until resistance is felt, then pull the starter grip briskly toward the arrow as shown below.

CAUTION: Do not allow the starter grip to snap back. Return it slowly by hand.



- 5) Move the choke lever to the OPEN position as the engine warms up.

NOTE: If the engine doesn't work by starting several times, check the engine oil level before trouble shooting other areas.

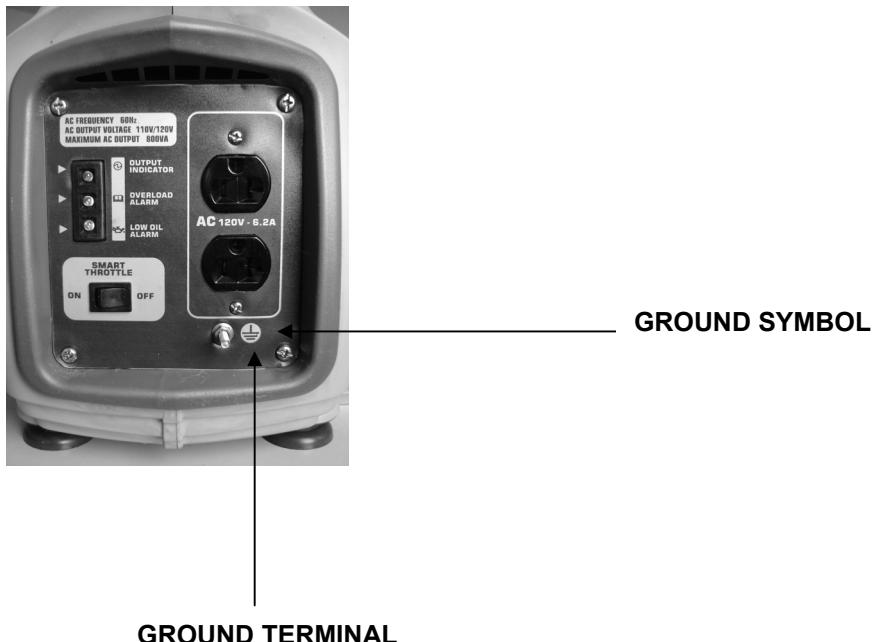


5) GENERATOR USE

⚠ WARNING

To prevent electrical shock from faulty appliances, the generator should be grounded. Connect with a heavy wire between the generator ground terminal and on external ground source.

Connections from standby power to a building's electrical system must be made by a qualified electrician and must comply with all applicable laws and electrical codes. Improper connections make electrical current from the generator to back feed into the utility lines. Such back feed may electrocute utility company workers or others who contact the lines during a power outage, and when utility power is restored the generator may explode, burn, or cause fires in the building's electrical system.

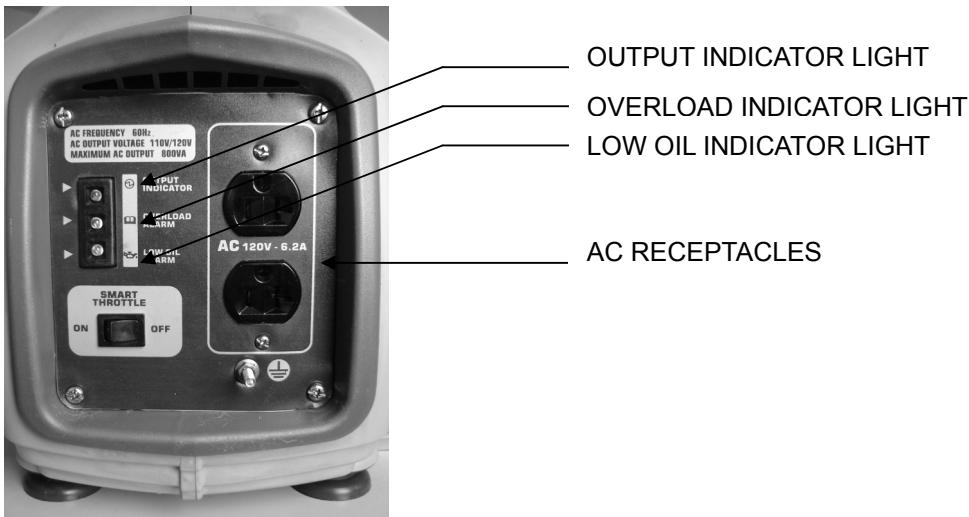


AC Applications

Prior to operating your generator please:

- Be certain that the generator and all appliances are in good working order. Defective appliances or power cords can cause electrical shocks.
- Make sure that the electrical rating of the equipment being used does not exceed the maximum power rating of the generator.
- The maximum power rating of the generator must never be exceeded. Power levels between rated and maximum may be used for no longer than 30 minutes.
- Turn off and disconnect any appliance if it seems like it is not running normally. Verify if the appliance is faulty or if the generator is being overloaded.

NOTE: Significant overloading the generator will set off the circuit breakers. Minor overloading might not set off the circuit breakers, but will shorten the life the generator.



- Operating at maximum power is limited to 30 minutes. Maximum power is 800 watts.
- Generator must not exceed rated power for continuous operation. Rated power is 750 watts.
- The VA of all appliances is usually listed near the model number or serial number.

AC Operation

- Turn on the generator, and make sure the output indicator LED (green) is lit, refer to "Starting/Stopping the Engine" (page 10) for more information.
- Before plugging in the any appliances make sure that the total power rating of all the appliances does not exceed the power rating of the generator.
- Plug in the appliance. Motorized appliances usually use more power than their rated power for start-up.

The overload indicator LED (red) will turn on if the generator is overloaded (if load exceeds 750 watts). If the generator stays overloaded for more than 4 seconds, power to the appliances will be cut off and the output indicator LED (green) will shut off. Turn off the engine and examine the problem. Verify if the cause is a short circuit connection or an overload. Correct the problem and restart the engine.

NOTE: When an electric motor is started, the overload indicator LED (red) might turn on. If it does not turn off after 4 seconds, consult your ETQ dealer.

Oil Alert System

The Oil Alert system is designed to prevent engine damage caused by an insufficient amount of oil in the crankcase. Before the oil level in the crankcase falls below a safe limit, the oil alert system will automatically shut down the engine. The engine will not start if you try to start the engine with low oil (the red oil alert indicator light will also light up). If this occurs, add engine oil.

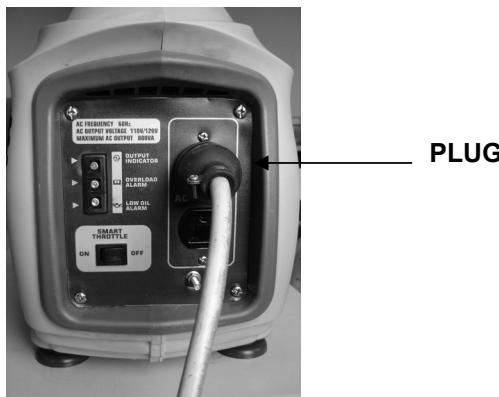


6) STOPPING THE ENGINE

To stop the engine in an emergency, turn the engine switch to the STOP position.

IN NORMAL CONDITION:

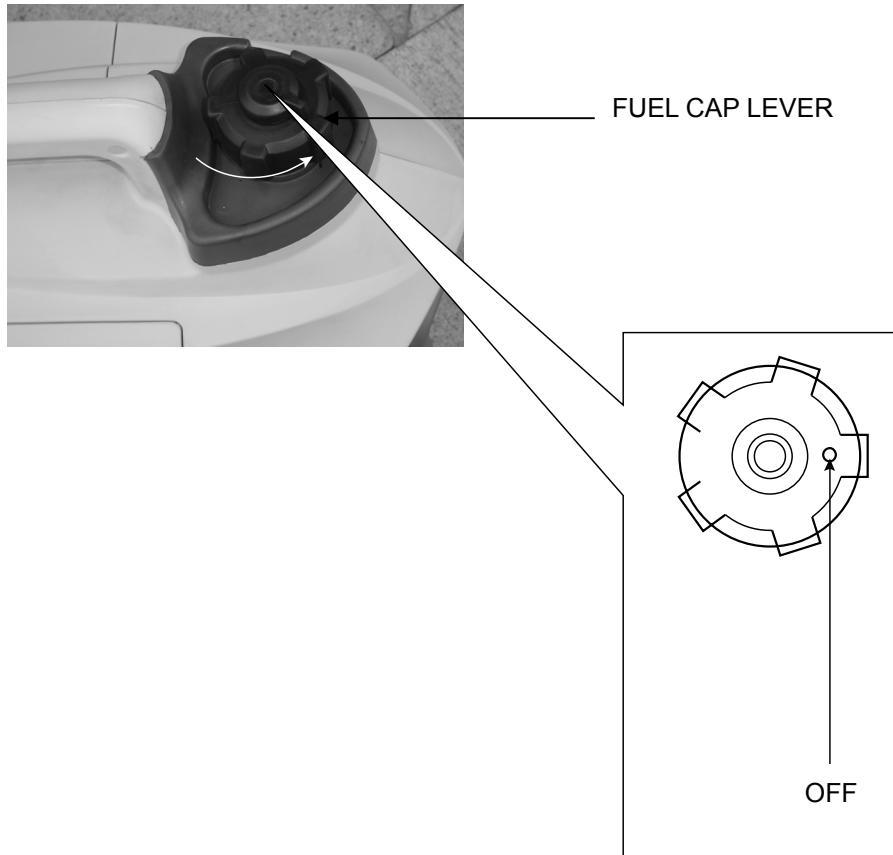
1. Switch off all connected appliances and disconnect them from the generator receptacles.



2. Turn the engine/fuel valve switch to the OFF position. It should be located on the side of the generator under the recoil starter.



3. Turn the fuel cap lever counter clockwise to the “OFF” position.



CAUTION: Be sure the fuel cap lever and the engine switch are on the “OFF” off position when stopping, transporting and/or storing the generator.

7) MAINTENANCE TIPS & INSTRUCTIONS

The purpose of the maintenance schedule is to keep the generator in optimal operating condition. Inspect and service the generator as scheduled in the following table.

WARNING

Turn the engine off before performing any maintenance. If the engine must be running, verify that the area is well ventilated. The exhaust contains poisonous carbon monoxide gas.

CAUTION: Use genuine replacement parts or their equivalent. Using replacement parts that are not equivalent in quality may damage the generator.

Quick Reference Maintenance Chart

ITEM	REMARKS	Pre-Operation inspection (daily)	Monthly (10 hrs.)	Every 3 Months (50 hrs.)	Every 6 Months (100 hrs.)	Yearly (300 hrs.)
Spark Plug	Check the condition, adjust the gap, and clean. Replace if necessary.			•		
Engine Oil	Check the oil level.	•				
	Change the oil.		•			
Air Cleaner	Check the oil level, clean, and replace if necessary.	•	•			
Fuel Filter	Clean the fuel filter. Replace if necessary.				•	
Valve Clearance	Check and adjust when necessary.					•
Fuel Line	Check the fuel line for cracks or damage. Replace if necessary.				•	
Exhaust System	Check for leakage. Retighten or replace the gasket if necessary. Check the muffler screen.					•
Carburetor	Check the operation of the choke.					•
Cooling System	Check for damage to the fan.					•
Starting System	Check the operation of the recoil starter.					•
Fittings and Fasteners	Check all fittings and fasteners. Make corrections if necessary.					•

NOTE:

- Run the generator for several hours in order to determine the maintenance that is required.
- Maintenance will be required more frequently if the generator is operated in a dusty environment.
- This generator should be serviced by an authorized service technician unless the owner has the proper tools and is mechanically proficient.

1. CHANGING OIL

Drain the oil while the engine is still warm to drain the oil as fast as possible.

CAUTION: Make sure to turn the engine switch and the fuel cap lever to the OFF position before draining.

- Loosen the cover screw and remove the left side maintenance cover.
- Remove the oil filler cap.
- Drain old engine oil into a container thoroughly.
- Refill with the crankcase with the recommended amount oil; check the oil level before attempting to start the engine.
- Reinstall the left side maintenance cover and tighten the cover screw securely.

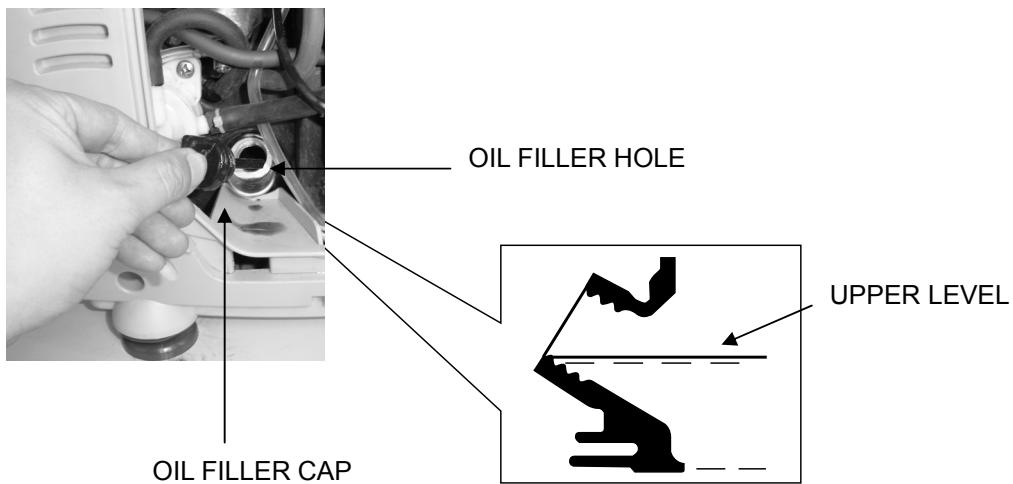
ENGINE OIL CAPACITY: 0.16L



LEFT SIDE
MAINTENANCE COVER



NOTE: Please dispose of used motor oil in a manner that is compatible with the environment. Do not dispose in the trash, ground, or drains.

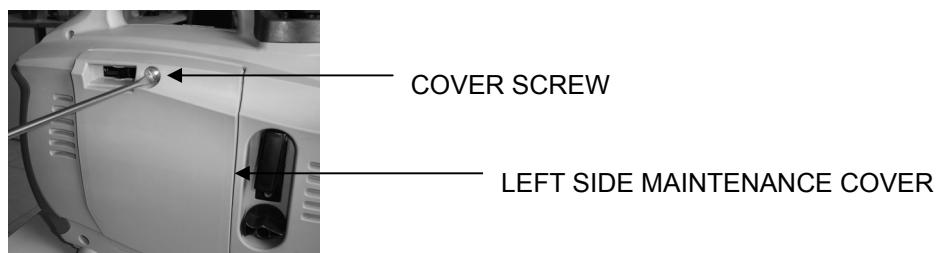


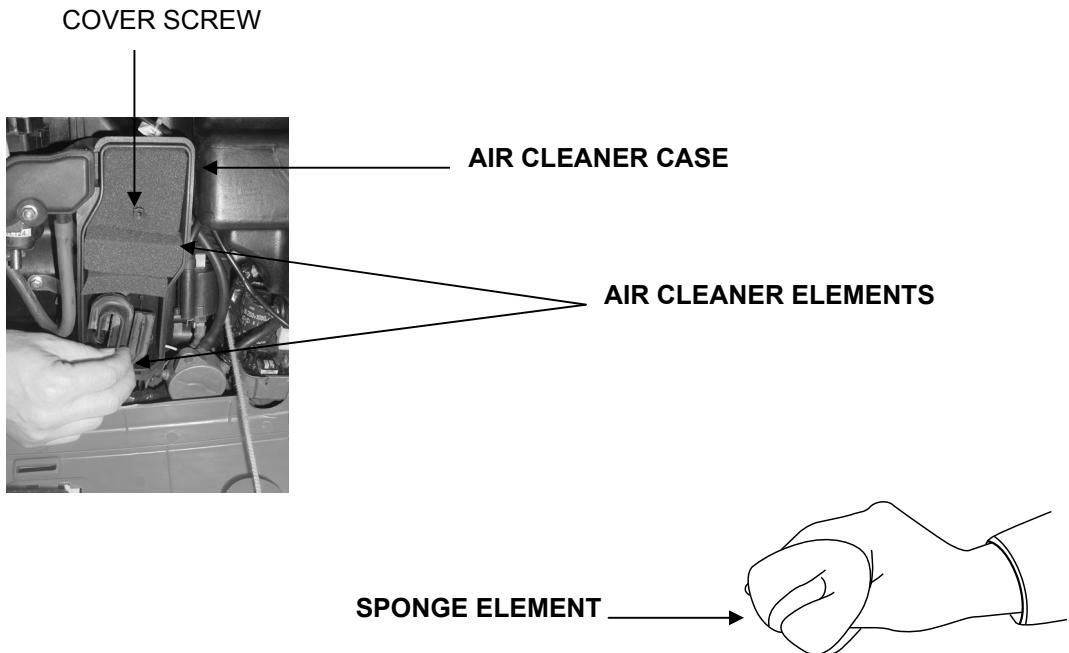
2. AIR CLEANER SERVICE

A dirty air cleaner will restrict air flowing into the carburetor. To prevent carburetor malfunction, service the air cleaner regularly. Service more frequently when operating the generator in extremely dusty areas.

⚠️ WARNING

Do not use gasoline or low flash point solvents for cleaning. They are flammable and explosive under certain conditions.





CAUTION: Never run the generator without an air cleaner element installed. Rapid engine wear may occur.

- Remove the cover screw and the left side maintenance cover.
- Press the latch tab on the top of the air filter body, and remove the air filter cover.
- Wash the element using a non-flammable or high-flashpoint solvent, and then dry it thoroughly.
- Soak the element in clean engine oil, and then squeeze out the excess oil.
- Reinstall the air filter and the air filter cover.
- Reinstall the left side maintenance cover, and tighten the cover screw.

3. SPARK PLUG SERVICE

RECOMMENDED SPARK PLUG TYPE: NGK CR5HSB

To ensure proper engine operation, the spark must be properly gapped and free of deposits.

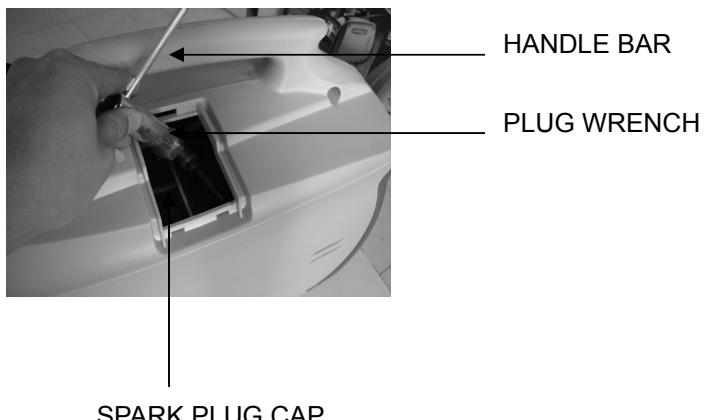
Remove the spark plug maintenance cover.



Remove the spark plug cap.

Clean any dirt around the spark base.

Use the wrench to remove the spark plug.



8) TRANSPORTATION/STORAGE

Transportation:

If the generator has been running, let it cool for at least 15 minutes before loading it into a vehicle. A hot generator can seriously burn you or can ignite flammable materials. To prevent fuel leakage, the engine should be upright (normal operating position) nicely secured. The engine switch and the fuel tank cap vent lever should both be in the "OFF" position. Do not place any heavy items on the generator.

Avoid direct sunlight when putting the generator on a vehicle. If the generator is left in an enclosed vehicle for long periods of time, the high temperature inside the vehicle may cause the gasoline in the fuel tank to explode. Avoid driving on rough roads for extended periods of time with the generator on board. If it is necessary to transport the generator on a rough road, drain the gasoline from the generator before transport.

Storage:

Verify that the fuel has been drained completely before transporting or storing the generator. Long-term storage (longer than 30 days) requires certain preventive procedures in order to guard against deterioration. The generator needs to run for at least 30 minutes every month to prevent hard starting.

Before storing the unit for an extended period, verify that the storage area is free of excessive humidity and dust.

Long-term storage (longer than 30 days):

If it is necessary to store the generator for an extended period (longer than 30 days), follow these instructions:

1. Drain the fuel.
2. Drain the engine oil.
3. Verify that all switches are in the OFF position.

Cold weather starting tips:

Most gas-powered generators are more difficult to start during cold temperatures. This generator has been tested for cold weather starting, but it will still be more difficult to start the engine in below-freezing temperatures.

Ease of starting improves if the generator has been stored under more temperate conditions, such as in a garage or a basement. Note: the generator should not be stored indoors unless all fuel has been drained from it. Please see the section entitled 'Transportation/Storage' for more detailed information.

In cold weather conditions, move the generator indoors for a period of 30 to 60-minutes, if possible, in order to allow the components to warm up before attempting to start it.

CAUTION: Do not start the generator indoors. Move it back outdoors before attempting to start it.

When starting the generator at below-freezing temperatures, the following steps are recommended:

- Use 5W-30, 4-stroke formula (low temperature oil) engine oil instead of 10W-30 oil.
- Verify that the engine oil level is appropriate (a low engine oil level will decrease the probability of starting, and may damage the engine).
- Check the fuel level (use only unleaded gasoline with an octane rating of 87 or higher).
- Turn the fuel switch to the ON position.
- Move the choke lever to the OFF (CLOSED) position (i.e.: minimum air and maximum fuel mix).
- Verify that there is no appliance or other apparatus plugged into any receptacles.
- Turn the engine switch to the ON position.
- During the initial pull of the starter cord, pull lightly until resistance is felt. Continue to pull with more effort, but slowly and evenly. This pull is intended to reduce mechanical resistance that is built up due to the cold and the period of non-use.
- After the initial pull, pull the starter cord briskly 3 times, and then wait 15 seconds if the engine does not start. The 15-second delay will allow excess fuel at the spark plug to evaporate. Failure to delay for 15 seconds or pulling more than 3 times in a row may cause the spark plug to become flooded. If the spark plug becomes saturated with fuel, the engine will not start.
- Repeat the previous step until the engine starts
Note: the engine and the starter will warm up slightly with each pull. The engine will start more easily once the engine and the starter are warm.
- The engine may stop immediately after it starts. If this happens, repeat the starting procedure.
- Once the engine has started and continues to run, allow it to run for 15 seconds, and then gradually move the choke lever to the ON (OPEN) position (i.e.: proper mix of air and fuel).
- Caution: Do not allow the starter cord to snap back against the engine. Guide it gently back into position in order to prevent damage to the starter and the housing.
- Caution: If the engine does not start after many pulls, inspect the spark plug. If the spark plug is saturated with fuel and/or carbon deposits, clean it or replace it with a clean spark plug.

9) TROUBLESHOOTING (FAQ)

CAUTION: The motor will automatically shut off if the engine oil level is too low. If the generator will not start, check the oil level first.

Condition	Cause		Corrective Action	
The engine will not start. The engine output is low. The engine runs erratically.	Insufficient compression	The spark plug is loose.	Tighten the spark plug securely.	
		The cylinder head bolt is loose.	Tighten the cylinder head bolt securely.	
		The gasket is damaged.	Replace the gasket.	
	The combustion chamber is not supplied with fuel.	1. Insufficient pulling speed for the starting cord.	Pull the starting cord sharply.	
		2. Foreign substance in the fuel tank.	Clean the fuel tank.	
		3. Clogged fuel line.	Clean the fuel line.	
		4. No fuel in the tank.	Refill the fuel tank.	
		5. The fuel valve is not open.	Open the fuel valve.	
	Sufficient compression	1. The spark plug is dirty with carbon or wet with fuel.	Remove the carbon or wipe out the spark plug.	
		2. The spark plug is damaged.	Replace the spark plug.	
		3. The magneto is defective.	Call the Toll-Free Helpline: 1-888-908-6200	
		4. The carburetor is not properly adjusted.		
	The fuel is not the proper grade.		Use the proper grade of fuel.	
	The generator is overloaded.		Verify that there are not too many devices plugged in.	
	The generator is overheating.		Check the fan.	
	The oil level is too low.		Fill the oil to the proper level, as specified.	
The indicator light is ON, but there is no AC or DC output.	The circuit breaker has been tripped.		Reset the circuit breaker.	
	There is a poor connection or a faulty lead.		Check and repair.	
	The receptacle is defective.		Check and repair.	
	The circuit breaker is defective.			
The indicator light is OFF, and there is no AC or DC output.	There is a problem with the generator.		Check and repair.	
Output power is irregular.	The engine RPM is too high or too low.			
	Components are loose.			
		Have the engine checked and repaired by a qualified service technician.		
		Check and tighten all components.		

10) SPECIFICATIONS

Engine

Engine Type	4-stroke, overhead valve, single cylinder
Displacement	38 cc
Bore x Stroke	φ40.0×30 mm
Compression Ratio	10:1
Engine Speed	4200～5,500 rpm
Cooling System	Forced Air
Ignition System	Full Transistor
Oil Capacity	0.16 Liter (5.4 fl oz)
Fuel Tank Capacity	1.8 Liter (0.48 gallon)
Spark Plug	A7RTC*
Noise Level	58 dB at 7 m

*Recommended replacement NGK CR5HSB

Generator

AC Output	Rated Voltage	120 V
	Rated Frequency	60 Hz
	Rated Output	750 Watts
	Max Output	800 Watts

Dimensions and Weight

Length x Width x Height	448 x 248 x 375 mm (17.6 x 9.8 x 14.8 inch)
Dry weight	12 kg (26.46 pounds)

11) LIMITED WARRANTY

Eastern Tools & Equipment, Inc. will repair or replace, free of charge, any part or parts of the generator that are defective in material or workmanship or both. Transportation charges on parts submitted for repair or replacement under this Warranty must be borne by purchaser. This warranty is effective for the time period and subject to the conditions provided for in this policy. For warranty service, find the nearest Authorized Service Dealer by contacting the place of purchase or Eastern Tools & Equipment, Inc. THERE IS NO OTHER EXPRESSED WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM PURCHASE, OR TO THE EXTENT PERMITTED BY LAW ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED. LIABILITY FOR CONSEQUENTIAL DAMAGES UNDER ANY AND ALL WARRANTIES ARE EXCLUDED TO THE EXTENT EXCLUSION IS PERMITTED BY LAW. Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation and exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

Eastern Tools & Equipment, Inc.

WARRANTY PERIOD***

ENGINES	WITHIN U.S.A AND CANADA		OUTSIDE U.S.A. AND CANADA	
	CONSUMER USE	COMMERCIAL USE	CONSUMER USE	COMMERCIAL USE
GASOLINE GENERATOR	1 year	90 days	1 year	90 days

The warranty period begins on the date of purchase by the first retail consumer or commercial end user, and continues for the period of time stated in the table above. "Consumer use" means personal residential household use by a retail consumer. "Commercial use" means all other uses, including the commercial, income producing or rental purpose. Once the engine has experienced commercial use, it shall thereafter be considered as a commercial use engine for purpose of this warranty.

Engines use in competitive racing or commercial or rental tracks are not warranted.

*****A two-year warranty applies to the emission control system on engines certified by EPA and CARB.**

IMPORTANT

"WARRANTY REGISTRATIONS IS NECESSARY TO OBTAIN LIMITED WARRANTY ON EASTERN TOOLS & EQUIPMENT, INC., ENGINES. THE WARRANTY REGISTRATION CARD MUST BE RETURNED WITHIN 15 DAYS OF PURCHASE FOR LIMITED WARRANTY TO BE VALID"

About Your Product Warranty

Eastern Tools & Equipment, Inc. welcomes warranty repair and apologizes to you for being inconvenienced. Any Authorized Service Dealer may perform warranty repairs. Most warranty repairs are handled routinely, but sometimes warranty service may be inappropriate. For example, warranty would not apply if an engine is damaged because of misuse, lack of routine maintenance, shipping, handling, warehousing and improper installation. Similarly, warranty is void if the serial number on the engine has been removed or if the engine has been altered or modified. If a customer differs with the decision of the Service Dealer, an investigation will be made to determine whether the warranty applies. Ask the Service Dealer to submit all supporting facts to his Distributor or the factory for review. If the distributor or the factory decides that the claim is justified, the customer will be fully reimbursed for those items that are defective. To avoid misunderstanding, which might occur between the customer and the dealer, listed below are some of the causes of engine failure that the warranty does not cover.

Normal wear:

Engines and generators, like all mechanical devices, need periodic parts service and replacement to perform well. Warranty will not cover repair when normal use has exhausted the life of a part of an engine.

Improper maintenance:

The life of an engine or your equipment depends upon the conditions under which it operates, and the care it receives. Some applications, such as tillers, pumps, and rotary movers, are very often used in dusty or dirty conditions, which can cause what appears to be premature, wear. Such wear, when caused by dirt, dust, spark plug cleaning grit, or other abrasive material that has entered the engine because of improper maintenance is not covered by warranty.

This warranty covers engine related defective material and/or workmanship only, and not replacement or refund of the equipment to which the engine may be mounted. Nor does the warranty extend to repairs required because of:

1. Problems caused by parts that are not original eastern tools & equipment, inc., parts.
2. Equipment controls or installations that prevent starting, cause unsatisfactory engine performance, or shorten engine life. (Contact equipment manufacturer.)
3. Leaking carburetor, clogged fuel pipes, sticking valves, or other damage, caused by using contaminated or stale fuel. (Use clean, fresh, lead-free gasoline.)
4. Parts which are scored or broken because an engine was operated with insufficient or contaminated lubricating oil, or and incorrect grade of lubricating oil (check oil level daily or after every 8 hours of operation. Refill when necessary and change at recommended intervals.) Engine damage may occur if oil level is not properly maintained. Read Operating & Maintenance Instructions.
5. Repair or adjustment of associated parts or assemblies such as clutches, transmissions, remote controls, etc., which are not manufactured by Eastern Tools & Equipment, Inc.
6. Damage or wear to parts caused by dirt, which entered the engine because of improper air filter maintenance, re-assembly, or use of a non-original air filter element or cartridge. Read Operating & Maintenance Instructions.
7. Parts damaged by over-speeding, or overheating caused by grass, debris, or dirt, which plugs or clogs the cooling fins, or flywheel are, or damaged caused by operating the engine in a confined area without sufficient ventilation.
8. Engine or equipment parts broken by excessive vibration caused by a loose cutter blades unbalanced blades or loose unbalanced impellers, improper attachment of equipment to engine crankshaft, over speeding or other abuse in operation.
9. A bent or broken crankshaft, caused by striking a solid object with the cutter blade of a rotary lawn mower, or excessive v-belt tightness.
10. Routine tune-up or adjustment of the engine.
11. Engine or engine component failure, i.e., combustion chamber, valves, valve seats, valve guides, or burned starter motor winding, caused by the altered fuels such as, liquefied petroleum, natural gas, altered gasoline's etc.

Warranty is available only through service dealers, which have been authorized by Eastern Tools & Equipment, Inc., please contact the place of purchase or Eastern Tools & Equipment, Inc. for a Service Dealer near you.

CALIFORNIA & USEPA EMISSION (OR EVAPORATIVE) CONTROL WARRANTY

The U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB) and Eastern Tools & Equipment, Inc. are pleased to explain the Federal and California Emission Control System Warranty on your small nonroad engine. In California, new small nonroad engines must be designed, built and equipped to meet the State's stringent and anti-smog standards. Eastern Tools & Equipment, Inc. must warrant the emission (or evaporative) control system on your small nonroad engine for the periods of time listed above listed above provided there has been no abuse, neglect or improper maintenance of your small nonroad engine.

Your emission (or evaporative) control system may include parts such as the carburetor, or fuel-injection system, the ignition system and catalytic converter. Also included may be hoses, belts, connectors and other emission (or evaporative)-related assemblies.

Where a warrantable condition exists, Eastern Tools & Equipment, Inc. will repair your small nonroad engine at no cost to you including diagnosis, parts and labor.

OWNER'S WARRANTY RESPONSIBILITIES

As the small nonroad engine owner, you are responsible for the performance of the required maintenance listed in your Owner's Manual. Eastern Tools & Equipment, Inc. recommends that you retain all receipts covering maintenance on your small nonroad engine, but Eastern Tools & Equipment, Inc. cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the small nonroad engine owner, you should, however, be aware that Eastern Tools & Equipment, Inc. may deny you warranty coverage if your small nonroad or part thereof has failed due to abuse, neglect, improper maintenance or unapproved modifications.

You are responsible for presenting your small nonroad engine to Eastern Tools & Equipment, Inc. distribution center as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities or request warranty service you should contact either the place of purchase or Eastern Tools & Equipment, Inc., c/o Service Manager, Engine and Equipment Service Division.

IMPORTANT NOTE:

This warranty statement explains your rights and obligations under Emission Control system Warranty (ECS Warranty), which is provided to you by Eastern Tools & Equipment, Inc. pursuant to California law. Eastern Tools & Equipment, Inc. also provides to original purchasers of new Eastern Tools & Equipment, Inc. engines. Eastern Tools & Equipment, Inc. Limited Warranties for New engines & other Equipment associated with the engine (Eastern Tools & Equipment, Inc. Products Warranty), which is enclosed with all New Eastern Tools & Equipment, Inc. engines and products on a separate sheet. The ECS Warranty applies only to the emission (or evaporative) control system of your new engine. To the extent that there is any conflict in terms between the ECS Warranty and the Eastern Tools & Equipment, Inc., Warranty, the ECS Warranty shall apply except in any circumstances in which the Eastern Tools & Equipment, Inc. Product Warranty may provide a longer warranty period. Both the ECS Warranty and the Eastern Tools & Equipment, Inc. product Warranty describe important right and obligations with respect to your new engine.

Eastern Tools & Equipment, Inc. at its location in Ontario, California can perform warranty service or any authorized service dealer near you. At the time of requesting warranty service, evidence must be presented of the date of sale to the original purchaser. The purchaser shall pay any charges for transporting the product to and from the place when the inspection and/or warranty preformed. The purchaser shall be responsible for any damage or loss incurred in connection with the transportation of any engine or any part(s) thereof submitted for inspection and/or warranty work.

If you have any questions regarding your warranty rights and responsibilities, you should contact Eastern Tools & Equipment, Inc.

Mail: ***Eastern Tools & Equipment, Inc.***

111 Bluegrass Dr.

Norwalk, OH 44857

Telephone: ***1-888-908-6200***

Website: ***www.easterntools.com***

PRODUCT REGISTRATION

*For more efficient customer service, please fill out the information below and mail to Eastern Tools & Equipment, Inc.
Product Warranty and Registration Division.*

Model No. _____ Engine Serial No. _____ Purchase Date ____ / ____ / ____

Purchased from:

Retail Location Private Consumer Other _____

Name _____

Location Address _____

Telephone (____) ____ - _____ Purchase Price _____

Purchased: New Used

Consumer Information:

Name _____ Telephone (____) ____ - _____

Street Address _____ Suite or Apt No. _____

City _____ State _____ Zip Code _____

Province or County _____

Are you a: Business Residence

Product Usage Information:

How often will you use this product?

Everyday Periodically Emergency Use Only Other

What type of application will you use this product in?

Heavy Commercial Moderate Commercial Light Commercial Tradeshows

Heavy Residential Moderate Residential Light Residential Camping/Backpacking

Other _____

Important information:

It is critical to your warranty that the original point of sales receipt be retained by current consumer, and in order to comply with Eastern Tools & Equipment Product Warranty statement you must return the registration card within 15 days of original purchase. Product warranty is valid from original date of purchase.

Please mail the above card to:

Eastern Tools & Equipment, Inc.

111 Bluegrass Dr.

Norwalk, OH 44857

EASTERN TOOLS & EQUIPMENT, INC.

TEL: (888) 908-6200

WEB SITE: easterntools.com