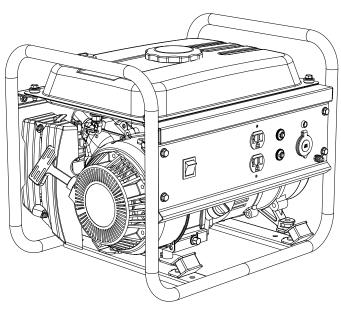


1800W PORTABLE GENERATOR



Model # 56180 bit.ly/WENvideo

IMPORTANT:

Your new tool has been engineered and manufactured to WEN's highest standards for dependability, ease of operation, and operator safety. When properly cared for, this product will supply you years of rugged, trouble-free performance. Pay close attention to the rules for safe operation, warnings, and cautions. If you use your tool properly and for intended purpose, you will enjoy years of safe, reliable service.



NEED HELP? CONTACT US!

Have product questions? Need technical support? Please feel free to contact us at:

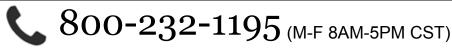






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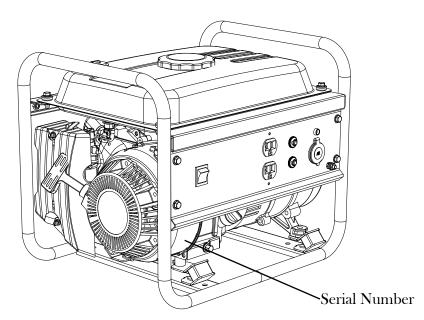
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GENERATOR IDENTIFICATION

If assistance for information or service is required, please contact the Customer Service Help Line by calling 800-232-1195; customer will be asked to provide generator information when calling.

Refer to the illustration below for the location of the serial number. Record generator information in the spaces provided below.

DATE OF PURCHASE:	
PURCHASED FROM:	
GENERATOR MODEL NUMBER: 56180	
ENGINE SERIAL NUMBER:	



SERVICE RECORD

Record Service Dates:

	Date	Date	Date	Date	Date	Date
Change Oil						
Change Spark Plug						
Clean Fuel Tank						
Clean Air Filter						

INTRODUCTION

Thank you for purchasing a WEN Generator. This manual provides information regarding the safe operation and maintenance of this product. Every effort has been made to ensure the accuracy of the information in this manual. WEN reserves the right to change this product, manual and specifications at any time without prior notice.

Please keep this manual available to all users during the entire life of the generator.



This manual contains special messages to bring attention to potential safety concerns and generator damage as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.

QUESTIONS? PROBLEMS?

In order to answer questions and solve problems in the most efficient and speedy manner, contact Customer Service at (800) 232-1195, M-F 8-5 CST

NOTICE REGARDING EMISSIONS

Engines that are certified to comply with U.S. EPA emission regulations for SORE (Small Off Road Equipment), are certified to operate on regular unleaded gasoline, and may include the following emission control systems: (EM) Engine Modifications and (TWC) Three-Way Catalyst (if so equipped).

SAFETY INFORMATION

Before operating this generator read and observe all warnings, cautions, and instructions both on the generator and in this owner's manual.

NOTE: The following safety information is not meant to cover all possible conditions and situations that may occur.

This safety alert symbol is used to identify safety information about hazards that can result in personal injury.



A signal word (DANGER, WARNING, or CAUTION) is used with the alert symbol to indicate the likelihood and the potential severity of injury. In addition, a hazard symbol may be used to represent the type of hazard.

DANGER indicates a hazard, which, if not avoided, will result in death or serious injury.

WARNING indicates a hazard, which, if not avoided, could result in death or serious injury.

CAUTION indicates a hazard, which, if not avoided, might result in minor or moderate injury.

CAUTION when used without the alert symbol, indicates a situation that could result in damage to the engine or generator.

SAFETY INFORMATION

For any questions regarding the hazard and safety notices listed in this manual or on the product, please call (800) 232-1195 M-F 8-5 CST before using the generator.



DANGER: CARBON MONOXIDE

Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide (CO). This is a poison gas you cannot see or smell. If you can smell the generator exhaust, you are breathing CO. But even if you cannot smell the exhaust, you could be breathing CO.

NEVER use a generator inside homes, garages, crawl spaces, or other partially enclosed areas. Deadly levels of carbon monoxide can build up in these areas. Using a fan or opening windows and doors does NOT supply enough fresh air. ONLY use a generator outside and far away from windows, doors, and vents. These openings can pull in generator exhaust.

Even if you use a generator correctly, CO may leak into the home. ALWAYS use a battery-powered or battery-backup CO alarm in the home. If you start to feel sick, dizzy, or weak after the generator has been running, move to fresh air RIGHT AWAY. See a doctor. You may have carbon monoxide poisoning.



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



WARNING: This generator may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death if ignited. A nearby open flame can lead to explosion even if it isn't directly in contact with gasoline.

GENERATOR SAFETY RULES:

- 1) Do not operate near open flame.
- 2) Do not smoke near generator.
- 3) Always operate on a firm, level surface.
- 4) Always turn generator off before refueling. Allow generator to cool for at least 2 minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
- 5) Do not overfill fuel tank. Gasoline may expand during operation. Do not fill to the top of the tank. Allow for expansion.
- 6) Always check for spilled fuel before operating.
- 7) Empty fuel tank before storing or transporting the generator.
- 8) Do not use in rainy conditions.

- 9) ALWAYS ground the generator before using it (see the "Ground the Generator" portion of the "Generator Preparation" section).
- 10) Generator should only be plugged into electrical devices, either directly or with an extension cord. NEVER connect to a building's electrical system without a qualified electrician. Such connections must comply with local electrical laws and codes. Failure to comply can create a back-feed, which may result in serious injury or death to utility workers.
- 11) Use a ground fault circuit interrupter (GFCI) in highly conductive areas such as metal decking or steel work. GFCIs are available in-line with some extension cords.
- 12) Do not touch bare wires or receptacles (outlets).
- 13) Do not allow children or non-qualified persons to operate the generator.

SAFETY INFORMATION

GENERATOR SAFETY RULES (CONTINUED):

- 14) Do not touch hot surfaces. Pay attention to warning labels on the generator identifying hot parts of the machine.
- 15) Allow generator to cool down after use before touching engine or areas of the generator that become hot during use.
- 16) Only use generator for its intended purposes.
- 17) Operate only on dry, level surfaces.
- 18) Allow generator to run for several minutes before connecting electrical devices.
- 19) Shut off and disconnect any malfunctioning devices from generator.

- 20) Do not exceed the wattage capacity of the generator by plugging in more electrical devices than the unit can handle.
- 21) Do not turn on electrical devices until after they are connected to the generator.
- 22) Turn off all connected electrical devices before stopping the generator.
- 23) Turn the engine switch to "OFF" position when the engine is not running.

CAUTION: Misuse of this generator can damage it or shorten its life.



WARNING: This generator produces heat when running. Temperatures near exhaust can exceed 150° F (65° C).

SAVE THESE INSTRUCTIONS - This manual contains important instructions for the WEN generator that should be followed during installation and maintenance of the generator.

Generators vibrate in normal use. During and after the use of the generator, inspect both the generator as well as extension and power supply cords for damage resulting from vibration. Have damaged items repaired or replaced as necessary. Do not use plugs or cords that show signs of damage such as broken or cracked insulation.

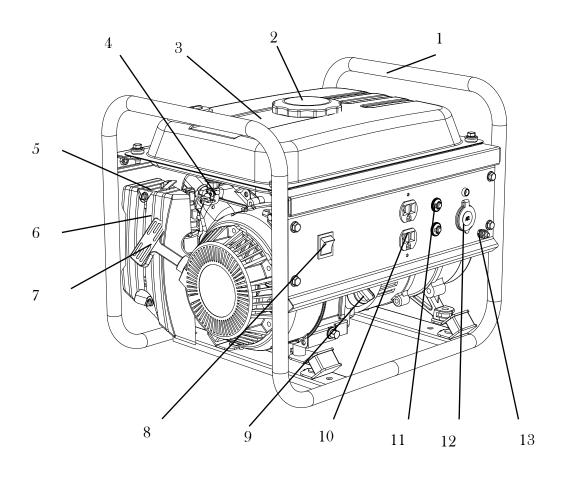
For power outages, permanently installed stationary generators are better suited for providing backup power to the home. Even a properly connected portable generator can become overloaded. This may result in overheating or stressing of the components, possibly leading to a generator failure.



WARNING: If this generator is used as a supply for a building's wiring system, the generator must be installed by a qualified electrician and connected to a transfer switch as a separately derived system in accordance with the National Electrical Code, NFPA 70. The generator shall be connected to a transfer switch that switches all conductors excluding the equipment grounding conductor. The frame of the generator shall be connected to an approved grounding electrode.

GENERATOR COMPONENTS

Use the illustrations below to become familiar with the locations and functions of the various components and controls of this generator. Take out all accessories from the box, making sure it is completely empty before discarding the package.



- 1 Frame
- 2 Fuel Tank Cap
- 3 Fuel Tank
- 4 Fuel Valve Assembly
- 5 Choke Lever
- 6 Air Cleaner
- 7 Recoil Starter

- 8 ON/OFF Switch
- 9 Oil Dipstick
- 10 120V Duplex Receptacle
- 11 Circuit Breakers
- 12 12V Cigarette Lighter Style DC Receptacle
- 13 Grounding Terminal

GENERATOR PREPARATION

USING THE GENERATOR FOR THE FIRST TIME

CAUTION: The following section describes the necessary steps to prepare the generator for use. If after reading this section, you are unsure about how to perform any of the steps please call (800) 232-1195 M-F 8-5 CST for customer service. Failure to perform these steps properly can damage the generator or shorten its life.

STEP 1 - ADD OIL

The generator is shipped without oil. User must add the proper amount of oil before operating the generator for the first time. The oil capacity of the engine crankcase is 13.5 fl. ounces. For general use (above 40° F), we recommend 30W, 4-stroke engine oil. 10W-30 synthetic oil is also acceptable.

To add oil, follow these steps:

Note: make sure the generator is on a level surface. Tilting the generator to assist in filling will cause oil to flow into the engine areas and will cause damage. Keep the generator level!

- 1. Remove the dipstick from the engine (Fig. 2).
- 2. Add oil slowly, being careful not to overfill the unit. We highly recommend using a funnel if you have one available. Fill the crank case to the upper fill line so the oil lands about halfway up the dipstick threads (Fig. 2).
- 3. To check the oil level, wipe the dipstick with a clean rag. Insert the dipstick into the oil fill opening without screwing it in.

 Remove the dipstick to check the oil mark.
- 4. Slowly add more oil and repeat step 4 until the oil mark reaches to the top of the dipstick, or just when the oil is visibly coming up the bottom threads (Fig. 2). Do not overfill the crankcase. The generator is equipped with a low-oil sensor and will not start without a sufficient amount of oil.
- 5. Check for oil leaks and firmly tighten the dipstick.

ENGINE OIL RECOMMENDATIONS

Select good quality detergent oil bearing the American Petroleum Institute (API) service classifications SJ, SL, or SM (synthetic oils may be used). Use the ASE viscosity grade of oil from the following chart (Fig. 1) that matches the starting temperature anticipated before the next oil changes.

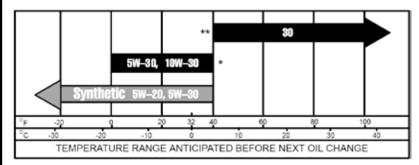
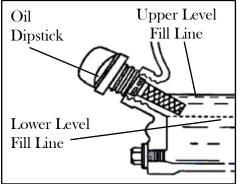


Fig. 1 - Engine Oil Temperature Recommendation

CAUTION: Air cooled engines run hotter than automotive engines. The use of non-synthetic multi-viscosity oils (5W-30, 10W-30, etc.) in temperatures above 40° F will result in higher than normal oil consumption. When using a multi-viscosity oil, check the oil level more frequently than you would otherwise.



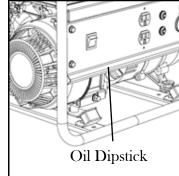


Fig. 2 - Oil Fill Opening, Dipstick and Oil Level

GENERATOR PREPARATION



WARNING: This generator may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death if ignited. A nearby open flame can lead to explosion even if not directly in contact with gasoline.

Step 2 - ADD GASOLINE

Use fresh (within 30 days from purchase), lead-free gasoline with a minimum of 87 octane rating. Do not mix oil with gasoline.

To add gasoline, follow these steps:

- 1. Make sure the generator is on a level surface.
- 2. Unscrew fuel cap and set aside.

NOTE: The fuel cap may be tight and hard to unscrew.

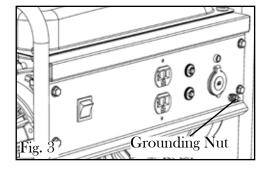
3. Slowly add unleaded gasoline to the fuel tank. Be careful not to over-fill. The capacity of the fuel tank is 1.1 gallons.

NOTE: Do not fill the fuel tank to the very top. Gasoline will expand and spill over during use even with the fuel cap in place.

4. Reinstall fuel cap and wipe clean any spilled gasoline with a dry cloth.

IMPORTANT:

- Never use an oil/gasoline mixture.
- Never use old gasoline.
- Avoid getting dirt or water into the fuel tank.
- Gasoline can age in the tank and make starting difficult. Never store generator for extended periods of time with fuel in the tank.



STEP 3 - GROUND THE GENERATOR

Ground the generator by tightening the grounding nut on the front control panel against a grounding wire (Fig. 3). A generally acceptable grounding wire is a No. 12 AWG (American Wire Gauge) stranded copper wire. This grounding wire should be connected at the other end to a copper, brass, or steel-grounding rod that is driven into the earth. Wire and grounding rods are not included with the generator.

Grounding codes can vary by location. Contact a local electrician to check the area codes.

NOTE: After completing the above preparation, the generator is ready to be started.



WARNING: Failure to properly ground the generator increases your risk of electric shock.

STARTING THE GENERATOR

Before starting the generator, make sure you have read and performed the steps in the "Generator Preparation" section of this manual. If you are unsure about how to perform any of the steps in this manual please call (800) 232-1195 M-F 8-5 CST for customer service.



DANGER: CARBON MONOXIDE - USING A GENERATOR INDOORS CAN KILL YOU IN MINUTES.

Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide (CO). This is a poison gas you cannot see or smell. If you can smell the generator exhaust, you are breathing CO. But even if you cannot smell the exhaust, you could be breathing CO.

NEVER use a generator inside homes, garages, crawl spaces, or other partially enclosed areas. Deadly levels of carbon monoxide can build up in these areas. Using a fan or opening windows and doors does NOT supply enough fresh air. ONLY use a generator outside and far away from windows, doors, and vents. These openings can pull in generator exhaust.

Even if you use a generator correctly, CO may leak into the home. ALWAYS use a battery-powered or battery-backup CO alarm in the home. If you start to feel sick, dizzy, or weak after the generator has been running, move to fresh air RIGHT AWAY. See a doctor. You may have carbon monoxide poisoning.



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



WARNING: This generator may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death if ignited. A nearby open flame can lead to explosion even if it isn't directly in contact with gasoline.



WARNING: This generator produces powerful voltage, which can result in electrocution.

ALWAYS ground the generator before using it (see the "Ground the Generator" portion of the "Generator Preparation" section).

Generator should only be plugged into electrical devices, either directly or with an extension cord. NEVER connect to a building electrical system without a qualified electrician. Such connections must comply with local electrical laws and codes. Failure to comply can create a back-feed, which may result in serious injury or death to utility workers.

Use a ground fault circuit interrupter (GFCI) in highly conductive areas such as metal decking or steel work. GF-CIs are available in-line with some extension cords.

Do not use in rainy or wet conditions. Do not touch bare wires or receptacles (outlets). Do not allow children or non-qualified persons to operate.

CAUTION: Disconnect all electrical loads from the generator before attempting to start.

STARTING THE GENERATOR

STARTING THE ENGINE

To start the generator, perform the following steps:

- 1. Unplug all electrical devices from the generator during ignition. Otherwise it will be difficult for the engine to start.
- 2. To maximize safety, make sure the generator is properly grounded (Refer to "Ground the Generator").
- 3. Check the oil and fuel levels.
- 4. Turn the fuel valve to the "ON" position (See Figure 4).
- 5. Move the choke lever to the "CLOSE" position (See Figure 5).
- 6. Set the ON/OFF Switch to the "ON" position.
- 7. Pull on the recoil starter handle slowly until a slight resistance is felt, then pull quickly to start the engine. Return cord gently into the recoil starter. Never allow the cord to snap back.
- 8. If engine fails to start, repeat step 7. NOTE: After repeated failed attempts to start the engine, please consult the troubleshooting guide before attempting again. If problems persist please call (800) 232-1195 M-F 8-5 CST.
- 9. Once the engine has started, slowly return the choke lever all the way to the "OPEN" position.
- 10. Allow the engine to run for several minutes before attempting to connect any electrical devices. This allows the generator to stabilize its speed and temperature.

Allow the generator to run for several minutes before attempting to connect any electrical devices. This allows the generator to stabilize its speed and temperature.

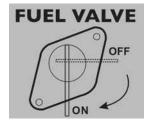


Fig. 4 - Fuel Valve



Fig. 5 Choke Lever

STOPPING THE GENERATOR

TO STOP THE GENERATOR

- 1. Turn off all electrical devices prior to unplugging them from the generator. Unplugging running devices can cause damage to the generator.
- 2. Turn the engine switch to the "OFF" position.



WARNING: Allow the generator to cool for several minutes before touching areas that become hot during use.

CAUTION: Allowing gasoline to sit in the fuel tank for long periods of time can make it difficult to start the generator in the future. Never store the generator for extended periods of time (over 2 months) with fuel in the fuel tank. Refer to Generator Storage Section.

SUBSEQUENT STARTING OF THE GENERATOR

If this is not the first time using the generator, the user should take the following steps to prepare it for operation.

IMPORTANT: At this point the user should be familiar with the procedures described in the sections titled "Starting the Generator" and "Generator Preparation." If the user has not yet read these sections, go back and read them now.

Step 1 - CHECK THE OIL

Oil consumption is normal during generator use. The generator is equipped with a low oil pressure shutoff to protect it from damage. The oil level of the engine should be checked before each use to ensure that the engine crankcase contains sufficient lubricant.

To check or add oil, follow these steps:

- 1. Make sure the generator is on a level surface.
- 2. Remove the oil filler/dipstick cap and check the oil level.

IMPORTANT:

- Use only UNLEADED gasoline.
- Do not use old gasoline.
- Never use an oil/gasoline mixture.
- Avoid getting dirt or water into the fuel tank.
- 3. If oil level is below the second thread from the lip of the oil fill opening, slowly add oil until the engine crank-case is filled.
- 4. Reinstall and tighten oil cap before starting the engine.

Step 2 - CHECK THE FUEL LEVEL

Before starting the generator, check to see that there is sufficient gasoline in the fuel tank. Add additional gasoline as necessary but leave sufficient room in the tank for expansion.

SUBSEQUENT STARTING OF THE GENERATOR

Step 3 - GROUND THE GENERATOR

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WARNING: Failure to properly ground the generator increases the chances of electric shock.

Ground the generator by tightening the grounding nut on the front control panel against a grounding wire (Fig. 3). A generally acceptable grounding wire is a No. 12 AWG (American Wire Gauge) stranded copper wire. This grounding wire should be connected at the other end to a copper, brass, or steel-grounding rod that is driven into the earth. Wire and grounding rod are not included in generator contents. Grounding codes can vary by location. Contact a local electrician for area codes.

USING THE GENERATOR

Before connecting electrical devices, allow the generator to run for a few minutes to stabilize the speed and voltage output.

CAUTION: Become familiar with the markings on the panel before connecting electrical devices.

Connect electrical devices running on AC current according to their wattage requirements. The chart below shows the rated and surge wattage of the generator.

The rated (running) wattage is the wattage the generator can produce on a continuous basis.

The surge wattage is the maximum amount of power the generator can produce for an extremely short period of time (seconds). Many electrical devices such as refrigerators require short bursts of extra power in addition to the rated wattage listed by the device to start their motors. The surge wattage ability of the generator covers this extra power requirement.

Item	Rated (Running) Wattage	Surge Wattage
56180	1800	1500

The total running wattage requirement of the electrical devices connected to the generator should not exceed the rated wattage of the generator itself. To calculate the total wattage requirement of the electrical devices you plan to connect, find the rated (or running) wattage of each device. This number should be listed somewhere on the device or in its instruction manual. If this wattage cannot be found, calculate it by multiplying the Voltage requirement by the Amperage drawn:

Watts = Volts x Amperes

USING THE GENERATOR

If the electrical specifications are not available for your electronic devices, estimate the watts requirement of the device by using the chart in Figure 6.

When the rated wattage requirement of each electrical device has been determined, add these numbers to find the total rated wattage needed. If this number exceeds the rated wattage of the generator, DO NOT connect all these devices. Select a combination of electrical devices, which have a total rated wattage lower than or equal to the rated wattage of the generator.

CAUTION: The generator can run at its surge wattage capacity for only a short time. Connect electrical devices requiring a rated (running) wattage equal to or less than the rated wattage of the generator. Never connect devices requiring a rated wattage equal to the surge wattage of the generator. This can trip the circuit protectors (circuit breakers).

Tool or Appliance	Running Watts	Surge Watts
Saw - circular	1500	1500
Air compressor (1 HP)	1500	3000
Window air conditioner	1200	1800
Saw - miter	1200	1200
Microwave	1000	0
Well water pump	1000	1000
Saw - reciprocating	960	1040
Sump pump	800	1200
Refrigerator freezer	800	1200
Furnace blower	800	1300
Computer	800	0
Electric drill	600	900
Television	500	0
Deep freezer	500	500
Garage door opener	480	0
Stereo	400	0
Box fan	300	600
Clock radio	300	0
Security system	180	0
DVD player / VCR	100	0
Common light bulb	75	0

Fig. 6 - Estimated wattage requirements of common electrical devices

Note: The above wattage figures are estimates. Check the wattage listed on the electrical device before consulting this chart. Once the electrical devices have been chosen, connect them according to the following procedure:

- 1. Plug in each electrical device, making sure that the device is turned off.
- 2. Check power indicator light. The generator may be overloaded. If so, unplug the electronics, then restart the generator before plugging the load back in. If the reset button does not reset, wait several minutes and try again. If the power light still does not come on, call the customer service number for further instructions.

USING THE GENERATOR

CAUTION: Do not connect 50Hz loads to the generator.

SOME NOTES ABOUT POWER CORDS: Long or thin cords can drain the power provided to an electrical device by the generator. When using such cords, allow for a slightly higher rated wattage requirement by the electrical device. See Figure 7 for recommended cords based on the power requirement of the electrical device.

Device Red	quirements	Max. Cord Length (ft) by Wire Gauge				
Amps	Watts (120V)	#8 wire	#10 wire	#12 wire	#14 wire	#16 wire
2.5	300	NR	NR	NR	375	250
5	600	NR	NR	300	200	125
7.5	900	NR	350	200	125	100
10	1200	NR	250	150	100	50
15	1800	NR	150	100	65	NR

^{*}NR = Not Recommended

Fig. 7 - Maximum Extension Cord Lengths by Power Requirement

If an overload occurs, shut down the generator. Unplug all electrical devices and wait five minutes. Then, start the unit back up again to get power back.

MAINTENANCE/CARE

Proper routine maintenance of the generator will help prolong the life of the machine. Please perform maintenance checks and operations according to the schedule in Figure 8. If there are any questions about the maintenance procedures listed in this manual, please call (800) 232-1195 M-F 8-5 CST.

CAUTION: Never perform maintenance operations while the generator is running. Drain your carburetor after every use. Do not store the generator with fuel inside the tank for more than 2 months. Run the generator for 15 minutes a month to maximize its lifespan.

Recomme Maintenance		Each 8 hours or daily	Every 25 hours	Every 3 months or 50 hours	Every 6 months or 100 hours	Every year	As necessary
Engine oil	Check level	X					
	Replace		X*	X*			X
Air cleaner	Check		X		X		
cartridge	Clean				X		
Spark plug	Check/ clean/ regap				X		
	Change					X	X
Fuel tank	Check level	X					
	Clean					X	
Carburetor	Drain	X					

Fig. 8 - Recommended maintenance schedule

^{*} Clean/change more often under dusty conditions or operating under heavy load.

MAINTENANCE

HIGH ALTITUDE OPERATION ABOVE 2000 FEET

The fuel system on this generator may be affected by operation at high altitudes. Proper operation can be ensured by installing an altitude kit at altitudes higher than 2000 feet above sea level. At elevations above 8000 feet, the engine may experience a decrease in performance, even with the proper altitude kit. Operating this generator without said kit may increase the engine's emissions and decrease both fuel economy and performance.

The kit should be installed by a qualified mechanic. Refer to the instructions included with your altitude kit for more information about installation. You can order the kit at wenproducts.com by searching part 56180-HA27 for 2000 to 7000 feet above sea level.



WARNING: To prevent serious injury from fire, follow the kit installation procedures in a well-ventilated area away from ignition sources. If the engine is hot from use, shut the engine off and wait for it to cool before proceeding. Do not smoke near the generator. Warranty will be void if adjustments are not made for high altitude use.

CLEANING THE GENERATOR

Never clean the generator when it is running! Never clean with a bucket of water or a hose. Water can get inside the working parts of the generator and cause corrosion or a short circuit.

Always try to use the generator in a cool, dry place. If the generator becomes dirty, clean the exterior with a damp cloth, a soft brush, a vacuum or pressurized air.

CHECKING THE OIL

Check the oil level of the generator according to the Recommended Maintenance Schedule in Fig. 9. The generator is equipped with an automatic shutoff to protect it from running on low oil. The generator should be checked before each use for proper oil level. This is a critical step for proper engine starting. To check the oil level:

- 1. Make sure the generator is on a level surface.
- 2. Open access panel. Clean around oil fill. Remove dipstick and wipe the dipstick with a clean rag. Insert the dipstick into the oil fill opening without screwing in. Remove the dipstick to check the oil mark. Add oil if the oil mark covers less than one half of the dipstick.
- 3. Slowly add more oil and repeat step 2 until the oil mark reaches to the top of dipstick (Fig. 2). Do not over fill the crankcase.
- 4. Reinstall oil dipstick and access panel.

DRAINING THE CARBURETOR

The carburetor drain can be accessed from the backside of the generator between the air filter assembly and the engine (Fig. 9). After each use, open up the carburetor drain with a screwdriver and drain out any gasoline that has built up inside. Once the fuel has drained, close the drain back up with the same screwdriver. It is best to do this after every use and required before storing the generator for long periods of time.



NOTE: WE SUGGEST RUNNING YOUR GENERATOR AT LEAST ONCE A MONTH IN ORDER TO MAXIMIZE THE LIFESPAN OF THE GENERATOR.

MAINTENANCE

CHANGING/ADDING OIL

Change the oil according to the Recommended Maintenance Schedule in Figure 9. Change the oil when the engine is warm. This will allow for complete drainage. Change oil more often if operating under heavy load or high ambient temperatures. It is also necessary to drain the oil from the crankcase if it has become contaminated with water or dirt. The oil capacity of the generator engine is 13.5 fl. ounces. Add oil when the oil level is low. For proper type and weight of oil refer to "add oil" portion of the "Generator Preparation" section.

- 1. Place generator on elevated platform such as table or desk. Put a container next to it to hold the used oil. Turn the vacuum relief valve to "OFF" position.
- 2. Unscrew the dipstick from the engine and set aside.
- 3. Tilt the generator so the used oil flows from the engine into the container. Tilt some more to ensure all oil is out of the crankcase.
- 4. Fill the crankcase with fresh oil and reinstall the dipstick. Clean any oil spillage..

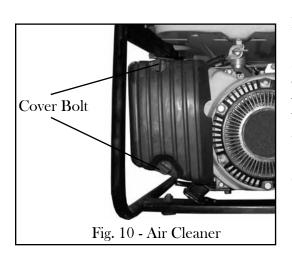
To refill the crankcase with oil, follow these steps:

- 1. Make sure the generator is on a level surface. Tilting the generator to assist in filling will cause oil to flow into engine areas and will cause damage. Keep generator level!
- 2. Remove the dipstick from the engine.
- 3. Using a funnel or appropriate dispenser, add the correct amount of oil into the crankcase. The engine is equipped with a low oil pressure sensor and will not start if the amount of oil is insufficient.
- 4. Reinstall dipstick.

NOTE: Never dispose of used motor oil in the trash or down a drain. Please call a local recycling center or auto garage to arrange oil disposal.

AIR CLEANER MAINTENANCE

Routine maintenance of the air cleaner helps maintain proper airflow to the carburetor. Occasionally check that the air cleaner is free of excessive dirt. Refer to Recommended Maintenance Schedule in Figure 8.



- 1. Unscrew the cover bolt (Fig. 10) and remove the air cleaner cover. Remove the air cleaner element from the casing.
- 2. Check and clean the foam air cleaner element. Replace with a new one if the element is damaged. Good elements can be washed in soapy water, dried and reused. There is no need to add oil to the element. Wipe off excessive oil from the air cleaner case. Small amount of oil in the element is normal and necessary for the engine to work properly.
- 3. Reinstall the air cleaner element and cover.

MAINTENANCE

SPARK PLUG MAINTENANCE

The spark plug is important for proper engine operation. A good spark plug should be intact, free of deposits, and properly gapped. Refer to Recommended Maintenance Schedule in Figure 9. To inspect the spark plug:

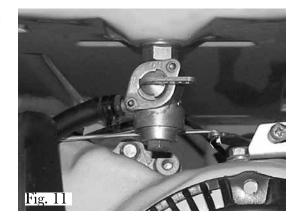
- 1. Remove spark plug boot. Be careful not to tear insulation or wire.
- 2. Unscrew the spark plug from the engine using the spark plug wrench provided. There is limited space for the wrench to turn. Use both rows of holes in the spark plug wrench to gain leverage to loosen the plug.
- 3. Visually inspect the spark plug for cracks or excessive electrode wear. Replace as necessary.
- 4. Measure the plug gap with a wire gauge. The gap should be 0.7 to 0.8 mm (0.028-0.031 in).
- 5. If re-using the spark plug, use a wire brush to clean any dirt from around the spark plug base then re-gap the spark plug.
- 6. Screw the spark plug back into the spark plug hole using the spark plug wrench. Do not over-tighten spark plug. Recommended tightening of spark plug is ½ to ¾ of a turn after spark plug gasket contacts spark plug hole. Reinstall the spark plug boot.

DRAINING THE FUEL TANK

Clean fuel tank each year and before storing the generator for longer than one to two months. To drain the fuel tank and carburetor:

- 1. Remove the fuel cap; carefully turn the generator over to pour the gasoline in the fuel tank to appropriate container.
- 2. Once fuel is drained, reinstall the fuel cap.
- 3. Turn on the engine and keep the engine running until it stops. This burns out the fuel in the carburetor and fuel tank.
- 4. Store the emptied gasoline in a suitable place.

CAUTION: Do not store fuel for more than two months.



FUEL FILTER CUP CLEANING

The fuel filter cup is a small well underneath the fuel valve. It helps to trap dirt and water that may be in the fuel tank before it can enter the engine. To clean the fuel filter cup:

- 1. Turn the fuel valve to the "OFF" position.
- 2. Unscrew the fuel filter cup from the fuel valve using a wrench. Turn the valve toward you and unscrew (Fig. 11).
- 3. Clean the cup of all sediments using a rag or brush.
- 4. Reinstall the fuel filter cup.

STORAGE & TRANSPORT PROCEDURES

CAUTION: Never place any type of storage cover on the generator while it is still hot.

If the generator is being stored for short periods of time (30 to 60 days), add stabilized fuel to the fuel tank until full. NOTE: Filling the tank reduces the amount of air in the tank and helps fight deterioration of fuel. Run the engine for 2 – 3 minutes allowing stabilized fuel mixture to circulate through the carburetor. Never store with fuel in the tank for more than two months. When storing the generator for extended periods of time:

- Drain the fuel tank (see "Draining the Fuel Tank" in the "Maintenance" section).
- Drain the carburetor (see "Draining the Carburetor" in the Maintenance section).
- Change oil.
- Do not obstruct any ventilation openings.
- Keep the generator in a cool dry area.

When transporting generator:

- Drain the fuel tank if possible (see "Draining the Fuel Tank" in the "Maintenance" section).
- Keep the generator upright. Never place the generator side down. Doing so will make it difficult to start.

SPECIFICATIONS

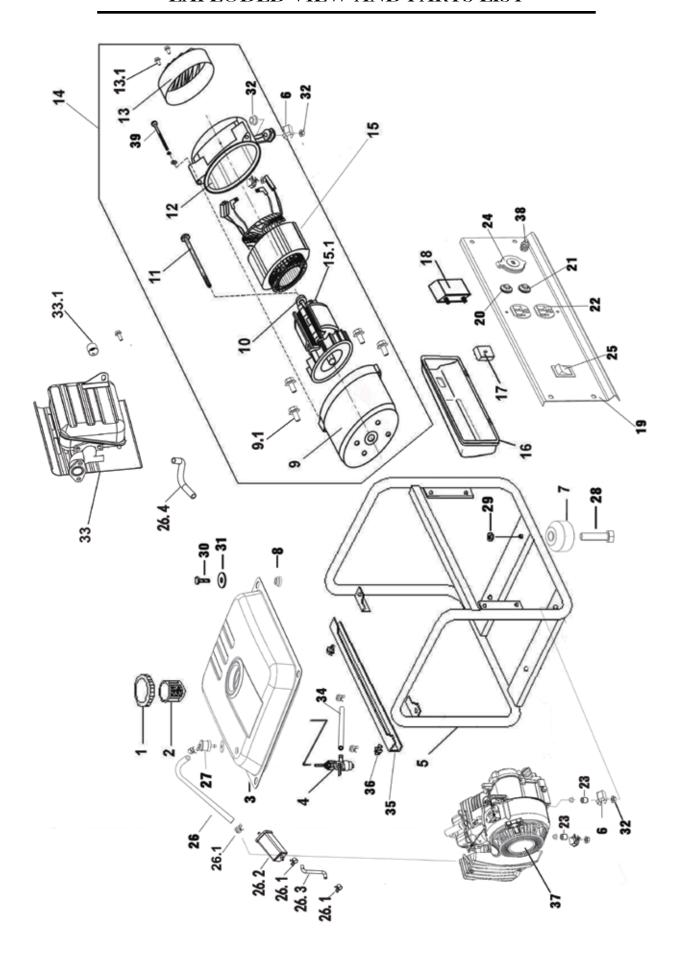
Rated Voltage 12V DC Rated Amperage 8.3 A Rated Wattage 100 W

AC output

Rated Wattage	1500 Watts
Surge Wattage	1800 Watts
Rated Voltage	120V
Rated Amperage	12.5 A
Frequency	60 Hz
Phase	Single
	Length: 19.90 inches
Dimensions	Width: 15.90 inches
	Height: 17.10 inches
Weight	51 lbs

Engine

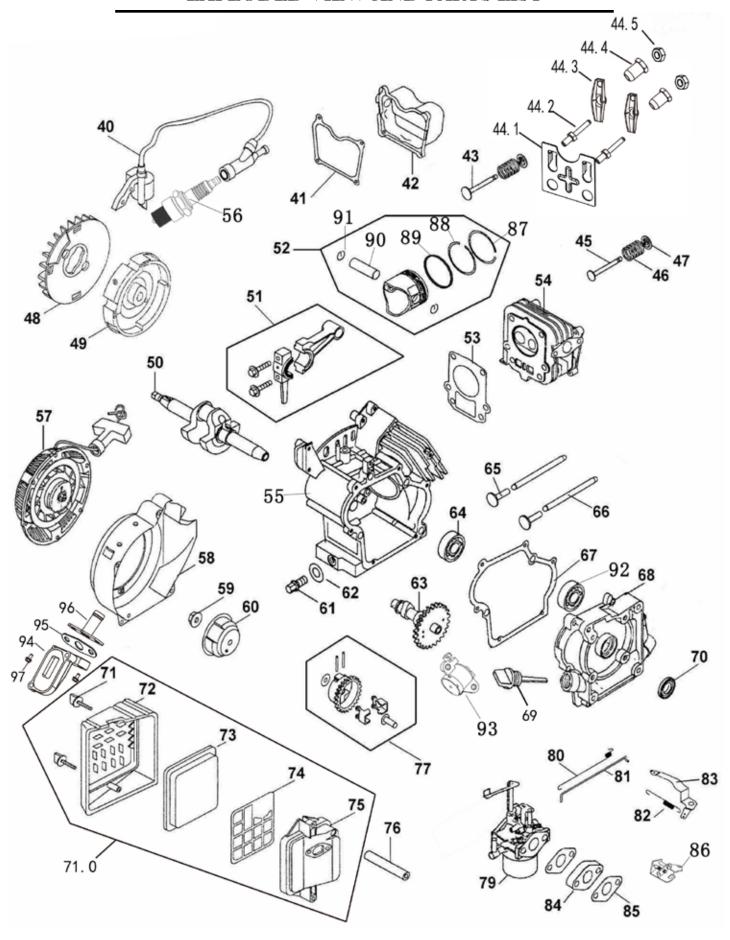
Engine type	4 stroke, OHV, single cylinder with forced air cooling system
Spark plug gap	0.7 - 0.8 mm (0.028 - 0.031 in)
Spark plug torque	1/2 - $3/4$ turn after gasket contacts base or 15 ft.lb
Displacement	98 cc
Fuel tank capacity	1.1 gallon 87 octane minimum
Oil capacity	13.50 fl.oz
Lubrication system	Splash lubrication
Run time on 50% load	7.5 hours
Noise rating	63 d B at 22 feet
Spark plug	NGK BP7HS



EXPLODED VIEW AND PARTS LIST

No.	Part Number	Description
1	56180-001	Fuel Cap
2	56180-002	Fuel Filter
3	56180-003	Fuel Tank
4	56180-004	Fuel Cock
5	56180-005	Frame
6	56180-006	Resilient Mount
7	56180-007	Rubber Foot
8	56180-008	Rubber Spacer
9	56180-009	Front Case
9.1	56180-009.1	Bolt M8x20
10	56180-010	Bearing 6202
11	56180-011	Bolt M8x168
12	56180-012	Motor Housing
13	56180-013	End Cover
13.1	56180-013.1	Bolt M6x12
14	56180-014	Alternator Assembly
15	56180-015	Stator
15.1	56180-015.1	Rotor
16	56180-016	Panel Rear Cover
17	56180-017	Rectifier
18	56180-018	Capacitor
19	56180-019	Control Panel
20	56180-020	AC Circuit Protector
21	56180-021	DC Circuit Protector
22	56180-022	Duplex Receptacle

No.	Part Number	Description
23	56180-023	Bracket
24	56180-024	12V DC Receptacle
25	56180-025	Engine Switch
26	56180-026	Fuel Hose
26.1	56180-026.1	Fuel Hose Clamp
26.2	56180-026.2	Catalyst
26.3	56180-026.3	Hose
26.4	56180-026.4	Hose
26.5	56180-26.5	Gas Line Clip
27	56180-027	One Way Valve
28	56180-028	Bolt
29	56180-029	Nut
30	56180-030	Bolt
31	56180-031	Washer
32	56180-032	Nut
N/A	56180-033.3	Muffler Gasket
33	56180-033	Muffler Assembly
33.1	56180-033.1	Spark Arrestor
33.2	56180.033.2	Muffler Bracket
34	56180-034	Fuel Hose
35	56180-035	Fuel Tank Support
36	56180-036	Blot
37	56180-037	Engine Assembly
38	56180-038	Grounding Terminal
39	56180-039	Bolt M6x96

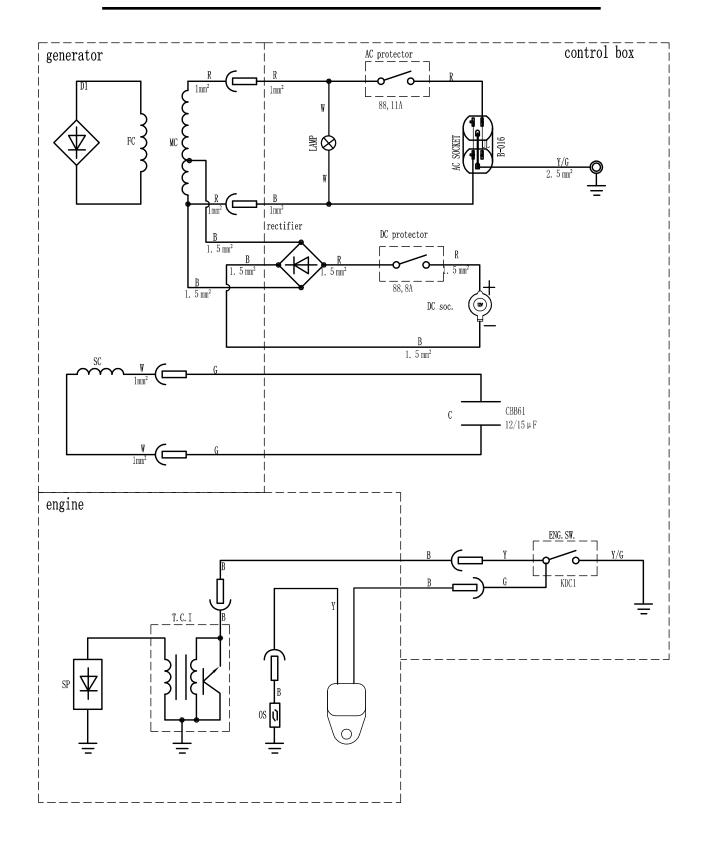


EXPLODED VIEW AND PARTS LIST

No.	Part Number	Description
40	56180-040	Ignition Coil Assembly
41	56180-041	Head Cover Gasket
42	56180-042	Cylinder Head Cover
43	56180-043	Intake Valve
44.1	56180-044.1	Push Rod Guide Plate
44.2	56180-044.2	Rocking Arm Stand
44.3	56180-044.3	Rocking Arm
44.4	56180-044.4	Adjust Nut
44.5	56180-044.5	Lock Nut
45	56180-045	Exhaust Valve
46	56180-046	Valve Spring
47	56180-047	Valve Spring Retainer
48	56180-048	Fan
49	56180-049	Flywheel
50	56180-050	Crankshaft
51	56180-051	Connecting Rod Assembly
52	56180-052	Piston Assembly
53	56180-053	Cylinder Head Assembly
54	56180-054	Cylinder Head
55	56180-055	Crankcase
56	56180-056	Spark Plug
57	56180-057	Recoil Starter
58	56180-058	Fan Cover
59	56180-059	Flange Nut M12x1.25
60	56180-060	Starting Cup
61	56180-061	Drain Bolt
62	56180-062	Washer
63	56180-063	Camshaft Assembly
64	56180-064	Bearing
65	56180-065	Valve Lifter
66	56180-066	Push Rod
N/A	56180-098	Power Light Indicator

No.	Part Number	Description
67	56180-067	Crankcase Gasket
68	56180-068	Crankcase Cover
69	56180-069	Dipstick
70	56180-070	Oil Seal
71.0	56180-070.0	Air Cleaner Assembly
71	56180-071	Screw
72	56180-072	Air Cleaner Housing
73	56180-073	Foam Element
74	56180-074	Support Pack
75	56180-075	Air Cleaner Cover
76	56180-076	Hose
77	56180-077	Regulator gear assembly
79	56180-079	Carburetor
80	56180-080	Carburetor Spring
81	56180-081	Link Rod
82	56180-082	Governor Spring
83	56180-083	Governor Arm
84	56180-084	Intake Insulator
85	56180-085	Intake Valve Gasket
86	56180-086	Governor Bracket
87	56180-087	Piston Ring I
88	56180-088	Piston Ring II
89	56180-089	Piston Ring III
90	56180-090	Piston Axes
91	56180-091	Piston Axes Ring
92	56180-092	Bearing
93	56180-093	Oil Alert Assembly
94	56180-094	Gulp Valve System
95	56180-095	Gulp Valve Gasket
96	56180-096	Gulp Valve Connection Plate
97	56180-097	Bolt M6X16

WIRING DIAGRAM



TROUBLESHOOTING

IMPORTANT: If trouble persists, please call our customer help line at (800) 232-1195 M-F 8-5 Central Time.

PROBLEM	CAUSE	SOLUTION
Engine will not start.	Engine switch is set to OFF.	Set engine switch to ON.
	Fuel valve is turned to OFF.	Turn fuel valve to ON position.
	Choke is open.	Close the choke.
	Engine is out of gas.	Add gas.
	Engine is filled with contaminated or old gas.	Change the gas in the tank.
	Spark plug is dirty.	Clean the spark plug.
	Spark plug is broken.	Replace spark plug.
	Generator is not on a level surface.	Move the generator to a level surface to prevent low oil shutdown from triggering.
	Oil is low.	Add or replace oil.
	Carburetor is air locked.	Shut off the gas valve and remove the screw from the bottom of the carburetor to allow it to reset.
Engine runs but there is no electrical output.	Circuit reset button is off.	Wait for two minutes and push the circuit reset button to the ON position.
	Bad connecting wires/cables.	If you are using an extension cord, use a different one.
	Bad electrical device connected to the generator.	Try connecting a different device.
Generator runs but does not support all electrical devices connected.	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 few electrical loads to the generator.
	Short in one of the devices.	Try disconnecting any faulty or short-circuited electrical loads.
	Air cleaner is dirty.	Clean or replace air cleaner.
DC No Power	Power cord plug not securely in place.	Twist and push the power cord plug into receptacle until contact is made with bottom of the receptacle.
	Protective fuse is blown.	Contact our customer service help line at 800-232-1195.

WARRANTY STATEMENT

Remember to save the receipt and to accurately fill out and mail the product registration card. Proof of purchase is required for all warranty work.

WEN® Generators are under warranty to be free from defects in materials and workmanship for a period of two (2) years from date of original purchase. Generators used for Commercial or Rental use have a warranty period of 90 days from date of original purchase. Keep purchase receipt and mail in the product registration card for proof of purchase.

WEN® will repair or replace, at its discretion, any part that is proven to be defective in materials or workmanship under normal use during the two (2) years warranty period. Warranty repairs or replacements will be made without charge for parts or labor. Parts replaced during warranty repairs will be considered as part of the original product and will have the same warranty period as the original product.

To exercise the warranty, DO NOT RETURN TO RETAILER. Instead, call the toll free Customer Service number at (800) 232-1195 and you will be instructed on where to take the generator for warranty service. Take the generator and proof of purchase (the receipt) to the repair facility recommended by the Customer Service Representative. To make a claim under this Limited Warranty, you must make sure to keep a copy of your proof of purchase that clearly defines the Date of Purchase (month and year) and the Place of Purchase. Place of purchase must be a direct vendor of Great Lakes Technologies, LLC. Third party vendors such as garage sales, pawn shops, resale shops, or any other secondhand merchant void the warranty included with this product. Contact techsupport@wenproducts.com or 1-800-232-1195 to make arrangements for repairs and transportation.

When returning a product for warranty service, the shipping charges must be prepaid by the purchaser. The product must be shipped in its original container (or an equivalent), properly packed to withstand the hazards of shipment. The product must be fully insured with a copy of the warranty card and/or the proof of purchase enclosed. There must also be a description of the problem in order to help our repairs department diagnose and fix the issue. Repairs will be made and the product will be returned and shipped back to the purchaser at no charge.

THIS LIMITED WARRANTY DOES NOT APPLY TO ACCESSORY ITEMS THAT WEAR OUT FROM REGULAR USAGE OVER TIME INCLUDING BELTS, BRUSHES, BLADES, ETC.

The warranty does not extend to generators damaged or affected by fuel contamination, accidents, neglect, misuse, unauthorized alterations, use in an application for which the product was not designed and any other modifications or abuse. Labor for warranty parts is only covered for the contiguous United States (48 states).

WEN® is not liable for any indirect, incidental or consequential damages from the sale or use of this product. Any implied warranties are limited to two (2) years as stated in this written limited warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages. Some states do not allow limitation on the length of an implied warranty. This warranty gives you specific legal rights, and you may have other rights that vary from state to state.