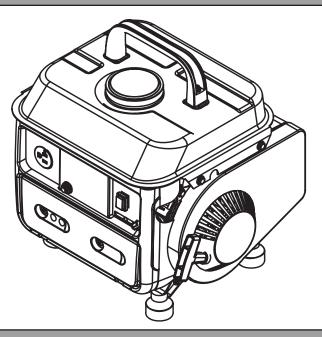


**MODEL 56105** 

# 1000 WATT 2-STROKE GENERATOR



For replacement parts visit **WENPRODUCTS.COM** 

**EPA CERTIFIED** 

CARB COMPLIANT

### **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 its 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:



800-232-1195 (M-F 8am-5pm CST)



techsupport@wenproducts.com



WENPRODUCTS.COM

**NOTICE:** Please refer to wenproducts.com for the most up-to-date instruction manual.

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## **SPECIFICATIONS**

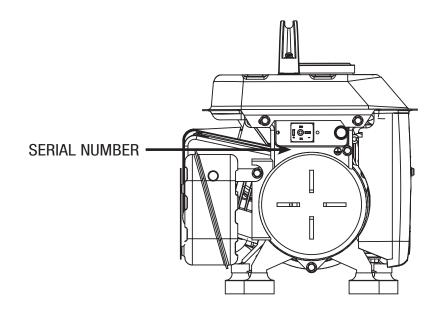
Wattage	900 Rated Watts, 1000 Surge Watts
Rated Output	AC 120V, 60Hz, 7A
Engine	2-stroke, single cylinder, 63cc
Fuel Tank Capacity	1 gallon (4L)
Fuel Mix Ratio	50:1 (Gasoline:Oil)
Half-Load Run Time	5 hours
Full-Load Noise Rating	95 dB at 13 feet (4m)
Dimensions	15 x 12 x 14.5 in. (L x W x H)
Product Net Weight	39 lbs

## **INTRODUCTION**

#### THANKS FOR PURCHASING THE WEN GENERATOR.

Refer to the illustration below for the location of the serial number. Record the generator information in the spaces provided below. If assistance for information or service is required, please contact the Customer Service Help Line by calling 800-232-1195, M-F 8-5 CST; you will be asked to provide the following generator information when calling.

GENERATOR MODEL NUMBER: WEN 56105
DATE OF PURCHASE:
PURCHASED FROM:
SERIAL MIIMRER:



#### **SERVICE RECORD**

Record the service dates of your generator in the chart below.

Service Record	Date	Date	Date	Date	Date	Date
Change Oil						
Change Spark Plug						
Clean Fuel Tank						
Clean Air Cleaner						

#### TO MAXIMIZE THE LIFESPAN OF YOUR GENERATOR:

We recommend running your generator at least ONCE A MONTH for 15 to 30 minutes. Start the generator according to the instructions and plug a small load in to make sure the outlet is producing electricity.

## **SAFETY INFORMATION**

/!\ WARNING: Before operating the generator, make sure to read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and serious injury.

#### SAFETY INTRODUCTION

Safety is a combination of common sense, staying alert, and knowing how your tool works. This manual contains important information regarding the generator's potential safety concerns, as well as preparation, operation, and maintenance instructions. Before operating this generator, be sure to read and observe all warnings and instructions both on the generator labels and in this instruction manual. Failure to follow all instructions listed below may result in personal injury.

**NOTE:** The following safety information is not meant to cover all possible conditions and situations that may occur. WEN reserves the right to change this product and specifications at any time without prior notice.

SAVE THESE INSTRUCTIONS - Please keep this manual available to all users during the entire life of the tool. Review it frequently to maximize safety for both yourself and others.

#### **SAFETY SYMBOLS**

The purpose of following safety symbols is to attract your attention to possible dangers. The safety symbols, and their explanations, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.



**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 machine.

#### **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).

#### **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 or email techsupport@wenproducts.com.

## **GENERATOR SAFETY WARNINGS**

#### ✓! 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: RISK OF EXPLOSION. HIGH FLAMMABLE: 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.

- Do not operate near open flame.
- Do not smoke near generator.
- Always operate on a firm, level surface.
- 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.
- Do not overfill fuel tank. Gasoline may expand during operation. Do not fill to the top of the tank. Allow for expansion.
- Always check for spilled fuel before operating.
- Empty fuel tank before storing or transporting the generator.
- Before transporting, turn fuel valve to OFF and disconnect spark plug wire.

/!\ 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 all applicable laws and electrical codes and 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.

California Proposition 65 WARNING: This product contains chemicals and produces exhaust known to the State of California to cause cancer, birth defects and other reproductive harm.

## **GENERATOR SAFETY WARNINGS**

**WARNING:** Do not let comfort or familiarity with the product replace strict adherence to product safety rules. Failure to follow the safety instructions may result in serious personal injury.

#### **OPERATING ENVIRONMENT SAFETY**

- 1. Using a generator indoors can kill you in minutes. Only use a generator outside and far away from windows, doors and vents.
- 2. Do not operate near open flame or flammable materials. 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.
- 3. Do not smoke near the generator.
- 4. Do not use the generator in rainy or wet conditions; doing so significantly increases the risk of electrical shock.
- 5. Always operate the generator on a dry, firm, level surface.
- 6. Do not allow children or non-qualified persons to operate the generator.

#### **GENERATOR PREPARATION SAFETY**

- 1. Always ground the generator before using it to maximize safety (see the "GROUNDING THE GENERATOR" portion of the "GENERATOR PREPARATION" section on page 11).
- 2. Do not overfill fuel tank, as gasoline may expand during operation. Do not fill to the very top of the tank. Leave room for gasoline expansion. Always check for spilled fuel before operating.
- 3. If any part of the generator or electrical device is broken, damaged, or defective, make sure it is repaired or replaced before operation. Service should only be performed by a qualified technician. Do not use receptacles or cords that show signs of damage, such as broken or cracked insulation.
- 4. Use a ground fault circuit interrupter (GFCI) in highly conductive areas such as metal decking or steel work. Extension cords with in-line GFCIs are recommended for these operations to maximize safety.
- 5. NEVER connect the generator 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.

**NOTE:** 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.

## **GENERATOR SAFETY WARNINGS**

#### **GENERATOR OPERATION SAFETY**

- 1. Only use the generator for its intended purposes. Modifying or using the generator for operations for which it was not designed may cause hazards and personal injury.
- 2. Do not touch bare wires or receptacles (outlets).
- 3. Do not exceed the wattage capacity of the generator by plugging in more electrical devices than the unit can handle.
- 4. Allow generator to run for several minutes before connecting electrical devices.
- 5. Do not turn ON electrical devices until after they are connected to the generator.
- 6. 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.
- 7. Do not touch HOT PARTS. This generator produces heat when running. Temperatures near exhaust can exceed 150° F (65° C). Allow generator to cool down after use before touching engine or areas of the generator that become hot during use.
- 8. Turn off all connected electrical devices before stopping the generator.
- 9. 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.
- 10. Turn the engine switch to "OFF" position when the engine is not running.
- 11. Empty fuel tank before storing or transporting the generator. Do not store generator or gasoline near furnaces, water heaters, or any other appliances that produce heat or have automatic ignitions. Store the generator and fuel away from sparks, open flames, pilot lights, heat and other sources of ignition.

#### TO MAXIMIZE THE LIFESPAN OF YOUR GENERATOR:

We recommend running your generator at least once a month for 15 to 30 minutes. Start the generator according to the instructions and plug a small load in to make sure the outlet is producing electricity. If you do not run it often, it will greatly shorten the lifespan and performance of the generator.

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

## **UNPACKING & ASSEMBLY**

#### UNPACKING

Place the packaging on a sturdy, flat surface. Carefully unpack the generator and all accessories from the box, making sure it is completely empty before discarding the package. Your generator comes with the items listed below. Please check to see that all of the following items are included with your generator.

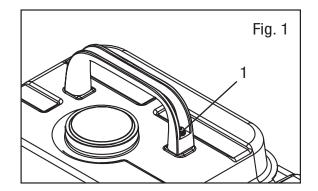
- Carrying Handle with 2 Bolts and 2 Washers
- Spark Plug Wrench
- Measuring Cup

If any part is damaged or missing, please contact our customer service at (800) 232-1195, M-F 8-5 CST or email us at techsupport@wenproducts.com.

#### **ASSEMBLY**

#### To attach the carrying handle:

- 1. Remove the 2 bolts and 2 washers from the handle.
- 2. Position the handle over the threaded holes in the fuel tank.
- 3. Fasten the handle with the bolts and washers (Fig. 1 1). Tighten the bolts using a Phillips-head screwdriver (not included).



#### **HIGH ALTITUDE OPERATION ABOVE 3000 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. The kit can be ordered from **wenproducts.com** by searching the part number 56105-HA. Use jet nozzle #68 for altitudes between 3000 to 6000 feet; use jet nozzle #65 for altitudes between 6000 to 8000 feet. At elevations above 8000 feet, the engine may experience a decrease in performance, even with the proper altitude kit.

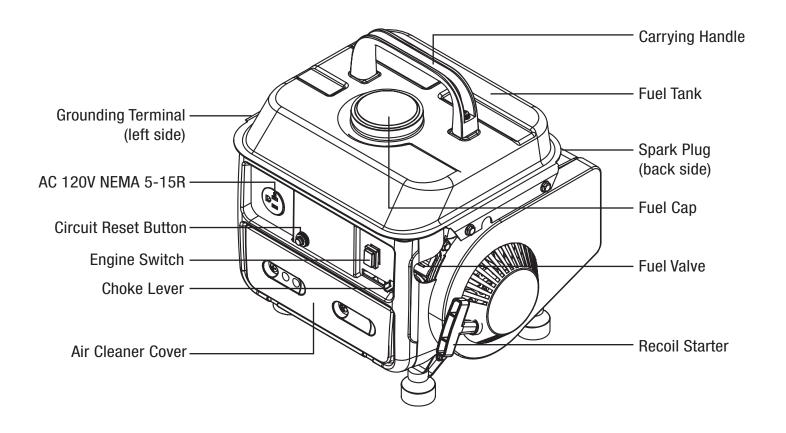
Operating this generator without said kit may increase the engine's emissions and decrease both fuel economy and performance. The kit should be installed by a qualified mechanic. Refer to the instructions included with your altitude kit for more information about installation.

**CAUTION:** Be sure to UNINSTALL the high altitude kit when operating at altitudes below 3000 feet. Engines with the high-altitude kit installed operated at lower altitudes could cause severe engine damage and affect emissions compliance.

**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.

## **KNOW YOUR GENERATOR**

Use the illustration below to become familiar with all the components and controls of this generator.



- Grounding Terminal connect grounding wires here to properly ground the generator
- 120 Volt AC Receptacle for connecting electrical devices that run on 120V, 60 Hz, single phase, AC current
- Circuit Reset Button Reset button that protects the generator from outlet overload
- Engine Switch to start/stop engine
- Choke Lever adjusts the amount of air let into the engine during startup
- Air Cleaner- a removable, cleanable, sponge-like element that filters the air entering the engine

- Carrying Handle for easy transport of the generator (installed by user)
- Fuel Tank 1 gallon capacity
- Spark Plug ignites engine
- Fuel Cap access to the fuel tank for adding fuel
- Fuel Valve allows fuel to enter engine from the fuel tank
- Recoil Starter pull-cord for starting engine

## **GENERATOR PREPARATION**

The following section describes the necessary steps to prepare the generator for use. If 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: MIXING GASOLINE AND OIL (50:1)**

#### **Oil Specifications:**

Use one of the following classifications of highquality, 2-cycle engine oil:

- NMMA
- TC-W2
- TC-W3
- JASO FB
- FASO FC

#### **Gasoline Specifications:**

- Use UNLEADED gasoline with a maximum of 10% ethanol (E10 gasoline for general use).
- Fuel must be fresh (within 30 days from purchase), and clean. NEVER use gasoline stored for long periods.

**CAUTION:** DO NOT mix gasoline and oil directly in the fuel tank; use a separate, approved gasoline-storage and dispensing container.

#### To mix gasoline and oil:

- 1. Make sure the fuel container is outside and in a well ventilated area.
- 2. Fill the clean, approved gasoline-storage container with **1/4** of the desired gasoline amount. For example, if mixing 1 gallon of gas, add 1/4-gallon into the container. This allows sufficient space inside the container for gasoline to mix with oil. The remaining 3/4-gallon will be added later.

# GASOLINE & OIL MIXING RATIO 50:1

- For 1 gallon gasoline, use 2.5 oz oil
- For 2 gallon gasoline, use 5 oz oil
- For 5 gallon gasoline, use 13 oz oil
- 3. Measure and add the required amount of oil to the gasoline according to the mixing ratio of 50:1 (e.g. if mixing 1 gallon of gasoline, add 2.5 oz oil).
- 4. Tighten the cap on the fuel container.
- 5. Shake the container vigorously to mix the gasoline and oil.
- 6. Slowly unscrew the fuel cap, as pressure may have built up inside. Slowly removing the cap allows any pressure to dissipate. Add the remaining 3/4 portion of fuel. Wipe away any spilled fuel or oil. Tighten the cap to avoid getting dirt or water into the mixed fuel.

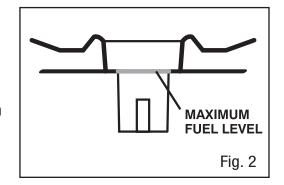
**MARNING:** Never store generator with fuel in the fuel tank inside a building with potential sources of ignition such as hot water tanks, space heaters, clothes dryers, electric motors, etc.

## **GENERATOR PREPARATION**

#### STEP 2: FILLING THE FUEL TANK

**WARNING:** Keep generator away from open flame. 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.

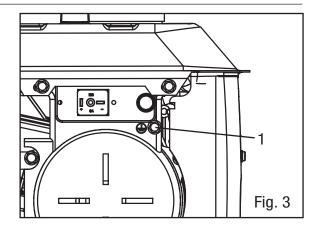
- Do not operate near open flame.
- Do not smoke near the generator.
- Always operate on a firm, level surface.
- Always turn generator off before refueling. Allow generator to cool for at least 2 minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
- Do not overfill fuel tank. Fuel may expand during operation. Do not fill to the top of the tank. Allow for expansion.
- Always check for spilled fuel before operating. Clean up any spilled fuel before starting.
- Empty fuel tank before storing or transporting the generator to prevent spilling.
- 1. Clean the area around the fuel fill cap and remove the fuel fill cap.
- 2. Using the gasoline/oil mixture mixed in the previous step, slowly add the fuel into the tank. The fuel tank capacity is 1 gallon. DO NOT overfill the fuel tank check the maximum fuel level shown in Fig. 2. Leave space for fuel expansion.
- 3. Replace the fuel fill cap and wipe up any spilled fuel.



#### STEP 3 - GROUNDING THE GENERATOR

To reduce the risk of electric shock and to maximize safety, the generator should be properly grounded. Ground the generator by tightening the grounding nut on the left of the generator (Fig. 3) against a grounding wire. 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.



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

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

## **STARTING 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:** DO NOT operate generator near open flame or flammable materials 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. Do not smoke near the generator.



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

/!\ **WARNING:** 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.

/!\ **WARNING:** Generator should only be connected to electrical devices, either directly or with an extension cord. NEVER connect to a building electrical system without a qualified electrician and connected to a transfer switch as a separately derived system. 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.

To maximize safety, ALWAYS ground the generator before using it (see the "GROUNDING THE GENERATOR" portion of the "GENERATOR PREPARATION" section).

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.

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

## **STARTING YOUR 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.

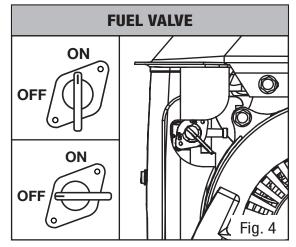
- 1. Place the generator outside on a dry, level surface. Allow at least two feet of clearance on all sides of the generator.
- 1. No electrical devices should be connected to the generator during startup. This can make it difficult for the engine to start.
- 2. Check that the generator is properly grounded (see "GROUNDING THE GENERATOR").
- 3. Make sure there is sufficient level of fuel in the fuel tank. Add fuel if necessary (refer to "FILLING THE FUEL TANK").
- 4. Turn the fuel valve to the ON position (Fig. 4, vertical position).
- 5. Move the choke lever to the CLOSED position (Fig. 5 move lever to far left position).
- 6. Set the engine switch to the ON position (Fig. 6 until the upper part of the rocker switch is firmly depressed).
- 7. Place one hand on the generator to hold it in place, and hold the recoil starter with the other hand. 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 machine. Never allow the cord to snap back.

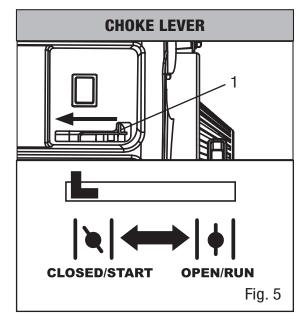
**NOTE:** DO NOT place your foot on the generator and yank on the recoil starter. That may cause excessive wear on the recoil starter.

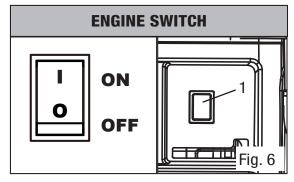
8. If engine fails to start, repeat step 7.

**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 (move lever to far right position).







10. 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.

## **USING THE GENERATOR**

## **CALCULATING THE WATTAGE OF YOUR DEVICE(S)**

Connect electrical devices running on AC current according to their wattage requirements. Calculate the running wattage and starting wattage of the device(s) you wish to connect, and MAKE SURE that they are within the capacity of your generator.

	Generator Running (Rated) Watts	Generator Starting (Surge) Watts
	900W	1000W
Generator Wattage Capacity	What this means: The generator can produce a maximum of 900W on a continuous basis to supply the running wattage requirement of your electronic device(s).	What this means: Some devices such as box fans require short bursts of extra power in addition to the rated wattage listed by the device to start their motors.
		The generator can produce a maximum wattage of 1000W for a short period of time (seconds) to cover the extra starting power requirement of your electronic devices.
	_	vice you plan to connect. The information truction manual, or you may refer to Fig. 7.
	_	ulated using this equation: ts x Amperes
	To calculate the total running watts of your devices:	To calculate the total starting watts of your devices:
	+ Add up the running wattages of all the device(s) you plan to connect	+ Add up the total running wattage of all the device(s) you plan to connect
Electronic Device Wattage Calculation	= The total running wattage This wattage should NOT exceed the gen-	+ Add the single highest ADDITIONAL starting wattage out of the device(s) you plan to connect
	erator's running wattage of <b>900W.</b> It is recommended to maintain a load at or	= The total surge (starting) wattage
	below <b>810W</b> (90% of the generator's rated output) to ensure steady voltage output and to prolong the generator's lifespan.	This wattage should NOT exceed the generator's starting wattage of <b>1000W</b> .
	If any of either of the total calculated runnin capacity of your generator, adjust the load u Otherwise you will overload the generator, a	ıntil both wattage requirements are met.

## **USING THE GENERATOR**

The chart below serves as a reference for the estimated wattage requirements of common electrical devices. However, do not solely rely on this chart - all electronics and appliances are built differently. Always check the wattage listed on the electrical device before consulting this chart.

Tool or Appliance	Rated (Running) Watts	Additional Starting Watts
Computer	800	0
Television	500	0
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
Inflator	50	150

Fig. 7 - Estimated wattage requirements of common electrical devices

**NOTE:** 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 the machine's components, possibly leading to a generator failure.

#### **CONNECTING THE DEVICES**

**CAUTION:** Become familiar with the markings on the panel before connecting electrical devices. The 120V AC receptacle is for connecting electrical devices that run on 120V, 60 Hz, single phase, AC current. DO NOT connect 50Hz or 3-phase loads to the generator.

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

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

**CAUTION:** Avoid overloading the generator. Overloading your generator can damage the capacitor the rotor in your generator and the electrical device(s) plugged into the generator.

## **USING THE GENERATOR**

#### IN CASE OF OVERLOAD

If your becomes overloaded from too much drawn wattage, the circuit breaker will shut off power to protect the generator. If an overload occurs, disconnect all electrical devices from the generator and wait five minutes, then press the circuit breaker to reset. Check the total wattage of the devices and reduce the load if it exceeds the capacity of the generator.

**NOTE:** The circuit reset button is thermally activated. The breaker has to cool down before it can be reset. If the reset button does not reset, wait several minutes and try again. If problem persists, call our customer service 1-800-232-1195 for further instructions.

#### SOME NOTES ABOUT POWER CORDS

Long or thin extension cords can drain the power provided to your electrical devices. Refer to the following chart in determining the necessary gauge extension cord for each of your devices. Round up to the higher amperage in the chart to maximize safety.

Device Requirements		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

Fig. 8 - Power Cord Requirement Guide

\*NR = Not Recommended

## **STOPPING THE GENERATOR**

**CAUTION:** Unplugging running devices can cause damage to the generator. Never stop the engine with electrical devices connected and running.

#### To shut off 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. Push the engine switch to the OFF position.
- 3. Turn the fuel valve to the OFF (horizontal) position.



**WARNING:** Allow the generator to cool down 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 "STORING THE GENERATOR" on page 22.

#### RECOMMENDED MAINTENANCE SCHEDULE

Proper routine maintenance of the generator will help prolong the life of the machine. Please perform maintenance checks and operations according to the Maintenance Schedule in Fig. 14. If there are any questions about the maintenance procedures listed in this manual, please call (800) 232-1195 M-F 8-5 CST or email techsupport@wenproducts.com.

**WARNING:** Never perform maintenance operations while the generator is running. Before maintaining or servicing the generator, turn OFF the generator, disconnect all devices and allow the generator to cool down.

	mended ce Schedule	Each 8 hours or daily	Every 25 hours	Every 3 months or 50 hours	Every 6 months or 100 hours	Every year	As necessary
Air Filter	Check			х*			Х
All Filler	Clean			х*			
Spark Plug	Check/clean/ regap				Х		
	Change					Х	Х
Fuel Tank	Check level	Х					Х
ruei lälik	Drain					Х	Х
Carburetor	Drain	Х					Х

Fig. 9 - Recommended Maintenance Schedule

#### **IMPORTANT GENERATOR MAINTENANCE TIPS:**

- Drain your carburetor after each use and before storage (see page 18) to prevent it from clogging.
- Do not store the generator with fuel inside the tank for more than 2 months the fuel will go bad.
- Run the generator for at least 15 minutes every month to maximize its lifespan.

**NOTE:** Failure to properly maintain the generator can result in void the warranty.

<sup>\*</sup> Clean/change more often under dusty conditions or operating under heavy load.

#### **CLEANING THE GENERATOR**

Keep the generator clean to prevent improper operation or machine damage from dirt and debris. Inspect all ventilation openings on the generator. These openings must be kept clean and unobstructed. If the generator becomes dirty, use a damp cloth to wipe exterior surfaces. Use a soft bristle brush to loosen dirt and oil and use a vacuum to pick up loose dirt. Use low pressure air (not to exceed 25 PSI) to blow away dirt.

**WARNING:** 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.

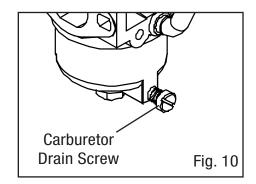
#### DRAINING THE CARBURETOR

#### Recommended to drain after every use, and before storage.

Draining the carburetor is recommended to prevent the fuel from clogging up the carburetor. A clogged carburetor can prevent the generator from starting. Remove the front panel of the generator. The choke lever is located on top of the carburetor.

- 1. Open up the carburetor drain screw with a Phillips screwdriver (not included) and drain out any gasoline that has built up inside the carburetor into an approved gasoline-storage container.
- 2. Once the fuel has drained, tighten the drain screw with the screw-driver.

**NOTE:** Make sure to drain your carburetor before storing the generator for long periods of time.



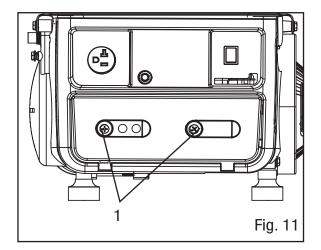
#### **AIR FILTER MAINTENANCE**

Check every 50 hours of operation (refer to Fig. 9 - Recommended Maintenance Schedule).

Routine maintenance of the air filter helps maintain proper airflow to the carburetor. The air filter should be free of excessive dirt.

#### To inspect and clean the air filter:

- 1. Undo the two screws (Fig. 11 1) holding the air cleaner cover in place using a Phillips head screwdriver (not included).
- 2. Wear gloves; air filter is oily. Remove the air filter element. Wipe any dirt from inside of the air filter casing.
- 3. Wash the element in warm soapy water. Squeeze it thoroughly dry in a clean cloth.
- 4. If the air filter element has been damaged, replace with a new one. Replacement air filters can be ordered from wen-products.com by searching the Part No. 56105-079.



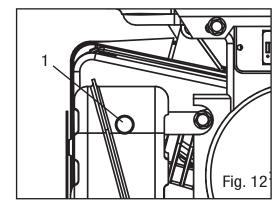
- 5. Saturate the element in clean engine oil and squeeze off excess oil in a clean absorbent cloth. Drip the sponge-like element in clean engine oil (meeting the requirements specified on page 10), squeeze out extra oil and reinsert into the casing. **NOTE:** A small amount of oil in the element is necessary for the engine to work properly.
- 6. Attach the air cleaner cover with the 2 screws.

**WARNING:** Running the engine with a dirty, damaged or missing air filter element can result in danger to the operator and cause the engine to wear out prematurely.

#### **SPARK ARRESTOR MAINTENANCE**

Inspect and clean the spark arrestor every 200 hours of operation (refer to Maintenance Schedule). The spark arrester is located outside the muffler, which gets very hot during operation. Allow the engine to cool completely before servicing the spark arrester. To inspect and clean the spark arrester:

- 1. Remove the screw that secures the spark arrestor to the muffler.
- 2. Remove the spark arrestor screen (Fig. 12 1).
- 3. Carefully clean and remove the carbon deposits from the spark arrestor screen with a wire brush. Replace the spark arrestor if it is damaged.
- 4. Reinstall the spark arrestor in the muffler and secure it in place with the screw.



#### **SPARK PLUG MAINTENANCE**

#### Refer to Recommended Maintenance Schedule in Fig. 9 for maintaining the spark plug.

The spark plug is important for proper engine operation. Check the spark plug regularly for proper engine operation. A good spark plug should be intact, free of deposits, and properly gapped.

#### To inspect or replace the spark plug:

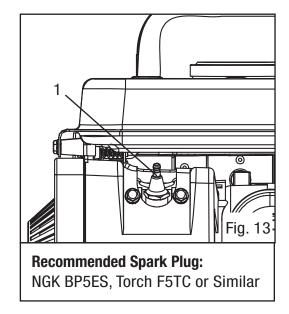
- 1. Pull on the spark plug boot to remove it. Be careful not to tear any insulation or wire.
- 2. Use the included spark plug wrench to unscrew and carefully remove the spark plug from the engine.
- 3. Visually inspect the spark plug. If it is cracked or chipped, or if the electrodes are worn or burned, discard it and replace with a new spark plug.

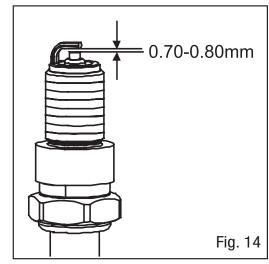
We recommend replacing with a NGK BP5ES spark plug (Part No. 56105-069), available for purchase at wenproducts.com.

- 4. If re-using the spark plug, use a wire brush to clean any dirt from around the spark plug base, then re-gap the spark plug.
- 5. Measure the plug gap with a spark plug gap gauge. The gap should be 0.7 to 0.8 mm (0.028-0.031 in.) (Fig. 14). Carefully adjust the gap if necessary.
- 6. Screw the spark plug back into the spark plug hole by hand. After the spark plug is properly seated, use the spark plug wrench to tighten it. Do not over-tighten the spark plug.

**NOTE:** The spark plug torque is 9 - 12 N.m (7 - 8 ft.lb). The spark plug should be tightened 1/2 to 3/4 turn after spark plug gasket contacts spark plug hole.

7. Reinstall the spark plug boot over the spark plug.

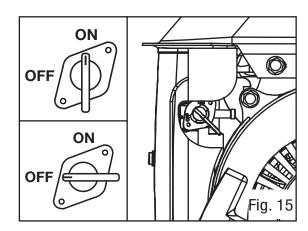


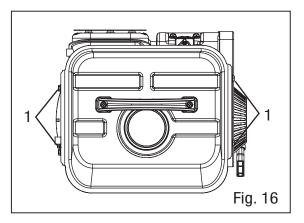


#### DRAINING THE FUEL TANK

Clean the fuel tank each year, or before storing the generator for extended periods of time. To drain the fuel tank:

- 1. Turn the fuel valve to the OFF (horizontal) position.
- 2. Remove the four bolts holding the fuel tank onto the generator frame (Fig. 16 1).
- 3. Lift the fuel tank and rotate it so as to clear the tank from the generator frame. The fuel valve should be visible. Place a approved gasoline-storage container under the fuel valve to catch fuel when the fuel line is disconnected.
- 4. Using a pair of pliers, slide the fuel line clamp off the fuel valve so the line can be disconnected.
- 5. Collect any fuel left in the fuel line going to the carburetor.
- 6. Place the fuel tank over the fuel collecting container and open the fuel valve. The fuel should drain from the tank.
- 7. Reconnect the fuel line and reattach the fuel tank with the four bolts.
- 8. Start and run the engine until fuel runs out.
- 9. Store the emptied fuel in a suitable place.





**CAUTION:** Do not store fuel for more than 2 months. Fuel stored for longer than 2 months can go bad.

**WARNING:** Never store generator with fuel in the fuel tank inside a building with potential sources of ignition such as hot water tanks, space heaters, clothes dryers, electric motors, etc.

#### PRODUCT DISPOSAL

Do not dispose of used generator or parts with your household waste. This product contains electrical or electronic components that should be recycled. Please take this product to your local recycling facility for responsible disposal to minimize its environmental impact.

Do not dispose of used oil or fuel in the trash or down a drain. Please contact your local recycling center or auto garage to arrange proper oil/fuel disposal.

## **TRANSPORTATION & STORAGE**

#### TRANSPORTING THE GENERATOR

To prevent fuel spillage when transporting, be sure to perform the following:

- 1. Tighten the fuel cap.
- 2. Set the engine switch to OFF.
- 3. Drain the fuel tank if possible (see "DRAINING THE FUEL TANK" page 21).
- 4. Keep the generator upright. Never place the generator on its side or upside down doing so will make it difficult to start.

**WARNING:** Avoid direct sunlight inside a vehicle. If the generator is left in an enclosed vehicle for many hours, the high temperature could cause the fuel to vaporize and result in a possible explosion.

#### STORING THE GENERATOR

Shut off the generator and allow the unit to cool to room temperature before storing it. NEVER place any type of storage cover on the generator while it is still hot. Do not obstruct any ventilation openings.

Follow the procedures below for properly storing your generator. We highly recommend running your generator once a month for 15 to 30 minutes. Plug in a small load in to ensure there is proper power output.

#### For Short Periods (30 to 60 Days):

- Drain the carburetor (see page 18).
- Gasoline stored over 30 days can start to go bad and damage fuel system components.

#### Add fuel stabilizer:

Follow the suggested portions and instructions of your preferred stabilizer. Run the engine for 15 to 20 minutes, allowing the fuel stabilizer to mix with the gasoline and circulate through the carburetor, and then top off with fuel. Filling the fuel tank full reduces the amount of air in the tank and helps fight deterioration of fuel.

# For Extended Periods (Over 60 Days):

- Drain the carburetor (see page 18).
- Drain the fuel tank (see "DRAINING THE FUEL TANK" on page 21). Never store with fuel in the tank for more than two months.

**! WARNING:** Store the generator upright in a cool and dry location, away from sources of heat, open flames, sparks or pilot lights.

## TROUBLESHOOTING GUIDE

**WARNING:** Stop using the generator immediately if any of the following problems occur or risk serious personal injury. If you have any questions, please contact our customer service at (800) 232-1195, M-F 8-5 CST or email us at techsupport@wenproducts.com.

PROBLEM	POSSIBLE CAUSE	SOLUTION
	Engine switch is set to OFF.	Set engine switch to ON.
	Fuel valve is turned to OFF.	Turn fuel valve to ON.
	Engine is out of fuel.	Add fuel (see page 10).
Engine will not start.	Engine is filled with contaminated or old fuel.	Drain fuel in the tank (see page 21). Fill with fresh fuel (see page 10).
Start.	Spark plug is dirty or broken.	Clean or replace the spark plug (see page 20).
	Air filter element is dirty	Clean or replace air filter element (see page 19).
	Carburetor is air locked.	Remove the screw from the bottom of the carburetor and remove the carburetor bowl to allow the float to reset. Replace bowl and reinstall screw.
	Circuit reset button has been tripped due to overload.	Wait for 2 minutes and push the circuit reset button to reset it.
Engine runs but there is no electrical output.	Bad connecting cords/wires.	Check the power cords and extension cords. Do not use if any cord is damaged. Replace damaged cords immediately.
	Bad electrical device connected to the generator.	Try connecting a different device.
Generator runs but does not sup-	Generator is overloaded.	Turn off and unplug all electrical devices. Turn off generator. Wait 5 minutes, then press the circuit breaker to reset. Reduce load before starting the generator.
port all electrical devices con-	Short circuit in one of the devices.	Try disconnecting any faulty or short-circuited electrical loads.
nected.	Air filter is dirty.	Clean or replace the air filter element (see page 19).
Engine is "Hunting" during Operation (Engine RPM is fluctuating).	1. The fuel isn't running through the fuel valve. 2. The air filter is clogged. 3. The muffler or spark arrester is blocked 4. There is gunk in the carburetor preventing a consistent fuel/air mixture from forming.	Turn off the generator and wait for it to cool down. Perform the following steps:  1. Check if the fuel is properly and consistently going through the fuel valve  2. Check for any blockage in the air filter. Check and clean the air filter as necessary (see page 19).  3. Check if the spark arrester is blocked. Clean with metal brush as necessary (see page 20).  4. Use "gunk remover" spray on the carburetor jets.

# **SPECIFICATIONS**

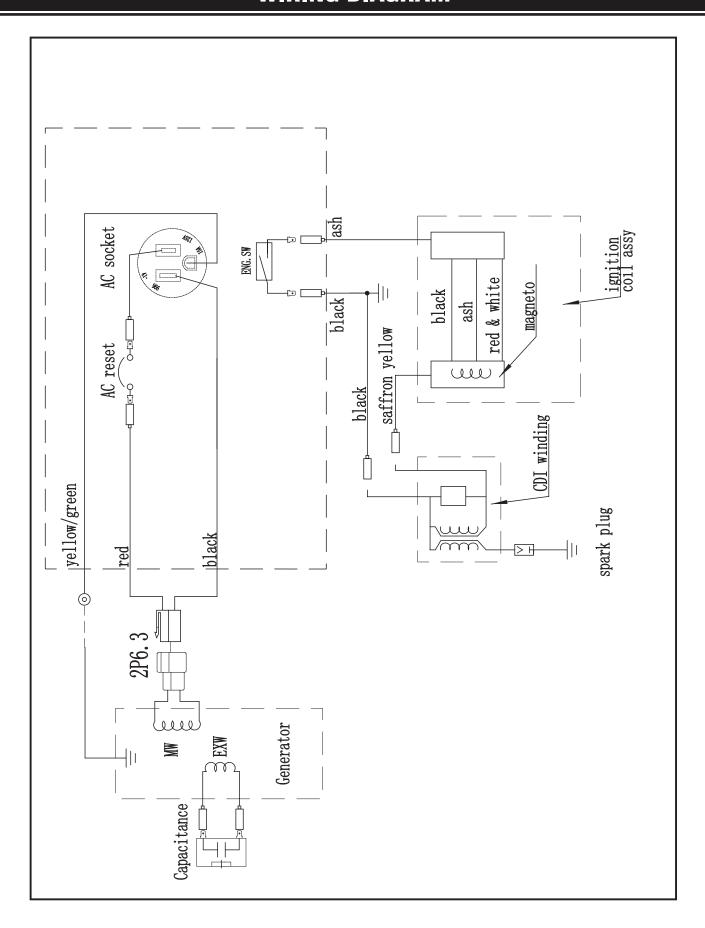
## **GENERATOR**

Rated Wattage	900 Watts
Surge Wattage	1000 Watts
Phase	Single
Rated Frequency	60Hz
Rated Voltage	AC 120V
Rated Amperage	7A
	Length: 15 in.
Product Dimensions	Width: 12 in.
	Height:14.5 in.
Product Net Weight	39 lbs

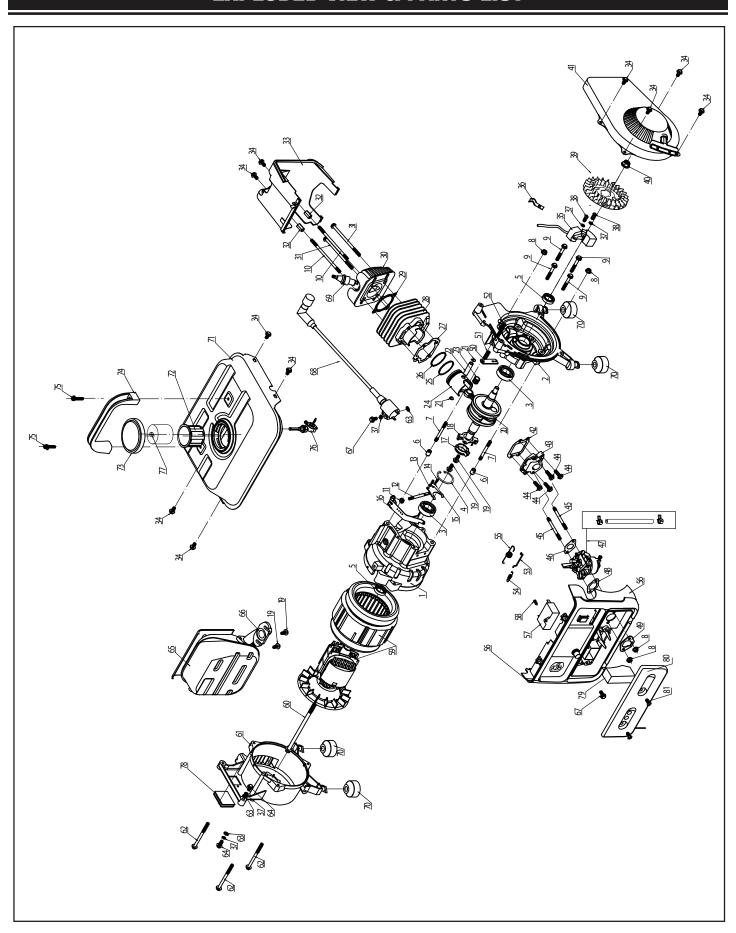
## **ENGINE**

Engine Type	2-stroke, single cylinder with forced air cooling system
Engine Displacement	63cc
Engine Ignition System	Non-Contact Transistor
Fuel Tank Capacity	1 US gallon (4L)
Half-Load Run Time	5 hours
Full-Load Noise Rating	95 dB at 13 feet (4m)
Spark Plug Type	NGK BP5ES, Torch F5TC
Spark Plug Gap	0.7 - 0.8 mm (0.028 - 0.031 in)
Spark Plug Torque	9 - 12 N.m ( 7 - 8 ft.lb)

# **WIRING DIAGRAM**



## **EXPLODED VIEW & PARTS LIST**



# **EXPLODED VIEW & PARTS LIST**

No.	Part No.	Description	Qty.
1	56101-001	Left Crankcase	1
2	56101-002	Right Crankcase	1
3	56101-003	Bearing 6004	2
4	56101-004	Hole Circlip Ø45	1
5	56101-005	Oil Seal 20x30x7	2
6	56101-006	Pin 10*7*14	2
7	56101-007	Stud M6x50	2
8	56101-008	Toothed Flange Nut M6	4
9	56101-009	Flange Bolt M6x45	4
10	56101-010	Stud M6x100	2
11	56101-011	0il Seal 6*12*4	1
12	56101-012	Governor Shaft	1
13	56101-013	Governor Fork	1
14	56101-014	Cross Round Head Bolt M3x8	2
15	56101-015	Spring Washer Ø3	2
16	56101-016	Governor Arm	1
17	56101-017	Collar Bushing	1
18	56101-018	Centrifugal Switch	1
19	56101-019	Flange Bolt M6x16	4
20	56101-020	Crankshaft Assembly	1
21	56101-021	Circlip	2
22	56101-022	Piston Pin	1
23	56101-023	Roller Bearing 14x10x13	1
24	56101-024	Piston	1
25	56101-025	Second Piston Ring	1
26	56101-026	First Piston Ring	1
27	56101-027	Cylinder Gasket	1
28	56101-028	Cylinder	1
29	56101-029	Cylinder Cap Gasket	1
30	56101-030	Cylinder Head	1
31	56101-031	Flange Bolt M6x105	2
32	56101-032	Thick Nut M6x18	2
33	56101-033	Cylinder Head Cover	1
34	56101-034	Flange Bolt M6x12	10
35	56101-035	Ignition Coil Assembly	1
36	56101-036	Clamp	1
37	56101-037	Spring Washer Ø6	5
38	56101-038	Cross Round Head Bolt M6x16	2
39	56101-039	Flywheel	1
40	56101-040	Flange Nut M10x1.25	1
41	56101-041	Recoil Starter Assembly	1

No.	Part No.	Description	Qty.
42	56101-042	Intake Valve Gasket	1
43	56101-043	Intake Valve Assembly	1
44	56101-044	Flange Bolt M6x18	4
45	56101-045	Stud M6x60	2
46	56101-046	Intake Gasket	1
47	56101-047	Carburetor	1
48	56101-048	Carburetor Gasket B	1
49	56101-049	Carburetor Gasket A	1
50	56101-050	Supporting Plate	1
51	56101-051	Compression Spring	1
52	56101-052	Cross Round Head Bolt M6x40	1
53	56101-053	Rod Link	1
54	56101-054	Tension Spring	1
55	56101-055	Governor Spring	1
56	56101-056	Control Panel Assembly	1
57	56101-057	Capacitor	1
58	56101-058	Self-Tapping Screw ST4.2x14	1
59	56105-059	Rotor/Stator Assembly	1
60	56105-060	Flange Bolt M8*160	1
61	56105-061	Rear Cover	1
62	56101-063	Flange Bolt M6x80	3
63	56101-064	Toothed Washer Ø6	3
64	56101-065	Flange Bolt M6x10	2
65	56101-066	Muffler	1
66	56101-067	Muffler Gasket	1
67	56101-068	Flange Bolt M6x16	2
68	56105-068	Spark Plug Boot Assembly	1
69	56101-070	Spark Plug NGK BP5ES	1
70	56101-071	Rubber Foot	4
71	56105-071	Fuel Tank	1
72	56101-073	Fuel Filter	1
73	56100-044	Fuel Tank Cap	1
74	56101-075	Handle	1
75	56101-076	Cross Round Head Bolt M6x30	1
76	56100-041-1	Fuel Switch	1
77	56101-080	Fuel Measuring Cup	1
78	56101-079	Rubber Cover	1
79	56105-079	Air Filter Element	1
80	56105-080	Air Filter Cover	1
81	56105-081	Air Filter Cover Screw	2

## **WARRANTY STATEMENT**

WEN Products is committed to building tools that are dependable for years. Our warranties are consistent with this commitment and our dedication to quality.

#### LIMITED WARRANTY OF WEN PRODUCTS FOR HOME USE

GREAT LAKES TECHNOLOGIES, LLC ("Seller") warrants to the original purchaser only, that all WEN consumer power tools will be free from defects in material or workmanship during personal use for a period of two (2) years from date of purchase or 500 hours of use; whichever comes first. Ninety days for all WEN products if the tool is used for professional or commercial use. Purchaser has 30 days from the date of purchase to report missing or damaged parts.

SELLER'S SOLE OBLIGATION AND YOUR EXCLUSIVE REMEDY under this Limited Warranty and, to the extent permitted by law, any warranty or condition implied by law, shall be the replacement of parts, without charge, which are defective in material or workmanship and which have not been subjected to misuse, alteration, careless handling, misrepair, abuse, neglect, normal wear and tear, improper maintenance, improper storage, incorrect lubricants/ fuels, or other conditions adversely affecting the Product or the component of the Product, whether by accident or intentionally, by persons other than Seller. 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. Purchasing through third party vendors, including but not limited to garage sales, pawn shops, resale shops, or any other secondhand merchant, voids the warranty included with this product. Contact techsupport@wenproducts.com or 1-800-232-1195 with the following information to make arrangements: your shipping address, phone number, serial number, required part numbers, and proof of purchase. Damaged or defective parts and products may need to be sent to WEN before the replacements can be shipped out.

Upon the confirmation of a WEN representative, your product may qualify for repairs and service work. 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 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 for addresses within the contiguous United States.

THIS LIMITED WARRANTY DOES NOT APPLY TO ITEMS THAT WEAR OUT FROM REGULAR USAGE OVER TIME, INCLUDING FILTERS, SPARK PLUGS, VOLTAGE REGULATORS, BRUSHES, GASKETS, O-RINGS, WHEEL KITS, BATTERIES, RECOIL STARTERS, HIGH PRESSURE HOSES, SPRAY GUNS, ETC. ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURATION TO TWO (2) YEARS FROM DATE OF PURCHASE. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING BUT NOT LIMITED TO LIABILITY FOR LOSS OF PROFITS) ARISING FROM THE SALE OR USE OF THIS PRODUCT. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE IN THE U.S., PROVINCE TO PROVINCE IN CANADA AND FROM COUNTRY TO COUNTRY.

THIS LIMITED WARRANTY APPLIES ONLY TO ITEMS SOLD WITHIN THE UNITED STATES OF AMERICA, CANADA AND THE COMMONWEALTH OF PUERTO RICO. FOR WARRANTY COVERAGE WITHIN OTHER COUNTRIES, CONTACT THE WEN CUSTOMER SUPPORT LINE. FOR WARRANTY PARTS OR PRODUCTS REPAIRED UNDER WARRANTY SHIPPING TO ADDRESSES OUTSIDE OF THE CONTIGUOUS UNITED STATES, ADDITIONAL SHIPPING CHARGES MAY APPLY.

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