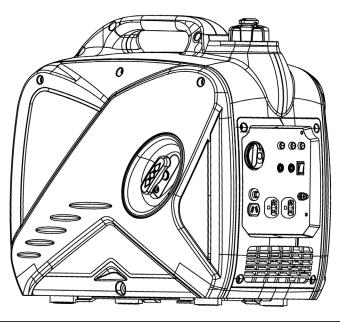


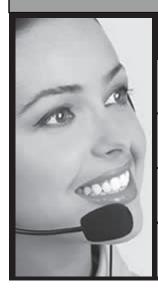
# 2000W INVERTER GENERATOR



Model # 56200i 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:



800 -- 232 -- 1195 (M-F 8AM-5PM CST)



tech support@wenproducts.com



WENPRODUCTS.COM

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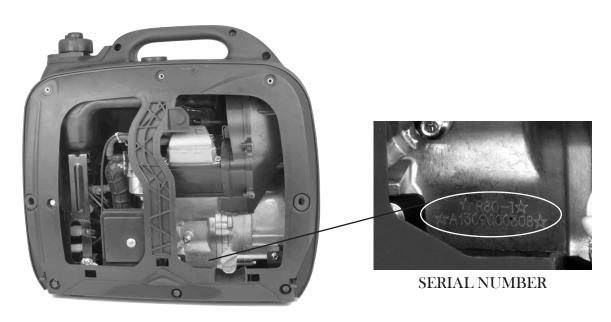
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# GENERATOR IDENTIFICATION

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: _	
ENGINE SERIAL NUMBER:	



# SERVICE RECORD

#### **Record Service Dates:**

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

#### INTRODUCTION

Thank You for Purchasing a WEN® Product. 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 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, 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 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. Read the entire Owner's Manual for safety and operating instructions. Failure to follow instructions and safety information could result in serious injury or death.

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.

### GENERAL SAFETY PROCEDURES

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, crawlspaces, or other partly 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.

- 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.



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. GFCIs are available in-line with some extension cords.
- Do not use in rainy conditions.
- Do not touch bare wires or receptacles (outlets).
- Do not allow children or non-qualified persons to operate.

# GENERAL SAFETY PROCEDURES



WARNING: This generator produces heat when running. Temperatures near exhaust can exceed  $150^{\circ}$  F ( $65^{\circ}$  C).

Do not touch hot surfaces. Pay attention to warning labels on the generator identifying hot parts of the machine.

Allow generator to cool down after use before touching engine or areas of the generator that become hot during use.

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

Only use generator for its intended purposes.

Operate only on dry, level surfaces.

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

Shut off and disconnect any malfunctioning devices from generator.

Do not exceed the wattage capacity of the generator by plugging in more electrical devices than the unit can handle.

Do not turn on electrical devices until after they are connected to the generator.

Turn off all connected electrical devices before stopping the generator.

Turn the engine switch to "OFF" position when the engine is not running.

# IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS - This manual contains important instructions for the WEN® 2000W inverter generator that should be followed during installation and maintenance of the generator.

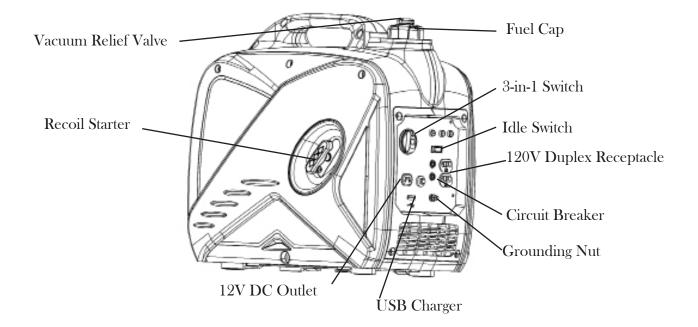
Generators vibrate in normal use. During and after the use of the generator, inspect botht he generator as well as extension and power supply cords for damage resulting from vibration. Have damaged items repaired or replaced as necessary. Do not use plugs or cords that show signs of damage such as broken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

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.



# GENERATOR PREPARATION

#### USING THE GENERATOR FOR THE FIRST TIME



The following section describes steps necessary 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 0.37 quarts (0.35 liters). For general use (above 40° F), we recommend 30W, 4-stroke engine oil.

#### 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 (Figure 1) that matches the starting temperature anticipated before the next oil changes.

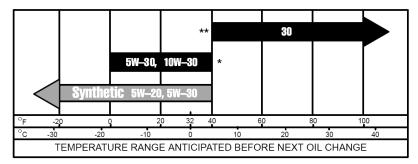


Figure 1 - Engine Oil Replacemendations

#### To add 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. Open the access panel. Remove the dipstick from the engine. (Figure 2)
- 3. Add oil slowly to bring level to full. (Figure 2).
- 4. To check the oil level: 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.
- 5. Slowly add more oil and repeat step 4 until the oil mark reaches to the top of the dipstick (Figure 2). Do not over fill the crankcase. The generator is equipped with a low oil sensor and will not start if the amount of oil is in sufficient.
- 6. Check for oil leaks. Tighten dipstick firmly before closing the access panel.

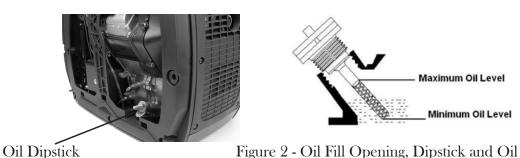


Figure 2 - Oil Fill Opening, Dipstick and Oil Level

# GENERATOR PREPARATION

#### Step 2 - ADD GASOLINE



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.

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 overfill. The capacity of the fuel tank is 1 gallon. 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**



WARNING: Failure to properly ground the generator can result in electrocution.

Ground the generator by tightening the grounding nut on the front control panel against a grounding wire (Figure 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 in generator contents.

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

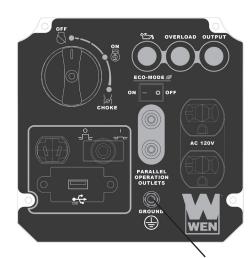


Figure 3 - Grounding Nut

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

# STARTING THE GENERATOR

Before starting the generator, make sure you have read and performed the steps in the "Generator Preperation" 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.

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. Even if you cannot smell the exhaust, you may be breathing CO.

NEVER use a generator inside homes, garages, crawlspaces, or other partly 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: 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 Preperation" 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. GFCIs 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 starting. Otherwise it can be difficult for the engine to start.
- 2. Check that the generator is properly grounded (Refer to "Ground the Generator").
- 3. Check the oil and fuel levels.
- 4. Turn the ECO-MODE switch to "OFF."
- 5. Open vacuum relief valve on top of fuel cap (Figure 4A). Rotate clockwise to the "ON" position.
- 6. Turn the 3-in-1 switch to the "CHOKE" position (Figure 4B).
- 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. Once the engine has started, slowly turn the 3-in-1 switch to the "ON" position (Figure 4C).
- 9. To turn the generator off, turn the knob to the OFF position (Figure 4E).

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.

NOTE: Turn the knob to the Fuel Shut-off Position (Figure 4D) in order to stop the flow of fuel from the gas tank to the engine.

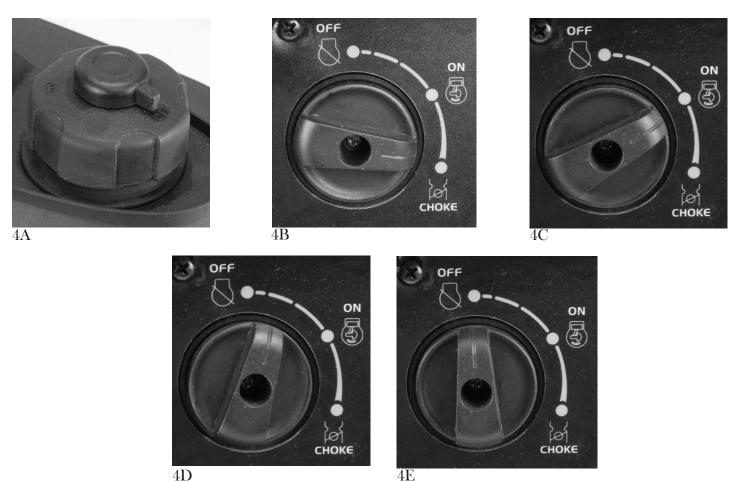


Figure 4 - Fuel Cap & Fuel Valve

### STARTING THE GENERATOR

#### ECO-MODE IDLE CONTROL SWITCH

This generator is equipped with an Eco-Mode Idle Control Switch. Engaging the switch will automatically adjust the engine speed to match the load at hand. When an electrical device comes on line, the generator engine will automatically speed up to supply the power needed and will slow down as the need decreases. The variable engine speed can reduce fuel consumption and noise level. Keep this switch engaged when the power load requirement is less than 1000W. Do not engage the Idle Control Switch when the total load is more than 1000W. The generator engine must run at full speed to supply the required power for anything over 1000W.

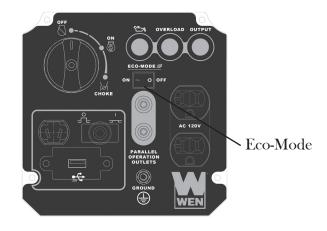


Figure 5 - Control Panel

### 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 3-in-1 knob to the "OFF" position.
- 3. Close the vacuum relief valve on top of fuel cap. Rotate counterclockwise 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 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 section titled "Using the Generator for the First Time." If the user has not yet read this section, go back and read it 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.

# SUBSEQUENT STARTING OF THE GENERATOR

To check or add oil, follow these steps:

- 1. Place the generator on a level surface.
- 2. Open access panel. Clean around oil fill hole. 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 (Figure 2). Do not over fill the crankcase.
- 4. Tighten dipstick firmly then put back access panel 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 tank for expansion.



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 fuel.

- 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. Clean up any spilled fuel before starting.
- Empty fuel tank before storing or transporting the generator.
- Before transporting, turn fuel valve to off position.

#### **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.

#### **Step 3 - GROUND THE GENERATOR**



WARNING: Failure to properly ground the generator can result in electrocution.

Ground the generator by tightening the grounding nut on the front control panel against a grounding wire (Figure 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

WARNING: When this generator is used on 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 other than the equipment grounding conductor. The frame of the generator shall be connected to an approved grounding electrode.

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.

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 in Figure 6 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
56200i	1600	2000

Figure 6 - Generator Wattage

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

If these specifications are not available, estimate the watts requirement of the device by using the chart in Figure 7.

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.

# USING 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	Rated (Running) Watts	ADDITIONAL SURGE WATTS
Electric water heater (40 Gal)	4000	0
Hot plate	2500	0
Saw - radial arm	2000	2000
Electric stove (each element)	1500-2800	0
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

Figure 7- 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 that will be powered by the generator have been determined, connect these devices according to the following procedure:

- 1. Plug in each electrical device, making sure that the device is turned off.
- 2. Check the overload light and power indicator light. If the overload light is on, 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 8 for recommended cords based on the power requirement of the electrical device.

Device Rec	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

<sup>\*</sup>NR = Not Recommended

Figure 8 - 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 9.

If there are any questions about the maintenance procedures listed in this manual, please call (800) 232-1195 M-F 8-5CT.

CAUTION: Never perform maintenance operations while the generator is running.

Recommen	ded	Each 8	First 8	Every 25	Every 3	Every 6	Every	As neces-
Maintenand	Maintenance Schedule		hours	hours	months or	months or	year	sary
		daily			50 hours	100 hours		
Engine oil	Check	X						
	level							
	Replace		X	X*	X*			X
Air	Check			X		X		
cleaner cartridge	Clean					X		
Spark plug	Check/					X		
	clean							
	Change						X	X
Fuel tank	Check	X						
	level							
	Clean						X	

Figure 9 - Recommended maintenance schedule

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

#### 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 a short circuit or corrosion.

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 Figure 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 (Figure 10). Do not over fill the crankcase.
- 4. Reinstall oil dipstick and access panel.



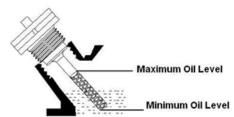


Figure 10 - Oil Fill Opening, Dipstick and Oil Level

#### 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 0.37 qts. 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.

Drain the oil from the generator according to the following steps after removing the side panel.

- 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 before closing the side panel.

#### 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 9. For air cleaner detail, refer to Figure 11.

- 1. Remove the side panel.
- 2. Remove three screws then pull the air cleaner cartridge out.
- 3. Check and clean the air cleaner element, replace with a new one if the element is damaged. Good element can be washed in soapy water, dried and reused. There is no need to add oil to the element.
- 4. 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.
- 5. Reinstall the air cleaner element, cartridge and access panel.

CAUTION: running the engine with dirty, damaged or missing air cleaner element will cause the engine to wear out prematurely.



Air Cleaner Cover

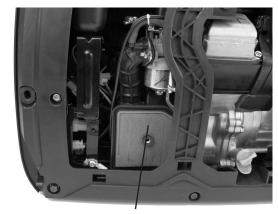


Figure 11 - Air Cleaner

Air Cleaner Element

#### 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 side panel.
- 2. Remove spark plug boot. Be careful not to tear insulation or wire.
- 3. 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.
- 4. Visually inspect the spark plug for cracks or excessive electrode wear. Replace as necessary.
- 5. Measure the plug gap with a wire gauge. The gap should be 0.6-0.7 mm (0.024-0.028 in).
- 6. 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.
- 7. 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 and control panel.

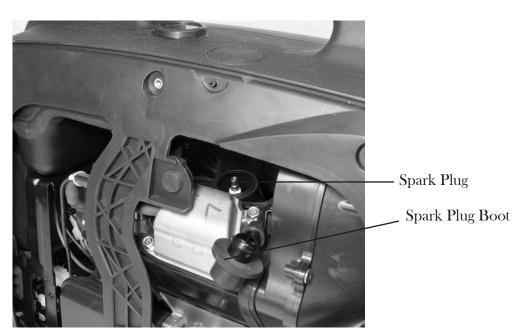


Figure 12 - Spark Plug Location

#### DRAINING THE FUEL TANK

Clean fuel tank each year or before storing the generator for extended periods of time. 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 3 months.

# 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 reduce deterioration of fuel. Run the engine for 2 – 3 minutes allowing stabilized fuel mixture to circulate through the carburetor.

When storing the generator for extended periods of time:

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

#### When transporting generator:

- Tighten fuel cap and vacuum relief valve. 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**

# DC output

Rated Voltage	12 VDC
Rated Amperage	8.3 A
Rated Wattage	100 W
USB Charger	5V, 1 A

# AC output

Rated Wattage	1600 Watts
Surge Wattage	2000 Watts
Rated Voltage	120 V
Rated Amperage	13.3 A
Frequency	60 Hz
Phase	Single
	Length: 20.50 inches
Dimensions	Width: 11.60 inches
	Height: 19.30 inches
Weight	48.4 lbs

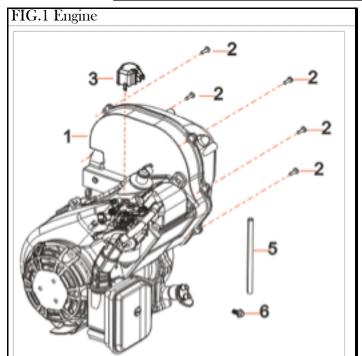
# Engine

Engine type	4 stroke, OHV, single cylinder with forced air cooling system
Spark plug gap	0.6 - 0.7 mm (0.024 - 0.028 in)
Spark plug torque	1/2 - 3/4 turn after gasket contacts base or 15 ft.lb
Displacement	79.7 cc
Fuel tank capacity	1 gallon 87 octane minimum
Oil capacity	0.37 quarts (0.35 liters)
Lubrication system	Splash lubrication
Run time on 50% load	6 hours
Noise rating:	50 dB at no load
(tested from 22 ft away	51 dB at 1/4 load
with an ambient dB	52 dB at 1/2 load
rating of 44dB)	55  dB at $3/4  load$
Spark plug	A5RTC

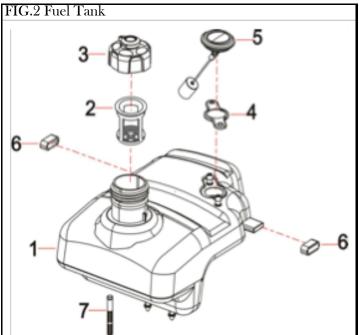
# TROUBLESHOOTING

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

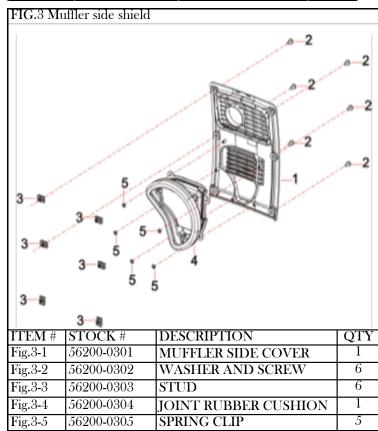
Problem	Cause	Solution
Engine will not start	Engine switch in "OFF" position	Set engine switch to "CHOKE" position.
	Engine is filled with contaminated or old fuel	Change the fuel in the tank.
	Not enough oil in crankcase	Add or replace oil.
	Air cleaner is dirty.	Clean or replace air cleaner.
	Spark plug is dirty.	Clean spark plug.
	Spark plug is broken.	Replace spark plug.
	Generator is not on level surface.	Move generator to a level surface to prevent low oil shutdown from triggering.
	Engine needs maintenance	Get a professional engine tune-up at an authorized small engine repair shop
	Generator was tilted when adding oil, or shipped side-down	Remove spark plugs, turn off engine switch then pull recoil starter four times to remove oil form the combustion chamber.
Engine stops	Vacuum relief valve in "OFF" position	Turn vacuum relief valve to "ON" position
	Not enough oil in crankcase	Add or change oil
	Engine is out of fuel	Add fuel.
Blue smoke in exhaust	Generator inclined, oil entered combustion chamber	Move generator to a level position
	Too much oil was added to the crankcase.	Drain excessive oil.
Generator runs but	Bad connecting wires/cables.	If using an extension cord, try a different one.
does not support all electrical devices connected.	Bad electrical device connected to generator.	Try connecting a different device
	Generator is overloaded, Overload light is on	Perform these steps: 1. Turn off all electrical devices. 2. Unplug all electrical devices. 3. Shut down the engine. 4. Wait several minutes and then start the engine. 5. Try connecting fewer electrical loads to the generator.
	Short in one of the connected devices.	Try disconnecting any faulty or short-circuited electrical loads.

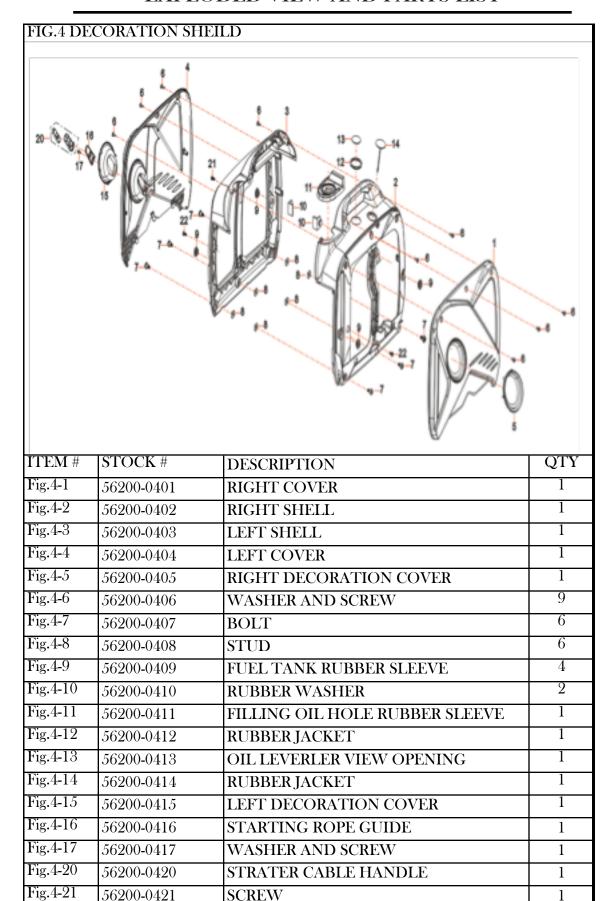


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ITEM #	STOCK #	DESCRIPTION	QTY
Fig.1-1	56200-0101	ENGINE	1
Fig.1-2	56200-0102	SCREW	5
Fig.1-3	56200-0103	CAP	1
Fig.1-5	56200-0105	FUEL TUBE	1
Fig.1-6	56200-0106	BOLT	1



ITEM#	STOCK #	DESCRIPTION	QTY
Fig.2-1		FUEL TANK	1
Fig.2-2		FUEL FILTER	1
Fig.2-3		FUEL TANK COVER	1
Fig.2-4		OIL SEAL CLAMP	1
Fig.2-5		FUEL GAUGE	1
Fig.2-6	56200-0206	BUSH	2
Fig.2-7	56200-0207	STRAINER ELEMENT	1



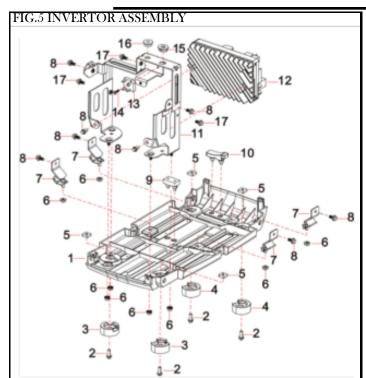


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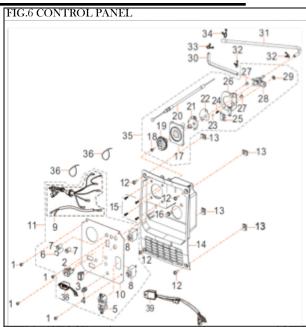
Fig.4-22

56200-0422

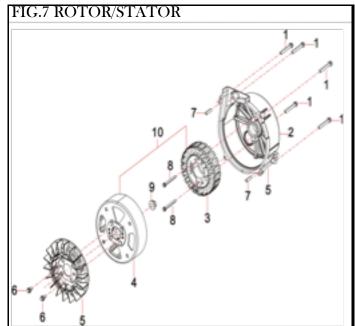
**BOLT** 



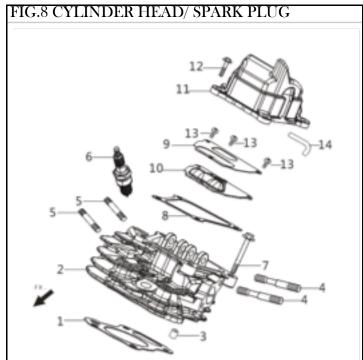
ITEM#	STOCK #	DESCRIPTION	QTY
Fig.5-1	56200-0501	BOTTOM PLATE	1
Fig.5-2	56200-0502	BOLT	4
Fig.5-3	56200-0503	FRAME SEAT	2
Fig.5-4	56200-0504	FRAME SEAT	2
Fig.5-5	56200-0505	NUT	4
Fig.5-6	56200-0506	NUT	8
Fig.5-7	56200-0507	ENGINE FRAME CUSHION	4
Fig.5-8	56200-0508	BOLT	8
Fig.5-9	56200-0509	BRACKET, CUSHION RUBBER BRACKET	1
Fig.5-10	56200-0510	BRACKET, CUSHION RUBBER BRACKET	1
Fig.5-11	56200-0511	INVENTOR SUPPORT	1
Fig.5-12	56200-0512	INVERTOR	1
Fig.5-13	56200-0513	RECTIFIER BRIDGE	1
Fig.5-14	56200-0514	SCREW	1
Fig.5-15	56200-0515	FUEL TANK RUBBER SLEEVE	1
Fig.5-16	56200-0516	FUEL TANK RUBBER SLEEVE	1
Fig.5-17	56200-0517	BOLT	3



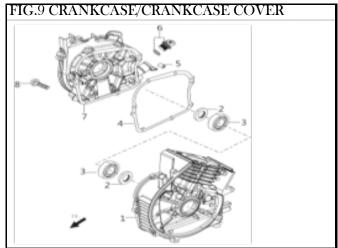
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ITEM #  STOCK #   DESCRIPTION	QTY
Fig.6-1 56200-0601 SCREW	4
Fig.6-2 56200-0602 DC OUTLET	1
Fig.6-3 56200-0603 IDEL SWITCH	1
Fig.6-4 56200-0604 GROUNDING TERMINAL	1
Fig.6-5 56200-0605 DUPLEX RECEPTACLE	1
Fig.6-6 56200-0606 OVERLOAD INDICATOR	1
Fig.6-7 56200-0607 OUTPUT INDICATOR	2
Fig.6-8 56200-0608 CIRCUIT BREAKER 20 A	1
Fig.6-10 56200-0610 CONTROL PANEL	1
Fig.6-11 56200-0611 CONTROL PANEL ASSEMBLY	1
Fig.6-12   56200-0612   WASHER AND SCREW	4
Fig.6-13 56200-0613 NUT	4
Fig.6-14 56200-0614 PANEL SEAT	1
Fig.6-15 56200-0615 SCREW	4
Fig.6-16 56200-0616 BOLT	1
Fig.6-17 56200-0617 CONTROL BOX	1
Fig.6-18 56200-0618 SCREW	1
Fig.6-19 56200-0619 KNOB	1
Fig.6-20 56200-0620 CHOKE HANDLE ASSEMBLY	1
Fig.6-21 56200-0621 COVER PLATE	1
Fig.6-22 56200-0622 CHOKE CABLE STOPPER BLOC	1
Fig.6-23 56200-0623 STEEL BALL	1
Fig.6-24 56200-0624 STOPPER ADJUSTING SPRING	1
Fig.6-26 56200-0626 FUEL COCK BRACKET	1
Fig.6-27 56200-0627 SCREW	2
Fig.6-28 56200-0628 FUEL COCK ASSEMBLY	1
Fig.6-29 56200-0629 NUT	1
Fig.6-30 56200-0630 FUEL TUBE	1
Fig.6-31 56200-0631 FUEL TUBE	1
Fig.6-32 56200-0632 COLLAR	2
Fig.6-33 56200-0633 COLLAR	1
Fig.6-34 56200-0634 COLLAR	1
Fig.6-36 56200-0636 BAND	2
Fig.6-37 56200-0637 RUBBER JACKET	3
Fig.6-38 56200-0638 USB CHARGER	1
Fig.6-39 56200-0639 RECTIFIER REGULATOR	1



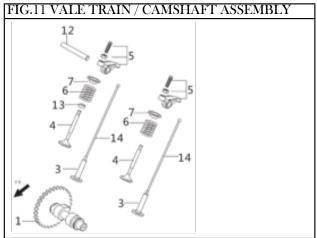
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ITEM#	STOCK #	DESCRIPTION	QTY
Fig.7-1	56200-0701	BOLT	5
Fig.7-2	56200-0702	MOTOR SHROUD	1
Fig.7-3	56200-0703	STATOR COMP	1
Fig.7-4	56200-0704	ROTOR COMP	1
Fig.7-5	56200-0705	IMPELLER	1
Fig.7-6	56200-0706	BOLT	2
Fig.7-7	56200-0707	PIN	2
Fig.7-8	56200-0708	BOLT	2
Fig.7-9	56200-0709	NUT	1



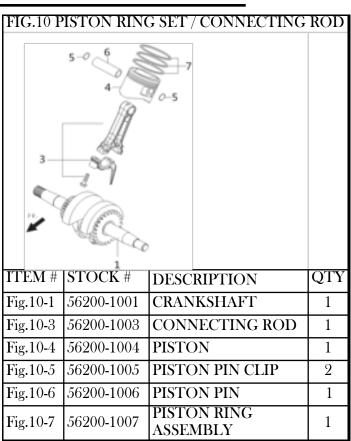
ITEM #	STOCK #	DESCRIPTION	QTY
Fig.8-1	56200-0801	CYLINDER HEAD GASKET	1
Fig.8-2	56200-0802	CYLINDER HEAD ASSEMBLY	1
Fig.8-3	56200-0803	PIN	2
Fig.8-4	56200-0804	STUD	2
Fig.8-5	56200-0805	STUD	2
Fig.8-6	56200-0806	SPARK PLUG	1
Fig.8-7	56200-0807	CYLINDER HEAD BOLT	4
Fig.8-8	56200-0808	CYLINDER HEAD COVER GASKET	1
Fig.8-9	56200-0809	BREATH GROOVE	1
Fig.8-10	56200-0810	BREATH GROOVE GASKET	1
Fig.8-11	56200-0811	CYLINDER HEAD COVER ASSEMBLY	1
Fig.8-12	56200-0812	BOLT	4
Fig.8-13	56200-0813	BOLT	3
Fig.8-14	56200-0814	BREATHER TUBE	1

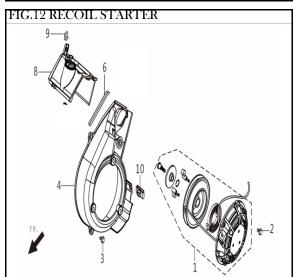


ITEM #	STOCK #	DESCRIPTION	QTY
Fig.9-1	56200-0901	CRANKCASE ASSEMBLY	1
Fig.9-2	56200-0902	OIL-SEAL	2
Fig.9-3	56200-0903	BEARING	2
Fig.9-4	56200-0904	CRANKCASE GASKET	1
Fig.9-5	56200-0905	PIN	2
Fig.9-6	56200-0906	OIL DIPSTICK	1
Fig.9-7	56200-0907	CRANKCASE COVER	1
Fig.9-8	56200-0908	BOLT	7

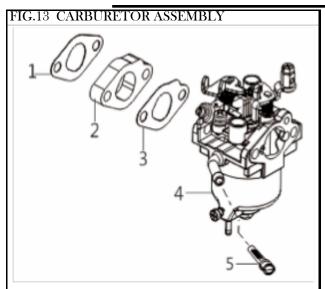


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ITEM #	STOCK #	DESCRIPTION	QTY
Fig.11-1	56200-1101	CAMSHAFT ASSEMBLY	1
Fig.11-3	56200-1103	VALVE TAPPET	2
Fig.11-4	56200-1104	VALVE	1
Fig.11-5	56200-1105	VALVE ROCKER ASSEMBLY	2
Fig.11-6	56200-1106	VALVE SPRING	2
Fig.11-7	56200-1107	VALVE SPRING SEAT	2
Fig.11-12	56200-1112	VALVE ROCKER SHAFT	1
Fig.11-13	56200-1113	SEAL GUIDE	1
Fig.11-14	56200-1114	VALVE LIFTER	2

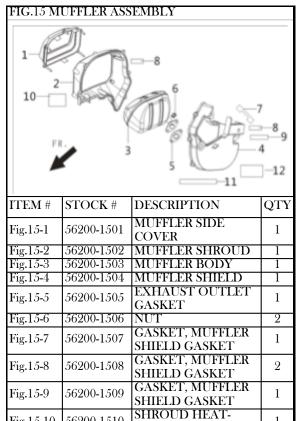




ITEM #	STOCK #	DESCRIPTION	QTY
Fig.12-1	56200-1201	RECOIL STARTER ASSEMBLY	1
Fig.12-2	56200-1202	BOLT	3
Fig.12-3	56200-1203	BOLT	3
Fig.12-4	56200-1204	SHROUD	1
Fig.12-6	56200-1206	SHROUD SEAL STRIP	1
Fig.12-8	56200-1208	CYLINDER HEAD SHROUD PLATE	1
Fig.12-9	56200-1209	STOP PLATE	1
Fig.12- 10	56200-1210	NUT	1



ITEM#	STOCK #	DESCRIPTION	QTY
Fig.13-1	56200-1301	CARBURETOR GASKET	1
Fig.13-2	56200-1302	CARBURETOR INSULATOR PLATE	1
Fig.13-3		INSULATOR GASKET	1
Fig.13-4		CARBURETOR	1
Fig.13-5	56200-1305	FUEL STRAINER	1



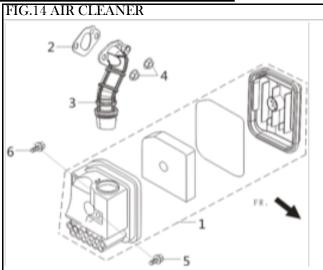
PROOF PAPER SHIELD HEAT-

PROOF PAPER

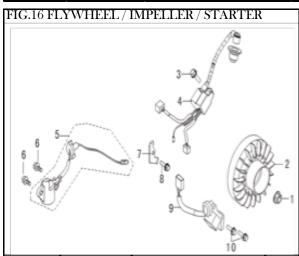
HEAT-PROOF PAPER

1

1



ITEM #	STOCK #	DESCRIPTION	QTY
Fig.14-1	56200-1401	AIR CLEANER	1
Fig.14-2	56200-1402	AIR CLEANER GASKET	1
Fig.14-3	56200-1403	AIR CLEANER INTAKE DUCT	1
Fig.14-4	56200-1404	NUT	2
Fig.14-5	56200-1405	STUD	1
Fig.14-6	56200-1406	STUD	1



ITEM #	STOCK #	DECODINETON	QTY
		DESCRIPTION	
Fig.16-1	56200-1601	FLYWHEEL NUT	1
Fig.16-2	56200-1602	FLYWHEEL ASSEMBLY	1
Fig.16-3	56200-1603	BOLT	1
Fig.16-4	56200-1604	IGNITOR	1
Fig.16-5	56200-1605	ENGINE OIL SENSOR	1
Fig.16-6	56200-1606	BOLT	2
Fig.16-7	56200-1607	CLAMP	1
Fig.16-8	56200-1608	BOLT	1
Fig.16-9	56200-1609	IGNITION COIL	1
Fig.16-10	56200-1610	BOLT	2

Fig.15-10

Fig.15-11

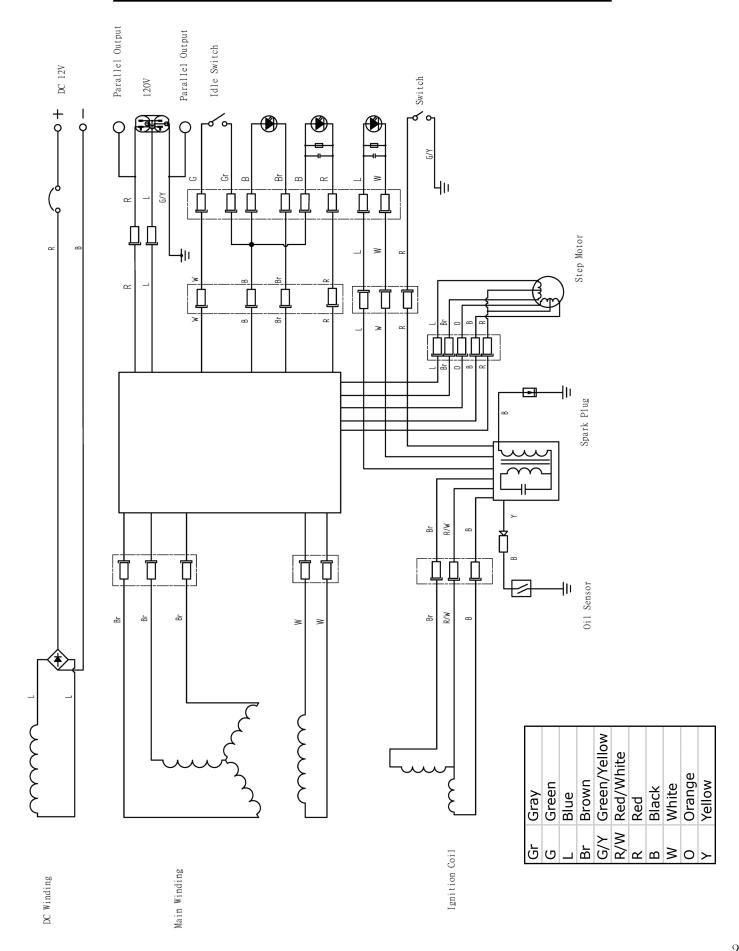
Fig.15-12

56200-1510

56200-1511

56200-1512

# WIRING DIAGRAM



# 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.

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.