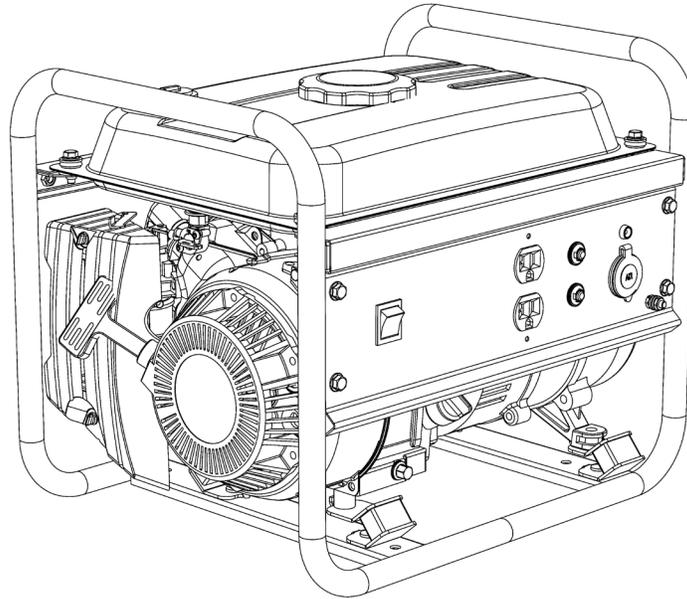




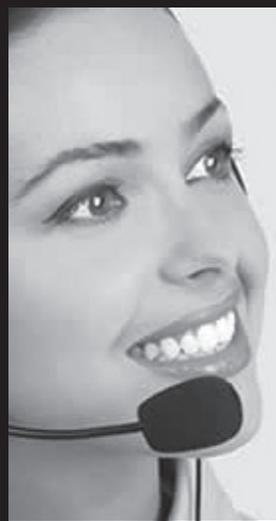
# 1800W PORTABLE GENERATOR



Model # 56180  
[bit.ly/WENvideo](http://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)

 [techsupport@wenproducts.com](mailto:techsupport@wenproducts.com)

 [WENPRODUCTS.COM](http://WENPRODUCTS.COM)

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## GENERATOR IDENTIFICATION

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

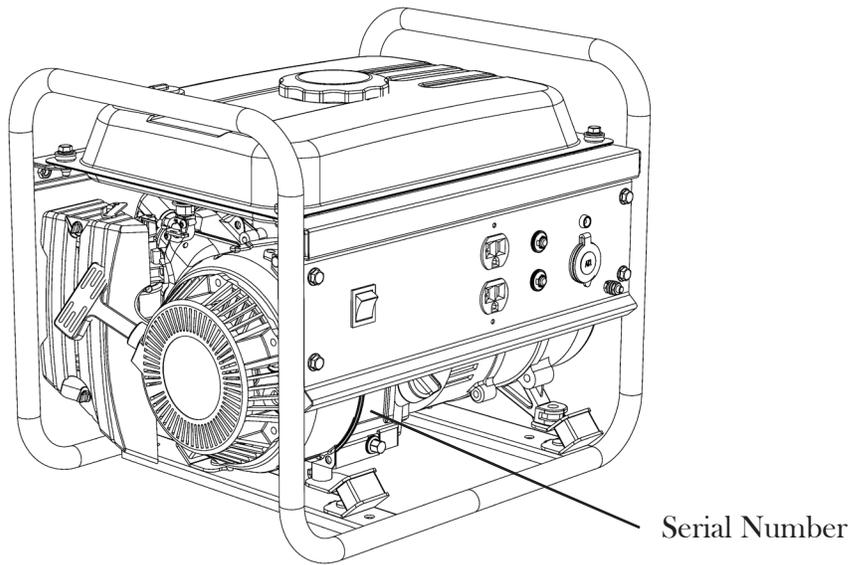
Refer to the illustration below for the location of the serial number. Record generator information in the spaces provided below.

DATE OF PURCHASE: \_\_\_\_\_

PURCHASED FROM: \_\_\_\_\_

GENERATOR MODEL NUMBER: 56180

ENGINE SERIAL NUMBER: \_\_\_\_\_



## SERVICE RECORD

Record Service Dates:

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

## INTRODUCTION

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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

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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<sup>o</sup> F (65<sup>o</sup> 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® 1800W generator that should be followed during installation and maintenance of the generator.

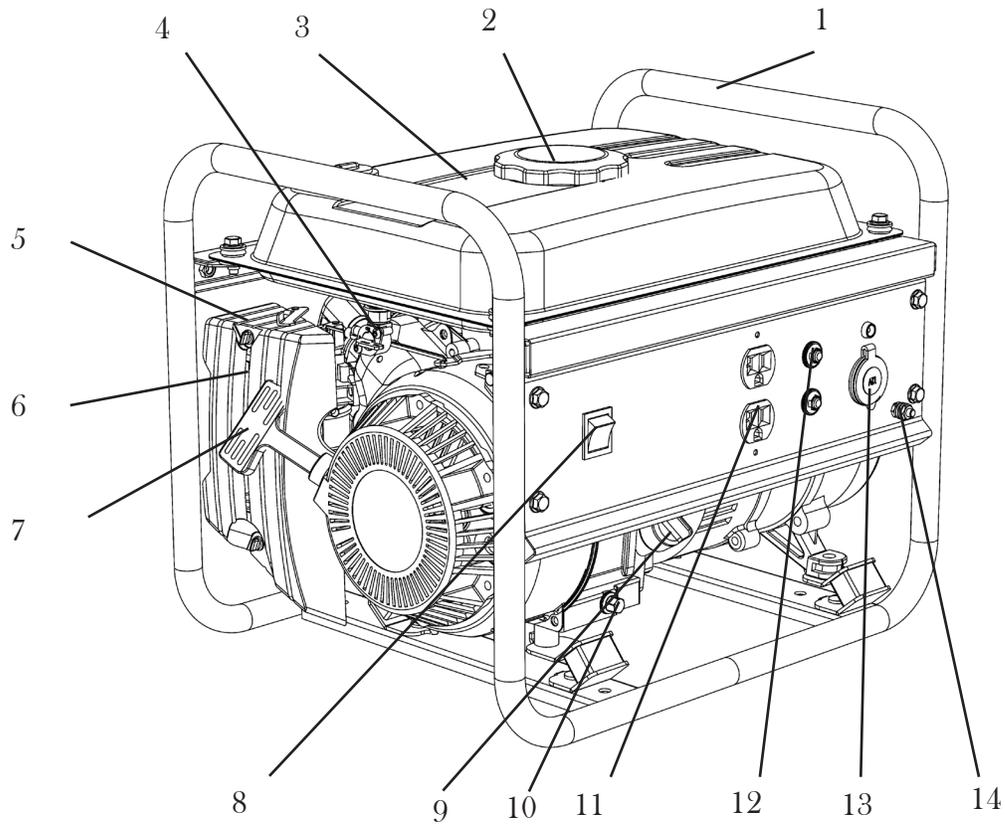
Generators vibrate in normal use. During and after the use of the generator, inspect both the generator as well as extension and power supply cords for damage resulting from vibration. Have damaged items repaired or replaced as necessary. Do not use plugs or cords that show signs of damage such as broken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

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

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

# GENERATOR COMPONENTS

Use the illustrations below to become familiar with the locations and functions of the various components and controls of this generator.



- |   |                     |    |   |
|---|---------------------|----|---|
| 1 | Frame               | 8  | ON/OFF Switch                             |
| 2 | Fuel Tank Cap       | 9  | Oil Dipstick                              |
| 3 | Fuel Tank           | 10 | Oil Drain Bolt                            |
| 4 | Fuel Valve Assembly | 11 | 120V Duplex Receptacle                    |
| 5 | Choke Lever         | 12 | Circuit Breakers                          |
| 6 | Air Cleaner         | 13 | 12V Cigarette Lighter Style DC Receptacle |
| 7 | Recoil Starter      | 14 | Grounding Terminal                        |

# 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 13.5 fl. oz. 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.

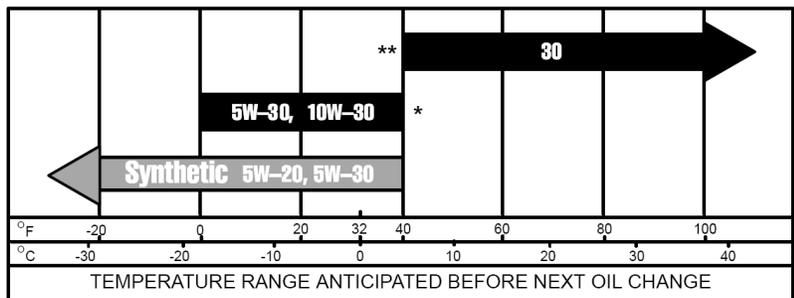
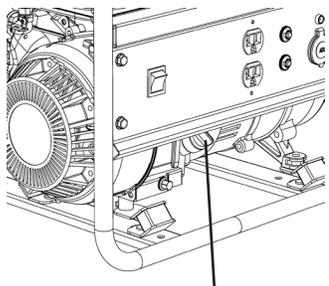


Figure 1 - Engine Oil Temperature Recommendations

### 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. Remove the dipstick from the engine. (Figure 2)
3. Add oil slowly as to not overflow the unit. (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 it 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 overfill the crankcase. The generator is equipped with a low-oil sensor and will not start if the amount of oil is insufficient.
6. Check for oil leaks. Tighten dipstick firmly.



Oil Dipstick

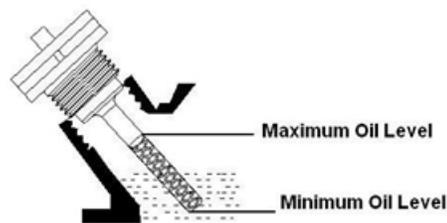


Figure 2 - Oil Fill Opening, Dipstick and Oil Level

# 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 1.45 gallons. **NOTE:** Do not fill the fuel tank to the very top. Gasoline will expand and spill over during use even with the fuel cap in place.
4. Reinstall fuel cap and wipe clean any spilled gasoline with a dry cloth.

### IMPORTANT:

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



## 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.

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

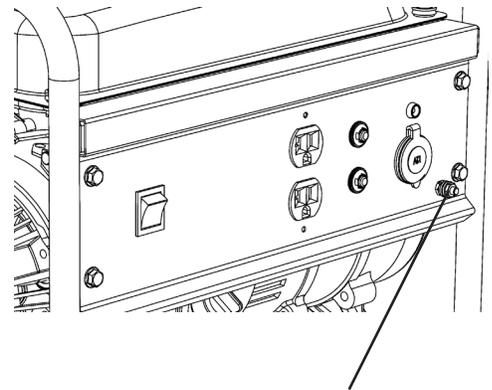


Figure 3 - Grounding Nut

## STARTING THE GENERATOR

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



### **DANGER: CARBON MONOXIDE.**

Using a generator indoors **CAN KILL YOU IN MINUTES.**

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 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 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

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## STARTING THE ENGINE

To start the generator, perform the following steps:

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

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

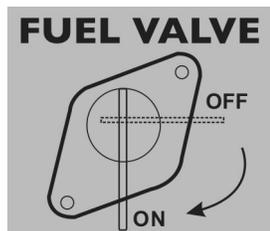


Figure 4 - Fuel Valve

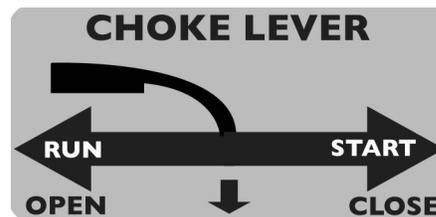


Figure 5 Choke Lever

# STOPPING THE GENERATOR

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## 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 “ON/OFF” switch to the “OFF” position.
3. Turn the fuel valve to the “OFF” (horizontal) 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

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



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

### Step 1 - CHECK THE OIL

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

To check or add oil, follow these steps:

1. Make sure the generator is on a level surface. Clean around oil fill.
2. Remove the oil filler/dipstick cap and check the oil level.
3. If oil level is below the second thread from the lip of the oil fill opening, slowly add oil until the engine crankcase is filled.
4. Reinstall and tighten oil cap before starting the engine.

### Step 2 - CHECK THE FUEL LEVEL

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

## SUBSEQUENT STARTING OF THE GENERATOR



**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 an explosion even if it is not directly in contact with fuel.

- Do not operate near open flames.
- Do not smoke near the generator.
- Always operate on a firm, level surface.
- Always turn the generator off before refueling. Allow generator to cool for at least 2 minutes before removing the 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 the 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

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**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.

### AC USAGE

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
56180	1500	1800

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:

$$\text{Watts} = \text{Volts} \times \text{Amperes}$$

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

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**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).

<b>Tool or Appliance</b>	<b>Rated (Running) Watts</b>	<b>ADDITIONAL SURGE WATTS</b>
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, remove the plugged in load, then press the power reset button before plugging the loads 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.

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

## USING THE GENERATOR

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### 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 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
15	1800	NR	150	100	65	NR

\*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.

### DC USAGE

This Generator is equipped with a 12V DC receptacle. The maximum draw for this DC outlet is 8.3 Amps. The 12V DC receptacle is not intended for use to charge automotive batteries.

## MAINTENANCE/CARE

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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 8-5CST.

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

Recommended Maintenance Schedule		Each 8 hours or daily	First 8 hours	Every 25 hours	Every 3 months or 50 hours	Every 6 months or 100 hours	Every year	As necessary
Engine oil	Check level	x						
	Replace		x	x*	x*			x
Air cleaner cartridge	Check			x		x		
	Clean					x		
Spark plug	Check/clean					x		
	Change						x	x
Fuel tank	Check level	x						
	Clean						x	

Figure 9 - Recommended maintenance schedule

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

# MAINTENANCE & CARE

## 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. 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.

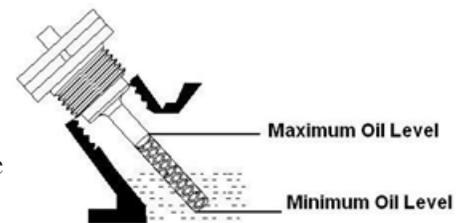


Figure 10 - Oil Fill Opening, Dipstick and Oil Level

## 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 13.5 fl.oz. 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.

### To drain oil, follow these steps:

1. Place a container underneath the engine to catch oil as it drains.
2. Using a 10 mm hex wrench, unscrew the oil drain plug. Allow all the oil drain from the engine.
3. Reinstall the oil drain plug and tighten with a 10 mm hex wrench.



Drain Plug

## MAINTENANCE & CARE

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### 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 (13.5 fl.oz) into the crankcase. The engine is equipped with a low oil 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. Unscrew the cover bolt, then remove the air cleaner cover.
2. Remove the air cleaner element from the casing.
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 and cover.

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

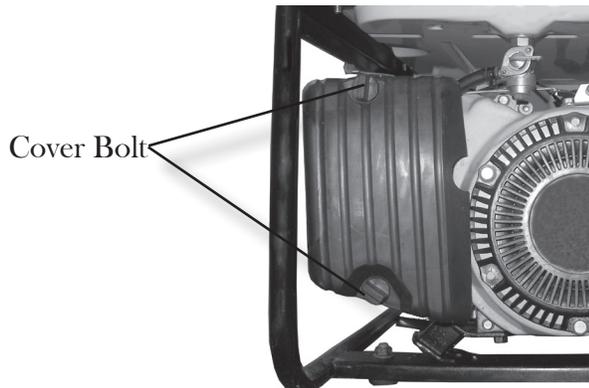


Figure 11 - Air Cleaner

## MAINTENANCE & CARE

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### FUEL FILTER CUP CLEANING

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

1. Turn the fuel valve to the “OFF” position.
2. Unscrew the fuel filter cup from the fuel valve using a wrench. Turn the valve toward you and unscrew (See Figure 12).
3. Clean the cup of all sediments using a rag or brush.
4. Reinstall the fuel filter cup.

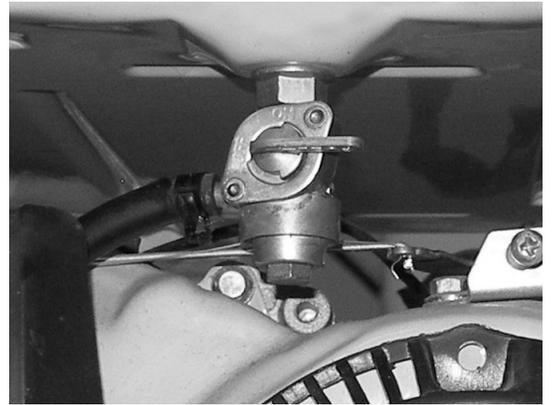


Figure 12 Removing the Fuel Filter Cup

### SPARK PLUG MAINTENANCE

Spark plug: NGK BP6HS

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

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

## MAINTENANCE & CARE

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### 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. Turn the fuel valve to the “OFF” position.
2. Remove the fuel line between the fuel valve and carburetor. Caution: A small amount of fuel may leak from the hose during removal.
3. Attach a fuel line (not included with the generator) to the exposed end of the fuel valve.
4. Position fuel line into an appropriate container and open the fuel valve allowing fuel to flow into the container.
5. Once fuel is drained, shut off the fuel valve.
6. Start and run the engine until fuel runs out.
7. Remove the fuel filter cup (See “FUEL FILTER CUP CLEANING”).
8. Empty the fuel filter cup of any fuel and clean.
9. Reinstall the fuel filter cup.
10. Store the emptied gasoline in a suitable place.

**CAUTION:** Do not store fuel for more than 3 months.

### STORAGE & TRANSPORT PROCEDURES

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**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

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## DC output

Rated Voltage	12 VDC
Rated Amperage	8.3 A
Rated Wattage	100 W

## AC output

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

## Engine

Engine type	4 stroke, OHV, single cylinder with forced air cooling system
Spark plug gap	0.7 - 0.8 mm (0.028 - 0.031 in)
Spark plug torque	1/2 - 3/4 turn after gasket contacts base or 15 ft.lb
Displacement	98 cc
Fuel tank capacity	1.45 gallon 87 octane minimum
Oil capacity	13.50 fl.oz
Lubrication system	Splash lubrication
Run time on 50% load	7.5 hours
Noise rating	63 dB at 22 feet
Spark plug	NGK BP6HS

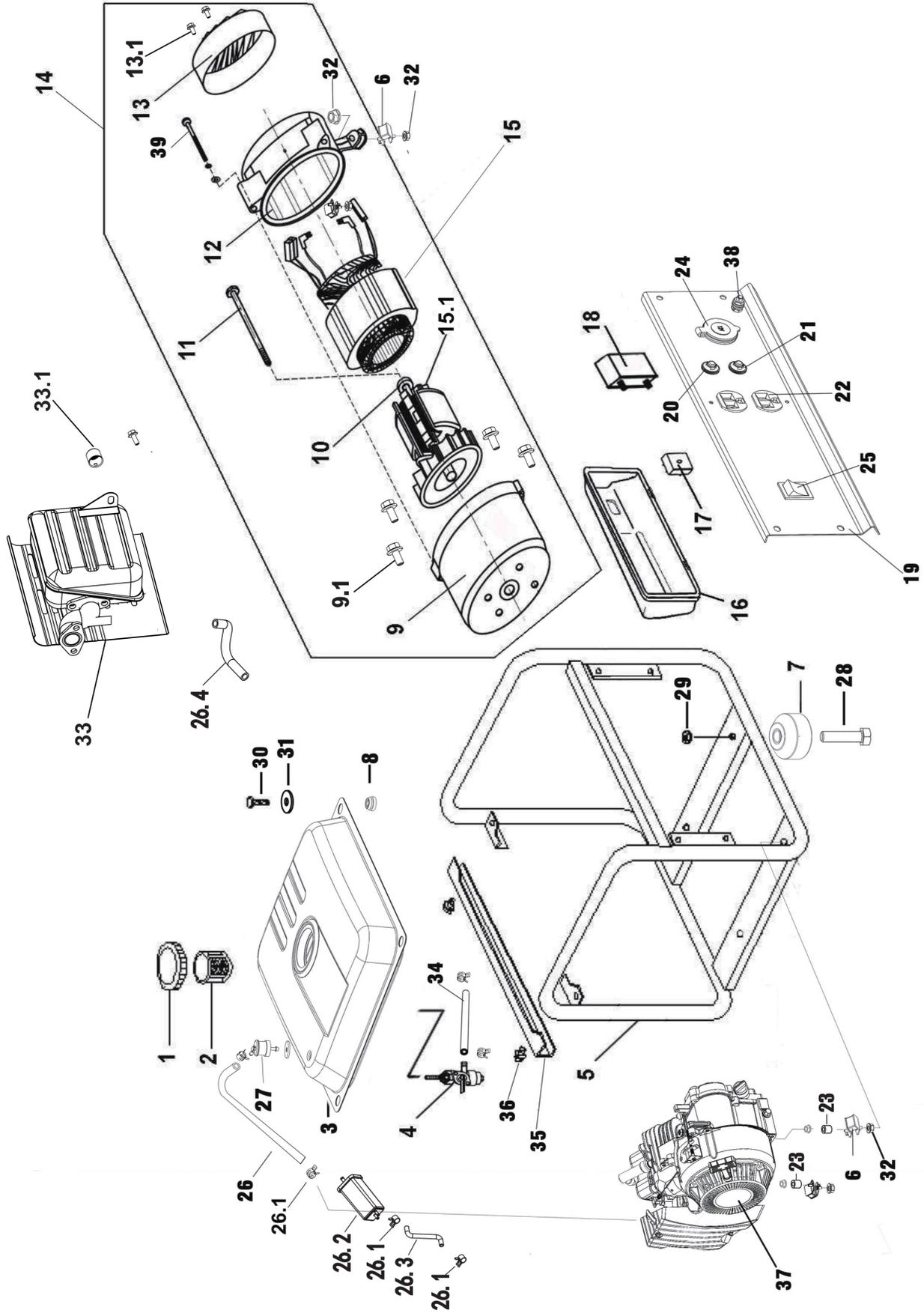
## TROUBLESHOOTING

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

<b>Problem</b>	<b>Cause</b>	<b>Solution</b>
Engine will not start	Engine switch is set to "OFF".	Set engine switch to "ON".
	Fuel valve is turned to "OFF".	Turn fuel valve to "ON" position.
	Choke is open.	Close the choke.
	Engine is out of gas.	Add gas.
	Engine is filled with contaminated or old gas	Change the gas in the tank.
	Spark plug is dirty.	Clean 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.
	Oil is low	Add or replace oil.
Engine runs but there is no electrical output	Circuit reset button is off.	Wait for 2 minutes and push the circuit reset button to the "ON" position.
	Bad connecting wires/cables.	If you are using an extension cord, try a different one.
	Bad electrical device connected to generator.	Try connecting a different device.
Generator runs but does not support all electrical devices connected.	Generator is overloaded	Perform these steps: 1. Turn off all electrical devices. 2. Unplug all electrical devices. 3. Turn off generator. 4. Wait several minutes. 5. Restart generator. 6. Try connecting fewer electrical loads to the generator.
	Short in one of the connected devices.	Try disconnecting any faulty or short-circuited electrical loads.
	Air cleaner is dirty.	Clean or replace air cleaner.
DC No Power	Power cord plug not securely in place	Twist and push power cord plug into receptacle until contact is made with bottom of receptacle.
	Protective fuse is blown	Contact our customer service help line at <b>(800) 232-1195</b> .

# EXPLODED VIEW AND PARTS LIST



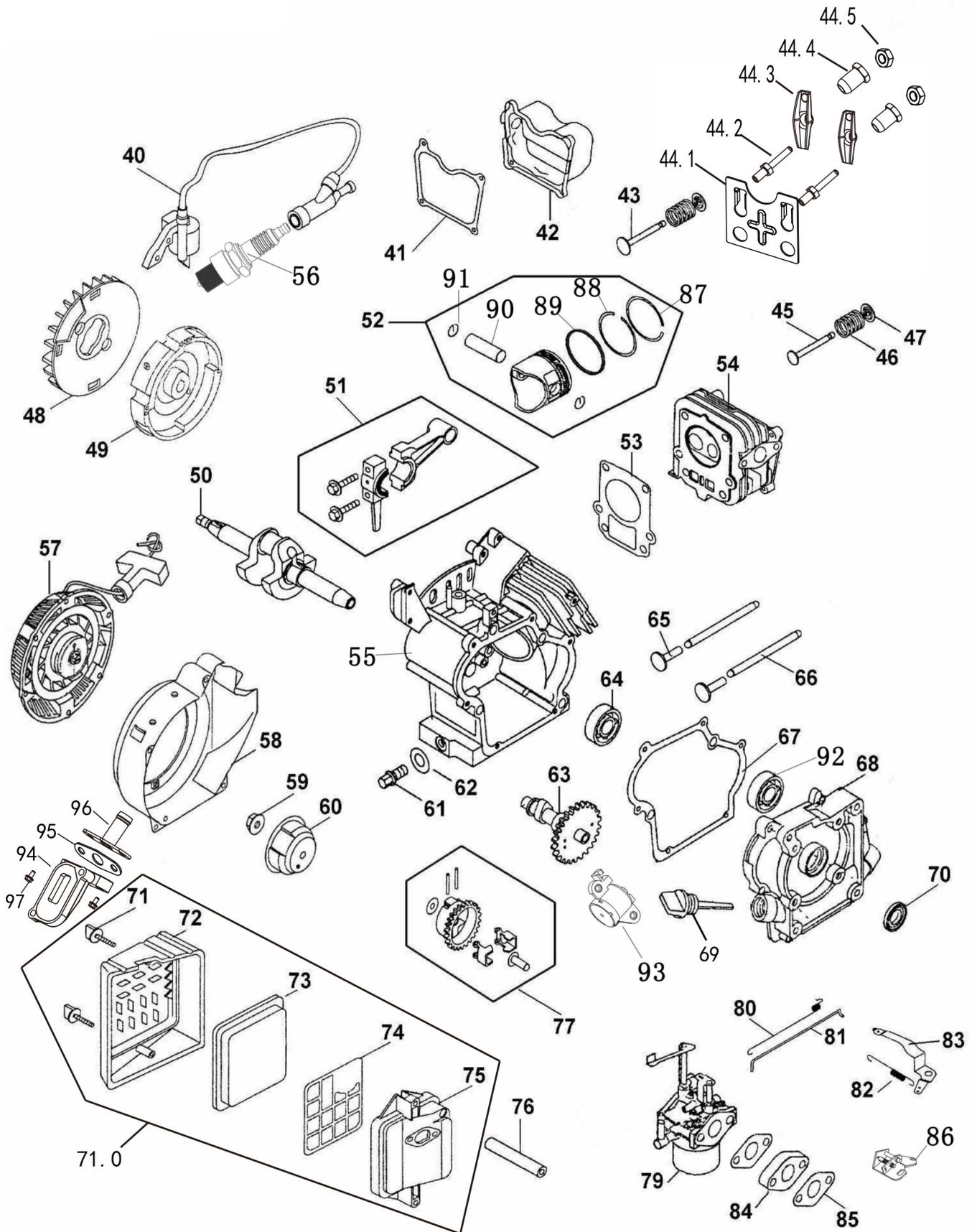
## EXPLODED VIEW AND PARTS LIST

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Item #	Stock #	Description
1	56180-001	Fuel Cap
2	56180-002	Fuel Filter
3	56180-003	Fuel Tank
4	56180-004	Fuel Cock
5	56180-005	Frame
6	56180-006	Resilient Mount
7	56180-007	Rubber Foot
8	56180-008	Rubber Spacer
9	56180-009	Front Case
9.1	56180-009.1	Bolt M8x20
10	56180-010	Bearing 6202
11	56180-011	Bolt M8x168
12	56180-012	Motor Housing
13	56180-013	End Cover
13.1	56180-013.1	Bolt M6x12
14	56180-014	Alternator Assembly
15	56180-015	Stator
15.1	56180-015.1	Rotor
16	56180-016	Panel Rear Cover
17	56180-017	Rectifer
18	56180-018	Capacitor
19	56180-019	Control Panel
20	56180-020	AC Circuit Protector
21	56180-021	DC Circuit Protector

Item #	Stock #	Description
22	56180-022	Duplex Receptacle
23	56180-023	Bracket
24	56180-024	12V Cigarette Lighter Style DC Receptacle
25	56180-025	Engine Switch
26	56180-026	Fuel Hose
26.1	56180-026.1	Fuel Hose Clamp
26.2	56180-026.2	Catalyst
26.3	56180-026.3	Hose
26.4	56180-026.4	Hose
27	56180-027	One Way Valve
28	56180-028	Bolt
29	56180-029	Nut
30	56180-030	Bolt
31	56180-031	Washer
32	56180-032	Nut
33	56180-033	Muffler Assembly
33.1	56180-033.1	Spark Arrestor
33.2	56180-033.2	Muffler Bracket
34	56180-034	Fuel Hose
35	56180-035	Fuel Tank Support
36	56180-036	Blot
37	56180-037	Engine Assembly
38	56180-038	Grounding Terminal
39	56180-039	Bolt M6x96

# EXPLODED VIEW AND PARTS LIST



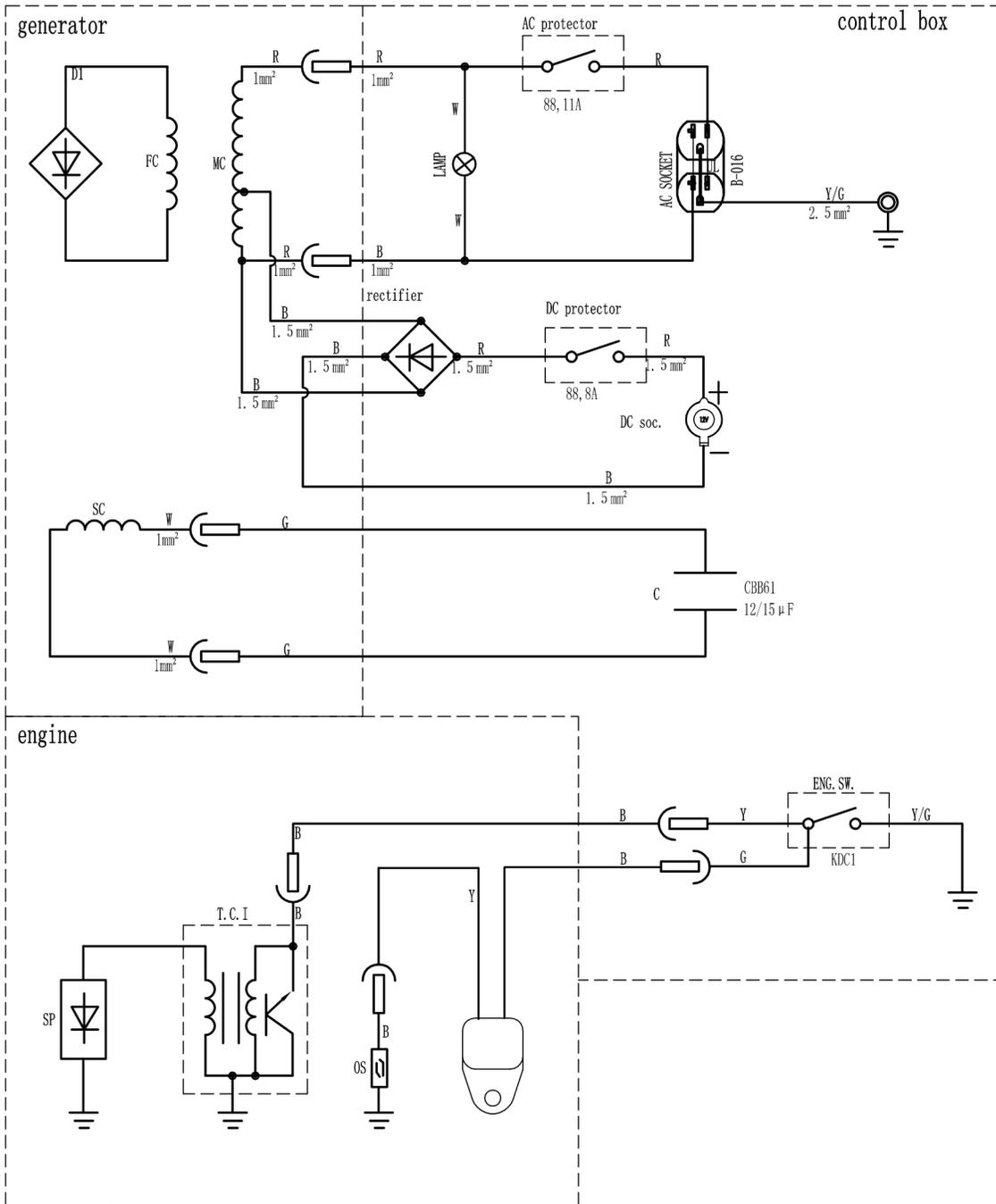
## EXPLODED VIEW AND PARTS LIST

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Item #	Stock #	description
40	56180-040	Ignition Coil Assembly
41	56180-041	Head Cover Gasket
42	56180-042	Cylinder Head Cover
43	56180-043	Intake Valve
44.1	56180-044.1	Push Rod Guide Plate
44.2	56180-044.2	Rocking Arm Stud
44.3	56180-044.3	Rocking Arm
44.4	56180-044.4	Adjust Nut
44.5	56180-044.5	Lock Nut
45	56180-045	Exhaust Valve
46	56180-046	Valve Spring
47	56180-047	Valve Spring Retainer
48	56180-048	Fan
49	56180-049	Flywheel
50	56180-050	Crankshaft
51	56180-051	Connecting Rod Assembly
52	56180-052	Piston Assembly
53	56180-053	Cylinder Head Assembly
54	56180-054	Cylinder Head
55	56180-055	Crankcase
56	56180-056	Spark Plug
57	56180-057	Recoil Starter
58	56180-058	Fan Cover
59	56180-059	Flange Nut M12x1.25
60	56180-060	Starting Cup
61	56180-061	Drain Bolt
62	56180-062	Washer
63	56180-063	Camshaft Assembly
64	56180-064	Bearing
65	56180-065	Valve Lifter
66	56180-066	Push Rod

Item #	Stock #	description
67	56180-067	Crankcase Gasket
68	56180-068	Crankcase Cover
69	56180-069	Dipstick
70	56180-070	Oil Seal
71.0	56180-071.0	Air Cleaner Assembly
71	56180-071	Screw
72	56180-072	Air Cleaner Housing
73	56180-073	Foam Element
74	56180-074	Support Pack
75	56180-075	Air Cleaner Cover
76	56180-076	Hose
77	56180-077	Regulator gear assembly
79	56180-079	Carburetor
80	56180-080	Carburetor Spring
81	56180-081	Link Rod
82	56180-082	Governor Spring
83	56180-083	Governor Arm
84	56180-084	Intake Insulator
85	56180-085	Intake Valve Gasket
86	56180-086	Governor Bracket
87	56180-087	Piston Ring I
88	56180-088	Piston Ring II
89	56180-089	Piston Ring III
90	56180-090	Piston Axes
91	56180-091	Piston Axes Ring
92	56180-092	Bearing
93	56180-093	Oil Alert Assembly
94	56180-094	Gulp Valve System
95	56180-095	Gulp Valve Gasket
96	56180-096	Gulp Valve Connection Plate
97	56180-097	Bolt M6x16

# WIRING DIAGRAM



## WARRANTY STATEMENT

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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.

All transportation costs under warranty, including return to the factory if necessary, are to be borne by the purchaser and prepaid by the purchaser. The term “purchaser” means the person for whom the generator is originally purchased. This warranty is non-transferable.

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.