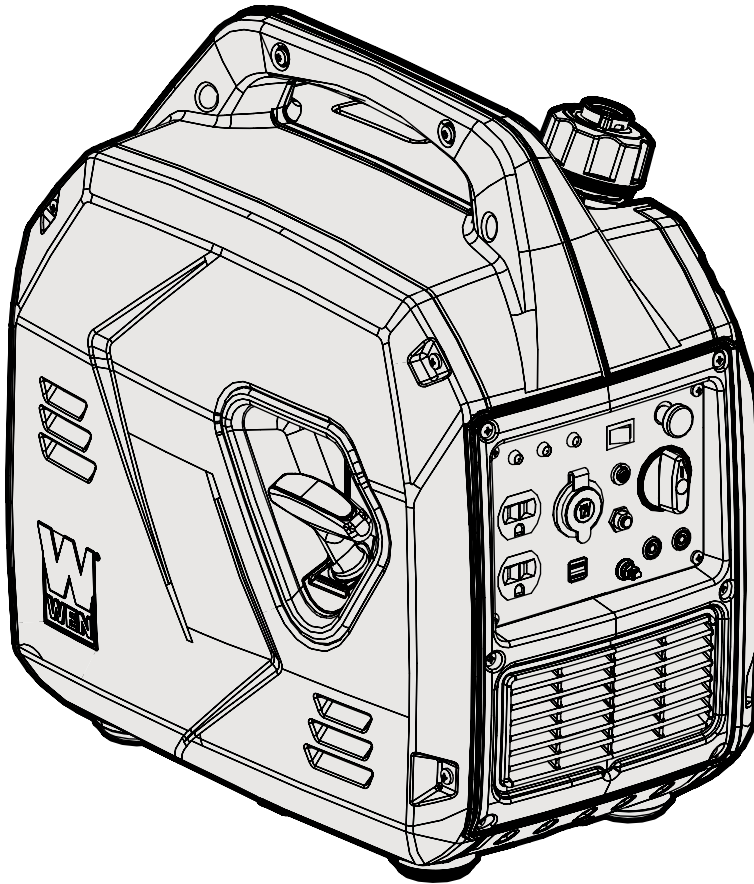




MODEL 56235i

2350W INVERTER GENERATOR

Instruction Manual



NEED HELP? CONTACT US!

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



1-800-232-1195 (M-F 8AM-5PM CST)



TECHSUPPORT@WENPRODUCTS.COM

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

For replacement parts and the most up-to-date instruction manuals, visit ***WENPRODUCTS.COM***

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To purchase accessories for your tool, visit ***WENPRODUCTS.COM***

Magnetic Oil Dipstick (Model No. 55201)
WEN Parallel Connection Kit

Weatherproof Generator Cover (Model No. 56200iC)
High-Altitude Kit (Part No. 56202i-HA36 & 56202i-HA69)

SPECIFICATIONS

GENERATOR

Model Number	56235i
Surge (Starting) Wattage	2350 Watts
Rated (Running) Wattage	1900 Watts
Rated Voltage	AC: 120V, DC: 12V (Cigarette Plug), 5V
Rated Amperage	AC: 15.8A, DC: 8.3A (Cigarette Plug), 2.1A/1A (USB)
Phase	Single
Frequency	60Hz
Product Weight	39 lbs
Product Dimensions	17.3" x 11.5" x 17.7"

ENGINE

Engine Type	4 stroke, OHV, single cylinder with forced air cooling system
Engine Displacement	79cc
Engine Speed	4800 RPM
Fuel Tank Capacity	1.06 Gallons (4 L)
Oil Capacity	17.1 fl. oz. (0.5 L)
Half-Load Run Time	5.7 Hours
Lubrication System	Splash Lubrication
Spark Plug Type	Torch E5T (NGK BP5H)
Spark Plug Gap	0.6 mm - 0.8 mm (0.02 in. - 0.03 in.)
Spark Plug Torque	11.1 - 14.7 ft-lbs (15 - 20 Nm)

INTRODUCTION


Thanks for purchasing the WEN 2350-Watt Inverter Generator. Refer to the illustration below for the location of the serial number on the specifications label. Record the generator information in the spaces provided below. If assistance for information or service is required, please contact customer service by calling **1-800-232-1195**, M-F 8-5 CST; you will be asked to provide the following generator information when calling.

Generator Model Number: 56235i

Date of Purchase: _____

Purchased From: _____

Serial Number: _____



MODEL 56235i

Serial Number

2350 WATT INVERTER GENERATOR

RATED WATTAGE	1900W	VOLTAGE	AC: 120V DC: 12V, 5V
SURGE WATTAGE	2350W	AMPERAGE	AC: 15.8A DC: 8.3A 2.1A/1A USB
RATED FREQUENCY	60 Hz	SERIAL NO.	
FUEL CAPACITY	1.06 gal.	ENGINE SERIAL NO.	
OIL CAPACITY	17.1 fl. oz.	<p style="text-align: center; margin: 0;">1-800-232-1195 WENPRODUCTS.COM</p> <p style="font-size: small; margin: 0;">Great Lakes Technologies LLC • 2750 Alft Lane • Elgin, IL 60124</p>	
PRODUCT WEIGHT	39 lbs.		

MADE IN CHINA

SERVICE RECORD

Record the service dates of your generator in the chart below. Please perform maintenance checks and operations according to the "Maintenance" section of the manual.

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

TO MAXIMIZE THE LIFESPAN OF YOUR GENERATOR: We recommend running your generator at least once a month for 20 to 30 minutes. Start the generator according to the instructions and plug a small load in to make sure the outlet is producing electricity.

SAFETY INFORMATION

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

SAFETY INTRODUCTION

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

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

At WEN, we are continuously improving our products. If you find that your tool does not exactly match this manual, please visit wenproducts.com for the most up-to-date manual or contact customer service at **1-800-232-1195**, M-F 8-5 CST.

Keep this manual available to all users during the entire life of the tool and review it frequently to maximize safety for both yourself and others.

SAVE THESE SAFETY INSTRUCTIONS.

SAFETY SYMBOLS

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

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

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

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

CAUTION! when used without the alert symbol, indicates a situation that could result in damage to the machine.

NOTICE REGARDING EMISSIONS

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

QUESTIONS? PROBLEMS?

In order to answer questions and solve problems in the most efficient and speedy manner, contact customer service at **1-800-232-1195**, M-F 8-5 CST or email techsupport@wenproducts.com.

GENERATOR SAFETY WARNINGS


DANGER! CARBON MONOXIDE

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





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

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


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

- Do not operate near open flame, heat, or any other ignition source. Do not smoke near the generator.
- Always operate on a firm, level surface.
- Always turn generator off before refueling. Allow generator to cool for at least 2 minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
- Do not overfill fuel tank. Gasoline may expand during operation. Do not fill to the top of the tank. Allow for expansion. Always check for spilled fuel before operating.
- If fuel spills, move the generator at least 30 feet away from the spill and wipe clean any spilled fuel before starting the engine.
- Empty fuel tank before storing or transporting the generator.

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

 **CALIFORNIA PROPOSITION 65 WARNING:** This product contains chemicals and produces exhaust known to the State of California to cause cancer, birth defects and other reproductive harm. For more information, visit www.P65Warnings.ca.gov

GENERATOR SAFETY WARNINGS

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

OPERATING ENVIRONMENT

1. **Using a generator indoors can kill you in minutes.** Only use a generator outside and far away from windows, doors and vents.

2. **Do not smoke near the generator.**

3. **Do not operate near open flame, heat, or flammable materials.** This generator may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death if ignited. A nearby open flame can lead to an explosion even if it isn't directly in contact with gasoline.

4. **Do not expose the generator to rainy or wet conditions; doing so significantly increases the risk of electrical shock.** Never handle the generator, electronic devices, or any cord while standing in water, while barefoot, or when hands or feet are wet.

5. **Always operate the generator on a dry, firm, level surface.**

6. **The generator should have at least 5 feet of clearance from buildings or other equipment during operation.**

7. **Do not allow children or non-qualified persons to operate the generator.**

GENERATOR PREPARATION

1. **Always ground the generator before using it to maximize safety** (see "Ground the Generator" section).

2. **Do not overfill fuel tank, as gasoline may expand during operation.** Do not fill to the very top of the tank. Leave room for gasoline expansion. Always check for spilled fuel before operating.

3. **If any part of the generator, electrical device or power cord is broken, damaged, or defective, make sure it is repaired or replaced before operation.** Service should only be performed by a qualified technician. Do not use receptacles or cords that show signs of damage, such as broken or cracked insulation.

4. **Use a ground fault circuit interrupter (GFCI) in highly conductive areas such as metal decking or steel work.** Extension cords with in-line GFCIs are recommended for these operations to maximize safety.

5. **If connecting the generator to a building's electrical system for standby power, you MUST consult a qualified electrician and install a transfer switch.** 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.

6. **Never modify the generator in any way.** Modifying or using the machine for any other purpose for which it is not designed may result in serious injuries, machine damage and voiding of the warranty.

GENERATOR OPERATION


1. **Only use the generator for its intended purposes.** Modifying or using the generator for operations for which it was not designed may cause hazards and personal injury.

2. **Do not touch bare wires or receptacles (outlets).**

3. **Do not exceed the wattage capacity of the generator by plugging in more electrical devices than the unit can handle.** This could damage the generator and/or connected electrical devices. Check the operating voltage and frequency requirements of all electrical devices prior to plugging them into the generator.

Generator safety warnings continue on the next page.

GENERATOR SAFETY WARNINGS

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

TO MAXIMIZE THE LIFESPAN OF YOUR GENERATOR: We recommend running your generator at least once a month for 20 to 30 minutes. Start the generator according to the instructions and plug a small load in to make sure the outlet is producing electricity. If you do not run it often, it will greatly shorten the generator's lifespan and void the warranty.

4. **Allow generator to run for several minutes before connecting electrical devices.** Do not start or stop engine with electrical devices plugged in to the receptacles. Failure to do so could damage the generator and/or connected electrical devices.
5. **Do not turn on electrical devices until after they are connected to the generator.**
6. **Generators vibrate in normal use.** During and after the use of the generator, inspect both the generator as well as extension and power supply cords for damage resulting from vibration.
7. **Do not touch hot parts.** This generator produces heat when running. Temperatures near exhaust can exceed 150°F (65°C). Allow generator to cool down after use before touching engine or areas of the generator that become hot during use.
8. **Turn off all connected electrical devices before stopping the generator.**
9. **Always turn generator off before refueling.** Allow generator to cool for at least 2 minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
10. **Turn the engine switch to “OFF” position when the engine is not running.**
11. **Empty fuel tank before storing or transporting the generator.** Do not store generator or gasoline near furnaces, water heaters, or any other appliances that produce heat or have automatic ignitions. Store the generator and fuel away from sparks, open flames, pilot lights, heat and other sources of ignition.
12. **Always wash hands after handling generator.**

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

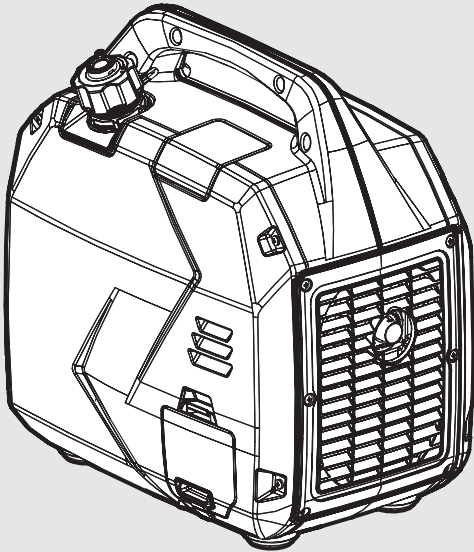
UNPACKING & PACKING LIST

UNPACKING

With the help of a friend or trustworthy foe, such as one of your in-laws, carefully remove the generator from the packaging and place it on a sturdy, flat surface. Make sure to take out all contents and accessories. Do not discard the packaging until everything is removed. Check the packing list below to make sure you have all of the parts and accessories. If any part is missing or broken, please contact customer service at **1-800-232-1195** (M-F 8-5 CST), or email techsupport@wenproducts.com.

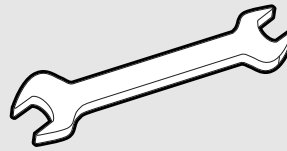
PACKING LIST

Components

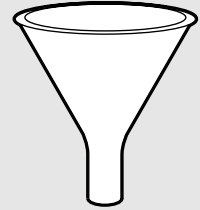


Generator

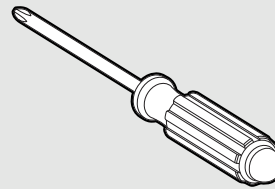
Tools & Accessories



8/10mm Wrench



Funnel



Screwdriver



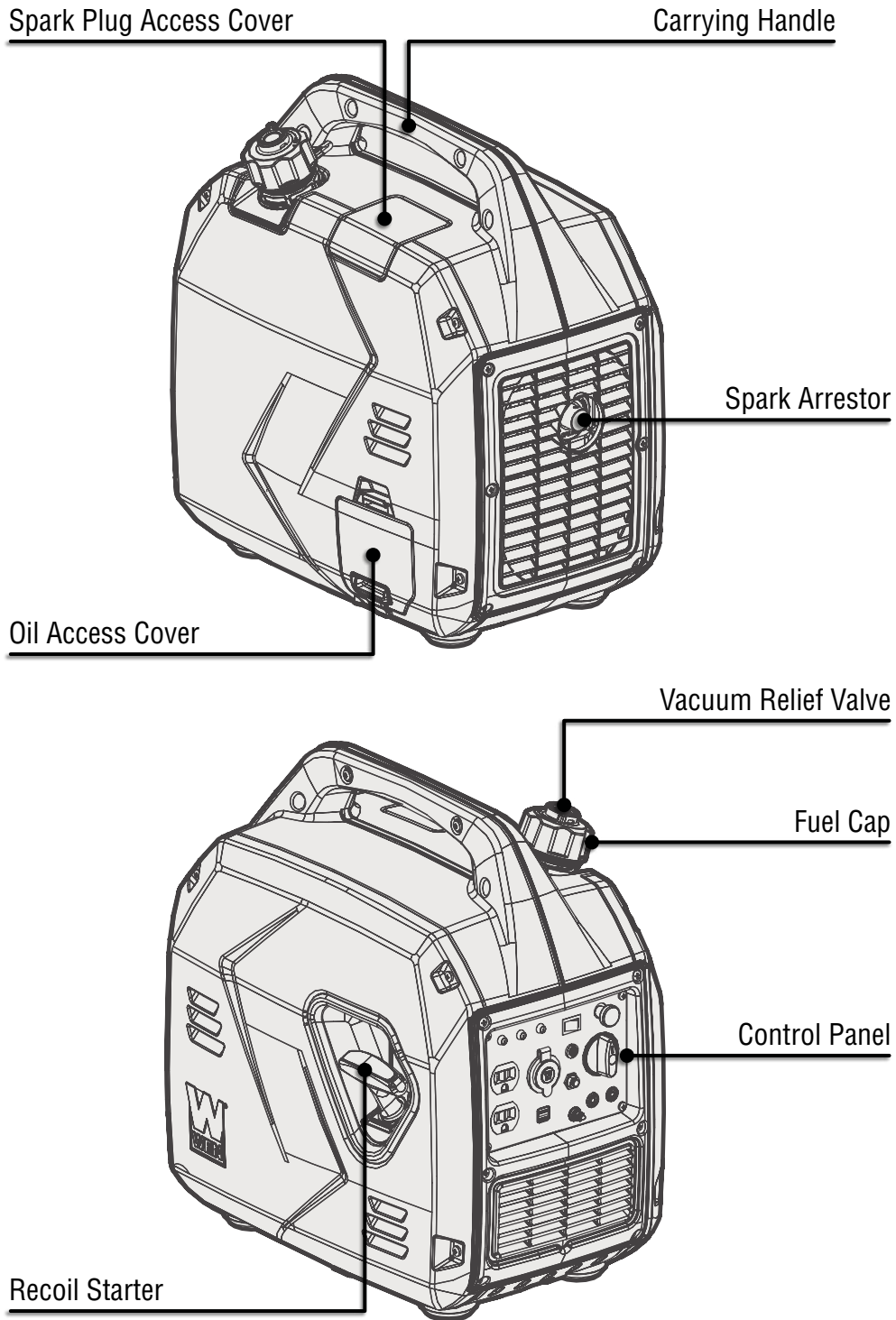
Spark Plug Socket

KNOW YOUR INVERTER GENERATOR

TOOL PURPOSE

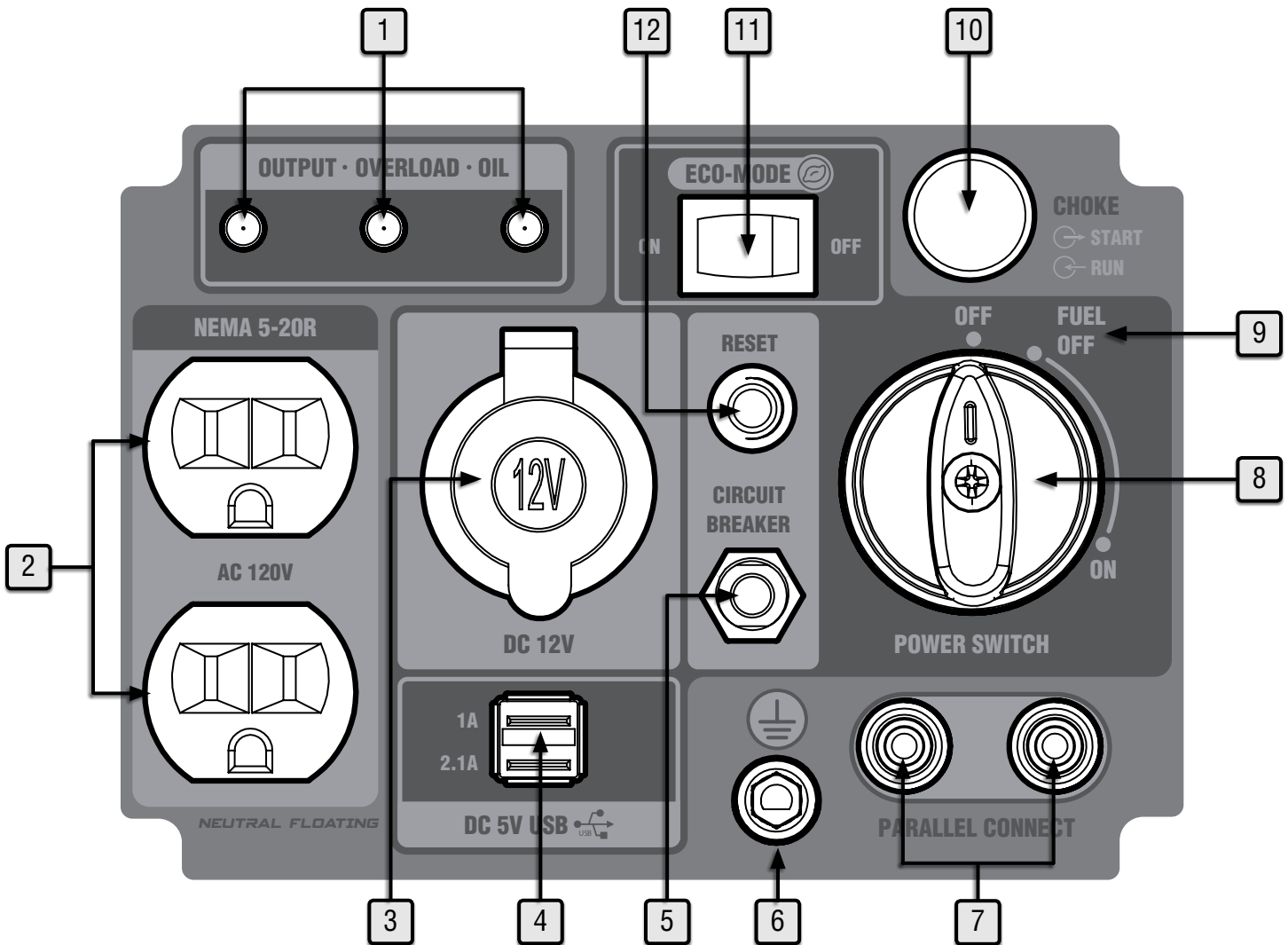
Inverter Generators provide you with clean and quiet power, when and where you need it most. Refer to the following diagrams to become familiarized with all the parts and controls of your Generator. The components will be referred to later in the manual for assembly and operation instructions.

GENERATOR



KNOW YOUR INVERTER GENERATOR

CONTROL PANEL



1. Indicator Lights

Output, Overload, & Low Oil

2. AC 120V NEMA 5-20R Duplex Receptacles

Standard household outlets provide 120V 60Hz power.

3. 12V DC Outlet

Cigarette-style outlet provides DC power.

4. 5V USB Port

1A & 2.1A for charging various electronic devices.

5. Circuit Breaker

Press to reset.

6. Grounding Nut

Ground the generator to reduce the risk of electric shock. Refer to "Ground the Generator" section on page 14.

7. Parallel Connection

Connect to share wattage between inverter generators.

8. On / Off Switch

Used to turn on or shut down the generator.

9. Fuel Off

Turn the ON / OFF Switch to this position to burn off the fuel in the carburetor. See p. 22.

10. Choke Lever

Used to start the engine.

11. Eco-Mode Switch

Maximizes fuel economy & run time.

12. Reset Button

Press to reset the circuit in case of overload.

PREPARATION

The following section describes the necessary steps to prepare the generator for use. If you are unsure about how to perform any of the steps please call **1-(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 / CHECK 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 **17.1 fl. oz.** (0.5 L).

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). Select the SAE viscosity grade of oil that matches the expected operating temperature.

- **30W Engine Oil**
Temperatures above 40°F
- **10W-30 Engine Oil**
Temperatures between 0°F - 40°F
- **Synthetic 5W-30 Engine Oil**
All temperature ranges

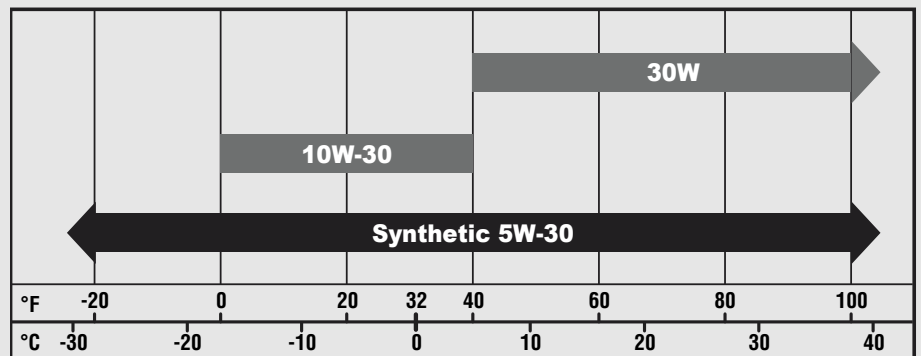


Fig. 1

TO ADD OIL:

1. Place the generator on a level surface. Make sure the engine is OFF before adding or checking oil.

CAUTION! Keep the generator level. Tilting the generator to assist in filling will cause oil to flow into the wrong areas of the engine and cause damage.

1. Open the oil access cover (Fig. 2 - 1), remove and wipe the oil dipstick with a clean rag. Insert the dipstick into the oil fill opening without screwing it in.
2. Remove the dipstick to check the oil mark on the dipstick (Fig. 3).
3. Add oil if the oil mark covers less than one half of the dipstick.
3. Slowly add oil and repeat step 2 until the oil mark reaches to the top of dipstick (or when you can see the oil coming halfway up the oil fill threads). Do not overfill the crankcase.
4. Wipe clean any oil leaks and firmly tighten the dipstick.

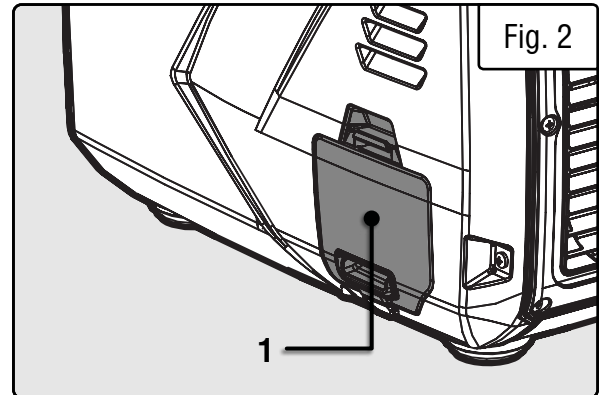


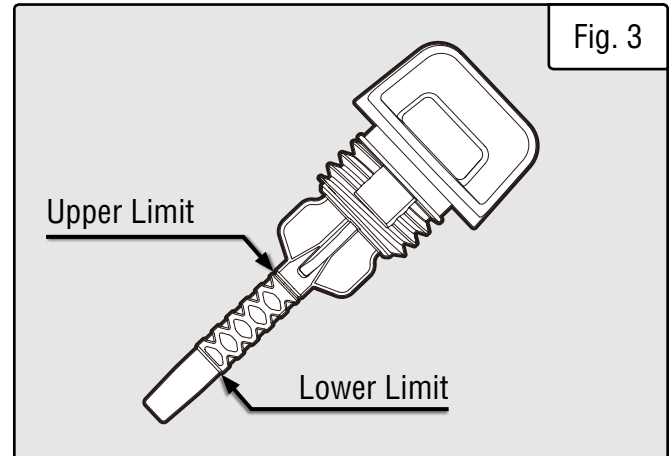
Fig. 2

CAUTION! For subsequent operation, the oil level should be checked before each use, or after every 8 hours of operation. The generator is equipped with a low-oil sensor and will not start without a sufficient amount of oil. Follow the instructions on the next page to check the oil level.

PREPARATION

TO CHECK OIL LEVEL (before every subsequent start):

1. Place the generator on a level surface. Make sure the engine is OFF before adding or checking oil.
2. Remove and wipe the dipstick with a clean rag.
3. Insert the dipstick into the oil fill without screwing it in. Remove the dipstick to check the oil mark.
4. If the oil mark covers **less than one half** of the dipstick, slowly **add oil** until the oil mark reaches the top of the dipstick (or when you can see the oil coming halfway up the oil fill threads). See Fig. 3.



TIP: Your WEN generator is compatible with the **WEN 55201** Magnetic Oil Dipstick (not included), available for purchase at **wenproducts.com**. The dipstick's industrial-strength magnetic tip will collect metal shavings from your generator's oil tank to help preserve the engine and extend your generator's lifespan.

STEP 2 - ADD / CHECK FUEL

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

- Do not operate near open flame, heat, or any other ignition source. Do not smoke near the generator.
- Always operate on a firm, level surface.
- Always turn generator off before refueling. Allow generator to cool for at least 2 minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
- Do not overfill fuel tank. Gasoline may expand during operation. Do not fill to the top of the tank. Allow for expansion. Always check for spilled fuel before operating.
- If fuel spills, move the generator at least 30 feet away from the spill and wipe clean any spilled fuel before starting the engine.
- Empty fuel tank before storing or transporting the generator.

ONLY use fresh (within 30 days from purchase), lead-free gasoline with a **minimum of 87 octane rating**. The generator performs best with ethanol-free gasoline. **DO NOT** use gasoline with over 10% ethanol.

The capacity of the fuel tank is **1.06 gallons**. Do not mix oil with gasoline.

Follow the instructions on the next page to add gasoline.

IMPORTANT:

- Avoid getting dirt or water into the fuel tank.
- Keep gasoline away from sparks, open flames, pilot lights, heat, and other sources of ignition.
- Gasoline can age in the tank and make starting difficult. Never store the generator for more than 2 months with fuel in the tank.
- Never use an oil/gasoline mixture.
- Never use old gasoline.

PREPARATION

TO ADD GASOLINE:

Use fresh (within 30 days from purchase), lead-free gasoline with a minimum of 87 octane rating. The generator performs best with ethanol-free gasoline. **DO NOT** use gasoline with over 10% ethanol. The capacity of the fuel tank is 1.06 gallon. Do not mix oil with gasoline.

1. Place the generator on a level surface. Make sure the engine is OFF before adding or checking the fuel.
2. Unscrew the fuel cap (Fig. 4 - 1) and set it aside. The fuel cap may be tight and hard to unscrew.
3. Slowly add unleaded gasoline to the fuel tank. Be careful not to overfill. Reinstall fuel cap and wipe clean any spilled gasoline with a dry cloth.

NOTE: Do not fill the fuel tank to the very top. If you do so, gasoline will expand and spill during use, even with the fuel cap in place.

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

STEP 3 - GROUND THE GENERATOR

To reduce the risk of electric shock and to maximize safety, the generator should be properly grounded.

1. Attach one end of the grounding wire to the grounding nut (Fig. 5 - 1). Tighten the nut to secure the grounding wire.
2. Connect the other end of the grounding wire to a copper, brass, or steel-grounding rod that is driven into the earth.

HIGH ALTITUDE OPERATION ABOVE 2000 FEET

The fuel system on this generator may be affected by operation at high altitudes. Proper operation can be ensured by installing an altitude kit at altitudes higher than 2000 feet above sea level. At elevations above 7000 feet, the engine may experience a decrease in performance, even with the proper altitude kit. Operating this generator without said kit may increase the engine's emissions and decrease both fuel economy and performance.

This kit should be installed by a qualified mechanic. You can order the kit at wenproducts.com by searching part number **56202i-HA36** or **56202i-HA69**. Refer to the instructions included with your altitude kit for more information about installation.

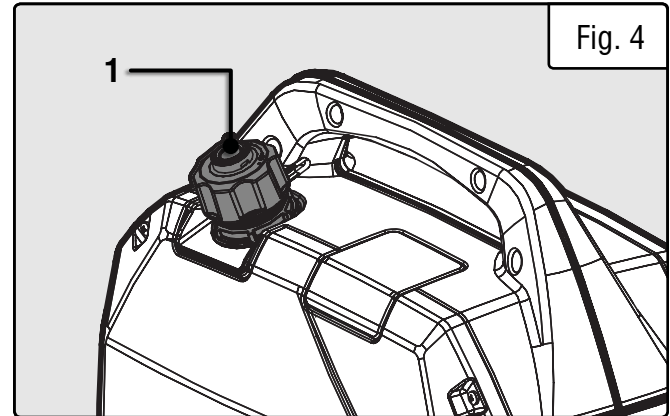


Fig. 4

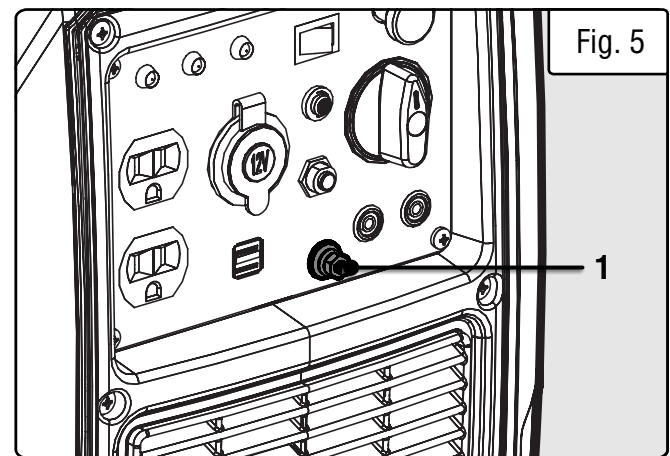


Fig. 5

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

NOTE: Grounding wire and grounding rods are not included with the generator. A generally acceptable grounding wire is a **No. 12 AWG (American Wire Gauge) stranded copper wire**. Grounding codes can vary by location. Contact a local electrician to check the area codes.

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

CAUTION! UNINSTALL the high altitude kit when operating at altitudes below 2000 feet.

STARTING YOUR GENERATOR

Before starting the generator, make sure you have read and performed the steps in the “Preparation” section of this manual, pages 12-14. If you are unsure about how to perform any of the steps in this manual please call **1-(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. But even if you cannot smell the exhaust, you could be breathing CO.


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


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

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

 **WARNING!** Do not operate generator near open flame or flammable materials. This generator may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death if ignited. A nearby open flame can lead to explosion even if it isn't directly in contact with gasoline. Do not smoke near the generator.

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

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

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

To maximize safety, **ALWAYS** ground the generator before using it. See page 14, “Ground the Generator”.

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

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

Follow the instructions on the next page to start your generator.

STARTING YOUR GENERATOR

BEFORE STARTING THE GENERATOR

1. Verify that the generator is outside on a dry, level surface. Allow at least two feet of clearance on all sides of the generator.
2. To maximize safety, check that the generator is properly grounded. See page 14, “Ground the Generator.”
3. Check that there is a sufficient level of oil in the crankcase. Add oil if necessary. Refer to page 12, “Step 1 - Add / Check Oil.”
4. Check that there is a sufficient level of fuel in the fuel tank. Add gas if necessary. Refer to page 13, “Step 2 - Add / Check Fuel.”
5. Make sure all electrical devices are unplugged from the generator during ignition. Otherwise it will be difficult for the engine to start.

STARTING THE GENERATOR

1. Place the generator outside on a dry, level surface. Allow at least two feet of clearance on all sides of the generator.
2. Check there is sufficient level of oil in the crankcase. Add oil if necessary (refer to “Add / Check Oil” on page 12).
3. Check there is sufficient level of gasoline in the fuel tank. Add fuel if necessary (refer to “Add Gasoline” on page 13).
4. To maximize safety, make sure the generator is properly grounded (refer to “Ground the Generator” on page 14).
5. Make sure all electrical devices are unplugged from the generator during ignition. Otherwise it will be difficult for the engine to start.
6. Turn the ECO-MODE switch to “OFF” during starting (Fig. 6).
7. Open the vacuum relief valve on top of fuel cap (Fig. 7 - 1) by rotating it clockwise to the “ON” position. This will allow fuel to flow.
8. Turn the engine switch to the ON position (Fig. 8).
9. If the engine is cold, pull out the choke lever to CLOSE the choke valve. If the engine is warm, push the choke lever in to OPEN the choke valve (Fig. 9).
10. Pull on the recoil starter handle (Fig. 10) 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.

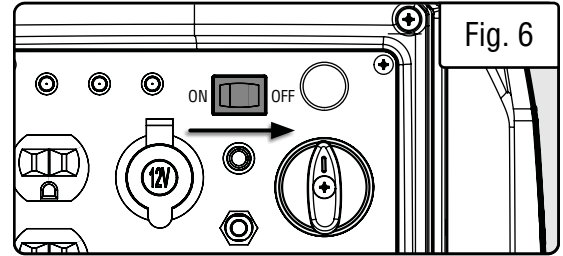


Fig. 6

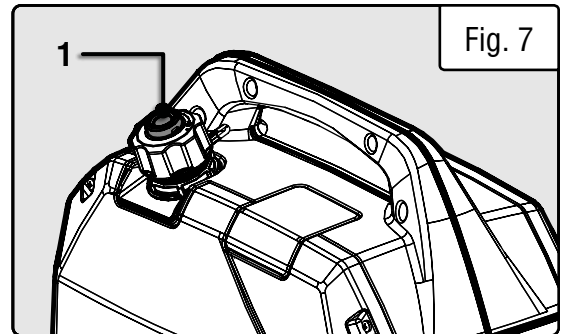


Fig. 7

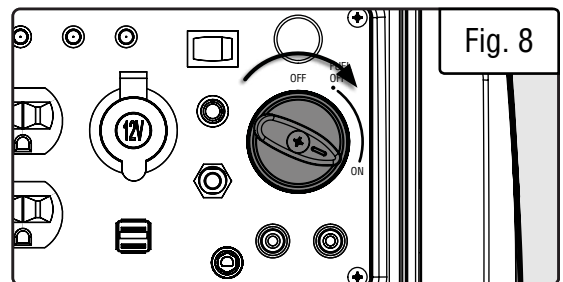


Fig. 8

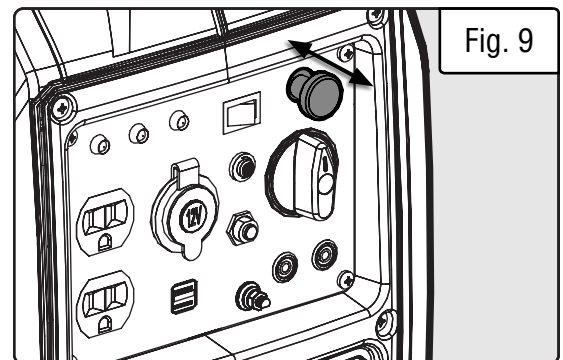


Fig. 9

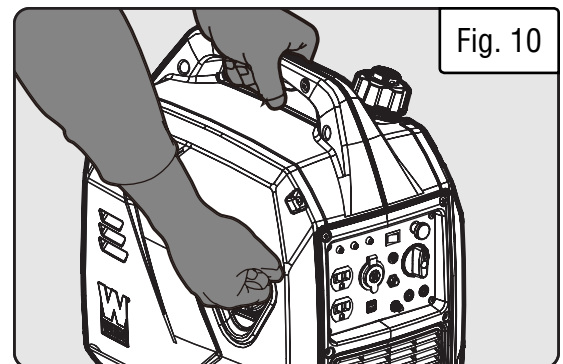


Fig. 10

STARTING YOUR GENERATOR

STARTING THE GENERATOR (CONTINUED)

11. Repeat step 10 until the engine starts. Note that the engine start time cannot exceed 15 minutes. If the engine fails to start, allow it to cool down for one minute before restarting, otherwise it may cause machine damage.

NOTE: After repeated failed attempts to start the engine, please consult the troubleshooting guide before attempting again. If problems persist please call **1-(800) 232-1195** M-F 8-5 CST.

12. After the engine has started, the output indication light (green) on the control panel will light up.

13. Slowly push in the choke lever to open the choke valve (Fig. 11).

NOTE: If the engine shakes or runs unstably, pull the choke lever halfway to the HALF open position, and then push it in to the FULL open position after the engine is running stably.

14. 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.

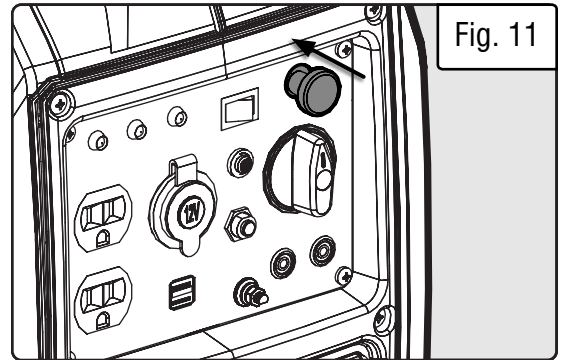


Fig. 11

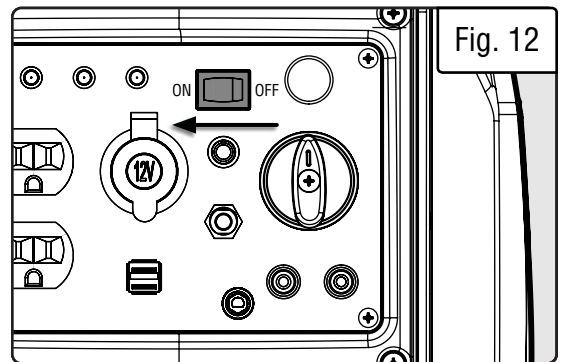


Fig. 12

ECO-MODE SWITCH

This generator is equipped with an Eco-Mode Idle Control Switch (Fig. 12). Engaging the switch automatically adjusts the engine to match the load. When the electrical load changes, the generator engine will automatically speed up and slow down as needed. This reduces fuel consumption and noise levels.

Keep this switch engaged when the power load requirement is less than 1000W. Do not engage the Eco-Mode Switch when the total load is more than 1000W. The generator engine must run at full speed to supply power for anything over 1000W.

OIL LEVEL SHUTDOWN

The low oil indication light (yellow) will turn on to remind you that the engine oil level is low and need to be refilled. The generator is equipped with a low oil pressure shutoff that will automatically stop the engine when the oil level is too low to protect the unit from damage. The oil level of the engine should be checked before each start to ensure that the engine crankcase contains sufficient lubricant.

PARALLEL OPERATION

The parallel connection feature (Fig. 13 - 1) allows you to connect two WEN generators to increase the total available electrical power. The "Parallel Connection Kit" can be purchased from wenproducts.com.

Follow the instructions included with your WEN parallel connection kit for proper installation and operation.

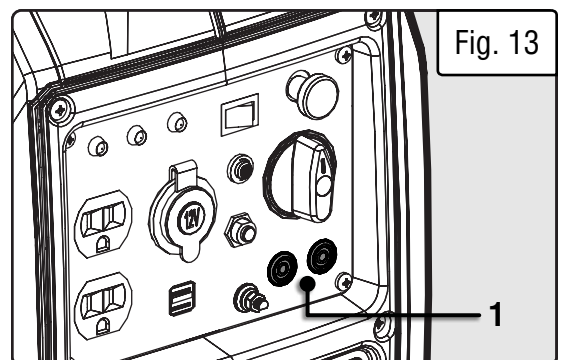


Fig. 13

USING YOUR GENERATOR

CALCULATING THE WATTAGE OF YOUR DEVICE(S)

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

Generator Wattage Capacity	GENERATOR RUNNING (RATED) WATTS	GENERATOR STARTING (SURGE) WATTS
		1900W
	<p>What this means: The generator can produce a maximum of 1900W on a continuous basis to supply on-going power to your electronic devices.</p> <p>NOTE: Also check the rated amperage for each outlet and make sure not to overload the individual outlets.</p>	<p>What this means: Some devices such as box fans require short bursts of extra power in addition to the rated wattage listed by the device to start their motors.</p> <p>The generator can produce a maximum wattage of 2350W for a short period of time (seconds) to cover the extra starting power required by your electronic devices.</p>
Electronic Device Wattage Calculation	<p>Find the wattage information of each device you plan to connect. The information should be listed on the device or in its instruction manual, or you may refer to page 19, Table 2.</p> <p style="text-align: center;">The wattage can be calculated using this equation: Watts = Volts x Amperes</p>	
	<p>To calculate the total running watts of your devices:</p> <p>+ Add up the running wattages of all the device(s) you plan to connect.</p> <p>= The total running (rated) wattage.</p> <p>This wattage should NOT exceed the running wattage of 1900W.</p> <p>It is recommended to maintain a load at or below 1710W (90% of the rated output) to ensure steady voltage output and to prolong the generator's lifespan.</p>	<p>To calculate the total starting watts of your devices:</p> <p>+ Add up the total running wattage of all the device(s) you plan to connect.</p> <p>+ Add the single highest ADDITIONAL starting wattage out of the device(s) you plan to connect.</p> <p>= The total starting (surge) wattage.</p> <p>This wattage should NOT exceed the starting wattage of 2350W.</p>
	<p>If any of either of the total calculated running watts or starting watts is higher than the capacity of your generator, adjust the load until both wattage requirements are met. Otherwise you will overload the generator, and cause damage to the engine and your electrical device(s).</p>	

Table 1 - How to Calculate Wattages

USING YOUR GENERATOR

CALCULATING THE WATTAGE OF YOUR DEVICE(S) - CONTINUED

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

Tool or Appliance	Rated (Running) Watts	Surge (Starting) 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
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

Table 2 - Estimated Wattages of Common Electrical Appliances

NOTE: Become familiar with the functions and capacity of each component on the control panel before connecting electrical devices. See page 11 for more information about the components of the control panel. Do not overload generator or individual panel receptacles. Do not connect 50Hz or 3-phase loads to the generator.

USING YOUR GENERATOR

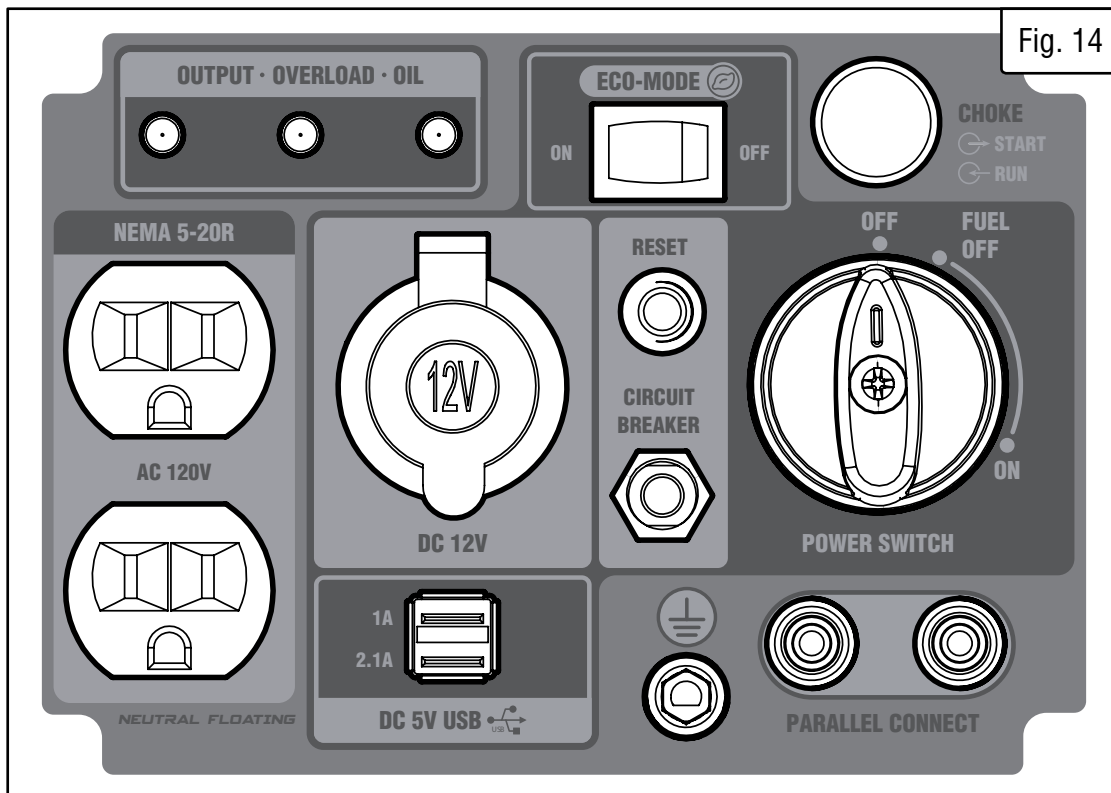
CONNECTING ELECTRICAL DEVICES

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 (1900W) of the generator, DO NOT connect all these devices. Select a combination of electrical devices with a total rated wattage lower than or equal to the rated wattage of the generator.

⚠ CAUTION! Become familiar with the markings on the control panel (Fig. 14) before connecting electrical devices. Do not connect 50Hz loads to the generator.

1. Before connecting electrical devices, allow the generator to run for a few minutes to stabilize the speed and voltage output.
2. Make sure that all devices are turned off. Start plugging in each electric device, from the highest wattage to the lowest. Check the power indicator light (green) to ensure the generator is producing power.
3. Do not overload the generator or individual panel receptacles. If an overload occurs, the overload indication light (red) will activate. If it is flashing, turn off and unplug one load. If it is solid (not flashing), the generator will cut off power to protect itself. Unplug all electrical devices and then press the reset button to reset the entire circuit, or press the circuit breaker to reset the DC circuit. Check the total wattage of the devices and reduce the load if it exceeds the capacity of the generator. Then, plug the loads back in one by one.

NOTE: If the reset button or circuit breaker does not reset, wait several minutes and try again. If problem still persists, please call **1-(800) 232-1195** M-F 8-5 CST.



NOTE: The NEMA 5-20 receptacles are capable of connecting devices up to 20A only when two generators are parallel connected. When operating a single generator, do not exceed 15.8A (1900 running watts) on this receptacle.

USING YOUR 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.

Device Requirements			Max. Cord Length (ft) by Wire Gauge				
Amps	Watts (120V)	Watts (240V)	#8 wire	#10 wire	#12 wire	#14 wire	#16 wire
2.5	300	600	NR	NR	NR	375	250
5	600	1200	NR	NR	300	200	125
7.5	900	1800	NR	350	200	125	100
10	1200	2400	NR	250	150	100	50
15	1800	3600	NR	150	100	65	NR
20	2400	4800	175	125	75	50	NR
25	3000	6000	150	100	60	NR	NR
30	3600	7200	125	65	NR	NR	NR
40	4800	9600	90	NR	NR	NR	NR

*NR = Not Recommended

Table 3 - Power Cord Requirement Guide

⚠ WARNING! Generator should **only** be connected to electrical devices, either directly or with an extension cord. NEVER CONNECT TO A BUILDING ELECTRICAL SYSTEM without a qualified electrician and connected to a transfer switch as a separately derived system. Such connections must comply with local electrical laws and codes. Failure to comply can create a back-feed, which may result in serious injury or death to utility workers.

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

STOPPING YOUR GENERATOR

SHUTTING OFF THE GENERATOR

1. Turn off all electrical devices and then unplug the devices from the generator.

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

2. Allow generator to run at no load for a few minutes to stabilize internal temperatures.

3. Turn the engine switch to the FUEL OFF position (Fig. 15). This feature will burn off the remaining fuel in the carburetor, helping to combat fuel degradation and prolong engine life. You may also choose to shut off the engine quickly (e.g. for refueling, moving the generator, etc.) by turning the engine switch to the OFF position (Fig. 16), but this option will let fuel remain in the carburetor. Be sure to drain the carburetor (see page 26) after use to prolong engine life.

4. Close the vacuum relief valve (Fig. 17) on the top of the fuel cap by rotating it 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 (over 2 months) with fuel in the fuel tank. Refer to “Storing the Generator” on page 28.

