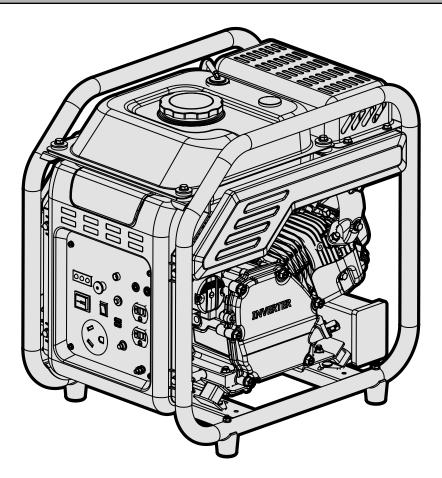


**MODEL DF402iX** 

# 4000-WATT DUAL FUEL 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 vour tool properly and for its intended purpose, you will enjoy years of safe, reliable service.

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

Magnetic Oil Dipstick (Model No. 55201)

Generator Cover (Model 56310iC and GNC400)

**30A 3600W Parallel Connection Kit** (Model GNA36i)

**50A 6000W Parallel Connection Kit** (Model GNA50i)

High Altitude Kit (Model DF402iX-HA36 and DF402iX-HA68)

## **SPECIFICATIONS**

## **GENERATOR**

| Model Number             | DF402iX                        |
|--------------------------|--------------------------------|
| Surge (Starting) Wattage | 4000W (Gas) 3600W (LPG)        |
| Rated (Running) Wattage  | 3500W (Gas) 3200W (LPG)        |
| Rated Voltage            | 120V AC                        |
| Rated Amperage           | 29.2A                          |
| Phase                    | Single                         |
| Frequency                | 60Hz                           |
| Product Weight           | 66.1 lbs                       |
| Product Dimensions       | 19.8 in. × 13.8 in. × 18.9 in. |

## **ENGINE**

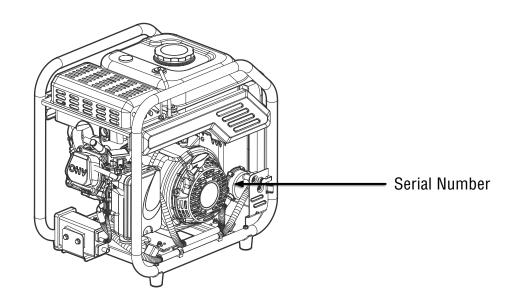
| Engine Type              | 4 stroke, OHV, single cylinder with forced air cooling system |
|--------------------------|---|
| Engine Displacement      | 212cc   |
| Fuel Tank Capacity       | 1.85 US Gallons (7.00 L), 87 Octane Minimum                   |
| Oil Capacity             | 17.0 fl. oz. (0.5 L)  |
| Half-Load Run Time (Gas) | 7 Hours   |
| Half-Load Run Time (LPG) | 9.5 Hours with 20-lb Tank and Eco-Mode ON                     |
| Lubrication System       | Forced Splash   |
| Spark Plug Type          | Torch F6RTC (NGK BPR6ES)                                      |
| Spark Plug Gap           | 0.7 - 0.8 mm (0.028 - 0.031 in.)                              |
| Spark Plug Torque        | ½ - ¾ turn after gasket contacts base or 15 ft-lbs (20.33 Nm) |

### INTRODUCTION

Thanks for purchasing the WEN 4000-Watt Dual Fuel Inverter Generator. Refer to the illustration below for the locations of the serial number on the side of the engine or on the serial number 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:   | DF402iX |
|------------|-------|-----------|---------|
| deliciator | Model | Mullingi. |         |

| Date of Purchase: | <br> |  |
|-------------------|------|--|
| Purchased From:   | <br> |  |
| Serial Number     |      |  |



#### **SERVICE RECORD**

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

| 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.

## **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 "STOP" 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.

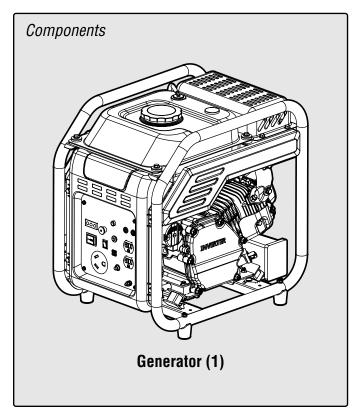
## **UNPACKING & PACKING LIST**

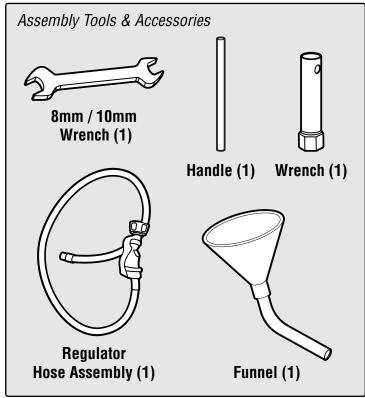
#### UNPACKING

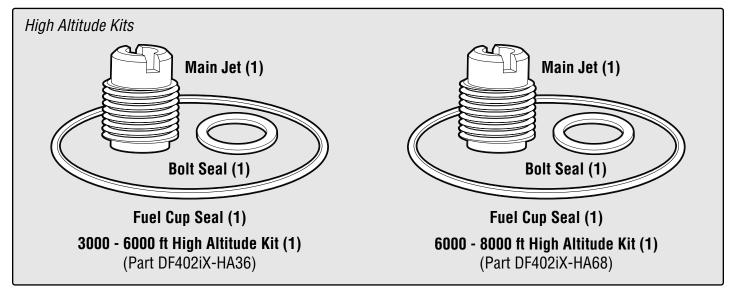
With the help of a friend or trustworthy foe, carefully remove the generator from the packaging and place it on a sturdy, flat surface. Make sure to take out all contents and accessories. Do not discard the packaging until everything is removed. Check the packing list on page 9 to make sure you have 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**.

## **UNPACKING & PACKING LIST**

#### PACKING LIST

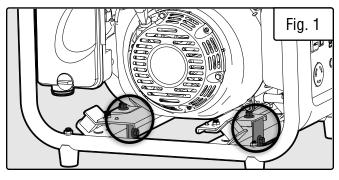






#### REMOVING THE SHIPPING BRACKETS

Your generator comes with two shipping brackets that protect the generator during delivery. These brackets should be removed before using the generator. The shipping brackets are located on the two lower beams of the generator (Fig. 1). Use the included 8mm/10mm wrench to remove the two bolts on each bracket, then slide the brackets off. You will not need the bracket or bolts, please discard appropriately.



### **ASSEMBLY & ADJUSTMENTS**

#### HIGH ALTITUDE OPERATION ABOVE 3000 FEET

The fuel system on this generator may be affected by operation at high altitudes. Proper operation can be ensured by installing an altitude kit at altitudes higher than 3000 feet above sea level. At elevations above 8000 feet, the engine may experience a decrease in performance, even with the proper altitude kit. Operating this generator without the high altitude kit at elevations above 3000 feet may increase the engine's emissions and decrease both fuel economy and performance.

INSTALLING THE HIGH ALTITUDE KIT

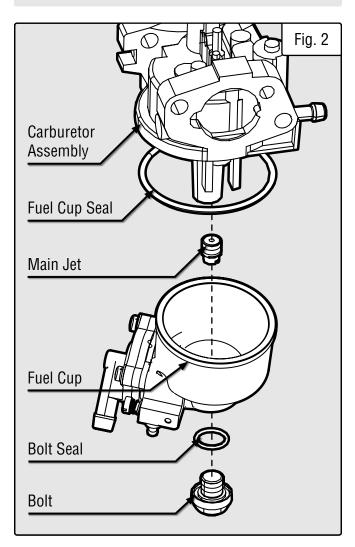
This kit should be installed by a qualified mechanic. Contact customer service at **1-800-232-1195** (M-F 8-5 CST), or email **techsupport@wenproducts.com** for information about service centers near you.

Gather the parts in the high altitude kit. Refer to page 9.

- 1. Flip the engine switch to the STOP position.
- 2. Turn the fuel valve to the OFF position.
- 3. Prepare an approved gasoline-storage container to catch any spilled fuel. Place it near the fuel valve.
- 4. The carburetor can be accessed from the backside of the generator between the engine and the air filter. Loosen the bolt (Fig. 2) on the bottom of the carburetor with a Phillipshead screwdriver (not included). **CAUTION! The carburetor bowl may have gas in it which will leak upon removing the bolt**.
- 5. Remove the bolt, bolt seal, fuel cup, fuel cup seal, and main jet from the body of the carburetor assembly. Refer to Fig. 2.
- 6. Replace the main jet with the replacement jet needed for your altitude range (3000-6000 ft or 6000-8000 ft). **NOTE:** The fuel cup seal and bolt seal may be damaged during removal and should be replaced with the new ones from the kit.
- 7. Reassemble the fuel cup seal, fuel cup, bolt seal, and bolt. Tighten with a Phillips-head screwdriver to secure.

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 3000 feet.



**CAUTION!** UNINSTALL the high altitude kit when operating at altitudes below 3000 feet.

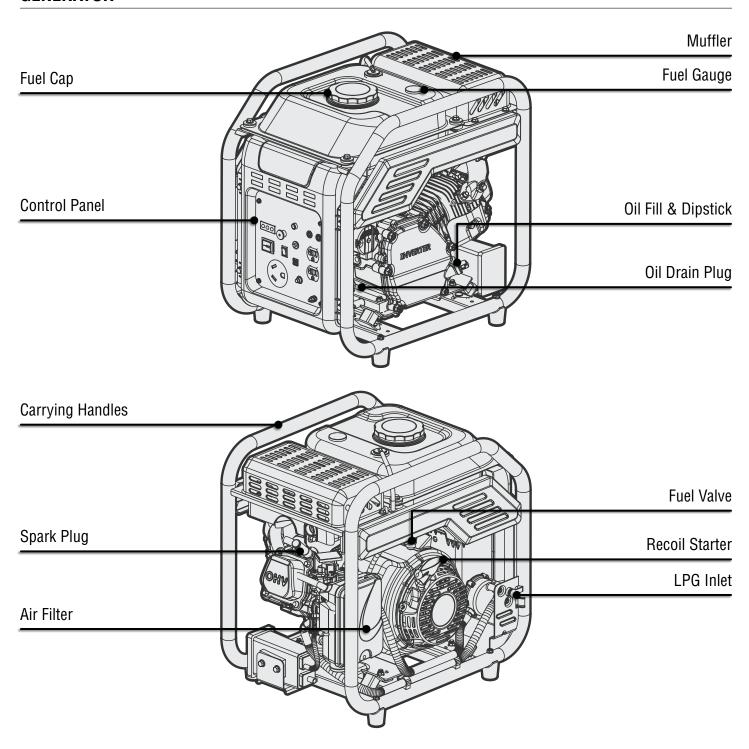
8. Wipe up any spilled fuel and allow excess to evaporate before starting the engine. WARNING! To prevent fire, do not start the engine while the smell of fuel hangs in the air.

## KNOW YOUR GENERATOR

### **KNOW YOUR GENERATOR**

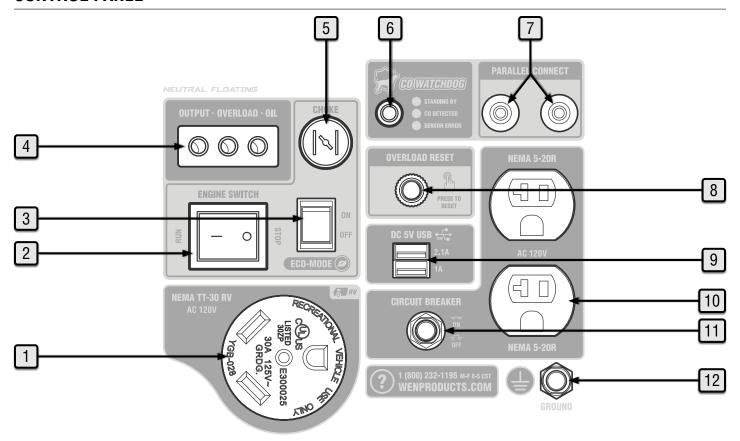
Refer to the following diagrams to become familiarized with all the parts and controls of your generator. The components will be referred to later in the manual for assembly and operation instructions.

### **GENERATOR**



## KNOW YOUR GENERATOR

#### **CONTROL PANEL**



#### 1. AC 120V NEMA TT-30R RV Receptacle

Standard RV connector.

#### 2. Engine Switch

This switch makes the engine run or stop.

#### 3. Eco-Mode Switch

Flip this switch to ON to increase fuel economy and runtime when the load is below 2400W (75% load).

#### 4. Indicator Lights

The output light (green) will turn on when the receptacles have power, the overload light (red) will turn on if the generator is overloaded, the oil light (yellow) will turn on if the oil is low.

#### 5. Choke Button

Adjusts the amount of air allowed into the engine during startup.

#### 6. CO WATCHDOG Carbon Monoxide Monitor

Measures the accumulation of poisonous CO gas while the generator is running. If the level of CO gas gets too high, the CO Watchdog system will automatically shut down the generator. See p. 22 for more information.

#### 7. Parallel Connection

Connect your generator to another generator with a parallel kit to gain more power.

#### 8. Overload Reset

If the overload light is ON, press this button to reset your generator.

#### 9. DC 5V USB Ports

The upper USB port provides 2.1A, while the lower port provides 1A of power.

#### 10. AC 120V NEMA 5-20R Duplex Receptacles (20A)

Standard household outlets provide 120V 60Hz power.

#### 11. Circuit Breaker

Push the button to reset the NEMA 5-20R circuit.

#### 12. Grounding Nut

Ground the generator to reduce the risk of electric shock. Refer to "Step 3 - Ground The Generator" on page 17.

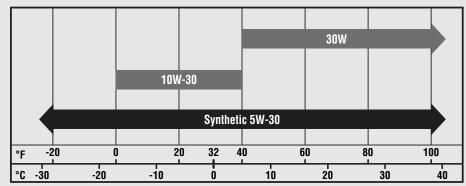
The following section describes the necessary steps to prepare the generator for use. If you are unsure about how to perform any of the steps please call **1-800-232-1195** (M-F 8-5 CST) for customer service. Failure to perform these steps properly can damage the generator or shorten its life.

#### 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 **17.0 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. For general use (above 40° F), we recommend using 30W engine oil.

Fig. 3



- 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

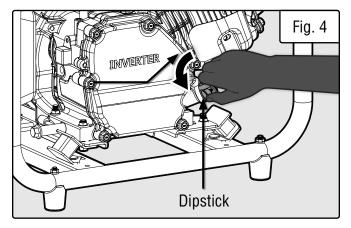
#### TO ADD OIL:

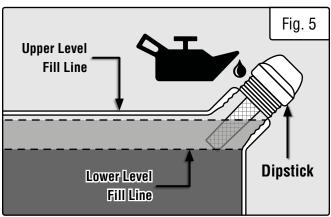
1. Place the generator on a level surface. Make sure the engine is OFF before adding or checking oil.

**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.

- 2. Unscrew the oil dipstick (Fig. 4) from the engine.
- 3. Using an oil funnel or appropriate dispenser, slowly add oil into the oil fill, being careful not to overfill the unit. Fill the crankcase to the upper fill line so you can visually see the oil coming halfway up the oil fill threads. See Fig. 5.
- 4. Reinstall the oil dipstick and firmly tighten it. Wipe clean any spilled oil.

**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.



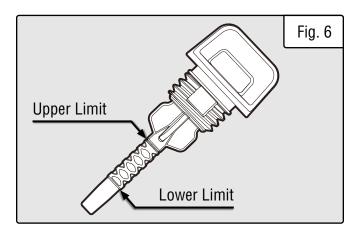


#### **TO CHECK OIL LEVEL** (before every subsequent start):

- 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. 6.

#### **OIL LEVEL SHUTDOWN**

To protect the unit from damage, the generator is equipped with a low-oil-pressure shutoff that will automatically shut down the engine when the oil level is too low. The oil level of the engine should be checked before each start to ensure that the engine crankcase contains sufficient lubricant.



**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

#### **FUEL OPTION A: GASOLINE**

**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.

Use ONLY 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 **1.85 US gallons (7.00 L)**. Do not mix oil with gasoline.

#### To add gasoline:

- 1. Make sure the generator is shut OFF and on a level surface. Unscrew the fuel cap (Fig. 7) and set it aside. The fuel cap may be tight and hard to unscrew.
- 2. Slowly add unleaded gasoline to the fuel tank. Be careful not to overfill.

**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.

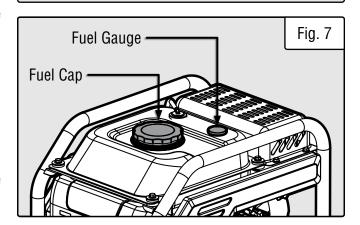
3. Reinstall fuel cap and wipe clean any spilled gasoline with a dry cloth.

#### To check gas level (before every subsequent start):

- 1. Before starting the generator, check the fuel gauge (Fig.7) to see if there is sufficient fuel inside the tank:
  - **E** = Empty
  - **F** = Full
- 2. If the tank is empty add gasoline to the gas tank. See above section, "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.



### STEP 2 - ADD / CHECK FUEL (CONTINUED)

### **FUEL OPTION B: LIQUID PETROLEUM GAS (LPG)**

#### To connect your generator to an LPG cylinder:

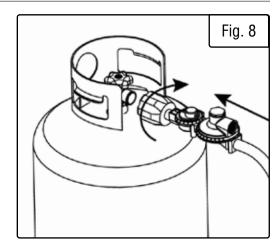
- 1. Take off the safety caps from the cylinder valve, generator mounted regulator, and regulator connecting hose ends.
- 2. With the LPG tank valve closed, attach the LPG regulator connecting hose to the valve. Turn the plastic coupling from the hose right (clockwise) to tighten hose assembly onto the LPG tank (Fig. 8).
- 3. Remove the protective rubber cover from the LPG inlet (Fig. 9 1) on the side of the generator. Connect the nut on the other end of the regulator connecting hose to the LPG inlet. Tighten the nut using the a wrench.
- 4. Turn the LPG tank valve ON (Fig. 10) and check for leaks by spraying soapy water to check connections. If bubbles appear, become larger in size, or increase in number, a leak exists. This MUST be corrected before using generator. Contact WEN customer service at **1-800-232-1195**, M-F 8-5 CST, or email **techsupport@wenproducts.com** for assistance.

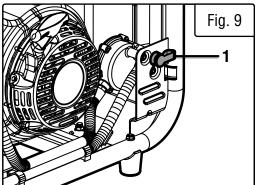
**NOTE**: You can use Teflon (or other tape) to secure the connection of the LPG hose to your generator.

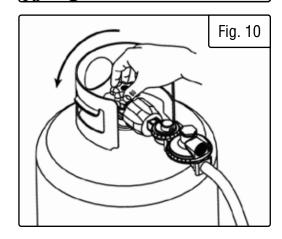
**NOTE:** If you would like to purchase other accessories for your dualfuel generator, consult your local dealer of propane and propane accessories, I tell you what.

CAUTION! Always position the LPG cylinder so the connection between the tank and LPG inlet won't cause sharp bends or kinks in the hose.

**WARNING!** Risk of burns. Contact with liquid contents of cylinder will cause freeze burns to the skin. If liquid contents contacts skin or eyes, seek immediate medical attention.







**WARNING!** When transporting and storing, keep cylinder secured in an upright position with cylinder valve turned off. Keep cylinders ventilated and away from heat when in a vehicle.

#### **AUTO FUEL SELECTION**

Your generator is equipped with Auto Fuel Selection Technology. What this means is that the generator will automatically select the fuel source (LPG or gasoline) depending on availability. LPG is prioritized; this means that if a propane tank with enough LPG is connected, the generator will automatically use LPG. If no propane tank is connected, or if there is no LPG remaining in the tank, the generator will use gasoline (if there is gasoline in the fuel tank). Refer to the table below for information on how to set up your generator for a particular fuel.

|                         | Propane tank valve | Fuel Valve |
|-------------------------|--------------------|------------|
| I want to use gasoline. | Closed             | Run        |
| I want to use LPG.      | Open               | Off or On* |

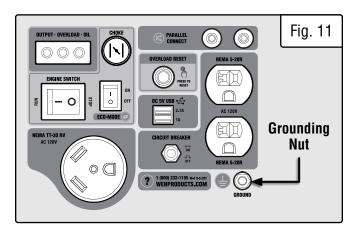
Table 1 – Auto Fuel Selection® chart.\*It is ideal to run the generator on LPG with the fuel valve closed (OFF), but if it stays open, the generator will still run properly.

**NOTE:** Make sure the generator can handle the load(s) you plan to connect. The generator can provide more power when running on gasoline than on LPG. Consult the specifications table on p. 3, as well as the chart "Calculating the Wattage of Your Device(s)" to ensure that your load(s) will not exceed the rated wattage for a particular fuel. See also "Switching Fuels" section for more information.

#### 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. 11). 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.



**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.

### STARTING YOUR GENERATOR

Before starting the generator, make sure you have read and performed the steps in the "Generator Preparation" section of this manual, pages 14-16. 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 batterybackup 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. Refer to "Step 3 - Ground The Generator" on page 17.

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 it.

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

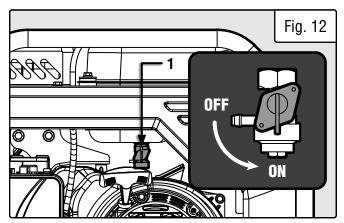
## STARTING YOUR GENERATOR

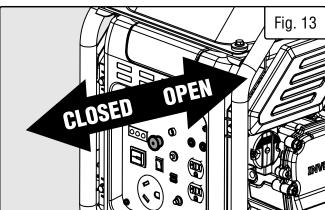
#### BEFORE STARTING THE GENERATOR

- 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. Refer to "Step 3 Ground The Generator" on page 17.
- 3. Check that there is a sufficient level of oil in the crankcase. Add oil if necessary. Refer to "Step 1 Add/Check Oil" on page 13.
- 4. Check that there is a sufficient level of fuel in the fuel tank. Add gas if necessary. Refer to "Step 2 Add/Check Fuel" on page 14. If using LPG, make sure there is enough propane in the tank, and that the tank and regulator hose are properly connected.
- 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 (GASOLINE)

- 1. Turn the fuel valve (Fig. 12 1) to the ON position.
- 2. Pull the choke button out to the CLOSED/START position (Fig. 13).
- 3. Flip the engine switch (page 12) to the RUN position.
- 4. Pull on the recoil starter handle (page 11) 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.
- 5. If engine fails to start, repeat this step.
- 6. Once the engine has started, slowly push the choke button into the OPEN/RUN position (Fig. 13).
- 7. 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. Follow the instructions in the next section for properly connecting your electrical devices.





**NOTE:** In case you have had repeated failed attempts to start the engine, please consult the troubleshooting guide before attempting to start the generator. If problems persist please call **1-800-232-1195**, M-F 8-5 CST.

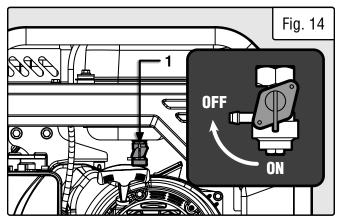
## STARTING YOUR GENERATOR

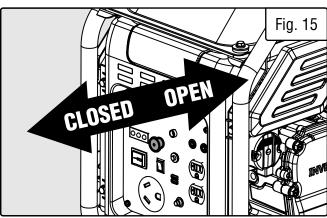
### STARTING THE GENERATOR (LPG)

- 1. Turn the fuel valve (Fig. 14 1) to the OFF position.
- 2. Connect the LPG regulator hose assembly to the inlet on the generator. Turn the LPG tank valve ON.
- 3. Pull the choke button out to the CLOSED/START position (Fig. 15).
- 4. Prime the engine by gently pulling the recoil starter 1 3 times.
- 5. Flip the engine switch (page 12) to the RUN position.
- 6. Pull on the recoil starter handle (page 11) 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.
- 7. If engine fails to start, repeat this step.
- 8. Once the engine has started, slowly push the choke button in to the OPEN/RUN position (Fig. 15).

**NOTE:** If the engine is warm, you may need to adjust the position of the choke button.

9. 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. Follow the instructions in the next section for properly connecting your electrical devices.





## **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 RUNNING (RATED) WATTS   | GENERATOR STARTING (SURGE) WATTS  |  |  |  |
|----------------------------------|---|---|--|--|--|
|                                  | Gas: 3500W LPG: 3200W   | Gas: 4000W LPG: 3600W   |  |  |  |
| Generator<br>Wattage<br>Capacity | What this means: The generator can produce a maximum of 3500W (gas) or 3200W (LPG) on a continuous basis to supply ongoing power to your electronic devices.  | 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.                       |  |  |  |
|                                  | <b>NOTE:</b> Also check the rated amperage for each outlet and make sure not to overload the individual outlets.  | The generator can produce a maximum wattage of 4000W (gas) or 3600W (LPG) for a short period of time (seconds) to cover the extra starting power required by your electronic devices. |  |  |  |
|                                  | 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 22, Table 2 - Estimated Wattages of Common Electrical Appliances.  |   |  |  |  |
|                                  | The wattage can be calculated using the   | nis equation: Watts = Volts x Amperes   |  |  |  |
|                                  | To calculate the total running watts of your devices:   | To calculate the total starting watts of your devices:  |  |  |  |
| Electronic                       | + Add up the running wattages of all the device(s) you plan to connect.   | + Add up the total running wattage of all the device(s) you plan to connect.  |  |  |  |
| Device<br>Wattage<br>Calculation | = The total running (rated) wattage.  This wattage should NOT exceed the running wattage of <b>3500W (gas) or 3200W (LPG)</b> .   | + Add the single highest ADDITIONAL start-<br>ing wattage out of the device(s) you plan to<br>connect.  |  |  |  |
|                                  | It is recommended to maintain a load at or<br>below 3150W (gas) or 2880W (LPG) (90%   | = The total starting (surge) wattage.   |  |  |  |
|                                  | of the rated output) to ensure steady voltage output and to prolong the generator's lifespan.   | This wattage should NOT exceed the starting wattage of 4000W (gas) or 3600W (LPG).  |  |  |  |
|                                  | 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). |   |  |  |  |

### 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 |  |
|-------------------------------|-----------------------|------------------------|--|
| 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 12 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.

#### CONNECTING ELECTRICAL DEVICES

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

#### **ECO-MODE SWITCH**

This generator is equipped with an Eco-Mode Idle Control Switch (page 12). Engaging this switch allows the system to regulate the engine speed and automatically adjust its fuel consumption to match the required 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, while extending runtime and engine's lifespan.

Keep this switch engaged ONLY when the power load requirement is less than 2400W (75% of the rated watts). Do not engage the Eco-Mode Switch when the total load is more than 2400W. The generator engine must run at full speed to supply power for anything over 2400W.

#### PARALLEL OPERATION

The parallel connection ports (page 12) allow you to connect two WEN generators to increase the total available electrical power. The WEN Parallel Connection Kit can be purchased from **wenproducts.com**. Follow the instructions included with your parallel connection kit for proper installation and operation.

#### CIRCUIT BREAKER

The 20A AC circuit breaker will activate when the load on the NEMA 5-20R outlets exceeds 20A. When the circuit breaker activates, turn off and disconnect the device from its respective outlet, and press the circuit breaker to reset.

#### IN CASE OF OVERLOAD

If your generator becomes overloaded from too much drawn wattage, the overload light (red) on the control panel will light up. Follow the instructions below when an overload occurs:

- When you're close to overloading the generator, the overload light will start to flash. Reduce the load by turning off and disconnecting your electronic device(s) until the overload light turns off. Then you may continue to operate your generator.
- When you've overloaded the generator, the overload light will stay on and the overload reset button (page 12) will activate to cut off the output in 3 to 16 seconds, depending on the load. Reduce the load by turning off and disconnecting your electrical device(s) until the overload light turns off. Wait about five minutes and then press the activated reset button to reset the circuit. If no power is produced after resetting, turn off and disconnect all electrical devices and restart your generator.
- The pattern in which the overload light blinks gives diagnostic information about the problem. Refer to the chart on the next page.

| LI                | GHT                   |   |  |  |
|-------------------|-----------------------|---|--|--|
| GREEN             | RED                   | MEANING                                 | RESOLUTION                                   |  |
| (POWER INDICATOR) | (OVERLOAD)            |   |  |  |
| ON                | OFF                   | Generator output is normal.             | No action needed.                            |  |
| ON                | Flashing continuously | Generator is exceeding rated output.    | Reduce load on generator.                    |  |
| OFF               | Flashes 1x, repeating | Voltage at alternator is too low. No    | Check for loose connections. Call            |  |
|                   | every 3 sec           | electrical output.                      | <b>1-800-232-1195</b> for assistance.        |  |
| OFF               | Flashes 2x, repeating | Engine speed is too low. No electrical  | Check carburetor and stepper motor.          |  |
|                   | every 3 sec           | output.                                 | Ensure Eco-Mode is OFF. Have genera-         |  |
|                   |                       |   | tor serviced; call <b>1-800-232-1195</b> for |  |
|                   |                       |   | assistance.                                  |  |
| OFF               | Flashes 3x, repeating | Inverter temperature is too high. No    | Turn generator off and let it cool down      |  |
|                   | every 3 sec           | electrical output.                      | fully (1 – 2 hours) before restarting.       |  |
| OFF               | Flashes 5x, repeating | Voltage at alternator is too high. No   | Have generator serviced; call <b>1-800-</b>  |  |
|                   | every 3 sec           | electrical output.                      | <b>232-1195</b> for assistance.              |  |
| OFF               | Flashes 6x, repeating | Generator has exceeded rated output     | Turn OFF and disconnect loads. Press         |  |
|                   | every 3 sec           | and cut off power to protect itself. No | RESET button on panel. Reduce load           |  |
|                   |                       | electrical output.                      | on generator.                                |  |

#### SOME NOTES ABOUT POWER CORDS

Refer to the following chart in determining the necessary gauge extension cord for each of your devices. Round up to the higher amperage in the chart to maximize safety.

| D    | evice Requir    | ements       | Max. Cord Length (ft) by Wire Gauge |          |          |          |          |
|------|-----------------|--------------|-------------------------------------|----------|----------|----------|----------|
| Amps | Watts<br>(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       |

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

Table 3 - Power Cord Requirement Guide

MARNING! 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.

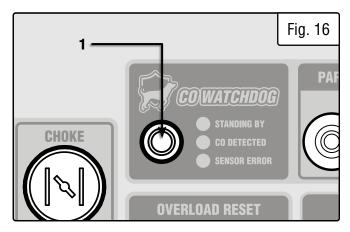
#### SWITCHING FUELS

Your generator is equipped with Auto Fuel Selection technology. To maximize your generator's lifespan, we recommend removing all loads from the generator before switching between gasoline and LPG. If this is not possible, reduce loads as much as possible in order to ensure a smooth switch. Your generator is rated to handle a higher load when running on gasoline than on LPG, so keep this in mind when planning your fuel usage.

#### CO SENSOR INFORMATION

The CO Watchdog carbon monoxide monitoring system (Fig. 16 - 1) measures the accumulation of poisonous CO gas while the generator is running. If the level of CO gas gets too high, the CO Watchdog system will automatically shut down the generator. This system is not a substitute for an indoor CO alarm.

Whenever the CO Watchdog system shuts down the generator, the LED on the generator control panel (Fig. 16 - 1) will **blink red** for at least 5 minutes after the generator is shut down. An LED on the sensor module itself will also start blinking red. **If you notice that the LED is blinking red, vacate the area immediately.** Go to an open, outdoor area. Ventilate the area around the generator thoroughly before returning. Let the generator stay shut down for a few minutes before restarting the engine. This should allow



**NOTE:** if the generator is oriented so that the engine exhaust is blown towards the CO sensor, the generator may shut down.

carbon monoxide to dissipate from the area. If you restart the generator and CO Watchdog detects that CO levels are still too high, it will shut down the generator again. If CO levels are low enough, the generator will run normally.

Ensure that the generator is located in an open outdoor area, with the exhaust pointing away from occupied structures, and pointing away from the prevailing winds, such that those winds do not blow engine exhaust towards the sensor module. If anyone experiences dizziness, headaches, nausea, fatigue, or other symptoms of CO poisoning, get to fresh air immediately and seek the attention of a qualified medical professional. Follow all other directions in this manual regarding the connection and disconnection of electrical devices when starting or shutting down the generator.

When starting the generator, the CO Watchdog LED on the panel may flash. This indicates that the system is running a self-test procedure, and does not indicate a problem.

If the CO Watchdog LED on the panel is **yellow**, a system error has occurred, or the CO sensor has reached the end of its life. Contact WEN customer service (1-800-232-1195, M - F 8 - 5 CST, or **techsupport@wenproducts.com**) for assistance.

#### When operating your generator, please note the following:

- The CO Watchdog does not discriminate in its input; any source of carbon monoxide in the area around the generator could cause it to activate. If the CO Watchdog LED is blinking red, safety measures should be taken immediately.
- Tampering with, disconnecting, or bypassing the CO sensor could cause hazardous conditions, including but not necessarily limited to injury or death, and will void your warranty. The generator will not run with the CO sensor disconnected or bypassed, or if the CO sensor indicates an error.
- The CO sensor has a lifetime of about 7 years, and is capable of monitoring its lifetime. If your generator shows an error light several years after purchase, it may be time to replace the CO sensor. Contact WEN customer service for assistance.

## SHUTTING OFF YOUR GENERATOR

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

WARNING! Allow the generator to cool down before touching areas that become hot during use.

**CAUTION!** Allowing gasoline to sit in the fuel tank for long periods of time can make it difficult to start the generator in the future. Never store the generator for extended periods of time (over 2 months) with fuel in the fuel tank. Refer to "Storing The Generator" on page 32.

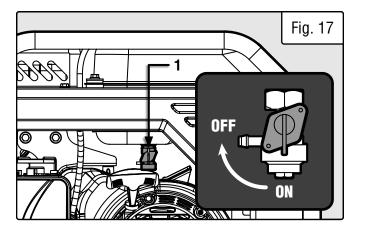
#### MANUAL SHUTOFF

- 1. Turn off all electrical devices prior to unplugging them from the generator. Unplugging running devices can cause damage to the generator. Never start or stop the generator with electrical devices plugged in or turned on.
- 2. Let engine run at no-load for several minutes to stabilize internal temperatures of engine and generator.
- 3A (Gasoline): Turn the fuel valve (Fig. 17 1) to the OFF position. Let the generator run until the fuel is used up.
- 3B (LPG): Make sure the fuel valve is in the OFF position. Turn the LPG tank valve to the OFF position and disconnect the LPG hose from the generator.
- 4. Flip the engine switch (page 12) to the STOP position.
- 5. Drain the carburetor. Refer to "Draining The Carburetor" on page 29.

**NOTE:** We recommend draining the carburetor after every session in which gasoline was used. If you drained the carburetor previously, and only used LPG as fuel, you do not need to drain the carburetor.

**IMPORTANT:** Always ensure that the fuel valve and the engine switch are in the OFF position when the generator is not in use.

**NOTE:** If for some reason (e.g. refueling, moving the generator, etc.) you need to shut down the generator quickly, simply flip the engine switch to STOP. However, doing this will allow fuel to remain in the carburetor. and will lead to problems if the carburetor is not drained after use.



#### RECOMMENDED MAINTENANCE SCHEDULE

Proper routine maintenance of the generator will help prolong the life of the machine. Please perform maintenance checks and operations according to the maintenance schedule below, Table 4. If there are any questions about the maintenance procedures listed in this manual, please contact customer service at **1-800-232-1195** (M-F 8-5 CST), or email **techsupport@wenproducts.com**.

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

|                   | mended<br>ce Schedule | Every 8<br>Hours or<br>Daily | Every 25<br>Hours | Every 3<br>Months or<br>50 Hours | Every 6<br>Months or<br>100 Hours | Before<br>Storage | As<br>Necessary |
|-------------------|-----------------------|------------------------------|-------------------|----------------------------------|-----------------------------------|-------------------|-----------------|
| Engine Oil        | Check Level           | Х                            |                   |                                  |                                   |                   |                 |
| Ellyllie Oli      | Replace               |                              | Χ*                |                                  |                                   |                   | Х               |
| Air Filter        | Check                 |                              |                   | Χ*                               |                                   |                   |                 |
| Air Filler        | Clean                 |                              |                   | Χ*                               |                                   |                   |                 |
| Spark Plug        | Check/Clean/<br>Regap |                              |                   |                                  | Х                                 |                   |                 |
|                   | Change                |                              |                   |                                  | Х                                 |                   | Х               |
| Fuel              | Check Level           | Х                            |                   |                                  |                                   |                   |                 |
| Fuel              | Drain                 |                              |                   |                                  |                                   | Х                 | Х               |
| Carburetor        | Drain                 | Х                            |                   |                                  |                                   |                   | Х               |
| Spark<br>Arrestor | Check/Clean           |                              |                   |                                  | Х                                 |                   |                 |

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

Table 4 - Recommended Maintenance Schedule

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

- Drain your carburetor after each use and before storage to prevent it from clogging.
- Do not store the generator with fuel inside the tank for more than 2 months the fuel will go bad.
- Run the generator for 20 to 30 minutes every month to maximize its lifespan.

**NOTE:** Failure to properly maintain the generator will void the warranty.

#### CLEANING YOUR GENERATOR

Keep the generator clean to prevent improper operation or machine damage from dirt and debris. Inspect all ventilation openings on the generator. These openings must be kept clean and unobstructed.

If the generator becomes dirty, use a damp cloth to wipe exterior surfaces. Use a soft bristle brush to loosen dirt and oil and use a vacuum to pick up loose dirt. Use low pressure air (not to exceed 25 PSI) to blow away dirt.

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

#### CHECKING/ADDING OIL

**Check the oil level before each use and every 8 hours of operation** (refer to page 27, Table 4). The oil capacity of the generator engine is **17.0 fl. oz. (0.5 L)**. Add oil when the oil level is low. For the proper type and weight of oil refer to page 13, Fig. 3. This is a critical step for proper engine starting. The generator is equipped with a with low-oil shut down to protect it from running without oil.

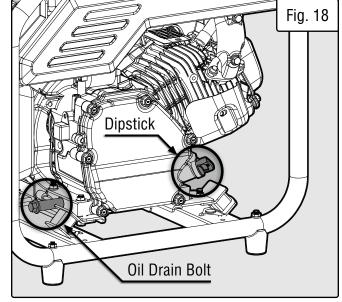
To check the oil level and/or add oil refer to "Step 1 - Add/Check Oil" on page 13.

**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.

#### DRAINING/CHANGING OIL

**Change the oil according to the Recommended Maintenance Schedule** (refer to page 27, Table 4). Change the 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. Changing the oil when the engine is warm allows for complete drainage.

- 1. Place generator on a level, elevated platform. Prepare an approved oil-storage container underneath the oil drain bolt next to the oil dipstick to catch the oil as it drains. See Fig. 18. **NOTE:** To avoid possible fuel spills from the carburetor bowl, drain the carburetor (refer to "Draining The Carburetor" on page 29) before draining the oil.
- 2. Unscrew the oil drain bolt and allow oil to drain from the engine completely.
- 3. Reinstall the oil drain bolt and tighten it securely. Wipe clean any oil spillage.
- 4. To add new oil, refer to "Step 1 Add/Check Oil" on page 13.



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

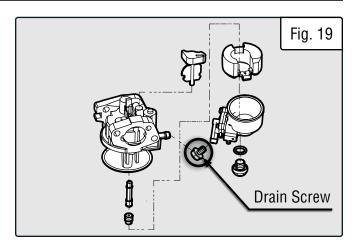
#### DRAINING THE CARBURETOR

**Drain the carburetor after every use and before storing the generator** (refer to page 27, Table 4). Draining the carburetor can help prevent build-up and blockages caused by stagnant fuel inside of the carburetor.

**NOTE:** We recommend draining the carburetor after every session in which gasoline was used. If you drained the carburetor previously, and only used LPG as fuel, you do not need to drain the carburetor.

- 1. Prepare an approved gasoline-storage container under the carburetor to collect the drained fuel.
- 2. The carburetor can be accessed from the backside of the generator between the engine and the air filter. To drain the carburetor, open up the carburetor drain screw with a Phillips-head screwdriver (not included) and drain out any gasoline that has built up inside. See Fig. 19.

3. Once the fuel has drained, close the drain screw.



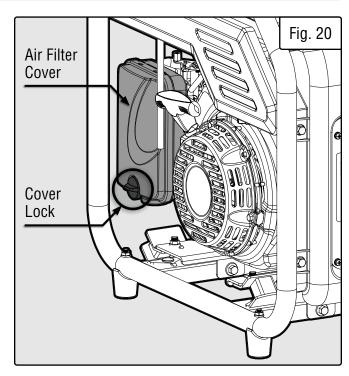
**NOTE:** Make sure to drain your carburetor before storing the generator for long periods of time.

#### INSPECTING/CLEANING THE AIR FILTER

**Inspect and clean the air filter every 50 hours of operation** (refer to page 27, Table 4). Routine maintenance of the air filter helps maintain proper airflow to the carburetor. Occasionally check that the air filter is free of excessive dirt. Clean air filter more frequently in dirty or dusty conditions.

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

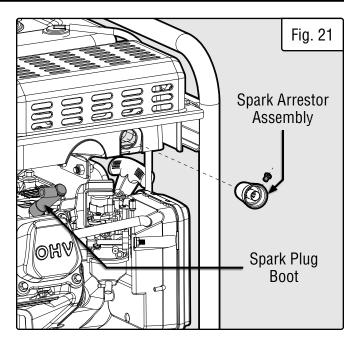
- 1. Remove the air filter cover by unscrewing the cover lock knob at the bottom of the air filter cover. See Fig. 20.
- 2. Remove the foam, sponge-like air filter element from the casing. Wipe excessive oil and any dirt from inside of the air filter casing.
- 3. Check the foam, sponge-like air filter element.
  - a) **Good elements** can be washed in soapy water. Dry the element in clean cloth (do not twist it). Add a few drops of engine oil to the air filter element and spread it evenly. A small amount of oil left in the element is normal and necessary for the engine to work properly.
  - b) **Damaged elements** should be replaced with a new one. Replacement air filters can be purchased from **wenproducts.com** by searching part number **GN400i-1002.**
- 4. Reinstall the air filter element and air filter cover.



### INSPECTING/CLEANING THE SPARK ARRESTOR

**Inspect and clean the spark arrestor every 100 hours of operation** (refer to page 27, Table 4). The spark arrestor is located outside the muffler, which gets very hot during operation. Allow the engine to cool completely before servicing the spark arrestor.

- 1. Remove the Phillips-head screw that secures the spark arrestor to the muffler. See Fig. 21.
- 2. Remove the spark arrestor screen.
- 3. Carefully clean and remove the carbon deposits from the spark arrestor screen with a wire brush. Replace the spark arrestor if it is damaged. Replacement spark arrestors can be purchased from **wenproducts.com** by searching the part number **GN400i-1101.1**.
- 4. Reinstall the spark arrestor in the muffler and secure it in place with the screws.



#### SPARK PLUG MAINTENANCE

**Inspect and change the spark plug every 100 hours of operation** (refer to page 27, Table 4). The spark plug is important for proper engine operation. Check the spark plug regularly to maintain proper engine operation. A good spark plug should be intact, free of deposits, and properly gapped.

- 1. Gently pull on the spark plug boot to remove it (Fig. 21). Be careful not to tear insulation or wire.
- 2. Use the included spark plug wrench (page 9, slide the handle into the hole on the wrench) to unscrew the spark plug from the engine. **TIP:** 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. If it is cracked or chipped, or if the electrodes are worn or burned, discard it and replace with a new spark plug. We recommend replacing it with a **Torch F6RTC (or NGK BPR6ES)** spark plug. These can be purchased from **wenproducts.com** by searching part number **56310i-0104**.
- 4. If re-using the spark plug, use a wire brush to clean any dirt from around the spark plug base, then re-gap the spark plug.

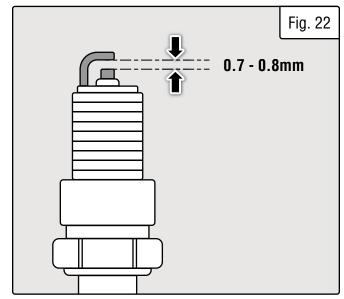
Instructions continue on the next page.

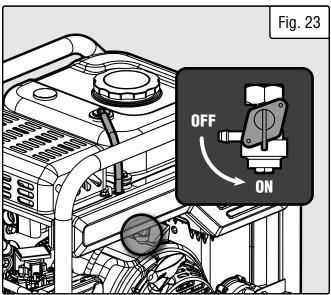
- 5. Measure the plug gap with a spark plug gap gauge. The gap should be **0.7 to 0.8 mm (0.028-0.031 in)**. Carefully adjust the gap if necessary. See Fig. 22.
- 6. Screw the spark plug back into the spark plug hole using the spark plug wrench. Do not over-tighten spark plug. Recommended tightening of the spark plug is ½ to ¾ of a turn (15 ft-lb torque/20.33 Nm) after the spark plug gasket contacts the spark plug hole.
- 7. Reinstall the spark plug boot over the spark plug.

#### DRAINING THE FUEL TANK

Drain and clean the fuel tank each year, or before storing the generator for longer than two months.

- 1. Prepare an approved gasoline-storage container to collect the drained fuel. Place it near the fuel valve (Fig. 23).
- 2. Turn the fuel valve to the OFF position.
- 3. Locate the fuel line between the fuel valve and the carburetor (Fig. 23 1). Disconnect the fuel line from the fuel valve. **NOTE:** A small amount of fuel may leak from the fuel line during removal.
- 4. Place a funnel below the fuel valve opening, and direct the other end of the funnel over the prepared container.
- 5. Turn the fuel valve to the ON position to start draining the fuel from the fuel valve opening. **NOTE:** The draining process may take a few hours, depending on the amount of fuel in your gas tank.
- 6. Once the fuel is completely drained, turn the fuel valve to the OFF position.
- 7. Start and run the engine until the fuel runs out.
- 8. Drain the carburetor. Refer to "Draining The Carburetor" on page 29.





**CAUTION!** Store the emptied gasoline in a suitable place. Never store fuel for more than 2 months.

## TRANSPORTATION & STORAGE

#### TRANSPORTING THE GENERATOR

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

- 1. Tighten the fuel cap and turn the fuel valve to the OFF position.
- 2. Flip the engine switch to the STOP position.
- 3. Drain the fuel tank if possible. Refer to "Draining The Fuel Tank" on page 31.
- 4. Keep the generator upright. Never place the generator on its side or upside down doing so could damage the internal components of the generator and make it difficult to start.

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

#### STORING THE GENERATOR

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

Follow the procedures below for properly storing your generator. We highly recommend running your generator once a month for 20 to 30 minutes. Plug in a small load in to ensure there is proper power output.

**TIP:** Your WEN generator is compatible with the **WEN 56310iC and GNC400** Generator Covers (not included). They are available for purchase at **wenproducts.com**.

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

- Drain the carburetor. Refer to "Draining The Carburetor" on page 29.
- Add fuel stabilizer: Follow the suggested portions and instructions of your preferred stabilizer. Run the engine for 15 to 20 minutes, allowing the fuel stabilizer to mix with the gasoline and circulate through the carburetor, and then top off with fuel. Filling the fuel tank full reduces the amount of air in the tank and helps fight deterioration of fuel.

#### For Extended Periods (Over 60 Days):

- Drain the fuel tank and carburetor.
   Refer to "Draining The Fuel Tank"
   on page 31, and "Draining The Carburetor" on page 29.
- Never store generator with fuel in the tank for more than two months.
- Change the engine oil. Refer to "Checking/Adding Oil" on page 28.

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

#### PRODUCT DISPOSAL

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

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



Please recycle the packaging and electronic components where facilities exist. Please contact your local auto garage or recycling facility to properly dispose of oil/fuel.

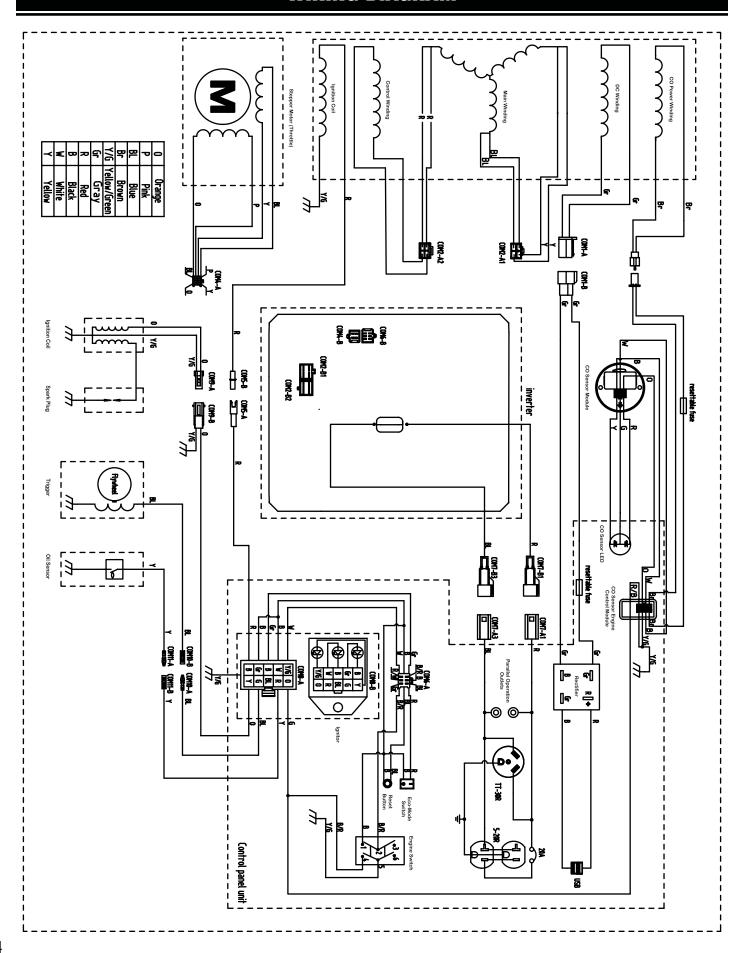
## TROUBLESHOOTING GUIDE

⚠ **WARNING!** Stop using the generator immediately if any of the following problems occur or risk serious personal injury. If you have any questions, please contact customer service at **1-800-232-1195** (M-F 8-5 CST), or email **techsupport@wenproducts.com**.

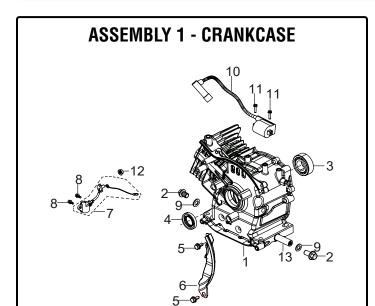
| PROBLEM  | POSSIBLE CAUSE   | SOLUTION  |
|--|--|---|
|  | 1. Engine switch is set to OFF (0).  | 1. Turn engine switch to ON (I) if using recoil start, or START (II) if using electric start.   |
|  | 2. Engine has not been primed (LPG only).                                    | 2. Prime engine.  |
|  | 3. Oil is low.   | 3. Add oil.   |
|  | 4. Engine is out of fuel.  | 4. Add fuel.  |
| Engine will not                                | 5. Engine is filled with contaminated or old fuel.                           | 5. Drain fuel in the tank and carburetor. Replace with fresh fuel.  |
| start.   | 6. Spark plug is dirty or broken.  | 6. Clean or replace spark plug.   |
|  | 7. Propane tank is turned OFF.   | 7. Dang it, Bobby, I told you to turn that thing on!  |
|  | 8. Carburetor is air locked.   | 8. Turn the 2-in-1 switch to OFF. Remove bolt from bottom of the carburetor. Take off the carburetor bowl to allow it to reset. Replace carburetor bowl and reinstall the bolt.   |
|  | 9. Regulator is stuck.   | 9. Turn OFF propane tank. Disconnect hose from propane fitting. Contact WEN customer service for assistance.  |
|  | 10. Ghost in the generator.  | 10. Persuade ghost to leave. Consult Bill Murray if needed.   |
|  | Reset button has activated due to wattage overload.                          | 1. Turn off and unplug all electrical devices. Press reset button. Check the total wattage of the devices and reduce the load if it exceeds the capacity of the generator for your particular fuel (LPG or gasoline).                                       |
| Engine runs, but<br>there is no<br>electrical  | 2. Breaker has tripped due to wattage overload.                              | 2. Turn off and unplug all electrical devices. Wait 3 minutes, and press the activated breaker to reset. Check the total wattage of the devices and reduce the load if it exceeds the capacity of the generator for your particular fuel (LPG or gasoline). |
| output.  | 3. Bad connecting cord or wire.  | 3. Check power cords & extension cords. Do not use if any cord is damaged. Replace damaged cords immediately.   |
|  | 4. Bad electrical device connected to the generator.                         | 4. Try connecting a different device.   |
| Generator runs,<br>but does not<br>support all | AC or DC receptacles are overloaded; circuit breaker has tripped.            | 1. Turn off and unplug all electrical devices. Wait 3 minutes, then press the breaker to reset. Check the amperage of the devices to ensure they are within the receptacles' rated capacities.  |
| electrical devices                             | 2. Short circuit in one of the devices.                                      | 2. Disconnect any faulty or short-circuited electrical devices.   |
| connected.                                     | 3. Air filter is dirty.  | 3. Clean or replace the air filter element.   |
| Engine is                                      | 1. Gasoline is not running through fuel valve.                               | 1. Make sure there is enough fuel. Make sure 2-in-1 switch is turned to RUN.  |
| "hunting"                                      | 2. Propane level is getting low.   | 2. Switch to a new propane tank, or use gasoline.   |
| during operation                               | 3. Air filter is dirty.  | 3. Clean or replace the air filter element.   |
| (engine RPM is                                 | 4. Spark arrestor is dirty.  | 4. Clean the spark arrestor.  |
| fluctuating).                                  | 5. There is gunk in the carburetor preventing a consistent fuel/air mixture. | 5. Use carburetor cleaner spray on the carburetor bowl and jets.  |

**IMPORTANT:** Repairs and replacements should only be performed by an authorized technician. Parts and accessories that wear down over the course of normal use are not covered by the two-year warranty.

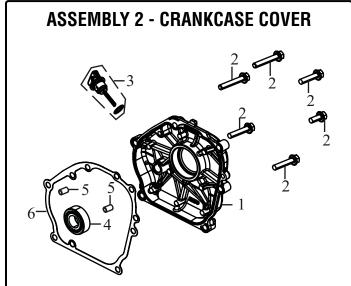
## **WIRING DIAGRAM**



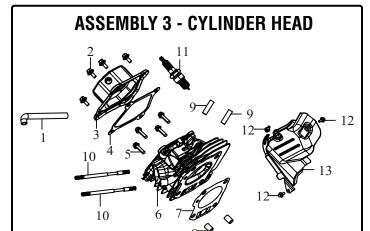
**NOTE:** Replacement parts can be purchased from wenproducts.com, or by calling our customer service at (800) 232-1195, M-F 8-5 CST. Parts and accessories that wear down over the course of normal use are not covered by the two-year warranty. Not all parts may be available for purchase.



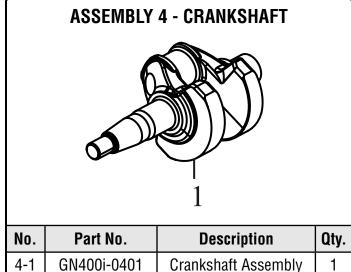
| No.  | Part No.     | Description                       | Qty. |
|------|--------------|-----------------------------------|------|
| 1-1  | GN400i-0101  | Crankcase<br>Subassembly          | 1    |
| 1-2  | GN400i-0102  | Drain Plug Bolt, M10-<br>1.25     | 2    |
| 1-3  | GN400i-0103  | Deep Groove Ball<br>Bearing, 6205 | 1    |
| 1-4  | 56310i-0306  | Oil Seal                          | 1    |
| 1-5  | 56200-1202   | Bolt, M6x12                       | 2    |
| 1-6  | DF402iX-0106 | Lower Shield                      | 1    |
| 1-7  | 56310i-0211  | Engine Oil Sensor                 | 1    |
| 1-8  | 56200-0502   | Bolt, M6x14                       | 2    |
| 1-9  | 56380i-0102  | Flat Washer                       | 2    |
| 1-10 | GN400i-0110  | Ignition Coil                     | 1    |
| 1-11 | GN400i-0111  | Bolt, M5x20                       | 2    |
| 1-12 | 56310i-0210  | Flanged Hex Nut, M10              | 1    |
| 1-13 | GN400i-0113  | Oil Drain Tube                    | 1    |



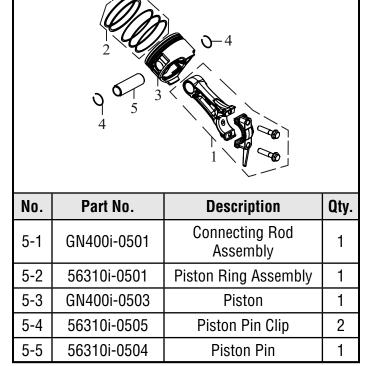
| No. | Part No.     | Description                       | Qty. |
|-----|--------------|-----------------------------------|------|
| 2-1 | GN400i-0201  | Crankcase Cover                   | 1    |
| 2-2 | 56310i-0307  | Bolt, M8x32                       | 6    |
| 2-3 | DF402iX-0204 | Oil Dipstick<br>Subassembly       | 1    |
| 2-4 | GN400i-0204  | Deep Groove Ball<br>Bearing, 6205 | 1    |
| 2-5 | GN400i-0205  | Positioning Pin                   | 2    |
| 2-6 | GN400i-0206  | Crankcase Gasket                  | 1    |



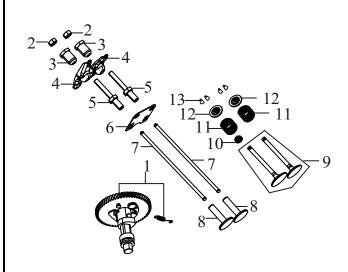
| No.  | Part No.     | Description                             | Qty. |
|------|--------------|---|------|
| 3-1  | GN400i-0301  | Breather Tube                           | 1    |
| 3-2  | 56200-1202   | Bolt, M6x12                             | 4    |
| 3-3  | DF402iX-0303 | Cylinder Head Cover<br>Subassembly      | 1    |
| 3-4  | GN400i-0304  | Cylinder Head Cover<br>Gasket           | 1    |
| 3-5  | 56310i-0106  | Cylinder Head Bolt,<br>M8x60            | 4    |
| 3-6  | GN400i-0306  | Cylinder Head<br>Subassembly            | 1    |
| 3-7  | DF402iX-0307 | Cylinder Head Gasket                    | 1    |
| 3-8  | 56380i-0311  | Positioning Pin                         | 2    |
| 3-9  | 56310i-0109  | Stud Bolt, M8x34                        | 2    |
| 3-10 | 56380i-0309  | Stud Bolt, M6x105                       | 2    |
| 3-11 | 56310i-0104  | Spark Plug, Torch<br>F6RTC (NGK BPR6ES) | 1    |
| 3-12 | 56200-0706   | Bolt, M6x10                             | 3    |
| 3-13 | DF402iX-0313 | Cylinder Body Shroud                    | 1    |



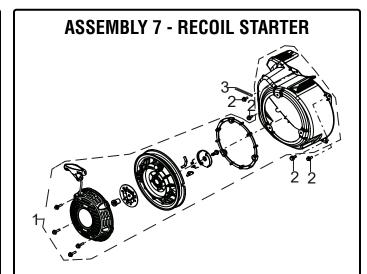
ASSEMBLY 5 - CONNECTING ROD, PISTON, PISTON RING SET



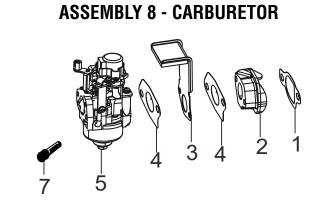
### **ASSEMBLY 6 - VALVE & CAMSHAFT**



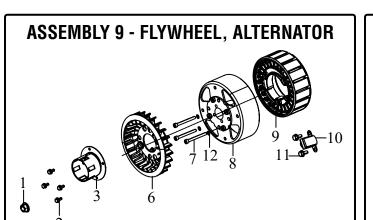
| No.  | Part No.     | Description                     | Qty. |
|------|--------------|---------------------------------|------|
| 6-1  | GN400i-0601  | Camshaft Assembly               | 1    |
| 6-2  | GN400i-0602  | Valve Lock Nut                  | 2    |
| 6-3  | GN400i-0603  | Valve Adjustment Nut            | 2    |
| 6-4  | GN400i-0604  | Valve Rocker Arm                | 2    |
| 6-5  | GN400i-0605  | Rocker Shaft Bolt               | 2    |
| 6-6  | DF402iX-0606 | Lifter Stopper Plate            | 1    |
| 6-7  | GN400i-0607  | Valve Lifter                    | 2    |
| 6-8  | 56310i-0607  | Valve Tappet                    | 2    |
| 6-9  | GN400i-0609  | Valve Set (Intake &<br>Exhaust) | 1    |
| 6-10 | 56310i-0603  | Seal Guide                      | 1    |
| 6-11 | 56310i-0604  | Valve Spring                    | 2    |
| 6-12 | 56380i-0605  | Valve Spring Seat               | 2    |
| 6-13 | 56310i-0606  | Valve Lock Clamp                | 4    |



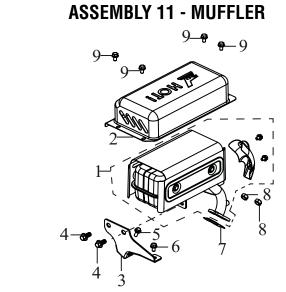
| No. | Part No.     | Description             | Qty. |
|-----|--------------|-------------------------|------|
| 7-1 | GN400i-0701  | Recoil Starter assembly | 1    |
| 7-2 | 56200-1202   | Bolt, M6x12             | 4    |
| 7-3 | DF402iX-0703 | Clip                    | 1    |



| No.  | Part No.     | Description                          | Qty. |
|------|--------------|--------------------------------------|------|
| 8-1  | DF402iX-0801 | Carburetor Insulator Gasket          | 1    |
| 8-2  | GN400i-0802  | Carburetor Insulator Plate           | 1    |
| 8-3  | DF402iX-0803 | Stepper Motor Insulating<br>Plate    | 1    |
| 8-4  | DF402iX-0804 | Carburetor Gasket                    | 2    |
| 8-5  | DF402iX-0805 | Carburetor Assembly                  | 1    |
| 8-6  | 56200-1305   | Fuel Strainer                        | 1    |
| N.P. | DF402IX-HA36 | High-Altitude Kit, 3000 -<br>6000 ft | 1    |
| N.P. | DF402IX-HA68 | High-Altitude Kit, 6000 -<br>8000 ft | 1    |



| No.  | Part No.     | Description                     | Qty. |
|------|--------------|---------------------------------|------|
| 9-1  | 56310i-1101  | Flywheel Nut, M14-1.5           | 1    |
| 9-2  | 56200-0706   | Bolt, M6x12                     | 4    |
| 9-3  | GN400i-0903  | Starter Pulley                  | 1    |
| 9-6  | GN400i-0906  | Impeller                        | 1    |
| 9-7  | 56310i-1103  | Socket Head Cap<br>Screw, M6x60 | 3    |
| 9-8  | DF402iX-0908 | Rotor                           | 1    |
| 9-9  | DF402iX-0909 | Stator                          | 1    |
| 9-10 | GN400i-0910  | Trigger                         | 1    |
| 9-11 | 56310i-1106  | Bolt, M5x16                     | 2    |
| 9-12 | GN400iX-0912 | Flat Washer, 6mm                | 3    |



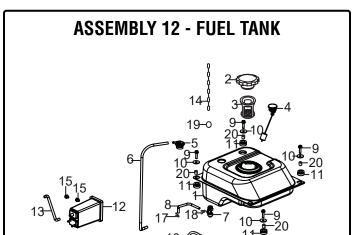
| No.  | Part No.      | Description         | Qty. |
|------|---------------|---------------------|------|
| 11-1 | GN400i-1101   | Muffler Assembly    | 1    |
| N.P. | GN400i-1101.1 | Spark Arrestor      | 1    |
| 11-2 | GN400i-1102   | Outer Muffler Cover | 1    |
| 11-3 | GN400i-1103   | Muffler Bracket     | 1    |
| 11-4 | GN400i-1104   | Bolt, M8x16         | 2    |
| 11-5 | 56200-1202    | Bolt, M6x12         | 1    |
| 11-6 | GN400i-1106   | Bolt, M8x16         | 1    |
| 11-7 | GN400i-1107   | Muffler Gasket      | 1    |
| 11-8 | GN400i-1108   | Nut, M8             | 2    |
| 11-9 | 56380I-0313   | Bolt, M6x12         | 4    |

Bolt, M6x25

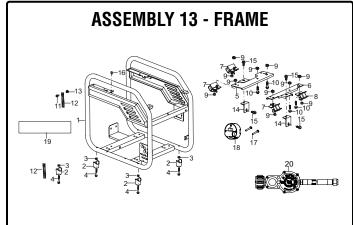
#### **ASSEMBLY 10 - AIR FILTER** Description Qty. No. Part No. DF402iX-1001 Air Filter Gasket 1 10-1 10-2 GN400i-1002 Air Filter Assembly 1 56200-0506 Flanged Hex Nut, M6 2 10-3

10-4

56310i-1420

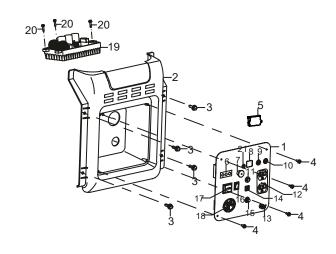


| Part No.     | Description   | Qty.  |
|--------------|---|---|
| GN400i-1201  | Fuel Tank   | 1   |
| GN400i-1202  | Fuel Tank Cap   | 1   |
| GN400i-1203  | Fuel Strainer   | 1   |
| GN400i-1204  | Fuel Gauge  | 1   |
| GN400i-1205  | Breather Valve  | 1   |
| GN400i-1206B | Breather Tube   | 1   |
| GN400i-1207  | Fuel Valve  | 1   |
| GN400i-1208  | Fuel Tube   | 1   |
| GN400i-1209  | Bolt, M6x25   | 4   |
| GN400i-1210  | Flat Washer   | 4   |
| 56380i-1207  | Fuel Tank Damper  | 4   |
| GN400i-1212  | Carbon Tank   | 1   |
| GN400i-1213  | Air Filter Tube   | 1   |
| GN400i-1214  | Fuel Tank Cap Chain   | 1   |
| DF402iX-1215 | Bolt, M6x10   | 2   |
| GN400i-1216  | Rubber Cover  | 1   |
| GN400i-1217  | Fuel Tube Clamp A   | 1   |
| GN400i-1218  | Fuel Tube Clamp B   | 1   |
| GN400iX-1219 | Fuel Tank Cap Chain<br>Clip   | 1   |
| GN400i-1220  | Bushing   | 4   |
| DF402iX-1221 | Tube Clip   | 1   |
|              | GN400i-1201 GN400i-1202 GN400i-1203 GN400i-1204 GN400i-1205 GN400i-1206B GN400i-1207 GN400i-1208 GN400i-1209 GN400i-1210 56380i-1207 GN400i-1212 GN400i-1213 GN400i-1214 DF402iX-1215 GN400i-1217 GN400i-1218 GN400i-1218 GN400i-1220 | GN400i-1201 Fuel Tank GN400i-1202 Fuel Tank Cap GN400i-1203 Fuel Strainer GN400i-1204 Fuel Gauge GN400i-1205 Breather Valve GN400i-1206B Breather Tube GN400i-1207 Fuel Valve GN400i-1208 Fuel Tube GN400i-1209 Bolt, M6x25 GN400i-1210 Flat Washer 56380i-1207 Fuel Tank Damper GN400i-1212 Carbon Tank GN400i-1213 Air Filter Tube GN400i-1214 Fuel Tank Cap Chain DF402iX-1215 Bolt, M6x10 GN400i-1216 Rubber Cover GN400i-1218 Fuel Tube Clamp A GN400i-1218 Fuel Tube Clamp B GN400i-1219 Fuel Tank Cap Chain Clip GN400i-1220 Bushing |



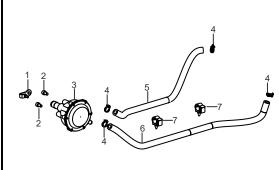
| No.   | Part No.     | Description                               | Qty. |
|-------|--------------|---|------|
| 13-1  | DF402iX-1301 | Frame Assembly                            | 1    |
| 13-2  | GN400i-1302  | Foot                                      | 4    |
| 13-3  | GN400i-1303  | Flanged Hex Nut, M6                       | 4    |
| 13-4  | GN400i-1304  | Bolt, M6x35                               | 4    |
| 13-5  | GN400i-1305  | Engine Plate, Rear                        | 1    |
| 13-6  | GN400i-1306  | Engine Plate, Forward                     | 1    |
| 13-7  | 56310i-1409  | Engine Frame<br>Cushion, Left             | 3    |
| 13-8  | 56310i-1411  | Engine Frame<br>Cushion, Right            | 1    |
| 13-9  | 56310i-1404  | Flanged Hex Nut, M8                       | 11   |
| 13-10 | GN400i-1310  | Bolt, M8x35                               | 4    |
| 13-11 | GN400i-1311  | Bolt, M6x8                                | 1    |
| 13-12 | GN400i-1312  | Clip                                      | 2    |
| 13-13 | GN400i-1313  | Nut, M6                                   | 1    |
| 13-14 | GN400i-1314  | Shipping Bracket                          | 2    |
| 13-15 | GN400i-1315  | Bolt, M8x16                               | 4    |
| 13-16 | GN400i-1316  | Rubber Damper                             | 1    |
| 13-17 | GN400iX-1317 | Pan Head Screw,<br>M4x25                  | 2    |
| 13-18 | GN625iX-1430 | CO Sensor Module                          | 1    |
| 13-19 | GN400iX-1319 | Thermal Baffle                            | 1    |
| 13-20 | DF400i-1332  | Primary LPG<br>Regulator Hose<br>Assembly | 1    |

## **ASSEMBLY 14 - CONTROL PANEL**



| No.   | Part No.     | Description                        | Qty. |
|-------|--------------|------------------------------------|------|
| 14-1  | GN400iX-1401 | Control Panel Subassembly          | 1    |
| 14-2  | GN400i-1402  | Panel Seat                         | 1    |
| 14-3  | GN400i-1403  | Bolt, M6x14                        | 4    |
| 14-4  | GN400i-1404  | Self-tapping Screw, ST4.2x16       | 4    |
| 14-5  | GN625iX-1430 | CO Sensor Engine Control<br>Module | 1    |
| 14-6  | GN400i-1406  | Ignitor                            | 1    |
| 14-7  | GN400i-1407  | Choke Button and Cable             | 1    |
| 14-8  | GN400i-1408  | Rectifier Bridge                   | 1    |
| 14-9  | 56380i-1423  | Parallel Port, Negative            | 1    |
| 14-10 | 56380i-1424  | Parallel Port, Positive            | 1    |
| 14-11 | GN400i-1411  | Reset Button                       | 1    |
| 14-12 | 56380i-1421  | NEMA 5-20R Duplex Outlet           | 1    |
| 14-13 | GN400i-1413  | Grounding Nut                      | 1    |
| 14-14 | GN400i-1414  | USB Port Assembly                  | 1    |
| 14-15 | GN400i-1415  | AC Breaker, 20A                    | 1    |
| 14-16 | 56380i-1422  | Eco-Mode Switch                    | 1    |
| 14-17 | GN400i-1417  | Engine Switch                      | 1    |
| 14-18 | GN400i-1418B | NEMA TT-30R Outlet                 | 1    |
| 14-19 | DF402iX-1419 | Inverter                           | 1    |
| 14-20 | GN400i-1420  | Bolt, M6x20                        | 3    |
| 14-21 | GN400iX-1421 | CO Sensor LED                      | 1    |

## **ASSEMBLY 15. LPG REGULATOR**



| No.  | Part No.     | Description                           | Qty. |
|------|--------------|---------------------------------------|------|
| 15-1 | DF400i-1437  | LPG Inlet<br>Plug                     | 1    |
| 15-2 | DF402iX-1502 | Socket<br>Head Cap<br>Screw,<br>M6x10 | 2    |
| 15-3 | DF402iX-1503 | Secondary<br>LPG<br>Regulator         | 1    |
| 15-4 | DF402iX-1504 | Hose Clamp                            | 4    |
| 15-5 | DF402iX-1505 | LPG Hose 1                            | 1    |
| 15-6 | DF402iX-1506 | LPG Hose 2                            | 1    |
| 15-7 | DF402iX-1507 | Hose Clip                             | 2    |

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

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

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

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

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