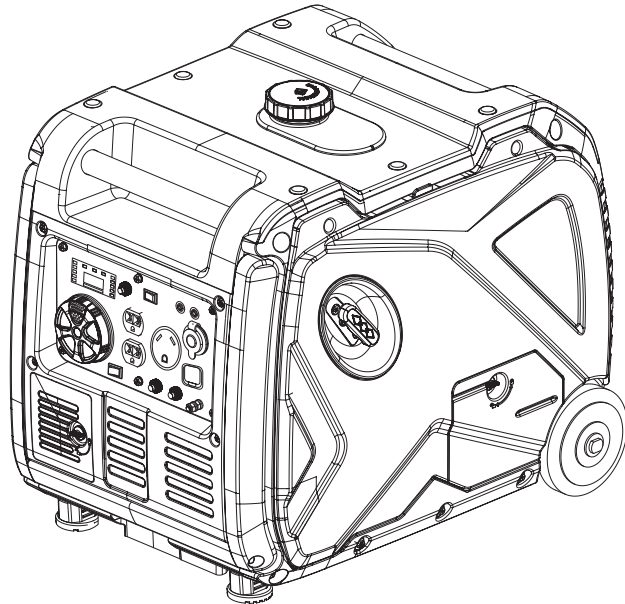




MODEL 56380i

3800 WATT INVERTER GENERATOR

bit.ly/wenvideo



For replacement parts visit
WENPRODUCTS.COM

EPA CERTIFIED

CARB COMPLIANT

IMPORTANT:

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

NEED HELP? CONTACT US!

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



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



techsupport@wenproducts.com



WENPRODUCTS.COM



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

TABLE OF CONTENTS

Introduction	2
Safety Information.....	4
Generator Safety Warnings	5
Know Your Generator	8
Generator Preparation	10
Starting the Generator	16
Using the Generator	18
Shutting Off the Generator	23
Maintenance	24
Transportation & Storage	32
Troubleshooting Guide	33
Specifications	34
Wiring Diagram	35
Exploded View & Parts List	36
Warranty Statement	47

KEY SPECIFICATIONS

Wattage	3800 Surge Watts, 3400 Rated Watts
Phase	Single
Frequency	60Hz
Rated Voltage	AC: 120V
	DC: 12V (Cigar Lighter), 5V (USB)
Rated Amperage	AC: 28.3A (Total), 28.3A (TT-30R), 20A (5-20R)
	DC: 10A (Total), 8A (Cigar Lighter), 1A/2.1A (USB)
Oil Capacity	18.6 fl. oz. (0.55 L)
Half-Load Run Time	8.5 hours
Battery	1.6 Ah Lithium-Ion
Product Dimensions	23.2 x 18 x 20.1 in. (L x W x H)
Product Net Weight	99.2 lbs (45 kg)

Your WEN 56380i generator is compatible with the WEN 56421 Parallel Connection Kit and the WEN 55201 Magnetic Oil Dipstick, available for purchase at wenproducts.com

INTRODUCTION

THANKS FOR PURCHASING THE WEN GENERATOR.

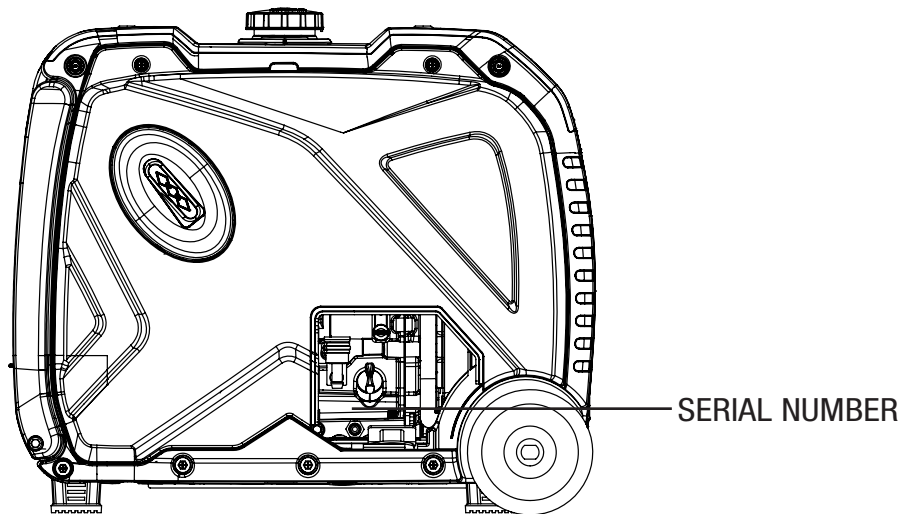
Refer to the illustration below for the location of the serial number on the side of the engine. Record the generator information in the spaces provided below. If assistance for information or service is required, please contact the Customer Service Help Line by calling 800-232-1195, M-F 8-5 CST; you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

GENERATOR MODEL NUMBER: WEN 56380i

DATE OF PURCHASE: _____

PURCHASED FROM: _____

SERIAL NUMBER: _____



SERVICE RECORD


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

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

TO MAXIMIZE THE LIFESPAN OF YOUR GENERATOR:

We recommend running your generator at least ONCE A MONTH for 20 to 30 minutes. Start the generator according to the instructions and plug a small load in to make sure the outlet is producing electricity.

SAFETY INFORMATION

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

SAFETY INTRODUCTION


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


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


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

SAFETY SYMBOLS

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

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

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

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

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

NOTICE REGARDING EMISSIONS

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

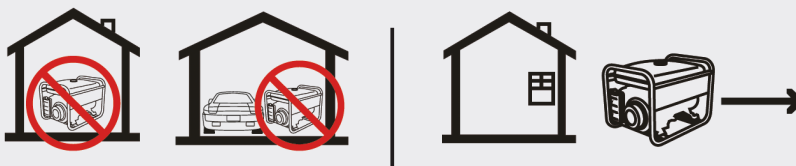
QUESTIONS? PROBLEMS?

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

GENERATOR SAFETY WARNINGS


DANGER: CARBON MONOXIDE

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





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

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


 **WARNING: RISK OF EXPLOSION. 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 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 bare-foot, 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 SAFETY WARNINGS

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

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

TO MAXIMIZE THE LIFESPAN OF YOUR GENERATOR:

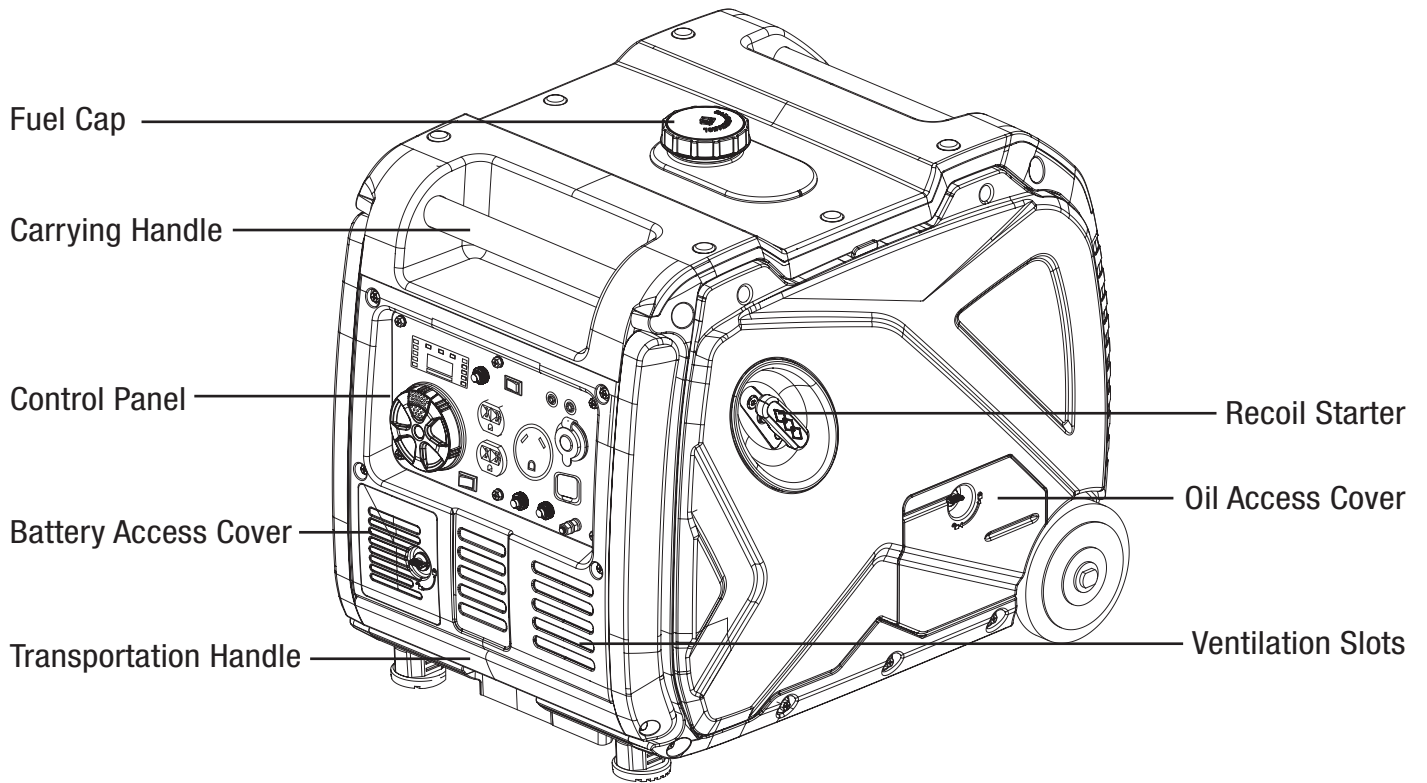
We recommend running your generator at least once a month for 20 to 30 minutes. Start the generator according to the instructions and plug a small load in to make sure the outlet is producing electricity. If you do not run it often, it will greatly shorten the generator's lifespan and void the warranty.

KNOW YOUR GENERATOR

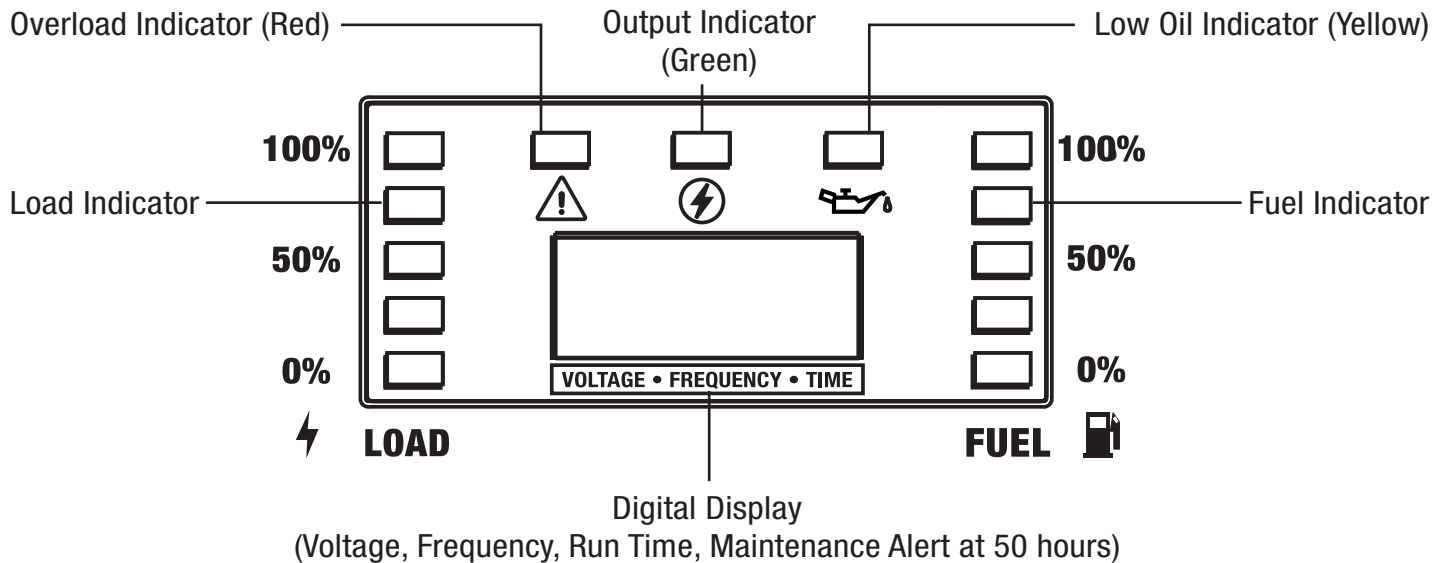
Place the generator packaging on a sturdy, flat surface. Carefully unpack the generator and all accessories from the box, making sure it is completely empty before discarding the package.

Use the illustration below to become familiar with this generator. If any part is damaged or missing, please contact our customer service at (800) 232-1195, M-F 8-5 CST or email techsupport@wenproducts.com.

GENERATOR

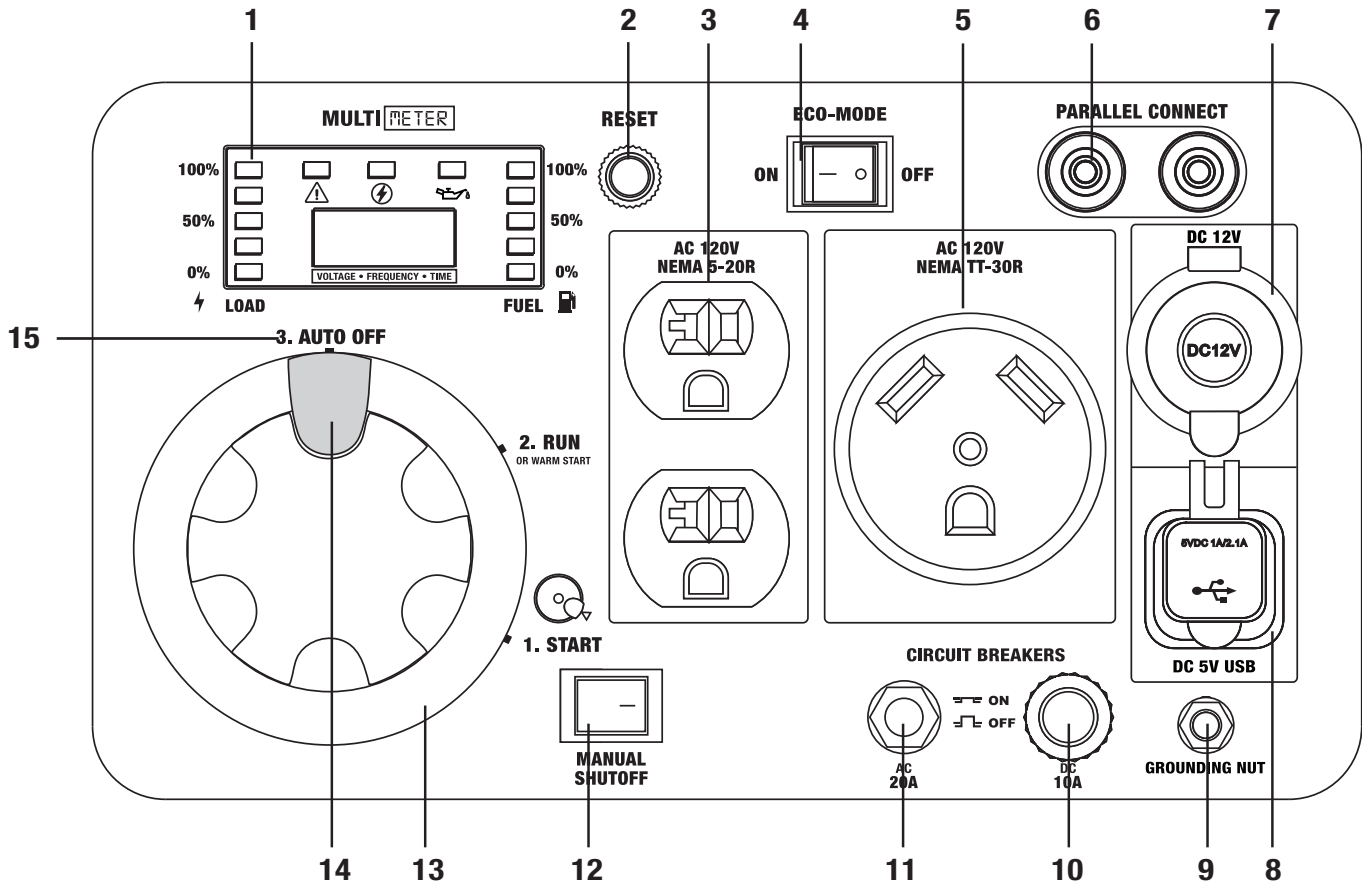


MULTIMETER



KNOW YOUR GENERATOR

CONTROL PANEL



1. Multimeter with Indicator Lights

2. Reset Button

Push button to reset the circuit (see page 21)

3. AC 120V NEMA 5-20 Duplex Receptacles (20A)

4. Eco-Mode Switch

Turn ON to increase fuel economy and runtime when the load is below 2550W (75% load)

5. AC 120V NEMA TT-30 Receptacle (28.3A)

6. Parallel Connection Ports

Connect two WEN inverter generators through a parallel connection kit for a higher output

7. DC 12V Cigarette-Light Style Receptacle

8. DC 5V USB Outlets

9. Grounding Nut

Ground generator to reduce risk of electric shock

10. DC Circuit Breaker (10A)

11. AC Circuit Breaker for NEMA 5-20R (20A)

12. Manual Shutoff Button

Push down for 10 seconds to shutoff generator manually (see page 23)

13. 3-in-1 Switch

Turn switch to start, run, and automatically shut off the generator

14. Engine Start Button

Turn switch to "start" and press button to ignite the engine (see page 17)

15. Auto Off/Fuel Shutoff

Automatically shuts off generator after fuel in the carburetor is consumed (see page 23)

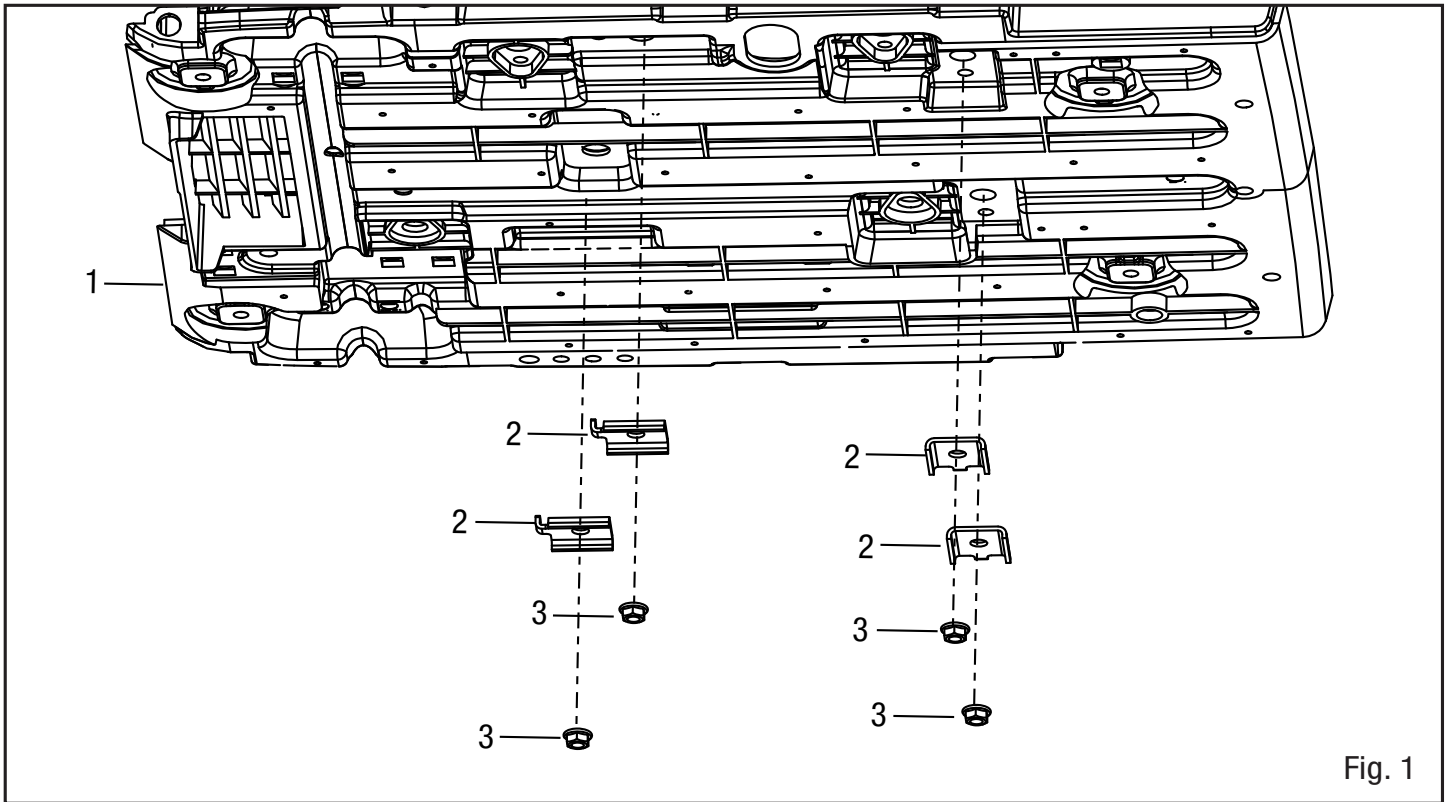
GENERATOR PREPARATION

REMOVING THE MOUNTING PLATES

Your generator is shipped with four mounting plates that secure the engine to the generator housing in order to prevent machine damage during shipping. Make sure to remove the four mounting plates before operating your generator.

To remove the mounting plates:

1. With the help of another person, place generator on an elevated platform such as table or workbench. Make sure the generator is stable. Do not tilt the generator as there may be remaining fuel inside the crankcase from testing.
2. Remove the four nuts (Fig. 1 - 3) and mounting plates (Fig. 1 - 2) from the generator's baseplate (Fig. 1 - 1).
3. Follow the instructions in the following pages to prepare your generator for starting.



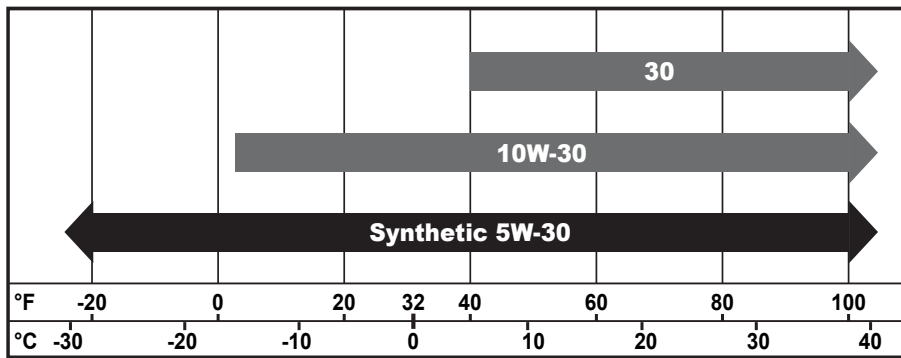
GENERATOR PREPARATION

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

STEP 1 - 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 **18.6 fl. oz. (0.55 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 30W engine oil.



- 30W engine oil for temperatures above 40°F.
- 10W-30 engine oil for temperatures between 0°F - 40°F.
- Synthetic 5W-30 engine oil for all temperature ranges.

Fig. 2 - Oil Recommendation Chart

To add oil, follow these steps:

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. Turn the oil access cover knob to the unlocked position, and remove the access cover from the side panel. Unscrew the oil dipstick from the engine.

3. Using an oil funnel or appropriate dispenser, slowly add oil into the oil fill (Fig. 3), 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 (Fig. 3.1).

4. Reinstall the oil dipstick and firmly tighten it. Wipe clean any spilled oil.

5. Reinstall the oil access cover. Turn the oil access cover knob to the locked position to secure the cover in place.

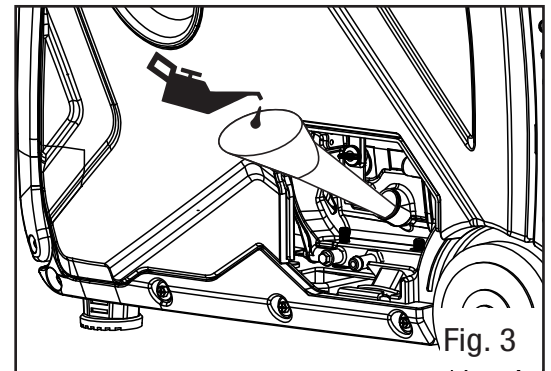


Fig. 3

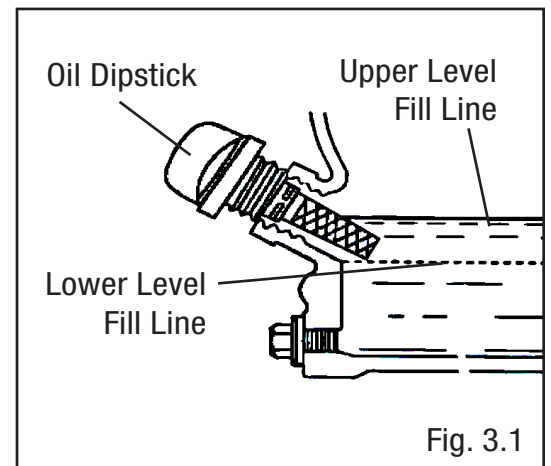


Fig. 3.1

GENERATOR PREPARATION

STEP 1 - ADD/CHECK OIL (CONTINUED)

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.

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. Open the oil access cover. 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 (Fig. 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).

4. Wipe clean any oil leaks and firmly tighten the dipstick. Reinstall the oil access cover.

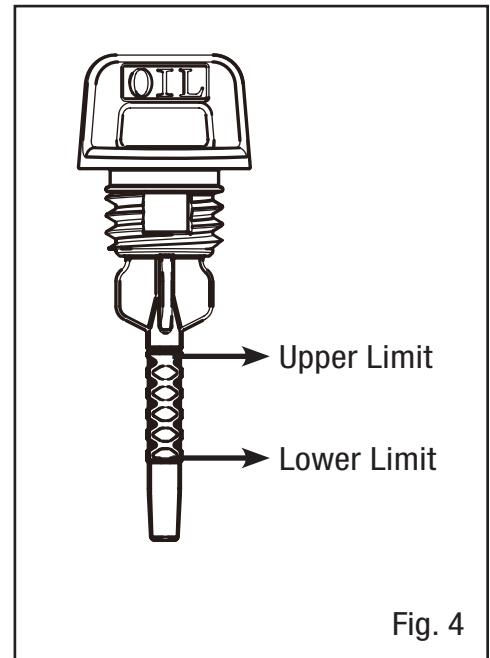


Fig. 4

OIL LEVEL SHUTDOWN

To protect the unit from damage, the generator is equipped with a low-oil-pressure shutoff that will automatically stop the engine when the oil level is too low. The yellow low oil indication light (Fig. 5) will turn ON to remind you that the engine oil level is low and need to be refilled.

The oil level of the engine should be checked before each start to ensure that the engine crankcase contains sufficient lubricant.

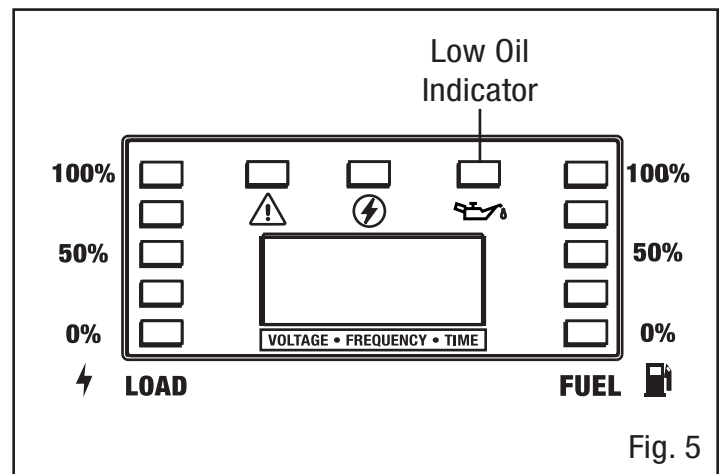


Fig. 5

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 compartment to help preserve the engine and extend your generator's lifespan.

GENERATOR PREPARATION

STEP 2 - ADD/CHECK FUEL

⚠️ GASOLINE WARNING: Keep generator away from open flame. This generator may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death if ignited. A nearby open flame can lead to explosion even if not directly in contact with gasoline.

- Do not operate near open flame, 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 the fuel cap. Loosen cap slowly to relieve pressure in tank.
- Do not overfill fuel tank. Fuel may expand during operation. Do not fill to the top of the tank. Allow for expansion.
- Always check for spilled fuel before operating. Clean up any spilled fuel before starting.
- Empty fuel tank before storing or transporting the generator to prevent spilling.

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 **2.2 US gallons (8.3 L)**. **DO NOT** mix oil with gasoline.

To add gasoline, follow these steps:

1. Make sure the generator is shut OFF and on a level surface. Unscrew the fuel cap (Fig. 6) 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.

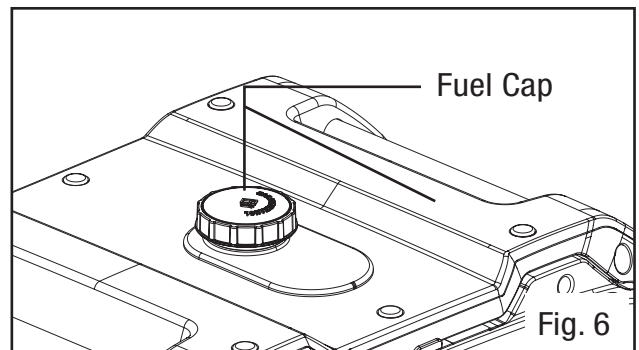
3. Reinstall fuel cap and wipe clean any spilled gasoline with a dry cloth.

To check fuel level:

During operation, the fuel level will be displayed by the indicator lights on the right side of the multi-meter. If the fuel level is low, refill the fuel tank before starting your generator for the next time.

IMPORTANT:

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



GENERATOR PREPARATION

STEP 3 - CONNECT THE BATTERY

⚠ WARNING: BATTERY GIVES OFF EXPLOSIVE HYDROGEN GAS.

- Keep battery away from sparks, cigarettes, or other sources of flame.
- Do not connect or disconnect battery while generator is running.
- Service or use battery only in well ventilated areas.

⚠ WARNING: Battery contains sulfuric acid. Battery acid is poisonous. Tilting the generator with the battery installed can cause battery acid to spill.

- Wear protective clothing and eye wear when servicing battery.
- Keep out of reach of children.
- If battery acid gets on your skin, wash with water immediately.
- If battery acid gets in your eyes, flush with water for at least 15 minutes and call a doctor immediately.

If battery acid is swallowed, call a doctor immediately. Drink a large amount of water or milk. Then drink milk of magnesia or vegetable oil.

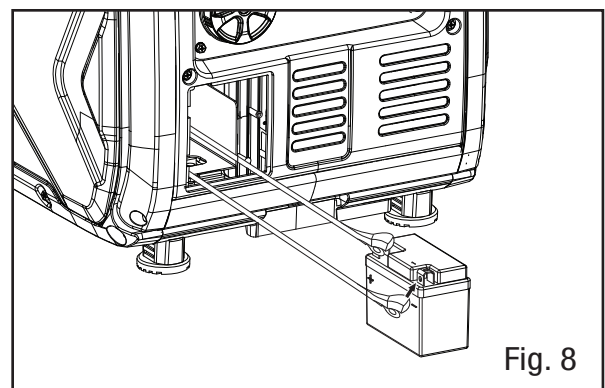
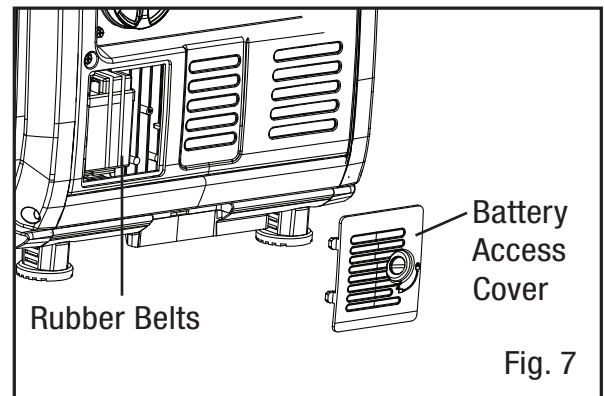
The generator is shipped with the lithium-ion battery's negative (-) terminal disconnected to maximize safety. To start the generator using electric start, the battery must be connected.

To connect the battery:

1. Using a quarter coin or flat-head screwdriver (not included), open and remove the battery access cover (Fig. 7).
2. Loosen the rubber belts and pull out the battery.
3. Remove the cover from the battery's negative (-) terminal and connect the black cable to the battery's negative (-) terminal as shown in Fig. 8.

The generator's positive pole has already been connected. Double check to confirm that the connection is secure.

4. Return the battery into position and use the rubber belts to fasten the battery.
5. Reinstall and secure the battery access cover.



IMPORTANT: If you do not plan to use the generator for a long period of time, we recommend to DISCONNECT the negative battery cable from the battery to protect the battery from losing charge. After disconnecting the cable, cover the free end with an insulator such as electrical tape. You may also choose to use a trickle charger (not included) to maintain battery charge.

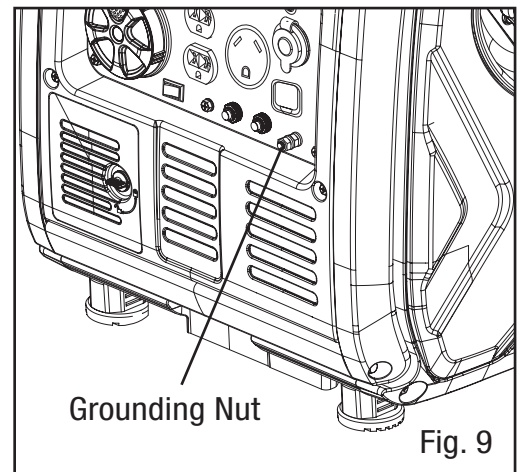
GENERATOR PREPARATION

STEP 4 - GROUND THE GENERATOR

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

Ground the generator by tightening the grounding nut on the front control panel (Fig. 9) against a grounding wire. A generally acceptable grounding wire is a **No. 12 AWG (American Wire Gauge) stranded copper wire**.

This grounding wire should be connected at the other end to a copper, brass, or steel grounding rod that is driven into the earth. Wire and grounding rods are not included with the generator.



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



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

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 said kit may increase the engine's emissions and decrease both fuel economy and performance.

You can order the kit at wenproducts.com by searching part **56380i-HA**. There are two kits - one for altitudes between 3000 and 6000 feet (56380i-HA36), and the other for altitudes from 6000 to 8000 feet (56380i-HA68). This kit should be installed by a qualified mechanic. Refer to the instructions included with your altitude kit for more information about installation.



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: Engines with the high-altitude kit installed operated at lower altitudes could cause severe engine damage and affect emissions compliance. Be sure to UNINSTALL the high altitude kit when operating at altitudes below 2000 feet.

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

STARTING THE GENERATOR


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


DANGER: CARBON MONOXIDE

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


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


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

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

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

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

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

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

To maximize safety, ALWAYS ground the generator before using it (see the “GROUND THE GENERATOR” section on page 14).

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

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

STARTING YOUR GENERATOR

Before starting the generator:

1. Verify that the generator is outside on a dry, level surface. Allow at least two feet of clearance on all sides of the generator.
2. To maximize safety, check that the generator is properly grounded (see “GROUND THE GENERATOR”).
3. Check there is sufficient level of oil in the crankcase. Add oil if necessary (see “ADD/CHECK OIL”).
4. Make sure there is sufficient level of gasoline in the fuel tank. Add fuel if necessary (see “ADD/CHECK FUEL”).
5. Make sure all electrical devices are unplugged from the generator during ignition. Otherwise it will be difficult for the engine to start.

To start the generator, perform the following steps:

1. Turn the ECO-MODE (Fig. 10) switch to “OFF” during starting.
2. Turn the 3-in-1 dial switch (Fig. 11) to the “START” position.

NOTE: If starting the generator with a warm engine, turn the dial switch to the “RUN” position.

Option A: Electric Start:

3. Push the start button inwards until the engine starts.

NOTE: If the engine does not start, release the button and try again. Keeping the switch in the START position too long can damage the starter.

4. When engine starts, release the switch to the “RUN” position.

Option B: Pull Start

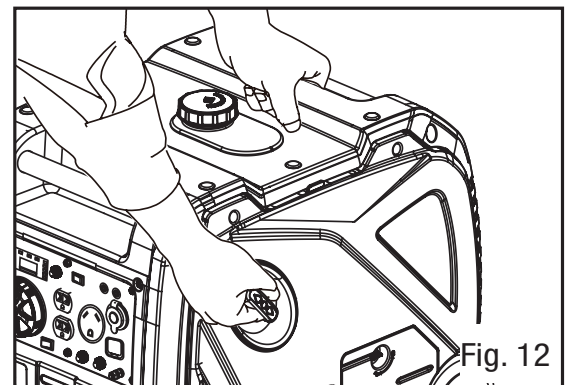
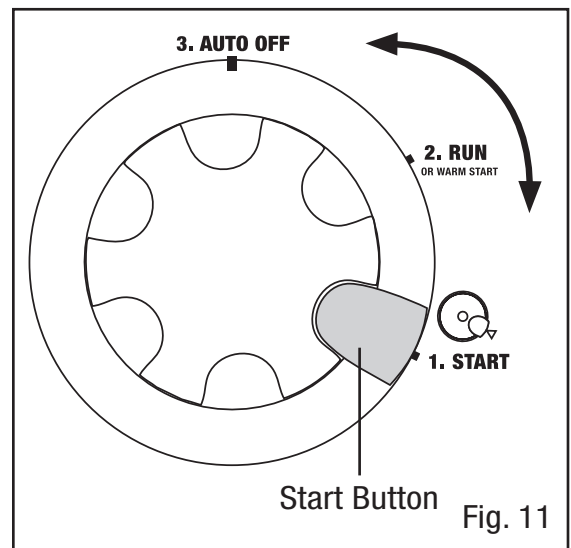
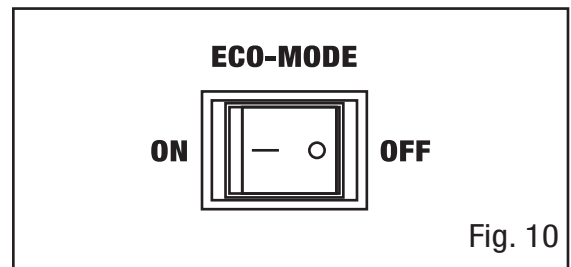
3. Place one hand on the generator to hold it in place, and pull on the recoil starter handle slowly until a slight resistance is felt (Fig. 12). Then pull quickly to start the engine. Return cord gently into the machine. Never allow the cord to snap back.

4. If engine fails to start, repeat step 3B.

NOTE: If you have repeated failed attempts to start the engine, please consult the troubleshooting guide (page 31). If problems persist please call (800) 232-1195 M-F 8-5 CST.

5. After the engine has started, turn the 3-in-1 switch to the “RUN” position. The output indicator light (green) will light up.

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



USING THE GENERATOR

CALCULATING THE WATTAGE OF YOUR DEVICE(S)

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

Generator Wattage Capacity	Generator Running (Rated) Watts	Generator Starting (Surge) Watts
	3400W	3800W
	<p>What this means: The generator can produce a maximum of 3400W on a continuous basis to supply ongoing power to your electronic devices.</p> <p>NOTE: Please also check the rated amperage for each outlet and make sure not to overload the individual outlets.</p>	<p>What this means: Some devices such as box fans require short bursts of extra power in addition to the rated wattage listed by the device to start their motors.</p> <p>The generator can produce a maximum wattage of 3800W for a short period of time (seconds) to cover the extra starting power required by your electronic devices.</p>
Electronic Device Wattage Calculation	<p>Find the wattage information of each device you plan to connect. The information should be listed on the device or in its instruction manual, or you may refer to Fig. 13.</p> <p style="text-align: center;">The wattage can be calculated using this equation: Watts = Volts x Amperes</p>	
	<p>To calculate the total running watts of your devices:</p> <p>+ Add up the running wattages of all the device(s) you plan to connect</p> <p>= The total running wattage</p> <p>This wattage should NOT exceed the generator's running wattage of 3400W.</p> <p>It is recommended to maintain a load at or below 3060W (90% of the generator's rated output) to ensure steady voltage output and to prolong the generator's lifespan.</p>	<p>To calculate the total starting watts of your devices:</p> <p>+ Add up the total running wattage of all the device(s) you plan to connect</p> <p>+ Add the single highest ADDITIONAL starting wattage out of the device(s) you plan to connect</p> <p>= The total surge (starting) wattage</p> <p>This wattage should NOT exceed the generator's starting wattage of 3800W.</p>
	<p>If any of either of the total calculated running watts or starting watts is higher than the capacity of your generator, adjust the load until both wattage requirements are met. Otherwise you will overload the generator, and cause damage to the engine and your electrical device(s).</p>	

USING THE GENERATOR

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

Tool or Appliance	Rated (Running) Watts	Surge (Starting) Watts
Hot plate	2500	0
Electric stove (each element)	1500-2800	0
Saw - circular	1500	1500
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

Fig. 13 - Estimated wattage requirements of common electrical devices

Once the total wattage of your electronic device(s) have been calculated, follow the instructions on the following pages to properly connect the device(s) to the generator.

USING THE GENERATOR

KNOW YOUR CONTROL PANEL

Become familiar with the functions and capacity of each component on the control panel.

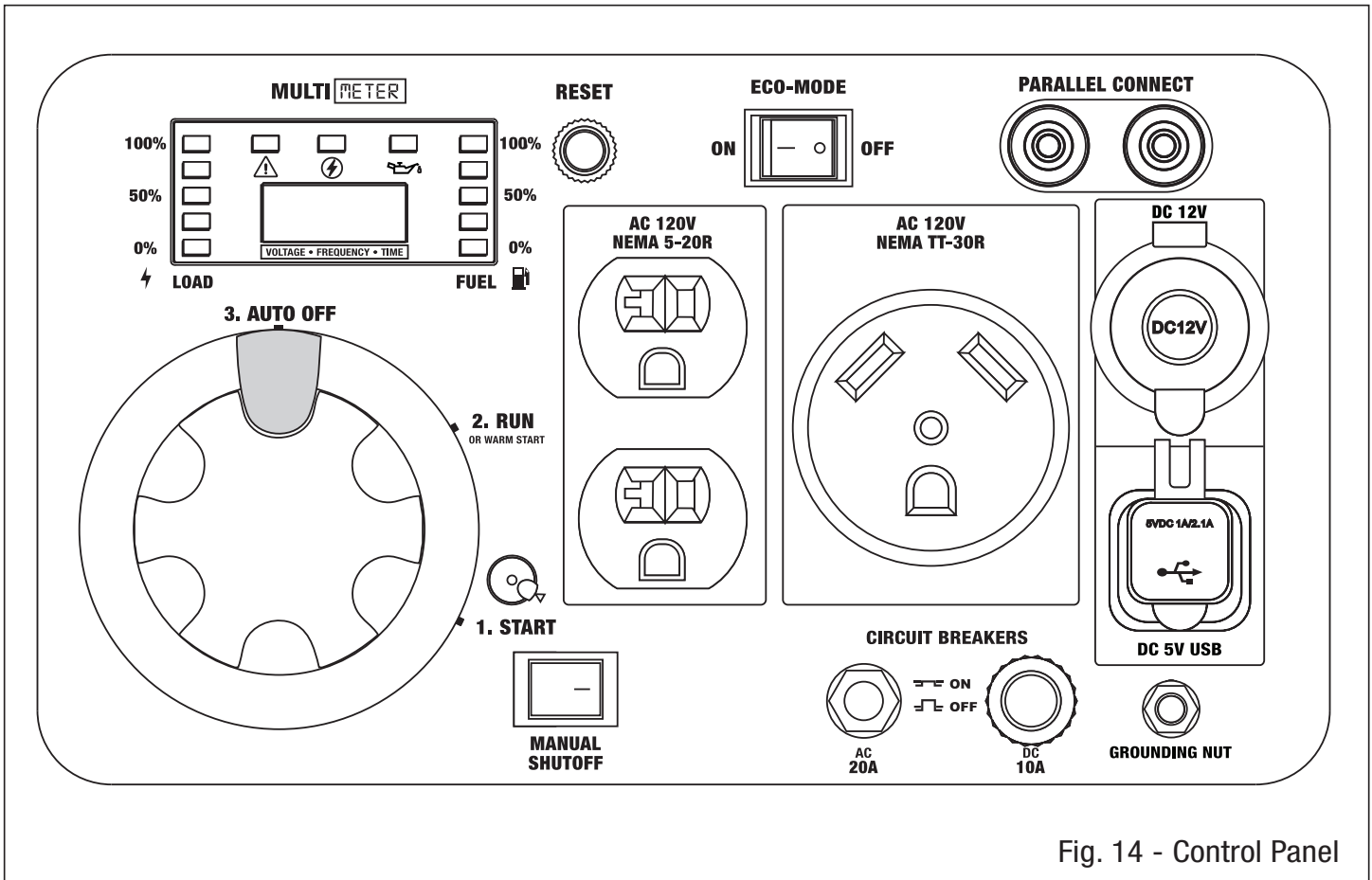


Fig. 14 - Control Panel

CONNECTING ELECTRICAL DEVICES

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

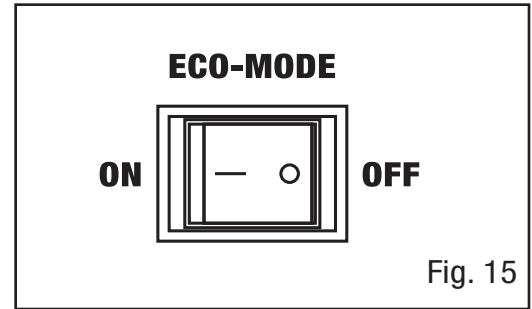
Follow the steps below to properly connect your device(s) to the generator:

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

USING THE GENERATOR

ECO-MODE SWITCH

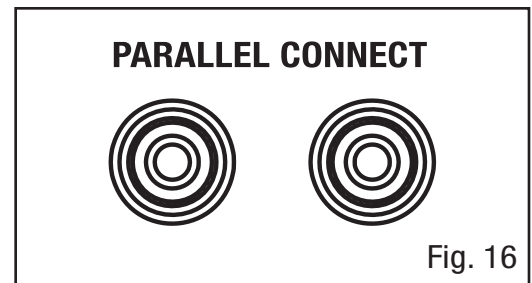
This generator is equipped with an Eco-Mode Idle Control Switch (Fig. 15). Engaging this switch allows the system to regulate the engine speed and automatically adjust its fuel consumption to match the required load. When the electrical load changes, the generator engine will automatically speed up and 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 2550W** (75% of the rated watts). Do not engage the Eco-Mode Switch when the total load is more than 2550W. The generator engine must run at full speed to supply power for anything over 2550W.

PARALLEL OPERATION

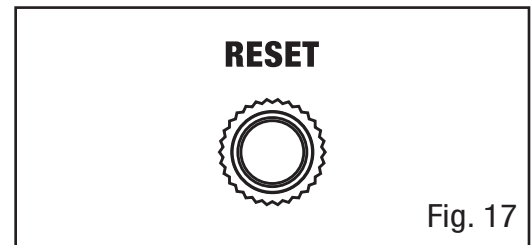
The parallel connection ports (Fig. 16) allow you to connect two WEN generators to increase the total available electrical power. The **WEN 56421 Parallel Connection Kit** can be purchased from **wen-products.com**. Follow the instructions included with your parallel connection kit for proper installation and operation.



IN CASE OF OVERLOAD

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

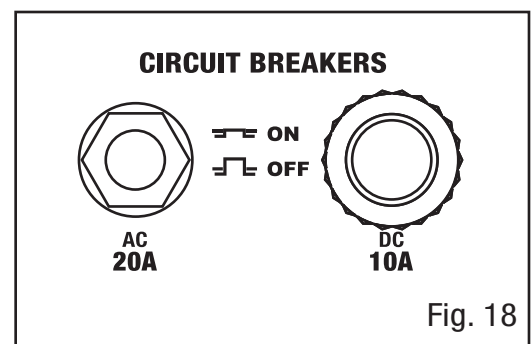
- When you're close to overloading the generator, the overload light will start to flash. Reduce the load by turning off and disconnecting your electronic device(s) until the overload light turns off. Then you may continue to operate your generator.



- When you've overloaded the generator, the overload light will stay on and the reset button (Fig. 17) 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.

CIRCUIT BREAKERS

In addition to the reset button that protects the generator's main circuit, the circuit breakers (Fig. 18) protect the individual AC and DC circuits. The 20-amp AC circuit breaker will activate when the NEMA 5-20 outlets exceed 20A. The 10-amp DC circuit breaker will activate when the DC 12V and USB outlets exceed 10A. When the circuit breaker activates, turn off and disconnect the device from its respective outlet, and press the circuit breaker to reset.



USING THE GENERATOR

SOME NOTES ABOUT POWER CORDS

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

Device Requirements			Max. Cord Length (ft) by Wire Gauge				
Amps	Watts (120V)	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

Fig. 19 - Power Cord Requirement Guide

*NR = Not Recommended

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

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

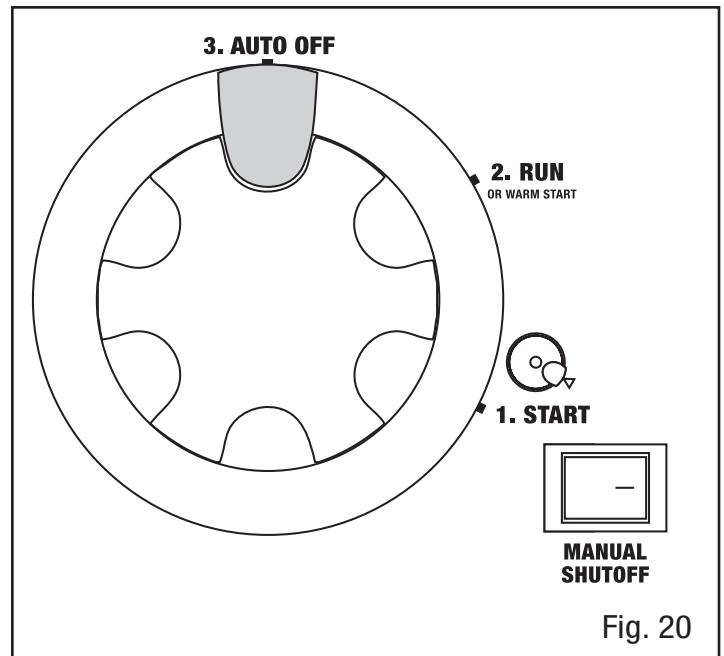
SHUTTING OFF THE GENERATOR

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

OPTION 1: AUTOMATIC FUEL SHUTOFF (RECOMMENDED)

The WEN 3800W Inverter Generator is equipped with automatic fuel shutoff. This feature turns off the flow of fuel, allowing for the generator to use up the remaining fuel from the carburetor before turning off. This prolongs the lifespan of the generator by preventing build-up and blockages caused by stagnant fuel inside of a carburetor.

1. Turn off all electrical devices prior to unplugging them from the generator. Unplugging running devices can cause damage to the generator.
2. Allow generator to run at no load for a few minutes to stabilize internal temperatures.
3. Turn the engine switch to the “AUTO OFF” position (Fig. 20).
4. The engine will continue to run until the majority of the fuel in the carburetor is consumed. It will then shut off automatically. This feature helps to prevent the carburetor from being clogged by stale fuel, extending your generator’s lifespan.



OPTION 2: MANUAL SHUTOFF

In case you are in a hurry and do not want to wait for the generator to automatically shut down, the manual shutoff feature is available. However, this method will leave stagnant fuel in the carburetor, possibly causing blockages, a shortened lifespan, and other maintenance issues. If this approach is frequently taken, make sure to drain your carburetor before any long storage periods.

1. Turn off all electrical devices prior to unplugging them from the generator. Unplugging running devices can cause damage to the generator.
2. Press the “MANUAL SHUTOFF” switch and hold it down in the “OFF” position for about 6 seconds until the engine shuts off.

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.”

MAINTENANCE

RECOMMENDED MAINTENANCE SCHEDULE

Proper routine maintenance of the generator will help prolong the life of the machine. Please perform maintenance checks and operations according to the Maintenance Schedule in Fig. 21. If there are any questions about the maintenance procedures listed in this manual, please call (800) 232-1195 M-F 8-5 CST or email techsupport@wenproducts.com.

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

Recommended Maintenance Schedule		Each 8 hours or daily	Every 25 hours	Every 3 months or 50 hours	Every 6 months or 100 hours	Before Storage	As necessary
Engine Oil	Check level	x					
	Replace		x*			x	x
Air Filter	Check			x*			
	Clean			x*			
Spark Plug	Check/clean/regap				x		
	Change					x	x
Fuel Tank	Check level	x					
	Drain					x	x
Carburetor (Auto Shutoff)	Drain					x	x
Carburetor (Manual Shutoff)		x				x	
Spark Arrestor	Check/Clean				x		
Battery	Disconnect					x	

Fig. 21 - Recommended Maintenance Schedule

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

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 at least 20 minutes every month to charge the battery and maximize the generator's lifespan.

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

MAINTENANCE

CLEANING THE GENERATOR

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

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

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

CHECKING/ADDING OIL

Check the oil level before each use and every 8 hours of operation (refer to Fig. 21).

The oil capacity of the generator engine is **18.6 fl. ounces**. Add oil when the oil level is low. For proper type and weight of oil refer to “ADD OIL” portion of the “GENERATOR PREPARATION” section. 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 add oil:

1. Make sure the generator is on a level surface. Do not tilt the generator, as oil will flow into engine areas and cause damage. Keep generator level!
2. Turn the oil access cover knob to the unlocked position, and remove the access cover from the front panel. Clean around the oil fill. Remove the dipstick and wipe it with a clean rag.
3. Insert the dipstick into the oil fill opening without screwing in. Remove the dipstick to check the oil mark (Fig. 22). Add oil if the oil mark covers less than one half of the dipstick.
4. Using a funnel or appropriate dispenser, slowly add more oil. Repeat the step above until the oil mark reaches the top of the dipstick (you can see oil coming up the threads of the oil fill). Do not over fill.
5. Reinstall dipstick and wipe clean any spilled oil with a rag. Reinstall the oil access cover.

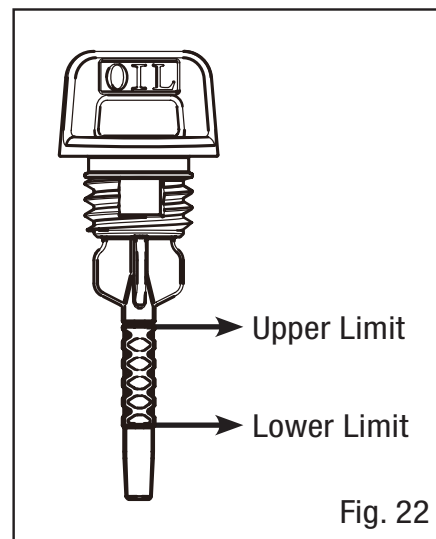


Fig. 22

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 pan to help preserve the engine and extend your generator's lifespan.

DRAINING THE CARBURETOR

We recommend draining the carburetor after every use and before storing the generator. (If the generator is shut off using the AUTO OFF/FUEL OFF, it is only necessary to drain it before periods of long storage.) Draining the carburetor can prevent the fuel from clogging up the carburetor; a clogged carburetor can prevent the generator from starting.

1. With the help of another person, place the generator on an elevated platform such as a table or desk.

2. Make sure that the 3-in-1 dial switch is turned to "AUTO OFF". At this position, the fuel valve is turned OFF so that only the fuel left inside the carburetor will be drained out.

3. Using a Phillips-head screwdriver (not included), unscrew the top two screws (Fig. 23 - 1) and remove the service panel on the opposite side of the recoil starter.

4. The carburetor can be accessed between the engine and the air filter (Fig. 23). Locate the transparent tube from the carburetor (Fig. 24) that extends down through the base plate of the generator.

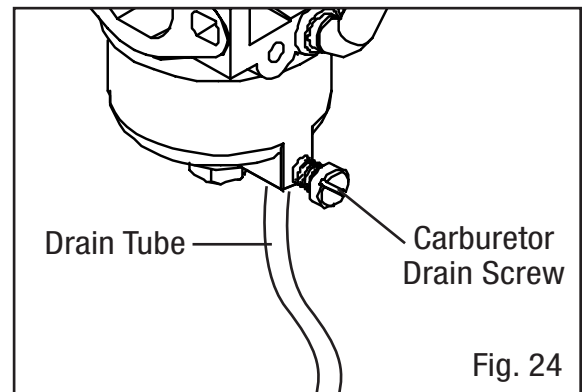
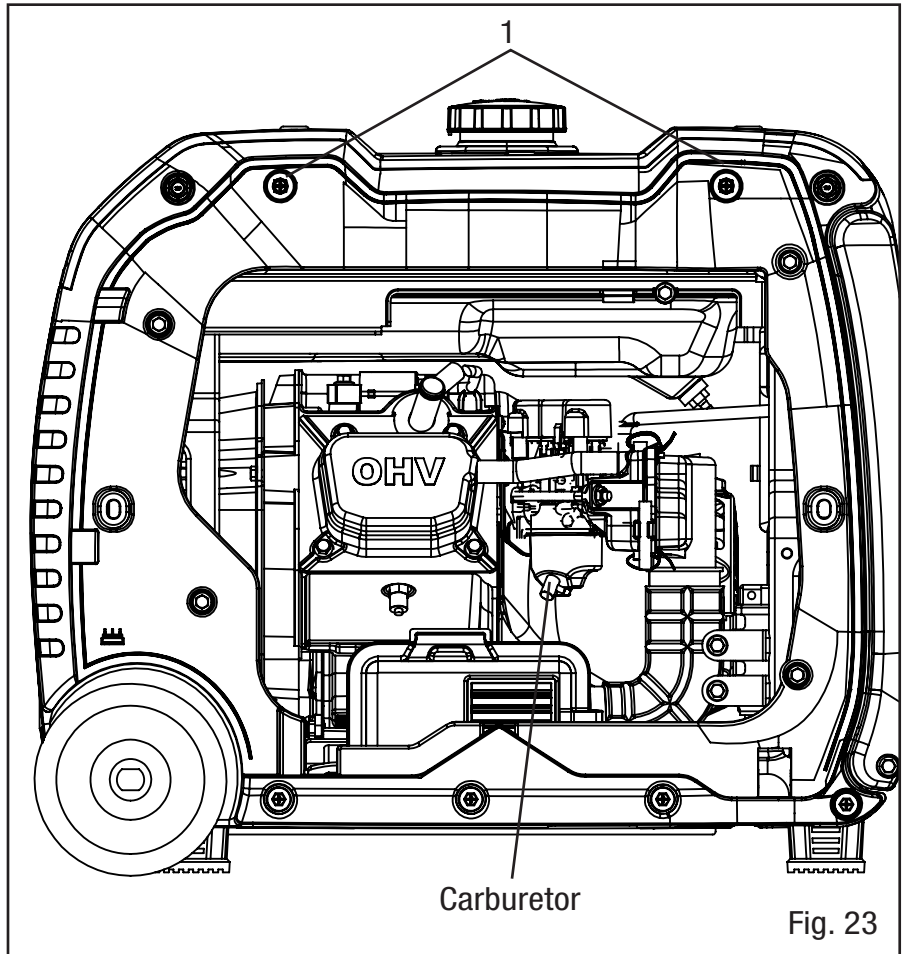
5. Prepare an approved gasoline-storage container and direct the end of the drain tube into the container.

6. Open up the carburetor drain screw (Fig. 24) with a flat-head screwdriver (not included) and drain out any gasoline that has built up inside the carburetor through the drain tube into the approved gasoline-storage container.

7. Once the fuel has drained, tighten the drain screw with the screwdriver.

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

8. Reinstall the service panel.



MAINTENANCE

AIR FILTER MAINTENANCE

Check every 50 hours of operation (refer to Fig. 21 - Recommended Maintenance Schedule).

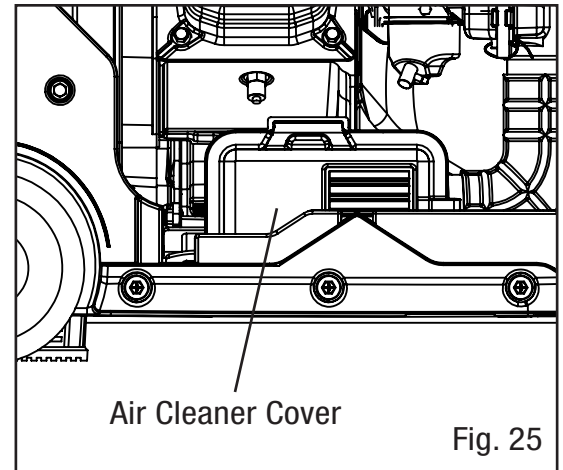
Routine maintenance of the air filter helps maintain proper airflow to the carburetor. Occasionally check that the air cleaner is free of excessive dirt.

To inspect and clean the air filter:

1. Using a Phillips-head screwdriver (not included), unscrew the top two screws (Fig. 23 - 1) and remove the service panel on the opposite side of the recoil starter.

2. Take the cover off of the air cleaner (Fig. 25). Remove the sponge-like air filter element from the casing. Wipe excessive oil and any dirt from inside of the air filter casing.

3. Check and clean the foam air filter element. 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.



If the air filter element has been damaged, replace it with a new one. Replacement air filters can be ordered from wenproducts.com by searching **part no. 56380i-1001.1**.

4. Reinstall the air cleaner element, air cleaner cover and service panel.

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

SPARK ARRESTOR MAINTENANCE

Inspect and clean the spark arrestor every 100 hours of operation.

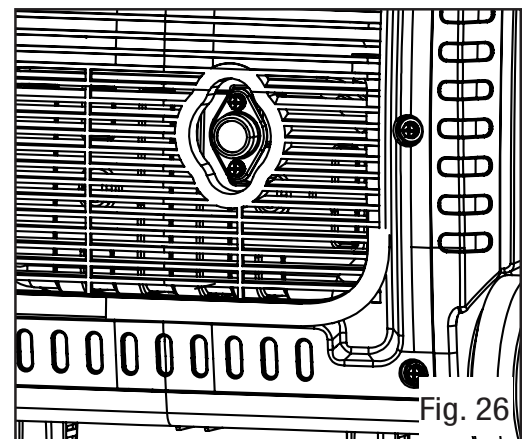
The spark arrestor is located outside the muffler, which gets very hot during operation. Allow the engine to cool completely before servicing the spark arrestor. To inspect and clean the spark arrestor:

1. Remove the two Phillips-head screws that secure the spark arrestor to the muffler (Fig. 26).

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 no. **56380i-1115**).

4. Reinstall the spark arrestor in the muffler and secure it in place with the screws.



SPARK PLUG MAINTENANCE

Refer to Recommended Maintenance Schedule in Fig. 21 for maintaining the spark plug.

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.

To inspect or replace the spark plug:

1. Using a Phillips-head screwdriver (not included), unscrew the top two screws (Fig. 23 - 1) and remove the service panel on the opposite side of the recoil starter.

2. Gently pull on the spark plug boot (Fig. 27) to remove it. Be careful not to tear any insulation or wire.

3. Use the included spark plug wrench to unscrew and then carefully remove the spark plug from the engine (Fig. 28). **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.

4. Visually inspect the spark plug. If it is cracked or chipped, or if the electrodes are worn or burned, discard it and replace with a new spark plug.

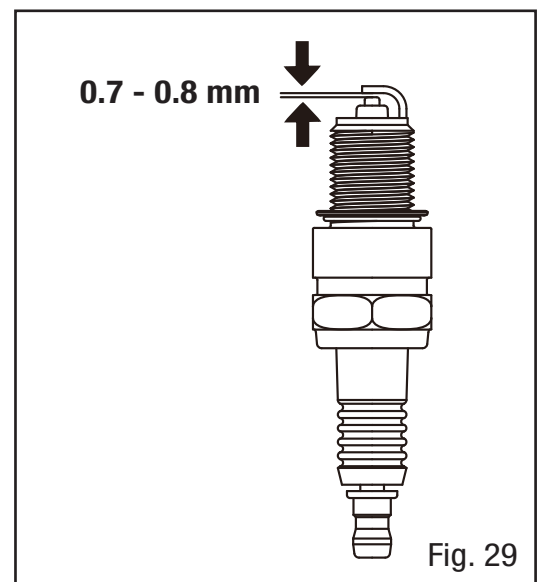
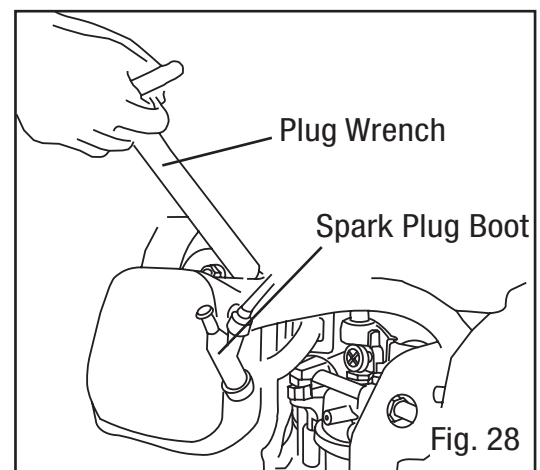
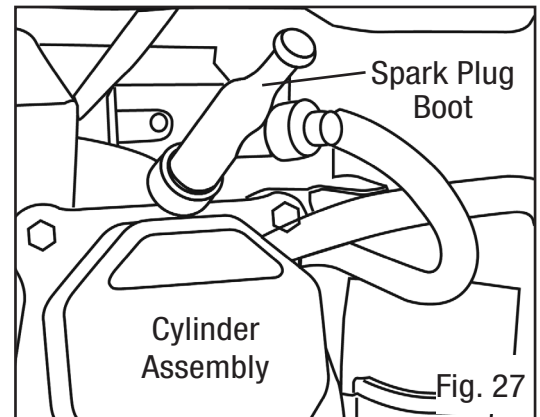
We recommend replacing with a **NGK BPR6ES/Torch F6RTC** spark plug (**part no. 56310i-0104**), available for purchase at **wenproducts.com**.

5. If re-using the spark plug, use a wire brush to clean any dirt from around the spark plug base, then re-gap the spark plug.

6. Measure the plug gap with a spark plug gap gauge. The gap should be **0.7 - 0.8 mm (0.028 - 0.031 in)** (Fig. 29). Carefully adjust the gap if necessary.

7. Screw the spark plug back into the spark plug hole using the spark plug wrench. Do not over-tighten spark plug. Recommended tightening of spark plug is **½ to ¾ of a turn** (15 ft-lb torque/20.33 Nm) after spark plug gasket contacts spark plug hole.

8. Reinstall the spark plug boot, spark plug rubber cover, and service panel.



MAINTENANCE

DRAINING/CHANGING OIL

Change the oil according to the Recommended Maintenance Schedule in Fig. 21.

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.

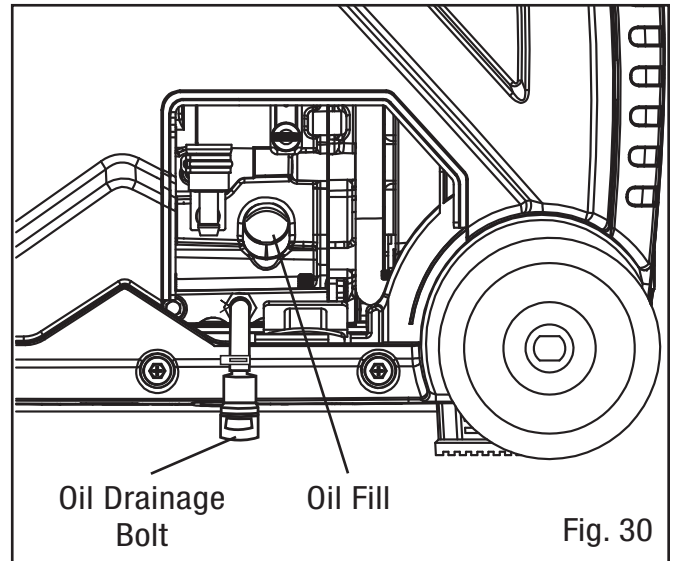
To change engine oil:

1. With the help of another person, place the generator on an elevated platform such as table or workbench.

NOTE: To avoid possible oil spills from the carburetor bowl, drain the carburetor (see page 26) before draining oil.

2. Turn the oil access cover knob to the unlocked position, and remove the cover from the side panel.

3. Prepare an approved gasoline-storage container and place it below the oil drainage plug (Fig. 30) to catch oil as it drains.



4. Unplug the oil drainage plug and allow oil to drain from the engine completely.

5. Reinstall the oil drainage plug after the oil has drained.

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.

6. Unscrew the oil dipstick. Using a funnel or appropriate dispenser, add 18.6 oz. of clean engine oil (see engine oil recommendations on page 11) into the oil fill until you can see oil coming up the threads of the oil fill. Do not over fill.

7. Reinstall the oil dipstick and tighten it securely. Wipe clean any oil spillage and reinstall the oil access cover.

MAINTENANCE

DRAINING THE FUEL TANK

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

To drain the fuel tank and carburetor:

1. Using a Phillips-head screwdriver (not included), remove the service panel on the opposite side of the recoil starter by unscrewing the top two screws (Fig. 23 - 1).
2. Locate the carburetor and the transparent drain tube that extends down through the base plate of the generator (Fig. 31).
3. Prepare an approved gasoline-storage container and direct the end of the transparent tube into the container.
4. Remove the fuel cap. Turn the 3-in-1 dial switch to the “RUN” position (Fig. 32). This will open up the fuel valve.

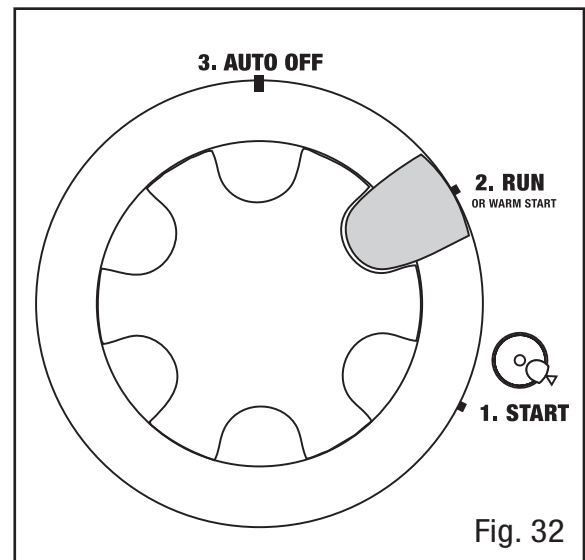
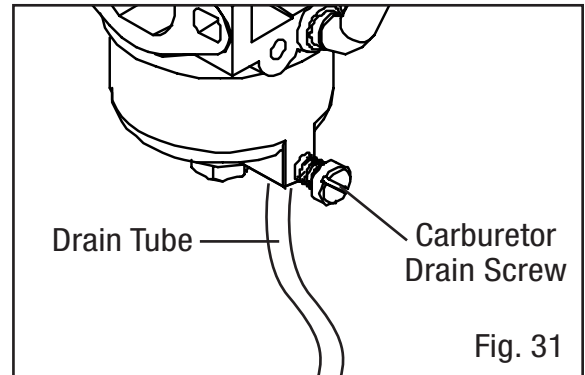
5. Open up the carburetor drain screw (Fig. 31) with a flat-head screwdriver (not included). Fuel will start draining from the carburetor and fuel tank through the drain tube.

NOTE: The draining process may take a few hours, depending on the amount of fuel in your gas tank.

6. Once fuel is completely drained from the tube, reinstall the fuel cap and turn the 3-in-1 switch to “OFF” position. Tighten the drain screw with the screwdriver and reinstall the service panel.

7. Start and run the generator until the fuel runs out.

8. Store the emptied gasoline in a suitable place. DO NOT store flammable materials near the gasoline.



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

MAINTENANCE

BATTERY MAINTENANCE/STORAGE

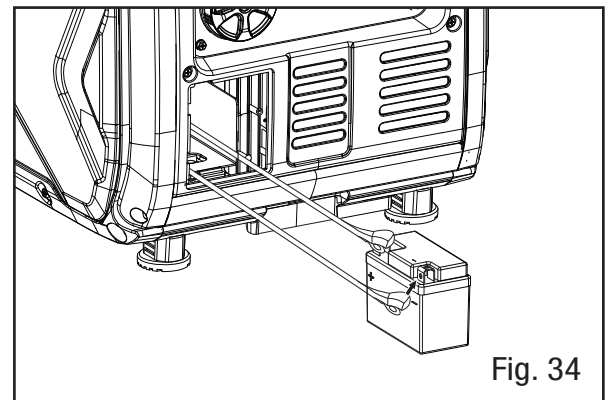
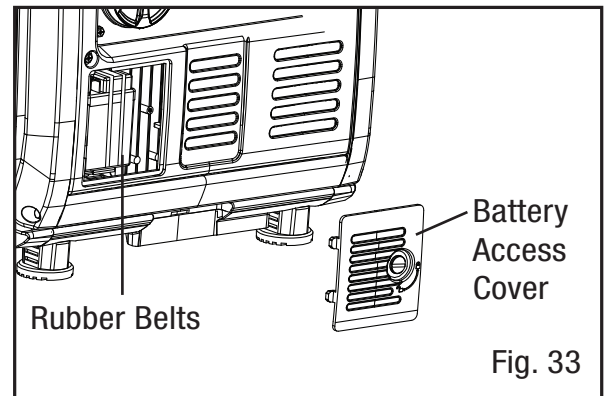
The lithium-ion battery will receive charge when the engine is running. Remember to run the generator once a month for 20-30 minutes to charge the battery. A charged battery will allow you to start the generator using the electric start button during your next time of need. If the battery is out of charge, you may start the generator using the recoil starter.

If the generator is not used for a long period, it is recommended to disconnect the negative (black) battery cable from the battery to protect it from losing charge. After disconnecting the cable, cover the free end with an insulator such as electrical tape.

TIP: You can also connect the battery to an automatic trickle charger to keep the battery charged.

To reinstall/replace the battery:

1. Using a quarter coin or flat-head screwdriver (not included), open and remove the battery access cover (Fig. 33).
2. Loosen the rubber belts and pull out the battery (Fig. 34).
3. Disconnect the negative (-) battery terminal first (black cable).
4. Disconnect the positive (+) battery terminal second (red cable).
5. Replace with an identical new battery (**part no. 56380i-1304**).
6. Connect the positive (+) battery terminal (red cable) first. Slide rubber boot over the positive terminal.
7. Connect the negative (-) battery terminal (black cable) second. Slide rubber boot over the negative terminal.
8. Return the battery into position and use the rubber belts to fasten the battery.
9. Reinstall and secure the battery access cover.




NOTE: Always recycle used batteries in accordance with local laws and regulations. Contact your local solid waste collection site or recycling facility to obtain information on local recycling processes.

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 vacuum relief valve to “OFF”.
2. Set the engine switch to “OFF”.
3. Drain the fuel tank if possible (see “DRAINING THE FUEL TANK”).
4. Keep the generator upright. Never place the generator on its side or upside down - doing so will make it difficult to start.

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

STORING THE GENERATOR

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

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


For Short Periods (30 to 60 Days):

- Drain the carburetor.
- Disconnect the negative lead from the battery.
- **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):

- Disconnect the negative lead from the battery.
- Drain the fuel tank and carburetor (see “DRAINING THE FUEL TANK”). NEVER store generator with fuel in the tank for more than two months.
- Change the engine oil (see “CHANGING OIL”).

 **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 auto garage to arrange proper oil/fuel disposal.

TROUBLESHOOTING GUIDE

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

PROBLEM	POSSIBLE CAUSE	SOLUTION
Engine will not start.	3-in-1 switch is set to OFF.	Set 3-in-1 to ON.
	Battery is out of power	Electric start will not work if battery is out of power. Start generator using the recoil start to charge the battery.
	Oil is low.	Add or replace oil.
	Engine is out of fuel.	Add fuel.
	Engine is filled with contaminated or old fuel.	Drain fuel in the tank. Fill with fresh fuel.
	Spark plug is dirty or broken.	Clean or replace the spark plug.
	Carburetor is air locked.	Turn the 3-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.
	Ghost in the generator.	Persuade ghost to leave.
Engine runs but there is no electrical output.	Reset button is tripped due to wattage overload.	Turn off and all unplug electrical devices. Wait 3 minutes, then press the activated reset button to reset. Check the total wattage of the devices and reduce the load if it exceeds the capacity of the generator.
	Bad connecting cords/wires.	Check the power cords and extension cords. Do not use if any cord is damaged. Replace damaged cords immediately.
	Bad electrical device connected to the generator.	Try connecting a different device.
Generator runs but does not support all electrical devices connected.	AC or DC receptacles are overloaded, circuit breaker tripped	Turn off and unplug the electrical devices. Wait 3 minutes, then press the circuit breaker to reset. Check the amperage of the devices to make sure they are within the capacity of the receptacles.
	Short circuit in one of the devices.	Disconnect any faulty or short-circuited electrical loads.
	Air filter is dirty.	Clean or replace the air filter element.
Engine is "Hunting" during operation (Engine RPM is fluctuating).	<ol style="list-style-type: none"> 1. The fuel isn't running through the fuel valve. 2. The air filter is clogged. 3. The muffler or spark arrester is blocked 4. There is gunk in the carburetor preventing a consistent fuel/air mixture. 	<p>Turn off the generator and wait for it to cool down. Perform the following steps:</p> <ol style="list-style-type: none"> 1. Check if the fuel is properly and consistently going through the fuel valve 2. Check for any blockage in the air filter. Check and clean the air filter as necessary. 3. Check if the spark arrester is blocked. Clean with metal brush as necessary. 4. Use "gunk remover" spray on the carburetor jets.

SPECIFICATIONS

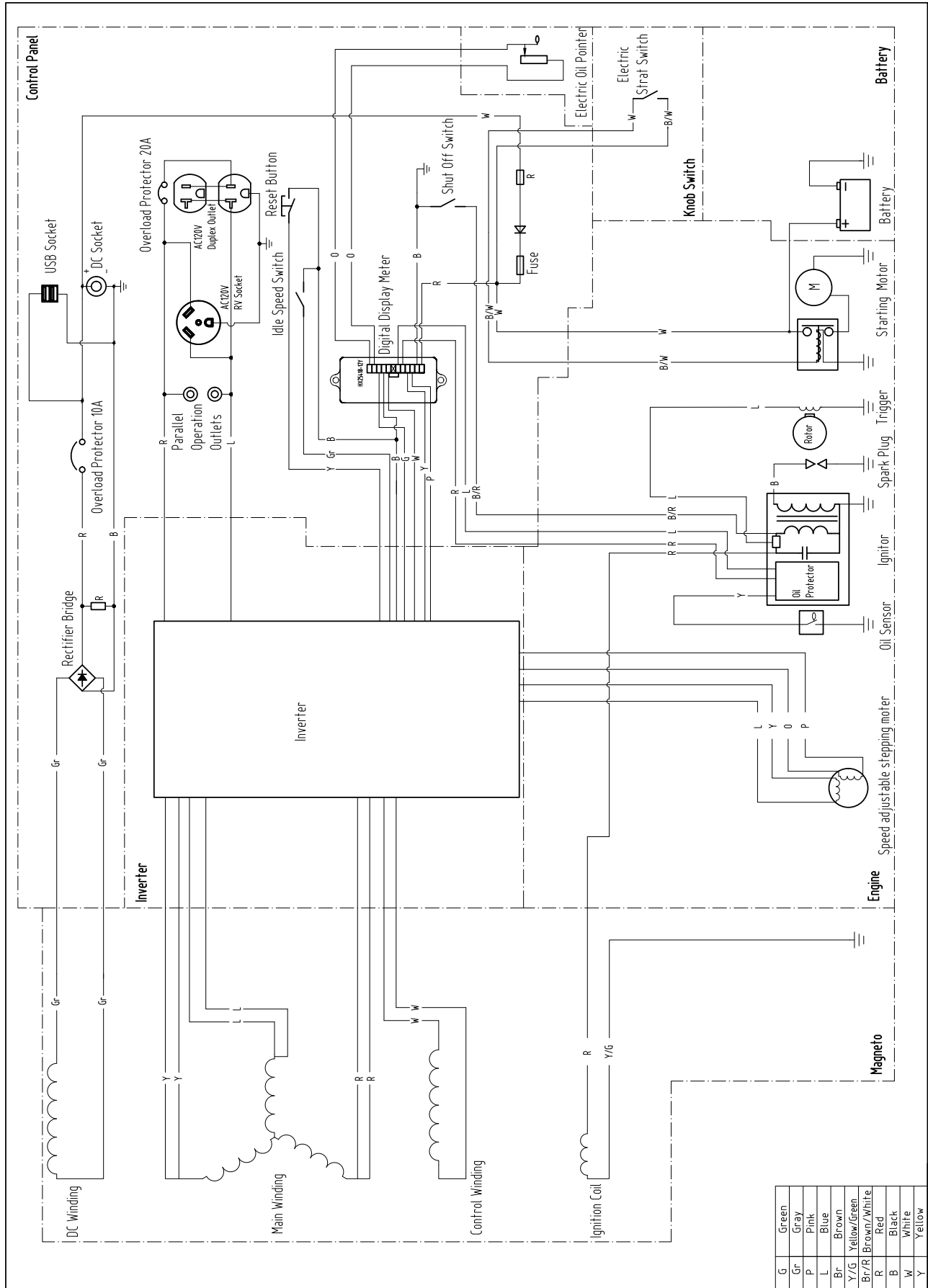
GENERATOR

Rated Wattage	3400 Watts
Surge Wattage	3800 Watts
Rated Voltage	AC: 120V
	DC: 12V (Cigar Lighter), 5V (USB)
Rated Amperage	AC: 28.3A (Total), 28.3A (TT-30R), 20A (5-20R)
	DC: 10A (Total), 8A (Cigar Lighter), 1A/2.1A (USB)
Phase	Single
Frequency	60Hz
Product Dimensions	Length: 23.2 in. (590 mm)
	Width: 18 in. (456 mm)
	Height: 20.1 in. (511 mm)
Product Net Weight	99.2 lbs (45 kg)

ENGINE

Engine Type	4-stroke, OHV, single cylinder with forced air cooling system
Engine Displacement	212cc
Engine Speed	3600 RPM
Fuel Tank Capacity	2.2 US gallon (8.3 L), 87 octane minimum
Oil Capacity	18.6 fl. oz. (0.55 L)
Half-Load Run Time	8.5 hours
Lubrication System	Splash Lubrication
Spark Plug Type	NGK BPR6ES/Torch F6RTC
Spark Plug Gap	0.7 - 0.8 mm (0.028 - 0.031 in)
Spark Plug Torque	1/2 - 3/4 turn after gasket contacts base or 15 ft-lbs
Battery	1.6 Ah Lithium-Ion

WIRING DIAGRAM



EXPLODED VIEW & PARTS LIST

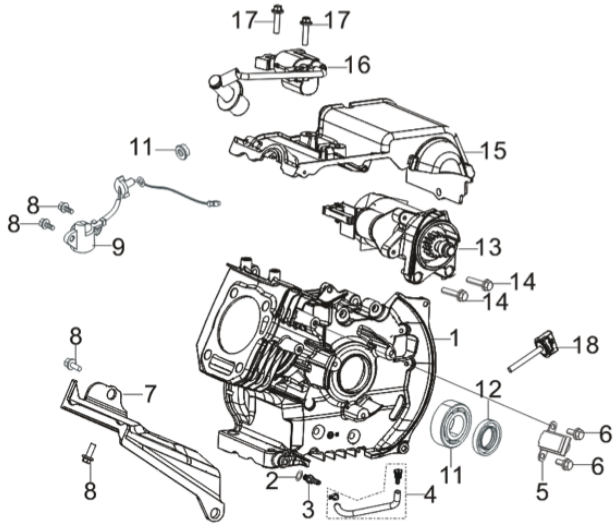


Fig. 1 - Crankcase Assembly

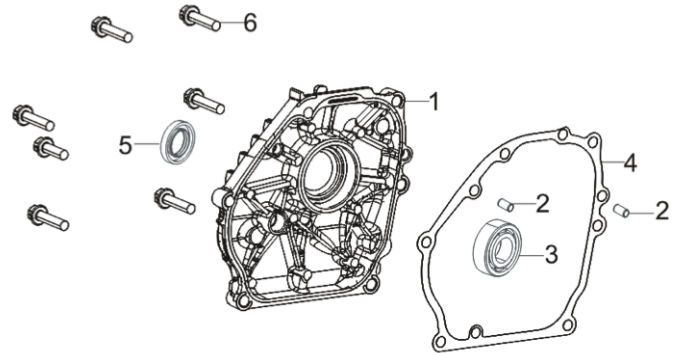


Fig. 2 - Crankcase Cover Assembly

Fig. No.	Part No.	Description	Qty.
1-1	56380i-0101	Crankcase Subassembly	1
1-2	56380i-0102	Flat Washer	1
1-3	56380i-0103	Connector, Oil Drain Hose	1
1-4	56380i-0104	Oil Drain Hose	1
1-5	56380i-0105	Trigger	1
1-6	56310i-1106	Bolt	2
1-7	56380i-0107	Crankcase Side Shield	1
1-8	56310i-1201	Bolt	4
1-9	56310i-0211	Engine Oil Sensor	1
1-10	56310i-0210	Nut	1
1-11	56380i-0111	Bearing	1
1-12	56310i-0306	Oil Seal	1
1-13	56380i-0113	Starter Motor	1
1-14	56380i-0114	Bolt	2
1-15	56380i-0115	Protective Cover	1
1-16	56380i-0116	Ignition Coil	1
1-17	56380i-0117	Bolt	2
1-18	56380i-0118	Oil Dipstick	1

Fig. No.	Part No.	Description	Qty.
2-1	56380i-0201	Cover, Crankcase	1
2-2	56200-0803	Pin	2
2-3	56380i-0203	Ball Bearing	1
2-4	56380i-0204	Gasket, Crankcase	1
2-5	56310i-0306	Seal, Oil	1
2-6	56310i-0307	Bolt	6

EXPLODED VIEW & PARTS LIST

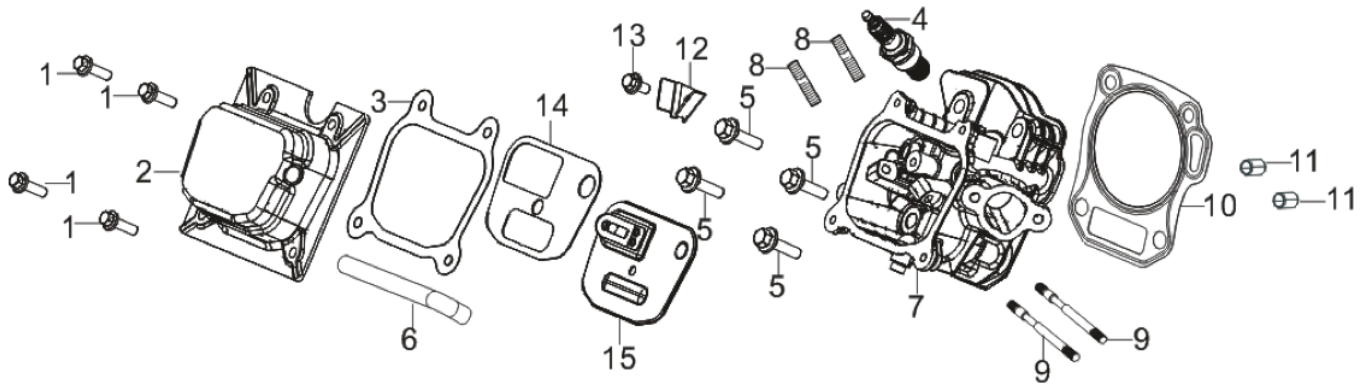


Fig. 3 - Cylinder Head Assembly

Fig. No.	Part No.	Description	Qty.	Fig. No.	Part No.	Description	Qty.
3-1	56200-1202	Bolt	4	3-8	56310i-0109	Bolt	2
3-2	56380i-0302	Cylinder Head Cover Subassembly	1	3-9	56380i-0309	Bolt	2
3-3	56380i-0303	Cylinder Head Cover Gasket	1	3-10	56380i-0310	Cylinder Head Gasket	1
3-4	56310i-0104	Spark Plug	1	3-11	56380i-0311	Pin	2
3-5	56310i-0106	Cylinder Head Bolt	4	3-12	56380i-0312	Limiter	1
3-6	56380i-0306	Breather Tube	1	3-13	56380i-0313	Bolt	1
3-7	56380i-0307	Cylinder Head Subassembly	1	3-14	56380i-0314	Breather Gasket	1
				3-15	56380i-0315	Breather Plate	1

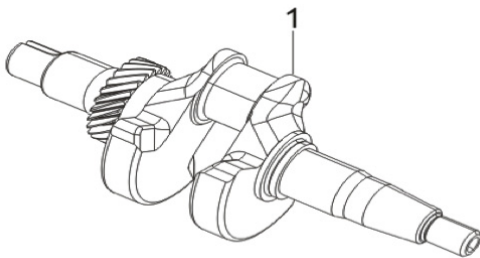


Fig. 4 - Crankshaft Assembly

Fig. No.	Part No.	Description	Qty.
4-1	56380-0401	Crankshaft Assembly	1

EXPLODED VIEW & PARTS LIST

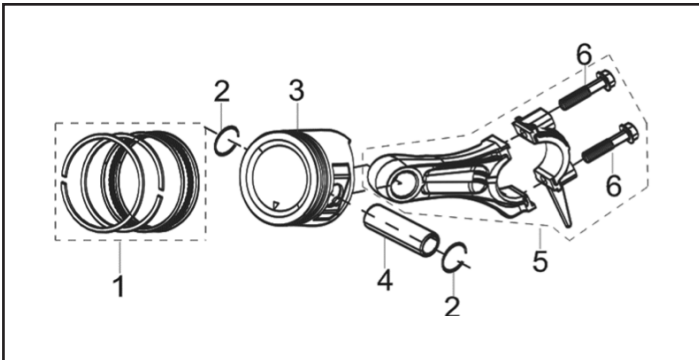


Fig. 5 - Piston Ring Set & Connecting Rod

Fig. No.	Part No.	Description	Qty.
5-1	56310i-0501	Piston Ring Assembly	1
5-2	56310i-0505	Piston Pin Clip	2
5-3	56380i-0503	Piston	1
5-4	56310i-0504	Piston Pin	1
5-5	56380i-0505	Connecting Rod	1

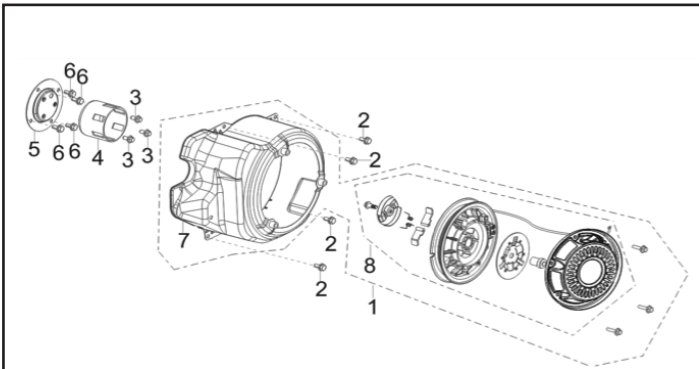


Fig. 7 - Recoil Starter

Fig. No.	Part No.	Description	Qty.
7-1	56380i-0701	Recoil Starter Assembly	1
7-2	56200-1202	Bolt	4
7-3	56200-0706	Bolt	3
7-4	56380i-0704	Starter Pulley	1
7-5	56380i-0705	Starter Cup Seat	1
7-6	56200-0502	Bolt	4
7-7	56380i-0707	Shroud	1
7-8	56380i-0708	Recoil Starter	1

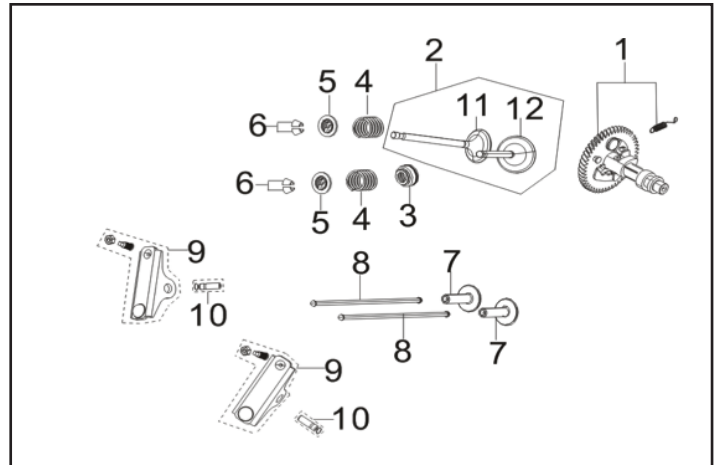


Fig. 6 - Valve Train & Camshaft Subassembly

Fig. No.	Part No.	Description	Qty.
6-1	56380i-0601	Camshaft Assembly	1
6-2	56380i-0602	Valve Set	1
6-12	56380i-0602.1	Intake Valve	1
6-11	56380i-0602.2	Exhaust Valve	1
6-3	56310i-0603	Seal Guide	1
6-4	56310i-0604	Valve Spring	2
6-5	56380i-0605	Valve Spring Seat	2
6-6	56310i-0606	Valve Lock Clamp	4
6-7	56310i-0607	Valve Tappet	2
6-8	56380i-0608	Valve Lifter Subassembly	2
6-9	56380i-0609	Valve Rocker Arm	2
6-10	56380i-0610	Rocker Shaft	2

EXPLODED VIEW & PARTS LIST

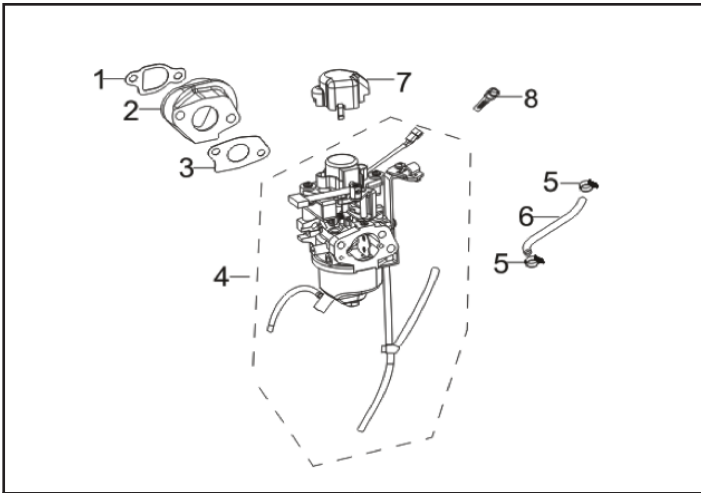


Fig. 8 - Carburetor Assembly

Fig. No.	Part No.	Description	Qty.
8-1	56380i-0801	Carburetor Insulator Gasket	1
8-2	56380i-0802	Carburetor Insulator Plate	1
8-3	56380i-0803	Carburetor Gasket	1
8-4	56380i-0804	Carburetor Assembly	1
8-5	56380i-0805	Clamp	2
8-6	56380i-0806	Fuel Tube	1
8-7	56200-0103	Cap	1
8-8	56200-1305	Fuel Strainer	1

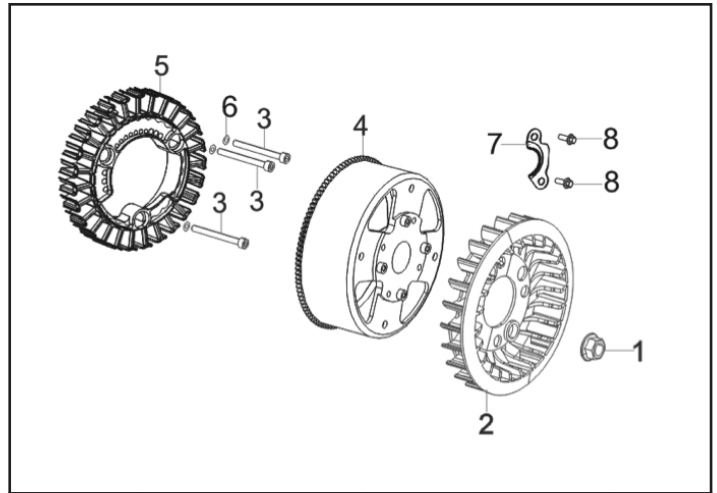


Fig. 9 - Rotor/Stator Assembly

Fig. No.	Part No.	Description	Qty.
9-1	56310i-1101	Flywheel Nut	1
9-2	56380i-0902	Impeller	1
9-3	56310i-1103	Bolt	3
9-4	56380i-0904	Rotor	1
9-5	56380i-0905	Stator	1
9-6	56380i-0906	Flat Washer	3
9-7	56380i-0907	Wiring Clamp	1
9-8	56310i-0207	Bolt	2

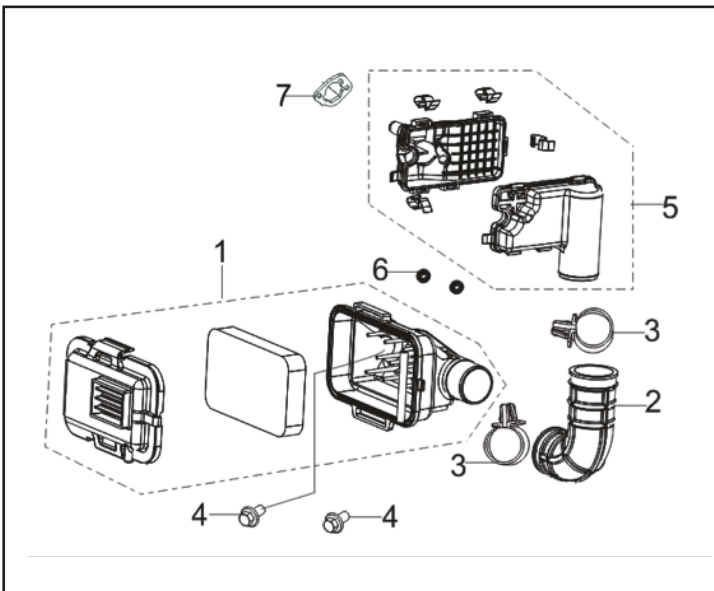


Fig. 10 - Air Filter Assembly

Fig. No.	Part No.	Description	Qty.
10-1	56380i-1001	Air Filter Assembly	1
	56380i-1001.1	Air Filter Element	1
10-2	56380i-1002	Intake Tube	1
10-3	56380i-1003	Intake Tube Clamp	2
10-4	56310i-1420	Bolt	2
10-5	56380i-1005	Secondary Air Filter	1
10-6	56200-0506	Nut	2
10-7	56310i-0901	Air Filter Gasket	1

EXPLODED VIEW & PARTS LIST

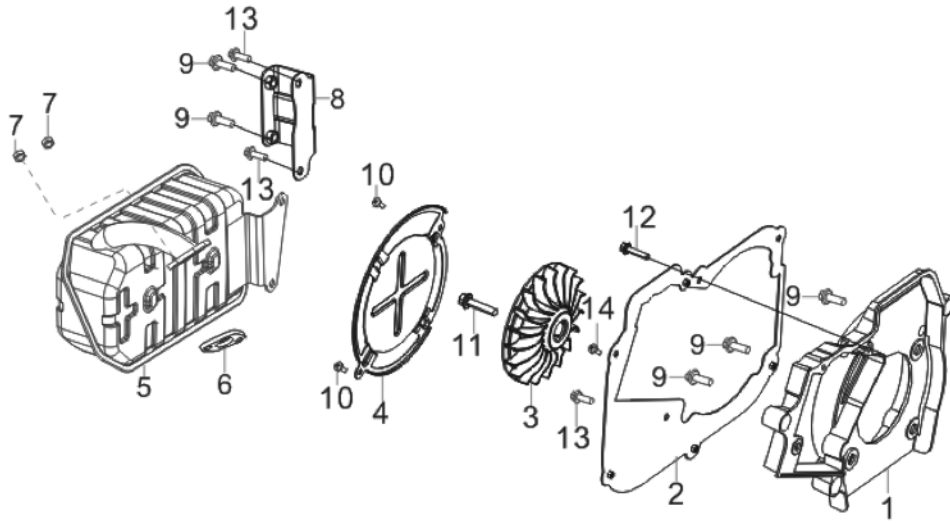
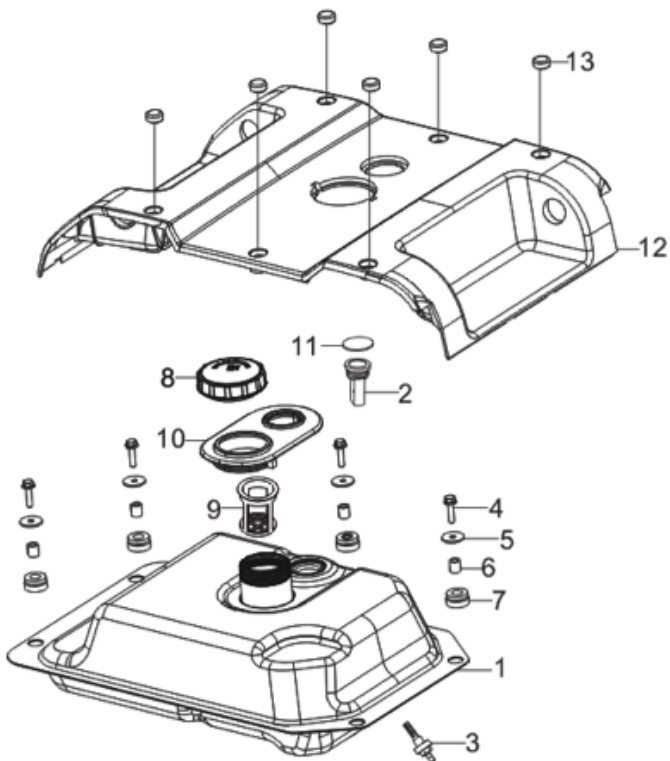


Fig. 11 - Muffler Assembly

Fig. No.	Part No.	Description	Qty.
11-1	56380i-1101	Shroud	1
11-2	56380i-1102	Muffler Cover Support	1
11-3	56380i-1103	Impeller	1
11-4	56380i-1104	Muffler Insulation Plate	1
11-5	56380i-1105	Muffler Assembly	1
11-6	56380i-1106	Muffler Gasket	1
11-7	56310i-1010	Nut	2
11-8	56380i-1108	Muffler Bracket	1
11-9	56310i-1009	Bolt	5
11-10	56380i-1110	Bolt	2
11-11	56310i-1004	Bolt	1
11-12	56380i-1112	Bolt	1
11-13	56200-0508	Bolt	3
11-14	56380i-1114	Bolt	1
N/A	56380i-1115	Spark Arrestor	1

EXPLODED VIEW & PARTS LIST

Fig. 12 - Fuel Tank Assembly			
Fig. No.	Part No.	Description	Qty.
12-1	56380i-1201	Fuel Tank Assembly	1
12-2	56380i-1202	Fuel Gauge	1
12-3	56380i-1203	Fuel Tank Outlet	1
12-4	56310i-1701	Bolt	4
12-5	56380i-1205	Flat Washer	4
12-6	56380i-1206	Bushing	4
12-7	56380i-1207	Fuel Tank Damper	4
12-8	56380i-1208	Fuel Tank Cap	1
12-9	56380i-1209	Fuel Strainer	1
12-10	56380i-1210	Fuel Tank Sleeve	1
12-11	56200-0413	Fuel Level Sight Glass	1
12-12	56380i-1212	Upper Cover	1
12-13	56380i-1213	Cover Plug	1



EXPLODED VIEW & PARTS LIST

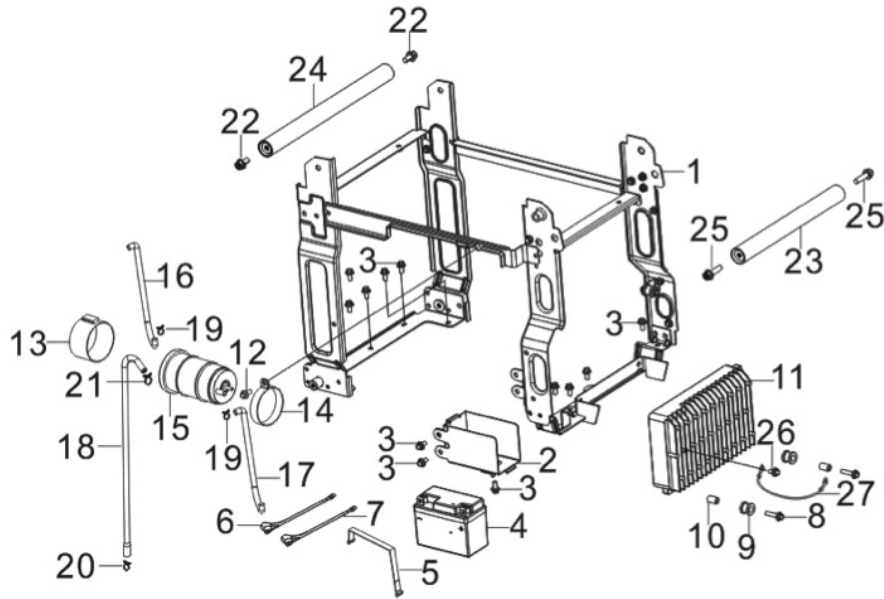


Fig. 13 - Frame

Fig. No.	Part No.	Description	Qty.	Fig. No.	Part No.	Description	Qty.
13-1	56380i-1301	Engine Frame Assembly	1	13-14	56380i-1314	Carbon Tank Mounting Bracket	1
13-2	56380i-1302	Battery Case	1	13-15	56380i-1315	Carbon Tank	1
13-3	56380i-1303	Bolt	12	13-16	56380i-1316	Carbon Tank Hose, Primary	1
13-4	56380i-1304	Battery	1	13-17	56380i-1317	Air Filter Hose	1
13-5	56380i-1305	Battery Bracket	1	13-18	56380i-1318	Carbon Tank Hose, Secondary	1
13-6	56380i-1306	Anode Wire (Negative)	1	13-19	56380i-1319	Clamp	2
13-7	56380i-1307	Cathode Wire (Positive)	1	13-20	56380i-1320	Clamp	1
13-8	56310i-1420	Bolt	2	13-21	56380i-1321	Clamp	1
13-9	56310i-1419	Bushing	2	13-22	56310i-1009	Bolt	2
13-10	56310i-1421	Rubber Jacket	2	13-23	56380i-1323	Front Handle	1
13-11	56380i-1311	Inverter	1	13-24	56380i-1324	Handle	1
13-12	56310i-1425	Bolt	1	13-25	56380i-1325	Bolt	2
13-13	56380i-1313	Rubber Sleeve	1	13-26	56380i-1326	Screw	1
				13-27	56380i-1327	Grounding Wire	1

EXPLODED VIEW & PARTS LIST

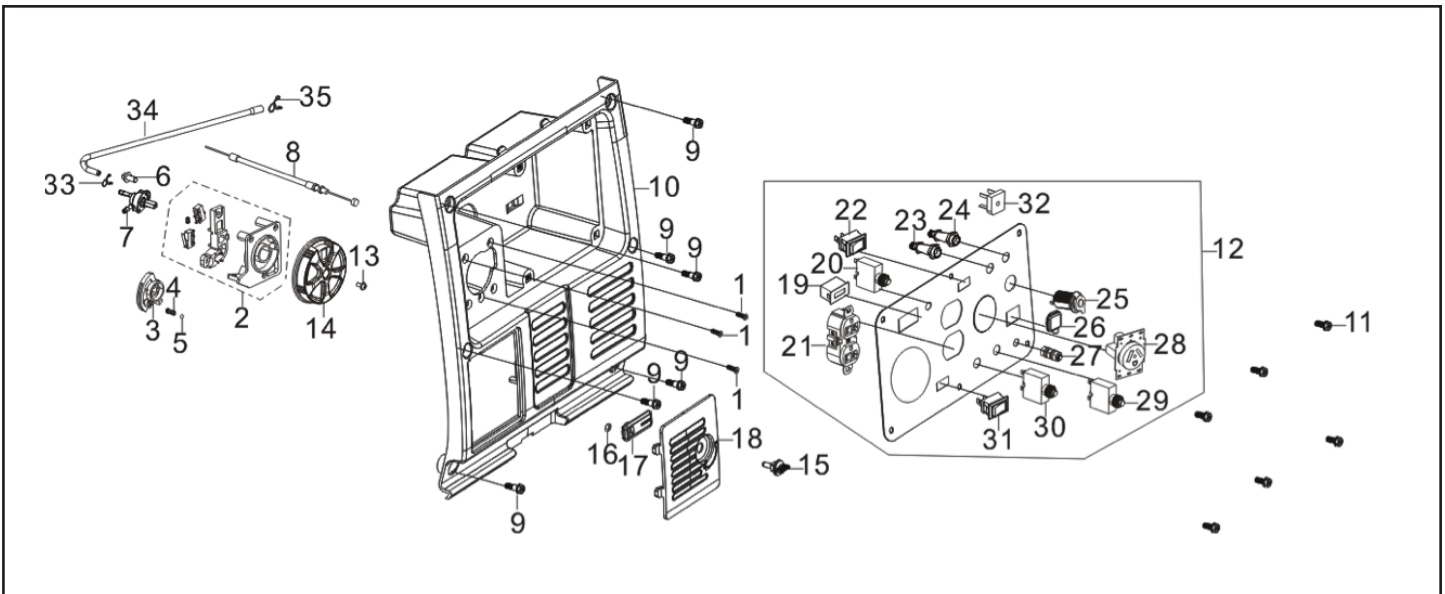


Fig. 14 - Control Panel Assembly

Fig. No.	Part No.	Description	Qty.	Fig. No.	Part No.	Description	Qty.
14-1	56200-0615	Screw	3	14-19	56380i-1419	Multimeter	1
14-2	56380i-1402	Switch Subassembly	1	14-20	56380i-1420	Reset Button	1
14-3	56200-0621B	Cover Plate	1	14-21	56380i-1421	NEMA 5-20R Duplex Outlet	1
14-4	56200-0624B	Adjustment Spring	1	14-22	56380i-1422	Switch Subassembly	1
14-5	56200-0623	Steel Ball	1	14-23	56380i-1423	Parallel Port, Negative	1
14-6	56200-0502	Bolt	1	14-24	56380i-1424	Parallel Port, Positive	1
14-7	56200-0628	Fuel Cock Assembly	1	14-25	56380i-1425	12V DC Outlet	1
14-8	56310i-1628	Choke Handle Subassembly	1	14-26	56380i-1426	USB Outlet	1
14-9	56380i-1409	Bolt	6	14-27	56380i-1427	Grounding Nut	1
14-10	56380i-1410	Panel Seat	1	14-28	56380i-1428	NEMA TT-30R Outlet	1
14-11	56200-0302	Screw And Washer	6	14-29	56380i-1429	DC Breaker, 10A	1
14-12	56380i-1412	Control Panel Subassembly	1	14-30	56380i-1430	AC Breaker, 20A	1
14-13	56200-0514	Screw	1	14-31	56380i-1431	Switch Subassembly	1
14-14	56380i-1414	Knob	1	14-32	56380i-1432	Rectifier Bridge	1
14-15	56200-0425B	Bolt	1	14-33	56380i-1433	Clamp	1
14-16	56200-0427B	Nylon Nut	1	14-34	56380i-1434	Fuel Tube	1
14-17	56380i-1417	Blocker	1	14-35	56380i-1435	Clamp	1
14-18	56380i-1418	Battery Cover	1				

EXPLODED VIEW & PARTS LIST

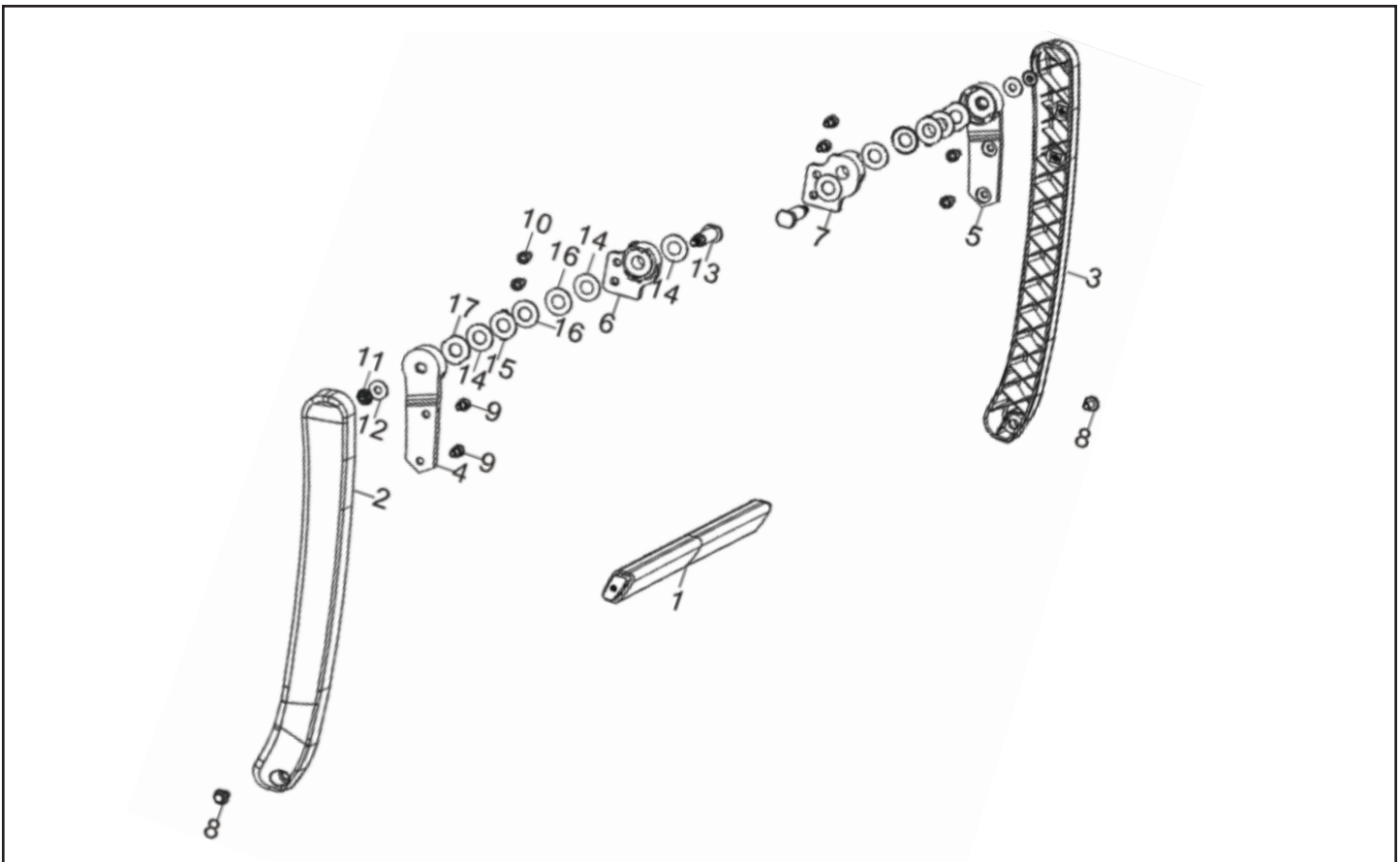


Fig. 15 - Handle

Fig. No.	Part No.	Description	Qty.	Fig. No.	Part No.	Description	Qty.
15-1	56380i-1501	Handle Tube	1	15-9	56380i-1509	Bolt	4
15-2	56380i-1502	Left Rotation Arm	1	15-10	56310i-0209	Bolt	4
15-3	56380i-1503	Right Rotation Arm	1	15-11	56310i-1807	Nylon Nut	2
15-4	56380i-1504	Left Handle Connector	1	15-12	56380i-1512	Flat Washer	2
15-5	56380i-1505	Right Handle Connector	1	15-13	56380i-1513	Connector Fastener	2
15-6	56380i-1506	Left Handle Connector Seat	1	15-14	56380i-1514	Flat Washer	6
15-7	56380i-1507	Right Handle Connector Seat	1	15-15	56380i-1515	Positioning Block	2
15-8	56200-0517	Bolt	2	15-16	56380i-1516	Washer	4
				15-17	56380i-1517	Flat Washer	2
				N/A	56380i-1500ASM	Handle Assembly	1

EXPLODED VIEW & PARTS LIST

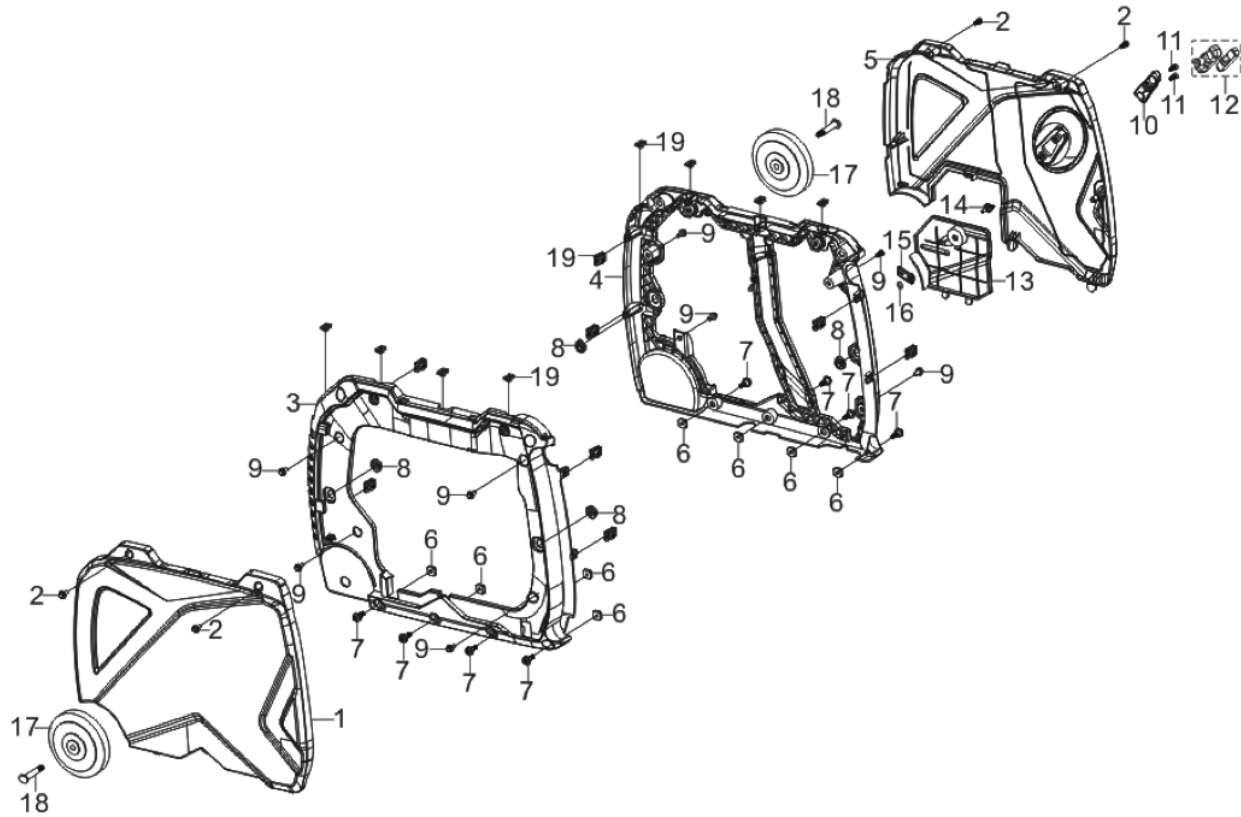


Fig. 16 - Side Covers

Fig. No.	Part No.	Description	Qty.	Fig. No.	Part No.	Description	Qty.
16-1	56380i-1601	Left Cover	1	16-11	56200-0612	Screw And Washer	2
16-2	56200-0406	Bolt	4	16-12	56200-0420	Recoil Starter Handle	1
16-3	56380i-1603	Left Shell	1	16-13	56380i-1613	Right Maintenance Door	1
16-4	56380i-1604	Right Shell	1	16-14	56200-0425B	Bolt	1
16-5	56380i-1605	Right Cover	1	16-15	56380i-1615	Maintenance Door Lock	1
16-6	56200-0408	Nut	8	16-16	56200-0427B	Nut	1
16-7	56380i-1607	Bolt	8	16-17	56380i-1617	Wheel	2
16-8	56200-0515	Fuel Tank Rubber Sleeve	4	16-18	56380i-1618	Wheel Axle	2
16-9	56200-0508	Bolt	8	16-19	56380i-1619	Nut	16
16-10	56380i-1610	Recoil Starter Guide Subassembly	1				

EXPLODED VIEW & PARTS LIST

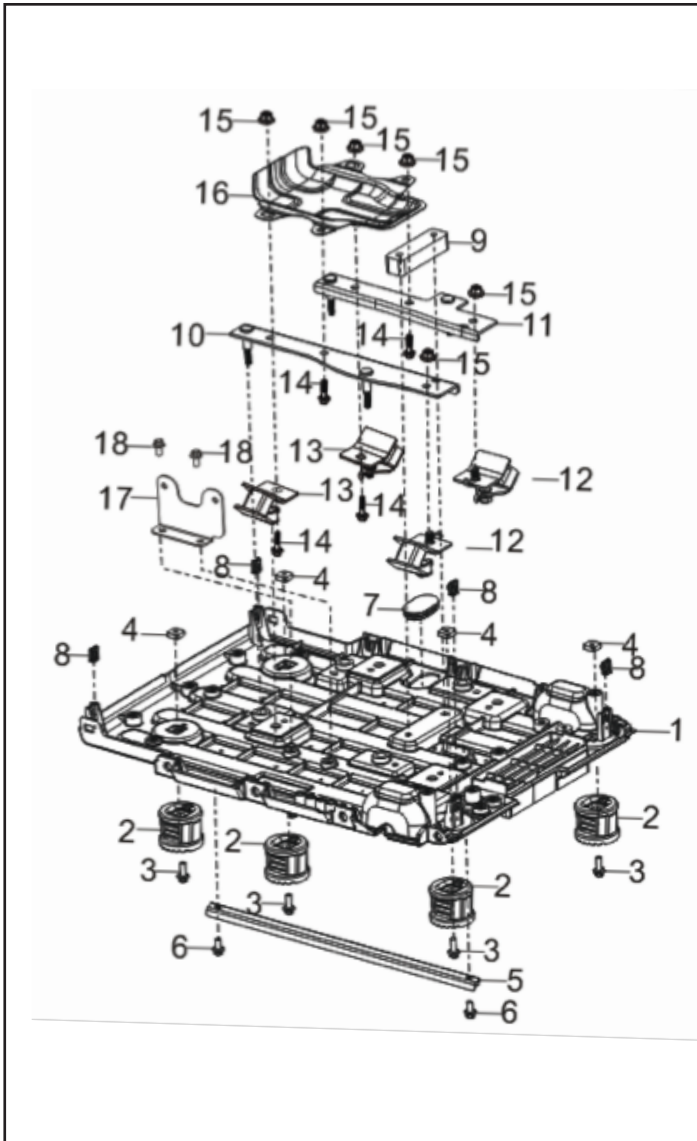


Fig. 17 - Baseplate

Fig. No.	Part No.	Description	Qty.
17-1	56380i-1701	Baseplate	1
17-2	56380i-1702	Engine Frame Damper Seat	4
17-3	56310i-0209	Bolt	4
17-4	56200-0505	Nut	4
17-5	56380i-1705	Reinforcement Plate	1
17-6	56200-0508	Bolt	2
17-7	56310i-1407	Cover Plug	1
17-8	56380i-1708	Nut	4
17-9	56380i-1709	Cushion	1
17-10	56380i-1710	Left Support	1
17-11	56380i-1711	Right Support	1
17-12	56310i-1409	Left Engine Frame Damper	2
17-13	56310i-1411	Right Engine Frame Damper	2
17-14	56310i-1412	Bolt	4
17-15	56310i-1404	Nut	10
17-16	56380i-1716	Crankcase Airflow Manifold	1
17-17	56380i-1717	Air Filter Support	1
17-18	56200-0508	Bolt	2

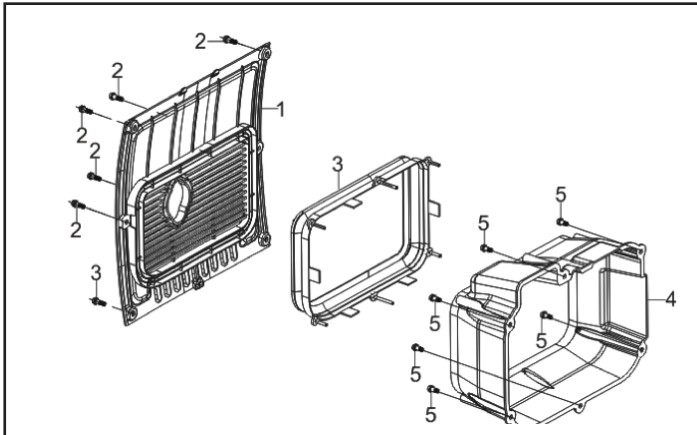


Fig. 18 - Muffler Cover

Fig. No.	Part No.	Description	Qty.
18-1	56380i-1801	Outer Muffler Cover	1
18-2	56380i-1802	Bolt	6
18-3	56380i-1803	Heat Insulator	1
18-4	56380i-1804	Inner Muffler Cover	1
18-5	56200-0406	Bolt	6

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.

WARRANTY STATEMENT

REMEMBER TO SAVE THE RECEIPT. PROOF OF PURCHASE IS REQUIRED FOR ALL WARRANTY WORK.

WEN® Generators are under warranty to be free from defects in materials and workmanship for a period of two (2) years from date of original purchase. Generators used for Commercial or Rental use have a warranty period of 90 days from date of original purchase. Keep purchase receipt and mail in the product registration card for proof of purchase.

WEN® will repair or replace, at its discretion, any part that is proven to be defective in materials or workmanship under normal use during the two (2) years warranty period. Warranty repairs or replacements will be made without charge for parts or labor. Parts replaced during warranty repairs will be considered as part of the original product and will have the same warranty period as the original product.

To exercise the warranty, **DO NOT RETURN TO RETAILER**. Instead, call the toll free Customer Service number at (800) 232-1195 and you will be instructed on where to take the generator for warranty service. Take the generator and proof of purchase (the receipt) to the repair facility recommended by the Customer Service Representative. To make a claim under this Limited Warranty, you must make sure to keep a copy of your proof of purchase that clearly defines the Date of Purchase (month and year) and the Place of Purchase. Place of purchase must be a direct vendor of Great Lakes Technologies, LLC. Third party vendors such as garage sales, pawn shops, resale shops, or any other secondhand merchant void the warranty included with this product. Contact techsupport@wenproducts.com or 1-800-232-1195 to make arrangements for repairs and transportation.

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

NOTE: THIS LIMITED WARRANTY DOES NOT APPLY TO ACCESSORY ITEMS THAT WEAR OUT FROM REGULAR USAGE OVER TIME INCLUDING BELTS, BRUSHES, BLADES, ETC.

The warranty does not extend to generators damaged or affected by fuel contamination, accidents, neglect, misuse, unauthorized alterations, use in an application for which the product was not designed and any other modifications or abuse. Labor for warranty parts is only covered for the contiguous United States (48 states).

WEN® is not liable for any indirect, incidental or consequential damages from the sale or use of this product. Any implied warranties are limited to two (2) years as stated in this written limited warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages. Some states do not allow limitation on the length of an implied warranty. This warranty gives you specific legal rights, and you may have other rights that vary from state to state.

**THANKS FOR
REMEMBERING**

