

GEN2000LP

2000 Surge Watts / 1350 Running Watts

LPG PORTABLE GENERATOR

INSTRUCTION MANUAL



READ ALL INSTRUCTIONS AND WARNINGS BEFORE USING THIS PRODUCT.

This manual provides important information on proper operation & maintenance. Every effort has been made to ensure the accuracy of this manual. These instructions are not meant to cover every possible condition and situation that may occur. We reserve the right to change this product at any time without prior notice.

**IF THERE IS ANY QUESTION ABOUT A CONDITION BEING SAFE OR UNSAFE,
DO NOT OPERATE THIS PRODUCT!**

DO NOT RETURN THIS PRODUCT TO THE RETAILER - CONTACT CUSTOMER SERVICE.

If you experience a problem, have questions or need parts for this product, visit our website <http://www.buffalotools.com> or call Customer Service at 1-866-460-9436, Monday-Friday, 8 AM - 4 PM Central Time. A copy of the sales receipt is required.

FOR CONSUMER USE ONLY – NOT FOR PROFESSIONAL USE.

KEEP THIS MANUAL, SALES RECEIPT & APPLICABLE WARRANTY FOR FUTURE REFERENCE.



SEEK THE ADVISE OF A LICENSED ELECTRICIAN FOR 120V WIRING

Model GEN2000LP 2000 Surge Watts / 1350 Running Watts LPG (Liquid Propane) Portable Generator

This unit is a LPG driven generator.

FEATURES:

- 2000 Surge Output
- 1350 Running Watts
- 120 Volt Operation
- 2.8 HP Engine, 4 Stroke OHV
- Air Cooled
- Recoil Start
- Spark Arrestor
- UL Listed Electrical Components
- Engine Shut Off Switch
- 1-12V DC Outlet
- 1-120V Outlets
- EPA –approved
- Run time = 12 hrs @ 50% load per 20 lbs of LPG fuel
- Fuel type- Liquid Propane Gas Only
- Propane Tank Not Included
- Decibel Rating: < 65 db



THIS ENGINE MEETS U.S. EPA EMISSION STANDARDS UNDER 40 CFR 1054.625 . Emission compliance period is 125 hours. Keep the purchase receipt and mail in the product registration card for proof of purchase. NB Corp limits emission-related warranty repairs to authorized service centers for owners located within 100 miles of an authorized service center. For owners located more than 100 miles from an authorized service center, NB Corp will, in its sole discretion, either pay for shipping costs to and from an authorized service center, provide for a service technician to come to the owner to make the warranty repair, or pay for the repair to be made at a local non-authorized service center. The provisions of this paragraph apply only for the contiguous states, excluding the states with high-altitude areas identified in 40 CFR part 1054, Appendix III. To exercise this warranty, **DO NOT RETURN TO RETAILER.** Instead, **call Customer Service toll free at 1-866-460-9436 (email address info@buffalotools.com)** and you will be instructed on where to take the engine for warranty service. Take the generator and proof of purchase (your receipt) to the repair facility recommended by the Customer Service Representative. 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.

1 YEAR LIMITED WARRANTY Generators are warranted to be free from defects in materials and workmanship for a period of 1 year from date of original purchase. NB Corp. is not liable for any indirect, incidental or consequential damages from the sale or use of this product. Any implied warranties are limited to 1 year as stated, or as otherwise 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. NB Corp will repair or replace, at its discretion, any part that is proven to be defective in materials or workmanship under normal use during the 1 year 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. This warranty gives you specific legal rights, and you may have other rights that vary from state to state.

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RECOGNIZE SAFETY SYMBOLS, WORDS AND LABELS

What You Need to Know About Safety Instructions

Warning and Important Safety Instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when operating or cleaning tools and equipment.

Always contact your dealer, distributor, service agent or manufacturer about problems or conditions you do not understand.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.



SEEK THE ADVICE OF A LICENSED ELECTRICIAN FOR 120V WIRING

Legal Requirements:

Federal and/or State Occupational Safety and Health Administration (OSHA) regulations, local codes, and/or ordinances may apply to the intended use of this generator. Consult a qualified electrician, electrical inspector, and/or the local agency having jurisdiction. Some areas require generators to be registered with local utility companies. Additional regulations may apply if this generator will be used at a construction site.

IMPORTANT SAFETY INSTRUCTIONS

STOP!

Before using this generator and if you have any questions regarding the hazard and safety notices listed in this manual and/or on this generator, call 1-866-460-9436, Monday - Friday, 8 AM - 4 PM Central Time.

DANGER

Carbon Monoxide Gas: When in operation, the exhaust from this generator contains poisonous carbon monoxide gas. Carbon monoxide gas is both odorless and colorless AND may be present even if you do not see or smell gas. Breathing this poison gas can lead to headaches, dizziness, drowsiness, loss of consciousness and eventually death.

- USE THIS GENERATOR ONLY OUTDOORS IN NON-CONFINED AREAS. DO NOT SECURE THE GENERATOR WITH A CHAIN OR ROPE, AS THIS WILL MAKE IT DIFFICULT TO MOVE IN AN EMERGENCY.
- Keep at least several feet of clearance on all sides to allow proper ventilation for this generator.

WARNING

Chemicals: According to the State of California, the exhaust from this generator contains chemicals known to cause cancer, birth defects, or other reproductive harm.

WARNING

Propane (LPG): This generator may emit highly flammable and explosive vapors, which can cause severe burns or even death. A nearby open flame can lead to an explosion even if not directly in contact the fuel.

- Do not operate this generator near open flame.
- Always operate this generator on a firm, level surface.

This fuel is highly flammable and explosive. Handling fuel can result in serious injury or burns.

- Before starting the generator, inspect your LPG tank and NG pipeline and valve for damage or leaks, attach only approved tanks that have been properly filled by an approved station, DO NOT light or smoke cigarette. Replace the hose at the first sign of a leak or if age-cracking becomes apparent.
- Always handle propane fuel and generator outdoors.
- Before transporting, turn the fuel valve to the "off" position and disconnect the spark plug.

DANGER

Powerful Voltage: This generator produces powerful voltage, which can result in electrocution.

- ALWAYS ground this generator before using it. (See "Ground the Generator" section in this manual).
- Only electrical devices should be plugged into this generator, either directly or with an extension cord. NEVER connect a building electrical system to this generator without a qualified electrician. **Doing so voids your warranty.** Such connections must isolate generator power from utility power and comply with local electrical laws and codes. Failure to comply can create a back feed into utility lines creating an electrocution hazard, which may result in serious injury or death to utility workers. Such a back feed may cause this generator to explode, burn and create fires when utility power is restored.
- Do not use this generator in wet conditions (rain, snow, active sprinkler system, wet hands, etc.). Always keep this generator dry and operate it with dry hands.
- Do not touch bare wires or outlets (receptacles).
- Do not allow children or non-qualified persons to operate this generator.

DANGER

High Temperatures: This generator produces heat when in operation. Temperatures near the exhaust can exceed 150 Degrees Fahrenheit (65 Degrees Celsius).

- Do not touch hot surfaces. Observe all warning placards on this generator denoting hot surfaces.
- Allow this generator to cool for several minutes after use before touching the engine, muffler or other areas that are hot during operation and before storing indoors.
- Hot exhaust may ignite some materials. Keep flammable materials away from this generator.
- Keep at least several feet of clearance on all sides of this generator during operation. Do not enclose this generator in any structure.

CAUTION

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

- Use this generator only for its intended purpose.
- Operate this generator only on a dry, level surface.
- Allow this generator to run for several minutes before connecting any electrical devices.
- Promptly turn off any malfunctioning devices and disconnect them.
- Do not operate an excessive number of electrical devices in excess of the wattage capacity of this generator.
- Do not turn on electrical devices until *after* they are connected to this generator.
- Turn off all connected electrical devices before stopping this generator.

WARNING

Usage: Consult a physician(s) before using this generator if using a pacemaker. Electromagnetic fields in close proximity to a heart pacemaker could cause a pacemaker to malfunction or fail. Caution is necessary when near the engine's recoil starter.

CAUTION

Usage: Prolonged exposure to high noise levels can be hazardous to hearing. Always wear ANSI-approved hearing protection when operating or working around the generator when it is running.

CAUTION

Usage: This generator is not intended to power sensitive electronic equipment such as TVs, DVD players, stereos, desktop computers or laptop computers without the use of an appropriate line conditioner and/or surge protector (both not included). Sensitive electronic equipment should be operated on approved inverter type generators or pure sine wave generators. For additional information consult the devices operation manual or call customer service at 1-866-460-9436 Monday - Friday, 8 AM - 4 PM Central Time.

WARNING

Usage: Avoid the use of extension cords if possible. If you choose to use them, be sure they are sized adequately to handle the flow of electricity. An undersized cord can overheat, short out and cause a fire.



WARNING

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



DANGER

EXHAUST CONTAINS POISONOUS CARBON MONOXIDE GAS THAT CAN BUILD UP TO DANGEROUS LEVELS IN CLOSED AREAS. BREATHING CARBON MONOXIDE CAN CAUSE UNCONSCIOUSNESS OR DEATH. Never run the generator in a closed or even partly closed area where people may be present.



WARNING

IMPROPER CONNECTIONS TO A BUILDING CAN ALLOW ELECTRICAL CURRENT TO BACKFEED INTO UTILITY LINES, CREATING AN ELECTROCUTION HAZARD. Connections to a building must isolate generator power from utility power and comply with all applicable laws and electrical codes.

In addition to the previously described safety information, familiarize yourself with all safety and hazard placards on this generator.

⚠ DANGER POISONOUS GAS

Generator exhaust contains toxic carbon monoxide gas. Breathing exhaust can cause loss of consciousness and shortness of breath. NEVER operate generator in poorly ventilated areas.

⚠ WARNING

Risk of electric shock. Do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

⚠ WARNING! RISK OF ELECTRIC SHOCK

This generator produces high voltage.
 Always ground properly before use.
 Do not connect to any building electrical system.
 Never use in rainy or wet conditions.
 Never touch bare wires or receptacles.
 Never allow children or non-qualified person to operate.



⚠ CAUTION! HOT EXHAUST

⚠ DO NOT TOUCH

⚠ CAUTION!
HIGH TEMPERATURE
DO NOT TOUCH

⚠ DANGER

Using a generator indoors CAN KILL YOU IN MINUTES.
 Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.

NEVER use inside a home or garage. EVEN IF doors and windows are open.




Only use OUTSIDE and far away from windows, doors, and vents.

PACKAGE CONTENTS

The following items are supplied with this Model GEN2000LP 2000 Surge Watts / 1350 Running Watts Portable LP Generator. Verify that all items are included.

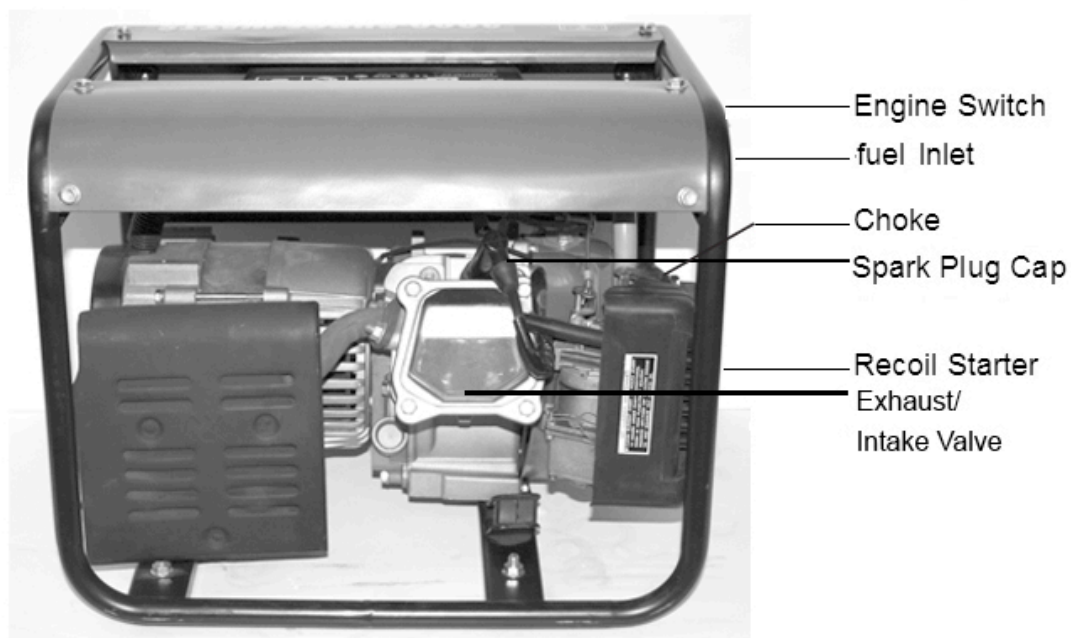
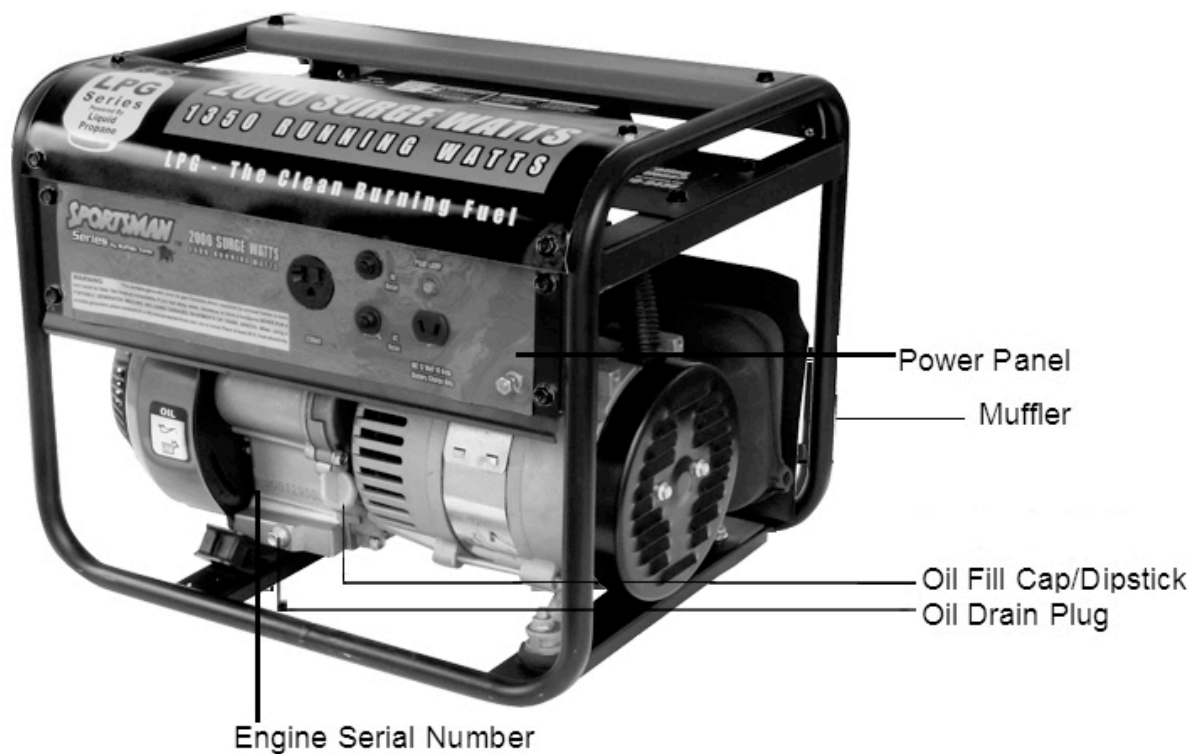
STOP!

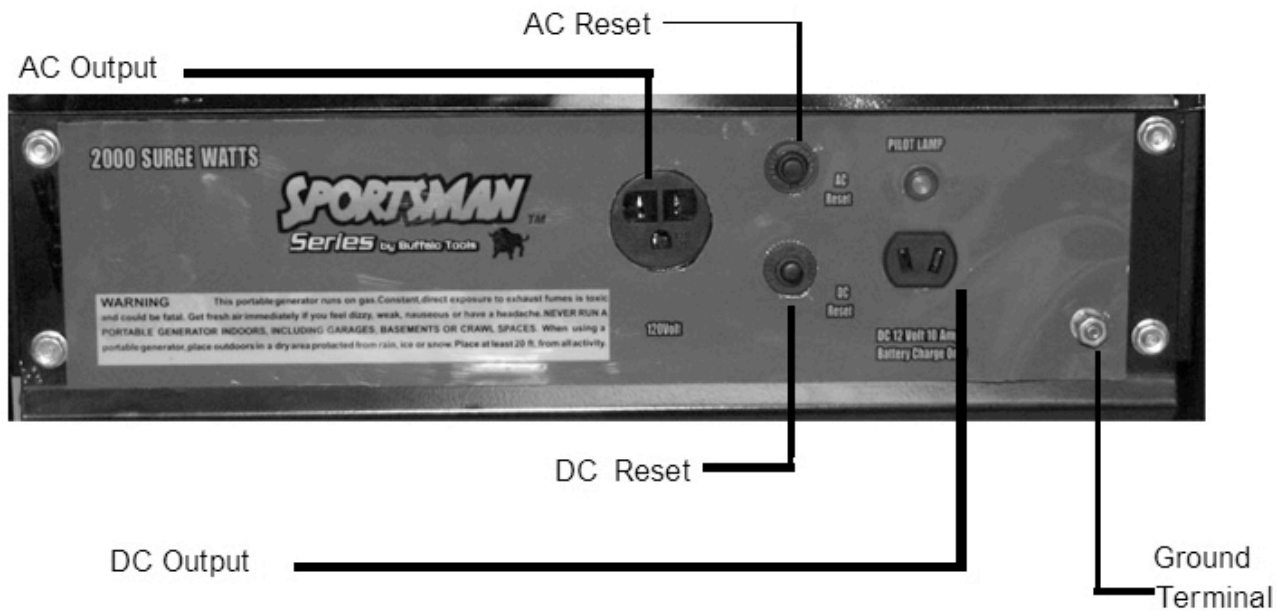
If there are missing items, call 1-866-460-9436, Monday - Friday, 8 AM - 4 PM Central Time for customer service. DO NOT RETURN THIS GENERATOR TO THE RETAILER.

Item List:	
	Set of 2 DC connector wires for connecting 12 Volt automotive-type batteries
	Spark plug wrench
	5 Ft. Regulator Hose Kit

GENERATOR COMPONENTS

Observe the locations and functions of the various components and controls of this generator.





The Air Filter is not adjustable. Tampering with the governor can damage your generator and your electrical devices, and will void your warranty.

To prevent electrical shock from faulty appliances, the generator should be grounded. Connect a length of heavy wire between the ground terminal and the ground source. Consult with a qualified electrician to ensure compliance with local electrical codes.

PREPARING THE GENERATOR FOR USE

Using this Generator for the First-Time

STOP!

CAUTION

The following section describes the required steps for preparing this generator for the first use. Failure to correctly perform these steps can damage this generator and/or shorten its life. If still unsure about how to perform any of these steps after reading this section, call 1-866-460-9436 Monday - Friday, 8 AM - 4 PM Central Time for customer service.

If this generator is being used for the first time, the following few steps are required to prepare it for operation:

Step 1 - Add Oil

This generator requires engine oil to function. Engine oil is a major factor affecting engine performance and service life. When new from the package, this generator contains no oil in the engine crankcase. The correct quantity of oil is equal to the oil capacity of the engine crankcase and is 14 fluid oz for this model GEN2000LP 2000 Surge Watts / 1350 Running Watts Portable LP Generator. Add the correct quantity of oil before operating this generator for the first time. When replenishing oil for subsequent use of this generator, always determine that this generator has the correct quantity of oil.

Model GEN2000LP Oil Capacity	14 ounces
Model GEN2000LP Oil Type Recommended	High Detergent Motor Oil, SAE10W-30

To add oil:

1. Confirm that this generator is on a level surface.
2. Unscrew the oil filler/dipstick cap from the engine as illustrated in Figure 1.
3. Using a funnel, add high detergent motor oil to fill the engine crankcase to the correct quantity as stated above. SAE10W-30 oil is recommended for general, all-temperature use. When the engine crankcase is full, the oil level should reach the lower lip of the oil filling opening as illustrated in Figure 2.
4. Replace the oil filler/dipstick cap.

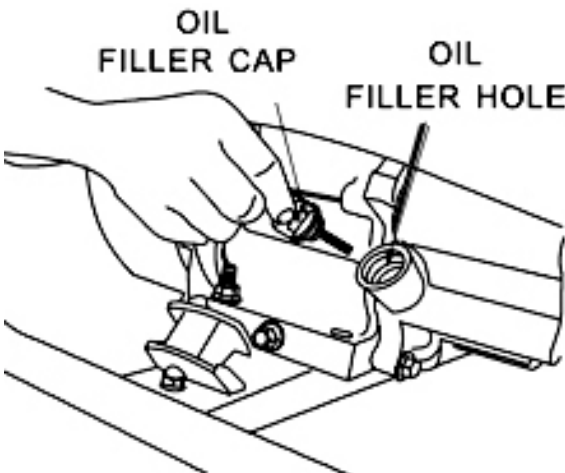


Figure 1 - Unscrewing the Oil Cap



Figure 2 - Adding Oil

Step 2 – Connect Fuel

WARNING

Sulfur, water, dust, etc. are harmful for engine. If the gas supply source (LPG) contains these harmful elements, user must use filter to remove sulfur, water etc. and clean gas. Otherwise, the engine service lifetime will be shortened.

Connect Propane Gas Supply Source

Step 1: Keep gas supply source closed.

Step 2: Fix two clips on the both ends of approved gas pipeline.

Step 3: Attached the gas pipeline to GAS INLET and gas supply source.

Step 4: Use screwdriver to tighten the clip at each end of gas pipeline until it's not easy to pull down from gas pipeline and prevent gas leaking.

All gas pipe joints should be tightly secured before operating the machine.
Check the joints and gas hose for leakage or breaks, replace the damaged joints and hose if necessary.
Check the gas pipeline for any damages every 18 months.
Place the LPG cylinder vertically.



Pre-Operation Check List

Step 1 Check that the gas supply source is in good condition. Check that the gas inlet connection is tightly fixed and not leaking.

Step 2 CHOKE VALVE GRIP is at CHOKE (CLOSE) position. The generator may be hard to start if CHOKE VALVE GRIP is at RUN (OPEN) position.

Step 3 Check if engine oil is full.

Step 4 Make sure GROUND TERMINAL is properly grounded.

Step 5 AC CIRCUIT BREAKER must be at OFF position

Step 6 AC OUTPUT no load connected.
Disconnect all electrical loads from the generator set before starting the engine. The generator may be hard to start if a load is connected.

Step 7 DC OUTPUT no load connected.

Step 3 - Ground the Generator

WARNING

Failure to properly ground this generator can result in electrocution.

Ground this generator by tightening the grounding nut against a grounding wire as illustrated in Figure 3. A No. 12 AWG (American Wire Gauge) stranded copper wire is generally an acceptable grounding wire. The other end of this grounding wire should be connected to a copper or brass grounding rod that is driven into the earth.

Grounding codes can vary by location. Contact a local electrician for information on grounding regulations for your area.



Figure 3 - Attaching the Grounding Wire to this Generator

Subsequent Use of this Generator

For subsequent uses of this generator after the first use, certain steps still must be completed to prepare it for operation.

IMPORTANT: Be familiar with the procedures described in the previous section titled “Using the Generator for the First Time” of this manual. If not, review this section now.

Step 1 - Verify Oil Level

Even though this generator is equipped with an automatic shutoff to protect it from damage due to low oil, it is important to check the oil level in the engine crankcase before each use to ensure that there is sufficient quantity.

1. Verify that this generator is on a level surface.
2. Unscrew the oil filler/dipstick cap from the engine.
3. With a dry cloth, wipe the oil off of the dipstick that is located on the inside of the cap.
4. Fully insert the dipstick without screwing the filler/dipstick cap and then remove again. There should be oil on the dipstick. If there is no oil on the dipstick, or oil is visible only at the very end of the dipstick, add oil until the engine crankcase is filled. (See “Changing/Adding Oil” in the “Maintenance/Care” section of this manual).
5. Confirm that the oil filler/dipstick cap is properly screwed in place when finished verifying the oil level.

NOTE: The oil capacity for this Model GEN2000LP 2000 Surge Watts / 1350 Running Watts Portable LP Generator is 14 oz (US).

Model GEN2000LP Oil Capacity	14 ounces
Model GEN2000LP Oil Type Recommended	High Detergent Motor Oil, SAE 10W-30

Step 3 - Ground the Generator

WARNING

Failure to properly ground this generator can result in electrocution.

Ground this generator by tightening the grounding nut against a grounding wire as previously illustrated in Figure 3. A generally acceptable grounding wire is a No. 12 AWG (American Wire Gauge) stranded copper wire. The other end of this grounding wire should be connected to a copper or brass grounding rod that is driven into the earth. Grounding codes can vary by location. Contact a local electrician for information on grounding regulations for your area.

STARTING THE GENERATOR

STOP!

Before starting this generator, confirm that all the steps in the section titled, "Preparing the Generator for Use," of this manual have been correctly completed. If unsure about how to perform any of these steps, call 1-866-460-9436, Monday - Friday, 8 AM - 4 PM Central Time for customer service.

CAUTION

Disconnect all electrical loads from this generator before attempting to start.

Step 01



Step 02



Step 03



Step 04



Step 05



Step 1 Open fuel supply source.

Step 2 Turn ENGINE SWITCH at ON position.

Step 3 Move Choke Lever to CHOKE position.

Step 4 For recoil start: Pull the STARTER GRIP slowly until resistance is felt and then pull rapidly. After the engine started, return the STARTER GRIP gently to prevent damage to the starter or housing. DO NOT allow the starter grip to snap back. Return it slowly by hand.

Step 5 Turn the CHOKE LEVER to RUN position

Choke Rod

The choke is used to provide an enriched fuel mixture when starting a cold engine. It can be opened and closed by operating the choke rod manually. Pull the rod out toward CLOSED to enrich the mixture for cold starting

USING THE GENERATOR

After the engine has been running for several minutes, electrical devices may be connected to this generator.

AC Usage

Electrical devices running on AC current may be connected according to their wattage requirements. The rated (running) and surge wattage for this Model GEN2000LP 2000 Surge Watts / 1350 Running Watts Portable LP Generator is 1,350 and 2,000, respectively.

Model GEN2000 Rated (Running) Wattage	1350
Model GEN2000 Surge Wattage	2000

The *rated (running) wattage* corresponds to the maximum wattage a generator can output on a continuous basis.

The *surge wattage* corresponds to the maximum amount of power a generator can output for a short time. Many electrical devices, such as a refrigerator, require short bursts of extra power for starting and stopping fan motors, etc., in addition to their listed rated wattage. Motorized devices typically require more than their rated wattage for startup. The surge wattage ability of a generator allows for this extra power requirement.

The total running wattage requirement of the electrical devices connected to a generator should not exceed the rated wattage of the generator itself. To calculate the total wattage requirement of the electrical devices to be connected, look up the rated (running) wattage of each device and add these numbers together to find the total wattage that all of the devices together will draw from the generator. If the total wattage of the selected devices exceeds the rated wattage of the generator, DO NOT connect all of the devices. Select a combination of the electrical devices that will have a total wattage less than or equal to the rated wattage for the generator, i.e., no more than 2000 for this Model GEN2000 2000 Surge Watts / 1350 Running Watts Portable Generator.

CAUTION

This generator can run at its surge wattage capacity for only a short time. Connect electrical devices requiring a rated (running) wattage equal to or less than the rated wattage of this generator. Never connect devices requiring a rated wattage equal to the surge wattage of a generator.

A device's rated (running) wattage should be listed somewhere on the device itself and/or in its manual. If the wattage specification for a device is not available, the wattage can be calculated by multiplying the Voltage requirement (120 or 240) by the Amperage drawn.

Watts = Volts x Amperes

Or, the wattage required by a device can be estimated by using the following chart (see Figure 7). The chart provides only estimates and it is better to know the exact wattage of each electrical device to be powered by this generator.

Electrical Device	Rated (Running) Watts	Additional Surge Watts
air compressor (1 HP)	1500	3000
air compressor (1 - 1/2 HP)	2500	2500
airless sprayer (1/3 HP)	600	1200
box fan	300	600
clock radio AM/FM	300	0
coffee maker	1500	0
computer w/17 inch monitor	800	0
deep freezer	500	500
electric drill (1/2 HP)	1000	1000
DVD/CD player or VCR	100	0
furnace fan blower (1/2 HP)	800	1300
garage door opener (1/2 HP)	480	520
hot plate	2500	0
light bulb (75 watt)	75	0
microwave oven (1000 watt)	1000	0
quartz halogen work light	1000	0
refrigerator/freezer (18 Cu. Ft.)	800	1600
saw - circular (7 1/4 inch)	1500	1500
saw - miter (10 inch)	1800	1800
saw - reciprocating	960	1040
security system	180	0
electric stove - single element	1500	0
sump pump	800	1200
television (27 inch color)	500	0
electric water heater (40 gallon)	4000	0
window air conditioner (10000 BTU)	1200	1800
window fan	300	600

Figure 7 - Estimated wattage requirements for common electrical devices.

Connect electrical devices to this generator according to the following procedure:

1. Allow the engine to run for several minutes after it has been started.
2. Confirm that the electrical device is switched off prior to plugging it into this generator.

⚠ CAUTION

Connect only electrical devices that are in good working order. Faulty devices or power cords present the risk of electrical shock. Immediately turn off and disconnect any device that commences to operate abnormally, sluggish or abruptly stops. Determine if the problem was the device or the rated load capacity of this generator has been exceeded.

NOTE: Plug appliances into the correct outlet. Connect standard 120 Volt, single phase, 60 Hz loads to the 120 Volt outlet. See Figure 8 for an illustration of these outlets.

⚠ CAUTION

Even though this Model GEN2000LP Portable LP Generator has an overall rated wattage of 2000, do not attempt to draw more than 1350 Watts (20 A) from any ONE of the 120 Volt outlets. Draws higher than 1350 Watts (20 A) will damage this generator and void the warranty.

3. Make sure AC Reset button is pressed in.
4. Turn on the connected electrical devices beginning with the device with the highest rated wattage requirement and then each additional device with the next lower rated wattage requirement.

⚠ CAUTION

Do not connect 50Hz or 3-phase loads to this generator.

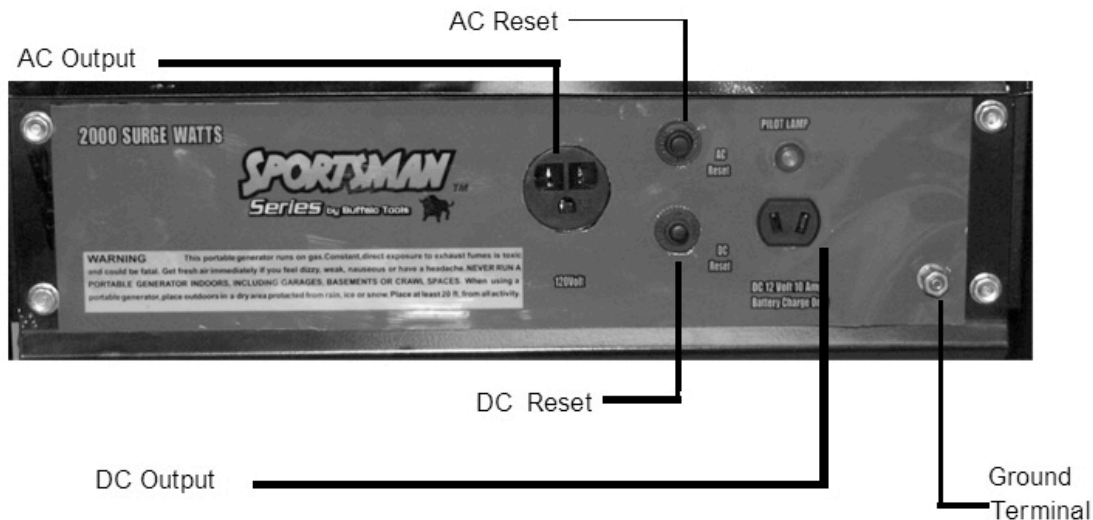


Figure 8 - Outlets Available on this Generator.

SOME NOTES ABOUT POWER CORDS

Long or thin cords can require more wattage from a generator to power an electrical device. Figure 9 shows the recommended cords according to the power requirement of the electrical device. When using cords that exceed these specifications, allow for the electrical device to have a slightly higher rated wattage requirement.

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	1000	600	375	250
5	600	1200	NR	500	300	200	125
7.5	900	1800	NR	350	200	125	100
10	1200	2400	NR	250	150	100	50
15	1800	3600	NR	150	100	65	NR
20	2400	4800	175	125	75	50	NR
25	3000	6000	150	100	60	NR	NR
30	3600	7200	125	65	NR	NR	NR
40	4800	9600	90	NR	NR	NR	NR

NR = Not Recommended.

Figure 9 - Maximum Extension Cord Lengths by Power Requirement

DC Usage

⚠ CAUTION

The DC outlet is only for recharging 12 Volt automotive-type batteries. Do not connect any other device to this outlet.

⚠ CAUTION

Use this generator only for recharging 12 Volt batteries. NEVER attempt to jumpstart a car with this generator.

⚠ DANGER

Failing to use the correct procedure can cause a battery to explode, seriously injuring anyone nearby. Keep heat, sparks, flame and smoking materials away from the battery.

To connect 12 Volt batteries to the DC outlet:

1. Connect the red charging wire to the positive terminal of the battery and the black charging wire to the negative terminal of the battery.
2. Connect the plug end of the wire to the 12V DC outlet on this generator.
3. Start this generator.
4. When disconnecting, always disconnect the wires from this generator first to avoid a spark.

⚠ DANGER

Storage batteries emit highly explosive hydrogen gas when charged.

Batteries also contain acid, which can cause severe chemical burns.

- Do not allow open flames or cigarettes nearby for several minutes after charging a battery.
- Always wear protective goggles and rubber gloves when charging a battery.
 - If battery acid gets on the skin, flush with water.
 - If battery acid gets in the eyes, flush with water and immediately call a physician.
 - If battery acid is swallowed, drink large quantities of milk and immediately call a physician.

STOPPING THE GENERATOR

To stop this generator:

1. Turn off all connected electrical devices and then unplug them.
2. Allow this generator to run for several more minutes with no electrical devices connected to help stabilize the temperature of this generator.
3. Turn the engine switch "off".
4. Turn the fuel valve to the "off" position.

⚠ WARNING

Allow this generator to cool down before touching areas that become hot during operation.

MAINTENANCE/CARE

Proper routine maintenance of this generator is essential for safe, economical, and trouble-free operation. It will help prolong the life of this generator as well as help reduce air pollution. Perform maintenance checks and procedures according to the schedule in Figure 10.

STOP!

If you have questions about maintenance procedures described in this manual, call 1-866-460-9436, Monday - Friday, 8 AM - 4 PM Central Time.

CAUTION

Never perform maintenance procedures while this generator is running. Allow this generator to cool before commencing any maintenance procedures. Keep heat, sparks and flame away.

WARNING

Improper maintenance and/or failure to correct any problems prior to operating this generator can cause a malfunction which could cause death or serious injury. Always follow the inspection and maintenance recommendations and schedules in this manual.

Recommended Maintenance Schedule

		Each Use	Every Month or Each 20 Hrs	Every 3 Months or Each 50 Hrs	Every 6 Months or Each 100 Hrs	Every Year or Each 300 Hrs
Engine Oil	Check Level	X				
	Replace		X (First Use)		X	
Air Filter	Check	X				
	Clean			X		
Spark Plug	Check/Clean				X	
	Clean					X

Figure 10 - Recommended maintenance schedule

Cleaning the Generator

Always try to use this generator in a cool dry place. If this generator becomes dirty, the exterior can be cleaned with a damp cloth, soft brush, vacuum and/or pressurized air.

Never clean this generator with a bucket of water and/or a hose as water can get inside and cause a short circuit or corrosion.

Never use gasoline to clean parts of this generator.

Checking the Oil Level

Even though this generator is equipped with an automatic shutoff to protect it from damage due to low oil, it is important to check the oil level in the engine crankcase before each use to ensure that there is a sufficient quantity.

To check the oil level:

1. Verify that this generator is shut down and on a level surface.
2. Unscrew the oil filler/dipstick cap from the engine as illustrated in Figure 11.
3. With a dry cloth, wipe the oil off of the dipstick that is located on the inside of the cap.
4. Insert the dipstick as if replacing the cap and then remove again. There should be oil on the dipstick. If there is no oil on the dipstick, or oil is visible only at the very end of the dipstick, add oil until the engine crankcase is filled (see "Changing/Adding Oil" in this section of this manual).
5. Confirm that the oil filler/dipstick cap is properly in place when finished verifying the oil level.

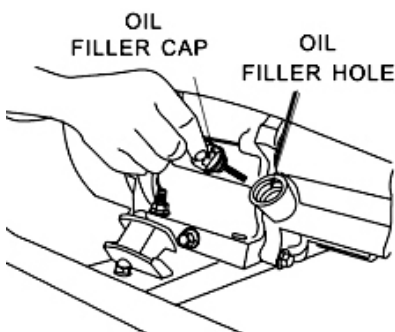


Figure 11 - Checking the Oil

Changing/Adding Oil

The oil level in this generator should be checked before each use. (See Figure 10.) When the oil level is low, add oil until the level is sufficient to operate this generator.

The oil capacity for this Model GEN2000LP 2000 Surge Watts / 1350 Running Watts Portable LP Generator engine is 14 fluid oz.

To drain the oil from this generator:

The oil should be changed after the first 20 hours of operation. The oil should then be changed every 6months, or for every 100 hours of use time, or when it has become contaminated with water and/or dirt.

1. Place a bucket underneath this generator to catch oil as it drains.
2. Using a 10 mm hex wrench, unscrew the oil drain plug located on the crankcase underneath the oil filler/dipstick cap as illustrated in Figure 12.
3. Allow all the oil to drain from this generator.
4. Replace the oil drain plug and tighten with a 10 mm hex wrench.

NOTE: Never dispose of used motor oil in the trash, down a drain or on the ground. Put oil in a sealed container and contact your local recycling center or auto garage to arrange oil disposal.

To add oil to the engine crankcase:

1. Confirm that this generator is on a level surface.
2. Unscrew the oil filler/dipstick cap from the engine as illustrated in Figure 11 above.
3. Using a funnel, add high detergent motor oil to fill the engine crankcase to the correct quantity. SAE10W-30 oil is recommended for general use.

When the engine crankcase is full, the oil level should reach the lower lip of the oil filling opening as shown in Figure 13.

Model GEN2000LP Oil Capacity	14 oz
Model GEN2000LP Oil Type Recommended	High Detergent Motor Oil, SAE10W-30

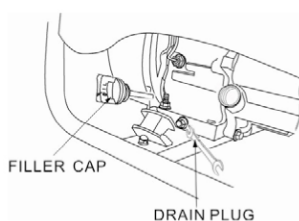


Figure 12 - Draining Oil



Figure 13 - Adding Oil

Air Filter Maintenance

Occasionally verify that the air filter is free of excessive dirt. The air filter will require more frequent cleaning when operating this generator in extremely dusty areas.

1. Unhinge the clasps at the top and bottom of the air filter cover as shown in Figure 14.
2. Remove the sponge-like elements from the casing.
3. Wipe the dirt from inside the empty air filter casing.
4. Wash the sponge-like elements in household detergent and warm water. **Do not use gasoline or a flammable solvent.**
5. Allow the sponge-like elements to dry thoroughly.
6. Soak the dry sponge-like elements in engine oil. Squeeze out any excess oil. The engine will smoke during initial startup if too much oil is left in the air filter.
7. Replace the sponge-like elements in the air filter casing (the fine element first) and replace the cover.

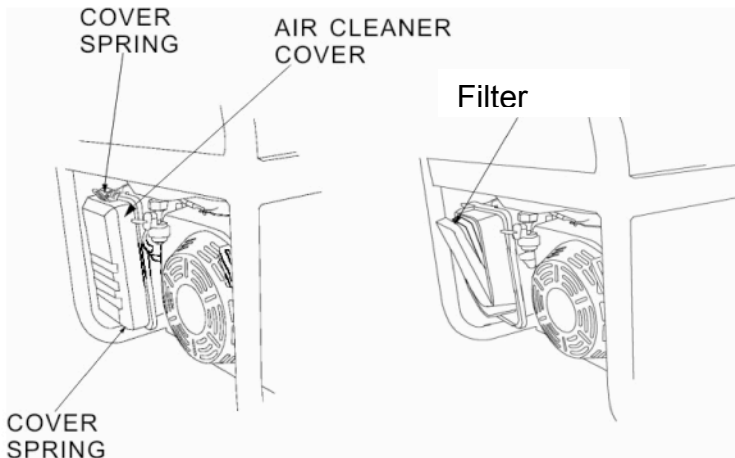


Figure 14 - Removing the Air Filter Casing.

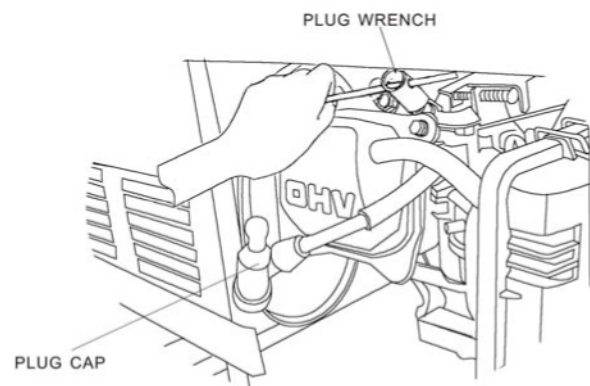


Figure 16 - Locating the Spark Plug

Spark Plug Maintenance

This LP Generator is more efficient than traditional gasoline generators. As such, the spark plug on this LP generator will last longer.

Please contact Customer Service if you have questions regarding the spark plug. (Figure 16)

STORAGE/TRANSPORT PROCEDURES



Never place any type of storage cover on this generator while it is still hot.

When transporting or storing this generator for extended time:

- Allow generator to fully cool before moving it. A hot engine and exhaust system can burn you and ignite some materials.
- Disconnect the battery used for the electric start feature of this generator, first disconnecting the black cable and then the red cable.
- Turn the fuel valve to the “off” position.
- Disconnect the spark plug. (See Figure 16, locating the spark plug.)
- Do not obstruct any ventilation openings.
- Do not drop or strike this generator while moving it.
- Store this generator in a cool dry area, free of excessive dust.

TROUBLESHOOTING

IMPORTANT: If trouble persists, call our customer help line at 1-866-460-9436, Monday - Friday, 8 AM - 4 PM Central Time.

Symptom	Cause	Solution
Engine will not start.		
	Fuel valve is turned to "closed."	Turn fuel valve to "open."
	Choke is open.	Close the choke.
	Propane Tank is out of fuel.	Replace propane fuel tank.
	Spark plug is dirty.	Clean spark plug.
	Generator is not on level surface.	Move generator to a level surface to prevent triggering the low oil shutdown.
Generator runs but does not support all connected electrical devices.	Oil is low.	Add or replace oil.
	Generator is overloaded.	Reduce draw on generator to within this generator's rated wattage by reducing number of connected electrical devices.
	Short in one of the connected devices.	Disconnect any faulty or short-circuited electrical loads.
	Air filter is dirty.	Clean or replace air filter.
	Loose wiring harness connection	Turn off generator, then check wiring behind control panel and at the end of generator for loose connection. If wires are loose, tighten the screws and/or nuts. Be certain the plug in connectors are pushed together all the way.
Engine runs but there is no electrical output.	Reset button(s) is (are) "off."	Push reset button(s) to "on."
	Loose wiring harness connection	Turn off generator, then check wiring behind control panel and at the end of generator for loose connection. If wires are loose, tighten the screws and/or nuts. Be certain the plug in connectors are pushed together all the way.
	Bad connecting wires/cables.	Try a different extension cord.
	Bad electrical device connected to generator.	Disconnect device, try connecting another device.

SPECIFICATIONS

Model GEN2000LP 4000 Surge Watts / 3250 Running Watts Portable LP Generator

Generator

Type	Brushless, Revolving Magnetic Field, Self Exciting, 2-Pole, Single Phase
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AC Output

Rated Wattage (W)	2000
Surge Wattage (W)	1350
Rated Voltage (V)	120
Rated Amperage	9A at 120 V
Rated Frequency (Hz)	60
Phase	Single

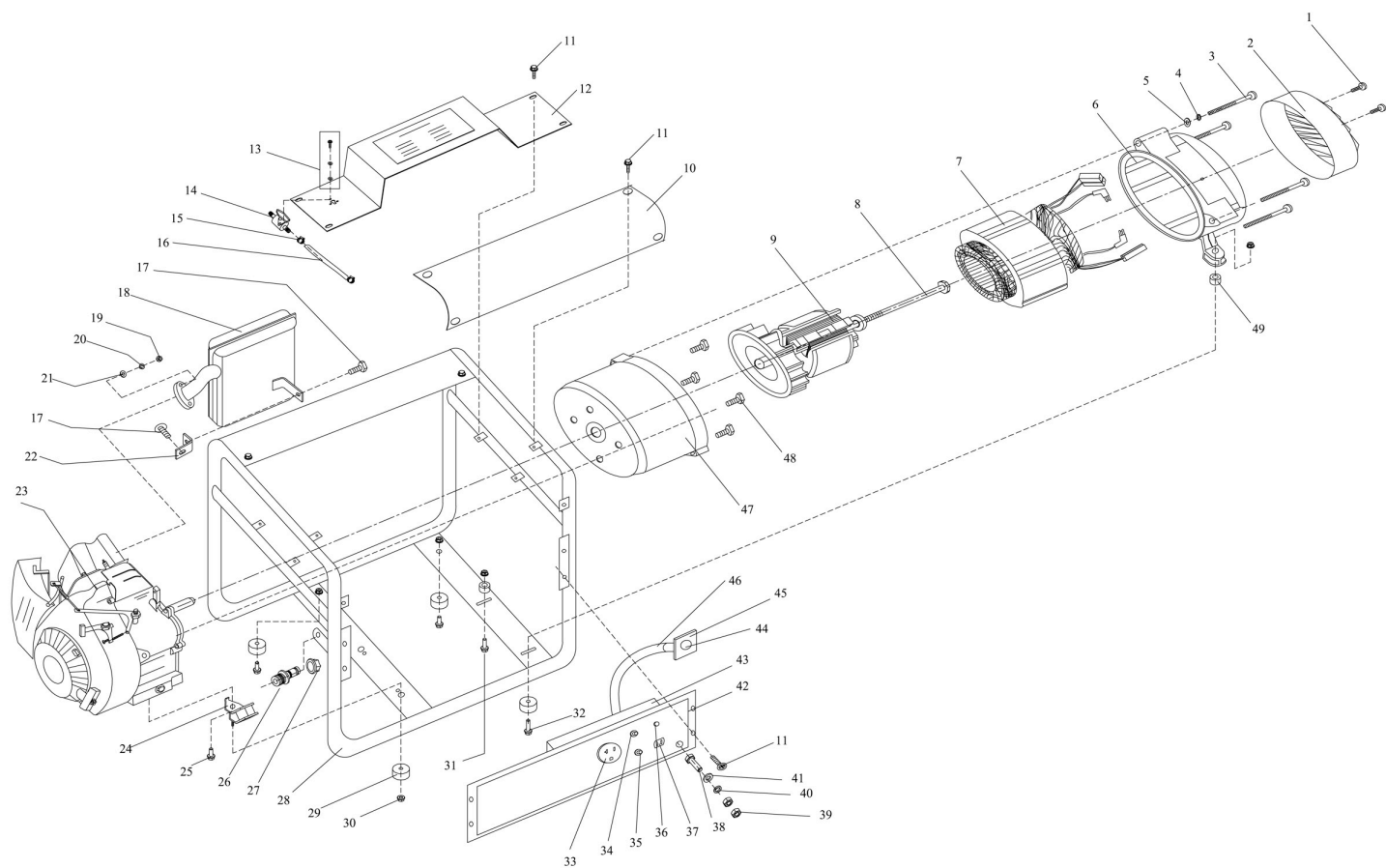
DC Output

Voltage (V)	12
Circuit Breaker Amperage (A)	10

Engine

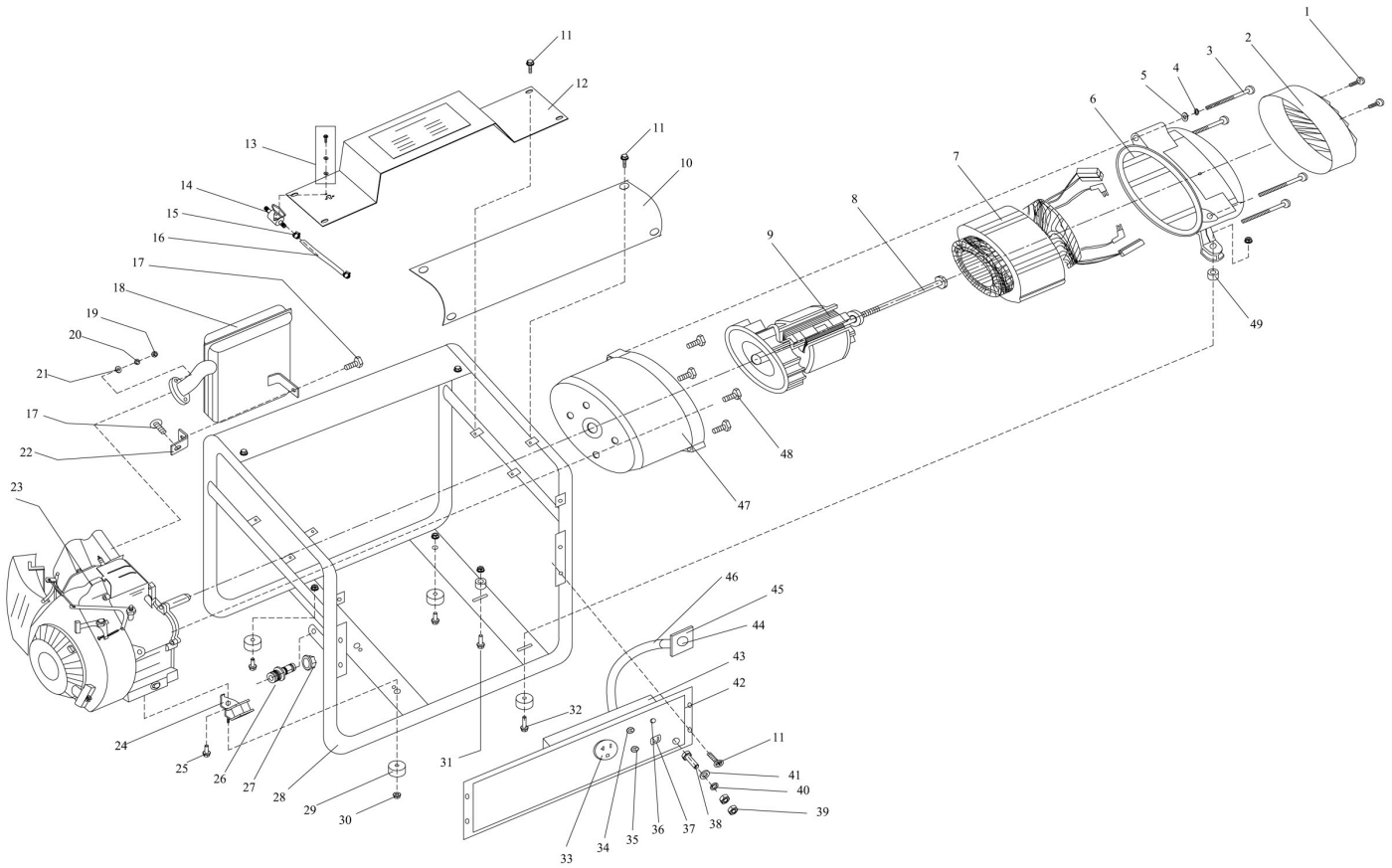
Approvals	EPA
Engine Model (HP)	2.8
Engine Type	4-stroke OHV single cylinder with forced air cooling system.
Ignition System	Non-contact transistor (T.C.I.)
Starting System	Recoil
Continuous Operating Hours	Run time = 12 hrs @ 50% load per 20 lbs of LPG fuel
Oil Capacity (SAE10W-30) (fluid oz)	14 oz

PARTS DIAGRAM



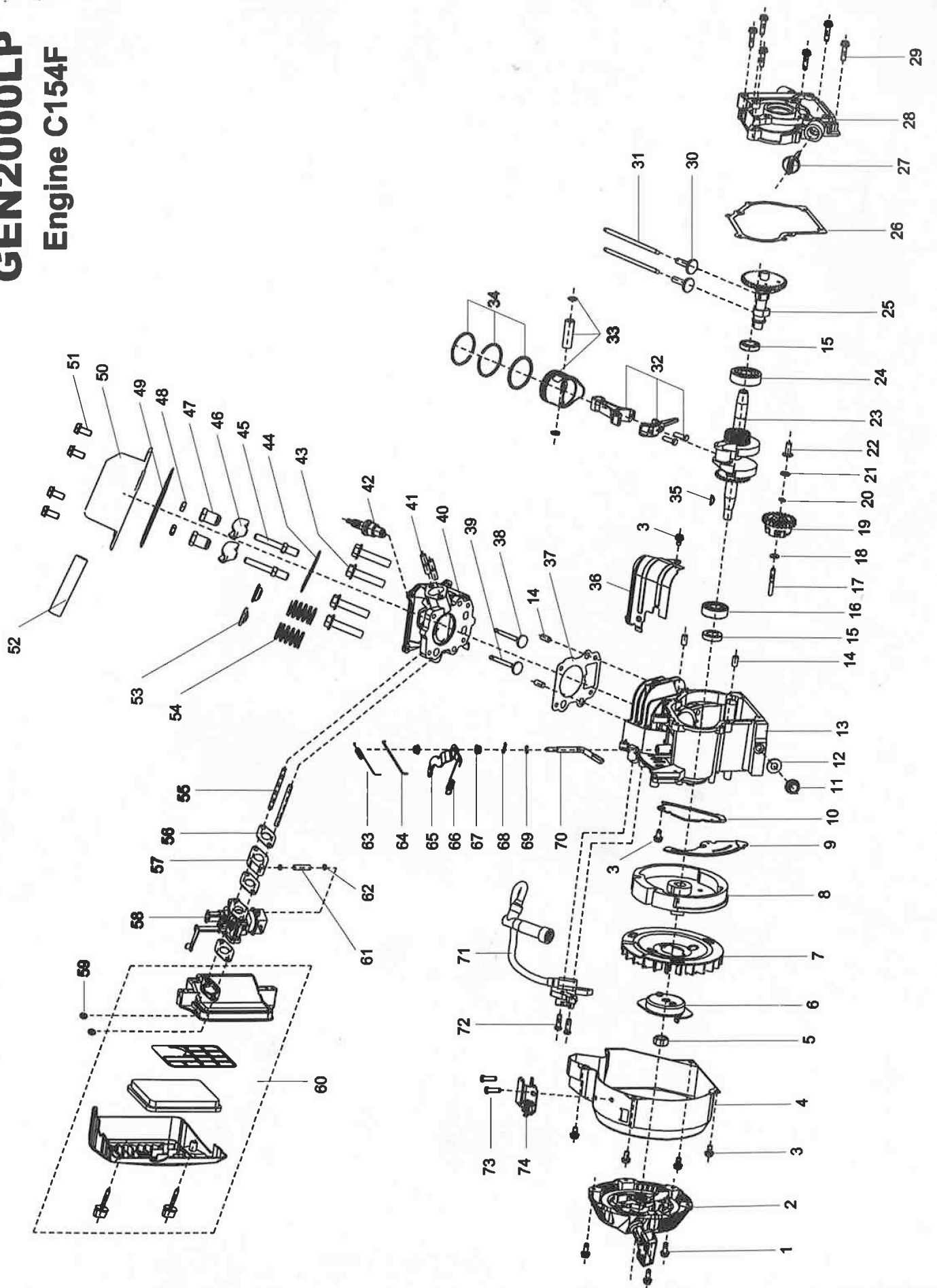
PARTS DIAGRAM

NO.	NAME	PART NO.	NO.
1	Bolt	GB5780 M5*10	2
2	Cover		1
3	Bolt	GB5780 M6*95	4
4	Spring Washer	GB93 6	4
5	Washer	GB95 6	4
6	Rear Cover		1
7	Stator		1
8	Bolt	GB5789 M8*170	1
9	Rotor		1
10	Frame Cover	CG100-020200	2
11	Bolt	GB5789 M6*8	16
12	Middle Cover	CG100-020201	1
13	Bolt	GB/T9074M4×8	2
14	Engine Switch	CG500-021700X	1
15	Clip	CG500-000007	4
16	Rubber Tube	CG500-020202	1
17	Bolt	GB5789 M6*10	2
18	Muffler	G003A-07-01	1
19	Nut	GB6170M8	2
20	Spring Washer	GB93 8	2
21	Washer	GB95 8	2
22	Fixed Talon		1
23	Engine Assembly	C154F	1
24	Cushion	G003A-00-02	2
25	Bolt	GB5789 M8*16	4
26	Gas Inlet	CG500-031604DC	1
27	Nut	CG500-031605F1	1
28	Frame	CG100-020100	1
29	Cushion	WP80-02-01	4
30	Nut	GB6177.1 M8	6
31	Bolt	GB5789 M8*35	1
32	Bolt	GB5789 M8*40	1
33	Socket(AC)	G003A-11-04	1
34	Pilot Lamp	G003A-11-07	1
35	Circuit Protector(AC)	G003A-11-05	1
36	Circuit Protector(DC)	G020H-11-07	1
37	Socket(DC)	G010G-11-05	1
38	Bolt	GB5783 M6*16	1
39	Nut	GB6170 M6	2
40	Spring Washer	GB93 6	1
41	Washer	GB95 6	1
42	Control Panel	G003A-11-02G	1
43	Control Panel Cover	G003A-11-2G	1
44	Harness Assembly	G003A-11-01G	1
45	Rubber Boot	G003A-11-2G	1
46	Bellows	G003A-11-3	1
47	Front Cover		1
48	Bolt	GB5789 M8*20	4
49	Cushion	G003A-12-2	2



GEN2000LP

Engine C154F



No.	Part Code	Name	Amount
1	GB/T 5789	Bolt M6×10	螺栓 M6×10 3
2	Q02-09-01	Recoil Starter Assy	启动拉盘总成 1
3	GB/T16674	Bolt M6×12	螺栓 M6×12 6
4	Q02-10-1B	Fan Cover Comp	风扇罩 1
5	Q02-00-17	Flange Nut M12×1.25	六角法兰螺母M12X1.25 1
6	Q02-09-1	Starter driven plate	启动从动盘 1
7	Q02-10-6	Cooling fan	冷却风扇 1
8	C154F-11-0300	Flywheel assy	飞轮组合 1
9	Q02-10-4	Wind-blocking-board assy 1	挡风板组合1 (塑料) 1
10	Q02-10-5	Wind-blocking-board assy 2	挡风板组合2 (塑料) 1
11	Q02-01-5	Bolt,oil-discharging	放油螺栓 (M10*1.5*15) 1
12	Q02-01-6	Washer, oil-discharging bolt	放油螺栓垫圈 1
13	Q03-01-4	Crankcase (single drain hole)	箱体 (单放油孔) 1
14	Q02-01-2X	Pin	定位销 4
15	Q02-01-3	Oil seal	曲轴油封 (Φ30*Φ17*6) 2
16	GB276	Radial Ball Bearing 203	深沟球轴承203 1
17	Q03-01-7	Governor Shaft	调速齿轮轴 1
18	Q02-00-15	Flat Washer 6 (special)	平垫6 (特制) 1
19	Q03-06-01	Governor Gear	调速从动齿轮组合 1
20	Q04-01-11	Governor Shaft Clip	调速齿轮轴卡簧 1
21	Q02-06-4	Washer	滑套专用垫片 (Φ16*Φ6.2*0.5) 1
22	Q02-06-1	Governor Slider (for gas)	调速滑套 1
23	Q02-03-03E	straight tooth Crankshaft Assy	直齿曲轴组合 (燃气用) 1
24	GB276	Radial Ball Bearing 303	深沟球轴承303 1
25	Q02-04-01B	steel Camshaft assy	钢凸轮轴组合 1
26	Q02-01-1	Crankcase Gasket	合箱密封垫 1
27	Q02-01-9	Oil gauge	油标尺组合 1
28	Q02-01-8	Crankcase Cover	箱盖 (单油尺) 1
29	GB/T5789	Flange Bolt	法兰头螺栓 6
30	Q02-04-5	Valve Lifter	挺柱 2
31	Q02-04-6	Push Rod	推杆 2
32	Q02-03-04	Connecting Rod Assembly	连杆组合 1
33	Q03-03-01	Piston Assembly	活塞组合 1
34	Q03-03-02	Piston Ring Assembly	活塞环组合 1
35	GB/T1099	Half-circle key	半圆键5*6.5*16 1
36	Q02-10-2	Shroud (up)	上导风罩 1
37	Q02-02-1	Cylinder Head Gasket	气缸头密封垫 1
38	Q02-04-2	Exhaust valve	排气门 1
39	Q02-04-1	Intake valve	进气门 1
40	Q03-02-01	Cylinder head assy	气缸头组合 1
41	Q06-02-11	Exhaust Pipe Double-ended Bolt	排气双头螺栓M8*35 2
42	R02-11-06	Spark plug	火花塞 1
43	GB/T5789	Bolt	螺栓M8*55 4
44	Q03-04-13	Push Rod Guide Plate	推杆导向板 1
45	Q03-04-8	Valve adjusting screw	气门摇臂调节螺栓 2
46	Q03-04-7	Rock arm assy	气门摇臂 2
47	Q04-04-9	Valve adjusting nut	气门调节球头螺母 2
48	Q03-04-10	Valve snap nut	气门间隙锁紧螺母 2
49	Q04-02-2	Head Cover Packing Washer	缸头盖密封垫 1
50	Q04-02-02P	Cylinder Head Cover Assy	气缸头盖组合 1
51	GB/T5789	Bolt	螺栓 M6×12 4
52	C152FW-000003	Air Pipe	通气管 (8X13X90) 1
53	Q02-04-4	Valve Spring Washer	气门弹簧座 2
54	Q02-04-3	Valve spring	气门弹簧 2
55	Q02-02-10A	Intake Pipe Double-ended Bolt	进气双头螺栓6*97 2
56	Q02-08-2B	Vacuum Pipe Packing 3	化油器密封垫 3
57	C120B1-000415A	Vacuum Pipe Comp	进气管 1
58		Air-fuel Mixer	混合阀 1
59	GB6177.1M6	Flange Nut M6	法兰螺母M6 2
60	Q02-05-00	Air Cleaner	空滤器 1
61		Fuel Pipe	双层油管 0.04m
62	C500B1-000715A	Clip	卡子 2
63	Q02-06-7	Throttle Valve Connecting Spring	节气门连接簧 1
64	Q02-06-8	Connecting-rod	调速连杆 1
65	C152FW-060004	Speed Adjusting Arm	调速摇臂 1
66	Q02-06-5B	Speed Extension Spring (60Hz 10 laps)	调速拉簧 (60Hz 大10圈) 1
67	GB6177.1	Flange Nut M6	法兰面防滑螺母M6 2
68	Q02-06-3	Rotated pole Clip ring	转杆卡簧 (开口销) 1
69	GB/T896 Φ6	Snap ring	开口挡圈 1
70	Q02-06-2X	Rotated pole	转杆 1
71	Q02-11-01P	Ignition coil assy	高压包组合 1
72	GB16674M6X20	Flange Bolt	法兰头螺栓 2
73	GB5789M6X20	Flange Bolt	法兰头螺栓 2
74	Q02-06-02G	speed governing base comp	电机调速座组合 1

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