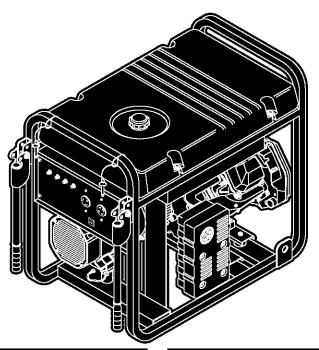


## 6500XL RATED WATT

### EXTENDED LIFE GENERATOR

## **Owner's Manual**



### Parts Included\*

- Generator
- Wheel kit
- Storage Cover
- Battery charge cables
- · Spare Spark Plug, Air Filter, and Oil Filter
- · Spark Plug Wrench
- (2) Locking 30 Amp plugs
- Engine oil
- · Owner's manual
- · Engine manual

\*If any parts are missing or damaged, call 1-800-270-1408.

Table of Contents
Safety Rules
Assembly4-5
Know Your Generator
Operation
Product Specifications
Maintenance
Storage
Troubleshooting
Schematic
Wiring Diagram
Replacement Parts16-19
Warranty Last Page

### Questions? Help is just a moment away!

Call: Generac Generator Helpline - I-800-270-1408 M-F 8-5 CT Web: www.generac-portables.com or www.briggsandstratton.com



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.





# EQUIPMENT DESCRIPTION

This generator is an engine—driven, revolving field, alternating current (AC) generator. It was designed to supply electrical power for operating compatible electrical lighting, appliances, tools and motor loads.

This manual contains information for a generator that operates 120 and/or 240 Volt, single phase, 60 Hz devices that require up to 6,500 watts (6.5 kW) of power that pull up to 54.2 Amps at 120 Volts or 27.1 Amps at 240 Volts.

**CAUTION!** Do Not exceed the generator's wattage/amperage capacity. Add up the rated watts of all devices you are connecting to generator receptacles at one time. This total should not be greater than 6,500 watts. See "Don't Overload the Generator" on page 11.

The generator's revolving field is driven at about 3,600 rpm by a single-cylinder engine.

Every effort has been made to ensure that information in this manual is accurate and current. However, Generac reserves the right to change, alter or otherwise improve the product and this document at any time without prior notice.



CAUTION! Do Not tamper with engine governed speed. High operating speeds are dangerous and increase risk of personal injury or damage to equipment. The generator supplies correct rated frequency and voltage only when running at proper governed speed. Incorrect frequency and/or voltage can damage some connected electrical loads. Operating at excessively low speeds imposes a heavy load. When adequate engine power is not available engine life may be shortened.

The Emission Control System for this generator is warranted for standards set by the Environmental Protection Agency. For warranty information refer to the engine owner's manual.

### **SAFETY RULES**

This generator set was designed and manufactured for specific applications. **Do Not** attempt to modify the unit or use it for any application it was not designed for. If you have any questions about your generator's application, ask your dealer or consult the factory.

The manufacturer could not possibly anticipate every circumstance that might involve a hazard. For that reason warnings in the manual and warnings on tags or decals affixed to the unit are not all—inclusive. If you intend to handle, operate or service the unit by a procedure or method not specifically recommended by the manufacturer, first make sure that such a procedure or method will not render this equipment unsafe or pose a threat to you and others.

Read this manual carefully and become familiar with your generator set. Know its applications, its limitations and any hazards involved.



### **WARNING:**



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



WARNING! You must isolate the generator from the electric utility using approved transfer equipment if this unit is used for backup power. Failure to isolate the generator from the power utility may result in injury or death to electric utility workers and damage to the generator due to a backfeed of electrical energy. Whenever the unit is providing backup power, the electric utility must be notified.



DANGER! Generator exhaust gases contain DEADLY carbon monoxide gas. If breathed in sufficient concentrations, carbon monoxide can cause unconsciousness or death. Operate this equipment outdoors where adequate ventilation is available.





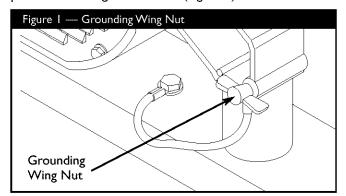
- The generator produces a very powerful voltage that can cause serious injury or death by electrocution. Never touch bare wires or receptacles. Never permit a child or any unqualified person to operate the generator.
- Never handle any kind of electrical cord or device while standing in water, while barefoot or while hands or feet are wet. Death or serious injury from electrocution may result.
- Use a ground fault circuit interrupter (GFCI) in any damp or highly conductive area (such as metal decking or steel work).
- Never use worn, bare, frayed or otherwise damaged electrical cords with the generator. Death, serious injury and property damage from electrical shock may result.
- Gasoline is highly FLAMMABLE and its vapors are EXPLOSIVE. Never allow smoking, open flames, sparks or heat in the vicinity while handling gasoline. Avoid spilling gasoline on a hot engine. Comply with all laws regulating storage and handling of gasoline.
- Do Not overfill the fuel tank. Always allow room for fuel expansion. If tank is overfilled, fuel can overflow onto a hot engine and cause a FIRE or an EXPLOSION.
- Never store a generator with fuel in the tank where gasoline vapors might reach an open flame, spark or pilot light (as on a furnace, water heater, clothes dryer). FIRE or an EXPLOSION may result.
- The unit requires an adequate flow of cooling air for its continued proper operation. Never operate the unit inside any room or enclosure where the free flow of cooling air into and out of the unit might be obstructed. Allow at least 2 feet of clearance on all sides of generator, even while operating unit outdoors, or you could damage the unit.
- Never start, or stop the unit with electrical loads connected to receptacles with the connected devices turned ON. Start the engine and let it stabilize before connecting any electrical loads. Disconnect all electrical loads before shutting down the generator.
- Do Not insert any object through cooling slots of the engine. You could damage the unit or injure yourself.

### · Never operate the generator:

in rain; in any enclosed compartment; when connected electrical devices overheat; if electrical output is lost; if engine or generator sparks; if flame or smoke is observed while unit is running; if unit vibrates excessively.

## GROUNDING THE GENERATOR

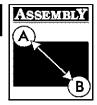
The National Electrical Code requires that the frame and external electrically conductive parts of this generator be properly connected to an approved earth ground. Local electrical codes may also require proper grounding of the unit. For that purpose, a GROUNDING WING NUT is provided on the generator end (Figure 1).



Generally, connecting a No. 12 AWG (American Wire Gauge) stranded copper wire to the grounding wing nut and to an earth-driven copper or brass grounding rod (electrode) provides adequate protection against electrical shock. Be careful to keep the grounding wire attached after connecting the stranded copper wire. However, local codes may vary widely. Consult with a local electrician for grounding requirements in your area.

Properly grounding the generator helps prevent electrical shock if a ground fault condition exists in the generator or in connected electrical devices. Proper grounding also helps dissipate static electricity, which often builds up in ungrounded devices.





Your generator requires some assembly and is ready for use after it has been properly serviced with the recommended oil and fuel.

If you have any problems with the assembly of your generator, please call the generator helpline at 1-800-270-1408.

**IMPORTANT:** Any attempt to run the unit before it has been serviced with the recommended oil will result in an engine failure.

# REMOVE GENERATOR FROM CARTON

- Set the carton on a rigid flat surface with "This Side Up" arrows pointing upward.
- Carefully open the top flaps of the shipping carton.
   Review "Cold Weather Operation" on page 9.
- Cut down corners at one end of carton from top to bottom and lay that side of carton down flat.
- · Remove all packing material, carton fillers, etc.
- · Remove the generator from the shipping carton.

### **INSTALL WHEEL KIT**

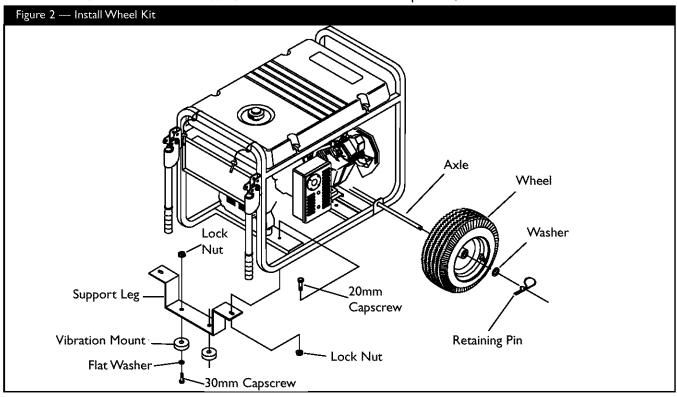
The wheel kit is designed to greatly improve the portability of your generator.

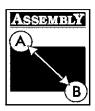
NOTE: Wheel kit is not intended for over-the-road use.

You will need a socket wrench with 1/2" or 13mm sockets and a needle-nose plier to install this kit.

### Refer to Figure 2 and install the wheel kit as follows:

- · Place the generator on a hard flat surface.
- Stand at the engine end of the generator and gently tilt the generator forward, high enough to place wooden blocks beneath the cradle. This will allow you to add the wheels.
- Slide the axle through the holes in the brackets provided on the generator cradle.
- Slide one wheel and flat washer on each end of the axle.
   Make sure the air inflation valve is outward. Insert both retaining pins using the needle-nose plier. Remove the wooden blocks.
- Attach the vibration mounts to the support leg with 30mm capscrews, washers and lock nuts.







- With the wheels on, you can now lift up the handle end and attach the support leg with 20mm cap screws and lock nuts.
- Check each fastener to ensure it is secure and the tires are inflated between 15-40 PSI.

## BEFORE STARTING THE ENGINE

### Add Oil

**CAUTION!** Any attempt to crank or start the engine before it has been properly filled with the recommended oil may result in an engine failure.

### To fill your engine with oil:

- · Place generator on a level surface.
- Follow the oil grade recommendations and oil fill instructions given in the engine owner's manual.

**NOTE:** The generator's revolving field rides on a prelubricated and sealed ball bearing that requires no additional lubrication for the life of the bearing.

### Add Gasoline

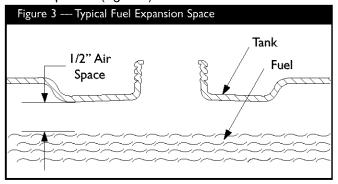


WARNING! Never fill fuel tank indoors. Never fill fuel tank when engine is running or hot. Allow unit to cool for two minutes before refueling. Do Not light a cigarette or smoke when filling the fuel tank.



**WARNING!** Do Not overfill the fuel tank. Always allow room for fuel expansion.

- Use regular UNLEADED gasoline with the generator engine. Do Not use premium gasoline. Do Not mix oil with gasoline.
- · Clean area around fuel fill cap, remove cap.
- Slowly add unleaded regular gasoline to fuel tank. Be careful not to overfill. Allow about 1/2" of tank space for fuel expansion (Figure 3).



· Install fuel cap and wipe up any spilled gasoline.

**IMPORTANT:** It is important to prevent gum deposits from forming in essential fuel system parts, such as the carburetor, fuel filter, fuel hose or tank during storage. Also, experience indicates that alcohol-blended fuels (called gasohol, ethanol or methanol) can attract moisture, which leads to separation and formation of acids during storage. Acidic fuel can damage the fuel system of an engine while in storage.

To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. See "Storage" on page 12. **Never** use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.

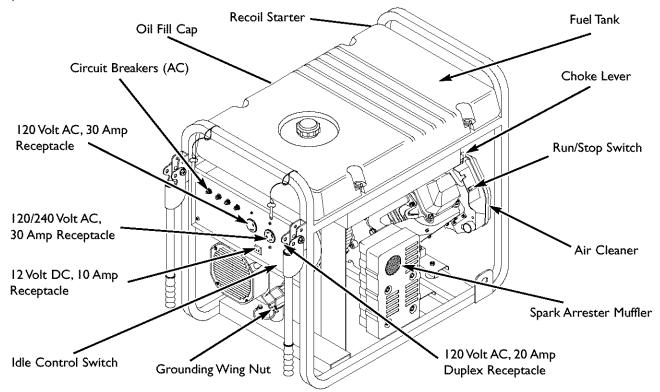




### **KNOW YOUR GENERATOR**

### Read this owner's manual and safety rules before operating your generator.

Compare the illustrations with your generator, to familiarize yourself with the locations of various controls and adjustments. Save this manual for future reference.



**12 Volt DC,10 Amp Receptacle** — Recharge a discharged 12 Volt automotive type battery through this receptacle.

**I 20 Volt AC, 20 Amp, Duplex Receptacle** — May be used to supply electrical power for the operation of I 20 Volt AC, 20 Amp, single phase, 60 Hz electrical lighting, appliance, tool and motor loads.

**120 Volt AC, 30 Amp Locking Receptacle** — May be used to supply electrical power for the operation of 120 Volt AC, 30 Amp, single phase, 60 Hz electrical lighting, appliance, tool and motor loads.

120/240 Volt AC, 30 Amp Locking Receptacle — May be used to supply electrical power for the operation of 120 and/or 240 Volt AC, 30 Amp, single phase, 60 Hz electrical lighting, appliance, tool and motor loads.

**Air Cleaner** — Uses a dry type filter element and foam pre-cleaner to limit the amount of dirt and dust sucked into the engine.

Choke Lever — Used when starting a cold engine.

**Circuit Breakers (AC)** — Each receptacle is provided with a "push to reset" circuit breaker to protect the generator against electrical overload.

Fuel Tank — Capacity of seven (7) U.S. gallons.

**Grounding Wing Nut** — Used for proper grounding of unit.

Idle Control Switch — With this switch set to ON, printed circuit board in control panel automatically reduces engine speed when no load is connected and increases engine to proper speed when load is applied. However, be sure switch is OFF when starting engine.

Oil Fill Cap — Add oil to engine here.

Recoil starter — Used to start the engine.

**Run/Stop Switch** — Set this switch to "**Run**" before using recoil starter. Set switch to "**Stop**" to switch OFF engine.

**Spark Arrester Muffler** — Exhaust muffler lowers engine noise and is equipped with a spark arrester screen.





# OPERATING THE GENERATOR

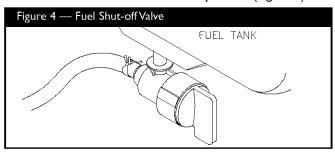


**CAUTION!** Never start or stop unit with electrical loads connected AND with the connected devices turned ON.

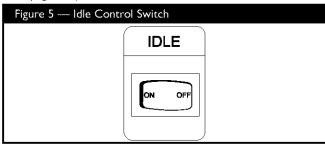
### Starting the Engine

Disconnect all electrical loads from the generator. Follow these start instruction steps in numerical order:

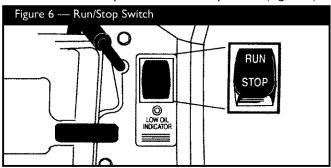
1. Turn the fuel valve to the "On" position (Figure 4).



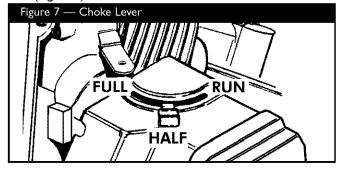
 Make sure the Idle Control switch is in "Off" position (Figure 5).



3. Set the Run/Stop switch to "Run" position (Figure 6).



4. Place the choke lever in the "**Full**" choke position (Figure 7).



- Grasp the recoil handle and pull slowly until slight resistance is felt. Then pull rapidly one time only to start engine.
  - If engine starts, proceed to step 7.
  - If engine fails to start, proceed to step 6.
- 6. Move the choke lever to "Half" choke position, and pull recoil handle twice.
  - If engine fails to start, repeat steps 4 thru 6.
- Move choke lever to "Run" position. If engine falters, move choke lever to "Half" choke position until the engine runs smoothly and then to "Run" position.

**NOTE:** If engine still fails to start after 3 pulls, check for proper oil level in crankcase. This unit is equipped with a Low Oil Shutdown System. See engine manual.

Refer to the engine owner's manual for complete starting instructions.

### **Connecting Electrical Loads**

- Let engine stabilize and warm up for a few minutes after starting.
- Plug in and turn on the desired 120 and/or 240 Volt AC, single phase, 60 Hz electrical loads.
- Do Not connect 240 Volt loads to the 120 Volt receptacles.
- Do Not connect 3—phase loads to the generator.
- Do Not connect 50 Hz loads to the generator.
- DO NOT OVERLOAD THE GENERATOR. See "Don't Overload the Generator" on page 11.





### Stopping the Engine

- Unplug all electrical loads from generator panel receptacles. Never start or stop engine with electrical devices plugged in and turned on.
- Put the idle control switch in the "Off" position.
- Let engine run at no-load for 30 seconds to stabilize the internal temperatures of engine and alternator.
- · Move run/stop switch to "Stop".
- · Close the fuel shut-off valve.

### **Operating Automatic Idle Control**

This switch is designed to greatly improve fuel economy. When this switch is turned ON, the engine will only run at its normal high governed engine speed when an electrical load is connected. When an electrical load is removed, the engine will run at a reduced speed. With the switch off, the engine will run at the normal high engine speed. Always have the switch off when starting and stopping the engine.

### Charging a Battery



WARNING! Storage batteries give off explosive hydrogen gas while recharging. An explosive mixture will remain around the battery for a long time after it has been charged. The slightest spark can ignite the hydrogen and cause an explosion, resulting in blindness or other serious injury.

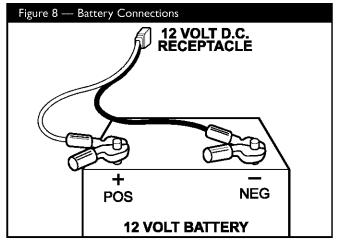


WARNING! Do Not permit smoking, open flame, sparks or any other source of heat around a battery. Wear protective goggles, rubber apron and rubber gloves when working around a battery. Battery electrolyte fluid is an extremely caustic sulfuric acid solution that can cause severe burns. If spill occurs flush area with clear water immediately.

Your generator has the capability of recharging a discharged 12 Volt automotive or utility style storage battery. **Do Not** use the unit to charge any 6 Volt batteries. **Do Not** use the unit to crank an engine having a discharged battery.

### To recharge 12 Volt batteries, proceed as follows:

- Check fluid level in all battery cells. If necessary, add ONLY distilled water to cover separators in battery cells.
   Do Not use tap water.
- If the battery is equipped with vent caps, make sure they are installed and are tight.
- · If necessary, clean battery terminals.
- Connect battery charge cable connector plug to panel receptacle identified by the words "12-VOLTS D.C.".
- Connect battery charge cable clamp with **red** handle to the **positive (+)** battery terminal (Figure 8).



- Connect battery charge cable clamp with **black** handle to the **negative** (-) battery terminal (Figure 8).
- Start engine. Let the engine run while battery recharges.
- · When battery has charged, shut down engine

**NOTE:** Use an automotive hydrometer to test battery state of charge and condition. Follow the hydrometer manufacturer's instructions carefully. Generally, a battery is considered to be at 100% state of charge when specific gravity of its fluid (as measured by hydrometer) is 1.260 or higher.





# COLD WEATHER OPERATION

Under certain weather conditions (temperatures below 40°F [4°C] and a high dew point), your generator may experience icing of the carburetor and/or the crankcase breather system.

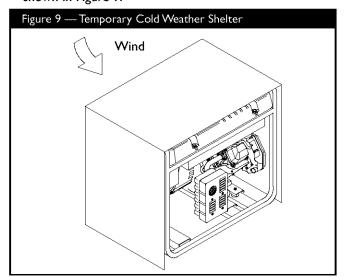
In an emergency, use the original shipping box as a temporary shelter:

- · Cut off all flaps.
- Cut out one of the long sides of the box to expose exhaust side of unit. Ensure a minimum of two feet clearance between open side of box and nearest object.
- · Cut appropriate slots to access receptacles of unit.
- · Start unit, then place box over it.

**IMPORTANT:** Remove shelter when temperature is above 40°F [4°C].

For a more permanent shelter, build a structure that will enclose three sides and the top of the generator:

Make sure entire muffler-side of generator is exposed.
 Note that your generator may appear different from that shown in Figure 9.



- Ensure a minimum of two feet clearance between open side of box and nearest object.
- · Face exposed end away from wind and elements.
- Enclosure should hold enough heat created by the generator to prevent problems.

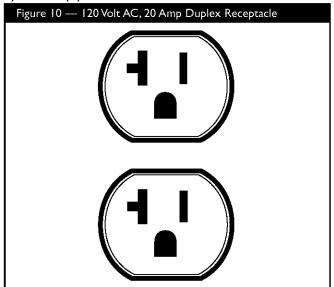


**CAUTION!** Never run unit indoors. **Do Not** enclose generator any more than shown.

### RECEPTACLES

## 120 Volt AC, 20 Amp, Duplex Receptacle

Each receptacle (Figure 10) is protected against overload by a 20 Amp push-to-reset circuit breaker.



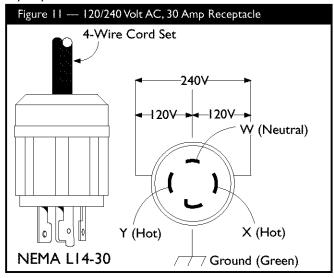
Use each receptacle to operate 120 Volt AC, single—phase, 60 Hz electrical loads requiring up to 2,400 watts (2.4 kW) at 20 Amps of current. Use cord sets that are rated for 125 Volt AC loads at 20 Amps (or greater).





## 120/240 Volt AC, 30 Amp, Locking Receptacle

Use a NEMA L14-30 plug with this receptacle. Connect a 4-wire cord set rated for 250 Volt AC loads at 30 Amps (or greater) (Figure 11). You can use the same 4-wire cord if you plan to run a 120 Volt load.



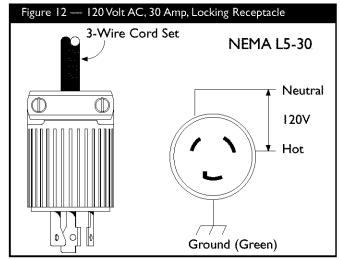
This receptacle powers 120/240 Volt AC, 60 Hz, single phase loads requiring up to 3,600 watts of power at 30 Amps for 120 Volts; 6,500 watts of power (6.5 kW) at 30 Amps for 240 Volts. The outlet is protected by a 30 Amp push—to—reset circuit breaker.



**CAUTION!** Although this outlet is rated for 120/240 Volt 30 Amp (up to 7,200 watts), the generator is only rated for 6,500 watts. Powering loads that exceed the wattage/amperage capacity of the generator can damage it or cause serious injuries. 240 Volt loads powered through this outlet should not exceed 27.1 Amps of current draw.

## 120 Volt AC, 30 Amp Locking Receptacle

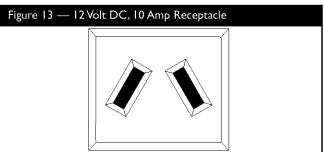
Use a NEMA L5-30 plug with this receptacle. Connect a 3-wire cord set rated for 125 Volts AC at 30 Amps to the plug (Figure 12).



Use this receptacle to operate I20 Volt AC, 60 Hz, single phase loads requiring up to 3,600 watts (3.6 kW) of power at 30 Amps. The outlet is protected by a 30 Amp push-to-reset circuit breaker.

### 12 Volt DC, 10 Amp Receptacle

This connector (identified by the legend "12-VOLT D.C.") supplies 12 Volts DC at 10 Amps through battery charging cables for recharging 12 Volt batteries (Figure 13). See "Charging a Battery" on page 8.







# DON'T OVERLOAD YOUR GENERATOR

### **Capacity**

You must make sure your generator can supply enough rated (running) and surge (starting) watts for the items you will power at the same time. Follow these simple steps:

- 1. Select the items you will power at the same time.
- Total the rated (running) watts of these items. This is the amount of power your generator must produce to keep your items running. See Figure 14.
- 3. Estimate how many surge (starting) watts you will need. Surge wattage is the short burst of power needed to start electric motor-driven tools or appliances such as a circular saw or refrigerator. Because not all motors start at the same time, total surge watts can be estimated by adding only the item(s) with the highest additional surge watts to the total rated watts from step 2.

#### Example:

Tool or Appliance	Rated (Running) Watts	Additional Surge (Starting) Watts			
Window Air	1200	1800			
Conditioner					
Refrigerator	800	1600			
Deep Freezer	500	500			
Television	500	-			
Light (75 Watts)	75	-			
	3075 Total	1800 Highest			
	Running Watts	Surge Watts			

Total Rated (Running) Watts = 3075 Highest Additional Surge Watts = 1800 Total Generator Output Required = 4875

### **Power Management**

To prolong the life of your generator and attached devices, it is important to take care when adding electrical loads to your generator. There should be nothing connected to the generator outlets before starting it's engine. The correct and safe way to manage generator power is to sequentially add loads as follows:

- With nothing connected to the generator, start the engine as described in this manual.
- Plug in and turn on the first load, preferably the largest load you have.
- 3. Permit the generator output to stabilize (engine runs smoothly and attached device operates properly.

- 4. Plug in and turn on the next load.
- 5. Again, permit the generator to stabilize.
- Repeat steps 4 and 5 for each additional load.

**Never** add more loads than the generator capacity. Take special care to consider surge loads in generator capacity, as described above.

Figure 14 - Wattage Reference Chart					
Tool or Appliance	Rated* (Running) Watts	Additional Surge (Starting) Watts			
Essentials					
Light Bulb - 75 watt	75	-			
Deep Freezer	500	500			
Sump Pump	800	1200			
Refrigerator/Freezer - 18 Cu. Ft.	800	1600			
Water Well Pump - 1/3 HP	1000	2000			
Heating/Cooling					
Window AC - 10,000 BTU	1200	1800			
Window Fan	300	600			
Furnace Fan Blower - 1/2 HP	800	1300			
Kitchen					
Microwave Oven - 1000 Watt	1000	-			
Coffee Maker	1500	-			
Electric Stove - Single Element	1500	-			
Hot Plate	2500	-			
Family Room					
DVD/CD Player	100	-			
VCR	100	-			
Stereo Receiver	450	-			
Color Television - 27"	500	-			
Personal Computer w/17" monitor	800	-			
Other					
Security System	180	-			
AM/FM Clock Radio	300	-			
Garage Door Opener - 1/2 HP	480	520			
Electric Water Heater - 40 Gallon	4000	-			
DIY/Job Site					
Quartz Halogen Work Light	1000	-			
Airless Sprayer - 1/3 HP	600	1200			
Reciprocating Saw	960	960			
Electric Drill - 1/2 HP	1000	1000			
Circular Saw - 7 1/4"	1500	1500			
Miter Saw - 10"	1800	1800			
Planer/Jointer - 6"	1800	1800			
Table Saw/Radial Arm Saw - 10"	2000	2000			
Air Compressor - 1-1/2 HP	2500	2500			
- Land					

<sup>\*</sup>Wattages listed are approximate only. Check tool or appliance for actual wattage.







### **SPECIFICATIONS**

Maximum Surge Watts10,500 watts
Continuous Wattage Capacity6,500 watts
Power Factor
Rated Maximum Continuous AC Load Current:
At 120 Volts
At 240 Volts
$Phase \\ \cdots \\ I-phase$
Rated Frequency
Fuel Tank Capacity 7 U.S. gallons
Shipping Weight

# GENERAL MAINTENANCE RECOMMENDATIONS

The Owner/Operator is responsible for making sure that all periodic maintenance tasks are completed on a timely basis; that all discrepancies are corrected; and that the unit is kept clean and properly stored. **Never operate a damaged or defective generator.** 

### **Engine Maintenance**

See engine owner's manual for instructions.



**CAUTION!** Avoid prolonged or repeated skin contact with used motor oil. Used motor oil has been shown to cause skin cancer in certain laboratory animals. Thoroughly wash exposed areas with soap and water.

KEEP OUT OF REACH OF CHILDREN. DON'T POLLUTE. CONSERVE RESOURCES. RETURN USED OIL TO COLLECTION CENTERS.

### **Generator Maintenance**

Generator maintenance consists of keeping the unit clean and dry. Operate and store the unit in a clean dry environment where it will not be exposed to excessive dust, dirt, moisture or any corrosive vapors. Cooling air slots in the generator must not become clogged with snow, leaves or any other foreign material.

**NOTE:** Do Not use a garden hose to clean generator. Water can enter engine fuel system and cause problems. In addition, if water enters generator through cooling air slots, some of the water will be retained in voids and cracks of the rotor and stator winding insulation. Water

and dirt buildup on the generator internal windings will eventually decrease the insulation resistance of these windings.

### To Clean the Generator

- · Use a damp cloth to wipe exterior surfaces clean.
- A soft bristle brush may be used to loosen caked on dirt or oil.
- A vacuum cleaner may be used to pick up loose dirt and debris.
- Low pressure air (not to exceed 25 psi) may be used to blow away dirt. Inspect cooling air slots and opening on generator. These openings must be kept clean and unobstructed.

### **STORAGE**

The generator should be started at least once every seven days and allowed to run at least 30 minutes. If this cannot be done and you must store the unit for more than 30 days, use the following guidelines to prepare it for storage.

### Generator Storage

- Clean the generator as outlined in "To Clean the Generator."
- Check that cooling air slots and openings on generator are open and unobstructed.



**CAUTION!** Storage covers can be flammable. **Do Not** place a storage cover over a hot generator. Let the unit cool for a sufficient time before placing the cover on the unit.

### **Engine Storage**

See engine owner's manual for instructions.

### Other Storage Tips

- Do Not store gasoline from one season to another.
- Replace fuel container if it starts to rust. Rust and/or dirt in fuel can cause problems if it's used with this unit.
- · Store in clean and dry area.

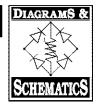




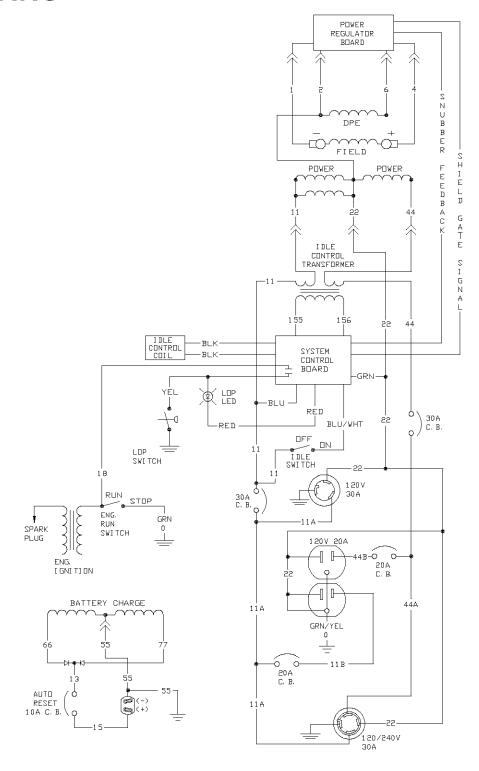
### **TROUBLESHOOTING**

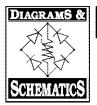
Problem	Cause	Solution
	Circuit breaker is open.	Reset circuit breaker.
Engine is running, but	2. Poor connection or defective cord set.	2. Check and repair.
no AC output is	3. Connected device is bad.	3. Connect another device that is in good
available.		condition.
	4. Fault in generator.	4. Contact Generac service facility.
	Short circuit in a connected load.	Disconnect shorted electrical load.
Engine runs good but	2. Generator is overloaded.	2. See "Don't Overload the Generator"
bogs down when loads		on page 11.
are connected.	3. Engine speed is too slow.	3. Contact Generac Power Systems
are connected.		service facility.
	4. Shorted generator circuit.	4. Contact Generac service facility.
	1. Run/Stop switch set to "Stop".	1. Set switch to "Run".
	2. Dirty air cleaner.	2. Clean or replace air cleaner.
	3. Out of gasoline.	3. Fill fuel tank.
	4. Stale gasoline.	4. Drain gas tank and fill with fresh fuel.
	5. Spark plug wire not connected to spark	5. Connect wire to spark plug.
	plug.	
	6. Bad spark plug.	6. Replace spark plug.
Engine will not start; or	7. Water in gasoline.	7. Drain gas tank; fill with fresh fuel.
starts and runs rough.	8. Overchoking.	8. Put choke lever to "Run" position.
	9. Low oil level.	9. Fill crankcase to proper level.
	10. Excessively rich fuel mixture.	<ol> <li>Contact Generac Power Systems service facility.</li> </ol>
	11. Intake valve stuck open or closed.	11. Contact Generac Power Systems
		service facility.
	12. Engine has lost compression.	12. Contact Generac Power Systems
	,	service facility.
	Out of gasoline.	Fill fuel tank.
Engine shuts down	2. Low oil level.	2. Fill crankcase to proper level.
during operation.	3. Fault in engine.	3. Contact Generac Power Systems
		service facility.
	1. Load is too high.	See "Don't Overload the Generator"
		on page 11.
Engine lacks power.	2. Dirty air filter.	2. Replace air filter.
	3. Engine needs to be serviced.	Contact Generac Power Systems
		service facility.
	Choke is opened too soon.	Move choke to halfway position till
Engine "hunts" or		engine runs smoothly.
falters.	2. Carburetor is running too rich or too	2. Contact Generac Power Systems
	lean.	service facility.





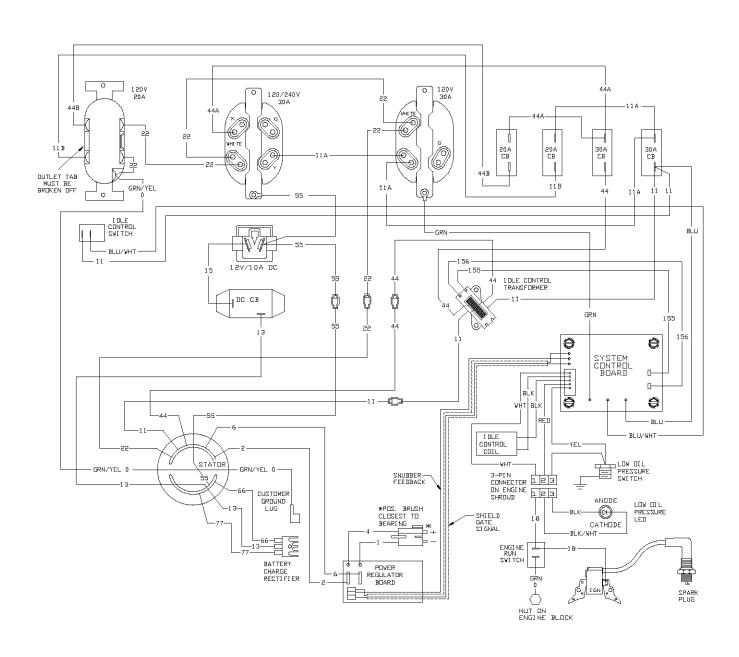
### **SCHEMATIC**



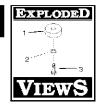




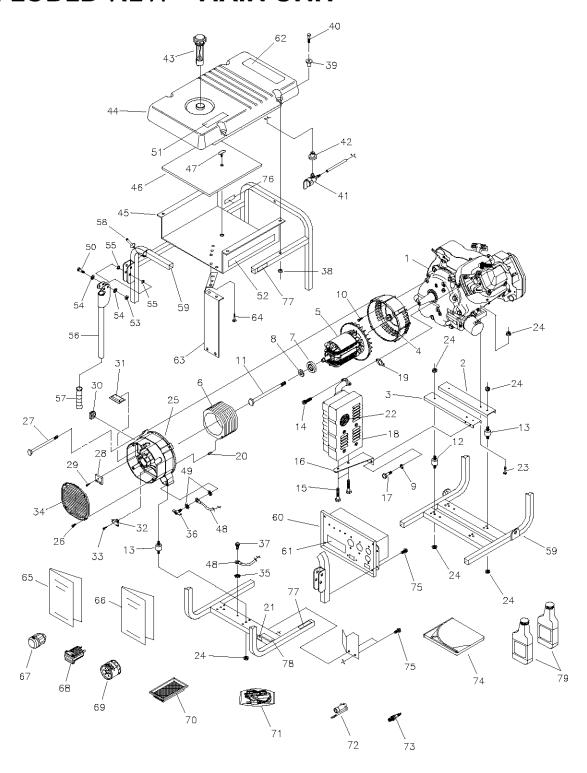
### **WIRING DIAGRAM**







## **EXPLODED VIEW - MAIN UNIT**





40 78831BGS 41 80270GS

42 78299GS

I VALVE, Tank

I BUSHING, Plastic Tank



### **PARTS LIST - MAIN UNIT**

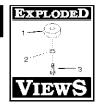
Item	Part #	Qty	Description	Item	Part #	Qty	Description
- 1	NSP	1	ENGINE	43	B4363GS	1	CAP, Fuel Gauge
2	A92531GS	1	SUPPORT, Support	44	B1998GS	- 1	TANK, ASM, 7- Gal (Includes
3	A92731GS	l	SUPPORT, Engine & Muffler				Items 41 & 42)
4	92247GS	l	HOUSING, Engine Adapter	45	J92039GS	1	SHIELD, Heat
5	92679GGS	1	ASSEMBLY, Rotor (Inclds Item 7)	46	92665GS		INSULATION #2-1/4" Thick
6	92681AGS	1	ASSEMBLY, Stator	47	85000GS	- 1	CLIP, Insulation
7	65791GS	ı	BEARING	48	14353621GS	- 1	WIRE, Ground
8	96796GS	1	WASHER, 22.2 O.D. x 3 Thk	49	26850GS	2	WASHER, M6 Shakeproof
9	22129GS	2	WASHER, M8 Lock	50	39287GS	2	HHCS, M8 - 1.25 x 45
10	86307GS	4	HHMS, 5/16 - 24 x 3/4 SEMS	51	92982GS		DECAL, Danger
- 11	25254GS	l	HHCS, 5/16 - 24 x 9-7/8"	52	189407GS	2	DECAL, Heat Shield
12	92609GS	2	MOUNT, Vibration	53	49820GS	2	NUT, M8 Nylok
13	82857GS	4	MOUNT, Vibration	54	22145GS	4	WASHER, Flat, 5/16 - M8
14	40976GS	2	SCREW, M8 - 1.25 × 20	55	187104GS	4	WASHER, Nylon
15	66476GS	2	CAPSCREW, M6 - 1.0 x 12mm	56	BB5586GS	2	HANDLE
16	92532GS	1	BRACKET, Muffler	57	B4605GS	2	GRIP
17	22142GS	2	SCREW, 5/16 - 18 x 3/4"	58	B4135GS	2	PIN, with Lanyard
18	A7433GS	1	MUFFLER	59	A187024GS		CRADLE
19	90239GS	l	GASKET, Muffler	60	92630GS		ASSEMBLY, Control Panel
20	81917GS	l	PIN, 4 mm x 10 Roll	61	189406GS		DECAL, Control Panel
21	B4986GS	1	DECAL, Ground	62	93826GS		DECAL, Start Instructions
22	83083GS	1	SCREEN, Spark Arrester	63	J96068GS		SHIELD, Heat
23	22531GS	2	HHCS, 5/16-18 x 1-3/4"	64	56893GS	5	CRIMPTITE, 10-24 x 1/2"
24	189160GS	12	NUT, 5/16-18 Serrated Flange	65	A8927GS		MANUAL, Engine
25	66825CGS	1	CARRIER, Rear Bearing	66	189417GS	I	MANUAL, Owners
26	74908GS	4	TAPTITE, M5-0.8 × 10	67	43438GS	- 1	PLUG, 240V, 30A 4-Prong
27	86308BGS	4	BOLT, M6 -1 x 165 mm Stator	68	37806GS		PLUG, 125V, 30A 3-Prong
28	65795GS		RECTIFIER, Battery Charge	69	70185GS		OIL FILTER
29	66849AGS	1	<b>TAPTITE</b> , M5-0.8 × 20	70	73111GS	I	ELEMENT, Air Cleaner
30	67022GS	1	GROMMET, Rubber	71	65787GS	- 1	CABLE, Battery Charge
31	84132GS		ASSEMBLY, Power Regulator	72	84882GS		WRENCH, Spark Plug
32	66386GS		ASSEMBLY, Brush Holder	73	72347GS		SPARK PLUG
33	66849GS	2	TAPTITE, M5 - 0.8 x 16	74	B4767GS	I	COVER, Storage
34	B4871GS	1	COVER, Bearing Carrier	75	B2153GS	6	SCREW, Self Driller, 12-14 x 7/8"
35	22769GS		WASHER, #10 Int. Shakeproof	76	73054GS		DECAL, Fuel Shut Off
36	86494GS	ı	SCREW, M6 -1.0 x 16 Wing	77	77816GS	2	DECAL, Caution Hot Muffler
37	86292GS	1	HHCS, #10 Self Driller		20566GS	I	DECAL, I-800
38	77395GS	4	NUT, M6 Flange Lock	79	AB3061GS	2	OIL BOTTLES, 28 oz.
39	83465GS	4	GROMMET, Tank				
40	78831BGS	4	HHCS, M6-1.0 x 60, SEMS				
4 1	0007000	,	1 / A 1 1 / 200 1000 1	<b>—</b>			

**Optional Accessories Not Included:** 

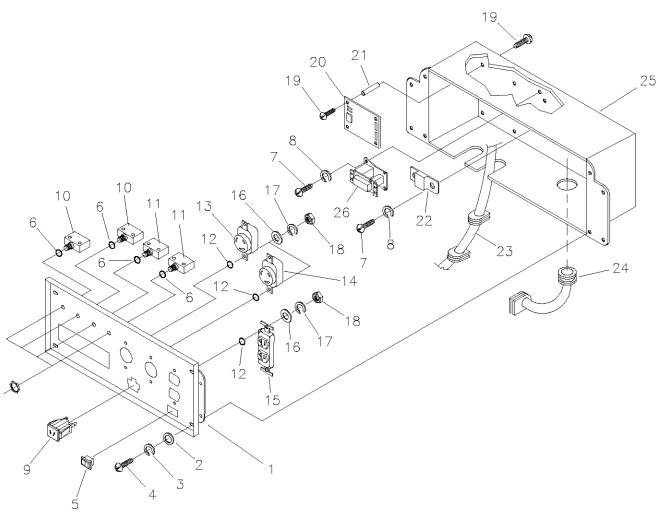
Cord Wrap

84883GS

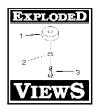




### **EXPLODED VIEW AND PARTS LIST - CONTROL PANEL**

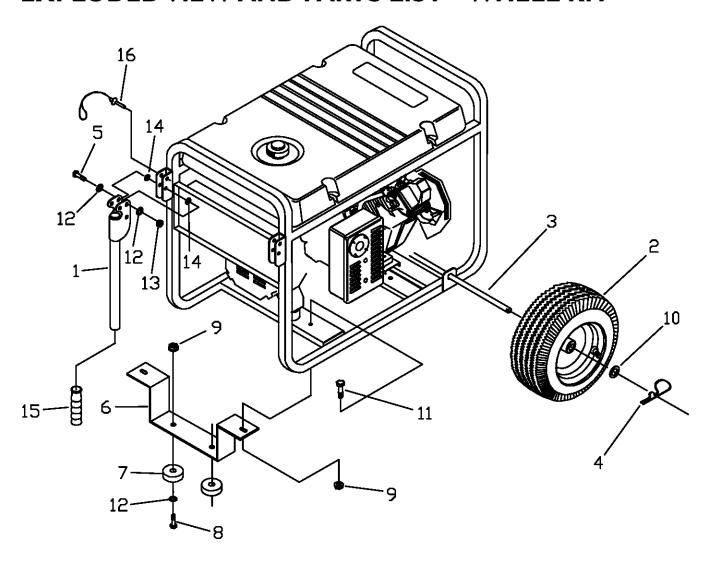


Item	Part#	Qty	Description	ltem	Part #	Qty	Description
I	A92070GS	1	PANEL, Control	14	43437GS	١	OUTLET, 120V/240V, 30A
2	23897GS	4	FLAT WASHER, #10 M5				Locking
3	49226GS	4	LOCK WASHER, M5	15	68759GS	l	OUTLET, I20V, 20A Duplex
4	91526GS	4	SCREW, M5-0.8 x 12mm	16	43180GS	6	FLAT WASHER, M4
5	82538GS	1	SWITCH, Idle Control	17	22264GS	6	LOCK WASHER, #8 M4
6	82881GS	4	LOCK WASHER, 7/16"	18	51715GS	6	NUT, M4-0.7 Hex
7	43181GS	4	SCREW, M3 - 0.5 x 10mm	19	64526GS	8	SCREW, #6-32 × 3/8"
8	43182GS	4	LOCK WASHER, M3	20	83970GS	l	BOARD, System Control
9	90418GS	1	OUTLET, 12V	21	64525GS	4	STAND-OFF, 3/4" Hex
10	75207AGS	2	CIRCUIT BREAKER, 30A	22	87962GS	l	CIRCUIT BREAKER. 12V, 10A
- 11	75207GS	2	CIRCUIT BREAKER, 20A	23	84335GS	l	ASSEMBLY, Wire Harness
12	23365GS	6	WASHER, #8 Shakeproof	24	84134GS	l	GROMMET, Rubber Conn.
13	68868GS	1	OUTLET, 120 Volt, 30 Amp	25	B92069GS	l	BOX, Control Panel
			Locking	26	84028GS	I	TRANSFORMER, Idle Control





### **EXPLODED VIEW AND PARTS LIST – WHEEL KIT**



Item	n Part #	Qty	Description	Item	Part #	Qty	Description
ı	BB5586GS	2	HANDLE	9	52858GS	4	NUT, Lock M8
2	B4966GS	2	WHEEL	10	22247GS	2	WASHER, Wheel
3	93693GGS	•	AXLE	- 11	39253GS	2	CAPSCREW, Hex Hd M8 -
4	87005AGS	2	PIN, Retaining				$1.25 \times 20$
5	39287GS	2	HHCS, M8 - 1.25 x 45	12	22145GS	6	WASHER, Flat, 5/16-M8
6	B186927GS	ł	LEG, Support	13	49820GS	2	NUT, M8 Nylok
7	27007GS	2	MOUNT, Vibration	14	187104GS	4	WASHER, Nylon
8	42909GS	2	CAPSCREW, Hex Hd. M8 - 1.25	15	B4605GS	2	GRIP
			× 30	16	B4135GS	2	PIN, with Lanyard

# LIMITED WARRANTY FOR PORTABLE GENERATORS

GENERAC PORTABLE PRODUCTS, LLC (hereafter referred to as the COMPANY) warrants to the original purchaser that the components in its portable generator will be free from defects in materials or workmanship for the items and period set forth below from the date of original purchase. This warranty does not include the gasoline engine when furnished or attached because such engine is covered solely by the engine manufacturer's warranty. Starting batteries are not warranted by the COMPANY. The term "original purchaser" means the person for whom the generator is originally purchased. This warranty is not transferable and applies only to portable generators driven by an overhead valve engine.

### Warranty Schedule:

Consumer\* Commercial\*

Engine Warranted solely by the engine manufacturer

All other parts 2 years (2nd year parts only) I Year

With the exception of European Community Countries, all units bound for export shall be warranted for One (1) Year in Consumer applications, and 90 days in Commercial applications as defined below.

\*NOTE: For the purpose of this warranty "consumer use" means personal residential household use by original purchaser. This warranty does not apply to units used for prime power in place of utility. "Commercial Use" means all other uses, including rental, construction, commercial and income producing purposes. Once a generator has experienced commercial use, it shall thereafter be considered a commercial use generator for the purposes of this warranty.

During the warranty period, the COMPANY will, at is option, repair or replace any part which, upon examination by the COMPANY, is found to be defective under normal use and service\*\*. All transportation costs under warranty, including return to the factory if necessary, are to be borne by the purchaser and prepaid by the purchaser. This warranty does not cover normal maintenance and service and does not apply to a generator set, alternator, or parts which have been subjected to improper or unauthorized installation or alteration, misuse, negligence, accident, overloading, overspeeding, improper maintenance, repair or storage so as, in the COMPANY's judgement, to adversely affect its performance and reliability.

\*\*NORMAL WEAR: As with all mechanical devices, the generator needs periodic parts service and replacement to perform well. This warranty will not cover repair when normal wear has exhausted the life of a part or generator.

THERE IS NO OTHER EXPRESS WARRANTY. THE COMPANY HEREBY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO THE EXTENT PERMITTED BY LAW. THE DURATION OF ANY IMPLIED WARRANTIES WHICH CANNOT BE DISCLAIMED IS LIMITED TO THE TIME PERIOD AS SPECIFIED IN THE EXPRESS WARRANTY. LIABILITY FOR CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES UNDER ANY AND ALL WARRANTIES IS EXCLUDED. THE COMPANY ALSO DISCLAIMS ANY RESPONSIBILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SUCH AS THE LOSS OF TIME OR THE USE OF THE POWER EQUIPMENT, OR ANY COMMERCIAL LOSS DUE TO THE FAILURE OF THE EQUIPMENT: AND ANY IMPLIED WARRANTIES ARE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

For service, see your nearest COMPANY authorized warranty service facility or call I-877-544-0982. Or look on the internet at www.generac-portables.com. Warranty service can be performed only by a COMPANY authorized service facility. This warranty will not apply to service at any other facility. At the time of requesting warranty service, evidence of original purchase date must be presented.