GENERAC CORPPORATION

OWNER'S MANUAL

SVP-5000 SERIES PORTABLE AC GENERATORS

Model 9719-2

DANGER! THIS GENERATOR IS DESIGNED FOR OUTDOOR USE ONLY. DO NOT USE THIS GENERATOR INSIDE ANY BUILDING OR ENCLOSURE INCLUDING THE GENERATOR COMPARTMENT OF A RECREATIONAL VEHICLE (RV). FIRE OR AN EXPLOSION MAY RESULT. NO USER PERFORMED MODIFICATIONS, INCLUDING VENTING OF EXHAUST AND/OR COOLING VENTILATION, WILL ELIMINATE THE DANGER.

DANGER: IF THIS UNIT IS USED FOR BACKUP POWER IN THE EVENT OF A UTILITY POWER FAILURE, THE FOLLOWING STEP MUST BE TAKEN: BEFORE CONNECTING THE GENERATOR TO AN ELECTRICAL SYSTEM, OPEN THE MAIN CIRCUIT BREAKER OR MAIN SWITCH SERVING THE SYSTEM, TO ISOLATE THE GENERATOR SYSTEM FROM THE ELECTRIC UTILITY. FAILURE TO ISOLATE THE GENERATOR AND UTILITY SYSTEMS MAY RESULT IN DAMAGE TO THE GENERATOR AND MAY ALSO RESULT IN INJURY OR DEATH TO ELECTRIC UTILITY WORKERS, DUE TO A BACKFEED OF ELECTRICAL ENERGY.

MODEL & SERIAL NUMBERS

In the spaces provided below, insert the Model and Serial numbers of your generator. Retain these numbers for future reference. You can find Model and Serial Numbers on the generator DATA PLATE, along with other important information.

Model Number_____

Serial Number_____

DANGER! DO NOT TAMPER WITH ENGINE GOVERNED SPEED. HIGH OPERATING SPEEDS ARE DANGEROUS AND INCREASE THE 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 HEAVY LOAD AT SUCH REDUCED SPEEDS, WHEN ADEQUATE ENGINE POWER IS NOT AVAILABLE, AND MAY SHORTEN ENGINE LIFE.

EQUIPMENT DESCRIPTION

The SVP-5000 generator is an engine-driven, revolving field, alternating current (AC) generators. They were designed to supply electrical power for operating compatible electrical lighting, appliance, tool and motor loads. This manual contains information for generators used to operate 120 and/or 240 volts, single phase, 60 Hz devices that require up to 5000 watts (5.0 kW) of power that pull up to 41.6 amps at 120 volts or 20.8 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 5000 watts. In most cases rated watts of the electrical device can be found on the device nameplate. If the device nameplate gives only volts and amps, multiply volts times amps to obtain watts (volts X amps = watts).

These SVP-5000 has the following standard features:

- **Large Overhead Tank:** Five gallon capacity
- **Cradle Mounted Control Panel:** Includes the following:
  - **120-Volt, 20-Amp Duplex Receptacle**
  - **Full capacity outlet:** 120/240-volt, 20-amp twist-lock receptacle.
- **Low Oil Shutdown:** Automatically shuts down the engine if oil drops below safe operational level.
- **Briggs & Stratton Engine:** The generator's revolving field is driven at about 3600 rpm by a Briggs & Stratton 10 h.p. engine.

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/Distributor or consult the factory.

Generac could not possibly anticipate every circumstance that might involve a hazard. For that reason the warnings in the Manual and the warnings on tags or decals affixed to the unit are not all-inclusive. If you intend to use a handling, operation or service procedure or method not specifically recommended by Generac, first make sure that such a procedure or method will not render the 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.
- The generator produces a very powerful voltage that can cause extremely dangerous electrical shock. Avoid contact with bare wires, terminals, etc. Never permit any unqualified person to operate or service the generator.
- Never handle any kind of electrical cord or device while standing in water, while barefoot or while hands or feet are wet. Dangerous electrical shock will result.
- Use a ground fault circuit interrupter in any damp or highly conductive area (such as metal decking or steel work).
- Do not use any worn, bare, frayed or otherwise damaged electrical cord sets with the generator.

SAFETY RULES (continued)

- Using any defective cord set may result in electrical shock or damage to equipment and/or property.
- Gasoline is highly FLAMMABLE and its vapors are EXPLOSIVE. Do not permit 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.
- Operate the generator only on level surfaces and where it will not be exposed to excessive moisture, dirt, dust or corrosive vapors.
- 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 FIRE or an EXPLOSION.
- Never store generator with fuel in tank where gasoline vapors might reach an open flame or spark or pilot light (as on a furnace, water heater or clothes dryer). FIRE or an EXPLOSION might result.
- Generator exhaust gases contain DEADLY carbon monoxide gas. This dangerous gas, if breathed in sufficient concentrations, can cause unconsciousness or even death. Operate this equipment only in the open air where adequate ventilation is available.
- The engine-generator 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. Without sufficient cooling air flow, the unit quickly overheats, damaging the generator or nearby property. Never operate the unit where ambient temperatures exceed 100°F.
- Do not insert any object through the cooling slots of the engine-generator. You could damage the unit or injure yourself.
- Never start, or stop, the generator with electrical loads connected to the receptacles with the connected devices turned ON. Start engine and let it stabilize before connecting electrical loads. Disconnect all electrical loads before shutting down generator.
- Never operate the generator (a) in the rain; (b) in any enclosed compartment; (c) if changes in engine speed are evident; (d) if connected electrical devices overheat; (e) if electrical output is lost; (f) if sparking is evident; (g) if flame or smoke is observed; (h) if the 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 control panel (Figure 1).

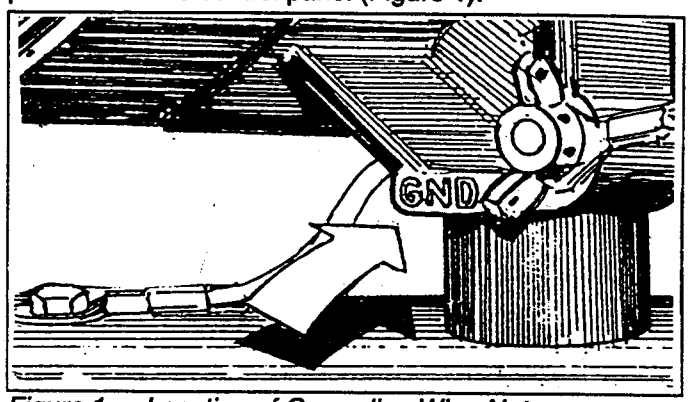


Figure 1 — Location of Grounding Wing Nut

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

Properly grounding 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.

BEFORE STARTING THE ENGINE

Perform the following tasks before trying to start the generator engine:

Check Engine Oil Level: Refer to the engine manufacturer's instructions for oil servicing procedures and recommendations. Fill engine to proper level with recommended oil before attempting to start the engine.

CAUTION! Any attempt to crank or start the engine before it has been properly serviced with the recommended oil results in an engine failure.

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

SERVICE DEALER LOCATION

To locate the nearest Generac Servicing Dealer, please call our 800 number.
ONLY DEALER LOCATION INFORMATION CAN BE OBTAINED AT THIS NUMBER

800-333-1322

OPERATING THE GENERATOR

- **Starting the Engine:** Disconnect all electrical loads from the generator.
- Open the fuel shut-off valve.
- Adjust the engine choke as necessary (see engine manufacturer's instructions).
- Crank the engine as outlined in engine manufacturer's instructions. When engine starts, open the choke gradually as engine warms up.

- **Applying 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 volts, single phase, 60 Hertz, AC electrical loads.
- DO NOT OVERLOAD THE GENERATOR. Add up the rated watts (or amps) of all loads to be connected at one time. This total should not be greater than the rated wattage/amperage capacity of the generator.

- **Stopping the Engine:** Disconnect all electrical loads and let engine run at no-load for a few minutes.
- Turn off the engine according to the engine manufacturer's instructions.

RECEPTACLES

The SVP-5000 generator has these receptacles:

120 Volts, 20 Amp Duplex Receptacles: Each receptacle of this pair (Figure 2) is protected against overload by 20-amp push-to-reset type of circuit breaker. Use each receptacle to operate 120 volts, single phase 60 Hz, AC electrical loads requiring up to 2400 watts (2.4 kW) at 20 amps of current.

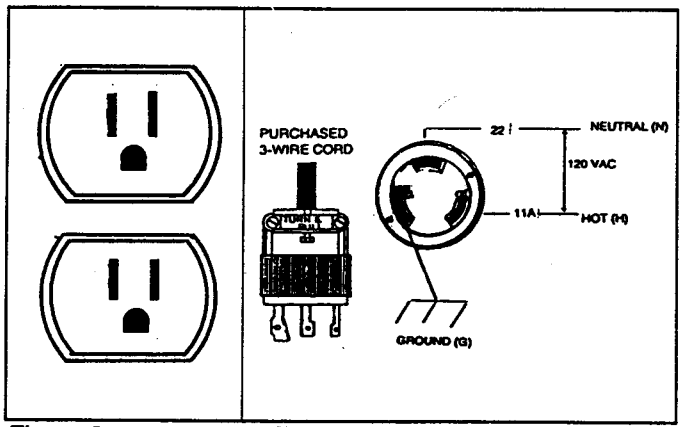


Figure 2

Figure 3

120 Volts, 30 Amp Twistlock Receptacle: This is a full capacity receptacle (Figure 3), which means you can take the full rated wattage from this sole receptacle. It is a NEMA L5-30R type.

A NEMA L5-30P mating connector plug is required to use with the 240 volts receptacle. Connect a suitable 3-wire cord set to the plug and to the desired load.

120/240 Volts, 20 Amp Twistlock Receptacle: This is a full capacity receptacle (Figure 4), which means you can take the full rated wattage from this sole receptacle. It is a NEMA L14-20R type.

A NEMA L14-20P mating connector plug is required to use with the 240 volts receptacle. Connect a suitable 4-wire cord set to the plug and to the desired load.

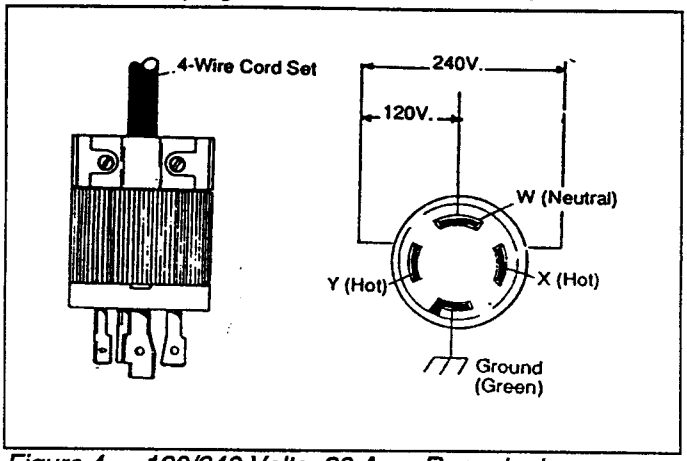


Figure 4 — 120/240 Volts, 20 Amp Receptacle

STORAGE

If you must store the generator for more than 30 days, using a fuel additive such as STA-BIL®, or an equivalent prevents fuel gum deposits from forming. Refer to engine manufacturer's instructions for further storage instructions.

MAINTENANCE

Generator Maintenance: Consists of keeping the unit clean and dry. Use damp cloth to wipe exterior surfaces clean. Use soft brush to loosen caked on dirt. You can use a vacuum system to remove loosened dirt. Never use a forceful spray of water to clean engine-generator. Water can contaminate the engine fuel system and can cause serious problems in the generator.

Engine Maintenance: Refer to the engine manufacturer's instructions for periodic maintenance of the engine.

GENERATOR SPECIFICATIONS

Rated Maximum Continuous Wattage Capacity	5000 watts (5.0 kW)
Power Factor	1.0
Rated Maximum Continuous Load Current	
At 120 Volts	41.6 amps
At 240 Volts	20.8 amps
Phase	1-Phase
Rated Frequency	60 Hz

DON'T OVERLOAD THE GENERATOR

Overloading a generator in excess of its rated wattage capacity can result in damage to generator and to connected electrical devices. Observe the following, to prevent overloading the unit:

- Add up the total wattage of all electrical devices to be connected at one time. This total should NOT be greater than the generator's wattage capacity.
- The rated wattage of lights can be taken from light bulbs. The rated wattage of tools, appliances and motors can usually be found on a data plate or decal affixed to the device.
- If the appliance, tool or motor does not give wattage, mulitply 120 volts times ampere rating to determine watts (volts x amps = watts).
- Some electric motors, such as induction types, require about two-and-a-half times more watts of power for starting than for running. This surge of power lasts for only a few seconds when starting such motors. Be sure you allow for this high starting wattage when selecting electrical devices to connect to your generator. First figure the watts needed to start the largest motor. Add to that figure the running watts of all other connected loads.
- The GUIDE below is provided to assist you in determining how many items your generator can operate at one time.

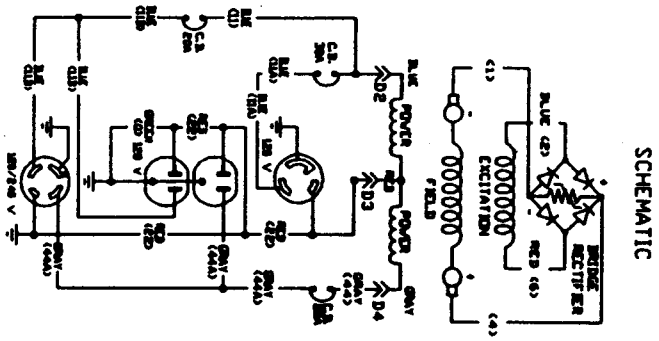
WATTAGE REFERENCE GUIDE

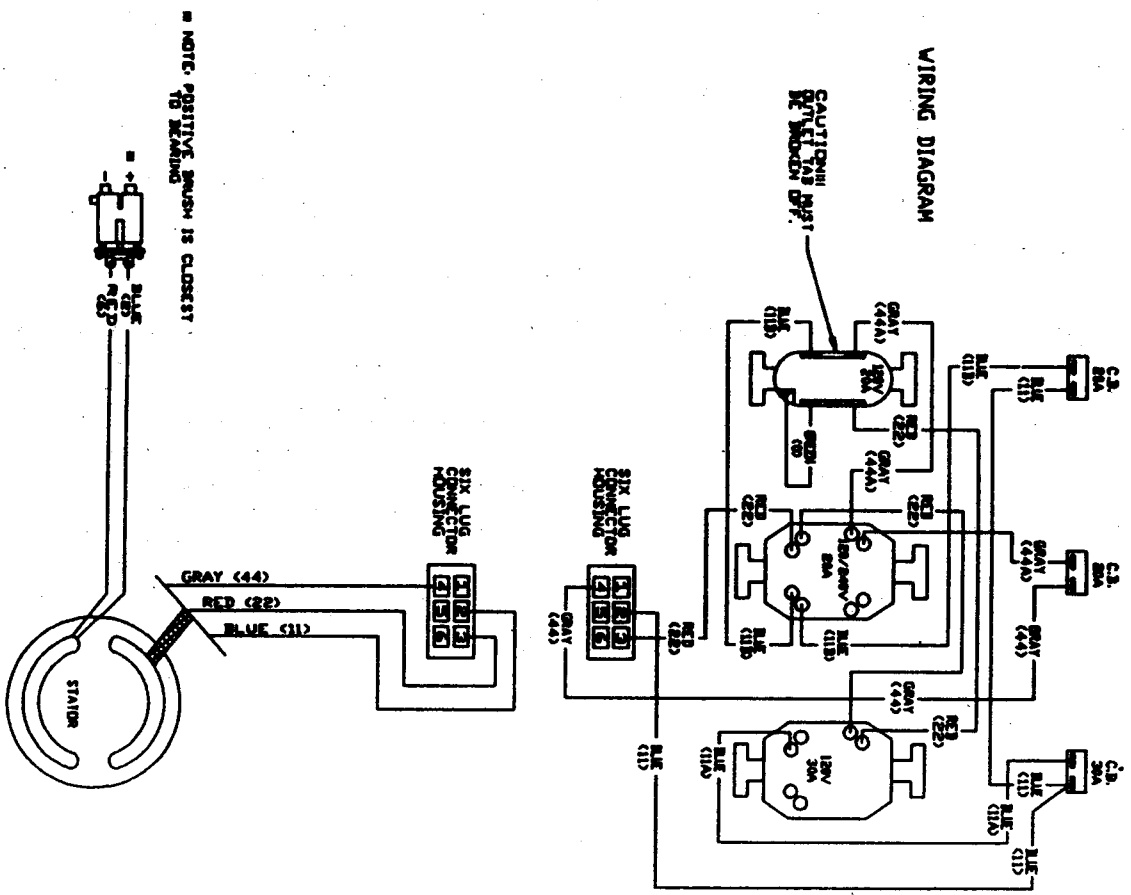
	RUNNING WATTS
*Air Conditioner (12,000 Btu)	1700
Battery Charger (20 amp)	500
Belt Sander (3")	1000
Chain Saw	1200
Circular Saw (6-12/")	800 to 1000
Coffee Maker	1000
*Compressor (1 HP)	2000
*Compressor (3/4 HP)	1800
*Compressor (1/2 HP)	1400
Curling Iron	700
*Freezer	500
Disc Sander (9")	1200
Edge Trimmer	500
Electric Nail Gun	1200
Electric Range (one element)	1500
Electric Skillet	1250
*Furnace Fan (1/3 HP)	1200
Hair Dryer	1200
Hand Drill (1")	1100
Hand Drill (1/2")	750 to 1000
Hand Drill (3/8")	500
Hand Drill (1/4")	250
Hedge Trimmer	450
Impact Wrench	500
*Jet Pump	800

	RUNNING WATTS
Lawn Mower	1200
Light Bulb	100
Microwave Oven	700
*Milk Cooler	1100
Oil Burner on Furnace	300
Oil Fired Space Heater (140,000 Btu)	400
Oil Fired Space Heater (85,000 Btu)	225
Oil Fired Space Heater (30,000 Btu)	150
*Paint Sprayer, Airless (1/3 HP)	600
Paint Sprayer, Airless (handheld)	150
Radio	50 to 200
*Refrigerator	600
Slow Cooker	200
*Submersible Pump (1-1/2 HP)	2800
*Submersible Pump (1 HP)	2000
*Submersible Pump (1/2 HP)	1500
Sump Pump	600
*Table Saw (10")	1750 to 2000
Television	200 to 500
Weed Trimmer	500

* Allow 2-1/2 times the listed watts for starting these devices.

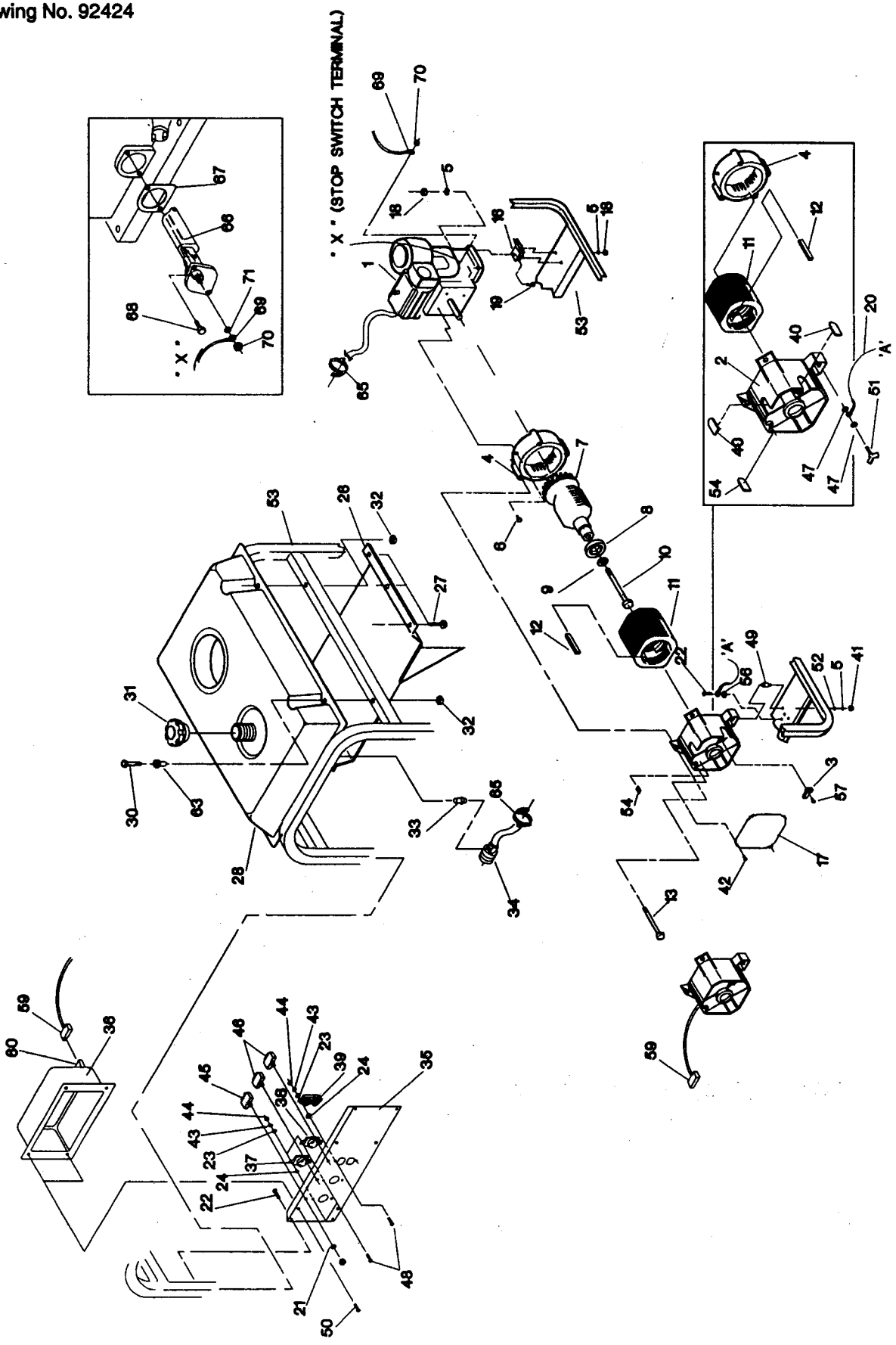
Drawing No. 93441





EXPLODED VIEW — SVP-5000 AC GENERATOR

Drawing No. 92424



REPAIR PARTS — SVP-5000 A-C GENERATOR

Drawin No. 92424

ITEM	PART NO.	QTY.	DESCRIPTION
1	91011	1	10 h.p. Briggs & Stratto Engine
2	66825C	1	Rear Bearing Carrier
3	91825	1	Brush & Bridge Rectifier Assembly
4	66365-G	1	Adaptor Housing
5	22129	8	M8 Lock Washer
6	86307	4	5/16-24 x 2-1/2" Screw
7	91844	1	Rotor Assembly
8	65791	1	Bearing
9	67451	1	Special Washer
10	47480	1	Rotor Bolt
11	91859	1	Stator Assembly
12	81917	1	M4 x 10mm Roll Pin
13	86308C	4	Stator Bolt
16	70642	2	45-degree Vibration Mount
17	67025	1	Bearing Carrier Cover
18	52858	6	M8-1.25 Flange Lock Nut
19	76222	3	M8-1.25 x 40mm Screw
20	143-53621	1	4" long Ground Wire
21	82881	3	Internal Lock Washer
22	86292	5	No. 10 Self-drilling Screw
23	38150	6	No. 8 Flat Washer
24	23365	6	No. 8 Serrated Lock Washer
26	78951A	1	Heat Shield
27	56892	2	No. 10-24 x 3/8" Screw
28	77374	1	5 gal. Plastic Tank
30	78831B	4	M6 x 60mm Capscrew (black)
31	84582	1	Fuel Tank Cap
32	77395	4	M6 Hex Lock Nut
33	78299	1	Plastic Tank Bushing
34	78298	1	Plastic Tank Valve
35	81897	1	Control Panel
36	81919	1	Control Panel Back
37	68868	1	120 volt, 30 amp Twistlock Receptacle
38	68867	1	120/240 volt, 20 amp Twistlock Receptacle
39	68759	1	120 volt, 20 amp Duplex Outlet
40	84242	2	Rear Bearing Carrier Grommet
41	25244	2	5/16-18 Hex Nut
42	74908	3	M5-0.8 x 10mm Hex Screw
43	22264	6	No. 8 Lock Washer
44	51715	6	M4-0.7 Hex Nut
45	75207A	1	30 amp Circuit Breaker
46	75207	2	20 amp Circuit Breaker
47	26850	2	1/4" Shakeproof Washer
48	75475	6	M4-0.7 x 10mm Screw
49	82857	2	Rubber Mount
50	82308	6	Self-tapping Screw
51	86494	1	M6 x 16mm Wing Screw
52	22145	2	M8 Flat Washer
53	91020	1	Cradle
54	67022	1	Rubber Grommet
56	22769	1	#10 Shakeproof Washer
57	66849	2	M5-0.8 x 15mm Screw
59	22695	1	6-pin Male Connector
60	22694	1	6-pin Connector
63	83465	4	Mounting Tank Grommet
65	48031C	2	1/4" Hose Clamp
66	88977	1	Low Oil Shutdown Switch
67	91841	1	LOS Gasket
68	32713	1	No. 10-32 x 5/8" Screw
69	91842A	1	LOS Wire
70	22471	2	No. 8-32 Nut
71	23365	1	No. 8 Shakeproof Washer

ONE-YEAR LIMITED WARRANTY FOR PORTABLE GENERATORS

GENERAC warrants to the original purchaser that its generator will be free from defects in materials or workmanship for a period of one year* from the date of original purchase. This warranty, however, does not include the gasoline engine when furnished or attached. With the exception of the GN-Series engines, this engine is covered solely by the warranty of the manufacturer of such engine. The GN-Series engines are covered **solely** by this Generac 1-year warranty. Starting batteries are not warranted by Generac.

***NOTE: Rental units, demonstrators, commercial or prime power applications, such as construction or utility are warranted for 90 days. Rental units, demonstrators, or commercial applications such as construction or utility which are resold are not covered under warranty by GENERAC. Any warranty, whether expressed or implied, rests solely with the seller.**

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

There is no other express warranty. GENERAC 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 (one year) as specified in the express warranty. Liability for consequential, incidental, or special damages under any and all warranties is excluded to the extent permitted by law. Some states do not allow limitations on how long an implied warranty lasts, or the exclusions or limitations 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.

This warranty is effective for all products manufactured after January 1, 1986, and supersedes all prior warranties of GENERAC.

For service, contact your nearest GENERAC authorized warranty service facility, as shown on GENERAC's listing of authorized warranty service facilities. Warranty service can only be performed by a GENERAC authorized service facility. At the time of requesting warranty service, evidence of original purchase date must be presented.

GENERAC CORPORATION

P.O. Box 8

Highway 59 and Hillside Road

Waukesha, WI 53187

TELEPHONE: (414) 544-4811 FAX: (414) 544-4851