GeneratorJoe

LEADER IN **BRUSHLESS** GENERATORS

OWNER'S MANUAL

FOR PORTABLE GEN-SET MODELS: PP, GPN, GPNDL, GPGF, AND PP-HGS WITH KW SIZES: 3.0, 4.0, 5.0, 6.5, 7.5, 9.0, 10.5, 12.0, AND 15.0 KW

PORTABLE GENERATORS

READ ENTIRE INSTRUCTION MANUAL FOR SAFE OPERATION OF GENERATOR. ALSO READ SEPARATE AND INCLUDED ENGINE MANUAL BEFORE ACTUAL USE. IT IS IMPORTANT FOR USER TO KNOW HOW TO SAFELY START AND HOW TO SAFELY STOP ENGINE,BEFORE ATTEMPT OF FIRST TIME USE.

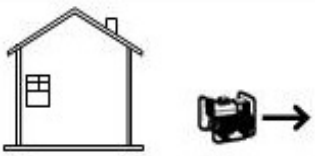
GeneratorJoe®
4723 Muirfield Court
Santa Rosa, CA 95405
Phone: 707 542-2224
Fax: 707 542-2227
Email: sales@generatorjoe.Net
Web: www.generatorjoe.NET

⚠ 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.

Avoid other generator hazards.
READ MANUAL BEFORE USE

***CALIFORNIA PROPOSITION 65 WARNING ***
ENGINE EXHAUST FROM THIS PRODUCT CONTAINS CHEMICALS KNOWN TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

EFFECTIVE DATE: APRIL 2007

PREFACE:

This compact, lightweight generating set is a very high quality, portable electric power source. It is intended for temporary electric power to power tools, lighting, small electric motors and other similar industrial, commercial and construction machinery.

Before starting your generating set, thoroughly study the instructions and cautions in this manual to insure you are fully acquainted with the operation of this set. Proper preparation, operation and maintenance will result in operator safety, best performance and long life of generating set.

For detailed engine handling, always refer to the separate engine instruction book furnished with the set.

Generator Joe is constantly improving its products. The specifications outlined herein are subject to change without prior notice or obligation. The purchaser and/or user assumes liability of any modification and/or alterations made on this equipment from original design and manufacture.
Before using, user shall determine the suitability of this product for its intended use and assumes liability therein.

1. INTRODUCTION:

This generating set consists of generator, engine, base and power take off means.

The generator is a two pole, 3600 RPM (3000 RPM for 50 hertz operation), brushless, revolving field, synchronous type with one ball bearing. The rotor of the generator is directly connected to the engine crankshaft and the stator is rigidly coupled to the engine casting, through the bearing casting. Other styles include a generator only, key shaft extended, two bearing, foot mounted, for use with couplings or V-belt and pulley method of connection to a key shaft engine.

2. FEATURES:

POWER ASSIST is an exclusive excitation system using power capacitor and unique new winding design to insure minimum power fluctuations, maintains excellent voltage regulation without other external devices, and provides superior induction motor load starting power.

I**NNOVATIVE WINDING** consists of all copper field and rotor windings, large diameter electrical grade steel laminations, Class H high 200° C heat insulation protection, all to insure against burn-outs or early failures.

3. RULES FOR SAFE OPERATIONS:

Safety precautions are essential when operating this equipment. Using this equipment with respect and caution will considerably lessen the possibilities of personal injury. This manual will warn of specific personal injury potential, and these warnings will be designated by the symbol:

⚠

Read your generator and engine operator manuals carefully, know your equipment before you use it. Consider the application, limitations and potential hazards before operation.

⚠ This generating set is equipped with a ground terminal for your protection. Always complete the grounding path from the set to an external grounding source to prevent electrical shock.

Electric load applied to generating set must be within its rating. Overloading will damage set or shorten its life.
Engine must not be run at excessive over-speed conditions. Do not tamper with parts that may increase speed and result in damage to set.

Generating set must reach operating speed before load is applied. Disconnect electric loads before shutting engine down.

⚠ Maintain electrical cords in good condition. Worn, bare, frayed or otherwise damaged cords can cause electric shock.

⚠ Never operate the generating set, or handle any electrical equipment while standing in water, while barefoot, while hands are wet, or while in the rain or snow to prevent dangerous electric shock.

⚠ A ground fault circuit interrupter (GFCI) should be used in damp or high electrical conductive areas and construction job-sites to prevent electric shock.

⚠ Before working on the engine or the generator, always remove the spark plug or the spark plug wire to prevent accidental starting.

⚠ Check generating fuel system on a regular basis. Look for signs of leaks, deterioration, chafed or spongy fuel hose, loose or missing fuel hose clamps, rusted or damaged fuel tanks, defective fuel shut-off valve. Correct any defects before operation.

⚠ Always provide adequate ventilation. Do not operate set in any enclosed or narrow space. Engines consume oxygen and give off deadly carbon monoxide poisonous gas. Improper ventilation will cause damage to set and possible injury to people.

⚠ Avoid severe burns by not touching hot muffler, hot exhaust manifold, or engine cooling cylinders.

⚠ Keep generator and engine clean. Remove all oil or gasoline deposits, and accumulated dirt from set and immediate area. Poor housekeeping creates a fire hazard.

⚠ Keep a fire extinguisher close by your set and be familiar on how to use it. Consult your local fire department for correct extinguisher type.

⚠ The unit should never be operated under the following conditions:

A. Change in engine speed, slow or fast
B. Overheating in load connecting devices.
C. Sparking or arcs from set.
D. Loss of electrical output.
E. Damaged receptacles.
F. Engine misfire.
G. Excessive vibration.
H. Enclosed compartments, or confined areas.
I. Flame or smoke
J. Rain, snow or water conditions.
K. Operator non-attendance.

⚠ The unit must be operated under the following conditions:

A. Good ventilation. Avoid areas where vapors can be trapped such as boat bilges, basements, garages, etc. Air flow and temperatures are important. Never operate set when temperature is over 110° F.

B. Engine exhaust gas is poisonous and dangerous. The gas contains carbon monoxide, an odorless, invisible gas which causes serious illness or death if breathed. Always direct exhaust fumes away from humans.

C. Avoid refueling while engine is hot, still running, in the dark, near open flames or sparking electrical devices.

4. INSTALLATION:

OUTDOORS: Choose a location where generating set will not be exposed to rain, snow or direct sunlight. Make sure that set is on secure level ground so that it cannot slide or shift around. Also, position the set so that the exhaust will not be directed toward nearby people.

The installation site must be free from water, moisture, or dust. All electrical components should be protected from excessive moisture or deterioration of insulation system will happen and result in grounding or short circuit of generating system.

Foreign matters, such as dust, dirt, sand, lint, or abrasive materials can cause damage to generator and engine if allowed into its cooling system.

INDOORS: It may be necessary to install generating set inside a type of shelter. If this is your choice, several factors must be considered. Whenever an engine is installed indoors, the exhaust fumes must be vented to the outside. The engine should be installed at least two feet from any outside wall. If you use an exhaust pipe that is too small in diameter or use more than two right angles, an excessive back pressure will result, which can overheat the engine, lose horsepower, and destroy valves. Always use an approved flexible exhaust hose between engine and rigid pipe. Consult a local engine specialist or your local fire department for special instructions on these types of installation. Never install generator indoors where humans habitat.

⚠ Do not try to install your generator inside confined areas, without the help of experienced engine and generator technicians. Improper inside installations can cause health hazards or death.

⚠ Remember, exhaust fumes are deadly carbon monoxide gas, and it must be vented to the outside where there are no people. Cooling air of sufficient amounts must be brought in and exhausted out to insure proper cooling of engine and generator.

5. PRE-START PREPARATIONS:

Your generating set has been thoroughly inspected prior to shipment from the factory. However, be sure to check for damaged parts, loose nuts and bolts, which could have occurred in transit.

GROUND. The ground terminal on the generating set should always be used to connect the set to a suitable ground. The ground path should be #8 size wire and not over six foot long. Insert one end of #8 wire into ground terminal and tighten set screw onto wire securely. Connect other end of wire to a suitable ground.

LOCATE AND BE FAMILIAR WITH THE FOLLOWING ITEMS:

RECEPTACLES. (1, 2, 3, 9, & 10) Most generator sets will have a receptacle panel with a variety of components, depending on the specific generator set. It is important to know that all receptacles conform to National Electrical Manufacturer's Association (NEMA) regulations and matching NEMA male caps should always be used. Always use grounded male plugs. The neutral line of generating set is mechanically grounded to frame.

CIRCUIT BREAKER. (4 & 5) All portable single phase generating sets have circuit breakers to protect against electrical overloads. If possible, it is advised to switch off or remove electric load before starting engine.

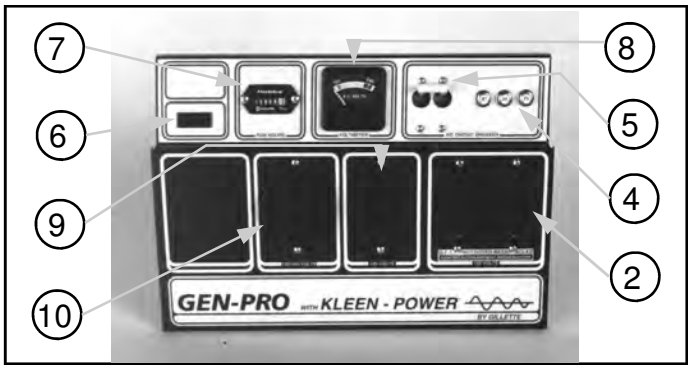
BALANCED LOAD. Special winding design will automatically not allow an unbalanced electric load condition while using a large 120 volt load.

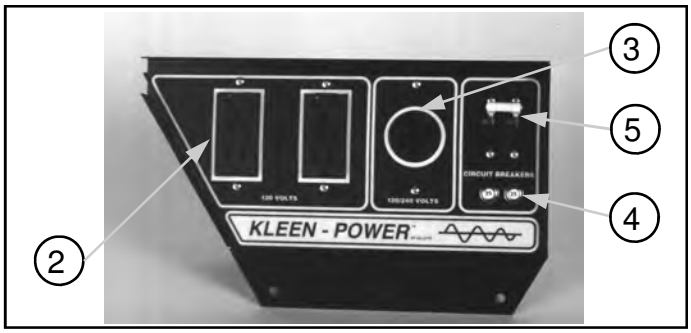
ENGINE STOP SWITCH. (6) Some models have the engine stop switch on the receptacle panel and some models have this stop switch located on the engine. Always locate this switch and be familiar with its location before operating the set.

HOUR METER. (7) Some models indicate the hours of use to help in determining service periods.

VOLT METER. (8) Some models indicate the voltage output of generator set.

GEN-PRO AND POWER-PRO RECEPTACLE PANELS





1 STANDARD 120 VOLT, 15 AMP, NEMA 5-15R RECEPTACLE
2 SPECIAL 120 VOLT, 15 OR 20 AMP, NEMA 5-15R GFCI RECEPTACLE WITH ELECTRIC SHOCK PROTECTION.
3 STANDARD 120/240 VOLT 20 OR 30 AMP NEMA L14-20R OR NEMA L14-30R TWIST-LOCK, 4 WIRE RECEPTACLE.
4 PUSH BUTTON, THERMO RE-ACTING MAIN CIRCUIT BREAKER
5 TWO POLE MAGNETIC RE-ACTING MAIN CIRCUIT BREAKER
6 OPTIONAL ENGINE START-STOP SWITCH
7 RUN TIME METER
8 VOLTMETER
9 STANDARD 120 VOLT, 30 AMP, NEMA L5-30R RECEPTACLE
10 SPECIAL 120/240 VOLT 50 OR 60 AMP, NEMA 14-50R OR NEMA 14-60R FULL POWER RECEPTACLE

FUEL VALVE. The generator fuel tank has an ON-OFF valve mounted underneath tank. Always keep this valve closed when the set is not in use.

FUEL CAP. Some models have fuel level indicator built into the extended run fuel tanks. You can always safely monitor fuel level on all tanks without cap removal.

OIL-GUARD. All models have protection against damage to engine resulting from low oil level. As the oil level falls below safe level, the engine automatically shuts down and the engine will not restart, until oil is added.

6. LOAD APPLICATION:

Determine the total electric load before it is connected to generating set to prevent overloading. Always compare the generating set nameplate data with that of the equipment to be used to insure that watts, volts, amperage and frequency requirements are suitable for operating equipment. Generally, the wattage listed on the equipment nameplate is its rated output. However, some equipment may require three to ten times more wattage than its rating on the nameplate, as the wattage is influenced by the equipment efficiency, power factor and starting system. NOTE; If wattage is not given on equipment nameplate, approximate wattage may be determined by multiplying nameplate voltage by nameplate amperage.

VOLTAGE X AMPERAGE = WATTS

When connecting a resistive load such as incandescent lights, heaters or common electric power tools, a capacity of up to the generating set full rated wattage output can be used. When connecting a fluorescent or mercury light, transformers, inductive coils, or electric motors a capacity of up to the generating set full rated wattage output, multiplied by 0.6 can be used.

CAUTION: Electric motors and electric motor driven equipment will draw much greater amperage for starting, than for running these motors. Follow the chart for code G electric motors, but pay special attention to caution concerning the code L electric motors.

CAUTION: Code L Electric Motors, used on equipment such as air compressors, air conditioners, or submersible water pump motors require an extreme high amount of starting power, up to 6 or 8 times the motor name plate running amps. The gen-set wattage rating must be sized to the electric motor starting watts.

THREE PHASE. Some models are available with three phase power upon special request. The nameplate rating will always be shown as KVA (Kilo-Volt amps) rather than the watts for single phase. If three phase output (KVA) is not given on equipment nameplate, approximate output can be determined by multiplying volts X amps X sq. root of 3 X powerfactor, divided by 1000.

VOLTS X AMPS X SQ.-ROOT-OF-3 X P.F. / 1000=KVA

ELEC. MOTOR HORSE POWER	CODE G ELECTRIC MOTORS	
	*STARTING WATTS	RUNNING WATTS
1/2	2000	1100
1	3800	1800
2	6000	2800
3	8000	4000
4	11000	5500
5	13000	6500

EXTENSION CORDS. When electric power is to be provided to various loads at some distance from generating set, extension cords are normally used. These cords should be sized to allow for distance in length and amperage so that the voltage drop between the set and point of use is held to a minimum.

AMPS AT 240 V.	LOAD IN WATTS	DROP CORD LENGTH IN FEET			
		#10 GA. CORD	#12 GA. CORD	#14 GA. CORD	#16 GA. CORD
10	2400	250	150	100	75
20	4800	125	75	50	25
30	7200	60	35	25	10
40	9600	30	15	10	*
50	12000	15	*	*	*
60	14400	*	*	*	*

CAUTION: Equipment damage can result from low voltage due to small wire size. * Not recommended.

GROUND FAULT CIRCUIT INTERRUPTION: When certain adverse conditions exist, an electric shock potential is possible to the operator of electric generator sets. It is recommended by the **NATIONAL ELECTRICAL CODE (NEC)** and **OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION (OSHA)** to utilize a device that will automatically disconnect the electric load from the electric power source when these health and the life threatening conditions exist.

This device protects you against hazardous electrical shock that may be caused if your body becomes a path through which electricity travels, to reach ground potential. This could happen when you touch an appliance or cord which is “Live” through faulty mechanism, damp or worn insulation, etc. Also, be cautious about touching plumbing or other mechanical paths to ground.

Article 305-6 of the National Electrical Code, l990, states that ground fault protection for personnel on construction sites shall be provided for all l25 volt, l5 amp and 20 amp receptacles. Gen-Pro portable generators provide this personnel electric shock protection by means of a "ground-fault circuit interrupter" (GFCI) built into its l5 and 20 amp, l20 volt receptacles. This UL approved device meets OSHA and NEC requirements for electric shock protection on job-site portable electric power appliances.

These GFCI protection devices should be tested for correct operation before each use. Test procedure with gen-set in operation: Push test button on GFCI receptacles. The RESET button should pop out from inner surface. This should result in no power at all from receptacles protected by GFCI. Verify by plugging test lamp or voltmeter into every GFCI protected receptacle. If GFCI tests correctly (no power output), then push RESET button back into place until it locks and remains depressed for full power output.

CAUTION: RESET button will not remain in place if tests do not meet correct standards or if RESET trips by itself during normal use. **DO NOT CONTINUE TO USE GENERATOR SET.** Consult a qualified repairman or electrician to determine problem with GFCI.

WARNING: GFCI protection should not be considered an all inclusive answer for total electrical shock protection, as all possible use conditions are too extensive to be considered.

WARNING: GFCI protection should not be used directly or indirectly with life support apparatus or associated circuitry.

DETERMINING ALTERNATOR LOAD REQUIREMENTS				
✓	APPLIANCE	NOTES	RUNNING WATTS	TOTAL WATTS
	VCR	(1)	70	
	Light Bulb		1000	
	Radio		100	
	Television	(1)	100	
	Stereo	(1)	120	
	Fry Pan		150	
	Home Computer	(1)	150	
	Vacuum Cleaner		250	
	Attic Fan, 1/4 hp	(2)	400	
	Sump Pump, 1/3 hp	(2)	500	
	Refrigerator	(3)	600	
	Furnace Fan, 1/3 hp	(2)	600	
	Freezer	(3)	800	
	Jet Water Pump, 3/4 hp	(2)	900	
	Electric Stove Element		1000	
	Submersible Water Pump, 1hp	(4)	1000	
	Toaster		1000	
	Coffee Maker		1200	
	Dishwasher		1200	
	Hair Dryer		1200	
	Microwave Oven		1500	
	Submersible Water Pump, 2 hp	(4)	1600	
	Water heater		3000	
	Oven		4500	
	Air Compressor on 120V	(4)	1800	
	Total Watts Checked			

NOTES:

⚠ (1) Make sure that generator produces no more than 10% harmful harmonic wave-form distortions or possible destruction of these loads may result.

⚠ (2) Hard-starting motors require starting watts of 3 to 4 times the rated running watts.

⚠ (3) These loads may require up to l5 minutes to restart due to its normal build up of compressor head pressure.

⚠ (4) These are extremely hard starting Code L electric motors and they require 6 to 8 times name plate running amps for total starting load.
NOTE: Consult dealer on extremely hard to start motor loads such as air conditioners and air compressors, and submersible water pumps.

7. BEFORE STARTING.

A. Disconnect all electrical loads.

B. Make sure the generating set is positioned on firm level surface.

C. Check the lubricating oil and maintain to proper level. **CAUTION:** Never start engine when oil level is below normal level or when oil fill cap is off.

D. Check fuel level and fill tank 3/4 full with clean fresh unleaded automotive gasoline. Never fill fuel tank completely to the top. Always wipe up and remove any spilled gasoline.

E. Make sure that exhaust is directed to outside area void of people, or animals.

8. STARTING.

A. Open the On-Off fuel valve underneath the fuel tank.

B. Close the manual choke. Adjust this choke according to operating conditions. When the engine is already warm or it is a warm day, you may only have to close the choke half way, or not at all.

C. Move engine start-stop switch to start position. This switch is almost always mounted on the engine, and it can be a toggle switch, a rotary switch, a lever switch, or a stop-start switch which may be mounted on the generator receptacle panel.

D. Firmly grasp the starting rope handle and slowly pull it out. The resistance becomes hardest at a certain point corresponding to the engine compression point. Let the rope rewind itself from this point, then pull sharply. Repeat process if engine fails to start. **CAUTION:** Do not pull the rope all the way to the end. Do not release the rope handle after pulling. While still holding on, allow it to rewind slowly into its housing.
CAUTION: It is possible to cause arm and back injury if starting rope is pulled in a reckless or hazardous manner.

E. When the engine starts, open the choke slowly. **CAUTION:** Allow generating set to run at no load for five (5) minutes upon initial start-up to permit engine and generator to warm up and stabilize.

F. Check the generating set for abnormal noises or smells. If OK, connect the load to the generating set. **CAUTION:** Do not apply full heavy electrical load during the first three (3) hours on your brand new set.

9. STOPPING.

A. Remove all loads from generating set.

B. Continue to run the engine at no load for three to five minutesso that the engine may cool down.

C. Stop the engine by depressing start-stop switch to "stop". The switch may be found on the receptacle panel or on the engine.

D. Do not leave the generating set until it has completely stopped. Engine and muffler will remain hot for several hours after set is stopped. Severe burns remain as potential injury hazard.

E. After engine is stopped, close the fuel on-off valve (under fuel tank) and secure set.

⚠ WARNING ⚠
STAND-BY INSTALLATION

If your generating set is to be used as a standby electric power source in case of utility power failure, it must be installed by a registered and licensed electrician and in compliance with all applicable state and local electrical codes. Also, local Fire Departments must be consulted concerning proper and safe handling procedures for fuels such as gasoline, diesel, LPG, propane, or natural gas.

DO NOT CONNECT ANY GENERATOR SET TO ANY EXISTING ELECTRICAL SYSTEM WITHOUT AN ISOLATING, UL APPROVED TRANSFER SWITCH INSTALLED BY A LICENSED ELECTRICIAN.

YOUR GENERATING SET MAY HAVE ONE OR MORE OF THE FOLLOWING OPTIONAL ITEMS;

A. Three Phase Output available on all models. The rating is always shown in KVA (Kilo-Volt-Amp) and power take-off can be through terminal strip or four wire twist-lock receptacle.

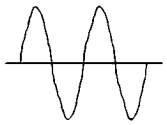
B. Spark Arrestor Screen for B & S and HONDA engines only. This USDA approved muffler screen will stop sparks from leaving muffler and can be attached at any time. **CAUTION:** This screen must be cleaned of carbon particles every 50 hours of operation.

C. Two Wheel Dolly is in knock-down kit form. It can be assembled in minutes with the use of a 7/16" wrench and will fit 5 KW through 7.5 KW, GPN or PP series. A built-in two wheel dolly is furnished as standard equipment on all larger size gen-sets, from 9kw and up.

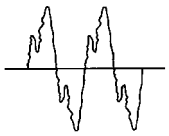
D."Kleen-Power" is a major component of your generator set. In the past, much attention was given to generator features such as voltage regulation or maintenance free "brushless" generators. However, no consideration was given to the most important electric power feature, "the wave-form". Electric current is measured in hertz, the international unit of frequency, and it equals 60 cycles per second. A single cycle is called a wave-form and is graphically displayed to show how clean, or distortion free, electric power can be.

CAUTION: Always make sure that the emergency electric power source produces no more than 10% harmful harmonic wave-form distortions or possible load damage may occur.

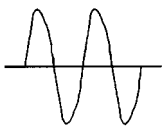
A typical commercial power wave-form looks like this: with wave-form distortion of 3% to 5% and is safe for all electric loads.



A typical generator set wave-form looks like this: with wave-form distortion of 25% to 35% and is not safe for any voltage sensitive loads.



Your generator winding with "Kleen-Power" has a wave-form like this: with wave-form distortion of 7% to 8% and is safe for all plugged-in electric loads.



E. "**SPEED-MATIC"** automatic engine idle speed device. This item is factory installed only, and at "no load" condition will control engine speed at approximately 2600 to 2800 RPM at 75 to 80 VAC. When an electrical load of l00 watts or more is introduced into the circuit, the engine will automatically speed up to the required 3600 RPM and produce either the full l20 VAC or 240 VAC required voltage. This device saves wear on the engine and reduces fuel consumption when you have to let the engine run at long periods of time but only occasionally are you going to use power. A switch is also included to by-pass the entire device allowing set to run at full speed when electric loads are to be used either frequently or constantly.

F. Manual Transfer Switch allows generating set to be used for stand-by power. This device will not allow emergency generating power and normal commercial power to be connected to the electrical load at the same time. Upon power failure, the generating set must be manually started, and the transfer switch must be operated manually.

G. LOW OIL SHUT DOWN PROTECTION. All sets have this feature and if oil level falls below safe level, the engine will shutdown and will not start until proper oil level is restored.

⚠ Starting battery for electric start generator sets will be furnished by user. These starting batteries vary in size and power output. Consult the chart information found on battery base as attached to each gen-set for correct size for your set. Most batteries are wet charged and ready to use; but you may find a battery that is dry charged and must have electrolyte acid installed. This acid is not furnished with set.
CAUTION: If battery acid is ever required, battery must be brought to a full charge by commercial battery charger for 24 hours. Use extreme caution when handling the batteries. Battery acid is extremely dangerous and can cause severe burns to the eyes, skin, and clothing. Flush contaminated areas immediately with water, then call your doctor.
All electric start engines include a built-in battery charger which operates automatically when the engine runs. Provisions must be made to keep battery fully charged if the engine will not be run frequently as in the case of a permanent stand-by set. This can be accomplished by a small commercial battery charger connected to battery and plugged into normal power.

CAUTION: Overcharging the battery will cause battery damage. Always use an automatically regulated charger so that as battery becomes charged, the rate of charge is automatically reduced. Check battery cells with a hydrometer. The specific gravity of each cell should be l.280 at 75 F. If cells are low, add distilled water and recharge battery. Keep battery and battery terminals clean and dry. Terminals should have light grease or petroleum jelly applied to retard corrosion.

Disconnection or connection of battery terminals while engine is running will cause violent spark and may result in explosion. Never smoke or use open flame near battery. The area of battery use must be well ventilated because batteries give off a poisonous and explosive gas when being charged.

H. Each extended run fuel tank has a separate fuel valve underneath tank. Always shut this valve off when generator is not in use.

I. 50 Hertz winding is special; usually for generating sets to be sent to foreign lands. The operating speed is reduced to 3000 RPM and normal wattage rating is reduced by l5% to accommodate this winding.

⚠ SAFETY IN REVIEW: ⚠

A. Guard yourself against electric shock; avoid personal contact with live terminals, wires and receptacles. The electric output voltage in your generator can produce a fatal shock.

B. Always use approved 3-prong grounded plugs and 3-wire cords.

C. The generator must be properly grounded. There is a labeled ground lug on each set for connection to #8 copper wire attached to suitable ground to earth.

D. Operation of this set in an enclosed compartment of a recreational motor home, of other types of vehicle compartment, enclosed space or poorly ventilated area, is not recommended and will cause a potential fire hazard and/or personal health or death hazard by poisonous fumes.

E. Gasoline and other fuels will always present a hazard of explosion or fire. Keep correct type fire extinguisher close by generating set, and consult local fire department on handling and storage of dangerous fuels.

F. Battery acid can produce skin, eye, and clothing damage. Batteries emit a hydrogen gas when being charged. This gas is poisonous and highly explosive. Use extreme caution when handling batteries.

G. California proposition 65 warning: This is a warning to user that all exhaust fumes from this engine contain chemicals known to cause cancer, birth defects, or other reproductive harm. Do Not Breathe poisonous engine exhaust fumes.

H. All wiring must conform to national electric code as well as state and local codes when using generating set as emergency home or business standby power set. You must consult and employ a qualified licensed electrician for safe, hazard and shock-proof installation. Installing a home or business emergency power system to your existing wiring circuits is not a "do-it-yourself" project.

I. User must supply battery for energizing engine electric starter motor. Be sure battery connections are of correct polarity. All electric start engines use negative ground, l2 V DC battery with minimum size of 45 amp-hour rating, or minimum 230 cold cranking amp size, 8 HP through 25 HP gasoline engines... All diesel engines should have minimum 60 amp-hour or 400 cold cranking amp size battery. When connecting or disconnecting battery cables, engine must not be running or cranking.

J. Always shut the engine down completely before filling engine fuel tank. Never try to fill fuel tank while engine is in operation, or when viewing conditions are limited. Only fill tank to 3/4 full. Never fill tank to full level.

K. Before transporting generator in vehicle, drain or run out all fuel. This prevents possible fuel leakage.

L. Engine should be refueled in a well lighted area. Avoid fuel spills. Do not operate generator set where fuel spills have occurred until all excess fuel is cleaned up and removed. Avoid refueling near open flames, sparking electric devices, power tools, other high heat conditions or while the set is running.

M. Good ventilation is mandatory for safe generator operation. Avoid areas when fuel vapors and exhaust gases can be trapped: basements, boat bilges, compartments, garages, etc. Proper air flow and temperatures are important for safe operation of air-cooled sets. Never operate generator set when temperature exceeds 110° F.

N. Muffler and air cleaner should always be installed and in good condition. They act as a flame arrestor if backfiring occurs.

O. A spark arrestor muffler must be used when gen-set is operated around or near flammable materials such as farm crops, grain dust, forests, brush, dry grass, and other similar flammable items to help prevent fires caused by potentially hot engine carbon sparks exiting through muffler. California statutes #l34005(6), 442, and 443 legally require the use of this item on all portable gen-sets. It is required on all U.S. Forest Service lands and may also be required by various other states' statutes and ordinances.

P. The gasoline container, used to fill generator fuel tank, must be an approved tank for this application. Always use a small container, not over two (2) gallon capacity. Make sure the container is vented. Open the vent and the pour nozzle while the gasoline container is on the ground. Proceed to fill fuel tank while engine is stopped. Avoid carrying opened gas tank over three (3) feet in length. Do not drop gasoline tank. Follow all recommendations from gasoline tank manufacturer in the use of their product. Do not try to refill gasoline tanks when temperature exceeds l00 F/40 C.

Q. Some generator models are equipped with automatic GFCI receptacles. If a ground fault exists (potential electric shock hazard), the receptacle will not produce power. When ground fault condition is removed, manually reset built-in circuit breaker. For maximum protection against electric shock hazard, manually operate test switch on GFCI protected receptacle, while gen-set engine is running and before electric load is applied to receptacles.

R. Always read engine manual thoroughly before initial start of your new gen-set. The engine is not considered broke-in until 25-35 hours run time has passed.

S. High altitude and high tempatures create a negative effect on engines and can severely reduce engine horse power, therefore reducing electric power output.

T. Clean, high octane lead free fuel is always recommended to develop peak horsepower in small engines. Never use old, stale fuel, or leaded fuel.

U. All engines comply to existing EPA regulations for maximum toxic exhaust fumes as of September 1997.

V. Consult with licensed electrician on proper grounding procedures as outlined in National Electric Code (NEC) article 250-5.

W. All generators have been factory load tested. All engines are “green” and have not had the (50) hour break in time to develop peak horsepower. Engine horsepower ratings meet SAE-J1349 test codes which specify reduced ratings of 3 1/2% for each 1000 feet over 328 feet above sea level and 1% reduced rating for every 10°F (5.56°C) rise above 77°F (25°C).

Thank you for purchasing this Generator Joe. It has been designed to yield years of trouble free service, even in the most abusive conditions. If you have any further questions, please call, write, or fax us, attention Christopher Habic or Charles Habic.

GeneratorJoe®
4723 Muirfield Court
Santa Rosa, CA 95405
Phone: 707 542-2224
Fax: 707 542-2227
Email: sales@generatorjoe.Net
Web: www.generatorjoe.NET

GeneratorJoe®

4723 Muirfield Court
Santa Rosa, CA 95405
Phone: 707 542-2224
Fax: 707 542-2227
Email: sales@generatorjoe.Net
Web: www.generatorjoe.NET

PGOG1/PORTABLES/GASOLINE
GJ-OWN-725-20090908