



W I L D C A T
P O W E R G E N

RENEGADE

RE0153*GP**

OPERATOR & INSTALLATION

MANUAL

SAVE THESE INSTRUCTIONS

This manual contains important instructions that should be followed during installation and maintenance of the generator and battery. Read and understand all instructions in the manual before starting and operating the generator set.

USING THE MANUAL

Congratulations on your choice of a **WILDCAT POWER GEN** generator set. You have selected a high-quality, precision engineered generator set designed and tested to give you years of satisfactory service. To get the best performance from your new engine generator set, it is important that you carefully read and follow the operating instructions in this manual.

Should you experience a problem, please follow the “**Troubleshooting Tables**” near the end of this manual. The warranty listed in the manual describes what you can expect from **WILDCAT POWER GEN** should you need service assistance in the future.

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No other Wildcat Power Gen generator has the same serial number as yours. It is important that you record the number and other vital information here. If you should ever need to contact us on this unit it will help us to respond to your needs faster.

Wildcat Power Gen Serial Number: _____

Purchase Date: _____

PROPER USE AND INSTALLATION

You must be sure your new generator set is:

- Properly serviced prior to starting.
- Operated in a well-ventilated area.
- Properly exhausted and gasses safely dispersed.
- Operated only for its designed purposes.
- Used only by operators who understand its operation.
- Properly maintained.

UNIT SPECIFICATIONS

RE0153***GP: Renegade 15kW Gas Powered

Continuous Watts: 15,000 Watts
Surge Watts: 18,000 Watts

Voltage	208V	240V	480V
Continuous Amperage	72.1 amps	62.5 amps	31.3 amps
Surge Amperage	86.5 amps	75 amps	37.5 amps

Engine Model: _____

Alternator Model: Mecc Alte S20F-230/2

Controller Model: Datakom DKG-116

Additional Notes:

SAFETY INFORMATION

This engine generator set has been designed and manufactured to allow safe, reliable performance. Poor maintenance, improper or careless use can result in potentially deadly hazards, from electrical shock, exhaust gas asphyxiation or fire. Please read all safety instructions carefully before installation or use. Keep these instructions handy for future reference. Take special note and follow all warnings on the unit labels and in the manuals.

ANSI SAFETY DEFINITIONS

DANGER:

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.

WARNING:

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

CAUTION:

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

ELECTRICAL SHOCK The output voltage present in this equipment can cause fatal electric shock. This equipment must be operated by a responsible person.

- Do not allow anyone to operate the generator without proper instruction.
- Guard against electric shock.
- Avoid contact with live terminals or receptacles.
- Use extreme care if operating this unit in rain or snow.
- Use only three-pronged grounded receptacles and extension cords.
- Be sure the unit is properly grounded to an external ground rod driven into the earth.

FIRE HAZARD Gasoline and other fuels present a hazard of possible explosion and/or fire.

- Do not refuel when the engine is running or hot.
- Keep fuel containers out of reach of children.

- Do not smoke or use an open flame near the generator set or fuel tank.
- Keep a fire extinguisher nearby & know its proper use. Fire extinguishers rated ABC by NFPA are appropriate.
- Store fuel only in an approved container, and only in a well-ventilated area.
- Follow local codes for closeness to combustible material.

DEADLY EXHAUST GAS Exhaust fumes from any gasoline engine contain carbon monoxide, which is an invisible, odorless and deadly gas that must be mixed with fresh air.

- Operate only in well ventilated areas.
- Never operate indoors including attached garages
- Never operate the unit in such a way as to allow exhaust gasses to seep back into closed rooms (i.e., through windows, walls, floors).

NOISE HAZARD Excessive noise and continuous exposure may lead to hearing loss.

- Use hearing protection when working around this equipment for long periods of time.
- Keep your neighbors in mind when using this equipment.

CLEANLINESS Keep the generator and surrounding area clean.

- Remove all grease, ice, snow or materials that create slippery conditions around the unit.
- Remove any rags or other materials that could create a potential fire hazard.
- Carefully clean up any gas or oil spills before starting the unit.

SERVICING EQUIPMENT All service, including the installation or replacement of service parts, should be performed only by a qualified technician.

- Use only factory approved repair parts.
- Do not work on this equipment when fatigued.
- Never remove the protective guards, covers, or receptacle panels while the engine is running.
- Use extreme caution when working on electrical components. High output voltage from this equipment can cause serious injury or death.
- Avoid hot mufflers, exhaust manifolds, and engine parts, which can cause severe burns instantly.
- The use of the engine-generator set must comply with all national, state and local codes.

TESTING POLICY

Before any generator is shipped from the factory, it is fully checked for performance. The generator is loaded to its full capacity. The voltage, current and frequency are carefully checked.

Rated output of the generator is based on engineering tests of typical units, and is subject to, and limited by, the temperature, altitude, fuel, and other conditions specified by the manufacturer of the applicable engines.

INTENDED USES

This engine generator set has been designed primarily for stationary heavy-duty remote use. Both 120 volt and 240 volt receptacles are provided in the control panel to plug in your loads (lights, portable tools,

and small appliances). These units are dual wound generators, therefore the 120 volt loads must be equally split with 1/2 of the rated capacity available on each of the two 120 volt circuits.

This stationary unit requires large quantities of fresh air for cooling the engine and generator. For safety, long life and adequate performance, these units should never be run in small compartments without positive fresh air flow.

RESTRICTED USES

DO NOT remove from the cradle assembly. Removal of the generator from the cradle assembly may cause excessive vibration and damage to the engine-generator set AND VOIDS THE MANUFACTURER WARRANTY.

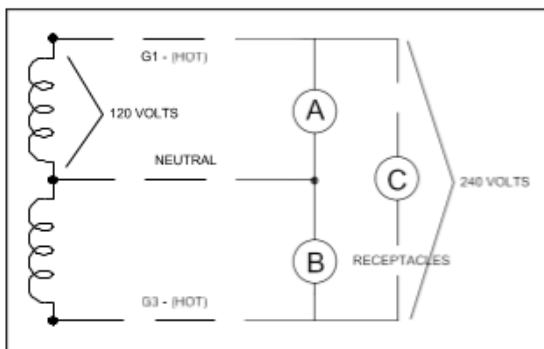
DO NOT install and operate this generator in a small compartment, such as generator compartments of vehicles, motorhomes or travel trailers. These compartments will not allow enough free flow of fresh air to reach the engine generator set for cooling and will cause the unit to overheat, damaging both the engine and generator. Small compartments will also develop hot spots where there is very little air flow and may cause a fire.

PLEASE NOTE There are 3rd party companies making enclosures for generators that have been properly engineered. The use of these 3rd party enclosures is acceptable as long as they have been certified BY WILDCAT POWER GEN and meet current code.

DO NOT attempt to operate at 50 cycles. These units are designed and governed to operate at 60 cycles only.

UNIT CAPABILITIES

120 volt and 240 volt receptacles are provided for connection to various loads. A & B represent the 120 volt output legs of this generator. Up to 4000 watts at 120 volts (33 Amps) can be drawn from the receptacles attached to either A or B output legs. This generator is capable of producing 60 Amps of 240 volt current at C. Check the appliance or tool nameplates for the current and voltage to ensure compatibility. Remember that power taken from C reduces the power available at equally both A and B and vice versa.



STARTING ELECTRIC MOTORS

Electric motors require much more current (amps) to start them than to run them. Some motors, particularly low-cost split-phase motors, are very hard to start and require 5 to 7 times as much starting current as running current. Capacitor motors are easier to start and usually require 2 to 4 times as much starting current as running current. Repulsion induction motors are the easiest to start and require only 1 1/2 to 2 1/2 times as much starting as running current.

Most fractional horsepower motors take about the same amount of current to run them whether they are Repulsion Induction (RI), Capacitor (Cap), or Split-Phase (SP) type.

If the electric motor is connected to a hard-starting load such as an air compressor, it will require more starting current. If it is connected to a light load, or no load such as a power saw, it will require less starting current. The exact requirement will also vary with the brand or design of the motor.

Self-exciting generators respond to severe overloading differently than utility power. When overloaded, the engine is not able to supply enough power to bring the electric motor up to operating speed. The generator responds with high initial starting current, but the engine speed drops sharply. The overload may stall the engine. If allowed to operate at very low speeds, the electric motor starting winding will burn out in a short time. The generator winding might also be damaged.

CAUTION: EQUIPMENT DAMAGE

RUNNING THE GENERATOR SET UNDER THESE CONDITIONS MAY RESULT IN DAMAGE TO THE GENERATOR STATOR AS WELL AS THE MOTOR WINDING.

The heavy surge of current required for starting motors is required for only an instant. The generator will not be damaged if it can bring the motor up to speed in a few seconds of time. If difficulty is experienced in starting motors, turn all other electrical loads off and if possible, reduce the load on the electric motor.

UNPACKING THE UNIT

When you unpack your new engine-generator set be sure to remove all the information sheets and manuals from the carton.

This generator-set was in good order when shipped. Inspect the generator-set promptly after receiving it. If any damage is noted, notify the transportation company immediately and request proper procedures for filing a "concealed damage" claim. Title to the equipment and responsibility for filing a claim rests with you when a generator-set is sent F.O.B. Destination or F.O.B. Origin.

Before proceeding with the preparations of your new generator-set for operation, take a couple of minutes to ensure the unit you have received is the correct model and review the specification pages in this manual to ensure that this unit meets your job requirements.

LUBRICATION

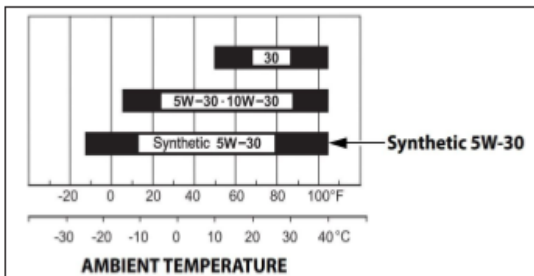
Failure to maintain the engine oil at the proper level will result in serious engine damage. Before starting the engine, fill the crankcase to the proper level with a good quality oil. The recommended grade of oil and quantity of oil required is listed in the engine operator's manual and under the service tab in this manual.

Oil is added to the engine by removing the oil fill cap and adding oil at this point. After filling the crankcase to the proper level, be sure you properly tighten the oil fill cap. NOTE: This generator must be on a level surface before you check or add oil to the system.

The necessity of using the correct oil and keeping the crankcase full cannot be overemphasized. Engine failures resulting from inadequate or improper lubricant are considered abuse and not covered by the generator or engine manufacturer's warranty.

Oil Recommendations

Outdoor temperatures determine the proper oil viscosity for the engines. Use the chart to select the best viscosity for the outdoor temperature range expected.



* Below 40°F (4°C) the use of SAE30 will result in hard starting.

** Above 80°F (27°C) the use of 10W-30 may cause increased oil consumption. Check oil level more frequently.

Wildcat Power recommends the use of their warranty certified oils for best performance. Other high-quality detergent oils are acceptable if classified for service SF, SG, SH, SJ or higher.

Do not use special additives.

GASOLINE INSTRUCTIONS

The information in this instruction is offered to assist you in providing the proper gasoline fuel supply for your engine. This information is only provided to advise you of the engine's requirements and the decisions you must make. In no case should this information be interpreted to conflict with any local, state or national code. If in doubt, always follow local codes.

DANGER! FIRE - PERSONAL INJURY. GASOLINE IS EXTREMELY FLAMMABLE, AND GASOLINE VAPOR CAN EXPLODE, CAUSING SERIOUS INJURY OR DEATH. USE EXTREME CARE WHEN HANDLING GASOLINE.

Keep flames and sparks away, and do not smoke in the area. Be sure the engine compartment is dry and clear of fuel vapor before starting the generator.

Fuel Recommendations

Use unleaded gasoline with a pump octane rating of 86 or higher. The engine is certified to operate on unleaded gasoline. Unleaded gasoline produces fewer engine and spark plug deposits and extends exhaust system life.

Never use stale or contaminated gasoline or oil/gasoline mixtures. Avoid getting dirt or water in the fuel tank.

Occasionally, you may hear light "spark knock" or "pinging" (metallic rapping noise) while operating under heavy loads. This is no cause for concern.

If spark knock or pinging occurs at a steady engine speed, under normal load, change brands of gasoline. If spark knock or pinging persists, see an authorized servicing dealer.

NOTICE: Running the engine with persistent spark knock or pinging can cause engine damage. Running the engine with persistent spark knock or pinging is misuse, and the warranty does not cover parts damaged by misuse.

Oxygenated Fuels

Some conventional gasolines are blended with alcohol or an ether compound. These gasolines are collectively referred to as oxygenated fuels. To meet clean air standards, some areas of the United States and Canada use oxygenated fuels to help reduce emissions.

If you use an oxygenated fuel, be sure it is unleaded and meets the minimum octane rating requirements.

Before using an oxygenated fuel, try to confirm the fuel's content. Some states/provinces require this information to be posted on the pump.

The following are the EPA approved percentages of oxygenates:

Ethanol (ethyl or grain alcohol): You may use gasoline containing up to 10% ethanol by volume. Gasoline containing ethanol may be marketed under the Gasohol.

MTBE (methyl tertiary butyl ether): You may use gasoline containing up to 15% MTBE by volume.

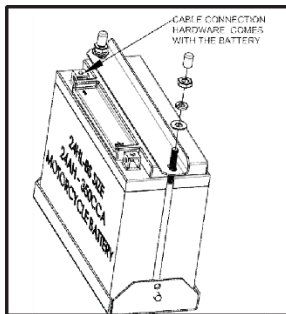
Methanol (methyl or wood alcohol): You may use gasoline containing up to 5% of methanol by volume as long as it also contains cosolvents and corrosion inhibitors to protect the fuel system. Gasoline containing more than 5% methanol by volume may cause starting or performance problems. It may also damage metal, rubber, and plastic parts of your fuel system.

If you notice any undesirable operating symptoms, try another service station or switch to another brand of gasoline.

Fuel system damage or performance problems resulting from the use of an oxygenated fuel containing more than the percentage of oxygenates mentioned above are not covered under warranty.

BATTERY INSTALLATION

This engine generator set is shipped without a battery or tie-down kit. It is the customer's responsibility to provide the battery and ensure the battery is properly secured in the initial startup and installation. Parts required to secure the battery consist of a battery tie-down and hardware for installation of the customer-supplied battery on the unit. If you intend to use the power plant's electric start system, you will need to purchase and install a battery to operate it.



WARNING! EQUIPMENT DAMAGE - *The battery positive (+) cable is shipped with a plastic protective cap. When starting manually, this protective cap must remain in place to avoid possible damage to the engine electrical system and/or generator end.*

A 12-volt powersports (motorcycle/ATV/snowmobile) battery, BCI group 20 or 24HL rated at 300 CCA or larger is recommended for this electric start engine generator set.
Maximum length: 8 1/8", Maximum width: 3 9/16", Height range: 5 3/4" - 7".

Amp Hours: 15AH or greater. Follow the battery manufacturers recommendations for servicing and charging prior to use. Connect the battery to the electric start system using the cables provided.

CAUTION! EQUIPMENT DAMAGE - *These electric start engines are NEGATIVE GROUND. Use extreme caution when connecting the battery. Connect the NEGATIVE battery terminal to GROUND.*

For your safety, always connect the positive battery cable to the “bat+” terminal first. Then connect the negative battery cable to the “bat-” terminal. Make sure all connections are clean and tight. Reverse the sequence when disconnecting, disconnect the negative cable first. These engines produce enough direct current to keep a battery charged under normal operating conditions but were not intended to be used as a battery charger.

WARNING! PERSONAL INJURY

Lead acid batteries produce explosive hydrogen gas when charging. Keep sparks, flames, and burning cigarettes away from the battery. Ventilate the area when charging or using the battery in an enclosed space. Lead acid batteries contain sulfuric acid, which causes severe burns. If acid contacts eyes, skin or clothing, flush well with water. For contact with eyes, get immediate medical attention.

BATTERY CHARGING

Units equipped with electric start have a small fly-wheel charger built into the engine flywheel assembly for recharging the starting battery. This flywheel charger generates a small AC current that passes through a diode assembly to produce a DC charging current of about 1 to 3 AMPS. This circuit is not designed to be used as a battery charging circuit to recharge dead batteries.

INSTALLATION WIRING

RED – Leg 1 (120VAC Leg to Common)

BLACK – Leg 2 (120VAC Leg to Common)

[RED to BLACK for 240 VAC]

Remote start – Orange and Blue/Orange connected via switch

Battery Trickle Charger – Red with shore power, Blue common

OIL ALERT SYSTEM

This **WILDCAT POWER GEN** generator is equipped standard with low oil shutdown systems. The Honda engine uses an oil pressure switch system. This low oil warning system will automatically stop the engine before the oil level reaches a critical danger point. This feature is designed to prevent costly repairs and downtime.

CAUTION! EQUIPMENT DAMAGE

Allowing the engine to shutdown repeatedly on low oil level may cause excessive wear which can be cumulative.

INITIAL START UP

The controller make and model may vary during production. Please refer to the controller make and model information at the beginning of this manual to obtain detailed controller use instructions, or contact WILDCAT POWER GEN at 620-500-5111 or support@wildcatpowergen.com for further assistance.

The throttle control on these generators is preset and locked to operate at 3600 RPM (nominal) with no load speed set at 3690 RPM. Only a trained service technician should be allowed to adjust this speed setting.

NOTICE! ENGINE START LOCKOUT

*This unit **will not start** if it is low on oil. The lubricating oil level must be at the **full** mark before the engine will start and run.*

STARTING HINTS

Cold weather

- Use the proper oil for the temperature expected.
- Use fresh winter grade fuel. Winter grade gasoline is blended to improve starting.
- *Do not use summer grade gasoline.*

Hot weather

- Use the proper oil for the temperature expected.
- Use only summer blended gasoline. Using gasoline left over from winter may cause the unit to vapor lock.

STOPPING AND STORAGE

Before extended storage (over 30 days) certain precautions must be taken to ensure the fuel doesn't deteriorate and clog the fuel system. **Note:** Running the engine to use up the fuel in the lines and carburetor will still leave a small amount of fuel in the carburetor. It is best for extended storage to treat the fuel before draining

While the engine is warm, drain the oil and refill with fresh oil. Clean dirt and chaff from the cylinder, cylinder head fins, blower housing, screen and muffler areas. Store in a clean and dry area.

OPERATING SPEED

The engine-generator must be run at the correct speed in order to produce the proper electrical voltage and frequency.

CAUTION! EQUIPMENT DAMAGE

The output voltage should be checked to ensure the generator is working properly prior to connecting a load to the generator. Failure to do so could result in damage to equipment plugged into the unit and possible injury to the individual.

All engines have a tendency to slow down when a load is applied. When the electrical load is connected to the generator, the engine is more heavily loaded and as a result, the speed drops slightly. This slight decrease in speed, together with the voltage drop within the generator itself, results in a slightly lower voltage when the generator is loaded to its full capacity than when running no load. The slight variation in speed also affects the frequency of the output current. This frequency variation has no appreciable effect in the operation of motors, lights and most appliances. However, electronic equipment and clocks will be affected if correct RPM is not maintained. See *Load vs. Output chart*.

Although individual units and models vary slightly, the normal voltage and frequency of the engine generator described in this manual are approximately as follows, under varying loads:

LOAD VS. OUTPUT			
Generator Load	Speed (RPM)	Frequency (Hz)	Voltage
None	3690	61.5	125V
Half	3600	60.0	120V
Full	3510	58.5	115V

The speed of the engine was carefully adjusted at the factory so that the generator produces the proper voltage and frequency. For normal usage, the speed setting should not be changed. If the generator is being run continuously on a very light load, it is often advisable to lower the operating speed slightly.

CAUTION! EQUIPMENT DAMAGE

SPEED ADJUSTMENTS SHOULD ONLY BE MADE BY A QUALIFIED SERVICE TECH.
Whenever making any speed adjustments, check the unit with a voltmeter and a frequency meter or tachometer and be sure the voltage and speed are correct.

Lower voltage may damage both the generator and any load connected to it. Running the engine at excessively high speeds results in high voltage, which may significantly shorten the life of appliances being used.

Output voltage should be checked periodically to ensure continued proper operation of the generating plant and appliances. If the generator is not equipped with a voltmeter, it can be checked with a portable meter.

CONNECTING THE LOADS

APPLYING THE LOADS

Allow the engine to warm up for two or three minutes before applying any load. This will allow the engine to reach normal operating temperature and oil to circulate throughout the engine. A short warm-up time will permit the engine to work more efficiently when the load is applied and will reduce the wear in the engine, extending its life.

Receptacles have been provided to allow loads to be connected to the generator. The loads should be added one at a time. If a large motor is being started; or multiple motors are being started, they should be started individually and the largest should be started first.

CAUTION! EQUIPMENT OVERLOAD

Keep the generator load within the generator and receptacle nameplate rating. Overloading may cause damage to the generator and/or the loads.

Most electric tools and appliances will have the voltage and amperage requirements on their individual nameplates. When in doubt, consult the manufacturer or a local electrician. The nameplate amperage rating for electric motors can be misleading. See "Starting Electric Motors" in Unit Capabilities (page 4).

These engine-generator sets are inherently self-regulating based on engine speed. The engine governor will automatically adjust itself to the load. No harm to the generator will result if it is operated with no load connected. Proper utilization of the receptacles located on the control panel is necessary to prevent damage to either the receptacles or the generator. The generator is a limited source of electrical power, therefore, pay special attention to the receptacle and generator ratings. The nameplate rating can be obtained through a single receptacle as long as the receptacle amperage rating is not exceeded.

GROUNDING

All units must be grounded. Drive a 3/4 or 1" copper pipe or rod into the ground close to the engine-generator set. The pipe must penetrate moist earth. Connect an approved ground clamp to the pipe. Run a no.10 Awg wire from the clamp to the generator ground lug on the receptacle panel. Do not connect to a water pipe or to a ground used by a radio system.

The engine-generators covered in this manual were designed primarily for portable use. If you are connecting into a building wiring system that is already grounded using the 14-60 4 wire plug, you do not have to ground the unit.

WARNING! PERSONAL DANGER

DO NOT OPERATE THIS GENERATOR INDOORS.

The unit should be stored in a warm dry location. During a power outage, move the unit outdoors to a flat dry location such as a driveway or sidewalk.

WIRING

Plug your tools such as drills, saws, blowers, sump pump and other items to be powered directly into the generator receptacles. Before plugging in all the tools and cord sets, recheck the rating of the generator set. Be sure it can handle the intended load and is compatible with the voltage, phase, and current ratings. 'Hard Wiring' this unit directly into a home or a temporary construction site electrical system **SHOULD BE PERFORMED BY A LICENSED ELECTRICIAN.**

For your safety, all wiring must be done by a qualified electrician and conform to the National Electric Code and comply with all state and local codes and regulations. Check with local authorities before proceeding.

WARNING! PERSONAL DANGER

A fully isolated, double pole double throw manual transfer switch must be installed any time a generator is being connected to an existing distribution system.

1. These engine generator sets are designed for portable use. Receptacles are provided on the control panel to permit 120 volt portable appliances and tools to be plugged directly into them. Please note that the 4-wire 120/240 volt receptacle on these units are designed to power both 120 or 240 volt loads. The plug for this receptacle can be wired for either 120 volt, 240 volt, or a combination of 120 and 240 volt loads depending on how the plug is wired.

A 4-wire receptacle (two hot, one ground, and one neutral) has been provided on the control panel for use in temporary power applications requiring 120/240 volt power. Consult a licensed electrician for wiring the TemPower plug and connecting it as temporary service. To connect these units directly to an un-powered, isolated construction site TemPower panel, have your electrician connect to the control panel using a 120/240 volt, 4-wire twist-lock plug (L14-30P).

2. If the generator set is to be connected to an existing distribution system, a fully isolated manual transfer switch must be installed. The transfer switch prevents damage to the generator and other circuit components if main line power is restored while the generator is connected. Installing a transfer switch also permits the use of normal fusing.

3. Many homes and construction sites are wired for at least 60 to 100 Amp entrance service, much greater than the capacity of this portable generator. When installing the generator at these sites, a secondary emergency distribution panel may have to be installed, such as the Emergency Transfer/Service (ET/S) system available through your WILDCAT POWER GEN dealer. The emergency distribution panel must be installed by a licensed electrician according to all applicable codes. The electrician will move the critical circuits to be powered during the outage to the emergency panel. Keep in mind only a limited amount of amperage is available from the generator set. Some circuit breakers may still have to be turned off to prevent an overload on the generator during the initial start up. See the nameplate on your generator for the amperage capabilities of your unit.

CAUTION! EQUIPMENT DAMAGE

Failure to properly limit and balance the load applied to the generator will cause the generator to produce low voltage and may damage the engine generator set. It may also cause severe damage to the loads

connected to the generator at that time. Improper loading of the generator set constitutes abuse and will not be covered by warranty.

ENGINE CARE

First 5 Hours
<ul style="list-style-type: none">• Change oil
Every 8 Hours or Daily
<ul style="list-style-type: none">• Check engine oil level• Clean area around muffler and controls
Every 100 Hours or Annually
<ul style="list-style-type: none">• Clean or change air filter *• Clean pre-cleaner (if equipped) *• Change engine oil and filter• Replace spark plug• Check muffler and spark arrester
Every 250 Hours or Annually
<ul style="list-style-type: none">• Check valve clearance. Adjust if necessary.
Every 400 Hours or Annually
<ul style="list-style-type: none">•• Change air filter• Replace fuel filter• Clean air-cooling system *• Clean oil cooler fins *

If major engine service or repair is required, contact an authorized engine service center. The manufacturer of these engines has established an excellent world-wide engine service organization. Engine service is very likely available from a nearby authorized dealer or distributor. Check the yellow pages of your local telephone directory under "Engines-Gasoline" for the closest engine repair center or ask the dealer from whom you purchased the power plant.

1. **Change the oil** after the first 5 hours of operation and yearly or 100 hours thereafter under normal operating conditions. Change engine oil every 50 hours of operation if the engine is operated under heavy load, or in high ambient temperatures.
 - a) Start the engine and warm it up, stop the engine and remove the spark plug wire to prevent it from accidentally being started.
 - b) Remove the oil drain plug at the base of the engine and drain the oil into an approved container.
 - c) Remove the oil filter and dispose of it properly.
 - d) Before you install the new oil filter, lightly lubricate the oil filter gasket with fresh clean oil.

- e) Install the oil filter by hand until the gasket contacts the oil filter adapter, then tighten the oil filter 1/2 to 3/4 turns.
- f) Replace oil drain plug.
- g) Remove oil filler plug and refill with new oil. Refer to the table on page 5 for the proper grade of oil based on your operating temperature.

NOTE: This engine requires 46 to 48 ounces of oil if it is completely drained. Use caution when refilling the engine as some residual oil may have remained in the engine. Always use the dipstick when filling the engine with oil to prevent overfilling.

- h) Replace the filler plug.
 - i) Start the engine up and warm it up.
2. After warming up the engine, recheck the oil level and refill as necessary to bring it to the proper level. See page 5 for proper oil level.
 3. **Checking the Oil Level:** The oil level must always be checked before the engine is started. Take care to remove any dirt or debris from around the oil fill plug before removing. Be sure the oil level is maintained. Fill to the “**FULL**” mark on the dipstick.
 4. **Dual Element Air Filter:** Clean and or replace foam pre-cleaner and air filter annually or every 100 hours. Service more often under dusty conditions.

WARNING! EQUIPMENT DAMAGE: *Never start or run the engine with the air filter removed.*

Spark Plug: Replace annually or every 100 hours of operation. Always replace it with the same spark plug that came in the engine and check the gap before installing. Spark plug gap is 0.030”. Poor spark will also occur if spark plug wire does not fit firmly on the spark plug. If this happens, reform the terminal to fit firmly on the spark plug tip.

GENERATOR CARE

Proper care and maintenance of the generator is necessary to ensure a long trouble-free life.

1. **Exercising the Generator** - The generator should be operated every three to four weeks. It should be operated for a period of time sufficient to warm the unit up and to dry out any moisture that has accumulated in the windings. If left, this moisture can cause corrosion in the

winding. Frequent operation of the engine generator set will also ensure that the set is operating properly should it be needed in an emergency.

2. **Generator Maintenance** - Any major generator service, including the installation or replacement of parts, should be performed only by a qualified electrical service technician. **USE ONLY FACTORY APPROVED REPAIR PARTS.**

- a) Bearing - The bearing used in these generators is a heavy duty double sealed ball bearing. They require no maintenance or lubrication.
- b) Receptacles - Quality receptacles have been utilized. If a receptacle should become cracked or otherwise damaged, replace it. Using damaged or cracked receptacles can be both dangerous to the operator and destructive to the equipment.

Notice: Do not use pressurized air or solvents to clean the filter. Pressurized air can damage the filter and solvents will dissolve the filter.

- a) Wash the pre-cleaner in liquid detergent and water, then allow it to thoroughly air dry. **DO NOT** oil the pre-cleaner.
- b) Install foam pre-cleaner to the air filter.
- c) Install the air filter and secure with retainer and nut.
- d) Install and secure the cover.

CLEANING

Remove dirt and debris with a cloth or brush. **DO NOT** use high pressure spray to clean either the engine or the generator. This high-pressure spray could contaminate the fuel system and the generator components.

1. Keep the air inlet screen on both the engine and generator free of any dirt or debris to insure proper cooling. At least yearly, remove the blower housing on the engine and clean the chaff and dirt out of the engine cooling fins and flywheel. Clean more often if necessary. Failure to keep these areas clean may cause overheating and permanent damage to the unit.
2. Periodically clean the muffler area to remove all grass, dirt and combustible debris to prevent a fire.
3. On engine mufflers equipped with spark arrestors, the spark arrester must be removed every 50 hours for cleaning and inspection. Replace if damaged.

TROUBLESHOOTING

PROBLEM (SYMPTOMS) POSSIBLE CAUSES

Won't Start

- *Low Oil Level.
 - *Fouled spark plug.
 - *Out of fuel.
 - *Start switch in Off position.
 - *Fuel valve turned off.
 - *Plugged fuel filter.
-

Voltage too low

- *Engine speed is too low.
 - *Generator overloaded.
 - *Defective stator.
 - *Defective rotor (field).
 - *Defective Capacitor.
-

Circuit Breaker Trips

- *Defective load.
 - *Defective receptacle.
 - *Excessive Load.
-

Voltage too high

- *Engine speed is too high.
-

Generator overheating

- *Overloaded.
 - *Insufficient ventilation.
-

No output voltage

- | | |
|--|---------------------------|
| *Short in load (disconnect). | *Defective stator. |
| *Tripped or defective circuit breaker. | *Defective rotor (field). |
| *Broken or loose wire. | *Shorted capacitor. |
| *Defective receptacle. | *Shorted diodes on rotor. |
| *No residual magnetism (in generator). | *GFCI Receptacle tripped |

36 MONTH LIMITED WARRANTY

Engines LPG LLC dba Wildcat Power Gen warrants to the original purchaser for 36 months that goods manufactured or supplied by it will be free from defects in workmanship and material, provided such goods are installed, operated and maintained in accordance with **WILDCAT POWER GEN's** written instructions.

WILDCAT POWER GEN warrants to the ultimate purchaser and each subsequent purchaser that the evaporative emission control system is designed, built, and equipped so as to conform at the time of original sale to the then-current evaporative emission requirements. In addition, it is free from defects in materials and workmanship that may keep it from meeting these requirements. This evaporative emission control system is warranted for two years. If an evaporative emission related part on your equipment is defective, the part will be repaired or replaced by **WILDCAT POWER GEN**.

WILDCAT POWER GEN's sole liability, and Purchaser's sole remedy for a failure under this warranty, shall be limited to the repair of the product. At **WILDCAT POWER GEN's** option, material found to be defective in material or workmanship under normal use and service will be repaired or replaced. For warranty service, return the product within 24 months from the date of purchase, transportation charges prepaid, to your nearest **WILDCAT POWER GEN** Authorized Service Center.

THERE IS NO OTHER EXPRESS WARRANTY.

To the extent permitted by law, any and all warranties, including those of merchantability and fitness for a particular purpose, are limited to 36 months from the date of purchase. In no event is **WILDCAT POWER GEN** liable for incidental or consequential damages.

Note: Some states do not allow limitation on the duration of implied warranty and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply in every instance. This warranty gives you specific legal rights which may vary from state to state.

WILDCAT POWER GEN reserves the right to change or improve its products without incurring any obligations to make such changes or improvements on products purchased previously.

WARRANTY EXCLUSIONS:

WILDCAT POWER GEN does not warrant Batteries, or Other Component Parts that are warranted by their respective manufacturers.

WILDCAT POWER GEN does not warrant modifications or alterations which were not made by **WILDCAT POWER GEN**.

WILDCAT POWER GEN does not warrant products which have been subjected to misuse and/or negligence or have been involved in an accident.

This warranty does not include travel time, mileage or labor for removal or reinstallation of a **WILDCAT POWER GEN** product from its application.