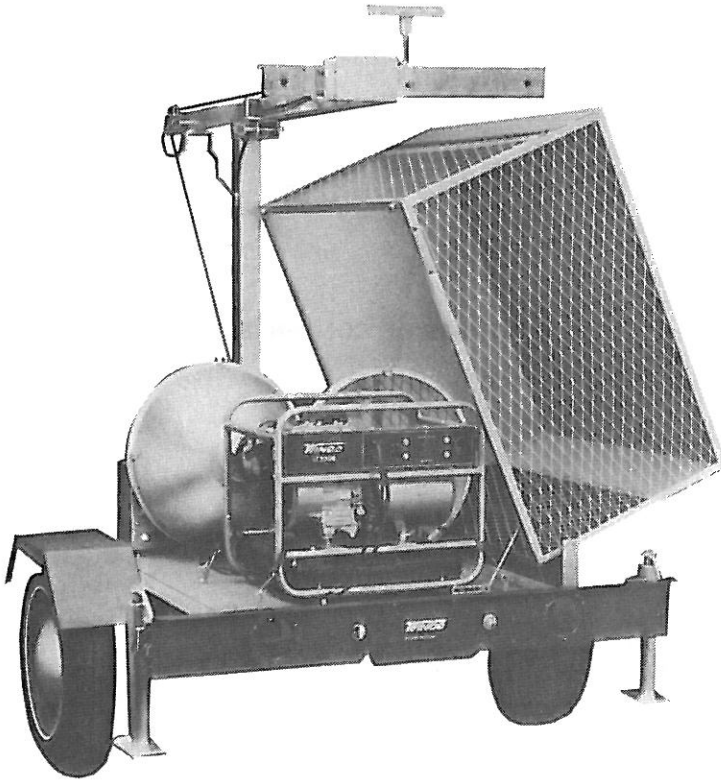




**MODEL LT 3000
GENERATOR (FOR LS2 MOBILE LIGHTING SYSTEMS)**

OPERATION AND MAINTENANCE INSTRUCTIONS



INTRODUCTION

Congratulations on your purchase of a quality Winco engine generator. This lightweight portable generating set has been engineered and produced by one of the world's leading manufacturers—with over 50 years of excellence in generator design, high standards of performance and quality—to ensure your full satisfaction.

Please fill in the blanks below and retain this manual for your future reference. This information will be necessary if you would ever require parts or service.

Generator Model _____

Serial Number _____

Date of Purchase _____

Place of Purchase _____

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TESTING POLICY

Before your unit was shipped from the factory, it was fully checked for performance. The generator was loaded to its full capacity, and the voltage, current, and frequency were carefully checked. A test card with this data is filed by unit serial number for permanent record of performance.

This engine generator set incorporates a number of features for your convenience, comfort and safety.

- Vibration isolated control panel
- 4 Gallon fuel tank
- Fuel gauge
- Low oil level engine shutdown
- USDA approved spark arresting muffler
- Wrap around carrying cradle
- Kawasaki 4 cycle 5HP hypereutectic aluminum alloy engine

NOTE:

This instruction book covers only the generator, NOT the engine. See the engine manufacturer's operator's manual regarding any questions pertaining to the engine.

FOR YOUR PROTECTION

Read all instructions before attempting to operate the generator.

UNPACKING

When unpacking the generator set, be sure to inspect it carefully for freight loss or damage. Check the nameplate of the unit to ensure it is what you ordered (i.e. proper KW, voltage, fuel, etc.) If you have any questions contact your local authorized dealer. If you see evidence of loss or damage to the unit at the time of delivery, have the driver sign and describe the loss or damage in the "memo of loss or damage" section on the freight bill. Then contact the carrier to get instructions on filing a claim.

When loss or damage is discovered after the equipment is delivered, but not seen at the time of delivery, it is referred to as "concealed damage." Separate any damaged material and contact the carrier for proper procedures to file a "concealed damage" claim.

The title to the equipment and responsibility for filing a claim rests with you when a generator is sent F.O.B. shipping point. Only you, the customer, can legally file a claim.

GENERAL SAFETY INFORMATION



WARNING!

Despite the safe design of this unit, operating it imprudently, neglecting its maintenance, or being careless with it can cause serious injury or death. This generator is powerful enough to deliver a fatal electrical shock. Allow only a responsible and capable person to operate this unit.

1. NEVER allow anyone to operate the unit without proper instructions.
2. NEVER operate the unit indoors or in a poorly ventilated area. (Exhaust gases contain carbon monoxide, an odorless and deadly poison.)
3. NEVER refuel the engine while it is running. Allow the engine to cool for at least two minutes before refueling.

4. NEVER store quantities of fuel, oily rags or other flammable material near this equipment.
5. NEVER touch a hot muffler, exhaust manifold or other hot engine parts. (They can cause serious burns.)
6. NEVER operate or work on this generator when fatigued and or under the influence of alcohol or other drugs.
7. NEVER remove the protective guards or the receptacle panel while the engine is running.
8. NEVER operate this generator in the rain or snow unless the receptacles and all other electrical components are protected from the elements.
9. NEVER connect or disconnect electrical connections under load.
10. NEVER attempt to lift the equipment unless you are certain the lifting device has sufficient capacity. NEVER allow it to swing while suspended. ALWAYS be certain the supporting structure is adequate to handle the load.
11. NEVER wear neckties or other loose clothing that can be caught in moving parts while you are operating this equipment.
12. ALWAYS keep a fire extinguisher near the generator. Extinguishers rated ABC by the NFPA are appropriate for this use. Consult the local fire department if you have questions regarding fire extinguisher ratings. Keep the extinguisher properly maintained and be familiar with its use.
13. ALWAYS use extreme caution when using or working on this generator. Voltages present can cause a fatal electrical shock.
14. ALWAYS use only grounded plugs and drop cords. (This generator is equipped with grounded receptacles for your safety.)
15. ALWAYS ground the generator. Use an external ground rod driven into the earth. (See National Electric Code Handbook.)
16. ALWAYS keep the unit and the area around it clean. Remove all material such as grease, water, ice and snow that can create slippery conditions.
17. ALWAYS be sure only qualified technicians perform service (install, repair or replace parts) on this unit, and use only factory-approved parts.
18. ALWAYS wear a protection device if continually exposed to excessive engine noise over long periods. (Excessive noise is tiring, and overexposure to it can cause temporary or permanent hearing loss.)

PREPARATION

CAUTION

CAUTION:

This unit was shipped without oil.

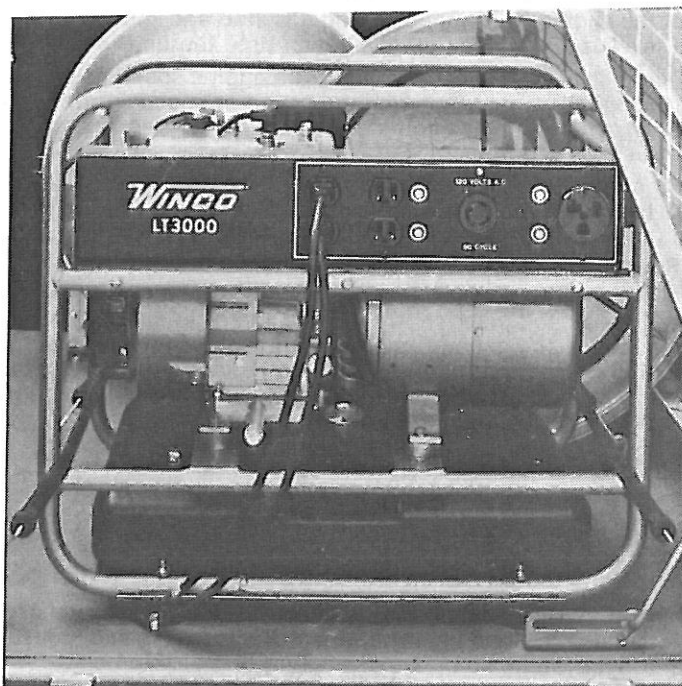
1. Lubrication: Before starting the engine, fill the crankcase to the recommended level of the proper weight/grade of oil, as recommended by the engine manufacturer's maintenance instructions. The necessity of using the correct oil, and keeping the crankcase at the recommended level cannot be overemphasized.
2. Fuel: Ensure the unit has been filled with the proper type and grade of fuel. DO NOT refuel while running or when hot. Let it cool for at least 2 minutes. Take every precaution to prevent dirt of any kind from getting into the fuel tank. Dirt will clog up the fuel line screen and carburetor jets. Use only clean fuel from a clean container and use a clean funnel to refill. THIS IS A 4 CYCLE ENGINE—DO NOT MIX OIL WITH THE GASOLINE.



WARNING:

Gasoline and its fumes are dangerous when not properly handled or the adequate precautions are not taken.

3. Adjustments: All necessary adjustments have been made at the factory. This unit is ready to operate. It has been checked and thoroughly tested at its rated capacity while running. Do not make any adjustments until you have studied all these instructions and the engine manual.



OPERATION

Start Up Checklist

Use the following checklist to verify the correct preparation of your engine generator before starting.

On all units check:

1. Engine oil—fill as required with correct grade and quantity.
2. Check fuel level—fill with clean fresh fuel as required.
3. Periodically check the primer bulb, gas line and fuel filter for damage or cracking. Replace if necessary.
4. Visually check unit for loose parts.
5. Ventilation. (Do not operate indoors. Exhaust gases are deadly.)

Starting

1. To start engine, turn the red plastic stop/run switch on the engine shroud above the recoil handle to the "RUN" position.
2. Pump the fuel primer bulb 3-5 times or until firm. The primer bulb is located between the fuel tank and the fuel pump. This will provide sufficient fuel at the carburetor for initial starting or after the unit has run out of fuel. NOTE: Priming the carburetor is not normally necessary when restarting.
Refer to engine operator's manual for the location of the choke. Close the choke lever completely to start a cold engine. When restarting a warm engine, close the choke halfway.

NOTE: Avoid overchoking. Don't leave the choke in the closed position after the engine starts. It may not be necessary to choke the engine when it is warm.

4. Manual Start: Pull the recoil starter slightly and when compression is felt, give the starter rope a sharp, vigorous pull.

5. **Low Oil Level Shutdown:** Your generator is equipped with a low oil level shutdown to protect the engine. The engine will initially start and shut down in a few seconds if the oil level is low. Check oil level each time the unit is started.

DO NOT change engine speed settings. The engine speed has been preset at the factory for 3600 RPM operation and the governor speed control tightened to prevent slipping. Operating the engine at a higher or lower speed can result in engine, generator or other equipment damage.

6. **Circuit Breakers:** Each receptacle is protected by a circuit breaker. If the load is too great, the circuit breaker will open. Before resetting the circuit breaker disconnect the load. Reset the circuit breaker to restore power to the receptacle.
7. **Output Power:** This model is equipped with “full power” windings, which enable full generator output power (wattage) to be drawn from a single 120 volt winding.
8. **Operation:** It is a good practice to allow the engine to run for 2 to 3 minutes before applying a load to the generator. This enables the engine to warm up and the oil to thoroughly 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.

Stopping

Turn the red plastic stop/run switch on the engine shroud to the “stop” position.

Before extended storage—when the generator is not going to be used for several months, certain precautions must be taken to ensure the fuel doesn’t deteriorate and clog the fuel system.

1. Remove remaining fuel from the fuel tank by siphoning or pumping it empty.
2. Start the engine and allow to run until all the fuel in the carburetor/fuel tank has been used up and the engine stops.

Refueling



WARNING:

NEVER refuel a running engine or allow fuel to be spilled on a hot engine or muffler. Let the engine cool at least 2 minutes before attempting to refuel. NEVER refuel an engine near an open flame or spark source. NEVER refuel indoors. NEVER run unit indoors.

Always use clean, fresh fuel blended for the proper season. Winter fuel will vaporlock when used in the summer and summer fuel will cause hard starting in the winter. Gasoline which has been stored for months loses its volatile properties due to evaporation, leaving behind a varnish like residue. This residue, although burnable, will clog the fuel system and cause sticking valves and carbon build up after a short time.

Wipe up any spilled fuel and allow sufficient time for all the residue to completely evaporate before attempting to start the engine.

YOUR RESPONSIBILITIES

This unit has been designed and thoroughly tested to help insure a long service life. It is YOUR RESPONSIBILITY to perform the routine maintenance necessary to keep the engine and generator warranty in force. FAILURE to PERFORM ROUTINE MAINTENANCE may result in an expensive and un-necessary PREMATURE NON-WARRANTY FAILURE.

Please use the following maintenance chart as a guideline for your preventative maintenance schedule.

Check:

Oil level every five (5) hours.

Fuel level daily.

Air cleaner weekly/more often under dirty conditions.

Change:

Oil after the first two (2) hours and every 25 hours thereafter.

Clean/Replace:

Unit—keep the unit clean and remove dirt, grease and debris from the air inlets on the engine and generator.

Air cleaner yearly under normal conditions, more often under extremely dirty conditions.

Spark plug periodically or once a year depending on usage.

WARRANTY

WINCO warrants for **one year** from date of shipment, it will repair or replace at its option, for the **original user**, the whole or any part of the product found upon examination by WINCO at its **factory** at 225 South Cordova Avenue, Le Center, Minnesota, or by any **factory-authorized service station** to be defective in material or workmanship under normal use and service.

For warranty service, return the product within **one year** from date of shipment, transportation charges **prepaid**, to the WINCO factory or to your nearest factory-authorized service station.

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 one year from date of shipment, and liability for incidental or consequential damages or expenses is excluded. Some states do not allow limitations on the duration of an implied warranty, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights; you may have other rights which vary from state to state.

WINCO does not warrant engines or certain other component parts of the product since such items are warranted by their manufacturers.

WINCO does not warrant **alterations or repairs** which were not made by the WINCO factory or a factory-authorized service station and which affect the stability or reliability of the product.

WINCO does not warrant products which have been exposed to **misuse** and/or **negligence** or have been involved in an **accident**.

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

Service Department

ENERGY
CORPORATION