LESTRONIC II BATTERY CHARGER
MODEL 07210

PLEASE SAVE THESE IMPORTANT SAFETY AND OPERATING INSTRUCTIONS

For correct operation of the equipment, it is important to read and be familiar with this entire manual before installing and operating the charger.

DO NOT DISCARD THIS MANUAL AFTER READING.

LOOK FOR THIS SYMBOL TO POINT OUT SAFETY PRECAUTIONS. IT MEANS: BECOME ALERT—YOUR SAFETY IS INVOLVED. IF YOU DO NOT FOLLOW THESE SAFETY INSTRUCTIONS, INJURY OR PROPERTY DAMAGE CAN OCCUR.

1. This manual contains important safety and operating instructions for your battery charger.
2. Before using battery charger, read all instructions and cautionary markings on battery charger, battery, and product using battery.

\[\text{CAUTION: TO REDUCE RISK OF INJURY, CHARGE ONLY LIQUID ELECTROLYTE (WET) LEAD ACID RECHARGEABLE BATTERIES. OTHER TYPES OF BATTERIES MAY BURST CAUSING PERSONAL INJURY AND DAMAGE.}\]

3. Do not expose charger to rain or snow.
4. Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.
5. To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
6. Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
7. An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in a risk of fire and electric shock. If extension cord must be used, make sure:
   a. Pins on plug of extension cord are the same number, size, and shape as those of plug on charger.
   b. Extension cord is properly wired and in good electrical condition.
   c. Wire size is large enough for AC ampere rating of charger.
8. Do not operate charger with damaged cord or plug; replace it immediately.
9. Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified service center.
10. Do not disassemble charger; take it to a qualified service center when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
11. To reduce risk of electric shock, unplug charger from a live outlet or disconnect AC power to the outlet before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.
INTRODUCTION
This battery charger is a self-regulating charger with a minimum of moving parts, designed for long, trouble-free service. Built-in line voltage compensation produces a consistent output when the AC supply voltage varies by as much as 10% from nominal. The charger utilizes convection cooling which maximizes the reliability and minimizes any maintenance costs. Only liquid electrolyte (wet) lead acid batteries should be recharged with this charger to ensure superior battery performance and life. A patented electronic circuit turns the charger on and off automatically. When the battery has reached its maximum state of charge, the circuitry will turn the charger off.

RECEIVING AND INSTALLING THE CHARGER
When the charger is received, portable chargers should be checked for possible in-transit damage. If any damage is found, it should be reported as a claim to the carrier. Proper installation of the charger is important in order to achieve good charger performance and to prevent damage to the charger and batteries. The charger should be located in a clean, cool, dry and well ventilated area. To permit free air flow for convection cooling, allow three inches (3") minimum between the charger and any wall and six inches (6") between the charger and other equipment. Position the charger on a foundation of stone, brick, concrete or grounded metal.

DANGER: TO REDUCE THE RISK OF FIRE, DO NOT USE THE CHARGER NEAR FLAMMABLE MATERIALS OR VAPORES.

AC INPUT AND GROUNDING INSTRUCTIONS

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK OR FIRE, DISCONNECT POWER TO RECEPTACLE BEFORE INSTALLING OR REMOVING UNIT.

For 120 VAC Nominal, 60 Hz Chargers:
Chargers should be grounded to reduce the risk of electric shock. Charger is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The installed plug must be plugged into an outlet that is properly installed and grounded in accordance with all electrical codes and ordinances.

DANGER: NEVER ALTER AC CORD OR PLUG PROVIDED IF IT WILL NOT FIT OUTLET. HAVE A PROPER OUTLET INSTALLED BY A QUALIFIED ELECTRICIAN. IMPROPER CONNECTION CAN RESULT IN A RISK OF ELECTRIC SHOCK.
This battery charger is for use on a nominal 120 volt circuit and has a grounding plug, which looks like the adapter illustrated in Figure A. A temporary adapter, which looks like the adapter illustrated in Figures B and C, may be used to connect this plug to a two-pole receptacle as shown in Figure B if a properly grounded outlet is not available. The temporary adapter should be used only until a grounded outlet can be installed by a qualified electrician.

GROUNDING METHODS

NOTE: The use of the adapter shown in figures B and C is not permitted in Canada.

DANGER: BEFORE USING ADAPTER AS ILLUSTRATED, BE CERTAIN THE CENTER SCREW OF OUTLET PANEL IS GROUNDED.
The green-colored rigid ear or lug extending from adapter must be connected to a properly grounded outlet. If necessary, replace original outlet cover plate screw with a longer screw that will secure adapter ear or lug to outlet plate and make ground connection to grounded outlet.

For 230 VAC Nominal, 50 Hz Chargers:
This battery charger must be grounded to reduce the risk of electric shock. This charger is equipped with an electrical cord having an equipment-grounding conductor which must be connected to the ground prong of an appropriate plug for a nominal 230 Volt, 50 Hertz circuit. This plug must be connected to an appropriate AC outlet which is properly installed and grounded in accordance with the National Electrical Code and all local codes and ordinances.

EXTENSION CORD REQUIREMENTS
Always use a three conductor No. 12 AWG heavy duty cord with ground, properly wired, in good electrical condition and keep it as short as possible. Make sure the pins on the plug of the extension cord are the same number, size and shape as the AC plug of the battery charger. The use of an improper extension cord could result in a risk of fire or electrical shock. Locate all cords so they will not be...
stepped on, tripped over or otherwise subjected to
damage or stress.

OPERATING INSTRUCTIONS
1. Connect AC supply cord to a properly grounded
single phase outlet of the proper voltage and
frequency as specified on the charger front.
2. Connect the DC output plug, if not already
connected, by grasping the plug body and
pushing it straight into the receptacle until it is
fully engaged. The BLACK wire must be
connected to battery negative (-), and the RED
or WHITE wire to battery positive (+). Make
sure all connections are clean and tight.
3. The charger will start after a short delay as
indicated by the transformer hum and the
ammeter movement.

WARNING: LEAD ACID BATTERIES
GENERATE GASES WHICH CAN BE EXPLOSIVE.
CHARGE ONLY IN WELL VENTILATED AREAS.
DO NOT DISCONNECT CHARGER DC OUTPUT
TERMINALS FROM BATTERY WHEN CHARGER
IS ON. THE RESULTING ARcing AND BURNING
COULD CAUSE THE BATTERY TO EXPLODE.
KEEP SPARKS, FLAME AND SMOKING
MATERIALS AWAY FROM BATTERY.

If the charger must be stopped, always
disconnect the AC cord from its outlet to
terminate the charge.
4. Monitor the ammeter for correct charge rate.
Normal charging at the finish charge rate for the
last 3 to 5 hours is important to achieve
equalization of all battery cells every time the
batteries are charged. New batteries or
batteries charged in cold temperatures (below
50°F) will require more time to achieve full
charge.
5. Charger turns off automatically when battery is
fully charged. Charge time varies with battery
size and depth of discharge. Allow 8 hours for
normal charging. Severely discharged batteries
may require up to 12 hours to be properly
charged and equalized. After the charger has
turned off, disconnect the AC supply cord from
outlet, then disconnect the DC output plug from
the battery on portable chargers only.

CAUTION: DO NOT LEAVE CHARGER ON
WHILE UNATTENDED FOR MORE THAN TWO
CONSECUTIVE DAYS. SEVERE OVER-
CHARGING AND POSSIBLE DAMAGE TO
BATTERIES WILL RESULT IF CHARGER
SHOULD FAIL TO TURN OFF.

MAINTENANCE INSTRUCTIONS
The battery charger requires minimal maintenance.
It should be kept clean and all connections are to be
tightly secured. In the event of intermittent
operation, examine and tighten, if necessary, all
connections. Be sure the chassis is securely
grounded. If any problems cannot be resolved,
consult a qualified service center.

Observe the following battery cycle maintenance
procedures to obtain good performance and
maximum cycle life.
1. Always observe the following personal safety
precautions when working with lead acid
batteries:
   a. Someone should be within range of your
      voice or close enough to come to your aid
      when you work near a battery.
   b. Have plenty of fresh water and soap nearby
      in case battery acid contacts skin, clothing
      or eyes.
   c. Wear complete eye protection and clothing
      protection. Avoid touching eyes while
      working near battery.
   d. If battery acid contacts skin or clothing,
      wash immediately with soap and water. If
      acid enters eye, immediately flood eye with
      running cold water for at least ten minutes
      and get medical attention.
   e. Never smoke or allow a spark or flame in the
      vicinity of batteries.
   f. Be extra cautious to reduce risk of dropping
      a metal tool onto battery. It might spark or
      short-circuit battery or other electrical part
      that may cause explosion.
   g. Remove personal metal items such as rings,
      bracelets, necklaces, and watches when
      working with a lead acid battery. A lead acid
      battery can produce a short-circuit current
      high enough to weld a ring or the like to
      metal, causing a severe burn.
   h. Never charge a frozen battery.

DANGER: TO REDUCE RISK OF ELECTRIC
SHOCK, ALWAYS DISCONNECT THE AC
SUPPLY CORD FROM ITS OUTLET AND THE DC
OUTPUT CORD FROM THE BATTERY BEFORE
ATTEMPTING ANY MAINTENANCE (CHANGING
FUSES, ETC.) OR CLEANING OF THE BATTERY
CHARGER.

2. New batteries should be given a full charge
before their first use because it is difficult to
know how long batteries have been stored.
3. Limit use of new batteries for first five cycles.
   New batteries are not capable of their rated
output until they have been discharged a number of times.

4. Do not excessively discharge batteries. Excessive discharge can cause polarity reversal of individual cells resulting in complete failure shortly thereafter. Limited use of new batteries will minimize the chance of cell reversal.

5. Check the level of the electrolyte in conventional liquid electrolyte lead acid batteries monthly. Maintain the proper electrolyte level by adding distilled or purified water when necessary. Electrolyte levels lower during discharge and rise during charge. Therefore, it is mandatory that water be added to cells only when they are fully charged; do not overfill. Old batteries require more frequent additions of water than new batteries.

PARTS LIST FOR LESTRONIC II CHARGER
MODEL 07210, TYPE 24LC25-8ET, 115 VAC / 60 Hz

<table>
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<tr>
<th>PART NO.</th>
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<tr>
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<td>CASE ASSEMBLY</td>
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<tr>
<td>11576S</td>
<td>TRANSFORMER ASSEMBLY</td>
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<td>02390S</td>
<td>CAPACITOR, 6.0 MFD, 660 VAC</td>
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<td>16354S</td>
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<td>* 04483S</td>
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<td>** 23385S</td>
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<td>BUSHING, 7W-2, INSULATOR FOR CORDSETS</td>
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<td>CORDSET, DC, NO PLUG, 12/2, 118”</td>
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<td>08807S</td>
<td>CORDSET, DC, RING TERMINALS, 96”</td>
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<td>CORDSET, DC, 175 AMP PLUG, GRAY, 101”</td>
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<td>PLUG ASSEMBLY, DC, 175 AMP ANDERSON PLUG</td>
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* FOR USE WITH CHARGERS BUILT BEFORE 39/03
** FOR USE WITH CHARGERS BUILT AFTER 39/03