



24 VOLT DUAL MODE AUTOMATIC BATTERY CHARGER MODEL 18330 TYPE 24EL8

Specifications

AC Supply: 120 volts, 60 Hertz, single-phase, 3 amps maximum

DC Output: 24 volts, 8 amps tapering to 2 amps

Battery Capacity: Two series connected, 6 cell, 12 volt deep-cycle motive power batteries. Gel

cell and sealed "maintenance-free" or conventional replaceable electrolyte

deep-cycle batteries

Battery Size: 28 to 90 amp hours

Normal Recharge Time: 8 hours

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.

Features

- Charger output characteristics are adjustable to charge gel cell and sealed or conventional replaceable liquid electrolyte deep-cycle lead-acid batteries. Different charge characteristics are selected by a switch on the front of the charger.
- · Patented electronic circuit monitors battery state of charge and automatically turns charger off as battery reaches full charge
- Line voltage compensation produces consistent charger output for AC supply voltage variations of ± 3% from nominal.
- Convection-cooled design for maximum reliability and minimum maintenance.

INTRODUCTION

The Dual-Mode wheelchair battery charger is designed to recharge deep-cycle, lead-acid batteries of conventional replaceable electrolyte or gel cell and sealed "maintenance-free" design. The different charge characteristics required by these different types of battery design are selected by sliding the

"BATTERY TYPE" switch to the correct setting. A patented electronic circuit turns the charger on and off automatically.

Batteries used on wheelchairs are subjected to severe deep-cycle duty on a daily basis. For this reason, it is important that only Deep-Cycle batteries be used.

CAUTION: THIS CHARGER IS FOR USE ONLY ON 12 CELL, 28-90 AMP-HR (20 HR. RATE), 2.38-2.50 VOLTS PER CELL MAXIMUM RECHARGEABLE, **DEEP-CYCLE** VOLTAGE BATTERY SYSTEMS. THIS CHARGER IS FOR **USE ON REPLACEABLE ELECTROLYTE OR GEL** CELL AND SEALED "MAINTENANCE-FREE" **DEEP-CYCLE BATTERIES.** "BATTERY TYPE" SWITCH MUST BE SET TO THE PROPER TYPE OF BATTERY. **BATTERIES** IMPROPERLY MATCHED WITH CHARGER MAY BURST. CAUSING PERSONAL INJURY AND DAMAGE TO BATTERIES OR CHARGER.

INITIAL INSTALLATION

Circuit breaker or fuse protection in the 120 volt AC outlet to which the charger is to be plugged should allow 5 amps per charger. Do not overload electrical outlet. Use of an extension cord with the charger should be avoided unless absolutely necessary. Use of an improper extension cord could result in a risk of a fire and electric shock. If an extension cord is needed, use a three-conductor, No. 16 AWG (or larger) cord with ground, properly wired, in good electrical condition and keep as short as possible. Make sure that the pins on the plug of the extension cord are the same number, size, and shape as that of the plug on the battery charger. Locate all cords so that they will not be stepped on, tripped over, or otherwise subjected to damage or stress. Do not operate the battery charger with a damaged cord or Do not operate the battery charger if it received a sharp blow, was dropped, or otherwise damaged in any matter. Refer to a qualified service agent.

Provide adequate ventilation for both batteries and charger. The convection cooled design requires an unobstructed flow of cooling air for proper operation. Keep all charger ventilation openings at least two inches (2") (5.08cm) away from walls and other objects. Do not allow clothing, blankets, or other material to cover charger. DO NOT PLACE UNDER BED.

WARNING: CHARGERS CAN IGNITE FLAMMABLE MATERIALS AND VAPORS. DO GRAIN NOT USE NEAR FUELS, DUST. SOLVENTS. THINNERS. OR **OTHER** FLAMMABLES.

WARNING: KEEP DRY; DO NOT EXPOSE TO RAIN OR SPRAY. FOR STORAGE, KEEP CHARGER IN A BUILDING. REPLACE WORN, CUT, OR DAMAGED ELECTRICAL CORDS AND PLUGS IMMEDIATELY.

AC INPUT

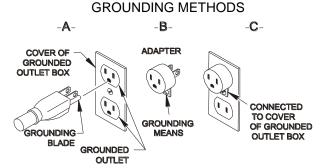
This battery charger must be grounded to reduce the risk of electric shock. It is equipped with an electric cord having an equipment-grounding conductor and a ground-type plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with the National Electrical Code and all local codes and ordinances.

DANGER: IMPROPER CONNECTION OF THE EQUIPMENT-GROUNDING CONDUCTOR CAN RESULT IN RISK OF ELECTRIC SHOCK. DO NOT REMOVE GROUNDING PRONG FROM PLUG.

GROUNDING INSTRUCTIONS

This battery charger is equipped with a grounding plug as illustrated in Figure A, for use on a nominal 120 volt, 60 Hertz circuit. A temporary adapter, as 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 properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

DANGER: BEFORE USING THE ADAPTER AS ILLUSTRATED, BE CERTAIN THAT THE CENTER SCREW OF THE OUTLET PLATE IS GROUNDED.



NOTE: Use of adapter shown in Figures B and C is NOT permitted in Canada.

BATTERY TYPE

Battery manufacturers frequently use the same battery cases for different battery types. Replaceable liquid electrolyte deep-cycle batteries have removable cell caps. Water electrolyzed by discharging and charging the battery is replaced through these openings.

Gel cell and sealed "maintenance-free" deep-cycle batteries are generally distinguished by non-removable cell caps. The physical appearance of the battery case is frequently the same as that of a replacement liquid electrolyte battery though the cell caps are generally not removable.

Refer to the battery manufacturer's information panel on the battery case to determine the type battery you have. If the information panel is missing or not legible, do not use the battery. Refer to your dealer if you do not understand what type battery you are using and have them set the "BATTERY TYPE" switch accordingly.

The "BATTERY TYPE" switch is a two-position slide switch visible in the rectangular opening on the front of the charger. Using a small screwdriver, slide the switch from one setting to the other through the opening. Take care not to damage the switch when moving it to the desired setting.

NORMAL OPERATION

Instructions printed on cover of charger are for daily reference.

 Set "BATTERY TYPE" switch to the proper style of battery to be charged.

ACAUTION: MAKE SURE THE BATTERY PACK IS A 24-VOLT, 12-CELL, SERIES CONNECTED, 28-90 AMP-HOUR (20 HR. RATE), **DEEP-CYCLE** RECHARGEABLE SYSTEM. THE "GEL CELL AND SEALED DEEP-CYCLE BATTERY" SETTING CHARGES TO A MAXIMUM ON-CHARGE VOLTAGE OF 2.38 **VOLTS PER CELL.** THE "REPLACEABLE **ELECTROLYTE DEEP-CYCLE BATTERY**" SETTING HAS AN ON-CHARGE VOLTAGE OF AT VISUALLY LEAST 2.50 VOLTS PER CELL. CHECK THAT THE BATTERY TYPE SWITCH IS SET CORRECTLY FOR THE TYPE OF BATTERY YOU ARE USING.

CAUTION: MANY DC PLUGS DO NOT HAVE A STANDARDIZED WIRING PATTERN. BEFORE CONNECTING TO EQUIPMENT, VERIFY THAT THE CHARGER PLUG WIRING PATTERN MATCHES THE EQUIPMENT BEING CHARGED BEFORE CONNECTING. DAMAGE MAY RESULT IF A PLUG THAT IS WIRED FOR OTHER APPLICATIONS IS USED ON YOUR EQUIPMENT. CONTACT YOUR DEALER OR THE EQUIPMENT MANUFACTURER FOR MORE INFORMATION.

DANGER: TO PREVENT ELECTRIC SHOCK, DO NOT TOUCH UNINSULATED PARTS OF THE CHARGER DC OUTPUT CONNECTOR, BATTERY CONNECTOR, OR BATTERY TERMINALS. MAKE SURE ALL ELECTRICAL CONNECTORS ARE IN

GOOD WORKING CONDITION. DO NOT USE CONNECTORS THAT ARE CRACKED, CORRODED, OR DO NOT MAKE ADEQUATE ELECTRICAL CONTACT. USE OF A DAMAGED OR DEFECTIVE CONNECTOR MAY RESULT IN A RISK OF OVERHEATING OR ELECTRIC SHOCK.

- 2. Move "POWER" switch to "OFF" position.
- 3. Connect the power supply cord to a properly grounded, 120 volt, 60 Hertz single-phase outlet.
- Connect charger's DC output plug to the wheelchair charging receptacle. Do not connect the DC plug unless the "POWER" switch is in the "OFF" position.
- 5. Move the "POWER" switch to "ON" and the RED and GREEN lights will come on steady for a few seconds to test the light. If the lights do not come on, either the AC cord is not plugged in or the AC outlet is not live. Test for a live AC outlet by connecting a suitable household appliance into the specific outlet.

WARNING: CHARGER IS NOT TO BE USED WHILE THE EQUIPMENT IS OPERATING.

ATTENTION! Ne pas utiliser le charger pendant que l'equipment est en marche.

WARNING: LEAD-ACID BATTERIES GENERATE GASES WHICH CAN BE EXPLOSIVE. TO PREVENT ARCING OR BURNING NEAR BATTERIES, DO NOT DISCONNECT CHARGING CORD FROM BATTERIES WHEN THE CHARGER IS OPERATING. IF THE CHARGE CYCLE MUST BE INTERRUPTED. MOVE THE "POWER" SWITCH TO "OFF", DISCONNECT THE CHARGER POWER SUPPLY CORD BEFORE DISCONNECTING THE DC OUTPUT CORD FROM THE BATTERIES. KEEP SPARKS, FLAME, AND SMOKING MATERIALS AWAY FROM BATTERIES.

WARNING: ALWAYS SHIELD EYES WHEN WORKING NEAR BATTERIES. DO NOT PUT WRENCHES OR OTHER METAL OBJECTS ACROSS BATTERY TERMINAL OR BATTERY TOP. ARCING OR EXPLOSION OF THE BATTERY CAN RESULT!

Charger will output power three to five (3-5) seconds after turning switch "ON" as indicated by the RED light turning off, the slow blinking GREEN light (once per second), and a slight transformer hum.

If both lights go off about five (5) seconds after AC is applied, check to see if the DC plug is correctly connected to the battery. If the DC plug is connected properly, either an open circuit exists in the wheelchair's internal circuitry or the

battery voltage is below 7 volts (see Troubleshooting).

The charger has an under-voltage protection mode which will terminate the charge if the battery voltage does not increase above 18 volts in 10 minutes. This prevents destroying 12-volt battery systems with this 24-volt charger. When this shutoff occurs, the RED light will come on steady.

6. Correct initial charge rate should be between 7 to 9 amps. As the batteries become more charged, the charge rate decreases. When the batteries reach approximately 80% of full charge, the GREEN light will fast blink (eight times per second), the charge rate will have decreased as determined by the "BATTERY TYPE" switch setting and the condition of the batteries.

Replaceable Electrolyte Deep Cycle Batteries

With healthy batteries, the charging current will decrease to between 1 to 3 amps and remain there until the charger turns off. As replaceable electrolyte deep cycle batteries lose capacity, the charge rate may no longer decrease to this reading. The charger will still determine when the batteries are as charged as they are capable of being and will turn off. When battery capacity has decreased to where the charger is no longer able to taper down to less than 3 amps, or the batteries will no longer perform as desired, they should be replaced.

Gel Cell and Sealed Deep Cycle Batteries

The charging current will decrease to near zero and remain there until the charger turns off. Gel cell deep cycle batteries will still taper to near zero charge current even as they wear out and lose capacity and range. As sealed deep cycle batteries lose capacity and range, the charge current may no longer decrease to this low a reading. The charger will still determine when the batteries are as charged as they are capable of being and turn off. When the batteries will no longer perform as desired, they should be replaced.

- 7. Charger is equipped with a thermal breaker which automatically turns the charger off if it overheats. Should charger turn off before the batteries are fully charged, check to be sure all ventilation openings are free from obstructions. After charger cools down to a safe temperature, it will automatically restart. If charger repeatedly overheats, refer to a qualified service agent.
- 8. Charger turns off automatically when batteries are fully charged as indicated by steady ON GREEN light. Charge time varies with battery size and depth of discharge. Allow 8 hours for

normal charging. Larger batteries (greater than 90 ampere-hours) or severely discharged batteries may require up to 16 hours to be properly charged and equalized. If the charger operates for 16 hours and is unable to fully charge the batteries, an internal timer turns the charger off and begins to fast blink the RED light.

A maximum voltage shutoff for wet batteries is an additional safety feature of the charger. When the battery potential increases above 2.83 volts per cell, the charge cycle is terminated and the RED light begins to slow blink.

 After the charger has turned off, move the "POWER" switch to "OFF", then disconnect the DC output cord from the wheelchair charging receptacle.

CAUTION: TO AVOID DAMAGE TO THE CHARGER CORD AND BATTERY CONNECTOR, DISCONNECT BY GRASPING THE PLUG HANDLE OR BODY AND PULLING IT STRAIGHT OUT OF THE BATTERY CONNECTOR. DO NOT PULL ON THE CHARGER CORD. DO NOT TWIST, ROCK, OR PULL THE PLUG SIDEWAYS.

WARNING: TO PREVENT ARCING OR BURNING NEAR THE BATTERIES, DO NOT DISCONNECT THE OUTPUT CORD FROM THE BATTERIES WHILE THE CHARGER IS OPERATING. IF THE CHARGE CYCLE MUST BE INTERRUPTED, FIRST SLIDE THE "POWER" SWITCH TO "OFF", THEN DISCONNECT THE OUTPUT CORD FROM THE BATTERIES. KEEP SPARKS, FLAME, AND SMOKING MATERIALS AWAY FROM BATTERIES. NO SMOKING.

WARNING: DO NOT LEAVE THE DC OUTPUT CONNECTOR PLUGGED IN WHILE UNATTENDED FOR MORE THAN TWO (2) DAYS. SEVERE OVERCHARGING AND DAMAGE TO THE BATTERIES MAY RESULT IF THE CHARGER DOES NOT TURN OFF.

PROPER CARE OF DEEP-CYCLE MOTIVE POWER BATTERIES

Batteries used on wheelchairs are subjected to severe deep-cycle duty on a daily basis. For this reason, it is important that only deep-cycle batteries be used. Although these batteries are designed to withstand such duty, the following precautions must be observed to obtain good performance and maximum cycle life.

CAUTION: ALWAYS WEAR PROTECTIVE EYE SHIELDS AND CLOTHING WHEN WORKING WITH BATTERIES. BATTERIES CONTAIN ACID

WHICH CAN CAUSE BODILY HARM. DO NOT PLACE WRENCHES OR OTHER METAL OBJECTS ACROSS THE BATTERY TERMINALS OR BATTERY TOP. ARCING OR EXPLOSION OF THE BATTERY MAY RESULT. SOMEONE SHOULD BE WITHIN THE RANGE OF YOUR VOICE OR CLOSE ENOUGH TO COME TO YOUR AID WHEN YOU WORK NEAR A LEAD-ACID BATTERY. HAVE PLENTY OF FRESH WATER AND SOAP NEARBY IN CASE BATTERY ACID CONTACTS SKIN, CLOTHING OR EYES.

WARNING: RISK OF EXPLOSIVE GASES. WORKING IN VICINITY OF A LEAD-ACID BATTERY IS DANGEROUS. **BATTERIES** GENERATE **EXPLOSIVE GASES** DURING NORMAL BATTERY OPERATION. FOR THIS REASON, IT IS OF UTMOST IMPORTANCE THAT EACH TIME BEFORE USING YOUR CHARGER, YOU READ THIS MANUAL AND FOLLOW THE INSTRUCTIONS EXACTLY.

- New batteries should be given a full charge before their first use because it is difficult to know how long batteries have been stored.
- Limit use of new batteries for first 5 cycles. New batteries are not capable of their rated output until they have been discharged a number of times.
- 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 change of cell reversal.
- CHECK THE LEVEL OF THE ELECTROLYTE IN CONVENTIONAL LIQUID ELECTROLYTE **LEAD** ACID **BATTERIES** MONTHLY. MAINTAIN THE PROPER ELECTROLYTE LEVEL BY **ADDING** WATER 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 compared to new batteries.
- 5. Keep tops of batteries clean and dry to prevent excessive self-discharge. Keep battery terminals reasonably tight.

PERSONAL PRECAUTIONS

- 1. Someone should be within range of your voice or close enough to come to your aid when you work near a lead-acid battery.
- 2. Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing, or eyes.

- Wear complete eye protection and clothing protection. Avoid touching eyes while working near battery.
- 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 10 minutes and get medical attention immediately.
- 5. NEVER smoke or allow a spark or flame in vicinity of battery.
- Be extra cautious to reduce risk of dropping a metal tool onto battery. It might spark or shortcircuit battery or other electrical part that may cause explosion.
- 7. 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.
- 8. **NEVER** charge a frozen battery.

TROUBLESHOOTING GUIDE

To be able to troubleshoot safely and effectively, it is important to read this guide completely before beginning any tests.

CAUTION: DO NOT DISASSEMBLE THE CHARGER. TAKE IT TO A QUALIFIED SERVICE AGENT WHEN SERVICE OR REPAIR IS REQUIRED. INCORRECT REASSEMBLY MAY RESULT IN RISK OF ELECTRIC SHOCK OR FIRE.

The following procedures are intended only to determine if a malfunction may exist in the charger.

DANGER: TO REDUCE THE RISK OF ELECTRIC SHOCK, ALWAYS DISCONNECT BOTH THE POWER SUPPLY CORD AND THE OUTPUT CORD BEFORE ATTEMPTING ANY MAINTENANCE OR CLEANING; TURNING THE CHARGER OFF DOES NOT REDUCE THE RISK.

WARNING: DO NOT OPERATE THE CHARGER IF IT IS MALFUNCTIONING. PERSONAL INJURY OR PROPERTY DAMAGE COULD RESULT.

Use the following chart to help you troubleshoot problems with the battery and charger system. There are four different modes that each light can have: OFF (light is off), SLOW BLINK (light blinks on and off once per second), FAST BLINK (light blinks on and off eight times per second), and STEADY (light is full on).

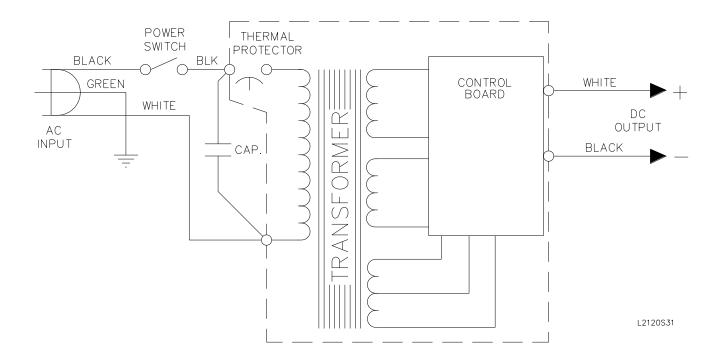
RED LIGHT	GREEN LIGHT	FUNCTION
OFF	OFF	No AC power or no battery connected
STEADY	STEADY	Light test when AC connected
OFF	SLOW BLINK	Charging (less than 80% charged)
OFF	FAST BLINK	Charging (over 80% charged)
OFF	STEADY	Normal charge completed
STEADY	OFF	Undervoltage shutoff, < 18.0 volts
SLOW BLINK	OFF	Overvoltage shutoff, > 33.96 volts
FAST BLINK	OFF	Maximum timer shutoff, > 16 hours

- If the GREEN and RED lights do not illuminate within three (3) seconds after the AC power is applied to the charger, it indicates one of the following:
 - a. Charger "POWER" switch is not in "ON" position.
 - b. Charger is not plugged into a live AC outlet.
- 2. If both lights go off and stay off three to five (3-5) seconds after the charger connections are completed, it indicates one of the following and the charger is prevented from turning on:
 - a. DC plug not connected to the wheelchair receptacle.
 - Fault in wheelchair wiring. Poor or open connections in the wheelchair wiring that connects to the batteries; corroded terminals, loose or worn plugs and receptacles, loose or worn fuseholders. (Have your dealer repair the wheelchair.)
 - c. Battery connections in wheelchair wrong (reverse polarity).
 - d. One or both batteries no longer serviceable (voltage below 7 volts for a 24-volt system).
- 3. If the charger turns off before the batteries are fully charged, it indicates one of the following:
 - a. Charger internal thermal breaker turned the charger off due to overheating because charger ventilation openings are blocked. After the charger has cooled down to a safe temperature, it will automatically restart. If the charger repeatedly overheats, it may be malfunctioning.
 - b. The AC power was interrupted during charge.
 - c. The DC cord charging plug accidentally disconnected during charge.
 - d. Fault in wheelchair wiring. The wheelchair charging circuit has high resistance, corroded or loose connections; loose or worn wheelchair charging receptacle, loose or worn wheelchair fuseholders.
- 4. A decrease in wheelchair range where the chair loses power earlier and earlier in the day indicates one of the following:

- a. Using the wheelchair before batteries are fully charged and charger is turned off shortens battery life and begins reducing daily range. This battery capacity loss is permanent and not recovered with additional charge cycles.
- b. Conventional replaceable liquid electrolyte batteries are being under charged on the gel cell "BATTERY TYPE" switch setting. Battery capacity lost in this manner is permanent and is not recovered with additional charge cycles.
- c. Severe overcharging occurs when gel cell (maintenance-free) batteries are charged on the conventional wet led acid "BATTERY TYPE" switch setting. Battery capacity lost in this manner is permanent and occurs very rapidly. Check with your dealer about battery replacement.
- d. The battery has been allowed to sulfate. Charge the battery no less frequently than once every three (3) days when the wheelchair is lightly utilized. Once sulfation is allowed to take place, it may be partially reduced by returning, temporarily, to daily charging.
- e. The electrolyte level in conventional liquid electrolyte lead-acid batteries was allowed to drop below the top of the battery plates. Add distilled water to just cover the tops of the plates immediately upon discovery and fill to the proper level with distilled water at the completion of the very next charge cycle. Battery capacity lost in this manner is permanent and is not recovered with additional charge cycles.
- This is the normal wearout process for all types of deep-cycle motive power batteries.
- 5. If battery voltage does not exceed 18 volts after 10 minutes of charging, the charger turns off and the RED light will turn on steady indicating one of the following:
 - a. Improper batteries used with charger. Must be a 12-cell, series connected 2.38-2.50 volts per cell battery system.
 - b. Failed cells in the battery do not allow the battery voltage to rise above 18 volts.
- 6. The charger operates through 16 hours before turning off. The RED light will begin to blink very rapidly indicating one of the following:
 - a. Batteries of higher than 90 amp-hour capacity (20 hr. rate) can require more than 16 hours to charge.
 - b. New batteries (5 cycles or less) can require more than 16 hours to charge.

- c. Very deeply discharged batteries (100% discharged) can require more than 16 hours to charge.
- d. Several failed cells in the batteries that do not allow the charge rate to taper below 4 amps.
- 7. If battery voltage exceeds 2.83 volts per cell, the charger turns off and the right light begins to slow blink indicating one of the following:
- a. Improper batteries used with charger. Must be a 12-cell, 2.38-2.50 volts per cell battery system.
- b. Battery design may be inappropriate for this use. Check with your dealer for deep-cycle batteries only.
- c. Sulfation of batteries may have occurred.

WIRING DIAGRAM



PARTS LIST FOR 24 VOLT DUAL MODE CHARGER MODEL 18330 TYPE 24EL8 120 VAC / 60 HZ

PART NO.	QTY.	DESCRIPTION
31153S	1	CASE ASSEMBLY
22458S	1	SWITCH, ROCKER
04275S	1	BUSHING, STRAIN RELIEF, FOR AC CORD
18363S	1	BUSHING, STRAIN RELIEF, FOR DC CORD
23083S	1	CORDSET, AC, 18/3, 102" W/ MOLDED PLUG
23049S	1	CORDSET, DC, 16/2, 108", W/ CANNON PLUG
16612S	1	CORDSET, DC, 16/2, 108", W/ CANNON PLUG
17219S	1	CORDSET, DC, 16/2, 108", W/ SB50 GRAY PLUG
20838S	1	CORDSET, DC, 16/2, 108", W/ SB50 RED PLUG
14422S	1	CORDSET, DC, 16/2, 108", W/ 30A POWER POLE PLUG
23171S	1	CORDSET, DC, 16/2, 108", W/ 30A POWER POLE PLUG
33099S	1	CORDSET, DC, 16/2, 108", W/ NEUTRIK PLUG

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