ASSOCIATE
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MODEL 6082
1-60 CELL SERIES CHARGER
OPERATOR'S MANUAL

Be sure to read and understand these instructions before using this unit. Save these instructions. This manual contains important safety, operating and m

INTRODUCTION

The Model 6082 is a battery charger designed to charge batteries in series. It will charge 1 to 60 battery cells (2 to 158 volts) at a charge rate not to excee

It will charge "standard lead-acid," "recombination" and "maintenance-free" batteries. The charger has 2 charge rates to allow the user to adjust the outpu

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS - This manual contains important safety and operating instructions for battery charger Model 6082.

1. DANGER - RISK OF EXPLOSIVE GASES

a. Working in vicinity of a lead acid battery is dangerous. Batteries generate explosive gases during normal battery operation. These gases may be igni and explode inside the battery cell. Such an explosion is dangerous because pieces of the battery and battery acid may cause great harm to anyone and eyes if not immediately washed off with fresh water. For this reason it is of utmost importance that each time before using your charger you rea

b. To reduce risk of battery explosion, follow these instructions and those published by the battery manufacturer and manufacturer of any equipment yo markings on these products and on the engine.

2. PERSONAL PRECAUTIONS

a. Always wear a face shield when working around lead-acid batteries. Avoid rubbing or touching eyes while working near batteries.
b. Never smoke or allow a spark or flame in the vicinity of a battery or engine.
c. Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing, or eyes. IF ACID ENTERS EYE, immediately flood eyes with attention immediately. Never use eyedrops or other medication unless ordered to by a doctor.
d. Never charge a frozen battery.
e. Someone should be within range of your voice or close enough to come to your aid when you work near a lead-acid battery.
f. Be extra cautious to reduce risk of dropping a metal tool onto the battery. It might spark or short circuit battery or other electrical part that may cause
g. Remove personal metal items such as rings, bracelets, necklaces, and watches when working with a lead-acid battery. A lead-acid battery can prod like to metal, causing a severe burn.
h. Use this charger for charging a LEAD-ACID battery only. It is not intended to supply power to a low-voltage electrical system other than in an automo charging dry-cell batteries that are commonly used with home appliances. These batteries may burst and cause injury to persons and damage to pro

3. CAUTION - To reduce the risk of injury, charge only wet cell, lead-acid, automotive type rechargeable batteries. Other types of batteries may burst
Do not expose the charger to rain or snow if specifically warned on the unit not to do so.
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.
To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
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. That pins on the plug of extension cord are the same number, size and shape as those of the plug on the charger.
   b That extension cord is properly wired and in condition, and
   c. If the length of the extension cord is less than 25 feet, use a 14- AWG cord. If 50 feet 12-AWG. 100 feet 10-AWG. 150 feet 8-AWG.
Do not operate the charger with a damaged cord or plug, replace them immediately.
Do not operate the charger if it has received a sharp blow, been dropped, or otherwise damaged in any way, take it to a qualified serviceman.
Do not disassemble the charger unless you are qualified to work on electrical products. If not, take it to a qualified serviceman when service or repair electric shock or fire.
To reduce risk of electric shock, unplug charger from the outlet before attempting any maintenance or cleaning. Turning off controls will not reduce th

4. PREPARING TO CHARGE

a. When removing battery from vehicle to charge, always remove grounded terminal from battery first. Make sure all accessories in the vehicle are off,
b. Be sure area around battery is well-ventilated while battery is being charged. Gas can be forcefully blown away by using a piece of cardboard or oth
c. Clean battery terminals. Be careful to keep corrosion from coming contact with eyes.
d. Add distilled water in each cell until battery acid reaches level specified by battery manufacture. This helps purge excessive gas from cells. Do not manufacturer's recharging instructions.
e. Study all battery manufacturer's specific precautions such as removing or not removing cell caps while charging and the recommended rate of charge

5. CHARGER LOCATION

a. Locate the charger as far away from the battery as the DC cables permit.
b. Never place the charger directly above a battery being charged; gases from battery will corrode and damage the charger.
c. Never allow battery acid to drip on the charger when reading specific gravity or filling battery.
d. Do not operate the charger in a closed-in area or restrict ventilation in any way.
e. Do not set a battery on top of the charger.

6. DC CONNECTION PRECAUTIONS

a. Connect and disconnect DC output clamps only after setting charger switches on OFF position and removing AC cord from electric outlet. Never allov
b. Attach clamps to battery post and twist or rock back and forth several times to make a good connection. This tends to keep clamps from slipping off t

7. FOLLOW THESE STEPS WHEN BATTERY IS INSTALLED IN VEHICLE. A SPARK NEAR THE BATTERY MAY CAUSE BATTERY EXPLOSION. TO REDUCE RISK OF A SPARK NEAR BATTERY:

a. Position AC and DC cords to reduce risk or damage by hood, door, or moving engine parts.
b. Stay clear of fan blades, belts, pullets, and other parts that can cause injury to persons.
c. Check polarity of battery post. POSITIVE (POS, P, +) battery post usually has a larger diameter than NEGATIVE (NEG, N, -) post.
d. Determine which post of battery is grounded (connected) to the chassis. If negative post is grounded to the chassis (as in most vehicles), see item "e
e. For negative-grounded vehicle, connect POSITIVE (RED) clamp from the battery charger to POSITIVE (POS, P, +) ungrounded post of battery. Connec gauge metal part of frame, or engine block away from battery. Do not connect the clamp to carburetor, fuel lines, or sheet metal part of the frame.
f. For positive-grounded vehicle, connect NEGATIVE (BLACK) clamp from battery charger to NEGATIVE (NEG, N, -) ungrounded post of battery. Connec block away from battery. Do not connect clamp to carburetor, fuel lines, or sheet metal body parts. Connect to a heavy gauge metal part of the frame
g. When disconnecting the charger, turn switches to off, disconnect AC cord, remove clamp from vehicle chassis, and then remove clamp from battery t
h. See operating instructions for length of charge information.

8. FOLLOW THESE STEPS WHEN BATTERY IS OUTSIDE VEHICLE. A SPARK NEAR THE BATTERY MAY CAUSE BATTERY EXPLOSION. TO REDUCE RISK OF A SPARK NEAR BATTERY:

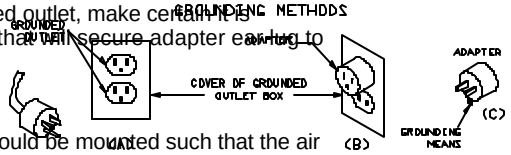
a. Check polarity of battery post. POSITIVE (POS, P, +) battery post usually has a larger diameter than the NEGATIVE (NEG, N, -) post.
b. Attach at least a 24 inch long 6-gauge (AWG) insulated battery cable to the NEGATIVE (NEG, N, -) battery post.
c. Connect POSITIVE (RED) charger clamp to POSITIVE (POS, P, +) post of the battery.
d. Position yourself and free end of the cables as far away from the battery as possible, then connect the NEGATIVE (BLACK) charger clamp to free en
e. Do not face battery when making final connection.
f. When disconnecting the charger, always do so in reverse sequence of connecting procedure and break first connection while standing as far away
g. A marine (boat) battery must be removed and charged on shore. To charge it on board requires equipment specially designed for marine use.

9. GROUNDING AND AC POWER CORD CONNECTION INSTRUCTIONS

This charger should be grounded to reduce risk of electric shock. This charger is equipped with an electric cord having an equipment grounding condu into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER. Never alter AC cord or plug provided if it will not fit the outlet, have a proper outlet installed by a qualified electrician. Improper connectio charger is for use on a nominal 120 volt circuit. It has a grounding plug that looks like the plug illustrated in sketch (A). A temporary adapter, which loc connect this plug to a two-pole receptacle, as shown in sketch B, until a properly grounded outlet can be installed by a qualified electrician.

DANGER. Before using adapter as illustrated, be certain that center screw of outlet plate is grounded. The green-colored rigid ear of lug extending from adapter must be connected to a properly grounded outlet, make certain it is grounded. If necessary, replace original outlet cover plate screw with a longer screw that will secure adapter ear lug to outlet cover plate and make ground connection to grounded outlet.



MOUNTING:

The Battery Charger may be set on a table or a shelf. Do not set charger on floor. It should be mounted such that the air intake louvers are at least 18 inches from the floor. Regardless of how it is placed, the top and side louvers of the unit must not be blocked. This is a convection cooled charger and blocking the louvers will damage the unit. When locating the unit, take into account the number of batteries to be recharged and location of the recharging racks. Never place the charger such that battery acid or wat directly over the batteries to be charged. Fumes caused by gassing batteries will be drawn through the charger by convection and cause damage to

CONTROLS:

AMMETER: Indicates the amount of current that the batteries are receiving. The larger the amount of current, the faster the batteries will charge. All b current. Do not exceed 6 amps charge rate.

MAIN POWER SWITCH: This switch turns the power off to the entire charging unit. Any time the charger is not being used, this switch should be turr

RANGE SWITCH: The range switch should be set in the LOW position when charging 24 cells or less in order to obtain a stable current adjustment.

CURRENT LIMIT ADJUST: After attaching the clamps to the batteries, charging current can be set by turning the knob clockwise to increase and coun will be a slight 2 - 3 second delay after attaching the clamps before current can be set.

NOTE: The charger will not begin charging if the battery voltage is below 3 Volts. If this condition exists, connect a good battery in parallel, observ begins. Adjust charging current and then remove the parallel battery. Turn Current Limit Adjust full counter-clockwise before removing the

SAFETY FEATURES:

REVERSE POLARITY PROTECTION: If the DC clamps are hooked up incorrectly to the battery, the control will not turn on to allow output voltage.

ANTI-SPARKING PROTECTION: If the DC clamps are connected in proper polarity to a battery of 3 or more volts, 2 to 3 seconds of delay occurs befor momentarily disconnected, output voltage shuts off immediately and requires another 2 to 3 seconds to turn on again.

CAUTION ! ! !

When a number of batteries are connected in series, a high DC voltage exists at the terminals of the end batteries. When not connected, the charger l may still present a shock hazard.

SERIES CHARGING:

Connecting batteries in series (see illustration D) allows a person to charge a number of batteries at one time using only one low current, high voltage

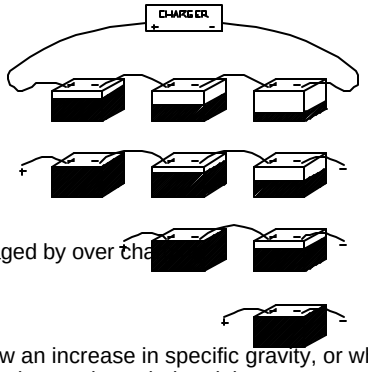
is indicated by the ammeter. Thus, each battery will arrive in a fully charged condition at a different time. Conditions that affect charging time are bat other factors.

Six and twelve volt batteries may be intermixed when series charging. The total voltage of the batteries should not exceed the rated voltage of the ch

Example: A Charger is rated a nominal 60 cells. Ten 12 volt batteries in series or twenty 6 volt batteries in series can be charged or any combination

To charge batteries in series, connect the charger's positive lead to the positive post of the first battery. Connect a jumper from the negative post of t Continue until all batteries are connected. Attach negative lead of charger to remaining battery post.

Dark area represents state of charge of battery.



At start of charge

Remove battery when it becomes fully charged

Charger output voltage must be turned down after battery is removed

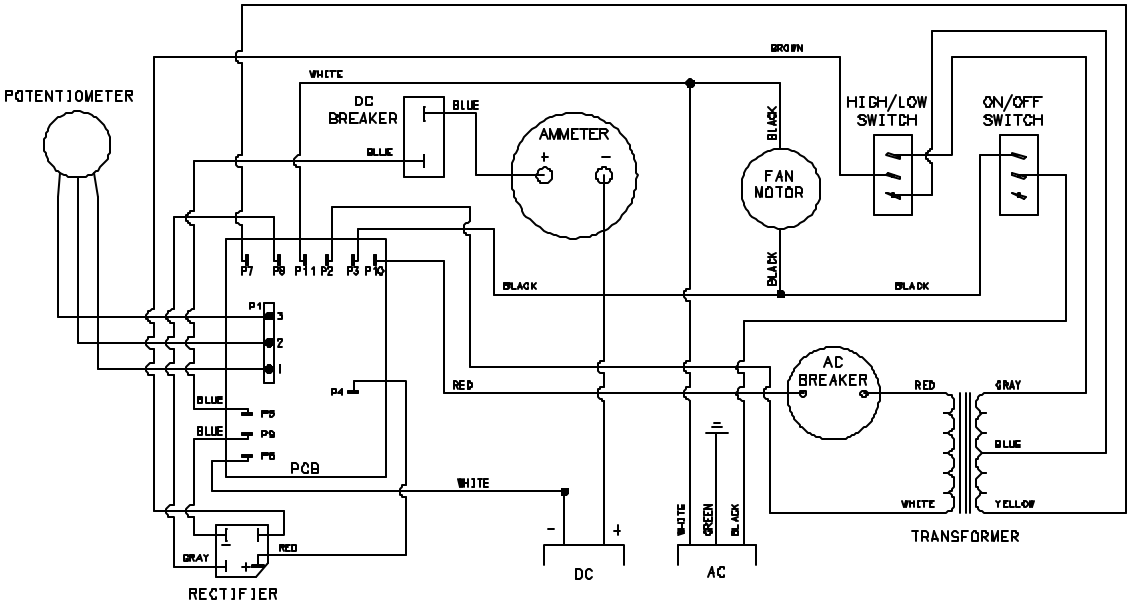
At finish of charge, turn main power switch "Off" to conserve energy

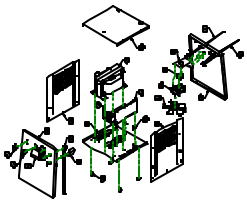
When a battery is fully charged, it must be removed from the charging circuit. If it is not, it may be damaged by over cha

END OF CHARGE:

Discontinue charge when three successive hydrometer readings taken at half hour intervals fail to show an increase in specific gravity, or when battery begins to gas excessively or when temperature of electrolyte reaches approximately 120EF. If a battery is sealed and these determinations cannot be made, see manufacturer's instructions for charging.

WIRING DIAGRAM





PARTLIST

ITEM	DESCRIPTION	PART NO.
1	Switch	610172
2	Ammeter	605616
3	AC Cord	610628
4	DC Cables	610898
5	Bridge Rectifier	610090
6	Transformer	610629
7	PC Board	610630

8	Fan Bracket	610631
9	Fan Motor	610632
10	Fan Blade	610189
11	Potentiometer	610633
12	DC Circuit Breaker	610640
13	Side Panels (1 pair)	610253
14	Back Panel	610897
15	Front Panel	610635
16	Top Panel	610636
17	Base	610637
18	PCB standoff	610638
19	Feet	610639
20	AC Circuit Breaker	610808

Parts may be purchased from your local authorized service depot listed in the Service Procedure Manual supplied with your product.

If you elect to order parts from the factory you may do so by mail or phone. Minimum order from the factory is $25.00. Orders received that are under the are not considered to be part of the dollar value of the order. We Do Not have a C.O.D. policy. Cashiers check, money order, Master Card or Visa Card ar only the number and expiration date. DO NOT SEND CARD.

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ILLUSTRATION LISTING

	FILENAME	DESCRIPTION
FIG. 1	LOGO.EPS	ASSOCIATED LOGO
FIG. 2	PLUG.PLT	GROUNDING ADAPTER
FIG. 3	SERS_BAT.PLT	SERIES BATTERY HOOKUP
FIG. 4	27-517A.PLT	WIRING DIAGRAM 6082 cadmax 27-517.dwg
FIG. 5	27-517B.PLT	exploded view 6082 cadmax 27-517.dwg

Revision record.

10/93 initial release
11/98 1) manual reduced from six to four pages, reuce font size and eliminate double spacing. 2) new wiring diagram with ac breaker. 3) new exploded pa six digit number changes 610898 was 610098, 610253 was 610072, 610897 was 610634, add 610808.
05/00 removed current limiting from safety features on page 3.
01/01 corrected 27-517a.plt wiring diagram p2 & p3 connections.