MODEL 6065

12 VOLT PARALLEL 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 maintenance instructions.

INTRODUCTION

Model 6065 battery charger is designed to charge one to ten 12 volt batteries in parallel. The multiple charge rates allow batteries to be slow charged or fast charged at a rate not to exceed 30 amps output of the charger. The voltmeter allows you to adjust the charge rate to compensate (see charging instructions).
This unit is not intended to be used as a car starting unit. The output leads are terminated in ring terminals and designed to be permanently attached to a parallel charging rack.

1. DANGER . RISK OF EXPLOSIVE GASES

a. Working in the vicinity of a lead acid battery is dangerous. Batteries generate explosive gases during normal battery operation. TI may be ignited by a spark or flame and burn back through the vent hole and explode inside the battery cell. Such an explosion is because pieces of the battery and battery acid may cause ,great harm to anyone in the immediate area. Battery acid will cause L~ skin 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 read this manual and following instructions exactly.
b. To reduce risk of battery explosion, follow these instructions and those published by the battery manufacturer and manufacturer of any equipment you intend to use in the vicinity of battery. Review cautionary markings on these products and on 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 running cold water for at least 10 minutes and get medical attention immediately. Never use eye drops 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 battery. It might spark or short circuit battery or other electrical part that may cause an explosion.
g. Remove personal metal items such as rings, bracelets, necklaces, and watches when working with a lead-acid battery. A lead-a can produce a short circuit current high enough to weld a ring or the like to metal, causing a severe burn.
h. Use 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 application. Do not use battery charger for charging dry-cell batteries that are commonly used with home appliances. These batteries may burst and cause injury to persons and damage to property.

3. CAUTION . To reduce risk of injury, charge only wet cell, lead-acid, automotive type rechargeable batteries. Other types of batteries may burst causing personal injury and damage.

Do not expose 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 plug of extension cord are the same number, size and shape as those of plug on charger;
b. That extension cord is properly wired and in good electrical 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, 150 feet – 8 AWG.

Do not operate charger with 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 service center.
Do not disassemble charger unless you are qualified to work on electrical products. If not, take it to a qualified service center when service or repair is required. Incorrect assembly may result in risk of electrical shock or fire. To reduce the risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.

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, so as not to cause an arc.

b. Be sure area around battery is welt ventilated while battery is being charged. Gas can be forcefully blown away by using a piece of cardboard or other non-metallic material as a fan.

c. Clean battery terminals. Be careful to keep corrosion from coming in contact with eyes.

d. Add distilled water in each cell until battery acid reaches level specified by battery manufacturer. This helps purge excessive gas from cells. Do not overfill. For a battery without cell caps, carefully follow manufacturer's recharging instructions.

e. Study all battery manufacturers specific precautions such as removing or not removing cell caps while charging and recommended rate of charge.

5 CHARGER LOCATION

a. Locate charger as far away from battery as DC cables permit.

b. Never place charger directly above battery being charged; gases from battery will corrode and damage charger.

c. Never allow battery acid to drip on charger when reading specific gravity or filling battery.

d. Do not operate charger in a closed-in area or restrict ventilation in any way.

e. Do not set a battery on top of 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 allow clamps to touch each other.

b. Attach clamps to battery posts and twist or rock back and forth several times to make a good connection. This tends to keep clamps from slipping off terminals and helps to reduce risk of sparking.

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. Slay clear of fan blades, belts, pulleys, and other parts that can cause injury to persons.

c. Check polarity of battery posts. POSITIVE (POS,P, +) battery post usually has 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 chassis (as in most vehicles), see item e. If positive post in grounded to the chassis, see item f.

e. For negative-grounded vehicle, connect POSITIVE (RED) clamp from battery charger to POSITIVE(POS,P, +) ungrounded post of battery. Connect NEGATIVE (BLACK) clamp to vehicle chassis, heavy gauge metal part of frame, or engine block away from battery. Do not connect clamp to carburetor. fuel lines, or sheet metal part of the frame.

For positive-grounded vehicle, connect NEGATIVE(BLACK) clip from battery charger to NEGATIVE (NEG,N,-) ungrounded post of battery. Connect POSITIVE (RED) clip to vehicle chassis or engine block away from battery, Do not connect clip to carburetor, fuel lines, or sheet-metal body parts. Connect to a heavy gauge metal part of the frame or engine block.

g. When disconnecting charger, turn switches to off, disconnect AC cord, remove clamp from vehicle chassis, and then remove clamp from battery terminal.

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 posts. POSITIVE (POS,P,+) battery post usually has a larger diameter than NEGATIVE(NEG,N,-) post.

b. Attach at least a 24 inch long 6-gauge (AWG) insulated battery cable to NEGATIVE (NEG,N,-) battery post.

c. Connect POSITIVE (RED charger clamp to POSITIVE (POS,P, +) post of battery.

d. Position yourself and free end of cables as far away from battery as possible-then connect NEGATIVE (BLACK) charger clamp to free end of cable.

e. Do not face battery when making final connection.

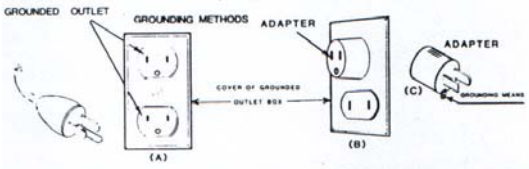
f. When disconnecting charger, always do so in reverse sequence of connecting procedure and break first connection while standing as far away from battery as practical.

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

Charger should be grounded to reduce risk of electric shock. Charger is equipped with an electric cord having an equipment grounding conductor and a grounding plug. The plug must be plugged 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 outlet, have proper outlet installed by a qualified electrician. Improper connection can result in a risk of an electric shock. The battery charger is for use on a nominal 120-volt circuit, and has a grounding plug that looks like the plug illustrated in sketch A. A temporary adapter, which looks like the adapter illustrated in sketch C, may be used to 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 to 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" from the floor. Regardless of how t 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 water may be spilled in the top of the unit. Never place the unit directly over the batteries to be charged Fumes caused by gassing batteries wilt be drawn through the charger by convection and cause damage to the unit. When connecting the charger to a charging rack, always be sure the connections are made in the correct polarity. The positive lead on the charger is marked with a red band.

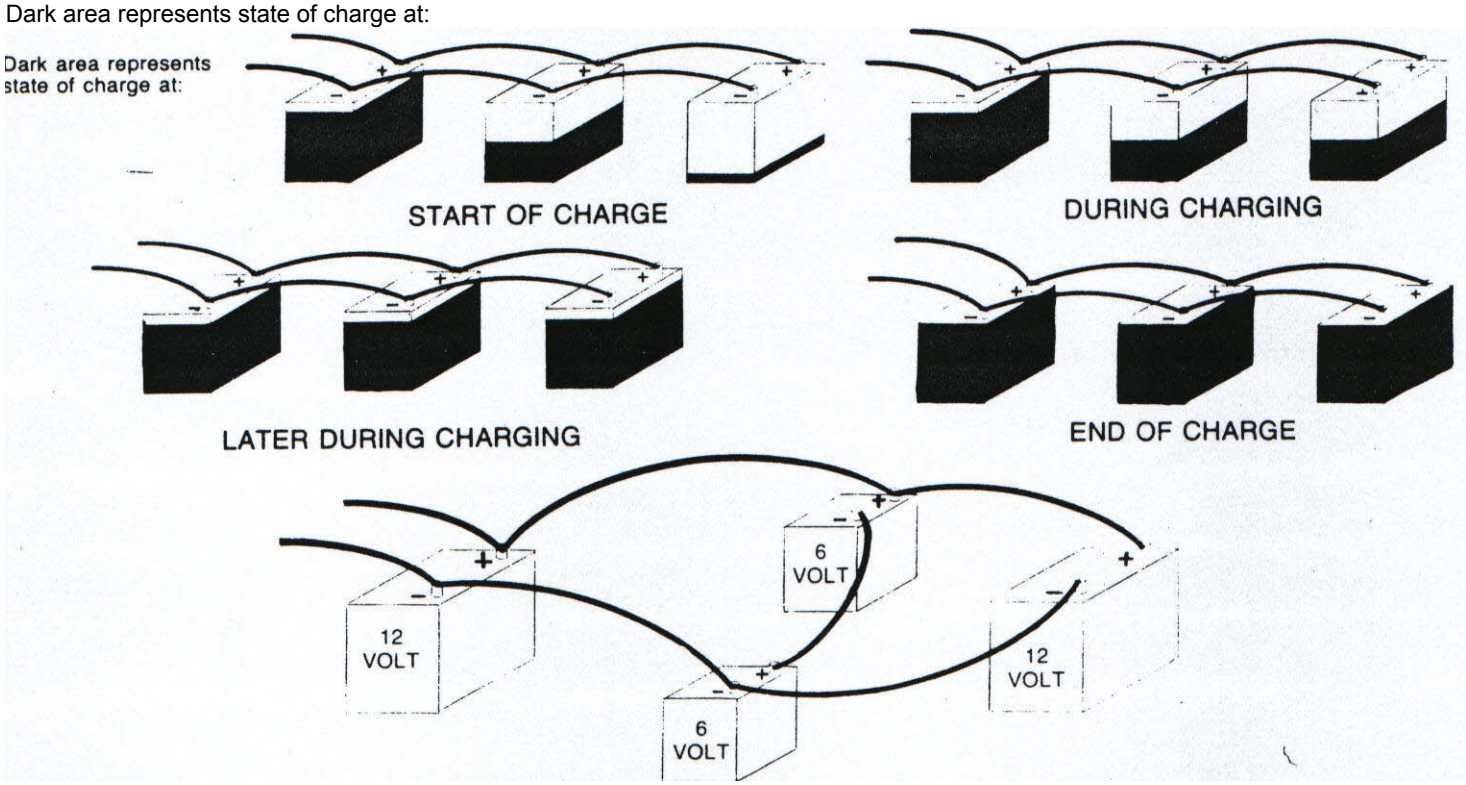
PARALLEL CHARGING:

Connecting batteries in parallel (see illustration) allows a person to charge a number of batteries at one time using only one 12 volt charger. The amount of charge being put in the batteries should not exceed the rating of the charger. The amount of charge that each battery received will depend on the state of charge of the batteries on the rack, condition of the batteries, temperature of the batteries, and other factors.

Connecting discharged batteries to a rack of fully charged batteries will not cause the charged batteries to become discharged. With a rack of batteries in various states of charge, the most discharged battery will receive the largest amount of charge. As it is charged up and becomes equal to another battery, the two will charge equally and come up together. (see illustration).

PARALLEL CHARGING

Dark area represents state of charge at:



TO CHARGE 6 VOLT BATTERIES:

Six volt batteries must be charged 2 at a time. The 6 volt batteries must be connected in series (positive post of one battery to negative post of other battery) and then the pair of batteries must be connected in parallel with the other batteries.

Never connect one, six volt battery to the charger. No other voltage battery may be charged with this charger.

CONTROLS:

Ammeter: The ammeter shows the total amount of charge that is being received by the batteries. The amount each battery will receive depends on several factors (see parallel charging). The charger's full output is 30 amps and that amount should never be exceeded.

Voltmeter: The voltmeter shows the voltage at which the batteries are being charged. The amount of voltage applied to a battery will determine the amount of current the battery will receive. See section on "charging batteries" for a complete description of the voltmeter and its use. Switches: The charger has two switches used to adjust the ouput voltage and current. Moving the "fine" switch from La to Hi does not increase the charging voltage as much as moving the "coarse" switch from a low position to a higher position. This design allows you to have 16 distinct charge rates.

TO CHARGE BATTERIES:

This charger is designed to charge all types of 12 volt automotive batteries. The voltmeter scale is color coded to represent the three most common types of batteries.

The GREEN scale represents the proper voltages for CONVENTIONAL batteries.

The BLUE scale represents the proper charging voltages for RECOMBINATION batteries and LOW MAINTENANCE batteries. The YELLOW scale represents the proper charging voltage for MAINTENANCE FREE batteries.

The RED scale areas indicate the charging voltage is too high and should be turned down, If not turned down, over charging can occur to the batteries.

A CONVENTIONAL battery is one that has accessible filler caps and the plates are lead-antimony construction. A RECOMBINATION battery is one that has no filler caps and no free electrolyte.

A LOW MAINTENANCE battery is one that has filler caps and the plates are a combination of lead-antimony and lead-calcium. A MAINTENANCE FREE battery may or may not have filler caps and the plates are lead-calcium.

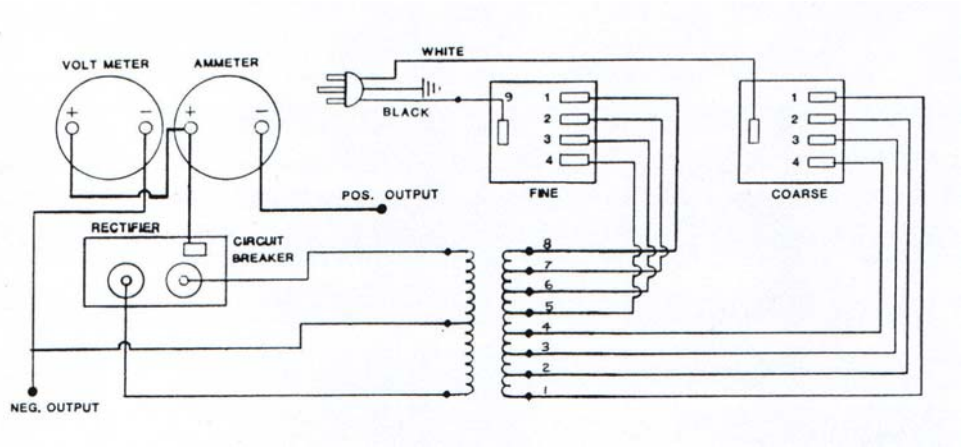
If more than one type of battery is charged at one time, use the lowest suggested settings.

To charge batteries overnight: Adjust charging voltage to 3/4-1 volt less than the recommended highest voltage. Do not exceed 30 amps. As the batteries charge, the charging current will decrease and the charging voltage increase. The “end of charge” voltage should not exceed the maximum suggested value.

The charging voltage bands are intended to be guidelines to enable the operator to have a starting point to charge batteries. The age of the batteries, temperature, and type of batteries will affect the charging cycle. The best setting for your charging conditions will have to be determined by experience.

END OF CHARGE:

Discontinue charging when specific gravity reading does not change in 3 consecutive readings, battery is freely gassing or when the electrolyte reaches 120˚F. If your battery is sealed and these determinations cannot be made, see manufacturers instructions for charging.



MODEL 6065 PARTS LIST

605675 Switch w/knob (1)
605632 Ammeter
610058 Voltmeter
605206 A.C. Cord
605628 D.C. Cable Set
610122 Rectifier Assembly
610069 Circuit Breaker
610057 Handle (Optional Accessory)
610253 Side Panels (1 Pr.)
610075 Top Panel
610076 Base
610081 Front Panel
610082 Back Panel
610097 Transformer

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 minimum will not be processed. Taxes and freight are extra and are not considered to be part of the dollar value of the order. We do not have a COD. policy. Cashier check, money order, Master Card or Visa are acceptable. If you use a Master Card or Visa Card send only the number and expiration. Do not send the card.

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