

GUEST®

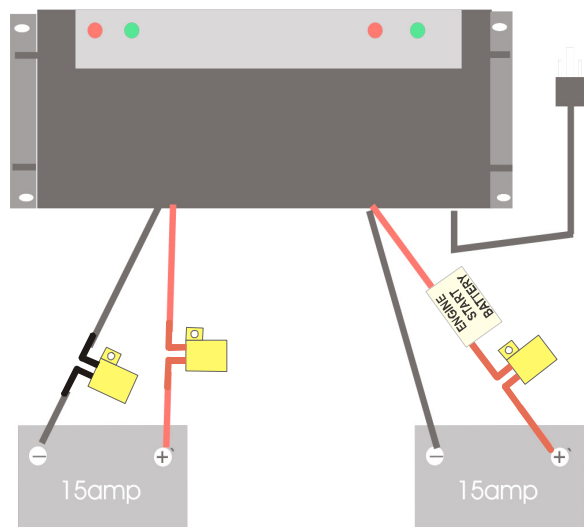
MODEL 2722-B 30 AMP, 2 OUTPUTS, 3 STAGE BATTERY CHARGER

OWNER'S MANUAL

Connections at a glance:

The Guest Model 2722-B charges 2 batteries, as shown below. In agreement with the American Boat and Yacht Council (A.B.Y.C.), Guest strongly recommends using a 25 Amp fuse in each positive (+) output cable.

1. Charger POS (white wire with fuse) to battery " + " .
2. Charger NEG (black wire) to battery " - " .
3. Plug AC line cord into a GFCI protected wall socket.
4. Remove connections in the reverse order.



SAVE THESE INSTRUCTIONS

1. INTRODUCING THE CHARGER

The Guest ChargePro Model 2722-B offers you a unique selection of independent outputs to economically satisfy all battery combinations normally encountered in the marine industry. Each product in the series is encapsulated in a waterproof, shockproof, thermally conductive compound to provide you many years of trouble free operation in wet and/or corrosive environments.

2. IMPORTANT SAFETY INSTRUCTIONS

This manual contains important safety and operating instructions for the charger. Read the entire manual before using the charger. Also read all instructions and cautions for the batteries and equipment in the vicinity of the batteries.

WARNINGS

THIS CHARGER SHOULD BE USED TO CHARGE ONLY 12-VOLT DC LEAD ACID OR GEL CELL TYPE BATTERY SYSTEMS. USE ON OTHER THAN A 12 VDC SYSTEM CAN CAUSE THE BATTERY TO EXPLODE AND CAUSE PERSONAL INJURY.

RISK OF EXPLOSIVE GASES! WORKING IN THE VICINITY OF LEAD ACID BATTERIES IS DANGEROUS. BATTERIES GENERATE EXPLOSIVE GASES DURING NORMAL OPERATION. THEREFORE IT IS OF UTMOST IMPORTANCE YOU FOLLOW THESE INSTRUCTIONS EXACTLY.

Personal Safety Precautions

Adhere to the following personal safety precautions when installing or working with the chargers:

1. Someone should be within voice range 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 your skin, clothing, or eyes.
3. Wear complete eye protection and clothing protection. Avoid touching your eyes while working near a battery.
4. If battery acid contacts your skin or clothing, wash them immediately with soap and water. If acid enters your eye, flood the eye with cold, running water for at least ten minutes and get medical attention.
5. Never smoke or allow an open flame in the vicinity of the battery.

6. Do not drop a metal tool onto the battery. It may spark, short circuit the battery and may cause an explosion.
7. Remove all personal metal items such as rings, bracelets, necklaces, and watches when working near a lead-acid battery. A battery can produce short circuit currents high enough to weld a ring or the like to metal, causing a severe burn.

Preparing to Charge Precautions

Before charging a battery with the charger, read the following precautions:

1. Do **NOT** operate the charger if the input or output cables or an LED is damaged.
2. Make sure all accessories on the product you are charging are OFF.
3. If the battery or batteries must be removed from the product, always remove the grounded terminal from the battery first.
4. Be sure the area around the battery is well ventilated while the battery is being charged. Gas can be forcefully blown away using a piece of cardboard or other non-metallic material as a “hand fan”.
5. Clean battery terminals. Be careful to keep corrosion from coming in contact with your eyes.
6. Add distilled water in each cell until battery acid reaches levels specified by the battery manufacturer. This helps purge excessive gas from cells. Do not overfill. For a battery without cell caps, carefully follow the manufacturer’s recharging instructions. **Check water levels frequently.**
7. Study all battery manufacturer’s precautions.
8. Never allow ring terminals to touch each other.
9. **NEVER** charge a frozen battery.
10. Please be sure the DC system to which the charger is connected is not drawing excessive current from the battery for extended periods of time while the charger is operating. This is important to ensure the charger correctly transitions through each charging stage to finish with the float voltage level. If the DC system is drawing continuous current while charging, reduced life or damage to the battery may occur.

Grounding Precaution

DANGER

Do not operate this charger with a two bladed ground adapter plug or extension cord. Doing so can result in serious personal injury.

CAUTION: To reduce the risk of shock, connect only to a properly grounded outlet.

3. INSTALLING THE CHARGER

Choosing Mounting Location

The charger should have at least eight inches of unobstructed area on all sides of the unit for effective cooling. The case of this charger will become warm during operation. Do not install onto a carpeted, upholstered, or varnished surface.

Mounting the Charger

1. Use corrosion resistant # 10 bolts, backed by a flat washer, and secured to the mounting surface with a split-ring washer.
2. Hold the charger to the mounting surface and mark the holes.
3. Remove the charger and drill the mounting holes.
4. Align the charger and assemble the mounting hardware. Secure.

Making Connections

DANGER

Before working on electrical equipment, first determine there is no live AC power! Double-check power connections and all battery terminations.

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

Refer to **Connections at a glance** for proper DC and AC terminations.

4. OPERATING THE CHARGER

When this charger senses a drop in battery voltage, it automatically increases its output to re-charge the battery. When the low battery returns to full charge, the 2722-B maintains very small current flow to keep the batteries fully charged and ready for use without overcharging. The total 30-amp output of this charger is divided between the two outputs.

The Guest ChargePro 2722-B battery charger is fully automatic, requires no maintenance, and can be left unattended. However, the electrolyte (battery acid) in lead acid batteries can gradually evaporate, particularly in warm climates. For this reason, check the levels in your batteries once a month as a part of your normal maintenance routine.

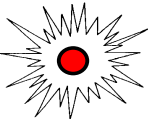

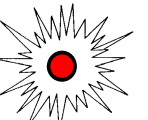
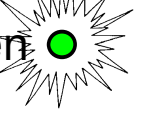

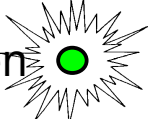
Timer Feature

The timer allows the charger to stay in the absorption mode for approximately 2 hrs. Once it has timed out, it brings the output voltage down from 14.50VDC (Absorption voltage) to 13.30VDC (Float voltage) while still maintaining output current. This keeps the batteries from boiling while maintaining the current needed for dc loads.

Overload Protection

If an electrical short or overload (excessive demand) occurs in the DC wiring connected to this charger. The charger will reduce its output voltage to avoid internal damage. The Guest model 2722-B has initial electronic current limiting. When an electrical short occurs, the red LED on the front panel will be on. The overload or short must be removed in order for the charger to start charging again.

The **LED Function Chart** below describes the charging process.

Display	Operating condition
<p>Red </p> <p>Green </p>	<p>When the red LED is on, it indicates that your batteries are discharged and the model 2722-B is recharging them at the "BULK" rate (stage 1). This charging rate is 15 Amps.</p> <p>While the red LED is on, the voltage measured (with the charger on) will be 11.8 to 14.20 Volts.</p> <p>If the red LED stays on for more than 24 hours, refer to Problem 1 in the troubleshooting section in this manual.</p>
<p>Red </p> <p>Green </p>	<p>When both the green and the red LED's are on, the 2722-B is charging at an "ABSORPTION" rate (stage 2). This mode of charging gradually "tops off" your batteries, and reduces harmful sulfating. While both LED's are on, the voltage measured (with the charger on) should be approx. 14.20 to 14.80 VDC.</p> <p>If both lights stay on longer than 24 hours, refer to Problem 2 in the troubleshooting section in this manual.</p>
<p>Red </p> <p>Green </p>	<p>When the green LED is on, the model 2722-B is charging at a "FLOAT" or "MAINTENANCE" rate of less than 1.5 Amps, (stage 3). Your batteries are now 90% charged and ready for use. This "float" charging current will gradually decrease to as low as 0.1 Amps as the batteries reach 100% charge. They will now be kept at full charge without over-charging.</p> <p>If the green LED stays on when your battery is known to be low, refer to Problem 3 in the troubleshooting section in this manual.</p> <p>If the timer feature is active only the Green LED will be on at a Float voltage of 13.30 VDC while still maintaining output current.</p>
<p>BOTH LEDs OFF</p>	<p>Refer to trouble shooting section in this manual.</p>

5. MAINTAINING THE CHARGER

Periodically clean all of the battery terminals with baking soda and tighten all connections. No other maintenance on the charger is required.

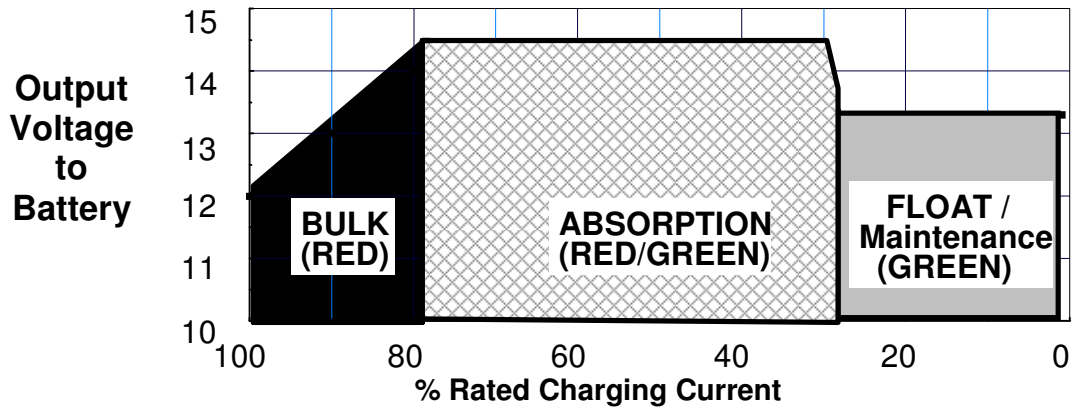
6. TROUBLESHOOTING

Problem	Cause	Solution
1. Charger does not seem to be charging batteries properly.	<ol style="list-style-type: none"> 1. Batteries too large for the charger to support or too many batteries attached to charger. 2. Red LED is off due to a DC overload or a DC short. 3. One or more defective batteries. 4. Component failure. 	<ol style="list-style-type: none"> 1. Install a higher amperage battery charger or a second charger. 2. Remove source of overload or short. 3. Test batteries and replace if necessary. 4. Return charger to Guest Service department.
2. Static on TV or radio whenever the charger is turned on.	<ol style="list-style-type: none"> 1. Certain TV's and radios are unusually sensitive to RF interference. 2. Charger is mounted within 3 feet of TV or radio. 	<ol style="list-style-type: none"> 1. Increase the distance between the charger and the TV or radio. 2. Connect TV or radio to an AC circuit other than the AC circuit used by the charger.
3. The GFCI breaker, (Ground Fault Circuit Interrupter), turns off whenever the charger is turned on.	<ol style="list-style-type: none"> 1. There is a problem with the AC connections or dockside power system. 2. Certain brands of GFCI breakers are sensitive to "switching" power supplies 	<ol style="list-style-type: none"> 1. Confirm that the Charger's AC ground connections are intact then test dockside power. 2. Contact Guest service for info.
4. Both LEDs are off.	<ol style="list-style-type: none"> 1. The timer may have timed out. 2. External loads exceed the charger's output. 	<ol style="list-style-type: none"> 1. Recycle the charger's AC voltage (unplug AC cord of charger and allow to sit 2 - 5 minutes before reapplying the AC cord) will reset the Absorption timer allowing the charger to cycle through its three stages.

7. SPECIFICATIONS

Output:	
Charging:	12.0 Volts DC (min.) @ 15 Amps each output
Maintaining:	13.30 Volts DC at 0.1 to 0.3 Amps
Input:	
Rated AC Voltage	100 - 130 volts/ 60 Hz AC
Current Draw	6.3 Amps at full output
Maximum recommended battery size:	
For recharging:	Up to 200 Amp-Hours each output
Maintenance only:	Up to 350 Amp-Hours
Physical Dimensions:	
Height x Width x Depth	6.5" x 9.5" x 2.75"
Cable Lengths:	
DC Cable Lengths	6ft

Guest Model 2722-B Charging Modes



LIMITED WARRANTY

For two (2) years from the date of purchase, The Guest Co. will, at its discretion, repair or replace for the original consumer, free of charge, any parts found defective in material or workmanship.

Proof of purchase is required: A computerized register receipt is required. Handwritten receipts are not accepted for warranty proof of purchase.

There is no other expressed warranty. Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to two years from the date of purchase. This is the exclusive remedy and consequential damages excluded where permitted by law.

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