

GUEST[®]

MODEL 2611-1-B

**10 AMP ON BOARD BATTERY CHARGER
One Output
OWNER'S MANUAL**

IMPORTANT!
READ THESE INSTRUCTIONS BEFORE
INSTALLING AND USING THIS PRODUCT.
Keep these instructions for future reference.

SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

1. This manual contains important safety and operating instructions for the GUEST 2611-1-B battery charger.
2. Before using battery charger, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.
3. **CAUTION** -To reduce risk of injury, charge only lead-acid, (maintenance free or refillable), or "gel-cell" rechargeable batteries. Other types of batteries may burst causing personal injury and damage.
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.
5. To reduce risk of damage to electrical 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) 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 condition and
 - c) That wire size is large enough for AC ampere rating of charger as specified in Table 61.1.

TABLE 61.1
RECOMMENDED MINIMUM AWG SIZE FOR
EXTENSION CORDS FOR BATTERY CHARGERS

Charger's AC input Rating-Amperes		Length of Cord, Feet			
		AWG size of Cord			
Equal to or greater than	but less than	25	50	100	150
2 amps	3 amps	18	16	16	14

8. Do not operate charger with damaged cord or plug - replace them immediately.
9. Do not operate charger if it been damaged in any way. Return it to the manufacturer for service.
10. Do not disassemble charger. Incorrect re-assembly may result in a risk of electric shock or fire.
11. To reduce risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning

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.

To reduce risk of battery explosion, follow these instructions, those published by battery manufacturer and the manufacturers of any equipment you intend to use in vicinity of battery. Review cautionary marking on these products and on engine.

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.
3. Wear complete eye protection and clothing protection. Avoid touching eyes while working near battery.
4. 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 sparks or flame in vicinity of battery.
6. 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.
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 bracelet to metal, causing a severe burn.
8. Use charger for charging a LEAD-ACID or gel-cell battery only. 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.
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.

PRODUCT DESCRIPTION

The Guest 2611-1-B ChargePro is a solid-state "3-stage" battery charger. It can produce a full 10 amps of 12 volt DC charging current and is lightweight, silent and completely automatic. If a DC short or overload occurs, it will reduce its output to a safe level, then automatically return to normal after the overload is removed. Unlike automotive "trickle" chargers, the 2611-1-B will not boil off the electrolytes in properly installed and maintained batteries. For additional safety, an advanced thermal protection circuit guards against overheating by temporarily reducing the charger's output.

SPECIFICATIONS

Total DC output (12 volt circuit)	
maximum:	10 amps at 12 volts
"float" mode:	0.1 to 0.3 amps at 13.3 volts
DC output fuse	AGC 15 amp
Input voltage:	100 to 130 volts/50 or 60 Hz AC
Max. AC draw at 115 volts:	2 amps
Housing dimensions:	5.1"H x 7.75"W x 2.4"D

APPLICATION

This battery charger is ideal for installations using one 12-volt lead-acid or gel-cell battery connected in 12-volt system.

The Guest 2611-1-B ChargePro can normally recharge one deeply discharged battery in twelve hours or less. After recharging, this charger will keep the battery at full charge indefinitely without overcharging. Installations using larger batteries will have longer charging times. This battery charger is NOT designed to be used as a power supply without being connected to a 12-volt battery.

MOUNTING THE CHARGER

The Guest 2611-1-B ChargePro charger requires a mounting location that allows air to flow freely around the charger while it is operating. Choose a mounting location, which will allow at least 12" of air space around the mounted charger. Avoid mounting onto a carpeted, painted or varnished surface if possible. Do not mount the unit in a location where accumulated water may submerge the wiring connected to it.

FAILURE TO ALLOW ADEQUATE COOLING SPACE CAN SHORTEN THE SERVICE LIFE OF THIS CHARGER.

Mount the charger in an accessible location as far from the battery as the charger's DC output cables permit, but do not lengthen the DC output cables unless absolutely necessary. (See page 6.) Due to its waterproof construction, the charger itself can be mounted in an exterior location if necessary.

This charger will become warm while it is operating.

1. After you have chosen a suitable mounting location, use the charger as a template to mark the location of the mounting holes onto the mounting surface. Be sure you will be able to drill or screw into the mounting location without damaging hidden wires, tanks or other components.
2. Mount the charger using four #10 self-tapping screws or machine screws, nuts and lock washers. (Mounting hardware is not included)
3. Fasten the charger's wiring securely to the boat every 18" along its length according to ABYC specifications. Use non-conductive clamps or wire ties. Mount the wires away from areas where they might be damaged by heat or sharp objects.

PREPARING TO CHARGE

1. 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 other nonmetallic material as a fan.
2. Clean battery terminals. Be careful to keep corrosion from coming in contact with eyes.
3. 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.
4. Study all battery manufacturer's specific precautions such as removing or not removing cell caps while charging and recommended rates of charge.

DC CONNECTION PRECAUTIONS

1. Connect and disconnect DC output clips only after setting any -charger switches to off position and removing AC cord from electric outlet. Never allow clips to touch each other.
2. Attach clips to battery posts and twist or rock back and forth several times to make a good connection. This tends to keep clips from slipping off terminals and helps to reduce risk of sparking.
3. FOLLOW THESE STEPS WHEN BATTERY IS INSTALLED IN VEHICLE. A SPARK NEAR BATTERY MAY CAUSE BATTERY EXPLOSION. TO REDUCE RISK OF A SPARK NEAR BATTERY:
 - a. Position AC and DC cords to reduce risk of damage by hood, door, or moving engine part.
 - b. Stay 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 is grounded to the chassis, see item f.
 - e. For negative-grounded vehicle, connect POSITIVE (RED) clip from battery charger to POSITIVE (POS, P, +) ungrounded post of battery. Connect NEGATIVE (BLACK) 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.
 - f. 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 gage metal part of the frame or engine block.
 - g. When disconnecting charger, turn switches to off, disconnect AC cord, remove clip from vehicle chassis, and then remove clip from battery terminal.
 - h. See operating instructions for length of charge information.

4. 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 clip to POSITIVE (POS, P, +) post of battery.
 - d. Position yourself and free end of cable as far away from battery as possible - then connect NEGATIVE (BLACK) charger clip 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 as far away from battery as practical.

CHARGER LOCATION

1. Locate charger so that DC cable reaches the battery to be charged. If a DC cable must be extended, use Guest Extension Kit (P/N U-3632-P).
2. Never place charger directly above battery being charged; gases from battery will corrode and damage charger.
3. Never allow battery acid to drip on charger when reading gravity or filling battery.
4. Do not operate charger in a closed-in area that restricts ventilation. Reduced performance will result as charger protects itself from high temperature operation.
5. Do not set a battery on top of charger.

ELECTRICAL CONNECTIONS

Ventilate the battery area thoroughly before making any connections. Attach the DC output wires to the batteries BEFORE you plug the charger into a GFI-equipped AC outlet. Connect the Red wires to the Positive (+) battery terminals and the Black wires to the negative (-) battery terminals.

Ventilate the area thoroughly. A small spark may occur when the charger is connected to a battery for the first time. This is normal.

Avoid lengthening the original output wires.

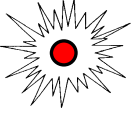

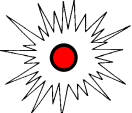
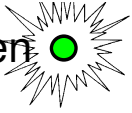

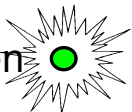
CAUTION!

DO NOT reverse the polarity of battery connections! Attaching the charger's output wires to the batteries backwards will blow the in-line AGC 15 amp fuse. See the troubleshooting section in the back of this manual for more information.

OPERATION

Activate the battery charger by plugging in the AC line cord. Use only a grounded 3-pin 115 volt AC outlet equipped with a UL listed GFI (Ground Fault Interrupting Circuit) breaker. One or more of the LED lights on the front of the charger will glow.

The chart below describes how the two LED lights on the charger indicate the state of charge of your batteries.

Display	Operating condition
Red  Green 	<p>When the red light is on, it indicates that your battery is discharged and the 2611-1-B is recharging it at the "bulk" rate (stage 1). This charging rate is 10 amps.</p> <p>While the red LED is on, the voltage measured at the battery, (with the charger on) will be 11.8 to 14 volts.</p> <p>If the red LED stays on for more than 48 hours, refer to the trouble-shooting page at the back of this manual.</p>
Red  Green 	<p>When both the green and the red lights are on, the 2611-1-B is charging at an "absorption" rate of between 3 and 10 amps (stage 2). This "absorption" charging current gradually "tops off" your battery, and reduces harmful sulfating.</p> <p>While both lights are on, the voltage measured at the battery, (with the charger on) should be approx. 14 volts.</p> <p>If both lights stay on longer than 48 hours, refer to the trouble-shooting page at the back of this manual.</p>
Red  Green 	<p>When the green light is on, the 2611-1-B is charging at a "float" rate of less than 3 amps, (stage 3). Your battery is now 80%-90% charged and ready for use. This "float" charging current will gradually decrease to as low as 0.1 amps over the next few days as the battery reaches 100% charge. It will now be kept at full charge without over-charging.</p> <p>If the green light stays on when your batteries are known to be low, refer to the trouble-shooting page at the back of this manual.</p>

TROUBLESHOOTING

Problem	Cause	Solution
1. The LED lights function, but the charger does not seem to be charging battery. (Note: Measure the voltages in your battery as described under "Operation" on pg. 8 to confirm that there is actually a charging problem.)	<ol style="list-style-type: none"> 1. A defective or damaged battery. 2. One or more loose wire connections. 3. Charger has reduced its output voltage due to a DC overload or a DC short. 4. One or both of the AGC 15 amp DC output fuse(s) have blown. 	<ol style="list-style-type: none"> 1. Test battery and replace if necessary. 2. Tighten connections. 3. Remove the source of the overload or short Test the charger as described below for problem #3. 4. Test/replace AGC 15 amp output fuse(s). Do NOT replace with a higher amperage fuse.
2. It seems to take a long time to re-charge the battery in hot weather.	<ol style="list-style-type: none"> 1. The charger has overheated due to poor air circulation, and has reduced its output. 	<ol style="list-style-type: none"> 1. Consider moving the charger to a location with better ventilation.
3. The red light stays on all the time.	<ol style="list-style-type: none"> 1. A dead short or overload. 2. A bad battery. 3. Too many batteries. 4. A heavy DC load on battery while charging (lights, pumps, etc.). 5. Battery is too large. 	<ol style="list-style-type: none"> a. Unplug the AC cord. b. Remove the black charger output wire from battery. c. When AC power is re-applied, only the green light should turn on. If not, replace charger.
4. The green light stays on but the battery does not recharge.	<ol style="list-style-type: none"> 1. Check charger's output fuses. 2. Check wiring connections. 	<ol style="list-style-type: none"> 1. Replace blown output fuses with 15 amp AGC fuse. Do NOT use a higher amperage fuse. 2. If connections and fuses are good, return charger to factory for service.
5. Both the red and green lights stay on all the time.	<ol style="list-style-type: none"> 1. The battery is damaged or unable to reach full charge. 2. A DC accessory is continuously drawing 3 amps or more, holding the charger in its absorption stage. 	<ol style="list-style-type: none"> 1. Check electrolyte. Test/replace the battery(ies) 2. Disconnect accessories while charging. If conditions on board force the charger to stay in absorption stage for several days, battery damage may occur.
6. When AC power is applied, neither light turns on	<ol style="list-style-type: none"> 1. Confirm that AC power is available. 2. Internal failure. 	<ol style="list-style-type: none"> 1. Reset AC power. 2. Return charger to Guest Service department.

FCC Class A EMC Notice

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning this equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

LIMITED WARRANTY

For two (2) years from the date of original 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. All transportation charges under this warranty must be borne by the consumer.

Proof of purchase is required: A computerized register receipt is required. Hand-written receipts are not accepted for warranty proof of purchase. In the absence of a receipt, warranty period will be calculated from date of manufacture printed or stamped on the product.

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 are excluded where permitted by law.

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