

# *FJC, Inc.*

Part # 52020

**12V BATTERY Charger/Maintainer**

**INPUT: 110V AC 60Hz    OUTPUT: 6/12V DC 2A**

## **INSTRUCTION MANUAL**

### **SAFETY WARNINGS AND PRECAUTION**

**CAUTION: TO PREVENT BATTERY DAMAGE: DO NOT USE on gel batteries or AGM (absorbed glass mat) type batteries.**

- **Do not operate the Battery Maintainer in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** *Electrical products create sparks which may ignite the dust or fumes.*
- **Keep bystanders, children, and visitors away while operating the Battery Maintainer.** *Distractions can cause you to lose control. Protect others in the work area from sparks. Provide barriers or shields as needed.*
- **Grounded products must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.**
- **Double insulated products are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** *Double insulation eliminates the need for the three wire grounded power cord and grounded power supply system.*
- **Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators.** *There is an increased risk of electric shock if your body is grounded.*
- **Do not abuse the Power Cord. Never use the Power Cord to carry the Battery Maintainer or pull the Plug from an outlet. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately.** *Damaged Power Cords increase the risk of electric shock.*

- **An extension cord should not be used unless absolutely necessary. If an extension cord is used, make sure wire size is large enough to operate battery maintainer.**
- **Stay alert, watch what you are doing, and use common sense when operating the Battery Maintainer. Do not operate the Battery Maintainer under the influence of drugs, alcohol, or medication.**
- **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair and clothing away from the Battery Maintainer. *Loose clothes, jewelry, or long hair can be caught in the Battery Maintainer, causing personal injury.***
- **Use safety equipment. Always wear eye protection during assembly, use, and maintenance.**
- **Do not overload the Battery Maintainer. Use the correct Battery Maintainer for your application. *The Battery Maintainer will perform better and safer at the speed and capacity for which it is designed.***
- **Disconnect the Power Cord Plug from the power source before making any adjustments, changing accessories, or storing the Battery Maintainer. *Such preventive safety measures reduce the risk of turning on the product accidentally.***
- **Maintain the Battery Maintainer with care. *Do not use a damaged Battery Maintainer. Tag damaged Battery Maintainer "Do not use" until repaired.***
- **Battery Maintainer service must be performed only by qualified repair personnel. *Service or maintenance performed by unqualified personnel could result in a risk of injury.***
- **Always unplug the Battery Maintainer from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.**
- **Marine Batteries (batteries used in boats) should be removed from vessel before charging.**
- **WARNING! People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.**
- **Do not expose the Battery Maintainer equipment to moisture, rain or wet conditions. *Water entering electrically powered equipment will increase the risk of electric shock.***
- **Do not service or disassemble the battery maintainer.**
- **Follow all warnings, cautions and instructions from battery manufacturer.**
- **WARNING: Risk of Explosive Gases: Working around a Lead-acid battery is dangerous. Lead-acid batteries generate explosive gases during normal operation. It is very important that you read these instructions every time you use this battery maintainer and follow them.**



Read the **ENTIRE IMPORTANT SAFETY WARNINGS AND PRECAUTIONS** section at the beginning of this manual before set up or use of this product.

## Display Features

### ➤ Voltage Switch

Switch to 6v or 12v for the battery type that is to be charged.

### ➤ LED Display of Charging

The red LED indicates the battery is being charged. And will not indicate when the battery is fully charged, reverse polarity, short circuit or is in the float stage.

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**AGM (absorbed glass mat) type batteries.**

## Charging Procedure

1. Check Battery Charger/Maintainer and Battery Status
2. Place the Battery Charger/Maintainer on a stable, flat surface. Then check for cracked or broken parts, damaged power cords, clamps, and any other condition that may affect the safe operation of the Battery Maintainer.

## Connecting the Battery Charger/Maintainer to your Battery

3. Make sure the area where battery is being charged is well ventilated.
4. Place the Battery Charger/Maintainer on a stable, flat surface as far from the battery as possible.
5. DO NOT PLACE the battery Charger/Maintainer on top of the battery.
6. Connect the Red Charging Clamp to the positive (+) terminal of the battery. Connect the Black Charging Clamp to the negative (-) terminal or appropriate ground. Do not connect black charging clamp to fuel lines or carburetor.
7. If the battery charger/maintainer is connected correctly the red LED light will be lighted.

## Connect the Battery Charger/Maintainer to the Power Supply (120V AC)

1. Plug the Input Power Cord into 120V AC power supply, The red LED Charging Indicator light will remain lighted during the battery charging stage.

## Charging Stages

1. When the battery charger is charging the red LED indicator light will light up showing the battery is being charged.
2. The red LED light will go off when the battery is fully charged and the battery charger/maintainer has entered the float stage. During the float stage the battery charger/maintainer will output a voltage to maintain the battery at  $6.8V \pm .02V$  for a 6V battery or  $13.6V \pm 0.2V$  for a 12V battery.

## Disconnecting the Battery Charger/Maintainer and Battery

1. To disconnect the battery charger/maintainer from the battery, first disconnect the Power Cord of Battery Charger from its electrical outlet. Then disconnect the Battery Clamps from the battery.

## Battery Charger/Maintainer Maintenance

With a dry cloth, remove any oil and residue from the Battery Charger/Maintainer after each use. Do not clean with flammable or corrosive liquids. Store in a secure, safe and dry location that can be locked and that is out of the reach of children.

## SPECIFICATIONS PARAMETERS

- Input: 120V AC 60Hz
- Output: 12V/6V DC 1A
- Battery Type: 6V/12V Flooded Lead-acid Batteries only
- Output Display: LED
- Input Wire: SPT-2, 18AWG, 1.83M
- Output Wire: SPT-2, 18AWG, 1.83M
- Operating Environmental: 32°F to 104°F (0°C to 40°C) , 90% RH maximum; non-Condensing

## **WARRANTY**

FJC warrants this Battery Maintainer for 1 year from date of purchase with proof of purchase. As we cannot control the use of our products, the guarantee shall not exceed the purchase price. We make no other warranty of any kind expressed or implied. This Battery Maintainer is warranted to be free from defects in material and workmanship under normal use and service for 1 year after the sale of this product by FJC, Inc. FJC's sole obligation under this warranty shall be to repair or replace any defective product or parts thereof, which are returned to our factory. The warranty shall not apply to any product or part which has been subject to misuse, negligence or accident. FJC, Inc. shall not be responsible for any special or consequential damages and the warranty as set forth is in lieu of all other warranties either expressed or implied. However FJC, Inc. makes no warranty or merchantability in respect to this battery maintainer for any particular purpose other than that stated in this manual.

### ***FJC, Inc.***

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## **RETURNS**

All merchandise to be returned must have a prior authorization from FJC, Inc. Contact FJC, Inc. before sending any product back to FJC.