

INSTRUCTION MANUAL

AUTO CHARGE 20 PIM AUTOMATIC BATTERY CHARGER



MODEL # 091-10PIM

NOTE :

**This charger is designed for vehicles with
3 batteries, negative ground and require
a ground fault interrupter.**

3 YEAR WARRANTY



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INTRODUCTION

The Auto Charge 20 PIM Battery Charger is a compact completely automatic charger designed for installation on vehicles with three batteries. Three individual chargers are provided to charge the three batteries. Voltage is sensed separately for each battery so that each battery is charged according to its requirements. The total output to the three batteries is 20 amperes. An ammeter provides continuous indication of the charger output.

Construction of the Auto Charge 20 PIM is extremely rugged to withstand the shock and vibration normally encountered by vehicle mounted equipment. The unit operates completely automatically and stops charging the batteries when they are fully charged. There is no trickle charge and therefore no danger of overcharging and water boil-off. Any parasitic loads on the battery such as radio, lights, etc., are automatically supplied with current by the charger.

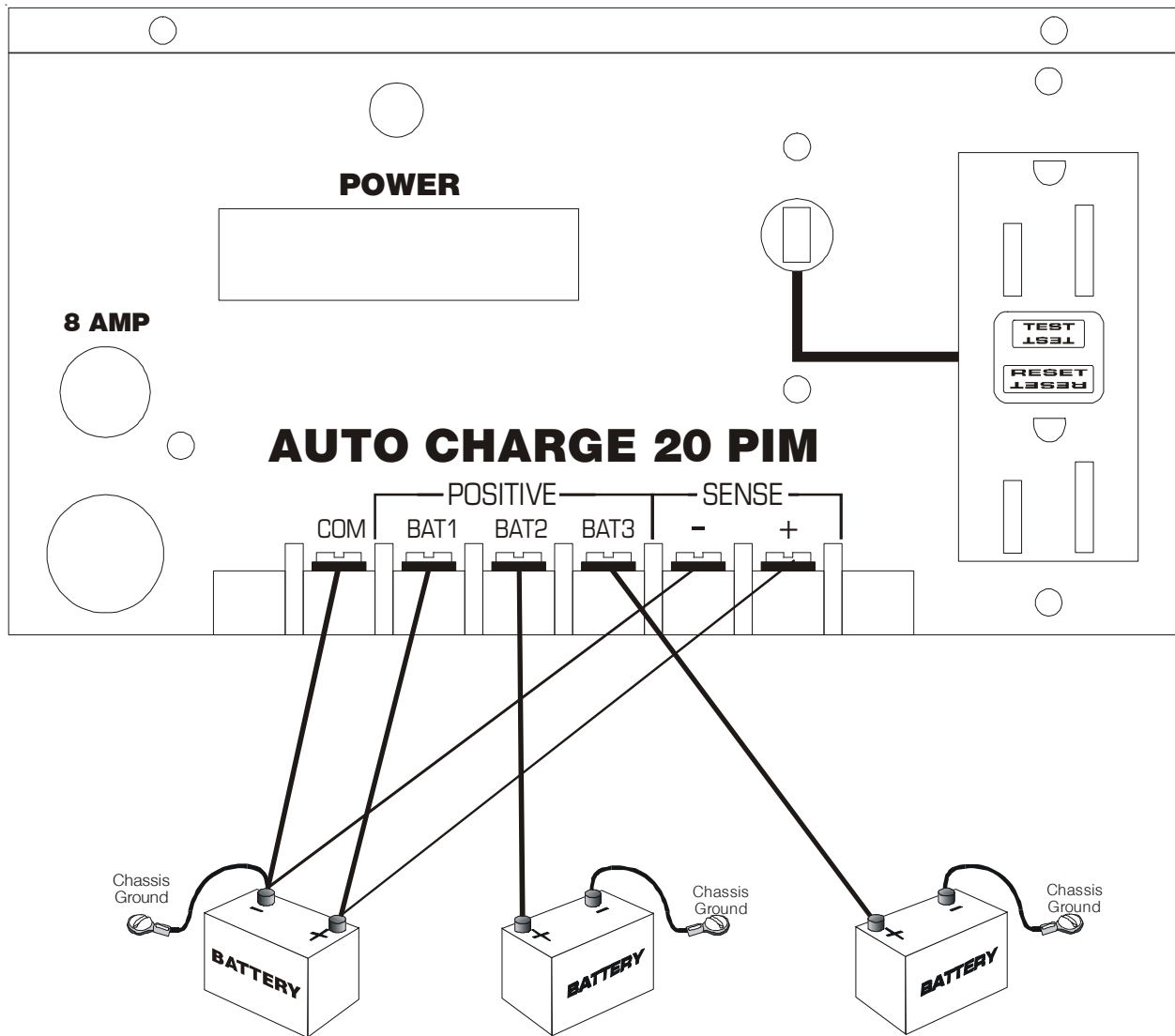
Any 120 volt loads when plugged into the GFI on the Auto-Charge 20 PIM will be protected from ground faults. A separate lever operated circuit breaker protects the GFI connected loads. This circuit breaker may also be use to disconnect these loads from the line. The fuse on the Auto-Charge 20 PIM protects the charger only.

INSTALLATION

The Auto Charge 20 PIM Automatic Battery Charger should be installed in an area with adequate ventilation.

1. Mount the charger using the four holes provided for this.
2. Connect the wiring from the batteries to the Output Terminal Strip.
3. Connect the wiring to the batteries. Ring lugs that have been securely crimped, or soldered, should be used.
4. Double check all wiring before proceeding.
5. Wire the A.C. power to power input terminal strip.
6. Pilot light will light to show that the charger has power.

INSTALLATION WIRING DIAGRAM

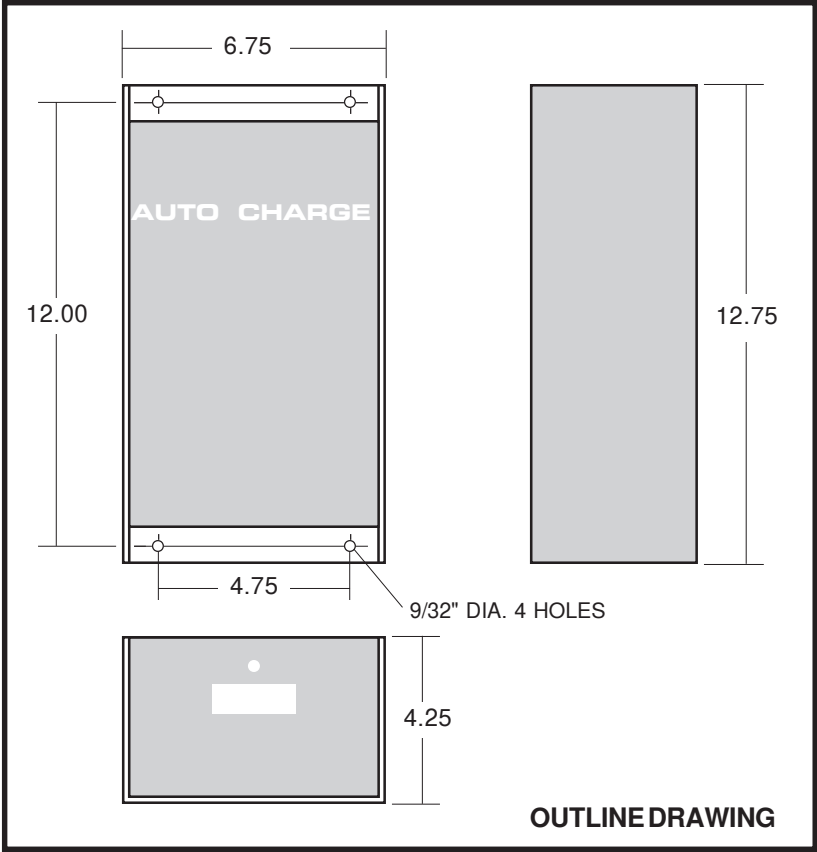


IMPORTANT: Charger output wire size for COM, BAT 1, BAT 2, & BAT 3 is 12 awg. Charger output wire size for Sense - and + is 16 AWG. Wire size is for a maximum length of 20 feet. If wiring is to be longer, larger wiring is required. Additional information is available on request.

NOTE: Sense leads are shown connected to battery #1 but may be connected to either battery #2 or battery #3 at the installers option. The sense leads however **must** be connected for the charger to operate. The charger does not require a 3 battery vehicle to function properly. For single battery vehicles connect to battery #1 only.

SPECIFICATION & OUTLINE

SPECIFICATIONS:
Input: 120 VAC, 50/60 Hz, 4.7 Amps
Output: 12 VDC
Output Current: 20 Amps
Charge Indicator: 0-25 amps 5%
Weight: 22 lbs



INSTALLATION RECORD & WARRANTY

Date Installed _____

Installed By _____

Vehicle Identification _____

Vehicle Owner _____

WARRANTY

All products of Kussmaul Electronics Company Inc. are warranted to be free of defects of material or workmanship. Liability is limited to repairing or replacing at our factory, without charge, any material or defects which become apparent in normal use within 3 years from the date the equipment was shipped. Equipment is to be returned, shipping charges prepaid and will be returned, after repair, shipping charges paid.

Kussmaul Electronics Company, Inc. shall have no liability for damages of any kind to associated equipment arising from the installation and /or use of the Kussmaul Electronics Company, Inc. products. The purchaser, by the acceptance of the equipment, assumes all liability for any damages which may result from its installation, use or misuse, by the purchaser, his or its employees or others.