

INSTRUCTION MANUAL

AUTO CHARGE 12 HO DV AUTOMATIC BATTERY CHARGER



MODEL # 091-170-DV-XX

NOTE :
**This charger is designed for
vehicles with a single
battery system**

3 YEAR WARRANTY



KUSSMAUL ELECTRONICS CO., INC.

170 CHERRY AVE., WEST SAYVILLE, N.Y. 11796-1221

Phone: 631-567-0314

Toll Free: 800-346-0857

Fax: 631-567-5826

Web: www.kussmaul.com

E-Mail: sales@kussmaul.com

INTRODUCTION

The Auto Charge 12HO Battery Charger is a compact completely automatic charger designed for installation on vehicles with a single battery system. The patented "sample & hold" circuit is utilized to detect the battery voltage via the charging cables . An ammeter provides continuous indication of the charger output.

Construction of the Auto Charge 12HO 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.

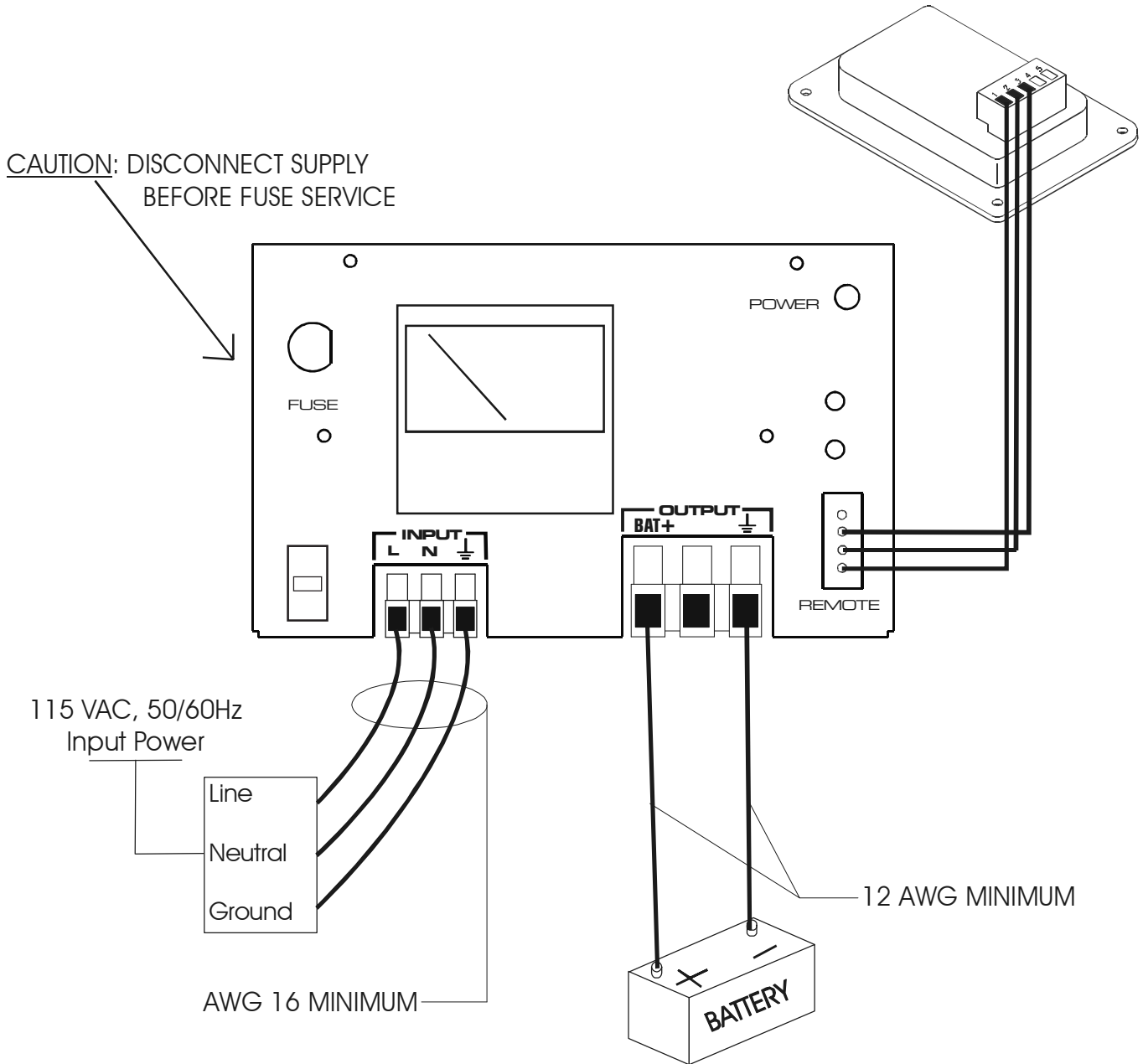
INSTALLATION

The Auto Charge 12HO Automatic Battery Charger should be installed in an area with adequate ventilation. A power terminal is supplied for connection to AC.

1. Mount the charger using the four holes located in the front and rear of the charger.
2. Connect the wiring from the battery 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. Check the position of the Voltage Selector Switch and wire the VAC input power line to the power source.
6. Pilot light will light to show that the charger has power.

INSTALLATION WIRING DIAGRAM

Optional Bar-graph Indicator
091-39-022



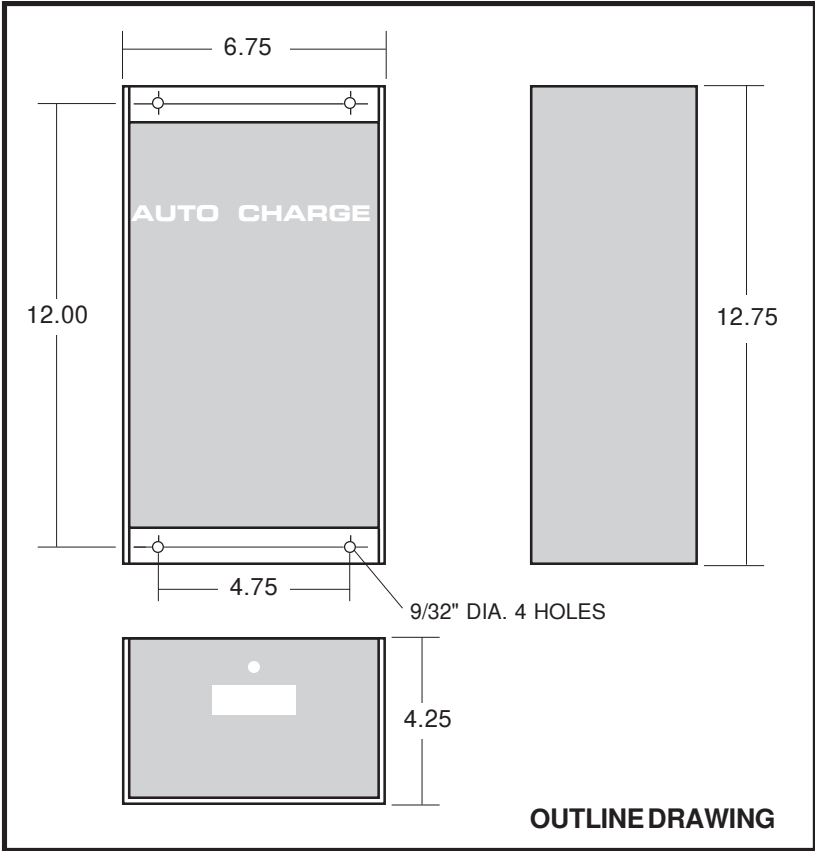
IMPORTANT: Wire size is for a maximum length of 20 feet. If wiring is to be longer, larger wiring is required. Additional information is available on request.

NOTE: Do not apply 230 volts to the charger with the selector switch in the 115 volt position serious damage may result.

OUTLINE

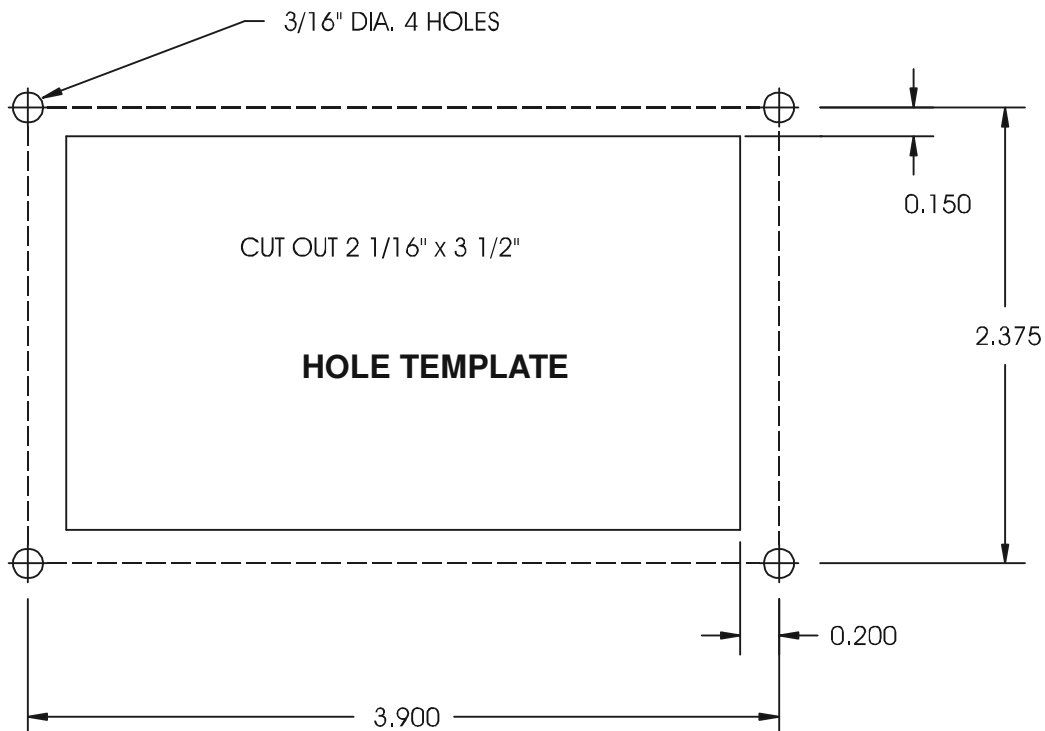
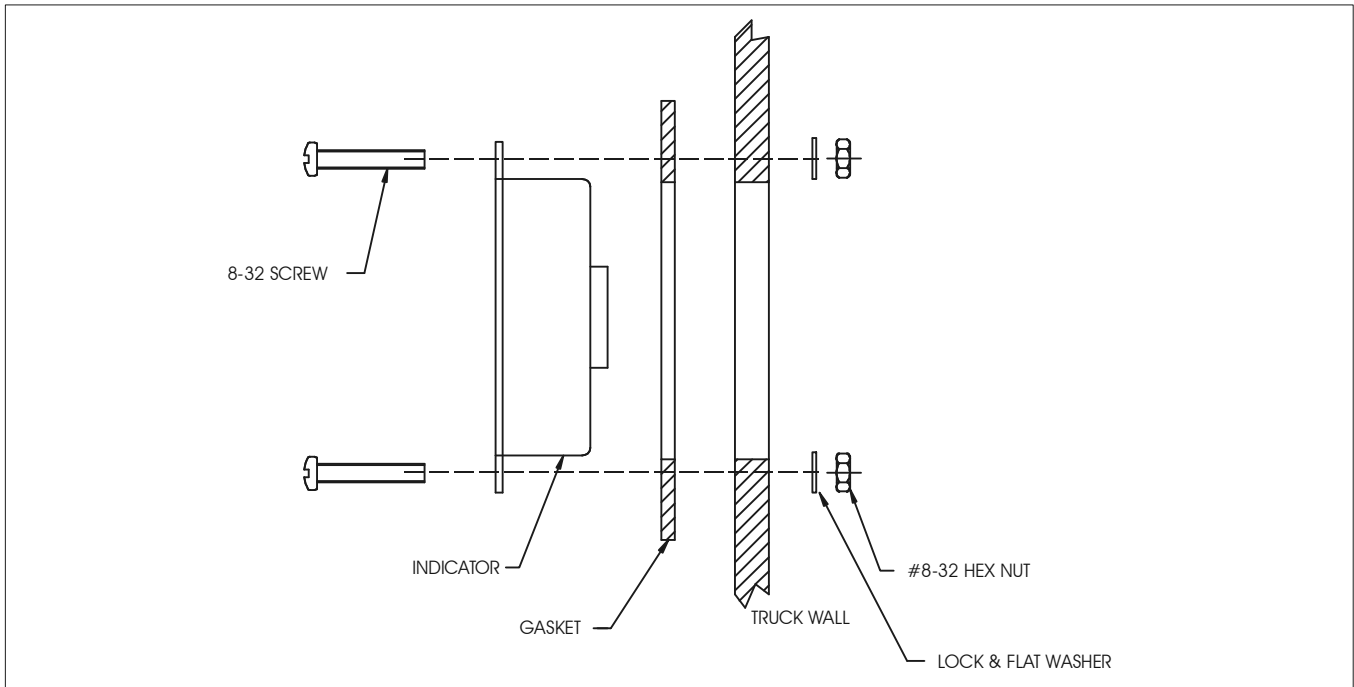
SPECIFICATIONS:

Model Number	Output Voltage	Output Current	Input Voltage	Input Current	Current Meter	Input Fuse	Output Fuse	Weight
091-170-DV-12	12 Vdc	20 Amps	115 / 230 Vac, 50/60 Hz	4 / 2 Amps	25 Amps	8 Amps	40 Amps	16 lbs
091-170-DV-24	24 Vdc	12 Amps	115 / 230 Vac, 50/60 Hz	4 / 2 Amps	15 Amps	4 Amps	24 Amps	16 lbs



INDICATOR INSTALLATION

1. Locate Indicator in a convenient place on the vehicle.
2. Place the template in position and center punch in 4 places.
3. Drill holes as shown.
4. Cut out square hole.
5. Connect wiring to charger in accordance with the instructions in the charger installation instructions.
6. Install as shown.
7. Insert (4) #8-32 screws supplied and tighten. (**CAUTION: Do not over tighten because you will bend the plastic bezel and break the watertight seal).**



Hole Template may not be to Scale, please check dimensions before using.

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 others.