

## INSTRUCTION MANUAL

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# AUTO CHARGE 12 HO 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

# **INTRODUCTION**

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The Auto Charge 12HO is 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**

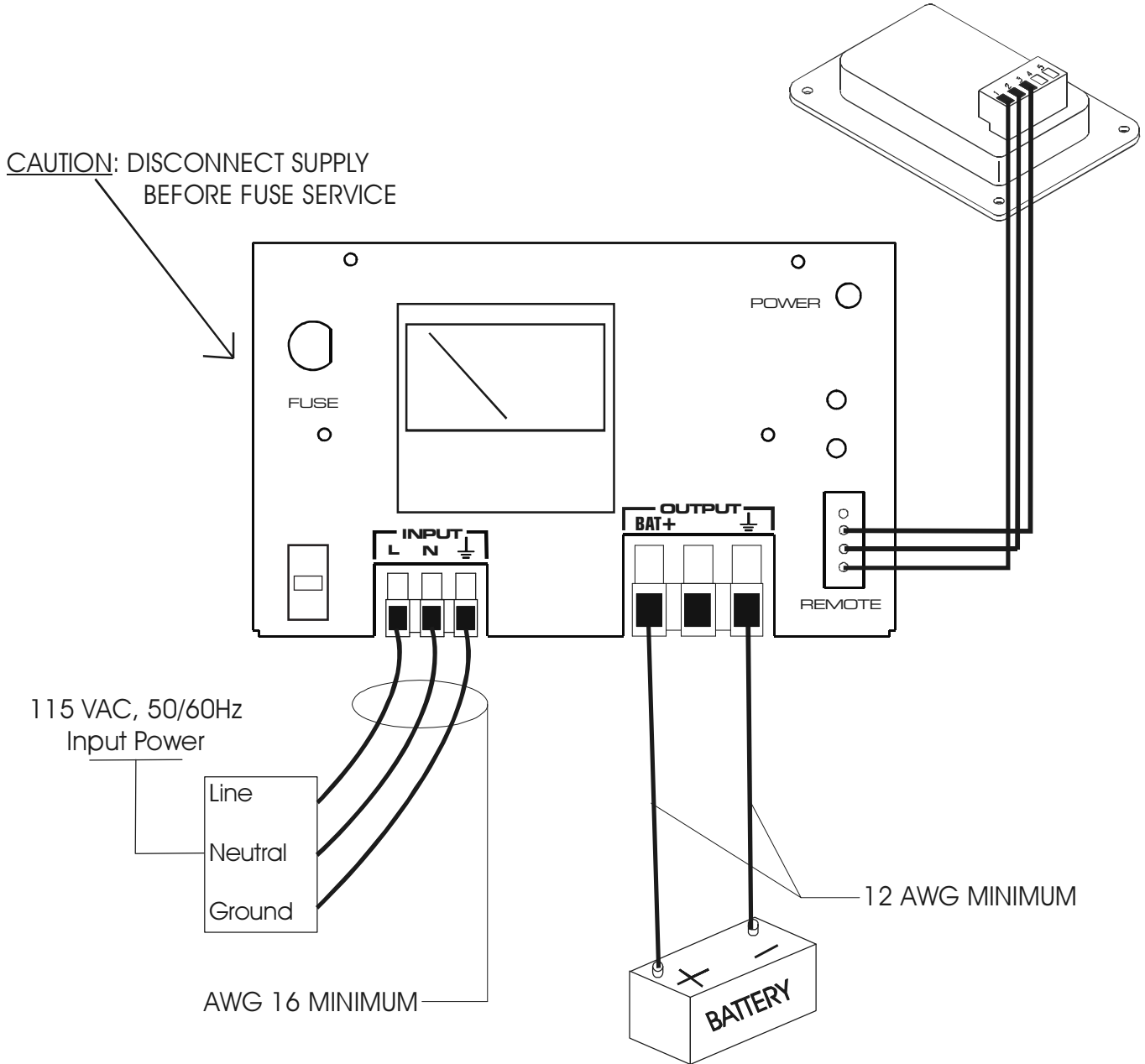
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The Auto Charge 12HO Automatic Battery Charger should be installed in an area with adequate ventilation. A power terminal is supplied for connection to AC.

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.

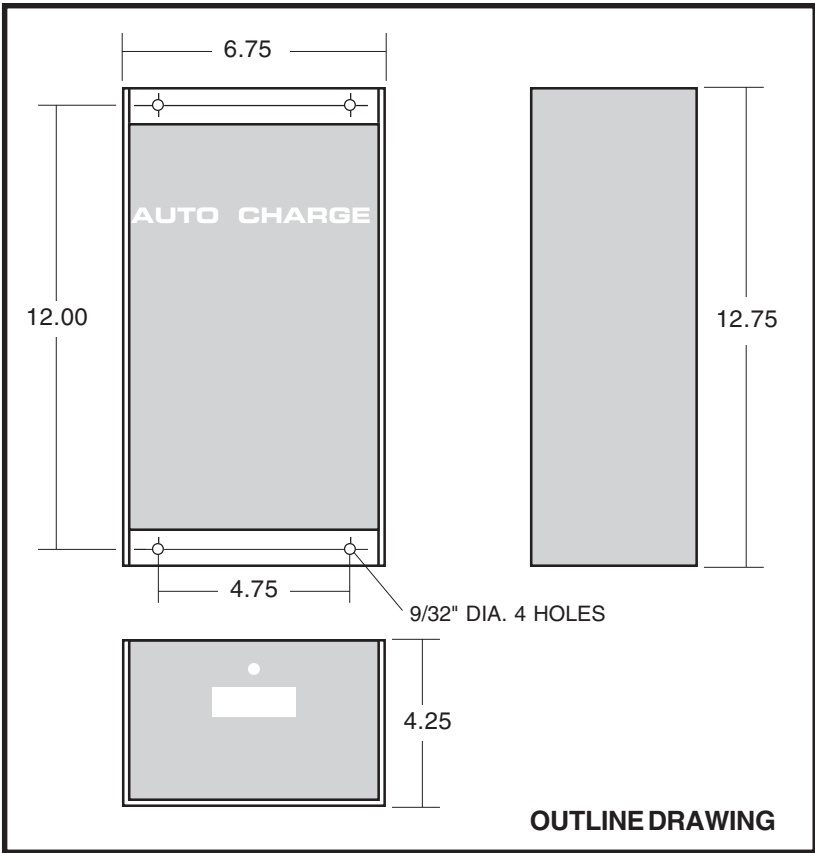
**NOTE:** Do not apply 230 volts to the charger with the selector switch in the 115 volt position serious damage may result.

# OUTLINE

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## SPECIFICATIONS:

Model #	091-170-DV-12	091-170-DV-24
Output Voltage/Current	12V/20Amps	24V/12Amps
115VAC Input current	4 Amps	4 Amps
230VAC Input current	2 Amp	2 Amp
115 VAC Input Fuse	8 amp	8 amp
230VAC Input Fuse	4 amp	4 amp
Weight	16lb	15lb



# **INSTALLATION RECORD & WARRANTY**

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**Date Installed** \_\_\_\_\_

**Installed By** \_\_\_\_\_

**Vehicle Identification** \_\_\_\_\_

**Vehicle Owner** \_\_\_\_\_

## ***WARRANTY***

All product 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.

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.