#### **INSTRUCTION MANUAL**

# ECONO CHARGE 25 AUTOMATIC MULTI-VEHICLE BATTERY CHARGER



MODEL #091-17

INPUT: 120 Volts A.C., 50/60 Hz, 5 Amps OUTPUT: 13.25 Volts D.C.

3 YEAR WARRANTY



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## INTRODUCTION

This procedure defines the installation and wiring for the Econo-Charge 25 Automatic Battery Charger. It is suggested that the installer read the entire instruction booklet to become familiar with the tasks involved before starting.

The Econo-Charge 25 is a completely automatic battery charger with isolation diodes at its output to permit charging 6 separate batteries while maintaining isolation between the batteries. A current limiter protects the charger from excessive output currents when charging deeply discharged batteries, or if one of the vehicles is started while the charger is connected. The charger may remain connected to the batteries for an indefinite period without danger of overcharging.

A cooling fan operated by a temperature sensitive switch maintains cooling air flow through the charger. During periods of low output, when the charger is cool, the fan is inoperative.

**NOTE:** This charger is ideal for vehicles with similar sized batteries and equal or no parasitic loads.

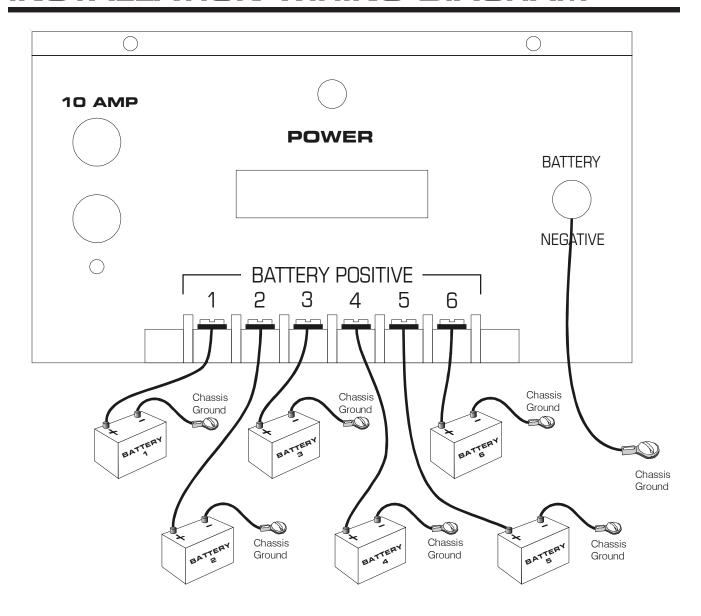
<u>Unequal loading of the output may cause overcharging of the lighter loaded batteries</u>

### INSTALLATION

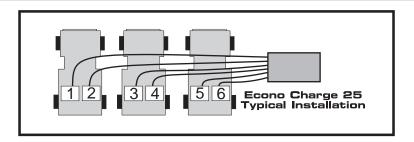
The Econo-Charge 25 Automatic Battery Charger should be installed in an area with adequate ventilation. A power cord is supplied for connection to A.C. power.

- 1) Mount the charger using the four holes provided for this.
- 2) Connect the wiring from the batteries to the Output Terminal Strip. Spade lugs that have been securely crimped or soldered should be used.
- 3) Wire the A.C. power line cord.
- 4) Double check all wiring before proceeding.
- 5) Pilot light will light to show that the charger has power.
- 6) The ammeter indicates the total current flowing to all the batteries. A charging current limit is factory set.

# INSTALLATION WIRING DIAGRAM



## TYPICAL INSTALLATION



Wire Size Table			
Distance from			
Charger to Battery	Wire Size		
0 to 20 feet	# 12 AWG		
20 to 40 feet	# 10 AWG		
40 to 60 feet	#8 AWG		
60 to 80 feet	#6 AWG		

# SPECIFICATION & OUTLINE

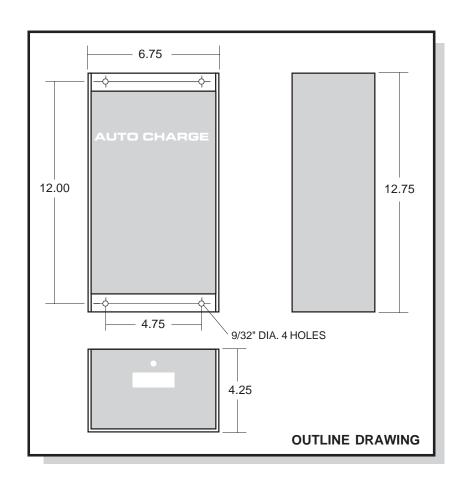
**SPECIFICATIONS:** 

Input: see chart, 50/60 Hz
Output Voltage: see chart
Output Current: see chart

Charge Indicator: 0-25 amps 5%

Weight: 22 lbs

SPECIFICATION CHART					
MODEL #	INPUT	INPUT	OUTPUT	OUTPUT	INPUT FUSE
	VOLTAGE	AMPS	VOLTAGE	AMPS	FAST ACTING
091-17	120 A.C.	5	12 D.C.	25	10 AMP
091-17-230	230 A.C.	3	12 D.C.	25	5 AMP
091-17-24	120 A.C.	5	24 D.C.	13	10 AMP
091-17-24-230	230 A.C.	3	24 D.C.	13	5 AMP



#### 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.

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.