#### INSTRUCTION MANUAL

# **AUTO CHARGE 75**

#### **AUTOMATIC BATTERY CHARGER**

MODEL #091-75-XX-XXX()



NOTE: THIS CHARGER IS DESIGNED FOR A SINGLE BATTERY SYSTEM.

**3 YEAR WARRANTY** 



TEL: in NY 631-567-0314 TOLL FREE: 800-346-0857 FAX: 631-567-5826

## **TABLE OF CONTENTS**

Introduction
Installation
Specification & Outline
Warranty

## **LIST OF ILLUSTRATIONS**

Figure 1 Block Diagram
Figure 2 Electrical Arrangement
Figure 3 Wiring

#### INTRODUCTION

The Auto Charge 75, Model 091-75 is a compact, high output, completely automatic battery charger. Available in a wide array of output voltages it may be specified for operation from either 120 volts or 230 volts, 50/60 Hz. The specification chart lists the various models with the output current ratings.

The charger functions automatically by adjusting its output voltage with a variation of the triggering angle of the silicon controlled rectifiers in the full wave rectifier. Output current is limited by detecting the voltage drop across a low resistance shunt and modifying the triggering angle to limit the current. A block diagram appears in figure 1.

This charger may remain energized and connected to the battery for extended periods of time with no danger of overcharging or water boil-off. It is available with Auto Equalization and Temperature Compensation as options.

#### **INSTALLATION**

The Auto Charge 75 automatic battery charger should be installed in an area with adequate ventilation. A power cord and output wires are provided. Note that this charger is fan cooled and that the fan is thermostatically controlled. The fan operates only when required to keep the charger components cooled.

- Mount the charger using the four holes provided.
- 2. Connect the red wire to the battery positive, and the black wire to the battery negative. Be certain that the battery voltage corresponds to the output voltage rating of the charger.
- 3. Double check all wiring before proceeding.
- 4. Wire the A.C. power line to a power source that corresponds to the input requirements of the charger.
- 5. The installer may add an ammeter in the output of the charger if output current indication is desired.

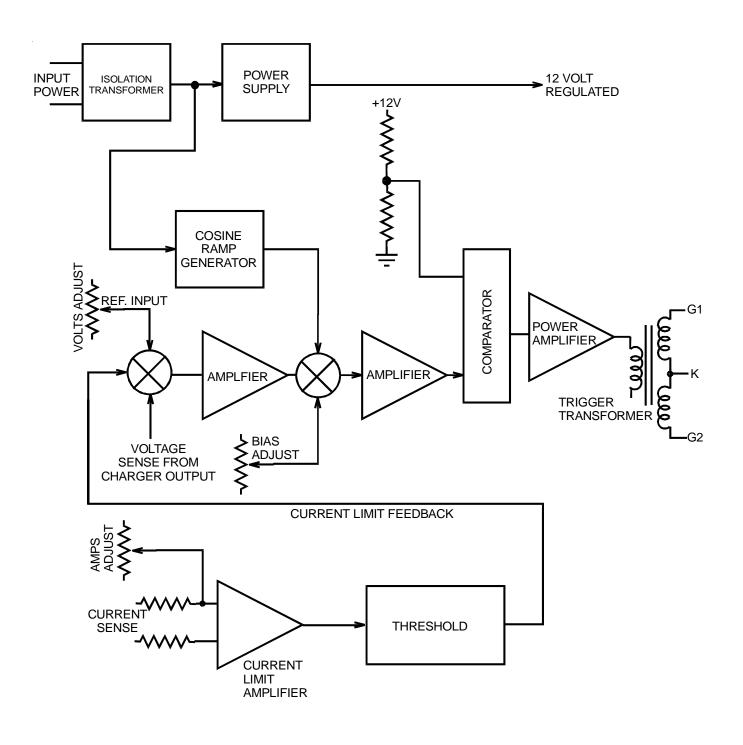


Figure 1

BLOCK DIAGRAM, AUTO CHARGE CONTROL CIRCUIT

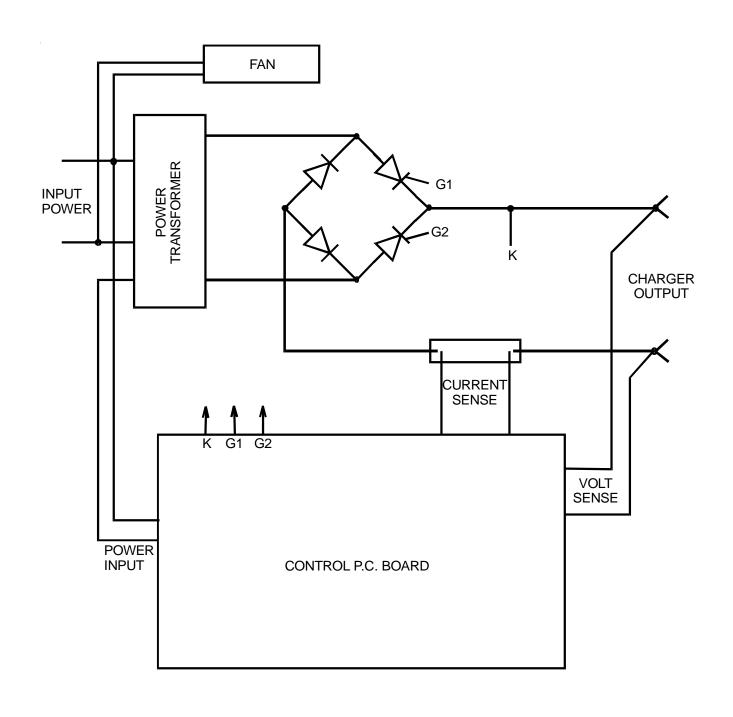


Figure 2
Model 091-75, Auto Charge, Electrical Arrangement

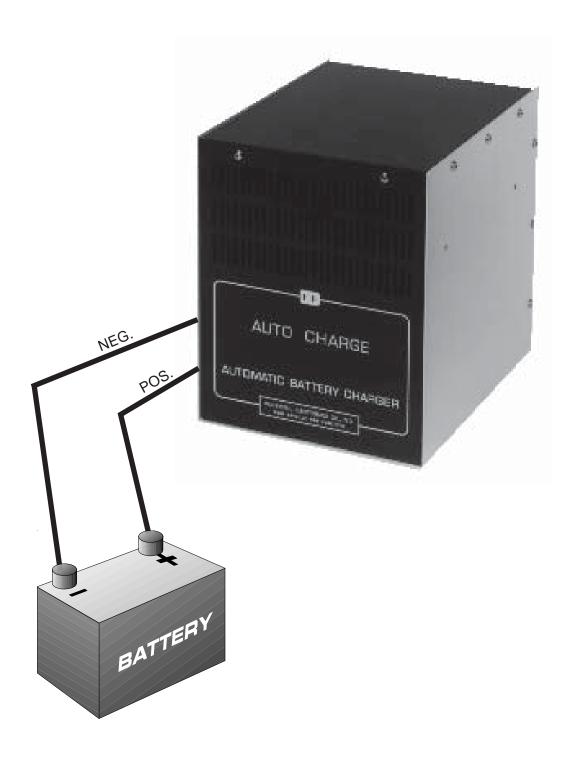


Figure 3 Wiring

## **SPECIFICATION & OUTLINE**

#### **SPECIFICATIONS:**

| INPUT:                |           |      |      |
|-----------------------|-----------|------|------|
| VOLTS                 | FREQUENCY | AMPS | FUSE |
| 120                   | 50/60 Hz  | 17   | 20   |
| 230                   | 50/60 Hz  | 9    | 12   |
| 277                   | 50/60 Hz  | 8    | 10   |
| all fuses are slo-blo |           |      |      |

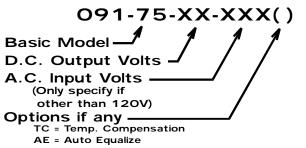
Output: see chart

**Output Current:** see chart

Weight: 65 lbs

| SPECIFICATION CHART |          |          |        |  |
|---------------------|----------|----------|--------|--|
| MODEL#              | INPUT    | OUTPUT   | OUTPUT |  |
|                     | VOLTAGE  | VOLTAGE  | AMPS   |  |
| 091-75-12           | 120 A.C. | 12 D.C.  | 75     |  |
| 091-75-24           | 120 A.C. | 24 D.C.  | 40     |  |
| 091-75-32           | 120 A.C. | 32 D.C.  | 30     |  |
| 091-75-36           | 120 A.C. | 36 D.C.  | 27     |  |
| 091-75-48           | 120 A.C. | 48 D.C.  | 25     |  |
| 091-75-72           | 120 A.C. | 72 D.C.  | 15     |  |
| 091-75-96           | 120 A.C. | 96 D.C.  | 12     |  |
| 091-75-120          | 120 A.C. | 120 D.C. | 10     |  |
| 091-75-12-230       | 230 A.C. | 12 D.C.  | 75     |  |
| 091-75-24-230       | 230 A.C. | 24 D.C.  | 40     |  |
| 091-75-32-230       | 230 A.C. | 32 D.C.  | 30     |  |
| 091-75-36-230       | 230 A.C. | 36 D.C.  | 27     |  |
| 091-75-48-230       | 230 A.C. | 48 D.C.  | 25     |  |
| 091-75-72-230       | 230 A.C. | 72 D.C.  | 15     |  |
| 091-75-96-230       | 230 A.C. | 96 D.C.  | 12     |  |
| 091-75-120-230      | 230 A.C. | 120 D.C. | 10     |  |
| 091-75-48-277       | 277 A.C. | 48 D.C.  | 25     |  |

## Model Number Specification



0UTLINE DRAWING

## **INSTALLATION RECORD & WARRANTY**

| Date Installed           |  |
|--------------------------|--|
|                          |  |
| Installed By             |  |
| <b>3</b>                 |  |
| 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.