

**MOTOR
APPLIANCE
CORPORATION**

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**INDUSTRIAL BATTERY CHARGERS
MULTI-VOLTAGE**

**INSTRUCTION
M16605 REV.**

**INSTRUCTIONS & PARTS LIST
12 - 24 - 36 - 48 Volts DC
Model MCM 50A**

DC VOLTS		12V	24V	36V	48V	AC FUSE RATING
DC AMPS		50A	40A	35A	25A	
AC AMPS AT LINE VOLTAGE SHOWN						
AC LINE VOLTAGE	120	9.0	14.4	18.9	18.0	25AMP
	208	5.2	8.3	10.9	10.4	15AMP
	240	4.5	7.2	9.5	9.0	15AMP

GENERAL INFORMATION

■ The MAC Industrial Multi-Voltage Battery Charger features the versatility of charging either 12, 24, 36, or 48 Volt battery systems. The charger operates on single-phase input voltage of either 120, 208, or 240 Volts. The Mac Multi-Voltage Charger features a ferro-resonant transformer that automatically monitors the battery voltage. The transformer will deliver maximum charging current on low battery voltage and as the battery voltage increases the charging current will decrease to a regulated, pre-established charge designed to protect the battery.

INSTALLATION

■ Unpack the charger carefully. Report immediately any damage that may have occurred in shipping. The battery charger door assembly is recessed to protect the ammeter and timer from damage. Be sure to connect the DC plug with the correct polarity as indicated on the charger (positive and negative). Both AC and DC internal fusing is provided and located on the main terminal panel behind the door assembly.

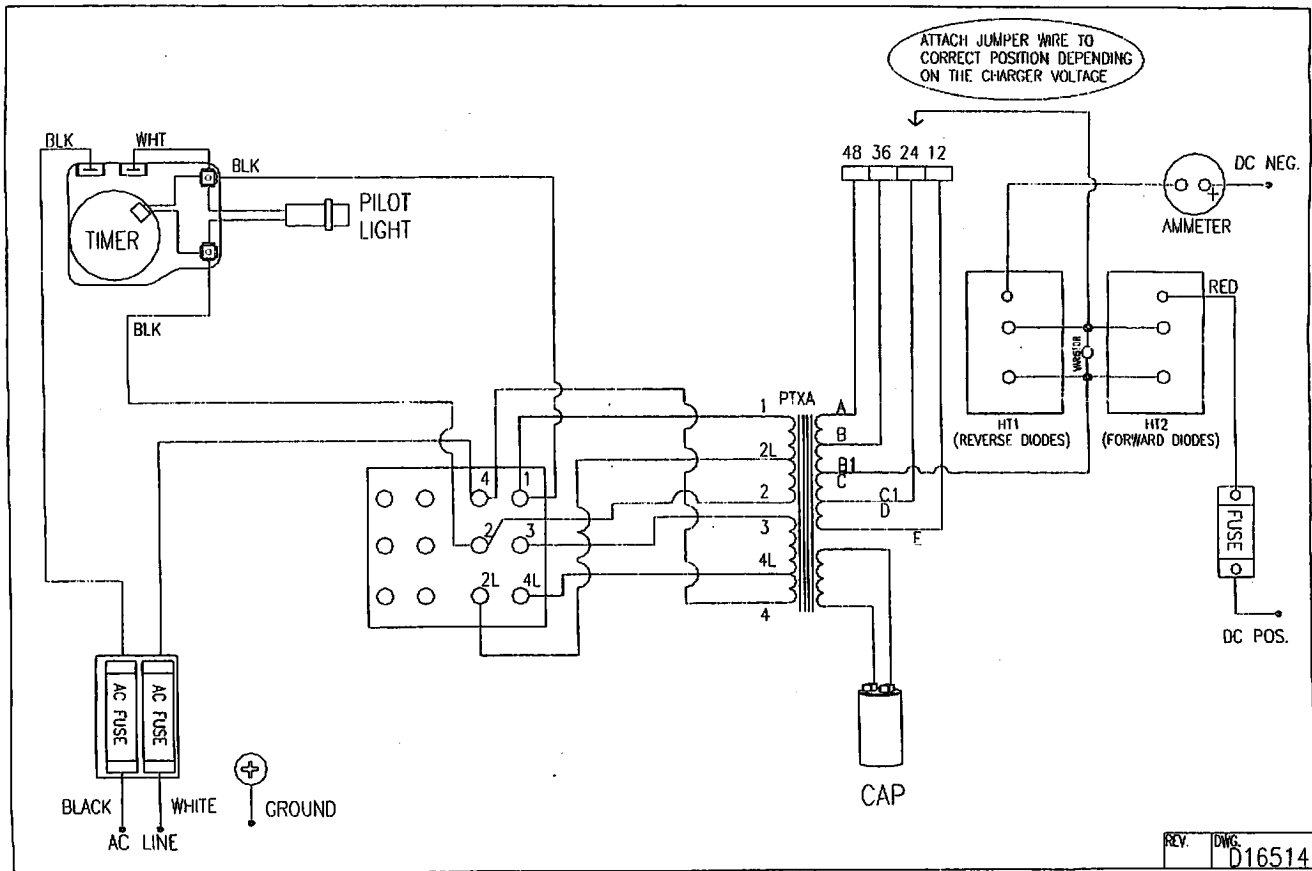
Be sure that AC wiring is of sufficient size to carry the current as indicated on the nameplate. AC line connections can be made from a disconnect switch to the fuse block of the charger through the hole provided in the side of the case. Access to the fuse block can be made by removing the two screws in the corners of the door assembly then swinging outward. Check to be sure that the voltage adjust panel is set to agree with the nominal incoming supply voltage: i.e., 120, 208, or 240 volts. Refer to main terminal panel to adjust for voltage settings other than the standard factory setting of 120 volts.

OPERATING PROCEDURE

1. Check to see that the charger is of the same system voltage for the batteries being charged.
2. Connect charge plug to battery with timer "OFF".
3. Check incoming AC line voltage for agreement with AC terminal connections.
4. Set timer to "8" for normal charge.
5. Charger output will automatically adjust itself according to the state of charge of the batteries.

PARTS LIST

DESCRIPTION	DESCRIPTION	DESCRIPTION
CASE TOP	HEATKINK ASSEMBLY	POWER TRANSFORMER
CASE DOOR ASSEMBLY	DIODES - POSITIVE BASE	AMMETER, 0-75 AMP
CASE BASE	DIODES - NEGATIVE BASE	DC LEADS ASSEMBLY
CASE BACK	PILOT LIGHT ASSEMBLY	DC STRAIN RELIEF
CASE MAIN PANEL	TIMER	DC PLUG
CASE SIDE (RIGHT OR LEFT)	TIMER KNOB	DC SELECTOR PLUG
CASE TIMER CONTROL PANEL	FUSE, DC	AC CORD ASSEMBLY
CAPACITOR BRACKET	FUSE HOLDER, DC	AC CORD STRAIN RELIEF
CAPACITOR	FUSE, AC (SHOWN ON DOOR)	
VARISTOR ASSEMBLY	FUSE HOLDER, AC	



STATEMENT OF WARRANTY

- Motor Appliance Corporation guarantees all MAC Battery Chargers to be free from defects in material and/or workmanship for a period of twelve months from date of manufacture.
- MAC will, at their option, repair or replace FOB Chesterfield, Missouri, or the nearest MAC Authorized Service Facility, at their expense, any MAC Battery Charger failing due to defects in material and/or workmanship during the guarantee period.
- MAC will not be responsible for any consequential damages, or the labor to remove or reinstall battery Chargers on the equipment with which they are used. Our liability shall be limited to the repair or replacement of defective Battery Chargers only.
- Under no circumstances will MAC be responsible for any expense in connection with repairs made by anyone other than the factory or authorized service facility, unless such repairs have been specifically authorized in writing by the factory.
- All Battery Chargers requiring repair are to be shipped, freight prepaid to our factory or nearest authorized service facility.
- The above warranty is effective only when the Battery Charger has been operated under normal conditions, without abuse due to negligence or improper application and when applied load as indicated by the voltage and current characteristics agree with the nameplate data on the Battery Charger.