

**MOTOR
APPLIANCE
CORPORATION**

601 International Avenue
Washington, MO. 63090

Phone (636) 532-3406
FAX (636) 532-4609

**INDUSTRIAL BATTERY CHARGERS
MULTI-VOLTAGE**

**INSTRUCTION
M17632 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 12, 24, 36, or 48 volt battery systems. The charger operates on single-phase input voltage of 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. 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 base

Be sure that AC wiring is of sufficient size to carry the current as indicated on the nameplate. AC line connections can be made

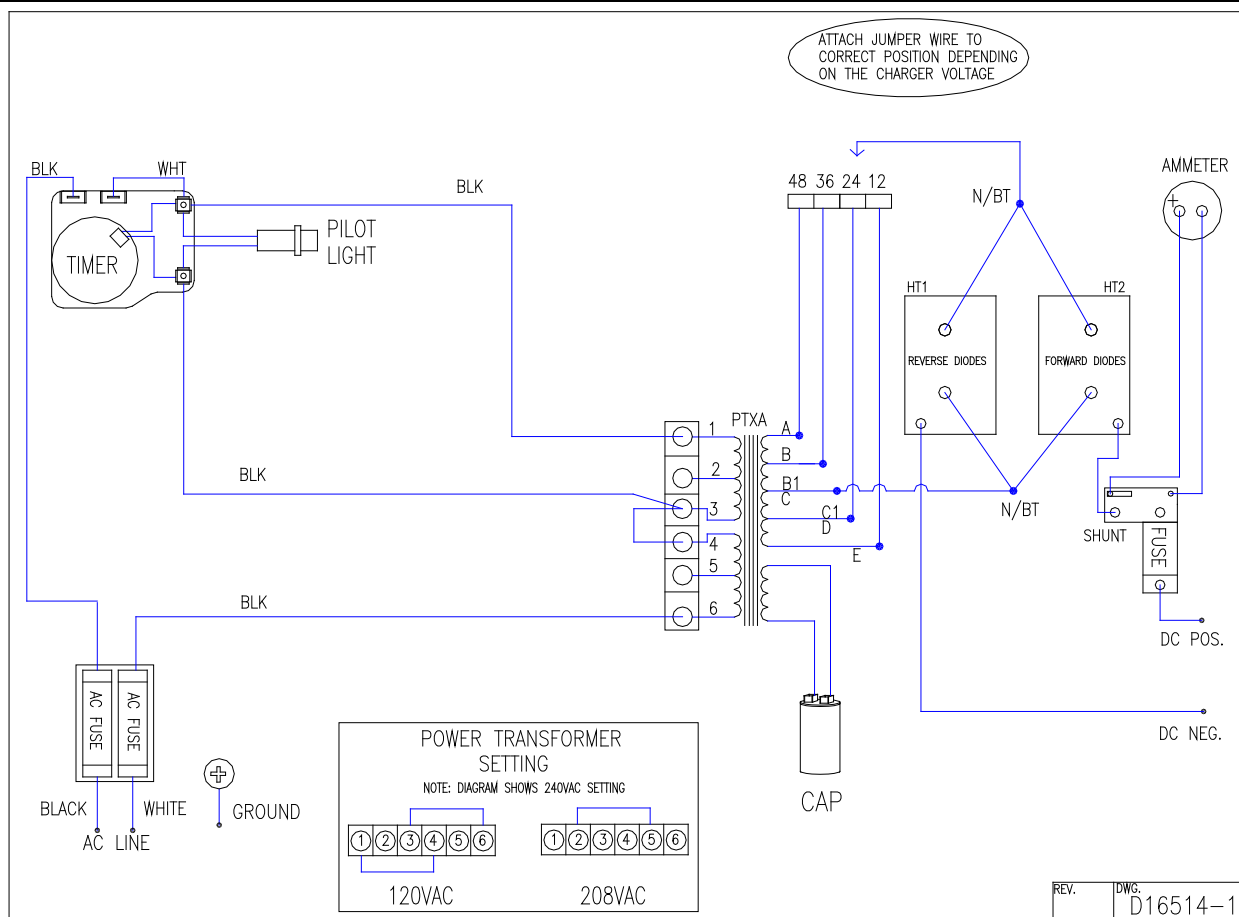
from a disconnect switch to the fuse block of the charger through the electrical knockout provided on the side of the case. Access to the fuse block can be made by loosening the screw in the center of the door assembly then swinging outward. Check to be sure that the voltage adjust terminal block jumper or jumpers are set to match the nominal incoming supply voltage: i.e., 120, 208, or 240 volts. For voltage setting other than the standard factory setting of 120 volts you will be required to either move the jumper wire or add another jumper wire to the terminal block. Refer to the wiring diagram for exact placement of the jumpers.

OPERATING PROCEDURE

1. Check incoming AC line voltage to verify it matches the AC terminal block settings.
2. Check to see that the charger is set to the proper DC voltage being charged..
3. Connect charge plug to battery with timer "OFF".
4. Daily Charge - Set timer to "8" hours
Equalize Charge - Set time to "11" hours
5. Charger output will automatically adjust itself according to the state of charge of the batteries.

PARTS LIST

DESCRIPTION	DESCRIPTION	DESCRIPTION
CASE TOP	DIODES - POSITIVE BASE	POWER TRANSFORMER
CASE DOOR	DIODES - NEGATIVE BASE	AMMETER, 0-100 AMP
CASE BASE	PILOT LIGHT ASSEMBLY	DC LEADS ASSEMBLY
CASE BACK	TIMER	DC STRAIN RELIEF
CASE SIDE (RIGHT OR LEFT)	TIMER KNOB	DC PLUG
CAPACITOR BRACKET	FUSE, DC	DC SELECTOR PLUG
CAPACITOR	FUSE, AC (SHOWN ON DOOR)	AC CORD ASSEMBLY
HEATSINK ASSEMBLY	FUSE HOLDER, AC	AC CORD STRAIN RELIEF
TERMINAL BLOCK (AC)	SHUNT	



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 Blytheville, Arkansas 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 guaranteed 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 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.