

# TC & GA SERIES

## INDUSTRIAL EMERGENCY LIGHTS

### IMPORTANT SAFEGUARDS

WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED INCLUDING THE FOLLOWING:

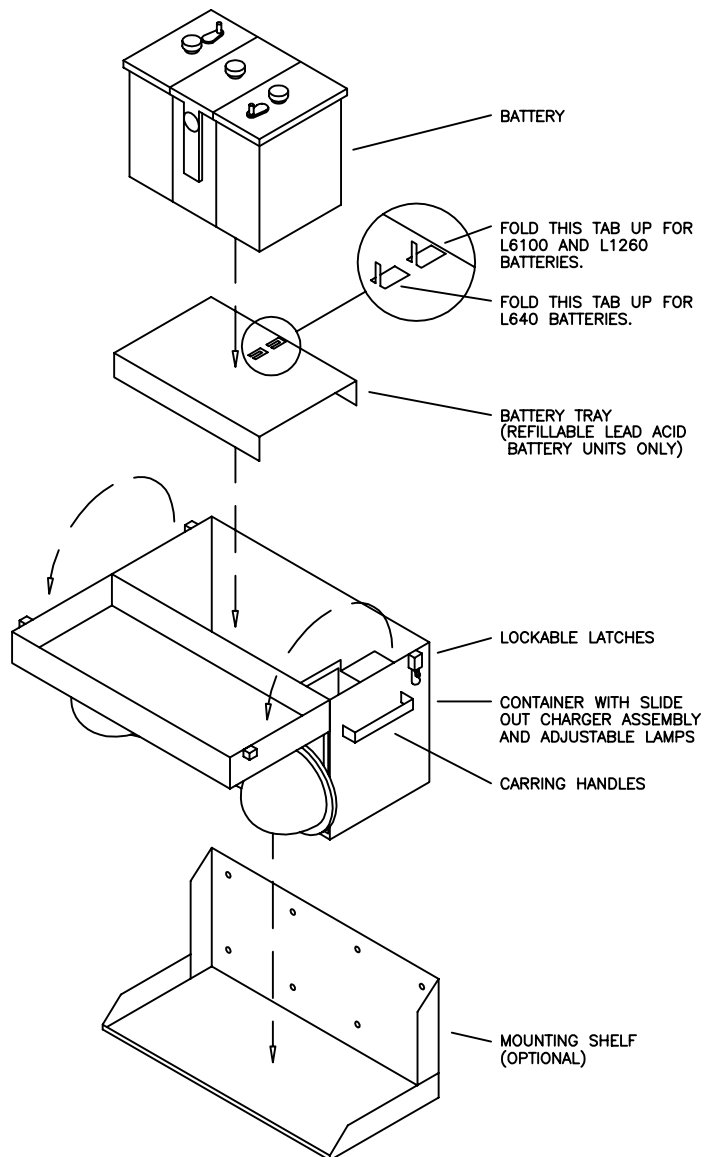
## READ AND FOLLOW ALL SAFETY INSTRUCTIONS

- 1) DO NOT USE OUTDOORS.
- 2) DO NOT LET POWER SUPPLY CORDS TOUCH HOT SURFACES.
- 3) DO NOT MOUNT NEAR GAS OR ELECTRIC HEATERS.
- 4) USE CAUTION WHEN SERVICING BATTERIES. BATTERY ACID CAN CAUSE BURNS TO SKIN AND EYES. IF ACID IS SPILLED ON SKIN OR IN EYES FLUSH WITH FRESH WATER AND CONTACT PHYSICIAN IMMEDIATELY.
- 5) EQUIPMENT SHOULD BE MOUNTED IN LOCATIONS AND AT HEIGHTS WHERE IT WILL NOT BE READILY SUBJECTED TO TAMPERING BY UNAUTHORIZED PERSONNEL.
- 6) THE USE OF ACCESSORY EQUIPMENT NOT RECOMMENDED BY THE MANUFACTURER MAY CAUSE AN UNSAFE CONDITION.
- 7) DO NOT USE THIS EQUIPMENT FOR OTHER THAN INTENDED USE.
- 8) CAUTION: SEALED LAMPS MAY HAVE INNER HALOGEN CYCLE BULB. THIS PRESSURE FILLED INNER BULB COULD SHATTER IF SCRATCHED OR DAMAGED. IF THE OUTER SEALED BEAM IS INTACT, THIS WILL BE NO PROBLEM. IF THE OUTER SEALED ENVELOPE IS BROKEN DO NOT OPERATE BUT REMOVE AND DISPOSE OF LAMP WITH CARE.

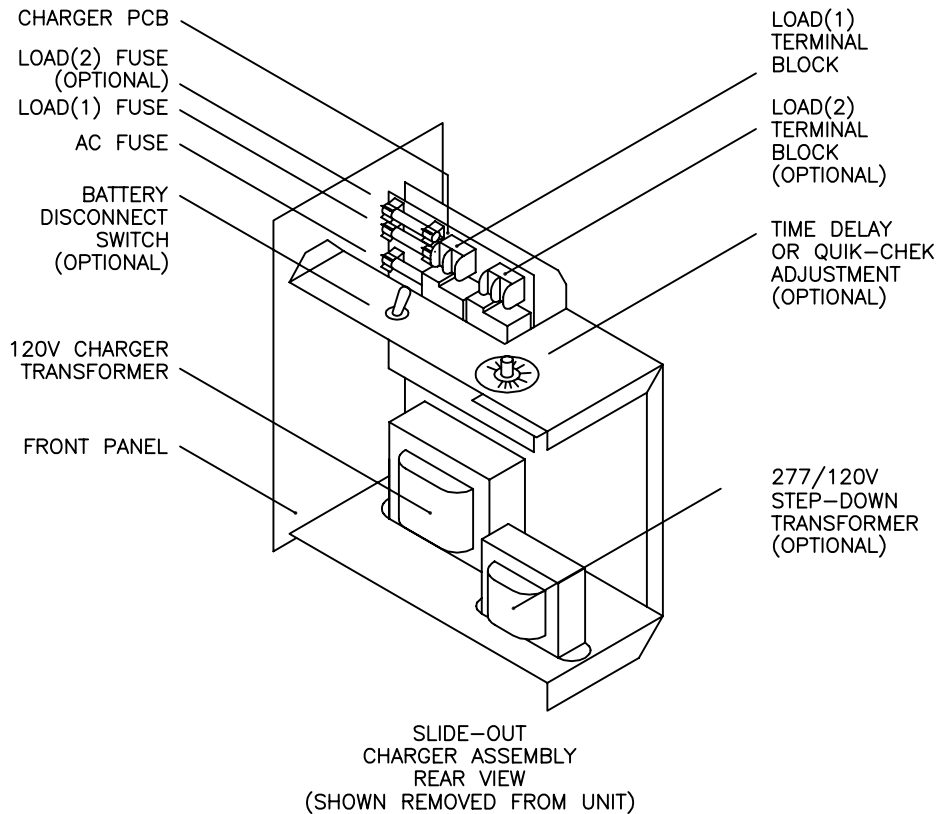
## SAVE THESE INSTRUCTIONS

### MOUNTING INSTRUCTIONS :

1. Mount the unit in the desired location.  
For ease of mounting an optional mounting shelf may be used for the unit to sit on.
2. Run conduit, A.C. and remote lamp wires (as applicable) to the unit. Conduit knockouts are provided on the side and back of the container for hardwiring the unit. Additional knockouts are provided for remote lamp connections.  
For the ease of A.C. connections an optional cord and plug may be used to connect the unit to an A.C. socket.
3. Connect the unit to an unswitched single A.C. power source of 120 VAC, 277 VAC for optional 277 VAC units, as shown in the wiring diagram. Charger assembly need not be removed for installation of this unit.
4. Ground unit in accordance with the requirements of the National Electrical Code.
5. Connect remote lamps to terminal block(s) on the charger assembly. NOTE: 20 AMPS. MAX. LOAD PER TERMINAL BLOCK. DO NOT EXCEED MARKED TOTAL OUTPUT RATING OF THE UNIT.
6. Once the unit is in place with the A.C. power off, install battery(s). For refillable lead acid batteries, refer to separate instructions provided with the battery(s).  
Refillable Lead-acid batteries require a battery tray installed as shown in the diagram for the battery to sit on.
7. Connect the battery(s) to the charger assembly.  
Battery(-) to the black wire and battery(+) to the red wire.  
For multiple batteries connected together refer to the Multiple Battery Installation Diagrams.
8. Apply A.C. power to the unit.  
The "A.C. ON" amber indicator should turn on.  
Press the "TEST SWITCH". The emergency lamps should light and the "AC ON" indicator should turn off.  
Release the "TEST SWITCH". The emergency lamps should turn off and the "AC ON" indicator should turn on.  
Within 24 hours the battery should be fully charged.
9. Record the model number, serial number and installation date on the Test-service Log Card. Perform initial test and record it as required by the National Electrical Code, Article 700.



IF YOU HAVE ANY QUESTIONS REGARDING THE INSTALLATION OF THIS UNIT PLEASE CALL OUR CUSTOMER SERVICE DEPARTMENT.



## STANDARD EQUIPMENT

**SLIDE-OUT CHARGER ASSEMBLY** – Convenient easy slide-out chassis for repair or replacement. Consists of a Front Panel, Chassis, 3-Rate Charger PCB and 120V Charging Transformer.

**CHARGER PCB** – Comes standard with a 3-Rate Charger, 20A Output Circuit with terminal block and DC fuse for the load, an AC input fuse, Integral Test Switch and Capacity Meter for determining status of the battery.

**120V CHARGING TRANSFORMER** – For converting an unswitched 120V single phase power supply to usable voltage for the Charger PCB.

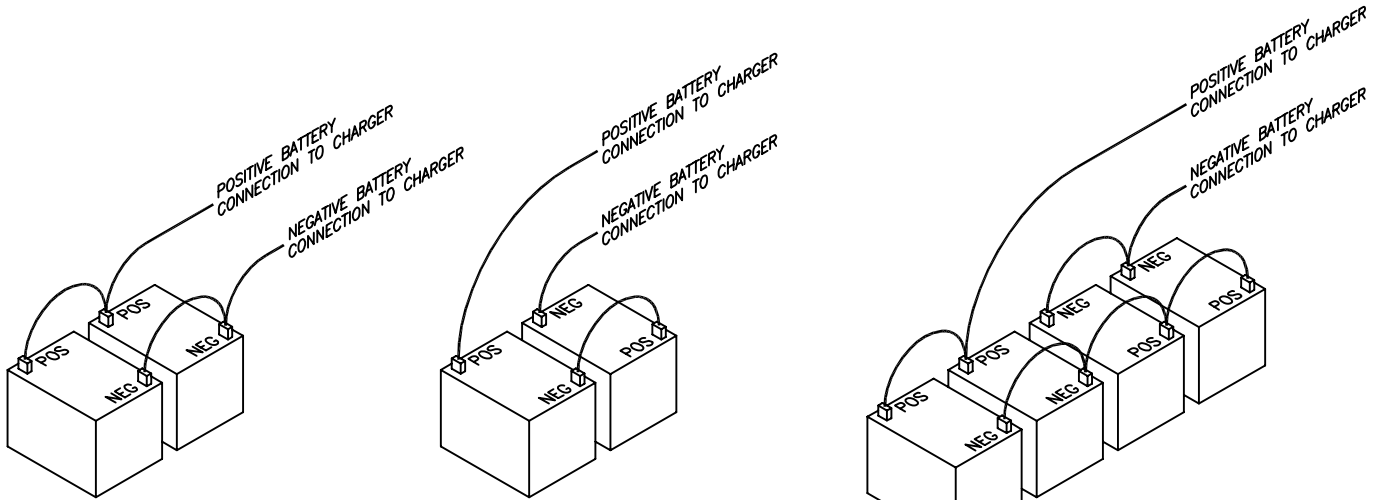
### OPTIONS SUFFIX

## OPTIONAL EQUIPMENT

- BDS**     **BATTERY DISCONNECT SWITCH** – For use in units which are used in remote locations which are going to be left for an extended period of time without electricity. The battery may be disconnected using the switch to prevent deep discharge. The switch must be turned back on in order for the unit to work properly during occupancy of the location.
- P2**     **CORD AND PLUG** – (Not shown) For connecting your unit to an AC outlet.
- DO**     **DOUBLE OUTPUT CIRCUIT** – Second output circuit on the Charger PCB which includes a second terminal block and fuse for an additional 20A load.
- MOUNTING SHELF** – A convenient means of mounting your unit to the wall. Just mount the shelf in place and place your unit on the shelf.
- TD**     **TIME DELAY** – For use in locations where there is a delay of illumination after the AC power has been restored, such as HID lighting. The time delay setting may be adjusted from 1 to 60 minutes by turning the adjustment knob counterclockwise. This will allow the emergency lamp(s) to illuminate the area until the normal AC lighting has been restored.
- QC**     **QUIK-CHEK** – (Includes Time Delay) A convenient remote control test feature which allows you to test your unit with a hand held transmitter. One press of a button on the transmitter and the emergency lamps will illuminate for a preset amount of time as if you were pressing the test switch on the unit itself. Manual test switch on the front panel is still operational.
- 277**     **277/120V STEP-DOWN TRANSFORMER** – For units being connected to an unswitched 277V single phase power supply.

# MULTIPLE BATTERY INSTALLATION DIAGRAMS

BATTERY TERMINAL TYPE, SIZE AND LOCATION MAY VARY FROM ILLUSTRATION.



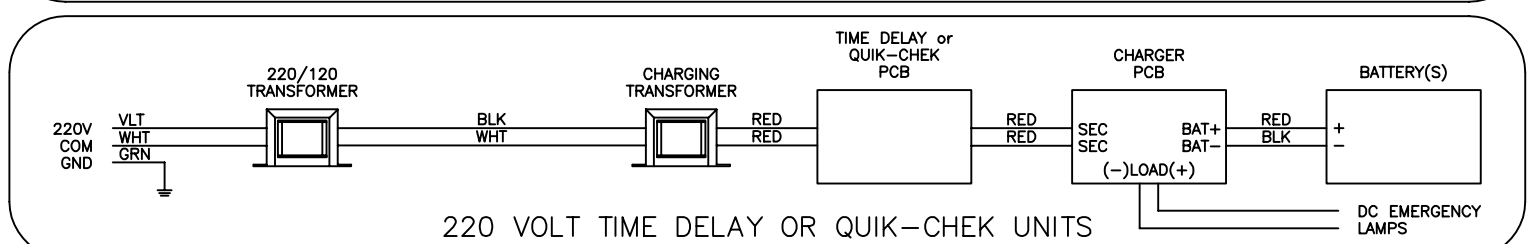
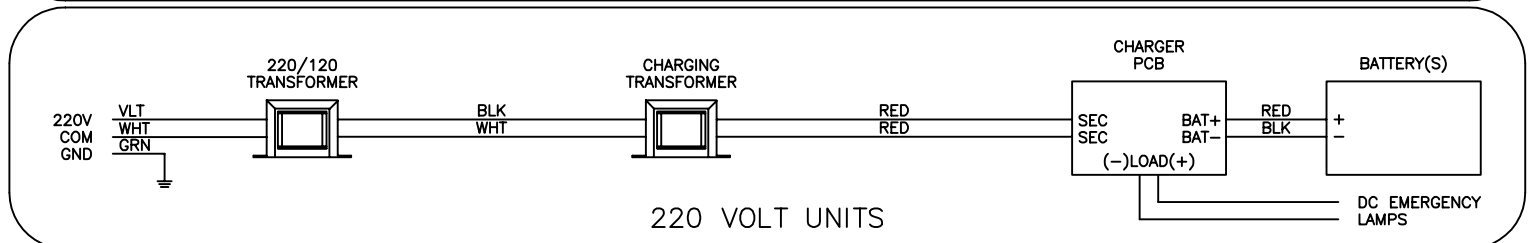
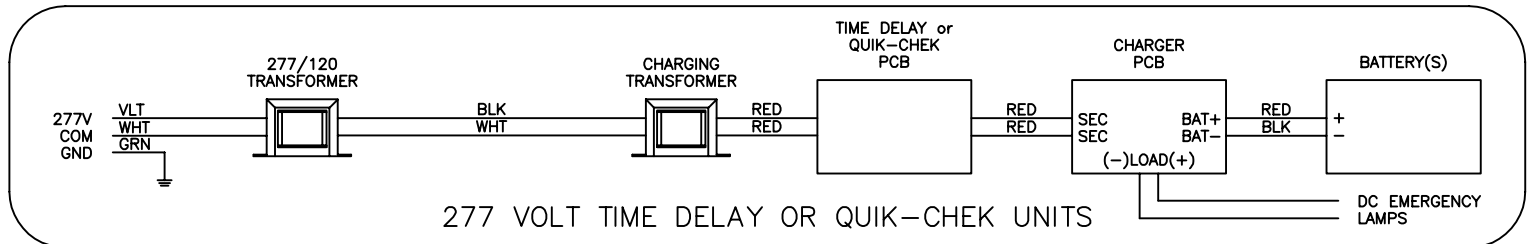
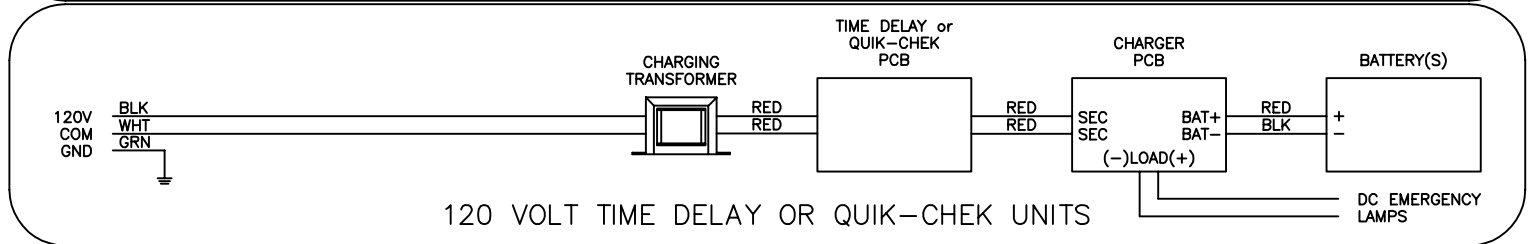
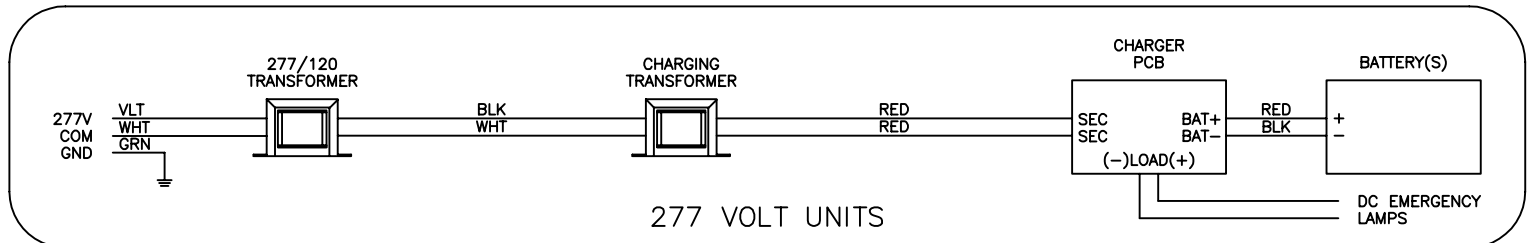
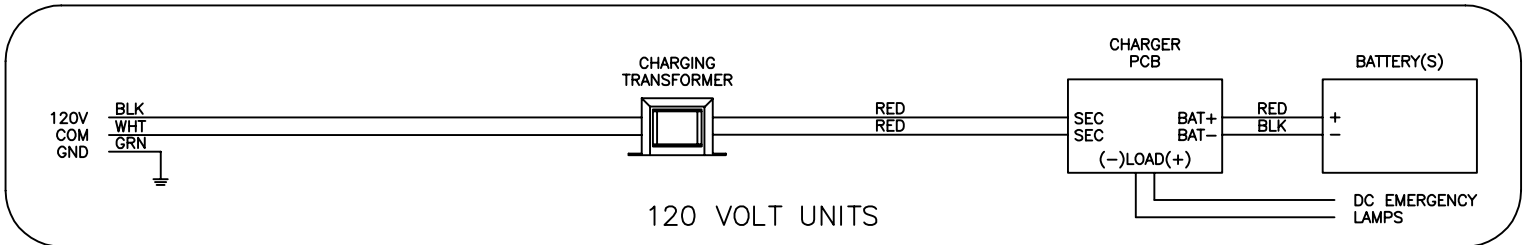
6 VOLT UNITS WITH  
TWO 6 VOLT BATTERIES  
IN PARALLEL.

12 VOLT UNITS WITH  
TWO 6 VOLT BATTERIES  
IN SERIES.

12 VOLT UNITS WITH  
FOUR 6 VOLT BATTERIES. TWO SETS  
OF TWO PARALLEL BATTERIES IN SERIES.

# ELECTRICAL DIAGRAMS

**NOTE:** SERVICING SHOULD BE PERFORMED BY QUALIFIED SERVICE PERSONNEL. IF THE UNIT MALFUNCTIONS, DISCONNECT FROM POWER SUPPLY AND CONTACT BIG BEAM EMERGENCY SYSTEMS, INC. OR THE LOCAL BIG BEAM EMERGENCY SYSTEMS, INC. REPRESENTATIVE, WRITTEN AUTHORIZATION MUST BE OBTAINED PRIOR TO THE PREPAID RETURN OF ANY EQUIPMENT. THE BATTERY(S) MUST ALWAYS BE PROPERLY MARKED AND SHIPPED SEPARATELY.



117-0538-0704

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