

mcPhilben®

your next thought in emergency lighting

DEB-1

INSTALLATION INSTRUCTIONS

! IMPORTANT SAFEGUARDS !

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

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. To prevent high voltage from being present on red & yellow output leads prior to installation, battery connector must be open. Do not join battery connector until installation is complete and AC power is supplied to the emergency ballast.
2. This product is for use with most 17 W through 40 W single pin or bipin fluorescent lamps, including energy saving, circline, U-shaped and rapid-start (4-pin) long compact fluorescent lamps.
3. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
4. To reduce the risk of electric shock, disconnect both normal and emergency power supplies and battery connector of the emergency ballast before servicing.
5. This emergency ballast is for factory or field installation in either the ballast channel or on top of the fixture.
6. This product is for use in indoor fixtures except air handling heated air outlets, and wet, damp, or hazardous location fixtures.
7. An unswitched AC power source is required. (120 or 277 VAC)
8. Do not install near gas or electric heaters.
9. Do not attempt to service the battery. A sealed, no-maintenance battery is used that is not field replaceable. Contact the manufacturer for information on service.
10. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
11. Do not use this product for other than intended use.
12. Servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS



**CONTAINS NICKEL-CADMIUM
RECHARGEABLE BATTERY.
MUST BE RECYCLED OR
DISPOSED OF PROPERLY.**



INSTALLATION



WARNING: TO PREVENT HIGH VOLTAGE FROM BEING PRESENT ON RED & YELLOW OUTPUT LEADS PRIOR TO INSTALLATION, BATTERY CONNECTOR MUST BE OPEN. DO NOT JOIN BATTERY CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED TO THE EMERGENCY BALLAST.

NOTE: Make sure that the necessary branch circuit wiring is available. An unswitched source of power is required. The emergency ballast must be fed from the same branch circuit as the AC ballast.

1. Disconnect AC power from the fixture. Remove the ballast channel cover and install the emergency ballast either in the ballast channel (see Illustrations 1 & 2) or on top of the fixture* (see Illustration 3).
2. Select the appropriate wiring diagram to connect the emergency ballast to the AC ballast and lamp. Make sure all connections are in accordance with the National Electrical Code and any local regulations.

ILLUSTRATION 1

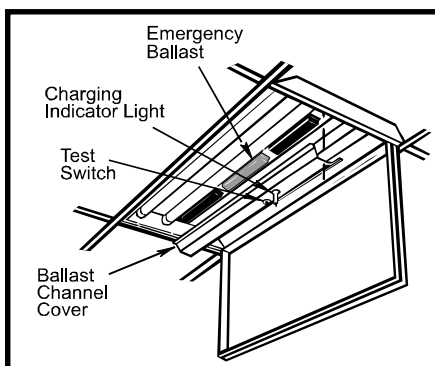


ILLUSTRATION 2

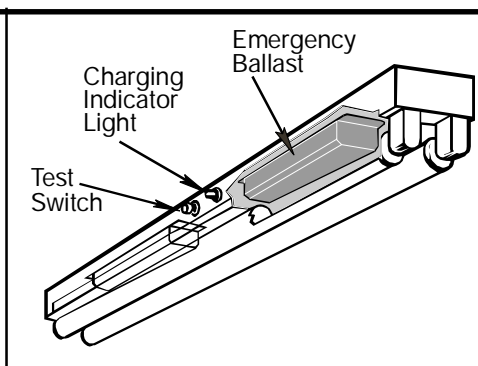
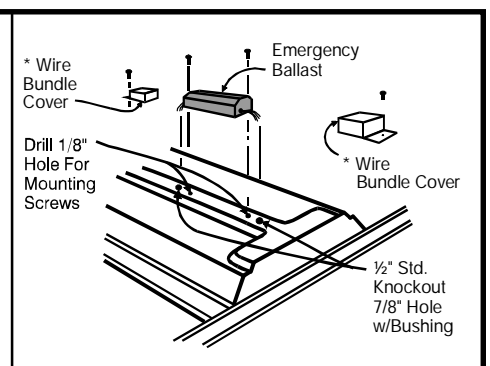


ILLUSTRATION 3



*For installation on top of the fixture, wire bundle covers may be required by state or local codes. These covers are available from the manufacturer as an accessory kit and must be ordered separately. Call your local distributor or the factory for complete information.

3. Install the test switch through the ballast channel cover of a troffer or through the side of a strip fixture. Drill a 1/2" hole and install the switch as shown (see Illustrations 1 & 2). Wire the test switch so that it removes AC power from both the emergency ballast and the AC ballast at the same time (see Illustration 4).
4. Refer to Illustration 5 and install the charging indicator light so that it will be visible after the fixture is installed.

NOTE: After installing the charging indicator light and test switch, mark each with the appropriate label. If a detached charging indicator light is used, connect by matching wire colors and install as shown in Illustration 5.

5. In a readily visible location, attach the label "CAUTION—This Unit Has More Than One Power Connection Point. To Reduce The Risk Of Electric Shock, Disconnect Both The Branch Circuit-Breakers Or Fuses And Emergency Power Supplies Before Servicing."

ILLUSTRATION 4

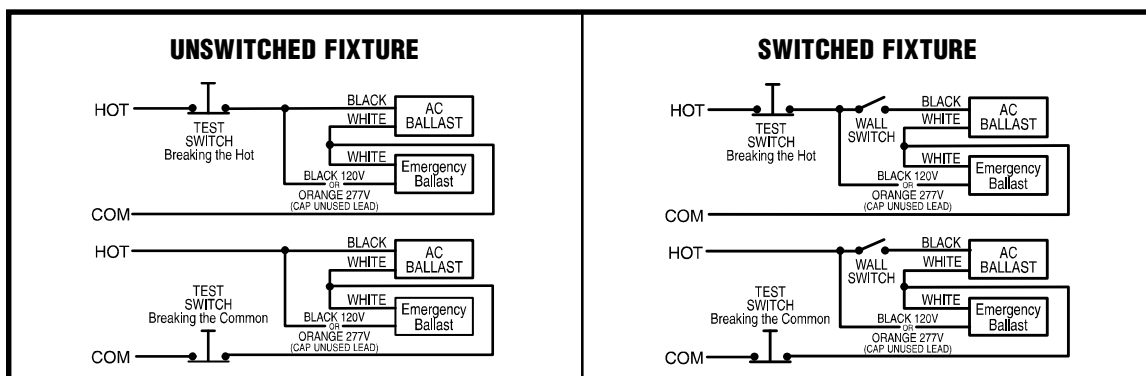
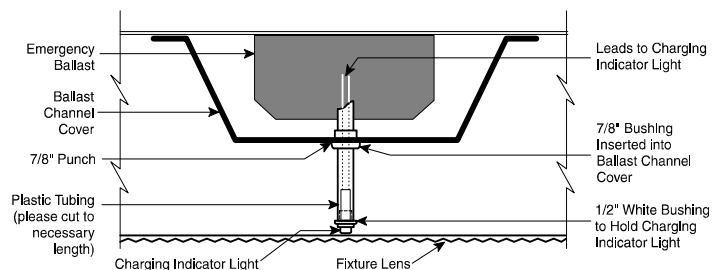
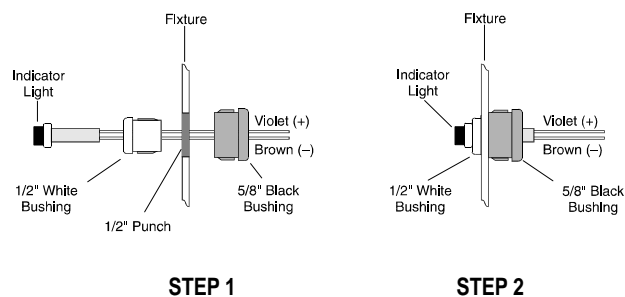


ILLUSTRATION 5

TROFFER STYLE FIXTURE



STRIP STYLE FIXTURE



NOTE: After installing the charging indicator light and test switch, mark each with the appropriate label.

6. After installation is complete, supply AC power to the emergency ballast and join the battery connector.
7. A short-term discharge test may be conducted after the emergency ballast has been charging for one hour. Charge for 24 hours before conducting a long-term discharge test. Refer to OPERATION.

OPERATION

When AC power is applied, the charging indicator light is illuminated, indicating that the battery is being charged. When power fails, the emergency ballast automatically switches to emergency power, operating one lamp at reduced illumination. This emergency ballast will operate 17 W through 40 W lamps for a minimum of 90 minutes.

MAINTENANCE

Although no routine maintenance is required to keep the emergency ballast functional, it should be checked periodically to ensure that it is working. The following schedule is recommended:

1. Visually inspect the charging indicator light monthly. It should be illuminated.
2. Test the emergency operation of the fixture at 30-day intervals for a minimum of 30 seconds. One lamp should operate at reduced illumination.
3. Conduct a 90-minute discharge test once a year. One lamp should operate at reduced illumination for at least 90 minutes.

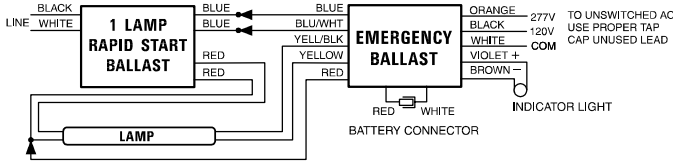
Refer any servicing indicated by these checks to qualified personnel.

— WIRING DIAGRAMS FOR 1-LAMP EMERGENCY OPERATION —

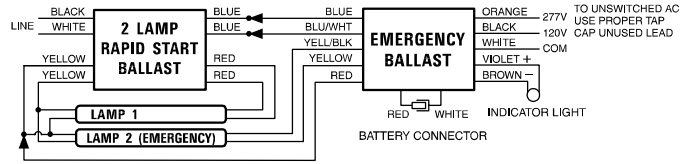
EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

TYPICAL SCHEMATICS ONLY. MAY BE USED WITH OTHER BALLASTS. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

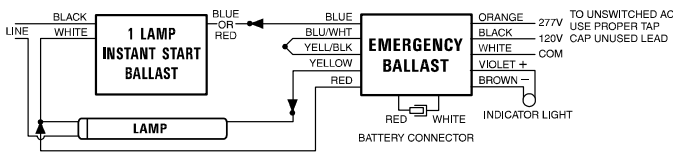
A. ONE (1) LAMP RAPID START BALLAST



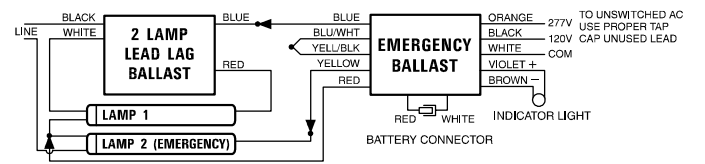
B. TWO (2) LAMP RAPID START BALLAST



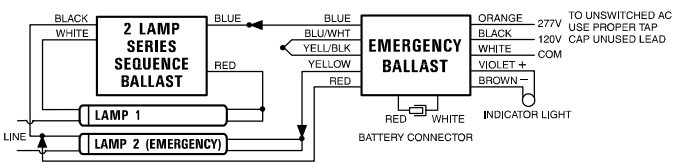
C. ONE (1) LAMP INSTANT START SLIMLINE BALLAST



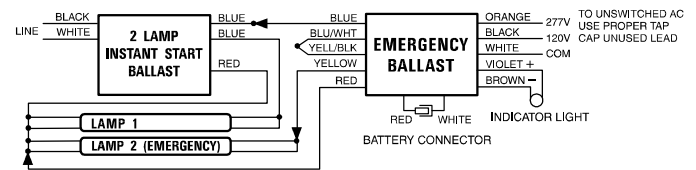
D. TWO (2) LAMP LEAD/LAG INSTANT START SLIMLINE BALLAST



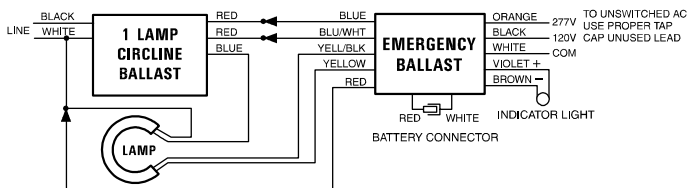
E. TWO (2) LAMP SERIES SEQUENCE INSTANT START BALLAST WITH FOUR (4) LEADS



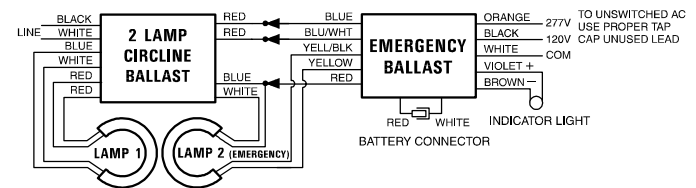
F. TWO (2) LAMP INSTANT START ELECTRONIC BALLAST



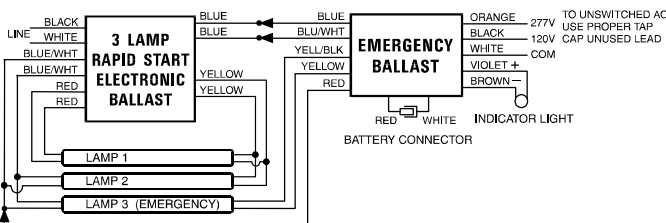
G. ONE (1) LAMP CIRCLINE RAPID START BALLAST



H. TWO (2) LAMP CIRCLINE RAPID START BALLAST



I. THREE (3) LAMP RAPID START ELECTRONIC BALLAST



See insert page for additional wiring diagrams. For diagrams not shown, please call the factory with AC ballast brand name and catalog number.

WIRING DIAGRAMS - for EMERGENCY-ONLY fixtures

K. ONE (1) 17 W-40 W LAMP WITHOUT AC BALLAST

