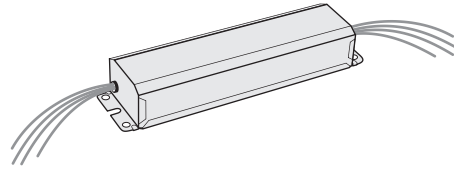


B50RCT

Installation Instructions

REMOTE CONTROL TESTING EMERGENCY EQUIPMENT



PHILIPS
bodine



! 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 one 17 W through 215 W (2' - 8') or two 17 W through 40 W (2' - 4') single pin or bipin fluorescent lamps, including standard, energy saving, HO, VHO, 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.
6. This product is suitable for damp locations where the ambient temperature is 0°C minimum, +50°C maximum. Product is also suitable for installation in sealed and gasketed fixtures. Product is not suitable for heated air outlets and wet or hazardous locations.
7. An unswitched AC power source is required (120 or 277 VAC, 60Hz).
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



Ni - Cd

**THIS PRODUCT CONTAINS A RECHARGEABLE NICKEL-CADMIUM BATTERY.
THE BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY.**

08/04/11

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INSTALLATION

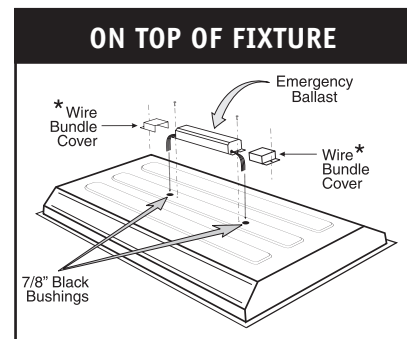
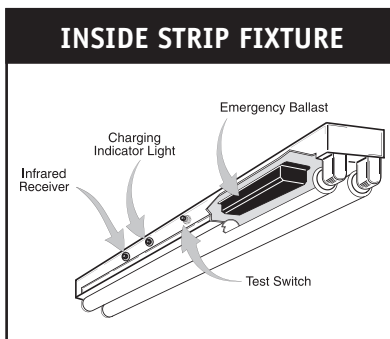
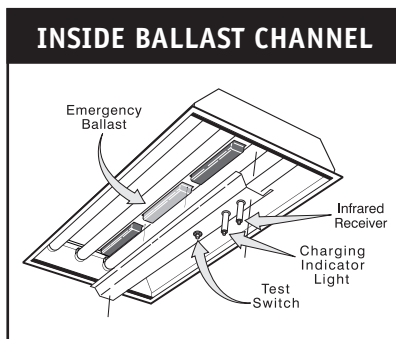


WARNING: TO PREVENT HIGH VOLTAGE FROM BEING PRESENT ON RED & YELLOW OUTPUT LEADS PRIOR TO INSTALLATION, BATTERY CONNECTOR MUST BE OPEN. DO NOT JOIN BATTERY CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED TO THE EMERGENCY BALLAST.

NOTE: Make sure 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.

STEP #1 ▶ INSTALLING THE EMERGENCY BALLAST

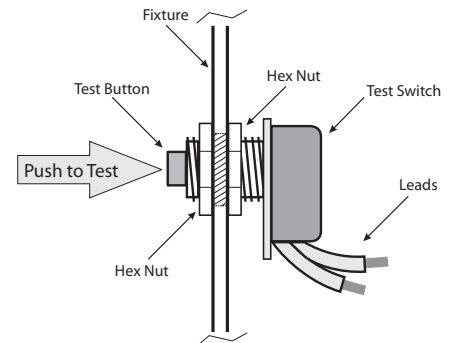
- > Disconnect AC power from the fixture. Remove the ballast channel cover and install the emergency ballast either in the ballast channel or on top of the fixture.* **Remote mounting distance must be less than half the maximum remote mounting distance for the AC ballast. Consult AC ballast manufacturer before remote installation.**
- > Depending on the type of fixture in use install emergency ballast using one of the methods illustrated below.



* For installation on top of the fixture, wire bundle covers (RMC-60) 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.

STEP #2 ▶ INSTALLING THE TEST SWITCH

- > Refer to the illustrations above and 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.
- > Wire the test switch so that it removes AC power from both the emergency ballast and the AC ballast at the same time. (see wiring diagrams)



STEP #3 ▶ INSTALLING THE CHARGING INDICATOR LIGHT

- > Install the CHARGING INDICATOR LIGHT as shown in the illustration on the following page so that it will be visible after the fixture is installed.

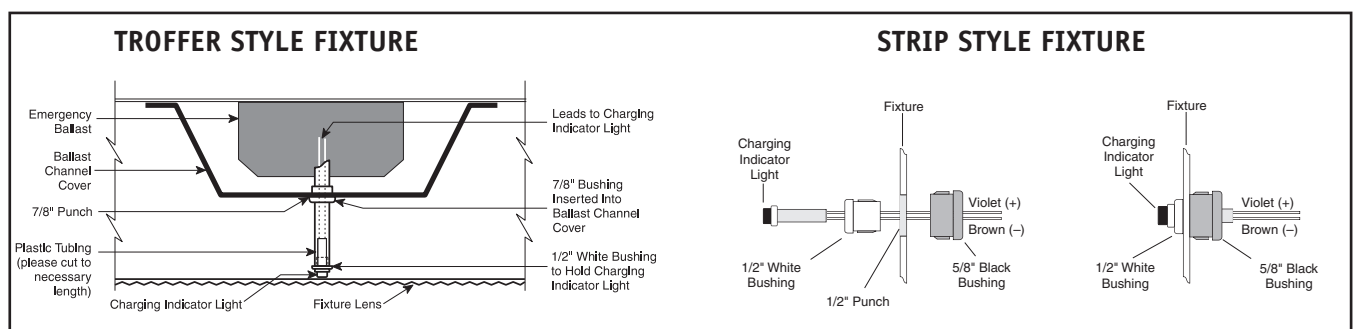
STEP #4 ▶ INSTALLING THE INFRARED RECEIVER

- > Refer to the illustration on the following page and install the infrared receiver and cable assembly as shown. The infrared receivers should be installed flush against the fixture lens and allows line of sight assess with hand held remote control transmitter (Bodine Model WHRCT sold separately).

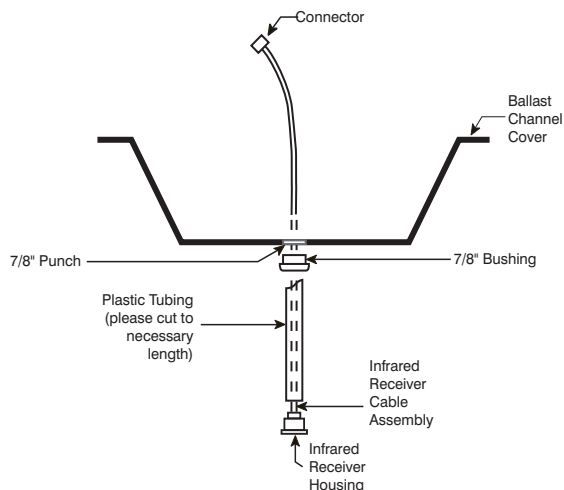
STEP #5 ► WIRING THE EMERGENCY BALLAST

- > Determine the type of AC ballast installed in the fixture.
- > Select the appropriate wiring diagram on back to connect the emergency ballast to the AC ballast and lamp(s). Make sure all connections are in accordance with the National Electrical Code and any local regulations.
- > After installation is complete, supply AC power to the emergency ballast and join the battery connector.
- > At this point, power should be connected to both the AC ballast and the emergency ballast, and the Charging Indicator Light should illuminate indicating the battery is charging.
- > 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.
- > 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.”**

CHARGING INDICATOR LIGHT INSTALLATION

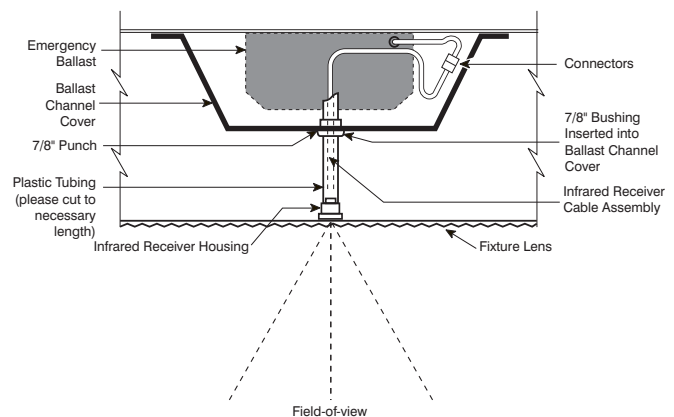


THE INFRARED DETECTOR INSTALLATION



STEP 1

Feed infrared receiver cable assembly connector through plastic tubing, 7/8" bushing, and ballast channel cover. Insert infrared receiver housing into plastic tubing.



STEP 2

Slide plastic tubing through 7/8" bushing. Connect infrared receiver cable assembly to emergency ballast.

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 (internal battery), operating either one or two lamps at reduced illumination for at least 90 minutes. When AC power is restored, the emergency ballast returns to charging mode and delays AC ballast operation for approximately three seconds to prevent false tripping of AC ballast (end-of-lamp life) shutdown circuits. See section below for explanation of remote control testing feature.

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 or two lamps should operate at reduced illumination.
3. Conduct a 90-minute discharge test once a year. One or two lamps should operate at reduced illumination for at least 90 minutes.

! REFER ANY SERVICING INDICATED BY THESE CHECKS TO QUALIFIED PERSONNEL !

REMOTE CONTROL TESTING

The B50RCT offers the unique option of testing the emergency ballast from a remote location. A handheld remote control transmitter (Bodine Model WHRCT, sold separately) is required to use this feature. Testing of emergency ballast operation can still be accomplished by turning AC power off at the circuit breaker or by depressing the test switch.

Remote Control Transmitter Operation: The handheld remote control transmitter has three (3) push-buttons: one for executing a **30-second** test, one for executing a **90-minute** test, and one to abort either test and **reset** the emergency ballast to the "normal" charging mode. The push-buttons are momentary action; hence, they do not need to be held down. The remote control simply initiates the action; however, the function and timing are controlled by the electronics within the emergency ballast.

After fixture installation is complete and AC power is supplied to the fixture, stand beneath the fixture to be tested and point the remote control transmitter at the infrared receiver. Press the **30-second** or **90-minute test** button on the remote control transmitter. The emergency ballast automatically simulates a power outage and runs the lamp(s) from its internal battery for 30 seconds or 90 minutes (depending on the test button selected). (Note: the emergency ballast must charge for at least 24 hours before performing a 90-minute test).

To abort a test at any time, point the remote control transmitter at the infrared receiver and press the **reset** button. The emergency ballast automatically restores the fixture to its operational state before the test.

Note: Use the handheld remote control transmitter near the fixture and within the receiver field-of-view (see Illustration 5).

B50RCT WIRING DIAGRAMS

The following diagrams are typical schematics only. May be used with other ballasts. Consult the factory for other wiring diagrams. Emergency Ballast and AC Ballast must be fed from the SAME BRANCH CIRCUIT.

IMPORTANT TEXT: REFER TO TABLE 1 REGARDING BROWN CONNECTOR

Table 1

LAMP (DIAMETER)	BASE TYPE	WATTAGE (Length)	NO. of LAMPS (EMERGENCY-MODE)	BROWN CONNECTOR
T8,T9,T10,T12 (1", 1¼", 1½")	Single or Bipin	17 - 40 W (2'-4')	1	CLOSED
		40 - 215 W (5' -8')	2	OPEN
LONG COMPACT	4-PIN (2G11)	18 - 39 W	1	CLOSED
			2	OPEN
		40 - 55 W	1	CLOSED
TWIN/QUAD/ TRIPLE TWIN/ QUADRUPLE TWIN-TUBE COMPACT	4-PIN (G24q,GX24q)	18 - 32 W	1	CLOSED
			2	OPEN
		42 W	1	CLOSED
2D	4-PIN (GR10q)	16 - 38 W	1	CLOSED
			2	OPEN
		55 W	1	OPEN

WIRING DIAGRAM for 1-LAMP emergency operation

RAPID START AC BALLASTS

FIG A ONE (1) LAMP RAPID START BALLAST

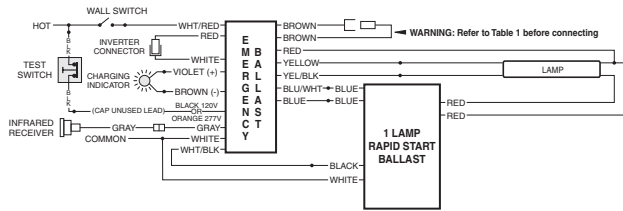


FIG C TWO (2) LAMP RAPID START BALLAST

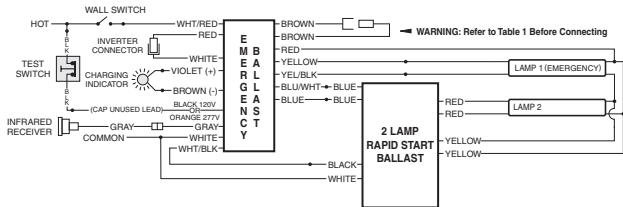


FIG E THREE (3) LAMP RAPID START BALLAST

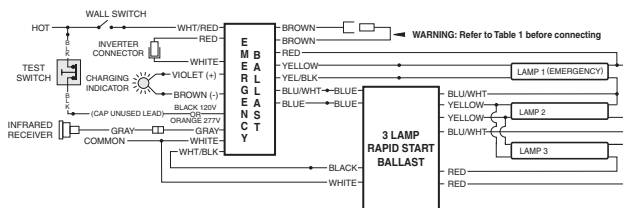
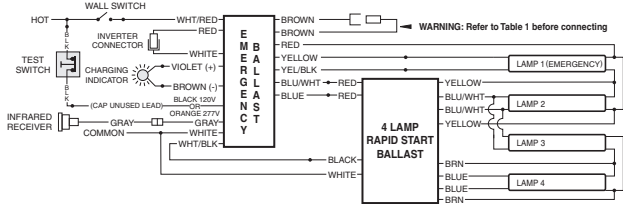


FIG G FOUR (4) LAMP RAPID START BALLAST



INSTANT START AC BALLASTS

FIG B ONE (1) LAMP INSTANT START BALLAST

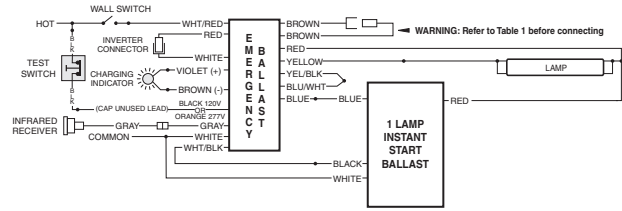


FIG D TWO (2) LAMP INSTANT START BALLAST

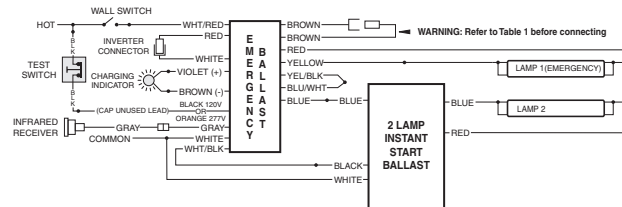


FIG F THREE (3) LAMP INSTANT START BALLAST

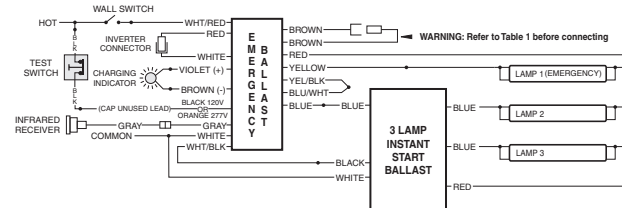
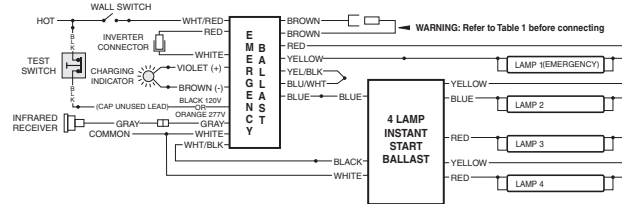


FIG H FOUR (4) LAMP INSTANT START BALLAST



B50RCT WIRING DIAGRAMS

WIRING DIAGRAMS for 2-LAMP emergency operation (2' - 4', 17- 40 W lamps only)

FIG I TWO (2) LAMP RAPID START BALLAST

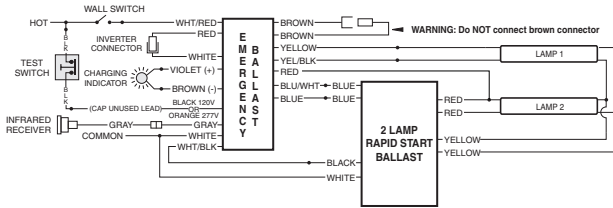


FIG J TWO (2) LAMP INSTANT START BALLAST

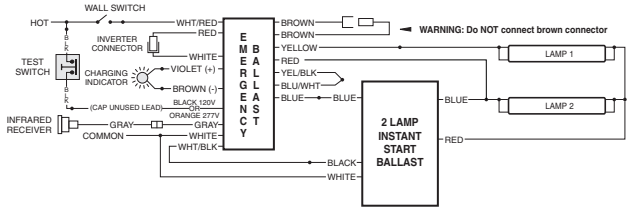


FIG K THREE (3) LAMP RAPID START BALLAST

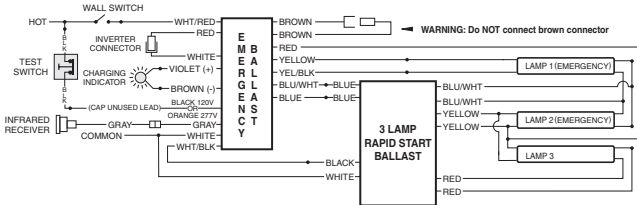


FIG L THREE (3) LAMP INSTANT START BALLAST

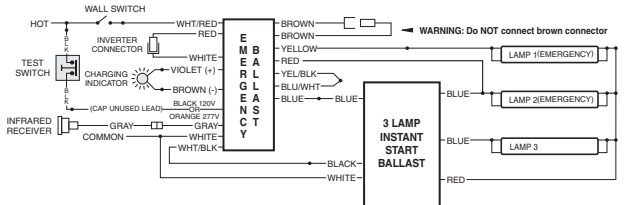


FIG M FOUR (4) LAMP RAPID START BALLAST

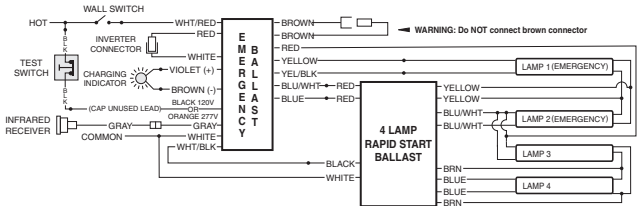
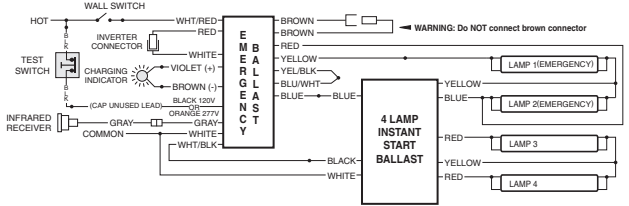


FIG N FOUR (4) LAMP INSTANT START BALLAST



WIRING DIAGRAMS for Emergency-Only fixtures

FIG O ONE (1) LAMP WITHOUT AC BALLAST

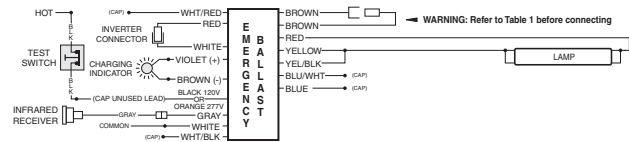


FIG P TWO (2) LAMPS WITHOUT AC BALLAST

