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Bodine Electric B50

Bodine B50 Emergency Ballast Instruction Manual

Model: B50 | Brand: Bodine Electric

INTRODUCTION

The Bodine B50 Emergency Ballast is an electronic device designed to provide emergency illumination for fluorescent lighting fixtures. It includes a backup battery and charger, ensuring that connected lamps remain illuminated for a minimum of 90 minutes during a power outage. This unit operates on 120/277V input and requires a 24-hour recharge time. It is compatible with various compact, linear, and U-bent fluorescent lamp types, supporting a range of wattages from 17W to 215W.



Figure 1: The Bodine B50 Emergency Ballast. This image shows the compact, rectangular metal housing of the ballast with wiring extending from one end. The label clearly displays "PHILIPS bodine B50 FLUORESCENT EMERGENCY BALLAST" along with a recycling symbol.

IMPORTANT SAFETY INFORMATION

- **WARNING:** Risk of electric shock. Disconnect power before installation or servicing.
- Installation and servicing must be performed by qualified personnel only.
- Ensure all wiring connections are secure and comply with local and national electrical codes.
- Do not use this equipment with dimming ballasts or other non-compatible lighting controls.
- This unit is designed for indoor use in dry locations only.
- Do not attempt to open or modify the ballast housing. There are no user-serviceable parts inside.

SETUP AND INSTALLATION

Proper installation is critical for the safe and effective operation of the Bodine B50 Emergency Ballast. Refer to the wiring diagrams provided with the product packaging for specific connections. The following steps outline a general installation procedure:

1. **Power Disconnection:** Before beginning any installation, ensure that all power to the fixture and circuit is disconnected at the breaker panel. Verify with a voltage tester.
2. **Mounting:** Mount the B50 emergency ballast securely to the fixture or in an accessible location near the fixture. Ensure adequate ventilation.
3. **Wiring:**
 - Connect the AC input wires of the B50 to the unswitched AC power supply (120V or 277V, as applicable).
 - Connect the output wires of the B50 to the designated lamp terminals according to the wiring diagram.
 - Ensure proper grounding.
4. **Lamp Compatibility:** Confirm that the fluorescent lamps being used are compatible with the B50 ballast. Refer to the specifications section for compatible lamp types and wattages.
5. **Test Switch Installation:** Install the provided test switch in an accessible location. This switch allows for manual testing of the emergency function.
6. **Power Restoration:** Once all connections are secure and verified, restore power to the circuit. The ballast will begin charging its internal battery.

For detailed wiring instructions, consult the diagram included with your specific product unit. Incorrect wiring can lead to malfunction or electrical hazards.

OPERATING INSTRUCTIONS

The Bodine B50 Emergency Ballast operates automatically. Under normal power conditions, it charges its internal battery while allowing the fixture's normal ballast to operate the lamps. When AC power is interrupted, the B50 automatically switches to emergency mode, illuminating the connected lamps for a minimum of 90 minutes.

Initial Operation and Charging:

Upon initial installation and power-up, the B50's battery will require a full 24-hour charge to reach its rated emergency duration. During this initial charge period, the emergency function may not provide the full 90 minutes of illumination.

Testing the Emergency Function:

Regular testing is recommended to ensure the emergency ballast is functioning correctly. Use the installed test switch to simulate a power failure:

1. Press and hold the test switch. The normal AC power to the lamps should be interrupted, and the lamps should illuminate via the emergency ballast.
2. Observe the lamps for at least 30 seconds to confirm stable emergency illumination.
3. Release the test switch. The lamps should return to normal operation (if AC power is present).

Perform a 30-second functional test monthly and a full 90-minute discharge test annually. Keep records of all tests.

MAINTENANCE

The Bodine B50 Emergency Ballast is designed for minimal maintenance. The internal battery is sealed and maintenance-free. However, regular testing is crucial to ensure operational readiness.

- **Cleaning:** Keep the exterior of the ballast clean and free from dust and debris. Use a dry, soft cloth for cleaning. Do not use liquid cleaners.
- **Battery Replacement:** The internal battery has a typical lifespan of 5 years. If the unit fails to provide 90 minutes of emergency illumination during an annual test, the battery may need replacement. Battery replacement should only be performed by qualified service personnel using genuine Bodine replacement parts.
- **Inspection:** Periodically inspect the wiring and connections for any signs of damage or wear.

TROUBLESHOOTING

If the Bodine B50 Emergency Ballast is not functioning as expected, consult the following troubleshooting guide:

Problem	Possible Cause	Solution
Lamps do not illuminate in emergency mode.	No AC power to the ballast. Battery not fully charged. Incorrect wiring. Incompatible lamps. Defective lamps. Battery end-of-life.	Check circuit breaker and wiring connections. Allow 24 hours for initial charge. Verify wiring against diagram. Ensure lamps are compatible. Replace lamps. Replace battery (by qualified personnel).
Emergency illumination duration is less than 90 minutes.	Battery not fully charged. Battery end-of-life.	Ensure ballast has been connected to AC power for at least 24 hours. Replace battery (by qualified personnel).
Lamps flicker or are dim in emergency mode.	Low battery charge. Incompatible lamps. Defective lamps.	Allow battery to fully charge. Verify lamp compatibility. Replace lamps.

If troubleshooting steps do not resolve the issue, contact customer support or a qualified electrician.

SPECIFICATIONS

- **Model:** Bodine B50
- **Type:** Electronic Emergency Ballast
- **Input Voltage:** 120/277V AC
- **Emergency Illumination Time:** 90 minutes minimum
- **Recharge Time:** 24 hours
- **Compatible Lamp Types:** Compact, Linear & U-Bent Fluorescent Lamps
- **Compatible Lamp Wattage:** (1) 17-215W, 2-8 ft or (2) 17-40W
- **Lamp Bases Supported:** 2-Pin (G13), 2-Pin Mini (G5), Recessed Double Contact (R17d), 4-Pin (2G11)
- **Material:** Copper (internal components), Metal housing
- **Item Weight:** Approximately 3.2 ounces
- **Manufacturer:** Bodine
- **ASIN:** B00JV3GDMQ

WARRANTY AND SUPPORT

Specific warranty information for the Bodine B50 Emergency Ballast is typically provided with the product packaging or

available on the manufacturer's official website. Please retain your proof of purchase for warranty claims.

For technical support, installation assistance, or warranty inquiries, please contact Bodine Electric customer service.

Contact details can usually be found on the product packaging or the official Bodine website. When contacting support, please have your product model number (B50) and purchase date available.

Note: Protection plans may be available from third-party providers. These are separate from the manufacturer's warranty.

