

INSTRUCTIONS

LED T8 Tube Series-Ballast Bypass Single-Ended



RAB Lighting is committed to creating high-quality, affordable, well-designed and energy-efficient LED lighting and controls that make it easy for electricians to install and end users to save energy. We'd love to hear your comments. Please call the Marketing Department at 888-RAB-1000 or email: marketing@rablighting.com



IMPORTANT

READ CAREFULLY BEFORE INSTALLING FIXTURE. RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE.

RAB LED tubes must be wired in accordance with the National Electrical Code and all applicable local codes. Proper grounding is required for safety. THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

WARNINGS:

- **Make certain power is OFF before installing or maintaining fixture.**
- **RISK OF FIRE.** USE ONLY IN PLACE OF FLUORESCENT LAMPS SPECIFIED ON LABEL.
- **RISK OF ELECTRIC SHOCK.** DO NOT USE WHERE DIRECTLY EXPOSED TO WATER. SUITABLE FOR DAMP LOCATIONS.
- **The luminaire wiring has now been modified and will no longer operate fluorescent lamps.**
- Do not use with dimmers.
- This device is not intended for use with emergency exits.

SAFETY INFORMATION:

- (1) To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.
 - (2) Please examine all parts that are not intended to be replaced by the retrofit kit for damage and replace any damaged parts prior to installation of the retrofit kit.
 - (3) Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.
 - (4) Installers should not disconnect existing wires from lampholder terminals to make new connections at lampholder terminals. Instead installers should cut existing lampholder leads away from the lampholder and make new electrical connections to lampholder lead wires by employing applicable connectors.
- If lamp does not light when the luminaire is energized, remove lamp from luminaire and contact a qualified electrician. This device is NOT intended for use with emergency exit fixtures or emergency exit lights. Lamps must be operated within an ambient fixture temperature of -20°C and 45°C to ensure UL compliance.

INSTALLATION INSTRUCTIONS

- 1) Make sure the circuit breaker that supplies the power to the fixture is turned off.
2. Remove lens or diffuser cover (if applicable) and existing fluorescent lamps.
3. Open/Remove ballast wiring compartment cover.
4. Identify the line and neutral wires running from the breaker box to the ballast and confirm the power is off using a voltmeter.
5. Cut all wires connected to ballast, and remove ballast (and starter if present). Dispose of removed ballast and fluorescent lamps in accordance with government regulations in your area.
6. Ensure that the fixture contains non-shunted G13 bi-pin lamp holders (Fig. 1). If socket lamp holders are internally shunted, then replace with new non-shunted socket lamp holders. If socket lamp holders are shunted with a jumper wire, remove wire to convert into non-shunted sockets.

INSTALLATION INSTRUCTIONS (cont'd)

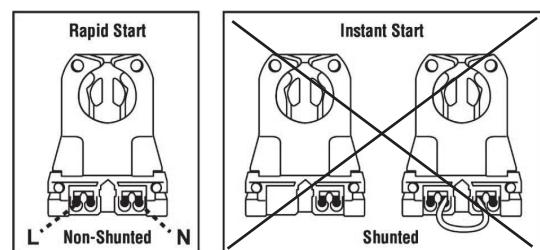


Fig: 1 - Non-shunted & Shunted Lamp Holder

7. LED T8 lamps are designed for single sided connections only (Fig. 2). To install, please wire non-shunted sockets by connecting one wire from the lamp holder to branch circuit L (LIVE) and the other wire at the opposite end to the branch circuit N (NEUTRAL). Do not connect opposite side to power. Use appropriate wires for connection.



Fig: 2 - Single sided connection

Note: These instructions do not cover all details or variations in equipment nor do they provide for every possible situation during installation, operation or maintenance.

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INSTALLATION INSTRUCTIONS (cont'd)

- Make sure all sockets are replaced and wired according to the appropriate wiring diagram. (Fig. 2, 3, 4, 5).

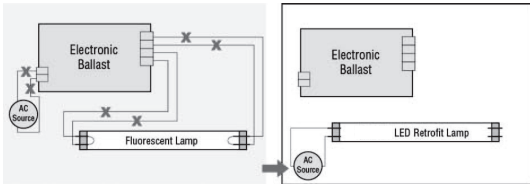


Fig. 3 - Retrofit with One Lamp

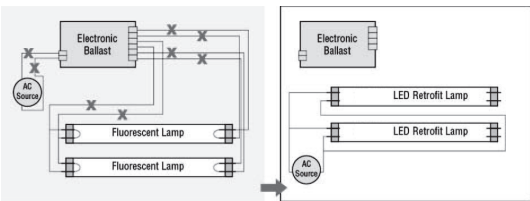


Fig. 4 - Retrofit with Two Lamps

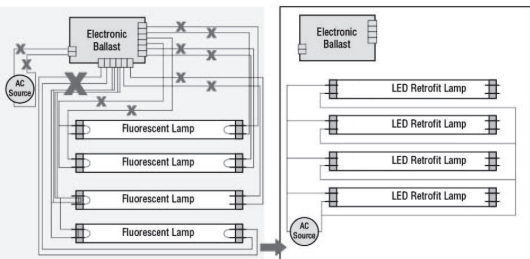


Fig. 5 - Retrofit with Three/Four Lamps

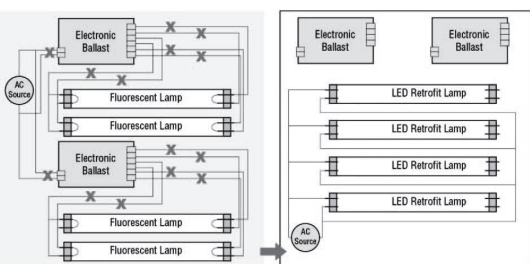


Fig. 6 - Retrofit with Three/Four Lamps & Two Ballasts

- Reinstall the ballast cover to hide all wires.
- Install your new LED T8 replacement lamps.
- Apply Relamping Label on a visible location inside the fixture.
- Reinstall lens or diffusion cover on the light fixture.
- Turn power on at the breaker box.
- Turn on the lights.

PRODUCT NOTES

The products covered in this report are intended to retrofit Type IC or Non-IC recessed mount Listed Fluorescent luminaires with instructions to remove the existing trim. They use maximum four straight tubular lamps with or without a diffuser.

The minimum lamp compartment dimensions are tabulated below:

Model Number	MINIMUM LAMP COMPARTMENT DIMENSIONS (cm)
T20021/T20022/T20023/T20024 T8-8-24-8XX-SE-BYP	61 x 57 x 5
T20025/T20026/T20027/T20028 T8-12-48G-8XX-SE-BYP T20029/T20030/T20031/T20032 T8-15-48G-H-8XX-BYP	124 x 57 x 5

Replace LED lamp only with model: T8-8-24G-8XX-SE-BYP; T8-12-48G-8XX-SE-BYP; T8-15-48G-H-8XX-SE-BYP. Manufactured by RAB Lighting Inc.

WARNING

RISK OF FIRE OR ELECTRIC SHOCK. Install this kit only in luminaires that have the construction features and dimensions shown in the photographs and/or drawings and where the input rating of the retrofit kit does not exceed the input rating of the luminaire.

RISK OF FIRE OR ELECTRIC SHOCK. LED Retrofit Kit installation requires knowledge of luminaires electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.

CAUTION RISK OF FIRE. To avoid potential fire or shock hazard, do not use this retrofit kit in luminaires employing shunted bi-pin lampholders. Note: Shunted lamp holders are found only in fluorescent luminaires with Instant-Start ballasts. Instant-start ballasts can be identified by the words "Instant Start" or "I.S." marked on the ballast. This designation may be in the form of a statement pertaining to the ballast itself, or may be combined with the marking for the lamps with which the ballast is intended to be used, for example F40T12/IS. For more information, contact the LED luminaire retrofit kit manufacturer.

THIS RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY AUTHORITIES HAVING JURISDICTION.