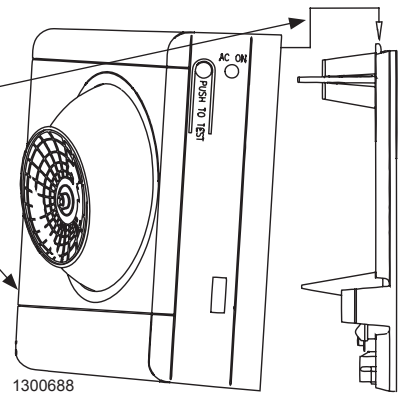


## Final Assembly

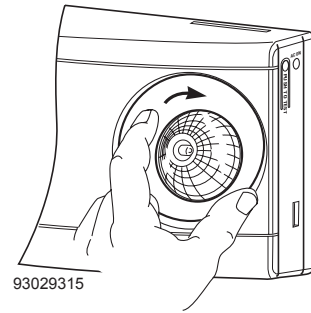
1. Dress wires neatly to prevent pinching.

2. Align housing slots over back plate tabs.

3. Pivot housing and snap closed.



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4. Energize unit. Charge a minimum of 24 hours prior to testing.

5. Press test switch and hold. Aim lamp heads for proper light distribution.

6. Snap directional chevron arrow plugs into exit stencil face as required.

## OPERATION

"AC ON" LED is illuminated when AC power is present.

NOTE: All models are supplied with an AC Lockout circuit, which prevents the lamps and "EXIT" legend from illuminating when the battery is connected and no AC power is present.

NOTE: All models are supplied with a Low Voltage Disconnect circuit, which prevents damage to the battery from deep discharge during prolonged emergency operation.

NOTE: Batteries are often shipped in a discharged state – this is normal. The battery will require charging. Allow several hours of charge before testing the unit.

### Models With SPECTRON® Self-Testing/Self-Diagnostic Circuitry

Models equipped with the Spectron self-testing/self-diagnostic electronics system provide:

■ Visual indication of AC power status

■ Visual indication of self-diagnostic test cycle

—Visual indication of any unit malfunctions including—

■ Battery fault

■ Transfer fault

■ Charger fault

■ Emergency Lamp fault

Spectron equipped units also include:

**Brownout protection:** unit will automatically transfer to emergency operation upon detection of low AC power (approximately 80% of nominal line).

**Time Delay Retransfer:** upon return of normal AC power, unit will remain in the emergency mode for an additional 15 minutes to allow AC power to stabilize.

**LED Status Indicator**

Two LEDs, one green and one red, are provided on the control panel of all models equipped with the Spectron option.

Green Operating Status Indicator:

The green Operating Status Indicator serves as both an AC power and a self-test indicator. During normal operation, the green Operating Status Indicator will be illuminated, indicating the presence of AC power. During all automatic or manual self-test cycles, the green Operating Status Indicator will blink at a 1 Hz. rate.

Red Service Alert Indicator:

Under normal operating conditions, the red Service Alert Indicator will remain "off". In the event the Spectron controller detects a malfunction, the red Service Alert Indicator will blink at a 1 Hz. rate, based on the following table:

Red Status Indicator Code	Description
One blink ON/pause	Battery not connected
Two blinks ON/pause	Battery fault
Three blinks ON/pause	Charger fault
Four blinks ON/pause	Transfer circuit fault
Five blinks ON/pause	Emergency Lamp fault

**Automatic Tests**

The unit will automatically initiate a self-test/self-diagnostic cycle based on the following table:

Testing Period	Duration of Test
Once a month	1 minute
Once every 6 months	60 minutes

**Manual Tests**

Using the unit test switch, users can initiate different duration test cycles based on the following table:

Initiating Action	Test Cycle
Press test switch once	1 minute
Press test switch twice	5 minutes
Press test switch three times	30 minutes
Press test switch four times	60 minutes

Pressing the test switch at any time after a test cycle has begun cancels the remainder of the test and returns the unit to normal operation.

## MAINTENANCE

### TROUBLE SHOOTING

• "EXIT" legend does not illuminate

- Check wiring connections.

• Emergency circuit does not work

- Batteries are shipped uncharged and disconnected. Connect power pack leads and charge before testing.
- Make sure charger board is properly seated.
- Check wiring connections.

### MAINTENANCE

Signs should be tested and maintained in accordance with National Electrical Code and NFPA 101 Life Safety Code requirements.

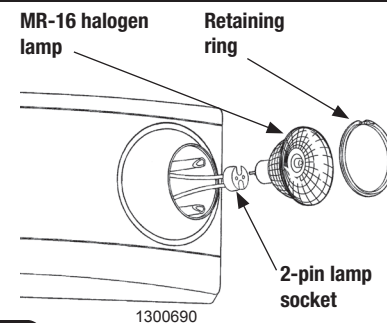
It is recommended that emergency exit signs be tested for 30 seconds once a month and for 90 minutes once a year.

### LAMP REPLACEMENT

**CAUTION:** Halogen lamps operate at high temperatures.

Allow defective lamp to cool completely before replacing.

1. Remove plastic lamp retaining ring.
2. Pull defective lamp from lighting head assembly and unplug lamp from socket
3. Plug replacement lamp into socket and install lamp into lighting head assembly.
4. Reinstall lamp retainer ring (flat side toward lamp).



1300690

### RECYCLING INFORMATION

All thermoplastic parts are recyclable.

All cartons contain recycled materials.

All models contain nickel-cadmium batteries.

Please recycle responsibly.



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DUAL LITE

## LT Tandem Series

Thermoplastic Combination Emergency Lighting Unit/LED Exit Sign

### Installation, Operation and Maintenance Instructions



93029329

## 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. Equipment should be mounted in locations and at heights where it will not readily be subject to tampering by unauthorized personnel.
5. The use of accessory equipment not authorized by the manufacturer may cause an unsafe condition.
6. Do not use this equipment for other than its intended purpose.
7. Servicing of this equipment should be performed by qualified service personnel.
8. Test cycling: the Life Safety Code (NFPA 101) requires testing of emergency exit signs once a month for a minimum of 30 seconds and once a year for a minimum of 90 minutes.

## INSTALLER:

- SEE UNIT LABEL FOR ADDITIONAL MODEL SPECIFICATIONS
- SAVE THESE INSTRUCTIONS FOR USE BY OWNER/OCCUPANT

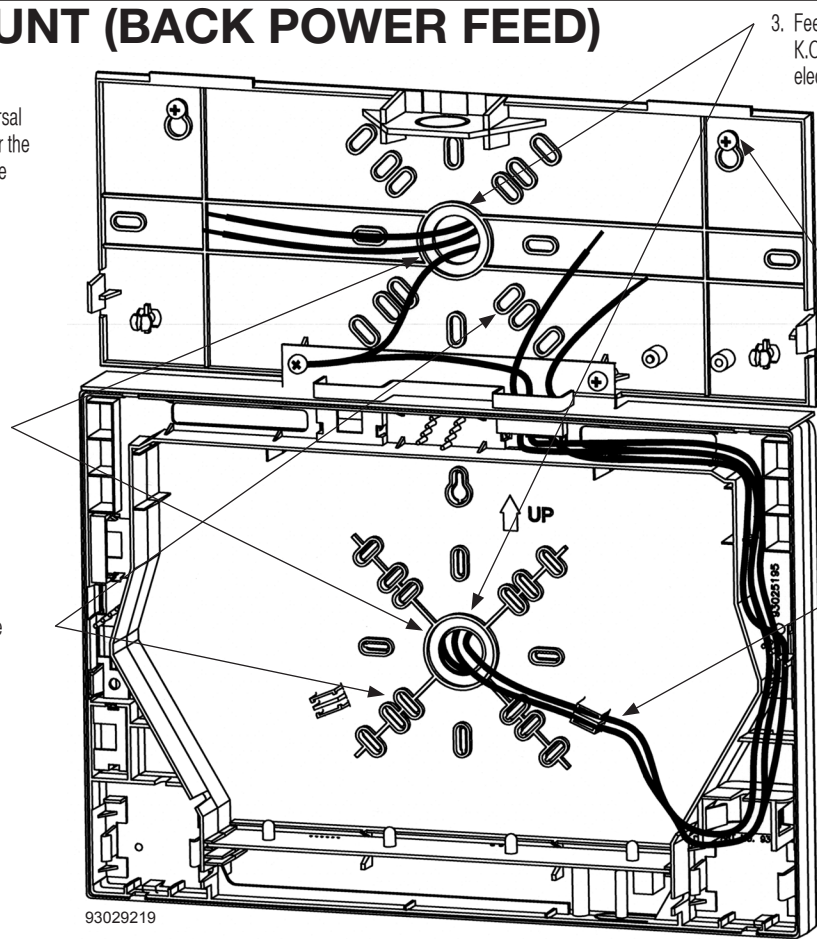
**WARNING** – This product contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm. Thoroughly wash hands after installing, handling, cleaning, or otherwise touching this product.

# INSTALLATION INSTRUCTIONS

## WALL MOUNT (BACK POWER FEED)

**NOTE:** LT models may be wall mounted using the universal mounting pattern in either the unit or exit sign back plate (see instructions below).

1. Remove center □" K.O. in selected back plate.
2. Remove appropriate back plate K.O.s for electrical box screws.



3. Feed wires through center K.O. and mount back plate to electrical box.

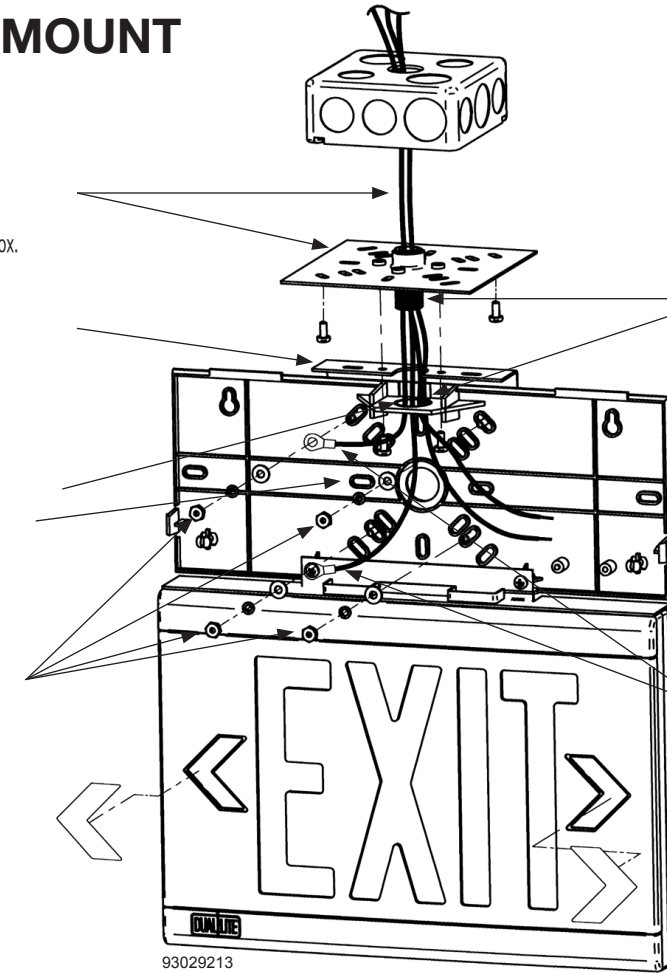
**CAUTION:** If the LT model is mounted to the electrical box from the exit sign back plate, the emergency lighting unit must be mechanically secured to the wall using the keyhole K.O.s provided in the back plate.

4. If mounting by the exit sign back plate, route utility wiring as shown for final connection inside the unit housing.

93029219

## CEILING (TOP) MOUNT

1. Feed building wires through threaded nipple in ceiling mount base plate and affix the plate to the electrical box using screws provided with box.
2. Attach unit mounting bracket to screw studs in base plate using two screws provided.
3. Remove □" K.O. in unit back plate top flange and 4 appropriate K.O.s in unit back plate mounting pattern.
4. Place unit back plate onto screw studs in bracket assembly and secure with #8 locking hardware provided.



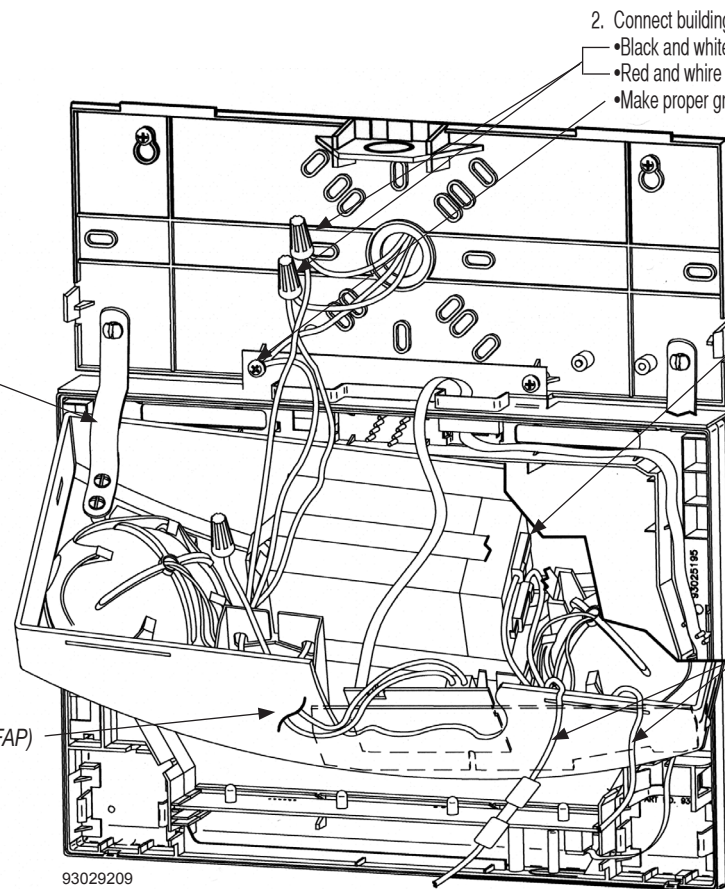
**CAUTION:** Make sure the threaded nipple (used as the wiring channel) extends from the base plate through the □" hole in the unit back plate top flange.

**IMPORTANT:** For ceiling mounted applications, two grounding pig tail leads are provided. Both grounding pig tails must be properly connected to the building utility ground for safety reasons.

93029213

## ELECTRICAL CONNECTIONS (ALL MODELS)

1. Attach unit housing to back plate by plastic hinge straps provided.



2. Connect building wires to transformer leads.
  - Black and white wires for 120V (cap unused lead)
  - Red and white wires for 277V (cap unused lead)
  - Make proper ground connection

3. Connect red circuit board lead to (+) battery terminal.

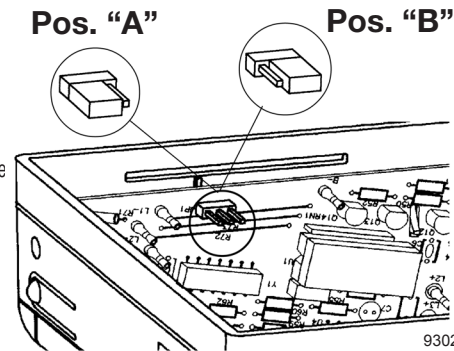
4. Connect remote lighting load to yellow (-) and blue (+, fused) pigtail leads provided (remote capacity models only).

5. **Fire Alarm Panel Interface Option (-FAP)**  
Connect the two violet pigtail leads from the alarm module to appropriate 24 volt AC or DC fire alarm panel wires. Wiring connections may be made inside the unit housing or within the electrical box.

93029209

## REMOTE CAPACITY MODEL JUMPER SETTING

**LT\_\_3 Models only**  
Remote capacity models provide sufficient battery capacity to operate one additional 5 watt remote lighting fixture. Remote capacity models with the Spectron® option are shipped from the factory with a load sensing jumper provided as shown in position "A" of the adjacent illustration. In this position, the Spectron diagnostic circuitry can sense a failure in any of the unit's three connected lamps (two integral and one remote).

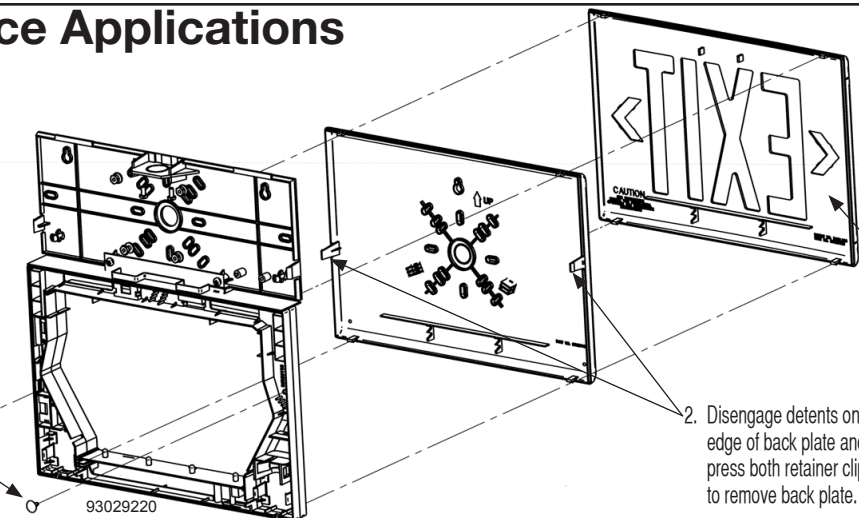


**IMPORTANT**  
If the third (remote) lighting head is not to be connected (for the purpose of extended run time or other reasons), the load sensing jumper must be reinstalled as shown in Position "B" to prevent a false lamp failure indication.

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## Double Face Applications

1. Remove safety tabs to free back plate retainer clips.



3. Place double face stencil assembly onto back side of exit frame and snap into place.

2. Disengage detents on bottom edge of back plate and press both retainer clips inward to remove back plate.

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continued...