



LED Luminaires (LUR Series 2nd Gen Install and Troubleshooting Guide)



BEFORE YOU BEGIN

Read these instructions completely and carefully.



WARNING/AVERTISSEMENT

RISK OF FIRE OR ELECTRIC SHOCK

- Turn power off before inspection, installation or removal.
- Properly ground electrical enclosure.
- Follow all NEC and local codes.
- Only those open holes indicated in the photographs and/or drawings may be made or altered as a result of kit installation. Do not leave any other open holes in an enclosure of wiring or electrical components.
- LUR LED retrofit kit installation requires knowledge of luminaires electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.
- To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.
- Install this kit only in the 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.
- Use only UL approved wire for input/output connections. Minimum size 18 AWG or 14 AWG for continuous runs.
- When using multi-branch wire circuits with a shared neutral, do not operate any circuit with the neutral open. Also ensure all neutral connections are secure before energizing the circuit. An open neutral can cause an overvoltage condition at the luminaire power supply.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. CAN ICES-005 (A) / NMB-005 (A).

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



Important Notes for Installation

IMPORTANT - Maximum Length of Electrical Run

Ensure that maximum safe working load of the fixture's suspension brackets is not exceeded after LUR retrofit kit is added.

Prepare Electrical Wiring



Electrical Requirements

- The LED fixture must be supplied with 120-277VAC, 50/60Hz and protected by a max. 20A circuit breaker. Use min. 75°C supply conductor.



Grounding Instructions

- The grounding and bonding of the overall system shall be done in accordance with National Electric Code (NEC) Article 600 and local codes.

IMPORTANT - During Installation

1. When Installing, use clean gloves in order to avoid fouling the lens and photoband.
2. All provided screws must be screwed in and tightened to ensure that the retrofit kit is safely attached to existing luminaire. Max torque: 33 lbf-in.
3. Minimum distance from ceiling to luminaire: 3 in.
4. a) Maximum length of electrical run: 120V: 176 ft. / 277V: 412 ft.
b) During Install, please add voltage drop per 8 ft. (0.01V/8 ft.)
5. It is recommended to use the optional tether kit (93064841) to ensure extra mechanical security on final install.
6. a) Ensure to cover and disconnect any unused dimming circuit to avoid accidental connections between themselves (see Wiring Diagram on last page).
7. For any additional AC circuit in the existing power drop not being used, please perform the following:
 - Disconnect the Circuit not being used. Strongly recommended to do this at the nearest junction box level.
 - Note the breaker ID corresponding to the unused electrical circuits.
 - Close the breaker not in use with a Breaker Lock along with a label stating the following:
 - o "Circuit Disabled per LED Lighting Project 2019"
8. Ensure Master and Satellite sequence is respected to avoid fixture overloading.
 - In the event that 2 masters were placed back to back after finishing a site, please reach out to correct contact to order a 4FT SKU, which can be used to replace the mis-placed MASTER fixture. This step is crucial as this will impact the Lumen Maintenance of the fixture
9. By using this retrofit kit, you are not required to remove the existing ballast and can be kept inside the fixture. Please note that the AC electrical circuit feeding the ballast is disabled (See Note 7 above)

Save These Instructions

These instructions do not purport to cover all details or variations in components nor to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problem arise which are not covered sufficiently for the purchaser's purpose, the matter should be referred to Current. Current does not claim liability for any installation not performed according to this guide or not by a qualified electrician.

Required Tools

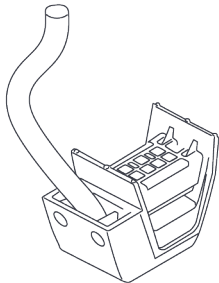
- Portable drill with 1/4" hex drive bit
- Screwdriver
- Knock-out Punch Set (see instructions at page 5)
- 1/4" Socket Nut
- Splice Connector (UL Listed, Max 20A & 14AWG)

Kit Components

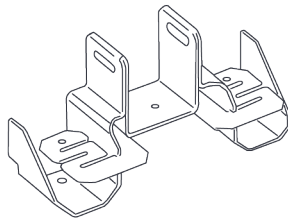
LUR Starter Kit

A starter kit is required for each existing power drops. The starter kit contains:

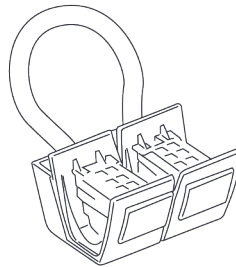
- Starter Bridge (x1)
- Suspension Bracket (x2)
- B-Bridge (x1)
- Finisher Bridge (x1)



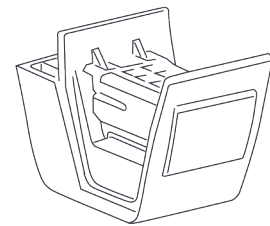
Starter Bridge



Suspension Bracket



B-Bridge



Finisher Bridge

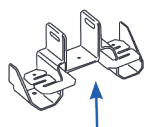
Note: If more Starter Bridges are needed and there is a leftover of B-Bridges, you may cut the B-Bridge in half to make 2 Starter Bridges

Regular LUR Kit

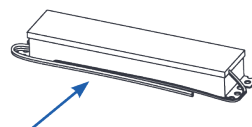
LUR Gen 2 Retrofit kit comes in an 8 ft. configuration. The kit contains:

- 4 ft. light engine (x2)
- Master (x1)
- Satellite (x1)

The master LE has an integrated driver. Each 4 ft. unit comes with to a bridge and a suspension bracket, pre-attached.



Suspension Bracket

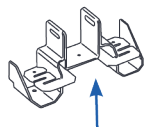


Integrated Driver



Master Light Engine

Bridge Connection



Suspension Bracket



Satellite Light Engine

Bridge Connection



Power Drop

Before initializing a row of continuous run, locate the existing power drop.

Installation of a Retrofit Kit

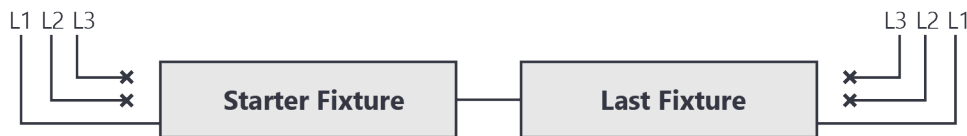
Note: Fixture shown below is an example; please follow steps as needed according to the fixture being retrofitted.

1. Remove the fluorescent tubes.
2. Open fixture (remove belly pan) and disconnect the AC electrical circuit from the main drop.

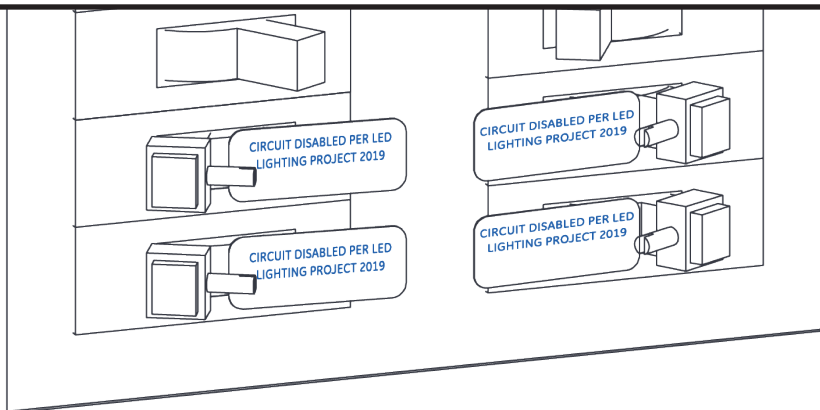
Important

For the Starter Fixture, disconnect all AC electrical circuits that will not be used/connected to the starter bridge. It is strongly recommended to disconnect the electrical circuit at the nearest junction box.

- If the electrical circuit is closed (i.e. it will not be connected to another row of lighting fixtures), the last fixture of the row will need a Finisher Bridge.
- If the electrical circuit is being carried over to another fixture row, the last fixture will need a Starter Bridge to feed the AC power to another row (See illustration below)



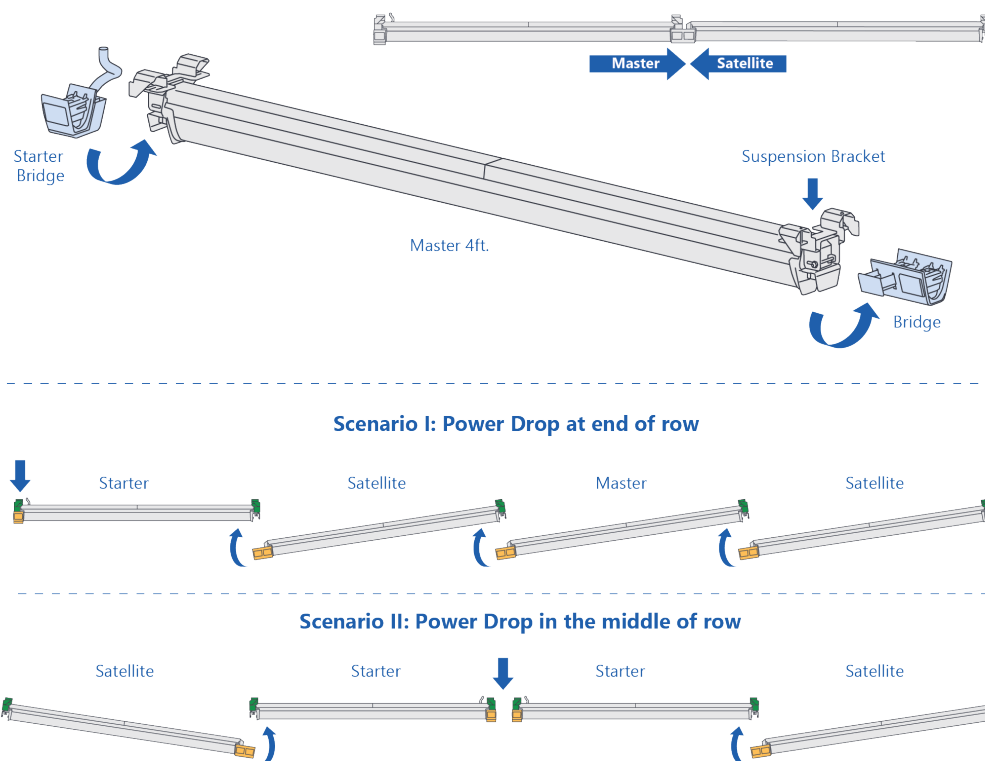
Note: L1/L2 and L3 represents AC electrical circuits. In certain applications, multiple electrical circuits will be present at the start of a lighting fixture row. During the retrofitting process, please ensure that all unused electrical circuits are properly disconnected per NEC code and that their respective breakers are turned off



Note: For all unused disconnect lines, turn off their respective breaker, lock with a breaker lock and apply a label stating “**Circuit Disabled per LED lighting project 2020**”. This will help traceability in the future.

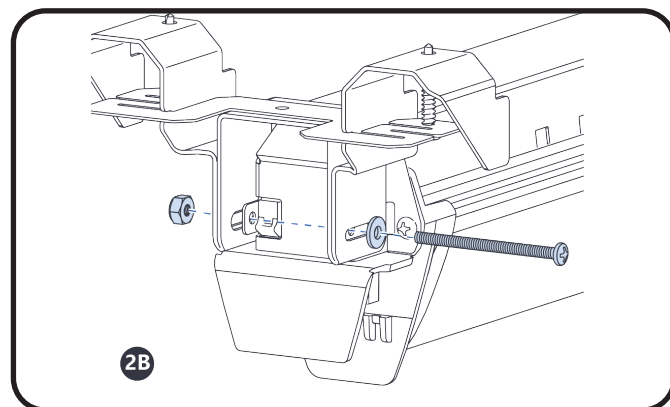
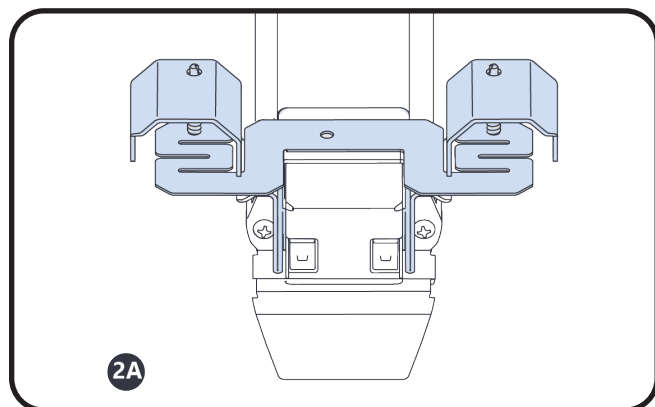
Starter Fixture Installation

To begin installation LUR Gen 2 fixtures, a starter kit is needed. The kit will be used to convert a standard MASTER light.



- 1 On the master 4 ft., remove the attached bridge connection. Pull out the lock using a flat head screwdriver, then slide the bridge off the end cap by moving the fixture away from the bridge connector.

*In the scenario where the power drop is in the middle of a row, two starter fixtures will be required.



- 2 Install the suspension bracket on the master fixture on the side where the bridge connection was removed. Place the suspension bracket in the orientation shown in 2A, then align it with the holes of the PSU cover. Insert the screw and lock it using a washer and nut as shown in 2B.

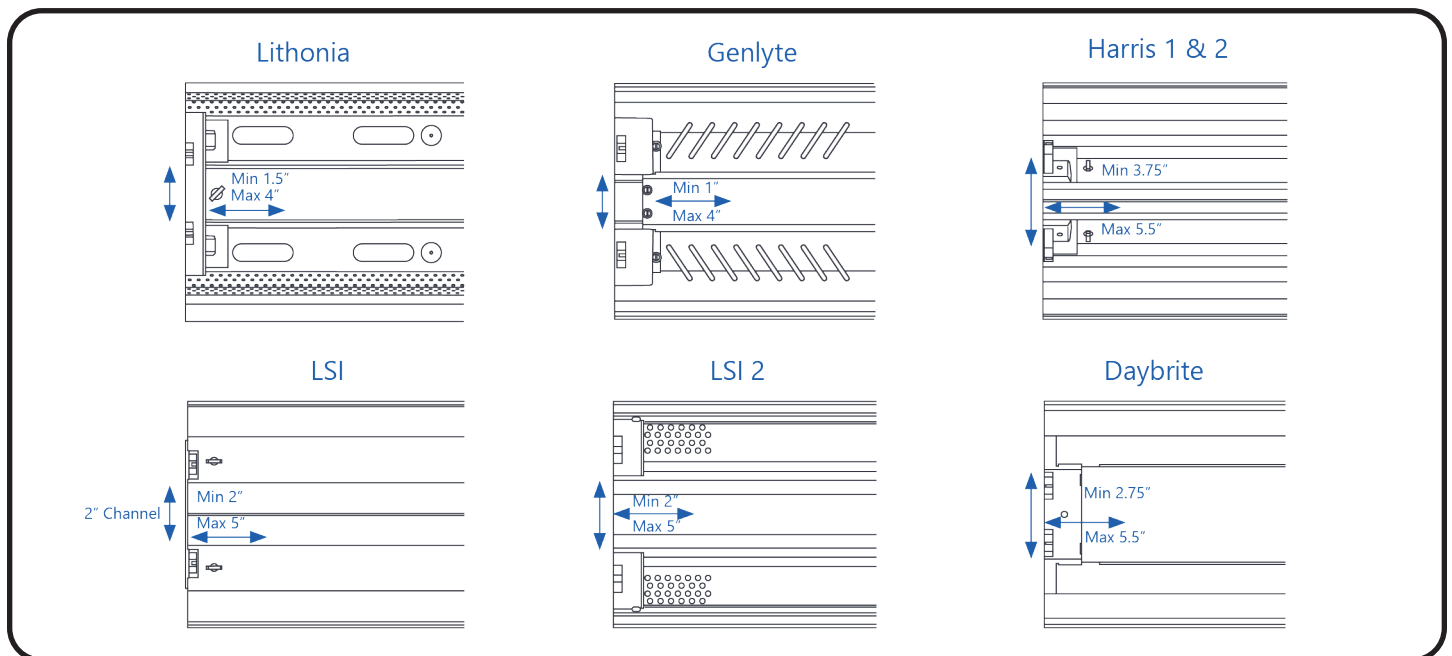
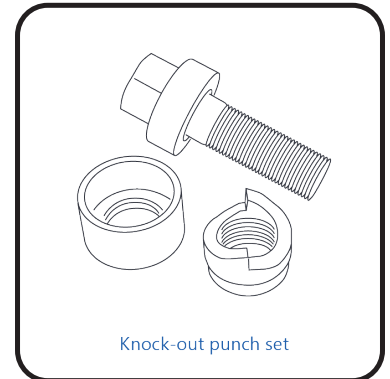
NOTE: The first fixture with the starter bridge will have 2 suspension brackets, while every additional 4 ft. will have 1 suspension bracket.

Starter Fixture Installation - Continued

- ③ Use a knock-out punch set to make a 7/8" punch hole in the cover plate reflector within the range indicated in the diagrams of step 3, based on the fixture being retrofitted.

If permitted, use up-light slot in lieu of punch hole to pass through starter harness

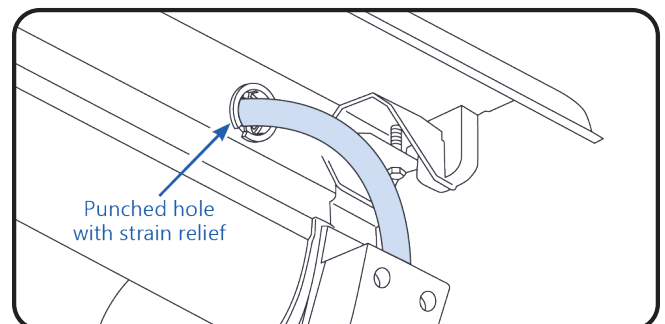
- Ⓐ To make a punch hole clean and accurate, use a multi-bit or a mesh to make the initial hole of 3/8". When making the punch, ensure that all shavings are contained.
- Ⓑ Insert the die in the pilot of the appropriate dimension through the hole and the punch on the other side of the metal cover plate with the sharp part towards the metal plate. Rotate the punch until it is close to the metal plate and use a key, to rotate the pilot until a clean hole is made.



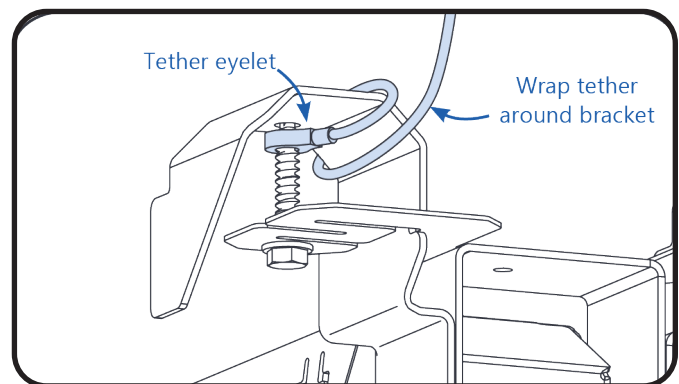
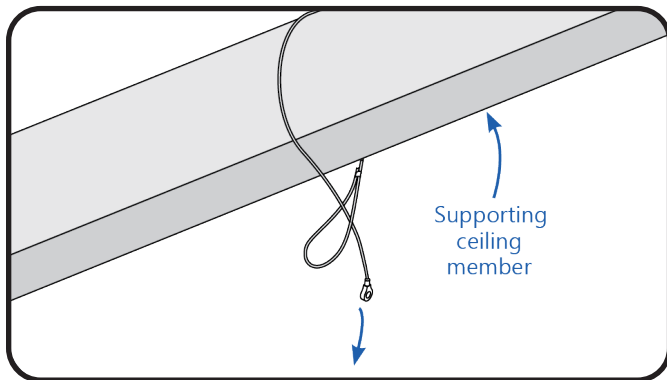
- ④ Install the strain relief into the punched hole and insert the wires of the starter harness through the hole and connect it to the main drop, while letting the starter bridge hang through the hole.

** For up-light retrofitted fixture (X-wing, Lithonia etc.), use the up-light slots to pass the power chord and access existing knockout on the enclosure

- ⑤ Rotate the light fixture and screw in the 2nd suspension bracket, connect the starter harness in the endcap as shown below and insert the bridge lock in the starter bridge. Follow the steps of the regular fixture install to complete the installation.



Starter Fixture Installation - Continued

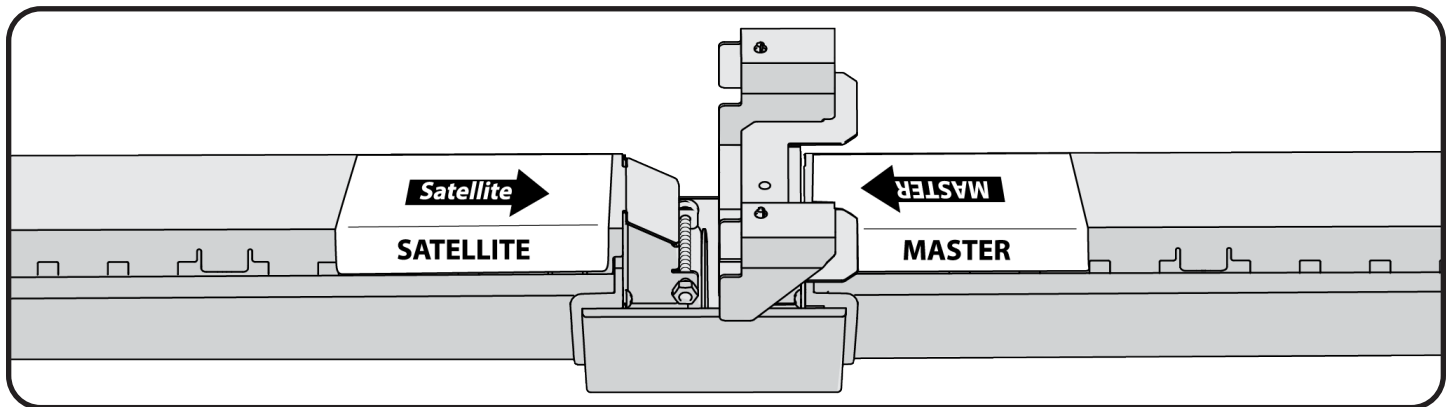


- ⑥ Wrap the tether over a supporting ceiling member, and slip its loop around the fixture's metal bracket. (Example shown; choose wrapping location wherever possible). The eyelet will be placed between the screw and the bracket (right). For every row of fixtures, 2 tethers must be installed per 8 ft. for the first and last fixtures in the row. For all other fixtures, one tether must be installed per 8 ft. Screw brackets into fixture.

NOTE: Max torque is 33 lbf-in to avoid deforming bracket.

NOTE: Do not remove spacers on the brackets' screws, as they are meant to stay on screws after installation.

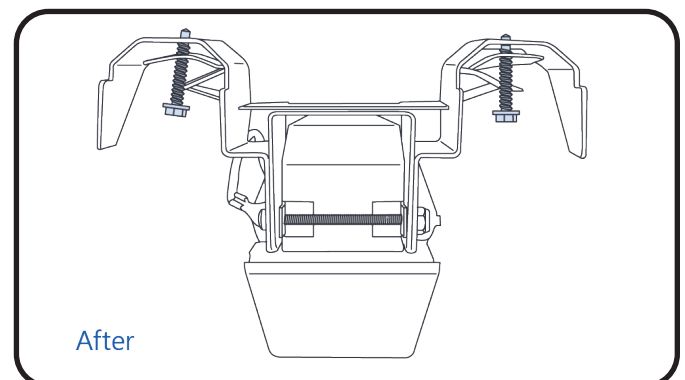
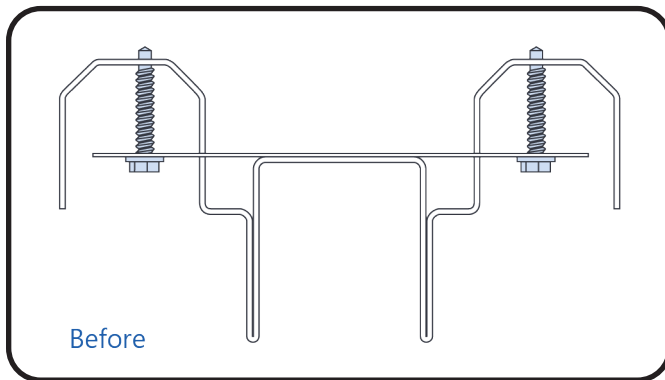
Regular Fixture Installation



The regular LUR fixture comes in a configuration of two 4 ft. LE: the master and the satellite. Ensure that the label arrows are facing the same direction to have the correct wiring convention. The labels are located on both the top and side of the fixture.

**If there is a bad sequence of Master-Satellite on a row after installation, replace the wrongly-positioned fixture by a 4FT SKU.

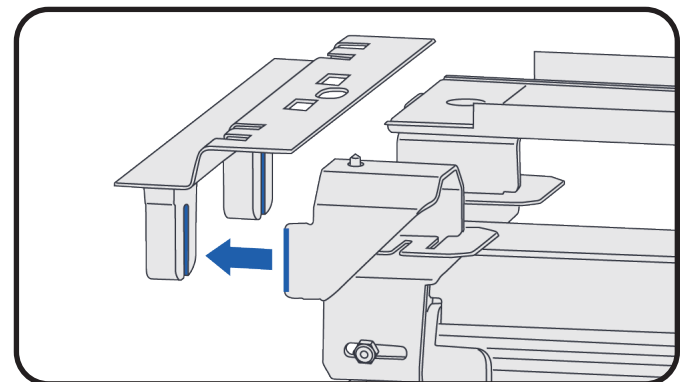
Regular Fixture Installation - Continued



① Ensure drilling screws are mounted properly engaging both components of the suspension bracket.

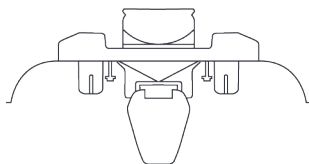
② Hold the fixture vertically and align both edges of the suspension bracket with the center of the tombstones.

The diagram illustrates the desired alignment.

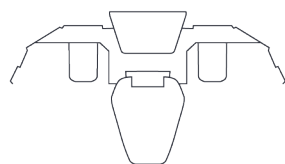


The diagram below indicates the alignment for different retrofitted fixture

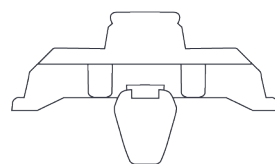
types. LSI Fixture



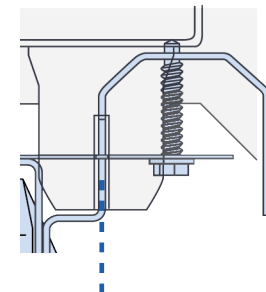
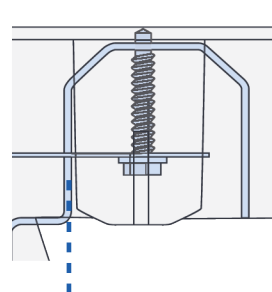
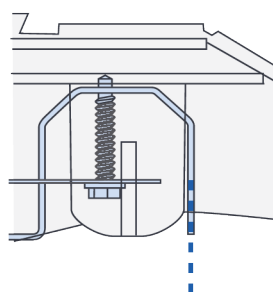
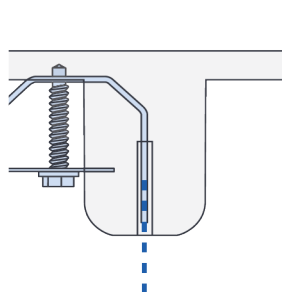
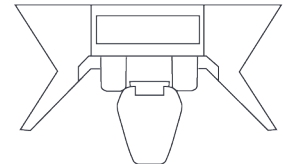
Genlyte Fixture



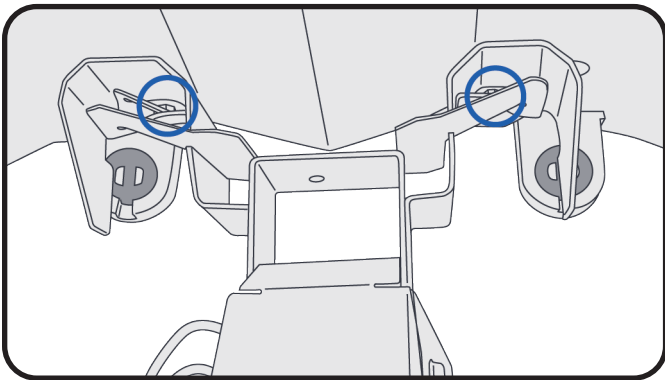
Lithonia Fixture



Day-Brite Fixture



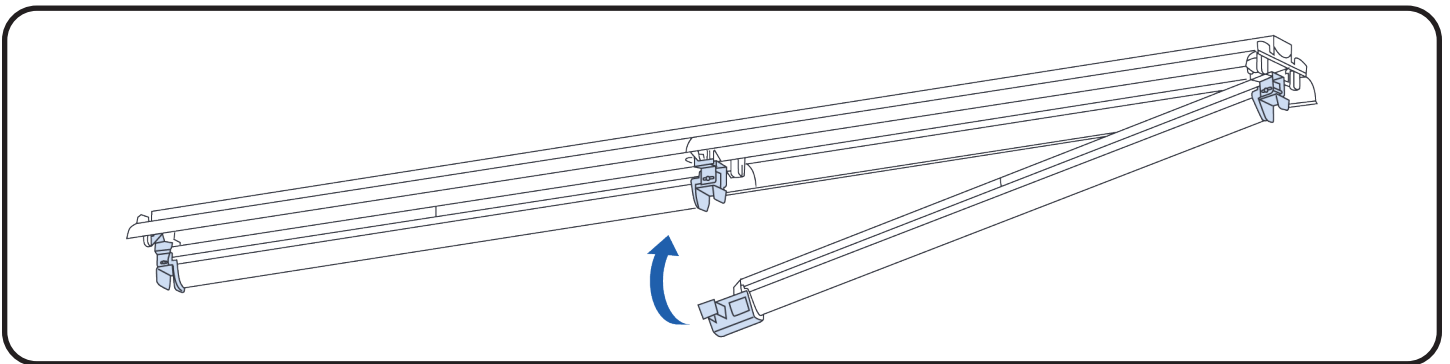
Regular Fixture Installation - Continued



- 3 Drill the screws through the suspension bracket into the reflector.

NOTE: The bottom tab will bend during the drilling process.

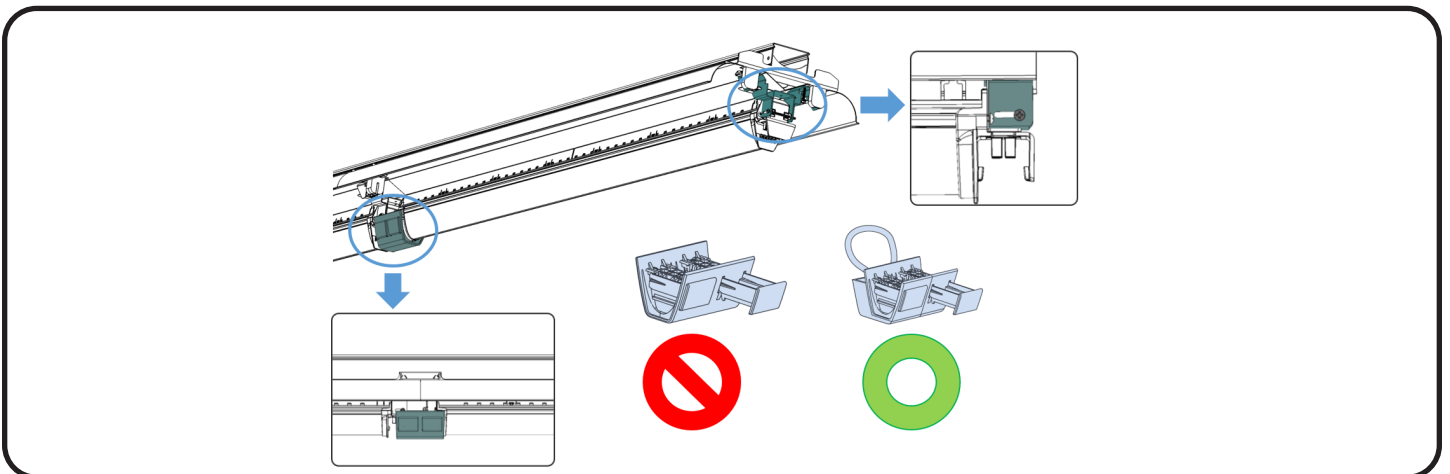
NOTE: Repeat this step for each fixture end in the case of a starter fixture.



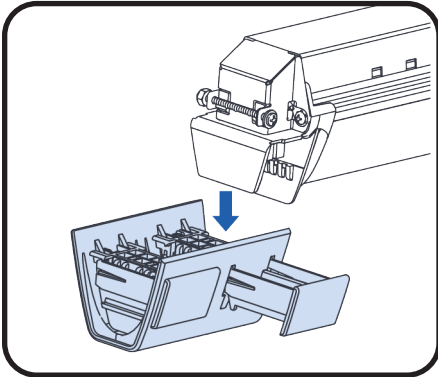
- 4 Open the bridge lock using a flat head screwdriver, as shown in the figure below. Rotate the fixture to a horizontal position and attach it to the adjacent fixture through the bridge. Lock both bridge locks to ensure the assembly stays in place.

NOTE: LUR Luminaires are designed for smooth continuous run install. Should additional force be required to make connections between luminaires, ensure that mounting geometry is correct and if needed, refer to conditional step 5 or refer to troubleshooting guide on the last page.

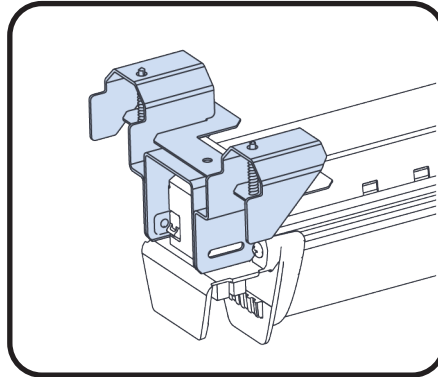
- 6 Conditional Steps: Only follow this step in the case of a gap between adjacent fixtures. If the regular bridge does not fit even when the fixture is slid to the maximum extent (refer to figure below) use a B-Bridge instead to account for the extra gap.



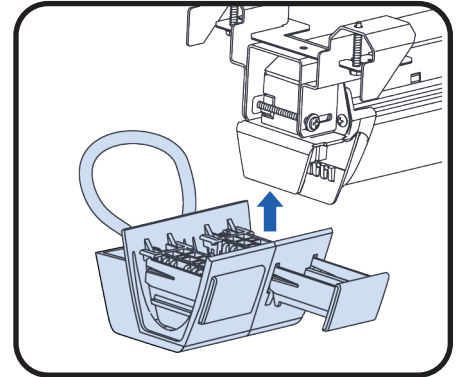
Regular Fixture Installation - Continued



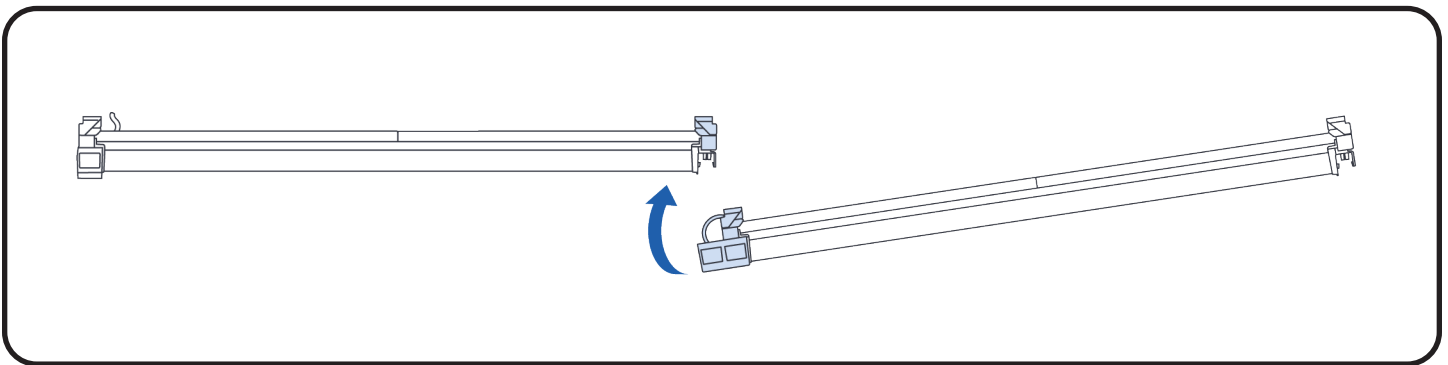
- 5A** Pull the lock. Remove the regular bridge by sliding it downwards. Install a suspension bracket.



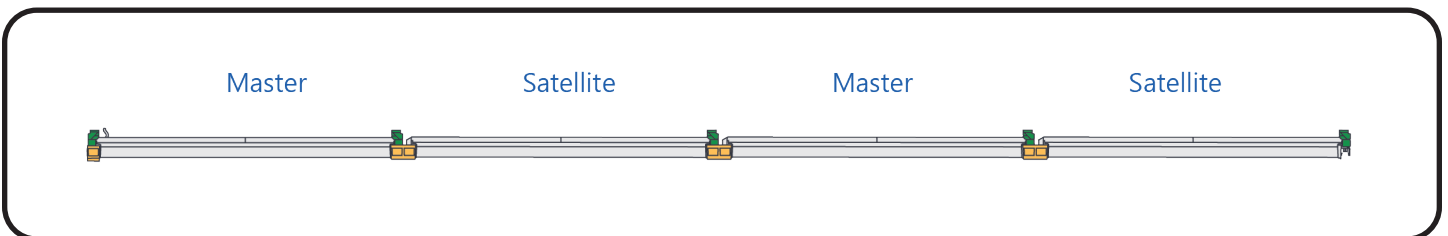
- 5B** Install a suspension bracket instead of the bridge. There should be a suspension bracket on each side of the B-Bridge.



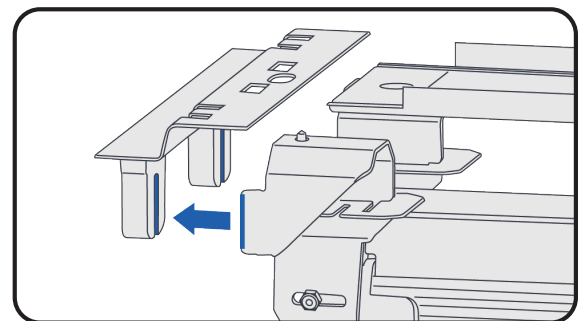
- 5C** Pull the lock. Remove the regular bridge by sliding it downwards. Install a suspension bracket.



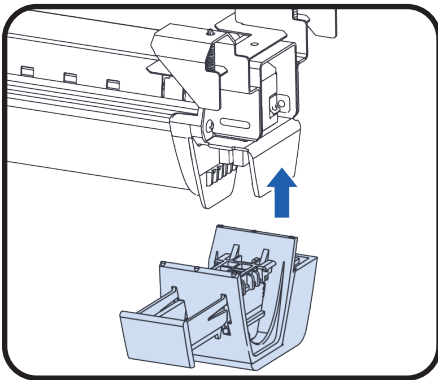
- 5D** Rotate the fixture to a horizontal position and attach it to the adjacent fixture through the bridge. Lock both bridge locks to ensure the assembly stays in place.



Note: The suspension bracket comes with a slot to allow adjustment in the field to accommodate variance in length. For best practices, start the fixture towards the middle as shown on the right. Upon installing the following fixture, if it cannot reach the bridge connector, slightly shift the fixture close by utilizing the space provided by the slot in the suspension bracket. If the suspension bracket is not reaching the tombstones, the fixture must be converted to a starter fixture and use a B-Bridge to continue installation.



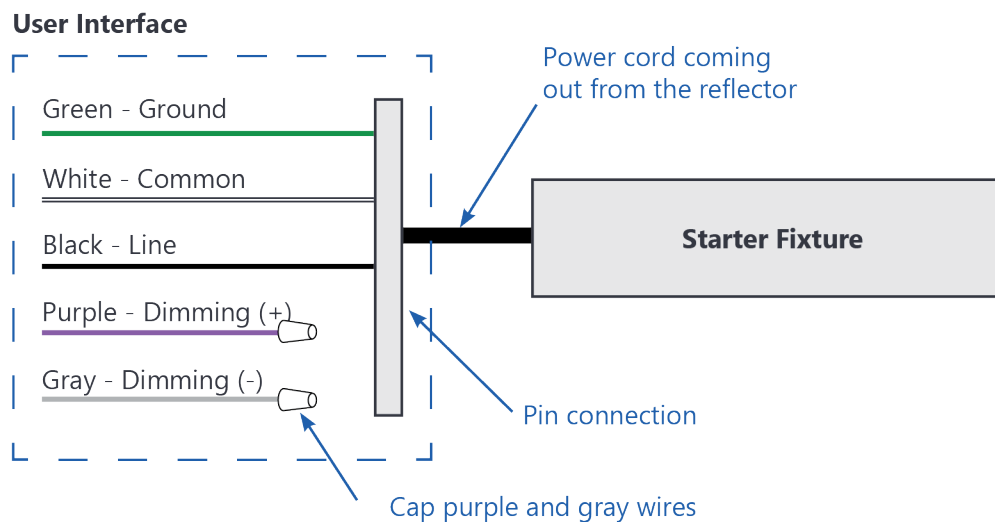
Regular Fixture Installation - Continued



- ⑥ The last fixture in a continuous fixture requires a finisher bridge. Remove the bridge from the light engine and install the finisher bridge on the bracket side of the fixture. Insert the bridge lock, as shown in the figure to the left.

Wiring Diagram

Follow the wiring instruction below to connect the starter fixture to the power source. Wiring for the rest of the continuous line of fixtures is ensured by the bridge connections.



Troubleshooting

Luminaire will not turn on	• Check that the color of the supply side wires matches the color of the wires they are connected to. • Check that all wire connectors and bridges are properly connected. • Verify that the input voltage is within specs. • Verify that each 8 ft. section has one master and one satellite fixture. • Verify that label arrows are all pointing in the same direction.
Luminaire will not dim	• Check that all wire connectors and bridges are properly connected. • Verify that label arrows are all pointing in the same direction.
Luminaire cannot be connected	• If the gap between fixtures is too large, use the B-Bridge instead of the bridge. • Ensure that mounting geometry is correct