

Installation Instructions for
**Entra Round or Square Type IC, Air-tight
 New Construction Adjustable LED Housing**

ELEMENT
 a brand of TECH LIGHTING®

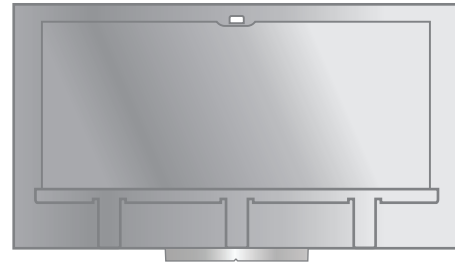
LED - ROUND/SQUARE

GENERAL PRODUCT INFORMATION:

This product is safety listed for damp locations with all trims, and for wet locations with trims EN3RFB-H__; EN3RLB-H__; EN3SFB-H__; and EN3SLB-H__.

This product may be dimmed with a standard electronic dimmer and/or 0-10V dimmer.

This instruction shows a typical installation.

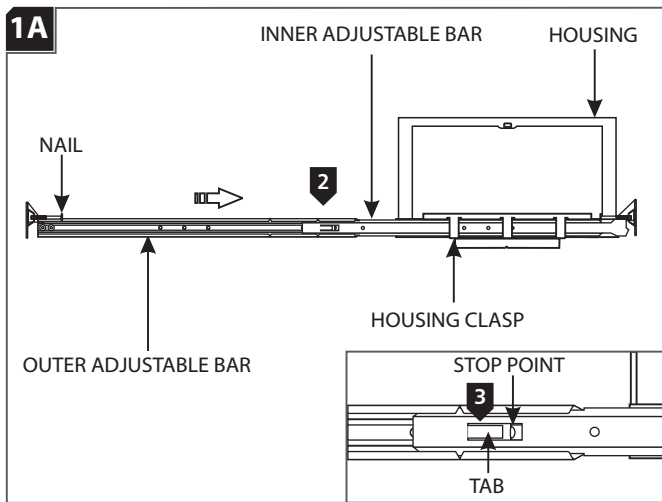


CAUTION - RISK OF FIRE

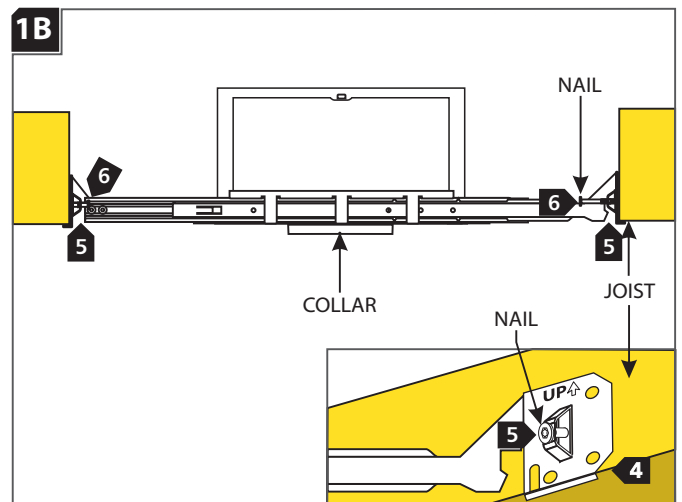
This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.

Use minimum 90°C supply conductors.

Install the Housing



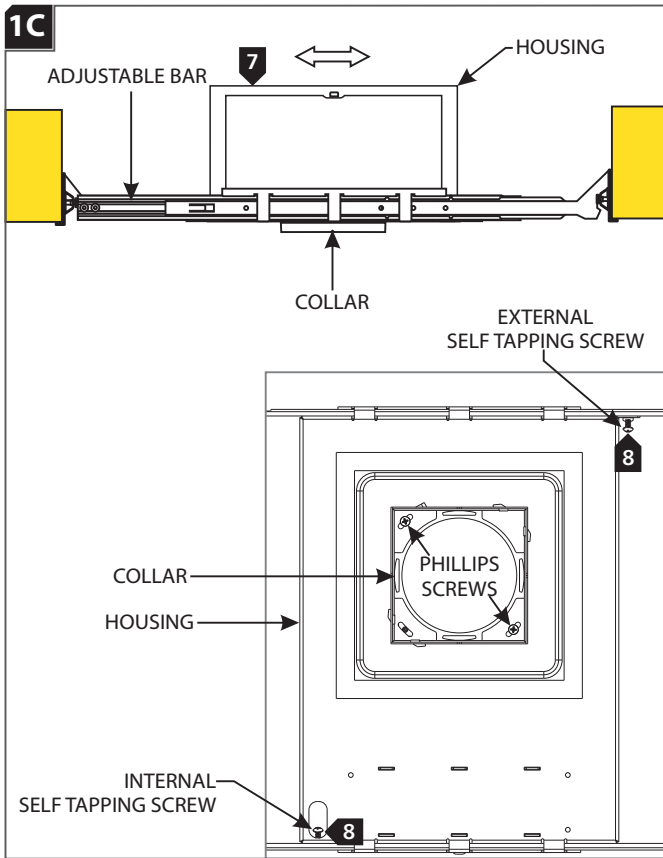
- 1 Remove the plaster ring from the housing.
For flangeless trims, save the ring for step 4A.
For flanged trims, the plaster ring can be discarded.
- 2 Slide the inner adjustable bar completely through the three housing clasps. **Make sure the "UP" marking is pointing upward.**
- 3 Slide and push the outer adjustable bar completely onto the inner adjustable bar so that the tab clicks into place behind the stop point. This will prevent the adjustable bars from coming apart.
- 4 Repeat steps 2 & 3 for the other side of the housing.



NOTE: The adjustable bars can be mounted to joists that are spaced 16" - 24" apart.

- 5 Align the bottom of the end plates with the bottom of the ceiling joists.
- 6 Level the adjustable bars and, with a hammer, tap the nails completely into the joists to secure the adjustable bars.

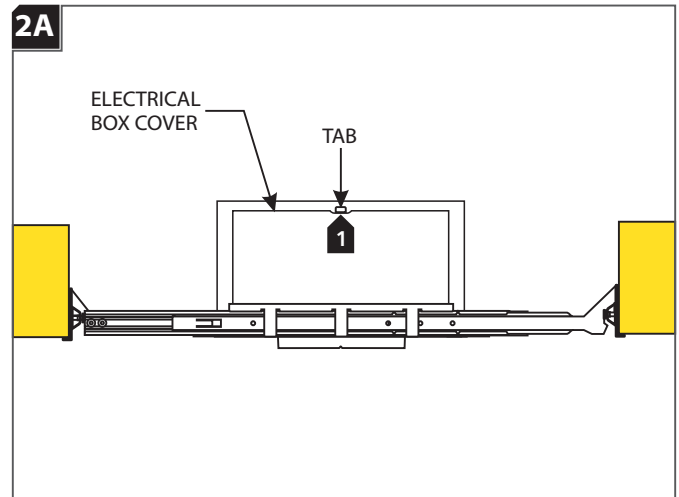
Connect Power to the Housing



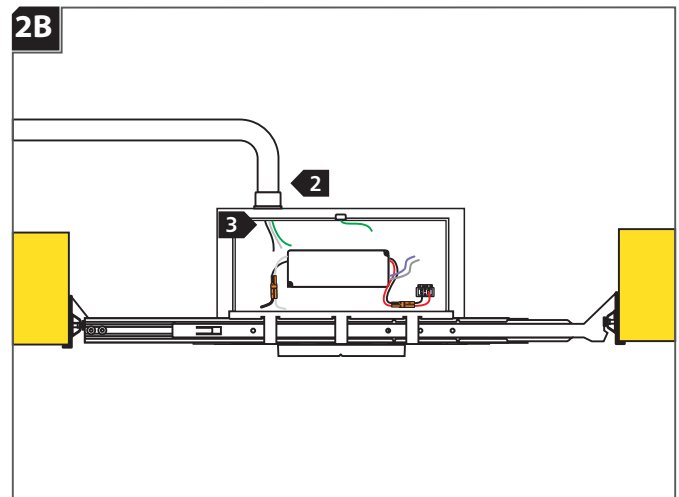
- 7 Adjust the collar's position (horizontal position) by sliding the housing on adjustable bars.
- 8 When the desired location is achieved, tighten the two self tapping screws to lock the housing onto the adjustable bars. **Note:** This housing has one internal and one external self tapping screw.

NOTE: Notches in collar can be used to align multiple housings using a laser or string.

NOTE: Square collar can be adjusted to account for slight rotational misalignment between multiple housings. To adjust, loosen the two Phillips screws, rotate the collar by hand, and re-tighten the screws.



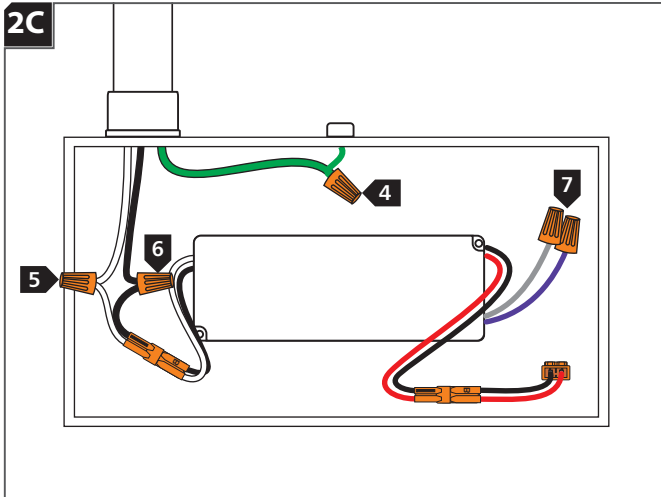
- 1 Push the tab on the housing electrical box up and remove the electrical box cover.



- 2 Install the conduit to the housing electrical box.
- 3 Run the power line wires into the housing electrical box.

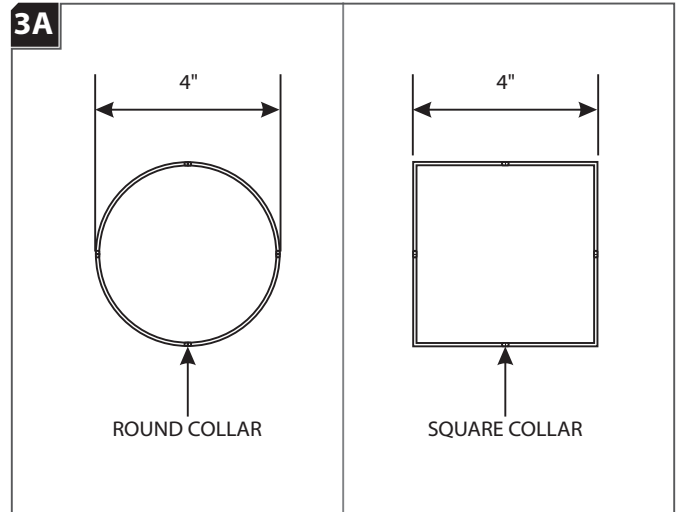
NOTE: When a fixture is installed in a location that requires servicing from below the ceiling through the fixture aperture, the branch circuit connections need to be able to be brought out through the aperture. To accomplish this, an NM type cable in conjunction with snap-in/push-in connectors must be used and a 12" service loop must be left available outside of the fixture housing wiring compartment to allow additional branch circuit wiring to be pulled through the snap-in/push-in connector and extended out through the aperture below ceiling level.

WARNING: RISK OF FIRE: When using the housing electrical box for power feed through, use **MAX** 4 - #12 AWG, or 6 - #14 AWG branch circuit wires.

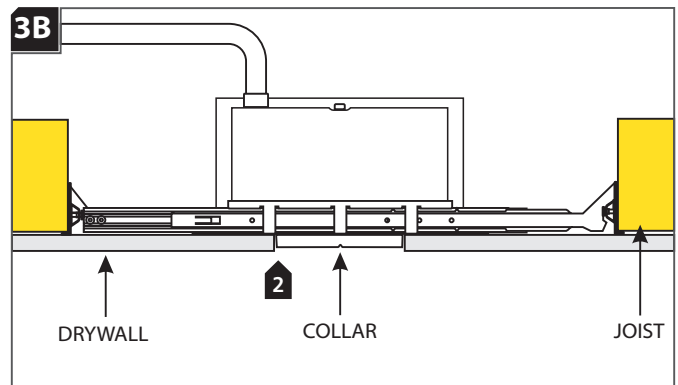


- 4 Make sure that housing is grounded in accordance with local electrical codes.
- 5 Connect the neutral power line wire to the white driver wire with a wire nut.
- 6 Connect the hot power line wire to the black driver wire with a wire nut.
- 7 For 0-10V dimming, use the purple and gray wire to connect to a compatible dimmer. If 0-10V dimming is not being used, make sure the purple and gray wires are capped off.
- 8 Replace the electrical box cover. Make sure that the top edge of the cover snaps under the tab.

Install Drywall

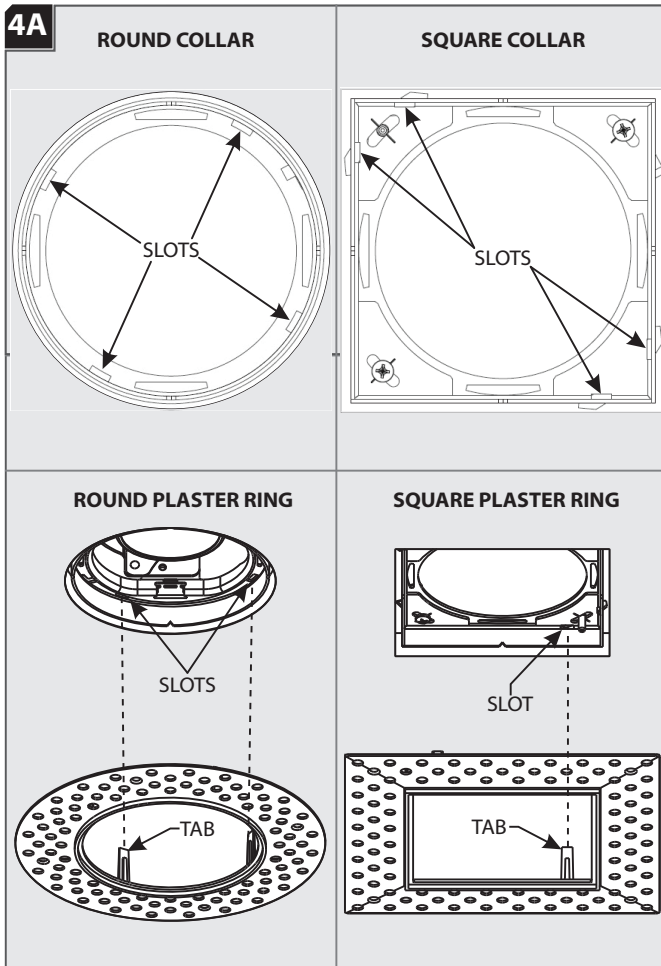


- 1 Mark an appropriate sized diameter circle or square on drywall. Cut out the marked section. **Note:** The drywall may be cut by running a 1/8" RotoZip around the outside of the collar.

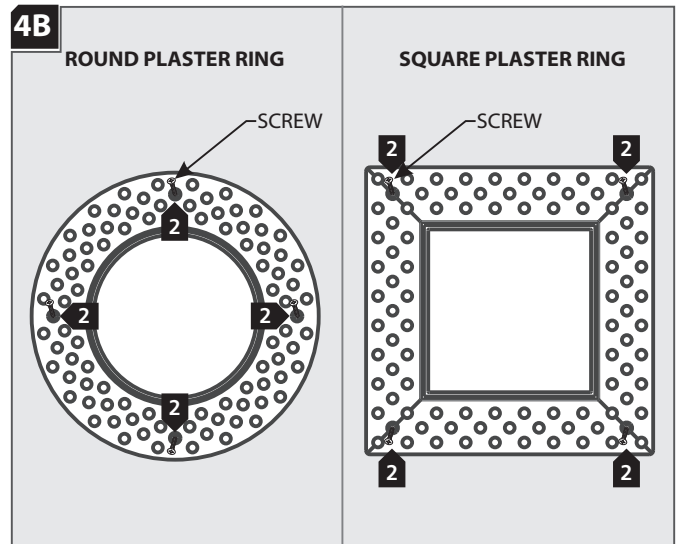


- 2 Align the cut out section of drywall with the collar and install drywall.
- 3 **For flanged trim installations,** insert the provided paint shield and paint ceiling as needed. Remove shield after painting.

Install the Plaster Ring (Flangeless Version Only)



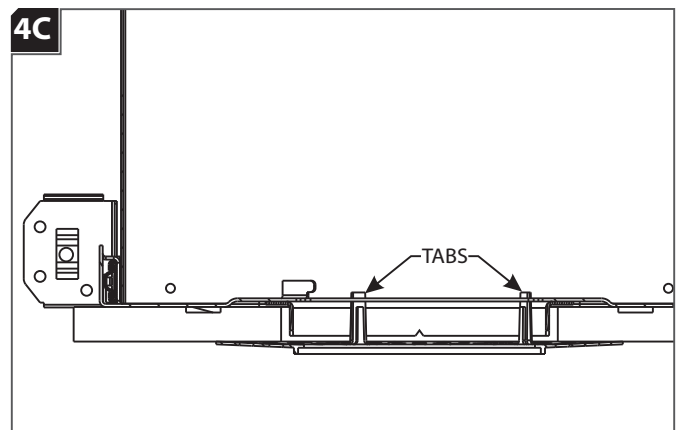
- 1 Align the plaster ring tabs with the slots in the housing. Push the tabs up through the slots and bring the plaster ring flush to the ceiling. All four alignment tabs must be on the inside of the collar and through the slots. The plaster ring should be centered to the housing aperture.



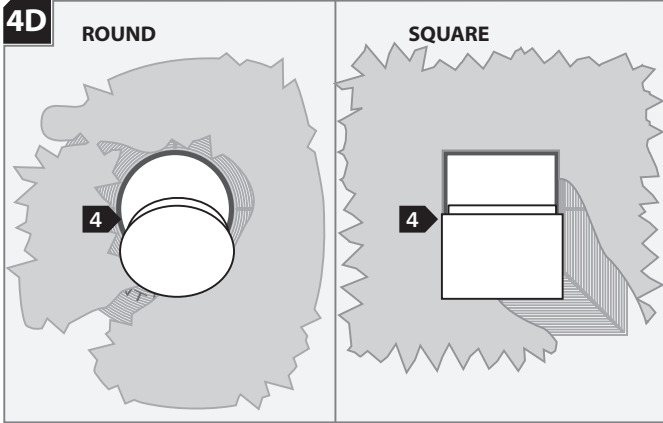
- 2 Secure the plaster ring in place with four self-drilling screws appropriate for your drywall thickness. The four mounting holes on the ring are smaller than the plaster holes. Make sure that the screws penetrate through the fixture housing.

- For 1/2 or 5/8 drywall, use 1.25" drywall screws.
- For 3/4, 7/8, or 1" drywall, use 1.5" drywall screws.

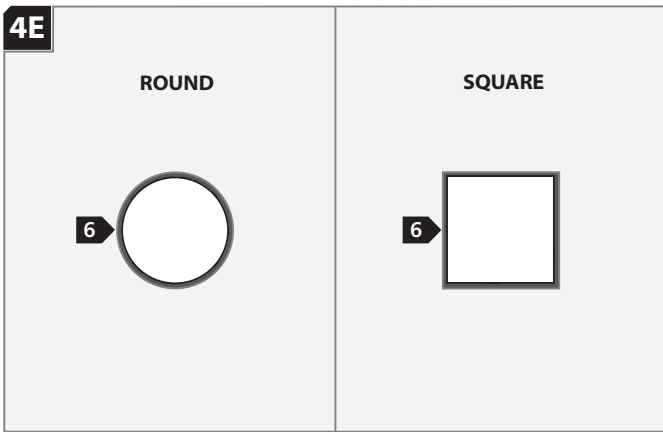
NOTE: Do not overtighten the screws! Overtightening may warp the plaster ring, causing an uneven ceiling surface. If the plate becomes warped, back the screws out until the plate sits flush to the ceiling.



- 3 The top portion of the alignment tabs on the plaster ring should be broken off to avoid interference with the light module. Bend the tabs back and forth inside the housing to break the tabs.

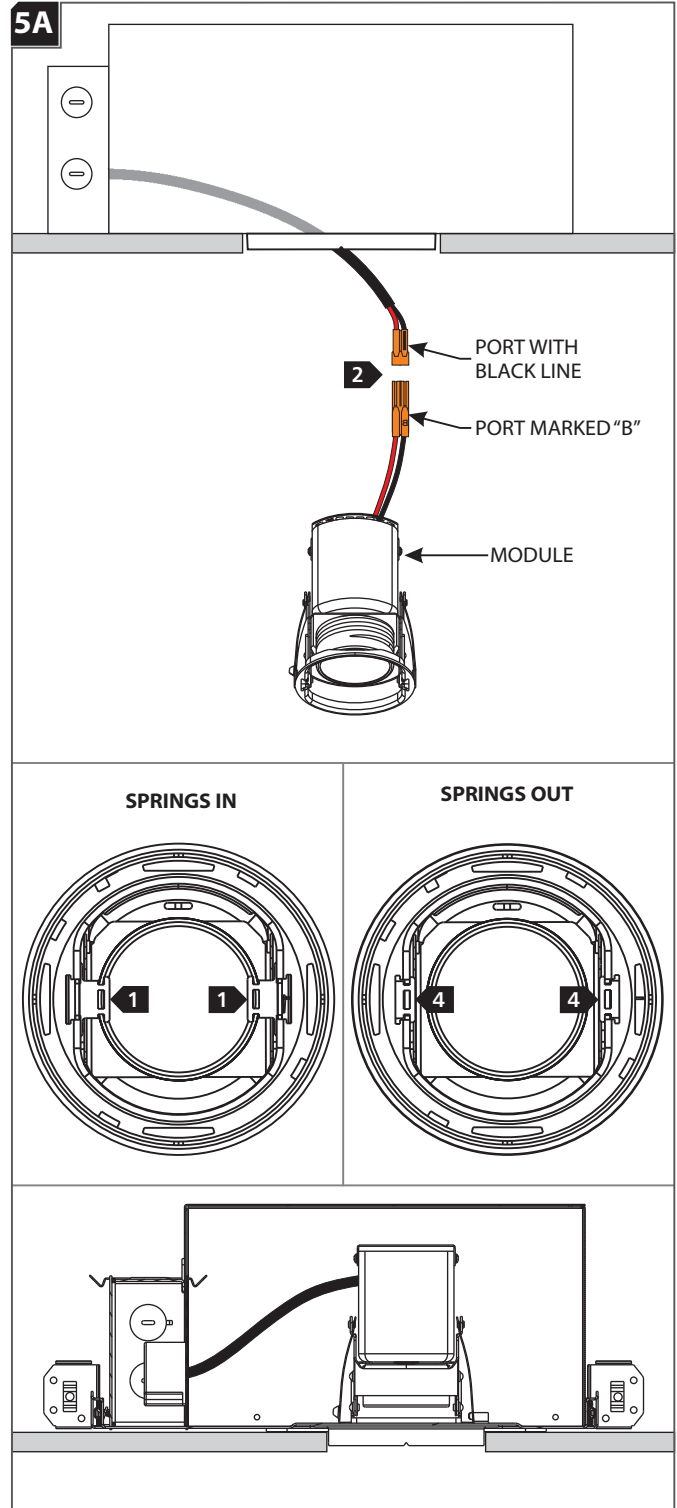


- 4 Plug the collar with the provided dust shield.
- 5 Properly plaster onto the plaster ring and drywall.



- 6 Finish around the fixture to match drywall.

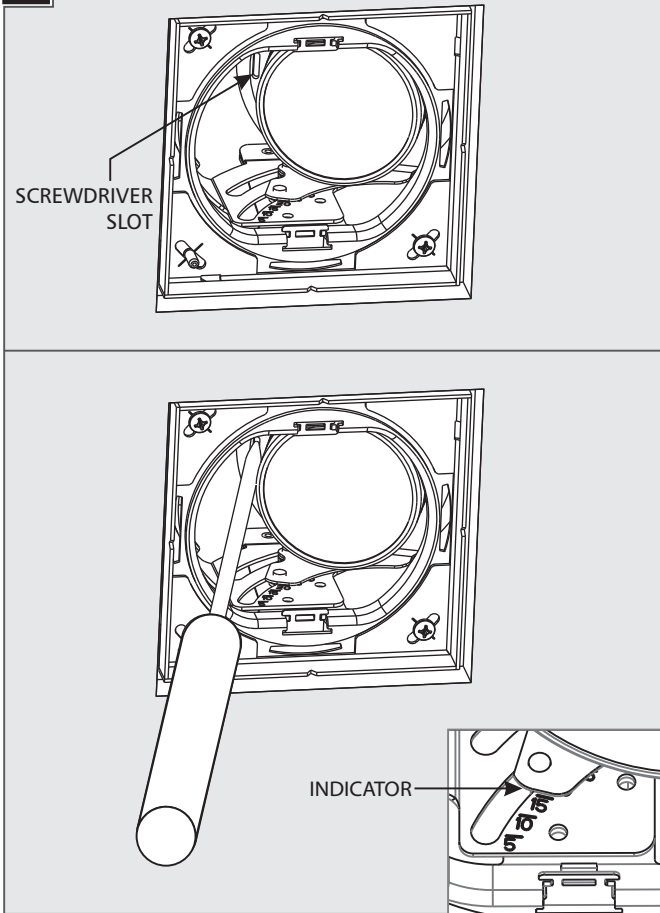
Install the Module



- 1 Push the mounting springs inward.
- 2 Connect the jumper cable to the housing wire making sure the port marked "B" is paired with the port with a black line.
- 3 Insert the module through the collar and into housing.
- 4 Secure the module by pushing the springs outward.

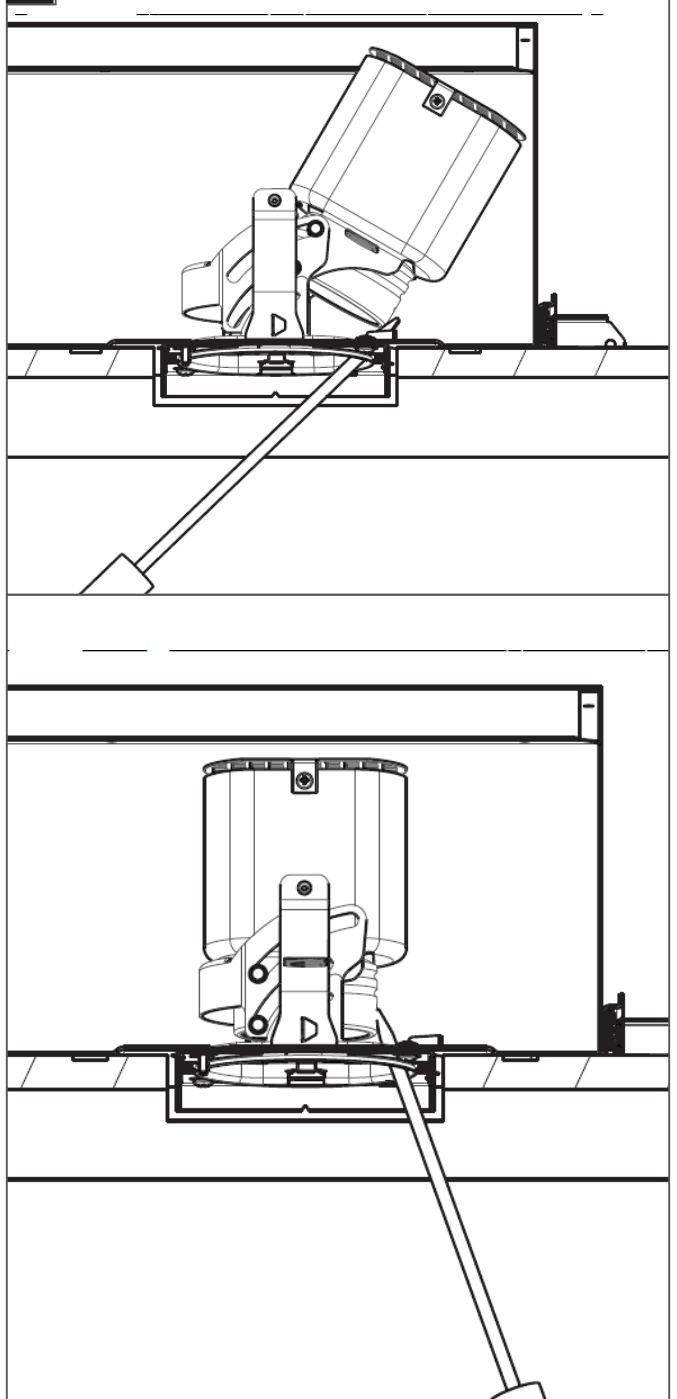
Adjust the Module

6A



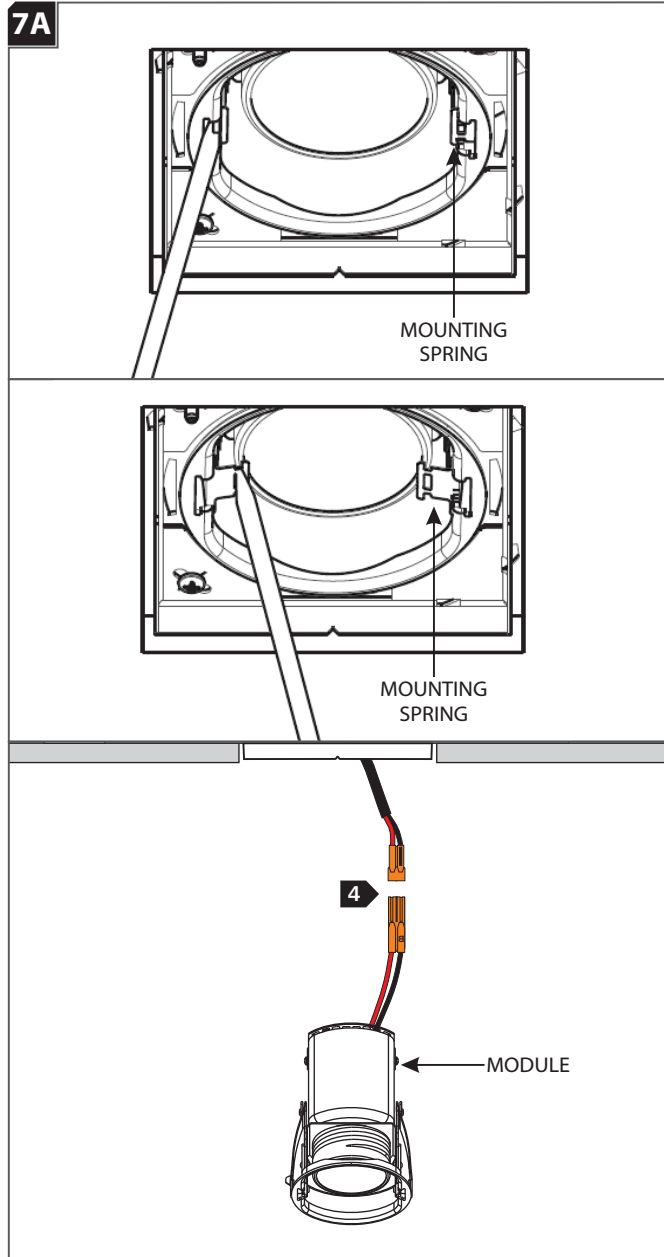
- 1 To adjust the module, insert a flat head screw driver into the slot of the module and gently pry the module to the desired angle.

6B



- 2 To tilt the module from a tilted position back towards the 0° downlight position, insert a long screwdriver and contact the back of the heat sink. Using a prying motion, tilt the module inward to the desired position.

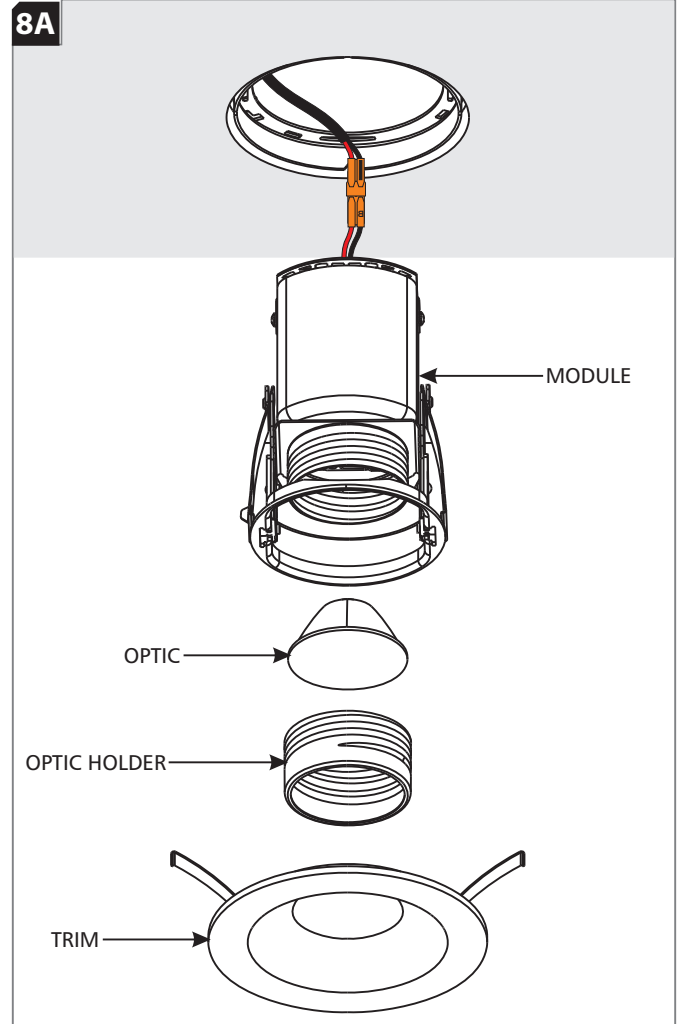
Removing the Module



Note: The module must be removed in order to access the junction box or replace the optic.

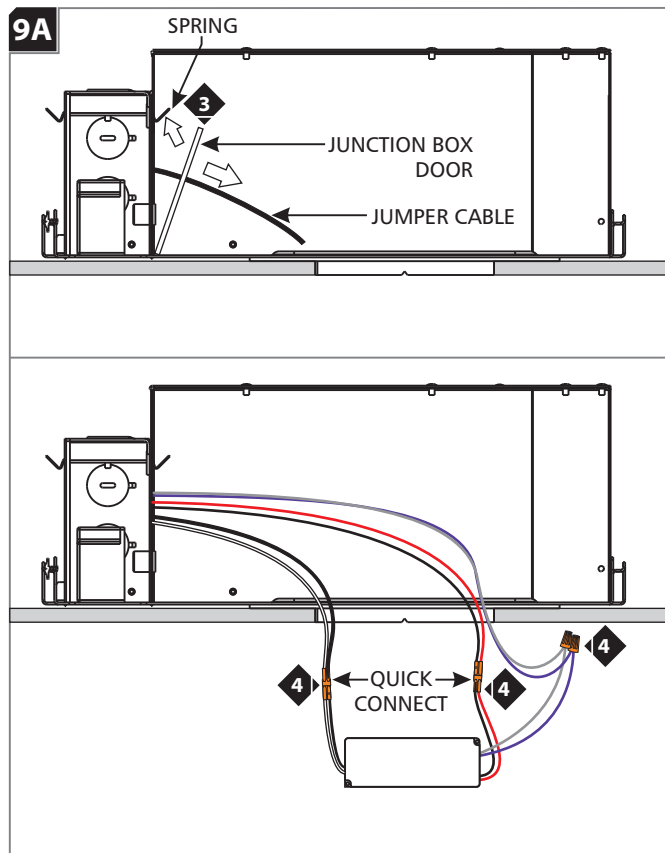
- 1 Remove the trim (refer to trim instructions).
- 2 If the module is tilted, bring the module back to the downlight position (refer to step 7B).
- 3 Use a small flat head screwdriver (3/16" blade or smaller) to pull the mounting springs inward. Insert the screwdriver into the slot in the spring, and pivot the tool to pull in the spring. Repeat for both springs while supporting the module by hand.
- 4 Pull the module down from the housing and disconnect the jumper cable.

Install or Replace Optics



- 1 Remove the module (refer to step 4A).
- 2 Unscrew and remove the optic holder.
- 3 Remove old optic and replace with new optic. **Note:** 20°, 40°, and 65° optics included. 40° optic is pre-installed.
- 4 Screw the optic holder back into the module until fully secured.
- 5 Reinstall the module and revert it back to its original position.
- 6 Re-install the trim (refer to trim instructions).

Replace the Driver



- 1 Remove the trim (refer to trim instructions).
- 2 Remove and disconnect the LED module (see Section 7).
- 3 Open the junction box door by pushing up on the spring and gently pulling the jumper cable. The door will remain loose inside the housing.
- 4 Pull the driver from the fixture and disconnect both quick connects. If using 0-10V wiring, also disconnect the purple and gray dimming wires.
- 5 Install the new driver: connect the red/black wires to the connector on the jumper cable. Connect the black/white wires to the connector on the black/white fixture wires. Connect the dimmer wires (if used).
- 6 Secure the driver to the housing pan inside the junction box using the tape provided.
- 7 Reinstall the junction box door. Reinstall the LED module and trim.

SAVE THESE INSTRUCTIONS!

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