

# purolinear 360™

assembly instructions

**SONNEMAN®**  
A WAY OF LIGHT

# Purolinear 360™ Product Information and Warnings

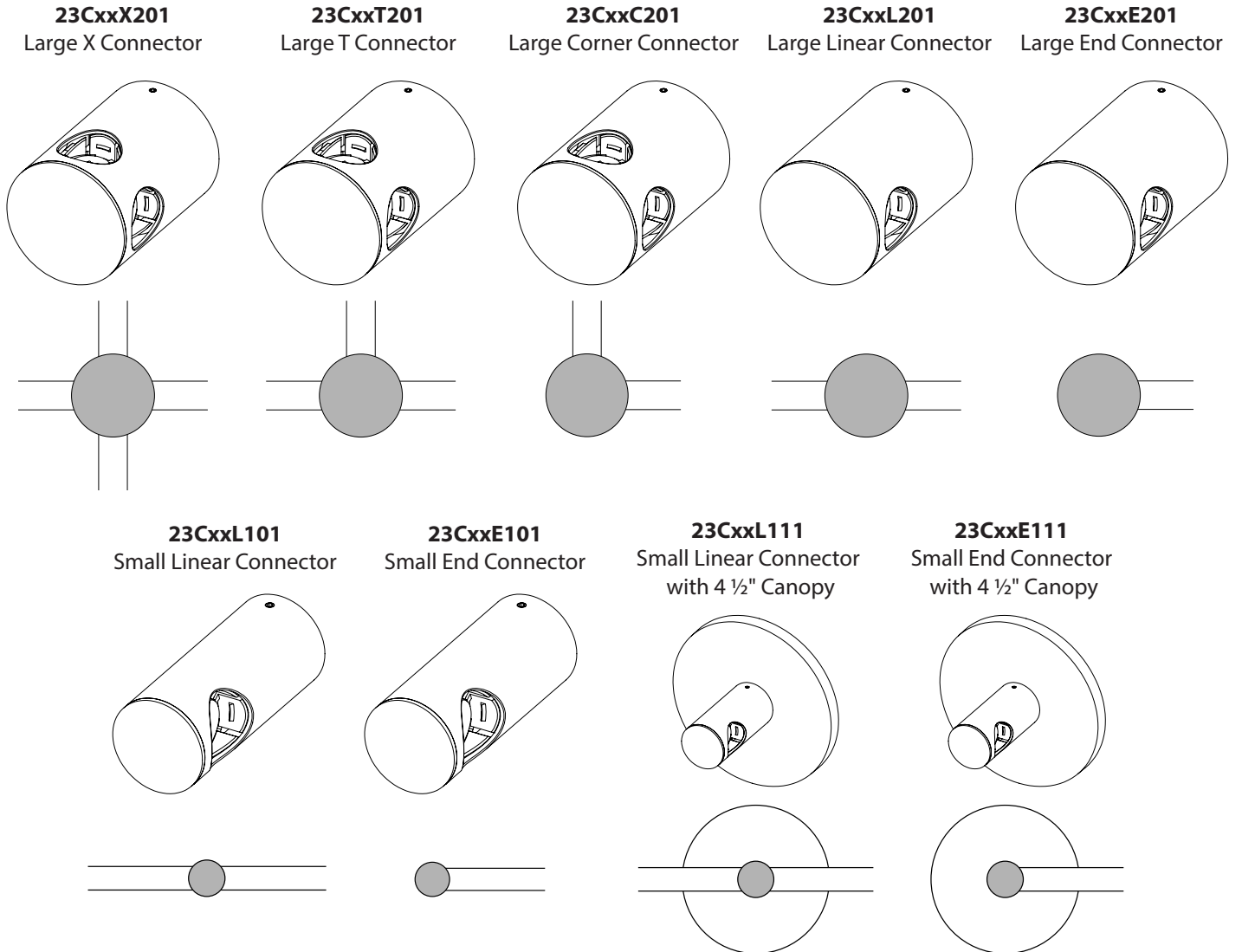
## Important

- **Always disconnect the power before installing or replacing Luminaires and before cleaning or other maintenance.**
- **Consult a qualified, licensed electrician to ensure correct branch circuit conductor.**  
*Consulter un électricien qualifié pour vous assurer que les conducteurs de la dérivation sont adéquats.*
- 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.  
*CE PRODUIT DOIT ÊTRE INSTALLÉ CONFORMÉMENT AUX DISPOSITIONS APPLICABLES CODE D'INSTALLATION PAR UNE PERSONNE FAMILIÈRE AVEC LA CONSTRUCTION ET LE FONCTIONNEMENT DU PRODUIT ET LES RISQUES.*
- Suitable for Damp Locations. *Convient aux Emplacements Humides.*
- Please read all included assembly instructions and warnings carefully before installation. Contact Customer Service if you have any questions or concerns. Before installation, please confirm that the fixture is compatible with your supply voltage and dimming system, if present.
- LEDs are highly sensitive electronic devices, and must be treated with care. Do not open any factory sealed compartments, and avoid touching the LEDs with your hands or any object.
- Although all our fixtures are equipped with protective devices, LED electronic systems are vulnerable to power surges and supply variations. Do not install LED fixtures on the same circuit as any motors, appliances, or HVAC systems.
- Any mounting hardware is provided for your convenience and should be used with discretion. Always use the appropriate hardware for the mounting surface.

# Welcome to Purolinear 360™

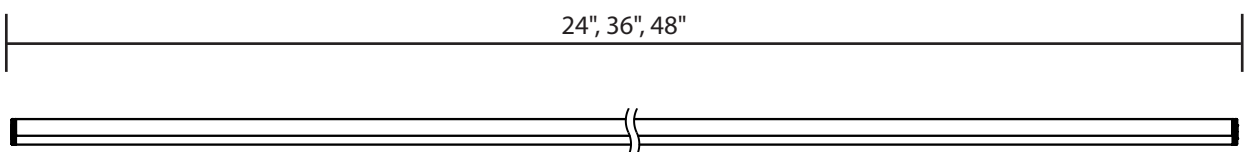
A Purolinear 360 configuration is built from LED Luminaires and Connectors. Illumination radiates from the Luminaires, which can be rotated in their Connectors to shine in any direction. The Connectors form a structural and electrical connection between the Luminaires, and can be configured in many different ways. Any Connector can be used as a power feed.

## Connectors



## Luminaires

- 23Lxx243090** - 24" Luminaire
- 23Lxx363090** - 36" Luminaire
- 23Lxx483090** - 48" Luminaire



## System Layout Considerations

**To prevent electrical overload and avoid excessive voltage drop:**

1. Do not exceed 8ft total Luminaire length from a power feed in any direction (Fig. 1).
2. Do not exceed 16ft total Luminaire length branching from a single Connector (except a power feed Connector) (Fig. 2-3).
3. Do not exceed 32ft total Luminaire length per power feed.

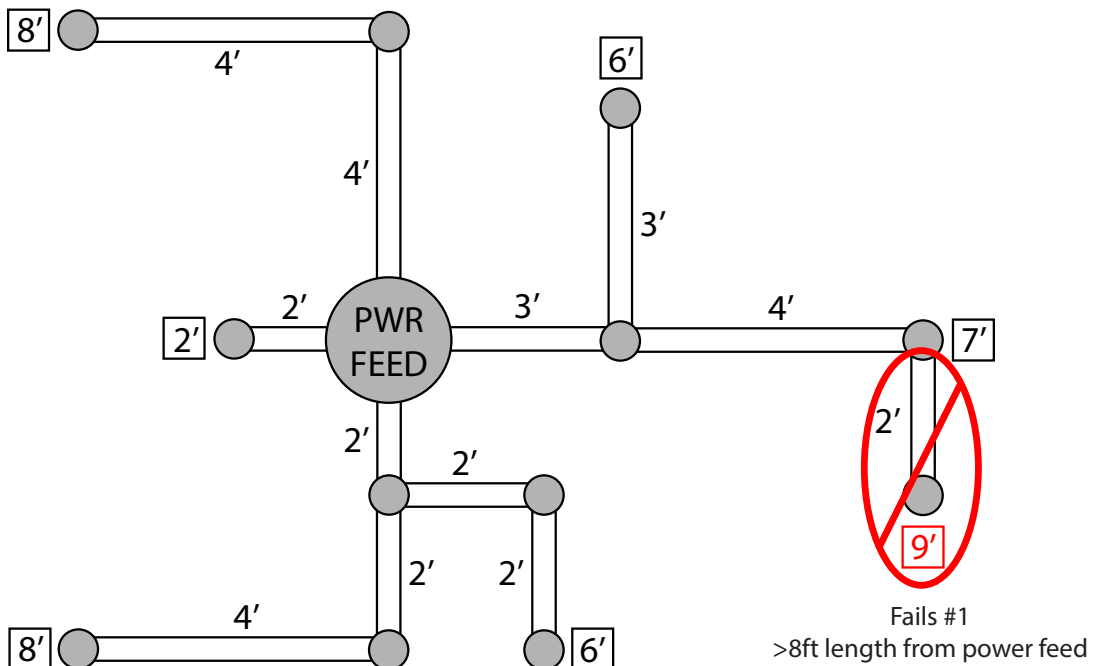


Fig. 1

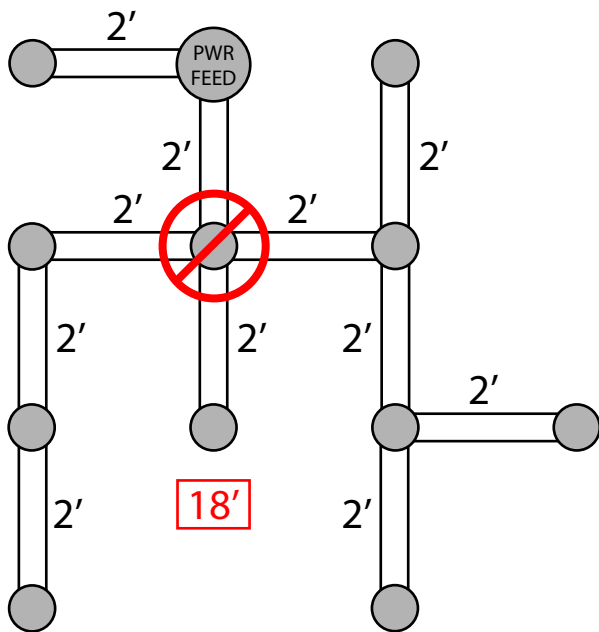


Fig. 2  
Fails #2

>16ft branching from X Connector

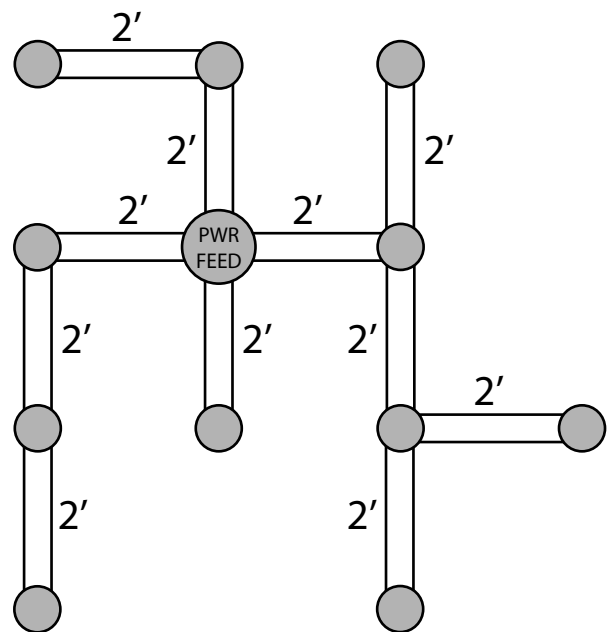


Fig. 3  
Passes #2

by relocating power feed

## System Layout Considerations (cont.)

4. Configurations that violate any of the prior requirements must be split into two or more electrically-isolated subsections, each of which meets the requirements individually. Each subsection requires a separate power feed. See Fig. 4 for an example configuration split into two subsections. Subsections are electrically isolated by applying the included insulating stickers (A) to the Luminaire PCB (B) to block electrical contact between the appropriate Luminaires and Connectors (Fig. 5).

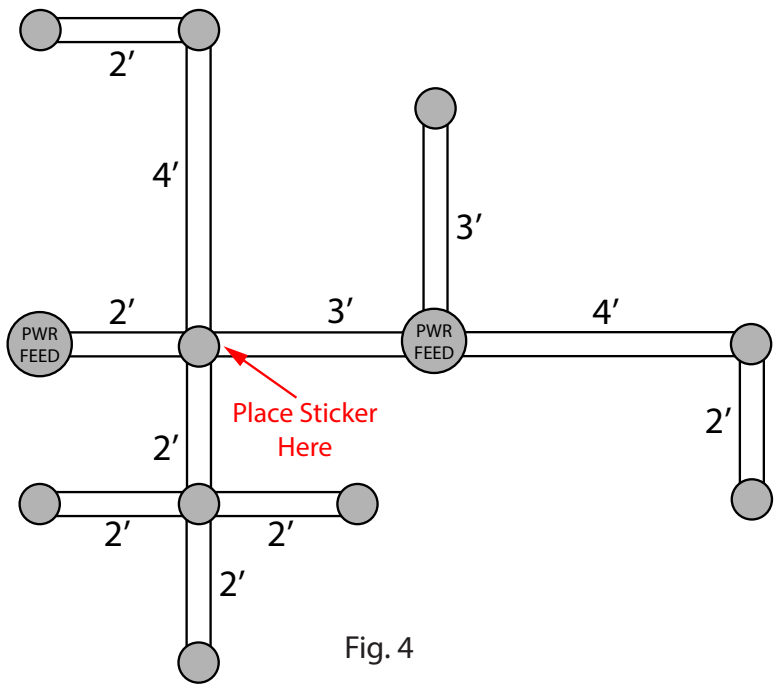


Fig. 4

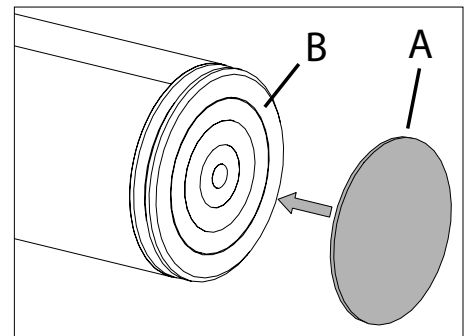


Fig. 5

5. Balance the electrical load in a configuration by making the total Luminaire length in each branch as similar as possible. For example, a 12ft linear configuration should be grouped in two 6ft sections, rather than a 4ft section and an 8ft section (Fig. 6).  
6. Any Connector type may be used as a power feed.

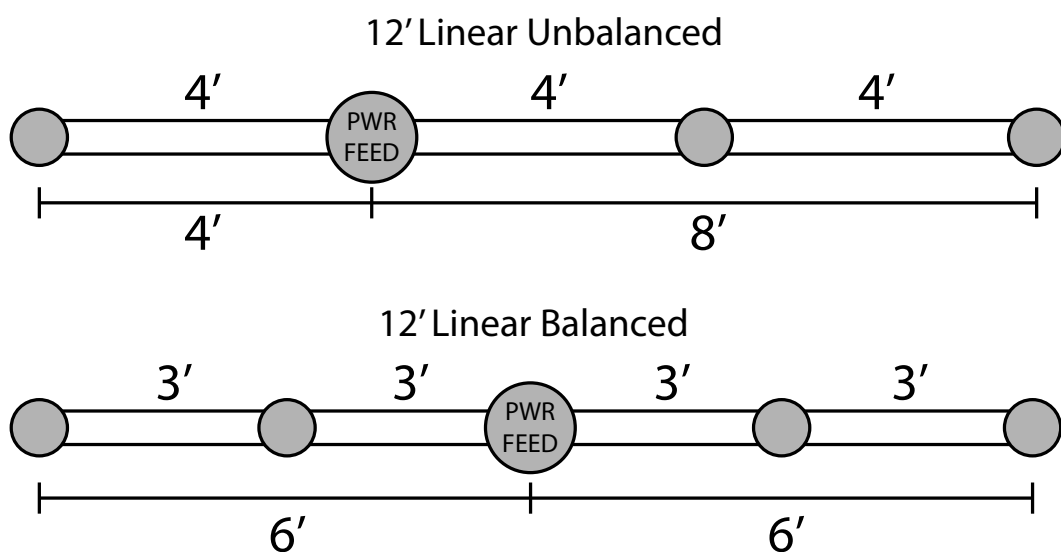


Fig. 6

# System Installation

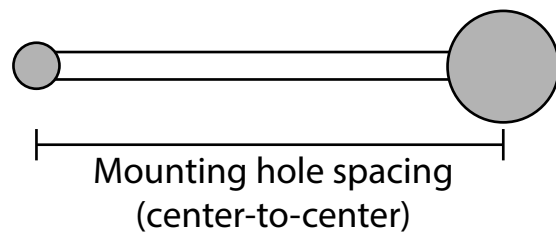
## General steps for any configuration

1. Measure and mark the locations of all Connectors on the mounting surface. Refer to Table 1 for Connector spacing.
2. Install power feed Connector(s) in desired location(s) as shown on pages 5-6.
3. Install a neighboring Connector as shown on page 6.
4. Install Luminaire between Connectors as shown on page 7.
5. Repeat steps 3-4 for all remaining Connectors and Luminaires.
6. Restore power to the outlet box or branch circuit.

Connector Mounting Hole Spacing

Luminaire Size	Connector Sizes		
	Small-Small	Small-Large	Large-Large
2ft	24"	24 3/8"	24 3/4"
3ft	36"	36 3/8"	36 3/4"
4ft	48"	48 3/8"	48 3/4"

Table 1



## Connector Installation

### Power Feed Connector with Outlet Box Driver - Shown with 23CxxE111 (Fig. 7)

1. Shut off power to the outlet box (A).
2. Make appropriate electrical connections using wire nuts:
  - a. Connect the LED driver's (B) live wire to the live outlet box (A) wire.
  - b. Connect the LED driver's neutral wire to the neutral outlet box wire.
  - c. Connect outlet box ground wire (green or uncoated) to the crossbar (C) using the green screw.
  - d. Pass Connector wires through center hole of crossbar.
  - e. Connect the LED driver's positive (+) output wire to the red connector wire.
  - f. Connect the LED driver's negative (-) output wire to the black connector wire.
  - g. Carefully place driver and connections in outlet box.
3. Install cross bar (C) to outlet box using outlet box screws (D).
4. Using included Allen key (J), loosen set screws (E) and remove Connector (F) from mounting bracket (G).
5. Secure canopy to mounting surface by screwing canopy nipple (H) into center hole of crossbar (C).
- Note:** Hold Connector (F) and keep wires slack. Do not allow wires to twist while screwing on canopy.
6. Place Connector (F) on mounting bracket (G) and secure by tightening set screws (E) using included Allen key.

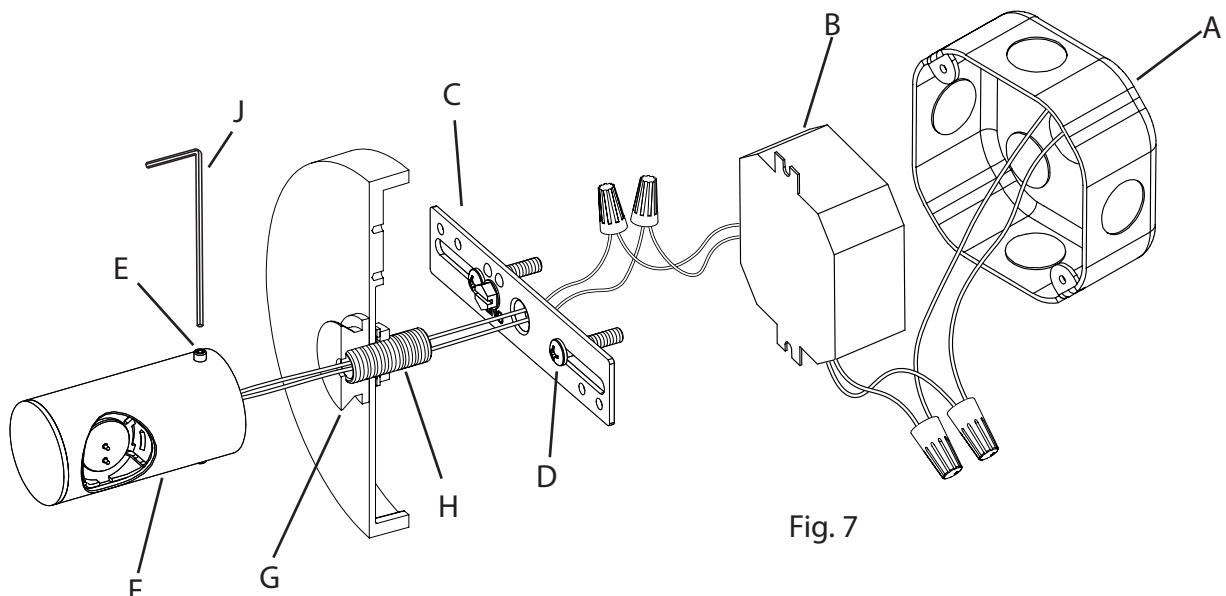


Fig. 7

## Connector Installation (cont.)

### Power Feed Connector with Remote Driver - Shown with 23CxxE201 (Fig. 8-9)

1. Shut off power to the branch circuit conductors.
2. The LED driver (A) must be installed in a remote and accessible location near the fixture in accordance with local electrical code (Fig. 9). Make appropriate electrical connections using wire nuts:
  - a. Connect the LED driver's (A) live wire to the live branch circuit conductor.
  - b. Connect the LED driver's neutral wire to the neutral branch circuit conductor.
  - c. Connect the LED driver's positive (+) output wire to the required length of red wire (not included) to reach the Connector (B).
  - d. Connect the LED Driver's negative (-) output wire to the required length of black wire (not included) to reach the Connector.
3. Drill a  $\frac{3}{4}$ " hole (J) in the wall where the Connector (B) is to be installed.
4. Using included Allen key (K), loosen set screws (H) and remove Connector (B) from mounting bracket (C).
5. Pull low voltage wires (F) through off-center hole (G) in mounting bracket (C).
6. Make appropriate electrical connections using wire nuts:
  - a. Connect the positive (red) low voltage wire to the Connector red wire.
  - b. Connect the negative (black) low voltage wire to the Connector black wire.
  - c. Carefully place connections inside Connector (C).
7. Insert toggle anchor (D) through hole in wall (J) and tighten screw (E) until it is secured in place, making sure not to pinch the connector wires.
8. Place connector (B) on mounting bracket (C) and secure by tightening set screws (H) with included Allen key.

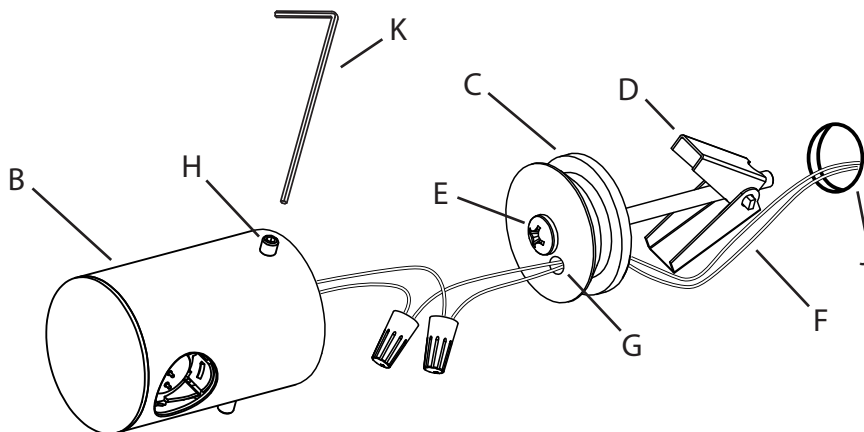


Fig. 8

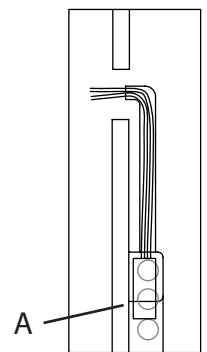


Fig. 9

### Connector (non-Power Feed) - Shown with 23CxxE201 (Fig. 10)

1. Drill a  $\frac{3}{4}$ " hole where the Connector (B) is to be installed.
2. Loosen set screws (A) with included Allen key (F) and remove Connector (B) from mounting bracket (C).
3. Insert toggle anchor (D) through hole in wall and tighten screw (E) until it is secured in place.
4. Cap or trim exposed ends of Connector wires and place inside Connector (B).
5. Place connector (B) on mounting bracket (C) and secure by tightening set screws (A) with included Allen key.

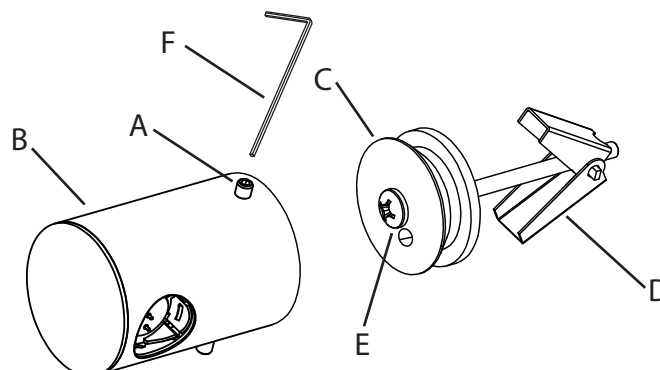


Fig. 10

## Luminaire Installation (Fig. 11-12)

1. Designate the two connectors on each side of the Luminaire as **A** and **B** (Fig. 11). Leave **Connector A** fully installed to mounting surface. Remove **Connector B** from its mounting bracket (C) by loosening set screws with included Allen key.
2. Angle the Luminaire into the ports on **Connector A** and **B**. Align **Connector B** with its mounting bracket.
3. Carefully pivot the Luminaire into both connector ports while moving **Connector B** onto its mounting bracket.  
If necessary, adjust **Connector B** position to ensure Luminaire is fully inserted into both connector ports: loosen the toggle anchor screw, adjust the bracket position, and retighten the toggle anchor screw.
4. Secure **Connector B** by tightening set screws with included Allen key.

**Note:** For some configurations, two Luminaires may need to be installed simultaneously to a shared **Connector D** (Fig. 12). Follow steps 1-4 above with **Connector D** in place of **Connector B**.

**Note:** To remove Luminaire from Connector, gently tilt and pull Luminaire to disengage Connector clips. Do not apply excessive force or damage to the Luminaire and Connector may result.

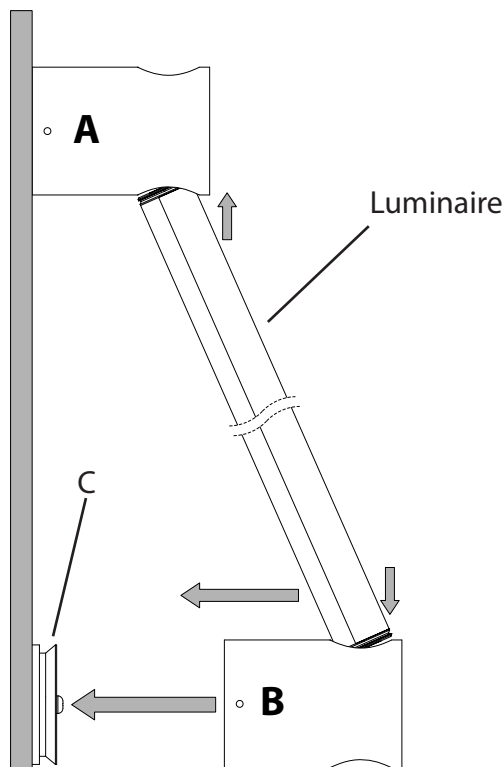


Fig. 11

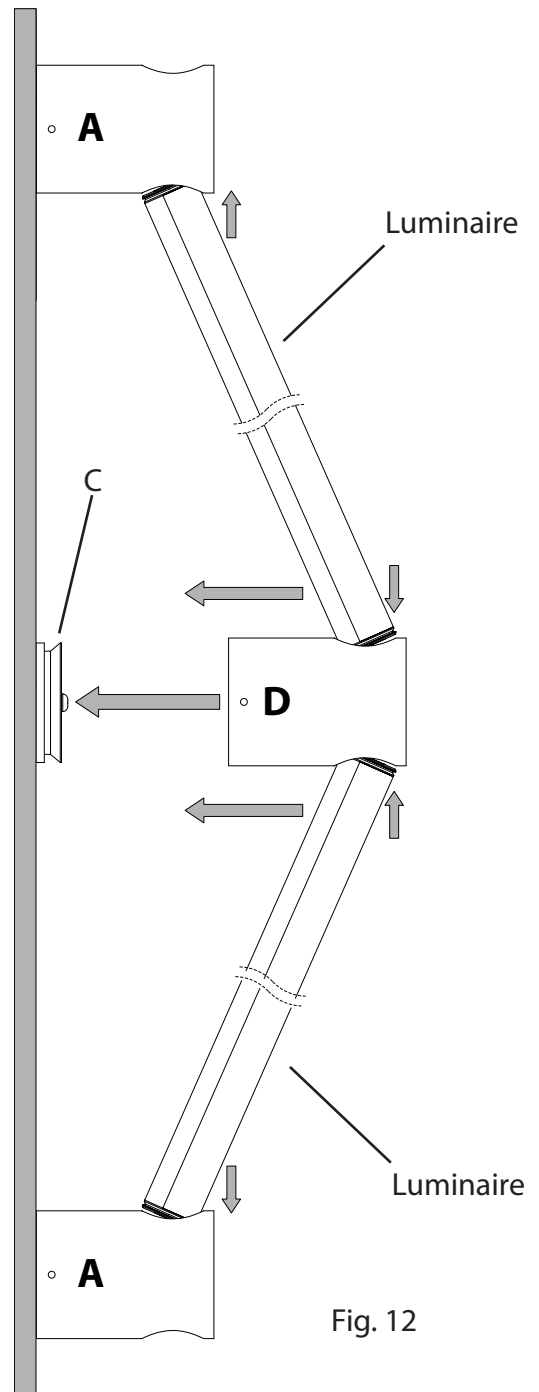


Fig. 12