

Suspenders from Sonneman is available in numerous configurations and options. From single, multiple, linear, offset, zig zag, single or double ring, staggered or wall versions, please call Urban Lighting Inc. to assist you in building your Suspenders.

A delicately scaled, modular system of interconnected elements and suspended LED luminaires.

suspenders[™]

assembly instructions

SONNEMAN[®]
A WAY OF LIGHT

index

Information and Warnings.	1
<u>Configuration Assembly</u>	2
1-Tier Tri-Bar.	3
4-Tier Tri-Bar.	4
1-Tier Linear.	5
2-Tier Linear.	6
2-Tier Tandem	7
2-Tier grid	8
Offset Linear	9
Zig-Zag	10
Single Ring	11
Double Ring	12
Mini Single Sconce	13
Standard Single Sconce	14
Bar Sconce	15

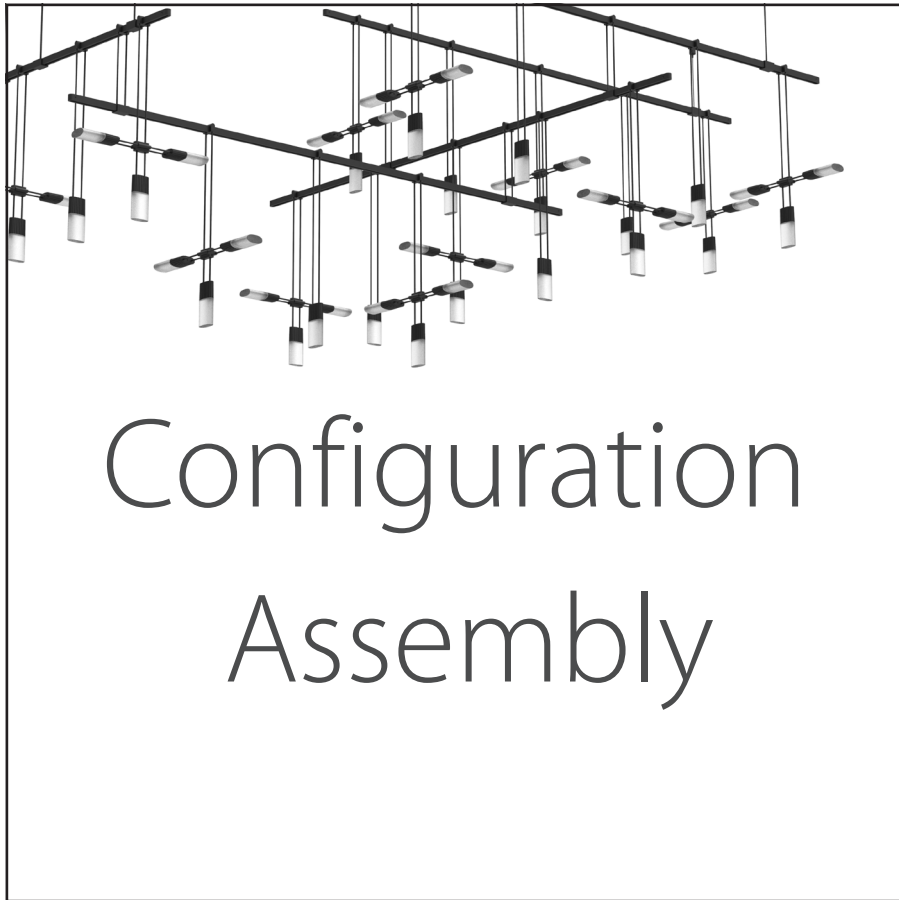
suspenders™

<u>Component Installation</u>	16
Linear, Tri-Bar, and Ring Power Feed.	17
Tandem Power Feed	18
Minibox Ceiling Power Feed	19
Minibox Wall Sconce Power Feed	21
Standard Wall Power Feed.	23
Bar Sconce Power Feed	24
Power Feed Hanger Assembly	25
Ceiling Hanger Assembly	26
Power Bar Assembly	27
Power Bar Hanger	28
Luminaire and Luminaire Hanger	29

Suspenders™ 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.**
- 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.
- Do not remove or bypass any LED Driver or Transformer that is provided with the fixture, and do not replace or substitute with another power supply.
- Remote Transformer installation must be done by a licensed electrician and in accordance with local building and electrical codes. Remote installations should be in an accessible location, as close to the fixture as possible. The appropriate wire gauge must be used to limit the voltage drop to no more than 5%.
- Fixtures must be wired in parallel on independent leads; do not "daisy chain" multiple fixtures together or wire them in series.
- All factory-made splices and connections must remain intact. LED circuits are carefully designed and built, and improper connections may damage the fixture.
- Any mounting hardware is provided for your convenience and should be used with discretion. Always use the appropriate hardware for the mounting surface.
- To avoid excessive voltage drop, the longest electrical path from the Power Feed to the furthest Luminaire should not exceed 30 feet.
- Suspenders™ transformers can be loaded up to 80% of their rated wattage.
- Suspenders™ transformers feature short-circuit protection with automatic recovery, and will resume operation once the short-circuit condition is removed.
- Suspenders™ transformers have 24VAC output, and are dimmable with Electronic Low Voltage dimmers ONLY.
- Suspenders™ must be installed in dry locations ONLY.



Configuration Assembly

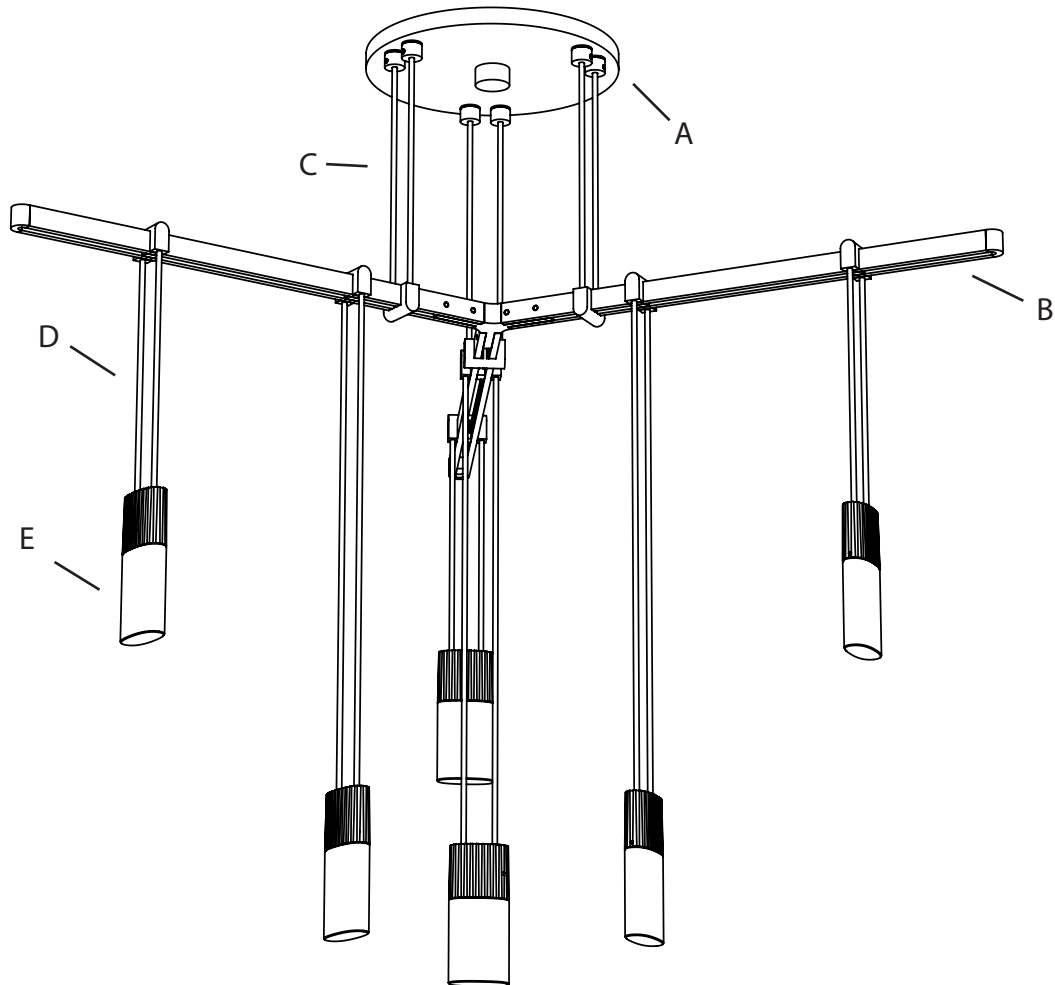
Suspenders™ - 1-Tier Tri-Bar Configuration

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.



1. Shut off power to the outlet box.
2. Assemble the Power Feed (A) as shown on page 17
3. Assemble the Tri-Bar Power Bar (B) as shown on page 27. (Figs.1-2)
4. Connect the Power Feed Hangers (C) to the Tri-Bar Power Bar (B) so they are aligned with the lines on top of the Power Bar.
5. Connect the Power Feed Hangers (C) to the Power Feed (A) as shown on page 25.
6. Connect the Luminaire Hangers (D) to the Luminaires (E) as shown on page 29. (Figs. 1-2)
7. Connect the Luminaire Hangers (D) to the Tri-Bar Power Bar (B) as shown on page 29. (Fig. 3)
8. Restore power to the outlet box.

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

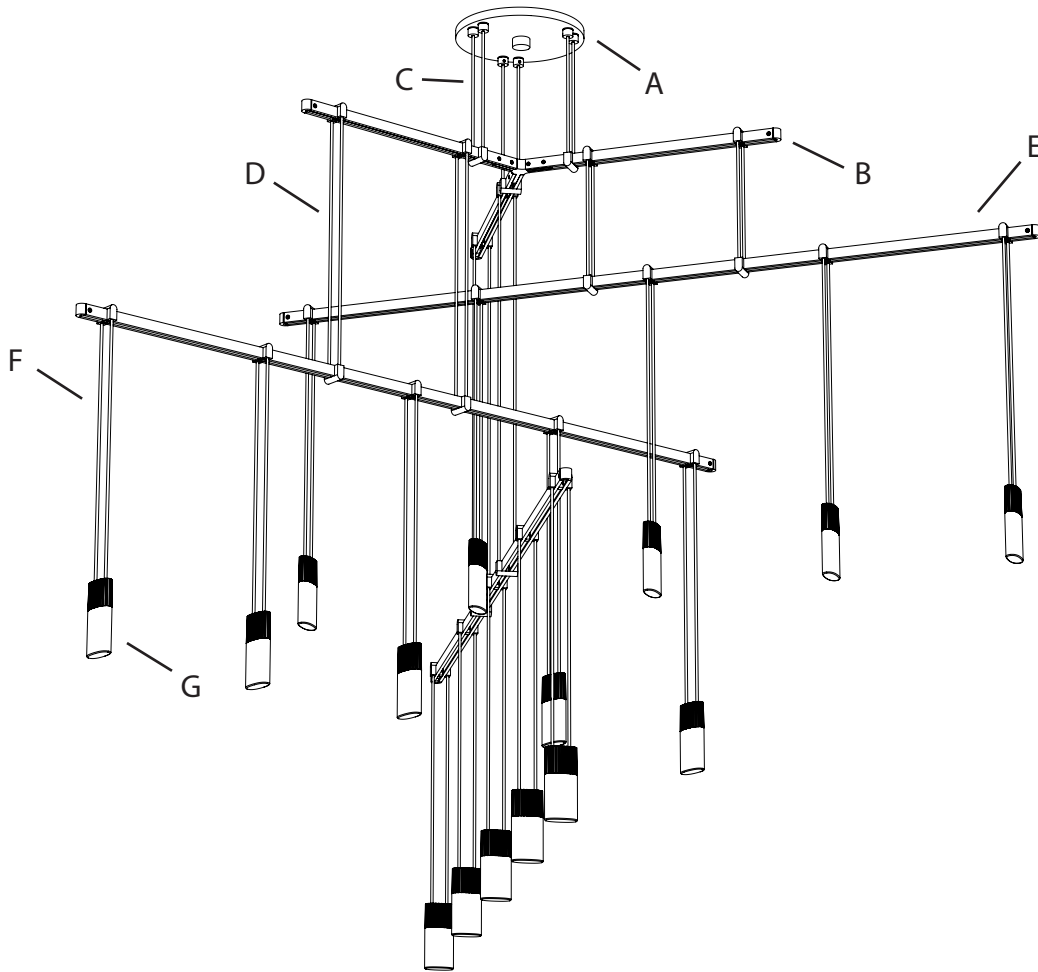
Suspenders™ - 4-Tier Tri-Bar Configuration

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.



1. Shut off power to the outlet box.
2. Assemble the Power Feed (A) as shown on page 17.
3. Assemble the Tri-Bar Power Bar (B) as shown on page 27. (Figs. 1-2)
4. Connect the Power Feed Hangers (C) to the Tri-Bar Power Bar (B) so they are aligned with the lines on top of the Power Bar.
5. Connect the Power Feed Hangers (C) to the Power Feed (A) as shown on page 25.
6. Connect the Parallel Power Bar Hangers (D) to each arm of the Tri-Bar Power Bar (B) as shown on page 28. (Figs. 1-2)
7. Connect each of the three Linear Power Bars (E) to the Parallel Power Bar Hangers (D) as shown on page 28. (Figs. 1-2)
8. Connect the Luminaire Hangers (F) to the Linear Power Bars (E) as shown on page 29. (Fig. 3)
9. Connect the Luminaires (G) to the Luminaire Hangers (F) as shown on page 29. (Figs. 1-2)
10. Restore power to the outlet box.

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

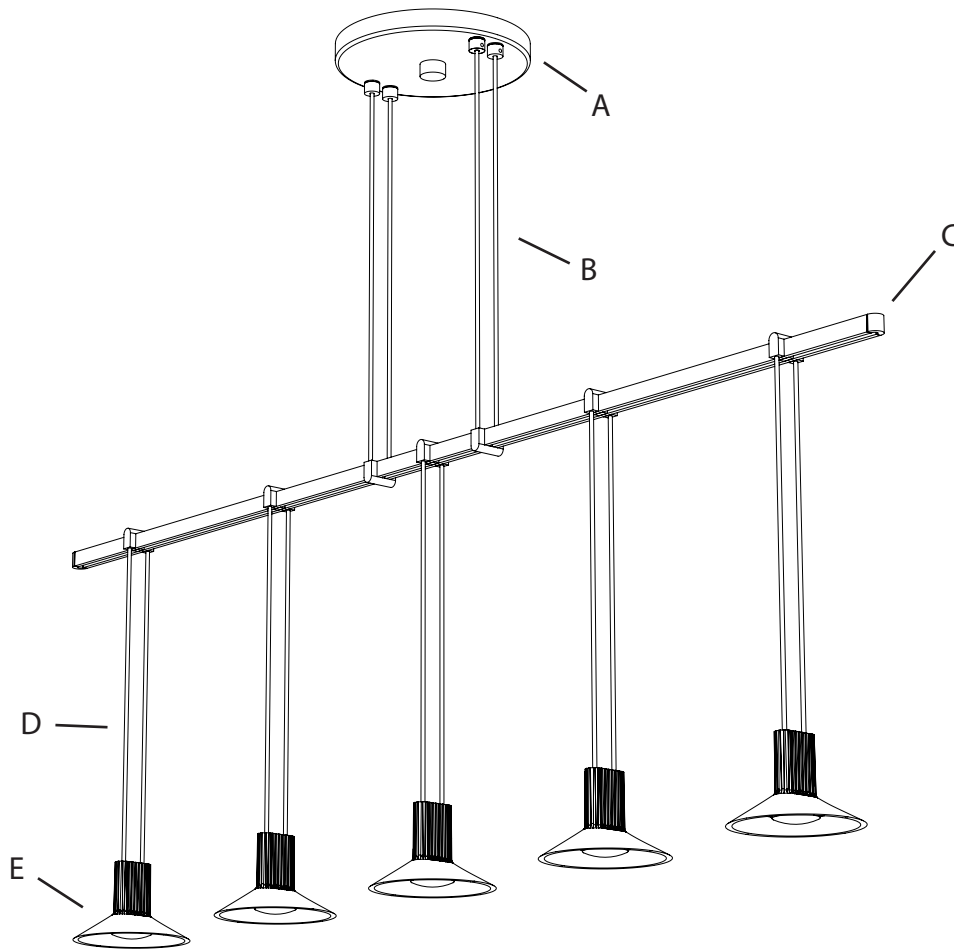
Suspenders™ - 1-Tier Linear Configuration

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.



1. Shut off power to the outlet box.
2. Assemble the Power Feed (A) as shown on page 17.
3. Connect the Power Feed Hangers (B) to the Power Feed (A) as shown on page 25.
4. Connect the Linear Power Bar (C) to the Power Feed Hangers (B) as shown on page 25.
5. Connect the Luminaire Hangers (D) to the Linear Power Bar (C) as shown on page 29. (Fig. 3)
6. Connect the Luminaires (E) to the Luminaire Hangers (D) as shown on page 29. (Figs. 1-2)
7. Restore power to the outlet box.

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

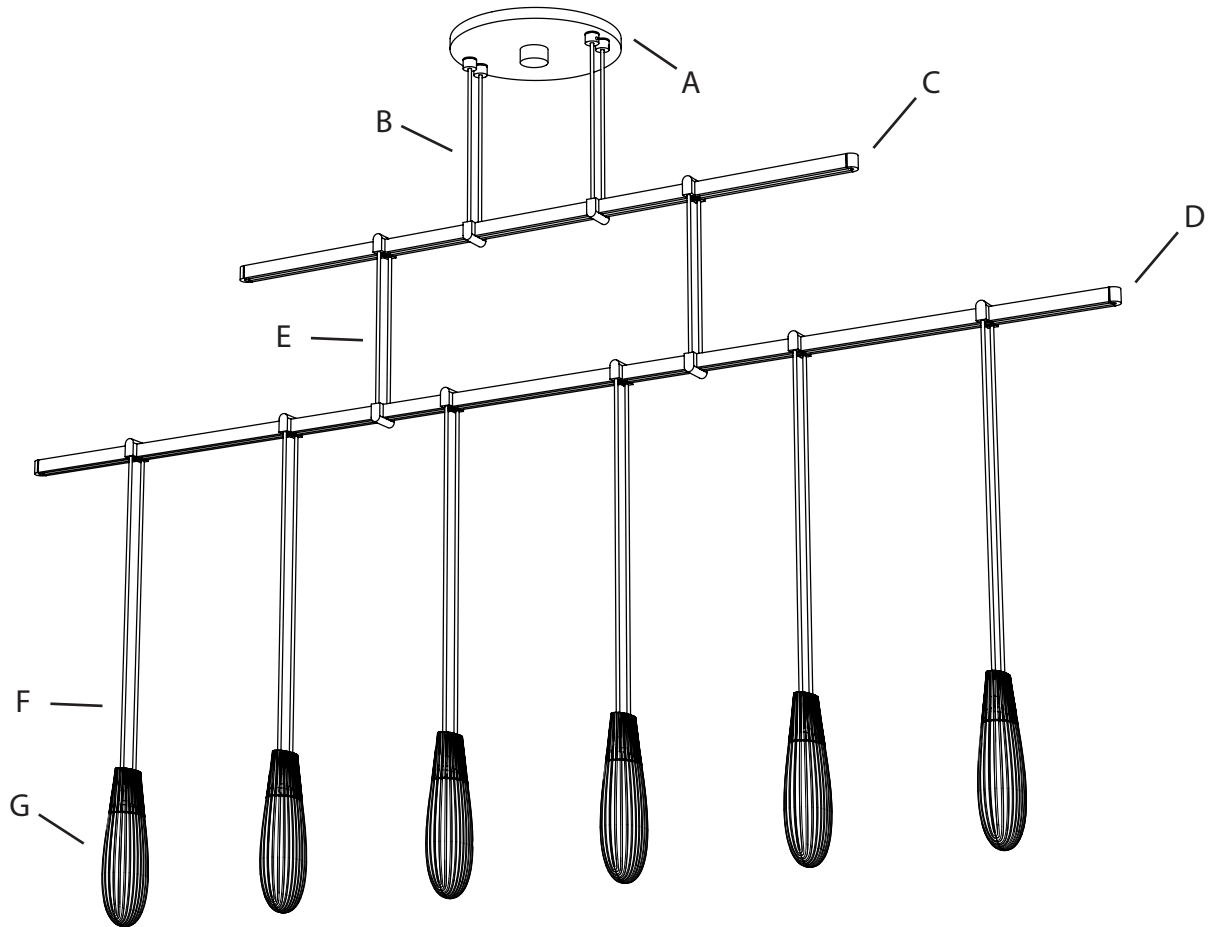
Suspenders™ - 2-Tier Linear Configuration

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.



1. Shut off power to the outlet box.
2. Assemble the Power Feed (A) as shown on page 17.
3. Connect the Power Feed Hangers (B) to the Power Feed (A) as shown on page 25.
4. Connect the first-tier Linear Power Bar (C) to the Power Feed Hanger (B) as shown on page 25.
5. Connect the second-tier Linear Power Bar (D) to the first-tier Linear Power Bar (C) using the Parallel Power Bar Hangers (E) as shown on page 28. (Fig. 1-2)
6. Connect the Luminaire Hangers (F) to the second-tier Linear Power Bar (D) as shown on page 29. (Fig. 3)
7. Connect the Luminaires (G) to the Luminaire Hangers (F) as shown on page 29. (Figs. 1-2)
8. Restore power to the outlet box.

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

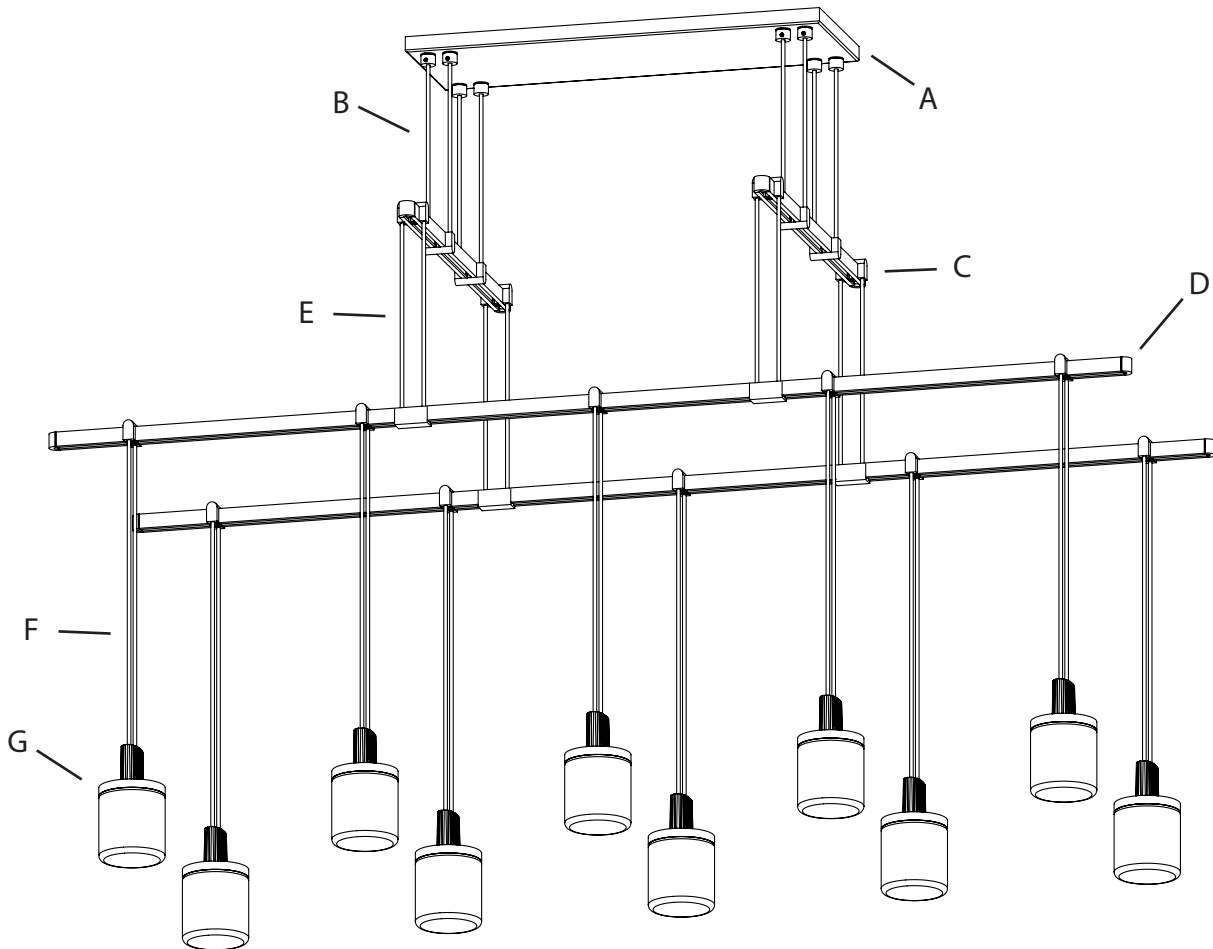
Suspenders™ - 2-Tier Tandem Configuration

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.



1. Shut off power to the outlet box.
2. Assemble the Power Feed (A) as shown on page 18.
3. Connect the Power Feed Hangers (B) to the Power Feed (A) as shown on page 25.
4. Connect the first-tier Linear Power Bars (C) to the Power Feed Hangers (B) as shown on page 25.
5. Connect the second-tier Linear Power Bars (D) to the first-tier Linear Power Bars (C) using the Perpendicular Power Bar Hangers (E) as shown on page 28. (Fig. 3-5)
6. Connect the Luminaire Hangers (F) to the second-tier Linear Power Bars (D) as shown on page 29. (Fig. 3)
7. Connect the Luminaires (G) to the Luminaire Hangers (F) as shown on page 29. (Figs. 1-2)
8. Restore power to the outlet box.

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

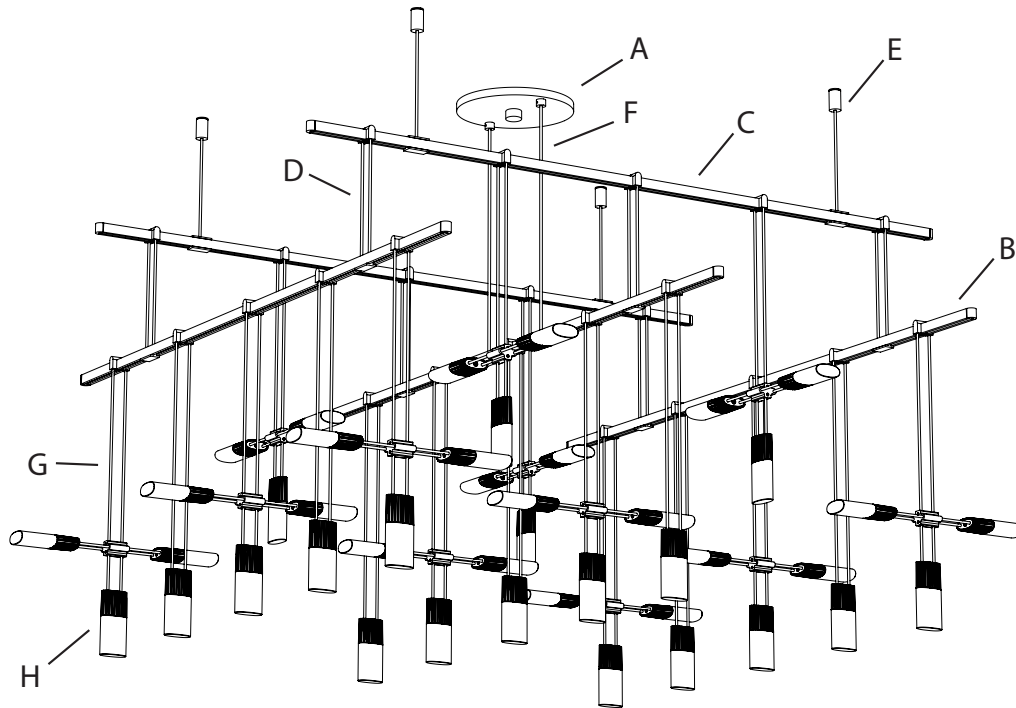
Suspenders™ - 2-Tier Grid Configuration

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.



1. Shut off power to the outlet box.
2. Assemble the Power Feed (A) as shown on page 17.
3. Connect the second-tier Linear Power Bars (B) to the first-tier Linear Power Bars (C) using the Perpendicular Power Bar Hangers (D) as shown on page 28. (Fig. 3-5)
4. Connect the Ceiling Hangers (E) to the first-tier Linear Power Bars (C) and install in the ceiling as shown on page 26.
5. Connect the center second-tier Linear Power Bar (B) to the Power Feed (A) using the Cord Power Feed Hangers (F) as shown on page 25.
6. Connect the Luminaire Hangers (G) to the Linear Power Bars (B, C) as shown on page 29. (Fig. 3)

Single Luminaire Suggested Installation:

36" - Hang 1pc Luminaire Hanger (G) from the first-tier Linear Power Bars (C) between each second-tier Linear Power Bar (B). Hang 5pcs Luminaire Hangers (G) from each of the second-tier Linear Power Bars (B).

48" - Hang 2pcs Luminaire Hangers (G) from the first-tier Linear Power Bars (C) between each second-tier Linear Power Bar (B). Hang 6pcs Luminaire Hangers (G) from each of the second-tier Linear Power Bars (B).

7. Connect the Luminaires (H) to the Luminaire Hangers (G) as shown on page 29. (Figs. 1-2)

Single/Cluster Combo Suggested Installation:

Hang 1pc Cluster Luminaire from the first-tier Linear Power Bars (C) between each second-tier Linear Power Bar (B).

36" - Outer Second-Tier Linear Power Bars (B): Hang 3pcs Cluster Luminaire and 2pcs Single Luminaire in an alternating pattern.

Middle Second-Tier Linear Power Bar (B): Hang 2pcs Cluster Luminaire and 3pcs Single Luminaire in an alternating pattern.

48" - All Second-Tier Linear Power Bars (B): Hang 3pcs Cluster Luminaire and 2pcs Single Luminaire in an alternating pattern.

8. Restore power to the outlet box.

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

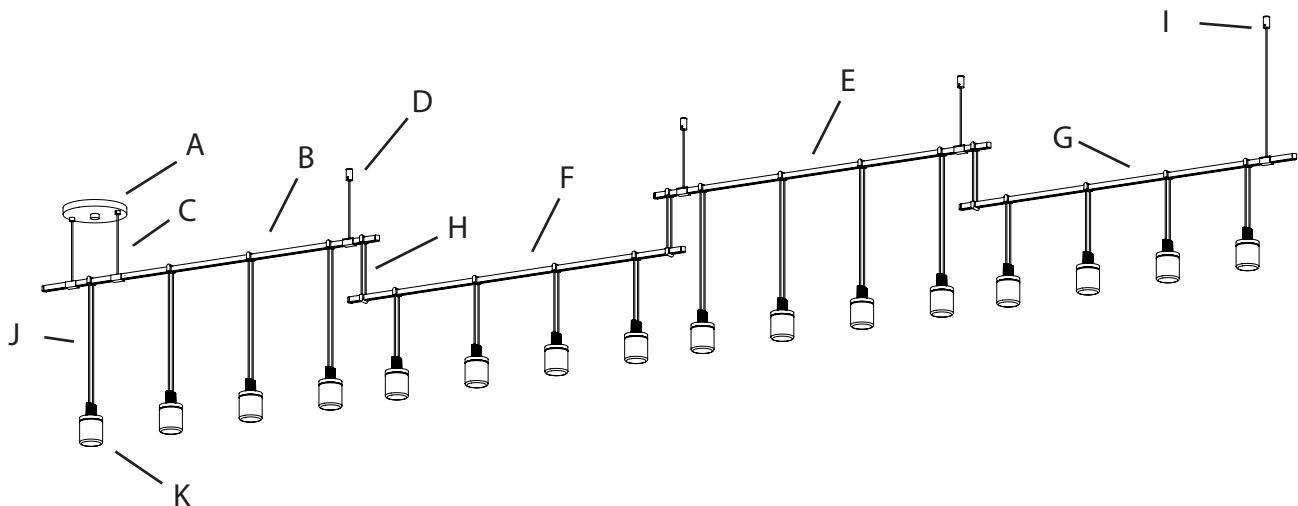
Suspenders™ - Offset Linear Configuration

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.



1. Shut off power to the outlet box.
2. Assemble the Power Feed (A) as shown on page 17.
3. Connect one of the upper Linear Power Bars (B) to the Power Feed (A) on one end using the Power Feed Hangers (C) as shown on page 25, and to the ceiling on the other end using the Ceiling Hanger (D) as shown on page 26.
4. Connect the other upper Linear Power Bar(s) (E) to the ceiling in line with the first using the Ceiling Hangers (D) as shown on page 26.
5. Connect the lower Linear Power Bar(s) (F, G) to the upper Linear Power Bars (B, E) using the Parallel Power Bar Hangers (H) as shown on page 28. (Fig. 1-2). **4-Bar Configuration Only:** Connect the free end of the last lower Linear Power Bar (G) to the ceiling using the Cable Ceiling Hanger (I) as shown on page 26.
6. Connect the Luminaire Hangers (J) to the Linear Power Bars (B, E, F, G) as shown on page 29. (Fig. 3)
7. Connect the Luminaires (K) to the Luminaire Hangers (J) as shown on page 29. (Figs. 1-2)

Single/Cluster Combo Suggested Installation:

- 24"** - Upper Linear Power Bars (B,E): Hang 2pcs Single Luminaire and 1pc Cluster Luminaire in an alternating pattern.
Lower Linear Power Bars (F,G): Hang 1pc Single Luminaire and 2pcs Cluster Luminaire in an alternating pattern.
 - 36"** - Upper Linear Power Bars (B,E): Hang 1pc Single Luminaire and 2pcs Cluster Luminaire in an alternating pattern.
Lower Linear Power Bars (F,G): Hang 2pcs Single Luminaire and 1pc Cluster Luminaire in an alternating pattern.
 - 48"** - All Linear Power Bars (B,E,F,G): Hang 2pcs Single Luminaire and 2pcs Cluster Luminaire in an alternating pattern.
8. Restore power to the outlet box.

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

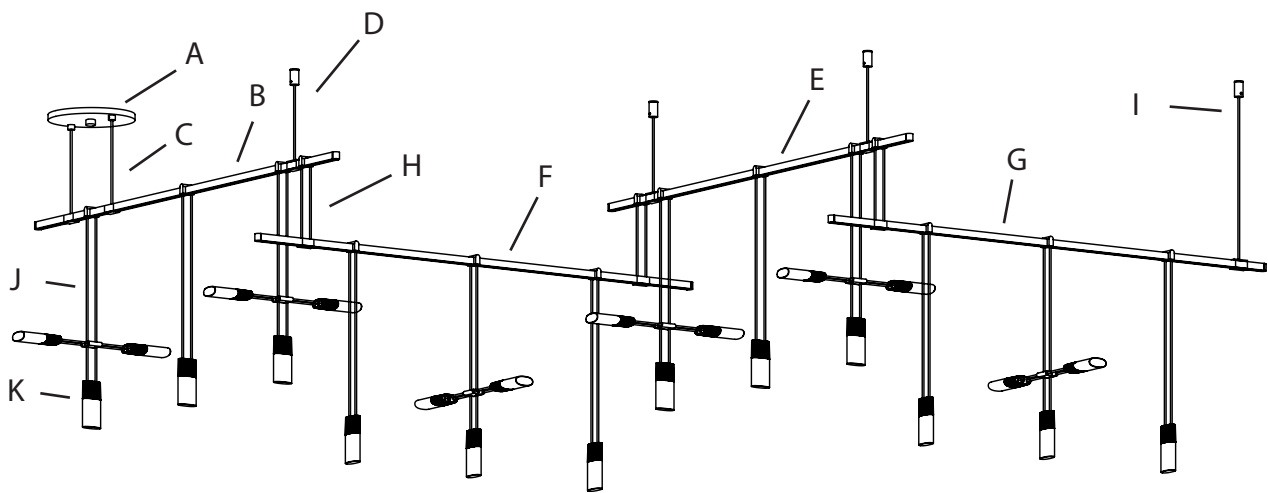
Suspenders™ - Zig-Zag Configuration

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.



1. Shut off power to the outlet box.
2. Assemble the Power Feed (A) as shown on page 17.
3. Connect one of the upper Linear Power Bars (B) to the Power Feed (A) on one end using the Power Feed Hangers (C) as shown on page 25, and to the ceiling on the other end using the Ceiling Hanger (D) as shown on page 26.
4. Connect the other upper Linear Power Bar(s) (E) to the ceiling offset and parallel to the first using the Ceiling Hangers (D) as shown on page 26.
5. Connect the lower Linear Power Bar(s) (F, G) to the upper Linear Power Bars (B, E) using the Perpendicular Power Bar Hangers (H) as shown on page 28. (Fig. 3-4). **4-Bar Configuration Only:** Connect the free end of the last lower Linear Power Bar (G) to the ceiling using the Cable Ceiling Hanger (I) as shown on page 26.
6. Connect the Luminaire Hangers (J) to the Linear Power Bars (B, E, F, G) as shown on page 29. (Fig. 3)
7. Connect the Luminares (K) to the Luminaire Hangers (J) as shown on page 29. (Figs. 1-2)

Single/Cluster Combo Suggested Installation:

- 24"** - Upper Linear Power Bars (B,E): Hang 2pcs Single Luminaire and 1pc Cluster Luminaire in an alternating pattern.
Lower Linear Power Bars (F,G): Hang 1pc Single Luminaire and 2pcs Cluster Luminaire in an alternating pattern.
 - 36"** - Upper Linear Power Bars (B,E): Hang 1pc Single Luminaire and 2pcs Cluster Luminaire in an alternating pattern.
Lower Linear Power Bars (F,G): Hang 2pcs Single Luminaire and 1pc Cluster Luminaire in an alternating pattern.
 - 48"** - All Linear Power Bars (B,E,F,G): Hang 2pcs Single Luminaire and 2pcs Cluster Luminaire in an alternating pattern.
8. Restore power to the outlet box.

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

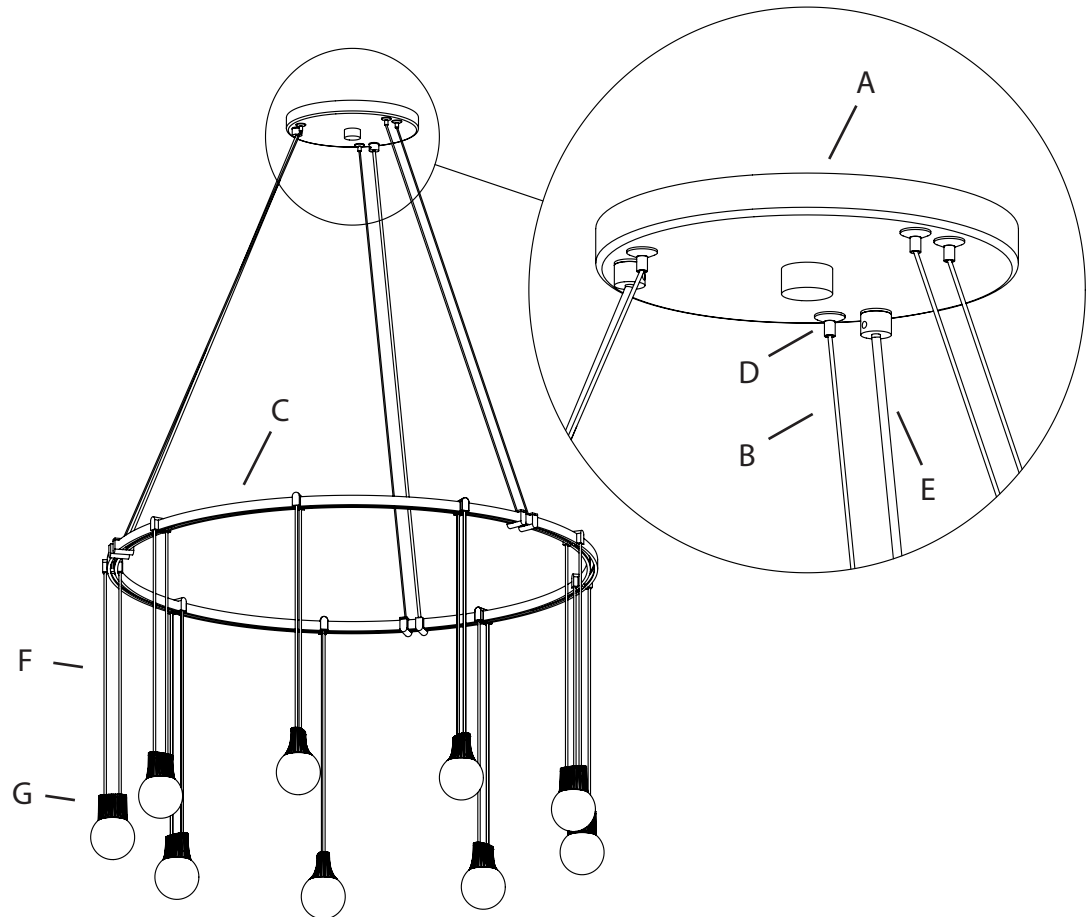
Suspenders™ - Single Ring Configuration

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.



1. Shut off power to the outlet box.
2. Assemble the Power Feed (A) as shown on page 17.
3. Determine desired hanging height, and cut the support cables (B) to length plus 3 inches. Connect the Ring Power Bar (C) to the Power Feed (A) by inserting the support cables into the grippers (D) and adjusting to the desired length: to shorten, push the cable up; to lengthen, push in the gripper plunger while pulling down on the cable, release the plunger to lock.
4. Connect the Cord Power Feed Hangers (E) to the Power Feed (A) as shown on page 25.
5. Connect the Luminaire Hangers (F) the Ring Power Bar (C) as shown on page 29. (Fig. 3)
6. Connect the Luminaires (G) to the Luminaire Hangers (F) as shown on page 29. (Figs. 1-2)
7. Restore power to the outlet box.

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

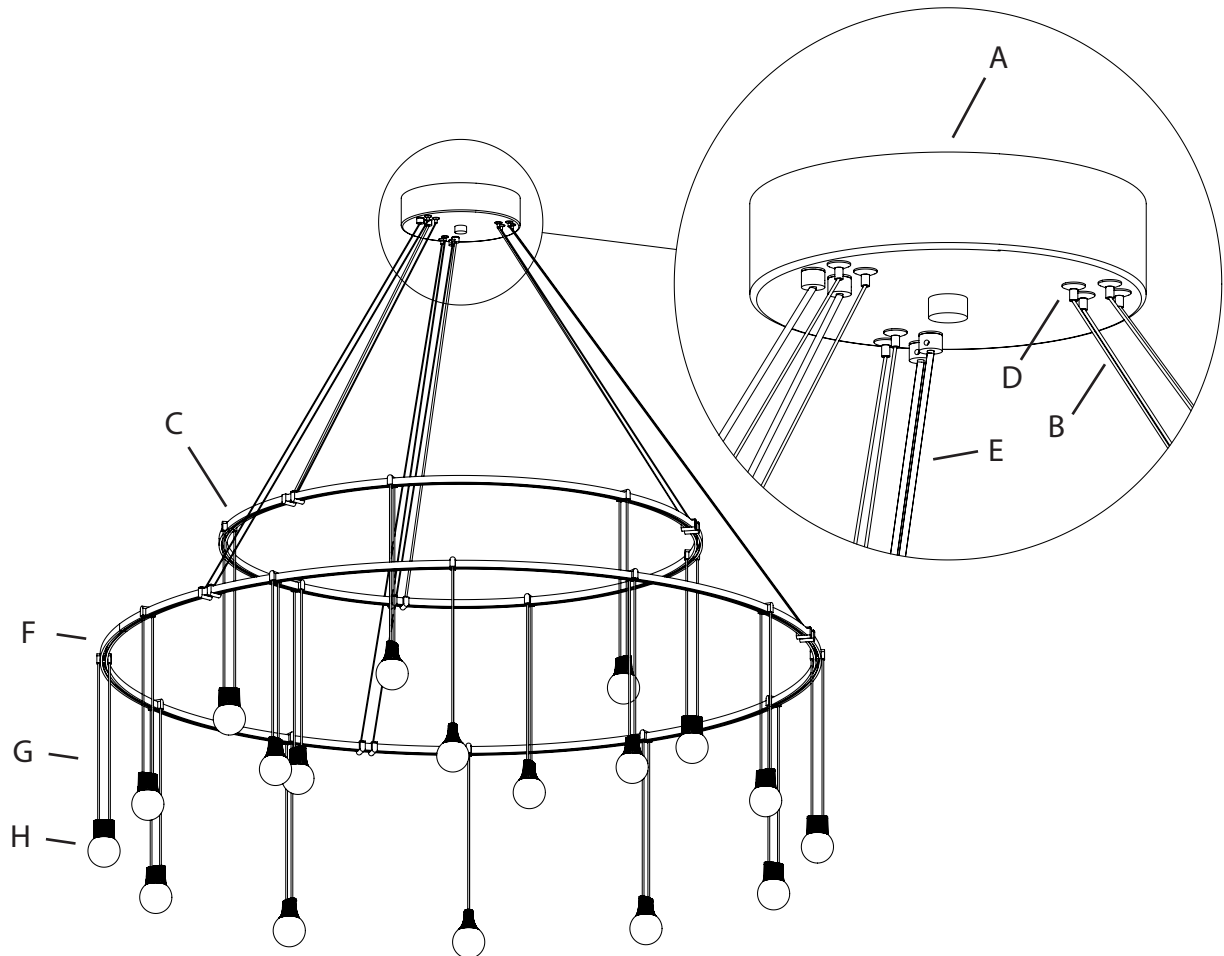
Suspenders™ - Double Ring Configuration

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.



1. Shut off power to the outlet box.
2. Assemble the Power Feed (A) as shown on page 17.
3. Determine desired hanging height, and cut the support cables (B) to length plus 3 inches. Connect the inner Ring Power Bar (C) to the Power Feed (A) by inserting the support cables into the grippers (D) and adjusting to the desired length: to shorten, push the cable up; to lengthen, push in the gripper plunger while pulling down on the cable, release the plunger to lock. Connect the inner Ring Cord Power Feed Hangers (E) to the Power Feed (A) as shown on page 25.
Note: The inner Ring Power Bar cables and cords should connect to the inner set of Power Feed bushings and grippers.
4. Repeat Step 3 for the Outer Ring Power Bar (F).
Note: The outer Ring Power Bar cables and cords should connect to the outer set of Power Feed bushings and grippers.
5. Connect the Luminaire Hangers (G) to the Ring Power Bars (C, F) as shown on page 29. (Fig. 3)
Suggested Installation:
 - 24"/40" - Hang 15pcs Luminaire Hangers (G) on outer Ring Power Bar (F), 9pcs Luminaire Hangers (G) on inner Ring Power Bar (C).
 - 32"/48" - Hang 18pcs Luminaire Hangers (G) on outer Ring Power Bar (F), 12pcs Luminaire Hangers (G) on inner Ring Power Bar (C).
6. Connect the Luminaires (H) to the Luminaire Hangers (G) as shown on page 29. (Figs. 1-2)
7. Restore power to the outlet box.

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

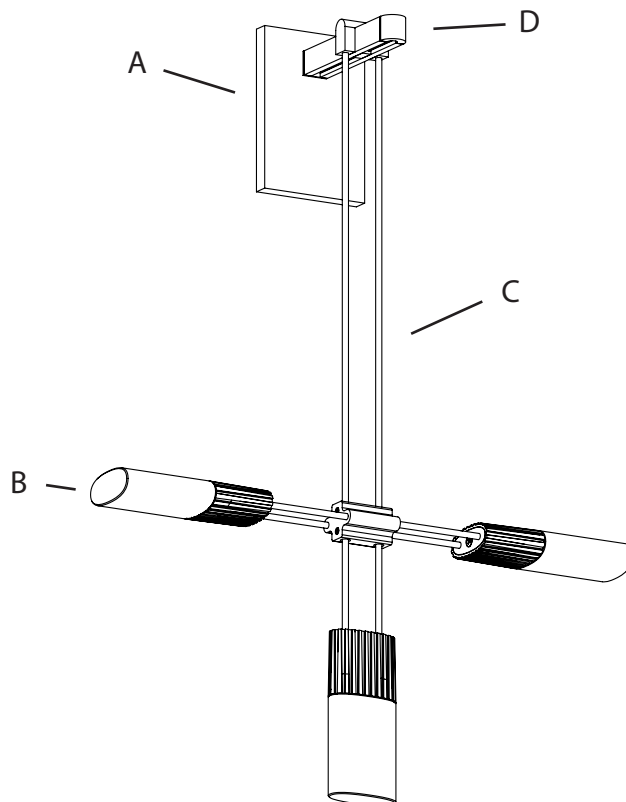
Suspenders™ - Mini Single Sconce Configuration

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.



1. Shut off power to the branch circuit conductor.
2. Assemble the Power Feed (A) as shown on page 21.
3. Connect the Luminaire (B) to the Luminaire Hanger (C) as shown on page 29. (Figs. 1-2)
4. Connect the Luminaire Hanger (C) the Power Bar (D) as shown on page 29. (Fig. 3)
5. Restore power to the branch circuit conductor.

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

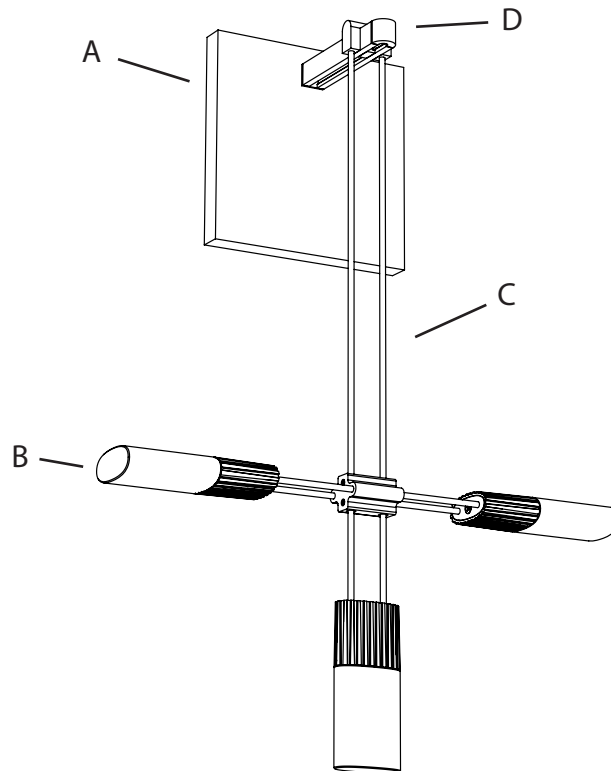
Suspenders™ - Standard Single Sconce Configuration

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.



1. Shut off power to the outlet box.
2. Assemble the Power Feed (A) as shown on page 23.
3. Connect the Luminaire (B) to the Luminaire Hanger (C) as shown on page 29. (Figs. 1-2)
4. Connect the Luminaire Hanger (C) the Power Bar (D) as shown on page 29. (Fig. 3)
5. Restore power to the outlet box.

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

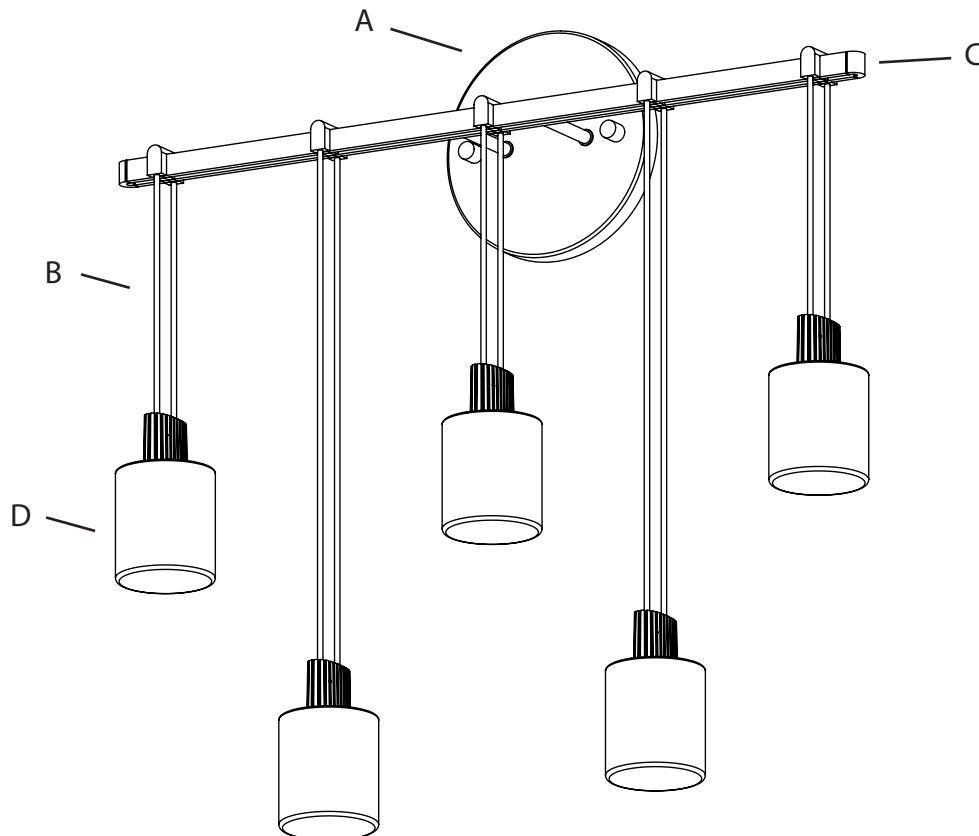
Suspenders™ - Bar Sconce Configuration

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

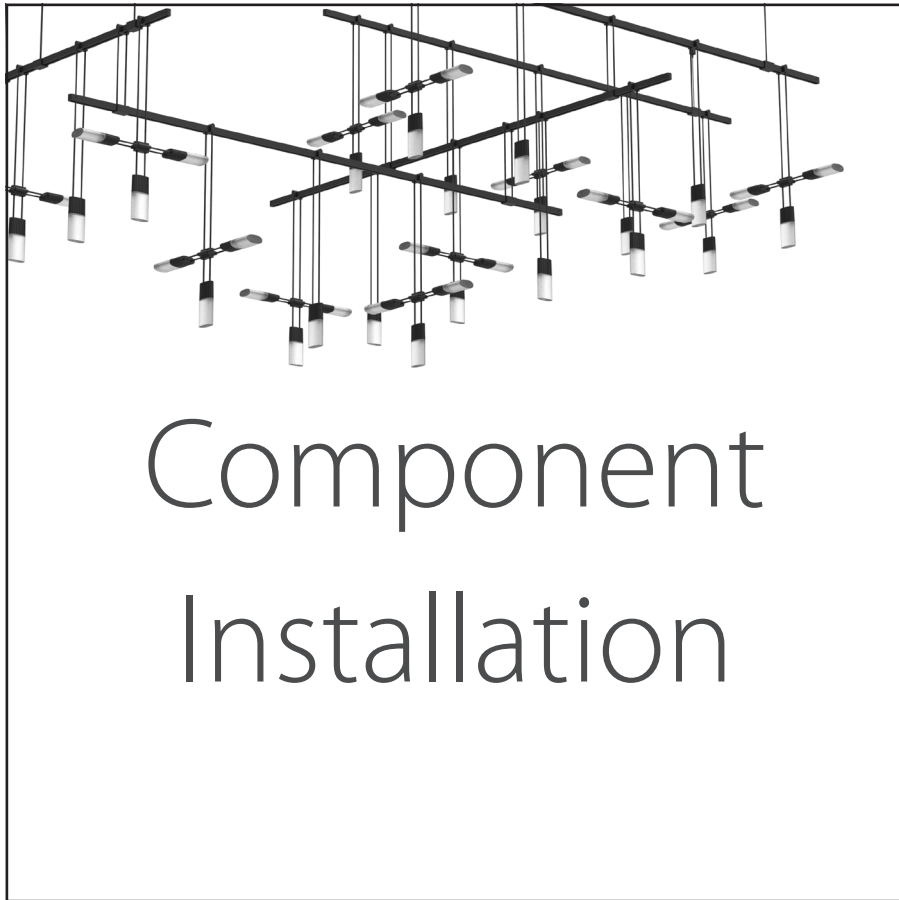
- Always disconnect the power before installing or replacing bulbs and before cleaning or other maintenance.
- Consult a qualified, licensed electrician to ensure correct branch circuit conductor.
Consulter un électricien qualifié pour vous assurer que les conducteurs de la dérivation sont adéquats.



1. Shut off power to the outlet box.
2. Assemble the Power Feed (A) as shown on page 24.
3. Connect the Luminaire Hangers (B) the Power Bar (C) as shown on page 29. (Fig. 3)
4. Connect the Luminaires (D) to the Luminaire Hangers (B) as shown on page 29. (Figs. 1-2)
5. Restore power to the outlet box.

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.



Component Installation

Linear, Tri-Bar, and Ring Power Feed Installation Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.

Deep Power Feed Installation (Fig. 1):

1. Shut off power to the outlet box (A).
2. Attach the crossbar (B) to the outlet box (A) using the two (2) long screws (C).
3. Make appropriate electrical connections using wire nuts:
 - a. Connect the transformer's (D) live wire (black) to the live outlet box wire.
 - b. Connect the transformer's neutral wire (white) to the neutral outlet box wire.
 - c. Connect the ground outlet box wire (green or uncoated) to the crossbar using the green screw.
 - d. Connect one of the black Power Feed (E) wires to one of the transformer output wires. Connect the other black Power Feed wire to the second transformer output wire.
 - e. Carefully place connections in outlet box (A).
4. **For 150W and 300W transformers:** Attach the transformer (D) to the Power Feed (E) using the two (2) small screws (F).
For 60W and 75W transformers: Place the transformer inside the Power Feed.
5. Install the Power Feed (E) to the crossbar (B) by passing the nipple (G) through the hole in the Power Feed and securing with the finial (H).

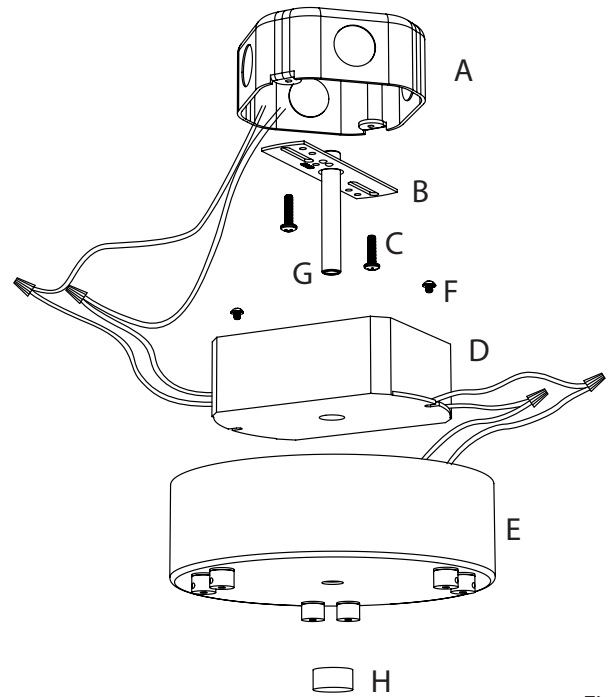


Fig. 1

Shallow Power Feed Installation (Fig. 2):

1. Shut off power to the outlet box (A).
2. **For remote transformer use:** The transformer (D) must be installed in an accessible location in accordance with local electrical codes. You must use the appropriate wire gauge from the transformer to the Power Feed to limit the voltage drop to less than 5%.
3. Make appropriate electrical connections using wire nuts:
 - a. Connect the transformer's (D) live wire (black) to the live outlet box wire.
 - b. Connect the transformer's neutral wire (white) to the neutral outlet box wire.
 - c. Connect the ground outlet box wire (green or uncoated) to the crossbar using the green screw.
 - d. Connect one of the black Power Feed (E) wires to one of the transformer output wires. Connect the other black Power Feed wire to the second transformer output wire.
 - e. Carefully place connections and transformer (if applicable) in outlet box (A).
4. Attach the crossbar (B) to the outlet box using the two (2) long screws (C).
5. Install the Power Feed (E) to the crossbar (B) by passing the nipple (G) through the hole in the Power Feed and securing with the finial (H).

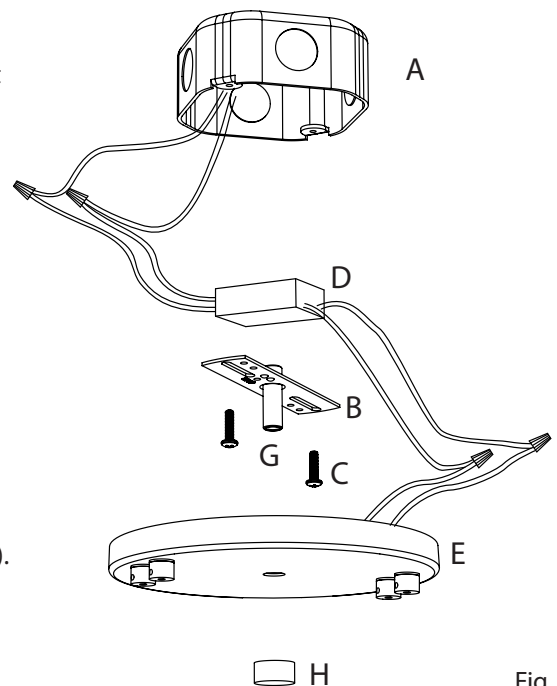


Fig. 2

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

March 09, 2016

Tandem Power Feed Installation

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.

Deep Power Feed Installation (Fig. 1):

1. Shut off power to the outlet box (A).
2. Attach the mounting plate (B) to the outlet box (A) using the two (2) long Phillips screws (C).
3. Make appropriate electrical connections using wire nuts:
 - a. Connect the transformer's (D) live wire (black) to the live outlet box wire.
 - b. Connect the transformer's neutral wire (white) to the neutral outlet box wire.
 - c. Connect the ground outlet box wire (green or uncoated) to the mounting plate using the green screw.
 - d. Connect one of the black Power Feed (E) wires to one of the transformer output wires. Connect the other black Power Feed wire to the second transformer output wire.
 - e. Carefully place connections in outlet box (A).
4. **For 150W and 300W transformers:** Attach the transformer (D) to the Power Feed (E) using the two (2) small pan head screws (F).
For 60W and 75W transformers: Place the transformer inside the Power Feed.
5. Install the Power Feed (E) to the mounting plate (B) using the four (4) counter-sunk Phillips screws (G).

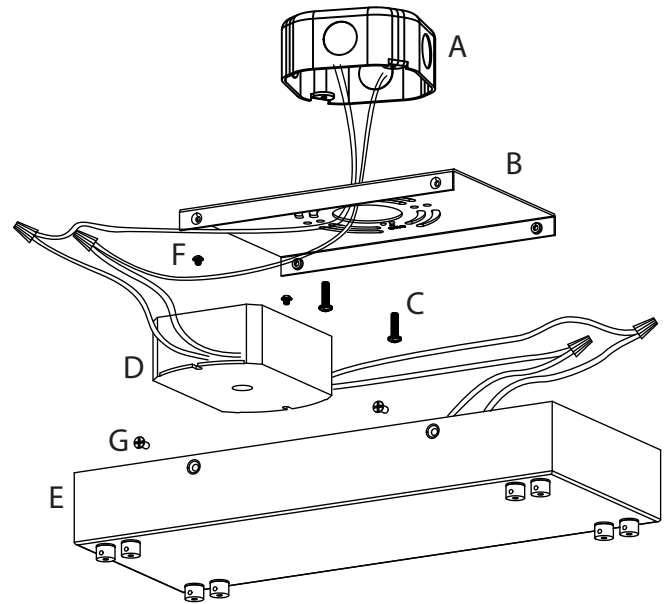


Fig. 1

Shallow Power Feed Installation (Fig. 2):

1. Shut off power to the outlet box (A).
2. **For remote transformer use:** The transformer (D) must be installed in an accessible location in accordance with local electrical codes. You must use the appropriate wire gauge from the transformer to the Power Feed to limit the voltage drop to less than 5%.
3. Make appropriate electrical connections using wire nuts:
 - a. Connect the transformer's (D) live wire (black) to the live outlet box wire.
 - b. Connect the transformer's neutral wire (white) to the neutral outlet box wire.
 - c. Connect the ground outlet box wire (green or uncoated) to the mounting plate (B) using the green screw.
 - d. Connect one of the black Power Feed (E) wires to one of the transformer output wires. Connect the other black Power Feed wire to the second transformer output wire.
 - e. Carefully place connections and transformer (if applicable) in outlet box (A).
4. Attach the mounting plate (B) to the outlet box (A) using the two (2) long Phillips screws (C).
5. Install the Power Feed (E) to the mounting plate (B) using the four (4) counter-sunk Phillips screws (G).

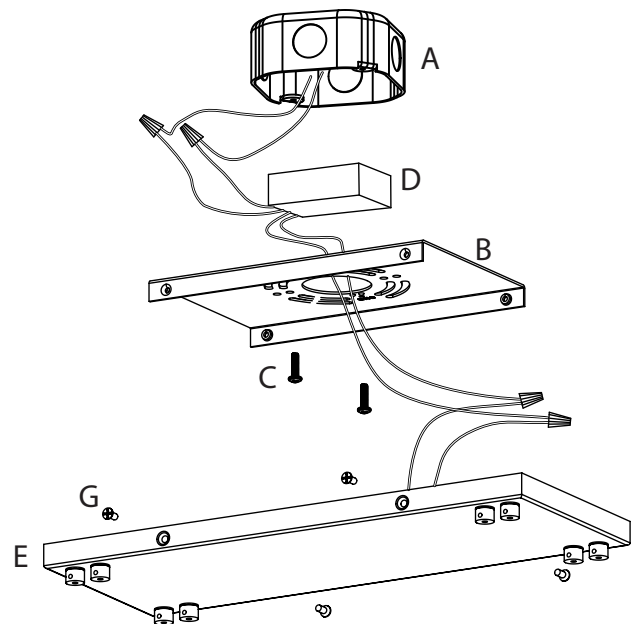


Fig. 2

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

Minibox Ceiling Power Feed Installation

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.

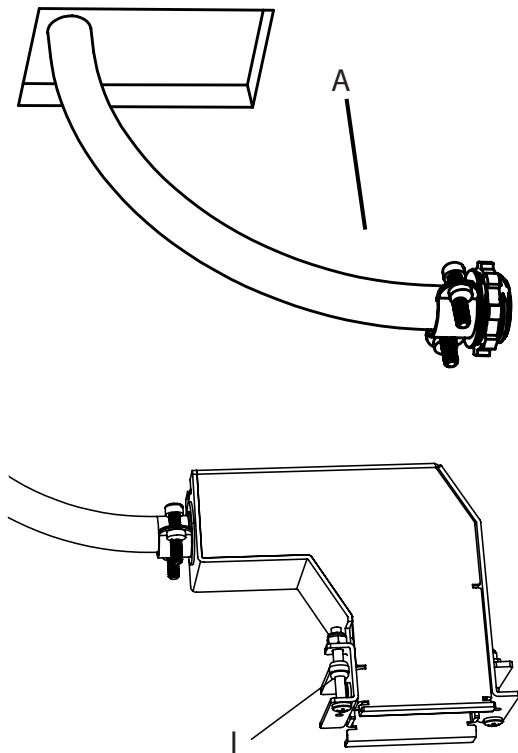


Fig. 2

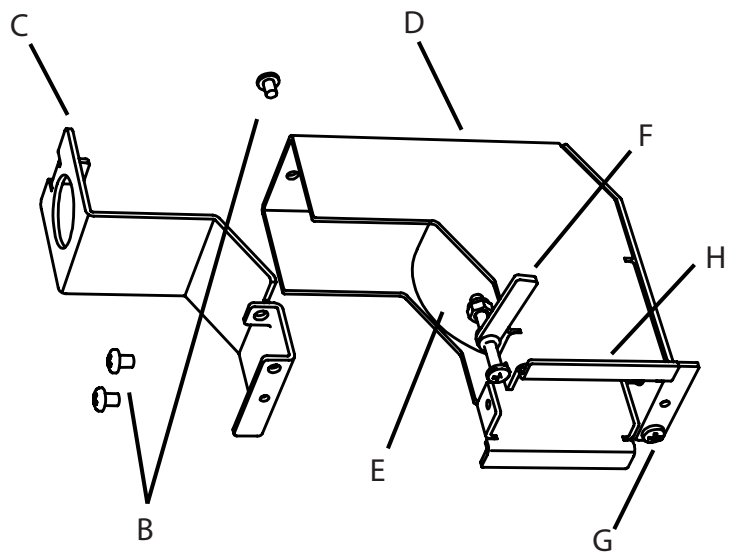


Fig. 1

1. **For remote transformer use:** The transformer must be installed in an accessible location in accordance with local electrical codes. You must use the appropriate wire gauge from the transformer to the Power Feed to limit the voltage drop to less than 5%.
2. Shut off power to the branch circuit conductor.
3. Cut an opening in the mounting surface (minimum 3/8" thick) that measures 1.5" wide by 2.75" high. (Fig. 1)
4. Pull 1/2 trade size flexible metal conduit or building cable (A) through the opening. (Fig. 1)
5. Remove the three Phillips screws (B) and separate the Minibox into upper (C) and lower (D) halves. (Fig. 1)
6. Remove the knockout tab from the upper half (C) and attach the cable/conduit (A) to the knockout opening using appropriate connectors (Note: Cable/conduit and connectors not included). (Fig. 1)
7. Make appropriate electrical connections using wire nuts:
 - a. Connect the transformer's live wire (black) to the live outlet box wire.
 - b. Connect the transformer's neutral wire (white) to the neutral outlet box wire.
 - c. Connect the ground wire (green) to the outlet box ground screw.
 - d. **For 60W and 75W unhooused transformers only:** Carefully place connections and transformer (E) in lower half (D), with the connections in the section near the knockout. (Fig. 1)
8. Flip wing tabs (F) inward so that the Minibox will fit into the drywall opening. (Fig. 2)
9. Reattach upper (C) and lower (D) halves by installing the three Phillips screws (B) removed previously. (Fig. 1)
10. Loosen the two mounting screws (G) on the front face of the Minibox until the gap between the wing tabs (F) and the side tabs (H) is greater than the thickness of the mounting surface. (Fig. 1)
11. Flip wing tabs (F) inward so that the Minibox will fit into the drywall opening. (Fig. 2)
12. Slide O-rings (I) along mounting screws (G) so that they are flush against the wing tabs (F). (Fig. 2)

(continued on next page)

March 09, 2016

Minibox Ceiling Power Feed Installation

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.

12. Feed the Minibox into the wall opening at a slight angle (Fig. 3) until the side tabs (H) are pressed against the mounting surface. (Fig. 3)
13. While keeping the side tabs (H) pressed against the mounting surface, secure the Minibox to the mounting surface by tightening the two mounting screws (G). (Fig. 4)
14. Make appropriate electrical connections using wire nuts: Connect one of the black Power Feed wires to one of the transformer output wires. Connect the other black Power Feed wire to the second transformer output wire. Carefully place connections in the Minibox. (Fig. 5)
15. Attach mounting bracket (J) to Minibox with two mounting screws (K). (Fig. 5)
16. Attach Power Feed (L) to mounting bracket (J). Secure using set screw (M) and included Allen key (N). (Fig. 6)

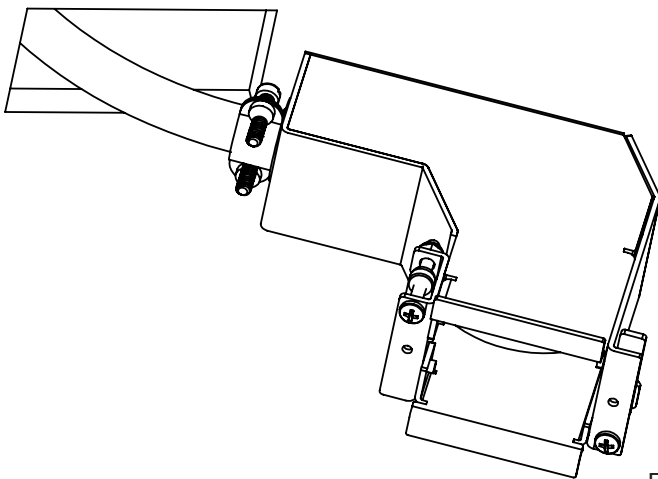


Fig. 3

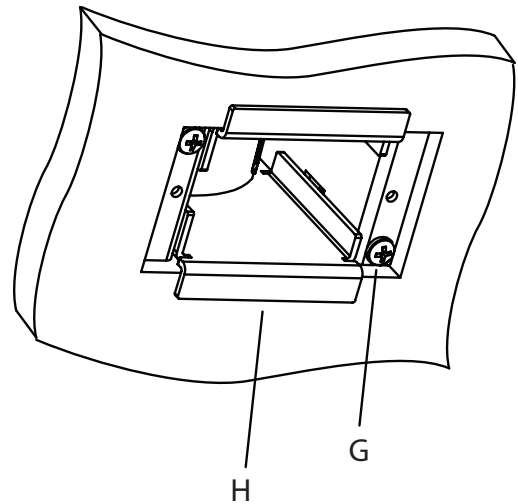


Fig. 4

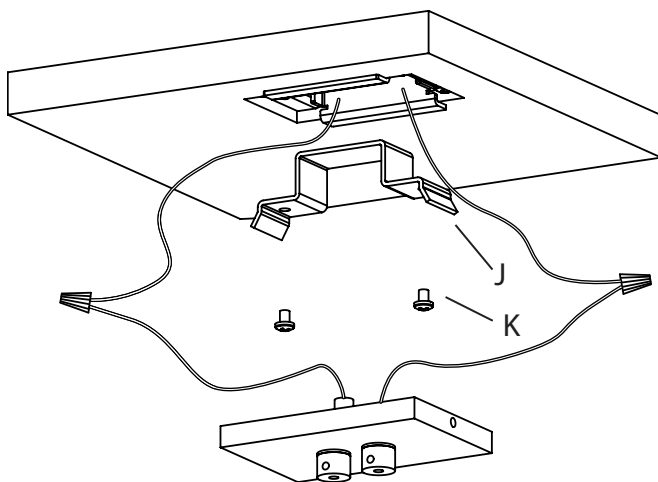


Fig. 5

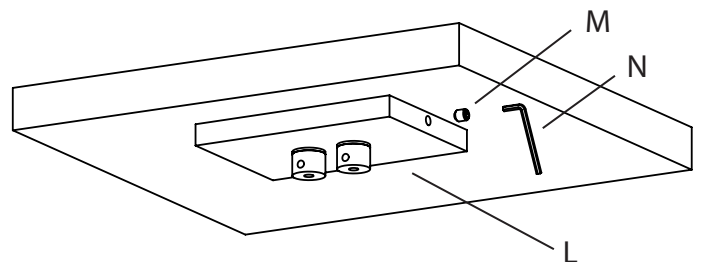


Fig. 6

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

Minibox Wall Sconce Power Feed Installation

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.

1. **For remote transformer use:** The transformer must be installed in an accessible location in accordance with local electrical codes. You must use the appropriate wire gauge from the transformer to the Power Feed to limit the voltage drop to less than 5%.
2. Shut off power to the branch circuit conductor.
3. Cut an opening in the mounting surface (minimum 3/8" thick) that measures 1.5" wide by 2.75" high. (Fig. 1)
4. Pull 1/2 trade size flexible metal conduit or building cable (A) through the opening. (Fig. 1)
5. Remove the three Phillips screws (B) and separate the Minibox into upper (C) and lower (D) halves. (Fig. 1)
6. Remove the knockout tab from the upper half (C) and attach the cable/conduit (A) to the knockout opening using appropriate connectors (Note: Cable/conduit and connectors not included). (Fig. 1)
7. Make appropriate electrical connections using wire nuts:
 - a. Connect the transformer's live wire (black) to the live outlet box wire.
 - b. Connect the transformer's neutral wire (white) to the neutral outlet box wire.
 - c. Connect the ground wire (green) to the outlet box ground screw.
 - d. **For 60W and 75W unhused transformers only:** Carefully place connections and transformer (E) in lower half (D), with the connections in the section near the knockout. (Fig. 1)
8. Flip wing tabs (F) inward so that the Minibox will fit into the drywall opening. (Fig. 2)
9. Reattach upper (C) and lower (D) halves by installing the three Phillips screws (B) removed previously. (Fig. 1)
10. Loosen the two mounting screws (G) on the front face of the Minibox until the gap between the wing tabs (F) and the side tabs (H) is greater than the thickness of the mounting surface. (Fig. 1)
11. Flip wing tabs (F) inward so that the Minibox will fit into the drywall opening. (Fig. 2)
12. Slide O-rings (I) along mounting screws (G) so that they are flush against the wing tabs (F). (Fig. 2)

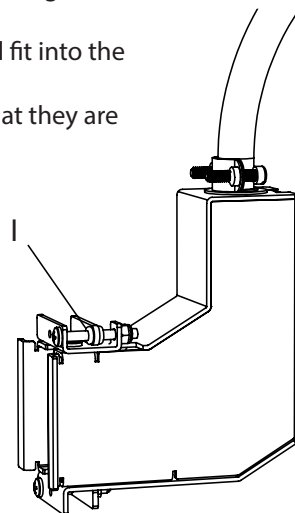
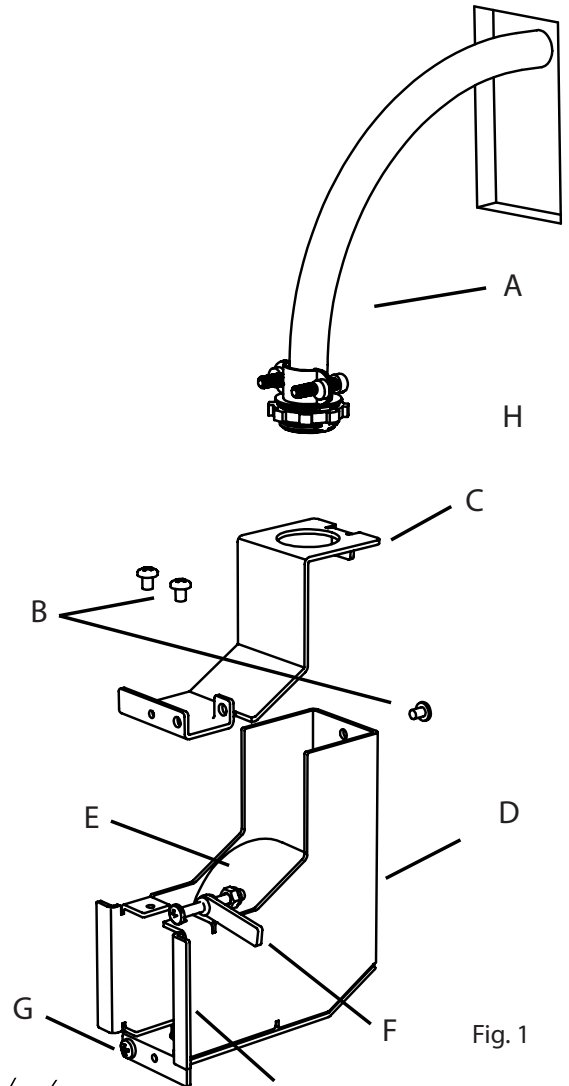


Fig. 2

(continued on next page)

March 09, 2016

Minibox Wall Power Feed Installation

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.

12. Feed the Minibox into the wall opening at a slight angle (Fig. 3) until the side tabs (H) are pressed against the mounting surface. (Fig. 3)
17. While keeping the side tabs (H) pressed against the mounting surface, secure the Minibox to the mounting surface by tightening the two mounting screws (G). (Fig. 4)
18. Make appropriate electrical connections using wire nuts: Connect one of the black Power Feed wires to one of the transformer output wires. Connect the other black Power Feed wire to the second transformer output wire. Carefully place connections in the Minibox. (Fig. 5)
19. Attach mounting bracket (J) to Minibox with two mounting screws (K). (Fig. 5)
20. Attach Power Feed (L) to mounting bracket (J). Secure using set screw (M) and included Allen key (N). (Fig. 6)

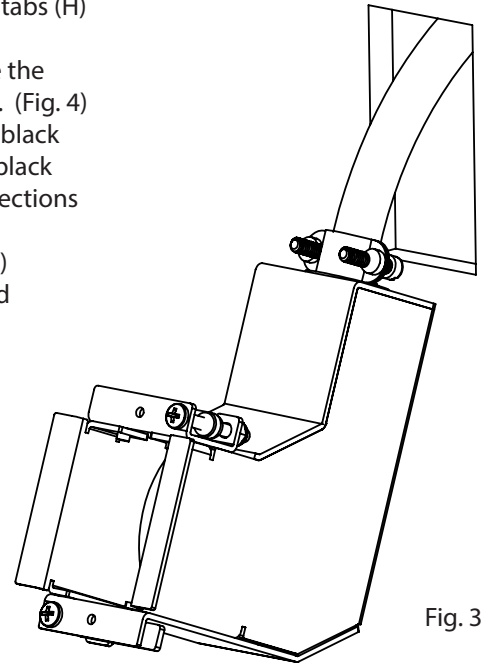


Fig. 3

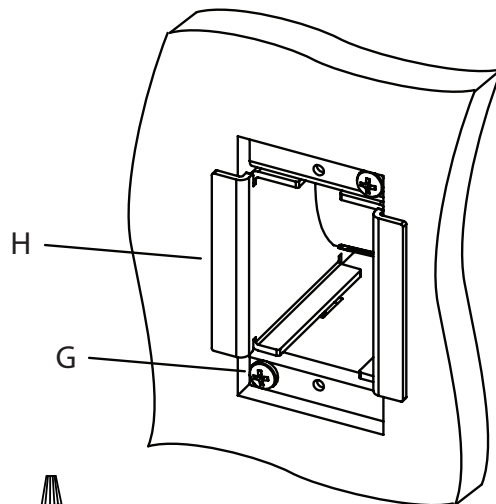


Fig. 4

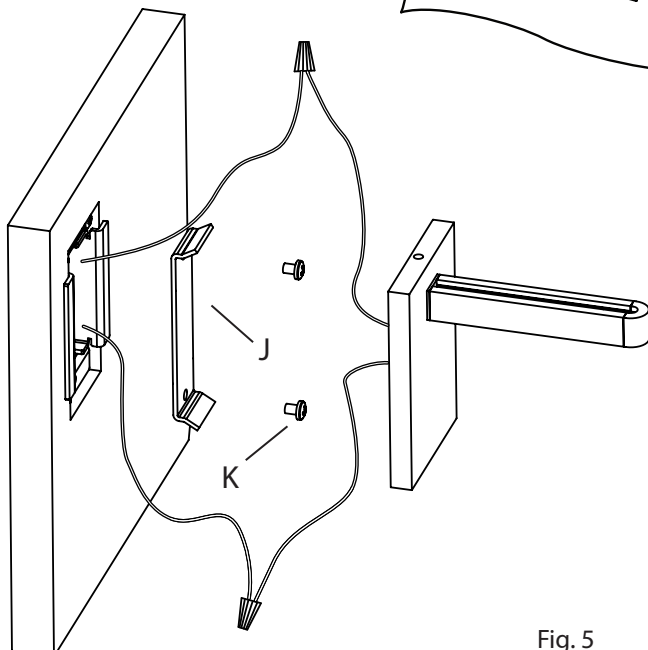


Fig. 5

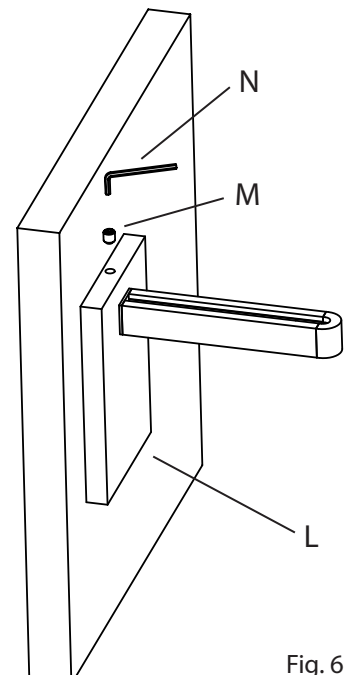


Fig. 6

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

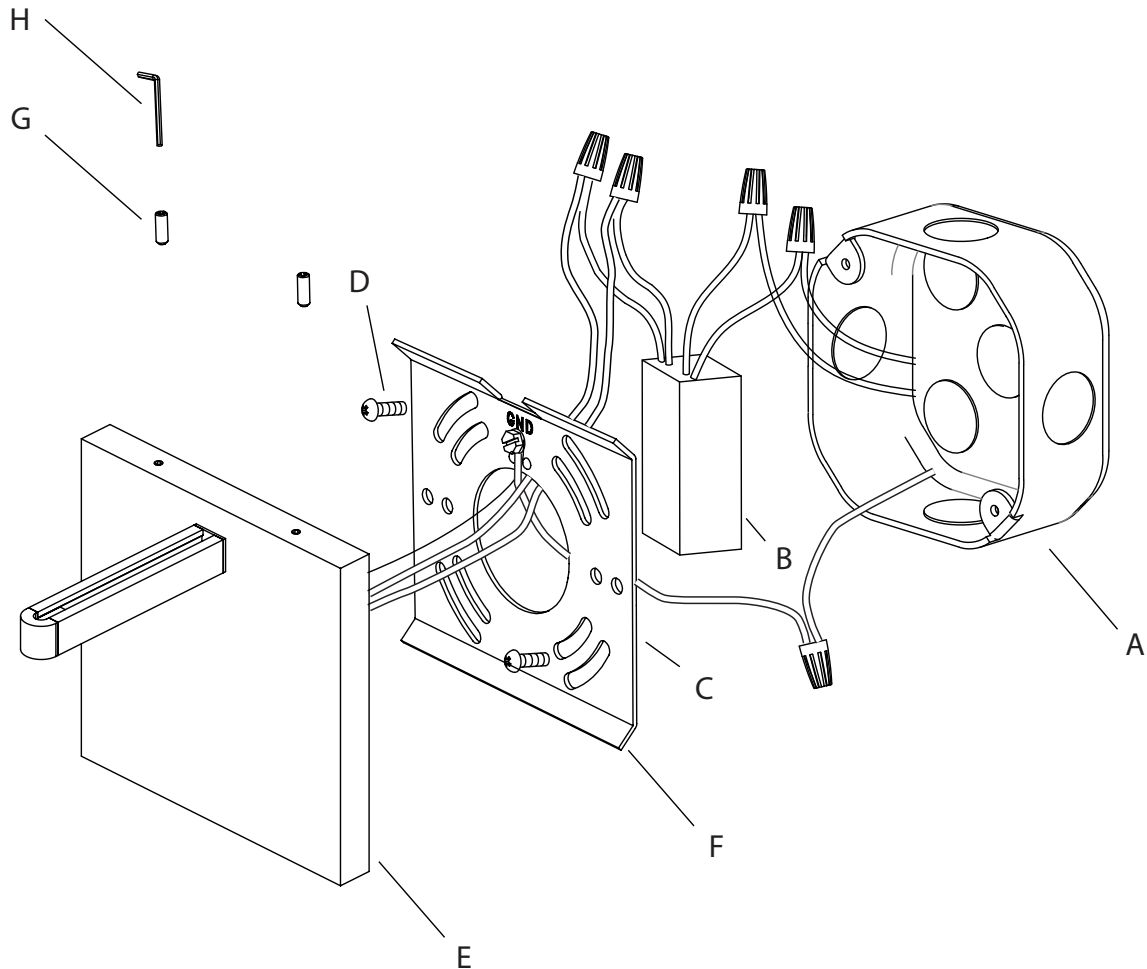
Standard Wall Power Feed Installation

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.



1. Shut off power to the outlet box (A).
2. Make appropriate electrical connections using wire nuts:
 - a. Connect the transformer's (B) live wire (black) to the live outlet box wire.
 - b. Connect the transformer's (B) neutral wire (white) to the neutral outlet box wire.
 - c. Connect the ground wire (green or uncoated) to the ground outlet box wire.
 - d. Carefully place connections and transformer (B) in outlet box (A).
3. Attach the mounting plate (C) to the outlet box (A), secure with outlet box screws (D).
4. Install the Power Feed (E) to the mounting plate (C) by hooking the bend (F) onto the bracket in the Power Feed. Secure with set screws (G) using included Allen wrench (H).

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

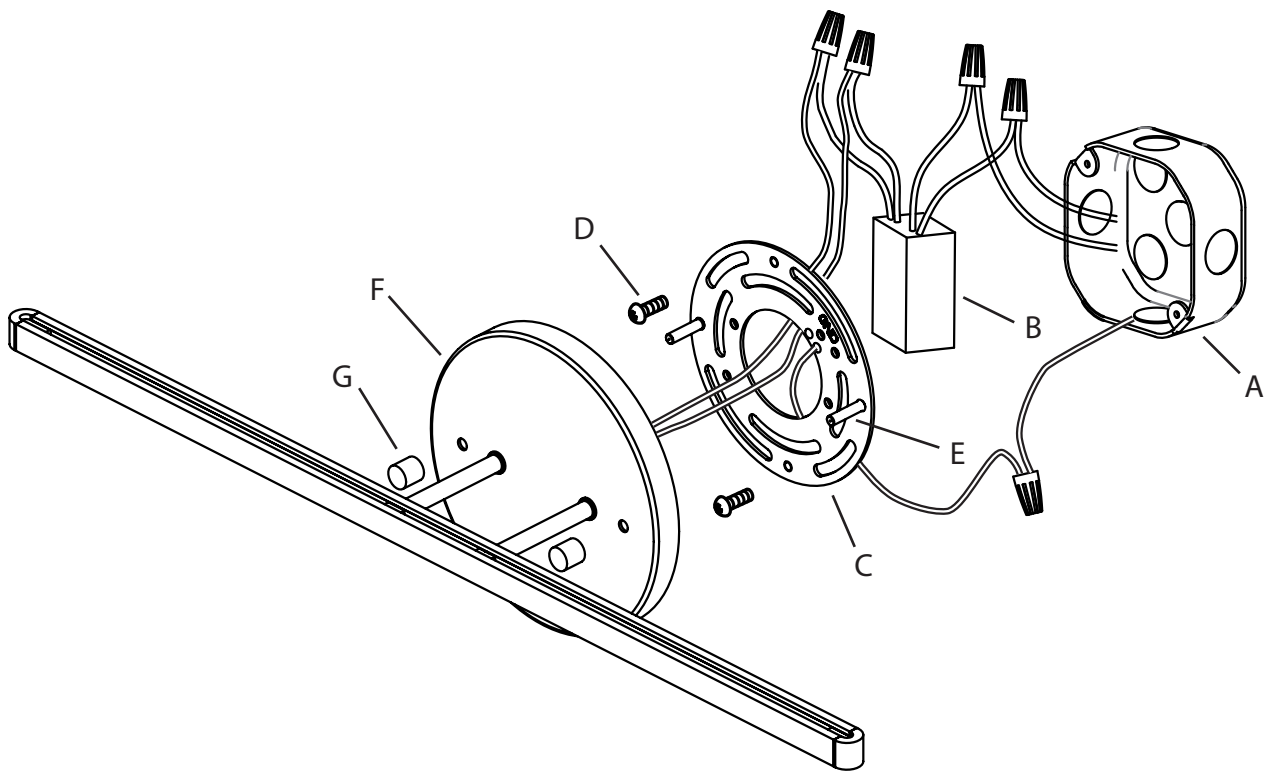
Bar Sconce Power Feed Installation

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Important

- Always disconnect the power before installing or replacing bulbs 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.



1. Shut off power to the outlet box (A).
2. Make appropriate electrical connections using wire nuts:
 - a. Connect the transformer's (B) live wire (black) to the live outlet box wire.
 - b. Connect the transformer's (B) neutral wire (white) to the neutral outlet box wire.
 - c. Connect the ground wire (green or uncoated) to the ground outlet box wire.
 - d. Carefully place connections and transformer (B) in outlet box (A).
3. Attach the mounting plate (C) to the outlet box (A), secure with outlet box screws (D) so that the studs (E) are horizontal.
4. Install the Power Feed (F) to the mounting plate (C) by passing the studs (E) through the holes on the Power Feed, secure with the cap nuts (G).

Note

- This fixture is dimmable with Electronic Low Voltage (i.e., Trailing-Edge/Reverse Phase) type dimmers ONLY.

Power Feed Hanger Assembly

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Single Cord Power Feed Hanger:

NOTE: Each Single Cord Power Feed Hanger only carries half of the electrical circuit, and must be used in pairs. To avoid short-circuiting the system, the spring contacts must point in different directions.

1. Install the Single Cord Power Feed Hanger onto the Power Bar the same was as the Perpendicular Power Bar Hanger (page 28): pass the cord through the Power Bar, tip the Hanger 45 degrees and insert the copper springs into the center of the Power Bar, then push the Hanger up while tipping it back up 45 degrees. (Fig. 1)
2. Cut the cord to the desired length, and remove 10mm (3/8") of insulation from the end of each cord.
3. Twist the wire strands tightly, then insert the exposed wires into the Power Feed bushings. Secure by tightening the set screws with the included Allen key.

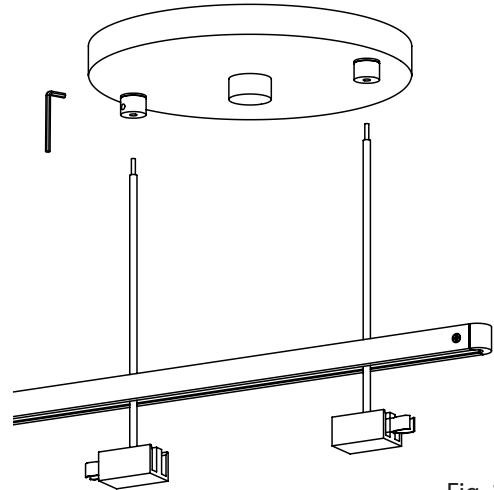


Fig. 1

Double Cord Power Feed Hanger:

1. Install the Double Cord Power Feed Hanger onto the Power Bar the same was as the Parallel Power Bar Hanger (page 28): press down firmly on the top of the Power Bar, while pressing up on the bottom of the Hanger, until the Power Bar clicks into place. (Fig. 2)
2. Cut the cords to the desired length, and remove 10mm (3/8") of insulation from the end of each cord.
3. Twist the wire strands tightly, then insert the exposed wires into the Power Feed bushings. Secure by tightening the set screws with the included Allen key.

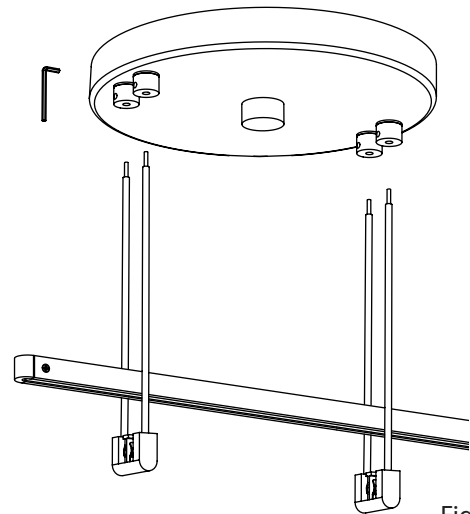


Fig. 2

Double Rod Power Feed Hanger:

1. Install the Double Rod Power Feed Hanger onto the Power Bar the same was as the Parallel Power Bar Hanger (page 28): press down firmly on the top of the Power Bar, while pressing up on the bottom of the Hanger, until the Power Bar clicks into place. (Fig. 3)
2. Cut the rods to the desired length, and use the included sandpaper tool to remove 10mm (3/8") of the paint from the end of each rod.
3. Insert the rods into the Power Feed bushings. Secure by tightening the set screws with the included Allen key.

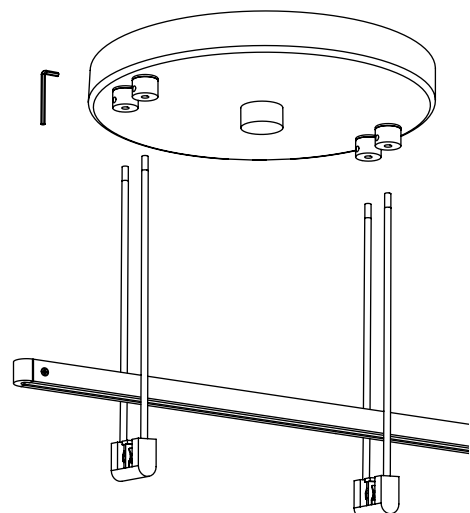


Fig. 3

Ceiling Hanger Assembly

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

Rod Ceiling Hanger Assembly:

1. Install the mounting bracket to the ceiling with anchor and screw, then screw the post onto the mounting bracket. (Fig. 1)
2. Pass the Ceiling Hanger rod through the Power Bar, then through the center hole of the cover, making sure the counter-sunk holes on the cover are facing up. Attach the cover to the Ceiling Hanger using the two small Phillips screws. (Fig. 2)
3. Cut the rod to the desired length, then insert the rod into the post and tighten the set screw with the Allen key. (Fig. 3)



Fig. 1

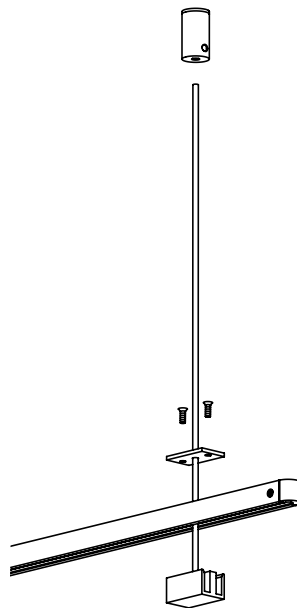


Fig. 2

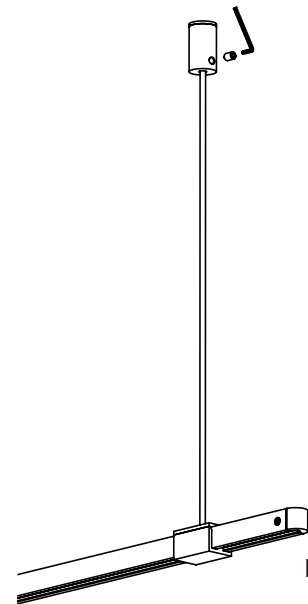


Fig. 3

Cable Ceiling Hanger Assembly:

1. Install the mounting bracket to the ceiling with anchor and screw, then screw the post onto the mounting bracket. (Fig. 4)
2. Pass the Ceiling Hanger cable through the Power Bar, then through the center hole of the cover, making sure the counter-sunk holes on the cover are facing up. Attach the cover to the Ceiling Hanger using the two small Phillips screws. (Fig. 5)
3. Insert the cable into the post and adjust to the desired length: to shorten, push the cable up; to lengthen, push in the plunger while pulling down on the cable, release the plunger to lock. Cut off the excess cable where it exits the post. (Fig. 6)



Fig. 4

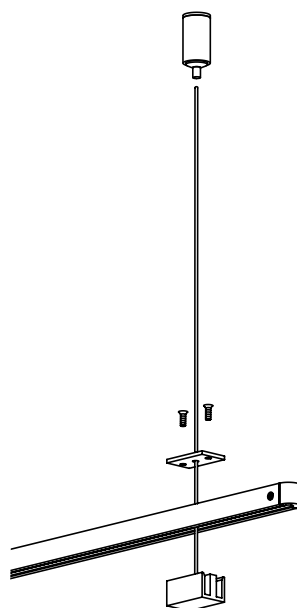


Fig. 5

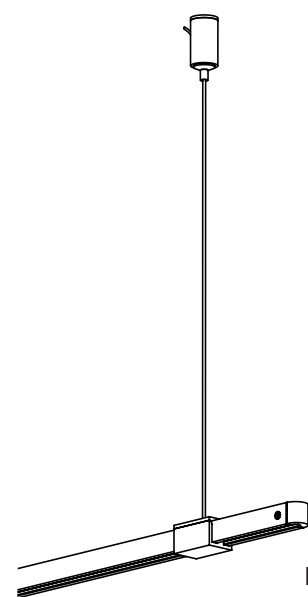


Fig. 6

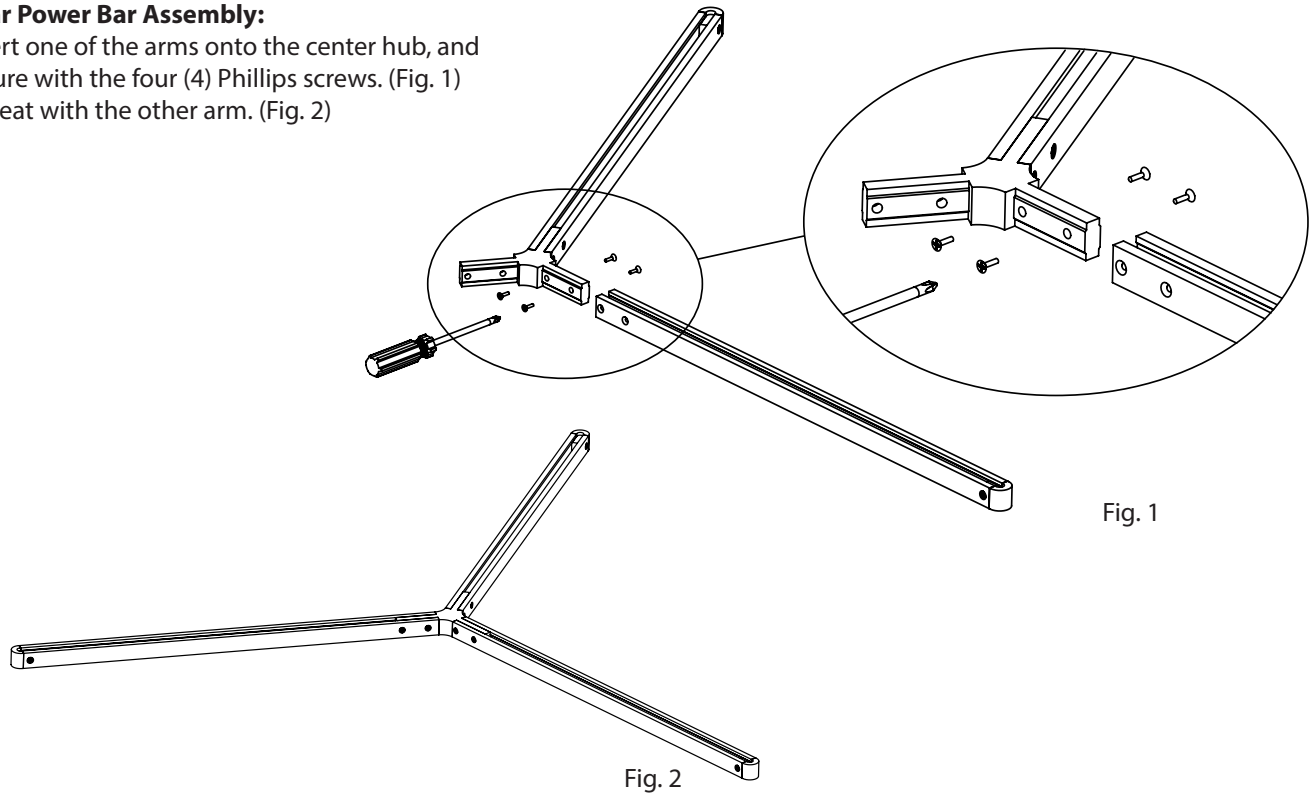
Power Bar Assembly

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

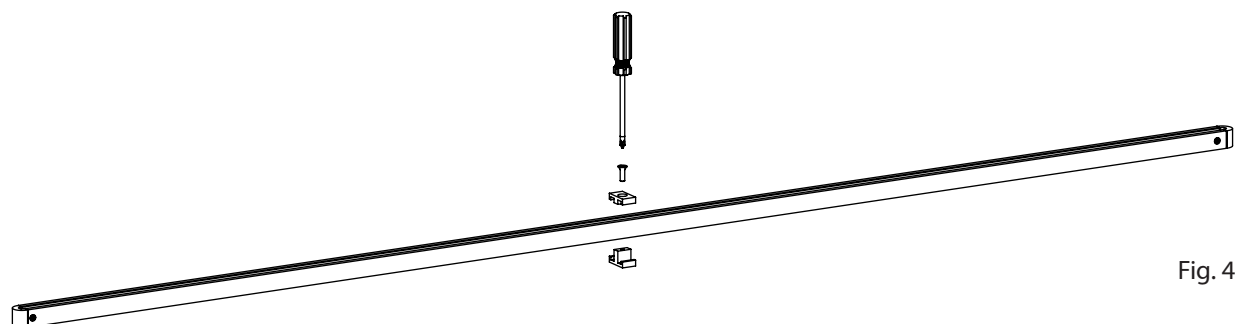
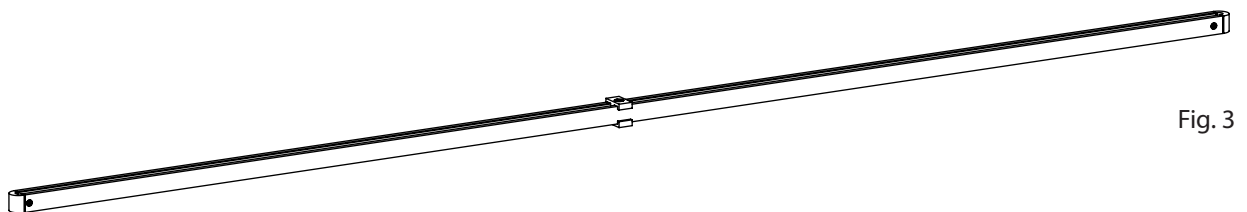
Tri-Bar Power Bar Assembly:

1. Insert one of the arms onto the center hub, and secure with the four (4) Phillips screws. (Fig. 1)
2. Repeat with the other arm. (Fig. 2)



Linear Power Bar Assembly:

1. The Linear Power Bar comes with a spacer clip pre-installed at the center of the Power Bar. (Fig. 2)
2. If desired, the spacer clip can be removed using a Phillips screwdriver. (Fig. 4)



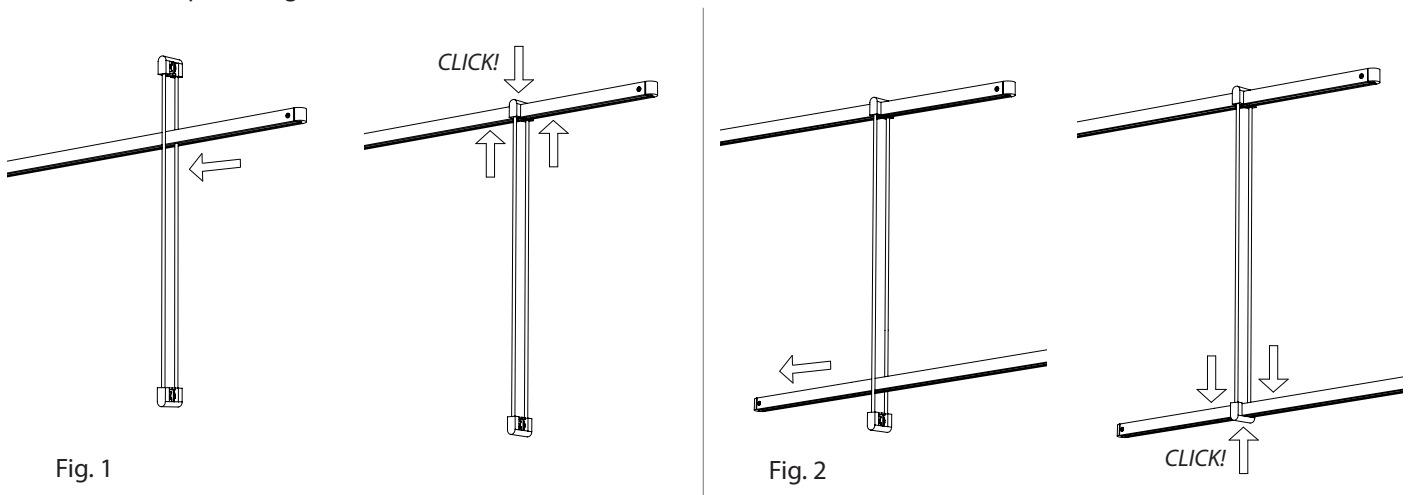
Power Bar Hanger Installation

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

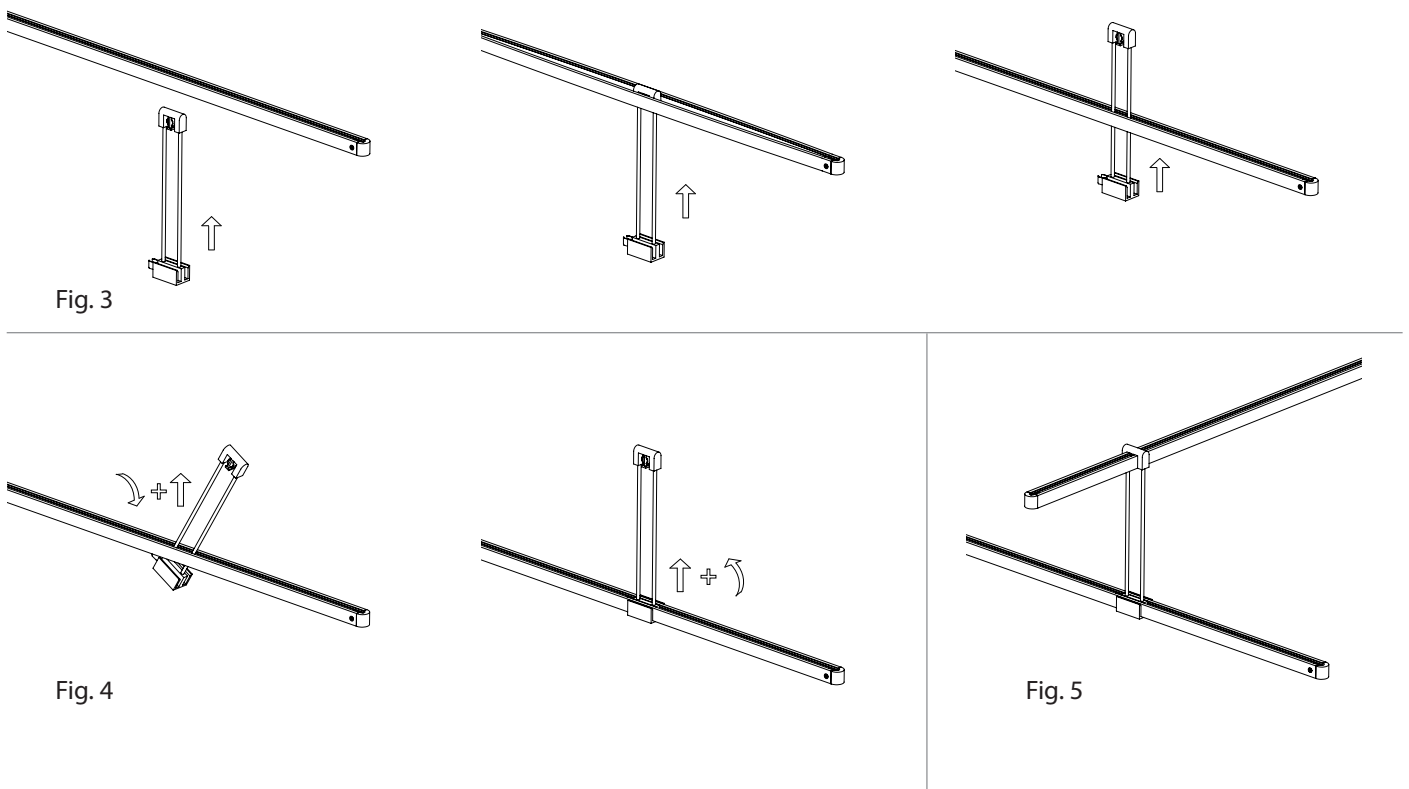
Parallel Power Bar Hanger:

1. Pass one end of the Parallel Power Bar Hanger over the end of a Power Bar. (Fig. 1)
2. Press down firmly on the top of the Power Bar Hanger, while pressing up on the bottom of the Power Bar, until the Power Bar Hanger clicks into place. (Fig. 1)
3. Pass a second Power Bar between the rods of the Power Bar Hanger. (Fig. 2)
4. Press down firmly on the top of the Power Bar, while pressing up on the bottom of the Power Bar Hanger, until the Power Bar clicks into place. (Fig. 2)



Perpendicular Power Bar Hanger:

1. Gently spread apart the Power Bar and insert the rods of the Perpendicular Power Bar Hanger through the Power Bar. (Fig. 3)
2. Tip the Perpendicular Power Bar Hanger 45 degrees and insert the copper springs into the center of the Power Bar. (Fig. 4)
3. Push the Perpendicular Power Bar Hanger up while tipping it back up 45 degrees. (Fig. 4)
4. Attach the second Power Bar the same way as for the Parallel Power Bar Hanger. (Fig. 5)



Luminaire and Luminaire Hanger Installation

Assembly Instructions

INSTRUCTIONS D'INSTALLATION

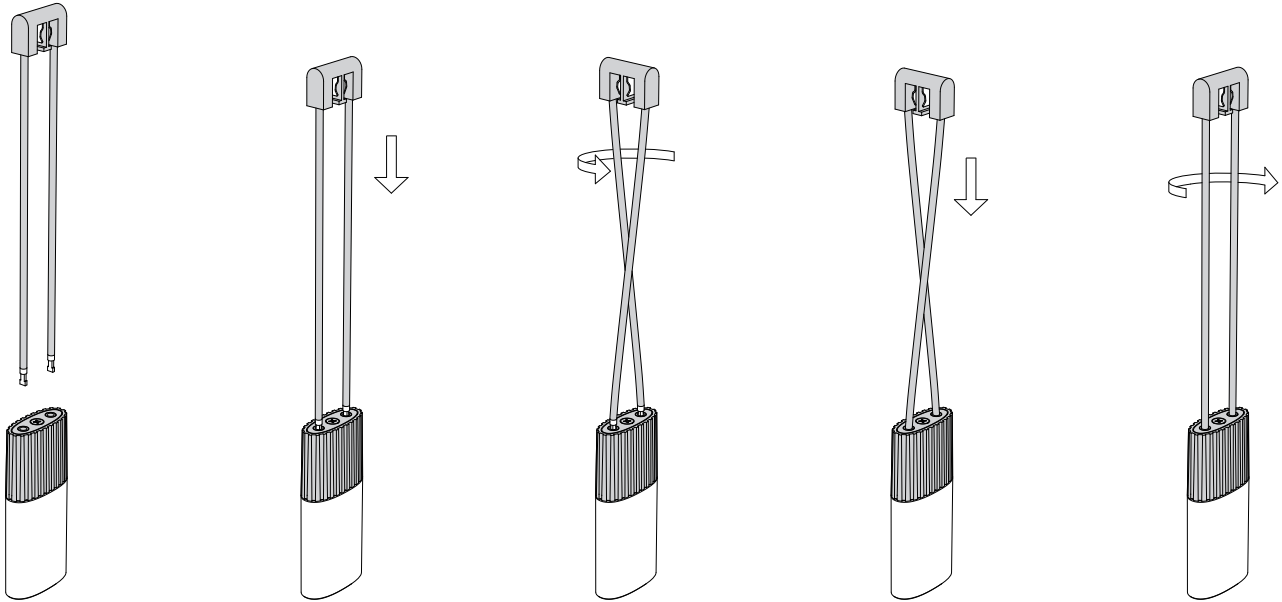


Fig. 1

Connecting an RPxx Luminaire to a Luminaire Hanger (Fig. 1):

1. Gently insert the two Luminaire Hanger rods into the holes on the top of the Luminaire.
2. Rotate the Luminaire or Luminaire Hanger 90 degrees.
3. Push the Luminaire Hanger rods into the Luminaire until the copper on the ends of the rods is no longer visible.
4. Rotate the Luminaire or Luminaire Hanger back 90 degrees to lock.

Connecting an HCxx Luminaire to a Cluster Luminaire Hanger (Fig. 2):

1. Insert the two rods of the Cluster Luminaire Hanger and the bottom Luminaire into the center hub.
2. Use the included Allen wrench to tighten the four set screws.

Connecting a Luminaire Hanger to a Power Bar (Fig. 3):

1. Place the Luminaire Hanger over the Power Bar.
2. Press down firmly on the top of the Luminaire Hanger, while pressing up on the bottom of the Power Bar, until the Luminaire Hanger clicks into place.

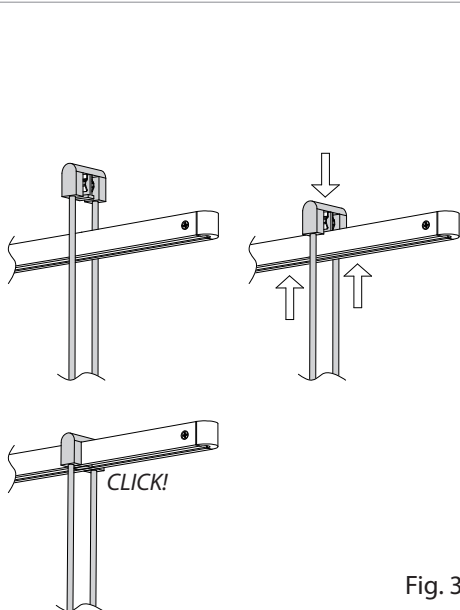


Fig. 3

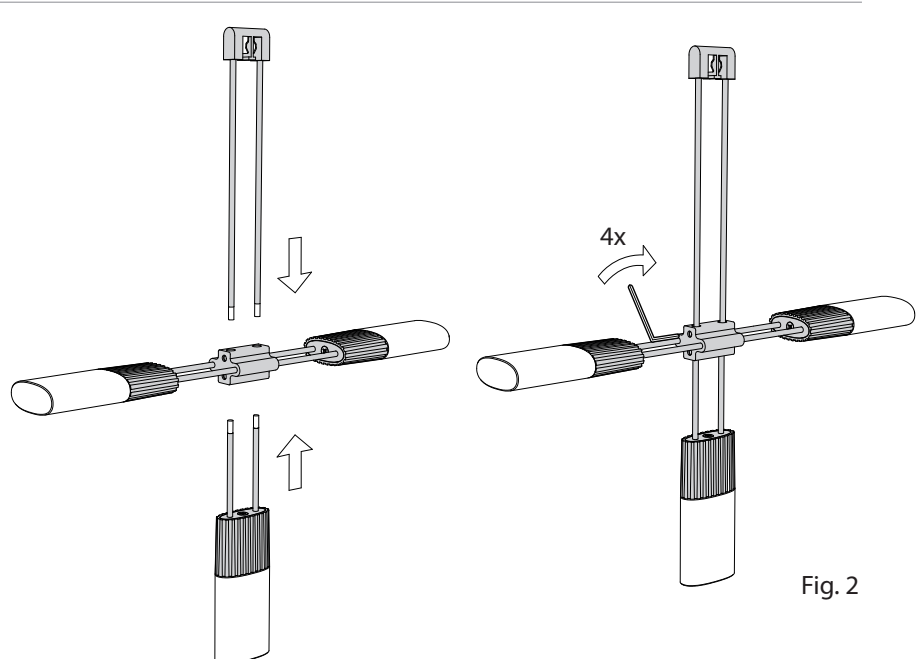


Fig. 2