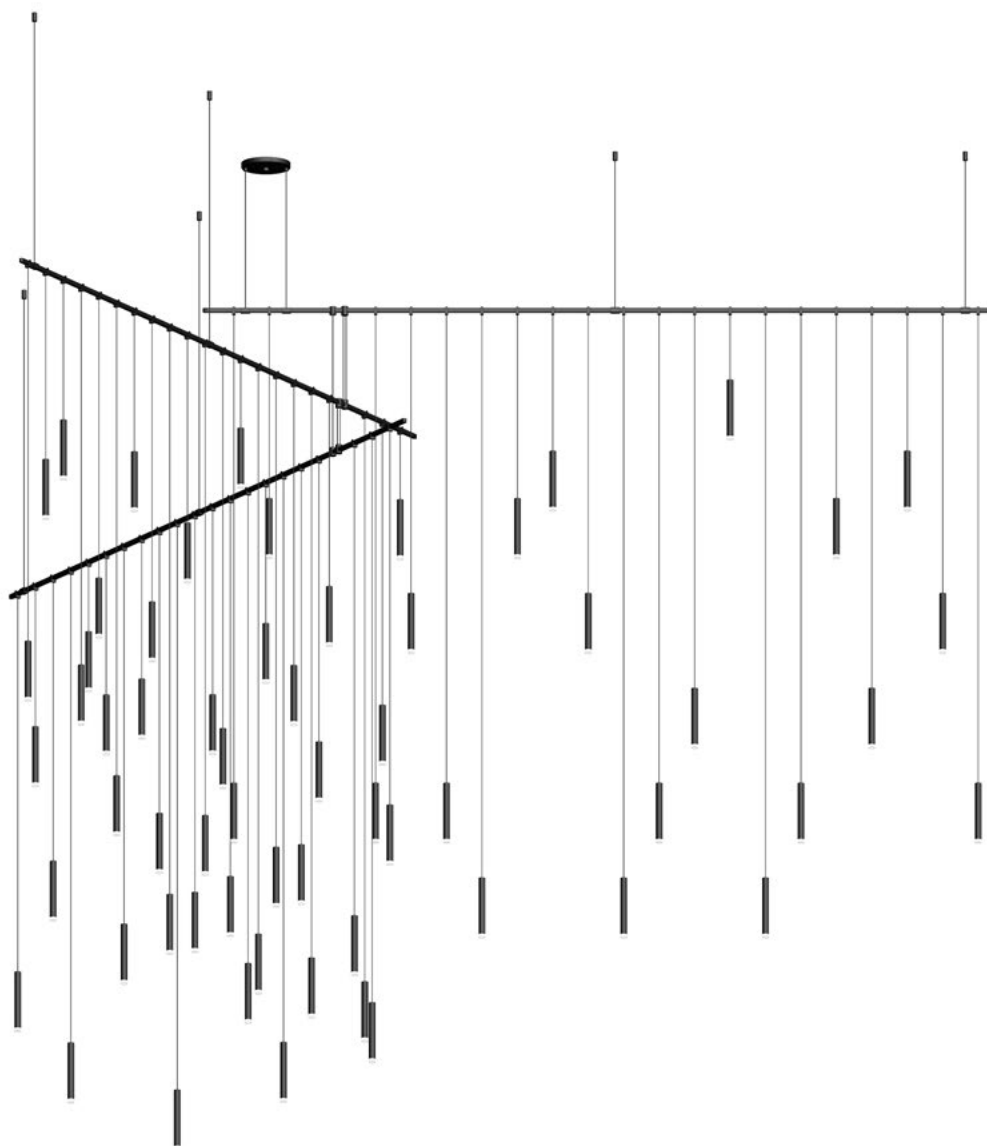




SLS1149

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

suspenders[®]

Custom Assembly Instructions

SONNEMAN[®]
A WAY OF LIGHT

December 2, 2020

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.

Tier Definition

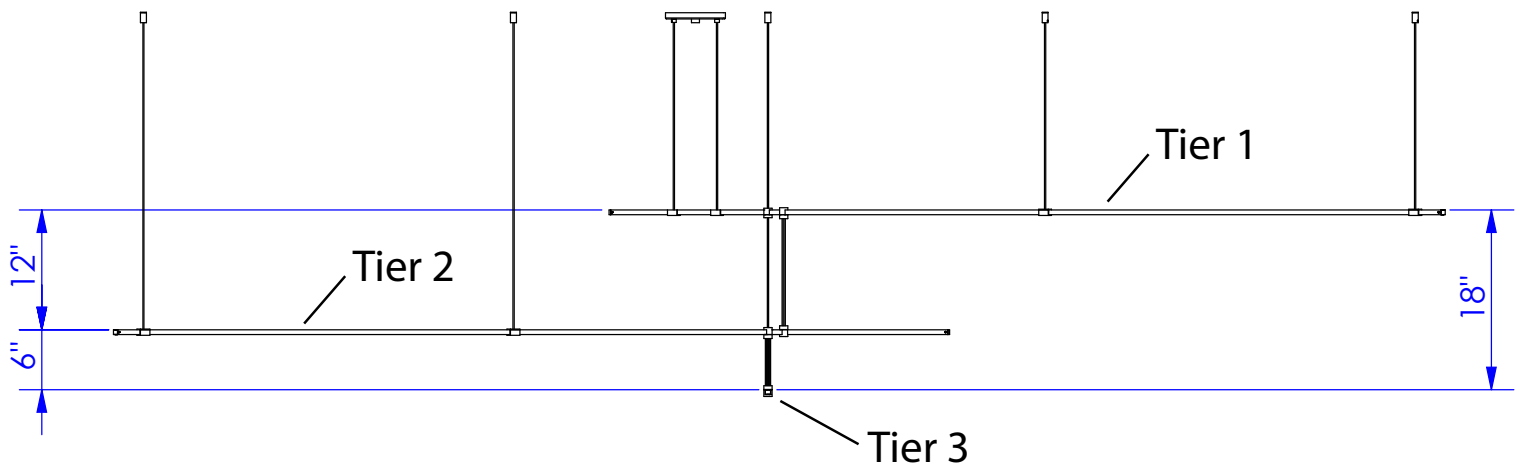


Fig. 1

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Step 1

Shallow Power Feed Installation (Fig. 2):

1. Shut off power to the **outlet box**.
2. **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%.
3. 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 outlet box wire (green or uncoated) to the crossbar using the green screw.
 - d. 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.
 - e. Carefully place connections and Transformer (if applicable) in outlet box.
4. Attach the **crossbar** to the outlet box using the two (2) long **screws**.
5. Install the Power Feed to the crossbar by passing the **threaded nipple** through the hole in the Power Feed and securing with the **finial**.

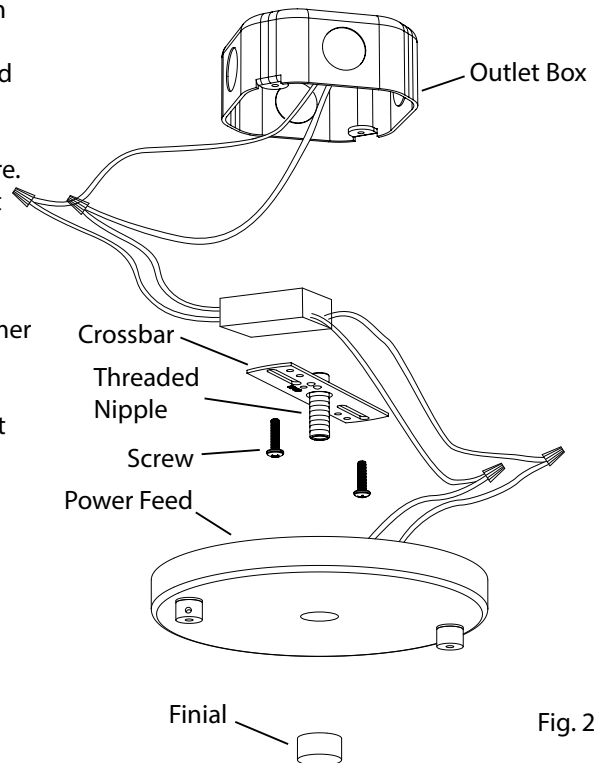


Fig. 2

Note

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

Step 2

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: 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. 3)
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.

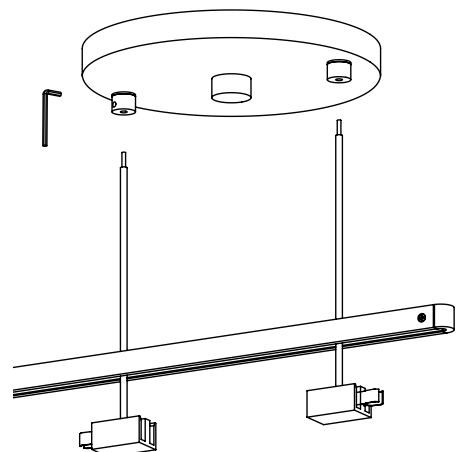


Fig. 3

Power Feed Location

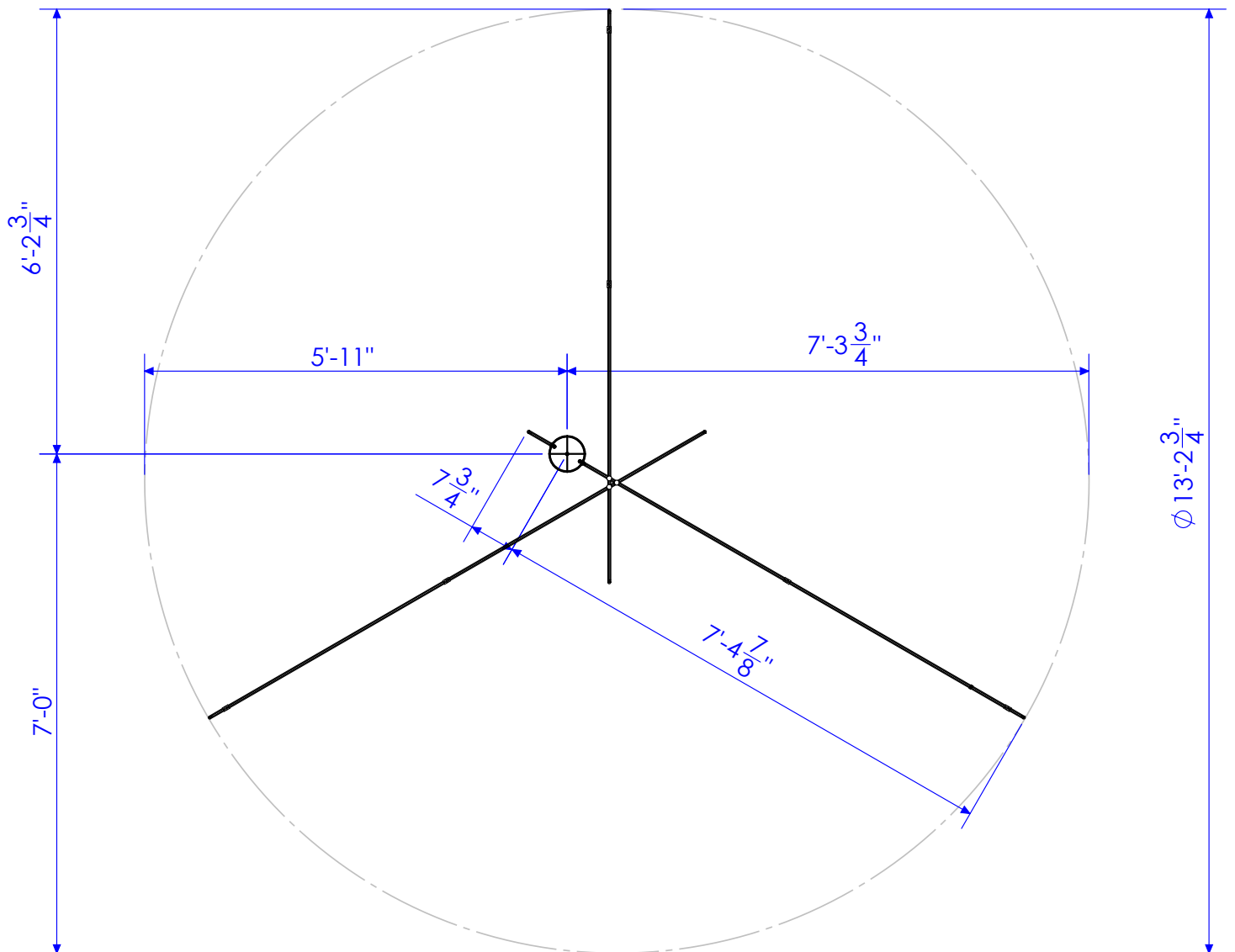


Fig. 4

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Step 3 - Ceiling Hangers

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. 5)
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. 6)
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.7)

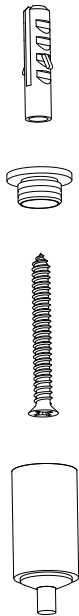


Fig. 5

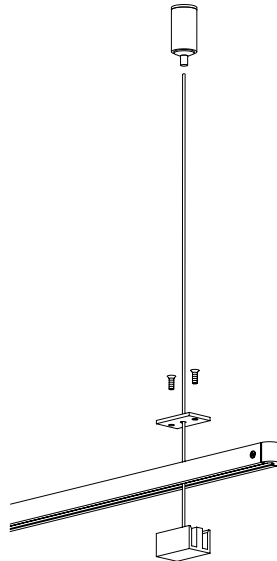


Fig. 6

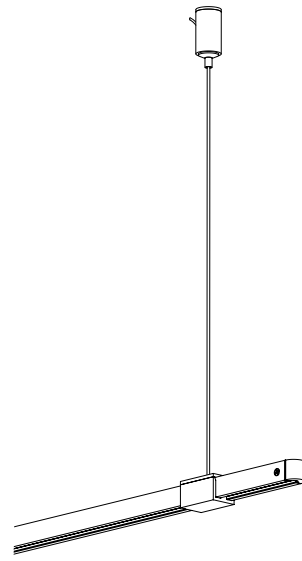


Fig. 7

STEP 4 - Power Bar Hangers

Single and Double Rotational Power Bar Hanger:

1. Press down firmly on the top of the **Power Bar Hanger Hub** while pressing up on the bottom of the **Power Bar**, until the Power Bar Hanger Hub clicks into place (Fig. 8).
2. Insert the **Hanger Clip** through the **Hanger Hub** and press up on the Hanger Clip until Hanger Clip clicks into place (Fig. 9).
3. Press the **Hanger Rod** up against the Hanger Hub and screw in the **Hanger Sleeve**. Be sure that the brass contacts on the Power Bar Hanger Hub are touching those on the Hanger Rod (Fig. 10). NOTE: Do not fully tighten.
4. Rotate **Power Bar** to the desired position and secure by fully tightening the **Hanger Sleeve** (Fig. 11).
5. Repeat steps 1-4 for the second **Power Bar**.

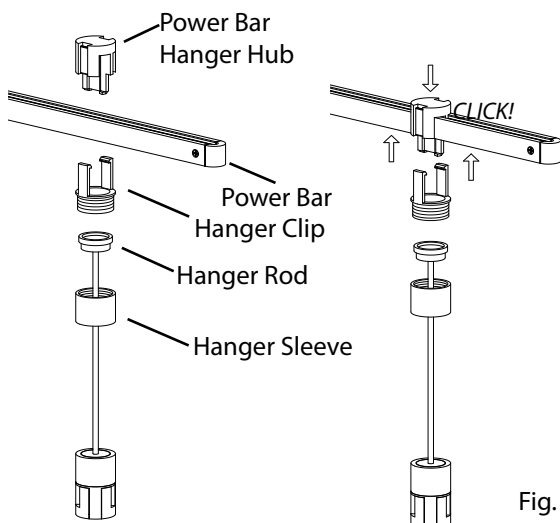


Fig. 8

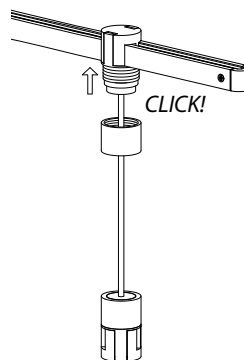


Fig. 9

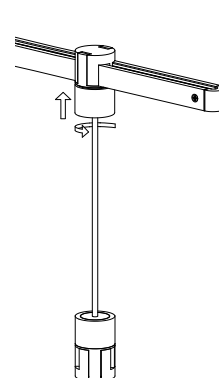


Fig. 10

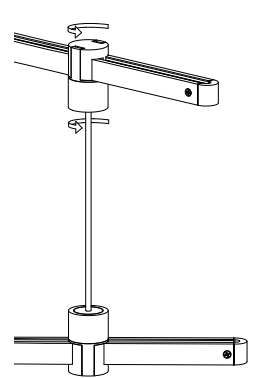
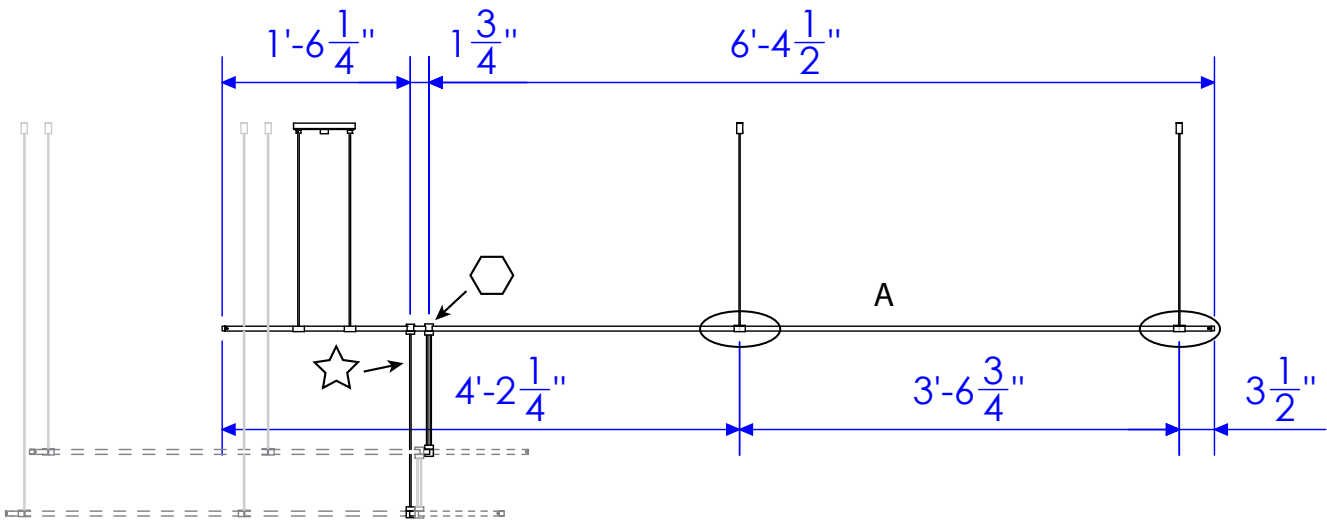


Fig. 11

Tier 1

Locate the Ceiling Hangers, Power Bar Hangers and Power Bars for Tier 1 as shown in Fig 12. Follow instructions from step 3 and 4.



Front View (Parallel to Tier 1)

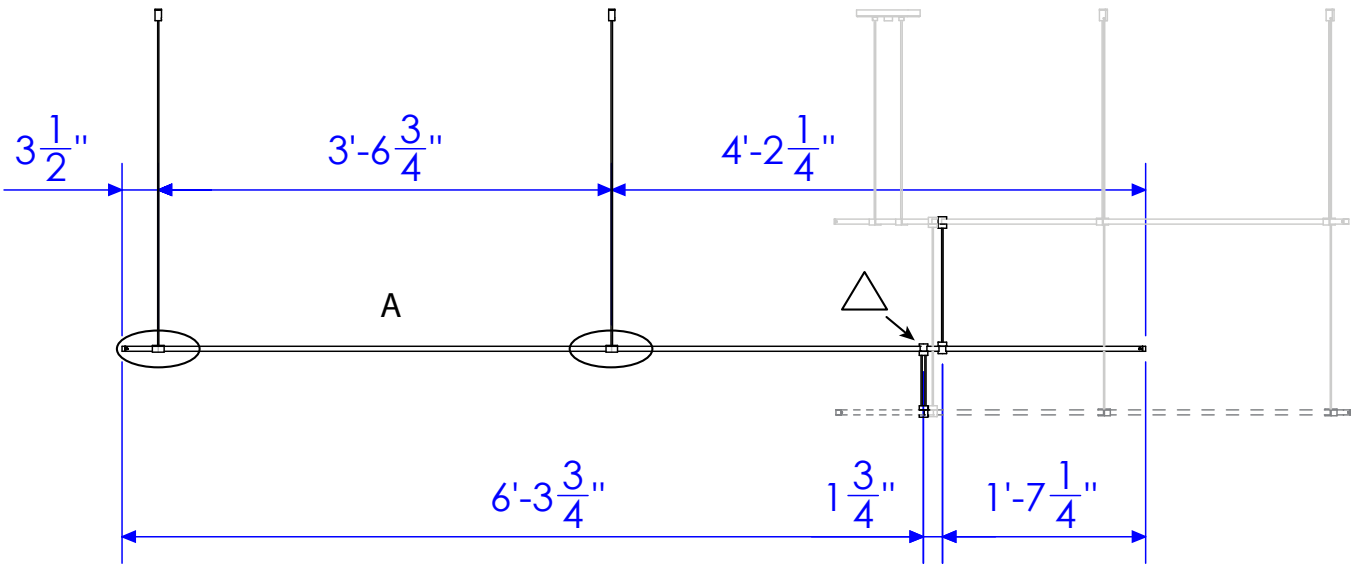
Fig. 12

Ceiling Hangers	Power Bar Hangers	Power Bars
 = 1XB02SB06K	 = 1XB03RD06K	A = 1XC01XX96K
	 = 1XB03RD12K	----- = Suspended from Current Tier
	 = 1XB03RS18K	

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Tier 2

Locate the Ceiling Hangers and Power Bars for Tier 2 as shown in Fig 13. Follow instructions from step 3 and 4.



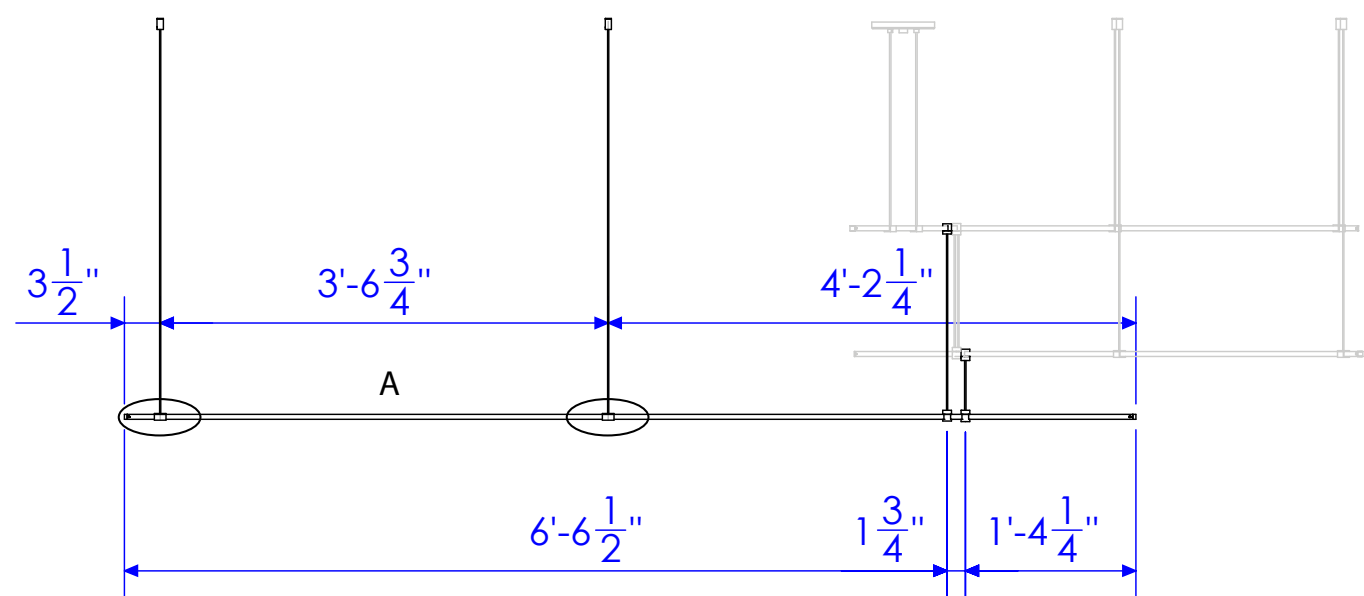
Front View (Parallel to Tier 2)

Fig. 13

Ceiling Hangers	Power Bar Hangers	Power Bars
= 1XB02SB06K	= 1XB03RD06K	A = 1XC01XX96K
	= 1XB03RD12K	===== = Suspended from Current Tier
	= 1XB03RS18K	

Tier 3

Locate the Ceiling Hangers and Power Bars for Tier 3 as shown in Fig 14. Follow instructions from step 3 and 4.



Front View (Parallel to Tier 3)

Fig. 14

Ceiling Hangers	Power Bar Hangers	Power Bars
 = 1XB02SB06K	 = 1XB03RD06K	A = 1XC01XX96K
	 = 1XB03RD12K	===== = Suspended from Current Tier
	 = 1XB03RS18K	

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STEP 5 - Luminaires & Hangers

Monoline™ Single Cord Hangers:

1. Align **Hanger** with **Power Bar** (Fig. 15) and 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. 16)
2. To remove, tilt hanger then pull down from **Power Bar** (Fig. 17).
3. Smooth cord by gently pulling it between thumb and forefinger. Alternatively, place a rigid rod between thumb and cord, such as the barrel of a pen or the shank of a screwdriver.

Note: Use opposite hand to grasp cord above the region being smoothed. Do not apply excessive force, or damage to cord and hanger may result.

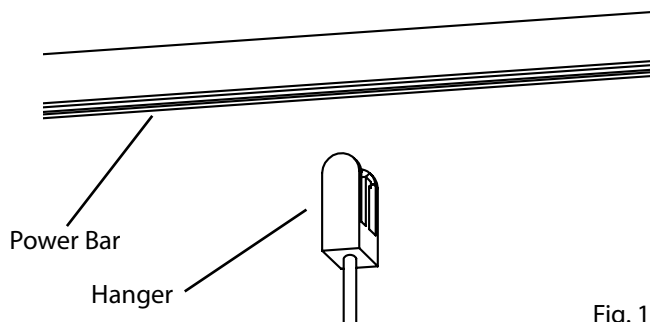


Fig. 15

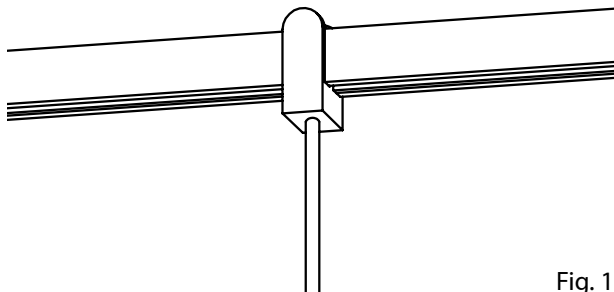
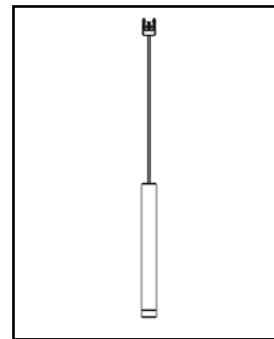


Fig. 16



CL11K Monoline Luminaires

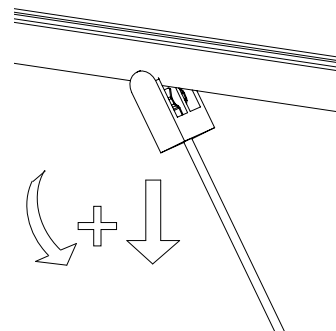


Fig. 17

Luminaire Locations - Tier 1

Locate Luminaires for Tier 1 as shown in Fig 18. Follow instructions from step 5.

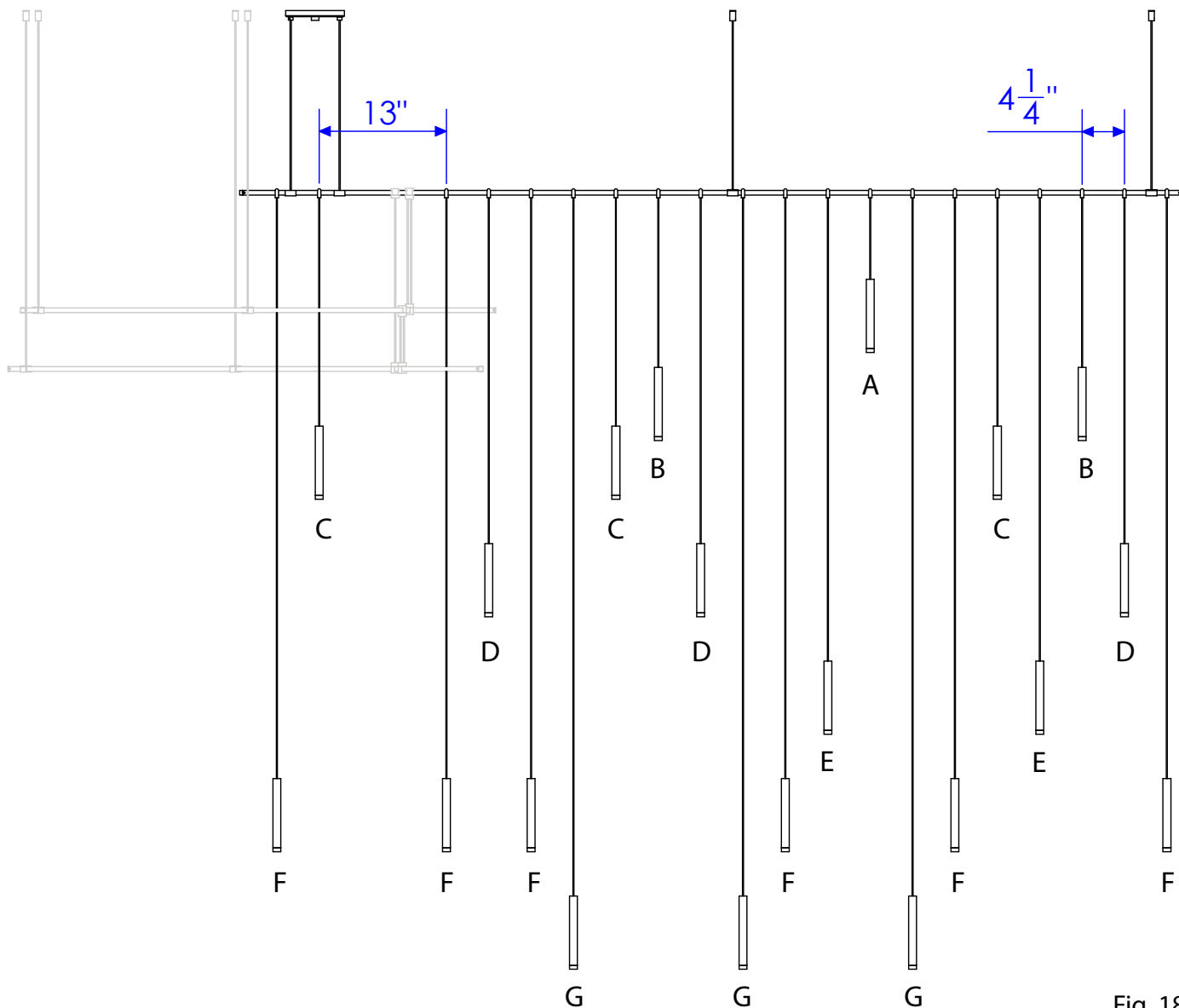


Fig. 18

Luminaire Types:

A = 1DXXCL06K-09

E = 1DXXCL06K-48

B = 1DXXCL06K-18

F = 1DXXCL06K-60

C = 1DXXCL06K-24

G = 1DXXCL06K-72

D = 1DXXCL06K-36

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Luminaire Locations - Tier 2

Locate Luminaires for Tier 2 as shown in Fig 19. Follow instructions from step 5.

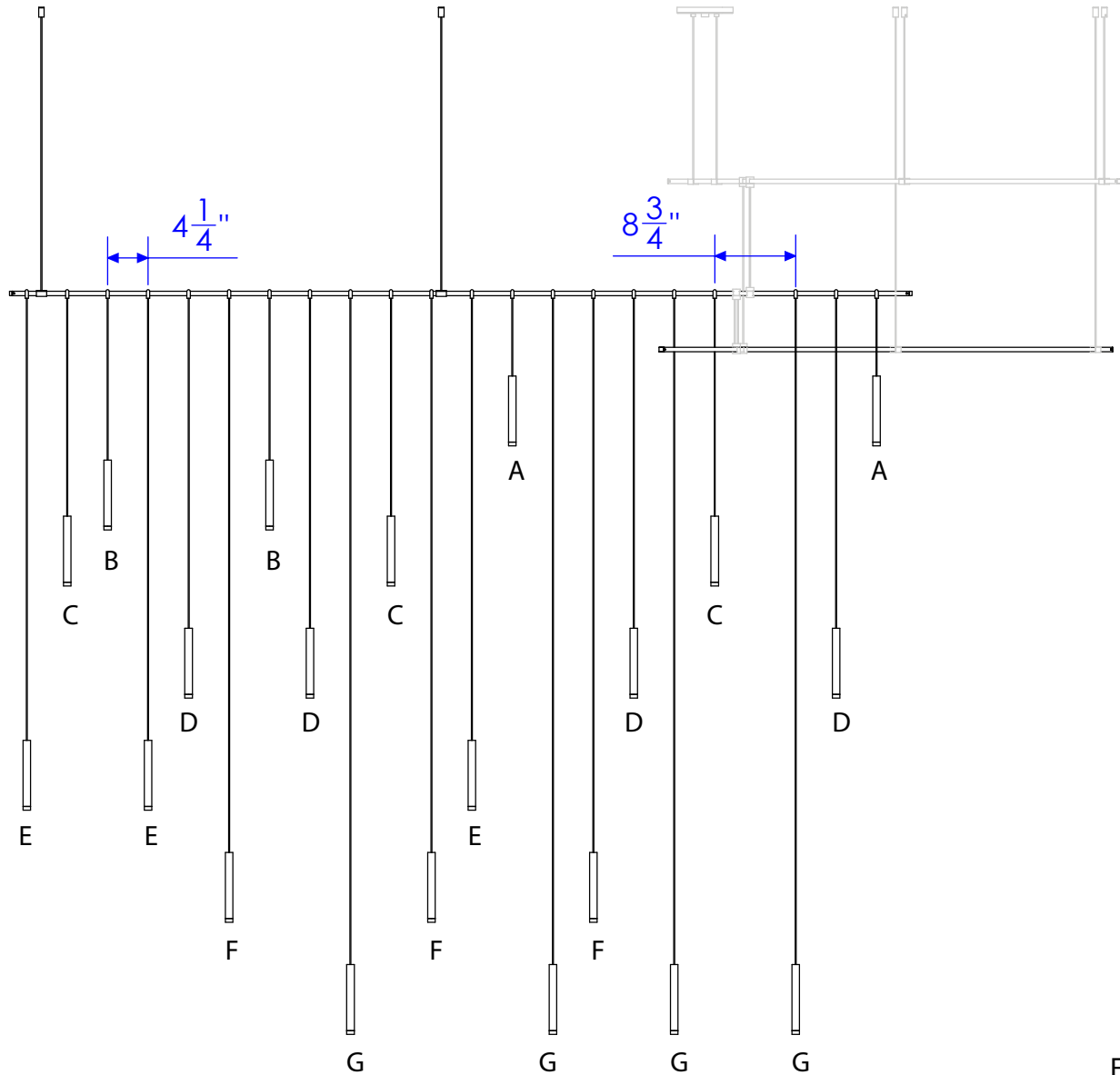


Fig. 19

Luminaire Types:

A = 1DXXCL06K-09

E = 1DXXCL06K-48

B = 1DXXCL06K-18

F = 1DXXCL06K-60

C = 1DXXCL06K-24

G = 1DXXCL06K-72

D = 1DXXCL06K-36

Luminaire Locations - Tier 3

Locate Luminaires for Tier 3 as shown in Fig 20. Follow instructions from step 5.

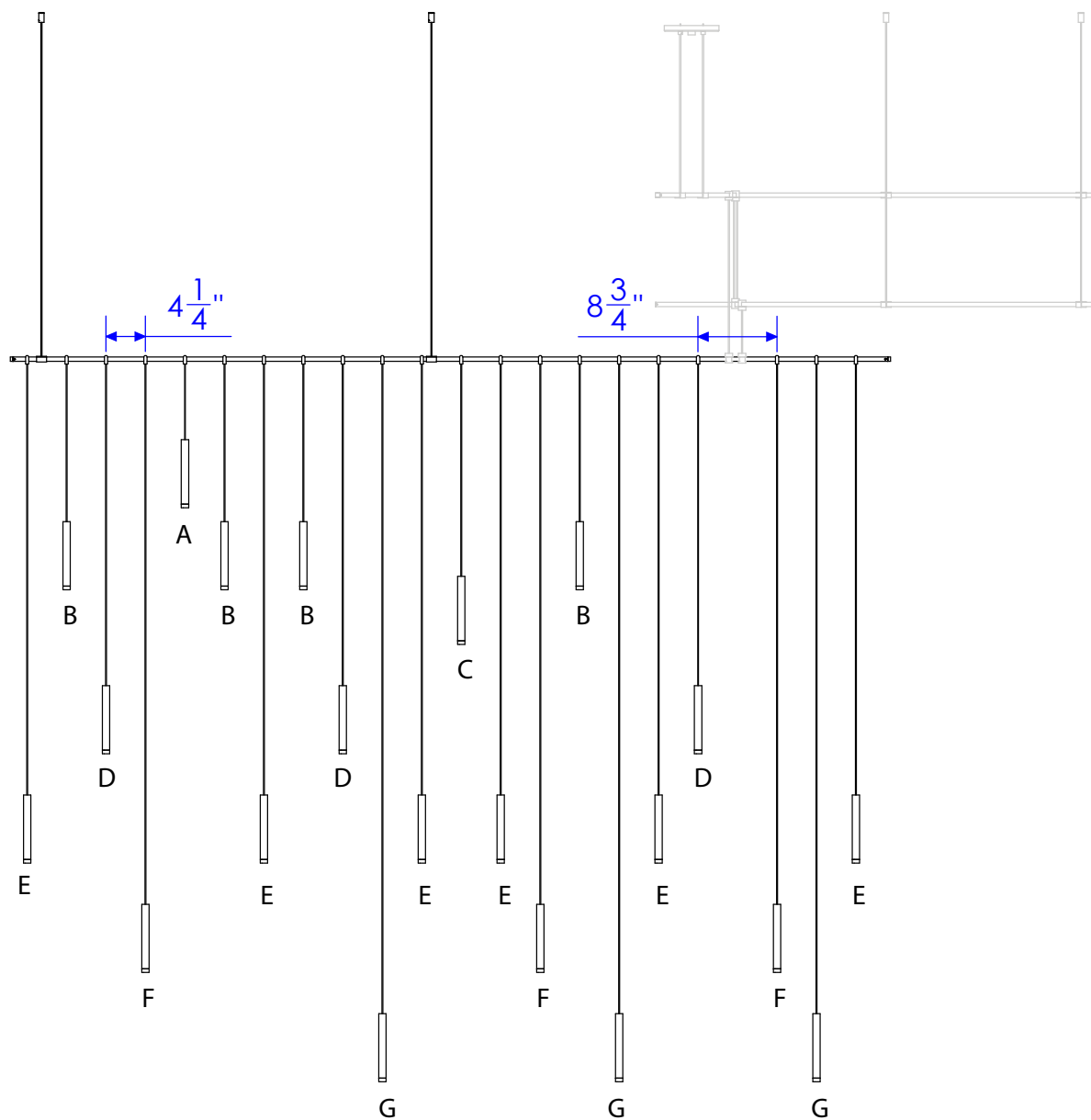


Fig. 20

Luminaire Types:

A = 1XDXXCL06K-09

E = 1XDXXCL06K-48

B = 1XDXXCL06K-18

F = 1XDXXCL06K-60

C = 1XDXXCL06K-24

G = 1XDXXCL06K-72

D = 1XDXXCL06K-36