

21Q13-Rxxxxx - Aquarius

Constellation™

assembly instructions

SONNEMAN®
A WAY OF LIGHT

Constellation™ 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.
- 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.
- Remote LED Driver 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 avoid overloading the LED Driver.
- Any mounting hardware is provided for your convenience and should be used with discretion. Always use the appropriate hardware for the mounting surface.
- Constellation™ LED Drivers are 24VDC Constant Voltage output.
- Constellation™ must be installed in dry locations ONLY.

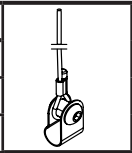
June 14, 2022

Welcome to Constellation™

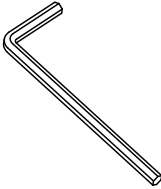
A Constellation configuration is built from LED hubs, connecting arms, end arms, and cable ceiling hangers. Illumination radiates through either the white optical acrylic lenses, or sparkles with refracted light through micro-faceted clear acrylic crystal lenses. Each hub is a complete LED light engine, using an array of LEDs with driver circuitry on each of the two faces of the hub. The connecting arms form a structural and electrical connection between the hubs, and are easily assembled by inserting the arm into the hub and are secured in place by a retaining set screw. The hubs can revolve around the connecting arms to alter the orientation of the illumination and that of the intersecting connecting arms. The configuration is supported by cable ceiling hangers that slide onto an arm and lock into place as needed, and is powered by a special power feed hub connected to the ceiling power feed.

WHAT COMES IN THE BOX

Ceiling Hanger/Hanger Clips

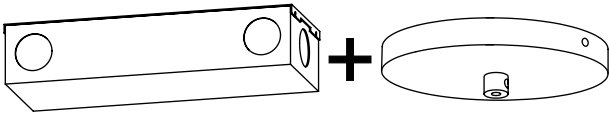
System #	Qty	
21Q13-Rx33xx	4	
21Q13-Rx55xx	6	
21Q13-Rx77xx	8	

Hang Clip and Cable



Large Hex Wrench
(Qty 1+)

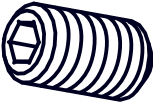
Power Feed and Supply



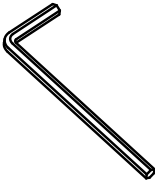
Remote Power Supply w/ Canopy
(Qty 1+)

NOTE: For Surface Mount Power Feed (21XD021302 and 21XD031302) see separate AI

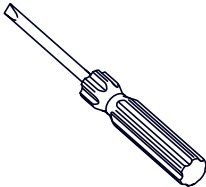
Power Feed Hardware



Canopy Set Screw
(Qty 1+)



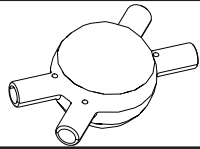
Medium Hex Wrench
(Qty 1+)



Screwdriver
(Qty 1+)

Hubs

System #	Qty
21Q13-Rx33xx	9
21Q13-Rx55xx	25
21Q13-Rx77xx	49

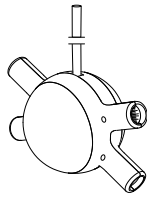


45° Hub

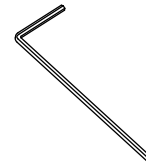
System #	Qty
21Q13-Rx33xx	36+
21Q13-Rx55xx	100+
21Q13-Rx77xx	196+



M2 Set Screw

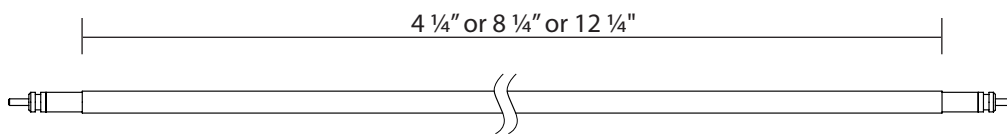


Power Feed Hub
(Qty 1)



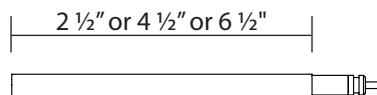
Small Hex Wrench
(Qty 3+)

Arms



Connecting Arm

System #	Qty
21Q13-Rx33xx	12
21Q13-Rx55xx	40
21Q13-Rx77xx	84



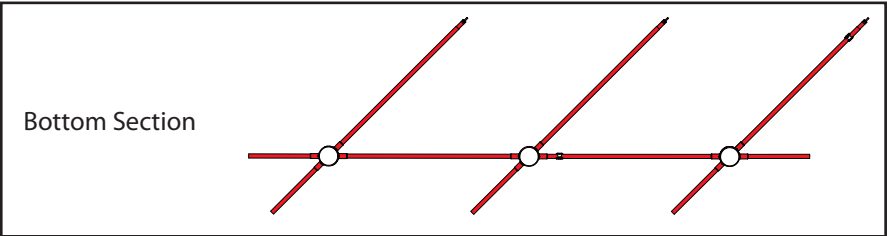
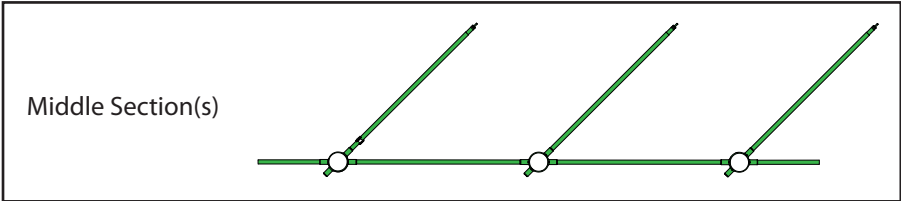
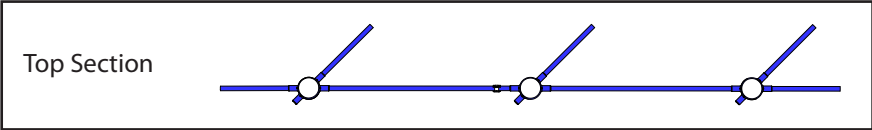
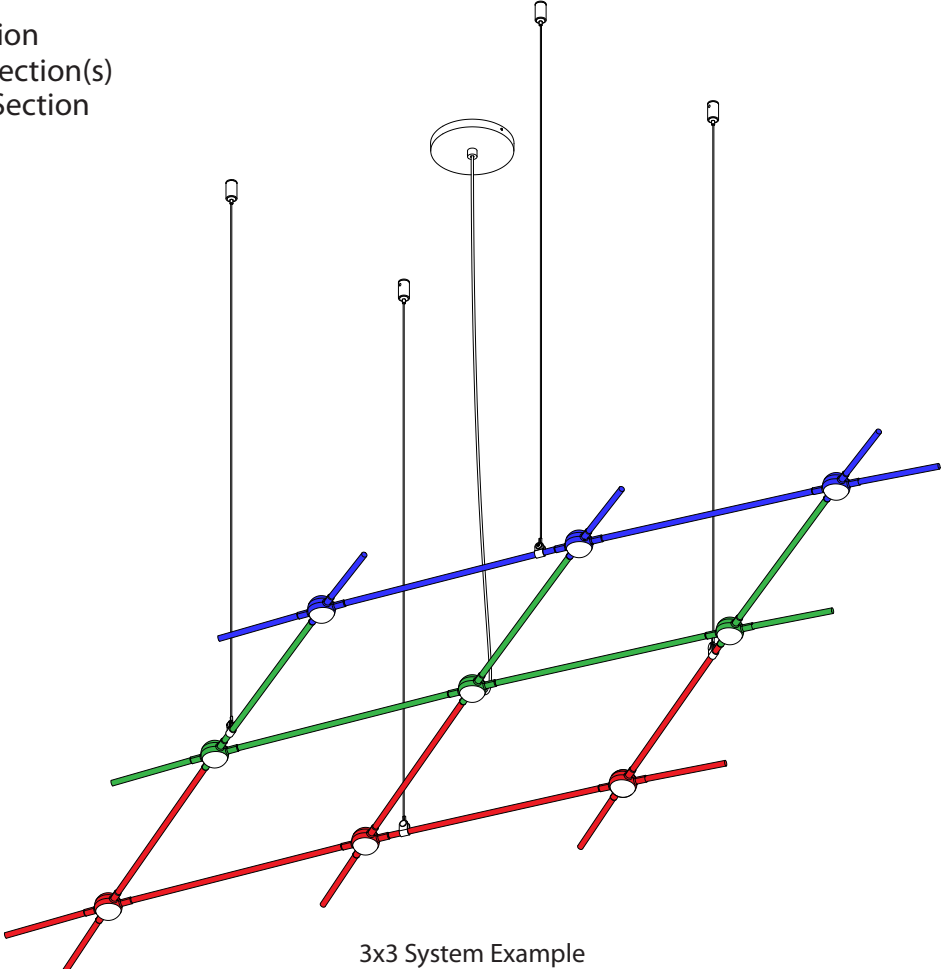
End Arm

System #	Qty
21Q13-Rx33xx	12
21Q13-Rx55xx	20
21Q13-Rx77xx	28

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OVERVIEW OF ASSEMBLED AQUARIUS

- Top Section
- Middle Section(s)
- Bottom Section



NOTE: Bottom, Middle, and Top are three discrete sections of any size Aquarius configuration. There may be multiple Middle sections depending on the size of the system.

ASSEMBLY INSTRUCTION

Determining Spacing For Suspension Locations:

NOTE: The suspension location of a given system determines the resulting shape (concave or convex) of the system.

1. Consult site plan for branch circuit Outlet Box location.
2. Refer to Fig. 1 for examples of system shapes in relation to hanging zones.
3. Determine the system shape that you would like to achieve and create a sketch using the Constellation Aquarius Grid provided in Fig 2. This sketch will be used as a reference later.
4. Measure and mark drop point locations on the ceiling as chosen by the sketch created in Step 3.

NOTE: The anchoring zones denoted by gray areas in Fig. 1 are suggestions only. Hang Clips and suspension cables are provided with this system. It is up to the technicians discretion to select the locations of the Hang Clip and cable if the default positions are not feasible.

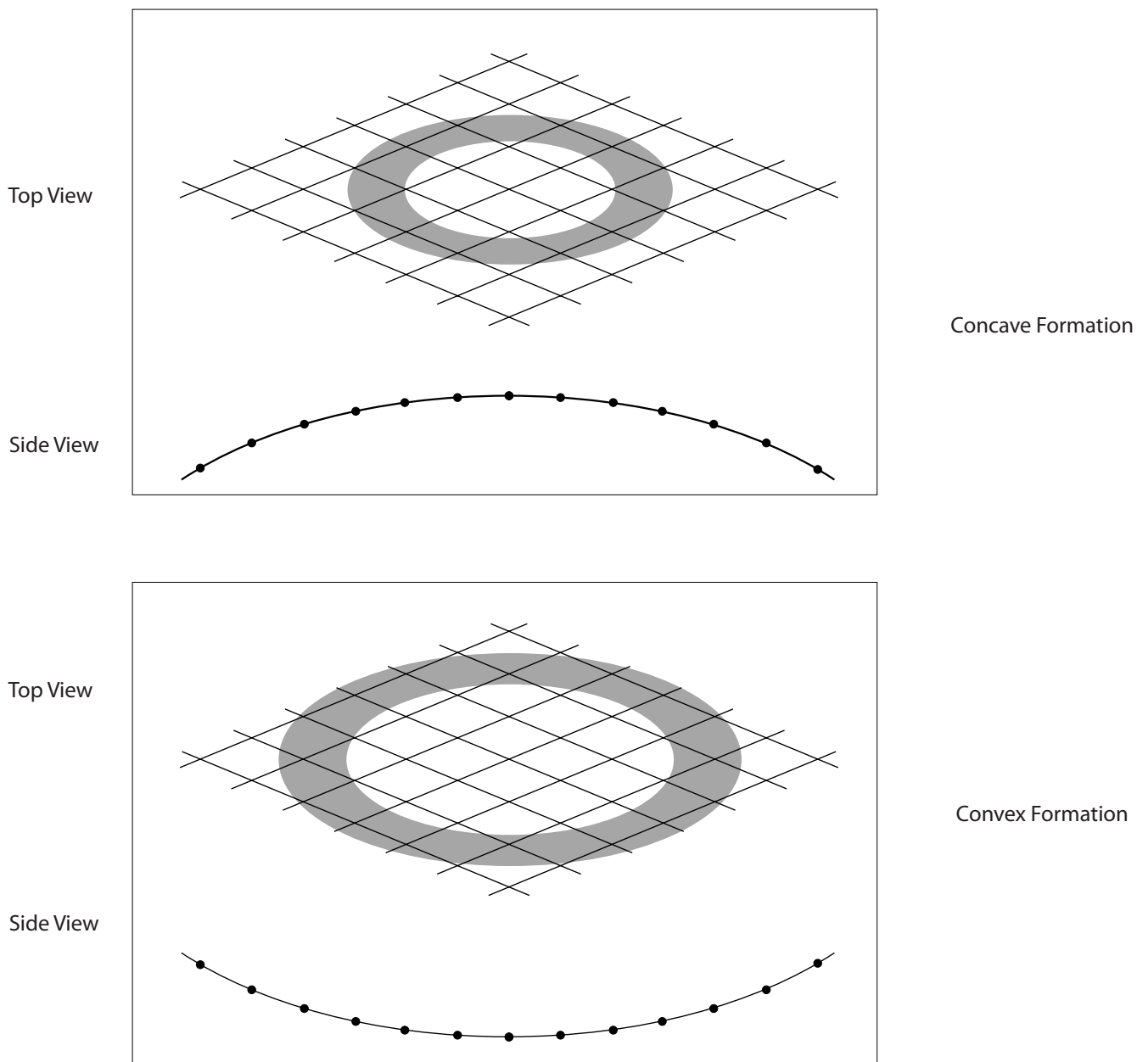
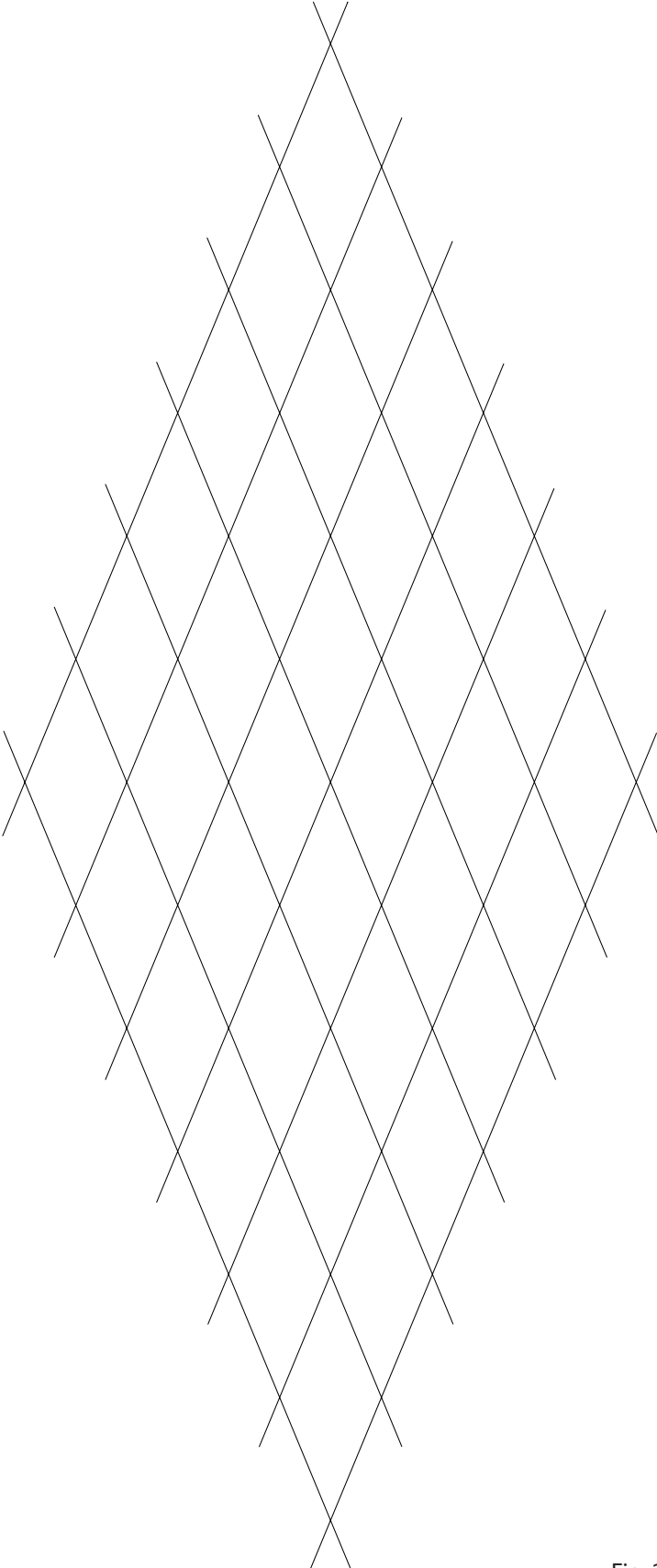


Fig. 1



3x3 System
Grid Use Example

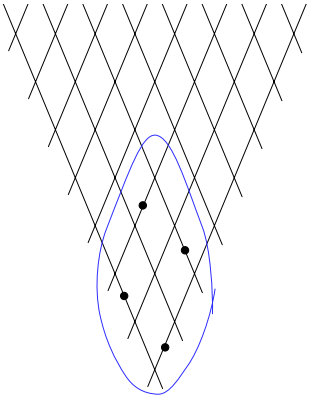


Fig. 2

Suspension Hanger Installation:

5. Attach Suspension Hangers to the ceiling at locations determined in Steps 1-4. Install the Mounting Bracket (K) to the ceiling with Anchor (L) and Screw (M), then screw the Post (N) onto the mounting bracket (Fig. 3). **CAUTION: Customer is responsible for ensuring appropriate ceiling construction to support the weight of the fixture.**

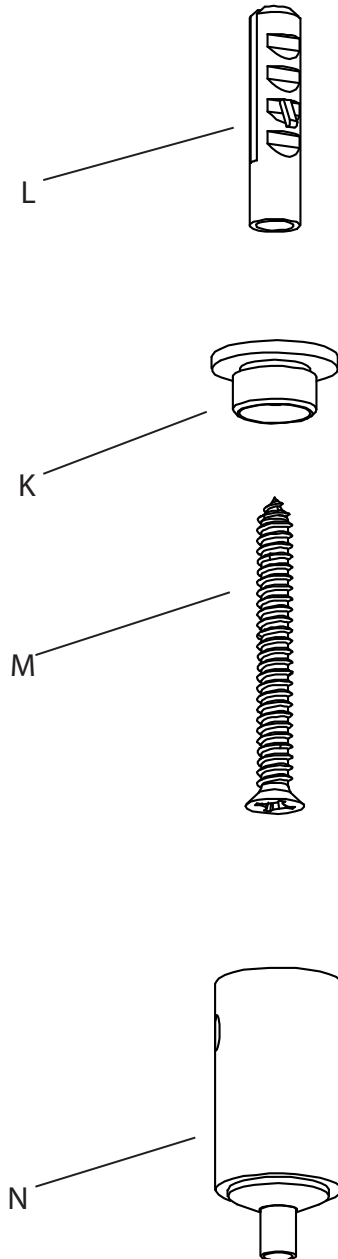


Fig. 3

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- Top Section
- Middle Section(s)
- Bottom Section

3x3 System Assembly Example

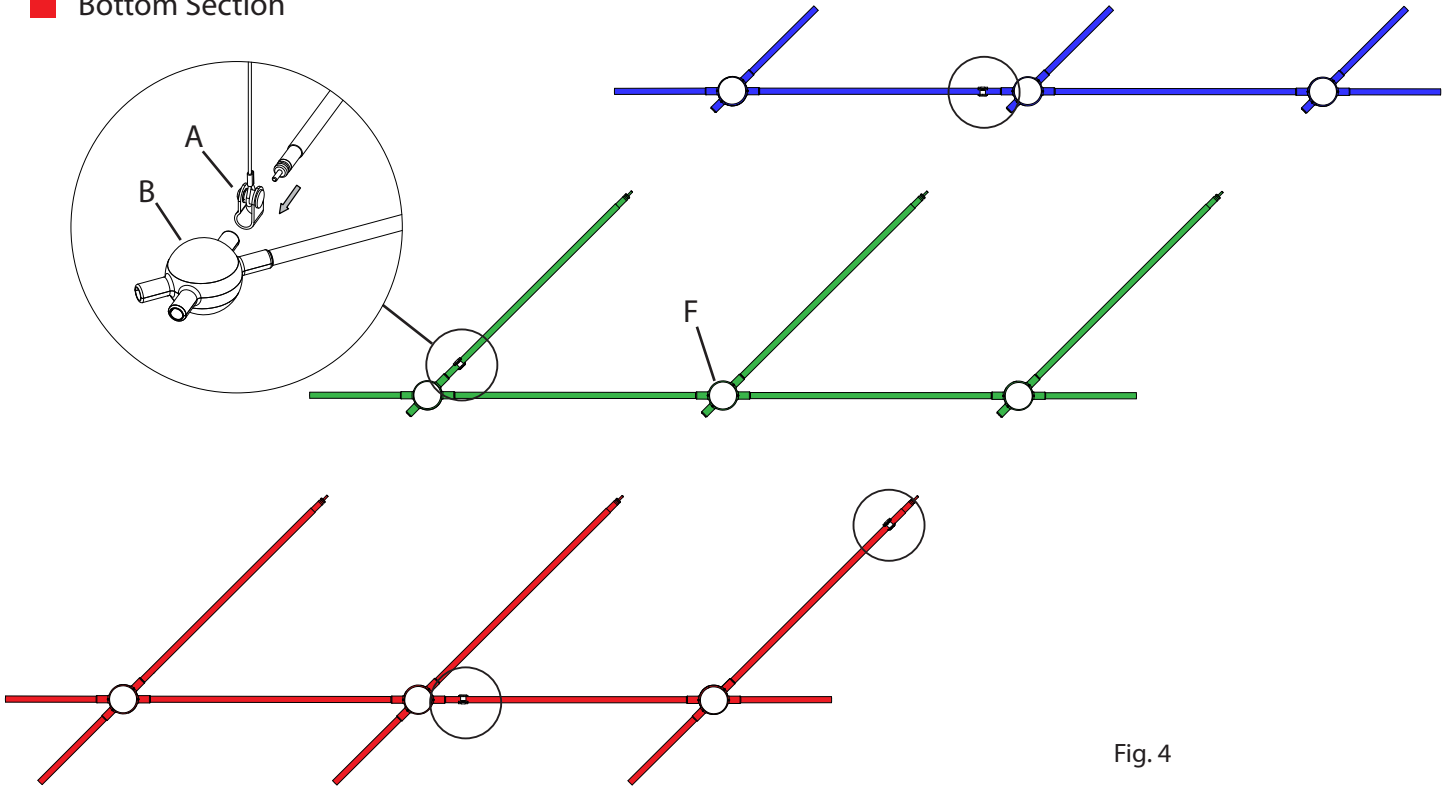


Fig. 4

Arm and Hang Clip Assembly:

6. Assemble Hang Clips (A) near Hubs (B) as shown in Fig. 4.
7. Install Arm (C) into the Hang Clip (A) (Fig. 5) by sliding the Arm through the Clip. Reference Constellation Aquarius Grid from Step 3. Once the Arm (C) is in the desired location, tighten the Screw (D) using the Large Hex Wrench (E) provided.
8. Assemble the components to create the Section sub-assemblies by executing steps 9-11. **NOTE:** The Power Feed Hub (F) can be placed at any location. In this example, the center hub of Section 2 is a Power Feed Hub.

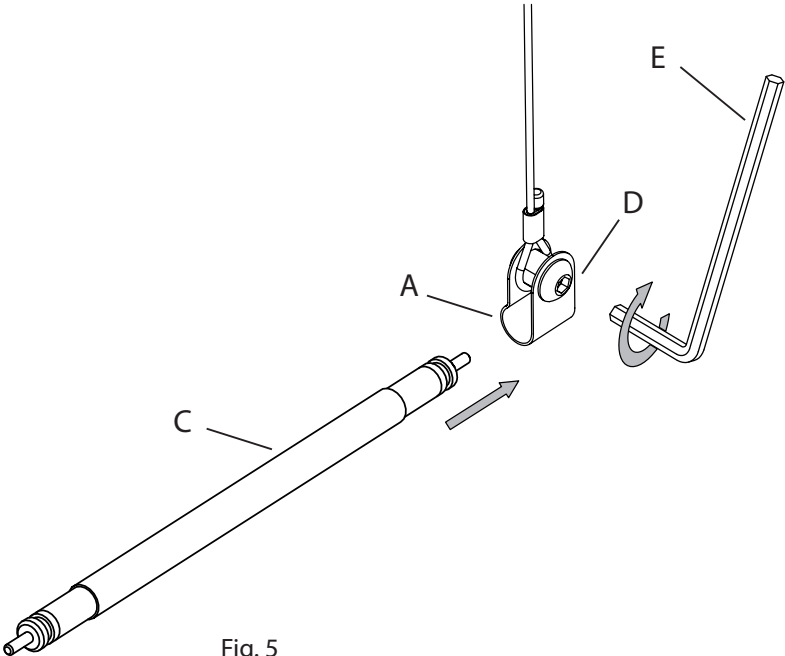


Fig. 5

Arm and LED Hub Section Assembly:

9. Install each Arm (C) into an LED Hub (B) by fully inserting the Arm into a Neck (G) on the Hub (Fig. 6).
 10. After each Arm (C) is connected to the Hub (B), install the M2 Set Screw (H) into the Neck (G) of the Hub, using the Small Hex Wrench (J) provided, and tighten until it comes in contact with the plastic cap on the Arm. **NOTE:** For aesthetic and ease of assembly purposes, make sure that the setscrew holes for all hubs are facing up when assembling each section.
- CAUTION: Do not over tighten the set screws.**
11. Build all available sections.

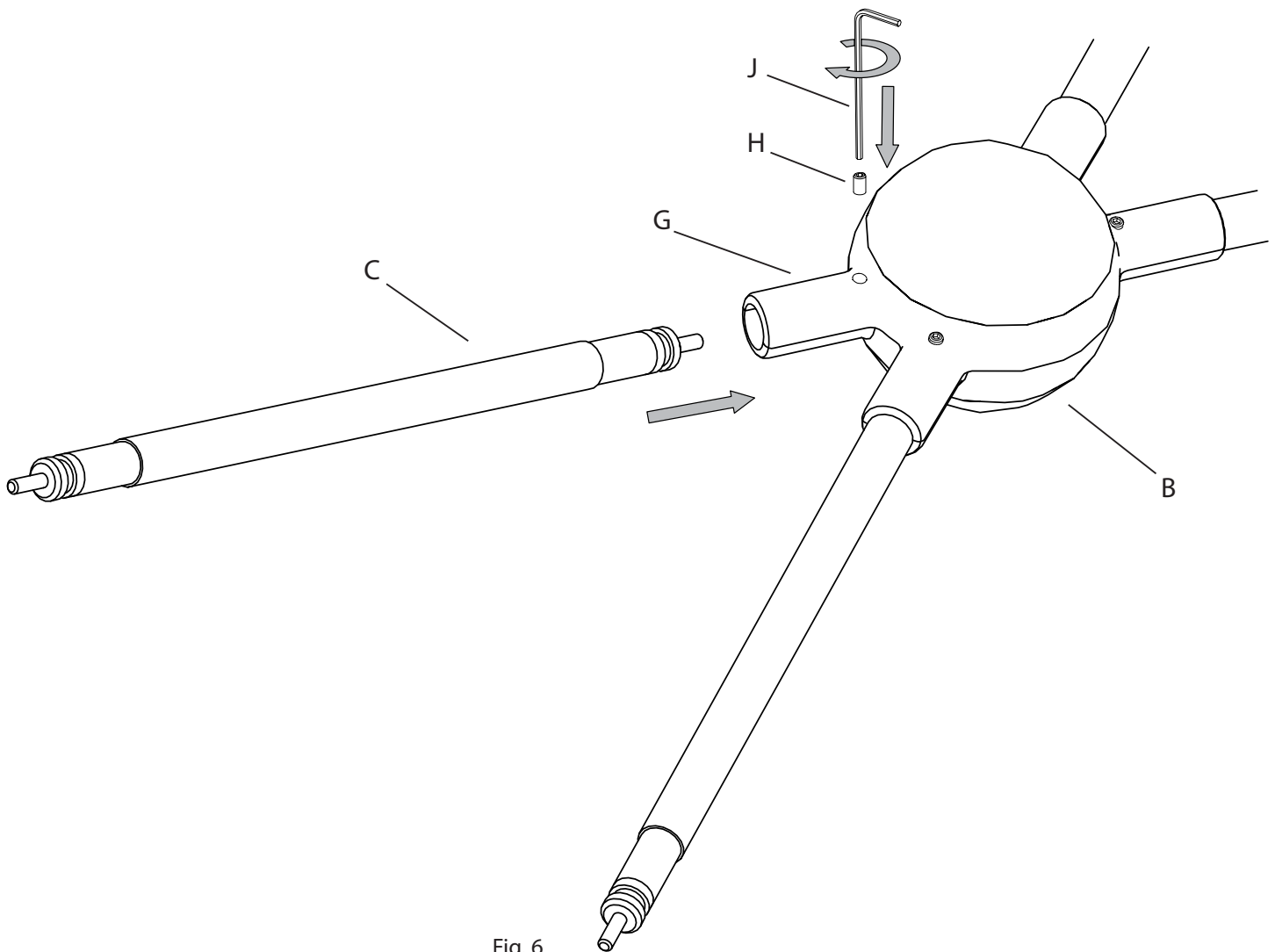


Fig. 6

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Connecting Sections 1, 2, 3, etc. Together:

12. While on the floor, starting from the bottom (Section 1), place the next section adjacent to the previous section.
13. Consecutively connect the previous section to the next section (Section 1 to Section 2, Section 2 to Section 3, etc.) one Arm at a time starting from either end (follow Steps 10 and 11 to establish connections) (Fig. 7)
14. Repeat Steps 12 and 13 for each section.
15. Hoist and hang system to the ceiling by Inserting the Cables (P) into the Posts (N) 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. 8). **CAUTION: Do not cut off remaining excess cable until final adjustments have been made. Excess cable will be needed for adjusting system shape and height. Acquire assistance for this step, avoid executing with one person.**

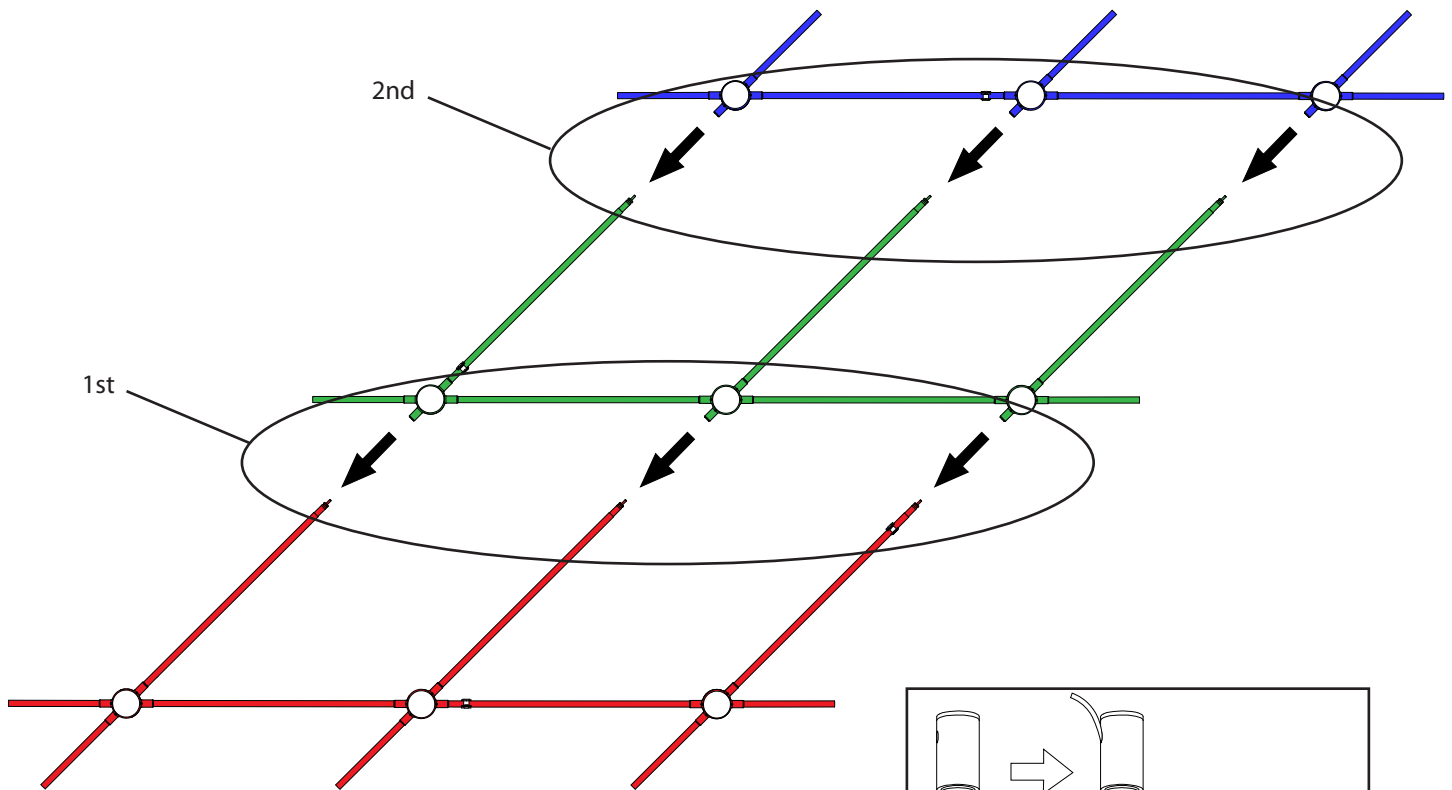


Fig. 7

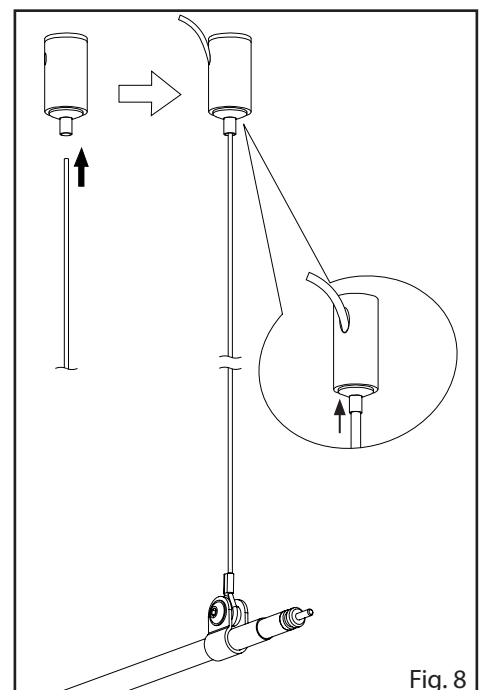


Fig. 8

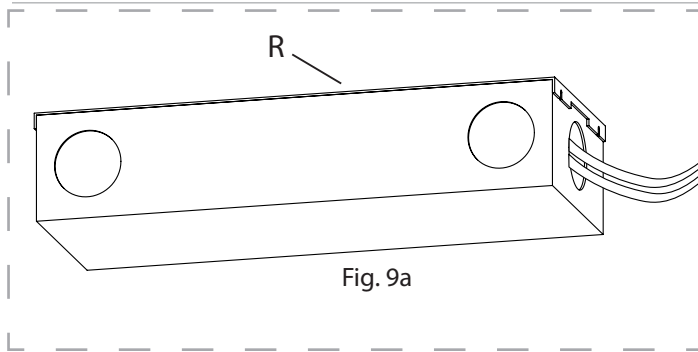


Fig. 9a

Remote Power Supply Installation (Fig. 9a):

16. Shut off power to the Outlet Box (Q).
17. Install the Power Supply (R) in a remote and accessible location near the fixture in accordance with local electrical code.
 - Make appropriate electrical connections using wire nuts:
 - a. Connect the Power Supply's (R) live wire (black) to the live supply wire.
 - b. Connect the Power Supply's neutral wire (white) to the neutral supply wire.
 - c. Connect the Power Supply's ground wire (green or uncoated) to the ground supply wire.
 - d. Connect the Power Supply's positive (+) output wire (red) to the required length of red wire (not included) to reach the Outlet Box (Q).
 - e. Connect the Power Supply's negative (-) output wire (black) to the required length of black wire (not included) to reach the Outlet Box.

Power Feed Installation (Fig. 9b):

18. Feed the Cord (S) on the Power Feed Hub (F) through the Bushing (T) on the Power Feed. Adjust the cord length as desired, and secure with the Slotted Set Screw (U) using the provided Screwdriver (V). Reserve excess Cord in the Outlet Box (Q).
19. Attach the Mounting Plate (W) to the Outlet Box (Q) using the two Outlet Box Screws (X).
20. Make appropriate electrical connections using wire nuts:
 - a. Connect the positive (red) low voltage wire from the Power Supply (R) to the red side (inner, jacketed conductor) of the Power Feed Hub Cord (S).
 - b. Connect the negative (black) low voltage wire from the Power Supply to the black side (outer, braided conductor) of the Power Feed Hub Cord.
 - c. Carefully place the connections in the Outlet Box.
21. Install the Canopy (Y) to the Mounting Plate (W) and secure with Set Screws (Z) using the Medium Hex Wrench (AA) provided.
22. Restore power to Outlet Box (Q).

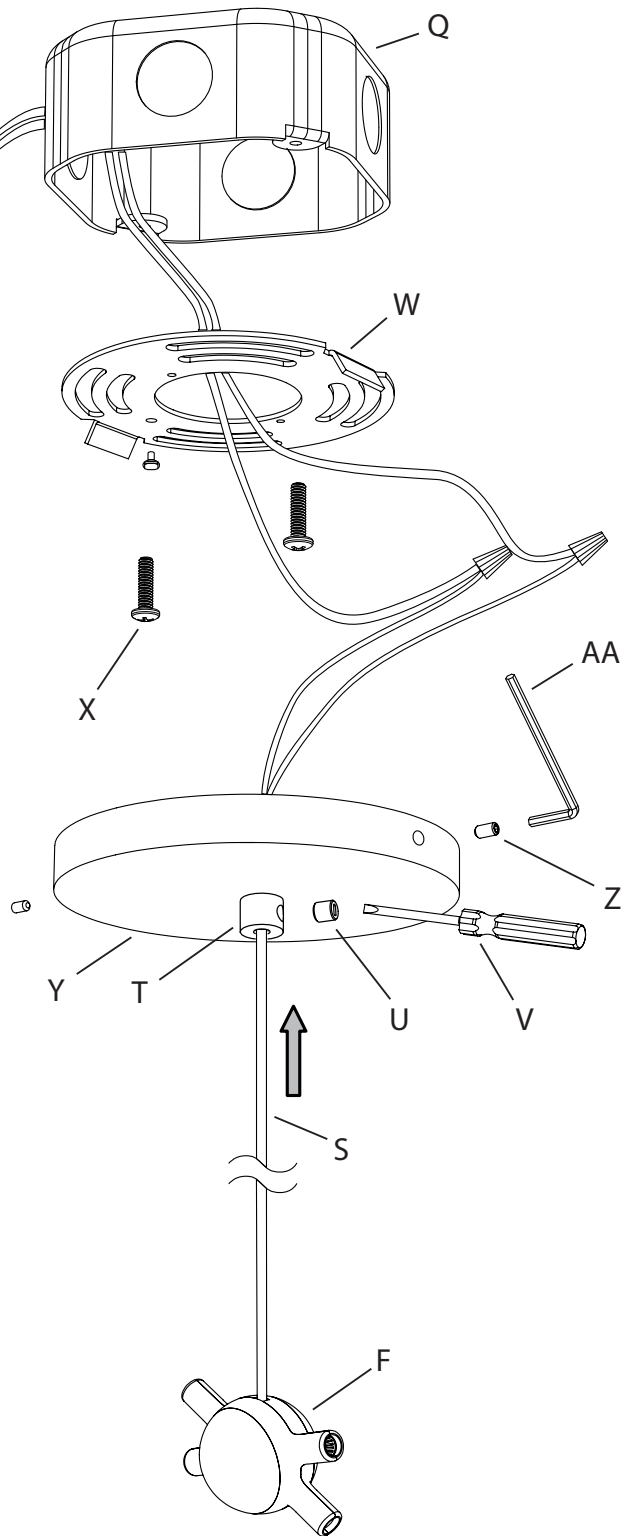


Fig. 9b

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COMPLETED ASSEMBLY

7x7 System Assembly Example

