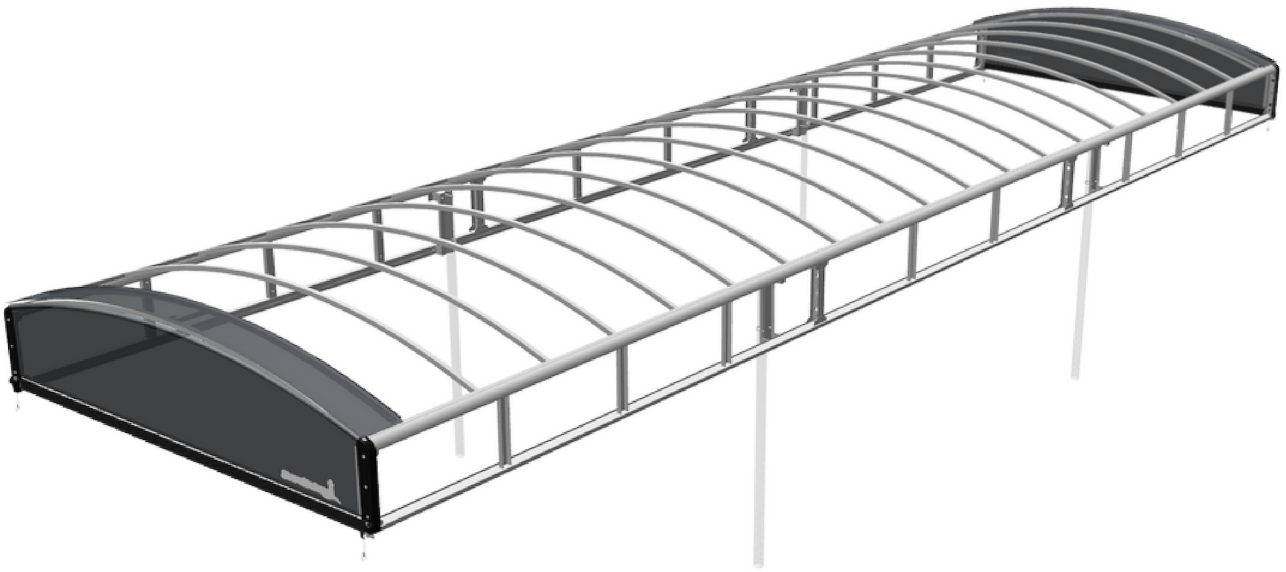




REVOLUTION CANOPY FRAME



Patent No. 10,145,121



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Introduction

Thank you for choosing ShoreStation. Please study this manual carefully BEFORE operating the system and keep it in a safe place for future reference. If you have questions or concerns about the operation and/or service of your lift, please contact your ShoreStation dealer.



WARNING

DO NOT ATTEMPT TO ASSEMBLE THIS SYSTEM WITHOUT FIRST STUDYING THIS MANUAL AND INFORMATION ON LABELS INCLUDED WITH THE SYSTEM. FAILURE TO DO SO CAN LEAD TO IMPROPER OPERATION RESULTING IN SERIOUS PERSONAL INJURY AND/OR PRODUCT DAMAGE. IF YOU HAVE FURTHER QUESTIONS AFTER REVIEWING THIS INFORMATION, CONTACT A SHORESTATION REPRESENTATIVE AT (800) 859-3028.

Safety Instructions



WARNING

- **ASSEMBLY AND INSTALLATION OF THIS SYSTEM MAY REQUIRE WORKING OVER WATER. ALWAYS WEAR A PERSONAL FLOATATION DEVICE (PFD) WHEN WORKING OVER THE WATER.**
- Always wear proper personal protective equipment such as safety glasses, gloves, hardhats, and clothing.
- Never work alone and observe safe lifting practices such as team lifting and proper lifting posture.
- Do not modify the equipment unless you have received direct written approval from the manufacturer (ShoreStation)
- Remove all jewelry and any conductive items from your body before working with DC system
- Check all fasteners for tightness periodically.
- Cover the terminals on the end of the harness with a non-conductive material (like tape) when they are not connected to prevent shortening.

Tools Required:

1/2", 7/16", 9/16" SAE Sockets and Wrenches, Cordless Power Drill, #30 Torx bit



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Assembly Instructions

1. Sort Hardware

Open the hardware box and bag and sort the hardware and other contents by size. Note: Several parts on the end of the frame are designated with LEFT or RIGHT orientation. Facing the canopy from either end, right-hand parts on the right and left-hand parts on the left.

HARDWARE BOX CONTENTS (73842)

- (1) 73981 - CANOPY STRAP 36-48FT
- (4) 72466 - CANOPY HANGER BRACKET
- (2) 73970 - CANOPY BOW SPACER
- (2) 3510695 - CANOPY END CAP LEFT
- (2) 3510696 - CANOPY END CAP RIGHT
- (4) 72976 - KEDER RAIL
- (4) 72469 - CANOPY END SHIM
- (2) 73809 - CANOPY END LATCH ASSEMBLY LEFT
- (2) 73810 - CANOPY END LATCH ASSEMBLY RIGHT
- (2) 72504 - CANOPY STORM STRAP 30FT
- (1) 73877 - HARDWARE BAG
- (1) HA0297 - LIFT ANCHORING ATTACHEMENT KIT
- (4) 73985 - FRAME STIFFENER

HARDWARE BAG CONTENTS (73877)

- 8 - CARR 1/4-20 X 1 1/4 CS STAINLESS
- 12 - CARR 1/4-20 X 3/4 CS STAINLESS
- 12 - HEX LOCKNUT 1/4-20 BRASS /NYLON INSERT
- 8 - NUT KEP 1/4-20 SS
- 20 - WASHER USS FLAT 1/4 SS
- 8 - WASHER USS FLAT 1/4ID X 1OD SS
- 52 - SCREW 1/4-20X2 1/4 SIX LOBE PA
- 16 - SCREW #12X3/4SQ. PAN SS SELF-D
- 12 - SCREW 1/4-20X3/4 TORX PAN SS
- 4 - SCREW 1/4-20X3/4 TORX PAN MACH
- 4 - HH 3/8-16 X 4 CS STAINLESS
- 8 - HH 3/8-16 X 1 1/2 CS STAINLESS
- 20 - HEX LOCKNUT 3/8-16 BRASS/NYLON
- 24 - WASHER USS FLAT 3/8 SS
- 12 - RIVET PLASTIC FENDER PUSH TYPE
- 4 - HH 1/2-13 X 4 1/4 CS STAINLESS
- 4 - HEX LOCKNUT 1/2-13 BRASS/NYLON
- 4 - U-BOLT 3/8-16 X 3 7/16 X 3 1/2 SS
- 16 - SQUARE WASHER 1 X 1

SEE HARDWARE BELOW FOR INSTALLING ANY RF16-XXX CANOPY

HARDWARE BOX CONTENTS (73839)

- (1) 72695 - CANOPY STRAP 14-18FT
- (4) 72466 - CANOPY HANGER BRACKET
- (2) 73970 - CANOPY BOW SPACER
- (2) 3510695 - CANOPY END CAP LEFT
- (2) 3510696 - CANOPY END CAP RIGHT
- (4) 72976 - KEDER RAIL
- (4) 72469 - CANOPY END SHIM
- (2) 73809 - CANOPY END LATCH ASSEMBLY LEFT
- (2) 73810 - CANOPY END LATCH ASSEMBLY RIGHT
- (2) 72504 - CANOPY STORM STRAP 30FT
- (1) 73297 - HARDWARE BAG
- (1) HA0297 - LIFT ANCHORING ATTACHEMENT KIT

HARDWARE BAG CONTENTS (73279)

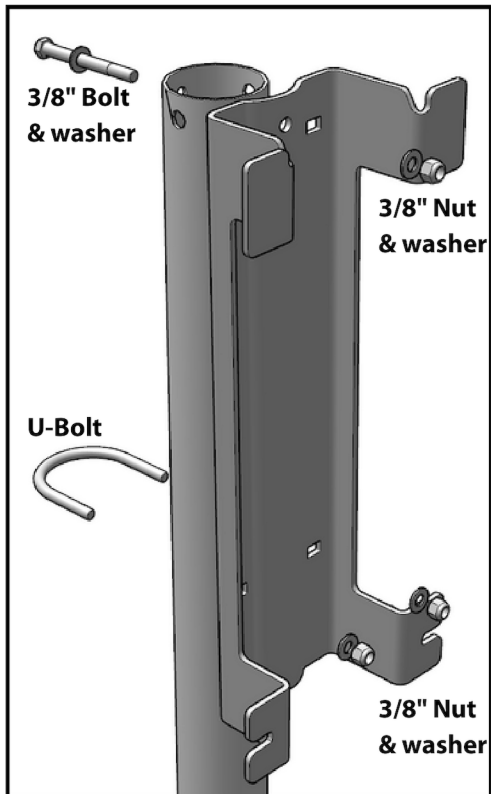
- 8 - CARR 1/4-20 X 1 1/4 CS STAINLESS
- 12 - CARR 1/4-20 X 3/4 CS STAINLESS
- 12 - HEX LOCKNUT 1/4-20 BRASS /NYLON INSERT
- 8 - NUT KEP 1/4-20 SS
- 20 - WASHER USS FLAT 1/4 SS
- 8 - WASHER USS FLAT 1/4ID X 1OD SS
- 20 - SCREW 1/4-20X2 1/4 SIX LOBE PA
- 12 - SCREW 1/4-20X3/4 TORX PAN SS
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- 12 - RIVET PLASTIC FENDER PUSH TYPE
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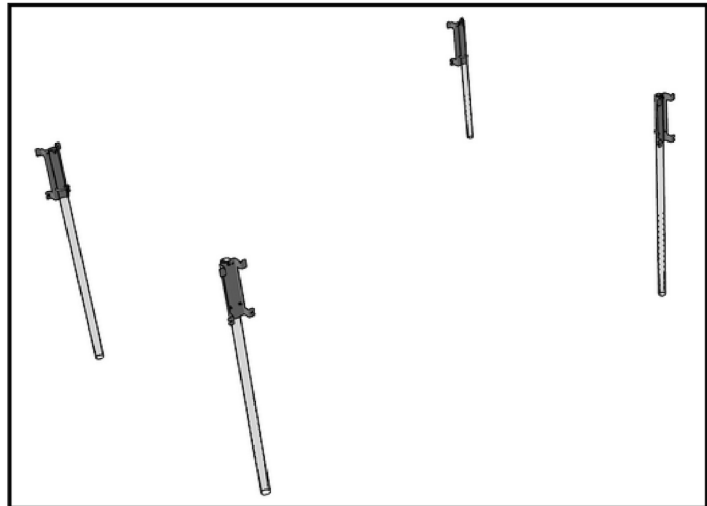
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2. Hanger Brackets

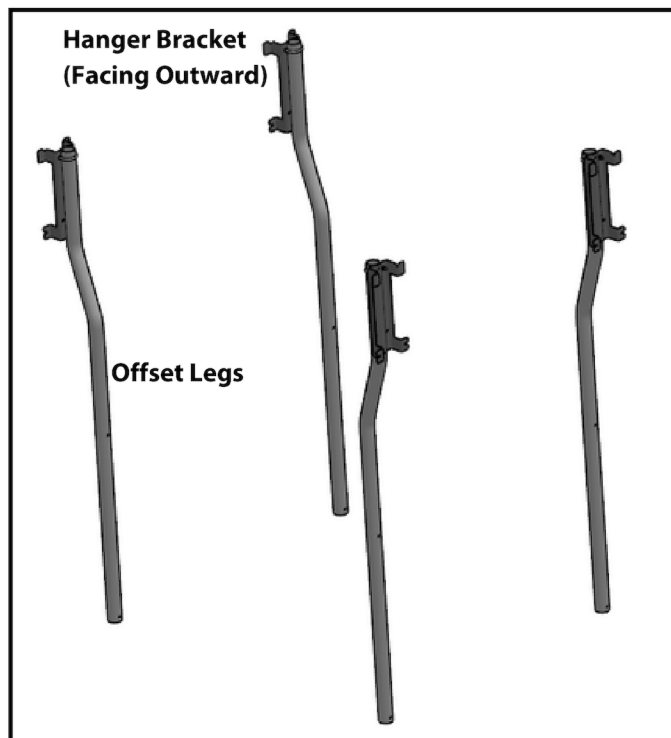
Put the 3/8-16 x 4 bolt through a 3/8 washer, a canopy leg, and a hanger bracket. Add another washer and start the locknut. Use a U-bolt and 3/8 washers and locknuts to attach the hanger brackets to the canopy legs. Make sure the bracket faces toward the outside of the boat lift (shown below) and tighten the locknuts.



STRAIGHT CANOPY LEGS



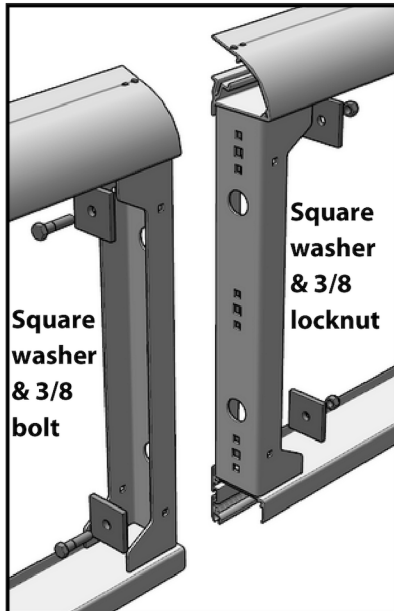
OFFSET CANOPY LEGS



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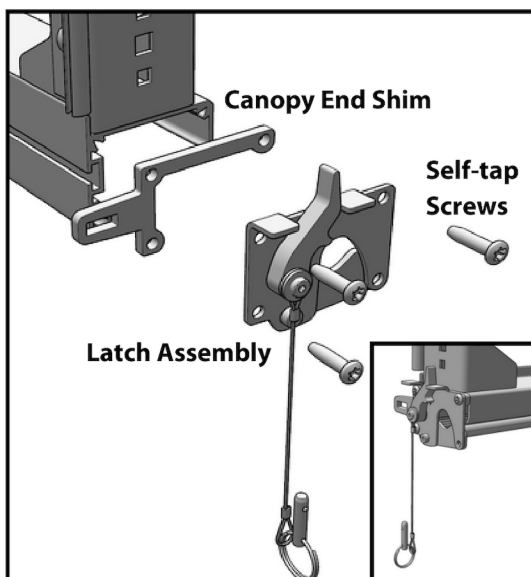
3. Connect Side Frames

Use the 3/8-16 x 1-1/2 bolts, square washers, and 3/8 locknuts to connect the side frames as shown below. Make sure the T-slot and keder slot on the bottom extrusion line up, then tighten the hardware. If your side frames are comprised of different lengths, the shortest length should be in the middle EXCEPT for RF38-XX canopies, where the longest length will be in the middle. See chart on page 10.

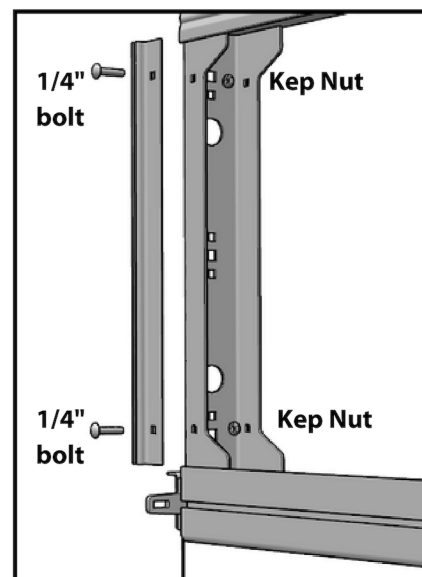


4. Assemble End Frames

Align the canopy end shim holes with latch assembly holes and put self-tap screws through the holes. Screw the screws into the lower frame extrusion- Do NOT over tighten. Attach the keder rail with 1/4-20 x 1-1/4 carriage bolts and kep nuts as shown below - leave the kep nuts loose. Repeat on all corners.



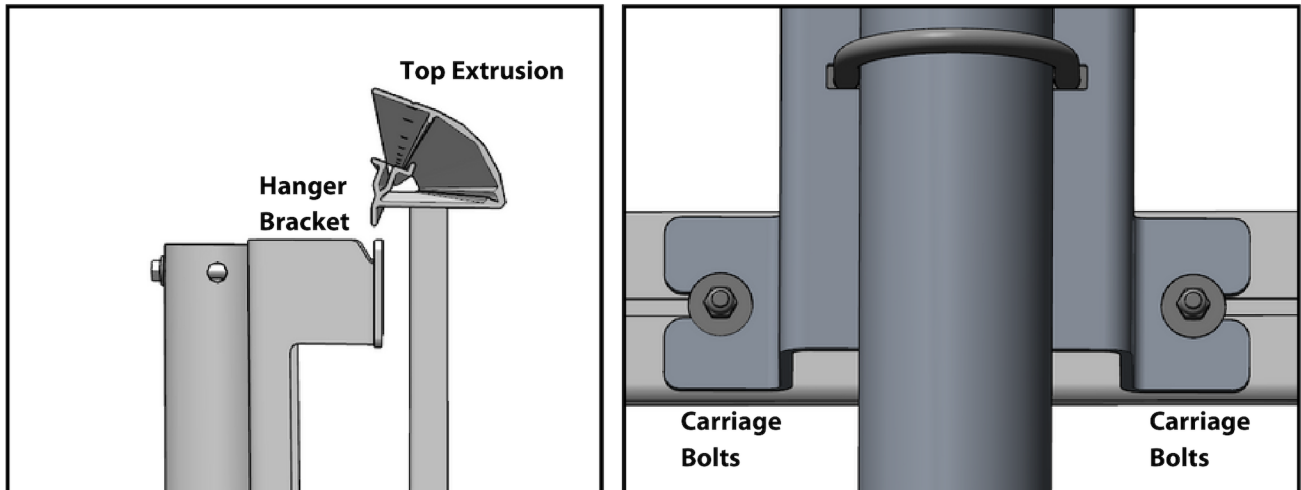
Keder Rail



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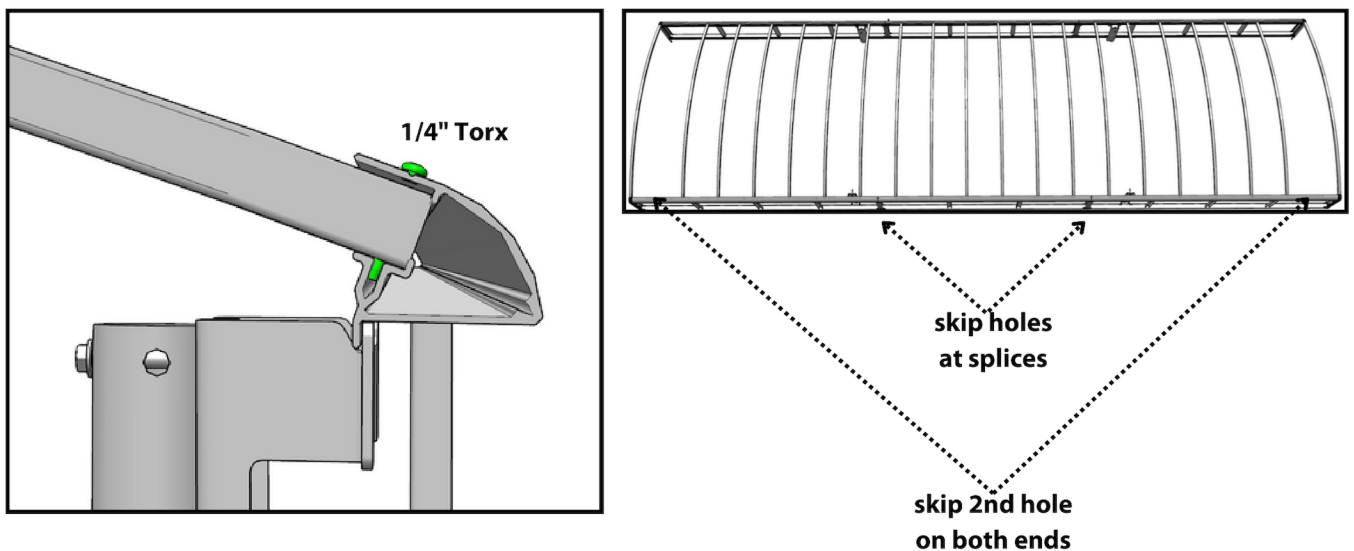
5. Hang Side Frames

Lift one side frame and lay the lip of the top extrusion into the hanger bracket as shown below. Hang the other side frame and adjust them as needed so the ends of the side frames line up with each other. Then slide the carriage bolts into the T-slot of the canopy side frame and into the hanger bracket slot, add the washers and locknuts, and tighten them.



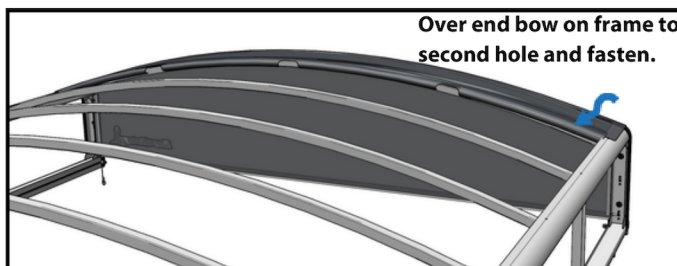
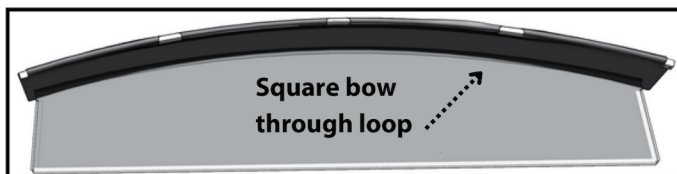
6. Add the Bows

Start on one end, put a bow into the top extrusion on both side frames, align the bow holes with the top extrusion holes, and use a cordless drill to screw in a 1/4 x 2-1/4 Torx screw. Repeat this going down the side frames, but skip the second hole from end on both ends. Also, skip the holes at the splines of the side frame sections.



7. Attach End Screen

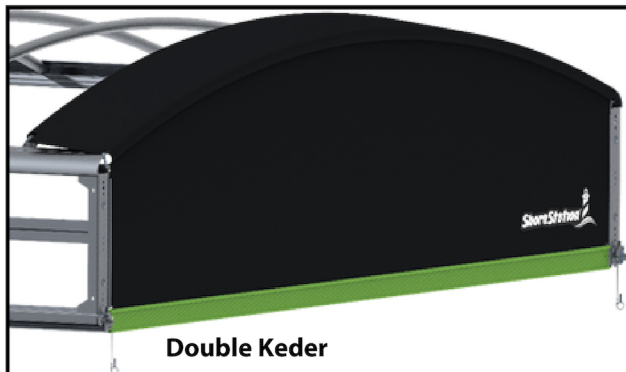
Slide a square bow into the loop of the end screen. Put the bow over the end bow on the frame. Be sure the flat ends are underneath the top extrusion. Line up the with the frame's holes and fasten with Torx screws. Slide the end screen keder into the keder rail on both sides and pull down the end screen. Tighten the kep nuts. Repeat on other end.



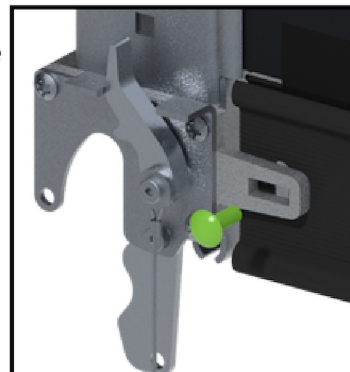
Slide End Screen into keder rail and pull down. Tighten kep nuts.

8. Double Keder

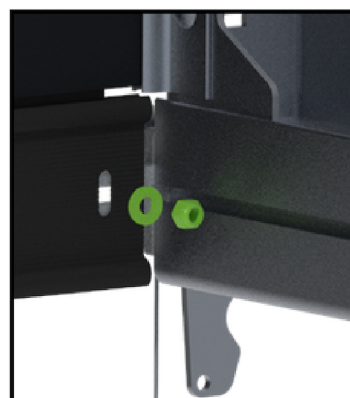
Slide the double keder part onto the bottom of the end screen. If necessary, push end screen up to get the double keder behind the corner end plates. Put a carriage bolt through the corner end plate and double keder slot. On the inside of the frame, secure the double keder with a washer and tighten a brass locknut. Repeat in all corners.



Double Keder Behind Corner Plate



Inside Frame Corner



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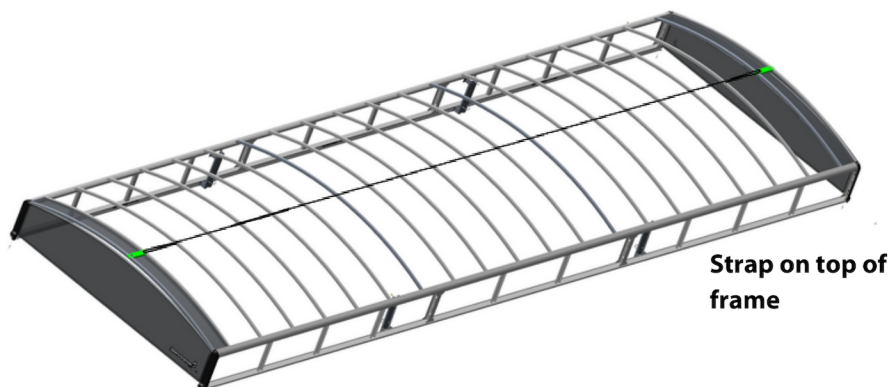
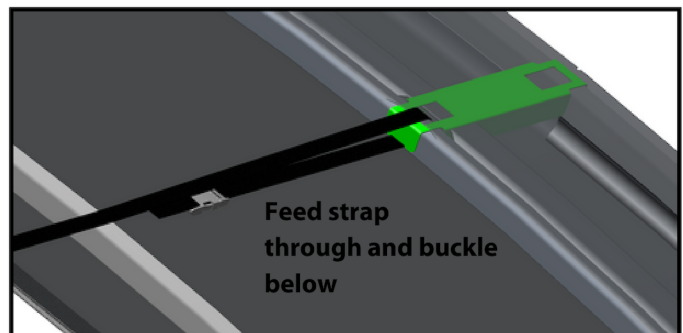
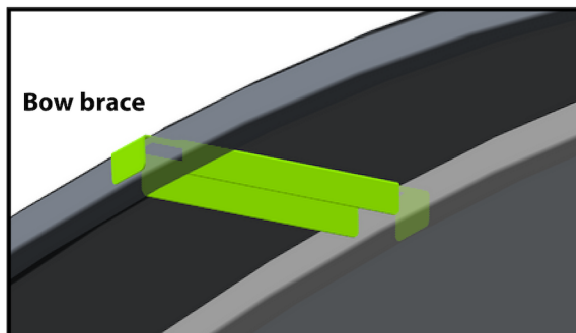
9. End Caps

Use black push-type plastic rivets to attach the plastic end caps on the corners. Do NOT push the rivet tight before inserting it through the end caps and frame.



10. Add Center Strap

Press fit the bow braces on the bows under the end screen (one brace each end). Feed the center strap through the bow brace hole and snap the buckle together. Run the strap to the other bow brace and keep the strap on top of all the bows. Put the strap through the bow brace like the other end and snap the buckle together. Then tighten the strap on both ends. The buckle should be underneath the strap as shown below.



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REVOLUTION CANOPY BUNDLES

Customer ID	CANOPY FRAME CONFIGURATIONS - EACH SIDE TO BE ASSEMBLED IN ORDER SHOWN BELOW			
RF38-XXX	<div><div>72453 - 12'</div><div></div><div>72454 - 14'</div><div></div><div>72453 - 12'</div><div></div><div>72454 - 14'</div></div>			
RF40-XXX	<div><div>72454 - 14'</div><div></div><div>72453 - 12'</div><div></div><div>72454 - 14'</div></div>			
RF42-XXX	<div><div>72454 - 14'</div><div></div><div>72454 - 14'</div><div></div><div>72454 - 14'</div></div>			
RF44-XXX	<div><div>72505 - 16'</div><div></div><div>72453 - 12'</div><div></div><div>72505 - 16'</div></div>			
RF46-XXX	<div><div>72505 - 16'</div><div></div><div>72454 - 14'</div><div></div><div>72505 - 16'</div></div>			
RF48-XXX	<div><div>72505 - 16'</div><div></div><div>72505 - 16'</div><div></div><div>72505 - 16'</div></div>			