

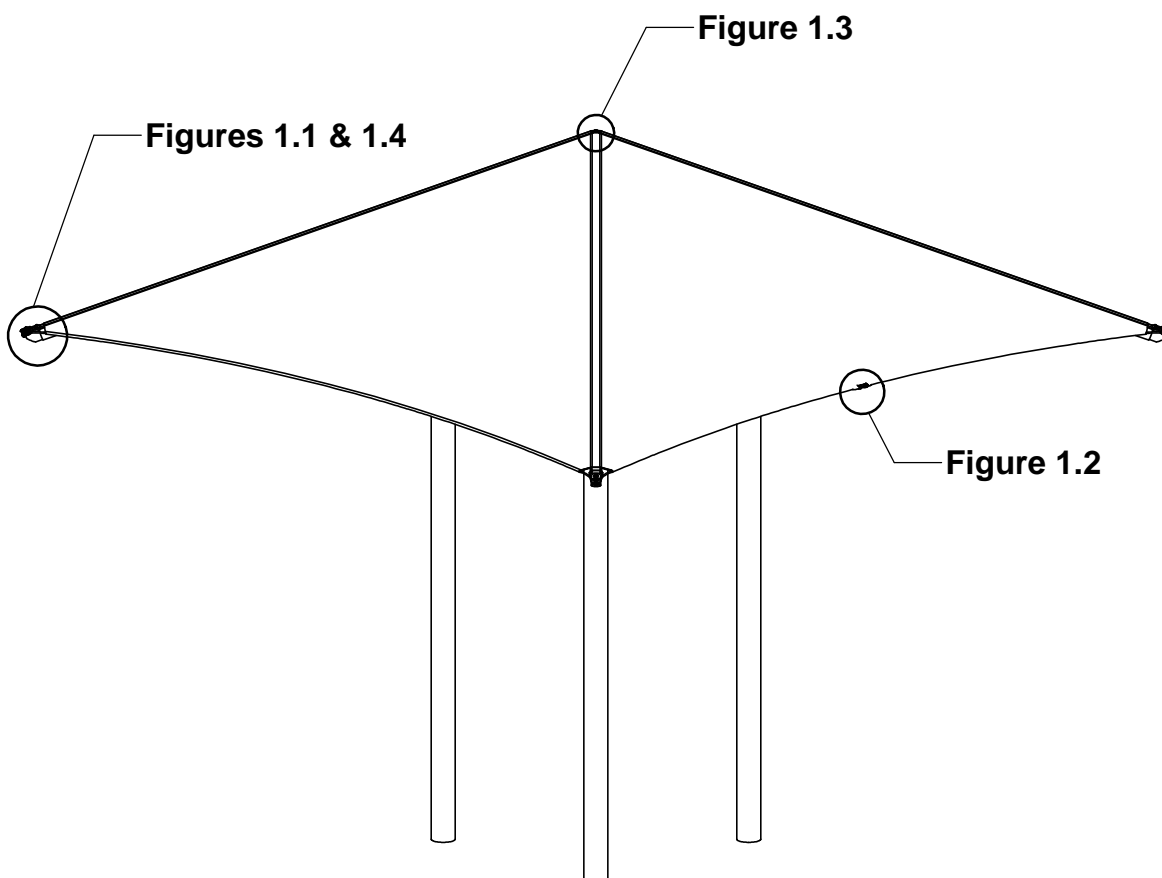
## IMPORTANT NOTES: Read First

(A) Use liquid thread lock (such as Loctite®) with all threaded hardware. **Important:** Liquid thread lock (prior to curing) helps to eliminate the common problem of "thread seizure" in stainless steel hardware by serving as a lubricant during assembly.

(B) When installing Shade Canopy Square Roof, make sure that the lowest point of the roof is a minimum of 84" [2130mm] above the underlying play surface.

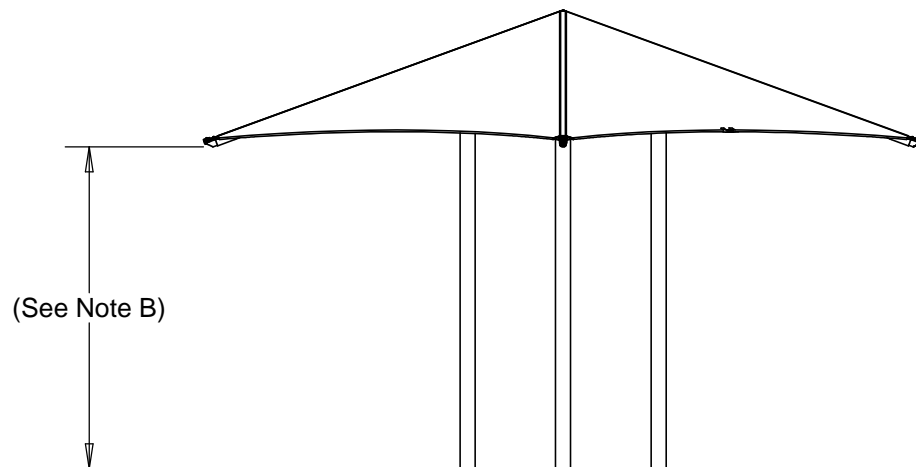
(C) Remove canopy from Shade Canopy Roof in high wind and heavy snow conditions. Block protrusions while canopy is removed to maintain CPSC/ASTM compliance.

**FIGURE 1**  
Shade Canopy  
Square Roof

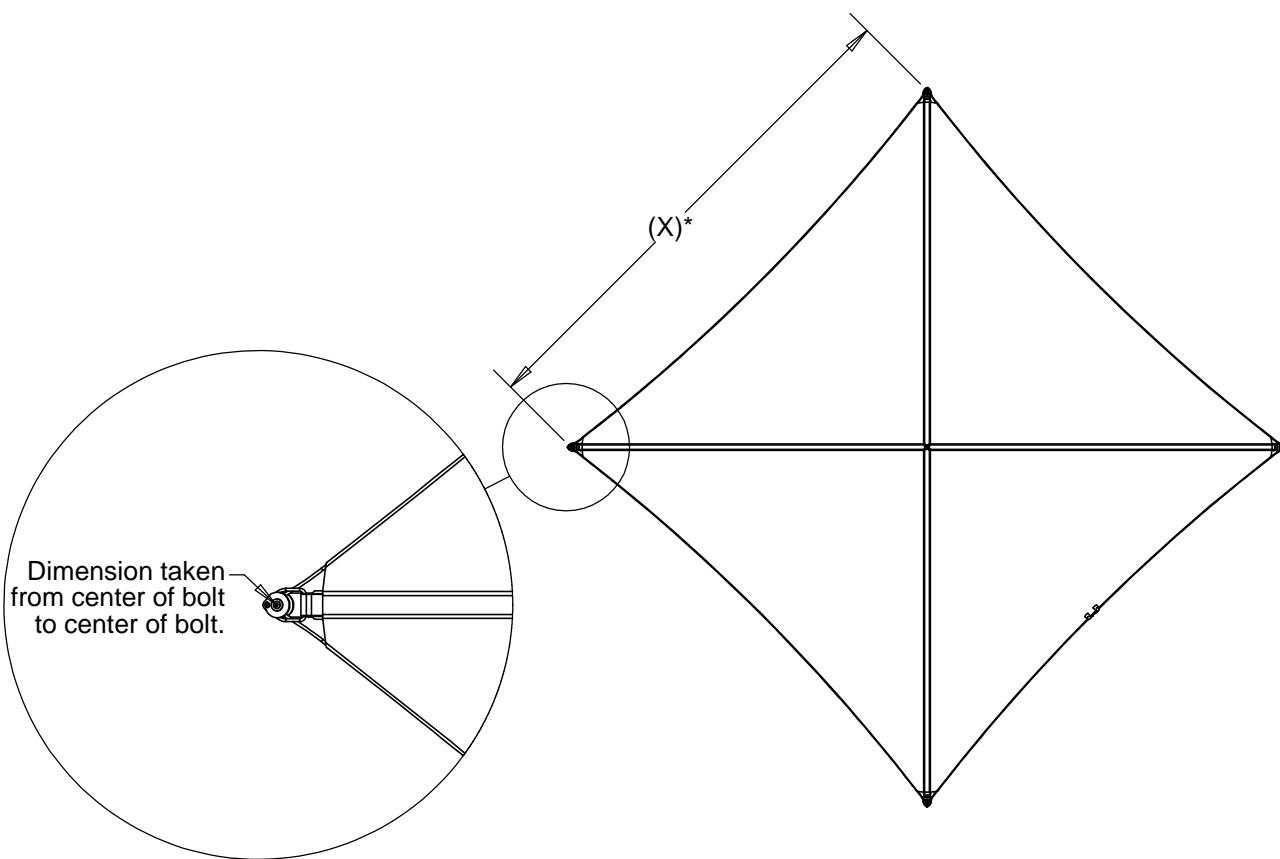


**NOTE:** R5 14' Shade Canopy Square Roof shown. Other configurations will vary slightly, but does not affect assembly.

**Elevation View**



**Top View**

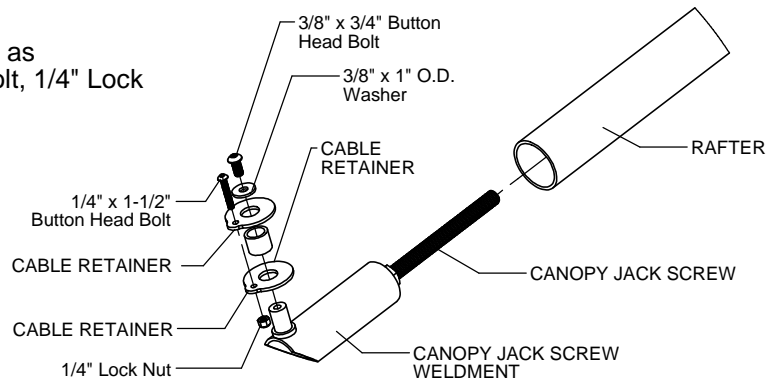


\* Dimension indicated should be equal on all sides.

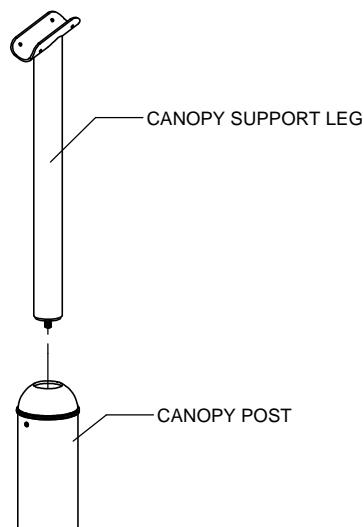
## Step 1 (Factory Assembled)

Assemble Canopy Jack Screws. Apply grease to Canopy Jack Screws and attach to Rafters as shown in Figure 1.1. (See Note A)

**NOTE:** Do not use liquid thread lock (such as Locktite®) on 1/4" x 1-1/2" Button Head Bolt, 1/4" Lock Nut and Canopy Jack Screw in this step.



**Figure 1.1**



**FIGURE 2**

## Step 2

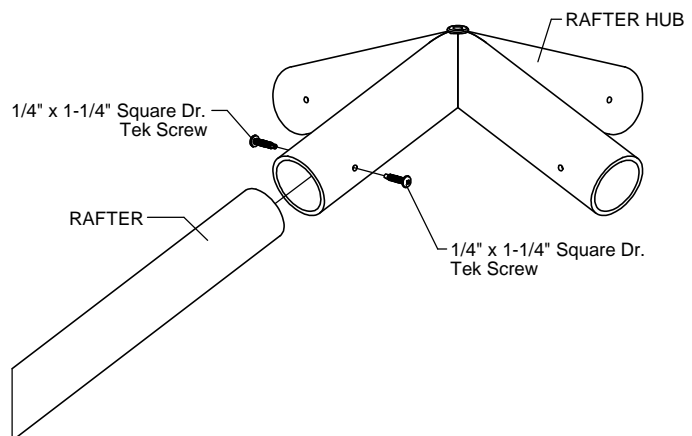
Screw Canopy Support Legs into Canopy Posts as shown in Figure 2. Canopy Support Legs should be pointed at an upward angle to center of deck.

**NOTE:** Insure all Canopy Support Legs are at same height.

## Step 3

Insert Rafters into Rafter Hub until Rafters contact the rafter stops. Secure Rafters to Rafter Hub as shown in Figure 3.

**NOTE:** Insure the lower end of all Rafters are at same length when attached to Rafter Hub.

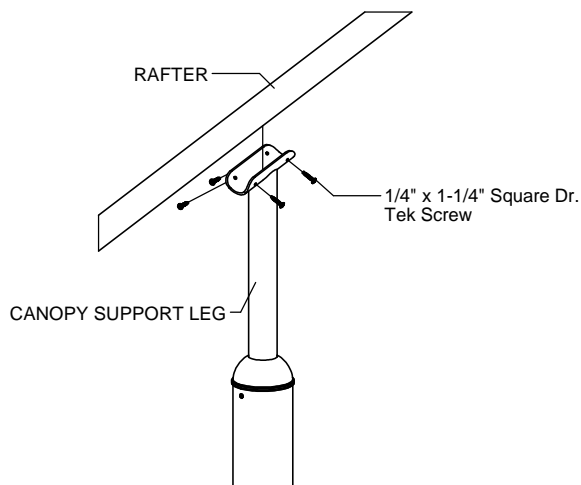


**FIGURE 3**

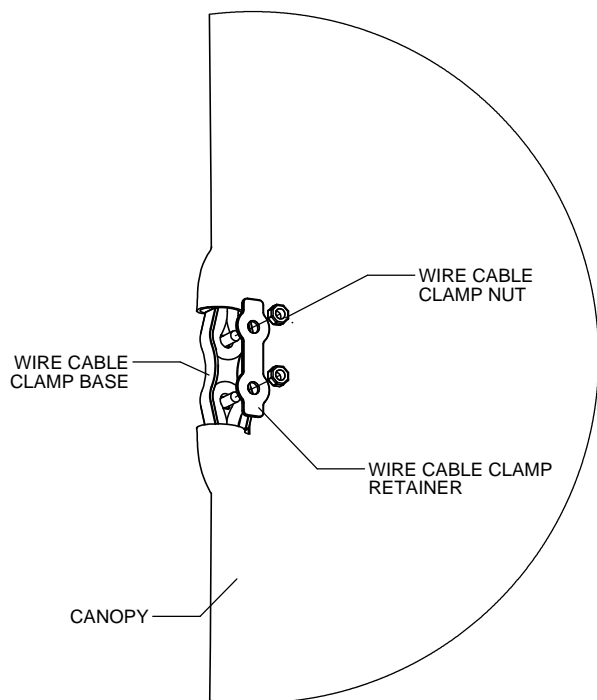
## Step 4

Set Rafters into Canopy Support Legs and center above deck. Secure Rafters to Canopy Support Legs as shown in Figure 4.

**NOTE:** Insure all lower ends of Rafters are level and at same height after attached to Canopy Support Legs.



**FIGURE 4**



**Figure 1.2**

## Step 5

Insert Wire Cable through perimeter of Canopy Square.

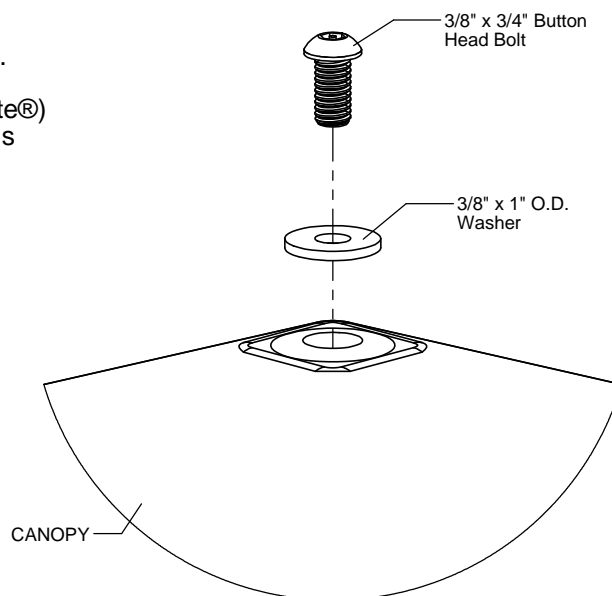
## Step 6

Attach Wire Cable Clamp to Wire Cable as shown in Figure 1.2.

## Step 7

Attach Canopy to Rafter Hub as shown in Figure 1.3.

**NOTE:** Do not use liquid thread lock (such as Locktite®) on 3/8" x 3/4" Button Head Bolt and Rafter Hub in this step.



**Figure 1.3**

## Step 8

Remove 1/4" x 1-1/2" Button Head Bolt and 1/4" Lock Nut From Canopy Jack Screw. Hook D-Rings and Wire Cable over Cable Retainers. Secure to Canopy Jack Screws as shown in Figure 1.4.

## Step 9

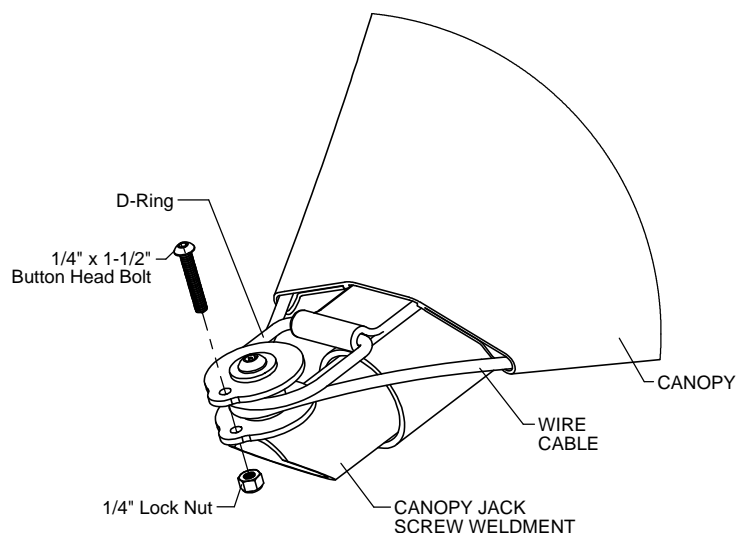
Adjust Wire Cable overlap and Wire Clamp until Canopy is taut and D-Rings are secure against retainers. Slide Wire Cable around until Wire Cable Clamp is hidden inside of Canopy.

## Step 10

Evenly tighten Canopy Jack Screws to adjust Canopy tension and maintain a uniform dimension on all sides. (See Top View)

## Step 11

Fully tighten all fasteners according to the "TIGHTENING TORQUE FOR HARDWARE" section of the Installation Manual.



**Figure 1.4**

# SHADE CANOPY SQUARE ROOF INSTALLATION INSTRUCTIONS

**18021**  
Page 6 of 6

## Parts List

Part #	DESCRIPTION	QTY.
FS-18022-LEG	Roof Canopy Support Leg	4
FS-18021-HUB	Roof Canopy Square Rafter Hub	1
Varies	Roof Canopy Square Rafter	4
Varies	Shade Canopy Square	1
451003	1/4" Wire Cable Clamp	1
455114	1/4" Canopy Wire Cable	1
9103032-TR	Bolt Button Head 3/8" x 3/4"	1
9271060	Screw Tek 1/4" x 1-1/4" PH SQDR	24
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	1

## Assembled Parts List

Part #	DESCRIPTION	QTY.
AE-4751	Roof Canopy Cable Retainer	8
FS-18022-JAC	Roof Canopy Jack Screw	4
LE-4775	Roof Canopy Retainer Spacer	4
91010672-TR	Bolt Button Head 1/4" x 1-1/2"	4
9103032-TR	Bolt Button Head 3/8" x 3/4"	4
9333002	Washer Flat 3/8" x 1" O.D. x .100" thick	4
9411012	Nut Lock 1/4"	4

## Specifications

### ROOF CANOPY JACK SCREW:

Shall be fabricated using 2" O.D. 10 gauge steel tube with welded 3/16" thick steel plugs, welded 1" O.D. machined steel retainer stub, 1" O.D. 11 gauge steel cable spacer and punched 10 gauge steel retainers. The Roof Canopy Jack Screw shall have a multi-staged baked-on powder coated finish.

### ROOF CANOPY SQUARE RAFTER HUB:

Shall be fabricated using 2.50" O.D. schedule 40 pipe with welded zinc nut and stainless steel stop. The Roof Canopy Square Rafter Hub shall have a multi-stage baked-on powder coat finish.

### ROOF CANOPY SQUARE RAFTER:

Shall be fabricated using 2.375" O.D. 10 gauge steel tubing with welded 1/2" thick steel plug. The Roof Canopy Square Rafter shall have a multi-stage baked-on powder coat finish.

### ROOF CANOPY SUPPORT LEG:

Shall be fabricated using 2.375" O.D. 10 gauge steel tubing welded to a formed 3/16" thick steel cradle. The Roof Canopy Support Leg shall have a multi-stage baked-on powder coat finish.

### SHADE CANOPY SQUARE:

Shall be UV & mildew resistant woven acrylic fabric, folded and stitched for strength and to accommodate steel cable.

### 1/4" CANOPY WIRE CABLE:

Shall be Ø1/4" steel cable with a clear vinyl coating.

### HARDWARE:

Shall be stainless steel, zinc/nickel plated or galvanized as required to resist rust and corrosion.

## Maintenance

Periodically tighten all screws, bolts and nuts. A periodic inspection of all parts is necessary. If a part is broken or worn, replace immediately. For general maintenance please refer to our Playground Maintenance Manual.



Manufactured by Krauss Craft, Inc.  
www.playcraftsystems.com

For Customer Service Call  
800.333.8519 (U.S.A.) or  
541.955.9199 (International)

**Rev B**  
11/9/2012