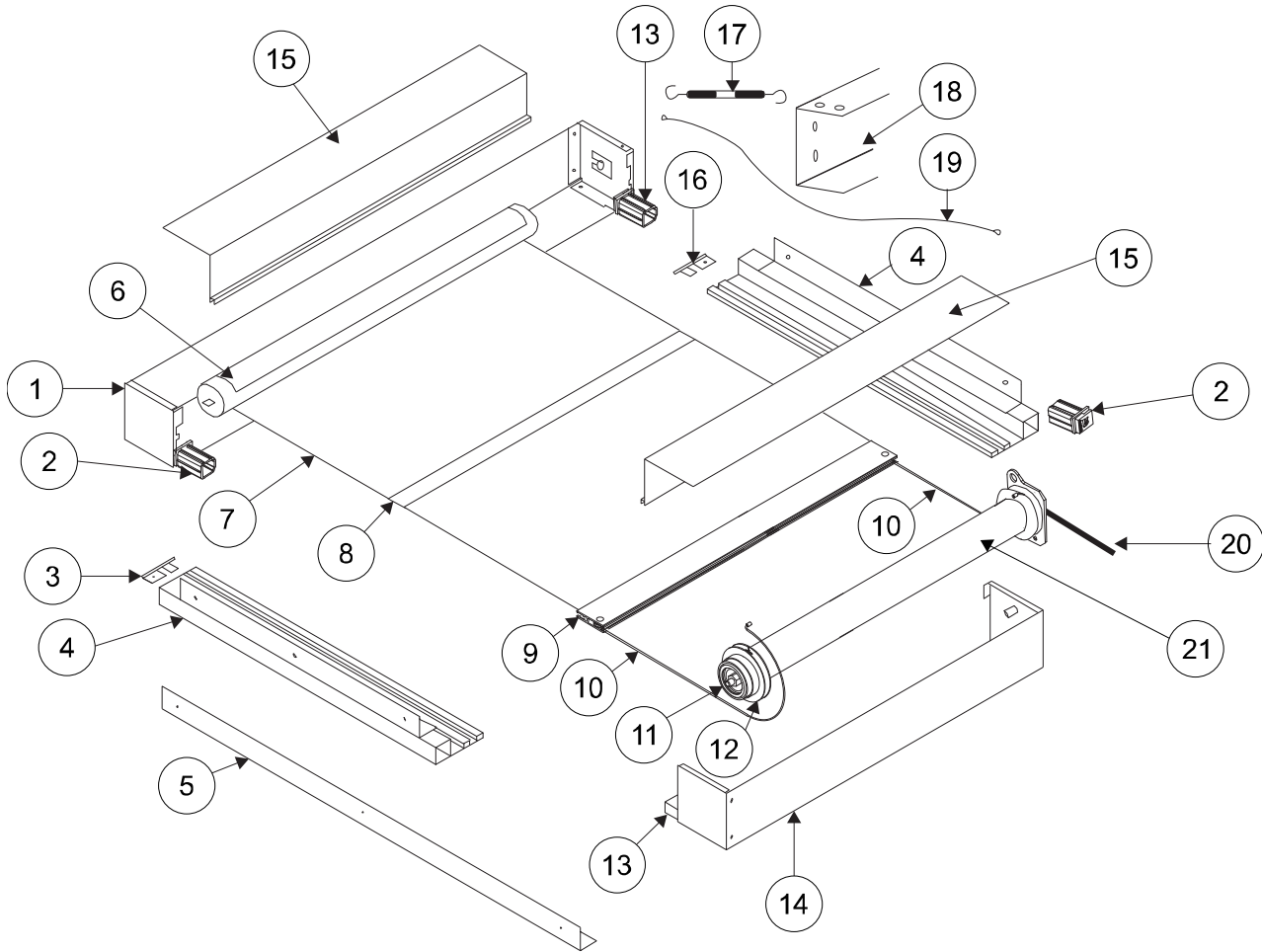


Contents

The following items are included with the Crestron® Skylight Shade assembly to ensure proper installation.



#	DESCRIPTION
1	Spring Roller Headbox
2	Flange Endcap (Right, Qty. 2)
3	Fabric Guide (Right)
4	Side Support Flange (Qty. 2)
5	Trim Angle (Qty. 4)
6	Spring Roller Assembly
7	Fabric
8	Steel Stay
9	Slat Bar
10	Take-Up Cable
11	Idler Gudgeon (Sliding or Spring Loaded Pin)
12	Take-Up Reel

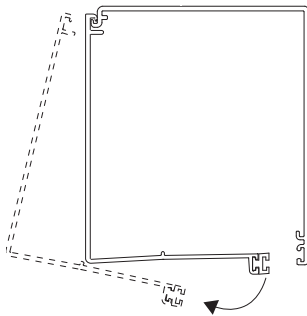
#	DESCRIPTION
13	Flange Endcap (Left, Qty. 2)
14	Motor Tube Headbox
15	Face Cover (Qty. 2)
16	Fabric Guide (Left)
17	Turnbuckle (for Units with Cable Support Only)
18	Support Channel (for Units with Cable Support Only)
19	Support Cable (for Units with Cable Support Only)
20	Motor Lead
21	Motor Tube Assembly



Unpacking and Installation Preparation

1. Arrange all parts on the floor the same way they are to be installed. Ensure that the motor end and spring roller end are positioned at the ends of the skylight opening.
2. Remove the face covers from both headboxes as shown in the following illustration.

Remove Face Cover from Headbox (Side View)

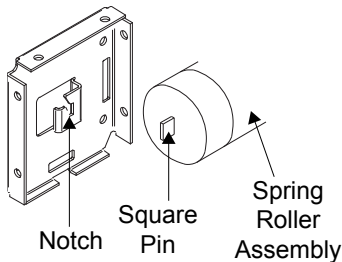


3. Remove the spring roller assembly from the spring roller headbox.

NOTE: The spring roller is pre-tensioned and the square pin on the idler end is locked in the notch.

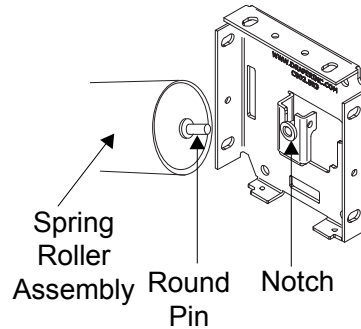
- a. Rotate the roller so that the square pin can be worked out of the notch of the idler bracket.

Spring Roller - Idler End (Headbox Removed for Clarity)



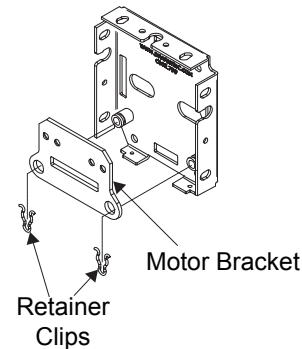
- b. Remove the spring roller assembly from the operator end bracket by sliding the round pin out of the notch. Refer to the illustration that follows.

Spring Roller - Operator End (Headbox Removed for Clarity)



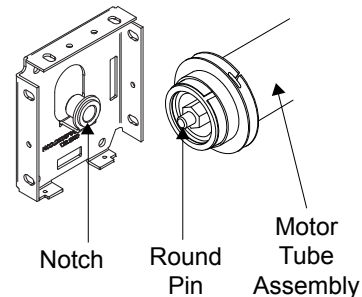
4. Remove the motor tube assembly from the motor tube headbox.
 - a. Remove the retainer clips that secure the motor tube assembly to the bracket. Keep all retainer clips for reinstallation of the motor tube.

Motor Tube Assembly - Motor End (Headbox Removed for Clarity)



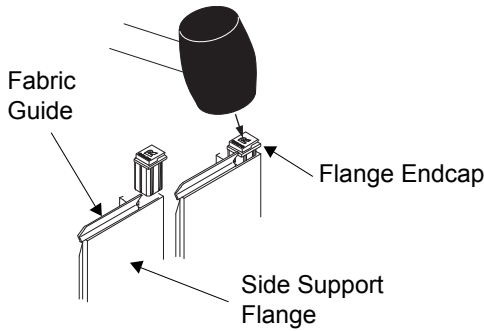
- b. Compress the idler gudgeon in the motor tube by sliding the motor tube assembly toward the idler end of the headbox.
- c. Pivot the motor end of the motor tube assembly out of the headbox.

Motor Tube Assembly - Idler End (Headbox Removed for Clarity)



5. Insert the left and right side flange endcaps into the right side support flanges. The flange endcaps are stamped with an **L** or **R** to indicate left and right. The flange endcaps should be fully inserted into the side support flanges. If necessary, tap gently with a plastic hammer or rubber mallet.

Insert Flange Endcaps



6. (Outside (face) mount applications only) Insert the fabric guides into the right and left side support flanges. The fabric guides are installed on the spring roller headbox end of the assembly and the bevel-bent portion should point away from the fabric when the shade is closed.

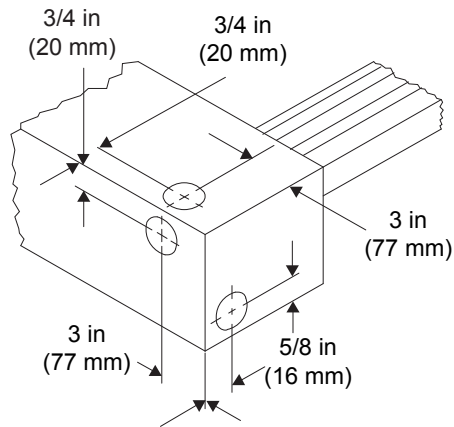
Installation

NOTE: The Skylight Shade can be installed up and down slopes, but not sideways along slopes. Headboxes must be installed level.

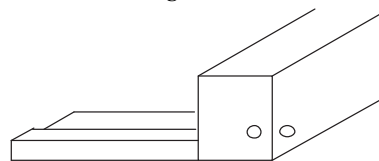
A hole may need to be drilled in the headbox for the conduit connector (not supplied). The hole size for the conduit connector depends on the size of the conduit connector used.

The drilling location depends on the installation scenario and whether the Skylight Shade is to be inside or outside mounted. For drilling guidelines, refer to the illustrations that follow.

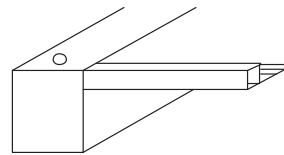
Headbox Drilling Locations (Not to Scale)



Headbox Drilling Locations – Inside Mount



Headbox Drilling Location – Outside Mount



If the Skylight Shade is to be inside (jamb) mounted, then proceed to the “Inside (Jamb) Mount” procedure that follows. If the unit is to be outside (face) mounted, refer to the “Outside (Face) Mount” procedure on page 5.

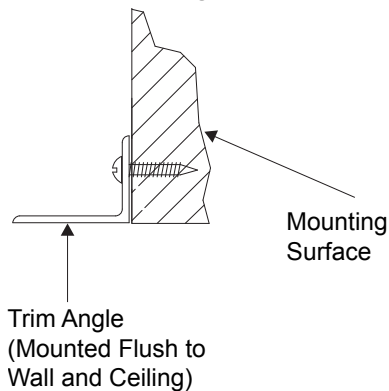
Inside (Jamb) Mount

Install Trim Angle

1. Ensure that the four trim angles fit the skylight opening exactly. The trim angles should be flush with the sides and bottom of the skylight opening.
2. Install the four trim angles inside the skylight opening to create a frame around the inside of the skylight opening. The Skylight Shade assembly rests on the frame created by the trim angles. Refer to the illustration that follows.

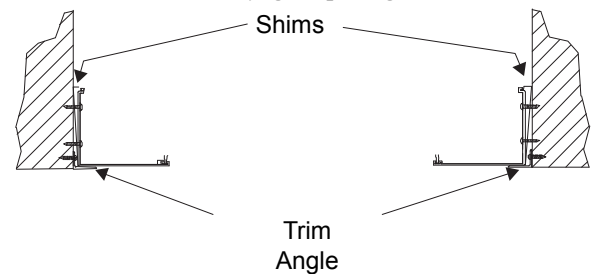
NOTE: It may be necessary to counter-sink the screws into the trim angles.

Mount the Trim Angles



- b. Secure the headboxes into position using the mounting screws. Refer to the illustration that follows.

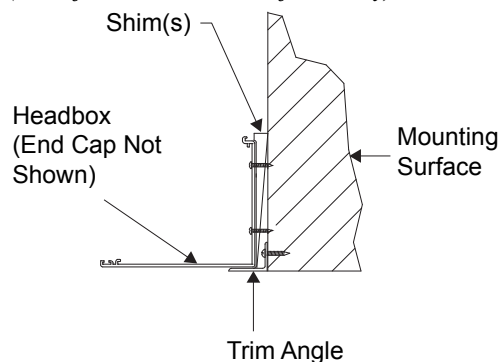
Secure Headboxes to Skylight Opening



Install Headboxes

1. Place the spring roller headbox into the skylight opening so that it rests on the frame created by the trim angles.
2. Center the spring roller headbox in the opening
3. (Optional) Temporarily place shims behind the headbox if the skylight opening is larger than the Skylight Shade assembly.
4. Secure the spring roller headbox to the mounting surface with screws appropriate for the mounting scenario. Refer to the illustration below.

Shim Headbox – Side View (End of Headbox Removed for Clarity)

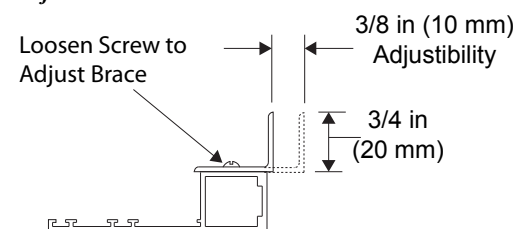


Install Side Support Flanges

The side support flanges are installed along the length of the skylight opening and provide a smooth surface for the Skylight Shade fabric to travel across. The side support flanges have an adjustable brace that allows the side support flange to be installed square in an opening that is not square. To install the side support flanges:

1. Attach the side support flanges to the headboxes using the flange endcaps that were installed during the “Unpacking and Installation Preparation” procedure in step 5. The side support flanges sit on top of the frame created by the four trim angles.
2. If the brace on the side support flange does not sit flush to the wall in the skylight opening, loosen the screws on the top of the side support flange using a Phillips screwdriver and reposition the brace to sit flush.

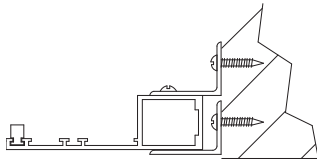
Adjust Brace



5. Repeat step 1 through 4 for the motor tube headbox.
6. After the spring roller headbox and the motor tube headbox are in place, measure the opposite corners of the assembly to ensure the unit is square (measurements should be within 1/8 in (~4 mm) of each other). If the headboxes are not square, perform the following steps:
 - a. Loosen the mounting screws, adjust the headboxes, and shim until the unit is square.

3. Use screws (not supplied) to fasten the brace to the wall of the skylight opening.

Mount Side Support Flange



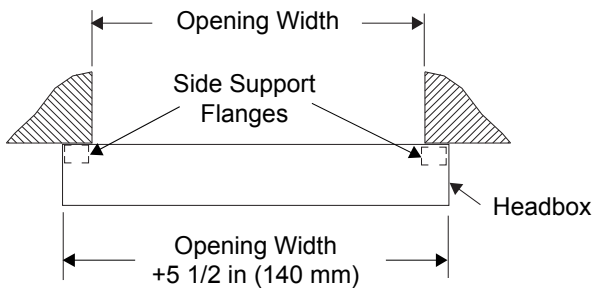
4. Ensure the side support flanges are square to the two installed headboxes and tighten the screws that hold the brace to the flange.

Outside (Face) Mount

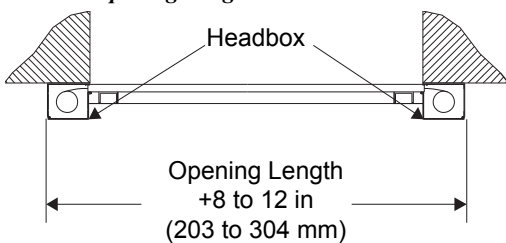
Install Headboxes

1. Measure the length and width of the skylight opening and the Skylight Shade (length of the side support channel plus the headbox width). Compare the two measurements and verify that the Skylight Shade assembly is the proper size for the skylight opening. Consider the following:
 - The Skylight Shade width should be approximately 5 1/2 in (140 mm) larger than the skylight opening to be covered
 - The Skylight Shade length should be approximately 8 in (203 mm) longer than the skylight opening (approximately 11 to 12 in (279 to 304 mm) if the slat bar and headboxes are all to extend beyond the skylight opening).

Measure Opening Width



Measure Opening Length



2. Mark the roller spring and motor tube headbox mounting locations and measure the opposite

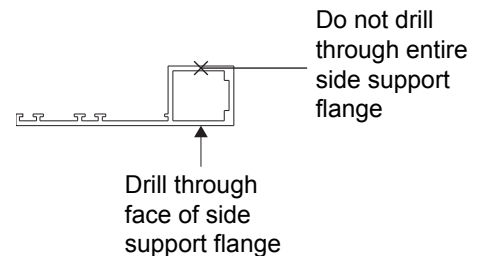
corners to ensure the unit is square (measurements should be within 1/8 in (~4 mm) of each other).

3. Hold the spring roller headbox against the marked ceiling, ensuring that the headbox is centered to the skylight opening.
4. Secure the spring roller headbox to the ceiling with screws that are appropriate for the installation location.
5. Repeat steps 3 and 4 for the motor tube headbox.
6. Verify that the assembly is square (measurements should be within 1/8 in (~4 mm) of each other).

Install Side Support Flanges

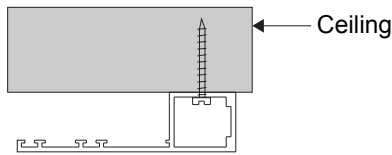
1. Remove the braces from the side support flange by removing the screws on the top of the side support flanges with a Phillips screwdriver.
2. Attach the side support flanges to the headboxes using the flange endcaps that were installed in step 5 of the “Unpacking and Installation Preparation” procedure on page 2.
 - a. The flange endcaps hook onto the sides of the headboxes. Ensure the side support flanges are on the mounting locations marked in step 2 of “Outside (Face) Mount”.
 - b. Using a drill and a 3/8 inch drill bit, make a hole through the face of the side support flange. The hole allows a screw to pass through the face of the side support flange and secure the inside of the side support flange to the ceiling. Do not drill through the entire side support flange or the installed screw is unable to hold the side support flange

Drill Through Side Support Flange

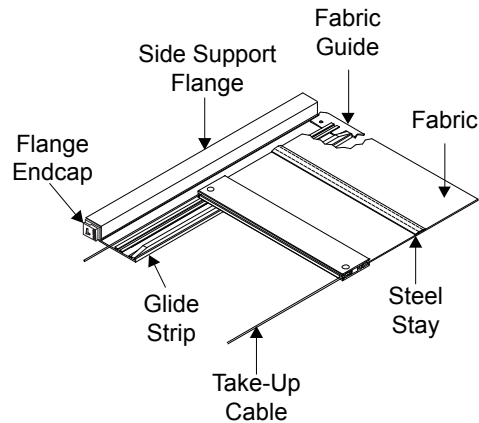


- c. Attach the side support flanges to the ceiling using screws through the holes created in the face of the side support flange.

Assembly Diagram



Assembly Diagram



3. Cover the screw holes created in step 2b with the supplied plastic plug buttons.

Install Cable Support (Units with Cable Support Only)

NOTE: If the Skylight Shade does not utilize a cable support system, proceed to “Roller Assembly and Installation” on page 7.

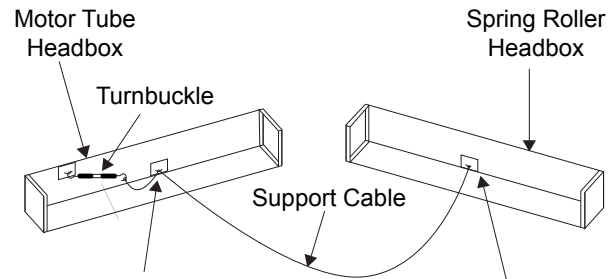
NOTE: Units with an outside width greater than 36 inches (~1 m) require one support cable. Additional cables may be used at Crestron’s discretion.

Inside Mount Installations

The cable support for inside mount installations comes with a cable support and turnbuckle that are installed inside the headboxes.

1. Thread the support cable through the hook in the center of the motor tube headbox.
2. Attach the loop at the end of the support cable to the hook on the inside of the spring roller headbox.
3. Attach the other end of the support cable to the turnbuckle in the motor tube headbox.

Assemble Cable Supports



Thread the end of the support cable through the hook in the motor tube headbox.

Attach the loop of the support cable to the hook in the spring roller headbox.

4. Create tension in the support cable by tightening the turnbuckle until the cable is straight.

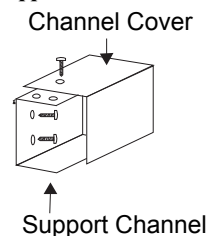
NOTE: Ensure the support cable is as tight as possible without overtightening. Loosen the support cable if the shade fabric has difficulty returning to the full open position.

Outside Mount Installations

The cable support for outside mount installations comes with two support channels, a cable support, and a turnbuckle that are installed outside the headboxes. The support channels and cable support come pre-assembled.

1. Remove the channel covers from the support channels by removing the screws from the top of the support channels.

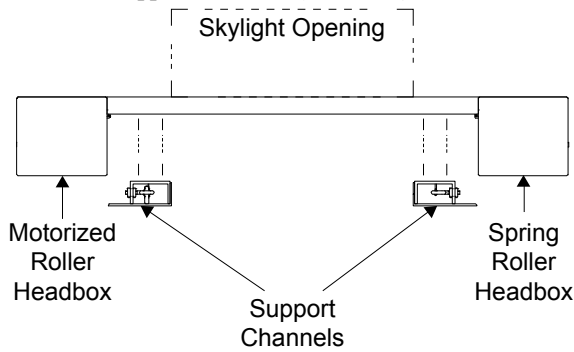
Support Channel and Channel Cover



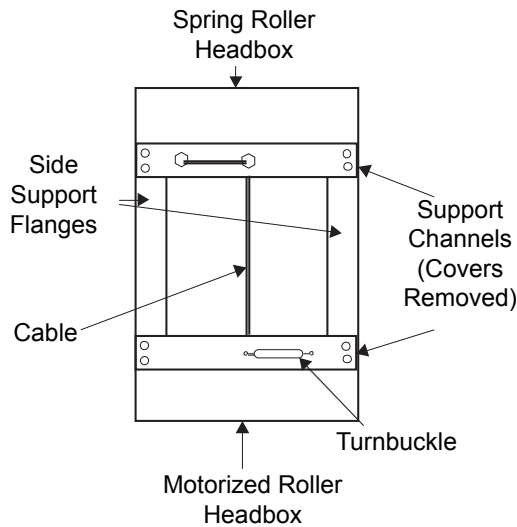
2. Attach the support channels to the side support flanges using the pre-drilled holes in the support channels.

NOTE: If there is not enough slack in the support cable to allow both support channels to be attached to the side support flanges, unhook the turnbuckle from the support on the motor end of unit. After attaching both channel supports to their side support flanges, re-attach the turnbuckle.

Attach Side Support Channels (Side View)



Attach Side Support Channels (Top View)



3. Apply tension to the cable by tightening the turnbuckle until the cable is straight.

NOTE: Ensure the cable is as tight as possible without overtightening. Loosen the cable if the shade fabric has difficulty returning to the full open position.

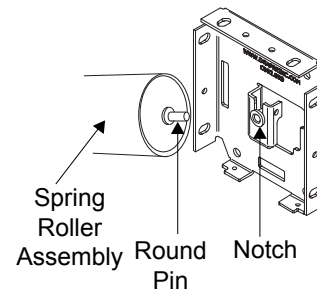
4. Re-attach the channel cover with the screws that were removed in step 1.

Roller Assembly and Installation

NOTE: If the spring was unwound when removed from the headbox, add 8 to 11 pre-turns prior to placing the spring roller into the headbox.

1. Insert the round pin on the spring roller assembly into the notch in the bracket of the spring roller headbox.

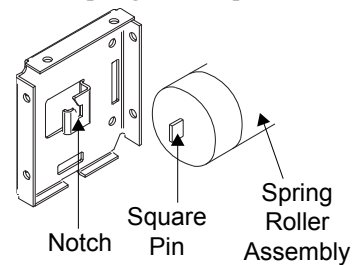
Insert Spring Roller Round Pin into Notch



NOTE: The spring roller should be pre-tensioned and the square pin on the idler end should be locked in the notch.

2. Insert the square pin on the spring roller assembly into the notch in the bracket of the spring roller headbox.
 - a. Rotate the spring roller so that the pin can be fully worked into the end cap.

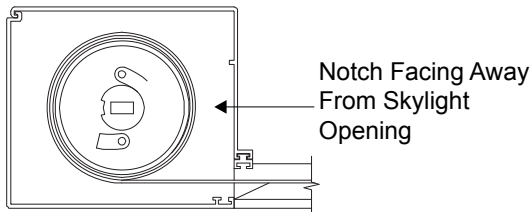
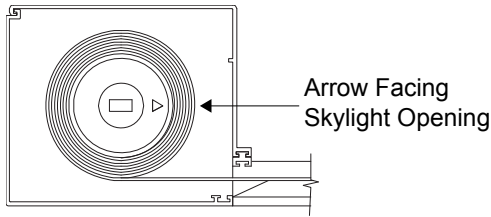
Insert Spring Roller Square Pin into Notch



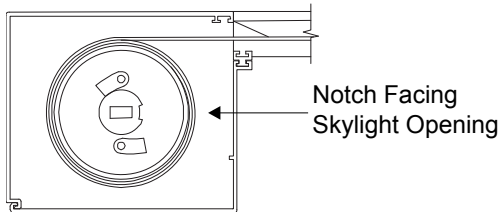
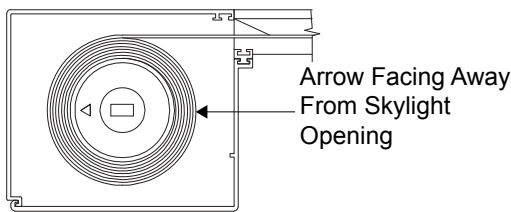
- b. Refer to the illustrations that follow to make sure that the notch or arrow on the spring roller is pointing in the proper direction.

NOTE: If the notch or arrow is not oriented in the proper direction, the spring loaded roller may unwind and lose its tension.

Notch and Arrow Alignment on Spring Roller – Inside Mount

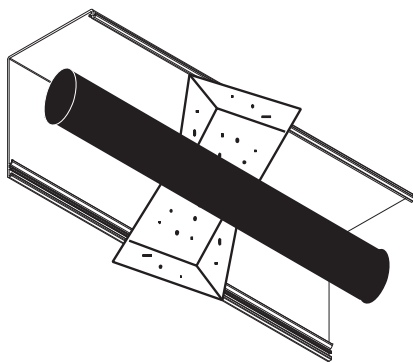


Notch and Arrow Alignment on Spring Roller – Outside Mount



3. Wedge a soft object, such as styrofoam, between the spring roller and its headbox to prevent the spring roller from moving.

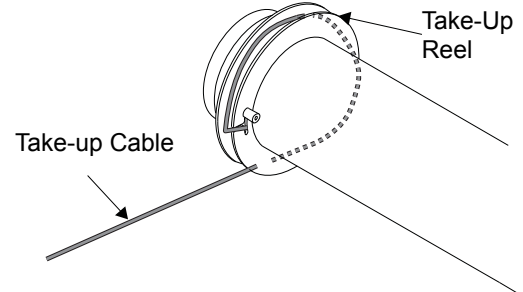
Wedge Styrofoam Between Spring Roller and Headbox



4. Insert the motor tube assembly's round pin into the notch in the bracket of the motor tube headbox.

5. Secure the motor bracket to the motor tube headbox using the retainer clips removed during step 4 in "Unpacking and Installation Preparation" on page 2.
6. Wrap one end of the take-up cable that is attached to the slat bar underneath and around the motor tube assembly so approximately 3/4 of a revolution is achieved.
7. Slide the take-up cable into the slot in the take-up reel and set the cable stop against the outer side of the take-up reel. Be sure that the take-up cable is contained between the walls of the take-up reel.
8. Repeat step 4 and 5 for the other take-up cable.

Assemble Cable to Take-Up Reel



Wiring

For information on wiring this device, refer to the Crestron Roller Shades and Interfaces Wiring Guide (Doc. 7516) at www.crestron.com/manuals.

For information on wiring Skylight Shades that use a C2N-SDC, refer to the Crestron Shade & Drap Motor Controller Operations & Installation Guide (Doc. 6316).

Programming and Setup

Before the Skylight Shade can be operated the device must be programmed and set up.

For information on programming and setup of Skylight Shades that use a CSC-ACCN or CSC-ACEX, refer to the Crestron Roller Shades and Interfaces Programming and Setup Guide (Doc. 7361).

For information on programming and setup of Skylight Shades that use a C2N-SDC, refer to the Crestron Shade & Drap Motor Controller Operations & Installation Guide (Doc. 6316).

Cleaning and Maintenance

Idlers on spring roller assembly and motor tube assembly may occasionally need lubrication. If lubrication is required, apply a small amount of lithium-based grease directly to the idler pin.

Most fabrics can be cleaned at the window by vacuuming with a soft brush attachment. They may also be cleaned with a soft sponge or soft cloth and a mild solution of warm soapy water. Dishwashing liquid is recommended. A clean dry cloth is recommended for the metal finish. Consult with Crestron before cleaning the fabric or if there are any questions about cleaning the fabric.

Further Inquiries

To locate specific information or resolve questions after reviewing this guide, contact Crestron's True Blue Support at 1-888-CRESTRON [1-888-273-7876] or, for assistance within a particular geographic region, refer to the listing of Crestron worldwide offices at www.crestron.com/offices.

To post a question about Crestron products, log onto Crestron's Online Help at www.crestron.com/onlinehelp. First-time users must establish a user account to fully benefit from all available features.

Future Updates

As Crestron improves functions, adds new features and extends the capabilities of the Skylight Shades, additional information may be made available as manual updates. These updates are solely electronic and serve as intermediary supplements prior to the release of a complete technical documentation revision.

Check the Crestron Web site periodically for manual update availability and its relevance. Updates are identified as an "Addendum" in the Download column.

The specific patents that cover Crestron products are listed at patents.crestron.com.

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Crestron Shading Solutions Standard Limited Warranty

This limited warranty (“Warranty”) is applicable to (a) Crestron Shading Solutions control system shade fabric, shade mounting hardware including tracks and roller tubes, and shade motors (collectively “Hardware”) and (b) Crestron Shading Solutions control system wall controls, interfaces and system accessories, (“External Components” and , with the Hardware the “Shading Solutions System”). Batteries are excluded from External Components and are not covered under this warranty. Customer acknowledges and agrees that use of the Shading Solutions System, or any part thereof, constitutes acceptance of all terms and conditions of this Warranty.

Limited Warranty

Subject to the exclusions and restrictions and for the periods of time described in this Warranty, Crestron warrants that the Shading Solutions System will be free from manufacturing defects under normal use. If any manufacturing defect exists in any Hardware or External Component during the periods of time identified below from the date of shipment by Crestron, as long as Customer promptly notifies Crestron of the defect and, if requested by Crestron, upon the return of the defective part(s), Crestron will, at its option, either repair the defective part(s), or provide comparable replacement part(s) or issue a credit to the Customer against the purchase price of comparable replacement part(s) purchased from Crestron as noted in the schedule below.

Number of Years from Date of Shipment, as applicable	Percentage Warranted by Crestron for Hardware
Up to 5	100%
More than 5 but not more than 8	50%
More than 8	0%

Crestron warrants that External Components, excluding batteries, will be free from manufacturing defects under normal use from date of shipment by Crestron for a period of (a) one (1) year as to the power supplies, (b) ninety (90) days as to touch screen displays and overlay components, (c) three (3) years as to other External Components. Replacement parts for the Shading Solutions System provided by Crestron or, at its sole discretion, an approved vendor may be new, used, repaired, reconditioned and/or made by a different manufacturer.

EXCLUSIONS AND RESTRICTIONS

This Warranty does not cover, and Crestron and its suppliers are not responsible for:

- Damage, malfunction, or inoperability diagnosed by Crestron or a Crestron approved third-party as being caused by normal wear and tear, abuse, misuse, incorrect installation, neglect, accident, interference, or adverse environmental factors.

Such environmental factors shall include, but not be limited to: (a) use of incorrect line voltages; (b) improperly rated fuses or circuit breakers; (c) failure to install, maintain, and operate the System pursuant to the operating instructions provided by Crestron; (d) failure to comply with the applicable provisions of the National Electrical Code and Safety Standards of Underwriters Laboratories; (e) use of incompatible devices or accessories; (f) improper or insufficient ventilation; (g) unauthorized repairs or adjustments; (h) vandalism including a virus or computer hacker; (i) acts of God, such as fire, lightning, flooding, tornado, earthquake, hurricane or other problems beyond Crestron’s control; or (j) failure to maintain equipment under the specified ambient temperature limits.
- On-site labor costs to diagnose issues with, and to remove, repair, replace, adjust, reinstall and/or reprogram the Shading Solutions System or any of its components.
- Components and equipment external to the Shading Solutions System, such as, but not limited to: (a) lamps, sockets, and fixtures; (b) fixture wiring between ballasts and lamps; (c) building wiring between the dimmer panels and lamps; (d) wiring between the control panels; (e) audio-visual equipment; and (f) other non-Crestron equipment such as motion detectors.
- The cost of repairing or replacing other property that is damaged when the Shading Solutions System does not work properly, even if the damage was caused by the Shading Solutions System.
- Any loss of software or data. Customer has sole responsibility to properly back up all data on any other storage device(s) in the Shading Solutions System.
- Repairs required due to malfunctions caused by non-Crestron supplied software.

EXCEPT AS EXPRESSLY PROVIDED IN THIS WARRANTY, THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF ANY TYPE, INCLUDING ANY IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

CRESTRON DOES NOT WARRANT THAT THE SHADING SOLUTIONS SYSTEM WILL OPERATE WITHOUT INTERRUPTION OR BE ERROR FREE.

NO CRESTRON AGENT, EMPLOYEE, OR REPRESENTATIVE HAS ANY AUTHORITY TO BIND CRESTRON TO ANY AFFIRMATION, REPRESENTATION, OR WARRANTY CONCERNING THE SHADING SOLUTIONS SYSTEM.

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To Make A Warranty Claim

To make a warranty claim, promptly notify Crestron within the warranty periods described above by calling the Crestron Technical Support Center at 1-888-CRESTRON. Crestron, in its sole discretion, will determine what action, if any, is required under this Warranty.

Most Shading Solutions System problems can be corrected over the phone through close cooperation between Customer and a Crestron technician. To better enable Crestron to address a warranty claim, please have the Shading Solutions System’s serial and model numbers, its current operating system version, and the brand names and models of any peripheral devices (such as a modem) used with the Shading Solutions System available when making the call.

If Crestron, in its sole discretion, determines that an on-site visit or other remedial action is necessary, Crestron may send a representative or coordinate the dispatch of a representative from a Crestron approved vendor, to Customer’s site, and/or coordinate a warranty service call between Customer and a Crestron approved vendor.

All on-site labor costs incurred to diagnose any problems with the Shading Solutions System and to repair, replace or adjust (at Crestron’s option) the Shading Solutions System to restore it to normal operation will be paid by customer at the then current service price unless covered by a separate Crestron Support and Maintenance Plan.