

Installation Instructions

Skylight FlexShades by Draper

Caution

- ① Read entire procedure before installing. Keep instructions for future reference.
- ② Tools needed for installation: Cordless drill/screwdriver, with flathead, phillips, and 1/4" nut driver attachments (magnetized, if possible), extensions, and 1/8" drill bit; Carpenter's level; Hack saw; Aluminum file; Square; Stiff™ tape measure or zig-zag rule; and 7/8" electrical knockout hole punch.
- ③ Use extreme care during installation to avoid scratching finish on Skylight parts.
- ④ Use drawings on back page as reference throughout installation.
- ⑤ Headboxes and side channels must be installed level and square.
- ⑥ Controls may be shipped separately, or in same carton as shades; do not discard with packing material.

Please follow installation guidelines carefully. Failure to do so invalidates warranty.

Installation Preparation

- ① Arrange pieces on floor in the general manner they are to be installed. All four corners are color coded by tape for easy matching.
- ② Remove covers from both headboxes (see Fig. 1).

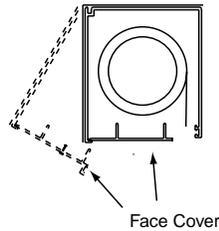


Figure 1

- ③ Remove spring roller from its headbox. The one-notch spring roller is pre-tensioned and the dog is locked in the notch.
- ④ Remove roller/motor assembly from its headbox by removing the black plastic retainer clip at the idler end and the retainer pins from the motor end. Take the idler end out of its bracket, then slide the motor end off the motor studs on the endcap (see Fig. 2). Keep all retainer clips and pins.

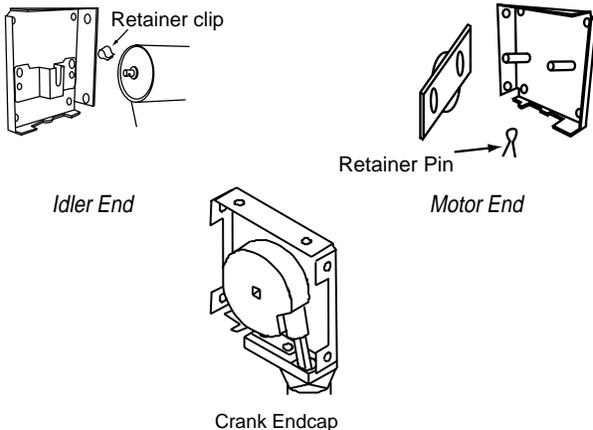


Figure 2

- ⑤ If the shade has a detachable crank handle, remove the universal joint from the bottom of the end cap by removing 2 screws. (Fig. 3). Save universal joint & screws.

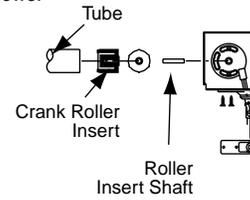


Figure 3

NOTE: If unit is motorized, you may need to locate and drill a hole for the conduit connector (Conduit connector is not supplied) (see Fig. 4).

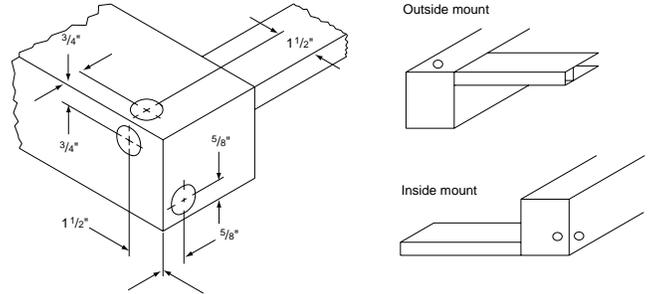


Figure 4

Unit Assembly/Installation

- ① With unit still on floor, install both side channels to both headboxes (see Fig. 5). Make sure channel locators are properly seated; tap gently with plastic hammer or rubber mallet if necessary. NOTE: Fabric travels toward motor end.

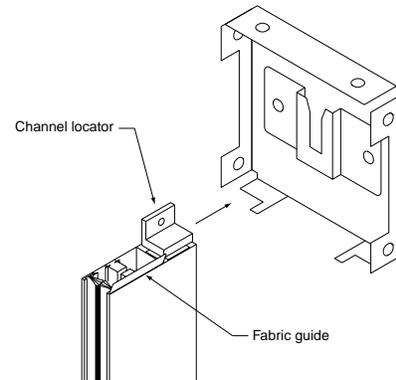


Figure 5

- ② Insert four fabric guides into side channel grooves to help funnel fabric into the channels (see Fig. 14). Make sure the bevel, or bent portion, is placed facing up if inside mount, and down if outside mount.

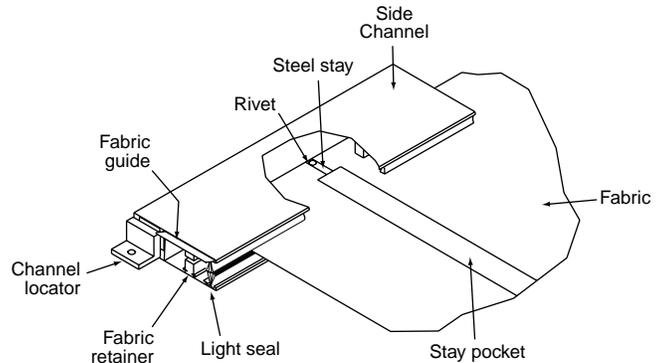


Figure 14

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- ③ For Outside Mount—Measure opening and unit and compare the two (see Fig. 6). The Skylight FlexShade should be about 5 1/2" larger than the opening to be covered; the length should be about 8" longer than opening (11"-12" longer if slat bar and headboxes are all to be outside opening).

Note: Skylight FlexShades can be installed up and down slopes, but not sideways along slopes. Headboxes must be installed level.

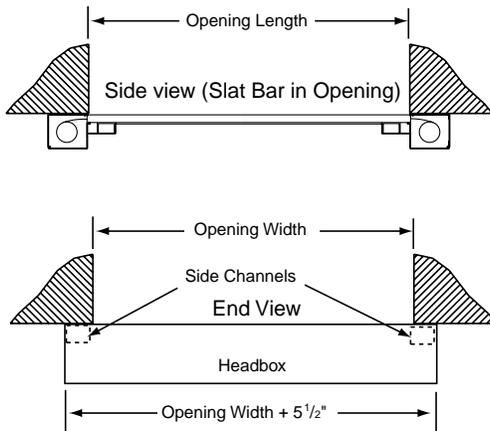


Figure 6

- ④ **For Inside Mount**—Measure and cut the lower perimeter angles that will support the headboxes and side channels, making sure they fit the opening exactly.

For Outside (face) Mount—Locate and layout lines on the surface of the ceiling or the face itself, representing the unit size. Check these lines for squareness by checking for equal diagonals (+/- 1/8").

- ⑤ **For Inside Mount**—Place the assembled skylight frame onto the perimeter angles. NOTE: You may have to take the unit apart and reassemble it in the opening. Center the skylight frame in the opening and temporarily place shims (see Fig. 7). Once the frame is in place, measure the diagonals to make sure the unit is square. Adjust frame and re-shim until it is square, then install screws through endcaps to hold them in position.

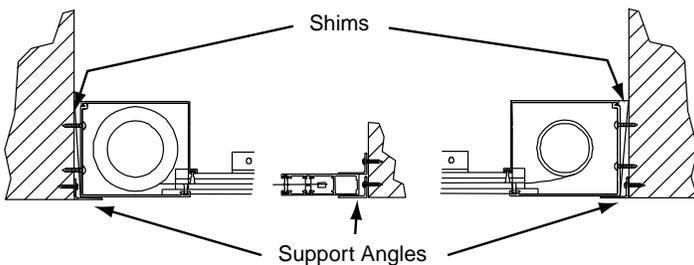


Figure 7

For Outside Mount—Pre-drill holes in headboxes to match holes in endcaps. Outside mount units are generally too large to attach in one piece, so take apart the frame for installation. On the layout lines, attach each headbox through the endcap holes using the long, non-painted screws. Next, place each side channel by sliding its channel locator black plastic tab into the headbox endcap matching slot. Make sure side channels are on the layout lines, and attach using screws through the face of the channel. Cover screw holes with colored plastic plug buttons.

- ⑥ **For Inside Mount**—Loosen adjustable channel mounting angle fasteners, and slide the angles out until they meet the jamb (see Fig. 8). Fasten with #8 x 3/4" screws. Re-check the straightness of each side channel, then tighten the angle to side channel screws.

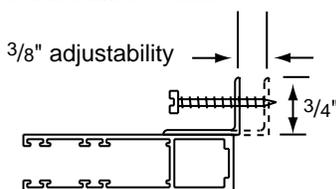


Figure 8

Cable Support System

NOTE: If your Skylight FlexShade does not utilize a cable support system, skip this section and go to "Roller Assembly/Installation".

For Inside Mount—

- ① Make sure Skylight unit is square.
- ② Fasten cable support plates to structure through outboard holes in plate (see Fig. 9). If #10 x 1 1/2" screws provided are not adequate, installer will need to provide fasteners appropriate to site conditions.
- ③ Attach loop at one end of cable to hook on cable attachment plate at spring roller headbox. Run cable the full length of the opening, and through the hole at the lower plate in the motor end headbox.
- ④ Attach remaining cable loop to turnbuckle, which in turn attaches to upper cable attachment plate in motor end headbox.
- ⑤ Tension cable by tightening turnbuckle until cable is straight. **NOTE: Do not overtighten, but make sure cable is as taut as possible.**

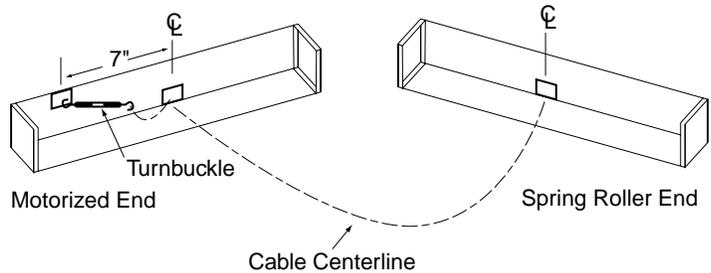


Figure 9

NOTE: Above view shown with face/bottom covers removed from headboxes.

For Outside Mount—

- ① Make sure unit is square.
- ② Install the motor roller and spring roller assemblies by following the instructions in the "Roller Assembly/Installation" section.
- ③ Remove finished channel covers from from support channels.
- ④ Attach support channels to the side channels through the pre-drilled holes (see Fig. 10). Make sure fuzzy protective strip along bottom of supports channels face inside, away from the headboxes.

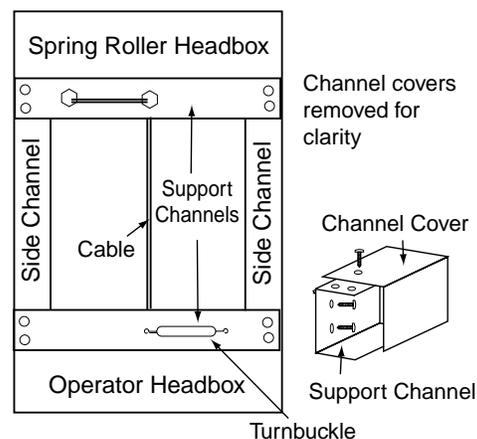


Figure 10

- ⑤ Tension cable by tightening turnbuckle until cable is straight. **NOTE: Do not overtighten, but make sure cable is as taut as possible.**
- ⑥ Re-attach channel cover with fasteners provided.

Please Note: If there is not enough slack in the cable to allow you to attach both channel supports, unhook turnbuckle from support on operator end of unit. After attaching both channel supports to side channels, you can re-attach turnbuckle.

Roller Assembly/Installation

- ① Re-install motor/roller assembly by generally reversing the steps in the "Installation Preparation" section.
- ② Re-install the spring roller by generally reversing the steps in the "Installation Preparation" section. Note that the notch on the spring roller must be positioned to face out, toward the frame, not in toward the motor end headbox (see Fig. 11).

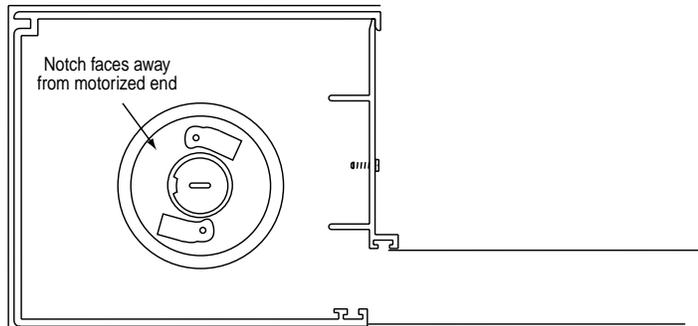


Figure 11

- ③ Wedge something soft, such as Styrofoam, between the spring roller and its headbox to keep the spring roller from moving.
- ④ Feed Kevlar® ribbon down through the side channels to the take-up reels on the motor roller assembly, using the ribbon feed tool provided (see Fig. 12). **Make sure ribbon does not twist: a twisted ribbon will cause shade to lock up.**

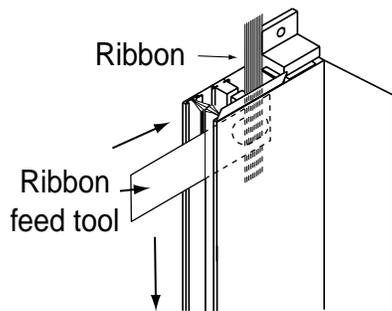


Figure 12

Note: Be careful when starting the slat bar and fabric into the side channels to avoid tearing the fabric. Use a screwdriver or the ribbon feed tool to work the ribbon under the pulley.

- ⑤ Remove the screw (with washer) in each pulley and re-install through hole in Kevlar® ribbon (see Fig. 13). Be careful not to "strip" the screw hole.
- ⑥ Remove wedge from spring roller.

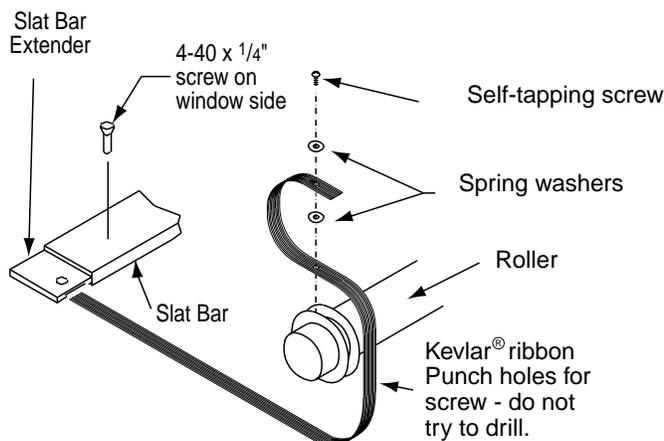


Figure 13

Electrical Connections

Shade operates on 115 V., 60 Hz. current.

Shade is shipped with internal wiring complete and control switch(es) fully boxed. Shades plug into junction box located inside headbox. Wiring to controls and electrical must then be completed from the junction box box. Connections should be made in accordance with attached wiring diagram, and wiring should comply with national and local electrical codes.

All operating switches should be "off" before power is connected.

Adjustments

- ① Adjust limit switches so the fabric can be completely drawn or retracted without the slat bar leading edge going beyond the fabric retention guides located at the upper end of each side channel. Limit switches are set by the installer.
 - A. Fully depress both limit switch push buttons, then operate switch to make sure system works properly.
 - B. Raise shade to desired "up" stop position.
 - C. Set upper limit by depressing and releasing the proper push button (see Fig. 15).

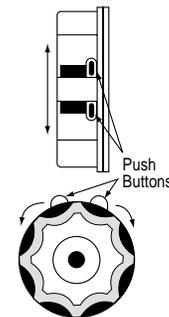


Figure 15

D. Lower shade to desired "down" stop position.

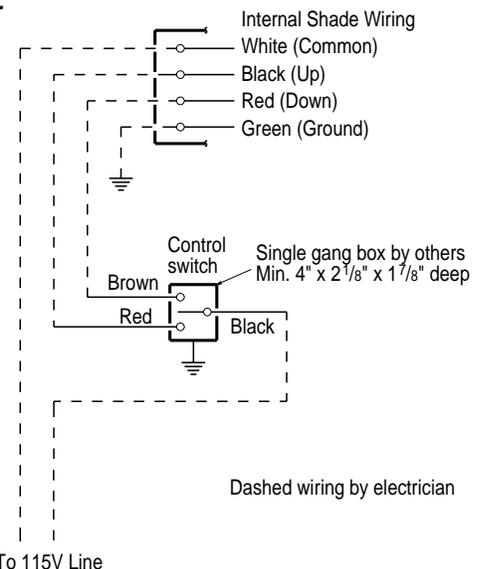
E. Set lower limit by depressing and releasing the proper push button.

NOTE: Limit switches can be set with a single motor switch on a test cord furnished by Draper, Inc. upon request. For multiple unit installations, each shade's limit switch must be set before hooking them up to a group control system.

- ② Once adjustments have been completed, re-install headbox covers.

Single Shade Wiring Diagram

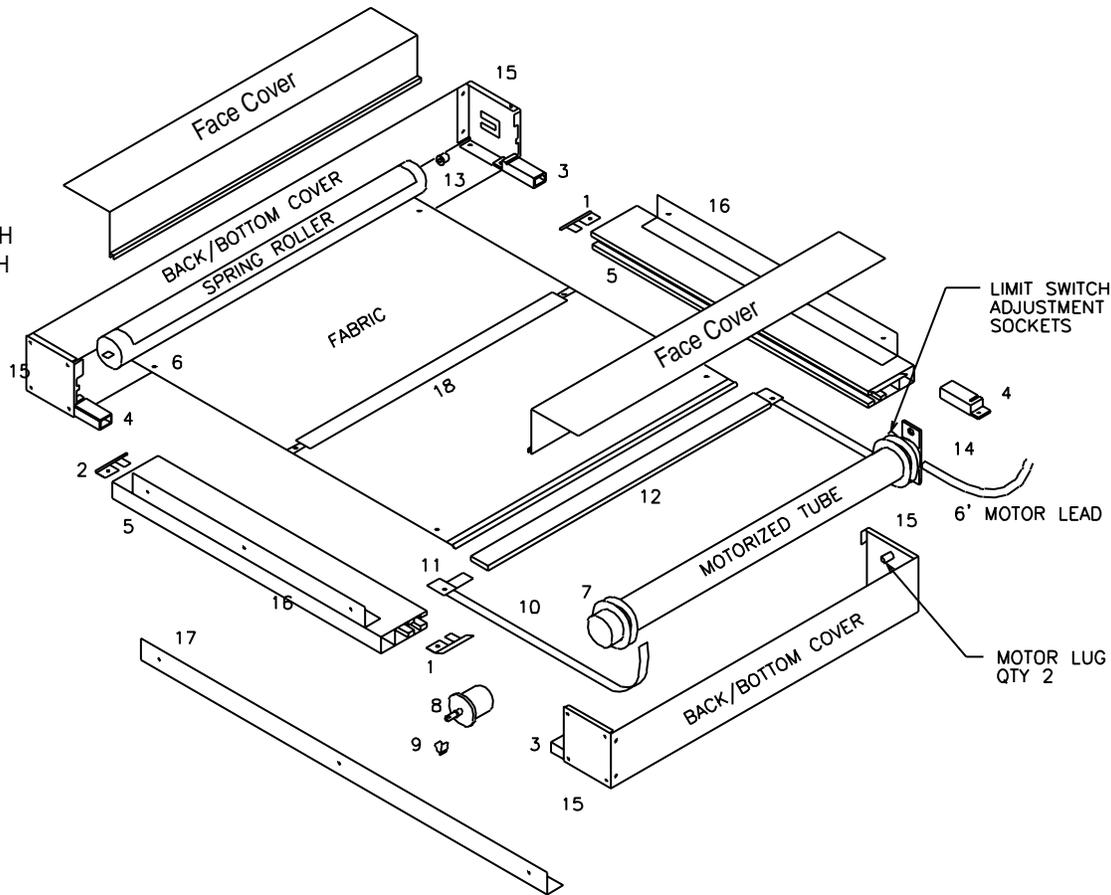
For multiple shades or low voltage wiring, consult diagrams provided with control.



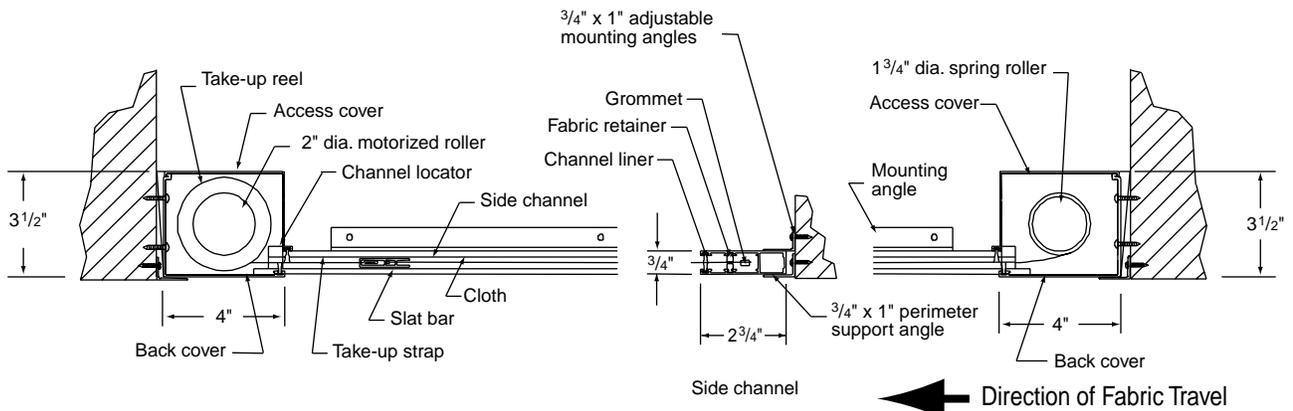
NOTE: This wiring diagram is for standard right-hand motor placement, fabric from rear of roller. It also applies for left-hand motor placement, fabric from the front of the roller. For left hand motor placement with fabric from rear of roller, or right hand motor placement with fabric from front of roller, Red becomes "Up" and Black becomes "Down."

Skylight FlexShade Exploded View

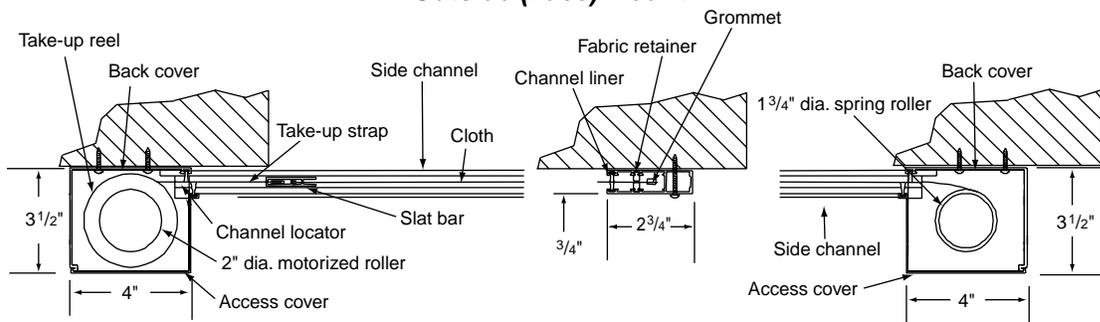
- 1- Fabric Guide RH
- 2- Fabric Guide LH
- 3- Channel Locator RH
- 4- Channel Locator LH
- 5- Side Channel
- 6- Grommet
- 7- Take-Up Reel
- 8- Idler Gudgeon
- 9- Retainer Clip
- 10- Reel Tape
- 11- Slat Bar Extender
- 12- Slat Bar
- 13- Nylon Bushing
- 14- Motor
- 15- Endcap
- 16- Mounting Angle
- 17- Trim Angle
- 18- Steel Stay



Inside (Jamb) Mount



Outside (Face) Mount



If you encounter any difficulties installing or servicing your Skylight FlexShade, call your dealer or Draper, Inc., Spiceland, Ind., (765) 987-7999, fax (765) 987-7142, or e-mail draper@draperinc.com.