

# Rollstar Shade Installation Instructions

## All Lifting Systems Inside or Outside Mount

Thank you for purchasing your new *Rollstar™* shade. It has been custom-made from the highest quality materials to the dimensions you specified. With proper installation and care, it will provide you with many years of beauty and trouble-free use.

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### Tools Required

- Metal measuring tape
- Drill
- 1/4" and 7/16" hex drivers
- 1/16" drill bit
- Standard and Phillips screwdrivers
- Level
- Awl or pencil
- Ladder or stepstool
- Needle nose pliers
- Motor tester (optional). A motor tester can be purchased from Castec.

The brackets must be securely attached to the wall or other mounting surface, preferably by drilling the screws into wood studs. If studs are not available, you will need to purchase special fasteners designed for your mounting surface. If you are mounting the brackets to concrete, brick, tile, or stone, you will also need a masonry drill bit.

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### Important Information on Fasteners

The shade components must be securely attached to the mounting surface. The screws included with the shade can be used in wood or metal. When installing to a wood surface, drill 1/16" pilot holes before setting the screws. When installing to metal, use self-tapping screws or pre-drill 1/8" holes.

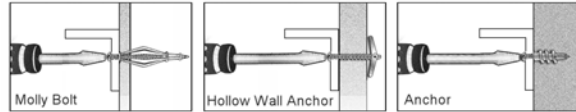


Figure 1 Special Fasteners

For other surfaces, use special fasteners designed for your mounting surface (not included). See Figure 1 for examples. When selecting your fastener, make sure it is designed to support the weight of the product being installed. Follow the fastener manufacturer's instructions carefully.

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### Components and Hardware

**Important:** When you remove the shade from its packaging, leave it rolled up, as in Figure 2. Do not remove the straps until the shade is installed in the brackets.

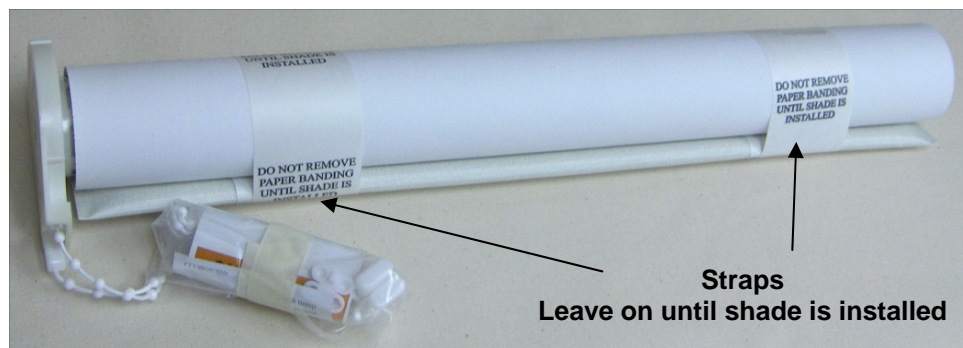


Figure 2 Rollstar Shade with Chain and Clutch Lifting System

## Components for Chain and Clutch and Spring Roller Shades

- Shade
- Two brackets—designed to accommodate shade lifting system (see below)
- Four hex head screws
- Chain holder and one flat-head Phillips screw (for chain and clutch only)

### Brackets for Chain and Clutch and Spring Roller Shades

The brackets pictured below are samples of the different basic types of brackets. The actual brackets included with the shade depend on both the type of lifting system and the size of the shade. However, the installation procedure is essentially the same.



Chain & Clutch  
Bracket, Clutch End



Chain & Clutch  
Bracket, Idler End



Heavy Duty  
Chain & Clutch  
Bracket, Clutch End



Heavy Duty  
Chain & Clutch  
Bracket, Idler End



Spring Roller Bracket,  
Pin End

Spring Roller  
Bracket,  
Spring End

### Motorized Shade Components

- Shade
- For LT50 Series Star Head Motors:
  - Two universal motor brackets—designed to accommodate shade lifting system. These brackets are described in the following section.
  - Four hex head screws with washers
  - Motor retaining clip
  - Bracket covers
- For LT50 Series Round Head Motors:
  - Two motor brackets—designed to accommodate shade lifting system
  - Four hex head screws with washers
  - Cotter pin (for motor)
- For LS40 Series Round Head Motors:
  - Two motor brackets—designed to accommodate shade lifting system
  - Four hex head screws
- For Battery Powered Motors:
  - Two motor brackets—designed to accommodate shade lifting system
  - Four hex head screws
  - Battery Attachment Hardware
  - Battery Packs
  - Battery Lead

### A Word about Universal Motor Brackets

Universal motor brackets are considered “universal” because they can be used for both ceiling and wall mount installations. In addition, each bracket can be made into either a motor bracket, an idler bracket, or an intermediate bracket for shades requiring center support. This flexibility is accomplished by setting pins and attachments into predrilled holes to configure the bracket for the desired utility and installation. This is a great benefit to installers, who can adjust the brackets onsite to meet the needs of their installation, if needed, rather than reorder a set of “fixed” brackets that were not originally shipped with the order.

Figure 3 shows a standard universal bracket and the set of predrilled holes that hold the pins or the accessory parts. Refer to the callouts below for a complete description of each hole and how it is used depending upon the needs of the installation.

**Note:** The placement of these holes is the same on the extended bracket.

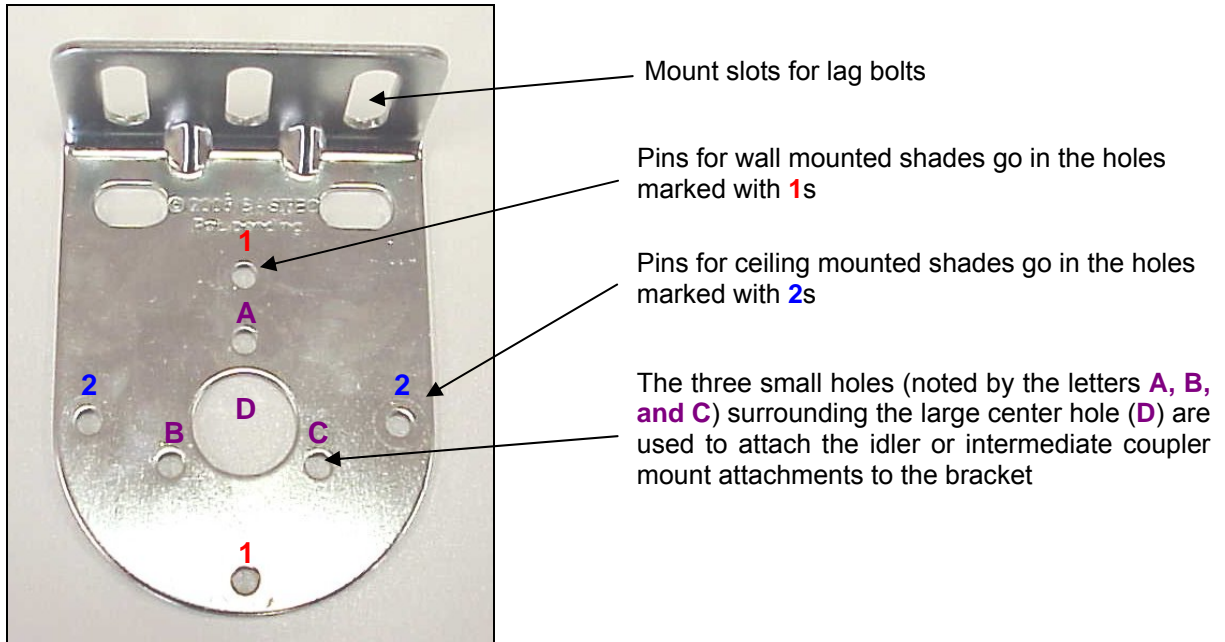


Figure 3 Universal Motor Bracket (without pins)

Figure 4 shows the attachments that are screwed to the center of the bracket to transform it into either an idler bracket or intermediate support bracket. The idler attachment is shown on the left in this photo, and the support bracket is on the right.



Figure 4 Center Support Attachments

The intermediate support bracket has a fixed copper bushing in the center. This bushing houses the connecting joints of the center support tube adapters (shown in Figure 5).

**Important!** Unless your shade needs center support due to its width, the universal bracket will not come with the intermediate support attachment or the center support tube adapters.



Figure 5 Center Support Bracket and Tube Connecting Joints

Figure 6 shows a detail of a motor pin and the machine screw used to hold it to the bracket. The groove cut into the side of the pin holds the motor retaining clip (Figure 7). The base of the pin is flat, and the top is rounded to help ease the installation of the motor into the bracket assembly.



Figure 6 Motor Pin and Machine Screw



Figure 7 Motor Retaining Clip

The brackets pictured below in Figures 8 through 13 are examples of the different configurations that can be used with the universal motor brackets.



Figure 8 Wall Mount—Standard Motor Bracket



Figure 9 Wall Mount—Extended Motor Bracket



Figure 10 Ceiling Mount—Standard Motor Bracket



Figure 11 Ceiling Mount—Extended Motor Bracket



Figure 12 Standard Idler Bracket (Wall/Ceiling Mount)



Figure 13 Extended Idler Bracket (Wall/Ceiling Mount)

## Installation Steps

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### All Lifting Systems

#### Step 1: Determine Shade and Installation Bracket Locations

**Note:** In the following steps, if you are installing Universal Motor Brackets, install the bracket covers *before* proceeding.

- Slide the bracket covers onto the motor brackets. For a smoother installation, squeeze the sides of the bracket cover as you slide it onto the bracket. (See Figure 14)

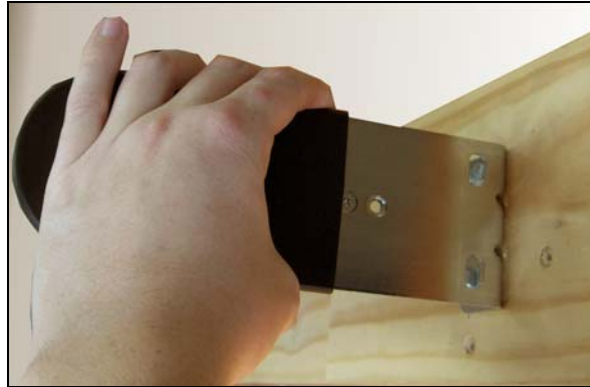


Figure 14 Installing the Bracket Cover

#### *Inside Mount for Walls/Ceilings*

- Hold the shade in the appropriate location to verify that it fits within the opening. There should be a slight gap on either side of the shade to allow for the thickness of the installation brackets.
- Mark the locations of the brackets, being sure they are level with each other. If you will be mounting to the upper surface of the window frame, you may need to use a shim (not included).

#### *Outside Mount for Walls/Ceilings*

- Temporarily place the brackets on the un-mounted shade, and then measure the distance between the outside edges of the brackets.
- Measure and mark the bracket locations on the wall, using a level to be sure the brackets will be perfectly level.

**Important:** For the shade to operate properly, the brackets must be perfectly level.

#### Step 2: Attach the Brackets

- Drill 1/16" starter holes at each bracket hole location.
- Use the hex head screws and washers provided to attach the brackets to the wall or window frame, being sure the brackets are level. Use a shim if needed. If you do not reach wood or other solid backing, use secure fasteners (not included).

**Important:** For the remaining steps, refer to the instructions that apply to your lifting system in the following sections.



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## Shades with Chain and Clutch Lifting Systems

Perform Steps 1 and 2 under *All Lifting Systems* before performing the steps below. **Note:** For shades with C24 clutches and heavy duty clutch brackets, go to conditional step 3a below. For shades using spring assist systems, installation is as described in Step 3.

### Step 3: Attach the Shade

- Remove the shade from its packaging, but leave it rolled up with the straps holding the roll.
- Attach the clutch end by pushing the clutch onto the bracket spear. See Figure 15.

**Note:** The spring tension for spring assist systems is set at Castec. You do not need to set the tension during installation of the shade.

- Lift the idler end up over the bracket notch, rotating as needed, and drop the idler end pin into the bracket. See Figure 16.
- Secure the idler end by rotating the locking lever to close the slot opening.
- Proceed to Step 4: Adjust the Shade.



Figure 15 Clutch End in Bracket



Figure 16 Idler End in Bracket

### Conditional—for C24 Clutches and Heavy Duty Clutch Brackets

#### Step 3a: Attach the Shade

- Place the idler pin on the shade into the idler end bracket. See Figure 17.
- Gently push the shade toward the idler bracket until the idler pin on the shade collapses. See Figure 18.
- Attach the clutch end by pushing the clutch onto the heavy duty bracket spear and releasing the tension on the idler pin. See Figure 19.



Figure 17 Idler Pin and Idler Bracket



Figure 18 Idler Pin Collapsed in Bracket

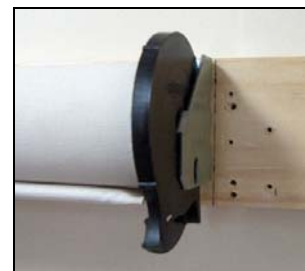


Figure 19 C24 Clutch on Heavy Duty Bracket

#### Step 4: Adjust the Shade

- Remove the packing straps and pull the back length of chain down to lower the shade.
- Raise the shade and check to see that it tracks properly and that the lower edge is level.
- If the shade telescopes to either side or does not raise and lower evenly, refer to the *Troubleshooting* section.

**Warning:** Do not lower the shade more than one inch below the ordered length. For the shade to stay securely fastened, several inches of shade cloth must stay wrapped around the tube.

#### Step 5: Set the Lower Bead Stop

**Note:** A chain and clutch lifting system has two bead stops to limit how far the shade can be raised or lowered. The bead stop for the upper limit, which also connects the chain, is put in position at the factory; the lower stop is placed when the shade is installed, to allow it to be adjusted precisely for the window.

- Pull the back length of the chain down until the shade is at its lowest position in the window.
- Grasp the bead that is at the top front of the clutch (Figure 20), pull it down, and attach the bead stop at that bead. On a plastic chain, simply snap the bead stop onto the chain (Figure 21). For a metal chain, crimp the stop onto the chain with grooved pliers (Figure 22).



Figure 20 Clutch End



Figure 21 Plastic Bead Stop



Figure 22 Crimp Metal Stop

#### Step 6: Attach the Chain Holder

**Important:** Hanging cords are a safety hazard for small children and pets. The chain holder is a necessary safety feature to prevent strangulation. Do not omit this step.

- Hold the chain holder upright and position it against the wall or window frame so that the chain is straight but not stretched (Figure 23). There should be enough slack so that the bead stops can rotate around the chain holder easily.
- Mark the location of the installation hole on the wall, and drill a 1/16" pilot hole.
- Attach the chain holder to the wall or window frame using the Phillips screw provided. If you do not reach solid backing, use a secure fastener (not included).



Figure 23 Chain Holder

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## Shades with Motorized Lifting Systems

Perform Steps 1 and 2 under *All Lifting Systems* before performing the steps below. In Step 3, be sure to follow the steps for the type of motor you are installing.

**Note:** For battery-powered motorized shades, see the section on Shades with Battery Motor Lifting Systems on page 11.

### Step 3: Attach the Shade

#### *LT50 Star Head Motors Using Universal Motor Brackets*

**Important:** In the referenced graphics for the following steps, all top treatments such as fascias and headboxes have been removed for clarity. The graphics show the shade in a wall mount configuration; the steps to follow for either type of mount (wall or ceiling) are those listed below.

- Place the idler pin on the shade into the idler end bracket. See Figure 24.
- Gently push the shade toward the idler bracket until the idler pin on the shade collapses. See Figure 25.

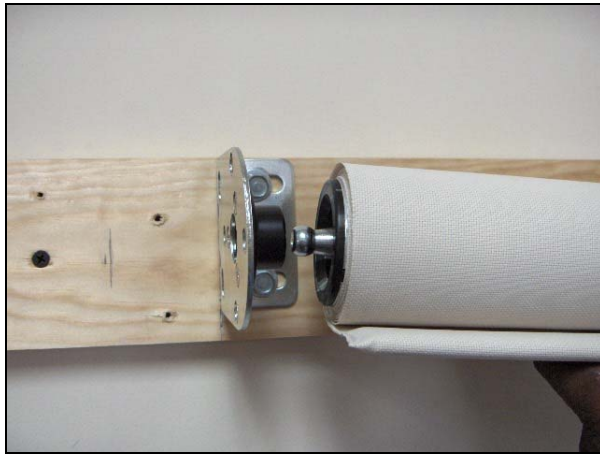


Figure 24 Motor Idler Going into Bracket

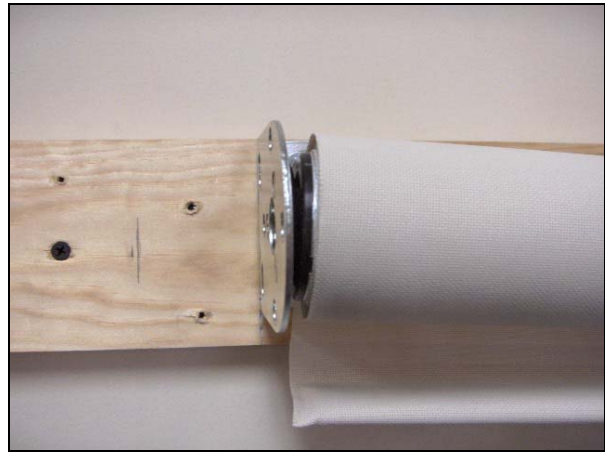


Figure 25 Motor Idler Collapsed in Bracket

- At the other end of the shade, align the limit switches on the motor to the desired position. These switches should point down or a little towards the room so that they are accessible.
- Bring the hardwired end of the motor to the pins on the motor bracket.



- Allow the shade to slide back so that the star head on the motor engages the pins on the motor bracket. See Figure 26.

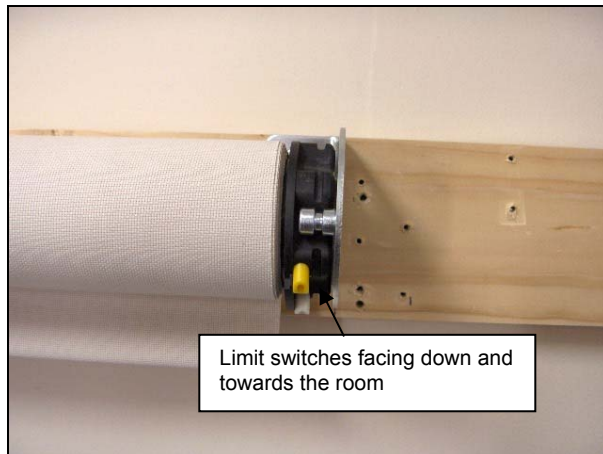


Figure 26 Motor in Bracket

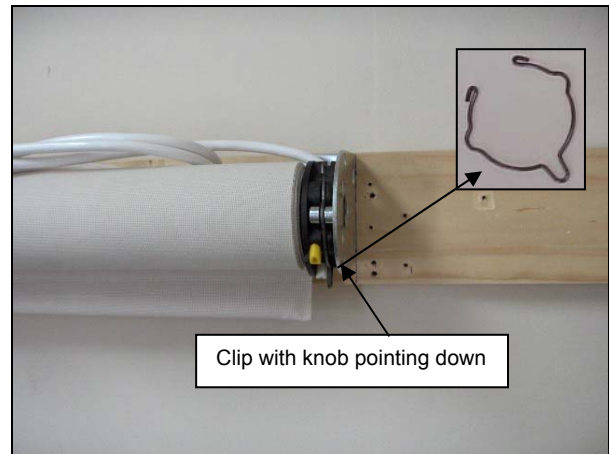


Figure 27 Motor in Bracket with Motor Retaining Clip in Place  
(Detail of motor clip at top right in figure)

- When the pins on the motor bracket have engaged the motor, the motor will remain in the brackets without additional adjustment.
  - **Important! Follow This Step!** The motor will remain in the brackets, but to ensure that it does not slip out of the installation, attach the motor retaining clip into the groove on the pins and motor. The clip should snap into position when it has been properly inserted into the groove on both pins. See Figure 27.
  - **Helpful Hint!** It can be difficult to snap the motor retaining clip into the groove on the pins and motor once the motor is installed in the bracket. To avoid such difficulties, you can pre-load the motor retaining clip onto the motor before putting the motor into the brackets. To do this:
    - Place the motor retaining clip onto the star head portion of the motor. The clip should be on the wider part of the head near the tube. Do not put the clip into the groove on the motor.
    - Engage the star head motor with the pins on the motor bracket. The motor should engage the pins without the clip getting in the way.
    - Slide the motor retaining clip into the groove on the motor and pins.
- Note:** The small knob on the bottom of the retaining clip should point straight down when installed. If it is necessary to remove the motor from the brackets—for example, to clean the shade or to move the installation from wall to ceiling (or vice versa)—simply place the tip of a screwdriver into this knob and gently pull the retaining clip away from the motor and the bracket pins.
- Finish the installation by cutting the packaging straps from the shade. Use caution to prevent the shade being damaged by this operation.
  - Proceed to Step 4: Test the Shade and Set Limit Switches.

### LT50 Round Head Motors Using Standard Heavy-Duty Brackets

- Place the idler end of the shade in the idler end bracket (Figures 29 and 30).
- Lift the motor end into its bracket, being sure that the holes align with the holes in the bracket and the limit switches are easily accessible (Figure 31).
- Use needle nose pliers to insert the cotter pin, and then bend the tabs of the pin so it cannot slip back through (Figure 32).
- Finish the installation by cutting the packaging straps from the shade. Use caution to prevent the shade being damaged by this operation.
- Proceed to Step 4: Test the Shade and Set Limit Switches.



Figure 28 Motor Idler Going into Bracket



Figure 29 Motor Idler in Bracket



Figure 30 Motor in Bracket

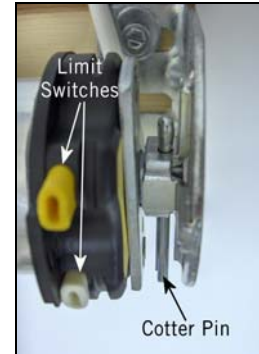


Figure 31 Motor in Bracket with Cotter Pin

(fascia removed for illustration)

### LS40 Round Head Motors Using Standard RollEase Brackets

- Installing an LS40 motor is very similar to installing a shade with a C8 clutch and chain. In fact, the same clutch and idler brackets are used for the LS40 as for a shade using a C8 clutch lifting system. This is because the LS40 motor and the C8 clutch both fit into 1 1/2" tubes.
- Remove the shade from its packaging, but leave it rolled up with the straps holding the roll.
- Attach the motor end by pushing the motor onto the bracket spear.
- Lift the idler end up over the bracket notch, rotating as needed, and drop the idler end pin into the bracket.
- Secure the idler end by rotating the locking lever to close the slot opening.
- Proceed to Step 4: Test the Shade and Set Limit Switches.

#### Step 4: Test the Shade and Set Limit Switches

- If a motor tester is available, connect the motor tester by clamping each lead onto the motor wire of the same color, and then test the motor to verify correct operation. Raise and lower the shade and check to see that it tracks properly and the lower edge is level. If the shade telescopes to either side or does not raise and lower evenly, refer to the *Troubleshooting* section.
- If the motor limit switches need adjustment, do so now (instructions included separately).

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## Shades with Battery Motor Lifting Systems

Perform Steps 1 and 2 under *All Lifting Systems* before performing the steps below.



Figure 32 Battery Packs and Motor Lead

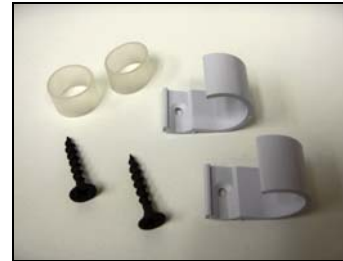


Figure 33 Battery Attachment Hardware

### Step 3: Attach the Battery Pack

- Find a location for the battery packs (shown in Figure 32) that will be least visible but will allow you to plug the batteries into the motor using the 12" lead provided. (Battery packs last about five years, but you should also consider accessibility for changing battery packs.) A 9-volt motor uses one battery pack; a 12-volt motor uses two packs attached together. Two battery packs can be placed side by side or end to end, whichever way they fit best.
- Mark the locations to attach the battery pack brackets (Figure 33) placing the open end of the U facing up or out. Attach the brackets using the screws provided. If you are attaching to a metal surface such as inside a fascia or headbox, you will need to purchase self-tapping screws.
- If you are installing two battery packs, connect them, male to female (Figure 34 and Figure 35).



Figure 34 Battery Pack Connectors



Figure 35 Battery Packs Connected



Figure 36 Battery Pack Attached

- If you are attaching the battery packs in a vertical orientation, you can use the flexible bands included in the hardware packet to make a tighter fit in the bracket if needed. Push the bands over the battery pack before placing the pack in the brackets.
- Snap the battery packs into the brackets with the female lead toward the motor, as in Figure 36.

#### Step 4: Place the Shade in the Shade Brackets

- Remove the shade from its packaging but leave it rolled up with the straps securing the roll.



Figure 37 Motor Lead in Motor



Figure 38 Motor in Bracket



Figure 39 Idler End in Bracket

- Plug the motor lead into the back of the motor. See Figure 37.
- Attach the motor end to the motor bracket by pushing it onto the bracket spear. See Figure 38.
- Lift the idler end up over the idler bracket notch, rotating as needed, and drop the idler end pin into the bracket. See Figure 39.
- Secure the idler end by rotating the locking lever to close the slot opening.



Figure 40 Motor Connected to Battery Pack (back view)

- Connect the motor lead to the battery pack (see Figure 40).
- Remove the straps from the shade and test the shade operation. If the limits are not set correctly, adjust the limits per the motor instructions included separately.

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## Shades with Spring Roller Lifting Systems

Perform Steps 1 and 2 under *All Lifting Systems* before performing the steps below.

### Step 3: Attach the Shade

- Insert the pin end of the shade into the round hole in the pin end bracket.
- Leaving the straps on the shade, place the rectangular spring end in its bracket as follows:
  - Use needle nose pliers to turn the spring pin about five turns in the opposite direction to the roll of the shade. This sets the spring tension. See Figure 41.
  - Holding onto the spring pin with the pliers, guide it into the spring roller bracket.
  - Rotate the bracket locking lever up to lock the pin in place. See Figure 42.
- Proceed to Step 4: Adjust the Shade.

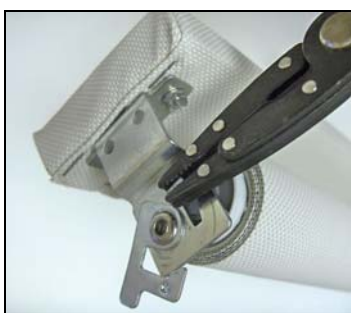


Figure 41 Setting the Spring Tension



Figure 42 Spring Pin Locked in Spring Roller Bracket

### Step 4: Adjust the Shade

- Remove the packing straps and test that the shade operates properly by raising and lowering it a few times. See the *Troubleshooting* section if the shade telescopes to either side or does not raise and lower evenly.
- If the shade does not raise all the way to the top, adjust the tension of the spring roller using either of the following methods:
  - Lower the shade a few inches below its highest point. Take the shade out of the brackets, and manually roll up the remaining shade fabric. Replace the fully rolled shade in the brackets.
  - Remove the shade from the brackets and use pliers or an adjustable wrench to turn the rectangular spring end pin. Start by turning it a half turn counterclockwise to unlock it. Then turn it one or two rotations clockwise. Each full turn of the pin equals one full turn of the roller. Replace the shade in the brackets and test that it now rolls up completely. Repeat or adjust as necessary.
- If the shade pulls too tightly against the headrail when raised, adjust the tension of the spring roller using either of the following methods:
  - Remove the shade from the brackets and unroll a few inches of the shade. Replace the partially unrolled shade in the brackets and test that the tension is now correct. Repeat or adjust as needed.
  - Remove the shade from the brackets and use pliers or an adjustable wrench to turn the rectangular spring end pin. Turn it one or two rotations counterclockwise. Make sure that the pin locks after each turn. Each full turn of the pin equals one full turn of the roller. Replace the shade in the brackets and test the tension. Repeat or adjust as necessary.



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## Caring for Your Rollstar Shade

Your *Rollstar™* shade will provide you with years of beauty and pleasure with minimal care and cleaning. To care for your shade:

- Vacuum using a brush or dust head attachment.
- Dust lightly using a soft, clean cloth.
- Never immerse your shade in water or liquids of any kind.
- If necessary, wipe the solar fabric with a damp cloth. Allow the shade to dry completely before raising.
- On some fabrics, a mild detergent solution can be used if needed. Test on a small inconspicuous area first. Be sure to rinse thoroughly and allow the shade to dry fully before raising.

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## Troubleshooting

**Important:** When troubleshooting, you might need to pull the shade down to expose part of the tube. However, only expose enough tube to be able to shim the shade, as explained below. If you allow the shade to unroll so much that the entire roll of fabric is falling from the back, the fabric might come off the tube.

Problem:

The shade telescopes to one side or the other, or rolls up unevenly.

Solution:

The brackets may be installed unevenly. If the shade telescopes to the left, the right bracket is higher than the left bracket. If the shade telescopes to the right, the left bracket is higher than the right bracket. Use a level to check the bracket positions and re-install one bracket, using a shim if necessary.

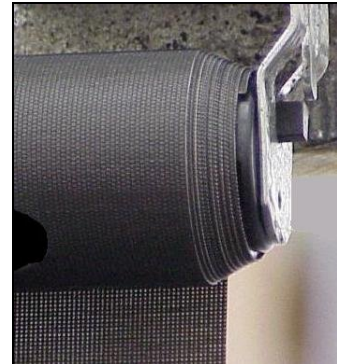


Figure 43 Telescoping to the left

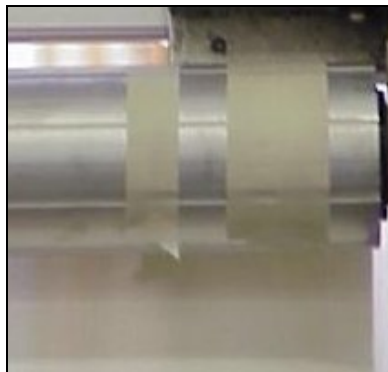


Figure 44 Masking tape shims

Problem:

The shade telescopes to one side or the other, but the brackets are perfectly level.

Solution:

Lower the shade until a small part of the tube is exposed. Adjust the shade for telescoping by shimming with masking tape. Use a piece of masking tape on the side opposite the telescoping end; for example, if the shade telescopes to the left (see Figure 43), then place the masking tape on the right side of the shade (see Figure 44). Raise and lower the shade to test for proper tracking. If the shade still does not track properly, repeat the above procedure. The correct amount of tape needed is determined by trial and error.

Problem:

The shade rolls up unevenly, but the brackets are perfectly level.

Solution:

Lower the shade until a small part of the tube is exposed. Place one or two long strips of masking tape horizontally along the tube (about half the length) on the side that hangs too low. Raise and lower the shade to see if it now rolls evenly. If the shade still does not roll evenly, repeat the above procedure. The correct amount of tape needed is determined by trial and error.