

# Top Down Rollstar Shade Installation Instructions

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.

## **Tools Required**

- Metal measuring tape
- Level
- Awl or pencil
- Ladder or stepstool
- Needle nose pliers
- Motor tester if shade is motorized (a motor tester can be purchased from Castec)
- Power drill with the following bits:
  - 1/16" wood drill bit
  - 1/8" drill bit
  - Masonry or metal drill bit may be required depending on mounting surface
  - 1/4" hex driver
  - Phillips screwdriver

## **Important Information on Fasteners**

The shade components must be securely attached to the mounting surface. The screws included 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 predrill 1/8" holes.

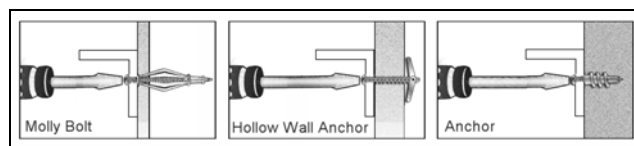


Figure 1 Special Fasteners

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.

## **Components and Hardware**

**Important:** When you remove the shade from its packaging, do not remove the packing straps. Leave the shade rolled up until it is installed in the brackets.

### All Lifting Systems

- Shade on spring roller
- Spring roller brackets and screws (unless sill rail with brackets is included)

#### *With Headrail*

- Headrail with brackets or pulleys attached (valance attached if ordered)
- Inside mount—headrail screws
- Outside mount—headrail brackets and screws

#### *With Sill Rail*

- Sill rail with spring roller brackets attached
- Inside mount—sill rail screws
- Outside mount—sill rail brackets and screws

### Additional Components by Lifting System

#### *Chain and Clutch Lifting Systems*

- Tube with clutch
- Brackets with screws (unless sill rail with brackets is included)
- C-clips
- Bead stop

#### *Motorized Lifting Systems*

























- Motor tube with motor
- Motor brackets and screws (unless sill rail with brackets is included)
- C-clips
- Cotter pin

#### *Cord and Pulley Lifting Systems*

- Pulleys (attached to cords)
- Pulley screws (unless headrail with pulleys is included)
- Cord tassel
- Cord cleat

## Hardware Photos

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

					
Spring Roller Bracket, Pin End	Spring Roller Bracket, Spring End	Chain and Clutch Bracket, Clutch End	Chain and Clutch Bracket, Idler End		
					
Headrail/Sill Rail L-Bracket	C-Clip	Attachment Device for 2 3/4" Tube	Bracket Mounting Screw (all brackets to wall or window frame) 1 1/2" Hex Head	Pulley or L- Bracket Mounting Screw (L-bracket to headrail) 3/4" Hex Head	Sill Rail or Headrail Mounting Screw 2" Hex Head
					
Plastic Bead Stop (for chain and clutch only)	Chain Holder Screw 1/4" Phillips (for chain and clutch only)	Cord Tassel (for cord and pulley only)	Crimp Sleeve (for cord and pulley only)		
					
Metal Bead Stop (for chain and clutch only)	Cotter Pin (for LT50 Round Head motors only)	Cord Cleat (for cord and pulley only)	Motor Retaining Clip (for use with Universal Motor Brackets)		
					
Universal Motor Bracket -Standard Ceiling Mount	Universal Motor Bracket-Extended Ceiling Mount	Universal Motor Bracket-Standard Wall Mount	Universal Motor Bracket-Extended Wall Mount	Universal Motor Bracket-Standard Idler	Universal Motor Bracket-Extended Idler

## **Inside/Ceiling Mount All Lifting Systems**

Step 1: Inside Mount: Attach the Headrail or Upper Brackets

**Note:** For cord and pulley installation without headrail, go directly to step 2.

### *Headrail*

- If the lifting system is cord and pulley, the headrail and shade are connected. In this case, unwrap the cords from their shipping cards and lay the rolled shade on the windowsill. Leave the straps on the shade for now. (For chain and clutch or motor lifting systems the shade is not connected to the headrail.)
- Hold the headrail and valance assembly in the desired location in the window frame and note positions for drilling the mounting holes. Place a hole about 4"–5" from each end, and space any additional holes evenly along the headrail, no more than 36" apart.
- Drill 1/8" holes in the headrail at the marked locations.
- Attach the headrail to the window frame using the mounting screws provided.

### *Brackets—Chain and Clutch or Motor*

- Temporarily place the brackets on the tube.
- Hold the tube in the desired position in the opening, making sure the operating system is on the correct side as specified in the order.
- Remove the brackets from the tube and install them using the mounting screws provided.

Step 2: Inside Mount: Mount the Sill Rail or Attach the Spring Roller Brackets

### *Sill Rail*

- If the shade has a sill rail, mount it to the windowsill in the same manner as the headrail (see Step 1).

### *Brackets*

- Leaving the straps on the shade, place the brackets on the spring roller tube, and hold the tube in position in the windowsill. Make sure it is oriented according to customer specifications (the shade is ordinarily installed to roll off the back of the tube).
- Mark the bracket positions.
- Remove the brackets from the spring roller tube and attach them at the marked locations using the mounting screws provided.

Step 3: Inside Mount: Place the Spring Roller in the Brackets

Leaving the straps on the shade, place the spring roller tube in its brackets as follows:

- Place the idler end pin in the idler bracket (see Figure 2).
- Use needle nose pliers to turn the spring end pin about five turns in the opposite direction to the roll of the shade.
- Without letting go of the end pin with the pliers, guide it into the spring end bracket (see Figure 3).
- Rotate the bracket locking lever down to lock the pin in place (see Figure 4).
- After the shade is fully installed, test and adjust tension.



Figure 2 Spring Roller in Idler Bracket



Figure 3 Placing Spring Pin in Spring Roller Bracket



Figure 4 Spring Pin in Spring Roller Bracket

**Important:** Complete the installation by following the steps below from Step 4 for the applicable lifting system.

### **Outside/Wall Mount All Lifting Systems**

Step 1: Outside Mount: Attach the Headrail or Upper Brackets

#### *Headrail*

- Using a level and tape measure, determine and mark the position of the shade according to the ordered dimensions.
- Hold the headrail in place over the window, make sure it is level and centered, and mark the bracket positions. Place a bracket about 4"–5" from each end, and space additional brackets evenly along the headrail no more than 36" apart. Align with studs where possible.
- Attach the brackets to the wall using the 1 1/2" mounting screws provided. If studs are not available, use special fasteners (not included).
- Place the headrail on the brackets, push it back against the wall, and ensure it is centered.
- Drill 1/16" pilot holes in the headrail at the bracket mounting hole locations, and attach the headrail to the brackets using the 3/4" mounting screws provided.

#### *Brackets*

- Use a level and tape measure to determine and mark the position of the shade according to the ordered dimensions.
- Temporarily place the brackets on the tube.
- Hold the tube in place above the window, making sure the lifting system is on the correct side as specified in the order. Mark the bracket positions, making sure they are level.
- Attach the upper brackets to the wall. If studs are not available, use special fasteners.

## Step 2: Outside Mount: Attach the Spring Roller Brackets or Sill Rail

### *Sill Rail*

- Measure and mark the position for the sill rail on the wall. Use a level and measuring tape to ensure it is level, aligned with the headrail or brackets above, and placed at the correct distance for the ordered length of the shade.
- Mark positions above the sill rail for the sill rail brackets, placing a bracket about 4"–5" from each end and spacing any additional brackets no more than 36" apart.
- Mount the brackets to the wall. If studs are not available, use special fasteners.
- Hold the sill rail against the wall below the brackets, make sure it is centered, and drill 1/16" holes in the rail at the bracket mounting hole locations.
- Attach the sill rail to the brackets using the 3/4" mounting screws provided.

### *Brackets*

- Without removing the straps from the shade, temporarily place the spring roller brackets on the tube.
- Hold the shade in place below the window and mark the bracket positions on the wall. Use a level and measuring tape to ensure the lower brackets are level, aligned with the headrail or brackets above, and spaced according to the dimensions of the shade.
- Attach the brackets to the wall. If studs are not available, use special fasteners applicable to your mounting surface (not included).

## Step 3: Outside Mount: Place the Spring Roller in the Brackets

Leaving the straps on the shade, place the spring roller tube in its brackets as follows:

- Place the idler end pin in the idler bracket (see Figure 2).
- Use needle nose pliers to turn the spring end pin about five turns in the opposite direction to the roll of the shade.
- Without letting go of the end pin with the pliers, guide it into the spring end bracket (see Figure 3).
- Rotate the bracket locking lever down to lock the pin in place (see Figure 4).
- After the shade is fully installed, test and adjust the tension.

**Important:** Complete the installation by following the steps below from Step 4 for the applicable lifting system.

## **Cord and Pulley Lifting System Inside or Outside Mount**

Begin with steps 1-3 under *All Lifting Systems Outside/Wall Mount* or *All Lifting Systems Inside/Ceiling Mount* as applicable to your installation.

Cord and Pulley Step 4: Install the Pulleys in the Upper Window Frame

**Note:** This step is for shades without headrails. If the shade has a headrail, go to step 5.

- Determine the correct depth for the pulleys in the window frame and measure from each cord to the closest side of the window frame.
- Mark these measurements in the top of the window frame.
- Position the pulleys so that the cords align with the marked locations, making sure the cords are not twisted or tangled.
- Install the pulleys using the mounting screws provided.



Figure 5 Pulley Installed



Figure 6 Tassel  
with Crimped Cord

Cord and Pulley Step 5: Attach the Tassel

- Determine the correct length for the pull cord so that it can be easily reached when the shade is open. Ensure the cords have even tension and are not twisted.
- With the shade in its rolled/lower position, string the cords through the tassel and then through the crimp sleeve.
- Crimp the crimp sleeve to the cords, and trim any excess cord.

### Cord and Pulley Step 6: Install the Cord Cleat

- Allow the cord to hang straight with the shade in its lowered/rolled position. Position the cleat on the wall or window frame just above the cord pull, so the cord end can be wrapped on the cleat with the shade down.
- Install the cleat using the matching screws provided. If solid backing is not available, use special fasteners.

**Important:** Hanging cords are a safety hazard for small children and pets. Wrap the cord on the cleat even when the shade is open.



Figure 7 Cord on Cleat—Shade Down



Figure 8 Cord on Cleat—Shade Raised

### Cord and Pulley Step 7: Adjust the Shade

Raise and lower the shade and check that it operates properly and that the tension in the spring roller is correct. See the *Troubleshooting* section to resolve any tracking or tension problems.

## **Chain and Clutch Lifting System—Inside or Outside Mount**

Begin with steps 1–3 under *All Lifting Systems Outside/Wall Mount* or *All Lifting Systems Inside/Ceiling Mount* as applicable to your installation.

### Chain and Clutch Step 4: Place the Tube in the Upper Brackets



Figure 9 Clutch End in Bracket

- Push the clutch onto the bracket spear with the chain facing the floor (see Figure 9).
- Lift the idler end up over the bracket notch, rotating as needed, and drop the idler end pin into the bracket (see Figure 10).
- Secure the idler end using the method applicable to the clutch size:
  - For C8 and C16 clutches, rotate the locking lever to close the slot opening.
  - For C24 clutches, align the hole in the idler end pin with the hole in the bracket. Use needle nose pliers to insert the cotter pin, and then bend the tabs of the pin so it cannot slip back through.



Figure 10 Idler End in Bracket

### Chain and Clutch Step 5: Attach the Cords to the Tube

The type of cord attachment used depends on the tube size. Follow the instructions below that apply to the shade you are installing.

#### *C-Clip Attachment*

- Unwrap the lift cords from their cards.
- Operate the chain in the direction for lowering the shade until it goes all the way to the bead stop. For a regular roll (the shade comes off the back of the tube) the bead stop will be at the front.



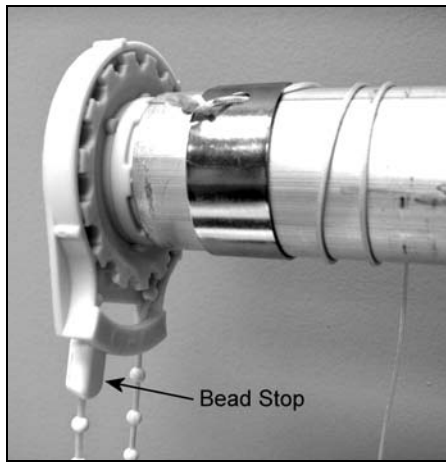


Figure 11 Cord Wrapped on Tube

- Bring a cord straight up from the shade, pass it around the tube from the back, and wrap it around twice going toward the outside of the tube.  
**Note:** If the shade has a reverse roll (rolls off the front of the spring roller tube), pass the cord around the tube from the front.
- Pass the cord through the hole in one of the C-clips and snap the C-clip onto the tube toward the end of the tube from the cord.  
**Note:** For end cords, it is important to put the C-clip between the cord and the end of the tube to avoid the risk of the cord wrapping off the tube when the shade is raised.
- Pull any excess cord through the C-clip and make a knot. Do not cut off the excess cord yet, as it may be needed for further adjustments.
- Repeat this procedure for each of the lift cords.
- Adjust the tension by rotating the C-clips to remove any slack in the cord.

#### Nut and Bolt Attachment for 2 $\frac{3}{4}$ " Tube

- If the shade has a 2 $\frac{3}{4}$ " tube, the cords are attached with a small nut and bolt device that slides into a groove in the tube. Slide the attachment devices into one of the grooves in the tube and align them with the cords.
- Bring a cord straight up from the shade and pass it around the tube from the back. Position the attachment device toward the end of the tube and wrap the cord around twice. If the shade has a reverse roll (rolls off the front of the spring roller tube), pass the cord around the tube from the front.  
**Note:** For end cords, it is important to put the attachment device between the end of the tube and the cord to avoid the risk of the cord wrapping off the tube when the shade is raised.
- String the cord through its attachment device, pull any excess cord through, and tie a knot.
- Secure the attachment device by tightening the screw.
- Do not cut off the excess cord yet, as it may be needed for further adjustments.
- Repeat this procedure for each of the lift cords.
- Adjust the cord tension by retying the knots as needed.

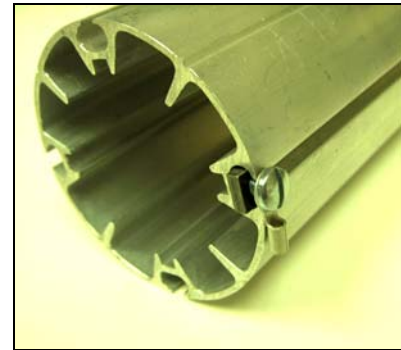


Figure 12 Cord Attachment Device on 2 $\frac{3}{4}$ " Tube

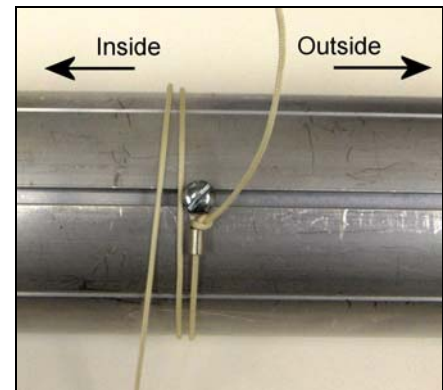


Figure 13 Cord Wrapped on 2 $\frac{3}{4}$ " Tube

#### Chain and Clutch Step 6: Adjust the Shade and Set the Upper Bead Stop

Operate the chain to raise and lower the shade and check to see that it tracks properly and the tension in the spring roller is correct. If the shade is not operating correctly see the *Troubleshooting* section on the last page.

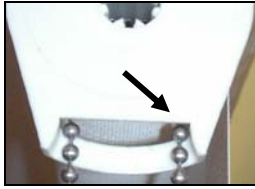


Figure 14 Top Back Bead

- Pull the front length of the chain down until the shade is at its desired upper position in the window.
- Grasp the bead that is at the top back of the clutch (see Figure 14), pull it down, and attach the bead stop at that bead. (For a reverse roll, it would be the bead at the top front.) On a plastic chain, simply snap the bead stop onto the chain (see Figure 15).
- For a metal chain, crimp the stop onto the chain with grooved pliers (see Figure 16).



Figure 15 Plastic Bead Stop



Figure 16 Crimping Metal Stop

### Chain and Clutch Step 7: 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. 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 17 Chain Holder

## Motorized Lifting System Inside or Outside Mount

Begin with steps 1–3 under *All Lifting Systems Outside/Wall Mount* or *All Lifting Systems Inside/Ceiling Mount* as applicable to your installation.

### Motorized Shade Components

- Shade
- For LT50 Series Star Head Motors:
  - Two universal motor brackets—configured to accommodate shade lifting system. These brackets are described in the following section.
  - Four hex head screws with washers
  - Motor retaining clip
- 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

## 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 7 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. The universal motor brackets shown in Figure 7 are examples of the different configurations that can be used.

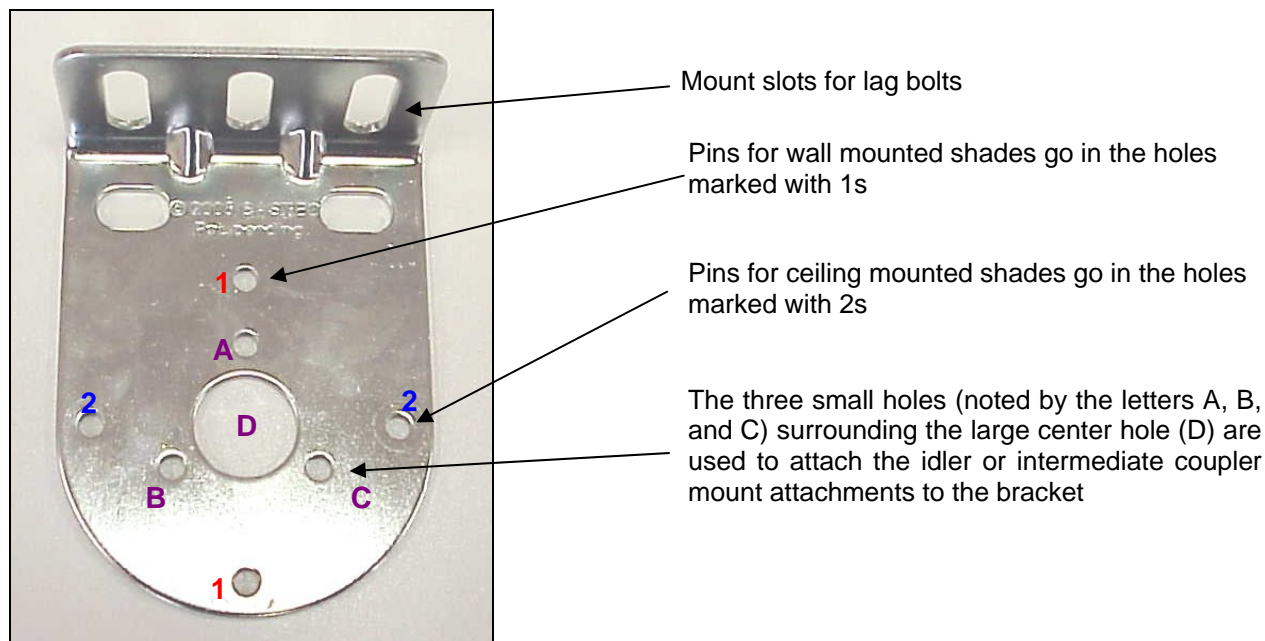


Figure 7 Universal Motor Bracket (without pins)

Figure 8 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 8 Center Support Attachments

Note that 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 9).

**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 9 Center Support Bracket and Tube Connecting Joints

Figure 10 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 (shown in the Hardware Photos on page 3). 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 10 Motor Pin and Machine Screw

#### Motorized Step 4: 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 fascia 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 11.
- Gently push the shade toward the idler bracket until the idler pin on the shade collapses. See Figure 12.

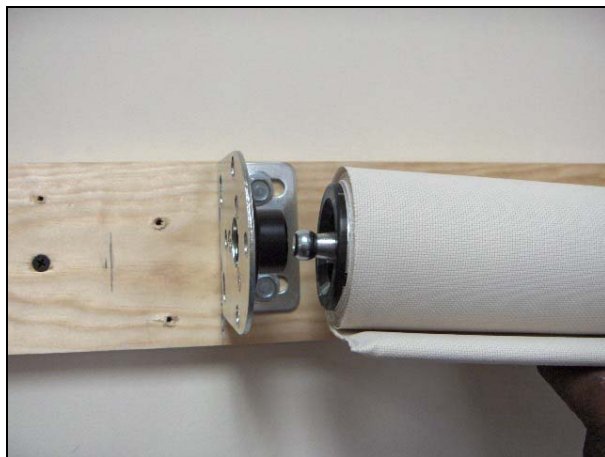


Figure 11 Motor Idler Going into Bracket

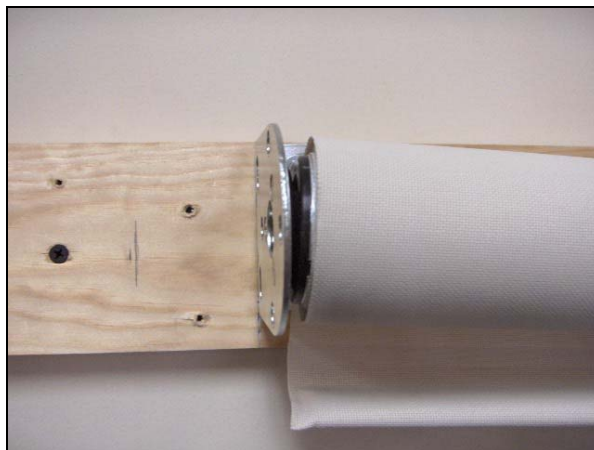


Figure 12 Motor Idler Collapsed in Bracket

- 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 13.
- 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 14.
- **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:
  1. 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.
  2. 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.
  3. Slide the motor retaining clip into the groove on the motor and pins.

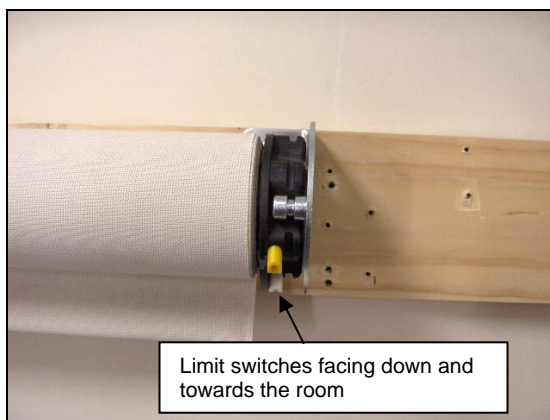


Figure 13 Motor in Bracket

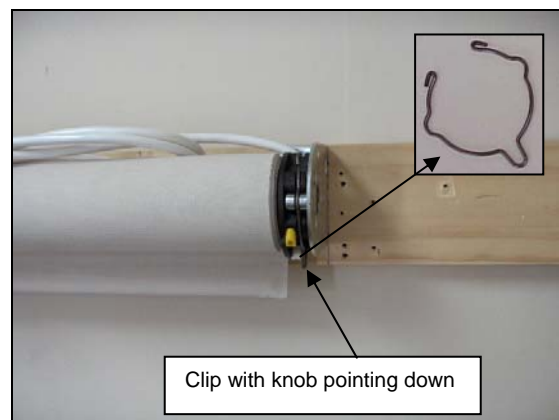


Figure 14 Motor in Bracket with Motor Retaining Clip in Place  
(Detail of motor clip at top right in figure)

**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 5: Attach the Lifting Cords to the Motor.

### *LT50 Round Head Motors with Heavy-Duty Brackets*

- Place the idler end of the shade in the idler end bracket (Figures 15 and 16).
- 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 17).
- Use needle nose pliers to insert the cotter pin, and then bend the tabs of the pin so it cannot slip back through (Figure 18).
- 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 5: Attach the Lifting Cords to the Motor.



Figure 15 Motor Idler Going into Bracket



Figure 16 Motor Idler in Bracket



Figure 17 Motor in Bracket

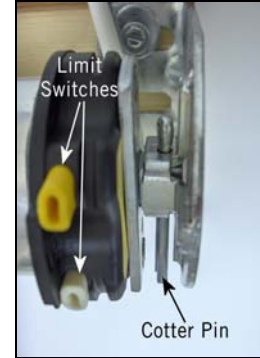


Figure 18 Motor in Bracket with Cotter Pin

(fascia removed for illustration)

### *LS40 Round Head Motors with 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 5: Attach the Lifting Cords to the Motor.

**Important:** The remaining steps are for all shades with all motor types.

#### Motor Step 5: Attach the Cords to the Motor Tube

The type of cord attachment used depends on the tube size. Follow the instructions below that apply to the shade you are installing.

#### *C-Clip Attachment*

- Unwrap the lift cords from their cards.
- Bring a cord straight up from the shade, pass it around the tube from the back, and wrap it around twice going toward the outside of the tube. Note: If the shade has a reverse roll (rolls off the front of the spring roller tube), pass the cord around the motor tube from the front.



Figure 18 Cord Wrapped on Motor Tube

- Pass the cord through the hole in one of the C-clips and snap the C-clip onto the tube toward the end of the tube from the cord.  
**Note:** For end cords, it is important to put the C-clip between the end of the tube and the cord to avoid the risk of the cord wrapping off the tube when the shade is raised.
- Pull any excess cord through the C-clip and make a knot. Do not cut off the excess cord yet, as it may be needed for further adjustments.
- Repeat this procedure for each of the lift cords.
- Adjust the tension by rotating the C-clips to remove any slack in the cord.

#### Nut and Bolt Attachment for 2¾" Tube

- If the shade has a 2¾" tube, the cords are attached with a small nut and bolt device that slides into a groove in the tube. Slide the attachment devices into one of the grooves in the tube and align them with the cords.
- Bring a cord straight up from the shade and pass it around the tube from the back. Position the attachment device toward the end of the tube and wrap the cord around twice. If the shade has a reverse roll (rolls off the front of the spring roller tube), pass the cord around the tube from the front. **Note:** For end cords, it is important to put the attachment device between the end of the tube and the cord to avoid the risk of the cord wrapping off the tube when the shade is raised.
- String the cord through its attachment device, pull any excess cord through, and tie a knot.
- Secure the attachment device by tightening the screw.
- Do not cut off the excess cord yet, as it may be needed for further adjustments.
- Repeat this procedure for each of the lift cords.
- Adjust the cord tension by retying the knots as needed.



Figure 19 Cord Attachment Device on 2¾" Tube

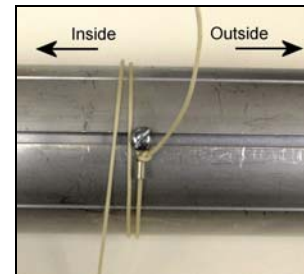


Figure 20 Cord Wrapped on 2¾" Tube

#### Step 6: 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, see the *Troubleshooting* section.
- If the motor limit switches need adjustment, do so now (instructions included separately).

### 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.

## Troubleshooting

### **Problem:**

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

### **Solution:**

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

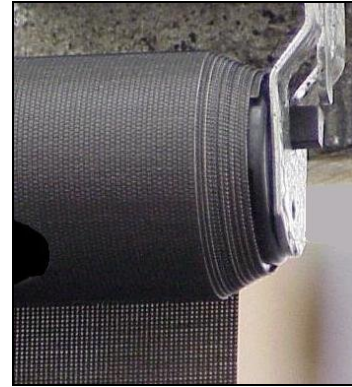


Figure 21 Telescoping Left

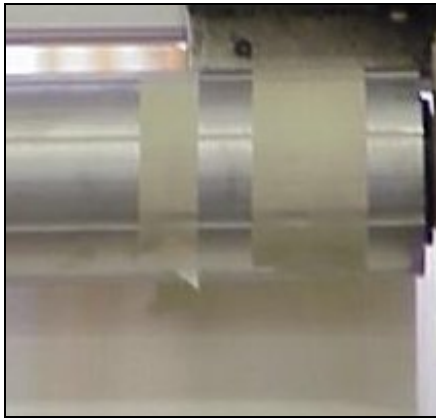


Figure 22 Masking Tape Shims

### **Problem:**

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

### **Solution:**

Unroll 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, place the masking tape on the right side of the shade. 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:**

Unroll the shade until a small part of the tube is exposed. Place one or two long strips of masking tape along about half the length of the tube on the side that is too long. 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.

(Troubleshooting continued on next page)



**Problem:**

The shade does not roll up completely at the bottom or pulls too tightly against the sill or bottom rail.

**Solution:**

Adjust the tension of the spring roller as follows:

Raise the locking lever on the spring end bracket. Use needle nose pliers to grasp the spring pin and remove it from the bracket. Without letting go of the spring pin, turn it one or two turns to increase or decrease the tension as needed. Still holding the spring pin with the pliers, carefully guide it back into the bracket. Lower the locking lever.



Figure 23 Placing Spring Pin in Spring Roller Bracket

**Problem:**

On a motorized or chain and clutch shade, the cord tension is uneven or the end rail of the shade is not level.

**Solution:**

Lower the shade to its rolled position and check the tension in the lifting cords. Turn the C-clips on the tube to adjust the cord length until there is equal tension on both cords. For a 2<sup>3</sup>/<sub>4</sub>" tube, adjust the cord tension by retying the cord knots at the attachment device.