

## Introduction

The **Soft Shade Roller Spring System** is designed to create an improved soft shade that is control-cord free and eliminates the need for a bead chain or drive cord making the system more child-safe. It manually raises or lowers soft shades by using Lift Bands or Roller-Clips to attach the lift cords to the roller. **The total weight of the shade should be less than 5 lb.** This should be fine for most shades that will fit single width and double width hung windows. Fig.1 shows the back view of an assembled soft shade roller spring system with 4 Roller-Clips on the roller when the shade is all the way down.

**Encased Lift Cord Shroud Tape Arrangement** (see Fig. 1): The shade can be made with Encased Lift Cord on the edge or well inside the edge of the shade. It is important to consider the Encased Lift Cord location and spacing before you attach the Encased Lift Cord to your shade. **Recent Industry child safety guidelines recommend a 2" offset between the edge of the shade and the edge of the Encased Lift Cord.**

**Roller Clip Arrangement** (see Fig. 1): The roller clips should be  $\frac{3}{4}$ " offset from the lift cords. The roller clips should be mounted to the left and right of the lift cords alternately across all inner lift cords. Otherwise the shade may creep to one side when raised.

**Shade Length:** The length of the shade has to be 3" or more than the height of the window for inside mount; and 3" or more than the designed length of the shade for outside mount, so that the shade can be pulled downward a few inches to release the spring lock when the shade covers the window completely. **The shade should never be pulled all the way down to prevent locking up the shade.**

**Basic Components** are shown in Fig. 2.

1. Roller Spring **RSL** includes Roller Spring and End Plug.
2. Bracket Sets **RS1** and **RS2** includes 2 Universal Brackets, 2 Bracket Covers, 2 Bracket Inserts, & 4 screws.
3. Aluminum Roller **RC60** ( $1\frac{1}{2}$ " diameter) in 4',6', 8', and 12' lengths.
4. Soft Shade Roller Clip **RWRC3**.

Bracket size and projections are illustrated in Fig. 3

### Fabrication - For Encased Lift Cord Tape

**Step 1.** The dust board needs to be at least 3" wide. Cut the dust board to the shade width. You may either paint the dust board, wrap it with fabric, or leave it bare. Staples or Hook/Loop may be used to secure fabric to wood.

**Step 2.** Attach the shade to the dust board.

**Step 3.** Cut your aluminum roller  $1\frac{1}{4}$ " or more shorter than your dust board.

**Step 4.** For best results, remove burs from the inside edge of the roller after cutting to the correct size. Insert the shade roller spring into the roller as shown in Fig. 4. This may require additional force, but do not push directly on the spring blade or the end plug pin.

**Step 5.** As shown in Fig. 5, place the roller spring and end plug bracket inserts into the brackets. Squeeze the top of the inserts to pop them into position.

**Step 6.** Lay the shade totally flat and face down on your work table for front mounted shade as shown in Fig. 1. Position the dustboard at the top of the shade. Ensure the spring insert end of the roller is located on the left side of the shade as shown in Fig. 1. If the fabric is to be mounted to the back of the dustboard, the spring insert needs to be on the right side of the shade. Install the appropriate brackets to the correct location on the dustboard. Be sure the bracket with the end plug and roller spring insert are located on the correct side.

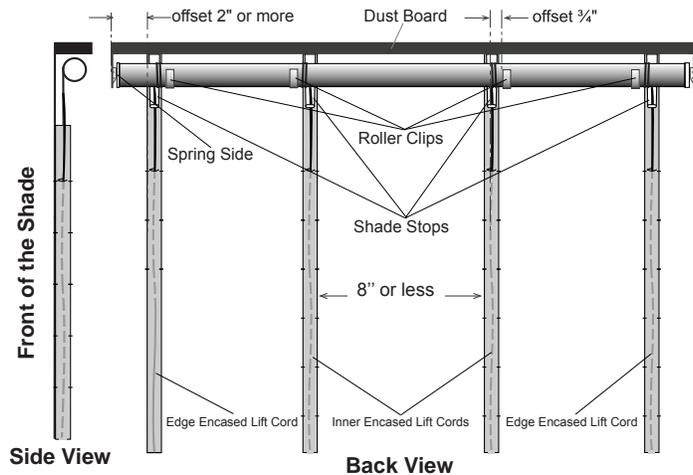


Fig. 1 A Soft Shade Roller Spring System

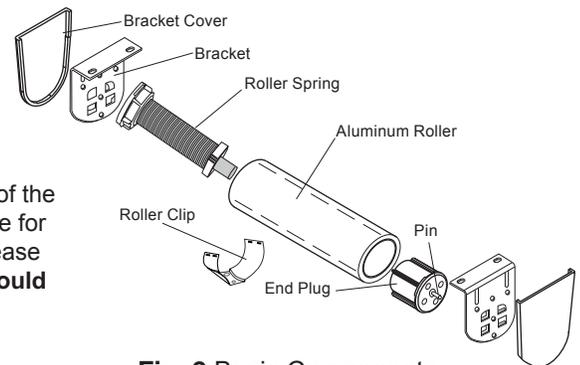


Fig. 2 Basic Components

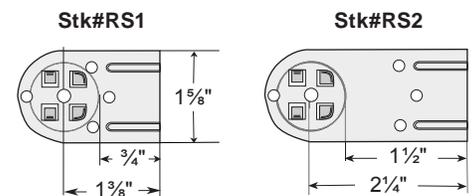


Fig. 3 Brackets for Roller Spring (Stk# RSL)

## Fabrication - Using Encased Lift Cord Shroud Tape

**Step 7.** Cut all rows of Encased Lift Cord Tape 12–15" longer than the finished length of the shade. At the bottom of the shade, take the cord out of the shroud and secure it to the shade using a shade ring. An orb may be used to temporarily secure the cord to the shade. Sew the empty shroud into the hem of the shade. Tack the Encased Lift Cord Tape to the back of the shade, through all layers, at the spacing necessary to make appropriate folds; with 8" between tacks. Just above the last tack, pull the cord out of the shroud, thread it up through the shade stop to the roller clip and tie off. The empty shroud can then be turned under and tacked down or run up to the head rail and stapled down.

**Step 8.** Mark the locations of your roller clips. Be sure to offset and alternate the locations of the clips as shown in Fig. 1. Once the clip is attached to the roller, it will not slip or pop off. Put clips at the locations marked on the tube. You may insert a screw driver underneath the clip and lift it slightly for small position adjustment. Lastly, be sure all clips are aligned when you look down the shade roller.

**Step 9.** Temporarily install your dust board on the wall so that you can access the back side. Insert the roller end plug pin into the end plug side bracket and slide the spring end blade into the Spring Bracket as shown in Fig. 5 and Fig. 1. Let all the lift cords hang down, and turn roller clockwise two full turns so that all the lift cords wrap around the roller at least two full rounds. Make sure all lift cords are hanging down inside the roller close to the shade.

**Step10.** If necessary, adjust the cord tension by re-tying the cord to the bottom ring. If using an orb, remove it now and tie the exposed cord to a bottom shade ring.

**Step11.** Slide the spring end roller out of the bracket. Hold the spring end roller steady while keeping the end plug pin firmly in its bracket. Use window shade spring crank, WST4, to apply roller spring tension by turning the crank clockwise. The number of turns to build up initial spring tension equals the length (in inches) of your shade divided by 2.5. Be careful to avoid over turning the spring. Slide the spring blade in the spring end bracket.

**Step12.** Run the shade up and down to see if the spring tension is enough to completely lift the shade. If not, use the window shade spring crank to apply a few more turns until proper spring tension is achieved.

**Step 13.** To set the tension on the spring if you are not using the shade spring crank, bring the shade down to its longest position. Take the roller out of the brackets and manually roll the cords around the tube to lift the shade. Place the shade back in the brackets and pull it down to its longest position. Repeat the above process as needed to set the tension.

## Fabrication - Using 10" Lift Band

**Step 7.** Cut each Lift Band 8"–10" longer than the finished length of the shade. At the bottom of the shade, sew the Lift Band into the hem.

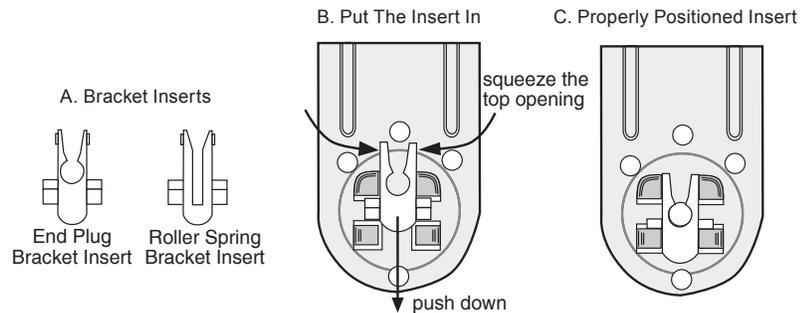
**Step 8.** Pull the Lift Band material up through the shade so that the lift bands run between the back of the shade and the fiberglass ribs. Roll the lift band around the roller from the back (next to the shade lining) to the front. Mark the area the lift bands cover on the tape. Gently remove the tape cover, exposing the tape in that area only.

**Step 9.** Level the shade by adjusting the Lift Band until the shade is correct. Stick the Lift Band material to the exposed tape on the roller tube. Roll excess lift band material around roller tube. Excess material is necessary for the spring to engage correctly.

**Step10.** Temporarily install your dust board to the wall. Run the shade up and down several times, and check for either too much tension or slack on the lift bands when the shade is all the way down. Adjust as needed by gently releasing the lift material from the tape and repositioning. Once the shade is leveled, place a piece of tape over the area of the roller where the lift material is attached to secure.



**Fig. 4** Install Roller Spring and End Plug



**Fig. 5** Put Brackets Inserts In