



RV Kits

CAREFREE

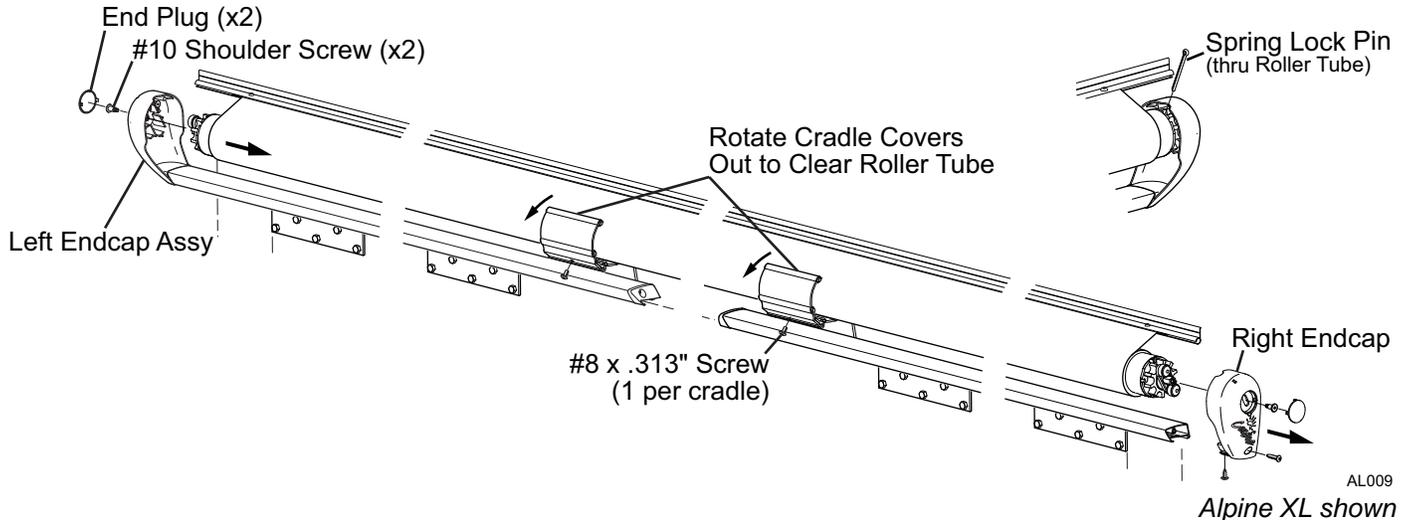
ALPINE COVER SPRING REPLACEMENT

Kit No:
R001859
R001859XL

These instructions are for spring replacement on the Alpine. For fabric and/or roller tube replacements, refer to the Alpine Service Manual available at www.carefreeofcolorado.com

CAUTION These procedures deal directly with the pre-wound spring tension in the roller tube, if the spring is prematurely released, the roller tube can spin out of control. Failure to exercise care and/or failure to follow the instructions can result in personal injury and/or property damage.

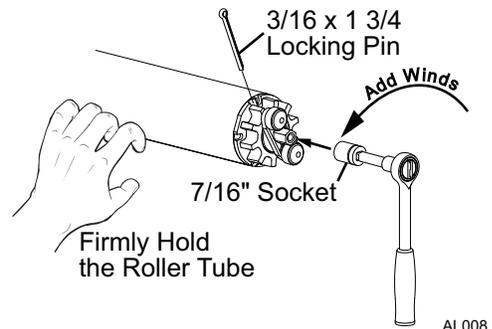
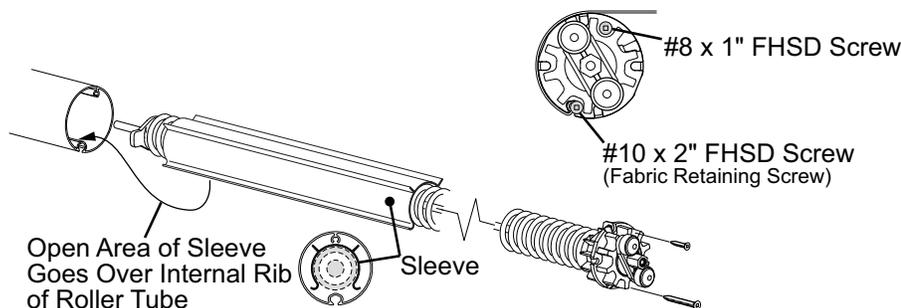
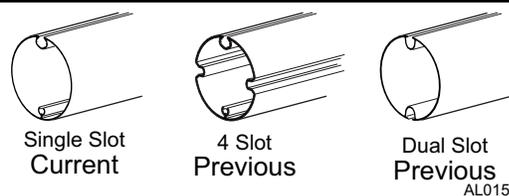
NOTE: Standard Alpines use a single mounting bracket for each endcap assembly. XL models use two brackets per endcap assembly and center cradle supports as shown below. Except where noted, instructions apply to all models.



1. Open the room 3" – 4".
2. On the right end of the roller tube, insert a spring locking pin through the bearing and spindle; it may be necessary to twist the roller to align the holes. The locking pin is a 3/16 x 1 1/4 cotter pin or equivalent. Place tape over the head of the pin to avoid the pin coming out.
3. *For XL models:* Remove the small #8 screws from the front of the cradles and rotate the cradle covers out from the roller tub.
4. Remove the end plugs and #10 shoulder screws from the endcaps (one in each endcap) and save.
5. Remove the screws (2) holding the RH endcap and set aside.
6. Hold the roller tube and remove the RH endcap from the roller tube and support extrusion.
7. Pull the roller tube from the LH end cap.
8. Unroll the canopy from the roller tube. It is not necessary to remove the canopy. Unrolling the fabric allows for better grip on the roller tube in the next steps.

Tip: Use ladders or a scaffold to support the roller tube when it is disengaged.

NOTE: Springs used with the current single slot roller tube has a snap on sleeve to reduce noise when the slideout room is open and closed. If there is a sleeve on the old spring, remove the sleeve and snap over the new replacement spring. The sleeve is not used with previous roller tube configurations.



NOTE: It will be necessary to firmly support and brace the roller tube. A second person is required to hold the roller tube.

9. Remove the existing spring winds.

Tip: Use a pair of good quality work gloves to protect the hands while holding onto the roller tube. Insulated rubber gloves provide a solid grip.

9.1. Firmly hold onto the roller tube.

CAUTION The spring is wound and under tension. When the pin is removed, the spindle will turn rapidly. To avoid personal injury, keep hands away from the spindle until the spring has unwound.

9.2. Remove the spring locking pin and allow the spring to unwind.

10. After the spring is unwound, remove the #8 x 1 flat head square drive screw that attaches the spindle assembly and the #10 x 2 flat head screw that secures the fabric and save.

11. Remove the spring assembly from the roller tube and set aside.

12. Insert the new spring assembly and secure to the roller tube with the #8 x 1 screw removed previously.

13. Install the #10 x 2 FHSD screw through the fabric slot hole and polycord. The screw must be positioned to thread into the metal of the roller tube slot and the edge of the polycord. DO NOT OVER TIGHTEN; maximum torque 16 in-lbs.

Calculating the Spring Winds

The spring winds are calculated based on the box length of the slide-out. To calculate the spring winds (room closed), measure the box length IN FEET.

<u>Box Length</u>		<u>Winds Required</u>
<u>R001859</u>		
59" or less	Spring Winds =	11
5' to 16'11"	Spring Winds =	Number of feet +7

*Example: Box Length = 10' 4"; spring winds = 10 + 7 = 17.
Always round down to the nearest whole number.*

<u>R001859XL</u>		
17' to 22' 11"	Spring Winds =	10
23' and longer	Spring Winds =	12

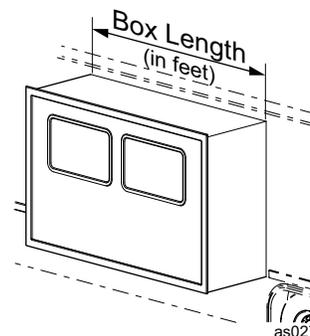
Adding Spring Winds

NOTE: Have a spring locking pin available. The pin should be a solid 3/16 x 1 1/4 shaft with a flat end such as a drill bit. If using a 3/16 cotter pin, cut the two legs flush so that the end is flat.

14. Have one person firmly hold the roller tube stationary.

15. Using a 7/16" socket wrench or equivalent, turn the spindle counter clockwise to add spring winds. One complete rotation of the spindle equals one spring wind.

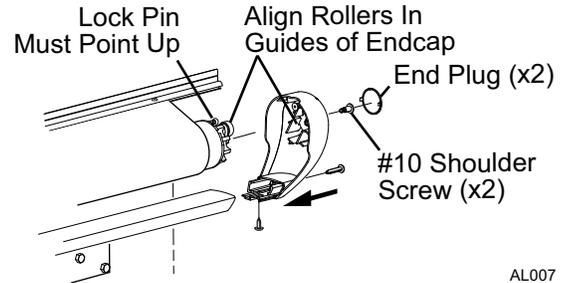
16. After adding the required number of spring winds, firmly hold the wrench and roller tube and insert the spring locking pin.



17. Hold the pin in place and slowly release the wrench. Place tape over the head of the pin to avoid the pin coming out.
18. Roll the fabric onto the roller tube. The fabric must roll over the top of the roller tube toward the vehicle. Allow only enough slack to allow the roller tube to fit into the end caps.

NOTICE Failure to roll up the slack before installing the roller tube will reduce the spring tension. This can cause the fabric to sag and not roll up correctly when the room is closed.

19. Slide the roller tube into the LH endcap. Align the rollers inside the guides of the endcap. The roller tube should be oriented with the head of the spring lock pin pointing up on the RH side.
20. Slide the RH endcap over the spindle of the roller tube. Align the rollers inside the guides of the endcap.
21. Align the endcap with the extrusion and secure the endcap to the extrusion using the screws removed previously. Do not over tighten.



22. Attach the roller tube to the endcaps using the two #10 shoulder screws removed previously. Torque to 25-35 in-lbs.
23. Install the end plugs in endcaps.
24. *For XL models:* Rotate the cradle covers up against the roller. Align the screw holes and attach using one (1) #8 x .313" screw in each cradle.

CAUTION When the pin is removed, the roller tube spring will quickly roll up any slack material. Use care that hands and fingers are out of the way.

25. Remove the spring locking pin from the end of the roller tube assembly.