



# SERVICE MANUAL

## ALPINE SLIDEOUT COVER

Product style code Hi

Mounting Bracket style code KG

### RV



Read this manual before servicing or using this product. Failure to follow the instructions and safety precautions in this manual can result in personal injury and/or cause the product to not operate properly.



### TABLE OF CONTENTS

<b>Product Overview</b> .....	<b>1</b>
Specifications .....	1
<b>Canopy Replacement</b> .....	<b>2</b>
<b>Spring Replacement</b> .....	<b>4</b>
<b>Standard Maintenance</b> .....	<b>4</b>
Fabric Care .....	7
Mildew .....	7
Pooling .....	7
Hardware Maintenance .....	7
Roller Tube Noise .....	7
<b>Part Number Listing</b> .....	<b>8</b>
Part Number/Serial Number Location .....	8
Illustrated Parts List .....	8

## PROPRIETARY STATEMENT

The Alpine Slideout Cover is a product of Carefree of Colorado, located in Broomfield, Colorado, USA. The information contained in or disclosed in this document is considered proprietary to Carefree of Colorado. Every effort has been made to ensure that the information presented in the document is accurate and complete. However, Carefree of Colorado assumes no liability for errors or for any damages that result from the use of this document.

The information contained in this manual pertains to the current configuration of the models listed on the title page. Earlier model configurations may differ from the information given. Carefree of Colorado reserves the right to cancel, change, alter or add any parts and assemblies, described in this manual, without prior notice.

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## SAFETY INFORMATION



This is the safety alert symbol. It is used to alert individuals to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible personal injury or death.



Indicates a hazardous situation, which if not avoided, could result in death or serious bodily injury.



Indicates a hazardous situation, which if not avoided, may result in minor or moderate bodily injury.



Indicates a situation that may result in equipment-related damage.

### General Safety:



This product can expose you to chemicals including Di-isodecyl phthalate (DIDP), Vinyl Chloride and Formaldehyde, which are known to the state of California to cause cancer or birth defects or other reproductive harm. For more information visit [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov)



Shock Hazard. Always disconnect battery or power source before working on or around the electrical system.



Always wear appropriate safety equipment (i.e. goggles).



Always use appropriate lifting devices and/or helpers when lifting or holding heavy objects.

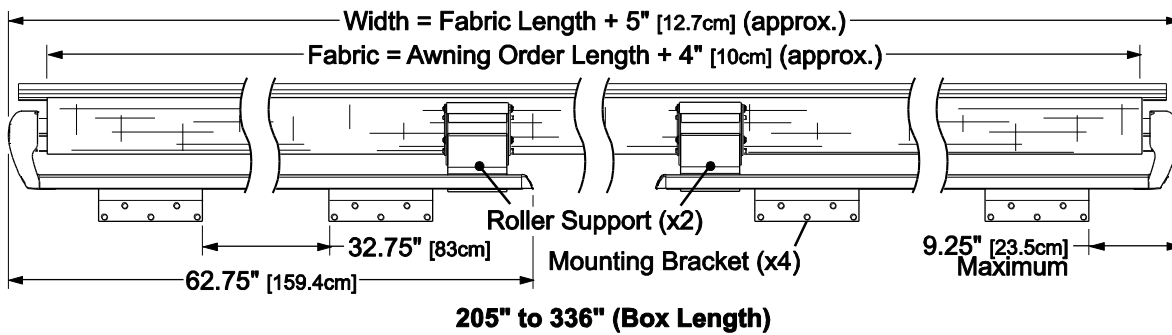
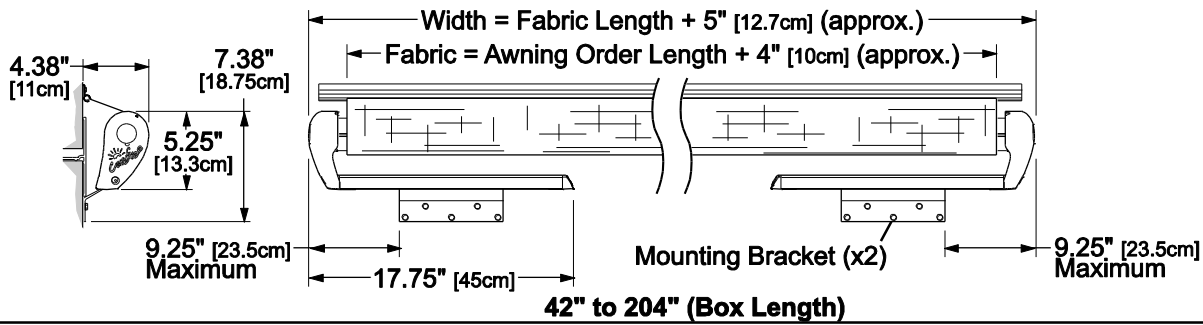


When using fasteners, do not over tighten. Soft materials such as fiberglass and aluminum can be "stripped out" and lose the ability to grip and hold.

## PRODUCT OVERVIEW

- Light weight slideout cover with style and performance;
- Simple Installation;
- Two mounting bracket sizes available to accommodate a range of room flange sizes;
- Carefree's innovative automatic anti-billow lock securely holds the fabric during travel.

## SPECIFICATIONS



AL001c

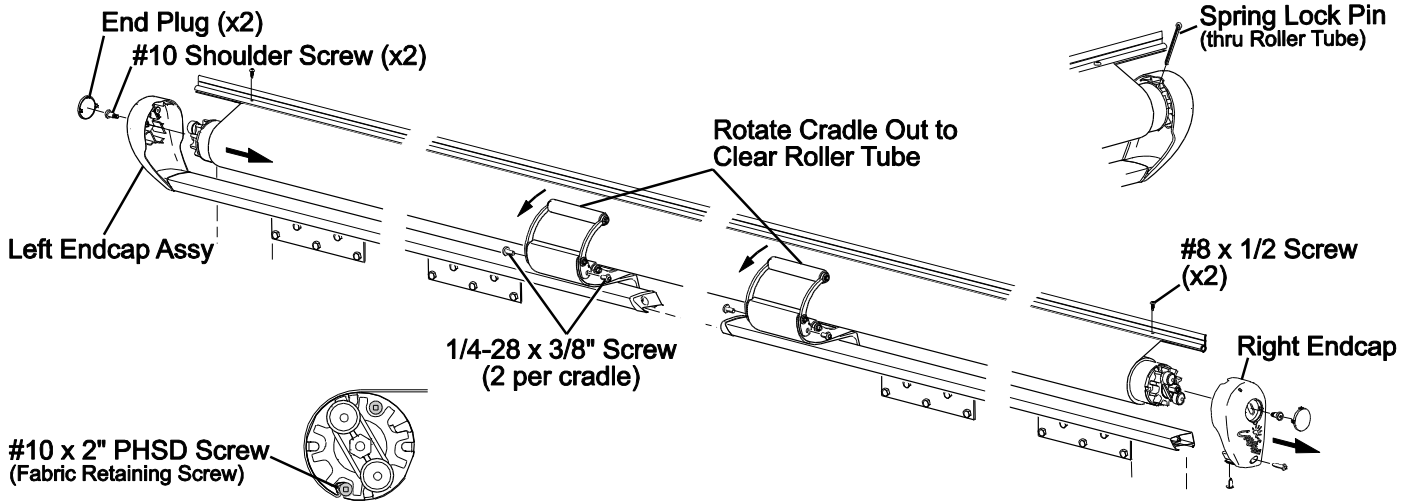
<b>AVAILABLE LENGTHS:</b> (measured box length) 42" - 336"		<b>AVAILABLE EXTENSION:</b> Up to 42"
<b>FABRIC TENSION</b>	One spring mounted in RH end of roller tube OR Two springs, one each end	
<b>COLOR:</b>	<i>Hardware:</i>	White, Black
	<i>Fabric:</i>	
<b>WEIGHT:</b>	<i>Standard</i>	Base Weight @ 42" Box Length = 13.5 lbs; for every 12" increase, add 1 lb <i>Weight calculation is approximate. Actual weight may vary based on specific installation details</i>

**NOTICE** When installing the awning it is important that the correct awning length is used and that the brackets are positioned so that the arms are fully engaged in the mounting brackets as shown. Failure to mount the awning with the arms fully engaged can result in the anti-billow lock not functioning properly and allowing the awning to billow.

## CANOPY REPLACEMENT

**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.

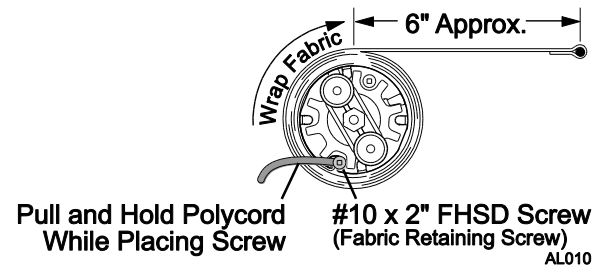


AL009a

1. Close the room if open.
2. Remove the fabric retaining screws from the awning rail.
3. On the right and left 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.
4. *For XL models:* Remove the 1/4 x 3/8 screws from the cradles and rotate the cradles out from the roller tube.
5. Remove the end plugs and #10 shoulder screws from the endcaps (one in each endcap).
6. Remove the screws (2) holding the RH endcap and set aside.
7. Hold the roller tube and remove the RH endcap from the roller tube and support extrusion.
8. Pull the roller tube from the LH end cap.
9. Unroll the canopy from the roller tube.
 

*Tip: Use ladders or a scaffold to support the roller tube when it is disengaged.*
10. Remove the fabric retaining screws from the roller tube spindles and save.
11. Slide the roller tube off of the fabric making sure to note left and right side of roller
12. Slide the old canopy from the awning rail.
13. Unfold the replacement fabric.
14. Slide the large polyrod of the fabric into the awning rail. Orient the fabric so the hem is down. Center the fabric over the room.
15. Slide the roller tube onto the fabric. Make sure to keep the same right and left sides of roller from step 11.

16. After the fabric is centered, pull and hold the excess polycord to the side of the fabric slot. Place one (1) #10 x 2 FHS D 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. The screw action will pull the polycord further into the slot hole. Do not over tighten; maximum torque 16 in-lbs.



17. After the screw is installed, trim the excess polycord.

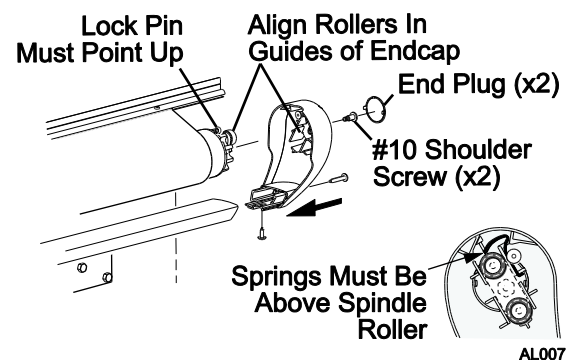
18. After tightening the fabric in the slot from one end of the roller tube to the other end, repeat step 5 and 6 on the opposite end to secure the fabric.

19. Roll the fabric onto the roller tube. Note the direction of the wrap as shown. The view is of the RH spindle. Allow approximately 6" of fabric to extend past the roller tube.

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

20. Roll up any slack material onto the roller tube.

21. 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.



**NOTE:** Ensure that both return springs inside the endcap are above the spindle rollers.

22. Slide the RH endcap over the spindle of the roller tube. Align the rollers inside the guides of the endcap.

23. Align the endcap with the extrusion and secure the endcap to the extrusion using the screws removed previously. Do not over tighten.

24. Attach the endcaps and roller tube together using the two #10 shoulder screws removed previously. Torque to 25-35 in-lbs.

25. Install the end plugs in endcaps.

26. *For XL models:* Rotate the cradle up against the roller. Align the screw holes and attach using two (2) 1/4 x .38" screws in each cradle.

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

27. Remove the spring locking pins from both end of the roller tube assembly.

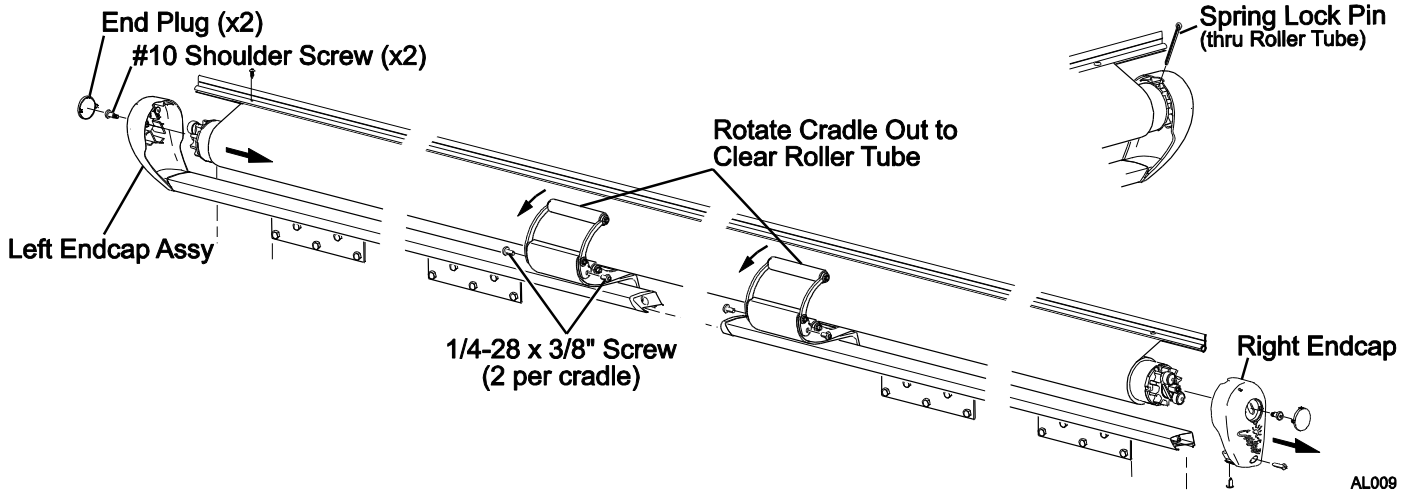
28. Open and close the room to ensure that the fabric is rolling up straight on the roller tube. Adjust the fabric position in the awning rail as required.

29. Secure the fabric to the awning rail using two #8 x 1/2 screws through the rail and fabric.

## SPRING REPLACEMENT

**CAUTION** These procedures deal directly with the pre-wound spring tension in the roller tube, if a 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.

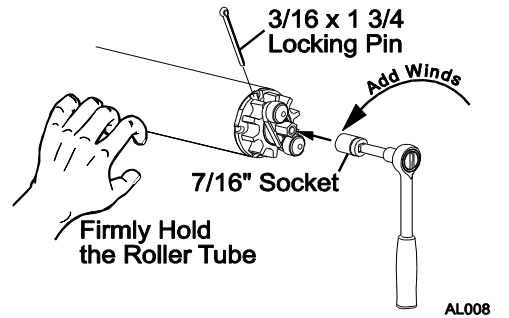
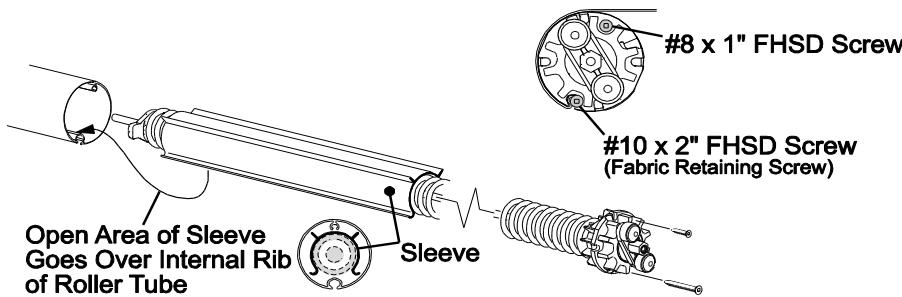
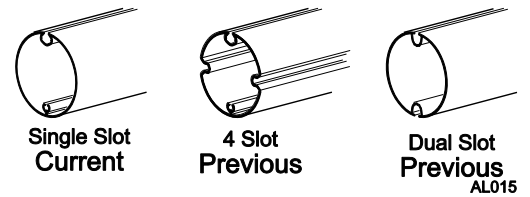
**NOTE:** Standard Alpines use a single mounting bracket for each endcap assembly. XL models use two brackets per endcap assembly and center cradle supports as shown below. Except where noted, instructions apply to all models.



1. Open the room 3" – 4".
2. On the right and left 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 1/4 x 3/8 screws from the cradles and rotate the cradle out from the roller tube.
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:** Some spring configurations used with the current single slot roller tube have 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.

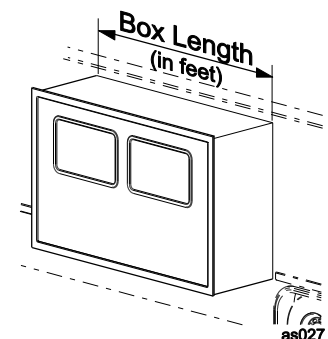
Calculating the Spring Winds

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 9'6"	Spring Winds = Number of feet +14
10' to 16'	Spring Winds = Number of feet +5

*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.

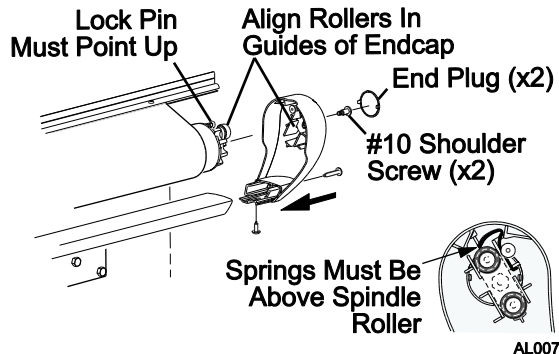
14. Have one person firmly hold the roller tube stationary.
15. Using a 7/16" socket wrench or equivalent; turn the spindle counter clockwise on right spring, clockwise on left spring, to add spring winds. One complete rotation of the spindle equals one spring wind.
16. After adding the required number 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.

**NOTE:** Ensure that both return springs inside the endcap are above the spindle rollers.

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 up against the roller. Align the screw holes and attach using two (2) 1/4 x 3/8" 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.

## **STANDARD MAINTENANCE**

Maintaining a Carefree Ascent slide-out cover is easy. Just follow these basic steps:

- Periodically check that the fasteners are tight. Tighten if necessary.
- Keep the awning fabric clean.

### **FABRIC CARE**

**NOTICE** Do not use oil based cleaners or any caustic, granulated, or abrasive type cleaners on your Carefree product.

1. One of the best ways to keep the fabric looking good and to delay the need for deep or vigorous cleanings is to hose fabrics off on a monthly basis with clear water. This practice will help prevent dirt from becoming deeply imbedded in the fabric. In most environments, a thorough cleaning will be needed every two to three years.
2. When it's time for a thorough cleaning, the fabric can be cleaned while still on the awning frame.
  - For Vinyl Fabric – Use a soft brush and warm water with soap.
3. When cleaning the fabric, it is important to observe the following:
  - Always use a natural soap, never detergent.
  - Water should be cold to lukewarm, never more than 100°F.
  - Air-dry only. Never apply heat to the fabric.
  - Always allow the fabric to dry thoroughly before rolling up the canopy.

### **Mildew**

Mildew is a fungus growth that looks like dirt. Vinyl coated polyester fabrics are mildew resistant because of a chemical biocide in the vinyl coating. Under ordinary conditions, mildew will not appear. However, in areas where high temperature and humidity are common, mildew can be a problem and required the material to be washed more frequently. Thoroughly rinse the fabric with clean water and allow to air dry completely before rolling up the canopy.

### **Pooling**

When water collects on the top of the fabric, this is known as "pooling". This can occur during inclement weather or if a running air conditioner discharges over the awning. The water is dumped when the awning is retracted. It is recommended that if water accumulates on the top; retract the room in steps (8"-12") to dump the water. This will help prevent the fabric from stretching or distorting.

**IMPORTANT NOTE: If the room must be closed during wet weather (rain), close the room in increments (approximately 6-8"). This is to allow water to run off while the room is closing and prevent sudden pooling.**

### **HARDWARE MAINTENANCE**

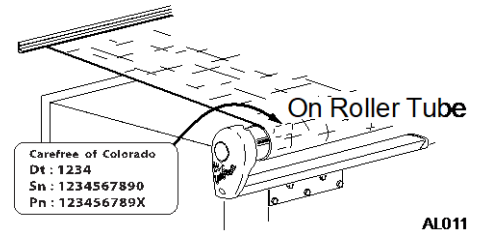
- Replace any parts that become damaged.
- Periodically check all mounting hardware, screws, lags, etc., and re-tighten when necessary.

### **Roller Tube Noise**

After a period of use, the roller tube bearing may make some squeaking noises. Spray some silicone lubricant between the flange on the pivot shaft and the roller tube bearing. Open and close the room and repeat the application until the lubricant has penetrated between the shaft and bearing.

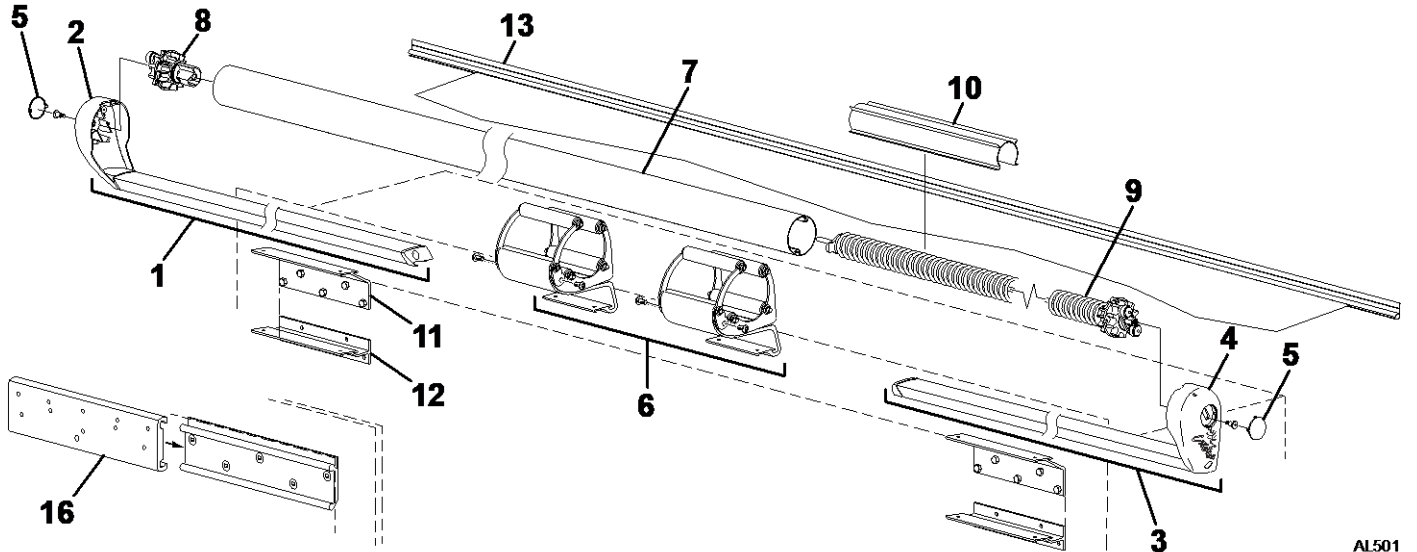
# PART NUMBER LISTING

## PART NUMBER/SERIAL NUMBER LOCATION



AL011

## ILLUSTRATED PARTS LIST



AL501

Item	Part Number	Description		Notes
1	See Note 3	Endcap and Mounting Tube Assy, LH	42"-204"	3
	R001905XXX	Endcap and Mounting Tube Assy, LH	205"-336"	
	R001958XX	Endcap and Mounting Tube Assy, LH	>336"	
2	R001903XXX	Endcap, LH		
3	See Note 3	Endcap and Mounting Tube Assy, RH	42"-204"	3
	R001906XXX	Endcap and Mounting Tube Assy, RH	205"-336"	
	R001959XXX	Endcap and Mounting Tube Assy, RH	>336"	
4	R001904XXX	Endcap, RH		
5	R001902XXX	Plug	pkg of 2	
6	SG0027-WHT	Cradle, Roller Support, White	pkg of 2	
	SG0027-BLK	Cradle, Roller Support, Black	pkg of 2	
7	610900-xxx.xx	Roller Tube		
8	R012019-001	Spindle Assy, LH	Standard	
	R012019-002	Spindle Assy, LH	XL	
9	R001859	Spring Assy, RH	Standard	
	R001859XL	Spring Assy, RH	XL	
10	R041481-001	Spring Sleeve, used with single slot roller tube		
11	R012546-505	Bracket, Mounting Kit, Tall	White	2
	R012546-506	Bracket, Mounting Kit, Tall	Black	2
12	R012545-505	Bracket, Mounting Kit, Short	White	2
	R012545-506	Bracket, Mounting Kit, Short	Black	2
13	610700xxx	Awning Rail		
14	R001925-XXX	Hardware Pack, Standard	not shown	
15	R001926-XXX	Hardware Pack, XL	not shown	
16	BX0013-2-WHT	Carefree Slide Topper Prepped Access Plate Adapter Kit	pkg of 2 w/ hardware	
	BX0013-2-BLK	Carefree Slide Topper Prepped Access Plate Adapter Kit	pkg of 2 w/ hardware	

- Notes:
- xxx = Length in inches; XXX = Color, WHT = White, BLK = Black
  - Bracket kits (items 11 & 12) contain 2 brackets and attaching hardware. Awnings for box lengths 205" or longer requires 2 kits.
  - For Endcap and Mounting Tube replacements for standard length awnings, order complete arm kit:
 

KG25S15 – White with short bracket	KG25T15 – White with tall bracket
KGJVS15 – Black with short bracket	KGJVT15 – Black with tall bracket