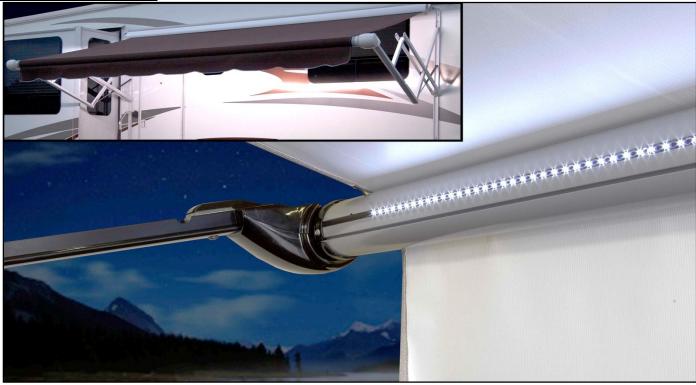


SERVICE MANUAL

LED ROLLER LIGHTING

RV



SPECIFICATIONS

MOUNTING:	LED light strip is factory mounted in a specially designed roller tube. Wire is concealed in canopy hem.	
LENGTH:	Available for awnings 10' – 21'* * Maximum LED strip length is 16' 5". For awnings greater than 18', strip is centered in the roller tube.	
Power:	1A, 12VDC	
CONTROLS:	Single pole, single throw switch (SR0101) Note: The Switch kit is ordered separately. Kit includes in-line fuse holder and 2A spade type fuse. For an installer furnished control switch, see notes in "Switch Installation".	

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This manual covers basic LED lighting for factory mounted LED strips in the roller tube. For additional information please refer to the appropriate product service manual.

PROPRIETARY STATEMENT

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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

AWARNING A WARNING INDICATES A POTENTIALLY HAZARDOUS SITUATION THAT, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY AND/OR MAJOR PROPERTY DAMAGE.

CAUTION A caution indicates a potentially hazardous situation that may cause minor to moderate personal injury and/or property damage. It may also be used to alert against unsafe practices.

NOTE: A note indicates further information about a product, part, or step.

Tip: A tip provides helpful suggestions.

Safety Notes:

- 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, use care not to over tighten. Soft materials such as fiberglass and aluminum can be "stripped out" and lose the ability to grip and hold.

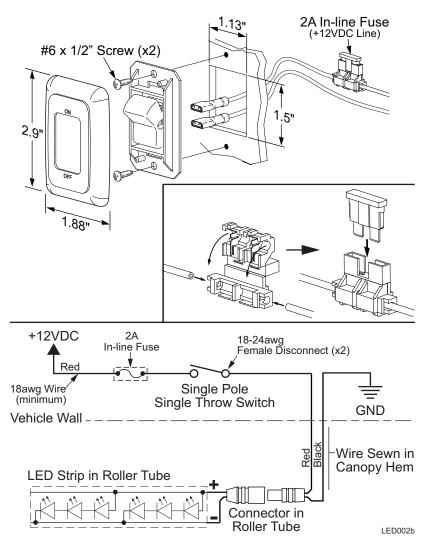
SWITCH INSTALLATION

NOTE: Installers may choose to furnish the control switch. The installation requires that the power line (+12VDC) be attached to a dedicated 2A circuit breaker or a 2A in-line fuse must be installed between the switch and power source. For easy access, locate the fuse close to the switch.

- 1. Determine the location of the switch.
- 2. At the switch location, cut a 1 1/8" x 1 1/2" hole.
- 3. Wire the switch as shown below. Wire terminals at the switch are .187, 18-24 awg female disconnects.

NOTE: Allow adequate slack in the 12VDC power line so that the in-line fuse (installed in step 4) can be accessed from behind the switch.

- 4. Install the in-line fuse:
 - 4.1. Near the switch, cut the red 12VDC power line to the switch. Do not strip the insulation.
 - 4.2. Insert a wire end into one of the wire channels until it butts up against the stop.
 - 4.3. Fold that half of the connector body over until the element contacts the wire. Use pliers to crimp the connector closed.
 - 4.4. Repeat for the second wire end.
 - 4.5. Slide the fuse into the fuse port. Ensure that is firmly seated.
- Press the in-line fuse, wires and switch into the mounting hole. Secure the switch using two (2) #6 x 1/2" screws.
- 6. Snap the switch bezel over the switch frame.



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Clamp the Canopy

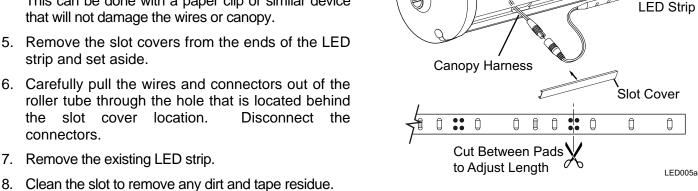
LED Slot

Harness in this locaion

REPLACING THE LED STRIP - SPRINGLESS ROLLERS

These instructions apply to Travel'r, Eclipse, Pioneer and Pioneer Lite installations with LED's in the roller tube.

- 1. Extend the awning out completely.
- 2. Disconnect power.
- 3. Use a non-permanent marker to mark the location of the ends of the LED strip.
- 4. Clamp the canopy harness in the canopy to prevent the wire from pulling up into the seam of the canopy. This can be done with a paper clip or similar device
- 5. Remove the slot covers from the ends of the LED strip and set aside.
- the slot cover location. connectors.
- 7. Remove the existing LED strip.



- 9. Starting at the reference mark made previously, remove the release paper from the back of the new strip and press the strip into the LED slot.
- 10. At the end of the roller tube, cut the LED strip to match the mark made previously. To trim the LED strip, always cut between the 4-pad cluster as shown.
- 11. Connect the canopy harness connector and LED connector. Then carefully push the connectors into the roller tube.
- 12. Press the slot covers into the LED slot.
- 13. Restore power and test.

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REPLACING THE LED STRIP -ROLLERS WITH SPRINGS

These instructions apply to Fiesta and Fiesta Lite installations with LED's in the roller tube.

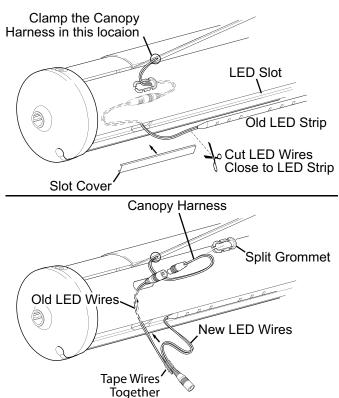
- 14. Extend the awning out completely.
- 15. Disconnect power.
- 16. Use a non-permanent marker to mark the location of the ends of the LED strip.
- 17. Clamp the canopy harness in the canopy to prevent the wire from pulling up into the seam of the canopy. This can be done with a paper clip or similar device that will not damage the wires or canopy.
- 18. Remove the slot covers from the ends of the LED strip and set aside.
- 19. Remove the existing LED strip from the LED slot.
- 20. Cut the old LED wires close to the LED strip. Tape or secure the wires on the outside of the roller tube.
- 21. Clean the slot to remove any dirt and tape residue.
- 22. Starting with the wire leads at the reference mark made previously, remove the release paper from the back of the new strip and press the strip into the LED slot.
- 23. At the end of the roller tube, cut the LED strip to match the mark made previously. To trim the LED strip, always cut between the 4-pad cluster as shown.
- 24. Tape the old LED wires to the new LED wires and connector.
- 25. Locate and remove the split grommet from the roller tube.
- 26. Carefully pull the wires and connectors out of the roller tube. Disconnect the connectors.
- 27. Carefully feed the new LED connector through the hole in the slot
- 28. Use the old LED wire to pull the new connector out of the grommet hole. Remove the tape and old wire and discard.

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Cut Between Pads

to Adjust Length

- 29. Connect the canopy harness connector and new LED connector. Then carefully push the connectors back into the roller tube.
- 30. Place the split grommet around the canopy harness and press the grommet into the hole of the roller tube.
- 31. Press the slot covers into the LED slot.
- 32. Restore power and test.

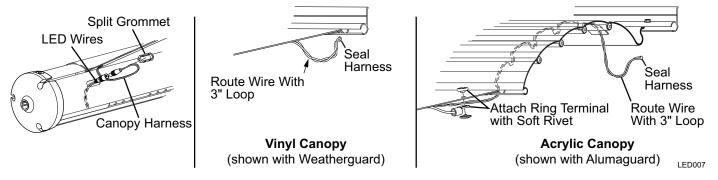


LED005b

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CANOPY WIRE HARNESS REPLACEMENT

NOTE: Acrylic canopies uses a soft rivet in the hem next to the metal wrap to hold the harness in place. Dual tapered canopies do not use the rivet. If replacing a harness in a tapered canopy, skip steps 6 and 11.1.



- 1. Extend the awning out completely.
- 2. Locate and remove the split grommet from the roller tube.
- 3. Carefully pull the wires and connectors out of the roller tube. Disconnect the connectors.
- 4. Clamp the LED harness connector outside the roller tube to prevent it from falling back into the roller tube. This can be done with a paper clip or similar device that will not damage the wires.
- 5. At the awning rail, clip the harness close to the canopy. Clamp the harness going into the vehicle to prevent it from falling in the vehicle wall.
- 6. <u>For acrylic canopies only:</u> Remove the rivet from the canopy. This is a soft rivet and can be cut off with side cutters.
- 7. At the roller tube, cutoff the connector from the old canopy harness.
- 8. Securely tape the new harness to the old harness.
- Carefully use the old harness to pull the new harness through the hem of the canopy.
- 10. After the new harness has been routed in the canopy hem:
 - 10.1. Connect the canopy harness connector and LED connector. Then carefully push the connectors into the roller tube.
 - 10.2. Place the split grommet over the canopy harness and press the grommet into the hole of the roller tube.
- 11. At the vehicle wall:
 - 11.1. For acrylic canopies only: Attach the new harness terminal ring to the canopy using a new rivet.
 - 11.2. If the canopy has a metal wrap, attach the wire to the inside of the wrap (see page 5) then proceed with the next step.
 - 11.3. At the vehicle wall, route the new canopy harness through the wall to the switch.
 - Tip: Tie the new harness to the old harness that was cut previously. Use the old harness to pull the new harness through the wall to the desired location.
 - 11.4. At the vehicle wall, provide a 3" loop of harness between the canopy and wall. Seal the wall entrance hole and harness with a quality silicone sealant.
 - 11.5. Connect the new harness to the switch. Two (2) .187, 18-24 awg female disconnects are provided if connecting to a switch.
 - 11.6. <u>Alternate method:</u> At the wall, splice the new harness to the existing harness using 24 awg butt connectors. Push the connectors into the vehicle wall. Seal the wall entrance hole and wires with a quality silicone sealant.

NOTE: Be sure to allow enough harness from the canopy to provide a 3" loop of harness and adequate length for the connectors to be pushed inside the wall before sealing the hole and harness with a quality silicone sealant.

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ATTACHING THE HARNESS TO FABRIC WRAP

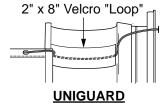
When replacing the canopy only or replacing the canopy harness, it is necessary to attach the cable to the inside of the wrap.

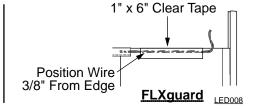
For vinyl canopies with Weatherguard, the harness is routed in the seam of the Weatherguard, no additional attachment is necessary.

For other wraps follow the directions below:

- 1. Open the awning to access the inside surface of the wrap.
- 2. Clean the inside surface of the wrap.



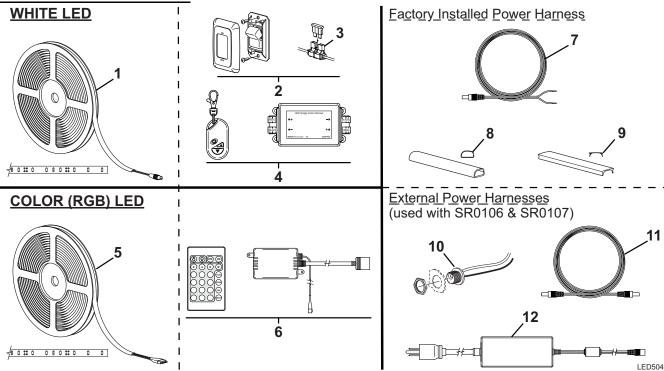




- 3. Attach the harness to the inside surface.
 - 3.1. <u>For Alumaguard</u>: Use 1" by 2" pieces of Velcro (loop) taping the harness on each slat between the joints.
 - 3.2. For Uniquard: Tape the harness to the inside surface using a 2" x 8" piece of Velcro (loop).
 - 3.3. <u>For FLXguard</u>: Position the harness approximately 3/8" from the edge of the material. Attach using a 1" x 6" piece of clear tape (the tape is a special bond tape available from Carefree).

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LED COMPONENTS



Item	Part Number	Description	Notes
White L	ED		
1a	R001714	LED Strip, White, 16' Length, 8" Lead For awnings 18' or less	1
1b	R001715	LED Strip, White, 16' Length, 26" Lead For awnings 19' or longer	1
1c	R001736	LED Strip, White, 49" Length. 8" Lead Used w/ Marquee 66" or less	1
2	SR0101	Switch and Fuse Kit (includes item 3) used with White LED	
3	R019493-001	Fuse Kit (includes fuse holder and 2A fuse)	
4	SR0100	Remote and Controller Kit use with White LED	3
RGB (C	Color) LED		
5a	R060733-001	LED Strip, RGB, 16' Length, 8" Lead For awnings 18' or less	1
5b	R060733-002	LED Strip, RGB, 16' Length, 26" Lead For awnings 19' or longer	1
6	R001763	Remote and Controller Kit, RGB	3
7a	R060740-001	Harness, Factory Installed LED Roller Assy, 16' Length vinyl canopy	
7b	R060718-001	Harness, Factory Installed LED Box Awning,22' Length	
7c	R001718	Harness, Factory Installed LED Roller Assy single flare (acrylic) canopy	
7d	R060715-001	Harness, Factory Installed LED Roller Assy used on Latitude, Longitude	
8	R040616-206	Wire Channel 43" Length	
9	R001716	Slot Cover 24" Length	
10	R060275	Power Socket, 12V External Power Supply	
11	R060724-001	Power Cord, 12V External Power Supply	
12	R060725-001	AC/DC Power Supply 110AC to 12Vdc External Power Supply	
13	SR0107	White LED Upgrade Kit Not Shown	4
14	SR0106	RGB LED Upgrade Kit Not Shown	5

Notes: 1. LED Strips (items 1 & 5) are sent on rolls and cut to length during installation.

- 2. White and RGB strips and components are NOT interchangeable.
- 3. Remotes are not available separately. It is necessary to replace the remote and controller.
- 4. White LED upgrade kit (SR0107) contains items 1a, 3, 4, 10, 11 & 12.
- 5. RGB LED upgrade kit (SR0106) contains items 5a, 3, 6, 10, 11 & 12.

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