



SERVICE MANUAL

TRAVEL'R

RV

AVAILABLE IN FIXED PITCH AND ADJUSTABLE PITCH MODELS



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.

For LED replacement parts and service procedures refer to 052584-301 “LED Service Manual for Vertical Arms” available on-line at www.carefreeofcolorado.com

NOTE: The Travel'r Fixed Flat Pitch Awning has been discontinued as of 08-2012. This product is no longer available for new product installation. References in this manual to the Fixed Flat Pitch are for service only.



TABLE OF CONTENTS

Canopy Replacement	1
Installing the Tractioners.....	4
Motor Replacement	5
Replacing the Motor – Series I	5
Replacing the Motor – Series II	7
Replacing the Gas Shock	9
Replacing the Pitch Adjust Button	10
Diagnostics/Troubleshooting	11
Wiring Diagram - Single Switch Prior to July 2010	15
Wiring Diagram - Single Switch - July 2010 and on.....	15
Wiring Diagram - Travel'r LCDR Direct Response.....	16
Wiring Diagram - Direct Response	17
Standard Maintenance	18
Fabric Care	18
Mildew	18
Pooling	18
Arm Care	18
Hardware Maintenance	18
Manual Override	19
Override With Emergency Terminals	19
Override Without Emergency Terminals	19
Programming the Remote Receiver	20
Operational Notes:	20
Part Number Listing	21
Part Number/Serial Number Location.....	21
Illustrated Parts List	22
Travel'r, Fixed Pitch.....	22
Travel'r, Adjustable Pitch.....	24
Optional Electronics	26

PROPRIETARY STATEMENT

The Travel'r Patio Awning 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.



WARNING

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



CAUTION

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

NOTICE

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

General Safety:



WARNING

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



WARNING

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



WARNING

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



CAUTION

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

NOTICE

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.

SPECIFICATIONS

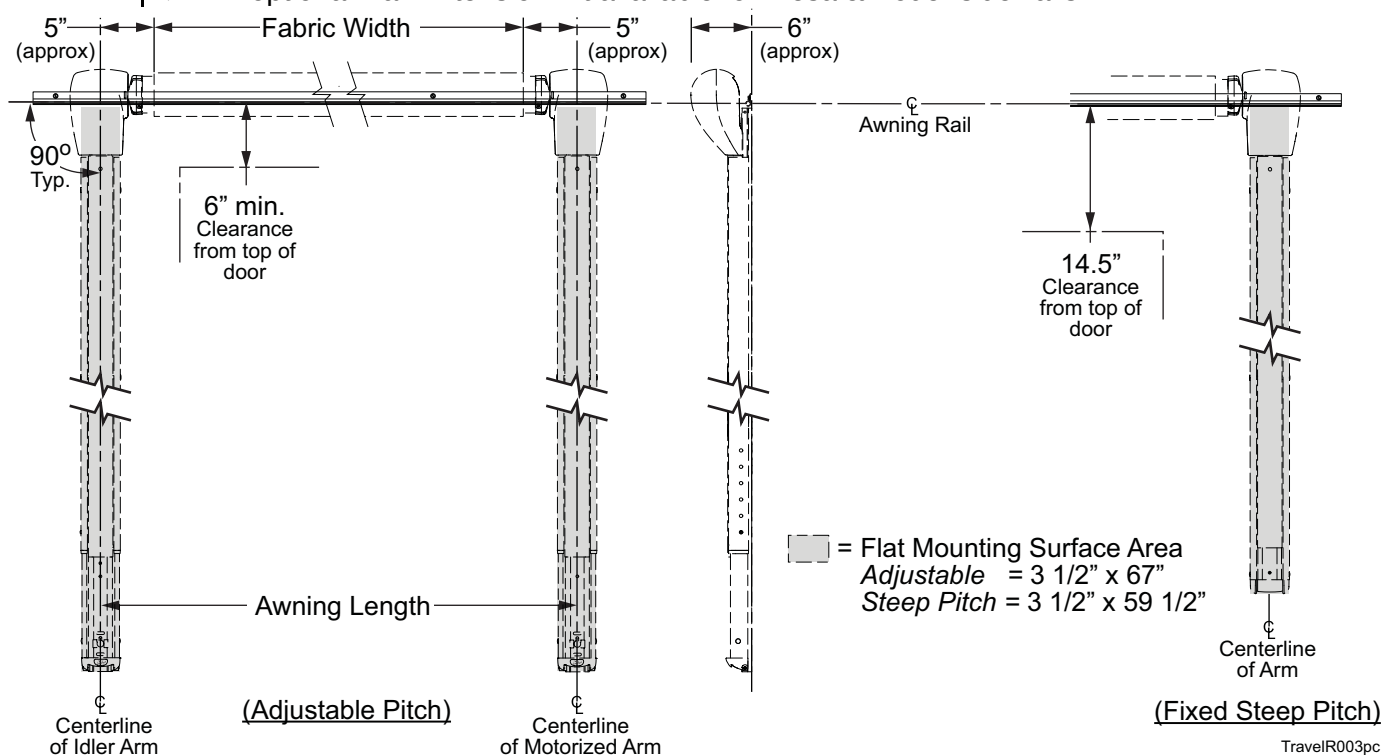
The Travel'r provides motorized awning comfort with Carefree's standards for looks, strength and dependability. It is the successful blend of style, quality and economy.

- The unique "scissor" style arms provide maximum strength, stability and ease of operation.
- Worm gear style motor is billow proof - eliminates the need for travel locks.
- Available in 2 styles: Fixed Steep Pitch Adjustable Pitch

NOTE: The Travel'r Fixed Flat Pitch Awning has been discontinued as of 08-2012. This product is no longer available for new product installation. References in this manual to the Fixed Flat Pitch are for service only.

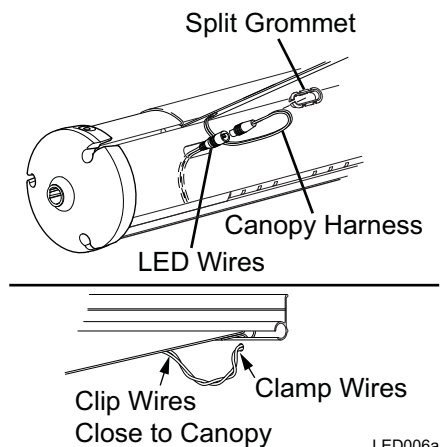
- For the fixed flat pitch and adjustable model set to the flat pitch, the auto-dump automatically releases to allow water to run-off to prevent water pooling. When the water is gone, the arms return to the extended position.
- The Adjustable Pitch Travel'r has easy to use 6-position pitch adjustment. The pitch can be left in any position and the awning will roll up completely! When the awning is rolled back out, it rolls out to the pitch setting previously set.

LENGTH	12' - 21' [366 - 640cm]		
EXTENSION:	8' [244cm]	Drop @ Flat Pitch: 12" [30.5cm]	Drop @ Steep Pitch: 36" [91cm]
	Values are approximate, actual dimensions may vary with specific installations.		
EXTENSION TIME:	28 Seconds (approx)		RETRACT TIME: 32 Seconds (approx)
POWER REQUIREMENTS:	12VDC (operating range 10VDC to 14VDC) Circuit Rating: 15 amp		
POWER SOURCE:	Motor and controls are routed and hardwired into the vehicle's 12V system		
EMERGENCY RETRACT:	Electrical override system (external power source)		
COLOR:	Hardware:	White or Black	
	Fabric:	Vinyl, Polyweave or Acrylic Fabric with Alumaguard or Uniguard	
	Fabric Wrap:	Weatherguard (vinyl) or Metal Wraps: Alumaguard or Uniguard	
OPTIONS:	◆ LCDR Direct Response Electronic Package available as an upgrade kit		
	◆ Available as a complete awning or as an upgrade to existing Carefree or A&E awnings with an 8' extension. If upgrading an A&E with a steel roller tube it is also necessary to replace the roller tube with a Carefree aluminum roller tube.		
	◆ An optional Rail Extension Kit available for Mesa & Yoder sidewalls.		



CANOPY REPLACEMENT

1. Remove the canopy retaining screws in the awning rail.
2. Extend the awning out completely.
3. For awnings with LEDs in the roller tube:
 - 3.1. On the motor side, remove the split grommet from the roller tube.
 - 3.2. Carefully pull the wires and connectors out of the roller tube. Disconnect the connectors.
 - 3.3. 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.
 - 3.4. 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 wall.
4. Remove the screws that attach the end caps to the roller tube and save.
5. While holding the roller tube up, pull the roller tube out of the end cap of the motor head.



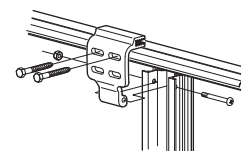
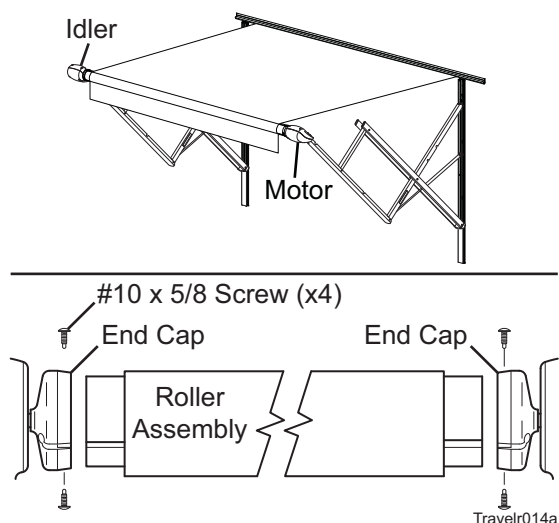
NOTICE Do not allow the roller tube to drop toward the ground. The twisting motion can cause serious damage to the idler arm.

6. Support the roller tube; pull the roller tube out of the end cap of the idler head.
7. Allow the fabric and roller tube to hang down on the side of the RV. Use care to not scratch the side of the RV.
8. Mark the slots that the current fabric is in then remove any fabric retaining screws in the roller tube and tractioners used with Alumaguard. Slide the roller tube off the fabric.
9. Determine the type of canopy replacement:

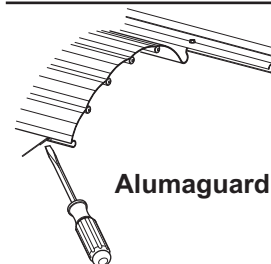
- If replacing a full fabric canopy or canopy with Alumaguard or canopy with Uniguard: For arms using an upper mounting bracket, it will be necessary to remove the upper bracket from one side. After removing the bracket brace the arm using scaffolding or similar support.

NOTICE The lower mounting screws for arms using the upper bracket may not be mounted into structural members of the vehicle wall. Failure to support the arm can result in damage to the vehicle wall.

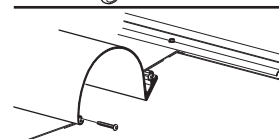
- For canopy only replacement for units with Alumaguard: The fabric is crimped into the aluminum slat. Use a large flat screw driver or similar tool to spread open the crimp on both sides of the fabric.
 - For canopy only replacement for units with Uniguard: Remove the retaining screws from both sides of the Uniguard.
 - For canopies with LEDs at the awning rail: Disconnect the LED strip from the harness for white LEDs or from the controller for RGB applications.
10. Slide the fabric out of the awning rail or metal wrap.



Upper Bracket
(After Market Installations)



Alumaguard



Uniguard TravelR014b

11. Clean and deburr the roller tube slots and awning rail/Alumaguard/Uniguard as required. If not previously done, spread open the awning rail track to facilitate inserting the new fabric.

Tip: Lightly spraying the slots with a dry silicone lubricant will help the fabric slide into the slot without staining the material.

12. Unfold the replacement fabric

- 12.1. Slide the new fabric into the awning rail/Alumaguard/Uniguard.

12.1.1. For Alumaguard: Center the fabric, use a pair of side cutters or similar tool and crimp the aluminum. Use care to not bend or distort the aluminum slats.

12.1.2. For Uniguard: Center the fabric and install the fabric retaining screws removed previously.

12.1.3. Allow the fabric to hang down the side of the coach.

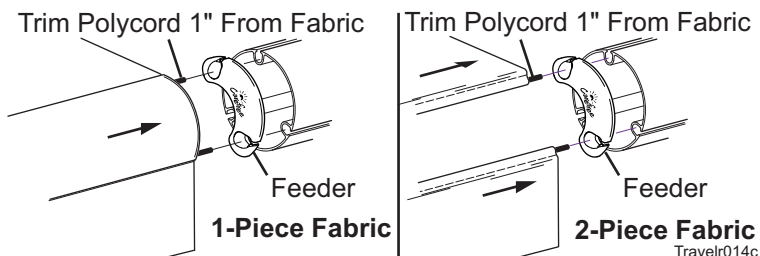
NOTE: While the awning fabric is fairly robust, care must be taken not to snag it on the awning rail.

13. If removed, install the upper mounting bracket.

14. Position the fabric feeders on the roller tube. Be sure to use the same slots as the old canopy.

15. Slide the roller tube on to the new fabric.

16. Remove the feeders.

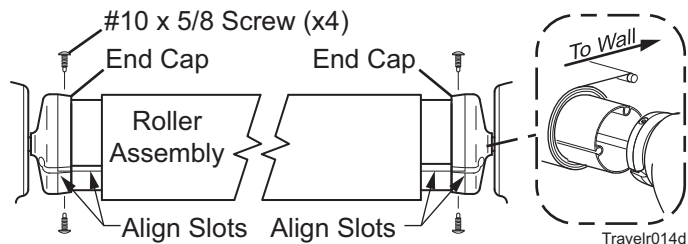


17. Lift and align the roller assembly with the end cap on the motorized arm assembly. Rotate the end cap until the slot in the cap aligns with the empty slot in the roller tube; press the roller assembly fully into the cap. The end cap must seat squarely over the end of the roller tube.

NOTE: The roller assembly must be oriented with the fabric going over the roller toward the vehicle wall.

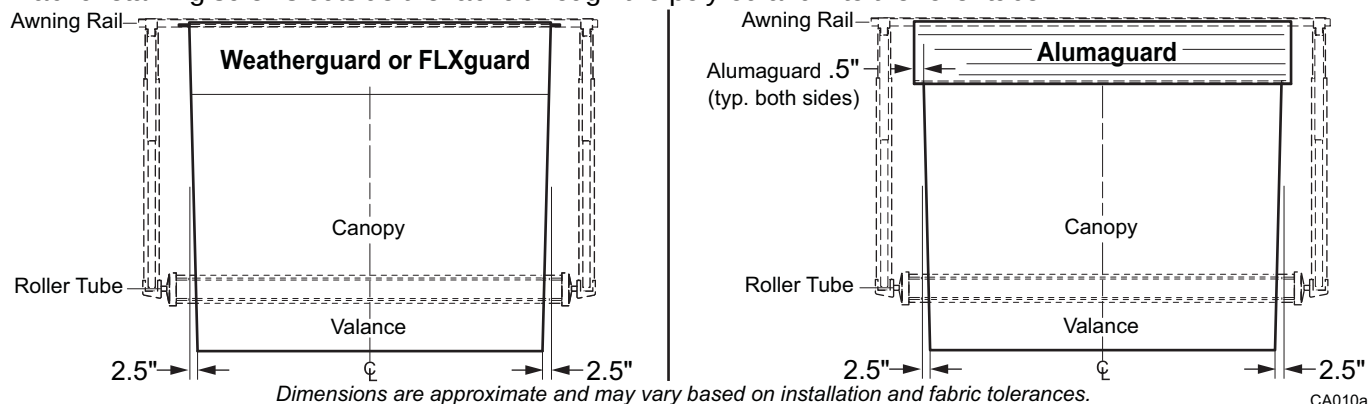
18. Secure the end cap to the roller tube using two #10 square-drive screws.

19. Repeat to attach the idler arm assembly to the roller tube.

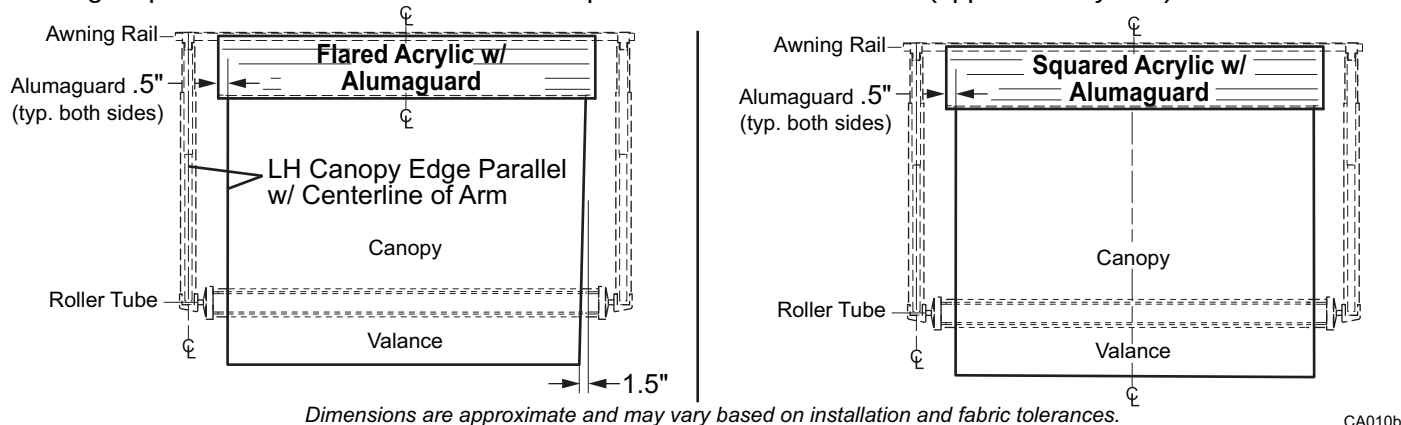
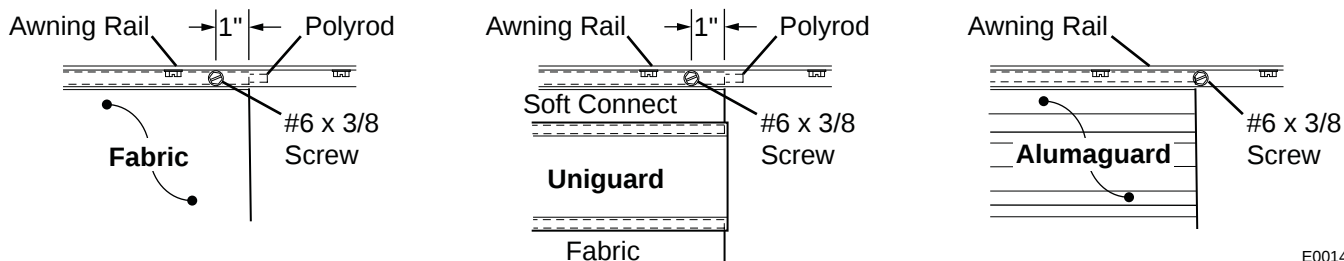


Position the Canopy**20. Alumaguard/Uniguard applications:**

- 20.1. The Alumaguard/Uniguard should be centered between the arms.
- 20.2. Center the fabric in the Alumaguard/Uniguard. Once positioned, use a pair of side cutters or similar tool and crimp the aluminum over the polyrod. Use care to not bend or distort the aluminum slats.

21. FLXguard and Weatherguard: Center the fabric in the awning rail between the arms.**22. Replacement canopies are flared (tapered) on both sides.** Center the fabric on the roller tube. Install the fabric retaining screws outside the fabric through the polyrod and into the roller tube.**Current Replacement Fabrics**

NOTE: Previous acrylic canopies with LEDs were flared only on the right side. If servicing an awning and not replacing the canopy, the LH edge of the canopy should be parallel to the centerline of the LH arm leaving a larger space between the roller tube end cap and fabric on the RH side (approximately 1.5").

**Previous Acrylic Replacement Fabrics****23. Extend and retract the awning to confirm that the canopy is rolling up straight. Then secure the fabric in the awning rail using the fabric retaining screws removed previously.**

- 23.1. For vinyl awnings, place screw through awning rail, polyrod and canopy approximately 1" in from the end of the fabric.
- 23.2. For Uniguard awnings, place screw through awning rail, polyrod and the soft connect material approximately 1" in from the end of the fabric.
- 23.3. For Alumaguard awnings, place screw on the outer edge of the Alumaguard (not through the Alumaguard).

24. For awnings with LEDs in the roller tube:

- 24.1. Connect the canopy harness connector and LED connector. Then carefully push the connectors into the roller tube.
- 24.2. Place the split grommet over the canopy harness and press the grommet into the hole of the roller tube.
- 24.3. If the canopy has a metal wrap, attach the wire to the inside of the wrap (see page **Error! Bookmark not defined.**) then proceed with the next step.
- 24.4. 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.
- 24.5. 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.
- 24.6. Connect the new harness to the switch. Two (2) .187, 18-24 awg female disconnects are provided if connecting to a switch.
- 24.7. Alternate method: 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.

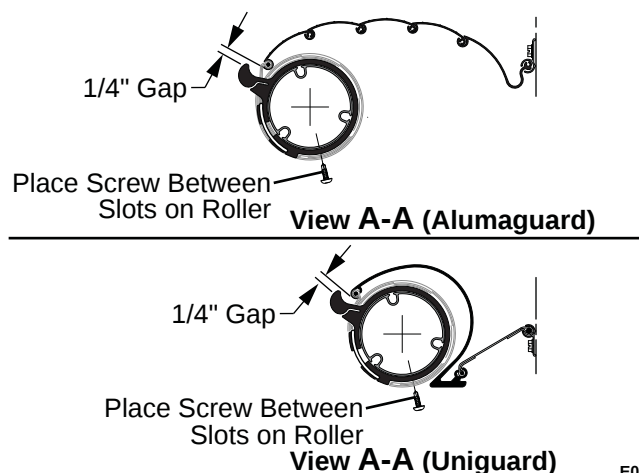
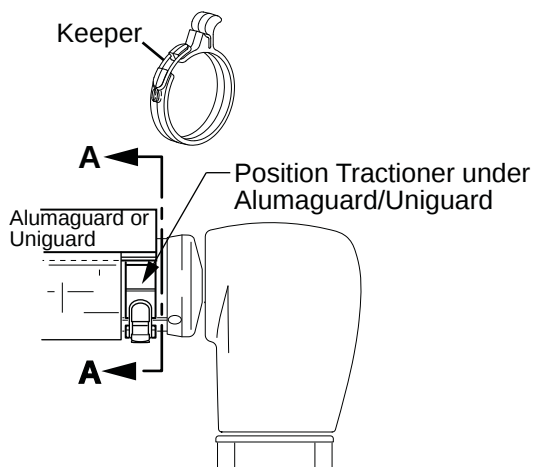
NOTE: Be sure to allow enough harness from the canopy to provide a 3" loop of harness and adequate length for the connectors to be pushed inside the wall before sealing the hole and harness with a quality silicone sealant.

25. For canopies with LEDs at the awning rail: Connect the LED strip to the harness for white LEDs or to the controller for RGB applications.

For Alumaguard/Uniguard installations, go to "Installing the Tractioners".

INSTALLING THE TRACTIONERS

The tractioners are used with the metal fabric wraps.

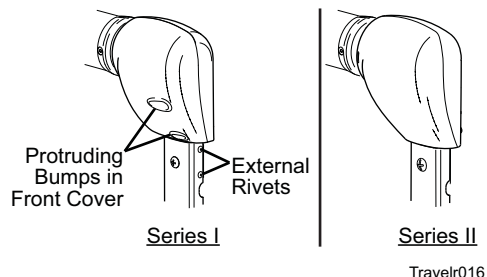


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1. Partially extend the awning until the Alumaguard/Uniguard is extended as shown.
2. Unlock the keeper and wrap the tractioner around the roller tube.
3. Position the tractioner under the Alumaguard/Uniguard with a 1/4" gap between Alumaguard and tractioner. Lock the keeper.
4. Repeat for the other end of the roller tube.
5. Extend the awning to verify that the tractioners are lifting the metal wrap up and over the roller assembly.
6. To secure the tractioner, drill a 1/8" hole through the tractioner and roller tube, roughly center the hole between two slots of the roller tube.
7. Secure with one (1) #10 square drive screw.

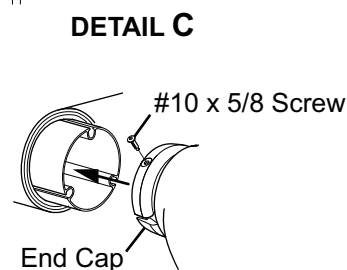
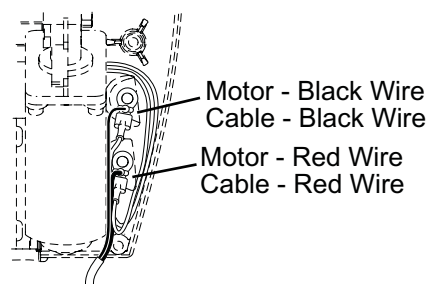
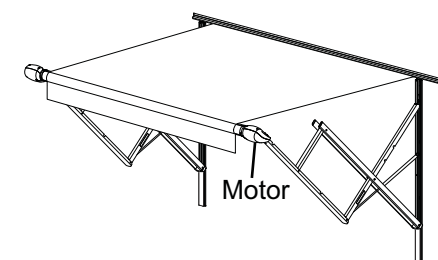
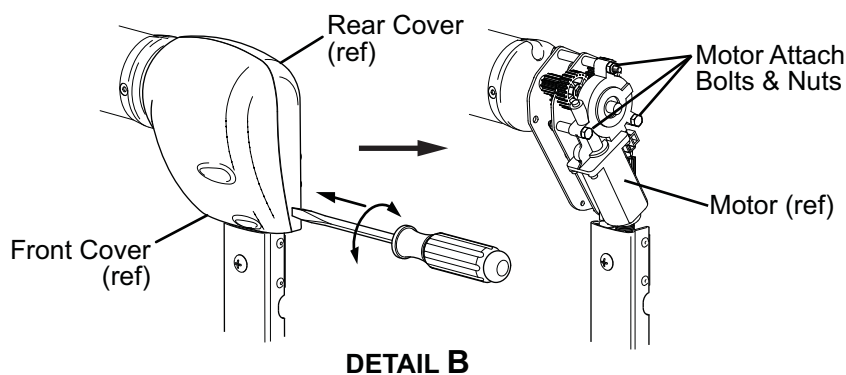
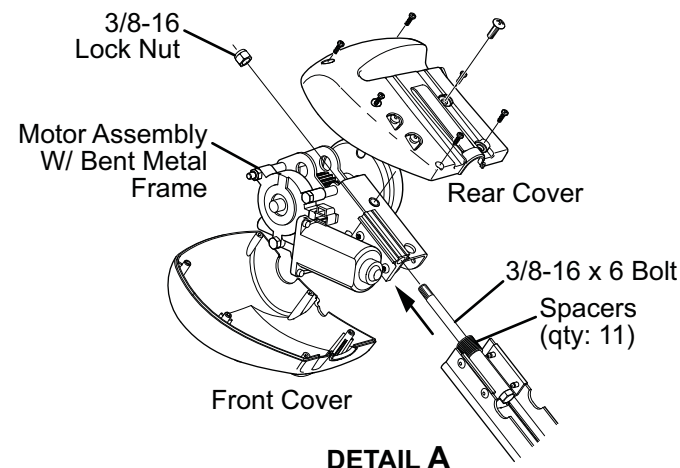
MOTOR REPLACEMENT

STOP! Before continuing, it is necessary to determine which motor configuration is installed on the awning. **SERIES I** uses a bent sheet metal mounting frame. **SERIES II** uses a cast metal mounting frame. The mounting and attachment of the two configurations are different. To distinguish between the two, look at the motor head. The bent sheet metal frame (Series I) has two protruding bumps in the front cover. There are also two exposed rivets on each side of the arm channel. The cover for the cast metal (Series II) is smooth and there are no rivets.



NOTE: Motor assemblies and covers are not interchangeable between the two configurations.

REPLACING THE MOTOR – SERIES I



1. (refer to Detail A) For Awnings Fully or Partially Extended:
 - 1.1 On the right hand arm remove the front cover by removing the six (6) smaller screws from the back of the motor head. Save cover and screws.
 - 1.2 Disconnect the motor and cable wires from inside the rear cover. Note the location of each wire.
 - 1.3 Remove the rear cover by removing the one (1) large screw from the back of the motor head. Save cover and screw.
 - 1.4 Go to step 3.

2. (refer to Detail B) For Awnings Fully Retracted:

NOTE: This procedure will require replacing the front and rear motor covers in addition to the motor assembly.

2.1 Place a large flat blade screwdriver or similar tool in the seam between the front and rear covers. Using a twisting and prying motion, break the covers off. It may be necessary to use a hammer and lightly tap the screwdriver into the plastic to establish a starting point.

Tip: Start at the bottom and work around the seam until the covers are off.

2.2 Disconnect the motor and cable wires from inside the rear cover. Note the location of each wire.

2.3 (refer to **Error! Reference source not found.**, Detail B) Firmly hold the motor and idler arms up while removing the three (3) motor attach bolts and nuts.

2.4 Remove the motor from the motor mounting frame.



CAUTION The arms are under tension from the gas shocks. When the motor is disengaged from the gears, the roller tube will be able to free spin and both arms will extend from the gas shock tension. Use extreme care and hold the arms in position. It will be necessary to have at least one other person holding the idler arm.

2.5 While holding on to the arms and roller tube, allow the awning to extend to the maximum position; the fabric will unroll from the roller tube.

2.6 On the right hand arm remove any pieces of the front and rear covers. Remove the cover's attaching screws and save.

2.7 Go to step 3.

3. Remove the two square drive screws attaching the end cap to the roller tube and separate the roller tube and end cap. It will be necessary to hold the roller tube and motor arm. Allow the arm to extend out.

4. Use a scaffold or similar device to support the roller tube.



NOTICE Do not allow the roller tube to drop toward the ground. The twisting motion can cause serious damage to the idler arm.

5. Loosen and remove the 3/8-16 lock nut from the mounting bolt. Make note of the number and order of the spacer-washers between the arm mounting block and the motor head.

Tip: When the nut is removed, the bolt will slide out of the arm mounting block inside the arm channel. Placing tape on the head of the mounting bolt and the spacers will prevent the bolt and the spacers from falling out when the nut and motor are removed.

6. Remove the motor assembly. The motor assembly consists of the motor, mounting frame, gears, shaft and roller end cap.

7. Place the new motor assembly in position over the mounting bolt. Ensure that the spacer-washers are all accounted for.

8. Secure using the washer and lock nut removed previously. The nut should be tightened until snug but the motor head should be able to swivel by hand.

9. Attach the rear cover to the motor assembly using the large screw removed previously.

10. Attach the motor and cable wires to the terminals inside the rear cover.

11. Align the roller tube with the end cap on the motorized arm assembly. Rotate the end cap until the slot in the cap aligns with the empty slot in the roller assembly, and then press the roller assembly fully into the cap. The end cap must seat squarely over the end of the roller assembly when complete.

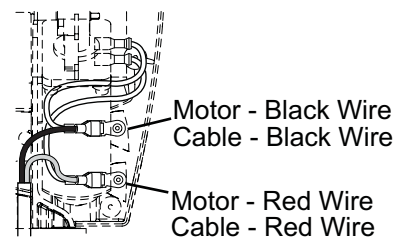
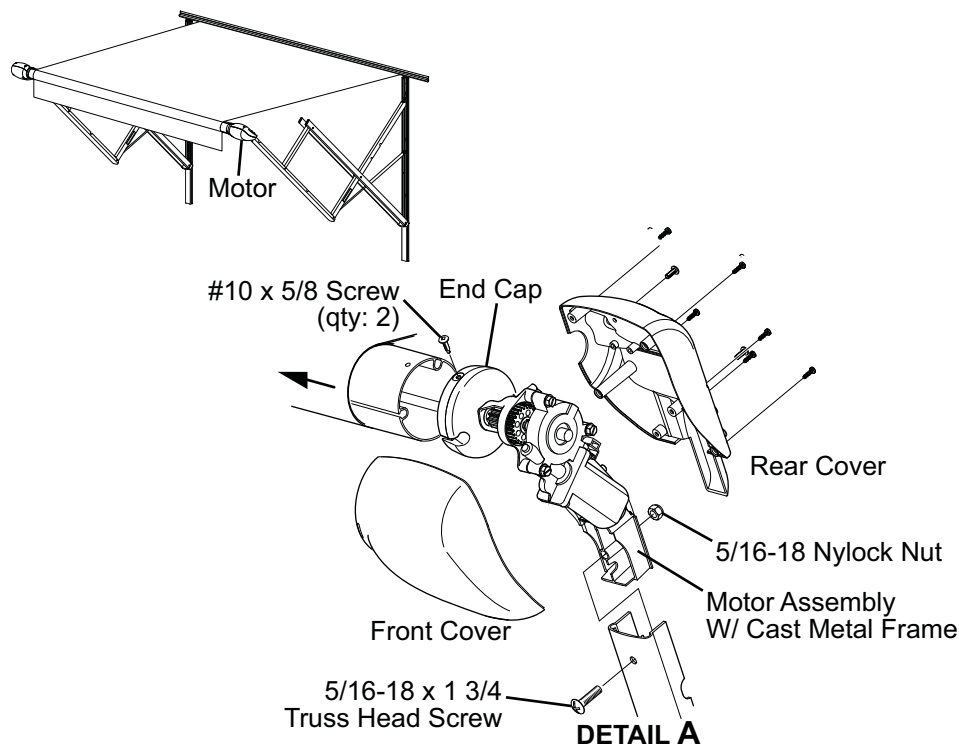
12. Secure the end cap to the roller assembly using two #10 x 5/8 square-drive screws.

13. Restore power and test operation. If the awning moves in the wrong direction (i.e. extends when retract is pushed) reverse the two small wires plugged into the motor.

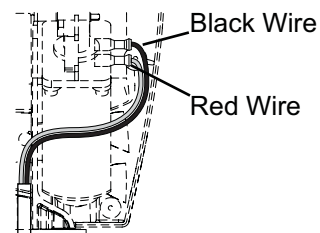
14. Attach the front cover using the small screws removed previously.

REPLACING THE MOTOR – SERIES II

⚠ CAUTION The arms are under tension from the gas shocks. When the motor and/or roller tube is disengaged from the arm, the roller tube will be free to spin; **both** arms will extend from the gas shock tension. Use extreme care and hold the arms in position. It will be necessary to have at least one other person holding the idler arm.



Rear Cover
w/ Override Terminals



Rear Cover
w/o Override Terminals

DETAIL B

Travelr017

1. For Awnings Fully or Partially Extended:

- 1.1 Remove the front cover by removing the six (6) smaller screws from the back of the motor head. Save cover and screws.
- 1.2 Disconnect the motor and cable wires from inside the rear cover. Note the location of each wire.
- 1.3 Remove the rear cover by removing the two (2) large screws from the back of the motor head. Save cover and screw.
- 1.4 Remove the two square drive screws attaching the end cap to the roller tube and separate the roller tube and end cap. It will be necessary to hold the roller tube and motor arm. Allow the motor arm to extend to its maximum position.
- 1.6 If the awning is only partially extended, hold onto the idler arm and allow it to extend while supporting and guiding the roller tube and allowing the fabric to unroll.
- 1.7 Using a scaffold or similar device support the roller tube.

NOTICE Do not allow the roller tube to drop toward the ground. The twisting motion can cause serious damage to the idler arm.

- 1.8 Remove the 5/16-18 screw and nut then remove the motor assembly from the arm channel.
- 1.9 Go to step 3.

2. For Awnings Fully Retracted:

- 2.1 While holding both arms and the roller tube, remove the 5/16-18 screw. Allow the motor arm to extend out and away from the motor assembly and roller tube.
 - 2.2 Tie the idler arm in the closed or partially open position.
 - 2.3 Using a scaffold or similar device support the roller tube.
 - 2.4 Rotate the roller tube and motor head around to access the cover screws on the back
 - 2.5 Remove the front cover by removing the six (6) smaller screws from the back of the motor head. Save cover and screws.
 - 2.6 Disconnect the motor and cable wires from inside the rear cover. Note the location of each wire.
 - 2.7 Remove the rear cover by removing the two (2) large screws from the back of the motor head. Save cover and screws.
 - 2.8 Remove the two square drive screws attaching the end cap to the roller tube and separate the roller tube and end cap.
3. Position the new motor assembly in the arm channel and attach using one each 5/16-18 x 1 1/2 bolt and nylock nut.
 4. Attach the rear cover to the motor assembly using the large screws removed previously.
 5. Attach the motor and cable wires to the terminals inside the rear cover.
 6. Align the roller tube with the end cap on the motorized arm assembly. Rotate the end cap until the slot in the cap aligns with the empty slot in the roller assembly, and then press the roller assembly fully into the cap. The end cap must seat squarely over the end of the roller assembly when complete.
NOTE: It may be necessary to close and hold the arm to align the end cap and roller tube.
 7. Secure the end cap to the roller assembly using two #10 x 5/8 square-drive screws.
 8. Restore power and test operation. If the awning moves in the wrong direction (i.e. extends when retract is pushed) reverse only the two motor wires in the rear cover.
 9. Attach the front cover using the small screws removed previously.

REPLACING THE GAS SHOCK

CAUTION The gas shock has approximately 85 lbs of pressure in the closed position. A pressurized shock can open rapidly when removed or released and cause personal injury and property damage.

1. Open the awning.

NOTE: The arm may not open completely when the shock has lost pressure or is removed. It may be necessary to carefully pull the arm out and away from the vehicle to open the awning.

2. Remove the stop bolts and save.
3. Remove the two square drive screws attaching the end cap to the roller tube and separate the roller tube and end cap. It will be necessary to hold the roller tube and motor arm. Allow the arm to extend out.
4. Use a scaffold or similar device to support the roller tube.

NOTICE Do not allow the roller tube to drop toward the ground. The twisting motion can cause serious damage to the other arm.

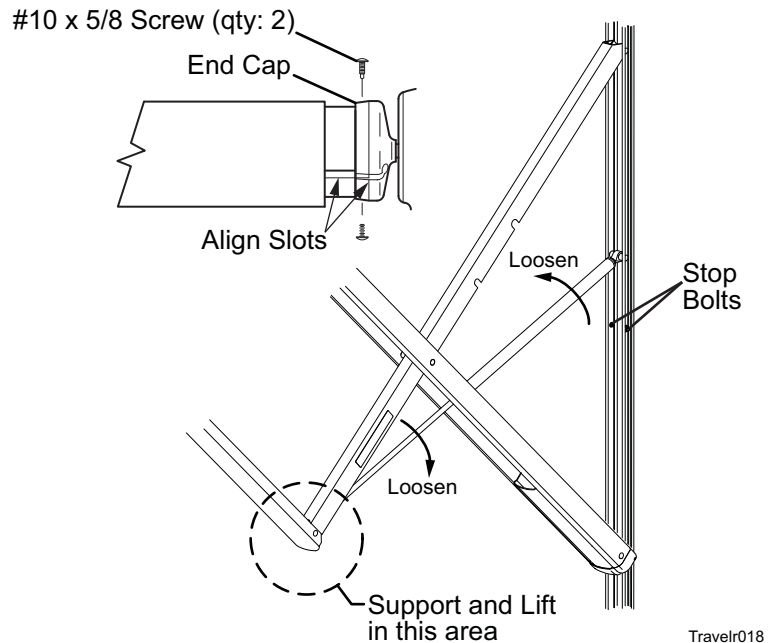
5. Support the arm in the area shown.
6. Unscrew the shock barrel from the clevis in the mounting channel.

Tip: Wearing a pair of rubber gloves will aid in gripping the surfaces of the shock.

7. Unscrew the shaft from the clevis in the arm joint. Set old shock aside.

NOTE: It may be necessary to use vice grips or pliers on the old shock to unscrew the shock from the clevis. DO NOT use vice grips or pliers on the new shock. Damage to the surface of the shaft or damage to the barrel can cause the new shock to not work correctly.

8. Unpack the new shock and carefully allow it to extend to its maximum length.
9. Coat the threads of the shaft of the new shock with a non-permanent thread lock (i.e. loctite) then screw the rod into the clevis of the arm elbow. Hand-tighten only.
10. Lift and hold the arm up in the area indicated in **Error! Reference source not found..** The arm should be unfolded and extended as far as possible.
11. Coat the threads of the barrel of the new shock with a non-permanent thread lock (i.e. loctite) then screw the barrel into the clevis in the mounting channel. Hand-tighten only. It will be necessary to grip and hold the shaft while turning the barrel.
12. Align the roller tube with the end cap on the arm assembly. Rotate the end cap until the slot in the cap aligns with the empty slot in the roller assembly, and then press the roller assembly fully into the cap. The end cap must seat squarely over the end of the roller assembly when complete.
13. Secure the end cap to the roller assembly using two #10 x 5/8 square-drive screws.
14. Partially retract the awning. It may be necessary to lightly pull down on the lower arm at the mounting channel until the rollers are past the location of the stop bolts. Always pull down from the bottom of the arm to avoid pinching.
15. Reinstall the stop bolts removed in step 2.



Travelr018

REPLACING THE PITCH ADJUST BUTTON

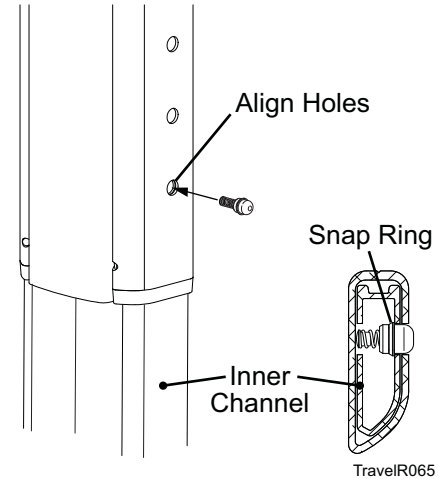
The kit is a simple to install replacement for the pitch adjustment button.

This procedure may be done with the awning closed or open.

1. If not already done, align the inner and outer holes in the arm. It does not matter which outer hole is used.

NOTE: It is not necessary to remove the broken button or spring. If visible, use a small screwdriver or equivalent to push the old spring away from the hole.

2. Carefully push the spring into the holes.
3. With the button aligned with the holes, squeeze the snap ring to fit through the holes and press the button into the holes until the snap ring expands inside the inner channel.



DIAGNOSTICS/TROUBLESHOOTING

The following procedures are intended to aid the service technician to logically resolve operational issues with the mechanical and standard electronics installations.

Common Operational Items

The following are operational items that may come up as questions during normal operation. These are also given in the operator's manual.

1. The motor has a thermal protection circuit. If the motor overheats, the circuit will shut off the motor. Wait approximately 15 minutes, operation will return to normal. As an example, this may occur if the awning is fully closed and retract switch pushed repeatedly, then the awning does not extend.
2. The awning seems to extend and retract slowly. The operational range is 28-35 seconds to extend or retract. If the power supply is on the low side of the range (10V) the awning will move slower.
3. The awning may appear to move jerkily. When the fabric is rolled out, the Alumaguard or Uniguard may "bounce" creating a wave like motion in the canopy fabric. This will create the appearance of moving jerkily.
4. With Uniguard, the awning sticks or hangs up. When Uniguard is installed with a vinyl canopy, the vinyl will have a tendency to "cling" to the Uniguard when not used over an extended period. Open and close the awning in short bursts 2 or 3 times, the awning will then open normally.

In the charts below, YES is a positive response to the test; NO is a negative response.

D01 THE AWNING OPERATES IN REVERSE OF THE SWITCH PLATE			
<i>This condition generally occurs during new installations or when major components have been replaced.</i>			
A	Confirm Switch is mounted in correct position and correctly oriented.	YES	Switch mounted OK; go to test B
		NO	Carefully remove the switch, rotate 180 and reinstall in panel. Reconnect harnesses and retest
B	Confirm switch is wired correctly. Use the wiring diagram and confirm the wires to/from the switch to the connector are correctly placed.	YES	Switch wired OK; go to test C
		NO	Rewire the switch according to the wiring diagram

D02 THE AWNING DOES NOT EXTEND AND/OR RETRACT			
A	Check Installation Integrity Use the wiring diagram and confirm that the components and wiring are properly installed and connected	YES	Go to test B
		NO	Correct as required
B	Confirm Power Supply Is vehicle battery or power source providing 10V to 14V to the Switch?	YES	Go to test B
		NO	Correct as required
C	Test Motor Function 1. For installations with an external plug; Disconnect plug. 2. For installations with a single switch; Remove switch plate and disconnect the motor wires from the switch. 3. Attach jumper leads to the emergency terminals located on the back of the motor head. 4. Connect the other ends of the jumpers to a 12-18VDC power source (i.e. drill battery). It may be necessary to try then reverse the leads on the battery and try again. 5. Does the motor run?	YES	Motor is good, go to test D
		NO	Motor is defective - replace
D	Test wire continuity between motor and wire ends.	YES	Wire continuity good – reconnect the wires disconnected in the previous test then go to test D
		NO	Repair as required then reconnect the wires disconnected in the previous test.

D02 is continued on next page

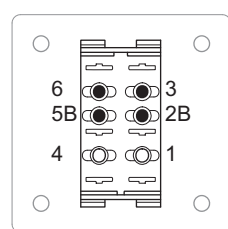
D02 (CONT)

E Test Switch Function – Single Switch Installation (this test requires a continuity tester)
The Patio Switch used in the Single Switch Installation is a center on that is internally cross-wired to short in the center position to provide dynamic braking for the motor to prevent "drift" when the awning is stopped.

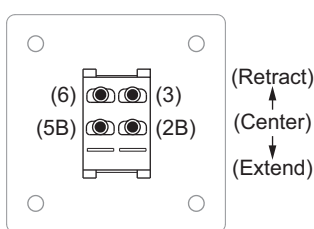
Test 1 is for Series I & II switches. Use Test 2 for Series III switches.

Observe continuity for switch in center position, extend position and retract position.

1a Place one lead of tester on pin 2B. Touch 2nd lead to the other pins one at a time.	Pin:	Center	Extend	Retract	YES	Test OK, all checks pass – go to step 1b
	3	N	Y	N		
	6	Y	N	Y		
	5B	Y	N	N		
N = no continuity, Y = continuity					NO	Test failed; switch defective - replace
1b Place one lead of tester on pin 5B. Touch 2nd lead to the other pins one at a time.	Pin:	Center	Extend	Retract		
	3	N	N	Y		
	6	Y	Y	N		
N = no continuity, Y = continuity					NO	Test failed; switch defective - replace



Series I Switch



Series II Switch

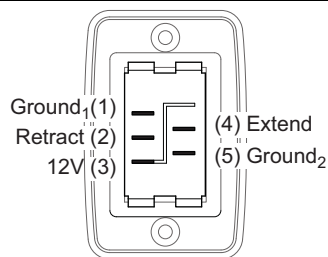
Note:
 The Series II switch terminals are not labeled.
 The illustrations are labeled for identification purposes in the procedures above.

Travelr019

Test 2 is for Series III switches. Use Test 1 for Series I & II switches.

Observe continuity for switch in center position, extend position and retract position.

2a	Place one lead of tester on 12V pin (3). Touch 2nd lead to the other pins one at a time.	Pin:	Center	Extend	Retract	YES	Test OK, all checks pass – go to step 2b
		2	N	N	Y		
		4	N	Y	N		
		N = no continuity, Y = continuity				NO	Test failed; switch defective - replace
		All other pins should be NO in all switch positions					
2b	Place one lead of tester on Ground ₁ pin (1). Touch 2nd lead to the other pins one at a time.	Pin:	Center	Extend	Retract	YES	Test OK, all checks pass – go to step 2c
		2	Y	Y	N		
		N = no continuity, Y = continuity					
		All other pins should be NO in all switch positions					
		2c	Place one lead of tester on Ground ₂ pin (5). Touch 2nd lead to the other pins one at a time.	Pin:	Center	Extend	Retract
4	Y			N	Y		
N = no continuity, Y = continuity				NO	Test failed; switch defective - replace		
All other pins should be NO in all switch positions							



Series III Switch

Note:
 The Series III switch terminals are not labeled.
 The illustration is labeled for identification purposes in the procedures above.

Travelr019a

D03 ARM DOES NOT EXTEND OR DOES NOT EXTEND COMPLETELY			
A	Visually confirm motor is working when control switch is pressed.	YES	Go to test B
		NO	Go to test D02 – Awning Does Not Extend and/or Retract – page 11.
B	Confirm that the arm channels, pivot points and contact points are clean and clear of obstructions.	YES	Go to test C
		NO	Clean and Lubricate then retest. If the arm still hangs up – go to test C
C	If the awning has Alumaguard, check that the tractioners are installed and positioned correctly (refer to page 4).	YES	Tractioners OK - Go to test D
		NO	Reposition and attach the tractioners according to the directions on page 4 and retest.
D	1. Open the awning. If the awning arm does not extend, carefully pull the arm out as the fabric is unrolling. 2. Does the fabric sag when the awning is extended? 3. Inspect the shock. Is there evidence of dirt build up and oil leaks on the rod? 4. Hand close and open the arm. Is the tension from the shock mushy, weak or missing? NOTE: To close the awning by hand, push the head of the arm toward the coach. Pulling down on the head or roller tube WILL NOT close the awning.	YES	Shock is defective – replace. See procedure on page 9.
		NO	Shock extends with arm and is solid. Shock pressure is approximately 85 lbs. Go to test E.
E	<i>This step only applies to new Uniguard and Alumaguard installations that do not extend correctly.</i> Check that the centerline of the roller tube is 3/4" ± 1/4" above the centerline of the awning rail. Refer to 052540-002 Travel'r, Installation Manual and reposition arms as required.		

D04 DIRECT RESPONSE AWNING DOES NOT AUTO-RETRACT DURING WINDY CONDITIONS

The auto - retract system is only active when the power switch is in the ON position.

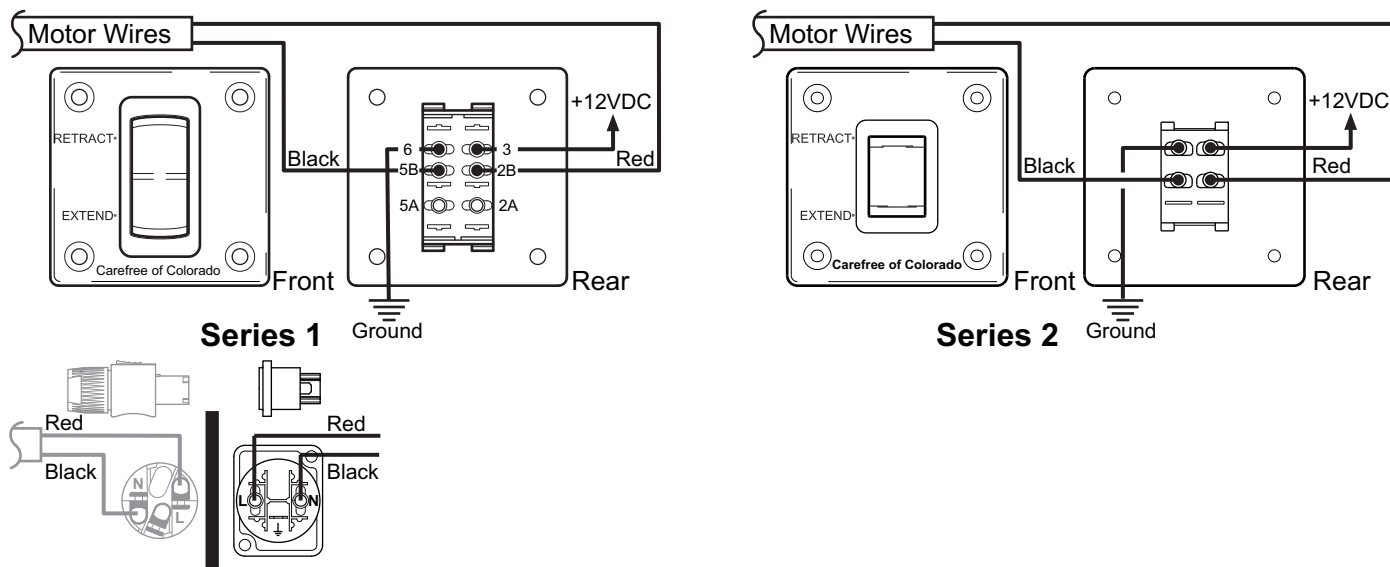
A	Confirm awning operates normally using the standard extend/retract switch with power on.	YES	Module is defective - replace
		NO	Go to Test D05

D05 DIRECT RESPONSE STANDARD OPERATION

A	Check Installation Integrity Use the wiring diagram and confirm that the components and wiring are properly installed and connected	YES	Go to test B
		NO	Correct as required
B	Confirm Power Supply Is vehicle battery or power source providing 10V to 14V to the Power Switch?	YES	Go to test C
		NO	Correct as required
C	Test Motor Function 1. Remove the front cover of the motor head. 2. Disconnect the red and black wires from the module to the terminals inside the rear cover. 3. Attach jumper leads to the emergency terminals located on the back of the motor head. 4. Connect the other ends of the jumpers to a 12-18VDC power source (i.e. drill battery). It may be necessary to try then reverse the leads on the battery and try again. 5. Does the motor run?	YES	Motor is good, go to test D
		NO	Motor is defective - replace
D	Test Power Switch 1. Disconnect wires from Power Switch. 2. Using a continuity tester place one lead on each terminal. 3. With the switch in the OFF position, circuit should be open. 4. With the switch in the ON position, circuit should be closed.	YES	Switch is good, go to test E
		NO	Switch defective - replace switch assy.
E	Test the Extend/Retract Switch 1. Using a continuity tester, place one lead on center pin. Place the second lead on bottom pin. Put the switch in the center position and measure the continuity. Circuit should be open. 2. Press the switch down (Extend). Circuit should be open. 3. Press the switch up (Retract). Circuit should be closed. 4. Move the second lead to the top pin. Put the switch in the center position and measure. Circuit should be open. 5. Press the switch down (Extend). Circuit should be closed. 6. Press the switch up (Retract). Circuit should be open	YES	Switch is good, go to test F
		NO	Switch defective - replace switch assy.
F	Test wire continuity between motor and wire ends.	YES	Wire continuity good – module is defective replace
		NO	Repair as required then reconnect the wires.

WIRING DIAGRAM - SINGLE SWITCH PRIOR TO JULY 2010

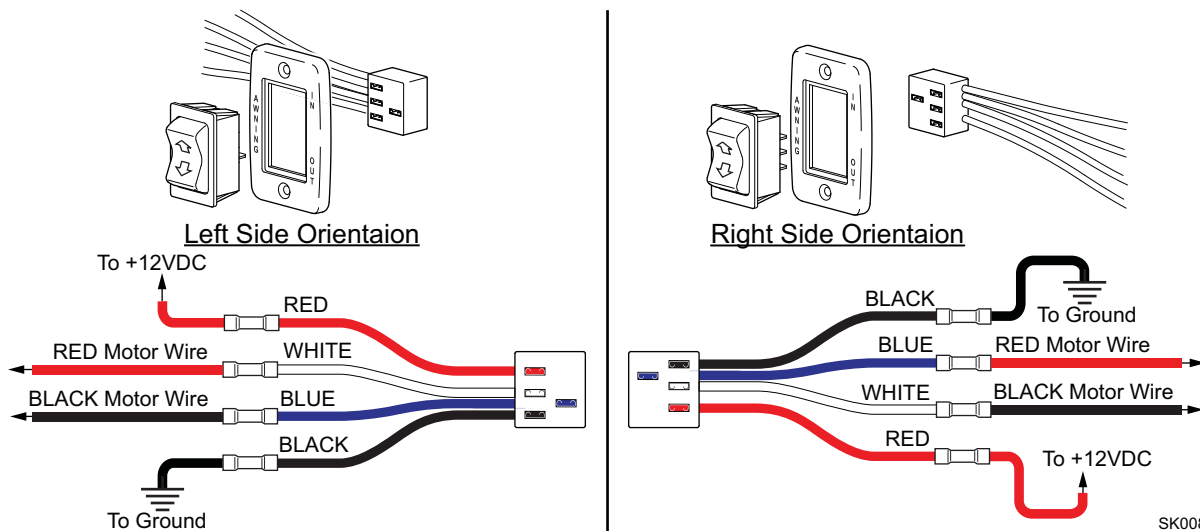
Series I and Series II switch hardware has been discontinued. For wiring replacement switches, use instructions provided with the Single Switch Kit.



Detail A
Wall Mount Connector

TravelR008

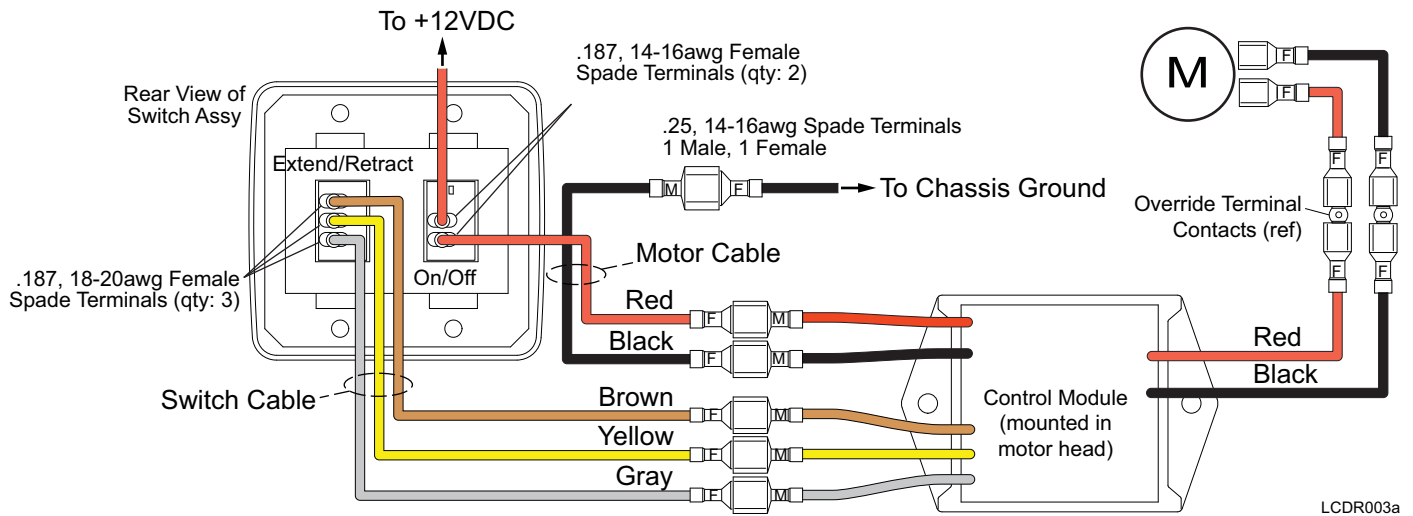
WIRING DIAGRAM - SINGLE SWITCH - JULY 2010 AND ON



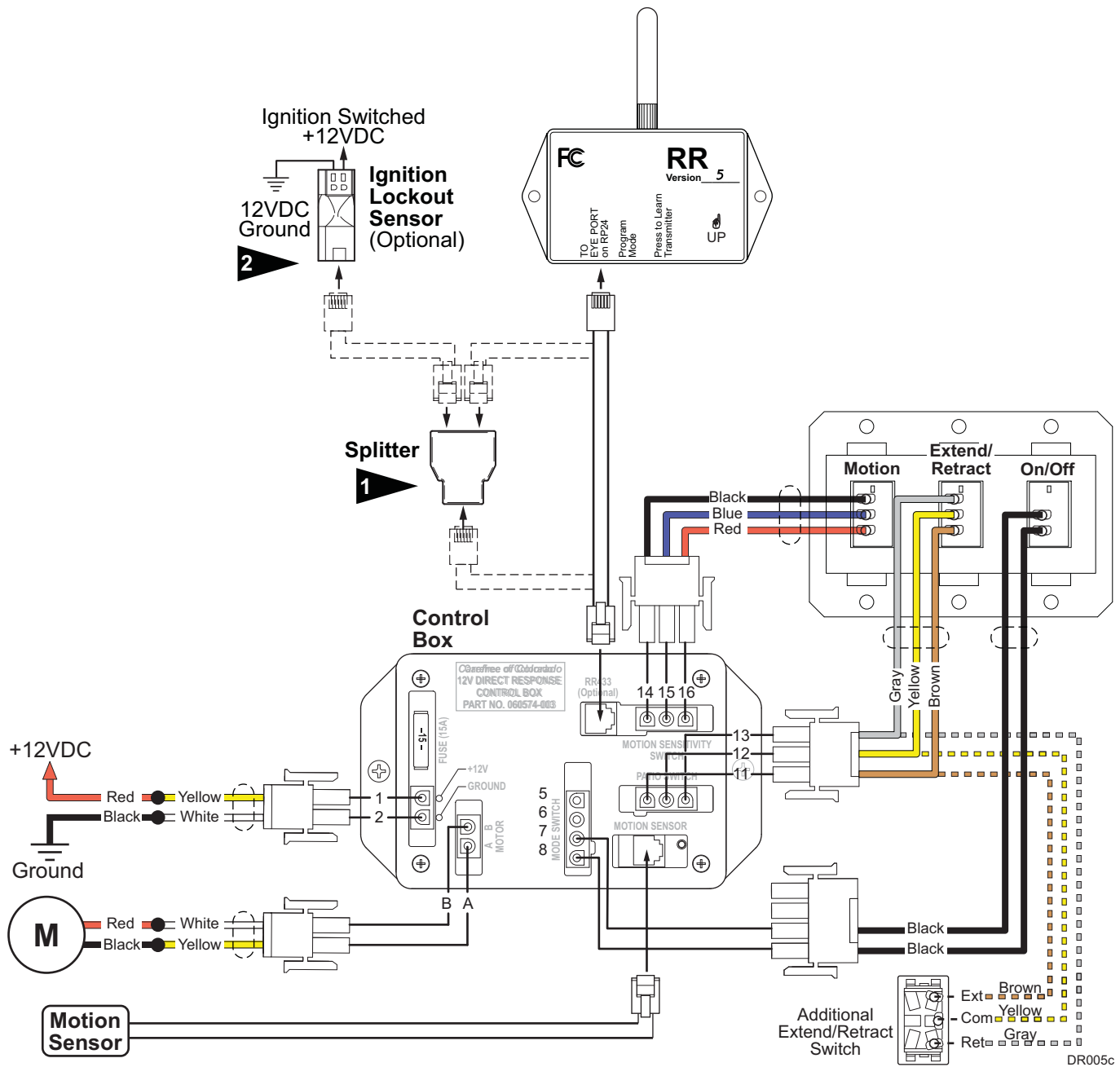
SK008

NOTES:

1. If connector block is oriented with wires to the left, reverse the motor wires. WHITE connector block wire goes to RED motor wire, BLUE connector wire goes to BLACK motor wire.
2. For first time replacement installation, refer to installation instructions furnished with replacement switch kit.

WIRING DIAGRAM - TRAVEL'R LCDR DIRECT RESPONSE

WIRING DIAGRAM - DIRECT RESPONSE



1 Splitter is used only when the optional Lock-Out Sensor is installed. Connect the RF receiver directly to the control box if Lock-Out is not installed.

2 The optional Lock-Out Sensor can be used only with control boxes marked "060574-003" or higher.
Wires for the sensor are not pin specific.

STANDARD MAINTENANCE

Maintaining the Carefree Manual Patio Awning is easy. Just follow these basic steps:

- Always operate the awning according to the instructions.
- Periodically check that the fasteners are tight. Tighten if necessary.
- Keep the awning fabric and arms 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 an awning frame.
 - For Vinyl Fabric – Use a soft brush and warm water with soap.
 - For Acrylic Fabric – Use a stiff 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 awning.

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 awning.

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 awning in steps (8"-12") to dump the water. This will help prevent the fabric from stretching or distorting.

The effects of wind and rain on an awning are unpredictable. Severe damage to the awning and the vehicle may result. IF WIND OR EXTENDED PERIODS OF RAIN ARE EXPECTED, ROLL UP THE AWNING AND SECURE FOR TRAVEL.

ARM CARE

The best method of keeping the arms and braces operating smoothly is to clean them. Dirt and debris can cause the channels not to slide easily.

NOTE: Avoid introducing water into the motorized housings.

Periodically wash out the channels with running water (i.e. a hose) to keep them clean. If the arms still do not move easily, lightly spray the contact and pivot points with a dry silicone lubricant after the arms have been cleaned and dried thoroughly.

Hardware Maintenance

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

MANUAL OVERRIDE

If the original power source fails or is unavailable, the Travel'r has emergency override terminals (12V). The terminals can be used with a 10V-14V power source, such as a cordless drill battery or car battery.

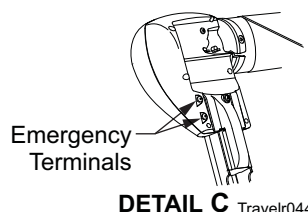
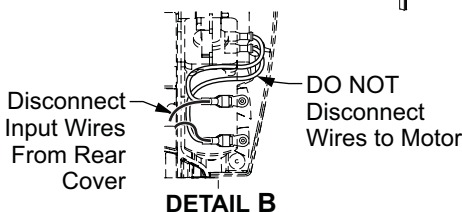
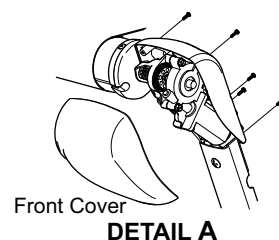
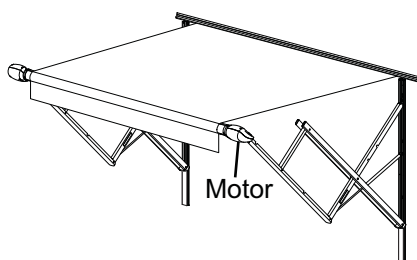
NOTICE Do not connect the Travel'r wires to a 110V power source! Doing so will permanently damage the awning!

Travel'r models built through 2012 have override terminals on the back of the motor head. If the motor head has the metal terminals, use the procedure "Override with Emergency Terminals". For models built in 2013 and later, use "Override without Emergency Terminals".

Override With Emergency Terminals

NOTICE Do not use the emergency terminals without following the directions below. The electronic circuit creates a dynamic brake for the motor by shorting and grounding the motor leads. Steps 1 and 2 removes the brake to allow the emergency override to work.

1. (Detail A) Remove the front cover from the motor head. There are six (6) small screws in the rear of the motor head.
2. (Detail B) Disconnect the input cable wires from the terminals in the rear cover. DO NOT disconnect the wires to the motor.
3. Leave the wires disconnected and reattach the front cover.
4. (Detail C) Attach the provided jumper leads to the terminals, located on the rear of the motorized head.
5. Connect the other ends of the jumper leads to a 12V source. If the awning does not begin to move, reverse the leads.
6. Maintain contact throughout the retraction process.



CAUTION

Be careful when retracting the awning as the awning may move abruptly.

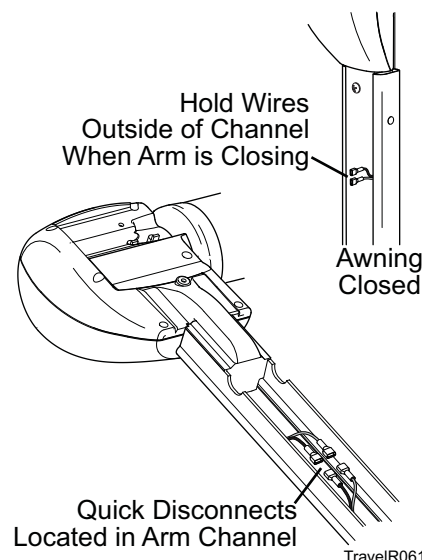
Override Without Emergency Terminals

1. Locate and separate the quick disconnects located in the motor arm channel. Position the wires from the motor on the outside of the channel.
2. Attach jumper wires to the wires from the motor.
3. Connect the other ends of the jumper leads to a 12-14V source. If the awning moves in the wrong direction, reverse the leads.
4. Maintain contact throughout the retraction process. Hold the wires from the motor on the outside of the channel while the awning is closing. This will provide access to open the awning.



CAUTION

Be careful when retracting the awning as the awning may move abruptly.



5. When power is restored, use the jumper wires to extend the awning for access to the cable connectors. Attach the connectors and secure in the arm channel.

PROGRAMMING THE REMOTE RECEIVER

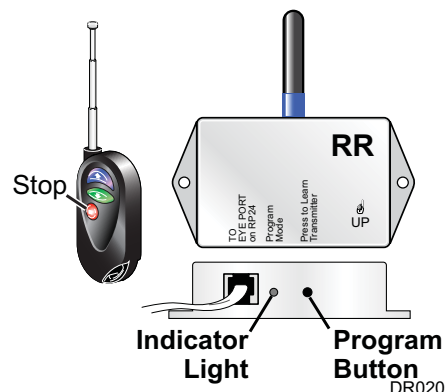
Remotes are available with the factory installed Direct Response system. Remotes are not available for the Direct Response LCDR upgrade system.

When adding or replacing a remote control, it is necessary to program the transmitter and receiver.

1. Power to the control box must be on.
2. Press and release the "Press to Learn Transmitter" button on the bottom of the receiver box. The receiver is in program mode when the red light comes on.
3. Press and release the STOP button on the remote. The red light will go out after the receiver learns the remote signal.

NOTE: Pressing the stop button will cause the blue up arrow button to default as the close (retract) function.

If a function button is pressed to train the receiver, it will be programmed as the retract button. Example: Pressing the top button will program the top button for retract and the bottom button as extend.

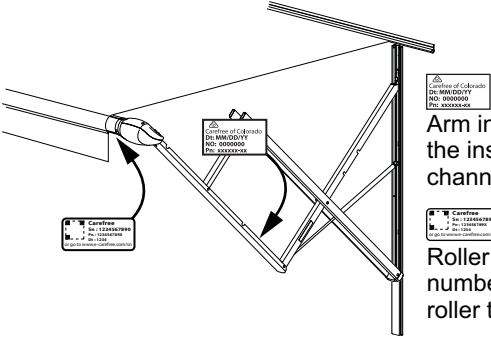


Operational Notes:

- Transmitter and receiver operate on frequency 433 MHz.
- The receiver exits the program mode after ten seconds.
- If the light does not come on, the memory is full and must be cleared.
- To clear the memory: PRESS AND HOLD the transmitter learn button. While holding the button, the indicator light should be OFF for the full 5 seconds then come on.
- If the light does not go out during programming, the receiver already knows the transmitter's signal or the battery in the remote needs to be replaced.
- The system may be programmed for up to 5 remotes. Additional remotes may be ordered separately.

PART NUMBER LISTING

PART NUMBER/SERIAL NUMBER LOCATION



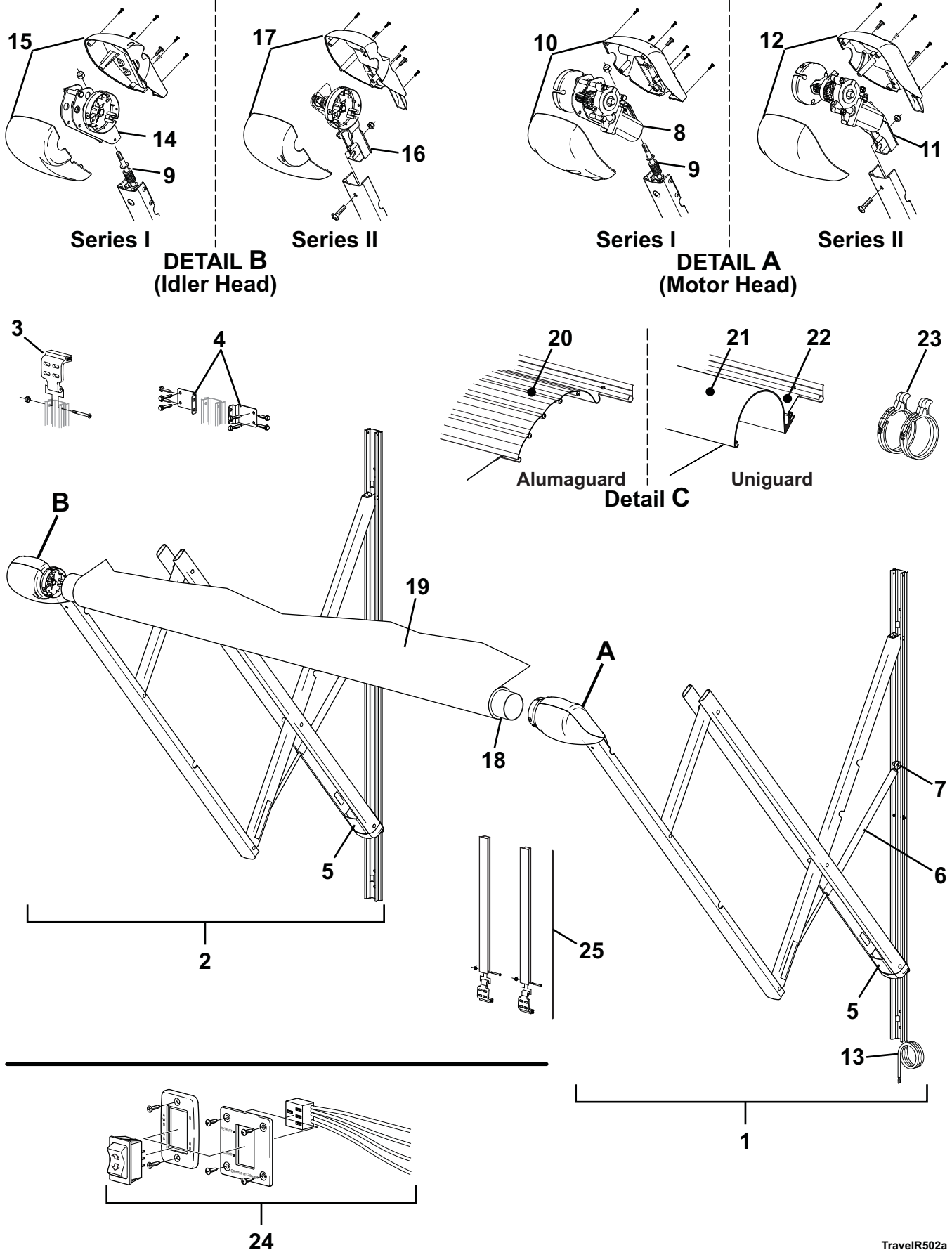
Arm information is located on the inside of the lower arm channel.

Roller tube part and serial numbers are located on the roller tube.

TravelR013

ILLUSTRATED PARTS LIST

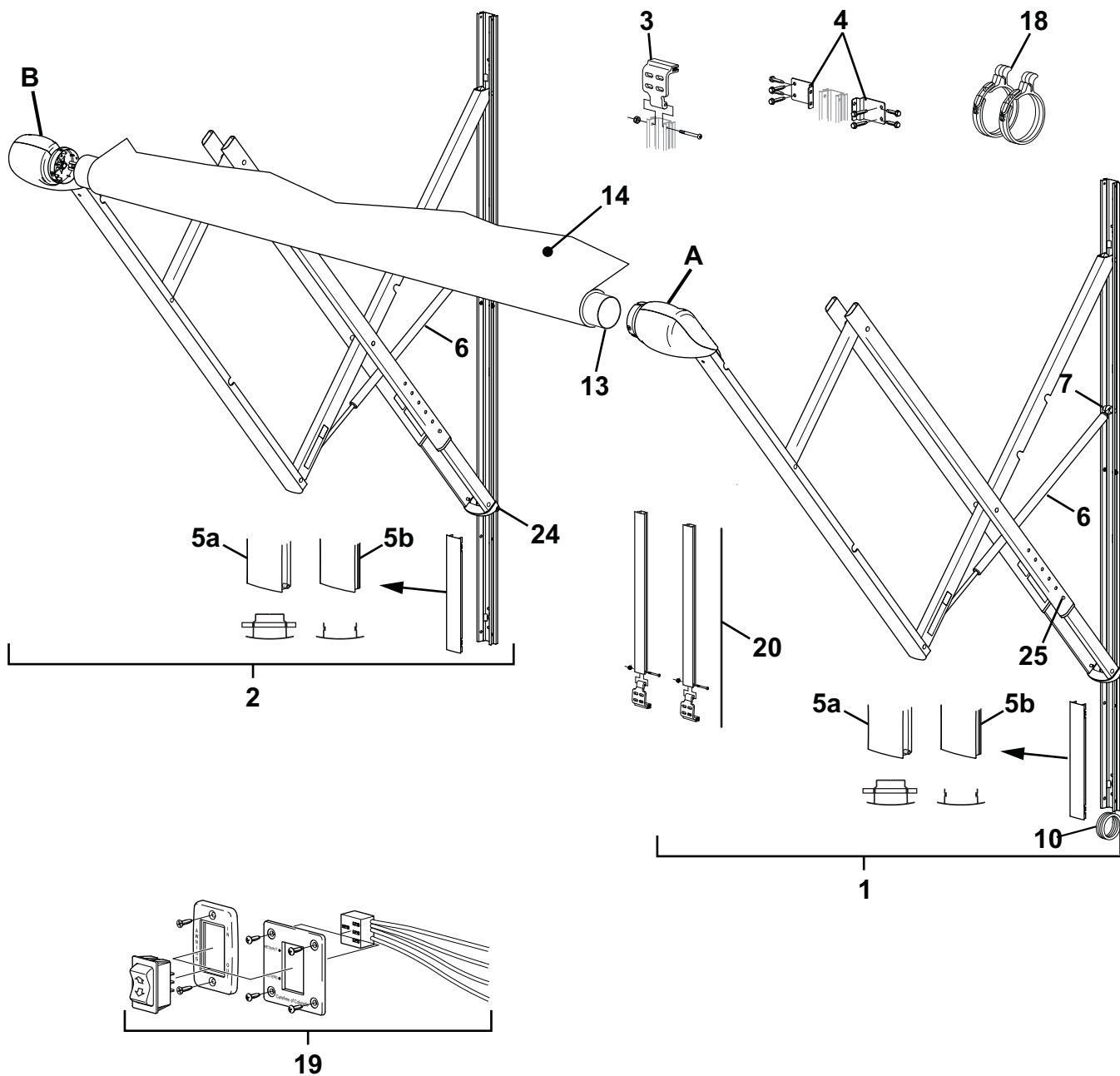
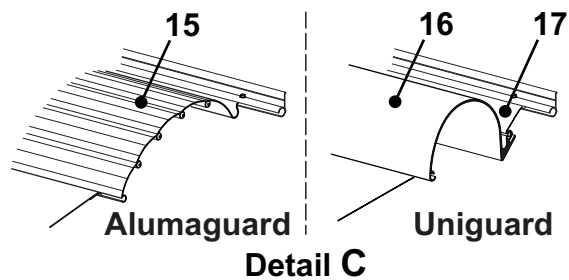
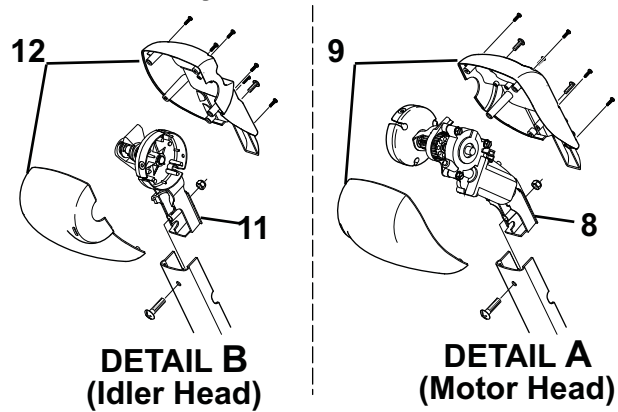
Travel'r, Fixed Pitch



TravelR502a

Item	Part Number	Description	Notes
1	NLA	1/2 Set Hardware, Arm Assy, Motorized, RH	Flat Pitch 1,2,7
	R001507XXX	1/2 Set Hardware, Arm Assy, Motorized, RH	Steep Pitch 1,2
2	NLA	1/2 Set Hardware, Arm Assy, Idler, LH	Flat Pitch 1,2,7
	R001508XXX	1/2 Set Hardware, Arm Assy, Idler, LH	Steep Pitch 1,2
3	R001094XXX	Top Mounting Bracket	Used w/ Aftermarket Only 1
4	SG0014	Quick Mount Bracket Kit (includes 4 brackets and hardware)	White 1
	SG0015	Quick Mount Bracket Kit (includes 4 brackets and hardware)	Black 1
5	R001532XXX	Fascia, 11", Flat Pitch	qty: 1 1,3
	R001533XXX	Fascia, 3", Steep Pitch	qty: 2 1
6	R001252	Gas Shock, 42.5" extended length (clevis to clevis)	Flat Pitch
	R001331	Gas Shock, 37" extended length (clevis to clevis)	Steep Pitch
7	R001576	Shock Hardware Kit	
8	R001104XXX	Motor Assy	Series I 1
9	R001323	Kit, Head Attach Hardware	Series I 1
10	R001324XXX	Kit, Motor Cover	Series I 1,4
11	R001326XXX	Kit, Motor Assy	Series II 1,5
12	R001328XXX	Kit, Motor Cover	Series II 1,4
13	R060414-006	Cable, Motor	
14	R001107XXX	Idler Assy	Series I 1
15	R001325XXX	Kit, Idler Cover	Series I 1,4
16	R001327XXX	Kit, Idler Assy	Series II 1,5
17	R001329XXX	Kit, Idler Cover	Series II 1,4
18	19xx00	Roller Tube, 3-slot	3 1/2" Dia
19		Canopy	Refer to Canopy Order Form
20	20xx36XXX	Alumaguard Assembly Only	1
21	R001246XXX-xxx	Uniguard (includes 4.25" soft connect)	1
	R001246XXX-xxxT	Uniguard (includes 5.25" soft connect)	1
22	R001247XXX-xxx	Soft Connect	4.25" Wide 1
	R001247XXX-xxxT	Soft Connect	5.25" Wide
23	901067	Tractioner	set of two
24	R001605	Kit Single Switch	6
25	R014634-025	Extension Kit, White	
	<i>The following parts are not shown</i>		
26	R014492-251	Hardware Pack, w/ Top Bracket	White
27	R014492-JV1	Hardware Pack, w/ Top Bracket	Black
28	R001697	Replacement Roller Kit	Single Arm

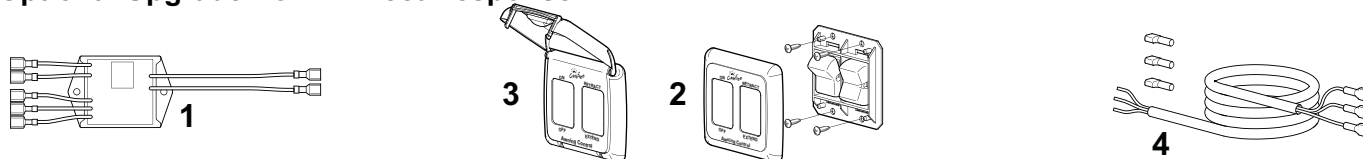
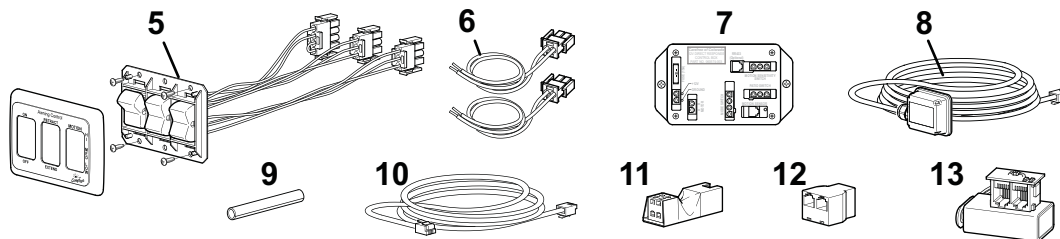
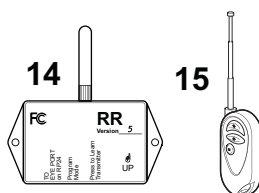
- Notes:
1. XXX = Color; xx = Length in inches. WHT=White; BLK=Black
 2. Arm assemblies are configuration specific and cannot be interchanged. When ordering, provide the following information: part number, serial number, flat/steep pitch.
 3. Fascia kit includes one fascia and screws.
 4. Head cover kits include one front cover, one rear cover and screws.
 5. Series II replacement motor and idler assemblies includes screw and nut.
 6. Switch kit includes switch, faceplates, screws and connector. Kit replaces all previous single switch kits.
 7. The Fixed Flat Pitch Travel'r has been discontinued. For replacement arm options, contact Carefree Customer Service.

Travel'r, Adjustable Pitch

TravelR503a

Item	Part Number	Description	Notes
1	R001642XXX	1/2 Set Hardware, Arm Assy, Motorized, RH	1
2	R001643XXX	1/2 Set Hardware, Arm Assy, Idler, LH	1
3	R001094XXX	Top Mounting Bracket	1
4	SG0014	Quick Mount Bracket Kit (includes 4 brackets and hardware)	White
	SG0015	Quick Mount Bracket Kit (includes 4 brackets and hardware)	Black
	R019320-105	Quick Mount Bracket Kit (includes 2 brackets and hardware)	White
	R019320-106	Quick Mount Bracket Kit (includes 2 brackets and hardware)	Black
5a	R019284-005	Fascia w/ external stop pin, White	qty 2 4
	R019284-006	Fascia w/ external stop pin, Black	qty 2 4
5b	R019874-005	Fascia w/o stop, White	qty 2
	R019874-006	Fascia w/o stop, Black	qty 2
6	R001252	Gas Shock	
7	R001576	Shock Hardware Kit	
8	R001326XXX	Kit, Motor Assy	1
9	R001328XXX	Kit, Motor Cover	1
10	R060414-006	Cable, Motor	
11	R001327XXX	Kit, Idler Assy	1,2
12	R001329XXX	Kit, Idler Cover	1,2
13	19xx00	Roller Tube, 4-Slot, No LED	3 1/2" Dia
	19xx00RB	Roller Tube, 4-Slot, w/ White LED	3 1/2" Dia
14		Canopy	Refer to Canopy Order Form
15	20xx36XXX	Alumaguard Assembly Only	1
16	R001246XXX-xxx	Uniguard (includes 4.25" soft connect)	1
	R001246XXX-xxxT	Uniguard (includes 5.25" soft connect)	1
17	R001247XXX-xxx	Soft Connect	4.25" Wide 1
	R001247XXX-xxxT	Soft Connect	5.25" Wide 1
18	901067	Tractioner	set of two
	R001008	O-Ring, Tractioner Retainer	pkg of 2
19	R001605	Switch Kit	3
20	R014634-025	Extension Kit	White
	<i>The following parts are not shown</i>		
21	R014492-251	Hardware Pack, w/Top Bracket	White
	R014492-JV1	Hardware Pack, w/Top Bracket	Black
22	R029875-005	Hardware Pack, OEM	White
	R029875-006	Hardware Pack, OEM	Black
23	R019404-002	Jumper Harness Kit	10' lg
24	R001697	Replacement Roller Kit	
25	R001801	Valco Button Kit	

- Notes:
1. XXX = Color; xxx= Length in inches.
 2. Head cover kits include one front cover, one rear cover and screws.
 3. Switch kit includes switch, faceplates, screws and connector. Kit replaces all previous single switch kits.
 4. Fascia kits include two fascia plates and screws.

Optional Electronics**Optional Upgrade LCDR Direct Response****Factory Installed Direct Response (OEM)****Remote (see notes)**

TravelR504

Item	Part Number	Description	Notes
1	R060686-003	Sensor/Control Module	used with LCDR 1,2
2	R019468-006	Switch Kit	used with LCDR 1,2
3	SR0115	Covered Bezel Kit	used with LCDR
4	R060688-006	Cable	used with LCDR 1,2
5	R019489-001	Switch Kit	Direct Response
6	R060345-001	Harness - Power, Motor Connect	Direct Response
7	R060574-003	Controller	Direct Response
8	R060538-002	Sensor w/ Cable	Direct Response
9	R040562-001	Cord Retainer	Direct Response
10	R060434-001	Phone Cable, 60"	Direct Response
11	R060532-001	Ignition Lockout Sensor, EL	Direct Response 2
12	R060589-001	Splitter	Used with Ignition Lockout
13	SR0095	Sensor Test Tool	Direct Response
14	R060429-002	RF Remote Receiver, 433 MHz, Version 5	Direct Response 2
15	R060622-001	Key FOB, Remote, 433 MHZ, Version 5	Direct Response 2

Notes: 1. A Travel'r upgrade kit (SR0093) is available and contains items 1, 2, 4 and attaching hardware.
 2. The remote control, ignition lockout options are NOT available with the LCDR Direct Response system.

For LED replacement parts and service procedures refer to 052584-301 "LED Service Manual for Vertical Arms" available on-line at www.carefreeofcolorado.com



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