Carefree of Colorado

RV

WINNEBAGO INSTALLATION MANUAL

ECLIPSE ARMS AND CANOPY

THIS PUBLICATION COVERS MODELS FOR ORIGINAL EQUIPMENT MANUFACTURERS:

- Universal Eclipse

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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

⚠WARNING

A WARNING INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, 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 to not over tighten. Soft materials such as fiberglass and aluminum can be "stripped out" and lose the ability to grip and hold.

Reference Publications located @ www.carefreeofcolorado.com:

052547-031 Eclipse Arms and Canopy OEM Installation Manual

052547-211 Eclipse Owner's Manual

052547-301 Eclipse Service Manual

PRODUCT OVERVIEW

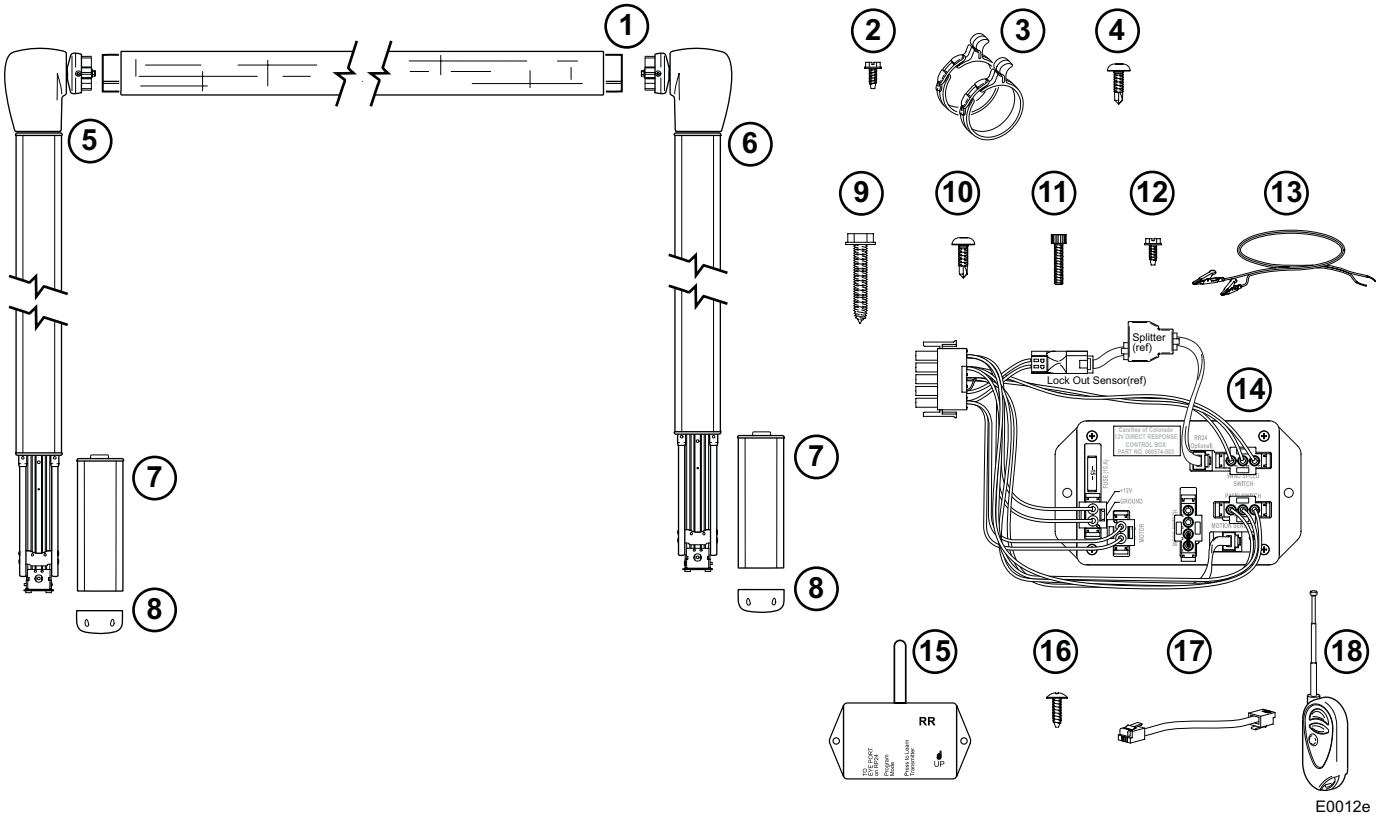
The Eclipse Patio Awning uses unique "scissor" style arms that do not require vertical ground support. The arms provide easy to use pitch adjustment—simply push together the pins on the arms, snap into the hole set desired, and the pitch is set! The pitch can be left in any position and the Eclipse will roll up completely! When the awning is rolled back out, it rolls out to the pitch setting previously set.

The awning rollbar and arms are made from light weight, no-rust aluminum. The awning fabric is offered in either heavy weight vinyl or the Sunbrella® fabric, one of the most durable, strongest, weather-resistant and fade-resistant fabrics on the market.

ECLIPSE PATIO AWNING SPECIFICATIONS:

	ECLIPSE UNIVERSAL	ECLIPSE XL
Maximum Extension:	8 foot	9 foot
Maximum Length:	21 feet	21 feet
Drop @ Min. Pitch:	approximately 12 inches	approximately 13.5 inches
Drop @ Max Pitch:	approximately 40 inches	approximately 45 inches
Extend Actuation:	Gas Shock	Gas Shock
Retract Actuation:	Motorized roll up	Motorized roll up w/ supplemental spring tension
Position Control:	Motorized roll out/in	
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)	

COMPONENT CHECKLIST



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☑	ITEM	DESCRIPTION	QTY	NOTE
❑	1	Rollbar Assembly	1	
❑	2	Screw, HWHC #6 x 3/8	2	
❑	3	Tractioner	2	2
❑	4	Screw, Truss Head, SQ Drive #10 x 5/8	2	2
❑	5	LH Arm Assy, Idler	1	
❑	6	RH Arm Assy, Motorized	1	4
❑	7	Fascia Assy	2	
❑	8	Bottom Cover	2	
❑	9	Screw, Lag 1/4 x 1 1/2	8	
❑	10	Screw, Truss Head, SQ Drive #10 x 5/8	4	
❑	11	Screw, SHC #8 x 3/4	4	
❑	12	Screw, HWHC #6 x 3/8	2	
❑	13	Jumper Cable	1	3
❑	14	Control Box w/ attached Harness	1	5
❑	15	Receiver, RF, 433 MHz	1	
❑	16	Screw, Phillips Truss Head #6 x 1/2	4	
❑	17	Cable 6"	1	
❑	18	Remote Control Key FOB, 433MHz	1	

Notes:
1. Awning configuration is specified at time of order, including awning length, fabric, color etc. Check awning assembly against original purchase order.
2. Screws and Tractioners are furnished with rollbar assemblies equipped with optional Alumaguard or Uniguard. Tractioners are only used with Uniguard with vinyl fabric.
3. Place Jumper Cable (item 13) with RV owner information.
4. Wire harness hole plug and connectors are part of the RH arm assembly harness
5. Control Box (item 14) harness includes splitter and lockout module

INSTALLATION

REQUIRED PRE-INSTALLATION PREPARATION

1. Park the vehicle on a flat surface and level the unit.
2. Check where the awning arms will be installed. The arms fit snug to the side of the vehicle and must not cover or interfere with exhaust vents, lights etc.
3. If there is an awning rail installed, check that the awning rail runs the full length of the awning. Please refer to the note under "Installing an Awning Rail" before proceeding.

INSTALLING AN AWNING RAIL

NOTE: <u>For canopies WITHOUT Alumaguard or Uniguard:</u> If the vehicle already has a full-length awning rail installed, skip to step 6.

<u>For Alumaguard and Uniguard installations:</u> If the existing awning rail is incorporated into the coach trim or a drip rail, it will be necessary to mount a standard awning rail flat on the coach wall. The awning rail and arms must be positioned so that any existing trim does not interfere with the Alumaguard or Uniguard's "Flex Connect" or the awning arm when in the closed position.

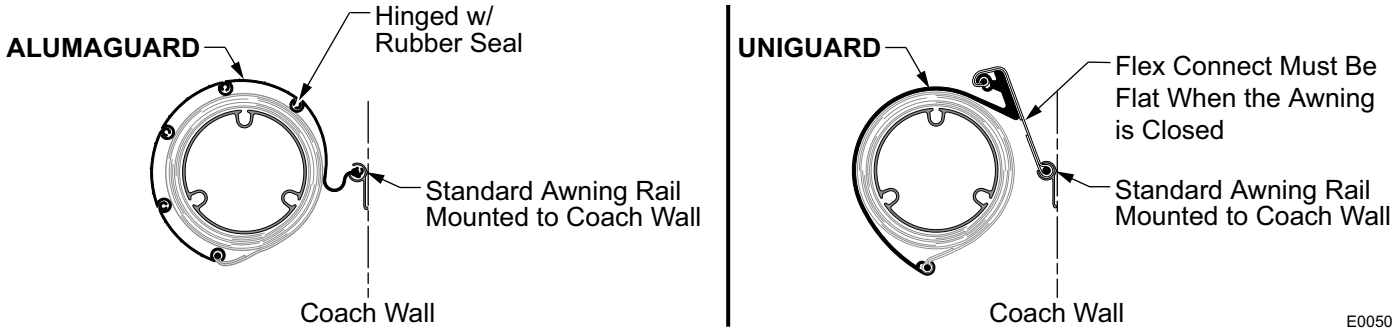

Figure 1. Fabric Wrap Positioning.

1. Determine the optimum positioning of the awning so that the arms will not interfere with the door frame or light fixtures. The centerline of the rail should be above the door opening a minimum of 6" for vinyl and 7" for Alumaguard/Uniguard.
2. Awning rail must be level.
3. After determining mounting position, mark the position with a chalk line.
4. Seal the back of the rail with silicone sealant or putty tape.
5. Align the awning rail onto the wall and secure with #10 x 3/4" screws. Use all the attach holes in the rail.

⚠CAUTION

MAKE SURE THE SCREWS ARE SECURELY MOUNTED TO THE STRUCTURAL FRAME OF THE VEHICLE.

6. Use a screwdriver to spread open one end of the awning rail on the installation side.
7. File any sharp edges or burrs from the end of the rail. This will help protect the awning fabric from damage during installation.
8. Spray inside the awning rail track with silicone lubricant.

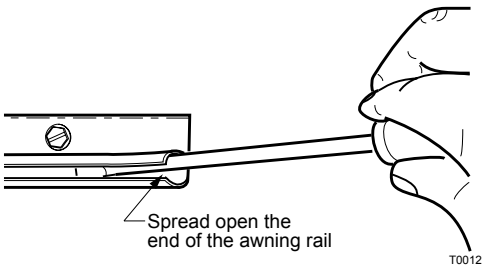

Figure 2. Adjusting the Awning Rail.

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ASSEMBLING THE AWNING

⚠CAUTION

DURING ASSEMBLY AND INSTALLATION, THE ARM ASSEMBLIES MUST REMAIN PERPENDICULAR TO THE ROLLER ASSEMBLY. FAILURE TO HANDLE THE ARM ASSEMBLIES CAREFULLY CAN BEND THE DRIVE SHAFT.

1. *(Refer to Figure 3)* 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 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.

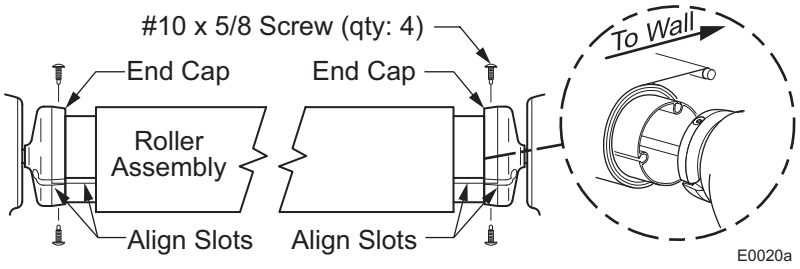


Figure 3. Assembling the Awning.

NOTE: The roller assembly must be oriented with the fabric going over the roller toward the mounting surface.

2. Secure the end cap to the roller assembly using two #10 square-drive screws.
3. Repeat to attach the non-motorized arm assembly to the roller assembly.

MOUNTING THE AWNING

⚠CAUTION

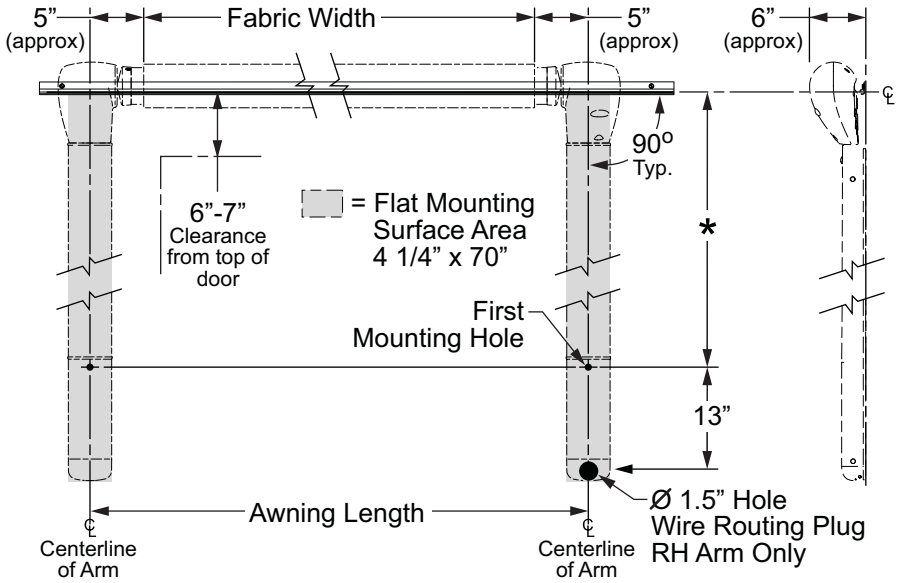
IT IS RECOMMENDED THAT AT LEAST THREE PEOPLE INSTALL THE AWNING DUE TO ITS SIZE AND WEIGHT.

NOTES:

a) For the bottom mounting holes: if mounting into structure, use the 1/4 x 1 1/2 screws; if not attaching into structure, use the furnished moly rivets.

b) The upper mounting holes must attach into structure using the screws provided. If structural backing is not available for the upper mounting holes, it will be necessary to use the aftermarket arm configuration so that the upper brackets mount into the structural members at the roof line.

1. Check the location where the awning is to be mounted. Ensure that the awning will not interfere with other equipment on the vehicle, such as a slide out room, light fixtures, exhaust vents etc.



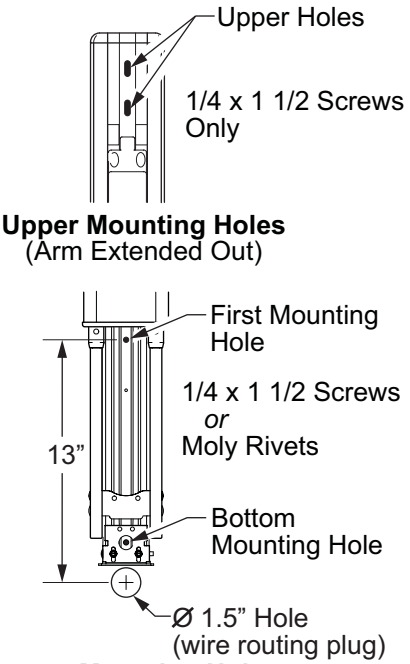


Figure 4. General Layout and Installation.

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2. On the awning rail, mark the location of the centerline of the motorized arm assembly. From the centerline of the awning rail, measure down vertically a distance of 56" ± 1/4" for units with a 4 1/4" soft connect; for units with a 5 1/4" soft connect, measure 56 7/8" ± 1/4". This will be the location of the first mounting hole. Drill a 5/32" pilot hole.
3. On the centerline from step 2, measure down vertically a distance of 13" from the pilot hole drilled in the previous step. This is the location of the wire routing plug. Drill a 1.5" hole in the outer portion of the wall.
4. Unroll the canopy one wrap.
5. With one person holding each arm, the third person should thread the polyrod (the plastic rod on the edge of the fabric or Uniguard flex connect) into the awning rail, starting at one end. Carefully move across the vehicle, gently pulling the fabric into the rail, until the awning is in the pre-determined location.

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

6. *(Refer to Figure 4)* Align the bottom mounting hole in the motorized arm with the pilot hole drilled in step 2. The arm assembly must be perpendicular to the awning rail.
7. Attach the motorized arm using a 1/4 x 1 1/2” lag screw.
8. Confirm that the arm is perpendicular to the awning rail, attach the arm at the second bottom mounting point (shown in Figure 4) using a 5/32” drill bit and a 1/4 x 1-1/2” lag screw.
9. Position the roller assembly so that it is perpendicular to the motorized arm assembly. Position the non-motorized arm perpendicular to the roller assembly.
10. Drill a 5/32” hole at the bottom mounting hole and attach the non-motorized arm using a 1/4 x 1 1/2” lag screw.
11. Check the alignment; the arm assembly must be perpendicular to the roller assembly. When the alignment is correct, drill and attach the arm at the second bottom mounting hole (shown in Figure 4) using a 5/32” drill bit and a 1/4 x 1-1/2” lag screw.
12. Hold the awning closed and carefully remove the plastic wraps at the top of the arms. The awning will open a few inches.
13. Open the awning about 18” or until the top mounting holes on the arms are visible. To open
    - Use the supplied jumper cables and attach to the emergency terminals located on the top of the motorized head.
    - Connect the other ends of the jumper leads to a 12V source. If the awning does not begin to move, reverse the leads.
14. Using a 5/32” drill bit, locate and drill the mounting holes.
15. Using two each 1/4 x 1-1/2” lag screws, attach the top of the arm assemblies to the vehicle.
16. Below the RH arm, connect the two connectors (C7 & C8) to the OEM harness inside the wall.
17. Coat the inner face of the cable hole plug with a quality silicone sealant or caulk and press the connectors and plug into the 1.5" hole below the RH arm.

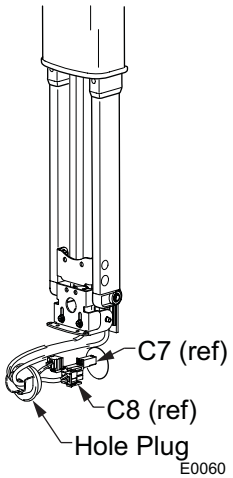

Figure 5. Arm Connectors.

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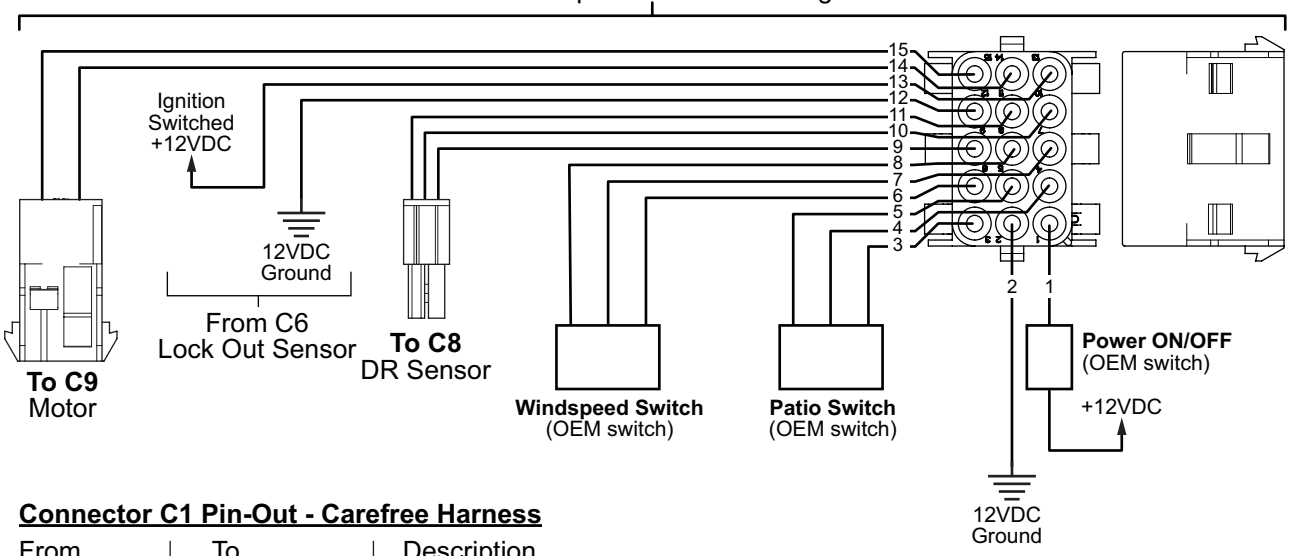
CONTROL SYSTEM INSTALLATION

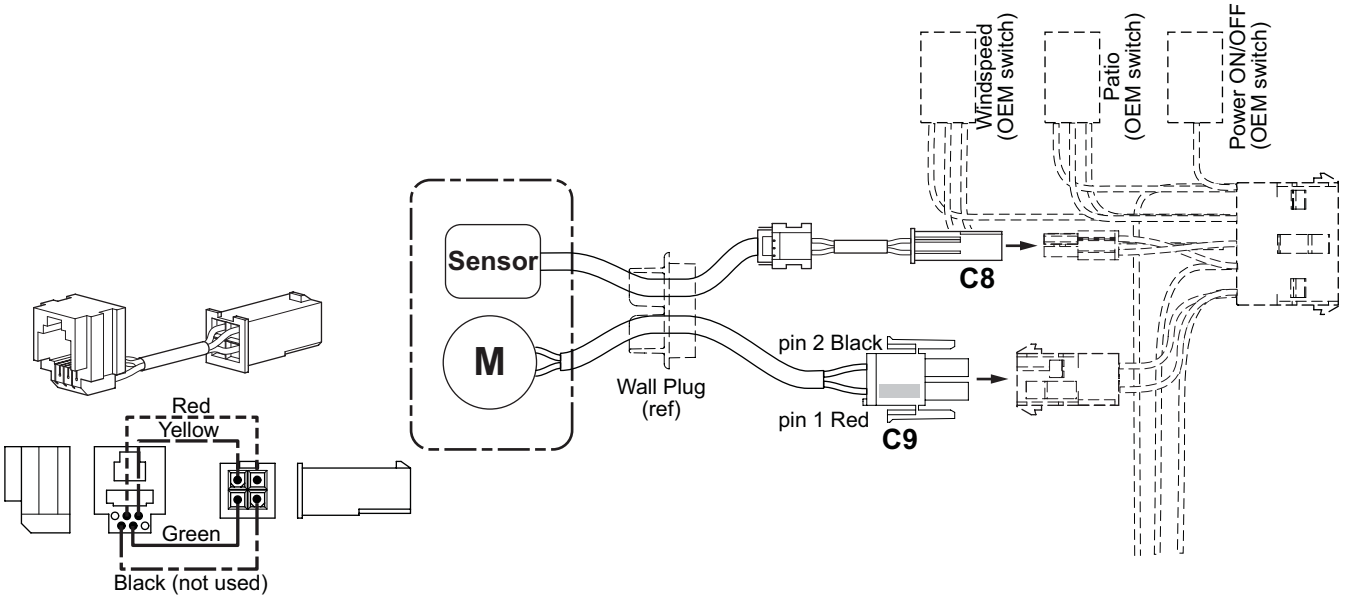
OEM Harness (Simplified)

refer to OEM literature for specific harness configuration and details



Connector C1 Pin-Out - Carefree Harness

From	To	Description	
C1 pin 1	C2 pin 2	+12VDC Power	
C1 pin 2	C2 pin 1	12VDC Ground	
C1 pin 3	C4 pin 1	Patio Switch, Input for Retract	
C1 pin 4	C4 pin 2	Patio Switch, Common (DC Ground)	
C1 pin 5	C4 pin 3	Patio Switch, Input for Extend	
C1 pin 6	C5 pin 1	Wind Speed, Low	
C1 pin 7	C5 pin 2	Wind Speed, Common (DC Ground)	
C1 pin 8	C5 pin 3	Wind Speed, High	
C1 pin 9	C15 “pin 4”	Motion Sensor, Data Signal	refer to Detail B
C1 pin 10	C15 “pin 3”	Motion Sensor, +12VDC power	
C1 pin 11	C15 “pin 2”	Motion Sensor, Common (DC Ground)	
C1 pin 12	C6 pin 1	Ignition Lockout, Signal Input 1	
C1 pin 13	C6 pin 2	Ignition Lockout, Signal Input 2	
C1 pin 14	C3 pin 2	Motor, A Input	
C1 pin 15	C3 pin 1	Motor, B Input	



Phone Cable Adaptor

DETAIL A

DR031b

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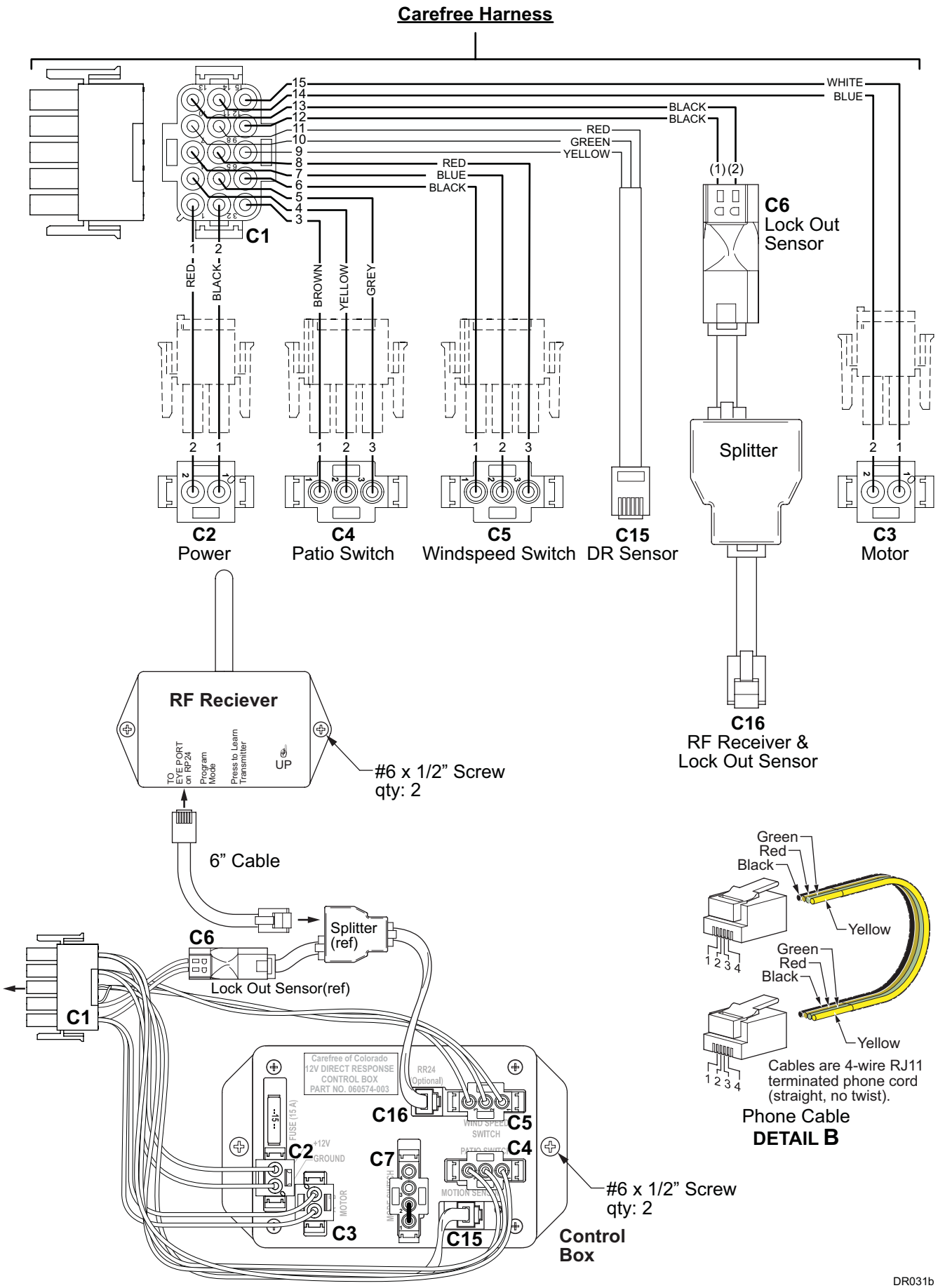

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⚠CAUTION

ALWAYS DISCONNECT THE VEHICLE BATTERY AND ELECTRICAL SOURCES BEFORE WORKING WITH THE ELECTRICAL WIRING AND COMPONENTS.

INSTALLING THE CONTROL BOX

1. Mount the control box to the mounting surface using two (2) #6 x 1/2 screws.
2. Attach connector C1 to the OEM harness.

INSTALLING THE RF RECEIVER

1. Determine the location of the RF receiver:
   - 1.1 Do not mount the unit near heat producing elements such as LP appliances or engine exhaust components.
   - 1.2 For best reception, do not mount the unit near or on a metal surface.
   - 1.3 Mount the unit with the antenna pointing up.
   - 1.4 The included cable is approximately 6 inches long. Mount the unit close enough to the control box so that the cord can be connected without stressing the connections.
   - 1.5 Allow room below the box to access the connector jack, programming button and indicator light.
2. Position the control box and secure using two (2) #6 x 1/2" screws.
3. Connect the 6" cable to the receiver.
4. route the cable to the splitter in the control box harness and connect.

Programming the Receiver

When adding or replacing a key FOB it is necessary to program the receiver for the transmitter

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 close (retract) button. Example: Pressing the bottom button will program the bottom button for retract and the top button as extend.
4. Repeat for each additional remote.

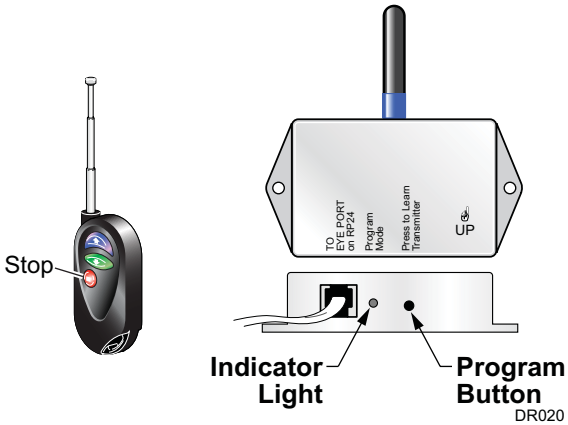

Figure 6. RF Receiver.

OPERATIONAL NOTES:

- Transmitter and receiver operate on a frequency of 433 MHz.
- The receiver exits the program mode after ten seconds.
- If the light does not come on above, the memory is full and must be cleared. If the light still does not come on, check the continuity of the cord between the boxes and repair or replace as required. Pin 1 of the 1st connector goes to pin 1 of the 2nd connector etc.
- If the light does not go out in above, the receiver already knows the transmitter's signal or the battery in the remote needs to be replaced.
- To clear the memory: PRESS AND HOLD the transmitter learn button for 5 seconds. While holding the button, the indicator light should be OFF for the full 5 seconds then come on.
- The system may be programmed for up to 5 remotes. Additional remotes may be ordered separately.

FINAL ASSEMBLY

ATTACHING THE FASCIA AND BOTTOM COVER

1. Make sure the awning is completely closed.
2. Insert the tab, on the fascia, under the arm base and rest it on the mounting plate.
3. Check that the gap between the top of the fascia and the arm channel is approximately 1/8".
   - If the gap is too large or too small, set the fascia aside, loosen the mounting plate screws and adjust the mounting plate height as required. Tighten the screws and set the fascia in position.
4. Place the bottom cover beneath fascia. Carefully tuck any wires into the bottom cover.

   NOTE: There are tabs on the top of the cover to correctly align the bottom cover and fascia. The fascia should seat in the groove of the cover.
5. Attach the cover to the fascia with the supplied socket head screws using a 9/64" Allen wrench. The bolts must go through the cover, the plate, and the fascia.
6. Repeat for the other side.

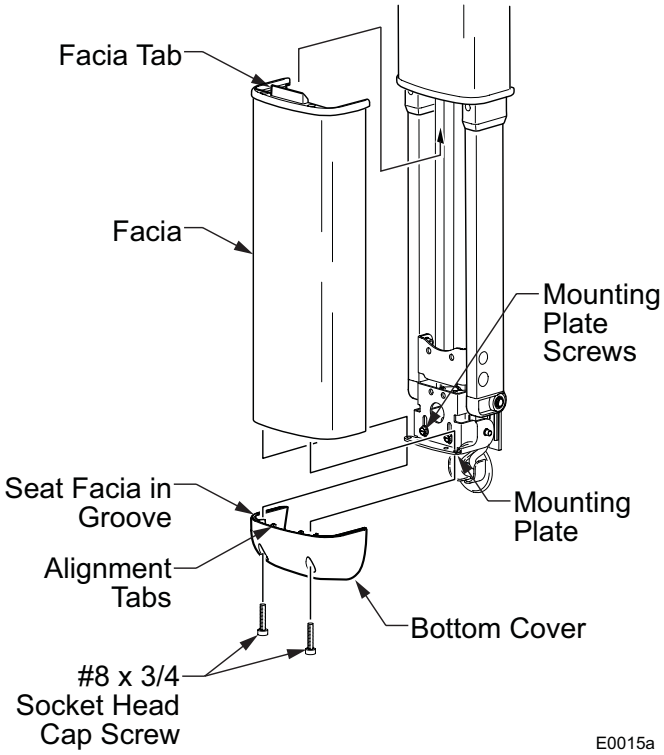

Figure 7. Attaching the Fascia and Bottom Cover.

7. Verify proper installation by opening and closing the awning.

SECURING THE FABRIC

1. Roll the awning in and out several times to make sure that the fabric is square on the rollbar.
2. Secure the canopy using one, #6 x 3/8" hex head screw at both sides of the awning.

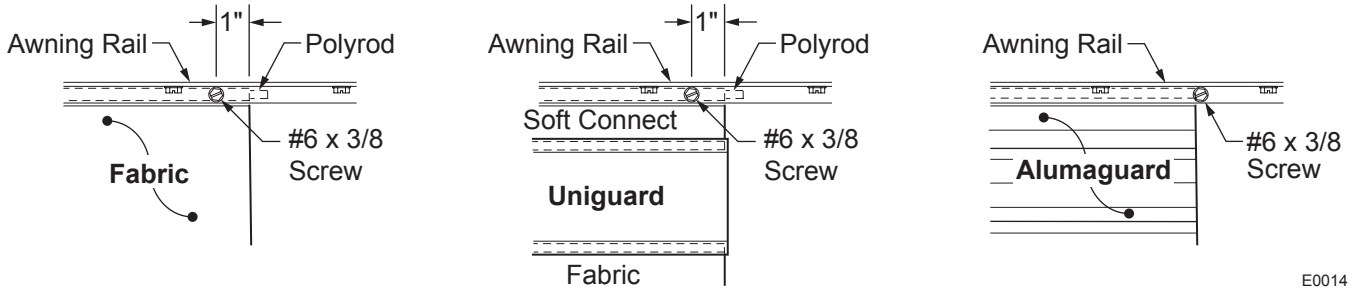

Figure 8. Securing the Fabric.

2.1 For vinyl awnings, place screw through awning rail, polyrod and canopy approximately 1" in from the end of the fabric.

2.2 For Uniguard awnings, place screw through awning rail, polyrod and the soft connect material approximately 1" in from the end of the fabric.

2.3 For Alumaguard awnings, place screw on the outer edge of the Alumaguard (not through the Alumaguard).

REMOVING THE TEMPORARY ASSEMBLY PINS

2 pins are inserted into the back of the left (idler) head for lateral stability during installation. Using a pair of pliers, remove and discard both pins.

NOTE: The awning will operate with the pins in place; for long term use, the pins must be removed to allow for climate variances.

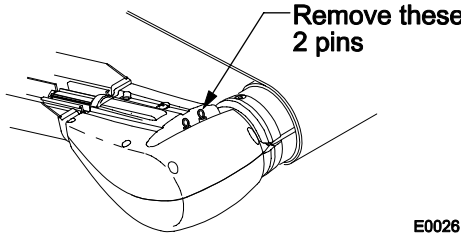

Figure 9. Removing the Assembly Pins.

INSTALLING THE TRACTIONERS

The tractioners are used with the Alumaguard metal fabric wrap and Uniguard with vinyl fabric.

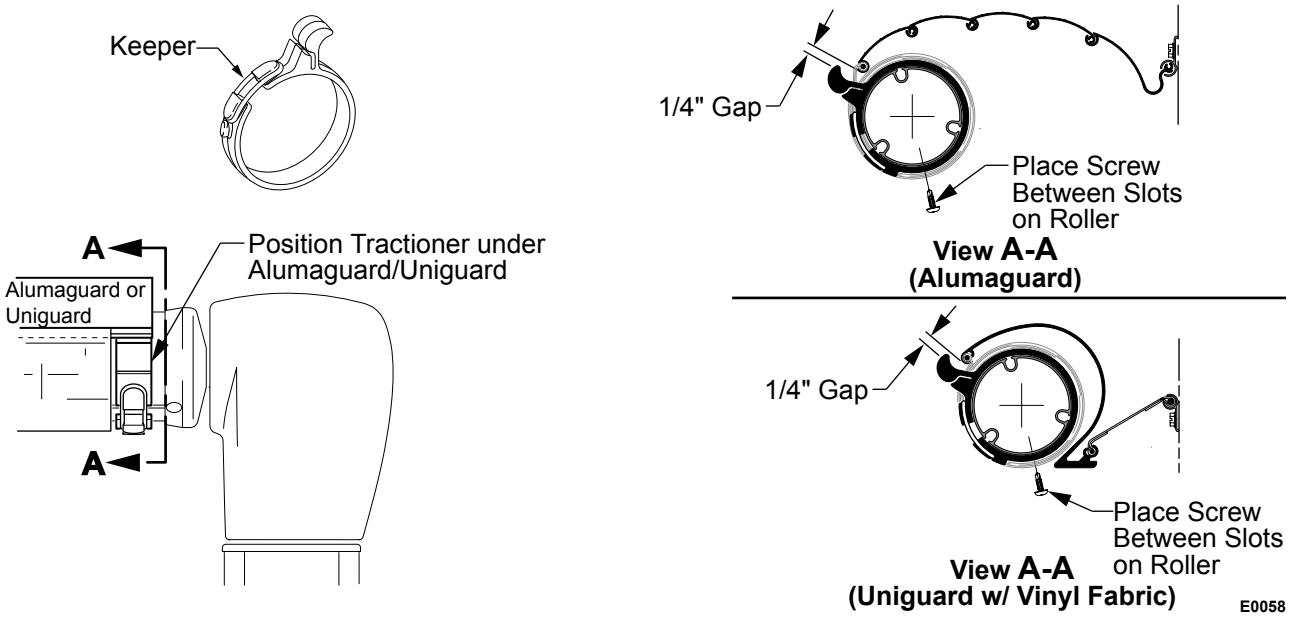

Figure 10. Installing the Alumaguard Tractioner.

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 rollbar.
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 rollbar, roughly center the hole between two slots of the rollbar.
7. Secure with one (1) #10 square drive screw.