



INSTALLATION MANUAL

COMPASS ARM REPLACEMENT FOR LONGITUDE

RV

THIS MANUAL PROVIDES INSTRUCTIONS FOR THE BASIC INSTALLATION OF THE AWNING.



Read this manual before installing 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.



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PROPRIETARY STATEMENT

The Compass 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.



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



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

NOTICE

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

General Safety:



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



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



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



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

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.

PRODUCT OVERVIEW

The adjustable pitch Compass provides motorized awning comfort with Carefree's standards for looks, strength and dependability with a successful blend of style, quality and economy.

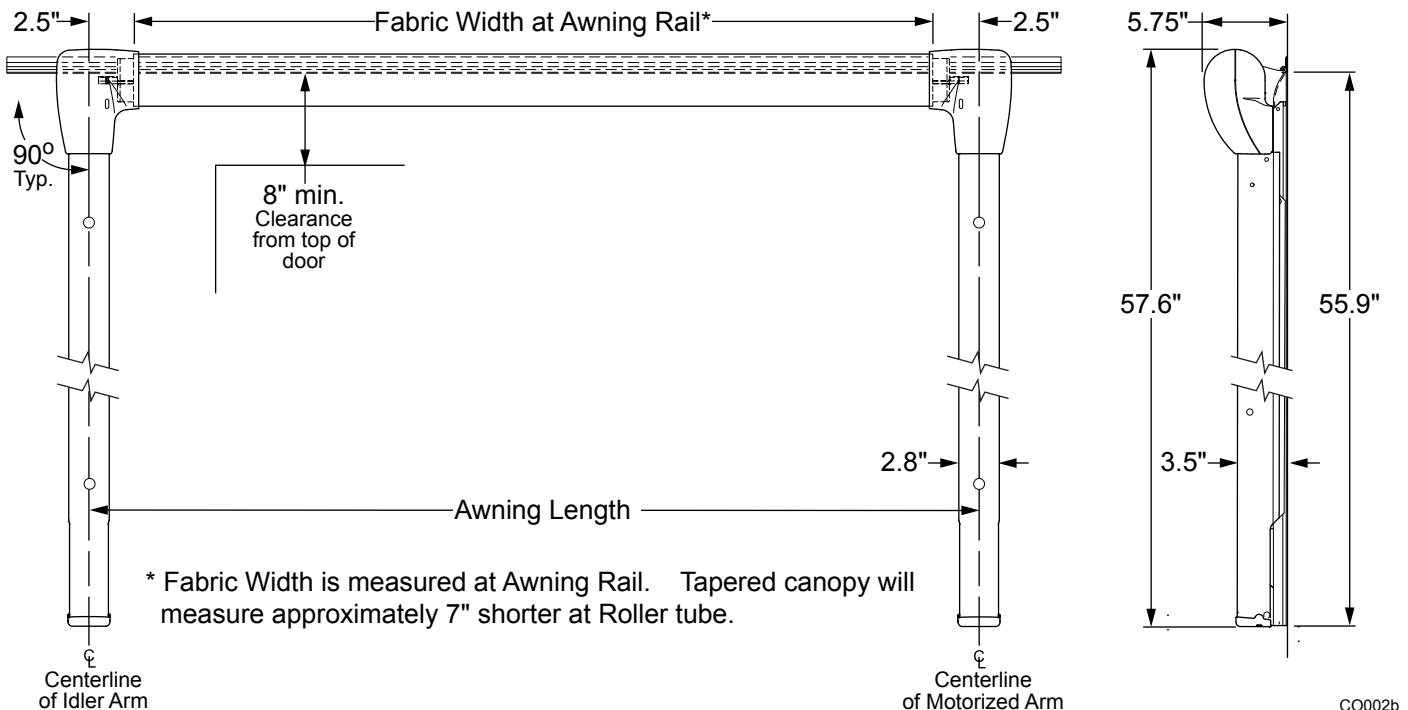
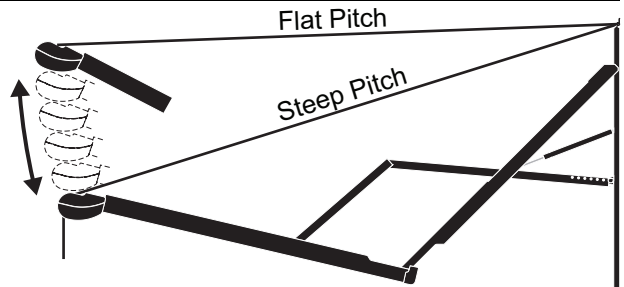
The variable pitch offers 6 settings from flat (3°) to steep (16°).

The awning roller tube and arms are made from light weight, no-rust aluminum. The awning fabric is heavy weight vinyl.

Specifications:

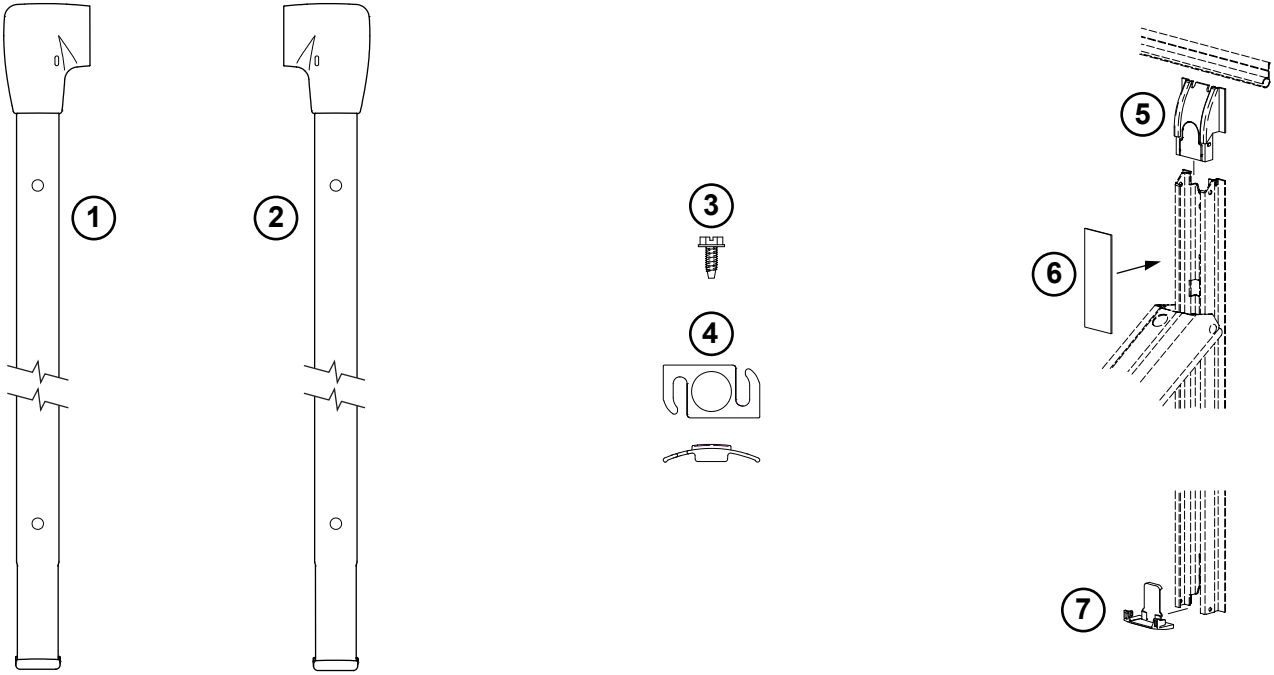
MAXIMUM EXTENSION:		88 inches	MAXIMUM LENGTH:	20 feet
PITCH:	FLAT	3°	DROP:	approximately 6 inches
	STEEP	16°		approximately 26.5 inches
Angle is Canopy vs horizontal			Measurement is from centerline of Awning Rail to centerline of roller tube	
MOTOR:	Power: 10VDC–14VDC		Circuit Rating: 15 amp	motor mounted in arm
POWER SOURCE:	Motor and controls are routed and hardwired into the vehicle's 12V system			
EXTEND ACTUATION:	Gas Shock			
POSITION CONTROL:	Motorized roll out/in			
CONTROLLER:	<u>Standard:</u> 3 position, momentary ON, center OFF; DC polarity reversing switch with dynamic brake.			
	<u>Optional:</u> BT12 Wireless Awning Control System			
COLOR:	Frame:	White, Black		
	Canopy:	Vinyl with Weatherguard or FLXguard. Refer to sales literature for options.		

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COMPONENT CHECKLIST



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<input checked="" type="checkbox"/>	ITEM	DESCRIPTION	QTY	NOTE
<input type="checkbox"/>	1	Arm Assembly, LH	1	1
<input type="checkbox"/>	2	Arm Assembly, RH	1	1
<input type="checkbox"/>	3	Screw, Hex Washer Head #6 x 3/8	2	
<input type="checkbox"/>	4	Hole Plug	4	
<input type="checkbox"/>	5	Top Cover	2	
<input type="checkbox"/>	6	Wire Cover, Upper, Optional	1	3
<input type="checkbox"/>	7	Wire Cover, Lower, Optional	1	3

Notes:

1. Awning configuration is specified at time of order, including awning length, fabric, color etc. Check awning assembly against original purchase order. Arms are configuration specific and are not interchangeable.
2. Attaching hardware is furnished by installer. Refer to "Mounting the Awning" for requirements.
3. Wire Covers (5, 6) are optional and must be specified at time of order.

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.

REMOVE THE EXISTING ARMS

1. Fully extend the awning out.
2. Disconnect power to the awning.

NOTICE Provide supports for the arms and roller tube during disassembly and assembly.

3. Detach the roller tube from the arms.

- 3.1. On the back of the motor head, open the access cover and pull the retaining clip out.

Tip: Press in on the retaining ear inside the head for easier removal of the clip.

- 3.2. Pull the roller tube out of the head.

NOTE: The arm will extend out when the roller tube is removed.

- 3.3. Repeat for the idler side.

- 3.4. Allow the roller tube and canopy to hang down on the side of the vehicle.

4. On the vehicle wall use a non-permanent marker and carefully mark the centerline of both arms.

5. If installed, remove the upper and/or lower wire covers.

6. *For top of the motor arm routing:*

- 6.1. Disconnect or clip the wires a minimum of 2"-3" from the wall entry point to allow splicing the new wires. This includes the motor wires, LED wires and speaker wires (if installed).

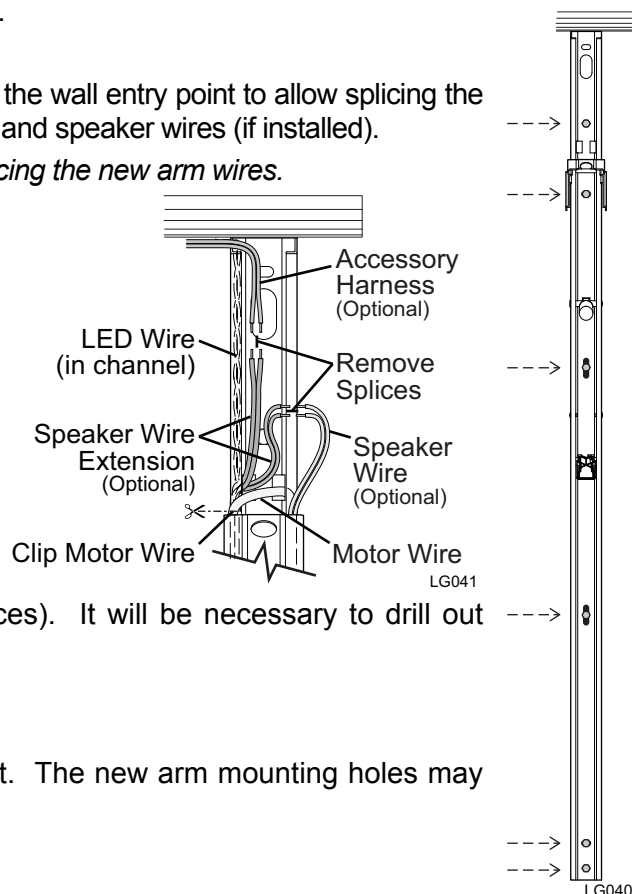
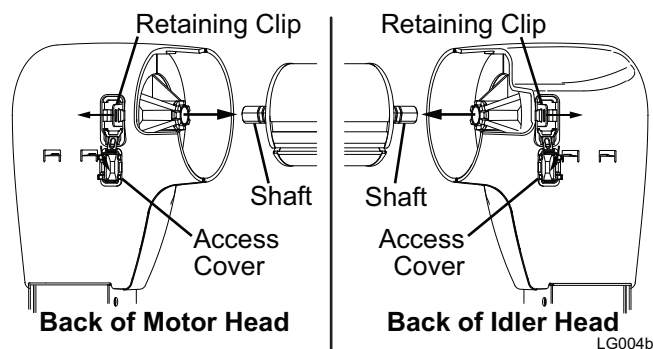
Tip: Mark the wires for easier identification when splicing the new arm wires.

7. *For bottom of the motor arm routing:*

- 7.1. Disconnect or clip the motor cable and speaker wires at the top of the arm.

- 7.2. Loosen the arm's attaching hardware approximately 1" and pull the arm away from the wall.

- 7.3. Carefully pull the LED wires, speaker wires (if installed) and the motor cable out of the channel on the back of the arm and allow wires to hang down at the bottom. Use caution to not bend, break or damage the wires.



8. Remove the attaching hardware from the arm (6 places). It will be necessary to drill out rivets if used.

9. Set the arm aside.

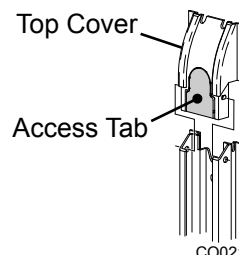
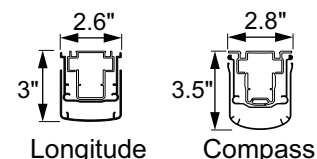
10. Repeat for the other side.

11. Plug the existing mounting holes with a quality sealant. The new arm mounting holes may not match all of the existing holes.

MOUNTING THE NEW ARMS

NOTE: The Compass arm profile is slightly larger than the Longitude arm profile. This does not affect the installation or placement of the arms.

The motor cable has a 10" lead at the top of the arm. The cable is tucked into the back of the mounting rail. Remove the cable from the back of the arm and route back through the access hole.



1. Press the top cover into the rear channel until pins snap into the holes of the channel.
2. Optional: The access tab in the top cover can be left in place or can be removed for easier wire access. This is particularly useful for top of the arm wiring.

3. Position the idler arm on the vehicle: Align the center of the arm with the arm centerline marked previously. Butt the top cover against the bottom of the awning rail.
4. Hold the idler arm in position and drive a screw through the upper access hole (▲) and rear channel into the vehicle wall.
5. Confirm that the arm is perpendicular to the awning rail then drive a screw through the lower access hole (▲) and rear channel into the vehicle wall.
6. Position the motor arm on the vehicle: Align the center of the arm with the arm centerline marked previously. Position the top of the rear channel 2" below the bottom of the awning rail.
7. Hold the motor arm in position and drive a screw through the upper access hole (▲) and rear channel into the vehicle wall.
8. Confirm that the arm is perpendicular to the awning rail then drive a screw through the lower access hole (▲) and rear channel into the vehicle wall.
9. Hold the arms closed and carefully remove the cable ties at the top of the arms.

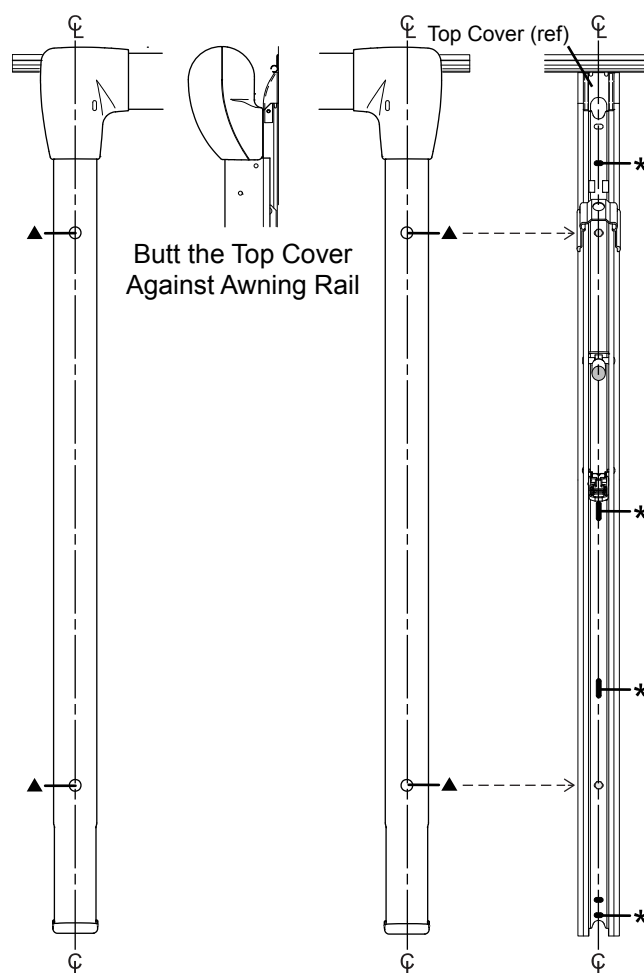
NOTICE

The arms will open completely. Use supports to hold the arm in position.

STOP

If the wires are routed at the bottom of the arm go to "Bottom of the Arm Routing" on page 5.

10. Attach each arm in the 4 additional positions (marked with an *) shown.



NOTE: Attaching hardware is furnished by installer.

If mounting into structure: Use #14 x 1 1/2" lag screws or equivalent. Requires a 5/32" pilot hole.

If mounting to the outer skin only: Use 3/16" moly rivets. Requires a 7/32" (#4) hole.

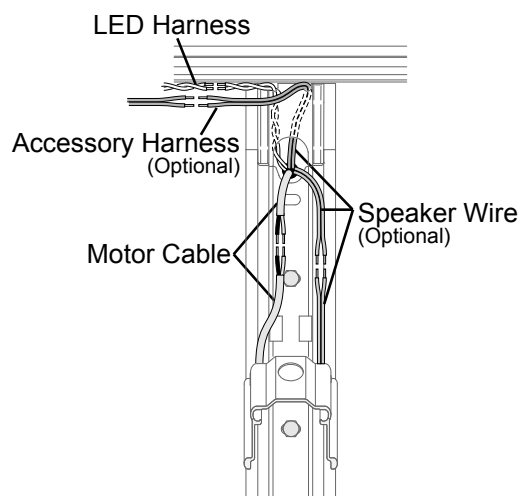
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WIRING THE ARMS

NOTICE Always use weather tight connectors for splicing. **MATCH** the wire colors of the wires being spliced.

Top of Arm Routing

1. Sort and identify the wires from the wall entry hole that were previously disconnected or clipped.
2. Splice the new motor cable wires to the existing cable wires.
3. Route the LED harness through the top slot of the top cover and splice the LED wires together.
4. If installed, route the accessory wire through the open slot at the top of the top cover then splice speaker wires to the existing wires from the mounting hole.



Top of Arm Wiring

Bottom of the Arm Routing

NOTICE Firmly support the arm during this procedure.

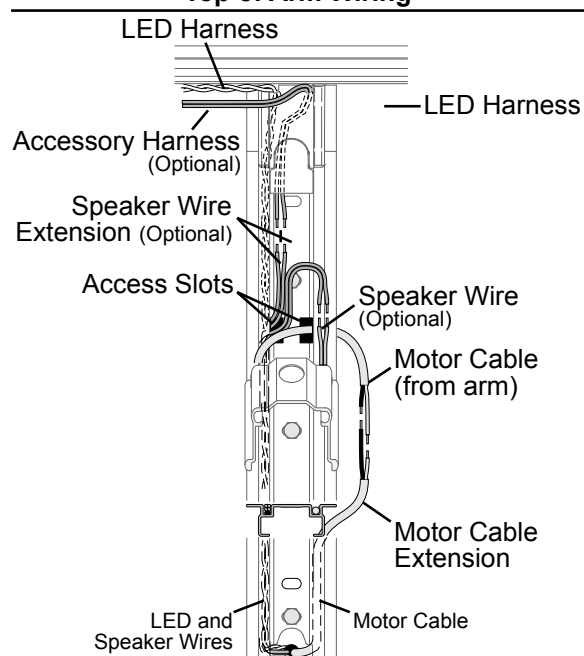
1. Loosen the arm's attaching hardware approximately 1" and pull the arm away from the wall.
2. From the bottom, press the motor cable into groove in the back of the extrusion on the RH side.

Tip: Use a small amount of sealant or tape to hold the wires in place during routing.

3. Feed the end of the new motor cable from the arm through the RH access hole above the arm.
4. Splice the motor wires together and finish pressing the motor cable and splices into the groove in the back of the extrusion.

Tip: Stagger the splices to reduce the profile of the splices and wires.

5. From the bottom, press the LED harness into the groove in the back of the extrusion on the LH side. Route the wires out the top of the extrusion and through the slot of the top cover.
6. If installed, press the speaker wire(s) on top of the LED wires. Feed the end of the wires through the LH access hole above the arm.
7. After all wires are routed in the back of the arm, press the arm against the wall ensuring that the wires are not pinched. Tighten the arm fasteners.
8. If not done previously, finish securing the arm with 4 additional fasteners as shown on page 4.
9. If installed, splice the accessory and speaker wires to the existing wires routed from the bottom of the arm.



Bottom of Arm Wiring

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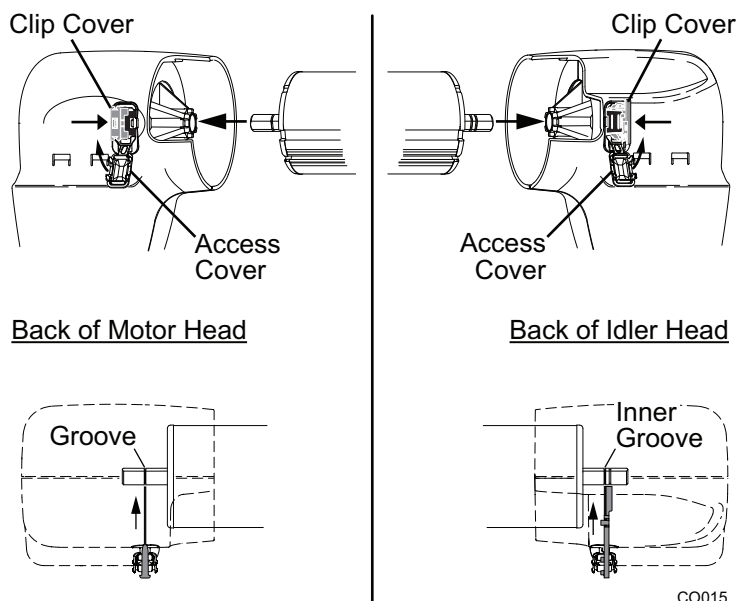
ATTACH THE ROLLER TUBE

1. Lift the roller tube up and align with the arm heads.
2. On the RH (motor) arm:
 - 2.1. Press the roller tube shaft into the hole in the motor head. It may be necessary to twist the roller tube to align the flats on the roller tube shaft with the flats in the motor head bearing.

NOTE: The retaining clips are factory installed in the rear head cover as shown.

- 2.2. With the roller tube shaft FULLY INSERTED, press the retaining clip onto the shaft. The clip goes in only when the shaft is fully inserted. Press the clip until it is firmly seated in the groove of the roller tube shaft.

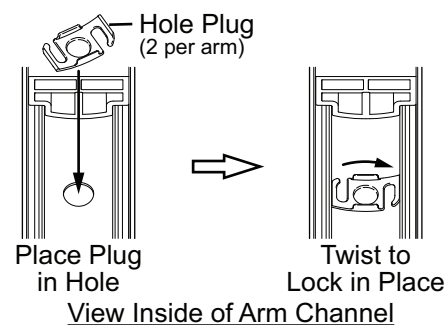
NOTICE The roller tube must be fully inserted into the head for the clip to align with the groove on the shaft. The roller tube can disengage if the clip does not seat in the groove of the shaft.



3. On the LH (idler) arm:
 - 3.1. Press the roller tube shaft into the hole in the idler head.
 - 3.2. With the roller tube shaft fully inserted, press the retaining clip onto the shaft. Move the roller tube shaft until the clip aligns with the inner groove of the shaft. Press the clip until it is firmly seated in the groove of the shaft.
4. On the back of the motor and idler heads, remove the plastic retaining clip covers and discard.
5. Rotate the access covers up and snap into the retaining clip openings.

INSTALL THE HOLE PLUGS

1. From the back of the front channel, insert the plug into the hole.
2. Twist to lock into place.



OPTIONAL WIRE COVERS

Two optional wire covers are available for the Compass.

For upper wire routing use the upper wire cover.

Trim the wire cover for best fit. To slide the cover up into the top cover, notch the upper corners approximately 1/4" x 1". This allows it to extend under the access tab of the top cover.

Pinch the cover and snap into the channel and slide up into the top cover.

NOTE: The Longitude bottom cover does not fit on the Compass arms. It will be necessary to order new bottom covers for use with the Compass arms.

For lower wire routing use the lower wire cover. The cover snaps onto the bottom of the rear channel. The lower cover is purchased in sets of two (2). These can be applied to both arms for a balanced aesthetic appearance.

