

Crosswing

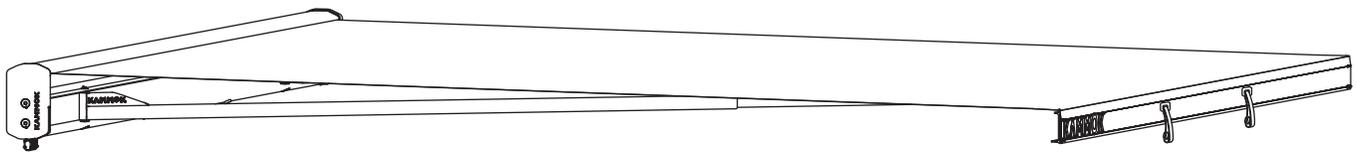
Car Awning

KAMMOK

User Manual_{1.0}

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Special Circumstances	Found Online
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Your Crosswing is carefully designed to be serviceable. Details Found on our website at kammok.com/crosswing-instructions.

1. In rare instances, you may need to add more tension to your Crosswing. Please reference the "Adjusting The Crosswing's Tension" section in the online instructions.

2. The fabric on your Crosswing Awning is replaceable if damaged or for future customization. Please reference the "Replacing The Crosswing's Fabric" section in the online instructions.

3. For replacement parts due to damage or malfunction, please contact our Customer Support Team at +1 512-399-1418.

**Adventure grade.
Better made.**

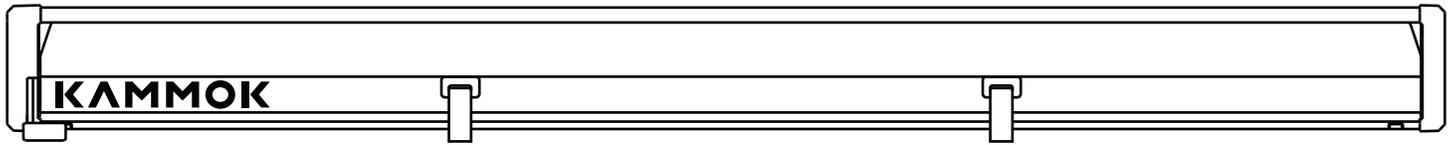
Designed in Austin, Texas | Made in China



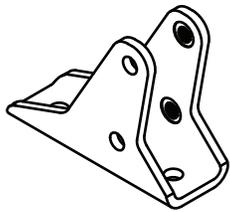
Flip for Instructions ►

Parts Included

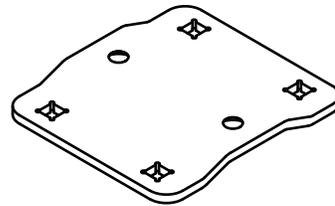
Crosswing Awning x 1



Mounting Bracket x 2



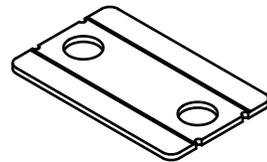
Clamping Plates x 4



Angle Adjust Bracket x 2



Rubber Pads for Clamping Plates x 4



Carriage Bolts x 8



5/8 in Bolts x 8



Flat Head Bolts x 4



1 5/8 in Bolts x 4



Lock Washers x 4



Nylon Lock Nuts x 12



T-Slot Nuts x 8

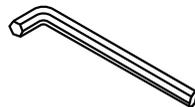


What You'll Need

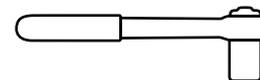
- 5 mm Hex Wrench



- 6 mm Hex Wrench



- 13 mm Socket or Crescent Wrench

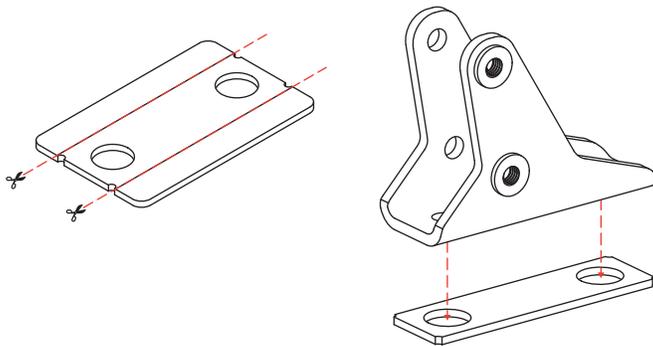


- WARNING:**
- Check that all awning fasteners are tightened and awning is securely attached to vehicle before driving.
 - Ensure awning is properly closed and secure with pronto latch locked and safety straps snapped in before driving vehicle.
 - Pinch hazard! Keep body parts clear of moving parts during opening and closing of awning.

- Stow awning in high winds (above 25 mph) or heavy snow.
- Do not allow awning to self retract uncontrolled.
- Awning contains a high tension spring system, do not alter the spring system.
- Do not attempt to adjust tension without following provided instructions.
- Do not pull down on or hang from the awning.
- Do not hang any non-Kammok approved items from awning.

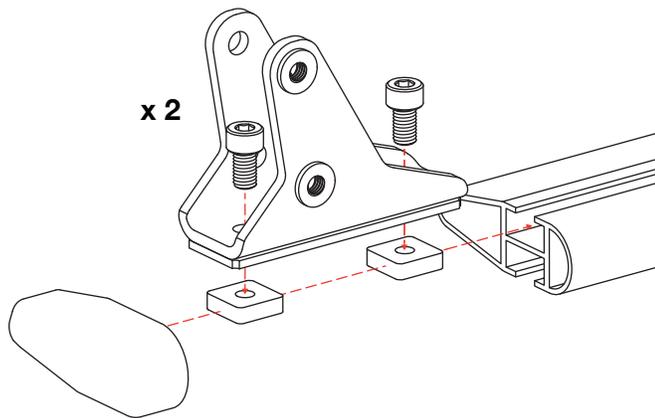
T-Slotted Roof Racks

- 1** Trim rubber pad at indents. Apply adhesive backed rubber pad to bottom of each Angle Adjust Bracket.



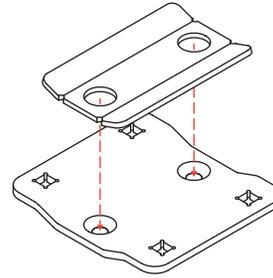
- 2** Attach one Angle Adjust Bracket to each crossbar using two T-slot nuts and two 5/8" bolts. Place at even positions on the bars.

TOOL: 6 mm Hex wrench



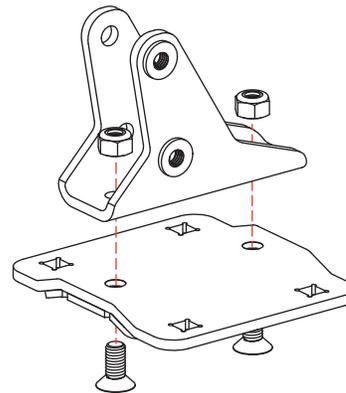
Cross Bars without T-Slots

- 1** Apply adhesive backed rubber pad to each clamping plate.



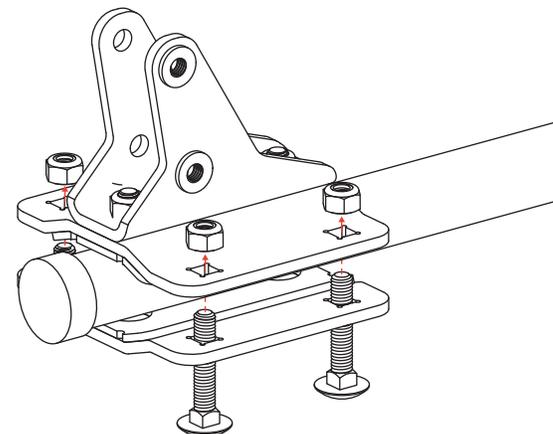
- 2** Attach one clamping plate to each Angle Adjust Bracket using two flat head bolts and 2 nylon lock nuts.

TOOLS: 13 mm Crescent or socket wrench. 5 mm Hex wrench

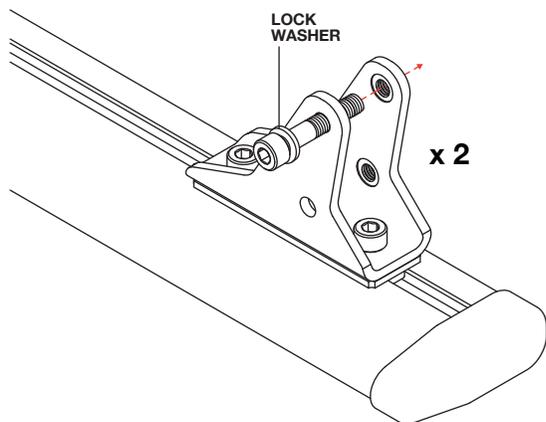


- 3** Using additional clamping plate, 4 carriage bolts, and 4 nylon lock nuts, clamp the Angle Adjust Bracket to crossbar. Repeat for other crossbar.

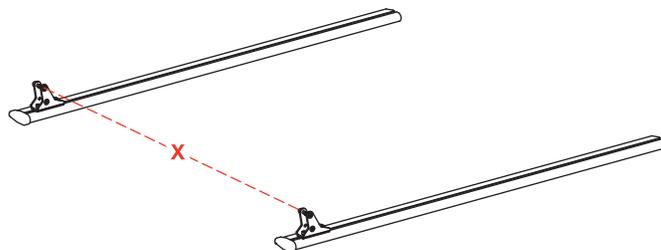
TOOL: 13 mm Crescent or Socket Wrench



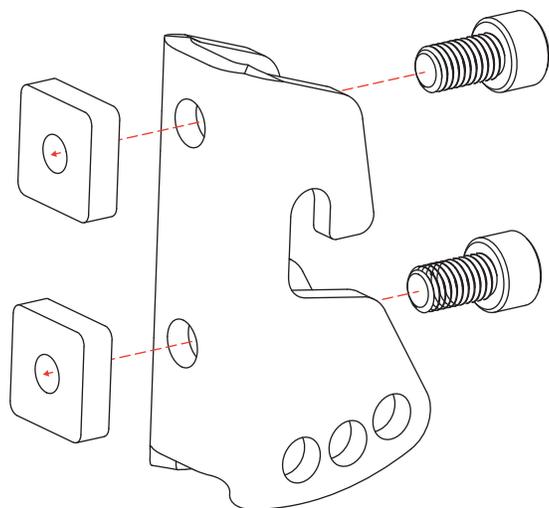
- 1** Pre-thread one 1 5/8" bolt with lock washer into the top hole of each Angle Adjust Bracket.



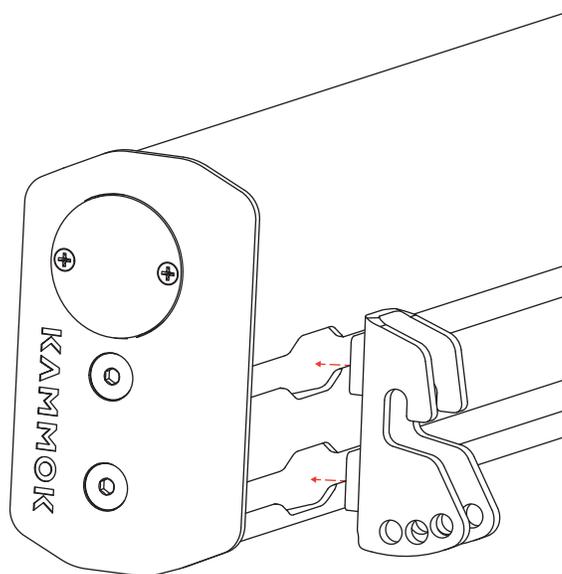
- 2** Measure spacing between angle adjust brackets.



- 3** Pre-thread two T-slot nuts onto each Awning Mounting Bracket using two 5/8" bolts, do not tighten.

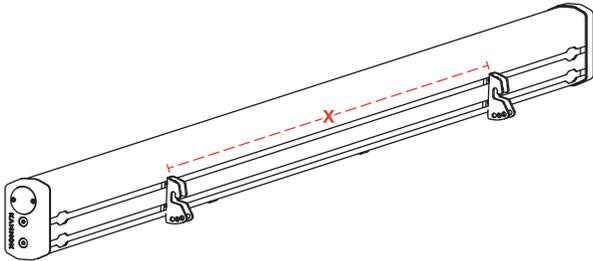


- 4** Slip the T-slot nuts (with Awning Mounting Bracket in tow) into the T-slots located on the back of the Crosswing Awning using the cutaways at each end.

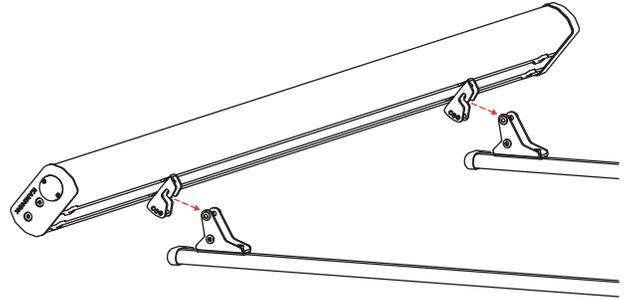


- 5** Position the Awning Mounting Brackets to align with the spacing of the Angle Adjust Brackets. Tighten fasteners lightly.

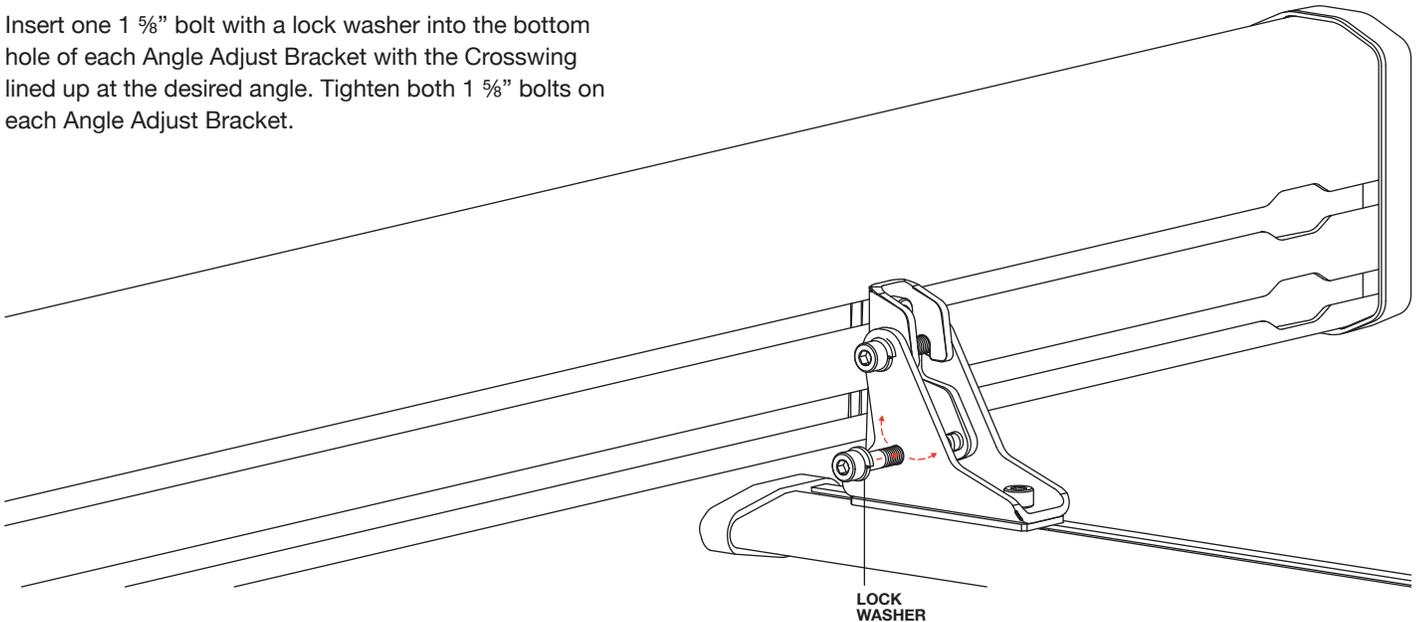
TOOL: 6 mm Hex wrench



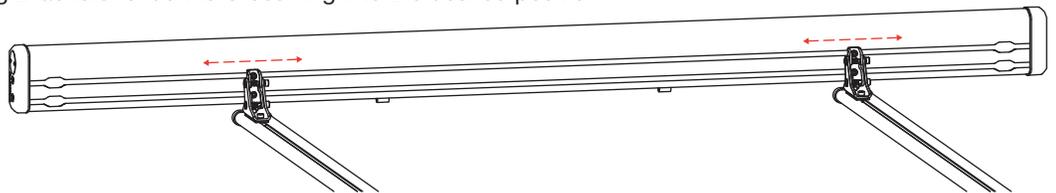
- 6** With the help of an additional person, lift the Crosswing up to the vehicle. Align the Awning Mounting Brackets with the Angle Adjust Brackets, slot the hook of each Awning Mounting Bracket onto the bolts of the Angle Adjust Brackets, let the Crosswing pivot down until it rests against the Angle Adjust Bracket, the Crosswing will hang safely.



- 7** Insert one 1 5/8" bolt with a lock washer into the bottom hole of each Angle Adjust Bracket with the Crosswing lined up at the desired angle. Tighten both 1 5/8" bolts on each Angle Adjust Bracket.



- 8** If the Crosswing is not at the desired position: slightly loosen the four 5/8" bolts holding the Crosswing to the Awning Mounting Brackets. Slide the Crosswing into the desired position along the length of the vehicle.



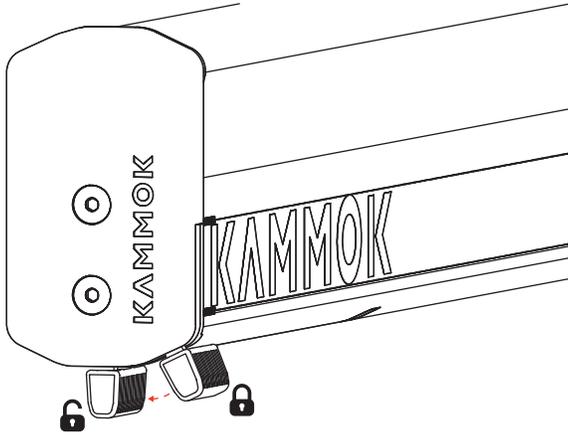
- 9** Tighten all four 5/8" bolts holding the Crosswing to the Awning Mounting Brackets.

- 10** Check that all fasteners are securely tightened.

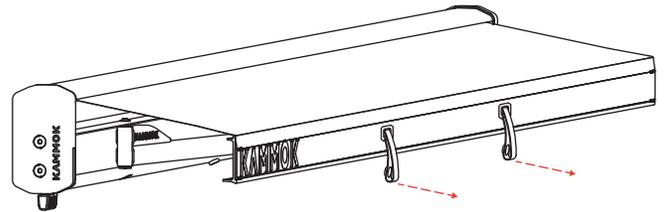
WARNING: Pinch hazard, be careful not to place body parts in path of moving parts.

How To Open the Crosswing

- 1** Place the Control Lever into the unlocked (straight down) position.

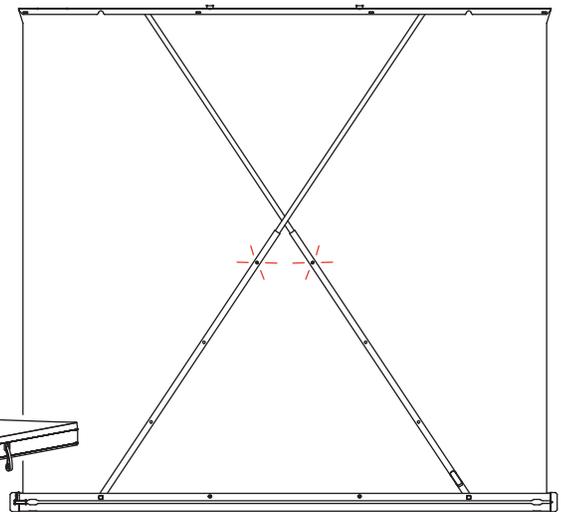


- 2** Release Safety strap snaps. Pull the Crosswing open evenly by each safety strap. Do not let go of straps until awning is securely locked in position.



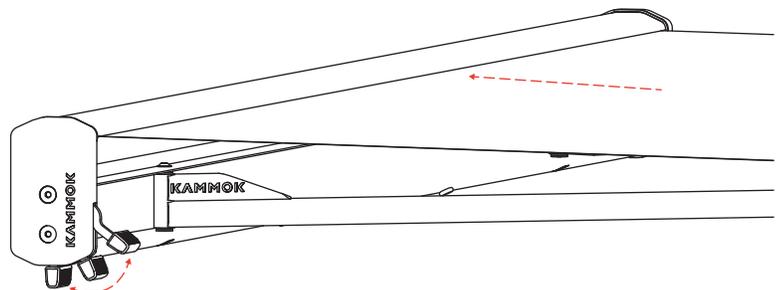
- 3** There are three points where the Crosswing will lock into place (located at 3', 4'11", and 6'6"). You will hear two clicks sounding together at each point. These clicks are the spring pins locking the awning into place. The awning cannot be left open at any other location.

Note: The locking buttons engage when the awning is being pulled open but are automatically disengaged when traveling in the reverse direction. Refer to closing instructions if you travel past your desired locking position.



- 4** Pull the control lever up to tighten the fabric. You will hear the ratchet mechanism click.

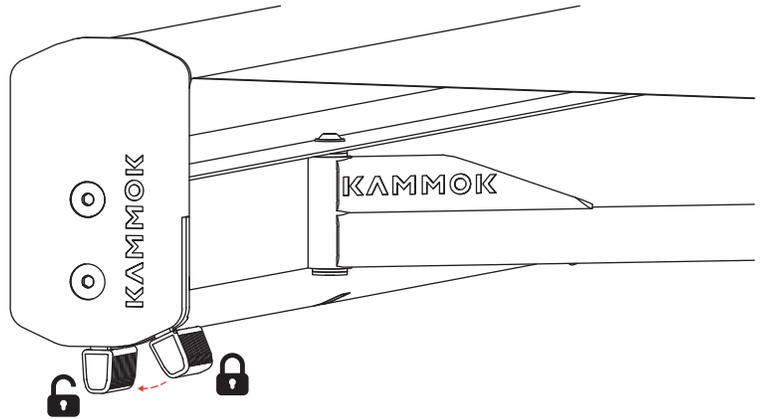
Note: The control lever will automatically return to the locked position. If you press the lever beyond this position, the tension will be released. The fabric will loosen and the tightening process will have to start over.



WARNING: Pinch hazard, be careful not to place body parts in path of moving parts.

How To Close the Crosswing

- 1 Place the Control Lever into the unlocked (straight down) position.

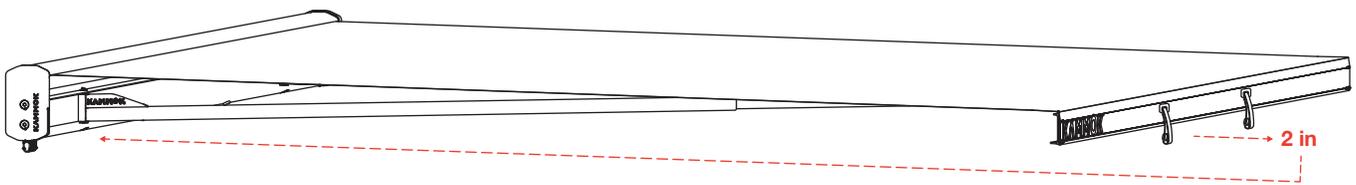


- 2 Grab the two safety straps/pull loops. Pull the awning out 2"-3", which will disengage the spring pins.

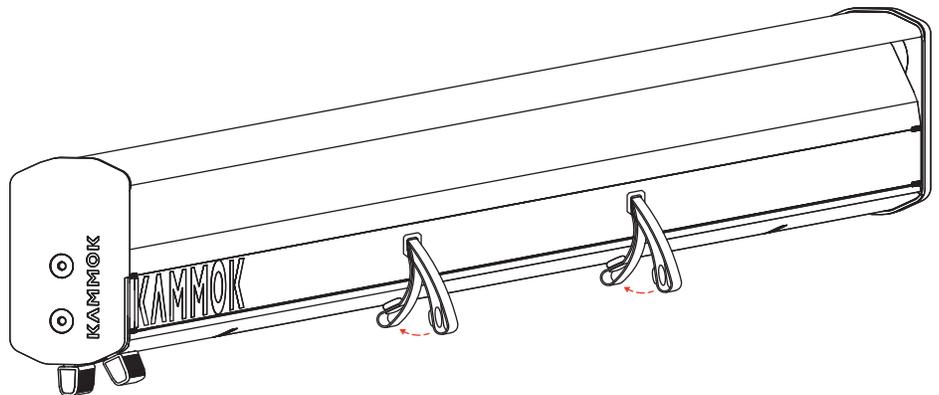
Note: Do not let go of the awning safety straps until fully closed.

- 3 Without releasing the pull loops, slowly guide the awning straight back to its closed position. The internal spring will assist the awning in winding itself up.

Note: If fabric retracts unevenly onto the reel and gets stuck, pull open and repeat the previous steps, ensuring the frame stays even during closing.



- 4 When the awning is fully closed, click the Safety Straps back onto their snap fasteners. Return the Control Lever to the locked position, the ratcheting feature can be used if the fabric is loose on the reel.



Special Circumstances

Adjusting the Awning's Tension.....Page 9

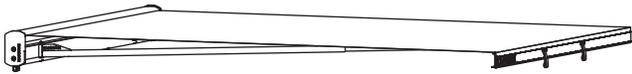
Replace the Awning's Fabric.....Page 11

WARNING: High spring tension, do not allow socket wrench or tension adjust hex to spin freely once engaged.

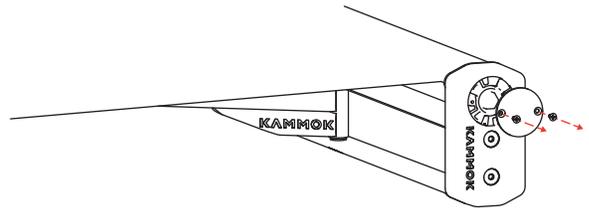
Adjusting the Crosswing's Tension

The spring tension should only be increased if the Crosswing is failing to retract easily or you are replacing the fabric, described later in these instructions.

- 1** Fully open the Crosswing and leave the Control Lever in the unlocked position. This will allow you to gauge the spring tension.



- 2** Remove the two Phillips head screws holding the Tension Adjust Cover on the right side of the Crosswing. Remove the Tension Adjust Cover. Be careful not to misplace the Tension Adjust Cover and screws.



To increase tension.

Continue on to step 3 below.

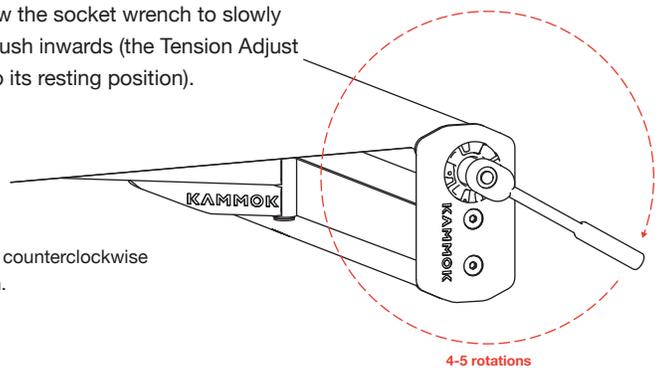
To decrease tension.

Skip to step 7 on the following page.

- 3** Using a $\frac{5}{8}$ " socket and wrench, turn the Tension Adjust hex clockwise (the hex will pull itself inward before spinning freely).

- 4** Make 40-50 turns clockwise. Allow the socket wrench to slowly rotate counterclockwise, do not push inwards (the Tension Adjust hex will push back out and sit into its resting position).

Note: Once the wrench ceases to spin counterclockwise on its own you can remove the wrench.



- 5** Test the new spring tension by closing and opening the Crosswing. If additional tension is desired repeat from step 3.

- 6** Replace Tension Adjust Cover and screws.

WARNING: High spring tension, do not allow socket wrench or tension adjust hex to spin freely once engaged.

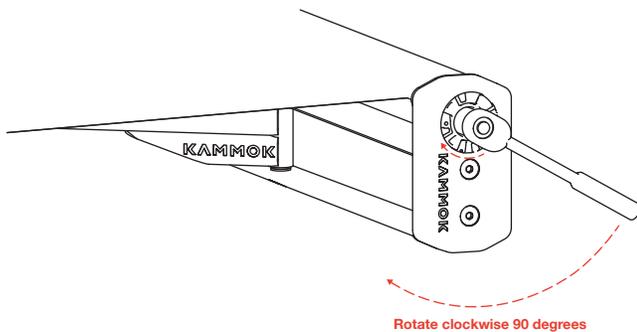
To decrease tension.

Continue on to step 7 below.

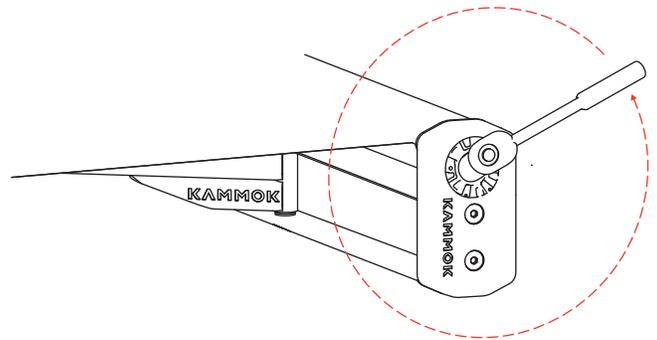
To increase tension.

Go back to step 3 on the previous page.

- 7** Using a 5/8" socket and wrench, turn the Tension Adjust hex 90 degrees clockwise. The Hex will pull itself inward and then spin freely.



- 8** Push inward on the socket so that the tension adjust hex does not push out and lock, allow the socket wrench to slowly spin counterclockwise. (If the tension adjust hex locks and stops turning repeat from step 3 on Page 9 ensuring that you are maintaining inward pressure on the socket).

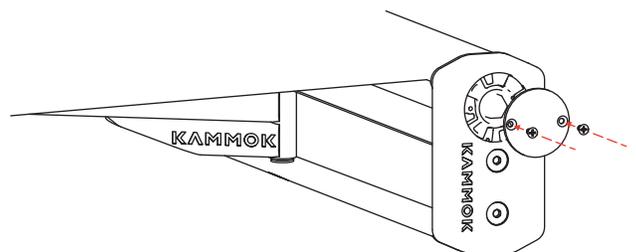


- 9** Once the socket wrench has made 40-50 counterclockwise turns, stop pushing inward on the socket wrench and slowly allow the wrench to turn counterclockwise (the Tension Adjust hex will push back out and sit into its resting position).

- 10** Once the wrench ceases to spin counterclockwise on its own you can remove the wrench.

- 11** Test the new spring tension by closing and opening the Crosswing. If less tension is desired, repeat from step 3.

- 12** Replace Tension Adjust Cover and screws.



Replacing the Crosswing's Fabric

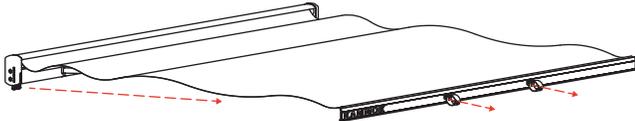
This is not a regular function and should only be replaced under specific circumstances.

- 1** Pull the awning out to its fully deployed position. Follow steps 7-9 in the previous section (Page 10) to remove all tension from the spring assembly.

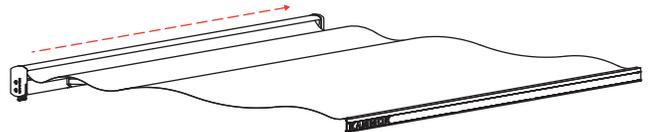
- 2** Allow the socket wrench to turn counterclockwise until all spring tension has been removed from the system (wrench will stop pushing back against you), remove the wrench.

- 3** Flip up the safety straps, remove the screw underneath each strap and the post from the other side. Set the strap assembly and fasteners in a safe place.

TOOL: 3 mm Hex wrench



- 4** Remove the fabric from the car end of the frame by separating the hook and loop Velcro attachment. Start at one end and work across.

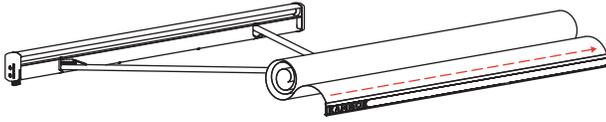


- 5** Roll the fabric towards the face plate before separating the Velcro from the awning. Again work across the awning from left to right as you separate the fabric from the faceplate.

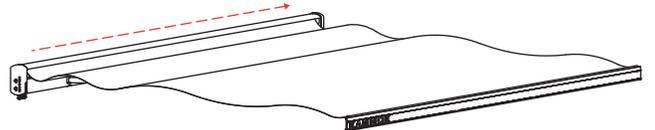


- 6** Grab the new replacement fabric.

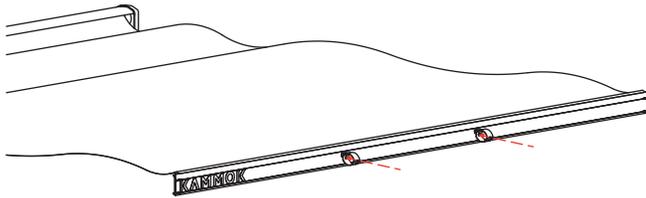
7 With Velcro side down, Line up the front edge of the fabric with the faceplate Velcro and press firmly as you work your way across the awning. While working across the awning, check that the screw holes for the pull loops line up with the precut holes of the fabric.



8 Attach other end of fabric to the reel tube, lining up one end of the Velcro then pressing down from left to right.



9 Reattached the safety strap assembly and fasteners.



10 With both ends of the fabric reattached, follow the *Crosswing Tension Adjust instructions* for increasing tension on Page 9, starting at Step 3.

11 On Page 9, Step 4 of the *Crosswing Tension Adjust Instructions*, make 35 turns clockwise, then follow the remaining steps to complete the tensioning process.

Clean & Care Maintenance

The awning can be wiped clean with mild soap and water. If the opening action of the awning becomes stiff, mild lubricants can be added to the telescopic tubing and the pivots of the swing arms.