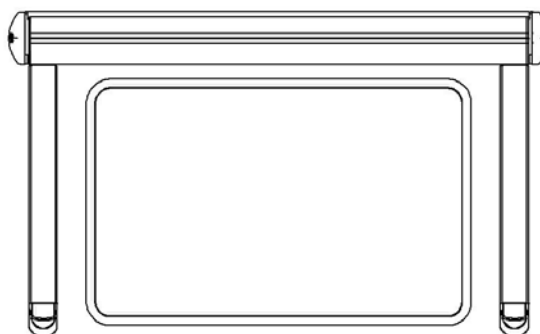


MODELS
89000(XX).(XXX) FRTA
860000(X).400(X) HARDWARE
A&E Power Window Awning



USA
SERVICE OFFICE
Dometic Corporation
509 South Polar Street
LaGrange, IN 46761
260-463-4858

CANADA
Dometic Distribution
866 Langs Drive
Cambridge, Ontario
CANADA N3H2N7
519-653-4390

**For Service Center
Assistance Call:**
800-544-4881

⚠ WARNING

This manual must be read and understood before installation, adjustment, service, or maintenance is performed. This unit must be installed by a qualified service technician. Modification of this product can be extremely hazardous and could result in personal injury or property damage.

⚠ AVERTISSEMENT

Lire et comprendre ce manuel avant de procéder à l'installation, à des réglages, de l'entretien ou des réparations. L'installation de cet appareil doit être effectuée par un réparateur qualifié. Toute modification de cet appareil peut être extrêmement dangereuse et entraîner des blessures ou dommages matériels.

SERVICE INSTRUCTIONS**Model**

89000 SERIES
860000 SERIES

SAFETY INSTRUCTIONS

This manual has safety information and instructions to help users eliminate or reduce the risk of accidents and injuries.

RECOGNIZE SAFETY INFORMATION



This is the safety-alert symbol. When you see this symbol in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating instructions.

UNDERSTAND SIGNAL WORDS

A signal word, **WARNING** OR **CAUTION** is used with the safety-alert symbol. They give the level of risk for potential injury.



WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

Read and follow all safety information and instructions.

GENERAL INSTRUCTIONS



These instructions must be read and understood before installation of this kit. This kit must be installed by a Dometic Service Center or a qualified service technician. Modification of this product can be extremely hazardous and could result in personal injury or property damage.



Improper installation may damage equipment/ could endanger life, cause serious injury and/ or property damage.

GENERAL INFORMATION

Important: Read all relevant steps before beginning service.

Dometic Corporation reserves the right to modify appearances and specifications without notice.

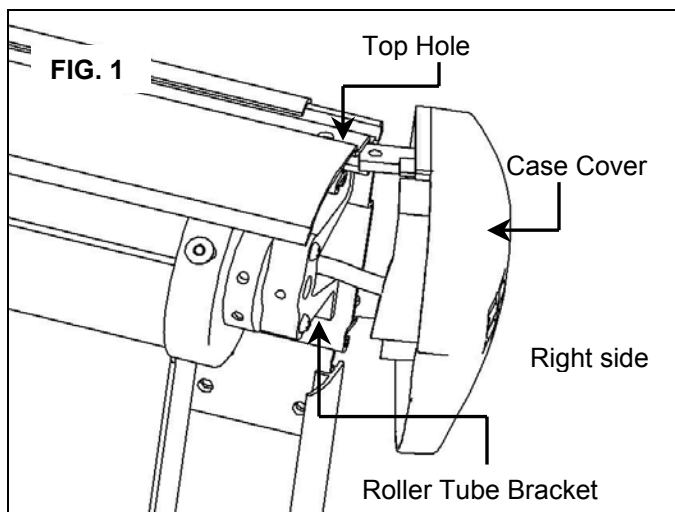
Important: This kit must be installed by a qualified person.

Tools Required

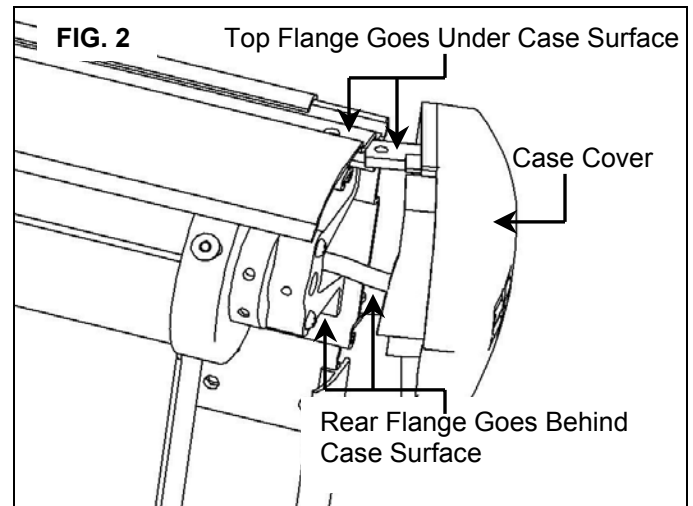
Electric Drill	5/16" Drill Bit
Flat Head Screwdriver	3/16" Drill Bit
Pop Rivet Tool	Silicone/Tape Sealant
Step Ladder	7/64" Allen Wrench
Silicone Lubricant	

A. Replacement Of Case Covers

1. Open awning. Locate right hand case cover illustrated in FIG. 1.
2. Using a Phillips head screwdriver remove the #8X3/8" screw from the top of the case and the #8X1 3/8" screw from the bottom hole in the roller tube bracket. Location of the screws can be seen on FIG. 1.



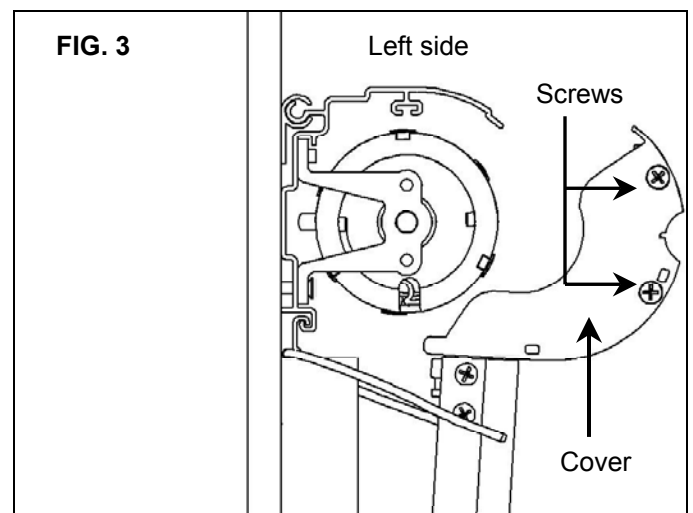
3. Remove old case cover. Slide new right-hand case cover in place. The top flange of the cover should fit inside and under the top surface of the case (See FIG. 2). The rear flange should fit behind the rear wall of the case, between the case and the coach wall. The rear wall of the right-hand case cover has a large notch to accommodate the motor cable. Check that any silicone sealant or excess wire do not interfere with the case cover.



4. Ensure that both holes line up with the corresponding holes in the case. Drive one (1) #8X3/8" screw (supplied) through the top hole in the case and into the flange in the case cover.
5. Drive one (1) #8x1-3/8" screw (supplied) through the bottom hole in the roller tube bracket, through the case, through the case cover, and into the coach wall.
6. Repeat Steps 1- 5 for the left side.

B. Replacement Of Front Rail Covers

1. Open awning. Locate front rail cover illustrated in FIG. 3.
2. Using a Phillips head screwdriver remove the two #8X1/2" flat head screws securing the front rail cover to the front rail. See FIG. 3 for location.



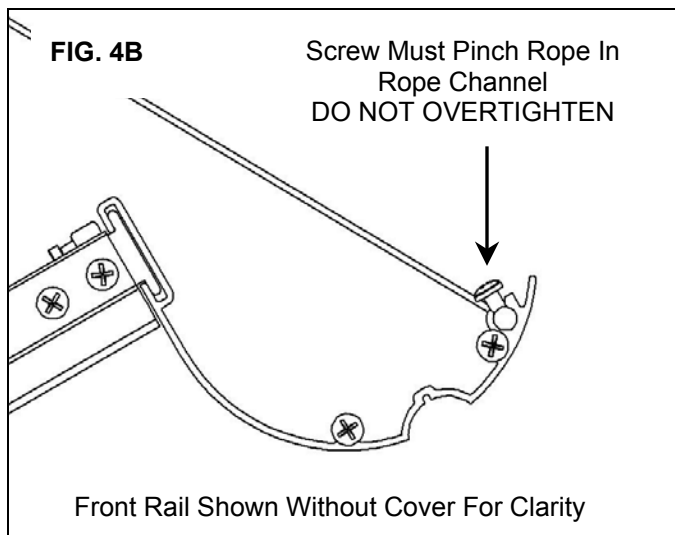
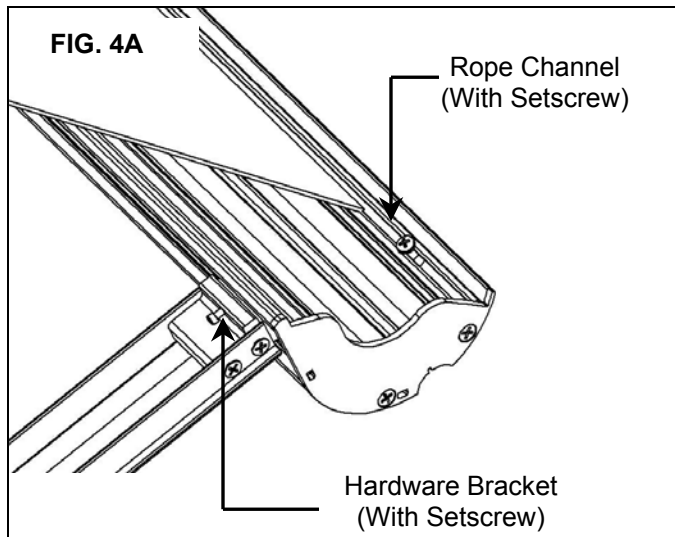
3. Remove old cover. Line up new front rail cover with edge of front rail. Ensure holes in cover line up with the hole channels in the front rail.

Note: Ensure correct cover is installed in each side. Each cover has countersunk holes on its outer face only. It does not matter which side is replaced first.

4. Secure cover to front rail with two (2) #8X1/2" flat head screws (supplied).
5. Repeat Steps 1-4 on opposite side.

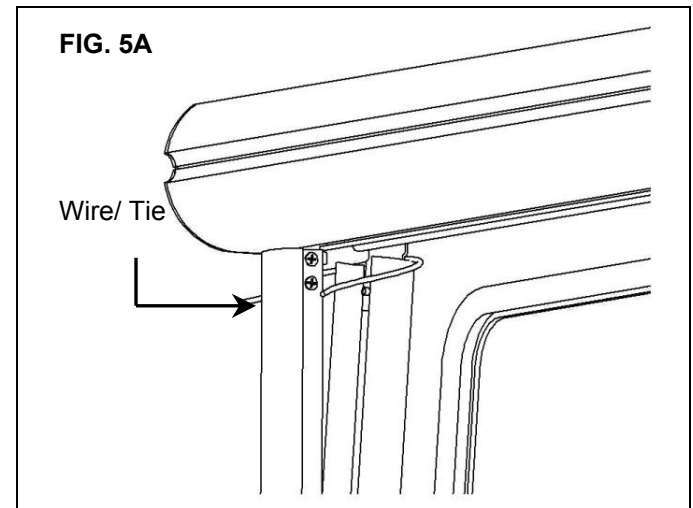
C. Replacement Of Hardware

1. Case and rail covers must be removed in order to detach hardware. Refer to Sections A and B in the manual for removal instructions.
2. Open the awning completely. Remove all screws (or Oscar rivets) holding both of the hardware arms to the coach.
3. Loosen the setscrew at each hardware bracket illustrated in FIG. 4.

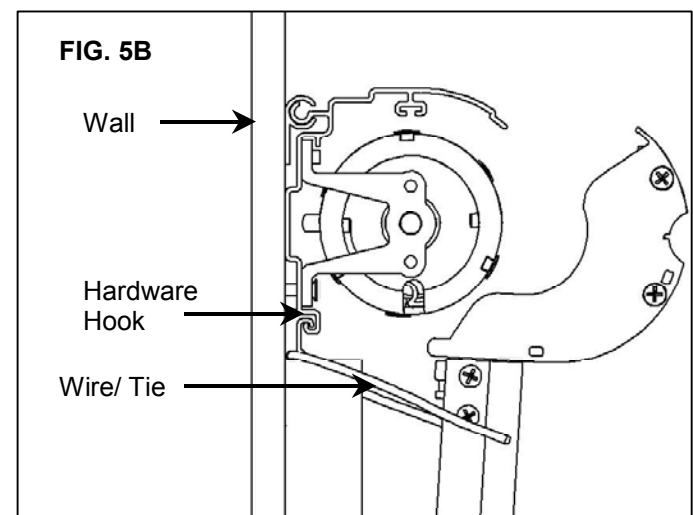


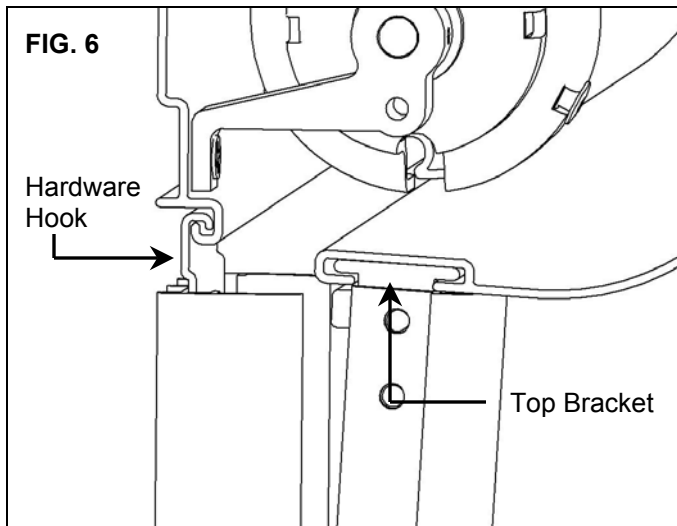
4. Retract the awning until almost completely closed (See FIG. 5A and 5B).

5. Secure the hardware in the almost closed position by sliding a sturdy rope, nylon string, wire, or wire tie behind the hardware hook. Location of hardware hook is shown in FIG. 5B and 6. Take care not to scratch or damage the coach wall.



6. Tie securely around the front of the front channel. This will keep the hardware from popping open unexpectedly (due to the gas springs) during removal. Make sure to secure both sets of hardware arms.
7. Once safely tied, hardware may slide out of the back case and front rail. The right-hand hardware will slide out to the right; the left-hand hardware will slide out to the left.





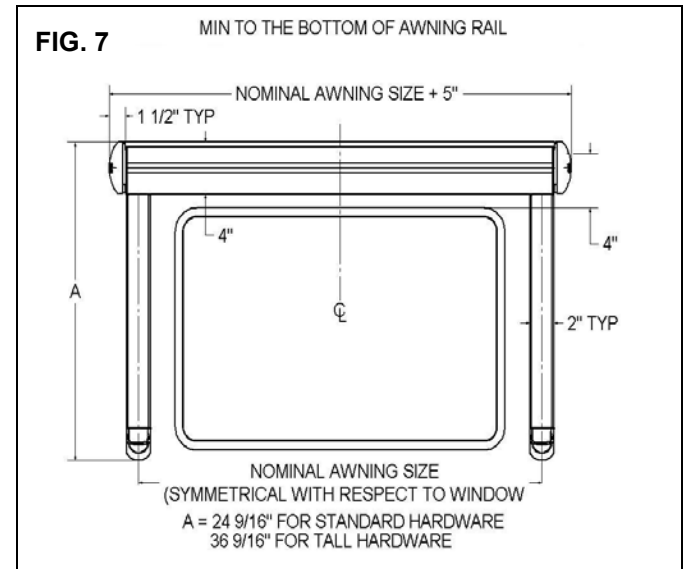
8. New hardware may now be installed. Each hardware arm assembly comes with two wire ties keeping it closed. The tie kept in place by the caution/ warning decal must remain in place at this time. The slack in this wire tie will allow the hardware to be opened only partially. Remove only the other tie and leave the one held in place by the caution/ warning decal.

CAUTION

The hardware arm assemblies are pressurized and will spring open. Do not remove the nylon ties until instructed to do so. Failure to follow these instructions could cause serious personal injury or property damage.

9. With the hardware arm assembly secured in the partially open position, simultaneously slide the hardware top bracket into the front rail and the hardware hook into the case (See FIG. 6). Outer edge of hardware should be flush with edge of case. Repeat with the opposite end. Hardware arms should be symmetrical with respect to the centerline of the case (See FIG. 7).
10. Cut and remove the second set of ties. You will secure the case and hardware with screws (or Oscar rivets) to the coach wall in the next steps.
11. Extend awning approximately 26" by pressing down on the rocker switch. Verify that hardware is plumb and in the desired location.
12. Find screw pack inside new hardware (screw pack is included inside arm with serial number label). Apply gentle pressure downward at the hardware elbow to ensure hardware is as low as the hardware hook will allow. Drive one #8X1 3/8" screw (supplied) through the oval hole in back channel and into the coach wall. The oval

hole will allow for fine adjustments (if needed) before the rest of the fasteners are applied. If no structural backing is available behind the wall, you may use the supplied 3/16"X 1" Oscar rivets by pre-drilling 3/16" holes into the wall using the back channel as guide. Repeat on opposite end.



13. Before applying the rest of the fasteners, install the case and front rail covers. Refer to Sections A and B of this manual for instructions.
14. Check that the front rail is centered with the case. There should be a gap of approximately 1/8" between the case cover and the front rail cover in each side (this gap may be smaller or bigger for each unit, depending on manufacturing tolerances). This is a designed feature to allow operational clearance. Secure hardware to front rail by tightening the screw in each hardware bracket (hardware must be partially open for this step, See FIG. 4).
15. Close and open awning to verify fabric is tracking correctly. Loosen screws in FIG. 4 and fine adjust position of front rail if necessary.

Note: Awning extension is calibrated for Standard hardware. If you intend to use this awning with Tall hardware, see Section D (Limit Switch Adjustment) for instructions on adjusting the awning extension.

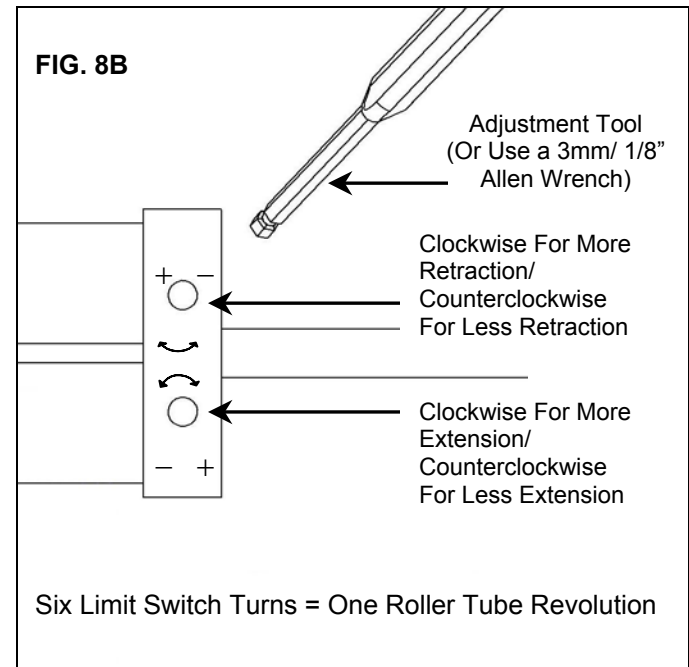
16. If no more adjustments are necessary, open the awning and finish securing the hardware with screws or Oscar rivets through the remaining holes.

D. Limit Switch Adjustment

1. The A&E Power Window Awning comes equipped with limit switches to stop the motor at full extension or full retraction. These limits are set at the factory for Standard hardware, and typically should not need any adjustment by the

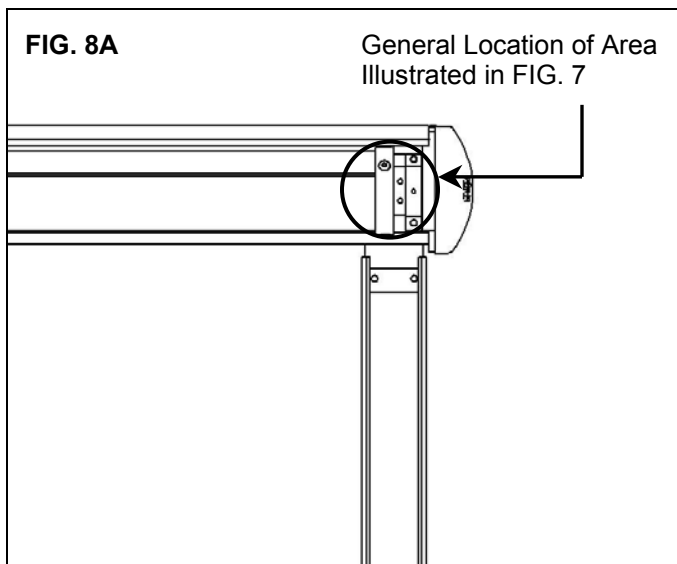
installer or the user. If adjustment of the limit switches is deemed necessary, or if the awning is to be used with Tall hardware, an adjustment tool is included with the A&E Power Window Awning (or use a 3mm or 1/8" Allen Wrench).

2. **HOW TO DETERMINE IF ADJUSTMENT IS NECESSARY:** The front rail should fit snug against the case when the awning is fully retracted. The motor should turn itself off and stop trying to turn when the awning is fully retracted. If the motor continues to try to turn once the awning is closed, damage to the motor or awning components may occur. Refer to FIG. 8A and 8B for details on adjusting the limit switch for less retraction. The motor should also stop upon full extension. The appropriate projections are illustrated in FIG. 10 for Standard or Tall hardware. Note that the dimensions illustrated are from the leading lip of the awning case to the leading edge of the front rail. Also note that the hardware will not be perpendicular to the coach wall (the proper angle is about 80 degrees). If awning is allowed to extend beyond those points, the hardware could bottom out and cause the fabric to sag. Refer to FIG. 8A and 8B for details on adjusting the limit switch for less extension.
3. **ADJUSTING EXTENSION LIMIT SWITCH FOR TALL HARDWARE:** The A&E Power Window Awning comes calibrated for use with Standard hardware. In order to get the appropriate extension for Tall hardware, the extension limit switch must be adjusted by turning it 20-22 full turns clockwise using the provided tool or a 3mm or 1/8" Allen Wrench (See FIG. 8A and 8B). We recommend initially turning the limit switch no more than 20 full rotations, then fine adjusting in quarter-turn increments until the desired extension is achieved (See FIG. 10).



E. Replacement Of Fabric

1. Open awning completely.
2. Using a Phillips head screwdriver, remove the pair of setscrews holding down the fabric at each end of the front rail (See FIG. 4).
3. Remove the left case cover and left front rail cover (left side only). Refer back to sections A and B in this manual for removal instructions.
4. Notice that several wraps of fabric remain on the roller tube. In the next few steps, you will completely unwrap the fabric from the roller tube by adjusting the extension limit switch.
5. Before adjusting the limit switch, you should protect the hardware from bottoming out on itself by sliding a folded cloth, rolled-up piece of paper, or any suitable material in the hardware gap illustrated in FIG. 9. Do this on both sets of hardware. This will avoid potential cosmetic damage to the hardware when the fabric goes slack.

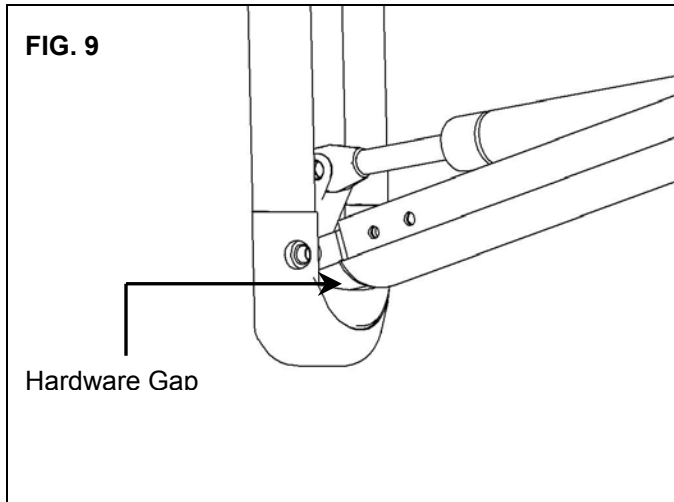


CAUTION

Pinch-point: avoid placing fingers in hardware gap.

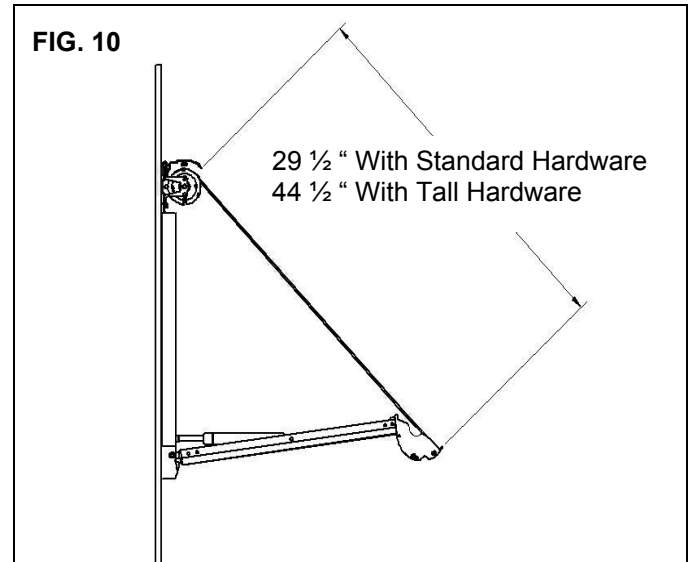
6. Locate the limit switch (see FIG. 8A and 8B). Using the adjustment tool that came with the original awning (or a 3mm or 1/8" Allen Wrench), turn the extension limit switch clockwise for more extension. You can do this while keeping the rocker switch depressed in the "extend" position. The roller tube will continue to turn more and more as the switch is adjusted for more extension, allowing more fabric to unwrap.

It will be helpful to keep track of how many turns were added to the limit switch, as the same amount of turns will have to be subtracted once installation is complete.



7. Once the fabric is fully rolled-out and the roller tube is exposed, three pieces of masking tape along the roller tube will be visible. Remove the masking tape.
8. Remove the fabric by sliding it out the left side.
9. Install the new fabric by sliding it in from the left. The top rope (at the roller tube) and bottom rope (at the front rail) must slide into place simultaneously. Make sure the side hems and the bottom rope-pocket hem (going into the front rail) face down. The top rope-pocket hem (at the roller tube) will face up.
10. Apply masking tape approximately in the same locations where first removed.
11. Using the same tool as in Step 6, subtract the turns added in Step 6 by turning the same limit switch (for extension) the same amount of turns, this time in the counter-clockwise direction.
12. Roll in fabric fully by pressing on the rocker switch in the "retract" direction. Roll out again fully (extend awning) by pressing the rocker switch in the "extend" direction. Verify that awning is extending the appropriate distance (see FIG. 10), and that it is tracking correctly. Follow the limit switch adjustment instructions in Section D if more adjustments are required.
13. Secure fabric to front rail using the setscrews. Once the fabric is completely secure, case covers and rail covers may be reattached to the awning. Close and open awning to verify fabric is tracking correctly. Refer to the previous sections for adjustments to the limit switches, hardware, or covers as needed.

FIG. 10



E. Replacement Of Front Rail

1. Open awning FULLY. It would be helpful to take note of the location of setscrews, fabric edge, and hardware with respect to the edges of the old front rail.
2. Loosen the setscrews at each hardware top bracket (see FIG. 4).
3. Using a Phillips head screwdriver remove the two #10X1/2" flat head screws and detach the front rail cover (see FIG. 3) at each side of the awning.
4. Using a Phillips head screwdriver remove the pair of setscrews securing the fabric rope at each end of the front rail (see FIG. 4).
5. Protect the hardware from bottoming out on itself by sliding a folded cloth, rolled-up piece of paper, or any suitable material in the hardware gap illustrated in FIG. 9. Do this on both sets of hardware. This will avoid potential cosmetic damage to the hardware when the front rail is removed.
6. Slide the left hardware bracket out of the front rail by sliding it to the left. Slide the right hardware bracket out of the front rail by sliding it to the right. Do not let go of the front rail, as it may swing towards the coach wall causing damage/ injury. The assistance of a second person is recommended with awnings over 90" nominal length.

CAUTION

You must maintain control of the front rail once it is detached from the hardware. Failure to do so may cause the front rail to swing towards the coach causing damage or injury. Failure to follow these instructions could cause serious personal injury or property damage.

⚠ CAUTION

The hardware arm assemblies are pressurized and will spring open. Do not slide the hardware out of the front rail unless awning is fully open. Failure to follow these instructions could cause serious personal injury or property damage.

7. Slide the front rail completely off the fabric rope with a smooth motion to one side.
8. Slide the new front rail onto the fabric rope. Be careful not to snag the fabric with the edges of the front rail rope channel, and watch out for side hems.
9. Slide the right hardware bracket into the front rail from the right. Slide the left hardware bracket into the front rail from the left. Using the old front rail as reference (see Step 1), locate fabric, hardware, and setscrews at the same relative location with respect to the new front rail.
10. Tighten setscrews at hardware top brackets. Replace setscrews for fabric rope (see FIG. 4A and 4B). DO NOT OVERTIGHTEN SETSCREWS.
11. Reinstall both front rail covers. Make sure to install the correct cover at each side. Front rail covers have countersinks on the outside face only.
12. Remove protective material from hardware gap (see Step 5).
13. Close awning with caution. Make sure front rail is properly centered with case.

⚠ CAUTION

Damage to the case covers or front rail covers could occur if the front rail is improperly aligned. When closing the awning for the first time, visually inspect the awning closing, and if not aligned properly, stop closing awning until correct alignment has been obtained.

14. Loosen set screws and adjust front rail, hardware, or fabric position as necessary.