



RECORD THIS UNIT INFORMATION FOR
FUTURE REFERENCE:
Model Number _____
Serial Number _____
Date Purchased _____

REPLACEMENT INSTRUCTIONS FOR AWNINGS

- Fabric
- Torsion Assembly
- Weathershield
- Stop Assembly
- Drop Shade Assembly
- Drive Assembly

For WeatherPro Plus Awnings

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⚠ 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
1(X)5(XX)(XX).000
FRTA
Series

REVISION A
Form No. 3311271.013 02/17
(French 3311272.029_A)
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LaGrange, IN 46761

Important: These Instructions must stay with unit. Owner read carefully.

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.

For WeatherPro Awnings & Power Patio Awnings

Tools Required:

Vise Grips®	Screwdriver	Pliers
Socket Wrench Set	Electric Drill	7/64" X 2-3/4" Cotter Pin
3/16" Drill Bit	Step ladder	Wood Block
3/8" Pop Rivet	3/16" Pop Rivet	Nylon Wire Ties
End Cap Guide	Pop Rivet Tool	End Cap Guide

A. General Instructions

The Fabric Roller Tube Assembly (FRTA) consists of a vinyl or acrylic Fabric, Roller Tube, Torsion Assembly and Weathershield.

The instructions will aid the service person to make repairs quickly and correctly. The repairs must be made by a qualified service person. Read instructions ENTIRELY before attempting to make repairs on the product.

WARNING

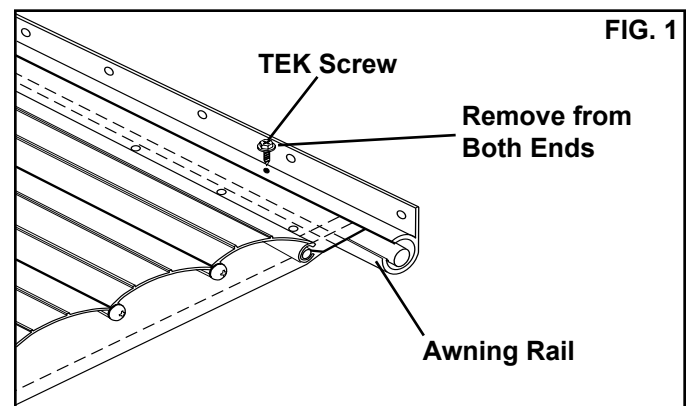
These instructions must be read and understood before installation, adjustment, service or maintenance is performed. This unit must be installed by a qualified serviceman. Modification of this product can be extremely hazardous and could result in personal injury or property damage.

B. Removing The Awning From The Coach

1. In all instances of fabric, roller tube or weather-shield replacement, it is necessary to unroll the fabric. A large clean and smooth work area is required to prevent damage to the fabric.

Note: If replacement of either torsion assembly is required, awning removal from the coach is not necessary. Proceed to Sections "C" and "D".

2. Remove the TEK screws securing the awning fabric at each end of the awning rail. See FIG. 1.



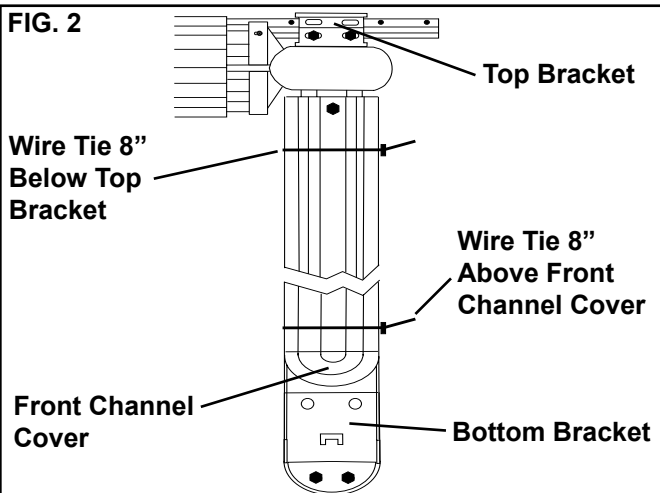
3. Extend or open the awning two revolutions of the FRTA. This will allow for removal of top brackets and the FRTA.
4. Remove lag screws holding bottom brackets to the coach wall. If the back channel has been secured to the coach wall directly, remove the screws/rivets through the two holes in the back channel.
5. Pin the left hand torsion. See Section C
6. Disconnect the three wire harnesses (motor power, brake, and wind sensor) at their plugs by the top casting of the right arm assembly.
7. The next two steps require three people. Loosen the lag bolts holding the top and bottom mounting brackets to the coach. Push the arm assemblies closed and wrap two heavy nylon wire ties around each arm assembly to prevent them from extending during removal of the FRTA. One should be 8 inches above the front channel cover, and the other 8 inches below the top mounting bracket. Do both arm assemblies. See FIG. 2

⚠ WARNING

Arms under tension from the gas strut are dangerous. Use extreme care. If not controlled the arms will extend quickly. Keep hands and clothing clear of awning arms, as personal injury may result.

8. While lifting the arm assemblies to support the FRTA, remove the lag bolts holding the top mounting brackets to the coach wall. Slowly walk the awning fabric out of the awning rail.
9. Lay the FRTA on a large clean work area to prevent damages.
10. Before removing the arm assemblies, you must read and understand Sections C and D.

FIG. 2



C. Removing The Left Hand Torsion

⚠ WARNING

Use extreme care. Springs under tension are dangerous. If not controlled they will unwind quickly. Keep hands and clothing clear of top casting, as personal injury may result.

Note: If the awning is installed on a coach, complete the following steps on a step ladder with the FRTA extended two turns from the awning rail.

⚠ WARNING

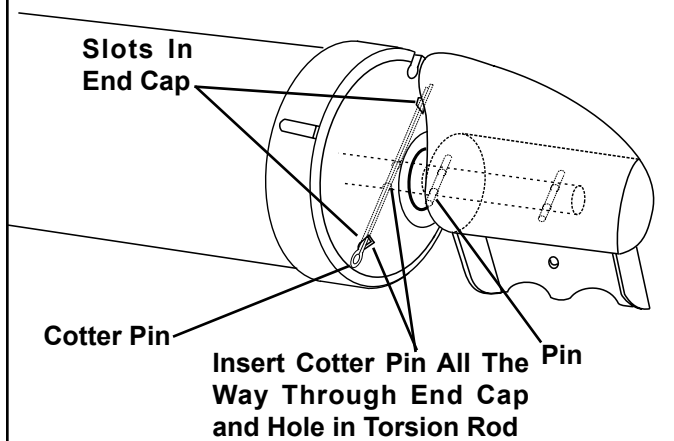
Severe injury can result from the rapid spin-off of the top casting. NEVER use bare hands to handle a top casting under spring tension.

1. Before the left arm assembly is removed the torsion must be pinned to prevent uncontrolled unwinding of the spring.
 - a. Turn top casting or FRTA until the pin is parallel with the two slots in the end cap. See FIG. 3.

FIG. 3

Left Hand Torsion Shown

Turn FRTA or Top Casting to Align Slots in End Cap with Pin

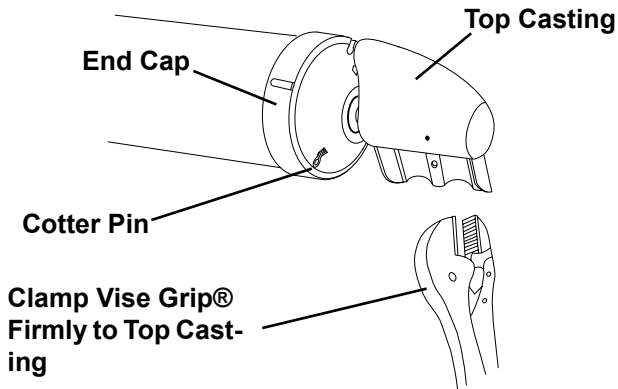


- b. To pin the left hand torsion insert a 7/64" x 2-3/8" cotter pin through the end cap and torsion rod. Put a piece of tape over the head of the cotter pin to prevent it from dropping out. See FIG. 3.

Note: Do step "c" if FRTA is installed on coach. If not installed on coach proceed to step "d".

- c. Insert a wood block, between front and back channel to space the FRTA 2" to 3" from the coach. Push arm assembly closed. Wrap a nylon wire tie around arm to keep it from extending.

FIG. 4

Left Hand Torsion Shown

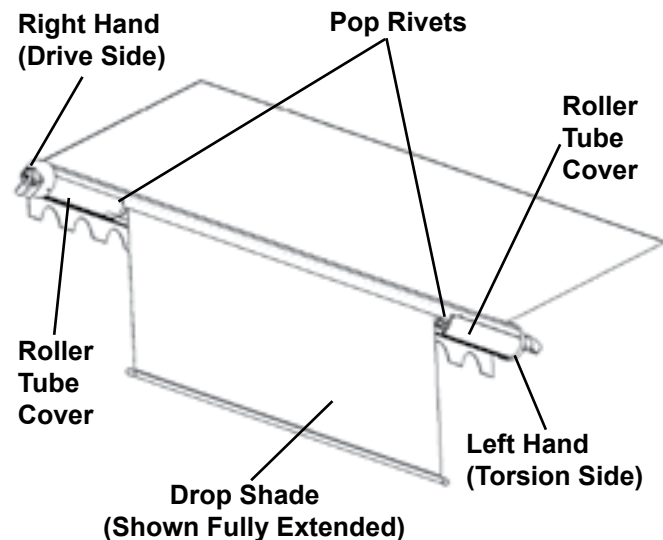
- d. Remove Hex Head 1/4-20 x 1/2" screw that attaches arm assembly to top casting. Lift casting out of arm assembly.
- e. Clamp a Vice-Grip® firmly to the top casting. See FIG. 4.
- f. Keep a tight hold onto the Vise Grip® while the cotter pin is pulled out of the end cap.
- g. Slowly unwind the spring tension, do not allow rapid spin off.
- h. Use the electric drill with a 3/16" bit to remove the three pop rivets that secure the end cap to the roller tube. Pull the torsion out of the tube and remove any burrs or rivet bodies.

Note: If the awning is installed on a coach, complete the following steps on a step ladder with the FRTA extended two turns from the awning rail.

D. Removing The Right Hand Drive Assembly

1. Roll the awning out until just before the drop shade starts lowering.
2. Pin the left hand torsion assembly. See Section C.
3. Disconnect the three wire harnesses (motor power, brake, and wind sensor) at their plugs by the top casting of the right arm assembly.
4. Remove the wind sensor by removing the 1/4-20 nut and sliding it off the 1/4-20 x 1.25" hex head bolt. Place the wind sensor in a safe place.
5. Use a 3/16" drill bit to remove the right hand roller tube cover by drilling out the pop rivet on the top corner of the cover (farthest from the roller tube end cap) and sliding it towards the center of the tube and out of the roller end cap. See FIG. 5A.

FIG. 5A

View From Under The Awning

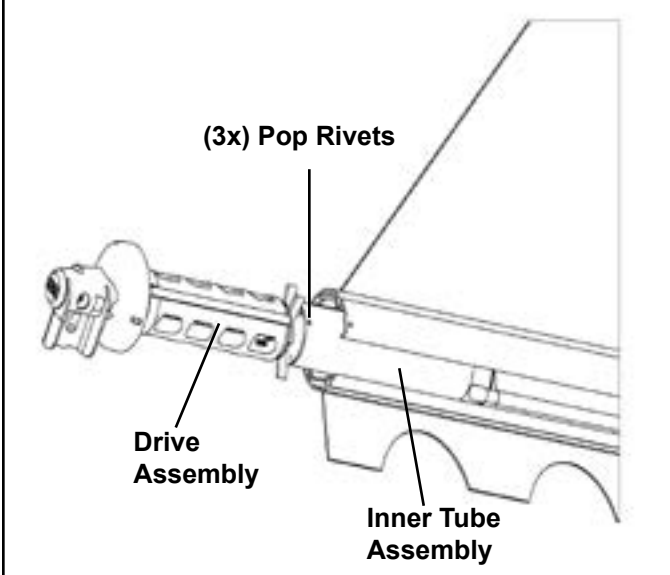
6. Drill out the three pop rivets that secure the roller tube end cap to the roller tube.
7. The next steps will require two people. While one person supports the roller tube securely, remove the 1/4-20 x 1.25" hex head bolt from the right hand top casting. Take care not to lose the heavy duty curved washer and split lock washer on the bolt. Slide the top casting out of the right hand hardware by firmly pushing the roller tube and top casting forward. At this point one person must support the roller tube assembly.

⚠ WARNING

Use extreme caution when supporting the roller tube while standing on the ground or on a ladder. The weight of the roller tube assembly will tend to pull towards the coach wall, and it may knock you off balance.

8. While one person supports the roller tube assembly, slide the drive assembly and inner shade tube out of the roller tube until the three pop rivets holding the drive assembly to the inner tube assembly are exposed. See FIG. 5B. Since this will require sliding several internal components away from their proper position, you may experience some resistance in the form of friction, chattering, etc.

FIG. 5B



9. Drill out the three pop rivets holding the drive assembly to the inner shade tube. Remove the drive assembly.
10. To install a new drive assembly, see Section J.

E. Removing The Fabric From Roller Tube

1. Remove awning from coach. See Section B.
2. Unwrap fabric completely from roller tube and onto a clean surface.
3. Remove left hand torsion. See Section C.
4. With the awning laying flat, slide the fabric out from the roller tube.

F. Removing And Replacing Weather-shield Assembly

1. Remove the two screws (one on each side) that lock slat "A" to first slat "B". See FIGS. 6A, 6B, & 7.

FIG. 6A

Top Slat "A"

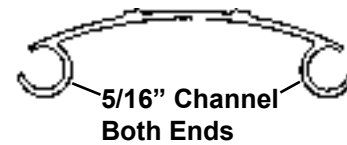
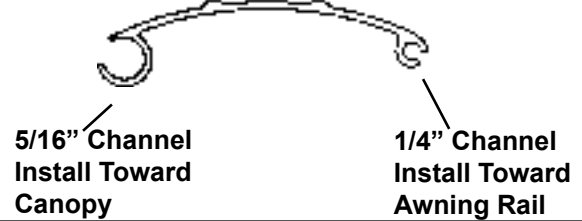


FIG. 6B

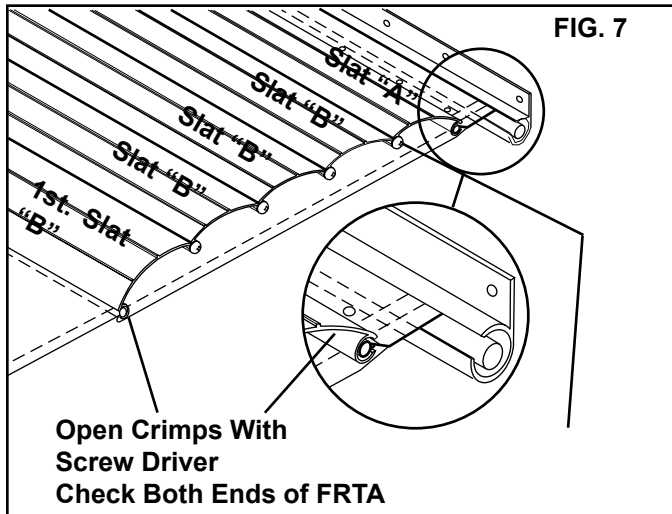
Slat "B"



2. Use a screw driver to spread open the crimp in the slats. Slide the top slat "A" off slat assembly and fabric. Keep for reinstall in Step 5 (unless new slat assembly is being installed). Hold "B" (toward canopy) to allow the slat assembly to slide off fabric. If new fabric is being installed, lay new fabric over old one. Check for correct size and color.
3. The new replacement weathershield/fabric will be installed as shown in FIG. 7. Place connected slat assembly on top of fabric.

Note: Make sure the 1/4" groove on all "B" slats are toward awning rail. If new weathershield assembly is being installed, it is shipped with 6 slats. Remove the first slat "B", it is not needed.

4. Use a small file and round ends of the groove in the 5/16" end of first slat "B" and "A". See FIGS. 6A, 6B & 7.
5. Slide first slat "B" of the connected weathershield assembly (if slat "A" was removed in Step 1, it should be replaced) onto the polyrope in fabric located approximately 12" from awning rail end; and, at the same time, slide slat "A" onto polyrope located 1" from awning rail. See FIGS. 6A, 6B & 7. Slide the weathershield onto both ropes at the same rate.
6. Crimp both channels of the weathershield about 3" from end of slats onto polyrope to secure the weathershield assembly to the fabric. It is only necessary to crimp weathershield on one end of the FRTA. See FIG. 7.

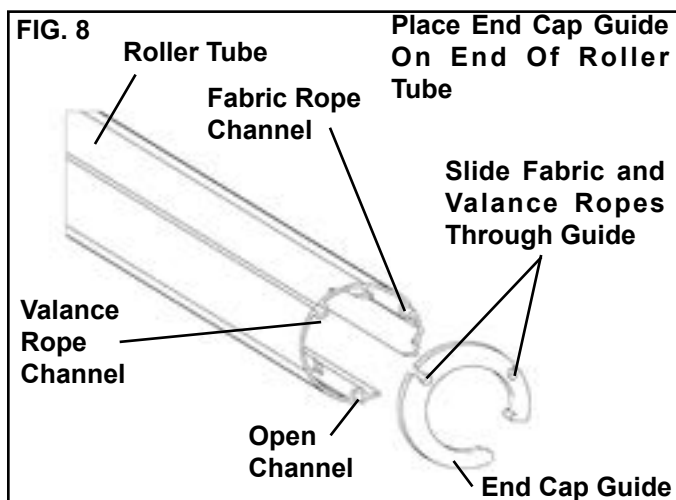


G. Installing Fabric On Roller Tube

1. Unfold the new fabric and lay it on top of the existing fabric in the exact same position. Be sure the new fabric is the correct size and color.
2. Dometic requires the use of the end cap guide to prevent damages to the fabric, when replacing the fabric. Place the end cap guide (supplied with the replacement fabric) on the end of the roller tube. The locating tab on the end cap guide is placed in the open (unused) channel of the roller tube. See FIG. 8.

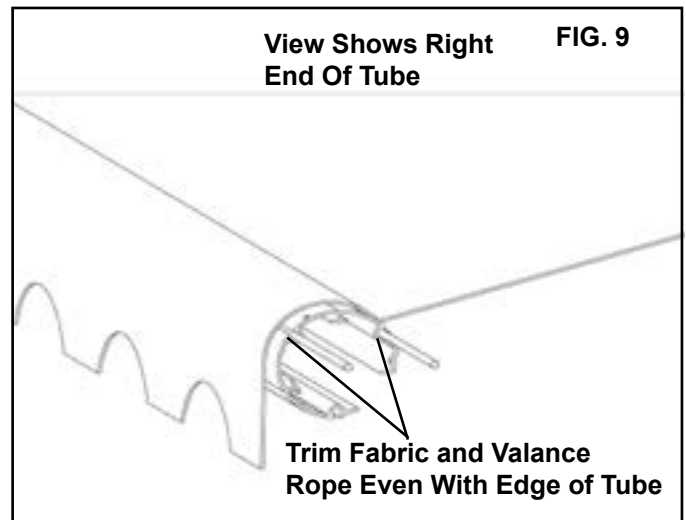
Note: When changing the fabric, it is vital that the same rope channels be used. Failure to do so will cause the awning to malfunction. See FIG. 8.

3. Guide the roller tube over the polyrope(s) of the fabric. Be careful not to damage the roller tube or the fabric.
4. Center the fabric on the roller tube and hand-roll the entire assembly in the same direction as the original fabric.
5. See Section "F" for Roller Cover Replacement Steps 3 to 6 and Section "H" Replacing Torsion Assemblies.



H. Replacing left hand Torsion Assembly

1. The polyropes must be trimmed even with the roller tube; otherwise they can interfere with the end cap and prevent assembly.
2. Use side-cutters or scissors to trim polyropes. Use of box cutters or any other type of single blade tool is not recommended, as sudden and unexpected motions may occur when cutting through the ropes.
3. Trim all ropes even with the edge of the roller tube. See FIG. 9.
4. Slide left hand torsion assembly into left end of roller tube. Turn end cap until locating tabs are in place in the step on the roller tube near the open slot. This should align the open channel with the key-hole in the end cap.
5. Secure the end cap to the roller tube using three pop rivets. See Section I on winding left hand torsion assembly.



I. Winding Left Hand Torsion Assembly

⚠ WARNING

Use extreme care. Springs under tension are dangerous. If not controlled they will unwind quickly. Keep hands and clothing clear of top casting, as personal injury may result.

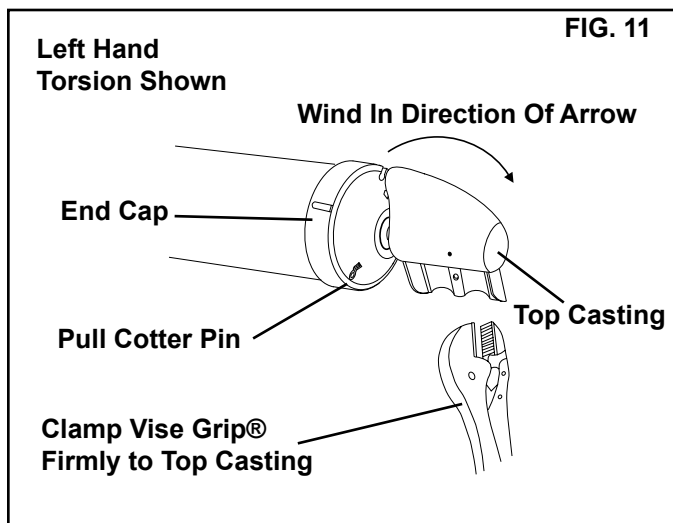
Note: If the awning is installed on a coach, complete the following steps on a step ladder with the FRTA extended two turns from the awning rail.

⚠ WARNING

Severe injury can result from the rapid spin-off of the top casting. NEVER use bare hands to handle a top casting under spring tension.

1. Clamp the Vise Grip® tightly to the top casting on the left hand torsion assembly.
2. Start with the Vise Grip® in the 6 o'clock position. Keep a firm hold onto the Vise Grip®. Slowly wind in the direction of the arrow three complete turns. See FIG. 11.

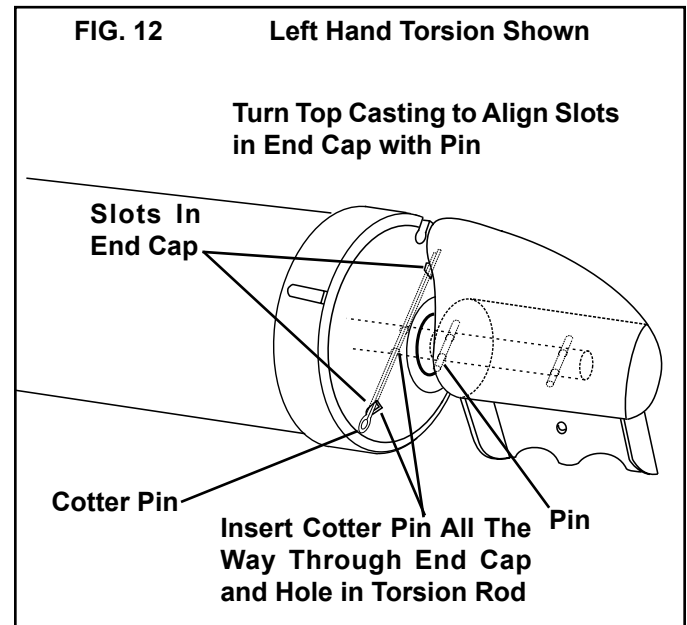
Note: If Awning is fully extended, wind the spring tension a total of eight turns.



3. Turn top casting or FRTA until the pin is parallel with the two slots in the end cap. See FIG. 12. Insert a 7/64" x 2-3/4" cotter pin through the end cap and torsion rod. Put a piece of tape over the head of the cotter pin to prevent it from dropping out. See FIG. 12.
4. Remove Vise Grip® from top casting and insert into arm assembly. Replace Hex Head 1/4-20 x 1/2" screw and tighten.

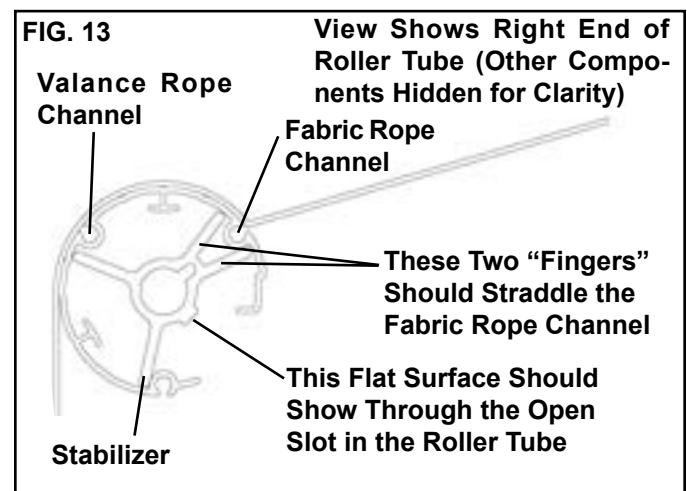
Note: If awning is not installed on coach. Install per the WeatherPro or Power Patio Awning installation instructions.

5. Remove 2-3/4" cotter pin and check operation of the awning.

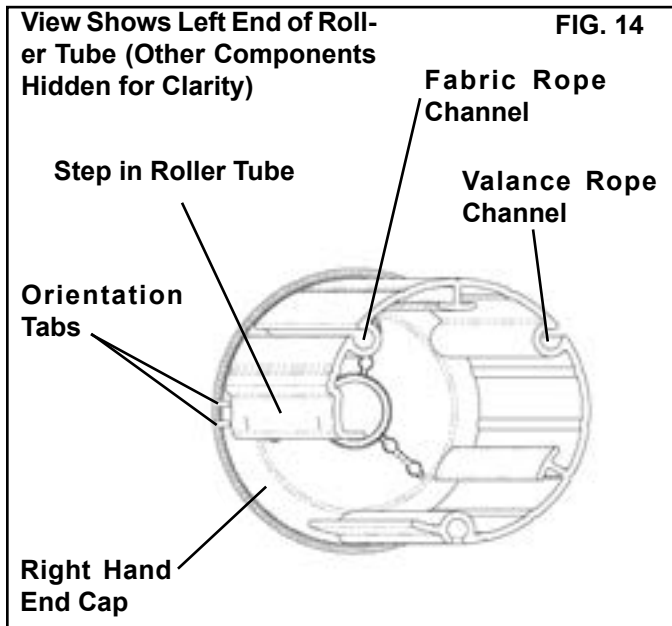


J. Installing A New Right Hand Drive Assembly

1. Remove any burrs/debris from the inside of the inner shade tube.
2. Slide in the drive casting of the new right hand drive assembly into the inner shade tube.
3. Secure the drive casting to the inner shade tube with three pop rivets.
4. Slide the inner shade tube and drive assembly into the roller tube. Make sure that the idle stabilizer is oriented correctly. See FIG. 13.



5. Rotate the roller tube end cap until the orientation tabs are aligned with the step in the roller tube. See FIG. 14.
6. Secure Roller tube end cap to roller tube with three pop rivets.
7. Slide top casting into hardware extrusion by aligning the tongues in the extrusion with the grooves in the casting. Take care to not damage the tongues in the hardware extrusion.
8. Install the 1/4-20 x 1.25" hex head screw through the hardware extrusion and through the top casting.
9. Install the wind sensor by sliding onto the 1/4-20 x 1.25" hex head bolt and securing it with the nut.
10. Reconnect the three harnesses.



11. Reinstall the roller tube cover by sliding it into the right hand roller tube end cap and securing it with a pop rivet on the opposite corner.

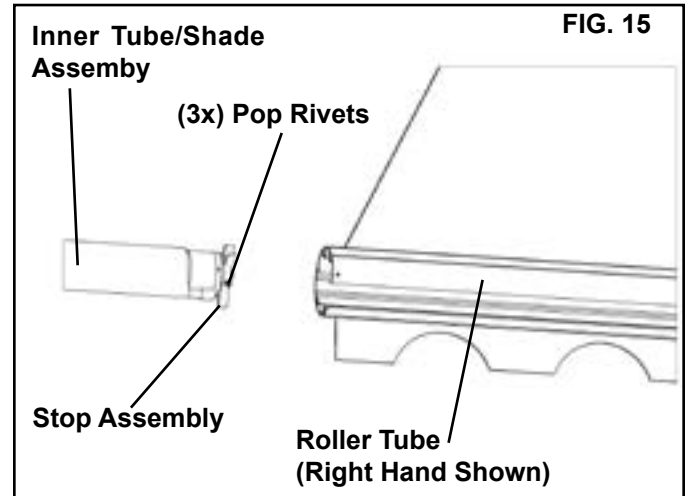
⚠ WARNING

Make sure to reinstall the heavy duty curved washer and the split lockwasher. Failure to do so may cause failure of the hardware and may cause property damage and/or personal injury.

K. Removing The Drop Shade Stop Assembly

1. Follow the procedure of Section D to remove the right hand drive assembly, Steps 1-8.
2. It will not be necessary to separate the drive assembly from the inner tube (Step 9 in Section D) to complete this procedure, but some people may find it easier to manage the components separately. Therefore, Step 9 in Section D is optional for this procedure.

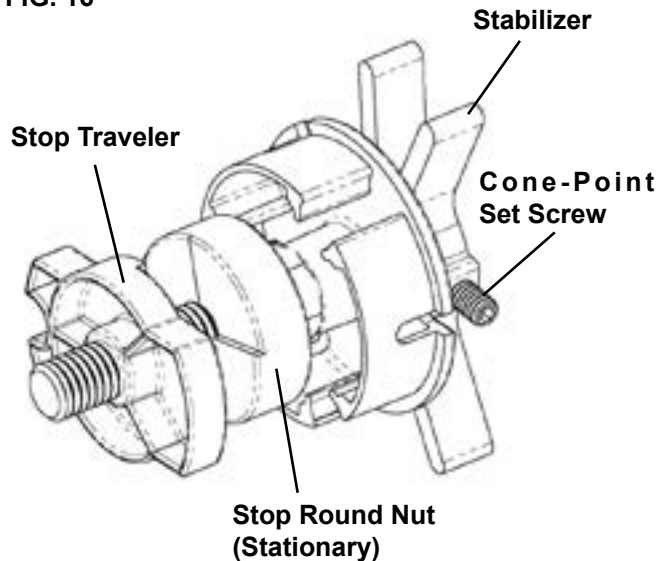
3. Completely pull the right hand drive assembly and inner shade tube from the roller tube, taking care to place the inner tube/drop shade assembly on a clean surface as to not damage or soil it.
4. Drill out the three pop rivets holding the stop assembly to the inner shade tube. See FIG. 15.
5. Slide stop assembly out of the inner shade tube. Clear out any burrs or debris from inside the inner shade tube.
6. Proceed to Sections L and M for installation and adjustment of a new stop assembly.



L. Installing A New Drop Shade Stop Assembly

1. Refer to FIG. 16. Ensure that the stop traveler is backed away from the round nut 6-7 turns as follows: holding the stop assembly by the stabilizer, turn the stop traveler toward the round nut until it bottoms out (to establish a zero point), then back away 6-7 turns. This setting allows the shade to roll out 6-7 turns of the inner tube (an approximate shade projection of 4 to 4.5 feet), and leaves one turn wrapped on the inner tube for its protection. This setting may be adjusted once the awning is completely reassembled. See Section M.
2. Align the notch in the stop traveler with the rope channel in the inner shade tube. Slide into the shade tube.
3. Align one of the slots in the stop assembly end cap with the rope channel in the inner shade tube. Take care not to allow the stabilizer to rotate excessively with respect to the inner shade tube, as this would alter the setting verified in Step 1 (the stop assembly end cap should rotate freely with respect to the stabilizer). Slide into the shade tube and secure with three pop rivets.
4. Align the stabilizer such that the set screw is accessible through the opening in the roller tube "c" shape. Slowly slide inner shade tube/stop assembly into roller tube.

5. If the drive assembly has been disassembled from the inner shade tube, you may reassemble them at this time by following Step 1-3 of Section J.
6. Finish by following Steps 4-11 in Section J.

FIG. 16

M. Adjusting Drop Shade Projection

1. Optimal drop shade projection occurs when most of the shade material has been exposed, with only enough material left wrapped on the inner tube to completely wrap around once (the bare metal of the inner tube should not be visible through the open slot in the roller tube). If this is not the case, adjustment of the drop shade stop mechanism is recommended. To perform this procedure you will need:
 - 1/8" hex wrench
 - small gear-wrench with a 3/8" hex bit
 - ladder
2. Roll the awning completely out, including the drop shade until the drop shade stop engages or the electronic control unit times out and shuts the awning off.
3. Remove the left hand roller tube cover by drilling out the pop rivet on the top corner farthest from the roller tube end cap and sliding the cover out of the end cap. This will expose the torsion spring and drop shade stop mechanism for ease of access. See FIGS. 5A and 17.
4. Using a permanent marker or scoring tool, make a mark on the head of the socket-head bolt and on the stabilizer so you will be able to align them again after removing the cone-point set screw in Step 5 (the cone-point engages a hole on the side wall of the bolt's head).

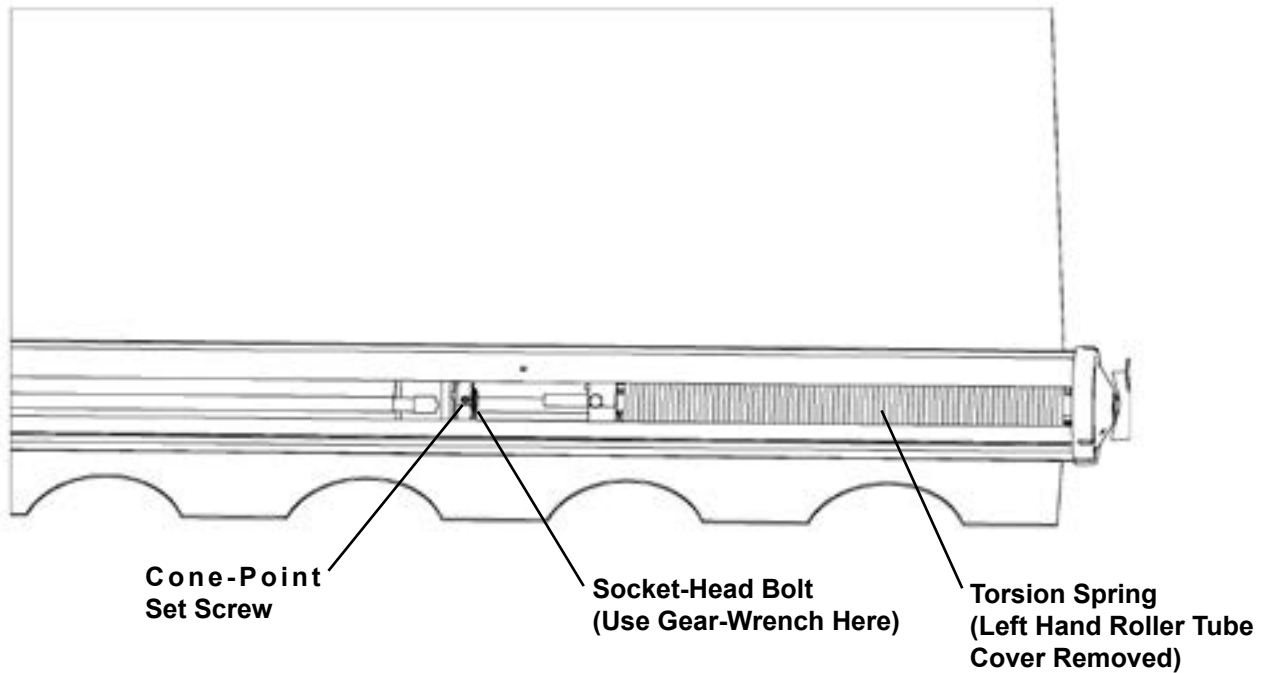
5. If the shade projection is less than optimal (too much shade material left wrapped around the inner tube):
 - i) Remove the cone-point set screw using the 1/8" hex wrench.
 - ii) Press "EXTEND" on the key fob or remote switch to allow the shade to roll down and expose extra shade material. Stop when desired amount of drop shade is showing.
 - iii) Ensure that the marks made in Step 4 are aligned and reinstall the cone-point set screw. If the marks are not aligned, use the gear-wrench to turn the socket-head bolt clockwise or counter-clockwise (whichever way is closest to the alignment mark).
6. If the shade projection is more than optimal (the shade material unwraps completely off the tube or starts wrapping itself on the tube backwards):
 - i) Press "RETRACT" on the key fob or remote switch to allow the shade to roll up (if the fabric has rolled backwards onto the inner tube, this will initially have the effect of "extending" the shade as it corrects its backward rotation). Stop when desired amount of drop shade is showing.
 - ii) Remove the cone-point set screw using the 1/8" wrench.
 - iii) Use the gear-wrench to turn the socket-head bolt clockwise until the stop mechanism is engaged and does not allow any more turns.
 - iv) Ensure that the marks made in Step 4 are aligned and reinstall the cone-point set screw. If the marks are not aligned, use the gear-wrench to turn the socket-head bolt clockwise or counter-clockwise (whichever way is closest to the alignment mark).
7. Replace the left hand roller tube cover by sliding it in the roller tube end cap and using a pop rivet.

N. Removing The Drop Shade Assembly

Important: The WeatherPro Plus patio awning will not roll up if the drop shade is damaged or missing. Before removing the existing drop shade assembly, be sure to have a new assembly available for immediate replacement.

1. Follow steps 1-5ii in Section M ("Adjusting Drop Shade Projection") to roll out the drop shade completely. No wraps of shade material should be left on the inner tube. Do not re-install cone-point set screw yet.
2. Verify that drop shade assembly slides freely back and forth in the rope channel in inner tube. Strips of tape may have been installed at the factory to hold the shade fabric secured to the inner tube. This is done to minimize shifting. If this is the case, carefully peel off any and all strips of tape.

FIG. 17



3. Some models will have an access notch in the inner tube end cap (part of the stop assembly, see FIG 16) to allow the shade assembly to slide through. If this is the case, proceed to Step 5.
4. If there is no notch in the inner tube end cap, or if it is not aligned with the rope channel, drill out the three rivets holding the end cap of the stop assembly to the inner tube and carefully separate it from the inner tube (do not attempt to take stop assembly out of the outer tube). Only a small amount of separation will be enough to allow the drop shade assembly to slide out of the inner tube. Make sure not to alter the orientation of the stop assembly with respect to the inner tube.
5. Slide the shade assembly out of the inner tube toward the torsion spring side of the awning and slightly down. Although some resistance due to friction is to be expected, repeat step 2 if excessive resistance is encountered.
6. Proceed to Section O for installation of a new drop shade assembly.
3. Adjust the location of the drop shade assembly with respect to the inner tube. The edge of the drop shade fabric closest to the torsion spring should be approximately $\frac{1}{2}$ " from the edge of the inner tube.
4. In order to keep the shade assembly from shifting due to wind, vibration, etc., it is recommended that it be taped in place using masking tape. Three strips approximately 5" long (one in the middle and one a few inches from each edge) applied length-wise will be sufficient. IMPORTANT: the masking tape should be applied on the side facing the FRONT of the awning (away from the coach wall). This will ensure that the tape is hidden from view when a full wrap of shade fabric is left on the inner tube.
5. Adjust the drop shade projection by following Steps 6i, 6iii, 6iv, and 7 in Section M. Optimal drop shade projection occurs when most of the shade material has been exposed, with only enough material left wrapped on the inner tube to completely wrap around once. Refer to Section M for more details.
6. Verify proper operation by retracting and extending awning. In particular, verify that there is generous clearance between the drop tube ends (with black end caps) and the left and right hand roller tube covers. Interference between these components will adversely affect the performance and durability of this product. If interference exists on one side or the other, adjust the centering of the drop shade assembly by repeating Steps 3-5 in this Section.

O. Installing A New Drop Shade Assembly

1. It is recommended that two people install a new shade assembly. This will ease the process, as well as minimize the potential for damage to the drop shade.
2. During the following steps, the drop shade assembly may be fully-extended or rolled onto its drop tube (to keep from dragging on the ground). Align the poly rope at the top of the drop shade assembly with the rope channel in the inner tube. Make sure the hem is facing toward the FRONT of the awning (away from the coach wall). Slide shade assembly completely into inner tube.