

REPLACEMENT INSTRUCTIONS FOR 828XXXX, 830XXXX, 833XXXX, 834XXXX, 836XXXX SERIES MODEL 8300 AND SUNCHASER AWNINGS

■ FABRIC ■ ROLLER TUBE ■ TORSION ASSEMBLY

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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

MODELS

828(XXXX) 834(XXXX)
830(XXXX) 836(XXXX)
833(XXXX)

REVISION

Form No.3105903.060 8/04
(Replaces 3105903.052)
(French 3108577.044)
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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 When 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

WARNING

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.

The Fabric Roller Tube Assembly (FRTA) consists of a fabric, a roller tube and torsion assemblies.

For proper awning operation, the roller tube is under spring tension from the torsion assemblies.

WARNING

Improper release of this spring tension can result in damage to the awning, severe personal injury, or both.

TOOLS AND HARDWARE REQUIRED:

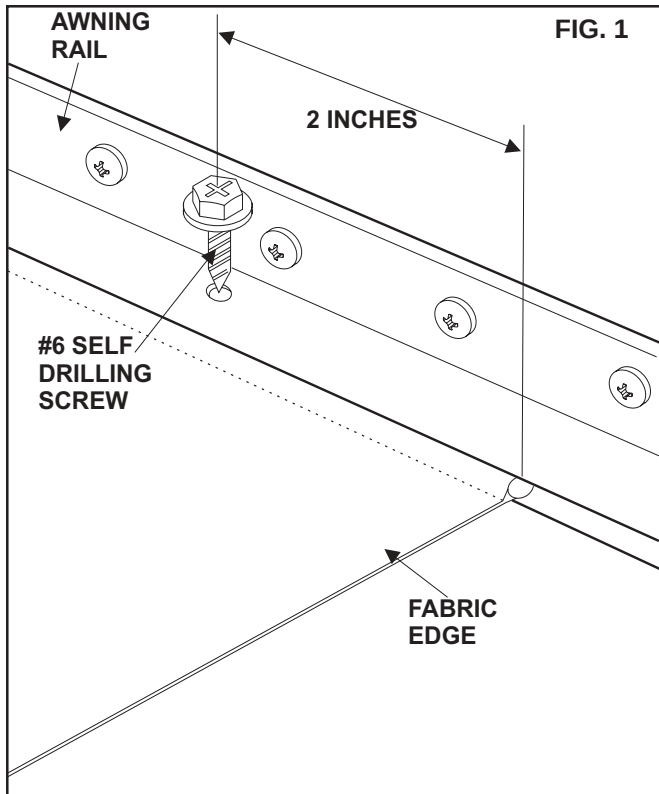
End Cap Guide	Socket Wrench Set
Screwdriver	Pliers
Electric Drill	Pop Rivet Tool
3/16" Drill Bit	Roll of Gray Tape
Stepladder	Small File
Torsion Winding Tool	Steel Pin
1/8" Cardboard or Wood Spacer	
3/16" Pop Rivet (308171.006) 4 req.	

A. Removal Of Awning From Coach

Note: Awning removal from the coach is NOT necessary when replacing a torsion assembly. Proceed to Section B, Steps 1 & 2, Sections C, Steps 1–3, and Section D, Steps 1–3.

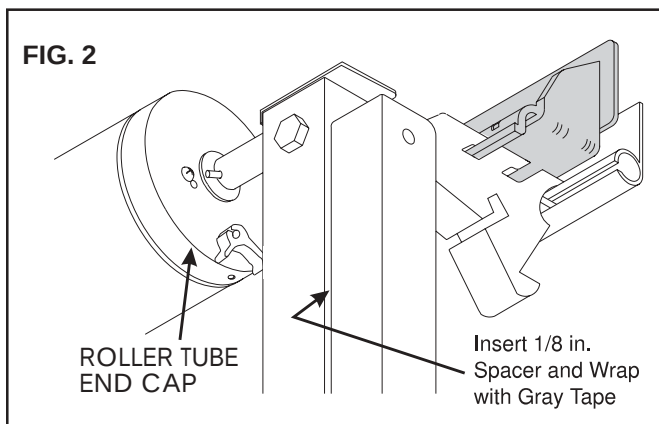
1. In all instances of fabric or roller tube replacement, it will be necessary to have a large work area to allow complete unrolling of the awning. This work area must be clean and smooth so the fabric will not be damaged.

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



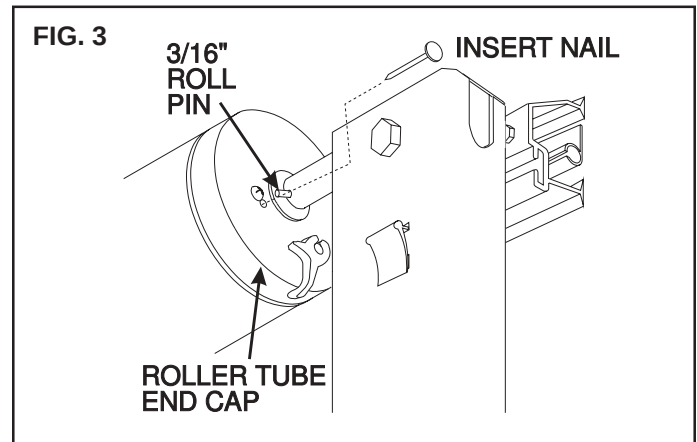
ONSQUARE HARDWARE:

3. Place a 1/8" cardboard or wood spacer between the arm and the rafter. Wrap gray tape around the arm and rafter to hold them together. See FIG. 2. Repeat on opposite end of awning.

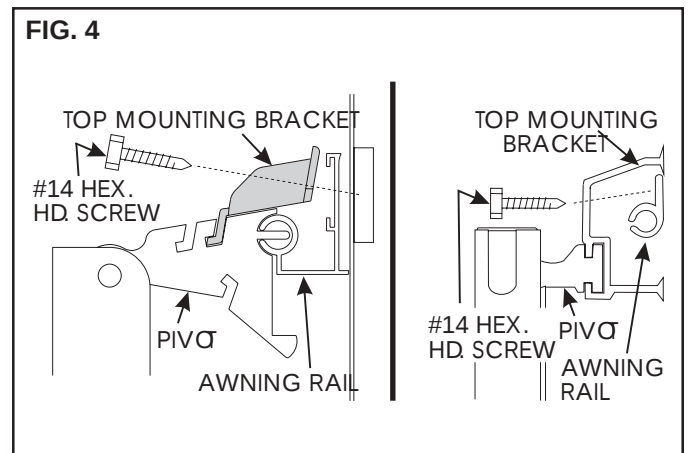


4. Remove both of the patio feet from their mounting brackets and extend the adjustable arms until each patio foot rests on the ground. Tighten knob to secure adjustable arm in this position.

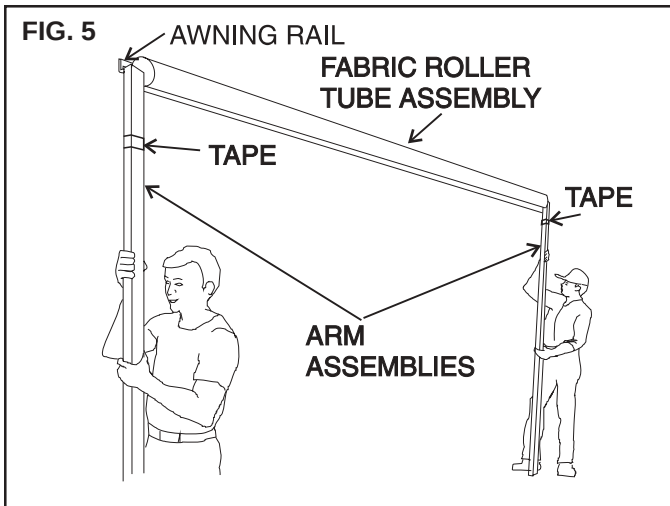
5. To keep the awning from unwinding be sure the lock lever is in the roll down position and a nail inserted in each torsion assembly for positive locking of the roller tube. The left end should be done first. Insert pin into hole on the left end cap. Grasp roller assembly and release Safe-T-Lock™ lever. Allow awning to roll up slowly until it stops against the pin. Insert the pin into the right end cap to hold it in place. See FIG. 3.



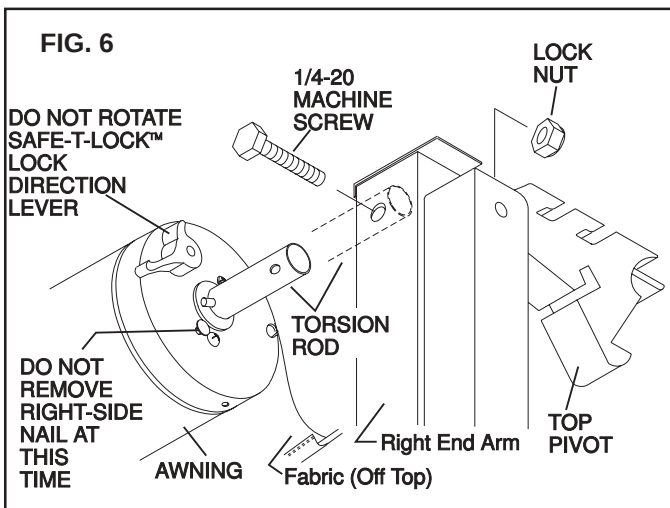
6. Remove the two #14 x 2" Hex Head screws from the top mounting bracket. Repeat for the opposite end. See FIG. 4.



7. With one person grasping each support arm, keeping the two arm assemblies **PARALLEL** to each other to avoid excessive twisting and possible damage to assembly, walk the awning out of the awning rail. See FIG. 5.



8. Carefully lay the fabric roller tube assembly on a clean, well padded "V" trough to prevent fabric damage. Remove the right arm assembly from the respective torsion rod, by removing the 1/4"-20 machine screws and 1/4" locknuts. See FIG. 6.



⚠ WARNING

DO NOT REMOVE the NAIL at this time and DO NOT attempt to rotate the Safe-T-Lock™ Lock Direction Lever.

9. Lift the right end of the awning and roll the FRTA assembly clockwise  one-half turn or until roll pin (inside end cap) is stopped against the nail.
10. Remove the left arm assembly from the torsion rod by removing the 1/4"-20 machine screws and locknuts.
11. Proceed to **Section B. Removal of Torsion Assembly from Roller Tube**.

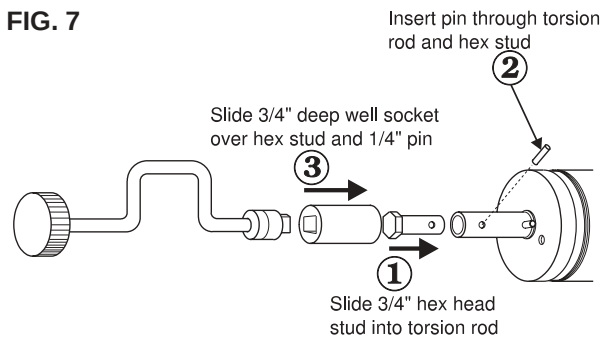
B. Removal Of Torsion Assembly From Roller Tube

1. The awning is removed from the coach and is on the ground with the torsion pinned and arms removed.
 - a. Insert torsion winding 3/4" hex head stud into the end of the torsion rod. Insert 1/4" pin through 3/4" deep well socket over hex stud. Slide the 3/4" deep well socket over hex stud until it locks 1/4" pin in place. See FIG. 7.

⚠ WARNING

Severe injuries can result from the rapid spin-off of the torsion spring. Always have a positive grip on the speed wrench or breaker bar. Ratchet should not be used because it may allow rapid spin-off of the torsion spring.

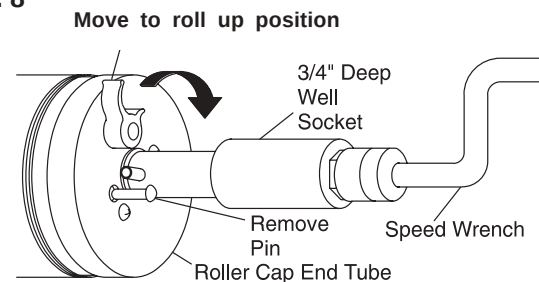
FIG. 7



- b. Insert speed wrench or breaker bar into socket.
- c. Remove the pin from the end cap. It may be necessary to turn torsion rod to release pressure from pin, making it easier to remove. See FIG. 8.

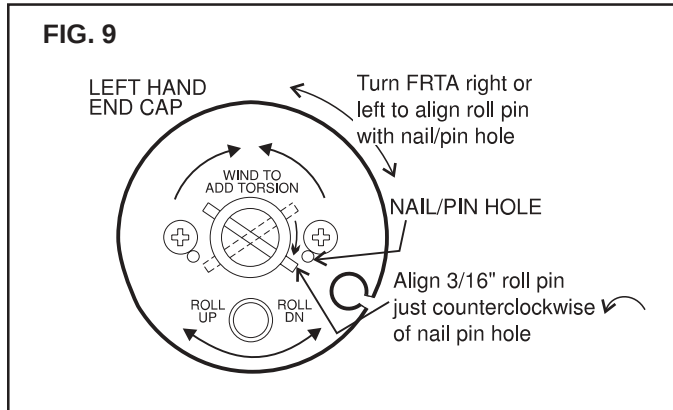
Note: On right hand torsion, move the Safe-T-Lock™ lever to the roll-up position.

FIG. 8



- d. Slowly unwind the spring tension from the torsion.
- e. Use 3/16" drill bit to remove the two pop rivets from the end cap.
- f. Slide the torsion out of the roller tube.

2. The awning is installed on the coach.
 - a. This is the method used when replacing torsion or main arm. The awning must be fully extended with rafters locked in place and the Safe-T-Lock™ lever in the roll-down position.
 - b. Insert pin in left torsion end cap. It should be placed in one of the two holes closest to the counter-clockwise side of the 1/8" roll pin in torsion rod. It may be necessary to rotate the FRTA one way or the other to place the pin correctly. See FIG. 9.
 - c. The right hand torsion should also be pinned. See Section A, Paragraph 5 on Page 3, for instructions.



- d. The arm can now be removed from either right hand or left hand torsion. To prevent damage to fabric and other parts, the end of the roller tube must be supported so it will not swing back against the coach or drop down.
- e. The torsion can now be unwound. Refer to Section B., Number 1, Steps a. through f.

C. Removal And Replacement Of Fabric & Roller Tube

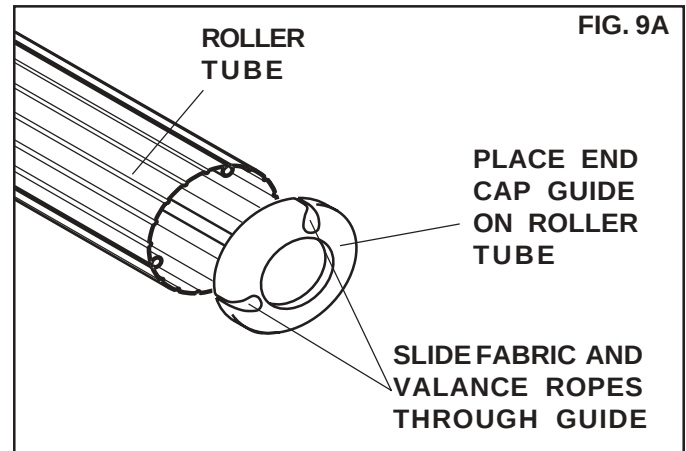
1. The awning must be removed from coach. See Section A.
2. The torsions must be removed from both ends of the roller tube. See Section B., Number 1, Steps a through f.
3. Unroll fabric from roller tube, with the top-side facing down.

CAUTION

Fabric is to be rolled out only on a clean surface to prevent damage.

4. Pull poly ropes out of the notch in each end of the rollertube.
5. Have one person hold the edge of the fabric while a second person slides the roller tube off the fabric.
6. If the new fabric is to be installed, lay it on top of the old fabric in the same direction. Make sure the size and color is correct.

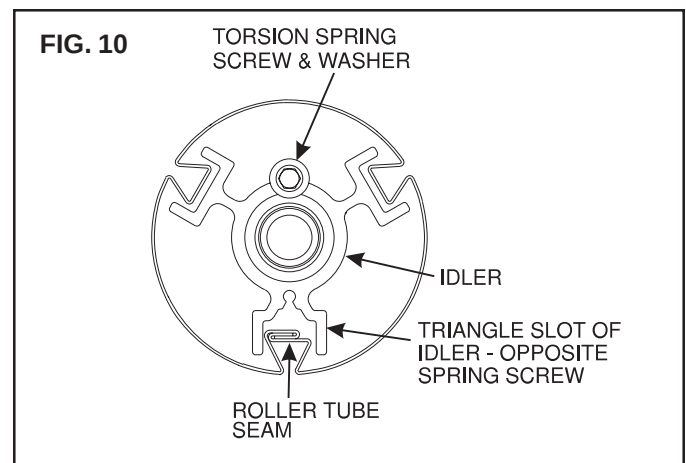
7. Dometic requires the use of the end cap guide to prevent damages to the fabric, when replacing the fabric/roller tube. Place the end cap guide supplied with the replacement fabric/roller tube on the end of the roller tube. Slide the fabric and valance ropes through the end cap guide and onto the roller tube. See figure 9A.
8. Center fabric on roller tube.
9. Install torsion per instructions in Section D.



D. Replacement Of Torsion

1. Insert the leg of the idler opposite the torsion spring screw and washer over the seamed groove of the rollertube. See FIG. 10.

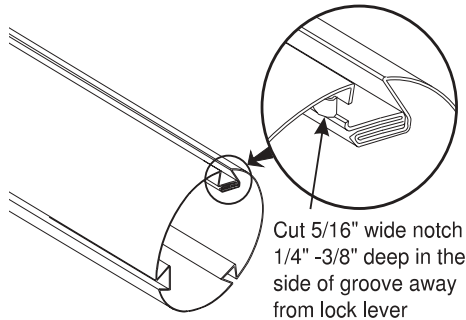
Note: The idler leg opposite the torsion spring screw has a triangle shape.



2. Installation of a new roller tube may require a notch cut in the side of the groove away from lock lever for each poly rope. See FIG. 11.

Note: Insert torsion idler into roller tube before the poly rope is stretched. See Section D. Step 1.

FIG. 11

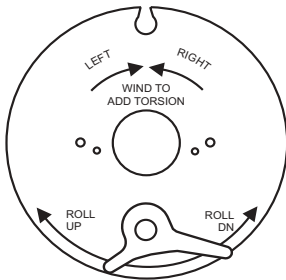


3. Use pliers to stretch the poly rope 1/4" – 1/2" and tuck it into the notch and place off to the side. See FIG. 16A-16G on pages 7-9. Repeat Steps 1 and 2 on opposite end.
4. Slide torsion assembly into roller tube. Identify the end cap "A", "B" or "C" (refer to FIG. 12). Position the Safety-T-Lock™ Lever as shown in FIGS. 16A–16F on pages 7-9.

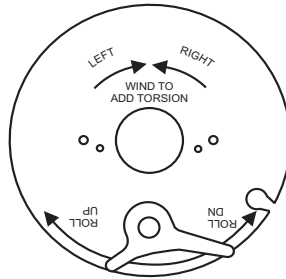
The left-hand end cap is always positioned with the open notch over the open groove. See FIG. 16G on page 9.

FIG. 12

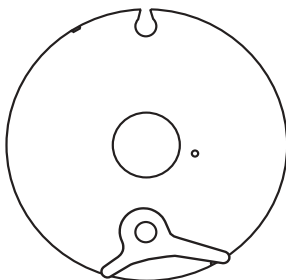
CAP A



CAP B



CAP C

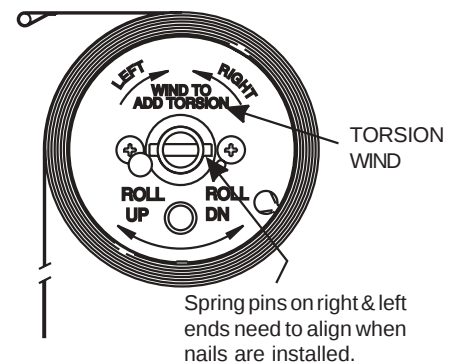


5. Mark the location of rivet holes in the end cap on rollertube. Drill 3/16" hole. Remove any drill burrs from inside roller tube.
6. Attach end cap to roller tube with two 3/16" x 3/8" pop rivets. Repeat on opposite end.

E. Winding Torsions

1. Insert torsion winding tool into torsion rod. See FIG. 7.
2. Always have the speed wrench handle at the 6 O'clock positions and turn towards the side of the coach. Left hand end cap is turned clock-wise and right hand end cap is turned counter-clock-wise to add tension.

FIG. 13



Note: Right hand torsion must have Safe-T-Lock™ lever in the roll-down position.

3. After torsion spring is wound to proper number of turns, insert a steel pin in the end cap to prevent rapid spin-off when reinstalling on coach. See FIG. 3, page 3 and Table 1 & 2. Torsion assembly in figure 14 has a larger stabilizer than the torsion assembly in figure 15, shown with bubble 1 in both figures.

CAUTION

Select correct torsion assembly and wind torsion to the appropriate winds as specified in table 1 or 2.

4. Reinstall awning per the Operating and Installation Manual. If the awning is not removed from the coach, reverse disassembly procedure.

TABLE 1: TORSION WINDING FOR FIGURE 14

AWNING LENGTH	ROLLED UP TURNS*	EXTENDED TURNS
8'	5	11
9'	5	11
10'	5	11
11'	5	11
12'	5	11
13'	6	12
14'	6	12
15'	7	13
16'	7	13
17'	9	15
18'	9	15
19'	10	16
20'	10	16
21' and above	10	16

*Add 6 additional turns to torsion spring when awning is fully extended.

TABLE 2: TORSION WINDING FOR FIGURE 15

AWNING LENGTH	ROLLED UP TURNS*	EXTENDED TURNS
8'	8	14
9'	8	14
10'	8	14
11'	8	14
12'	8	14
13'	9	15
14'	9	15
15'	10	16
16'	10	16
17'	12	18
18'	12	18
19'	12	18
20'	12	18
21' and above	12	18

*Add 6 additional turns to torsion spring when awning is fully extended.

FIG. 14

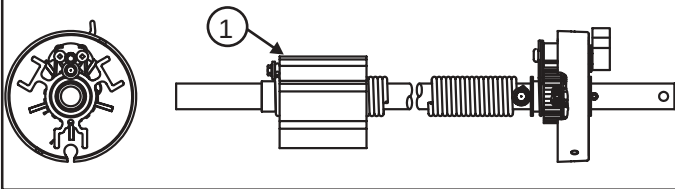


FIG. 15

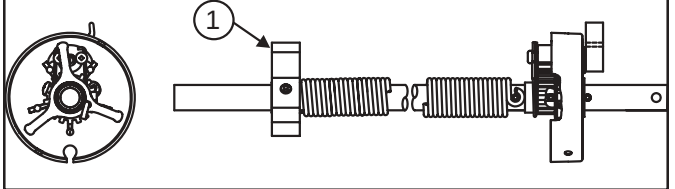


FIG. 16A

RIGHT-HAND
END CAP "A"

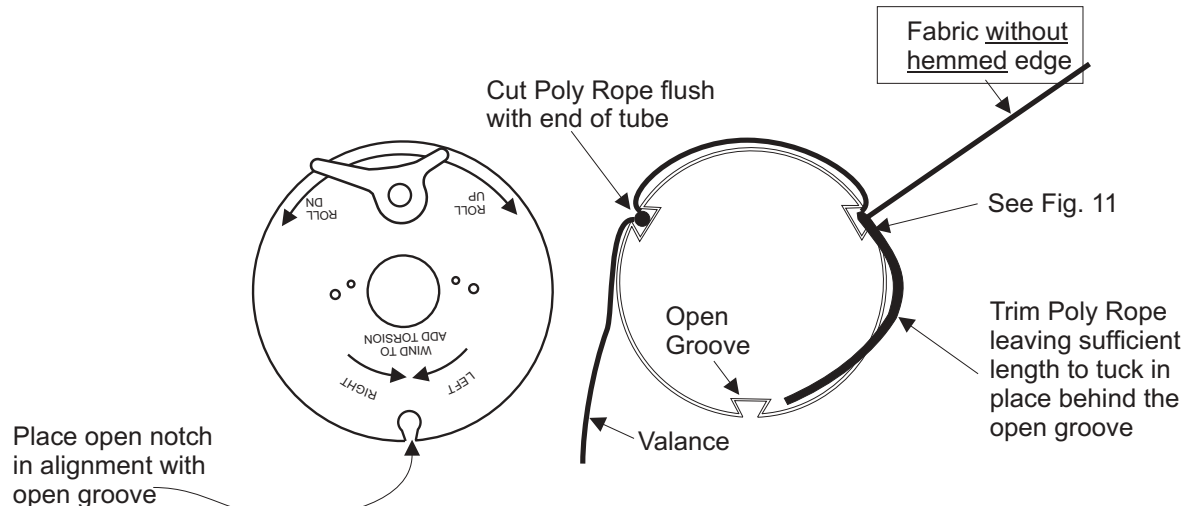


FIG. 16B

RIGHT-HAND
END CAP "A"Place open notch in alignment
with fabric grooveCut Poly Rope flush
with end of tubeFabric edge
folded and
hemmed

See Fig. 11

Open
GrooveTrim Poly Rope
leaving sufficient
length to tuck in
place behind the
open groove

Valance

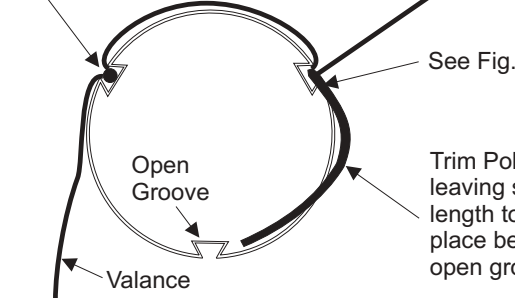
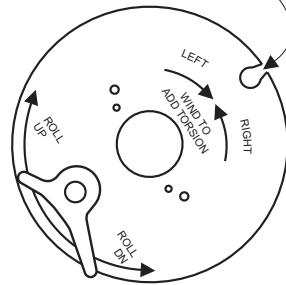


FIG. 16C

RIGHT-HAND
END CAP "B"Place open notch in alignment
with fabric grooveCut Poly Rope flush
with end of tubeFabric edge
folded and
hemmed

See Fig. 11

Open
GrooveTrim Poly Rope
leaving sufficient
length to tuck in
place behind the
open groove

Valance

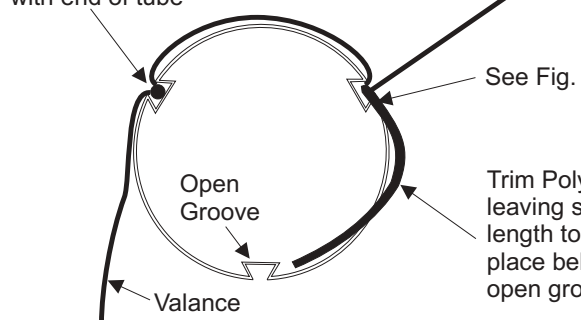
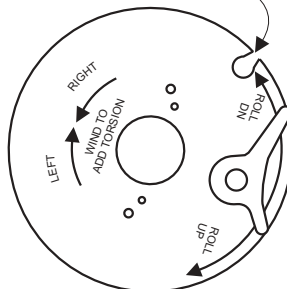


FIG. 16D

RIGHT-HAND
END CAP "B"Cut Poly Rope flush
with end of tubeFabric without
hemmed edge

See Fig. 11

Open
GrooveTrim Poly Rope
leaving sufficient
length to tuck in
place behind the
open groove

Valance

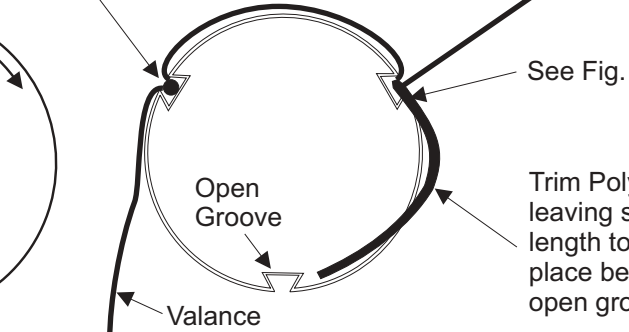
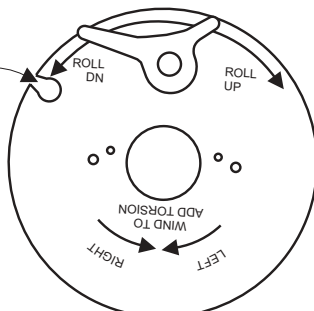
Place open notch
in alignment with
valance groove

FIG. 16E

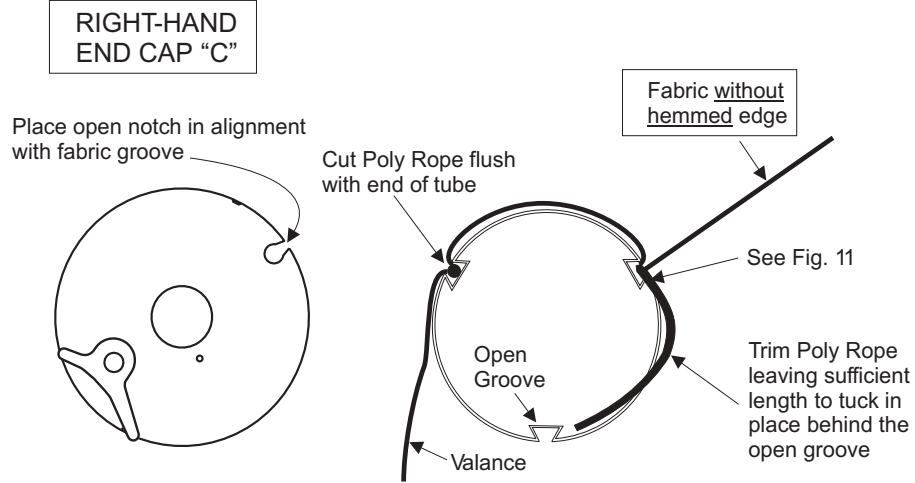


FIG. 16F

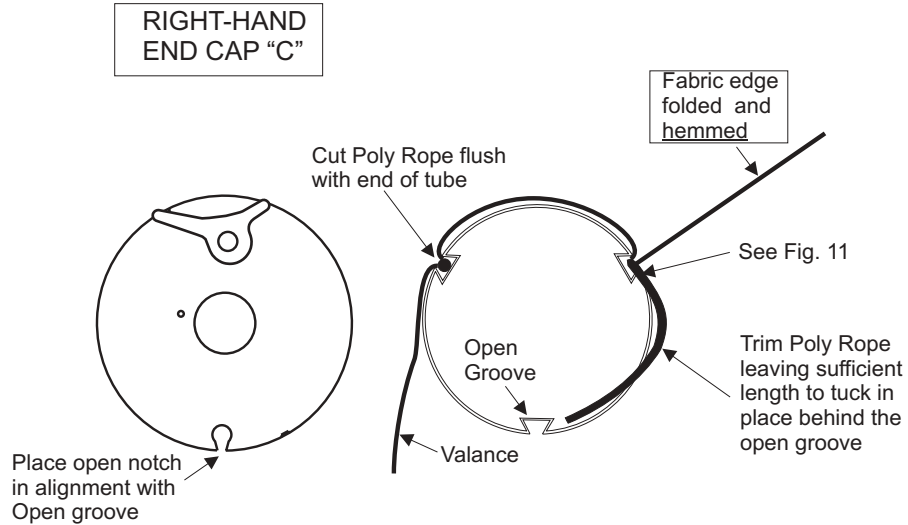


FIG. 16G

