



TORSION/DRIVE ASSEMBLY INSTALLATION INSTRUCTIONS ONESTEP AWNING

■ TORSION ASSEMBLY/DRIVE

Tools and Supplies Required:

5 x 5/16" Bolt	1/8 x 2" Cotter Pin	Wire Ties
Screwdriver	Pop Rivet Tool	Socket Wrench Set
Electric Drill	Adjustable Wrench	3/16" Drill Bit
Step Ladder	3/16"x3/8" Pop Rivets	1" Wood Block

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SERVICE INSTRUCTIONS

ONESTEP AWNINGS

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.

Note: The replacement motor drive assembly supplied here is an internal drive (See FIG. 10), and differs from the external, spring loaded drive originally supplied with this product. See FIG. 5. The new drive *must* be used in conjunction with a Heavy Duty Left-end Torsion Assembly for proper operation. Damage to the replacement drive assembly or the control can occur if not used in conjunction with a Heavy Duty Left-end Torsion. The Heavy Duty Left-end Torsion can be identified in two ways:

1. The styling of the roller tube end cap (riveted to the roller tube) of the Heavy Duty Left-end Torsion will match the replacement motor drive assembly roller tube end cap.
2. The spring of a Heavy Duty Torsion will have a "black" paint mark on the lower end. If you did not receive a Heavy Duty Left-end Torsion and your product does not already have one, please contact Dometic Technical Service (1-800-216-5115) to order this item.

INSTALLATION INSTRUCTIONS

A. Unwinding A Left Hand Torsion Assembly Spring

⚠ WARNING

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

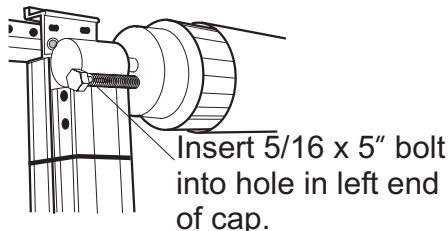
Note: If the awning is installed on a coach, complete the following steps on a step ladder with the awning extended two feet from the awning rail.

⚠ WARNING

Severe injury can result from the rapid spin-off of the top casting. Use the 3308335.003 crank (NEVER use bare hands) to handle a top casting under spring tension.

1. Before the Left Hand (LH) torsion is removed from the hardware the torsion must be pinned to prevent uncontrolled unwinding of the spring.
 - a. To pin the left hand torsion, insert a 5/16" x 5" bolt into the hole of the same size in the end cap. The top casting acts as a stop, preventing the torsion from turning. See FIG. 1.

FIG. 1



2. Remove the 1/4-20 x 1/2" screw holding the arm to the torsion. **DO NOT LIFT** the FRTA off of the arm. See FIG. 1.
3. While casting is still in the arm, place the 3308335.003 crank on the back side of the casting. Insert the 1/4-20 x 1/2" screw through the bracket on the crank and tighten it to the back of the top casting. See FIG. 3.

FIG. 2

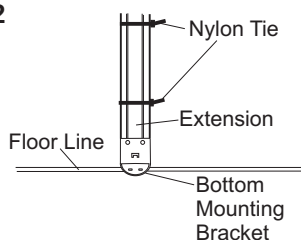
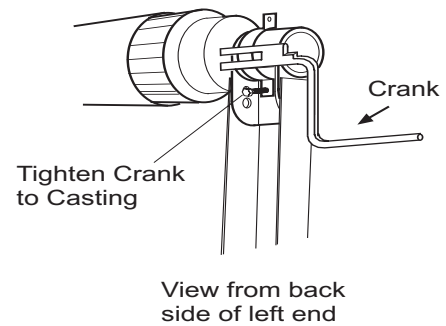
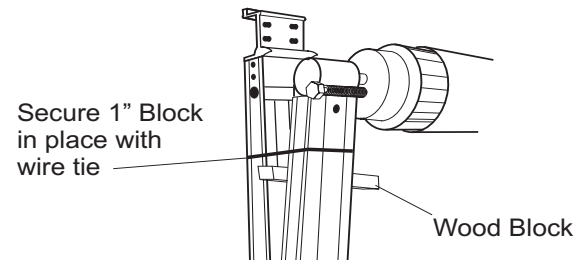


FIG. 3



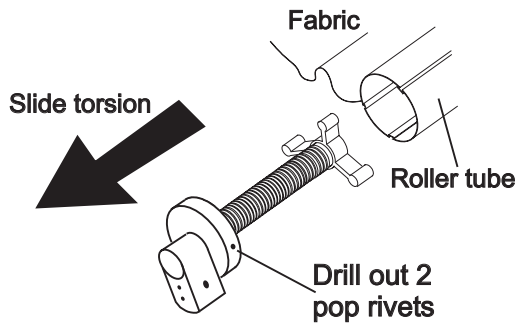
4. Hardware must be secured to prevent uncontrolled extension during service. Extend awning enough to place a 1" block below the left hand end cap and push the left arm back to the closed position. Install three heavy wire ties around the arm. One tie should be 8 inches above the bottom mounting bracket and the second is above the gas shock mounting bracket. The third should be just below the top casting holding the wood block in place. See FIG. 2 and 3A.

FIG. 3A



5. Rest the roller tube on your shoulder and lift the top casting of the torsion off the arm assembly. Grip the tool firmly and remove the bolt from the torsion. Keeping a firm grip on the tool, slowly unwind the tension out of the spring.
6. Make sure the torsion spring has been relieved of its tension.
7. Mark or make note of the location of the fabric and the end cap on the roller tube. This is necessary to reposition the new torsion, fabric or roller tube exactly the same when the new part is installed.
8. Drill out the two rivets from the left hand torsion using a 3/16" drill bit. Remove torsion assembly from roller tube and clean out any burrs or foreign particles left behind. See FIG. 4.
9. Proceed to Section C.

FIG. 4



B. Unwinding And Removing A Right Hand Torsion Assembly

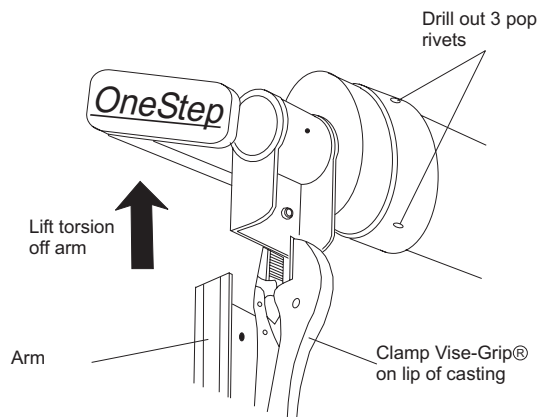
Note: The awning is installed on a coach, complete the following steps on a step ladder with the awning extended two feet.

! 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.

1. Disconnect motor harness from power harness. Remove the 1/4-20 x 1/2" screw that attaches the arm to the motorized torsion.
2. Hardware must be secured to prevent uncontrolled extension during service. Extend awning enough to place a 1" block below the left hand end cap and push the right arm back to the closed position. Install three heavy wire ties around the arm. One tie should be 8 inches above the bottom mounting bracket and the second is above the gas shock mounting bracket. The third should be just below the top casting holding the wood block in place. See FIG. 2 & 3A.
3. Lift torsion from arm and secure torsion tool to casting (Vise-Grip® may be used instead of torsion tool as per Fig. 5).

FIG. 5

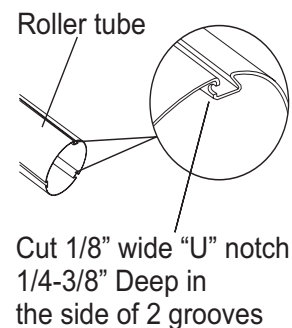


4. Drill out the 3 pop rivets using the 3/16" drill bit.
5. Slide the torsion out of the tube. When the end cap of the torsion clears the roller tube, the spring tension can be unwound. Exercise extreme care, as uncontrolled unwinding of torsion can result in injury. Slowly unwind tension out of the spring.
6. Remove the torsion from the roller tube and clean out any burrs or foreign particles left behind.
7. Proceed to Section E.

C. Replacing the Left Hand Torsion Assembly

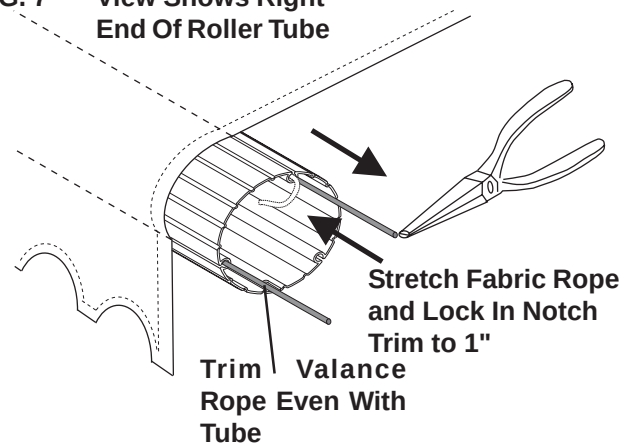
1. The roller tube groove must be "U" notched before the fabric poly rope can be stretched and wedged into the notch. See FIG. 6.

FIG. 6



2. Use pliers to stretch poly rope 1/4"-1/2" and tuck it into the notch. Position the poly rope off to one side, making sure it will not interfere with the torsion. See FIG. 7.

FIG. 7 View Shows Right End Of Roller Tube



3. Reinstall the left hand torsion assembly in the roller tube. Align rivet holes on the end cap with the holes in the roller tube. Be sure the new torsion is in the same position as the original torsion.

Note: If the roller tube is new, the rivet holes must be drilled. Mark the hole location on the roller tube using the end cap as a template. Drill the 3/16" holes and secure torsion assembly with 3/16" x 3/8" long pop rivets.

D. 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.

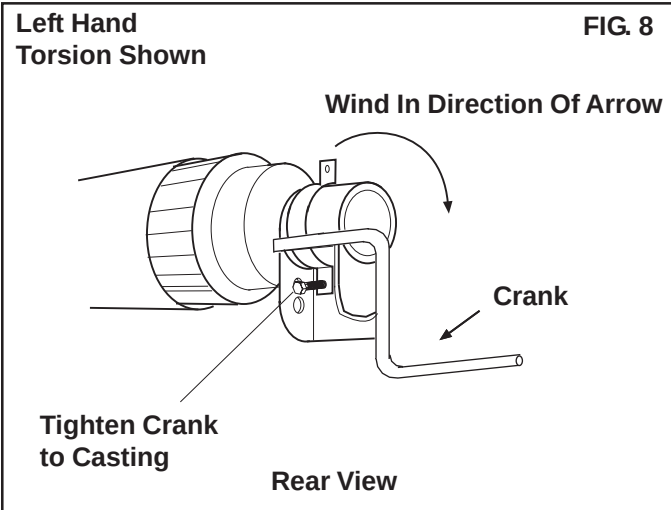
Note: If the awning is installed on a coach, complete the following steps on a step ladder with the FRTA extended two turns from the awning rail.

⚠ 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. Secure torsion tool to the top casting on the left hand torsion assembly.
2. Start with the tool in the 6 o'clock position. Keep a firm hold onto the tool. Slowly wind in the direction of the arrow 9 complete turns. See FIG. 8.

Note: If Awning is fully extended; wind the spring tension a total of 17 turns.



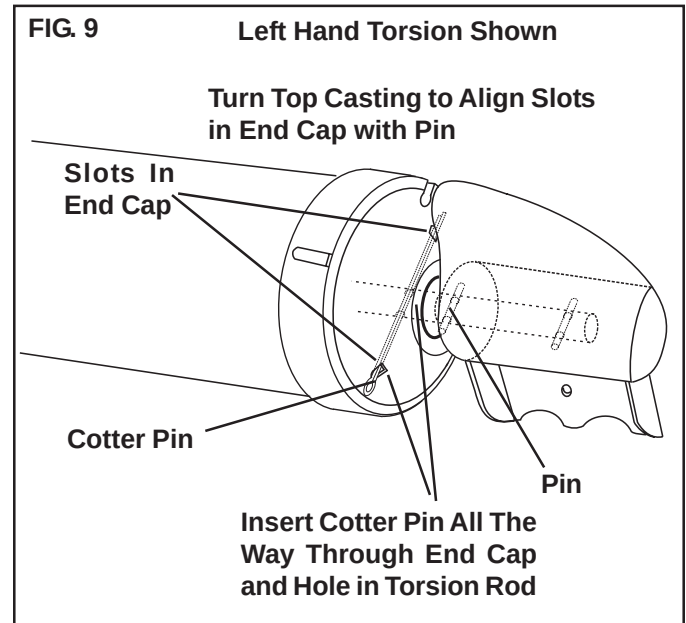
3. Turn top casting or FRTA until the pin hole in torsion rod is parallel with the two slots in the end cap. See FIG. 9. Insert a 7/64" x 2-3/4" cotter pin through the end cap and torsion rod. Put a piece of tape over the head of the cotter pin to prevent it from dropping out. See FIG. 9.

4. Remove torsion tool 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 OneStep installation instructions.

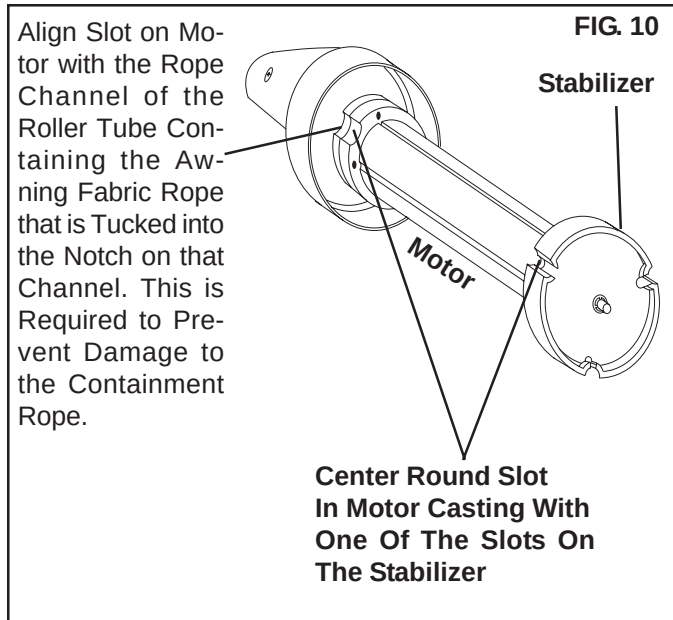
5. Remove 2-3/4" cotter pin and check operation of the awning.

Note: Top casting in FIG. 8 & 9 are subject to change. Pictures are representative and may not look exactly alike.



E. Replacing Drive Assembly

1. Install right hand drive.
 - a. New right hand drives are shipped with the top casting and the stabilizer positioned for installation.



- b. Motor drive assembly should be placed in the roller tube with the motor slot positioned under the channel with the fabric rope. See FIG. 7 & 10.
 - c. Turn the end cap on the motor drive torsion until the rivet holes match the holes in the roller tube. Install the three 3/16" x 3/8" pop rivets to secure the drive to the roller tube.
 - d. Connect motor harness to power harness.

Note: FRTA's installed on the coach will require the motor drive assembly to be operated with DC power as part of the replacement process. This is required to align the Top Casting so that it can be slipped easily into the arm assembly. This will align the Top Casting of the motor drive to the left end Top Casting. The castings on left and right ends must be parallel to each other.

2. This completes the Torsion/Drive Assembly replacement. Check awning for proper operation. See OneStep User's Guide.