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**RIVET GUN** 

ELECTRIC DRILL

VISE GRIP PLIERS 5/32" DRILL BIT

3/8"WRENCH

#2 PHILLIPS SCREWDRIVER

# NOTICE: Please read ALL instructions carefully before beginning work.

### REMOVE Z-SPRING ASSEMBLY: A.

### 1. Unlock awning and roll down.

2. Set the front rafter arm and the front Z- Lock, if any, to lock the awning open. Support the roller tube as shown in Fig. A2. Caution Main arm may be under spring tension. Unbolt rear main arm from the lower main hinge (Fig. A1) and slide the main arm tube assembly off of the main arm bar.

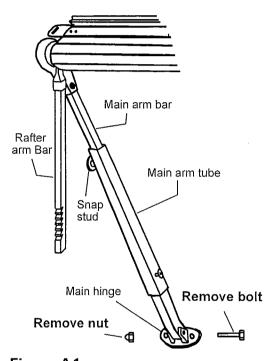


Figure A1

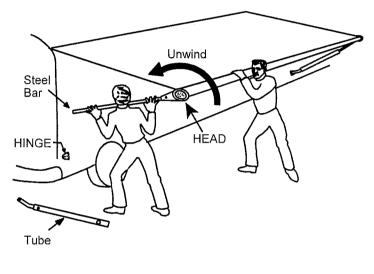


Figure A2

3. Using the main arm bar as a lever, unwind the spring completely by turning the main arm bar counterclockwise. (Fig. A2) The number of turns will vary with the length of the awning. It will be approximately the length of the awning plus 7 (e.g. 21' awning; 28 turns).

### 4. Disconnect Arms

- a) Make sure the roller is supported securely. then disconnect main arm.
- b) Remove and discard the 10-32 x 1 1/2" machine screw(1) and locknut(5) securing Head Casting(2) to the shaft(3). Set Arm aside.
- c) Slip off Rafter Arm(4) and set aside.

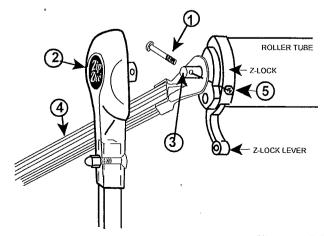


Figure A3

### 5. Remove Z-Spring Assembly (Fig. A4)

- a) Slide fabric on roller tube back to expose four rivets around end of roller tube.
- b) Drill out all four rivets using 5/32" drill bit.
- c) Use pliers to pull Z-Spring Assembly out of tube as shown.

# FABRIC

Z-SPRING LOCK

ASSEMBLY

Figure A4

Fabric

## **B. INSTALL Z-SPRING**

### 1. Insert and attach Z-Spring

- a) Insert Z-Spring into roller tube. Using holes in tube as a guide, drill the end cap using #20 or 3/16" drill.
- b) Insert replacement rivets and secure with rivet gun.

### 2. Reconnect arms

- a) Open Z-Lock (pull lever(3) open) and rotate cover(2) so lever is facing down.
- b) Slip Rafter Arm onto shaft (Fig. A3) so that flat side of casting is against lock.
- c) Align hole in Head Casting with hole in shaft then reattach head casting to shaft with new partially threaded, black, hardened steel 10-Figure B1 32 x 1-1/2" screw and lock nut provided. **Do not reuse old screw.**



- a) Make sure the lock lever on the Z-spring lock remains open during winding. Closing the lock at any time during the winding of the spring can cause damage to the lock mechanism.
- b) The single torsion spring is wound by turning the head casting clockwise (facing forward), using the stainless steel support arm bar as a lever (see Fig.A2).

Wind the spring according to the awning size, using the guide below:

7 turns plus 1 turn per foot of awning length. **Example**: 18 ft awning equals 25 turns

After winding, slide the main arm tube onto the bar with the end of the bar facing away from the coach. Then swing the assembled arm to the coach and bolt onto hinge.

Now test the spring tension and adjust accordingly. The awning should not start to roll up until you give the roller a swift starting push upward. 12 to 24 inches of fabric may have to wind around the roller before the spring takes over. Because of variations in spring temper, you may have to add or deduct a few turns to reach the right balance.

Close the awning. Use the strap to control speed and direction of the roller and spiral the strap as shown in **Fig. C1** to prevent cloth build-up. Release the strap when the roller is about 14 inches from the coach, allowing the awning to snap closed.

When closed, there should be an even amount of exposed roller at either end of the awning. If not, unroll and close the awning again, giving the roller a lateral push in the directions needed. Please read the Owner's Manual carefully. It contains important information regarding the care and treatment of your awning. For safety, always close the awning when the vehicle is left unattended or when weather threatens.

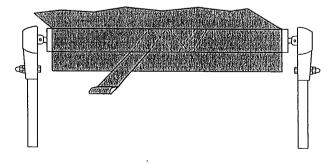


Figure C1