

# Replacing a Rib

## Instructions

**WARNING: unplug any electrical appliance before attempting any repair.**

### STEP 1

Remove the fabric from the frame. Lay the umbrella on it side over a workbench or table, with the damaged rib facing upwards.

### STEP 2

Separate the damaged rib from the return arm by removing the two screws on the rib connector.

### STEP 3 (for lighted umbrellas only)

Remove the electric box cover from the upper hub. Locate the two wires from the damaged rib, then disconnect the WHITE wire from the outside ring and the RED wire from the inside ring. Attach a three-foot piece of fishing line or string to the two wires before removing the rib. This will assist in retrieving the new wires.

### STEP 4

Locate and remove one (1) hub bolt on each side of the damaged rib from the upper hub. Insert a flat head screwdriver between the two sections of the hub and pry open the hub enough to remove only the damaged rib and the rib pin from the hub. Note: it may be necessary to loosen other bolts in order to pry open the hub. Use caution when pulling any electric wires thru the hub.

### STEP 5

If the new rib has lights, then attach the new wires to the fishing line to assist in pulling the wires thru the hub and into the electric box. Pry open the two sections of

**the hub and insert the rib w/pin. Make sure the rib pin drops into the slot before closing the upper hub. Re-tighten all the hub bolts in the hub.**

#### **STEP 6**

**Attach the new rib to the return arm at the rib connector using the two screws.**

#### **STEP 7 (for lighted umbrellas only)**

**Connect the WHITE wire to the outside ring and the RED wire to the inside ring. Place the cover on the electric box and secure.**

#### **STEP 8**

**Place the umbrella in an upright position. Now, slowly open and close the umbrella to test the ribs. (For lighted umbrellas, plug in the transformer and check the lights while the umbrella is fully open). If satisfied, place the fabric on the umbrella frame. You have successfully completed the repair.**

*For further assistance contact our service dept. @ Wanda Technology*