# **FUNBRELLA MAINTENANCE**

Maintenance should be performed on the frame, winch assembly and fabric top at least once a year.

#### FRAME

- 1. Check bolts fastening top casting to center pole. Tighten or replace if worn.
- 2. Inspect condition of top and bottom aluminum castings. There should be no cracks in the hinge ears or excessive wear in the bolt holes.
- 3. Check flat ends of bows and braces. There should be no breaks in the metal or excessive wear to the bolt holes.
- 4. Check all bolts fastening bows and braces to the castings for wear. Lock nuts are to be tightened so at least one and a half threads are exposed beyond the nut. Over tightening can result in frame damage.

## **WINCH ASSEMBLY**

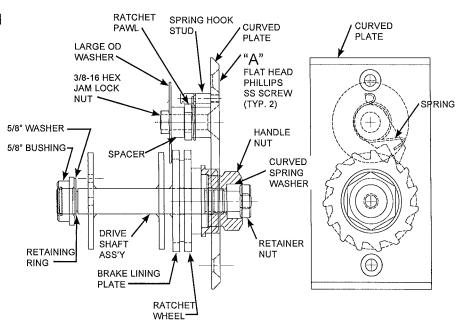
#### Removal:

- 1. Lower Funbrella to fully closed position (on 20' model, use prop to hold lower brace casting above winch plate for clearance).
- 2. Remove (2) flat head phillips screws "A": (see drawing) at top and bottom of cover plate.
- 3. Hold winch handle nut in one hand and pull winch assembly from pole. Apply light pressure against cover plate toward pole while removing to prevent winch assembly from misaligning with ratchet pawl.

#### Maintenance:

- Check condition of cable. Frayed or worn cable should be replaced.
- Check condition of ratchet pawl, pawl torsion spring and ratchet wheel. Replace if worn.
- 3. Pawl flat head phillips screw should be tight at all times and ratchet pawl should move freely (if loose, check condition of pawl and retighten). Note: Models prior to July, 1996 use a %" standard jam nut to secure this assembly. Locktite must be applied if nut is removed and/or replaced. Lubricate ratchet pawl assembly with a good grade of lithium based grease.

### WINCH ASSEMBLY



**CUT-AWAY VIEW** 

**FRONT VIEW**