



## Cleaning Protocol for Bi-polar Ionization Tubes

The ionization tubes must be washed on a periodic basis to ensure operating efficiency. At minimum, they should be washed any time the primary filter is serviced, but in no case, longer than 1 ½ years. For heavy tobacco smoke applications, the tubes may require washing on a three to four month cycle. The tubes can be washed using the following procedure:

**WARNING : All power to the ionization unit must be disconnected prior to undertaking any maintenance procedure !**

1.1.1 Remove the tubes from the unit by lifting the leaf spring from the surface of the tube and unscrew each tube.

1.1.2 A solution of warm water and non-abrasive detergent can be used to clean the tubes.

**NOTE: DO NOT wet the polycarbonate tube base under any circumstances. DO NOT submerge ionization tube in water.**

**!!! WARNING: SHORT CIRCUITING MAY OCCUR !!!**

1.1.3 A soft nylon brush may be used to remove embedded material within the external electrode.

**NOTE : DO NOT attempt to remove the tube's outer electrode.**

1.1.4 Rinse with clean water after washing.

1.1.5 Replace ionization tubes only after they are completely dry. Pay special attention to removing any moisture from the polycarbonate base.

1.1.6 Screw tube into socket by holding the leaf spring clear of tube surface. Turn tube into socket by the plastic base. After tube contacts base, tighten an additional 1/8 to 1/4 turn.

**NOTE : Do not use hand tools to tighten tubes, as they will damage the glass tubes.**

1.1.7 Make sure that the leaf spring is in contact with tube surface.

**REMEMBER: The tubes are fragile - Handle With Care.**

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