How to clean/disinfect the pneumotach

nSpire recommends the use of KoKo Filters to reduce the need for disassembly and cleaning the KoKo spirometer.

Dust Removal

To remove dust from the surface of the pneumotach core, nSpire recommends using a moisture free dust remover spray. *Moisture free* compressed air can also be used.

Cleaning the Core Assembly

If it becomes necessary to disinfect and/or submerge the pneumotach in a cleaning solution, the core assembly must be removed from the spirometer handle (follow directions in the figures shown). **This is the only part of the KoKo Spirometer that can be submerged in liquid**. The core of the pneumotach is made from a brass alloy. Care should be taken that the disinfectant solution used does not damage the core. nSpire recommends Diisobutylphenoxyethoxyethyl dimethyl benzyl ammonium chloride, or any equivalent non-corrosive solution.

> **Note: There are two different models of the KoKo Spirometer. One has a large thumb screw above the serial number sticker on the handle, and the other does not. Please follow the disassembly instructions for the KoKo that you have.**

KoKo with thumb screw:

1) Remove the thumb screw located above the serial number sticker on the handle:

2) Push the core assembly out of its holder in the direction shown:

3) If the core assembly is difficult to remove, place a wood block over the top opening (as shown in the figure) and tap the block with a hammer:

4) Once you have removed the core assembly from the pneumotach handle, submerge the core assembly in the chosen disinfectant solution, rinse thoroughly in distilled water, air dry and then reassemble the system.

5) Slide the core assembly back into the handle, making sure that the black set screw is in the slot provided for it in the handle.

6) Replace the thumb screw and tighten.

KoKo without thumb screw:

1) Remove the O-ring from the side of the pneumotach to which the arrows point:

2) - 4) Follow directions 2-5 above.

5) Slide the core assembly back into the handle, making sure that the tab matches with the slot provided for it in the handle.

6) Replace the O-ring.

NOTE: After disassembly, disinfecting and reassembly, you must re-calibrate the KoKo Spirometer prior to patient testing. Always calibrate with the filter in place.

Caution: Do not attempt to wash or submerge the KoKo Spirometer handle in water or cleaning fluid. There are electronic components inside the handle that will be permanently damaged.

Recommended Disinfectant

The core of the pneumotach is made from a brass alloy. Care should be taken that the disinfectant solution used does not damage the core. nSpire recommends Diisobutylphenoxyethoxyethyl dimethyl benzyl ammonium chloride, a decontaminate solution, or any equivalent non-corrosive solution.

Nebulizer Cleaning

At least once a day, disassemble and wash the entire nebulizer and tubing with a decontaminant/sterilant solution according to the directions accompanying the solution. Rinse with hot tap water and allow to air dry prior to reassembly.