

General Care of the Flute: Cleaning, Part 3

by Martin Greene

Paradoxically, cleaning, which leads to long instrument life, can be the most destructive if done incorrectly. This is because a flute is a strange combination of strengths and weaknesses. Unlike other woodwinds, which can have their reeds replaced quickly and cheaply, the flute relies on a permanent sound generator — the far edge of the embouchure hole — which, although made of metal, is nevertheless quite delicate.

Cleaning consists of three parts: cleaning the pads, cleaning the body, and cleaning the headjoint and embouchure hole.

When swabbing the flute, which should be done first, insert the corner of the swab into and through the “needle eye” of the cleaning rod. Wooden cleaning rods are better than metal, since they preclude the possibility of scratching the inside of the tube, at least to some extent. Some people prefer silk, others cotton, as a swab material; there is no clear consensus as to superiority for one over the other.

The material should, after passing through the eye of the rod, be wrapped around the rod so that no part of the rod is visible. It is then inserted into the flute body, rotated so as to pick up as much moisture as possible, and withdrawn. The same procedure is used on the headjoint and foot.

To clean the pads, close each key in turn. Clean only the ones which are obviously wet, or which are sticking. Sticking can be more easily heard than seen or felt; hold the body or foot close to your ear, work the key and listen.

A sticking pad will announce itself with a popping or smacking sound. Take a cigarette paper, slide it under the pad and close the hole by pressing lightly on the pad cup. Don't press hard and don't close the hole by pressing the key, that creates unnecessary stress on the key.

Hold the pad down for a few seconds, release, discard the cigarette paper, and then work the key again, listening for further sticking. Repeat if necessary. Do not hold the key down and slide the paper out from under it; this will eventually wear the pad's surface and render it useless due to loss of seal.

While doing the above, it is a good idea to put cigarette papers under all the holes which are closed when not in use. These are: the two high small trill key holes and the g-sharp hole on the body; and the e-flat hole on the foot. These holes, closed most of the time during play and closed constantly when the flute is in its case, are most prone to long term sticking damage to the pad. You can leave cigarette papers under them while checking the other pads for sticking.

Some people store the flute with papers left under those “always closed” pads, but opinions differ with regard to this practice; it is probably best not to leave cigarette papers under pads on a semi-permanent basis. (The same can be said for so-called “pad savers.”) In all of the above cleaning procedures, make very sure that you either do not use gummed cigarette papers, or, if you do, that the gummed portion never contacts a pad.

Opinions are varied about cleaning the flute body, but it is generally agreed that using silver polish is asking for trouble. It is too easy to get the polish into the joints of the mechanism or onto the pads. Some people, for whatever reason, are not bothered by the sight of tarnish, and do not clean the body at all.

Others like the flute to remain attractive, and eliminate tarnish on the body (and headjoint, and foot) using a tarnish cloth. These cloths, once denigrated due to the belief that they leave fine deposits which can interfere with the mechanism, have improved over the years and are now generally safe for the mechanism, as long as a high-quality cloth is used.

Nevertheless, they (or any other sort of cloth) should not be used to clean under the mechanism or on the rods and springs. It is simply too easy to snag the mechanism or a spring, and deform it. If it is essential that the flute's body be perfectly clean, it should be taken to a reputable shop, where the mechanism will be removed and the cleaning performed, on the bare tube, by experts.

Some people do not like tarnish cloths, and prefer simply to use a damp cloth of some non-fraying material. This works to keep the flute fairly clean, but will never eliminate tarnish, nor leave an anti-tarnish coating, the way a good tarnish cloth will.

When cleaning keys, use a light touch and a lot of caution. Avoid side to side movements (inline with the flute's body) when cleaning the pad cups; this can cause looseness if the key bends there, eliminating the required hermetic seal of the pad. Lightly use a circular motion to clean pad cups, and straight motions on other keys. It is not a bad idea to simply tolerate a certain amount of tarnish on keys, since repeated cleaning invites the inevitable mistake which can damage the mechanism.

When cleaning the headjoint, great care must be taken not to damage the far side ("blowing edge") of the embouchure hole. Of course the headjoint is swabbed out per the procedure outlined above, but some flutists prefer to clean it even more thoroughly in order to eliminate gradual accumulations of various deposits.

The embouchure hole is the source of the flute's sound, and any damage here, no matter how slight, will affect tone. So will an accumulation of saliva/food/drink deposits, present to some small degree whenever the flute is played. This cleaning should take place after the swabbing, but before the surface of the headjoint is cleaned with a cloth.

The headjoint should be carefully held under a stream of lukewarm tap water, allowing it to flow over the embouchure plate and into the embouchure hole. The cork end of the headjoint is held higher than the tenon end, to avoid soaking the cork with water. If desired, a *soft* toothbrush can be treated with liquid dishwashing soap, and the interior of the embouchure hole cleaned with very, very gentle strokes.

If possible an antibacterial soap should be used. This soap should contain *no* abrasives and no deleterious chemicals. If there is any doubt as to its contents, it is best simply to use no toothbrush or soap, and skip that step, since damage to the headjoint or embouchure hole is generally a serious matter. After this water cleaning, the swab is used again, so that the headjoint will have received two swabbings before the flute is put away.

Finally, after all cleaning, pad cleaning, swabbing and rubbing is completed, it is a good idea to put the flute in its case, but leave the case open for a while. This gives the flute time to slowly return to ambient temperature, while allowing its interior and pads to dry out. If it is returned right away, moisture and warmth are held inside the case for hours, which is not good for the mechanism or pads.

Indeed, if at all possible, the general principle should be to avoid rapid changes of environment. In other words, to warm the flute up slowly; to avoid suddenly taking a warm instrument into a cold environment, or vice versa; to put an instrument away but give it some time to "breathe" before being shut up in its case. Although made of metal, a flute responds well to the sort of care which you would think appropriate for an instrument made of wood.