

The Flute – looking after the instrument

Routine care and maintenance

Before playing:

- Hold the head-joint in one hand and the socket of the body for 2 to 3 minutes to warm up the instrument **do not warm the instrument by blowing into it** – this will just cause condensation problems as well as initially distorting the tuning. Alternatively hold the whole assembled instrument over a radiator for 2 to 3 minutes to warm it up (this is only possible with metal flutes).

After playing:

- Leave the instrument on its stand to "air".

- If you need to pack away the instrument then when you take the instrument apart "flick" the head-joint to remove any water droplets and next swab out each part of the instrument then leave the Flute to "air" in its case with the top open for 5-10 minutes, this will help prolong the life of the pads. If the instrument has to be regularly packed away without being left to air then a "pad saver" will help - it will soak up the moisture left in the instrument.

Cleaning the instrument:

- If dust or fluff does gather on the instrument then gently brush it away with a shaving brush.

- Occasionally polish the instrument (using a silver cleaning cloth) particularly the embouchure plate, the keys, and the place where you put your right thumb (this will prolong the life of the silver plating).

- Once a month use a precision screwdriver (if you feel competent enough) to gently check the screws at either end of the key rods are not loose (do not adjust any tiny screws found at the back or to the side of the individual keys).

- If the pads become sticky do the following: -use pad cleaning papers to clean the pads - dab on a little Methylated spirits onto the paper with a cotton bud, place the paper under the key pad, hold the key lightly closed and pull the paper through; now that the pad is clean place a sheet of powder paper under the pad, hold the key lightly closed and pull the paper through.

A safe method of assembly

It is often during assembly that the instrument is damaged, so check that your method of assembly does not put undue strain on the mechanism. Outlined below is a safe method of assembly.

1. Wipe the head-joint and foot-joint tenons with a piece of silver cloth to remove any dust or grit.
2. Grip the head-joint in your left hand and grip the socket on the Flute body with your right hand, then gently twist the body onto the head-joint.
3. Once the head-joint is fully inserted rotate it so that the embouchure hole is aligned with the keys - then pull the head-joint out 2 mm.
4. Now grip the socket of the body with your left hand.
5. If possible grip the very end of the foot-joint with your right hand to avoid touching the keys (if you find this difficult then grip the foot-joint with the upper part of your palm pressing down gently on top of the key hinges while keeping the two lowest keys held closed with the middle of your palm). Gently twist the foot-joint onto the tenon on the Flute body in a clockwise direction only (when you take the instrument apart you must also twist the foot-joint off in a clockwise direction).
6. Align the foot-joint so that your little finger can operate the keys; if you need to re-align the foot-joint remember to twist it in a clockwise direction only.

Note that many Flute players assemble the instrument correctly but find when they start to play that they need to adjust the position of the head-joint slightly and whilst making this adjustment they forget to grip the body of the instrument at the socket and instead grip the keys (this eventually bends the mechanism so that the pads do not seat properly); likewise players may need to adjust the position of the foot-joint slightly and whilst making this adjustment they forget to twist the foot-joint in a clockwise direction and instead twist it anti-clockwise back towards them (this puts excessive pressure on the front of the pads and they quickly start to deform and leak).

The tuning rod

The tuning rod is a long thin rod that is usually supplied with the Flute and has its own resting place in the Flute case. At one end of the rod is a slot, and at the other end there is a notch (about 1 cm from the end).

The first function of the rod is to check that the head cork in the head-joint is in the right position: gently insert the notched end of the rod into the head-joint until it contacts the head cork plate, look into the embouchure hole and check the notch is in the centre of the hole (make sure you are standing directly under a light when doing this or you might get a false reading), if the notch is not in the centre of the embouchure hole then the head cork needs replacing. The second function of the rod is to enable cleaning of the bore: cut a small piece of silver cloth about (10cm x 10cm) and thread this through the slot in the rod; clean the bore of the head-joint, body, and foot-joint.

Flute stands

Some players find the chore of assembling and dis-assembling a Flute can prevent them practicing. If the Flute is placed on a stand after playing it can be left assembled and it will drain properly (although it is vulnerable to being knocked over). If the stand is to be kept at home, buy the largest possible because this will be the most stable; if the stand needs to be used at performances as well as at home, then a smaller stand that fits inside the case, case cover, or body of the instrument, might be better. Children might be better off placing the instrument under their bed (resting with the holes pointing upwards), the instrument won't drain effectively but it might be played more often and won't get knocked over.

In performances it is best for the player to keep hold of their Flute (rather than place it on a stand) with the **holes facing upwards** and the instrument tilted down; doing this will help the instrument drain and also keep it warm so it stays in tune.

Cases and case covers

Flutes are easily damaged and an instrument case that holds the flute snugly is essential. The keys will be bent if the instrument can move in the case while being carried. Nothing else should be kept in the case unless there is a specific compartment for it. It is essential to have a tenon cleaning cloth - if the case has a space under the body of the Flute then store the cloth there - do not store the cloth on top of the instrument! If there is no space then it is best to buy a case cover in order to store the cloth with the instrument.

Servicing the instrument

The instrument should be serviced once a year to ensure it is operating correctly. The pads, corks, and felts on the instrument (and also the adhesives which keeps these items in place) deteriorate over time. On older or poorer quality instruments the mechanism itself starts to wear and keys can become loose or jammed.

Usually such deterioration is gradual and the player subconsciously compensates by blowing harder and pressing harder on the keys. Without servicing the deterioration continues: the quality of tone diminishes; the instrument becomes less responsive; the tuning becomes unreliable. Eventually something major goes wrong and the instrument becomes unplayable and in need of considerable repair.

Players often blame themselves for the poor sound they produce when really it is the condition of the instrument that is causing problems. The first indication that the instrument needs servicing is usually when the player starts having problems playing the Low C by using the Low C touch-piece only. Test your Flute with the following exercises, in all cases you should be able to play the notes without squeezing the keys hard or blowing hard: C to B \flat using thumb key; B to A; A to G; G to F \sharp ; G to F; Low D to Low C.