

# Parents and new players

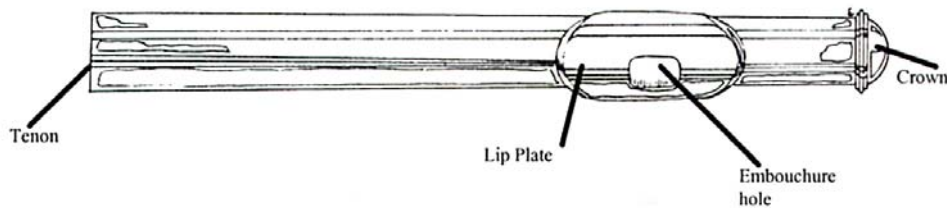
## Your top flute questions answered

When looking for a new flute and researching the various options, you can often be faced with flute jargon such as E mechanism or split E, open or closed mechanism, C or B footjoint options, headjoint over-cutting and undercutting, silver-plated or silver, padding and set-up...

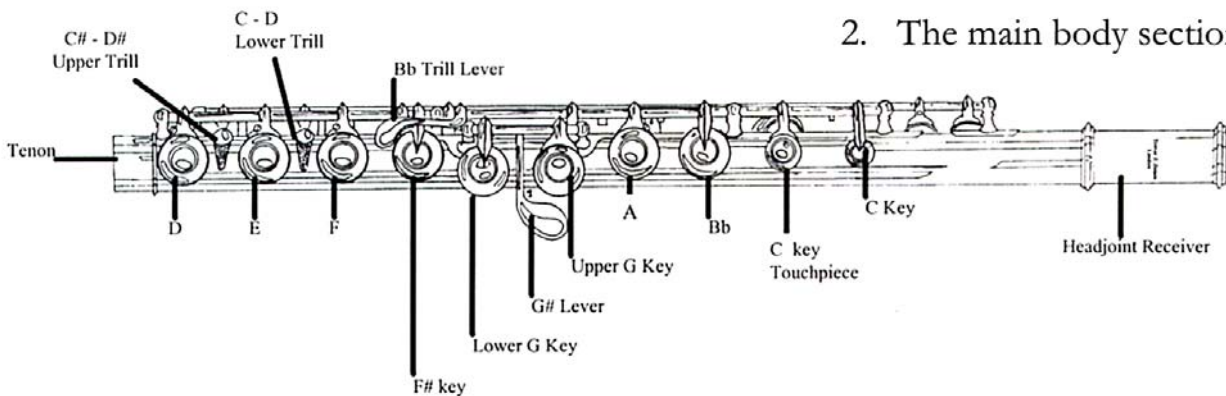
This guide should hopefully steer you through the jargon and help you to be more informed when visiting the music shop.

Let's start when you open the flute case, you will find the instrument split it to three distinct parts.

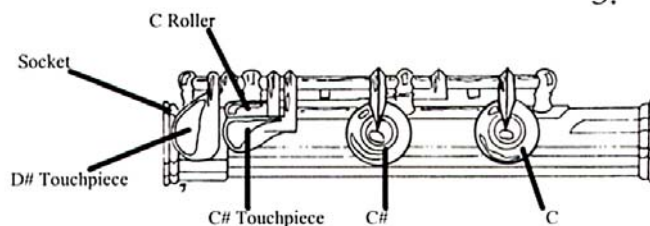
### 1. The flute headjoint



### 2. The main body section



### 3. The footjoint section



The tenon end of the flute headjoint fits gently in to the headjoint receiver part of the main body section. The footjoint socket end is gently added to the tenon end of the main body section. (*Refer to our Website 'Care and Maintenance' section for the complete method on how to put together and take apart your instrument*).

*The pictured above is of a Trevor J. James flute, closed hole, without E mechanism and with a C footjoint (more explanation to follow)*

We appreciate that many parents and young players rarely understand all the information that is given out in brochures. Let us now look at the most commonly asked questions!

## FAQ's

### (1) What are flutes made of?

Most student flutes are silver plated, however there comes a time in a player's musical evolution when they want to demand more of the instrument with regard to tonal colours and flexibility. The progression to a flute with silver headjoint, silver tube or silver tube and mechanism certainly assists the established player in their search for musical advancement. Most manufacturers will identify the areas that have precious metal content by stamping the numbers 925, which signifies a silver content of 925 parts per 1000. On the Trevor J. James 'Cantabile' flute (solid head), the 925 is stamped next to the crown, on the underside of the headjoint. On the 'Virtuoso'(solid tube) model, 925 is stamped on the underside of the main body and footjoint section. Flutes can also be made of gold, which like silver is also a precious elemental member of the copper family. Pure gold is measured as '24 karat'. 9k, 14k, 18k and 24k flutes are available from specialist flute makers. Other materials in used in flute manufacture today include platinum and wood.

The question of which metal gives the best tone has yet to be definitively answered as all players have different desires and opinions. However players and teachers would certainly agree that there are benefits to a student up-grading their silver-plated flute to a silver head, silver tube or one with silver tube and mechanism.

### (2) I am told that the flute headjoint is very important, why? Is the design the same for all brands?

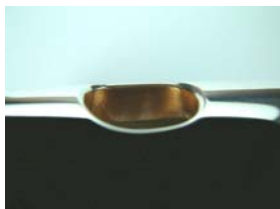


The headjoint is singularly the most important part of the flute, not only for sound production but also for tuning. Flute makers continually strive to make the 'perfect' headjoint, however because this is such a subjective topic, the perfect headjoint will probably never be made. Broken down into three distinct parts, the headjoint tube (*joins to the main body section of the flute*), lip plate (*used to rest the musicians lips on*) and the chimney or riser (*linking the lip plate with the headjoint tube*), most headjoints give different strengths and tonal widths in various parts of the octave depending on the expertise of design and manufacture. It is vital for the new player or beginner to purchase a flute with a headjoint design that gives easy tone production. There are many reasons for the different headjoint characteristics of the flute manufacturers - different parabolic curves, varying embouchure sizes, angles and depths. What can be said with certainty however is that a student will advance more quickly and to a higher standard if they play on a flute with a good quality and responsive headjoint.

It must be stressed here that the quality of design and headjoint varies widely from brand to brand. It is therefore vital to the new player that they purchase a flute from a manufacturer with a specialist flute reputation. The purchase of a flute with a little-known brand name based solely on price may not be the best long-term decision.

Student flute headjoints are usually silver-plated. When the musician becomes more advanced more expensive types are available in solid silver, gold, platinum or wood versions.

### (3) What is undercutting and overcutting of the embouchure hole?



*Example of Trevor J. James lip plate with 9k gold riser showing the over-cutting of the embouchure hole*

Looking at the headjoint again, overcutting is the term given to the bevel on top sides of the embouchure hole, whilst undercutting is the action of changing the angles at the bottom of the chimney or riser. With Trevor J. James headjoints, both actions are achieved by hand filing and then finished by polishing the angled areas. Overcutting and undercutting of the embouchure hole and chimney does indeed make a difference to the sound and tonal flexibility, however as this is again a subjective topic, the extent and severity of the cutting varies from flute maker to flute maker, as does the preference from player to player.

### (4) I read that a flute can have E mechanism (also known as split E) what is it?



The split E mechanism has been around for many years and is popular in most flute playing countries. One of the many high notes on the flute is the note E (E in the third octave). This note has always been difficult to play in tune; it has a tendency to be sharp as well as crack easily. When a player plays the high E on a flute without an E mechanism, both G keys remain open. However if the player has an E mechanism, a bar located adjacent to the F# key pushes down the lower G key. The upper G key however remains open. Many students find the addition of an E mechanism beneficial.

### (5) E mechanism aside, is the general mechanism of the flute the same on all brands?

No, the flute can again be split into distinct categories - flutes with an offset mechanism or flutes with the mechanism inline.



in-line 'G' key



Offset 'G' key

**The offset model** – In the main flute body section, the G keys mechanism is set forward of the other keys. There is a separate set of posts and rod for the G keys and they are not part of the left hand section. The offset model predominates in many world markets.

**The in-line model** - . Simply, all the keys on the main body are in line with each other. The G keys are set in the same row as the B, A, F, E, and D keys. The G keys are part of the left-hand section.

*General note: There is no acoustical difference between the two styles. Many players prefer the offset G keys because it feels more natural to them. Those who consider it conducive to good hand position prefer the in-line configuration. It is purely a matter of personal choice.*

**(6) So you say that there are different mechanism options, why do some flutes also have holes in the keys and others not?**



Closed hole



Open hole

There are two common forms of key styles used today, 'closed hole' keys, and the 'open hole' style. The 'open hole' flutes have five keys which have holes in them - the A key, one of the G keys, the F, E and D keys. The purpose of the hole is to provide increased air circulation when the key is open. To close the key, the finger must cover the hole completely. In addition to the acoustical differences for this key style, there are certain artistic and aesthetic preferences for them, as well as the ability to encompass many of the modern day flute techniques that may require the player to half cover the keyhole. The most common key style in the U.K is the closed hole version which as the name implies, has keys without holes, however in the USA and other European countries, the open hole mechanism is the most requested.

**(7) Why are the pads of the flute so important?**



Padding a flute is the single most important process in making a flute play at its best. A well-padded student flute will play better than a badly padded professional flute. Pads are made of felt, backed by very thin card and surrounded by an artificial membrane. The role of a pad is to quietly close off a tone hole completely, creating a hermetic (air-tight) seal with the least amount of effort. If a pad is not seated (fitted) correctly in the key cup, it will cause an air leak that will affect the formation of the note it produces when closed, as well as every note below that pad. The hermetic seal made by the pad is therefore the single most important factor in tonal production. This process continues to constitute a large proportion of Trevor J. James & Co. workshop man-hours during instrument construction.

**(8) What makes a good student flute?**

Taking account of some of the points previously listed above, a flute manufactured to be of the greatest benefit to the student will come from a manufacturer who takes seriously the importance of the headjoint, and padding process. A new flute student will require a flute that blows very easily and with the minimum of resistance. All flute players will remember their early flute learning days and those 'dizzy moments' as they tried desperately to get those notes out. In a similar vein to the sport of 'golf', where if you tense up and try to hit the ball hard, the ball will never go as far and as straight as you want, flute players should relax and let the flute do the talking. Therefore a student flute with a highly responsive and free blowing headjoint will certainly assist the student in their quest to become a good player, the Trevor J. James 3011E and the 'Privilege' model are universally renowned for these qualities. Choosing a flute from a company who understands and prioritises the importance of the headjoint and padding process is vital for all students, parents and retailers who take their music and music education seriously.

**(9) What is the difference between traditional key cups those with pointed key arms?**



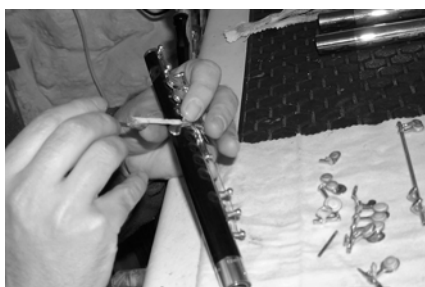
Traditional key cup



Pointed key cup

Most student manufacturers use the traditional key cup design for their flutes rather than the key arms favoured on the more expensive semi and fully handmade flutes. Traditional key cups can be cast or drop forged in one piece whereas French style pointed key arms are usually made in two separate parts and then carefully soldered together to form one.

**(10) Why is the regulation of the flute so important?**



As you may have already noticed, some of the keys on a flute when depressed will also cause other keys to close. The purpose of regulating the flute is to ensure that two or more keys, which must close together, will seal the tone holes at exactly the same time. Some keys are not closed directly, but will depend on the closing of other keys to activate them, e.g. the F# key is closed by the action of the D, E and F keys. It is also possible to make the mechanism feel heavier or lighter to the touch, however this is again of individual taste. Whilst it is possible to change the feel of the mechanism, unless it is really heavy, it would be of no significant benefit to the new student. However lightening of the key work mechanism can be of great importance to the more advanced player.

**(11) What is a 'B footjoint'?**



*C footjoint*



*B footjoint*

The standard concert flute comes with a natural three octave range, from low C (C1) to top C (C4), however the more advanced and professional player can occasionally be found 'up in the gods' playing C# 4 through to F#4. Advanced flute music may however contain a low 'B', which is too low for a normal concert flute to play, unless it has an extra key. This extra key is situated on the footjoint below the 'C' tone hole and is called the low 'B'. This particular footjoint is therefore called a 'B footjoint' as opposed to the normal 'C footjoint' found as standard on all flutes.

Whilst C footjoint instruments predominate in the UK, many players also prefer the tonal benefits gained from playing on a flute with a B footjoint.

**(12) What makes Trevor James flutes different from other manufacturers?**

Quite simple really, Trevor J. James flutes are renowned for their manufacturing, performance and tonal qualities. They take pride in the attention to detail in headjoint design and manufacture along with emphasizing the importance of making the flute 'feel' good to the touch. Their Company motto reads '***Making Life Sound Beautiful***' and there can be nothing more beneficial to either a new student or an advanced Conservatory player than playing on a flute that they can really 'trust'.

The purchase of a new flute is such a personal issue that we wish you the very best in your decision. We hope that you enjoy many years of music making.