



**Arms, French pointed or "Y"**— The part that connects the keys to the rods of a flute. French pointed arms extend across the middle of the key and come to a point before connecting to the rod. French pointed arms are only seen on professional instruments and are generally thought to be more exact when placing the key on the tone hole, allowing a better seat. "Y" arms attach to the edge of the keys and are popular with students and intermediate players. "Y" arms are quite sturdy.

**Body**— Middle portion of the flute, containing the mechanism. When the flute is said to have a silver plated body or a solid silver body, this is most often referring to the tubing only, rather than the mechanism.

**C# Trill**— This is an extra key, located by the B<sup>b</sup> lever, for trills or tremolos involving C#. Very useful in alternate fingerings. Offered by most manufacturers as a special order item on advanced instruments.

**Crown**— End piece of the headjoint.

**Embouchure Plate**— This is where the player's lip touches the flute. Generally the material matches the headjoint, but some manufacturers include a solid silver embouchure plate on a silver plated headjoint. Alternative materials often seen are a gold-plated or solid gold lip plate. The riser is often included in the gold plating or may be solid gold.

**Footjoint, B vs. C**— This is the third section of the flute and is played with the fifth finger, right hand. The C foot allows the flute range to go down to low C. The B foot, mostly seen on intermediate level instruments and above, extends the range to low B, a note often seen in more advanced literature. The B foot is also often seen with the gizmo key.

**French Flute**— Open holes (see Open hole vs. Closed hole)

**Gizmo Key**— Also known as the high C facilitator. The extra tubing on the end of the B foot sometimes hinders playing the highest C. The gizmo is attached to the B key, and closes this key to help relieve the problem.

**Headjoint**— This is the first section of the flute. It is typically silver plated or nickel plated for student instruments, with sterling silver on intermediate and above. The headjoint includes the embouchure plate and crown.

**Mechanism**— The entire key section, including keys, rods, springs, posts, etc. The action of the keys is the result of this mechanism. In student instruments, the mechanism is fairly sturdy with relatively slow or heavy action. As the level of the instrument rises, so does the playability of the mechanism. High-end instruments have mechanisms that are extremely easy to play.

**Offset G vs. Inline G**— The G key is played with the left hand ring-finger. "Inline G" refers to the G key being directly in-line with the others. Many students start with an "offset G", where the G key is slightly offset from the others, because it is easier for them to reach. As they become more comfortable, they may switch to an inline G. At the advanced or professional level it is a personal choice, with the inline being slightly more popular.

**Open hole vs. Closed hole**— Open hole flutes have holes in the keys that the fingers cover and closed hole flutes have all closed keys. Both options are available in all levels and are a matter of personal preference. Closed holes are generally more popular with students, and the musician typically moves to open holes with an intermediate or advanced flute. A beginning student may have more flexibility of hand position on a closed hole flute. Closed hole flutes are a bit heavier, and may have a slightly darker sound. Open holes are also good for students because the player must cover the holes to play a sound, making bad hand position impossible. Advancing musicians find closed holes beneficial when using alternate fingerings or shading the holes for intonation purposes. Open holes are generally a bit more expensive, but most feel they are worth the added expense.

**Plateau Flute**— Closed hole (see Open hole vs. Closed hole)

**Riser**— Also referred to as the chimney, and is where the embouchure plate connects to the headjoint. There are many different manufacturing techniques and materials, but the riser is often the same material as the embouchure plate. Gold risers are also available on some professional instruments as a special order option.

**Rollers**— These help facilitate the movement between keys on the footjoint. Standard rollers include those for the C and B keys. Optional rollers, which are generally only available by special order on higher end instruments, include a C# and D# roller to allow smooth action between these keys.

**Springs**— These keep the keys open when they are not being pressed. Durable springs on student and intermediate instruments, while not as flexible as professional springs, are quite sturdy. Professional instruments use a variety of materials used for their springs. White gold is by far the most popular.

**Split E**— "high E facilitator." Improves intonation and control over the high E, a problematic note for most flutists. There are several variations on this feature. The "Split E" mechanism is built onto the flute, only available in an offset G, and it closes the lower of the G keys, forcing the air to a lower tone hole. The "Clutch" is a variation of this type. It allows the player to turn the feature on and off. The "E insert" or "high E facilitator" is much less expensive and is available on an inline or offset G. It is a disk that is generally either donut- or half moon-shaped and inserted into the G tone hole. This has roughly the same effect as the mechanism, but because it cannot cover the tone hole completely it is slightly less effective. The insert can be added to any instrument after purchase.

**Tone Holes**— The tone hole is the opening on the body that is covered by the key. The tone hole wall can be either drawn or soldered. With drawn tone holes, the wall is actually drawn from the body and rolled down, to form an even surface area for the key. With soldered tone holes, the wall is soldered onto the body, allowing both the wall thickness and the surface to be very exact. Because soldering requires so much more hand work, it is generally seen only on high-end instruments. While we notice little tonal difference between the two, there are arguments for and against both.

**Wall Thickness**— This refers to the actual thickness of the tubing used. Generally, a heavy wall thickness is going to have a darker sound and a thin wall will be brighter. Some manufacturers feature a thin wall headjoint and a standard wall body.