

Care and Maintenance of Clarinet and Saxophone Reeds

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Acknowledgments

I want to acknowledge all my music teachers for their dedication, devotion, and inspiration. In particular my clarinet/saxophone instructors:

- Floyd Estep (Coon Sanders Nighthawks Jazz Band 1924 to 1929)
- Peter Zukovsky (former bass clarinetist and saxophonist with the Chicago Symphony 1946 to 1958)
- Kalman Bloch (former principle clarinet with the Los Angeles Philharmonic 1937 to 1981)

A special acknowledgement of my father, Joseph Sulmeyer (B.A. Clarinet Performance, Juilliard School of Music, 1940) who taught me more than I ever wanted to know about the reeds, and I'm soooo glad he did!

Preface

The information contained in this class is an accumulation of knowledge and experience I have gathered. It is meant as a guide to aspiring clarinet and saxophone students in their quest for the “perfect” reed. I want to stress that this is the way I care for my reeds. The student should develop their own methods over time with experimentation, and should always seek the advice and guidance from their primary instructor.

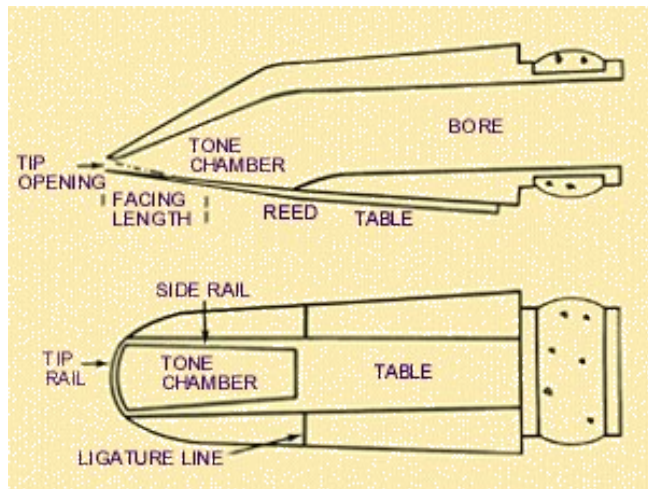
Introduction

The quality of sound produced by the instrument is a combination of four factors which I have ranked in order of decreasing importance :

3. Artist
4. Reed
5. Mouth piece
6. Instrument

The focus of this class is on the reed and its interactions with the artist and mouthpiece.

Definitions

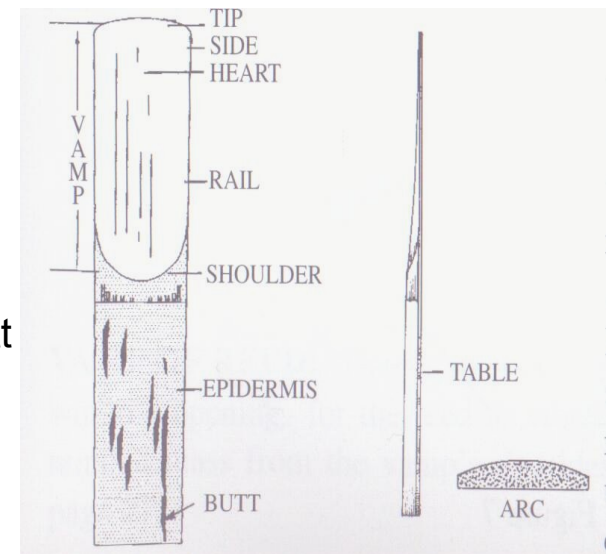


Mouthpiece

Table	Flat area where the reed is positioned
Window	Opening through which air enters the instrument
Facing Length	Distance from the position where table begins to angle towards the tip to the tip rail
Tip Opening	Distance from the tip rail to the tip of the reed

Reed

Vamp	Area where the curve cut begins to the tip
Rail	Side edge
Shoulder	Area from the score on the bark to the curve cut at the bottom of the vamp
Epidermis	The skin of the cane from the score on the bark to the butt
Butt	The bottom or end
Tip	The fine edge at the top
Heart	The center just below the tip



Supplies

Water Bottle

Rather than wetting my reeds in my mouth, I use a small plastic bottle (like a prescription medicine bottle from a pharmacy). The size of the bottle should be 3" tall for clarinet reeds. When the reed is inserted tip down into the bottle, it floats so the tip does not bang against the bottom. When filling the bottle, ensure there is enough water to soak the reed up to the bark.

3% solution of hydrogen peroxide (H₂O₂)

Similarly, I have another bottle with H₂O₂ for use after playing. This will kill bacteria that tend to break down the fibers in the reed and give your reeds a longer life.

Reed Selection

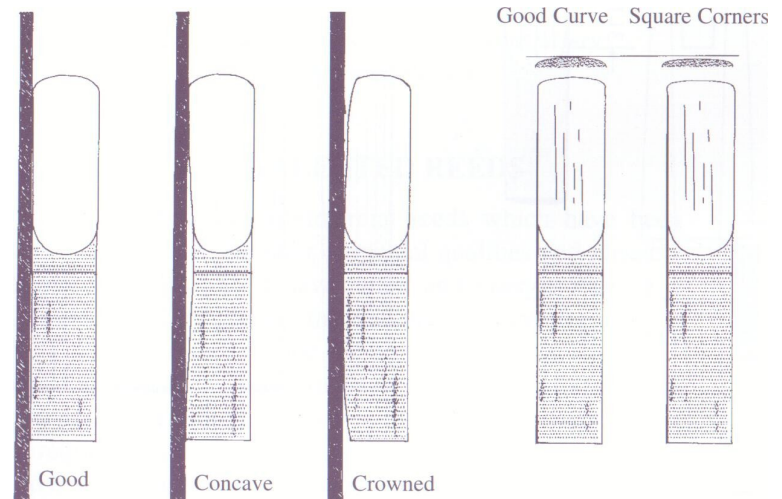
It is beyond the scope of this class to discuss the different manufacturers and reed shapes used. However, it is important to note that the choice is dependant on the student's skill, the mouthpiece, and the instrument. This topic should be discussed with your private instructor who understands your individual needs.

Over the many years of playing I have discovered that on average, out of a box of 10 reeds, three will not be usable, four can be used for practice, two can be used during rehearsals or lessons, and one might be good enough for performances. Buying just one or two reeds at a time means you might get no useful reeds.

Weed the Reeds

All reeds must be visually inspected for irregularities in the structure of the cane and imperfections in the manufacturing process.

- ✓ Are walls at the butt end even?
- ✓ Are the sides crowned or concave?
- ✓ Does the curve at the tip match the mouthpiece?
- ✓ Are the vamp's shoulders the same length?
- ✓ Is the reed's table warped?
- ✓ Are there any truncated reeds?



Weed the Reeds

- ✓ Are the vascular bundles too thick?
- ✓ Are the vascular bundles straight and evenly distributed?
- ✓ Do the vascular bundles extend into the tip of the reed?

With a little experience, this whole process should take about 15 seconds per reed or a little over two minutes for a box of 10.

Good



Poor Cane



Thick Xylem



Life Expectancy

- A properly treated and maintained reed will play for about 20 hours.
- A reed will peak somewhere between half and two thirds of its life.
- A reed can be “promoted” or “demoted” during its life. (*practice to rehearsal, rehearsal to performance, and back down again.*)

Break-in

A reed must be broken in over a period of days if it is eventually to become one that is dependable and usable for a period of time. Reeds that are "played-out" - that is used constantly without a rest period when they are new - most likely will have a drastically shortened life expectancy.

- ✓ Soak for 15 seconds. Play for only 5 minutes. Play only low register (octave) and at *mf*.
 - ✓ Rest the reed for one or two days.
 - ✓ Repeat steps one and two. Add some play in upper register (octave).
 - ✓ Soak for 30 seconds. Play for 10 minutes. Use both upper and lower registers and some altissimo register. Play both *p* and *ff*.
 - ✓ Rest the reed for one or two days
 - ✓ Repeat steps 4 and 5
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- Once the break-in period is over, a reed should not be played more than two hours in any one session.
 - Always allow a reed to rest several days before using it again.
 - *Performance* reeds should be played occasionally for short sessions (30 minutes) to ensure and maintain their condition.

Reed Storage

In order to keep reeds from warping they should be stored against a hard, flat surface with light but even pressure and at a relative humidity between 60% and 80%.

High quality reed cases are expensive. A good, inexpensive, alternative is a ¼" thick piece of glass large enough to hold two reeds on each side (2" X 3" for clarinet reeds). The reeds are held in place with a rubber band. The rubber band should be ¼" to ½" wide with a length that allows it to wrap once around and maintain good pressure on the reeds. Unfortunately, glass can easily break and is hard to work with if you don't have the proper tools, so 1/8" Plexiglas is a reasonable substitute. In either case be sure to remove the sharp edges by beveling. The reed holder(s) should then be kept in a small container that seals well. Additionally, the holders should be supported in the container in such a manner that they do not interact with each other. A simple method is to use foam padding.

To maintain the relative humidity moisture must be available inside the container. A small clear plastic box works well. Cut a kitchen sponge to fit very loosely inside the box as it will expand when soaked. Drill a lot of 1/16" holes evenly on all surfaces of the box. Glue the box together with the sponge inside and let it dry. Briefly soak the box under a faucet and shake as much water out as you can. Keeps this in your reed box and make sure it is always moist. This will keep the humidity in your reed box constant. Your reeds will be less likely to warp and will last much longer.

Session Care

- Before playing, soak the reed for no more than 30 seconds. The reed should be moist but *not* water logged!
- After playing, wipe off any accumulated saliva, then soak in hydrogen peroxide (H₂O₂) for 15 seconds. Wipe off the excess fluid and place the reed on a hard flat surface. Applying mild pressure with your thumb, start at the reed's shoulder and slide your thumb to the tip. Repeat this action two or three times. This forces any fluid within the reed to be expelled. **This procedure will greatly lengthen the life of your reed.**