

Saxophone Reed Placement & Adjustment

by
Steven Mauk

All saxophonists struggle with reed problems. Although today there are many more professional brands available than ever before, the challenge of finding an excellent reed remains difficult. My experience has shown that one of the most critical elements for success is the flexible placement of the reed and ligature on the mouthpiece. Subtle adjustments can make a world of difference to both the player and the listener.

Initial Reed Selection

I begin my search for a good reed like many others. I purchase a box of professional reeds, soak them for about five minutes in lukewarm water, and then test them briefly, playing mainly in the lower and middle registers. I quickly determine which reeds are hard, medium, or soft, and place them in piles according to their strength. (I am generally looking for a reed that seems a bit hard at first, so it will eventually *break in* to feel medium in strength.) I let the reeds dry — flat side up — and repeat the process over the next few days, expanding the range and the playing time. After about three days, I usually end up with a couple that seem likely candidates for a performance, a few that have potential as practice reeds, and some that just don't work well. I store these usable reeds in a reed case with an activated charcoal filter, which allows the reeds to retain some moisture, but not become moldy. I continue to play these selected reeds a bit more each day, allowing them to break in slowly, and to acclimatize to the current temperature and humidity levels present at that time of the year.

Reed and Ligature Placement

Below are the general procedures for placing a reed on the mouthpiece

1. Wet the reed as you usual (either with water or saliva), being sure the back of the reed is quite wet. (This moisture helps form a good seal between the mouthpiece and reed.)
2. Place the ligature on the mouthpiece. (Always place the reed *under* the ligature, rather than sliding the ligature *over* the reed. This avoids chipping the reed tip.)
3. Slip the reed under the ligature and align it carefully on the mouthpiece. (Hold the mouthpiece in front of your eyes — tip pointing upward and neck end downward — and site straight across the tip of the mouthpiece. Align the reed tip so you see just a tiny line of mouthpiece over the top of the reed. Be sure that the sides and bottom of the reed are straight and evenly aligned)
4. Place the top of the ligature at the etched line marked around the mouthpiece. (If no line is present, place the ligature at a point about 1/8th inch below the U-shaped opening of the mouthpiece.)
5. Tighten ligature securely, but not overly tight.

Embouchure Placement

Once the reed and ligature are correctly positioned, the player must be sure that the proper amount of mouthpiece is inserted into the mouth. Unless this is correct, the mouthpiece will not produce the sound intended by the manufacturer. You can easily find this fulcrum or *break point* (the point where the mouthpiece lay curves away from the reed) in the following manner.

Cut a piece of computer or notebook paper into a strip approximately 4 x 2 inches in size. With the reed properly aligned on the mouthpiece, slip the paper between the reed and mouthpiece. (Insert the paper several times to be sure the paper stops at the same spot). Use a pencil to mark a line on the front surface of the reed to indicate where this *break point* occurs. Place the end of your left-hand thumb at this line. Bring the mouthpiece up to your mouth until the tip of your thumb touches your bottom lip. Remove your left hand, *do not move*, and play a few notes. This is the proper amount of mouthpiece to insert into the mouth.

Reed Adjustments

Many saxophonists find that using reed rush, reed knives, or sandpaper can be effective tools for reed adjustments. These are all viable methods, but do not always meet the day-to-day and hour-to-hour changes that reeds undergo. I prefer a method of repositioning the reed and ligature to meet the needs of the moment. This has become my most effective reed adjustment technique, and allows me to adapt to changing temperature and humidity conditions. While I usually move the reed tip and ligature in *opposite directions*, numerous combinations may be effective. These are merely a few combinations, so be creative and experiment to see what works best for you.

Problem	Reed Tip	Ligature	Explanation
Reed too hard or dull sound	Move down slightly	Move up slightly	Thinner cane at <i>break point</i> makes reed vibrate easier; higher ligature brings reed closer to mouthpiece tip for quicker response
Reed too soft or edgy sound	Move tip up slightly	Move down slightly	Thicker cane at <i>break point</i> makes reed more resistant; ligature placement moves reed further from mouthpiece tip for more resistant response
Response too quick; not enough resistance	No change	Move down slightly	Widens tip opening slightly more resistant response
Response too slow; too much resistance	No change	Move up slightly	Narrows tip opening slightly for quicker response
Reed hard, but tone bright	Move tip down slightly	No change or move down slightly	Thinner cane at <i>break point</i> makes reed vibrate easier; lower ligature placement darkens tone
Reed soft, but tone dull	Move tip up slightly	No change or move up slightly	Thicker cane at <i>break point</i> makes reed feel more resistant; higher ligature frees tone