

# SAX Clinic!

## 20 Points on Developing Great Tone and Technique

Whether one is a beginner or advanced player, basic fundamentals are necessary. This entails the two "T's" – Tone and Technique. In many instances the "T's" are inter-related and are directly dependent upon air support. Air support is the instrument's lifeline, and how it is used determines sound quality. Further, and arguably just as important, it is the means to shape the sound and musically express through the instrument. In the development of a good foundation, however, there are other areas of attention to consider.

**1) Assembly** - A routine is important. This begins with putting on the neckstrap and installing the mouthpiece on the saxophone neck. Place the ligature and reed on the mouthpiece, making sure that the reed is flush with the rails and tip of the mouthpiece. Once the reed is correctly secured in place, the player can do a blow-check to make sure the sound and resistance are correct. One can also do a suction test, to be sure that the reed is not warped. The last step in the assembly of the instrument should be aligning the mouthpiece apparatus on the body of the saxophone.

**2) Posture** (sitting, standing, expressive movement) - Good posture optimizes airflow, reduces neck or back tension, and acts as an agent to heighten on-task behavior. Good posture includes: sitting alert without slouching, paying attention to head position (centered to the upper torso and without abnormally tilting or protruding forward or backward), and an adjusted neck strap so that the mouthpiece can be placed in the musician's mouth without adjusting the head up or down or from side-to-side to accommodate the individual's natural posture. Whether sitting or standing, the position of the saxophone should remain relatively the same to the player so that the hand, head, and body positions do not change whatsoever. If and when the saxophonist moves as a part of emoting in a musical way, the head and upper torso and hand positions should remain relatively the same. Expression should generally be the result of moving or pivoting at the waist.

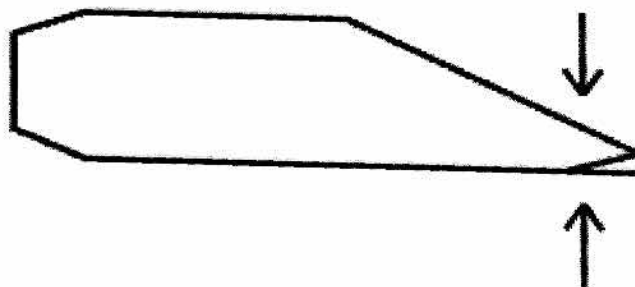
**3) Hand/Finger Position** - The left and right hands should each be formed similar to holding a baseball, and because of this, the hands will not inadvertently depress the palm (left hand) or side (right hand) keys. The fingers should not be acutely curled, but naturally curved and available to depress the keys like little levers.

**4) The Breath** - Inhaling should be done through the corners of the mouth. The throat must remain open and relaxed, allowing one to feel the coolness of the air at the back of the throat, similar to yawning. Fill the lungs with air like a glass of water, from the bottom-up. Exhaling should be immediate with no stoppage or air lock-up in the lungs. Through the inhaling/exhaling process, the shoulders should remain relaxed while avoiding vertical movement. Helpful hint: visualize the lungs, windpipe, and instrument as one air-column.

**5) Oral Cavity** - The tongue must remain down at the back of the throat. "AH" or "OH" is desirable and not "EH" or "EE". Form the middle and the front of the tongue like a chute for the air to pass directly to the tip of the reed. Imagine the instrument as an external voice box; similar to speaking, the tongue/throat position determines tone quality and timbre.

**6) Embouchure Formation** - A good embouchure allows one to play with a full and steady tone in all ranges with minimal effort. The standard rule is avoiding puffing cheeks and chin muscle dimples. The muscles of the mouth should surround the mouthpiece like a rubber band or drawstring, providing equal support to the reed and mouthpiece, similar to whistling or saying "DOO" or "OOO". The bottom lip not only serves as a cushion but also supports the reed.

**7) Mouthpiece Placement** - Even if the embouchure is set correctly, too much mouthpiece and the tone will "spread" while too little and the tone will be small, thin, and fuzzy. Sometimes a mouthpiece placement problem arises when the student switches back and forth from a classical to a jazz mouthpiece, or from a larger to a smaller saxophone (or vice-versa). For correct placement, the top and bottom teeth should be aligned and positioned at the point where the reed separates from the table of the mouthpiece (see Figure 1). In all instances, the top teeth should be firmly anchored on top of the mouthpiece. A mouthpiece patch/cushion is recommended, which cushions the top teeth on the mouthpiece, protecting the mouthpiece from damage the teeth.



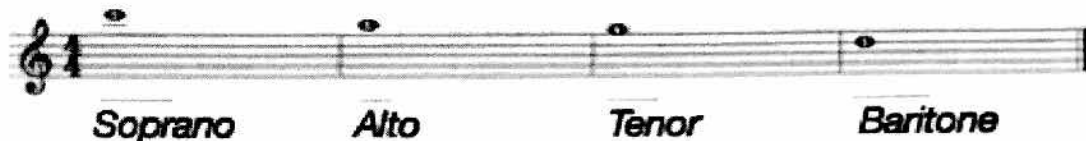
*Figure 1 - arrows indicate correct top and bottom teeth placement*

**8) Embouchure and Reed Strength** - If there are issues with embouchure pressure (too loose or tight), mouthpiece placement, and/or reed strength (too soft or hard), this will negatively affect responsiveness and/or pitch. Figure 2 is an example of a quick check exercise to assess if all areas are correct. With a good embouchure and a good reed selection, this exercise should be effortless.



*Figure 2 - octave response exercise*

**9) Mouthpiece Pitch** - Figure 3 below indicates concert pitches. Match at a forte dynamic level.



If the mouthpiece pitch is too high, relax the embouchure and/or the throat. Once the desired pitch is attained, then tongue repeatedly with the goal to maintain the same steady pitch.

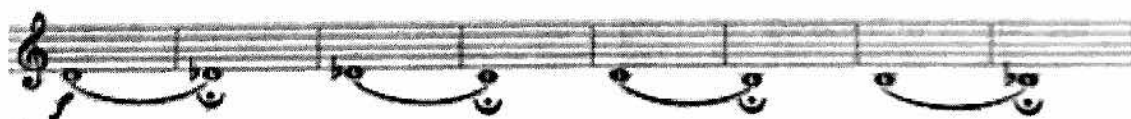
**10) Long Tones and Sample Exercises** - Work with a tuner and sustain pitches through gradual dynamic changes; pay attention to the embouchure and what subtle adjustments are necessary to maintain a steady pitch (see Figure 4). Work for an open resonating sound in all ranges, and strive to maintain equal tone color from pitch to pitch (see Figure 5). For the extreme ranges start on the lower pitches: D below the staff, then Db, C, B, and Bb (see Figure 6). Similarly explore the higher part of the range starting on D above the staff, then D#, E, F, and F# (see Figure 7). While working on long tones, it is essential to use lots of air support and shape them appropriately!



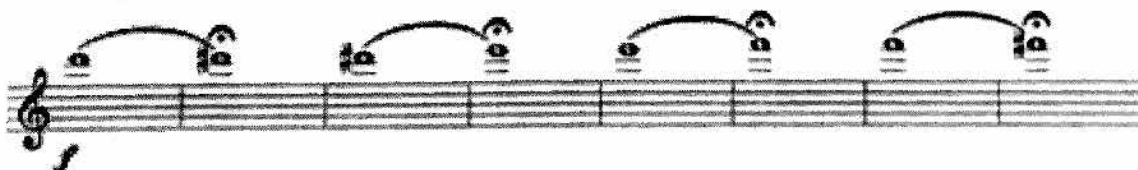
**Figure 4 - tuning and control of long tones through dynamic changes**



**Figure 5 - sample tone and tuning interval/range control exercises**

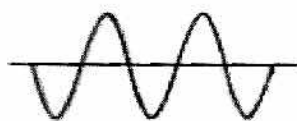


**Figure 6 - low register control exercise**



**Figure 7 - upper register control exercise**

**11) Vibrato and Pitch Control** - Emulate the vibrato of an accomplished vocalist or string player. Listen to recordings of great cellists, violinists and vocalists, not just wind players! Practice blowing with the mouthpiece and neckpiece alone, striving for a clear, full, and steady tone. Repeat the exercise with vibrato, concentrating on uniform speed and depth of each undulation (see Figure 8). Acceptable vibrato speeds are between a quarter note = 60 – 80 in 16th notes. Practice with a metronome using the syllables "VU-VU-VU-VU" or "WU-WU-WU-WU", similar to the concept of chewing gum. In the early stages the vibrato may sound choppy (see Figure 9) and/or uneven (inconsistent depth and width undulations) (see Figure 10). With time and practice, strive to produce a "spinning" vibrato and independent from the pulse of the music (see Figure 11). Through the process of mastering vibrato, the student will discover that some pitches are easier to control than others. Thus, it is critical to spend quality time producing vibrato on pitches that are more difficult. The ultimate goal is to produce an even and controlled vibrato in all ranges of the saxophone along with the ability to change width and speed according to the dynamic and style changes of the music. Aesthetically, a controlled vibrato also becomes another means to enhance musical expression.



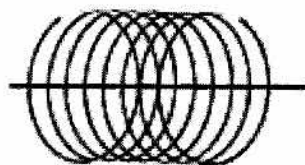
**Figure 8 - even vibrato around pitch center**



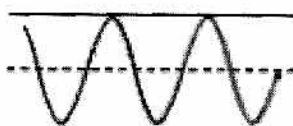
**Figure 9 - choppy vibrato (early stages)**



**Figure 10 - uncontrolled vibrato**



**Figure 11 - "spinning" vibrato around pitch center (preferred)**



**Figure 12 - vibrato below pitch center**

**12) Articulation** - A simple exercise is to start the tone with the air. In slow motion stop the sound with the lightest tongue possible and then release it. Keep continuous air pressure behind the tongue (see Figure 13).

**Figure 13 - air stream interrupted by tongue**



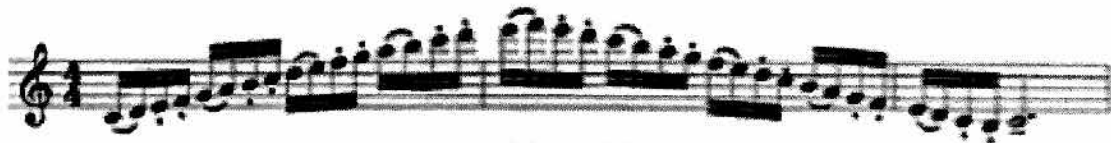
Repeat this cycle several times while gradually speeding up and maintaining the same audible attack and release. Note: the tip of the reed should come in contact slightly back from the tip on the upper side of the tongue. If the attack and release are correctly executed, the student will potentially tongue as fast as he/she can repeatedly say the syllable "TOO" or "DOO". A simple but effective tonguing exercise includes fast repeating notes, concentrating on clarity and evenness (see Figure 14).



**Figure 14 - sample tonguing exercise with repeating notes**

It is crucial to differentiate between articulation styles, and be able to produce them without "popping" the notes. The tongue releases in the same manner whether playing staccato, marcato, legato, tenuto, neutral, etc. Thus, style is created through the control and shaping of the air immediately after the tongue releases from the reed.

**13) Tongue/Finger Coordination** - Combine tone and technique development through the use of scales and scale-related exercises (chromatic, major, harmonic/melodic minor, etc.), utilizing the full range of the saxophone and the use of a metronome at various tempi (see Figure 15). It is helpful to memorize scales and/or related exercises so that full attention can then be placed on sound and coordination. An excellent exercise includes practicing slurred scales/patterns, and then applying a variety of articulation patterns (see Figure 16). There are many etude books that can provide a variety of articulation/scale exercises.

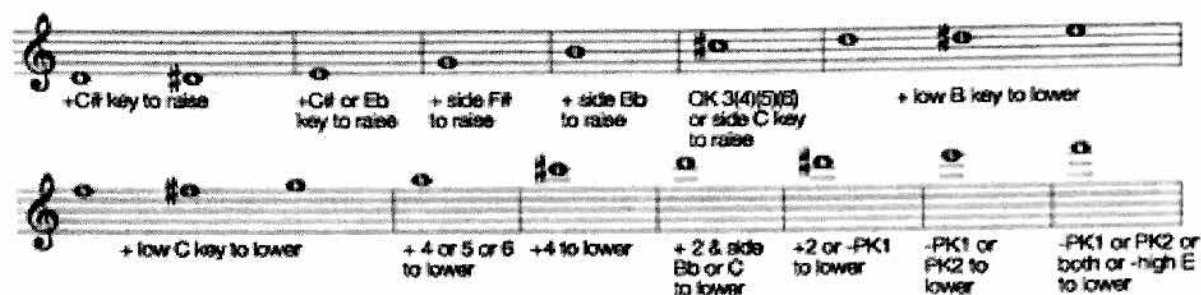


**Figure 15 - sample tongue/finger coordination exercise 1**



**Figure 16 - sample tongue/finger coordination exercise 2**

**14) Alternate Fingerings for Venting/Tuning** - Alternate fingerings can serve three functions to: provide the desired timbre change, adjust for blending/ tuning, and sometimes allowing the player to play with improved technical fluency in a given musical passage. Pressing key(s) will either vent (to raise the pitch) or lengthen the air column (to lower the pitch). An excellent resource is Hello! Mr. Sax. by Jean-Marie Londeix (Alphonse Leduc) (see Figure 17).



**Figure 17 - common notes to alter for blending/tuning**

**15) Practicing** - A productive routine can include: long tones (5%), scales with a variety of articulations (20%), studies/etudes (20%), repertoire (30%), improvisation (15%) and sight-reading (10%). Quality practice in an environment without distractions is key. Attention to sound and awareness to all nuances of one's playing can be educational. When appropriate, try practice episodes in a quiet dark room so more attention can be shifted to the senses of touch and hearing. Audio and/ or video recording sessions are useful to provide objective feedback. A helpful mindset: while practicing/performing also be the listener/audience.

When approaching new music, theoretical, historical, and aesthetic inquiries should be a part of the learning process. Systematically work through the music slowly with a metronome. An established system of marking the music is helpful to expedite progress. Trills, turns, grace notes, mordents, and any other ornamentation can be initially left out (unless it does not interfere with the rhythms) and then added later. Technical challenges within the music should be isolated and played through slowly, but evenly. Correcting uneven 8th and/or 16th rhythms, can be accomplished by incorporating alternate fingerings (where applicable) that idiomatically make sense. Don't be afraid to write on your music! Reminding yourself of tricky accidentals or places to use alternate fingerings is encouraged! Strive to play true dynamics, and only produce *f* and *ff* levels as control of pitch and tone will allow. Dynamic contrast is not only gauged by how loudly one can play, but also the ability to control the softest area of this spectrum.

**16) Standard Repertoire** - There are several resources available to guide the classical saxophonist in choosing repertoire such as A Comprehensive Guide to the Saxophone Repertoire by Jean-Marie Londeix (Bruce Ronkin Books). This resource is a compilation of all pertinent solo and chamber literature written for the saxophone from 1844 to 2003. My favorite way to discover new repertoire is to listen to recordings of saxophonists and look deeper into the pieces that I enjoy the most!

**17) Aural Sound Concept** - Listen-Absorb-Emulate! Whether pursuing classical or jazz, the student who studies with a qualified instructor has the opportunity to model their mentor's sound. Recordings of professional players are also very helpful. With the use of the Internet, especially services like Soundcloud, YouTube and Spotify – you can find so many recordings with just a few clicks!

The “jazz” vs. the “classical” sound not only involves differences of approach (articulations and timbre variations), but use of different mouthpieces. Generally jazz musicians play on mouthpieces with a longer lay (the distance between the point where the reed departs from the table of the mouthpiece to the tip) and/or a larger bore. The longer the lay, an increased mouthpiece placement is needed and generally the need for a softer reed strength. A longer lay in combination with a larger bore allows the player to produce a bigger sound.

**18) Ensemble Role** - The saxophone with its unique tone color and capabilities can project through an ensemble when needed, such as in solo passages. It is important for the saxophonist/section to balance with other players/sections, but generally not to dominate unless clearly indicated. As the “mediator” (hybrid) of the ensemble it is the role of the saxophonist/ section to support other instruments/sections and “get into the sound colors” of the other instruments whether playing accompaniment or melodic lines.

**19) Equipment** - Decent equipment is paramount including a standard and reputable name brand mouthpiece, ligature, and instrument in good playing condition. Be vigilant because trendy brands, products, and accessories do not address the saxophonist's needs. Purchase the highest quality saxophone one can afford, particularly when upgrading. If one cannot upgrade due to financial reasons, purchasing a professional model mouthpiece is an acceptable compromise. Good equipment also includes reeds. The best option is choosing a professional brand name that has an established reputation. It is crucial to purchase several reeds at a time. Equally important is rotating at least four reeds at a time in one's practice/performance routine. This is important as it not only avoids the embouchure conforming to one reed in any given time period, but one then has several back-ups. Reeds will eventually lose strength and sound quality over time, but not as quickly when rotating them. When reeds get soft they tend to produce a “buzzy” sound making it difficult to blend with other instruments. Most beginning players start on a 2-strength reed and as they advance, reed strength should be increased. Most professional players settle around a 3 - 3.5 strength reed. Specific information concerning reed adjustments can be found in *The Art of Saxophone Playing* by Larry Teal (Alfred Music Publishing).

**20) Always be sure to have fun while making music! Make music that you enjoy!**

# Recommended Saxophone Literature and Equipment

## BEGINNER

### Etudes

Londeix, Jean Marie  
Teal, Larry  
Hovey, N. W.  
Rousseau, Eugene

Playing the Saxophone (Vol. 1)  
Melodies for the Young Saxophonist  
Beginning Method for Beginning Students  
Saxophone Method for Beginning Students

### Repertoire

Benson, Warren  
Benson, Warren  
Damase, Jean-Michel  
Ibert, Jacques  
Lantier, Pierre  
Rousseau, Eugene  
Still, William Grant  
Teal, Larry

Cantilena  
Farewell  
Vacances  
Histoires  
Sicilienne  
Solos for Saxophone  
Romance  
Solos for the Alto Saxophone

## INTERMEDIATE

### Etudes

Londeix, Jean-Marie  
Teal, Larry  
Voxman, Himie  
Teal, Larry

Playing the Saxophone (Vol. 2)  
The Saxophonist's Manual  
Advanced Method I and II  
The Art of Saxophone Playing

### Repertoire

Bach / Mule  
Bozza, Eugene  
Debussy, Claude  
Francaix, Jean  
Handel / Rascher  
Ibert, Jacques  
Jacobi, Wolfgang  
Jolivet, Andre  
Kaufmann, Walter  
Rascher, Sigurd  
Rueff, Jeanine  
Saint-Saëns / Teal  
Schumann / Hemke  
Teal, Larry  
Voxman, Himie

Sonata No. 6  
Aria  
Syrinx  
Cinq Danses Exotiques  
Sonata No. 3  
Aria  
Sonata  
Fantasie-Improptu  
Meditation  
Rascher Collection  
Chanson et Passepeid  
Sonate, Op. 67  
Three Romances  
Program Solos for Alto Saxophone  
Concert and Contest Collection



## ADVANCED

### **Etudes**

Ferling / Mule  
Londeix, Jean-Marie  
Sinta, Donald  
Nash, Ted  
Rascher, Sigurd  
Teal, Larry  
Berbiguier / Mule

48 Etudes for Oboe (Saxophone)  
Playing the Saxophone (vol. 3)  
Voicing  
Altissimo Studies  
Top Tones for Saxophone  
The Saxophonist's Workbook  
18 Exercises or Etudes

### **Repertoire**

Creston, Paul  
Debussy, Claude  
Demersseman / Hemke  
Glazounov, Alexander  
Handel / Mule  
Heiden, Bernhard  
Ibert, Jacques  
Maurice, Paule  
Milhaud, Darius  
Noda, Ryo  
Persichetti, Vincent  
Tomasi, Henri  
Villa-Lobos, Heitor

Sonata  
Rapsodie  
Carnival of Venice  
Concerto  
Sonata No. 6  
Sonata  
Concertino da Camera  
Tableaux de Provence  
Scaramouche  
Improvisation I  
Parable  
Ballade  
Fantasia (soprano/tenor)

**NOTE:** The saxophone literature goes FAR beyond what is listed here. I recommend checking out the recordings of the "Important Saxophonists" noted below to find a wide variety of sounds and repertoire that may inspire you! Bolded names are my personal favorites ☺

### **A Small Sampling of Important Saxophonists:**

#### **Classical:**

Adolphe Sax (inventor!)  
Marcel Mule  
Sigurd Rascher  
Jean-Marie Londeix  
Larry Teal  
Eugene Rousseau  
Donald Sinta  
Fred Hemke  
**Claude Delangle**  
**Jean-Michel Goury**  
**Timothy McAllister**  
**Marcuss Weiss**  
**Lars Mlekusch**  
**Ryan Muncy**

#### **Jazz:**

Coleman Hawkins  
Cannonball Adderley  
Charlie Parker  
**John Coltrane**  
**Albert Ayler**  
**Michael Brecker**  
Branford Marsalis  
Chris Potter  
Joshua Redman  
**Eric Dolphy**

#### **Free Jazz / Free Improv**

**Anthony Braxton**  
Roscoe Mitchell  
**Ornette Coleman**  
**Evan Parker**  
John Zorn

#### **Recent / Pop(-ish)?**

**Colin Stetson**  
**Battle Trance**  
(saxophone quartet)  
Too Many Zooz  
Moon Hooch

### **Recommended Equipment:**

Classical:

Saxophone models: Selmer series II or III, Yama EX, 62 or 75 series.

Mouthpieces: Selmer C\*, Selmer S90-180, Selmer S90-190, Vandoren AL3, Vandoren A28

Reeds: Vandoren (Traditional – Blue Box) - 2.5, 3, or 3.5

Ligatures: BG (Traditional), Vandoren (Optimum), Bay, Ishimori

Neckstraps: Avoid any with stretchy material (Neotech, specifically)

Jazz:

Saxophone models: Selmer Mark VI, Selmer Series II, Yamaha Z

Mouthpieces: Otto Link, Meyer, Beechler, Berg Larsen, Vandoren (facings 5-6). Alto = hard rubber mouthpieces; Tenor/Bari – hard rubber or metal mouthpieces

Reeds: Vandoren ZZ, V-16 or Java (2.5, 3 or 2.5 strength)

### **Recommended Jazz Study Materials:**

Lennie Niehaus – Jazz Conception for Saxophone (Basic, Intermediate and Advanced)

Jamey Aebersold Jazz: Volume 54 (Maiden Voyage)

Jamey Aebersold Jazz: (any volume)

Charlie Parker Omnibook

Jerry Coker – Patterns for Jazz

The Ramon Ricker Improvisation Series

### **Introduction to a few Extended Techniques for Saxophone**

Altissimo – Notes above the standard saxophone range

Multiphonics – Multiple notes sounding at once, using special fingerings/mouth positions

Slap Tongue – Percussive sounds caused by tongue pulling reed down so it rebounds and strikes the mouthpiece.

Air Stream Disturbances – flutter tongue, growl, singing while playing

Trumpet Tones – Buzzing into the neck to play notes

Quarter tones – There are pitches notes between half steps that composers like to use!

Key Clicks

Circular Breathing – A technique to allow you to breath while continuing to play

## Reputable Saxophone Mouthpiece Options (expanded)

It is recommended to try multiple mouthpieces and find the one that works well for you and helps you produce the tone you are looking for. Listening to other saxophonists is essential to developing a sound concept, so you can emulate saxophonists and differentiate your own sound, as desired!

### Classical

#### Soprano

Selmer S-80 - C\*, C\*\*, D, (rubber or metal)

Bamber 5, 6

Rousseau 3R, 4R, 5R

VandorenV5 S15

Vandoren Optimum SL3, SL4

#### Alto

Selmer S-80 - C\*, C\*\* (rubber or metal)

Selmer S-90 - 180, 190, S125 (160)

Larry Teal (Selmer)

Vandoren A27, AL3, V5 A28

Rousseau 4-R, NC4

Meyer 5 medium

Bamber 5, 6

Bilger-Morgan M2, R3

#### Tenor

Selmer S-80 - C\*, C\*\*, (rubber or metal)

Selmer S-90 - 180, 190, 200

Larry Teal (Selmer)

Meyer 5 medium

Rousseau 4-R

Bamber 5, 6

Bilger-Morgan M2, R3

Vandoren T20

#### Baritone

Selmer S-80 C, C\*, C\*\*, D

Selmer S-90 - 180, 190, 200

Rousseau 4R, 5R

Bamber 5, 6

Vandoren V5 B25, B35

### Jazz

#### Soprano

Selmer S-80 - D, E, F

Bamber 6, 7

Meyer 6 medium VandorenV16

Otto Link Tone Edge 5\*, 6, 6\*

#### Alto

Selmer D, E, F, rubber or metal

Couf 6, 7

Meyer 6, 7 both medium

Beechler M5S

Lakey 6\*

Otto Link 6, 6\*, 7, 7\*, 8, 8\*

Brilhardt 6, 6\*, 7, 7\*

Vandoren V16 A5, A6, A7, Java A35

#### Tenor

Selmer D, E, F metal

Otto Link 6, 6\*, 7, 7\*, 8, 8\*

Berg Larsen 90, 95, 100, 105, 110, 120, 130

Meyer 6, 7, 8

Vandoren T45, T55, T75

Brilhardt 7, 7\*, 8, 8\*, 9, 9\*

Dukoff 7, 7\*, 8, 8\*, 9, 9\*, 10

Lakey 6\*3, 7\*3, 8\*3, 9\*3

#### Baritone

Berg Larsen 110

Otto Link 8, 8\*, 9, 9\*, 10, 10\*

Rouseau JDX 5

Meyer 7, 8 both medium

Brilhardt 7, 7\*, 8, 8\*, 9, 9

### Sample Reputable Ligatures

Selmer Stock or Inverted, BG (Standard, Revelation, Super Revelation, Metal), Bonade, Vandoren Optimum, Winslow, Bay