**Addressing Common Issues for Saxophone Players**

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**Reed Care**

Unfortunately, most saxophonists try to squeeze every last second out of reeds that are well past their prime. I always recommend to young players that they not let their reed supply drop below three good (undamaged or new) reeds. If a reed gets cracked or chipped, it needs to be thrown away (NOT put back into the case as an “emergency” reed!). When allowed to play on damaged reeds, students develop modified embouchures in order to support the faulty equipment. They often continue to do this until the reed will not play at all, and then they typically can’t play well on a good condition reed. If they get in the habit of replacing their reeds every six to eight weeks, then they continue to develop an embouchure based on good equipment.

Reeds get weaker over time as they are played. Even if a reed is clean and undamaged, if it’s been played for a long time, its relative strength (2.5, 3) is slowly decreasing. This decreases the player’s dynamic range and decreases the response of the reed.

Reeds should be cleaned regularly (preferably after every play session)!

Reeds should also be prepared before the first use by lightly sanding down the flat of the reed on a piece of plain white paper, and should be properly moistened before use. Most of the time moistening a reed should be spent moistening the heel, which prevents many squeaking issues.

A good plastic reed (I use Legere Signature for practice sessions) solves many issues, but they are expensive (around $30 each) and aren’t much more resistant to physical damage than regular reeds. I don’t recommend these to students who are still replacing reeds due to damage. If a student does buy one, they come in ¼ strengths. ¼ strength less than their normal reed is usually good. These reeds are incredibly consistent. I usually describe them as being 90% of a great reed.

Adjusting reeds is something students can do themselves. You might consider purchasing a Vandoren glass reed file for this. Examine the translucency of the reed in front of a bright light if a reed is playing with a dull, dead sound (or just feels unusually stiff) right out of the package. You should see a convex heart to the reed extending out away from the cut. This is sometimes wildly out of balance. The shoulders and heart of the reed are the spots that the student can try adjusting (not the tip, that’s the job of a reed trimmer). The file isn’t sharp, so there really isn’t any risk in doing this… the reed was already bad, right?

**Saxophone Assembly and Cleaning**

Most of the damage done to saxophones is done when putting on the neck (pull-down damage and octave key damage) and while handling the instrument without a neckstrap. The saxophone should always be handled by the bell whenever possible. Smaller players should use two hands on the horn: one on the bell, one on the top of the body around the neck screw.

Placing the saxophone on the ground is always a risky proposition, but fire drills happen. The alto and tenor saxophone should be put down on the side that has all the keywork. It seems counterintuitive, but putting it down on the other side puts all the weight on the palm D key. Many sax stands are small enough to fit inside the bell in the case (Hercules and K&M both make stands like this). It’s worth it for students to buy them if it’s affordable for the family.

A pull-through swab should be used regularly (preferably after each play session, but at least once per week). This is always done at the end of a play session. The inside of the neck needs very regular cleaning. Special swabs are available for this, but a twisted up paper towel will do the job just fine. The inside of the neck at the cork end gets just as dirty as the inside of the mouthpiece. It gets nasty in there.

Some mouthpieces look like plastic, but they may actually be made from hard rubber. To check, run the table of the mouthpiece vigorously with the thumb until it heats up from the friction, and then smell it. If it smells like burning tires (it’ll smell strongly of this), then it’s hard rubber. These mouthpieces are capable of a better sound than plastic pieces, but they are more fragile, and should never be washed in hot water.

If you let the neck and mouthpiece get too dirty, you’re actually changing the inside dimensions of the instrument. Good luck with tuning, then!

Sticky pads are inevitable. The G# and low C# keys are held closed by default, and opened by a spring when the key is pressed. These stick all the time, especially if the player doesn’t swab their horn often or eats and then plays without rinsing their mouth. Even in the best of care circumstances, the G# will stick eventually. The Bb bis key is also fairly prone to becoming sticky. Pad cleaning paper is essentially the same as cigarette rolling paper, but it’s often easier and less suspicious for players to have a US $1 bill. These have the right texture for cleaning the pads, and they’re tough. Throw them in the pocket of a pair of jeans to wash them when they get too dirty.

**Neckstrap placement**

Whether they are playing seated on standing, the neckstrap should be adjusted in such a way that the saxophone mouthpiece comes directly to a comfortable position in the mouth when the player pushes out away from the body through the thumb rests. This assumes that the saxophone player is “standing from the waist up” when seated, and standing with good posture when playing standing.

The neckstrap that comes in the case is fine for most players, but if they’re looking for something more comfortable, please avoid those awful, bouncy Neotech straps. Most stores have a cheap padded strap. For really great straps, I recommend Cebulla, Just Joe’s, or B&G. These are usually leather straps with either high-density memory foam or gel padding.

**Seated posture and playing position**

As with most wind instruments of moderate size, the player’s back should not touch the back of their chair. If the saxophone is being played off to the right side of the body, then the saxophonist should not necessarily have both feet flat on the ground; the left foot should be flat, and the right foot should be back further (likely on the ball of the foot, though this depends on the size and flexibility of the player). Leaning forward slightly is recommended.

The saxophone can also be played in the centre between the legs, but only if the player has a long enough back to keep the right arm away from the right leg. This is not recommended for bari sax players. Much like the clarinet, the soprano can be played without a neckstrap, but many players find the fatigue in the right thumb isn’t worth it. If the soprano has a curved neck, it is fairly easy to use a neckstrap, but a straight neck makes using a neckstrap more difficult.

You can’t see what’s going on with this unless you get behind your saxophone players, but some of them don’t put their thumb on the left hand thumb rest. The thumb should always be on this, and always be in contact with the octave key.

**Mouthpiece, Reed, and Ligature Setup**

The reed should always be square on the table, and the tip of the reed and mouthpiece should meet exactly when they are gently squeezed together. The ligature should not extend out past the cut/sloped edge of the cane; French File cut reeds show the optimal position for the ligature (at the edge of the bark of the cane). For most of the older style, two-screws-under-the-reed ligatures, the logo on the top of the mouthpiece should be centered in the circle. Better ligatures can exceed $200, but Rovner ligatures are great, reasonably priced ($30-40), and are virtually indestructible. The “dark” and “light” descriptors on Rovne ligatures refer to the effect of the ligature on the sound.

Most student mouthpieces that come in the case are suitable for concert band use. Yamaha student mouthpieces are fairly flexible, and can probably work in a pinch in a jazz band, but it’ll be tough for most students to project their sound loudly enough in a high school jazz band with a classical mouthpiece shape. If a jazz band student is looking to upgrade their mouthpiece, this can be extremely expensive. Intermediate mouthpieces (often good enough for pro use) are usually in the $150-$250 range. Vandoren, Meyer (alto only, please), Otto Link (tenor only, please), Jody Jazz, and D’Addario all make nice jazz mouthpieces. There’s no reason for the student to buy a $600 mouthpiece right away (even if they are all kinds of awesome). Ask them to beware of metal mouthpieces, because those pieces require a very strong, stable embouchure to avoid squeaking.

The average student should be playing on a 4 or 5 tip opening with a 2.5-3 strength reed. There’s no real reason to have students playing on stronger reeds than that, though some might play enough to want the extra resistance and power given by a 3.5. Students don’t graduate to stronger reeds as they age, but rather should be playing on a reed that is free-blowing throughout the entire range and dynamic range of the instrument. If they choke a reed when they try to play loud, it’s probably too soft. If it’s very hard to play low or quietly, it’s probably too hard. If the student gets a mouthpiece with a bigger tip opening, then they might need to consider stepping down their reed strength. Some of those old Rico Royal “Jazz” mouthpieces from the 80’s and 90’s can have some unusually large tip openings. Consider keeping these for a punishment for students who forget mouthpieces.

Check that your reed is getting a good seal against the mouthpiece whenever there is suspicion that the reed is on its last legs. Making sure the reed is properly moistened and positioned on the mouthpiece, press the mouthpiece against the heel of your hand and suck all of the air out of the mouthpiece, trying to stick the reed and mouthpiece together at the end. If there is a good seal, the reed and mouthpiece will stick together for a short time, releasing with an audible “pop”. If there isn’t a good seal, the reed may be warped or damaged. If no reed will seal, the mouthpiece could be warped or damaged (or just really dirty).

**Basic Embouchure**

Most young saxophone players have two issues: the embouchure is too tight, and they don’t have enough mouthpiece in their mouth.

For young players, I insist that they have their top teeth firmly placed on the top of the mouthpiece. This is their anchor, or main point of attachment to the instrument. They should be resting the full weight of their head on the top of their mouthpiece (not actually pushing down through the front teeth, but relaxing their head onto the mouthpiece). Many players find this to be uncomfortable, but mouthpiece patches are cheap. I recommend these for all single reed woodwinds. The increase in comfort is incredible. Bari sax and bass clarinet players will love how their eyeballs stop shaking when they use a mouthpiece patch. The teeth should be placed a one third to one half way up the beak of the mouthpiece. Any less will make the sound thin and weak. Too much makes the sound coarse and honky. The balance point for tooth placement is usually right above where the reed meets the rails of the mouthpiece. Some small amount of trial and error to account for overbite/underbite is advisable.

The reed should rest on the bottom lip, and the thickest part of the bottom lip should be between the reed and the bottom teeth. For a player with fuller lips, it should almost appear that the lip is rolled out somewhat. The muscular part of the bottom lip should never be all the way inside the mouth. Players who do this are unlikely to have any tone control on the instrument.

The lips should be a soft as possible while still creating a seal. The corners of the mouth should be round and focused in towards the mouthpiece. The bottom lip is flexed towards the centre of the lip, but NEVER applies upward pressure into the reed (this kills the vibration of the reed). One of my great teachers showed me that the embouchure should be soft enough that the right pinky finger can be pushed into the mouth and pulled out while playing a note without breaking the sound. If the sound breaks, the embouchure is too tight.

**Alternate Fingerings**

The saxophone has a lot of alternate fingerings available through side keys, but the most important one to understand is Bb. Side Bb should be used for chromatic playing, and bis Bb should be used for leaps. Trying to do a smooth, fast, Eb major arpeggio on a sax using the side Bb is inadvisable. A good fingering chart will show most alternate fingerings, but in general, side B, C, and F# are used for trills and turns/flips.

Some saxophonists are hopelessly out of tune on middle D (4th line, with octave). Sometimes it’s a bad embouchure, but often it’s a poorly designed or maintained horn. For alto, try fingering middle C with the Eb palm key, and for tenor, try fingering the D palm key with no octave key.

**AIR!**

As with every instrument, students just don’t supply the instrument with enough air most of the time. Ask the students to use *faster* air instead of *more* air. This usually brings the instrument into tune and allows for a greater range of dynamics. Even when playing a softly, the air should be moving very fast with the diaphragm engaged, but the air stream should be very small. Louder dynamics require a wider air stream. Asking for more air often makes the student puff their cheeks and blast away. If you like that enraged-goose tone, then go ahead.

What happens inside the mouth is tough to determine. A skilled sax player can often troubleshoot this just by listening to the student, but in general, the mouth shape should be like a frontally-placed “ooooo” for mid range, getting smaller in the upper register, and be like a rear-of-the-mouth-placed “ohhhh” for the low register (soft palate raised like a yawn).

The tongue should hit the reed just past the tip of the tongue, akin to the pad of the finger (not poking at the reed with the tip of the tongue). Aim dead centre for hard accents, slightly off centre for standard articulation, and off centre for legato articulation. If the student can rest their tongue on the reed without stopping the sound, that’s a good spot for legato tonguing.