## The 5 Must Haves for Beginning/Advanced Brass Players

I have found there are 5 must-have embouchure principles at the foundation of many, if not all, advanced horn playing techniques. These principles can be taught to beginners to immediately improve their tone quality and facility around the instrument. Not surprisingly, these work

equally well with trumpet and trombone embouchures. If these techniques are taught to beginning students, it will avoid the need for a radical embouchure change later on in a brass player's career.

The 5 Must Haves:

- 1) Chin muscle flexed downward.
- 2) Mouthpiece placed below the bottom lip pink line.
- 3) 2/3 upper -1/3 lower lip in the mouthpiece.
- 4) Mouthpiece angled downward.
- 5) Tongue down.



On my website, <u>http://www.hornlessons.org</u>, please view my technique videos and download a handout that explores these concepts in more detail (see the Order tab then scroll down to workshop handouts).

## How to Teach the 5 Must-Haves and Other Essential Embouchure Basics:

Step 1) Start by **flexing the chin muscle downward** and shaping the lips forward (like whistling or blowing a candle) See Ex. 1. Make sure the bottom lip is firm. The upper lip should be relaxed and protrude further out than the bottom lip. Seal the lips shut at the corners like a zip-lock bag and relax the center. Practice buzzing the center of the lips by touching them together then buzzing them open.





Step 2) When putting the lips into the mouthpiece, start by placing the bottom of the **mouthpiece below the pink line** of a firm bottom lip and **flexed chin** (Ex. 2). Buzz only the top lip while holding the mouthpiece on a firm bottom lip. Buzz the mouthpiece with the angle downward and off the top lip to ensure the top lip is free to buzz. Then press the mouthpiece onto both lips, making sure the mouthpiece is still pressed on a firm bottom lip. Step 3) Seal the lips (touching them together), pucker them forward, inside the rim of the mouthpiece, and then relax. Do not stretch or separate the lips or place them ON the outer rim. This will make the player pinch the notes and produce an airy, forced sound. Start with the lips closed and relaxed, then buzz/blow the lips open. Confirm, with the lip line, that there is 2/3 **upper — 1/3 lower lip** inside the rim (Ex. 3). In general, horn or trumpet students with thicker lips may need a bigger mouthpiece or might consider playing the Trombone or Tuba.

Step 4) Buzz the mouthpiece with the **angle slightly downward** (Ex. 4) to get a pure buzz/tone. Pressing straight on or more into the top lip creates a brighter, harder, more nasal sound. Keep the bottom of the mouthpiece firmly connected to a firm lower lip, supported by the bottom teeth.

Buzz the mouthpiece, glissing up and down to practice the zip-lock bag action of the lips.\* Then do scales on the mouthpiece. As long as the lips are puckered forward, use as much **pressure** as needed to achieve a solid, efficient buzz.





There are two general actions to master with the lips, horizontal and vertical: **Horizontal Action** (\*the Zip-Lock Bag Action Sealing the Sides to Center) —Practice firming the corners first, then firming/sealing the lips to the center. Do NOT roll up the chin or bottom lip when buzzing/slurring upwards. Instead, firm the lips from the sides to center like saying "eeeyou." (See Videos 4 and 5 and page 1 of the handout, "Horsey Buzz.")

**Vertical Action** (Jaw Up/Down)—Having the **chin and corners firm** connects the bottom lip to the jawbone (see Videos 7 and 8). This is very important when you put the mouthpiece on the horn and want to connect to the bottom of the notes.

Step 5) Tongue — Become comfortable starting notes with and without the tongue (see page 8 of the handout at http://www.hornlessons.org/order/workshop-handouts). You can view my free Video 3, "Starting Notes" on the Order page of the website. In general, start notes with the tip of the tongue touching the front top teeth and top lip. The tip of the tongue holds the air back at the top lip and/or top teeth, and then the tongue pulls back and allows the air to vibrate the lips. Starting a note with the tongue is like spitting a seed. When slurring, you can have the tip of the tongue touch the bottom lip to keep it down and forward, as though singing, "aw" or "o." This will allow more air to get to the lips, create a deeper resonant connection to the instrument and open the tone. There may be a time when the tongue can come up, like in the extreme upper range, but this is the exception. It is better to focus on the lips and air to do the work and not rely on the tongue as a crutch to move or find notes.

Let's bring these concepts together. On the horn, resting the buzz/air stream on the groove (the back/bottom of every note) is the job of the bottom lip, pulled down by the chin muscle, which is

connected to the jaw. The groove is like a ledge, slot or pocket at the bottom of every note. The better the horn, the easier it is to find and rely on the groove. The feel of the groove, when the air stream is merging with the bottom of the note, is kind of like two magnets opposing each other. There will be a slight resistance or a cushion where the air stream/buzz merges with the bottom of the note. This is the connection to the note and where control is established.

Experiment with finding this groove by playing a note and then, with the chin and bottom lip firm, move the jaw up and down so the air stream aims higher or lower in the note and the pitch/intonation will become sharper or flatter. Use a jaw vibrato (up and down quickly) to help find/feel the bottom of each note. This jaw vibrato technique is different than pinching the center of the lips, rolling the bottom lip up or crunching up the chin muscle. Move the bottom lip, chin and jaw at the same time as one piece, not the chin muscles separately. Lock the chin muscle down to merge it with the jawbone. Get the chin muscle out of the equation as a moving variable. As an analogy, I imagine there is a rubber band attached to tip of my chin and the other end is pulling constantly down on the pink line of my bottom lip. This is to keep the center of the lips open and to keep the air stream down on the bottom of the note. If you relax the whole bottom lip or chin, the groove disappears and you will likely sag too flat out of the note. The "Breath Start" is my favorite way to confirm you're on the groove. Many thanks to Dale Clevenger for teaching me this technique.

Keeping the bottom lip firm at the corners enables one to pull down the center of the bottom lip with the chin/jaw, and open the center of the lips to focus the air stream down on the groove for optimum resonance. The air stream will then make a connection to the horn through the bottom/back of the note. Through this point, you can find the "bark point" (the place where the note all of a sudden gets louder and very responsive). This is the point where the best resonance, tone, slurring, endurance, loud and soft playing is achieved. I know professionals that play with the bottom mouthpiece rim IN the pink of the low lip, which does give a very responsive low register. The problem is the resulting sagging, weak connection to the groove and a weak high range. Since the chin muscle is connected to the bottom lip at the pink line, the mouthpiece needs to be set just below the pink line to be able to pull open and down the bottom lip. For best results, set the mouthpiece below that muscle ridge. If it is set IN the pink, the mouthpiece will slip off the pink lip muscle if the chin pulls the bottom lip downwards. Set in the pink also encourages the chin to crunch up which creates a more pinched and nasal sound. The bottom lip needs to be pulled down by the chin in order to get the air to rest on the bottom of the groove to have a solid connection with the horn. And a firm lower lip creates a clear groove in the horn on which one can relax the air stream and trust the overtone series structure for excerpts like the beginning of Rheingold or Heldenleben. If you play with either flabby lips at the corners or really tight lips in the center, a high tongue or a closed jaw, you will miss the "bark point" and have more frequent busted notes by flipping or chipping over the top of the note. The key to accuracy is both buzzing the right pitch and being able to connect deeply down to the bottom of each note, wherever that is in the horn. This allows for more stability and many more musical possibilities (more dynamic range, a richer, warmer, fuller sound, smoother slurs, clearer trills, etc.). Once you master the jaw/lip/chin connection you are ready for "Thick Air."

"Thick Air" creates a cushioned sound and is one of the ultimate goals of the 5 basic techniques. You can accomplish "Thick Air" by creating a large tunnel of air starting at the throat (keeping it open and relaxed), having a low tongue (laying it down on the bottom teeth) and playing with open, round shaped lips, puckered forward in a circle. This enables a large, round column of air to fill up the whole note, top to bottom, all the way to the back of the note. If you place the weight of the air deep down on the bottom of the note and rest on the groove/ledge, you will have what I call "Heavy Air." "Heavy Air" is using "Thick Air" and then focusing/relaxing that air to the bottom of the note for the most solid connection and for the smoothest slurs.

Once a player has figured out how to find and rest on the groove of one note, one can then master how to move from groove to groove. I use trill exercises and then larger slurs to practice this action. This is merging together the Vertical and Horizontal actions into circle sizes. Ideally, every note will have a unique circle size of air, determined by the lip circle size and jaw position (up or down, high or low). If one is truly resting on the bottom of each note, a low note will have a lower jaw position (a more open lip circle) and a higher note will have a higher jaw position (a smaller lip circle). The jaw position and lip circle size correlate directly with how high or low the note is on the page. Again, resting on and trusting the grooves with this open, thick air stream allows for the richest sound and smoothest slurs.

When moving from note to note, resist moving the air stream/buzz to the middle of the note and then to the bottom. This will create a "twa-twa" sound (to quote Clevenger) or a chewing sound. Keep the tongue down and focus on the vertical and horizontal actions or circle sizes. My law of upward slurs is "go down before you go up." Make sure you feel the bottom of the lower note, relax on it, keep the tongue down, and then do the vertical/horizontal action together to move up to the bottom of that next groove, not to the middle of the note. This gets rid of the whip sound in slurs and allows for a smoother, floating sound. With the bottom lip firm at the corners and chin flexed, the jaw can move the air stream to the bottom of any note, high or low. As long as the chin stays flexed and down, the sound stays open. When playing in the upper range, allow the jaw/bottom lip to move up, in and under the top lip. In the extreme low range, allow the jaw to move down and forward. Every slur, trill or movement from any note to any other note is based on the jaw moving the air stream to ensure a smooth transition between notes. Optimally, pitch/intonation corrections are to be made with the slides, the hand in the bell or with valve combinations to match the overtone series. The valve or slide placement determines where the groove/bottom of the note will sound (sharper/flatter). As a general principle, do not raise the tongue or pinch the lips (hold the notes up) to play in tune. That technique means you will forever be muscling and holding up notes rather than resting down and trusting the groove. Adjust the slide positions so there are evenly spaced stair steps between notes. If you find yourself on a note and raising the back of your tongue, you are trying to manipulate the intonation. Trust the bottom of the note and let the weight of the air stream rest on the groove. Adjust the slide if necessary to bring the groove up or down so you can relax the tongue. Tune to the 1, 2, 4, 8 harmonics. Temperature and humidity are also huge variables in tuning. Sure, very minute intonation changes can be made with the lips but this should not be the main tuning mechanism. As you can see, there are a number of areas that correlate directly with other brass playing embouchures in general. I encourage teachers, who start all their brass players on trumpet, to please teach 2/3 upper -1/3 lower lip. When their students transfer to other brass, they won't have to do an embouchure change to get a warmer sound. There are great sounding Jazz and Classical trumpet and trombone players that use 2/3 - 1/3. I have taken many students through embouchure changes, even some that have played professionally for 30-40 years. I have heard them say they wished they had this information in the beginning. Teachers can work wonders and save years of frustration by confirming that their brass players (at least the horn players) keep these 5 techniques in check:

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- 2) Mouthpiece placed below the bottom lip pink line.
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- 4) Mouthpiece angled downward.
- 5) Tongue down.

I hope these principles will help make teaching and performing easier for you. On my website, http://www.hornlessons.org, you can view 12 technique videos and download information that explore these concepts in more detail. We all have incredible influence on many lives and getting our students started out right can make a huma

our students started out right can make a huge difference in long run.

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