

Brighton Band Tuba Guide

Assembly and Instrument Basics

- Be alert when opening and closing the instrument case. It is recommended to put an arrow on your case to show which side should face down. Always open your instrument case on a flat surface.
- Place the instrument in your left hand. Take the mouthpiece in the right hand. Place the mouthpiece into the receiver. Turn the mouthpiece on quarter turn to the right. When removing the mouthpiece, turn it one quarter turn to the left.
- Never hit the mouthpiece in. This will jam the mouthpiece.
- The bass of the instrument will rest on the chair. The left arm is placed in front of the instrument and parallel to the floor. The left hand holds the instrument.
- Form a C with the right hand to obtain the proper finger technique. Place the pad of the first three fingers on top of the valves.
- Valve oil should be applied on a regular basis; every other day is recommended. Unscrew the valves at the valve cap, (not the button). Pay close attention to which direction the valve is turned. Apply a few drops of valve oil around the valve and place it back into the valve casing in the same direction it was before. Screw back on the valve cap and press the valve down a few times to work the oil in. Make sure that you do this process one at a time with each of the valves so that the valves are not mixed up.
- Apply tuning slide grease on the slides when you notice a lot of friction. Press down the valve associated with the slide as you remove it. Wipe down the slide before applying grease. A little grease goes a long way. Be careful not to get the grease on the inside of the side that connects to the valve. Work in each side of the slide one at a time before inserting the whole slide. Press down the valve as you replace the slide. Some people recommend using a dab of valve oil every once in a while on the third valve slide instead of slide grease to keep it moving quickly.
- Remove water from your instrument by pressing down the water key, pressing down the valves, and blowing fast air through the instrument. Avoid buzzing the lips.
- Remove surface fingerprints and smudge marks by wiping down your instrument with a soft cloth after you play it each time. Use a mouthpiece brush to clean the inside tube of the mouthpiece.
- If at any time, any part of the instrument including valves and slides become stuck, do not force it. Take it to an instrument repairman.
- It is recommended that you take your instrument in for general maintenance every six months. It is best to do this at a time when you are not actively performing it (during a break). With this being said, you should still practice during breaks.

Singing

- All instruments produce sound that imitates the human voice. Singing is an important tool for developing great ensemble tone quality and intonation. It is important that you take a serious approach to singing. The resonance and breath support necessary for singing are quite similar to proper playing.
- The key when singing is projection.
- Singing is the first standard on the national standard for instrumental music education. Playing an instrument is the second standard.
- The throat should be open.
- The face should be relaxed.
- The mouth shape should be oval like – the longer part of the oval from nose to chin.
- The same approach to breathing, air support, and direction of air with your wind instrument, applies to singing.

- Everyone should always be listening to match the pitch (ensemble setting)
- We will use different vowel sounds, including humming
- We believe in using audiation - check the pitch before, during, and after singing
- Whenever you have a hard time playing a section, it is a good idea to sing the part to get it imbedded into your head.

Tuning

- To tune, you need to adjust the tuning slide.
- If the tuning slide is pushed in, it will raise in pitch. If the tuning slide is pulled out, it will lower the pitch.
- Warm up thoroughly before tuning
- Tune at a mezzo-forte dynamic level and do not use vibrato
- Play the tuning note strait (no vibrato).
- Use a trustworthy electronic tuner to tune
- To tune the tuba, play the F just below the staff and work up the scale to the Bb inside the staff. Play the Bb for a few seconds before making any adjustments.
- To tune each valve, play up to the Bb as you would normally tune and then press down a valve individually. (1st – Ab, 2nd – A natural, 3rd-G). If there is a 4th valve, play the Bb below the staff and work up the scale to the F just below the staff; press down the 4th valve to play the same F. After a few seconds of playing the 4th valve F, adjust.

Posture

- Sit-up – put both feet on the floor, keep your back strait, and sit on the edge of your chair
- Sitting tall will allow your body to take full breathes and move naturally.
- Make sure you do not bend forward.
- Do not lean backwards and do not bend forward. It creates tension in the body that inhibits proper breathing. Your back should never touch the back of your chair.
- Keep your head strait
- Your elbows will never be against your ribcage. They will always be out in front of the body.
- Adjust the instrument to you. Do not adjust yourself to the instrument.

Breathing

- The correct breathing technique is known as abdominal breathing. This is not the shallow breathing that moves the shoulders and upper chest.
- When you lay down on your back, your body naturally abdominal breathes. I recommend this as a starting point to find the proper way to breathe with your instrument.
- To properly abdominal breathe, imagine your are inhaling into the bottom of your back. Open your ribs. When exhaling, keep your diaphragm low and abdomen supported. Do not expand or contract the abdomen and keep the abdomen firm. Do not exhale all of your air at once. Make your airstream while feeling pressure from the abdomen.
- If you expand your lungs fully, your lungs will push out on the diaphragm. This will cause expansion of the ribcage and some from the abdomen.
- Take a full breathe and blow with speed for a rich sound– a shallow breathe will not produce a good tone.
- While playing, you need to learn to take quick, deep breaths that are in time with the music. Breathing gym can help with this.

- A good exercise when working on passages is to perform the articulations and fingerings as you normally would, but only with air (creating no sound). This allows you to work on nothing but air control.
- Do not hold the air as you are breathing. We believe in a concept known as “one air motion.” The air is either moving into the body or moving out of the body. This helps with musical phrasing. Think of the breath as being part of the music.
- It is recommended to learn how to breathe on all counts of the music. Learn to not take breaths on longer notes, in the middle of phrases, or on beat four of common time.
- As a low brass player, you are going to have to fill up the instrument with more air than the other instruments in the room due to the size of the instrument. This means you will have to take more breathes. You want to use enough air to create a sound that will fill up the room.

Embouchure

- The lips are the mechanism for creating sound. The airstream vibrates your lips and the vibration is transmitted through the mouthpiece and the instrument. Always remember that lip vibration is creating your sound.
- The embouchure is formed evenly. 50% top lip and 50% bottom lip. There should not be any pressure applied from the mouthpiece into the player mouth.
- The upper and lower teeth are aligned together with proper distance between them (1/4-1/2 inches depending on the player’s mouth structure).
- As a tuba player, you will want to create a large oral cavity. For some notes, in particular low notes, you will need to drop your jaw. Imagine you have a ping pong ball in your mouth.
- Your lips should not stick out or curl in. As a tuba player, you must keep relaxed lips.
- Everyone’s mouth is built differently, which means embouchure will be slightly different from player to player.
- Accurate control of pitch and tone color involves a coordinated effort between the speed of your air, your air pressure, and the size of your aperture (the hole in your lips)

The Buzz

- Create the proper lip shape by saying the letter M and continuing to hum the syllable. Pull back the corners of the mouth. While the lips are together, begin to force air out of your mouth causing the lips to buzz. The lips will be centered; fifty percent of the top lips and fifty percent of the bottom lips will be located inside the rim of the mouthpiece.
- The faster the buzz due to a fast airstream, the higher in pitch. The slower the buzz due to a slower air stream, the lower the buzz. To play low notes, you must slow down the air stream and sometimes create a larger resonating chamber by separating the teeth. Focus on blowing into the mouthpiece with your abdomen. Make sure you maintain good air support in the low register.
- Keep the chin flat.
- The corners are always firm
- The aperture is always relaxed
- Buzzing the mouthpiece is similar to playing the horn, minus the back-pressure/resistance of the instrument. It is good for developing muscles and to listen to your buzz. Be sure that you hold your mouthpiece at the same angle you play your instrument.
- Mouthpiece buzzing on the lead pipe with the tuning slide removed is an excellent technique for helping to create equilibrium between the air, the embouchure, and the instrument. All three parts play an equally

important role in superior tone production. This technique can also be therapeutic for the embouchure and the surrounding muscles

- A variation on lead pipe buzzing (called “foghorn”) utilizes a looser embouchure, minimal pressure and a completely relaxed buzz on the lead pipe to increase blood flow and help the muscles of the face to warm down or slowly start up.
- Free buzzing is used to wake the lips up. There are different opinions on free buzzing. It is a valuable “pre-mouthpiece” training aid. This technique helps to focus and strengthen the embouchure without the aid of the mouthpiece. It is important to not do more than a few minutes of free buzzing and not buzz anything that is too strenuous.
- Pitch bending is a useful tool to develop flexibility; We recommend doing this during individual practice at home to gain lip control and build range. Your corners should stay firm and muscles in the upper lip should stay engaged. The bending or sliding of the pitch lies solely on the rolling in-and-out of the bottom lip and the type of air being used. When it comes to actually playing flexibility exercises both on the instrument and on the mouthpiece, target the exact pitch.
- When it comes to large interval leaps, we do not bend pitch; we utilize air velocity and tongue elevation while buzzing in the mouthpiece. Do not slow down the air too much in the lower range, as the pitch will go flat and the tone will be thin.

Finger Technique

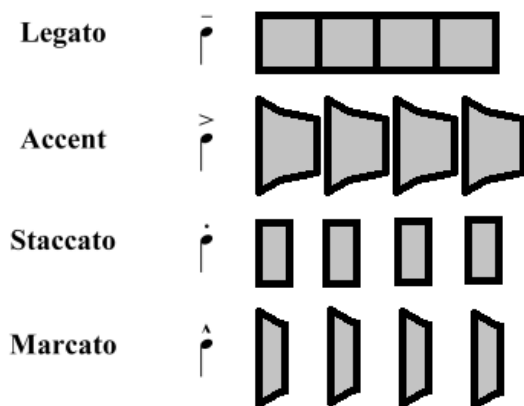
- Relax your hand to allow for smooth finger action.
- Press the valves straight down without any force. This will eliminate some wear and tear and eliminate some chances of mistakes do to stuck valves.
- All fingers need to remain relaxed, including the pinkie.
- The fingers always should transition quick and crisp no matter the tempo.
- The pads of the fingers should be touching the valves at all times. Otherwise, you will not be able to play faster passages.

Tonguing and Articulation

- Keep the air flowing. Your lips will respond and vibrate naturally.
- At all times, you must maintain the same sound you had during long tones.
- Make sure you keep the embouchure stable as you tongue
- Your tongue throat and lips should be relaxed. Focus more on your air stream and less on the tongue.
- Pronounce the syllable “dah” to find out where you need to tongue on the roof of the mouth. When articulating, please follow the chart below:

Articulation	normal	legato	staccato	marcato	accented
Syllable	dah	doo	dah	Dah	Dah
Difference from the normal enunciation	N/A	Smoother beginning and more connected	Same beginning as normal with half the length	Slightly more emphasis at the beginning with half the length	Slightly more emphasis at the beginning of the note, a slight decay

- When slurring, do not use the tongue except a legato tongue at on the first note. Make sure you create good air flow that relates to phrasing.
- When playing staccato, be careful to not put too much attack on the note
- Think about slightly faster air at the beginning of accented and marcato notes.
- When performing staccato notes, think of it as a water faucet. When you shut the faucet off, the water pressure is still there ready to go. Your air stops when the tip of your tongue touches the roof of your mouth, but air pressure is still ready to come out. When there is space, the tongue is waiting on the roof of your mouth unless you are taking a breath.
- The following chart is a visual representation of what different types of articulation sound like. It is known as the Articulation Visualization Key:



Bopping

- Bopping is a technique that is used to improve timing, uniformity of articulation and tonal resonance upon the initiation of sound. It is normally applied by marching ensembles, but can be used in concert ensembles as well.
- Bopping is executed by reducing every articulated note to a “round” staccato eighth note.
- Slurred passages are played full duration to the end of the slur.
- Tied notes are not sustained.
- Make sure that the throat remains open and relaxed. Keep notes open ended (no “dit” articulations, only “dah”).

Dynamics

- Dynamics are controlled by air speed, not the amount of air
- Tempo and dynamics have no correlation.
- When playing loud or soft, you need to listen to yourself and control your sound. Tone is the most important factor. When practicing at home, it is okay to experiment with dynamics to gain more control, but do not do so in a rehearsal setting. Control your sound.
- Some groups define their dynamics by expelling all of their air evenly over the assigned count structure for that dynamic. This can be a good exercise to memorize what each dynamic feels like. You should never fully “empty the tank” as this effects tone. The following is recommended to be performed at 108 beats per minute:

4 beats	6 beats	8 beats	12 beats	16 beats	20 beats	24 beats	28 beats
fff	ff	f	mf	mp	p	pp	ppp

This exercise can also be performed on a balloon to practice with resistance. As a young musician, it is recommended to start on one of the middle dynamics and work out from there. Focus on tone (quality of sound).

Performing Long Tones

- Take a big breath and focus on tone. Blow out with abdominal support. Be careful not to accent the beginning of the note.
- Start the note with the tongue. Release the tongue from the roof of your mouth at the same time you start playing.
- Start with warm air and release with a breathe
- Keep a consistent airstream and sound
- Perform numerous long tones (at least 5 for the duration of a full breathe exhale)
- Long tones are meant to be exactly that, long. If you are by yourself, take a deep breath and use the full extent of your air on one tone. If the tone is not long enough, take a deeper breathe.

Lip Slurs

- Lip slurs are indispensable for brass players. Lip slurs help players to develop transitionally across the full range of the instrument.
- Do not control notes with your lips. Let the air do the work. As you go higher, raise your tongue to occupy more space and increase the speed of your air stream.
- Maintain an evenness of the air flow throughout the entire slur to make certain there is a consistency from note to note.
- Play it like you would sing it.
- When buzzing, there should exist a quick slide between each pitch.
- Strive to avoid “slotting” each pitch when buzzing as this will translate an uneven slur when playing it on the horn.
- Sing - buzz - play for best results.
- Use defined aural shape (“oh”) in the lower and mid registers. Only in the upper register will we use other syllables (such as “aw” or “ah”). Use these syllables when singing slurs. Singing these syllables will give you an idea of where the tongue and oral shape should be.
- The embouchure should move as little as possible
- Make sure all of the notes are speaking with the same quality of sound and volume. Higher notes tend to be thin and strident, low notes tend to not be supported.
- Try to make a smooth connection between intervals. If it is not easy, practice with small intervals and at slower tempos. Focus on the air stream between intervals.

Scales

- Learning scales is very important since most literature is based on scales. They are the fundamentals of all playing.
- One you learn a scale, play it every day.
- Playing scales in different articulation styles will help you to play varying musical style
- Arpeggios can also help you to develop better control across the instrument; play them with various styles of articulation.

Solutions to Common Problems

- Tension of any kind will inhibit your playing ability
- When performing faster passages, make sure you stay relaxed and blow air consistently as if you were playing long tones. Allow the fingers and lips to be flexible. Practice the passage slowly and increase it gradually.
- If you notice endurance is an issue, make sure you are warming up. The more you practice, the better your muscles will develop, which will mean that you will develop better endurance.
- Maintain your abdominal and embouchure support when playing high notes
- When working on range building, always start from where you sound best. Playing scales up and down can help build range, but lip slurs will help more than anything.
- When playing tricky fingerings, play it at a comfortable tempo
- When playing across odd intervals, it is important to not use embouchure movement and to sing the interval in your head as you perform it.
- When needing to tongue fast, you need to patiently practice. It is crucial that you have the correct tonguing method. Practice slow. Since air stream created the sound, you need air pressure and speed. We use tonguing to have more accurate articulations. Your tongue should have minimum motion and be relaxed. That makes your tongue move fast. When your tongue gets tense or moves too much, try with an even slower tempo and little by little make the tempo faster. Instead of thinking that the tongue is moving forward, think that it is being pulled back after articulating.
- If you have problems playing a passage, imagine the exact pitch just before you play it, especially when you play large intervals. Singing can help you.