

A
Trombone
Experience

Instructional Method Book
&
DVD

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Introduction

Welcome to "A Trombone Experience." This method book and DVD are designed for use in school music programs, group lessons, and private lessons as a guide to good playing habits and proper playing techniques. This is not intended to replace the need for a fine band director or private lesson teacher. In fact, it is designed to reinforce the skills taught in these settings and may be found useful by teachers when planning beginning lessons or when trying to correct a "bad-habit." While musical exercises from mainstream method books are included, it is very important that quality method books and repertoire are purchased and become the focal point of the students' musical development in addition to this book. Use this Instructional Method Book and DVD to reinforce good habits with beginners and to correct bad habits with more veteran players. One ounce of prevention is worth more than a pound of cure.

History of the Trombone



Sackbut with Tuning Crooks

Many historians agree that the first brass instrument with a slide was likely a smaller and higher pitched instrument like a trumpet. However, the original design of the trombone came from an English instrument called the sackbut with this additional hand slide. There are many variations of this word ranging from sackbut, sackbutt, to saxbut. The word sackbut is likely a combination of the French words *saquer*, meaning to pull, and *bouter*, meaning to push. This pulling and pushing connection was most likely connected to the act of drawing out a sword from its sheath in medieval times. The Italian word for sackbut is the word trombone, derived from *tromba* (trumpet) and *-one* (a suffix meaning large), literally meaning a large trumpet. Sackbuts were the earliest ancestors of the trombone and emerged from Belgium around 1450. These instruments were equipped with a slide mechanism for changing pitch and a mouthpiece, much like modern day

trombones. However, the bells of these instruments were rimless and only about five inches in diameter. These original instruments were tenor voiced instruments and soon variations of the alto, bass, and contrabass trombones appeared by the early 1600's. Much like other brass instruments of the time, trombones often came with a variety of crooks to lower the pitch and sometimes even drop the instrument to a lower register.

Sackbuts were used in outdoor events, concerts, and in liturgical settings. These performing groups varied from *alta capella* (community wind bands), wind bands with voices, and eventually the first orchestra-type ensembles in religious settings. There are also solo pieces written specifically for trombone starting in the early 1600's. During the later Baroque period, Johann Sebastian Bach composed for the trombone in combination with the cornet to evoke the *stile antico* (ancient style) in some of his cantatas and George Frideric Handel used it in the *Dead March* from *Saul, Samson, and Israel in Egypt*, all of which were examples of a new increasingly popular oratorio style. The addition of trombones to the orchestra began in the



Boston Symphony
Trombone Section - 1910

1700's, though their most popular role was still as vocal support for the sacred music of the church, a tradition which continued until the mid-1800's. In 1807, Swedish composer Joachim Nicolas Eggert I, was the first to use the trombone in his *Symphony in E b*. However, the composer credited with its introduction into the symphony orchestra was Ludwig van Beethoven. Beethoven scored for trombone in the last movement of his *Symphony No. 5 in C minor* (1808), *Symphony No. 6 in F major* ("Pastoral"), and *Symphony No. 9* ("Choral"). Many composers were directly influenced by Beethoven's use of trombones and by the 19th century, trombones were fully integrated in the orchestra.

The first valve trombones were produced during the 1820's in Vienna using the double-piston valve. The valve trombone was most popular in the 1800's when the technology of rotary and piston valve instruments were developing quickly. Slide trombones have the unique ability to alter intonation with small adjustments of the slide, while valve trombones were hindered by the inherently out of tune valve sets that are used on trumpets and other 3 valve brass instruments. By the end of the 1800's, mass production of reliable, higher quality slide trombones led to a return of their popularity. Despite the mainstream popularity of the slide trombone, valve trombones have remained popular (almost to the exclusion of the slide trombone) in Austria, Italy, Bohemia, Moravia, Slovakia, Spain, Portugal, South America, and India. A special valve trombone made by Adolphe Sax in the 1870's, has a very different system utilizing a different valve and tubing set for slide positions 1-6 and the open fingering for position 7.



Six Valve Trombone



Rotary Valve F Attachment

Traditionally, the tone produced by a slide trombone was accomplished strictly through adjustments in slide position and embouchure. Due to this simplicity of design, a typical orchestral trombone section consisted of an alto in E flat, a tenor in B flat, and a bass in F. In 1839, Christian Friedrich Sattler, a German instrument maker, recognized that tubing could be added within the bell section of a Bb tenor trombone to achieve the range produced by an F bass trombone, essentially combining the two into one more functional and efficient instrument. The added tubing was actuated by a thumb operated trigger. In addition to increasing the range of the trombone, it also provided alternative slide positions to ease the technical burden of 6th and 7th slide positions below second space C and in certain situations above. This continues to be the basic design of the Bb/F trombone or more commonly referred to as the F-attachment or trigger trombone.

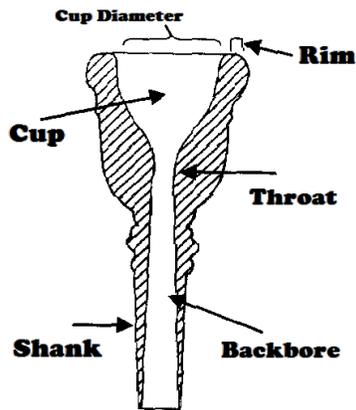
Today, the trombone can be found in wind ensembles, concert bands, symphony orchestras, marching bands, military bands, brass bands, brass quintets, brass choirs, jazz ensembles, and much more. While the instrument design has remained similar since its invention, numerous changes in construction have occurred during the technical advancements of the 1900's, including the use of different manufacturing materials, mouthpiece variations, differing bore and bell dimensions, and new trigger valve types.



Tenor Trombone with F Attachment

Trombone Equipment

Mouthpiece:



The mouthpiece is arguably the most important part of the instrument because it is where you and your instrument connect. The mouthpiece is a separate part of the trombone and can be interchanged with different manufacturers as long as the shank size is the same. Mouthpieces vary in material composition, shank, cup diameter, cup depth, rim shape, throat, back bore, and outside design among other factors. Variations in mouthpiece construction affect the individual player's ability to seal their lips on the mouthpiece properly, produce a reliable tone with a characteristic timbre, its volume, the player's level of comfort, and the instrument's ease and playability in a given pitch range.

In general, a mouthpiece that will meet the needs of most beginner and intermediate trombonists is the Bach 6 ½ AL, or equivalent. This is a good, medium-deep size mouthpiece that will continue to be the right size for many students even as they mature. Admittedly, mouthpiece selection is a highly personal decision, but it is recommended to ask a qualified band director or professional trombonists for help when searching for the right mouthpiece. Below is a reference chart of each component of mouthpiece design and how it affects different aspects of trombone performance.

Mouthpiece Design & Related Playing Characteristics						
RIM		CUP		THROAT		BACKBORE
Wide	Increases endurance	Large	Increases volume and control	Large	Increases blowing freedom, volume, tone, and sharpens high register (largest sizes also sharpen low register)	Except in general terms, it isn't possible to identify backbores by size because they also vary in shape. Various combinations of size and shape make the tone darker or more brilliant, raise or lower the pitch in one or more registers, and increase or decrease volume. In each instance, the effect depends in part on the throat and cup used in combination with the backbore.
Narrow	Improves flexibility and range	Small	Relieves fatigue and weakness			
Round	Improves comfort	Deep	Darkens tone (especially in low register)	Small	Increases resistance, endurance, brilliance, and flattens high register	
Sharp	Increases brilliance and precision of attack	Shallow	Brightens tone and improves response (especially in high register)			



Modern Valve Trombone with Three Piston Valves

Bb Tenor Trombone – Student Model (Straight):



Yamaha YSL-354

It can be confusing and stressful choosing the right instrument for a beginner. While there are many brands and models to choose from, it is a good idea to stick with the industry standards for this important purchase. In most cases a beginner student will be best served with a straight Bb tenor trombone. In the beginning, the additional weight and clumsiness of a trigger can be more than a small student can handle. It is recommended to start with a straight Bb tenor trombone and upgrade once the student is capable of handling the instrument and is at a developmentally appropriate stage where the trigger will serve them in a beneficial way.

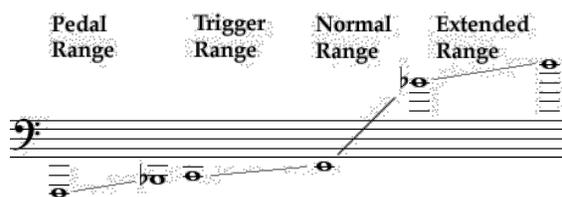
When making a used instrument purchase, make sure the instrument is in good working order and the slide moves freely. The slide is the most delicate part of the trombone and requires the most precise adjustment to allow for smooth and fluid operation. Most slides can be repaired by a trained technician, but be advised it may be cost prohibitive on some instruments. Purchasing a used instrument from a reputable music store decreases the chance of acquiring an instrument in poor repair. Be wary of instruments offered at discount prices substantially below the cost of a quality brand. It is likely these instruments are of lesser quality or have hidden issues. If possible, it is wise to purchase one of the following recommendations to avoid buyer's remorse. If purchasing from the internet, make sure there is a return possible in case the instrument is damaged or not properly represented. Remember to enlist the help of a qualified band director or professional trombonist when making this important purchase.

Recommended Student Model Instruments

MAKE	MODEL#
Bach	300
Besson	600
Conn	22H
Getzen	351
Holton	602
King	606
Yamaha	354

Bb Tenor Trombone with F Trigger Attachment:

There are musical and operational advantages to purchasing a tenor trombone with an F trigger attachment. The musical advantage is that straight tenor trombones are pitched in the key of Bb, giving them a usable chromatic range from E below the bass clef to Bb above middle C, an extended range by experienced players up to top line F in treble clef and the use of pedal tones from Bb below the staff to F four lines below bass clef. The additional tubing provided through the F attachment (accessed by a trigger operated valve) extends the chromatic range down a major 3rd to low C, almost connecting the normal range and pedal range (missing the B natural). In other words, this instrument becomes more flexible with a wider range than a straight Bb trombone. The operational advantage to intermediate trombonists is that trombones with an F attachment are easier to play. Notes that are typically played in longer positions (6th and 7th position) can be accessed with shorter positions with the trigger. For example, low F (below the staff in bass clef), which is played in 6th position on a straight trombone can also be played in 1st position with the



trigger. The same is true of low E natural (2nd position and trigger), second line B natural (2nd position and trigger), and second space C (1st position and trigger) just to name a few. Advanced trombonists benefit from this option when playing faster passages due to the accessibility of these notes in shorter positions.

The tubing in an F-attachment is referred to as either having a *closed wrap* or an *open wrap*. A closed wrap (traditional wrap) system keeps all of the extra tubing for the F attachment confined within the bell section of the trombone while an open wrap allows the tubing to extend beyond the crook of the bell section. Most trombonists say that the overall playability of an open wrap is better since the air flow is less restricted. There are simply fewer bends in an open wrap that the air must flow through than in a closed wrap. A compelling reason to purchase a closed wrap system over an open wrap is that the tubing of the closed wrapped F attachment is more protected from dents and tuning slide damage. High school and college trombonists involved with marching, will probably be better off with a closed wrap trigger trombone.



Closed Wrap Trigger



Open Wrap Trigger

The two styles of linkage that open and close the valve on an F attachment are string or mechanical. A mechanical linkage uses a metal arm with ball and socket joints to open and close the valve. This type of linkage requires less maintenance than a string, but often makes a clicking noise when used. A string linkage utilizes a string to move the valve when the trigger is used. A string linkage is silent when engaged, but does have the potential to break and need adjustment from time to time.



String Style Trigger Linkage



Mechanical Style Trigger Linkage

The most common type of valve used on a trigger trombone is the rotary valve. A rotary valve was used on the first ever trigger trombone developed by Christian Friedrich Sattler in 1839. Its ergonomic design and short throw action make it a popular design. The most common complaint about a rotary valve is its impeded air flow. The angles within the design of the valve cause the air to bend abruptly when traveling through the valve. Regardless, most trigger trombones are made with the rotary valve because of its durability and ease of maintenance. New designs like the axial flow valve have addressed this issue by illuminating the abrupt angles of the air path. Other proprietary designs which also serve to improve airflow are the Thayer Valve (Bach) and the CL2000 (Conn).



Rotary Valve



Axial Flow Valve

Bass Trombones:

Historically the first bass trombones were pitched in G and resembled a stretched tenor trombone. Instrument manufacturers moved away from a true bass trombone pitched in G towards a tenor-bass trombone pitched in Bb with two triggers. Eventually the tenor designation faded and the title of bass trombone was reborn. However, these instruments are pitched in Bb with a combination of two triggers ranging from F, Eb, D, and Gb. The current day bass trombone is very similar to the tenor trombone except a bass trombone has a bell diameter of at least nine and one-half inches and a bore of approximately .562 inches. Instruments smaller than this, having a bell diameter of eight



Yamaha Bass Trombone YBL-830
with Bb/F/Gb/D Trigger Combinations

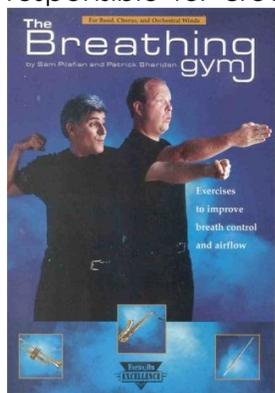
and one-half inches and a bore of .547 inches are considered large-bore tenor trombones with F attachments. Although tenor trombones have the same range as the bass trombone and have a more penetrating pedal tone register, they cannot equal the large sonorous quality of a true bass trombone.

Embouchure, Buzz, and Tonguing



Embouchure: The positioning and shaping of the mouth, lips, and tongue in order to play wind instruments with good tone, true pitch, and proper attack...*Harper's Dictionary of Music*

Before assembling the pieces of the trombone, it is important to prepare the vibrating mechanism of the instrument. Woodwind instruments rely on a reed to produce the initial sounds of the instrument while brass instruments utilize the player's lips. The lips are responsible for creating the initial sound that is amplified by the trombone. The lips



The Breathing Gym
Breathing Method Book

combined with an open and free flowing air stream will produce the correct buzz, both alone (fee buzzing) and on the mouthpiece. The air flowing past the lips creates the vibrations responsible for this sound.

There are many philosophies on breathing, but in short, inhale in a fashion that is free from tension, unnecessary movements, and provides a comfortably full feeling. A yawn-like inhale through the mouth (not the nose), followed by a fast and steady exhale should provide the correct fuel to set the lips in motion. The exhale is much like blowing out candles on a birthday cake. Remember, the more open and relaxed the air enters the body, the more likely it will exit in the same fashion.



An Unexpressive Facial Expression

To form the proper embouchure, simply create an unexpressive facial expression. This neutral expression places the facial muscles and corners of the lips in the proper location for a good embouchure. The lips should come together in the same fashion as saying the letter “M” or the word “dim.” The firmness in the corners can be related to a friendly handshake, not limp like a dead fish, but also not aggressive like an angry pit-bull.

In one fluid motion, inhale to a comfortable full feeling, set the embouchure formation as described above, and exhale a fast and steady stream of air through the lips. This will create a buzz or motorcycle-like sound effect if the proper firmness is present in the corners of the lips. It is helpful to think of blowing air through the lips in an effort to push them slightly apart. If no sound or buzz is produced, try resetting the embouchure with variations of firmness in the lips until a good buzz is created. Practice making these motorcycle sounds every day prior to buzzing on the mouthpiece and playing the full instrument. This is the fundamental building block for a great trombone sound.



The Free Buzz - Motorcycle Sound



Centering the Mouthpiece on the Lips

Next, form the embouchure as described above and place the mouthpiece centered on the lips from top to bottom and left to right. Use only enough pressure to seal the mouthpiece rim to the lips. Some facial features (jaw and teeth formations) may have a slight impact, but starting with a centered mouthpiece placement should provide a good foundation for a characteristic sound. Inhale through the corners of the mouth (outside the mouthpiece rim) and make the same motorcycle sound through the mouthpiece. This sound should be similar to the free buzz with some amplification. Many students will find it easier to buzz with the mouthpiece than to free buzz. Try buzzing a familiar tune like *Happy Birthday* or *Mary Had a Little Lamb* to practice changing pitches. Practicing these motorcycle-like sounds, fire engine sirens (glissing up and down in pitch), and buzzing simple songs on the mouthpiece will help develop a good embouchure and provide the foundation for a great trombone sound.

To this point, the tongue has not been directly involved with creating the buzz (however it will be partly responsible for changing pitch between partials, refer to p. 12). The tongue is used to initiate a clean sound at the start of each note, separate between notes, and to facilitate lip slurs (refer to p. 21). Place the left hand pointer finger on the chin and say the following syllable four times, “Dah-Dah-Dah-Dah”. This syllable should place the tongue on the upper gums, just above where the flesh meets the teeth without any movement of the jaw. Repeat this exercise again and take notice of where the tip of the tongue hits for the “D” part of each syllable. Practice saying each syllable out loud, whisper each syllable, and then practice the motion only without a vocal cue. Practice saying, whispering, action, and finally combine with mouthpiece buzzing. Make sure the chin and jaw stay stationary. The following

exercise practices placing the tongue in the correct position and can be combined with different articulations to expand upon musicality.

Adding The Tongue

"Say-Whisper-Action-Buzz"

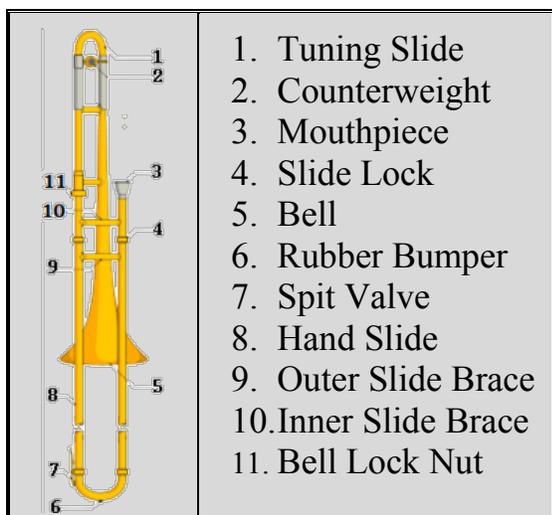
Stephen Burdick

Slowly ♩ = 76

Speak: Dah Dah Dah Dah Whisper: Dah Dah Dah Dah

Action: D D D D Buzz: + + + +

Instrument Assembly



1. Tuning Slide
2. Counterweight
3. Mouthpiece
4. Slide Lock
5. Bell
6. Rubber Bumper
7. Spit Valve
8. Hand Slide
9. Outer Slide Brace
10. Inner Slide Brace
11. Bell Lock Nut

The trombone is a delicate instrument, despite its rugged appearance. The most delicate part of the trombone is the hand slide. This is essentially the valves or keywork of the instrument and needs to be in good working order and kept free of dents or dings. Refer to p. 23 for a lesson on slide maintenance.

Place the trombone case on the floor with the latches flipping up to open. This will ensure the instrument doesn't accidentally fall out of the case when opened. Remove the hand slide section from the case. There will likely be case tabs holding the hand slide securely in place; just twist them out of the way and remove the hand slide. Make sure the slide lock is

engaged to keep the outer slide from falling off the inner slide. Hold the hand slide by the top brace with the right hand and rest the rubber bumper on the floor. Orientate the slide so the bell lock nut is to the left and the slide lock is to the right when placed in front of you. Remove the mouthpiece from the storage compartment in the case and insert it in the tubing on the right side of the hand slide with a gentle downward twisting motion. This is the side with the slide lock and without the threaded bell lock nut.

Next remove the bell section from the case using the left hand. There will likely be case tabs holding the bell securely in place, just twist them out of the way to remove the bell. Hold the bell with the tuning slide facing up and the threaded tube section facing to the right. Keep the braces of both the bell section and hand slide parallel to each other (this adjustment will be made momentarily). Place the bell onto the hand slide section opposite the mouthpiece and start threading the bell lock nut onto the threads

of the bell section (do not tighten all the way yet). Next, the bell and hand slide need to be adjusted to the proper playing angle. Pretend the bell is the front cover of a book and the hand slide is the back cover. Gently close the book to slightly less than a 90 degree angle (in relationship to the bell and hand slide braces). Gently tighten the bell lock nut to secure the sections together.



Instrument Assembly from Left to Right:
Hold the hand slide in the right hand - Insert mouthpiece with left hand - Connect bell with left hand and loosely tighten bell lock nut - Close the angle (book) of the trombone - Tightening bell lock nut

Hand Position



Correct hand position is the first step to creating an open sound and smooth slide technique. Each hand has its own responsibilities and formations, but both should be relaxed and free of tension. Before setting the hands in position on the trombone, take a moment to shake out the hands, arms, and shoulders. Body posture and hand position have an effect on tone production, ease of motion, and technical efficiency.



**Left Hand
Position Timeline**

Left Hand Position

Let's start with the left hand since it will be supporting the trombone's weight. Extend the left hand as if initiating a hand shake. Slide the crook of the thumb and pointer finger into the lower bell brace (closest to the bell and hand slide). The thumb should comfortably cradle the lower bell brace. If the trombone is equipped with an F trigger, move with the same "hand shaking motion" towards the trigger lever, stop short, and place the thumb lightly on the trigger lever thumb pad. In either case, the pointer finger should rest on the mouthpiece body at a comfortable angle. The remaining 3 fingers should comfortably grasp the inner slide brace of the hand slide (closest to the mouthpiece). The pinky can be used as a human slide lock, in an effort to prevent the outer slide from falling off the trombone. Prevent the trombone from resting on the left shoulder when raised up to the embouchure in playing position. The trombone will have a slight downward angle and the elbows should be held out slightly away from the body. This hand position can be remembered by *Shake – Point – Curl*.

Right Hand Position

Now that you have the left hand correctly placed and can support the majority of the trombone's weight with little effort, let's move to the right hand. This hand will be solely responsible for working the hand slide and spit valve. Place the pointer and middle fingers side-by-side and rest them on the pads of the thumb. This might look like a hand puppet dog or a bird beak. This forms the basic slide grip. Now place the puppet dog or bird beak on the lower portion of the outer hand slide brace (closest to the ground when the trombone is held up in playing position). The pinky and ring finger should rest gently on the underside of the slide. Make sure the palm of the hand faces towards the mouthpiece as much as comfortably possible. The basic action for moving the slide in and out can be compared to the loose wrist Italian hand phrase, "Spicy Meatball." Allow the wrist to glide freely in its socket like a ball joint.



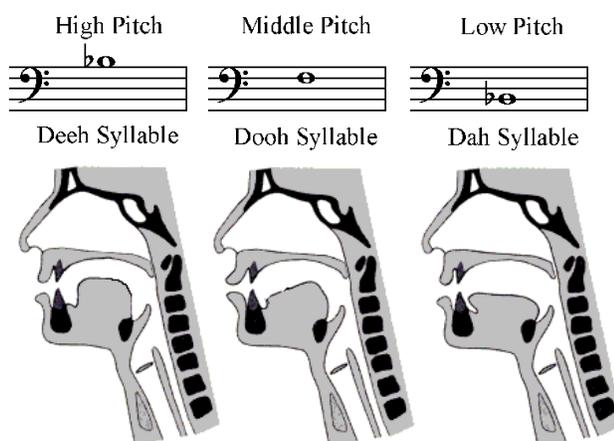
Right Hand Position Timeline

The First Notes



After practicing free buzzing, mouthpiece buzzing, and learning the proper hand positions, it's time to make the first sounds on the full instrument. Achieving a good free sounding buzz on the mouthpiece is crucial to making a good sound on the trombone and should take precedence over playing on the full instrument in the beginning lessons. Continue to practice buzzing in conjunction with the following steps to further develop embouchure growth.

If a good buzz was produced on the mouthpiece, it is likely that will produce a good sound on a few possible notes. While sitting on the edge of a chair with good posture and leaving the slide lock engaged (for your safety...), place the assembled instrument and mouthpiece in playing position as described earlier. Remember the instrument will likely be positioned slightly downward and the elbows should be held out slightly away from the body. Form the embouchure, inhale relaxed air from the corners of the mouth, and buzz into the mouthpiece. Pretend to blow out candles across the room and through the trombone. This steady and fast air stream should produce one of three possible notes low Bb, fourth line F, or Bb above the staff in bass clef (low – middle – or high). Use a piano or tuner to figure out which note is being played. If the first note was the lowest note of the three, try moving this note up by changing the oral cavity. For low notes, the tongue is likely in a low position in the oral cavity, such as saying the syllable "Dah." By moving the tongue to a slightly higher position in the mouth by saying "Dooh" the air moves with faster velocity across the lips and into the instrument. Moving to



Oral Cavity & Tongue Height Diagram:
Deeh – Dooh – Dah (Syllables from Left to Right)

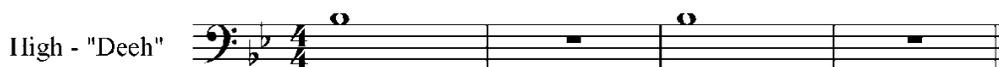
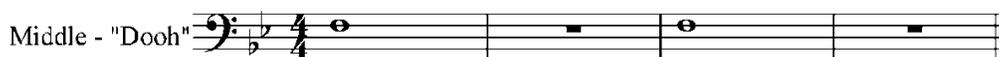
"Deeh" increases the velocity again. To witness this phenomenon, try whistling a series of notes from low to high and take notice of the changing tongue position. This should help move the sound from low to high depending on the relative position of the tongue in the mouth and vice versa to play lower. Use good listening skills and practice centering on each of the following low, middle, and high notes and moving between the three.

The First Notes

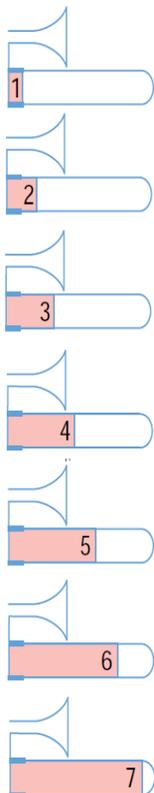
"Low - Middle -High"

Stephen Burdick

Slowly ♩ = 76



Finding the 7 Slide Positions



The trombone differs from all other brass and woodwind instruments in the area of fingerings or in the case of trombone, slide positions. On a trumpet, when a valve is pressed, a fixed amount of tubing is added to the airway. This is not the case with the slide trombone. The player must find the correct position through a continuum of space based on correct intonation. There are 7 different slide positions, much like there are 7 different fingering sets on any three valve brass instrument. The musical interval between any two consecutive slide positions is a minor second ($\frac{1}{2}$ step), or the same sound as the *Jaws Theme* (helpful when practicing the groupings below). With these 7 relative positions, trombonists have the ability to play the most in tune of any wind instrument through minor adjustments of the slide. It might also be added that they have the ability to play the most out of tune as well. It is easier to remember the relative slide positions as groups of positions rather than individual positions. Comparing each slide position to its partner in the grouping will help solidify an approximate location. The following are quick and easy ways to find the relative slide position.

Remember, the ear should be the final judge of correct slide position.



Grouping 1st & 2nd: 1st is all the way in and easy to find. Think of 2nd as right next to 1st. 2nd is often played longer on the slide than it should be, keep it closer to 1st to make it easier to find. Always listen to make sure they sound a half step apart.

Grouping 3rd & 4th: 3rd is just before the bell, and 4th is just past the bell. Think of 3rd and 4th as on either side of the bell from each other. Keep each one on the correct side of the bell. Always listen to make sure they sound a half step apart.

Grouping 5th & 6th: 5th is often played too close to 4th, so think of it as next to 6th. 6th is about an arm's length out for most players. Thinking of 5th as next to 6th, will keep 5th from being played too short on the slide. Additionally, 5th is almost the same distance away from 3rd as 3rd is from 1st. Practice the relative distance between all the way in to almost to the bell and almost to the bell and 5th. Always listen to make sure they sound a half step apart.

7th All Alone: 7th is all the way out on the slide, just past where the stockings (raised area) at the end of the inner slide tubes begin. If there is difficulty reaching all the way out to 7th, reach as far as possible. It may be necessary to push the right shoulder forward and open the right hand to get far enough out. Keep reaching for 7th and eventually it will be reached with practice. Many young students will literally grow into this as they themselves grow. Yamaha's YSL-350C has a small Bb/C trigger to aid students whom have physical challenges of reaching 7th position.

Song Groupings:

The following exercises use an easily found starting position (1st, 2nd, and 3rd) to reference more difficult to find positions (5th, 6th, and 7th). The basis for these exercises is using the relative distances between positions and a good ear to find the physical locations of each. In theory, the physical distance between 1st and 3rd should be closely related to the distance between 3rd and 5th. This relationship remains the same when starting in 2nd or 3rd position and moving to 4th/6th and 5th/7th respectively. However, due to the overtone series, the distance between each lengthening slide position increases slightly. Keep this in mind as your ear determines the positions in the following songs. Since most beginner students will produce one of three notes in 1st position during the first lesson, these exercises have been written out starting on the 2nd, 3rd, and 4th partials of the trombone overtones series. While these exercises are written out for the purposes of including the notation, it is not necessary for the beginner student to read in the keys of Gb, Db, F, C, E, and B major, but it is an added bonus! These exercises are purely for developing listening skills and finding the relative locations of each sled position. For best results, use a tuner to help find the first note of each song grouping, especially when starting in 2nd or 3rd positions. For more on the overtones series refer to p. 17.

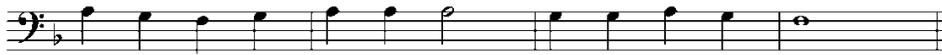


Soprano Trombone

2nd Position - Fourth Partial



Slide Positions: 2 4 6 4 2 2 2 4 4 4 2 2 2



2 4 6 4 2 2 2 4 4 2 4 6

Song Grouping 3rd - 5th - 7th:

Mary Had a Little Lamb

"The 3-5-7 Song"

Traditional
arr. Stephen Burdick

3rd Position - Second Partial

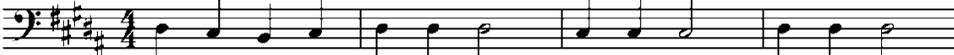


Slide Positions: 3 5 7 5 3 3 3 5 5 5 3 3 3

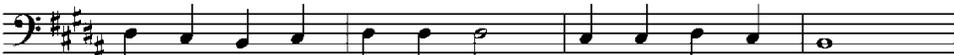


3 5 7 5 3 3 3 5 5 3 5 7

3rd Position - Third Partial



Slide Positions: 3 5 7 5 3 3 3 5 5 5 3 3 3

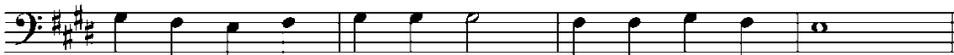


3 5 7 5 3 3 3 5 5 3 5 7

3rd Position - Fourth Partial



Slide Positions: 3 5 7 5 3 3 3 5 5 5 3 3 3



3 5 7 5 3 3 3 5 5 3 5 7

In review, when learning trombone slide positions, begin to tune the positions faster and more accurately by referencing the slide position groupings. Continue to strive for greater precision of each position and its relationship to the others in each grouping. It will continue to get easier to locate each position in a grouping because each always has a "partner" or "partners" to aid in its location. Always remember, the ear is the ultimate judge of intonation and should take precedence over everything else.

Fixing Incorrect Sounds



There are 9 possible incorrect sounds that can be produced. With a mirror, a good ear, and the proper knowledge, these incorrect sounds can be caught quickly and fixed with little effort. Create good embouchure habits from the very first day.

Incorrect Sounds & How to Fix Them		
Problem	Cause	Solution
Pinched Sound In All Registers	Blockage in P-G-K or T Consonant Positions	Focus Attention On Allowing Air Into Instrument Not On Resistance In Lips, Throat, Or Abdomen Area
Fuzzy Sound	Aperture In Embouchure Too Large Perhaps Due To Excessive Pressure	Practice On Mouthpiece - Hold Mouthpiece Lightly Avoid Pressure - Work For An Efficient Buzz.
Sharpness In Upper Register	Excess Tension In Embouchure And/Or Breath Mechanism	Practice High Passages Down An Octave, Then Transfer That Easy Singing Approach Up An Octave
Flat, Flabby Sound In Low Register	Low Breath Pressure Flabby Embouchure	Practice Low Passage Up An Octave, Then Transfer That Sensation Of Energy Down An Octave
Lip Slurs Pop Rather Than Flow	Attempt To Place Pitches With Breath Rather Than "Singing" With Lip	Practice On Mouthpiece To Get Small Efficient Change Between Notes - Avoid Movement Outside Mouthpiece. - Avoid Drastic Breath Pressure Changes Between Notes.
	Too Slow A Maneuver Between Notes (Gliss)	Move Quickly Between Notes
"Egging" The Notes	"Junk Factor" Movement Of Jaw, Lip, Throat At The Beginning Or End Of A Note	Play A Long Note And Take A Mental Picture Of The Good Tone In The Middle Of The Note Keep Embouchure In That Position On Subsequent Attacks
Difficulty With Upper Register	Mouthpiece Too Low	Move Mouthpiece Up
Difficulty With Lower Register	Mouthpiece Too High	Move Mouthpiece Down
Frayed Tone Quality	Split Tone Quality Caused By Lower Lip Being Drawn Back Toward Teeth	Approach Problem Range Stepwise From Above Or Below

*This table of possible sounds and corrections is found in the *Embou-Sure* book by M. Max McKee

The Overtone Series

-Trombone-

Partials:

Slide Positions: 1 2 3 4 5 6 7

To fully understand the trombone and the many possible slide positions for each note, it is necessary to understand the overtone series. The overtone series is similar to the electromagnetic spectrum of light. White light is comprised of proportions of all the colors of the spectrum and sound is comprised of a set of notes in equal divisions, sounding above a given fundamental. Any length of tubing will provide a certain

assortment of pitches that follow a very specific pattern and mathematical division. This pattern is known as the overtone series. The normal range of the straight Bb tenor trombone is from E below the staff to Bb four lines above the staff in bass clef. The following information will address this range of the trombone.

Each pitch in the series is called a partial with the lowest pitch obtainable known as the fundamental pitch. A trombone is pitched in Bb because its fundamental when in first position is Bb. Additionally there are seven fundamentals available on the trombone corresponding to the seven slide positions. Every pitch above the fundamental is technically referred to as an overtone. The terms partial and overtone are not the same. The first partial is the fundamental pitch and the first overtone is technically the second partial.

Pitch Tendencies

There are a few pitch tendencies in the overtone series that require small adjustments to sound in tune. This exists, not because of imperfections in the natural overtones series, but because of the use of tempered tuning in western music. Luckily it is easy to make small adjustments on the hand slide of the trombone to deal with these pitch issues. Although the degree of alteration to the pitch will vary from trombone to trombone, the following will apply.

In any given position, the overtone series is an extension of the fundamental pitch. These include a Bb series in 1st position, an A series in 2nd position, Ab in 3rd position, G in 4th position, Gb in 5th position, F in 6th position, and E in 7th position. Before slides and valves were invented, brass instruments were limited to the notes available above their fundamental which was based and limited by the total length of tubing. Interchangeable crooks of different lengths, added additional notes by changing the length of the instrument, and in turn changing the fundamental. The invention of the slide and valve created faster access to a variety of lengths with a push of a button or a change in slide position.

Partials 1, 2, 4, and 8 in any overtone series will be the same pitch name, just in different octaves. All Bb's in 1st position, A's in 2nd, Ab's in 3rd position, etc. These divisions of the series do not need any additional adjustments on the slide.

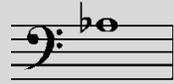
Partial 3 and 6 are sharp and require the use of a tuner to see the degree of sharpness. When a pitch is sharp, the instrument must be lengthened to lower the pitch. The longer the slide position, the greater that adjustment must be. That means if the adjustment needed to play partial 6 (F in 1st position) in tune is 1/8 of an inch, this may require partial 6 (Eb in 3rd position) to be 1/4 of an inch longer. This will vary among instruments and a tuner will be needed to find the tendencies of individual instruments.

Partial 7 (Ab above the staff in bass clef in 1st position) will be very flat in each slide position. Since 1st position is all the way in, Ab cannot be adjusted any shorter than it already is. This is why Ab is never played in 1st position. Additionally, when playing G above the staff in 2nd position, it requires shortening the slide position. Gb in 3rd and F in 4th (above the staff) require the same adjustments.

Additional Slide Positions

Knowing the overtones series gives greater access to a variety of additional slide positions. While some of them may have varying pitch tendencies, they still prove useful in certain situations. Learning a few simple rules will provide easy access to this knowledge.

Finding all the possible slide positions for a given note is very simple using the 1-3-5-7-9 formula. Dividing a partial number by two until it will no longer divide evenly, allows this simple formula to work (Partial 16, 8, 4, 2, and 1 are all the same letter name, 12, 6, and 3 are all the same letter name, etc.) Therefore by knowing partials 1, 3, 5, 7, 9 it is possible to quickly access information from all the partials in seconds using this shortcut. However, it becomes necessary to think backwards. In other words, think of the note you are looking for the fingering of (**the note in question**) as a partial to a fundamental that you are trying to figure out. Essentially try to find each **fundamental** as if the **note in question** was **partial 1, 3, 5, 7, or 9** of that **fundamental**. Another way to think of it is that **partial 1** is simply assuming the **note in question** is the **fundamental**, **partial 3** would be thinking of the **note in question** as the 5th of a major chord built on that **fundamental**, **partial 5** would be thinking of the **note in question** as the 3rd of a major chord built on that **fundamental**, **partial 7** would be thinking of the **note in question** as the flat 7th (building a dominant chord) of that **fundamental**, and **partial 9** would be thinking of the **note in question** as the major 9th (or same as the major 2nd letter name) of that **fundamental**. Next, take those **fundamentals** (listed in **BLUE** below) and check them against the **seven known fundamentals** of the Bb tenor trombone (listed in **GREEN** below). If the **fundamental** is one of the **seven Bb tenor trombone fundamentals**, than that slide position will work because that note exists as one of the **partials** of the **seven Bb trombone fundamentals**. These **usable positions** are listed in **ORANGE** below. If it isn't, then the **note in question** is not one of the **partials** of the **seven Bb trombone fundamentals** and therefore doesn't have any additional slide positions. These are labeled as **NONE** (listed in **RED** below).

Short-Cut Trick To Slide Position Freedom							
Note In Question							
Partial	Fundamental/ Slide Position	Fundamental/ Slide Position	Fundamental/ Slide Position	Fundamental/ Slide Position	Fundamental/ Slide Position		
1	Ab/3rd	D/NONE	Eb/NONE	Gb/5th	Bb/1st		
3	Dd/NONE	G/4th	Ab/3rd	Cb/NONE	Eb/NONE		
5	Fb/7th	Bb/1st	Cb/NONE	Ebb/NONE	Gb/5th		
7	Bb/NONE	E/7th	F/6th	Ab/3rd	C/NONE		
9	Gb/NONE	C/NONE	Db/NONE	Fb/7th	Ab/3rd		
<p style="text-align: center;">Below are the Seven Fundamentals Possible on the Bb Trombone and Their Respective Slide Position</p>							
	Bb/1st	A/2nd	Ab/3rd	G/4th	Gb/5th	F/6th	E/7th

To assist further, here are the questions to ask when looking for all the fingerings of the fourth line above the staff Bb in bass clef listed above:

Question:	Bb is partial 1 of what fundamental?	Answer:	Bb	✔
Question:	Bb is partial 3 of what fundamental?	Answer:	Eb	✘
Question:	Bb is partial 5 of what fundamental?	Answer:	Gb	✔
Question:	Bb is partial 7 of what fundamental?	Answer:	C	✘
Question:	Bb is partial 9 of what fundamental?	Answer:	Ab	✔

Bb, Gb, and Ab are fundamental series on the Bb trombone and therefore those positions can be used 1st, 5th, and 3rd respectively. Eb and C are not fundamental series on the Bb trombone so they cannot be used.

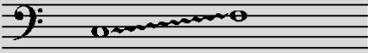
Using the F Attachment Trigger

The diagram shows a bass clef staff with notes C, C#, D, D#, E, A, A#, B, and C. Below the staff, the corresponding slide positions are listed: $7\frac{3}{4}$, $6\frac{1}{8}$, $4\frac{3}{4}$, $3\frac{1}{2}$, $2\frac{1}{4}$, $4\frac{3}{4}$, $3\frac{1}{2}$, $2\frac{1}{4}$, and 1.

The F attachment trigger, when pressed, adds additional tubing to the trombone and changes the fundamental from Bb to F. This provides an entirely new set of slide positions when working with this new fundamental. Bass trombones equipped with two triggers have three and sometimes four available fundamentals to work from. Due to intonation and quality of tone in some registers while using the F attachment, most trombonists agree that the most beneficial registers to use the F trigger is from second space C to first space A and from E below the staff to C below the staff in bass clef (refer to p. 6). This is extremely helpful and allows notes previously played in the long positions of 6th and 7th to be played with the trigger and 1st and 2nd.

Due to intonation using the fundamental of F, almost all of the slide positions using the trigger must be lengthened to sound in tune with the tempered scale of western music. In the chart on p. 35 these are listed as a slide position plus a fraction longer. For this reason, the B natural between the trigger range and the pedal range cannot be played on an F attachment trombone. The C in the trigger range requires the slide to be lengthened to $7\frac{3}{4}$ and does not allow for an additional 8th (plus) position to play the B natural. Some bass trombones with multiple triggers are capable of using additional fundamentals to reach this note.

While the tone and pitch may suffer in higher registers, in fast passages and when trying to slur or play legato, the additional slide positions of the F fundamental may still be usable. Rather than learning an entirely new set of slide positions based on the F fundamental, there is a simple rule to follow. On the next page, simply look at the **note to be played with the trigger**, think **up a perfect fourth**, recall the **regular trombone slide position for that new note**, and play it using the **trigger and new slide position**, but lengthen the slide to compensate for pitch. Following are a few examples using this rule.

Play vs. Think	Thought Process	Answer
<div style="display: flex; justify-content: space-around;"> Play Think </div>  <div style="display: flex; justify-content: space-around; margin-top: 10px;"> Normally 6th Trigger 1st </div>	Note To Be Played:	C
	Up A Perfect Fourth:	F
	New Note Regular Slide Position:	1ST
	Trigger and Position:	T-1ST
<div style="display: flex; justify-content: space-around;"> Play Think </div>  <div style="display: flex; justify-content: space-around; margin-top: 10px;"> Normally 4th Trigger 4th </div>	Note To Be Played:	D
	Up A Perfect Fourth:	G
	New Note Regular Slide Position:	4TH
	Trigger and Position:	T-Long 4TH
<div style="display: flex; justify-content: space-around;"> Play Think </div>  <div style="display: flex; justify-content: space-around; margin-top: 10px;"> Normally 5th Trigger 4th </div>	Note To Be Played:	F#
	Up A Perfect Fourth:	B
	New Note Regular Slide Position:	4TH
	Trigger and Position:	T-Long 4TH
<div style="display: flex; justify-content: space-around;"> Play Think </div>  <div style="display: flex; justify-content: space-around; margin-top: 10px;"> Normally 2nd Trigger 1st </div>	Note To Be Played:	A
	Up A Perfect Fourth:	D
	New Note Regular Slide Position:	1ST
	Trigger and Position:	T-1ST
<div style="display: flex; justify-content: space-around;"> Play Think </div>  <div style="display: flex; justify-content: space-around; margin-top: 10px;"> Normally 3rd Trigger 1st </div>	Note To Be Played:	C
	Up A Perfect Fourth:	F
	New Note Regular Slide Position:	1ST
	Trigger and Position:	T-1ST

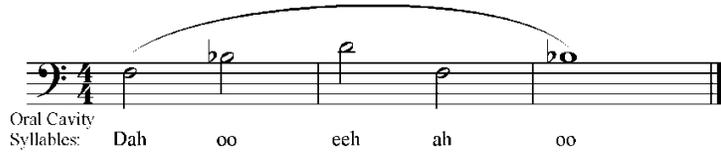


Lip Slurs & Legato Playing

To most wind instrument players, slurring is moving from one note to the next, connecting the sound, while not using the tongue. This system doesn't always work on the trombone. Slurring and legato playing are closely related on the trombone and it is difficult to talk about one without the other. This is because where a trumpet player can slur by just blowing and moving the valves, a trombonist must often make use of a light legato tongue to avoid smearing or glissing from one note to the next. In order to play two or more notes with a seamless connection, and free of smears, a trombonist must use techniques related to both slurring and legato tonguing.

There are five options for playing slurs/legato:

#1 Lip Slurs: This is where the slide stays in one position, and the oral cavity and embouchure do the work, slurring either up or down to a new note. Only the first note of the slur receives the consonant sound "D" while subsequent notes are shaped with just the vowel sound. For a description of oral cavity positions, refer to p. 12)



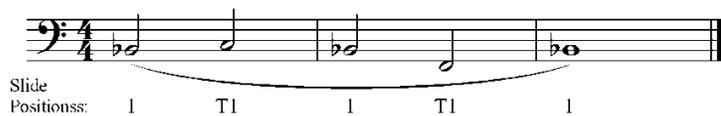
#2 Cross-Grain Slurs: These are used when the slide is moved in the opposite direction from the new note (note moves up in pitch and the slide moves out, and vice versa). The tongue is not needed, just use a quick, smooth slide motion and support the slur with a steady and fast air stream.



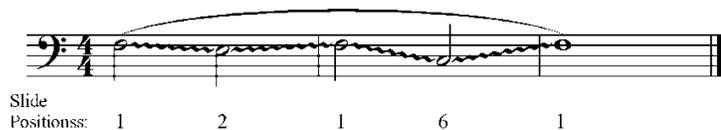
#3 Tongued Slurs: When the slide and the new note move in the same direction, the trombonist must lightly tongue (*legato* tongue) to avoid a smear or gliss when moving from one note to the next. This slur is the hardest since the tongue and slide must be completely synchronized.



#4 Valve Slurs: This is only possible on trombones equipped with an F attachment and work just like slurs for other three and four valve brass instruments. Just use a steady and fast air stream and quickly activate the rotary valve.



#5 Glissando: This is simply playing a note and moving the slide in or out. This technique is also called a smear. No attempt is made to articulate any pitch after the first one, they just all run together. This is a very popular sound effect, utilized in some of the great march literature of Henry Fillmore.



Practicing the above techniques in order from number one to number five will help build great legato playing. The first step is to use a lot of air. There needs to be a steady, fast, unbroken, and smooth supply of air from the beginning of the slur to the very end of the last note. Once lip slurs (#1 above) feel and sound good, the next step is a smooth, fast slide motion. Practice cross-grain slurs (#2 above) to help improve this

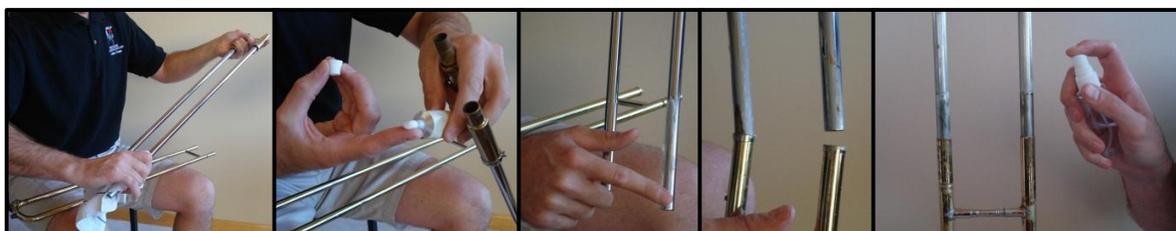
technique. Keep the air moving through the lip slurs and add the movement of the slide. Make sure the slide is aligned and dent-free, otherwise it will be very difficult to play smooth legato lines. The slide must move just as fast going from 1st to 6th position as it does from 1st to 2nd position. Tongued slurs (#3 above) utilize the air from lip slurs, the fast slide technique from cross-grain slurs, and a small amount of tongue to mask the slide change. This is the most challenging of the slurs because it combines three techniques into one. Play the first note, and move the slide at the exact same time as tapping the air stream with the tongue to move to the next. Valve slurs (#4 above) and Glissandos (#5 above) are much easier slurs to execute, but should be practiced, especially for minimizing trigger sounds while slurring with the valve.

Hand Slide & Rotary Valve Maintenance



To ensure the trombone is in good playing condition it is important to lubricate the hand slide and oil the rotary valve weekly. While weekly may be just right for some players, it may need to be done more often under certain circumstances.

To lubricate the hand slide, carefully remove the outer slide and lay it on a clean, flat surface. With a damp cloth, wipe each tube of the inner slide clean, removing old cream, dirt, and foreign substances. For best results, it is a good idea to use a slide cleaning rod and small cloth to remove the same substances and debris from the inside of the outer hand slide. Apply a small amount of slide cream to the stocking of the inner slides. These are the slightly thicker areas located at the ends of each tube. Use a finger to evenly spread slide cream until it coats the entire stocking area with a thin film. Be careful to not apply too much slide cream. This tends to make a mess and may actually hinder the movement of the slides. Insert the inner hand slide into the outer hand slide being careful to not bend or disturb the delicate alignment. Make sure the bell lock nut on the inner slide lines up with the spit valve of the outer slide. Rest the rubber bumper on the floor and raise the inner slide until the stockings are visible. Use a spray bottle to spray water evenly over the inner slides in the same manner as the slide cream was applied, with an even film over both stockings. Move the inner slide back and forth to spread the lubricant evenly and reapply water as needed. Between slide lubrications re-apply water to keep the slide moving freely. For beginner students, it may be easier to use a liquid cream instead of slide cream and water, eliminating the potential for damage since the slides do not need to be separated when using this product.



Slide Lubrication from Left to Right:

Remove inner slide from outer slide - Wipe the inner slide clean with a damp cloth – Apply a little slide cream to your finger - Spread slide cream evenly on the stockings - Assemble inner and outer slides - Spray water on the inner slide and operate hand slide

The rotary valve must be oiled prior to assembling the trombone. Remove the complete hand slide assembly and place it on a clean, even surface. Hold the bell

section with the bell pointed up and place a few drops of rotor oil into the hand slide receiver (near the bell locking nut). Press the thumb lever to activate the rotary valve and help spread the oil evenly on the rotor and casing. Apply a few drops of rotor spindle oil to the rotor stem, directly between the stop arm and the top of the casing. Carefully remove the valve cap and apply a few drops of rotor spindle oil to the bearings. Press the thumb lever to activate rotor and then replace the cap. If the



Oiling the Rotary Valve:
Hold bell up - Add a few drops of oil in the tube leading to the valve -
Add a drop under the valve cap - Work the thumb lever

rotary valve is designed using a mechanical metal linkage arm, apply a drop of lever oil to each linkage of the lever assembly. Unlike piston valves, it is not recommended that the rotary valve be removed by anyone other than a qualified repair technician during periodic maintenance.

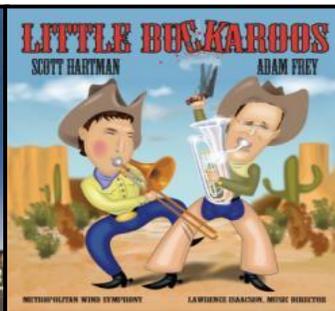
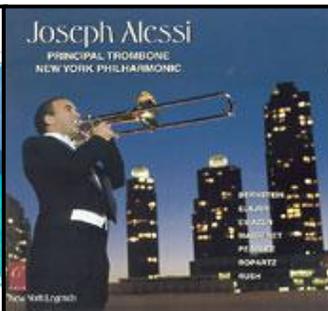
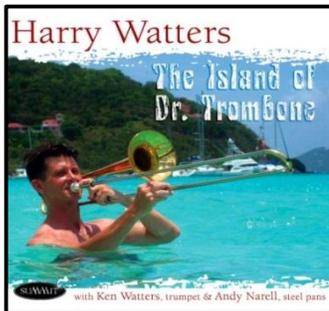
Disassembly



To disassemble the trombone, simply reverse the assembly directions provided on p. 10. Start by emptying any water or condensation from the instrument by holding the instrument in the left hand, place the left hand pinky around the outer hand slide brace (to prevent it from falling off, or engage the hand slide lock), place the bottom lip on the outside edge of the mouthpiece rim, open the spit valve with the right hand, and blow gentle air. Next, engage the hand slide lock and loosen the bell lock nut to remove the bell from the hand slide section. Place the bell in the case and secure using any provided case locks or tabs. Remove the mouthpiece with a gentle twisting motion and place in the appropriate storage area in the case. Make sure the



mouthpiece isn't able to move around and potentially damage the bell or more importantly the slide. Finish by carefully placing the hand slide section in the case and secure using any provided case locks or tabs. Close the case and properly latch the case locks to keep the trombone safe until the next practice session. Remember an ounce of prevention is worth a pound of cure when it comes to properly storing and maintaining your trombone.



Accessories



- **Slide cream** is a necessity for all trombonists and is used to keep the slide moving smoothly and freely. If the slide begins to “catch or hang up”, many technical passages and even simple legato passages will be difficult to execute. A thin and even coating is applied to the stockings of the inner slide. The hand slide should be lubricated at least once a week, or as needed depending on playing frequency.



- A **slide sprayer** is used to coat the inner slide with an even mist of water. This water works in conjunction with slide cream and creates a fast and smooth surface for the outer slide to glide over. Spraying a mist of water on the slide daily, will help keep this fast motion between applications of slide cream.



- **Liquid slide cream** is a substitute for the slide cream and water treatment. Beginners will find this much easier to apply and diminishes the opportunities for damaging a slide while lubricating its surfaces. Simply apply directly to the slide and work it in by moving the slide in and out.



- **Rotary oil** is used to lubricate the rotary valve of the F attachment. Placing a few drops down the tube leading to the valve will keep the action smooth and fast. The rotary valve should be oiled at least weekly, or as needed depending on playing frequency.



- **Rotor spindle oil** is used to lubricate the bearings of the rotary valve. A few drops under the valve cap and another few on rotor stem will keep the rotor moving fast on its axis. The rotary valve bearings should be oiled at least weekly, or as needed depending on playing frequency. It is a good idea to oil the bearings every time the rotary valve is oiled.



- **Lever oil** is used on mechanical F attachment levers that use a metal arm with ball and socket joints to connect the thumb lever to the valve. A drop on each ball and socket will keep the mechanism working quietly and with a smooth action. It is a good idea to lubricate these ball and sockets every time the valve is oiled.



- **Tuning slide grease** is used on the large tuning slide of the straight trombone and the smaller tuning slides of trigger attachments. A small amount of grease is applied directly to the tuning slide to keep it free moving, yet stationary. Service these slides once a month, or as needed.



- A **mouthpiece brush** is used to clean the inside of the mouthpiece, specifically the throat and backbore. It is important to keep these channels free of debris. For best results, soak the mouthpiece in warm soapy water, brush, and then rinse with clean water. The mouthpiece should be cleaned as needed and more frequently during times of sickness.



- A **snake** is used to clean the inside bore of the trombone. It is important to keep the inside of the trombone clean and free of debris. Disassemble the trombone (except the rotary valve) and soak the pieces in a warm soapy bath. Use the snake to clean each piece of tubing and be careful not to get the ends lodged in the tubing of tight spaces, especial on instruments equipped with a trigger. A total cleaning should be done yearly or more often depending on the personal oral hygiene of the trombonist or frequency of playing.



- A **slide cleaning rod** is used to clean the inner portion of the outer hand slide tubes. Combine this rod with a small piece of cloth to remove old cream, dirt, and foreign substances prior to lubricating the slide. For best results, this should be done each and every time the hand slide is lubricated, however this may not always be practical.



- **Slide protectors** are used to cover the outer hand slide tubes and protect them from dents, dings, and scratches. Beginners will find these extremely helpful in protecting the instrument during the early years. They simply slide over the tubes of the outer hand slide and provide a hard plastic barrier against damage.



- A **total care kit** may include many of the needed cleaning and care accessories at a discounted price. Most include a polishing cloth to help keep the exterior finish in good condition.

Suggested Listening List

Jazz Trombonists

Andy Martin
Bill Watrous
Harry Watters
JH Whigham
JJ Johnson
John Allred
John Fedchock
Michael Davis
Nils Wogram
Scott Richfield

Bass Trombonists

Blair Bollinger – Classical
Charles Vernon – Classical
Donald Knaub – Classical
Douglas Yeo – Classical
James Markey – Classical
Dave Taylor – Jazz

Classical Trombonists

Alain Trudel
Christian Lindberg
Dee Stewart
Gail Wilson
Jay Friedman
Joseph Alessi
Larry Zalkind
Ralph Sauer
Ron Barron
Scott Hartman
Steven Witser

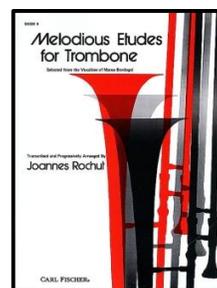
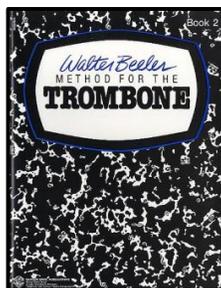
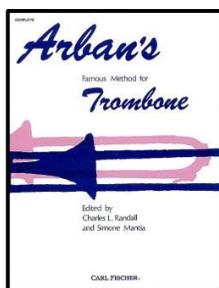
Brass Quintets

Atlanta Symphony Brass Quintet
Canadian Brass
Dallas Brass
Empire Brass
Heritage of America Brass Quintet
Meridian Arts Ensemble
Windward Brass Ensemble

Etude & Method Books

**Gail Wilson 2008 ABC Clinic*

40 Progressive Studies by Tyrrell
Arban's Famous Method for Trombone by Joseph Arban
Beeler Method for Trombone Book I
Beeler Method for Trombone Book II
Blazhevich Clef Studies for Trombone
Clarke's Method for Trombone by Ernest Clarke
From Treble Clef to Bass Clef Baritone by Reginald H. Fink
Introducing the Alto Clef by Reginald H. Fink
Introducing the Tenor Clef by Reginald H. Fink
Melodious Etudes (Bordogni) transcribed by Rochut Vol. I
Selected Studies by Voxman



Solos

*Gail Wilson 2008 ABC Clinic

Title:	Composer:	Publisher:
Adagio from "Cello Concerto"	Joseph Haydn	M. Witmark & Sons
Andante et Allegro	J. Guy Ropartz	Fischer
Andante et Allegro	Barat	Carl Fischer
Arm, Arm, Ye Brave	G.F. Handel	Edition Muscius
Barcarolle et chanson bachique	Jules Selmer-Collery	Leduc
Cameos For Bass Trombone	Gordon Jacob	Emerson Edition
Cantabile et Scherzando	Henri Busser	Leduc
Cavatine	Camille Saint-Saens	Durand
Concert Piece	Vaclav Nelhybel	E.C. Kerby Ltd.
Concerto (1 st Movement)	Gordon Jacob	Galaxy
Concerto for Trombone	F. Grafe	Belwin
Concertpiece #5	V. Blazhevich	Belwin
Drei Leichte Stucke	Paul Hindemith	Schirmer
Evening in the Country	Bela Bartok	Ludwig
First Solos for the Trombone	Henry Smith	Schirmer
If With All Your Hearts	Felix Mendelssohn	Southern Music
La Femme A Barbe	J. Berghmans	Leduc
Morceau Symphonique (Concert Piece)	A. Guilmant	Belwin, International
Piece Concertante	S. Rousseau	Carl Fischer
Piece en fa Mineaur	Florentin Morel	Billaudot
Six Esquisses	Julien Porret	M. Baron
Solo de Concours	Cröse-Spinelli	Belwin
Solos for the Trombone Player	Henry Smith	Schirmer
Sonata for Bass Trombone	Patrick McCarty	Ensemble
Sonata for Trombone and Piano	K. Serocki	Moeck
Sonatas for Trombone 1-6	Johann Galliard	McGinnis & Marx
Suite for Trombone and Piano	Johann Hasse	Rubank
Suite in F Major	henry Purcell	Edition Musicus

Duets

*Gail Wilson 2008 ABC Clinic

Title:	Composer:	Publisher:
23 Duets for 2 Trombones	Forest J. Baird	MS Publications
Amsden's Celebrated Duets	Arthur Amsden	Barnhouse
Concert Duets	V. Blazhevich	International
Selected Duets for Trombone Vol. I & II	H. Voxman	Rubank

Trios

*Gail Wilson 2008 ABC Clinic

Title:	Composer:	Publisher:
Adoramus Te, Christe	Orlando Di Lasso	Ensemble
Trio	Ronald LoPresti	Fischer

Quartets

*Gail Wilson 2008 ABC Clinic

Title:	Composer:	Publisher:
Achieved is the Glorious Work	Franz Joseph Haydn	Ensemble
Adagio from Symphony No. 3	Camille Saint-Saens	Ensemble

Album of 17 Pieces Vol. I & II	Keith Brown	International
Now is the Month of Maying	Thomas Morley	Ensemble
Sixteen Chorales	Robert King	Robert King
Suite of Lieder	Franz Schubert	Ensemble
Three Equali	L. Beethoven	Robert King
Trombone Quartet	Arthur Frackenpohl	Ensemble
Twenty-Four Early German Chorales	Robert King	Robert King

Orchestral Excerpts

*<http://www.tromboneexcerpts.org>

Tenor Trombone

<u>Composer:</u>	<u>Excerpt:</u>
Beethoven	Fidelio
Beethoven	Symphony 5
Beethoven	Symphony 9
Berlioz	Hungarian March
Berlioz	Roman Carnival
Borodin	Polovetsian Dances
Borodin	Steppes of Asia
Brahms	Symphony 1
Brahms	Symphony 2
Brahms	Symphony 4
Britten	Guide to Orchestra
Bruckner	Symphony 4
Bruckner	Symphony 7
Dvorak	Symphony 8
Milhaud	Creation du Monde
Mahler	Symphony 1
Mahler	Symphony 3
Mahler	Symphony 5
Mozart	Requiem
Prokofiev	Symphony 5
Ravel	Bolero
Ravel	Daphnis et Chloe
Rossini	William Tell
Saint-Saëns	Symphony 3
Schubert	Great Symphony
Schumann	Symphony 3
Shostakovich	Symphony 5
Strauss	Death/Transfig.
Strauss	Don Juan
Strauss	Till Eulenspiegel
Tchaikovsky	Symphony 4
Tchaikovsky	Symphony 6
Verdi	La Forze del Destino
Wagner	Flying Dutchman
Wagner	Ride of the Valkyries
Wagner	Tannhäuser

Bass Trombone

<u>Composer:</u>	<u>Excerpt:</u>
Beethoven	Symphony 9
Berlioz	Hungarian March
Berlioz	Roman Carnival
Borodin	Polovetsian Dances
Borodin	Steppes of Asia
Brahms	Symphony 1
Brahms	Symphony 2
Brahms	Symphony 4
Britten	Guide to Orchestra
Bruckner	Symphony 4
Bruckner	Symphony 7
Franck	Symphony in D
Haydn	The Creation
Kodaly	Hary Janos
Nielson	Flute Concerto
Mahler	Symphony 1
Mahler	Symphony 5
Prokofiev	Symphony 5
Respighi	Fountains of Rome
Respighi	Pines/Appian Way
Respighi	Pines/Catacomb
Rossini	William Tell
Schumann	Symphony 3
Shostakovich	Symphony 5
Strauss	Death/Transfig.
Strauss	Till Eulenspiegel
Tchaikovsky	Symphony 4
Tchaikovsky	Symphony 6
Wagner	Flying Dutchman
Wagner	Ride of the Valkyries
Wagner	Tannhäuser

range legato
9. lip slur

7(V) 6 6 6 1
7(V) 6(V)
7(V) 7(V) 6

10. fake tones - no valve
All 1st All 2nd All 3rd etc. all positions

11. fake tones - no valve

12. range $\text{♩} = c. 80$

glissando: 6 → 1 6 → 1 6 → 1 #6 → #1 6 → 1 6 → 1 6 → 1 b6 → b1 6 → 1

13. range $\text{♩} = c. 160$

Up and down. Glissando on all scales, two octaves.

14. lip benders

glissando etc. all positions

15. scale patterns

Harmonic Series

Partials: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

5% 10% 20% 30%

(sharp on some) (sharp on Fack)

* Gail Wilson 2008 ABC Clinic

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