

Warm-Up on Low Brass Instrument

by

Dr. Yutaka Kono

**Assistant Professor of Tuba and Euphonium
Texas A&M University-Kingsville**

**yutakatuba@mac.com
www.yutakakono.com
www.developingmusicians.com**

©2006 All Rights Reserved

For duplication of this article, please contact Dr. Kono

Warm-Up on Low Brass Instrument

by

Dr. Yutaka Kono

Assistant Professor of Tuba and Euphonium

Texas A&M University-Kingsville

Before starting each day of practice and performance, low brass players (or all musicians for that matter) should start with a good warm-up that will get them ready to play. This simple task is often overlooked or taken for granted, but by giving a few attentions it can be an effective tool to develop one's skill on the instrument.

First, let's establish what warm-up is.

Warm-up for low brass players is:

- To prepare the muscles involved in playing
- To be ready mentally
- To warm-up the instrument for more accurate intonation. (Pitch will be lower on a cold instrument.)

Warm-up for low brass players should be:

- Short
- Non-stressful physically (including chop and fingers/arm)
- Non-stressful mentally

Warm-up for low brass players should NOT be:

- Long
- In the upper range
- A practice session
- Daily routine session

The purpose of warm-up is to be ready to play or practice. There are three major components involved in playing an instrument: your body, your mind and the instrument. Before you can start playing the instrument, all three of them must become ready. A light stretching exercise won't hurt, since you are going to be sitting on the chair for a while. Also, stretching can help blood flow, and sends more oxygen to your brain. That won't hurt either. Then, a short warm-up must follow. Try to do the same warm-up every time. It will be like a signal to your brain that it is time to concentrate and practice. Also especially for low brass players, if the instrument is cold, the pitch tends to be flat. Hence, you need to warm-up the instrument as well. This will happen automatically after a few minutes of a warm-up routine.

Often, the brass players would say warm-up and daily routine is interchangeable or daily routine is a part of warm-up. In my opinion, they should be separated, since their

purposes are completely different. As they are mentioned above, the purpose of warm-up is to prepare body, mind and instrument for performance or practice. However, the purpose of daily routine is to develop ones skill by practicing a certain technique everyday. In other words, daily routine is an exercise that you already know how to play, but requires continuous progress and maintenance by performing it on daily basis. For example, lip slur is one of the most problematic techniques on brass instruments. One may already be able to play an exercise with lip slurs, but the technique itself certainly is not something one can play perfectly in a day. Even if you can play it well, you want to practice it continuously to make it even better. If you feel you can make a tremendous progress on the exercise in one practice session, of course, you should practice it.

One of the reasons to separate warm-up and daily routine has to do with how human brain works. When we do things that take concentration, the amount of focus that our brain can give does not stay at the same level. It will peak in the first few minutes; then, it gradually decreases. It has been said that you will have most concentration in first 30 minutes of your practice session. And when we say you have more concentration, that means you will be able to learn more materials. So why would you want to waste this precious time on the stuff you already know how to play? Since we want to utilize this high concentration time on learning, warm-up should be as short as it can be, and practice session to learn new material should start immediately. Of course, the time you need to take to warm-up can vary depends on a personal habit, skill level, and/or amount of practice you do. It may be two minutes for some, may be longer for some, and even longer if you are coming back from a vacation. In addition, if the exercise (i.e. lip slur) which should be in daily routine needs more attention, then it should be a part of practice session until you can play it without the maximum focus.

Another reason that we want to separate warm-up and daily routine session is that many daily routine exercises can be stressful to our chops. If we practice strenuous exercises such as lip slurs or high range exercise in the beginning, even if we want to use those techniques in the music we want to learn, our chops may be too tired. Just imagine two separate scenarios: practice a solo with a lot of high notes, then work on a your high range, and work on your high range, then practice a solo with a lot of high notes. In the first scenario, you will be able to learn the music faster and more, because of the high concentration time. Assuming you had an effective warm-up, you should be able to practice high parts with more success. (Successful play=progress.) In the second scenario, after you finish with high range daily routine, your lips will most likely be tired, and concentration is a little lower. Then you will need to learn a new piece with high notes. Chances of getting those high notes are probably decreased, and you need to practice it more to get that part better, therefore taking longer time to practice. Now, which one sounds like a better plan?

The topic of daily routine is covered briefly in this article, but it will be discussed even further in another article.

Warm-up exercise #1

The following warm-up exercise is designed to incorporate the three key elements of warm-up for low brass player: physical, mental, and the instrument, plus a few important elements of low brass playing. The warm-up will start on a comfortably playable note, then gradually increases the amount of necessary control, and air usage. While getting the body ready, you can also relax mentally and get your mind ready for a practice session. And of course, with the long tones, your instrument will be nice and ready by the time you finish it. This warm-up will also help you with increasing lung capacity, breathing control, relaxation, firm articulation, tone, intonation, relaxed embouchure, and volume control without becoming physically or mentally stressful.

Because of the incorporation of several different elements, it is more involved than just playing the right notes. Please take your time to read the following instruction very carefully. Also before you start on this warm-up you may want to get used to the breathing and articulation (1-12) without your instrument.

How to use this warm-up *IMPORTANT

1. Take a slow full breath, but not to the point that body tenses up. Accumulate the air from the bottom of your body, and think filling up to 99% of your lung capacity.
2. Close your mouth with your tongue to be ready to articulate.
3. Release the air while keeping the tongue in the same closed position. Don't let any air escape.
4. At this point, air pressure will be building in back of your mouth.
5. Relax your shoulder and abdominal area completely. The whole weight of air pressure should be resting on your tongue and tongue alone.
6. Release your tongue. Consistent and large stream of air should be coming out of your mouth without needing to be pushed
7. The result should be a firmly articulated pitch at a fairly large dynamic level (mezzo-forte) with consistent stream of sound.
8. Keep exhaling though the sound. Don't blow.
9. Keep the first note moderately short (1 to 2 seconds), then slur to the next note. Use slide glissando if you are playing this on a trombone.
10. Keep the airflow consistent. Do not let the volume to decrease
11. Second note of the slur should be longer than the first note
12. Listen to your sound carefully, and ask yourself questions.
 - How is my sound? Does it have a characteristic good sound?
 - How was my articulation?
 - Is my tone steady?
 - Does my pitch fracture, especially at the attack, when moving to the next pitch, and when I cut off the note?
 - Etc.
13. When you reach a point that requires you to blow the air out instead of just exhaling (which is called the rest point) stop playing the note
14. Every time you come to a rest, tell yourself that you are going to

- Be more and more relaxed as you go lower
 - Take even fuller breath as you go lower
 - Use even more air as you go lower
15. Repeat from 1 on each slur.
16. Try to reach the lowest possible note that you can play on your instrument, but you don't need to try to reach for an impossible note. Depends on your instrument's valve configuration, you may need to skip a few notes.

Warming up muscles and body

When you are not quite warmed up, even a long tone can be stressful to your chop. (If you don't believe me, learn to circular breath and hold a note for 3 minutes. By the time it's finished, you will believe me.) By taking a slow breath between each slurs and not going to the bottom of your air supply, there will be plenty of rest. While you are resting between the slurs, focus on your inhaling, and while you are playing, focus on relaxing.

By starting at relatively lower pitch and moving gradually to even lower pitch without ever going up, you will be able to warm up your chop without increasing tension of your embouchure.

Breathing Exercise

Keep your inhaling speed somewhat slow, and let it accumulate at the bottom of your body. Try to fill up your lung comfortably full. Do not come to the point that your body feels like starting to shake. Each time you inhale, try to inhale bigger quantity of air, while remaining relaxed. By taking a full breath each time, you will become accustomed to taking a full breath when you play, and also will help you to increase your lung capacity. Since breathing is a complex subject, I am not going to discuss it in a detail here. If you are interested in further reading on breathing, take a look at *Arnold Jacobs: Song and Wind* by Brian Frederiksen.

As you go lower on each note, you will need to use bigger quantity of air, and this exercise will encourage you to do that gradually. Every time you play each set, tell yourself to use even bigger and more relaxed air. Mental images such as exhaling hot air or fogging up a mirror with your breath may help you. Since you are using more air as you go lower, the notes will become shorter and shorter. Let them become shorter, but don't neglect to use a lot of air.

Lose tension

In the above instruction of how to use this exercise, I explained the process of articulation in detail. In the first few runs of this exercise, some people may notice that tension can build up in shoulder and chest area while taking a breath. During the process of articulation, there is a spot that you can check your body tension. After you close your mouth with your tongue and released the air, air pressure will build up. While you continuously hold your tongue to the position, see if you can relax your shoulder and chest area. By doing so, you may feel more pressure build up. Continue to rest the whole weight of the air pressure on your tongue and tongue alone until you release the tongue. Then, mostly likely you will have a heavy burst of air with a thick stream of air.

In low brass playing, that's enough air pressure to play most of the time, and certainly enough to play this exercise. If you succeeded in this process, you just played a note without unnecessary body tension. Your goal is to come to the point that you are relaxed the moment you place your tongue in position every time you articulate.

When you exhale naturally without forcing the air out, the air stream will stop around 2/3rds of your air capacity, and this is where you stop playing as well. You should have a decent amount of air left in your lung, and if you push it out, it should come out. But in this exercise, you don't need to use that air. Since pushing the air creates tension, and we are trying to eliminate the tension. So, once air stream stops automatically, let the sound stop, and go back to inhaling again.

One of the hardest things to do when you are not warmed up is to play an ascending interval. And, this is where players usually start to tense up or creates a funky embouchure. They will just focus on getting the pitch and forget the correct form of embouchure or air stream. In this exercise, you don't need to worry about that, since there is no ascending interval. By avoiding ascending interval, you can focus on relaxing the muscle and embouchure, just like doing a stretch for your mouth before a workout. By the time you finish, you should be comfortably warmed up and ready to play ascending intervals.

Warming up your mind

In neuroscience, brain waves are organized from high to low frequency like this:

- Beta, highly alert
- Alpha, alert but relaxed (maximum learning state)
- Theta, drowsy, about to fall sleep
- Delta, deep sleep

Optimal state of brain for learning is when its producing low beta to alpha waves. However, in this busy society, our brains are often going at very high pace. This high speed state, our brain is producing upper to middle beta wave, and focused more on reacting than to learning. By relaxing, we will be able to bring down the frequency of brain wave to alpha wave, which is considered to be the maximum learning state. Just remember that alpha wave is between high alert and drowsy.

To bring down the frequency of brain is the tricky part. Those who has seen a hypnosis show may remember a scene that hypnotist is swinging a pocket watch in front of a person and repeating "you are getting sleepy...you are getting sleepy..." then the person falls a sleep. Part of the reasons this happens is that human brain has a tendency of believing continuously repeated statement.

You can use this technique to slow down the brainwave also. While you do this warm-up, you can tell yourself in a calm inner voice, "I will be more relaxed as I go lower," repeatedly. You will be amazed how relaxed you can be. Of course, deep breathing and continuous repetition of patterned notes help too. By the time you reach the lowest you should feel very relaxed, and your brain is producing low beta to alpha wave. At this point, your brain should be ready to practice.

Also, remember that if you are angry, frustrated or stressed, your brain is most likely producing a very high beta wave. If you are in that state, you are nowhere near an optimal learning state.

This short warm-up exercise may seem simple on the staff paper, but the most important part of it is the part that cannot be written in a traditional musical notation. You must be aware of how to play it correctly, why it needs to be done, and what should be going on in one's brain. This warm-up may seem time consuming with all the fermatas, but it only takes about 3 minutes.

Notice to music educators.

This exercise can be an effective tool to warm-up as well as to develop fundamental skills like breathing and articulations. However, since there are so much more involved than just the notes, don't just give this exercise to your students and expect them to do it correctly. Notes on this exercise are rather simple, but what needs to happen in your head is not. Especially if you give this exercise to younger student without a proper instruction in a group setting, it will become a competition of who can play the note the longest. The problem is that if they try to play the notes longer, they will start pinching the embouchure, and use less and less air as they go lower. This defeats the purpose on two ways: not using more and more air as you go lower, and competition=stress=beta wave. Some students will do this even WITH a proper instruction. What I usually tell them is that if you can hold the note longer than everyone else, you are doing something wrong, and you probably need to use more air. Just use a calm voice and tell them like a general statement.

The range notated on this warm-up is extensive to serve a wide range of proficiency. For younger players, one octave of this exercise may be all they can do. If that's the case, but you believe they need more warm-up, you may want to play the whole thing twice. Since this utilizes the lower range considerably, some notes are impossible to play on a 3 valve instrument.

Finished?

By the time you finish this warm-up correctly, you should feel very calm and relaxed---especially your embouchure. Until you get used to the exercise, next pitch you play will be aimed too low, and most likely that note will be cracked. You know you did this warm-up correctly when that happens. After several days of using this as your warm-up, you won't have any problem getting the first note after the warm-up. What I recommend you to do next is to move on to Warm-Up Exercise #2 which is designed to be a bridge between a warm-up and practice.