I am a huge believer in the power of *mouthpiece buzzing*. Buzzing is a great way to warm up the air, the ears and the lips. Be sure to buzz the mouthpiece the same way you blow the horn (with lots of relaxed air flow and minimal pressure). I often check my airflow in the following manner: blow air (don’t buzz) through the mouthpiece and feel the amount of wind you get through the shank; now, buzz a tone on the mouthpiece and feel for this same wind to come through the shank while your lips are vibrating. Don’t allow yourself to squeeze a tight sound out of the mouthpiece with little or no air flow.

**Mouthpiece Buzzing:** In exercise #1, check for this relaxed air flow on simple long tones as well as long glissandos as high and low as you can comfortably buzz.

1. ![Mouthpiece Buzzing Exercise 1](image)

In exercise #2, work for a smooth glissando in measures 1-2 and 5-6 that translates into a gentle bend between slurred notes in measures 3-4 and 7-8. Balance the work between the embouchure muscles and the airstream; you should intensify the air speed slightly as you ascend, relaxing it slightly as you descend. Repeat exercise #2 as desired, starting on different pitches to stretch higher or lower.

2. ![Mouthpiece Buzzing Exercise 2](image)

In exercise #3, the plus sign indicates a seal between the mouthpiece and the lips, while the open sign indicates a break of that seal - arc the upper rim away from the top lip while maintaining contact between the lower rim and the bottom lip. Keep the corners strong to maintain a stable pitch while the seal is broken. Blow with a full, free-flowing air stream; it may help to imagine your air gently pushing the mouthpiece away from your face. As you return the mouthpiece to the sealed position, use the minimal amount of pressure needed on the top lip to create a seal - your bottom lip should act as the anchor for your embouchure. Repeat exercise #3 as desired, starting on different pitches to stretch higher or lower.

3. ![Mouthpiece Buzzing Exercise 3](image)

I always buzz my mouthpiece before I play. I recommend it as the first part of your daily warm-up. When done correctly, a mouthpiece warm-up will help the very first notes that you play on your instrument to feel and sound great!
Low Brass Warm-up

Compiled by Dan Cherry

**Long Tones:** Always strive for your most beautiful tone from the very first notes that you play. Listen for great intonation and a smooth change from note to note. Stay in the same partial as your starting pitch: use 6th and 7th positions on trombone, 1-3 (4) and 1-2-3 (2-4) on euphonium. This will help to stretch and warm-up the arm and fingers as well. Treat your long tones as a breathing exercise: take deep, full breaths and use all of your air on each 3 measure phrase. Focus on a smooth interchange between your inhalation and your exhalation – don’t hold your breath or stop the air before the initial articulation. It can also be helpful to practice using breath attacks to start each phrase.

1. Check for a fast, smooth and relaxed slide motion: there should be no audible glissando if you’re tonguing the notes
   - for a variation, play these long tones with *no tongue*: with slow glissandi for a comfortable stretch, or with fast glissandi to work on slide speed and accuracy

**Euphonium:**

- be sure that the valve action is quick, and that the fingers push the valves straight down
- also check that the timing of the fingers is coordinated, especially on the 3rd and 4th valves
Lip Slurs: Using mouthpiece exercise #2 above should help to set you up properly for these lip slur exercises. Remember to balance the work between your air and your chops: too much reliance on the air will result in explosive ‘pops’ on ascending slurs, while too much reliance on the chops will likely produce a very squeezed, strained sound. Always maintain good air flow – a subtle crescendo throughout each slur will help. Don’t be afraid to open up the jaw/oral cavity to create more space for the low notes. Make any embouchure adjustments as subtle as possible, but don’t sacrifice the sound quality in the name of refusing to change the jaw or tongue position. (Please note – this does NOT mean changing the placement of the mouthpiece on the lips.)
Low Brass Warm-up

Compiled by Dan Cherry

Legato Matching: This exercise involves a different approach for trombone and euphonium players, but it is designed to help any low brass player achieve an important goal: playing with a beautifully connected legato technique regardless of slide motion, valve combinations, or changing between partials. Once again, a relaxed, flowing airstream will make the rest of your work a lot easier.

Trombone:
- the key to this exercise is to match the sound of your legato tonguing to the sound of the actual lip slurs (between partials).
- first, play the exercise with no tongue to work both the air flow and the slide technique; notes should be absolutely connected, slide should be quick and accurate (intonation)
- add a solid but gentle legato articulation (dah or doh) to the notes on the same partial; match the sound of this articulation to the sound of your natural slurs

Euphonium:
- play this exercise completely slurred, making sure the air flow is steady and relaxed and the valve action is quick and well coordinated
- work to match the sound of the valve slurs and the lip slurs (most players achieve a gentler slur sound on the valve changes, so try to match that same smoothness on your lip slurs)
Articulation/Scales: It is important for brass players to warm up the tongue as well as the air, lips, etc. This exercise combines tonguing on a repeated pitch with tonguing in coordination with slide and valve changes. As a general rule, players should strive to use more air and less tongue when working on articulation. The tongue should ride the airstream, not force the air out. Let the tip of the tongue move up and down (not front to back) in the mouth, and avoid allowing the tongue to strike between the teeth except in the extreme low register. Practice tonguing with various articulations and note lengths, but don’t play any shorter than the demands of the music requires. These exercises also stretch into the upper register; focus on a faster air speed as you ascend.

Exercise 4a uses major scales in flat keys; exercise 4b uses major scales in sharp keys (and C). I like to alternate between exercises daily or weekly to keep all the scales fresh.
Low Lip Bends: This exercise is designed to stretch the embouchure muscles, open up the tone, and increase control over the airstream. The goal is to produce a false tone (the note in parentheses) that is in tune and as close to the actual tone of your instrument as possible. Bend into this false tone by opening the jaw, slightly relaxing the lip tension, slowing the air and easing into the lower pitch. *Stay in the same slide position/valve combination as the preceding pitch.

Trombone:
If you have an F-attachment, make these into 4-note slurs by playing the second note of each phrase on the valve.

Euphonium:
If you find the above exercise too difficult (or impossible!), try the following variation: