

# Tuning Your Tuba

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An organized and orderly tuning method is essential for optimal performance of an instrument. This is particularly important in order to evaluate an instrument. Tuning must involve more than merely adjusting the main tuning slide. Proper adjustment of all slides is essential for the best response, intonation and evenness of the instrument.

All tunings are a series of compromises - no system results in a perfectly tuned instrument. Many valid tuning methods exist. Without refuting any method, I offer my preferred method.

The primary register for tuba use is the low register as this is the only instrument capable of performing the lower notes with power and a broad tone. 'Lipping' in this register often results in more distortion of sound, particularly with younger players. Also, since many of our louder volumes in ensemble situations are done in the low register, it is an asset to have this register tuned accurately. One must think so much about air flow, tone and projection, it is helpful not to be concerned with adjusting intonation radically. A slide that is too short will cause the greatest trouble in the low register where most players tend to play sharp more often than flat. Also, it is generally easier to adjust intonation upward by lipping slightly in the upper register than it is to 'lip down' in the lower register and preserve power and tone centering. In order to assure the instrument's best performance in this register, it is of particular importance that slides are correctly tuned.

## FIRST STEP

For these reasons, I prefer to tune to the open 2nd partial (on BBb tuba, low Bb; on CC tuba, low C; on F tuba, low F) first. Tune this note with the main tuning slide, then check the other open notes. In some instances, additional adjustment to the slide may be necessary to help overcome intonation deficiencies of the instrument. This compromise must be worked out separately for each instrument and each player.

## SECOND STEP

After arriving at a workable compromise on the open tuning, tune the 2nd slide to a true half-step below the open 2nd partial. This should be an accurate half-step that settles solidly in tune in the low register with a rich open sound. Then check the upper harmonics and make adjustments only if absolutely necessary.

## THIRD STEP

Next adjust the 1st valve to a clear whole-step below the open 2nd partial. Check the upper harmonics.

## FOURTH STEP

The third slide tuning is particularly important. This is tuned to a clear 1 and 1/2 steps below the open 2nd partial (BBb tuba, G; CC tuba, A; F tuba, D). The 1 and 2 combination in this register is invariably sharp and the 3rd should give a better alternative. Before moving on, however, check the 2 and 3 combination in the low register. If this is sharp, pull the 3rd slide to compensate. In our country, the 3rd is seldom used alone and the additional length will help intonation when 3rd is used in combination with other valves. The compensated length should still allow for performing the 1 and 1/2 step below the open 2nd partial with 3rd valve alone rather than 1 and 2.

## FIFTH STEP

The fourth valve is now tuned to a perfect fourth below the open 2nd partial (BBb tuba, F; CC tuba, G; F tuba, CC). This low note is always important in typical tuba parts and should be solidly in tune. If this leaves the whole-step above the open 2nd partial slightly flat, then the 1 and 3 combination should give a usable alternative. If the 3rd valve has slightly more length as with the previous tuning procedure, then the 1 and 3 combination should be only slightly sharp. With a slight adjustment to the 1st valve slide when this fingering is used, this should work well. In fast passages, either fingering should work.

## SIX A

The 5th valve as a flat whole-step, should give the perfect fifth below the open 2nd partial when used in combination with the 4th valve (CC tuba, F; F tuba, BBb). With the 5th slide pulled adequately to play the 4 and 5 combination in tune, this should give enough length to play other low tones which use the 5th valve in combination with other valves in tune.

## SIX B

The 5th valve as a major third (2 and 3 combination), should be tuned to a solid major third below the open 2nd partial. Before moving on, check the 4 and 5 combination for intonation. (Note: With the major third 5th valve, many find it less necessary to use the extra length on the 3rd slide.)

This method for tuning should result in a good starting point for tuning your instrument. From this point, you may choose to make minor adjustments to suit your particular instrument, your particular playing/intonation needs or to suit a particular musical selection or passage. Never treat the slides as if they are 'set for life'. All professionals are constantly making minor adjustments. Systematically tuning your instrument should assist you in developing and refining your personal playing requirements, but always remain open for change.

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