Sound Improvement

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Brass instruments are simple acoustic amplifiers. They take the sound information that we input via buzzing the mouthpiece and amplify it. This is similar to a home stereo system. In the stereo, when a record is played, the sound begins as vibration of the needle in the grooves of a record. This vibration is transferred to the amplifier by the medium of electricity and carried by wires. The amplifier amplifies the signal without changing it significantly unless some filter is used (such as standard treble and bass controls).

The sound system of brass instruments is very similar. The source of sound production is the buzz. It is transferred to our amplifier (instrument) by the medium of air conducted into the instrument by the mouthpiece. The instrument then amplifies the signal with a set filter system (i.e. some instruments are brighter, darker, etc.). In either case, in order to receive the best sound possible, every component must be efficient and matched to each of the other components. A bad cable from the turntable can make the sound suffer, just as a poor mouthpiece can cause problems.

An important fact to note is that no matter how good the components are, a bad initial sound signal will result in bad sound. If the record is worn, the sound will crackle and the better the sound system, the more noticeable this deficiency. A weak or poor buzz will always produce a less than perfect sound. For this reason, I and many other teachers emphasize work on basic sound production through work on the buzz the source of the sound.

The Key: Mouth Piece Buzzing:

Anyone that can play a brass instrument can produce a buzz on the mouthpiece, however, some work may, be required to achieve a buzz in cases of a particularly inefficient embouchure. Not all registers are equally easy to buzz. Buzzing in the low register tends to be more difficult and requires practice. The time spent on improving the buzz is time well spent as every improvement in the buzz is reflected by improvement in the efficiency of sound production on the instrument.

A key point to make at the beginning of mouthpiece work is that we must produce the same buzz while buzzing the mouthpiece as when playing the instrument. Nothing is accomplished by learning to buzz the mouthpiece efficiently and then playing the instrument in the ‘same old way’. We want to improve the buzz and then use the improved buzz on the instrument.

What do I buzz?

Any material is good to use on the mouthpiece solos, band parts, pop songs, scales, etc. It is generally a good idea to begin with some easy middle register work and expand the range in both directions. If at first your range is limited on the mouthpiece, glissando octaves up or down to increase the range. Establish the pitch and maintain a steady buzz throughout the glissando until you reach a perfect octave, then take a breath and repeat the exercise up or down a step or half-step as appropriate. Be sure to keep air in the glissando and do not allow breaks in the buzz. This exercise will quickly increase your range.

What should I concentrate on?

When buzzing the mouthpiece, concentrate on a solid, dense sound that is void of extraneous noise. Be very conscious of pitch accuracy and intonation in every aspect of buzzing remember, the buzz will be amplified by the horn, so make the buzz as excellent as possible and buzz musically as if it were an actual performance.

Results:

Regular use of mouthpiece buzzing will result in immediate improvements in sound. I know of no other exercise which produces results so quickly. The key to success with mouthpiece buzzing is quality of time rather than quantity of time. Five to ten minutes of accurate, well focused buzzing is much more effective than an hour of airy, inaccurate work. A few minutes of buzzing in the warm-up or pre-warm-up can help get things off to a good start. Mouthpiece buzzing is also an excellent way to learn pieces more quickly. When you can accurately and musically produce the musical line, the only task that remains is to ‘push the right button’.

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