



HORN

Even if you tune your instrument correctly, there are still some factors that will cause it to play out of tune. There are MANY factors that will affect pitch, but here is a summary of the most common:

FACTOR	AFFECT
Right Hand Position	If the right hand is held too far into the bell, it will cause the pitch to be flat . If the right hand is not held far in enough, it will cause the pitch to be sharp .
Vowel Shape	An incorrect tongue position can greatly affect pitch. To correct sharpness in pitch, open up the space inside your mouth by saying "TOE." To correct flatness in pitch, arch your tongue by thinking of the syllable "TEE." Focus on increasing your air support and aiming the air stream forward.
Air Support	Slow, weak air speed will cause unsupported tone which may cause sharp pitch. Fast, over-blown air speed will cause wide, uncontrolled tone with may cause flat pitch.
Endurance Strength	As an individual plays over a period of time, the pitch may go sharp . However, playing when overtired will create flatness in pitch.
Temperature	Playing louder dynamics will cause the pitch to be sharp . Playing softer dynamics air temperature will cause the pitch to be flat .
Dynamics	Warm air temperature will cause the pitch to be sharp . Cold air temperature will cause the pitch to be flat . For best results, play in a space that is around 72 degrees Fahrenheit.
Equipment	An instrument that is not in good working order will cause poor pitch overall. Dents and mechanism misalignment are all signs of an instrument in need of a repair. Have the instrument checked by an instrument repair shop once a year.
Partials	Brass instruments are built off something called the harmonic series. Due to this configuration, different partials have different pitch tendencies: 1st, 2nd, 4th, 8th, 9th, 11th- okay in pitch 3rd, 6th, 12th partials: slightly sharp 5th, 10th partials: moderately flat 7th partial: very flat
Valve Combinations	The construction of the instrument causes different pitch tendencies with different valve combinations: 1st, 2nd, 3rd- okay in pitch 4th- moderately sharp 5th- moderately flat 6th, 7th- very sharp