

You can possibly alleviate some of the frustration caused by notes being "not quite right" by considering what goes on when you listen. Assume we want to tune the unisons to the D above the middle C on the piano. We already know that D above middle C is rated at 294 cycles per second. Let's say you get one of the unisons to what could be measured at 300 cycles per second, and the other one sounds just about right when you get it to, say, 291. What your ear then registers on your brain is a frequency of 300 cycles per second, one of 291, the difference between the two or nine cycles per second, and the total of the two—591.

So four things are actually happening. When you crawl down into it, you also realize that there is a wavering frequency which blends the notes together—although it's hard to isolate.

One final thing...When you pluck a string too forcefully, you stretch the frequency of its sound by another five or ten cycles per second. So after you think you have your strings tuned, you may have to go back and temper them so that they blend properly, although each may have been all right by itself. And if you are dealing with new strings, you'll have to adjust their tuning regularly for the first day or so until they "break in." Don't be upset if your strings seem to go out of tune almost immediately. They will stabilize.

If you are not yet tuned...relax. You have been bombarding your ears, chasing down sounds you're not used to finding, and you may have rendered yourself temporarily tone deaf.

Tuning is something for which you have to get in shape. Many of the world's best musicians sometimes find it hard to tune, so give yourself a break.

Go for a walk.

Listen to some music.

Do something entirely different.

And then come back to tuning.

We can both remember hours of trying to tune