

HOW TO SELECT A NEW CLARINET

by Tom Ridenour

Choosing a new clarinet is not rocket science. But it isn't falling off a log either. Like in all endeavors, the more you know and the less you guess the better decision you can make. Of course, there are many things that we can know about the clarinet requires years of practice and experience to understand and apply. For this reason, if you are a young player it is important that you have someone with more experience and skill to help you select a fine instrument.

Our first impression of a clarinet is usually what we feel and what we hear: the tone and the basic resistance. And often players don't go beyond this first impression in selecting a clarinet. The danger here is that many features of the clarinet may be missed which may later cause problems in performance.

The best way to make sure that you don't have any unpleasant surprises after the clarinet has been purchased it to have a system of testing that will give you as much objective information as possible about every aspect of the clarinet.

Let's look at each of these aspects separately.

TUNING

The clarinet needs to play in tune with the groups you will be playing in, and play in tune with itself.

Playing in tune with groups can usually be accomplished by various combinations of barrel lengths, bore tapers and mouthpieces.

Today there are many mouthpieces on the market which have Chedeville style interiors. These include my own Ridenour Model Z, Gilliotti, Gennusa, and the M13 Vandoren. These mouthpieces tend to be low pitched; that is, they will play 440-441 Hz. with the standard 66 millimeter barrel supplied in most professional clarinets. If your organization plays on the high side (442Hz+) and you prefer this style of mouthpiece you may need a shorter barrel, or else risk the danger of playing flat to your group at least until you are well warmed up.

Once you determine that the instrument you are selecting will play at the pitch level of your performance groups you need to check to see if the clarinet will play in tune with itself.

The best way to do this is to first warm up the clarinet well in a room that is around 70-72 degrees.

Once the clarinet is warm play the open "G" and pull the barrel until it is in tune. Sometimes the open "G" is quite sharp to the rest of the instrument. This may actually an advantage, since its' tendency toward sharpness will allow the player to cover the right hand fingers and still play the "G" in tune.

Putting these fingers down will make the open "G" better in tone and will make playing the middle break smoother as well.

Once the open "G" is in tune by pulling the barrel, test the clarion "G" and pull the middle joint until the octave "Gs" are in tune with one another. So half of your tuning is done at the barrel and half at the middle joint.

Once the "Gs" are in tune you are ready to see how well the clarinet plays in tune with itself.

Test the tuning from low to high by playing slow arpeggios. Also play the twelfths and see if there is any spread between them. For instance, play low "Bb" for several seconds then touch the register key and produce clarion "F". See if the needle of the tuner moves

when you make the change to the "F". If it stays the same you know that the "Bb" and "F" are in perfect relation to one another. If the needle moves then there is a ratio spread.

Go throughout the clarinet testing the twelfths. If it is a small bore clarinet you will most likely find that the twelfths are pretty good in the middle of the clarinet, but there is a spread in the twelfths at either end of the clarinet (E-B, F-C,D-A).

This is common to most clarinets, especially the small bore clarinets most of the best players play. There are no perfectly in tune clarinets, but it is good to keep the ratio spreading to a minimum.

One thing to watch out for is right hand sharpness in the low register. especially low "A". "Bb". "B". and low "C". Large bore

clarinets (bores over 14.7mm) can be very problematic in this regard. If you select a larger bore clarinet it is not likely that you will be able to play in tune with other clarinetists.

Almost 95% of professional classical players today play small bore clarinets, and they do this primarily because the tuning is better.

Once you are in tune on the open "G" check the throat tones to see if you can play them in tune as well. It is good to have a bit of sharpness in these tones because that will enable you to use long fingerings to improve their tone color and resonance. If they are just barely in tune adding the long resonance fingerings may make them go flat.

If the throats are flat you may want to try a slightly higher pitched mouthpiece. Some of the Chedeville style mouthpieces not only tune generally low, but individual mouthpieces may play the throat tones low to the rest of the clarinet.

If you are simply in love with your mouthpiece and find a specific clarinet, but the throat tones are low, don't despair. All is not lost! It is not a great problem to tune the throat tones to play quite well in tune for the mouthpiece you love so much with no detriment to the other playing properties you like.

We at Ridenour Clarinet Products do this routinely for players caught in this and similar dilemmas.

RESISTANCE

Resistance can be a deceptive thing. Most usually players gravitate to freer blowing clarinets, but this is a very superficial way to choose a clarinet.

The most influential factor in resistance is the mouthpiece/reed combination. Players who tend to play a very easy blowing set ups tend to prefer more resistant clarinets. Conversely, players who to play resistance set ups tend to prefer freer blowing clarinets.

Understanding this makes it easy to see that it is best to have a variety of good reeds, which are responsive, but which blow with different general resistances on hand when testing clarinets. In this way you can test freer clarinets and more resistant clarinets with a reed that better compliments each.

If you only have one reed you will ultimately be picking a clarinet to fit the reed of the day, and this will not always help you find the best clarinet.

Generally, those players who like to play the solo and chamber repertoire gravitate to a more flexible, "solistic", and colorful instrument, while orchestral players look for tonal center and projection.

There are, of course, clarinets which do both jobs well and if a player must do both the versatility of the instrument ought to be an issue in selecting the right instrument.

Of equal importance to the general resistance of the clarinet is the evenness of resistance. If the clarinet is uneven in resistance it can be very difficult to play and control. The clarinet may have a beautiful tone, but uneven resistance can make it miserable to play.

TESTING FOR RESISTANCE

Testing for evenness of resistance requires a bit of discipline from the player in that he or she must keep the same embouchure/air proportions as he or she plays throughout the clarinet. In performance you will have to adjust of course, but in selecting the clarinet you are testing it, not vice versa.

As you play slow arpeggios, scales, over the middle and high breaks, wide intervals and so forth listen carefully to see if the tone color and shape remains consistent. Does the tone get brighter and thinner? or duller and thicker? Do the notes speak the same with the same embouchure/air pressure?

Also notice how the air and lip feel as you play intervals. Can you keep the volume the same without changing air and embouchure? Can you play the same passages both loud and soft with basically the same embouchure/air?

As you play reflect on these questions. Of course, no clarinet will play without any adjustment whatsoever, but some play well with much less adjustment than others. Basically, the clarinet which tunes the best and demands the least embouchure/air pressure exchanges to play the full pitch and dynamic range of the clarinet will give you the best results.

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FLEXIBILITY AND STABILITY

The clarinet need not tune or color the same throughout, since some areas of the clarinet are more easily adjusted in tone shape, tuning and color than others. Basically, the longer the tube required to produce the note the less flexible in color and shape the tone will be.

Conversely, less flexible tones in color and shape tend to be more stable in pitch when playing dynamic extremes. Shorter pipe notes, like the throat tones are the most flexible, and can be lipped down pretty easily without losing much of the integrity of tone color and shape.

It is critical that the clarinet be as stable as possible in tone color, shape and pitch. In order to test these aspects it is necessary to play the different registers and areas of the clarinet at different dynamic extremes.

It is also good to test the "hold" an instrument had by seeing how much you can relax your embouchure before the pitch drops and the shape loses its' focus. The clarinet which keeps the tone color and shape the best in these dynamic extremes and which goes the least flat when played loudly and least sharp when played softly is the most stable clarinet.

Free blowing clarinets can often be problematic at dynamic extremes, since they do not have enough "hold" to maintain the envelope of the sound when played loudly or enough support to maintain center and color when played softly. If this happens it means you will either have to cutback on the dynamic or increase the embouchure pressure on the reed to keep the shape from shattering and the pitch from sagging at the loud dynamic, or increase air pressure at lower dynamics to avoid biting and driving the pitch higher. Because of this free blowing clarinets can be very tiring on the embouchure to play.

Resistance clarinets have the opposite problem. They contain the sound well but lack flexibility in color, shape and tuning.

It is perhaps good to avoid clarinets which are extreme in resistance, and best to find a clarinet which has both qualities to great degree. They are not easy to find, but they do exist.

FLEXIBILITY; PART II

The player needs to decide what sort of playing he wants to do, how he wants to play technically, and how he wants his playing to develop.

This means he has to consider where resistance will be displaced in the clarinet.

If the clarinet is very free it will require that resistance be placed in the reed/mouthpiece/embouchure. If the clarinet tends to have more "hold" in the bore then flexibility will have to be built into the mouth-piece/reed/embouchure formula.

This is a deeply personal thing, but certain principles can be observed that are important to consider. Essentially, the greater "hold" or resistance to the air the more the embouchure can relax. The easier blowing the clarinet is to the air the more the embouchure will have to work to hold the pitch and shape.

There is no absolute here. But these principles are good to keep in mind as you go through the process of testing.

BARRELS AND BELLS

Barrels and to a somewhat less of a degree bells have a great influence on the qualities of tone and resistance which attract us to a clarinet. For this reason what may seem to be the best clarinet at firstblush may just simply have the best barrel, and perhaps the best bell.

As you test through the clarinets rotate the barrels and bells radially and see what difference each radial position makes on resistance and tone.

If you have several clarinets to play at once try playing through them quickly and find the clarinet which seems to blow and sound the best.

Then take the barrel from it and retest all the clarinets with only that barrel. The results may surprise you.

Once this has been done and the best clarinet has been found take BOTH the barrel and the bell and retest all the clarinets. In this way you know that you have the best barrel and bell combination to test the qualities of the right and left hands of the clarinets, and this will help you pick the best clarinet rather than simply the clarinet with the best barrel and bell.

A FINAL WORD OF ADVISE ABOUT TESTING

When ever scientists carry out a test they have a plan. They have a series of questions for which they seek answers. We as clarinetists need to do the same rather than relying on our general first impression.

First of all, we need to be able to concentrate on how the instrument responds, sounds and tunes and how it feels to us. This means that we need to test the clarinet with music that we could play in our sleep. For if we difficult music only we will put our attention on the music and not the instrument.

I suggest that a variety of musical passages be chosen for testing the clarinet; examples, each of which, will give you pieces of critical information you need to get a total impression of the clarinet's strengths and weaknesses. This process is aided by asking yourself specific questions as you proceed. Great clarinetists often do this process unconsciously as they test an instrument. They are usually just as interested in what a clarinet does as they are how it sounds.

A short list of these questions an experienced clarinetist might ask himself as he tests an instrument might be as follows:

- How well can I slur over the middle and high breaks at different dynamics?
- Can I keep my air and embouchure the same when I slur from long pipe to short pipe notes in the clarion register? Or do notes pop out or color differently unless I change the way I play?
- Does the color and shape of the tone remain the same in all the clarion tones, or does it change unless I adjust?
- Does the tone color and shape change on higher tones as I play from loud to soft?
- Does the pitch sag at louder dynamics unless I use more embouchure pressure? Or does the clarinet maintain the pitch, as well as the color and shape?
- Does the clarinet give me good support as I play softer? Or does the sound dilute and require more embouchure pressure to sustain it?
- Is the pitch stable as I play softer, or does it begin to sail sharp?

These and many other questions need specific answers.... answers which are critical to your ability to perform with security, confidence and panache! If you don't ask them and look for the answers in testing you may find the answers at an inopportune time, such as at a performance, lesson or rehearsal after you have purchased the clarinet. Avoid that by testing thoughtfully at the git go!

A FEW WORDS ABOUT PROFESSIONAL CLARINET MODELS

Testing the clarinet is one thing and deciding which models to consider testing is quite another.

Most players today play small bore clarinets, and the most popular model in America is the Buffet R-13. Players have been attracted to it's tone color and resonance.

However, since the advent of the R-13 in the early 1950's Buffet and other manufacturers have produced many other models which also deserve consideration.

For those who "long for the good old days" Buffet has recreated some of the qualities of the original R-13 design, most specifically the 14.61mm bore. Players who want more definition in the sound may find it attractive.

While being similar to the R-13, the Buffet RC, and Festival, the Leblanc Concerto and Opus, as well as some of the recent Yamaha models, due to their higher register tube placement objectively produce better left hand E-B, F-C ratios than the R-13 as well as having a bit more "hold" in left hand clarion tones.

Due to changes in wood and other factors, past years have seen clarinets made with this higher placement with an occasional tendency to actually play the traditionally sharper R-13 tones clarion "C" and clarion "A" actually somewhat on the flat side.

We at Ridenour Clarinet Products are aware of this occasional problem and we make sure that every one of these models are hand tuned before the clarinet is shipped for trial, thus saving your time and giving you a better clarinet for initial testing.

While many players may feel that this tuning improvement is not enough to make them abandon what they have always liked about

the R-13, for others it may be valuable to consider.

I would be remiss if I neglected to mention Selmer's beautifully designed and made clarinets. Among these the 10-G and Recital have both reached a high level of perfection in production. Recently, Selmer has also produced a revolutionary clarinet called the Signature. It is unique from a design standpoint for several reasons. But for the player it offers some remarkable qualities not to be found in other models.

Specifically, the Signature boasts the darkest, roundest and most stable tones, best tuning and smoothest response of perhaps any French clarinet ever made, especially in the first two registers. Remarkably, there is virtually no ratio spread at either end of the bore of the clarinet, and all this without any added mechanism!

Its resistance displacement is different from other French models in that, more similar to the German clarinet, more "hold" is placed in the bore of the clarinet, allowing the player more freedom and flexibility in the reed/mouthpiece/embouchure formula without the usual thinning and excessive brightening of the higher tones.

The Selmer 10S-II is also a fine, beautifully made instrument. With its' rich color, soft textured tonal shape, and smooth connection of intervals, it is a refreshing change for someone who wants a freer blowing clarinet minus some of the negative qualities commonly found in such clarinets.

A FINAL WORD

Whatever clarinet you might prefer I hope the detailed testing described above will help you gather the information needed to choose the best clarinet for your own needs and artistic preferences.

I use these detailed tests to select fine clarinets from Brook Mays' huge volume of clarinets, doing much of the work for you already. In addition, I make sure that the clarinets we send are in excellent mechanical and padding condition, helping insure that you are actually choosing the best clarinet rather than the one which might happen to be in the best playing condition.

If you have further questions about clarinets, purchasing clarinets or if you are perplexed about which clarinet to purchase please don't hesitate to call or E-mail us. We will do our best to be of help to you.

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