

*Tricks to instantly improve the sound of your clarinet section
and fix those last-minute instrument malfunctions!*

TECHNIQUE AND PLAYING ISSUES

1. Soaking the reed

- a. Saliva vs. Water
- b. Soak reed while assembling the instrument
- c. Older reeds need to soak longer than newer ones

2. Reed and ligature placement

- a. Compare sound quality—higher vs. lower on mouthpiece
- b. Turn the instrument around so you are looking at the front of the instrument and adjust so there is a bit of reed showing above the mouthpiece

3. Reed Strength

- a. Students regularly play on reeds that are too soft, resulting in a “honky” tone and flat pitch.
- b. Beginners: 2 or 2½
- c. Intermediate: 3 or 3½
- d. Advanced: 3½ or 4*
 - i. Reed strengths vary depending on brand—Vandoren tends to be harder overall than other brands. (Mitchell Lurie, Rico, etc.)
 - ii. If a student plays consistently flat with a sliver of reed above the mouthpiece, continue moving the reed up until it feels and sounds stuffy. If the reed is up an eighth of an inch or more, the student should try a harder strength or a higher quality reed.

4. Embouchure

- a. Corners in and firm, concave chin are the most important aspects of good embouchure.
- b. Firm embouchure without the clarinet first, then add clarinet without moving the lips
- c. Analogies
 - i. Drawstring around the mouthpiece
 - ii. Sucking a cookie-dough (or fruit) shake through a straw
 - iii. Whistling then bringing lips flat against teeth
 - iv. Smile then bring corners in
 - v. Putting on chapstick then bringing corners in
 - vi. “eee-ü” (Keep the “eee” tongue and move lips to “ooo”)
 - vii. Say “prune” and hold the “ooo” sound

- d. Advantages
 - i. Prevents or reduces biting
 - ii. Allows reed to vibrate more effectively
 - iii. Even intonation and ease across registers
 - iv. Bigger, fuller sound and eventually more control and flexibility
- e. When working on embouchure, students will be flat at first, but will learn to focus the sound with their tongue rather than by biting up on the reed

5. Amount of mouthpiece

- a. The reed vibrates in three sections, which correspond to the different registers
- b. It takes more reed to produce high notes
- c. Have students rotate playing in the altissimo in each rehearsal so that only one person is playing in the altissimo at a time. The others play an octave lower, and they get used to playing loud, with enough reed without biting. They will learn to control the sound without overpowering the rest of the band, and play more relaxed by practicing passages down the octave

6. Air support

- a. Exercises/Analogies
 - i. Holding a small piece of paper on the wall with air stream, then use that same support while playing
 - ii. Air spinning down through the bell
 - iii. "Tense your muscles as if someone were going to punch you in the stomach"
 - 1. This is an extreme exaggeration of the actual feeling; support is not tense as this example implies. Instead it is a feeling of relaxation of the muscles with exhalation. This is to be done away from the clarinet and simply gets students feeling the right muscles.

7. Thumbrest

- a. The entire weight of the instrument rests on a player's thumb. Particularly for beginning students or for players with small hands, this makes it hard to cover the holes, and the weight of the instrument in the awkward thumb position can cause a lot of pain. Additionally, thumbrests are often too low for the natural placement of the thumb and put the hand in an uncomfortable and tight position, hampering technique and causing pain.
- b. You can have a repairman move the thumbrest higher so that the bottom lines up with the middle of the fork B tone hole—it is fast and cheap while the instrument is already in for other maintenance.
- c. Quick and cheap cushions
 - i. Rubber tubing—available at any hardware store for 30-50 cents/foot
 - 1. Firmer is usually better to provide extra support
 - ii. Surgical tubing
 - iii. Pencil Pad—fold over itself for extra padding
 - iv. Leather or suede strap—cut from a sheet of thin, flexible leather available at any craft store

MAINTENANCE

The inevitable scenario—five minutes before a concert, a student comes to you and can't get a sound out of his or her instrument. The following are the most common problems and quick fixes that you can diagnose and fix in five minutes or less.

Essential (and cheap!) equipment:

- Small flathead screwdriver for eyeglasses
- Small rubber bands
- Teflon plumber's tape
- Plastic cling wrap
- Cotton balls
- Toothpicks
- Paper clips (and wire cutter)

Throat A Key adjustment screw

- Sound symptom: a) No low register (chalumeau) notes will speak; b) middle register (clarion) notes do not speak above G; c) consistent squeaking in all registers
- If this screw is tightened too far, the A key will not close.
- Solution: Loosen this screw with a screwdriver so that there is a little bit of play between the screw and the G# key. Without play, the natural swelling of the pads because of playing causes the A key to stop sealing properly.

Bridge Key

- Sound Symptom: right hand notes are stuffy, grunt or do not come out at all, particularly in the middle (clarion) register
- This often gets bent or lines up improperly when students are careless putting the instrument together, or when pads are replaced.
- Solution: Check to make sure that the lower joint portion is under the upper joint portion and that they are lined up. Next, check that the two pads attached to the ring keys hit at the same time when you depress just the right hand rings. If the lower joint pad touches slightly before the lower, it will still play, but if the upper pad touches before the lower, the lower pad will not seal and students will not be able to produce any notes below top-line F.
 - If there is play in the bottom pad, you can do one of two things:
 - Sand the cork on the upper joint bridge key until they seal evenly
 - Bend the upper joint bridge key up slightly. Hold the left hand rings down and lift the bridge key with your other hand. Be gentle at first and increase pressure if you are having trouble getting it to move. However, be careful not to break the key—that is not a five-minute fix!

Low B/E foot

- Sound Symptom: Low E and middle line B will not speak or are much more resistant than surrounding notes, with or without
- This slender key can get caught on clothing, bumped on stands, or the felt on the pad gets worn so that the F/C key and E/B key do not close simultaneously
- Solution: With one hand, hold the F/C pad closed. With the other, gently push up or down on the foot, making small adjustments until the two keys close simultaneously

The following are temporary fixes that will need to be properly repaired by a technician, but work in a pinch when there is not time for anything else

Tenon corks

- Symptom: Instrument rocks back and forth at tenon joints, is more resistant than usual when played, falls apart
- Solution: If the cork is broken but still present, wrap with a couple of layers of Teflon tape. If it has fallen off, remove any remaining cork and fill the space with paper folded to fit and wrapped in place of the cork. Wrap a couple of rounds of Teflon tape around the tenon to secure it and it should be good to go!

Missing pads

- Fill the pad cup with part of a cotton ball, packed in tightly so that it is thicker than the cup. Wrap Teflon tape or saran wrap tightly around the cup to secure it, the way you would wrap a cloth bandage.

Missing screws

- Best: Use a toothpick in place of a pivot screw. Wedge it into the empty hole and twist a couple of times so that it will stay. Cut off most of the excess with scissors or wire cutters. The wooden toothpick will secure pivoting rods without stripping or damaging the inside of the mechanism
- Alternative for longer screws: If a toothpick is too thick and you can't shave it down, use a straightened paper clip. Be careful not to push it in too vigorously, as the metal can damage the threads at the end of the mechanism.

Broken/light springs

- If a pad needs to stay closed and does not:
 - Wrap a rubber band around the instrument over the top of the pad that is blowing open. You can adjust the tension by tying a knot in the rubber band to make it tighter over the mechanism if needed
- If a pad needs to stay open and does not:
 - Wrap a rubber band just behind the pad on the mechanism and tie it by pulling it through itself. Pull the rubber band around the instrument back toward the post mechanism the pad rotates on. Tie it off around a post on the other side of the instrument, adjusting the tension by stretching the rubber band the desired tension while tying it.