

HOW TO FIX A DOUBLE TONING BASS DRONE

By Brett Tidswell, APBA Principal of Piping

There is nothing worse than to be in a pipe band and have a bass drone that just doesn't want to start. You see it often, some poor piper thumping away at their bag and the drone double toning each time. With the less experienced you often see them strike up, not realising it is them and half the pipe corps re-starts their pipes, whilst some unsuspecting newbie stands around with a bass drone screaming. I am sure you have all seen it.

Well here is the good news. It can be fixed! There can be several causes, but let's have a look at what they are and how to fix them in all set ups.

Let's start with the really obvious:

- Ensure there is no obstruction up the drone. Hemp that has rolled over the top of a pin, cobwebs, spiders, felt lining from your case, anything which may obstruct the bore.
- Next ensure that the reed is firmly seated into the drone with waxed hemp, does not move and is seated well into the seat with little or no hemp showing between the reed and the drone.

These first two are worth a check if you have time. However, the most common cause of the double toning bass drone without any doubt is poorly set tuning slides. In an emergency this would be the first thing I would check.

- The top slide should be positioned up on, or just above the hemp line. This opens the top tuning chamber and helps the drone to operate effectively.
- The bottom slide should be positioned lower onto the pin. About half way or two finger spaces above the mount.



Usually by raising the top slide and then tuning the drone down a little using the lower joint you can resolve the problem immediately. (*My bass, as shown above has a very long lower tuning pin with the mount turned well down on the lower section, so it appears to tune quite high, whereas in reality it is about right.*)

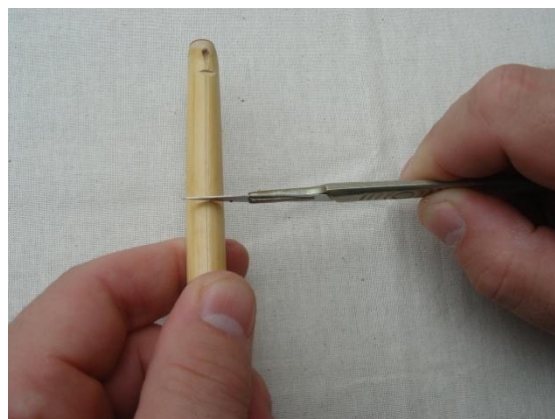
The next issue to check if nothing has worked so far is that the reed is getting enough air pressure. What may cause this?

- The reed is set up too strong, and the blade should be shortened using the bridle.
- There may be a blockage in the stock. A valve or tone enhancer causing a restriction, a build up of seasoning in the bottom of the stock, a kinked or leaking hose on a canister system. Check all of these. Remove or adjust whatever is causing the restriction.

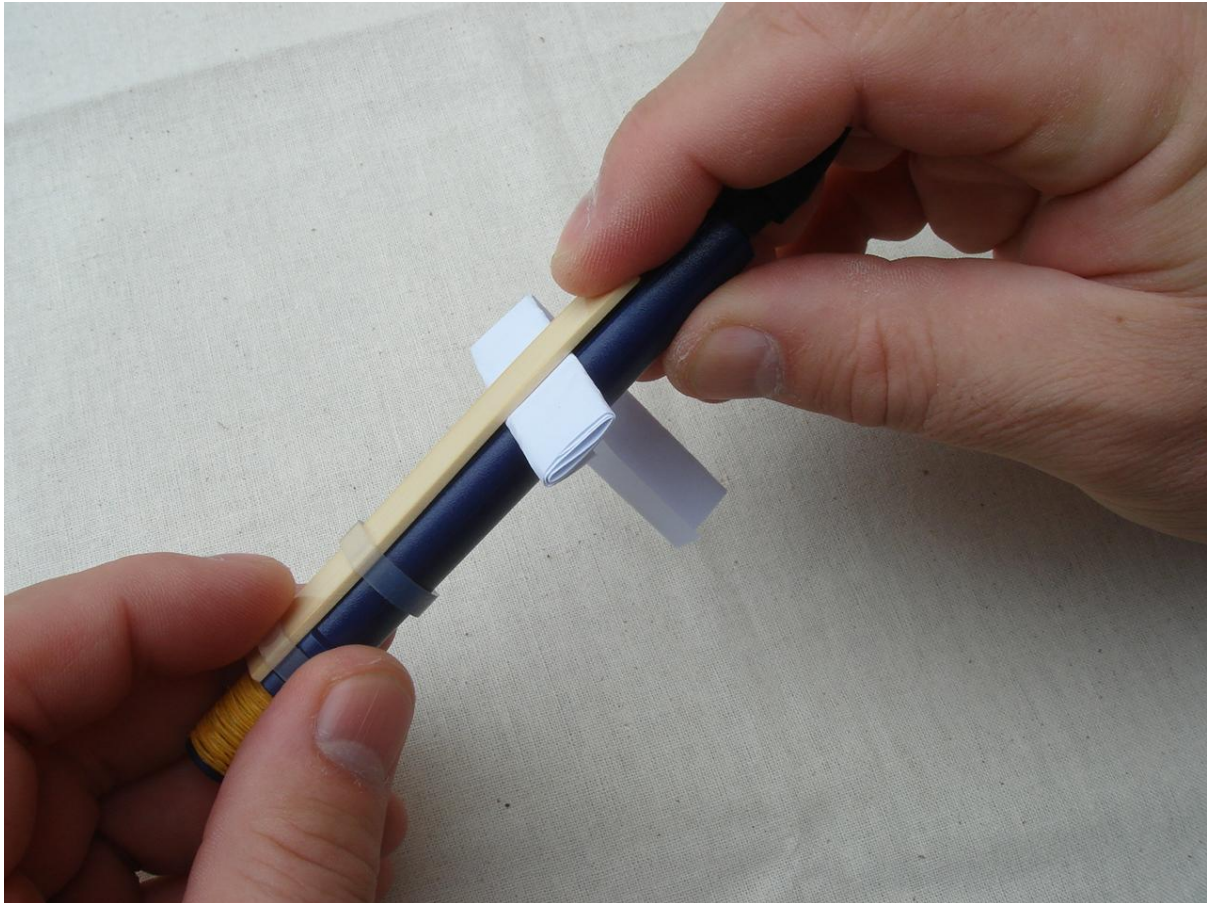
So if there is still a problem we need to look further afield. The older remedy for cane reeds was to assume the tongue was too stiff or too strong. To remedy a stiff tongue you would lengthen the tongue using the bridle. Yes the opposite of what we would recommend with a more modern synthetic reed. To remedy a tongue that was too strong or heavy we would take some cane from the inside of the tongue, so as not to affect the surface on the outside of the cane.



The other remedy was to scrape the outside of the tongue. This would often let moisture in and could result in an over curvature of the tongue, so was a less desirable method.



Another issue may be the curvature of the tongue or blade. This could mean that the vibrating end was sitting too high with the curvature of the blade too close to the closed end of the reed. To remedy this problem a small piece of paper can be folded a couple of times and inserted under the blade and pressure applied to the vibrating end, straightening the tongue.



If the problem still exists, it may be a problem with the structure of the reed's tongue or blade and we would suggest a new reed or a refurbishment be invested in. Ensure there is no dust or other substance under the blade. They can be cleaned by sliding a piece of paper under the blade. I regularly take my reeds apart and give them a thorough cleaning.

Further problem solving tips can be found in **“The Complete Pipers Handbook”** which funds the freely available school of piping website and is available here:

<http://www.schoolofpiping.com/handbook.html>

