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BAGPIPES
& REEDS

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Getting the Most Out of Your Bagpipe – A Maintenance Checklist

In order to get the most pleasure out of playing your bagpipe, it is critical that it is properly maintained. Poor maintenance is one of the main reasons why players struggle with playing and tuning their instrument. Even the best reeds will be unsteady and unreliable in a poorly maintained instrument.

Here is a list of things to check and how to check them.

Pipe Bag

The pipe bag is one of the most likely areas of the instrument to leak air. Any air that is lost through the bag is air that you have to replace, making the instrument harder to play.

Regardless of the bag material, it must be airtight. To check for this, plug the chanter and drone stocks with rubber stoppers. Blow up the bag with the blowpipe until it is as full as it can get. Squeeze the bag for 30 seconds. If after 30 seconds, it takes more than 1 breath to fill the bag, it is losing too much air.

Possible sources of air leaks are through the seams of the bag, around the stocks, or the stocks themselves. If you can't hear or feel the leak, you can use a soapy water solution to check. If the leaks are through the seam on a hide bag, a good seasoning may correct it. If the leaks are through the seam on a synthetic bag, you will probably have to replace it. Leaks around the stocks on a hide bag can be corrected by re-tying in the stock. On a synthetic bag, if the leak is between the rubber grommet and the bag, it will have to be replaced. If the leak is between the stock and grommet, you can wrap some plumber's tape (Magic Wrap) around the stock at the top of the grommet, or remove the stock and build up the diameter at the tie in groove with plumber's tape. If the leak it through the stock, it is because of a crack in the wood. These cracks are most common underneath the stock ferrules, but can also occur lower down on the stock. If this is the case, you will need to have the stock repaired by a competent bagpipe maker/repairer.

Another area that may cause leaks is the blowpipe or the blowpipe valve, which will be covered in the next section.

Blowpipe

If the pipe bag is leaking through the blowpipe, it is because the valve is leaking. Most valves have a round rubber flapper that is used to seal the valve. If the rubber has hardened or distorted so it is not flat, replace the valve. If the rubber is dirty, sometimes a good cleaning will get the valve working properly again. With a flapper valve, you may need to adjust how the valve seats on the bottom of the blowpipe. You can move the copper stem up and down or bend it to get the valve seated better. You can also check that the bottom of the blowpipe is flat and smooth.

The blowpipe itself must also be airtight. To check this, place the mouthpiece in your mouth and suck on it. You should be able to stick your tongue to the mouthpiece if there is no air leaking. If the valve is good, then the leak is either at the joint between the blowpipe and mouthpiece or the blowpipe is cracked. If the joint is leaking, remove the mouthpiece and add some waxed hemp or Teflon tape to the joint until the leak is gone. If the blowpipe is cracked, you will need to replace it or have it repaired by a competent bagpipe maker/repairer.

The size of the blowpipe bore is also important. The larger the bore, the more air that you can blow through it for the same amount of effort. Ideally, the blowpipe bore should be around 3/8". If it is smaller than 1/4", you should consider having it bored out to 3/8" by a competent bagpipe maker/repairer.

Wood

The wood is the heart of the instrument, and it needs to be in good condition. Check the bores of each section and the stocks. They should be smooth, clean, and without any obstructions. Well made instruments will have smooth bores. If the bores are rough, you can smooth them out with steel wool on a cleaning rod, or have a pipe maker/repairer do this for you. If the bores are dirty, a few good oilings with quality bore oil will remove most of the built up dirt.

Also check each section for cracks. A crack that leaks air can cause all sorts of problems. Pay particular attention to the wood underneath the ferrules, the stocks, and the tuning chambers of the drones. These are the most common areas where cracks will start. If you have a crack, have it repaired as soon a possible by a competent bagpipe maker/repairer. The crack will only get worse, not better.

The drone bushings in the top of each drone can become loose as the wood and glue age. Leaks around the bushes are quite common and can cause some serious drone instability. To check for leaks, remove the top section of each drone and plug the bush with a rubber stopper, or your finger. Blow in through the other end and check for leaks. If there is a leak, the bush will have to be removed and re-glued into the drone top. If you are not comfortable doing this, have a competent bagpipe maker/repaired do this for you.

Joints/Slides

It is critical that the joints between the sections are airtight. The bottom joints between the stocks and drones should be hemped with waxed hemp. These joints are the wettest part of the instrument, and the wax on the hemp prevents it from expanding and contracting with changes in moisture. When hemping, take your time and ensure that you use tight, even wraps so that the joint is hemped evenly over its length. These joints should be tight enough that they do not turn when you turn the drone tops for tuning. If these joints are hemped too tightly, or with unwaxed hemp, you will crack the tops of the stocks under the ferrules.

The tuning slides should also be hemped with waxed hemp to prevent expansion with changes in moisture. The slides should be hemped only tight enough to ensure that the drone tops will not slip under their own weight. If you like, you can wrap a little unwaxed hemp or Teflon tape for the final wrap to make the drones slide easier, but it is not necessary. You should be able to turn the drone with your thumb and two fingers. The bottom joint between the stock and drone sections should not move when you turn the top drone sections on the tuning slides.

If you find that the drone top sections are loose and tight as you move them up and down the tuning slides, the tuning chambers are worn and uneven and need to be trued up. Have a competent bagpipe maker/repairer do this for you.

Canisters/Valves/Enhancers

Reed problems can also be caused by problems or misuse of canister systems or drone valve/enhancers. If you are playing a canister system, ensure that all of the hoses are airtight and don't leak any air. Check the connections between the hoses and canister and the hoses and drone stocks. Sometimes the hoses will crack, or the glued joints between hoses will leak.

Drone valve/enhancers can wreak havoc with drone reeds if they are set up improperly. You must ensure that the valves are not set so tight that they restrict airflow so much that the reeds don't have enough air to operate properly. You should be able to blow through the valve, and it will open with very little pressure. If you have to blow hard to open the valve it is too strong. Consult the instructions that came with the valves to adjust their strength.

General

Ensure that all the mounts on your bagpipe are not loose or falling off. If they are loose, remove the mount and clean the old glue off both glued surfaces. Use a good quality white or wood glue to glue the mounts back on.

The drone cords need to be tied on so that the drones are not too far apart on your shoulder. A wide spacing between the drones will affect the way a listener perceives the sound of your drones. A closer spacing tends to give a more solid, full drone sound than a wider spacing. To tie your cords on, start out with one tassel beside the stock on your outside tenor drone. Run the

cord up to the outside tenor cord bead, and tie the cord in on either side with small cable ties or thread. Space the drones about 6” apart. A quick way to measure this is to run the cord from the outside tenor top down to the bottom of the ferrule. This is about 6”. Tie the middle tenor in at this location. Measure down to the bottom of the ferrule on the middle tenor top and use this for the spacing between the middle tenor and bass mid section. Tie the bass mid section at this location. Run the cords up to the top bass section and tie it in with a little bit of slack in the cord so that you can take the top section apart easily. The remainder of the cords can be left as is if they are not too long, of you can tie the end of the cord back to itself between the top and middle bass sections.