Care Instructions

PROTECT THIS FLUTE FROM HEAT AND MOISTURE EXTREMES! Do not leave it in your car on a hot day! QUESTIONS? Please read through these care instructions carefully first!

Cases and Storing: Your flute may be stored in the provided case or assembled. In any circumstance, the flute should never be stored in hot direct sunlight, near a heat source, and should be protected from extreme dryness. Leaving a flute in a hot car will result in damage! The use of an instrument humidifier is highly recommended, especially in dry climates. When you are done playing the instrument, disassemble and shake out any standing moisture - but do not dry out the flute excessively! The point is to retard the drying rate. Store the flute in an environment above 35% RH for best results. In dry climates, storing the flute in a plastic bag with a minor humidity source helps. Do not keep it over-humidified!

Do NOT leave your flute on a chair or couch at a Session. Someone will sit on it and break the sockets! I've had a number of flutes in for new head joints from this happening.

Breaking in a New Wooden Flute: Usually a new flute should be played only a few minutes at a time up to a cumulative amount of a few hours a day. After a month, the instrument can be played gradually more. The wood needs to get use to the cycle of wetting and drying. The flute should be oiled every 5-10 hours of playing time with Bore Oil, available from woodwind shops. Both the insides and outside of the flute should be oiled. Just avoid the urge to play it for several hours the first time you pick it up!

Oiling: Oiling protects your flute by keeping the wood flexible. It is not a water barrier! Oiling will also help keep the voice of your flute. Both the inside and outside of the flute needs to be oiled, but with only a small amount applied with a squeeze bottle and allowed to soak in (enough to wet the surfaces). Avoid moving the plug, and oil the flute when dry, **NOT** just after playing! If the plug gets moved, it should be reset to 23mm from the center of the embouchure.

I recommend just straight commercial music store variety Bore Oil over any others. Use the music store variety as this oil is designed for this purpose. Others go rancid, especially Almond Oil even treated with Vitamin E. Gamblin's Cold Pressed Linseed Oil is also a very good oil to use, as long as it is fresh and has hardly any smell. Do not use any other Linseed oils.

DO NOT USE oils with scents, such as Musk, scented massage oils, lavender oil etc. These are bad for the flute.

The Socket -Tenon Joints: I like to wrap the tenon with a good synthetic thread and lubricate the thread with the wax that they use for installing toilets, available at hardware stores everywhere. Never replace threaded wrappings with cork or wrap them with teflon tape! This will certainly lead to cracked sockets. Check periodically for tightness at the joints. If the joint gets too tight, pull it apart and unwrap a few turns of the thread. If the joints are too loose, they may be rewrapped, or a few turns of thread added - waxed dental floss works very well for this purpose. I use Gudebrod EE thread for wrapping. This is no longer made unfortunately, but can be found for sale frequently on eBay. Gudebrod D thread also works and is a little finer.

When flutes arrive, the joint may be sometimes a little loose. A few minutes of playing will usually tighten the joint some but in a pinch, a few turns of thread may be added. Waxed Dental Floss works very well for this. Loose joints will result in a slight loss of tone quality and firmness. Tightening the joints a bit reverses this! Unwrapping the original thread and rewrapping will also tighten it. Do not use Teflon Tape on the joints – this voids your warranty!

On flutes with tuning slides, always store the head joint as one piece, not two. Otherwise grit will work its way onto the slide surfaces. Lubricate with the same grease as used on the thread as needed. The inner slide is slightly oval for a tighter fit.

Pitch: I tune the flutes around 440 cold (441 warm) in order to allow for some tuning flexibility. If you find the flute's pitch center is considerably off, check the alignment of the fingerholes and toneholes and make adjustment - usually when sharp the flute can be lowered in pitch by rolling the embouchure in. It will also play better rolled in. As the instrument breaks in, bore shrinking lowers the pitch some. If you find the E and A or any other notes a little sharp, add a little bit of beeswax to the hole.

Embouchure: The far edge of the embouchure is left sharp for maximum tone development. Under so circumstances attempt to smooth it or round it or tonal loss will occur. Rubbing it on one's sleeve as some do will damage it! In general, I stop working on the embouchure when the tonal development is at peak. Sometimes I leave these looking asymmetric or rough. The most important feature is how it works, not how it looks. Do not attempt to modify it.

Warping: Your flute may warp slightly. According to my testing, this actually has a beneficial effect on the tone. Its also part of the normal ageing process. Simply do not worry about it.

Wood Quirks: The wood on your flute sometimes includes minor flaws such as staining, knots and small checks or cracks which have been sealed, then filled or partially filled with resin and wood dust, or sometimes left as-is. Usually these behave but if they open up or create other problems, contact me. Usually you can reseal them yourself with careful application of adhesive. Using such wood is the best use of a scarce resource.

Fingering Chart: Look for fingering charts online. Fingering charts for the pennywhistle are what you need. I prefer 0X0 XXX for C natural in the 2^{nd} octave – it will also work for the first octave though 0XX 000 is what is commonly used. 0XX XX0 also works well for the first octave C.

Servicing your Instrument: Servicing your flute is rarely needed as these flutes are robust and hold up well. If the tenons are loose, get some thread and learn to wrap them properly. Keep the flute well oiled. Contact me for assistance if cracks appear, or if the flute has been damaged. There is a fee for servicing depending upon what is needed.

Casey Burns - Wind Instrument Maker PO Box 882 Kingston WA 98346 <u>caseyburnsflutes@gmail.com</u>

DRY CLIMATE AND WINTER CARE

During the winter heating season, or in a dry climate, your flute is at higher risk due to the dryness. With a few extra simple steps, you can minimize this risk:

1) Oil the flute Regularly - when new, the flute should be oiled inside and out regularly and commonly. As the flute loses additional moisture, it will accept more oil. However, note that the flute was oiled heavily before sending. Thus oil it for the first time after 5-10 hours of cumulative playing time.

2) Store the flute in a somewhat airtight container with an instrument humidifier. The DampIt violin humidifier (you can order one of these online at Amazon.com) is highly recommended - however, a very slightly damp sponge will also work. Neither should be in direct contact with the instrument. Use a Rubbermaid or other Tupperware type container, with a few holes added to provide some circulation.

Be careful not to keep the instrument overhumidified! I've seen a few instances where keeping the flute too wet resulted in severe damage from molds, swelling, etc. The best range to keep it is around 40% relative humidity.

3) Monitor the Instrument - Your flute is shipped with the tenons wrapped to a certain degree of tightness that I consider acceptable. Dryness will cause this fit to loosen considerably. If this is happening, your flute is being stored in too dry a condition - increase the dampness of the sponge or humidifier. Bear in mind that the threads will loosen a little from normal usage. In this way, your flute will act as a good humidity gauge. However, I recommending getting a small humidity gauge from Amazon or similar to keep with the instrument. The DampIt has a paper humidity gauge that is perhaps less reliable.

The ideal is to keep the flute at an even humidity state. With these precautions, your flute should give you years of service.