

## *Care of Wooden Flutes*

***Important: If you do not follow these instructions, it is likely that your flute will develop cracks.***

***The most common cause of cracks is drying out and shrinkage of the wood, caused by keeping the flute in low humidity conditions, such as a heated house in winter. This can occur in as little as 2 or 3 days.***

- *After each time you play, completely dis-assemble the flute and swab the moisture out of the bore.*
- *Avoid extremes of heat, cold, and dryness.*
  - *Don't leave the flute in a car in hot or cold weather.*
  - *If your home is dry, store the flute in a case with a guitar humidifier or similar (available from music stores). If nothing else is available, keep the flute in a closed plastic garbage bag with a dampened paper towel also in the bag, but not in contact with the flute. It is best to keep the flute in a cool place, though not a place that gets below freezing. It is useful to get a hygrometer to measure the relative humidity (RH). We recommend that you keep the flute at an RH of 55% to 80%.*
- *Avoid sudden changes in temperature.*
  - *If you bring a flute in from a cold place, allow it to warm up gradually before playing. Warm it slowly with your hands, and then blow gently through the flute with the finger holes closed.*
- *Oil the bore once a week for the first month, and then once a month after that.*
  - *The best oil to use is woodwind bore oil (from a music store). You can also use unscented mineral oil (obtainable from a pharmacy).*
  - *Apply the oil by running an oil-soaked rag through the bore, then wipe out thoroughly after a few minutes. The idea is to allow some oil to penetrate and seal the wood, but do not allow any build-up on the surface. If your flute has keys, put some plastic (from a cut-up plastic bag) under the key pads to prevent the oil from getting on them.*
- *Apply cork grease to the tenon joints when they feel dry or do not slide smoothly.*
- *If a tenon joint is stuck (usually after playing), leave the flute for an hour or two (preferably in a dry cool place) and try again.*
- *Warning signs of excessive dryness are joints becoming loose and metal rings becoming detached.*
- *If a ring becomes detached, do not attempt to assemble the joint until the ring has been re-glued. The main function of the rings is to relieve stress on the socket and prevent cracking.*

### Fit of the Cork Joints

*The cork joints should be a firm push fit when the flute is fully warmed up from playing. It is normal for the joints to be a loose fit with some wobble when the flute is first assembled. There may be some variation in the fit as the flute is played in over the first few months.*

*If the joints become loose and wobbly even when the flute is fully warmed up, the cork should be replaced. We can do this under warranty in the first year. Plumbers Teflon tape can be used temporarily to improve the fit and prevent any air leakage.*

*If the joints become too tight, so that it is consistently hard to dis-assemble the flute, the fit can be corrected by light sanding with 220 grit sandpaper. We can do this as a warranty repair if you prefer.*

### The Tuning Slide

*The tuning slide should slide smoothly, but not move while playing. The grease which is used may be stiff when the flute is cold, but should loosen as it gets warmer. Do not try to move the tuning slide when the flute is cold – it could put excessive strain on the joints. Warm it up with your hands and by blowing into the flute first. If the slide is consistently too stiff, the grease can be cleaned off and replaced with a lighter grease which can be made at home to the consistency desired, as follows:*

*Gently melt together equal amounts of petroleum jelly (Vaseline) and candle wax. Pour into a cup and allow to cool. Try it on the slide. If it is too stiff, remelt it and add more petroleum jelly and try again until you reach the right consistency. If too loose, melt with more candle wax.*

### The Tuning Cork

*The position of the tuning cork in the head joint is adjusted to give the best internal tuning over the range of the flute, when it is fully warmed up and played at A440 tuning. It should not generally need to be moved unless you consistently play in a different tuning. The correct position is with the end of the cork at a distance of between 0.75 and 0.9 inches from the center of the embouchure. Fine adjustments within this range can be made to get the best results for the individual flute and player.*

### Additional Information for Keyed Flutes

*When putting the flute together and taking it apart, grip it by the round sections. Avoid gripping the keys or the raised block mounts, as these could be damaged. If you need to get extra grip, put on a pair of rubber gloves.*

*Air leaks under the key pads can develop over time, and make the flute very hard to play. If you suspect an air leak, try holding the pad down more firmly using a rubber band. If this improves the playing, there is probably an air leak and it is time for re-padding.*