

## Taking Care of Your Bow

One of the most exciting things about having a stringed instrument is the beautiful music one can make with it. Learning about such everyday matters as proper care and maintenance can, as a result, fall by the wayside. Players, teachers, and parents alike all too often and all too easily find themselves thinking of care as repair. However it is a fact that both the time invested in careful handling and the money spent on preventative maintenance are considerably less than the inconvenience, cost, and potential loss of value incurred in fixing damage due to accident or neglect.

Whether you presently own an instrument of which you are proud, are searching for another instrument, or maintain a collection, we invite you to familiarize yourself with bow care and maintenance procedures so that stringed instruments can continue bringing beauty and joy to you.

## Care and Maintenance by the Player

### Handling a bow

When handling a bow, one should keep in mind that the tip of a wood bow is particularly fragile. Players should avoid subjecting the bow to any undue stress including dropping, holding by the tip, tapping on the music stand as a form of applause, and that perennial school favorite - sword fighting.

### Cleaning

The recommended method of cleaning is to use a soft cloth to remove rosin dust, oil, and dirt from the bow stick immediately after each use before it has a chance to sink into the finish. Special untreated cloths may be purchased specifically for cleaning instruments and bows. If a treated cloth must be used, one should take great care not to get it near the hair of the bow. Other cloths may also be used provided they are soft, lint-free, and non-abrasive.

There are wide varieties of polishes and cleaners available for stringed instruments which may also be used on bows. However, if a bow is properly maintained, these products will not often be necessary. If using a polish or

cleaner, always test for compatibility with the varnish in a small inconspicuous area of the bow and take special care to keep the product well away from the bow hair. On a related note, using commercial or household solvents near an instrument or bow is to be avoided since, in some cases, even the vapors can cause serious damage.

Left unattended, the silver or nickel fittings found on the frog, button, and sometimes the tip will tend to oxidize over a period of time. While a heavy layer of tarnish should be cleaned by a technician, its appearance can easily be prevented by including the frog, button, and tip in the daily cleaning with a clean, untreated cloth. Over the course of time, bow hair near the frog may darken with a buildup of skin oils and rosin. When such a buildup becomes noticeable, the best and safest solution is to have the bow re-haired rather than to attempt to clean the hair by mechanical or chemical means.

### Humidity

Humidity control is of equal importance to bows as it is to instruments. Too much or too little humidity can be the cause of warping, cracking, and improper hair tension. Here is a guide for maintaining the proper level of humidity:

Actual Humidity	Outside	Recommended Humidity
Up to 20%		30%
30 to 40%		30 to 40%
40 to 60%		40 to 50%

In climates with severe seasonal temperature and humidity fluctuations, maintaining consistency can be a difficult task. While several case- or instrument-held humidifiers are available, it is most advisable to humidity or dehumidify the environment in which the instrument and bow are kept the majority of the time. It is important to remember that humidifiers for use inside the case or instrument are only effective when the case is closed. Once the case is opened, all of the humidified air quickly vanishes. Humidity is most easily measured with a wall-mounted hygrometer kept in the same room where the instrument is stored. Smaller hygrometers are available, but they may not give as accurate readings. Bow may, of course, be taken from

their properly-humidified environments in order to be played for reasonable periods of time. This may be done without harm as long as the bow is returned to its environment of proper humidity before the wood and hair lose or gain an undue amount of moisture.

### Temperature

In addition to that caused by drastic humidity changes, bows are also susceptible to similar damage caused by rapid fluctuations in temperature. While in colder climates it is often impossible to avoid subjecting a bow to low temperatures, it is important to make certain that the rate of temperature change is as slow as possible. This may be accomplished by allowing an instrument and bow to warm up to room temperature inside the case.

Excess heat may soften the finish which can pick up impressions of the case lining fabric or, in extreme cases, may "alligator" or cause the bow to stick to the inside of the case. Instances of excess heat can happen at any season and are most often caused by leaving the case in the direct sun, next to a heater, or unattended in either the passenger or luggage compartments of an automobile.

### Rosin

The most common questions about rosin concern stickiness, rosinning technique, rosinning frequency, and cleaning up excess rosin. A large number of rosins are commercially available varying in shape, packaging, color, grade, special additives, and recommended instrument. Violin, viola, and cello rosins will vary in stickiness with light rosins usually providing less grab than dark rosins. Less grab is usually desirable for violinists or in high heat and humidity climates. More grab is appropriate for cellists or in low temperature and humidity locales.

Rosins for violin, viola and cello can generally be quite similar. Bass rosins are quite soft by comparison giving a substantial amount of grab necessary to move thick, low-pitched strings. While a number of rosinning techniques exist, the goal of each is to evenly coat the hair with just the right amount of rosin—just enough to grip the strings properly, but not so much that excess rosin powder quickly coats the instrument and bow. One time-tested method of rosinning violin, viola, and cello bows is to use long, slow strokes back and forth along the entire length of the hair. Bow hair which needs more rosin will cut into the

rosin cake, while hair which is sufficiently rosined will slide easily over the cake on a layer of powdered rosin. Bass bows are traditionally rosined in quick, long strokes from the frog to the tip as bass rosin is too soft to allow the successful use of up and down bow strokes on the rosin cake.

Rosin which is not mounted in a wood or plastic block should be rotated gradually as it is being used. This rotation will maintain a flat surface allowing for the best rosin-to-hair contact and will also prevent damage to the sides of the bow caused by deeply grooved rosin. Rosining frequency is affected by personal preference, instrument type, rosin brand and grade, temperature, humidity, and the amount of time spent playing. One might expect to rosin a bow anywhere between every few hours to every few days.

As mentioned above, use a dry, clean, lintless cloth each day to wipe rosin dust from the bow stick and the surface of the instrument before it has a chance to sink into the finish. A clean, dry cloth should also be used periodically to wipe rosin build-up from the playing area of the strings. Rosin which is allowed to accumulate too heavily, especially on the undersides of the strings, will adversely affect the tone and playability of the instrument.

**Periodic inspection**

Players should develop the habit of inspecting their bows at least once a week for difficulty in tightening and loosening, improper hair tension, and damage particularly to the tip and frog. Problems such as these should always be referred to a technician for proper repair.

**Adjustment and Repair by a Technician**

**Rehairing**

Bow hair, no matter how good, will require periodic replacement by a technician when it no longer performs well. Extreme ranges of temperature and humidity can make hair change length resulting in difficulties tightening or loosening the bow. It can, over time, become glazed and lose its ability to accept rosin. Hair under tension will eventually lose its resiliency, become brittle, and break—especially in the hands of forceful players. Additionally, hair will break as a result of having been worn thin by the friction of playing. Therefore, players should expect bows to require rehairing at least once a year depending on usage and climate.

**Cleaning and polishing**

Solvents which will dissolve hardened dirt and rosin effectively, unfortunately, can be dangerous either to the finish of the bow or to the health of the casual user. Therefore, rosin which has hardened in or on the finish should always be referred to a technician for proper, safe cleaning.

**Difficulty in tightening and loosening**

Difficulty in turning the bow screw can often result from loose or long hair, a stripped eyelet, or an improperly seated frog or button. While an experienced player can often correctly identify the cause of a bow problem, fixing it is best done by a technician.

**Cracks and breaks**

Repair of any crack, split, or other break of the tip plate, the head of the bow, the shaft of the bow, the frog, or the button should always be performed by a technician. Well-intentioned but improper amateur repairs can often break again, cause further damage, and/or reduce the value of a bow.

**Questions** – Please don't hesitate to call us with any questions about your bow:

- Shar Violin Shop: 866-742-7270
- Repair & Restoration Shop: 734-786-4412