

Marching Bass Drum Tuning: “Spring Time to Showtime”

by Jeff Hoke

Achieving and maintaining a quality tuning, which addresses issues of tone quality and general musicianship, can be an elusive goal. However, this task can be simplified by establishing and following a procedure which is implemented from the moment the drums are taken out of storage in the spring to the introduction by the stadium announcer in the fall. There are numerous tuning suggestions which circulate through the marching activities, but seldom do concrete approaches surface which are presented in a “how-to” format. As a result, the following is offered as a guide.

Getting Started

We begin with the springtime ritual of taking the drums out of storage and preparing them for off-season training sessions. Each drum should be evaluated as it is removed from its case.

Exterior of the drum:

- Examine the heads. Indicators of a head that is in need of replacement are scratches severe enough to create an indentation, holes or tears (regardless of size), over-stretched heads as a result of high tensioning or very little tone production even with appropriate muffling.
- Examine the hoops. Hoops may begin to crack or chip as the result of being struck by a mallet shaft or lose their shape as the result of high tensioning.
- Inspect the eyelets. The eyelets which receive the carrier hoods can begin to loosen over time. Remove one of the heads and tighten.

Interior of the drum:

To avoid having to remove one of the heads to evaluate the interior of the drum, try using the tone holes.

- Look for any hardware that has loosened and begun to rattle inside the drum.
- Inspect any muffling material and repair/replace as needed. To avoid the need for muffling material in the future I strongly recommend the Remo Power Max drumheads.

Time to Tune

Begin by applying enough tension to the head that it begins to speak a pitch. Next, get the heads in tune with themselves by matching the pitch at each of the points of tension. I recommend using a set of vibes as your source of pitch as the pedal of this instrument allows the pitch to ring while tapping each side of the drum. Once both heads are in tune with themselves and at the same pitch, you will want to "seat" each head by placing the drum in a position which will allow you to use your hands to apply downward pressure at the center of the head.* Seating the head will allow it to better maintain the desired pitch. After seating, re-tune the head to itself. Repeat these steps until the desired pitch is achieved.

*The seating process is only necessary if you are working with heads that are glued at the rim as opposed to crimped.

Specific Pitch Tuning

Tuning to specific pitches is recommended as it allows you to tailor the bass drum sound to your musical program by using a chord structure relative to the pieces being performed. For example, if your group is presenting a program which involves primarily minor keys, you may want to use a minor chord to provide consistency of sonority throughout the ensemble.

Establishing Your Chord Structure

First, establish the number of drums you intend to use. Next, consider the difference in diameter from drum to drum. The greater the difference in diameter, the wider an interval the drums can comfortably achieve. For example, avoid using an interval of a fourth or fifth to separate two drums that differ only 2" in diameter. One of the drums will inevitably be at a pitch that is either too high or too low for its diameter and therefore will not comfortably speak with good tone quality.

Mallet Selection

For a general purpose application I recommend the use of a hard felt mallet with a wooden shaft such as the Vic Firth Corpsmaster series. For softer passages, consider these same mallets but with soft felt cores covered with fleece. Graduated sizes are offered to accommodate corresponding drum diameters.

Mallet holders

A common problem encountered when using multiple bass drum mallets is carrying these mallets in a way that is accessible to the performer. As a solution, consider the use of broomstick holders that are easily mounted to the shell at the top of the drum. These holders are usually found at home improvement or hardware stores.

Maintenance

Once you have achieved a tuning that meets your needs, the next concern is that of maintenance. Check pitches and muffling prior to each rehearsal or at least once a week. Making minor adjustments on a regular basis is certainly a more attractive option than lengthy tuning sessions prior to performances.

Words to the Wise

1. Have at least one extra head on hand for each bass drum at performances.
2. To remove manufacturer's printing from the heads, try paint remover or nail polish remover. Should you decide to leave the logos on the heads, be certain to center the printing while the performer is wearing the drum.
3. Try tuning the head on the side of the drum that will be played by the performer's strong hand a little sharp. By doing so, the drum will become more in tune throughout the course of the performance rather than going flat as it stretches.
4. When being transported, the drums should ride on their shells, not on their heads.
5. Always use cases with moving blankets inside to protect the drum's finish.