

Care and Tuning of Your Concert Snare Drum

By: Mark Carson (February, 2008)

The snare drum is the most used instrument in your percussion section, and a favorite of many young percussionists. As a result of constant use, the sound can easily deteriorate gradually over time, which is sometimes not noticed until the drum sounds really terrible.



As with any percussion instrument, visually inspect the instrument; are any parts missing or severely damaged? Pay particular attention to the top AND bottom heads. Also, check for missing tension rods and washers, damaged snare wires or cables, and the proper operation of the snare strainer or throw off.

The factor that affects the sound of drums the most is the condition of the membrane, or head. Modern Mylar heads are very resilient and durable, but the constant tension, exposure to heat and sunlight, and the impact of playing the drum stretch the head and reduce its rebound and resonance. A great rule of thumb is if the drumhead sounds bad, feels bad, or looks bad, it's probably time to replace it. Head replacement approximately once per year in most school situations is a good target.

How do we know if a drumhead sounds bad? Strike the drum with a relaxed full stroke. If the sound is dead or dull, check to make sure the head is in tune with itself, sometimes referred to as clear, or balanced. We do this by lightly tapping the head at the same distance from the rim (about 1" works well for me) at all tension rod locations around the drum, and listening to the pitch at all locations. If the head is not in tune with itself, adjust the tension rods so that the same pitch sounds at all points around the drum, adjusting high or low tones with a drum key. The tone, or sustain, of a drum is also a good indicator of the condition of a drumhead even on tighter snare drums. If the drum still sounds dead or dull, then we check the feel. Again, using a relaxed full stroke, strike the drum. If the stick does not rebound fully and effortlessly once the head is in tune with itself, it has most likely lost its resiliency, and needs to be replaced. Finally, check the appearance of a drumhead; if it is dented, pocked, scarred, or generally looks like it's seen better days, replace it. Simple grime can be cleaned using any mild household cleaner. We will discuss installing new heads in depth in a future article.

The tuning of drums in general, and especially of snare drums, is a matter of personal preference, but some general rules apply to all drums. If both heads are the same style and weight on a drum, the following tuning relationships yield the following sounds or results. If both heads are the same pitch or tension, the drum will produce maximum sustain, i.e. ring the longest. If the resonating, or bottom head, is tighter, the drum will be more articulate, and the sustain time shorter. If the bottom head is looser, a somewhat full sound results, and some players feel the drum is more sensitive at softer dynamics.

Given the above general guidelines, my preference is to have the bottom head tighter on a snare drum, as I'm looking for clear articulation from this drum. Given the fact the bottom head is usually much thinner on a snare drum, we still get good soft response with a tight tension. Feel free to try other relationships, but this is my starting point with a snare drum. Many concert percussionists seem to have success tuning their top, or batter head, to about an A, and the bottom head slightly higher, perhaps a Bb or B. Once again, these are very general guidelines. Experiment, listen, and experiment some more. Don't forget to have a friend play the drum so you can hear it from the audience's perspective.

What about the snares, you ask? It is a snare drum right? Yes, it is, but I always try to get the drum itself to sound good first. Today's percussionist is blessed and cursed with a multitude of snare choices, but we'll talk about those in a future article. It is important that the snares be in good condition; no dangling, bent, or missing strands. Also very important to the crispness and soft response of a snare drum, is the proper mounting of the snares; they should lie flat (not pulling or twisted), and be roughly centered, perhaps 1-3 mm closer to the butt side of the drum, because tightening and engaging the snares will pull them slightly towards the throw-off side. The butt side is the side opposite the strainer, or throw-off. Once the snares are properly mounted, we can begin to adjust the tension. Start with the snare too loose, yes too loose. Now, as you tap the drum, tighten the snares with your other hand; the drum should become more crisp. Keep going and you will hear the drum choke; then, loosen the snares a bit to that sweet spot where the drum sounded its best. Now play the drum at all dynamics and fine-tune the tension of the snares. It is not unusual for an expert snare drummer to adjust the snare tension slightly to accommodate loud or soft musical passages.

Here's a DW Percussion tip – place a small dot of red fingernail polish on the strainer adjustment knob. The red dot gives the player a visual reference for how much they've adjusted the snare tension tighter or looser.

We've talked about the condition of the drum, the tuning of the heads and the adjustment of the snares. Now spend a little time with your snare drum and experiment to find the best sound possible. Good luck!

 **Now that you know a little more about “Care and Tuning of Your Concert Snare Drum”, please check back soon for the next article in our series “What’s Going on Back There?”.**



DOUG WALLACE
P E R C U S S I O N

© 2008 Doug Wallace Percussion, LLC