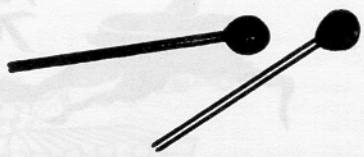
FIX IT — BUILD IT CORNER



Compiled & Edited by
Dennis Lester

REMOVING RATTLES IN THE BASS DRUM

by Norman Weinberg

The bass drum, being the lowest of the membrane percussion instruments is most subject to rattles and buzzes that interfere with the resonance of the drum. Removing rattles from the instrument isn't difficult and in a few hours an ill-sounding drum can be turned into a deep resonant drum.

First remove both heads and all hardware including tension casings from the shell (making sure not to lose any of the screws or washers). Now that you have a bare wood shell, take very fine steel wool or sandpaper and go over the rim of the shell. There should be no rough edges that could damage the head. Next clean the interior and exterior of the shell with any sort of household wood cleaner that is not abrasive and will not leave a heavy residue. Also clean the counterhoops and remove any dirt from around the flesh hoop. Next you can wax the rim of the shell with any brand of paste wax to prevent sticking of the head during tensioning. The purpose of this is to make a smooth surface so that the head glides over the shell and resists dust.

It is a good idea, now that the tension casings are off the drum to clean out the goop and grime that has built up inside them over the years. This can be done with a cotton swab and a cleansing agent. Also clean the tension rods so that the threads are free from any material that might prevent them from turning easily (any bent rods should be replaced at this time as they will not keep consistant tension on the head).

Next, all metal parts should be protected from touching other parts which might cause a rattle. A good place to begin is with the small springs inside the tension casings. Insulate the spring from the side-walls by wrapping it with a small piece of moleskin. Then place a small moleskin template of the tension casing between the casing and the exterior of the shell. Finish off this insulation with washers of moleskin between the casing mounting screws and the interior of the shell. It might be added here that other materials can be used in place of moleskin. Thin felt or leather or any other like-material would serve the same purpose. When remounting the tension casings, be sure to attach them securely.

The tension screw claw hooks that mount on the counter-hoop should be lubricated where they will come in contact with the tension rods. A good lubricant to use is petroleum jelly as it will not collect dust as fast as oil or grease and can be easily removed when the drum needs to be cleaned again. You can also use moleskin to insulate the claw where it comes in contact with the counterhoop. When inserting the tension rods into their casings, put a small dab of petroleum jelly on the threaded tip of the lug. Do not cover all the threads as this will become sloppy to work with (the lubricant will work it's way up the threads as the head is tightened).

Which ever method is used to suspend the bass drum: ring stand, folding stand, box type, or whatever, you should also make certain that it too will not rattle. You can do this by following the same principles as used on the drum...insulating between touching parts and lubrication of moving parts.

The Author

Norman Weinberg is presently working at Indiana University as a Percussion Technician dealing with inventory control and repair and maintenance of percussion instruments. He is also now playing timpani and acting as principle percussionist with the Evansville Philharmonic Orchestra in Evansville, Indiana.

(Ed. Note....We do not intend to "plug" this particular drum company, but it is the only one of its kind that we're aware of. If there are more of you out there please let us know. As you can see, people ARE looking for you.) →

MAINTENANCE OF WOOD BAR MALLET INSTRUMENTS

The bars of xylophones and marimbas, being constructed of wood, undergo structural changes as a result of alterations in atmospheric conditions and natural aging processes.

Higher temperatures and humidity cause a drop in pitch, while lower temperaturs and humidity cause a rise in pitch. This changing occurs day to day, hour to hour, even in temperature controlled buildings. The finish applied to bars slows this process down but does not stop it.

Natural aging also causes constant structural changes in the wood. Honduras rosewood, from which most xylophones and marimbas are made, is kiln dried to 7% moisture content, thus speeding up the natural drying process and causing unresolved tensions in the lumber. To relieve these tensions, the wood should be air dried over a period of years until the lumber reaches, BY NATURAL PROCESS, its Equilibrium Moisture Content. The longer the lumber is aged, the more stable it becomes and the longer it will hold its pitch.

Older instruments generally hold their pitch. On the other hand, newer instruments, often made from younger trees and suffering from lack of natural aging, are more vulnerable to atmospheric changes and do not hold their pitch as well. A new instrument (well in tune when it left the factory) might be grossly out of tune within six months.

Proper care of any marimba or xylophone involves keeping the instrument in tune—both the fundamentals and the harmonics. Many old instruments have suffered from neglect so long that it is not possible to bring the harmonics to pitch without altering the tonal quality of the bars.

If one can easily hear the "out of tune-ness," the instrument should have been tuned long ago. What isn't noticed at first is the intonation of the harmonics, which may be tested by placing a finger in the center of the bar and striking the node (over the cord) with a mallet. On a marimba, this harmonic should be two octaves above the fundamental; on a xylophone, a 12th higher. (A stroboConn will give a more accurate reading.)

Mallet percussion instruments are delicate and should receive the same care as a fine violin or piano. Don't neglect them.

Information supplied by: Fall Creek Marimbas, 429 Sheldon Rd., Freeville, N.Y. 13068.

Question:
Dear Editor,

In the summer Percussive Notes there was something about antique drums. I have an antique marching (military, side drum) snare and it is in need of repair. Could you send me some information about where I could get custom made raw-hyde heads and cords. Also would it be safe to take sand paper and rub the rough (slightly splintered) edges. Is there anything the snare cords could be replaced with in case I can't get any? Thanks for your cooperation.

Sincerely,
Pam Carter

Answer:
Dear Pam:

We hope we can assist you and others in repairing and finding replacement parts for antique rope tension field drums.

In answer to one of your questions...it would be alright for you to sand the rough edges of the shell and hoops as long as you don't increase the amount of splintering. I would recommend a very light sandpaper for this task.

If you feel the restoration of your drum should be handled by experts then there is at least one company that can do this for you. It's name and address is as follows: Eames Drum Company, 6 Drummer Lane, Wakefield, Mass. 01880, Telephone 617-245-8759.

These people can also supply you with the calfskin heads and cords you need. They have a wide variety of replacement parts on hand including strainers, gut snares, flesh hoops and counter hoops (plain, undrilled or drilled and finished). They also have accessories such as slings, calfskin head protectors, mufflers for snare or bass drums, rosewood 3-s drum sticks and practice pads.

We hope we have answered your questions and that you can successfully repair and restore your drum.

Keep on Drummin'
Denny Lester