

How to Change a Timpani Head and Adjust the Pedal Tension

Neville Curtis

Required Materials

Timpani Key
Pliers or Wrench
Rubber Mallet (hammer)
Timpani Mallets
1 Clean Cloth
Silicone Spray
Several Layers of Thick Cloth
Small Soft Cloth or Timpani Mute
Rubbing Alcohol
Vaseline
New Head, if changing

Procedure

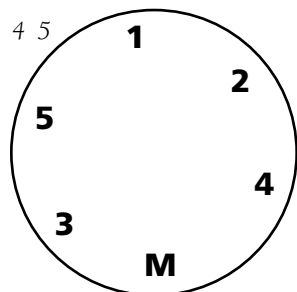
- Place the pedal all the way to the floor (lowest note). Keep your foot on the pedal. The pedal must stay in place or it will move rapidly to the high note position and possibly crack or break apart.
 - While your foot keeps the pedal in floor position, remove the tension rods with the timpani key. Some older model drums will have “T-handle” rods.
 - After removing the rods, remove the hoop and the head.
 - Move the pedal all the way up to the high note position SLOWLY!!! If you do not take it up slowly, the pedal will “fly” up and hit the base of the drum and possibly crack or break apart.
 - Clean out dirt, dust and any other debris that might be in the bowl. Check all nuts inside the bowl and tighten as needed.
 - Clean the rim of the bowl and the hoop with alcohol and the clean cloth. If you have copper bowls, remove the dents.
 - To remove any bowl dents, place the layers of cloth over the dents inside the bowl. With the rubber hammer, tap on the cloth until the dent is removed.
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- Carefully spray the silicone on the rim of the bowl. This will allow for smooth and quiet pitch changes.
 - Place a small amount of Vaseline on the end of each tuning rod. This will lubricate the rod and the inside of the casing.
 - Insert the rods into the hoop. Place the head (old or new) on the drum. Add the hoop and tighten all rods until the wrinkles disappear.
 - With your index finger or wooden end of timpani mallet, strike the head in the playing area by each tuning rod. You should hear the same pitch in each area. If not, adjust the rods as needed.
 - Move the pedal back to floor. Hold it down with your foot. Adjust each rod so the head sounds the correct pitch for that drum. 32”/30” = D; 29”/28” = F; 26”/25” = Bb; 23” = D
 - When you have the low note set, move the pedal up to raise the pitch a perfect fourth.

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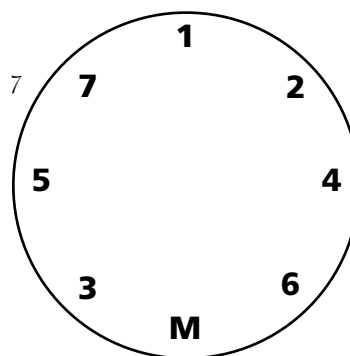
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- Select one tension rod to be the “master” pitch. Place the small cloth (handkerchief) or timpani mute on the head to eliminate overtones. Fine-tune all tension rods to the same pitch. Opposite tension rods affect each other, therefore use this guide when tuning.

Master 1 2 3 4 5



Master 1 2 3 4 5 6 7



- When you have each tension rod set, strike the head by each tension rod again to make certain the head is in tune with itself. If it is, it is balanced.
- Bring the pedal back to floor position. If the low note is not correct, adjust each tension rod equally until you get the correct pitch.

About The Pedal Tension Control (The knob on the base of the drum)

The pedal should hold at any position you move it to. If the pedal moves up by itself, there is too much tension in the spring. Turn the control COUNTERCLOCKWISE.

If the pedal moves down by itself, there is not enough tension in the spring. Turn the control CLOCKWISE.

* DO NOT make these adjustments until you have correctly balanced the head and tuned the drum to the correct floor position note.

Neville E. Curtis earned a Bachelor of Science Degree in Instrumental Music Education from East Carolina University - Greenville, North Carolina, and a Masters of Science Degree in Arts and Letters from the American Band College of Southern Oregon University - Ashland, Oregon. Mr. Curtis has also done graduate work at Charleston Southern University and Winthrop University.

Under his direction, the James Island Charter High School “Pride of the Island” band has received over 120 awards. The band program has won the South Carolina Outstanding Performance Award three times in the last four years. The band boasts numerous students in All County, All Region and All State Bands. Before coming to James Island, Mr. Curtis was Director of Bands at Loris High School, South Carolina, where he was presented the Teacher of the Year award in 1995. During his tenure at Loris, he was also Adjunct Professor of Percussion at Coastal Carolina University.

Mr. Curtis is a free-lance percussionist and vocalist who performs for numerous weddings and private functions in Charleston and surrounding areas. He remains an active clinician and adjudicator throughout the Carolinas. Mr. Curtis maintains memberships in several professional organizations including the Charleston County Band Directors Association, where he has served as president and currently serves as treasurer.