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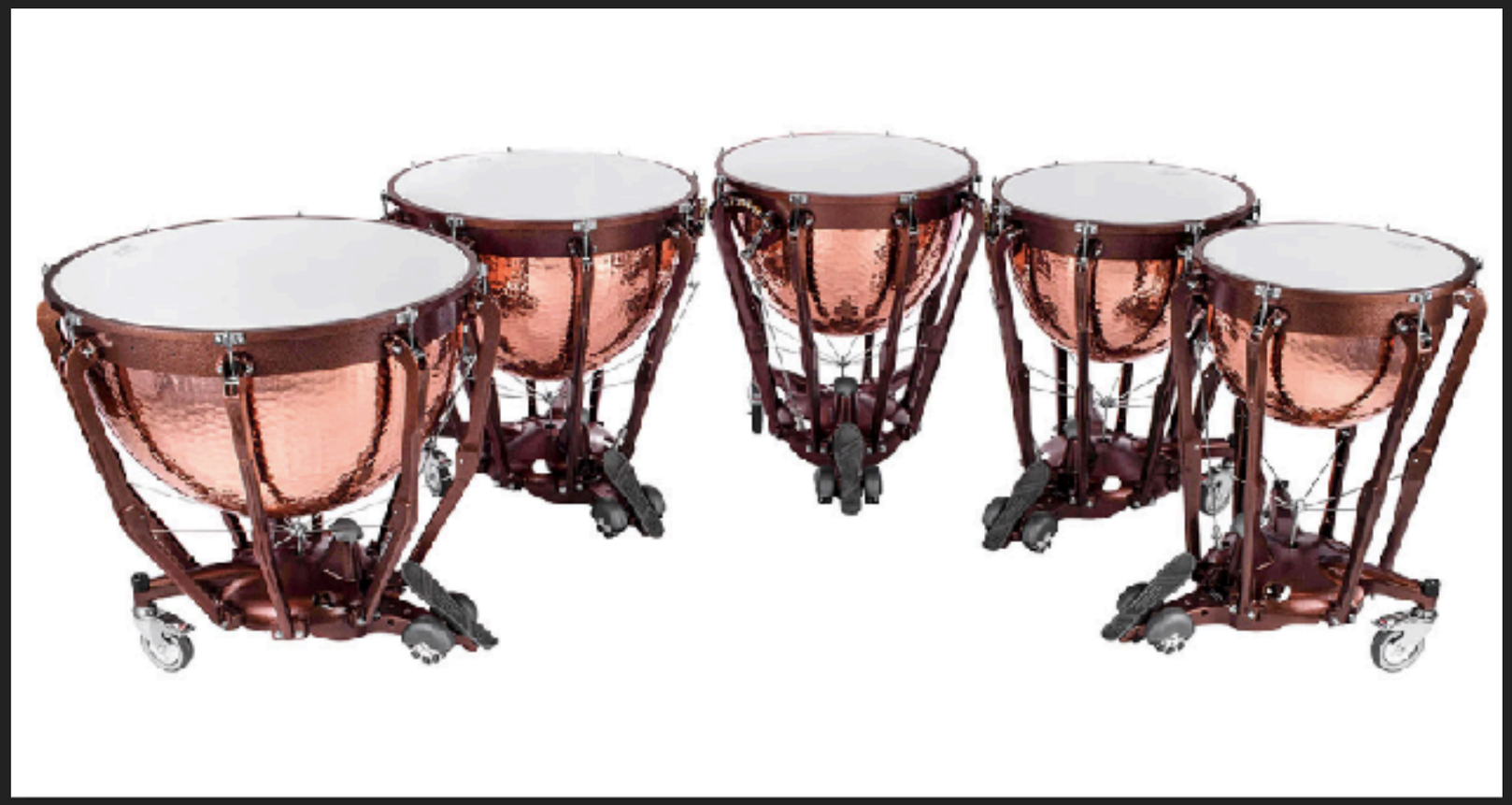
CHANGING TIMPANI HEADS

TEXT

- Replacing timpani heads can be a challenging procedure. It is such a particular skill, that I have known individuals that would make a little extra money by going school to school, changing heads for directors in need. Many colleges find it difficult to find the time to make this part of their curriculum. So there may be some percussion specialists out there that are a little hesitant to tackle this task as well. The following information is meant to help directors that don't want to (and often don't have the means to) pay someone hundreds of dollars to change their already expensive timpani heads. And if you're a percussion specialist, maybe this information will be useful to you as well. Keep in mind that there are exceptions to every rule, and sometimes certain instruments will have "unique" qualities that demand a different strategy. But I hope this information gives you a solid foundation to change your own heads with confidence.

THE DRUMS

- 4 drums is most common
- 32″, 29″, 26″ 23″
- If there is a 5th drum it is 20″



PITCH RANGE

- Each drum should only be able to achieve an interval of a P5
- 32″ D-A
- 29″ F-C
- 26″ Bb-F
- 23″ D-A
- 20″ F-C

HEAD SELECTION: REGULAR COLLAR VS. EXTENDED COLLAR

- The collar is the amount of space between the edge of the timpani and the counter hoop (rim)
- Newer drums (1980-present) almost ALWAYS have an extended collar

HEAD SELECTION

- Unlike other drums, timpani heads are NOT the same size as the drum
- The collar determines how much bigger the heads need to be
- Regular collar, typically 1″ larger than bowl
- Extended collar, typically 2″ larger than bowl
- When in doubt, get a MEASUREMENT

Ludwig 22" Timpani Head (for 20"extended collar drum) -

Ludwig 25" Timpani Head (for 23" extended collar drum) -

Ludwig 28" Timpani Head (for 26" extended collar drum) -

Ludwig 31" Timpani Head (for 29" extended collar drum) -

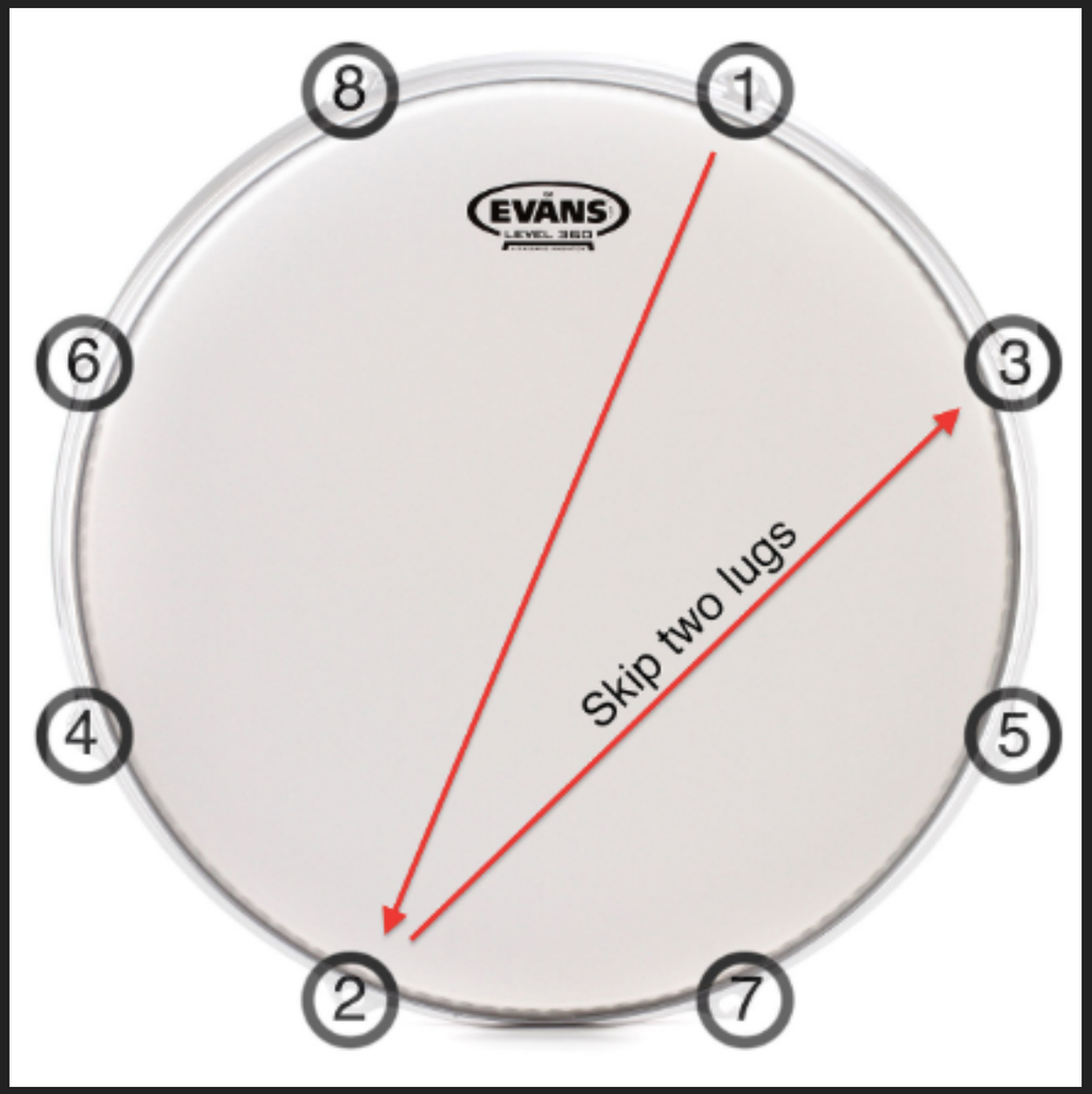
Ludwig 34" Timpani Head (for 32" extended collar drum) -

IMPORTANT TOOLS

- Drum Dial (Digital is best) $85
- Timpani Tuning Key $30
- Teflon Tape $5

CHANGING HEADS

- 1. Take off old head. Once head is loosened, the pedal will slam forward. You may want to put a towel or thin piece of wood down where the pedal will make contact
- 2. Clean rim of drum, and put a layer of teflon tape along the edge of the bowl. This will protect the head against any jagged bits of copper, and keep the head from sticking.
- 3. Place head on drum, making sure the same amount of head is sticking out around the bowl on ALL sides
- 4. Place foot on pedal, and make sure pedal is in its lowest position. Using your timpani tuning key, slowly tighten in a star pattern. First tuning round should make each lug free of rattles



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- 5. Check with drum dial for even-ness after each time you tune around the drum
- 6. Check a tuner to see if the lowest pitch of the drum's range is sounding while the pedal is engaged slightly from its lowest position. Allowing the pedal to "catch" for the lowest pitches will result in a purer tone then getting these notes with the pedal in its resting position
- 7. If flat, keep tightening! If sharp from the desired pitch, loosen. Double check with drum dial once you have found your range. If one lug reads 80 and another reads 82, this will cause the pitch to wobble. BE EXACT!
- Once you are confident with tuning, set tabs on gauges to match the pitches

THE PEDAL

- Sometimes, the pedal can cause the drum to have difficulty moving through its intervalic range. If you are certain the drum is tuned to the correct pitches, try the following adjustments to the pedal
- If pedal will not hold the low pitches, loosen the spring knob found underneath the bowl by turning it counter clockwise
- If pedal will not hold high pitches, tighten the knob by turning it clockwise

TUNING TIPS

- Once you find the lowest pitch, the highest pitch is typically positioned in the correct place as a result
- If lugs are uneven in their tuning, you will notice a wobble in the drum's sound. If this happens, check each lug with drum dial
- Try and leave a m2 or less between the lowest pitch and the lowest pitch of each drum's range. You want to engage the pedal slightly to reach each drum's lowest pitch.
- Many newer drums, already have a plastic or rubber strip around the rim of each bowl. If this is the case, teflon tape is not needed
- If head is too tight, the pedal will NOT be able to move freely
- Plastic heads can hold a much larger range…but DON'T!

MAINTENANCE

- Make adjustments in tuning for changes in climate. It is normal for heads to tighten or loosen with changes in weather. Do NOT move the tabs on the gauges because of tuning changes due to weather! Expect it, and tune
- Once the tabs on the gauges are set, you should never have to move individual pitch tabs. Adjust the knob at the base of your gauge. For example, if you find your drum has raised by a m2, that intervalic change will be the same for each pitch. Find the knob at the base of your gauge and adjust until the arrow points to the correct pitch. Once you have done this every other pitch will be correctly aligned with the gauge.
- Leave pedal at HALF tension when storing. If left tightened, the head will stretch. If left completely loose, the head will lose its tuning
- Rotate beating spots if you notice a wobble, or a dead sound, but are certain each lug is in tune.