TOUCHPOINT

The Division of Education Newsletter

Conn-Selmer
DIVISION of EDUCATION

Dr. Tim Lautzenheiser
Vice President of Education
Cell: 260.410.0717
DrTim@conn-selmer.com

Kelly Bryan
Manager of Educational Outreach
Phone: 574.523.0651
Cell: 574.329.8727
kbryan@conn-selmer.com

Michael Kamphuis
Managing Director, Division of Education
Work: 574.523.0677
Cell: 574.607.6000
mkamphuis@conn-selmer.com

Gary Markham
Executive Director,
Music Administration Collaborative
Phone: 678.300.3438
markhamg@aol.com

VOL. 2 • Issue 3 • July 15, 2014

A Note from Dr. Tim

Greetings. In this edition of *Touchpoint,* **Gary Devore,** Ludwig Percussion Specialist, discusses practical strategies for adjusting timpani.

Registration is now open for Conn-Selmer Institute 2015

June 7—10, 2015

Bethel College

Mishawaka, IN

VIP Discount code: 15csi11

CSI 2015 Registration Page

Our Next Issue Featuring:
An article by a Conn-Selmer VIP.

In Our Last Issue:
Finding and Maintaining Good Posture While Playing
by **Bernhard Scully**
Click here for the full article

Balancing Act *By Gary Devore*

Adjusting Ludwig Balanced Action™ Timpani

For pedal-tuned timpani to remain at a set pitch, the drums must have a mechanism to maintain tension on the head. Ludwig Balanced Action™ timpani work by balancing spring tension against head tension to hold pitch at any point in the drum's range.

Troubleshooting: Always begin by making sure that the drum is tuned to the correct range.

A drum that tends to creep up or down from a set pitch can usually be corrected by a slight increase in pressure on the friction pads (if the drum is so equipped). Using too much pressure on the "brakes" makes the pedal difficult to move.

If a *small* amount of brake pressure doesn't solve the problem, you may need to adjust the spring tension knob. Increasing the tension on the spring (turning the knob clockwise) will help prevent the pitch from sliding down. Decreasing the tension of the spring (turning the knob counterclockwise) will help prevent the pitch from sliding up.

A problem that is pronounced and localized at one end of the drum's range may be due to toe snap, heel snap, or spring lift.

Toe Snap
Symptoms: Typically, the drum will work in the lower range, but somewhere near the top of the drum's range, the toe of the pedal "snaps" down and the drum goes to its highest pitch.
Cause: Spring mechanism has too much leverage because it is positioned too far from the center pivot point.
Cure: Reposition the spring closer to the center pivot point by lengthening the horizontal pull rod.

Heel Snap
Symptoms: The opposite of toe snap. The drum works in its upper range, but somewhere near the bottom, the heel "snaps" down and the drum goes to its lowest pitch.
Cause: The spring mechanism does not have enough leverage because it is too close to the center pivot point.
Cure: Reposition the spring farther from the center pivot point by shortening the horizontal pull rod.

Spring Lift
Symptoms: When the toe of the pedal is pressed down for the highest pitch, the spring mechanism "lifts" out of the base casting. The drum will not stay at its highest pitch.
Cause: The spring has run out of travel before the pedal is fully depressed.
Cure: Increase the tension on the spring. This will extend the amount of travel that the spring has to match the range of the drum. Push the pedal all the way toe down, lifting the spring adjustment knob out of the base casting. While holding the pedal down, turn the spring tension knob until the bearing seats itself in the casting. The drum may now exhibit toe snap because of the extra tension to the spring mechanism.

Adjusting the Horizontal Pull Rod
The horizontal pull rod[1] connects the pedal to the spring mechanism. Drums made within the past 20 years have a flat section in the middle of the rod for friction pads to give resistance to pedal travel. Each end of the horizontal pull rod is threaded and is held to a clevis by two hex nuts. One end of the pull rod has left-hand threads so the length can be adjusted by turning the pull rod like a turnbuckle.[1]

1. Carefully turn the drum on its side to gain access to the underside of the drum.
2. If the drum is equipped with friction pads ("brakes"), use a regular drum key to spread the pads enough to allow the pull rod to turn.
3. Position the pedal somewhere in the middle of the drum's range.
4. Loosen the two hex nuts that are closest to the center of the pull rod (you won't be able to turn the ones trapped inside the clevises). Remember, one of the hex nuts has a left-hand thread; it may be painted red. If neither hex nut is painted red, you must look carefully to determine which one has the left-hand thread.
5. Adjust the length of the pull rod by turning it one or two turns. Two turns will make a significant difference, so start with no more than that.
6. If the drum has "brakes," tighten the brakes enough to align the flat spot in the pull rod, and then retighten the hex nuts. Loosen the brakes, stand the drum back up, and try it out. You should notice improvement at least. Repeat the procedure as necessary.
7. Changing the length of the horizontal pull rod will change the lowest pitch of the drum, so you will have to retune the drum to the correct range.

[1]Click here for Illustrations