## Diamond Marimbas Manual #1

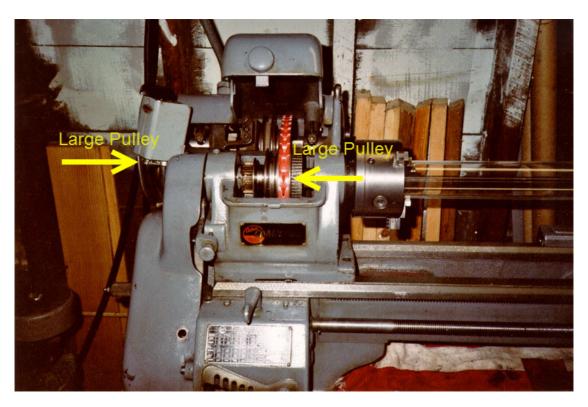
Resonator Channels

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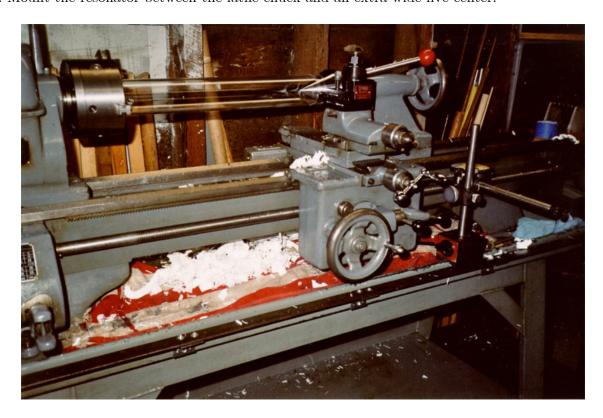
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On both Diamond Marimbas, I cut channels near the openings of the resonators, so that — when placed inside their mounting holes — the resonators no longer contact the terraced platform. This eliminates all resonator buzzing sounds.

1. Set the lathe to a slow speed at 192 rpm.

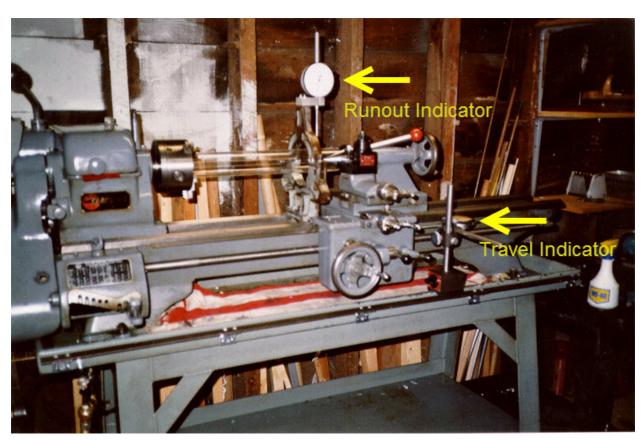


2. Mount the resonator between the lathe chuck and an extra wide live center.

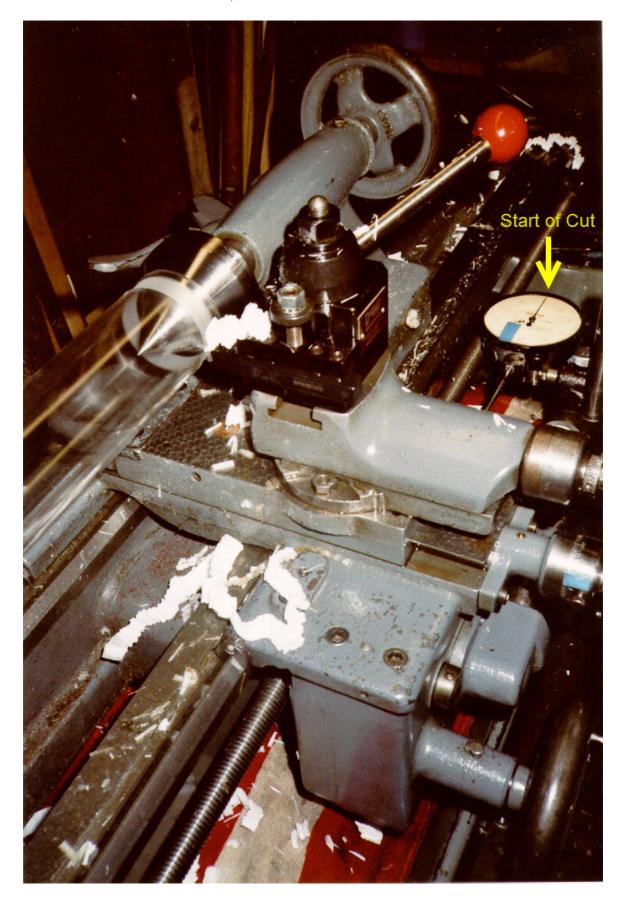




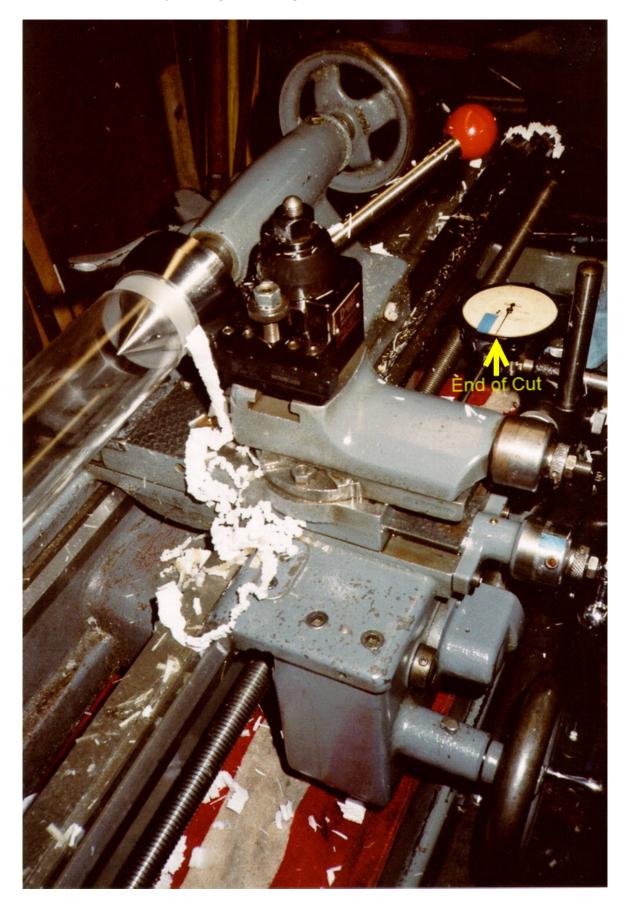
3. Set up two indicators: one to measure the runout and the other to measure the travel of the cutter, or the length of cut. Line the chuck jaws with red piano understringing felt to minimize scratching the acrylic. Due to mounting the resonator deep inside the chuck, the runout cannot be changed. Remove the steady rest and the runout indicator.



4. Set the travel indicator to 0.0 in., and start the first cut  $\frac{7}{8}$  in. below the resonator rim.



5. Make the second cut by moving the carriage 0.150 in. toward the rim.



6. Finish by returning the cutter to 0.0 in. on the indicator, and make a series of very fine passes with WD-40. Then apply 600 wet/dry paper, and polish with a buffing wheel.

