

INTERFERENCE - BEAT WITH TWO TUNING FORKS

AKD 06.02



Material:

<i>Item Code</i>	<i>Qty</i>	<i>Description</i>
DW100-1A	2	Tuning fork, 440 Hz, with resonance box
DW110-1A	1	Tuning fork mallet
DW110-1L	1	Tuning fork rider

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Goal:

We investigate what happens when two sounds interact with each other.

Setup:

The two tuning forks in the resonance boxes are placed next to each other.

Experiment:

First, the two tuning forks are struck.

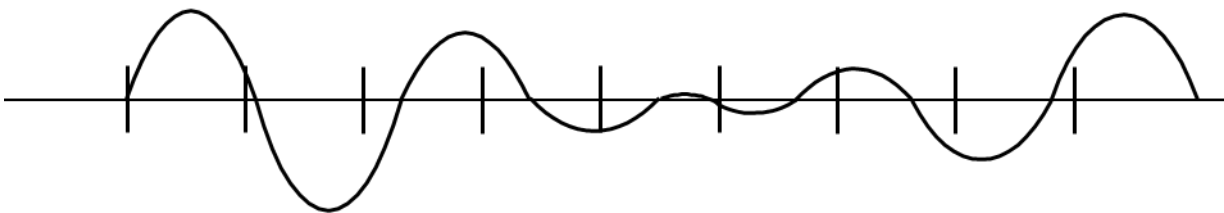
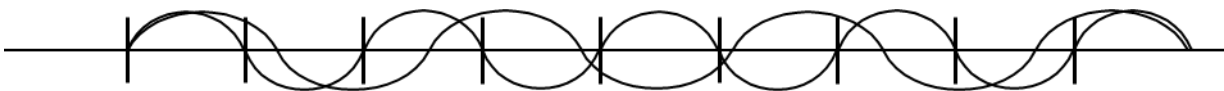


Then the frequency of one of the two tuning forks is slightly changed by a tuning fork rider (see note).



Result:

If at first there is only a general increase in volume, in the 2nd case there are intensity fluctuations - beats



LOUD

SILENT

LOUD

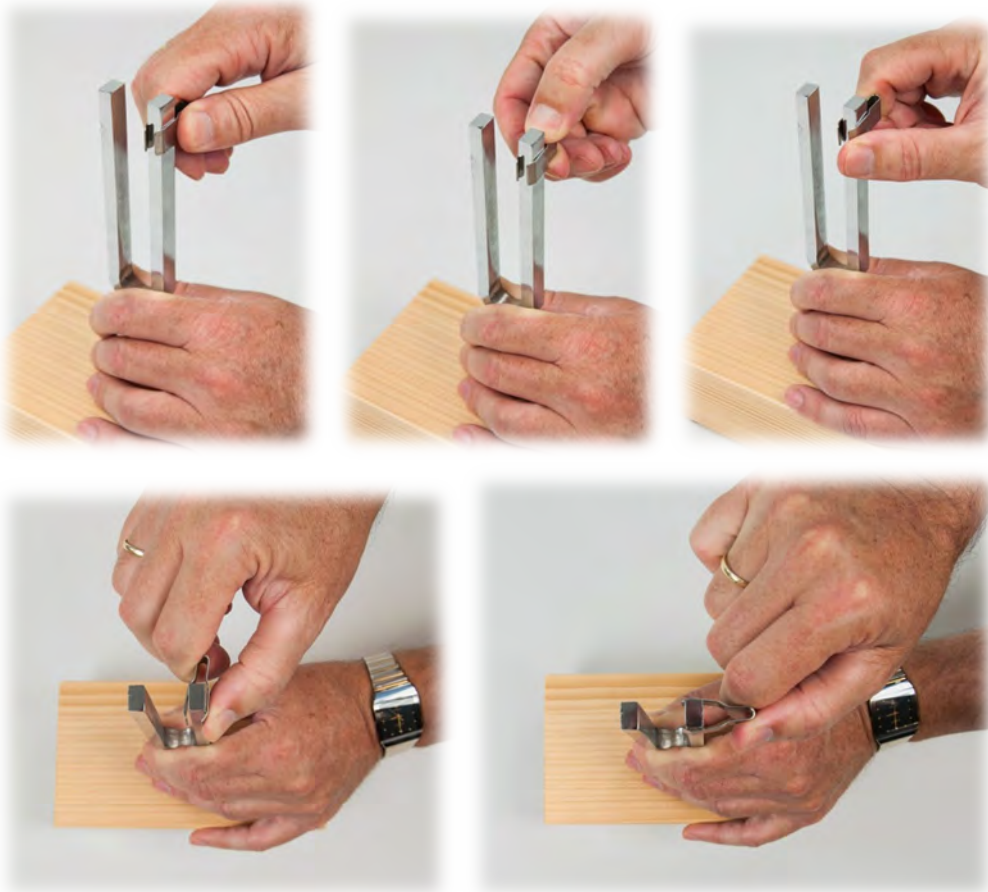
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Note:

Putting on the tuning fork rider:

First, the clamping spring is put on and then twisted so that it can exert its effect to the maximum.



If the tuning fork rider is mounted directly at the upper end of the tines, the frequency change is maximum. If the rider is mounted approximately in the upper quarter of the total length of the tuning fork, the frequency change is minimal.