

1002606 Tuning fork c 128 kHz with recording stylus

Instruction sheet

11/15 Hh



1. Safety instructions

- Be very careful when using an open flame to blacken the glass plate.

2. Description

The tuning fork with recording stylus demonstrates sound oscillations and allows the motion of the oscillation to be traced on a blackened glass plate.

The tuning fork is caused to oscillate at a large amplitude by tapping it lightly. One of the two prongs of the fork has a metal tip that can be used to record the motion by tracing it onto the included glass plate.

Resonant frequency: 128 Hz
Total length: approx. 280 mm
Dimensions of glass plate: 120 mm x 50 mm

3. Operation

3.1 Blackening the glass plate

- Dip cotton wool in turpentine and set it alight in a fireproof dish.
- Move the glass plate above the blackening flame so that the plate is coated evenly with black soot.

Alternatively

- Lightly smear the plate with oil.

- Scatter lycopodium powder on the plate so that an even coating results.

3.2 Experiment

- Attach the handle of the tuning fork firmly to a stand.
- Place the blackened plate on the bench so that the metal stylus just touches it.
- Set the tuning fork into oscillation with a slight tap.
- Draw the glass plate along beneath the stylus at a speed of about half a meter per second.

