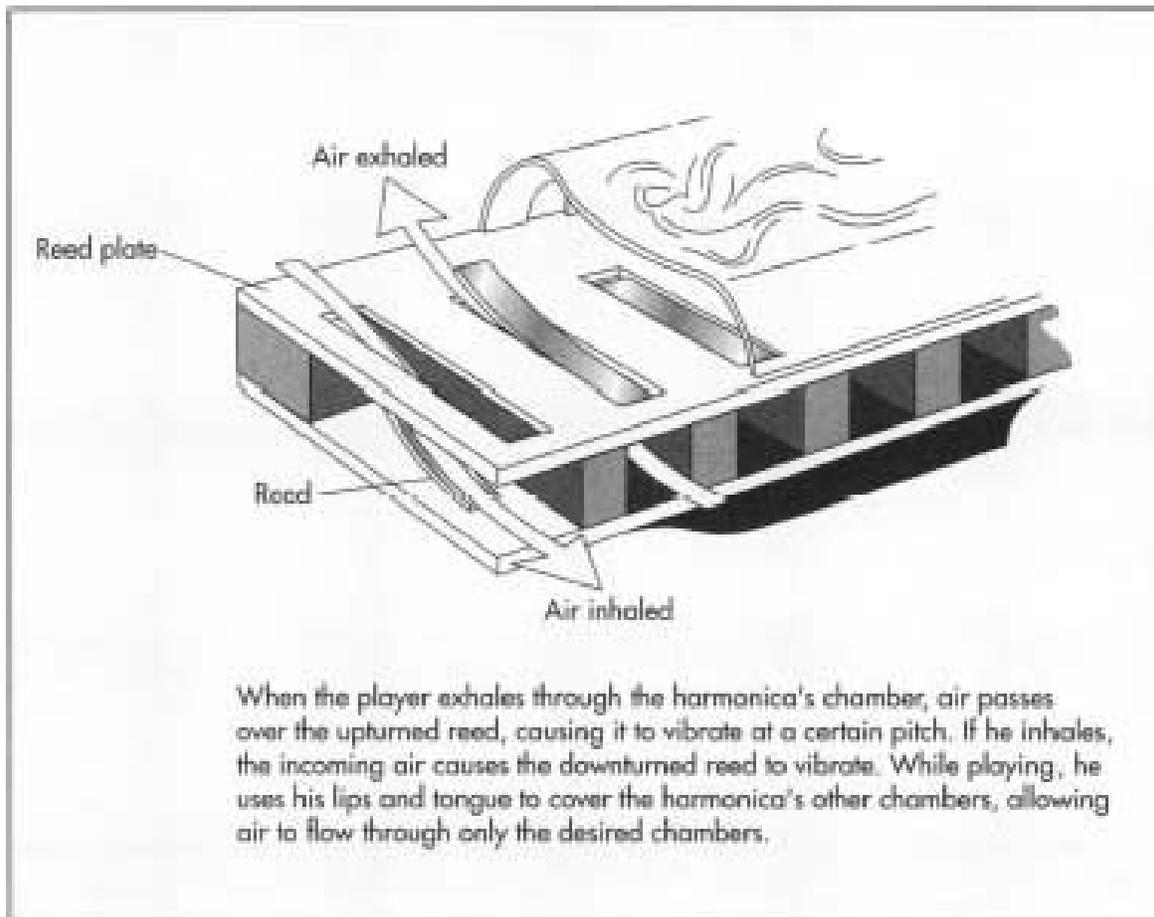


## THE WORKINGS OF THE HARMONICA

The **harmonica** is a free reed wind instrument. It is played by blowing air into it or drawing air out by placing lips over individual holes (reed chambers) or multiple holes. The pressure caused by blowing or drawing air into the reed chambers causes a reed or multiple reeds to vibrate up and down creating sound. Each chamber has multiple, variable-tuned brass or bronze reeds which are secured at one end and loose on the other end, with the loose end vibrating and creating sound.



Source: [zedomax.com](http://zedomax.com)

Reeds are pre-tuned to individual tones, and each tone is determined according to the size of reed. Longer reeds make deep, low sounds and short reeds make higher-pitched sounds. On certain types of harmonica the pre-tuned reed can be changed (bending a note) to another note by redirecting air flow into the chamber.

## Parts

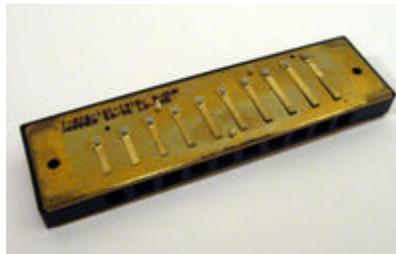
The harmonica has three basic parts: the *comb*, *reed-plates* and *cover-plates*.



Comb and two reedplates



Reed plate



Reedplate mounted on the comb of a diatonic harmonica.

## Comb

The comb is the main body of the instrument which contains the air chambers that cover the reeds.

## Reed-plate

The reed-plate is the grouping of several reeds in a single housing. The reeds are usually made of brass, but steel, aluminium and plastic are occasionally used. Individual reeds are usually riveted to the reed-plate. Reeds fixed on the inside (within the comb's air chamber) of the reed-plate respond to blowing, while those on the outside respond to suction.

## Cover plates

Cover plates cover the reed-plates and are usually made of metal, though wood and plastic have also been used. The choice of these is personal — because they project sound, they determine the tonal quality of the harmonica.

Source: <http://en.wikipedia.org/wiki/Harmonica>