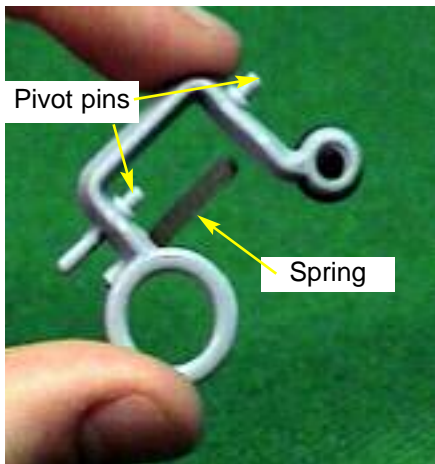


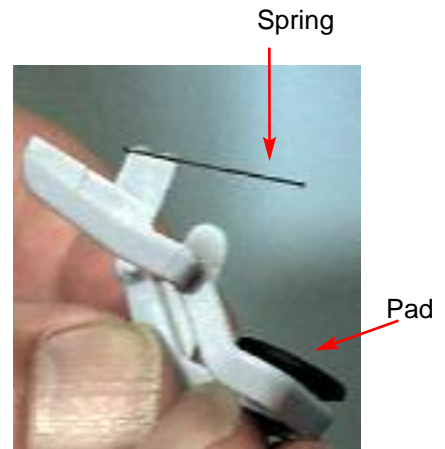
# SPRINGS AND PADS



Spring



Pad



Most keys have springs and pads.

The spring's job is to keep the pads closed, with two exceptions, until you press a key. Faults on the clarinet are caused by pads leaking air. The exceptions are keys 25 and 28. They stay open in their normal position.



There are three types of pads: small, medium and large.

Large pads are for the bottom four keys, 24, 25, 26 and 28.

There is only one medium pad and that is for key 12, underneath.

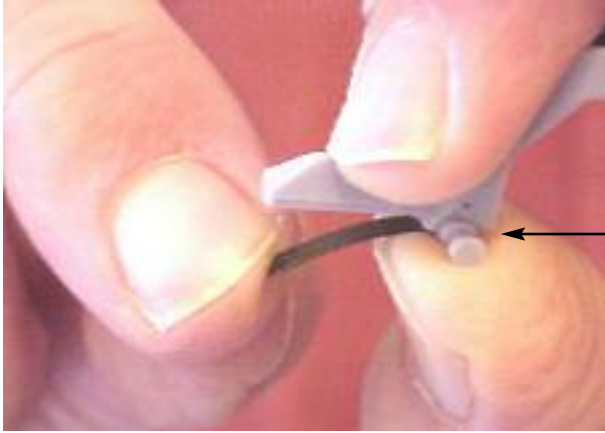
The seven small pads are for all the other keys.

Keys and pads don't spontaneously come off! Some action removes them - perhaps catching the clarinet on clothing or on a table's edge. If anything goes wrong look to see if:

- a spring has come off its spring pip;
- a pad is missing, or loose;
- a pivot pin has come out of its recess in the body.

The essence of fault finding lies in checking whether one of these has happened.

## STRENGTHENING A SPRING



Support the spring where it is welded onto the key.



Fig.2.

Fig.1.

If a pad is only closed lightly, the pressure of sound vibrations may cause it to leak as soon as you start playing. This would make the note itself and the notes below it hard or impossible to play. If this happens, increase the pressure on any suspect pads, **one at a time** starting with the one nearest the mouthpiece. You can do this by getting someone to press the pad firmly into the clarinet, or with an elastic band around the key (Fig.2. shows an example of this on key 8).

If this cures the problem, remove the key containing the leaking pad and strengthen its spring by bending as in Fig.1. It is essential to support the spring by pressing hard where the spring attaches to the key. If you don't, the spring may snap off.

Bend the spring a little at a time, replace the key and test the clarinet each time.

## INSERTING A PAD



Fig.3.



Pad



Fig.4.

Wet the pad.

Push the pad from underneath into the hole (Fig.3.) and help the head through from on top using something blunt like a ball-point pen (Fig.4.). Don't use too much force or the neck might tear.

Be careful not to damage the spring in the process.