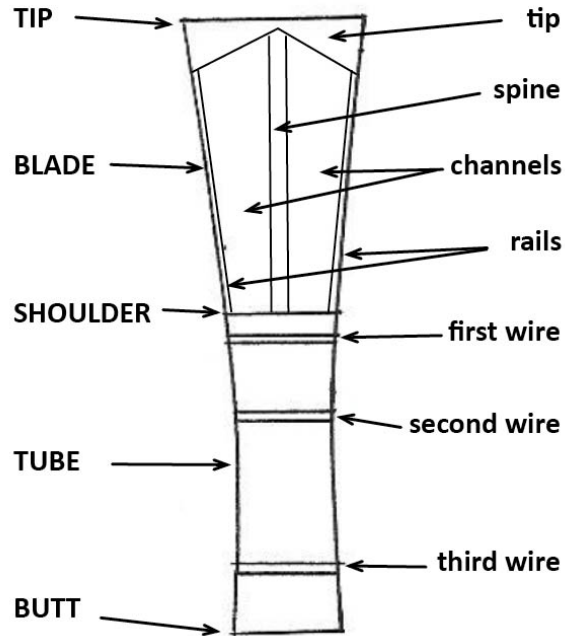


# DIAGNOSING AND ADJUSTING YOUR BASSOON REED

## Reed Anatomy

The areas shown below are the most important areas to know when identifying and fixing problems with your reed. These terms will be used throughout this handout.



## General Health

There are three primary elements of the reed to inspect for its general health:

- Cane (the wood)
- Shape
- Crow (the sound the reed makes when not attached to the bassoon)

### **Cane**

When looking at your reed, the cane should be tan in color with no spots or cracks. Playing on a reed that has started to mold or mildew means that you are putting mold in your mouth with every note. At this point, the reed is beyond fixing and should be thrown away.

## Shape

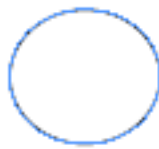
Looking at the shape of your reed can mean the shape of the first and second wire – how round or flattened they look – or the shape of the tip.

In general, the first wire should look somewhat more flattened than the rounded second wire. These wire shapes may change as you adjust the reed to make a better sound, but avoid over-rounding in either wire. Wire shapes are relatively easy to adjust, and very few shapes mean the reed needs to be thrown away. The pictures below show flattened, round, and over-round wire shapes.

*Flattened*



*Round*



*Over-Round*



To check the shape of the tip, look at the reed as if you were the air going into it. The top and bottom halves should mirror each other and look like gentle arcs. The pictures below show good and bad tip shapes.

*Good*



*Good*



*Bad*



*Bad*



## Crow

To hear the crow of your reed, put the reed in your mouth further than you would to play normally, with your lips almost all the way to the first wire. When you blow air through the reed, the resulting sound should have both high and low sounds. If the crow is only low, rattling sounds, the reed is likely too soft. If the crow is only high, the reed is likely too hard. Below, you can read about how to fix both of these problems.

## Adjusting

You will need the following materials to make basic adjustments to your reeds:

- Needle nosed pliers
- Wet/dry sandpaper (240, 600 grit)

If there is nothing visibly wrong with your reed but you are not happy with the sound it is producing, the reed is either too soft or too hard. Problems you may be experiencing are problems with:

- Tone – sounding very muffled or very buzzy
- Intonation – playing overall very flat or sharp
- Response – not making sound immediately when you articulate or only being able to play very loudly

### **Problem: Too Soft**

If the reed is too soft, it will:

- Sound flat
- Sound buzzy, overly bright
- Respond easily

To fix a soft bassoon reed, try the following steps in this order. Make sure to test the reed in between each adjustment to see if you have fixed the problem.

1. Slightly open both the first and second wires with your needle-nosed pliers.
2. Fold a piece of your 600 grit sandpaper in half and slide it into the reed. Gently hold the tip closed with your fingers, then slide the sandpaper out to remove soft cane from the inside of the reed.
3. Lightly sand both rails of the front half of both sides of the reed with your 240 grit sandpaper.

If these solutions do not work, ask your bassoon teacher for help. The reed may need to be cut shorter or scraped in one of the other areas with a reed knife.

### **Problem: Too Hard**

If the reed is too soft, it will:

- Sound sharp
- Sound muffled, too dark
- Not respond well

To fix a hard bassoon reed, try the following steps in this order. Make sure to test the reed in between each adjustment to see if you have fixed the problem.

1. Slightly close both the first and second wires with your needle-nosed pliers.
2. Lightly sand the entire blade on both sides of the reed with your 600 grit sandpaper.
3. Fold a piece of your 240 grit sandpaper and gently sand the back third of both sides of the reed, focusing on the center.

If these solutions do not work, ask your bassoon teacher for help. The reed may need to be scraped more precisely in one of the other areas with a reed knife.