Tune The Instrument

- Very slight adjustments may be made by adjusting the distance the bocal cork fits into the instrument.
- Choose the correct bocal - the higher the number, the lower the pitch.
- Tune the reed.

The basic pitch - The instrument is determined by the reed and its relationship with the embouchure. Listen!

Intonation Discrepancies

Causes and Remedies for Bad Notes:

Playing Position - Poor posture makes good breath support impossible.
- If the reed does not enter the mouth at a right angle, problems from uneven pressure may result.
- The reed should be made to enter at a slightly upward angle otherwise control of intonation is more difficult.

R. d - A reed that is too soft may cause overall flatness.
- A reed that is too hard may cause overall sharpness.
- A reed that is too old makes intonation difficult to control. The distance that the reed is placed on the bocal affects the pitch. The usual distance is one half inch.

Embouchure - To raise the pitch contract around the reed.
- To lower the pitch relax pressure around the reed.
- More reed in the mouth raises the pitch.
- Less reed in the mouth lowers the pitch.
- Pulling the lower jaw back slightly, lowers the pitch.
- Pushing the lower jaw forward slightly, raises the pitch.
- EE vowel sound will raise the pitch slightly.
- AH or OH vowel sound will lower pitch slightly.

Dynamics - Crescendos may appear to blow flat. To correct: Maintain breath support, slightly increase embouchure pressure, increase the velocity of the air stream.
- Diminuendos may appear to blow sharp. To correct: Maintain breath support, slightly relax lip pressure, decrease velocity of the air stream.
BASSOON

Possible Adjustments for Selected Pitch Tendencies

The Bassoon may tend to appear sharp in the lower register and sharp in the upper register.

Add the low D key to give more resonance to the note and add the right thumb to lower.

Usually flat - Raise the pitch by adding the 3rd finger of the right hand.

Usually sharp - Experiment with the little finger keys of the left hand for resonance - Humor down with an open throat and flat tongue.

A stuffy note - add the 1st, 2nd and 3rd fingers of the right hand and the thumb B♭ key plus the low F key in the right hand. This will sharpen the note, but the tone is so much better. Humor down with an open throat and flat tongue.

Occasionally flat - player may simply need to arch the tongue to humor the note higher. (Player should add the left hand E♭ key for pitches above high E)

Sharp - Add the 6th finger to lower it.
BASSOON/CONTRABASSOON TUNING GUIDE

Procedures for Tuning the Instrument(s)
1. Warm up thoroughly before tuning.
2. Tune at a mezzo-forte dynamic level and do not use vibrato.
3. Tune to a reliable frequency (electronic tuner, etc.) using the recommended tuning note(s) below.
4. Do not humor the tuning note; play it straight. Adjust the reed if the pitch is sharp or flat (see below).

**BASIC TUNING NOTE(S)**

\[ \text{mf Concert B}^\# 	ext{ or A or F} \]

**Tuning Mechanism:** None.

**Note:** It is not advisable to adjust the overall pitch of the bassoon by moving the bocal in or out of the instrument because the vent hole must be positioned so that the pad covers it. Although bassoon tuning is primarily dependent upon good embouchure formation and a properly adjusted reed, it is possible to use bocals of slightly different length to raise or lower the pitch of the instrument. The higher the bocal number, the lower the pitch.

**Techniques for Adjusting Pitches While Playing**
1. Alternate Fingerings
2. Amount of Reed in the Mouth
3. Embouchure Adjustment-Lipping
4. Finger Shading (Rare)
5. Combinations of the Above

**INHERENT INTONATION FLAWS**

a) Fourth space G is probably the most out of tune note on the bassoon. Use the supplementary key for this note if available (except in fast passages). Be sure to set the adjustment screw so that the tone is in tune.

b) The low register notes and some high register notes tend to be sharp. Lip the low notes in tune by decreasing the amount of reed in the mouth and embouchure firmness. For the high notes, try alternate fingerings.

Because the bassoon uses an old key system, almost every instrument is different as regards inherent intonation flaws. The bassoon has an extraordinarily large number of alternate fingerings available to correct faulty intonation. (Be sure that your instrument is properly adjusted and that you have a good quality reed.)

*Arrows pointing up indicate that the notes tend to be sharp; arrows pointing down indicate that the notes tend to be flat.*
Pitch Tendencies & Adjustments

Bassoon

F = Flat
S = Sharp
V= Very
1/2H = Half hole

(Notes not addressed are generally acceptable)

Pitch
Tendency

<table>
<thead>
<tr>
<th>Adjustment</th>
<th>S or F</th>
<th>F or S</th>
<th>F or S</th>
<th>F or S</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>No alternate exists</td>
<td>Could be either</td>
<td>Use RT3</td>
<td>Use RP3</td>
<td>Could be either</td>
<td>Use W, LT2, LT5</td>
</tr>
<tr>
<td>Drop jaw, open throat</td>
<td>Use RT3</td>
<td>Use RP3</td>
<td>RT4 - alternate</td>
<td>Stuffy &amp; unstable</td>
<td>Add 4, RT1 to W, 1, 3</td>
</tr>
<tr>
<td>Check on adding tuning ring, if extremely sharp</td>
<td>Could be either</td>
<td>Use W, LT2, LT5</td>
<td></td>
<td>Unstable</td>
<td></td>
</tr>
</tbody>
</table>

Add 6 to W, 1
Use RT3, W,
Use W,
Use RP3, W,
Could be either
Use 1, 2.
Use 1, 3, 4,

If still flat or unstable, reed is too soft or closed
1/2H 1, 2, 3, 4,
1/2H 1, 2, 3,
1/2H 1, 2,
Unstable
4, 5, 6
5, 6, and either

5, 6, LP1. May need more open 1/2 hole to speak better
4, 5, 6, LP1
3, 4, 5, 6
Add 5, 6, RP1 to 1, 2, 3, LT2

Use 1, 2, 3, 6
Add LP1 or LP2 to LT2, LT3, 1, LT2, LT3, 1, 2, 3, 6
2, 3, 4, 5, RP1

Use 1, 3, 4, 5,
plus either
Best: 2, LP1, 4,
5, RP1
Sharper: 2, 3, 4, 5,
RT1, LP1 or LP2
Flatter: 1/2H 1, 2, 3, 4

Use W, 1/2H 1,
2, 3, 4, RP1

Use LT2, LT3, 1,
Bassoon

(Trill keys not needed for basic fingerings are not included)
Carefully follow the procedures outlined in the Tuning Guide for your instrument before beginning to chart your intonation with a friend. Your teacher should provide an Intonation Charting Guidesheet with instructions on how to use an electronic tuner. Mark intonation discrepancies for lower octave scales below the staff.