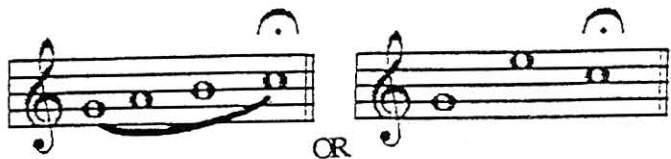


Harmonic Series, Trumpet (2nd Partials)

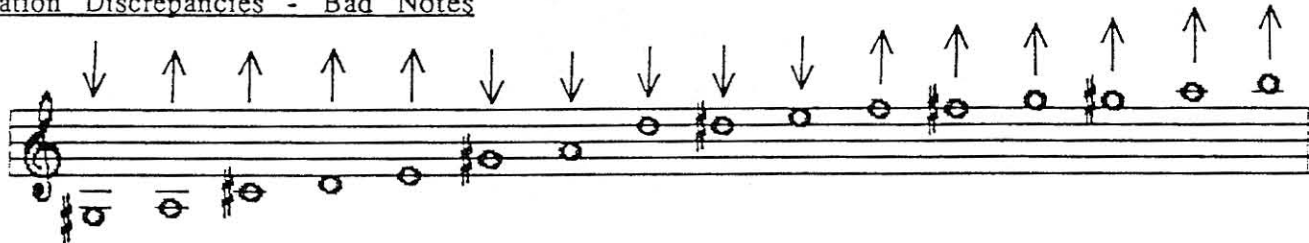
The image displays a musical score for the 2nd partials of a trumpet's harmonic series. It consists of nine staves, each representing a different partial. The notes are written on a grand staff (treble and bass clefs) and include accidentals. Below the notes, fingering patterns are indicated by numbers 1, 2, and 3. A circled note on the 8th staff (the 3rd partial) is annotated with 'Bb 1' and a circled '1' below it, indicating a specific fingering for that note. The notes and fingerings are as follows:

Partial	Note	Fingering
1	C <sub>2</sub>	0
2	C <sub>3</sub>	2
3	E <sub>3</sub>	1
4	G <sub>3</sub>	12
5	B <sub>2</sub>	23
6	C <sub>4</sub>	13
7	D <sub>4</sub>	123
8	E <sub>4</sub>	1
9	F <sub>4</sub>	123

## Bb TRUMPET

Tune The Instrument

When tuning to one note only play G to C with a soft tongue. Sustain the last note.

Intonation Discrepancies - Bad NotesCauses and Remedies for Bad Notes:

Consider the following generalizations for valve combination fingerings

- 1-2 valve combination is moderately sharp.
- 1-3 valve combination is very sharp.
- 1-2-3 valve combination extremely sharp.
- 2-3 valve combination is moderately flat.

**Embouchure** - Center the tone - The vibration frequency must agree with the partial to be played, if not the player may "bobble" the note.  
 - The accurate player (brass) must develop a muscular memory. (The player must listen and think as he or she plays)

**Syllables** - Sharp notes may be lowered with TOO or TAH with flat tongue.  
 - Flat notes may be raised with TEE syllable and arched tongue.

**Endurance** - Tune when the embouchure muscles are properly warmed up.  
 - As one plays, pitch generally will go sharp.  
 - Playing when over-tired may cause pitch to appear flat.

**Auxiliary Fingerings.** - Experiment with alternate fingerings that may work on your instrument.  
 - Adjust and utilize trigger mechanisms on sharp notes.

**Dynamics-** Crescendos may blow sharp. To correct: Maintain a firm embouchure throughout crescendo.  
 - Diminuendos may blow flat. To correct: Maintain sufficient breath support throughout the diminuendo.

**Listen** - To good music, develop your ear.

**Trigger** - Adjust and use trigger mechanisms on sharp notes.

**Mouthpiece** - Match the mouthpiece with the instrument.