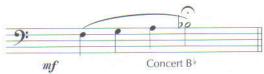
EUPHONIUM TUNING GUIDE

Procedures for Tuning the Instrument

- 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 below.
- 4. Do not humor the tuning note; play it straight. Adjust the main tuning slide if the pitch is sharp or flat.

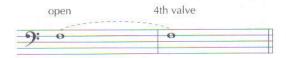
BASIC TUNING NOTE

The tuning pitch is indicated with a half note; quarter note pitches are used to help "groove" the tuning note by approaching it from below.



Tuning Mechanism: Main Tuning Slide. Pull out the main slide to lower the overall pitch of the instrument; push it in to raise the pitch.

To tune the fourth valve or compensating valve on euphoniums so equipped, play the third harmonic note F on the open horn, then engage the fourth valve and match the pitch. If the pitch played with the fourth valve is sharp or flat, pull out or push in the fourth valve slide.



Note: The fourth valve when engaged lengthens the overall tubing of the euphonium a perfect fourth, thus extending the low range downward as well as providing additional alternate fingerings for better intonation.

TUNING THE VALVES

Each of the valves on your instrument has a separate tuning slide which must be adjusted in relationship to the main tubing after it has been tuned. Neglecting to tune the valves will adversely affect the overall intonation of your instrument. Follow these procedures:

- 1. Tune the first valve exactly one whole step below the opening tuning note as follows:
 - Do not humor the pitch played with the valve. If it is flat, push in the slide. If it is sharp, pull out the slide. These procedures should be followed when tuning the other valves (see below).
- 2. Next, tune the second valve exactly one half step below the open tuning note as follows:
- 3. Last, tune the third valve exactly one and a half steps below the open tuning note as follows:

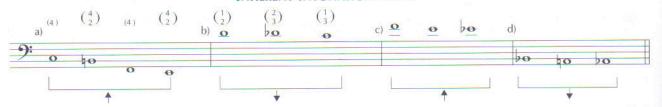
On instruments not equipped with a fourth valve it may be necessary to tune the third valve slightly flat to help lower notes played with valves 1-3 and 1-2-3.

9: 0 2 9: 0 3 9: 0 3

Techniques for Adjusting Pitches While Playing

- 1. Alternate Fingerings (includes use of the compensating valve if available)
- 2. Embouchure Adjustment-Lipping (increasing or decreasing lip tension)
- 3. Combinations of the Above

INHERENT INTONATION FLAWS*



- a) Use alternate fingerings if your instrument is equipped with a fourth valve, otherwise lip down.
- b) If the fifth harmonic notes are flat, try alternate fingerings or lip up.
- c) If the sixth harmonic notes are sharp, lip down.
- d) If the low B flat (also A and A flat) is flat when compared to the upper octave, lip up.