

2.2a *Mutes*

Most mutes will produce intonation and sound-quality difficulties in lower registers. Players need time after applying or removing the mute to also adjust their instruments' intonation. While trumpet *can* add and remove mute while playing, this is more difficult to do for horn and trombone, and impossible for the tuba. The tuba needs a considerable amount of time and a free hand to change mutes. When switching from one mute to another on any instrument, considerable time is needed, especially the bucket mute. For trombone, avoid writing anything requiring the "F-trigger" in combination with Wa-wa and Plunger mutes and quick mute changes. Likewise, trumpets cannot operate the valve slides (quarter tones / glissandi) while playing these mutes. While a straight mute can sound *ff* just with a different color, harmon and wa-wa mutes will not sound *ff*. A clear way of notating dynamics is *mf* (*ff*), meaning the input dynamic of "ff," and the resulting dynamic of "mf."

Straight "con sord." (all 4)



Cup (tpt / tbn.)



Practice mute (all 4)



Wa-wa (u-a) (tpt/tbn)



Harmon (tpt/tbn)



Plunger (o / +) pitch affected when "+" (tpt / tbn / horn)



2.2b *Stopped Horn*



From the earlier times when players used their hand to change pitches, the horn player has always played with a hand in the bell. Therefore, it's easy to alternate from open to stopped and reverse. The register has to be considered, because the dynamic will of course be quieter. So, preferably write stopped passages in the middle or upper range. When stopped horn is written in the lower range, a stop-mute must be used. **When writing for stopped**

horn, write the desired sounding pitch, and the player will transpose. Stopped notes are best notated with a "+" sign over top. A half-stopped effect is also possible, but then the intonation will be sacrificed.