Brass Clinic

Trumpet Mutes

By Adrian Griffin

Playing with a Mute

A mute in the bell of a brass instrument changes or distorts the sound in a particular way, and mutes constructed of cardboard, aluminum, brass, copper, synthetic polymers, or a combination of materials produce subtle differences in sound. On rare occasions players use a cloth bag or other soft material to mute the sound quality.

It takes practice for students to learn the adjustments to play well with a mute, adjusting to a different responsiveness, and correcting the intonation. It also takes skill to make rapid changes without dropping or clanking the mute. By working with a tuner students can determine how much to adjust the tuning slide, typically about ¼ inch on the main tuning slide. If they mark the tuning slide with a pencil they will have a fast reference to the correct point.

Playing clean articulations with a mute in takes more air and heavier tonguing. When the mute is removed, articulations will seem much easier.

(above) Derby hat mutes add an interesting visual effect to the change in sound color.

(above right) In a jazz piece an indication for a harmon mute generally means it should be played without a stem, but in a classical piece the assumption is that the stem should be in.

(right) A practice mute seals the end of the bell so sound can only pass through small vent holes.

Mutes in the Bandroom

A director who has limited experience with brass instruments should consult with experienced players when selecting a uniform brand of mute in each style. Some schools purchase matched sets of mutes for students to use, but if the budget precludes this, students should buy the prescribed mutes at the beginning of the school year. When seeking the advice of professional brass players or teachers, be sure to explain which pieces or styles of music the ensemble will perform.

Mutes have no place in a beginning band year. Generally seventh grade is the time to introduce mutes, and straight mutes are adequate for everything but a jazz program, which at any level will need a complete set of straight, cup, harmon, and plunger mutes. In high school students will probably use four types of mutes to play the broad range of literature.

Some jazz and classical pieces will call for specialized mutes to create specific colors. For example a very hushed band or orchestral passage might necessitate a specialty mute such as a Denis Wick wooden mute. It is prudent to tell the local music store what mutes you have specified so these will be on hand when students arrive.

During Performance

It is prudent to order mute racks to reduce the clutter. During quick changes a trumpet player can put the mute between the legs, under a knee or in an armpit. If a mute rack isn't available I suggest placing the mutes on a black or charcoal-colored towel. For those who play standing up, place it on a flat music stand at waist height. When sitting try folding a towel several times and place the towel and mute on the floor.

Before inserting a mute into the trumpet be sure to blow warm air into the bell; the cork will stay in place.
better with the resulting condensation. The mute should be inserted firmly to compress the corks for a secure fit. A slight twist will lock the mute in place. With a practice or a harmonic mute there should be an airtight seal against the bell; with other mutes there will be a gap between the mute and bell in the areas between the corks. Some straight and cup mutes have felt around the top of the mutes, which minimizes noises while inserting the mute. It also protects the bell from small scratches.

When a mute keeps slipping out of a bell, it may be the result of too little moisture or worn corks that provide poor traction. A few gentle rubs with fine sandpaper will roughen the cork surface. If the corks have become compressed over time, they should be replaced. Dirty or oily corks can be cleaned with rubbing alcohol; do not use water which evaporates slowly and may cause the corks to swell.

**Care of Mutes**

Some wear and tear is inevitable, including dents, but mutes should be protected as much as possible because major dents change the fits and vibrations, a leak will distort the intonation and response. The best protection is to carry them in a mute tote bag, which can safely hold several mutes. These bags are relatively inexpensive and will hold other accessories as well.

Some players wrap each mute individually in a sock or cloth, but moving and rubbing in a tote bag rarely damages them. Some of the more expensive models come in a cloth bag, which protects the finish but offers little cushioning. A good tote bag is still my first choice.

If a mute develops a leak along a seam, try blowing into the mute to feel where the air comes out. The leak may be sealed with epoxy, but it may have to be replaced.

**Mute Materials and Sound**

Mutes made of aluminum have the brightest sound; brass is warmer and more mellow, but copper produces the warmest, richest sound. The familiar red and white mutes are made of lexan polycarbonate and may be known as stonelined. These are virtually impossible to dent, but the sound is somewhat duller than more resonant metal mutes. Jazz players often use the stonelined variety of straight mute because the sound color changes across the dynamic range to provide the greater versatility in sound. Metal straight mutes have a more defined and consistent sound color across the dynamic range. For passages played by several muted trumpets, using the same model will produce a unified sound and consistent intonation.

**Types of Trumpet Mutes**

A straight mute may be either cone or pear shaped. It produces the sizzling, distant sound that suits the opening of Respighi’s Pines of Rome or the opening trumpet solo of Shostakovich's Symphony #1. A trumpet plays sharp with a straight mute, so move the tuning slide out a bit to compensate.

Aluminum straight mutes (below) produce the most traditional tone. The
red-and-white polycarbonate variety (above) is commonly used in school bands because it is durable and inexpensive. An aluminum straight mute is better suited for symphonic playing. Other varieties of the straight mute are used for their specific tone color, and can be purchased later as the occasion requires.

To get a more muted sound, try putting cotton inside a straight or cup mute to dampen the sound and make it more distant. Start with three cotton balls and do not use more than ten, and push the cotton through the opening with a pen. To remove the cotton, turn the mute upside down and snap it with a partially unfolded paperclip.

A cup mute is generally added for the wider variety of music played in high school. These are quieter than straight mutes and produce a soft, warm sound.

A relatively recent development is an adjustable cup mute, with a cup that can be moved on the mute stem to change the tone color. The adjustable cup gives better intonation. Although a synthetic fixed cup is common among high school students, the adjustable cup mutes with an aluminum cone are quickly becoming the professional standard.

The corks on a fixed cup mute may need to be shaved to get the cup close enough to the bell for a characteristic sound. The distance between the bell and the lip of the cup should be \( \frac{1}{2} - \frac{3}{4} \) inch. With an adjustable cup, it is an easy adjustment to arrive at the optimal gap. For a great example of cupped playing, listen to Dizzy Gillespie's Night in Tunisia.

A practice mute cuts the sound level by 70+% and is the best way to practice without disturbing others, but don't practice this way all the time. A practice mute is basically a straight mute and will make the sound sharper which is compensated for by adjusting the tuning slide. The greater resistance of a practice mute makes the lower range more difficult to play and articulations will be more laborious. After working with a practice mute articulations will seem much freer upon returning to normal playing.

The difference between a standard and a practice mute is that the practice mute actually seals the end of the bell with a ring of cork so sound can pass only through small vent holes.

With a Yamaha practice mute the player connects ear phones and the sound that is heard is that of an open trumpet, but there is a choice of several acoustics, such as a concert stage or a cathedral. A more expensive model corrects the intonation without adjusting the tuning slide and includes a metronome and drum patterns. Another application is to use the greater resistance of a practice mute to develop loud playing. This encourages an open throat more air to move through, a physical skill that can be transferred to open-trumpet playing.

Plunger mutes are usually made of rubber, or aluminum with a flock-sprayed interior to create a metallic and buzzy wa-wa sound in jazz playing, especially in Dixieland music. Mutes that have a rubber plunger produce a warmer sound.

A different notation is used to indicate movements of the plunger from note to note. A plus sign indicates to cover the bell with the plunger while a minus sign indicates to move the plunger away from the bell. Sometimes both instructions are written for the same note, as in Gershwin's Rhapsody in Blue, which calls for a harmon mute.

In jazz it is common for a chart to indicate a wa-wa effect with the hand but no mute. To do this the lower left edge of the bell is placed in the crease of the fingers and palm. Keep the fingers together but flat, not cupped. Open and close the hand in front of the bell to create a more subtle wa-wa effect than with a plunger mute.

Music stores sell standard plunger mutes, but many players settle for a rubber sink plunger in the local hardware store. Of the several available sizes of rubber plungers, choose the size closest to or slightly smaller than the bell.

To play with a plunger mute the right hand uses the pinky hook to support the trumpet, which frees the left hand to move the plunger by flexing the wrist in and out of the bell. The plunger should never fully block the passage of sound out of the bell.

When using a household plunger, many players simply cup their hand over the plunger to hold it, but some will cut a hole through the center of the plunger and insert the middle finger to grip the plunger firmly.

The Harmon Mute Company was the first to sell a wa-wa mute, and today the term refers to the general style rather than a specific brand, although the Harmon Mute Company still sells these mutes.

A harmon mute requires more air to play. Most jazz musicians prefer one made of copper, which creates a richer muted color. The Harmon mutes used in concert bands and for classical music are generally made of aluminum.

If the stem or removable tube is used, the sound is very buzzy, but when just the mute body is used, the sound is more mellow.
In a jazz piece an indication for a harmon mute generally means it should be played without a stem, but in a classical piece the assumption is that the stem should be in. The famous trumpet solo in Gershwin’s Rhapsody in Blue is a good example of playing with the stem, while Miles Davis on “My Funny Valentine” is without a stem.

Like a practice mute, a harmon mute completely seals the end of the bell and all sound comes through the mute. This mute also plays sharp and the tuning slide should be adjusted.

With extended use the stem of a harmon mute will become loose and rattle, but this can be treated with heavy grease or petroleum jelly to tighten the fit.

Cloth bag mutes produce a soft, velvety tone and are used primarily by jazz musicians. The purple Crown Royal (TM) bag is most common among professionals, but a polishing cloth or a soft cotton rag can also be used.

The bag is either draped over the top of the bell and cover about half of the air stream or the bag is used to cover the entire trumpet bell but hangs loosely to allow the sound to emerge. Do not push the bell all the way into the bag. Heavy fabric will dampen the sound and flatten the pitch more than thin cloth.

Some pieces, including Gershwin’s An American in Paris, call for a felt crown mute. The usual bag, a velvet hat, or a baseball cap are variously used for this.

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