



# Yorktown High School Trombone Survival Sheet

*No student will be denied the opportunity to participate in the band program based on the quality/brand of their instrument. Achievement is enhanced when students perform on quality instruments and understand how to properly care for their instruments. The intent of this document is to serve as a guide for parents and students as they navigate the many options that are available for aspiring musicians who seek to upgrade their instruments and/or purchase the necessary materials to perform required routine maintenance on their instrument.*

- **All Musicians Should Own a Metronome and a Tuner.**
- **It is better to buy a quality, used professional instrument than a new beginner/intermediate instrument. Many new instruments will never play in tune, and no amount of practice or hard work will help you make such an instrument sound good.**
- **Quality mouthpieces/reeds have a profound impact on the quality of your sound. Do not underestimate the value of a quality mouthpiece/reed!**
- **Routine maintenance can prevent the majority of reasons you would need to send an instrument to the repair shop. Clean instruments = Happy/working musicians.**

## **Brass Accessories/Materials**

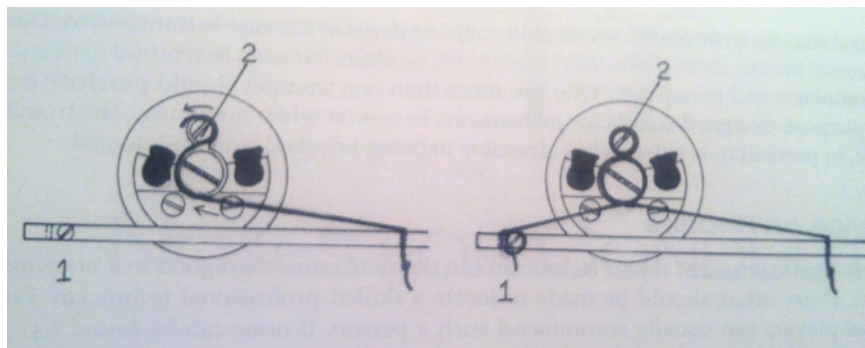
- Tapered Mouthpiece Brush (~ \$2)
- Cleaning Snake (~ \$5)
- Valve Oil (Al Cass or Blue Juice) (~ \$4)
- Yamaha Slide Oil and a Spray bottle (~\$10)
- Tuning Slide Grease (~ \$3)
- Polishing cloth (for lacquer) (~ \$4)
- Miracle Polishing Cloth, (for unlacquered areas) (~\$4)
- Trombone Stands (~ \$20 - \$40)
- Cleaning Rod (instrument specific) (~ \$6)
- Cheese cloth (for cleaning rod) 2 yards (~ \$10)

## **Brass Maintenance**

- Grime collects frequently in the instrument's mouthpiece and leadpipe; these should be cleaned every 2-3 weeks.
- You can clean the leadpipe and the instrument's other tubing by running lukewarm water through it while using a brush/snake (Pistons and Slides should be removed). Trombone slides require special handling to avoid damage. Careful not to use hot water which can damage the lacquer.
- Use a tapered mouthpiece brush to clean the mouthpiece after running water through it.
- The only means of protecting the valves against wear is to use the best lubricants available. There are a number of formulations on the market. Be careful of thin kerosene-based lubricants. They may offer fast action, but they do not offer the necessary level of protection. *Premature valve wear can only be prevented by lubricating the valves every day.*
- Cleaning piston valves: Wipe with a soft cloth moistened with valve oil to remove residue before applying new valve lubricant to the piston's surface. Follow the valve guides, and make sure the piston's number matches the casing you are inserting it into.

*\*Speak with Band Director &/or Private Instructor before purchases to ensure best deal and appropriate choices\**

- Cleaning rotary valves: Rotary valves require a valve oil that is heavier than that used for pistons. If the containers have tubes it will facilitate application. Use a lighter viscosity lubricant for the rotor and casing surfaces, and a higher viscosity on the bearings and linkages. For more detailed information on how to lubricate rotary valves, speak with your director/private instructor.
- Make sure tuning slides are properly greased. For slides that must be moved while playing, such as trumpet 1st and 3rd valve slides, use a lighter viscosity synthetic lubricant. Before lubricating, wipe the slide clean with a cloth to remove residue. *Valves should be depressed when inserting or withdrawing valve slides.*
- Restringing rotary valves. (see diagram) Special cord is designed for rotary valves. 20- to 27-pound test fishing line may be substituted (linen or Dacron line is preferable to nylon).
  - Once the string is threaded, pull it taut and tighten screw no. 1.
  - To adjust valve key height, depress key to desired position and and tighten screw no. 2.
  - Adjust middle valve first.



### Cleaning Slides

- Trombone Slide: Swab outer slide with cleaning rod and cloth. Inner slide should be cleaned before applying new lubricant with a soft cloth as well. After cleaning, apply small spots of trombone lubricant (e.g. Yamaha slide oil) on inner slide and spread evenly along surface. Only a light, barely visible film should remain. A fine mist of water can be sprayed on the slide surface to maintain good action.
- \* We recommend Yamaha Slide Oil (in reality it's a cream) vs. slide-o-mix. The Yamaha Slide cream is easier to apply and lasts a long time. Slide-o-mix will leave more residue build-up and require more consistent cleaning.

### Tenor Trombone Instrument Recommendation (listed in order from step-up to professional)

- Bach 36BO Stradivarius Series Trombone, Small Shank, (~\$3,000)
- Getzen 1047F Large Bore Tenor Trombone, (~ \$2,000)
- Conn 88HO Symphony Series F Attachment Trombone, Large Shank (~ \$2,300)
- Yamaha YSL-882O Xeno Series F Attachment Trombone, Large Shank (~ \$2,500)
- Bach 42BO Stradivarius Series F Attachment Trombone, Large Shank (~ \$3,000)

\*Don't give away or turn in your small shank horns, often times your beginner trombone is suitable to be played in jazz.

*\*Speak with Band Director &/or Private Instructor before purchases to ensure best deal and appropriate choices\**

\* Can't practice at home without disturbing family? Check out Yamaha's Silent Brass System.

**Recommended Mouthpieces:** Before purchasing a trombone mouthpiece, make sure you confirm whether you need a large- or small-shank mouthpiece.

Intermediate	Advanced
Denis Wick 6BS or 6BL Greg Alessi Models 6M, 5.5 Bach 7C, 6 6 <sup>1/2</sup> AL Schilke 47, 50 Josef Klier P77B	Denis Wick 5BS or 5BL, 4BL, 4AL Greg Alessi Models 6M, 3.5, 2 Bach 5G, 4G Schilke 51B, 51 Josef Klier P66B, P55A

### Bass Trombone Mouthpieces

Intermediate	Advanced
Denis Wick 5AL, 4AL, or 3AL Schilke 57 Bach 5G, 3G	Denis Wick 2AL, 1AL, or 0AL Schilke 58, 59, 60 Bach 2G, 1G, 1 <sup>1/2</sup> G Josef Klier P33Ak, P22AK

### Mutes

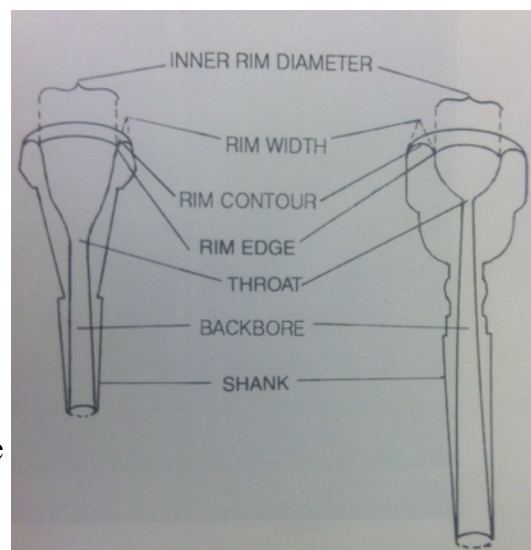
	Straight	Cup	Bucket	Harmon
Trombone	Denis Wick Aluminum Bottom (~ \$45)	Denis Wick (~ \$60)	Humes & Berg (~ \$30)	Jo Ral TRB-3 Trombone Bubble Mute (~ \$65)

Tom Crown is also well known for straight mutes, Jo Ral is a quality brand for all types including harmon and bucket, and the Humes & Berg cup mute is a classic.

### Mouthpieces

#### Criteria for a Good Mouthpiece

- Choose a high-quality mouthpiece of a recognized manufacturer.
- No single manufacturer makes the best mouthpiece for all brass instruments.
- Choose a mouthpiece that responds easily, plays well and without undue effort in all ranges, promotes clear tonguing, and has a good tone quality.
- Upper range may suffer temporarily after a change to a larger mouthpiece - it should soon return.



*\*Speak with Band Director &/or Private Instructor before purchases to ensure best deal and appropriate choices\**

- Avoid shallow mouthpieces.
- Each player is different - don't just pick a mouthpiece because someone famous uses it.
- *Test each mouthpiece individually.* Slight variations exist even with the same model.
- Try new mouthpieces at set intervals to see if they offer any improvements.
- Different manufacturers use varying systems to cup diameters and depth - make sure you understand what you are reading.

### **Parts of the Mouthpiece**

- Rim: inner diameter, width, contour, and edge (bite).
- Cup: depth and shape; air volume.
- Throat and bore: shape of opening, diameter, length of bore.
- Backbore: rate and shape of taper.
- Shank: length in relation to the instrument and accuracy of fit into the receiver.

### **What is the effect of these parts on your sound?**

- Inner rim diameter (cup diameter): the distance in between the inner edges of the rim defines the area in which the lips vibrate and, in conjunction with cup depth and shape, determines air volume of cup. A larger diameter encourages the embouchure to open more in its oscillation for a given pitch, contributing to a fuller, more resonant tone. Wider diameters can also offer greater comfort and flexibility by providing more room for the embouchure to make adjustments, and mouthpiece pressure is distributed across a wider area.
- Rim width: In general, wide rims tend to be less responsive and flexible. They are comfortable, however, and the added support contributes to security and endurance. Narrow rims offer flexibility and faster response, but the smaller contact area does not provide the support of a wider rim.
- Rim Contour: how the rim is shaped. Somewhat flat rims, if not too wide, tend to be responsive and offer a clear attack; very round contours are often less responsive and limit endurance.
- Rim Edge (Bite): the edge can be designed so that its presence is clearly detected by the lips or barely noticeable.
- Cup depth and shape *have the greatest influence over the quality of the tone.* Deeper cups = fuller sound and darker character. Shallow cups produce a timbre that is lighter in weight and brighter in color. Deep cups have more of the fundamental with less overtones present. Shallow cups have more of the upper partials in overtone series.
  - \*Shallow cups are not conducive to good development in the formative stages - they are a specialized tool for specific performance situations (not a shortcut for extending range).
- Throat/Bore - Large bores darken tone and provide body.
- Backbore: Endurance is a critical factor. A player's embouchure can become quickly exhausted due to the lack of resistance if the backbore is too large.

## **Additional Resources**

<http://www.bachbrass.com/pdf/AV6001%20Bach%20Mpce%20Manual.pdf>

<http://www.schilkemusic.com/files/SchilkeHowToSelectMPC.pdf>

<http://www.schilkemusic.com/files/2011SchilkeMpcCatalog.pdf>