

S.E. Shires Instrument Maintenance

General Trombone Maintenance

- The most important thing is to keep your instrument clean, inside and out, and to keep it well oiled. Simply wiping down the exterior of the instrument with a cloth before you put it in the case will slow lacquer wear, and cleaning the slides and valves regularly will prevent sluggish action and corrosion.
- We use the thinnest possible coat of epoxy lacquer, so that the effect on sound and response of the instrument is minimal. The lacquer is baked on at a high temperature for durability, but it still will wear away over time from contact with the acids on the surface of your skin. The durability of the lacquer finish will be enhanced if you are in the habit of wiping down the contact points of the instrument with a soft cloth whenever you put the instrument in the case.
- Oil serves to lubricate moving parts, but it also coats the surfaces and prevents oxidation from forming. Oxidation forms when the instrument is left wet from the condensation in our breath for even a small period of time. It will build up on the surfaces, eventually interfering with the action of valves and sometimes even causing them to seize completely.
- Oxidation also forms on tuning slides, making them difficult to move. We use and recommend Hetman Tuning Slide Gel, which needs to be applied more often than thicker tuning slide lubricants, but if it drips into the valve and slows the action, is easily dissolved with Hetman valve oils.

Trombone Handslide Maintenance

- Our handslides are built to closer tolerances than some others on the market. We recommend using small amounts of lubricant and reapplying for every 4-6 hours of playing time.
- Once a week, swab the insides of the outer slide with a cleaning rod, wrapped with cheesecloth or muslin. In order to really clean the surfaces well, we recommend you use enough cloth that the rod does not slide too easily down the tube, but of course not so much that you have to force it or it gets stuck. A small amount of denatured alcohol on the cloth will help clean more thoroughly.
- At the same time, you can swab the insides of the inner tubes. The best tool for this is similar to what woodwind players use: a string with a small piece of cloth on one end and a fishing weight on the other. If you get into this habit, swabbing particularly the upper leg of the slide frequently, you will virtually eliminate the need to clean the crook of the slide.
- Once a month it is a good idea to clean the slide thoroughly, in the following steps:
 1. Swab the inner and outer slides as directed above.
 2. Reassemble the slide and use a snake to clean the insides of the inner tubes and the crook. Pour some lukewarm water and dish detergent (Dawn is excellent) down the tubes as well, to aid the brush on the snake. DO NOT use the snake on the outer slide by itself; it is very easy to scratch the smooth surface this way and deteriorate the slide action.
 3. Flush the assembled slide through with lukewarm water until it runs clear. If necessary, repeat steps 1 and 2 until the water runs clear. Also, take off the outer slide and rinse it through by itself.
 4. Check the water key for alignment and the cork for wear. Usually its necessary to replace the cork about once a year.
 5. You can also lubricate the slide lock and leadpipe threads with a small amount of slide gel. This is not necessary every month, but it is still a good idea.
 6. Wipe all surfaces dry with a clean, soft cloth, reapply slide lubricant, and enjoy!

Trombone Valve Maintenance

- We find that most brass players don't oil their valves nearly often enough. Axial-flow valves in particular need to be oiled frequently for best action, about every day or two. Rotary valves should be oiled about twice a week. We recommend oiling your valves before you put the instrument in the case, particularly after long practice sessions or heavy performances or rehearsals. This practice will help prevent wear over the life of the instrument.
- Here at the factory we use and recommend Hetman products for lubrication, but almost any oil product will protect and lubricate well if it is applied frequently enough.
- Heavier oils such as Hetman Rotor Oil will last the longest, but on some valves may feel slower than preferred. Lighter oils such as Hetman piston oil will feel faster, but will break down faster as well.
- Our valves are built to precise fit and close tolerance, so a break-in time is expected. For the first 2-3 months you own the valve, it is a good idea to oil it even more frequently than the guidelines below, using a lighter style of valve oil. The Hetman Light Piston Oil is excellent for this purpose. After 2-3 months you can switch to a heavier oil and slightly less frequent oiling, and you can expect years of reliable action.
- It is important to regularly check that all screws and threaded valve caps are tight. They should not be forced beyond hand-tight, but they should be firmly tightened periodically. Because all of the screw joints involve moving parts, they can have a tendency to come loose over time, which will make them noisy, introduce wasted motion and inefficient action, and even broken parts. Rotary and Tru-Bore valve caps and the lockings on Axial valves helps to keep the valve alignment exactly true, so they should not be left loose.
- We recommend an annual chemical cleaning by an experienced, qualified brass technician. We DO NOT recommend taking the valves apart yourself, even if you have done so frequently with previous instruments you've owned. Some of our connecting parts are fit tightly and precisely enough that they can be damaged easily by attempting to work on them with inappropriate tools. If you oil the valves frequently enough, there should be no reason to take them apart to clean them in between annual professional chemical cleanings.

Trombone Valve Maintenance by valve type

Axial Flow and Rotary Valves

- 2-3 times per week, a few drops of rotary or piston valve oil should be applied to the inside of the valve. Apply through the slide receiver and the smaller leg main tuning slide receiver. On a dependent bass set, you will need to apply some oil through a valve tuning slide receiver; simply be careful to drip directly down the center of the tube, to avoid picking up tuning slide lubrication before getting to the valve rotor. Generally we recommend Hetman Light Rotor Oil for this purpose.
- Once a week, apply a drop of Bearing and Linkage Oil to the valve spindles. We recommend Hetman Light Bearing and Linkage Oil for this purpose.

TruBore Valves

- Once every 2-3 days, apply a few drops of rotary or piston valve oil should be applied to the inside of the valve. Apply through the slide receiver and the smaller leg main tuning slide receiver. On the Tru-Bore valve, you can also apply 2-3 drops of oil in the groove underneath the valve cap. On a dependent bass set, you will need to apply some oil through a valve tuning slide receiver; simply be careful to drip directly down the center of the tube, to avoid picking up tuning slide lubrication

before getting to the valve rotor. Generally we recommend Hetman Light Rotor Oil for this purpose, but some players prefer the faster action of Hetman Piston or Classic Piston Oil.

- Once a week, apply a drop of Bearing and Linkage Oil to the valve spindles. We recommend Hetman Light Bearing and Linkage Oil for this purpose.

Please keep in mind that your trombone is a finely tuned instrument assembled individually, piece by piece by master craftsmen, and as such, should be treated with respect. Please, do not force anything, trying for tighter or looser. If you can't move it, it provably shouldn't be moved. Do not disassemble the valve. If you develop a problem or have a question that isn't addressed here, please contact us! We love to hear from our customer and can usually talk you through any minor problems over the phone. If not, we can recommend authorized Shires repair techs and provide them with the assistance and/or parts they might need to get your instrument back into perfect playing condition. Please remember that any unauthorized tampering or repairs to any part of the instrument voids any and all factory warranties.

General Trumpet Maintenance

- The most important thing is to keep your instrument clean, inside and out, and to keep it well oiled. Simply wiping down the exterior of the instrument with a cloth before you put it in the case will slow wear, and cleaning the instrument regularly will prevent sluggish action and corrosion.
- For lacquered trumpets, please keep in mind that we use the thinnest possible coat of epoxy lacquer, so that the effect on sound and response of the instrument is minimal. The lacquer is baked on at a high temperature for durability, but it still will wear away over time from contact with the acids on the surface of your skin. The durability of the lacquer finish will be enhanced if you are in the habit of wiping down the contact points of the instrument with a soft cloth whenever you put the instrument in the case.
- Oil serves to lubricate moving parts, but it also coats the surfaces and prevents oxidation from forming. Oxidation forms when the instrument is left wet from the condensation in our breath for even a small period of time. It will build up on the surfaces, eventually interfering with the action of valves and sometimes even causing them to seize completely.
- Oxidation also forms on tuning slides, making them difficult to move. We use and recommend Hetman Tuning Slide Gel, which needs to be applied more often than thicker tuning slide lubricants, but if it drips into the valve and slows the action, is easily dissolved with Hetman valve oils.
- On a daily basis we recommend oiling your valves and putting a drop of oil down the leadpipe to coat the inside of the pipe and prevent buildup and corrosion. On a weekly basis we recommend cleaning your mouthpiece and leadpipe with a snake or brush and lubricating the 1st and 3rd valve slides, as well as the main tuning slides.