Oiling & Maintaining Rotary Valves

Sticky valves can frequently be repaired at home before taking a trip to the repair shop. Valves usually stick because they are dry and need to be lubricated. There are many methods that work, but this is what our repair team has found to be the best.

Two surfaces need lubrication: the bearings at the ends of the rotors and the areas that seal off the ports. Transmission oil works very well on the two bearing surfaces. For the bearing on the linkage side, place a few drops on the surface just below the stop arm and above the cork plate. Remove the rotor cap on the other side and place a few drops onto the rotor surface that spins. Work the valve to help spread the oil onto the bearing surfaces.

Music Showcase prefers not to use the suction method of pulling the oil into the valves. If the instrument is new and fairly tight, not much oil will be pulled into the valve. Also, please realize that the bearing surface is not the only area where oil can be pulled into the valve - grease and dirt may be pulled into the valve around the valve port areas causing additional sticking.

The second area requiring lubrication is the rotor itself. This can be accomplished by pulling the tuning slide (don't forget to depress the trigger) out and putting a few drops of fine trumpet valve oil into the tubes of the tuning slide. Do not drop the oil into the tubes that lead into the rotor. The oil can wash the tuning slide grease into the rotor causing sticky valves. Replace the tuning slide and turn the instrument into a position causing the oil to go into the valve while working the valve to distribute the oil.

Another area requiring lubrication is the linkage. If you have a string setup, no lubrication is necessary. Mechanical linkage requires lubrication within the ball and cup. Music Showcase has found that oil is not heavy enough and usually causes a noisy action. A lanolin based cream works well and can be obtained at your favourite music store or can be found at the local pharmacy. Remove the cup exposing the ball. Clean both ball and cup, apply the lanolin and reassemble.
GENERAL BRASS CLEANING

Brass instruments should be flushed out once a month to clean out any accumulation of dirt and to prevent corrosion. A good place to do this is in a bathtub. Fill the tub with lukewarm water and a mild soap (not detergent). Remove all tuning slides. Unscrew top and bottom valve caps, removing the valves at the same time. Any felts on valves should be removed so they don’t get wet.

Place instrument in water and flush interior with water and soap. Use a snake brush to clean tubes of tuning slides and bore of instrument. The snake brush can also be used on trombone slides, inside and outside.

Once all tubing has been cleaned, remove instrument and dry with a soft cotton cloth. Place any felts on valves and reassemble using a high quality valve oil. Reassemble tuning slides using a lanolin based slide grease (never Vaseline). A good practice to get into is to always push the tuning slides closed when you’re finished playing (primarily because this prevents the air from drying out the grease, and also, you’ll have to re-tune anyway).

GENERAL BRASS CARE TIPS

- You can wash the mouthpiece with warm, soapy water, making sure you dry the inside thoroughly. The mouthpiece should not have any dents in the end of the shank. If the mouthpiece gets stuck, do not attempt to remove it. Our Music Showcase repair department has a special tool for removing it.

- Wipe down the exterior of all brass instruments with a non-treated cloth to remove fingerprints and residue.

- Pitch is affected by temperature. Be sure to warm up your instrument before playing by blowing air through it.

- It is recommended that all brass instruments be taken to a professional repair technician at least once a year for general maintenance and professional cleaning. Doing so may prevent costly repairs in the future. Regular maintenance and professional chemical cleaning will also help prevent and retard “red rot”, a form of corrosion that eats through brass.

- Broken solder joints should not be ignored. Have a qualified repair technician check out your instrument as soon as possible.

- Never set anything on top of your brass instrument, whether inside or outside of its case; this includes sheet music! Damage occurs easily when items are placed on the instrument and the case is closed. Make sure your case is secure and all hinges, latches, and handles are securely fastened to the case.

- Never leave a brass instrument in a hot car or in your trunk. Extreme temperatures can damage your horn.