## Caring for Your French Horn

In order to continue to work properly, it is very important that your horn be properly maintained. Not only is a horn a musically artistic device, but it is also a mechanical tool requiring cleaning and service just as any machine would. Fortunately, maintaining a horn is not a difficult task when the student follows a few simple procedures on a regular basis. The following steps should be taken to keep your horn looking and sounding great.

Every Time You Play		Once a Week		Once a Month/As Needed	
1.	Wipe fingerprints clean with a handkerchief.	1. 2.	Grease all of your slides. Oil your valve posts (top	1.	Bathe your slides in lukewarm water to
2.	Empty water before storing the instrument in	3.	and bottom) using household oil. Use your flexible cleaner	2.	remove any buildup. Check strings for wear and have your teacher
3.	your case. Internally oil all of your valves using light valve	5.	to remove any sediment from your lead pipe.		replace any that need replacement.
4.	oil. Use your mouthpiece brush to remove any buildup that has collected in your mouthpiece.			3.	Clean the exterior surface of the horn with non-abrasive furniture polish.

## **Daily Maintenance**

The oil that is naturally secreted from your skin will be deposited on your horn as you handle it in normal daily playing. Although the resulting fingerprints are not immediately harmful to your horn, they will attract dirt and will result in a dingy appearance. In addition, the acids contained in your body oil will begin to slowly dissolve the lacquer coating on your instrument, exposing the metal beneath and resulting in oxidation. Besides the obvious unsightliness of a horn in this condition is the fact that the oxidized metal will rub off onto the player's hands, leaving a filthy residue. To prevent this, simply wipe the exterior surface of the horn with a dry handkerchief before placing your instrument back in its case each time you practice.

Aside from abusive handling of the instrument by the player, friction is the horn's greatest enemy. To prevent friction, a horn must be oiled **every day**. When valves become slow and unresponsive or begin to stick, damage has already begun to occur. To internally oil your valves, simply remove the slides leading to the thumb valve and the first valve on both the F and Bb sides of the horn. Put three to five drops of valve oil into each slide opening and rapidly wiggle the valves to spread the oil evenly around the rotor, rocking the horn slightly to distribute the excess oil throughout the remaining valves. Replace and reset the slides once this is finished. Refer to the illustrations on the following page for examples of how to correctly oil your valves.

As you play your instrument, saliva and tiny food particles are sometimes expelled into your instrument, creating a tartar-like residue on the inside of your mouthpiece. To prevent this, you should clean your mouthpiece with a mouthpiece brush every time you play your instrument. Make sure to rotate the brush (rather than thrusting) in both the shank and cup of the mouthpiece. For an extra clean mouthpiece, occasionally rinse and scrub your mouthpiece with rubbing alcohol or non-abrasive toothpaste then rinse with water.

## Weekly Maintenance

The French Horn can have as many as ten slides used for tuning adjustments and emptying water. These slides must be kept in good working order even if they are infrequently used, since a neglected slide will corrode in a remarkably short time. Greasing slides is a simple process that should be done every one to two weeks. Remove each slide one at a time and carefully wipe off the old grease with a lint-free cloth (shop towels work great). Apply a small bead of slide grease around the ends of the slide and gently work it back into the horn, using the instrument to spread the grease along the rest of the slide. Wipe off any excess grease. Repeat this process for the remaining slides. See the illustrations below for examples of how to correctly grease your slides.

In addition to daily oiling of the interior of your valves, you should also oil the posts of your valves once a week using light household oil, such as 3-n-1 brand. To oil the bottom posts, simply squeeze one drop of oil into the joint just beneath the string of each valve. To oil the top post, remove the valve cap from each valve and wipe off any old oil with a lint-free cloth. Apply a single drop of household oil to the top of the post and replace the valve cap. See the illustrations below for examples of correct oiling of the posts.

If you brush your mouthpiece every time you play you will prevent most obstructions from entering your instrument, but some particles will inevitably collect in the lead pipe of your instrument. Consequently, you should clean your lead pipe every week with a flexible cleaner, often called a "snake." Remove your mouthpiece and the main tuning slide from the horn and run the flexible cleaner completely through the lead pipe until all sediment is removed. Rinse the cleaner in running water between each pass.

## Monthly or As Needed Maintenance

Food particles and other mouth-blown sediment rarely reaches as far into the instrument as the valve slides, but other materials such as excess slide grease and tiny metal fragments from rotor wear can collect in these slides. To remove this, you should immerse your slides in a bathtub filled with lukewarm (not hot) water every month or two. A fifteen-minute soak will lift most of this unwanted material, but don't forget to grease the slides before replacing them.

Every now and then you should check your instrument for minor repairs. Examine the rotor strings for signs of wear and look for any loose screws and springs. You should also check all of the braces throughout the instrument to make sure none of the solder connections have broken loose. Tell your teacher if you find anything needing attention.

Occasionally you will want to polish your instrument to keep its luster and shine. Since all school-owned French Horns are lacquered regardless of their finish, brass and nickel-silver instruments alike should be cleaned with a soft rag sprayed with non-abrasive furniture polish, such as Pledge. Never spray the polish directly on the instrument, and never use brass or silver polish on your instrument. Doing so will seriously damage the finish of your instrument. Regardless of the quality of care you give your instrument, occasional repairs and adjustments will have to be made. It is far better in the long run to have repairs made by a qualified technician as soon as possible than to postpone sending an instrument to the shop by making makeshift repairs. Your director can advise you when it is necessary to take an instrument in for repairs.

Even the most gifted musician cannot be successful on an instrument that is not properly maintained. Proper care of a horn is not a huge, time-consuming task when basic procedures are followed on a daily basis. The result of good horn care is an instrument that looks and sounds better with less money spent on repairs. Daily maintenance of your instrument is part of your responsibility as a musician.