

2025 Edition

DISQUES A TEMPO

FREE

MAINTENANCE AND CLEANING GUIDE



FOR THE HORN

AND OTHER BRASS INSTRUMENTS

With Humor !



DISQUES A TEMPO

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The horn shown in the illustrations and photos of
this guide is a **Holton H181** model, awarded
First Prize at the Nice National Conservatory in
1991.

Cover:

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<https://rogerlucchayer.blogspot.com/>

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Roger-Luc Chayer is a Canadian musician, horn player, and conductor whose career extends well beyond the musical stage. Originally from Montréal-Nord, he began studying the horn at Collège Henri-Bourassa under the guidance of Lise Chayer and Antonio Bernabei. His talent and determination led him to France, where he was awarded a First Prize in Chamber Music in 1985 and a First Prize in Horn in 1991 at the Nice National Conservatory, in the tradition of the French school, under the direction of Paul Warin.

In Europe, he distinguished himself as a lyrical horn player, performing with prestigious ensembles such as the Opéra de Nice, the Orchestre du Capitole de Toulouse, and the Orchestre Régional de Cannes. Recognized as early as the 1980s as both the youngest conductor in Canada and the youngest Quebec horn player to perform on the international stage, he notably conducted the Orchestre des Solistes Méditerranéens in Nice.

As a producer and music publisher heading Disques A Tempo, he is dedicated to showcasing rare recordings, ranging from chamber music to Mozart concertos, as well as lesser-known orchestral works. His projects have brought together artists such as Véronique Lucignano, Louise-Andrée Baril, Didier Castell-Jacomin, and the Quintette National.

In 2012, he received the Queen Elizabeth II Diamond Jubilee Medal in recognition of his musical and journalistic contributions. He is also actively involved in humanitarian causes, particularly in support of people living with HIV. Journalist Daniel Rolland captured Chayer's artistic imprint by describing him as "*an absolutely unsurpassable artist*", whose notes "*with unparalleled generosity, seemed to flow from a true horn of plenty.*"



PREFACE

Cleaning a brass instrument isn't just about wiping it down and blowing into it. Oh no... it's a true art, almost as noble as playing music itself.

It's like caring for a classic car: you polish it, pamper it, attend to every little detail... and it rewards you in kind.

A horn, or any other brass instrument, is a work of art. Its sound, mechanical smoothness, and that "extra little soul" all depend directly on proper cleaning and lubrication—not just a random dab of oil like you would for a squeaky door.

This guide is the result of nearly forty years spent pampering my instruments. It's meant to help amateur musicians who aren't always sure how to go about it, and to avoid common pitfalls, like using the wrong cleaning product that turns your horn into a tarnished sculpture, or dubious grease that stifles its voice.

It can also serve professional musicians who

have never dared to get their hands "greasy"—or rather, inside the slides—and would like to learn. Over the years, I've met plenty of pros who had absolutely no idea how to care for a brass instrument... and who eyed it with the same apprehension as a cat staring at a bathtub full of water.

Unfortunately, instrument maintenance is rarely taught in conservatories, universities, or music schools. Yet it is essential to restore even an older instrument to its full sonic power and mechanical ease.

In this guide, I share the secrets I've accumulated over the years and walk you step by step through a complete cleaning. No need to do it every week—once a year is enough, even if you play daily.

The horn is a noble instrument, and like all nobles, it loves to be well cared for. So... grab your cloths!

Roger-Luc Chayer





SUPPLIES NEEDED

Have a musical instrument!

Next, choosing the right products—or avoiding the wrong ones—is crucial. Depending on their composition and ingredients, some cleaners can easily damage the instrument's finish, alter the lacquer, or harm the interior of the valves.

Recommended: Classic dish soap is always the simplest and safest choice. It acts as a gentle degreaser and also helps control the growth of mold and bacteria inside the instrument.

To Avoid: Abrasive products (scouring powders or pastes, steel wool, sandpaper). **Risk:** Irreversible scratches on the lacquer or bare metal, affecting both the appearance and protection against oxidation.

Examples: Scouring powder, overly strong polishing pastes (e.g., metal polish for car bodies), Scotch-Brite.

Alkaline or acidic household cleaners. Risk:

Acids (pure vinegar, lemon, limescale removers) attack brass directly and can tarnish or dissolve the lacquer. Strong bases (bleach, concentrated ammonia) can weaken solder joints and dry out soft components such as rubber or plastic.

Strong solvents (acetone, paint thinner, white spirit). **Risk:** Dissolving or softening the lacquer, damaging soft joints, or attacking certain glues.

Unsuitable detergents. **Risk:** Highly concentrated or scented dish soaps may leave greasy residues or slightly damage the lacquer over time. Prefer a mild, neutral dish soap diluted in plenty of lukewarm water.

Finally, never use steel wool—or any equivalent—to remove stains from the metal.

Over the years, brass “ages,” and slight shading or color variations may appear. This is a natural phenomenon that does not affect the instrument or its sound.



LET'S GET STARTED...

First of all, if you're unsure or worried about where to put the slides back after cleaning, grab your camera. Take several shots of your instrument from all angles—like a celebrity photo shoot—so you can refer to them when reassembling... and avoid creating a “Cubist horn” worthy of Picasso.

You can use all sorts of tubs for cleaning, as long as they are deep enough to fully submerge the horn. The entire instrument should be immersed, but there's no need to cover the bell all at once: soaking can be done in two steps, turning the horn so that every part of the bell gets its moment under water.

After all, even instruments enjoy a little rotating shower! Personally, I've always preferred using a bathtub, as it's large enough to hold all the detachable parts like the slides, while still leaving enough space to clean the instrument comfortably.

Once the tub is filled, add a generous amount of ordinary, non-concentrated dish soap, and stir gently by hand, trying to create as little foam as possible. A little trick to know if there's enough soap: the water should feel slippery... like a miniature skating rink for

your horn! Remember: the main goal of this step isn't just to remove dust or fingerprints, but to prepare the instrument for a proper deep degreasing.

SOAKING

Forget the idea of cleaning a horn without first giving it a good bath in soapy water. Every nook and cranny of the instrument deserves a little soak. Start by removing all slides and detachable parts and let them splash around in the water.

To ensure the soapy water reaches every interior section, I always rotate the horn in the water while gently pressing the keys, making sure even the valves get a little tour. Let the instrument relax for at least 30 minutes, then turn it onto the opposite side for a second 30-minute soak. Your horn will come out clean, relaxed... and maybe a little tanned!

CAUTION

The horn, like other brass instruments, is delicate. Always handle the bell and the larger tubing with care and gentleness. Cleaning should remain a nurturing moment, not a wrestling match: the instrument doesn't like being roughed up!



A GENTLE WIPE

For cleaning the instrument, it is essential to use a soft cloth to avoid scratching the finish while effectively removing dirt and residue from previous lubrications.

A polyester cloth is preferable, as it is more durable than cotton or linen and won't leave tiny fibers that could later sneak into the mechanisms like invisible little saboteurs.

This step requires time and attention to detail. Work section by section, because the horn is not just a pretty golden coil—it's a complex structure filled with small parts.

Rushing a wipe over the visible areas is pointless; for proper degreasing, start inside the bell and go as far as possible. Then move on to the exterior, rubbing as needed, but always with care and discernment.

The bell itself is the most fragile area. Throughout cleaning, make sure the instrument never rests on one side of the bell, or—oops—it will deform... and good luck

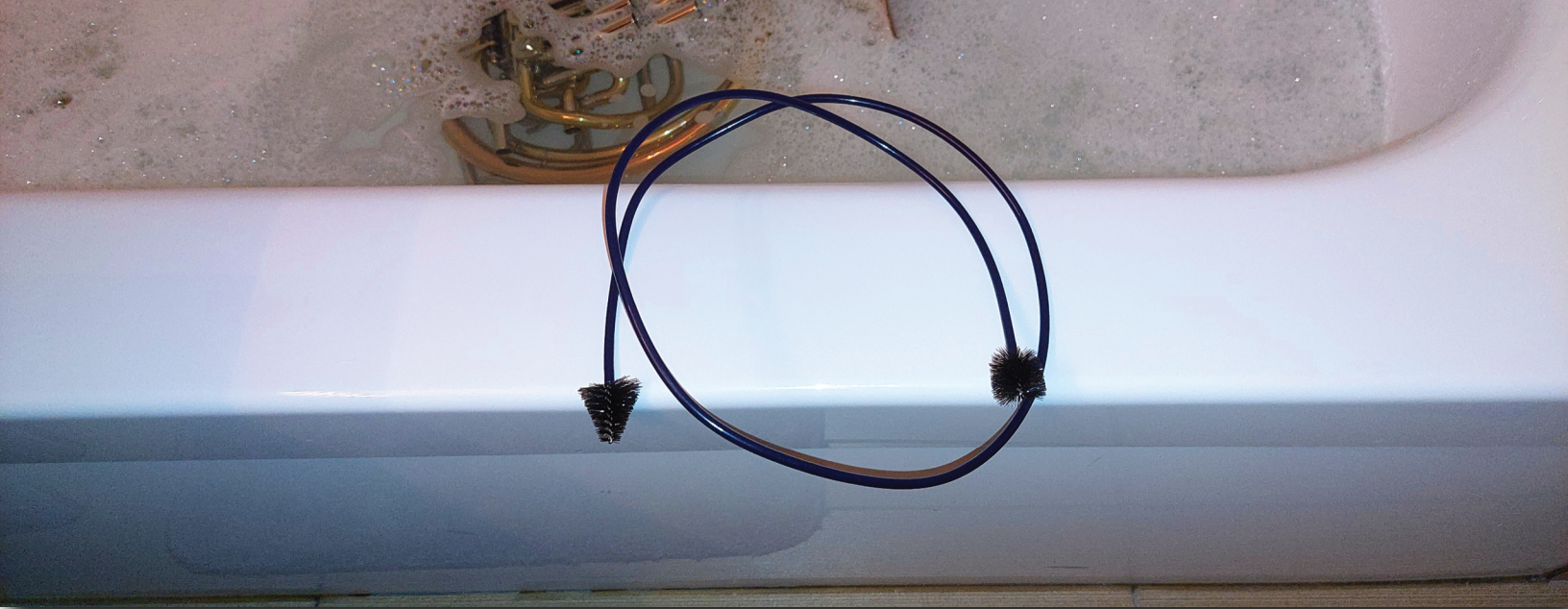
fixing that. Every little tube, every nook deserves careful attention, sometimes twice, as if you were cleaning an heirloom.

Finally, the water should be lukewarm, never hot. Water that is too hot can damage the metal—often lacquered brass or silver-plated—by softening or cracking the protective layer, causing tarnishing or blistering.

It can also cause uneven expansion compared to other materials, throwing off the adjustments. Cork, felt, or rubber joints are equally sensitive: heat can swell or deform them, or even dissolve the glue holding them in place.

At this stage, don't worry about the interior of the tubing and internal parts; that will come next. It is also important to remember never to use glass cleaner to polish the instrument.

Ingredients such as ammonia, often present, are fatal to the finish, whether lacquered or not.



THE BRUSHING

For cleaning the inside of your instrument, there's no compromise: you need a snake brush with two brushes—one at each end—and a length of at least 111 cm. Yes, 111 cm, not 110: that extra centimeter could be the one that saves your perfect note at the concert! The brushes should be made of plastic or polyester; forget about fabric tips, which not only do a poor job of scrubbing but sometimes become a veritable Airbnb for bacteria.

These brushes are easy to find at your music store or online at very reasonable prices (often cheaper than a fancy coffee). No matter the shape of the brush, both ends achieve the same result. Pass it through every tube, 5 to 10 times back and forth,

and don't forget to approach via the bell: the brush's length will allow you to reach around curves and access the farthest corners.

This step is crucial: it dislodges solid deposits that have settled throughout the instrument, like unauthorized squatters. Brush all the solid parts of the horn, treating each slide individually. In most cases, the brush is long and flexible enough to enter one side of a slide and come out the other—a small but satisfying victory. Repeat this back-and-forth at least five times. It's at this precise moment that the water will start to change color... a sign that the cleaning is working, and that your instrument is saying thank you.





HEALTH EFFECTS

After emptying the bath—often with water darker than when you started—you may sometimes find small solid particles at the bottom, “dark specks,” if you will. These are residues that were stuck inside the instrument, which is why thorough brushing is essential.

These debris are far from a health smoothie: they often contain verdigris, responsible for that metallic smell inside the horn.

Verdigris is mainly composed of copper acetates, carbonates, and chlorides.

Copper is great... in small amounts. But in excess (especially in soluble form), it becomes toxic. Playing with verdigris can lead to mouth irritation, stomach aches, nausea, vomiting, or even poisoning.

And that’s not all: constant moisture mixed with saliva turns the instrument into a private club for microbes. Saliva residues provide a full buffet for bacteria and fungi.

Bacteriological studies show that the inside of a horn can become colonized by yeasts, bacteria, and viruses—ready to harm the musician’s health if the instrument is not properly cleaned.





RINSING

At this stage, the goal is to rinse thoroughly so that no brushing debris or soap residue remains—anything that could damage the finish, affect the instrument's performance, or provide a five-star spa for bacteria.

I recommend using a showerhead to rinse the horn and all slides thoroughly. If a showerhead is not available, rinsing under running tap water will work; the key is to get water flowing through every part of the instrument, through every opening, while moving the pistons back and forth and manipulating each slide to ensure full circulation.

As an extra precaution—perhaps unnecessary, but I like to do it—I refill the tub with cold or lukewarm water and move all the pieces and the body of the instrument around, to remove any remaining contaminants or soap.

Soap residue in a horn can leave a sticky film that attracts dirt and deposits, slows down the slides, promotes corrosion, and alters the taste of the air. Worse, it can irritate the mouth and harbor microbes and fungi. Once this step is complete, you can confidently say that the instrument is clean and decontaminated.





DRYING - MOUTHPIECE

After carefully rinsing the instrument and its detachable parts, it's time to dry everything thoroughly—especially the exterior. But first, mission number one: expel as much water as possible from the inside of the horn and slides. If a little water remains, don't panic: after all, it's designed to handle some moisture... but not to become an aquarium.

Shake the slides, tilt the horn from side to side to let the excess water flow out, and don't forget to “drain” the pistons by holding the instrument in various positions while pressing the keys.

Finally, grab a finishing cloth and wipe down the exterior, paying attention to spaces between slides and every little nook. Yes, even the spot you think “nobody will see”: your horn will know. A cotton cloth is recommended.

For the mouthpiece, cleaning with dish soap is a must—and as often as possible, since it's the main gateway for bacteria. A small, pointed brush works perfectly. And above all, never lend your mouthpiece or use someone else's before a thorough wash—and no, it's not true that certain metals are naturally antiseptic.





PART II

GREASING AND LUBRICATION

One of the most important—and often underestimated—aspects of caring for your horn is lubrication and greasing.

Over the years, throughout my career, I've encountered countless techniques and products... many of which had absolutely nothing to do with proper brass instrument maintenance. In some cases, these “home remedies” actually harmed the valves and slides.

The goal of this crucial step is simple: allow the moving parts to operate at full capacity, let the slides glide like freshly sharpened skates, and most importantly, prevent any air leaks that would ruin the instrument's sound and make playing more painful than a horn solo in the rain.

Among my students—and even some professional colleagues—I've seen some real gems (or rather, disasters): cooking oils, candle wax, petroleum-based grease... Needless to say, the results were often catastrophic, and the poor horn ended up looking like a tired deep fryer.

In a few cases, I offered my services to properly clean and lubricate the instrument. The results were stunning: some colleagues admitted they hardly recognized their own horn, convinced I had secretly swapped it for a new model.

In this section, I will show you how to grease and lubricate a horn correctly, which products to use, and—most importantly—which ones to avoid like the plague.





VALVE SLIDE GREASE

First things first, prepare your workspace properly, because you'll soon realize: between grease and oil, it can quickly start to look like an Italian kitchen on a big production night.

A thick towel will serve as a protective tablecloth, and a cloth within reach will be your best friend for wiping your fingers between steps.

For a horn, it's best to banish any greases that have nothing to do with brass instruments. Forget mechanical or automotive greases—they're too thick and corrosive, and they can eat away at your lacquer or brass.

Plumbing greases or industrial silicone-based products aren't any better: they can react with instrument oils and turn into a sticky mess reminiscent of gum left under a table.

As for food greases—butter, oil, or margarine—they go rancid, smell awful, and turn your horn into a buffet for hungry bacteria.

Vaseline can work in a pinch, but it dries quickly, sticks slides together, and can migrate to the valves—not exactly ideal. Finally, liquid trombone lubricants are far too runny to properly seal a horn's tuning slides: let trombonists have those.

The right grease should allow the slides to move smoothly while ensuring a perfect seal. No need to spread it like butter on a baguette: a small dab on your finger applied to the first centimeter of the slide is more than enough.

Then, gently insert each slide with a small back-and-forth motion, allowing the grease to spread evenly along the tube. Repeat this operation slide by slide, and then fully reinsert each slide. Fine-tuning can be done at the end.

If you're careful, there won't be any excess or messy cleanup. Otherwise, expect a few suspicious stains on your clothes. In any case, after greasing, a quick wipe to remove any extra traces, and your horn will be ready to shine—without smelling like fried food or your Jeep engine!



THE OIL

In addition to greasing, lubricating the valves is absolutely essential for the horn's smooth purr and to ensure a long life for its precision mechanics—so fine you could almost call it Swiss watchmaking, but noisier when it squeaks.

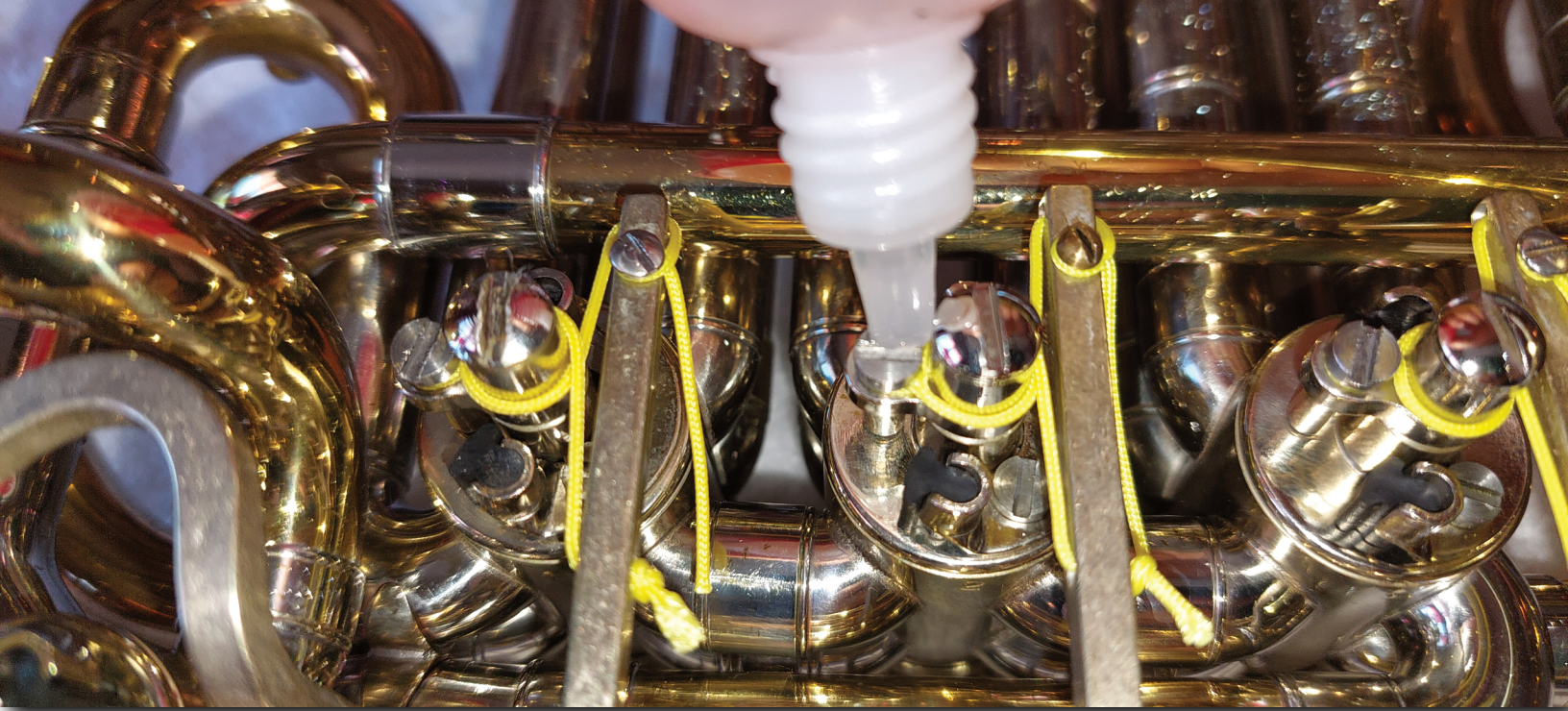
Start by unscrewing the valve caps on top of the instrument, wipe away any excess water that loves to hide there after cleaning, then drop a small amount of oil into the central hole. Screw the cap back on and move the valve for a few seconds—it's a bit like giving the valve head a well-deserved massage.

Next, turn the instrument over and locate the screws holding the springs. Add a drop of oil on each screw and

another directly on the spring: this prolongs its life, because a dry spring will always break eventually (and never at a convenient time, of course). Personally, I've always oiled the springs, and in my entire career, I've had only one break—proof that a few well-placed drops can work wonders.

Then, add a drop at the base of each central screw and operate the keys for a few seconds to distribute the oil evenly. Finally, finish with a few drops of oil in each slide entry to fully lubricate the inside of the valves. Here, it's better to use slightly too much than too little: you'll immediately notice the valve becomes quieter and moves with the grace of a well-warmed ballet dancer.





Never give in to the temptation to improvise with whatever is lying around the house. Olive oil is delicious on a salad, but catastrophic in a valve: it sticks, goes rancid, and your horn would eventually smell like a pizzeria.

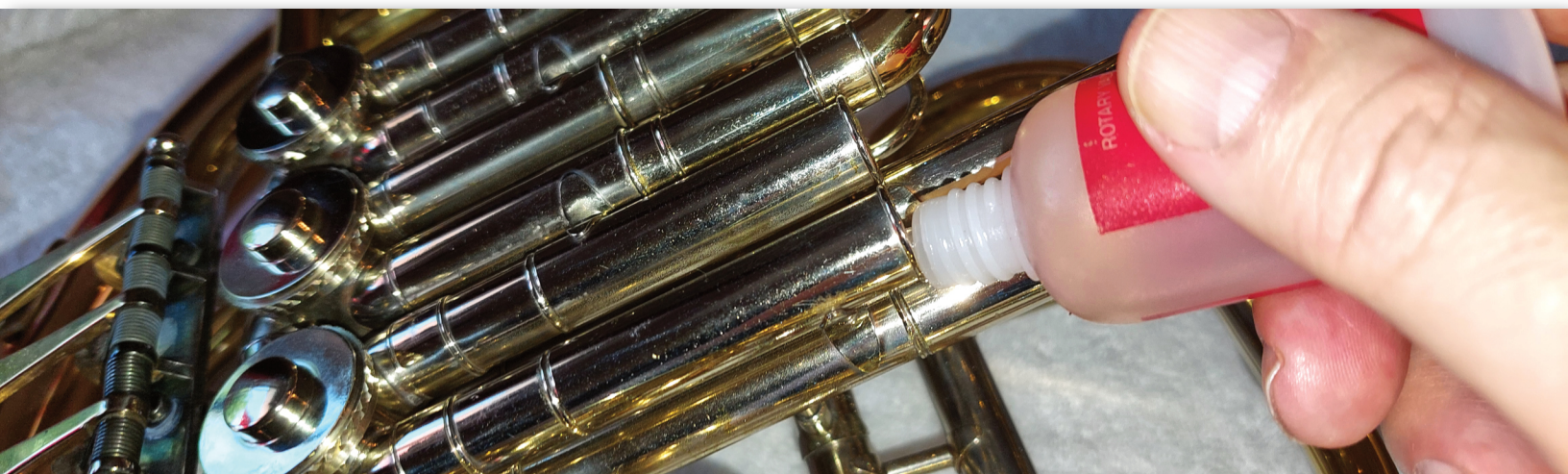
Motor oil might make your car run smoother, but your horn's mechanics will probably run rough. As for “miracle” all-purpose lubricants—the name says it all: it would take a true miracle for them not to damage your instrument. In short, if the little bottle doesn't say “brass instrument oil,” don't use it—leave it in the garage or the kitchen.

A well-maintained horn is a loyal companion: it responds instantly, the valves glide with the

softness of room-temperature semi-salted butter, and the sound comes out clear, noble, almost princely.

On the other hand, a mistreated horn is a temperamental diva: the valves squeak like an old cellar door, the springs dry out and break at the worst possible moment, and the bell ends up looking like a dented saucepan.

The advantage of proper maintenance is peace of mind and the joy of playing without fighting your instrument. The disadvantage of neglect is giving the audience a concert of squeaks, clicks, and groans that may make them smile... but not you. In short, taking care of your horn saves your reputation—and your sense of humor!





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