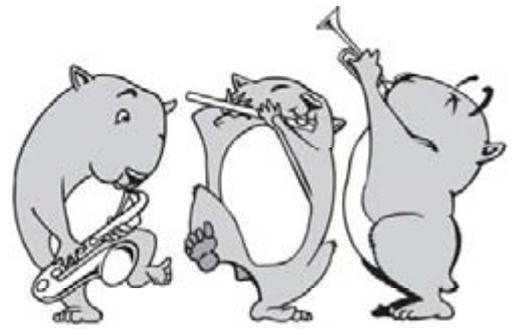


# WOMBAT WOODWIND & BRASS



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## PREVENTATIVE SAXOPHONE MAINTENANCE

**Martin Lukas**

### **A guide to maximising the life of your saxophone and extending the time between services.**

#### **THE GOLDEN RULES**

The best maintenance is preventative maintenance. It costs nothing, makes the instrument more pleasant to play and avoids unnecessary trips to the repairer. The following golden rules serve as a guide to maximising the life of your saxophone and extending the time between services.

#### **Rule 1 : No food or drink (apart from water) when playing.**

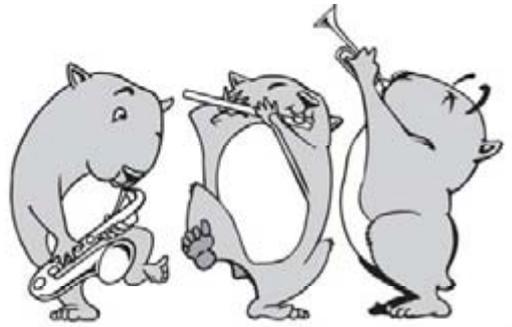
Every time that you eat or drink when playing, you reduce the life of your saxophone pads. Food particles, particularly sugars are a saxophone's worst enemies. Anything suspended or dissolved in the moisture contacts the pads. Food particles will stick to the surface of a pad, especially where the pad seats against the tone hole, prematurely forming "dirty rings" that shorten pad life. Sugars are particularly bad as they are absorbed into the pad for the life of the pad, so over time forming a sticky toffee. Sticky/noisy pads are both annoying to the player and difficult to remedy. Most often the only solution for sticky/noisy pads is for a repairer to replace them.

Most modern saxophone pads have had some form of water proofing/resistant treatment. These surface treatments help pads last longer, however, when combined with sugar they can actually contribute to sticky/noisy pad action, more so than older style pads. Therefore it is more important, now then ever before to avoid sugars while playing.

Food particles also collect in the mouthpiece and on the inside of the reed, becoming smelly and unhygienic. In an ideal world, a player would brush their teeth every time before they played their instrument or at least first rinse their mouth with water.

Players' fingers coated with food oils and fats will also coat the body and key work with oils and fats, making the saxophone attract even more dirt and grime. Ideally players should wash their hands before playing. Once a lot of dirt and grime has accumulated on the keywork and body, only a repairer can properly clean the instrument by servicing it with a "disassembly and clean". There is no need to invite such services before they are due.

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## **Rule 2 : Effectively clean and dry the inside of your saxophone**

When you blow into your instrument, you are blowing in air and saliva. The saliva in your mouth is intended to help digest food. Over time, this saliva will also digest your saxophone pads.

Most people are surprised that the pads that need replacing most often are not the ones that are the most used, rather they are the ones that are sprung shut, where your saliva "puddles" during playing and storage i.e. left hand palm pads, right hand side key pads, G#, low Eb and C# pads. So, when cleaning the instrument it is especially important to remove the puddles of saliva from the pads that are sprung shut.

A variety of saxophone pull-throughs are available. Most include some combination of chamois and bristles or cloth on a string. These help keep the bore clean, but they do not remove saliva from the sprung shut pads.

The best way to dry a saxophone is to use a "shove-it", "fuzzy", "furry stick" etc. These cleaners are tapered to fit the bore of the instrument and if inserted a few times will do a marvellous job of drying the bore and removing saliva puddles from the sprung shut pads. Having done this, it is equally important to store the cleaner outside of the instrument and case. If the cleaner is stored in the instrument, then fibres will dry and stick to wet areas in tone holes and on pads; reducing pad seal. If the cleaner is stored in the case, then the case will start to smell and the moisture absorbed by the cleaner can lead to rods and springs rusting.

Therefore it is important to not only clean and dry your saxophone, but to do so effectively. Effective cleaning and drying will delay saxophone pad digestion.

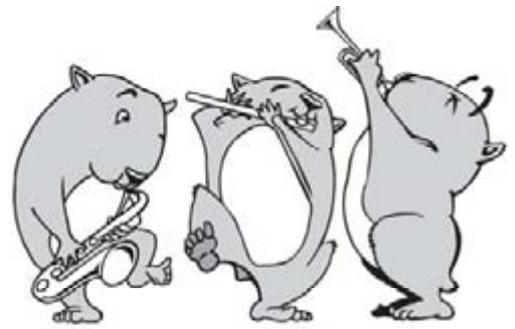
## **Rule 3 : Clean the outside of your saxophone after every time you play**

Perspiration from a player's fingers can be surprisingly corrosive to the point where a build-up of perspiration can etch silver plated and lacquered keywork! So the best thing to do is to clean your saxophone after every time it is played. Use a cloth or clean handkerchief to lightly wipe all keys and saxophone body surfaces. Do not rub vigorously because the cloth can catch on springs and pull them off their cradles.

NB Never use Brasso or any abrasive cleaner on lacquered surfaces (usually yellow colored). You will permanently scar the surface. Mr Sheen sprayed onto a cloth, then used to wipe the surface is OK. For silver surfaces, a commercial silver cleaning cloth is the only option, and only for the open surfaces.

Do not use any sort of cleaning liquid, cream, polish or spray on your saxophone. These cleaners will clean exposed surfaces but residue will also be left in between the keywork and smudge onto the pads, reducing their effectiveness. A saxophone can only be cleaned properly by first totally disassembling it. This is a job done for a qualified and repairer who will disassemble, clean and correctly reassemble the instrument!

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## **Rule 4 : Avoid sunlight, dust and extremes of temperature**

To keep your instrument keywork shiny, avoid placing the instrument in sunny or dusty places. Sunlight causes silver plated and even nickel plated keys to tarnish. Minimise contact with sunlight and dust by placing the instrument in its case when it's not being played. Saxophones have approximately 65 spots that need to be oiled. If any of these spots become dusty, the oil and dust mixture will gradually slow down the key action even to the point of a key seizing up.

Avoid extremes of temperature, hot and cold; such as experienced in a car during a hot day or cold night. In hot conditions, the glue holding pads in place is weakened causing pads to move or even fall out. Cold weather can cause shellac-based glues used on some saxophones to become brittle causing pads to fall out.

## **Rule 5 : Don't use bare fingers to grease the neck cork**

The neck cork may need occasional greasing to fit smoothly. A simple way to avoid spreading the grease onto the instrument is to wrap some writing paper or plastic wrap around the finger that will be used to apply the cork grease. Once the grease has been applied, then the paper or plastic wrap can be removed and discarded with no grease residue left on your hands.

Otherwise, greasy fingers will transfer cork grease residue to keywork and eventually the whole body of the saxophone. This grease will make the instrument slippery to hold and attract dust. The only way to properly remove grease residue is a total disassembly by a professional repairer to wash the instrument body and wipe all the keys and posts with solvent. This is a substantial service that can be easily avoided.

For young, inexperienced players, it may be easiest to simply remove the cork grease from the instrument case and leave it up to the players' teacher to grease the neck cork when required.

## **Rule 6 : Keep the neck tenon joint clean**

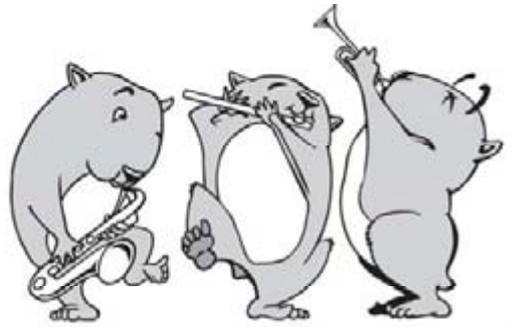
The tenon joint is the joint that connects the neck of the instrument to the body. Over time, grime can accumulate on this joint making it difficult to fit together. It is time to clean the tenon joint when you find that you are using an increasing amount of pressure to fit and un-fit the joint. Clean the inside and outside of a grimy joint using a handkerchief lightly moistened with methylated spirits. This can remove a surprising amount of grime. However, if the joint remains tight, repeat the cleaning process using Brasso. This is a stronger cleaner and will remove more grime. After using the Brasso to remove grime, you will need to reapply methylated spirits to remove the Brasso residue.

Accidental key damage may result from gripping a saxophone too hard to fit grimy joints. So, avoid this type of accidental damage by cleaning the tenon joint before needing to use excessive force!

Tenon joints don't need to be greased. Not only do greasy products like Vaseline and cork grease stain the saxophone case, the grease also gets on your fingers and then onto the saxophone attracting even more grime.

## **Rule 7 : Use a good quality, snug fitting case**

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Your instrument must fit securely into a case with good hinges, secure latches/zips and handle. If it is faulty, treat this as an emergency and seek repairs immediately. Or, just purchase a new case. Good quality replacement cases are not expensive compared to the cost of repairs if an instrument falls out onto concrete. If your instrument shakes like a maraca in its case, use some foam rubber or bubble wrap to take up the free space.

Every saxophone must have an end plug of the correct length installed. This protects the register key arm from bending and makes sure the saxophone does not wobble lengthwise in its case.

## **Rule 8 : Do not use the saxophone case as a music satchel**

Saxophone cases are usually made to carry a saxophone and a reasonable number of accessories. Since most saxophone cases do not include a sheet music compartment, these papers should not be squeezed into the case because there is a great likelihood that the added pressure of the papers will bend keywork.

Also, when carrying your case in your hand, face the case lid towards your body, so that if the case accidentally opens the lid will hit your body reducing the chance of the saxophone falling onto the ground.

## **Rule 9 : Leave oiling of keywork to the professionals**

Saxophones have about 65 spots that need to be oiled once a year. Each of these spots requires a minuscule amount of oil applied exactly, using a special purpose pinpoint oiler. Professional oilers have a point the diameter of a hypodermic needle. However, common keywork oiler bottles have points far greater in size that squirt out far too much oil. Each time too much oil is dropped onto the keywork it will smear the instrument and attract more grime. Excess oil will also loosen the glue that holds key corks, adjusting screws and silencer materials in place. So the oiling of saxophone keywork is best left to a person experienced in handling a professional standard pinpoint oiler; either a skilled teacher or qualified repairer.

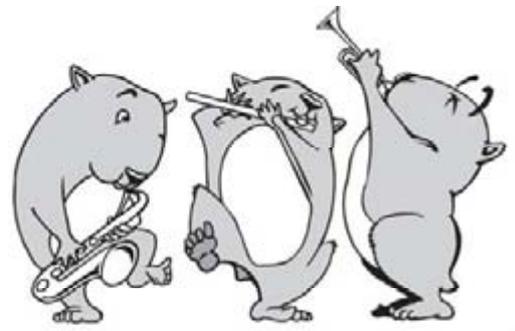
## **Rule 10: Do not leave the reed on the mouthpiece**

It is recommended that younger players not leave the reed on the mouthpiece because the reed can cement itself to the mouthpiece and become a medium for germs and thick mould. YUK! By taking the reed off the mouthpiece, the reed can be dried and a cleaning cloth can be pulled through the mouthpiece. Ideally the reed will then be kept in a proper reed holder (not cardboard or flexible plastic holders) where it is pressed against a flat surface and will dry straight and true without a corrugated tip.

## **Rule 11 Don't use gig bags**

Gig bags are known as the "repairer's friend" because they only provide an illusion of protection. On the other hand, solid traditional wood or moulded plastic cases actually do protect an instrument. No matter how careful you try to be, inevitably you or someone else will

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accidentally stand on, drop, trip or fall over an instrument in a gig bag. Bent bodies, damaged low Eb guards, bent high F and F# posts along with many other faults are the unnecessary signatures of gig bags.

## **Rule 12 Never trust your neck strap**

A neck strap is designed to support and spread the weight of the saxophone when playing. It is not there to have a sax swing in the wind while you do something else with both hands. A clip can break or become unconnected with disastrous results. Try never to take both hands off your saxophone at once.

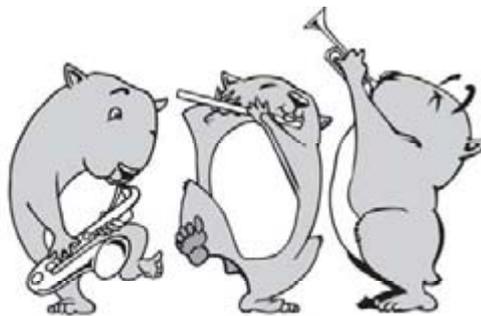
## **AUTHOR DETAILS**

This article has been written by Martin Lukas, the proprietor of Wombat Woodwind and Brass. Wombat Woodwind and Brass provides a full range of woodwind and brass instrument sales and repair services to customers throughout Australia.

Martin holds formal qualifications in band instrument repair from WITCC Iowa USA, music performance and music education from Melbourne University and has twenty years experience as an instrumental music teacher and high school band director. He also has many years of experience repairing instruments in both the USA and Australia.

This article reflects on Martin's accumulated experience as a qualified, experienced repairer and music teacher.

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## TEN COMMANDMENTS OF SAXOPHONE PREVENTATIVE MAINTENANCE

1. NO FOOD OR DRINK WHILE PLAYING, APART FROM WATER.
2. EFFECTIVELY CLEAN AND DRY THE INSIDE OF YOUR SAXOPHONE
3. CLEAN THE OUTSIDE OF YOUR SAXOPHONE AFTER EVERY TIME YOU PLAY
4. AVOID, SUNLIGHT, DUST AND EXTREMES OF TEMPERATURE
5. DO NOT USE BARE FINGERS TO GREASE THE NECK CORK
6. KEEP THE NECK TENON JOINT CLEAN
7. DO NOT USE THE SAXOPHONE CASE AS A CARRY BAG
8. LEAVE OILING OF THE KEYWORK TO THE PROFESSIONALS
9. DO NOT LEAVE THE REED ON THE MOUTHPIECE AFTER PLAYING
10. DON'T USE GIG BAGS