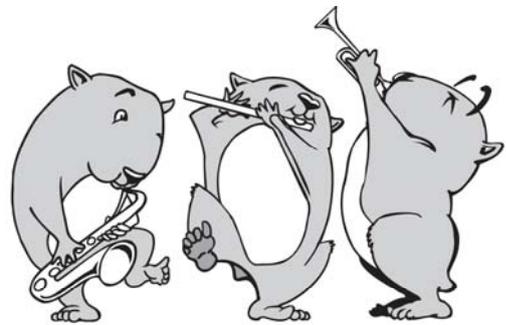


WOMBAT WOODWIND & BRASS



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PREVENTATIVE CLARINET MAINTENANCE

(For plastic body instruments)

Martin Lukas

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

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

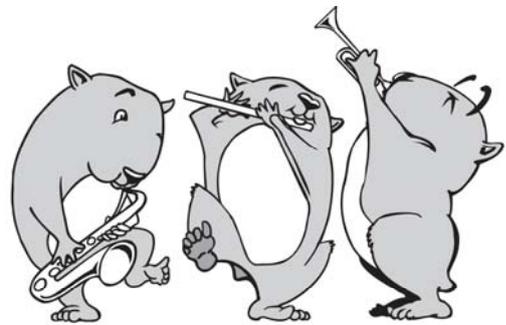
Every time that you eat or drink when playing, you reduce the life of your clarinet pads. Food particles, particularly sugars are a clarinet's worst enemies. Every time a clarinet is played, the pads absorb and then release moisture. Anything suspended or dissolved in the moisture also contacts the pads. 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, forming a sticky toffee that will eventually break the skin of the pad where it touches the tone hole.

Food and drink can also be a cause of noisy/sticky pads that can be both annoying to the player and difficult to remedy. Often the only solution is for a repairer to remove and replace the affected pad.

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 clarinet 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 : Do not sandpaper clarinet pads

This may sound weird, however repairers regularly see the results of this bad practice. Some players hold the mistaken belief that they are cleaning their clarinet pads by pulling cigarette papers, paper money or other forms of paper between a closed pad and a tone hole. But these players are wrong! Pulling any sort of paper between a closed clarinet pad and tone hole (or even just pressing) has the same effect as using fine sandpaper! Instead of cleaning the pad, this "roughs up" the pad's surface by pulling skin fibres loose, providing a greater surface area for grime. This supposed pad cleaning only provides temporary relief from sticky pads, whilst at the same time dramatically reducing pad life and pad seal.

Clarinet players who drag these various types of paper across clarinet pads often do so as a result of seeing oboe players do the same thing, thinking that if this works for the oboist it will work for them too! However, quality oboes have pads that are mostly cork. These cork pads are virtually indestructible, unlike the extremely delicate skins on clarinet pads! So, rather than cleaning pads, oboe players are actually using the paper to dry up "dribbles" in the very small tone holes of the instrument to avoid gurgles whilst they play.

Most clarinet tone holes are substantially larger than their respective oboe tone holes and as a consequence clarinets do not gurgle as frequently. To remove moisture from a clarinet, swab the instrument and then blow any remaining water out by placing your mouth next to the offending tone hole. Your clarinet pads will be grateful for not being roughed-up and prematurely worn. Also, roughed-up pads grab moisture more than pads with a smooth surface.

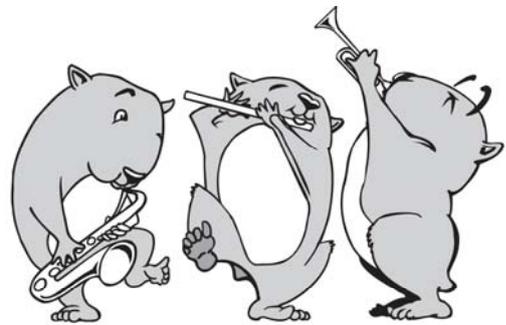
Rule 3 : Don't use bare fingers to grease tenon joints

Clarinet tenon joints (also called "joint corks") 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, tone hole chimneys and eventually the whole body of the clarinet. 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 corks when required.

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Rule 4 : Clean the outside of your clarinet after every time you play

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

Also, do not use any sort of cleaning liquid, cream, polish or spray on your clarinet. 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 clarinet can only be cleaned properly by first totally disassembling it. This is best done by a qualified and experienced repairer who will disassemble, clean and correctly reassemble the instrument!

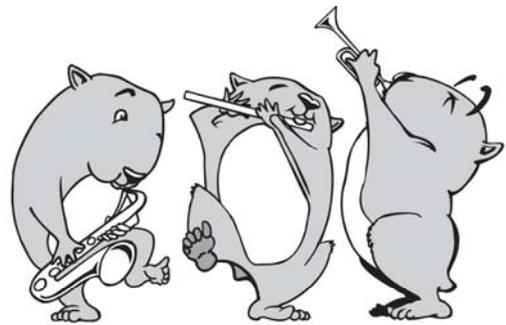
Rule 5 : Clean the inside of your clarinet after every time you play

Each time you play, moisture builds up inside your clarinet. Clarinet pads absorb moisture very quickly because they are made of cardboard, felt and skin. If a pad absorbs so much moisture that it swells then it may not properly cover the tone hole causing it to leak air and affect sound quality. Avoid this problem by removing the moisture from the instrument after each time it is played. The moisture can be removed from each section of the clarinet separately, by using a pull-through cloth. Firstly, separate the clarinet into its sections. Each section will be cleaned separately. Ideally, the moistened cleaning cloth should not be stored inside the clarinet case. Leaving the cloth in the case is bad for two reasons. Firstly; moisture will be retained in the case causing ferrous metal parts of the clarinet such as the pivot screws, adjusting screws and rods to rust. Secondly, the moisture can cause the case to smell musty and discolour keys.

Fuzzies (commercially available fuzzy cleaning sticks) can also be used to clean the insides of clarinets. However, they need to be used with care. If you choose to use a fuzzy to clean your instrument, just as for the cloth, do not leave the fuzzy inside the instrument or even store it inside the case. In both situations, the moisture remains in or near the instrument. Also, the drying fibres will adhere to pad surfaces, reducing a pad's ability to seal. Repairers regularly see pads with multi-coloured fibres stuck to them. Removing the fibres is a delicate process and an unnecessary repair.

Usually once in a clarinet player's life a cleaning pull through cloth will get stuck. If so, take it to a repairer immediately. They will have the correct tools to remove it safely. Do not use knitting needles, music stand shafts, knives etc. You will make the problem worse and quite likely scratch the bore or cause other problems such as bent keys.

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Rule 6 : Do not use the clarinet case as a carry bag

Clarinet cases are usually made to carry a clarinet and a small number of accessories. Your instrument can be scratched or damaged by sharing this space with medals, pencils, pencil sharpeners, coins and lollies.

Also, few cases include a special compartment for the storage of music. Music should only be placed inside a case that has a special compartment for this purpose. If a case does not have this, music should not be squeezed into the case as the added pressure can bend keywork.

Rule 7 : 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. Clarinets have approximately 35 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. The same applies to clarinets with synthetic peel-and-stick keycorks. Cold temperature can cause shellac based glues used on some clarinets to become very brittle causing pads to fall out.

Rule 8 : Leave oiling of keywork to the professionals

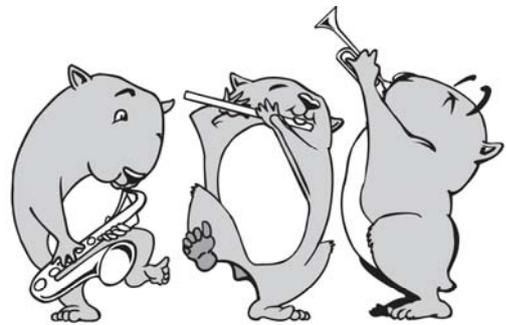
Clarinets have about 35 spots that need to be oiled only once a year. Each of these spots requires a minuscule amount of oil applied exactly, using a special purpose pinpoint oiler. Professional oilers have a pin point the diameter of a hypodermic needle. However, common keywork oiler bottles have points 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 clarinet keywork is best left to a person experienced in handling a professional pinpoint oiler; either a skilled teacher or qualified repairer.

Rule 9 : 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 10 : Assemble and disassemble the instrument carefully.

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Take the upper joint (the shorter joint with keys) with the left hand and the lower joint (the longer joint with keys) with the right hand. Gently twist the joints together with a back and forth rotation. Do not try a 360 turn as keys will bind. Do not “wobble” to fit. Be very careful to check that the upper joint key that extends over the cork joint fits over its partner on the lower joint. You will easily find the place to put your left hand so that this key is raised.

If the joints are uncomfortably tight for small hands to assemble easily, use some cork grease to lubricate. (see rule 3) If after applying the grease the fit is still uncomfortably tight, you will need to see a repairer to sand away excess cork. Assembly and disassembly needs to be comfortable for young players, otherwise excessive grip is used resulting in discomfort and possibly bent keys.

Rule 11 : Loose body rings are an emergency

Most clarinets have 4 body rings that strengthen the rather thin walls of sockets. If these become loose (can be rotated by hand) or even come off, do not play the instrument. Sockets without good support from rings can easily crack or snap off. This simple repair can avoid a major expense.

Rule 12 : Use a good quality, snug fitting case

Your clarinet 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.

Also, when carrying your case, get into the habit of facing the lid towards your body. In this way if the case accidentally opens, the lid will hit your body reducing the chance your clarinet falling onto the ground.

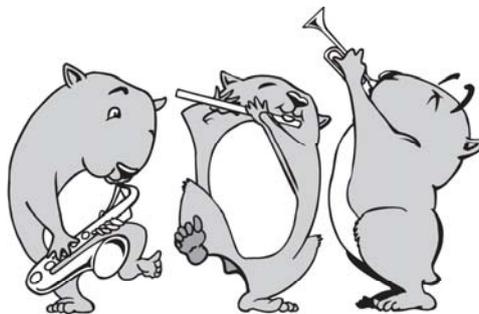
AUTHOR DETAILS

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 CLARINET PREVENTATIVE MAINTENANCE

1. NO FOOD OR DRINK WHILE PLAYING,
APART FROM WATER.
2. DO NOT SANDPAPER CLARINET PADS
3. DO NOT USE BARE FINGERS TO GREASE
TENON JOINTS
4. CLEAN THE OUTSIDE OF YOUR CLARINET
AFTER EVERY TIME YOU PLAY
5. CLEAN THE INSIDE OF YOUR CLARINET
AFTER EVERY TIME YOU PLAY
6. USE A GOOD CLARINET CASE BUT NOT AS
A CARRY BAG FOR ALL ODDS & ENDS
7. AVOID, SUNLIGHT, DUST AND EXTREMES
OF TEMPERATURE
8. LEAVE OILING OF THE KEYWORK TO THE
PROFESSIONALS
9. DO NOT LEAVE THE REED ON THE
MOUTHPIECE AFTER PLAYING
10. NO FOOD OR DRINK WHILE PLAYING,
APART FROM WATER.