

TERAFLOAT

LIGHTWEIGHT PERFECTION



user manual



Swissvet Veterinary Products 2017

The Terafloat is designed for equine dentistry.

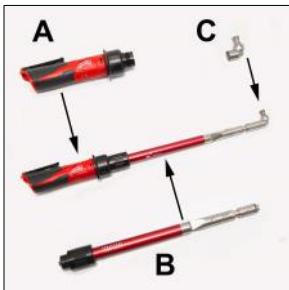


For questions or comments please contact your distributor

US 865 540 8830 - www.swissvet.com

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Version 1/2017



GENERAL INFORMATION: Please read these instructions carefully.

These instructions refer to the classic Terafloat and the Terafloat Eco. Other Terafloat instruments include the Terafloat Incisor and the Terafloat Pony; please refer to their respective manuals.

The classic (or the eco Terafloat) has 3 parts: A. the motor, B. the shaft (classic shaft shown), and C. the head.

Cleaning/Maintenance

Although water resistant, water should be used restrictively and please avoid water or dental debris from entering the motor. It is best to clean the instrument thoroughly after each use, before the dental debris has dried. Once dry it is very hard to remove. Only a cleaned instrument should be stored in the case.

Lubrication of the threads and the turning parts should be applied as needed, but daily maintenance is not necessary. A yearly service is recommended, please contact your distributor for details.

The carrying case is large enough to hold the instrument and all accessories. The batteries should be removed before storage to avoid the instrument from being accidentally turned on inside the case.



Safety precautions:

Please be aware that accidents can occur when working with horses. Only work with assistants covered under your insurance policy.

Please inform the client of the potential risks of dentistry procedures. Always use adequate sedation and a full mouth speculum for examination and treatment. The use of personal protective items such as eye protection, masks, and gloves is recommended. Avoid loose clothing or jewelry, and protect long hair with a hat or ponytail.



Warranty

We provide a one year limited warranty for manufacturing defects. The batteries, discs and drive cable are not covered. Inappropriate use and unapproved repairs of the instrument can limit or void the warranty.



It is especially important to keep the connections between motor/shaft, shaft/head and head/disc very clean and dry. Make sure the connections are always tightened. (areas with arrows on the pictures below)



1. MOTOR

KEEP CLEAN



The motor has a serial number starting with the letter M and a three or four digit number followed by one letter.

Four small red LED lights indicate the battery charge. It is recommended to recharge the batteries once the charge is at or below 25%. Please use genuine Milwaukee batteries only. There are different batteries available for this motor: the standard small based type with 2.0Ah (1.5Ah also available) and a larger flat base battery type with 4.0Ah (3.0Ah also available).



The batteries need between 30-75 minutes to charge, depending on the type of battery and the degree of charging needed. Please unplug the charger when not in use and remove charged batteries once the charger indicator light has turned green. Please refer to the Milwaukee operator's manual for the proper handling of the batteries.

A single bay charger is used for the basic and basic plus set. The four bay charger that charges up to four batteries is available for the standard set. Most power inverter for the car can be used with a normal charger if they are rated over 100W.

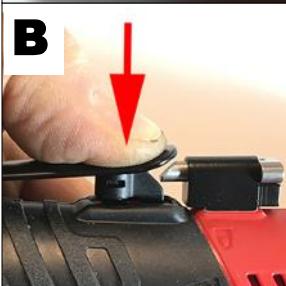


The long black bar on the motor engages the variable speed trigger. The metal pin of the locking switch in front of the black bar has three functions, depending on its position: no function (A), blocking function (B) or locking function (C). If locked the motor runs on full speed of 5400 RPM. The locking pin is undone most easily with a flick of the thumb.

Electronic clutch

The Milwaukee motor has a built in electronic limiter to protect the instrument in case the disc suddenly stops. The drive cable and the gears of the Terafloat are sturdy and designed not to fail.

However repeated blockage of the grinding disc and burrs will eventually cause damage to the instrument and should be avoided. Make sure you use a speculum that allows sufficient opening of the mouth for your work, especially in the back of the oral cavity.





2. SHAFT

KEEP CLEAN

The shaft has a serial number starting with the letter S and a three or four digit number followed by one letter.

Two shafts are available; they use the same motor and the same heads:

1. The Eco shaft (straight or curved) without light and without Turnflex joint.
2. The Classic shaft with LED light and Turnflex joint: The three LED lights in the classic shaft turn on once the trigger of the motor has been engaged. Make sure you don't block the light with your hand when using the float. The lights stay on for five seconds after the trigger is released and then turn off automatically.



Removing the shaft (classic or eco shaft)

The shaft is secured with a black shaft cap. It is important that the connection is tight and clean. Lubricate the threads of the connection if needed. To remove the shaft unscrew the shaft cap until completely free and pull the shaft from the motor. When re-connecting, make sure the two alignment marks, one on the black end portion of the shaft and one on the motor, are aligned (two arrows). Rotate the disc slightly to engage the drive cable into the driver of the motor if needed.

ALIGNMENT MARKS



A. Turnflex Joint (classic shaft)

The Turnflex mechanism allows to change the shaft from a straight to a flexed position: pull the first turning sleeve (1) forward and turn it by 180 degrees until the locking notch (N) engages into the second position.

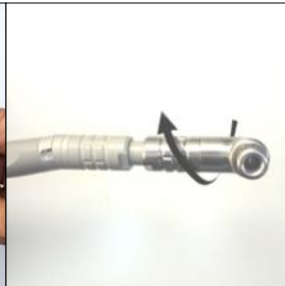
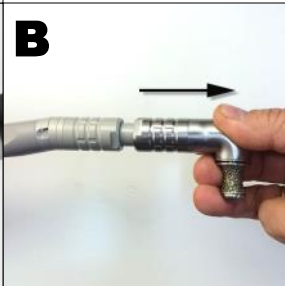
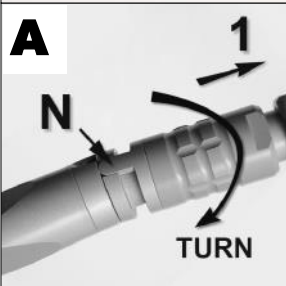
Keep this Turnflex mechanism clean and free of debris and use WD40 or grease to keep it lubricated if needed.



B. Rotate the Head (classic and eco shaft)

Applies to the classic shaft in a flexed position and the curved eco shaft: it is important for the grinding disc or burrs to have an appropriate position. The head can be rotated in 90 degree increments: Pull the head forward and turn the head with the second turning sleeve (2) until the desired position of the head has been reached. Keep the inner tube between the two turn cylinders clean and lubricate it with WD40 or grease if needed.

Make sure you don't unscrew the sleeve (2) when rotating the head!





3. HEAD

KEEP CLEAN

The head has a serial number starting with the letter K and a three or four digit number followed by one or two letters.

Two heads are available: without guard (1) and with guard (2, G). The guarded head is used with the disk only; when fitted with an apple core burr, the guard is in the way.

If using the head without a guard: There is a 3mm safety boarder with no diamond coating. Make sure the oral mucosa and disks or burrs are wet, allowing the non-coated part to glide over the mucosa without causing damage.

Changing the disc or burr

The Terafloat burrs are easily interchanged. First remove the head by unscrewing the turning sleeve. The following steps depend on the type of head.

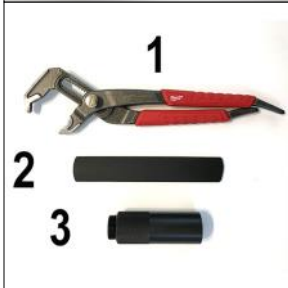
1. Without guard: You need to block the gear to unscrew the disc or burrs. Use the special locking tool (3), or a screw driver or a coin. Carefully screw the locking tool (3) onto the head, and avoid cross-threading the tool. Once the gears are blocked, unscrew the disc or burr. If needed, use the locking pliers (1). Use the biothane strap (2) to protect the diamond coating when using the pliers.
2. With guard: you need to block the disk and loosen the gear. There are two half-circle notches in the guard and the disk. Clean these notches and align disk to the guard for these notches to form a hole. Insert the two pins of the blocking tool into these two holes to block the disk. Use a screw driver into the gear to loosen the disk. Once loose, unscrew the disc by hand.

Make sure the threads of the new burr or disc are clean, screw it onto the head and tighten by hand. Put the head back onto the shaft. Again make sure the threads are clean and lubricate them if needed.

Make sure the turning sleeve is completely tightened onto the head before going back to work (double arrow below)

Grinding disc and burrs

A variety of discs and burrs are available: Disks: the T2 is used without guard, the T3 is for the head with guard. The burrs are: A2 and A3: apple core burr. Z1 large cylindrical burr, F1/F1 are diastema burrs - use those carefully.



USING THE TERAFLOAT

KEEP CLEAN

Use a full mouth speculum to open the oral cavity sufficiently to use the Terafloat safely. Inform your client of potential risk of dental procedures in horses.

Incisors and Canines: This procedure is best done at the beginning of the dental work when sedation is the strongest, with the Swissvet incisor speculum Use the grinding disc for work on incisors and additionally the apple core burr for smoothing the canines. Advanced users may consider the Terafloat Incisor float.

Points on lower and upper arcade: Use the apple core burr: place the burr at a 45 degree angle on the lingual (lower arcade) or vestibular (upper arcade) side of the cheek teeth where points need to be floated and move caudally.

Lowering the opening of the speculum on the treatment side can increase the space between cheek and molars. Remove sharp points carefully!

Hooks on lower and upper arcade: Hooks can be reduced with the grinding disk or with the apple core burr. If the space between upper and lower arcade is very tight, the use of the large cylindrical burr (Z1) may be indicated.

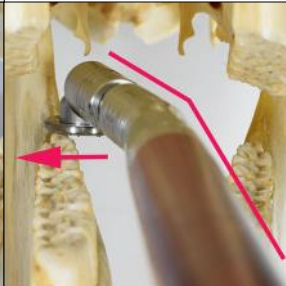
You may use your hand to guide the float for rostral hooks (1/206). Flexing the shaft down helps avoiding the incisor plates of the speculum.

When floating caudal hooks you may flex the shaft to the lingual side to push the tongue away, then hold the float straight or work your way from the lingual side onto the hooks.

Waves and steps Use the grinding disc or the large cylindrical burr for waves or steps. Make sure you do not create an open pulp and do not take more than two cheek tooth pairs out of occlusion at once.

Bit seat Use the apple core burr to place a bit seat, maybe guiding the instrument with your second hand for better control of the procedure. Make sure not to open the pulp with this procedure.

Diastema Use the long (F2) or short (F1) diastema burr - with precaution.



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