TERAFLOAT
POWERDENTISTRY

USER MANUAL

TERAFLOAT ®
LIGHT WEIGHT PERFECTION

Keep these instructions with the instrument.
If you have questions or need additional copies please contact Terafloat or your distributor.

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PLEASE READ - before using the Terafloat

The ECO and LED lines have 2 parts: The motor M and the shafts R or E. The routine shafts R are the disk or apple core shafts. They fit other burrs as well. The elite shafts E are the pony shaft and the incisor shaft. Each part has its own serial number. The shafts are screwed onto the motor.

The Terafloat FLX line has 3 parts: the motor M, the flex drive FD and the R or E shafts. The flex drive is screwed onto the motor and the connection to the shafts R or E is magnetic.

Cleaning/Maintenance

It is strongly recommended to clean the instrument thoroughly after each use. Once dry, dental debris is very hard to remove and dirty instruments may spread pathogens.

The shaft and grinding head are water resistant. Clean all moving parts with a brush and water and lubricate them with WC40 or a generic grease as needed. No other daily maintenance is necessary. Avoid water or dental debris from entering the motor. The motor is not water resistant. Wipe the instrument dry after cleaning.

The batteries must be removed when storing the instrument in the carrying case. Only clean and dry instruments should be placed into the case.

A yearly service is recommended, please contact your distributor for details. We offer loaner instruments during service.

Safety precautions:

The Terafloat is designed for licensed and equine experienced Veterinarian. Understand that accidents are possible when working with horses. Make sure that you have adequate training and experience with equine dentistry and that you are aware limits of equine dentistry.

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 ponytail.

Warranty

Terafloat offers a two year limited warranty for manufacturing defects. Inappropriate use and unapproved repairs of the instrument can limit or void the warranty.

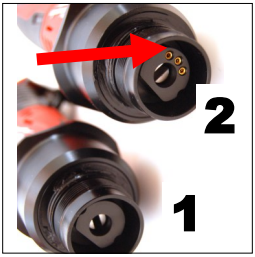
It is important to keep the connections between motor/shaft (1), flexible drive shaft/shaft of the FLX line (2), turnflex mechanism (3) grinding shaft/head (4.1) and head/disc (4.2) clean and dry. Make sure the connections are always tightened and that you don't unscrew the head accidentally while rotating the head.

Motor

The serial number of the motor starts with M followed by a four digit number and one letter.

There are two Terafloat motors available: ECO (1) and LED (2) with electrical contacts (arrow) for the LED shaft illumination. Otherwise these motors are identical.

The FLX line uses the ECO motor on a belt system with a pivoting motor attachment and a holster to carry the shaft when not working on a horse.



Electronic clutch

The Milwaukee motor is equipped with an electronic limiter and turns off when working against a strong resistance. If this happens, release the trigger and restart the instrument.

The drive cable and the gears of the Terafloat are sturdy enough to withstand the shut off resistance of the motor. However, repeated blockage of the grinding head eventually damages the instrument and must be avoided. Always use a speculum that allows sufficient opening of the mouth for your work. If you experience problems reaching caudal areas of the oral cavity with a disk, use the apple core burr instead of the disk.

Batteries and Charger

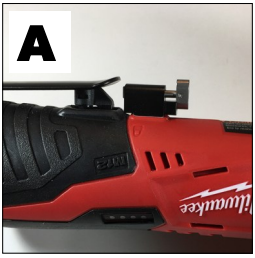
The 3.0Ah battery is standard for the ECO and LED lines while the 6.0Ah is used for the FLX line. Four small red LED lights indicate the battery charge. It is recommended to recharge once the charge reaches 25%.

The batteries need between 45min (3Ah) to 90min (6Ah) to charge. The charging time is significantly shorter than the working time to drain a battery. The standard 3.0Ah battery is powerful enough for a routine treatment of 4-8 horses.

Please unplug the charger when not in use and remove charged batteries once the charger indicator light has turned green. A single bay charger is standard for the Terafloat sets. The 4-bay charger offers a convenient option in a clinical setting to charge all batteries overnight. A car charger with a 12V cigarette plug is available.

Trigger Lock

The black toggle bar on the motor engages the variable speed trigger. The trigger lock in front of the black bar has three functions, depending on its position: no function (A), blocking function (B1/B2) 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 (B3) . The trigger lock has to be in the locked position (B) when using the incisor shaft or the FLX line.



Shaft

The shaft has a 4 digit serial number starting with letters and ending by one letter indicating the production series.

There are three Terafloat lines available, the ECO line (1), the LED line (2) and the FLX line (3) with the flex-drive. Each of these lines have 2 routine shafts (disc shaft and apple core shaft) and the elite shafts (pony and incisor). The LED lights of the LED line turn on when the motor trigger is engaged and turn off automatically 5 seconds after stopping the motor. This allows convenient time for examination of the oral cavity.

A: Removing the shaft (ECO or LED line) or flex drive (FLX line) from the motor

The shaft is secured to the motor with a black cap. It is important that the connection is tight and clean. Lubricate the threads of the connection with a grease 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.

F: Connecting the flex drive to the shaft (FLX line)

The flexible drive shaft uses a magnetic connection to the grinding shafts (routine or elite). The connection is maintenance free and waterproof.

Keep the connection clean and free of debris and use WD40 or grease to keep it lubricated if needed.

TF: Turnflex Joint (routine shafts)

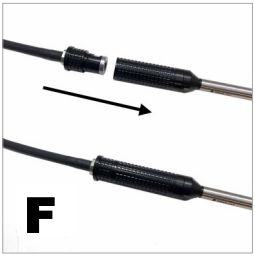
The Turnflex mechanism allows the shaft to change from a straight to a flexed position: pull the first turning sleeve forward (1) and turn it 180 degrees (2) until the tongue moves into the second groove.

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

Ro: Rotate the Head (routine shafts)

When using the routine shaft in a flexed position, it is important for the grinding head with a disc or burr to have an appropriate position in relation to the shaft. The head can be rotated in 90 degree increments: Pull the head forward (1) and turn the head with the lower turning sleeve until the desired position of the head has been reached (2).

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 when rotating the head!



Head (Turnflex Shafts)

The head is part of the routine shafts. It has a serial number starting with the letter K and a four digit number followed by a letter.

Two heads are available: one without a guard and one with a guard.

Guarded head: Standard for Terafloat sets and indicated by the letter G in the product number (eg T-0015EG). The guarded head is used with the T3 disk only and protects the oral mucosa when floating.

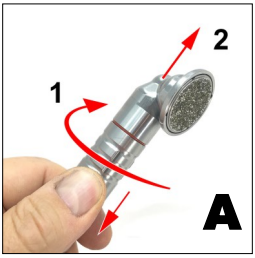
Non-guarded head: Standard for all other burrs and disks. There is a non-coated area on the T2 disk and the apple core and large cylindrical burr. Make sure the oral mucosa and disks or burrs are wet, allowing the non-coated part to glide over the mucosa without causing damage.

Changing the disc or burr

Tools needed: The head locking tool (1); spare burr (2a) or disc (2b) and blocking wrench (3).

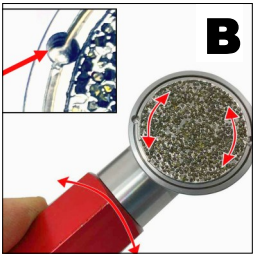
First remove the head (A) by unscrewing the turning sleeve (1) and remove the top of the head (2). Next, screw the red head locking tool carefully onto the head (B, do not cross thread). To change disks or burrs follow these steps:

Grinding heads with a guard: Principle: block the disk and loosen the gear: Once the red head locking tool is screwed onto the head, rotate it until the half-circle spaces in the disc and the guard form two holes. Insert the two pins of the blocking wrench (3) into these two holes to block the disk and hold it tight. Unscrew the head locking tool (1) to loosen the gears. Once loose, unscrew the disc by hand and replace it.



Grinding heads without a guard: Principle: block the gear to unscrew the disc or burrs. Once the gears are blocked with the red tool, unscrew the disc or burr. Use the locking pliers when unscrewing T2 disk. Once loose, unscrew the disc.

Make sure the threads of the new burr or disc are clean, screw it onto the head and tighten it by hand. Finally, put the head back onto the shaft. Again make sure the threads are clean and lubricate them with WD40/grease if needed. Make sure the turning sleeve is completely tightened onto the head before going back to work



A variety of discs and burrs are available: The T2 disc is used for the head without a guard, while the T3 disc is used exclusively with the guarded head. The discs are available with a coarse or a medium diamond coating. The burrs are: A2 and A4: apple core burrs, Z1 large cylindrical burr, F1/F2/F3 are diastema burrs - use those carefully.

IMPORTANT:

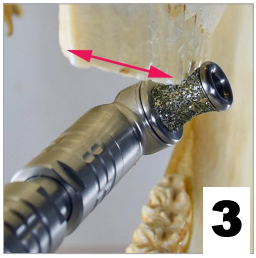
Use the Terafloat with a full mouth speculum when floating cheek teeth and an incisor speculum for incisor work. Biting on the Terafloat voids the warranty for the instrument and may result in tooth fractures.

These instructions are guidelines only. Please make sure to have adequate training in equine dentistry before using the Terafloat. The Terafloat diamond burrs and discs are very effective - float responsively.

Incisors (1) and Canines: Incisor work is best done at the beginning of the dental work when sedation is the strongest. Use the grinding disc for work on incisors (1). The apple core burr (with A4 or without A2 canine coating) is used for smoothing the canines. Advanced users may consider the Terafloat Incisor float (6).

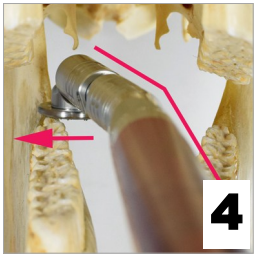
Points on lower (2) and upper arcade (3): Use the apple core burr: place the burr at a 45 degree angle on the lingual (2, lower arcade) or vestibular (3, upper arcade) side of the cheek teeth where points need to be floated and move caudally.

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



Hooks on lower (4) and upper arcade (5): Hooks can be reduced with the grinding disk, the apple core burr or the large cylindrical burr, depending on the type of lesion and the space between the upper and lower arcade.

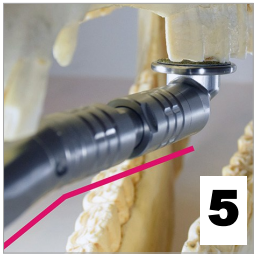
When floating caudal hooks, you may flex the shaft to the lingual side to push the tongue away, then hold the float straight or work your way from the lingual side onto the hooks (4). You may use your hand to guide the float for rostral hooks (1/206). Flexing the shaft downward helps avoid the incisor plates of the speculum (5). Consider the pony shaft if the space is limited or when working on small breeds (7)

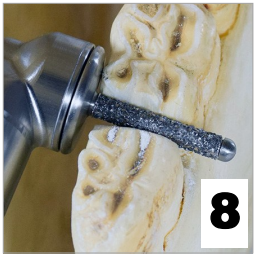


Waves and steps: Use the grinding disc (see 4) or, if space is very limited, the large cylindrical burr to reduce waves or steps. Do not accidentally open a pulp and do not take more than two cheek teeth out of occlusion at once to avoid excessive stress on the remaining teeth in occlusion.

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 to not open the pulp during this procedure.

Diastema (8): Use the extra long (D3 maxillary), the long (D2 mandibular) or short conical (D1) diastema burr to enlarge an interdental space - with precaution. Make sure you understand the risk of this procedure and perform it only if other treatments have failed.





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