



Alpine Float™ Equine Dental Tool
OPERATION MANUAL



Order Desk: (800) 824-3703
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VetOne Alpine Float™

Operation Manual

Thank you for choosing the VetOne Alpine Float. It is a superior product that has been successfully field-tested on horses across the country. The Alpine Float allows you to quickly and effectively perform all commonly accepted equine dental procedures.

For service, accessories and replacement parts, please contact VetOne directly at 1-888-694-8381.

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Introduction

The Alpine Float, available exclusively from MWI Veterinary Supply, is a motorized equine dental float that is safe, durable, ultra-reliable, and affordable to the equine dentist or general equine practitioner.

The proven combination of diamond and carbide on the abrasive cutter disk, which is mounted on a self-cleaning and heat-dissipating solid brass mouth guard, will provide as many as 200 floats. The cutter disk is easily cleaned between uses and is simple to replace as needed.

The unit is driven by a dependable, infinitely variable-speed Makita drill. A super-bright LED light with flexible head (sold separately) can be attached to the shaft to clearly illuminate the dental surface under any lighting conditions. The removable T-handle (included) can be attached to either side of the drill to allow two-handed operation and provide additional leverage if needed.

The Alpine Float comes in a lockable hard carrying case with everything you'll need to perform routine maintenance on the unit, which will ensure its reliable operation for years:

- Set of Allen wrenches to disassemble the unit
- Spanner wrench to remove the cutter disk and mouth guard
- Wire brush to clean the cutter disk
- Food-grade grease to lubricate the cutter disk

General Operation

CAUTION: Before plugging in the Alpine Float, always check to see that the switch lever actuates properly and returns to the “OFF” position when released.



Powering On

To start the tool, simply squeeze the switch lever. Tool speed is increased by increasing pressure on the switch lever. Release the switch lever to stop.

Controlling Speed

A speed control screw is provided so that maximum tool speed can be limited (variable). Turn the speed control screw clockwise for higher speed, and counterclockwise for lower speed.

Reversing Rotation

The tool driver has a reversing switch to change the direction of the cutter head's rotation. Move the reversing switch lever to the F side for forward (clockwise) rotation or the R side for reverse (counterclockwise) rotation.

Always check the direction of rotation before operation. Use the reversing switch only after the cutter disk comes to a complete stop.

CAUTION: Changing the direction of rotation before the cutter disk stops rotating may damage the tool.

Maintenance

Following these simple steps to clean the tool after each float will ensure optimal operation for hundreds of hours of use.

CAUTION: Always be sure that the tool is switched off and unplugged before attempting to perform inspection, maintenance or repair.

Tools Needed: **Allen Wrenches**
 Spanner Wrench
 Wire Brush

1. Remove the cutter disk

- a. With the pins facing down, place the spanner wrench over the cutter head of the tool and fit the pins into the holes on either side of the center screw in the cutter disk, as shown below.



- b. Holding the cutter disk in place with the spanner wrench, use the Allen wrench to loosen the center screw in the head by turning it counterclockwise.
- c. Remove the screw and lift the spanner wrench and cutter disk off the brass mouth guard.

2. Clean the cutter disk and mouth guard

- a. Use the wire brush to remove solid debris from under and around the cutter disk and mouth guard.
- b. Wipe all parts of the unit with a soft, damp cloth to remove all dental material. Applying a light lubricant coating such as WD-40[®] to the shaft will help to maintain the metal finish.

CAUTION: Do not immerse any part of the Alpine Float unit in water.

3. Lubricate the cutter disk

- a. Place a pea-sized dollop of grease on the brass mouth guard.

4. Reassemble the cutter head

- a. Place the cutter disk back onto the mouth guard and hold it with the spanner wrench.
- b. Replace the center screw, being careful not to over-tighten.



Repair

The Alpine Float is designed to be user-serviceable, and all tools and replacement parts needed for general repairs are available from MWI.

The following items are included with the Alpine Float (also sold separately):

MWI#	Description
601065	Spanner Wrench
601060	Allen Wrench Set
601061	Wire Brush
601062	Grease

The following parts are available for servicing the Alpine Float:

MWI#	Description
601059	Repair Kit (both Bearing Assemblies, Cutter Disk, Drive Belt)
601063	Upper Bearing Assembly
601064	Lower Bearing Assembly
601068	Cutter Disk
601069	Drive Belt

The following accessories are available for use with the Alpine Float:

MWI#	Description
601066	Light Source
601067	Light Bracket

Replacing the Drive Belt

If the cutter disk does not turn when the float is powered on, the drive belt might be broken.

Tools Needed: **Allen Wrenches**
 Spanner Wrench

1. Remove the mouth guard

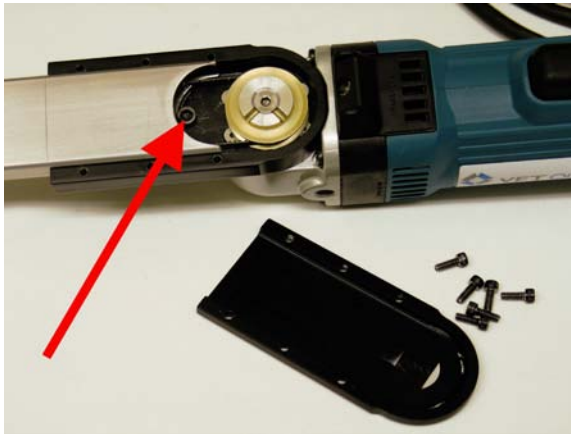
- a. Remove the cutter disk (see p. 3)
- b. Turn the spanner wrench over and align it with the slots on the mouth guard.



- c. Turn the wrench counterclockwise to remove the guard and expose the cutter head pulley.

2. Remove the old belt

- a. Remove the six bolts on the top of the case cover.
- b. Remove the set screw (indicated by the arrow below) that holds the shaft in place.



- c. Push the shaft upward as shown below to remove tension on the belt.



- d. Disengage the belt from around the cutter head pulley and pull the belt out through the shaft.

3. Install the new belt

- a. Push the belt through the shaft from the open end toward the cutter head pulley.
- b. Loop the belt around the cutter head pulley, ensuring that the grooves on the belt face inward as shown below.



CAUTION: Check carefully to ensure that the belt is not twisted inside the shaft.

- c. Loop the opposite end of the belt around the drive pulley.
- d. Reposition the shaft into the case and replace the set screw.
- e. Replace the case cover, installing the corner screws first, then the inside screws.

Replacing the Bearings

The cutter head bearings are housed in two sealed assemblies: One within the brass mouth guard (Upper Bearing Assembly) and the other directly beneath it inside the shaft (Lower Bearing Assembly). These bearing assemblies are precision machined for long life; however, they may need replacing after extensive wear. Indications of worn bearings are a grinding noise from the cutter head when the float is first turned on, or a decrease in the cutter disk speed during normal operation.

Tools Needed: Allen Wrenches
Spanner Wrench

1. Remove the mouth guard (Upper Bearing Assembly) and drive belt (see p. 6)



Upper Bearing Assembly, Top



Upper Bearing Assembly, Bottom

2. Remove the Lower Bearing Assembly
 - a. Turn the shaft over and the assembly (shown below) will drop out.



Lower Bearing Assembly

3. Install the new Lower Bearing Assembly
 - a. Place the assembly onto the spindle.
4. Reinstall the drive belt, new mouth guard (Upper Bearing Assembly) and cutter disk.

NOTE: These parts do not require lubrication of any kind. The only place that grease should be used on the Alpine Float is between the cutter disk and the brass mouth guard (Upper Bearing Assembly).

Specifications

FLOAT

Cutter Head Diameter 1.5"
Shaft Length 19-5/16"
Overall Length 28-1/4"
Weight < 5 lbs.

MAKITA DRIVER

The Makita 3/8" Angle Drill features a paddle switch with speed-limiting dial for easy one-handed operation, and ball-bearing construction for longer motor life.

Weight 3.1 lbs.
Motor 4.0 Amp
Length 10-5/8"
Speed 0-2400 RPM, infinitely variable, reversible
Power Cord Length 8'

LIGHT UNIT

Length of Flexible Neck 3-3/4"
Overall Length 7-3/4"
Power Source (1) AAA 1.5V alkaline battery (included)

Warranty

The VetOne Alpine Float is warranted to be free of defects in material and workmanship for a period of ONE YEAR from the original date of purchase. This warranty covers parts and labor, except abrasive cutter discs, bearings, lubrication, and drive belt. Cause of failure will be determined by MWI upon evaluation of failed unit. Damage due to abuse, neglect, lack of maintenance (as detailed in this Operation Manual), alteration, moisture, accidents, or unauthorized repairs by an entity other than MWI or its assignee will void the warranty.

MWI Veterinary Supply disclaims liability for any implied warranties, including implied warranties of "merchantability" and "fitness for a specific purpose," after the ONE YEAR term of this warranty. MWI Veterinary Supply shall be held harmless for any personal property damage including injuries or death to persons or animals harmed during the use of this product.

IN NO EVENT SHALL MWI VETERINARY SUPPLY BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES DURING OR AFTER THE TERM OF THIS WARRANTY. OUR LIABILITY UNDER THE WARRANTY SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT OF PARTS STATED ABOVE.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

To request warranty service, please contact VetOne at (888) 694-8381.

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