

# **Contents**

00 Warning	5
01 Features	6
02 Cleaning Effect	8
03 Machine overview	12
04 Getting started	14
05 Turning on/off	16
06 Using the machine	18
07 Water, fluid, filter	26

08 Cleaning the machine	28
09 Installing software updates	30
10 Troubleshooting guide	32
11 Frequently Asked Questions	44
12 Limited warranty disclaimer	45
13 Customer support contacts	47



#### **READ BEFORE USE**

Make sure that you have selected the correct AC voltage range on the back of the machine before plugging it into your wall outlet. Failing to do so will cause serious harm to the machine.



- The machine must be electrically grounded. Failing to do so can result in serious electric shock or death.
- Do not stick metallic objects into the machine from any of its openings, e.g. the ventilation slots on the sides. Doing so may result in serious electric shock or death.
- The machine must be placed on a level surface before operating. Failing to do so may cause a spill and damage the machine.
- When washing the removable water tank in a dishwasher, do not exceed 60 °C or 140 °F. Do not wash the tank in a dishwasher with dishes.

Do not cover the vertical ventilation slots on the sides of the machine.

Free airflow is needed to guarantee the proper functioning of the machine.

# **01** Features

ULTRASONIC CLEANING ARCHITECTURE

**CLEVER FEATURES** 

DESIGNED FOR YOU

# ULTRASONIC CLEANING ARCHITECTURE

#### **4 TRANSDUCER LAYOUT**

Ultrasonic cleaning tank that's in Degritter is purpose built for vinyl records. The tank has two ultrasonic transducers on either side emitting 120 kHz ultrasonic vibrations, evenly distributing the cleaning energy across the record's surface.

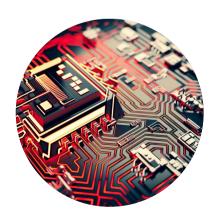
### POWER DRIVE™

### Frequency Sweep

The driving frequency of the Power Drive™ ultrasonic generator sweeps between 120-125 kHz. This evens the cavitation energy distribution in the water, minimizing losses and giving an uniform cleaning action.

#### 300 Watts

The average power output of all the washing programs is 300 W. This makes Degritter the most powerful ultrasonic record cleaner on the market per liter of water. The higher 120 kHz driving frequency keeps your records safe.



#### **CLEVER FEATURES**

### ACTIVE FILTERING™

Ultrasonic cleaning tank that's in Degritter is purpose built for vinyl records. The tank has two ultrasonic transducers on either side emitting 120 kHz ultrasonic vibrations, evenly distributing the cleaning energy across the record's surface.

# RECORD SAFE TEMPERATURE CONTROL

Degritter monitors water temperature and prevents it from rising to levels harmful for vinyl records. High temperatures are managed by automatic cooling cycles.

#### **SMART DRYING**

Records are dried by a flow of filtered air. Both the drying time and fan speed can be adjusted to keep noise levels in check and to prevent static electricity build up.

#### POSTWASH RINSE OPTION

Degritter supports rinsing records during washing cycles with the help of a separate water tank.



#### **DESIGNED FOR YOU**

### **DISTINCTLY AUTOMATIC**

The Degritter is fully automatic, requiring no additional effort after the cleaning cycle has started. Use the free time for listening to records instead of cleaning them.

# SIMPLE WATER MANAGEMENT

The machine has a convenient removable water tank for replacing cleaning water.

# **02** Cleaning Effect

ULTRASONIC CLEANING

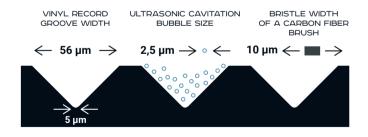
THE PRINCIPLE

CLEANING RECORDS

#### **ULTRASONIC CLEANING**

Ultrasonic cleaning has a unique ability to remove dirt that is not easily accessible by using other traditional means. Ultrasonic cleaners are used to clean many types of objects, including jewelry, optical parts, dental and surgical instruments and electronic equipment.

The smallest features in a vinyl record groove are the size of a few micrometers. Due to their minute size, it is difficult for the bristles of a typical vinyl cleaning brush to clean the entirety of the record groove.



#### THE PRINCIPLE

Ultrasonic cleaning works by agitating the cleaning liquid with high frequency acoustic pressure waves. This creates a large number of microscopic vacuum bubbles in the liquid, a phenomenon called cavitation. With every pressure wave, countless small vacuum bubbles are created and collapsed, releasing heat and water jets towards the record. This action will safely loosen and remove dirt and contaminants from the record.

#### CLEANING RECORDS

Ultrasonic cleaning as used in Degritter removes contaminants from records layer by layer. The cleaning is equally strong on the top of the groove and inside the groove.

However, when records are covered with a thick layer of gunk, it can take ultrasonic cleaning some time before the deepest layer of dirt is reached. We therefore recommend to first wipe heavy surface dirt

away with a microfibre cloth. This will speed up the cleaning process and will give better results faster.



## NOTE

Wiping the record with a microfiber cloth wet in record cleaning fluid or isopropyl alcohol will speed up the cleaning process when cleaning extremely dirty records.









CAVITATIONAL BUBBLE GROWING PHASE

BUBBLE IMPLOSION
WITH WATER JET

# **03** Machine overview

CONTENTS OF THE PACKAGE

PHYSICAL AND ELECTRICAL SPECIFICATIONS

MACHINE FRONT & SIDE PANELS

MACHINE REAR PANEL

**BUTTONS AND SCREEN** 

REMOVABLE WATER TANK

#### CONTENTS OF THE PACKAGE

- · Degritter machine
- Removable water tank with lid
- Replacement valve for removable water tank
- · AC power cable
- · 100 ml cleaning fluid
- · Fluid dosing pipette

- · Water level measurement strip
- · Pack of replacement filters
- Microfiber cloth
- Replacement valve kit for water tank
- Replacement O-ring seal for filter cap

### PHYSICAL AND ELECTRICAL SPECIFICATIONS

Weight	8.7 kg or 19.2 lb
Dimensions	37 × 28 × 21 cm or 14.6 x 11 x 8.3 in
Suggested ambient operating temperature	10 - 28 °C or 50 - 83 °F
Water tank capacity	1.3 L or 0.35 gal
Power input	AC 100-240 V, 4 A, 50/60 Hz
Power usage	~ 310 W at full power, ~2 W in sleep mode
Fuse	4 A, slow, 20 x 5 mm, DIN 41.660
Noise level	70 db
Ultrasonic cleaning frequency	120 kHz with fine-band frequency sweep

### MACHINE FRONT & SIDE PANELS

The Degritter is controlled using the buttons on the front of the machine. Records are inserted into the slot on top of the machine. The water tank is accessible from the top of the machine. There are vertical ventilation openings on both side panels. The circular cap in the lower half of the right side panel is the access port to the water filter.

#### MACHINE REAR PANEL

On the right side of the rear panel are the AC cable input and the AC on-off switch. The AC cable input socket contains the fuse drawer. On the left side are the AC select slideswitch and the SD card input slot.

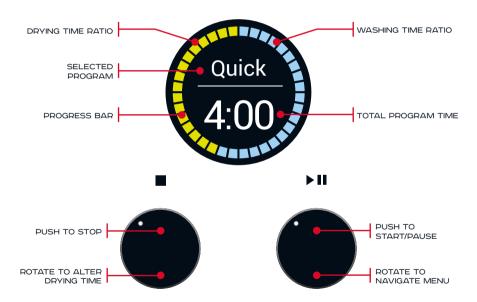




# 03 Machine overview

#### **BUTTONS AND SCREEN**

All Degritter functionalities can be accessed using the two buttons and the screen. Push and rotate the buttons for different operations.



#### REMOVABLE WATER TANK

The removable water tank is located on the back of the machine There is a marking Min on the outside of the water tank, indicating the necessary minimum water level. When filling the tank, it is recommended to fill the tank with as much water as one feels comfortable carrying. The more water in the removable tank, the better.



## NOTE

The tank is ethanol proof and can be washed in a dishwasher at max 60 °C or 140 °F. It is not recommended to wash the tank with dishware in a dishwasher.



# **04** Getting started

O1 SELECT PROPER AC VOLTAGE

**02** PLACE ON LEVEL SURFACE

**03** TURN DEGRITTER ON

04 PUT WATER INTO THE TANK

05 INSERT THE RECORD INTO THE MACHINE

**06 PRESS START** 

#### **OI SELECT PROPER AC VOLTAGE**

Make sure the slide switch is in the position indicating your wall output voltage, either 230 V or 115 V. Use the tip of a pen to slide the switch.

WARNING: An incorrect AC setting will damage the product and is not covered by the product warranty.

#### **02 PLACE ON LEVEL SURFACE**

Degritter must be placed on a level surface for it to function properly.

### **03** TURN DEGRITTER ON

Plug one end of the power cable into the machine and the other end into your wall outlet. Turn on the machine from the AC switch at the back.







#### **04 PUT WATER INTO THE TANK**

Fill the water tank with distilled water to a level exceeding the "Min" marking. The more water in the water tank, the better.

# O5 INSERT THE RECORD INTO THE MACHINE

Insert the 12" record into the machine as shown.

#### **06 PRESS START**

Start the quick washing program by pressing the button on the right. Washing progress is tracked by the countdown timer on the screen. You will be alerted with three beeps when the program finishes.







# **05** Turning on/off

AC ON-OFF SWITCH

POWERING ON

SOFT SHUTDOWN AND STARTUP

TIMED SHUTDOWN

LONG TERM STORAGE

#### AC ON-OFF SWITCH

The black switch on the back panel turns off all power to the machine. This is the best option if you are not planning to use Degritter for a long time or for transportation.



#### **POWERING ON**

After turning the machine on from the AC switch you'll first see a welcome text on the screen. After this, the machine will prime its pumps.



## NOTE

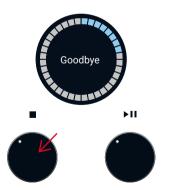
When the external tank is empty, a "No Water" warning will be displayed. Once the tank is filled, press any front panel button to resume.

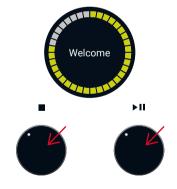


## SOFT SHUTDOWN AND STARTUP

For a soft shutdown, hold down the left button for 3 seconds. This is the recommended method for turning off Degritter. It cuts all power to the machine except for a small current to the processor and its power supply.

Press any button to start the machine again. You will be prompted with a welcoming screen.





#### **TIMED SHUTDOWN**

Degritter shuts down automatically when left idle for 15 minutes. Press any front panel button to start the machine up again.

#### LONG TERM STORAGE

When storing Degritter for a longer time period:

- Remove the water tank and pour away its contents;
- Insert the tank back into the machine;
- Turn Degritter off from the AC power switch;
- Remove the cord from the power socket;
- Unscrew and remove the water filter cap.

# 06 Using the machine

MENU NAVIGATION

ADJUSTING DRYING TIME

**RUNNING PROGRAMS** 

WASHING PROGRAMS

PRE-SOAK

COOLING WATER

DRY

DEGAS

RINSE WASH

**FAN POWER** 

WATER LEVEL

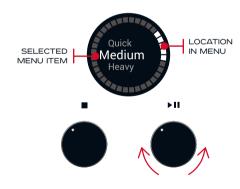
INFO

TEMPERATURE UNITS & FILTER RUNS

MACHINE MAINTENANCE CYCLE

#### MENU NAVIGATION

The Degritter menu will appear when the right button is turned or if the left button is pressed. Turn the right button to move between menu items. Push the right button to enter the highlighted menu item.



MENU ITEM	DESCRIPTION
Quick	Quick program for record cleaning
Medium	Medium program for record cleaning
Heavy	Heavy program for record cleaning
Dry	Program for drying the record without wash
Degas	Program for removing gas from new water
Rinse	Setting for allowing machine operation together with a separate rinse water tank.
Fan Power	Fan power setting configuration
Water Level	Water level setting configuration
Filter Runs	Setting for counting machine runs since last filter change.
Info	Information section about the machine

#### ADJUSTING DRYING TIME

Turn the left button to change drying time for all programs. Turn it left to make the drying time shorter and turn it right to make the drying time longer. Drying time will change the overall length of the program, but you cannot change the washing cycle's length with it. You can also adjust drying

time during a cleaning program when the record is being dried.

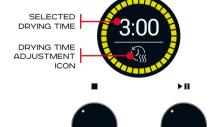


### NOTE

You can run record cleaning programs without the drying cycle. To do so, you can set the drying time to zero.

with three audible beeps when the program has finished.





### **RUNNING PROGRAMS**

Select the desired program by rotating the button on the right. To start the selected program, press the button on the right. You can stop the program by pressing the button on the left or pause the program by pressing the button on the right. You will be notified

# 06 Using the machine

#### WASHING PROGRAMS

Degritter has three washing programs with fixed predefined washing cycle lengths. The program washing durations above do not include drying time that can be configured as needed.



### NOTE

Washing programs move the record back and forth. This is normal and helps with the cleaning process.

PROGRAM NAME	WASHING DURATION
Quick	2 minutes 15 seconds*
Medium	5 minutes 15 seconds*
Heavy	8 minutes 15 seconds*

<sup>\*</sup> Listed durations are without the record rinse from a second tank.

#### QUICK

Quick program is suitable for mostly clean records that need rinsing or have light dust on them.

#### **MEDIUM**

Medium program runs a thorough cleaning cycle that will clean most records. This is a generally recommended program. It includes a presoak period at the start.

### **HEAVY**

Use the heavy program when quick or medium programs have not been sufficient for cleaning the record. Heavy program features an extra long cleaning period and includes a pre-soak at the start.

#### PRE-SOAK

The Medium and Heavy programs start the cleaning cycle by soaking the record in water for a short time period before starting the ultrasonic cleaning. This will wet and loosen any dried residue on it so that the cleaning cycle will be more effective.

### **COOLING WATER**

Energy emitted during ultrasonic cleaning will slowly increase the cleaning water temperature. Excess heat is mitigated automatically to protect records by adding 3 minutes of cooling to the washing time when over-temperature is sensed (35 °C or 95 °F). The ultrasonic generator stops working for this time and air is forced through the machine.



Water cooling cycles can lengthen the washing program, but they will not increase the total ultrasonic cleaning time that the record is exposed to.



During ultrasonic washing, the machine will display water temperature reading from its ultrasonic cleaning tank. The temperature unit can be changed between Celsius and Fahrenheit in the Info section.



#### DRY

The Dry program allows you to run the drying mode separately, without a washing cycle. Increase or decrease the drying time by rotating the button on the left. You can also adjust drying time during a program when the record is being dried.

#### **DEGAS**

The Degas program gets rid of excessive gas in your distilled water. This improves the ultrasonic cleaning process. Running the Degas program is not mandatory, as the

# 06 Using the machine

first cleaning program will have the similar effect as the Deaas. The Degas program should be run after adding cleaning fluids to the water as this will mix the fluid in the water



## NOTE

It is recommended to run the Degas program with every new tank of distilled water after adding cleaning fluid.



## NOTE

The Degas program is not needed after topping up the tank to compensate for the evaporated water.

#### **RINSE WASH**



The Rinse wash setting enables or disables the record rinsing functionality. If rinsing is switched on, then programs will have small text Rinse wash under the program time.



When the Rinse wash option is enabled, the machine will try to use a separate water tank for rinsing the records after every washing cycle. In order to do so, the user has to have two water tanks

The machine will prompt a message to insert the rinse water tank once the washing program has finished. Once the water tank has been swapped, the program will continue automatically.



## NOTE

A few drops of water may escape when swapping water tanks. As a precaution we recommend using the machine on a waterproof surface when a rinse tank is used.



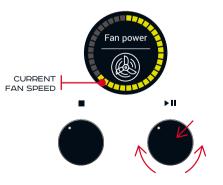
# NOTE

Enabling Rinse Tank will increase all washing programs by an additional 2 minutes and 15 seconds. This is the time that it takes to rinse the record.

#### **FAN POWER**

The fan power setting allows you to adjust the drying fan speed. Adjust fan power by pressing the button on the right - this starts the fans. Now rotate the button on the right to adjust fan power. Press the button on the right again to save your desired fan power value.

Less power means less audible noise, but it also dictates a longer drying time and vice versa.



#### **WATER LEVEL**

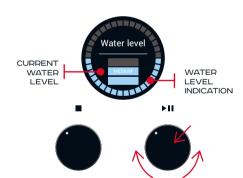
The water level setting allows you to change the water level in the ultrasonic tank. Press on the button on the right to activate selection. Rotate the button to choose between the three water level settings. When cleaning 12" records it is recommended to use the Medium water level setting.

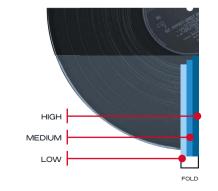
The Low water level setting is furthest from the record label, but with this setting the water level is closer to the filtration intake. On rare occasions using this setting can cause more foaming in the machine.

# 06 Using the machine

Degritter comes packaged with a color coded measurement strip. With it you can measure the distance from the edge of your record to the desired water level setting.

WATER LEVEL	DESCRIPTION
Low	Furthest from the label
Medium	Recommended setting for 12" records
High	The closest to the record label. For 7" records with adapter





### INFO

INFO ITEMS	DESCRIPTION
Serial	The machine's unique serial number.
Version	The current software version on the machine.
Filter Runs	How many washing cycles the machine has gone through since the last filter change. This value must be reset manually.
Temp	Ambient temperature of the machine.  The temperature unit can be changed between Celsius and Fahrenheit.



# TEMPERATURE UNITS

To enter the Info section configuration menu, press the right button while the Info menu has been selected.

- Blinking values indicate that the configuration menu is now active.
- Use the right button to navigate between Filter runs or Temp items.
- When the Filter runs has been selected, press the right button to reset the value to zero.
- When the *Temp* has been selected, press the right button to switch between Celsius and Fahrenheit.

 Press the left button to exit the Info section configuration menu.

#### MACHINE MAINTENANCE CYCLE

After every 50 washing programs, the machine will automatically run a quick maintenance cycle after the washing program. The maintenance cycle will pump water back and forth through the valves in order to clean potential debris from them. The cycle will take under 1 minute.

The maintenance program is run every 50 cycles with an offset of 10. This means that the program will start on the 60th, 110th, 160th, 210th cycles and so on.





## NOTE

Machine maintenance cycle can be started manually. To do so, navigate to the Water level section of the menu. Press and hold the left button and immediately press the right button.

# **07** Water, fluid, filter

USE PURIFIED WATER

ADDING CLEANING FLUID

FILTER REMINDER

MAINTAINING THE FILTER

#### USE PURIFIED WATER

Use only purified water to clean records as the limescale in tap water can have an adverse effect on cleaning, and it can leave residue on the inner surfaces of the machine over time. We recommend using distilled, reverse-osmosis or deionized water. Whichever water type is used, it is important to have low levels of dissolved solids, eg. limescale.



#### NOTE

It is recommended to change the water in the tank at least once every 1-2 weeks or after every 30 records. This is to avoid any microbial growth.



#### NOTE

Do not add foaming cleaning fluids to the water. Excessive amounts of foam can affect the machine's sensors.

#### ADDING CLEANING FLUID

Add cleaning fluid to distilled water to improve the cleaning process. The machine will run without it, but some impurities need a deteraent to properly get rid of them.

Fill the tank with distilled water run the degas function and only then add the cleaning fluid. Mix the fluids evenly by stirring them with the pipette. The suggested quantity for adding cleaning fluid is marked on the label of the fluid bottle. If used in prescribed concentrations, the Degritter cleaning fluids do not need to be rinsed

#### **FILTER REMINDER**

The machine will remind you to clean the filter after every 50 washing cycles. The reminder is automatic and will be prompted based on the *Filter runs* counter, visible in Info section, at 50, 100, 150, 200 ... runs.

In order for the reminder to work properly, the number of washing cycles on the filter will have to be reset every time the filter is cleaned. The *Filter runs* value can be reset in the Info section.



#### MAINTAINING THE FILTER

To access the water filter, unscrew the cap on the bottom half of the right side panel of the machine. Use a coin for screwing and unscrewing the cap. Turning the cap counterclockwise loosens it and turning it clockwise tightens it.

The filter consists of a fine steel mesh cylinder that has a foam insert. The cylinder will sit snugly in the filter cap and can be removed for cleaning.

When replacing the foam filter, it is important to also wash the steel mesh filter. If the foam filter is not too dirty, then it can be washed and reused. We recommend cleaning and replacing the filter after every 50 to 100 records.

When screwing the cap back into the chassis, make sure that the cap is flush with the side panel. This ensures that the cap seal will not leak.



## NOTE

Clean or replace the filter after every 50 to 100 cleaning cycles.



# **08** Cleaning the machine

WHEN TO CLEAN

CLEANING THE MACHINE

#### WHEN TO CLEAN

To prevent bacterial growth from forming inside the machine and to remove dirt that may have accumulated, it is recommended it is recommended to clean the Degritter every 200 washing cycles.

#### CLEANING THE MACHINE

- 1. Remove the rubber gasket from around the record insertion slot. The gasket is not glued and is not difficult to remove.
- 2. Without the rubber gasket there is better access to the ultrasonic cleaning tank. Clean the internal sides of the tank with a toothbrush. It is recommended to wet the brush in isopropyl alcohol (IPA) to improve the cleaning effect.
- 3. Once the scrubbing is done, follow it up with one Quick washing cycle with High water level (no drying) and with new pure water

- in the removable water tank. Make sure there is no record in the machine.
- 4. Add about 200ml of vinegar to the distilled water and run 5 Quick washing cycles (again without drying).
- 5. In the middle of one of the washing cycles, put the machine on pause and let the fluid sit in the ultrasonic cleaning tank for about 5 min.
- 6. Replace the vinegar solution with pure distilled water and run 3 Quick washing cycles to rinse off the machine.

# 09 Installing software updates

PREPARE THE SD CARD

**INSTALL SOFTWARE** 

VERIFY SOFTWARE VERSION

#### PREPARE THE SD CARD

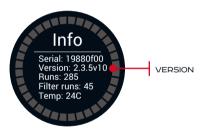
- Start with an empty SD card with FAT32 file system. The FAT32 is usually used with SD cards up to size 16 GB. Cards larger than 16 GB may have another file system and may not work.
- Download the latest compatible software from the Degritter website (degritter.com). The name of the software file is degrittr.bin.
- Copy the degrittr.bin file on to the SD card. Make sure that the file name is exactly degrittr. bin. Be mindful of the missing letter e.
- 4. Safely remove SD card from the computer by running the Safe Removal Procedure. Usually it involves ejecting the device from the software before physically removing it from the computer.

#### INSTALL SOFTWARE

- Turn off Degritter from the switch at the back and wait 10 seconds. This so that the capacitors in the machine can discharge.
- Insert the SD card into the machine as shown on the image.
- Turn on the machine from the switch on the back.
- After turning on the machine, the screen will remain blank for a few seconds. During this time the machine will upgrade itself.
- Once updating has finished, the machine will continue with a regular start up and the screen will indicate that you need to remove the SD card.

#### **VERIFY SOFTWARE VERSION**

Once the machine has started, navigate to the INFO section in the menu and verify that the new version listed is the same as on the degritter.com webpage.



# 10 Troubleshooting guide

IS THE ULTRASONIC CLEANING. WORKING?

CLEANING THE MACHINE



### NOTE

Most recent troubleshooting guide recommendations can be found on Degritter's website degritter.com.

## IS ULTRASONIC CLEANING WORKING?

The ultrasonic cleaning in Degritter machines can normally be detected by an accompanying hissing sound that resembles white noise. This is best heard during the Degas program when the machine turns ultrasonic cleaning on and off with about 7-10s intervals.

If there is doubt that Degritter's ultrasonic cleaning is not working properly, then the following characteristics of the machine can be checked.

#### TEMPERATURE MUST RISE

Ultrasonic cleaning in Degritter uses about 300W of power. A large portion of this will eventually be converted to heat and when ultrasonic cleaning is working properly, the machine will heat up during use. If the machine is working properly, then during a *Heavy* washing cycle the water temperature visible on the display will rise above 30 °C (86 °F).

#### CHECK POWER CONSUMPTION

Measure the power consumption of the machine with a wattmeter. Cheap and simple wattmeter devices will plug into a wall outlet and electrical devices can be connected to them. Wattmeters have an LCD display on it that will show the power consumption of the connected device, these can

be purchased either from a local hardware store or online. A Degritter machine with a properly working ultrasonic cleaning turned on will use about 300W of power.

If the temperature in the machine does not rise or if the machine has very low power consumption, contact **support@degritter.com**.

#### MACHINE IS LEAKING WATER

Most common leaks originate from either the filter cap or from the removable water tank and the machine connection. Both of these can result in water dripping from underneath the machine.

#### **FILTER CAP LEAK**

Remove the filter cap and make sure that the cap has a 2mm thick O-ring seal around it. When inserting it back into the machine take care to screw it all the way in.

# LEAK FROM THE WATER TANK CONNECTION

In order to prevent water from leaking from the water tank connection, make sure to press down slightly on the water tank when inserting it. This is to make sure that the water tank is all the way in. If a second water tank is available, try using the machine with a different tank. This is to exclude the possibility of a faulty water tank connection.

A bit of water in the bottom of the machine will not harm the electronics inside, but it should still be prevented. Before using the machine, switch it off from the AC switch and disconnect the power cable from the wall. Remove the water tank from the machine. Pick the machine up and tilt it 90 degrees from side to side to drain the chassis. Once this has been done, the machine can be turned on again.

If the water leaks persists, contact support@degritter.com.

# 10 Troubleshooting guide

FREQUENT WATER COOLING CYCLES

MACHINE IS FOAMING EXCESSIVELY

# FREQUENT WATER COOLING CYCLES



Degritter machine is using 300W of power for its ultrasonic cleaning. Most of this will be eventually converted to heat that will slowly raise the water temperature in the ultrasonic cleaning tank. Once the water temperature reaches 35 °C or 95 °F, the machine will insert a 3 min water cooling cycle into the washing program. This is done to prevent damage to the record from too high temperatures.

It is normal for the machine to reach the water temperature threshold after 1-2 *Heavy* washing cycles.

In order to reduce water cooling cycles:

- Fill the removable water tank with as much water as you feel safe carrying. The more the better
- Set a longer drying cycle with a lower Fan Power setting. This will give water more time to cool between washing cycles.
- When operating the machine remove the lid from the water tank

- Use two water tanks when cleaning a larger number of records. Swap water tanks between cycles, so that one tank can cool while the other one is in use.
- Place distilled water ice cubes or a small ice pack in the removable water tank while the machine is in use.

### MACHINE IS FOAMING EXCESSIVELY

It is normal to have small amounts of foam on the record during the washing cycle, but if the machine is generating too much foam, then it can cause water droplets running down on the record label.

To prevent foaming:

- Turn off the machine from the switch on the back when replacing the water tank. Turning the machine off and on from the switch will start booting up with priming. Properly primed pumps will generate less foam.
- Make sure that the filter has not clogged. Clean the filter after every 50 cycles.
- Fill the removable water tank

- with as much water as you feel comfortable carrying.
- Set the water level setting to Medium. The surface skimming filtration is pulling water into the filter quite close to the water line. In rare cases the Low water level setting can cause the filtration pump to suck in air which will cause additional foaming.
  - Try using less cleaning fluid

# 10 Troubleshooting guide

RECORD IS NOT ALIGNED PROPERLY

RECORD DOES NOT GET WET

THICK RECORDS GET STUCK

# RECORD IS NOT ALIGNED PROPERLY

When the record in the machine tilts to one side and rubs against the rubber gasket that is around the record insertion slot, then most likely there is a problem with the alignment of the plastic rollers located at the top right side of the machine that revolve the record.

To solve the issue, remove the rubber gasket from around the record insertion slot. Use a large flat headed screwdriver to shift the roller on the top right side of the machine on its shaft slightly. The shaft of this roller is connected to a motor driving the belt drive and the roller has been placed on the shaft with a tight fit. It is possible to move the roller's position slightly by pressing on its sides with a screwdriver. Before inserting anything into the

Degritter make sure that the device has been turned off from the AC switch at the back and also detach the power cable from the machine. When thick 180g or 200g records

#### **RECORD DOES NOT GET WET**

On some occasions, during the washing cycle, the side of the record exiting the ultrasonic cleaning tank can look almost dry. The cleaning fluid acting as a surfactant together with the back and forth movement of the record can cause almost all the water to flow off. When the water level inside the ultrasonic cleaning tank is close to the label during washing, then there is no reason to be alarmed.

#### THICK RECORDS GET STUCK

When thick 180g or 200g records do not sit properly in the record insertion slot and get stuck, the plastic rollers revolving the record, located at the bottom of the ultrasonic cleaning tank may have a too small gap.

To solve the issue, turn off the Degritter from the AC switch at the back. Remove the rubber gasket from around the record insertion slot. Place a thick record between the record revolving rollers while looking inside the machine. Try to determine which roller is causing the record to get stuck.

Once the problematic roller has been found, take a large flat headed screwdriver and place it at the center of the roller, at the groove where the record sits. Twist the screwdriver by a small degree to force the sides of the roller slightly apart. The two rollers at the bottom are made of two conjoined sides sitting on one shaft.

Increase the roller groove width by very small increments and test it with the record. Driving roller sides too far from each other will cause the roller to wedge itself stuck in the belt drive assembly.

Before inserting anything into the Degritter make sure that the device has been turned off from the AC switch on the back and also detach the power cable from the machine.

# 10 Troubleshooting guide

WATER DROPLETS ON RECORD AFTER DRYING

WATER IS LEAKING INTO THE ULTRASONIC CLEANING TANK

THICK RECORDS GET STUCK

HOW TO EMPTY ULTRASONIC TANK WITHOUT POWER

CLICKING SOUND DURING WASHING

### WATER DROPLETS ON RECORD AFTER DRVING

Water droplets on the record after the drying cycle can be caused by insufficient drying time, too high fan power setting, small amounts of water being left in the ultrasonic cleaning tank at the end of the washing cycle, or by a valve leaking water back into the ultrasonic cleaning tank.

Maximum Fan Power setting can on rare occasions throw up a few drops of water that has been left in the ultrasonic cleaning tank. The drying program will eventually dry these off, but it can cause trouble when trying to set precise drying length.

In order for the machine to pump out all the water from the ultrasonic cleaning tank, it is important for the filter to be sufficiently clean. With a clogged filter, some of the water can get trapped and will seep through to the ultrasonic cleaning tank later while the machine is drying the record.

If the issue persists, then the cause may also be a clogged valve that leaks a small amount of water back into the cleaning tank. To clean the valves, start the *Machine maintenance* cycle manually. The maintenance program will pump water back and forth through the valves and may remove debris stuck in there.

To start *Machine maintenance* navigate to the *Water level* section of the menu. Press and hold the left button and immediately press the right button. If this solves the issue, then clean the machine with vinegar as described in *Cleaning the machine section*.

### WATER IS LEAKING INTO THE ULTRASONIC CLEANING TANK

If water from the removable water tank is slowly leaking into the ultrasonic cleaning tank, then it indicates that the valve separating the tanks is letting small amounts of water through. This can be caused by debris stuck in the valve.

To clean the valves, start the *Machine maintenance* cycle manually. The maintenance program will pump water back and forth through the valves and may remove debris stuck in there.

To start *Machine maintenance* navigate to the *Water level* section of the menu. Press and hold the left button and immediately press the right button.

If this solves the issue, then clean the machine with vinegar as described in *Cleaning the machine* section.

## HOW TO EMPTY ULTRASONIC TANK WITHOUT POWER

If the machine has developed a fault that does not allow it to be turned on, but there is water left in the ultrasonic cleaning tank inside the machine, then removing the water will be necessary before debugging or shipping the machine.

To remove the water from inside the cleaning tank, first detach the power cable from the machine and place the Degritter on a waterproof surface. Remove the filter cap and the filter housing from the machine. Face the machine and start very

slowly tilting it to the right, by raising the left side of the Degritter. Eventually the water will start flowing through the filtration port out from the machine.

It is also beneficial to remove the right side panel from the machine as some of the water may flow over the ultrasonic cleaning tank and exit through there.

# CLICKING SOUND DURING WASHING

This is normal. During the washing cycles, the machine monitors the water level and will make small adjustments when necessary. In order to adjust the water level, a valve is opened and this makes the clicking sound.

# 10 Troubleshooting guide

FANS ARE ON AFTER PROGRAM HAS FINISHED

DISPLAY UPSIDE DOWN

DISPLAY HAS SCRAMBLED SECTIONS

MACHINE IS STARTING
PROGRAMS AUTOMATICALLY

WARNING: ADD WATER

WARNING: NO WATER

## FANS ARE ON AFTER PROGRAM HAS FINISHED

The machine monitors the temperature of its internals. Once the temperature exceeds 28 °C or 83 °F, the machine will cool itself to better prepare for the next washing cycle, even while in idle mode. The fans will stop automatically when the temperature has been sufficiently lowered.

#### **DISPLAY UPSIDE DOWN**

The issue is caused by a rare glitch in the software. Restarting the unit will solve it.

## DISPLAY HAS SCRAMBLED SECTIONS

During the machine's transport, sections of its memory may have been exposed to strong electromagnetic interference. Flashing the software again from the SD card will solve the issue.

## MACHINE IS STARTING PROGRAMS AUTOMATICALLY

An automated testing program has been accidentally enabled from the menu. Turning the machine off from the switch on the back, waiting 10s for the capacitors to discharge and turning the machine back on again will disable this function.

#### WARNING: ADD WATER



Add Water warning is displayed when there is not enough water in the removable water tank to fill the ultrasonic cleaning tank. Water will evaporate during washing and drying cycles and the water tank will need topping up.

If there is enough water in the water tank, then it can indicate that the removable water tank has not been inserted properly and the machine is having trouble pumping sufficient amounts of water from there.

When previous cases have been checked, then the cause may be a clogged pump or valve. To clean the valves, start the *Machine maintenance* cycle manually. The maintenance program will pump water back and forth th rough the valves and may remove debris stuck in there.

To start *Machine maintenance* navigate to the *Water level* section of the menu. Press and hold the left button and immediately press the right button.

If this solves the issue, then clean the machine with vinegar as described in *Cleaning the machine* section.

#### WARNING: NO WATER



**No Water** warning is presented when the machine is unable to detect water at the start of the program.

This can be caused by a removable water tank that has not been inserted properly so that the machine is having trouble pumping sufficient amounts of water from there.

It may also be caused by a clogged

# 10 Troubleshooting guide

WARNING: DRAIN FAIL

WARNING: ERR SENS4 & ERR SENS5 pump or valve. To clean the valves, start the *Machine maintenance* cycle manually. The maintenance program will pump water back and forth through the valves and may remove debris stuck in there

To start *Machine maintenance* navigate to the *Water level* section of the menu. Press and hold the left button and immediately press the right button.

If this solves the issue, then clean the machine with vinegar as described in *Cleaning the machine* section.

#### WARNING: DRAIN FAIL



Drain Fail warning is presented when the machine is unable to verify that the ultrasonic cleaning tank has been properly emptied.

To clean the valves, start the *Machine maintenance* cycle manually. The maintenance program will pump water back and forth through the valves and may remove debris stuck in there.

To start *Machine maintenance* navigate to the *Water level* section of the menu. Press and hold the left button and immediately press the right button.

If this solves the issue, then clean the machine with vinegar as described in *Cleaning the machine* section.

# WARNING: ERR SENS4 & ERR SENS5



Warnings ERR Sens4 or ERR Sens5 indicate that the machine has failed to properly detect upper water level in the ultrasonic cleaning tank.

The Degritter has three pairs of water level sensing pins near the top of the ultrasonic cleaning tank. These are visible when the rubber gasket has been removed from around the record insertion slot. The issue can be caused by either excessive foaming that has left some foam on the pins once the water is pumped out, the pins that have become dirty and need cleaning, or by slight misalignment of the angle of the pins.

For cleaning the pins, turn the Degritter off from the AC switch on the back of the machine and detach the power cable. Remove the rubber gasket from around the record insertion slot and locate the water level sensing pins near the top of the ultrasonic cleaning tank. Clean the pins by gently rubbing them with a toothbrush that has been wet in a bathroom cleaning agent. Take care not to bend the pins. Rinse the toothbrush and remove the leftover cleaning agent from the pins with a toothbrush wet in purified water. Follow up with 2-3 Quick washing cycles without a record to clean the ultrasonic cleaning tank and replace the water before cleaning records.

For adjusting the alignment of the water sensing pins, refer to the Guide for troubleshooting: ERR Sens4 & ERR Sens5 manual available on our website degritter.com under troubleshooting section.

# 11 Frequently Asked Questions

### IS THE MACHINE SAFE FOR CLEANING A SHELLAC RECORD?

Based on the experience of multiple customers of ours, we can say that cleaning shellac records with Degritter is safe for the records when no cleaning fluid is used. When cleaning shellac records run the programs only with pure purified water

## IS THE MACHINE SAFE FOR LACQUER-ACETATE RECORDS?

We have not conclusively tested cleaning lacquer-acetate records with Degritter. Still, running them through cleaning programs with pure water, without the fluid will likely do them no harm.

# CAN I USE MY OWN CLEANING FLUID?

Yes, you can try out your own cleaning fluid, but avoid pH extreme solutions, such as very high acidity or very alkaline chemicals.

Do not use fluids that increase foaming. Excessive foaming in the machine can cause water level sensors to give inaccurate readings. When experimenting, start with small amounts like 0.1 ml per water tank and test to see if the foaming has increased or not. When the foaming becomes a problem, revert back to purified water.

# 12 Limited warranty disclaimer

Degritter (Degritter OÜ) warrants each new ultrasonic cleaning product against defects in materials or workmanship for a period of two years from the date of purchase, and agrees to repair or replace any defective Degritter record cleaning machines without charge. Shipping costs are non-refundable. This warranty is transferable. All warranty claims must be accompanied by the original proof of purchase.

THIS WARRANTY DOES NOT COVER DAMAGE RESULTING FROM ACCIDENT, MISUSE OR ABUSE, LACK OF REASONABLE CARE, SHIPPING DAMAGE, MODIFICATIONS, THE AFFIXING OF ANY ATTACHMENT NOT PROVIDED WITH THE PRODUCT, OR LOSS OF PARTS.

Use of unauthorized chemical cleaning agents or liquids will void this warranty. Degritter will not pay

for warranty services performed by a non-authorized repair or diagnostic service and will not reimburse the consumer for damages resulting from warranty service performed by a non-authorized repair service. No responsibility is assumed for any special incidental or consequential damages due to a defective Degritter product.

In order to obtain warranty service, contact our customer support (support@degritter.com) for information. The product must be shipped postage prepaid to an authorized Degritter service location. It is suggested that, for your protection, you return shipments of product by insured mail, insurance prepaid. Damage occurring during shipment is not covered by this warranty. Shipping costs are nonrefundable. No other warranty, written or oral, is authorized by Degritter.

#### DISCLAIMER

In no event shall Degritter OÜ, or its employees, agents, suppliers, manufacturers, or contractors be liable for any damages of any kind of character, including without limitation any compensatory, incidental, direct, indirect, special, punitive, or consequential damages, loss of use, loss of data, loss of income or profit, loss of or damage to persons or property, claims of third parties, or other losses of any kind or character, and whether or not the possibility of such loss or damage has been notified to Degritter OÜ.



# 13 Customer support contacts

When emailing a support request, please describe what has happened, take a picture if possible and attach it to the email. Also provide us with your machine's serial number and the software version found in the Info menu.

support@degritter.com +372 5884 8839 Monday to Friday, 8:00-16:00 UTC

Degritter user guide: Mark I-ENG © Degritter all rights reserved, 2022 www.degritter.com







WWW.DEGRITTER.COM

Degritter user guide: Mark I-ENG © Degritter all rights reserved, 202