

# BIKE GROOVY

professional bike wash

## Operating instructions

380 V



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380 V

Operating instructions BikeGroovy

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## EC Declaration of Conformity

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We hereby declare that the machine described below, in its design and construction and in the version placed on the market by us, complies with the basic safety and health requirements of the Machinery Directive 2006/42/EC. This declaration shall lose its validity if the machine is modified without our agreement.

**Manufacturer:** Huber KSS Service GmbH  
Lambacher Feld 2  
4650 Lambach, Austria

### Description and identification of the machine:

- Function: Cleaning of bicycles
- Type/Model: BikeGroovy

### The machine complies with the following standards/directives:

EC Directive/Directive:  
Machinery Directive 2006/42/EC  
EMC Directive 2014/30/EU

Applied harmonised standards:  
EN60204-1:2029  
EN-ISO 13849-1:2015  
EN-ISO14118:2018

### Authorised representative for the technical documentation:

Alexander Huber  
Managing Director

### Place/date:

Lambach, 31.10..2023

### Indication of the authorised signatory:

Alexander Huber, Managing Director

Signature:




# 1 Safety information


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## 1.1 Nomenclature of the instructions used

Please note the meaning of the following symbols and notes in this document. The instructions are classified according to ISO 3864-2 according to different risk potential.

<b>DANGER</b>	
	Indicates an immediately life-threatening situation. Failure to follow this instruction may result in serious injury or death.

<b>WARNING</b>	
	Indicates a potentially life-threatening situation. Failure to follow this instruction may result in serious injury or death. person as a result.

<b>NOTE</b>	
	Indicates a potentially dangerous situation. Failure to follow this instruction may result in minor or moderate injury to a person.

<b>INFORMATION</b>	
	Indicates general information, useful instructions for the efficient operation of the system that do not affect the safety and health of the operating personnel.

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## 1.2 General information

These operating instructions must always be kept in an easily accessible location near the washing system.

### 1.3 Intended use and function

The BikeGroovy is designed for cleaning bicycles such as racing bikes, mountain bikes and e-bikes.






The device is not intended for use in potentially explosive atmospheres.




The prescribed maintenance work must be carried out regularly.

Work on the electrical system of the machine may only be carried out by qualified and trained electrical engineering specialists.

No modifications, additions or conversions may be made to the machine without the manufacturer's authorisation.

The machine must be inspected for occupational safety at least once a year by a qualified person. The operator must arrange for the inspection.

DANGER	
	<p>The appliance may only be operated with the protective cover closed In the event of a power supply failure, the power supply unit must be disconnected from the power supply.</p> <p>The appliance may only be reconnected to the power supply once the power supply has been successfully restored and the working area has been inspected.</p>
NOTE	
	<p>When using cleaning agents, only cleaning agents supplied or approved by the manufacturer are permitted for environmental protection reasons.</p> <p>The warranty is void if non-approved cleaning agents are used</p>
	<p>There is a risk of damage to pumps and valves at temperatures below 3° C or in the event of frost.</p> <p><b>Caution! Frost damage is not covered by the warranty!</b></p>
	<p><b>Never point the water jet at people or animals! DANGER OF SCALDING</b></p>
	<p>Do not spray the operating unit of the appliance with the water jet!</p>

	In addition to the instructions in the operating manual, the general safety and accident prevention regulations must be observed.
	The warning and information signs attached to the appliance provide important information for safe operation
	The manufacturer is not liable <ul style="list-style-type: none"><li>- for paint damage or scratches caused by improper handling</li><li>- damage to electronics or components of the bicycles</li><li>- If there is a risk of slipping (wet, slippery conditions)</li> <li>- Frost damage to the device</li></ul>

## 1.4 Non-intended use

The appliance is ONLY suitable for cleaning bicycles.

The washing of motorised vehicles such as cars or motorised bicycles, motorised garden tools etc. or any other type of motor washing is not in accordance with the intended use of the appliance and is considered improper use. This also includes operation outside the defined operating limits or with unauthorised modifications to the body.

The appliance must not be used for cleaning people or animals. There is a risk of scalding and incompatibility with the cleaning agent.

## 2 Description

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The BikeGroovy is a sustainable bike washing station from Austria and has a sludge and oil separator. The washing process takes place with low pressure and low water consumption. The device has a compact design and is made of corrosion-resistant stainless steel. Thanks to the splash guard, the washing area is dry and clean.

### 2.1 Technical data & operating limits

Unit description		Unit size	
Unit Dimensions	Depth	[mm]	850
	width	[mm]	2500
	Height with feet Height with wheels	[mm]	approx. 1540 1600
Weight			
- Bike Groovy (basic unit)		[kg]	270
Delivery capacity		[l/min]	Approx. 2
- Operating voltage		[V]	400 V/50 Hz/3PN
- Power consumption		[A]	16 A - CEE plug
- Water inlet pressure		bar	2 - 6
- Outlet pressure		bar	8,5
Capacity			
- Oil separator		[l]	2
- Collecting tray/sludge trap			10
Water temperature			
- At the wash nozzle		[°C]	up to 60

## 2.2. Connections

### 2.2.1 Power connection

The voltage specified on the rating plate must match the voltage of the power source.

- Protection class I appliances may only be connected to properly earthed power sources. The socket outlet must be fused with 16 A on the mains side.
- The mains connection cable specified by the manufacturer must be used; this also applies when replacing the cable. For type, see circuit diagram, rating plate.
- If an extension cable is used, it must have a protective earth conductor that is connected to the plug connections in accordance with the regulations. The cables of the extension cable must have a minimum cross-section of 2.5 mm<sup>2</sup>.
- It is recommended that this appliance is only connected to a socket outlet that is protected by a 30 mA residual current circuit breaker.
- Switching on processes cause brief voltage drops. Under unfavourable mains conditions, other devices may be affected.
- No interference is to be expected if the mains impedance is less than 0.15 Ohm.
- Never touch the mains plug with wet hands. - Ensure that the mains connection cable or extension cable is not injured or damaged by being run over, crushed, pulled or similar.
- Protect the cable from heat, oil and sharp edges. The connection must not be immersed in water.

### 2.2.2 Water connection:

The appliance has a Gardena-compatible quick coupling. A water hose can be connected to this coupling.

water hose can be connected to this coupling.

### 2.2.3 Drainage

Via dirt pump with Gardena-compatible quick coupling or a direct outlet via a ¾" plastic hose.

### 2.2.4 Compressed air connection (optional)

The compressed air connection is made via a Euro nipple in the technical compartment. Max. 6 bar

## 3 Parts overview

### 3.1 General view



### 3.2 Dimensions

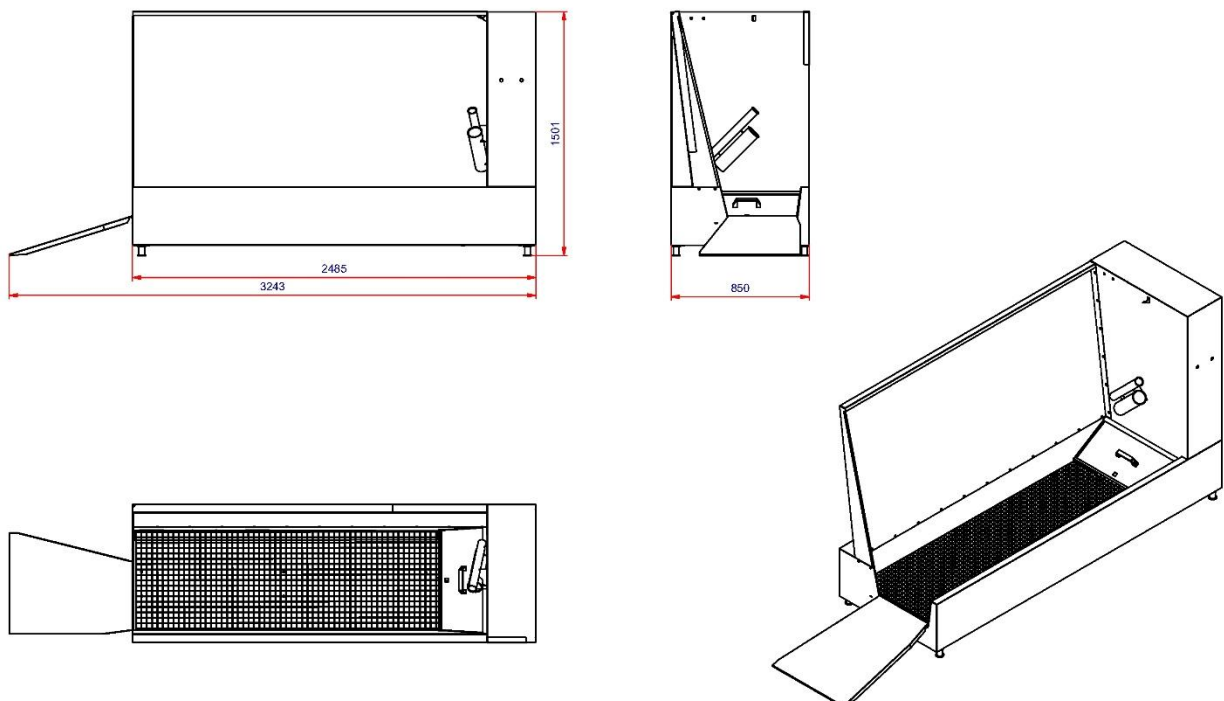
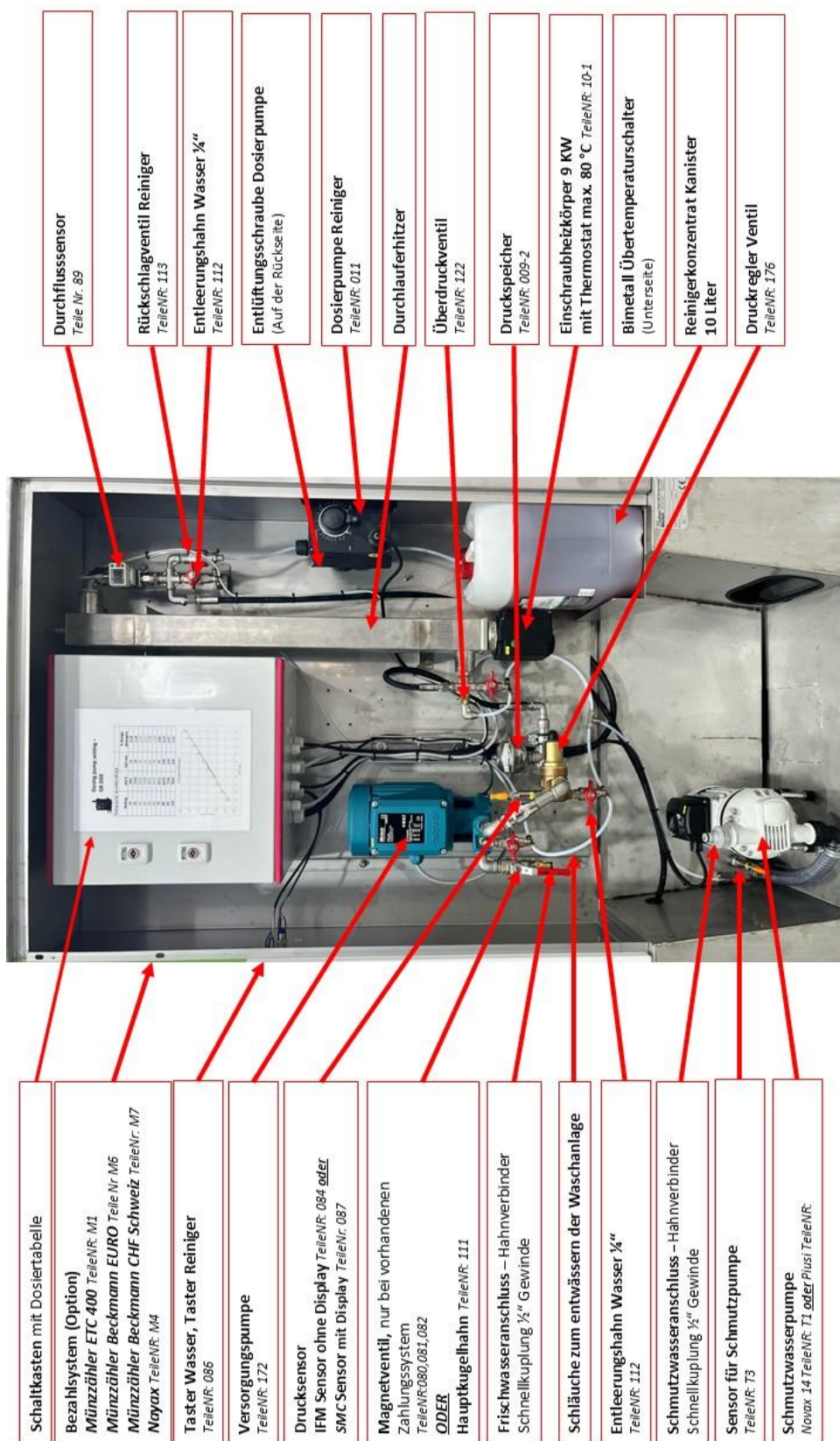


Figure 2: Detailed view

### 3.3 Technical room overview







- Durchflusssensor  
Teile Nr. 89
- Rückschlagventil Reiniger  
TeileNr. 113
- Entleerungshahn Wasser 1/4"  
TeileNr. 112
- Entlüftungsschraube Dosierpumpe  
(Auf der Rückseite)
- Dosierpumpe Reiniger  
TeileNr. 011
- Durchlauferhitzer
- Überdruckventil  
TeileNr. 122
- Druckspeicher  
TeileNr. 009-2
- Einschraubheizkörper 9 KW  
mit Thermostat max. 80 °C TeileNr. 10-1
- Bimetall Übertemperaturschalter  
(Unterseite)
- Reinigerkonzentrat Kanister  
10 Liter
- Druckregler Ventil  
TeileNr. 176

- Schaltkasten mit Dosiertabelle
- Bezahlsystem (Option)  
Münzzähler ETC 400 TeileNr. M1  
Münzzähler Beckmann EURO Teile Nr. M6  
Münzzähler Beckmann CHF Schweiz TeileNr. M7  
Novax TeileNr. M4
- Taster Wasser, Taster Reiniger  
TeileNr. 086
- Versorgungspumpe  
TeileNr. 172
- Drucksensor  
IFM Sensor ohne Display TeileNr. 084 oder  
SMC Sensor mit Display TeileNr. 087
- Magnetventil, nur bei vorhandenen  
Zahlungssystem  
TeileNr. 080, 081, 082  
ODER  
Hauptkugelhahn TeileNr. 111
- Frischwasseranschluss – Hahnverbinder  
Schnellkuplung 1/2" Gewinde
- Schläuche zum entwässern der Waschanlage
- Entleerungshahn Wasser 1/4"  
TeileNr. 112
- Schmutzwasseranschluss – Hahnverbinder  
Schnellkuplung 1/2" Gewinde
- Sensor für Schmutzpumpe  
TeileNr. 73
- Schmutzwasserpumpe  
Novax 14 TeileNr. T1 oder Plusi TeileNr.

## 4 Operation

### 4.1 Commissioning

DANGER	
	<p>Ensure that the mains connection cable or the extension cable is not damaged by driving over, crushing, pulling or similar.</p> <p>Cables must not be laid or lie in wet areas. Failure to follow these instructions may result in an electric shock and consequently in serious injury or death.</p> <p>Before connecting the power supply, make sure that the plug, Bike Groovy and connecting cables are in perfect and clean condition.</p>
	<p>It is not permitted to operate the BikeGroovy if it is very dirty or has defective components</p>
	<ul style="list-style-type: none"> <li>• Risk of injury due to scalding at the washing nozzle</li> <li>• Health hazards due to contact with cleaning concentrate</li> </ul>

NOTE	
	<ul style="list-style-type: none"> <li>- Before commissioning, the water connection, the drain hose and, depending on the version, the compressed air line must be</li> <li>- Operating the BikeGroovy without a functioning oil separator is not permitted for environmental protection reasons. The oil separator must be checked regularly to ensure that it is in good working order.</li> <li>- When using the device in hazardous areas (e.g. petrol stations), the relevant safety regulations must be observed. Operation in potentially explosive atmospheres is prohibited.</li> <li>- The appliance and its working equipment must be checked for proper condition and operational safety before use. If it is not in perfect condition, it must not be used</li> </ul>

1. The Bike Groovy must be positioned on a level surface. The height of the Bike Groovy can be adjusted horizontally using the adjustable supports. (Not possible for the version with wheels - the BikeGroovy must be positioned on a level surface) The oil separator only works properly when the BikeGroovy is levelled.
2. There is an opening on the underside through which you can thread the supply and return lines. The connections are located behind the technical door.
3. Connect the BikeGroovy to the water supply using the quick-release coupling. The water line pressure must be at least 2 bar.
4. If the device has a waste water pump, also connect the drain hose to the waste water pump using the quick-release coupling.
5. If there is no waste water pump, make sure that the leaking grey water is drained off via the outlet nozzle
6. If provided, connect your compressed air line or compressor to the prepared compressed air connection.
7. Connect a cleaning canister. Place the cleaning canister in the designated area and place the suction hose with non-return valve in the canister.  
We recommend setting the dial to 50 as the initial value. Later, the value and thus the concentration can be adjusted as required.
8. Open the ball valve on the water pipe upstream of the pump.
9. Connect the appliance to the power supply. (Make sure that the intended heat output is adapted to your domestic power supply! See point 2.2.1!)
10. Activate the washing system by pressing the *water button* (for systems with a payment system, a payment process must be carried out). The water inlet pressure must be at least 2 bar.
11. Operate the wash gun until the air escapes from the system and only water comes out of the gun.
12. The washing system is then ready for operation.

## 4.2 Cleaning agent

When connecting the cleaning agent canister, please observe the description in point 5.2.

In accordance with the guidelines for liquid ejectors, only the chemicals approved by the manufacturer may be used.

Excessive concentrations of chemicals can lead to component damage or damage to the bike's paintwork and will invalidate the warranty due to incorrect operation.

The following must not be used

- Demineralised, distilled or deionised water
- Cleaners that lead to a pH value < 7 and > 11
- Liquids that are flammable. Spraying can lead to an explosive air mixture!
- Cleaners that are not resistant to high temperatures

Use of cleaners that have not been approved by the manufacturer will invalidate the warranty!

## 4.3 Dosing

The concentration of the cleaner can be adjusted between 0-100 using the adjustment wheel.



### Einstellung Reinigerdosierung GR DDE

Dosierpumpe Grundfos GR DDE			% Dosierung Reiniger	
Einstellung	ml/ h	ml/ min	Groovy Berta (empf. 1-3%)	Groovy Enzo (empf. 2-4%)
10	840	14	0,58	0,58
20	1704	28	1,18	1,18
30	2520	42	1,75	1,75
40	3144	52	2,17	2,17
50	4032	67	2,79	2,79
60	4752	79	3,29	3,29
70	5512	92	3,83	3,83
80	6216	104	4,33	4,33
90	7158	119	4,97	4,97
100	7824	130	5,42	5,42

## 5 Maintenance / Troubleshooting

### 5.1 Cleaning and maintenance of the appliance

The appliance and all accessories must be cleaned if they are heavily soiled.

Do not use aggressive cleaning agents for cleaning

#### INFORMATION



The contaminated cleaning fluid must **not be allowed to** enter the soil, water or sewage system **untreated**. The relevant local disposal regulations of the respective country must be observed

### 5.2 Refilling the cleaning concentrate/replacing the canister

Check the fill level of the canister regularly!

1. Open the technical room door at the side.
2. Top up the cleaning canister with concentrate or replace it with a full canister.
3. The dosing pump vents itself. If no detergent is drawn in, open the small screw on the back of the dosing device slightly, wait until detergent comes out, then close it again immediately.
4. Close the technical room door again



### 5.3 Regular maintenance work

#### 5.3.1 Oil separator

Check regularly. If a lot of tramp oil has collected in the oil separator insert, it must be removed and emptied properly. To do this, push the insert forwards and then lift it out upwards. The oil must be disposed of in accordance with local regulations.

The oil separator container can also be vacuumed out with a wet vacuum cleaner.



### 5.3.2 Sludge separator

Depending on the level of contamination, the water in the sludge separator must be drained and the area cleaned of sludge.

To do this, first remove the oil separator insert as described above. The blind plug in the dirt area can then be removed so that the water can drain out of the dirt area. Suck out any residual water or dirt.

Remove the sludge from the tray using a small shovel or, ideally, a wet vacuum cleaner and dispose of it. Rinse with water. Tighten the blanking plug hand-tight again.



### 5.3.3 Dirt pump

Check at regular intervals whether the suction holes of the dirt pump are clear and the moisture sensor is clean.

### 5.4 Winterising

See section Bike Groovy winterised

## WARNING



Please winterise the BikeGroovy according to the instructions **BEFORE** there is a risk of frost!  
Frost damage is not covered by the warranty!

## 5.5 Troubleshooting

Fault	Possible cause	Remedy
<b>Water does not flow / insufficient pressure / pump does not switch on</b>	Water tap not open / insufficient water pressure	Check the supply line Open the taps (also in the appliance, in front of the pump) Check supply hose for kinks
	Dirty nozzle	Insert gun lock, remove nozzle and blow out from the front with compressed air or clean the hole with a pointed object
	Pump is not vented	Bleed the pump: Activate BikeGroovy (press the "Water" button), hold down the spray lance until air comes out of the nozzle or until water appears
<b>No cleaner comes out</b>	Concentrate tank empty	Top up concentrate (see Commissioning)
	Cleaning hose defective	Check for damage. Replace damaged hose
	Dosing pump is not pumping	"Cleaner" button must light up. Check cable.
	Dosing pump is running, but no cleaner is coming out	Open the bleed screw. See point 5.2
<b>No hot water</b>	The overtemperature fuse has tripped	Press the overtemperature fuse on the underside of the heater in the control cabinet.
	Insufficient water flow	The flow sensor must indicate at least 1.5 litres/min.
<b>Dirty water does not run away/water overflows</b>	Drain strainer clogged	Clean strainer, rinse
	Waste water pump not pumping	Clean suction openings. Check waste water hose
	Pump is stuck (only buzzing)	Press the ON/OFF switch on the pump a few times

## 5.6 Inspection obligation

### INFORMATION



In Germany, the hot cleaner must be inspected by an expert after every repair and at least once a year in accordance with DGUV Rule 100-500 Chapter 2.36 (Working with liquid ejectors) and DGUV Regulation 3 (Electrical systems and equipment). The result of the inspection must be recorded in writing.

### NOTE



The BikeGroovy must be checked for proper condition at least once a year. The inspection must be carried out by a qualified electrician or, if suitable measuring and testing equipment is used, by an instructed person.

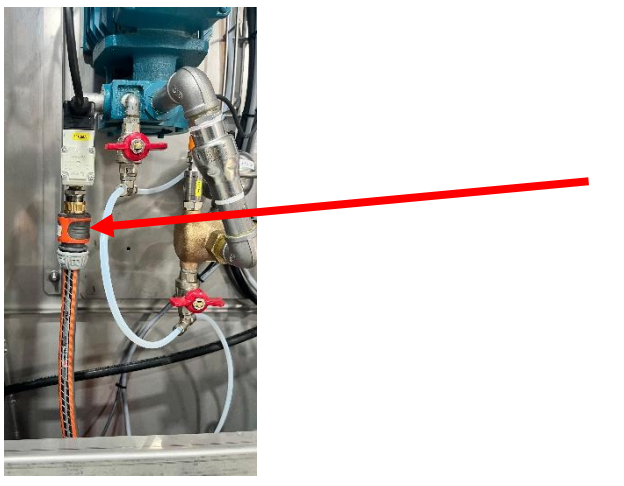

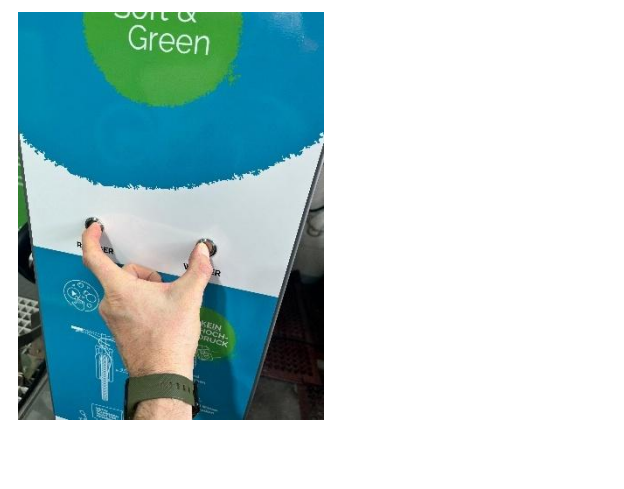
## Quick guide to bike washing


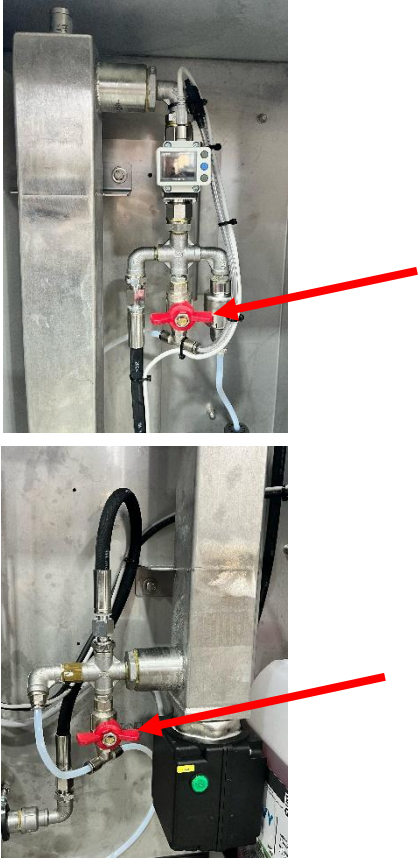
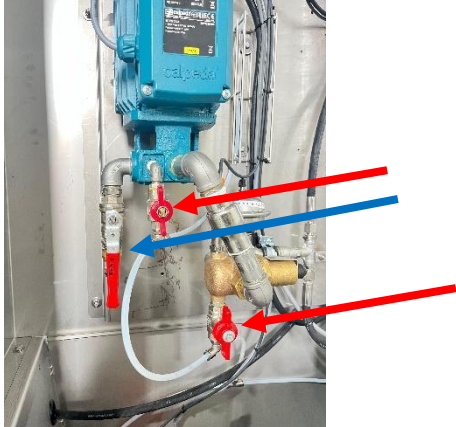
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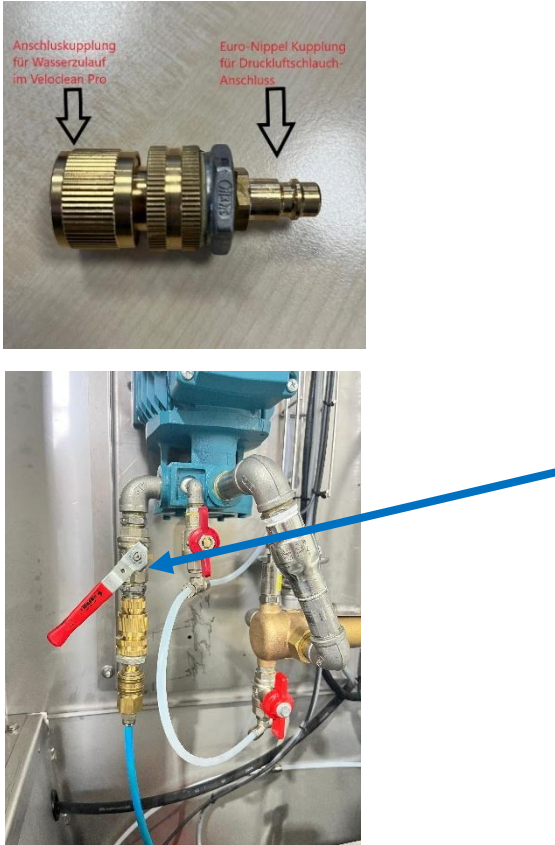

1. Remove sensitive parts/devices such as speedometer or mobile phone, saddlebags and water bottles from the bike.
2. Position the bike on the collection tray. The bike can be hung with the saddle on the bracket provided (adjustable left-right) or placed in the optional wheel holder. The BikeGroovy has a ramp for easier handling.
3. Depending on the version, the BikeGroovy is activated either by payment or directly.
4. Press the "Cleaner" button for the washing process
5. Water mixed with cleaner now comes out of the spray lance. Heavy soiling (e.g. drive, chain) can be pre-treated with cleaner concentrate using a spray bottle if necessary.
6. Lance distance 5 cm for optimum results
7. After the cleaning process, press the water button and rinse the bike with clean water
8. If necessary, make another payment to restart the process.
9. Depending on the design of the device, blow off sensitive components and the chain with air after cleaning
10. Finally, be sure to lubricate the chain.

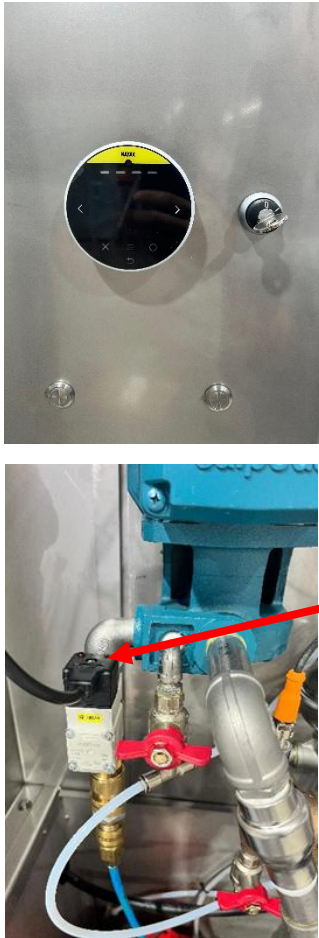
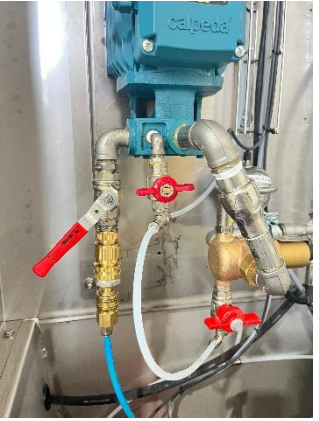
# BikeGroovy Winterfit






<p><b>Step 1</b></p>		<p>Switch off your water supply.</p> <p>Remove the water connection. You may need to place a container under the connection to catch any leaking water.</p>
<p><b>Step 2</b></p>		<p><b>Fill the dosing pump with antifreeze.</b> First remove the cleaning canister. Then take a container and fill with around 1 litre of antifreeze mixture with -20°C. Insert the cleaner suction hose into the container with antifreeze.</p> <p>You can also use antifreeze from the car sector, e.g. windscreen cleaner or radiator antifreeze.</p>
<p><b>Step 3</b></p>		<p>Press the "Cleaner" button AND the "Water" button simultaneously for 20 seconds. As soon as the dosing pump switches on, you will hear a beep. You can release the buttons.</p> <p>Both buttons flash.</p> <p>The system switches to "Service mode". The dosing pump starts pumping. The dial should be set to at least 40 %!</p> <p>For systems with a payment system, the water valve opens. (LED lights up)</p>

		<p>Press the wash gun while you hear the dosing pump cycle so that the antifreeze that has been sucked in can be pumped through the system. (approx. 90 sec.)</p> <p>As soon as the pulsing stops automatically, you can release the wash gun again.</p> <p>The container with the antifreeze is no longer required and can be removed.</p>
<p>Step 4</p>		<p>Now open the:</p> <ol style="list-style-type: none"> <li>1. red ball valve below the flow sensor</li> <li>2. Red ball valve next to the heater</li> </ol>
<p>Step 5</p>		<ol style="list-style-type: none"> <li>3. Open <b>all 3 marked</b> ball valves</li> </ol> <p>The water drains from the pipes, the heater and the water pump <b>into the dirty water area.</b></p> <p>When no more water runs out, close the ball valve marked in <b>blue.</b> (for systems without a payment system)</p>

		<p>Service mode ends after 5 minutes. The buttons stop flashing.</p> <p>For systems with a payment system, close the water inlet valve.</p>
<p><b>Step 6</b></p>		<p>Connect your compressed air hose to the water coupling using the compressed air coupling supplied.</p> <p>For systems <b>with a payment system</b>, now follow <b>step 8</b>.</p> <p>Slowly open the ball valve marked in blue to blow compressed air into the pipe system.</p> <p>Residual water is blown out of the system.</p> <p>For systems without a payment system, follow <b>step 9</b>.</p>
<p><b>Step 8</b></p>		<p>Now put the Bike Groovy into operation: If the system has a coin counter, by inserting a coin.</p> <p>With a cashless payment system with a payment process.</p>

		<p>For systems where the payment system is combined with a key switch, set the switch to the "I" - ON position.</p> <p>An LED lamp on the valve plug should now light up for the switch-on time.</p> <p>This step is necessary for the water valve to open. Residual water is blown out of the system.</p>
<p><b>Step 9</b></p>		<p>Close all ball valves marked in red in steps 4 and 5 one after the other (From bottom to top. 4 pcs.</p>
<p><b>Step 10</b></p>		<p>Continue to blow compressed air into the water connection and now press the wash gun until no water comes out of the wash gun, only air. You may need to add another coin or press the "Water" button again. Otherwise, the compressed air can no longer flow through the system when the valve closes after the switch-on time has elapsed.</p>

		<p>Then disconnect the air hose. Remove the air coupling in the same way.</p>
<p><b>Step 11</b></p>		<p>Remove the oil separator insert according to the maintenance description (point 5.3.1) and empty it.</p> <p>If possible, do not use the oil separator insert during the winterisation period and store it in a frost-free place.</p>
<p><b>Step 12</b></p>		<p>Empty the dirt collection area as described in section 5.3.2.</p> <p>Leave the blanking plug open during the winterisation period.</p>
<p><b>Step 13</b></p>		<p>Dismantle the spray hose with washing lance.</p> <p>To do this, loosen the hose connection with a 17 mm open-end spanner (use a 19 mm spanner to hold the fitting).</p> <p>Store in a frost-proof place.</p>

<p><b>Step 14</b></p>		<p>For <b>systems with a waste water pump</b>:</p> <p>To make the waste water pump frost-proof, first clean the waste water area as described under 5.3.2.</p> <p>Then fill the pumping area (marked red) of the pump with enough <b>antifreeze</b> so that the pump switches on once and pumps the antifreeze into the pipe or away.</p>
<p><b>Step 15</b></p>		<p>Disconnect the BikeGroovy from the power supply. The system should remain de-energised until it is switched on again after the cold season.</p> <p>Leave the BikeGroovy disconnected from the water supply until it is switched on again.</p>
		<p>The water collection area does not have to be completely cleared of water, even if the system is located outdoors. This is because rain, snow etc. can also get into the collection tank during the winter months. There is sufficient space for the liquid to expand. If the unit is stored inside in frost-free conditions, we recommend that you empty the washtub completely after cleaning.</p>
		<p>Your BikeGroovy is now ready for winter.</p>

**ATTENTION:**

**Simply draining the dirty water and oil separator is not enough to keep the BikeGroovy frost-free.**

**All pumps and valves must either be dry or flushed with antifreeze**

