



Manual

WilToc 3/1 Macerator Toilet Pump System Article 50741

Read and follow the operating instructions and safety information before using for the first time.

Technical changes reserved!

Due to further developments, illustrations, functioning steps and technical data can differ insignificantly.

Updating the documentation

If you have suggestions for improvement or have found any irregularities please contact us.



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from: _____

Name: _____

Firm: _____

Tel/Fax: _____

I would like to report the following mistakes:

Thank you for purchasing this quality product. To minimize the risk of injury by means of fire or electric shock we urge that our clients take some basic safety precautions when using this de- vice. Please read the operation instructions carefully and make sure you have understood its content. Always use a grounded power connection with the appropriate mains voltage. You can find the corre- sponding mains voltage on the type plate. If you have any doubts about the connection being grounded, have it checked by a qualified professional. Never use a faulty electric cable.

Do not inspect the electrical part of the pressure pond filter in a wet or damp environment or when you are wet yourself and protect it from direct sunlight. Install this device in a safe location so that nobody can step on the cable, fall over or damage it. Disconnect the power plug before cleaning it and use only a damp cloth for cleaning. Avoid using cleaning agents and make sure that no liquid enters the electrical part of the pump.

The electric part of the device contains no parts that can be inspected or serviced by the user. Leave the maintenance, adjustment and repair to qualified technical personnel. In case of unauthorised inter- vention the 2-year warranty is no longer valid! Keep these operation instructions safe.

- **The user is responsible** for the compliance with location specific safety and installing regulations. (Ask an electrician).
- Consequential damage arising from flooded rooms caused by dysfunctions of the appliance must be avoided by means of the appropriate measures. (installing an alarm system, reserve pump).
- In case of malfunction the repair work can be carried out only by a qualified electrician or the WilToc-service.
- The appliance must not run dry or with a completely closed intake port. The manufacturer's guarantee is no longer valid if the damage is caused by dry running.
- The unit cannot be used for swimming pools.
- The device cannot be employed for potable water circuits.
- The conveyance of aggressive fluids like abrasive liquids must be avoided.
- The pump must be protected against frost.
- The pump must be protected from run drying.



WARNING:

Read carefully all the safety guidelines and instructions. Non-compliance with the safety rules and regulations can lead to an electric shock, fire and/or serious injury.

Keep the instructions and the safety guidelines in a safe place in case you need them in the future.

Stability

To ensure the macerator's long working life, the user should make sure that only organic toilet sewage, water and toilet paper are removed with the toilet waste pump. The max. temperature of the pumped fluid should not exceed +50 °C in permanent operation.

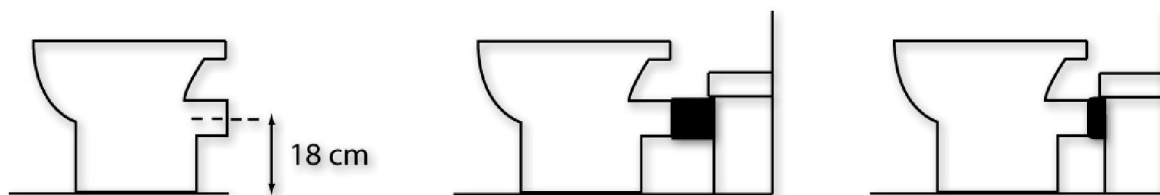
This pump must not transport flammable, gas-emitting or explosive liquids. It cannot be used for other fluids, like fuels, cleaning agents and other chemical products!

Installation

The macerator is installed according to the EN-12056-4 directive.

The unit can be operated on every standard toilet with a horizontal outflow. The midpoint of the horizontal drainage must comply with the EU-Standard: 18cm above the floor (Rohrbau/pipework: 18cm above the ground according to FFB).

If a washing machine is connected to the macerator, the drainage pipe/hose must not be directly connected to the macerator but it has to be led/coupled via a vented pipe system. If connected directly to the macerator, the collecting tank may crack and this does not fall under warranty.



ATTENTION:



Pay attention when installing the unit, the pump must not be mounted freely suspended from the pressure pipe or the power cable.

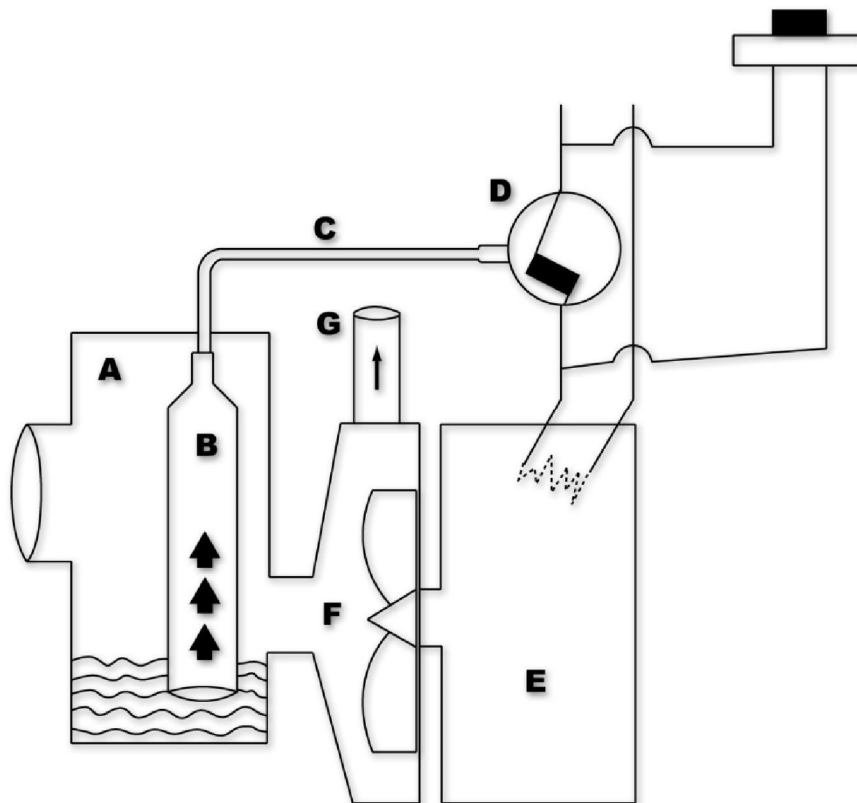
Functional principle

The macerator comprises a tank that stores the waste water and an electrical pump which is automatically controlled and operated via a pressure switch.

The conveying/transporting function is activated when the flushing is operated, just like in the case of a normal toilet.

The substances to be removed by pumping are collected in the tank (A). The air chamber (B) measures the air pressure that flows through the pipe (C) in order to activate/operate the pressure switch (D). The pressure switch starts the engine (E) that activates the turbine (F). The sewage is transported and removed through the outlet (G).

This mechanism is easy and the unit is made of high quality materials. The operating principle is based on a proven concept.



Control Component
1 Pressure Switch

Mechanism Components

- 1 electric motor
- 1 turbine

Control components and safety device

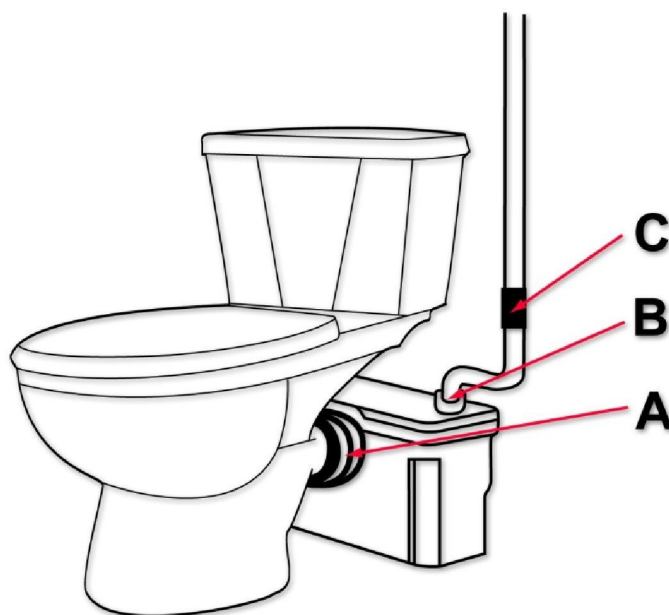
- 1 manual override switch
- 1 Check valve

Discharging the toilets

- d) Connect the horizontal departure of the toilet bowl with the rubber cuff of the pump system and stretch the connection with the enclosed bell. Take care that you if necessary use a lubricant, so that the rubber connection does not break.
- e) Join the drain pipe with the rubber connection piece, the pipe should have a diameter of 40 or 32 mm. Seal the connection with the clamping piece.

Check the installation of the non-return valve

- f) If the sewage should be transported / pumped upwards install the non-return valve as close as possible to the macerator.



Discharging waste form toilet and other appliances

Connect the discharge pipes of the other appliances to the rubber connectors provided and clamp with the pipe.

For bath or shower waste water, check that the slope from the Siphon has a gradient of at least 1 cm per meter so that the waste flows by gravity to the Macerator. If other appliances are connected along the discharge line near to the macerator, install check valves on their discharge pipes in order to prevent waste return.

The slope of the horizontal parts of the discharge line must have a gradient of 1 cm per meter.

Pressure switch inspection

Plug the pressure tap chamber located in the rubber tank, press it down to create pressure and listen to hear if there is a click indicating that the motor has switched on. If there is no click, also that the air chamber of the pressure switch pipe nozzle does not leak.

If the appliance is switched on, the motor should start running.

Before performing this operation, check that the opening or inside of the pressure tap chamber are not blocked.

Review the pressure switch

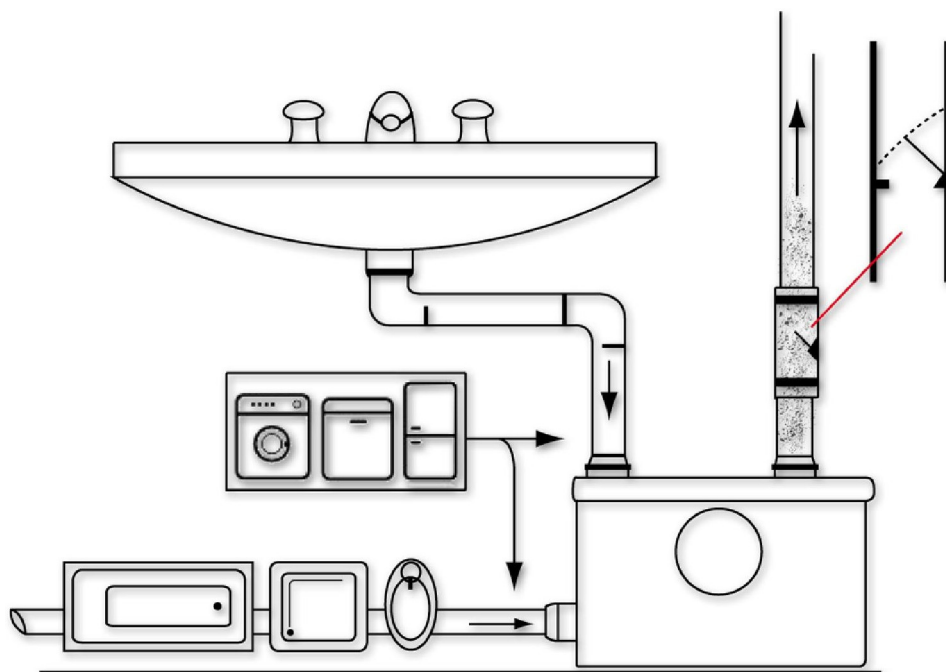
You trim this one to fastenings in the rubber container at, you push the excrement tank to below, around pressure to in the inner one you produce and pay attention on this, whether you hear a click noise. Clicking is switching the push button switch, this means that the engine would start. If you do not hear any click noise, you make sure that the air cell of the push button switch pipe does not have any leak or the excrement tank is leaky.

One can by also easy the push button switch puffs into the transparent tube, which leads to the push button switch trigger, one hears, one the switch switches and the engine must call if click. No water may be in the transparent tube and the push button switch! Otherwise push button switches dry or replace.

Cleaning the unit

The toilet pump macerator must be cleaned from the outside only with mild cleaning agents like damp cloth and soapy water. Damage caused by inappropriate cleaning agents does not fall under warranty.

Installing possibilities:



Troubleshooting

This device is only suitable for removing faeces and toilet paper. Perhaps, other small constituent can be pumped; bigger constituents can clog the pump. This is the main reason for malfunctions that is encountered by our customer service.

The appliance works but	Causes	Remedies
Is not powerful enough or too slow to discharge the waste	Discharge pipes too long or too high	Recalibrate the pipes
	Discharge pipe diameter too small	Recalibrate the pipes
	Partial blockage	Actuate the pump with manual override switch. If the problem persists, the pump must be blocked check the pump
Emits a humming noise but does not discharge the waste	Pump blocked	Check the pump
	Check valve installed the wrong way round	Reinstall it the right way round
Starts running and discharging accidentally	Check valve defect	Check the valve
	Leak in the flushing tank that causes water to flow into the macerator and sets it running intermittantly	Repair the leak
Runs continually	Vertical discharge without check valve	Install the check valve
	Check valve defect	Check the valve
	Pressure switch defect	Check the pressure switch
No humming noise	Electrical connection defect	Check the connection
	Pressure switch	Press the manual override switch several times, if the appliance starts running check the electrical connection of the pressure switch line. Pressing the manual override switch has no effect. Check the motor
	Motor	

Detailed error descriptions and solutions

Residual water in the shower

Should order the lifting equipment at the discharge of waste water turns clean the feeding waste water line have a slope of at least 2-3% and a height difference of at least 20cm from the siphon to the entrance of the pumping system .

This is both necessary so that the pressure switch in the toilet lift system works properly, the lifting unit turns on and pumps out the water. Possible error if this is not taken into account is that the lifting station does not empty the water or getting into the shower tray is too high residual in the pipes or possibly back .



Loud noises , engine running or not hard at , water is not discharged

These are the symptoms of a blockage of the lifting system .

If the system is clogged with toilet paper and faeces , it is sufficient in most cases , carefully rinse the system backwards with water. To do that, the output of the lifting station just a little water pressure, eg so that the residues are flushed out of the pump body back to the lifting unit with a garden hose. Please make sure that no water pressure comes on the collection of the lifting system. Otherwise, the pressure switch of the lifting unit is damaged and the automatic on / off does not work properly anymore .

With stronger obstructions / blockages by solid bodies that have jammed in the pump body , an opening of the pump may be necessary so that the solids can be removed.

For strong shocks through the solids in the pumping system , it may even happen that the motor bearings damaged. In this case, the motor of the lifting unit must be opened and the bearing be replaced. This error is usually expressed after removing or flushing of larger solids. The lifting unit can then be rotated by hand still free, but once you try to start the engine it blocked and only hums .

The flushing out of the lifting equipment requires no technical knowledge . Opening for cleaning should be left to a qualified technician . In this case, you can contact us happy . We will then prompt you to clean the lifting plant thoroughly and send it to our workshop.

Pump system does not pump out and is in the jog

This problem occurs with macerators (toilet pump systems), which were shut down (no electrical power) but still supplied water; pressurized wastewater from a dishwasher or washing machine was supplied, or it had more intake water than the pump could convey. As a result the pump system was "overfilled".

In this connection it can happen, that water penetrates in the pressure switch of the macerator and its proper functioning is impaired. Then the toilet pump system either runs permanently or no longer switches on automatically. This problem can be quickly solved and does not affect the guarantee.

You should proceed as follows

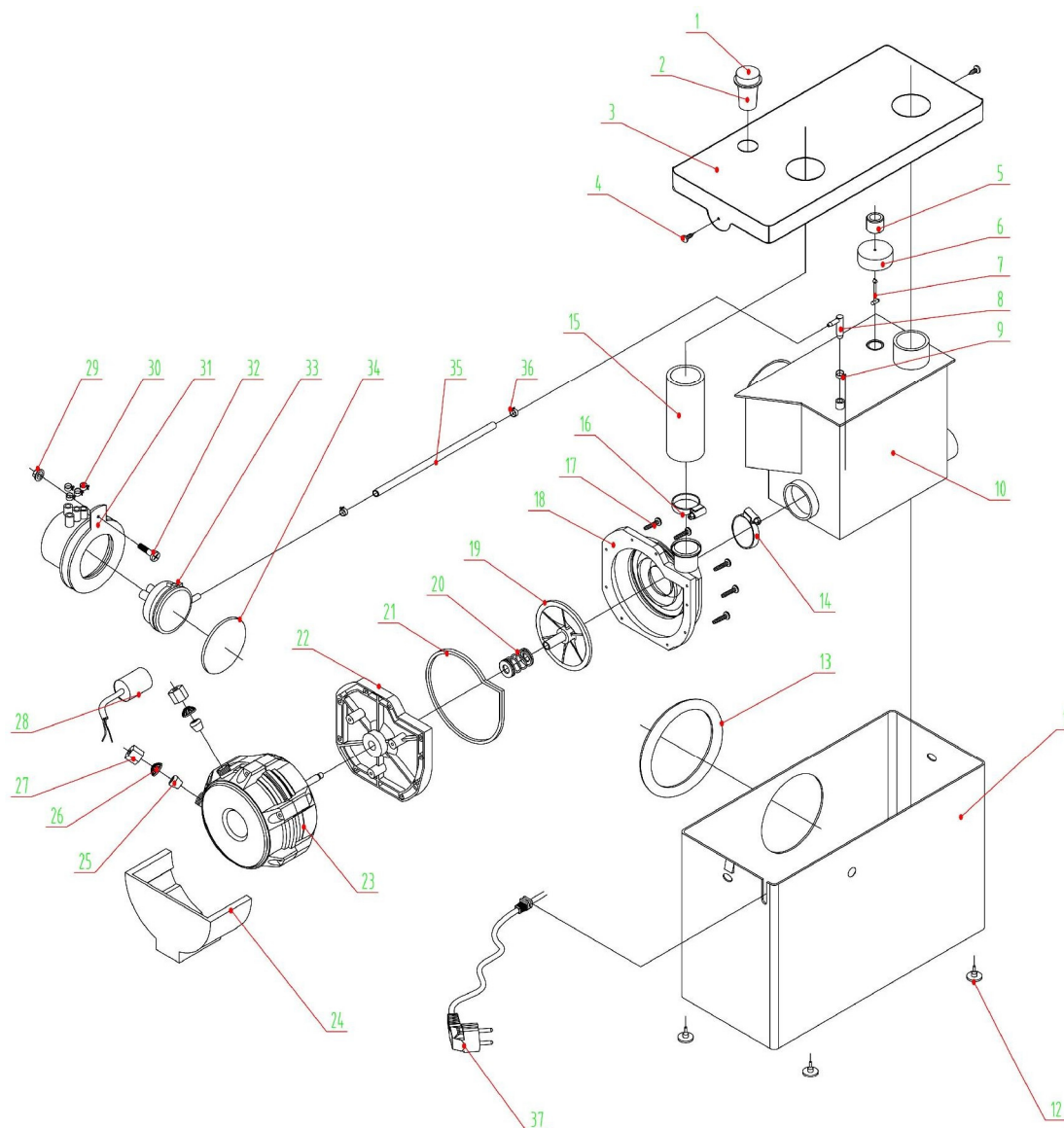
1. Disconnect the macerator from the mains voltage (pull out the plug).
2. Release the two screws (narrow sides) from the cover lid of the macerator and remove it. (the cover)
3. Empty the small transparent hose which connects the big "tank" with the small black "control box". Dry up the pressure switch in the small black box. (put it on the heating system or in the sun.)
4. After it had dried up, assembly the unit again in the reverse order.
5. Put the macerator into operation.

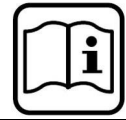
If you do not trust yourself to carry out this work, our technical service can do this for you. However I would like to remind you that this case of malfunction does not fall under manufacturer's warranty and the costs for work and transportation will be borne by the customer.



Partlist

1	Push Button (50741-2)
2	
3	Cover Lide Case Box (50741-4)
4	Screw
5	
6	Depressurization float
7	Vent valve
8	
9	
10	Tank (50741-6)
11	Case box (50741-4)
12	Rubber feet
13	Seal
14	Steel Clamp
15	Drain pipe (plastic / rubber)
16	Steel Clamp
17	Screw
18	
19	
20	
21	
22	Engine
23	
24	
25	
26	
27	
28	Capacitor
29	
30	
31	Pressure switch (50741-1)
32	
33	
34	
35	Transparent compressed air line (pressure switch)
36	Plastic Clamps





Disposal regulations

EU guidelines regarding the disposal of scrap electric appliances (WEEE, 2012/19/EU) were implemented in the law related to electrical and electronic equipment and appliances.

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Disposal of used electrical and electronic appliances (intended for use in the countries of the European Union and other European countries with a separate collection system for these appliances).

The logo on the article or on its packaging points out that this article must not be treated as normal household waste but must be disposed to a recycling collection point for electronic and electrical waste equipment. By contributing to the correct disposal of this article you protect the environment and the health of your fellow men. Environment and health are threatened by inappropriate disposal.

Materials' recycling helps reduce the consumption of raw materials.

Additional information on recycling this article can be provided by your local community, municipal waste disposal facilities or the store where you purchased the article.

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