KKfarming

AeroBox2

manual

english

Here is the online version!

AeroBox2

manual

When operating products from KK OG, national law must be regarded. The KK OG accept no responsibility and assume no liability for any improper or illegal use of their products!

Index

Package includes

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1. circulation pump: HYDOR Centrifugal Pump Pico 1 000 (1000 l/h)
2. high pressure pump: M.R.S. Whisper PowerPump Small (8.3 bar, 60 l/h)
3. reservoir
4. top cover
5. inlet with nozzles and distributor ring (pre- assembled)
6. filter coverplate
7. rubber cover
8. filter sponge
9. double filter (pre assembled)
10. 6mm-hose (ø 6mm outer / 4mm Inner)
11. 8mm-hose (ø 8mm outer / 6mm Inner)
12. 19mm-hose (ø 19mm outer / 15mm Inner)
13. 16 x net pots with plantholderdiscs
14. 4 x magnets
15. sealing
16. 2 x brackets

Assembling

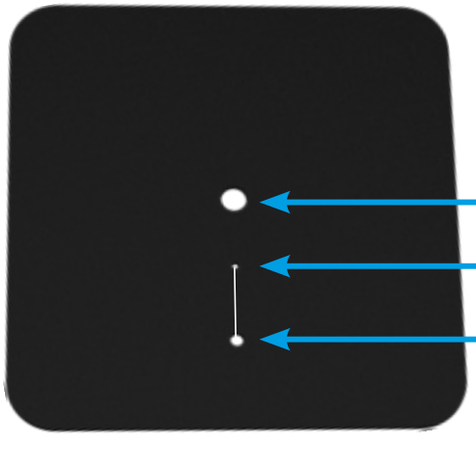
All you need to set up your AeroBox is a few minutes of
time, just follow the instructions in this manual.

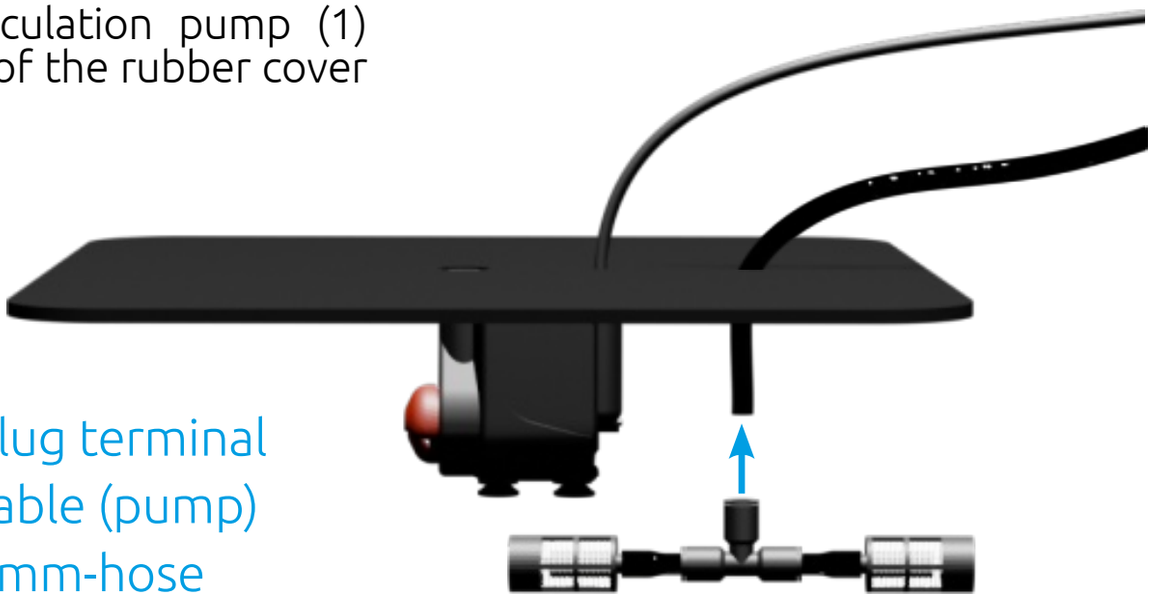
STEP 1

Put the filter spong (8) in the reservoir (3) as shown and remove the 4 magnets (14) from the bottom of the reservoir. They will be needed again in step 5.

STEP 2

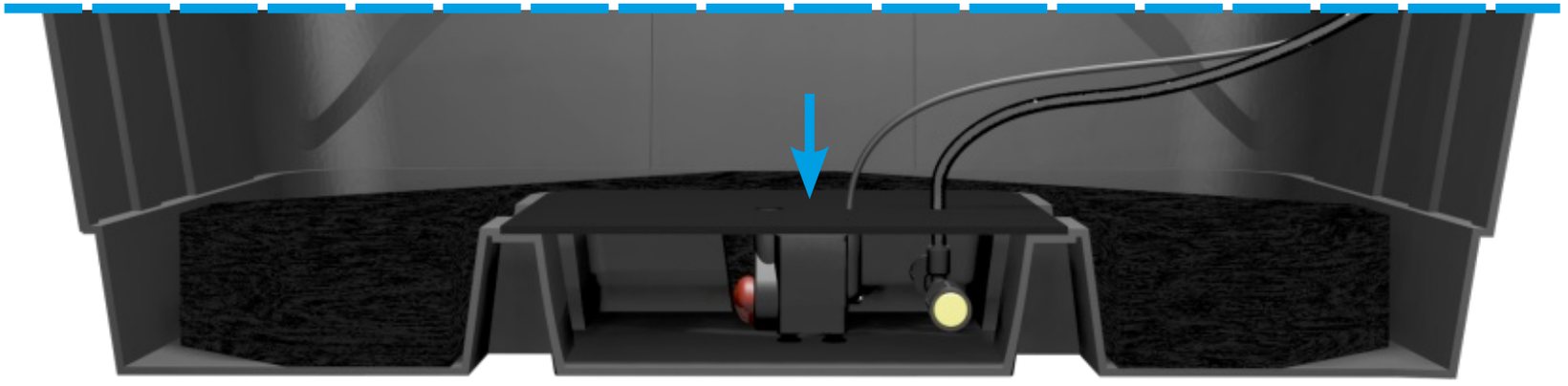
Thread the plug terminal of your circulation pump (1) through the slit in the rubber cover (7) and follow through with the cable. Subsequently put the pumpoutlet through the hole in the middle of the rubber cover (7). Now connect the doublefilter (9) with the 8mm hose (11) and thread it through the outermost hole in the rubber cover (7). Be aware that the doublefilter (9) and the circulation pump (1) have to be on the same side of the rubber cover (7).





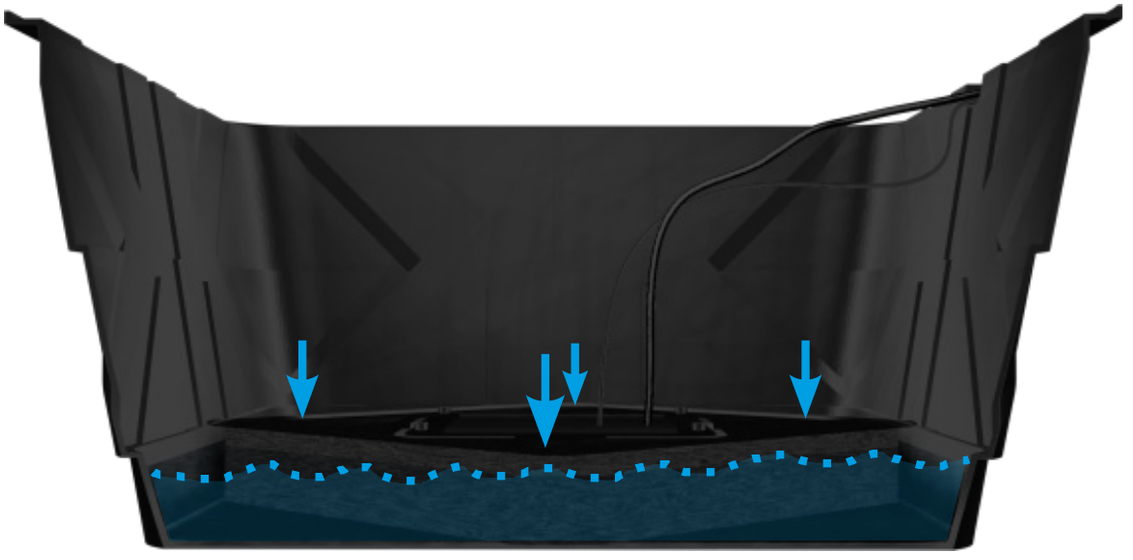
STEP 3

Now place the rubber cover with the circulation pump and the doublefilter facing downwards into the reservoir (3).
Afterwards press down on the cover with light pressure to fixate the circulation pump (1) onto the reservoir (3) with the rubber nubs of the circulation pump.



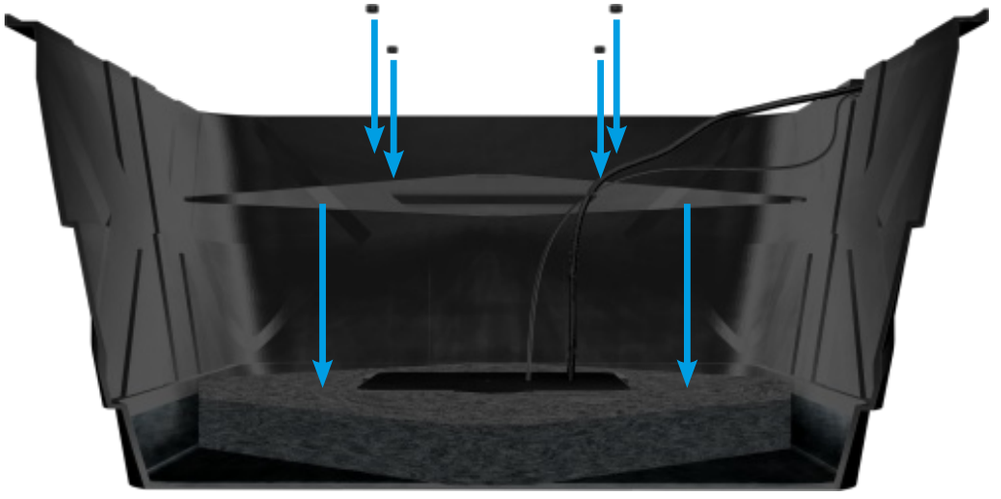
STEP 4

Fill the reservoir (3) with water until the filter sponge (8) starts floating.
now press the remaining air out of the filter sponge.



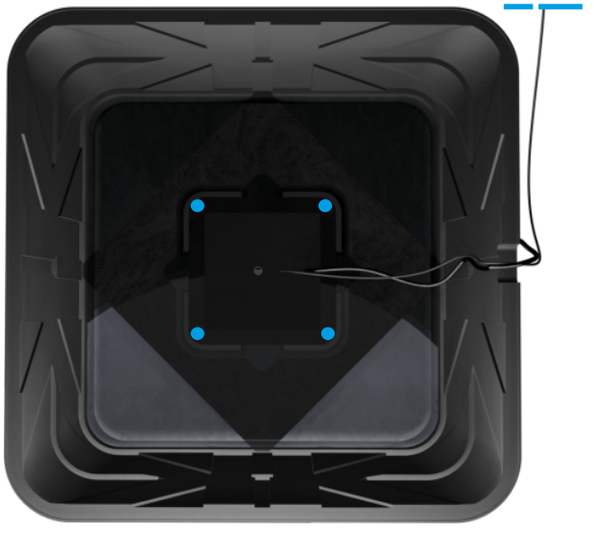
STEP 5

Put the filter coverplate (6) flush onto the filter sponge (8).
For this you have to thread the loose end of the 8mm hose (11) as well as the plug terminal of the circulation pump (1) through the square hole in the middle of the filter coverplate (6).



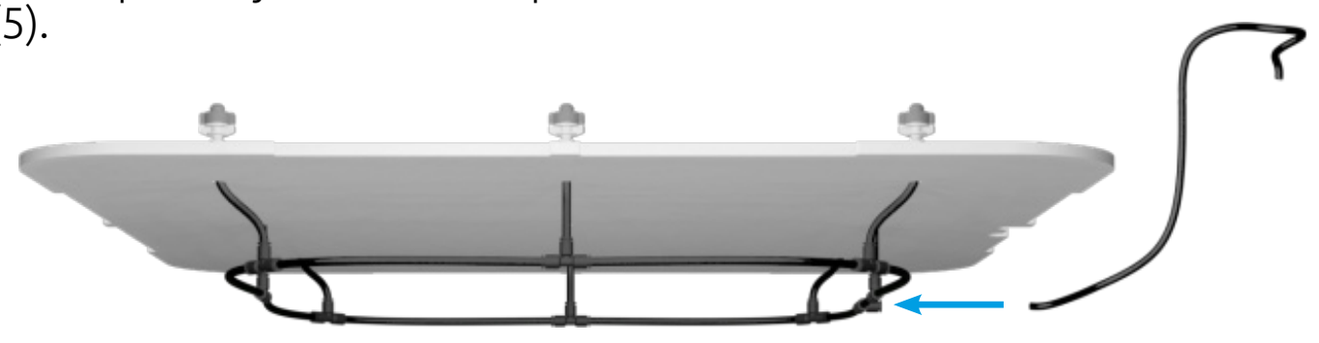
STEP 6

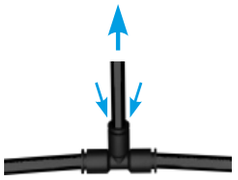
Place the four magnets (17) one by one onto the magnetic spots of the reservoir (3) to fixate the filter coverplate (6). You find those magnetic spots on the corners of the rubber cover (7) you put in previous.



STEP 7

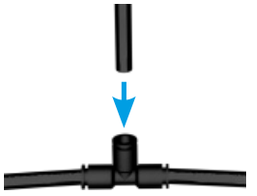
Connect a loose end of the 6mm hose (10) with the unoccupied T-joints of the pre assembled inlet (5).





release

To release the connectors, pull on the hose and push the movable ring against the direction of pull.



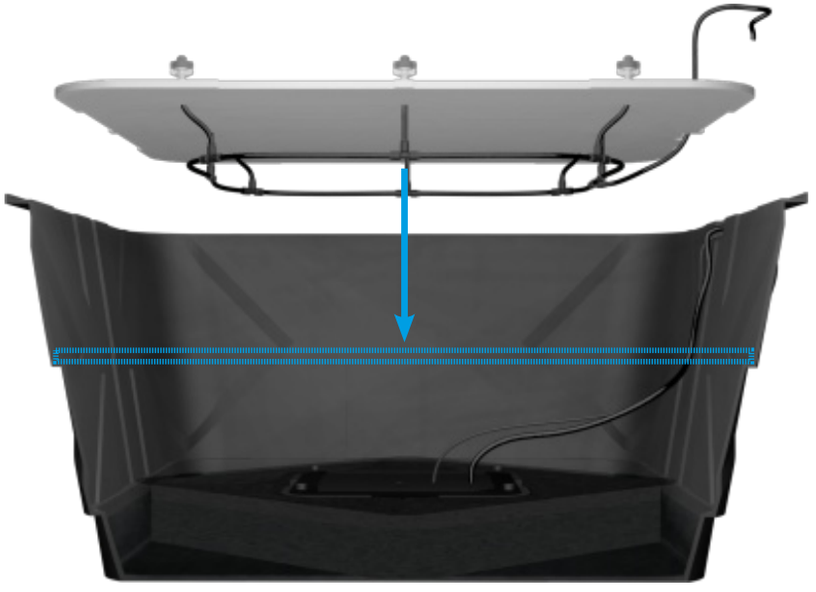
conjoin

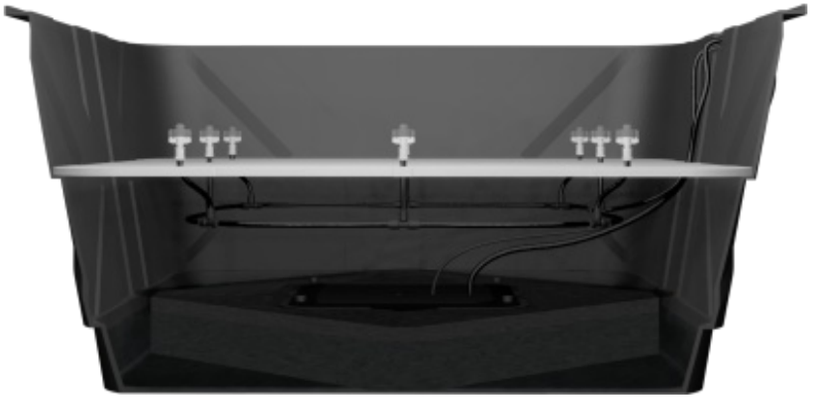
To conjoin the connectors, push the hose firmly into the unoccupied opening.

Be aware that the hoses are locked in place fully. Not only does a leaky system drop back into the water reservoir, also pump pressure is decreased.

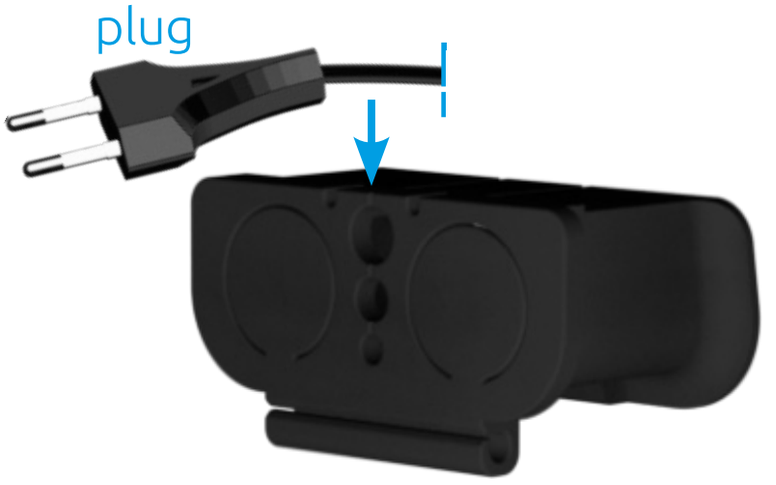
STEP 8

Put the pre assembled inlet (5) into the reservoir (3). Herebey you have to make sure that the loose ends of the 6mm hose (10) and the 8 mm hose (11) as well as the power cable of the circulation pump (1) go through the side opening of the inlet (5).

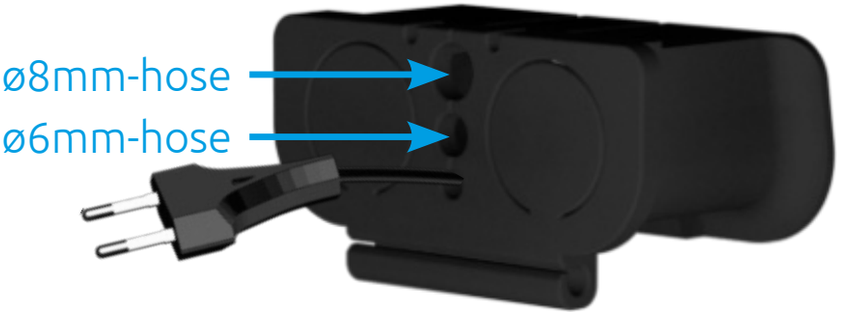




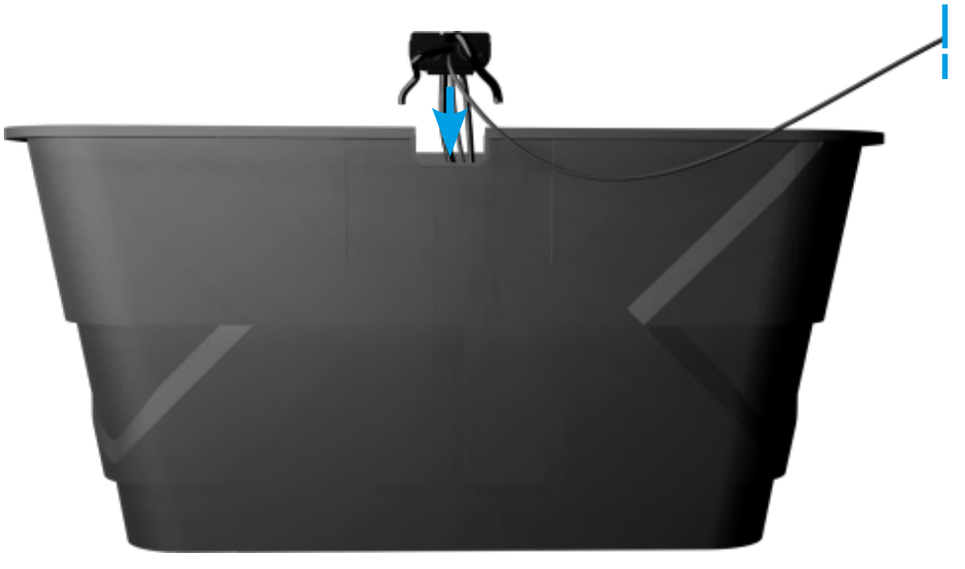
STEP 9
Squeeze the power cable of the circulation pump into the lowest hole of the sealing (18).



STEP 10
Squeeze the 6mm-hose (10) and afterwards the 8mm-hose (11) through the sealing (18).

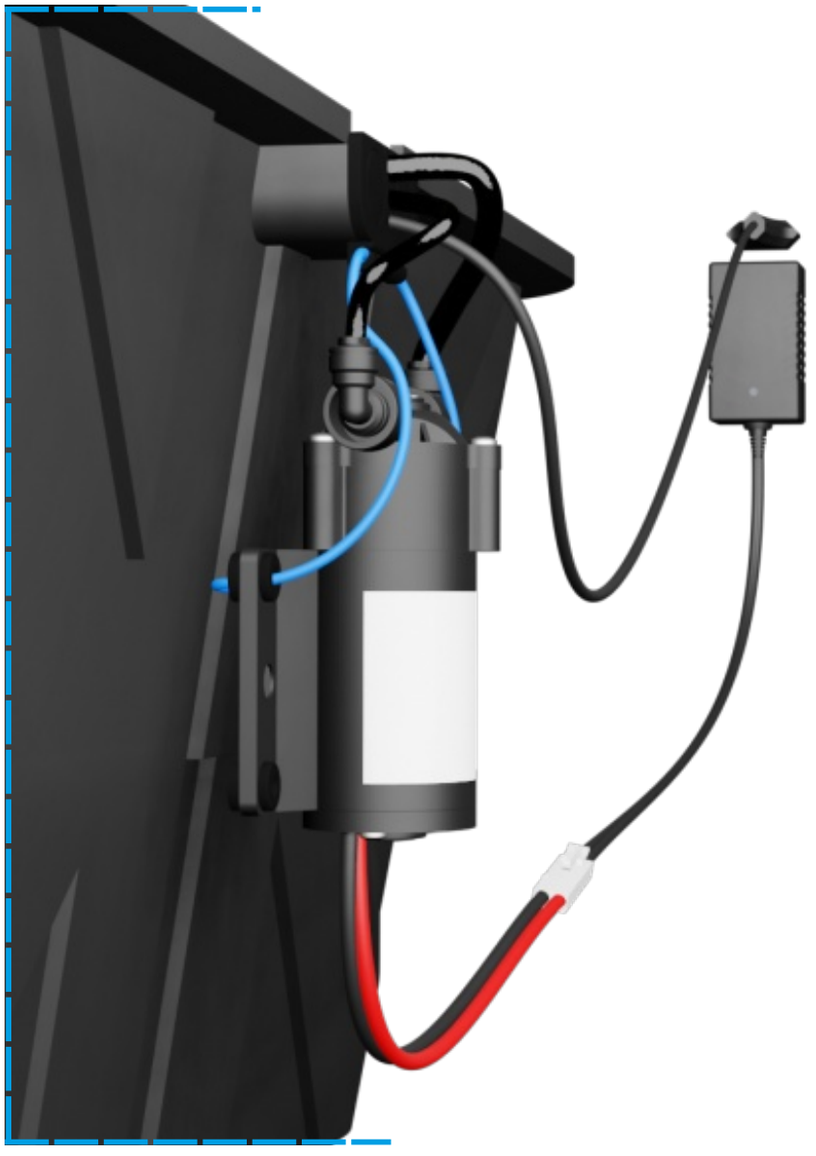


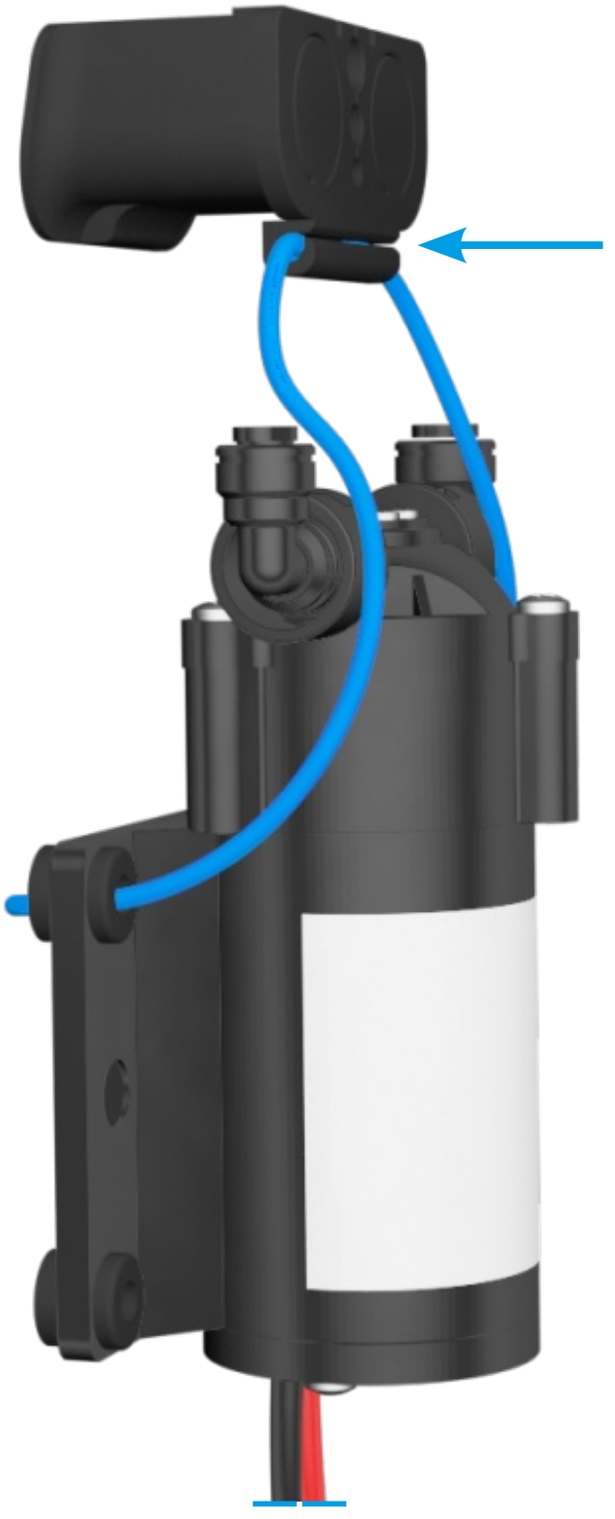
STEP 11
Put the sealing (18) into the lateral cutout of the reservoir (3).



STEP 12

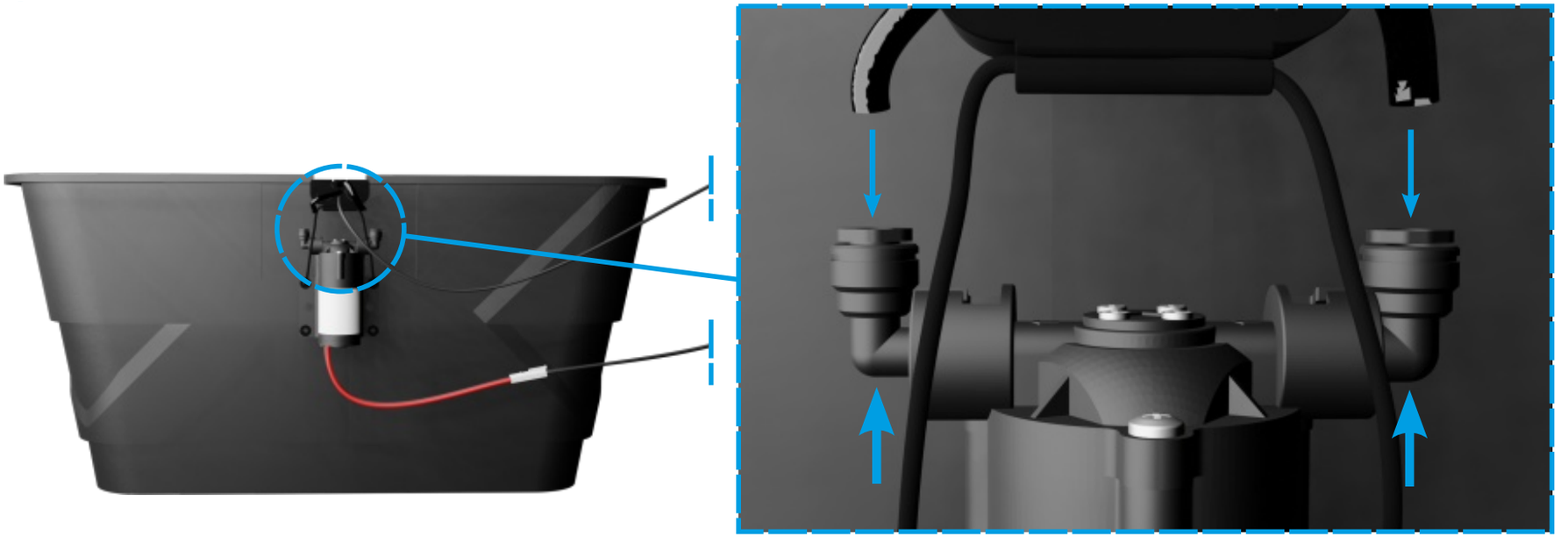
Mount the high pressure pump (2) onto the elongated hook of the sealing (18) using the rubber band.





STEP 13

Now conjoin the 6mm hose (10) and the 8mm hose (11) with the connectors of the high pressure pump (2).



Put the hose fully into the connectors of the pump so that the seal is tight and no water leaks out!

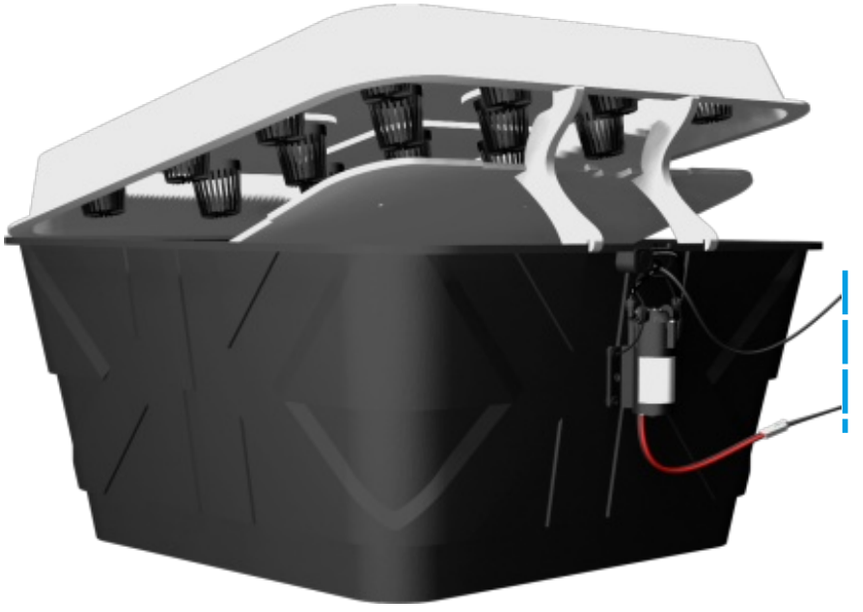
STEP 14

At last position the top cover (4) onto the reservoir (3) and put the netpots into its holes.

FINISHED

You can no fill up the Aerobox2 with water. Max water level is just under the inlet(5). Afterwards you can mix in the nutrients of your choice and regulate the parameters. This is where we suggest you to use our bracket(16).

The bracket(16) must be placed on the edge of the reservoir (3) next to the lateral cutout.



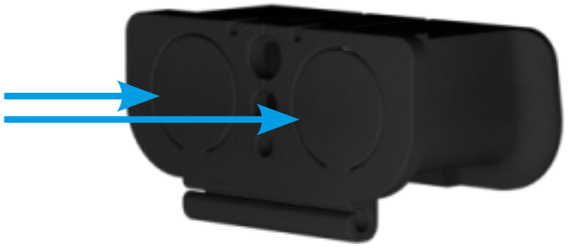
Turn on the circulation pump (1) for a few minutes and test the nozzles by plugging in the high pressure pump (2).

If the Aerobox 2 sprays as intended you can close the top cover and connect the high pressure pump to suitable intervall timer.

Before operating the Aerobox2 make sure that its impossible that water can flow to Power adapters, sockets eg. over the hoses.

There are two additional openings on the side if you want to use a chiller/watercooler with the system.

chiller (optional)



Operation

This manual is only a technical overview for operating an AeroBox. For more in depth operational procedures, tips and tricks visit us on our homepage:

www.kkfarming.com/en/guide/

Please follow the safety references in this manual.

How to open the Aerobox2

Open the top cover (4) of the AeroBox2 only on the side with the cutout for the sealing (15). This way it is impossible for water to flow over the cutout of the reservoir(3) onto electrical components.
With the help of the brackets (16) the Aerobox2 stays open during maintance.
Disconnect the high pressure pump(2) from power every time before opening the top cover(4) of the aerobox2.

Water/nutrient solution

You can fill the water reservoir up to 3cm under the inlet (5), but be aware that a high fill level will increase the risk of spilling over.

The circulation pump (1) will make sure the nutrient solution is stirred and replenished with oxygen. Furthermore it ensures plenty flow through the filter sponge (5). This is why it should be activated 24 hours a day.

This way nutrients and pH regulators can easily be added. Do keep in mind that it may take a few minutes for all data to show accurately. Additional agitation will accelerate this
process.

Watercooler

The Aerobox2 gives you the option to connect an external watercooler. You will find extra openings for this in the Sealing/gasket (15) as well as in the top cover (5).

Draining the System

First unplug the high pressure pump (2) and subsequently the circulation pump (1).
Remove the top cover (4) of the aerobox2 or open it using the bracket (16).
Remove the inlet (5) or fixate it by using the bracket (16).

To drain the Aerobox2 put one end of the 19mm-hose (12) into an adequate bucket or directly into the drain. Afterwards connect the other end of the hose with the outlet of the circulation pump (1).

Now you can plug in the circulation pump (1) and the Aerobox2 empties itself.

Immediately unplug the circulation pump(1) when it begins to soak in air.
Never leave the Aerobox2 unobserved during this process.

If the circutlation pump (1) runs dry it can be damaged.

ATTENTION – Never operate AeroBox2 without water!
This can severely damage the pump.

Maintenance

Maintaining the circulation pump

Even though the circulation pump (1) was designed for continuous use, a minimum of maintenance is necessary. Open the pump every 30-60 days and remove all soil and dirt. For this a soft brush or pipe cleaner can be helpful.

Cleaning the filter sponge

The filter sponge (8) should be rinsed with hot water every two to four months. Squeeze it out sufficiently afterwards.

Cleaning the reservoir, top cover and inlet

If the Aerobox2 gets contaminated after prolonged use you can rinse all components except the high pressure pump (2)! with hot water. Additionally you can use a soft towel or cloth for cleaning.

Maintaining the high pressure pump

For cleaning the high pressure pump (2) you must only use dry soft cloth! Humidity can damage the high pressure pump (2).

Cleaning the net pots

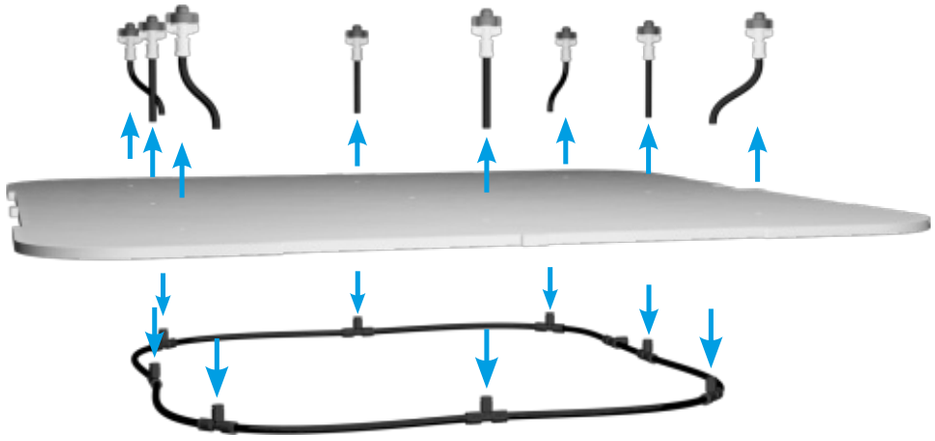
Take out the plantholderdiscs and clean them with clear water.
The net pots can be also cleaned with water and additionally with a sponge or a soft brush.

Cleaning the double filters

Disconnect the double filters (9) from the 8mm hose (11) and rinse them under running water and use a soft brush if necessary.
Reconnect the filter to the hose afterwards.

Cleaning the nozzles

Disconnect the hose of the nozzles from the T-joints and pull the spray valves out of the inlet(5).



Simply pull the spray valves you want to service off theadapter.

Take apart the valve by turning the grey valve head anti clockwise. Clean all parts using tap water and manuallyremove rough soiling.

To get rid of persistent soiling such as limescale, you can lay the parts of the spray valves in vinegar or other biocompatible detergants. Make sure to rinse all parts thoroughly with tap water afterwards.

When the parts are dry you can put them back together.
When screwing together be sure of correct latching.

Warnings

Attention, water combined with high voltage can cause life threatening events! Especially if leaks occur you mustalways switch off all electricity, before any further actions. Be aware that water can conduct high voltage.

Follow the references of maintenance in this manual!

Follow the enclosed safety instructions of the circulation and high pressure pump!
Check your plug in connections regularly or whenever you take any actions on your AeroBox2. The hoses must be pushed into the connector firmly.

Take care that leaking water cannot damage any surroundings.

Make sure that the Aerobox2 operates safely before letting it unobserverd. Do check all functions of the Aerobox2 regularily.

Please prevent Children and people that are not qualified, from tampering with your AeroBox2.

Magnets
The magnets included in your set of cuttings can damage electronic devices and magnetic data mediums permanently. Keep the magnets away from such devices. People with pacemakers or implanted defibrillators should stay clear of magnets.

Place of installation
In rare cases of damage, water can leak out of the high pressure pump. Therefore, make sure no consequential damages, such as damage on floors and furnitures, can occur when selecting your place of installation. KKfarming assume no liability caused by selecting an unsuitable place of installation.

Slopping over
The water in the water reservoir can slop over when being moved. Avoid moving AeroBox when filled. Water and high voltage can cause life threatening events! For this reasonrespect the following information:
Taking any actions on your AeroBox, all power plugs must be removed!

M.R.S. high pressure pump
Never operate your high pressure pump continuously, only operation in intervals guarantees a long life-span of the pump.

Contact / Support

For any questions or concerns please do not hesitate to contact us.
Use our contact form on our Homepage:

www.kkfarming.com/en/info/support/

or send us an e-mail:

office@kkfarming.com

Purchasing spare parts and accessories

Spare parts and accessories for your AeroBox can be found in our onlineshop:

www.kkfarming.com/en/shop/

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