

OPERATING MANUAL

Dual-channel Water-jet Aspirator

VE-11



WIGGENS
THE MAGIC MOTION

WIGGENS GmbH

Gässlesweg 22-24, 75334 Straubenhardt,
Germany

Tel.: 0049 7248 4529088

Wiggins Co., Ltd.

Room 426, Hall A, Office Building M8, No.1
Jiuxianqiao East Road, Chaoyang District,
Beijing 100015, China

Tel: +86 400-809-2068

Fax: +86 400-809-2068-112

info@wiggins.com

www.wiggins.com

Congratulations!

You have made an excellent choice.

WIGGENS thanks you for the trust you have placed in us.

This operating manual has been designed to help you gain an understanding of the operation and possible applications of our instruments. For optimal utilization of all functions, we recommend that you thoroughly study this manual prior to beginning operation.

Unpacking and Inspecting

Please unpack the device carefully. Check that the package is right-side-up and then open it. Check that model of the product is one that you ordered. Check that there is no damage. If there is any damage, file a damage claim with the carrier. In the case of any damage a damage report should be requested immediately. These instructions must be followed fully for us to guarantee our full support of your claim for protecting against loss from concealed damage. The form required for filing such a claim will be provided by the carrier.

Changes without prior notification reserved

Important: keep operating manual for future use

Content

1. Intended Use	4
2. Operator Responsibility	4
2.1. Disposal	5
CE Conformity	5
2.2. Technical Specifications	6
3. Safety Instructions	7
3.1. Explanation of Safety Notes	7
3.2. For Your Protection.....	8
3.3. For protection of the equipment.....	9
4. Operating Procedures	10
4.1. Environmental Operating Conditions	10
4.2. Installation	10
4.3. Operation.....	11
4.3.1. Structure Diagram	11
4.3.2. Operation.....	12
4.3.3. Precautions for using the organic solvents.....	14
4.4. Parts List.....	15
5. Cleaning and Maintenance	18
5.1. Routine Cleaning.....	18
5.2. Maintenance	19
6. Transport and Storage	19
7. Accessories and Spare Parts	20
8. Service.....	20
8.1. Trouble-Shooting.....	20
8.2. Warranty.....	21
8.3. Contact /Technical Service.....	22

1. Intended Use

Electric aspirator VE-11 produces a low vacuum condition using Bernoulli's principle by pumping water through aspirator head. When using VE-11 with rotary vacuum evaporator or for Gel dryer or low vacuum oven, inflow of a little water or solvent into the equipment do not make trouble to the instrument. And you can use this equipment continuously if you change the water in the bath.

The VE-11 is manufactured as polypropylene that has chemical resistance against most solvents. For effective usage, a small quantify of water (100ml/min) has to be continuously supplied by a user through the drain cock at the bottom part of the bath and drained through the over-flow nozzle. It reveals liquid circulation of the inner bath and means dilution that helps the instrument to be used longer.

Check-valve is designed for preventing water from flowing backward during the power failure. But this valve can't protect the equipment permanently. It is for short protection that saves the time to fix its original troubles that may be happened.

2. Operator Responsibility

The WIGGENS products ensure safe operation when installed, operated, and maintained according to safety regulations. This section explains the potential dangers that may arise when operating the instrument and also specifies the most important safety precautions to preclude these dangers as far as possible.

The operator is responsible for the qualification of the personnel operating the instrument.

The operator should be regularly instructed about the dangers involved with their job activities as well as measures to avert these dangers.

Make sure all persons tasked with operating, installing, and maintaining the instrument have read and understand the safety information and operating instructions.

When using hazardous materials or materials that could become hazardous, the instrument may be operated only by persons who are absolutely familiar with these materials and the instrument. These persons must be fully aware of possible risks.

Only qualified personnel are authorized to perform configuration, installation, maintenance and repairs of the instrument.

Routine operation can also be carried out by untrained personnel who should however be instructed by trained personnel.

Do not pump hazardous gases to humans, or explosive, flammable, toxic or corrosive gases or substances which contain chemicals, solvents or powders. Pumping such gases can cause bodily injury from exposure to harmful substances, explosion or fire.

If you have any questions concerning the operation of your instrument or the information in this manual, please contact us!

2.1. Disposal



At the end of its service life the instrument is to be disposed of in accordance with the local regulations specified for the disposal of electronic industry waste in an environmentally friendly manner.

CE Conformity



The products described in the operating instructions conform to the requirements of the following European guidelines:

Low voltage regulations with respect to legal harmonization of the member countries concerning electric devices for use within certain voltage limits.

EMC guideline with respect to legal harmonization of the member countries concerning electromagnetic compatibility.

APPROVALS

European

EN61326-1: 2013, 2014/30/EU

EN61010-1: 2010, 2014/35/EU

EN60204-1: 2006, 2006/42/EC

EN50581: 2012, 2011/65/EU

2.2. Technical Specifications

Model	VE-11	
Water Tank Capacity(L)	9.5	
Max. Vacuum range(Mpa/mmHg)	0.0906/680	
Max. Flow Rate	36 L/min (18 L/min*2)	
Material	Bath	Polypropylene
	Aspirator	Nickel- coating
Safety device	Fuse, check valve, overheat protection	
Dimensions	Bath internal (W x L, D)(mm/inch)	298x210x227 / 11 .7 x8.3x8.9
	Overall(W x D x H) (mm/inch)	330x265x390 / 13.0x 10.4x 15.4
	Absorption nozzle	9.5mm Ø x 2
	Drain cock, over flower nozzle(mm/inch)	Φ17.0/0.7
Electric requirement	AC230V / 50/60Hz / 0.7A	
Net Weight(kg/lbs)	5.7 / 12.6	
Order No.	900701	

All measurements have been carried out at the stated voltage, frequency, and an ambient temperature of 25°C.
 Technical changes without prior notification reserved.






WIGGENS Order Numbers consist of the Basic Order Number (BON) and the Order Number Addition (ONA) which explains different characteristics of the product that can vary from country to country. Order Numbers as stated on the product label and box label are stated as Full Order Numbers (FON), consisting of the BON followed by the ONA. For a full explanation of the ONA of your product, please ask your local WIGGENS support or refer to the Order Number Guide in the *WIGGENS* General Catalog.






3. Safety Instructions

3.1. Explanation of Safety Notes


In addition to the safety warnings listed, warnings are posted throughout the operating manual. These warnings are designated by an exclamation mark inside an equilateral triangle. "Warning of a dangerous situation (Attention! Please follow the documentation)."

Symbol	Additional term / Description
Warning signs 	<p>The danger is classified using a signal word. Read and follow these important instructions for averting dangers.</p> <p>Warning! Describes a possibly highly dangerous situation. If these instructions are not followed, serious injury and danger to life could result.</p> <p>Caution! Describes a possibly dangerous situation. If this is not avoided, slight or minor injuries could result. A warning of possible property damage may also be contained in the text.</p> <p>Notice! Describes a possibly harmful situation. If this is not avoided, the product or anything in its surroundings can be damaged.</p>
	<p>Note! Draws attention to something special.</p>
	<p>Important! Indicates usage tips and other useful information.</p>

3.2. For Your Protection

- Make sure you read and understand all instructions and safety precautions listed in this manual before installing or operating your instrument.
- Keep the operation instructions in a place where they can be accessed by everyone.
- Connect the instrument to a power socket with earthing contact (PE-protective earth).
- The power supply plug serves as a safe disconnecting device from the line and must always be easily accessible.
- Do not stay in the area below the instrument.
- Make sure the product is checked for proper condition regularly (depending on the conditions of use). Regularly check (at least every 2 months) the proper condition of the mandatory, warning, prohibition and safety labels.
- Never operate damaged equipment.
- Always turn off the instrument and disconnect the mains cable from the power source before performing any service or maintenance procedures, or before moving the instrument.
- Transport the instrument with care.
- Never operate instruments with damaged mains power cables.
- Observe all warning labels.
- Never remove warning labels.
- Repairs are to be carried out only by qualified service personnel
-  **Warning!** Never use the pump with any flammable gas or toxic material.
-  **Warning!** Before using a medium, check whether the medium can be transferred danger-free in the specific application case.
-  **Warning!** Ensure that the system is not subject to any risks of explosion, also in extreme operating situations (temperature, pressure) or in case of malfunctions.
-  **Warning!** Only transfer gases which remain stable under the Vacuum and temperatures occurring in the pump.
- Laboratory equipment or additional components connected to a pump have to be suitable for use with the pneumatic capabilities of the pump
-  **Warning!** Make sure the temperature of the medium is always sufficiently below the ignition temperature of the medium, to avoid ignition or explosion.
- If necessary, consider any external sources of energy, such as radiation, that may add heat to the medium.

3.3. For protection of the equipment

- You have received a product designed for industrial and experimental use. Nevertheless, avoid strikes to the housing, vibrations, damage to the operating-element panel, and contamination.
- Make sure that the mains power supply has low impedance to avoid any negative effects on instruments being operated on the same mains.
- Do not expose the unit to sunlight.
- Sudden drops may cause damage in the interior of the instrument.
- When finished with the pumping operation, do not turn off the pump at once but continue to run the vacuum pump for at least two minutes in order to draw out the mist and tiny liquids to prolong the service life of the pump.
- Never use the pump with any flammable gas or toxic material.
- Press the power switch to interrupt the pump, rather than disconnect the main power plug directly.
- When in an emergency, disconnect the main power plug.
- Protect the pump from vibrations, jolts and external damage.
- The pump is not recommended for use underground.
- The pump is not suitable for transferring dusts.
- The pump is not suitable for transferring liquids.
-  **Warning!** An overpressure must not be applied to the suction side of the pump.
- The pumps must not be modified. If a wearing part is replaced, the original function of the pump must be checked by reaching the specified ultimate vacuum.
- To prevent flowing backward of water upon a power failure of the moment, the unit has a flowing backward double breaker. It only makes users have some times to deal with the situation however, it does not mean the complete stop valve.

4. Operating Procedures

4.1. Environmental Operating Conditions

The aspirator must operate in the following conditions:

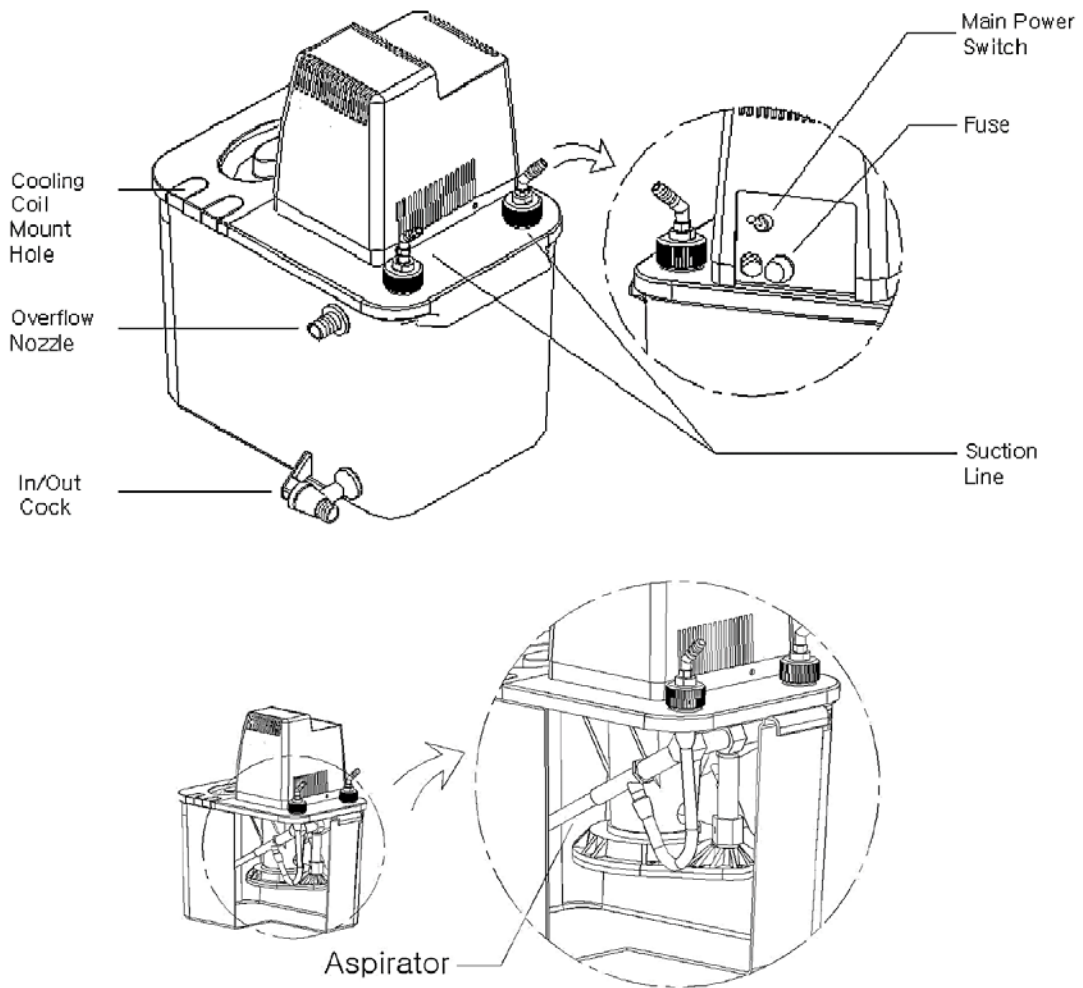
- Indoors
- Altitudes up to 2000 meters
- Temperatures from +5°C to +40°C
- Maximum relative humidity 80% for temperatures up to +31°C, linear decrease down to 50% relative humidity at a temperature of +40°C
- Max. mains fluctuation of $\pm 10\%$ are permissible
- Overvoltage category II

4.2. Installation

1. Please check on the proper voltage for operating. You should check the electricity in accordance with the ID label plate (The backside of unit).
2. Please check on the proper voltage, phase of capacity for an installing place.
3. Main power must be grounded. If it would not be, may cause a serious injury or damage on the unit.
4. This instrument is requested not to be used where is inclination and vibration place.
5. Do not expose to a direct rays.
6. Prevent overflowing of water in the bath, and do not operate with wet ha

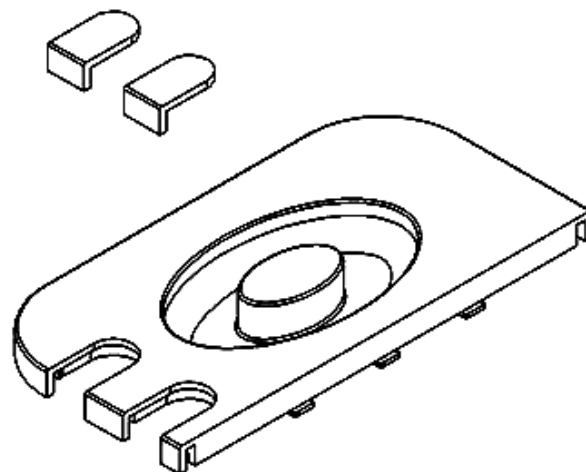
4.3. Operation

4.3.1. Structure Diagram



- Slots for cooling coil

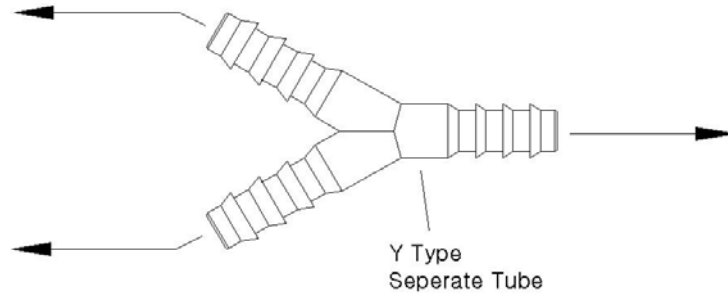
When you need cooling coil, you can put in a cooling coil through these slots. (Cooling coil is optional accessory.)



4.3.2. Operation

1. Use the machine in dry place, and keep away from flammable gas or dangerous explosive environment.
2. For fear that scale might be occurred in the bath, you had better use distilled water.
3. Only use inner circulation without infusing cooling water
 - 1) Fill up the water in the bath up to the over-flow-nozzle.(About 2 cm below from the nozzle)
 - 2) Connect a Y separate type tube to each of the suction ports and also something which vacuum is needed with silicone Hoses (Ø6).

(Refer to the below image)



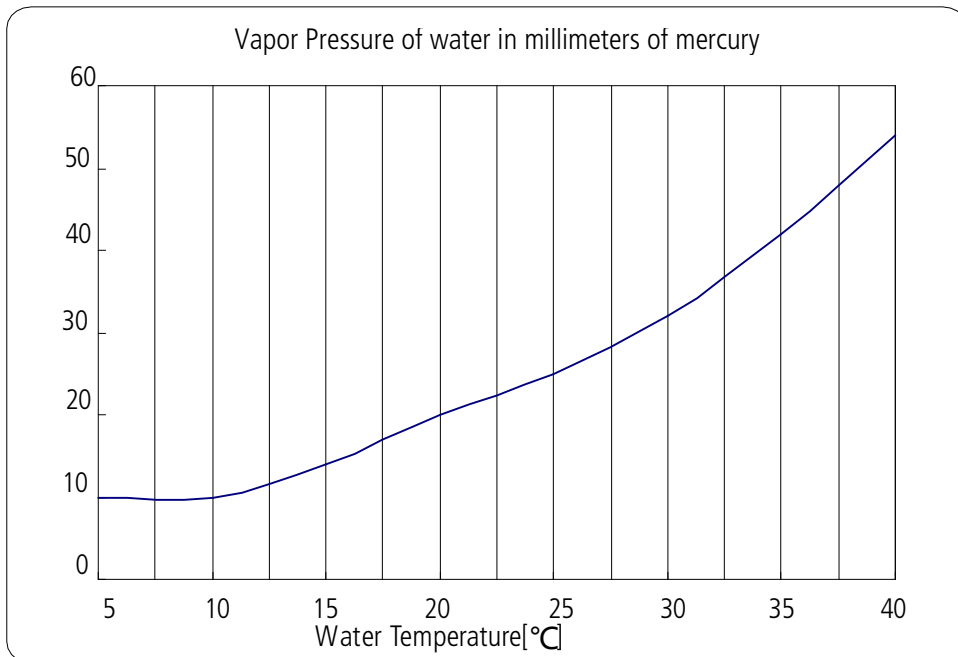
- 3) After then, turn on the main power switch. After the power on, the unit is working and ismaking vacuuming condition.



CAUTION!

In case of using for inner circulation for a long time, if the water temperature in the bath might increase, the vacuuming condition would be limited.

In addition to the vacuuming condition might be influenced by dissolved gas or impurities that dissolving in the water.



The above graph shows that vacuuming fluctuation is depending on water temperature in the bath.

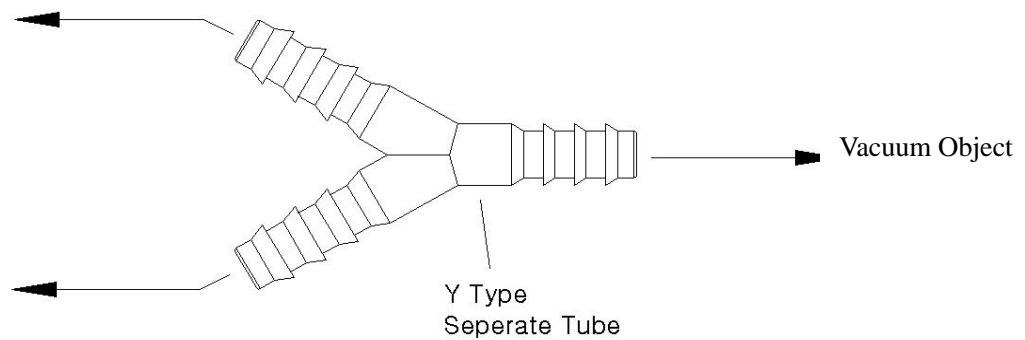
In case of using for inner circulation for a long time, if the water temperature in the bath might increase by the motor, the vacuuming condition would be limited.

When you use it for a long time, you had better infuse some cooling water to decrease the water temperature.

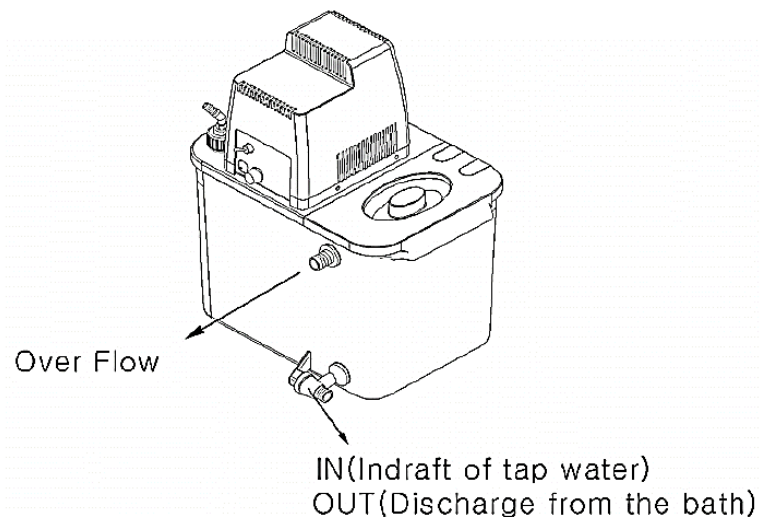
4. Use with inserting cooling water

- 1) Fill up the water in the bath up to the over-flow-nozzle.(Under about 2 cm of the nozzle)
- 2) Connect a Y separate type tube to the suction ports each and also something which vacuum is needed with silicone Hoses (Ø6).

(Refer to the below image)



- 3) Connect a hose with the over flow nozzle to discharge water.
- 4) Connect a hose to the cock to infuse water (cooling water).



5) Turn on the main power switch.

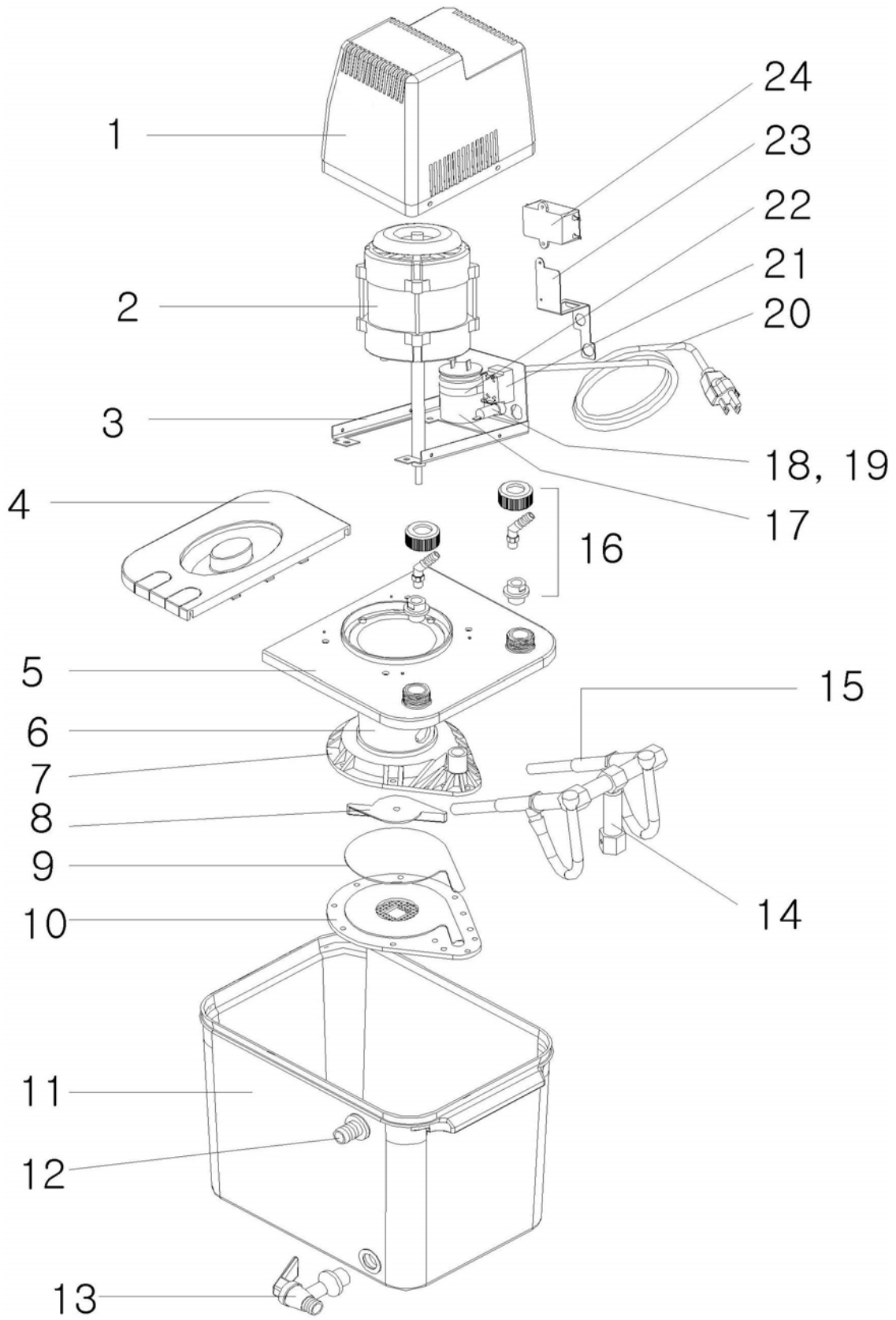
After the power on, the unit is working and is making vacuuming condition.

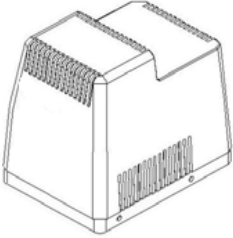
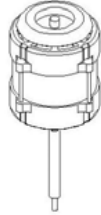
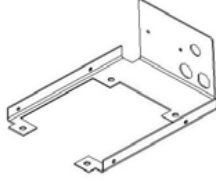
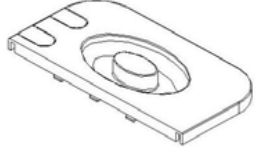
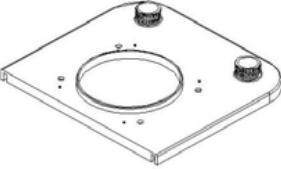
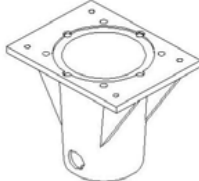
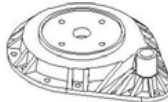


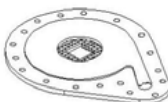

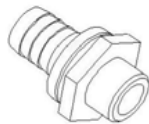


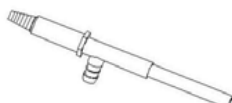
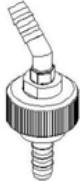
4.3.3. Precautions for using the organic solvents

1. Whenever possible, supply running water regularly in the tank.
Connect the hose for supplying the running water from In/Out cock and drain from Overflow nozzle.
2. If you are using organic solvents, you must supply running water.
After operation, drain the water in the tank. Draining the water will prevent the unit loss from the organic solvents and vapor.
3. If running water cannot be supplied, change the tank water as often as is necessary for its frequently of use. In case of using the toxic solvents, you must change the tank water more frequently.
4. After operation, rinse the aspirator thoroughly after each use.
Clean and empty the tank in order to avoid any contamination.
5. Followings are example of organic solvents which need this sort of special care

- Acetic Acid Chloride
- Acetone
- Acrylonitrile
- Alcohols: Benzyl
- Alcohols: Methyl
- Alcohols: Diacetone
- Ammonia
- Benzene
- Benzene Chloride
- Carbon Tetrachloride
- Cyclohexane
- Chlorobenzene
- Chloroform
- Cyclohexanone
- Dichloroethane
- Diethyl Ether
- Ethylene Dichloride
- Ethyl Ether
- Ethanolamine
- Ethyl ether
- Ethyl Acetate
- Furfural
- Hexane
- Kerosene
- Ketones
- Methyl Acetate
- Methyl Acetone
- Methylene Chloride
- Methyl Butyl Ketone
- Methyl Ethyl Ketone
- Nitrobenzene
- Nitrometane
- Pentane
- Perchloroethylene
- Pyridine
- Toluene(Toluol)
- Trichloroethylene
- Turpentine
- Xylene

4.4. Parts List



<p>1. Head</p>  <table border="1" data-bbox="145 555 453 618"> <thead> <tr> <th>Q'ty</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>FDA1153</td> </tr> </tbody> </table>	Q'ty	Part No.	1	FDA1153	<p>2. Motor</p>  <table border="1" data-bbox="475 533 783 618"> <thead> <tr> <th>Q'ty</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CGF1170[230V/50Hz]</td> </tr> <tr> <td>1</td> <td>CGF1179[120V/60Hz]</td> </tr> <tr> <td>1</td> <td>CGF1178[100V/50,60Hz]</td> </tr> </tbody> </table>	Q'ty	Part No.	1	CGF1170[230V/50Hz]	1	CGF1179[120V/60Hz]	1	CGF1178[100V/50,60Hz]	<p>3. Bracket</p>  <table border="1" data-bbox="805 555 1114 618"> <thead> <tr> <th>Q'ty</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>AAA2401</td> </tr> </tbody> </table>	Q'ty	Part No.	1	AAA2401	<p>4. Bath Cover(B)</p>  <table border="1" data-bbox="1136 555 1444 618"> <thead> <tr> <th>Q'ty</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>FDA1167</td> </tr> </tbody> </table>	Q'ty	Part No.	1	FDA1167
Q'ty	Part No.																						
1	FDA1153																						
Q'ty	Part No.																						
1	CGF1170[230V/50Hz]																						
1	CGF1179[120V/60Hz]																						
1	CGF1178[100V/50,60Hz]																						
Q'ty	Part No.																						
1	AAA2401																						
Q'ty	Part No.																						
1	FDA1167																						
<p>5. Bath Cover(A)</p>  <table border="1" data-bbox="145 1003 453 1064"> <thead> <tr> <th>Q'ty</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>FDA1166</td> </tr> </tbody> </table>	Q'ty	Part No.	1	FDA1166	<p>6. Motor Rack</p>  <table border="1" data-bbox="475 1003 783 1064"> <thead> <tr> <th>Q'ty</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>FDA1137</td> </tr> </tbody> </table>	Q'ty	Part No.	1	FDA1137	<p>7.Casing(Upper)</p>  <table border="1" data-bbox="805 1003 1114 1064"> <thead> <tr> <th>Q'ty</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>FDA1144</td> </tr> </tbody> </table>	Q'ty	Part No.	1	FDA1144	<p>8. Impeller</p>  <table border="1" data-bbox="1136 1003 1444 1064"> <thead> <tr> <th>Q'ty</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>FDA1139</td> </tr> </tbody> </table>	Q'ty	Part No.	1	FDA1139				
Q'ty	Part No.																						
1	FDA1166																						
Q'ty	Part No.																						
1	FDA1137																						
Q'ty	Part No.																						
1	FDA1144																						
Q'ty	Part No.																						
1	FDA1139																						
<p>9. Viton Packing</p>  <table border="1" data-bbox="145 1451 453 1509"> <thead> <tr> <th>Q'ty</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>FAA4218</td> </tr> </tbody> </table>	Q'ty	Part No.	1	FAA4218	<p>10. Casing(Bottom)</p>  <table border="1" data-bbox="475 1451 783 1509"> <thead> <tr> <th>Q'ty</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>FDA1146</td> </tr> </tbody> </table>	Q'ty	Part No.	1	FDA1146	<p>11. Bath</p>  <table border="1" data-bbox="805 1451 1114 1509"> <thead> <tr> <th>Q'ty</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>FDA1165</td> </tr> </tbody> </table>	Q'ty	Part No.	1	FDA1165	<p>12. Overflow Nozzle</p>  <table border="1" data-bbox="1136 1451 1444 1509"> <thead> <tr> <th>Q'ty</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>EFA6115</td> </tr> </tbody> </table>	Q'ty	Part No.	1	EFA6115				
Q'ty	Part No.																						
1	FAA4218																						
Q'ty	Part No.																						
1	FDA1146																						
Q'ty	Part No.																						
1	FDA1165																						
Q'ty	Part No.																						
1	EFA6115																						
<p>13. Cock</p>  <table border="1" data-bbox="145 1899 453 1955"> <thead> <tr> <th>Q'ty</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>EFA9128</td> </tr> </tbody> </table>	Q'ty	Part No.	1	EFA9128	<p>14. T type separate pipe</p>  <table border="1" data-bbox="475 1899 783 1955"> <thead> <tr> <th>Q'ty</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>EFA9116</td> </tr> </tbody> </table>	Q'ty	Part No.	1	EFA9116	<p>15. Aspirator</p>  <table border="1" data-bbox="805 1899 1114 1955"> <thead> <tr> <th>Q'ty</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>EFA9111</td> </tr> </tbody> </table>	Q'ty	Part No.	2	EFA9111	<p>16. Hose Nipple</p>  <table border="1" data-bbox="1136 1899 1444 1955"> <thead> <tr> <th>Q'ty</th> <th>Part No.</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>FDA1172</td> </tr> </tbody> </table>	Q'ty	Part No.	2	FDA1172				
Q'ty	Part No.																						
1	EFA9128																						
Q'ty	Part No.																						
1	EFA9116																						
Q'ty	Part No.																						
2	EFA9111																						
Q'ty	Part No.																						
2	FDA1172																						

17. Motor Condenser



Q'ty	Part No.
2	CIE6221 [100V~120V]
2	CIE6220 [220V~230V]

18. Fuse Holder



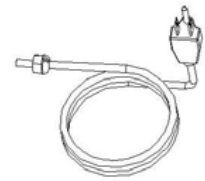
Q'ty	Part No.
1	CDE5150

19. Fuse



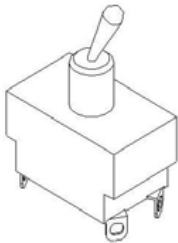
Q'ty	Part No.
2	CDE5561 [100V~120V]
2	CDE5562 [220V~230V]

20. Powercord Set



Q'ty	Part No.
2	CBE5701 [100V~120V]
2	CBE5010 [220V~230V]

21. Power Switch



Q'ty	Part No.
1	CCM5220

22. Clamp



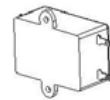
Q'ty	Part No.
1	AAA2101

23. Filter Bracket
(for only AC230V 50Hz)



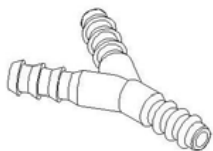
Q'ty	Part No.
1	AAA2301

24. Noise filter
(for only AC230V 50Hz)



Q'ty	Part No.
1	CIL6336

Y type separate tube



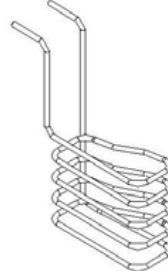
Q'ty	Part No.
1	EAA7111

Silicone Packing
(Option)



Q'ty	Part No.
1	FAA4211

Cooling Coil
(Option)



Q'ty	Part No.
1	AAA71510

Vacuum Controller
(Option)



Q'ty	Part No.
1	AAA71531



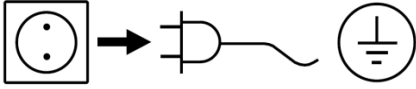
4 X 6 (Stainless steel)	4EA
4 X 16 (")	4EA
5 X 10 (")	18EA
5 X 12 (")	4EA

5. Cleaning and Maintenance

5.1. Routine Cleaning

Wipe the housing of the instrument with a damp cloth using a mild soap and water solution.

Cleaning



For cleaning disconnect the main plug.

Only use cleansing agents which have been recommended by WIGGENS

Use to remove:

Dyes isopropyl alcohol

Construction materials isopropyl alcohol/water containing surfactant

Cosmetics isopropyl alcohol/water containing surfactant

Foodstuffs water containing surfactant

Fuels water containing surfactant

- Do not allow moisture to get into the appliance when cleaning.
- Wear protective gloves when cleaning the devices.
- Before using another than the recommended method for cleaning or decontamination, the user must ascertain with WIGGENS that this method does not destroy the instrument



Note:

Do not use chlorine bleach, chlorine-based cleanser, abrasives, ammonia, steel wool or scouring pads with metal content or similar harsh solvents or abrasives. These may damage the surface of the instrument.

5.2. Maintenance

Do not attempt to service or repair a WIGGENS homogenizer. If the homogenizer's housing is opened the warranty becomes void. Contact WIGGENS for return authorization and return instructions.

Ordering spare parts

When ordering spare parts, please give:

- Machine type
- Manufacturing number, see type plate
- Item number and designation of the spare part.

Repair

Please only send devices in for repair that have been cleaned and are free of materials which might present health hazards. For this, use the "certificate of compliance" form which you can obtain from *WIGGENS*. If your appliance requires repair, return it in its original packaging. Storage packaging is not sufficient when sending the device - also use appropriate transport packaging.



CAUTION!

Failure to clean, maintenance, and handle the stirrer as outlined can lead to damages or be harmful to the health.

6. Transport and Storage

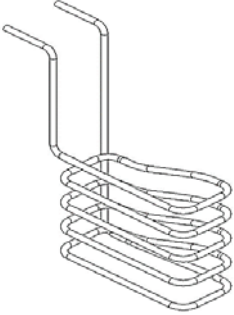
- Clean the homogenizer so that it is free from any materials which may be harmful to the health. Provide a material safety data sheet where appropriate.
- Place the homogenizer and its parts into the original packing or a container with necessary protection to prevent damage during transport. Seal the original packing or container with packing tape.
- Store the packed unit in a dry place.



CAUTION!

Failure to clean, maintenance, and handle the homogenizer as outlined can lead to damages or be harmful to the health.

7. Accessories and Spare Parts

Model/Name	Description	Order No.
Vacuum Gauge / Regulator	To monitor and control the vacuum pressure. (between 0.0267~0.0998MPa / 7.9~29.5” Hg)	900701-1
Cooling Coil 	to prevent vacuum from decreasing due to temperature increase	900701-2



CAUTION!

For safety and guarantee reasons only original accessory parts are to be used!

8. Service

8.1. Trouble-Shooting

Cause	Solutions
The unit stops running	<ol style="list-style-type: none"> 1. Check the power failure. 2. Check the fuse connection. 3. Check the terminals of the motor and capacitor. <p>If the motor is corroded or the capacitor terminal has problems, please contact the WIGGENS support.</p>
It has trouble with the vacuuming condition.	<ol style="list-style-type: none"> 1. Check the hose nipple sticks to the check valve. If it is loose, exchange it. 2. Check the temperature of water in the bath. (over40°C) If it has a high temperature, exchange the water in the bath or connect with a piped water line to cool it.
After vacuuming, the water is flowing backward.	<p>Check the chuck plate between chuck(A) and chuck (B). If it is damaged or decrepitude, exchange it.</p>

Making excessive noise	<ol style="list-style-type: none"> 1. Check shortage of the water. If it is short of water, fill up the water in the bath up to the over-flow-nozzle. (Under about 2cm of the nozzle) 2. Check the vacuuming hose gets left out Fixing up the vacuuming silicon hose tightly. 3. Please contact the WIGGENS support.
------------------------	---



CAUTION!

The motor has a thermal protector within. In case of the motor overheat, it would stop automatically. After the overheat motor is getting cool, it will operate again normally.



WIGGENS reserves the right to carry out technical modifications with repairs for providing improved performance of the instrument.

8.2. Warranty

In accordance with *WIGGENS* warranty conditions, the warranty period is 24 months. For claims under the warranty please contact your local dealer. You may also send the machine direct to our works, enclosing the delivery invoice and giving reasons for the claim. You will be liable for freight costs. The warranty does not cover wearing parts, nor does it apply to faults resulting from improper use or insufficient care and maintenance contrary to the instructions in this operating manual.

WIGGENS reserves the right to decide the validity of any warranty claim. In case of faults arising either due to faulty materials or workmanship, parts will be repaired or replaced free of charge.

Any other compensation claims, such as consumables, damages caused by corrosion or accidental breakage, are excluded from this guarantee.

This warranty may only be altered by a specifically published amendment. No individual has authorization to alter the provisions of this warranty policy or its amendments.

8.3. Contact /Technical Service

If your device is not working properly:

⇒ Please inform *WIGGENS* Instruments by using our contact information.

You have contacted *WIGGENS* Instruments?

⇒ Copy and complete the Confirmation of condition of unit from these operating instructions.

⇒ Please repack the device appropriately for transport and send to *WIGGENS* Instruments together with the Confirmation of condition of unit.

Our contact details

WIGGENS GmbH

Add: Gässlesweg 22-24, 75334 Straubenhardt, Germany

Tel.: 0049 7248 4529088

Wiggins Co., Ltd.

Room 426, Hall A, Office Building M8, No.1 Jiuxianqiao East Road, Chaoyang District, Beijing 100015, China

Tel: +86 400-809-2068

Fax: +86 400-809-2068-112

info@wiggins.com

service@wiggins.com

www.wiggins.com

Confirmation of condition of unit

In the case of repair, copy and complete the Confirmation of condition of unit and send it to *WIGGENS* Instruments.

1. Details about the unit

Product number

Serial number

Reason for repair

2. Has the device been cleaned, decontaminated/sterilized?

Yes

No

3. Is the unit in a condition which does not represent any health threats for the staff of our service department?

Yes

No

If not, which substances has the unit come into contact with?

4. Legally binding declaration

The customer is aware of being legally liable to *WIGGENS* Instruments for any damages arising from incomplete and incorrect information.

Date

Signature

Company stamp

Please Note

The shipper is responsible for the return of the goods in well-packed condition, suitable for the mode of transport.

Sender information

Name

Company

Department, research group Street

Zip code, city

Country

Phone

E-mail



WIGGENS GmbH

Gässlesweg 22-24, 75334 Straubenhardt, Germany

Tel.: 0049 7248 4529088

WIGGENS China

Room 426, Hall A, Office Building M8, No.1 Jiuxianqiao East Road,

Chaoyang District, Beijing 100015, China

Tel: +86 400-809-2068

Fax: +86 400-809-2068-112

info@wiggens.com

www.wiggens.com