

SCILOGEX

VACUUM PUMP INSTRUCTION MANUAL



A. Important Notice

The vacuum pump is designed for laboratory use only. Before the setup and operation of the unit, please read these instructions carefully to familiarize you with all installation and operation process. Any individual should be well trained by reading the instructions or by technical people from the authorized distributors before operating the unit.

Do not modify or alter the unit in any way. Any modification or alteration will void the warranty and would result in potential hazards.

We won't be responsible for any injury or damage caused by using the unit in case of any non-intended purpose, or modifying the unit by any person who is not authorized.

B. Unpacking

Please notice if the unit is in good situation. In case of damage or lack of any part when unpacking then please contact our local distributor or contact us by e-mail: mrc@mrclab.com immediately for assistance.

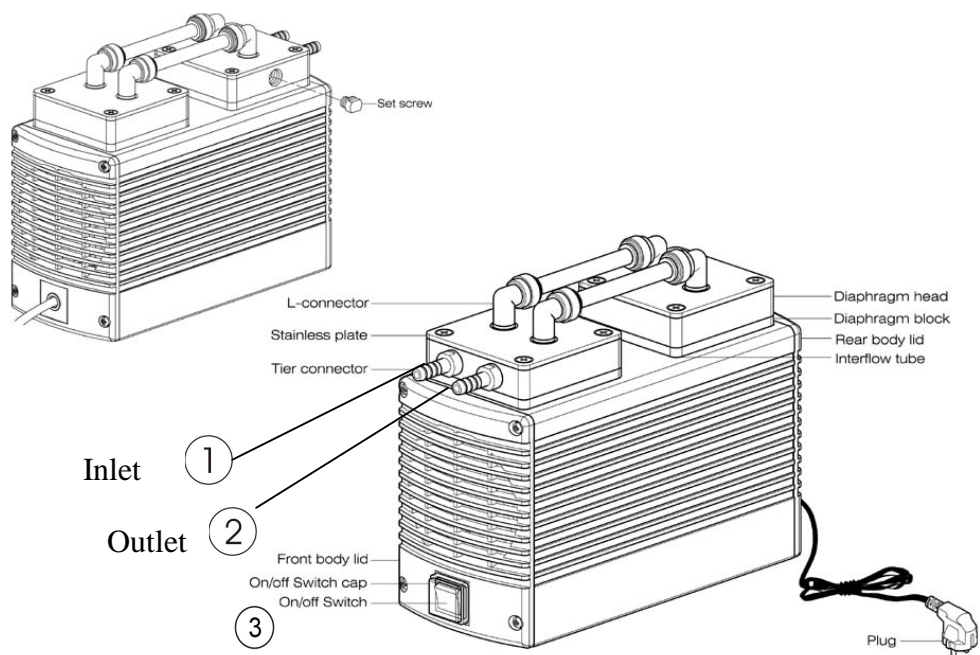
C. Installation

1. Check voltage specified on the nameplate at the bottom of the unit. Make sure if it matches the line voltage on your location.
2. Install the unit in a clean, dust-less and ventilated area where the ambient under 40°C.
3. To enable suction function, connect the inlet of the pump to the outlet of objective equipment with a high-pressure hose.

D. Warning

1. ***When finish pumping, please do not turn off the pump at once and continue to run the vacuum pump for at least two minutes in order to draw out the mist and tiny liquid to prolong the service life of the pump.***
2. The filter cartridge (optional) is used to absorb moisture and dust. Please replace it when it is saturated to maintain a high pumping efficiency.
3. If the pump does not work when turning on the switch, please release the vacuum and turn-on again. If still fail to start the pump, there may be a problem in the switch or motor, please contact local distributor for help immediately.
4. Never use the pump with any flammable gas or toxic material.
5. In case of any damage with the pump, please directly contact local distributor or us for service. Do not repair it by yourself to avoid hazard.

E. Operation

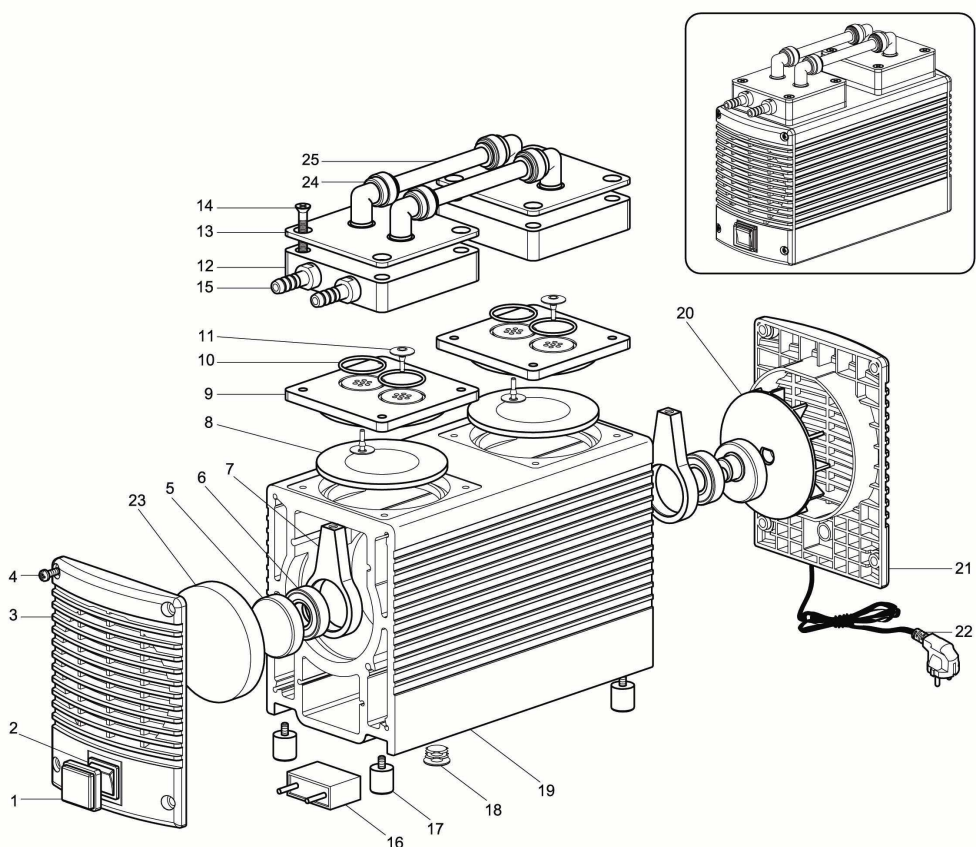


Operating procedure

1. The diagram of the pump system is shown as above.
2. Once all tubes have been connected to Inlet (1) \ Outlet (2) properly then activate the pumping function by pressing (3) on/off button.
3. To adjust vacuum of the pump, an optional vacuum regulator/ moisture trap is needed.

Warning: When pump is used in water filtration, please do not make the liquid level of flask exceed safety level. Failure to comply could result in serious damage to the pump and void the warranty. If it occurs, please contact the distributor immediately for service.

F. Parts List








INDEX	DESCRIPTION	QUAN	INDEX	DESCRIPTION	QUAN	INDEX	DESCRIPTION	QUAN
1	On/off Switch cap	1	10	O-ring	4	19	Body	1
2	On/off Switch	1	11	Valve plate	4	20	Cooling fan	1
3	Front body lid	1	12	Diaphragm head	2	21	Rear body lid	1
4	Set screw	8	13	Stainless plate	2	22	Plug	1
5	Counterweight	2	14	Set screw	8	23	Piston set cover	1
6	Bearing	2	15	Tier connector	2	24	L-connector	4
7	Connecting rod	2	16	Condenser	1	25	Interflow tube	2
8	Diaphragm	2	17	Rubber stand	4			
9	Diaphragm block	2	18	Clog	1			

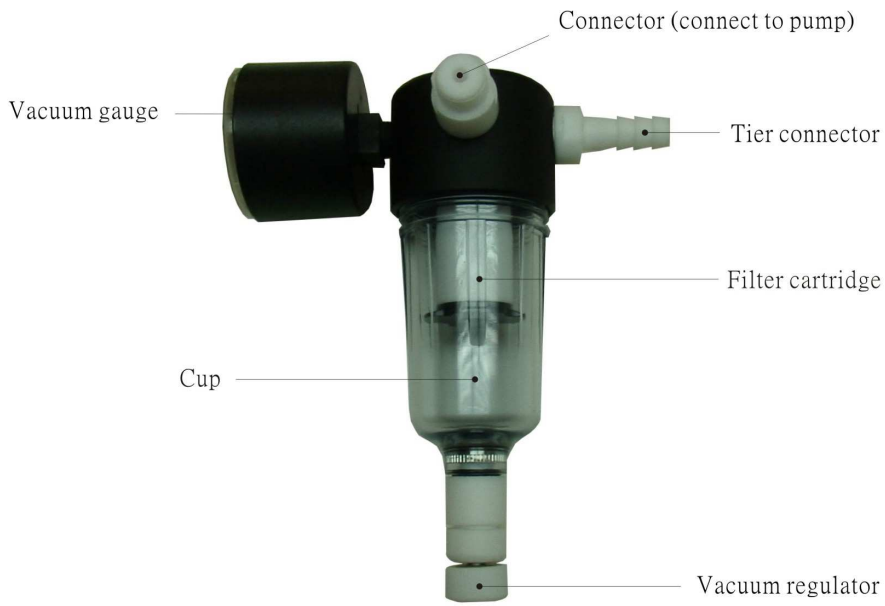
G. Vacuum regulator/moisture trap (Option)

Vacuum regulator/moisture trap is an optional item that is used to adjust vacuum and absorb moisture and particle.

1. The flow chart of installing vacuum regulator/moisture trap

	<p>1. Remove the screw at side of cylinder head with a spanner.</p>
	<p>2. Remove tier connector with a spanner.</p>
	<p>3. Fix the screw removed from step 1 at the location of tier connector removed from step 2.</p>
	<p>4. Fix the moisture trap at the location of the screw removed from Step 1. (Vacuum gauge is toward the front)</p>
	<p>5. Finished.</p>

2. The diagram of vacuum regulator/moisture trap



H. Maintenance

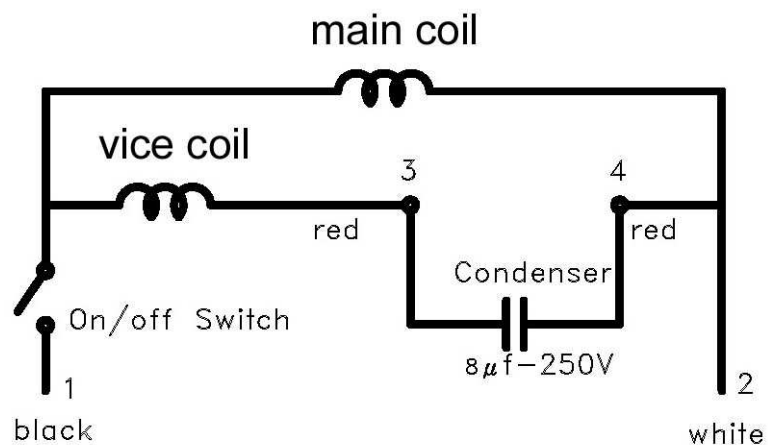
Replace cartridge:

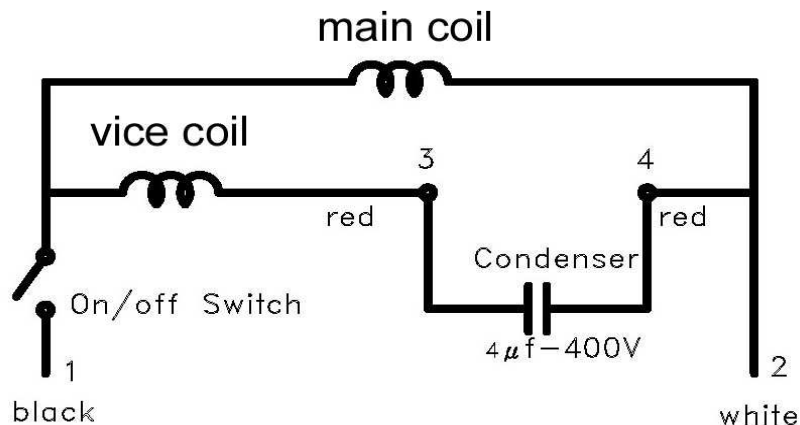
When filter cartridge is saturated and the flow rate or vacuum decreases then the filter cartridge should be replaced.

1. First, remove the moisture trap by rotating the cup counterclockwise. Second, remove the cartridge in the same way then replace a new one.
2. Dispose of the water in the moisture trap when full in the above same way.

I. Wiring diagram

110-120V/60Hz





J. Ordering Information

1. 169400-11 Scilogex 400 Vacuum pump, AC110V/60Hz
2. 169400-22 Scilogex 400 Vacuum pump, AC220V/50Hz
3. 169300-06 Vacuum regulator/moisture trap
4. 167300-07 Filter cartridge
5. 169400-60 Scilogex 400/410 repair kit

Scilogex PTFE Vacuum Pump Specifications

Scilogex Series Pumps [(37 lpm, AC110V, 60HZ) or (34 lpm, AC230V, 50HZ)] are chemical duty vacuum pumps that can be used in various applications. All wetted parts are made of PTFE material and the outer case is processed with squeeze-casting aluminum and anti-rust treatment. An air driven diaphragm and oil-free design will lower both cost and maintenance time.

APPLICATIONS

- a.. Various Filtration Applications
- b.. Gel Drying, Blotting after Electrophoresis
- c.. Rotary Evaporator
- d.. Centrifugal Evaporator
- e.. Solid-Phase Extraction (SPE)

Scilogex 400 PTFE Vacuum Pump Features

- a.. Acid, Alkali & Organic Vapor Resistant
- b.. Compact Size & Space Saving
- c.. CE Approved
- d.. Low Price & Most Cost Effective
- e.. Low Noise Level @ 50dB

Scilogex 400 PTFE Vacuum Pump Design

The Scilogex Series chemically resistant vacuum pumps are designed to be operator friendly and thanks to innovative mechanical technology, the noise level is only 50dB which makes for a noise-free laboratory. Scilogex pumps are all equipped with a thermal protection device that automatically stops the pump from running once it is over-heated and allows for resumption after the working temperature cools down. An optional Vacuum Regulator / Moisture Trap can be used to adjust vacuum and absorb moisture & particulate matter. The filter cartridge in the assembly is a consumable and should be replaced when saturated.

Maximum Power Consumption 90 Watts (110V); 95 Watts (220V)
 Maximum Current 1.3 Amps (110V); 0.6 Amps (220V)
 Maximum Flow Rate 38 lpm (110V); 34 lpm (220V)
 Maximum Vacuum 600 mm Hg (79 kPa)
 Maximum Pressure 30 psi
 Motor Rotation 1700 rpm (110V); 1450 rpm (220V)
 Capacitor 8µf/250V (110V); 4µf/400V (220V)

Horse Power 1/6 hp
 Pole 4P
 Net Weight 15 lbs (7 kg)
 Gross Weight 16 lbs (7.4 kg)
 Dimensions (l x w x h) 11 x 4 x 8-inches (280 x 112 x 210mm)
 Port Thread 5/16"
 Noise Level 50dB