

## A. Important Notice

This instrument is designed for laboratory usage only.

Before setting up and operating the **Vacuum Pump**, please read these instructions carefully to familiarize with all installation and operation process. Any individual shall be well trained by reading the instructions or by technical people from authorized distributors before operating the instrument.

The instrument shall not be modified or altered in any way. Any modification or alteration will void the warranty, void the regulatory certifications and create potential safety hazard.

***\* We are not responsible for any injury or damage caused by using the instrument for any non-intended purpose, or modifying the instrument by any person who is not authorized.***

## B. Unpacking

When unpacking, notice if the pump is in good situation. If not, please contact the distributor or contact us by e-mail: [export@todays.com.tw](mailto:export@todays.com.tw) immediately for assistance.



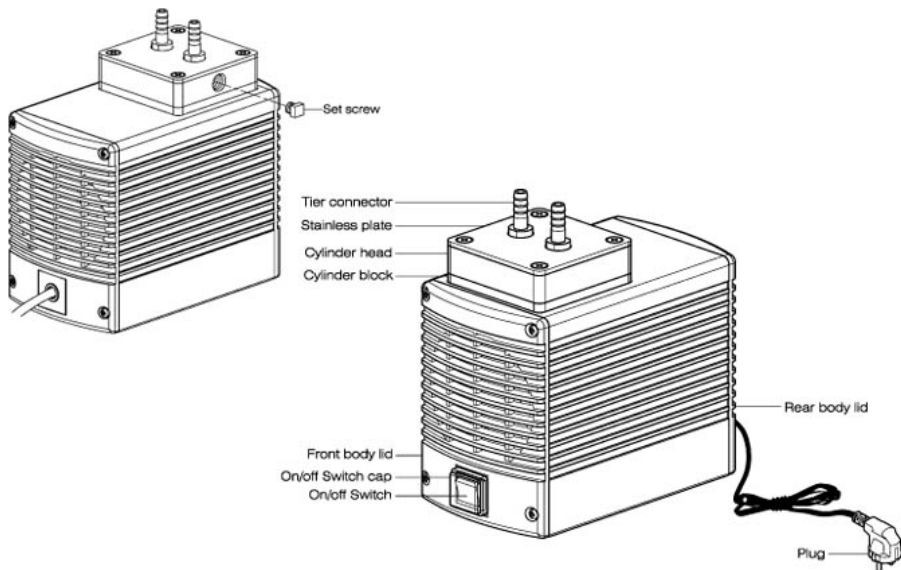
## C. Installation

1. Check voltage specified on name-plate on the bottom. Make sure if it matches the line voltage in your location.
2. Install the instrument in a clean, dust-less and ventilated area 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 continue to run the vacuum pump for at least two minutes in order to draw room air and clean up the residue condensates in the wet part to prolong the service life of the pump.***
2. The filter cartridge (optional) is used to absorb moisture and dust. Please replace it to maintain proper pumping efficiency when it is saturated.
3. If the pump does not work when restarted during operation, release the vacuum, and turn-on again. Otherwise may result overloading and damaging the motor.
4. Use the pump in a dry, clean well-ventilated area.
5. Never spray flammable or toxic materials.
6. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a competent person in order to avoid hazard.

## E. Function keys and operation

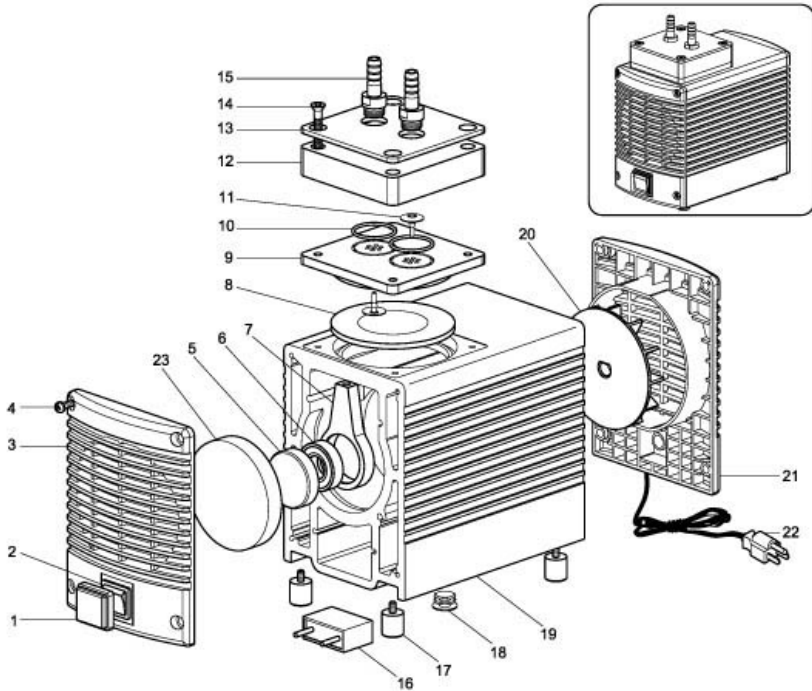


### Operating procedure

1. Schematic of the pump system is shown as above.
2. Once all of tubes have been connected, pumping function is activated by pressing on/off button.
3. For vacuum adjusting, an optional vacuum regulator / moisture trap is needed.

**\* Warning: When pump is used in water filtration, please be noted, never let 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	9	Diaphragm block	1	17	Rubber stand	4
2	On/off Switch	1	10	O-ring	2	18	Clog	1
3	Front body lid	1	11	Valve plate	2	19	Body	1
4	Set screw	8	12	Diaphragm head	1	20	Cooling fan	1
5	Counterweight	1	13	Stainless plate	1	21	Rear body lid	1
6	Bearing	1	14	Set screw	4	22	Plug	1
7	Connecting rod	1	15	Tier connector	2	23	Piston set cover	1
8	Diaphragm	1	16	Condenser	1			

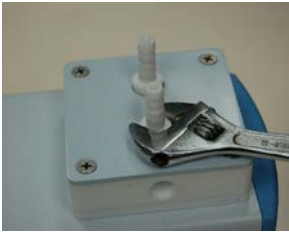
## G. Vacuum regulator/moisture trap (Option)

Vacuum regulator/moisture trap is an optional accessory which is used to adjust vacuum, absorb moisture and particle

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



1. Remove the screw at side of cylinder head with a spanner.



2. Remove tier connector with a spanner.



3. Fix the screw removed from step 1 at the location of tier connector removed from step 2.

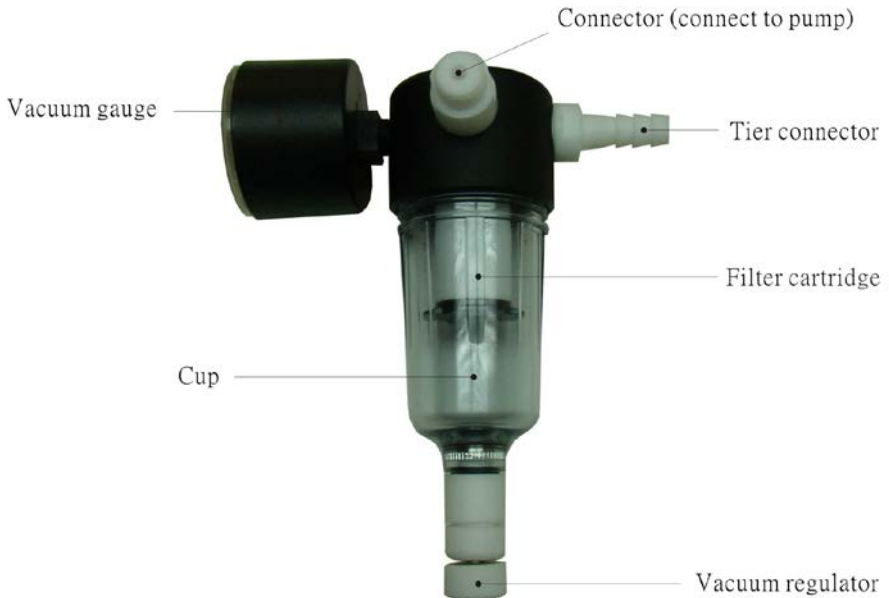


4. Fix the moisture trap at the location of the screw removed from Step 1.



5. Finished.

## 2. Function keys of Vacuum regulator/moisture trap



## H. Maintenance

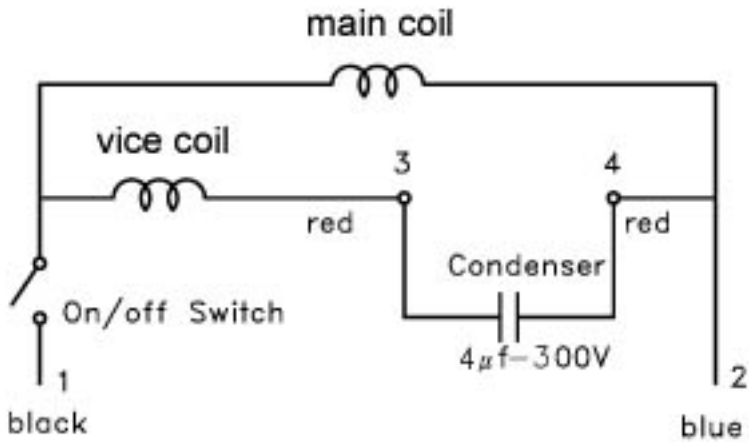
### Replace cartridge:

When filter cartridge is saturated and flow rate decreases, the filter cartridge then 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. Pour the water out of the moisture trap when it is filled with water.

# I. Wiring diagram

110-120V/60Hz



220-240V/50Hz

