

**Lafil 100**

Portable suction system



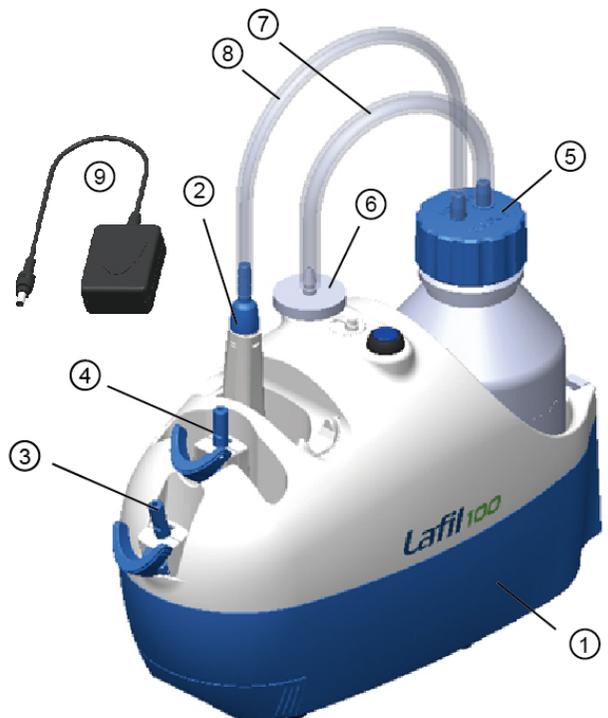
## Important notice

- Read and comply with this manual before installing or operating the equipment.
- Please ensure that the power supply voltage matches the voltage rating for the instrument.
- Please operate the instrument in well ventilated area and keep away from inflammables.
- This instrument is not corrosion-proof pump. It is not suitable for pumping acid, base or organic vapors or gases directly.
- Do not modify the equipment without authorization.
- Clean and maintain the instrument and accessories according to the maintenance method after every use.

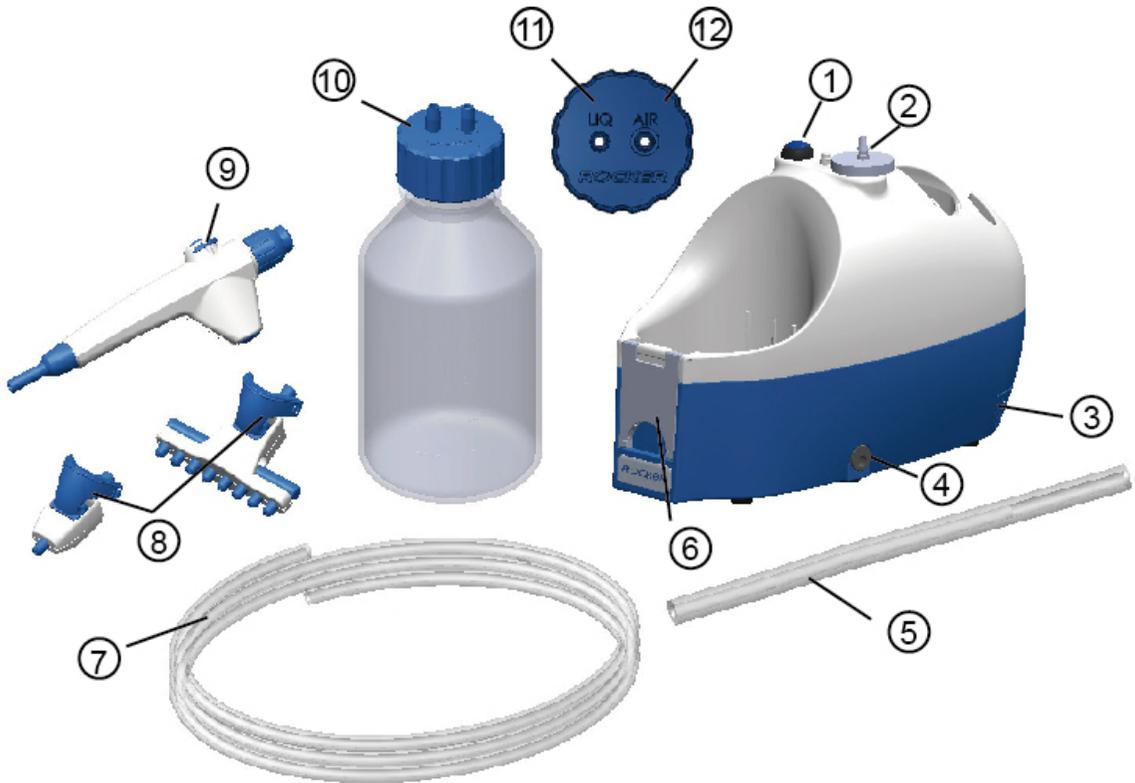
## Unpacking

Carefully check if the shipping carton is damaged before unpacking. Please check the items according to standard package list. If you have any questions, please preserve serial number, shipping carton and contact your dealer for quick solution.

Position	Designation
1	Lafil 100 suction unit
2	Handle
3	1 channel tip adaptor with ejector
4	8 channel tip adaptor with ejector
5	GL45 Suction cap with 500ml tissue bottle
6	Disc filter
7	30cm Silicone tube
8	100cm Silicone tube
9	Transformer
10	Accessory kit
11	Instruction manual



## Assembly & Disassembly diagram



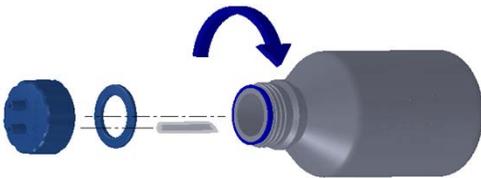
Position	Designation
1	Power switch
2	Disc filter
3	Residual liquid collection tray
4	Power plug
5	30cm silicone tube (short)
6	Centrifuge tube rack
7	100cm silicone tube (long)
8	Ejector bottom
9	Lock switch
10	Suction cap and tissue bottle
11	"LIQ" hose barb of the suction cap
12	"AIR" hose barb of the suction cap

# Installation and Operation

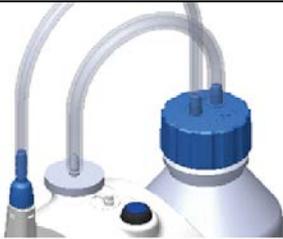
## Lafil 100



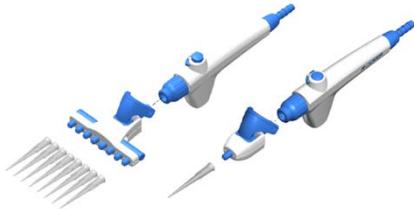
Assemble the disc filter and the residual liquid collection tray in Lafil 100 suction unit.



Assemble the tissue bottle set as the figure, then put it on the Lafil 100 suction unit.



Assemble the short tube with the disc filter to the "AIR" hose barb of the suction cap.  
Assemble the long tube with the handle to the "LIQ" hose barb of the suction cap



Connect the power supply and switch on the power.  
Choose the suitable adaptor to connect with the handle.

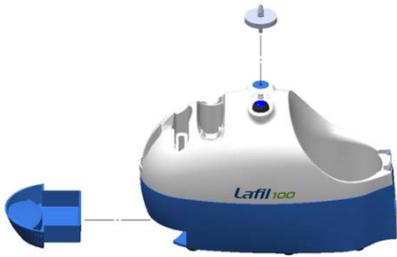


You can press the lock switch to do operation continuously.

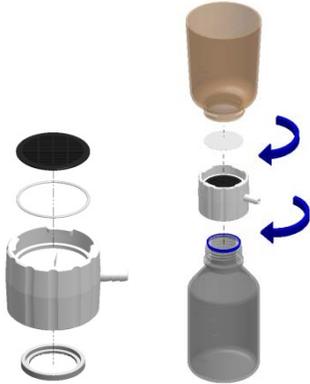


You can press the ejector bottom to eject tips.

### Lafil 100 + filter holder



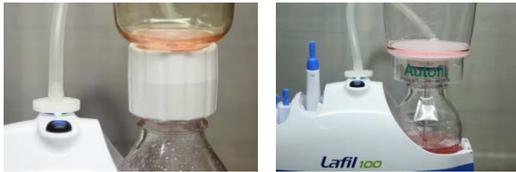
Assemble the disc filter and the residual liquid collection tray in Lafil 100 suction unit.



Set up the general filter holder or disposable funnel on the tissue bottle



Assemble tubing.



Connect the power supply and switch on the power to do filtration.

### Lafil 100 + 15, 50ml centrifuge tube and funnel



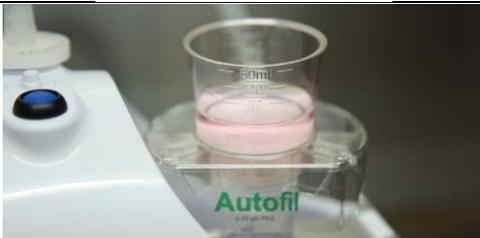
Assemble the disc filter and the residual liquid collection tray in Lafil 100 suction unit. Then set up the centrifuge tube rack.



Confirm the centrifuge tube rack is stable by checking the positioning hole in the middle of the rack.



Put the centrifuge tube and funnel in the rack, then assemble tubing.



Connect the power supply and switch on the power to do filtration.

## Maintenance

1. Please suck in pure water to clean the tubing after every use.
2. Suction accessories and silicone tube are autoclavable. Please clean and autoclave if need.
3. Lafil 100 suction unit is not autoclavable. Please clean the case by pure water or 75% alcohol.
4. It is strongly recommended to replace the main parts (internal rubber adaptor, O-ring and SS spring) of the handle every year at least to keep good aspiration.
5. Disc filter and silicone tubes are consumables, please replace at least every half year to ensure good aspiration.

## Troubleshooting

Symptoms	Possible causes	Remedy
Instrument fails to start	1. No electrical supply	Check the power supply conform to power specified on main unit or the switch is broken
	2. Power switch off	Switch on power
	3. High vacuum still	Release the vacuum
Vacuum fails to adjust	1. Air outlet clogged	Clean or replace the air outlet
	2. Weak power supply	Check the power supply
	3. Leak in the system	Check tubing, seals and coupling, replace if necessary
Low filtration speed/ poor vacuum	1. Leak in the system	Check tubing, seals and coupling, replace if necessary
	2. Liquid overflow	Check if the suction bottle is overflowing
	3. Weak power supply	Check the power supply
	4. Filter clogged	Replace filter

## Ordering Information

197100-01	Lafil 100, Portable Suction System with AC100-240V adaptor, US plug
197100-02	Lafil 100, Portable Suction System with AC100-240V adaptor, EU plug
197100-03	Lafil 100, Portable Suction System built-in battery with AC100-240V adaptor, US plug
199100-30	Handle
199100-75	1-channel tip adaptor with ejector (for 200 µl tip)
199100-50	8-channel tip adaptor with ejector (for 200 µl tip)
197100-47	1-channel S.S. adaptor (40mm)
197000-48	1-channel S.S. adaptor (80mm)
197100-49	8-channel S.S. adaptor (40mm)
197000-02	LF 3a, 300ml PES filter holder
197000-04	LF 5a, 500ml PES filter holder
197100-48	Lafil 100 UV-resistant cover
1152-RLS	Autofil disposable bottle top funnel, 500ml, 0.22µm, Φ90mm, PES membrane, 24/PK
1402-RLS	Autofil disposable centrifuge tube and funnel, 50ml, 0.22µm, Φ40mm, PES membrane, 24/PK
1411-RLS	Autofil disposable centrifuge tube and funnel, 15ml, 0.22µm, Φ40mm, PES membrane, 24/PK