

Service Manual

Lafil Series Vacuum Filtration System (main unit)



Model No.

Lafil 300

Lafil 400

CONTENTS

1. Instruction
2. Failure to start – Maintenance SOP
3. Poor / No Vacuum – Maintenance SOP
4. Most Common Problems
5. Explored Part List
 - Lafil 300
 - Lafil 400
6. Service Video Links

Instruction

- Important notice before troubleshooting:

1. Please comply with all electrical safety standards during repair.
2. Do not plug the outlet of the pump to avoid any danger.
3. Please refer to the service manual of Rocker 300/410 for the bare pump.
4. Make sure to release the residual vacuum to zero the vacuum gauge to prevent blowing fuse.

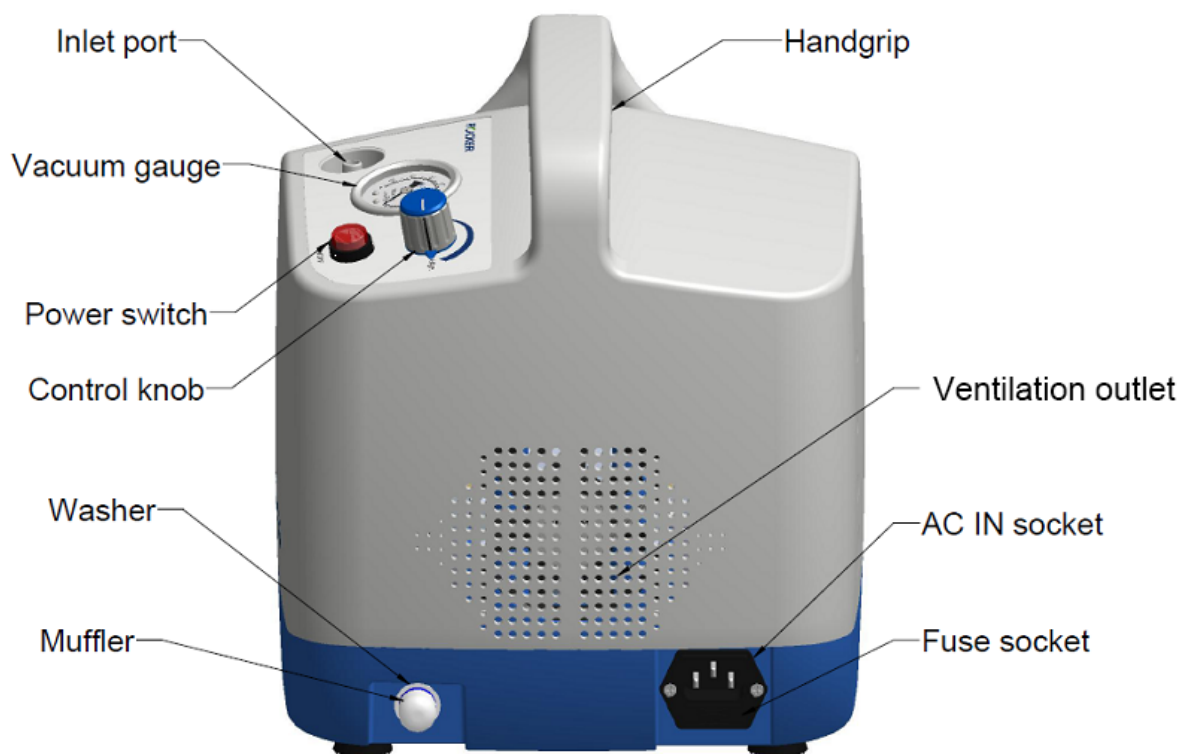
- Applicable Models:

Lafil 300, Lafil 400

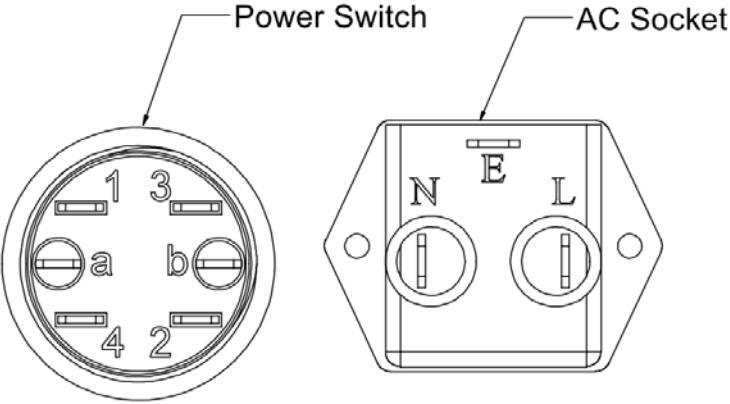
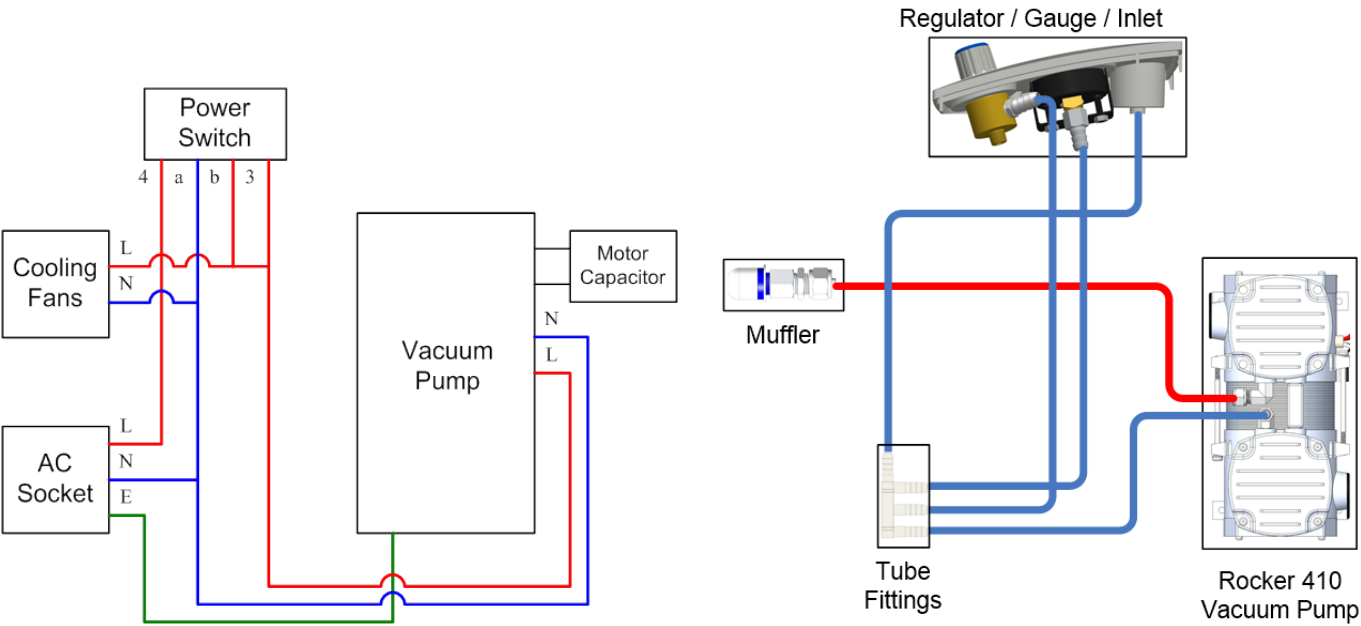
- Tools Preparation:

Screwdriver, Allen key, needle nose pliers, soldering iron, Wire Stripper/Cutter

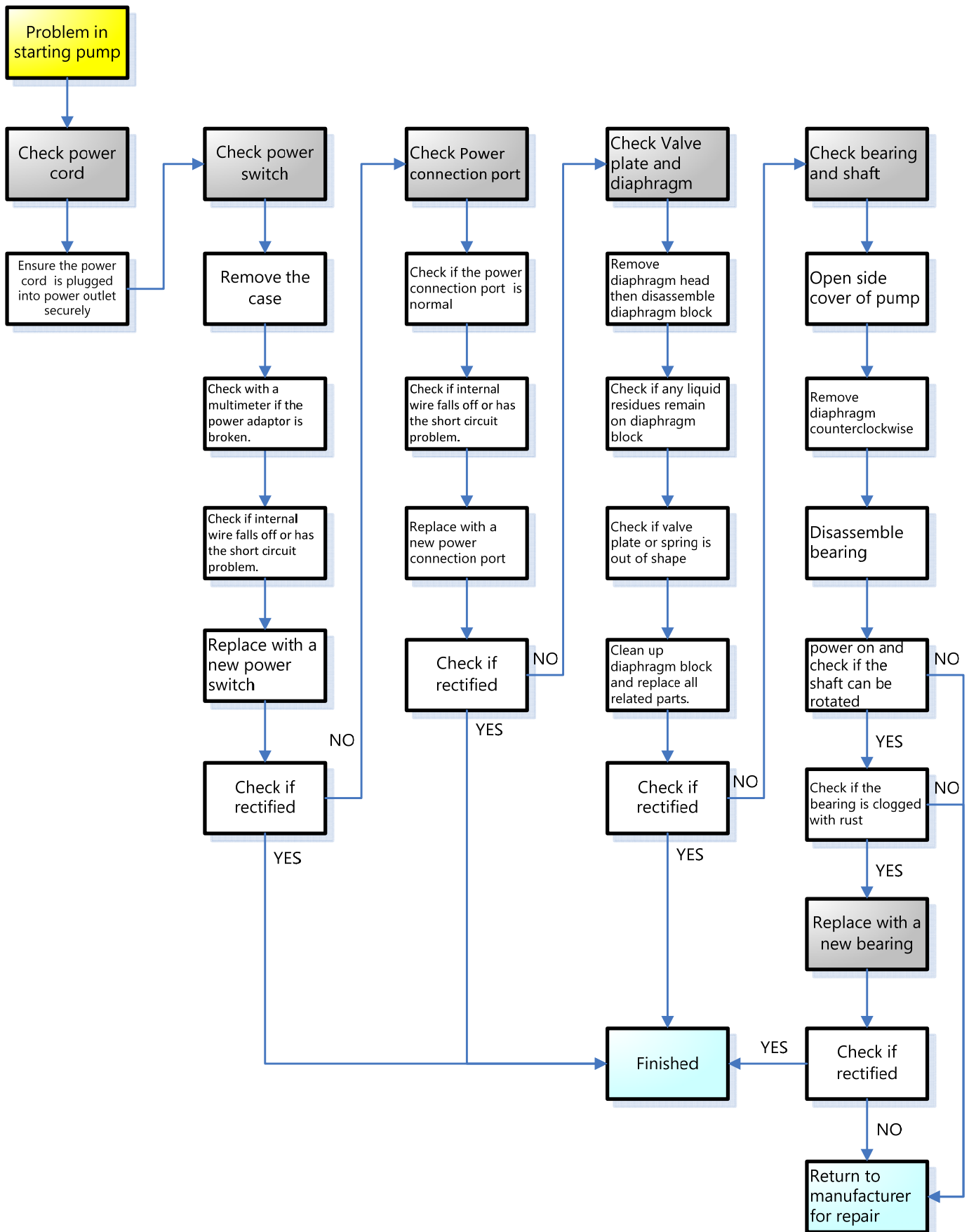
- Panel and Main Unit



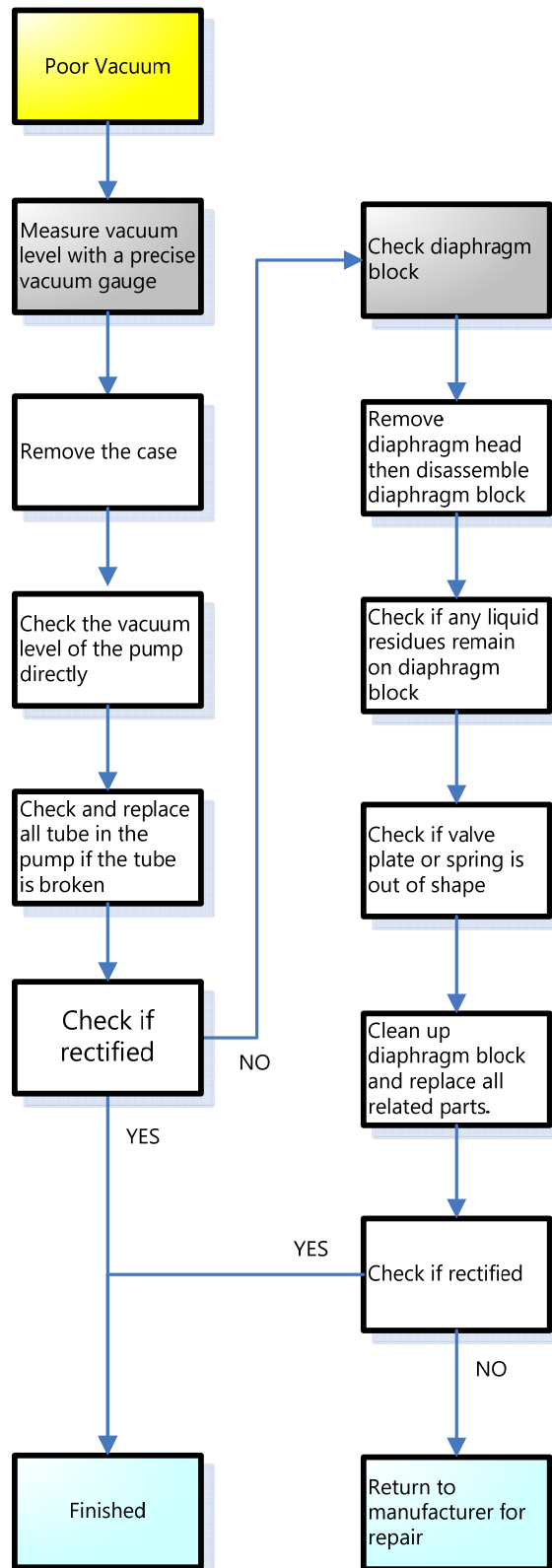
● Circuit Diagram and Tubing Connection



Failure to start – Maintenance SOP



Poor / No Vacuum - Maintenance SOP



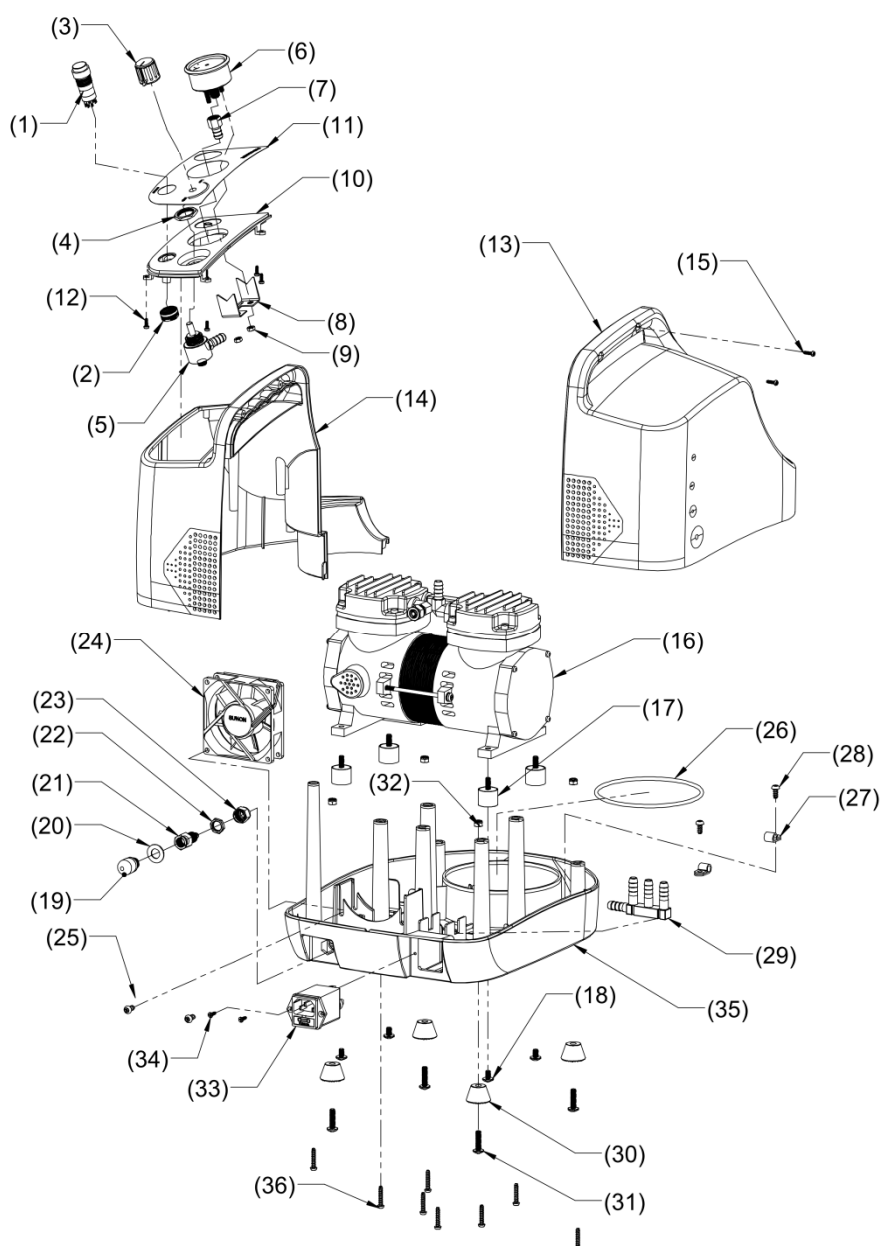
Most Common Problems

Symptom	Possible cause	Solution
Failure to start pump	Check if the pump is overheating.	Restart the main unit after the pump's temp cools down to room temp.
	Check if the gauge indicator is above 100mmHg.	Switch off and rotate gauge indicator to Low level then switch on when vacuum gauge indicator at zero.
	Check if the power supply conforms to power specified on main unit.	Use the power supply specified on the main unit.
	Check if the power plug fails to connect power outlet or power socket of the main unit.	Replace with a new power cord.
	Check if the fuse is blown	Replace with a new fuse if without short circuit on N & L plug tested by a multimeter.
	Remove the case with a screw driver and with check if internal wire falls off or has the short circuit problem.	Replace a new wire and connector.
	Remove the case with a screw driver and with check with a multimeter if the power switch is connected with power supply.	Replace with a new power switch.
	Check if the pump is still working when connected with the power supply.	Replace with a new Rcker410 pump or return to manufacturer for repair.
Power switch indicator unlighted	Check if internal wire falls off or has wrong wiring problem.	Replace with a terminal bond by crimping pliers and plug it back the right pin position.
	Supply the main unit with the correct voltage then recheck if the indicator is lighted.	Replace with a power switch part.
Cooling fan not working	Check if internal wire falls off or has wrong wiring problem.	Replace with a terminal bond by crimping pliers and plug it back the right pin position.
	Check if the power supply voltage is correct.	Replace with a new fan part.
Vacuum level not adjustable	Check if the loose screw inside vacuum regulator makes vacuum valve invalid.	Turn the shaft of vacuum regulator to the end counterclockwise -> fix control knob on the shaft (marking line towards "Low" level) -> tighten screw -> put the cap on control knob.
	Check if internal tubing connection is wrong or loose.	Make sure the tubing size is 6x12mm -> connect the correct tubing again.
	Check if the vacuum valve is working normally	Replace with a new vacuum valve
	Check if vacuum gauge indicator is working normally	Replace with a new gauge

Insufficient Vacuum	Check if the muffler is clogged.	Replace with a new muffler
	Check if internal tubing connection is wrong or loose.	Make sure the tubing size is 6x12mm -> connect the correct tubing again.
	Check if vacuum valve, gauge or F type connector is leaking.	Replace the broken part with a new one.
	Check if the bare vacuum pump inside the case is working at insufficient vacuum.	Replace a new Rocker 410 pump or return the pump to manufacturer for repair.
Increased noise level	Check if the muffler is defective or not installed properly.	Replace a new muffler.
	Check if the rubber stand of the main unit is broken.	Replace with a new rubber stand of the main unit.
	Check if all parts inside the case are fastened properly	Fasten the loose parts by tightening the screw.
	Check if the rubber stand of the bare pump inside the case is defective	Replace with a new rubber stand of the bare pump.
	Check if unusual sound or vibration when the pump is running.	Replace a new Rocker 410 pump or return the pump to manufacturer for repair.
Slow filtration	Check if working at insufficient vacuum	Please check by referring to "Insufficient Vacuum" .
	Check if any possible air leak through the tubing connection.	Replace with a new silicone tube.
	Check if any possible leak from the connected filtration apparatus/accessories	Replace with a new O-ring.

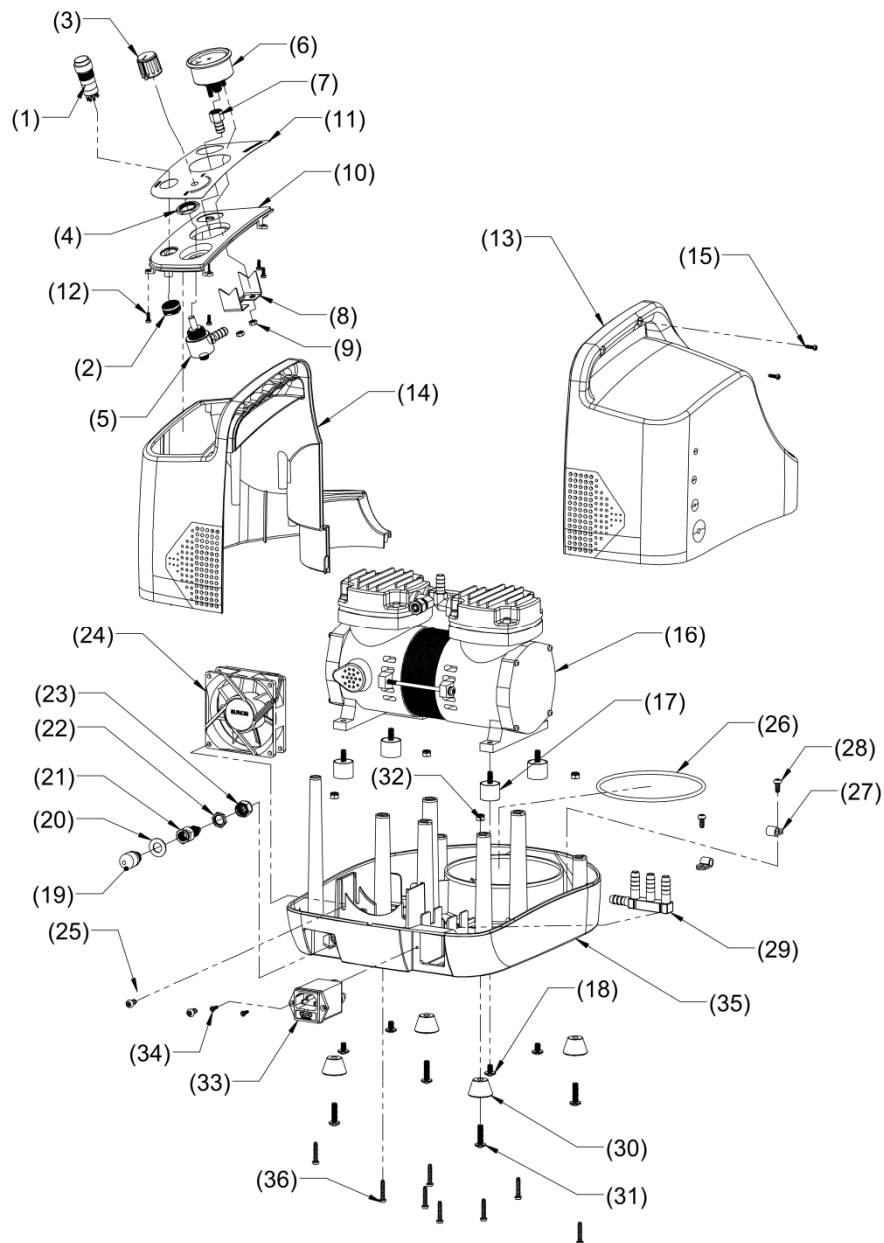
Exploded Part List

Lafil 300



Index No.	Cat. No.	Description	Q'ty	Remark
1	196200-37/38	110V/220V power switch	1	
5	197400-39	Vacuum valve	1	
6	197400-44	Vacuum gauge	1	
15		ψ3x10 mm self-tapping screw	2	
16		110V/220V Rocker 300 vacuum pump	1	
19	197400-45	PE muffler	1	
24	197400-37/38	110V/220V cooling fan	1	
33	175200-43	Power socket (incl. fuse seat)	1	

Lafil 400



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1	196200-37/38	110V/220V power switch	1	
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6	197400-44	Vacuum gauge	1	
15		ψ3x10 mm self-tapping screw	2	
16		110V/220V Rocker 410 vacuum pump	1	
19	197400-45	PE muffler	1	
24	197400-37/38	110V/220V cooling fan	1	
33	175200-43	Power socket (incl. fuse seat)	1	

Service Video Links

Model No.	Subject	Video Link
Lafil 300/400	Disassembly	https://drive.google.com/file/d/13Yac1_FYGyNBbr0HhHQO5BnOY55m3raq/view
Lafil 300/400	Assembly	https://drive.google.com/file/d/1qtTqS9nkJHUqfpFucrqZHJqribeBmQcF/view
Lafil 300/400	Replacement of air filter	https://drive.google.com/file/d/16JGTbAF9JPBMlaJKHi0oogZ_OWoW-YQX/view
Lafil 300/400	Replacement of Fuse	https://drive.google.com/file/d/1zIT3GpZnDkGcehNb5BM2Yienr8PZDzqr/view