

ENGLISH



Models: AERO 21-01 PC, AERO 26-01 PC, AERO 21-01 PC INOX, AERO 26-21 PC,
AERO 21-21 PC, AERO 26-2L PC, AERO 21-21 PC INOX, AERO 31-21 PC INOX

AERO

SERVICE MANUAL

Nilfisk
ALTO
works for you

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Preface

This repair manual contains a detailed description of the main repair work for wet and dry cleaners of the Nilfisk-ALTO AERO Series.

- * Repair work requires a suitable testing workplace with the necessary power supply.
- * If operating errors are evident, refer the customer to the operating instructions.
- * A fault in the equipment can have a number of causes. Chapter "C" Troubleshooting will help you here.
- * Refer to the illustrated spare parts lists during repairs. They show the assembly position and the sequence in which the individual components should be assembled.
- * Always observe "Technical Service Bulletin" (TSB) sheets! They contain information on technical modifications made after publication of this repair manual.

TSB sheets are also valid as a supplement to the spare part list until publication of a new edition!

Repair manuals and technical information sheets should be available at the site where repairs are carried out. It is not permitted to give them to third parties.

Use original Nilfisk-ALTO spare parts only!

Safety Instructions

For your own safety!



Before using the cleaner, always read the operating instructions and keep them readily available.

Only allow the vacuum cleaner to be used by persons who have been trained in its use and who have been explicitly authorized to use it.

Repairs should only be made by someone who has received proper instructions for the job or who is a qualified electrician.

After the repair or modification an electrical examination is to be performed according to EN 62638

Observe national safety directives and regulations for the electrical engineering trade, in particular:

IEC 60335-2-69
EN 60335-2-69

DIN VDE 105 Part 1:
Operation of power Installation.

EN 62638:
Repairing, modifying and testing electrical installations.

Model / Type		AERO 21-01						
Country variants		EU	GB	GB	CH	US	JP	
	Voltage	V	220-240	110	230	220-240	120	
Electrical data	Frequency	Hz	50-60		50	60		
	Fusing	A	16		10	15		
	Power consumption PIEC	W	1000					
	Power Max	W	1200					
	Power cord length	m	5	7	5	8	5	
	Power cord type		H05 VV	H07BQ-F	H05 VV	AWG18		
	Protection class				II			
	Protection category				IPX4			
	Motor data	Numbers of motors				1		
		Vacuum	mbar			210		
Air volume flow		l/min			3600			
Sound pressure level at 1m, EN 60704-1		dB(A)			72			
Operating noise		dB(A)			64			
Dimensions and weight		Width	mm			377		
	Depth	mm			385			
	Hight	mm			506			
	Weight	kg			8			
	Tank volume	l			20			
	Container net filling - dry (without bag)	l			16			
	Container net filling (wet)	l			12			

Model / Type	AERO 21-21		
Country variants	EU	CH	
Electrical data	Voltage	V	220-240
	Frequency	Hz	50-60
	Fusing	A	16
	Power consumption PIEC	W	1000
	Power Max	W	1200
	Power cord length	m	5
	Power cord type		H05 VV
	Protection class		I
Protection category		IPX4	
Motor data	Numbers of motors		1
	Vacuum	mbar	210
	Air volume flow	l/min	3600
	Sound pressure level at 1m, EN 60704-1	dB(A)	72
	Operating noise	dB(A)	64
Dimensions and weight	Width	mm	390
	Depth	mm	395
	Hight	mm	525
	Weight	kg	8
	Tank volume	l	20
	Container net filling - dry (without bag)	l	16
	Container net filling (wet)	l	12

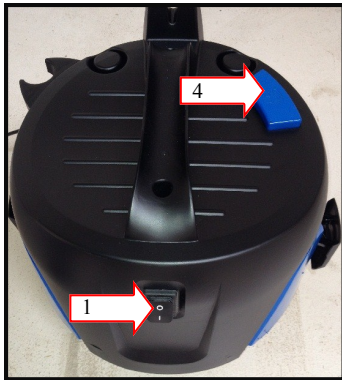
Model / Type			AERO 26-01
Country variants			EU
Electrical data	Voltage	V	220-240
	Frequency	Hz	50-60
	Fusing	A	16
	Power consumption PIEC	W	1000
	Power Max	W	1200
	Power cord lenght	m	5
	Power cord type		H05 VV
	Protection class		II
Protection category			IPX4
Motor data	Numbers of motors		1
	Vacuum	mbar	210
	Air volume flow	l/min	3600
	Sound pressure level at 1m, EN 60704-1	dB(A)	72
	Operating noise	dB(A)	64
Dimensions and weight	Width	mm	376
	Depth	mm	392
	Hight	mm	530
	Weight	kg	8
	Tank volume	l	25
	Container net filling - dry (without bag)	l	18,5
	Container net filling (wet)	l	16,2

Model / Type		AERO 26-21							
Country variants		EU	GB	GB	FR	AU/NZ	US		
	Voltage	220-240	110	230	220-240		120		
Electrical data	Frequency	50-60						60	
	Fusing	16						10	
	Power consumption PIEC	1000							
	Power Max	1200							
	Power cord length	5	8	8	5	8	8		
	Power cord type	H05 VV	H07BQ-F	H05 VV				AWG16	
	Protection class	I							
	Protection category	IPX4							
	Motor data	Numbers of motors	1						
		Vacuum	210						
Air volume flow		3600							
Sound pressure level at 1m, EN 60704-1		72							
Operating noise		64							
Dimensions and weight		Width	376						
	Depth	392							
	Hight	530							
	Weight	8							
	Tank volume	25							
	Container net filling - dry (without bag)	18,5							
	Container net filling (wet)	16,2							

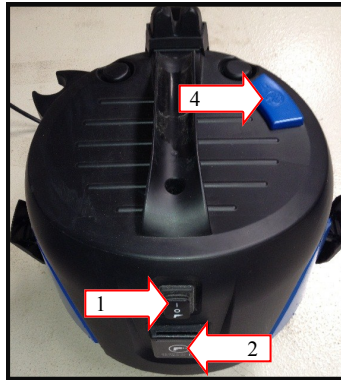
Model / Type	AERO 26-2L		
Country variants	EU	CH	
Electrical data	Voltage	V	220-240
	Frequency	Hz	50-60
	Fusing	A	16
	Power consumption PIEC	W	1200
	Power Max	W	1500
	Power cord length	m	5
	Power cord type		H05 VV
	Protection class		I
	Protection category		IPX4
Motor data	Numbers of motors		1
	Vacuum	mbar	235
	Air volume flow	l/min	3700
	Sound pressure level at 1m, EN 60704-1	dB(A)	67
	Operating noise	dB(A)	63
			64
Dimensions and weight	Width	mm	376
	Depth	mm	392
	Hight	mm	530
	Weight	kg	9
	Tank volume	l	25
	Container net filling - dry (without bag)	l	18,5
	Container net filling (wet)	l	16,2

Model / Type		AERO 31-21			
Country variants		EU	CH	US	
	Voltage	220-240			
Electrical data	Frequency	50-60	50	60	
	Fusing	A	16	10	
	Power consumption PIEC	W			
	Power Max	W			
	Power cord length	m	5	8	
	Power cord type	H05VV			
	Protection class	I			
	Protection category	IPX4			
Motor data	Numbers of motors	1			
	Vacuum	mbar	210		
	Air volume flow	l/min	3600		
	Sound pressure level at 1m, EN 60704-1	dB(A)	72		
	Operating noise	dB(A)	64		
Dimensions and weight	Width	mm	392		
	Depth	mm	395		
	Hight	mm	635		
	Weight	kg	10		
	Tank volume	l	30		
	Container net filling - dry (without bag)	l	24		
	Container net filling (wet)	l	22		

Overview of different types of motor heads



21-01



21-21

- | | |
|----|-----------------|
| 1. | On/ off |
| 2. | Tool socket |
| 3. | Variable speed |
| 4. | Filter cleaning |
| 5. | Cable rewind |



26-01



26-21 / 31-21



26-2L

Overview of different types of containers



Standard - 21L



Standard - 26L

- 1. Inlet
- 2. Castor wheels



INOX - 21L



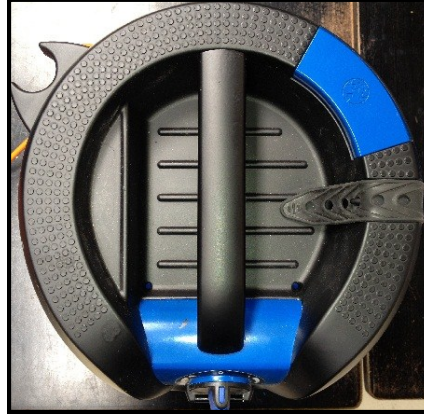
INOX - 31L

1. Motor head

1.1 Overview of the motor head



21-01, 21-21



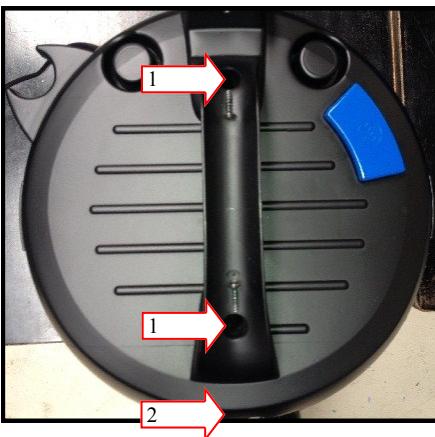
26-01, 26-21, 31-21, 26-2L

Description:

This is a general overview of how the motor heads will look* like from the above.

* Please expect some minor difference between the models.

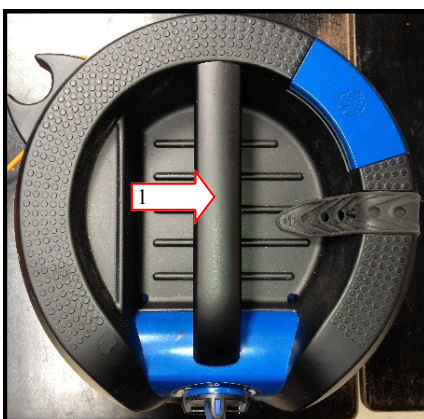
1.2 Disassembling/assembling of the cover



21-01, 21-21

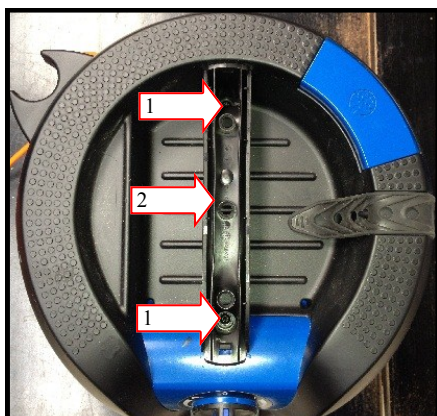
1. Position of screws
2. Pull gently outwards in the black plastic, just over the inlet

Lift gently in the cover.



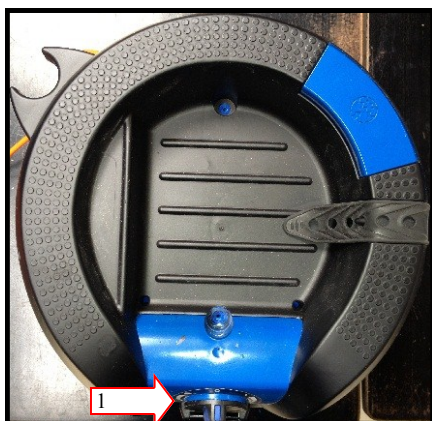
26-01, 26-21, 31-21, 26-2L

1. Lift the cover of the handle



26-01, 26-21, 31-21, 26-2L

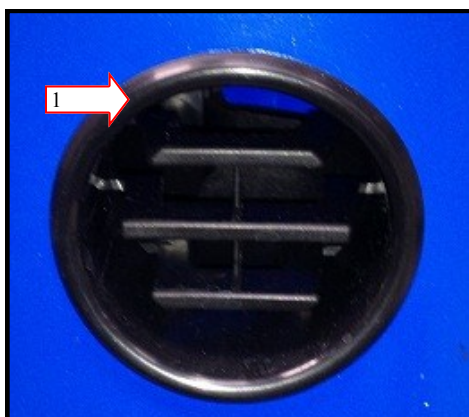
1. Position of screws
2. Remove the handle



26-01, 26-21, 31-21, 26-2L

1. Pull gently outward in the black plastic, just over the inlet

Lift gently in the cover.



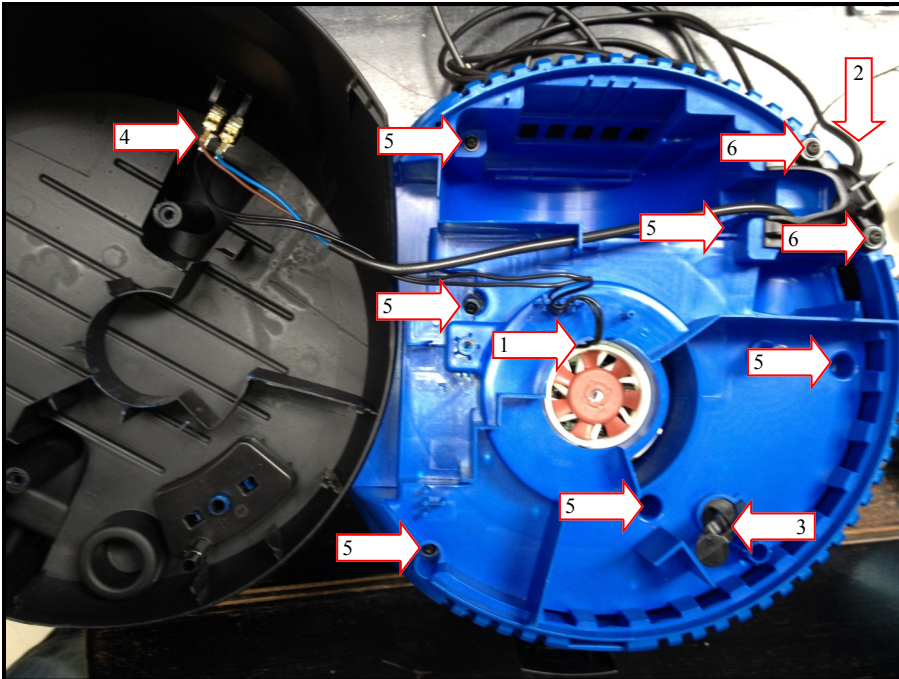
ALL

1. Pull gently outward in the blow-out plastic.

Please ensure the blow-out hole is clear before removing the air guide plate.

2. Air guide plate

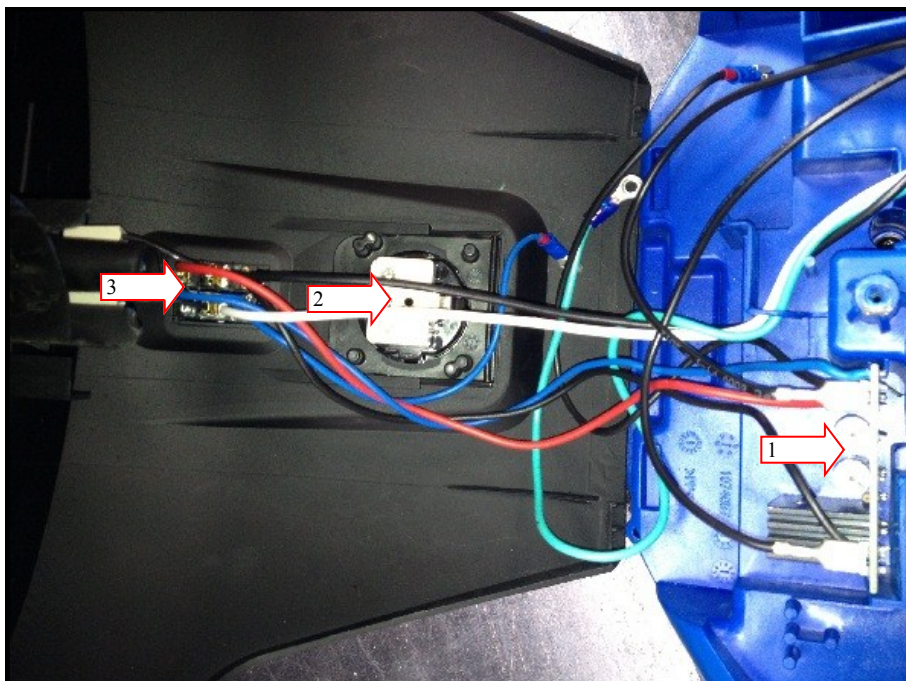
2.1 Overview and disassembly/assembly of the air guide plate



21-01 PC, 21-01 PC INOX

1. Wire to motor unit
2. Wire for input
3. Push & Clean extender arm
4. Switch
5. Position for screws
6. Screws for cable relief

Do NOT use this picture as an electrical connection guide.



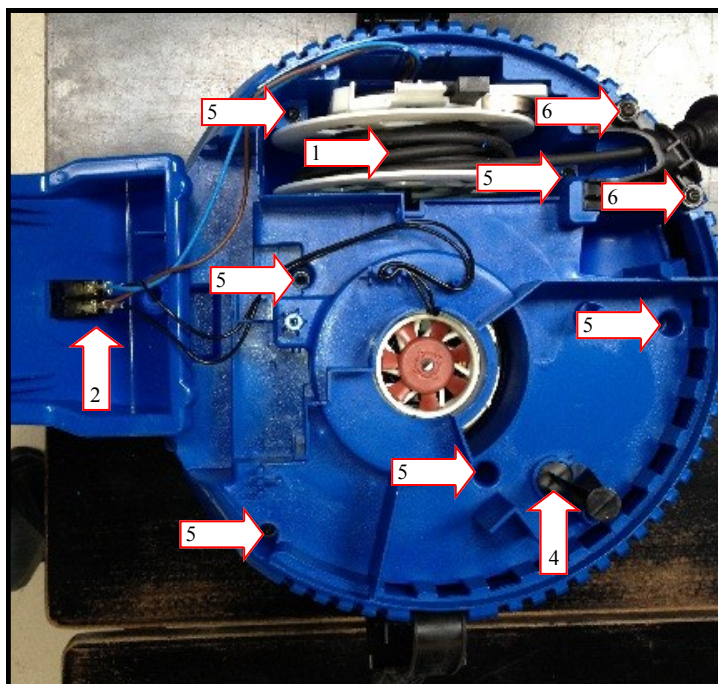
21-21 PC, 21-21 PC INOX

Please refer to the picture above for overview.

1. Circuit board
2. Tool socket
3. Switch

Do NOT use this picture as an electrical connection guide.

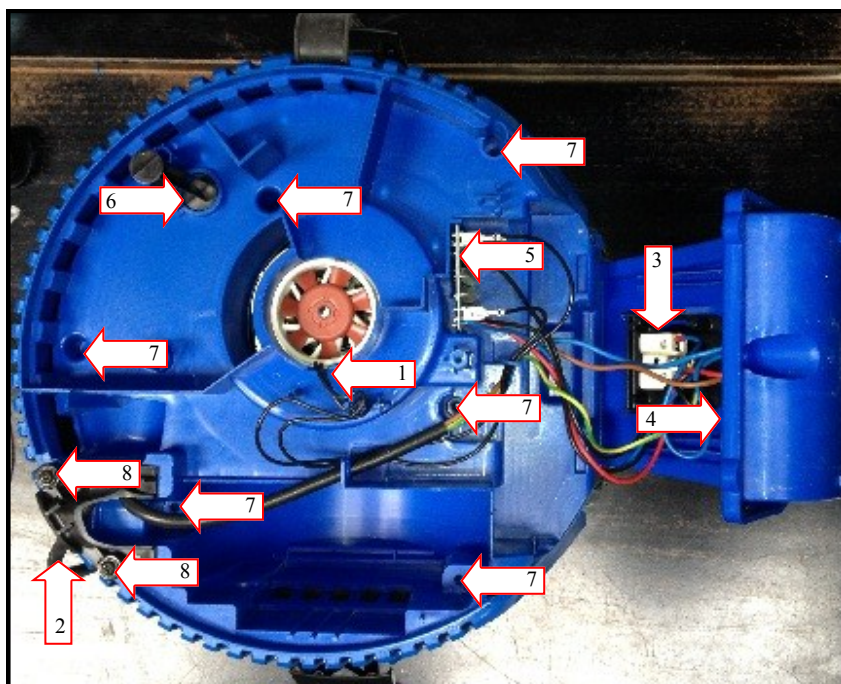
Models: 26-01 PC X, 26-21 PC, 31-21 PC INOX



26-01 PC X

1. Cable rewinder
2. Switch
3. Wire to motor unit
4. Push & Clean extender arm
5. Position of screws
6. Screws for cable relief

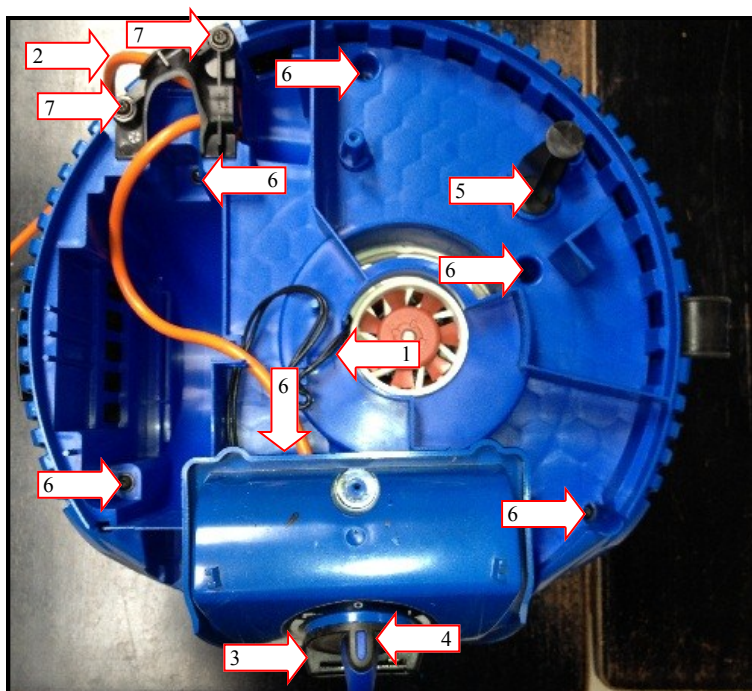
Do NOT use this picture as an electrical connection guide.



26-21 PC, 31-21 PC INOX

1. Wire to motor unit
2. Wire for input
3. Tool socket
4. Switch
5. Circuit board
6. Push & Clean extender arm
7. Positions of screws
8. Screws for cable relief

Do NOT use this picture as an electrical connection guide.

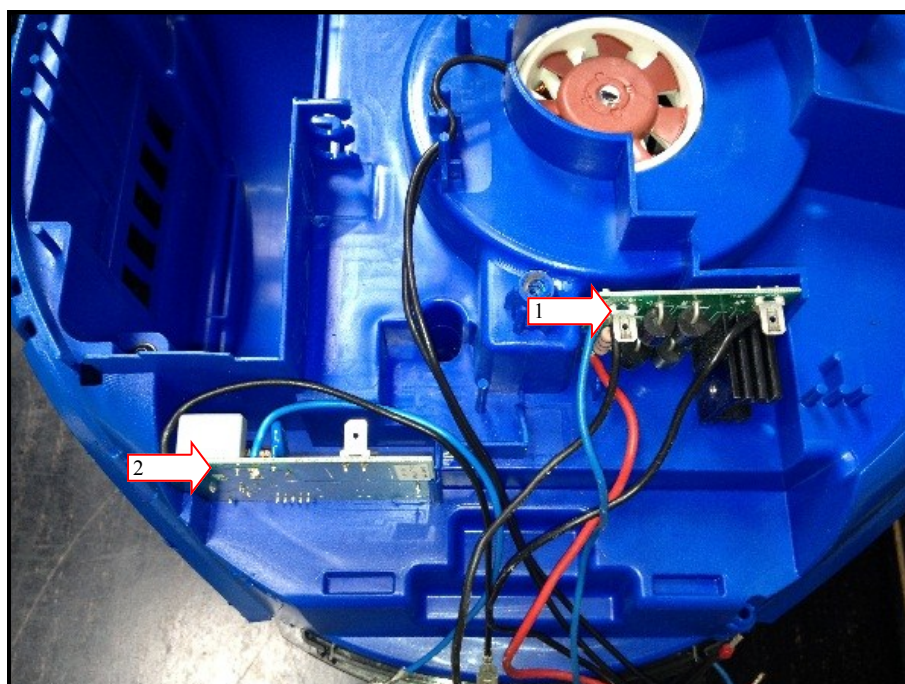


26-2L PC

Picture 1 of 2

1. Wire to motor unit
2. Wire for input
3. Tool socket
4. Adjustable switch
5. Push & Clean extender arm
6. Position of screws
7. Screws for cable relief

Do NOT use this picture as an electrical connection guide.



21-21 PC, 21-21 PC INOX, 26-21 PC, 26-2L PC, 31-21 PC INOX

Picture 2 of 2

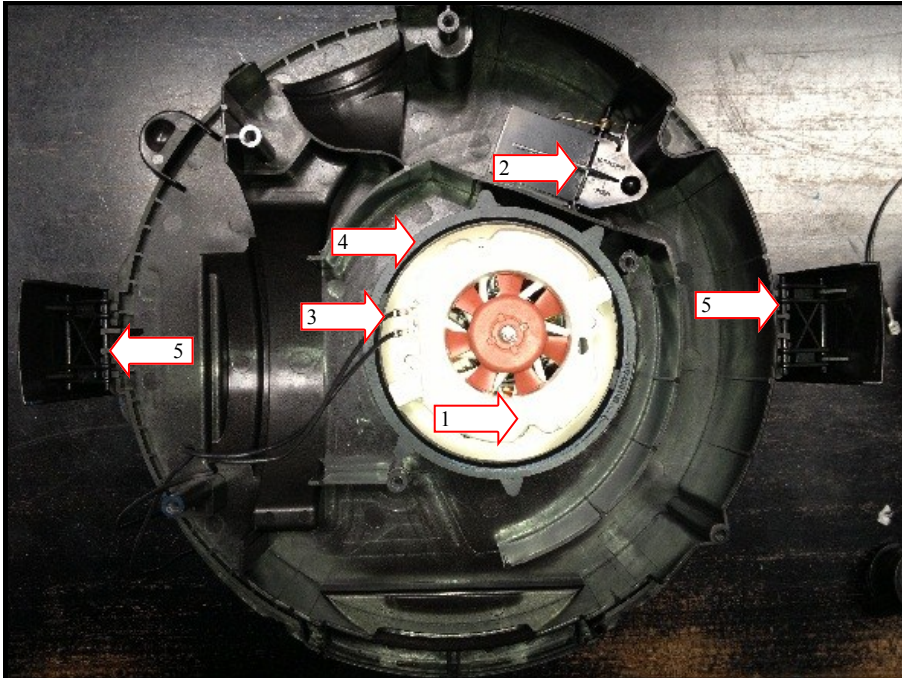
This picture is only meant to show the position for the different types of circuit boards.

1. Circuit board for normal switch and tool socket
2. Circuit board for adjustable switch and tool socket

Do NOT use this picture as an electrical connection guide.

3. Bottom plate

3.1 Overview and disassembly/assembly of the bottom plate



1. Motor unit
2. Push & Clean system
3. Motor unit wires
4. Gaskets
5. Container locks

Do NOT use this picture as an electrical connection guide.

All

4. Filter plate

4.1 Overview and disassembly/assembly of the filter plate



All

1. Filter tension

Rotate and lift to remove.



All

1. Filter
2. Deflector plate
3. Hole for airflow

Remove filter

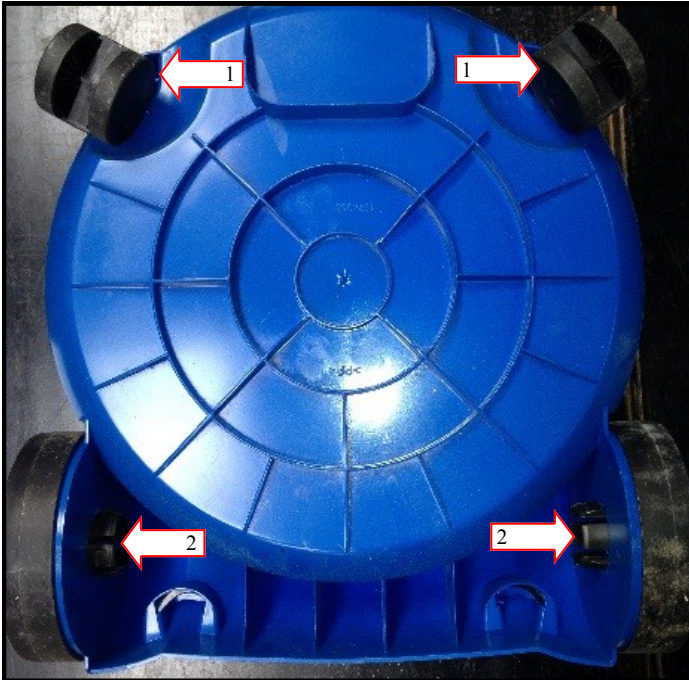


1. Filter gasket

All

5. Container

5.1 Overview and disassembly/assembly of the container



All

1. Castors

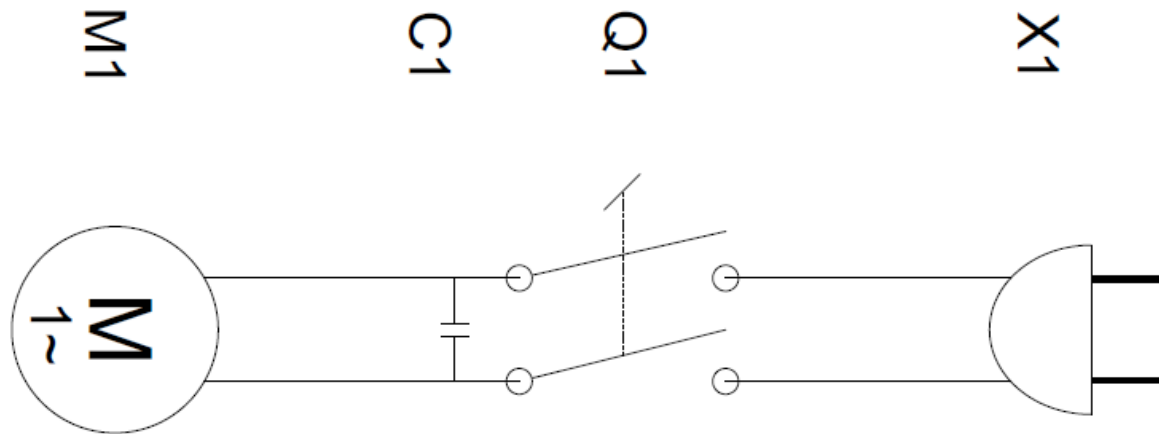
Pull to remove

2. Back wheels

Squeeze the inner part to remove



Torx screw driver T25
Torx screw driver T10
Hobby knife or similar
Cable cutter for solid cables



- C1 Filtering capacitor X2
- M1 Motor turbine
- Q1 Rotary switch
- X1 Power cord

