

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

SERVICE MANUAL



ONILISK

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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 seguence 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.

ONILTING

Technical data



Model: 21-01

Model / Type Country varients Bead weight Motor data	Voltage Voltage Frequency Fusing Power consumption PIEC Power Cond lenght Numbers of motors Vacuum Air volume flow Sound pressure level at 1m, EN 60704-1 Operating noise Width Depth Hight Weight	- Hz Hz V V V V V V V V V V V V V V V V V	EU 220-240 5 H05 VV	GB 110 16 16 16 16 7 7 7 16	AERO GB 230 230 230 230 230 230 230 230 230 230	AERO 21-01 B CH 30 220-240 50 50 1000 11000 1200 1200 1200 1200 1200 1	US US AW AW AN	Physical Phy
uoisnar	Container net filling - dry (without bag)				1	16		
niQ	Container net filling (wet)	—			1	12		

	Tec	hnica	l data
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Model / Type			AERO	AERO 21-21
Country varients			EU	СН
	Voltage	>	220-	220-240
	Frequency	Hz	50-60	50
et	Fusing	А	16	10
eb l	Power consumption PIEC	Μ	10	1000
eo i	Power Max	Ν	12	1200
ıtə	Power cord lenght	Е		5
Eli	Power cord type		HO5	H05 VV
	Protection class			
	Protection category		IP	IPX4
	Numbers of motors			1
ete	Vacuum	mbar	2:	210
r de	Air volume flow	l/min	36	3600
otoM	Sound pressure level at 1m, EN 60704-1	dB(A)	7	72
	Operating noise	dB(A)	9	64
1	Width	mm	36	390
ЧЗi	Depth	mm	36	395
эw	Hight	mm	5	525
pu	Weight	kg	8	8
e su	Tank volume	_	2	20
ioisi	Container net filling - dry			16
uəu	(without bag)	-	'	
niQ	Container net filling (wet)	_	-	12



Model: 21-21

ONILFISK

Model / Type			AERO 26-01
Country			EU
varients			
	Voltage	٧	220-240
	Frequency	Hz	50-60
et	Fusing	А	16
ep	Power consumption PIEC	Μ	1000
вэi	Power Max	W	1200
ıtəə	Power cord lenght	m	5
I3	Power cord type		H05 VV
	Protection class		II
	Protection category		1PX4
	Numbers of motors		1
ete	Vacuum	mbar	210
r de	Air volume flow	l/min	3600
oto	Sound pressure level at	עע/מא	<i>c</i> 2
Μ	1m, EN 60704-1	u D(A)	7/
	Operating noise	dB(A)	1 9
1	Width	mm	376
.48i	Depth	mm	392
ЭW	Hight	mm	530
pu	Weight	kg	8
e su	Tank volume		25
ois	Container net filling - dry	_	10 5
นอเ	(without bag)	-	C (OT
niQ	Container net filling	_	16.7
	(wet)	-	TU, L

Technical data

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SM AERO vers.	1.1 June 2020
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Model / Type					AERO	AERO 26-21	
Country varients			EU	GB	GB	FR	
	Voltage	>	220-240	110	230	2	220-240
	Frequency	Hz			50-60		
eti	Fusing	А		1	16		
ep	Power consumption PIEC	Μ			10	1000	
вэi	Power Max	Μ			12	1200	
ıtəə	Power cord lenght	Е	5	8		5	
Eli	Power cord type		H05 VV	H07BQ-F		H05 VV	
	Protection class					_	
	Protection category				Ы	IPX4	
	Numbers of motors					1	
eti	Vacuum	mbar			2	210	
r ds	Air volume flow	l/min			36	3600	
oto	Sound pressure level at	יע/מא				7	
М	1m, EN 60704-1	(w)an				1	
	Operating noise	dB(A)			9	64	
1	Width	mm			3	376	
.ជនរ	Depth	mm			ŝ	392	
эw	Hight	mm			5	530	
pu	Weight	kg				8	
e su	Tank volume	_			2	25	
iois	Container net filling - dry	_			15	19 E	
นอเ	(without bag)	-			Ч Ч	r'o	
niQ	Container net filling	-			10	16.7	
	(wet)	-			Ŧ	2,0	

Technical data

8 AWG16 Model: 26-21

1 0 0 0 0 0 0 0 0	
Technical data	1
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В

Model / Type			AERO	AERO 26-2L
Country			EU	CH
Valicits	Voltage	>	220-	220-240
	Frequency	Hz	50-60	50
et	Fusing	А	16	10
ep	Power consumption PIEC	Μ	12	1200
ico i	Power Max	M	15	1500
ıtə	Power cord lenght	Е		5
Eli	Power cord type		H05 VV	٧٧
	Protection class			
	Protection category		[d]	IPX4
	-			
	Numbers of motors			1
ete	Vacuum	mbar	23	235
r de	Air volume flow	l/min	37	3700
oto	Sound pressure level at	יע/שף	67	7
M	1m, EN 60704-1	/w/an	0	77
	Operating noise	dB(A)	63	64
1	Width	mm	37	376
Ч₿i	Depth	mm	36	392
ЭW	Hight	mm	5:	530
pu	Weight	kg	3	9
e su	Tank volume	_	25	5
oisu	Container net filling - dry	_	18	18,5
эu	(without bag)			
Dir	Container net filling (wet)	_	16	16,2
	(mail)			

Model / Type				AERO 31-21	
Country varients			EU	СН	SU
	Voltage	>	220	220-240	120
	Frequency	Ηz	50-60	50	60
eta	Fusing	А	16	10	15
ep	Power consumption PIEC	Μ		1000	
вэi	Power Max	Ν		1200	
ıtəə	Power cord lenght	Е		5	8
B	Power cord type		HOE	H05 VV	AWG16
	Protection class			_	
	Protection category			IPX4	
		•			
	Numbers of motors			1	
ete	Vacuum	mbar		210	
r de	Air volume flow	l/min		3600	
otoM	Sound pressure level at 1m, EN 60704-1	dB(A)		72	
	Operating noise	dB(A)		64	
1	Width	mm		392	
.។ខ	Depth	mm		395	
эw	Hight	mm		635	
	Weight	kg		10	
e su	Tank volume	_		30	
oisr	Container net filling - dry	_		24	
uəu	(without bag)			;	
niQ	Container net filling (wet)	_		22	
	1				





Model: 31-21

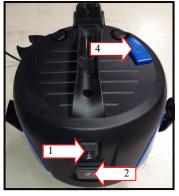
Construction

Models: All

Overview of different types of motor heads



21-01



21-21

- On/ off 1.
- 2. Tool socket
- Variable speed Filter cleaning 3.
- 4.
- Cable rewind 5.
- Resettable fuse (5 amp.) 6.



26-01



26-21 / 31-21



26-2L



Aero for AU/NZ with resettable fuse

Construction

С

Models: All

Overview of different types of containers



Standard - 21L



Standard - 26L

- 1. Inlet
- 2. Castor wheels



INOX - 21L



INOX - 31L

D

Models: All

1. Motor head

1.1 Overview of the motor head



21-01, 21-21



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

Position of screws

Lift gently in the cover.

1. 2. Description:

Pull gently outwards in the black plastic, just over the inlet

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



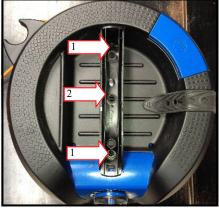
26-01, 26-21, 31-21, 26-2L

1. Lift the cover of the handle

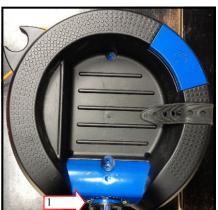




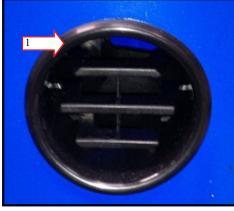
Models: All



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



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



ALL

- Position of screws 1.
- 2. Remove the handle

Pull gently outward in the black plas-1. tic, just over the inlet

Lift gently in the cover.

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

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

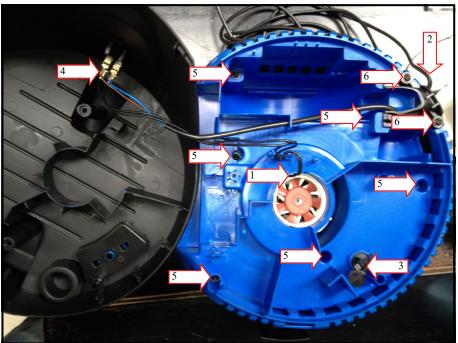




Models: 21-01 PC, 21-01 PC INOX, 21-21 PC, 21-21 PC INOX

2. Air guide plate

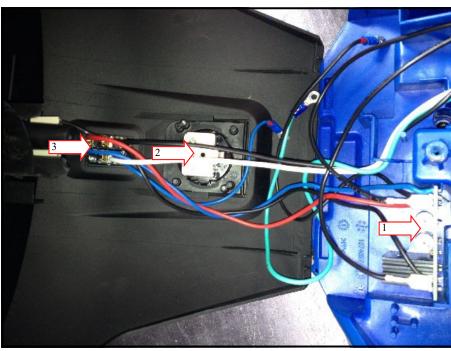
2.1 Overview and disassembly/assembly of the air guide plate



21-01 PC, 21-01 PC INOX

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

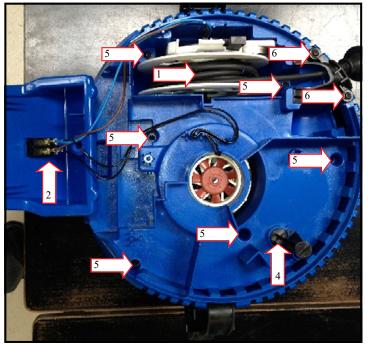
Do NOT use this picture as an electrical connection guide.

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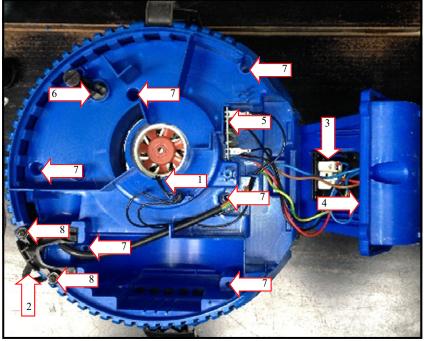
Service



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



26-01 PC X



26-21 PC, 31-21 PC INOX

- 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.

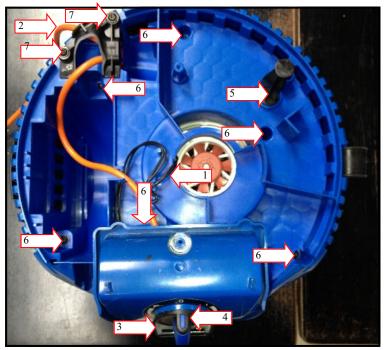
- 1. Wire to motor unit
- 2. Wire for input
- 3. Tool socket
- 4. Switch
- 5. Circuit board
- 6. Push & Clean extender arm
- 7. Positions of screws
- 8. Screws for cable relief

Do NOT use this picture as an electrical connection guide.

Nilfisk

Service

Models: 26-2L PC



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

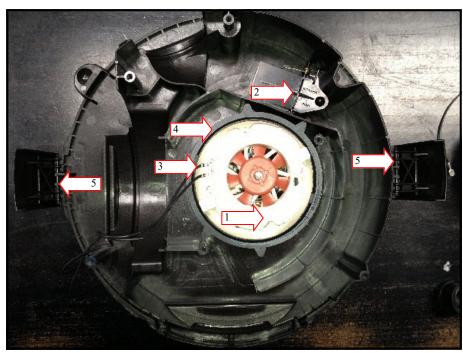
Picture 2 of 2 This picture is only meant to show the position for the different types of circuit boards.

- 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.

Models: All

3. Bottom plate 3.1 Overview and disassembly/assembly of the bottom plate



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

Do NOT use this picture as an electrical connection guide.



Models: All

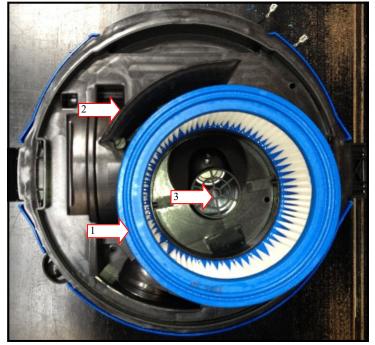
4. Filter plate4.1 Overview and disassembly/assembly of the filter plate



1. Filter tension

Rotate and lift to remove.

All



All

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

Remove filter

D

Models: All



1. Filter gasket

All

Models: All

5. Container

5.1 Overview and disassembly/assembly of the container



All

1. Castor wheels

Pull to remove.

2. Back wheels

Squeeze the inner part to remove

Pos. 1 Resettable fuse Pos. 2 Socket outlet D

Models: UA & NZ



Aero for AU/NZ with resettable fuse

An external power tool can be connected to the socket outlet. The socket has a 5 Amp thermal fuse to protect the machine against overload.

If the power consumption gets too high the thermal fuse activates and cut off the power on the socket outlet.

The thermal fuse can be deactivated again by pressing the knob.

The maximum power consumption of the connected power tool is stated in the section "Specifications" in the user manual.

ONILISK

Tools



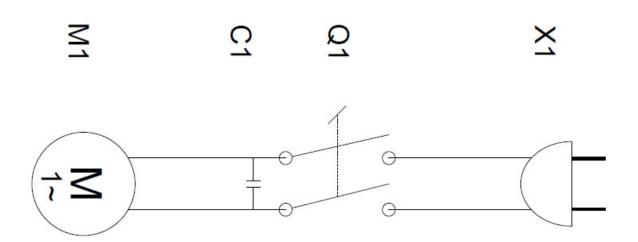
Special tools



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

Wiring





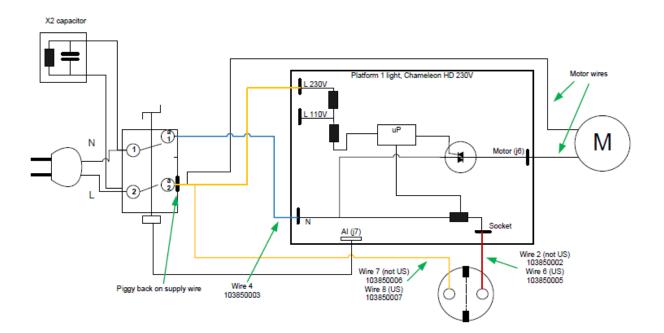
- C1 Filtering capacitor X2
- M1 Motor turbine
- Q1 Rotary switch
- X1 Power cord



Wiring

F

Model: NEO 2L

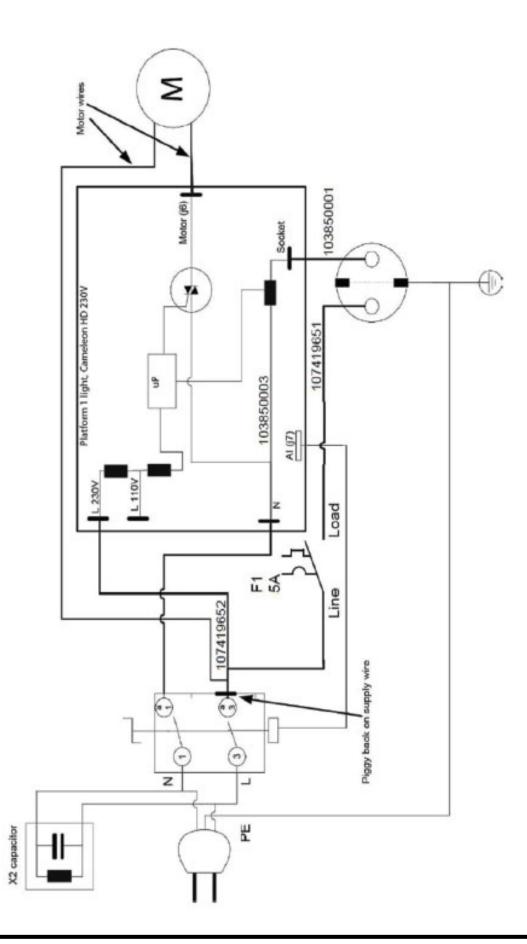


ONILISK

Wiring

F

Model: NEO 2L AU/NZ

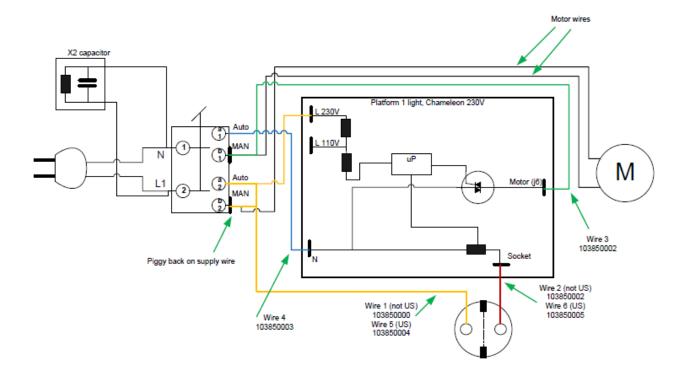




Wiring



Model: NEO 21



Wiring

Model: NEO 21 AU

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