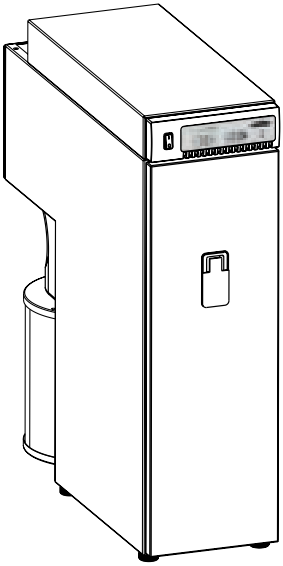
Z 1 ECO
Z 1 CAM

Single suction systems



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Content

Advanced settings are provided by the Zubler Suction-Technology APP , which is available for Android tablets or phones.

Therefore follow the users manual of the Zubler Suction-Technology APP, which is downloadable from www.zubler.de.

0. Introduction

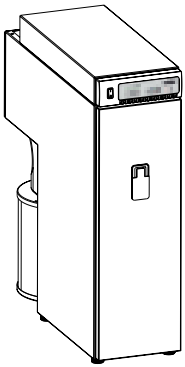
Dear customer,

we are pleased, that you have decided for a Zubler extraction system and hope it will enhance your work. The continuous development of our technology is based on the co-operation with experienced

dental technicians. The focus lies on the aim to optimize the extraction technology in the fields of performance, noise and reliability.

Please read this operating manual carefully in order to ensure a problem-free operation.

0.1 Declaration of conformity



We, Zubler Gerätebau GmbH

Buchbrunnenweg 26
89081 Ulm Jungingen

declare, that the product vacuuming unit

Z1 ECO

Z1 CAM

conforms to the health and safety requirements set out in the directives

2014/30/EC EMV-Directive
2014/35/EC Low-Voltage Directive
2006/42/EC Machines Directive
2011/65/EU RoHS Directive

Any modification not specifically approved by us voids the validity of this declaration.

Kurt Zubler
ceo

0.2 Intended purpose of use

This extraction system is designed exclusively for dry dusts!

Its use for the extraction of other types of dust or gases must be clarified with the manufacturer before putting into operation.

Work must be stopped immediately and the system switched off in the event of the appearance of visible clouds of dust or noticeably insufficient suction power.

Inform your dealer or our service team.

The Z1 is designed for indoor use.

The volume of air circulated by the system and returned to the room may not exceed 50% of the room air volume in closed rooms.

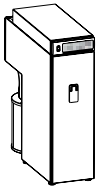
Use is restricted to persons who have been trained in its handling and are authorised to do so. We reserve the right to make changes even without updating this manual.

0.3 Operating Environment

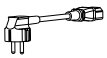
Temperature:	+5°C bis +40°C
Max. permissible relative humidity:	max. 80% (bei 30°C)
Total connected load :	10A

1. Installation of the appliance

1.1 Scope of supply and accessories



1x Z 1 extraction system



1x Power cable

1x cable C13/C14 (ECOonly)

1.8m hose 38 mm

1x elbow adaptor 50/40 mm

Special Accessories

		Item Number
	Adaptor C14 / CEE	012-00702
	H14-Filter H-Typ	556-0052
	Activated carbon filter C-Typ	556-0051
	exhaust adapter RD72 /DN75	896-1103
	diffusor-holder (without filter)	556-0057

1.2 Installation of the extraction system

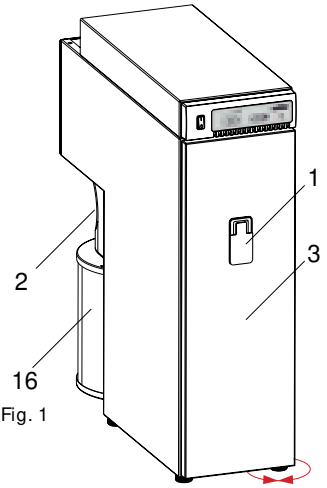


Fig. 1

1	Closure
2	Exhaust connection
3	Filter door
16	Diffusor
30	Exhaust Adaptor

1.2.1 Suction line

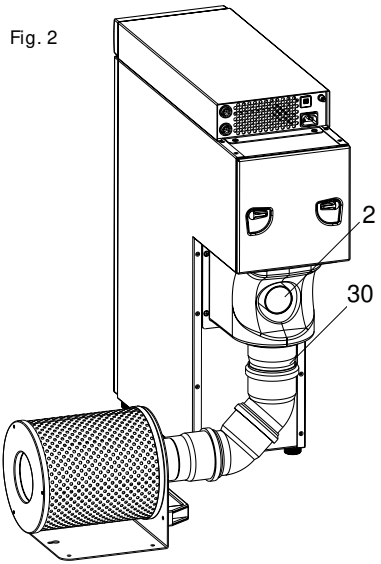
- Provide a sufficiently stable and leveled surface. Ensure that the housing does not touch the furniture to avoid noise production by resonances.
- If necessary the unit can be leveled by turning the feet up/down (Fig.1).
- Plug in the muffle of the enclosed suction hose to the intake nozzle (2) and the other side firmly to your intake system.

  Use the enclosed 90° adaptor if running sideways.

1.2.2 Exhaust

- If using the unit in non-stop operation, the exhausting air temperature is increased.
- To avoid overheating, the exhausting air must be able to flow out and spread free.
- If this is not possible, the diffusor can be removed and the exhausting air can be guided with a DN75 hose or pipe (Fig.2). Therefore use the optional exhaust-adaptor RD72/DN75 O.No. 896/1103
- To connect the diffusor to the DN75 hose or pipe you will need the optional diffusor-holder O.No. 556/0057 (Fig.3)
- Alternatively it is recommended to giude the exhaust air to the outside.

Fig. 2



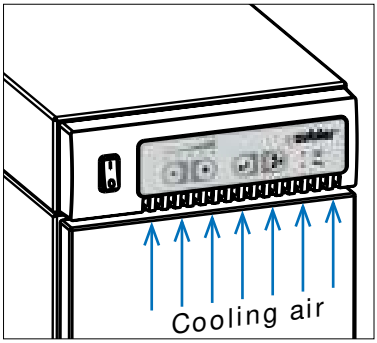


Fig. 4

1.2.3 Furniture integration

If integrating the suction unit into cabinets or niches the following requirements must be taken into account:

- The suction unit must be able to draw cooling air from the front (Fig.4)
- The hot exhausting air which is released on the back of the suction unit, must not reach the front. Therefore it is necessary, that there is a tight barrier surrounding the suction unit, separating the front from the back. Alternatively it is also possible to guide the exhausting air away from the suction unit, see chapter 1.2.2.

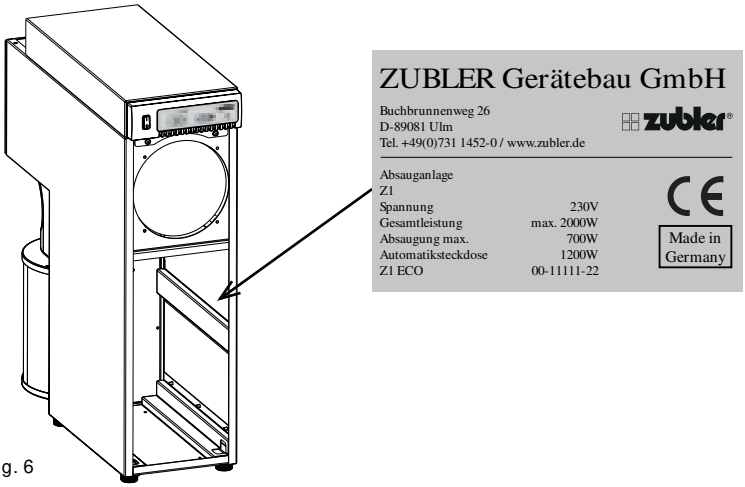


Fig. 6

1.2.4 Mains connection

- Before connecting the unit to the mains power supply, check if the voltage given on the number plate (Fig.6) corresponds with the local voltage.
- Plug the enclosed power cord into the IEC C14 connector 6 and the mains plug into a local power socket.
- The suction unit must not be switched ON/OFF with the mains power supply. The mains power supply must be connected permanently.

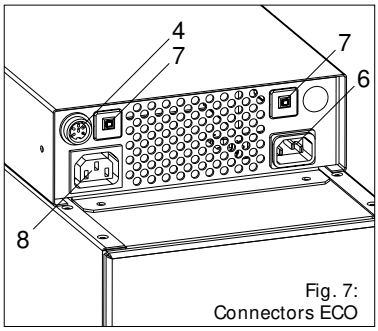


Fig. 7:
Connectors ECO

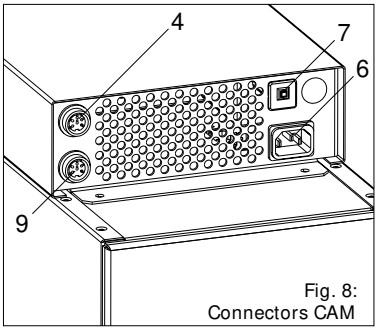


Fig. 8:
Connectors CAM

4	Data interface
6	Mains power supply (IEC C14)
7	Main fuse (10A)
7	Fuse power socket (6A)
8	Autom. power socket (IEC F)
9	24V interface

1.3 Connecting the working tools

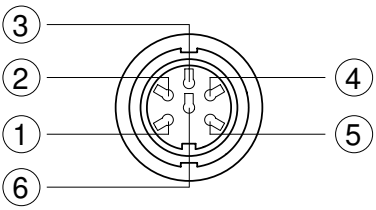
1.3.1 Appliances without interface (ECO only)

- If your appliance is equipped with a IEC plug type C14, use the enclosed IEC power cord (C13/C14) to connect the appliance to power socket 8.

  The power cord which was enclosed with your appliance is not needed.
- If your appliance is equipped with a CEE mains plug type F or C, you will need an optional CEE-adaptor (CEE/C14) O.No. 012/00701.

  The max. power rate of the appliance is limited to 600W (120V)or 1200W (240V)!

1.3.2 Appliances with switching output



- If your working appliance has a switching output, a control cable (special accessory) can be used to connect to the extraction system. Instead of C13 low temperature power outlet 8, use the data interface 4.

1.3.3 Appliances and machines with 230V output

- If there is a 230 V outlet on the machine for the extraction, use exclusively the SL230 accessory adaptor

1.3.3 Appliances and machines with 24V interface (CAM only)

- If there is a 24 V control output on the machine for the extraction, you need a special cable from the list on page 10.

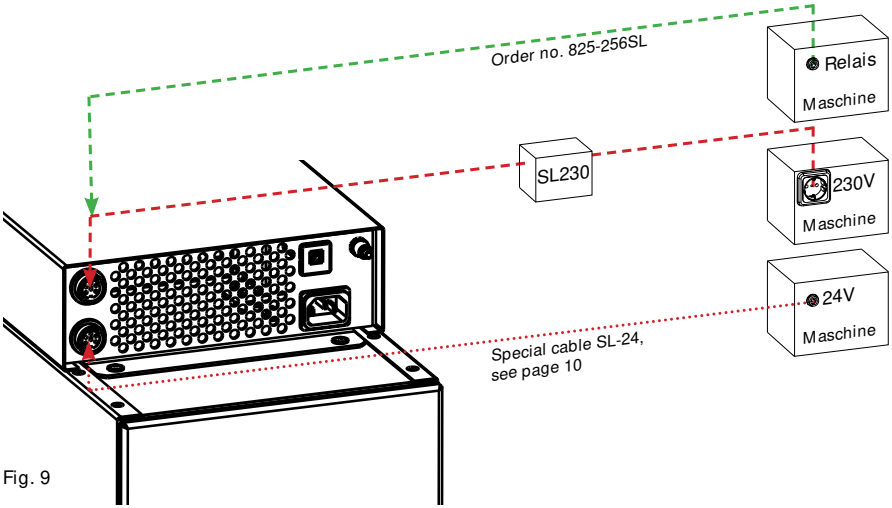
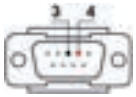
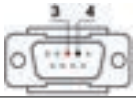
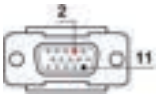
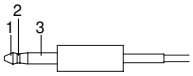


Fig. 9

Interface cable (accessory)

Ready-made adaptor cables are available for some common CAM systems (only start signal for suction system)

Cable plug	CAM system	Pin-configuration Extraction	Cam	order no.
	imes icore	1 (+)	4	825-25616
	ceramill motion	2 GND	3	
	Amann-Girrbach	1 (+)	3	825-25612
		2 GND	4	
	Vhf 4pol.	1 (+)	1	825-25610
		2 GND	4	
	Vhf 6pol.	1 (+)	1	825-25611
		2 GND	6	
	Sirona	1 (+)	2	825-25615
			7	
			10	
		2 GND	11	
	Roland	1 (+)	1	825-25613
		2 GND	2	
without	Other	1 (+)		825-25614
		2 GND		

24V interface:

An electrically isolated interface is available for communication with CAM systems and machines with PLC or 24 V connection.

The extraction system can be coupled to the dust-producing machine via this 8-pin connector for the automatic start. Status information of the extraction system can also be received by the machine.

Input voltage and pull-up voltage for the outputs must be provided by the machine. A voltage of between 5 V and 24 V is possible. Outputs are implemented as potential-free optocoupler switched outputs with a 120 Ohm series resistor.

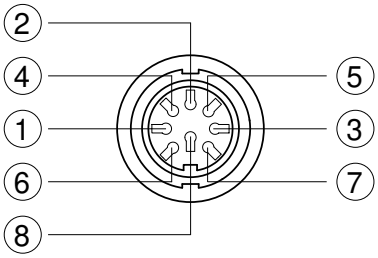


Fig. 11:

PIN configuration:

Type appliance socket Amphenol 8-pin

Pin	Cabel	Configuration
1	white	input 1 24V
2	brown	GND 1
3	green	input 2 24V
4	yellow	GND 2
5	grey	output 1
6	pink	24V CAM
7	blue	output 2
8	red	24V CAM

Commands to the extraction system:

The various extraction power levels can be switched, for example, in relation to the dust level (roughing or polishing).

Filter cleaning can take place in addition to the automatic mechanism of the extraction system during the operating pauses of the machine.

Input 1	Input 2	Function
0V	0V	Extraction OFF
24V	0V	Extraction ON with power level 1
0V	24V	Carry out filter cleaning
24V	24V	Extraction ON with power level 2

Output 1	Output 2	Status
0V	0V	Extraction not ready / OFF
24V	0V	Filter cleaning running
0V	24V	Filter replacement necessary
24V	24V	Extraction ready / Standby

1.4 Intake system

Basic system requirements include optimal particle flow, minimal noise production and ergonomic posture promotion.

The following criteria promote these basic requirements and are specifically adapted to Zubler suction systems.

- Suction funnel R1200,
- Rectangular pipe R1000, R1300
- Rectangular silencer R1100

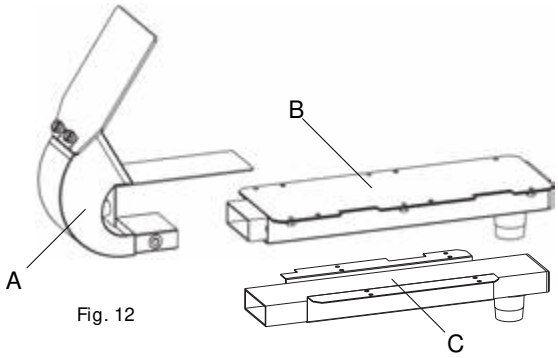


Fig. 12

A	Suction funnel R1200
B	Rectangular pipe R1300
C	Rectangular pipe R1000

- The R1200 suction funnel (21) was tested according to GS-IFA-M20 test no. 1305026 for a minimum suction performance of 20 l/s.
- Sitting in the upright position in a posture preserving ergonomically designed chair.
- Workpiece as close as possible to the suction funnel 21; no dust cloud may be visible. Trails of dust must be drawn into the hopper.
- Direction of viewing of the workpiece perpendicular to the protective screen.

2. Functions

2.1 Control unit

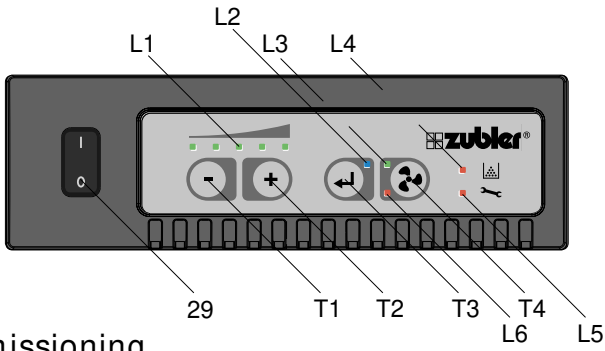


Fig. 13

2.2 Commissioning

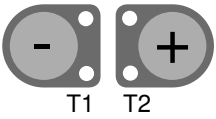
L1	LED Power level display
L2	LED Bluetoothanzeige
L3	LED “ ON”
L4	LED Filter
L5	LED Service
L6	LED “ OFF”
T1	minus-button
T2	plus-button
T3	Enter-button
T4	ON / OFF - button
29	Main switch

- The extraction system must be installed and connected as described in section 1.
- Switch on the main switch 29.
- One ore more LEDs of the suction level L1 are flashing.
  After approx. 5s the suction unit is ready and the last saved suction level is displayed. (At setup level 1).
- By pressing the ON/OFF button T4 the suction is started with the selected suction level L1.
- If changeing the suction level for the first time, the unit will take some time to calibrate the suction volume and compensate the flow resistances.
- For setting and saving suction levels, see section 2.4.

2.3 Setting up automatic operation (ECO only):

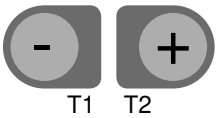
If a dust producing appliance is connected to the extraction system, the sensitivity must be adjusted for an automatic start of the extractor.

The following steps are necessary in order to teach the appliance:



- The appliance (max. 6A, 120V:600W, 240V:1300W) must be connected to the socket of the extraction system.
- Preselect the handpiece speed at which the extraction system should be started.
- Start the appliance or the handpiece nd keep it running.
- While the appliance is running, press and hold the buttons T1 (minus) and T2 (plus) at the same time for at least 3 seconds until a signal sounds and the LEDs of the display L1 light up. The extraction system will start running for approx. 3 seconds.
- Still keep the appliance running.
- As soon as another signal sounds and the LEDs of the display L1 start flashing, switch off the appliance or stop the handpiece immediately.
- Wait until a final signal sounds and the LEDs of the display L1 show the preselected suction level again.

2.4 Selecting and saving suction levels



- The suction levels 1 – 5 can be selected with the T1 (minus) and T2 (plus) buttons.
- The suction level shown on the display L1 is the currently saved level with which the extraction system switches on.

Level	Suction
1	20 l/s
2	25 l/s
3	30 l/s
4	35 l/s
5(„turbo“)	max 50 l/s

- Press the Enter button T3 to save the new suction level
- If the suction level is changed without pressing the Enter button T3, the extraction system will run the lastsaved suction level the next time the unit is started.
- Suction level 5 (“ Turbo mode”) is only avail. for short time usage (factory set to 5 min.) and can therefore not be saved in regulation mode.
- While in “ Turbo mode” the LED for suction level 5 is flashing.
  Once the time is elapsed, the suction will fall back to the saved suction level 1-4.
- Further adjustments can be made with the Zubler Suction-Technology APP (Android only).

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2.5 Current suction power

Example:

Suction level 3 is selected, but the air flow rate corresponds only to level 2.

If the LEDs of display L1 light up according to the selected suction level during suction operation, this means that the preset air flow rate of the suction level is also actually being provided and the motor has not yet reached its maximum power.

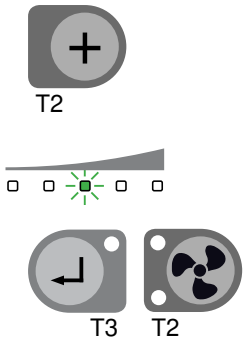
If the desired air flow rate cannot be attained (due to flow resistance or filter clogging), then LED lights that are solidsignify the attainable setting, while the flashing LEDs signify the setting and corresponding suction loss. The volumetric flow control device is preset in the factory so that a warning signal sounds and the Filter Maintenance LED L4 lights up only at minimum suction power.

In the advanced settings (see section 3) it is possible to set this so that the filter warning is given as soon as the suction power decreases to the next lower suction level.

- Further adjustments can be made with the Zubler Suction-Technology APP.

2.6 Setting the suction cutoff time

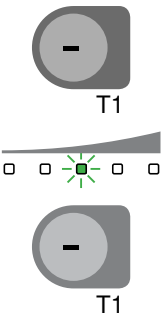
For the extraction of the residual dust in the air, it is possible to extend the time the extraction system should continue to run during breaks or after the end of dust production. The factory setting is 3 seconds.



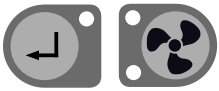
- press and hold the plus button T2 for at least 3 seconds until only the middle LED of display L1 is lit
- the suction time can be reduced by 1 sec per LED jump to the left with the T1 (-) button or increased by 1 sec per LED jump to the right with the T2 (+) button.
- press the Enter button T3 to save the new value
- press the fan button T4 to abort the procedure without saving
- the suction overrun time can be prolonged by a further 2 sec by repeating the procedure.
- Further adjustments can be made with the Zubler Suction-Technology APP (Android only).

2.7 Fine tuning of the automatic operation (ECO only)

If the automatic sensitivity matching of the dust producer to the extraction system has not yet led to an ideal result after section 1, the switch-on threshold of the extraction can still be manually readjusted.



- press and hold the minus button T1 for at least 3 seconds until only the middle LED of display L1 is lit
- lower the switch-on threshold with the T1 (-) button (extraction starts earlier
- easier; this is a solution if the extraction system switches off or doesn't start-up immediately despite dust being produced)



- the switch-on sensitivity of the T2 (+) button (extraction starts later / less easily; this is a solution if the extraction system occasionally starts up on its own or already runs in standby).
- press the Enter button T3 to save the new value
- press the fan button T4 to abort the procedure without saving
- the switching sensitivity can be set even higher or lower by repeating the procedure.
- see section 3 for advanced settings and troubleshooting.

2.8. Switching the extraction system off

The Z1 extraction system is intended only for switched-on standby operation.

If the extraction system is switched off or disconnected from the power supply, a switch-off time of at least 10 seconds is necessary.

If the extraction system is inadvertently switched back on immediately, or in the case of a short-term power failure of less than 10 seconds, the system can enter the error state. LED L5 lights up. In this case the extraction system must remain switched off for longer than 2 minutes in order to be able to start it again.

Note! The Z1 extraction system cannot be switched on and off by external switching electronics that interrupt the power supply to the extraction system.

3. Maintenance

3.1 Filter bag replacement

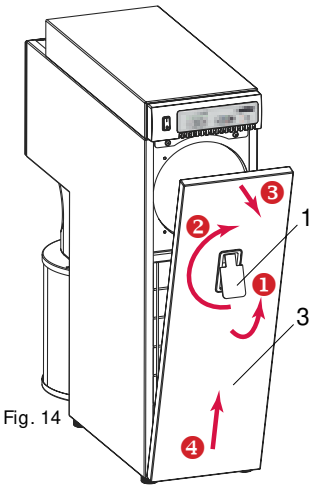


Fig. 14

Removal of the filter basket

- switch the system off at the main switch 29 (fig. 9) and also switch your working appliance off at the associated main switch to prevent inadvertent start-up.

❶ open closure 1 by lifting it

❷ rotate closure 1 by 180°.

❸ pull the filter door 3 approx. 15 cm towards you.

❹ you can now completely remove the filter door 3 by lifting it slightly.

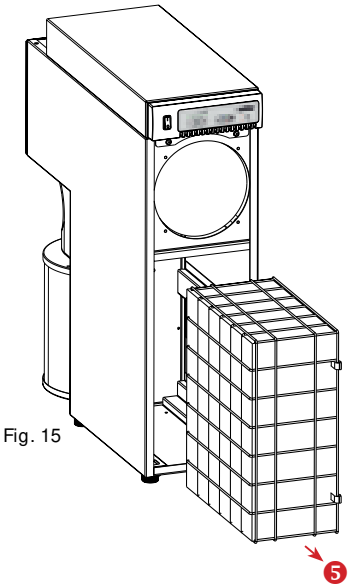


Fig. 15

❺ pull the filter cage out in a forward direction (fig. 15).

Replacement of the filter bag or fine filter is to be done only when wearing suitable protective equipment. (gloves, dust mask)

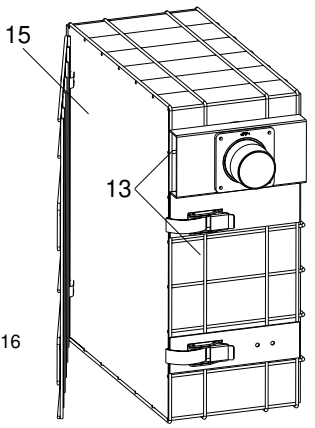
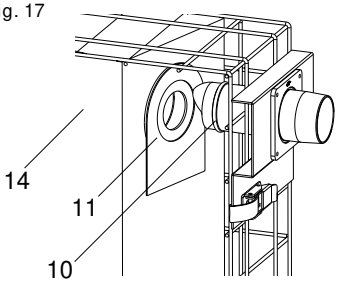


Fig. 16

Fig. 17



Removal of the filter bag

- open the filter cage 12 by releasing the clasps 13 and swinging the filter cage door out (fig. 13).
- pull the seal 11 of the filter bag 16 off the filter nozzle 10 (fig. 14).
- pull the adhesive film off the seal 11 and use it to seal the opening.
- dispose of the filter bag 16 according to the legal regulations applicable in your country.
- insert a new filter bag 16 and close the seal 11 over the filter nozzle 10 (fig. 14).
- close the filter cage door 15. (fig. 13)
- push the filter cage 12 into the housing up to the stop and lock the filter door 3 (fig. 11).
- switch the system on again at the main switch 14 (fig. 9) and switch your working appliance on again.

1	Closure
3	Filter door
10	Filter nozzle
11	Seal
12	Filter cage
13	Clasps
14	Filter cage door
15	Filter bag

Place contaminated filters immediately after removal in a dust-tight closable bag (plastic bag) and dispose of them according to the regulations applicable in your country.

3.2 Replacement of the main filter

If the red LED display L4 „ Filter“ lights up despite replacing the filter bag, or if the replacement intervals become noticeably shorter, the reason is usually that the fine filter is clogged with dust. To replace the fine filter cartridge, proceed in the following order:

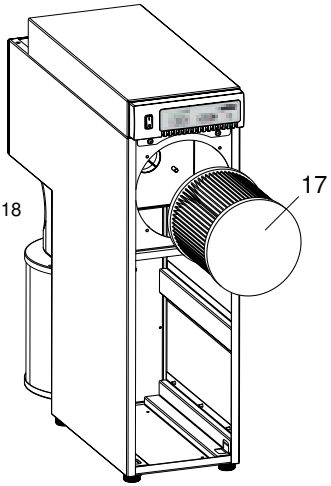
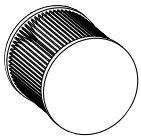


Fig. 18

16	Exhaust filter
17	Fine filter
28	Exhaust hood

- open the filter door 3 as described in section 4.1.
- pull the filter cage 12 out. You can now reach inside the filter chamber behind the fine filter 17 and pull it forwards and out.
- place the fine filter 17 immediately in a dust-tight closable container (plastic bag).
- dispose of the fine filter 17 according to the legal regulations applicable in your country.
- insert the new fine filter 17.
- when inserting the fine filter 17, a little pressure should be exerted towards the rear to ensure that the door closes correctly.
- you can now insert the filter cage 12 with filter bag 16 again. It is advisable to replace the filter bag 16 at the same time when replacing the fine filter



3.3 Exhaust filter

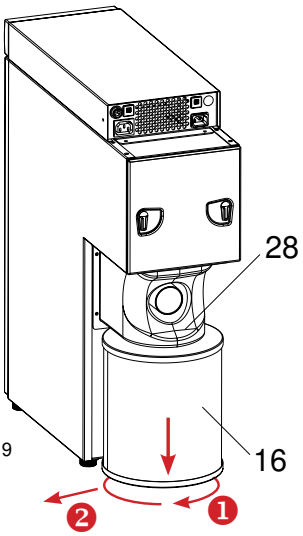


Fig. 19

Options:

- Diffusor M (D-type)
- Hepa filter H14 (H-type)
- Activated carbon filter (C-type)
- Switch the system off at the main switch 29 (fig. 9) and also switch your working appliance off at the associated main switch to prevent inadvertent start-up.

❶ twist the exhaust filter off the exhaust connection in the direction shown.

❷ after that you can remove the filter cartridge to the side or to the rear.

A H-filter or an activated carbon filter can be connected instead of the diffuser (exhaust distributor).
In addition, it is possible using an exhaust connector (special accessory) to feed the air via a pipeline into the open air.

Activated carbon filters must be replaced regularly!
The lifetime depends on the type, quantity and concentration of the extracted media.

3.4 Motor

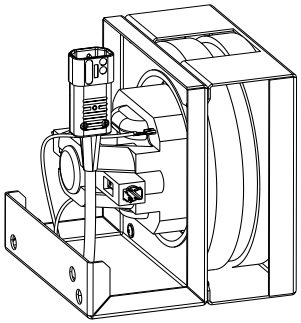


Fig. 20

Due to our innovative motor control, the wear of the motor and the carbon brushes is reduced significantly. Resulting in a maintenance-free runtime of 1500h (ECO) and 1000h (CAM).

Moreover the carbon brushes can be changed more often, enabling a total motor lifetime of several thousands of working hours.

The lifetime depends strongly upon the operating mode (Suction level, Filter filling grade).

Please take care, that in case of a motor change, the diffusor must also be replaced.

(See chapter 3.3)

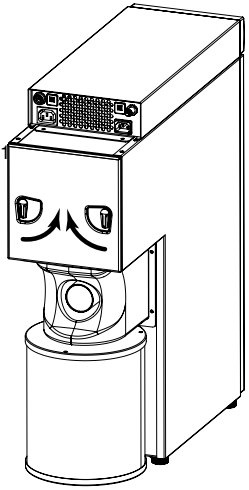


Fig. 21

3.6.1 Motor replacement:

- Remove the suction hose and all plug connections and pull the extraction system out.

❶ first of all, turn the two levers upwards (fig. 17).

Note! Unplug the power cord before opening the appliance!

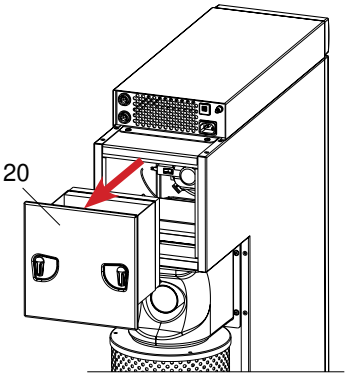


Fig. 22

❷ after that you can pull the sealing plate with silencer out to the rear (fig. 18), at the same time pulling the protective ground contact off the silencer housing on the left.

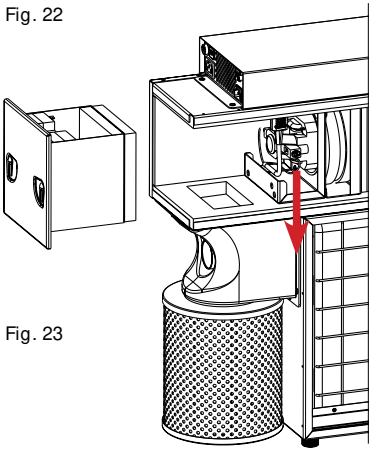


Fig. 23

Caution!

Ensure that the unit is disconnected from the mains power supply!

After unplugging the mains power supply, wait at least 2 min. before proceeding with the replacement of the motor.

❸ now you can disconnect the motor plug on the right-hand side in the appliance (fig. 23).

❹ the motor can then be pulled out to the rear (fig. 24).

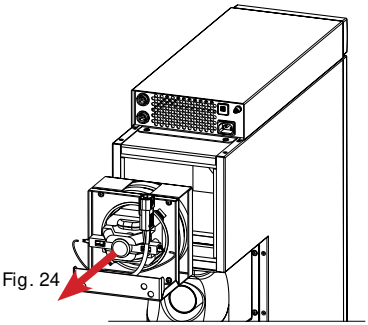


Fig. 24

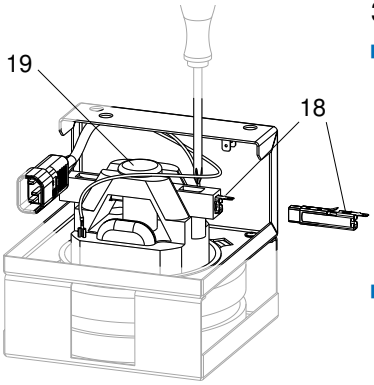


Fig. 25

T4

18	Carbon brushes
19	Motor package
20	Silencer

3.4.2 Carbon brush replacement

- After the brush time (1500h ECO, 1000h CAM) switches the suction system off and the service LED (L5) flashes quickly. By pressing the fan button (T4) for 3s, the error is skipped and it can continue to work for 100 hours while new brushes should be orderd.
- The motor package has to be removed in order to replace the carbon brushes! Using a blunt object, press the metal tongue downwards (fig. 25) and pull the carbon brush holder out. Now push in the carbon brush (see 3.5 Spare parts) until it engages and mount everything in the reverse order.

T1 T2

3.4.3. Reset brush time

- After replacing the carbon brushes the brush time will be reset. Switch on the extraction system with the Power switch (29) off. hold the T1 (minus) and T2 (plus) buttons pressed and turn the power switch (29) on again.

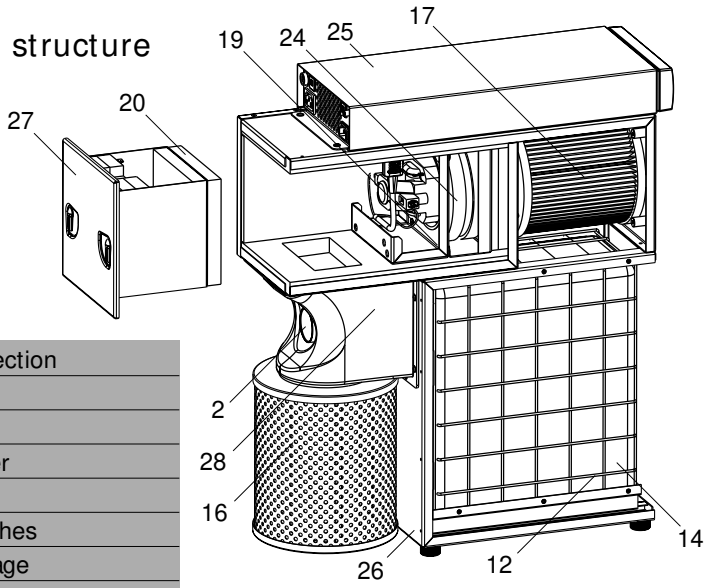
Caution!
Both carbon brushes must be removed after the brush time has expired.
no matter how big their remaining length is, the can still be over 50%. Every reset of the brush time is saved and must not be carried out without replacing the brushes. This will destroy the motor and void the warranty.

3.5 Spare parts

		Order no.
Filter bag		556-040
Filter bags 3pcs.		556-040P
Fine filter	M-type	556-0053
Difusor	D-type	556-0055
H14 filter	H-type	556-0052
Activated carbon filter Z1	C-type	556-0051
Activated carbon refill pack Z1		556-0056
Carbon brushes (1 pair)	220 – 240 V	896-1101
	100 – 120 V	896-1102
Motor module Z1	220 – 240 V	896-1104
	100 – 120 V	896-1105

3.6 Technical structure

Fig. 26



2	Hose connection
12	Filter insert
14	Filter bag
16	Exhaust filter
17	Main filter
18	Carbon brushes
19	Motor package
20	Silencer
24	Motor
25	Electronics housing
26	Filter housing
27	Motor cover
28	Exhaust hood

4. Error Codes

Error indication	Cause	Remedy
LED L4 (Filter condition) 	- Filterbag filled - Fine filter or diffusor clogged - Intake system, suction hose or exhaust clogged - Resistance of intake system too high	- Replace filterbag, fine filter, diffusor - Check intake system, suction hose and exhaust for obstackles - Use intake system with less resitance, more cross section
flashing	The selected suction level can not be reached. (Information only)	- Accept undercut - Replace filterbag - Shorten the cleaning cycles (PRO only)
fast flashing	The factory set min. suction power can not be reached	- Replace filterbag, fine filter, diffusor - Shorten the cleaning cycles (PRO only)
permanent	The factory set min. suction power can not be reached.	
LED L5 (Service)	Malfunction of the motor or motor control	
fast flashing 	Timer carbon brushes expired	- Replace carbon brushes - If no brushes are at hand, reset by pressing ON/OFF button T4 for 3 sec. CAUTION! - Carry out after 100h reset according to section 3.4.3. - If not changing the brushes, the motor will get damaged soon
permanent	Malfunction of the motor or motor control	- Switch OFF the suction unit with the main switch 29 and wait for 2 min. before restarting - Change motor - Contact service

Error indication	Cause	Remedy
Working tool is not working, has no power	- Suction unit is switched OFF or not ready - Fuse(s) 7 is (are) OFF	- Check if the suction unit is switched ON with main switch 29 - Check if there is a malfunction e.g. LEDs “ Filter” or “ Service” is lighted - Check if fuses 7 are ON - Ensure the working tool does not draw more than 600W (120V) or 1300W (230V)
Suction unit has no power, LEDs not lighted	- Local power socket has no power - Main fuse 7 (10A) is OFF	- Check power supply and power cord - Check if fuse 7 (10A) is ON
LED L1 (Suction level) One or more LEDs are flashing	The selected suction level can not be reached, but just the level of the LED which is not flashing due to: - Filterbag filled - Intake system, suction hose or exhaust is clogged - Resistance of intake system too high	- Replace filterbag, fine filter, diffusor - Check intake system, suction hose and exhaust for obstackles - Use intake system with less resitance, more cross section

5. Technical Data

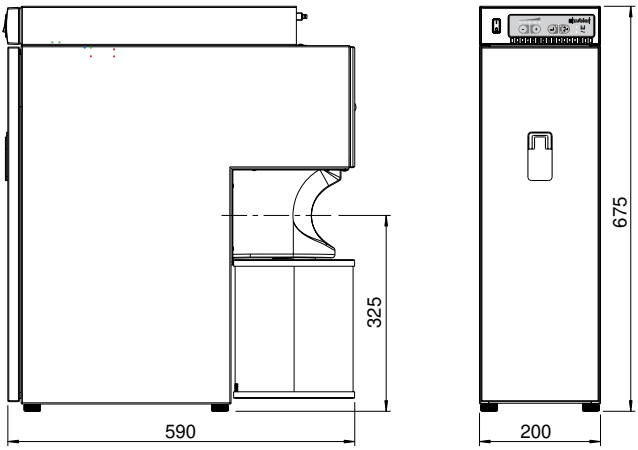


Fig. 27

Dimensions:

Width:		200mm	7.9”
Height:		675mm	26.6”
Depth:		590mm	23.2”
Weight:		28kg	61.7lbs
Voltage:	AC ±5%, 50-60Hz	230V	110V
Power consumption suction:		700W	700W
max. power outlet (ECO):		1300W	600W
max. total power (ECO):		2000W	1300W
Main fuse:		T10A	T15A
Fuse outlet. ECO:		T6A	T6A
Filter bag Capacity approx.:		ca. 11Liters	11.6qt
Main filter surface area:		1,1m²	11.8ft²
Suction flow (CFM):		15-50l/s	32-106cfm
max. Vakuum:		190mbar	2.8psi
Noise level:		42-58dB(A)	

6. Warranty

In case of an appropriate usage, according to the operating manual, we, Zubler GmbH, are granting a warranty of 12 months upon all parts of the suction unit, except wear parts.

Wear parts are carbon brushes and dust filtering elements as filterbags, filter cartridges.

Zubler grants a 3-year warranty for the motor or a running time of 1500 hours. By replacing the carbon brushes in the event of a warning message after the time interval, a significantly longer motor running time can be achieved. Operating the motor with replacement brushes is an option with no warranty.

We, Zubler GmbH are standing for professional and qualified repairs with original spare parts. Therefore we are granting a warranty of 6 months upon every repair performed by us or a certified retailer unless all necessary repairs were performed to enable an unrestricted function.

A warranty can not be claimed in case of:

- Inappropriate usage
- Usage beyond operating conditions
- Violation of operating- or connecting instructions
- Missing regular cleaning, servicing and efficiency testing
- Repairs performed by non-certified personnel
- Usage of non-original spare parts

7. Disposal instructions

7.1 Disposal of consumables

Full dust containers, filters or filter bags are to be disposed of in accordance with the regulations of the specific country or region that governs those laws where the unit is in service. Personal protective equipment is to be worn depending on the degree of contamination of the filter.

7.2 Disposal of the appliance

The appliance must be disposed of by a company that specializes in removal of equipment. The removal company must be informed about any residues in the appliance that could be harmful to health.

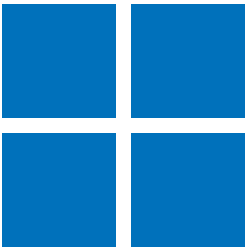
7.2.1 Disposal instructions for EU member states

In order to maintain and protect the environment, prevent environmental pollution and improve the reuse of raw materials (recycling), the European Commission has passed a directive according to which electrical and electronic appliances are taken back by the manufacturer in order to dispose of them properly or recycle them. Appliances marked with this symbol may therefore not be disposed of in the unsorted domestic waste within the European Union. Please enquire to your local authorities regarding proper disposal.

7.2.2 Special information for customers in Germany

Zubler electrical appliances are appliances for commercial use. These appliances may not be taken to municipal collection points for electrical appliances; instead, they are taken back directly by Zubler. You can find out more about current return options online at: www.zubler.de

technical changes without notice! 09.2020.en



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