

● Suction unit
SG-10



SG-10
standard version
(REF 140988)



SG-10
activated carbon version
(REF 140987)

● SERVICE MANUAL

Dear customer,

Thank you for choosing a product from the Wassermann range. Wassermann Dental-Maschinen incorporates the highest standards of quality and the latest technology.

In order to enjoy maximum performance and years of trouble-free operation, please read this service manual carefully before you connect this device and start work, and operate the device according to the recommended guidelines. The operation safety and the functionality of this device can only be guaranteed if you follow both the general safety guidelines and the applying laws to prevent accidents as well as the precautions given in this service manual. We are not liable for any damages which occur due to inappropriate usage or faulty operation of this device.



Make sure that anyone using this device has read and understood this service manual.

Keep this service manual in a safe place where it can be referred to as required at any time.

Company address:

Wassermann Dental-Maschinen GmbH

Rudorffweg 15-17

D-21031 Hamburg, Germany

Phone. : +49 (0)40 / 730 926 – 0 Fax.: +49 (0)40 / 730 37 24

E-mail: info@wassermann-dental.com

URL: <http://www.wassermann-dental.com>

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1 Features

The suction unit SG-10 is used to extract dental dust at the workplace and to extract polishing dust and fine blasting units.

- universal suction unit works with the low pressure principle
- power control is infinitely variable using the control element
- modular filter system for different uses
- innovative filter concept, easy-to-replace filter system
- filter saturation display
- other filters available: from the activated carbon filter to the high-volume plaster pre-filter
- suitable for continuous operation
- high-quality finish
- free from wear and maintenance-free
- recommended version for the Cemat-NT and Puna blasting units

2 Safety guidelines

2.1 Safety symbols used in this manual



Warning!

This is a warning of risk situations and dangers.

Failure to observe this warning could be life-threatening. These warnings has to be observed.



Information!

This symbol draws your attention to specific features that has to be observed.

2.2 Safety guidelines

Configuring and operating this equipment requires ***precise knowledge*** and ***observance*** of the instructions in this ***service manual***. The equipment is designed only for its intended application.



WARNING:

Servicing and repairs should be carried out only by authorised specialists.
Disconnect the power plug before starting any maintenance work.



Make sure that the equipment is connected to the correct power source.



Do not operate the unit without a fan guard or a filterbag! Do not operate the SG-10 in an explosive atmosphere! Do not apply suction to any liquids.

2.3 Responsibility for operation or damage

The responsibility for operating the device lies exclusively with the owner or user if said device is incorrectly serviced, maintained or altered by persons not employed by an authorised dealer or if the device is used in a manner contrary to its specified purpose.

The unit has to be maintained and operated in accordance with this service manual. Wassermann Dental-Maschinen GmbH is not responsible for damage arising from the ***nonobservance*** of these instructions.

Warranty and responsibility provisions contained in the sales and supply conditions of Wassermann Dental-Maschinen GmbH are not extended by these instructions.

3 Application

The suction unit SG-10 is versatile in use, e.g. at dental technician workplaces, with blasting units (e.g. Cemat NT, Puna) or with a polishing splash guard.

Maximum air extraction at low air speed is guaranteed. Only respirable suspended solids are extracted.

The benefits this provides are practically silent operation of the fan motor and quiet running due to the low flow speed of the extracted air. The slow air flow means that even during work over longer periods, the hands do not chill.

The SG-10 has an external rotary potentiometer for fan control and a pilot lamp to indicate filter saturation.

Additionally, the unit's modular structure permits operation with activated carbon and/or a pre-filter setting, e.g. for larger quantities of plaster. Furthermore, a specially developed suction hood is available for the dental technician workplace, hence optimising the suction performance.

Only use the device for this type of application.

4 Before starting

4.1 Transport

Before transporting the unit, ensure that it has been unplugged from the power socket. Make sure that it is packed correctly in order to avoid accidental damage.



Be sure to check for any transport damage when unpacking the goods. Note down any damage if found.

4.2 Installation

Open the box, remove the packing materials, and carefully lift out the device and accessories. Check the included accessories.

The device has to stand horizontally on a steady and even surface.



Install the device in a place where it will not block the working area and the functionality (take the dimensions into account). Make sure that there are about 10 cm of free space on rear side to guarantee air circulation (heat dissipation).



Do not install the unit outdoors or in places without proper ventilation.

Before start-up, be sure the device reaches room temperature.

4.3 Storage

If the unit is to be stored for an extended period, protect it from moisture and dust.

5 Installation / Start-up

1. Remove supply line/control element from the filter below the lid.
2. Make an electric connection.
3. Insert the power plug into the socket, making sure that the mains and the unit operate on the same voltage.

6 Operation

6.1 General operating instructions

All instructions for using the unit, whether in verbal or written form, are based on our own experience and experimentation and can only be regarded as guidelines.

1. The unit can be switched on and off by pressing the rocker switch on the supply line.
2. Start the fan and set the desired level by turning the control element. It can also be used to briefly stop the fan.
3. Use the rocker switch to deactivate the SG-10 during longer interruptions in work.



You have to press the rocker switch on the supply line in order to deactivate the unit!

The control element can be used to stop the fan, but the unit itself is not switched off!



Delayed fan start-up is a feature of this series and permits maintenance-free operation and a longer service life.

7 Troubleshooting

Fault	Cause	Remedy
Filter saturation – red lamp glows	Full filter	Replacing the filter (see 8.2.1)
Motor control does not work	Damaged potentiometer of the speed control	Please contact our service department
Full filter – but red lamp does not glow	Damaged lamp	Please contact our service department
	Damaged differential pressure switch	
Empty filter – but red lamp already glows	Damaged differential pressure switch	Please contact our service department



If the above recommendations do not solve the problem, contact your dental depot or our service department.

8 Care and maintenance

8.1 Cleaning



Disconnect the power plug before starting any maintenance work.

The identification plate has always to be kept in easily legible condition and has not to be removed.



Remove external dirt from time to time with some form of cold cleaner.

Use only cold cleaners to avoid damaging the paintwork or removing the lettering.

The equipment should be cleaned at regular intervals to ensure trouble-free operation. It requires only normal cleaning (sponge, damp cloth, mild detergent) and no further chemical additives.

8.2 Maintenance

The unit does not require any servicing. Just make sure that the device is kept clean.

8.2.1 Replacing the filter

Replacing the filter is part of the maintenance work.

Please replace the filter in the event that the suction performance falls noticeably, and certainly when the pilot lamp lights up.



Regular filter replacement is necessary to ensure maximum dust extraction. The pilot lamp for filter saturation was set to maximum suction performance. It simply indicates that the filter should be replaced; it does not deactivate the fan.

A disposable micro fine dust filterbag is fitted; it must be replaced when dust saturation (red pilot lamp) is reached.

To do this, open the fasteners on the right and the left, remove the lid, take out the filterbag and wrap in the adhesive foil enclosed with the spare filter. Insert the new filter, close the lid.



Depending on their use, activated carbon filters should be replaced when necessary, but after no later than 4 to 6 months. The filter cassette dust class M (secondary filter) should be replaced depending on its use (recommendation: use for no more than 12 months).

8.3 Repairs



Servicing or repairs to the unit has only to be carried out by qualified technicians. Only original spare parts are to be used. Responsibility for the product is voided if unauthorised persons alter it or if inappropriate components are installed.

8.4 Spare parts

If necessary please contact our service hotline phone.

8.5 Service hotline

0049 (0)40 / 730 926 - 0

8.6 Scope of delivery / Accessories

Incl. in delivery:	Item no.
<u>SG-10 standard version</u>	<u>140988</u>
Suction unit SG-10 base	140980
Speed regulator, fitted	140440
Supply line with switchable shock proof plug	140022
Micro fine dust filterbag (yellow) small, dust class M	---

Incl. in delivery:	Item no.
<u>SG-10 activated carbon version</u>	<u>140987</u>
Suction unit SG-10 base	140980
Speed regulator, fitted	140440
Supply line with switchable shock proof plug	140022
Micro fine dust filterbag (yellow) tall, dust class M	610074
Filter extension module (without filter)	140410
Module activated carbon filter (with filter)	140424

Accessories:	Item no.
Spare micro fine dust filterbag, dust class M, 1 set = 4 pieces	611010
Spare micro fine dust filterbag (yellow) tall, dust class M	610074
Spare filterbag for plaster (white) tall, class 1 / class 2	610073
Spare filter cassette, cpl.	140435
Spare activated carbon filter, cpl. (only SG-10 activated carbon version)	140436
Filter extension module (without filter)	140410
Module activated carbon filter (with filter)	140424



Item numbers for setup change SG-10 standard into activated carbon version:
140410 / 610074 / 140424

8.6.1 Use of the filter extension module

In order to fit a larger filterbag or the activated carbon filter, please use the filter extension. To do this, open the fasteners on the right and the left, take off the lid, insert the filter extension and close the fasteners.

Insert the new filter (e.g. plaster filterbag, long) into the filter extension, replace the lid and close using the fasteners on the right and the left.



8.6.2 Operating with activated carbon filter slot

In order to insert the activated carbon filter unit into the device, please first remove the old filterbag (as described under item 8.2.1).

After this, insert the slot already fitted with filters into the unit and fit the intermediate frame.

Then fit the filter extension to the unit (see item 8.5.1), insert the pre-filter (filterbag dust class M, long 340 mm) and close the lid.


In order to replace the activated carbon filter while using the SG-10, please remove the activated carbon filter slot from the unit and replace the used filters.



When fitting, resp. replacing the activated carbon filter, please initially press the 'filter cassette dust class M' (white folded filter) into the slot for activated carbon filter operation in the direction indicated by the arrow (displayed on the filter cassette). The activated carbon module cassette (black cassette) is then fitted.



8.7 Warranty

 The warranty period for our equipment is 12 months. If faults occur within the warranty period, contact your dental depot or get in touch directly with our service department.


Your equipment should only be operated in perfect condition. If faults occur which could harm operators or third parties, the unit should not be used until it has been fixed.

This warranty does not cover damage caused by improper use, external mechanical causes, transport damage or interference with the unit by unauthorized persons.

9 Technical data

<u>SG-10 standard version</u>	<u>Item no.: 140988</u>
<u>SG-10 activated carbon version</u>	<u>Item no.: 140987*</u>
Voltage ^(*)	220–240 V / 50/60 Hz
Power consumption	0.75 A
Output	110 W
W x H x D	348 (without plug) x 423 x 270 mm 348 (without plug) x 672 x 270 mm*
Weight	8.2 kg depends on version
Sound level	< 70 dB (A)
Suction capacity	600 m ³ /h (free-blowing) 270 m ³ /h (operating state)
Extractor nozzle	Ø 75 mm exterior

^(*)Other voltages on request

 The noise level of the unit amounts to ≤ 70 dB (A).
The emission value may be higher, depending on the number and the operating conditions. Please take suitable protective measures (e.g. ear protectors).

 The technical data are subject to change without prior notice.

10 EC Conformity Certificate

in accordance with 2006/95/EG (low-voltage guidelines) and 2004/108/EG (EMV guidelines) and 2006/42/EG (machinery guidelines)

Manufacturer:	W A S S E R M A N N Dental-Maschinen GmbH Rudorffweg 15 - 17 D-21031 Hamburg	Product description:	Suction unit for dental applications
Model:	SG-10 standard version SG-10 activated carbon version	Item no. 140988 Item no. 140987	
Applicable standards:	DIN EN 61010-1 DIN EN 61000-6-3 DIN EN 61000-6-1 DIN 45635-1 DIN EN 60335-1		

Hiermit wird bestätigt, dass die oben bezeichnete Maschine den genannten EG-Richtlinien entspricht. Diese Erklärung wird ungültig, falls die Maschine ohne unsere Zustimmung verändert wird.

This is to confirm that the above mentioned machine complies with the described EC rules. This declaration becomes invalid if the machine is modified without our approval.

Cette machine est conforme aux normes en vigueur de la Communauté Européenne. Cet avis est nul et non avenant si cette machine est modifiée sans notre accord.

Esta máquina, anteriormente mencionada, cumple con los límites requeridos por el reglamento EC. Ahora bien, esta declaración quedará invalidada en caso de realizar modificaciones al aparato sin nuestra aprobación.

Hiermee wordt bevestigd dat bovengenoemde machine voldoet aan de voorgeschreven EU normen. Deze verklaring verliest geldigheid als er zonder onze uitdrukkelijke toestemming wijzigen aan de machine worden aangebracht.

Place, date: Hamburg, 13.08.14

Company stamp:



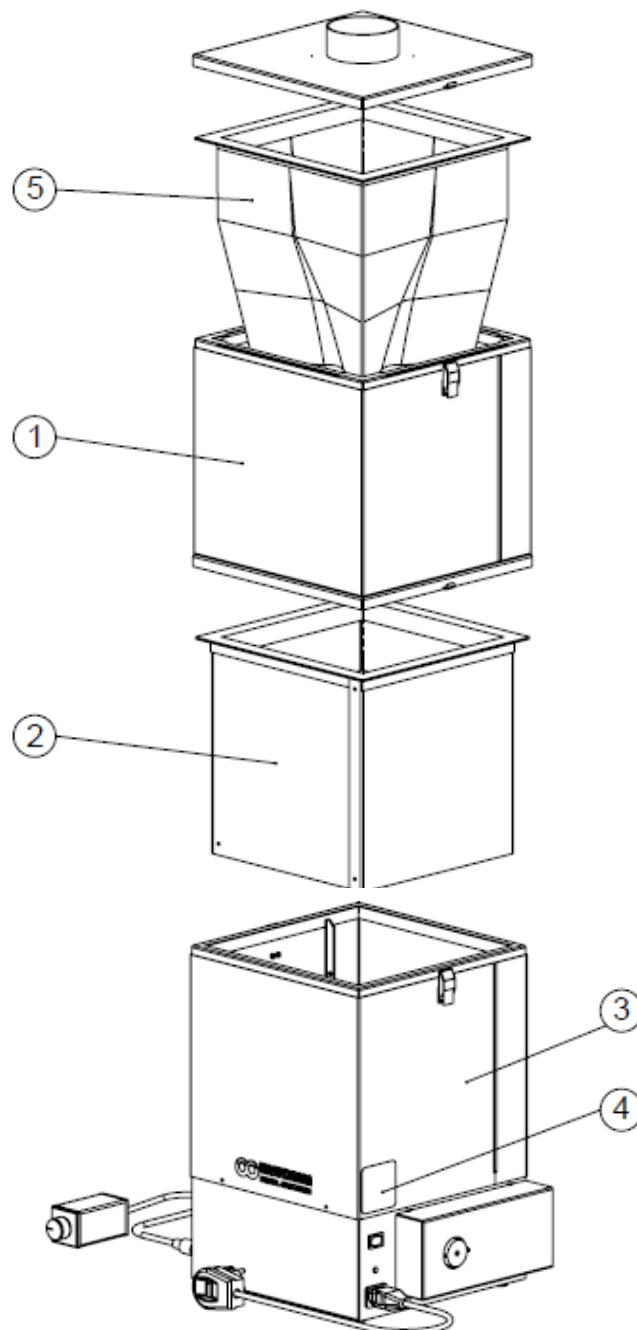
Signature : _____
Wilfried Wassermann
(Managing Director)



11 Technical drawings and spare parts

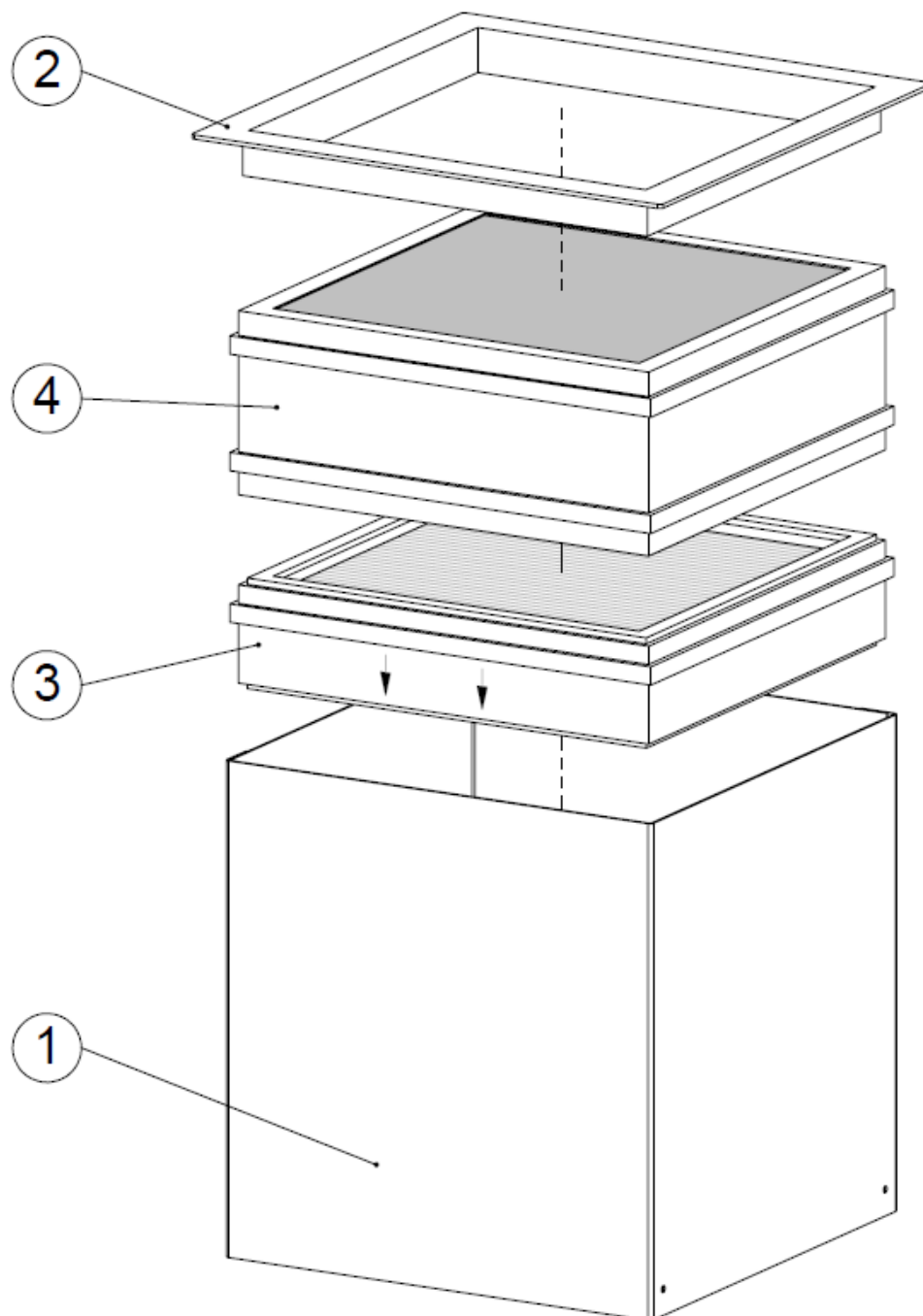
11.1 Construction SG-10 (incl. activated carbon filter)

1	REF: 140410	Filter extension module (without filter)
2	REF: 140424	Module activated carbon filter (with filter)
3	REF: 140980	Suction unit SG-10 base
4	REF: 310035	Identification plate (serial number etc.)
5	REF: 610074	Spare micro fine dust filterbag (yellow) tall, dust class M

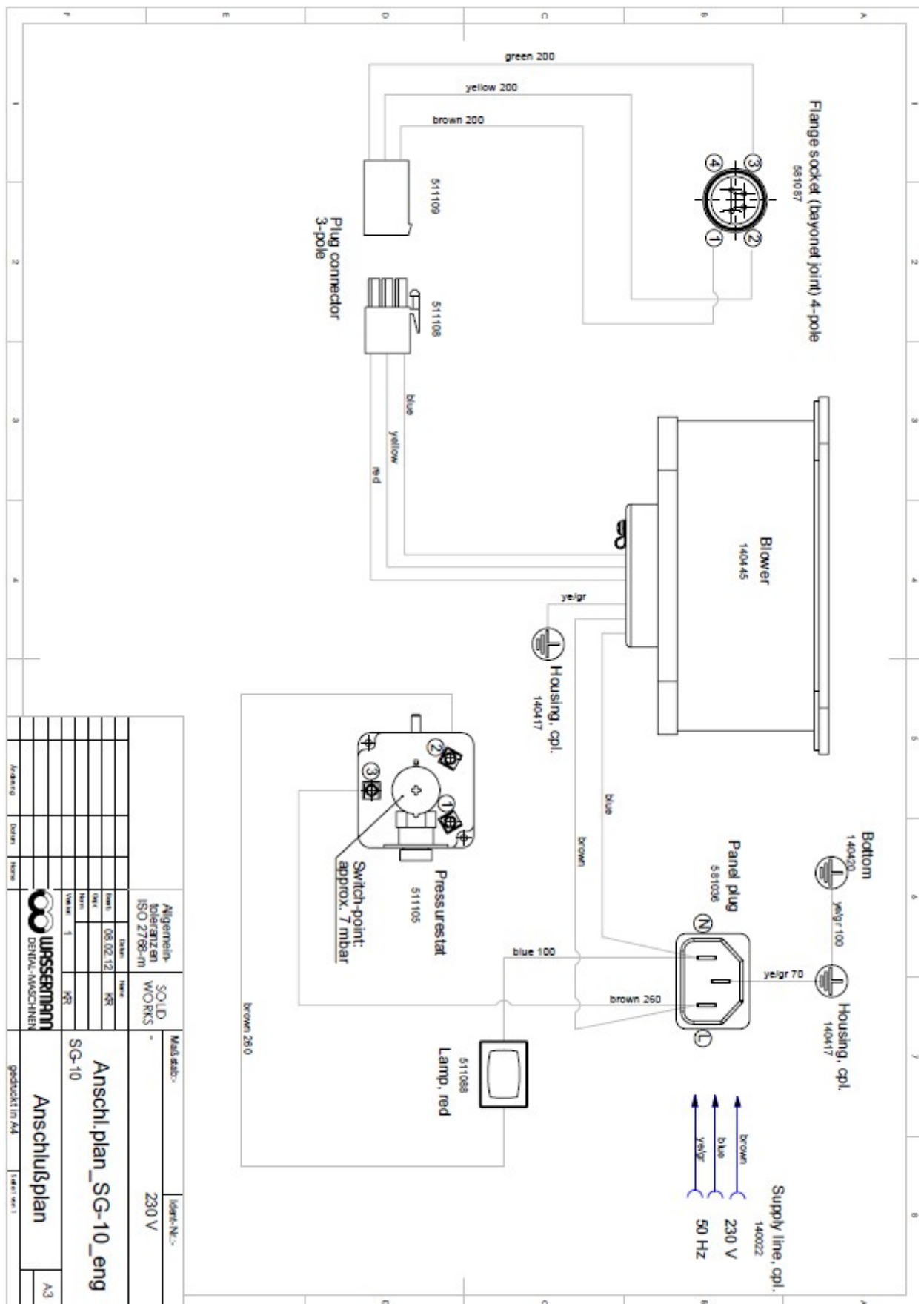


11.2 Construction module activated carbon filter (REF: 140424)

1	REF: 140426	Filter casing, cpl. SG-10
2	REF: 140427	Filter frame, cpl. SG-10
3	REF: 140435	Spare filter cassette, cpl.
4	REF: 140436	Spare activated carbon filter, cpl.



12 Wiring diagram



Wassermann Dental-Maschinen GmbH
Rudorffweg 15-17 · D-21031 Hamburg
Tel.: +49 (0)40 730 926-0 · Fax: +49 (0)40 730 37 24
info@wassermann-dental.com