

Suction Drawers **LSG-02 D and LSG-02 DE**



LSG-02 DE equipped with an auto-start-system



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.



The unit complies with the relevant EU guidelines.



The unit is subject to the EU guidelines 2012/19/EU (WEEE Directive).

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1 Features

The LSG-02 D/DE is used for extracting dust.

The LSG-02 D has an automatic level check, which stops the unit when the filter is full, while triggering the red warning light. In that case the filter has to be changed.

Switching the unit off cancels the signal. The filter capacity is pre-set at the factory.

The LSG-02 DE has an automatic level check and an automatic restart device. As soon as the handpiece motor is used, the extractor unit cuts in automatically. It incorporates a 20-second delay to allow for short breaks in the work process.

- Comfortable and durable single workbench suction with high degree of effectiveness
- Switches off automatically at filter saturation point – also all peripheral appliances
- Optical display when filter change is required
- Installation without difficulty, easy to operate, fast filter change
- Made entirely of metal
- Detachable safety screen in front of the work area
- Long-life brushless motor
- Suitable for continuous operation, switchable
- Practical accessory variations with possibility of later assembly: Gold and debris drawer optionally available as additional drawer, as well as a long-life monomer activated carbon filter
- LSG-02 DE: In addition with a practical automatic switch-on device for the automatic start of the suction by the motor handpiece and with an integrated run-on device for even more high safety and health in the workplace

2 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.

3 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.

4 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.

4.1 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.

5 Application

The LSG-02 D/DE extractor drawers are technically proven and solid items of equipment made entirely of metal. Once pulled out, the drawers switch on automatically as soon as you start work. If a finishing motor is attached to the extractor, it starts as soon as the drawer is pulled out. This connection automatically switches the handpiece motor off again as soon as the drawer is pushed in. Working without dust extraction is not possible with this configuration.

Only use the device for this type of application.

6 Before Starting

6.1 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.

6.2 Installation

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



Install the device in a place where it will not block the working area and the functionality (take the dimensions into account).



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

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

6.3 Storage

The unit location is very important when it comes to workplace safety, even if it is only to be set up there for a short period. The room should be dry, well ventilated and vibration-free. An even temperature and wooden supports also help. The unit should not be stored or set up outdoors. If the unit is to be stored for an extended period, protect it from moisture and dust.

7 Start-up/ Installation

7.1 Assembly (Basic Version without Accessory Additional Drawer)

To mount the unit, first pull the drawer slowly out of the holding frame until it stops.

Then carefully push the black plastic hook visible on the side of the rails in direction of arrow.

Now the frame can be removed from the suction drawer.

Attach the frame to the table plate.

The front screw hole should be 110 mm from the front edge of the plate.

Fasten the frame with 4 x M5 metal screws or 5 mm strong wood screws.

Then carefully insert the drawer into the guide rails of the mounted frame until the plastic hooks click into place, thus limiting the drawer extension.

Finally, insert the power plug into the socket, making sure that the mains and the unit operate on the same voltage.

7.2 Assembly/ Retrofitting with Accessory Additional Drawer, Item No. 145005)

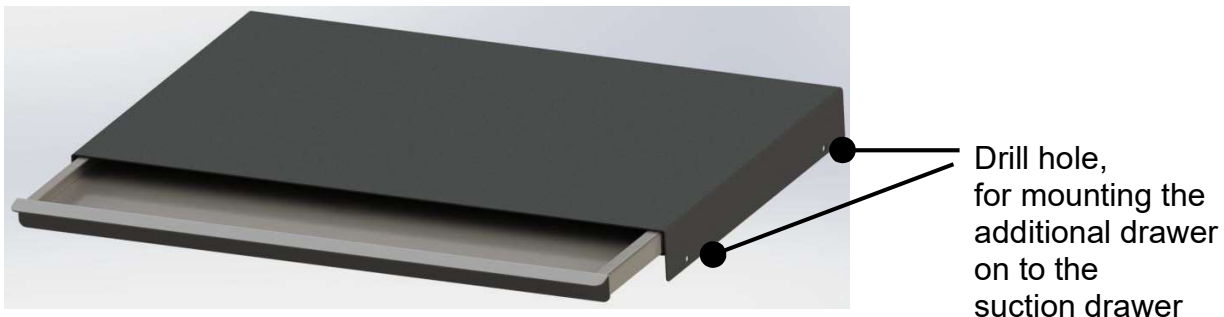
Pull the suction drawer slowly out of the holding frame until it stops.

Then carefully push the black plastic hook visible on the side of the rails in direction of arrow.

Now the frame can be removed from the suction drawer.

Retrofitting: If the LSG is already mounted under the table now it is possible to pull out the suction drawer completely.

To retrofit the additional drawer now untighten the 4 slotted screws of the LSG, put the additional drawer on to the suction drawer and retighten them again.



Loosen the guide rail screws on the right and left side of the holding frame, and move the guide rails from the top 3 holes into the lower 3 holes.

Retrofitting: If the mounting frame is already mounted, we recommend to unscrew the already mounted holding frame temporarily from the table plate.

Attach the frame to the table plate.

The front screw hole should be 110 mm from the front edge of the plate.

Fasten the frame with 4 x M5 metal screws or 5 mm strong wood screws.

Then carefully insert the suction unit with mounted additional drawer into the lower guide rails of the mounted frame until the plastic hooks click into place, thus limiting the drawer extension.

Finally, insert the power plug into the socket, making sure that the mains and the unit operate on the same voltage.

8 Operation

8.1 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. Press the (green) rocker switch.
2. A microswitch starts the extractor and any attached finishing motor as soon as the draw is pulled out.



Switch the unit off if it will not be used for an extended period.

8.2 How to set the automatic switch-on facility of LSG-02 DE

- 1.) Pull the drawer completely out of the mounting frame. On the upper site of the unit there is a plastic blank plug, under which the potentiometer for setting is situated.
- 2.) Switch on the Suction-drawer, switch on the Automatic-starting.
- 3.) Turn the potentiometer with the help of a little screwdriver very slowly anti-clockwise until it blocks.
- 4.) Let motor run, a little higher than lowest speed, recommended speed 5.000 min^{-1}
- 5.) Turn the potentiometer very slowly and carefully clockwise up to that point the suction unit starts.
- 6.) Setting is finished.

9 Troubleshooting

9.1 LSG-02 D

Fault	Cause	Remedy
Filter saturation - red light comes on	Filter full	Change filter or switch to continuous operation
Green rocker switch comes on but nothing happens	Faulty mains switch	Mains switch must be replaced

9.2 LSG-02 DE

Fault	Cause	Remedy
Filter saturation - red light comes on	Filter full	Change filter or switch to continuous operation
Green rocker switch comes on but nothing happens	Faulty mains switch	Mains switch must be replaced
No control from micromotor	Trim potentiometer not adjusted	Adjust trim potentiometer to match model



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

10 Care and Maintenance

10.1 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.

10.2 Maintenance

Filter change (optical display when filter change required).

In spite of changing the filter if required the LSG-02 D / LSG-02 DE does not require any servicing. Just make sure that the device is kept clean.

10.3 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.

10.4 Spare Parts

If necessary please contact our service hotline phone.

10.5 Service Hotline 0049 (0)40 730 926 -20/ -24

10.6 Scope of Delivery/ Accessories

Included in delivery:

- Safety screen, acrylic glass 195 x 176 x 3 mm
- Micro fine dust filterbag (yellow), dust class M
- Supply line

Accessories	Item no.
Additional drawer (can also be retrofitted)	145005
Mounting frame for KaVo tables	145006
Universal extractor hood with base plate	145200
Module activated carbon filter, cpl.	145240
Spare activated carbon filter	610056
Spare micro fine dust filterbag (yellow), dust class M, 1 set = 3 pieces	611015
Spare filterbag for plaster (white), class 1 / class 2, 1 set = 3 pieces	611017

11 Technical Data

LSG-02 D	REF. 145998
LSG-02 DE	REF. 145997*
Voltage	220–240 V / 50/60 Hz
Output	105 W
Power consumption	0.5 A
Power consumption peripheral appliance	max. 2 A
W x H x D/D max.	445 x 190 x 505/720 mm
Weight	17.2 kg, 17.5 kg*
Sound level	61 dB (A)
Suction capacity	360 m ³ / h (free-blowing)

Other voltages on request.

The noise level of the unit amounts to ≤ 70 dB (A).



Technical changes reserved.

12 Disposing of the Unit

The unit has to be disposed by an authorized recycling operation. The selected company has to be informed of all possibly health-hazardous residues in the unit.

12.1 Information on Disposal for Countries within the EU



To conserve and protect the environment, prevent environmental pollution and improve the recycling of raw materials, the European Commission adopted a directive that requires the manufacturer to accept the return of electrical and electronic units for proper disposal or recycling.

Within the European Union units with this symbol should not therefore be disposed of in unsorted domestic waste.

For more information regarding proper disposal please apply at your local authority.

13 EU Declaration of Conformity

in accordance with 2014/35/EU (Low Voltage Directive) and 2014/30/EU (Electromagnetic Compatibility Directive) and 2006/42/EC (Machinery Directive) and 2011/65/EU (RoHS Directive)

Manufacturer : W A S S E R M A N N Product description : Suction Unit for
Dental-Maschinen GmbH dental application
Rudorffweg 15-17
21031 Hamburg
Germany

Model : LSG-02 D REF. 145998
LSG-02 DE REF. 145997

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 EU-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 EU guidelines. This declaration becomes invalid if the machine is modified without our approval.

Cette machine est conforme aux normes en vigueur d'Union 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 UE. 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 wijzigingen aan de machine worden aangebracht.

Place, date: Hamburg, 2020-02-28

Company stamp :

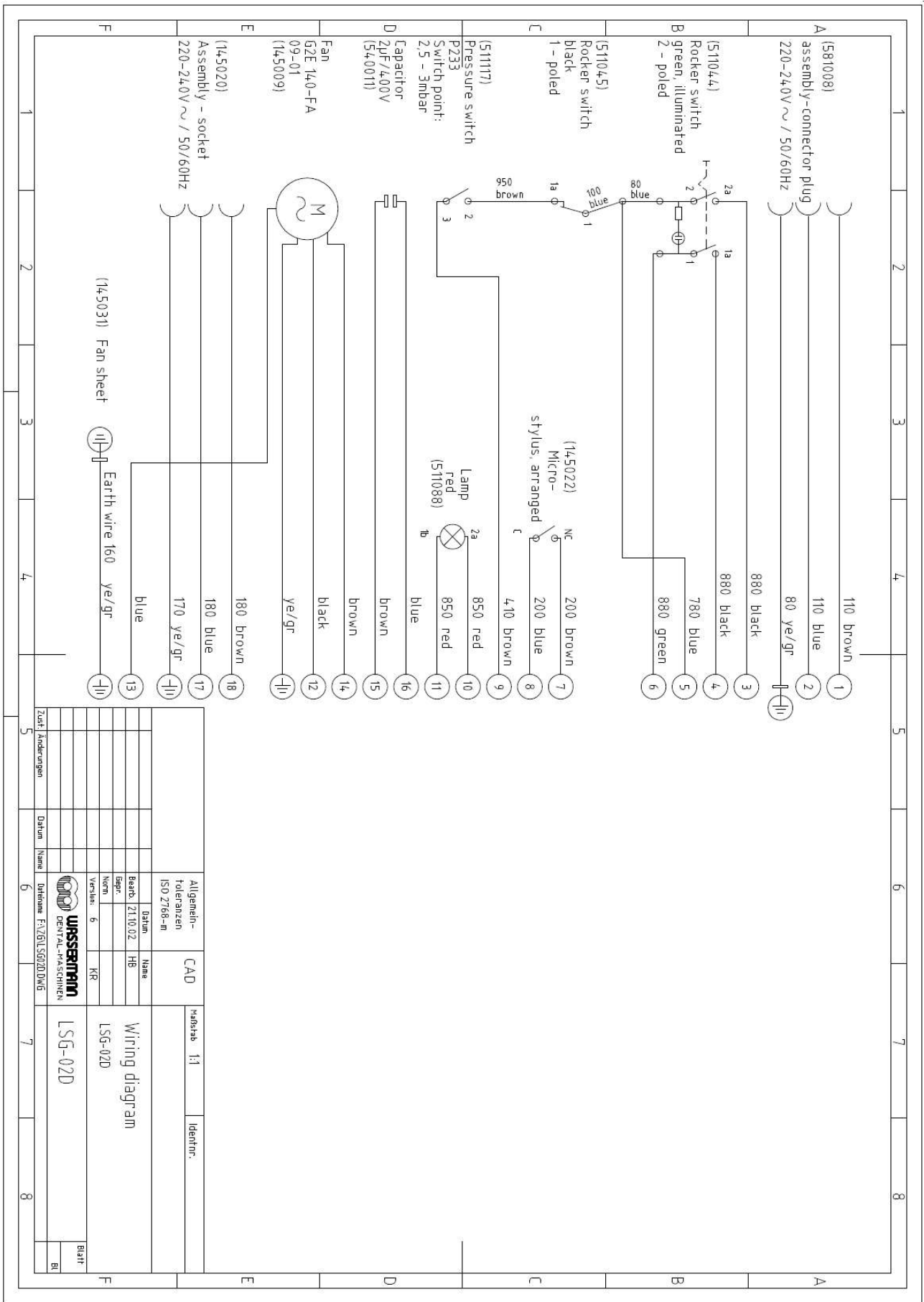


Signature: _____
Sven Wassermann
(Managing Director)

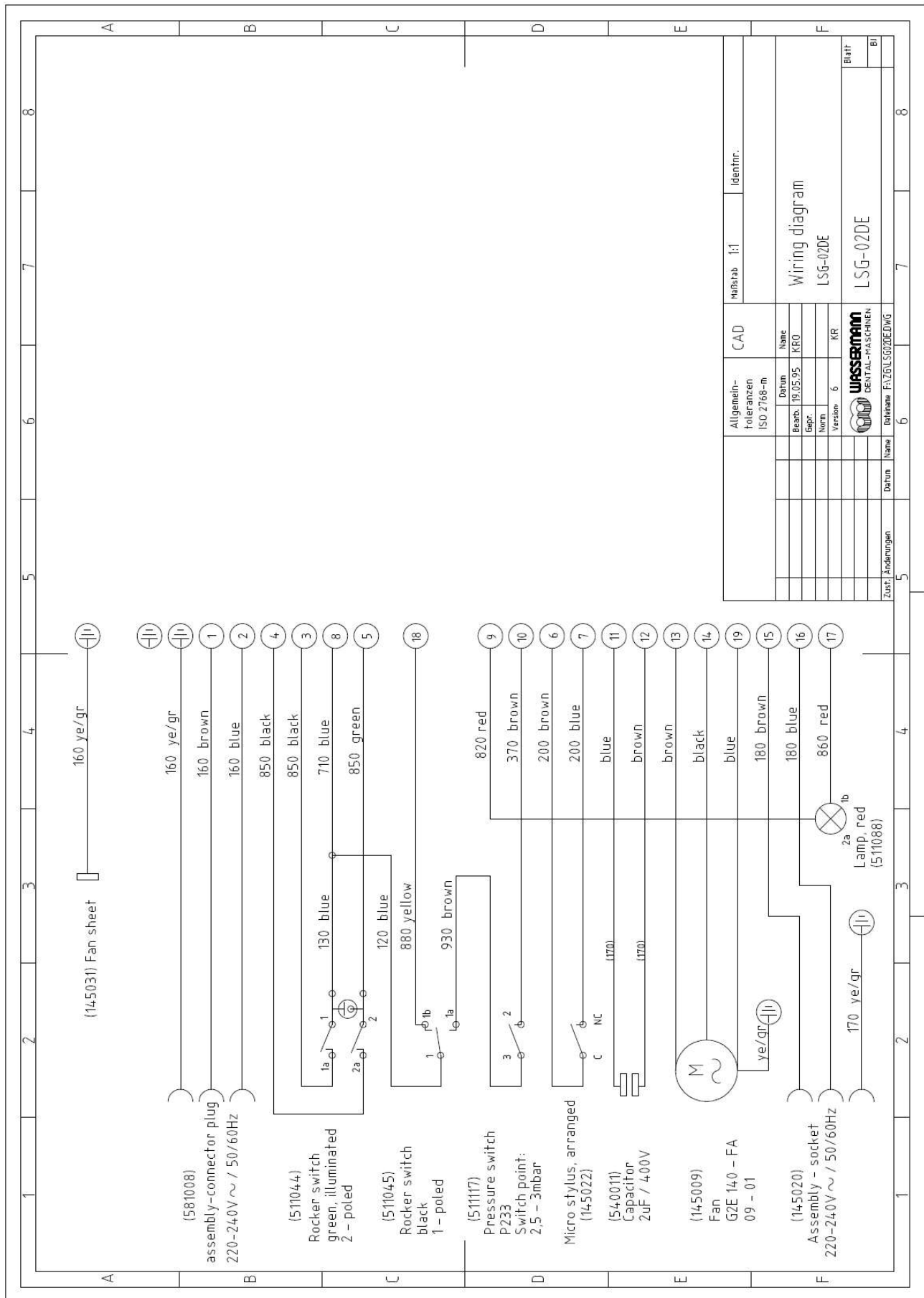


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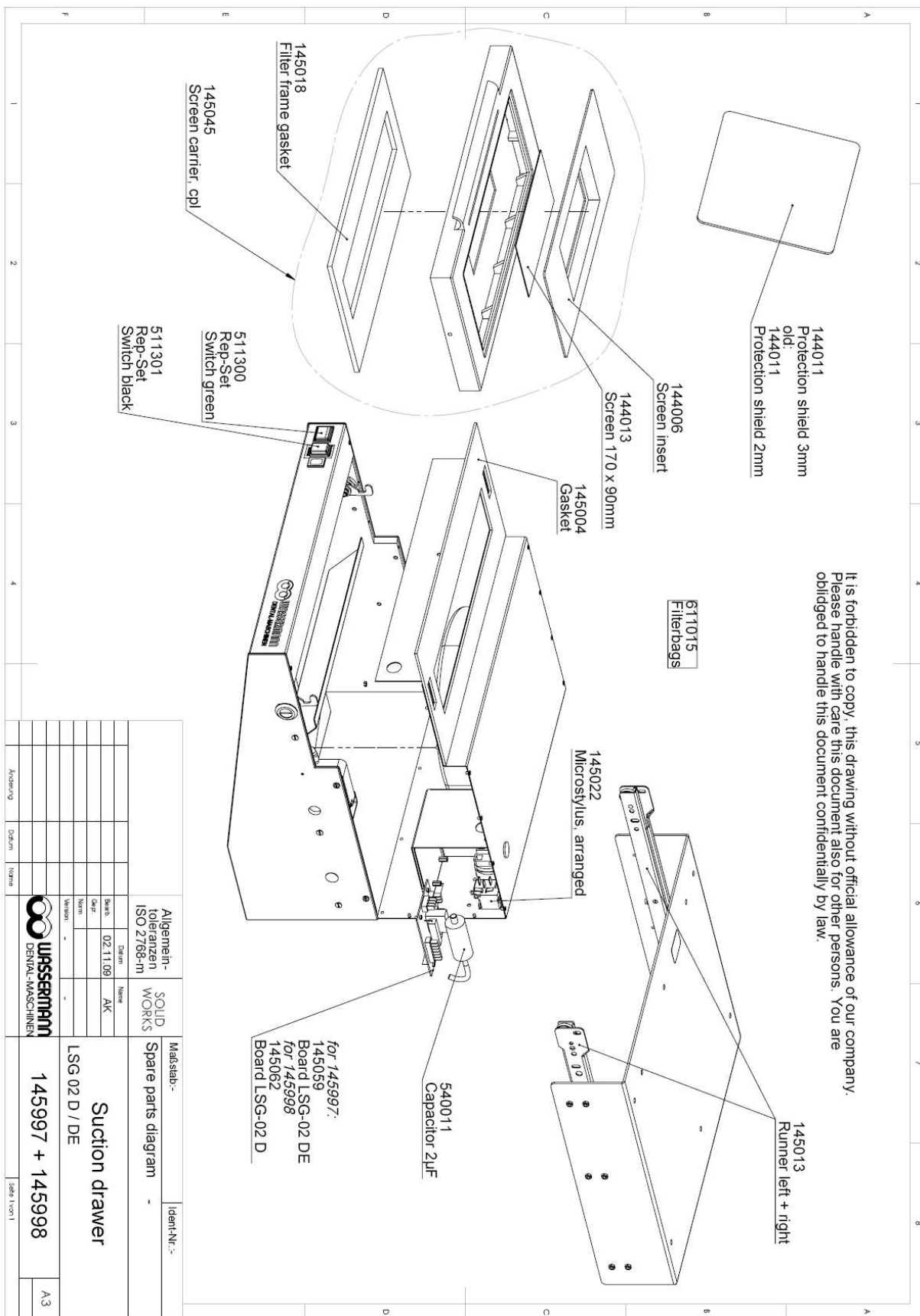
14 Wiring Diagram LSG-02 D



15 Wiring Diagram LSG-02 DE



16 Spare Part Diagram LSG-02 D/DE



It is forbidden to copy, this drawing without official allowance of our company.
Please handle with care this document also for other persons. You are
obliged to handle this document confidentially by law.

Allgemein- toleranzen ISO 2768-m		SOLID WORKS		Markenab- Spare parts diagram	Ident-Nr.:-
Bezahl.	02.11.09	AK		Suction drawer	-
Ger.					
Norm					
Version					
LSG 02 D / DE		145997 + 145998		A3	

Notes:



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