

Polishing Compact Unit **WP-Ex 3000 II** with Speed Regulator



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

- Compact and powerful stainless steel polishing unit for daily lab use
- Powerful, durable and maintenance-free induction motor
- 2 settings, 1500 bzw. 3000 min⁻¹
- Adjustable from 750–6000 min⁻¹
- Jacket-cooled motor, dust protected
- 9 mm standard cone on end of shaft for mounting brush spindle
- Two extra large micro fine dust filterbags, easy to replace
- Impact-resistant, adjustable security protection sheed and integrated daylight LEDs
- LED spot included in delivery
- Two easily removable full rubber polishing troughs
- Various safety systems
- Low-noise extractor
- Housing made of stainless steel
- Integrated drawer
- Emergency off-switch and restart protection guarantee safety at work

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.




- The retaining brackets (white) have to be above the filter frame so that the filter bag is fixed in place, and the cover must be closed.
- The main switch also functions as safety switch. If the power supply is interrupted, the switch returns to the neutral position in order to prevent an uncontrolled operation of the motor when the power supply is restored.
- The fuse of the **WP-Ex 3000 II** is located next to the socket of the supply line plug.

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


This polisher is used for polishing dental appliances. Its integrated suction system guarantees optimum performance.

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.

-  For transport ex works the polishing motor is supported by a stable paperboard block. Please remove this transit support before using the unit. After removing the cardboard box also the integrated drawer can be opened easily.

-  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 each 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.

6.3 Storage

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

The polisher 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 polisher should not be stored outdoors.

7 Installation/ Start-up



Before starting the unit, connect up the following:

7.1 Installing and Removing the Brush Spindles

The nuts must first be removed before you install the brush spindles. Use a cloth to ensure that the shaft ends are free of grease and then remount the nuts.

Use compressed air to remove any dust and dirt from the brush spindles.

Then install the spindles as marked: **L = left and R = right**. Fix the spindles in place by tapping lightly and carefully on the tip of the taper using a hammer and a plastic block.

Do not use force as this could damage the bearings and void the warranty.

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

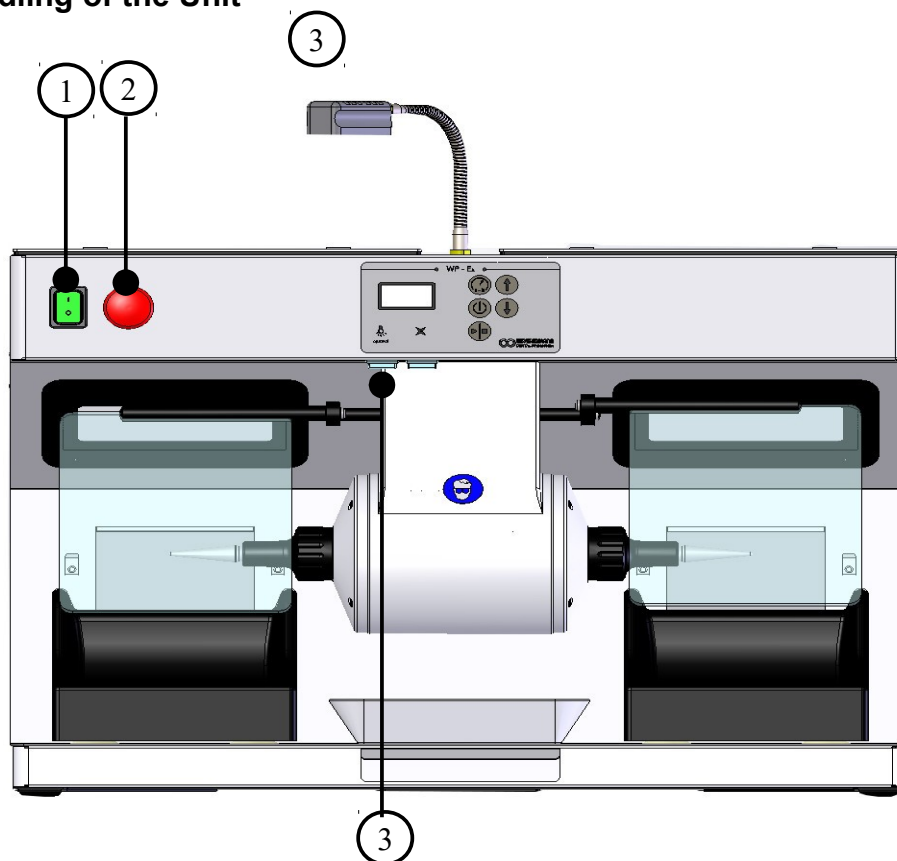
When the motor is on, the spindles must run true. If they do not, repeat the installation process.

8 Operation

8.1 General Operating Instructions

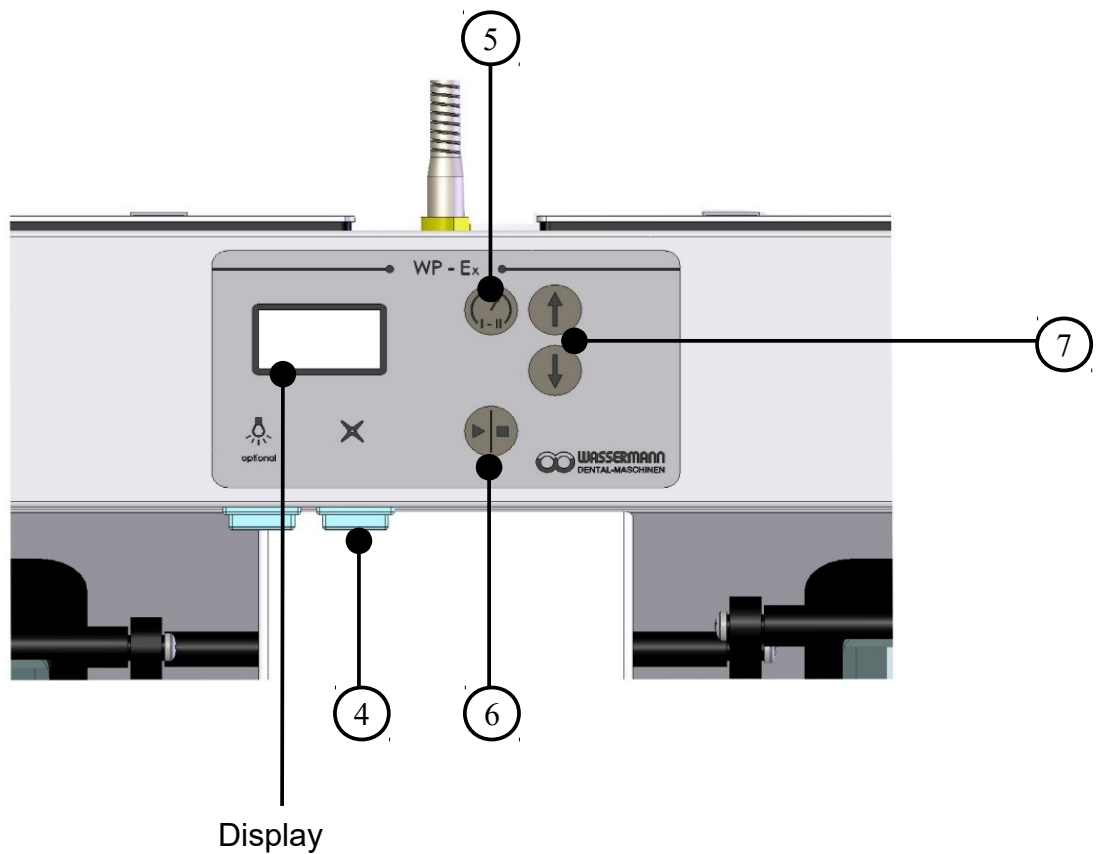
All instructions for using the unit, whether in verbal or written form, are based on our own experience and experimentation and can only be regarded as guidelines.

8.2 Handling of the Unit



The WP-3000 Ex II is turned on with the main switch. The motor speed is controlled using the arrow keys. The extraction and the LED spot can be manually turned on and off.

- | | | |
|----------------|---|--|
| Main Switch: | ① | The device is powered. The lighting is on. |
| Emergency off: | ② | Once applied, the motor is de-energized. The motor starts again by pressing the button „motor start / stop“ ⑥. |
| Toggle switch: | ③ | LED Spot on/off |



Toogle switch:

④

on and switch-off of the suction

Button

⑤

speed 1500 min^{-1} bzw. 3000 min^{-1}
adjustable during the operating

⑥

motor start / stop

⑦

with arrow keys speed adjustable during
the operating

9 Troubleshooting

| Fault | Cause | Solution |
|-------------------------------|---------------------------------------|--|
| Spindles do not stay in place | Spindles too loose | Use light hammer taps to fix spindles in place |
| Spindles cannot be undone | Spindles located too firmly on tapers | Contact our service department |
| Little to no suction | Filter bag full | Replace filter bag |
| Bearing noise | Faulty bearing | Contact our service department |
| Light does not work | LEDs defective | ATTENTION: The LEDs right and left are in series. That means both LEDs do not work although perhaps only one of them is faulty. Please check this in advance and replace only the faulty LEDs. |
| No function | Fuse is damaged | Check the fuse. Disconnect the power plug before starting any maintenance work. Change the fuse if necessary: REF 582013 FUSE 6.3 A M |



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.




Make sure the disassembly nuts for the brush spindles remain clean within the holes. Pay particular attention when polishing with pumice.



When undoing the nuts, remember that the **left side has a right-hand thread** and the **right side a left-hand thread**.

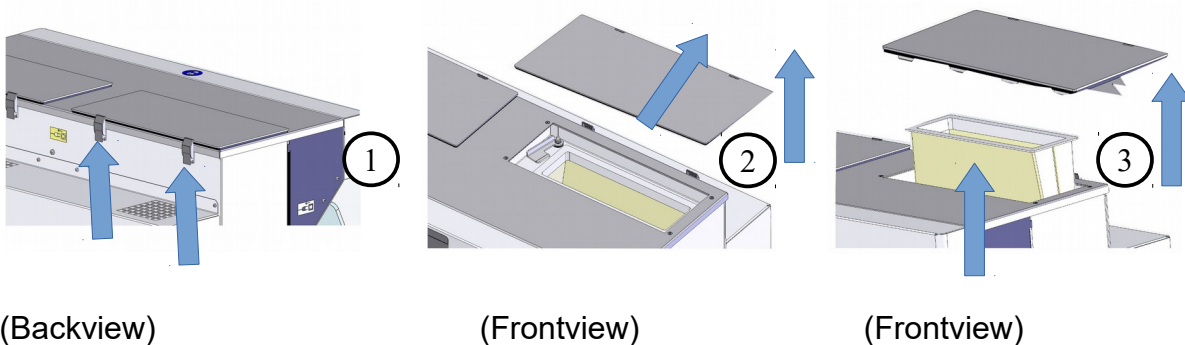
10.2 Maintenance

The unit does not require any servicing. Just make sure that the device is kept clean and a matched filter change should take place according to the needs.

-  The unit is equipped with 2 extra large micro fine dust filterbag.
If the suction power decreases, please change the filter!

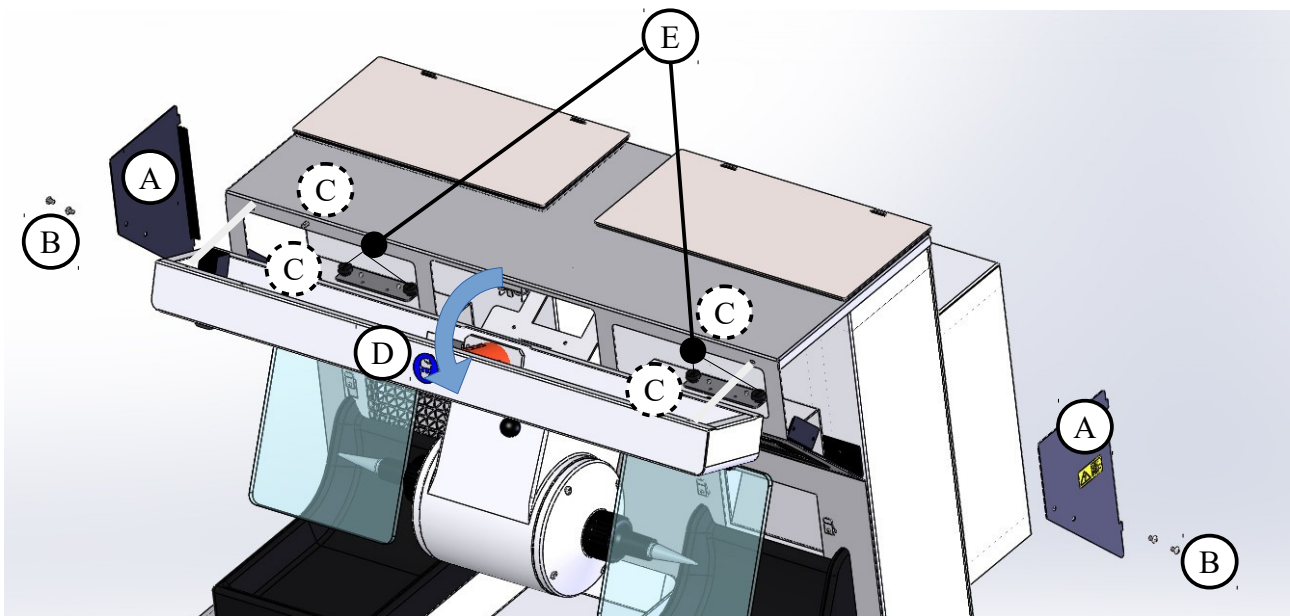
10.2.1 Filter and Changing the Filter

Open the two clamps on the rear panel. Then the cover can be slid back and be removed. Turn the retaining brackets (white) above the filterframe sideways, so that the filterbag can be changed. Insert new filterbag, making sure that the filterbag is smoothly inserted into the unit. Afterwards the retaining brackets (white) have to be turned back above the filter frame so that the filterbag is fixed in place. Replace the cover, slide forward and secure with two clamps. Do the same with the second cover and the second filter.



- ① Loose the clamps
- ② Lift the lid in the back slightly and push it backwards
- ③ Remove the cover and change the filter.

10.2.2 Changing the Integrated LEDs



Disconnect the power plug before starting any maintenance work.



ATTENTION: The LEDs right and left are in series. That means both LEDs do not work although perhaps only one of them is faulty. Please check this in advance and replace only the faulty LEDs.

- To open the service covers [A] on the right and left side of the unit unscrew the four screws [B] by using an Allen wrench.
- Then loose the four knurled screws [C] of the cover [D] inside the unit .
- The cover has not to be removed completely. It can be carefully hinged down and placed on the engine.
- Resolve the plug connection of the LED power cable.
- Dissolve now the two knurled screws [E] and remove the defective LED strip from the white retaining plate.
- Then insert the plug of the new LED bar in the plug connector and tighten the new LED strip with the knurled screws [E].
- Now fold up the cover [D] and tighten the four knurled screws [C] inside the unit hand-screwed.
- Insert service covers [A] right and left and fix each with the two screws [B].

10.2.3 Changing the Fuse

The fuse of the **WP-Ex 3000 II** is located next to the socket of the supply line plug.
Remove the damaged fuse and insert a new one.

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 parts: | Item no. |
|--|-----------------|
| Brush spindle right | 152022 |
| Brush spindle left | 152025 |
| Supply line | 592012 |
| Micro fine dust filterbag, 1 set =2 pieces | 611005 |
| Polishing trough, 2 pieces | 2 x 146503 |
| Drawer (W 621 x H 23 x D 219 mm) | 146388 |
| Storage bowl (W 257 x H 40 x D 198 mm) | 830409 |

| Accessories/ Spare parts: | Item no. |
|--|-----------------|
| Brush spindle right | 152022 |
| Brush spindle left | 152025 |
| Brush spindle 125 mm right | 152043 |
| Brush spindle 125 mm left | 152044 |
| Stone holder right | 152056 |
| Stone holder left | 152057 |
| Drill chuck right 1-6 mm clamping | 152049 |
| Micro fine dust filterbag, 1 set =2 pieces | 611005 |
| Storage bowl (W 257 x H 40 x D 198 mm) | 830409 |
| Suction protective grid | 146396 |
| Daylight LED spot* | 146390 |
| Fuse 6.3 A M | 582013 |

*Included in the standard scope of delivery, already mounted at the **WP-Ex 3000 II**.

11 Technical Data

| | |
|----------------------|---|
| WP-Ex 3000 II | Item no.: 146979 |
| Voltage | 220–240 V / 50/60 Hz |
| Power consumption | 2.8 A |
| Output | 650 W |
| Fan capacity | 445 m ³ /h (free-blowing) |
| W x H x D | 680 x 486 (with LED spot + 140 mm) x 527 mm |
| Weight with motor | 52 kg |
| Sound level | ≤ 65 dB (A) |
| Speed | 750-6000 min ⁻¹ adjustable |

Other voltages on request.

The noise level of the unit amounts to ≤ 65 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: Polishing
Dental-Maschinen GmbH Compact Unit for
Rudorffweg 15-17 dental
21031 Hamburg applications
Germany

Model: WP-Ex 3000 II Item no. 146979

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 wijzigen aan de machine worden aangebracht.

Place, date: Hamburg, 2021-03-23

Company stamp :

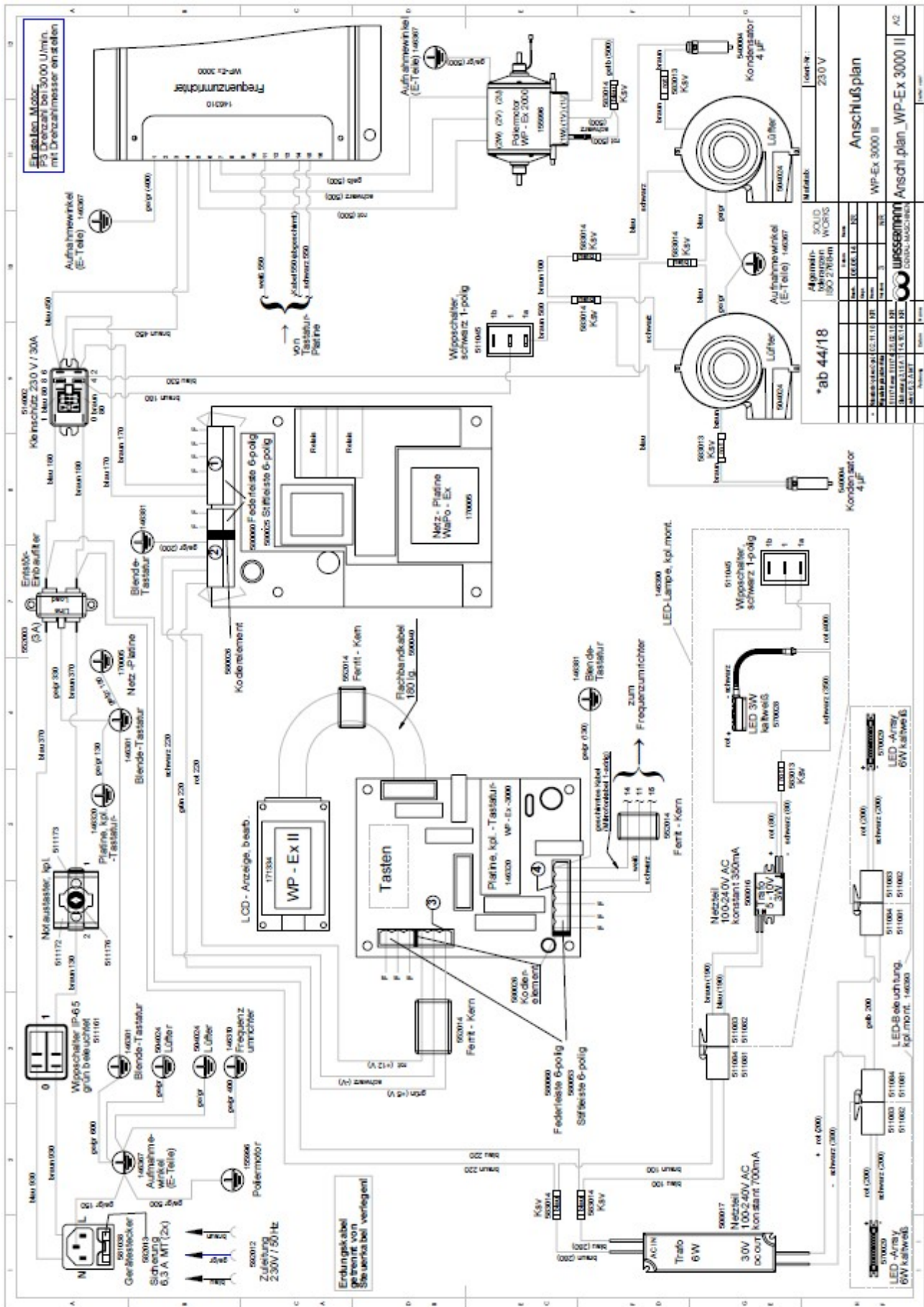


Signature: _____
Sven Wassermann
(Managing Director)

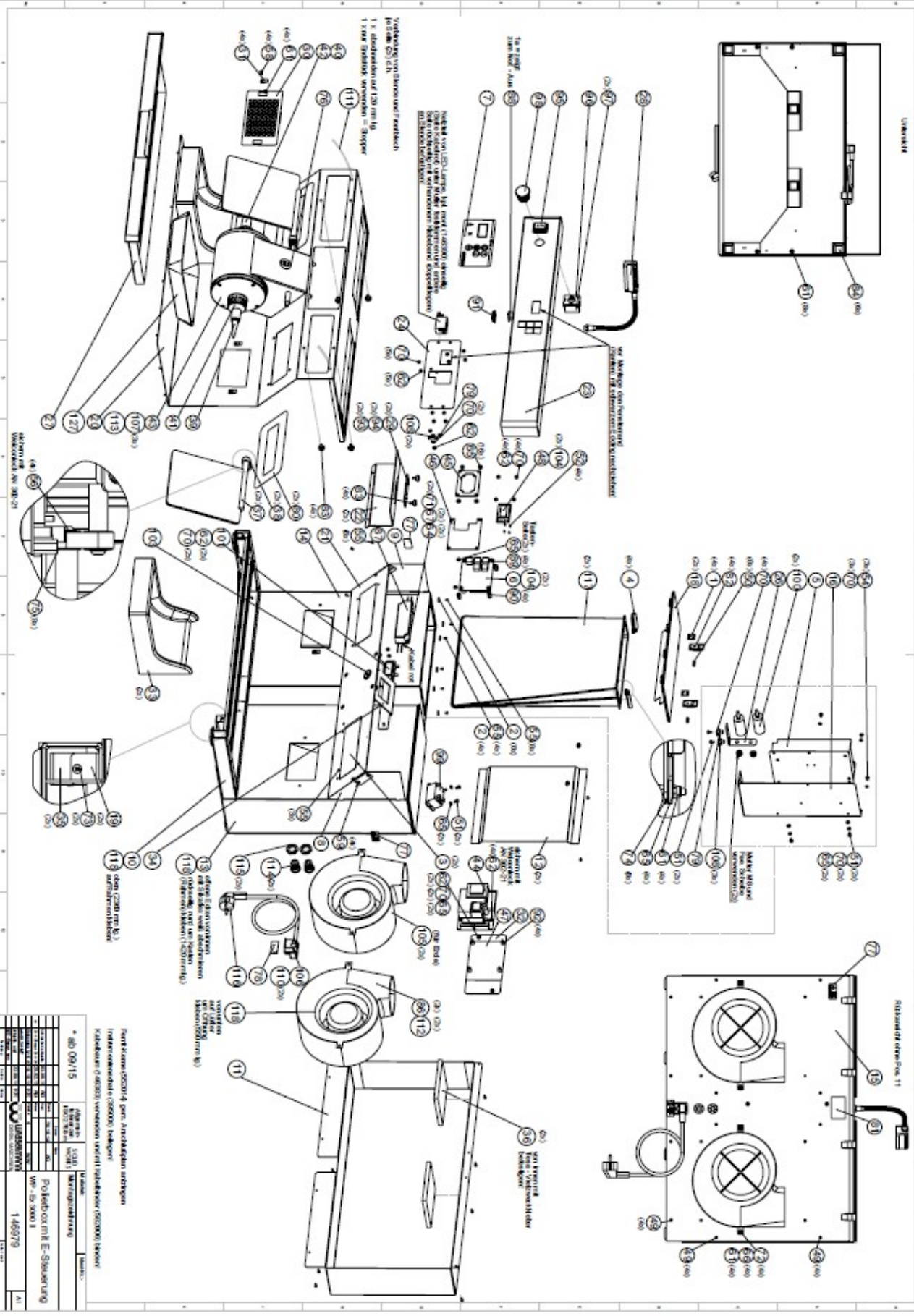


WASSERMANN
DENTAL-MASCHINEN GMBH
Rudorffweg 15-17 · 21031 Hamburg

14 Wiring Diagram



15 Spare Part Diagram



| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-------|--|---------|----------|---------------|---|---|---|
| 1 | Abtageschale | 127 | 830409 | | | | |
| 1 | INKA - Palette 600 x 800 500KG | 126 | 670180 | | | | |
| 1 | VP - Falkation 880 x 585 x 680 | 125 | 670179 | | | | |
| 1 | Lutbolsterfolie NS7 1200 mm breit | 124 | 1000mm | | | | |
| 4 | Polsterplatte 100 x 100 x 30 | 123 | 670124 | | | | |
| 1 | Instanrate - Folie 2 x 900 mm breit | 122 | 670122 | | | | |
| 1 | Instapak - Schaumstoff Component B - FFS | 121 | 1000G | | | | |
| 1 | Instapak - Schaumstoff Component A - FFS | 120 | 1170 G | | | | |
| 1 | Scottch-Klebeband 1mm doppelseitig | 119 | 1440mm | | | | |
| 1 | 1esa-Moll 9x3 | 118 | 7580mm | | | | |
| 2 | Fülltasche, groß mit Rahmen | 117 | 670065 | | | | |
| 2 | Zuleitung 3 Adrig m. Winkelstecker | 116 | 592012 | | | | |
| 2 | Gegenmutter GM T3 | 115 | 594015 | | | | |
| 2 | Kabelverschraubung MZ19 | 114 | 584005 | | | | |
| 1 | Kabelstiftverbinder 2,5qmm blau iso. | 113 | 583014 | | | | |
| 2 | Kabelstiftverbinder U,75qmm rot iso. | 112 | 583013 | | | | |
| 4 | Kabelbinder KB 370VV, schwarz | 111 | 582028 | | | | |
| 2 | Sicherung 6,3A/250V M1 D5 x 20 | 110 | 582013 | | | | |
| 30 | Kabelbinder KB 10Z | 109 | 582006 | | | | |
| 5 | Flachstecker 2-fach abgew. 4-6-3 | 108 | 581071 | | | | |
| 3 | Aderendhülse 1,5qmm schwarz iso | 107 | 581052 | | | | |
| 1 | Gerätestecker für zwei Sicherungen | 106 | 581038 | | | | |
| 2 | Flachstecker U,8-6-3 / 1qmm | 105 | 581004 | | | | |
| Stück | Beschreibung | lfd. Nr | Material | Zeichnungsnr. | | | |
| 4 | Verriegelung f. Stecker 14-polig | 104 | 580052 | | | | |
| 2 | Durchführungstülle D18,5 - D6 | 103 | 580011 | | | | |
| 3 | Ferrit - Kern (Klappkern) | 102 | 562014 | | | | |
| 1 | Feststoff-Endaufhänger 3A | 101 | 552003 | | | | |
| 2 | MP-Kondensator 4µF 400V | 100 | 540004 | | | | |
| 1 | Kleinschütz 230V/30A - 50/60Hz | 99 | 514002 | | | | |
| 1 | Druckkabel rot | 98 | 511176 | | | | |
| 2 | Beimel Ohm-Kontakt für N4-Aus | 97 | 511173 | | | | |
| 1 | Besetzungsdapter f100t für N0t-Aus | 96 | 511172 | | | | |
| 1 | Wippschalter, grün TP 65 | 95 | 511161 | | | | |
| 2 | Aufnahmegeräte - AMF - 2-polig | 94 | 511084 | | | | |
| 2 | Stiftkontakt - AMP - | 93 | 511081 | | | | |
| 4 | Distanzrolle DR 8/4,5 x 8 | 92 | 511078 | | | | |
| 1 | Schutzkappe für Wippschalter, 1-polig | 91 | 511068 | | | | |
| 4 | Abstandsplatten M4 x 15 | 90 | 511067 | | | | |
| 4 | Distanzrolle DR 8/4,5 x 5 | 89 | 511055 | | | | |
| 1 | Wippschalter, schwarz, 1-polig | 88 | 511045 | | | | |
| 1 | Netzteil 100-240V AC konstant 700 mA 6W | 87 | 508017 | | | | |
| 2 | Lüfter für VP - Ex 10 | 86 | 504024 | | | | |
| 1 | Instumentenschraube 190 x 150 x 17 weiß | 85 | 395004 | | | | |
| 6 | Gummifuss 32 x 32 - H6 SW 65 26 016 | 84 | 392008 | | | | |
| 4 | Rändelschraube M4x8, schwarz | 83 | 390043 | | | | |
| 8 | Spannverschluss 1 VP "KOLLEZ" | 82 | 390037 | | | | |
| 1 | Schraubdruckschleife SW b = 36 mm | 81 | 310200 | | | | |
| 2 | Aufkleber - Sichtschleife | 80 | 310107 | | | | |
| 2 | Erdungszeichen, selbstklebend | 79 | 310057 | | | | |
| 1 | Aufkleber Sicherung 6,3 A / 250V M1 | 78 | 310032 | | | | |
| 3 | Klebeschild "NETZSTECKER ZIEHEN" | 77 | 310009 | | | | |
| 1 | Aufkleber Schutzzone tragen | 76 | 310004 | | | | |
| 8 | Leiterfeder DIN 2093 18 x 8,2 x 0,8 | 75 | 250007 | | | | |
| 8 | Leiterfeder 15 x 5,2 x 0,7 | 74 | 250005 | | | | |
| 10 | Schraube DIN 7985 M3 x 6 | 73 | 208208 | | | | |
| 4 | Schraube DIN 7985 M4 x 10 | 72 | 208205 | | | | |
| 2 | Schraube DIN 125 D8,4 | 71 | 204064 | | | | |
| 75 | Facherschraube DIN 6798 J4,3 | 70 | 204037 | | | | |
| 18 | Schraube DIN 912 10,3 | 69 | 204019 | | | | |
| 20 | Schraube DIN 128 D8,4 | 68 | 204018 | | | | |
| 4 | Facherschraube DIN 6798 A3,2 | 67 | 204009 | | | | |
| 28 | Schraube DIN 912 1 A4,3 | 66 | 204005 | | | | |
| 2 | Mutter DIN 934 M8 | 65 | 204004 | | | | |
| 4 | Mutter DIN 934 M6 | 64 | 202085 | | | | |
| 18 | Mutter DIN 934 M4 | 63 | 202067 | | | | |
| 20 | Mutter DIN 985 M4 | 62 | 202019 | | | | |
| 8 | Mutter DIN 934 M6 | 61 | 202009 | | | | |
| 4 | Schraube DIN 7980 M4 x 6 | 60 | 201545 | | | | |
| 4 | Schraube DIN 7980 M4 x 10 | 59 | 201543 | | | | |
| 8 | Schraube DIN 7985 M5 x 8 | 57 | 201542 | | | | |
| 4 | Schraube DIN 7980 M5 x 10 | 56 | 201529 | | | | |
| 18 | Schraube DIN 985 M3 x 6 | 55 | 201514 | | | | |
| 3 | Schraube DIN 7985 M4 x 6 | 54 | 201111 | | | | |
| 1 | Schraube DIN 85 M4 x 6 | 53 | 201103 | | | | |
| Stück | Beschreibung | lfd. Nr | Material | Zeichnungsnr. | | | |

* ab 09/15

| | | | | | | | |
|--|---|--|--|--|--|--|--|
| <p>Abmessungen</p> <p>22.06.14</p> <p>22.06.14</p> <p>22.06.14</p> | <p>Material</p> <p>20.10.14</p> <p>20.10.14</p> <p>20.10.14</p> | <p>Werkstoff</p> <p>AG</p> <p>AG</p> <p>AG</p> | <p>Werkstoff</p> <p>AG</p> <p>AG</p> <p>AG</p> | <p>Werkstoff</p> <p>AG</p> <p>AG</p> <p>AG</p> | <p>Werkstoff</p> <p>AG</p> <p>AG</p> <p>AG</p> | <p>Werkstoff</p> <p>AG</p> <p>AG</p> <p>AG</p> | <p>Werkstoff</p> <p>AG</p> <p>AG</p> <p>AG</p> |
|--|---|--|--|--|--|--|--|

WASSERMANN DRUCKMASCHINEN

Polierbox mit E-Steuerung

WP - Ex 3000 II

146979

A3

Notes:



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