

OPERATING INSTRUCTION FOR SAW SHARPENING MACHINE SSG 600-A-DC



Original operating manual
Please keep for future use!

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EC-DECLARATION OF CONFORMITY

The manufacturer:

Kaindl-Schleiftechnik
Reiling GmbH
Remchinger Straße 4

75203 Königsbach-Stein
Germany

declares that the machine
described herein:

Saw blade sharpening machine
Type: **SSG 600-A-DC**

Refers to the safety and health requirements
of the following EC instructions:

EC-Machine instruction (2006/42/EC)
EC-Instruction EMV (2004/108/EC)

Applied harmonised norms:

**EN ISO 12100-1; EN ISO 12100-2; EN ISO 13857; EN ISO 13732-1;
EN 61029-1; EN 60204 Part 1; EN 61000-6-1; EN 61000-6-2;
EN 61000-6-3; EN 61000-6-4**


**Changes in design, which affect the technical data, listed in this operation manual
and the directed use, therefore change the machine substantially, make this
declaration invalid!**

The documents were compiled by:

Reinhard Reiling

Kaindl-Schleiftechnik
Reiling GmbH
Remchinger Straße 4
75203 Königsbach-Stein

Königsbach-Stein, dated 29.12.2009


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Reinhard Reiling, General Manager

1. TECHNICAL DESCRIPTION

1.1 BASIC VERSION

Range:	100-600 mm saw blade diameter
Saw blade boring hole:	20/25/30/32/35/40/50/70/75, Special size upon request
Grinding wheel specification:	Diamond grinding wheel D64 150 x 6 x 2 x 20
Adjustment of porting arm:	step less 0-180°
Adjustment of motor:	step less 0-270°
Grinding motor:	Voltage 230V / 50 Hz, Output 0,18 Kw, Revolutions 2850 RPM
Total energy absorption:	230 Watt, ready for connection CEC-plug device 5-poles
Determined sound pressure level as per DIN EN ISO 3744:	Emissions-Sound pressure level at working place as per DIN EN ISO 11204: 77 dB/A +/- 2 dB/A working with automatic by sharpening by use of corundum grinding wheel sharpening a HSS saw blade Ø 460 mm
Weight:	net 50 Kg
Dimension:	LxWxH 520 x 600 x 400 mm
Only for SSG-Automatic:	Control electro-pneumatic 110-240 Volt 50 / 60 Hz; complete for air pressure 5 bar medium (oil free) including maintenance unit

1.2 SPECIAL ACCESSORIES

Diamond grinding wheel:	Grit D76, Dimension 150 x 5 x 3 x 20 mm
Machine stand:	Base 450 x 350 mm, 680 x 710 mm
Coolant system:	pump cooling (see page 27)
Weight:	netto 120 Kg
Dimension:	L x W x H 680 x 710 x 1300 mm
Industrial dust exhaust, Filter Kat. M:	3600l/min, 230V / 50 Hz, 1450 W only for dry grinding
Automatic (for SSG 600-Manual):	Control electro-pneumatic 110-240 Volt 50 / 60 Hz; complete for air pressure 5 bar medium (oil free) including maintenance unit

Technical modification may be done without notification!

2. DIRECTED USE

The saw blade sharpening machine **SSG 600-M-LF** and **SSG 600-A-DC** is exclusively determined for sharpening of HSS and carbide tipped circular saw blades with range of Ø 100-600 mm which having a clear geometric tooth shape. For sharpening of carbide tipped saw blades a exhaust is recommended (see chapter "Exhaust").

For other operations, as listed here, the machine is not destined for - and goes to unauthorized use! The directed use includes also reading this operation manual, as well as keeping all containing directions of use - especially the safety information. In case the saw blade sharpening machine is not used as per intended purpose, a save operation cannot be granted. For all material- and personal damages, arising by not intended use, not the manufacturer, but the operator of the saw blade sharpening machine is responsible.

3. PREDICTABLE WRONG APPLICATION

The use as a table machine for manually guided grinding of workpieces, such as chisel, sheet metal, screwsdriver, etc. is not allowed!

4. GENERAL SAFETY ADVISE

- Electrical connection only by an electrician.
- Only in dry rooms.
- While grinding always wear your safety glasses.
- Only use original Kaindl grinding wheels, which correspond the norms **EN 12413** or **EN 13236**. The grinding wheel must be approved for the speed of the grinding spindle.
- As the conic pressure level, when sharpening HSS saw blades, may get up to 83 dB/A, we propose wearing a ear protection.
- Carbide tipped circular saw blades are only allowed to sharpen with a dust exhaust. The diameter of the exhaust plug is 36 mm. An exhaust power of 3000 l/min is sufficient.
- For carbide tipped circular saw blades with cobalt an additional exhaust filter cat. M is recommended.
- Let run grinding wheel always downwards.
- The mounting of the retrofit kit is only allowed at Kaindl company.
- Changes of the electrical equipment are only allowed with the agreement of the manufacturer and have to be done by an electrician.
- Grinding by use of cooling liquid, only with agreement of the manufacturer.
- Residual risk: By using the automatic, neglectible squeezes on the transport mechanism may occur.

5. DUTY OF TAKING CARE BY THE USER

The **saw blade sharpening machine SSG 600** has been designed and constructed under consideration of an endgangering analysis and careful selection of observed harmonized norms, as well as further technical specifications.

This safety can only be achieved in daily work, when all necessary steps are taken. It is the duty of taking care by the user to plan and control these steps.

The user has to take care that:

- The machine is used as directed (see chapter "Technical description")
- The machine is used in flawless workable condition, especially that the safety installations are checked
- protective goggles must be used and when the noise level in the workplace 85 dB / A may get up to wearing a ear protection
- The operation manual is always to be kept in a readable condition, complete and available near the machine
- All safety and warning instructions are not to be removed from the machine and kept readable

6. TRANSPORT

The machine is delivered in a carded- or wooden box on a pallet. The transportation should be done in vertical position, if possible to the final place of set up.

The machine must be checked for transport damage before starting up!

In case of damages (visible from the outside or not), please immendiately contact your forwarder to record the damage.

ATTENTION! The period for claims is very short!

DIMENSION AND WEIGHT

Table version:

Dimension L x W x H: 520 x 600 x 400 mm

Net weight: 50 Kg

Version with machine stand:

Dimension L x W x H: 680 x 710 x 1300 mm

Net weight: 120 Kg

7. DEMANDS OF THE OPERATING PERSONNEL

The **saw blade sharpening machine SSG 600** may only be used by persons who are familiar with this manual are allowed to work with this machine. In each case a safety goggle and ear protection should be placed near the machine.

8. SET UP

The performance, precision and lifetime of a machine, depends among other factors, also from the set up.

The machine is provided with a corrosion protection, this cover should be removed before use. The plank parts should be oiled slightly.

When setting up, please pay attention, that the machine is fix, vibration free in an optimal working height (80-85 cm working table height for the table version and 83 cm with machine stand) to grant a perfect operation of the machine.

9. TABLE VERSION

After unpacking, glue the felt hats on the cast iron feet of the base plate.

The advantages are, the machine is lined up within a few minutes on a table or working table and no vibration will appear.

10. VERSION WITH MACHINE STAND

After unpacking, place the machine stand with door side in front and put the tub on the stand (fixation borings for the automatic box on the left).

Place the machine inside the tub (2 persons will be needed).

Now the saw blade sharpening machine is screwed up with the tub and the machine stand on the cast iron feet of the base plate.

11. ENVIRONMENTAL CONDITIONS FOR SET UP

Only for dry rooms, from +5 to +50° Celsius, max 90% humidity not condensing.

12. FIXATION AND MOUNTING DIRECTION OF THE AUTOMATIC

12.1 DESCRIPTION OF COMPONENTS

See picture on page 16 and 17:

- Picture 1/15 - Transport cylinder
- Picture 1/16 - End position switch for transport cylinder
- Picture 1/17 - Support for transport cylinder
- Picture 1/18 - Adjustment arm for transport cylinder
- Picture 2/44 - Fixation for grinding cylinder
- Picture 2/45 - grinding cylinder
- Picture 2/46 - End position switch for grinding cylinder

12.2 MOUNTING DIRECTION FOR AUTOMATIC RETROFIT KIT

Only possible at Kaindl company.

12.3 CONNECTION OF CONTROL

See picture on page 25:

- The coloured pipes connect correspondingly with coloured plugs
- Put the cable tree plug on the back of the control box
- Electric power euro plug (Picture 5/7)
- Air pressure connection (Picture 5/6)

12.4 MAINTENANCE UNIT

- Use a maintenance unit with pressure reducing valve
- Bosch No. 0821 300 330 (included)

12.5 STARTING UP

3 phase-version 400V (option)

Before connection with electric power, a electrician should check that your **CEC-plug 5 poles** (high power electric socket):

All 3 phases having power (400 V / 50 Hz) and the rotary is right side (as per DIN)

In case one phase has no electric power the grinding, motor of the SSG 600 will be destroyed (the winding will burn out). In case, we will not replace unter warranty. After checking successfully the CEC-plug and socket 5 poles, connect the machine with electric current.

Next connect with air pressure (only for SSG 600 automatic), therefore use the supplie maintenance unit and adjust the operation pressure to **5 - 5,5 bar** (in this range, the machine works at it's best). The air consumption is approx. 50 L/min.

13. OPERATION

The saw blades must be cleaned blank before sharpening.

Please use some steel wool with soap and warm water.

Only with a clean surface, a regular transport is granted!

14. GENERAL DIRECTIONS

HSS-circular saw blades:

- Only to be sharpened with the cupplied corundum grinding wheel
- With this machine, a setting of the teeth is not possible

Carbide tipped circular saw blades:

- Only sharpen with a diamond wheel
- In order to keep the proportion of inside- and outside of teeth, please pay attention to the following: Re-sharpen the back of tooth only each 4-6 times. This means after having sharpened the inside tooth 4-6 times, then sharpend one time the back tooth.
- In the further sequel of this manual HSS circular saw blades will not be mentioned any further, as the complete adjustment is identical to carbide tipped - circular saw blades.

15. SELECTION OF TRANSPORT FINGER

In the original shipping version, the long transport finger unit is built in. The diameter is aligned to mark 1. For saw blades with \varnothing 150 - 600 mm.

For saw blades having a \varnothing from 100 - 150 mm, the short transport finger unit has to be mounted. In this case, please use mark 2. The transport finger unit has to be changed completely.

16. BASIC ADJUSTMENT OF THE SAW BLADES

- Place support arm (Picture 1/9) to 0°
- Open fixing lever (Picture 2/58) for fixation unit (Picture 1/4)
- Open fixation screw (Picture 2/57)
- Open clamping lever screw (Picture 2/42)
- Open saw blade support (Picture 1/23)

ADVISE: For saw blades with diameter smaller than 200 mm use the smaller flange (\varnothing 45 mm)

- Use the spacer ring, corresponding to the boring hole of your saw blade
- Place the saw blade on the arm (the inside of tooth must show to the left)
- Advance finger (Picture 2/33) place to **middle of inside tooth**, close fixation screw (Picture 2/57)
- Adjust saw blade in order the advance finger support comes in contact with the stop dog (Picture 4/79) or adjust diameter as shown in (Picture 3/65)
- Close clamping screw (Picture 2/42)
- Place clamping unit (Picture 1/14) parallel to the opposite holder below and fix with lever. Pay attention, that the saw blade can still be turned by hand without force

FIXATION OF SAW BLADE (ONLY SSG 600 A-DC AUTOMATIC)

Adjust knurled screw, depending on thickness of saw blade.

Pay attention, that the saw blade can still be turned by hand without force.

17. ADJUSTMENT OF INSIDE TOOTH

- Open motor fixation screw (Picture 2/39)
- Place motor graduation 0°. The grinding wheel must show to the right side.
- Open fixation of transport cylinder (Picture 2/51).
- Adjust the feed cylinder on the position rod side, in order the fixation lever is parallel to the outer edge of the saw blade and fix again.
- Transport the saw blade by using the feed lever (Picture 2/53) to the stop dog (Picture 4/79) Pay attention that the ball is pressed inside it's sleeve completely.
- Compress the cylinder and then move back the unit with feed lever (Picture 2/53) by adjusting how many teeth could be transported per feed. Now fix the cylinder with the clamping lever.
- To confirm of the advancing lever (Picture 2/53) against the stop (Picture 4/79) and drive back to the piston of transport cylinder completely retracted, control once more the desired number of teeth.
- Adjust angle of inside tooth as per the specification of the saw blade manufacturer with the fixation screw of the porting arm (Picture 2/50).
- Angle can be determined by moving the grinding wheel.
- Limit the grinding depth stop (Picture 3/70).
- Check the adjustments of grinding and transport manually.

18. TEST RUN OF THE AUTOMATIC

- Potentiometer **Transport** to graduation 3
- Potentiometer **Schleifen** to graduation 3
- Switch No. 1 to **Belüften**
- Switch No. 2 to **Start**
- Machine is running
- Check if the feed cylinder pushes the ball of the stop dog inside the sleeve completely (Picture 4/79)
- By adjusting the throttle valve, you can control faster or slower move-out of the feed cylinder
- By adjusting the throttle valve, you can control faster or slower move-in of the feed cylinder
- The adjustment of the potentiometer (Picture 5 transport) effect a change of the time-period between move-out and move-in of the feed cylinder
- Adjustment of grinding feed by the throttle valve, effects a faster or slower move-out of the grinding cylinder
- Adjustment of grinding feed by the throttle valve, effects a faster or slower move-in of the grinding cylinder
- The adjustment of the potentiometer (Picture 5 transport) effect a change of the time-period between move-out and move-in of the grinding cylinder

18.1 SHARPENING THE INSIDE TOOTH

- Press porting arm (Picture 1/9) against the stop dog (Picture 3/70)
- Adjust the grinding feed by use of the hand wheel (Picture 1/9)

18.2 FINISH OF THE GRINDING OPERATION

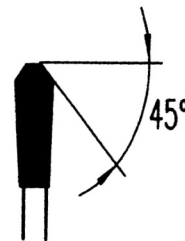
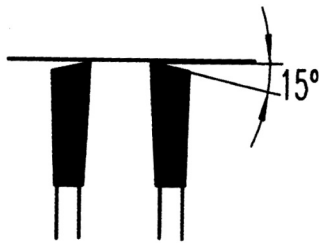
Motor off, both switches (Picture 5) set to stop and set up.

19. ADJUSTMENT AND GRINDING THE OUTSIDE TOOTH

- Open fixation screw of the motor (Picture 2/39).
- Turn the motor to position 0° , the grinding wheel must be on the left side.
- Open fixation screw (Picture 2/50), move porting arm (Picture 1/19) to the left and adjust at position: grinding the back of tooth, angle adjustment (Picture 1).
- Adjust the tooth, in the way, that the correct number of teeth are transported.

Alternating angle back of tooth

Phase angle back of tooth

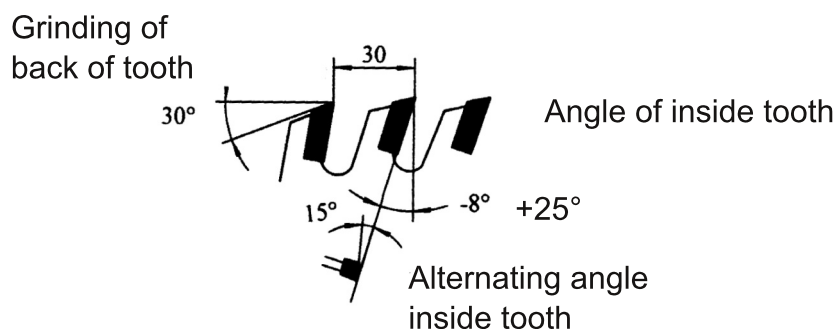


- Alternating- and phase angle are adjusted with the motor in relation to the motor scale (Picture 2).

DIRECTION!

- As the original angles for grinding the back of tooth, the alternating- and phase angles are often unknown, copy these angles from the tooth of saw blade. We propose you, to note these angles in a list (see picture Bild 1+2).
- Phase angle 45° below: grind over the back edge of the diamond coating
- Phase angle 45° upside: grind of the front edge of the diamond coating

Tooth distance



20. CHECKING OF DEFECTS

AUTOMATIC DOES NOT WORK

- Check electric main connection, rotation field as per DIN
- Press return current switch
- Check the electric wiring and plug on the back of the control box
- Potentiometer (Picture 5) on in **position 0**
- Throttle setback valves of the air pressure cylinders are closed

GRINDING- AND FEED CYLINDER

WORK AT SAME TIME

- Check pipe connections for their correct colour (Picture 5).

21. EXHAUST

SEPARATE DUST EXHAUST

For a separate dust exhaust, we suggest one of the following dust exhaust types:

Description	Supplier	Filter class
SQ 450-3M	WAP cleaning systems GmbH 89287 Bellenberg	M
ISA 15 K1-1	SORMA Paul Andrä KG 73547 Lorch-Waldhausen	M

If necessary, you will need an adaptor (pipe connection 37 mm) for your suction.

22. CLEANING & DRESSING OF GRINDING WHEELS

CLEANING OF DIAMOND WHEEL

- Use the saw blade as support for the cleaning stone (Picture 6)
- The gap between the saw blade and the diamond wheel should need exceed **3 mm**
- Start the motor and clean the diamond wheel with cleaning stone

DRESSING OF CORUNDUM GRINDING WHEEL

- Mount the grinding wheel dresser on the porting arm (Picture 9/82).
- Dress the wheel by twisting the grinding wheel dresser and move forward by use of the hand wheel (Picture 1/9).

23. CHANGE OF GRINDING WHEEL

Dismount the grinding wheel cover (Picture 1/4) with allen key SW 2,5 (included), while turning out the 3 screws (M4 x 12) and pull off the grinding wheel cover.

Now open the nut (SW 19) on the motor spindle, while holding the motor spindle with an allen key (SW 6) in the centre.

After having tuned out the nut, pull the wheel together with the support from the motor spindle. The mounting of the new wheel is made in the reversed sequence.

23.2 MOUNTING ON THE GRINDING WHEEL

Place the grinding wheel inside the dismantled grinding wheel support and don't forget the cardboard for the grinding wheel.

(Cardboard - grinding wheel - cardboard).

Turn the flange nut by hand on the grinding wheel support.

Take the socket screw wrench (included) and tightly close the flange nut.

24. DISPOSING OF THE GRINDING WHEEL

Old grinding wheel can be disposed as "rest garbage".

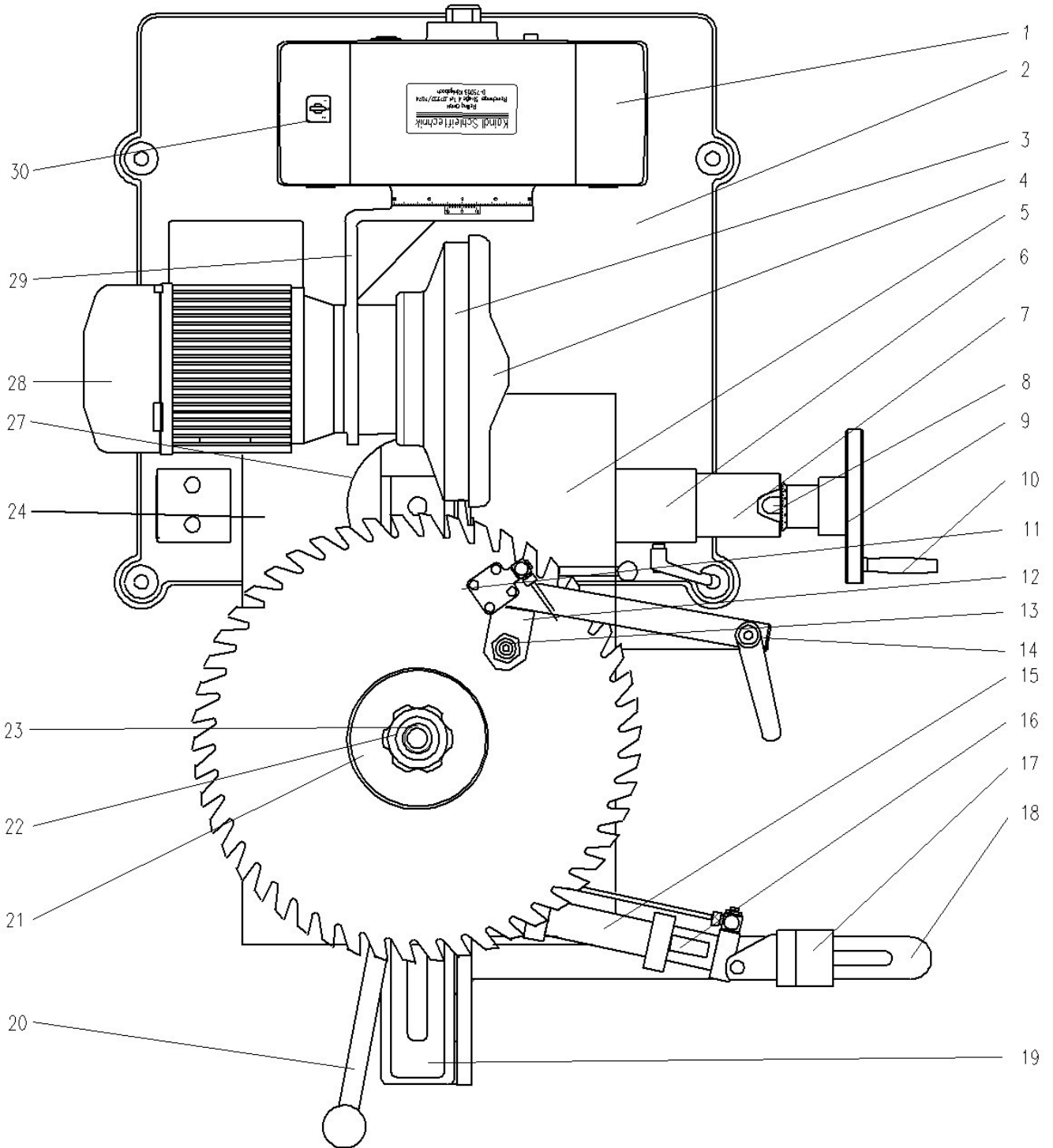
Diamond wheels, whose body material is aluminium, give to aluminium scrap metal.

ATTENTION!

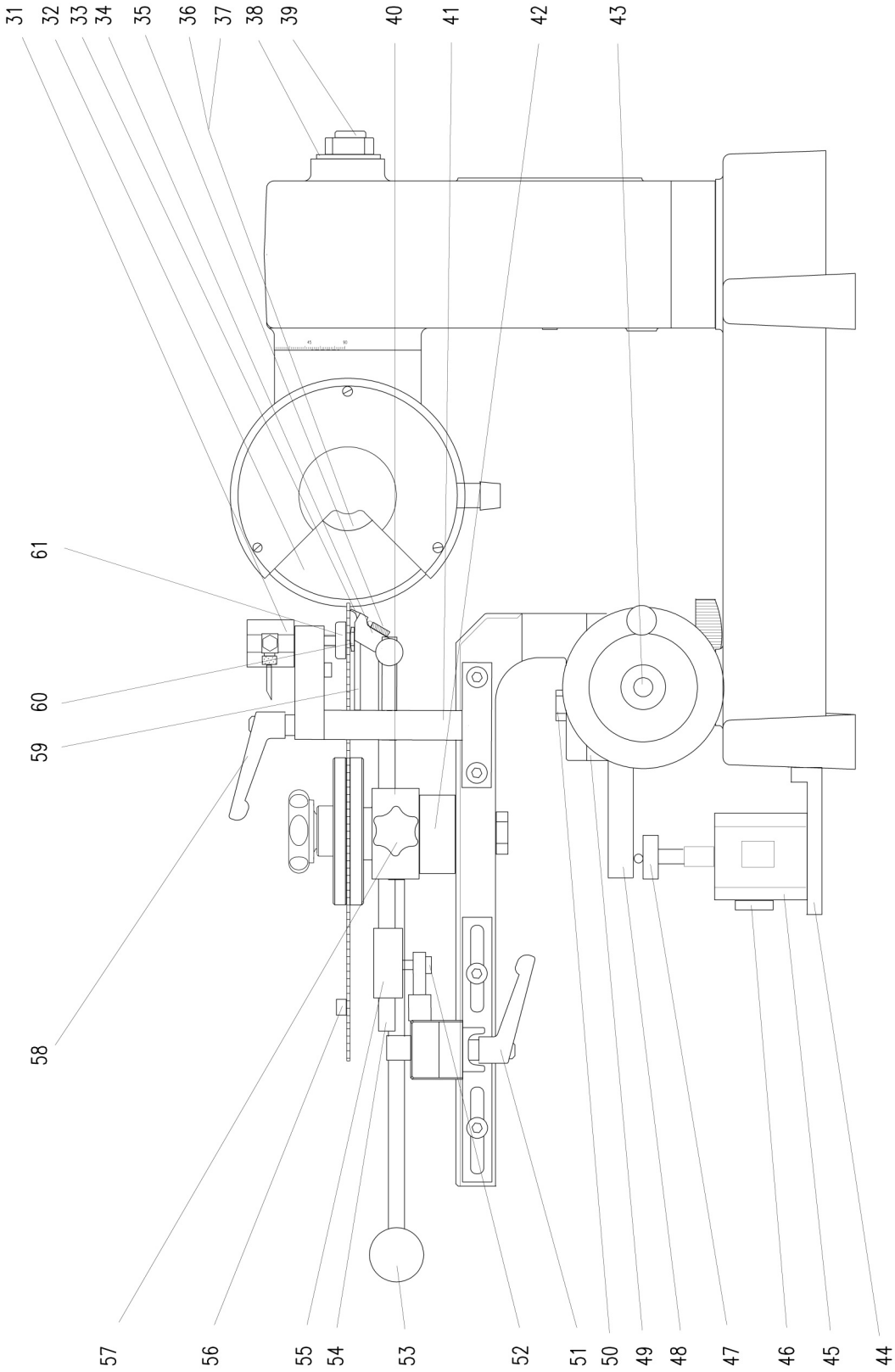
Never operate the SSG 600 without correctly mounted grinding wheel protection!

After changing the grinding wheel, a trial run of at least one minute is always to perform. In unusual behavior, the machine is switched off!

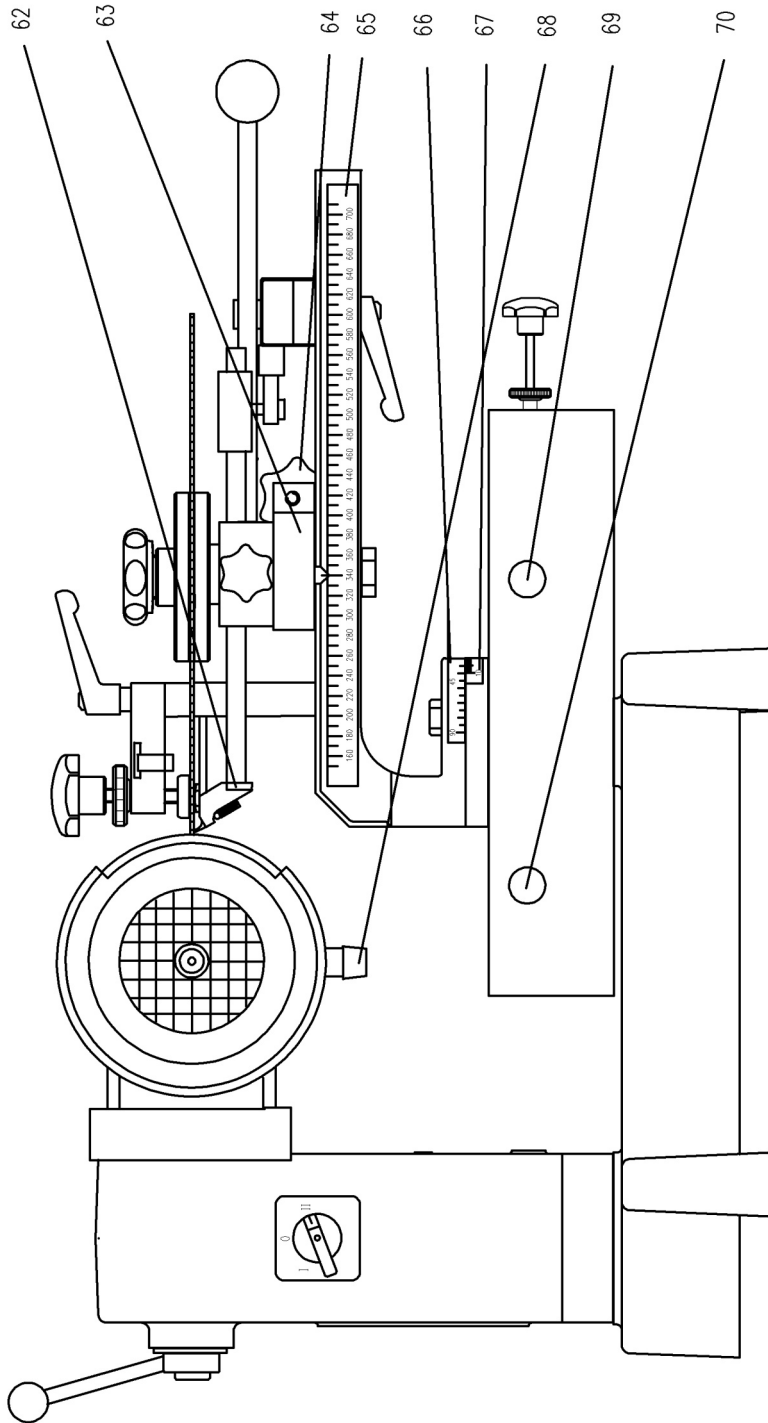
DRAWINGS OF MACHINE PICTURE 1



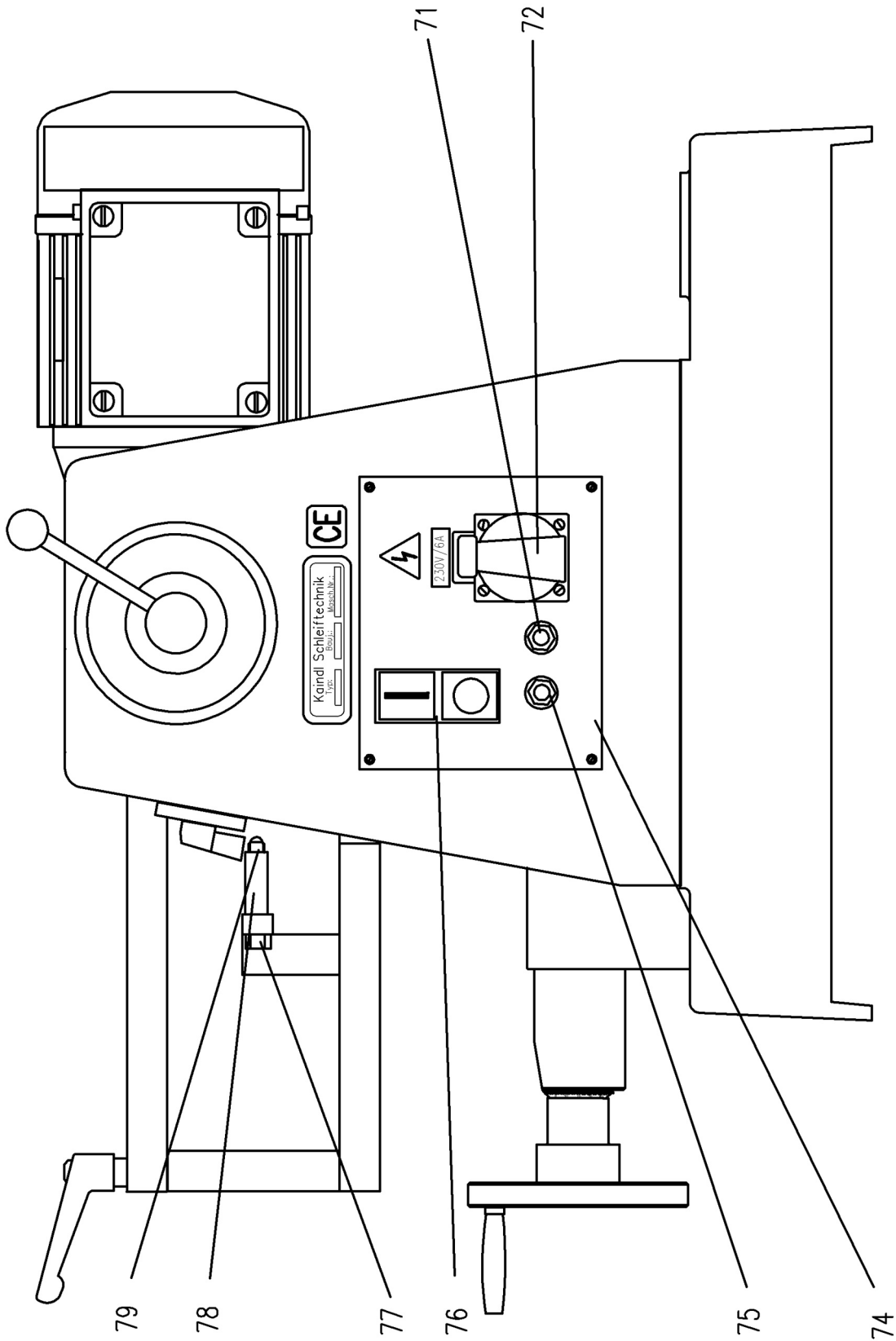
DRAWINGS OF MACHINE PICTURE 2



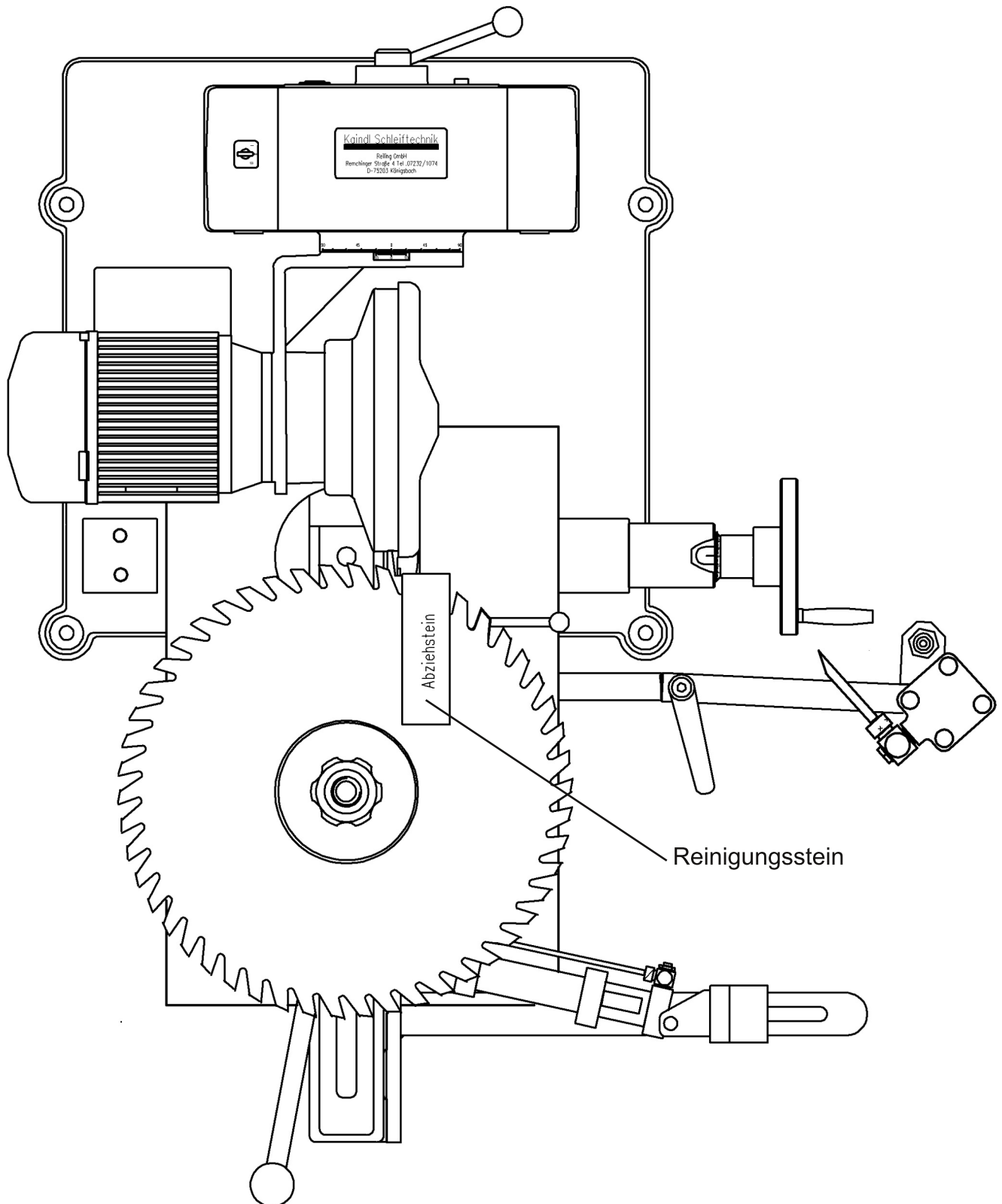
DRAWINGS OF MACHINE PICTURE 3



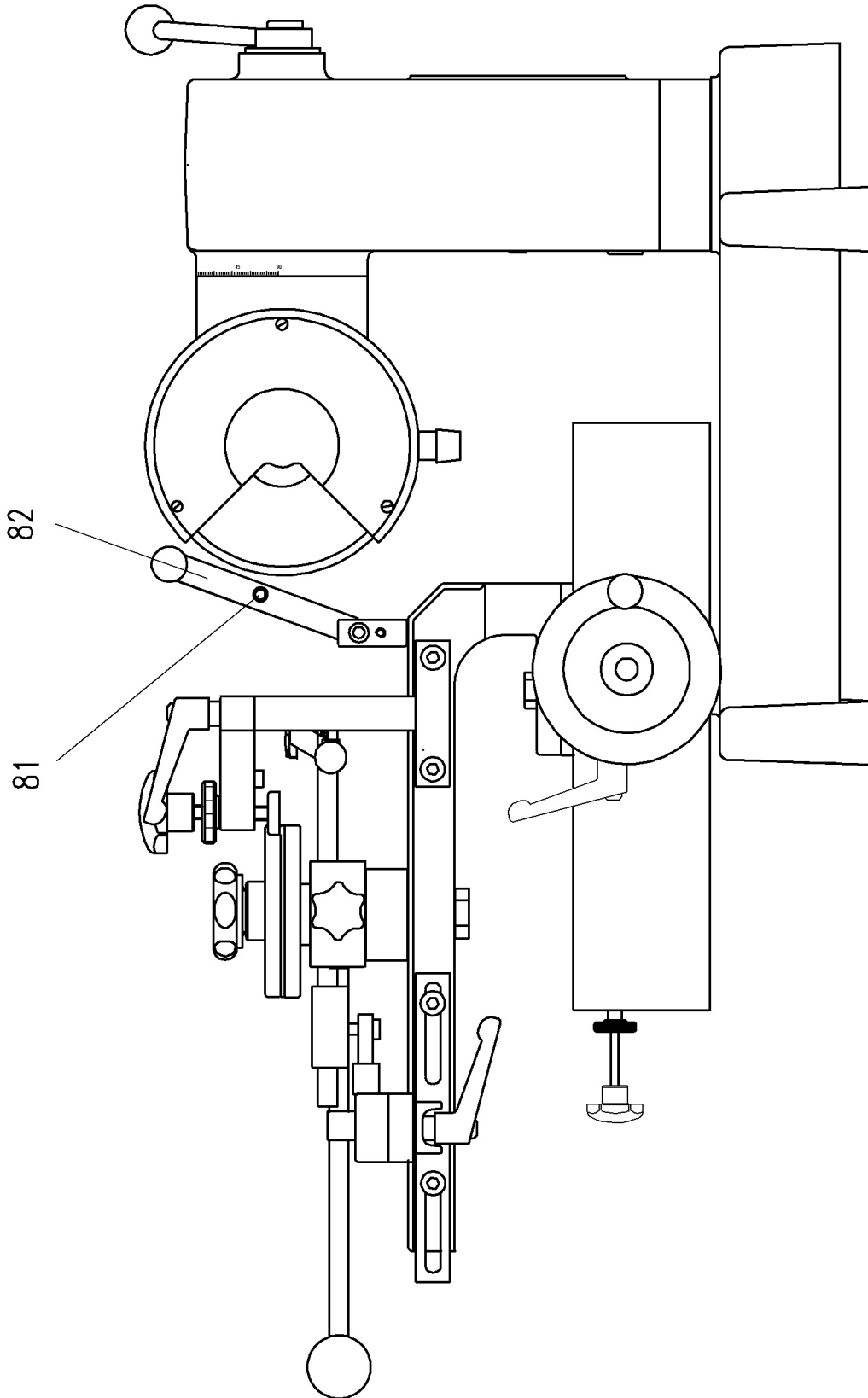
DRAWINGS OF MACHINE PICTURE 4



DRAWINGS OF MACHINE PICTURE 6



DRAWINGS OF MACHINE PICTURE 9



25. MAINTENANCE

The **saw blade sharpening machine SSG 600 (manual / automatic)** does not need a special maintenance. From time to time, check the air pipes (SSG 600-A-DC), electric- plug and socket for damage.

26. CLEANING AND GREASING

The **saw blade sharpening machine SSG 600** should be cleaned from dust (depending how long you worked with the machine) with a soft brush. Persistent soiling please clean by use of a usual in trade machine cleaner.

For preventing corrosion, please put a slight oil film on all blank parts. At this opportunity, also put a little machine grease on the adaptor of the saw blade support flange.

27. REPAIRS

Persons authorized by us are only allowed in our factory.

The change of wear parts (see part list) is permitted.

The change of electrical spare parts is only allowed by an electro expert.

28. WARRANTY

The warranty is **12 months** from date of shipment and refers to a **one shift work** under condition of a appropriate use of the machine. The guarantee includes the costs for replacing of defect parts and assembly groups, including the required working time.

Excluded from any guarantee are:

- Wear parts
- Transport damage
- An improper use
- Damage by use of force
- Damages and consequential damages caused by breach of the duty of taking care of the user

In case of a warranty claim, we ask you to inform us about the serial no. of the machine.

Returns have to be authorized by us, before shipment. We reserve the right to charge you with the transportation cost, if the return was not authorized.

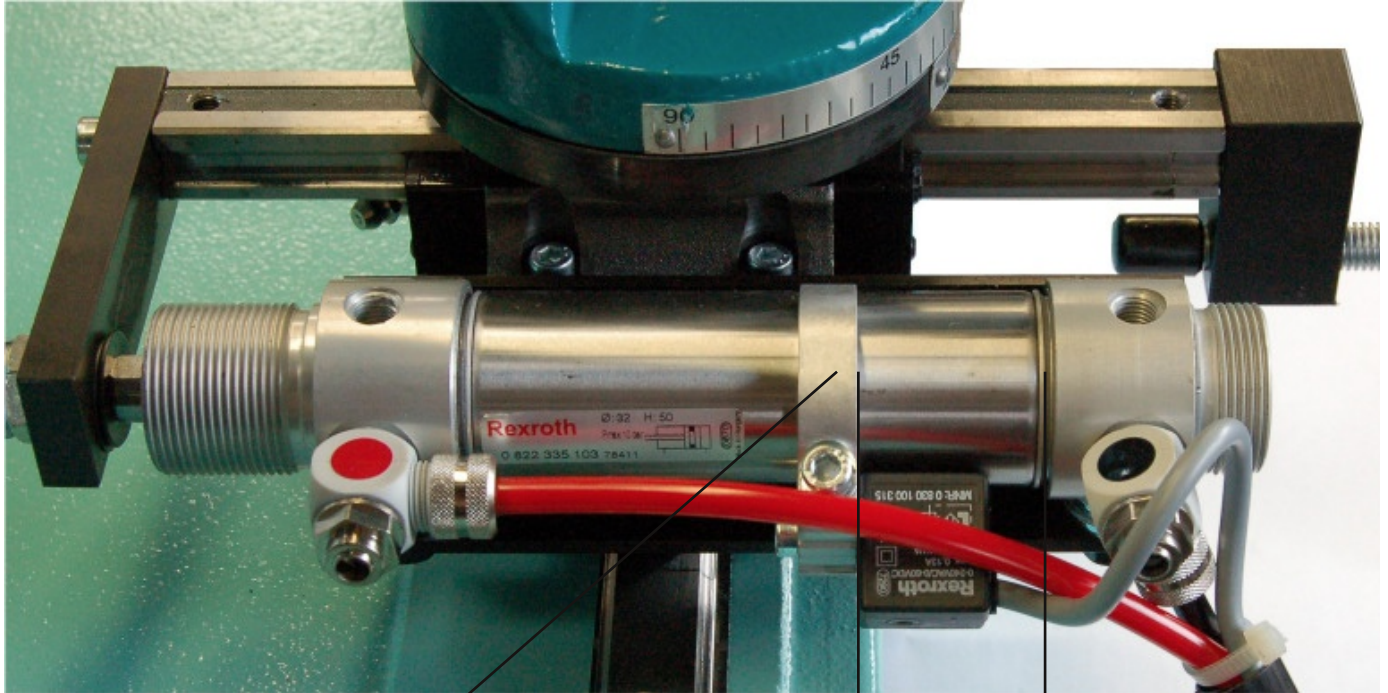
Spare parts or replacement parts are transferred absolutely in our ownership.

29. DISPOSAL OF THE MACHINE (EUC)

When sending back the machine to us (transport charges prepaid), the company Kaindl- Schleiftechnik Reiling GmbH grants for the competent disposal as per the currently in force guidelines of the European waste equipment regulations.

30. BASIC ADJUSTMENT FEED CYLINDER SSG-600

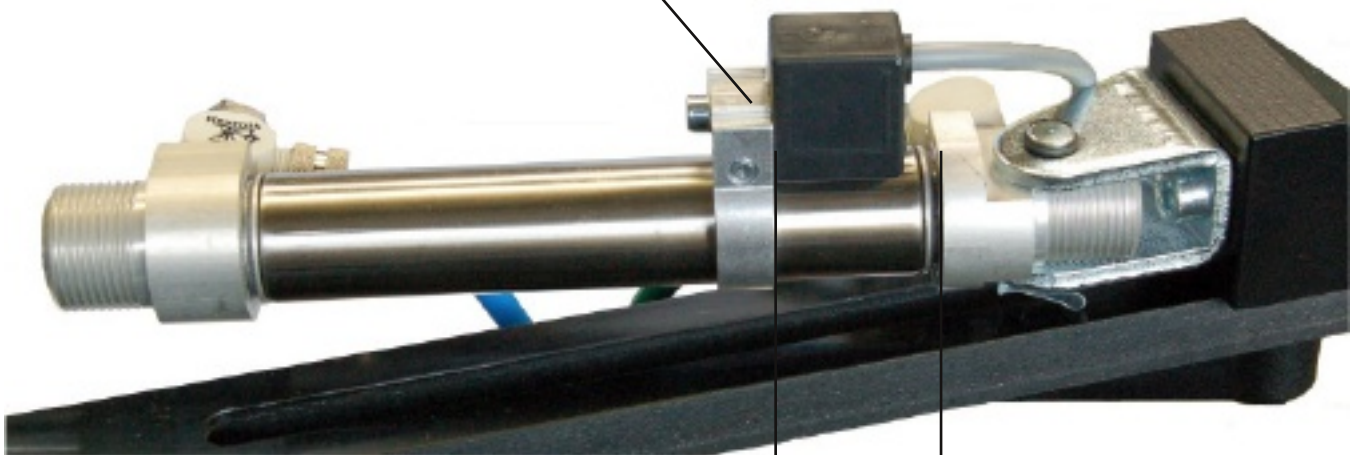
grinding cylinder



End position switch

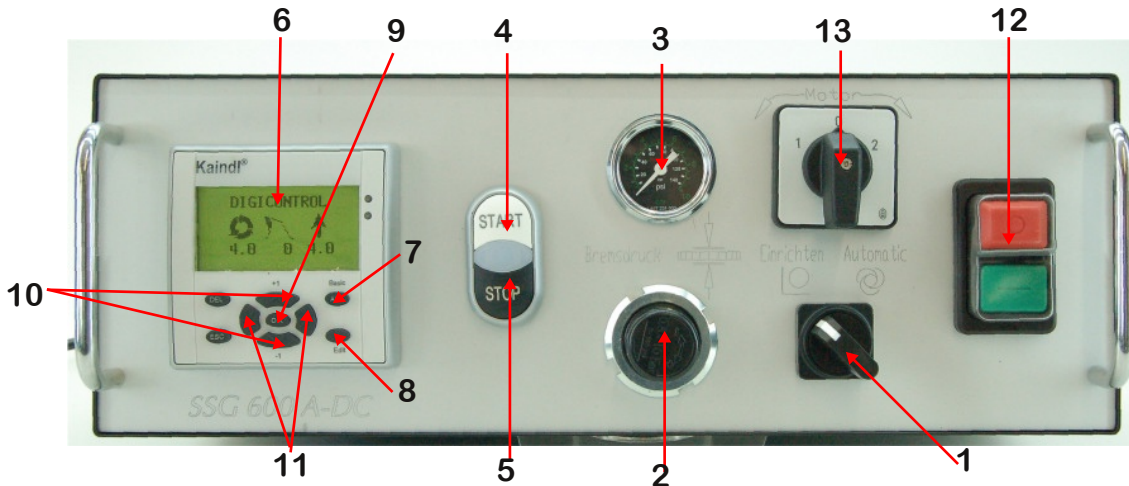
Basic adjustment 33 mm

Transport cylinder



Basic adjustment 28 mm

31. CONTROL SSG 600-A-DC (OPTION) HANDING ELEMENTS



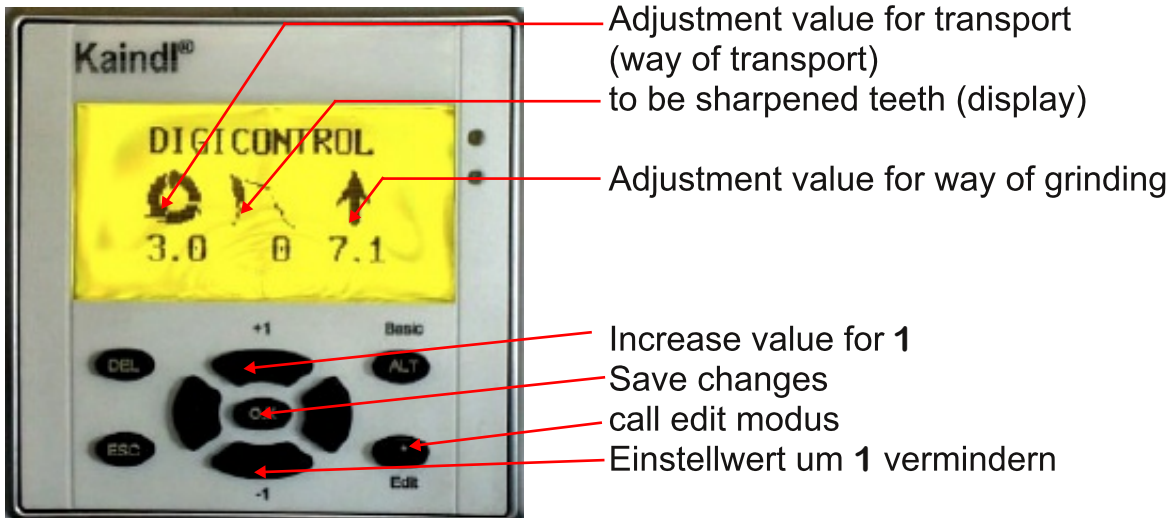
1. Adjustment / air pressure to cylinder
2. Pressure regulation valve for saw blade brake
3. Manometer brake pressure
4. Start button (Programm start)
5. Stop button (Programm stop)
6. Display
7. Basic (factory adjustments only for the visible display page)
8. Edit (Edit button for starting input of values)
9. OK button (saves values)
10. Change values +1 and -1
11. Shift of display to next page
12. ON-OFF switch
13. Motor right / left



1. Plug coupling for saw blade fixation (yellow tube)
2. Plug coupling for transport cylinder (blue tube)
3. Plug coupling for transport cylinder (green tube)
4. Plug coupling for grinding cylinder (red tube)
5. Plug coupling for grinding cylinder (black tube)
6. Connection socket for cable tree plug
7. Connection socket for grinding motor
8. Electrical connection phase only plug into the socket in the back of the machine
9. Plug coupling for pressure connection (Min. 5 bar - Max. 10 bar medium oil free)

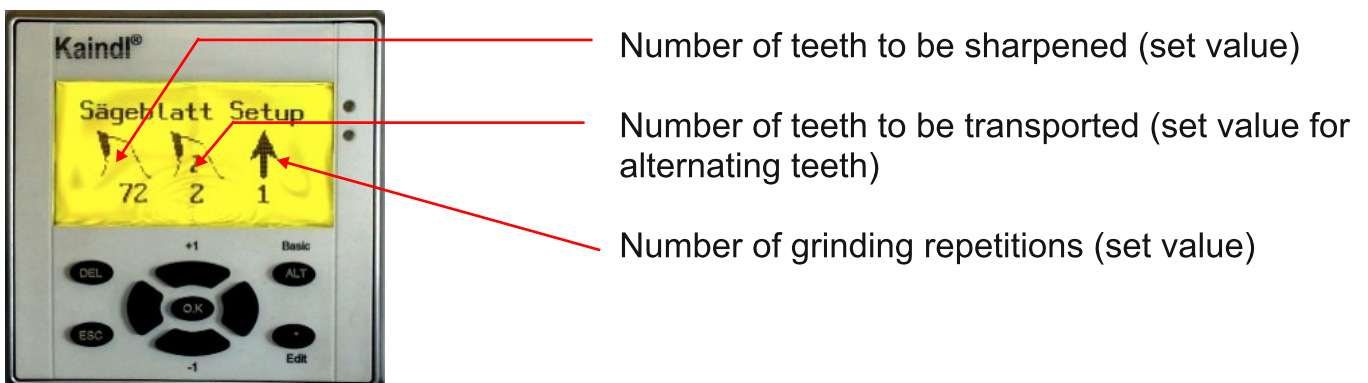
32. ADJUSTMENTS AT THE SSG 600-A-DC

The operation of the control unit is real simple and made for the workshop.



For changing the values of transport and grinding please proceed as follows:

1. Call edit modus by pressing the edit button. (The value for transport is flashing)
2. Increase or decrease value with buttons "+1" or "-1". In case you do not want to change values go to item 3.
3. Confirm adjustments with "OK" (adjustment value for grinding way flashes)
4. The adjustments for grinding way is same as described in item 2.
5. Confirm by pressing "OK" button
6. With button ">" (11 shift page display) for saw blade setup

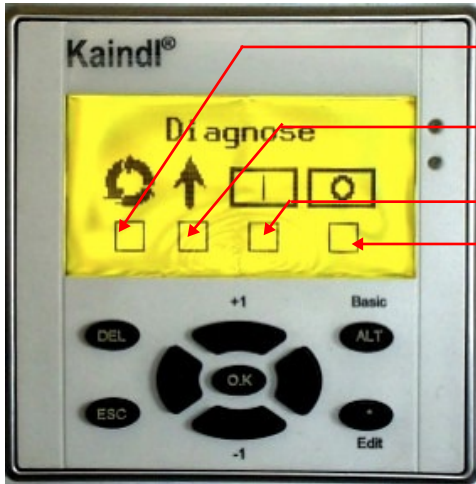


The adjustment of these values are to be made same as for transport- and grinding way.

1. Call the edit modus by pressing the "Edit" button. (Adjustment value for number of teeth to be sharpened)
2. Increase or decrease values with buttons "+1" or "-1". In case you do not want to change values go to item 3.
3. Confirm adjustments with "OK" (adjustment value for alternating teeth flashes)
4. The adjustment for grinding way is same as described in item 2.
5. Confirm adjustment with "OK".
6. With button ">" (11 shift page display) back to the saw blade setup

33. DIAGNOSIS FUNCTION OF THE CONTROL SYSTEM FOR END POSITION ADJUSTMENT

In order giving you an aid for checking or adjustment of the end position switches we provided the control of the **SSG 600-A-DC** with a diagnosis function.



End position switch transport cylinder (display)

End position switch grinding cylinder (display)

Start device (display)

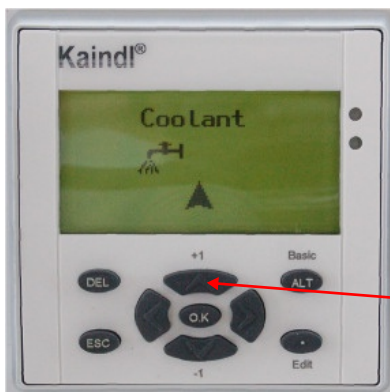
Stop device (display)

Advice:

While switches are working the referring displayed squares are dark.

To attain to the corresponding display pages press keys "<" and ">".
(11. changeover pages display)

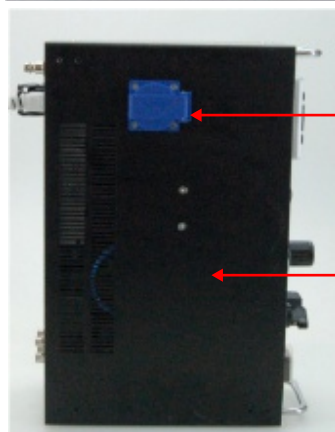
34. UNIVERSAL PUMP COOLING (OPTIONAL)



There is the possibility to connect a optional pump cooling unit to the machine. The control is already integrated in the sotware.

In the menue item "Coolant", you can switch ON/OFF the cooling circuit by pushing the arrow key upwards.

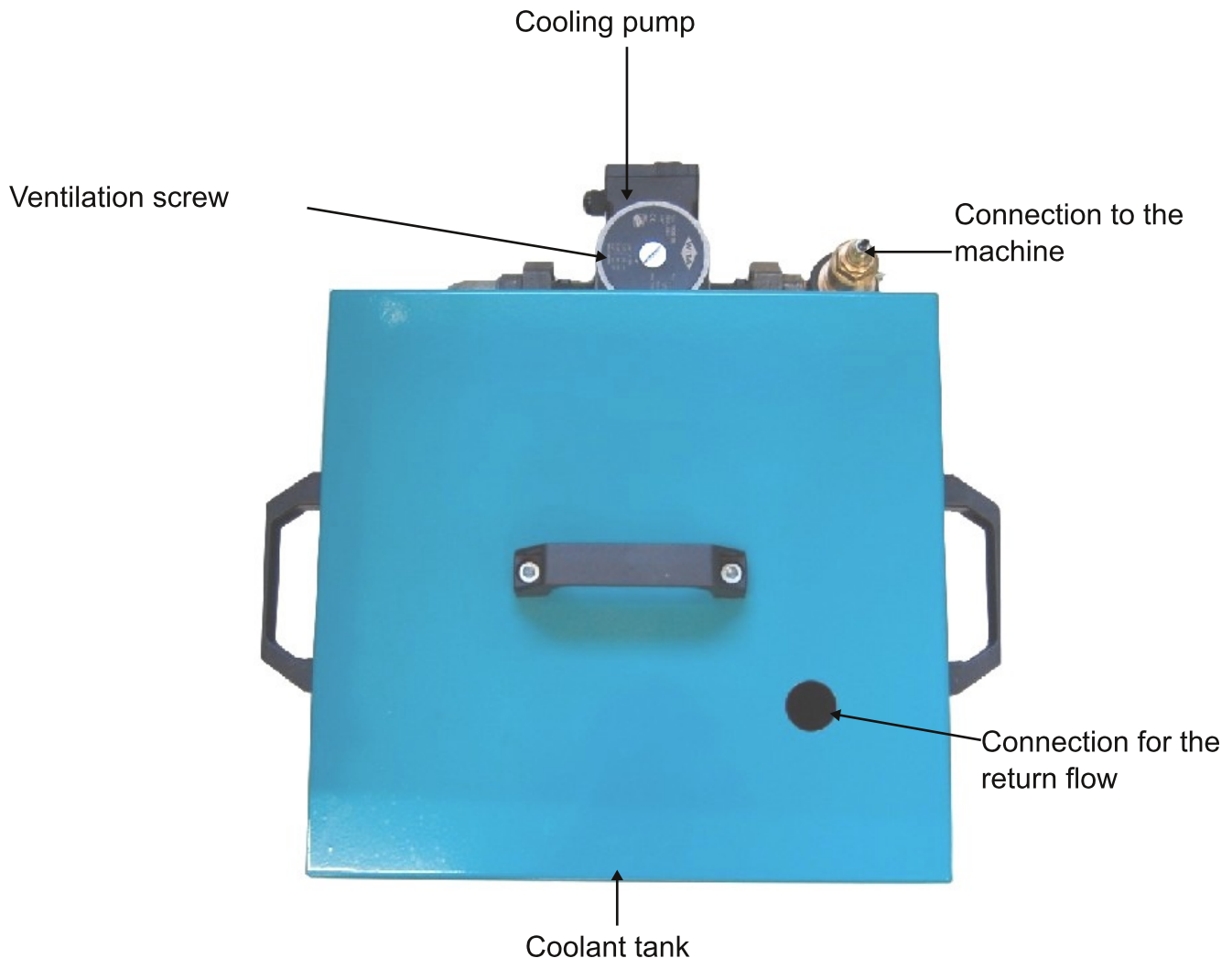
By pushing the arrow key you can switch ON/OFF the cooling circuit.



Electric socket for connecting the pump cooling

Control unit SSG-A-DC

35. DESCRIPTION OF THE COOLING UNIT



Before the first start, please vent the cooling pump

Please fill up the coolant tank to minimum upper edge of the pump.

Essentials about coolant- and grease agents:

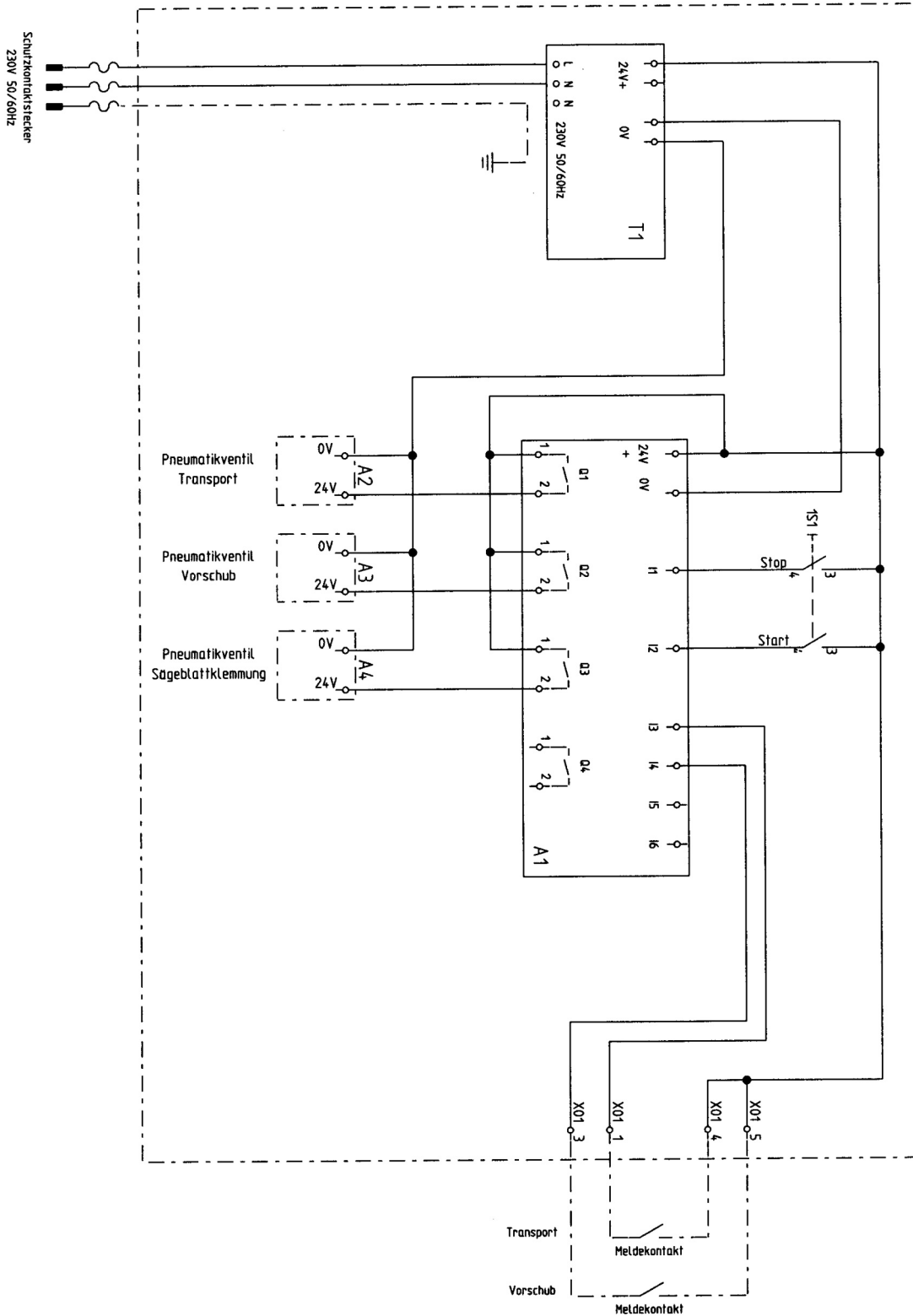
Please only use water mixable emulsions on a mineral oil basis.

For synthetic products, it can significantly damage the paint, various plastic parts and bearing seals; we will not be liable for such damages.

When sampling the cooling lubricants, please comply with the guidelines of the respective Lubricant manufacturer.

Please also follow the respective disposal instructions.

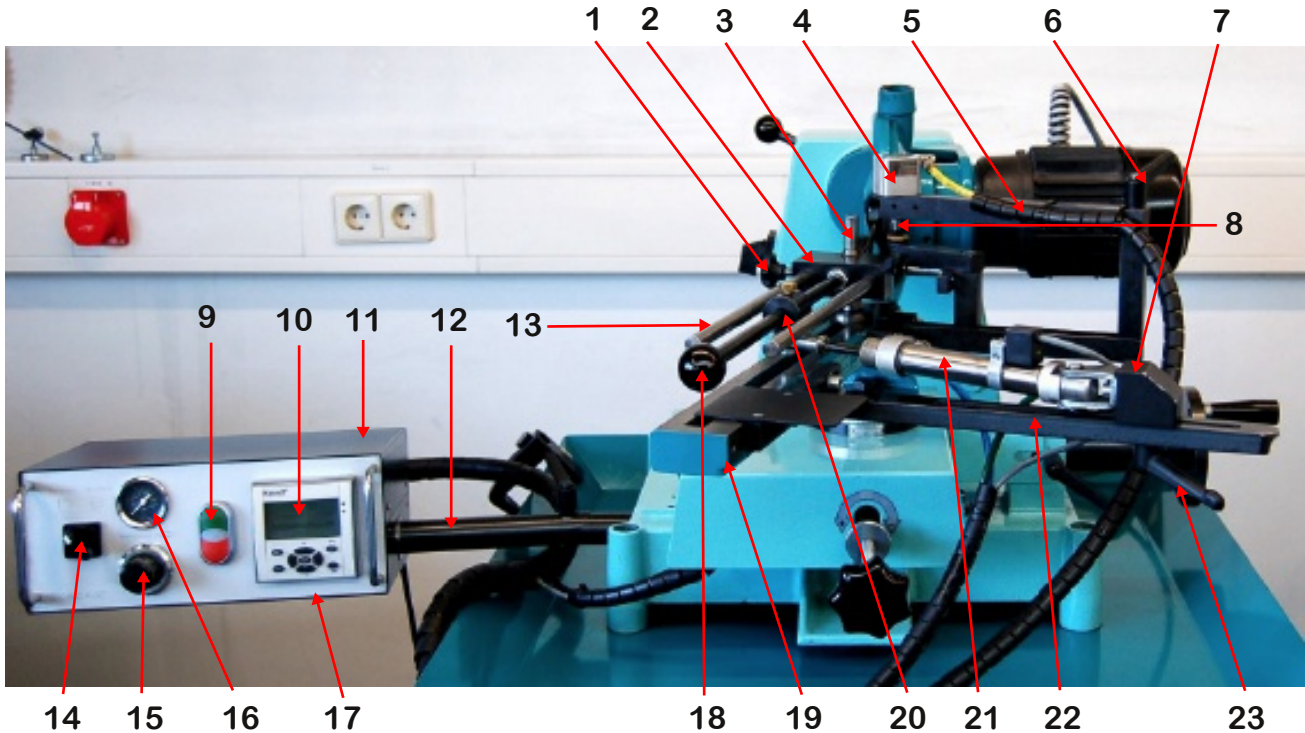
ELECTRONIC WIRING DIAGRAM SSG 600 A-LF-DC



36. SPARE PARTS LIST SSG 600-A-DC

Item-No.	Description
10774	Diamond grinding wheel grit D 64 150 x 6 x 2 x 20 mm
10805	Cleaning stone for diamond grinding wheel
10775	Corundum grinding wheel grit 46 150 x 15 x 20 mm
10776	Corundum grinding wheel grit 100 (fine) 150 x 15 x 20 mm
10796	Grinding wheel support
10804	Diamond grinding wheel dresser for corundum grinding wheel
10829	Rule scale for saw blade diameter
10798	Flange for saw blades
10780	Spacer ring for saw blade bore 25 mm
10781	Spacer ring for saw blade bore 30 mm
10782	Spacer ring for saw blade bore 32 mm
10783	Spacer ring for saw blade bore 35 mm
10784	Spacer ring for saw blade bore 40 mm
10785	Spacer ring for saw blade bore 45 mm
10786	Spacer ring for saw blade bore 50 mm
10787	Spacer ring for saw blade bore 60 mm
10788	Spacer ring for saw blade bore 65 mm
10789	Spacer ring for saw blade bore 70 mm
10772	Machine stand for SSG 600 complete with tub
10779	Tub for machine stand
10778	Base of machine stand without tub
10811	Tank for spray cooling
10818	Sliding screw (brass) M 6 / SW 19 mm
10809	Magnet for switch off sensor
10808	Saw blade transport short unit complete with holder screw and spring
10807	Transport finger, short, bulk
10827	Stop dog for tooth feed complete with holder
10800	Motor 3~400 V / 50 Hz
10819	Automatic box SSG 600 A compl. with case
10822	Relay for control unit SSG 600 A
10823	Cable tree complete with pipes, switches, plug and stop switch for SSG 600 A

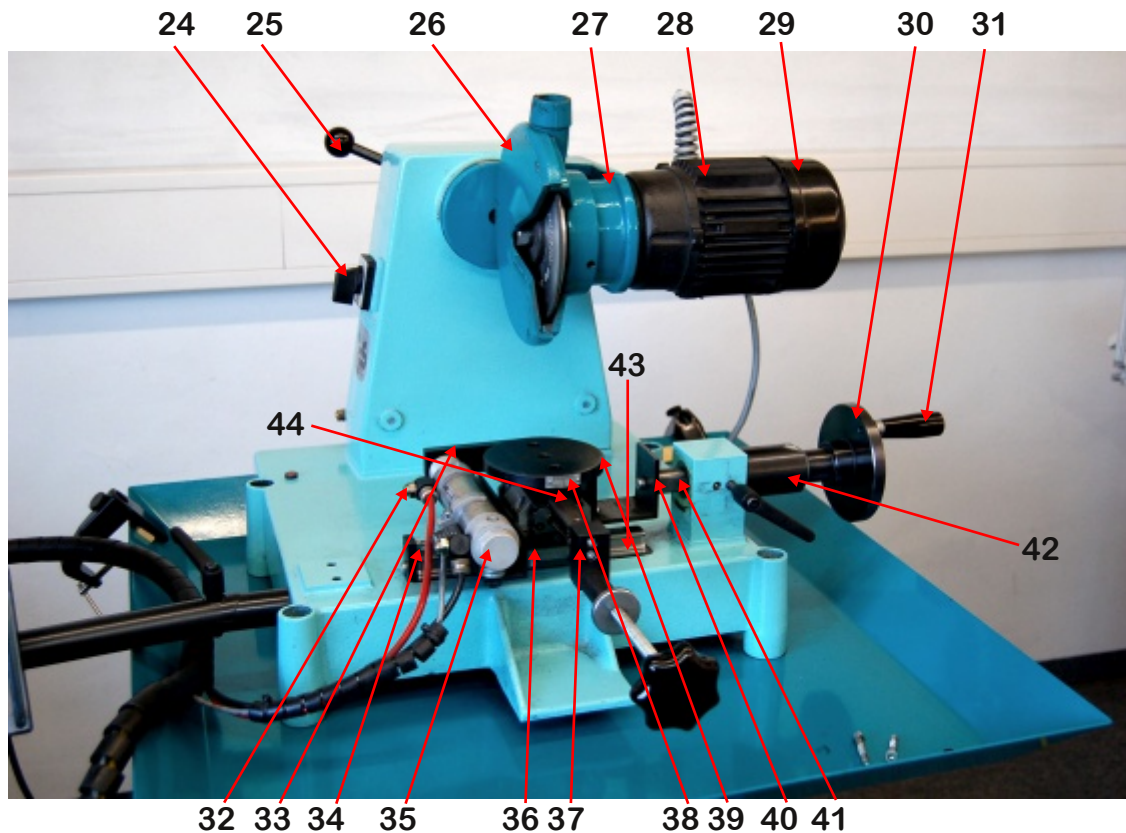
37. SPARE PART LIST SSG 600-A-DC



1. Item-No. 11126 Star knob screw M8 x 20 mm fixation of guidance bars
2. Item-No. 11312 Guidance bloc, saw blade flange
3. Item-No. 11039 Support arbor for saw blade flange
4. Item-No. 11088 Pneumatic cylinder 20 mm for saw blade fixation
5. Item-No. 12376 Support arm complete to positioning arm
6. Item-No. 11044 Clamping lever M8 x 32 mm
7. Item-No. 12377 Clamping bloc compl. holding fork and clamp lever for transp. cylinder
8. Item-No. 10818 Brass sliding screw SSG M6 / SW17 mm
9. Item-No. 11059 Twin function switch complete with pin elements
10. Item-No. 11384 Digital control panel SSG DC
11. Item-No. 11008 Case for control unit bulk
12. Item-No. 12378 Holding arm for control unit complete set of 3 pcs.
13. Item-No. 11125 Guiding bars 2 pcs. 335 x 12 mm
14. Item-No. 10820 Switch air-in/ adapt
15. Item-No. 12380 Control valve brake pressure
16. Item-No. 12381 Brake pressure-manometer
17. Item-No. 11255 Control unit SSG 600-DC complete
18. Item-No. 11127 Handle for transport
19. Item-No. 11093 Positioning arm for SSG 600 powder coated
20. Item-No. 11170 Adjustment ring for transport cylinder
21. Item-No. 10956 Transport cylinder dia 20 mm / lift 80 mm
22. Item-No. 12379 Guidance rail for transport cylinder
23. Item-No. 11412 Clamping lever M8 x 20 mm

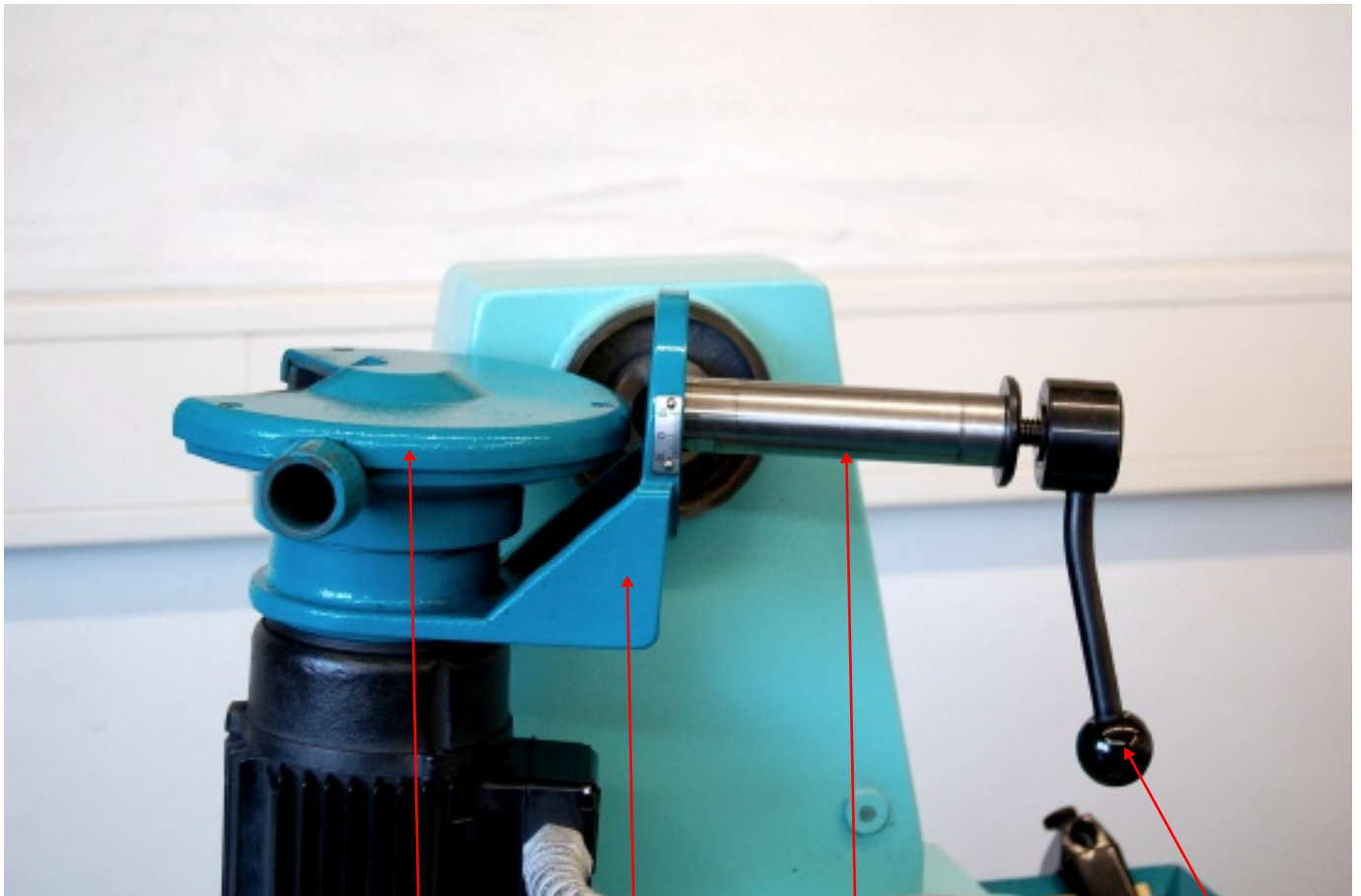
2+3 mounted = Item-No. 10832

37. SPARE PART LIST SSG 600-A-DC



- 24. Item-No. 11058 Motor switch 230 V TO-3-840 1/E
- 25. Item-No. 11130 Fixation handle M12 for motor adjustment
- 26. Item-No. 11244 Grinding wheel cover complete set of 2 pcs.
- 27. Item-No. 11241 Motor angle powder coated
- 28. Item-No. 10801 Motor 230 V/50 HZ 0,0180 Kw
- 29. Item-No. 10803 Motor-fan-wheel cover
- 30. Item-No. 12136 Handwheel with scale and fixation nut M12
- 31. Item-No. 12137 Turning handle for handwheel
- 32. Item-No. 10994 Backstroke trottle valve for pneumatic cylinder (machine has 4 pcs)
- 33. Item-No. 12358 Operation arm for grinding cylinder
- 34. Item-No. 10824 End position switch SSG 600-DC for grinding- and transport cyl.
- 35. Item-No. 11152 Grinding cylinder dia32 mm / lift 50 mm
- 36. Item-No. 12359 Cross plate with fixation angle for grinding cylinder
- 37. Item-No. 12360 Stop dog for tooth depth complete with holder set of 4 pcs.
- 38. Item-No. 12361 Washer flange for positioning arm
- 39. Item-No. 12362 Flange for positioning arm
- 40. Item-No. 12363 U-bridge for feeding
- 41. Item-No. 12365 Shaft dia 22 for feeding
- 42. Item-No. 12367 Threated spindle head complete with threaded spindle
- 43. Item-No. 11239 Guidance rail with carrier for X axis linear feed
- 44. Item-No. 11238 Guidance rail with carrier for Y axis linear feed

37. SPARE PART LIST SSG 600-A-DC



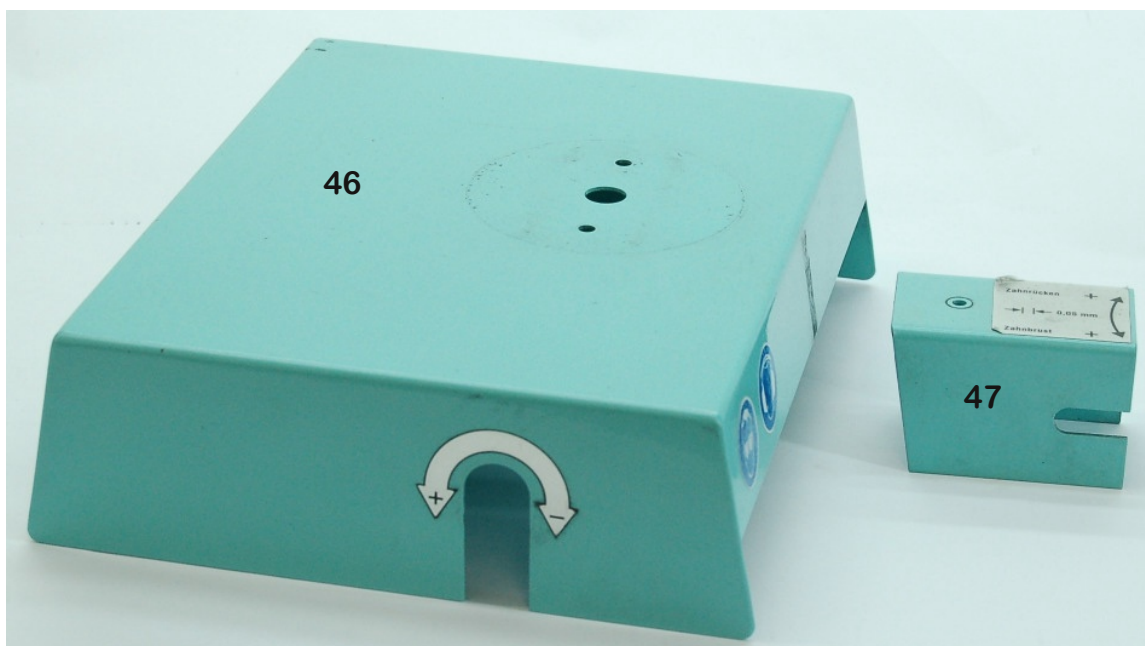
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- 45. Item-No. 11131 Axis of motor angle of motor adjustment
- 46. Item-No. 11128 Sheet metal cover small big size for guides
- 47. Item-No. 11129 Sheet metal cover small size for feeding shaft



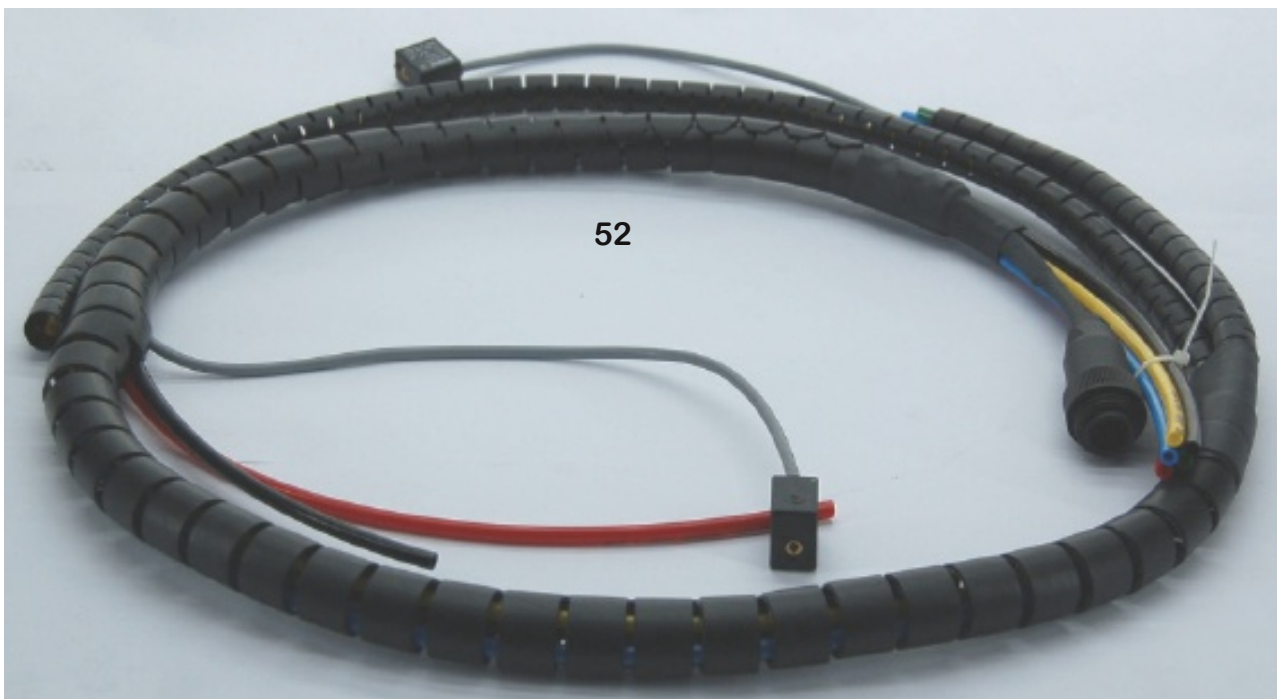
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37. SPARE PART LIST SSG 600-A-DC



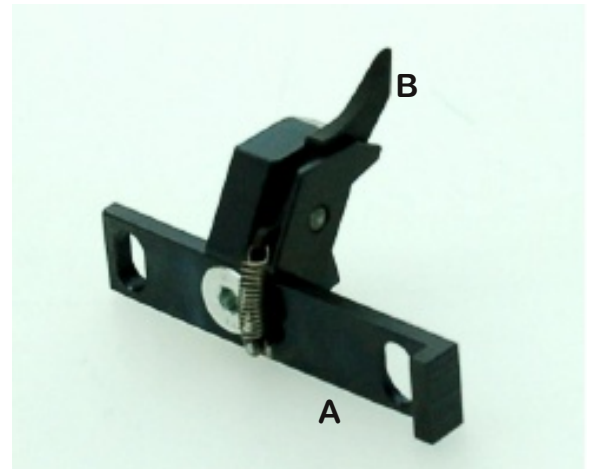
- 48. Item-No. 10796 Grinding wheel support SSG
- 49. Item-No. 11014 Clamping flange for saw blades 45 mm
- 50. Item-No. 10798 Clamping flange for saw blades 100 mm
- 51. Item-No. 10793 Set of reducer rings 25, 30, 32, 35, 40, 50, 70, 75 mm
- 52. Item-No. 11257 Cable tree complete with pipes and plugs for SSG 600-DC



37. SPARE PART LIST SSG 600-A-DC

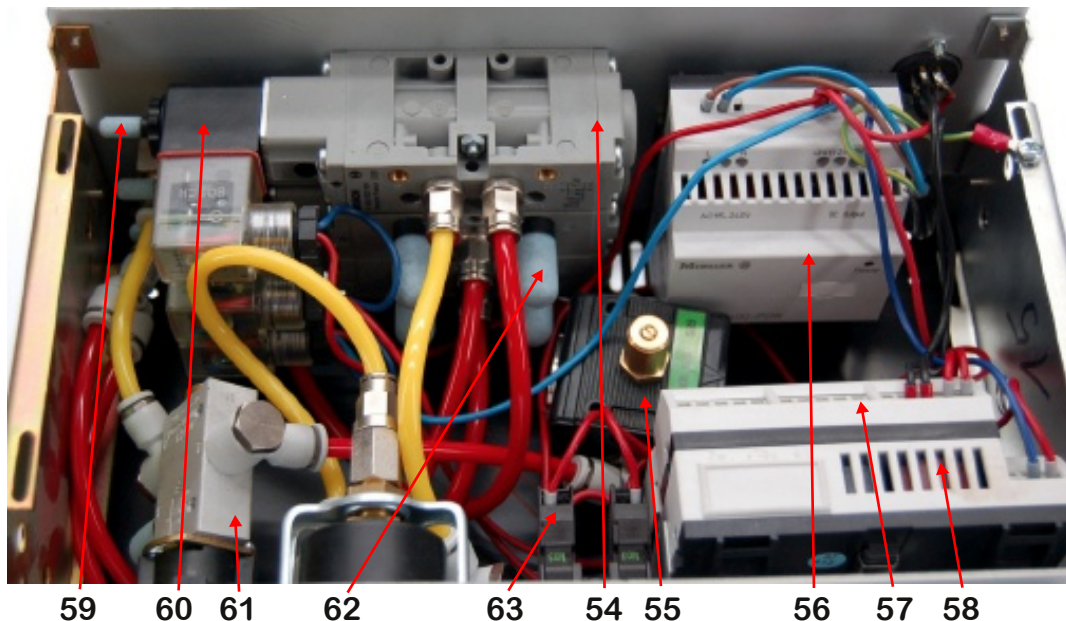


53. Item-No. 10794 Tool set SSG 600



A= Item-No. 10808 Saw blade transport unit

B= Item-No. 10807 Transport finger bulk



- 54. Item-No. 12368 Pneumatic valve 5/2 ways 24 V = (3 pcs inside)
- 55. Item-No. 12369 Air-in valve
- 56. Item-No. 11383 Transformator 24 V = 1,25 A
- 57. Item-No. 11381 I / O module
- 58. Item-No. 11382 CPU-NT module
- 59. Item-No. 12373 Silencer M5 for 5/2 way valve
- 60. Item-No. 12374 Magnetical pneumatic valve 24 V = for 5/2 way valve
- 61. Item-No. 12375 Mechanical pneumatic valve 3/2 way 1/8"
- 62. Item-No. 11101 Silencer 1/8" for pneumatic valve (5 pcs inside)
- 63. Item-No. 11061 Contact element SSG 2 pcs. EK 01 & 20 with fixation adaptor