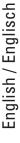


Operating Instructions

Translation of original operating instructions for the single-disc sanding machine

SINGLE







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Safety notes used in this operating instructions and their meaning:

warning!	Death, severe physical injury or significant property damage can occur if the corresponding cautionary measures are not taken!
CAUTION!	Moderate to light physical injury or property damage can occur if the corresponding cautionary measures are not taken!
ATTENTION!	An undesired event can occur if the corresponding instructions are not followed!





 $\label{eq:Fig.1} \textbf{Important parts and assemblies of the single-disc sanding machine SINGLE}.$



Introduction

1.1 FEATURES OF THE MACHINE

Fig. 1 shows the most important parts and assemblies which make up the SINGLE. We recommend that you take some time to become familiar with the machine.

1.2 DESCRIPTION OF THE MACHINE

The SINGLE single-disc sanding machine operates with a sanding plate to which Velcro-backed sanding discs can be attached. Of course, the conventional type of sanding disc with a fastening screw can also be used on the machine. The work zone is covered by the machine housing. In the machine housing, the electric motor is mounted vertically together with the gear. It is protected from sanding dust by the motor cover. The plug for connection to the mains is located on the machine housing. The motor switch with the switch positions ON/OFF is located in the handle at the top end of the guide tube. The machine is moved with this handle. At the back of the machine are two wheels which the machine runs on when it is moved.

You have purchased a high-quality product from LÄGLER®. We wish you a great deal of success with your SINGLE. All LÄGLER® products are subjected to a thorough inspection before leaving the factory.

Read these operating instructions completely before working with the SINGLE for the first time! These operating instructions include important information on occupational safety and will provide you with answers to many questions so that you can work with the machine safely and without any problems. If you cannot find a specific subject in these operating instructions, please read the LÄGLER® application technique manual "Sanding of wooden floors" (www.laegler.com) or contact our service department, your retailer or your importer.

1.3 INTENDED USE OF THE MACHINE

The SINGLE single-disc sanding machine is suitable for sanding wooden and cork floors and for work on floor underlays in the professional and DIY rental sectors. It can also be used for spreading care products and cleaning agents and for polishing floors.

Any application other than that described here is inadmissible without the consent of the manufacturer!



WARNING!

RISK OF DEATH from electrical shock:

The machine may <u>never</u> be used for wet processing operations of any kind!





1.4 PROTECTIVE DEVICES

The following parts of the machine are protective devices and must accordingly be kept in perfect working order:

Machine housing = Protection from sanding plate

and sanding disc

Dust extraction socket with cap = Protection from sanding plate

and sanding disc

Motor cover = Protection from live parts

Handles on the guide tube = Protection from live parts

Two-hand operation = Protection against unintentional starting of the machine

1.5 MACHINE CONFIGURATION

1.5.1 BASIC EQUIPMENT

- 1 Machine ready for operation
- 1 Operating instructions
- 1 Sanding plate
- Extension cable, length: 10 m (394"): for single-phase AC motor 3 x 2,5 mm² (3 x 0.0039 sq.in.) for three-phase AC motor 5 x 1,5 mm² (5 x 0.0023 sq.in.)
- 1 Hexagonal socket wrench, size 5 mm
- 1 Hexagonal socket wrench, size 6 mm
- 1 Respiratory protection mask, filter class P3

1.5.2 OPTIONAL EQUIPMENT

- Milling disc for work on floor underlays
- Diamond sanding disc for work on floor underlays
- Foldable earmuff
- Safety switch for fault current PRCD-S (for German mains supply)



You will find the corresponding part

numbers for the optional equipment and wearing parts in Section 11, Spare parts



NOTE:

SINGLE.



- INTRODUCTION $-\!-\!-$

1.5.3 WEARING PARTS AND SAFETY-RELATED PARTS

Check the condition of the wearing parts and the safety-related parts mentioned below at regular intervals in order to be able to work safely and optimally at all times.

Replace the following parts in case of wear and/or damage:

- Extension cable
- Motor cable
- Velcro coating on sanding plate
- Paper tensioning disc
- Screw for attaching paper tensioning disc
- Wheels
- Buffer
- Fluffy sealing strip





Hazard warnings and safety instructions



WARNING!

RISK OF DEATH, RISK OF INJURY, RISK OF FIRE:

- Be certain to read the hazard warnings and safety instructions before using the machine!
- Instruct your co-workers and colleagues accordingly! Otherwise these persons could be exposed to danger or injured!
- Keep these hazard warnings and safety instructions in a safe place!
- Observe the applicable regulations and legal requirements in your country!

2.1 HAZARD WARNINGS



WARNING!

RISK OF DEATH from suffocation and RISK OF INJURY:

 Never wrap the power cable around your neck or other parts of the body!

RISK OF DEATH from electrical shock:

- The machine may never be used for wet processing operations of any kind!
- Do not expose the machine to rain! Do not use the machine in moist or wet environments!
- Never connect the machine to hazardous electrical power sources such as electrical installations that are too weak, not fuse protected or without electrical grounding! Only use safety sockets!
- If the electrical installation is improper, there will be a risk of death if the machine is connected directly to the mains socket with the extension cable!
 - To protect yourself and the machine against faults in the mains supply use a safety switch PRCD (for German mains supply part number in Section 11, Spare parts SINGLE)!

 Observe the applicable regulations and legal requirements in your country!
- All extensive maintenance work, especially on the electrical equipment, must be conducted by a qualified expert for safety reasons!
- The machine must be switched off and the power plug must be removed from the socket during all maintenance work and all work on the electrical equipment!
- Avoid body contact with grounded parts, e.g. pipes, radiators, ovens, refrigerators!
- The quality of the motor cable and the power cables must match the quality of the original LÄGLER® cables!



HAZARD WARNINGS AND SAFETY INSTRUCTIONS -



WARNING!

RISK OF DEATH from electrical shock:

- The motor cable and the power cables must be protected from mechanical and electrical damages in the workplace!
- Do not carry or pull by the machine by the cable! Do not pull on the cable to remove the plug from the socket! Protect the cables against heat, oil and sharp edges!

RISK OF DEATH and RISK OF PROPERTY DAMAGE from unsecured load:

 When transported in a car or the like, the machines and all parts must be secured against sliding!

RISK OF EXPLOSION due to sparks while sanding or a high dust concentration in the air:

- Do not use the machine near
 - sources of fires,
 - flammable liquids or gases,
 - potentially explosive areas!
- Do not smoke in a dusty environment, e.g. while sanding, emptying the vacuum cleaner or cleaning the machine!

RISK OF FIRE from sparks while sanding or from spontaneous combustion:

- Prior to sanding a nailed or screwed floor all nails and screws must be countersunk deeply enough so that they cannot be sanded:
 - Countersink the nails for example with a hammer and a punch!
 - Tighten the screws!
- There is a high risk of fire when sanding woods with a large amount of resin, oiled or waxed floors or metal! Therefore, the machine must always be cleaned carefully directly after sanding! Be certain to note the warning notices of the manufacturers of paint, oil and wax!







WARNING!

RISK OF FIRE from sparks while sanding or from spontaneous combustion:

- Cloths, pads, et cetera which have been immersed in oil or wax can spontaneously combust! Be certain to note the warning notices of the manufacturers of paint, oil and wax!
- Be certain to note the instructions of the vacuum cleaner manufacturer for emptying the dust bag or disposing of the dust!

RISK OF FIRE from the overheating of the cables:

- Only the following motor cables and power cables may be used:
 - Machines with motor for mains voltage 220 V or 230 V:
 Cables with three wires! Each wire must have a cross-section of at least 2.5 mm² (0.0039 sq.in.)!
 - Machines with motor for mains voltage 400 V:
 Cables with five wires! Each wire must have a cross-section of at least 1.5 mm² (0.0023 sq.in.)!
- The maximum cable length in order to connect the machine to the mains supply must not exceed 20 m (790")!

HEALTH RISK caused by dust:

- Use only external vacuum cleaners approved for your work!
- Ensure that the external vacuum cleaner is properly connected to the machine (→ Section 5.6, Attaching an external vacuum cleaner)!
- Clean the machine regularly! Dust and deposits in the machine housing reduce the suction performance and the dust load at the workplace increases excessively!
- If the machine is operated correctly with a suitable vacuum cleaner, the mandatory dust emission values will not be exceeded! When sanding without a vacuum cleaner connected, a respiratory protection mask (at least filter class P2) must be worn!
- Always wear a respiratory protective mask (at least filter class P2) when executing works which might create dust, e.g. cleaning of the machine!



HAZARD WARNINGS AND SAFETY INSTRUCTIONS -



RISK OF INJURY and RISK OF PROPERTY DAMAGE from rotating tools and parts of the machine:

- For all operating conditions of the machine only one operator is required! As a consequence, for safety reasons only the machine operator must be in the working area while operating the machine!
- During operation of the machine, nobody but the machine operator may touch the cables!
- Before switching on the machine, make sure that
 - all wrenches and adjustment tools have been removed from the machine,
 - the sanding plate is attached correctly!
- Never switch on the machine if the plate can be touched by hand!
- Only tilt the switched-on machine backwards to such an extent that the plate cannot be touched under any circumstances!
- The machine may only be switched on when (→ Section 4.3, Switching on the machine):
 - it is in the working position,
 - the sanding plate is placed flat on the floor,
 - the dust extraction socket is closed!
- Never leave the operational machine unattended!
- Do not reach into rotating tools or parts of the machine!
- Do not wear any long articles of clothing or jewelry! These could be caught by moving parts!

RISK OF INJURY and RISK OF PROPERTY DAMAGE from unintentional starting of the machine:

- The power plug must always be removed from the socket when the machine is switched off!
- When connecting the machine to the mains supply, make sure that **both** start levers for switching on and off are **not** actuated!







RISK OF INJURY and RISK OF PROPERTY DAMAGE from the rolling away, tipping or falling of the machine:

- The machine must be secured against rolling away, tipping or falling when not in use!
- Always ensure that the machine is standing securely!

RISK OF INJURY and RISK OF PROPERTY DAMAGE from unsuitable parts:

Only use tools, accessories and spare parts from LÄGLER® for the SINGLE (Section 11, Spare parts SINGLE)!
 Warranty claims for foreign parts or damage caused thereby cannot be accepted!

HEALTH RISK caused by noise:

 Always use suitable hearing protection when conducting work that produces noise! Observe the applicable regulations and legal requirements in your country!

RISK OF PROPERTY DAMAGE:

- Remove any dirt from the gas spring at the bottom of the guide tube
 - either by wiping it with a dry cloth,
 - or by vacuuming it with a suitable vacuum cleaner!

Never blow off the gas spring with compressed air, otherwise the seals of the gas spring will be damaged!

- Never use any cleaning products which contain solvents!
- If the machine is not in use, remove the plate from the machine to avoid the following negative effects:
 - Damage to the surface which may be caused by the abrasive of the sanding plate, the diamond segments or the indexable inserts of the milling disc!
 - Damage to the flexible Velcro ring of the sanding plate, the diamond segments or the indexable inserts of the milling disc which can be caused by the weight of the machine!
- Never conduct a maintenance or a replacement of wearing parts on the newly sanded wooden floor! Thus, you will avoid scratches or other damage to the floor!
- Improper transport will result in damage to the machine!



HAZARD WARNINGS AND SAFETY INSTRUCTIONS -

2.2 GENERAL SAFETY INSTRUCTIONS

Check the machines for damage!

Check regularly and after a longer non-use of the machine

- the proper functioning of protective devices and moving parts,
- the parts including extension cables and motor cables for damage and wear.

Damaged protective devices and damaged or worn parts must be properly repaired or replaced by an authorized service shop insofar as nothing to the contrary is indicated in the operating instructions (Section 11, Spare parts SINGLE).

Damaged electrical components must be replaced with Original spare parts from LÄGLER® by a qualified electrician (Section 11, Spare parts SINGLE).

Do not use the machine if it cannot be switched on and/or switched off by using its switch.

Maintain your machines with care!

- Always keep the machines clean so that you can work better and more safely.
- Follow the maintenance guidelines and the instructions for replacing tools.
- Keep the handles dry and free of oil and grease.

• Provide good illumination in the workplace!

Well lit construction sites reduce the risk of injury and allow you to better evaluate the quality of your work.

Keep your work area tidy!

Untidy work areas create a risk of accidents.

Use the proper machines!

Do not use low-performance machines or additional devices for heavy jobs. Do not use the machines for purposes and work for which they are not intended.

Do not overload the machines!

They work better and more safely in the power range noted.

• Do not bend too far over the machines!

Avoid unnatural postures. Make sure that you stay in a stable position and keep your balance at all times.





- HAZARD WARNINGS AND SAFETY INSTRUCTIONS —

• Be attentive!

Pay attention to your work. Work carefully and do not use the machines if you are not concentrating.

• Store your machines safely!

Store your unused machines in a dry, closed location out of the reach of children!





Technical data

3.1 DATA ON TYPE PLATE

ATTENTION!

In order to receive the correct spare parts from us, please specify in inquiries and spare part orders \underline{always} the serial numbers of your machines!

The type plate of the SINGLE is located on the motor cover (fig. 2). The following technical data are specified on the type plate (fig. 3):

- 1 Manufacturer
- 2 Serial number of machine (Mach.-No.)
- **3** Year of manufacture (Year)
- 4 Machine name (Type)
- 5 Required mains voltage in volt (V)
- **6** Current consumption in ampere (A)
- 7 Motor frequency in CPS (Hz)
- 8 Motor power in kilowatt (KW)
- 9 Motor speed in 1/min (Rpm)
- 10 Weight of machine in kilogram (Weight)
- 11 Insulation class (Insul. Cl.)
- 12 Protection class (Prot. Cl.)
- 13 Type of current
- 14 Country of manufacture

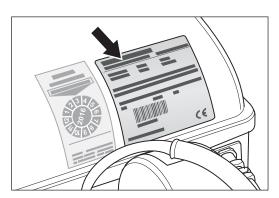
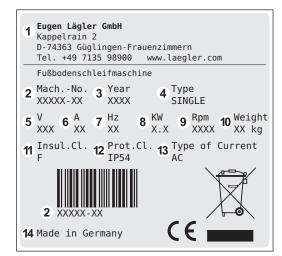


Fig. 2 Type plate on motor cover.



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Fig. 3 Data on type plate.

– TECHNICAL DATA ——

3.2 MACHINE DATA

Manufacturer	Eugen Lägler GmbH	
Machine type	Single-disc sanding machine	
Machine name	SINGLE	
Serial number	see type plate (fig. 2)	
Year of manufacture	see type plate (fig. 2)	

Motor type	single-phase AC motor	
Voltage	230 V	220 V 230 V
Frequency	50 Hz (CPS)	60 Hz (CPS)
Motor power	1.2 kW 60 μF	
Starting capacitor		
Running capacitor	40 μF	

Motor type	three-phase AC motor
Voltage	400 V
Frequency	50 Hz (CPS)
Motor power	1.6 kW

Necessary fuse protection of mains supply	at least 16 A
Protection class	IP 54
Safety devices	no-voltage release, temperature switch as overload protection in the motor





- TECHNICAL DATA —

Sanding plate diameter	406 mm (16")
Sanding plate speed	approx. 180 1/min (rpm)
Overall length without guide tube	615 mm (24.2")
Overall height of machine - with guide tube - without guide tube	1350 mm (53.1") 265 mm (10.4")
Height above sanding plate	46 mm (1.8")
Overall width of machine	435 mm (17.1")
Overall weight of the machine with sanding plate	45 kg (99 lbs.)

Dust emissions at workplace	< 2 mg/m ³
Workplace-related noise emission values (Measuring point at the operator's ear; 1.5 m above floor level) parquet sanding operation, sanding oak parquet, sanding paper grit 60	77 dB(A)
Measurement uncertainty constant of the noise emission values	4 dB(A)
Vibration total value a _{hv} (measured at the handle)	< 2.5 m/s ²

NOTE on noise emission:

The values indicated are emission values and must not represent safe workplace values as well.

Although a correlation exists between emission levels and immission levels, it is not always possible to determine whether additional precautionary measures are required.

Factors that can have an effect on the immission level existing at the workplace include the duration of the effects, the characteristics of the work area and other sources of noise, e.g. the number of machines and processing operations in the vicinity. The permissible workplace values may also vary from country to country. This information, however, is intended to enable the user to better estimate the

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dangers and risks.





Commissioning

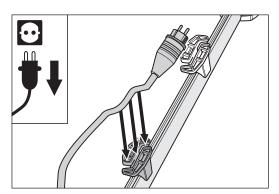


Fig. 4 Insert the motor cable in the lower cable holder on the guide tube.

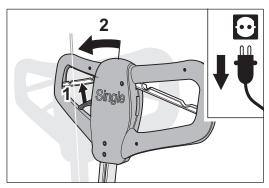


Fig. 5 Pull the adjusting lever to release the lock (1) and push the guide tube up until it reaches the mechanical stop (2).

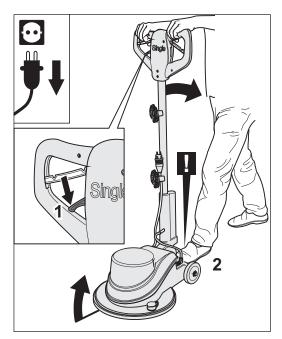


Fig. 6 Release the adjusting lever (1) and carefully tilt the machine backwards. Steady the machine with your foot to stop it rolling away (2) and ensure that the machine is stable!

This section describes the procedure for commissioning the SINGLE on site. In order to exclude the possibility of damage and malfunctions, it is essential to proceed in the sequence outlined below.



CAUTION!

RISK OF INJURY and RISK OF PROPERTY DAMAGE:

Before working with the machine for the first time, operating staff must be adequately instructed!

4.1 PREPARING THE MACHINE

ATTENTION!

Please note that the packaging serves as a transport container for the machine, accessories and the sanding medium! Furthermore, the machine can be sent back safely in the original packaging without risk should there be any problems!

- Unpack the machine carefully. Please ensure that packaging materials that are no longer needed are disposed of responsibly, in an environmentally-friendly way.
- 2 Attach the sanding disc you need to the sanding plate (→ Section 5.3, Changing the sanding disc).
- Insert the motor cable in the lower cable holder on the guide tube (fig. 4).
- 4 Pull the adjusting lever on the handle towards you to release the lock of the guide tube (fig. 5, 1). Push the guide tube into and past the vertical position until it reaches the mechanical stop (fig. 5, 2).



- 4
- Release the adjusting lever so that the guide tube can engage again (fig. 6, 1). Carefully tilt the machine backwards on the wheels. As you do so, steady the machine with your foot to stop it rolling away (fig. 6, 2).
 - Please ensure that the machine is stable before commencing work!
- **6** Push the sanding plate centrally onto the gear mount (fig. 7, 1) and turn it **counterclockwise** until it reaches the mechanical stop (fig. 7, 2).
- 7 Make sure that the adjusting lever on the handle is in the **lower position** (fig. 8, 1). Carefully tilt the machine forwards over the wheels and onto the sanding plate. As you do so, steady the machine with your foot to stop it rolling away (fig. 8 2).



CAUTION!

RISK OF INJURY and RISK OF PROPERTY DAMAGE from rotating parts of the machine:

Always adjust the guide tube only when the machine is switched off!

The height of the guide tube can be adjusted, allowing you to work with the SINGLE as comfortably as possible. To make this adjustment, pull the adjusting lever towards you (fig. 9, 1). This releases the lock on the guide tube so that it can be moved up or down. Choose the position of the handle that feels most comfortable to you (fig. 9, 2) and release the adjusting lever again.

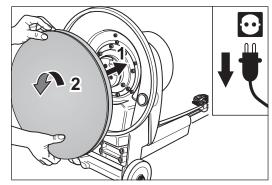


Fig. 7 Push on the sanding plate (1) and turn it **counterclockwise** until it reaches the mechanical stop (2).

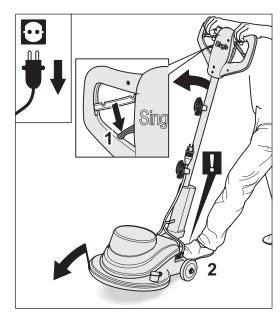


Fig. 8 Make sure that the adjusting lever is in the lower position (1). Carefully tilt the machine forwards and secure it against rolling away at the same time (2).

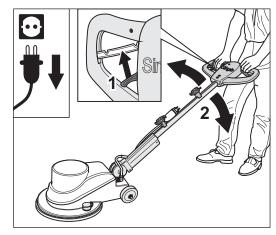


Fig. 9 When the machine is **switched off**, pull the adjusting lever towards you (1) and set the handle to a position that feels comfortable to you (2).





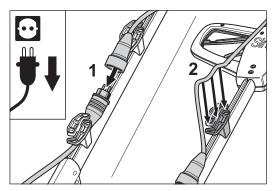


Fig. 10 Connect the motor cable to the extension cable (1).

Then insert the extension cable into the upper cable holder on the guide tube of the SINGLE (2).

4.2 CONNECTING THE POWER CABLE



SINGLE)!

WARNING!

RISK OF DEATH from electrical shock:

- Never connect the machine on hazardous electrical power sources such as electrical installations that are too weak, not fuse protected or without electrical grounding!
 Only use safety sockets!
- If the electrical installation is improper, there will be a <u>risk of death</u> if the machine is connected <u>directly</u> to the mains socket with the extension cable!
 To protect yourself and the machine against faults in the mains supply use a safety switch PRCD (for German mains supply part number in Section 11, Spare parts
- Observe the applicable regulations and legal requirements in your country!

RISK OF FIRE from the overheating of the cables:

- Only the following motor cables and power cables may be used:
 - Machines with motor for mains voltage <u>220 V</u> or <u>230 V</u>: Cables with <u>three</u> wires! Each wire must have a crosssection of at least 2.5 mm² (0.0039 sq.in.)!
 - Machines with motor for mains voltage 400 V:
 Cables with <u>five</u> wires! Each wire must have a cross-section of at least 1.5 mm² (0.0023 sq.in.)!
- The <u>maximum</u> cable length in order to connect the machine to the mains supply must not exceed 20 m (790")!
- 1 Push the socket onto the plug on the motor cable (fig. 10, 1) and insert the extension cable in the upper cable holder on the guide tube (fig. 10, 2).
- Insert the plug of the extension cable into the coupler of the safety switch PRCD or into the socket of a separate vacuum cleaner (Section 5.6, Attaching an external vacuum cleaner). Then insert the plug of the safety switch PRCD into an adequately fused mains socket with protective contacts.





The machine can also be switched on if the plug of the extension cable is plugged directly into an adequately fused mains socket with protective contacts.

However, the regulations and legal requirements applicable in your country must be absolutely observed!

4.3 SWITCHING ON THE MACHINE



CAUTION!

RISK OF INJURY and RISK OF PROPERTY DAMAGE from rotating parts of the machine:

- Please read this section very carefully! It contains important safety instructions!
- When switching on the machine, ensure that no objects randomly positioned in the vicinity can be picked up and no other persons are in the danger area!
- Never allow the machine to run unattended!

4.3.1 GENERAL

NEVER switch on the machine if:

- no sanding plate or milling disc is mounted (fig. 11)!
- the machine is **not** in the working position!
- the sanding plate or milling disc is not completely placed flat on the floor (fig. 12)!
 - If these conditions are not met, the sanding plate or milling disc can come free of its mount and parts or fingers can catch on the rotating plate or disc, resulting in injury and damage!
- the dust extraction socket is **not** closed either with its cap or a vacuum cleaner hose (→ Section 5.6, Attaching an external vacuum cleaner)!

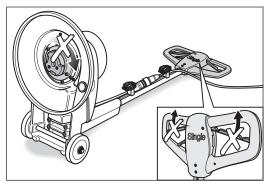


Fig. 11 **Never** switch on the machine, if there is **no** sanding plate or milling disc mounted!

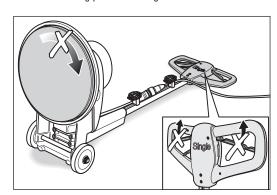


Fig. 12 Never switch on the machine if

- it is not in the working position,
- the sanding plate or milling disc is not completely placed flat on the floor!



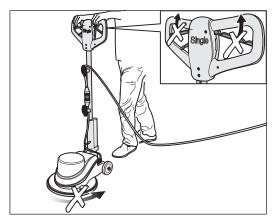


Fig. 13 ATTENTION: If the guide tube is in a vertical position, the machine cannot be switched on!

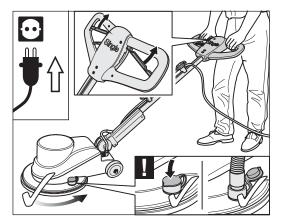


Fig. 14 Only switch on the machine in this working position, when

- the sanding plate is placed completely flat on the floor

and

 the dust extraction socket is closed either with its cap or with a vacuum cleaner hose!

Then pull both the start levers at the same time!

For safety reasons, the machine CANNOT be switched on if:

- the guide tube is in a vertical position, since this makes the machine very difficult to control (fig. 13).
- both start levers on the handle are not pulled at the same time.

Holding the machine steady with both hands enables you to control the machine properly when it is switched on, despite the motor starting torque.

Before switching on the machine, ensure that:

- all tools and adjustment tools have been removed from the machine.
- the machine is in the working position,
- the sanding plate is placed completely flat on the floor,
- the guide tube is not in a vertical position,
- the dust extraction socket is closed either with its cap or with a vacuum cleaner hose,
- you are in the middle of the room with the machine, as far away as possible from other persons or obstacles!

4.3.2 SWITCH-ON PROCEDURE

When you have made the checks mentioned in *Section 4.3.1*, *General*, the SINGLE can be started as follows:

- Pull both the start levers **at the same time** and hold the handle tight with **both** hands (fig. 14).
- 2 The machine will start up.

NOTE:

To start up the machine with almost no jerking movement, we recommend lifting the machine **slightly** at the handle immediately after you switch it on.





Additionally applies to machines with three-phase AC motor (mains voltage 400 V)

If the motor does not start after the two start levers have been pulled at the same time and the red LED light on the machine housing shines (fig. 15), the rotation direction of the motor must be changed. In order to do this, proceed as follows:

1 Disconnect the motor cable from extension cable!

2 Original LÄGLER® plug with **red** nut at the cable outlet (fig. 16, **A**):

- Put a screwdriver in the slit of the phase changing switch in the plug of the motor cable (fig. 17, 1).
- To unlock the phase changing switch press the screwdriver in the slit and at the same time turn the screwdriver 180° (fig. 17, 2).

Original LÄGLER $^{\otimes}$ plug with **yellow** nut at the cable outlet (fig. 16, **B**):

- Put a screwdriver in the slit of the phase changing switch in the plug of the motor cable (fig. 17, 1).
- To unlock the phase changing switch turn the screwdriver 180° against a small resistance (fig. 17, 2).

ATTENTION!

The phase changing switch can only be turned in one direction! The corresponding direction can be different with different plugs!

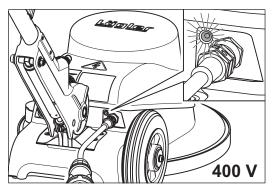


Fig. 15 The motor does not start and the red LED light on the machine housing shines.

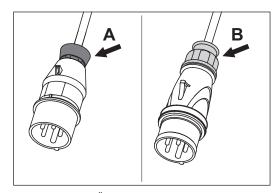


Fig. 16 Original LÄGLER® plug with **red** nut (**A**) or **yellow** nut (**B**).

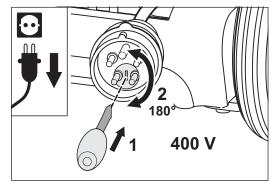


Fig. 17 Change the rotation direction of the motor by turning the phase changing switch 180°.

23



4.4 SWITCHING OFF THE MACHINE

To switch off the machine, release both the start levers but keep a tight hold on the machine with both hands on the handle, until the sanding plate has come to a complete standstill.



CAUTION!

RISK OF INJURY and RISK OF PROPERTY DAMAGE:

- Never allow the machine to run unattended!
- <u>Always</u> remove the power plug from the socket after you have switched off the machine!

RISK OF PROPERTY DAMAGE:

If the machine is not in use, remove the plate from the machine to avoid the following negative effects:

- Damage to the surface which may be caused by the abrasive of the sanding plate, the diamond segments or the indexable inserts of the milling disc!
- Damage to the flexible Velcro ring of the sanding plate, the diamond segments or the indexable inserts of the milling disc which can be caused by the weight of the machine!





Working with the SINGLE

5.1 GENERAL APPLICATION TIPS



WARNING!

RISK OF DEATH from electrical shock:

The machine may \underline{never} be used for wet processing operations of any kind!

- It is possible to avoid leaving deep sanding tracks caused by excessively coarse grits by initially selecting a fine grit for the first sanding process.
- Carry out a test sanding using grit 50 or 60. If this test is satisfactory and you envisage a good sanding result within a reasonable period, it is more efficient to start the sanding work off with these finer grits.
- You can avoid creating sanding tracks from the previous grit used by adhering to the grit sequence and not skipping more than one grit at a time.
- Thoroughly vacuum the floor and expansion gap immediately before starting each work step!
- Clean the wheels of the machine before each work step.
- When changing to a new sanding disc, always start work in a less well lit area of the room until the sanding disc loses its initial aggressive sanding effect.

NOTE:

For more information free of charge, please contact: within Germany

- Telephone: 0800 / 52 34 537 - Fax: 0800 / 48 66 353

- Telephone: 800-848-6635

or

- Telephone: 0049 - 7135 - 98 90 - 0 - Fax: 0049 - 7135 - 98 90 - 98 - E-mail: info@laegler.com - Internet: www.laegler.com

within the USA

You will also find important and interesting application tips in the LÄGLER® application technique manual "Sanding of wooden floors" (www.laegler.com)!



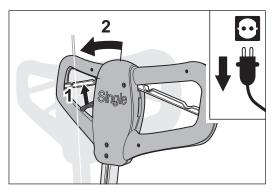


Fig. 18 Pull the adjusting lever to release the lock (1) and push the guide tube up until it reaches the mechanical stop (2).

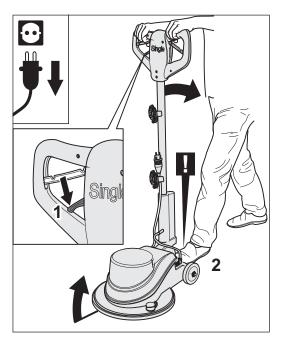


Fig. 19 Release the adjusting lever (1) and carefully tilt the machine backwards. Steady the machine with your foot to stop it rolling away (2) and ensure that the machine is stable!

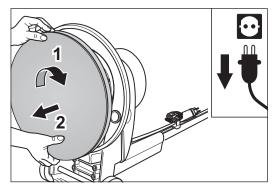


Fig. 20 Turn the sanding plate **clockwise** (1) and remove it from the machine (2).

5.2 CHANGING THE SANDING PLATE

5.2.1 REMOVING THE SANDING PLATE

- 1 Switch off the machine and pull the power plug out of the socket!
- 2 Pull the adjusting lever on the handle towards you to release the lock of the guide tube (fig. 18, 1). Push the guide tube into and past the vertical position until it reaches the mechanical stop (fig. 18, 2).
- Release the adjusting lever so that the guide tube can engage again (fig. 19, 1). Carefully tilt the machine backwards on the wheels. As you do so, steady the machine with your foot to stop it rolling away (fig. 19, 2).

Please ensure that the machine is stable before commencing work!

4 Turn the sanding plate clockwise (fig. 20, 1) and you can then remove it from the machine (fig. 20, 2).



5.2.2 INSERTING THE SANDING PLATE

- 1 In order to insert the sanding plate push it centrally onto the gear mount (fig. 21, 1) and turn it **counterclockwise** until it reaches the mechanical stop (fig. 21, 2).
- 2 Make sure that the adjusting lever is in the **lower position** (fig. 22, 1). Carefully tilt the machine forwards over the wheels and onto the sanding plate. As you do so, steady the machine with your foot to stop it rolling away (fig. 22, 2).

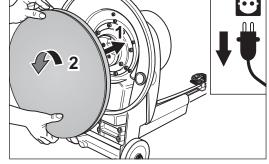
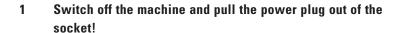


Fig. 21 Push on the sanding plate (1) and turn it **counterclockwise** until it reaches the mechanical stop (2).

5.3 CHANGING THE SANDING DISC

Depending on the type of sanding process you wish to perform, different grits can be selected. In order to change the abrasive, proceed as follows:



- Pull the adjusting lever on the handle towards you to release the lock of the guide tube (fig. 18, 1), and push the guide tube into and past the vertical position until it reaches the mechanical stop (fig. 18, 1).
- 3 Release the adjusting lever so that the guide tube can engage again (fig. 19, 1). Carefully tilt the machine backwards on the wheels. As you do so, steady the machine with your foot to stop it rolling away (fig. 19, 2).

Please ensure that the machine is stable before commencing work!

t the machine backwards on the dy the machine with your foot to 2). Fig. 22 Make sure that the adjusting lever is in the lower position (1). Carefully tilt the machine forwards and secure it against rolling away at the same time (2).

5.3.1 CHANGING VELCRO-BACKED SANDING DISCS

- 4 Pull the worn Velcro-backed sanding disc off the Velcro attachment ring of the sanding plate (fig. 23).
- Press the new Velcro-backed sanding disc with the Velcro side against the Velcro attachment ring of the sanding plate. As you do so, please ensure that the Velcro-backed sanding disc is attached to the sanding plate as centrally as possible.
- Make sure that the adjusting lever on the handle is in the **lower position** (fig. 22, 1). Carefully tilt the machine forwards over the wheels and onto the sanding plate. As you do so, steady the machine with your foot to stop it rolling away (fig. 22, 2).

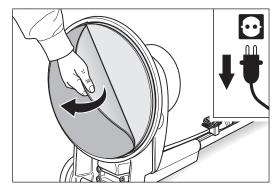


Fig. 23 Pull off the worn Velcro-backed sanding disc.



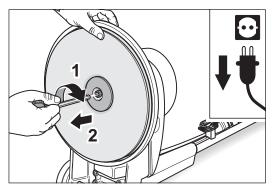


Fig. 24 Turn the screw for releasing the disc in a clockwise direction (left-handed thread)!

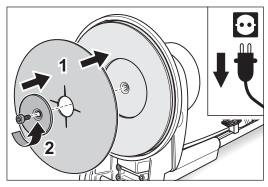


Fig. 25 Place the new sanding disc in the sanding plate (1) and screw it in place (2). Turn the screw counterclockwise to tighten (left-handed thread)!

5.3.2 CHANGING CONVENTIONAL SANDING DISCS

ATTENTION!

So that sanding discs that are attached in the conventional way do not come loose during sanding work (because of the direction in which the plate rotates), the fastening screw for the paper retaining disc has a <u>left-handed</u> thread!

- To release the paper retaining disc, turn the screw **clockwise** (**left-handed thread**) with a hexagonal socket wrench! As you do so, hold the sanding plate steady (fig. 24).
- Unscrew and remove the fastening screw completely.

 Remove the paper retaining disc and the worn sanding disc from the sanding plate and lay them to one side.

ATTENTION!

Only ever attach one sanding disc, otherwise the sanding results will be unsatisfactory and the dust suction system will not function properly!

- 6 Place a new sanding disc on the sanding plate and push the fastening screw with paper retaining disc into the sanding plate (fig. 25, 1).
- 7 Use the hexagonal socket wrench to turn the fastening screw counterclockwise into the sanding plate (left-handed thread, fig. 25, 2)! Please ensure that the sanding disc is attached to the sanding plate as centrally as possible.
- 8 Hand-tighten the fastening screw using the hexagonal socket wrench.



5.4 ADJUSTING AND REPLACING THE CABLE HOLDER

5.4.1 ADJUSTING THE CABLE HOLDER

The cable holder positions can be adjusted individually along the groove on the guide tube of the machine.

- Using a hexagonal socket wrench, slacken the screw in the middle of the cable holder just enough to let you slide the cable holder along the groove with the sliding block (fig. 26).
- 2 Slide the cable holder into the position you want it in and tighten the screw again. As you do so, the sliding block turns so that the cable holder is clamped in place (fig. 26).

5.4.2 REPLACING THE CABLE HOLDER

- To remove or replace a cable holder, slacken the screw in the middle of the cable holder. **Do not** remove the screw entirely from the sliding block! You can now remove the cable holder together with the sliding block (fig. 27).
- To mount a cable holder, push the screw with its washer into the hole on the cable holder and on the other side, screw the sliding block loosely onto the screw.
- **3** Push the sliding block into the groove on the guide tube (fig. 28, 1) and tighten the screw (fig. 28, 2). As you do so, the sliding block turns so that the cable holder is clamped in place.

5.5 ATTACHING THE FLUFFY SEALING STRIP AS PROTECTION AGAINST DUST

A fluffy sealing strip around the circumference of the machine improves the dust suction results by sealing off the gap between the working area of the machine and the floor.

You should attach the strip to the machine so that when the sanding plate is mounted, the strip is in contact with the floor right round the circumference of the machine (fig. 29).

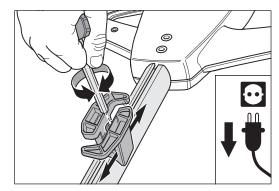


Fig. 26 Release the screw, do **not** remove it completely.

Then move the cable holder with the sliding block and tighten the screw again.

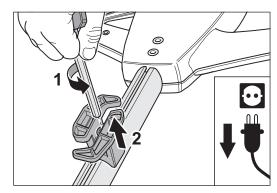


Fig. 27 Release the screw (1), do **not** remove it completely.

Then remove the cable holder **with** the sliding block (2).

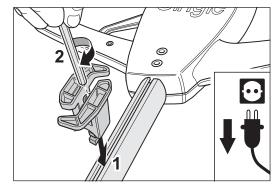


Fig. 28 Insert the sliding block in the groove on the guide tube (1) and tighten the screw (2).

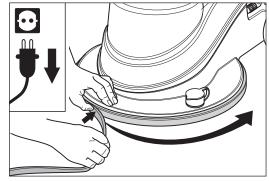


Fig. 29 Attach the fluffy sealing strip.



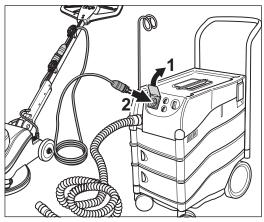


Fig. 30 Push the extension cable plug into the socket on the vacuum cleaner.

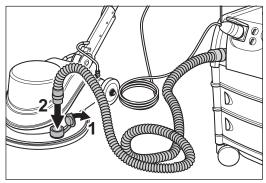


Fig. 31 Open the cap (1) and attach the hose to the SINGLE (2).

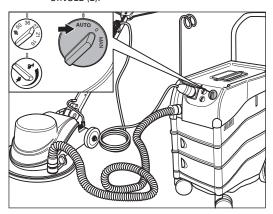


Fig. 32 Set the vacuum cleaner to the AUTO mode setting.

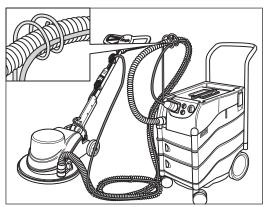


Fig. 33 Attach the extension cable to the vacuum cleaner suction hose.

5.6 ATTACHING AN EXTERNAL VACUUM CLEANER

We recommend attaching an external vacuum cleaner. This guarantees that the best possible dust removal results are achieved. The description below applies only for vacuum cleaners of the type FESTOOL mobile extractor CTM44E230V.



CAUTION!

Please comply with the safety specifications made by the vacuum cleaner manufacturer and read through the operating instructions for the vacuum cleaner carefully!

- 1 Insert the plug of the motor cable of the SINGLE into the coupler of the extension cable.
- 2 Insert the plug of the extension cable into the socket on the vacuum cleaner (fig. 30).
- Open the cap of the dust extraction socket on the machine housing (fig. 31, 1) and push the vacuum cleaner hose into the connection piece (fig. 31, 2).
- 4 Switch the vacuum cleaner to AUTO mode (fig. 32). AUTO mode means that the vacuum cleaner switches on and off automatically when the SINGLE is switched on and off.

NOTE:

To make work easier, you can attach the extension cable to the suction hose of the vacuum cleaner with several cable binders (fig. 33). In this way you can ensure that the cable will not get caught up under the machine. Use detachable cable binders for this purpose.

When the machine is ready for use as described in the preceding sections, you can start with the first sanding step.





Transport and storage



WARNING!

RISK OF DEATH and RISK OF PROPERTY DAMAGE from unsecured load:

When transported in a motor vehicle or the like, the machines and all parts must be secured against sliding!

RISK OF FIRE from spontaneous combustion:

Oil or wax can lead to spontaneous combustion! Therefore, the machine must <u>always</u> be cleaned carefully directly after sanding or application of oil or wax!

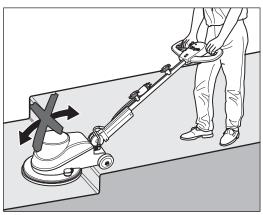


Fig. 34 Do not push or pull the machine over landings, stairs or the like!

6.1 TRANSPORT



WARNING!

RISK OF INJURY and RISK OF PROPERTY DAMAGE:

Do not push or pull the machine over landings, stairs or the like (fig. 34)!

In order to transport the machine properly, proceed as described below.

TRANSPORT AND STORAGE —

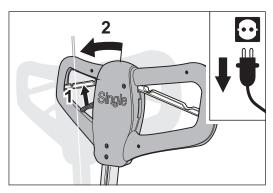


Fig. 35 Pull the adjusting lever to release the lock (1) and push the guide tube up until it reaches the mechanical stop (2).

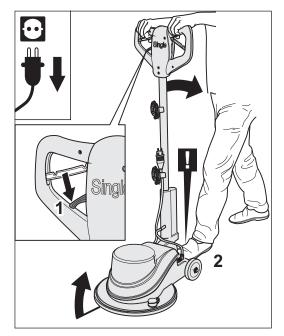


Fig. 36 Release the adjusting lever (1) and carefully tilt the machine backwards. Steady the machine with your foot to stop it rolling away (2) and ensure that the machine is stable!

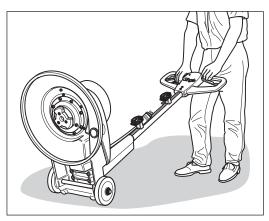


Fig. 37 Only move the machine in this position over flat surfaces or small landings.

6.1.1 TRANSPORT ON FLAT SURFACES OR OVER SMALL LANDINGS

Switch off the machine and pull the power plug out of the socket!

- Pull the adjusting lever on the handle towards you to release the lock of the guide tube (fig. .35, 1). Push the guide tube into and past the vertical position until it reaches the mechanical stop (fig. .35, 2).
- 3 Release the adjusting lever so that the guide tube can engage again (fig. 36, 1). Carefully tilt the machine backwards on the wheels. As you do so, steady the machine with your foot to stop it rolling away (fig. 36, 2).

Please ensure that the machine is stable before commencing work!

- 4 Remove the sanding plate (→ Section 5.2, Changing the sanding plate).
- 5 Lift the handle upwards with both hands until you are comfortably standing (fig. 37).
- Now you can push or pull the machine (fig. 37). In this position the machine can be held and moved with little effort.
- Pull the machine slowly and carefully over small landings such as doorsills so that the machine cannot slip out of your hand!

6.1.2 TRANSPORT OVER LARGER LANDINGS, STAIRS OR THE LIKE

In order to transport the machine out of the vehicle, over stairs or other large landings, the machine must be carried.

In order to facilitate this, the machine can be dismantled into three parts: the guide tube as one element, the sanding plate and the drive unit (machine housing with motor).

- 1 Switch off the machine and pull the power plug out of the socket!
- 2 Take the motor cable and the extension cable out of the cable holder on the guide tube.



TRANSPORT AND STORAGE -

- 3 Remove the sanding plate (→ Section 5.2, Changing the sanding plate).
- 4 Release the cable plug of the guide tube by turning the threaded ring on the cable plug counterclockwise (fig. 38, 1) and pull out the plug (fig. 38, 2).
- Pull the adjusting lever on the handle towards you to release the lock of the guide tube (fig. 39, 1) and push the guide tube back into a horizontal position (fig. 39, 2).
- 6 Use a hexagonal socket wrench to release the four fastening screws at the base of the guide tube. Steady the guide tube with one hand as you do so (fig. 40).

To reassemble the machine, mount the individual components again in reverse order to that described above.

6.2 STORAGE

If you wish to keep the machine in storage for a longer period of time, ensure that it is kept dry and free of the influence of frost in a location without excessive temperature fluctuations.

Store your unused machine in closed locations out of the reach of children!



CAUTION!

RISK OF PROPERTY DAMAGE:

- If the machine is not in use, remove the plate from the machine to <u>avoid</u> the following <u>negative</u> effects:
 - Damage to the surface which may be caused by the abrasive of the sanding plate, the diamond segments or the indexable inserts of the milling disc!
 - Damage to the flexible Velcro ring of the sanding plate, the diamond segments or the indexable inserts of the milling disc which can be caused by the weight of the machine!
- When storing for long periods, place the machine on the bottom part of the supplied transport packaging!

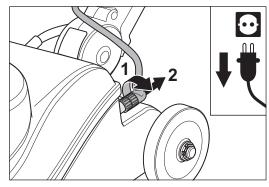


Fig. 38 Disconnect the cable plug of the guide tube from the machine housing.

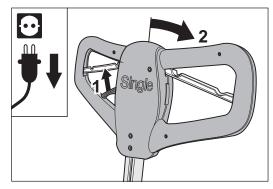


Fig. 39 Pull the adjusting lever to release the lock on the guide tube (1) and push the guide tube back into horizontal position (2).

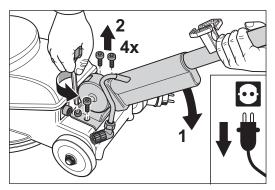


Fig. 40 Unscrew the guide tube.





Maintenance and replacement of wearing parts



WARNING!

RISK OF DEATH from electrical shock and RISK OF INJURY from rotating parts of the machine:

- All extensive maintenance work, especially on the electrical equipment, <u>must</u> be conducted by a qualified expert for safety reasons!
- All maintenance work and all work on the electrical equipment <u>must</u> be conducted with the machine switched off and with the power plug removed from the socket!



CAUTION!

RISK OF INJURY and RISK OF PROPERTY DAMAGE:

- Only use original spare parts from LÄGLER® (-> part numbers in Section 11, Spare parts SINGLE)! This is the only way to ensure that your machine continues to perform! Warranty claims for foreign parts or damage caused thereby cannot be accepted!
- Never conduct the maintenance work and replacement of wearing parts on the newly sanded floor! Thus, you will avoid scratches or other damage to the floor!

Periodically, but at the latest when you notice that damage has occurred, a variety of maintenance procedures have to be performed. For this work, always use original spare parts manufactured by LÄGLER®. Work in a clean, well lit location and proceed in accordance with these instructions. In the tool bag you will find the necessary tools to carry out the work described below.

The inspection of the machine can be carried out in a short time and avoids later complaints, which can be caused by minor damage to the machine or worn parts. These measures contribute significantly to maintaining the value of the machine and ultimately to your own safety.





7.1 CLEANING AND CARE



WARNING!

RISK OF FIRE from the formation of sparks while sanding or from spontaneous combustion:

- There is a high risk of fire when sanding woods with a large amount of resin, oiled or waxed floors or metal!
 Therefore, the machine must <u>always</u> be cleaned carefully directly after sanding!
- Be certain to note the warning notices of the paint, oil and wax manufacturers!

HEALTH RISK caused by dust and RISK OF PROPERTY DAMAGE:

Clean the machine regularly:

- Dust and deposits in the machine housing and the plate reduce the suction performance and the dust load at the workplace increases excessively!
- Remove any dirt from the gas spring at the bottom of the guide tube
 - either by wiping it with a dry cloth,
 - or by vacuuming it with a suitable vacuum cleaner!
 Never blow off the gas spring with compressed air, otherwise the seals of the gas spring will be damaged!
- Never use any cleaning products which contain solvents!

Before starting work, you should perform the following care procedure in order to ensure that the machine is in full working order and produces the customary high-quality sanding finish:

- Clean the machine's wheels.
- Clean all dust or other residues off the moving parts at the base of the guide tube.
- Carry out a visual inspection of the electrical equipment (extension cable, plugs, couplings). Replace damaged parts if necessary.





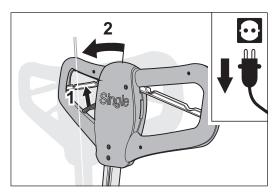


Fig. 41 Pull the adjusting lever to release the lock (1) and push the guide tube up until it reaches the mechanical stop (2).

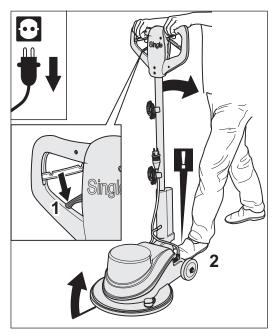


Fig. 42 Release the adjusting lever (1) and carefully tilt the machine backwards. Steady the machine with your foot to stop it rolling away (2) and ensure that the machine is stable!

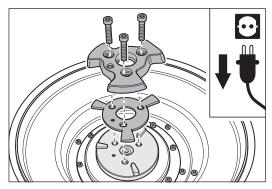


Fig. 43 Replace the plate mounting and the shock absorber.

7.2 REPLACING THE PLATE MOUNTING AND THE SHOCK ABSORBER

Always use original LÄGLER® plate mountings and shock absorbers (→ part number in Section 11, Spare parts SINGLE)!

1 Switch off the machine and pull the power plug out of the socket!

- 2 Pull the adjusting lever on the handle towards you to release the lock of the guide tube (fig. 41, 1), and push the guide tube into and past the vertical position until it reaches the mechanical stop (fig. 41, 2).
- 3 Release the adjusting lever so that the guide tube can engage again (fig. 42, 1). Carefully tilt the machine backwards on the wheels. As you do so, steady the machine with your foot to stop it rolling away (fig. 42, 2).

Please ensure that the machine is stable before commencing work!

- 4 Release and remove the three screws that fasten the plate mounting in place.
- 5 Use two screwdrivers or something similar to lever the plate mounting off the retaining pin.
- 6 Remove the shock absorber (fig. 43).
- 7 Replace the parts that are damaged or worn.





CAUTION!

RISK OF PROPERTY DAMAGE:

The gear of the SINGLE is maintenance-free and contains a special oil! The incorrect volume of oil can cause severe damage to the gear!

For this reason, <u>never</u> open the oil drainage screws in the motor shaft or in the gear cover (fig. 44, A and B)!

To assemble, follow the instructions above in reverse order. Please ensure that the pattern of holes on the shock absorber and the plate mounting match the pattern on the gear output.

7.3 REPLACING THE CENTERING DOME ON THE SANDING PLATE

- 1 Remove the sanding plate from the SINGLE and lay it on the floor with the flat side down.
- Turn the centering dome clockwise out of the sanding plate with an open-ended or ring spanner (left-handed thread, fig. 45)!
- To mount the new centering dome, screw it counterclockwise into the sanding plate (left-handed thread)!

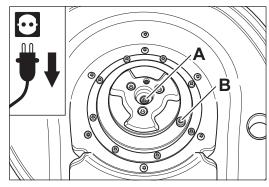


Fig. 44 The two screws with markings (A and B) are oil drainage screws. **DO NOT UNSCREW THEM!**

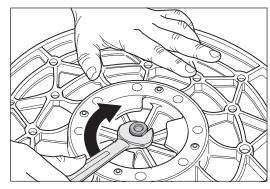


Fig. 45 To remove the centering dome, turn it in a clockwise direction (left-handed thread)!



Regular inspection and maintenance work in accordance with accident prevention regulations



WARNING!

Tests and testing intervals must comply with and be performed in accordance with the applicable regulations and legal requirements in your country!

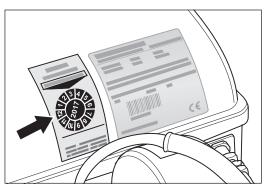


Fig. 46 The inspection label on motor cover confirms the electrical and mechanical safety of the machine and indicates when the next maintenance check is due.

The electrical operating equipment and machine parts must be inspected at least once a year by a qualified electrician with respect to electrical and mechanical safety, then be repaired as required. Afterwards, the operational safety must be confirmed by the attachment of an inspection label on the machine (fig. 46).

The elements required for the dust suction system must be checked at least once per year by a qualified expert and repaired as required. The functional efficiency must also be confirmed.

Ensure that only original LÄGLER® spare parts are used for maintenance work! You should only allow the customer service work to be conducted by LÄGLER® or an authorized LÄGLER® service center!

The service passport in these operating instructions (*Section 12*) documents when and where your machine was serviced.

Enter the serial number and the year of manufacture of your machine (please see the type plate) on the back cover of these operating instructions! If you do not do this, your service passport is invalid!

Make sure that the maintenance tasks in the service passport are confirmed by filling in a corresponding field with the date, stamp and signature.



WARNING!

In order to ensure the safety of the machines and equipment (= working equipment), the German Ordinance on Industrial Safety and Health (BetrSichV) must be complied with in Germany!

REGULATIONS VALID IN GERMANY

The German Ordinance on Industrial Safety and Health (BetrSichV) requires every employer to define the testing intervals on the work equipment they provide according to a risk analysis and to document all of this.



REGULAR INSPECTION AND MAINTENANCE WORK -

EXCERPT FROM THE GERMAN ACCIDENT PREVENTION REGULATIONS "DGUV VORSCHRIFT 3" (November 2012)

§ 5 Inspections

- (1) The employer must ensure that the proper condition of the electrical systems and equipment is inspected
 - before using the equipment for the first time and after an alteration or repair before being used again by an electrician or under the supervision of an electrician and
 - 2. at regular intervals.

The intervals are to be calculated in such a manner that defects which must be handled are detected in a timely manner.

- (2) The electrical engineering regulations relevant to the inspection are to be followed.
- (3) Upon request by the professional association, an inspection log with specific entries is to be maintained.
- (4) The inspection before the first commissioning as per paragraph 1 is not required if the employer receives confirmation from the manufacturer or installer that the electrical systems and equipment have been correspondingly procured in accordance with these accident prevention guidelines.

Table 1B: Recurring inspections of portable electrical equipment:

Systems/equipment (which are to be inspected)

- portable electrical equipment (insofar as is used)
- extension and device connection cables with plugs
- connection cables with plugs
- movable cables with plugs and fixed connections

Inspection interval

Every 6 months as a reference value, 3 months on construction sites*)

If an error rate of less than 2% is reached during the inspection, the inspection interval can be extended to a maximum of 1 year (valid for machines on construction sites, in production facilities and workshops).

*) See the BG information "Selection and Operation of Electrical Systems and Equipment on Construction Sites" (DGUV Information 203-006) for more details.

Type of inspection

The proper condition of the machines and equipment must be inspected.

Inspector

Electricians or persons trained in electrical engineering when using suitable measurement and inspection devices.

NOTE:

- All LÄGLER® machines and electrical equipment are subjected to an electrical inspection as well as a thorough visual and functional test before they leave the factory.
- A recurring inspection of the machines and electrical equipment must be conducted in Germany at certain intervals.
- LÄGLER® recommends using the guidelines of the German accident prevention regulations "DGUV Vorschrift 3" for inspections and inspection intervals.
- You can, of course, arrange for repairs and recurring inspections of LÄGLER® machines to be conducted by the LÄGLER® service department.





Causes of faults



WARNING!

RISK OF DEATH from electrical shock:

Work on the electrical equipment is to be conducted exclusively by a qualified electrician (circuit diagrams in Section 10)!

The machine must be switched off and the power plug removed from the socket during this work!

RISK OF INJURY due to unsuitable parts:

Make sure that only original LÄGLER® spare parts and original LÄGLER® accessories are used!

This section shows you how to remedy possible malfunctions. If none of the measures listed here are successful, please contact our service department, your retailer or your importer.

9.1 THE MACHINE DOES NOT RUN OR HAS SWITCHED OFF AUTOMATICALLY

- The guide tube is in the vertical position. In this position the machine cannot be switched on for safety reasons!
 - → Section 4.3, Switching on the machine
- To switch on the machine, the two start levers were not pulled at the same time!
 - → Section 4.3, Switching on the machine
- The machine is not connected to the electrical network.
 Check the following items:
 - Is the motor cable connected to the extension cable?
 - Is the extension cable plugged into the safety switch PRCD or into the socket of a separate vacuum cleaner?
 - Is the safety switch PRCD or the separate vacuum cleaner plugged into the mains socket?
- The fuse of the motor is blown. The cause of the blown fuse must be professionally removed and the fuse in the fuse holder replaced.

The fuse holder and two spare fuses are located under the motor cover near the control electrics.

- (→ part number in *Section 11, Spare parts SINGLE*).
- The mains socket is not properly connected. This error must be corrected by an expert.
- The electrical safety device of the electrical network interrupted the electrical circuit, e.g. because of
 - too many electricity consumers connected to the same electrical circuit,
 - improper electrical installation.

The causes for the error must be repaired by an expert.

 The electrical network is not providing sufficient voltage (undervoltage). Use a transformer if necessary (e.g. LÄGLER® part number 708.00.00.100 for 230 V).



- CAUSES OF FAULTS —

- The temperature switch in the motor has switched off the machine because
 - the power cables have a total length of more than 20 m (790")
 - the power cables have wire cross-sections which are too small:
 - at mains voltage 220 V and 230 V are the wire cross-sections smaller than $2.5\ \text{mm}^2$ (0.0039 sq.in.),
 - at mains voltage 400 V are the wire cross-sections smaller than 1.5 mm^2 (0.0023 sq.in.),
 - too much pressure was applied to the sanding plate while sanding.

The motor must cool off and the causes for the problems named above must be remedied.

- An electrical component of the machine (e.g. capacitors, contactor, cable, switch) is defective and must be inspected by a qualified electrician and replaced if necessary.
- Machine for mains voltage 400 V (three-phase AC):
 The motor has the wrong direction of rotation. The phase changing switch in the plug of the motor cable must be turned by 180°.
 - → Section 4.3.2, Switch-on procedure

9.2 THE MACHINE ATTEMPTS TO START UP BUT IS NOT ABLE TO DO SO

- At low temperatures: The machine is too cold and must be heated up to room temperature in a warm room.
- Cables which are too long or too thin are used for the electrical connection:
 - The power cables have a total length of more than 20 m (790").
 - The power cables have wire cross-sections which are too small:
 - at mains voltage 220 V and 230 V are the wire cross-sections smaller than 2.5 mm² (0.0039 sq.in.),
 - at mains voltage 400 V are the wire cross-sections smaller than 1.5 $\,$ mm 2 (0.0023 sq.in.).

This causes of faults lead to a loss of power and are not allowed for safety reasons!

 The electrical network is not providing sufficient voltage (undervoltage). Use a transformer if necessary (e.g. LÄGLER® part number 708.00.00.100 for 230 V).



- CAUSES OF FAULTS —

9.3 THE MACHINE RUNS BUT HAS NO OR VERY LITTLE SANDING POWER CAPACITY

- The sanding medium is incorrect or dull and must be replaced.
 - → Section 5.3, Changing the sanding disc
- At low temperatures: The machine is too cold and must be heated up to room temperature in a warm room.
- Cables which are too long or too thin are used for the electrical connection:
 - The power cables have a total length of more than 20 m (790").
 - The power cables have wire cross-sections which are too small:
 - at mains voltage 220 V and 230 V are the wire cross-sections smaller than 2.5 mm^2 (0.0039 sq.in.),
 - at mains voltage 400 V are the wire cross-sections smaller than 1.5 $\,$ mm² (0.0023 sq.in.).

This causes of faults lead to a loss of power and are not allowed for safety reasons!

 The electrical network is not providing sufficient voltage (undervoltage). Use a transformer if necessary (e.g. LÄGLER® part number 708.00.00.100 for 230 V).

9.4 THE MACHINE VIBRATES INTENSELY AND RUNS NOISILY

- The sanding medium is not properly attached to the sanding plate. The attachment must be corrected.
 - → Section 5.3, Changing the sanding disc
- The sanding medium is damaged or incorrect and must be replaced.
 - → Section 5.3, Changing the sanding disc
- The flexible Velcro ring between sanding plate and sanding medium is damaged and must be replaced.
- There are clogged materials and deposits in the machine that must be removed.





9.5 THE MACHINE RUNS BUT CREATES A GREAT DEAL OF DUST

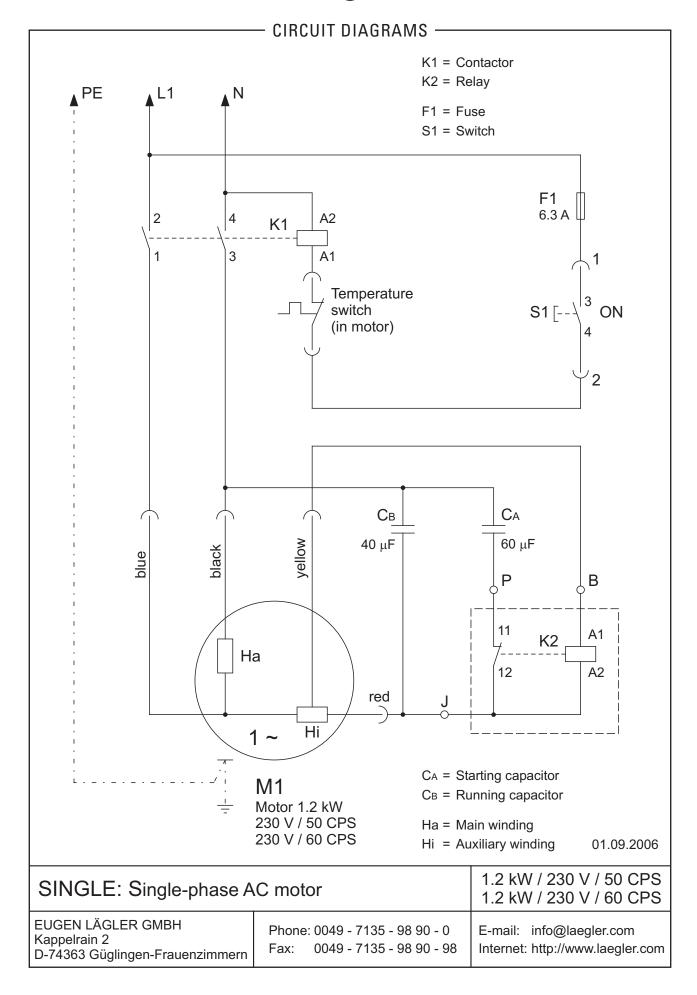
- No vacuum cleaner is connected to the machine or the dust extraction socket is not closed.
 - → Section 5.6, Attaching an external vacuum cleaner
- The fluffy sealing strip is missing, damaged or not mounted correctly.
 - → Section 5.5, Attaching the fluffy sealing strip as protection against dust
- There are clogged materials and deposits in the machine that must be removed.
- More than one sanding disc is mounted. Mount only one sanding disc.
 - → Section 5.3, Changing the sanding disc

9.6 SANDING PROBLEMS (WAVES, STRIPS, GROOVES)

- The floor was not vacuumed before sanding. The floor always must be thoroughly vacuumed immediately before each work step (every sanding step, gap filling or surface treatment).
- The sanding medium is not properly attached to the sanding plate. The attachment must be corrected.
 - → Section 5.3, Changing the sanding disc
- The sanding medium is damaged or incorrect and must be replaced.
 - → Section 5.3, Changing the sanding disc
- The wheels are dirty or damaged and must be cleaned or replaced.
- The machine is being moved too slowly and must be sped up.
- Incorrect machine guidance (the machine is not guided with circular movements during sanding).
- Too much pressure is applied to the sanding disc while sanding. If present, remove the additional weight.

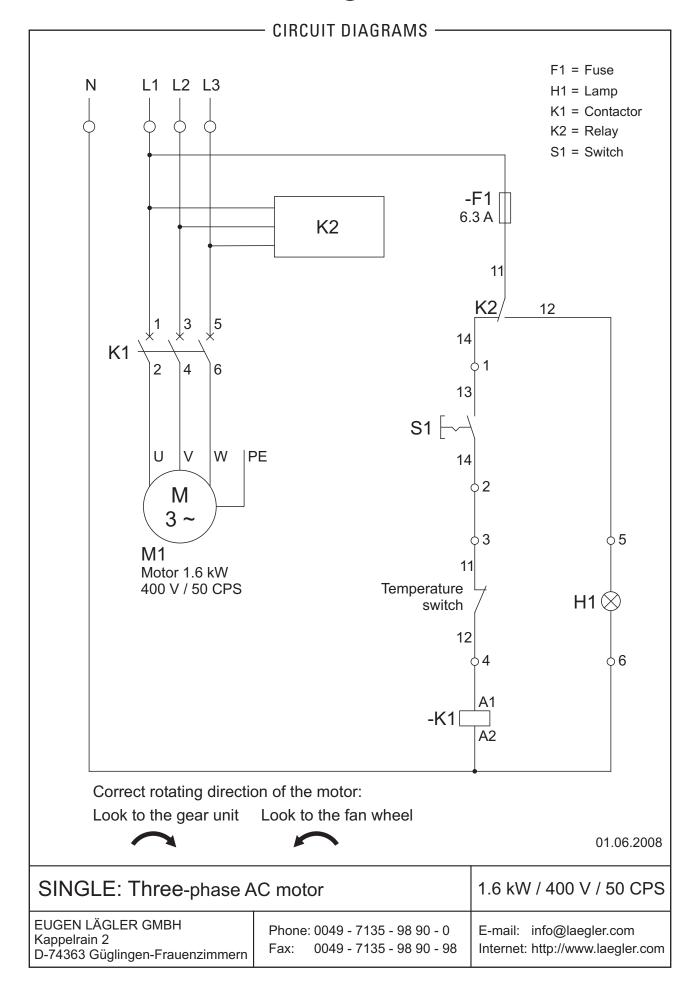




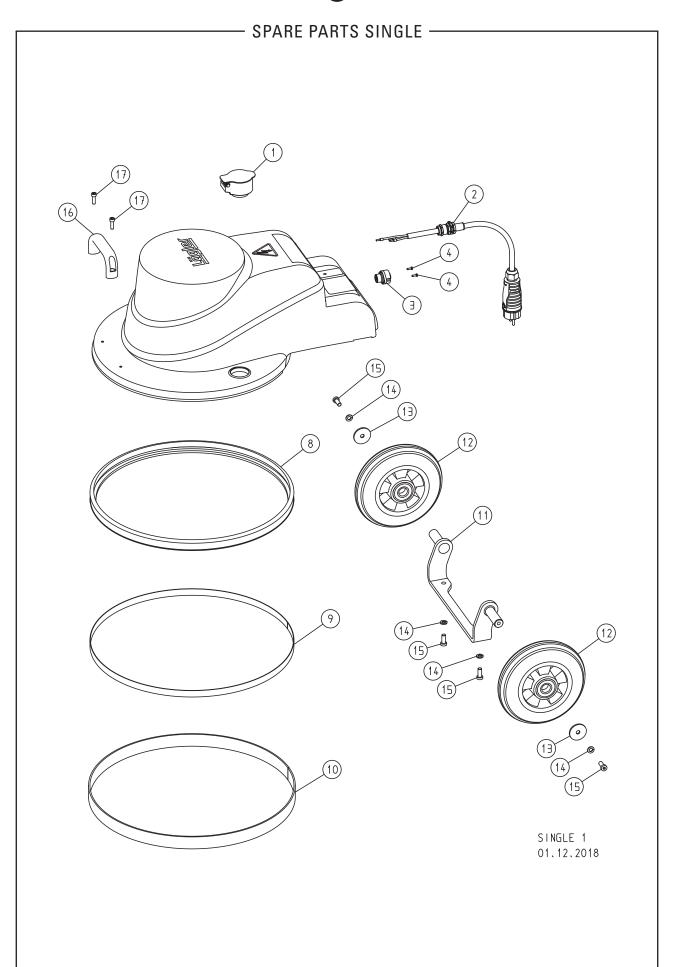












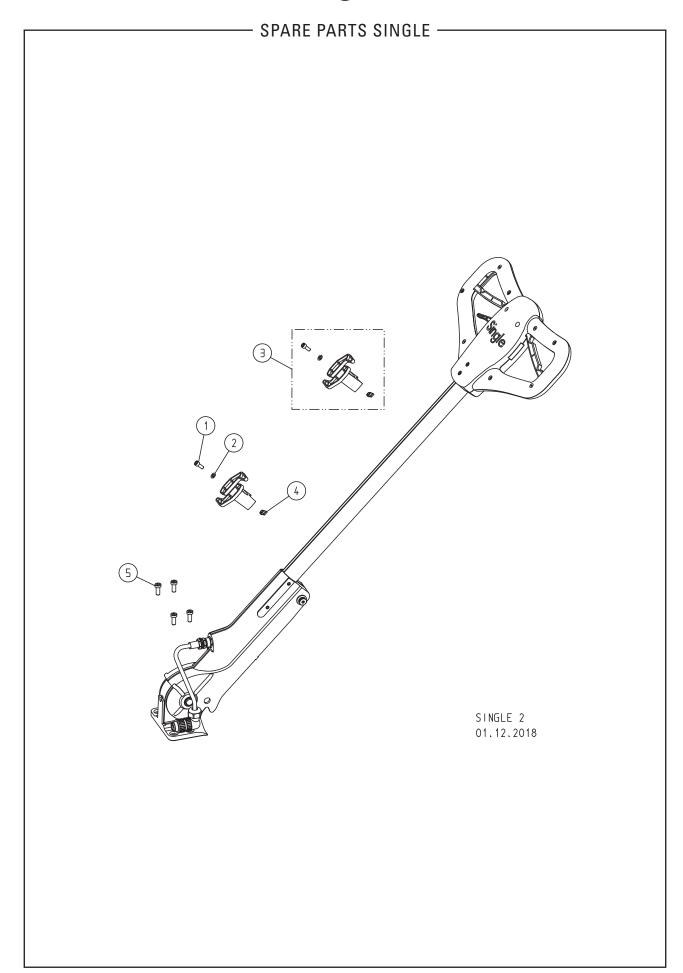




Item	Part number	Description	
1	850.01.80.200	Dust extraction socket	
2	000.65.43.252	Motor cable 3 x 2.5 mm²	
3	000.65.71.040	Integrated socket	
4	7500.1003.010	Screw	
8	850.01.02.105	Buffer	
9	850.01.40.100	Velcro	
10	850.01.51.100	Fluffy sealing strip	
11	850.05.10.100	Wheel holder	
12	850.05.19.105	Wheel (from year of manufacture 2019)	
	850.05.09.105	Wheel (up to year of manufacture 2018)	
	0125.1012.000	Washer (for wheel up to year of manufacture 2018)	
	0471.0012.000	Circlip (for wheel up to year of manufacture 2018)	
13	000.10.10.085	Washer	
14	0127.1008.000	Spring washer	
15	7984.1008.020	Screw	
16	000.20.10.121	Handle	
17	0912.1006.020	Screw	





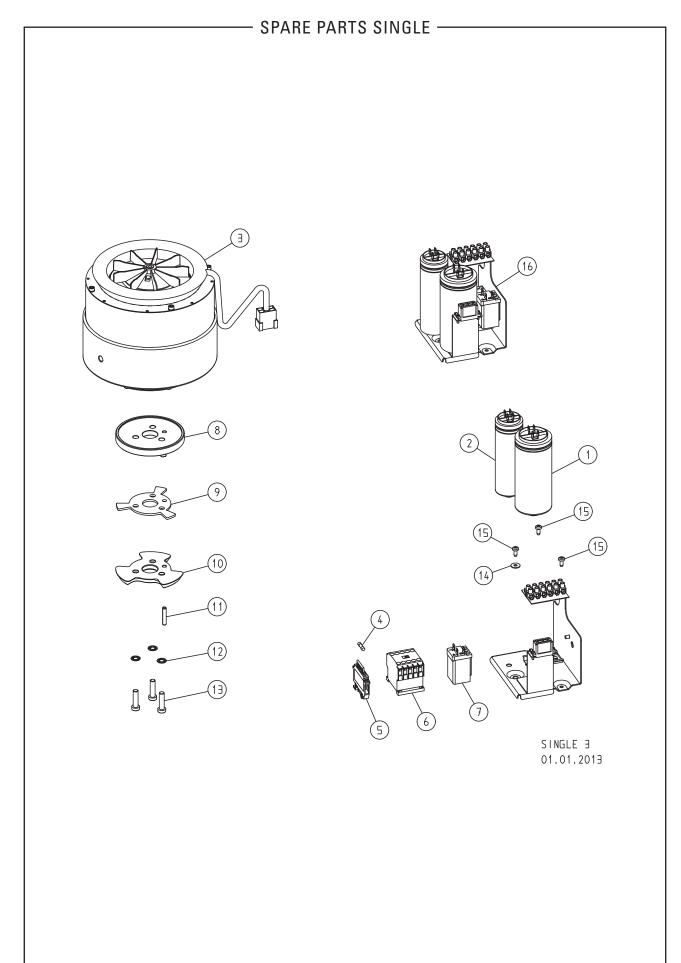






Item	Part number	Description
	850.20.00.200	Handle SINGLE, complete
1	0912.1006.016	Screw
2	0125.1006.000	Washer
3	850.20.26.100	Cable holder complete
4	850.20.29.100	Sliding block
5	7984.1008.020	Screw



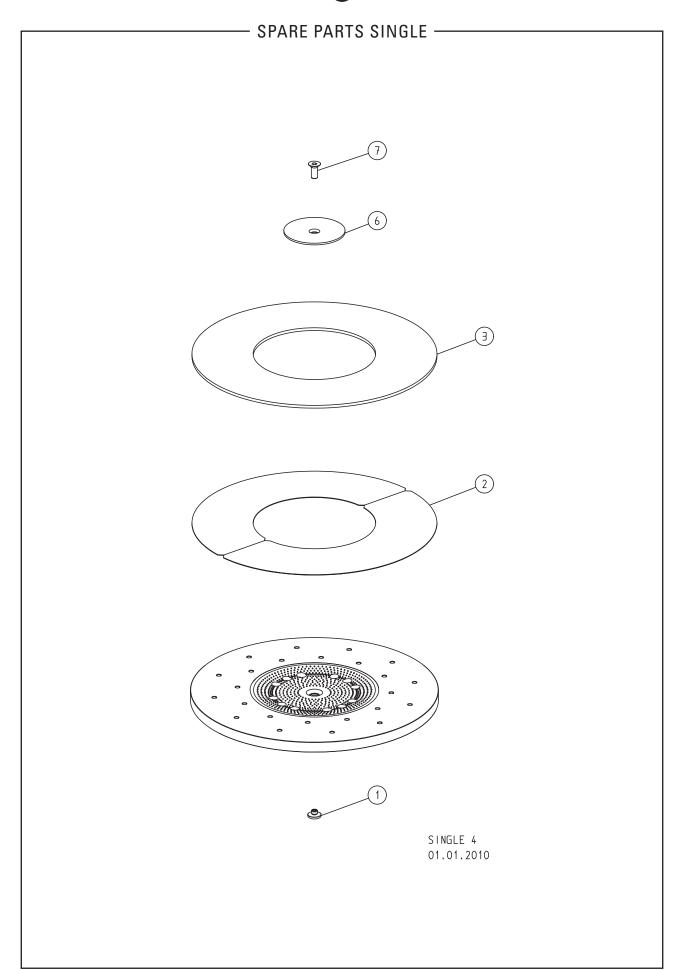




Item	Part number	Description
1	000.65.10.041	Running capacitor 40 μF
2	000.65.10.061	Starting capacitor 60 μF
3	850.65.00.200	Motor, 230 V / 50 CPS / 1.2 kW
4	000.65.80.061	Fuse, 6.3 A
5	000.65.82.010	Fuse holder
6	000.65.20.012	Contactor
7	000.65.20.230	Relay
8	850.64.06.100	Adapter mounting
9	850.64.07.205	Shock absorber
10	850.64.08.100	Plate mounting
11	1481.0006.032	Spring type straight pin
12	6797.1008.000	Washer
13	7984.1008.030	Screw
14	9021.1005.000	Washer
15	7500.1005.012	Screw
16	850.65.80.100	Control electric system complete, 230 V / 50 CPS





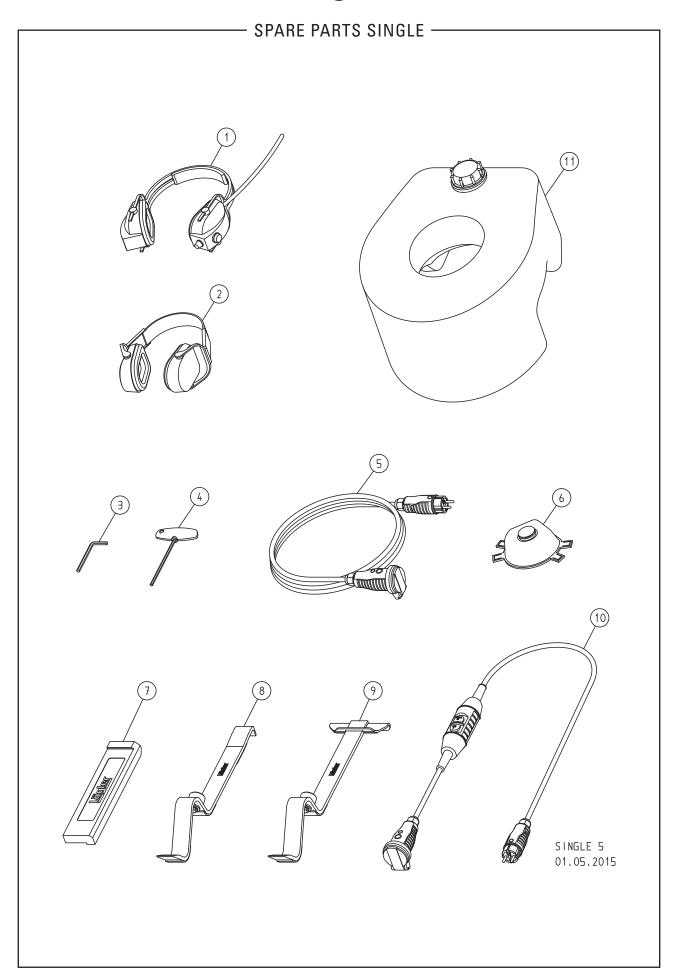






Item	Part number	Description	
	850.02.10.100	Sanding plate SINGLE complete, for double-faced sanding discs, velcro sanding discs and pads	
1	850.02.06.200	Centering dome	
2	850.02.11.100	Velcro coating, for pad and Velcro sanding disc (two parts necessary)	
3	850.02.13.105	Velcro ring flexible	
6	850.02.05.100	Paper tensioning disc	
7	7991.1010.725	Screw, left-handed thread	





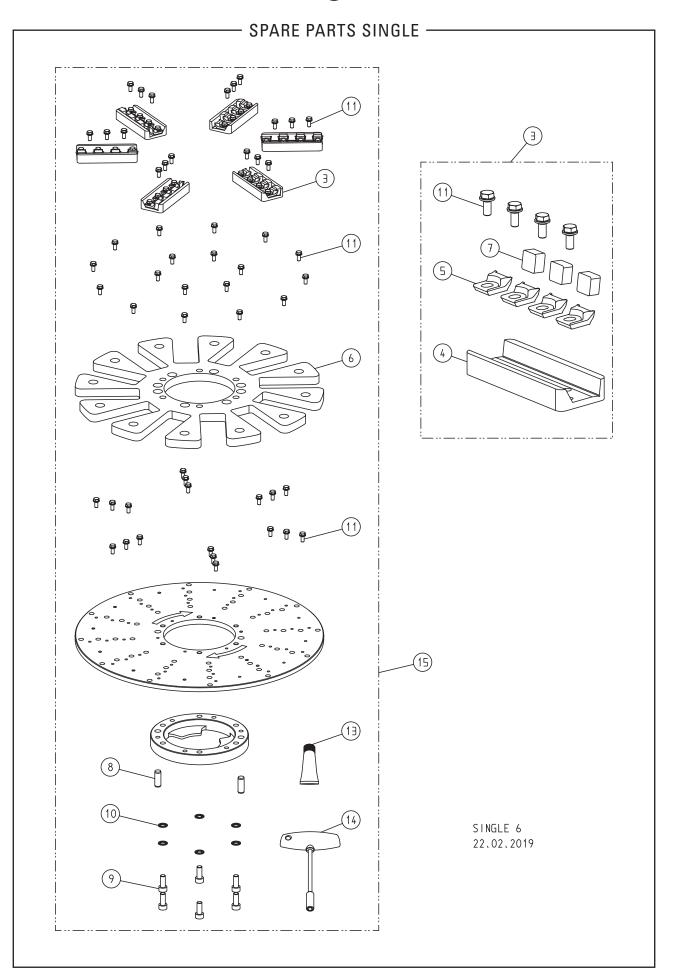




Item	Part number	Description	
1	000.01.10.011	Foldable earmuff type MUSIMUFF with FM radio	
2	000.01.10.021	Foldable earmuff type POCKET	
3	000.93.11.061	Hexagonal socket screw wrench 6 mm	
4	000.93.12.052	Hexagonal socket screw wrench 5 x 150 mm	
5	000.65.53.251	Extension cable 3 x 2.5 mm², 10 m long	
6	000.01.20.010	Respiratory protection mask P3	
7	701.10.00.100	Impact tool	
8	702.00.00.200	Parquet layer tool ZUGEISEN, small	
9	703.00.00.200	Parquet layer tool ZUGEISEN, broad	
10	000.01.65.020	Safety switch PRCD-S (for German mains supply)	
11	850.80.10.105	Additional weight SINGLE	





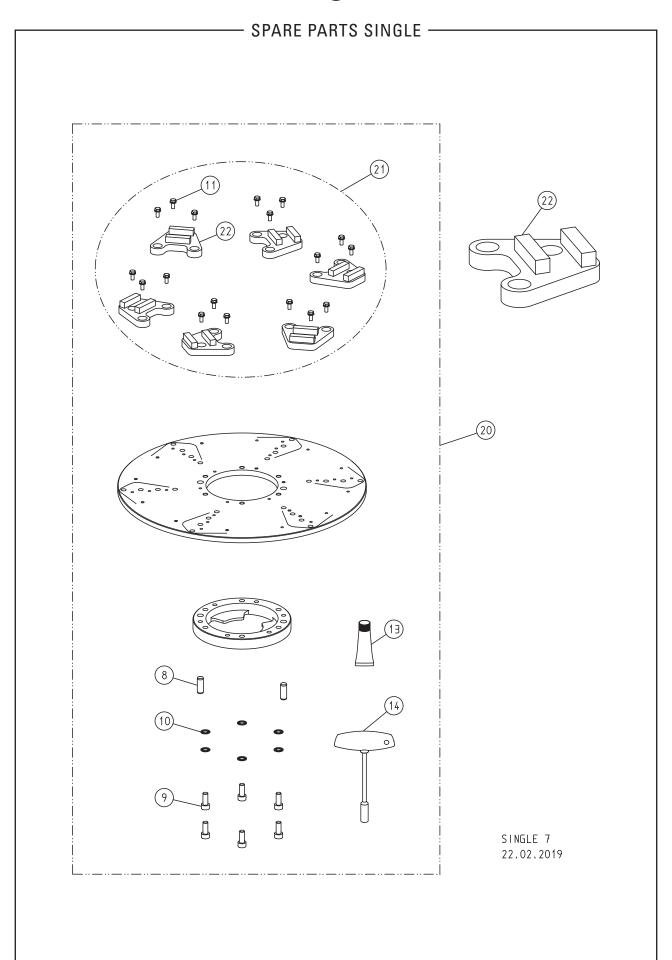






Item	Part number	Description	
3	850.02.43.100	Cutter holder, complete	
4	850.02.45.100	Cutter holder	
5	850.02.47.200	Clamping block	
6	850.02.49.100	Additional weight for milling disc SINGLE	
7	000.10.21.101	Ceramic indexable insert, SINGLE (10 pieces per box)	
8	7979.0010.028	Parallel pin	
9	0912.1008.020	Screw	
10	6797.1008.000	Washer	
11	6902.0305.012	Screw	
13	00.000.32.501	Copper paste	
14	000.93.13.052	Hexagonal socket screw wrench 8 x 125 mm	
15	850.02.40.100	Milling disc SINGLE, complete	



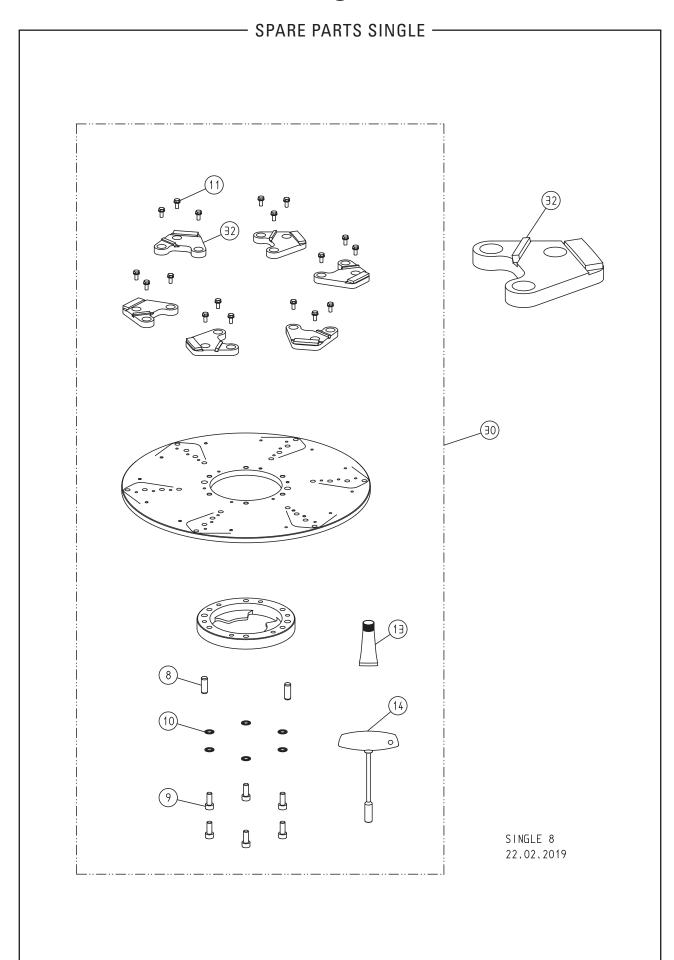






Item	Part number	Description
8	7979.0010.028	Parallel pin
9	0912.1008.020	Screw
10	6797.1008.000	Washer
11	6902.0305.012	Screw
13	00.000.32.501	Copper paste
14	000.93.13.052	Hexagonal socket screw wrench 8 x 125 mm
20	850.02.50.100	Diamond sanding disc SINGLE, complete
21	850.02.61.100	Kit for milling disc SINGLE
22	08.900.010.020	Diamond sanding segment, grit 20, red

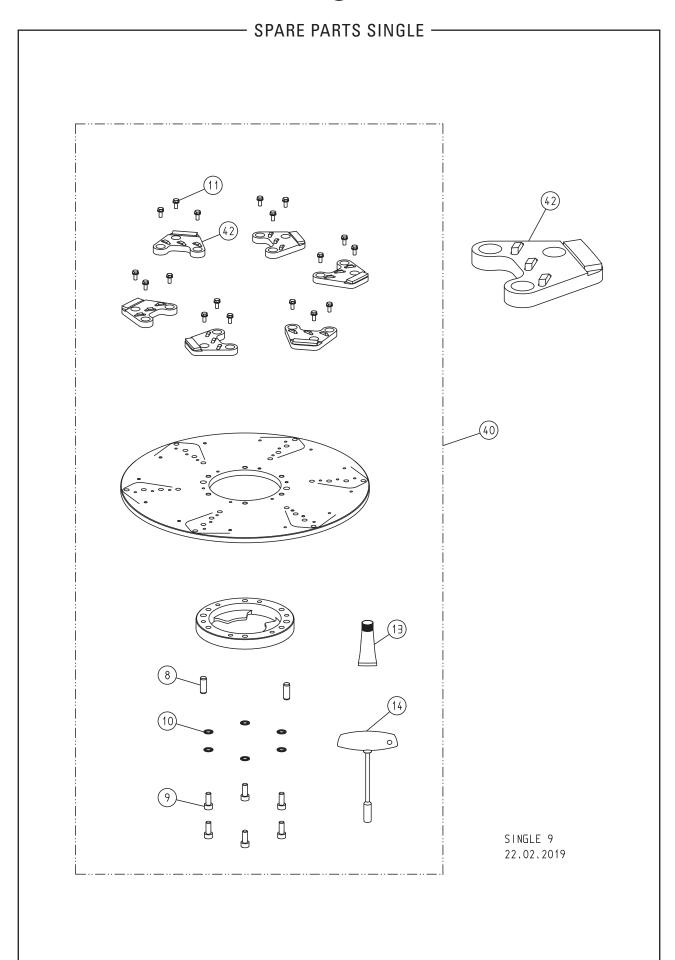






Item	Part number	Description
8	7979.0010.028	Parallel pin
9	0912.1008.020	Screw
10	6797.1008.000	Washer
11	6902.0305.012	Screw
13	00.000.32.501	Copper paste
14	000.93.13.052	Hexagonal socket screw wrench 8 x 125 mm
30	850.02.52.100	Scrabber disc SINGLE, wide, green
32	850.06.12.100	Scrabber Green, wide cutting edge

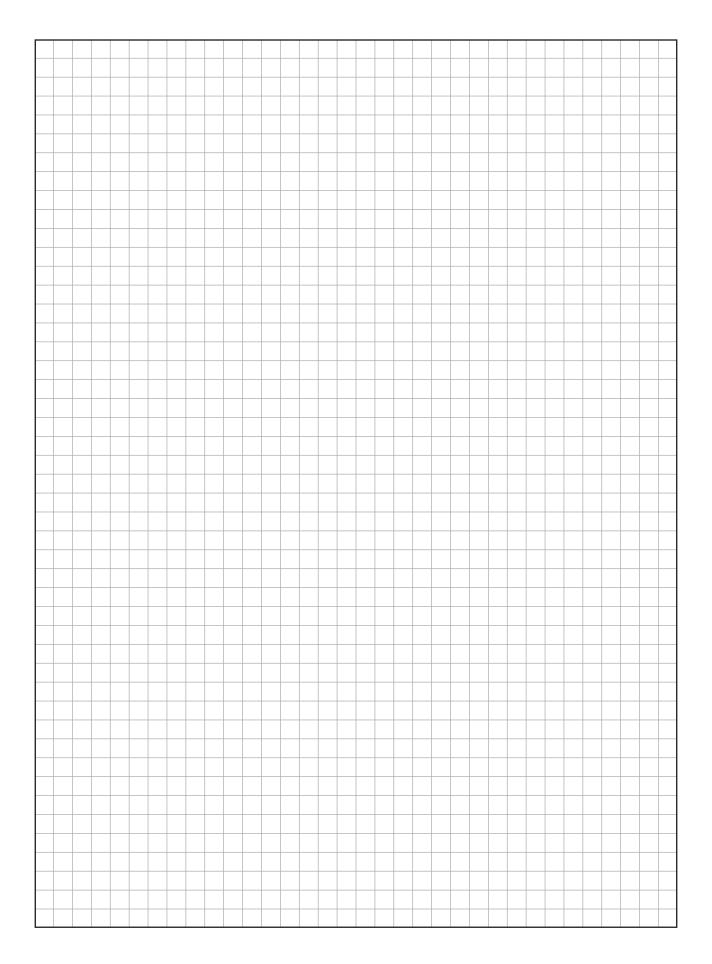




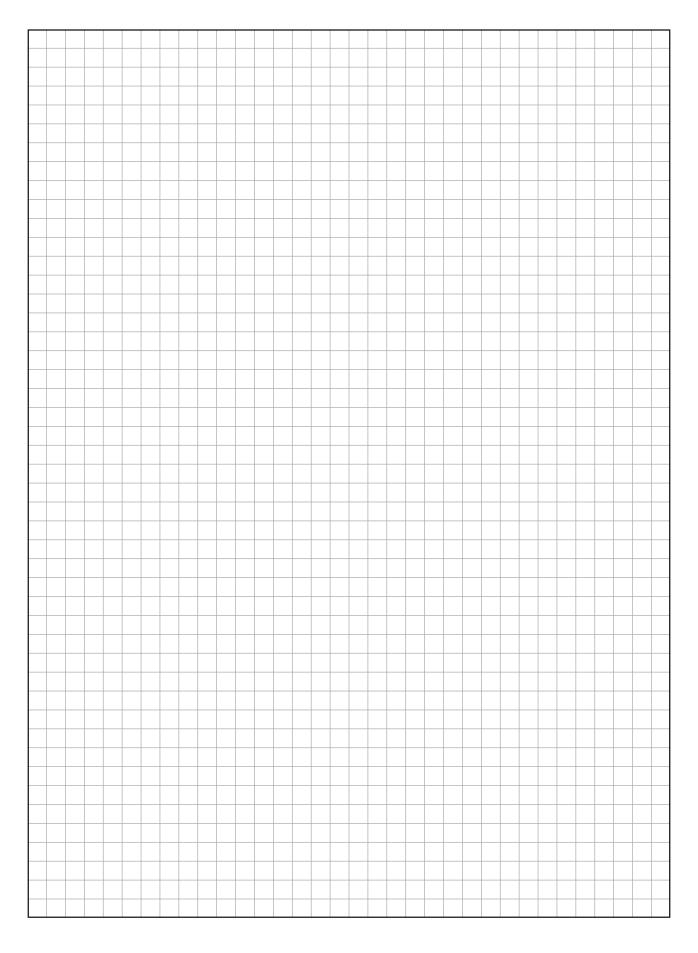




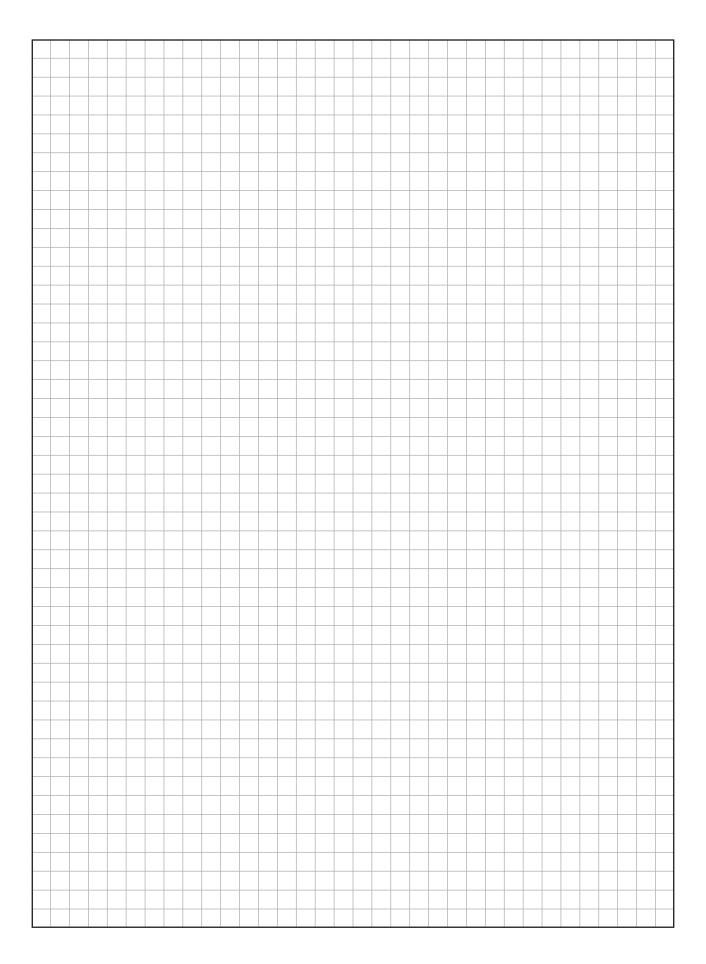
Item	Part number	Description	
8	7979.0010.028	Parallel pin	
9	0912.1008.020	Screw	
10	6797.1008.000	Washer	
11	6902.0305.012	Screw	
13	00.000.32.501	Copper paste	
14	000.93.13.052	Hexagonal socket screw wrench 8 x 125 mm	
40	850.02.53.100	Scrabber disc SINGLE, narrow, black	
42	850.06.13.100	Scrabber Black, 3 narrow cutting edges	















Service passport

Please enter the serial number and the year of manufacture of your machine on the rear side of these operating instructions (see type plate)! Otherwise the service passport will not be valid!

This service passport is a document. Make sure that all the tests and maintenance work carried out on the machine are confirmed by the servicing company here.

Date of test and	Date of test and	Date of test and
maintenance work:	maintenance work:	maintenance work:
Signature and company stamp	Signature and company stamp	Signature and company stamp
Date of test and	Date of test and	Date of test and
maintenance work:	maintenance work:	maintenance work:
Signature and company stamp	Signature and company stamp	Signature and company stamp
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maintenance work:	maintenance work:	maintenance work:
Signature and company stamp	Signature and company stamp	Signature and company stamp

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EC Declaration of conformity for machines (EC Directive 2006/42/EC)

The manufacturer Eugen Lägler GmbH, Kappelrain 2, D-74363 Güglingen-Frauenzimmern, Germany

Tel.: 0049 - 7135 - 98 90-0 · Fax: 0049 - 7135 - 98 90-98

 $E\text{-Mail: info@laegler.com} \cdot www.laegler.com$

certified herewith,

that the machine Generic denomination: Floor sanding machine

Function: Dry sanding of wooden floors

Model: SINGLE
Serial number: See type plate

Commercial name: Single-disc sanding machine

fulfils all the relevant provisions of the specified above European Directive.

The machine also fulfils all the relevant provisions of the European Directive **Electromagnetic Compatibility (2014/30/EU)**.

The following harmonized standards have been applied:

DIN EN ISO 12100: Safety of machinery - General principles for design - Risk assessment and risk reduction

DIN EN 60204-1: Safety of machinery - Electrical equipment of machines - Part 1

DIN EN 55014-1: Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1

DIN EN 55014-2: Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 2

DIN EN 61000-3-2: Electromagnetic compatibility (EMC) - Part 3-2: Limits **DIN EN 61000-3-3:** Electromagnetic compatibility (EMC) - Part 3-3: Limits

Technical file at: Eugen Lägler GmbH, Kappelrain 2

D-74363 Güglingen-Frauenzimmern

Germany

SINGLE	Serial number:	
	Year of manufacture:	

