
SINGLE - THE SINGLE-DISC SANDING MACHINE



English / Englisch

Operating Instructions

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

SINGLE

Lägler
www.laegler.com

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SINGLE ASSEMBLIES

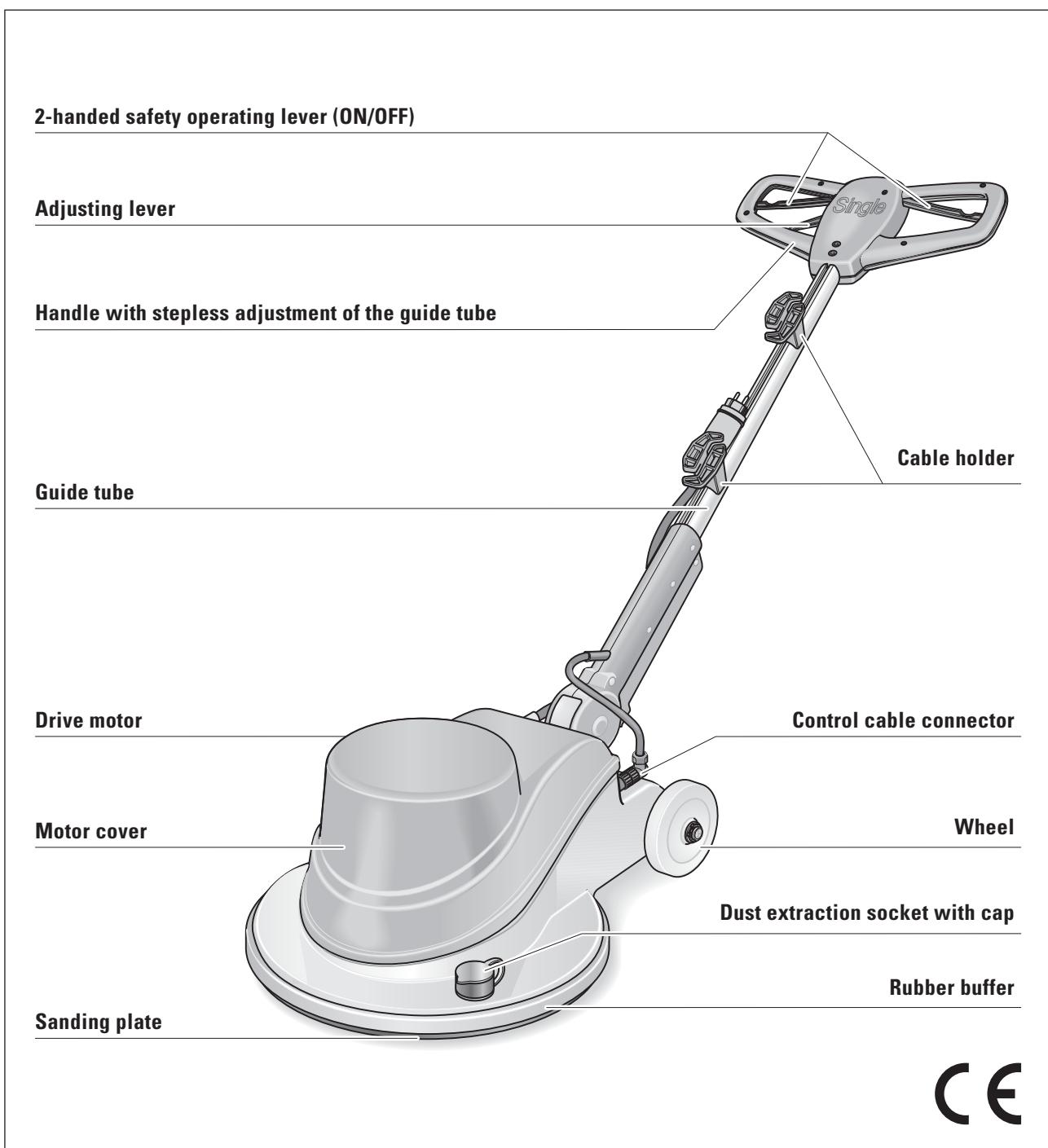


Fig. 1 Assemblies of the SINGLE single-disc sanding machine



Introduction

1.1 FEATURES OF THE MACHINE

Fig. 1 shows the most important 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 traditional 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.

The SINGLE single-disc sanding machine is intended for dry use only. Never attempt to use the SINGLE for any type of wet operation (risk of fatal accidents)!

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. Never use for wet operation!

You are now the owner of a high-quality product manufactured by LÄGLER®. We wish you every success with the SINGLE. This machine has been manufactured using state-of-the-art production techniques. All LÄGLER® products are subjected to thorough controls before they leave the factory.

Please read right through these operating instructions before working with the SINGLE for the first time. The operating instructions contain important information relating to working safety and will answer many of your questions, permitting you to work confidently and safely with the machine. If you require information which is not provided in these instructions, refer to your sanding instructions or consult our Customer Services Department, which will be pleased to advise you. Our fully trained and qualified service technicians are very familiar with the SINGLE and will be able to provide any assistance you may need.

INTRODUCTION

Never use the sanding machine for any type of wet operation!

When the machine is switched on, there is still a serious residual risk involved, despite all the safety devices fitted. For this reason, never reach into rotating tools or machine parts!

1.4 DANGER WARNINGS

Please read through the danger warnings carefully and instruct your employees or colleagues accordingly. Failure to comply with this requirement could result in dangerous situations or injury.

In order to avoid injury, the machine may only be switched on when it is in the working position, the sanding plate is placed flat on the floor and the dust extraction socket is closed (please see *Section 3.3, Starting the machine*).

Use only tools, accessories and spares intended for the SINGLE and supplied by LÄGLER®. No warranty cover exists for parts sourced from other manufacturers. Use of other parts can result in damage to the machine, to the floor you are sanding, or injury to the machine operator.

Incorrect transportation can result in damage to the equipment.

Keep well away from sources of fire.

Do not smoke when there is dust in the atmosphere (e.g. while working with the machine or emptying out the dust)

→ This could cause a dust explosion.

The mains connection cable must be kept out of the work area in order to prevent mechanical or electrical damage.

In order to prevent any chance of the machine being unintentionally started up, the power supply must be cut off when the machine is switched off, by unplugging from the mains.

To protect the equipment against current faults, we advise using a DI safety plug (For part nos. please see *Section 11, Spare parts*).

When the appliance is operated correctly with a vacuum cleaner (please see *Section 4.5, Attaching an external vacuum cleaner*), the prescribed dust limit values are adhered to. When the appliance is used without a vacuum cleaner connected, a respiratory protection mask P3 must be worn (For part nos. please see *Section 11, Spare parts*).

 TECHNICAL DATA

 1.5 SAFETY DEVICES

The following parts of the machine are safety 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

Technical data

Manufacturer.....	Eugen Lägler GmbH
Machine type.....	Single-disc sanding machine
Serial number	see rating plate
Year of construction.....	see rating plate
Motor type.....	single-phase AC motor
Voltage	230 V
Frequency	50 Hz (CPS)
Output.....	1.2 kW
Fusing	16 A
Insulation class	B
Protection rating	IP 54
Safety devices.....	no-voltage release thermal switch as overload protection in the motor
Starting capacitor	60 µF
Operating capacitor.....	40 µF
Sanding plate diameter	406 mm (16")
Sanding plate speed	approx. 180 1/min (rpm)
Total height without guide tube	265 mm (10 ½")
Total length without guide tube	615 mm (24 ¼")
Height above sanding plate	46 mm (1 ¾")
Total width.....	435 mm (17 1/8")
Weight of the machine with sanding plate.....	45 kg (99 lbs.)
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 grain size 60.....	77 dB(A)
Vibration total value a_{hv}	< 2.5 m/s ²
	(measured at the handle)

Note on noise emission:

The specified values are emission values and are not required to constitute safe workplace levels. Although a correlation does exist between emission and imission levels, it is not possible to conclude on this basis whether additional precautionary measures are necessary. Factors which influence the current imission level existing at the workplace include the duration of exposure, the character of the workroom, other noise sources such as the number of machines, and other adjacent machining processes. The admissible workplace values can also vary from one country to another. However, this information is provided in order to enable the user to better estimate the level of danger and risk.

TECHNICAL DATA

Note:

The motor data mentioned above relates to machines used in the Federal Republic of Germany. Different data may apply to exported machines. This is indicated on the motor rating plate.

The relevant article numbers of the optional accessories and wearing parts are provided in the spare parts lists *in Section 11*.

Intended applications

Sanding wooden and cork floors, work on floor underlays and spreading care products and cleaning agents.

Basic equipment

Machine ready for operation, extension cable 3 x 2.5 sq. mm - 10 m long, hexagonal socket wrench sizes 5 and 6, respiratory protection mask (P3) and operating manual.

Optional equipment

Universal sanding plate, vacuum cleaner (FESTOOL mobile extractor CTM44E230V), pocket for ear plugs, DI safety plug.

Wearing parts

To ensure that the machine works safely and to maximum effect, please check the condition of the wearing parts listed below at regular intervals:

- Replace Velcro attachment disc on the sanding plate if worn or damaged
- Replace paper retaining disc if worn or damaged
- Replace screw for attaching paper disc if worn or damaged
- Replace wheels if worn or damaged
- Replace extension cable if damaged
- Replace motor cable if damaged
- Replace buffer if damaged
- Replace fluffy sealing strip if damaged

Getting started

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.

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

3.1 PREPARING THE MACHINE FOR OPERATION

- 1 Unpack the machine carefully. Please ensure that packaging materials that are no longer needed are disposed of responsibly, in an environmentally-friendly way.

For safe dispatch of the machine at a subsequent date, the original packaging should be retained and used again.

- 2 Attach the sanding disc you need to the sanding plate (*Section 4.3, Changing the sanding disc*).
- 3 Insert the motor cable in the lower cable holder on the guide tube (Fig. 2).
- 4 Pull the adjusting lever on the handle towards you to release the lock of the guide tube, and push the guide tube into and past the vertical position until it reaches the mechanical stop (Fig. 3).
- 5 Release the adjusting lever so that the guide tube can engage again. Carefully tilt the machine backwards on the wheels. As you do so, steady the machine with your foot to stop it rolling away (Fig. 4). **Please ensure that the machine is stable before commencing work!**
- 6 Push the sanding plate centrally onto the gear mount and turn it anti-clockwise until it reaches the mechanical stop (Fig. 5).
- 7 Carefully tilt the machine back up over the wheels and onto the sanding plate. As you do so, steady the machine with your foot to stop it rolling away (Fig. 6).

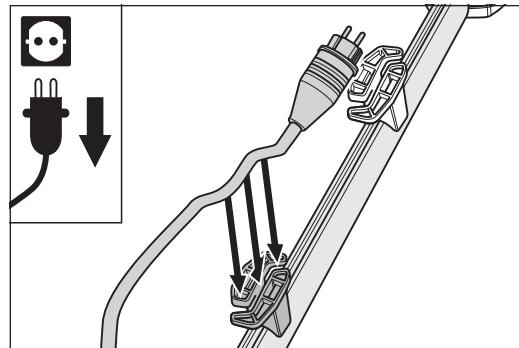


Fig. 2 Insert the motor cable in the lower cable holder on the guide tube.

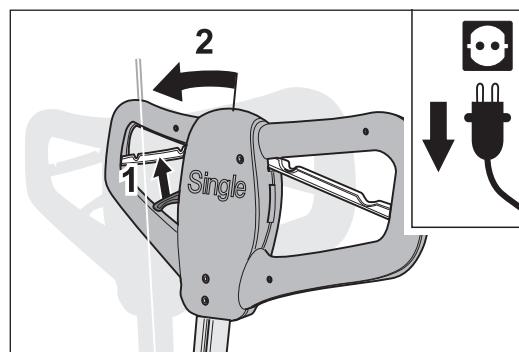


Fig. 3 Pull the adjusting lever to release the lock and raise the guide tube until it reaches the mechanical stop.

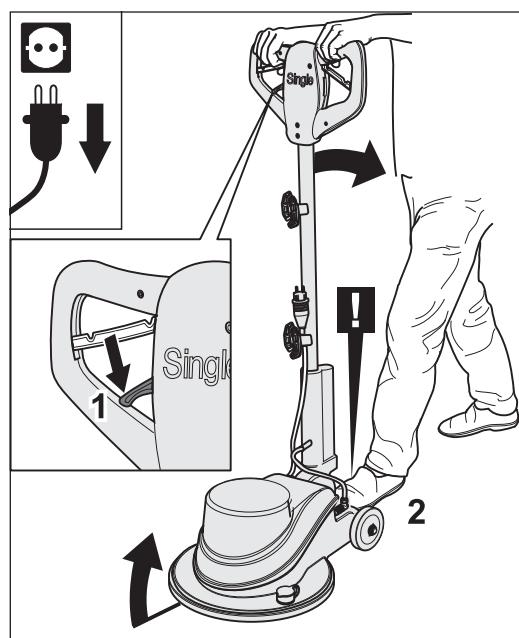


Fig. 4 Release the adjusting lever and carefully tilt the machine backwards. Steady the machine with your foot to stop it rolling away and ensure that it is stable!

 GETTING STARTED

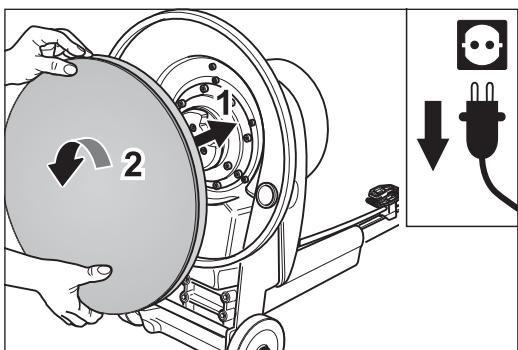


Fig. 5 Push on the sanding plate and turn it anti-clockwise until it reaches the mechanical stop.

- 8** 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. 3). This releases the lock on the guide tube so that it can be moved up or down. Choose the position that feels most comfortable to you (Fig. 7) and release the adjusting lever again.

NOTE:

This adjustment must never be made when the machine is switched on!

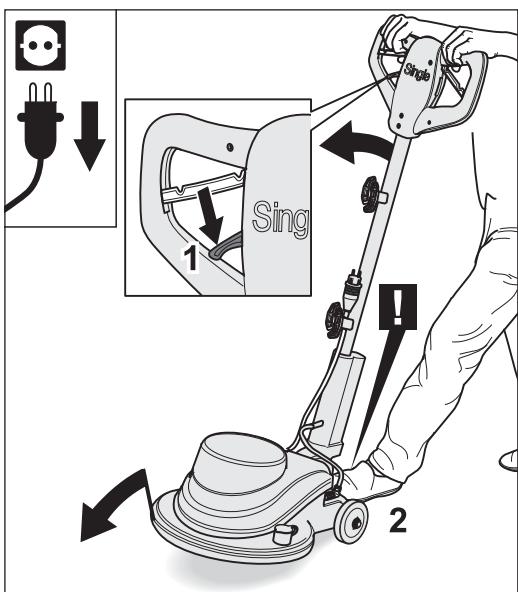


Fig. 6 Tilt the machine back up, holding it steady with your foot to stop it rolling away.

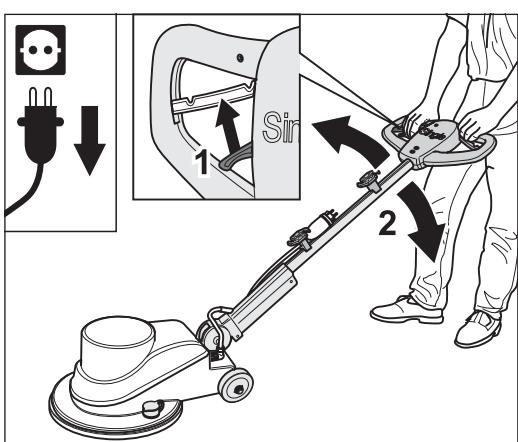


Fig. 7 Set the handle to a position that feels comfortable to you.

3.2 CONNECTING THE MAINS CABLE

- 1** Push the socket onto the plug on the motor cable and insert the extension cable in the upper cable holder on the guide tube (Fig. 8).
- 2** Plug the extension cable plug into an adequately fused mains socket with protective contacts or into the socket of a separate vacuum cleaner (please see also *Section 4.5, Attaching an external vacuum cleaner*).

3.3 STARTING THE MACHINE

NOTE:

Please read this section very carefully. It contains important safety instructions!

NEVER switch the machine unless:

- There is a sanding plate mounted (Fig. 9).
- The machine is in the working position and the sanding plate is placed flat on the floor (Fig. 10).
- The dust extraction socket is closed either with its cap or a vacuum cleaner hose (Fig. 12, please see also *Section 4.5, Attaching an external vacuum cleaner*).

If these conditions are not met, the sanding plate can come free of its mount and parts or fingers can catch on the rotating sanding plate, resulting in damage or injury!

GETTING STARTED

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. 11).
- UNLESS both start levers on the handle are 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.

Professional tip:

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

Before switching on the machine, ensure that:

- the sanding plate is placed flat on the floor and
- the guide tube is not in a vertical position and
- the dust extraction socket is closed either with its cap or with a vacuum cleaner hose!

When you have made these checks, the SINGLE can be started!

Pull both the start levers AT THE SAME TIME and hold the handle tight with both hands (Fig. 12). The machine will start up.

Never allow the machine to run unattended, otherwise damage or injury can occur!

Always pull the mains plug out of the socket once you have finished working.

3.4 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.

Never allow the machine to run unattended and always pull the mains plug out of the socket once you have finished working.

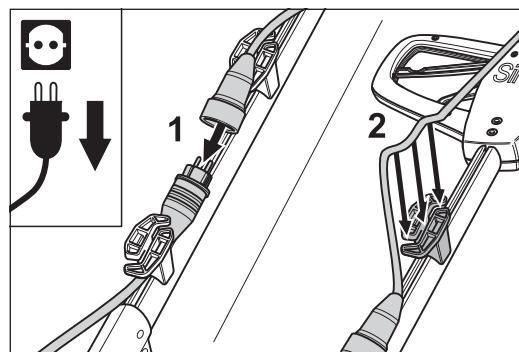


Fig. 8 Insert the extension cable in the upper cable holder on the guide tube.

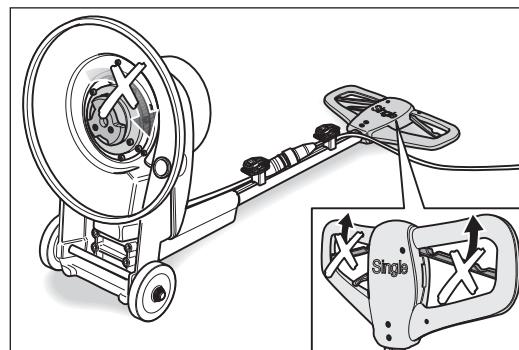


Fig. 9 Never switch on the machine unless there is a sanding plate mounted!

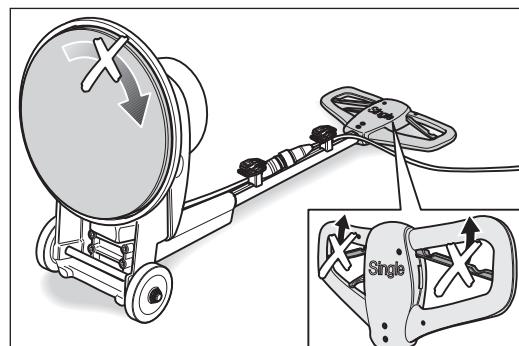


Fig. 10 Never switch on the machine unless it is in the working position and the sanding plate is placed flat on the floor!

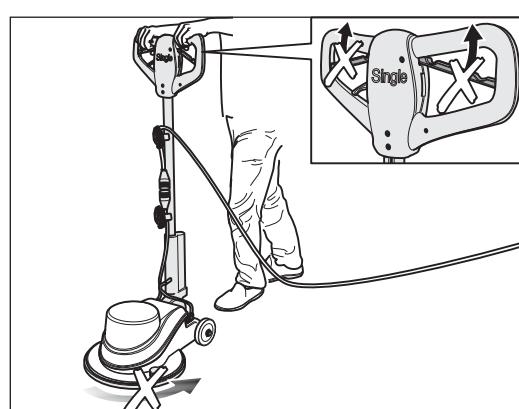


Fig. 11 If the guide tube is in a vertical position, the machine CANNOT be switched on!

Working with the SINGLE

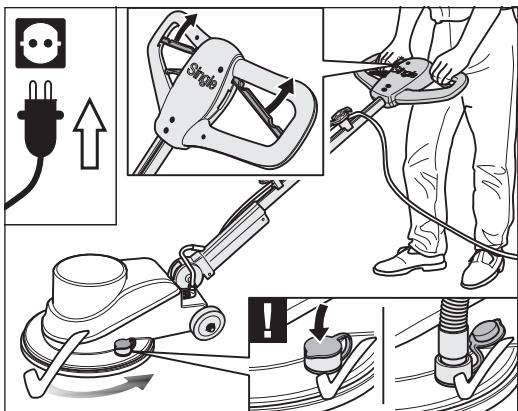


Fig. 12 Do not start the machine in this position unless
- the sanding plate is placed flat on the floor AND
- the dust extraction socket is closed either with
its cap or a vacuum cleaner hose!
Then pull both the start levers AT THE SAME TIME.

For more information free of charge, please apply to:

within Germany

- Tel.: 0800 / 52 34 537

- Fax: 0800 / 48 66 353

within the USA

- Tel.: 800-848-6635

or

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

- Fax: 0049 - 7135 - 98 90-98

- e-mail: info@laegler.com

- Internet: <http://www.laegler.com>

4.1 GENERAL APPLICATION TIPS

It is possible to avoid leaving deep sanding tracks caused by excessively coarse abrasion grain size by initially selecting a fine grain size for the first sanding process.

Carry out a test sanding process using a 50 or 60 grain size. 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 grain sizes. This is the best way to avoid leaving deep sanding tracks caused by an excessively coarse grain size.

You can avoid creating sanding tracks from the previous grain size used by adhering to the grain size sequence and not skipping more than one grain size at a time.

After each sanding pass, vacuum the floor thoroughly. Keep the machine's wheels clean.

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.

For other informative and important application tips, please refer to the LÄGLER® application technology brochure „Sanding wooden floors“!

4.2 CHANGING THE SANDING PLATE

1 Switch off the machine.

2 Pull the mains plug out of the socket.

3 Pull the adjusting lever on the handle towards you to release the lock of the guide tube, and push the guide tube into and past the vertical position until it reaches the mechanical stop (Fig. 13).

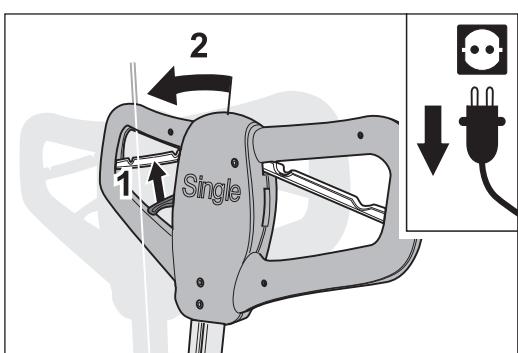


Fig. 13 Pull the adjusting lever to release the lock and push the guide tube up until it reaches the mechanical stop.

 WORKING WITH THE SINGLE

- 4 Release the adjusting lever so that the guide tube can engage again. Carefully tilt the machine backwards on the wheels. As you do so, steady the machine with your foot to stop it rolling away (Fig. 14). **Please ensure that the machine is stable before commencing work!**

- 5 Turn the sanding plate clockwise and you can then remove it from the machine.

- 6 Push the other sanding plate centrally onto the gear mount and turn it anti-clockwise until it reaches the mechanical stop (Fig. 15).

- 7 Carefully tilt the machine back up over the wheels and onto the sanding plate. As you do so, steady the machine with your foot to stop it rolling away (Fig. 16).

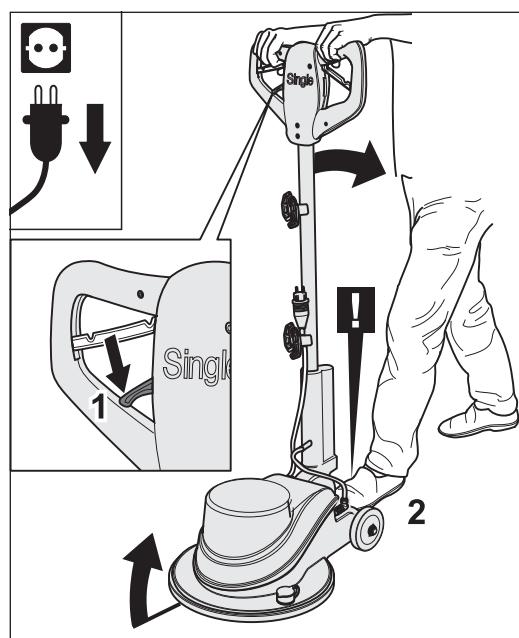


Fig. 14 Release the adjusting lever and carefully tilt the machine backwards. Ensure that the machine is stable!

4.3 CHANGING THE SANDING DISC

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

- 1 Switch off the machine.

- 2 **Pull the mains plug out of the socket.**

- 3 Pull the adjusting lever on the handle towards you to release the lock of the guide tube, and push the guide tube into and past the vertical position until it reaches the mechanical stop (Fig. 13).

- 4 Release the adjusting lever so that the guide tube can engage again. Carefully tilt the machine backwards on the wheels. As you do so, steady the machine with your foot to stop it rolling away (Fig. 14). **Please ensure that the machine is stable before commencing work!**

4.3.1 CHANGING VELCRO-BACKED SANDING DISCS

- 5 Pull the worn Velcro-backed sanding disc off the Velcro attachment disc of the sanding plate (Fig. 17).

- 6 Press on the sanding disc with the Velcro side against the Velcro attachment ring of the sanding plate. As you do so, please ensure that the sanding disc is attached to the sanding plate as centrally as possible.

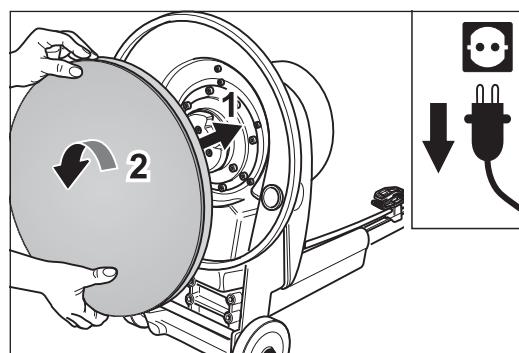


Fig. 15 Push on the sanding plate and turn it anti-clockwise until it reaches the mechanical stop.

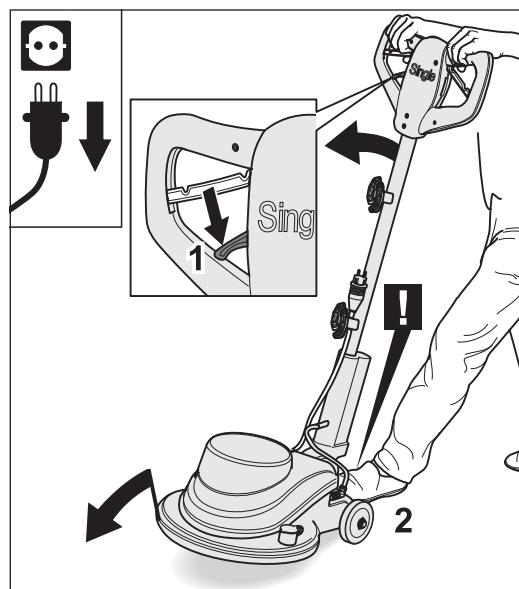


Fig. 16 Release the adjusting lever and carefully tilt the machine back up.

 WORKING WITH THE SINGLE

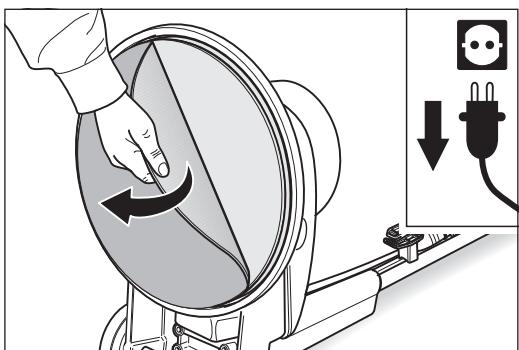


Fig. 17 Pull off the worn Velcro-backed sanding disc.

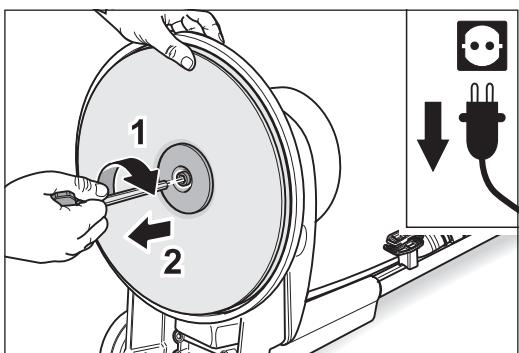


Fig. 18 Turn the screw for releasing the disc **in a clockwise direction** (it has a LEFT-HANDED THREAD)!

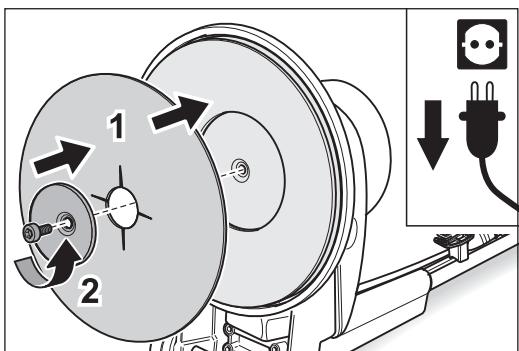


Fig. 19 Place the new sanding disc in the sanding plate and screw it in place. Turn the screw **anti-clockwise to tighten** (LEFT-HANDED THREAD)!

- 7 Carefully tilt the machine back up over the wheels and onto the sanding plate. As you do so, steady the machine with your foot to stop it rolling away (Fig. 16).

4.3.2 CHANGING CONVENTIONAL SANDING DISCS

NOTE:

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 LEFT-HANDED THREAD.

- 5 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. 18).
- 6 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.
- 7 Place a new sanding disc on the sanding plate and push the fastening screw with paper retaining disc into the sanding plate (Fig. 19).
- 8 Use the hexagonal socket wrench to turn the fastening screw **anti-clockwise** into the sanding plate (LEFT-HANDED THREAD)! Please ensure that the sanding disc is attached to the sanding plate as centrally as possible (Fig. 19).
- 9 Tighten the fastening screw as tightly as you can by hand, using the hexagonal socket wrench.

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

 WORKING WITH THE SINGLE

4.4 ADJUSTING AND REPLACING THE CABLE HOLDER

4.4.1 ADJUSTING THE CABLE HOLDER

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

- 1 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. 20).
- 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. 20).

4.4.2 REPLACING THE CABLE HOLDER

- 1 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. 21).
- 2 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 and tighten the screw. As you do so, the sliding block turns so that the cable holder is clamped in place (Fig. 22).

4.5 ATTACHING AN EXTERNAL VACUUM CLEANER

We recommend attaching a FESTOOL mobile extractor CTM44E230V as 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 specified here.

NOTE:

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

- 1 Plug the mains plug of the SINGLE into the extension cable.

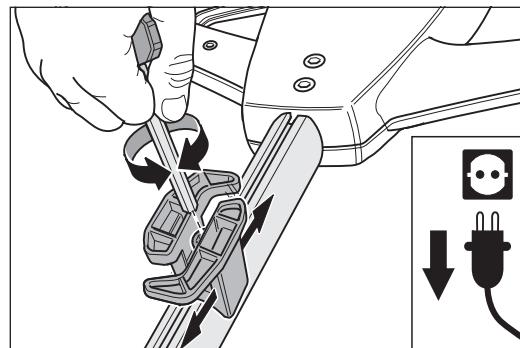


Fig. 20 Release the screw, move the cable holder with the sliding block and then tighten the screw again.

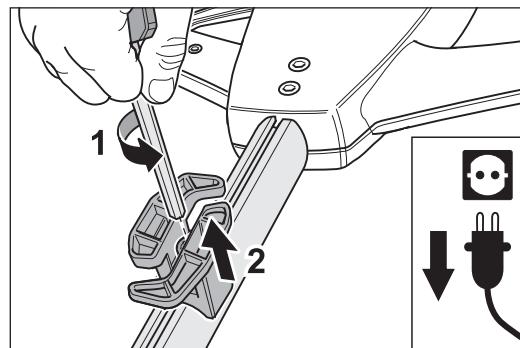


Fig. 21 Release the screw. Do NOT remove it completely, and remove the cable holder WITH the sliding block.

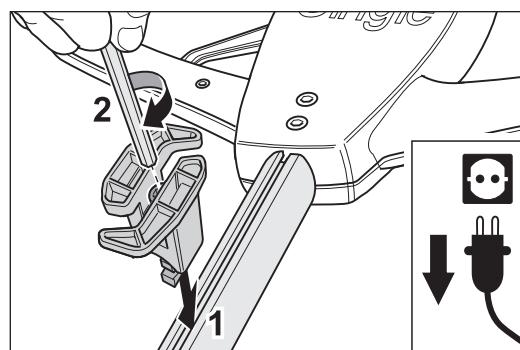


Fig. 22 Insert the sliding block in the groove on the guide tube and tighten the screw.

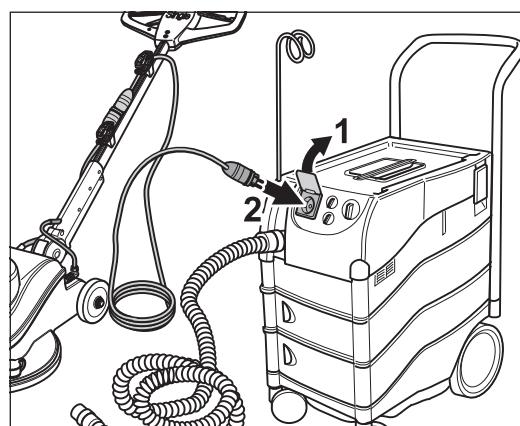


Fig. 23 Push the extension cable plug into the socket on the vacuum cleaner.

 WORKING WITH THE SINGLE

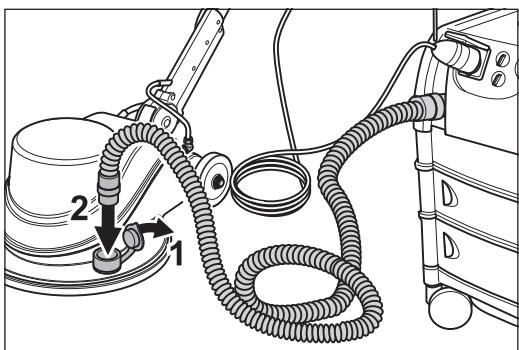


Fig. 24 Open the cap and attach the hose to the SINGLE.

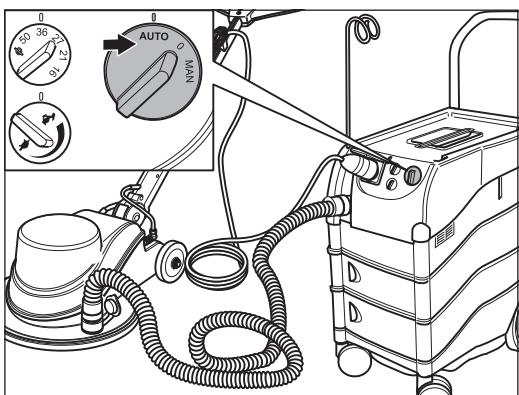


Fig. 25 Set the vacuum cleaner to the AUTO mode setting.

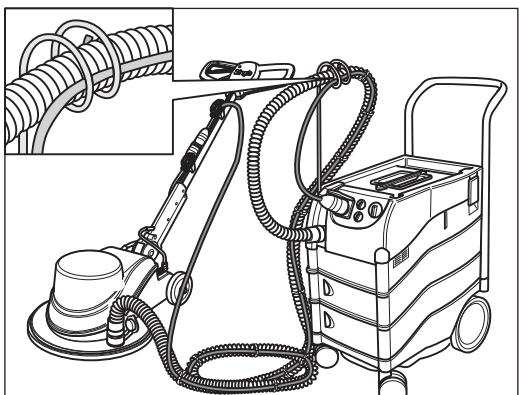


Fig. 26 Attach the extension cable to the vacuum cleaner suction hose.

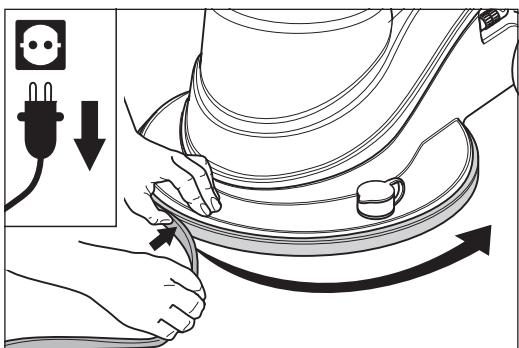


Fig. 27 Attach the fluffy sealing strip.

- 2 Plug the extension cable plug into the socket on the vacuum cleaner (Fig. 23).
- 3 Open the cap of the dust extraction socket on the machine housing and push the vacuum cleaner hose into the connection piece (Fig. 24).
- 4 Switch the vacuum cleaner to AUTO mode (Fig. 25). AUTO mode means that the vacuum cleaner switches on and off automatically when the SINGLE is switched on and off.

Professional tip:

To make work easier, you can attach the extension cable to the suction hose of the vacuum cleaner with several cable binders. In this way you can ensure that the cable will not get caught up under the machine (Fig. 26). Use detachable cable binders for this purpose.

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

4.6 ATTACHING THE FLUFFY SEALING STRIP AS PROTECTION AGAINST DUST

A fluffy sealing strip around the circumference of the machine improves the dust extraction 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. 27).

Transport and storage

5.1 DISMANTLING AND ASSEMBLING THE MACHINE

For transportation, 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). All parts must be adequately secured against slipping while being transported in the delivery van etc.

- 1 Switch off the machine and pull the extension cable out of the socket.**
- 2 Take the motor cable and the extension cable out of the cable holder on the guide tube.**
- 3 Remove the sanding plate (see *Section 4.2, Changing the sanding plate*).**
- 4 Release the cable plug of the guide tube by turning the threaded ring on the cable plug and pull out the plug (Fig. 28).**
- 5 Pull the adjusting lever on the handle towards you to release the lock of the guide tube (Fig. 29) and push the guide tube back into a horizontal position.**
- 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. 30).**

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

5.2 STORAGE

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

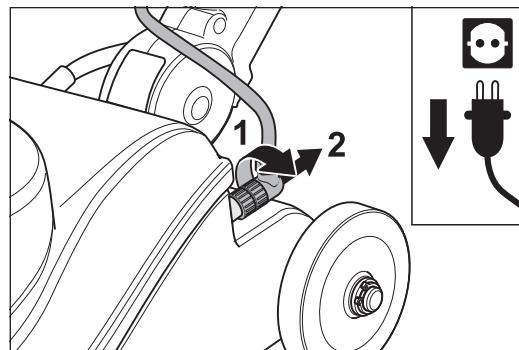


Fig. 28 Disconnect the cable plug of the guide tube from the machine housing.

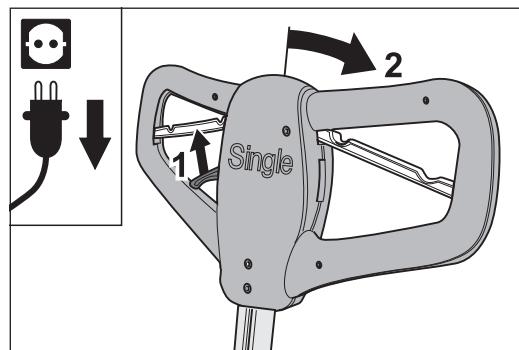


Fig. 29 Pull the adjusting lever to release the lock on the guide tube.

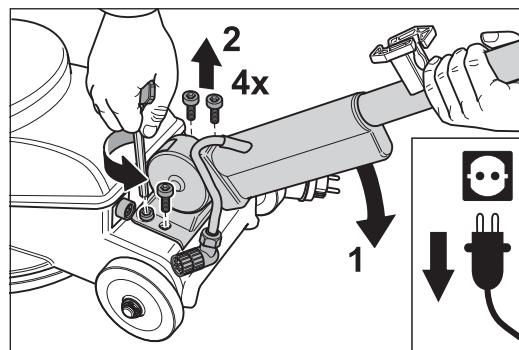


Fig. 30 Unscrew the guide tube.

Professional tip

When the machine is out of use for extended periods, you should remove the sanding plate from the machine, otherwise the weight of the machine can damage the flexible underlay of the sanding plate. Also, when the machine is out of use for extended periods, you should place the machine on the bottom part of the transport packaging in which it is delivered.

Maintenance and replacement of wearing parts

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.

For safety reasons, more extensive maintenance work, especially on the electrical equipment, must be carried out by a qualified specialist.

6.1 CLEANING AND CARE INSTRUCTIONS

Never use cleaning agents containing 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, plug, couplings).

6.2 REPLACING THE PLATE MOUNTING AND THE SHOCK ABSORBER

Always use original LÄGLER® plate mountings and shock absorbers (For part nos. please see *Section 11, Spare parts*).

- 1 Switch off the machine and pull the extension cable out of the socket.**
- 2 Pull the adjusting lever on the handle towards you to release the lock of the guide tube, and push the guide tube into and past the vertical position until it reaches the mechanical stop (Fig. 31).**

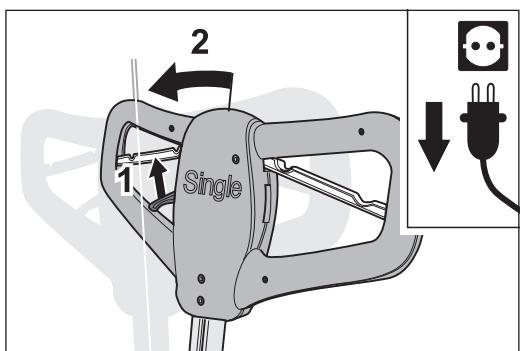


Fig. 31 Pull the adjusting lever to release the lock and push the guide tube up until it reaches the mechanical stop.

 MAINTENANCE AND REPLACEMENT OF WEARING PARTS

- 3 Release the adjusting lever so that the guide tube can engage again. Carefully tilt the machine backwards on the wheels. As you do so, steady the machine with your foot to stop it rolling away (Fig. 32). **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. 33).

- 7 Replace the parts that are damaged or worn.

- 8 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, NEVER open the oil drainage screws in the motor shaft or in the gear cover (Fig. 34, A and B)!

- 9 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.

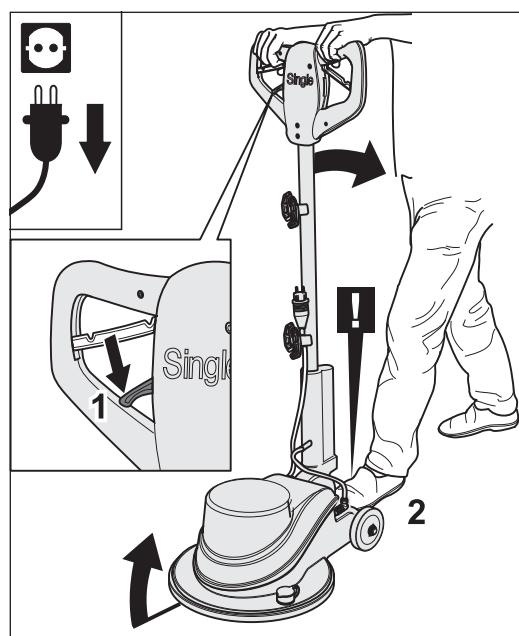


Fig. 32 Release the adjusting lever and carefully tilt the machine backwards. Ensure that the machine is stable!

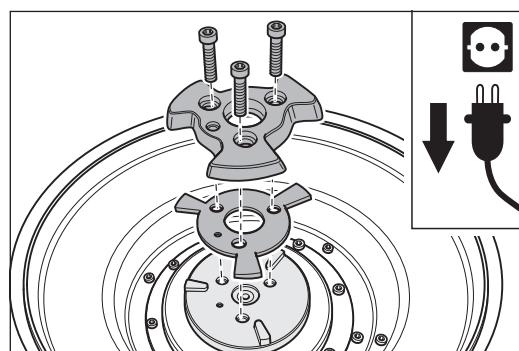


Fig. 33 Replace the plate mounting and the shock absorber.

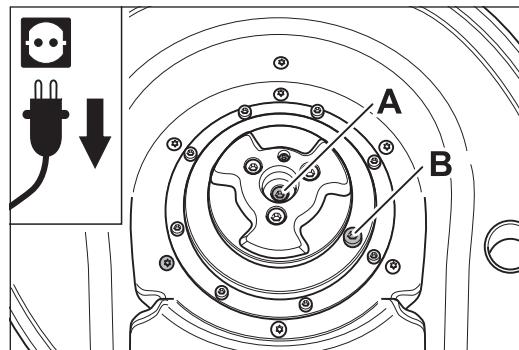


Fig. 34 The two screws with markings (A and B) are oil drainage screws. **DO NOT UNSCREW THEM!**

 MAINTENANCE AND REPLACEMENT OF WEARING PARTS

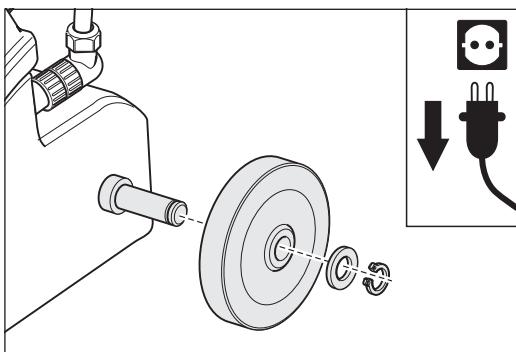


Fig. 35 Remove the retaining ring and remove the washer and the wheel. Install again in reverse order.

6.3 REPLACING THE WHEELS

Always use original LÄGLER® wheels (For part nos. please see *Section 11, Spare parts*).

- 1** Switch off the machine and pull the extension cable out of the socket.
- 2** Use a suitable pair of circlip pliers to remove the retaining ring from the wheel axle. Remove the washer and the wheel (Fig. 35).
- 3** To mount the new wheel, follow the instructions above in reverse order.

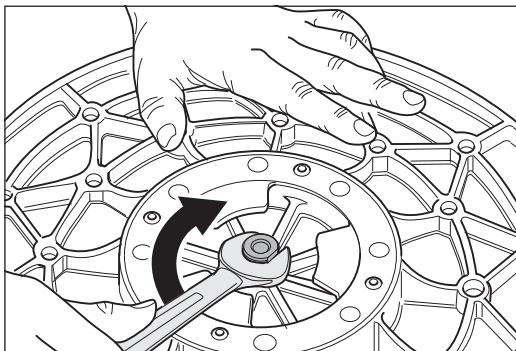


Fig. 36 To remove the centering dome, turn it **in a clockwise** direction (LEFT-HANDED THREAD)!

6.4 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.
- 2** Turn the centering dome **clockwise** out of the sanding plate with an open-ended or ring spanner (LEFT-HANDED THREAD, Fig. 36)!
- 3** To mount the new centering dome, screw it **anti-clockwise** into the sanding plate (LEFT-HANDED THREAD)!

Regular maintenance and testing in accordance with accident prevention regulations

The electrical operating equipment and machine components must be checked for their electrical and mechanical safety at least once a year by a specialist, repaired if necessary and then their safety certified by application of a test seal on the machine.

The elements required for dust pick-up must be checked at least once a year by a specialist and also repaired if necessary. They must also be certified as being in good working order.

Ensure that only original LÄGLER® spare parts are used for maintenance work. After-sales servicing should only be performed by LÄGLER® or by a LÄGLER®-approved workshop.

The service passport inside the back cover of these operating instructions (*Section 12*) documents when and where you have had your machine serviced.

Please enter the serial number and the year of construction of your machine in the space provided on the back cover of these operation instructions (please see the rating plate). If you do not do this, the service passport is invalid.

Ensure that maintenance work is recorded in the service passport by completing the relevant box with date, stamp and signature.

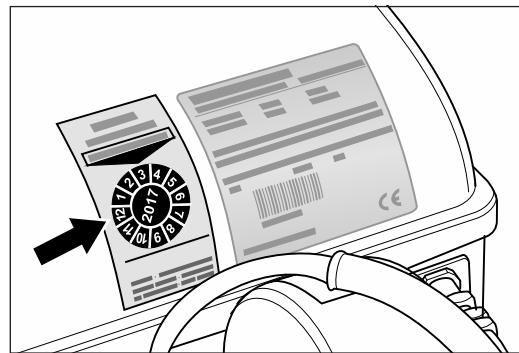


Fig. 37 The test seal is proof of safety certification.

Troubleshooting

This section indicates how possible errors can be remedied. Should the actions outlined here fail to bring about a solution to the problem, please do not hesitate to contact our Customer Services Department, which will be pleased to advise you. Our fully trained and qualified service technicians are very familiar with the SINGLE and will be able to provide any assistance you may need.

MACHINE FAILS TO START UP

The machine fails to start up

- The guide tube is in the vertical position.
- To start the machine, pull both start levers towards you at the same time.
- Check the power supply, connect if applicable (Is the extension cable plug in a wall socket? Have the motor cable and the extension cable been disconnected from each other?).
- Check the fuses.
- Have the electrical equipment tested by a qualified electrician (e.g. capacitors, contactor, relays, cable and switches).
- The thermal switch has tripped. Allow the machine to cool down.

The machine attempts to start up but is inhibited

- At low temperatures: allow the machine to warm up to room temperature in a warm room.
- Insufficient voltage: check the lead quality and length. Insufficiently dimensioned cable cross-sections (strand dia. less than 2.5 sq.mm) and excessively long supply lines should be avoided, if necessary use a transformer (Part. no. 708.00.00.100 for 230 Volts).

MACHINE RUNS BADLY

The machine runs but with no or insufficient sanding effect

- At low temperatures: allow the machine to warm up to room temperature in a warm room.
- Insufficient voltage: check the lead quality and length. Insufficiently dimensioned cable cross-sections (strand dia. less than 2.5 sq.mm) and excessively long supply lines should be avoided, if necessary use a transformer (Part. no. 708.00.00.100 for 230 Volts).
- Check that the drive elements are not blocking or sticking.
- Incorrect or blunt sanding abrasive.

 GENERAL SAFETY REMARKS

The machine is creating excessive noise and vibrations

- Check the sanding disc for damage.
- Check that the sanding disc is positioned in the centre of the sanding plate.
- Check the flexible underlay between the sanding plate and sanding disc for damage.
- Check the machine for blockages and build-up of deposits.

The machine runs well but creates dust

- Check the suction system for blockages and clean if necessary.
- More than one sanding disc has been mounted.

Sanding effect is not satisfactory

- The machine is being moved too slowly.
- Too much additional pressure is being exerted.
- The machine is being moved incorrectly (i.e. not in a circular movement).
- The sanding disc has not been mounted properly.

General safety remarks

Keep the work area tidy

Untidiness in the work area is a potential safety hazard.

Be aware of environmental influences

Never leave the machine out in the rain. Do not use the machine in humid or wet atmospheres. Ensure that good lighting is provided. Never use the machine close to sources of fire, combustible fluids or gases.

Keep away from sources of fire. Do not smoke when there is dust in the atmosphere (e.g. while working with the machine or emptying out the dust) → this could cause a dust explosion!

Guard against electric shocks

Avoid physical contact with earthed components such as pipes, radiators, stoves and fridges. Use the DI safety plug (For part nos. please see *Section 11, Spare parts*).

NOTE:

When working with power tools and machines, the following fundamental safety measures must be observed at all times in order to protect against electric shocks and danger of fire and injury. Read and remember these instructions before using the machine. Take good care of these safety instructions and keep them to hand at all times!

GENERAL SAFETY REMARKS

Keep children and unauthorised persons at a distance

Do not allow children or any unauthorised persons to touch the machine or the cable, keep them away from the work area.

Keep the machine in a safe place

Machines that are not in use should be kept in a dry, locked location out of the reach of children.

Do not overload the machine

You will be able to work better and more safely within the specified performance range.

Use the right machine

Do not subject underpowered machines or attachments to excessive work loads. Refrain from using machines for purposes and work for which they are not intended.

Wear suitable work clothing

Do not wear loose clothing or jewellery which could get caught in moving parts of the equipment.

Use safety gear

Use respiratory masks with filter class P3 when working in dust-laden atmospheres.

Only use the cable for its intended purpose

Never use the cable to carry or pull the machine, or to pull the plug out of the socket. Protect the cable from the effects of heat, oil and sharp edges.

Never bend too far over the machine

Avoid any abnormal posture. Make sure you are standing steadily, keeping your balance at all times.

Take good care of your machine

Keeping your machine clean will allow you to work more efficiently and safely. Comply with the maintenance regulations and the tool changing instructions. Check the cables regularly and have them replaced by a qualified expert if damaged. Check extension cables regularly and replace if damaged. Keep the handles dry and free of oil and grease.

Pull the plug out of the socket

When the machine is not in use, before performing maintenance work and when changing tools, the mains plug must be pulled out of the socket.

GENERAL SAFETY REMARKS

Never leave setting tools in the machine

Before switching on, always check that you have removed all spanners and setting tools.

Avoid unintentional start-up

Ensure that the ON/OFF switch is not activated when connecting the machine to the mains.

Be alert to potential dangers

Always concentrate on what you are doing. Act sensibly, never use the machine when you are having difficulty concentrating.

Check your machine for damage

Before making further use of the machine, check the safety devices or damaged parts with care and test that all machine functions are in correct working order. Check whether moving parts are working correctly, whether they are jamming, whether any parts are broken, whether all other parts are correctly mounted and all other conditions which could influence operation of the machine are correct.

Unless otherwise specified in the operating instructions, damaged safety devices and parts must be repaired or replaced professionally by an after-sales workshop. Damaged switches must be replaced by an after-sales workshop. Never use machines with switches which cannot be turned on or off.

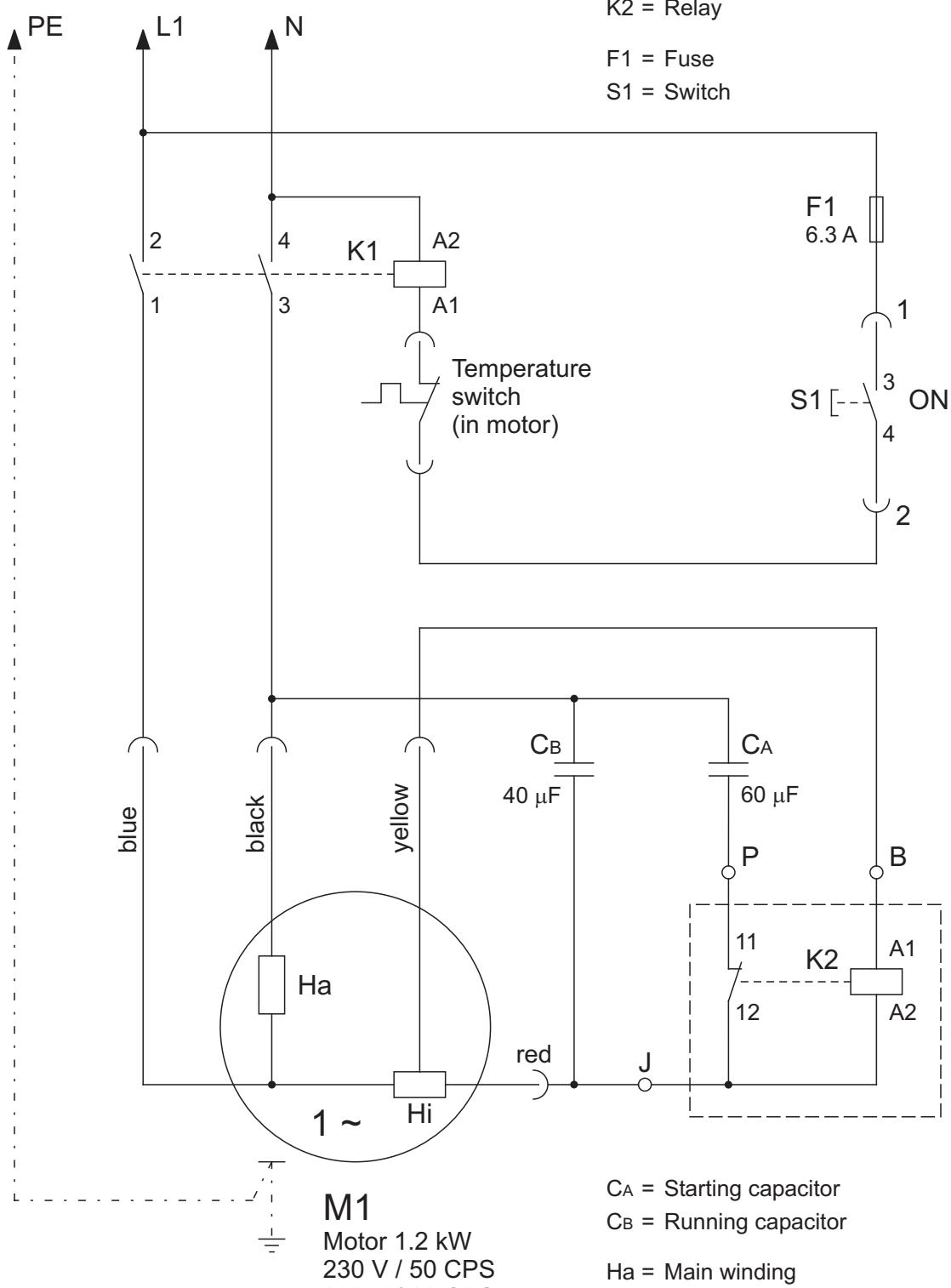
NOTE:

For your own safety, only use accessories and attachments which are specified in the operating instructions or offered in the relevant catalogue. The use of other tools or accessories than those recommended in the operating instructions can result in danger of personal injury.

Take care of these instructions and keep them within easy reach.

Observe the valid regulations of your employers' liability insurance association.

CIRCUIT DIAGRAMS



SINGLE: Single-phase AC motor

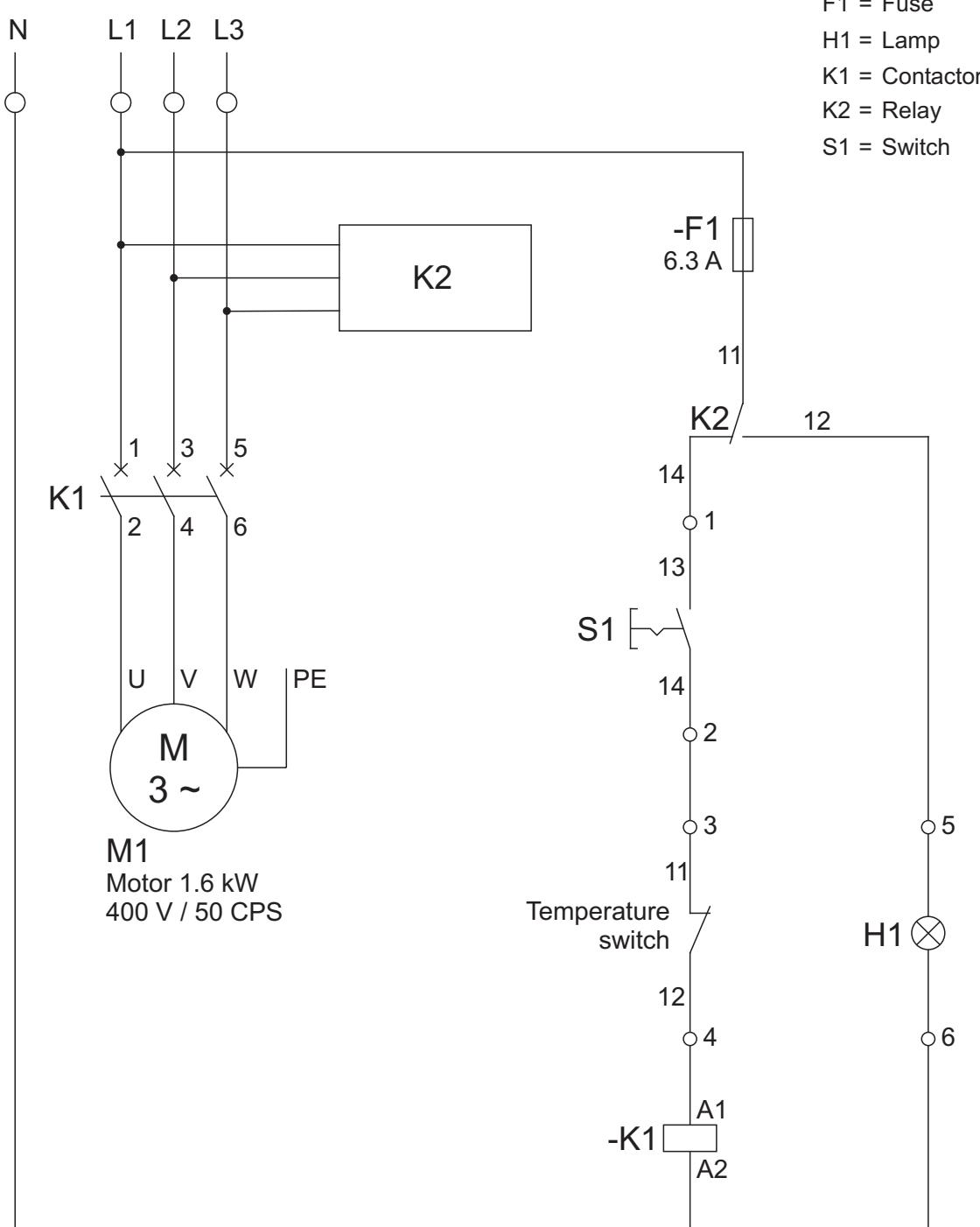
1.2 kW / 230 V / 50 CPS
1.2 kW / 230 V / 60 CPS

EUGEN LÄGLER GMBH
Kappelrain 2
D-74363 Güglingen-Frauenzimmern

Phone: 0049 - 7135 - 98 90 - 0
Fax: 0049 - 7135 - 98 90 - 98

E-mail: info@laegler.com
Internet: http://www.laegler.com

CIRCUIT DIAGRAMS



Correct rotating direction of the motor:

Look to the gear unit Look to the fan wheel



01.06.2008

SINGLE: Three-phase AC motor

1.6 kW / 400 V / 50 CPS

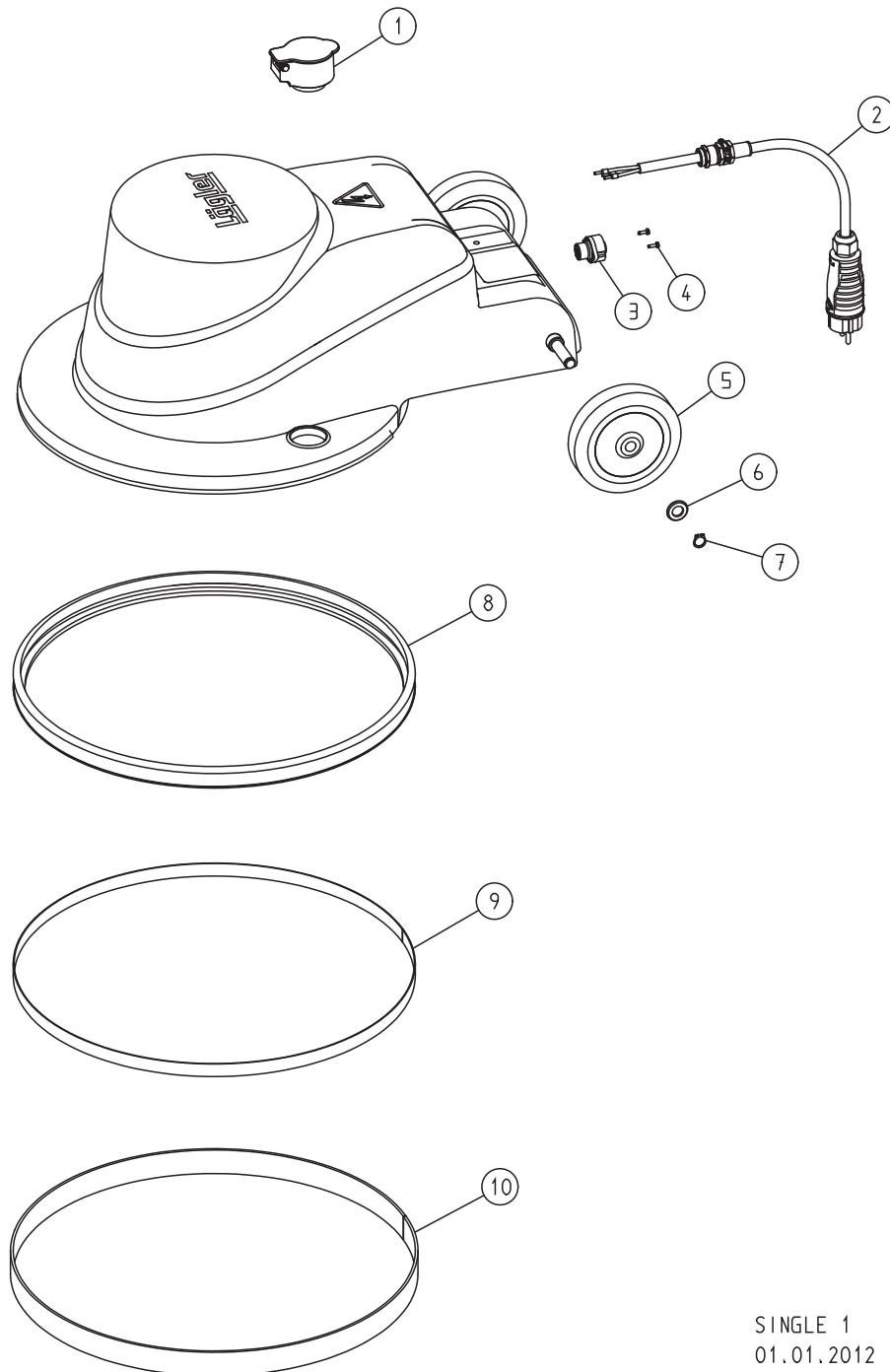
EUGEN LÄGLER GMBH
Kappelrain 2
D-74363 Güglingen-Frauenzimmern

Phone: 0049 - 7135 - 98 90 - 0
Fax: 0049 - 7135 - 98 90 - 98

E-mail: info@laegler.com
Internet: http://www.laegler.com

SPARE PARTS SINGLE

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines!



SINGLE 1
01.01.2012

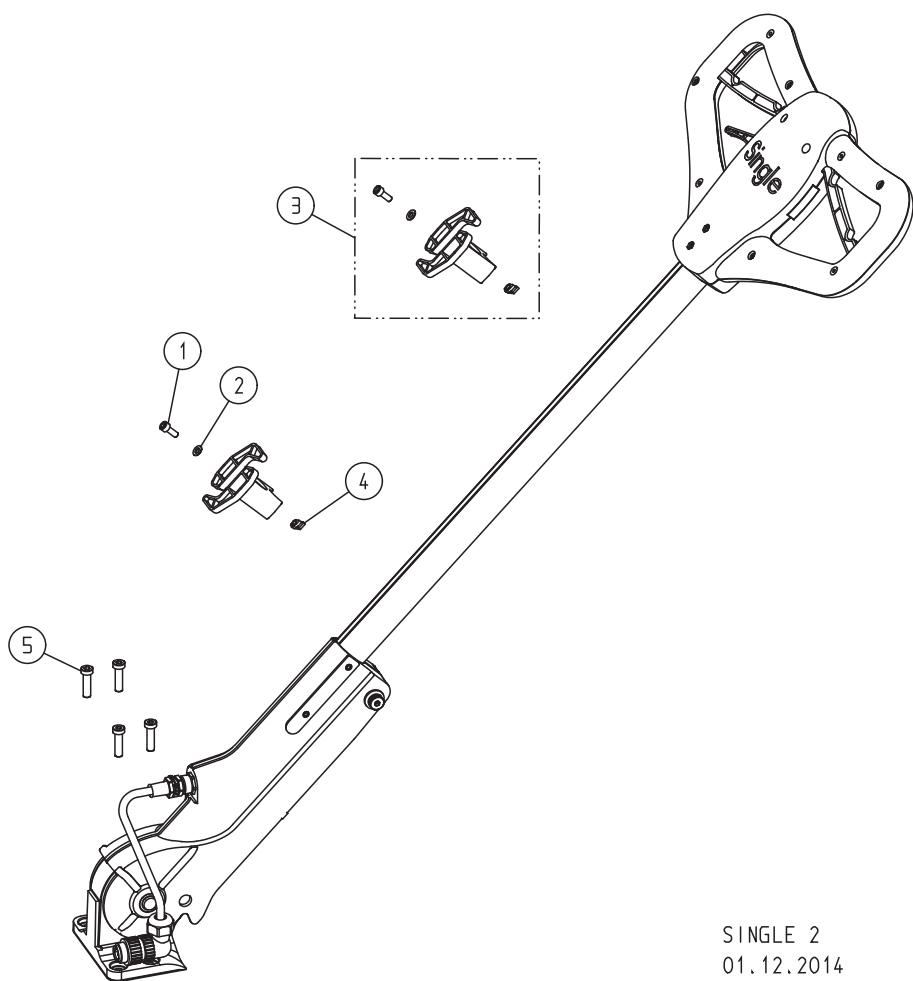
SPARE PARTS SINGLE

Item	Part number	Description
1	850.01.80.200	Dust extraction socket
2	000.65.43.252	Motor cable 3 x 2.5 mm ²
3	000.65.71.040	Integrated socket
4	7500.1003.010	Screw
5	850.05.09.105	Wheel
6	0125.1012.000	Washer
7	0471.0012.000	Circlip
8	850.01.02.105	Buffer
9	850.01.40.100	Velcro
10	850.01.51.100	Fluffy sealing strip

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines!

SPARE PARTS SINGLE

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines!



SINGLE 2
01.12.2014

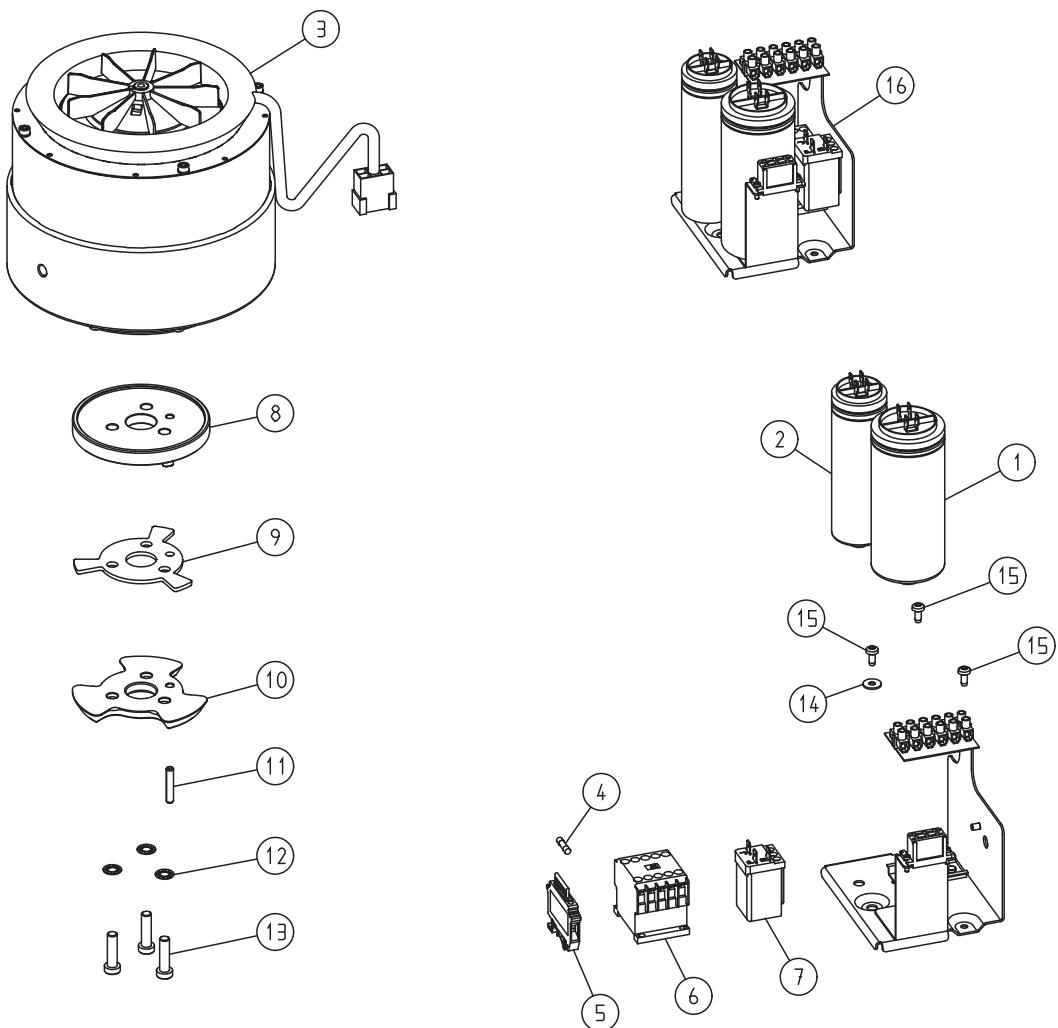
SPARE PARTS SINGLE

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	7984.1008.030	Screw

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines!

SPARE PARTS SINGLE

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines!



SINGLE 3
01.01.2013

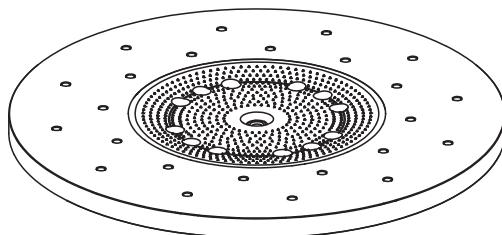
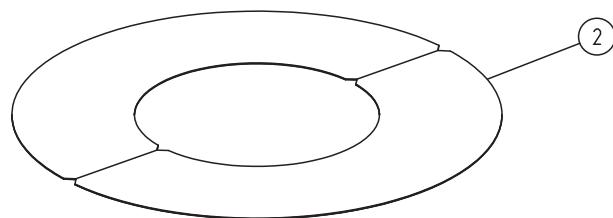
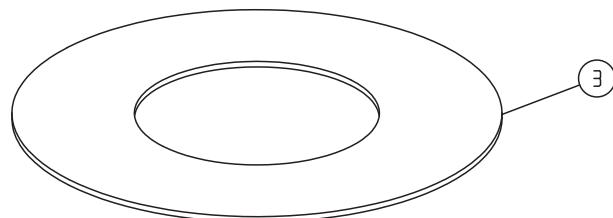
SPARE PARTS SINGLE

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

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines!

SPARE PARTS SINGLE

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines!



SINGLE 4
01.01.2010

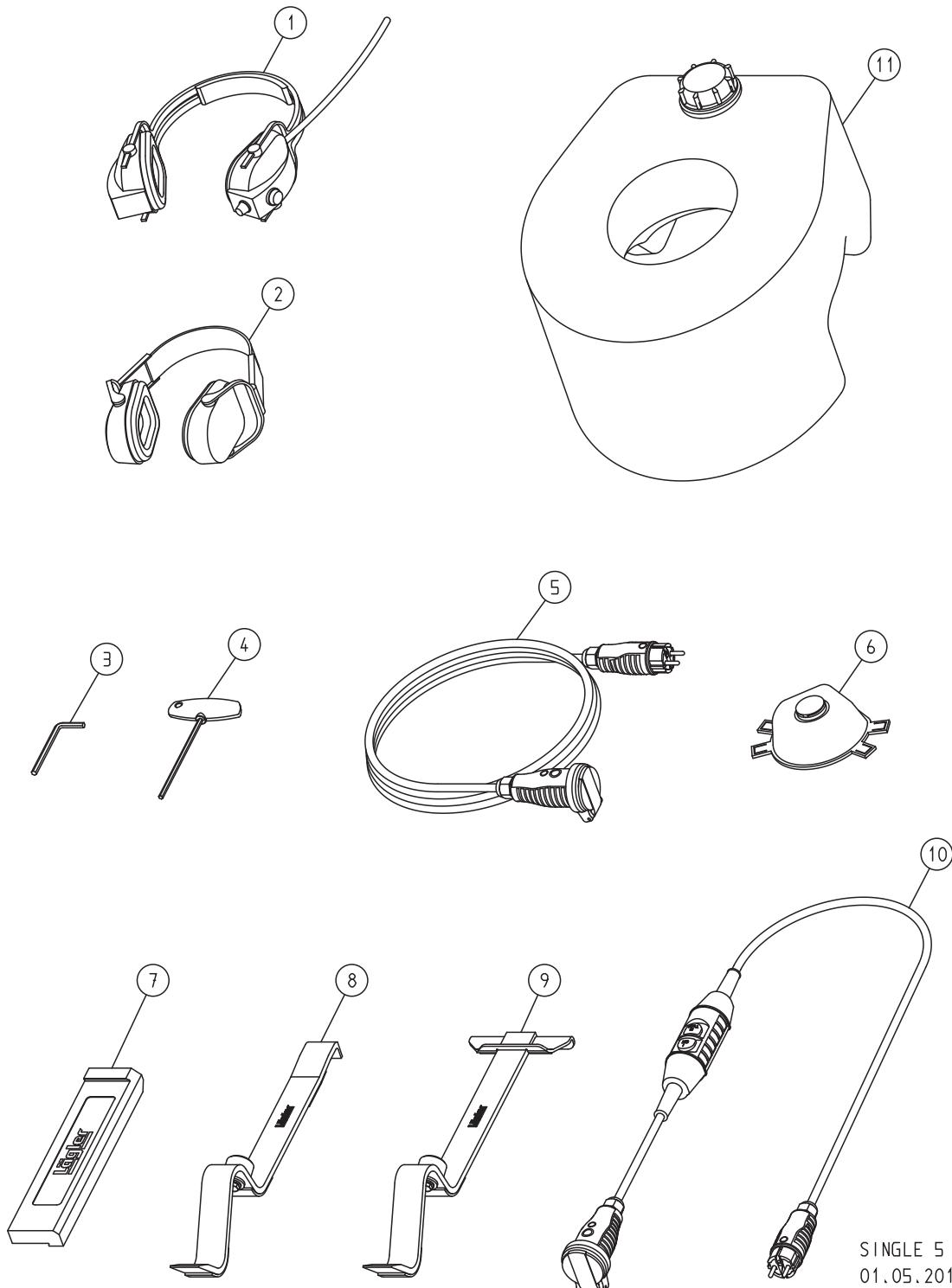
SPARE PARTS SINGLE

Item	Part number	Description
	850.02.10.100	Sanding plate SINGLE complete
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

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines!

SPARE PARTS SINGLE

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines!

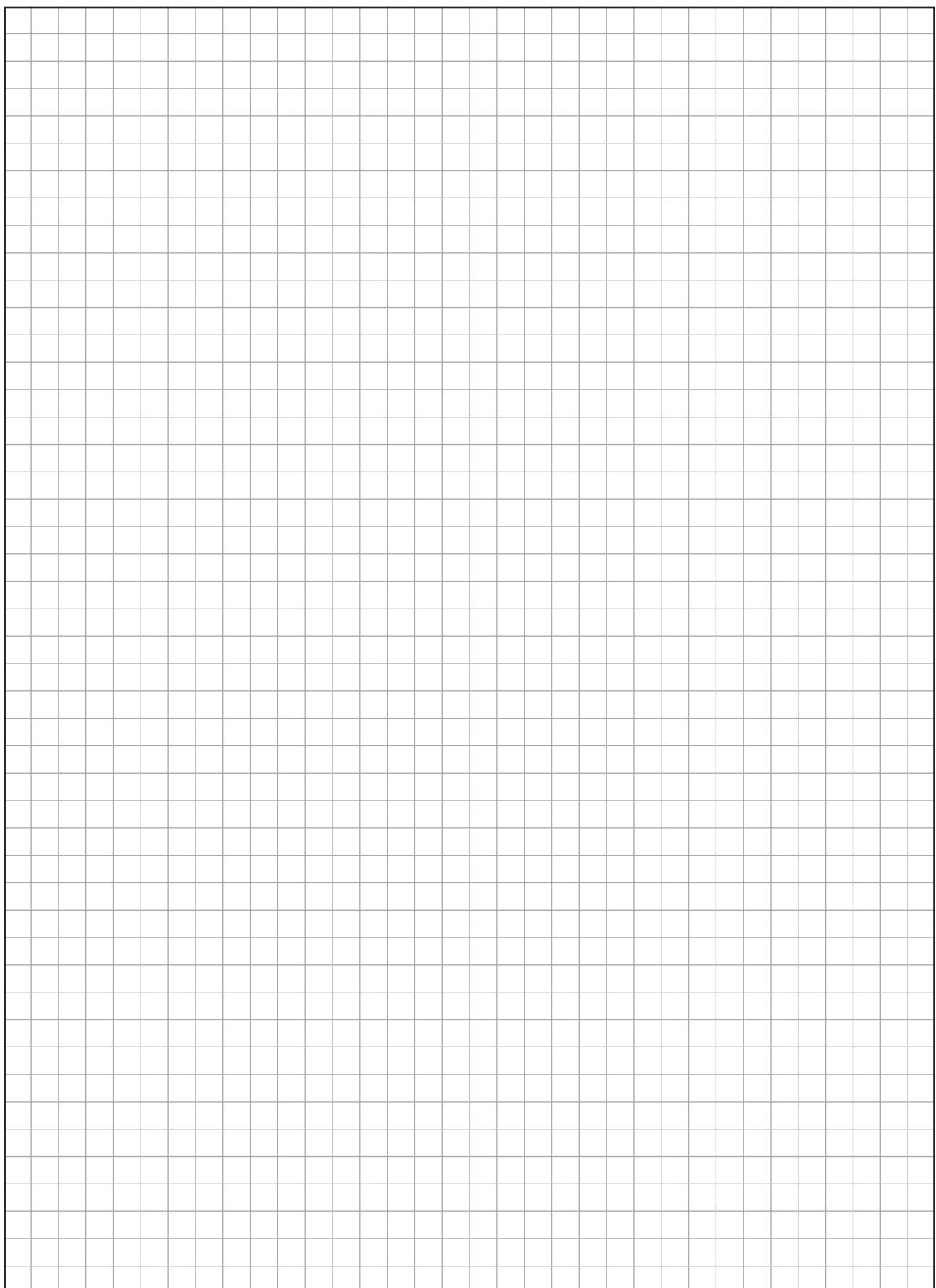


SPARE PARTS SINGLE

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 mm ² , 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

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines!

NOTES



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

EU DECLARATION OF CONFORMITY

EU Declaration of conformity for machines (EU 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-Mail: info@laegler.com · http://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 (2004/108/EG).

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

Güglingen-Frauenzimmern, March 1, 2016

Volker Wörner, Development Department
 Person Responsible for Documents
 Eugen Lägler GmbH, Kappelrain 2
 D-74363 Güglingen-Frauenzimmern
 Germany

SINGLE

Serial number:

Year of manufacture: