



English / Englisch

Operating Instructions

Translation of original operating instructions
for the edge sanding machine

UNICO

Lägler
www.laegler.com

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Safety notes used in this operating instructions and their meaning:

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

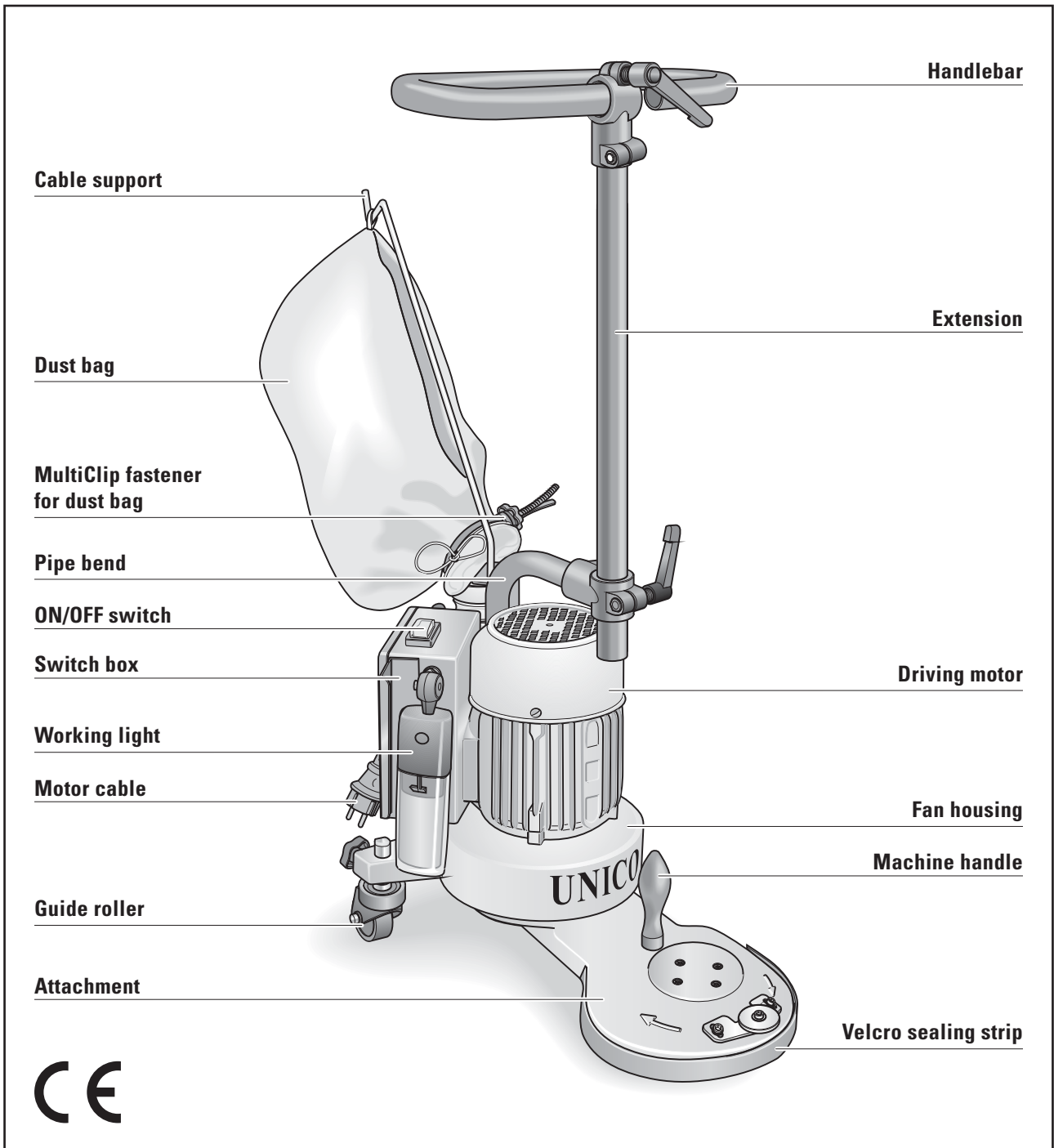


Fig. 1 Main features of the edge sanding machine UNICO.

Introduction

1.1 FEATURES OF THE MACHINE

In *Figure 1* we have provided the UNICO with the designations of the most important components. Please take a little time to become with the machine.

1.2 DESCRIPTION OF THE MACHINE

The edge sanding machine UNICO works with a sanding disc wheel, which is installed in an attachment. Three attachments in various lengths can be supplied. The housing of the attachment covers the actual working zone. A machine handle, which is used to guide the machine when you are working on your knees, can be installed depending on the length of the respective attachment. Velcro sealing tape is used to seal off the working zone from the discharge of dust. The resulting increased flow speed of the air upon entering the working zone from outside guarantees constant good suction of the sanding dust. Inside the attachment, there is a running V-belt, which is driven via the V-belt pulley of the motor installed vertically on the fan housing. The two guide rollers, which support the rear of the machine, are also installed on the fan housing. In front, the machine rests on the sanding abrasive (three-point support). The fan housing is provided with two additional drilled holes into which the machine handle can be screwed if and when required. On the rear side of the fan housing, a rotating pipe bend fitted to a pipe union conveys the sanding dust into the dust bag. The dust bag is fastened to the pipe bend by means of a quick fastener.

The dust bag is suspended from the cable support by means of a textile loop. This textile loop keeps the connection cable away from the working zone and is inserted in the holder on the pipe bend of the machine guiding system. This holder also includes the Allen key, which is required to replace conventional sanding discs. The pipe bend can be used to guide the machine when you are working on your knees. An extension including a handlebar is installed at the front end of the pipe end and can be used to guide the machine when you are working in a stooped position or in an upright position. The extension and the handlebar can be adjusted as soon as the clamping lever has been opened.

The machine guiding system and the switch box are attached to the motor. An ON/OFF switch including no-volt release as well as the rotating and swiveling working light is fitted to the upper side of the switch box.

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

Read these operating instructions completely before working with the UNICO 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.

**WARNING!****RISK OF DEATH from electrical shock:**

The machine may never be used for wet processing operations of any kind!

1.3 INTENDED USE OF THE MACHINE

The edge sanding machine UNICO is suitable for the dry sanding of parquet floors, deal floors and cork floors in dry environment.

Any other form of use is not permitted without the consent of the manufacturer!

1.4 PROTECTIVE DEVICES

The following parts of the machine are protective devices and must therefore be in perfect condition at all times:

Velcro sealing strip	=	Dust protection
Attachment	=	Protection against tools
Dust bag	=	Dust protection

1.5 MACHINE CONFIGURATION

1.5.1 BASIC EQUIPMENT

- 1 Machine ready for operation
- 1 Operating instructions
- 1 Dust bag
- 1 MultiClip for dust bag fixture
- 1 Cable support
- 1 O-ring as strain relief device
- 1 Extension cable, length 10 m (394"):
 - for single-phase AC motor 3 x 1.5 mm² (3 x 0.0023 sq.in.)
- 1 Allen key size 4 mm
- 1 Allen key size 5 mm
- 1 Allen key size 6 mm
- 1 Respiratory protective mask (P3)
- 1 Cotton bag

1.5.2 OPTIONAL EQUIPMENT

- Foldable earmuff
- Safety switch for fault current PRCD-S (for German mains supply)

NOTE:

You will find the corresponding part numbers for the optional equipment and wearing parts in *Section 11, Spare parts UNICO*.

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
- ON/OFF switch
- Velcro sealing tape at the attachment
- MultiClip
- V-belt
- Velcro disc at the sanding plate
- Sandpaper tensioning screw
- Dust bag

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 (for German mains supply → part number in *Section 11, Spare parts UNICO*)!
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!
- The motor cable and the power cables must be protected from mechanical and electrical damages in the workplace!

**WARNING!****RISK OF DEATH from electrical shock:**

- 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 dust bag 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 or 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!
- 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!

**WARNING!****RISK OF FIRE from sparks while sanding or from spontaneous combustion:**

- The dust bag must **always** be removed from the machine **directly** after sanding and emptied into a **non-combustible** container **outdoors!** Cover this container with a **non-combustible** cover and **be certain** to store it and the dust bag **outdoors** in **non-combustible** environment (→ *Section 5.3, Emptying the dust bag!*)
- Always transport and store the **cleaned** machine **without** dust bag!
- Always store used dust bags in **closed** and **non-combustible** containers!

RISK OF FIRE from the overheating of the cables:

- Only cables with **three** wires and wire cross-sections of **at least** 1.5 mm² (0.0023 sq.in.) may be used as motor cables and power cables!
- 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:

- Make sure that the dust bag is properly fastened to the machine!
- Do not use damaged, washed or repaired dust bags!
- Do not work with an overfilled dust bag (→ *Section 5.3, Emptying the dust bag!*)
- Clean the machine regularly! Dust and deposits in the attachment, in the fan housing and on the fan wheel reduce the suction performance and thus the dust load at the workplace increases excessively!
- If the machine is operated **correctly**, the mandatory dust emission values will not be exceeded! Empty the dust bag **outdoors!** At the same time a respiratory protective 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. emptying of the dust bag or cleaning of the machine!

**CAUTION!**

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 tools and adjustment tools have been removed from the machine!
- The machine **may not be started** if the sanding plate is on the floor! Therefore, tip the machine backwards slightly to start the machine (➔ *Section 4.11, Switching on the machine*)!
- Only tilt the switched-on machine backwards to such an extent that the sanding plate **cannot** be touched **under any circumstances**!
- **Never** leave the operational machine unattended!
- Do not reach into rotating tools or parts of the machine!
- Do not let children or other persons touch the machine or cables and keep them out of the work area!
- 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!
- Make sure that ON/OFF switch is **not** set to ON when connecting the machine to the mains supply!

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!

**CAUTION!****RISK OF INJURY and RISK OF PROPERTY DAMAGE from unsuitable parts:**

- Only use tools, accessories and spare parts from LÄGLER® for the UNICO (→ *Section 11, Spare parts UNICO*)!
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:

- Clean the machine regularly! Dust and deposits on the belt pulleys and the V-belt lead to vibrations which have a negative effect on the sanding result!
- Never use any cleaning products which contain solvents!
- Do not store the unused machine with sanding media on the sanding plate! Otherwise the sanding media can cause scratches on the ground!
- 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!

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 UNICO*).

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

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 clean!**

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 always the serial numbers of your machines!

The type plate of UNICO is located on the switch box of motor (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 Power factor cosine phi (cos)
- 11 Insulation class (Insul. Cl.)
- 12 Protection category (Prot. Cat.)
- 13 Type of current
- 14 Country of manufacture

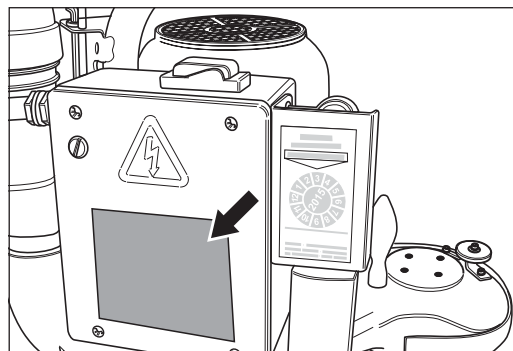


Fig. 2 Type plate on switch box of motor.

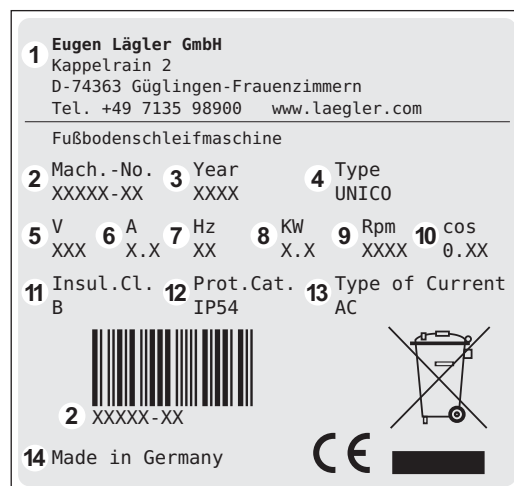


Fig. 3 Data on type plate.

3.2 MACHINE DATA

Manufacturer	Eugen Lägler GmbH
Machine type	edge sanding machine
Machine name	UNICO
Serial number	see type plate (fig. 2)
Year of manufacture	see type plate (fig. 2)

NOTE:

The motor data indicated here refers to machines used in Germany or USA. Exported machines may have other data that can be seen on the motor type plate.

Motor type	single-phase AC motor			
Voltage	220 + 230 V		110 + 120 V	
Frequency	50 Hz (CPS)	60 Hz (CPS)	50 Hz (CPS)	60 Hz (CPS)
Motor power	1.1 kW			
Capacitor	30 µF		130 µF	
Necessary fuse of mains supply	at least 10 A			
Insulation class	B			
Protection class	IP 54			
Safety devices	no-voltage release, temperature switch as overload protection in the motor			

Diameter of sanding disc	178 - 180 mm (approx. 7 - 7.1")
Speed of sanding disc - machine with motor 50 Hz (CPS) - machine with motor 60 Hz (CPS)	2690 1/min (rpm) 3318 1/min (rpm)
Attachment length - model 105 - model 230 - model 350	105 mm (approx. 4.1") 230 mm (approx. 9.1") 350 mm (approx. 13.8")
Overall length of machine - model 105 - model 230 - model 350	450 mm (approx. 17.7") 570 mm (approx. 22.4") 700 mm (approx. 27.6")
Overall width of machine	340 mm (approx. 13.4")
Attachment height	57 mm (approx. 2.2")
Overall height of machine	670 - 915 mm (approx. 26.4 - 36")
Overall weight of machine - model 105 - model 230 - model 350	19 kg (approx. 42 lbs) 20 kg (approx. 44 lbs) 21 kg (approx. 46 lbs)

 TECHNICAL DATA

Dust emissions at workplace	< 2 mg/m ³ (0.024 gr./cu.yd.)
Workplace-related noise emission values, measurement taken 1.6 m (5.25 ft.) above floor - sanding of beech parquet with sanding disc grit 80	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 dangers and risks.

Commissioning

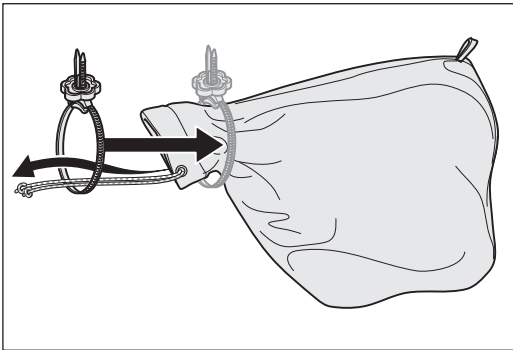


Fig. 4 Slide the MultiClip fastener over the opening of the dust bag.

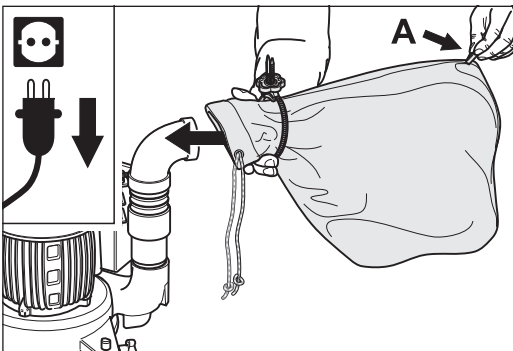


Fig. 5 Pull the dust bag over the suction pipe stub. The sling **A** must be on top.

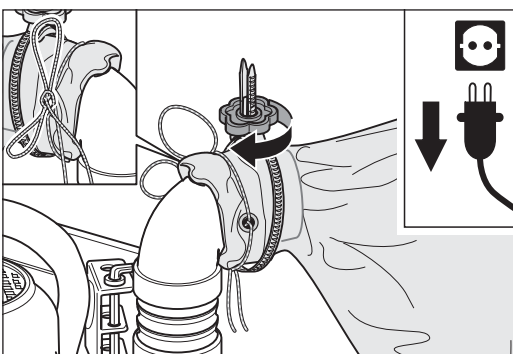


Fig. 6 Tighten the MultiClip firmly by hand and tie up the dust bag.

The section describes how to put the UNICO into service on site. To exclude any form of damage or malfunctions, you must proceed in the order of steps mentioned 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 ATTACHING THE DUST BAG

- 1 Unpack the machine carefully. Make sure that the packaging materials that are no longer required are disposed of properly in accordance with environmental protection regulations.

ATTENTION!

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

- 2 Slide the MultiClip fastener over the opening of the dust bag (fig. 4).
- 3 Pull the opening of the dust bag over the suction pipe stub of the machine. Make sure that the sling on the dust bag is on top (fig. 5).
- 4 Slide the MultiClip fastener approximately 1 to 2 cm (½ to 1") over the pipe stub.
- 5 Tighten the MultiClip fastener firmly by hand and make sure that the dust bag is not folded underneath the MultiClip fastener. In addition, then use the string to tie up the dust bag (fig. 6).

- 6 Pick up the cable support and hook it into the sling on the top end of the dust bag (fig. 7).
- 7 Insert the cable support into the proper bracket on the pipe bend (rear side of the machine) next to the Allen key (fig. 8).

4.2 SWIVELING THE PRESSURE HOSE

For your sanding work, the pressure hose can be rotated toward the left or right depending whether you standing on the right-hand side or on the left-hand side of the machine or whether you are kneeling or bending down. This ensures a constant volumetric flow of the air being sucked into the machine.

- 1 On the pressure hose, grab the black plastic pipe stub below the hose piece and rotate it toward the desired side. The dust bag will swivel with the black plastic pipe stub (fig. 9). Do not use the upper curved pipe piece to rotate the pressure hose.
- 2 Whenever appropriate, make sure that the dust bag is properly positioned without any folds.

4.3 INSTALLING THE VELCRO STRIP

Depending on the thickness of the abrasive in each case, the Velcro sealing strip on the attachment must be repositioned in order to improve the airflow conditions at the front end of the attachment and to seal off the sanding zone from the surrounding area.

- 1 **Switch off the machine and pull the power plug out of the socket!**
- 2 Fasten the Velcro strip by one end of the adhesive strip to the attachment and then place it all the way around the attachment (fig. 10).
- 3 On the front side of the machine, the Velcro strip should be about 1 mm away from the floor in order to be able to provide an air inlet. At all other locations, the strip is supposed to be resting on the floor.
- 4 The Velcro strip must be renewed whenever it is worn-out. However, you can, of course, also use the upper edge of the Velcro strip after turning it over.

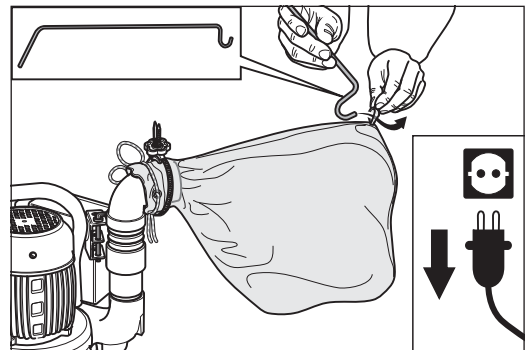


Fig. 7 Hook the cable support into the sling on the dust bag.

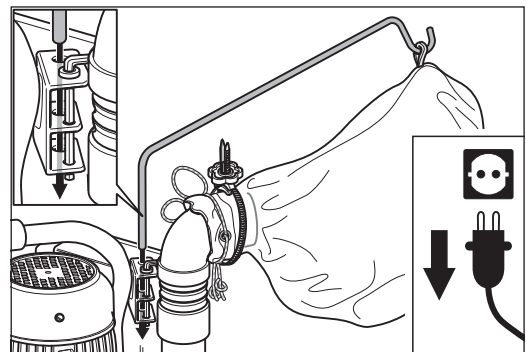


Fig. 8 Inserting the cable support into the proper bracket.

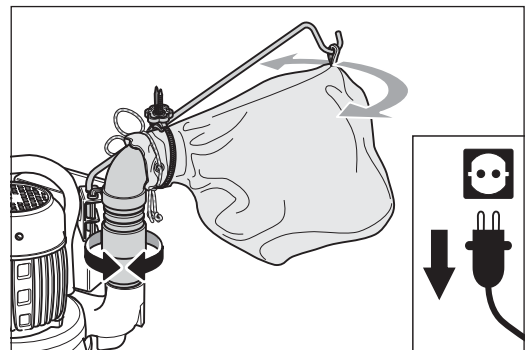


Fig. 9 The pressure hose can also be rotated at the lower plastic pipe stub.

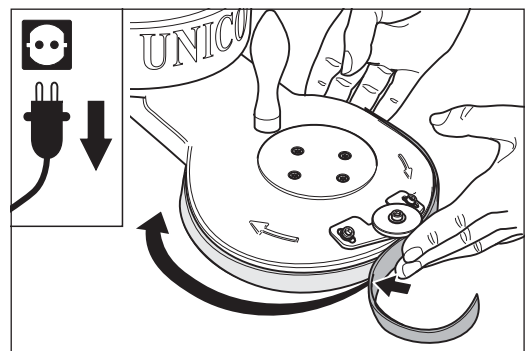


Fig. 10 Install the Velcro strip carefully to ensure properly sealing.

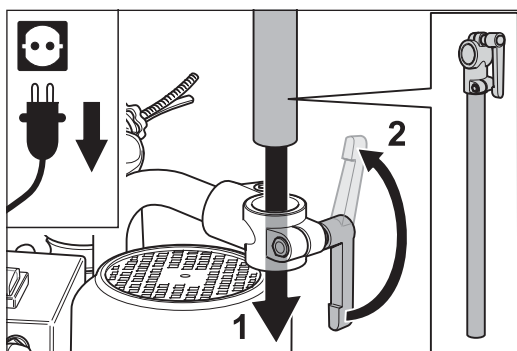


Fig. 11 Inserting the extension into the clamping piece **of the pipe bend** (1) and tightening the clamping lever (2)..

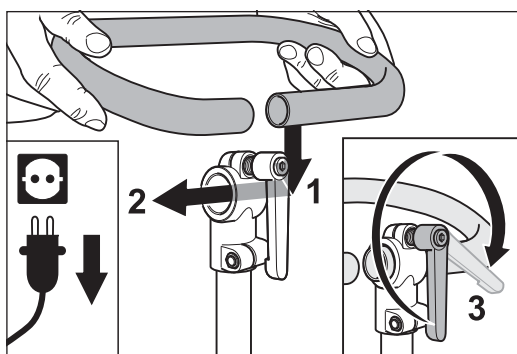


Fig. 12 Inserting the handlebar into the clamping piece **of the extension** (1 + 2) and tightening the clamping lever (3).

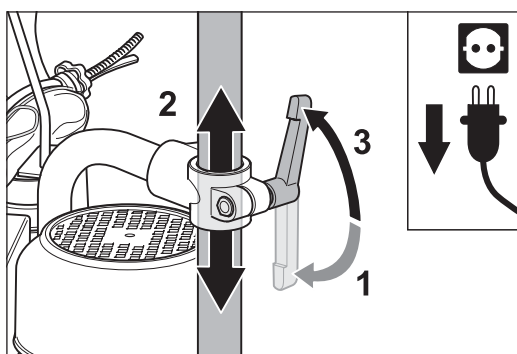


Fig. 13 Undoing the clamping lever (1), sliding the extension to suit your height (2) and tightening the clamping lever (3).

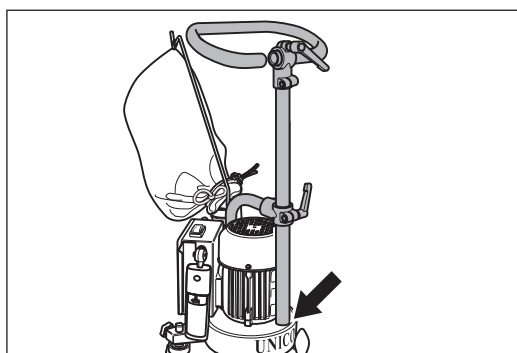


Fig. 14 The extension can also be pushed all the way down to the fan housing.

4.4 INSTALLING THE EXTENSION AND THE HANDLEBAR

- 1 Insert the extension into the clamping piece **of the pipe bend** (fig. 11, 1) and tighten the clamping lever firmly (fig. 11, 2).
- 2 Insert the long straight end of the handlebar into the clamping piece **of the extension** (fig. 12, 1 + 2) and tighten the clamping lever firmly. (fig. 12, 3).

4.5 ADJUSTING THE EXTENSION AND THE HANDLEBAR

4.5.1 ADJUSTING THE EXTENSION

The extension of the UNICO can be adjusted to suit the height and body position of any person performing the sanding work:

- 1 **Switch off the machine and pull the power plug out of the socket!**
- 2 To adjust the handle height, undo the clamping lever at the front end of the pipe bend (fig. 13, 1).
- 3 Slide the extension upward or downward (fig. 13, 2). At the bottom, it is also allowed to rest on the fan housing (fig. 14).
- 4 Tighten the clamping lever firmly again (fig. 13, 3).
- 5 To adjust the handlebar, undo the clamping lever at the upper end of the extension (fig. 15, 1).
- 6 Tilt the handlebar over into the desired position (fig. 15, 2) and then tighten the clamping lever firmly again.

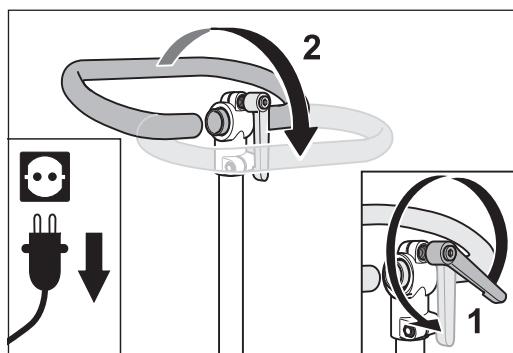


Fig. 15 Undoing the clamping lever on the extension (1) and tilting the handlebar over into the desired position (2).

4.5.2 REMOVING THE EXTENSION

Whenever you want to work in a stooped or kneeling position, you can also remove the extension and fasten the handlebar directly to the pipe bend:

- 1 **Switch off the machine and pull the power plug out of the socket!**
- 2 Undo the clamping lever at the upper end of the extension (fig. 16).
- 3 Pull the handlebar out of the clamping piece and remove it upward (fig. 17). Put the handlebar aside.
- 4 Undo the clamping lever at the front end of the pipe bend and pull the extension upward out of the bracket (fig. 18). Put the extension aside.

4.5.3 INSTALLING THE HANDLEBAR

The handlebar can be installed on the pipe bend in vertical position as well as in horizontal position.

Handlebar in vertical position:

- 1 Remove the extension first, as described in the preceding *Section 4.5.2, Removing the extension*.
- 2 Install the handlebar directly in the bracket on the front end of the pipe bend (fig. 19). Tighten the clamping lever again.

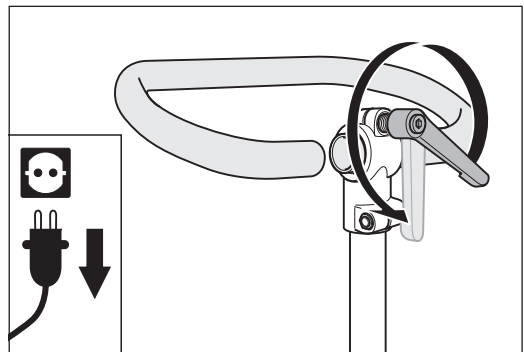


Fig. 16 Undoing the clamping lever on the extension.

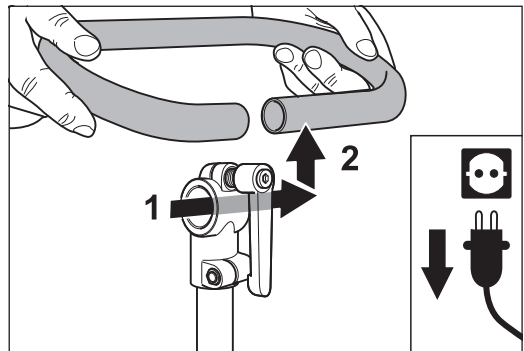


Fig. 17 Removing the handlebar.

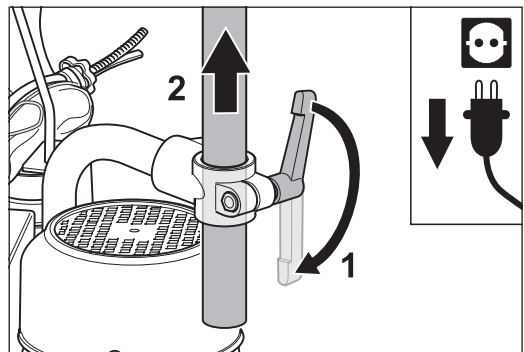


Fig. 18 Undoing the clamping lever at the pipe bend (1) and removing the extension (2).

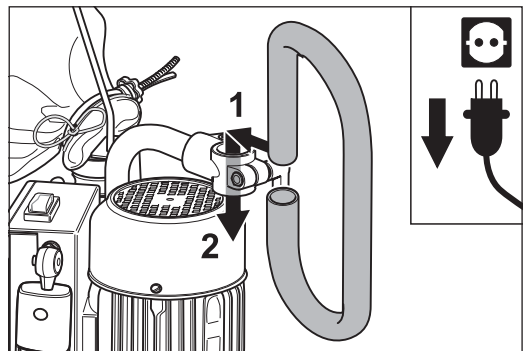


Fig. 19 Installing the handlebar on the pipe bend.

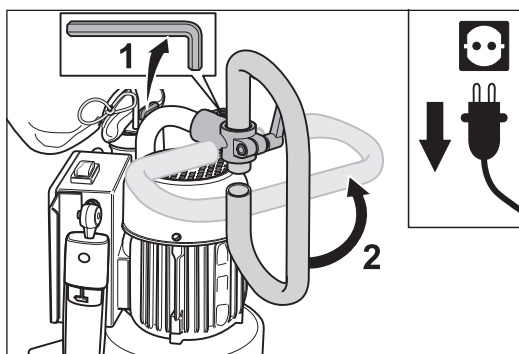


Fig. 20 Undo the screw on the angle clamping connector (1) and rotate the angle clamping connector by 90° (2).

Handlebar in horizontal position:

- 3 Use the enclosed Allen key to undo the screw on the angle clamping connector of the pipe bend and then rotate the angle clamping connector by 90° (fig. 20).
- 4 Use the Allen key to tighten the screw of the angle clamping connector again.

4.6 ADJUSTING THE GUIDE ROLLERS

The position of the guide rollers has a direct effect on the sanding results and on the aggressiveness of the machine. For rough sanding operations, a larger setting angle is selected and a flatter setting angle for fine-sanding operations.

Normally, the UNICO is supposed to sand the floor precisely at the front side of the attachment (fig. 21). If this is not the case, the machine will be sanding on one side (fig. 22 and fig. 24). The height of one of the guide rollers must then be readjusted (fig. 23 and fig. 25) because the quality of the sanded section is not the best and also because this has a negative effect on the suction system.

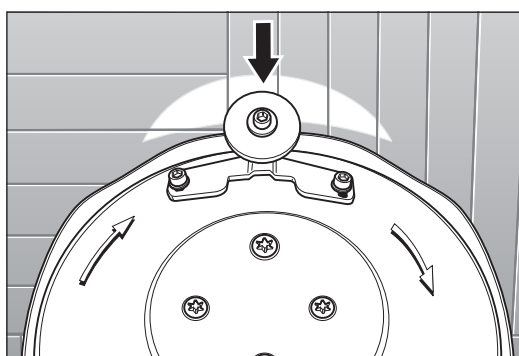


Fig. 21 **Correctly** adjusted guide rollers. The machine is sanding in **mid-position**.

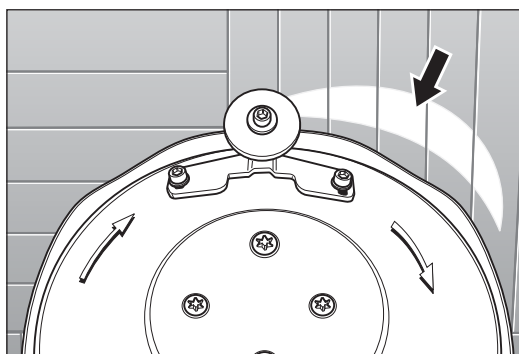


Fig. 22 The sanding zone is too far to the **right-hand** side means that ...

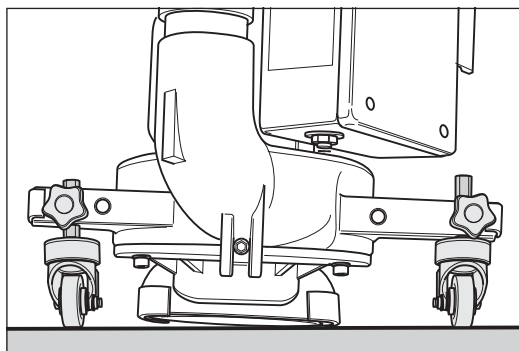


Fig. 23 ... the **right-hand** guide roller is further inside the guide roller arm of the fan housing than the left-hand guide roller.

In case the setting angle of the sanding disc is too large or too small, both guide rollers must be readjusted. Whenever too much material is sanded off on too little surface area, the setting angle is too large and the guide rollers must then be moved further inside the guide roller arms of the fan housing. Whenever the sanding capacity is insufficient and the surface being sanded is too large, you must then move the guide rollers further out of the guide roller arms of the fan housing.

With a correctly adjusted setting, the sanding zone is located at the front edge of the attachment (fig. 21).

If the machine is sanding too far to the right-hand side (fig. 22), the right-hand guide roller is further inside the guide roller arm of the fan housing than the left-hand guide roller (fig. 23).

However, if the machine is sanding too far to the left-hand side (fig. 24), the left-hand guide roller is further inside the guide roller arm of the fan housing than the right-hand guide roller (fig. 25).

Depending on the model in each case, you can make the correct settings using the distances between the guide roller arms of the fan housing and the wheel forks (fig. 26):

UNICO 105: $X = 7 \text{ mm}$

UNICO 230: $X = 9 \text{ mm}$

UNICO 350: $X = 11 \text{ mm}$

To adjust the guide rollers, proceed as follows:

- 1 **Switch off the machine and pull the power plug out of the socket!**
- 2 Use a piece of wood or your foot to support the UNICO from underneath to prevent the machine from falling onto the guide roller.
- 3 Undo the star grip screw on the guide roller arm of the fan housing carefully (fig. 27, 1).
- 4 Lift up the machine by grabbing it by the guide roller arm and, at the same time, use your thumb to press down on the upper end of the guide roller shaft. Adjust the guide roller with respect to the guide roller arm to the desired position (fig. 27, 2) and tighten the star grip screw firmly. Put the UNICO down again.
- 5 Carry out a trial sanding operation. If the machine does provide the desired mid-position sanded section, repeat the above-mentioned steps.

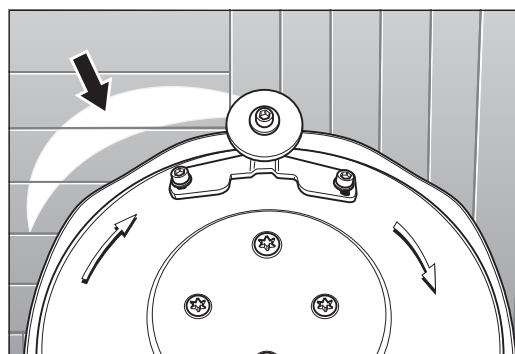


Fig. 24 The sanding zone is too far to the **left-hand** side means that ...

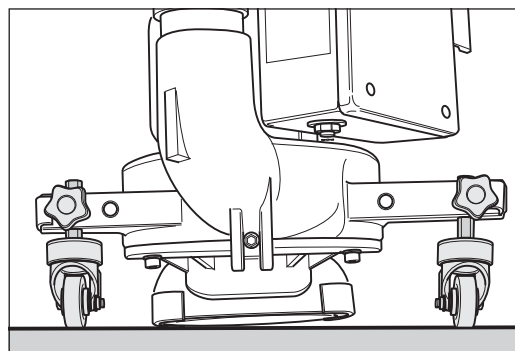


Fig. 25 ... the **left-hand** guide roller is further inside the guide roller arm of the fan housing than the right-hand guide roller.

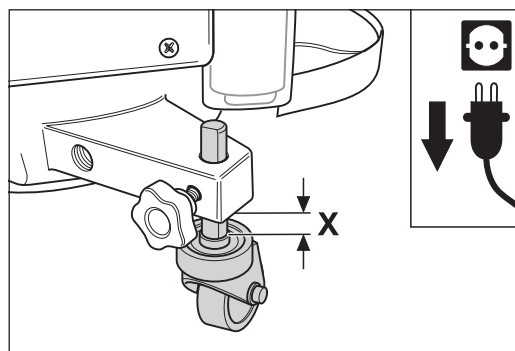


Fig. 26 Measure the distance **X** between the guide roller arm of the fan housing and the wheel fork.

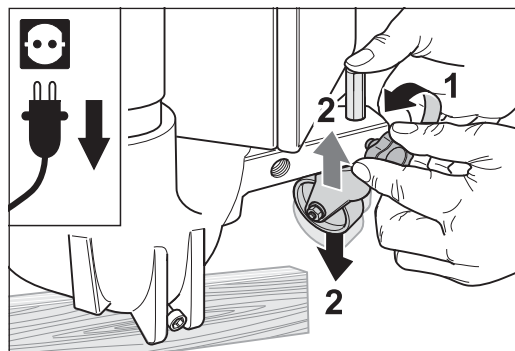


Fig. 27 Undo the star grip screw carefully (1) and then adjust the guide roller (2).

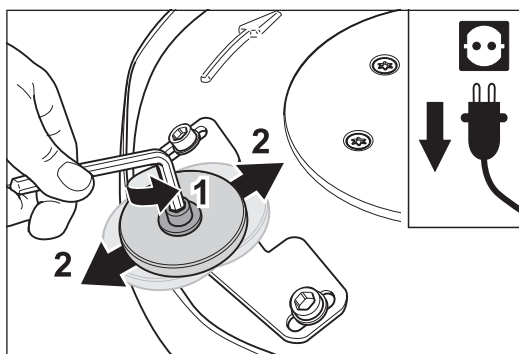


Fig. 28 Undo the screw in the center of the wall-protecting roller (1) and then position the roller (2).

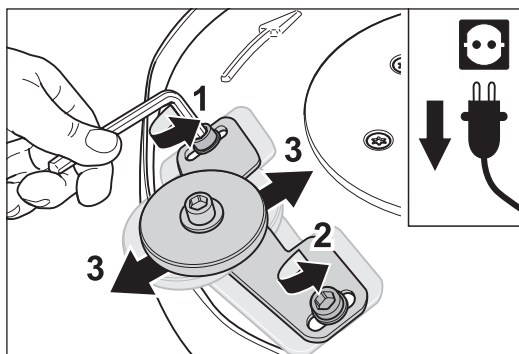


Fig. 29 Undo the screws on the wall-protecting roller bracket (1 + 2) and move the wall-protecting roller bracket (3).

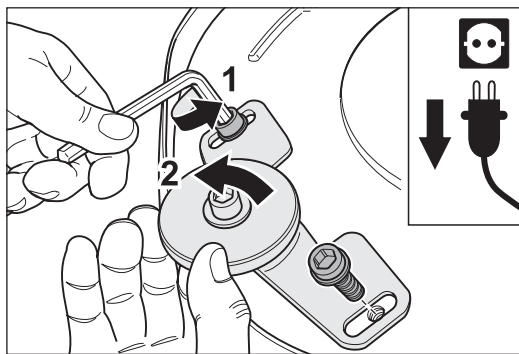


Fig. 30 Remove the screws on the wall-protecting roller bracket (1) and then remove the complete wall-protecting roller (2).

4.7 ADJUSTING THE WALL-PROTECTING ROLLER

In case of walls or baseboards with different shapes, sanding into these walls or baseboards can be prevented by adjusting the wall-protecting roller.

- 1 **Switch off the machine and pull the power plug out of the socket!**
- 2 Use an Allen key to undo the screw in the center of the wall-protecting roller and then move the wall-protecting roller into the desired position (fig. 28). Tighten the screw again.
You can also increase the adjustment distance of the wall-protecting roller by undoing the two screws with which the wall-protecting roller bracket is fastened to the attachment (fig. 29, 1 + 2).
- 3 Move the wall-protecting roller bracket into your desired position (fig. 29, 3) and then tighten the screws again.
- 4 To check your adjustments, place the switched-off UNICO against the wall so that the wall-protecting roller rests against the wall. However, the sanding disc wheel is not allowed to touch the wall or the baseboard. Otherwise, readjust the wall-protecting roller.

In the case of applications in which you deliberately want to sand right up to the wall, you can then move the wall-protecting roller completely out of the working zone.

In the case of applications in which you want to sand underneath very low radiators or cabinets, you can then remove the wall-protecting roller completely:

- 1 **Switch off the machine and pull the power plug out of the socket!**
- 2 Remove the two screws with which the wall-protecting roller bracket is fastened to the attachment and then remove the complete wall-protecting roller (fig. 30).

4.8 THE MACHINE HANDLE ON THE ATTACHMENT

The machine handle is installed on the front end of the long attachment (type 350) and of the medium-sized attachment (type 230). The machine handle is used in the kneeling position to guide the attachment (fig. 31). The machine handle can be unscrewed and then installed on the right-hand side or on the left-hand side of the rear side of the fan housing. When you are kneeling, you can then use the handle to guide the machine in inaccessible locations. In the case of the UNICO equipped with the short attachment (type 105), the machine handle is installed on the fan housing as a standard equipment feature.

- 1 **Switch off the machine and pull the power plug out of the socket!**
- 2 Unscrew the machine handle out of the attachment.
- 3 Screw the machine handle into the right-hand side or into the left-hand side of the fan housing and then tighten the handle firmly by hand (fig. 32).

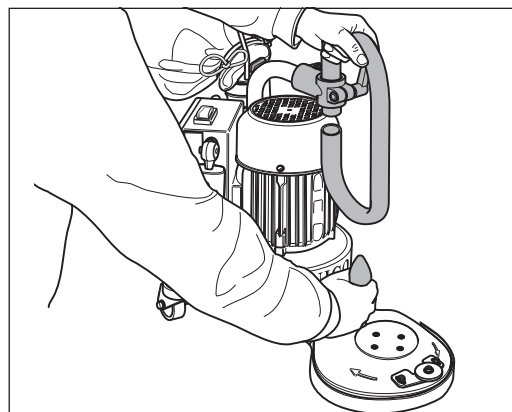


Fig. 31 The machine handle is used in the kneeling position to guide the attachment.

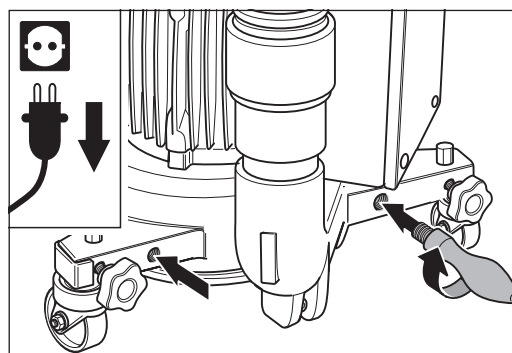


Fig. 32 The machine handle can also be screwed into the fan housing.

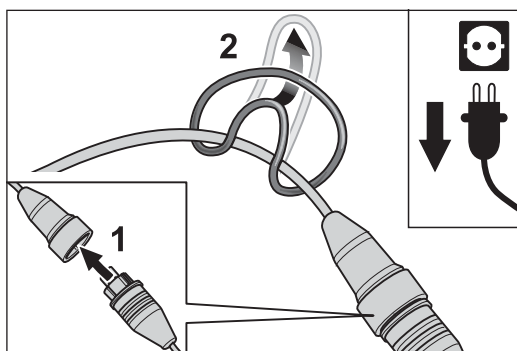


Fig. 33 Insert the plug of the motor cable into the coupling of the extension cable (1) and then fasten the strain relief ring to the extension cable (2).

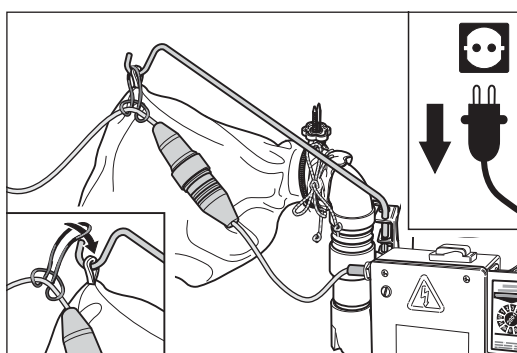


Fig. 34 Run the extension cable past the right-hand side of the dust bag and then hook the strain relief ring into the cable support.

4.9 CONNECTING THE POWER SUPPLY CABLE



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 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 UNICO*)!
- **Observe the applicable regulations and legal requirements in your country!**

RISK OF FIRE from the overheating of the cable:

- **Only cables with three wires and wire cross-section of at least 1.5 mm² (0.0023 sq.in.) may be used as motor cables and power cables!**
- **The maximum cable length in order to connect the machine to the mains supply must not exceed 20 m (790")!**

- 1 Insert the plug of the motor cable into the coupling of the extension cable (fig. 33, 1).
- 2 Fasten the strain relief ring to the extension cable (fig. 33, 2). Run the extension cable past the right-hand side of the dust bag and then hook the ring into the cable support (fig. 34).

Make sure that the cable can slide back and forth easily and does not pinch off the dust bag at any place! This will guarantee that there are no negative effects on the suction function!
- 3 Insert the cable plug of the extension cable into a sufficiently fuse-protected power supply socket equipped with earthing contacts. For increased safety, we recommend the use of a safety switch for fault current (for German mains supply → part number in *Section 11, Spare parts UNICO*).

4.10 ADJUSTING THE WORKING LIGHT

As soon as the connected extension cable has been inserted, the working light installed on the UNICO will light up. If this is not the case, check the power supply.

For more light from above, the working light can be swiveled upward (fig. 35) and rotated about its own axis (fig. 36). In the transport position, the light is well protected and illuminates the close range more intensively during the sanding work (fig. 37).

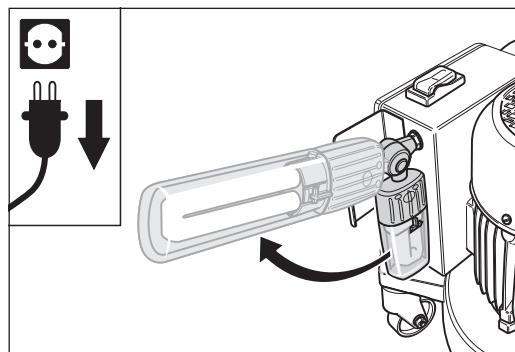


Fig. 35 The working light can be swiveled upward.

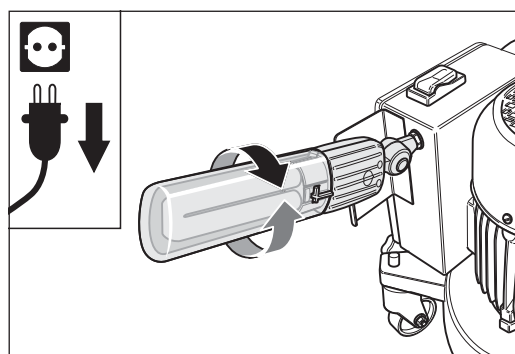


Fig. 36 The working light can be rotated about its own axis.

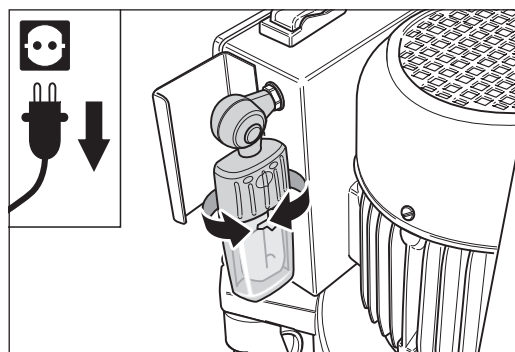


Fig. 37 In the transport position, the close range is illuminated better.

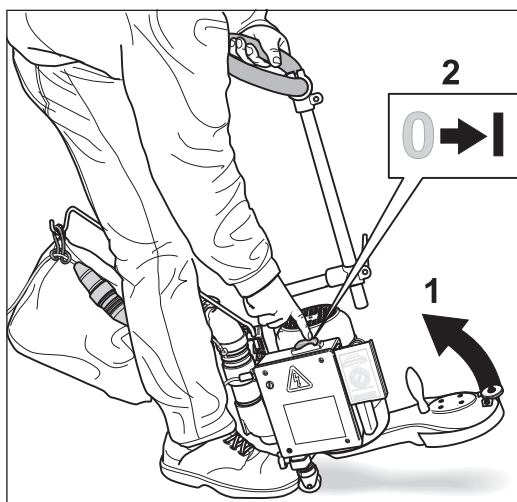


Fig. 38 To switch on the machine, tilt the UNICO slightly backward (1), use one hand to hold it by the handlebar and use your other hand to press the rocker switch (2).

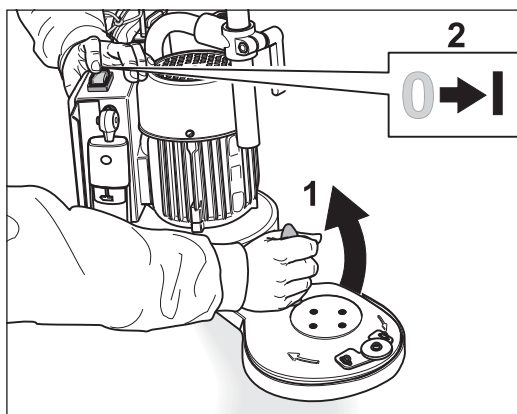


Fig. 39 To switch on the machine, tilt the UNICO slightly backward (1), use one hand to hold it by the machine handle and use your other hand to press the rocker switch (2).

4.11 SWITCHING ON THE MACHINE



CAUTION!

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

- **Always tip the machine backwards slightly (fig. 38, fig. 39) before switching on the machine so that the sanding disc is raised off the floor!**
- **Never allow the machine to run unattended!**

The UNICO is now ready to be started. When the machine is being switched on, the sanding disc wheel must be relieved of pressure slightly. Tilt the machine slightly backward. Depending on your working position, you will be using one hand to hold the handlebar on the extension (fig. 38) or the machine handle on the attachment (fig. 39). Now you can start the machine by pressing the rocker switch.

4.12 SWITCHING OFF THE MACHINE

**CAUTION!**

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

Always tip the machine backwards slightly (fig. 38, 1 and fig. 39, 1) before switching off the machine so that the sanding disc is raised off the floor!

To switch off the machine, tilt the machine slightly backward and then press the rocker switch on the side marked with "0". Wait until the sanding disc wheel comes to a standstill before you place the machine on the sanding disc wheel again.

**CAUTION!**

RISK OF INJURY and RISK OF PROPERTY DAMAGE:

Always remove the power plug from the socket after you have switched off the machine!

ATTENTION!

Do not store unused machines with abrasive on the sanding plate! The abrasive can cause scratches on the ground!

Working with the UNICO

NOTE:

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

- Telephone: 0800 / 52 34 537

- Fax: 0800 / 48 66 353

within the USA

- 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

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

5.1 GENERAL APPLICATION TIPS



WARNING!

RISK OF DEATH from electrical shock:

The machine may never be used for wet processing operations of any kind!

ATTENTION!

- **Bear in mind that the UNICO operates at very high cutting speeds! For this reason, there is a risk of burn marks for finer grit grades!**
- **Do not apply excessive pressure to the attachment while sanding!**
Excessive pressure
 - **significantly worsen the sanding finish by causing deep scratches or burn marks on the floor,**
 - **could cause the motor to switch off from overheating!**

The UNICO is used for the fine-sanding of transitions, borders, edges, and corners.

Generally, a Velcro coating is used on the sanding disc wheel. This Velcro coating provides a good dampening effect and also a cooler sanded section, which results in a higher sanding performance rate. In addition to modern Velcro sanding discs, traditional paper-type sanding discs can also be used.

Velcro sanding discs are slightly more expensive than paper-type sanding discs. However, the price difference is not an important factor when the higher quality of the abrasive and the considerably shorter disc-replacing time is included in the calculation of costs.

NOTE:

To achieve a very smooth surface in the edge areas of the floors and to carry out the sanding operation for the intermediate lacquer coat, you can install a sanding grid including an edge sanding pad as a base on the sanding disc wheel of the UNICO (→ *Section 5.2.3, Changing over from sanding discs to sanding grids with pad base*).

Prevent sanding marks caused by previously used grain sizes by complying with the recommended grain size order and by not skipping more than one grain size at a time.

Following each sanding operation, vacuum-clean the floor thoroughly. Keep the running wheels of the machine clean at all times.

You can work in various positions of your body with the machine. To prevent the dust bag from disturbing you during your sanding work, you can either swivel the pipe bend to the side or position the dust bag between your legs. In any case, you should always make sure that the dust bag is not constricted in order to be able to achieve good extraction of the sanding dust.

The various adjustment possibilities for the extension and the handlebar are described in *Section 4.5, Adjusting the extension and the handlebar*.

standing working position:

The height of the extension is adjusted according to your height (fig. 40).

stooped working position:

The extension is pushed all the way down (fig. 41) or the handlebar is installed directly on the pipe bend (fig. 42).

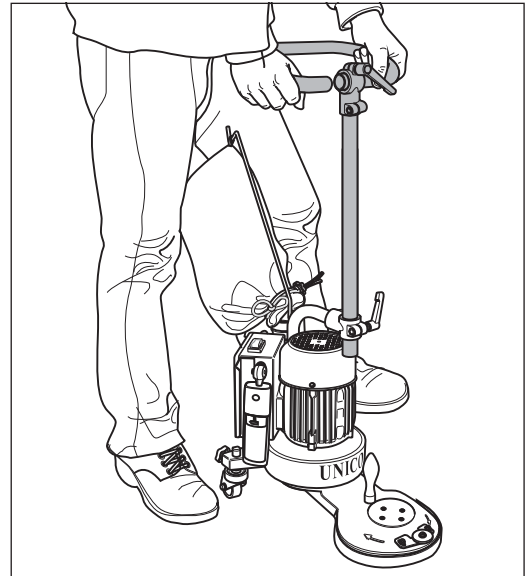


Fig. 40 Working in standing position with the UNICO.

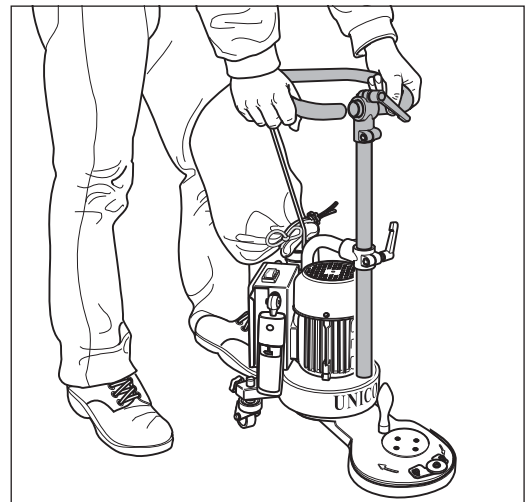


Fig. 41 Working in stooped position with the UNICO including the extension.

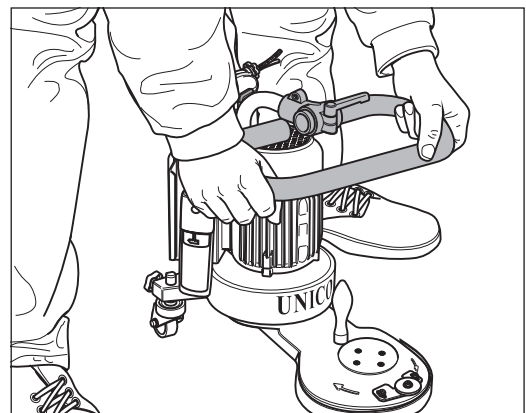


Fig. 42 Working in stooped position with the UNICO without the extension.

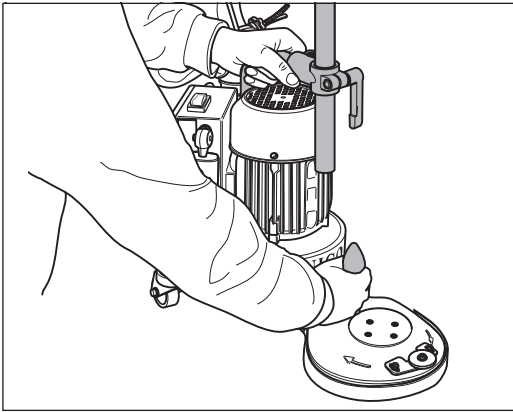


Fig. 43 Working in kneeling position with the UNICO.



Fig. 44 Working in kneeling position with the UNICO.

kneeling working position:

You can use the machine handle or the pipe bend to guide the machine (fig. 43). You do not need to remove the extension.

In case you want to sand underneath a radiator, for example, you can remove the machine handle from the attachment and install it on the fan housing (fig. 44).

5.2 REPLACING THE ABRASIVE

ATTENTION!

- **Only use sanding discs with paper as the base! Do not use any sanding discs with thick bases such as fiber discs, cutting discs or similar materials! Otherwise the sanding plate will be damaged!**
- **Do not use any double sanding discs (with sanding grit on both sides)! Otherwise the Velcro coating on the sanding plate will be damaged!**
- **Always use only one sanding disc! Otherwise the sanding result will not be satisfactory and the dust suction system will not be fully operational!**
- **You will receive the best sanding finish and price/performance ratio with the Velcro sanding discs from LÄGLER®!**
- **Each time you replace the abrasive, make sure that the Velcro sealing strip on the attachment is correctly seated (→ Section 4.3, Installing the Velcro strip)!**

Use the following abrasives only:

- Velcro sanding discs
- paper or fabric discs with 4 slits and a hole in the center with a diameter of 22 mm (approx. 0.9")
- sanding grid and pad with a hole in the center with a diameter of 22 mm (approx. 0.9")

The abrasive must have an external diameter of 178 - 180 mm (approx. 7 - 7.1").

You will use various grain sizes of the abrasive depending on the sanding work in each case. To replace the abrasive, proceed as follows:

5.2.1 REPLACING VELCRO SANDING DISCS

- 1 **Switch off the machine and pull the power plug out of the socket!**
- 2 Place the UNICO on its side by grabbing the machine by the handlebar on the right-hand side and then tilt the machine over to the **left-hand** side (fig. 45) and set it down carefully. **Always** set the UNICO down on the **left-hand** side (fig. 46)! This will prevent damage to the floor.
- 3 Pull off the worn-out Velcro sanding disc from the sanding disc wheel (fig. 47).
- 4 Use the proper Allen key or other suitable tool and insert it through the small hole of the new Velcro sanding disc.
- 5 Set the Velcro sanding disc in place by inserting the Allen key in the hole of the sanding disc first and then into the hexagon socket of the sandpaper tensioning screw (fig. 48). Then move the sanding disc up to the sanding disc wheel so that it rests precisely in centered position on the sanding disc wheel.
- 6 Remove the Allen key or the centering tool you have used and press the disc evenly onto the Velcro disc wheel. Store the centering tool in a safe place.

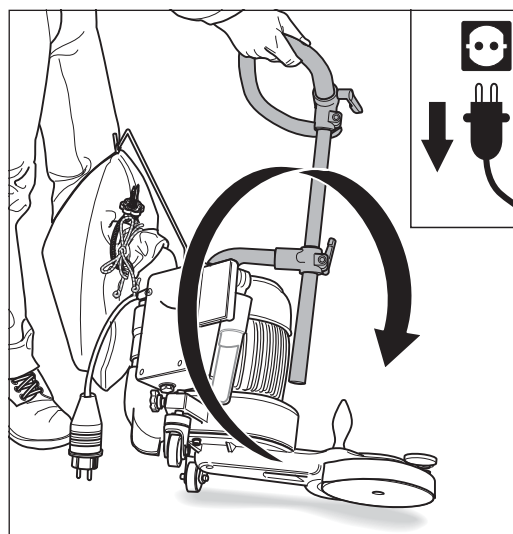


Fig. 45 Tilt the UNICO over to the **left-hand** side and set it down carefully.

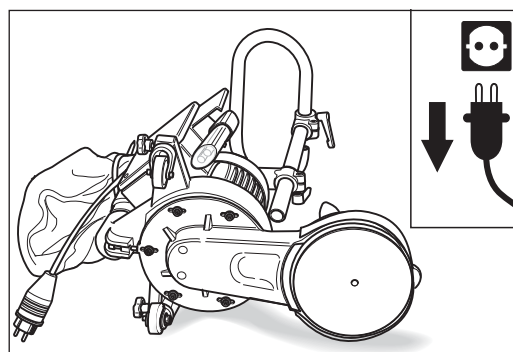


Fig. 46 Place the UNICO down on the **left-hand** side only.

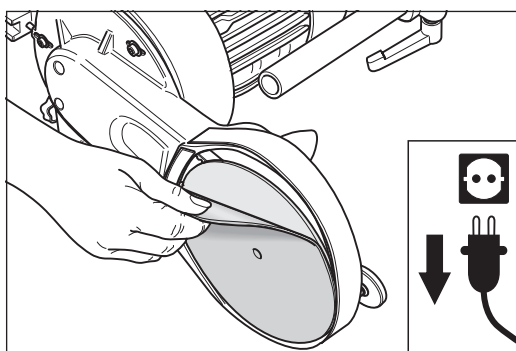


Fig. 47 Simply pull off the worn-out Velcro sanding disc.

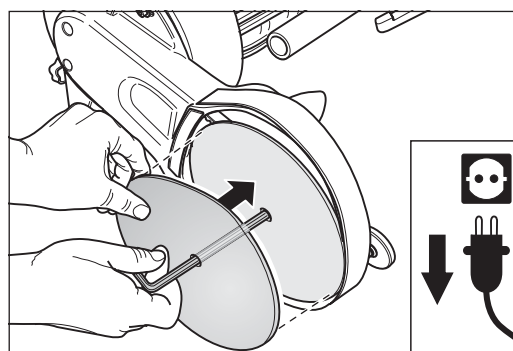


Fig. 48 To center the sanding disc, insert the Allen key into the hole of the sanding disc and then into the hexagon socket of the sandpaper tensioning screw.

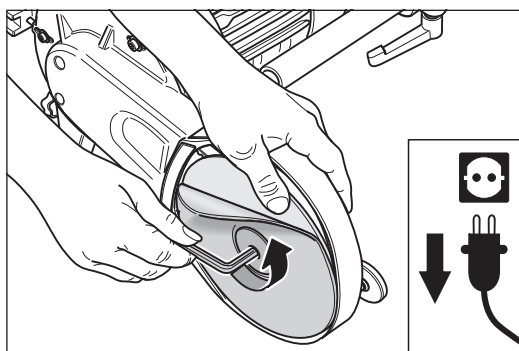


Fig. 49 Undo the sandpaper tensioning screw. To hold the sanding disc wheel, use your thumb to grab behind the sanding disc.

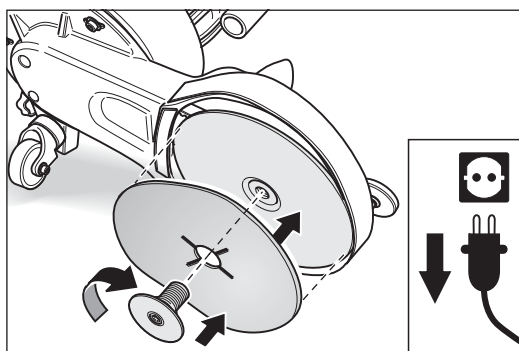


Fig. 50 Install the new sanding disc and then tighten the sandpaper tensioning screw firmly by hand.

5.2.2 REPLACING CONVENTIONAL SANDING DISCS

- 1 **Switch off the machine and pull the power plug out of the socket!**
- 2 Place the UNICO on its side by grabbing the machine by the handlebar on the right-hand side and then tilt the machine over to the **left-hand** side (fig. 45) and set it down carefully. **Always** set the UNICO down on the **left-hand** side (fig. 46)! This will prevent damage to the floor.
- 3 Use the proper Allen key and undo the sandpaper tensioning screw (normal right-hand thread). At the same time, use your other hand to hold the sanding disc wheel. If you use your thumb to grab behind the sanding disc, you will reduce the wear on the sandpaper tensioning screw (fig. 49).
- 4 Unscrew the sandpaper tensioning screw all the way out of the hole. Remove the screw and the sanding disc from the sanding disc wheel and put them aside.
- 5 Place a new sanding disc on the sanding disc wheel and insert the sandpaper tensioning screw into the sanding disc wheel. Make sure that the sanding disc is fastened in the best possible centered position on the sanding disc wheel (fig. 50).
- 6 Use the Allen key to screw the sandpaper tensioning screw into the sanding disc wheel. Tighten the sandpaper tensioning screw firmly by hand.

5.2.3 CHANGING OVER FROM SANDING DISCS TO SANDING GRIDS WITH PAD BASE

To achieve a very smooth surface in the edge areas of the floors and to carry out the sanding operation for the intermediate lacquer coat, you can install a sanding grid including an edge sanding pad as a base on the sanding disc wheel of the UNICO. Always use an edge sanding pad as a base (part number in *Section 11, Spare parts UNICO*).

- 1** **Switch off the machine and pull the power plug out of the socket!**
- 2** Place the UNICO on its side by grabbing the machine by the handlebar on the right-hand side and then tilt the machine over to the **left-hand** side (fig. 45) and set it down carefully. **Always** set the UNICO down on the **left-hand** side (fig. 46)! This will prevent damage to the floor.
- 3** Remove the sanding disc as described in *Sections 5.2.1, Replacing Velcro sanding discs* or *5.2.2, Replacing conventional sanding discs*.
- 4** Place an edge sanding pad and then a sanding grid on the sanding disc wheel. Insert the sandpaper tensioning screw into the sanding disc wheel. Make sure that the pad and the grid are fastened in the best possible centered position on the sanding disc wheel (fig. 51).
- 5** Use the Allen key to screw the sandpaper tensioning screw into the sanding disc wheel. Tighten the sandpaper tensioning screw firmly by hand.

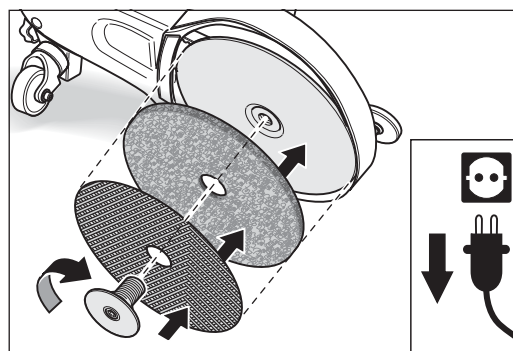


Fig. 51 Place the edge sanding pad on the sanding disc wheel first and then the sanding grid, and afterwards, tighten the sandpaper tensioning screw firmly by hand.

5.3 EMPTYING THE DUST BAG

**WARNING!****RISK OF FIRE from the formation of sparks while sanding:**

- **Note the warning on the switch box!**
- **The dust bag must always be removed from the machine directly after sanding and emptied into a non-combustible container outdoors!**
Cover this container with a non-combustible cover and be certain to store it and the dust bag outdoors in non-combustible environment!
- **Always transport and store used dust bags in closed and non-combustible containers!**

HEALTH RISK caused by dust:

In order to ensure that the dust values in the air do not exceed the prescribed threshold levels, please note:

- **The dust bag must be emptied when it is one-third full at the very latest in order to prevent a deterioration of the suction performance due to the lack of filtering surface area!**
- **Do not work with an overfilled dust bag!**
- **The dust bag must be emptied outdoors!**
- **When emptying the dust bag, wear a respiratory protective mask (at least filter class P2)!**
- **Do not wash, patch or repair the dust bag in any other manner!**
- **A damaged dust bag must be replaced immediately by a new original LÄGLER® dust bag for the UNICO (part numbers in *Section 11, Spare parts UNICO*)!**

Use only original LÄGLER® dust bags for the UNICO (part number in *Section 11, Spare parts UNICO*)!

When emptying the dust bag, you must use a respiratory protective mask (at least filter class P2).

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

- 2 **Put on a respiratory protective mask (at least filter class P2)!**
- 3 Hold the UNICO firmly by the extension and by the machine handle. Shake the machine so that the dust falls from the suction pipe stub into the dust bag (fig. 52). Set the machine down on the floor again.
- 4 Remove the strain relief ring together with the extension cable from the cable support (fig. 53, 1).
- 5 Unhook the sling on the dust bag from the cable support (fig. 53, 2).
- 6 Open the loop of the string on the dust bag (fig. 53, 3).
- 7 Undo the MultiClip fastener by unscrewing the nut (fig. 53, 4).
- 8 Pull off the dust bag from the pipe stub carefully (fig. 53, 5) and then use the string to close the dust bag so that no dust can escape on the way to the emptying location. Remove the MultiClip fastener.
- 9 **Empty the dust bag into a non-combustible container outdoors! Whirl up as little dust as possible! Close this container with a non-combustible cover and store it outdoors (RISK OF FIRE)!**
- 10 Install the dust bag again as described in *Section 4.1, Attaching the dust bag*. **Wear also the respiratory protective mask!**

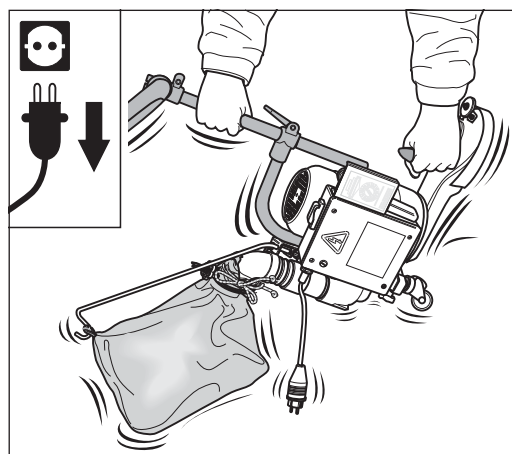


Fig. 52 Shake the machine so that the dust falls from the suction pipe stub into the dust bag.

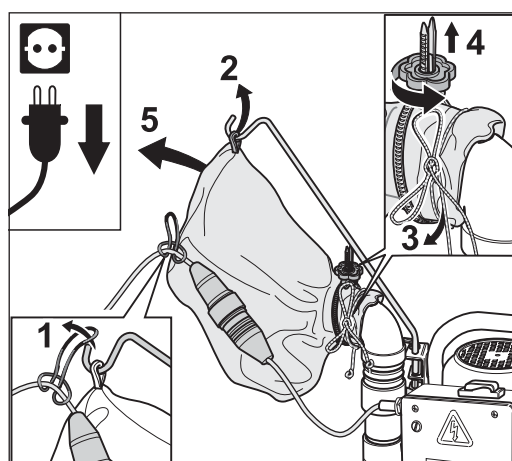


Fig. 53 Removing the dust bag.

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 or from the formation of sparks while sanding:

- **Oil or wax can lead to spontaneous combustion! Therefore, the machine must always be cleaned carefully directly after sanding!**
- **Always transport and store the cleaned machine without dust bag!**
- **Always store used dust bags in closed and non-combustible containers!**

NOTE!

You can use parts of the transport packing to transport or store the machine!

6.1 MACHINE TRANSPORT

**WARNING!****RISK OF INJURY and RISK OF PROPERTY DAMAGE:**

In the event of transport in an automobile or similar machine, all parts must be secured against sliding!

Before transporting the UNICO, swivel the working light downward (fig. 54). The working light is protected against damage by the angle plate on the switch box.

The machine can be easily carried by being picked up by the pipe bend into the front end of which the extension is attached (fig. 55). Especially when transporting the machine over roads, paths, concrete surfaces or pavement surfaces, you should carry the UNICO to prevent the guide rollers from becoming soiled and having a negative effect on the sanding results.

6.2 MACHINE STORAGE

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

- **Always transport and store the cleaned machine without dust bag!**
- **Always store used dust bags in closed and non-combustible containers!**

Whenever the machine is to be stored for a longer period of time, provide a dry, frost-free storage location without excessive temperature variations.

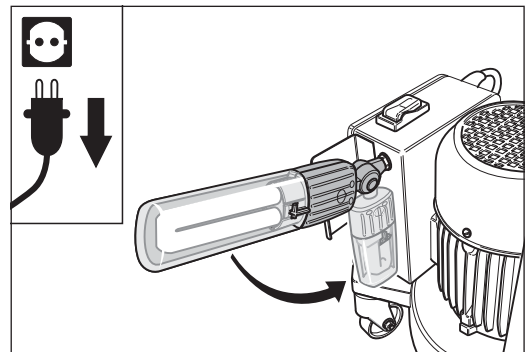


Fig. 54 To transport the machine, swivel the working light downward.

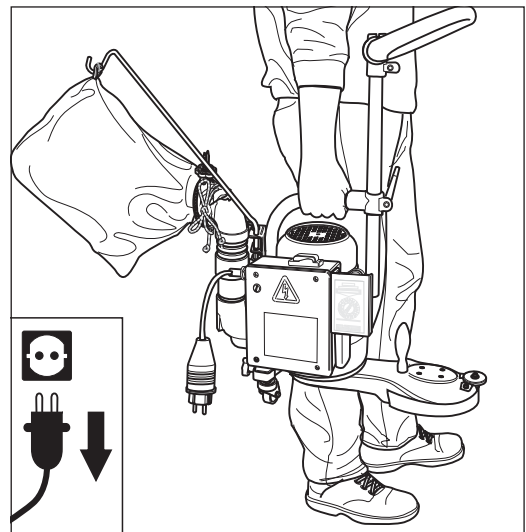


Fig. 55 The UNICO can be easily carried by being picked up by the pipe bend.

Maintenance work 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, must be conducted by a qualified expert for safety reasons!**
- **All maintenance work and all work on the electrical equipment must 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 UNICO*)! 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!**

From time to time, but never any later than the time when damage is detected, you must carry out various maintenance tasks. Work at a clean, well illuminated location and proceed according to these instructions. In the tool bag you will find the necessary tools in order to be able to carry out the tasks described below.

An inspection of the machine must be carried out with a minimum amount of time spent and rules out later complaints that could arise from any minor damage on the machine. These measures contribute considerably to preserving the value of the machine and, ultimately, to your own safety as well.

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 always 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 attachment, in the fan housing and on the fan wheel reduce the suction performance and thus the dust load at the workplace increases excessively!**
- **Dust and deposits on the belt pulleys and the V-belt lead to vibrations which have a negative effect on the sanding result!**
- **Never use any cleaning products which contain solvents!**

7.1.1 GENERAL

Before beginning the sanding work, you should carry out the following machine care measures to ensure proper operation of the machine and to guarantee first-class sanding results:

- Check the Velcro coating of the sanding disc wheel for signs of damage or soiling.
- Clean the running wheels of the machine.
- Check the suction system and the dust bag for any signs of leakage or damage.
- Carry out a visual inspection of the electrical equipment (extension cable, plug, and couplings).

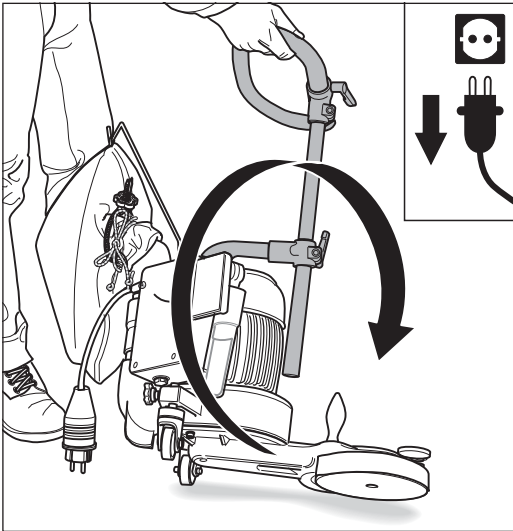


Fig. 56 Tilt the UNICO over to the **left-hand** side and set it down carefully.

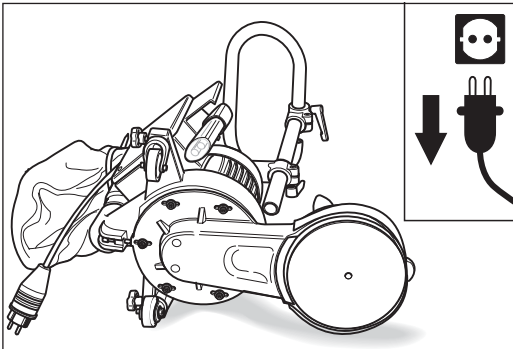


Fig. 57 Place the UNICO down on the **left-hand** side only.

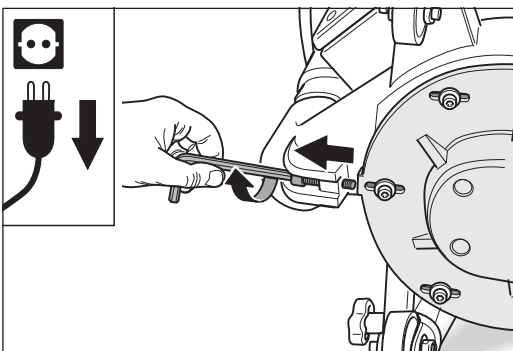


Fig. 58 Unscrew the belt-tensioning screw all the way back.

7.1.2 CLEANING THE V-BELT DRIVE UNIT

Following the floor restoration work, there is the possibility that residue from adhesives, waxes, sealing lacquers or similar substances may have accumulated on the belt pulleys, on the V-belt or inside the attachment housing. This can have a negative effect on the running characteristics of the machine and reduce the suction capacity. The conspicuous signs of this kind of soiling include irregular running, difficult start-up, reduced working speed, and increased noise development. The suction capacity also decreases. In the case, as described in *Section 7.3, Replacing the V-belt*, the V-belt must be dismantled and cleaned, and the attachment as well as the flanks of the belt pulleys must be cleaned. Check also the fan wheel and the fan housing for any signs of deposits. If and when required, a respiratory protective mask (at least filter class P2) should be worn.

7.2 TENSIONING THE V-BELT

The V-belt must be re-tensioned from time to time. Proceed as follows:

- 1 **Switch off the machine and pull the power plug out of the socket!**
- 2 Place the UNICO on its side by grabbing the machine by the handlebar on the right-hand side and then tilt the machine over to the **left-hand** side (fig. 56) and set it down carefully. **Always** set the UNICO down on the **left-hand** side (fig. 57)! This will prevent damage to the floor, and the shape of the fan housing also stops any dust falling back out of the dust bag from getting into the fan housing.
- 3 To relieve the V-belt tension, use the proper Allen key to unscrew the belt-tensioning screw all the way out until this screw disappears on the front side in the threaded hole of the fan housing (fig. 58).

- 4 Use the proper Allen key to undo all five screws with which the attachment is installed on the fan housing (fig. 59). **Do not unscrew these screws all the way out!**
- 5 Push the attachment all the way back. Use the machine handle to pull the attachment forward again until you feel the resistance caused by the V-belt (fig. 60). To prevent damage to the floor, make sure that the attachment does not touch the floor!
- 6 Use the Allen key to screw the five attachment-fastening screws only so far into the drilled holes as required to ensure that the attachment can no longer slide away; do not tighten the screws.
- 7 Set the attachment down again use the proper Allen key to screw the belt-tensioning screw all the way forward until it rests against the attachment (fig. 61).
- 8 With 3 to 4 additional rotations of the belt-tensioning screw, you will then tighten the belt exactly as required.

ATTENTION!

Do not overtighten the V-belt! This will allow you to avoid excessive wearing of the V-belt and the pulleys!

Whenever the V-belt can no longer be retightened because the fastening screws are up against the slits in the attachment (fig. 62), the wear limit of the V-belt has been reached and the V-belt must be replaced (→ *Section 7.3, Replacing the V-belt*).

- 9 Tighten the five screws with which the attachment is fastened to the fan housing carefully.

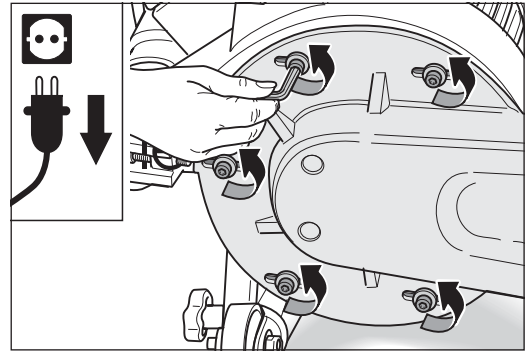


Fig. 59 Undoing the five fastening screws of the attachment. **Do not unscrew the screws all the way out!**

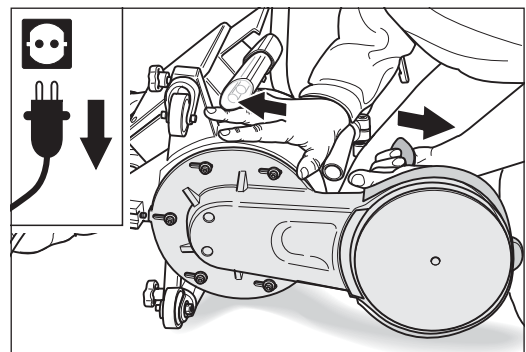


Fig. 60 Use the handle to pull the attachment forward until you feel the belt resistance.

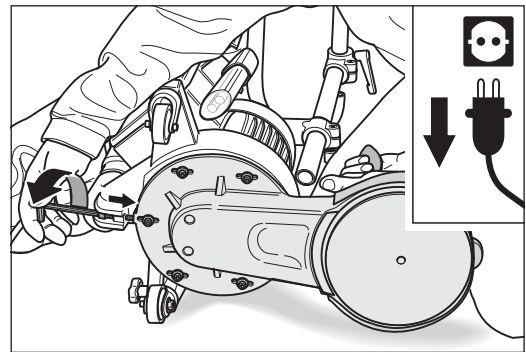


Fig. 61 Screw the belt-tensioning screw all the way in until it rests against the attachment.

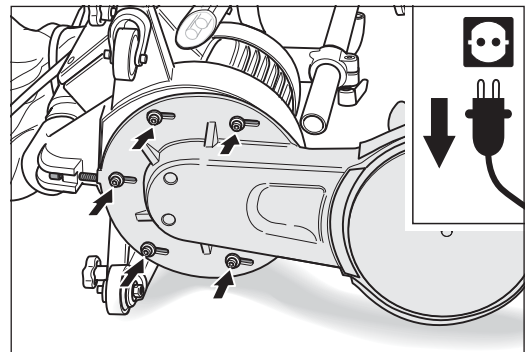


Fig. 62 The fastening screws are up against the slits in the attachment.

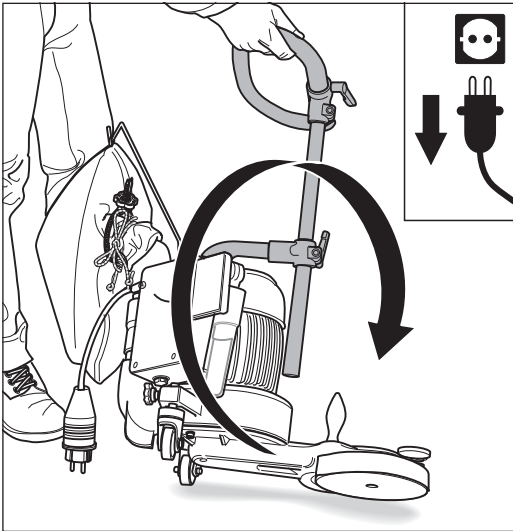


Fig. 63 Tilt the UNICO over to the **left-hand** side and set it down carefully.

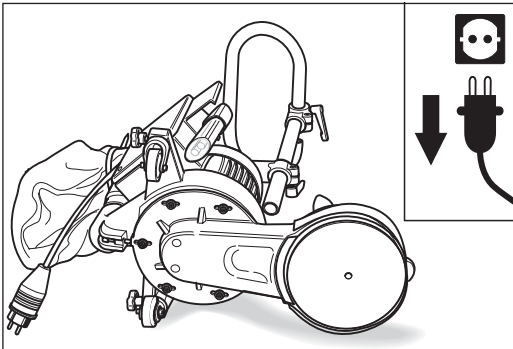


Fig. 64 Place the UNICO down on the **left-hand** side only.

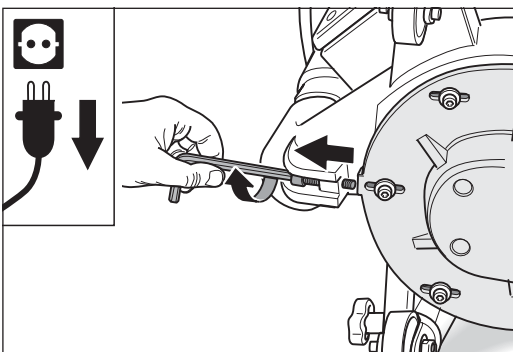


Fig. 65 Unscrew the belt-tensioning screw all the way out.

7.3 REPLACING THE V-BELT

Use only original LÄGLER® V-belts (part number in *Section 11, Spare parts UNICO!*)

Whenever the V-belt can no longer be retightened because the fastening screws are up against the slits in the attachment (fig. 62), the wear limit of the V-belt has been reached and the V-belt must be replaced.

Proceed as described below, whereby a sufficiently illuminated workplace and good tools are recommended:

- 1 **Switch off the machine and pull the power plug out of the socket!**
- 2 Place the UNICO on its side by grabbing the machine by the handlebar on the right-hand side and then tilt the machine over to the **left-hand** side (fig. 63) and set it down carefully. **Always** set the UNICO down on the **left-hand** side (fig. 64)! This will prevent damage to the floor, and the shape of the fan housing also stops any dust falling back out of the dust bag from getting into the fan housing.
- 3 To relieve the V-belt tension, use the proper Allen key to unscrew the belt-tensioning screw all the way out until this screw disappears on the front side in the threaded hole of the fan housing (fig. 65).
- 4 Use the proper Allen key to undo all five screws with which the attachment is installed on the fan housing (fig. 66).

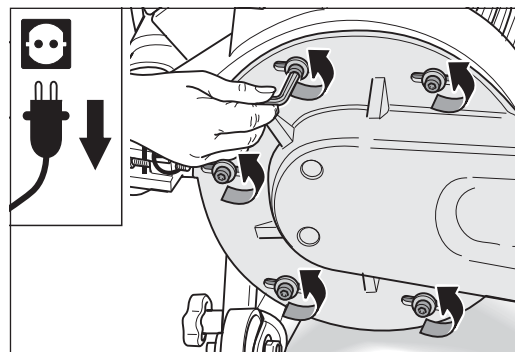


Fig. 66 Undoing the five fastening screws of the attachment.

- 5 Push the attachment all the way back and remove the five screws with which the attachment is installed on the fan housing. **Please note that the fan housing including the motor could tip over!**
- 6 Remove the attachment and place it including the belt pulley facing downward in flat position on a suitable working surface. **Do not place the attachment down on the wooden floor! You could damage the floor!**
- 7 Set a suitable screwdriver **with a continuous blade** on the screws of the bearing unit of the sanding disc wheel. Use a few light taps of your hammer on the screwdriver to loosen these screws (fig. 67)!
ATTENTION: risk of injury!
- 8 Unscrew the screws all the way out (fig. 68) and remove the complete bearing unit of the sanding disc wheel (fig. 69). The sanding disc can remain on the sanding disc wheel.
- 9 Pull the worn-out V-belt out of the attachment (fig. 70). Clean the two belt pulleys and the attachment. Wear a respiratory protective mask (at least filter class P2) whenever appropriate.
- 10 Insert a new V-belt (fig. 71). Pay attention to the correct installation position of the belt and pull the belt all the way back on the motor side.

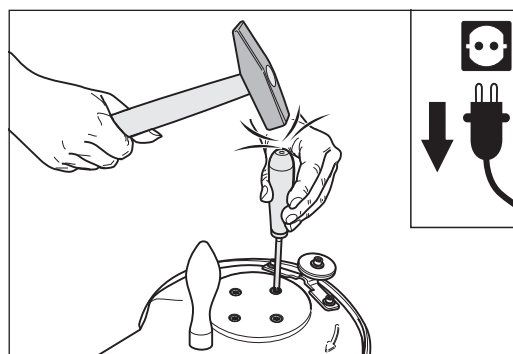


Fig. 67 Using a suitable screwdriver **with a continuous blade** and using a few light taps of your hammer, loosen the screws of the bearing unit of the sanding disc wheel.

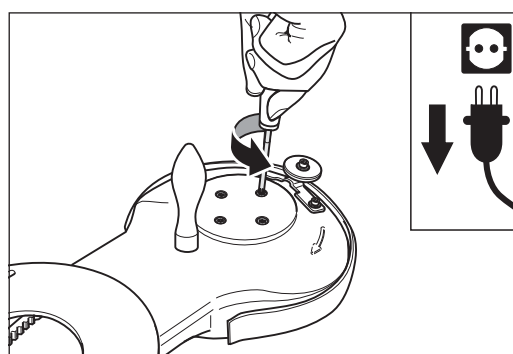


Fig. 68 Unscrewing the screws.

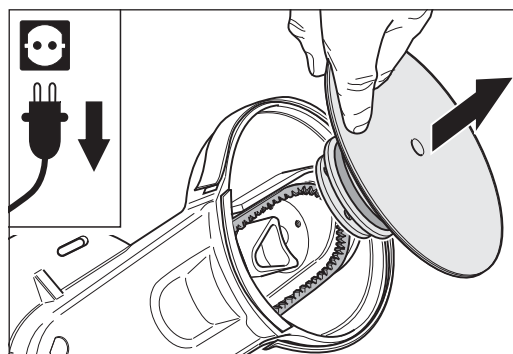


Fig. 69 Removing the complete sanding bearing unit.

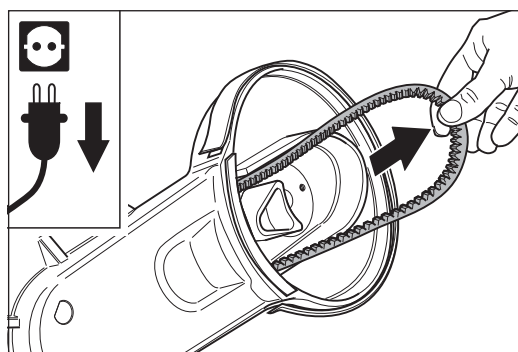


Fig. 70 Pulling the V-belt out of the attachment.

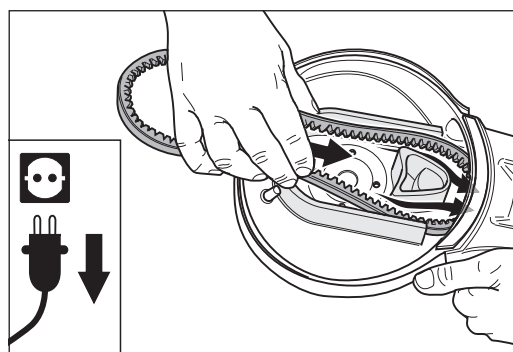


Fig. 71 Inserting a new V-belt and pulling it all the way back on the motor side.

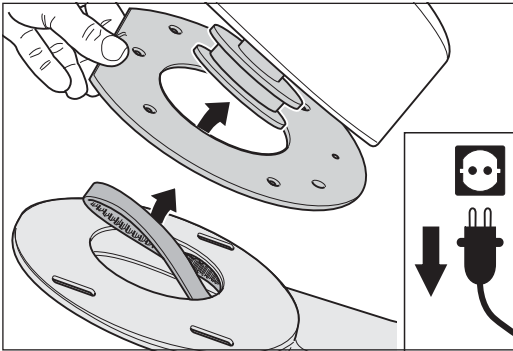


Fig. 72 During the assembly of the fan housing, pay attention to the correct position of the intermediate sheet-metal plate!

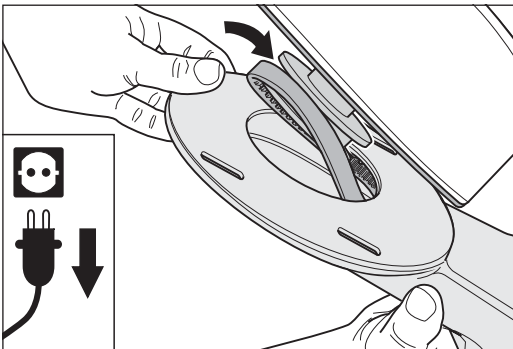


Fig. 73 Pull the V-belt slightly of the attachment and place it in the motor belt pulley.

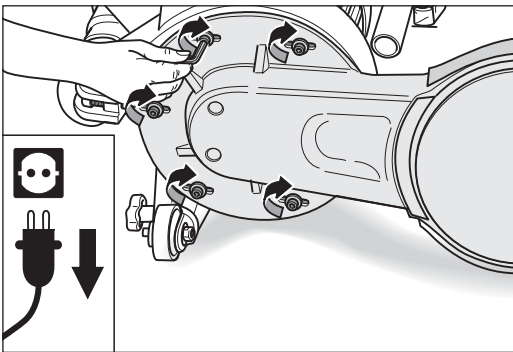


Fig. 74 Install the five screw including washers for fastening the attachment to the fan housing. **Do not tighten the screws firmly!**

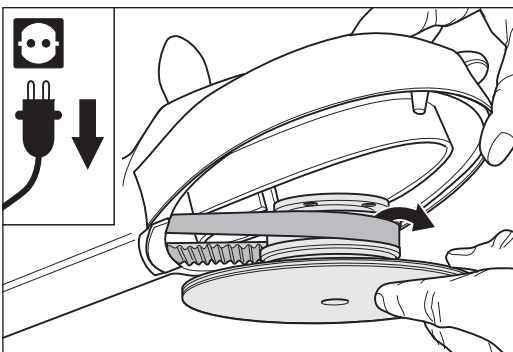


Fig. 75 Inserting the belt disc into the V-belt.

11 During the assembly of the attachment, pay attention to the correct position of the intermediate sheet-metal plate between the fan housing and the attachment (fig. 72)!

12 On the motor side, pull the V-belt slightly out of the attachment and then place it in the motor belt pulley (fig. 73).

13 Pull the V-belt forward on the sanding disc wheel side. Make sure that the V-belt is in the V-belt groove of the motor belt pulley. The attachment can then no longer fall off the fan housing.

14 To fasten the attachment to the fan housing, install the five hexagon socket screws including the respective washers (fig. 74). Do not tighten the screws!

15 Push the attachment all the way back.

16 At the front of the attachment, insert the belt pulley of the bearing unit of the sanding disc wheel into the V-belt (fig. 75).

17 To make sure that the hole pattern of the attachment and the fixture of the sanding disc wheel line up properly, insert a screwdriver from above through a hole in the attachment into a hole in the fixture of the sanding disc wheel (fig. 76).

18 Insert the bearing unit of the sanding disc wheel into the attachment.

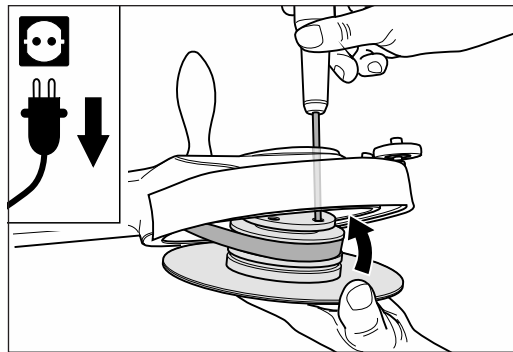


Fig. 76 For simplified assembly, insert a screwdriver from above through a hole in the attachment into a hole in the bearing unit of the sanding disc wheel.

- 19 Screw the countersunk screws on the attachment into the bearing unit of the sanding disc wheel (fig. 77). Make sure that the bearing unit is correctly seated in the attachment. Then tighten the countersunk screws firmly.
- 20 Tighten the V-belt, as described in detail in *Section 7.2, Tensioning the V-belt*, by pulling the attachment all the way forward until you feel a slight resistance.
- 21 With 3 to 4 additional rotations of the belt-tensioning screw, you will then tighten the belt exactly as required.

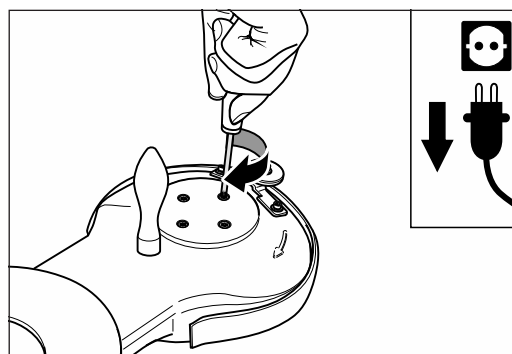


Fig. 77 Using the countersunk screws to tighten the bearing unit of the sanding disc wheel.

ATTENTION!

Do not overtighten the V-belt! This will allow you to avoid excessive wearing of the V-belt and the pulleys!

- 22 Tighten the five screws with which the attachment is fastened to the fan housing carefully.
- 23 Place the UNICO down on its wheels again. Use a suitable screwdriver to tighten the retaining screws of the bearing unit of the sanding disc wheel once more.

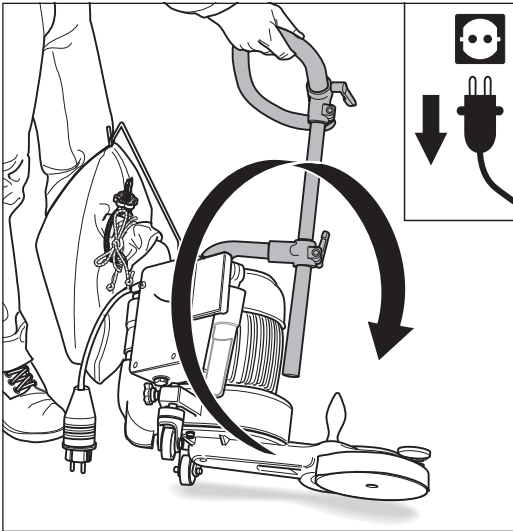


Fig. 78 Tilt the UNICO over to the **left-hand** side and set it down carefully.

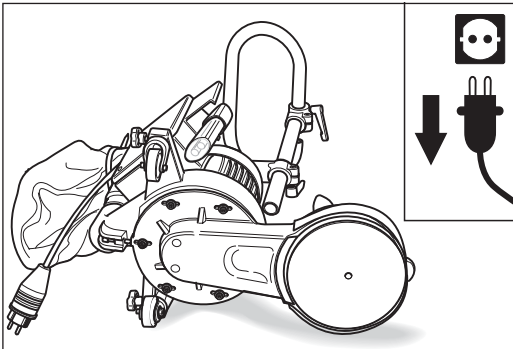


Fig. 79 Place the UNICO down on the **left-hand** side only.

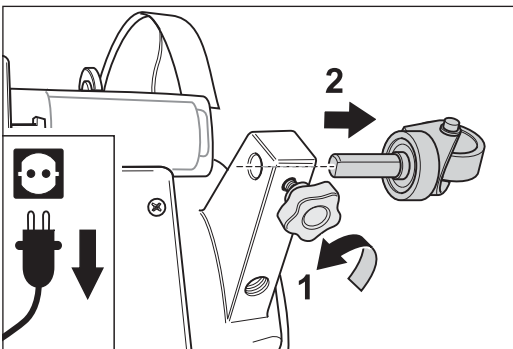


Fig. 80 Undoing the star grip screw (1) and removing the guide rollers from the fan housing (2).

7.4 REPLACING THE GUIDE ROLLERS

ATTENTION!

- **Blocked wheels or guide rollers restrict the mobility of the machine and leave marks on the floor! These parts must be replaced!**
- **Always replace both wheels or guide rollers!**

Use only original LÄGLER® wheels and guide rollers (part number in *Section 11, Spare parts UNICO!*)

- 1 **Switch off the machine and pull the power plug out of the socket!**
- 2 Place the UNICO on its side by grabbing the machine by the handlebar on the right-hand side and then tilt the machine over to the **left-hand** side (fig. 78) and set it down carefully. **Always** set the UNICO down on the **left-hand** side (fig. 79)! This will prevent damage to the floor.
- 3 Undo the star grip screws on the guide roller arms of the fan housing and pull the guide rollers out of the fan housing (fig. 80).
- 4 Install the new guide rollers and then adjust them as described in *Section 4.6, Adjusting the guide rollers.*

7.5 REPLACING THE WALL-PROTECTING ROLLER

Use only original LÄGLER® wall-protecting rollers (part number in *Section 11, Spare parts UNICO!*)

- 1** Switch off the machine and pull the power plug out of the socket!
- 2** Remove the two screws with which the wall-protecting roller is fastened to the attachment and then remove the complete wall-protecting roller (fig. 81).
- 3** Use an Allen key to remove the screw in the center of the wall-protecting roller.
- 4** Remove the old wall-protecting roller.
- 5** Insert the bushing into the new wall-protecting roller and then place this roller with one washer on each side onto the wall-protecting roller bracket. Make sure that the center of the roller is situated over the nut in the bracket.
- 6** Rotate the screw through the hole of the bushing into the nut.

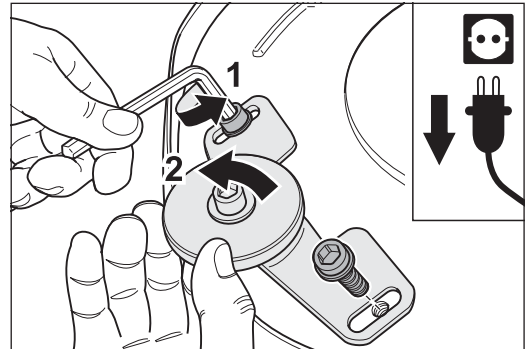


Fig. 81 Remove the screws on the wall-protecting roller bracket (1) and then remove the complete wall-protecting roller (2).

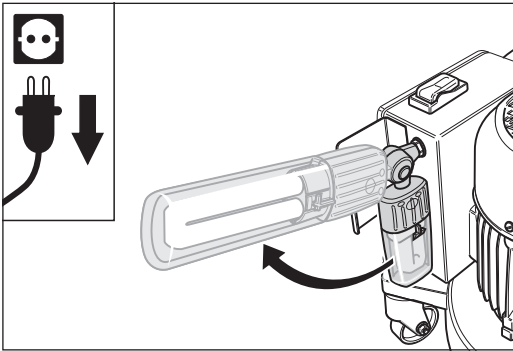


Fig. 82 Swivel the working light upward.

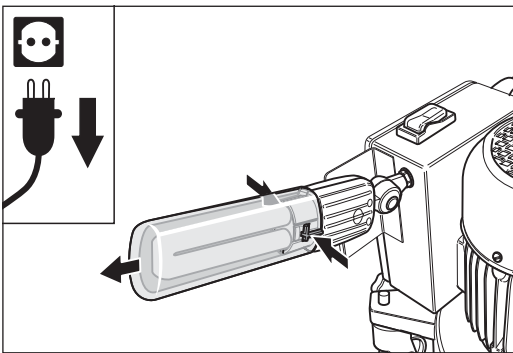


Fig. 83 Press the two clips on the fixture housing together and then remove the protective tube **carefully**.

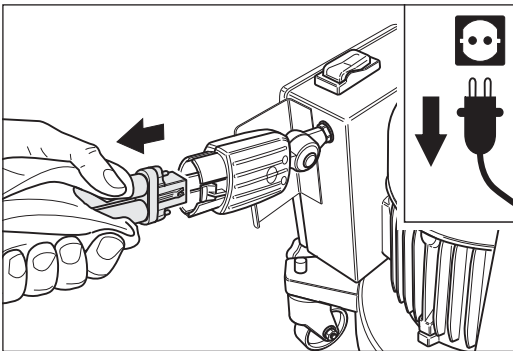


Fig. 84 Pull the defective fluorescent lamp out of the fixture **carefully**.

7.6 REPLACING THE FLUORESCENT LAMP

From the year of manufacture 2020 (USA from year of manufacture 2019) the UNICO is equipped with a very robust LED work light! With this light it is no longer necessary to change the lamp!

Until the year of manufacture 2019 (USA until year of manufacture 2018) the UNICO was equipped with a working light with fluorescent lamp. This can be replaced by the LED work light using a conversion kit (part number in *Section 11, Spare parts UNICO*).

At machines still equipped with a fluorescent tube, the tube must be replaced in case of a defect.

Use only original LÄGLER® fluorescent lamps (part number in *Section 11, Spare parts UNICO*)!

Let the light cool off before you proceed as follows:

- 1 **Switch off the machine and pull the power plug out of the socket!**
- 2 Swivel the working light upward (fig. 82).



CAUTION!

RISK OF BURNS and RISK OF INJURY by broken pieces of glass:

- **Please note that the lamp socket and the fluorescent tube can be hot!**
- **Do not break the protective tube and the fluorescent lamp! You could become injured by broken pieces of glass or you could also damage the floor!**

- 3 On the plastic fixture housing of the working light, press the two clips together that hold the protective tube and then remove the fluorescent lamp carefully (fig. 83).
- 4 Wrap a cloth or similar item around the fluorescent lamp and then pull the fluorescent lamp off the fixture. If appropriate, move the fluorescent lamp back and forth carefully (fig. 84).
- 5 Insert a new fluorescent lamp. You must feel the fluorescent lamp snap into place.

- 6 Insert the protective tube again. Make sure the two clips snap into place properly. Adjust the working light according to your requirements (→ *Section 4.10, Adjusting the working light*).

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!

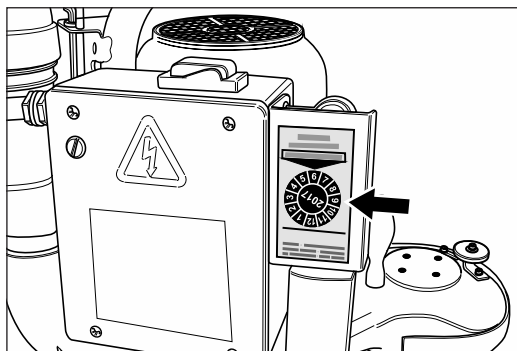


Fig. 85 The inspection label on the switch box of the motor confirms the electrical and mechanical safety of the machine and indicates the next due inspection date.

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. 85).

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 on the back cover of these operating instructions (please see the type plate)! 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.

EXCERPT FROM THE GERMAN ACCIDENT PREVENTION REGULATIONS "DGV VORSCHRIFT 3" (November 2013)

§ 5 Inspections

- (1) The employer must ensure that the proper condition of the electrical systems and equipment is inspected
1. 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" (DGV 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 "DGV 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!

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

The circuit diagram valid for your machine is located in the motor switch box!

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 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 inserted into the power socket?
- The power 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
 - too many electricity consumers are 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).
- 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 smaller than 1.5 mm² (0.0023 sq.in.),
 - or too much pressure was applied to the attachment 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. cable, switch, capacitor) is defective and must be inspected by a qualified electrician and replaced if necessary.

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 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).
- The V-belt is too tight and must be loosened.
 ➔ *Section 7.2, Tensioning the V-belt*

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

- The abrasive is incorrect or dull and must be replaced.
 ➔ *Section 5.2, Replacing the abrasive*
- 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 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).
- The V-belt is not tight enough and must be tightened a bit.
 ➔ *Section 7.2, Tensioning the V-belt*
- The machine setting angle is too flat. The guide rollers must be properly adjusted.
 ➔ *Section 4.6, Adjusting the guide rollers*

- There are clogged materials and deposits in the machine that must be removed.
➔ *Section 7.1, Cleaning and care*

9.4 THE MACHINE VIBRATES INTENSELY AND RUNS NOISILY

- The sanding medium does not have the proper tension. The tension must be corrected.
➔ *Section 5.2, Replacing the abrasive*
- The sanding medium is damaged or incorrect and must be replaced.
➔ *Section 5.2, Replacing the abrasive*
- The V-belt is dirty, damaged or worn-out and must be replaced.
➔ *Section 7.3, Replacing the V-belt*
- A pulley is dirty, damaged or worn-out and must be cleaned or replaced.
➔ *Section 7.1, Cleaning and care*
- There are clogged materials and deposits in the machine that must be removed.
➔ *Section 7.1, Cleaning and care*

9.5 THE MACHINE RUNS BUT CREATES A GREAT DEAL OF DUST

- The dust bag is more than one third full and must be emptied.
➔ *Section 5.3, Emptying the dust bag*
- The dust bag is not correctly attached or is damaged and must be replaced.
➔ *Section 4.1, Attaching the dust bag*
- The Velcro strip on the attachment is not attached correctly, either must be attached properly or is damaged and must be replaced.
➔ *Section 4.3, Installing the Velcro strip*
- There are clogged materials and deposits in the machine that must be removed.
➔ *Section 7.1, Cleaning and care*
- More than one sanding disc is mounted. Only install one sanding disc.
➔ *Section 5.2, Replacing the abrasive*

- The machine setting angle is too steep. The guide rollers must be properly adjusted.
➔ *Section 4.6, Adjusting the guide rollers*
- The machine is not guided correctly during the sanding process, this must be corrected!
The UNICO must be handled with rotary **clockwise** movements during the sanding process!
- Too much pressure is placed on the sanding disc during the sanding process. Do not press too hard on the attachment during the sanding process.

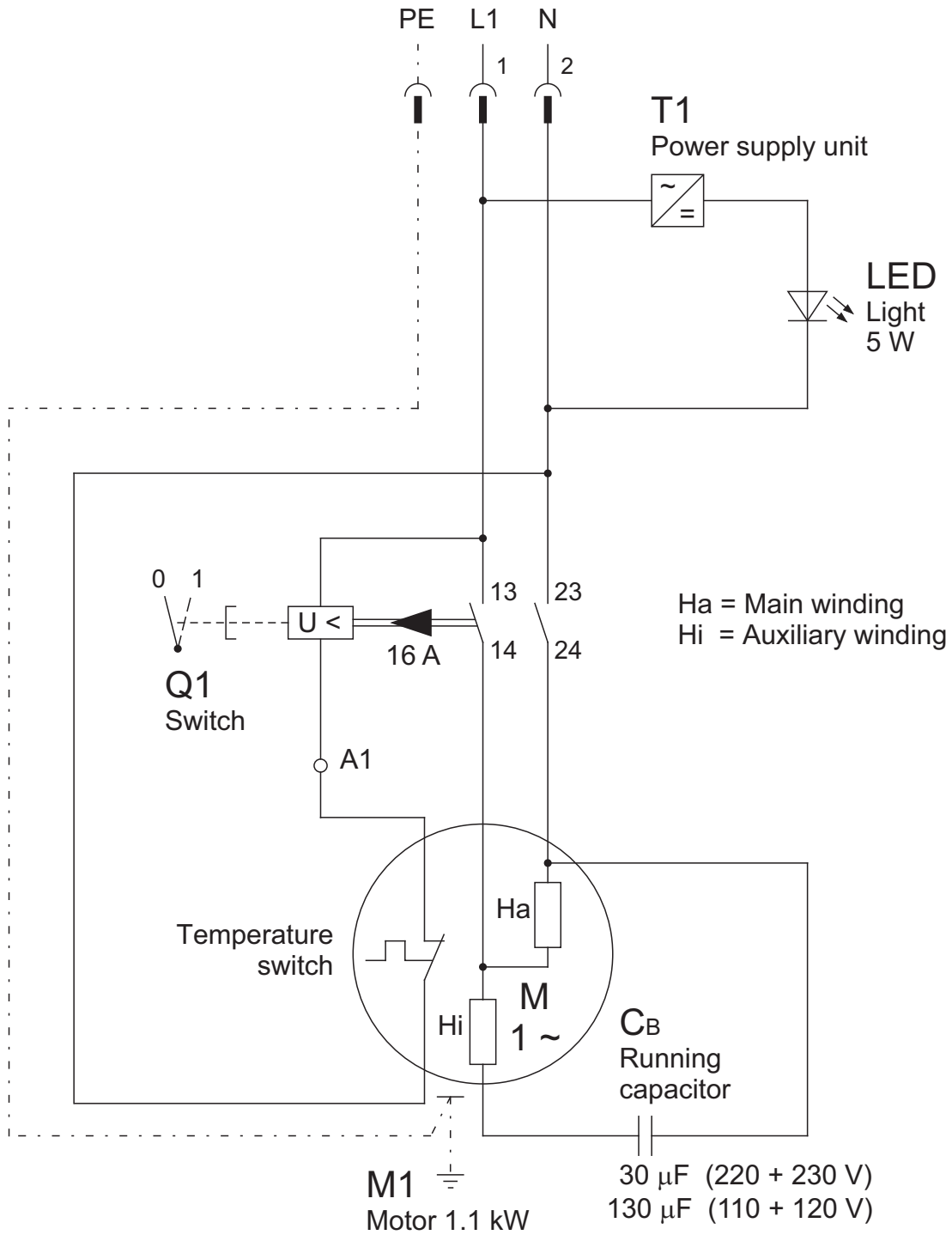
9.6 SANDING PROBLEMS (WAVES, STRIPS, GROOVES)

- The floor or stairs were not vacuumed before sanding. The floor or stairs must be vacuumed thoroughly always directly before each sanding step.
- The sanding disc was not lifted from the floor while the machine was switched on or off. Always tilt the machine backwards slightly before switching the machine on or off so that the sanding disc is lifted off the floor.
➔ *Section 4.11, Switching on the machine*
➔ *Section 4.12, Switching off the machine*
- The machine is being moved too slowly and must be sped up.
- The machine is not guided correctly during the sanding process, this must be corrected!
The UNICO must be handled with rotary **clockwise** movements during the sanding process!
- The abrasive does not have the proper tension. The tension must be corrected.
➔ *Section 5.2, Replacing the abrasive*
- The abrasive is damaged or incorrect and must be replaced.
➔ *Section 5.2, Replacing the abrasive*
- The machine setting angle is not correct. The guide rollers must be properly adjusted.
➔ *Section 4.6, Adjusting the guide rollers*
- The wheels are dirty or damaged and must be cleaned or replaced.
➔ *Section 7.4, Replacing and the guide rollers*

CAUSES OF FAULTS

- The V-belt is dirty, damaged or worn-out and must be replaced.
→ *Section 7.3, Replacing the V-belt*
- A pulley is dirty, damaged or worn-out and must be cleaned or replaced
→ *Section 7.1, Cleaning and care*
- Too much pressure is placed on the sanding disc during the sanding process. Do not press too hard on the attachment during the sanding process.

CIRCUIT DIAGRAM



01.11.2018

UNICO: Single-phase AC motor

1.1 kW / 230 V / 50 CPS
 1.1 kW / 120 V / 50 CPS
 1.1 kW / 220 + 230 V / 60 CPS
 1.1 kW / 110 + 120 V / 60 CPS

EUGEN LÄGLER GMBH
 Kappelrain 2
 D-74363 Güglingen-Frauenzimmern

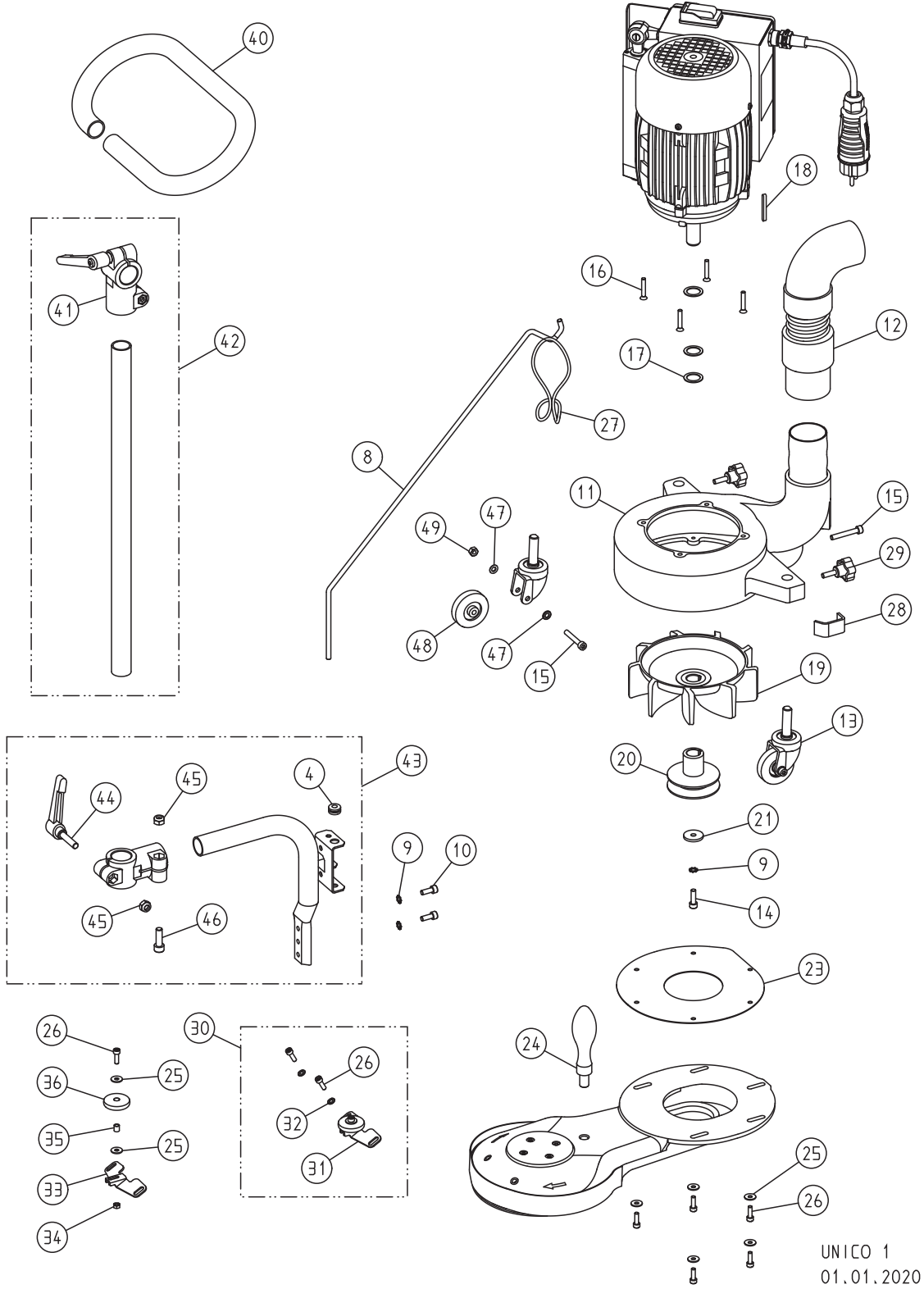
Phone: 0049 - 7135 - 98 90 - 0
 Fax: 0049 - 7135 - 98 90 - 98

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

The circuit diagram valid for your machine is located in the motor switch box.

SPARE PARTS UNICO

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines (→ Section 3.1)!



UNICO 1
01.01.2020

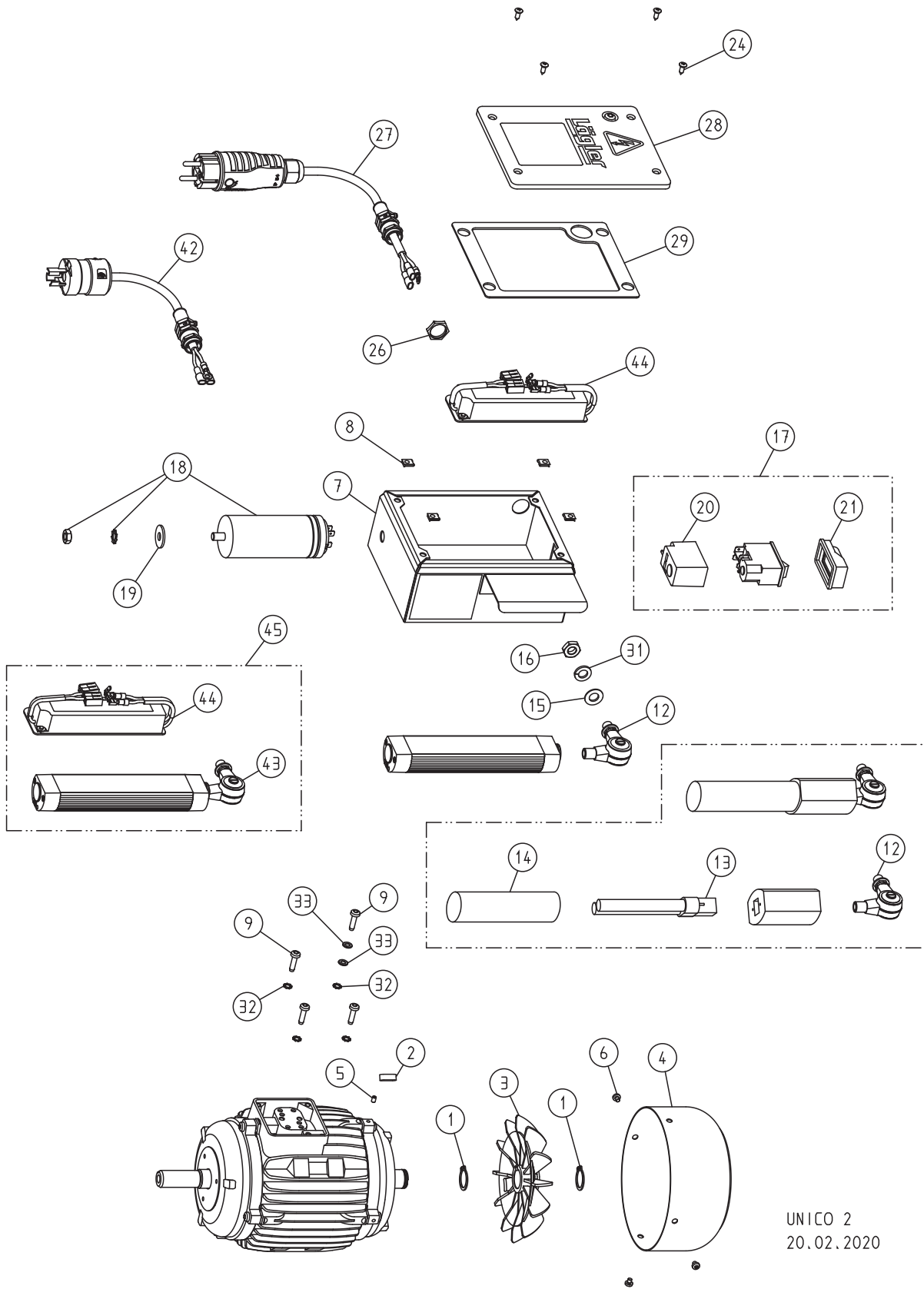
SPARE PARTS UNICO

Item	Part number	Description
4	000.63.12.071	Rubber tube
8	465.20.26.100	Cable support, complete
9	6797.1006.900	Washer
10	0912.1006.016	Screw
11	465.08.00.100	Fan housing, complete
12	465.14.00.105	Hose
13	465.05.00.200	Guide roller, complete
14	0912.1006.020	Screw
15	0912.1006.940	Screw
16	7500.1005.830	Screw
17	0988.0018.010	Washer
18	6885.0404.040	Parallel key
19	465.08.02.100	Fan wheel
20	465.65.06.100	Motor pulley
21	000.10.10.061	Washer
23	465.08.10.105	Sheet cover
24	000.20.30.121	Handle
25	9021.1005.000	Washer
26	0912.1005.016	Screw
27	00.000.41.002	Strain relief ring
28	465.08.21.105	Bumper felt
29	000.20.25.065	Cross grip
30	465.60.00.100	Wall-protecting roller with bracket, complete
31	465.60.10.100	Wall-protecting roller with bracket
32	0125.1005.000	Washer
33	465.60.01.100	Holder for wall-protecting roller
34	0934.1005.000	Nut
35	000.43.15.052	Bush
36	465.60.02.100	Wall-protecting roller
40	465.20.08.200	Handle
41	465.20.04.100	Pipe clamp
42	465.20.31.200	Guide tube
	465.20.30.200	Guide tube with handle
43	465.20.10.200	Pipe bend, complete
44	000.20.40.084	Clamping device
45	0980.1008.000	Nut
46	0912.1008.025	Screw
47	0125.1006.000	Washer
48	465.05.09.105	Wheel
49	0980.1006.000	Nut

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines (→ Section 3.1)!

SPARE PARTS UNICO

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines (→ Section 3.1)!



UNICO 2
20.02.2020

SPARE PARTS UNICO

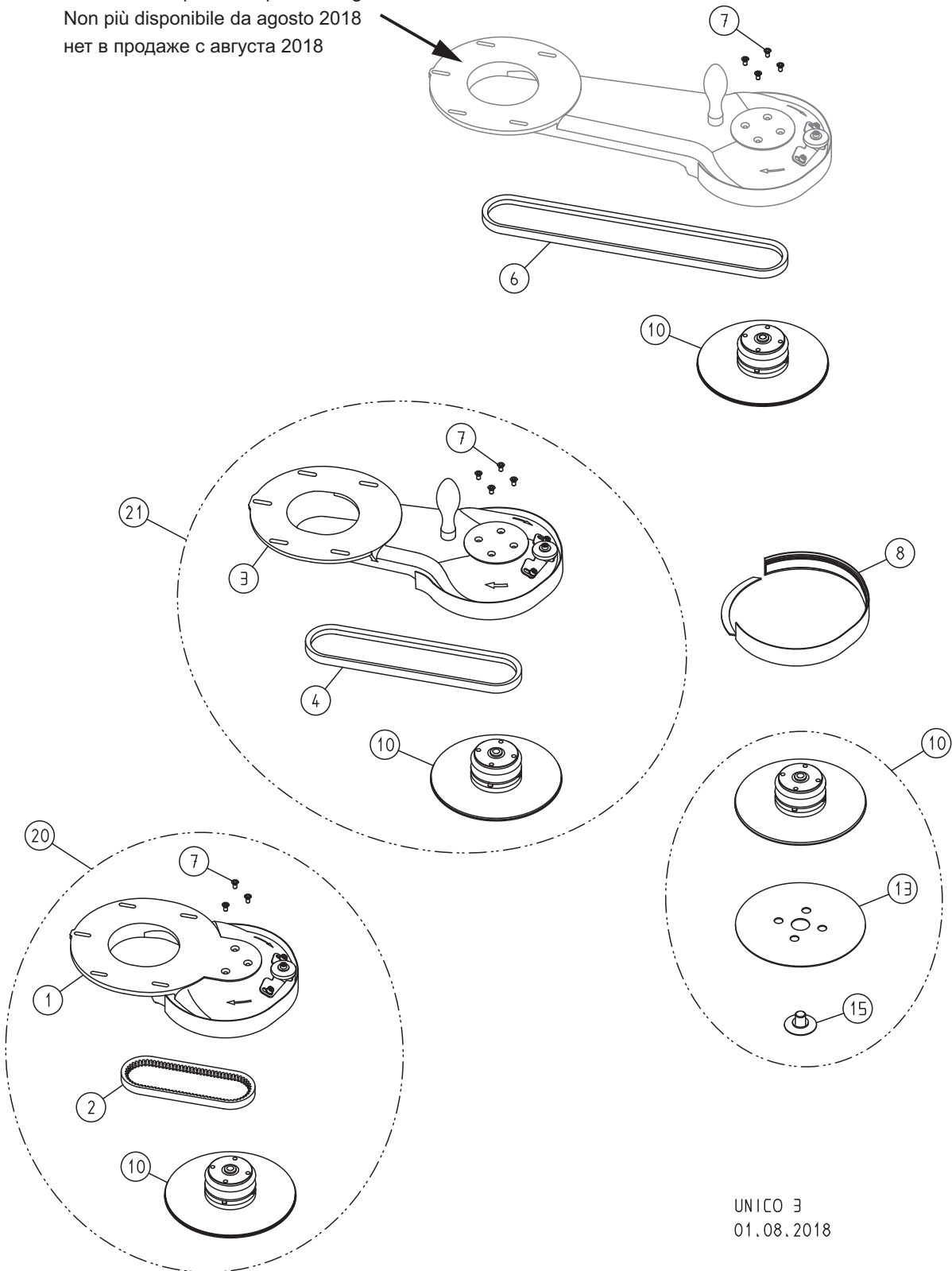
Item	Part number	Description
	465.65.00.100	Motor, 230 V / 50 CPS / 1.1 kW
	466.65.00.100	Motor, 230 V / 60 CPS / 1.1 kW
	468.65.00.100	Motor, 120 V / 60 CPS / 1.1 kW
	467.65.00.100	Motor, 220 V / 60 CPS / 1.1 kW, USA
	469.65.00.100	Motor, 110 V / 60 CPS / 1.1 kW, USA
1	0471.0020.000	Circlip
2	6885.0606.018	Parallel key
3	900.65.08.100	Fan blade
4	900.65.09.100	Fan cover
5	0913.0004.006	Grub screw
6	7985.1004.805	Screw
7	465.65.40.100	Switch box with clip nut (up to year of manufacture 2019 / USA up to year of manufacture 2018)
	465.65.40.200	Switch box with clip nut (from year of manufacture 2020 / USA from year of manufacture 2019)
8	000.50.10.110	Clip nut
9	7500.1005.020	Screw
12	465.63.20.105	Joint
13	465.63.11.105	Fluorescent lamp (up to year of manufacture 2019 / USA up to year of manufacture 2018)
14	465.63.12.105	Protective tube (up to year of manufacture 2019 / USA up to year of manufacture 2018)
15	0125.1010.000	Washer
16	0439.1010.010	Nut
17	000.65.60.255	Switch 230 V / 50 + 60 CPS with dust cover
	000.65.60.155	Switch 110 + 120 V / 50 + 60 CPS with dust cover
18	000.65.10.031	Capacitor 30 μ F
	000.65.10.131	Capacitor 130 μ F, USA
19	9021.1008.000	Washer
20	000.65.62.150	Dust cover
21	000.65.62.160	PVC cap with switch frame
26	000.68.60.113	Nut
27	000.65.43.151	Motor cable 3 x 1.5 mm ²
28	900.65.47.100	Cover with seal
29	465.65.48.105	Cover seal
31	0127.1010.000	Spring washer
32	6797.1005.900	Washer
33	0125.0105.000	Washer
42	000.65.43.153	Motor cable 3 x 1.5 mm ² , USA
43	465.63.01.205	LED work light, complete (from year of manufacture 2020 / USA from year of manufacture 2019)
44	465.63.30.100	Power supply unit for LED work light (from year of manufacture 2020 / USA from year of manufacture 2019)
45	465.63.00.100	Conversion kit UNICO LED light. The installation of the LED light must be carried out by a qualified electrician!

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines (→ Section 3.1)!

SPARE PARTS UNICO

Nicht mehr lieferbar ab August 2018
 No longer available from August 2018
 N'est plus disponible à partir d'août 2018
 Ya no está disponible a partir de agosto de 2018
 Non più disponibile da agosto 2018
 нет в продаже с августа 2018

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines (→ Section 3.1)!



UNICO 3
 01.08.2018

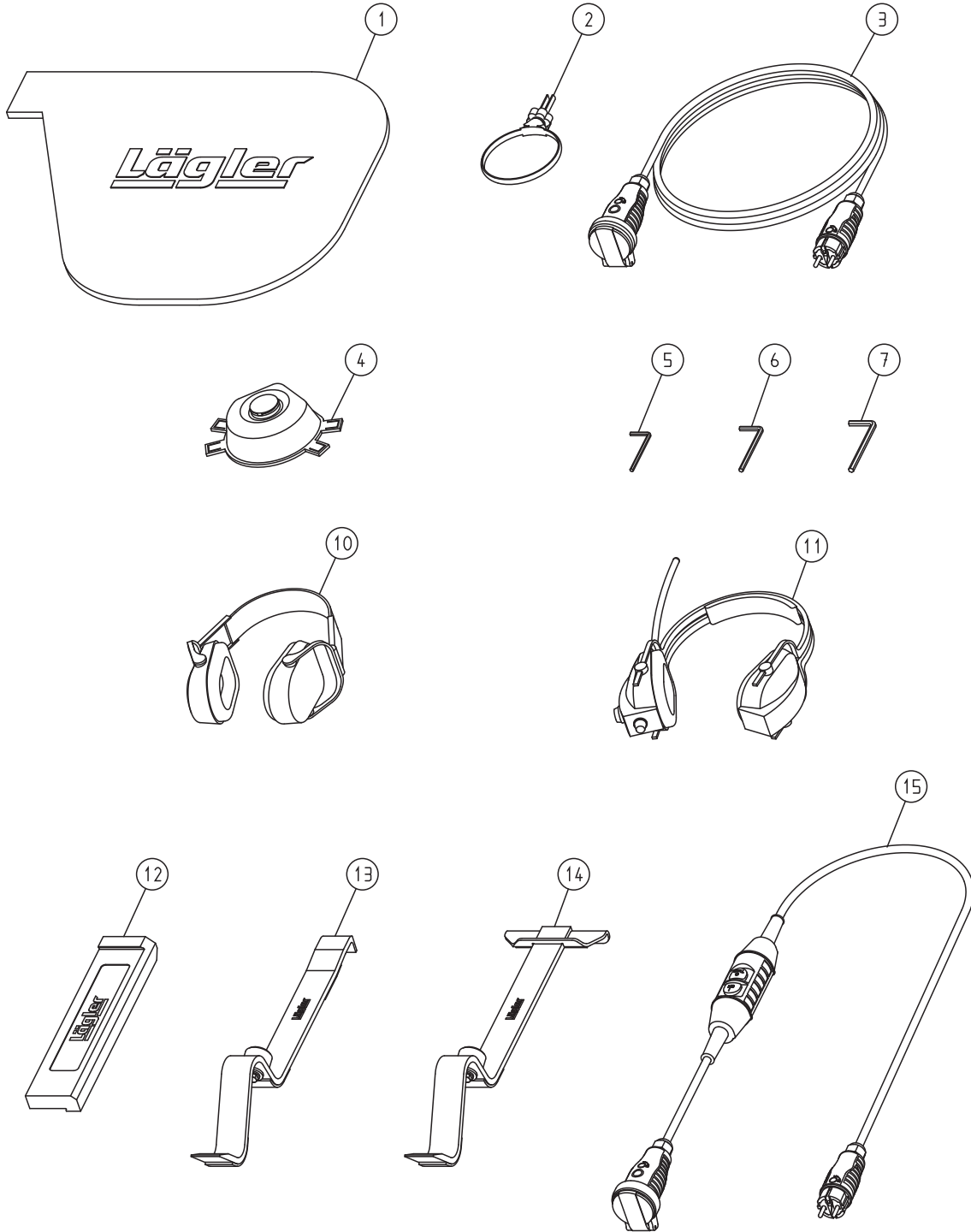
SPARE PARTS UNICO

Item	Part number	Description
1	425.01.01.200	Attachment 105 mm
2	000.70.13.044	V-belt
3	445.01.01.200	Attachment 230 mm
4	000.70.13.067	V-belt
6	000.70.13.092	V-belt
7	0965.1005.810	Screw
8	465.01.52.100	Sealing set
	465.01.51.105	Velcro by the roll (50 m)
10	465.01.91.200	Sanding plate, complete
13	465.02.12.205	Velcro disc 177 mm
	465.02.06.105	Felt disc
15	465.02.05.100	Paper tensioning screw
20	425.01.00.200	Attachment 105 mm, complete
21	445.01.00.200	Attachment 230 mm, complete

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines (→ Section 3.1)!

SPARE PARTS UNICO

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines (→ Section 3.1)!

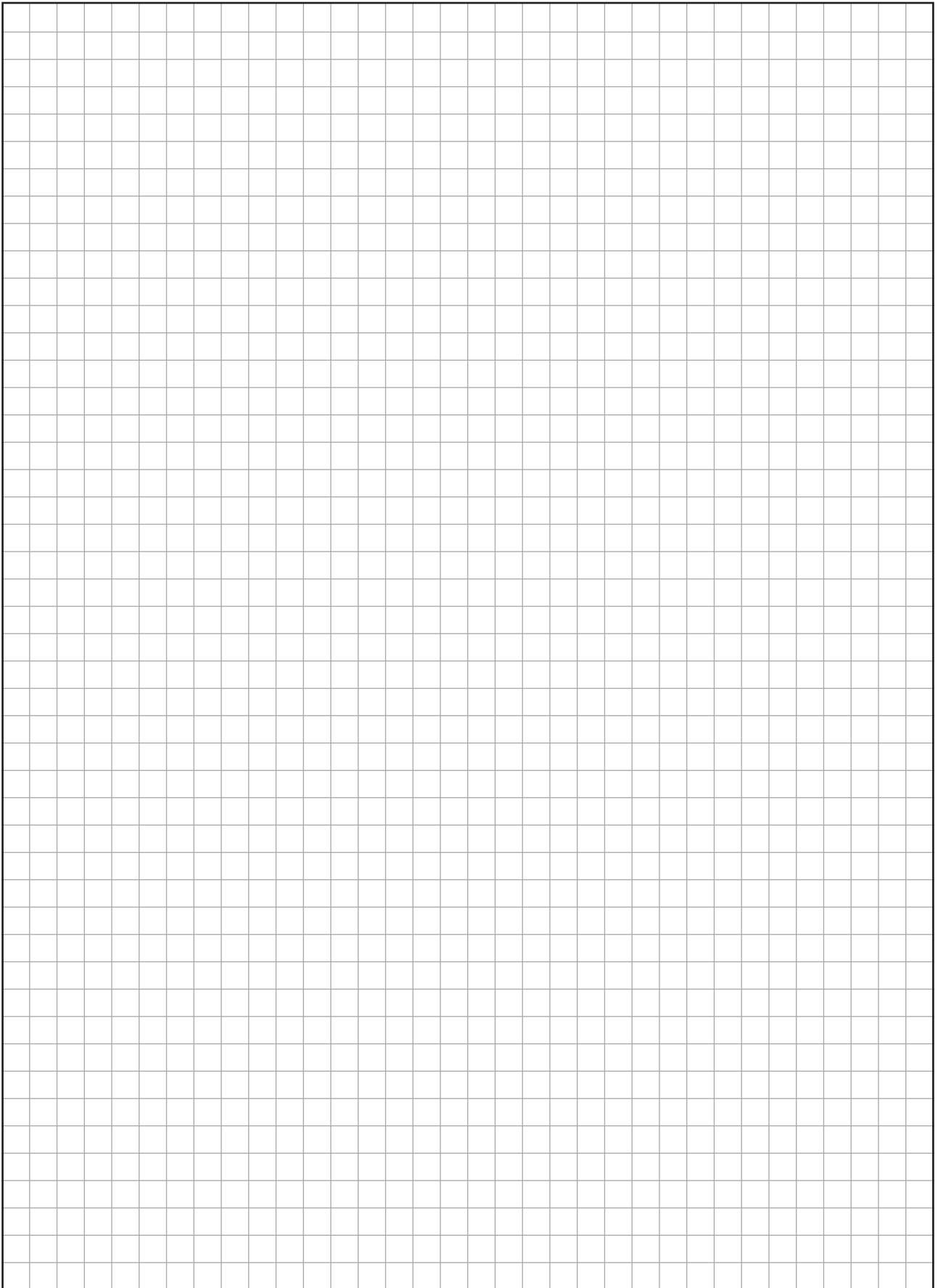


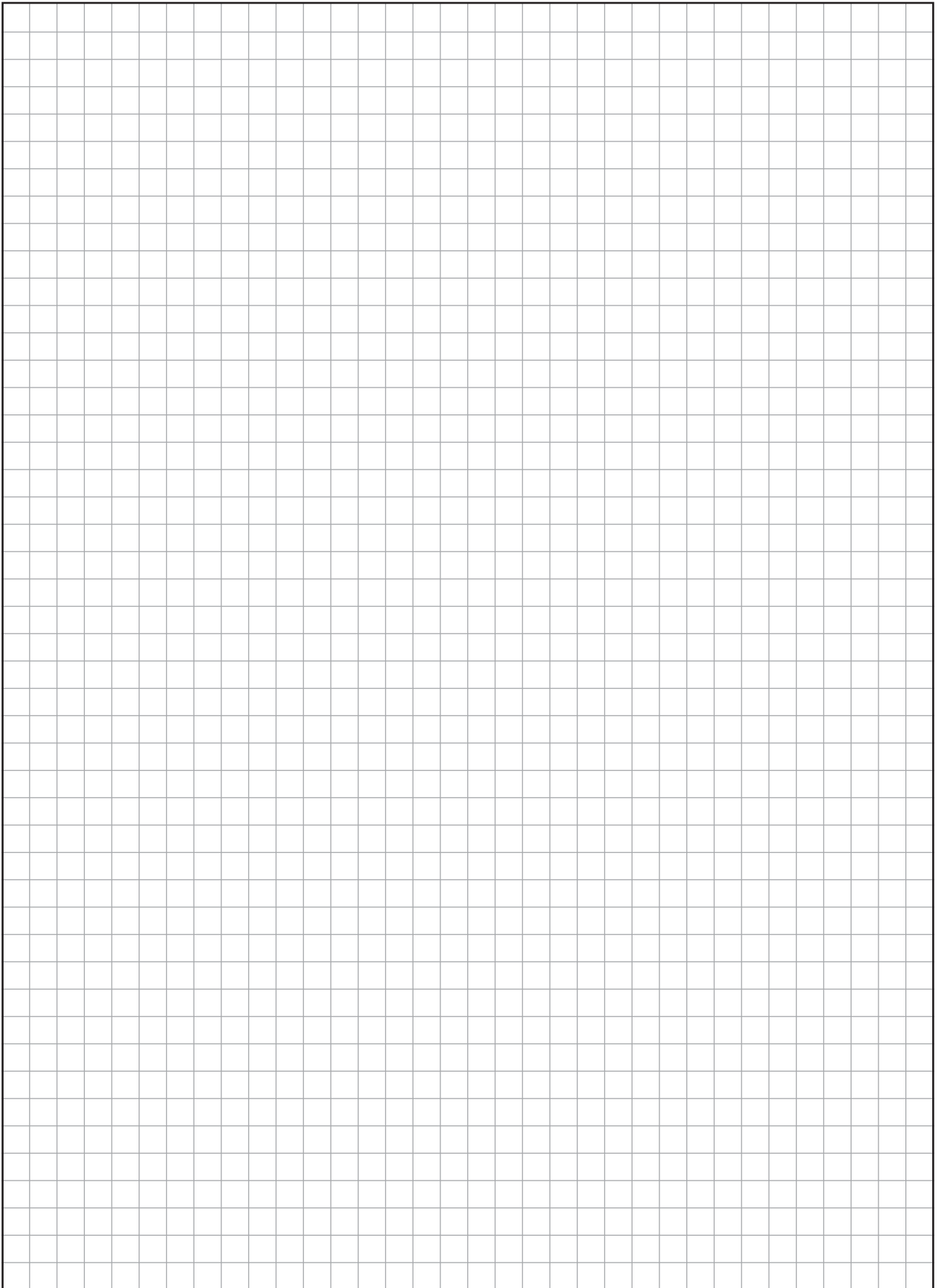
UNICO 4
01.05.2015

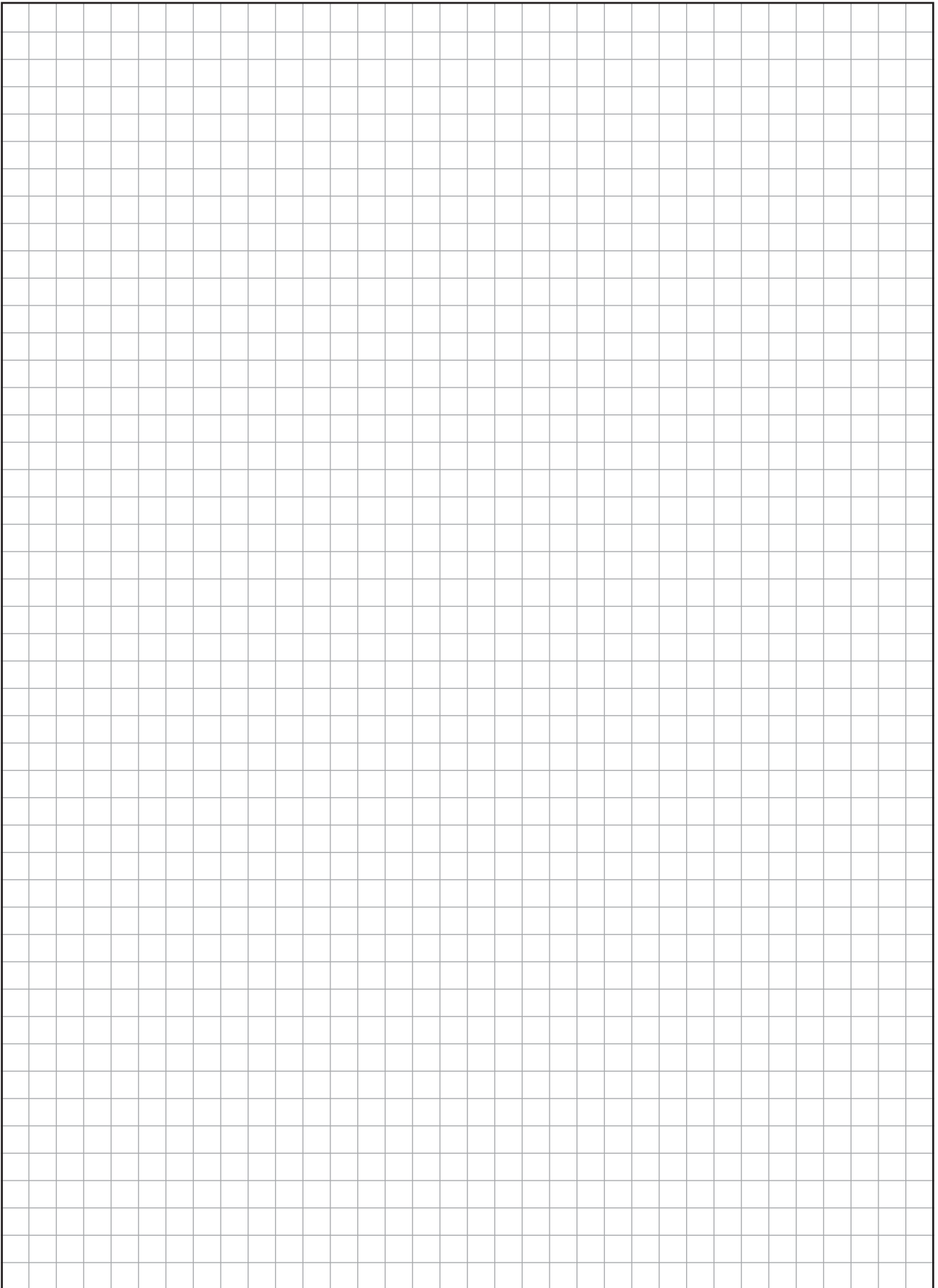
SPARE PARTS UNICO

Item	Part number	Description
1	465.00.80.105	Dust bag UNICO
2	000.01.40.110	MultiClip
3	000.65.53.151	Extension cable 3 x 1.5 mm ² , 10 m long
4	000.01.20.010	Respiratory protection mask P3
5	000.93.11.041	Hexagonal socket screw wrench 4 mm
6	000.93.11.051	Hexagonal socket screw wrench 5 mm
7	000.93.11.061	Hexagonal socket screw wrench 6 mm
10	000.01.10.021	Foldable earmuff type POCKET
11	000.01.10.011	Foldable earmuff type MUSIMUFF with FM radio
12	701.10.00.100	Impact tool
13	702.00.00.200	Parquet layer tool ZUGEISEN, small
14	703.00.00.200	Parquet layer tool ZUGEISEN, broad
15	000.01.65.020	Safety switch PRCD-S (for German mains supply)

ATTENTION: Please specify in inquiries and spare part orders always the serial numbers of your machines (→ Section 3.1)!







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

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-Mail: info@laegler.com · www.laegler.com

certified herewith,
 that the machine

Generic denomination: **Floor sanding machine**
 Function: **Dry sanding of wooden floors**
 Model: **UNICO**
 Serial number: **See type plate**
 Commercial name: **Edge 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

UNICO

Serial number: _____

Year of manufacture: _____