

Originalfassung

DE BETRIEBSANLEITUNG

PARKETTSCHLEIFMASCHINE

Übersetzung / Translation

EN USER MANUAL

WOODEN PARQUET POLISHING MACHINE

ES MANUAL DE INSTRUCCIONES

LIJADORA PARA PARQUET

SE BRUKSANVISNING

PARKETTSLIPMASKIN

FR MODE D'EMPLOI

PONCEUSE À PARQUET



PSM 2/PSM 3



2 SICHERHEITSZEICHEN / SAFETY SIGNS / SÄKERHETSTECKEN / SYMBOLES DE SÉCURITÉ

DE	SICHERHEITSZEICHEN BEDEUTUNG DER SYMBOLE	EN	SAFETY SIGNS DEFINITION OF SYMBOLS	ES	SEÑALES DE SEGURIDAD DEFINICIÓN DE SÍMBOLOS
SE	SÄKERHETSTECKEN SYMBOLERNAS BETYDELSE	FR	SYMBOLES DE SÉCURITÉ SIGNIFICATION DES SYMBOLES		



DE	CE-KONFORM: Dieses Produkt entspricht den EU-Richtlinien.
EN	EC-CONFORM: This product complies with the EC-directives.
ES	CONFORME-CE: Este producto cumple con las Directivas CE.
SE	CE-NORM: Denna produkt motsvarar EG-riktlinjerna.
FR	CONFORMITÉ CE : Ce produit répond aux directives CE.



DE	ANLEITUNG LESEN! Lesen Sie die Betriebs- und Wartungsanleitung Ihrer Maschine aufmerksam durch und machen Sie sich mit den Bedienelementen der Maschine gut vertraut um die Maschine ordnungsgemäß zu bedienen und so Schäden an Mensch und Maschine vorzubeugen.
EN	READ THE MANUAL! Read the user and maintenance manual carefully and get familiar with the controls in order to use the machine correctly and to avoid injuries and machine defects.
ES	¡LEA EL MANUAL! Lea el manual de uso y mantenimiento cuidadosamente y familiarícese con los controles con el fin de utilizar la máquina correctamente, para evitar lesiones y defectos de la máquina.
SE	LÄS ANVISNINGARNA! Läs igenom maskinens drifts- och underhållsanvisning noga och gör dig väl förtrodd med maskinens manöverelement för att kunna hantera maskinen på ett korrekt sätt och på så sätt undvika skador på människor och maskiner.
FR	LIRE LE MANUEL D'UTILISATION ! Lire le manuel d'exploitation et de maintenance de votre machine avec assiduité en vous familiarisant bien avec les organes de commande de la machine pour utiliser la machine correctement et prévenir ainsi des blessures corporelles et des dégâts sur la machine.



DE	Allgemeiner Hinweis
EN	General note
ES	Notas generales
SE	Allmänna anvisningar
FR	Informations générales



DE	Schutzausrüstung!
EN	Protection!
ES	¡Protección
SE	Skyddsutrustning!
FR	Équipement de protection !



DE	Maschine vor Wartung und Pausen ausschalten und Netzstecker ziehen!
EN	Stop and pull out the power plug before any break and engine maintenance!
ES	Desconecte la máquina de la fuente de alimentación antes de realizar el mantenimiento u otras actividades
SE	Stäng av maskinen och dra ur stickproppen innan underhåll och pauser!
FR	Éteindre la machine avant la maintenance et les pauses et débrancher la fiche secteur !



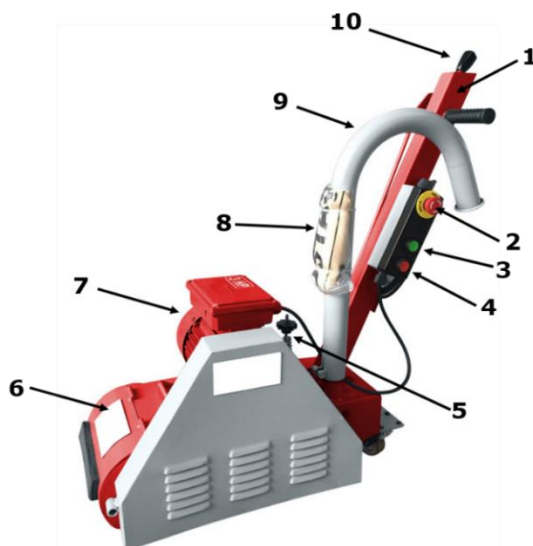
DE	Gefährliche elektrische Spannung!
EN	High voltage!
ES	Riesgo de descarga eléctrica!
SE	Farlig elektrisk spänning!
FR	Tension électrique dangereuse !



DE	Feuer, offenes Licht und Rauchen verboten!
EN	Fire, naked flame and smoking forbidden!
ES	Inflamable, riesgo de incendio, alejar del fuego !
SE	Rökning och öppen eld förbjudet!
FR	Défense de fumer, flamme nue, feu interdits !

3 TECHNIK / TECHNICS / DATOS TECNICOS / TEKNISKT / TECHNIQUE

3.1 Komponenten / components / componentes / Komponenter / Composants



PSM2 / PSM3			
1	Handgriff / Handle / Empuñadura / Handgrepp / Poignée	6	Walzenabdeckung/Drum cover / tapa rodillo / Valskydd / Cache du rouleau
2	Not-Aus-Schalter/Emergency stop / PARADA de emergencia / Nödstopps-brytare / Interrupteur d'ARRÊT D'URGENCE	7	Motor / Motor / Motor / Moteur
3	Ein-Schalter /On switch / Botón encendido / På-knapp / Interrupteur MARCHÉ	8	Staubsack / Dust bag / saco de polvo / Dammsäck / Sac à copeaux
4	Aus-Schalter /Off switch / Botón apagado / Av-knapp / Interrupteur ARRÊT	9	Staubrohr / Dust pipe / tubo polvo / Dammrör / Tuyau d'évacuation de la poussière
5	Spannhebel /Tension lever/Palanca tensión / Spännarm / Poignée de tension	10	Walzenhebel /Drum lever / Palanca rodillo / Valsarm / Poignée du rouleau

3.2 Technische Daten / Technical data / Tekniska data / Données techniques

	PSM2	PSM3
Netzspannung / Voltage / Voltaje / Nätspänning / Tension	230 V / 50 Hz	230 V / 50 Hz
Motorleistung / Motor power / potencia motor / Motoreffekt / Puissance du moteur	1,5 kW	2,2 kW
Motordrehzahl / Motor speed / Velocidad e rotación / Motorvarvtal / Vitesse de rotation du moteur	2800 min ⁻¹	2800 min ⁻¹
Schutzklasse / Protection class / clase protección / Skyddsklass / Classe de protection	IP 55	IP 55
Walzendurchmesser / Drum diameter / diám.rodillo / Valsdiameter / Diamètre du rouleau	Ø 176 mm	Ø 176 mm
Walzendrehzahl / Drum speed / velocidad rodillo / Valsvarvtal / Vitesse de rotation du rouleau	2000 min ⁻¹	2000 min ⁻¹
Schleifbreite / sanding width / Anchura abrasiva / Slipbredd / Largeur de ponçage	max. 200mm	max. 200mm
Maschinenmaße / Machine dimension / dimensiones máquina / Maskinmått / Dimensions de la machine	930 x 340 x 960 mm	930 x 340 x 960 mm
Gewicht / Weight / peso / Vikt / Poids	60 kg	63 kg

11 PREFACE (EN)

Dear Customer!

This operating manual contains information and important notes on commissioning and handling the PSM2 / PSM 3 wooden parquet polishing machine.

Following the usual commercial name of the machine (see cover) is substituted in this manual with the name "machine".

This manual is part of the product and shall not be stored separately from the product. Save it for later reference and if you let other people use the product, add this instruction manual to the product.



Please read and obey the security instructions!

Before first use read this manual carefully. It eases the correct use of the product and prevents misunderstanding and damages of product and the user's health.

Due to constant advancements in product design, construction pictures and content may diverse slightly. However, if you discover any errors, inform us please.
Technical specifications are subject to changes!

Please check the product contents immediately after receipt for any eventual transport damage or missing parts.

Claims from transport damage or missing parts must be placed immediately after initial product receipt and unpacking before putting the product into operation.

Please understand that later claims cannot be accepted anymore.

Copyright

© 2018

This document is protected by international copyright law. Any unauthorized duplication, translation or use of pictures, illustrations or text of this manual will be pursued by law.

Court of jurisdiction is the Landesgericht Linz or the competent court for 4170 Haslach, Austria!

Customer service contact

HOLZMANN MASCHINEN GmbH

4170 Haslach, Marktplatz 4
AUSTRIA

Tel +43 7289 71562 - 0

Fax +43 7289 71562 - 4

info@holzmann-maschinen.at

12 SAFETY

12.1 Intended use of the machine

Use the machine only if it is in perfect technical condition and in accordance with its intended purpose, safety and hazard awareness! Immediately rectify any malfunctions which could impair safety!

It is generally forbidden to change or make ineffective the safety equipment of the machine!

The machine is intended exclusively for the following activities:

Dry sanding of flat parquet and plank floors.

HOLZMANN-MASCHINEN accepts no responsibility or warranty for any other use or any other use and any resulting damage to property or injury.

Working conditions

The machine is designed for work under the following conditions:

Humidity max. 70%

Temperature von +5°C bis +40°C (+41°F to +104°F)

The machine must not be used or stored in damp rooms or outdoors.

Prohibited use

- Operation of the machine under conditions outside the limits specified in this manual is not permitted.
- The machine is not intended for grinding steps, furniture or concrete!
- Operation of the machine without the provided safety devices is not permitted.
- Dismantling or switching off the guards is prohibited.
- Modifications to the construction of the machine are prohibited.
- Operation of the machine in a manner or for purposes which do not exactly comply with the instructions in this manual is prohibited.
- Never leave the machine unattended, especially when there are children around!

12.2 Safety instructions

Warning signs and/or stickers on the machine that are illegible or have been removed must be replaced immediately!

Local laws and regulations may determine the minimum age of the operator and limit the use of this machine!

In order to avoid malfunctions, damages and health impairments, the following information must also be observed unconditionally:

- Clean the surfaces and joints to be worked on thoroughly before starting work.
- Ensure adequate lighting conditions at the workplace.
- Work in well-ventilated rooms.
- Protect the machine from moisture.
- Never leave the running machine unattended. Ensure that unauthorised persons are only at an appropriate safety distance from the machine and, in particular, keep children away from the device.
- Wear suitable work clothing (no loose clothing, neckties, jewellery, etc.) - danger of being caught or drawn in – and carry out kneeling activities only with knee pads!
- Wood dust can cause diseases (e.g. skin, respiratory diseases, allergic reactions). Protect yourself by wearing suitable personal protective equipment (hearing protection, safety goggles, fine dust mask, safety shoes, etc.).
- Wear protective gloves when replacing the abrasive belt.
- Do not work with the machine if you are tired, unconcentrated or under the influence of medication, alcohol or drugs!

- After adjustment, maintenance or repair work, make sure that no tool is left in/on the unit.
- Keep the device away from potential ignition sources (e.g. indicator lights and/or naked flames, burning cigarettes, etc.). There is a high risk of fire and explosion.
- Never remove the dust bag when the engine is running.
- Always store grinding dust in lockable, fireproof, non-combustible containers outdoors!
- Make sure that the mains switch is in the "Off" position before connecting the machine to the mains.
- Never run over the connection cable with the machine!
- Make sure that the device is earthed.
- Use only suitable extension cables.
- Switch off the unit before cleaning, maintenance or repair work, disconnect it from the mains and protect it from being switched on again unintentionally.

12.3 Residual risks

Despite proper use, certain residual risks cannot be completely eliminated. Due to the design and construction of the machine, hazardous situations may occur which are indicated in these operating instructions as follows:

	DANGER A safety instruction of this type indicates an imminently dangerous situation which, if not avoided, will result in death or serious injury.
	WARNING This type of safety information indicates a potentially hazardous situation which, if not avoided, could result in serious injury or even death.
	CAUTION A safety notice designed in this way indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
	NOTICE Such a safety notice indicates a potentially hazardous situation which, if not avoided, may result in property damage.

Regardless of all safety regulations, their common sense and appropriate technical suitability/training are and will remain the most important safety factor for fault-free operation of the machine. **Safe working depends on you!**

13 STARTUP



WARNING

Gefährliche elektrische Spannung! Das Hantieren an der an das Stromnetz angeschlossenen Maschine kann zu schweren Verletzungen oder sogar zum Tod führen kann. Maschine vor Aufnahme von Inbetriebnahme-Arbeiten vom Netz trennen und gegen unbeabsichtigtes Wiedereinschalten sichern!



NOTICE

Lubricate moving connecting parts with a thin layer of lubricating oil or grease before initial operation (and subsequently every 100 working hours).

13.1.1 Mounting the handle and dust pipe



Mount the handle and the dust pipe.

13.1.2 Attaching the dust bag to the dust pipe



Hang the dust bag on the dust pipe. Attach the rope to the bag closure.

14 OPERATION

- Only operate the machine in perfect condition and with the right abrasive.
- A visual inspection of the machine must be carried out before each operation. Safety devices as well as the electrical cables and operating elements must be checked for proper functioning.
- Check the surface to be machined. Loose parquet flooring must be fixed before sanding.

14.1 Operating



WARNING

Dangerous electrical voltage! Danger of fatal electric shock if the electric cable is run over! Never loop in the direction of the cable! Always hold the cable above the machine or run the cable in such a way that it has no contact with the abrasive.



CAUTION

Fire hazard! The grinding of nails can generate sparks that can ignite a fire. Always countersink nails so deeply that there is no risk of them grinding.



NOTICE

Make sure that the machine is switched off when connected to the power supply. Before switching on, make sure that the machine is loaded with abrasive paper. Only switch on the machine with the grinding roller in an upright position and not in contact with the ground!

14.1.1 Tips for correct grinding

The floor is sanded in abrasive paths that overlap from left to right.

Each grinding path corresponds to a forward and a backward grinding without offset on the same track.

Each backward sanding is followed by a forward sanding, which is offset about ten centimetres to the right.

Due to the space required by the operator and the machine, the floor remains unpolished at a distance of 1.5 metres from the wall behind the grinding machine.

To reach this area, you must turn the machine 180°. This surface is then also ground in grinding paths that overlap from left to right. Ensure a smooth transition to the surface that has already been ground.

Always move the machine evenly during grinding to avoid any dents in the floor.

Under no circumstances should the machine come to a standstill with the grinding roller lowered, as it would immediately grind a recess in the floor.

In order to achieve a beautiful surface of the floor, several sanding cycles are usually necessary. Before using the machine, find out about suitable abrasive grits.

14.1.2 Fitting the abrasive belt

See chapter **Fehler! Verweisquelle konnte nicht gefunden werden. Fehler! Verweisquelle konnte nicht gefunden werden.!**

14.1.3 Switching the motor on and off



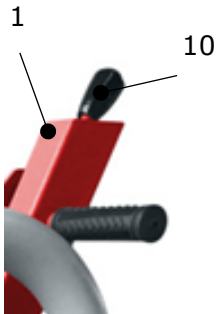
Switch on: Press the ON switch (green).

Switch off: Press the off switch (red).

In dangerous situation: Press the emergency stop switch.

Switching on again after eliminating the hazardous situation: Unlock the emergency stop switch by turning it clockwise (direction of arrow!) and press the ON switch (green).

14.1.4 Raising/lowering the grinding roller



Lift the grinding roller: Pull the roller lever (10) backwards and upwards.

Lowering the grinding roller: Only when the grinding roller has reached full speed, move the roller lever (10) forwards and downwards and thus press the grinding roller on.

15 CLEANING & MAINTENANCE

15.1 Cleaning



NOTICE

The use of solvents, aggressive chemicals or scouring agents will damage the machine! Therefore, only use water and, if necessary, mild cleaning agents for cleaning!

Clean the machine regularly after work from chips and grinding dust. impregnate bare surfaces of the machine against corrosion with commercially available means.

15.2 Maintenance



WARNING

Dangerous electrical voltage! Handling the machine connected to the power supply can cause serious injury or even death. Always disconnect the machine from the mains before carrying out maintenance and repair work and secure it against unintentional restarting!

The machine is low-maintenance. It contains only a few parts that require regular maintenance or servicing.

Check regularly whether the warning and safety instructions on the machine are present and in a perfectly legible condition.

Before each operation, check that the safety devices are in perfect condition!

Immediately rectify faults or defects that could impair the safety of the machine.
In the event of repairs, always contact a specialist workshop!

15.2.1 Maintenance and service plan

Before initial operation:

- Lubricate moving connecting parts with a thin layer of lubricating oil or grease.

After each operation:

- Removal of chips and grinding dust

After 10 operating hours:

- Check screw connections and tighten if necessary

After 100 hours of work:

- Clean moving connecting parts (if necessary, use a brush to remove chips and dust) and lubricate with a thin layer of lubricating oil or grease.

After 250 operating hours:

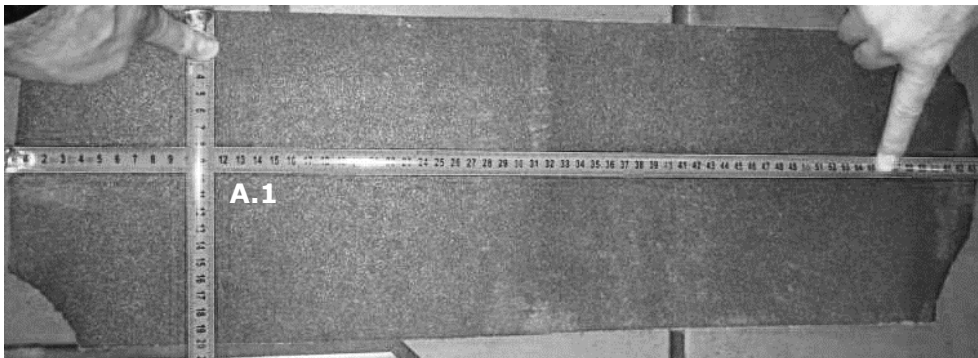


HINWEIS

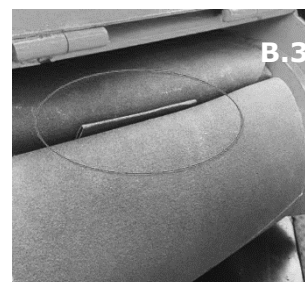
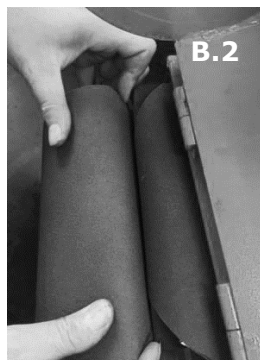
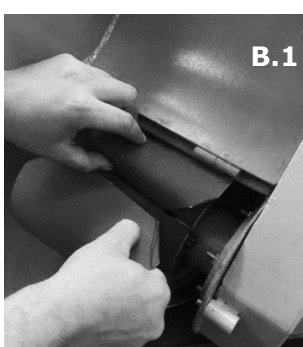
Excessive belt tension can lead to premature failure of the ball bearings. The belt must have a deformation of 10.5 mm at 30 ± 3 N load in the middle!

- - Check V-belt tension: Remove the belt cover. The belt tension is adjusted with the tension lever. If the belt is heavily worn, it must be replaced.

15.2.2 Changing the abrasive belt

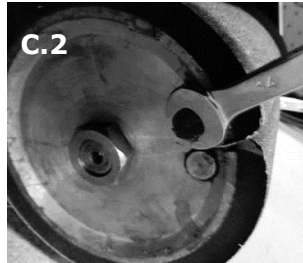
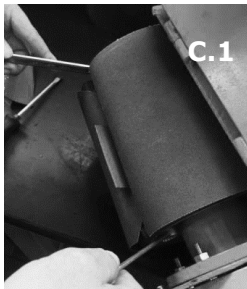


A) Cut the abrasive belt to size according to the original (640x200mm).



B) Wrap the abrasive belt around the roll (B.1) and insert the ends into the openings (B.2).
The resulting gap must be filled with normal abrasive paper (B.3).

This is best done with a piece of folded paper.
 With thicker abrasives (e.g. abrasive flow) placeholders are omitted.



C) Clamp the abrasive with suitable wrenches (C.2) by turning the lateral clamping screws (C.1, C.3) in opposite directions.

15.2.3 Setting the grinding pressure

The grinding pressure increases if you turn the clamping lever counterclockwise (see section 3.1). If the clamping lever is turned clockwise, the grinding pressure is reduced.

15.2.4 Adjusting the surface grinding



NOTICE

After the grinding roller or the rollers have been replaced, the so-called face grinding must always be readjusted!

After replacing the grinding roller or the rollers or if the machine grinds on one side, the surface grinding of the machine must be readjusted.

For precise surface grinding, the grinding roller and rollers must be on the same plane. The left roller is adjustable. The right roller is not adjustable.

Procedure:



1. Disconnect the machine from the mains and secure it against unintentional restarting.
2. Place the machine on the right side.
3. Loosen the eccentric screw on the left track roller.
4. Make adjustment.
5. Tighten the eccentric screw again.

15.2.5 Emptying the sanding dust bag



CAUTION

Grinding dust can ignite itself! Empty the sanding dust bag after each use of the machine or always when it is one third full. Never empty the contents of the dust bag over an open flame!

Remove the sanding dust bag and shake it out carefully to completely remove the sanding dust. Turn the dust bag to the left and wash with cold water (30°) in the washing machine to prevent the pores from clogging, thereby reducing the dust holding capacity.

16 TRANSPORT, STORAGE & DISPOSAL

16.1 Transport

Due to its heavy weight, never lift the machine alone, but always in pairs!

For transport, only hold the machine by the holders provided.

Only transport the machine in an upright position!

Secure the machine against slipping during transport.

16.2 Storage

Never store the machine in damp rooms, but only in dry rooms!

During prolonged storage, make sure that the rollers and grinding wheel do not come into contact with the ground. For this purpose, store the machine on two supports with a height of at least 20 mm.

16.3 Disposal



Observe national waste disposal regulations. Do not dispose of the machine, machine components or operating materials in residual waste. If necessary, contact your local authorities for information on available disposal options. If you buy a new machine or an equivalent machine from your dealer, he is obliged in certain countries to dispose of your old machine properly.

17 TROUBLE SHOOTING

BEFORE YOU START WORKING FOR THE ELIMINATION OF DEFECTS, DISCONNECT THE MACHINE FROM THE POWER SUPPLY.

Trouble	Possible cause	Solution
Machine will not start	• Switch defective	• Repair switch
	• Power supply is off	• Repair power supply
	• Fuse is defectivet	• Change fuse
	• Electric contactor is defective	• Repair or change electric contactor
Poor polishing performance	• Unauthorized or worn abrasive	• Change abrasive
	• Insufficient pressure of drum	• Increase drum pressure
	• Insufficient V-belt tension	• Tighten V-belt
	• Worn V-belt	• Change V-belt
Scratches on the work surface	• Wrong abrasive	• Change abrasive
	• Drum surface dirty or damaged	• Clean or change drum
Poor dust extraction	• Dust bag for more than 1/3 filled	• Empty dust bag
	• Dust bag dirty	• Wash the dust bag
Burns on the working surface	• Worn or fine abrasive	• Change abrasive
	• Too high drum pressure	• reduce drum pressure

MANY POTENTIAL SOURCES OF ERROR CAN BE CLEARED BY THE EXPERTLY CONNECTION TO THE ELECTRICITY GRID.

38 ERSATZTEILE / SPARE PARTS / RESERVDLAR / PIÈCES DE RECHANGE

38.1 Ersatzteilbestellung / spare parts order / Reservdelsbeställning / Commande de pièces détachées

(DE) Mit Holzmänn-Ersatzteilen verwenden Sie Ersatzteile, die ideal aufeinander abgestimmt sind. Die optimale Passgenauigkeit der Teile verkürzen die Einbauzeiten und erhöhen die Lebensdauer.

HINWEIS

Der Einbau von anderen als Originalersatzteilen führt zum Verlust der Garantie!

Daher gilt: Beim Tausch von Komponenten/Teilen nur Originalersatzteile verwenden

Beim Bestellen von Ersatzteilen verwenden Sie bitte das Serviceformular, das Sie am Ende dieser Anleitung finden. Geben Sie stets Maschinentype, Ersatzteilnummer sowie Bezeichnung an. Um Missverständnissen vorzubeugen, empfehlen wir mit der Ersatzteilbestellung eine Kopie der Ersatzteilzeichnung beizulegen, auf der die benötigten Ersatzteile eindeutig markiert sind. [Bestelladresse sehen Sie unter Kundendienstadressen im Vorwort dieser Dokumentation.](#)

(EN) With original Holzmänn spare parts you use parts that are attuned to each other shorten the installation time and elongate your products lifespan.

IMPORTANT

The installation of other than original spare parts voids the warranty!

So you always have to use original spare parts

When you place a spare parts order please use the service formular you can find in the last chapter of this manual. Always take a note of the machine type, spare parts number and partname. We recommend to copy the spare parts diagram and mark the spare part you need. [You find the order address in the preface of this operation manual.](#)

(ES) Para máquinas Holzmänn utilice siempre repuestos originales para reparar la máquina. El ajuste óptimo de las piezas reduce el tiempo de instalación y preserva la vida de la máquina.

INDICACIÓN

¡La instalación de piezas no originales anulara la garantía de la máquina!

Por lo tanto: Para el intercambio de componentes y piezas de recambio use originales.

Para realizar un pedido de recambio, use el formulario que se encuentra en el último capítulo de esta guía. Anote siempre el tipo de máquina, el número de repuesto y el nombre de la pieza. Recomendamos copiar el diagrama de piezas de repuesto y marcar la pieza de repuesto requerida. [Encontrará la dirección de pedido en el prefacio de éste manual de operación.](#)

(SE) Med Holzmänn reservdelar använder du reservdelar som matchar varandra perfekt. Delarnas perfekta passform förkortar monteringtiden och förlänger livslängden.

OBSERVERA

Inmonteringen av andra delar än originalreservdelar leder till att garantin slutar gälla!

Därför gäller: Använd endast originalreservdelar vid byte av komponenter/delar

Använd bara serviceformuläret som du hittar i slutet av den här bruksanvisningen vid beställning av reservdelar. Ange alltid maskintyp, reservdelsnummer och beteckning. För att förebygga missförstånd rekommenderar vi att du bifogar en kopia på reservdelsritningen där de erforderliga reservdelarna är entydigt markerade.

[Beställningsadressen finns under kundtjänstadresserna i förordet till denna dokumentation.](#)

(FR) Les pièces de rechange Holzmänn sont conçues pour correspondre idéalement. La précision d'ajustage optimale des pièces réduisent les temps de pose et augmente la durée de vie.

AVIS

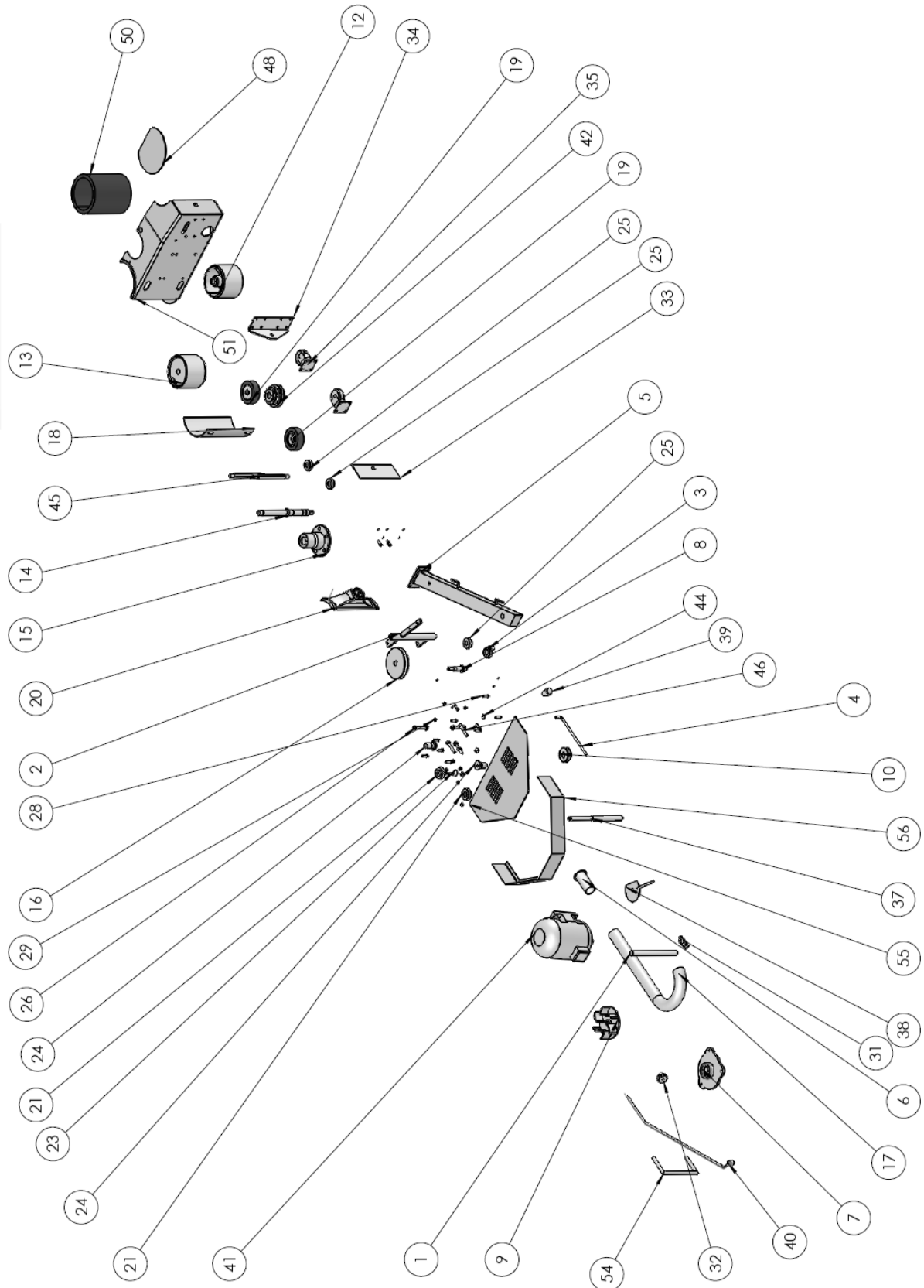
Le montage de pièces autres que les pièces de rechange d'origine entraîne la perte de la garantie !

Par conséquent, la règle est la suivante : Utiliser uniquement des pièces de rechange d'origine pour le remplacement des composants/pièces

Pour commander des pièces de rechange, veuillez utiliser le formulaire de service à la fin de ces instructions. Toujours indiquer le type de machine, le numéro de pièce de rechange et la désignation. Afin d'éviter tout malentendu, nous vous recommandons de joindre une copie du plan des pièces détachées à la commande de pièces détachées, sur laquelle les pièces détachées requises sont clairement indiquées.

[Pour l'adresse de commande, voir Adresses du service à la clientèle dans l'avant-propos de la présente documentation.](#)

38.2 Explosionszeichnung / explosion drawing / despiece / Explosionsritning / Vue éclatée



Nº.	Name	Qty.
1	Chassis-Befestigungs-Welle / chassis fixing shaft	1
2	Drosselklappe / damper	1
3	Lager / Bear	2
4	Klappenwelle / damper shaft	1
5	Profil / profile	1
6	Lüfterstutzen / fan out connection pipe	1
7	Lagergebläse / fan palier	1
8	Lüfterwelle / fan shaft	1
9	Ventilator / fan	1
10	Lüfterrand / fan rim	1
12	Aluminiumzylinder (Nut) / aluminum cylinder(groove)	1
13	Aluminiumzylinder (mutig) / aluminum cylinder(courageous)	1
14	Palisander Schaft / palier shaft	1
15	Aluminium Zylinder Palier / aluminum cylinder palier	1
16	Aluminium Zylinder Felge / aluminum cylinder rim	1
17	Ablaufleitung / discharge pipe	1
18	Holzfrontabdeckung / wood front cover	1
19	Gummirollen / rubber wheels	2
20	Aluminiumkonus-Ansaugschaufel / aluminum conical suction shovel	1
21	Gummiräder-Lager / rubber wheels bear	1
23	Ring / ring	1
24	Gummiräder-Welle / rubber wheels shaft	2
25	Lager / bear	2
26	Schraube / screw	4
28	Schraube / screw	4
29	Mutter / nut	4
31	Gummiwellen-Feder / rubber shaft spring	1
32	Gas-Bakalit / throttle bakalite	1
33	Hinterradplatte / rear wheel plate	1
34	Rollentisch / Wheel table	1
35	Rad / wheel	2
37	Drosselklappen-Welle / damper palier shaft	1
38	Hubarm / lifting arm	1
39	Birnenförmiger Drosselklappen-Bakalit / pear-shaped throttle bakalite	1
40	Hubarm-Welle / lifting arm shaft	1
41	Motor / motor	1
42	Motorfelge / motor rim	1
44	Ring / ring	1
45	Aluminiumzylinder-Welle / aluminum cylinder shaft	2
48	Aluminiumzylinder-Abdeckung / aluminum cylinder cover	1
50	Aluminiumgummi / aluminum rubber	1
51	Karosserie-Rahmen / body chassis	1
54	Getriebefeder-Eisen / transmission spring iron	1
55	Gehäuseblech / housing sheet	1
56	Oberes Gehäuseblech / upper housing sheet	1
57	Tasche / Bag	1
58	Elektrisches Steuerpult / Electric control panel	1
59	Halter / Holder	2