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Originalfassung

DE BETRIEBSANLEITUNG

Übersetzung / Translation

EN USER MANUAL

FR MANUEL D'UTILISATION

ES MANUAL DE INSTRUCCIONES

UNIVERSALSCHÄRFGERÄT

MULTI FUNCTION SHARPENER

AFFÛTEUSE UNIVERSELLE

AFILADORA MULTIFUNCIÓN



USG950



**YOUR
JOB.
OUR
TOOLS.**



2 SICHERHEITSZEICHEN / SAFETY SIGNS

SEÑALES DE SEGURIDAD / SIGNALISATION DE SÉCURITÉ

DE	SICHERHEITSZEICHEN BEDEUTUNG DER SYMBOLE	EN	SAFETY SIGNS DEFINITION OF SYMBOLS	FR	SIGNALISATION DE SÉCURITÉ DEFINITION DES SYMBOLES
ES	SEÑALES DE SEGURIDAD DEFINICIÓN DE SÍMBOLOS				



DE	CE-KONFORM! - Dieses Produkt entspricht den EU-Richtlinien.
EN	CE-Conformal! - This product complies with the EC-directives.
FR	Conforme CE! - Ce produit est conforme aux Directives CE.
ES	CONFORME-CE - Este producto cumple con las Directivas CE.

BETRIEBSANLEITUNG 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.

FR **LIRE LE MANUEL!** Lire le manuel d'utilisation et de maintenance avec soin permet de se familiariser avec les fonctions en vue d'utiliser correctement la machine afin d'éviter les blessures et le dysfonctionnement de l'appareil

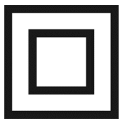
ES **¡LEA EL MANUAL!** Lea el manual de uso y mantenimiento cuidadosamente y familiarícese con los controles con el fin de utilizar la máquina correctamente, para evitar lesiones y defectos de la máquina.



DE	Schutzausrüstung tragen!
EN	Wear protective equipment
FR	Porter des vêtements de protection!
ES	¡Use equipos de protección!



DE	Maschine vor Wartung und Pausen ausschalten und Netzstecker ziehen
EN	Stop and pull out the power plug before any break and engine maintenance
FR	Éteindre et débrancher la machine avant chaque entretien ou pause!
ES	¡Apague y desconecte la máquina antes de hacer mantenimiento o pausa!



DE	Schutzklasse II
EN	Protection class II
FR	Degré de protection (Classe II)
ES	Clases de aislamiento (clase II)

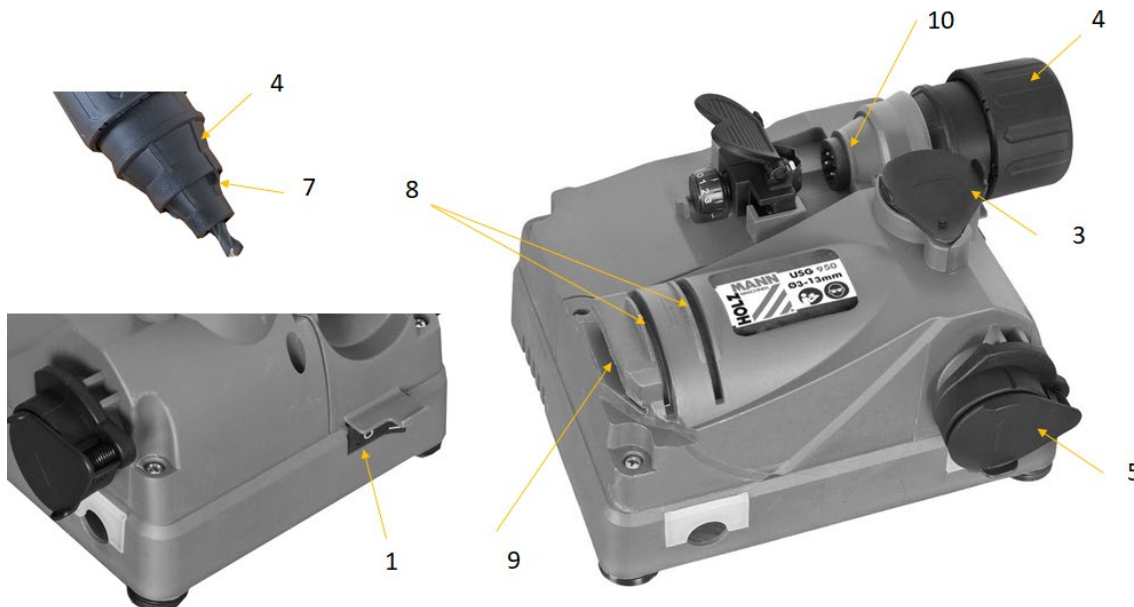
DE	Warnschilder und/oder Aufkleber an der Maschine, die unleserlich sind oder die entfernt wurden, sind umgehend zu erneuern!
EN	Missing or non-readable safety stickers have to be replaced immediately!
FR	Les panneaux d'avertissement et/ou autocollants d'avertissement illisibles ou retirés sur la machine doivent être remplacés immédiatement !
ES	Deben sustituirse inmediatamente los letreros de advertencia y/o las pegatinas que haya en la máquina, que se hayan vuelto ilegibles o se hayan retirado!



3 TECHNIK / TECHNIC

CARACTERISTIQUES TECHNIQUES / CARACTERÍSTICAS TÉCNICAS

3.1 Komponenten / Components / Composants / Componentes



Nr.	Bezeichnung / Description	Nr.	Bezeichnung / Description
1	EIN - AUS Schalter ON- OFF Switch Interrupteur Marche/Arrêt Interruptor encendido/apagado	6	Einstellknopf Schleifabnahme Adjusting grinding decrease Ajustement de la matière à affûter Ajuste de afilado
2	Klemmtaster Clamp button Bouton de verrouillage Botón de bloqueo	7	Drehbegrenzungsrippe Spannfutter Rotation restriction rib Nervure de positionnement Restricción de rotación
3	Freiwinkel Schleifführung Free angle guide Guide d'angle de dépouille Guía de ángulo libre	8	Messerschärfer Knife sharpener Affûteur de couteaux Afilador de cuchillo
4	Spannfutter chuck Mandrin Portabrocas	9	Scheren schärfen Scissors sharpening Affûteur de ciseaux Afilador de tijeras
5	Schleifführung Hauptschneide Grinding hole main cutting edge bord de coupe principal Guía de afilado de filo principal	10	Einstell-Führung Setting guide Positionneur de foret Guía de configuración



3.2 Technische Daten / Technical Data

Données techniques / Datos técnicos

Parameter / parameters	USG950
Spannung / (Frequenz) Voltage / (frequency) Tension nominale Voltaje, frecuencia	230V / (50Hz)
Motorleistung motor power Puissance Potencia del motor	150 W
max. Schleifscheibendrehzahl max. grinding stone speed max. Vitesse max. Revoluciones	5500
Bohrer Durchmesser Drill diameter Diamètre foret Diámetro de brocas	3 - 13 mm
Maschinendimension (L x B x H) machine Dimension (L x W x H) Dimension Dimensiones máquina	200 x 180 x 115 mm
Gewicht / weight Poids / Peso	1,62 kg
Schall-Druckpegel L_{PA} Sound pressure level L_{PA} Niveau de pression sonore L_{PA} Nivel presión sonora L_{PA}	82 dB(A) $k=3$ dB(A)
Schall-Leistungspegel L_{WA} Sound power level L_{WA} Niveau de puissance acoustique L_{WA} Nivel potencia acústica L_{WA}	95 dB(A) $k=3$ dB(A)

(DE) Hinweis Geräuschangaben: Die angegebenen Werte sind Emissionswerte und müssen damit nicht zugleich auch sichere Arbeitsplatzwerte darstellen. Obwohl es eine Korrelation zwischen Emissions- und Immissionspegeln gibt, kann daraus nicht zuverlässig abgeleitet werden, ob zusätzliche Vorsichtsmaßnahmen notwendig sind oder nicht. Faktoren, welche den am Arbeitsplatz tatsächlich vorhandenen Immissionspegel beeinflussen, beinhalten die Eigenart des Arbeitsraumes und andere Geräuschquellen, d. h. die Zahl der Maschinen und anderer benachbarter Arbeitsvorgänge. Die zulässigen Arbeitsplatzwerte können ebenso von Land zu Land variieren. Diese Information soll jedoch den Anwender befähigen, eine bessere Abschätzung von Gefährdung und Risiko vorzunehmen.

(EN) Notice noise emission: The values given are emission values and therefore do not have to represent safe workplace values at the same time. Although there is a correlation between emission and immission levels, it cannot be reliably deduced whether additional precautions are necessary or not. Factors influencing the actual immission level at the workplace include the nature of the workspace and other noise sources, i.e. the number of machines and other adjacent operations. The permissible workplace values may also vary from country to country. However, this information should enable the user to make a better assessment of hazard and risk.

(ES) Aviso sobre los valores de ruido: Los valores indicados son valores de emisión y, por lo tanto, no representan necesariamente al mismo tiempo valores seguros en el lugar de trabajo. Aunque hay una correlación entre los niveles de emisión y los de inmisión, no se puede deducir con certeza si es necesario adoptar medidas de precaución adicionales o no. Entre los factores que influyen en el nivel de inmisión real en el lugar de trabajo, se encuentran la naturaleza del espacio de trabajo y otras fuentes de ruido, es decir, el número de máquinas y otros procesos de trabajo adyacentes. Asimismo, los valores admisibles en el lugar de trabajo pueden variar de un país a otro. No obstante, esta información debe capacitar al usuario a evaluar mejor los peligros y los riesgos.

(FR) Avis Données sur le bruit : Les valeurs indiquées sont des valeurs d'émission et ne représentent donc pas nécessairement des valeurs de sécurité sur le lieu de travail. Bien qu'il existe une corrélation entre les niveaux d'émission et d'immission, il est impossible de déduire de manière fiable si des mesures de précaution supplémentaires sont nécessaires ou non. Les facteurs influençant le niveau d'immission réellement présent sur le lieu de travail comprennent les caractéristiques de la salle de travail et d'autres sources de bruit, c'est-à-dire le nombre de machines et d'autres processus de travail adjacents. Les valeurs autorisées sur le lieu de travail peuvent également varier d'un pays à l'autre. Toutefois, ces informations devraient permettre à l'utilisateur de mieux évaluer le danger et le risque.



8 PREFACE (EN)

Dear Customer!

This operating manual contains information and important notes for the safe start-up and handling of the multi-function sharper USG950, hereinafter referred to as "machine".



The manual is an integral part of the machine and must not be removed. Keep it for later use in a suitable place, easily accessible to users (operators), protected from dust and moisture, and enclose it with the machine if the machine is passed on to third parties!

Please pay special attention to the chapter Safety!

Due to the constant further development of our products, illustrations and contents may differ slightly. If you notice any errors, please inform us.

Subject to technical changes!

Check the goods immediately after receipt and note any complaints on the consignment note when taking over the goods from the deliverer!

Transport damage must be reported separately to us within 24 hours.

HOLZMANN MASCHINEN GMBH cannot accept any liability for unnoticed transport damage.

Copyright

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This documentation is protected by copyright. All rights reserved! Especially the reprint, the translation and the extraction of photos and illustrations will be prosecuted.

The place of jurisdiction shall be the Regional Court of Linz or the court responsible for 4170 Haslach.

Customer Service Address

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AT-4170 Haslach, Marktplatz 4
AUSTRIA
Tel +43 7289 71562 - 0
info@holzmann-maschinen.at



9 SAFETY

This section contains information and important notes on safe start-up and handling of the machine.



For your own safety, read these operating instructions carefully before putting the machine into operation. This will enable you to handle the machine safely and prevent misunderstandings as well as personal injury and damage to property. In addition, observe the symbols and pictograms used on the machine as well as the safety and hazard information!

9.1 Intended use of the machine

The machine is intended exclusively for the following activities: for sharpening drills, knives and scissors, each within the given technical limits.

HOLZMANN MASCHINEN assumes no responsibility or warranty for any other use or use beyond this and for any resulting damage to property or injury.

9.1.1 Technical Restrictions

The machine is intended for use under the following ambient conditions:

Rel. Humidity:	max. 90 %
Temperature	+5° C to +40° C

9.1.2 Prohibited Applications / Hazardous Misapplications

- Operating the machine without adequate physical and mental fitness.
- Operating the machine without knowledge of the operating instructions.
- Modifications or changes to the design of the machine.
- Operating the machine outdoors.
- Operating the machine in a potentially explosive environment
- Operating the machine outside the technical limits specified in this manual.
- Remove the safety markings attached to the machine.
- Modify, bypass or disable the safety devices of the machine.

The improper use or disregard of the versions and instructions described in this manual will result in the voiding of all warranty and compensation claims against Holzmann Maschinen GmbH.

9.2 User requirements

The machine is designed to be operated by one person. The physical and mental aptitude as well as knowledge and understanding of the operating instructions are prerequisites for operating the machine. Persons who, because of their physical, sensory or mental abilities or their inexperience or ignorance, are unable to operate the machinery safely must not use it without supervision or instruction from a responsible person.

Please note that local laws and regulations may determine the minimum age of the operator and restrict the use of this machine!

Put on your personal protective equipment before working on the machine.

Work on electrical components or equipment may only be carried out by a qualified electrician or under the guidance and supervision of a qualified electrician.

9.3 General safety instructions

To avoid malfunctions, damage and health hazards when working with the machine, the following points must be observed in addition to the general rules for safe working:

- The machine may only be operated, maintained or repaired by persons who are familiar with it and who have been informed about the dangers arising from this work.
- Check the machine for completeness and function before putting it into operation.
- Ensure a clean working environment.



- Ensure sufficient light conditions at the workplace.
- Ensure that unauthorised persons keep a safe distance from the machine.
- Keep children away from the machine.
- Wear suitable protective equipment (eye protection, dust mask, respiratory protection, hearing protection, gloves when handling tools) as well as close-fitting protective work clothing - never loose clothing, ties, jewellery, etc. - danger of being pulled in!
- Hide long hair under hair protection.
- - Do not remove sections or other parts of the workpiece from the cutting area while the machine is running!
- Always work with care and the necessary caution and under no circumstances use excessive force.
- Do not overstrain the machine!
- Do not work on the machine if you are tired, not concentrated or under the influence of medication, alcohol or drugs!
- Protection against electric shock. Avoid physical contact with grounded surfaces (e.g. pipes, radiators, stoves, refrigerators) if possible.
- Do not misuse the cable. Never carry the appliance by the cord or pull the appliance to disconnect it from the power outlet. Keep the cable away from heat, oil and sharp edges.
- Maintain the tools with care. Keep the cutting tools sharp and clean for better and safer performance.
- Use only suitable extension cables.
- A damaged or tangled cable increases the risk of electric shock. Handle the cable with care. Never use the cord to carry, pull or disconnect the power tool. Keep the cord away from heat, oil, sharp edges or moving parts.
- Disconnect the power cord when not in use or before any maintenance work.

9.4 Special safety instructions for that machine

- Grinding wheels should be stored and handled carefully according to the manufacturer's instructions;
- Inspect the grinding wheel before use; do not use chipped, cracked or otherwise defective products;
- Use only grinding wheels reinforced with organic bond (80m/s).
- Make sure that the grinding wheels are installed in accordance with the manufacturer's instructions;
- Ensure that the grinding wheel is correctly mounted and clamped before use, and use the machine in a secure position for 30 seconds without load, stop it immediately if strong vibrations are generated or other defects are detected. If this happens, check the machine to determine the cause.
- Make sure that the sparks caused by its use do not cause any danger, e.g. by reaching people or hitting flammable substances.
- Make sure that the air vents are not clogged when working in dusty conditions. If it is necessary to remove the dust, first unplug the machine from the power supply.
- Always wear safety glasses and hearing protection. It is advisable to use other individual protective equipment such as masks, gloves, helmets and aprons.

9.5 Hazard Warnings

Despite their intended use, certain residual risks remain.

Due to the design and construction of the machine, hazardous situations may occur when handling the machines, which are identified as follows in these operating instructions:

DANGER



A safety instruction designed in this way indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

**WARNING**

Such a safety instruction indicates a potentially hazardous situation which, if not avoided, may result in serious injury or even death.

CAUTION

A safety instruction designed in this way indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE

A safety notice designed in this way indicates a potentially hazardous situation which, if not avoided, may result in property damage.

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

10 OPERATION

10.1 Preparatory activities

10.1.1 Checking the delivery content

Note visible transport damages always on the delivery note and check the machine immediately after unpacking for transport damages or missing or damaged parts. Report any damage to the machine or missing parts immediately to your dealer or the shipping company.

10.1.2 Requirements of the location of installation

Choose a suitable work-site for the machine (stable and even).

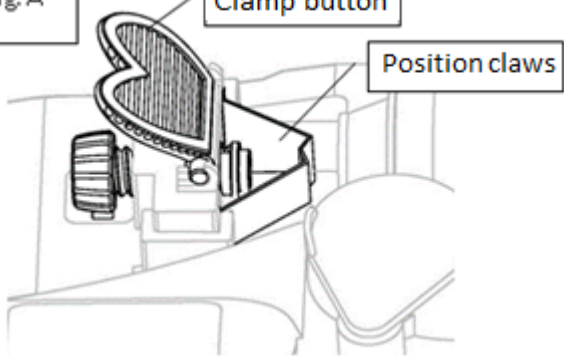
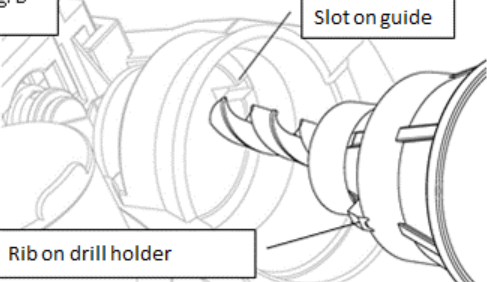
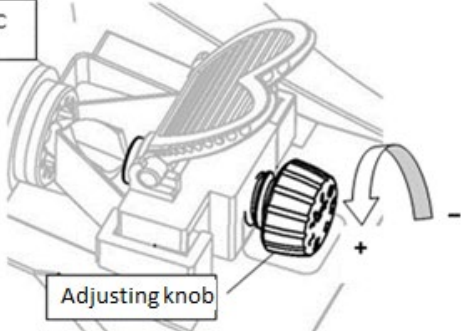
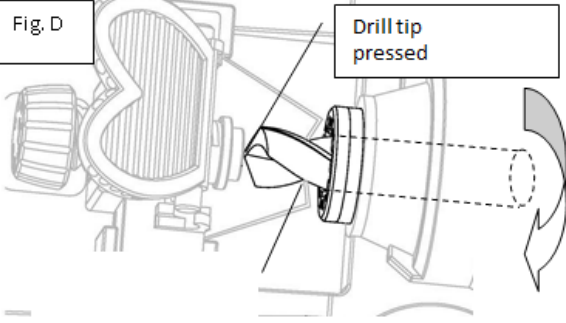
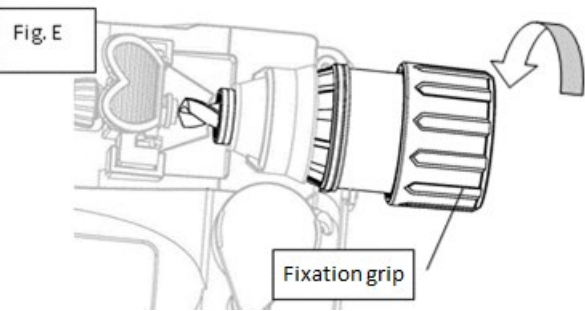
Pay attention to the safety requirements and the dimensions of the machine. The selected installation location must ensure a suitable connection to the electrical mains.

10.2 Sharpening drills

10.2.1 Installing the drill in the chuck

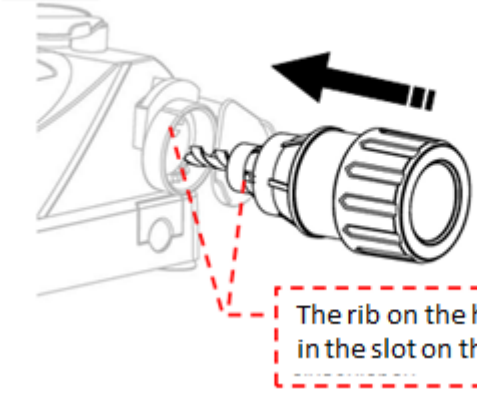
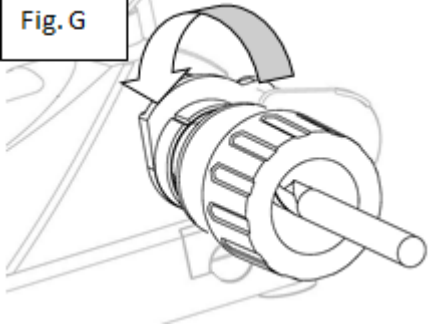
- The chuck (4) out of the device.
- The mount Grip by turning counterclockwise relax until the desired drill bit size is reached.
- Drill in chuck (4) and turn slightly to mount Grip.



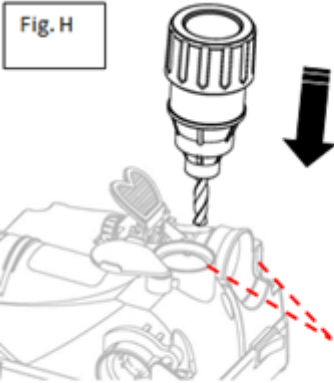
Fig. A  Clamp button Position claws	Open the terminal by pressing the springs clamp button
Fig. B  Slot on guide Rib on drill holder	Insert the chuck when clamp button pushed down in the adjustment guide. NOTICE  Insert the two rotary limiting ribs in the two adjustment grooves
Fig. C  Adjusting knob	By adjusting the grinding loss (thickness) of the material can be adjusted. • low grinding loss in normal sharpening. • large grinding decrease in damaged drills. "+" means more material will be removed. "-" means less material will be removed.
Fig. D  Drill tip pressed	Terminal switch (2) Slowly release lightly turning the drill end and thereby pinch clamp springs in drill nut. The drill is perfectly set up as shown in Fig. D.
Fig. E  Fixation grip	• Press and hold to stop plate drill and tighten with fixing grip clockwise. Chuck guide while pressing the clamp button (2) of the adjustment (10) pull out.



10.2.2 Drill grinding (cutting lip)

Fig. F 	• Switch on the machine with the ON switch (1). • Wait until the grinding wheel has reached idling speed (approx. 30 seconds). • Remove the protective covertsckappe entfernen. • Insert the chuck with drill right into the grind guide (5). NOTICE ! The two ribs of the chucks in the adjustment grooves running!
Fig. G 	• Turn the chuck in the honing guide slightly to the left and right up and down until no sanding with grinding sound more is heard. • Pull the chuck from the honing guide and rotate it through 180 °. Place the chuck again correctly and try again. • Turn off the unit at the ON / OFF switch. Let the wheel come to a standstill before removing the chuck

10.2.3 Grind drill clearance angle

NOTICE	
! Grind clearance angle is only suitable for drills over Ø 10mm.	
Fig. H 	• Insert chuck in relief angle grinding guide (3). Properly set rotation restriction ribs lead. Figure H • Turn the chuck in the clearance angle guide to the left and right up and down until no sanding with grinding sound more audible. • Pull the chuck from the clearance angle guide and rotate it through 180 °. Place the chuck back on and try again. • Turn off the sharpener on the ON / OFF switch. • Let the wheel come to a standstill before removing the chuck. • Pull the chuck out of the guide and open the mount Grip the chuck. Remove the finish-ground drill.



10.3 Sharpen knives



Switch the machine on with the ON switch(I) and wait until the grinding wheel has reached idling speed (approx.. 30sec).

- The blade into the guide on the handle side and move through the guide.
- When replacement Raise the blade, re-insert it in the initial position and pull in the direction shown.

10.4 sharpen scissors



Switch the machine on with the ON switch (I) and wait until the grinding wheel has reached idling speed (approx.. 30sec).

- The scissors ready to insert in the scissor-type guide and pull in the direction of the arrow through the guide.
- While Navigating easily take the scissors out of the guide, replace it in the original position and pull in the direction shown.

11 CLEANING, MAINTENANCE, STORAGE, DISPOSAL

11.1 Cleaning

NOTICE



Incorrect cleaning agents can attack the surface of the machine. Do not use solvents, nitro thinners or other cleaning agents that could damage the surface of the machine. Observe the specifications and instructions of the cleaning agent manufacturer!

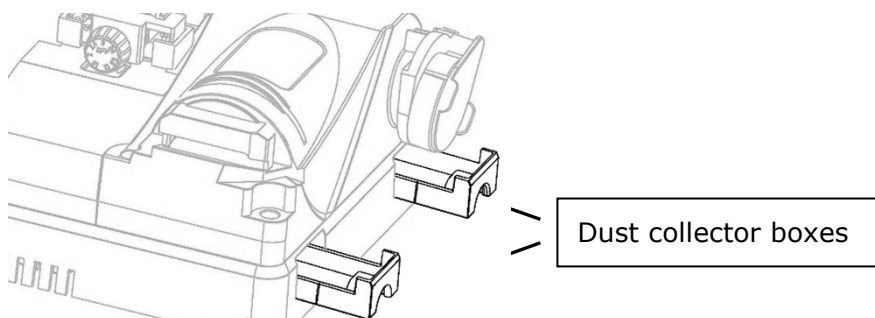
In addition, regular cleaning is a prerequisite for the safe operation of the machine and a long lifetime of the machine. Clean the machine after each use, but at least once a week and empty the grinding dust boxes.

WARNING



Danger due to electrical voltage! Handling the machine with the power supply up can lead to serious injuries or death. Always disconnect the machine from the power supply and secure it against unintentional or unauthorized reconnection before carrying out any troubleshooting measures!

After use, remove the grinding dust boxes from the machine and clean it.





11.2 Maintenance

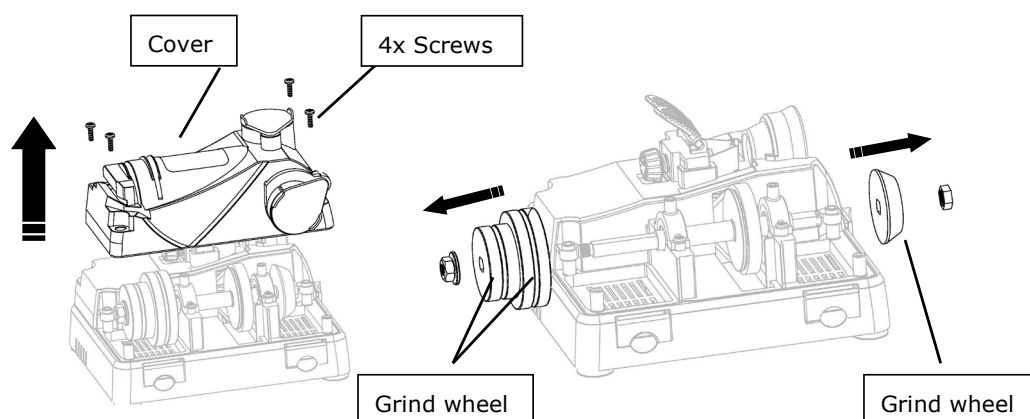
WARNING



Danger due to electrical voltage! Handling the machine with the power supply up can lead to serious injuries or even death. Always disconnect the machine from the power supply and secure it against unintentional or unauthorized reconnection before carrying out any troubleshooting measures!

The machine is low-maintenance and only a few parts have to be serviced. Nevertheless, malfunctions or defects which could impair the safety of the user must be rectified immediately!

11.2.1 Replace the grinding wheel



- Remove the cover by removing the 4 screws.
- With an Allen wrench the nut can be unscrewed by holding the grinding wheel.
- Now, the grinding wheel can be removed.
- After placing the new grinding wheel (s), tighten the nut and screw on the cover.

CAUTION



Do not use a grinding wheel with different specifications or different manufacture! This can lead to injuries. Service should be carried out by a specialist.

11.3 Storage

NOTICE



Improper storage can damage and destroy important components. Store packed or unpacked parts only under the intended ambient conditions!

When not in use, store the machine in a dry, frost-proof and lockable place to prevent possible damage and to ensure that unauthorised persons, especially children, cannot have access to the machine.

11.4 Disposal



Never dispose of the machine, machine components or equipment in residual waste. Observe the national disposal regulations. In certain countries retailers are obliged to dispose of your old machine properly, when you buy a new one. In doubt, contact your local authorities for information on the possibilities of legally compliant disposal.



20 ERSATZTEILE / SPARE PARTS

PIEZAS DE RECAMBIO / PIÈCE DE RECHANGE

20.1 Ersatzteilbestellung / spare parts order

Pedido de piezas / Commande de pièce de rechange

(DE) Mit HOLZMANN-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. **Oder nutzen sie die Online-Bestellmöglichkeit über den Ersatzteilkatalog bzw. Ersatzteilanforderungsformular auf unserer Homepage**

[Bestelladresse](#) sehen Sie unter [Kundendienstadressen](#) im Vorwort dieser Dokumentation.

(EN) With original HOLZMANN 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 formula you can find in the last chapter of this manual. Always take a note of the machine type, spare parts number and part name. We recommend to copy the spare parts diagram and mark the spare part you need. **Or use the electronic ordering opportunity via the spare parts catalogue or spare parts request form on our homepage**

[You find the order address in the preface of this operation manual.](#)

(ES) Con las piezas de recambio de Holzmänn, utiliza piezas de recambio que se ajustan perfectamente entre sí. El ajuste óptimo de los componentes acorta el tiempo de instalación y aumenta la vida útil.

AVISO

¡La instalación de piezas de recambio no originales lleva a la pérdida de garantía!

Por lo tanto: Al llevar a cabo la sustitución de componentes/piezas, utilice únicamente piezas de recambio originales

Para pedir piezas de recambio utilice el formulario del servicio de atención al cliente que encontrará al final del presente manual. Indique siempre el tipo de máquina, la referencia de la pieza de recambio y la denominación. Para evitar malentendidos, se recomienda adjuntar al pedido una copia del esquema de piezas de recambio en el que se marque claramente las piezas de recambio necesarias. **O utilice la opción de pedido online a través del catálogo de piezas de recambio o del formulario de solicitud de piezas de recambio que encontrará en nuestra página web**

[Encontrará la dirección de pedidos en las direcciones del servicio postventa que se encuentra en el prólogo de esta documentación.](#)

(FR) Avec des pièces de rechange de HOLZMANN vous utilisez toujours des pièces qui sont parfaitement adaptés. L'ajustement parfait des pièces permet de raccourcir les temps d'installation et d'augmenter la durée de vie de la machine.

IMPORTANT

L'installation de pièces de rechange non d'origine annule la garantie !

Utiliser toujours des pièces de rechange d'origine !

Pour commander des pièces détachées, s'il vous plaît utiliser le formulaire de service qui est la fin de ce manuel. Toujours entrer le type de machine et le numéro de la pièce de rechange et le nom de



la pièce. Pour éviter les malentendus, il est recommandé une copie du schéma de vue explosé dans lequel vous marquez clairement les pièces de rechange nécessaires.

[Vous trouverez notre adresse sur la préface de ce manuel.](#)

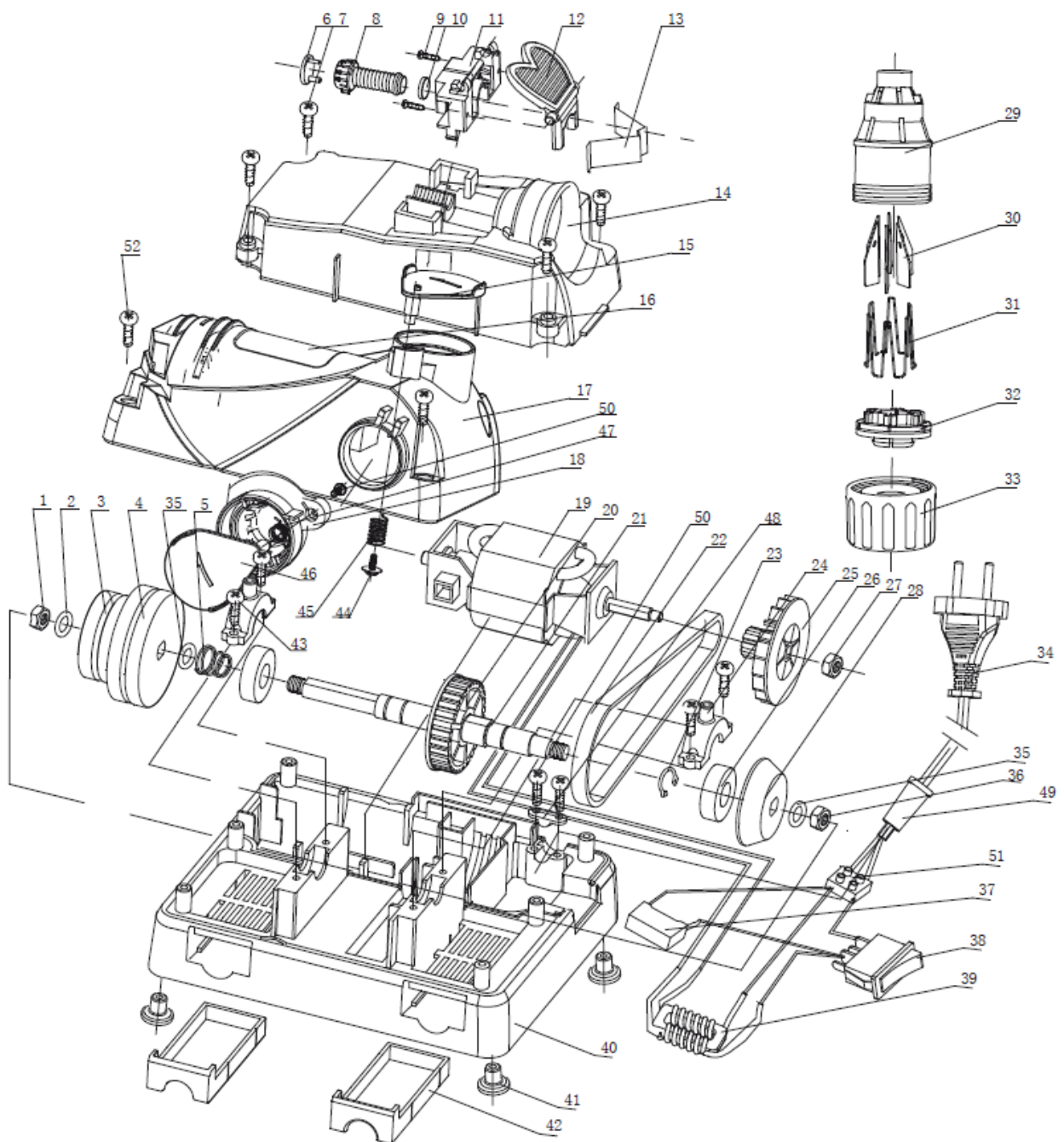
(DE) Den elektronischen Ersatzteilkatalog finden Sie auf unserer Homepage (Ersatzteile)

(EN) For electronic spare-parts catalogue please refer to our homepage (spare-parts)

(ES) Encontrará el catálogo electrónico de piezas de recambio en nuestra página web (piezas de recambio)

(FR) Vous pouvez trouver le catalogue électronique des pièces détachées sur notre page d'accueil (pièces détachées)

20.2 Explosionszeichnung / Exploded view





No.	Specification	No.	Specification
1	Anti-slip screw nut	27	Hexangular nut
2	Washer	28	Grinding wheel for drills
3	Grinding wheel for scissors	29	Drill adapter
4	Grinding wheel for knives	30	Clamp plate A
5	Spring	31	Clamp plate B
6	Scale plate	32	Lock base
7	Tapping screw	33	Lock knob
8	Threaded rod	34	Cable & plug
9	Tapping screw	35	Washer
10	Cover	36	Nut
11	Base	37	Capacitance
12	Fixation button	38	Switch
13	Fixation clamp	39	Electric cell
14	Upper housing A	40	Base housing
15	Drill hole cover	41	Shock absorber plate
16	Data plate	42	Dust catcher drawer
17	Upper housing B	43	Tapping screw
18	Sharpening base	44	Tapping screw
19	Motor	45	Spring
20	Gear	46	Sharpening base
21	Running shaft	47	Spring
22	In-phase belt	48	Crimp terminal
23	Spring ring	49	Cable sleeve
24	Bearing tip cover	50	Tapping screw
25	Main shaft wheel	51	Terminals
26	Bearing	52	Screw