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Originalfassung

DE BETRIEBSANLEITUNG **HANDKREISSÄGE**

Übersetzung / Translation

EN USER MANUAL **CIRCULAR HAND SAW**

HKS 210L

Edition: 11.11.2020 – Revision - 00 – RaR - DE/EN

2 SICHERHEITSZEICHEN / SAFETY SIGNS

DE SICHERHEITSZEICHEN
BEDEUTUNG DER SYMBOLE

EN SAFETY SIGNS
DEFINITION OF SYMBOLS

DE **CE-KONFORM:** Dieses Produkt entspricht den EU-Richtlinien.

EN **EC-CONFORM:** This product complies with the EC-directives.

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.

DE **Schutzausrüstung tragen!**

EN **Protective clothing!**

DE **Maschine vor Wartung und Pausen ausschalten und Netzstecker ziehen!**

EN **Stop and pull out the power plug before any break and engine maintenance!**

DE **Bedienung mit Handschuhen verboten!**

EN **Operation with gloves forbidden!**

DE **Warnung vor Schnittverletzungen!**

EN **Warning about cut injuries!**

DE **Schutzklasse II!**

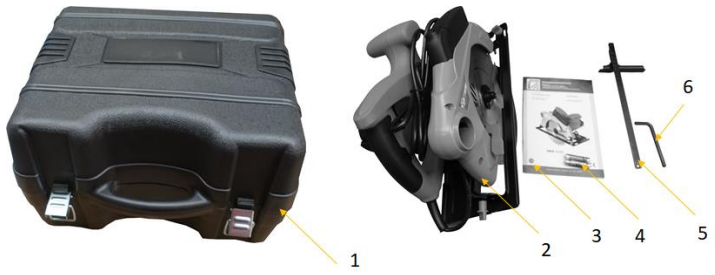
EN **Protection class II!**

DE **Laserklasse 2!**

EN **Laser class II!**

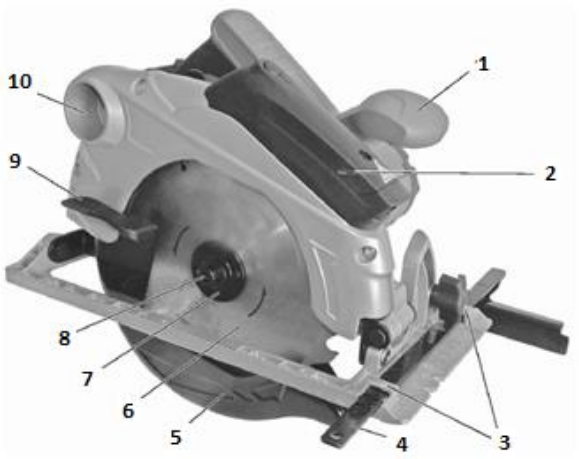
3 TECHNIK / TECHNIC

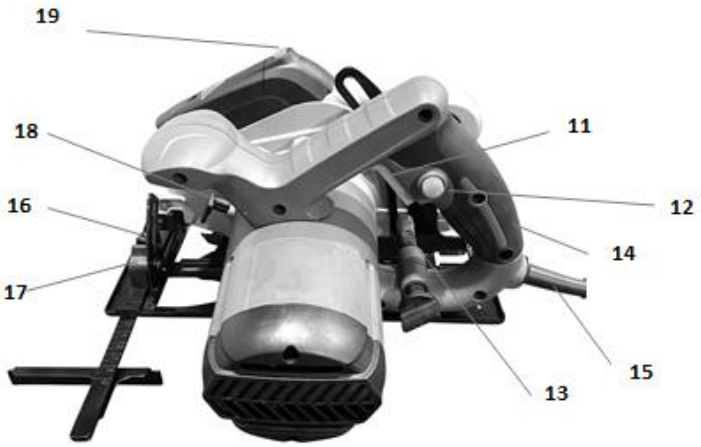
3.1 Lieferumfang / delivery content



HKS210L	
1	Koffer / box
2	Maschine mit Sägeblatt / machine with saw blade
3	Bedienungsanleitung / manual
4	2x AAA Batterie / 2 x AAA battery
5	Parallelanschlag / parallel stop
6	Werkzeug / tool

3.2 Komponenten / components





HKS 210L			
1	Zusatzgriff / additional handle	**11**	EIN-AUS-Schalter Maschine / ON-OFF-Switch machine
2	Lasereinheit / laser unit	**12**	Taste Sicherheitsverriegelung / button for safety lock
3	Führungsöffnungen für Parallelanschlag Guide openings for parallel stop	**13**	Verriegelung Schnitttiefenbegrenzer / Lock button depth adjustment
4	Parallelanschlag / parallel stop	**14**	Handgriff / handle
5	Sägeblattschutz / saw blade guard	**15**	Anschlusskabel / power cable
6	Sägeblatt / saw blade	**16**	Fixierschraube Parallelanschlag / Retaining screw for parallel stop
7	Außenflansch / outer flange	**17**	Verriegelung Schnittwinkel / Lock lever cutting angle
8	Flanschschraube mit Distanzscheibe / Flange screw with washer	**18**	Spindelarretierung / spindle lock
9	Hebel für Sägeblattschutz / lever for saw blade guard	**19**	EIN-AUS-Schalter Lasereinheit / ON-OFF-Switch laser unit
10	Absauganschluss / dust collector plug		

3.3 Technische Daten / Technical data

HKS210L	
Spannung / voltage	230 V / 50 Hz
Motorleistung / motor power	1800 W
Leerlaufdrehzahl Sägeblatt / idle speed saw blade	4500 min^{-1}
Sägeblatt-Dimension / saw blade dimension	Ø 210 / Ø 30 / 24T
Schnitttiefe 0° (45°) / cutting depth 0° (45°)	70 (48) mm
Schwenkbereich / tilting range	0° - 45°
Gewicht (Netto) / weight (net)	5,4 kg
Gewicht (Brutto) / weight (gross)	8,0 kg
Schutzklasse / protection class	II
IP-Schutzart / IP-protection class	IP20
Schallleistungspegel / sound power level L_{WA}	107,35 dB(A) k: 3dB(A)
Schalldruckpegel / sound pressure level L_{PA}	96,35 dB(A) k: 3 dB(A)
Vibration a_h (Handgriff / Zusatzgriff) Vibration a_h (handle / additional handle)	2,1 / 3,07 m/s² k: 1,5 m/s²
Lasereinheit / Laser unit:	
Spannungsversorgung / voltage supply	3 V / DC (2 x AAA; Batterie, battery)
Laser Klasse / laser class	Class II
Norm / Standard	EN 60825-1:2014
Laserwellenlänge / wavelength of laser	650nm
Laserleistung / laser output	< 1 mW

(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.

Der in dieser Betriebsanleitung angegebene Schwingungspegel ist entsprechend einem in EN 60745 genormten Messverfahren gemessen worden und kann für den Vergleich von Elektrowerkzeugen miteinander verwendet werden. Er eignet sich auch für eine vorläufige Einschätzung der Schwingungsbelastung. Der angegebene Schwingungspegel repräsentiert die hauptsächlichen Anwendungen des Elektrowerkzeugs. Wenn allerdings das Elektrowerkzeug für andere Anwendungen, mit abweichenden Einsatzwerkzeugen oder ungenügender Wartung eingesetzt wird, kann der Schwingungspegel abweichen. Dies kann die Schwingungsbelastung über den gesamten Arbeitszeitraum deutlich erhöhen. Für eine genaue Abschätzung der Schwingungsbelastung sollten auch die Zeiten berücksichtigt werden, in denen das Gerät abgeschaltet ist oder zwar läuft, aber nicht tatsächlich im Einsatz ist. Dies kann die Schwingungsbelastung über den gesamten Arbeitszeitraum deutlich reduzieren. Legen Sie zusätzliche Sicherheitsmaßnahmen zum Schutz des Bedieners vor der Wirkung von Schwingungen fest wie zum Beispiel: Wartung von Elektrowerkzeug und Einsatzwerkzeugen, Warmhalten der Hände, Organisation der Arbeitsabläufe.

(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.

The vibration emission level given in this user manual has been measured in accordance with a standardised test given in EN 60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure. The declared vibration emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period. However if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ. This may significantly decrease the exposure level over the total working period. Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep the hands warm, organisation of work patterns

10 PREFACE (EN)

Dear Customer!

This manual contains information and important instructions for the installation and correct use of the circular hand saw HKS 210L, hereinafter referred to as "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!

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

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11 SAFETY

This section contains information and important notes on safe commissioning and handling of the machine.

For your personal safety, please read these operating instructions carefully before commissioning. This will enable you to handle the machine safely and prevent misunderstandings as well as personal injury and damage to property. Also observe the symbols and pictograms used on the machine as well as the safety and danger information!

11.1 Intended Use

The machine is intended exclusively for the following activities:

Sawing straight cuts in wood, wood-type materials and plastics. Work on the different materials with suitable blades only.

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

11.1.1 Technical Restrictions

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

Rel. Humidity:	max. 65 %
Temperature (operational)	+5° C bis +40° C
Temperature (Storage, Transport)	-20° C bis +55° C

11.1.2 Prohibited Use / Forseeable Misuse

- Operation of the machine without adequate physical and mental aptitude
- Operating the machine without knowledge of the operating instructions
- Changes in the design of the machine
- Operating the machine in a potentially explosive environment (machine can generate ignition sparks during operation)
- Operation of the machine in closed rooms without chip and dust extraction (a normal household vacuum cleaner is not suitable as an extraction device).
- Operating the machine outside the limits specified in this manual
- Remove the safety markings attached to the machine.
- Modify, circumvent or disable the safety devices of the machine.
- Cutting of materials with dimensions outside the limits specified in this manual
- Use of tools which do not meet the safety requirements of the standard for machine tools for woodworking (EN847-1).
- Use of saw blades made of HSS steel.
- cutting firewood and round workpieces
- Use of saw blades with a lower permitted speed than 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.

11.2 Safety instructions

Missing or non-readable security stickers have to be replaced immediately!

The locally applicable laws and regulations may specify the minimum age of the operator and limit the use of this machine!

To avoid malfunction, machine defects and injuries, read the following security instructions!

Work area safety:

- Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Electrical safety:

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.

- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges and moving parts. Damaged or entangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

Personal safety:

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- If devices are provided for the connection of dust collectors and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

Power tool use and care:

- Do not overload the machine. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

Safety warnings for circular saws:

- Keep hands away from cutting area and the blade. Keep your second hand on auxiliary handle, or motor housing. If both hands are holding the saw, they cannot be cut by the blade.
- Do not reach underneath the workpiece. The guard cannot protect you from the blade below the workpiece.
- Adjust the cutting depth to the thickness of the workpiece. Less than a full tooth of the blade teeth should be visible below the workpiece.
- Never hold piece being cut in your hands or across your leg. Secure the workpiece to a stable platform. It is important to support the work properly to minimize body exposure, blade binding, or loss of control.
- Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will also

make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- When ripping, always use a rip fence or straight edge guide. This improves the accuracy of cut and reduces the chance of blade binding.
- Always use blades with correct size and shape of arbour holes. Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.
- Never use damaged or incorrect blade washers or bolt. The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.
- Check saw blade guard for proper closing before each use. Do not operate the saw if lower guard does not move freely and close instantly. Never clamp or tie the saw blade guard into the open position. If saw is accidentally dropped, saw blade guard may be bent. Raise the saw blade guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- Check the operation of the saw blade guard spring. If the guard and the spring are not operating properly, they must be serviced before use. The saw blade guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.
- The saw blade guard may be retracted manually only for special cuts such as "plunge cuts and angle cuts". Raise the saw blade guard by retracting the handle and as soon as the blade enters the material, release the saw blade guard.
- For all other sawing operations, the saw blade guard should operate automatically.
- Always observe that the saw blade guard is covering the blade before placing saw down on bench or floor. An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.
- Do not reach into the chip ejector with your hands. They could be injured by rotating parts.
- Do not work overhead with the saw. In this manner you do not have sufficient control over the power tool.
- Use suitable detectors to determine if utility lines are hidden in the work area or call the local utility company for assistance. Contact with electric lines can lead to fire and electric shock. Damaging a gas line can lead to explosion.
- Penetrating a water line causes property damage or may cause an electric shock.
- Do not operate the power tool stationary. It is not designed for operation with a saw table.
- Do not use high speed steel (HSS) saw blades. Such saw blades can easily break.
- Do not saw ferrous metals. Red hot chips can ignite the dust extraction.
- When working with the machine, always hold it firmly with both hands and provide for a secure stance. The power tool is guided more secure with both hands.
- Secure the workpiece. A workpiece clamped with clamping devices or in a vice is held more secure than by hand.
- Always wait until the machine has come to a complete stop before placing it down. The tool insert can jam and lead to loss of control over the power tool.

11.3 Remaining risk factors

Despite their intended use, certain residual risks remain. The following hazards may arise in connection with the machine´s construction and design:
- Risk of injury due to sharp edges of the workpiece, especially in non-fixed with a suitable tool / device workpiece.
- Risk of injury due to dust emissions, treated with harmful agents workpieces.
- Risk of injury to the eye by flying debris, even with safety goggles.
- Risk of injury due to kickback:

Kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator; When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator;
If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator.
Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.
- Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade. Kickback

could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.

- When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or kickback may occur. Investigate and take corrective actions to eliminate the cause of blade binding.
- When restarting a saw in the workpiece, centre the saw blade in the kerf and check that saw teeth are not engaged into the material. If saw blade is binding, it may walk up or kickback from the workpiece as the saw is restarted.
- Support large panels to minimise the risk of blade pinching and kickback. Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.
- Do not use dull or damaged blades. Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.
- Blade depth and bevel adjusting locking levers must be tight and secure before making cut. If blade adjustment shifts while cutting, it may cause binding and kickback.
- Use extra caution when sawing into existing walls or other blind areas. The protruding blade may cut objects that can cause kickback.

These risk factors can be minimized through obeying all security and operation instructions, proper machine maintenance, proficient and appropriate operation by persons with technical knowledge and experience.
In spite of all safety is and remains her healthy common sense and their corresponding technical qualification / training for use of the machines most important safety factor!

12 OPERATION

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 machine receipt and unpacking before putting the machine into operation. Please understand that later claims cannot be accepted anymore.

12.1 Operation instructions

NOTICE

- Perform all maintenance machine settings with the machine being disconnected from the power supply
- Immediately release the ON-OFF switch in case of malfunctions and pull the mains plug.
- Wait before starting to saw, until the saw blade has reached its maximum speed.
- Using the machine cut only in forward direction and never in backward direction.
- Allow the saw blade to stop completely before lifting the machine from the workpiece. Make sure that the saw blade guard covers the saw blade completely after sawing.
- Carefully check the material to be cut. Foreign bodies such as nails, screws or similar can seriously damage the machine.
- The cutting depth should be somewhat greater than the workpiece thickness while cutting wood.
- Always check the cutting depth for defective part before cutting the workpiece.

LASER:

- Do not look directly into the laser beam. Never direct the laser beam at people or objects other than the workpiece.
- Do not deliberately point the laser beam at people.
- Only point the laser beam at insensitive workpieces with a dull surface. Wood or rough surfaces are ideal for this. Shiny, reflective surfaces are not suitable for using a laser since the laser beam could be directed at the user by the reflective surfaces.

Always switch off the laser when you have finished work at the ON/OFF switch for the laser light.

12.2 Operation

Machine to be operated in a perfect state only. Inspect the device visually every time it is to be used. Check in particular the safety equipment, electrical controls, electric cables and screwed connection for damage and if tightened properly. Replace any damaged parts before operating the device.

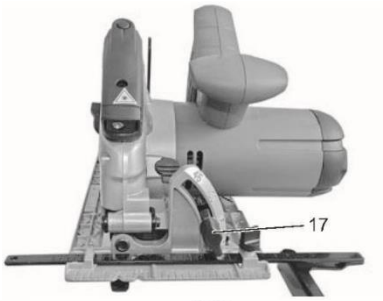
12.3 Settings

12.3.1 Cutting depth

Make sure that the depth of the saw blade is properly set for different materials!

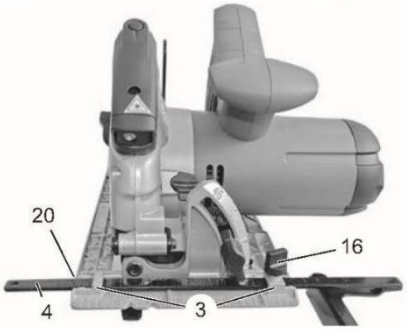
- Open locking of the depth adjustment button (13).
- Set the cutting depth to the required value.
- Close locking of the depth adjustment button (13) again.

12.3.2 Cutting angle



- Open the cutting angle locking mechanism (17).
- Set the cutting angle to the required value.
- Close the cutting angle locking mechanism (17).

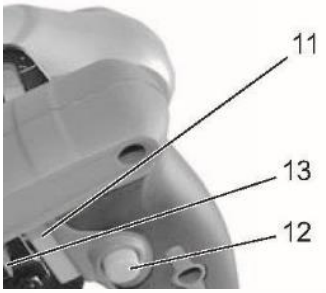
12.3.3 Parallel stop



The parallel stop can be used for the exact cutting of the tool. The parallel stop can be mounted on the product from both the side. The length specification on the parallel stop is only rough measurement.

- Undo the retaining screw (16).
- Guide the parallel stop (4) through the guide openings (3).
- Read desired measurement on marking (20).
- Tighten the attachment screw (16).

12.4 Switching ON / OFF

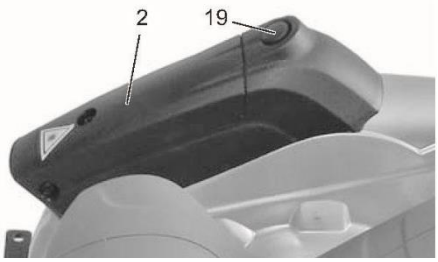


- Press the safety lock button (12)
- Press the ON-OFF-switch (11).

Lock key is integrated in the on-off switch (11) for better handling of the product. Switch on the product and firmly hold the lock key.

- To switch off release ON-OFF-switch.

12.5 Switching laser ON / OFF



- Push the on/off switch for the laser unit (19). The laser unit is activated.
- Push the on/off switch for the laser unit (19). The laser unit is deactivated.

12.6 Sawing

- Adjust desired cutting depth of the saw blade.
- Mount parallel stop (4) if required and adjust the distance from the saw blade.
- Set and align machine on workpiece.
- Switch on the machine.
- Penetrating saw blade into workpiece.
- Push machine towards the front and saw through workpiece in one work step.
- Switch of the machine.

13 MAINTENANCE

WARNING

Danger due to electrical voltage! Handling at the machine with upright power supply can lead to serious injuries or death. Always disconnect the machine from the power supply before cleaning, servicing or maintenance work and secure it against unintentional reconnection!

The machine does not require extensive maintenance. If malfunctions and defects occur, let it be serviced by trained persons only.

Check regularly the condition of the security stickers. Replace them if required.

Check regularly the condition of the machine!

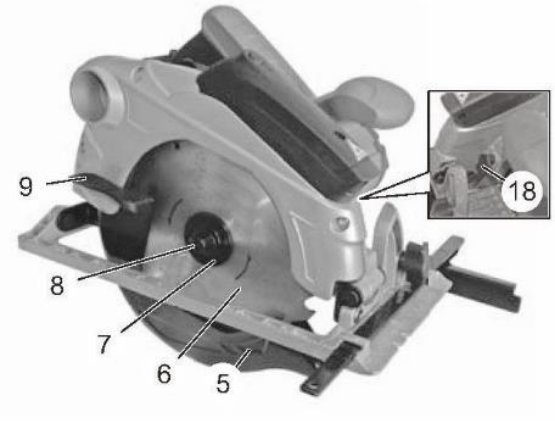
13.1 Changing saw blade

- Push and hold down spindle locking (18).
- Unscrew the flange screw with the washer (8) in counter-clockwise direction with the spindle lock (18) pressed and screw out of the shaft.
- Remove the flange screw with the washer (8).
- Remove the outer flange (7).

CAUTION

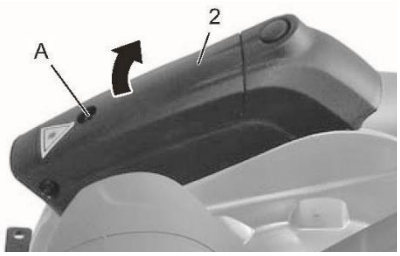
Risk of injury! Wear protective gloves when changing the saw blade.

- Pull back the lever for the saw blade guard (9) and hold.
- Take the saw blade (6) off the shaft and remove it from the machine.
- Attach new saw blade (6) on shaft. Pay attention to the rotational direction of the saw blade!
- Carefully release the lever for the saw blade guard (9).
- Push and hold down spindle locking (18).
- Place the outer flange (7) onto the shaft in correct position.
- Screw the flange screw with the washer (8) in clockwise direction into the shaft with the spindle lock (18) pressed and tighten with the enclosed tool.



13.2 Changing the batteries

- Loosen the screw (A) and remove the laser unit cover (2).
- Remove the batteries and insert new ones. Pay attention to correct polarity!
- Attach the laser unit cover (2) and secure with the screw (A).



13.3 Cleaning

NOTICE

The usage of certain solutions containing ingredients damaging metal surfaces as well as the use of scrubbing agents will damage the machine surface!

Never use running water or a high pressure cleaner to clean the machine

- After each use, clean the machine using a dry cloth or a brush if the machine is very dirty.
- Keep the ventilation slits clean and dustfree.

13.4 Storage

NOTE

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

When not in use, store the machine in a dry, frost-proof and lockable place to prevent the formation of rust on the one hand and to ensure that unauthorised persons and in particular children have no access to the machine.

13.5 Disposal

Observe the national waste disposal regulations. Never dispose of the machine, machine components or operating materials (like oil, batteries…) in residual waste. If necessary, contact your local authorities for information on the disposal options available.

If you buy a new machine or an equivalent device from your specialist dealer, he is obliged in certain countries to dispose of your old machine properly.

14 TROUBLESHOOTING

WARNING

Danger due to electrical voltage! Manipulating the machine with the power supply up can lead to serious injuries or death. Always disconnect the machine from the power supply before carrying out any troubleshooting work!

Many possible sources of error can be excluded in advance if the machine is properly connected to the mains. If you are unable to carry out necessary repairs properly and/or do not have the required training, always consult a specialist to correct/solve the problem!.

Trouble	Possible cause	Solution
Motor is not running	• Schalter defekt	• Repair switch
	• Power supply is off	• Repair power supply
	• Motor overheated	• Eliminate cause of the overheating, let cool down for a few minutes, then switch on again.
	• Machine overloaded	• Eliminate the cause of the overloading.
Saw power too low	• Saw blade blunt	• Replace saw blade
	• saw blade is not suitable for the material	• Replace saw blade
The saw vibrates severely	• Saw blade contorted	• Replace saw blade
	• Saw blade fitted incorrectly	• Fit the saw blade correctly

15 ERSATZTEILE / SPARE PARTS

15.1 Ersatzteilbestellung / spare parts order

(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

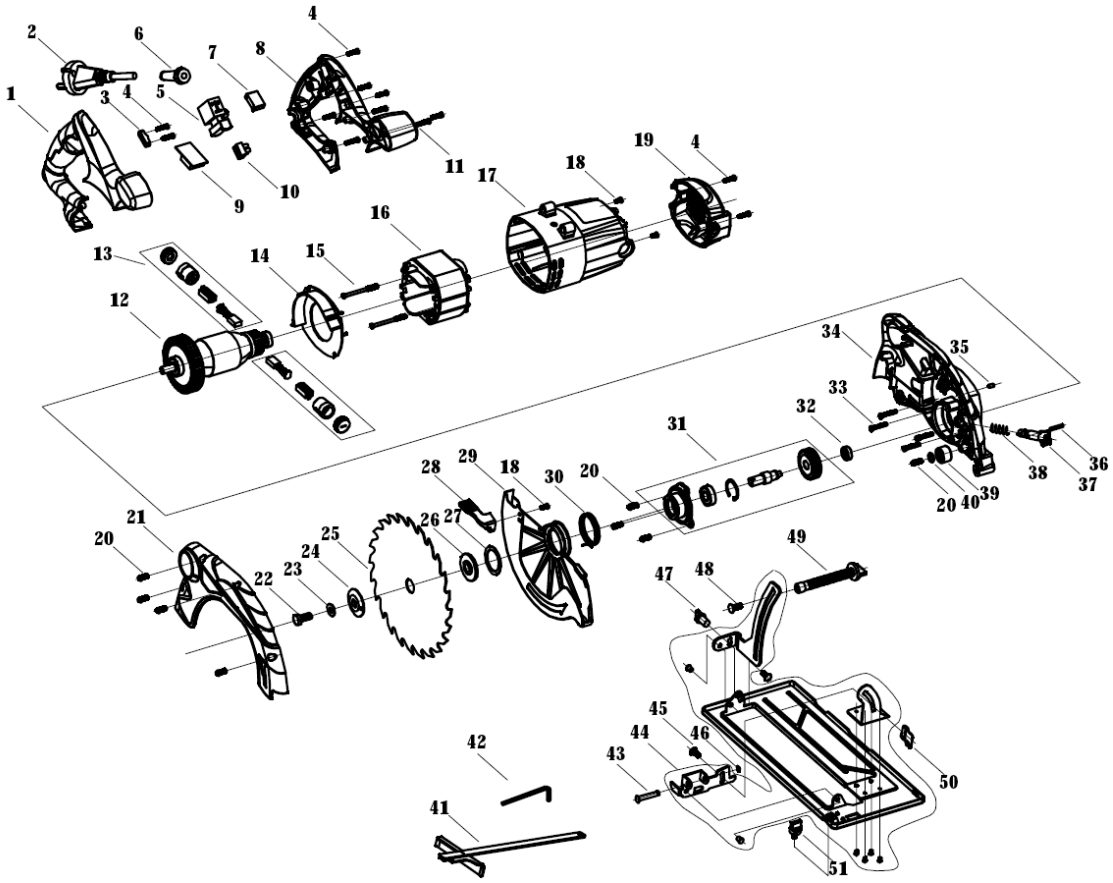
The installation of other than original spare parts voids the warranty!

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.

15.2 Explosionszeichnung / explosion drawing



Nr.	Name	Qty.	Nr.	Name	Qty.
1	Left handle	1	27	Movable shield coil spring	1
2	VDE plug and cable	1	28	Spanner	1
3	Tension disc	1	29	Movable shield assembly	1
4	Screw ST4x16	9	30	Screw ST4x10	1
5	Switch	1	31	Movable shield torsional spring	1
6	Cable sheath	1	32	Gear assembly	1
7	Capacitance	1	33	Screw ST4x25	4
8	right handle	1	34	Left head shell	1
9	Soft start plate	1	35	Rubber column	1
10	Binding post	1	36	Elastic cylindrical pin	1
11	Screw ST4x20	3	37	Shaft lock	1
12	Rotor assembly	1	38	Shaft lock spring	1
13	Carbon brush assembly	2	39	Stopping pad	1
14	Wind ring	1	40	Flat gasket	1
15	Screw ST5x55	2	41	Guide ruler assembly	1
16	Stator assembly	1	42	In six angle wrench	1
17	Housing	1	43	Connecting pin	1
18	Screw ST4x8	2	44	base plate assembly	1
19	Back cover	1	45	screwM5x12	2
20	Screw M5x12	8	46	Check ringØ6	1
21	Right head shell	1	47	Spanner I	1
22	Screw M8x14	1	48	screwM6x16	1
23	Gasket	1	49	Depth spanner	1
24	Upper splint	1	50	Spanner II	1
25	Saw blade	1	51	Guide ruler spanner	1
26	Lower splint	1			