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Originalfassung

**DE BETRIEBSANLEITUNG** 

**ZUG - KAPP- & GEHRUNGSSÄGE** 

Übersetzung / Translation

**EN USER MANUAL** 

**DRAW CUT MITRE SAW** 



 $\epsilon$ 

KAP305ECO





# 2 SICHERHEITSZEICHEN / SAFETY SIGNS / SIGNALISATION DE SÉCURITÉ

**DE** SICHERHEITSZEICHEN
BEDEUTUNG DER SYMBOLE

**EN** SAFETY SIGNS DEFINITION OF SYMBOLS

FR SIGNALISATION DE SÉCURITÉ DEFINITION DES SYMBOLES



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

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

FR CONFORME CE! - Ce produit est conforme aux Directives CE.

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.

**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.



DE Verletzungsgefahr! Nicht in das laufende Sägeblatt greifen

EN Danger of injury! Do not touch the running saw blade

FR Risque de blessure! Ne pas mettre la main dans la lame de scie en marche!



DE Schutzausrüstung tragen!

EN Protective clothing!

FR Porter un équipement de sécurité!











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!



DE Gefährliche elektrische Spannung!

EN High voltage!

FR Haut voltage!



DE Warnung vor Schnittverletzungen!

EN Warning about cut injuries!

FR Risque de coupure!



DE Schutzklasse II!

EN Protection class II!

FR Classe de protection II!



DE Laserklasse 2! EN Laser class II!

FR Laser classe 2!

DE Warnschilder und/oder Aufkleber an der Maschine, die unleserlich sind oder die entfernt wurden, sind umgehend zu erneuern!

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



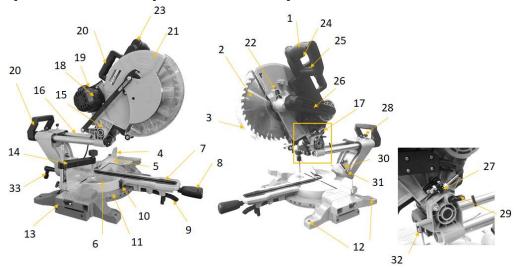
## 3 TECHNIK / TECHNIC / CARACTERISTIQUES TECHNIQUES

## 3.1 Lieferumfang / Delivery-content / Contenu de la livraison



#		Qty
1	Maschine / machine	1
2	Betriebsanleitung / manual	1
3	Werkstückniederhalter / Workpiece down holder	1
4	Staubsack / dust bag	1
5	Werkzeug / Tool	1
6	Werkstückausleger / Extension bracket	2
7	Kohlebürsten / carbon brushes	2

## 3.2 Komponenten / components / Composants



KAP 305ECO							
1	Bediengriff / Handle	17	Staubsack / Dust bag				
	Poignée		Sac à copeaux				
2	Sägeblatt / saw blade	18	Kohlebürstenhalter / Carbon brush holder / Couvercle				
	Lame de scie		de balai de charbon				
3	Sägeblattschutz (beweglich) / blade guard	19	Motor / motor				
	(moveable) / Couvercle de protection de la		Moteur				
	lame (mobile)						
4	Anschlag (einstellbar) Fence (adjutable)	20	Transportgriff / transport handle				
	Guide butée (réglable)		Poignée de transport				
5	Anschlag / Fence	21	Sägeblattschutz (oben) / Upper blade guard /				
	Guide		Protection de lame de scie (en haut)				
6	Drehtisch / Table (moveablbe)	22	Wellenverriegelungsknopf / spindle lock button /				
	Table (mobile)		Bouton de verrouillage de l'arbre				
7	Tischeinlage / Table insert	23	Entriegelungsknopf Ein-Schalter /Release lever ON-				
	Insert de table		switch / Levier de dégagement de l'unité de scie				
8	Gehrungswinkelverriegelung / Miter lock /	24	EIN-AUS-Schalter / On -OFF-switch				
	Verrou d'onglet		Interrupteur marche / arrêt				
9	Sperrhebel Gehrungswinkel / Miter angle lock	25	Laser Ein-Aus-Schalter / Laser ON-OFF-switch /				
	Verrou d'angle d'onglet		Interrupteur marche / arrêt du laser				
10	Gehrungswinkelindikator	26	Riemenabdeckung / Belt cover				
	Miter angle indicator		Couvercle de courroie				
	Indicateur d'angle						
11	Ģehrungswinkelskala /Miter angle scale	27	Tiefenanschlag / Cuting depth adjustment				
	Echelle d'angle		Butée de profondeur				
12	Befestigungsloch / Mounting hole	28	Zugverriegelung / Drag lock				
	Trou de montage		Vis de blocage du bras				
13	Werkstückausleger / Extension bracket	29	Entriegelungsknopf / Release knob				
	Support d'extension		Bouton de déverrouillage				
14	Werkstückniederhalter / Downholder	30	Ņeigungswinkelskala / Vertical angle scale				
	Presseur		Échelle d'angle d'inclinaison				
15	Sägearm / Saw arm	31	Einstellung Sägeaggregatneigung / Saw unit angle				
	Bras de scie		adjustment / Réglage de l'inclinaison de l'unité de scie				
16	Führungsschienen / Guide rails	32	Laser / Laser				
	Rails de guidage		Laser				



#### 3.3 Technische Daten / technical data

KAP305ECO	
Spannung / Voltage	230 V / 50 Hz
Voltage	·
Motorleistung / Motor power	1800W (S1 100%),
Puissance de moteur Schutzklasse / protection class	2000W (S6 40%)
Classe de protection	II
Schutzart / protection mode	10.30
Mode de protection	IP 20
Leerlaufdrehzahl Sägeblatt / Saw blade speed unloaded	3800 min <sup>-1</sup>
Vitesse de la lame de scie en ralenti	3000 111111
Sägeblatt / saw blade	Ø 305 mm / 40Z (2,8 mm)
Lame de scie	~ · · · · · · · · · · · · · · · · · · ·
Bohrungsø Sägeblatt / boreø saw blade	Ø 25,4 mm
Diamètre de l'arbre de la lame de scie  Arbeitstisch Winkel / horicontal swing	·
Rotation de la table	± 45°
Sägeaggregat Schwenkwinkel / tilt range	
Inclinaison de la scie	± 45°
Schnittleistung / cutting capacity 0° / 90°	330 x 105 mm
Capacité de coupe 0° / 90°	330 X 103 IIIII
Schnittleistung / cutting capacity 45° / 90°	230 x 105 mm
Capacité de coupe 45° / 90°	230 X 103 IIIII
Schnittleistung / cutting capacity 0° / 45°	330 x 60 mm
Capacité de coupe 0° / 45° Schnittleistung / cutting capacity 45° / 45°	
Capacité de coupe 45° / 45°	230 x 60 mm
Werkstückmindestgröße / workpiece minimum size	202 12 2
Taille minimale de la pièce	200 x 10 x 3mm
Anschlagdimension / fence dimension (L)	223 mm
Absauganschlussdurchmesser (innen /außen) ø / dust collection port	32,5 / 37,5 mm
diameter (inner / outer ø)	
Anschlusskabellänge / cable length	2 m
Schalldruckpegel / sound pressure level /	95dB(A) K:3dB(A)
Niveau de pression acoustique LPA Schallleistungspegel / sound power level /	
Niveau de puissance acoustique L <sub>WA</sub>	108dB(A) K:3dB(A)
Verpackungsmaße / packaging dimension	925 x 550 x 525
Maschinenmaße (L x B x H) /machine dimension (LxWxH)	Min. 890 x 615 x 490 mm
	Max. 900 x 930 x 690 mm
Gewicht (Netto) / weight (Net)	21 kg
Poids (Netto)	21 KY
Gewicht (Brutto) / weight (gross)	25 kg
Poids (Brut)	=9
LASER	Class II
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.

**(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.



## 11 PREFACE (EN)

#### **Dear Customer!**

This manual contains information and important instructions for the installation and correct use of the mitre saw KAP305ECO, hereinafter referred to as "machine".

Following the usual commercial name of the device (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!

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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#### **Customer service contact**

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#### 13 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!

#### 13.1 Intended Use of the Machine

The machine is intended exclusively for the following activities:

Cross-cut and mitre cutting of wood and materials with similar physical properties to wood within the specified 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 injuries.

#### 13.1.1 Technical Restrictions

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

Rel. Humidity: max. 65 %

Temperature (operational) +5° C bis +40° C

-20° C bis +55° C

Temperature (Storage, Transport)

#### 13.1.2 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).

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.

#### **13.2 User Requirements**

The physical and mental suitability 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 the supervision or instruction by a responsible person.

Please note that local laws and regulations may stipulate 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 instruction and supervision of a qualified electrician.



#### 13.3 Safety Devices

The machine is equipped with the following safety devices:

protective device Saw blade protection
Hold-down device and stop fence
Unlocking button Motor start

#### 13.4 General Safety Instructions

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

- Before commissioning, check the machine for completeness and function.
- Choose a level, vibration-free, non-slip surface for the installation location.
- Ensure sufficient space around the machine!
- Ensure sufficient lighting conditions at the workplace to avoid stroboscopic effects!
- Only use perfect tools that are free of cracks and other defects (e.g. deformations).
- Remove setting tools from the machine before switching on.
- Keep the area around the machine free of obstacles (e.g. dust, chips, cut workpiece parts etc.).
- Check the strength of the machine connections before each use.
- Never leave the running machine unattended. If necessary, stop the machine before leaving.
- The machine may only be operated, serviced or repaired by persons who are familiar with it and who have been informed of the dangers arising in the course of this work.
- Ensure that unauthorised persons maintain an appropriate safety distance from the machine and, in particular, keep children away from the machine..
- Wear suitable protective equipment (eye protection, dust mask, respiratory protection, ear protection, gloves when handling tools) as well as close-fitting work protective clothing never wear loose clothing, ties, jewellery, etc. danger of being drawn in!
- Work with gloves on rotating parts is not permitted!
- Hide long hair under hair protection.
- Do not remove any sections or other parts of the workpiece from the cutting area while the machine is running!
- Do not remove splinters and chips by hand! Use a sliding stick for this purpose!
- Always work with care and the necessary caution and never use excessive force.
- · Do not overload the machine!
- Do not work on the machine if you are tired, not concentrated or under the influence of medication, alcohol or drugs!
- Do not use the machine in areas where vapours from paints, solvents or flammable liquids represent a potential danger (danger of fire or explosion!).
- Do not smoke in the immediate vicinity of the machine (fire hazard)!
- Make sure that the ON/OFF switch is in the "OFF" position before connecting the machine to the power source.
- Do not use the machine if it cannot be switched on and off with the ON/OFF switch.
- Make sure that the device is earthed.



- Only use suitable extension cords.
- Always shut down the machine before carrying out any conversion, adjustment, measuring, cleaning, maintenance or repair work and always disconnect it from the power supply for maintenance or repair work. Before starting any work on the machine, wait until all tools or machine parts have come to a complete standstill and secure the machine against unintentional restarting.

#### 13.5 Electrical Safety

- Only use suitable extension cords. (cross-section 1.5mm² for length up to 25m; H05VV-F)
- A damaged or tangled cable increases the risk of electric shock. Handle the cable with care.
   Never use the cable to carry, pull or disconnect the power tool. Keep the cable away from heat, oil, sharp edges or moving parts.
- Proper plugs and sockets reduce the risk of electric shock.
- Water entry into machine increases the risk of electric shock. Do not expose machine to rain or moisture.
- The machine may only be used in humid environments if the power source is protected by a residual current circuit breaker.
- Do not use the power tool if it cannot be turned on and off with the ON/OFF switch.
- Avoid contact of the body with grounded surfaces such as pipes, radiators, ovens and refrigerators. There is an increased risk of electric shock if the body is earthed.

#### 13.6 Special Safety Instructions for Woodworking machines

- During operation of the machine wood dust is generated. Therefore, connect the machine to a suitable dust collection system for dust and chips during installation!
- Always switch on the dust collection system before you start machining the workpiece!
- Never remove sections or other parts of the workpiece from the cutting area while the machine is running.
- When using milling tools with a diameter of ≥ 16 mm and circular saw blades, these must comply with EN 847-1:2013 and EN 847-2:2013; tool carriers must comply with EN 847-3:2013;
- Excessive noise can cause hearing damage and temporary or permanent hearing loss. Wear hearing protection certified to health and safety regulations to limit noise exposure.
- Replace cracked and deformed saw blades immediately, they cannot be repaired.
- Use clean and sharpened saw blades, which are less sensitive to malfunctions and easier to quide.
- If possible, use clamps to hold/fix the workpiece. If you hold the workpiece by hand, always hold your hand at least 100 mm from both sides of the saw blade. Do not use this saw to cut parts that are too small to be securely clamped or held by hand.
- Never cross the intended cutting line in front of or behind the saw blade.
- Check your workpiece before cutting. If the workpiece is bent or warped, clamp it with the outside bent surface against the stop. Always make sure that there is no gap between the workpiece, stop and table along the cutting line. Bent or warped workpieces can twist or move and can cause jamming of the circular saw blade during cutting. There must also be no nails or foreign objects in the workpiece.
- Cut only one workpiece at the same time.
- Whenever you change the mitre angle setting, make sure that the adjustable stop for supporting the workpiece is set correctly and does not disturb the saw blade or the protective system. Without switching the machine "ON", check without moving the workpiece by moving the saw blade (completely simulated cut) that there are no disturbances or dangers when cutting at the stop.
- For a workpiece that is wider or longer than the supporting table, sufficient support such as table extensions, saw blocks, etc. must be provided.
- Always use a clamp or fixture designed to accept round material such as rods or tubes properly.
- Allow the saw blade to reach full speed before touching the workpiece.
- If the workpiece or saw blades become jammed, turn off the mitre saw immediately. Wait until all moving parts have come to a standstill and disconnect the plug from the power source, then start removing the jammed material.



- After you have finished cutting, release the switch, hold the machine head down and wait for the blade to stop before removing the cut part.
- Hold the handle firmly if you make an incomplete cut or release the switch before the machine head is fully in the down position.

#### Instructions for the use of the LASER:

- Do not look directly into the laser beam with unprotected eyes.
- Never point the laser beam at reflective surfaces or persons or animals. Even a low-power laser beam can cause eye damage.
- Never open the laser module. Unexpected exposure to the beam may occur.
- Do not replace the laser with another type of laser.
- Repairs to the laser may only be carried out by the laser manufacturer or an authorized representative.

## 13.7 Hazard Warnings

Despite their intended use, certain residual risks remain. Due to the structure and construction of the machine, hazardous situations may occur when handling the machines:

#### 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, their sound common sense and corresponding technical suitability/training are and remain the most important safety factor in the error-free operation of the machine. Safe working depends first and foremost on you!

#### 14 TRANSPORT

For proper transport, follow the instructions and information on the transport packaging regarding centre of gravity, attachment points, weight, means of transport to be used and prescribed transport position, etc.

Transport the machine in its packaging to the place of installation. When lifting, carrying and depositing the load, make sure that you are in the correct posture:

#### Lifting, Depositing

Ensure stability when lifting / setting down (legs hip width). Lift / lower load with bent knees and straight back (like weightlifter). Do not lift / lower the load jerkily.



#### Carrving

Carry load with both hands as close to body as possible. Carry load with straight back.

#### NOTICE



Transport of the unpacked machine only in transport position = saw unit in the lower position and locked by means of bolt as well as drag lock locked. Lifting the machine only by the transport handles.

#### 15 ASSEMBLY

#### 15.1 Checking scope of delivery

Check the machine immediately after delivery for transport damage and missing parts.

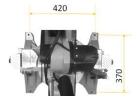
#### 15.2 The workplace

Choose a suitable place for the machine.

Pay attention to the safety requirements and the dimensions of the machine.

The selected location must ensure a suitable connection to the electrical supply as well as the possibility of connection to an extraction system. Ensure that the selected workplace (machine stand, worktop, ...) can bear the load of the machine and that the machine can be attached to it using screws (screws are not included in the scope of delivery). The machine must be levelled at all support points at the same time. In addition, a distance of at least 0.8 m around the machine must be secured all around. The necessary space for feeding long workpieces must be provided.

Hole pattern for machine mounting:



## 15.3 Assembling the machine

The machine is pre-assembled. Following assembly-steps are necessary:



#### Fasten the chip collection bag:

Press the metal ring of the chip collection bag together and pass it over the chip collection outlet. When the metal ring is released, the chip collection bag is fixed to the machine.



#### Assemble downholder

The workpiece hold-down clamp can be assembled to the left and right of the saw blade

To do this, place the downholder (1) in the hole (3) on the machine and fix it with the screw (2).

and the connection to the power supply/extraction system as well as setting up the machine at a suitable place of work and adjusting the attachments according to the work step.



#### 16 OPERATION

#### 16.1 Initial check before start

- Check that the speed of the machine is lower than the max. permissible speed of the saw blade used.
- Check saw blade rotation and saw blade dimensions to match the machine.
- Check that the saw blade guard works properly.
- Check whether the connection to a dust collection system is installed.
- Check whether the stops/fences are set correctly and the saw blade is tightened.
- Check whether the machine is fixed on the working plate or a machine stand.
  - Check whether the saw blade can run freely.

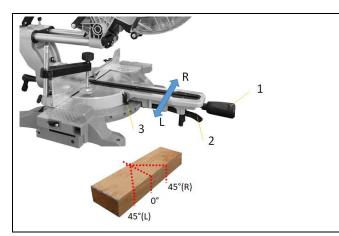
#### 16.2 Operation

#### 16.2.1 Locking / unlocking the machine head in the transport position.

By slightly pressing down the machine head (34) and simultaneously removing the locking bolt (11) from the motor holder, the saw is released from the lowest /transport position.

Note: Please hold the handle and guide the machine head slowly upwards until it reaches the uppermost position. If the handle is released, the machine head will jump up due to the spring preload. Press the machine head (34) downwards to engage and reattach the locking bolt (11).

#### 16.2.2 Setting the angular position of the worktable

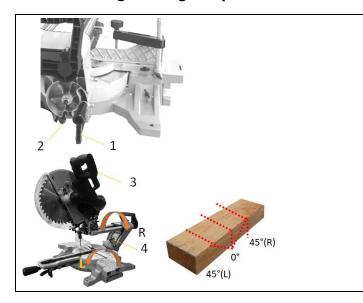


Release the locking handle (1) when it is tightened, pull the locked position lever (2) upwards and adjust the turntable to the desired angle with the locking handle.

The angle position is indicated by the pointer (3) on the turntable.

Return the locking handle to the closed position to secure the turntable.

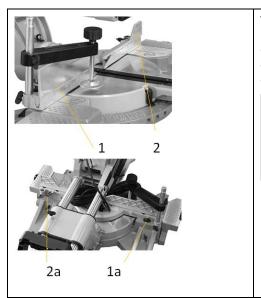
#### 16.2.3 Setting the angular position of the machine head



Release the angle lock (1). Pull the locking pin (2) and by means of the handle (3) tilt the machine head to the left or right until the desired angle (pointer position (4)) is reached. Retighten the angle locking lever (1).



#### 16.2.4 Setting the stops/fences



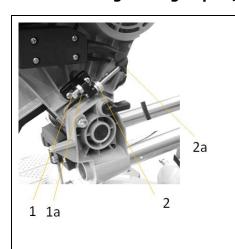
The two adjustable stops (1 and 2) must be adjusted after changing the machine head angle. To do this, loosen the fixing screws (1 and 2a) and adjust the fences so that there is a gap of at least 5 mm between the saw blade and fence. Then retighten the fixing screws to fix the stops.

#### CAUTION



Before cutting, check that the stop bars and the saw blade cannot collide. (simulated cut with switch-off machine)

#### 16.2.5 Setting cutting depth / cutting depth limiting



The cutting depth can be adjusted continuously with the screw (2a). To do this, loosen the thumb nut (2) on the screw (2a). Turn the screw (2a) in or out to set the desired cutting depth. Then retighten the thumb nut (2).

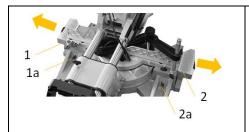
The lowest cutting depth limit is adjusted by means of screw 1. To do this, loosen the nut (1a) and screw in the screw for a deeper cutting position, screw out the screw for a higher cutting position and then fix it again by tightening the nut (1a).

#### NOTICE



Check the setting by performing a test cut.

#### 16.2.6 Setting the workpiece support



The workpiece support (1,2) can be adjusted in its position in relation to the table. To do this, loosen the screw (1a, 2a), pull out the workpiece support or move it to the rotary table and then fix it in the required position by tightening the screw (1a, 2a).

#### 16.2.7 Connection to a dust collection system

For dust extraction in closed rooms, connect a suction hose to the dust extraction nozzle and fix it with a hose clamp. Connection dimensions according to technical data.



#### 16.2.8 Switch machine ON-OFF



Switch the machine ON:

Press the locking button (1) and then press and hold down the ON/OFF button (2) on the handle.

Switch the machine OFF:

Release the ON-OFF switch (2)

#### 16.2.9 Switch Laser ON-OFF



Switch the laser on/off with switch (1). Switch in position 0: Laser switched off switch in position 1: laser switched on

#### 16.3 Operation modes

#### 16.3.1 Mitre cuts

Mitre are particularly suitable for cutting small workpieces (approx. 100 mm) to length.

• For cross-cut cuts, the sliding mechanism is fixed by the fixation screw (1) so that the saw unit cannot slide forwards or backwards during the cut.



- Adjust the angle setting according to the desired operation and adjust the stops/fences accordingly.
- Mark the cutting line (by laser).
- Place workpiece against stop/fence and table and fix with the clamp device.
- Move the machine head to the uppermost position.
- Switch on the machine and wait until the saw blade has reached full speed (approx. 5 sec.),
- Make the crosscut (move the machine head downwards) until it has reached the lowest position.
- Move the machine head to the uppermost position.

#### NOTE



Machine head is spring loaded, do not simply release the machine head, instead move the handle upwards until the uppermost position is reached (rest position).

- Release the ON-OFF switch and wait until saw blade comes to stand still.
- Remove workpiece

#### 16.3.2 Sliding cuts

Sliding cuts are suitable for cutting longer workpieces.



• For that kind of cuts, the sliding mechanism is unlocked by releasing the fixation screw (1) so that the saw unit can slide forwards or backwards during the cut.



- Adjust the angle setting according to the desired operation and adjust the stops/fences accordingly.
- Mark the cutting line (by laser).
- Place workpiece against stop/fence and table and fix with the clamp device.
- Move the machine head to its uppermost position and pull the machine head towards you.
- Switch on the machine and wait until the saw blade has reached full speed (approx. 5 sec.),
- Make the cut (move the machine head downwards) until it has reached the lowest position and then slowly push the machine head backwards to be able to machine the wide workpiece over its entire length.
- Move the machine head to the uppermost position.

#### NOTE



Machine head is spring loaded, do not simply release the machine head, instead move the handle upwards until the uppermost position is reached (rest position).

- Release the ON-OFF switch and wait until saw blade comes to stand still.
- Remove workpiece

#### 16.3.3 Slot cuts

Set the depth stop for slot cuts so that the desired cutting depth is obtained at the selected angle.

Make the mitre or sliding cuts as described in the respective chapter with the difference that the workpiece is not completely cut through.

## 17 CLEANING, MAINTENANCE, STORAGE, DISPOSAL

#### 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!

## 17.1 Cleaning

#### NOTE



Wrong cleaning agents can attack the varnish of the machine. Do not use solvents, nitro thinners, or other cleaning agents that could damage the machine's paint. Observe the information and instructions of the cleaning agent manufacturer!

Regular cleaning is a prerequisite for the safe operation of the machine and its long service life.

• Therefore, clean the machine after each use and remove any sawdust with a brush, broom or vacuum cleaner.

#### 17.2 Maintenance

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!



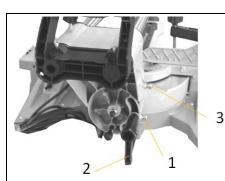
- Before each operation, check that the safety devices are in perfect condition.
- Regularly check that the warning and safety labels on the machine are in perfect and legible condition.
- Use only proper and suitable tools.
- Only use original spare parts recommended by the manufacturer.

#### 17.2.1 Maintenance schedule

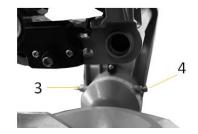
The type and degree of machine wear depend on the operating conditions. The following intervals apply when the machine is used within the specified limits:

interval	components	activity					
	Saw blade	Check for damage and replace if necessary.					
Roforo usago	Saw blade guard	Check function (see function check saw blade protection)					
Before usage	Table inlet	Check for damage and replace if necessary.					
	Cable	Check for damage and repair if necessary.					
	Maschine						
After usage	Saw blade guard	Remove dust/wood splinters and dirt					
	Chip bag						
after 50h (/ 10h)	Carbon brush	Check and replace if necessary.					
When	Saw balde	Check sharpness of saw blade and replace when					
required	Saw balue	necessary					

#### 17.2.2 Adjusting the angular position (by means of stop angle)







#### 90°-cut

Lower the machine head and secure it with the locking bolt.

- Loosen the fixing screw (1).
- Position the 90° stop angle (W) between saw blade and rotary table.
- Loosen the lock nut on the adjusting screw (1) and adjust the adjusting screw (1) until the angle between the saw blade and the rotary table is 90°.
- Retighten the lock nut.
- Then check the position of the angle indicator. If necessary, loosen the pointer with a Phillips screwdriver and move it to the 0° position on the scale and then fix it again.

#### 45°-cut

Lower the machine head and secure it with the locking bolt.

- Fix the turntable in 0° position.
- Loosen the fixing screw (2) and angle the machine head with the handle 45° to the left or right.
- Position the 45° angular stop between the saw blade and the rotary table.
- Loosen the lock nut on the adjusting screw (3 or 4) and turn the adjusting screw



#### 17.2.3 Saw blade change

#### CAUTION



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







- Swivel the machine head upwards and lock it with the locking bolt.
- Remove the screw securing the saw blade screw cover.
- Pull the movable guard downwards and then swing it upwards together with the saw blade screw cover.
- When the movable guard is above the upper fixed guard, the saw blade screw is accessible.
- Hold the movable protective hood in the upper position and lightly press the spindle locking knob (5) and turn the saw blade until the spindle lock engages.
- Loosen the flange screw by turning it clockwise. ATTENTION: Left-hand thread!
- Remove the flange screw and the flange disc.
- Remove the saw blade from the spindle.
- Place a new saw blade on the spindle. Make sure the direction of rotation is correct!
- Place the flange screw and the flange disc on the spindle and tighten counter clockwise.
- Move the movable protective hood to its initial position
- Re-attach the saw blade screw cover
- Check that the saw blade guard cover works properly and moves up and down when the saw arm is moved. (Saw arm position up Saw blade guard covers the saw).

#### CAUTION

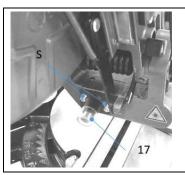


Pay attention to correct direction of rotation and dimension of the saw blade. Limits for dimension: Max. Diameter of 305mm and max. thickness of 3mm, as well as mounting diameter of 25,4mm.

- Before continuing with your work, make sure that all safety devices are in good operating condition. (Saw blade protection check)
- Important! Always when you change the saw blade, check that it rotates freely in the table insert in both cases. Vertical and  $45^{\circ}$  angle settings.
- Important! The work for changing and aligning the saw blade must be carried out correctly.

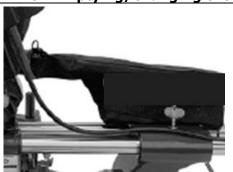


#### 17.2.4 Setting the Laser



If the laser (17) does not show the correct cutting line any more, you can adjust the laser. Loosen the Phillips screws (S) and adjust the laser by moving it sideways until the laser beam hits the teeth of the saw blade. Tighten both screws (S) again.

17.2.5 Emptying/changing the chip bag

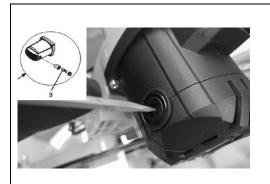


The saw is equipped with a sawdust and chip collection bag.

Attention! The sawdust/chip bag may only be used for cutting wood and wood-like materials!

Press the metal ring on the sawdust/chip bag (1) together and fasten it to the dust outlet. The chip bag can be emptied by means of a zipper.

#### 17.2.6 Check / change carbon brushes



Check the carbon brushes after the first 50 hours of operation with a new machine or when new brushes are fitted. After carrying out the first check, repeat the check every 10 hours of operation.

If the carbon is worn down to a length of 6 mm, or if the spring or contact wire is burnt or damaged, it is necessary to replace both brushes. If it turns out that the brushes can be used after removal, it is possible to remount them.

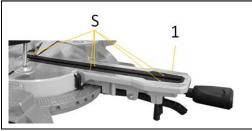
When servicing the carbon brushes, open the two locks counterclockwise. Then remove the carbon brushes. Replace the carbon brushes in reverse order.

#### 17.2.7 Exchange table insert





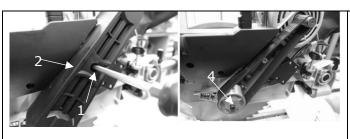
If the table insert (1) is damaged, there is a risk that small parts may become stucked between the table insert and the saw blade and block the saw blade



- 1. Remove screws (S) from the table insert (1). If necessary, turn the rotary table and machine head to reach the screws.
- 2. remove the table insert (1).
- 3 Install the new table insert (1).
- 4 Tighten the screws (S) on the table insert (1).



#### 17.2.8 Exchange V-Belt



- Loosen screw (1)
- Remove belt cover (2)
- Loosen the belt tension by turning the screws (4) counter clockwise!
- Change belts.
- Retighten the screws (4). Do not overtighten!
- Replace the belt cover and tighten all bolts

#### 17.3 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.

#### 17.4 Disposal



Observe the national waste disposal regulations. Never dispose of the machine, machine components or operating materials (like oil,...) 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.

#### 18 TROUBLESHOOTING





**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!

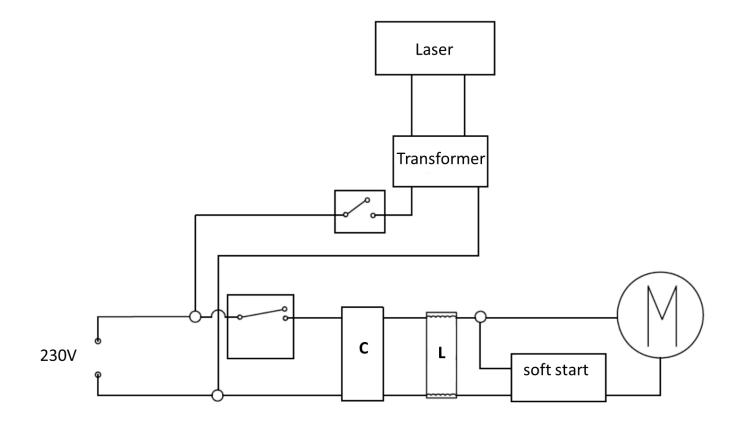
Many possible sources of error can be excluded in advance if the machine is properly connected to the mains.

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!.

Fault	Possible cause	Correction				
	No power supply	Connect to mains				
Machine doesn't start	<ul> <li>Carbon brushes defect</li> </ul>	Exchange carbon brushes				
	<ul><li>Motor defect</li></ul>	Exchange motor				
	<ul> <li>ON-OFF-switch defect</li> </ul>	<ul><li>Repair switch</li></ul>				
Workpiece kick-back	Dull saw blade	Replace saw blade				
	Wrong assembled saw blade	Check direction / assemble				
Wrong cutting angle	Angular position not correct	Adjusting the angular position				
Saw blade cuts the table	Incorrect setting of cutting depth	Adjust cutting depth				



## 19 SCHALTPLAN / WIRING DIAGRAM / SCHÉMA ÉLECTRIQUE





## 20 ERSATZTEILE / SPARE PARTS / PIÈCE DE RECHANGE

# 20.1 Ersatzteilbestellung / spare parts order / 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.

**(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 !

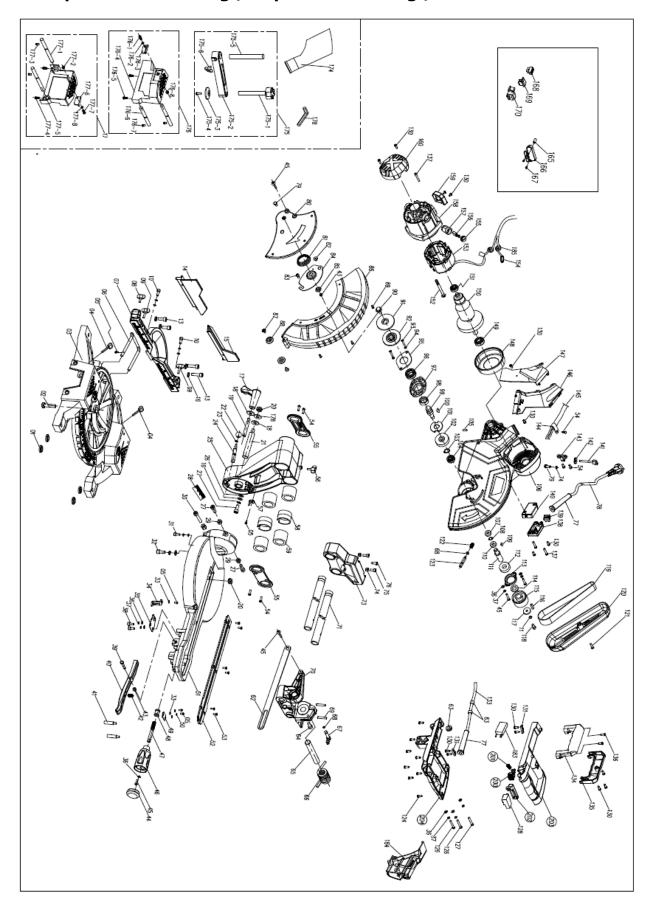
Pour commander des pièces détachées, s'il vous plaît utiliser le formulaire de service qui est la fin de ce manuel. Toujours entrer le type de machine et le numéro de la pièce de rechange et le nom de la pièce. Pour éviter les malentendus, il est recommandé une copie du schéma de vue explosé dans lequel 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



## 20.2 Explosionszeichnung / explosion drawing / Vue éclatée





#		Qty	#		Qty	#		Qty	#		Qty
1	Foundation washer	4	51	Disc	1	102	Large gear	1	155	Brush holder cover	2
2	M10*40 outer hexagon screw	1	52	Table insert	1	103	16 circlip for shafts	1	156	Carbon brush	2
3	Base	1	53	M4*10 grub screw	6	104	6000 bearing	1	157	Brush holder	2
4	M6*40 butterfly screw	2	54	M5*10 cross recessed pan head screw	7	105	M6x10 stud screw	1	158	Machine enclosure	1
5	M4*10 spherical phillip's screw	5	55	End cover	2	106	Head shell	1	159	Wire pressing box	1
6	1028 Rear support frame	1	56	M6*25 butterfly screw	1	107	699 bearing	1	160	Rear shade	1
7	Back frame	1	57	Chamfering pointer	1	108	12 circlip	1	183	0.22uf Capacitance	1
8	M6*8 butterfly screw	1	58	Distance sleeve of linear bearing	2	109	4*13 woodruff key	1	184	Line-through shield plate	1
9	M6*30 butterfly screw	2	59	Linear bearing	4	110	Small gear	1	185	Magnet ring	2
10	M6*20 socket head cap screw	2	60	φ7*φ17*1 plain washer	2	111	Intermediate shaft	1	165	Laser switch	1
11	6 spring washer	4	61	φ10*φ5.5*4 steel bushing	2	112	6202 bearing	1	166	The laser box	1
12	6 flat washer	3	62	Connecting rod	1	113	Bearing gland	1	167	M4x10Cross pan head screw	2
13	M8*20 socket head cap screw	4	63	Jacket	2	114	φ15*φ22*2 epoxy gasket	1	168	Transparent cover coat	1
14	Left movable back frame	1	64	M8*30 socket head cap screw	1	115	Belt pulley	1	169	Line bank	1
15	Right movable back frame	1	65	Connection axis	1	116	5*20 square key	1	170	Laser switch	1
16	8 spring washer	6	66	Big torsional spring	1	117	φ6*φ25*3 plain washer	1	171	Transparent cover coat	1
17	Angular locking handle	1	67	105A self-locking pin toggle button	1	118	M6*20 left hand socket head cap screw	1	174	Dust bag parts	1
18	Ф10*Ф25*2 gasket	2	68	6 circlip for shafts	1	119	Belt	1	175	Clamping block parts	1
19	Angular clamp axis	1	69	6*40 spring pin	2	120	Belt cover	1	175-1	Hand wheel	1
20	M10 lock nut	2	70	Support	1	121	M5*20 cross recessed pan head screw	1	175-2	Clamping block	1
21	Locking axis	1	71	Tension rod	2	122	Since the spring lock	1	175-3	Jaw iron	1
22	1240 ball nut	1	73	Tension rod handle	1	123	8 * 53 slot locking pin	1	175-4	6 lathes M5*7 pan head screw	1
23	O-shaped ring (9*2)	1	74	M6 nut	2	124	ST3.9*16 cross recessed pan head tapping screw	8	175-5	Fixed rod	1
24	Right-angle dowel pin	1	75	M6*14 socket head cap screw	2	126	M5*35 cross recessed pan head screw	2	175-6	M6*15 butterfly screw	1
25	Connecting base	1	76	5*16 slotted self tapping screw	1	127	M5*45 cross recessed pan head screw	1	175-7	The clamping block	1
26	8 flat washer	3	77	Cable jacket	2	128	Switch	1	175-8	The clamping piece of spring	1
27	M8*25 socket head cap screw	3	78	Cable	1	130	ST3.9*14 cross recessed pan head tapping screw	15	176	Left shelter part	1
28	Scale plate of connecting base	1	79	M6*12 outer hexagon screw	2	131	Tension disc	2	176-1	M5*14 Phillips big head screw	1
29	M8 nut	3	80	Transparent cover	1	133	Junction line	1	176-2	5 spring washer	1
30	M8*50 socket head cap screw	1	81	Big spring of transparent cover	1	134	Left lifting handle	1	176-3	Left shelter movable plate 1	1
31	M6*25 socket head cap screw	1	82	10 lathes M6*7 big flat head SHCS	1	135	Right lifting handle	1	176-4	Left shelter 1	1
32	M8*25 socket head cap screw	1	83	M6*10 cross recessed pan head screw	1	136	ST3.9*20 cross recessed pan head tapping screw	2	176-5	M5*12 Phillips big head screw 2	2
33	4 flat washer	4	84	Big cover sheet of transparent cover	1	137	M5*25 pherical phillip's screw	6	176-6	Extension rod 2	2
34	Pointer	1	85	Fixed sleeve	1	138	Junction box lid	1	176-7	M4*10 spherical Phillips screw 2	2 2
35	Limit rod	1	86	Transparent cover	1	139	Line bank	1	176-8	M5 lock nut 1	1
36	5 flat washer	12	87	4*15 Tapping screw with gasket	2	140	Junction box	1	177	Right shelter part 1	1
37	5 spring washer	11	88	Pulley	2	141	M6*50 butterfly screw	1	177-1	Extension rod 2	2
38	M5*14 socket head cap screw	2	89	M4*14 pherical phillip's screw	3	142	M6 knurled thumb nut (thin type)	1	177-2	M5 lock nut 1	1
39	M6*35 outer hexagon screw	1	90A	M8 * 20 Allen cushioned against tooth (8.8)	1	143	Depth limit frame	1	177-3	M4*10 spherical Phillips screw 2	2 2
40	Fixed rod	1	91	External compressive plate	1	144	Strain relief bushing	1	177-4	M5*12 Phillips big head screw	2
41	Support rod	2	92	Internal compressive plate	1	145	Junction line	1	177-5	Right shelter	1
42	Spring	1	93	M5*25 grub screw	2	146	Right dust discharge cover	1	177-6	Right shelter movable plate	1
43	M6 lock nut	2	94	5 bowel-shaped washer	2	147	Left dust discharge cover	1	177-7	M5*14 Phillips big head screw	1
44	Side handle cap	1	95	Gland	1	148	Fan shroud	1	177-8	5 spring washer	1
_	M5*16 cross recessed pan head screw	5	96	6003 bearing	1	149	6002 bearing	1	178	Allen key 6 x 120	1
46	Side handle	1	97	Front cover	1	150	Rotor	1	200	Since the lock button switch	1
47	Locking rod	1	98	Oil seal	1	151	6200 bearing	1	201	Button in the spring	1
48	M10*20 center slotted nut	1	99	Output shaft	1	152	ST4.8*70 cross recessed pan head tapping screw	2	202	Switch button	1
49 50	Lock washer	2	100	5*16 woodruff key	1	153 154	Stator	1	203	Upper handle	1
50	4 spring washer	4	101	Self-locking plate	1	154	Tension spring	2	204	Lower handle	1 1