HOLZMANN MASCHINEN GmbH
Marktplatz 4
4170 Haslach an der Mühl | AUSTRIA
+43 (0) 7289 71562-0 | FAX 7289 71562-4
info@holzmann-maschinen.at | www.holzmann-maschinen.at

Originalfassung

DE BETRIEBSANLEITUNG **METALLBANDSÄGE**

Übersetzung / Translation

EN USER MANUAL **HEAD BAND SAW**

ES INSTRUCCIONES DE SERVICIO **SIERRA DE CINTA METÁLICA**

FR MODE D'EMPLOI **SCIE À RUBAN À MÉTAUX**

BS 210TOP

BS 275TOP

Edition: 19.12.2017 – Revision - 01 – CEC - DE/EN/ES/FR

2 SICHERHEITSZEICHEN / SAFETY SIGNS / SEÑALES DE SEGURIDAD / SYMBOLES DE SECURITE

DE SICHERHEITSZEICHEN
BEDEUTUNG DER SYMBOLE

EN SAFETY SIGNS
DEFINITION OF SYMBOLS

ES SEÑALES DE SEGURIDAD
SIGNIFICADO DE LOS SÍMBOLOS

FR SYMBOLES DE SÉCURITÉ
SIGNIFICATION DES SYMBOLES

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

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

ES **CONFORMIDAD CE:** Este producto cumple con las directivas CE.

FR **CONFORMITÉ CE** : Ce produit répond aux directives CE.

DE **ANLEITUNG LESEN!** Lesen Sie die Betriebs- und Wartungsanleitung Ihrer Maschine aufmerksam durch und machen Sie sich mit den Bedienelementen der Maschine gut vertraut um die Maschine ordnungsgemäß zu bedienen und so Schäden an Mensch und Maschine vorzubeugen.

EN **READ THE MANUAL!** Read the user and maintenance manual carefully and get familiar with the controls in order to use the machine correctly and to avoid injuries and machine defects.

ES **¡LEER LAS INSTRUCCIONES!** Lea atentamente las instrucciones de servicio y de mantenimiento de su máquina y familiarícese con los elementos de mando de la misma para manejarla correctamente y, de este modo, evitar que se produzcan daños personales y en la máquina.

FR **LIRE LE MANUEL D'UTILISATION !** Lire le manuel d'exploitation et de maintenance de votre machine avec assiduité en vous familiarisant bien avec les organes de commande de la machine pour utiliser la machine correctement et prévenir ainsi des blessures corporelles et des dégâts sur la machine.

DE **WARNUNG!** Beachten Sie die Sicherheitssymbole! Die Nichtbeachtung der Vorschriften und Hinweise zum Einsatz der Maschine kann schwere Personenschäden verursachen und zu tödlichen Unfällen führen.

EN **ATTENTION!** Ignoring the safety signs and warnings applied on the machine as well as ignoring the security and operating instructions can cause serious injuries and even lead to death.

ES **¡ADVERTENCIA!** ¡Observe los símbolos de seguridad! El incumplimiento de las normas e indicaciones para utilizar la máquina pueden producir daños personales de carácter grave y provocar accidentes mortales.

FR **AVERTISSEMENT !** Observer les symboles de sécurité ! Le non-respect des prescriptions et des recommandations relatives à l'utilisation de la machine peut provoquer des dommages corporels graves, voire mortels.

DE **Allgemeiner Hinweis**

EN **General note**

ES **Indicaciones generales**

FR **Informations générales**

DE **Schutzausrüstung tragen!**

EN **Protective clothing!**

ES **¡Use el equipo de protección!**

FR **Porter un équipement de protection !**

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

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

ES **¡Apague la máquina y desconéctela de la red eléctrica antes de llevar a cabo trabajos de mantenimiento y antes de las pausas!**

FR **Éteindre la machine avant la maintenance et les pauses et débrancher la fiche secteur !**

DE **Warnung vor Schnittverletzungen!**

EN **Warning about cut injuries!**

ES **¡Advertencia de sufrir lesiones producidas por cortes!**

FR **Attention aux coupures !**

DE **Warnung vor wegschleudernden Teilen!**

EN **Warning against thrown-off items!**

ES **¡Advertencia por proyección de piezas!**

FR **Avertissement de projection de pièces !**

DE **Vor Nässe schützen!**

EN **Protect from moisture!**

ES **¡Proteger de la humedad!**

FR **Protéger de l'humidité !**

DE **Sicherheitsabstand einhalten!**

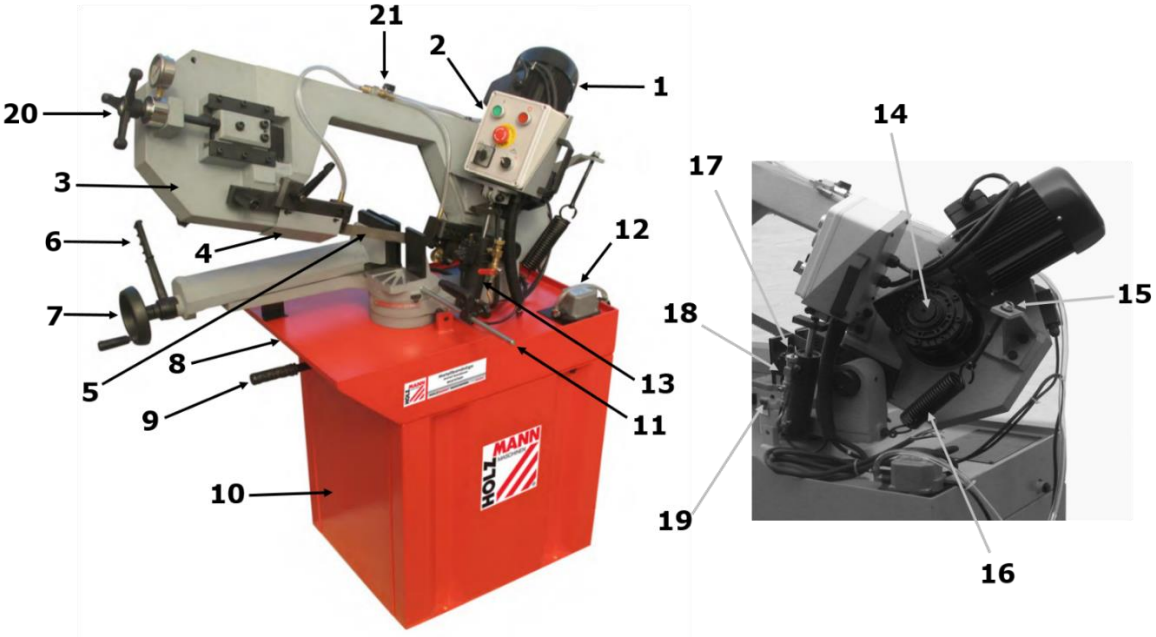
EN **Keep safety distance!**

ES **¡Mantenga la distancia de seguridad!**

FR **Respecter des distances de sécurité !**

3 TECHNIK / TECHNICS / TÉCNICA / TECHNIQUE

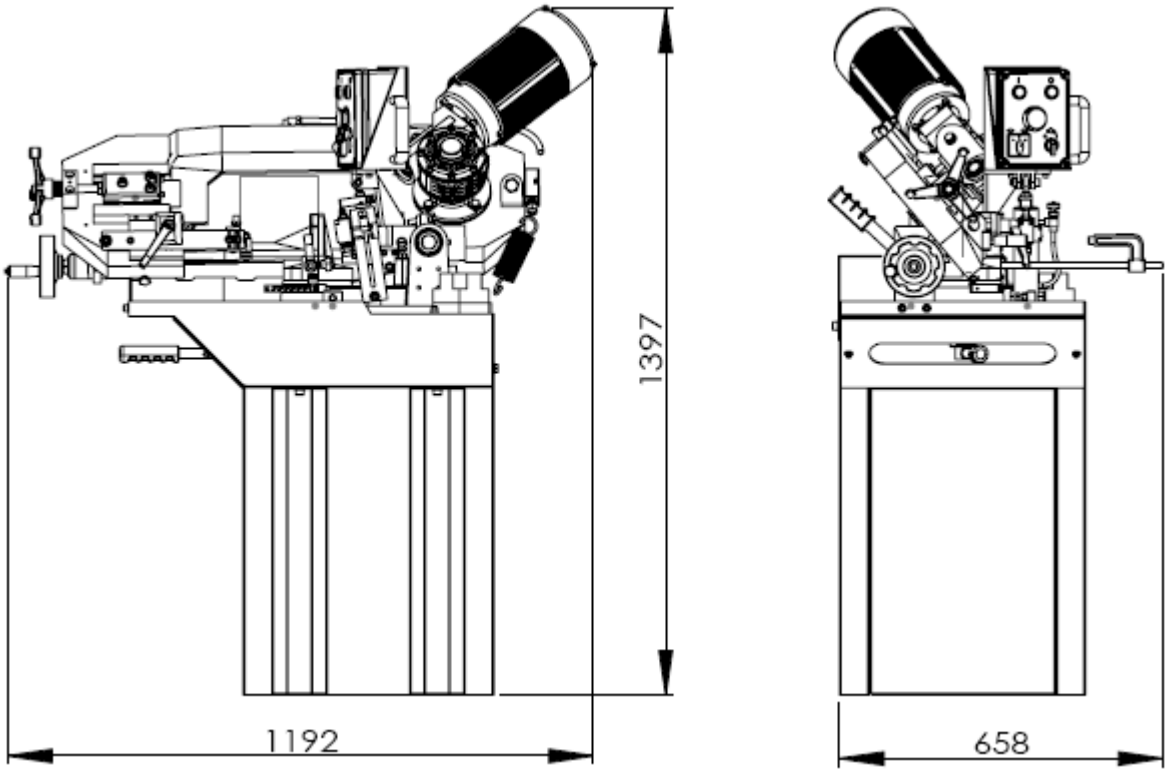
3.1 Komponenten / Components / Componentes / Composants



1	Motor / motor / motor / moteur	**12**	Kühlmittelpumpe / coolant pump / bomba de refrigerante / pompe à liquide de refroidissement
2	Schaltkasten / switch box / caja de conmutación / coffret électrique	**13**	Hydraulikzylinder/ hydraulic cylinder / cilindro hidráulico / cylindre hydraulique
3	Bandsägearm / saw arm / brazo de la sierra de cinta / bras de scie à ruban	**14**	Getriebe / gear box / engranaje / transmission
4	Sägebandschutz / blade safety guard / protector para cinta de sierra / protection de scie à ruban	**15**	Federspannschraube / spring adjustment knob / tornillo tensor elástico / vis de tension du ressort
5	Sägeband / blade / Cinta de la sierra / ruban de scie	**16**	Sägearmrückzugsfeder / saw arm return spring / muelle de retorno del brazo de la sierra / ressort de retour du bras de scie
6	Schnellverriegelung Schraubstock / quick lock lever for vice / anclaje rápido tornillo de banco / verrouillage rapide de l'étau	**17**	Absenkregler / hydraulic flow control valve / regulador de descenso / régulateur d'abaissement
7	Handrad / hand wheel / volante manual / volant	**18**	Hydraulikregler / hydraulic flow regulation valve / regulador hidráulico / régulateur hydraulique
8	Kühlmitteltank / coolant tank / depósito de refrigerante / réservoir de liquide de refroidissement	**19**	Endschalter / lower position limit switch / Interruptor de fin de carrera / interrupteur de fin de course
9	Sägearmverriegelungshebel / saw arm lock lever / palanca de anclaje del brazo de la sierra / levier de verrouillage du bras de scie	**20**	Handrad Sägebandspannung / handwheel for blade tension / volante tensor para cinta de sierra / volant de tension de la scie à ruban
10	Maschinenständer / cabinet stand / soporte de máquina / support de la machine	**21**	Kühlmittelflussregler / coolant controller / caudalímetro de refrigerante / régulateur du débit de liquide de refroidissement
11	Werkstückanschlag / work stop / tope de pieza / butée de pièce		

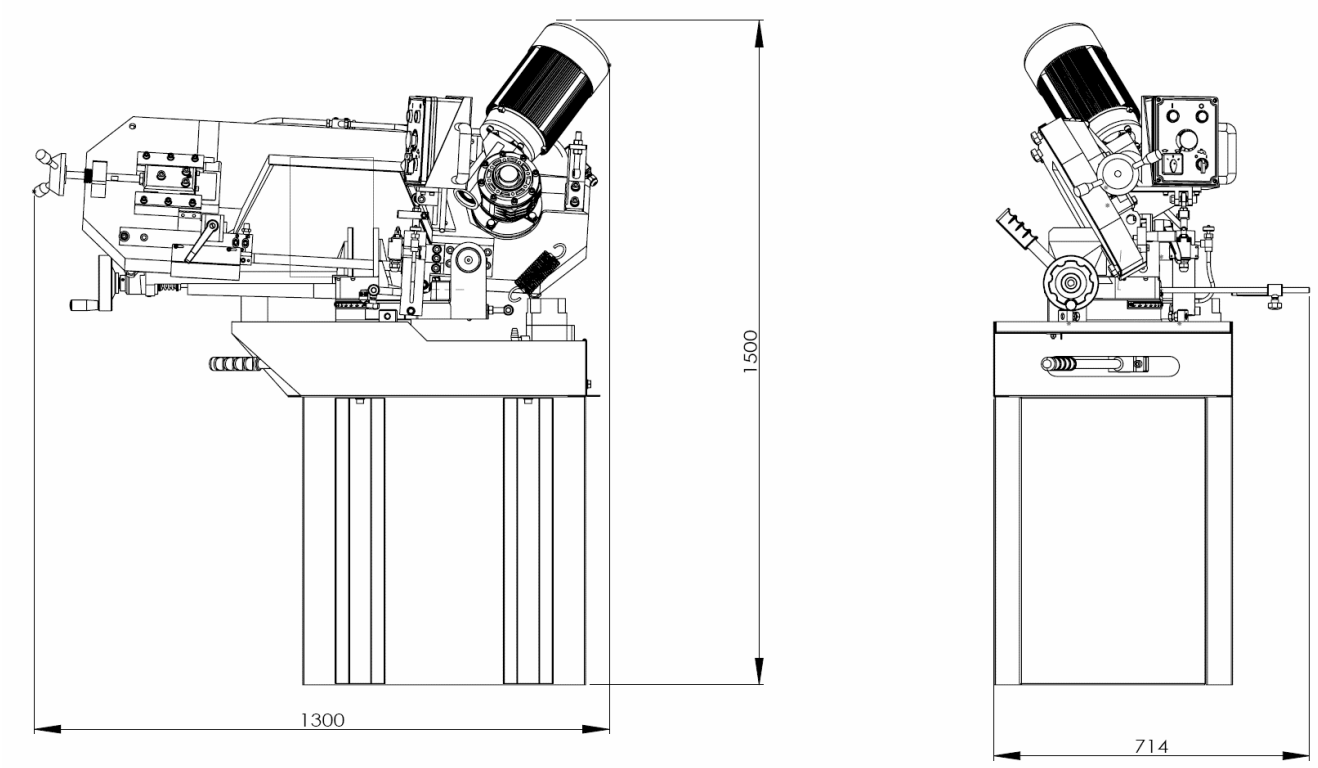
3.2 Technische Daten /Technical data / Datos técnicos / Données techniques

BT 210TOP				
Spannung / voltage / tensión / tension	230 V / 50 Hz		400 V / 3 / 50 Hz	
Motorleistung / motor power / potencia del motor / puissance du moteur	750 W		750 / 950 W (2 Stufen)	
Getriebeübersetzung / gear ratio / transmisión / Rapport de démultiplication	18:1		36:1	
Laufraddurchmesser Ø band wheel diameter / diámetro de polea Ø / diamètre du galet d'entraînement Ø	260 mm			
Sägebanddimension / saw band dimension / dimensiones de la cinta de la sierra / dimension du ruban de scie	2110 x 20 x 0,9 mm			
Schnittgeschwindigkeit / cutting band speed / velocidad de corte / vitesse de coupe	65 m/min		32,5 / 65 m/min	
Schwenkbereich tilting range / zona de giro / débattement	0 – 60°			
Leistung Kühlmittelpumpe power coolant pump / potencia de la bomba de refrigeración / puissance de la pompe de liquide de refroidissement	45 W			
Schnittleistung / ⌀ cutting performance [mm] / potencia de corte / puissance de coupe	**0°:** 170	**30°:**150	**45°:**140	**60°:**70
Schnittleistung / ▭ cutting performance [mm] / potencia de corte / puissance de coupe	**0°:** 170	**30°:**140	**45°:**140	**60°:**70
Schnittleistung / ▭ cutting performance [mm] / potencia de corte / puissance de coupe	**0°:** 180x170	**30°:**140x170	**45°:**140x170	**60°:**80x60
Gewicht / weight / peso / poids	145 kg			



BT 275TOP		
Spannung / Voltage / Tensión / Tension	230 V / 50 Hz	400 V / 3 / 50 Hz
Motorleistung /Motor power / Potencia del motor / Puissance du moteur	1,1 kW	1,1 / 1,5 kW (2 Stufen)
Getriebeübersetzung / gear ratio / transmisión / rapport de démultiplication	18:1	36:1
Laufraddurchmesser Ø / band wheel diameter / diámetro de polea Ø / diamètre du galet d'entraînement Ø	300 mm	
Sägebanddimension / saw band dimension / dimensiones de la cinta de la sierra / dimension du ruban de scie	2480 x 27 x 0,9 mm	
Schnittgeschwindigkeit / cutting band speed / velocidad de corte / vitesse de coupe	75 m/min	37,5 / 75 m/min
Schwenkbereich / tilting range / zona de giro / débattement	0 – 60°	
Leistung Kühlmittelpumpe / Power coolant pump / Potencia de la bomba de refrigeración / Puissance de la pompe de liquide de refroidissement	45 W	

Schnittleistung / Cutting performance [mm] / Potencia de corte / Puissance de coupe ⌀	**0°:** 220	**30°:**190	**45°:**160	**60°:**100
Schnittleistung / cutting performance [mm] / Potencia de corte / Puissance de coupe ▨	**0°:** 200	**30°:**180	**45°:**160	**60°:**100
Schnittleistung / cutting performance [mm] / Potencia de corte / Puissance de coupe ▭	**0°:** 260x140	**30°:**200x140	**45°:**160x140	**60°:**120x100
Gewicht / weight / Peso / Poids	195 kg			



10 PREFACE (EN)

Dear Customer!

This manual contains information and important instructions for the installation and correct use of the head band saw BS 210TOP / BS 275TOP.
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!
Before first use read this manual carefully. It eases the correct use of the product and prevents misunderstanding and damages of product and the user's health.

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

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

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

Please understand that later claims cannot be accepted anymore.

Copyright

© 2017
This document is protected by international copyright law. Any unauthorized duplication, translation or use of pictures, illustrations or text of this manual will be pursued by law.
Court of jurisdiction is the Landesgericht Linz or the competent court for 4170 Haslach, Austria!

Customer service contact

HOLZMANN MASCHINEN GmbH
4170 Haslach, Marktplatz 4
AUSTRIA
Tel +43 7289 71562 - 0
Fax +43 7289 71562 – 4
info@holzmann-maschinen.at

11 SAFETY

11.1 Intended Use

The machine must only be used for its intended purpose! Any other use is deemed to be a case of misuse.

To use the machine properly you must also observe and follow all safety regulations, the assembly instructions, operating and maintenance instructions lay down in this manual.

All people who use and service the machine have to be acquainted with this manual and must be informed about the machine's potential hazards.

It is also imperative to observe the accident prevention regulations in force in your area.

The same applies for the general rules of occupational health and safety.

The machine is used for:

To cut metal, cast iron and plastic materials

Any manipulation of the machine or its parts is a misuse, in this case HOLZMANN-MASCHINEN and its sales partners cannot be made liable for ANY direct or indirect damage.

WARNING

- **Use only blades allowable for this machine**
- **Never use damaged blades!**
- **Never use the machine with defective or without mounted guards**
- **The removal or modification of the safety components may result in damage to equipment and serious injury!**
- **The workpiece must be always clamped in the machine vice during cutting**
- **To remove sawdust and chippings from the machine when running is strictly prohibited!**

HIGHEST RISK OF INJURY!

11.2 Prohibited use

- The operation of the machine outside the stated technical limits described in this manual is forbidden.
- The machine shall not be operated in areas exposed to increased fire or explosion hazard.
- The use of the machine not being suitable for the use of the machine and not being certified is forbidden.
- The use of the machine not according with the required dimensions is forbidden.
- Any manipulation of the machine and parts is forbidden.
- The use of the machine for any purposes other than described in this user-manual is forbidden.
- The unattended operation on the machine during the working process is forbidden
- It is not allowed to leave the immediate work area during the work is being performed!

11.3 Security 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!

- **Keep your work area dry and tidy! An untidy work area may cause accidents. Avoid slippery floor!**
- **Make sure the work area is lighted sufficiently!**
- **Work only in a well ventilated area!**
- **Do not overload the machine!**

- **Provide good stability and keep balance all times.**
- **Keep away from the running blade!**
- **Always stay focused when working. Reduce distortion sources in your working environment. The operation of the machine when being tired, as well as under the influence of alcohol, drugs or concentration influencing medicaments is forbidden!**

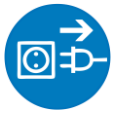
- **Only one person shall operate the machine**
- **The machine must be operated only by trained persons (knowledge and understanding of this manual), which have no limitations of motor skills compared with conventional workers.**

- **Do not allow other people, particularly children, to touch the machine or the cable. Keep them away from your work area!**
- **Make sure there is nobody present in the dangerous area. The minimum safety distance is 2m**

- **Wear suitable work clothes! Do not wear loose clothing or jewelry as they might be caught and cause severe accidents!**
- **Wear a hair net if you have long hair**
- **Loose objects can become entangled and cause serious injuries!**

- **Use personal safety equipment: ear protectors, safety goggles, safety shoes S1, work wear, safety gloves (EN 388, class 3111) when working with or on the machine!**
- **Never leave the machine running unattended! Before leaving the working area switch the machine off and wait until the machine stops!**

- **Always disconnect the machine prior to any actions performed at the machine!**
- **Avoid unintentional starting**
- **Do not use the machine with damaged switch**
- **The plug of an electrical tool must strictly correspond to the socket. Do not use any adapters together with earthed electric tools**



- **Each time you work with an electrically operated machine, caution is advised! There is a risk of electric shock, fire, cutting injury;**
- **Protect the machine from dampness (causing a short circuit)**

- **Use power tools and machines never in the vicinity of flammable liquids and gases (danger of explosion)**
- **Check the cable regularly for damage**
- **Do not use the cable to carry the machine or to fix the work piece**

- **Protect the cable from heat, oil and sharp edges**
- **Avoid body contact with earthed components**
- **Serious injuries caused by sharp edges on the hand are possible.**

11.4 Remaining risk factors

Even if the machine is used as required it is still impossible to eliminate certain residual risk factors totally. The following hazards may arise in connection with the machine´s construction and design:

- Risk of injury to the hands / fingers by the blade during operation.
- Risk of injury due to sharp edges of the workpiece.
- Risk of injury due to contacting with live electrical components.
- Risk of injury due to breakage or being thrown out of the saw blade or portions thereof, at overloading and incorrect direction of the saw blade..
- Risk of injury to the hearing by prolonged labor without hearing protection
- Risk of injury to the eye by flying debris, even with goggles..

12 ASSEMBLY

12.1 Preparatory activities

12.1.1 Delivery content

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.

12.1.2 Workplace requirements

The workplace has to fulfill the requirements.
The ground has to be even, in level and hard. It must be suitable at least to weight it with double weight per square meter than the machines net weight.
The chosen workplace must have access to a suitable electric supply net hat complies with the machines requirements.

12.1.3 Transport

The machine can be transported in package with a forklift.

The machine is very heavy. The machine shall be lifted from crate with a suitable lifting device only that is certified to be able to carry the machines load.

	**WARNING**
	The lifting and transportation of the machine must only be carried out by qualified staff and must be carried out with appropriate equipment**.**

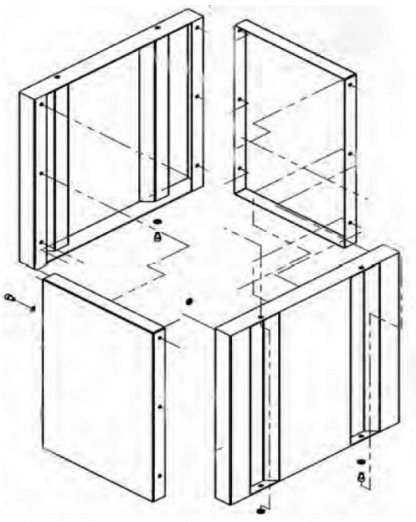
Note that lifting equipment used (crane, forklift, sling, etc.) must be in perfect condition.

To maneuver the machine in the packaging can also a pallet jack or a forklift be used.

Uncoated metal machine parts have been insulated with a greasy layer to inhibit corrosion.

This layer has to be removed. You can use standard solvents that do not damage the machine surface.

12.1.4 Assembly



This machine is completely assembled, just needs

to assemble the machine stand.

You only has to place the machine aggregate onto the assembled machine base.

Push the holiding rod of the workpiece end stop into the containing bushing in the vice and fix it.

Check all bolt and screw connections and retighten them if necessary.

12.2 Power supply

ATTENTION

When working with non-grounded machines:
Severe injury or even death may arise though electrocution!
Therefore: The machine must be operated at a grounded power socket

The connection of the machine to the electric power supply and the following checks have to be carried out by a respectively trained electrician only.

1. The electronic connection of the machine is designated for operation with a grounded power socket!
2. The mains supply must be secured with 16A:
3. If the connector plug doesn't fit or if it is defect, only qualified electricians may modify or re-new it!
4. The grounding wire should be held in green-yellow.
5. A damaged cable has to be exchanged immediately!
6. Check, whether the feeding voltage and the Hz comply to the required values of the machine. A deviation of feeding voltage of ±5% is allowed (e.g.: a machine with working voltage of 380V can work within a voltage bandwidth of 370 till 400V.
7. After connecting, check the right running direction!
8. Make sure that a possible extension cord is in good condition and suitable for the transmission of power. An undersized cord reduces the transmission of power and heats up.
9. A damaged cable must be replaced immediately

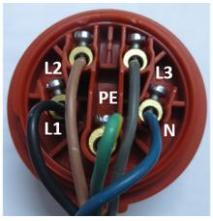
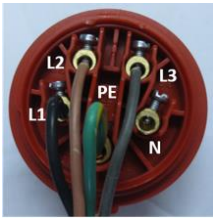
NOTICE

Operation is only allowed with safety switch against stray current (RCD max. stray current of 30mA)

NOTICE

Use only permitted extension cable with cross-section the one in the following table declared.

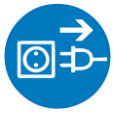
Voltage	Extension	Cross-section
220 V-240 V 50 Hz	<27 m	1,5 mm²
	<44 m	2,5 mm²
	<70 m	4,0 mm²
	<105 m	6,0 mm²

Plug 400V:	5-wire: **with** N-conductor 	4-wire: **without** N-conductor 

13 OPERATION

Device 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.

13.1 Operation instructions



WARNING

Perform all machine settings with the machine being disconnected from the power supply!

NOTICE

Checks to carry out before each workshift:

- General technical condition of the machine
- Safety equipment available and in working order
- Check sawband for wear and replace if necessary
- Check the coolant level and top up if necessary
- Moving parts are not blocked
- All the components for correct fit and function, especially the screws on the blade guard and lever control!
- All the tools for service / maintenance from the machine.
- Set the blade guard as close as possible to the workpiece.
- Splash guard

Checks to carry out before each cut:

- Angle set correctly?
- Vice adequately fixed?
- Make sure that the material to be processed is fixed properly in the vice.
- Ensure that the coolant circulates properly.
- Running direction of saw blade.

- **Never switch the machine on while pressing the blade against the material!**
- **Wait until the sawband has reached full speed – then performing the cut!**
- **For the cooling of the blade fill the tank with coolant liquid (KSM5L)**
- **Always support long overhanging workpieces additionally**

13.2 Operation

13.2.1 Control panel

SB1	ON-switch	**SA1**	2-step-switch
SB2	OFF-switch	**SA2**	Coolant switch
SB3	EMERGENCY switch		

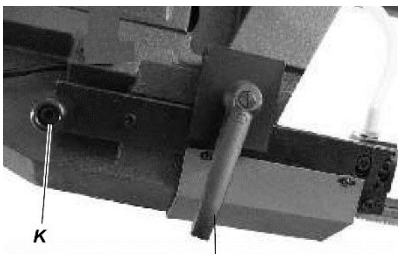
13.3 Adjusting

13.3.1 Blade tension

The ideal tension of the blade is achieved rotating the hand wheel until it touches the micro switch, that actuates the operation of the machine is actuated.

Proper blade tension is 4 to 8 MPa as measured on a blade tension gauge.

13.3.2 Blade guide



- Loosen the ratchet screw (J)
- Hold the handle(K) and slide blade guide block as close as possible to the material without interfering with cut.
- Tighten the hex socket screw(J)

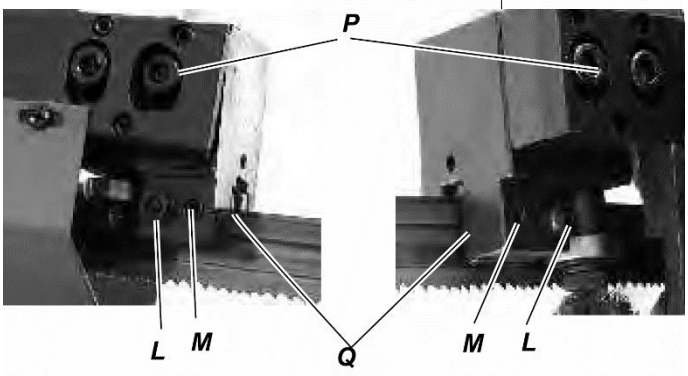
The blade guide is pre- set for a blade with 0,9 mm thickness

Loosen Allen screw (L), adjusting the set screw (M), the movable teeth (Q) will far away or close to the blade.

Make sure that between blade and two side teeth there is at least 0.1mm of play.

Then re-tighten Allen screw (L).

Make sure that between blade and upper teeth of the pad this is at least 0.2~0.3 mm of play; if necessary, loosen the Allen screws (P) that fasten the block and adjust accordingly.



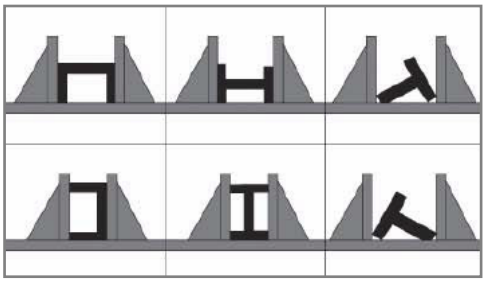
13.4 Clamping the workpiece

- Loosen the eccentric clamp lever(6)
- Insert workpiece in a way that it touches aligned the fixed jaw of the vice
- Take care to insert workpiece correctly (see figure)
- Overhanging workpieces must be supported additionally!

  Move the moveable jaw approx. 4mm to the workpiece by turning the handwheel (7).

  Now clamp the workpiece with the eccentric clamp lever.

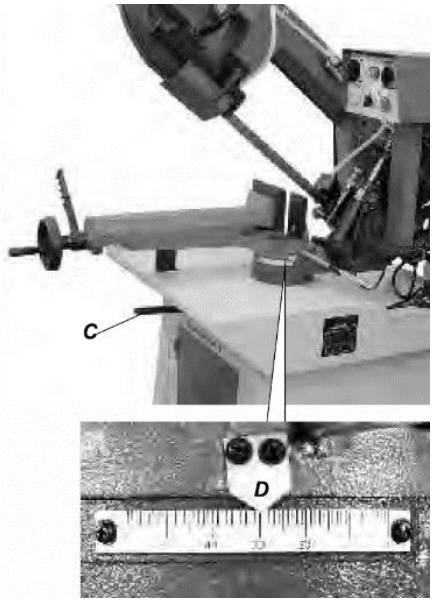
  You can now quick loosen and clamp workpieces of same width by simply loosening and tightening the eccentric clamp lever.



- Use the adjustable workpiece end stop (11), to cut long workpieces into even sections

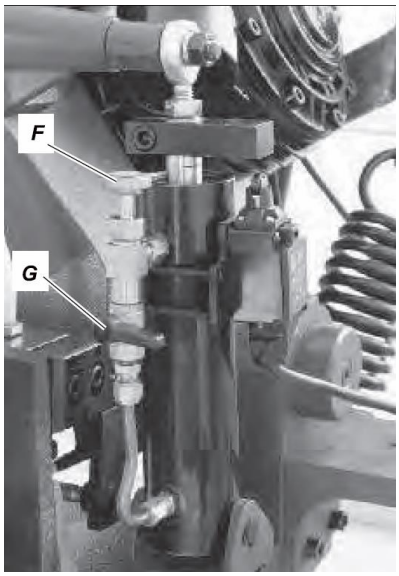
13.5 Cutting angle

- Turn the saw arm lock lever (C) to left to loosen the saw arm.
- Turn the saw arm to desired angle, see the scale (D)
- Then turn the saw arm lock lever to right to lock the saw supported arm.

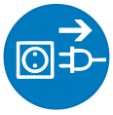


13.6 Cutting

- Full close the hydraulic flow regulation valve (G) and the hydraulic flow control valve (F).
- Raise the saw arm as possible (If necessary, set the tension with spring adjusting knob 15)
- Clamp the workpiece
- Select cutting speed with **SA1** (only at 400V)
- To start push **SB1**
- Open flow regulation valve (G)
- Slightly pull the saw arm down
- Open and adjust hydraulic flow control valve (F) by slightly turning the valve counter-clockwise to let saw arm descend with adequate speed and start cutting
- After cutting finished, machine can stopped automatically
- The cutting procedure can be interrupted by pushing **SB2** and **SB3**



14 MAINTENANCE

	ATTENTION	
	**Perform all maintenance machine settings with the machine being disconnected from the power supply!** **Serious injury due to unintentional or automatic activation of the machine!**	

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

NOTICE

Clean your machine regularly after every usage – it prolongs the machines lifespan and is a pre-requisite for a safe working environment.

Repair jobs shall be performed by respectively trained professionals only!

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

Check regularly the condition of the machine!

Store the machine in a closed, dry location.

Before first operation you should lubricate all connecting parts.

14.1 Maintenance plan

After each workshift:

- Raise the saw arm in the most upper position, secure it and close the hydraulic flow regulation valve.
- Detension the saw band.
- Clean the machine entirely.
- Lubricate the gliding surface of the vice and the blade slightly with some machinery oil.
- Clean the coolant tank from metal chips.

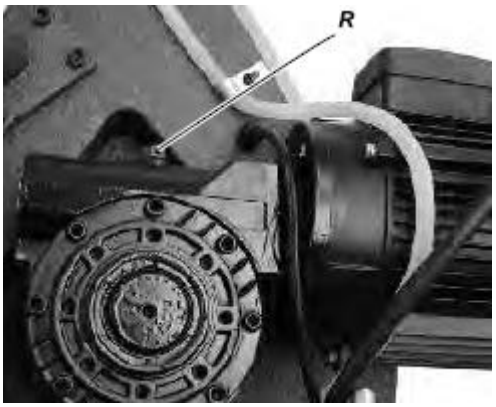
After 50 hours of operation

- Change coolant liquid, clean coolant tank and filter entirely
- Lubricate all connecting parts (if required, remove beforehand with a brush all swarfs and dust)

14.2 Changing saw blade

- Remove the saw blade protection cover by loosening and removing all screws.
- Loosen the saw band with the hand wheel entirely.
- Now remove cautiously the old saw band. Use cutting proof gloves.
- Install the new saw blade. Insert it first through both saw blade guide bearings and then lay them onto the flywheels.
- ATTENTION: Take care to install the saw band correctly! Check the direction of the teething.
- Tension the saw band with hand wheel.
- You can check the tension by applying in the middle of the free blade section a pressure of approx. 50Nm on the blade side. The blade is tensioned correctly, if it can be moved 3mm sidewards out of the straight cutting line.
- Turn by hand a flywheel and check the saw band for straight run

14.3 Gearbox



The gear box should not need changing unless the oil becomes contaminated or leaks.

To check the oil, raise the saw arm to vertical position. Wait a few minutes for the oil to drain down.

Loosen the vent screw (R) on top of the gearbox. The gear case is full when the oil is up to the bottom of the filler hole.

Use gear oil ISO 220 if it becomes necessary to change or add to the oil.

14.4 Cleaning

After each workshift the machine has to be cleaned. Remove chips etc. with a suitable tool. Do not remove them by hand (cutting injury!). Remove dust as well.

NOTICE

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

Clean the machine surface with a wet cloth soaked in a mild solution

14.5 Disposal

Do not dispose the machine in residual waste. Contact your local authorities for information regarding the available disposal options. When you buy at your local dealer for a replacement unit, the latter is obliged to exchange your old.

15 TROUBLE SHOOTING

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

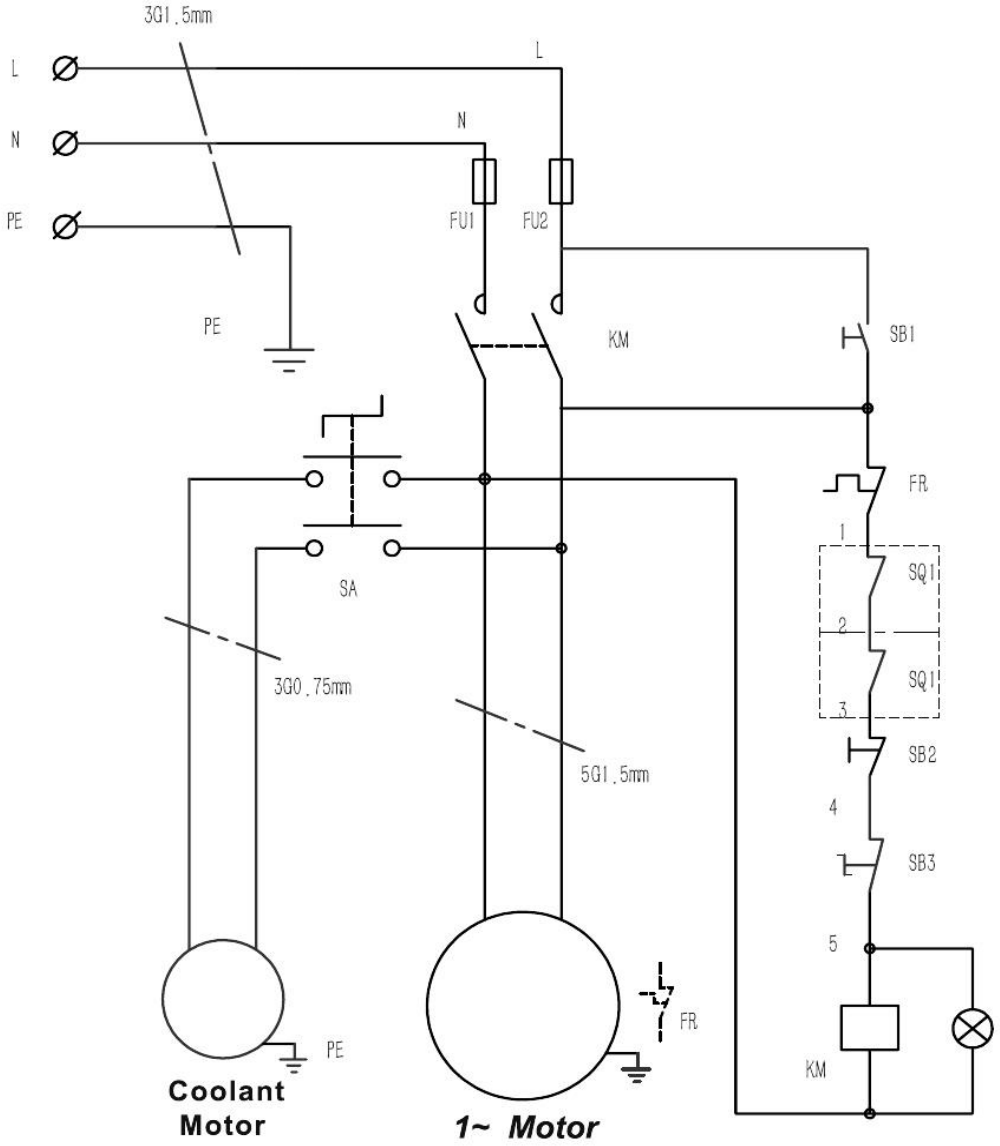
Trouble	Possible cause	Solution
Machine does not start	▪ Machine not connected to power supply ▪ Fuse of power circuit defect or not suitable ▪ Cable defect	▪ Check all power connections ▪ Change fuse ▪ Change cable
Saw band does not come to full speed, no power	▪ To long extension cord ▪ Power supply not matching with motor requirements. ▪ Weak, instable/volatile power supply	▪ change to suitable extension cord with sufficient cross-section, insulation and length ▪ Let check by electrician ▪ Contact electric power company
Motor gets hot very fast and has weak performance	▪ Motor does not receive power on one or even 2 phases	▪ Shut off machine immediately. Let the connection to supply circuit be checked by an electrician!
Saw band runs in opposite direction	▪ 2 of the 3 leading phases are switched whether in Plug or socket	Shut off machine immediately. Let the connection to supply circuit be corrected by an electrician!
Machine vibrates	▪ Placed on uneven underground ▪ Motor or any other parts loose	▪ modify ▪ check all screw joints if tightened
Bad cuts	▪ too high descent velocity ▪ unsuitable saw band for cutted material ▪ worn saw band ▪ saw band not tensioned correctly ▪ saw band guide outbalanced	▪ Reduce the descent velocity ▪ Use e.g. for stainless steel HQ Bi-Metal bands only ▪ replace ▪ tension saw band correctly ▪ readjust saw band guide

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

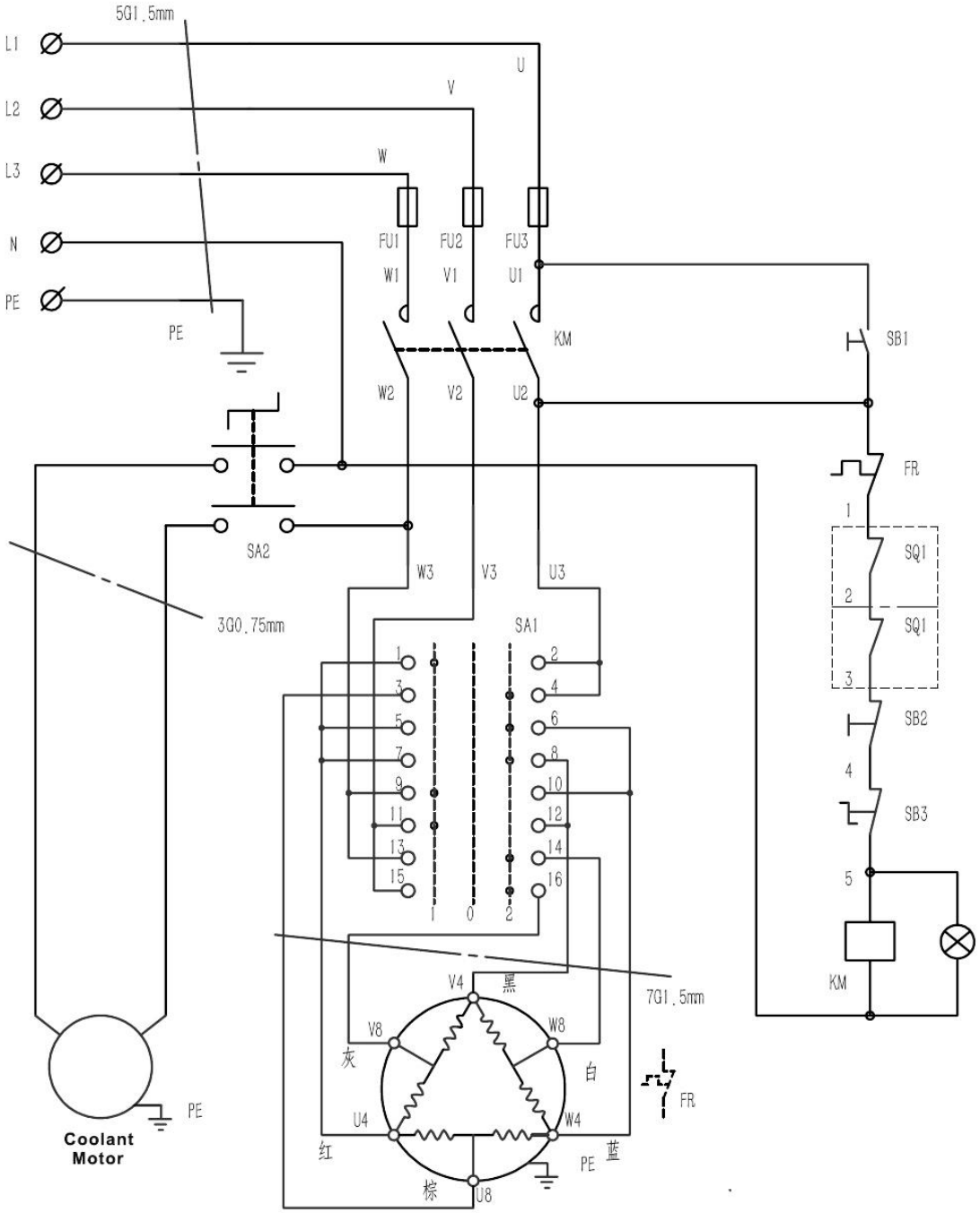
NOTICE

Should you in necessary repairs not able to properly to perform or you have not the prescribed training for it always attract a workshop to fix the problem.

28 SCHALTPLAN / WIRING DIAGRAM / DIAGRAMA DE CABLEADO / SCHEMA ELECTRIQUE



SB3:	Emergency Stop Button
SA2:	Water swtich
KM:	Contactor
FR:	Thermal protector
FU1-2:	Fuse 10A
SB1:	***ON*** Button
SB2:	Stop Button
SQ1-2:	Limit Switch



3~ Motor

SA1:	Hi/Low Speed Control
SA2:	Water swtich
KM:	Contactor
FR:	Thermal protector
FU1-3:	Fuse 5A
SB1:	***ON*** Button
SB2:	Stop Button
SB3:	Emergency Stop Button
SQ1-2:	Limit Switch

29 ERSATZTEILE / SPARE PARTS / PIEZAS DE RECAMBIO / PIECES DE RECHANGE

29.1 Ersatzteilbestellung / spare parts order / Pedido de piezas / Commande de pièces détachées

(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.

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 formular you can find in the last chapter of this manual. Always take a note of the machine type, spare parts number and partname. We recommend to copy the spare parts diagram and mark the spare part you need.

You find the order address in the preface of this operation manual.

(ES) Con las piezas de recambio de HOLZMANN, 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.

Encontrará la dirección de pedidos en las direcciones del servicio postventa que se encuentra en el prólogo de esta documentación.

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

AVIS

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

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

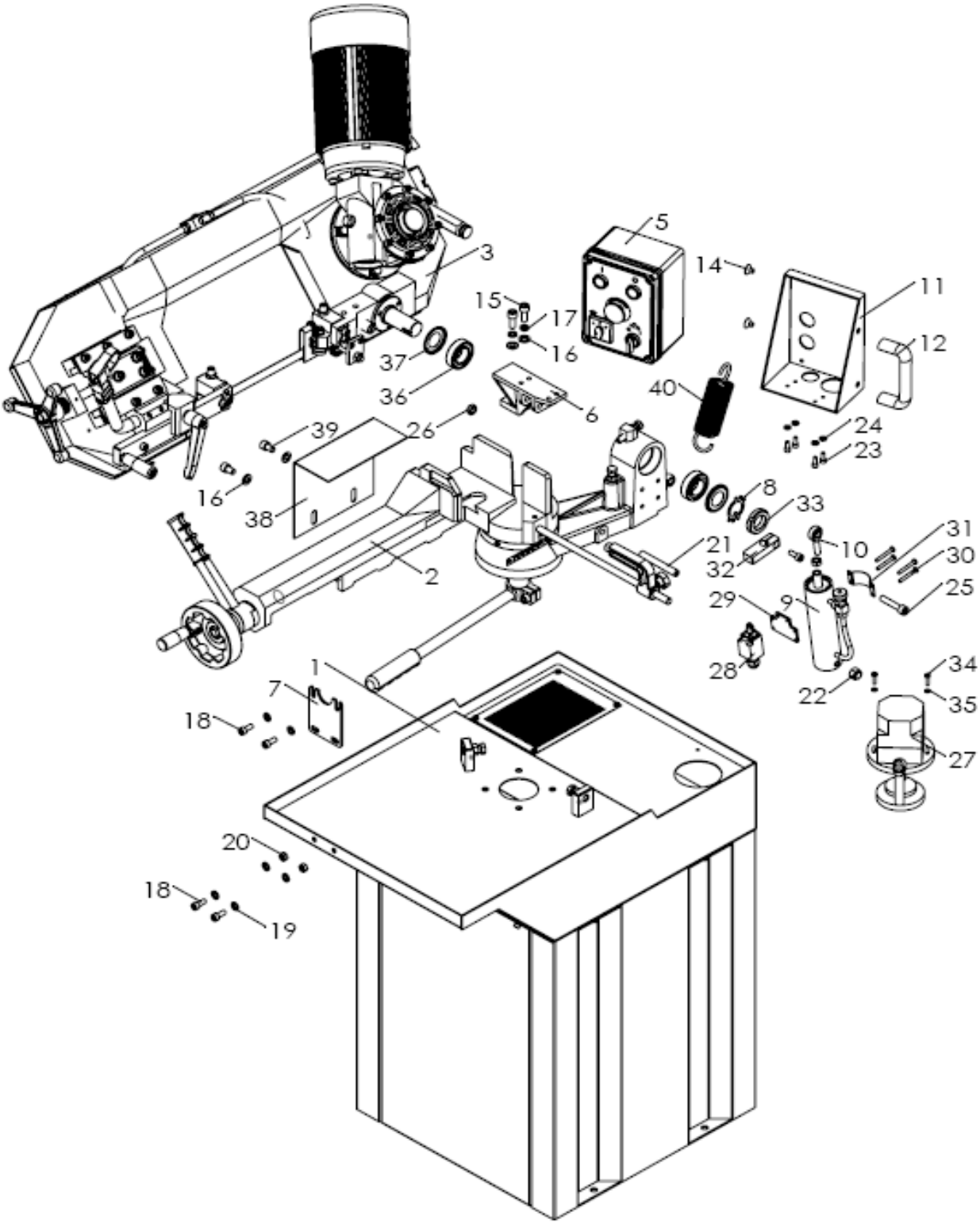
Pour commander des pièces de rechange, veuillez utiliser le formulaire de service à la fin de ces instructions. Toujours indiquer le type de machine, le numéro de pièce de rechange et la désignation. Afin d'éviter tout malentendu, nous vous recommandons de joindre une copie du plan des pièces détachées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

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

29.2 Explosionszeichnung / explosion drawing / Vista de despiece / Vue éclatée

BS 210TOP:

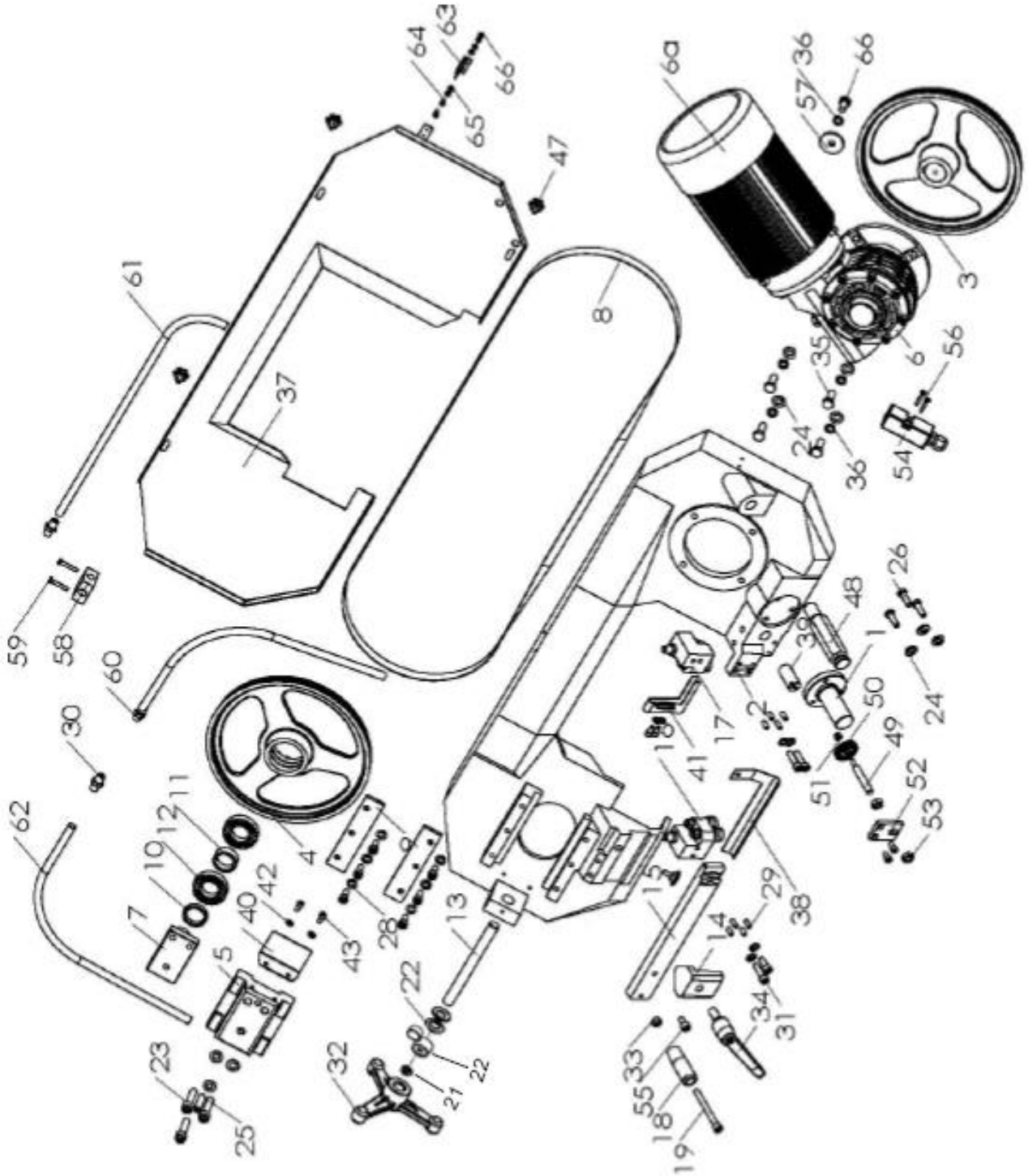
DIAGRAM A



SPARE PARTS LIST FOR DIAGRAM A

NO.	DESCRIPTION	NO.	DESCRIPTION
A-1	Base ass.	A-22	Locking nutM12
A-2	Vise ass.	A-23	Allen head screw M6x12mm
A-3	Saw bow ass.	A-24	Flat washer 6mm
A-5	Electric control box	A-25	Allen head screw M10x50mm
A-6	Upper seat, oil cylinder	A-26	Hex nut M0
A-7	Support plate, vise	A-27	Water pump
A-8	Washer 30mm	A-28	Mirco switch QKS7
A-9	Oil cylinder	A-29	Fix plate
A-10	Bearing SABJK10S	A-30	Cross pan head screw M4X40mm
A-11	Fix seat, control box	A-31	Switch locking plate
A-12	Handle	A-32	Limit plate
A-14	Sunk head cap screw M8x12mm	A-33	Round nut M30x1.5
A-15	Allen head screw M10x25mm	A-34	Cross pan head screw M5X20mm
A-16	Flat washer 10mm	A-35	Flat washer 5mm
A-17	Spring washer 10mm	A-36	TRB bearing 32006
A-18	Allen head screw M8x20mm	A-37	Bearing seal
A-19	Flat washer 8mm	A-38	Protection plate, vise
A-20	Hex nut M8	A-39	Allen head screw M10x16mm
A-21	Fix bolt, oil cylinder		

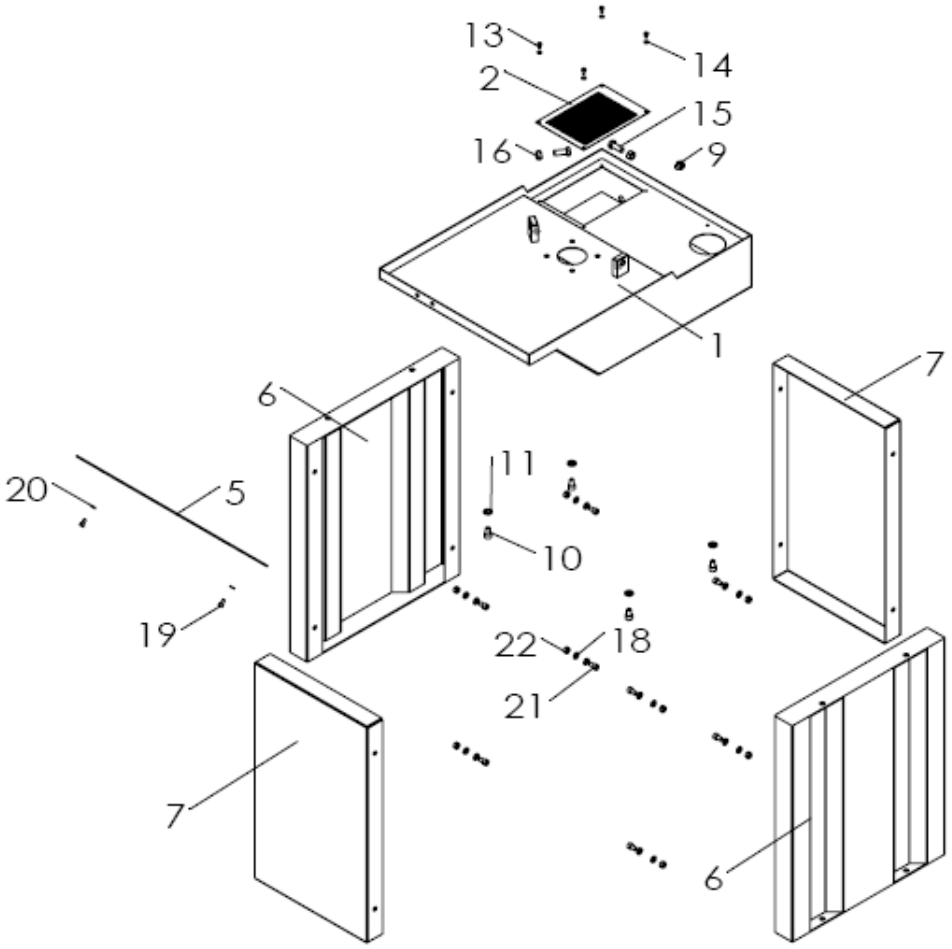
DIAGRAM B


64
63
66
65
47
61
37
8
6a
36
57
66
3
35
6
56
24
36
54
59
58
60
30
62
11
12
19
7
42
40
5
43
28
4
9
13
22
21
22
32
23
25
18
41
17
2
48
39
1
26
24
50
49
51
52
53
15
29
38
14
34
31
33
55
18
19

SPARE PARTS LIST FOR DIAGRAM B

NO.	DESCRIPTION	NO.	DESCRIPTION
B-1	Rotate shaft, saw bow	B-34	Ratchet handle M10x50mm
B-2	Saw bow	B-35	Hex head bolt M8x30mm
B-3	Driven wheel	B-36	Spring washer 10mm
B-4	Idler wheel	B-37	Saw bow cover
B-5	Seat, idler wheel	B-38	Blade cover
B-6	Gear box ass.	B-39	Limit shaft, saw bow
B-7	Shaft, idler wheel	B-40	Protection plate
B-8	Blade	B-41	Blade guard
B-9	Pressing plate	B-42	Flat washer 6mm
B-10	Adjusting sleeve	B-43	Allen head screw M6x12mm
B-11	Bearing sleeve	B-47	Star knob
B-12	Bearing 60062LS	B-48	Support rod, spring
B-13	Tensioning screw	B-49	Shaft
B-14	Pressing plate	B-50	Chips wheel
B-15	Tensioning plate,blade guard	B-51	Hex locking nut M6
B-16	Tensioning blade guard	B-52	Locating plate
B-17	Fixing blade guard	B-53	Hex nut M10
B-18	Handle	B-54	Miro switch QKS8
B-19	Allen head screw M8x80mm	B-55	Allen head screw M8x6mm
B-20	Thrust bearing	B-56	Pan head screw M4x30mm
B-21	Manometer gauge	B-57	C-ring
B-22	Belleville spring 16mm	B-58	Water valve
B-23	Allen head screw M10x45mm	B-59	Pan head screw M5x30mm
B-24	Flat washer 10mm	B-60	Joint head 1/4"
B-25	Set screw M10x40mm	B-61	Hose A
B-26	Hex head bolt M8x25mm	B-62	Hose B
B-28	Flat washer 8mm	B-63	Key for QKS8
B-29	Allen head screw M6x16mm	B-64	Pan head screw M4x12mm
B-30	Joint head 1/4"	B-65	Flat washer 4mm
B-31	Allen head screw M8x35mm	B-66	Hex nut M4
B-32	Star handle	B-67	Hex head bolt M10x20mm
B-33	Hex nut M8	B-6a	Gear box ass.

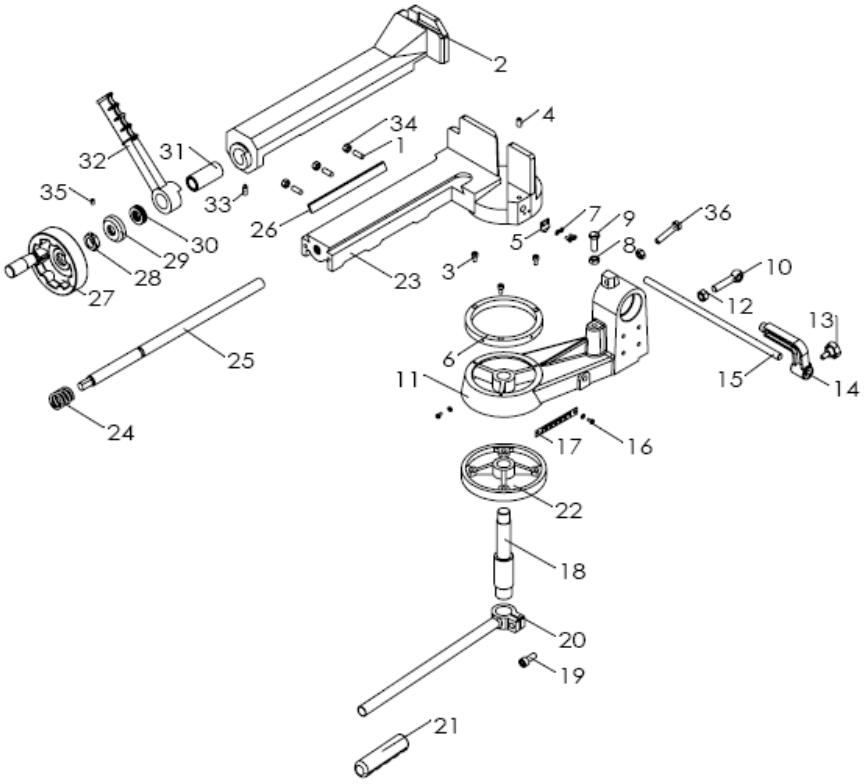
DIAGRAM C



SPARE PARTS LIST FOR DIAGRAM C

NO.	DESCRIPTION		NO.	DESCRIPTION
C-1	Base and tank		C-14	Flat washer 5mm
C-2	Strainer		C-15	Hex head bolt M12X30mm
C-5	Base plate		C-16	Hex nut M12
C-6	Left side panel		C-18	Flat washer 8mm
C-7	Rear panel		C-19	Allen head screw M6x12mm
C-9	Screw plug		C-20	Flat washer 6mm
C-10	Allen head screw M10x16mm		C-21	Hex head bolt M8X20mm
C-11	Flat washer 10mm		C-22	Hex nut M8
C-13	Pan head screw M5x10mm			

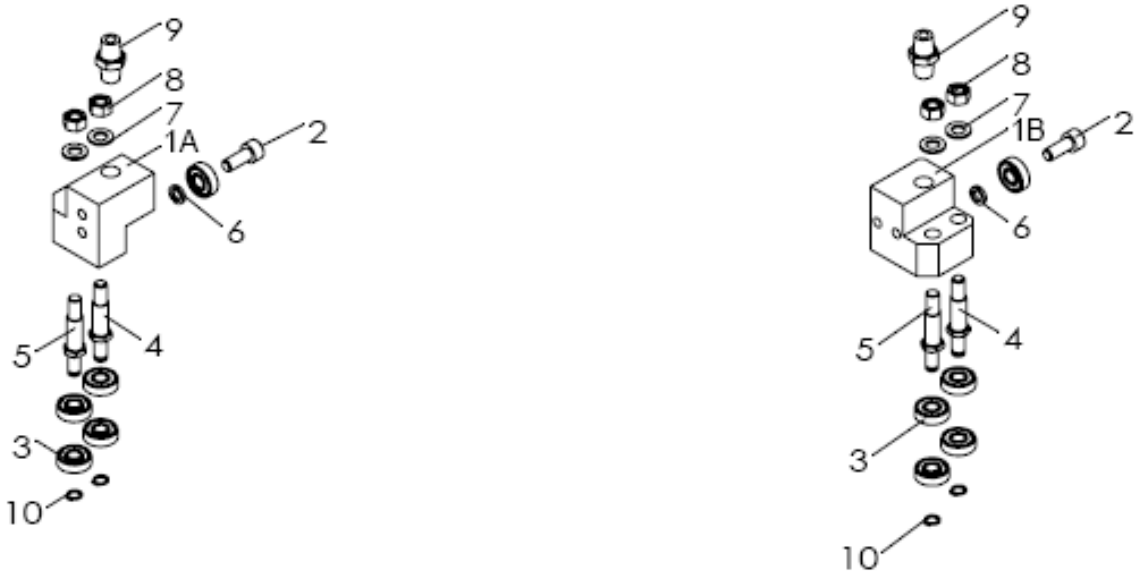
DIAGRAM D



SPARE PARTS LIST FOR DIAGRAM D

NO.	DESCRIPTION	NO.	DESCRIPTION
D-1	Setting screw M8x25mm	D-19	Allen head screw M10x35mm
D-2	Adjustable jaw,vise	D-20	Locking handle
D-3	Allen head screw M6x12mm	D-21	Handle sleeve
D-4	Setting screw M8x16mm	D-22	Swivel dial
D-5	Pointer	D-23	Vise base
D-6	Washer	D-24	Spring
D-7	Flat washer 4mm	D-25	Screw rod
D-8	Hex nut M10	D-26	Gib
D-9	Hex head bolt M10x35mm	D-27	Handle wheel
D-10	Pothook, spring	D-28	Hex nut
D-11	Swivel base	D-29	Bearing cover
D-12	Hex nut M12	D-30	Thrust bearing 51104
D-13	Knob	D-31	Screw rod sleeve
D-14	Limit rod	D-32	Knob, vise
D-15	Locating rod	D-33	Allen head screw M8x20mm
D-16	Pan head screw M4x6mm	D-34	Hex nut M8
D-17	Scale	D-35	Setting screw M5x10mm
D-18	Rotate shaft	D-36	Hex head bolt M10x50mm

DIAGRAM E



SPARE PARTS LIST FOR DIAGRAM E

NO.	DESCRIPTION
E-1A	Fixing blade guard
E-1B	Tensioning blade guard
E-2	Allen head screw M8x20mm
E-3	Bearing 608
E-4	Shaft
E-5	Eccentric shaft
E-6	Spring washer 8mm
E-7	Flat washer 8mm
E-8	Hex nut M8
E-9	Joint head 1/4"
E-10	C-ring

BS275TOP:

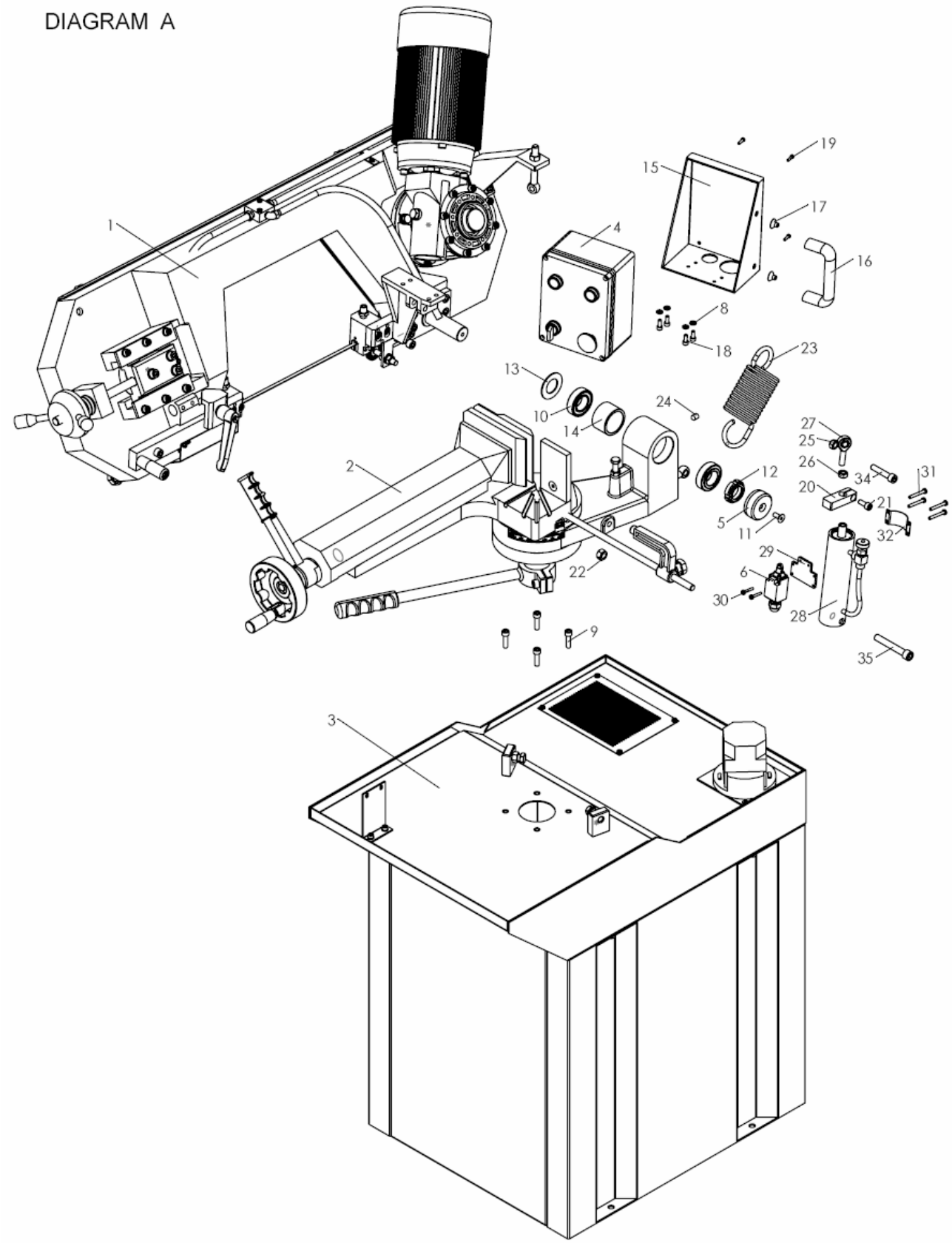


DIAGRAM A
1
2
3
4
5
6
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
34
35

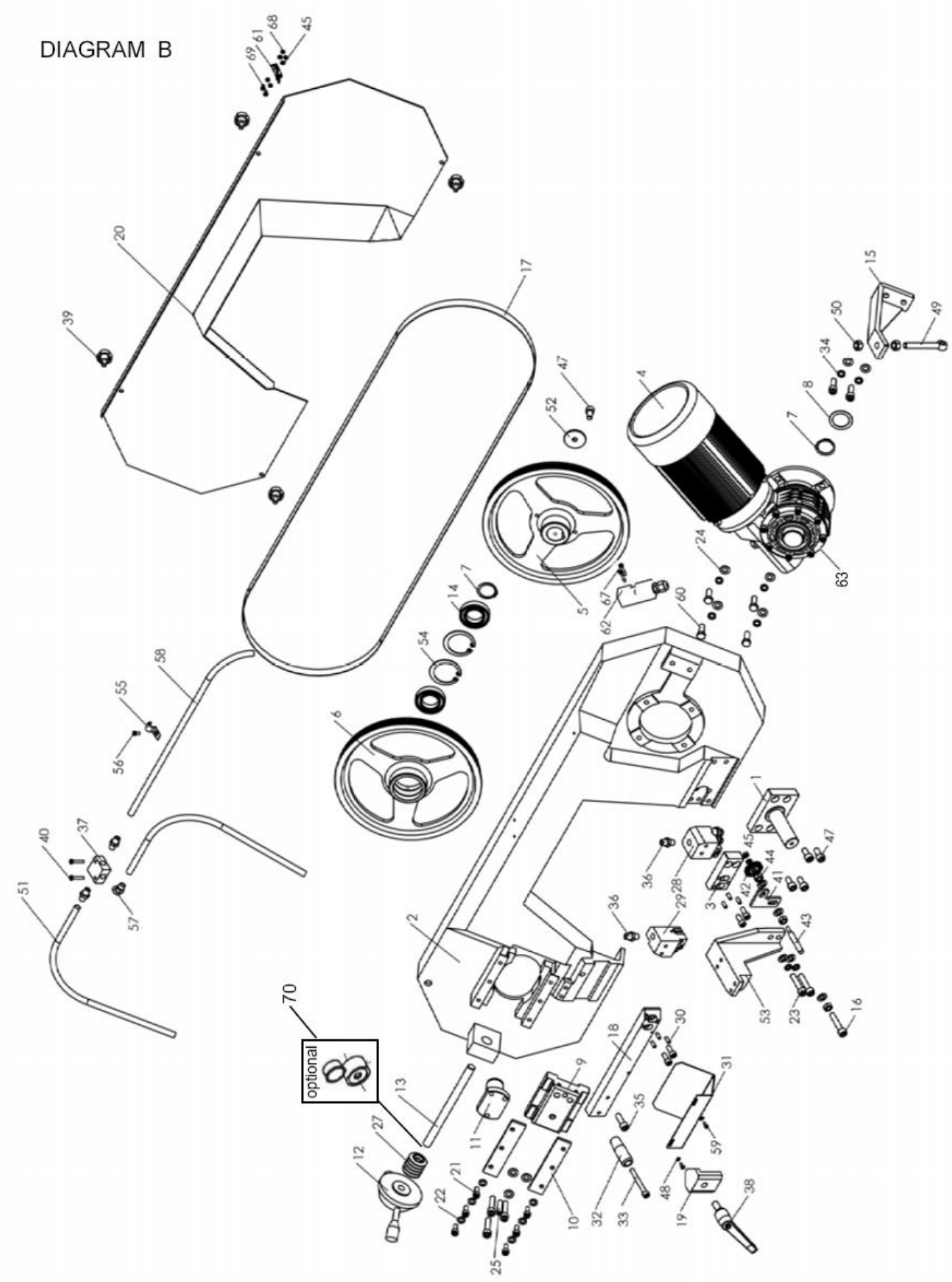


DIAGRAM B
optional

DIAGRAM C

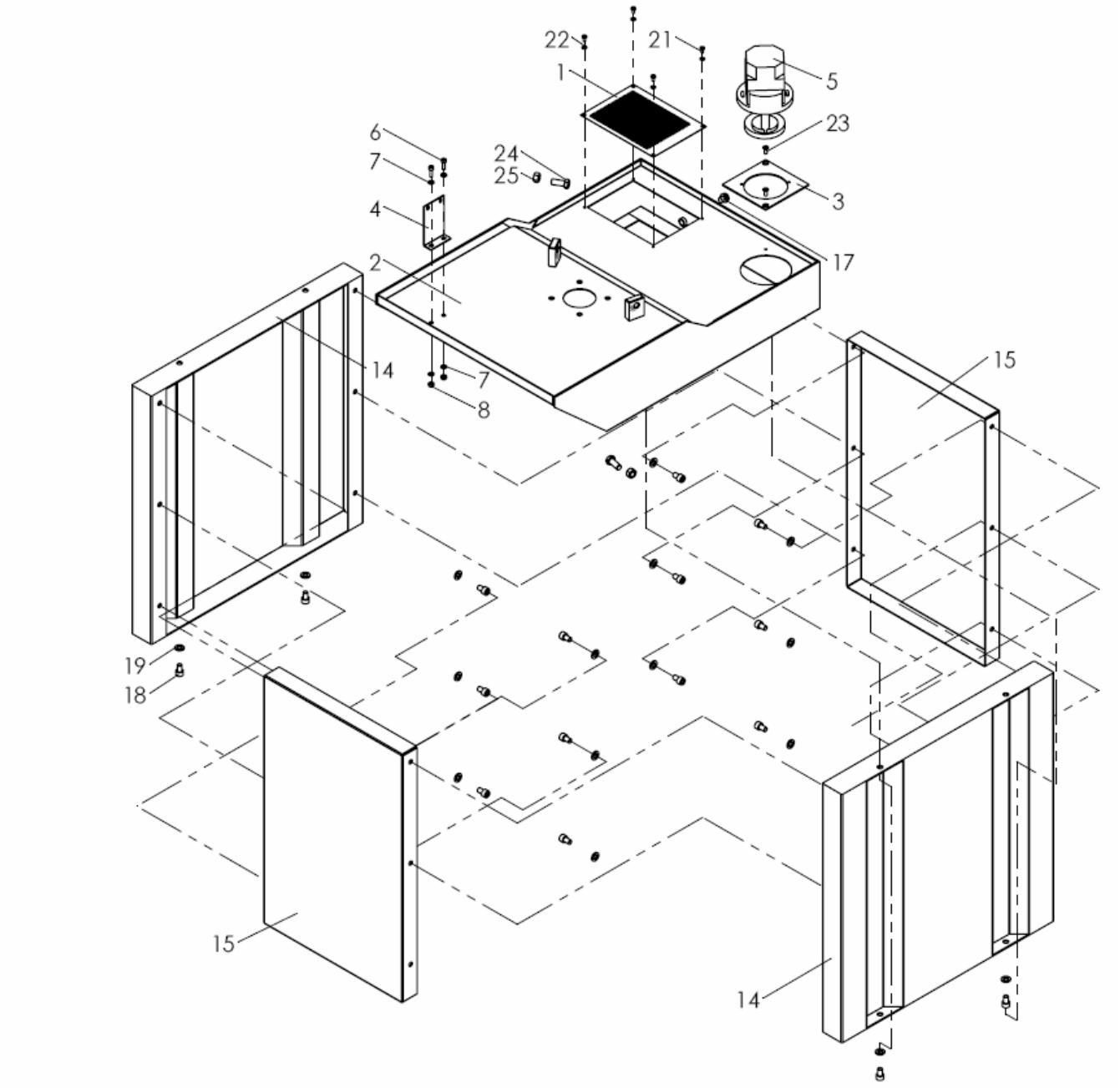


DIAGRAM D

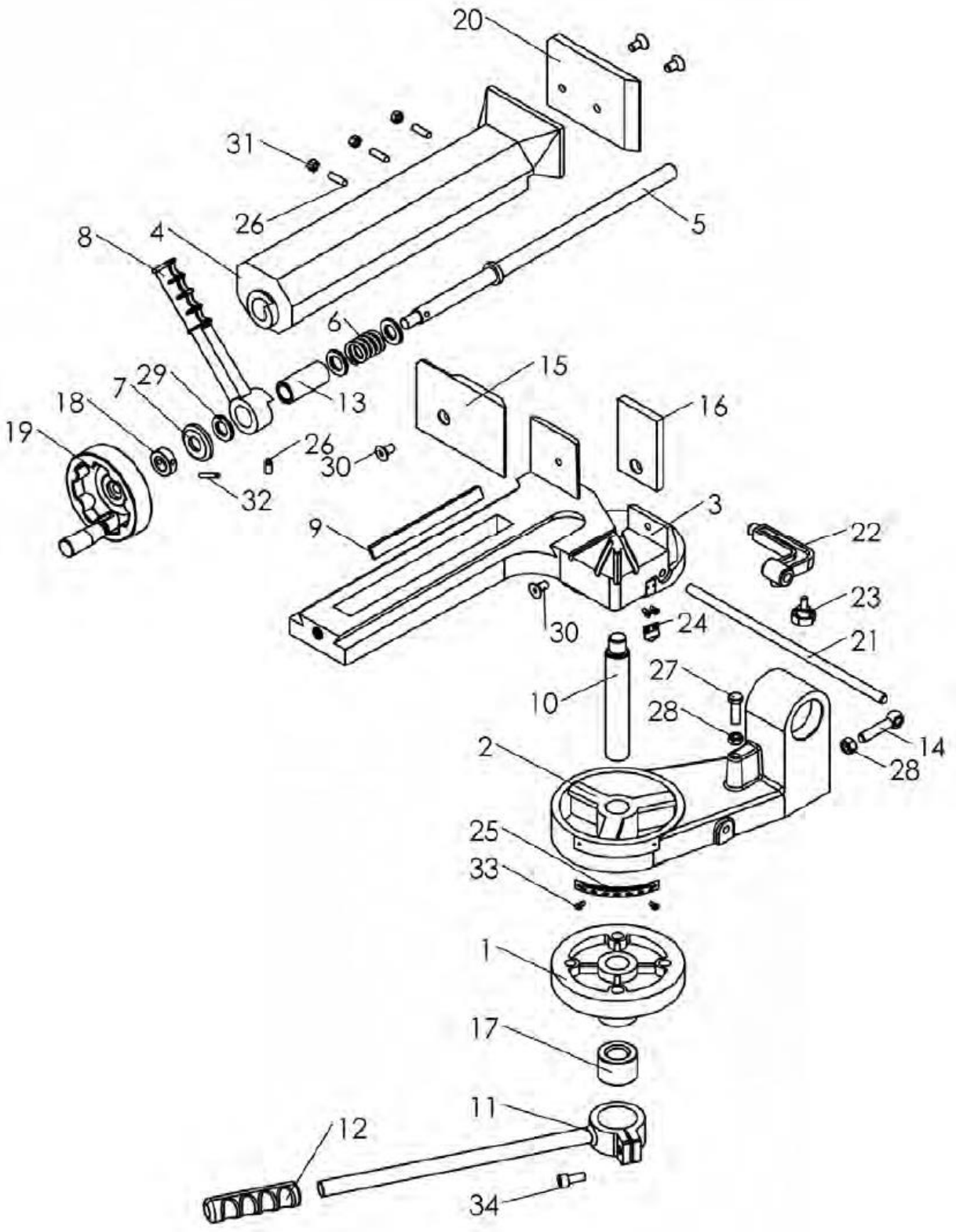

20
31
26
5
8
4
6
15
7
29
13
16
18
19
26
30
32
9
3
22
30
24
23
21
10
27
28
14
28
2
25
33
1
17
11
12
34

DIAGRAM E

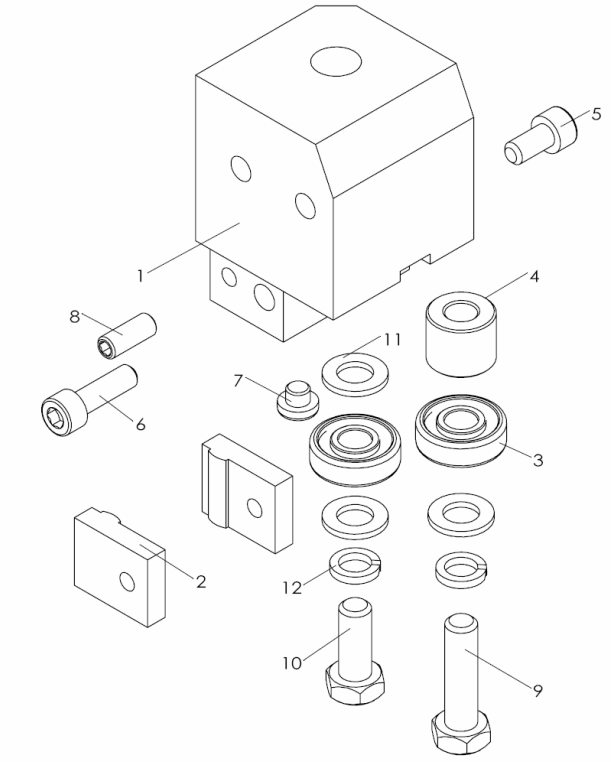
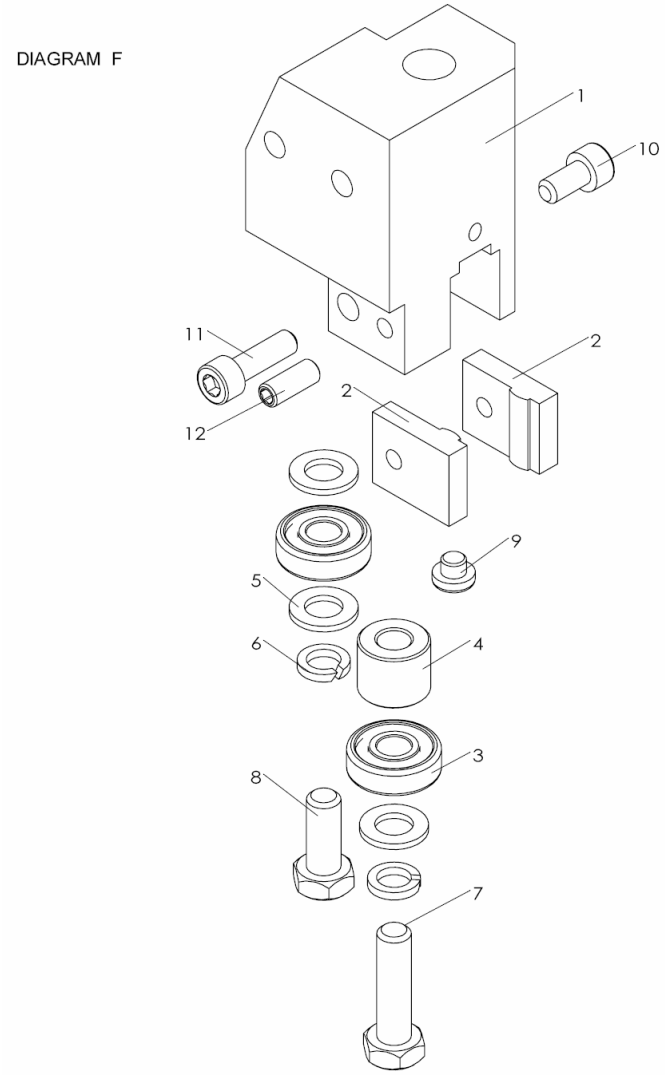


DIAGRAM F



PART LIST FOR DIAGRAM A

NO	Description	NO	Description
A-1	saw bow assembly	A-19	Cross pan head screw
A-2	Vise assembly	A-20	Limited block
A-3	Base assembly	A-21	Hex head screw M8X20
A-4	Control Box	A-22	Hex nut M12
A-5	Cap bearing	A-23	Spring, saw bow
A-6	Micro-switch	A-24	Allen screw M10X15
A-7	Hex head screw M6X15	A-25	Hex locking nut M10
A-8	Flat washer 6	A-26	Hex nut M10
A-9	Hex head screw M8X30	A-27	Bearing SABJK10S
A-10	Bearing 32006	A-28	Hydraulic cylinder
A-11	Sunk head screw M8X20	A-29	Key micro-switch
A-12	Round Nut	A-30	Cross pan head screw
A-13	Dustproof washer	A-31	Cross pan head screw
A-14	Bearing seat	A-32	Support micro-switch
A-15	Bracket, Control box	A-33	Hydraulic cylinder
A-16	Electric box handle	A-34	Hex head screw M10X50
A-17	Sunk head screw M8X12	A-35	Hex head screw M12X25
A-18	Hex head screw M6X15		

PART LIST FOR DIAGRAM B

NO	Description	NO	Description
B-1	Rotate shaft, saw bow	B-16	Hex head Screw M10X50
B-2	Saw bow	B-17	Saw blade
B-3	Saw blade guide plate	B-18	Saw blade Tensioner
B-4	Motor	B-19	Plate
B-5	Capstan	B-20	Blade Guard
B-6	Driven wheel	B-21	Hex head Screw M8X20
B-7	Shaft circlips 35	B-22	Flat Washer 8
B-8	Capstan Adjustment mat	B-23	Hex head Screw M10X45
B-9	The driven wheel seat	B-24	Flat Washer 10
B-10	The driven wheel seat	B-25	Allen Screw M10X40
B-11	The driven wheel shaft	B-26	Handle
B-12	Handle Flanges	B-27	Butterfly spring 16
B-13	Tensioner Screw	B-28	Fixed blade guide
B-14	Bearing 6007	B-29	Guide Mobile
B-15	Segment, stroke spring	B-30	Allen Screw M6X15

NO	Description
B-31	Blade safety guard
B-32	Handle
B-33	Hex head Screw M8X60
B-34	Spring washer 10
B-35	Hex head Screw M10X30
B-36	hose fitting
B-37	3-way fitting
B-38	Lock Lever
B-39	Knob
B-40	Cross Pan head screw
B-41	Positioning plate
B-42	Round brush
B-43	Support shaf
B-44	Hex Nut M10
B-45	Hex Nut 6
B-46	Flat washer 6
B-47	Hex head screw M10x20
B-48	Flat washer 4

NO	Description
B-50	Hex nut M12
B-51	Water pipe
B-52	Shaft collar
B-53	Oil cylinder upper
B-54	Circlip 62
B-55	Water pipe platen
B-56	Cross pan head screw M5x12
B-57	Elbow
B-58	Water pump hose
B-59	Hex head screw M4x10
B-60	Hex head screw M10x35
B-61	Key, micro-switch
B-62	Micro-switch
B-63	Gear box
B-67	Bolt
B-68	Bolt
B-69	Nut
B-70	Blade tension gauge(optional)

PART LIST FOR DIAGRAM C

NO	Description
C-1	Filter
C-2	Base and Tank
C-3	Water pump installation base
C-4	Support Vise
C-5	Coolant Pump
C-6	Hex head screw M6X15
C-7	Washer 6
C-8	Hex nut 6
C-14	Front panel door

NO	Description
C-15	Left side panel
C-17	Tank Plug
C-18	Hex head screw M10X16
C-19	Washer 10
C-21	Pan head screw M5X10
C-22	Washer 5
C-23	Pan head screw M6X12
C-24	Hex head screw M12X30
C-25	Hex nut M12

PART LIST FOR DIAGRAM D

NO	Description	NO	Description
D-1	Vise amount base	D-18	Collar
D-2	Vise rotate base	D-19	Vise handwheel
D-3	Fixed jaw, vise	D-20	Adjustable jaw plate
D-4	Adjustable jaw, vise	D-21	Bar-stop
D-5	Pivot shaft	D-22	Stop workpiece
D-6	Spring	D-23	Star type screw
D-7	Cover bearing	D-24	Pointer
D-8	Quick lock lever	D-25	Angle scales
D-9	Slide plate	D-26	Hex head screw M8X20
D-10	Lock thread	D-27	Hex head screw M10X35
D-11	Saw arm lock lever	D-28	Hex nut M12
D-12	Sliding handle sleeve	D-29	Bearing AXK2035
D-13	Pivot shaft sleeve	D-30	Sunk head screw M10X20
D-14	Spring lower hook	D-31	Hex nut 8
D-15	Fixed jaw plate	D-32	Opening Cylindrical pin 6X35
D-16	Fixed jaw plate	D-33	Cross pan head screw M4X10
D-17	Collar	D-34	Hex head screw M10X25

PART LIST FOR DIAGRAM E

NO	Description	NO	Description
E-1	Fixed blade guide	E-7	Limit washer
E-2	Fixed teeth	E-8	Allen screw M6X15
E-3	Bearing 608	E-9	Hex head screw M8X30
E-4	Spacer, guide	E-10	Hex head screw M8X20
E-5	Hex head screw M6X12	E-11	Flat washer 8
E-6	Hex head screw M6X20	E-12	Spring washer 8

PART LIST FOR DIAGRAM F

NO	Description	NO	Description
F-1	Guide, Mobile	F-7	Hex head screw M8X30
F-2	Fixed teeth	F-8	Hex head screw M8X20
F-3	Bearing 608	F-9	Limit washer
F-4	Spacer, guide	F-10	Hex head screw M6X12
F-5	Flat washer 8	F-11	Hex head screw M6X20
F-6	Spring washer 8	F-12	Allen screw M6X15

30 EU-KONFORMITÄTSERKLÄRUNG/CE-CERTIFICATE OF CONFORMITY / DECLARACIÓN DE CONFORMIDAD CE / DECLARATION DE CONFORMITE CE

CE

Inverkehrbringer / Distributor

HOLZMANN MASCHINEN® GmbH
4170 Haslach, Marktplatz 4, AUSTRIA
Tel.: +43/7289/71562-0; Fax.: +43/7289/71562-4
www.holzmann-maschinen.at

Bezeichnung / name / Denominación / Désignation
METALLBANDSÄGE / HEAD BAND SAW / SIERRA DE CINTA METÁLICA
Typ / model / Modelo / Type
BS 210TOP / BS 275TOP
EU-Richtlinien / EC-directives / Directivas CE / Directives CE
▪2006/42/EG
Angewandte Normen / applicable Standards / Normas aplicables / Normes applicables
▪EN 13898:2003+A1:2009+AC:2010, ▪EN 60204-1:2006+A1:2009+AC:2010 EN ISO 12100:2010

(DE) Hiermit erklären wir, dass die oben genannten Maschinen aufgrund ihrer Bauart in der von uns in Verkehr gebrachten Version den grundlegenden Sicherheits- und Gesundheitsanforderungen der angeführten EU-Richtlinien entsprechen. Diese Erklärung verliert ihre Gültigkeit, wenn Veränderungen an der Maschine vorgenommen werden, die nicht mit uns abgestimmt wurden.

(EN) Hereby we declare that the above mentioned machines meet the essential safety and health requirements of the above stated EC directives. Any manipulation or change of the machine not being explicitly authorized by us in advance renders this document null and void.

(ES) Por medio de la presente, declaramos que las máquinas arribas mencionadas debido a su concepción y construcción en la versión comercializada por nosotros cumplen todos los requisitos esenciales en materia de seguridad y de salud de las directivas CE mencionadas. Esta declaración perderá su validez en caso de que se lleven a cabo modificaciones en la máquina que no hayan sido acordadas con nosotros.

(FR) Nous déclarons par la présente qu'en raison de leur conception, les machines susmentionnées dans la version que nous commercialisons sont conformes aux exigences fondamentales de sécurité et de santé des directives CE mentionnées. Cette déclaration perd sa validité en cas de modifications non convenues avec nous apportées à la machine.

Technische Dokumentation
HOLZMANN-MASCHINEN GmbH
4170 Haslach, Marktplatz 4

Haslach, 28.12.2017
Ort / Datum place/date

DI (FH) Daniel Schörgenhuber
Geschäftsführer / Director