OPTIMUM®
MASCHINEN - GERMANY

Operating manual

Version 1.0.2

Hand-held metal band saw

OPTI saw® SQ-V10

Item no. 3184210

Preface

Dear customer,
Thank you very much for purchasing a product made by OPTIMUM.
OPTIMUM metal working machines offer a maximum of quality, technically optimum solutions and convince by an outstanding price performance ratio. Continuous enhancements and product
innovations guarantee state-of-the-art products and safety at any time.
Before commissioning the machine please thoroughly read these operating instructions and get familiar with the machine. Please also make sure that all persons operating the machine have read and understood the operating instructions beforehand.
Keep these operating instructions in a safe place nearby the machine.

Information

The operating instructions include indications for safety-relevant and proper installation, operation
and maintenanceof the machine. The continuous observance of all notes included in this manual guarantee the safety of persons and of the machine.
The manual determines the intended use of the machine and includes all necessary information for its economic operation as well as its long service life.
In the paragraph "Maintenance" all maintenance works and functional tests are described which the operator must perform in regular intervals.
The illustration and information included in the present manual can possibly deviate from the current state of construction of your machine. Being the manufacturer we are continuously seeking for improvements and renewal of the products. Therefore, changes might be performed without prior notice. The illustrations of the machine may be different from the illustrations in these instructions with regard to a few details. However, this does not have any influence on the operability of the machine.
Therefore, no claims may be derived from the indications and descriptions. Changes and errors are reserved !
Your suggestion with regard to these operating instructions are an important contribution to optimising
our work which we offer to our customers. For any questions or suggestions for improvement, please do not hesitate to contact our service department.

If you have any further questions after reading these operating instructions and you are not able to solve your problem with a help of these operating instructions, please contact your specialised dealer or directly the company OPTIMUM.

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1 Safety

This part of the operating instructions

- explains the meaning and use of the warning notes included in these operating instructions,
- defines the intended use of the metal band saw,
- points out the dangers that might arise for you or others if these instructions are not observed and
- informs you about how to avoid dangers.

In addition to these operating instructions, please observe

- the applicable laws and regulations,
- the statutory provisions for accident prevention,
- the prohibition, warning and mandatory signs as well as the warning notes on the metal band saw.
  warnings on the metal band saw.

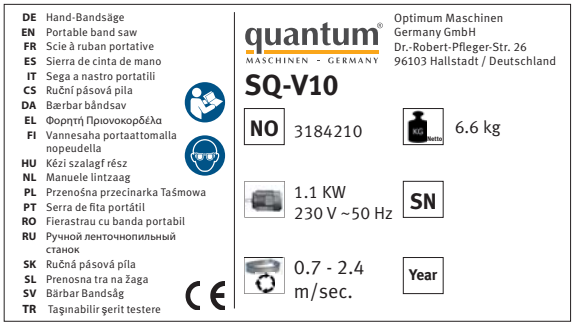
European standards must be met during installation, operation, maintenance and repair of the metal band saw.

If European standards have not yet been incorporated in the relevant national legislation of the destination country, the specific applicable regulations of each country must be observed.

If required, the relevant measures to comply with the country-specific regulations must be taken before commissioning the metal band saw.

Always keep this documentation close to the metal band saw.

1.1 Type plates



1.2 Safety instructions (warning notes)

1.2.1 Hazards Classification

We classify the safety warnings into different categories. The table below gives an overview of the classification of symbols (ideogram) and the warning signs for each specific danger and its (possible) consequences.

Symbol	Alarm expression	Definition / consequence
	**DANGER!**	Impending danger that will cause serious injury or death to people.
	WARNING!	A danger that can cause serious injury or death.
	CAUTION!	A danger or unsafe procedure that can cause personal injury or damage to property.
	**ATTENTION!**	Situation that could cause damage to the machine and product and other types of damage. No risk of injury to persons.

Symbol	Alarm expression	Definition / consequence
	**INFORMATION**	Practical tips and other important or useful information and notes. No dangerous or harmful consequences for people or objects.

In case of specific dangers, we replace the pictogram with


general danger


with a warning of


injury to hands,


hazardous electrical voltage,

or


rotating parts.

1.2.2 Other pictograms


Warning: danger of slipping!


Warning: risk of stumbling!


Warning: hot surface!


Warning: biological hazard!


Warning: automatic start-up!


Warning: tilting danger!


Warning: suspended loads!


Caution, danger of explosive substances!


Switching on forbidden!


Read the operating instructions before commissioning!


Pull out the mains plug!


Wear protective glasses!


Wear protective gloves!


Wear safety shoes!


Wear a protective suit!


Use ear protection!


Protect the environment!


Contact address

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1.3 Intended use

WARNING!

In the event of improper use, the metal belt saw

- **will endanger personnel,**
- **will endanger the machine and other material property of the operating company,**
- **the correct function of the machine may be affected.**

The machine is designed and manufactured to be used in environments where there is no potential danger of explosion.

The metal belt saw is designed and manufactured to saw cold metal, cast material and plastics or other material that are not health hazardous and do not generate dust.

The pieces to be cut must be of a shape that will allow them to be securely attached in the workholder vice and ensure that the piece does not come loose when it is being sawed.

The metal belt saw must only be installed and operated in a dry and ventilated place.

If the metal belt saw is used in any way other than described above, modified without authorization of Optimum Maschinen Germany GmbH, then the metal belt saw is being used improperly.

We will not be held liable for any damages resulting from any operation which is not in accordance with the intended use.

We expressly point out that the guarantee or CE conformity will expire due to any constructive technical or procedural changes which had not been performed by the company Optimum Maschinen Germany GmbH.

It is also part of intended use that

- observe the limits of the metal belt saw,
- obey the operating instructions,
- the inspection and maintenance instructions are observed.

ATTENTION!

The improper use of the metal band saw as well as the non-compliance with the safety regulations or the operating instructions exclude the manufacturer's liability for any damage to persons or objects resulting therefrom and invalidate the warranty claim!

1.4 Reasonably foreseeable misuses

Any other use other than that specified under "Intended use" or any use beyond the described use shall be deemed as non-intended use and is not permissible.

Any other use has to be discussed with the manufacturer.

In order to avoid misuse, it is necessary to read and understand the operating instructions before first commissioning. The user of the metal band saw must be qualified.

1.4.1 Avoiding misuse

The metal band saw is not suitable for sawing through high-strength and high-quality steel materials. Suitable materials are preferably tubes and profiles made of metal and non-ferrous metals.

INFORMATION

The metal band saw is built according to the standard EN 61800 class C2.

WARNING!

This type is not suitable for connection to a public low-voltage network supplying residential buildings. When connecting to a public low voltage network, radio frequency interference is expected.

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Overview of the EMC categories:

Categorie C1

- required limit values Class B Group 1 according to EN 55011

Categorie C2

- Required limit values class A Group 1 according to EN 55011, Installation by EMC experts and warning: “This is a product of category C2 according to EN 61800-3. This product may cause radio interference in a residential area. In this case, it may be necessary for the operator to take appropriate action.“

Categorie C3

- Required limit values class A group 2 according to EN 55011, whereby these limit values are below those of class A group 1, plus warning: „This type is not suitable for connection to a public low-voltage network supplying residential buildings. When connecting to a public low voltage network, radio frequency interference is expected. "

This machine	☐	☒	☐	☐
Categorie	**C1**	**C2**	**C3**	**C4**
Environment	Residential area Business area Industrial area		Industrial area	
Voltage / Current	< 1000 V			> 1000 V
EMC knowledge	no requirement	Installation and commissioning by an EMC expert		

1.5 Residual risks

Even if the device is used correctly, there is always a certain residual risk that cannot be excluded. The following potential hazards can be derived from the type and construction of the device:

- Contact with the unprotected part of the saw blade (cutting injury).
- Contact with ejected parts of the saw blade in the event of breakage (cutting injury).
- Non-return and ejection of workpiece parts (pushing).
- Loss of hearing ability if no hearing protection is used during work (hearing loss).
- Contact with electric current due to defective or sawn-on supply cable, motor housing (electric shock).
- Harmful emissions from sawed material.

If the instructions contained in this operating manual are not observed, other residual risks may occur due to improper use.

1.6 General safety instructions for electric tools

WARNING!

Read all safety instructions and instructions. Failure to follow the safety precautions and instructions may result in electric shock, fire and/or serious injury. Keep all safety information and instructions for future reference. The term "power tool" used in the safety instructions refers to power tools (with power cord) and battery-powered power tools (without power cord).

1.7 Workplace safety

- Keep your work area clean and well lit. Disorder or unlit work areas can lead to accidents.
- Do not work with the power tool in a potentially explosive environment containing flammable liquids, gases or dust. Power tools produce sparks that can ignite the dust or vapors.

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- Keep children and other persons away while using the power tool. If you are distracted, you may lose control of the unit.

1.8 Electrical safety

- The connector plug of the power tool must fit into the socket. The plug must not be changed in any way. Do not use adapter plugs together with earthed power tools. Unchanged plugs and suitable sockets reduce the risk of electric shock.
- Avoid physical contact with grounded surfaces such as pipes, heaters, stoves and refrigerators. There is an increased risk of electric shock if your body is grounded.
- Keep power tools away from rain or moisture. Penetration of water into a power tool increases the risk of electric shock.
- Do not misuse the cable to carry, hang, or disconnect the power tool from the outlet. Keep the cable away from heat, oil, sharp edges, or moving parts. Damaged or tangled cables increase the risk of electric shock.
- When working with an outdoor power tool, use only extension cords that are suitable for outdoor use. Using an extension cord suitable for outdoor use will reduce the risk of electric shock.
- If operation of the power tool in a humid environment is unavoidable, use a residual current circuit breaker. The use of a residual current circuit breaker reduces the risk of electric shock.

1.9 Personal safety

- Be attentive, pay attention to what you are doing, and go to work with a power tool with common sense. Do not use a power tool if you are tired or under the influence of drugs, alcohol or medication. A moment of carelessness while using the power tool can lead to serious injury.
- Always wear personal protective equipment and safety goggles. Wearing personal protective equipment such as a dust mask, non-slip safety shoes, safety helmet or ear protection, depending on the type and use of the power tool, will reduce the risk of injury.
- Avoid unintentional commissioning. Make sure the power tool is turned off before connecting, picking up or carrying it to the power supply and/or battery. If you have your finger on the switch when carrying the power tool or if you connect the unit to the power supply switched on, this can lead to accidents.
- Remove adjustment tools or wrenches before turning on the power tool. A tool or wrench located in a rotating part of the unit may cause injury.
- Avoid abnormal posture. Make sure you stand securely and keep your balance at all times. This will allow you to better control the power tool in unexpected situations.
- Wear appropriate clothing. Do not wear loose clothing or jewellery. Keep hair, clothing and gloves away from moving parts. Loose clothing, jewellery or long hair may be caught by moving parts.
- If dust extraction and collection devices can be installed, make sure they are connected and used correctly. Using a dust extractor may reduce dust hazards.
- Excessive noise levels can cause hearing damage. Hearing protection should therefore be worn, especially indoors.
- Dust and splinters can cause eye injury: Always wear safety glasses or glasses with safety glasses.
- Dust is a particular hazard. You should wear a protective mask to avoid inhaling dust.
- Always wear a helmet and safety shoes.
- Always wear perfect, close-fitting protective clothing.
- Long hair must be tied together, loose jewellery should be discarded.
- Do not work on the metal band saw if your ability to concentrate is reduced for any reason, such as the influence of medication.



1.10 Use and handling of the electric power tool

- Do not overload the device. Use the appropriate power tool for your work. With the appropriate power tool you will work better and safer in the specified power range.

- Do not use a power tool with a defective switch. A power tool that cannot be switched on or off is dangerous and must be repaired.
- Unplug and/or remove the battery before making any adjustments, changing any accessories, or putting the unit away. This precaution prevents the power tool from accidentally starting.
- Keep unused power tools out of the reach of children.
- Do not allow persons to use the device who are not familiar with it or have not read these instructions. Power tools are dangerous if used by inexperienced persons.
- Maintain power tools with care. Check that moving parts function correctly and do not jam, that parts are broken or damaged in such a way that the function of the power tool is impaired. Have damaged parts repaired before using the unit. Many accidents are caused by poorly maintained power tools.
- Keep cutting tools sharp and clean. Carefully maintained cutting tools with sharp cutting edges jam less and are easier to guide.
- Use power tools, accessories, insert tools, etc. according to these instructions. Take into account the working conditions and the activity to be performed. The use of power tools for applications other than those intended can lead to dangerous situations.

1.11 Safety during operation

The specified vibration emission value limits the working time. If you notice a gribble or discoloration (white) of the fingers, stop working.

WARNING!

The actual existing vibration emission value during the use of the machine may deviate from that specified in the operating instructions or by the manufacturer. This can be caused by the following influencing factors, which must be observed before each use or during use:

You should ask yourself the following questions.

- Is the machine being used correctly?
- Is the way of cutting the material and how the material is processed correct ?
- Is the state of use of the machine in order ?
- Is the sharpness of the saw blade in order ?
- Are the handles and any optional vibrating handles mounted and are they firmly attached to the machine body?

If you notice an unpleasant sensation or discoloration of the skin on your hands while using the machine, stop working immediately. Take adequate breaks from work.

Failure to observe sufficient work breaks may result in a hand-arm vibration syndrome.

The degree of load should be estimated as a function of the work or use of the machine and appropriate work breaks should be taken. In this way, the degree of load can be significantly reduced during the entire working time. Minimise the risk of vibration. Maintain this machine according to the instructions in the operating manual.

If the machine is used frequently, you should contact your specialist dealer and obtain anti-vibration accessories (handles) if necessary.

Avoid using the machine at temperatures t=10°C or less. Make a work plan to limit the vibration load.

A certain amount of noise from this device cannot be avoided. Relocate noisy work to approved and designated times. If necessary, adhere to rest periods and limit the duration of work to what is necessary.

For their personal protection and the protection of persons in the vicinity, suitable hearing protection must be worn.

1.12 Special safety instructions

- Only remove chips when the saw blade is at a standstill!
- Do not brake the running out band saw blade to the side!

- Before starting the sawing work, make sure that the saw blade shows the indicated direction of rotation.
- Do not start cutting until the saw band has reached its full speed.
- Do not machine workpieces that are too large or too small for the performance of the machine.
- When leaving the saw, first switch off the motor and disconnect the mains plug.
- Always work with sharp and set bandsaw blades.
- Torn saw bands or saw bands that have changed their shape must not be used.
- Use protective gloves when changing the saw blade.
- When working, only hold the appliance by the insulated gripping surfaces when carrying out work where the cutting tool could hit hidden power lines or the appliance's own cable. Contact with a live wire will also energize the metal parts of the equipment and result in electric shock.
- Do not touch metal parts during operation.

1.13 Personal protective equipment

For certain work personal protective equipment is required.

- Protect your face and your eyes: Wear a safety helmet with facial protection when performing works where your face and eyes are exposed to hazards. Use protective gloves when handling pieces with sharp edges.

- Use safety shoes when you assemble, disassemble or transport heavy components, or transport the metal belt saw.

- Use ear protection if the noise level (emission) in the workplace exceeds 80 dB (A).
- Before starting work make sure that the required personnel protective equipment is available at the work place.

CAUTION!

Dirty or contaminated personnel protective equipment can cause illness. It must be cleaned after each use and at least once a week.

2 Technical data

Nominal voltage	220-240V~, 50Hz
Power consumption	1100W
Belt speed	42 - 144 m/min
Insulation	Protection class II (device with protective insulation instead of a protective conductor)
Degree of protection	IP 20 (protection against foreign bodies and water)
Weight	6.3 kg
Max. sawing capacity 90° without table	127mm x 127mm
Max. sawing capacity 45° without table	40mm x 120mm
with table 90°	round: 115mm
	square: 105mm x 105mm
	rectangular: 100mm x 115mm
with table 45°	round: 45mm

	sqare: 40mm x 40mm
	rectangular: 30mm x 45mm
Saw blade dimension	1140 x13mm x 0.65mm (standard 10-14 teeth per inch)
Dimensions saw	465 x 280 x 165 mm
Noise and vibration	Measured values determined according to EN 60745-2-20 and EN 60745-1+A11
Sound pressure level	LpA: 89 dB(A) KpA: 3,0
Sound power level	LwA: 100 dB(A) KwA: 3,0
Typical hand-arm vibration	$a_{h,CM}$ = 6,62m/s^2 $a_{h,CW}$ = 6,08m/s^2 K = 1,5 m/s^2 for cut-out metal

3 Unpacking and Connecting

3.1 Scope of delivery

Compare the scope of delivery with the delivery note.

Immediately after receiving the metal band saw, check the condition and immediately complain any damage to the last carrier, even if the packaging is not damaged. In order to secure claims against the transport company, we recommend that you temporarily leave machines, equipment and packaging materials in the condition in which they were found when the damage was ascertained or photograph this condition. Please inform us of all other complaints within six days of receipt of the delivery.

Check all parts for tight fit.

3.2 Connection to power supply, wiring, socket design

The device is suitable for 220 - 240V alternating current. Make sure that the voltage (V) and frequency (Hz) of the machine (see type plate and technical data) match those for the mains connection.

Extension cables up to 22m in length should be 1.5mm2 or other suitable extension cables in accordance with local regulations. The electrical appliance has protection class II. The protective insulation of protection class II is a protective measure intended to prevent conductive parts of equipment from being touched which carry voltage as a result of a fault in the basic insulation. However, electric shock cannot be ruled out when cutting live parts and cables with a metal band saw.

3.3 Restrictions with regard to environmental conditions

Make sure that the work surface is clear and well-lit, neither wet nor exposed to flammable or explosive substances.

Prevent unauthorized persons from touching the machine or the power cord.

3.4 Storage

If the machine is not in use, it should be kept in a dry and safe place out of the reach of unauthorised persons.

ATTENTION!

Incorrect and improper storage can damage and destroy electrical and mechanical machine components.

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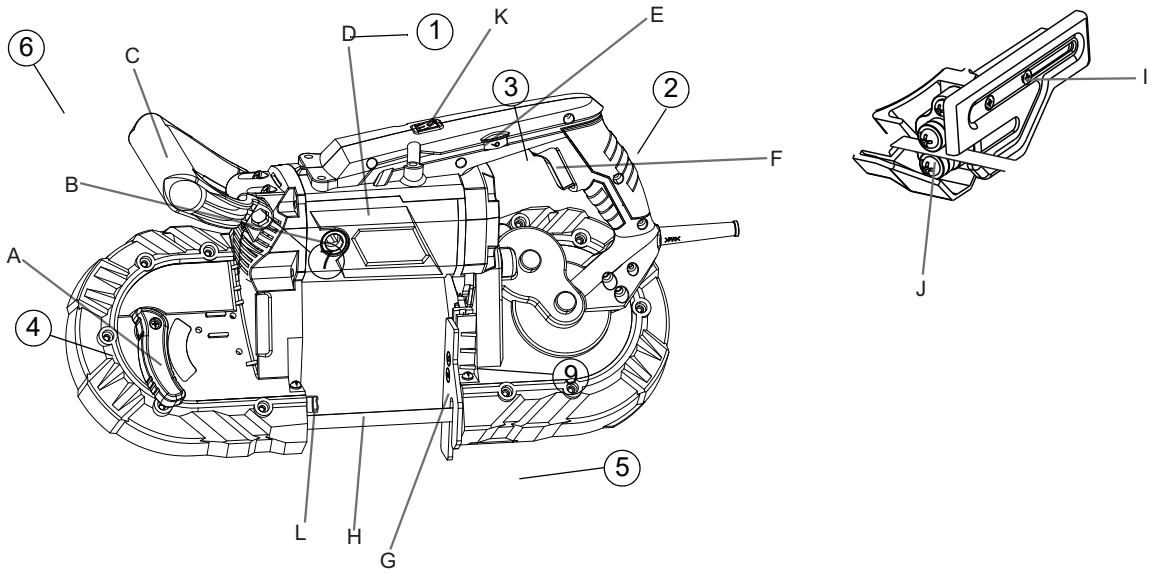
4 Operation

4.1 Overview



Pos.	Designation	Pos.	Designation
A	Clamping lever	B	Carbon brushes housing
C	Supporting handle	D	Motor housing
E	Speed controller	F	ON Switch with spring return
G	Workpiece - stop surface	H	Saw band
I	Screw	J	Saw blade guide
K	LED On/Off	L	LED light

4.2 Operating switch

WARNING!

Before connecting the machine to the mains, always check that the ON switch is not jammed by dirt.

- ❍ Press the ON switch (F) to turn on the unit.
- ❍ To switch off the unit, release the switch (F) again.

4.3 Clamping lever

Turn the clamping lever until the saw band is firmly tensioned.

4.4 Sawing

WARNING!

Make sure that the workpiece is actually clamped. Make sure that the saw band is tensioned with the clamping lever.

CAUTION!

Hold the metal band saw with your hands only on the insulated handles.

ATTENTION!

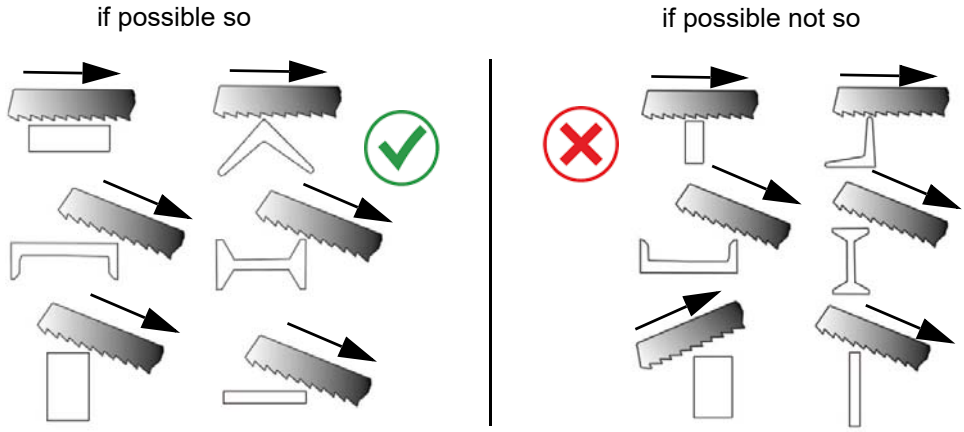
If the band saw becomes jammed or stuck in the workpiece material during sawing, release the ON switch immediately to prevent damage to the band saw blade and motor.

ATTENTION!

The band saw is not suitable for use with coolant during the sawing process. Coolant is deposited on the rubberized band rolls and causes the saw band to slip. It also reduces the service life of the machine.

Do not exert too much pressure on the machine when working. The machine's own weight is usually sufficient. Excessive force or leaning against the machine can bend the band saw blade, break the band saw blade, damage the machine and cause an accident.

- Use fixtures or a vice to hold the workpiece in place.
- A vice for more accurate saw guidance, which can be connected to the machine, is available as an option.
- Make sure that electrical cables are kept away from the work area.
- Place the workpiece stop face against the workpiece.
- Switch on the band saw.
- Tilt the machine so that the saw band is perpendicular to the workpiece.
- Please look out for foreign objects such as nails and screws on pre-treated wood.
- If possible, saw the material as follows ✓, wie in der nachfolgenden Abbildung dargestellt.



4.4.1 Speed adjustment

Regulation of the rotation speed. Regulate the speed of rotation by turning the speed control knob.

Never change the speed while the saw is running.

The speed is increased by turning the adjusting wheel in the direction of the number 6. Select a suitable speed for the workpiece to be cut.

ATTENTION!

The speed controller can only be turned up to the number 6 and back to 1. In the case of violent overturning, it may no longer be possible to set the speed.

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4.4.2 LED

LED for the lighting. Press the switch (K) to switch on the LED for the lighting. Press the switch again to turn off the backlight.

4.5 Optionally available saw guide with vice

Remove the 3 threaded cover caps from the saw and screw the support arm of the vice to the metal band saw. Sawing operations from 0 to 45° degrees are possible with the vice. The saw guide with vice is available under article no. 3184212.

5 Maintenance

ATTENTION!

Regular, properly performed maintenance is an essential prerequisite for

- **operational safety,**
- **trouble-free operation,**
- **a long service life of the metal band saw and**
- **the quality of the products you manufacture.**

5.1 Safety

WARNING!

The consequences of improperly carried out maintenance and repair work can be:

- **Severe injuries to those working on the metal band saw,**
- **Damage to the metal band saw.**

Only qualified personnel may service and repair the metal band saw.

5.1.1 Preparation

WARNING!

Only work on the metal band saw when it is disconnected from the power supply.

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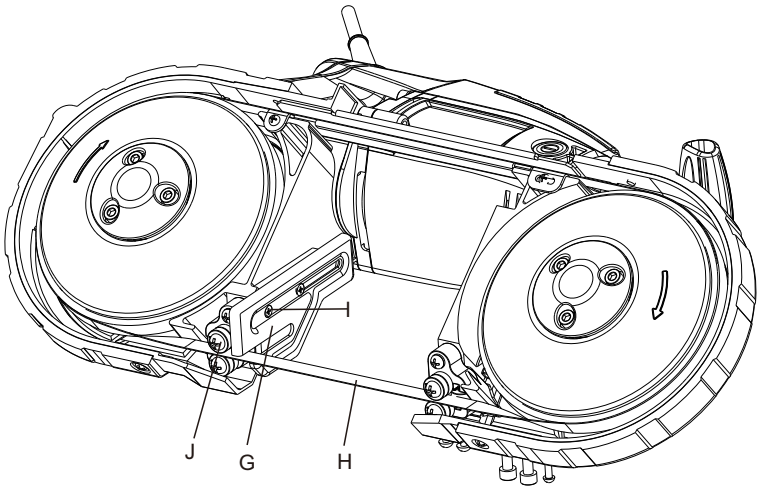
5.2 Inspection and maintenance

The company Optimum Maschinen Germany GmbH does not assume any liability and guarantee for damages and malfunctions as a result of non-observance of these operating instructions.

Use the following for repairs

- only perfect and suitable tools,
- only original spare parts or serial parts expressly approved by Optimum Maschinen Germany GmbH.
- Always keep the ventilation slots of the drive motor free and clean. Clean them with a soft brush.
- Wipe the metal band saw with a damp cloth. Do not use caustic agents.
- Water, oil and dirt must not get into the metal band saw.
- The saw band must be checked for damage before starting work.

5.3 Replacing the saw band



Img.5-1: Rear of saw with protective cover removed

ATTENTION!

Danger of cuts, proceed cautiously when carrying out the work described below. Use the prescribed protective equipment.

- Disconnect the mains plug.
- Release the saw blade tension. If necessary, remove the workpiece stop face (G) by loosening the screw (I).
- Remove the rear cover of the saw band. In the picture above it is already dismantled.
- Lift the saw band (H) from the band rollers.
- Check the guide rollers and remove any coarse chips. Jammed chips can prevent the guide rollers from turning and damage them.
- There are rubber bands on the tape rolls. The rubber bands must be checked for play or damage when changing the saw band. Clean chips from the rubber bands on the band rollers. This will extend the service life of the bands and prevent the saw band from slipping.
- Place a new band saw blade on the band rollers. The saw teeth must face downwards and be inside the saw band guide (J).
- Re-attach the stop face and turn the tension lever to tighten the band saw blade

5.4 Daily maintenance work

- Remove the chips and clean the machine.
- Check the protective covers for tight fit.

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5.5 Brush change

❍ Use a screwdriver to remove the two covers of the carbon brush housing. Remove the two carbon brushes and dispose of them.

5.5.1 Brush control

Check the carbon brushes after the first 50 hours of operation on a new machine or when new brushes are installed. Repeat the inspection every 10 operating hours after the first inspection. If the carbon is worn to a length of about 6 mm, or if the spring or contact wire is burnt or damaged, both brushes must be replaced. If the brushes are found to be reusable after removal, the brushes can be reinstalled.

INFORMATION

The brushes must always be replaced in pairs.

Slide in the new busts, put on the covers and tighten them with the screwdriver. The new brushes may produce sparks first, until they have adapted to the profile of the motor. Repeat the procedure on the other side.

5.6 Cleaning

Keep all safety devices, ventilation openings and the motor housing as free of dirt and dust as possible. Wipe the unit with a clean cloth or blow it out with compressed air at low pressure. We recommend that you clean the unit immediately after each use. Clean the unit regularly with a damp cloth and some soft soap. Do not use cleaning agents or solvents. These can attack the plastic parts of the unit. Make sure that no water can penetrate into the device. Penetration of water into a power tool increases the risk of electric shock. Wipe chips and dust from the machine with a cloth from time to time. To extend the life of the tool, oil the rotating parts monthly. Do not oil the engine.

6 Appendix

6.1 Copyright

6.2 Liability claims for defects / warranty

Besides the legal liability claims for defects of the customer towards the seller, the manufacturer of the product, OPTIMUM GmbH, Robert-Pfleger-Straße 26, D-96103 Hallstadt, does not grant any further warranties unless they are listed below or were promised as part of a single contractual provision.

❍ Liability or warranty claims are processed at OPTIMUM GmbH's discretion either directly or through one of its dealers.
Any defective products or components of such products will either be repaired or replaced by components which are free from defects. Ownership of replaced products or components is transferred to OPTIMUM Maschinen Germany GmbH.

❍ The automatically generated original proof of purchase which shows the date of purchase, the type of machine and the serial number, if applicable, is the precondition in order to assert liability or warranty claims. If the original proof of purchase is not presented, we are not able to perform any services.

- Defects resulting from the following circumstances are excluded from liability and warranty claims:
  - Using the product beyond the technical options and proper use, in particular due to over-straining of the machine.
  - Any defects arising by one's own fault due to faulty operations or if the operating manual is disregarded.
  - Inattentive or incorrect handling and use of improper equipment
  - Unauthorized modifications and repairs
  - Insufficient installation and safeguarding of the machine
  - Disregarding the installation requirements and conditions of use
  - atmospheric discharges, overvoltage and lightning strokes as well as chemical influences
- The following items are also not subject to liability or warranty claims:
  - Wearing parts and components which are subject to a standard wear as intended such as e.g. V-belts, ball bearings, illuminants, filters, sealings, etc.
  - Non reproducible software errors
- Any services, which OPTIMUM GmbH or one of its agents performs in order to fulfil any additional warranty are neither an acceptance of the defects nor an acceptance of its obligation to compensate. These services neither delay nor interrupt the warranty period.
- The court of jurisdiction for legal disputes between businessmen is Bamberg.
- If any of the aforementioned agreements is totally or partially inoperative and/or invalid, a provision which nearest approaches the intent of the guarantor and remains within the framework of the limits of liability and warranty which are specified by this contract is deemed agreed.

6.3 Advice for disposal / Options of reuse:

Please dispose of your equipment in an environmentally friendly manner, by not placing waste in the environment but in a professional manner.

Please do not simply throw away the packaging and later the disused machine, but dispose of both in accordance with the guidelines laid down by your city council/local authority or by an authorised disposal company.

6.3.1 Decommissioning

CAUTION!

Immediately decommission used machines in order to avoid later misuse and endangering of the environment or of persons.

- **Unplug the power cord.**
- **Cut the connection cable.**
- **Remove all operating materials from the used device which are harmful to the environment.**
- **If applicable remove batteries and accumulators.**
- **Disassemble the machine if required into easy-to-handle and reusable assemblies and component parts.**
- **Dispose of machine components and operating fluids using the intended disposal methods.**

6.3.2 Disposal of new device packaging

All used packaging materials and packaging aids from the machine are recyclable and generally need to be supplied to the material reuse.

The packaging wood can be supplied to the disposal or the reuse.

Any packaging components made of cardboard box can be chopped up and supplied to the waste paper collection.

The films are made of polyethylene (PE) and the cushion parts are made of polystyrene (PS). These materials can be reused after reconditioning if they are passed to a collection station or to the appropriate waste management enterprise.

Only forward the packaging materials correctly sorted to allow direct reuse.

6.3.3 Disposal of the old device

INFORMATION

Please take care in your interest and in the interest of the environment that all component parts of the machine are only disposed of in the intended and admitted way.

Please note that the electrical devices comprise a variety of reusable materials as well as environmentally hazardous components. Please ensure that these components are disposed of separately and professionally. In case of doubt, please contact your municipal waste management. If appropriate, call on the help of a specialist waste disposal company for the treatment of the material.

6.3.4 Disposal of electrical and electronic components

Please make sure that the electrical components are disposed of professionally and according to the statutory provisions.

The device is composed of electrical and electronic components and must not be disposed of as household waste. According to the European Directive regarding electrical and electronic used devices and the implementation of national legislation, used power tools and electrical machines need to be collected separately and supplied to an environmentally friendly recycling centre.

As the machine operator, you should obtain information regarding the authorised collection or disposal system which applies for your company.

Please make sure that the electrical components are disposed of professionally and according to the legal regulations. Please only throw depleted batteries in the collection boxes in shops or at municipal waste management companies.

6.4 Disposal through municipal collection facilities

Disposal of used electrical and electronic components
(Applicable in the countries of the European Union and other European countries with a separate collecting system for those devices).

The sign on the product or on its packing indicates that the product must not be handled as common household waste, but that is needs to be disposed of at a central collection point for recycling. Your contribution to the correct disposal of this product will protect the environment and the public health. Incorrect disposal constitutes a risk to the environment and public health. Recycling of material will help reduce the consumption of raw materials. For further information about the recycling of this product, please consult your District Office, municipal waste collection station or the shop where you have purchased the product.

6.5 Change information operating manual

Chapter	Short summary	new version number
CE	EN 60745-2-20:2010-02	1.0.1
Spare parts	Optional saw guide	1.0.2

OPTIMUM®
MASCHINEN - GERMANY

EC - Declaration of Conformity

in accordance with the Machinery Directive 2006/42/EC Annex II 1.A

The manufacturer / distributor Optimum Maschinen Germany GmbH
Dr.-Robert-Pfleger-Str. 26
D - 96103 Hallstadt

hereby declares that the following product

Product designation: Hand-held metal band saw

Type designation: SQ-V10

Hand-held metal bandsaw complying with all relevant provisions of the above Directive 2006/42/EC and the other Directives applied (hereinafter), including their amendments in force at the time of the declaration. The following other EU Directives have been applied: EMC Directive 2014/30/EU ; Restriction of the use of certain hazardous substances in electrical and electronic equipment 2015/863/EU

The safety objective meet the requirement of EC Directive 2006/42/EC.

The following harmonized standards were applied:

EN 60745-1:2009+A11:2010 - Hand-guided motor-operated electric tools. Safety. General requirements

EN 60745-2-20:2010-02 - Hand-held motor-operated electric tools - Safety - Part 2-20: Particular requirements for band saws

EN 55014-1:2006 +A1:2009 + A2:2011 - Electromagnetic compatibility - Requirements for household appliances, electric tools and similar electrical appliances - Part 1: Emission of disturbances

EN 55014-2:2015 - Electromagnetic compatibility - Requirements for household appliances, electric tools and similar electrical appliances - Part 2: Immunity

EN 61000-3-2:2014 - Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current <= 16 A per phase)

EN 61000-3-3:2013 - Electromagnetic compatibility (EMC) - Part 3-3: Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current <= 16 A per phase and not subject to conditional connection

Responsible for documentation: Kilian Stürmer, phone: +49 (0) 951 96555 - 800

Address: Dr.-Robert-Pfleger-Str. 26, D - 96103 Hallstadt, Germany

Kilian Stürmer
(CEO, General Manager)
Hallstadt, 2021-03-09

7 Ersatzteile - Spare parts

7.1 Ersatzteilbestellung - *Ordering spare parts*

Bitte geben Sie folgendes an - *Please indicate the following :*

- Seriennummer - *Serial No.*
- Maschinenbezeichnung - *Machines name*
- Herstellungsdatum - *Date of manufacture*
- Artikelnummer - *Article no.*

Die Artikelnummer befindet sich in der Ersatzteilliste. *The article no. is located in the spare parts list.* Die Seriennummer befindet sich am Typschild. *The serial no. is on the rating plate.*

7.2 Hotline Ersatzteile - Spare parts Hotline

+49 (0) 951-96555 -118

ersatzteile@stuermer-maschinen.de

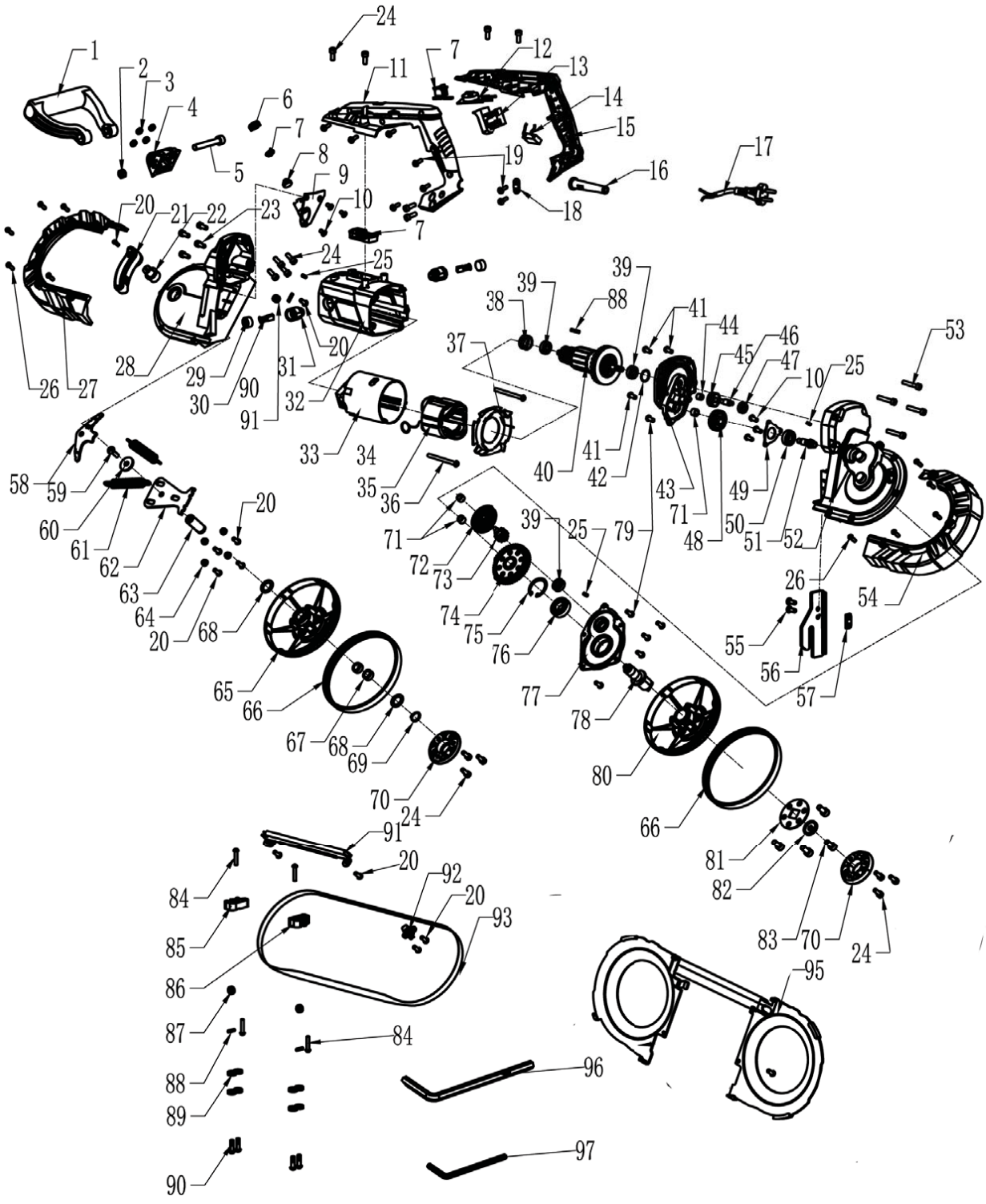
7.3 Service Hotline

+49 (0) 951-96555 -100

service@stuermer-maschinen.de

7.4 Ersatzteilzeichnungen - Spare part drawings

A komplette Säge - complete saw



SQ-V10					
Pos.	**Bezeichnung**	**Description**	**Menge Qty.**	**Grösse Size**	**Artikelnummer Item no.**
Pos. 1	Hilfsgriff SQ-V10	Auxiliary handle SQ-V10	1		0318421001
Pos. 2	Schraube SQ-V10	Screw SQ-V10	1	M8	
Pos. 3	Sicherungsmutter SQ-V10	Self-locking nut SQ-V10	4	M6	
Pos. 4	Hilfsgriffbasis SQ-V10	Auxiliary handle base SQ-V10	1		0318421004
Pos. 5	Schraube SQ-V10	Screw SQ-V10	1	M8×70mm	
Pos. 6	Lichtabdeckung SQ-V10	Light back cover SQ-V10	1		0318421006
Pos. 7	LED Licht SQ-V10	LED light SQ-V10	1		0318421007
Pos. 8	LED Abdeckung SQ-V10	LED Cover SQ-V10	1		0318421008
Pos. 9	Lichtsockel SQ-V10	Light base SQ-V10	1		0318421009
Pos. 10	Schraube SQ-V10	Screw SQ-V10	6	M4×8mm	
Pos. 11	Linker Griff SQ-V10	Left handle SQ-V10	1		0318421011
Pos. 12	Drehzahlregler SQ-V10	Speed controller SQ-V10	1		0318421012
Pos. 13	Schalter SQ-V10	Switch SQ-V10	1		0318421013
Pos. 14	Kondensator SQ-V10	Capacitor SQ-V10	1		0318421014
Pos. 15	Rechter Griff SQ-V10	Right handle SQ-V10	1		0318421015
Pos. 16	Hülse SQ-V10	Sleeve SQ-V10	1		0318421016
Pos. 17	Kabel SQ-V10	Cable SQ-V10	1		0318421017
Pos. 18	Kabelplatte SQ-V10	Cable plate SQ-V10	1		0318421018
Pos. 19	Schraube SQ-V10	Screw SQ-V10	8	4×16	
Pos. 20	Schraube SQ-V10	Screw SQ-V10	12	M4×12mm	
Pos. 21	Verstellbarer Schraubenschlüssel SQ-V10	Adjustable wrench SQ-V10	1		
Pos. 22	Einstellwelle SQ-V10	Adjusting shaft SQ-V10	1	45	0318421022
Pos. 23	Schraube SQ-V10	Screw SQ-V10	4	M6×20	
Pos. 24	Schraube SQ-V10	Screw SQ-V10	16	M6×14mm	
Pos. 25	Zylinderstift SQ-V10	Round pin SQ-V10	3	4×10mm	
Pos. 26	Schraube SQ-V10	Screw SQ-V10	10	M5×12mm	
Pos. 27	Stützhülse SQ-V10	Support sleeve SQ-V10	1		0318421027
Pos. 28	Halterung SQ-V10	Support SQ-V10	1		0318421028
Pos. 29	Bürstendeckel SQ-V10	Brush cap SQ-V10	2		0318421029
Pos. 31	Bürstenhalter SQ-V10	Brush holder SQ-V10	2		0318421031
Pos. 30	Kohlebürste SQ-V10	Carbon brush SQ-V10	2		0318421030
Pos. 32	Gehäuse SQ-V10	Housing SQ-V10	1		0318421032
Pos. 33	Statorbuchse SQ-V10	Stator sleeve SQ-V10	1		0318421033
Pos. 34	Zugfeder SQ-V10	Tension spring SQ-V10	2		0318421034
Pos. 35	Stator SQ-V10	Stator SQ-V10	1		0318421035
Pos. 36	Schraube SQ-V10	Screw SQ-V10	2	4.8×55mm	
Pos. 37	Windabweiser SQ-V10	Windshield SQ-V10	1		0318421037
Pos. 38	Lagerhülse SQ-V10	Bearing sleeve SQ-V10	1	608	
Pos. 39	Lager SQ-V10	Bearing SQ-V10	3	608Z	
Pos. 40	Rotor SQ-V10	Rotor SQ-V10	1		0318421040
Pos. 41	Schraube SQ-V10	Screw SQ-V10	3	M5×10mm	
Pos. 42	O-Ring SQ-V10	O ring SQ-V10	1	25×22×1.5mm	0318421042
Pos. 43	Mittlere Abdeckung SQ-V10	Middle cover SQ-V10	1		0318421043
Pos. 44	Nadellager SQ-V10	Neddle bearing SQ-V10	1	HK0608	0318421044
Pos. 45	Brückenzahnrad SQ-V10	Bridge gear SQ-V10	1		0318421045
Pos. 46	Zahnradwelle SQ-V10	Gear shaft SQ-V10	1		
Pos. 47	Lager SQ-V10	Bearing SQ-V10	1	626	
Pos. 48	Primärzahnrad SQ-V10	Primary gear SQ-V10	1		0318421048
Pos. 49	Lagerhülse SQ-V10	Bearing press sleeve SQ-V10	1		0318421049
Pos. 50	Lager SQ-V10	Bearing SQ-V10	1	6000z2RS	
Pos. 51	Sekundärritzel SQ-V10	Secondary pinion SQ-V10	1		0318421051
Pos. 52	Getriebekasten SQ-V10	Gear box SQ-V10	1		0318421052
Pos. 53	Schraube SQ-V10	Screw SQ-V10	4	M6×40mm	
Pos. 54	Getriebeabdeckung SQ-V10	Gear box sleeve SQ-V10	1		0318421054
Pos. 55	Schraube SQ-V10	Screw SQ-V10	2	M6x16mm	
Pos. 56	Halter SQ-V10	Holder SQ-V10	1		0318421056
Pos. 57	Schiebeblock SQ-V10	Slide block SQ-V10	1	M6	
Pos. 58	Verstellstütze SQ-V10	Adjusting support SQ-V10	1		0318421058
Pos. 59	Schraube SQ-V10	Screw SQ-V10	1	M6×20mm	
Pos. 60	Rad SQ-V10	Wheel SQ-V10	1		0318421060
Pos. 61	Zugfeder SQ-V10	Extension spring SQ-V10	2		0318421061
Pos. 62	Bewegliche Stütze SQ-V10	Movable support SQ-V10	1		0318421062
Pos. 63	Antriebswelle SQ-V10	Driving shaft SQ-V10	1		0318421063
Pos. 64	Zentrierhülse SQ-V10	Locating sleeve SQ-V10	4		0318421064
Pos. 65	Antriebsrad SQ-V10	Drive plate SQ-V10	1		0318421065
Pos. 66	Rutschfestes Band SQ-V10	Non-slip band SQ-V10	2		0318421066
Pos. 67	Kupferbuchse SQ-V10	Copper bush SQ-V10	2		0318421067
Pos. 68	Scheibe Staubabdichtung SQ-V10	Dust-proof washer SQ-V10	2		0318421068
Pos. 69	Sicherungsring Ø16 SQ-V10	Circlip Ø16 SQ-V10	1		0318421069

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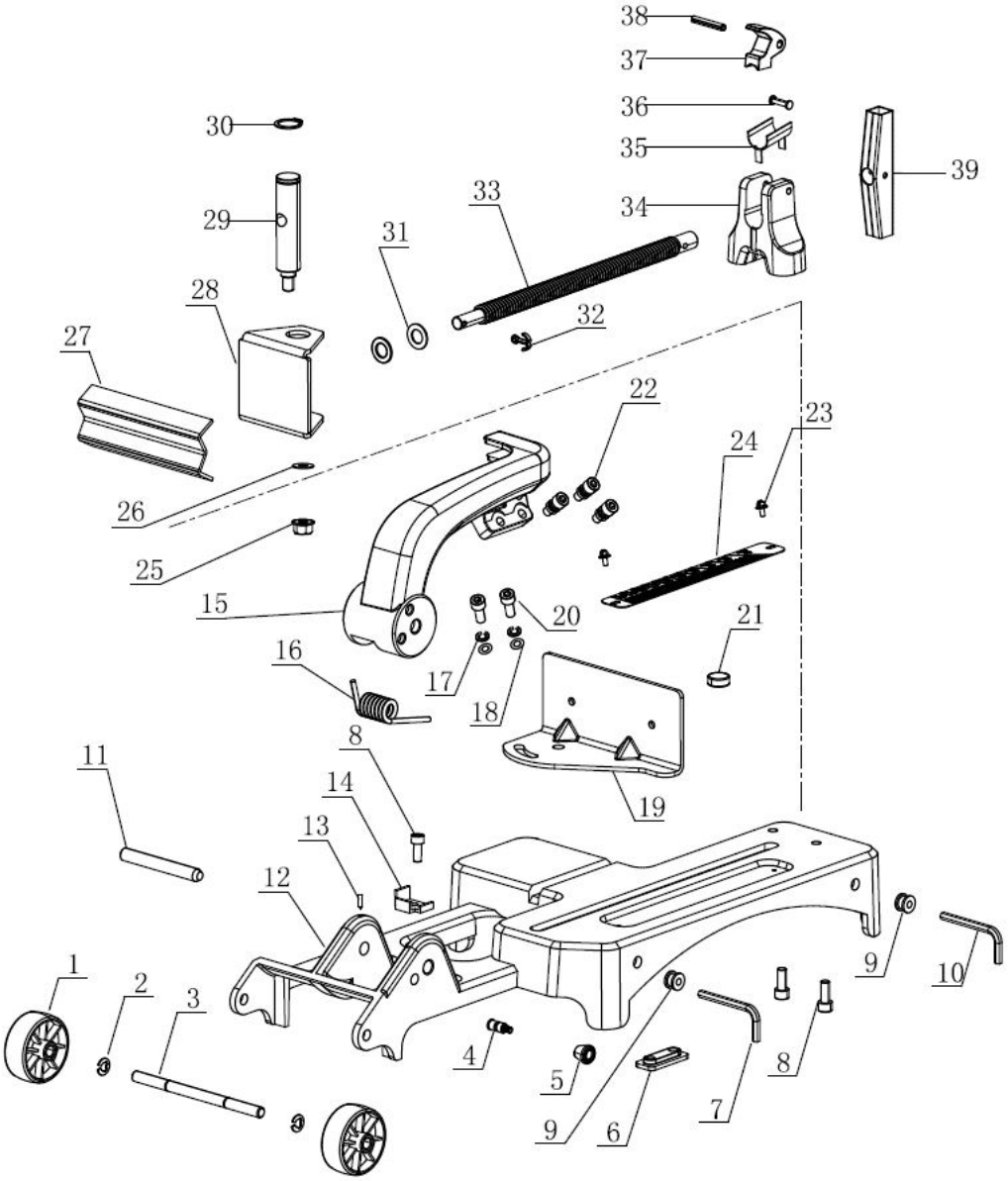
SQ-V10					
Pos.	**Bezeichnung**	**Description**	**Menge Qty.**	**Grösse Size**	**Artikelnummer Item no.**
Pos. 70	Abdeckung Antriebsrad SQ-V10	Drive plate cover SQ-V10	2		0318421070
Pos. 71	Nadellager SQ-V10	Neddle bearing SQ-V10	3		0318421071
Pos. 72	Sekundäres großes Zahnrad SQ-V10	Secondary large gear wheel SQ-V10	1		0318421072
Pos. 73	Welle für dreistufiges Ritzel SQ-V10	Shaft for three-stage pinion SQ-V10	1		0318421073
Pos. 74	Dreistufiges Ritzel SQ-V10	Three-stage pinion SQ-V10	1		0318421074
Pos. 75	Manschette Ø 35 SQ-V10	Collar Ø 35 SQ-V10	1		0318421075
Pos. 76	Lager SQ-V10	Bearing SQ-V10	1	6003z22RS	0406003
Pos. 77	Getriebeabdeckung SQ-V10	Gear box cover SQ-V10	1		0318421077
Pos. 78	Abtriebswelle SQ-V10	Output shaft SQ-V10	1		0318421078
Pos. 79	Schraube SQ-V10	Screw SQ-V10	6	M5×14mm	
Pos. 80	Antriebsrad SQ-V10	Drive plate SQ-V10	1		0318421080
Pos. 81	Kupplungsstück SQ-V10	Coupling piece SQ-V10	1		0318421081
Pos. 82	Druckplatte der Abtriebswelle SQ-V10	Output shaft pressure plate SQ-V10	1		0318421082
Pos. 83	Schraube SQ-V10	Screw SQ-V10	4	M8×14 mm	
Pos. 84	Schraube SQ-V10	Screw SQ-V10	4	M5×25mm	
Pos. 85	Fixierblock II SQ-V10	Locating block II SQ-V10	1		0318421085
Pos. 86	Fixierblock I SQ-V10	Locating block I SQ-V10	1		0318421086
Pos. 87	Lager SQ-V10	Bearing SQ-V10	3	624	
Pos. 88	Stift SQ-V10	Pin SQ-V10	4	4×16mm	
Pos. 89	Lager SQ-V10	Bearing SQ-V10	8	696	
Pos. 90	Spezialschraube SQ-V10	Special screw SQ-V10	4		0318421090
Pos. 91	Sägebandhalter SQ-V10	Saw band holder SQ-V10	1		0318421091
Pos. 92	Bürste SQ-V10	Brush SQ-V10	1		0318421092
Pos. 93	Sägeband SQ-V10	Saw band SQ-V10	1	1140×13×0.65 Bi-Metall 10-14 teeths per inch	3357548
Pos. 95	Rückseitige Bandabdeckung SQ-V10	Rear band cover SQ-V10	1		0318421095
Pos. 96	Schlüssel S6 SQ-V10	Wrench S6 SQ-V10	1		0318421096
Pos. 97	Schlüssel S4 SQ-V10	Wrench S4 SQ-V10	1		0318421097

SQ-V10_parts.fm

B Optionale Sägeführung mit Schraubstock - Optional saw guide with vice



SQ-V10 - Optionale Sägeführung mit Schraubstock - Optional saw guide with vice					
Pos.	**Bezeichnung**	**Description**	**Menge Qty.**	**Grösse Size**	**Artikelnummer Item no.**
1	Rad	Wheel	2	Ø65xØ8.3x24	03184210101
2	Sicherungsring	Split washer	2	Ø6	03184210102
3	Radwelle	Roller pin	1		03184210103
4	Anschlagstift	Stop pin	1		03184210104
5	Bolzenkappe	Bolt cap	1		03184210105
6	Klemmblock	Clamping block	1		03184210106
7	Schlüssel	Wrench	1	S8	03184210107
8	Schraube	Screw	2	M8x20	03184210108
9	Gummimanschette	Rubber sleeve	2		03184210109
10	Schlüssel	Wrench	1	S6	03184210110
11	Hebelbolzen	Lever pin	1		03184210111
12	Grundplatte	Base	1		03184210112
13	Gewindestift mit Innensechskant und flacher Spitze	Hexagon socket set screw with flat point	1		03184210113
14	Verstellblock	Adjustment block	1		03184210114
15	Kraftarm	Force arm	1		03184210115
16	Schenkelfeder	Torsion spring	1	16T·Ø13.4xØ4.5x7-91	03184210116
17	Federscheibe	Spring washer	2	Ø10	03184210117
18	Scheibe	Washer	2	Ø10	03184210118

SQ-V10_parts.fm

SQ-V10 - Optionale Sägeführung mit Schraubstock - Optional saw guide with vice					
Pos.	**Bezeichnung**	**Description**	**Menge Qty.**	**Grösse Size**	**Artikelnummer Item no.**
19	Schraubstockbacken	Vise jaw	1		03184210119
20	Schraube	Screw	2	M10x25	03184210120
21	Kissen	Cushion	1		03184210121
22	Schraube	Screw	3	M8x30	03184210122
23	Schraube	Screw	2	M4x14	03184210123
24	Skala	Scale	1		03184210124
25	Mutter	Nut	1	M10	03184210125
26	Scheibe	Washer	1	Ø10x28x2	03184210126
27	Klemmblech	Clamping plate	1		03184210127
28	beweglicher Backen	Moving jaw	1		03184210128
29	Schraubenwelle	Screw shaft	1		03184210129
30	Wellensicherungsring	Shaft retaining ring	1	Ø22	03184210130
31	Washer	Scheibe	2	Ø12.5	03184210131
32	Splint	Cotter pin	1	3x16	03184210132
33	Gewindestange	Screw rod	1		03184210133
34	Stangenhalterung Gewindestange	Screw rod support	1		03184210134
35	Abstandhalter Gewindestange	Screw rod spacer	1		03184210135
36	Niet	Rivet	1	5x22	03184210136
37	Schraubenhalter Schnellspannmutter	Quick release nut screw holder	1		03184210137
38	Spannstift	Clamping sleeve	1	Ø6	03184210138
39	Handgriff Gewindestange	Handle of screw rod	1		03184210139
CPL	kompletter Sägeständer	Saw stand complete	1	SQ-V10	3184212