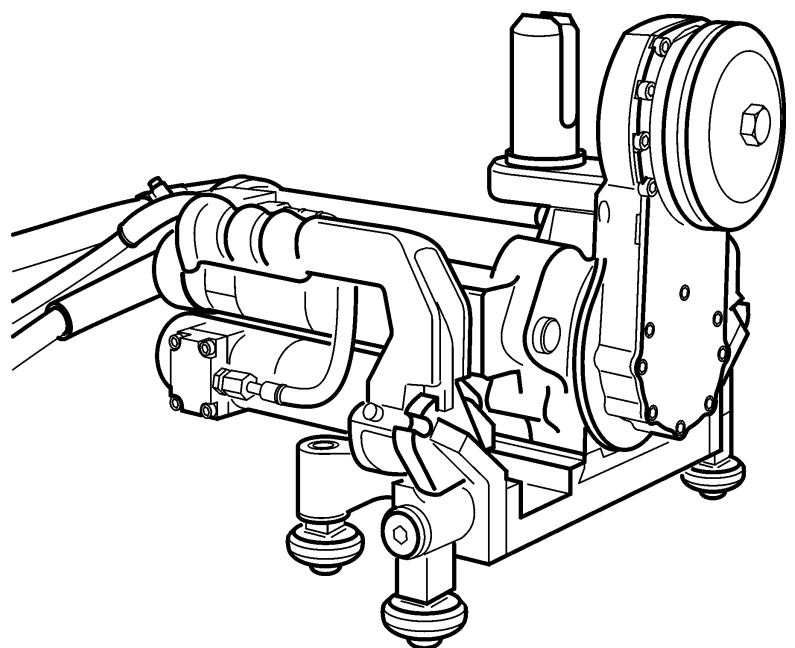


Operating Instructions

Spare parts list

Wall saw EX

Index 003



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0 Introduction

0.1 Congratulations!

You have decided to buy an advanced, tried and tested Hydrostress system and have thus acquired a highly sophisticated and reliable state-of-the-art unit.

Thanks to the stress we place on quality assurance, your Hydrostress system is another top-of-the-range Swiss product:

- High performance
- Reliable operation
- High portability
- Easy handling
- Low maintenance costs

Only original Hydrostress spare parts ensure quality and interchangeability.

In the case of neglected or inappropriate maintenance, we refuse to accept any warranty commitment as specified in our terms of delivery.

Any repair work is to be carried out by trained personnel only.

Should you need more details concerning your Hydrostress system in order to keep it in perfect condition, please contact our after-sales service for further information.

We hope that you will not experience any problems while working with your Hydrostress system.

TYROLIT Hydrostress AG

Management

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0.2 Validity of these Operating Instructions

These Operating instructions are just one part of the documentation accompanying the Wall saw EX. These Operating Instructions are supplemented by the "Wall Saws Safety Manual / System Description", see document structure 0.5, 0-3.

This manual is only valid for the following system:

Wall saw EX

0.3 Standards

This Operating Manual has been prepared in accordance with CE Machinery Directive Appendix I and with the relevant standards in force at the time of printing.

0.4 Delimitation of the system

These Operating Instructions describe the use of the Wall saw EX.

0.5 Document structure

The Wall saw EX documentation is structured as follows:

	Document
General system	Wall Saws Safety Manual / System Description
Machine	Wall saw EX Operating Instructions / Spare parts list
Components	Instruction leaflet

0.5.1 Wall Saws Safety Manual / System Description

Hydrostress machines and components have a modular design and can be assembled into various machine systems.

The “Safety Manual / System Description” are provided to help you operate the wall saw systems safely.

0.5.2 Wall saw EX Operating Instructions / Spare parts list

0.5.2.1 Operating Instructions

These Operating Instructions describe the characteristics of the Wall saw EX only.



Information
These Operating Instructions are supplemented by the primary “Wall Saws Safety Manual / System Description” documentation and by the documentation accompanying the product.

0.5.2.2 Spare parts list

The spare parts list is a standard part of the Operating Instructions.

0.5.3 Instruction leaflet

Instruction leaflets are used for system components that do not have their own Operating Instructions, but still require information to be provided for safe assembly or trouble-free operation.

1 Product description

1.1 Important information on the Wall saw EX

1.1.1 Description of the main components

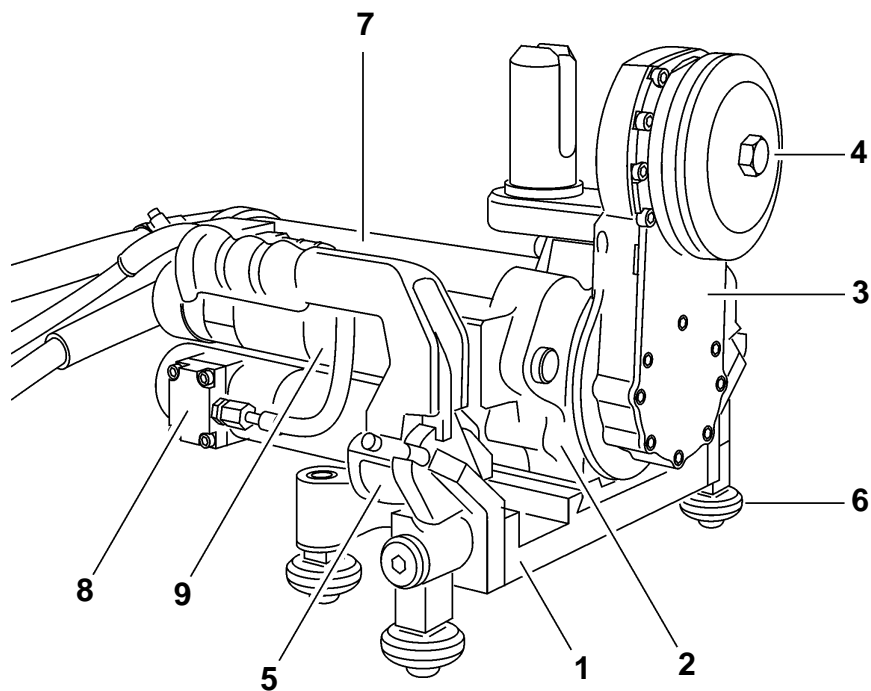


Fig. 1-1 Main components

- | | |
|---------------------|---------------------|
| 1 Chassis | 6 Guide rollers |
| 2 Sliding unit | 7 Blade drive motor |
| 3 Geared swivel arm | 8 Feed motor |
| 4 Saw blade uptake | 9 Swivelling motor |
| 5 Lock unit | |

1.1.2 Application

The Wall saw EX is designed and built for the following application:

- Cutting of concrete (including reinforced), masonry and natural stone
- Cutting of parting cuts, flush cuts, and cross-cuts in ceilings, floors or walls.
- Only original TYROLIT Hydrostress AG tools (saw blades) should be used
- The Wall saw EX is designed for saw blades from Ø 450 to Ø 750 mm

The applicable mandatory limitations on use and parameters are contained in Chapter 1 "Technical data" 1.2, 1-4

1.1.2.1 Safety measures

Any use other than for the intended purpose (see Chapter 1.1.2, 1-2), constitutes abuse or misuse.

1.1.3 Name plate

All type-specific data can be found on the name plate.

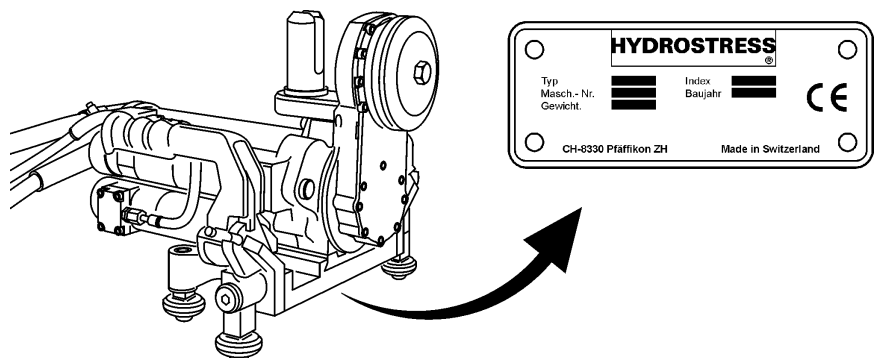


Fig. 1-2 Name plate

1.1.4 EC declaration of conformity

Description	Electric wall saw
Type designation	Wall saw EX
Year of construction	2004

We declare under our own liability that this product complies with the following directives and standards:

1.1.4.1 Directive applied:

European Machine Directive 98/37/EEC
European EMC Directive 89/336/EEC
European Low Voltage Directive 73/23/EEC

1.1.4.2 Standards applied:

EN 12100-1	Safety of machines – Basic concepts, general design principles
EN 12100-2	
EN 294	Safety of machines – Safety distances to prevent upper limbs reaching danger areas
EN 349	Safety of machines – Safety distances to avoid crushing of body parts
EN 61000-4-4	Electromagnetic Compatibility (EMC)
EN 61000-4-5	Electromagnetic Compatibility (EMC)
EN 61000-6-2	Electromagnetic Compatibility (EMC)

TYROLIT Hydrostress AG



Roland Kägi
Department Manager

1.2 Technical data

1.2.1 Measurements

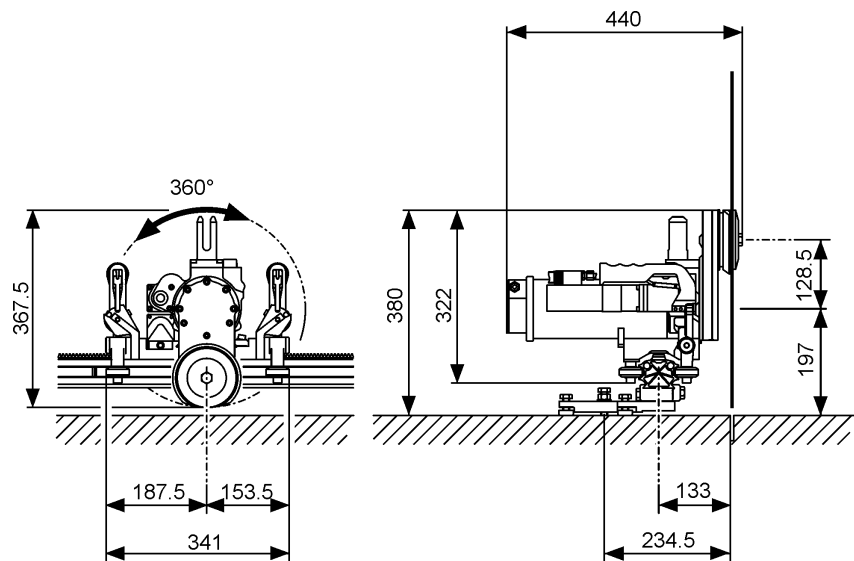


Fig. 1-3 Measurements in mm

1.2.2 Design

Construction:	Light aluminium/steel construction
Swivel arm rotation:	360°
Power transmission	Toothed wheel
Blade drive transmission ratio:	1:4
Grips:	2-piece with locking function
Guide rollers:	Wear-free, suitable for EX rail
Securing to rail:	Locking and safety function on grip
Blade drive motor:	Electric motor with gears and overload protection (high frequency, water-cooled)
Feed motor:	Electric motor with gears and brake
Swivelling motor:	Electric motor with gears and brake
Flush cutting:	Standard blade hub without blade cover
Normal cutting:	Standard blade hub with blade cover
Water:	Water connection on electric main motor

1.2.3 Weight

Wall saw head complete

- incl. 1 feed motor
 - incl. 1 swivelling motor
 - incl. blade drive motor
- 26 kg

1.2.4 Blade drive motor

Electric motor (high frequency, water-cooled)

Voltage	400 V
Max. output	11kW
Ratio	1:5

1.2.5 Feed motors

1.2.5.1 Electric feed motor with gears and brake

Ratio	1:184
Voltage	48 V
Feed	Toothed wheel on rail

1.2.5.2 Electric swivelling motor with gears and brake

Ratio	1:184
Voltage	48 V
Swivelling range	360°

1.2.6 Output

Output at 16A	8kW
Output at 32A	11kW

1.2.7 Saw blades

Saw blade max.	Ø 750mm
Fully detachable saw blade	Ø 625mm
Blade uptake	Ø 60mm (25,4mm)
Blade fixing on wall saw	Fixed
Saw blade fixing on blade flange	Central screw
Saw blade fixing (Flush cutting)	6 countersunk head screws 90mm graduated circle
Blade flange-Ø	110mm
Cutting depth for Ø 750mm saw blade for Ø 650mm saw blade for Ø 600mm saw blade for Ø 450mm saw blade	310mm 260mm 235mm 160mm

1.2.8 Lubricants

Specification:

Gear oil:	Klüber EG 4-150 (TYROLIT No.10979011)	
Gear grease:	Penetration:	420-460
	NLGI:	00
Lubricating grease:	Penetration:	265-295
	NLGI:	2

1.2.9 Connectable control unit

The Wall saw EX should only be operated with the EX control unit with integrated remote controller.

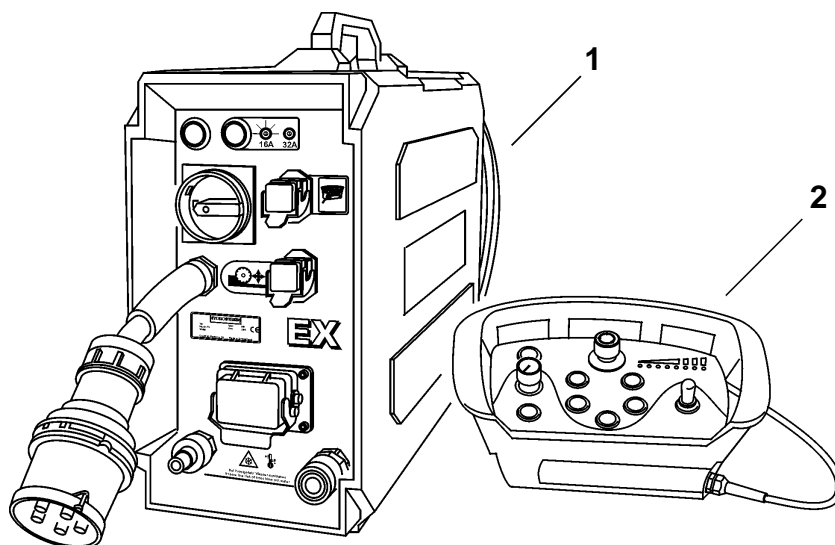


Fig. 1-4 Control unit with remote controller

- 1 Control unit
- 2 Remote controller

1.2.10 Water connection

Pressure:	min. 2 bar to max. 6 bar
Quantity:	min. 4 l/min
Temperature:	25°C

1.2.11 Noise level

Depending on the working environment, the Wall saw EX can cause excessive noise during operation.

The noise can cause permanent harm to the hearing of operating personnel and of other people nearby within a short time.

Ear protectors must therefore always be worn while working.



 	Danger
	<p>Noise danger</p> <p>When using the Wall saw EX hearing protection must be worn.</p> <p>If this instruction is not followed irreparable hearing damage may result.</p>

Fig. 1-5

1.3 Accessories

1.3.1 Blade guard Ø 750mm

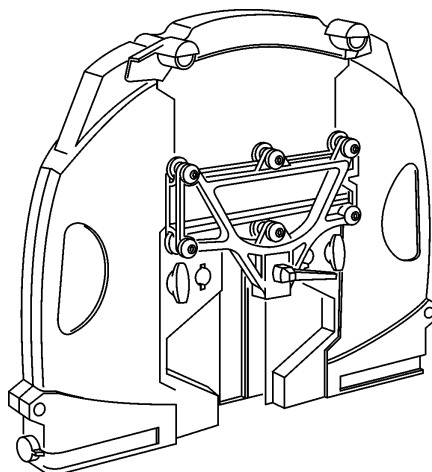


Fig. 1-6 Blade guard No.10980155

1.3.2 Rail system

1.3.2.1 Aluminium/steel rail system:



Fig. 1-7 EX guide rails

EX 1,100mm guide rails	No. 10978640
EX 2,200mm guide rails	No. 10978879

1.3.2.2 Rail stopper

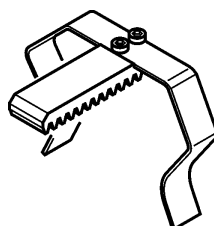


Fig. 1-8 Rail stopper No. 10980264

1.3.2.3 Rail connector

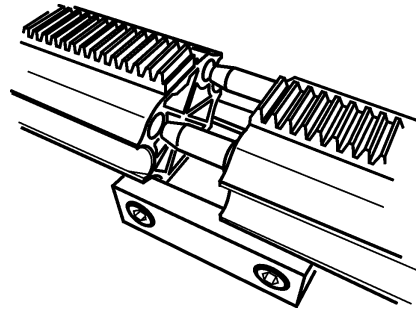


Fig. 1-9 Rail connector No.10979395

1.3.2.4 Rotating rail support

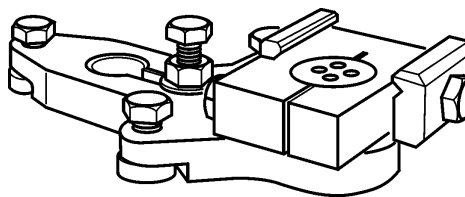


Fig. 1-10 Rotating rail support No.10980156

1.3.2.5 Transporter

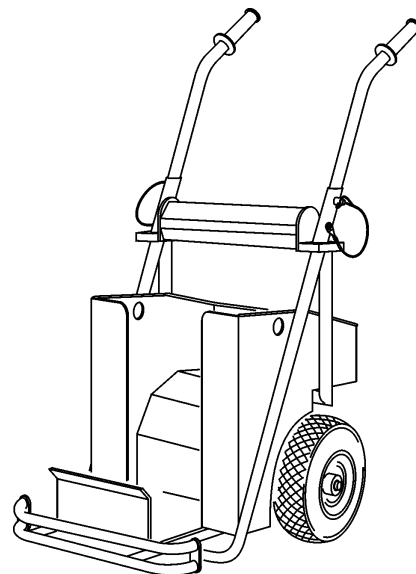


Fig. 1-11 Transporter No. 10980437

1.3.3 Tool chest

Tool chest with contents Part number 10980347

Tool chest excluding contents Part number 973801

1.3.3.1 Tool chest contents

Q-ty	Description	Part Number
1	Allen key, size across flats 5	973791
1	Combination ring and open-end spanner 19	969340
1	Allen key with handle 6	980340
1	Dowel iron for M12	977153
1	1.25 kg steel hammer	973770
10	Drive-in dowel	971622
1	Plastic hammer PB 297/4	973769
4	Combinut	971866
4	M12 x 55 hexagon bolt	979338
4	M12 13/24/2.5 plain washer	971964
5	Ear plugs	977224
12	M8 x 16 countersunk head screw	971825
2	M12 x 35 hexagon bolt	969911
1	Grease gun	975056
1	EP replacement cartridge	975057
6	Chisel 290 x 27 mm	980304
1	Dowel drill DM 15 mm	977180
1	Safety goggles	975055
1	Rail stopper	10980264
1	Rail stopper instruction leaflet	10980413

1.4 Scope of supply

- Wall saw EX
 - incl. 1 electric motor (high frequency, water-cooled)
 - incl. 1 electric feed motor with gears and brake
 - incl. 1 electric swivelling motor with gears and brake
 - incl. blade guard uptake
 - incl. 2 rail stoppers
- Wall Saws Safety Manual / System Description
- Operating Instructions / Spare parts list

2 Safety instructions



Information

The safety instructions for the Wall saw EX are supplemented by the safety instructions of the “Wall Saws Safety Manual /System Description”.

No work should be performed on or with the wall saw system until the safety instructions in the wall saw Operating Instructions and the Safety Manual / System Description have been read and understood.

2.1 General

2.1.1 Target audience

This chapter describes the safety instructions that are essential to follow when using the Wall saw EX.

All persons who work on and with the Wall saw EX, have a duty to read and understand the chapters of the Operating Instructions and the Safety Manual / System Description relevant to their particular activities.

This applies in particular to the “Safety instructions” chapter which is mandatory for all persons and activities.

2.1.2 Observance of the safety instructions


No work must be performed on or with the Wall saw EX before the safety instructions contained in the Operating Instructions (Chapter 2) have been read and understood. The Operating Instructions are mandatory for all work – abridged instructions should only be used in the form of checklists.

The Wall saw EX has been inspected before being shipped and is delivered in perfect condition. TYROLIT Hydrostress AG does not accept any liability for damage caused by the failure to observe the instructions and information provided in the Operating Instructions. This applies in particular to:

- Damage caused by improper use and operator error.
- Damage caused by failure to observe safety-related information in the Operating Instructions and the Wall Saws Safety Manual / System Description or shown on the warning signs fitted to the machine.
- Damage caused by defective or absence of maintenance work.

Independently performed conversions and alterations may affect safety and are not permitted.

2.1.3 Use for intended application

The intended application is described in “Chapter 1” under 1.1.2,  1-2.

2.1.4 Observance of the information on workplace safety and danger area

Descriptions of the workplace and danger areas are provided in the Wall Saws Safety Manual / System Description.

2.2 Safety principles

2.2.1 Delimitation of the safety concept

The Wall saw EX has no effect on the safety concept of the connected systems, apparatus and installations.

2.2.2 Safety elements

Protection from personal injury is based primarily on a safety concept and design safety.

2.2.2.1 Passive safety elements

Protection from live parts

All functional units that contain parts which carry hazardous voltages, are shock-protected by suitable covers.

2.2.3 Removing protective devices

Protective devices should only be removed when the device is turned off, disconnected from the mains and at a standstill. Safety components in particular should only be removed and refitted by authorised personnel, see "Chapter 2" 2.6.1, 2-6.

Before using the Wall saw EX again, the safety elements must be checked for correct operation.

2.2.4 Safety measures (organisational)

2.2.4.1 Product monitoring obligation

Operating personnel must notify changes in the operational behaviour or safety-related components to a responsible person or the manufacturer immediately.

2.2.4.2 Location of Operating Instructions

A copy of the Operating Instructions must be available at all times to staff at the place of use of the apparatus.

2.3 General safety rules

2.3.1 Statutory provisions

The generally applicable national and local safety and accident prevention provisions and the supplementary operator regulations must be followed and complied with.

2.3.2 Inspection and maintenance obligation

The operator is under an obligation to only use the Wall saw EX when it is in a perfect and undamaged condition. The maintenance intervals shown in the Operating Instructions must be adhered to without fail. Malfunctions and mechanical damage must be rectified without delay.

2.3.3 Spare parts

Only original spare parts should be used. Otherwise damage may be caused to the Wall saw EX or to other property and persons.

2.3.4 Power connections

The Wall saw EX must be connected and coupled to the control unit used in accordance with the Operating Instructions.

2.3.5 Modifications

No technical alterations should be made to the apparatus in the form of additions or conversions without the written consent of TYROLIT Hydrostress AG.

2.3.6 Safety instructions in the individual chapters

The chapters of these Operating Instructions contain additional safety instructions. These make reference to specific potential dangers (residual dangers). The instructions must be followed closely and require that the actions described are taken.

2.4 Information and symbols

In these Operating Instructions information panels are used to draw attention to residual dangers and to point out important technical requirements.

2.4.1 Hazard symbols in the Operating Instructions



Danger

Warning of danger, where failure to comply could lead to death or serious injury.



Warning

Warning of danger, where failure to comply could lead to injury or damage to property.

Fig. 2-1 Danger and warning notices

2.4.2 Information symbol



Information

Text displayed in this way is practical information and is aimed at achieving optimum use of the installation or apparatus. Failure to take note of this information may mean that the performances shown in the technical data can no longer be guaranteed.

Fig. 2-2 Information notice

2.5 Generally applicable warnings of residual dangers

In the following warnings of residual dangers are shown that are generally applicable to all work with and on the Wall saw EX and during all phases of the life of the Wall saw EX.



Danger

Danger from electric shock!

Work on electrical systems should only be performed by authorised personnel and with the control unit disconnected from the mains and with the main switch switched off.

Failure to comply with this regulation may lead to serious physical injury or death. Secondary damage such as fires may also occur.



Warning

Danger from sharp tool edges

When touching tools at a standstill it is recommended that protective gloves are worn.

Failure to adhere to this regulation may result in cut wounds to the hands.

2.6 Responsibility

2.6.1 Authorised personnel

Work on or with TYROLIT Hydrostress AG machines or systems should only be performed by authorised personnel. Personnel are considered by TYROLIT Hydrostress AG to be authorised if they meet the necessary training and know-how requirements and they have been assigned a precise functional role.

The personnel qualifications for the corresponding work are contained in the introduction under "General" of the respective chapters.

2.6.2 Delimitation of authority (functional roles)

2.6.2.1 Manufacturer

TYROLIT Hydrostress AG or a company expressly nominated by TYROLIT Hydrostress AG is deemed to be the manufacturer of the products supplied by TYROLIT Hydrostress AG. Within the context of an integrated quality and safety control system the manufacturer is entitled to request from the operator information on the products.

2.6.2.2 Operator

The operator named by TYROLIT Hydrostress AG is the primary, legal entity responsible for the correct use of the product and for the training and use of the authorised personnel. The operator sets out the mandatory skills and level of training of the authorised personnel for his company.

2.6.3 Operator (user)

User is the term employed by TYROLIT Hydrostress AG to designate a person who independently performs the following work:

- Sets up TYROLIT Hydrostress AG machines or systems for tasks according to the intended purpose.
- Performs tasks independently and monitors these.
- Locates malfunctions and initiates or performs troubleshooting.
- Carries out servicing and simple maintenance.
- Monitors the correct functioning of the safety devices.

2.6.4 Service engineer

Service engineer is a term used by TYROLIT Hydrostress AG to designate a person who independently performs the following work:

- Installs TYROLIT Hydrostress AG machines and systems and controls their correct application.
- Makes adjustments to machines and systems for which special access rights are required.
- Performs repairs, complex service work and maintenance work.

2.6.5 Qualification and training

2.6.5.1 Operator

- Trained building expert in a management position
- Has extensive experience in personnel training and danger assessment.
- Has read and understood the “Safety instructions” chapter.

2.6.5.2 Operator (user)

- Has trained as a concrete cutting expert or has completed a technical course from the regional professional association and federation or has professional experience.
- Has received an introduction (basic training) to the operation of the Wall saw EX from a service engineer.
- Has read and understood chapter 2 “Safety instructions”.

2.6.5.3 Service engineer

- Specialist professional training (mechanical / electrotechnical).
- Has attended specialist courses at TYROLIT Hydrostress AG.
- Has read and understood the “Safety instructions” chapter.

3 Design and function

3.1 General

The Wall saw EX is a part of a modular design wall saw system. In order to be able to use the Wall saw EX correctly further system components are needed.

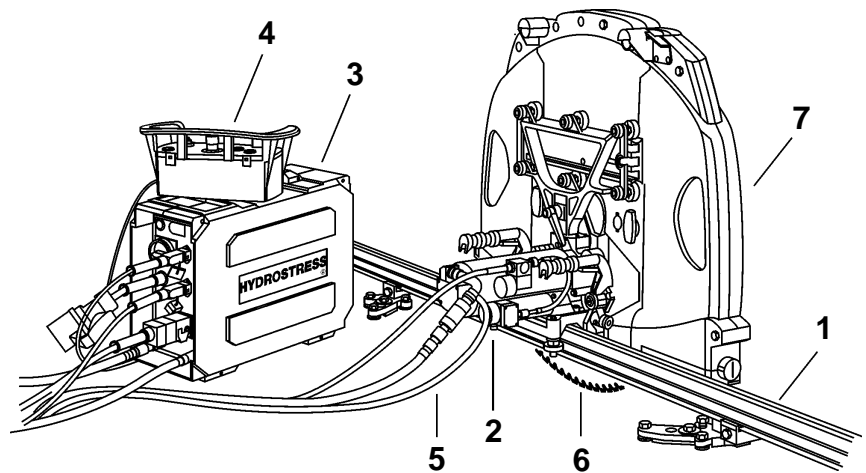


Fig. 3-1 System components

- | | |
|---------------------------------|--------------------|
| 1 Guide rail with rail supports | 5 Connecting cable |
| 2 Wall saw EX | 6 Saw blade |
| 3 Control unit | 7 Blade guard |
| 4 Remote controller | |



Information

The design and function, along with the individual system components, of the saw system are described in the Wall Saws Safety Manual / System Description.

3.2 Construction of the Wall saw EX

3.2.1 Components

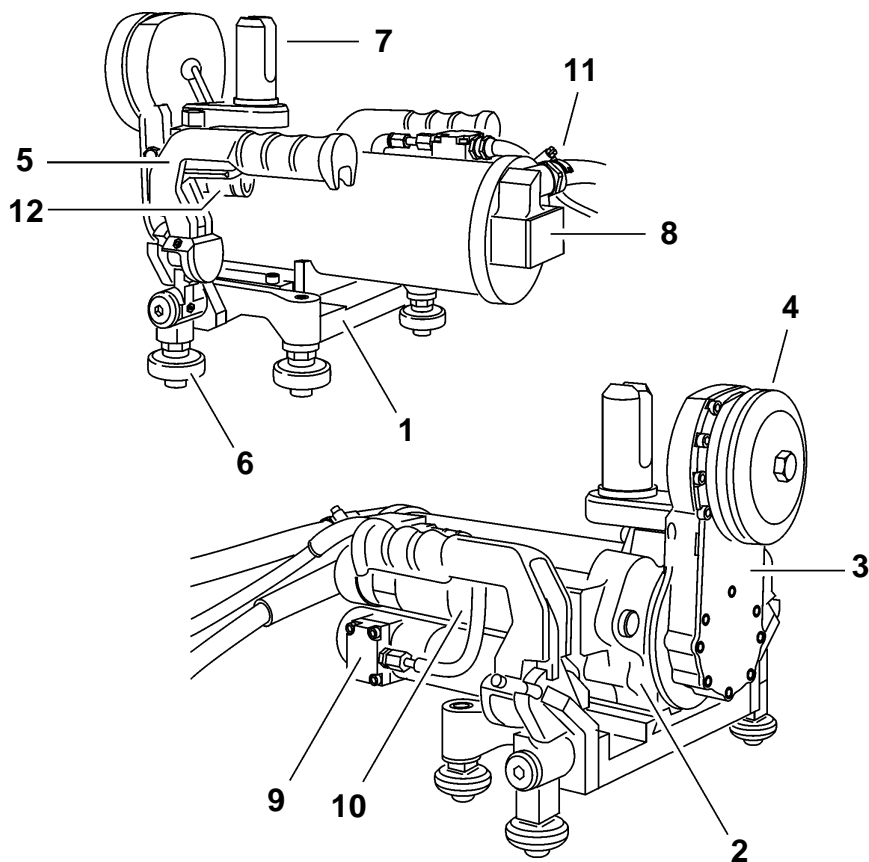


Fig. 3-2 Components

- | | |
|---------------------|---------------------------|
| 1 Chassis | 7 Blade guard uptake bolt |
| 2 Sliding unit | 8 Blade drive motor |
| 3 Geared swivel arm | 9 Feed motor |
| 4 Saw blade uptake | 10 Swivelling motor |
| 5 Lock unit | 11 Water connection |
| 6 Guide rollers | 12 Water bypass |

3.2.2 Component construction

3.2.2.1 Chassis

The carriage guide is milled into the chassis to accommodate the sliding unit. The two sliding units and the feed motor are mounted on the chassis.

3.2.2.2 Sliding unit

The sliding unit is the main body of the Wall saw EX. The construction is based on a machined aluminium base plate on or in which the individual components are mounted or fitted.

3.2.2.3 Geared swivel arm

The light construction geared swivel arm incorporates the toothed gear wheels and their bearings and the blade hub and the water line for cooling the diamond saw blade.

A plug screw with magnet is fitted on the side of the geared swivel arm to catch metal particles.

Saw blade uptake

The saw blade is secured by means of a central screw via the blade flange and the blade cover to the geared swivel arm.

3.2.2.4 Lock unit

The lock units are components that are screwed to the side of the chassis.

The lock units comprise:

- Grip (combined with lock function)
- Swivelling block
- Support plate with fixed guide roller and screwed grid element
- Swivel roller holder with guide roller

Guide rollers

The guide rollers are constructed in a wear-free material and with sealed four-point ball-bearings.

3.2.2.5 Blade guard uptake bolt

The scope of supply of the Wall saw EX includes the bolt for the blade guard uptake.

3.2.2.6 Blade drive motor

Electric drive motor (high frequency, water-cooled) with integrated gears and overload protection.

3.2.2.7 Feed motor

Electric motor with integrated gears and integrated brake


3.2.2.8 Swivelling motor

Electric motor with integrated gears and integrated brake

3.2.2.9 Water connection

The Wall saw EX has a water supply to the blade drive motor via the water connection (plug-in nipple). The water line leads to the cooling via the drive motor. Water flow control takes place by means of a bypass line and a water valve on the chassis. The water admitted flows through the chassis via the geared swivel arm and emerges centrally on the diamond saw blade.

**Information**

Once the motor has been cooled, the cooling water can be completely diverted by means of the bypass valve. This feature allows dry cuts using suitable diamond saw blades. Information on the water valve can be found in "Chapter 5" 5.2.6.3,  5-4.

3.3 Function of the Wall saw EX

The Wall saw EX is the central component of the wall saw system. All the motors, along with the cutting tool and the blade guard are mounted on the EX.

3.3.1 Components

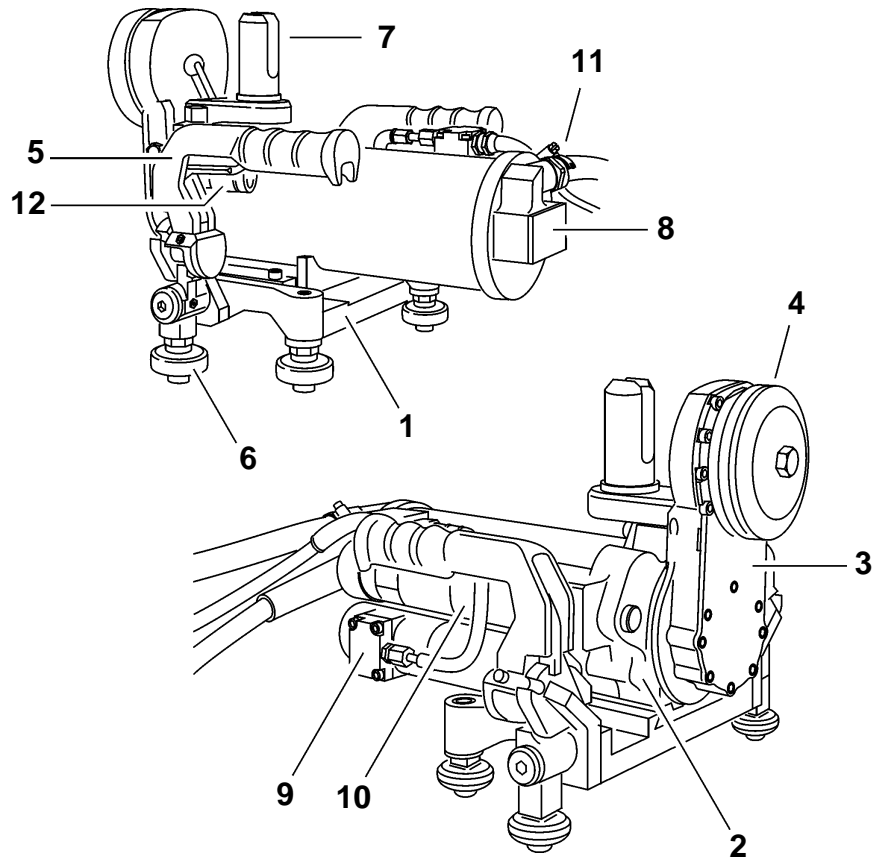



Fig. 3-3 Components

- | | |
|---------------------|---------------------------|
| 1 Chassis | 7 Blade guard uptake bolt |
| 2 Sliding unit | 8 Blade drive motor |
| 3 Geared swivel arm | 9 Feed motor |
| 4 Saw blade uptake | 10 Swivelling motor |
| 5 Lock unit | 11 Water connection |
| 6 Guide rolls | 12 Water bypass |

3.3.2 Function of the components

3.3.2.1 Chassis

The chassis allows precise parallel cutting. Information on creating a parallel cut can be found in "Chapter 5" 5.2.6.4,  5-5.

Lock unit uptake:

The two lock units are mounted on the side of the chassis.

Feed motor for travelling motion:

The feed motor for the travelling motion of the Wall saw EX is mounted on the chassis.

3.3.2.2 Sliding unit

The sliding unit is the main body of the Wall saw EX. The sliding unit incorporates the following components and seats:

Toothed gear for the swivelling motion of the swivel arm:

The toothed gear incorporated in the sliding unit for the rotating movement of the geared swivel arm transmits the speed generated by the feed motor with a ratio of 1:4.

Drive shaft with pinion for geared swivel arm:

The drive shaft running on bearings in the sliding unit transmits the speed from the drive motor directly to the drive pinion of the geared swivel arm.

Bolt uptake on blade guard holder:

Four M8 threaded bore holes are provided in the sliding unit for securing the blade guard.

3.3.2.3 Geared swivel arm

The light construction geared swivel arm transmits the speed generated by the drive motor and the torque via the toothed gears (ratio 1:4) to the cutting tool.

The geared swivel arm has a rotation of 360°.

Saw blade uptake:

The saw blade is secured for normal cutting by means of a central screw and blade cover to the blade flange. For flush cutting the diamond saw blade is secured directly to the blade flange by means of countersunk screws.

Plug screw with magnet

The plug screw with magnet collects metal particles in the geared swivel arm and allows filling of the gear oil.

3.3.2.4 Lock unit

The lock units with integral guide rollers clamp and secure the Wall saw EX to the rail system.

Guide rollers

The guide rollers ensure safely guided longitudinal movement of the Wall saw EX on the guide rail.

3.3.2.5 Blade guard uptake bolt

The bolt is used to secure the blade guard.

3.3.2.6 Blade drive motor

The blade drive motor drives the cutting tool via the geared swivel arm (ratio 1:4). The speed can be varied according to the blade diameter. The drive motor is connected to the control unit. The direction of rotation is set.

Overload protection:

To prevent damage to the motor and gears the blade drive motor is fitted with overload protection.

Resetting (coupling) overload protection:

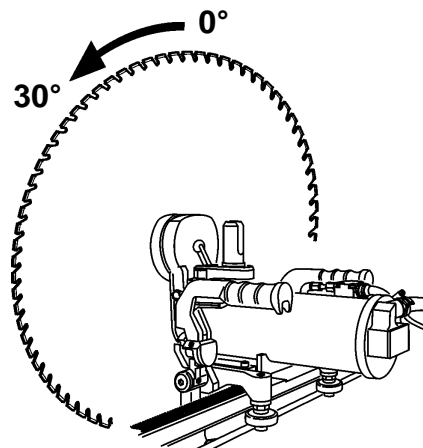


Fig. 3-4 Resetting overload protection

Proceed as follows:

- Switch off the wall saw
- Remove the blade guard
- Rotate the diamond saw blade backwards by 30° against the saw blade direction of rotation
(Always wear safety gloves when performing this operation)
- The coupling can be heard to click as it resets
- Mount the blade guard and switch on the saw system again

3.3.2.7 Feed motor

Using the feed motor the Wall saw EX can be moved backwards and forwards on the guide rail. The feed motor is connected to the EX control unit. The direction of feed and the feed speed can be adjusted on the remote controller of the EX control unit.

3.3.2.8 Swivelling motor

The swivel arm of the Wall saw EX is driven by the swivelling motor. The swivel motion causes the cutting tool to enter the material to be cut. The swivelling motor is connected to the control unit. The direction of swivel and the swivel speed can be adjusted on the remote controller of the EX control unit.



Information

The feed motor and the swivelling motor on the Wall saw EX are identical. This fact means that the motors are interchangeable.

3.3.2.9 Water


Water is used for cooling the blade drive motor and the cutting tool.

Water connection on blade drive motor

The water connection and line to the cutting tool provide the water supply that is essential for cutting.





Information

The cooling water regulation can be adjusted smoothly by means of a bypass line and a water valve. Details on the water cooling regulation can be found in "Chapter 5" 5.2.6.3,  5-4.

4 Assembly / disassembly


4.1 Assembly / disassembly of the saw system



Information	
	<p>In order to be able to use the Wall saw EX correctly (see “Chapter 1” 1.1.2,  1-2), it must have other system components added in order to form a complete saw system (see “Chapter 3” 3,  3-1).</p> <p>A description of the assembly and disassembly of the wall saw system is provided in the Wall Saws Safety Manual / System Description.</p>

4.2 Assembly of the Wall saw EX

4.2.1 General

Before proceeding read Chapter 2 “Safety instructions”,  2-1 in these Operating Instructions. Be sure also to take note of all the danger information given here and follow all the instructions on how to avoid physical injury and damage to property.

4.2.2 Safety instructions

It is essential to observe the following safety instructions, in particular in relation to the assembly/disassembly of the Wall saw EX.



Danger	
	<p>Danger of falling heavy parts.</p> <p>When performing the types of work described in this chapter, it is essential to wear the following individual protective equipment: helmet, safety goggles, protective gloves and safety shoes.</p> <p>It is essential that the work instructions and procedures described in these Operating Instructions are followed.</p> <p>Failure to observe this regulation may lead to serious physical injury, possibly even death, and to property damage.</p>



Warning	
	<p>Danger from uncontrolled movements of the Wall saw EX!</p> <p>Never connect or disconnect cables when the Wall saw EX is running.</p> <p>Failure to adhere to this regulation may result in cut wounds or injury to body parts and damage to property.</p>

4.2.3 Personnel qualifications

- Have trained as a concrete cutting expert or have completed a technical course from the regional professional association and federation or has professional experience.
- Have received an introduction (basic training) to the operation of the Wall saw EX from a service engineer.
- Have read and understood chapter 2 "Safety instructions".

4.3 Transport to the place of installation

The Wall saw EX is a high-quality apparatus. The Wall saw EX must be transported in such a way that it is not damaged in transit. Where suitable means of transport are available, these must be used.

- Do not place any items on the Wall saw EX during transport
- Protect all toothed parts and the saw blade uptake from impacts



Information

The Wall saw EX should be carried carefully, by two people if possible to prevent spinal damage and accidents.

4.4 Connecting the Wall saw EX

Always proceed as follows:

- Position the Wall saw EX on the previously mounted guide rail
- Mount the saw blade
- Mount the blade guard
- Connect the Wall saw EX to the control unit
- Connect the control unit to the mains system

4.4.1 Position the Wall saw EX on the guide rail

Position the Wall saw EX on the guide rail and secure it by means of the lock unit.

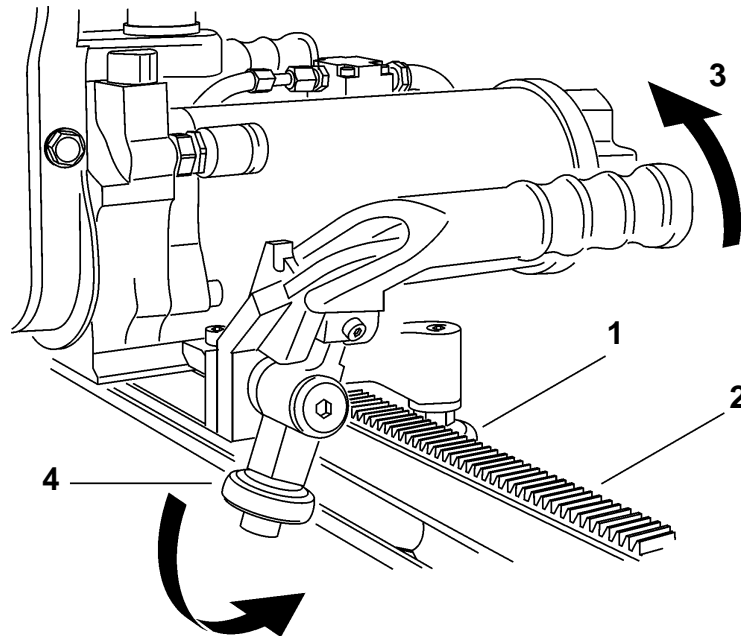


Fig. 4-1 Position the Wall saw EX on the guide rail

Proceed as follows:

- Grip position:
The two grips are folded outwards and latched
- Guide the two fixed guide rollers (1) of the Wall saw EX in the grooves of the guide rail (2)
- Release the grips by means of the release grip and swivel the grips into the middle of the Wall saw EX (3)
- During the swivelling manoeuvre ensure that the two swivel rollers (4) locate correctly in the grooves of the guide rail
- The Wall saw EX is correctly assembled if the two grips are latched in the vertical position and the rollers are located in the grooves of the guide rail



Information

If the lock unit does not lock or the Wall saw EX sits too loosely on the guide rail, the guide rollers must be adjusted.
(See "Chapter 4" 4.4.1.1, 4-5)

4.4.1.1 Adjusting the guide rollers

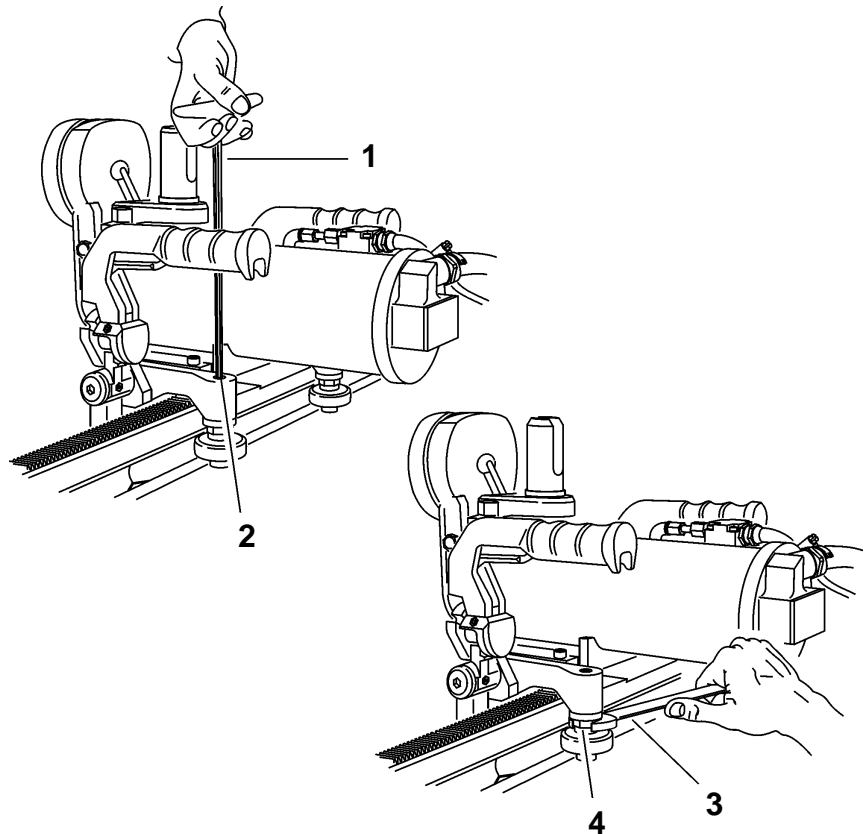


Fig. 4-2 Adjusting the guide rollers

- | | |
|----------------------------------|-------------------------------------|
| 1 Allen key, size across flats 6 | 3 Fork wrench, size across flats 19 |
| 2 Cylindrical screw M8 | 4 Eccentric shaft |

Proceed as follows:

- Loosen the cylindrical screw (2) using the Allen key (1), size across flats 6
- Use the fork wrench (3), size across flats 19 to tighten the guide roller via the eccentric shaft (4)
- The guide rollers are correctly adjusted when they sit in the guide grooves and the guide rollers can be rotated manually
- Once the guide rollers have been adjusted, retighten the cylindrical screws (2) with the Allen key (1), size across flats 6



Information

Defective guide rollers can be replaced by replacement set No. 10977991.

4.4.2 Mounting the saw blade



Information
The diamond saw blades can be mounted in any position of the swivel arm.

4.4.2.1 Saw blade uptake hole Ø 60mm

The Wall saw EX is fitted as standard with a centring ring for diamond saw blades with an uptake hole of Ø 60mm.

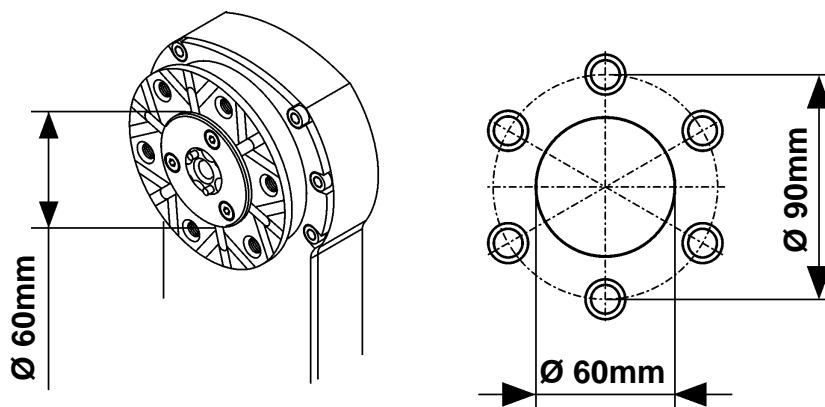


Fig. 4-3 Saw blade uptake hole Ø 60mm

4.4.2.2 Saw blade uptake hole 1" (Ø 25,4mm)

When using diamond saw blade with 1" (Ø 25,4mm) uptake hole the centring ring must be removed.

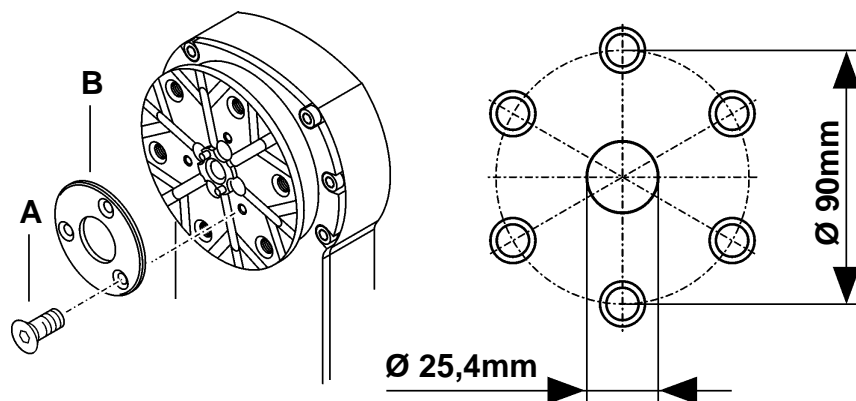


Fig. 4-4 Saw blade uptake hole 1" (Ø 25,4mm)

- A Countersunk head screw M5x10 (Part No.10978653)
- B Centring ring (Part No.10978404)

4.4.2.3 Saw blade mounting for normal cutting

Secure the diamond saw blade with blade guard and central screw.

Use only original anchoring screws:

Hexagon head screw: M12x30 (Part No. 971916)

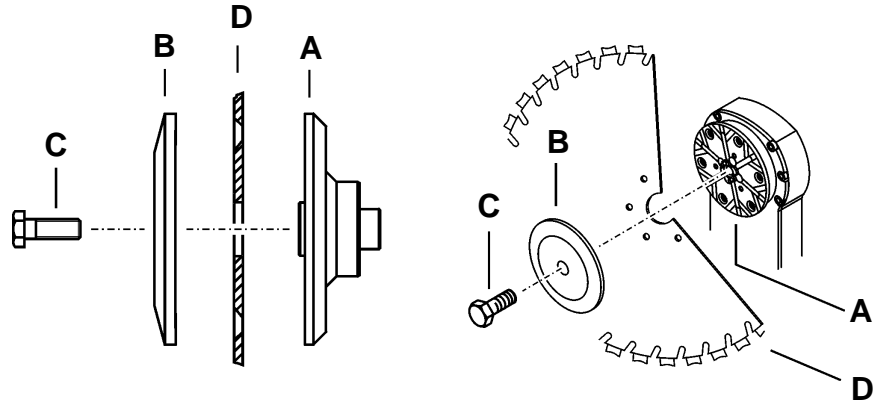


Fig. 4-5 Saw blade mounting for normal cutting

- A Blade flange
- B Blade cover
- C Central screw
(Hexagon head screw M12x30)
- D Diamond saw blade

Assembly:

- Slide saw blade (D) onto blade flange (A)
- Alignment of saw blade:
Countersinking of the anchoring holes against the blade guard (B)
- Screw down blade cover (B) by means of central screw (C) onto the blade flange (A)
Tool: Fork wrench, size across flats 19

4.4.2.4 Saw blade mounting for flush cutting

Secure the diamond saw blade with 6 countersunk head screws.

Use only original anchoring screws:

Countersunk head screw: M8x12 (Part No. 10978654)

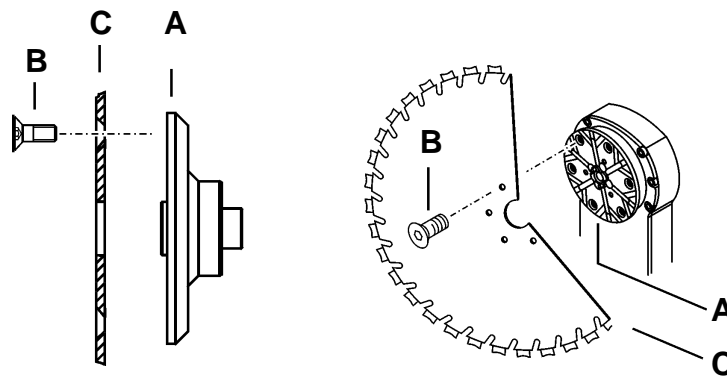


Fig. 4-6 Saw blade fixing for flush cutting

- A Blade flange
- B 6 anchoring screws
(countersunk head screws M 8x12)
- C Diamond saw blade

Assembly:

- Slide diamond saw blade (C) onto blade flange (A)
- Alignment of the saw blade:
Note countersinking of anchoring holes
- Use 6 countersunk head screws (B) (tighten screws crosswise) to screw the diamond saw blade (C) to the blade flange (A).
Tool: 5mm Allen key

4.4.3 Mount the blade guard



Information

Details on mounting the blade guard and suitable blade guard holders can be found in the blade guard instruction leaflet.

4.4.4 Connect the Wall saw EX to the control unit

4.4.4.1 Fundamentals

- Ensure that couplings and connectors are clean at all times
- Always disconnect the control unit from the mains supply before handling the Wall saw EX

4.4.4.2 Establish the cable connection

The following cable connections must be established:

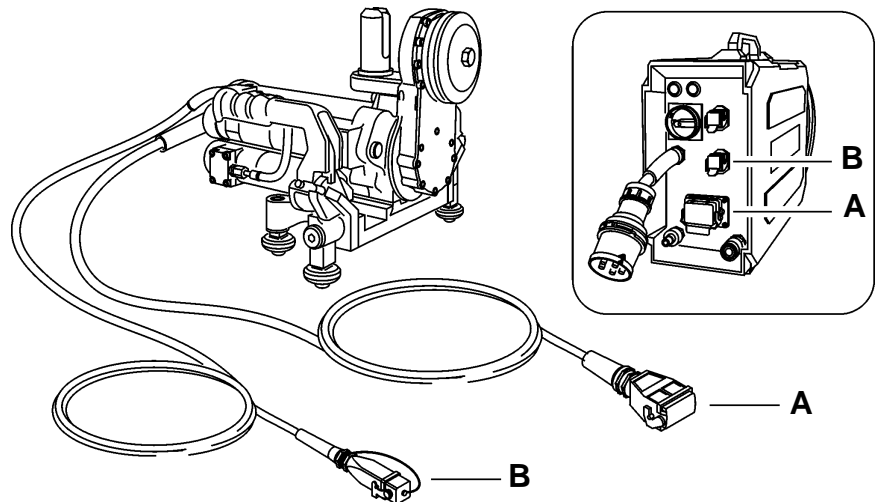


Fig. 4-7 Cable connections

Wall saw EX	Control unit connections
Saw blade drive motor "Cable with plug (A)"	Coupling (A)
Feed and swivelling motor "Cable with plug (B)"	Coupling (B)

Coupling drive motor to the control unit

In order to firmly attach the drive motor cable to the control unit the cable connection is secured.

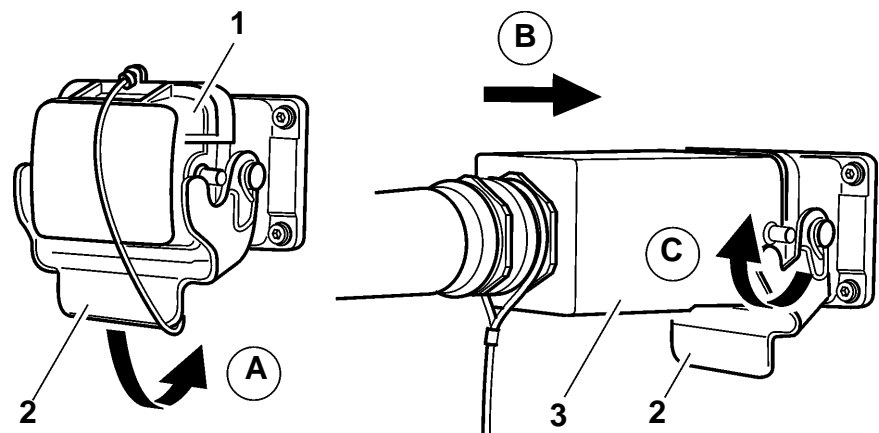


Fig. 4-8 Drive motor connection coupling

- 1 Protective cup
- 2 Locking plate
- 3 Connector
- Drive motor cable

Proceed as follows:

- Visual inspection
 - Before connecting check the coupling and the connector for cleanliness
 - Check the connecting cable for damage
- Step A
 - Remove the protective cup (1) on the control unit by folding down the locking plate (2)
- Step B
 - Remove the protective cup from the drive motor cable (3) and push the connector firmly into the coupling
- Step C
 - Secure the plug connector by means of the locking plate (2)

Warning



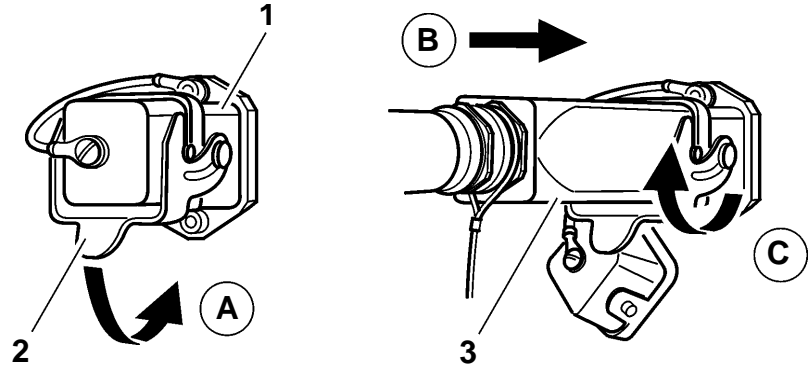
Danger from uncontrolled movements!

Never connect or disconnect cables when the Wall saw EX is running.

Failure to adhere to this regulation may result in physical injury and damage to property.

Coupling feed/swivel motor to the control unit

In order to firmly attach the feed motor cable to the control unit the cable connection is secured.



Feed motor connection coupling

- 1 Protective cup
 - 2 Locking plate
 - 3 Connector
- Feed motor

Proceed as follows:

- Visual inspection
 - Before connecting check the coupling and the connector for cleanliness
 - Check the connecting cable for damage
- Step A
 - Remove the protective cups from the coupling (1) on the control unit by folding down the locking plate (2)
- Step B
 - Remove the protective cup from the feed motor cable connector (3) and push the connector firmly into the coupling
- Step C
 - Secure the plug connector by means of the locking plate (2)

Warning



Danger from uncontrolled movements!

Never connect or disconnect cables when the Wall saw EX is running.

Failure to adhere to this regulation may result in physical injury and damage to property.

4.4.4.3 Water connection

The following water connection must be established:

The cooling water of the saw system flows from the EX control unit via the blade drive motor to the water distribution on the diamond saw blade.

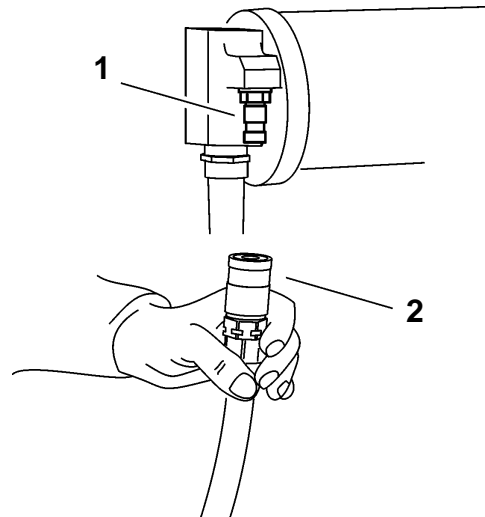


Fig. 4-9 Water connection

- 1 Blade drive motor hose stem
- 2 Water hose coupling

Proceed as follows:

- Visual inspection

Check:

- Water hose for damage and contamination
- Couplings for damage and contamination

- Push the hose coupling of the water hose (2) onto the hose stem (1) of the blade drive motor until you hear it "click"
- Push the hose stem of the water hose onto the hose coupling on the control unit stem until you hear it "click"



Information

The Operating Instructions describe how to connect the control unit with the water and power sources correctly.

4.5 Disconnecting the Wall saw EX from the system

Fundamentals

- Always keep couplings and connectors clean and never allow them to drop
- Always disconnect the control unit from the mains supply before handling the Wall saw EX

Always proceed as follows:

- Switch off the control unit and disconnect from the mains system
- Release the drive motor cable from the control unit, unplug it and coil it
- Fit protective cups to coupling and connector
- Release the drive and swivelling motor cable on the control unit, unplug it and coil it
- Fit protective cups to coupling and connector
- Uncouple water hose from control unit
- Uncouple water hose from blade drive motor and coil it



Information

In order to prevent contamination of the water hose, the two ends of the hose should be coupled together.

4.6 Disassembling the Wall saw EX

Always proceed as follows:

- For disconnection of the Wall saw EX from the system, see "Chapter 4" 4.5, 4-13
- Disassemble the blade guard
- Remove the saw blade
- Lift Wall saw EX from guide rail

4.6.1 Disassemble the blade guard



Information

Details on mounting the blade guard and suitable blade guard holders can be found in the blade guard instruction leaflet.

4.6.2 Remove the saw blade



Information

The saw blade can be mounted in any position of the swivel arm.

4.6.3 Lifting Wall saw EX from guide rail

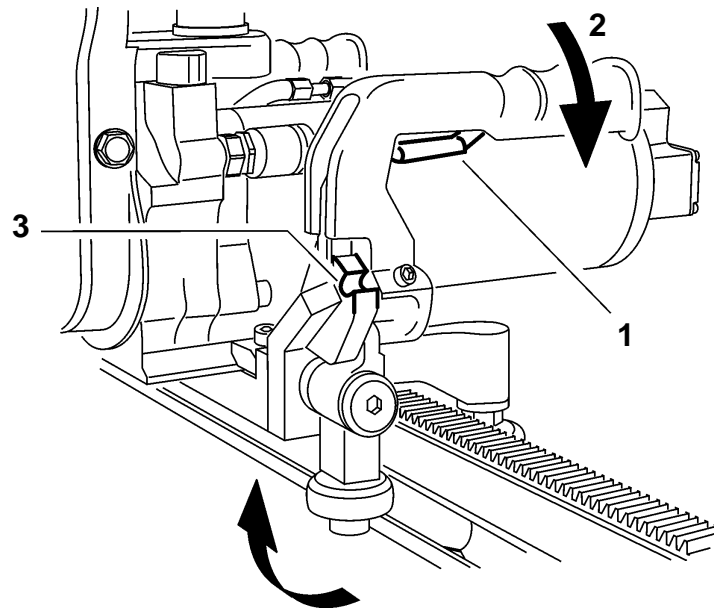


Fig. 4-10 Lifting Wall saw EX from guide rail

Proceed as follows:



- Hold the Wall saw EX securely with both hands
- Release the Wall saw EX by means of the release grip (1) and swivel the grips outwards (2) until they lock in the out position (3)
- Lift the Wall saw EX from the guide rail

5 Operation

5.1 Operation of the Wall saw EX in the system




Information

In order to be able to use the Wall saw EX correctly (see “Chapter 1” 1.1.2,  1-2), it must have other system components added in order to form a complete saw system (see “Chapter 3” 3,  3-1).

In order for you to be able to safely operate the Wall saw EX in the saw system, you must first read the Safety Manual / System Description for wall saws.

5.2 Operation of the Wall saw EX

5.2.1 General

Before proceeding read Chapter 2 “Safety instructions”,  2-1 in these Operating Instructions. Be sure also to take note of all the danger information given here and follow the instructions on how to avoid physical injury and damage to property.

5.2.2 Safety instructions

It is essential to observe the following safety instructions, in particular in relation to the operation of the Wall saw EX.



Danger


Danger of falling heavy parts.

When performing the types of work described in this chapter, it is essential to wear the following individual protective equipment: helmet, safety goggles, protective gloves and safety shoes.

It is essential that the work instructions and procedures described in these Operating Instructions are followed.

Failure to observe this regulation may lead to serious physical injury, possibly even death, and to property damage.

Danger




Danger from machine suddenly starting up.

Before switching on the system the operator must ensure that no other person is present in the danger areas.
If the system is left unattended it must be switched off and secured against being powered up again.

Failure to observe this regulation may lead to serious physical injury, possibly even death, and to property damage.

Danger





Hazard from falling building structures.

The building structure must be correctly secured (see Operating Instructions in the Wall Saws Safety Manual / System Description).

Failure to observe this regulation may lead to serious physical injury, possibly even death, and to property damage.

Danger



Noise danger.

When using the Wall saw EX hearing protection must be worn.

If this instruction is not followed irreparable hearing damage may result.

5.2.3 Personnel qualifications

- Have trained as a concrete cutting expert or have completed a technical course from the regional professional association and federation or has professional experience.
- Have received an introduction (basic training) to the operation of the Wall saw EX from a service engineer.
- Have read and understood chapter 2 "Safety instructions".

5.2.4 Operating elements

5.2.4.1 EX control unit with remote controller

The Wall saw EX is operated via the remote controller of the EX control unit. Information on connection and on the individual operations can be found in the Operating Instructions of the EX control unit.

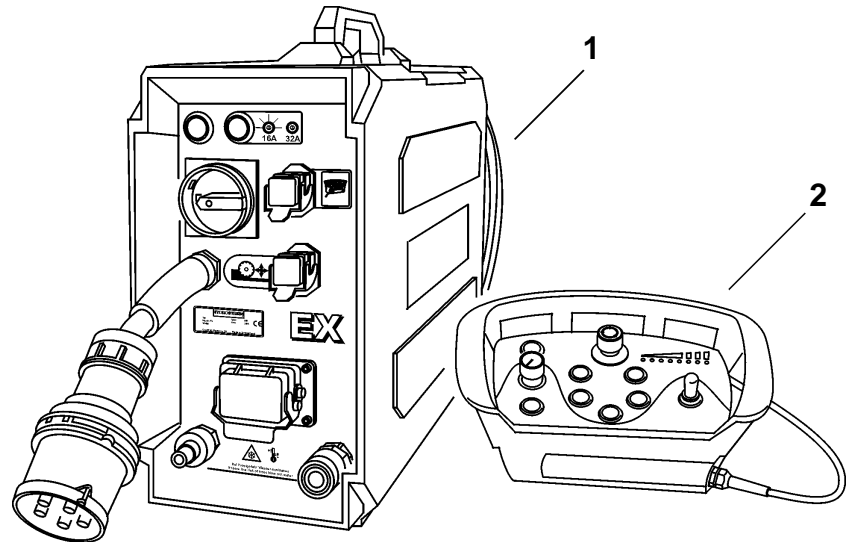


Fig. 5-1 EX control unit with remote controller

- 1 EX control unit
- 2 Remote controller

5.2.5 Safety-related operator's controls

5.2.5.1 Blade guard

The blade guard is a safety device. It provides protection from accidental contact with the cutting tool and from flying parts and at the same time acts as a spray guard. Working without the blade guard is prohibited.

5.2.5.2 Emergency Stop pushbutton

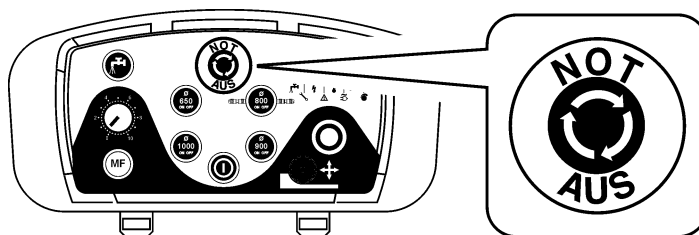



Fig. 5-2 Emergency stop

In danger situations the Emergency Stop pushbutton must be pressed immediately. Pressing the Emergency Stop pushbutton immediately halts the system and prevents the system being accidentally switched on again.

5.2.6 Operating elements on the Wall saw EX


5.2.6.1 Lock unit

Information on the lock unit and its operation can be found in "Chapter 4" 4.4.1,  4-4.

Grip / Lock grip

In the latched position the lock unit of the Wall saw EX can also be used as a grip.

5.2.6.2 Couplings

Information on connection and on the couplings of the Wall saw EX can be found in "Chapter 4" 4.4.4,  4-9.

5.2.6.3 Water connection on chassis

Once the motor has cooled, the water for cooling the diamond saw blade can be regulated using the water valve (1). The cooling water regulation can be adjusted smoothly as far as dry cutting. The cooling water is carried away by means of the water hose (3).

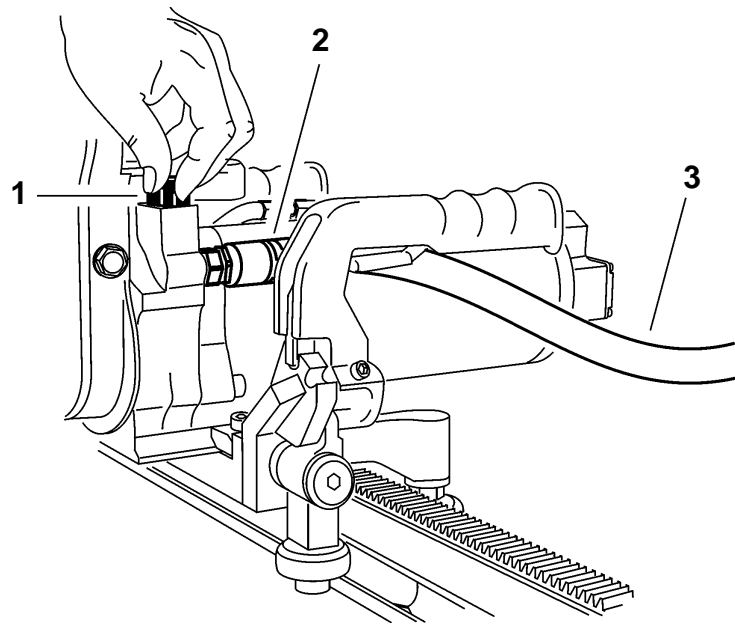


Fig. 5-3 Water regulation

- 1 Water valve
- 2 Water coupling
- 3 Water hose



Information

Dry cutting:

For dry cutting diamond saw blades with a suitable specification must be used. The operating and safety instructions for dry cutting must also be observed.

5.2.6.4 Sliding unit

The sliding unit of the Wall saw EX allows:

- Precise cutting thanks to accurate alignment
- Parallel cutting
- Possibilities for correction

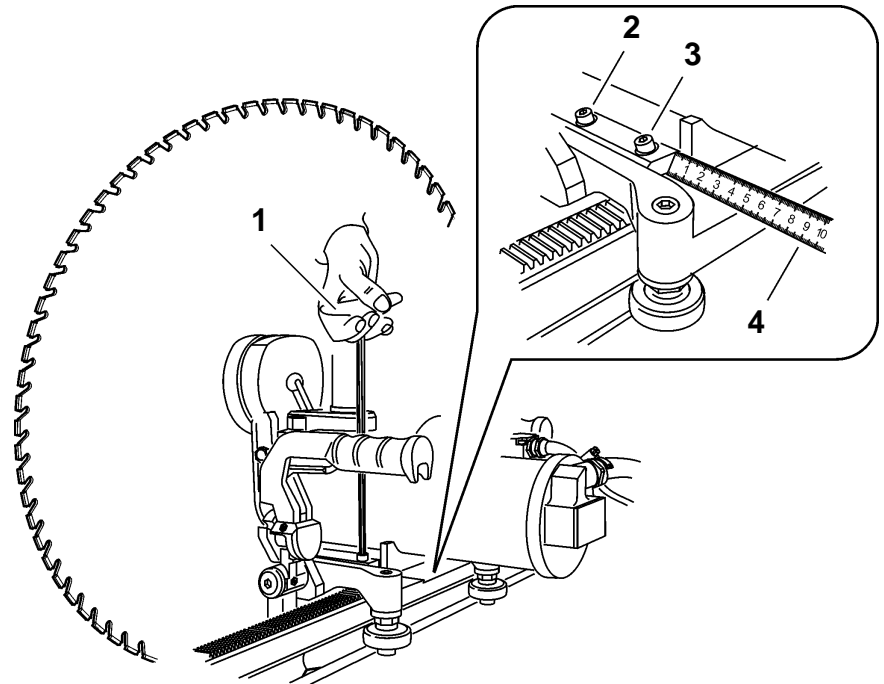


Fig. 5-4 Parallel cutting

- | | |
|----------------------------------|------------------------|
| 1 Allen key, size across flats 6 | 3 Cylindrical screw M8 |
| 2 Cylindrical screw M8 | 4 Rule |

In order to create a parallel cut, proceed as follows:

- Perform the first cut in the normal way
- Swing the diamond saw blade fully out of the cut
- Secure the Wall saw EX against accidental start-up
- Loosen the cylindrical screws (2 and 3) using the Allen key (1), size across flats 6
- Slide the chassis to the desired cutting width
- The cutting width can be accurately measured using the rule (4) on the rear of the sliding unit
- Re-tighten the cylindrical screws (2 and 3)



Information

With the sliding unit of the Wall saw EX parallel cuts at a distance of up to a maximum of 50 mm can be produced.

5.3 Troubleshooting

Proceed systematically when looking for the causes of a fault. When searching for and correcting faults, use the troubleshooting table in the “Wall Saws Safety Manual / System Description”.



Information

The troubleshooting tables can be found in Chapter 6 of the “Wall Saws Safety Manual / System Description”.

If you are unable to remedy a fault, please call our service centre (see Manufacturer’s address: ☎-II on the reverse of the title page).

To guarantee a rapid and professional solution to the problem, it is important that you have prepared as follows before calling:

- Try to describe the fault as accurately as possible
- Note the type and index of your system components (see name plate).
- Have the Operating Instructions close to hand

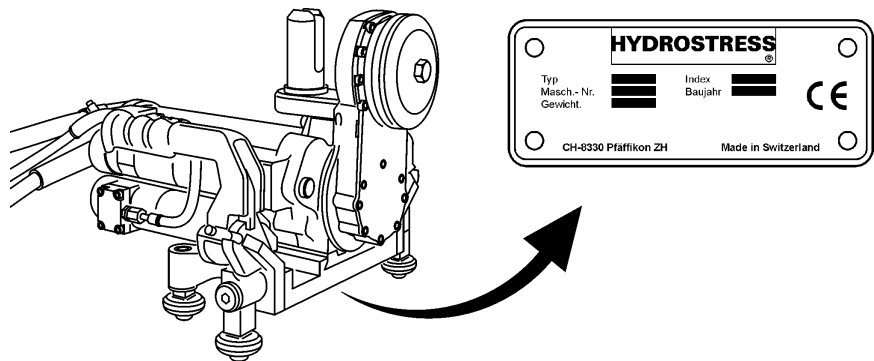


Fig. 5-5 Name plate

5.4 Putting into operation

The Wall saw EX is supplied ready for use. That which is described under Operation in the “Wall Saws Safety Manual / System Description” also applies to the putting into operation of the Wall saw EX.



Information

Information on operation of walls saws can be found in the “Wall Saws Safety Manual / System Description” Chapter 6.

6 Servicing and maintenance

6.1 General

Before proceeding read Chapter 2 "Safety instructions", § 2-1 in these Operating Instructions. Be sure also to take note of all the danger information given here and follow the instructions on how to avoid physical injury and damage to property.

6.1.1 Safety instructions

It is essential to observe the following safety instructions, in particular in relation to the servicing and maintenance of the Wall saw EX.



Danger

Danger of falling heavy parts.

When performing the types of work described in this chapter, it is essential to wear the following individual protective equipment: helmet, safety goggles, protective gloves and safety shoes.

It is essential that the work instructions and procedures described in these Operating Instructions are followed.

Failure to observe this regulation may lead to serious physical injury, possibly even death, and to property damage.



Warning

Danger from uncontrolled movements of the Wall saw EX!

Never connect or disconnect cables when the Wall saw EX is running.

Failure to adhere to this regulation may result in cut wounds or injury to body parts and damage to property.

6.1.2 Personnel qualifications

The Wall saw EX should not be maintained by unauthorised persons. Personnel are only authorised where they meet the following requirements:

- Have trained as a concrete cutting expert or have completed a technical course from the regional professional association and federation or has professional experience.
- Have received an introduction (basic training) to the operation of the Wall saw EX from a service engineer.
- Have read and understood chapter 2 “Safety instructions”.

6.2 Maintenance and servicing table

The following maintenance work must be performed according to the prescribed cycles. Wear parts that are not subject to particular maintenance intervals should also be checked regularly for wear and adjusted or exchanged as necessary.

Maintain the system within the indicated intervals in order to ensure:

- Safety for the user
- Optimum performance
- Optimum reliability at all times

		before each putting into operation	upon completion of work	weekly	annually	in the event of malfunction	in the event of damage
Wall saw EX	Retighten accessible screws and nuts			X		X	X
Lock unit	Clean latching recesses and guide grooves	X	X			X	X
	Lubricate lock unit (see "Chapter 6" 6.2.1, 6-4)			X		X	X
Guide rollers	Check for wear (play in bearings)	X	X			X	X
	Clean guide rollers	X	X			X	X
Swivel arm	Water cleaning		X				
	Check saw blade uptake for wear	X				X	X
	Replace gear oil (every 100 hours) (see "Chapter 6" 6.2.2, 6-4)				X	X	
Feed motor	Check for cleanliness / tightness	X	X			X	X
Drive motor	Check for cleanliness / tightness	X	X			X	X
Water economy	Water line (Tightness / cleanliness check)	X				X	X
	Blow out water (frost hazard)		X				
Saw blade	Water cleaning		X				
	Check for wear	X	X			X	X
Major service	May only be carried out by TYROLIT Hydrostress AG or an authorised representative	After 100 / 300 / 500 / 700 hours Signalling via remote controller of the EX control unit					

6.2.1 Grease nipple

On the Wall saw EX grease nipples are only positioned on the lock units. In order for the lock units of the Wall saw EX to remain easy to use, they should be lubricated regularly as indicated in the servicing and maintenance table.

6.2.1.1 Grease nipple position

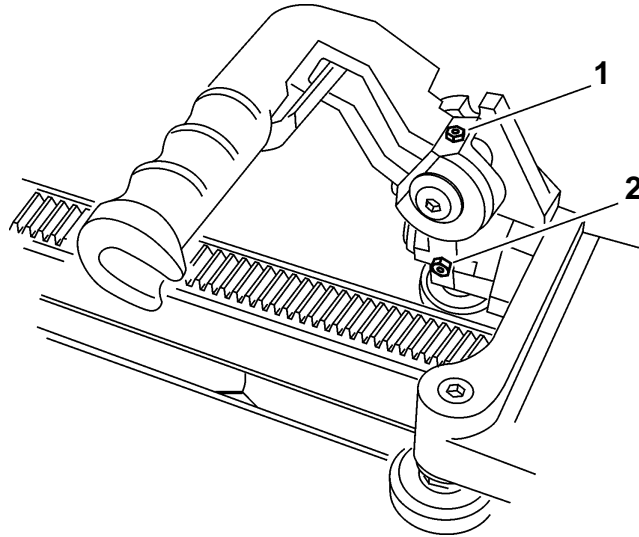


Fig. 6-1 Grease nipple

- 1 Grease nipple (handle rotating motion)
- 2 Grease nipple (guide roller swivelling motion)

6.2.2 Gear oil (swivel arm)


In order to guarantee trouble-free operation of the geared swivel arm the gear oil should be changed approximately every 100 hours. The remote controller of the control unit EX indicates the time for gear oil change.

Proceed as follows:

- Remove the plug screw located on the side of the geared swivel arm.
- Allow the gear oil to flow out through a swivelling movement of the Wall saw EX
- Fill the geared swivel arm with 1 dl fresh gear oil (see "Chapter 1" 1.2.8, 1-6)
- Close off the geared swivel arm with the plug screw

6.3 Warranty

TYROLIT Hydrostress AG warrants that the system supplied is free from material and manufacturing defects. For the undertaking of warranty services by TYROLIT Hydrostress AG - in international sales under the express exclusion of the warranty regulations of the UN law on sales of 11 April 1980 - the following conditions apply:

1. Any warranty claims must take place within 12 months from hand-over. Any undertaking of warranty service does not extend this time limit.
2. The system and/or any affected part(s) must be sent immediately a defect is discovered to TYROLIT Hydrostress AG or a local authorised TYROLIT Hydrostress AG branch office.
3. This warranty covers the free of charge repair or free of charge replacement of defective parts. No undertaking of warranty over and above this exists.
4. Parts that are normally subject to wear and tear are not covered by this warranty.
For wear parts regulations see "Chapter 6" 6.4,  6-6.
5. The warranty service is only undertaken provided that the system has been correctly used, handled, serviced and cleaned in accordance with the Operating Instructions and the technical integrity is preserved, i.e. that only original TYROLIT Hydrostress AG consumable material, accessories and spare parts have been used with the system.
6. Further claims are excluded. In particular, TYROLIT Hydrostress AG shall not be liable for direct or indirect damages, losses or costs associated with the use of the system.
7. The warranty expires immediately if the system or only one individual component of it is in any way converted, changed or modified.
8. Provided that a special written contract was concluded for the system, any warranty agreements established therein shall apply. Any verbal or implicit warranty agreements are invalid.

6.4 VDMA wear parts

6.4.1 Wear parts regulations

Wear parts are parts which are subject to operational wear and tear when the machine is used correctly. A uniform definition of wear is not possible as this will differ according to the intensity of use. Wear parts must be maintained, adjusted and, if necessary, replaced differently for each system according to the Operating Instructions of the manufacturer. Operational wear and tear cannot justify a warranty claim.

Wear parts:

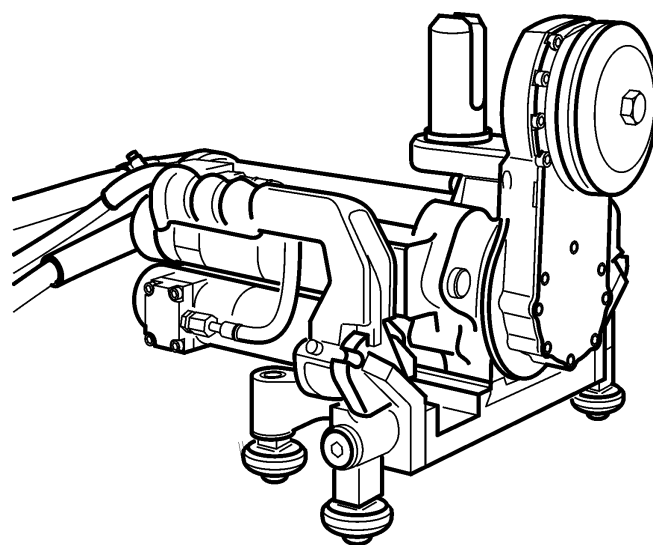
- feed and drive elements such as toothed racks, toothed wheels, pinions, spindles, spindle nuts, spindle bearings, wire, chains, chain wheels and belts,
- seals, cables, hoses, collars, connectors, couplings and switches for pneumatics, hydraulics, water, electricity and fuel
- guide elements such as guide beads, guide bushes, guide rails, rollers, bearings and anti-slip supports
- clamps of quick-release systems
- flushing head seals
- friction and anti-friction bearings that do not operate in an oil bath
- shaft sealing rings and seals
- friction and overload couplings, brake device
- carbon brushes, collectors
- easy release rings
- adjusting potentiometers and manual control elements
- fuses and lamps
- auxiliary and operating resources
- anchoring elements such as dowels, tie bolts and screws
- floor coverings
- lamellas
- membranes
- spark plugs, glow plugs
- parts of the reversing starter such as starting cord, starting handle, starting roller, starting spring
- sealing brushes, rubber seals, splash guards
- filters of all kinds
- drive and diverter rolls, bandages
- wire movement guards
- running and drive wheels
- water pumps
- cutting spoil transport rollers
- drilling, parting-off and cutting tools

Ersatzteilliste

Spare Parts List / Liste des pièces détachées / Lista delle parti di ricambio

Wandsäge EX

Index / Indice 003



Verwendung der Ersatzteilliste

Die Ersatzteilliste ist keine Montage- oder Demontageanleitung. Diese Ersatzteilliste dient ausschliesslich zum einfachen und schnellen Finden von Ersatzteilen, die bei der untenstehenden Adresse bestellt werden können.

Sicherheitsvorschrift



Gefahr

Montieren oder demontieren von Baugruppen kann Risiken bergen, auf die in dieser Ersatzteilliste nicht hingewiesen wird.

Das Verwenden dieser Ersatzteilliste für Montage- oder Demontagezwecke ist strikte verboten. Für Montage- und Demontearbeiten sind ausschliesslich die entsprechenden Beschreibungen in der Betriebsanleitung zu befolgen.

Nichtbeachten dieser Vorschrift kann zu Verletzungen führen, die im schlimmsten Fall auch den Tod zur Folge haben könnten.

Bestellungen



Information

Um Falschlieferungen zu vermeiden sollten vor der Versendung die Angaben in der Bestellung auf Richtigkeit und Vollständigkeit (siehe unter Bestellangaben) überprüft werden.

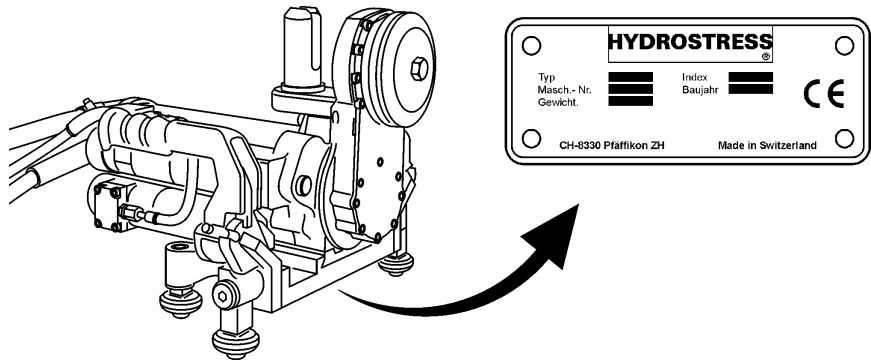
Es ist auch darauf zu achten, dass die Lieferadresse vollständig angegeben ist.

Bestelladresse:

TYROLIT Hydrostress AG
Witzbergstrasse 18
CH-8330 Pfäffikon
Switzerland
Telefon +41 (0) 44 / 952 18 18
Telefax +41 (0) 44 / 952 18 00
e-mail: info@tyrolit.com
www.tyrolit.com

0 Ersatzteilliste

0.1 Bestellangaben



Bei Bestellungen von Ersatzteilen benötigen wir folgende Angaben:

- Maschinentyp gemäss Typenschild (z.B. Wandsäge EX)
- Maschinennummer gemäss Typenschild (z.B. 20030000)
- Maschinenindex gemäss Typenschild (z.B. 003)
- Ersatzteilnummer gemäss Ersatzteilliste (z.B. 10977902)

Für Bestellungen, Fragen und Informationen wenden Sie sich bitte an die zuständige Niederlassung.

How to use the spare parts list

The spare parts list is not intended as instructions for assembly or dismantling work. It is exclusively intended to help you to quickly and easily find spare parts, which can then be ordered at the address below.

Safety regulations



Danger

The assembling or dismantling of modules can involve risks which are not identified in this spare parts list.

The use of this spare parts list for assembly or dismantling purposes is strictly forbidden. For assembly or dismantling tasks it is essential to only follow the corresponding descriptions in the operating manual.

If this regulation is not heeded injuries may be incurred which in the worst case can also be fatal.

Ordering



Information

To avoid incorrect deliveries you should check the order details for correctness and completeness (see under ordering details) prior shipment.

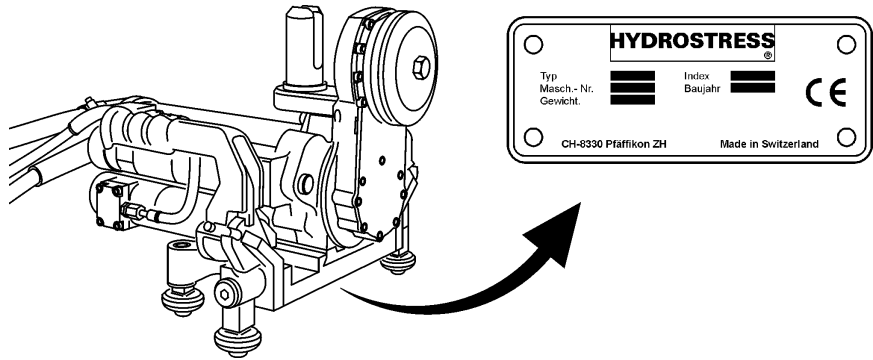
You should ensure that the delivery address is given in full.

Order address:

TYROLIT Hydrostress AG
Witzbergstrasse 18
CH-8330 Pfäffikon
Switzerland
Telefon +41 (0) 44 / 952 18 18
Telefax +41 (0) 44 / 952 18 00
e-mail: info@tyrolit.com
www.tyrolit.com

0 Spare Parts List

0.1 Ordering details



When spare parts are ordered we need the following details:

- Machine type according to nameplate (e.g. Wandsäge EX)
- Machine number according to nameplate (e.g. 20030000)
- Machine index according to nameplate (e.g. 003)
- Spare part number according to the spare parts list (e.g. 10977902)

For orders, questions and information please contact your responsible branch office.

Utilisation de la liste des pièces détachées

La liste des pièces détachées n'est pas une instruction de montage ou de démontage. Cette liste sert exclusivement à trouver simplement et rapidement les pièces détachées, qui peuvent être commandées à l'adresse mentionnée ci-dessous.

Prescription de sécurité



Danger

Le montage ou le démontage des modules peut présenter des risques dont il n'est pas fait mention dans cette liste des pièces détachées.

Il est strictement interdit d'employer cette liste des pièces détachées à des fins de montage ou de démontage. Pour les opérations de montage et de démontage, il faut exclusivement suivre les descriptions correspondantes dans le mode d'emploi.

Le non-respect de la présente prescription peut conduire à des blessures, pouvant même entraîner la mort.

Commandes



Information

Pour éviter des livraisons inappropriées, il est conseillé de vérifier avant l'expédition l'exactitude et l'exhaustivité des indications fournies dans la commande (voir Données de commande).

Il faut aussi veiller à bien indiquer l'adresse de livraison en entier.

Adresse de commande :

TYROLIT Hydrostress AG

Witzbergstrasse 18

CH-8330 Pfäffikon

Suisse

Téléphone +41 (0) 44 / 952 18 18

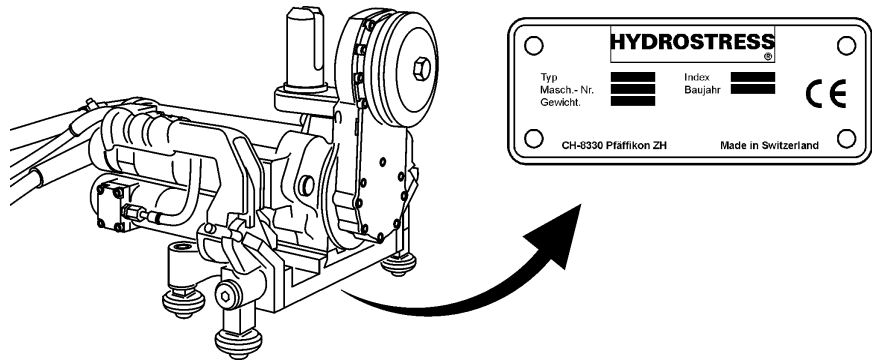
Télécopie +41 (0) 44 / 952 18 00

e-mail: info@tyrolit.com

www.tyrolit.com

0 Liste des pièces détachées

0.1 Données de commande



Lors de la commande de pièces détachées, nous avons besoin des données suivantes :

- Type de machine selon la plaque signalétique (p.ex. Wandsäge EX)
- Numéro de machine selon la plaque signalétique (p.ex. 20030000)
- Indice de machine selon la plaque signalétique (p.ex. 003)
- Numéro de pièce détachée selon la liste des pièces détachées (p.ex. 10977902)

Pour les commandes, questions et informations, vous êtes prié de vous adresser à la filiale compétente.

Uso della lista delle parti di ricambio

La lista delle parti di ricambio non è un manuale d'istruzioni per montaggio o smontaggio. Questa lista delle parti di ricambio serve esclusivamente per trovare in modo semplice e rapido parti di ricambio che possono essere ordinate all'indirizzo riportato qui sotto.

Norme di sicurezza



Pericolo

Il montaggio o lo smontaggio di componenti della macchina può comportare pericoli che non sono indicati in questa lista delle parti di ricambio.

E' assolutamente vietato servirsi di questa lista delle parti di ricambio per scopo di montaggio o di smontaggio. Per operazioni di montaggio o smontaggio occorre seguire esclusivamente le relative istruzioni nel manuale per l'uso della macchina.

La mancata osservanza di queste norme può comportare lesioni, e nel caso peggiore anche la morte.

Ordinazioni



Informazione

Per evitare forniture incorrette, occorre verificare prima dell'invio dell'ordinazione se i dati indicati in essa sono corretti e completi (vedere la lista dei dati per l'ordinazione).

Occorre verificare anche se l'indirizzo per la consegna è esatto e completo.

Indirizzo per ordinazioni:

TYROLIT Hydrostress AG

Witzbergstrasse 18

CH-8330 Pfäffikon

Svizzera

Telefon +41 (0) 44 / 952 18 18

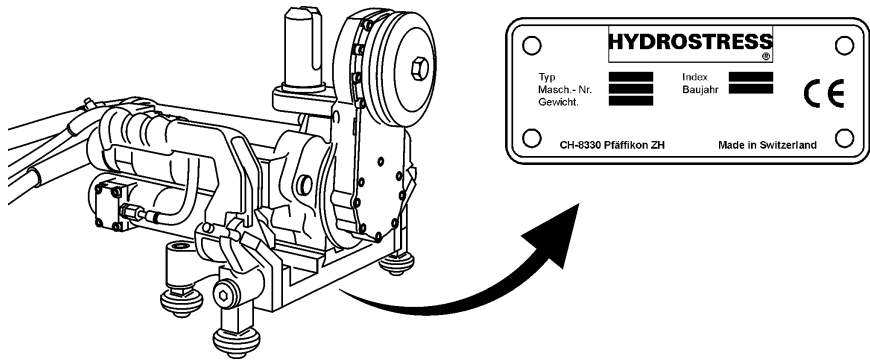
Telefax +41 (0) 44 / 952 18 00

e-mail: info@tyrolit.com

www.tyrolit.com

0 Lista delle parti di ricambio

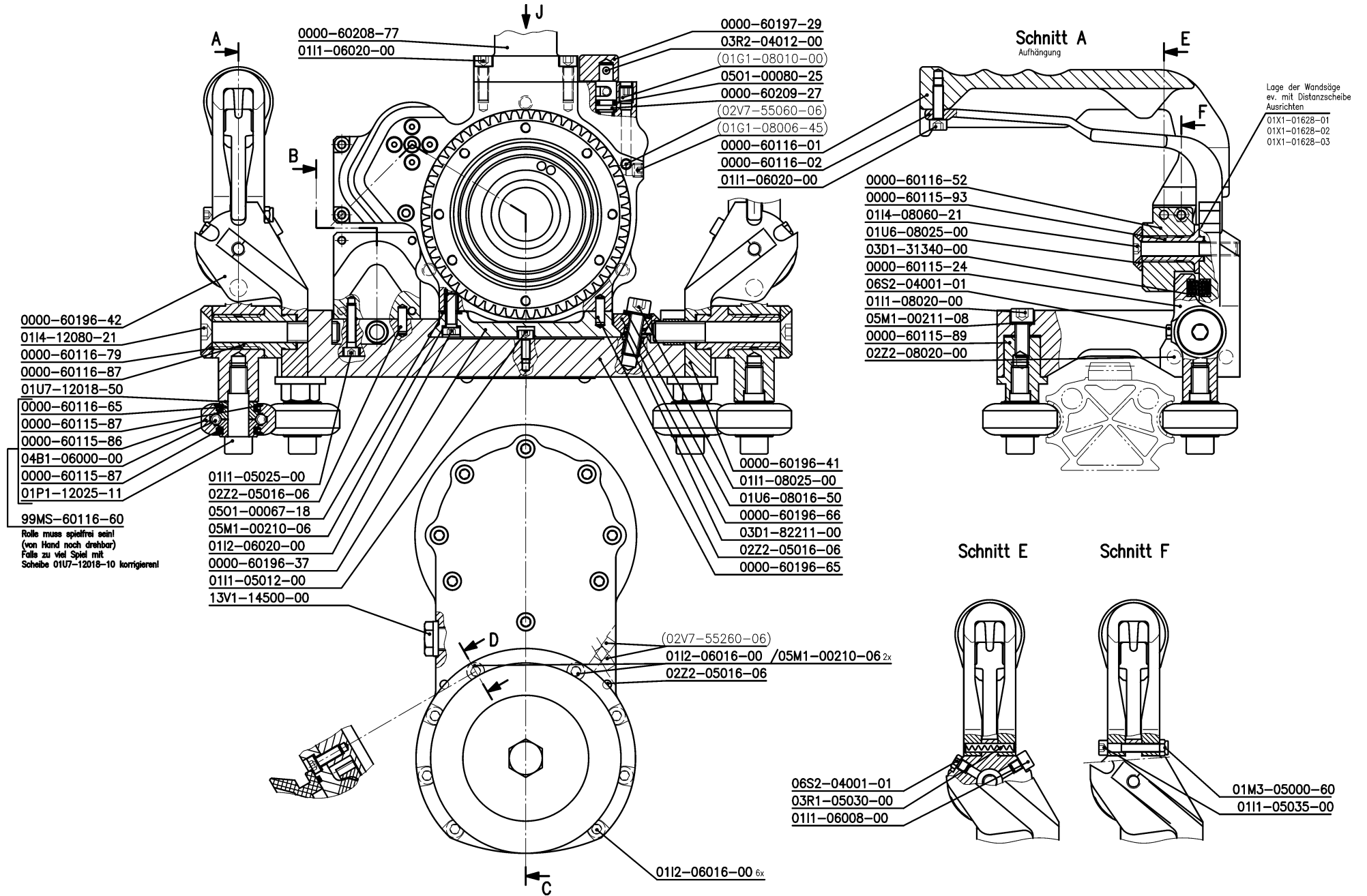
0.1 Dati per l'ordinazione



Per ordinazioni di parti di ricambio ci occorrono i dati seguenti:

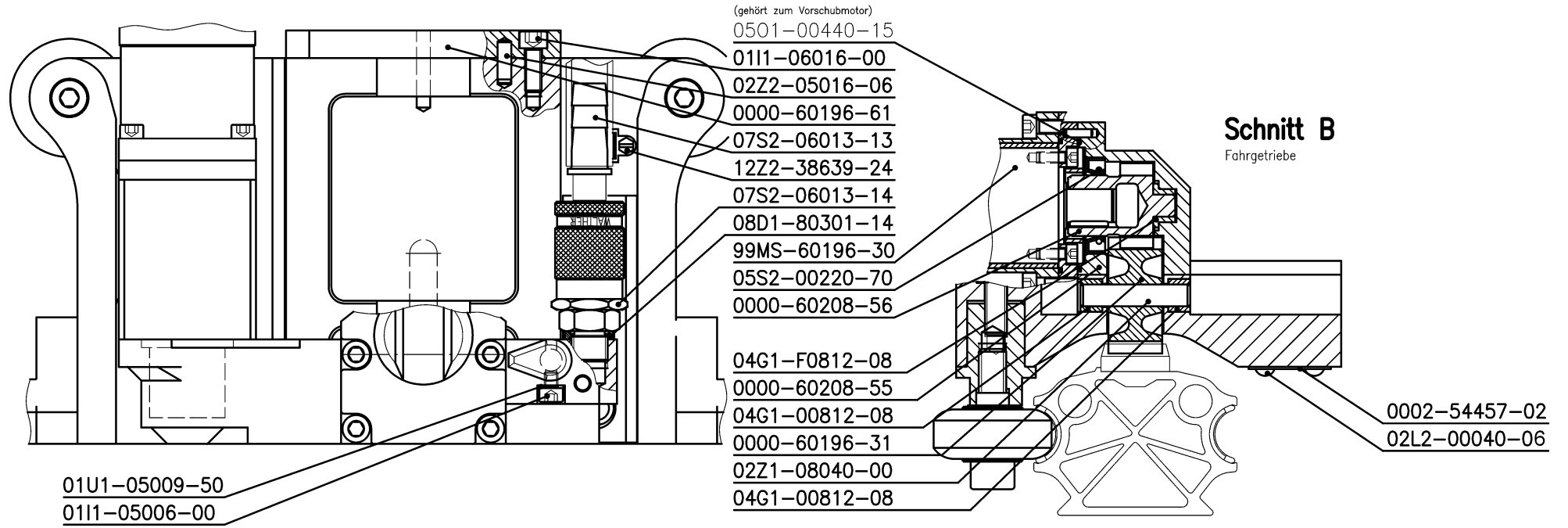
- Tipo di macchina indicato sulla targhetta della macchina (per es. Wandsäge EX)
- Numero della macchina indicato sulla targhetta della macchina (per es. 20030000)
- Indice della macchina indicato sulla targhetta della macchina (per es. 003)
- Numero della parte di ricambio secondo la lista di parti di ricambio (per es. 10977902)

Per ordinazioni, domande o richieste d'informazioni Vi preghiamo di rivolgerVi all'agenzia competente.

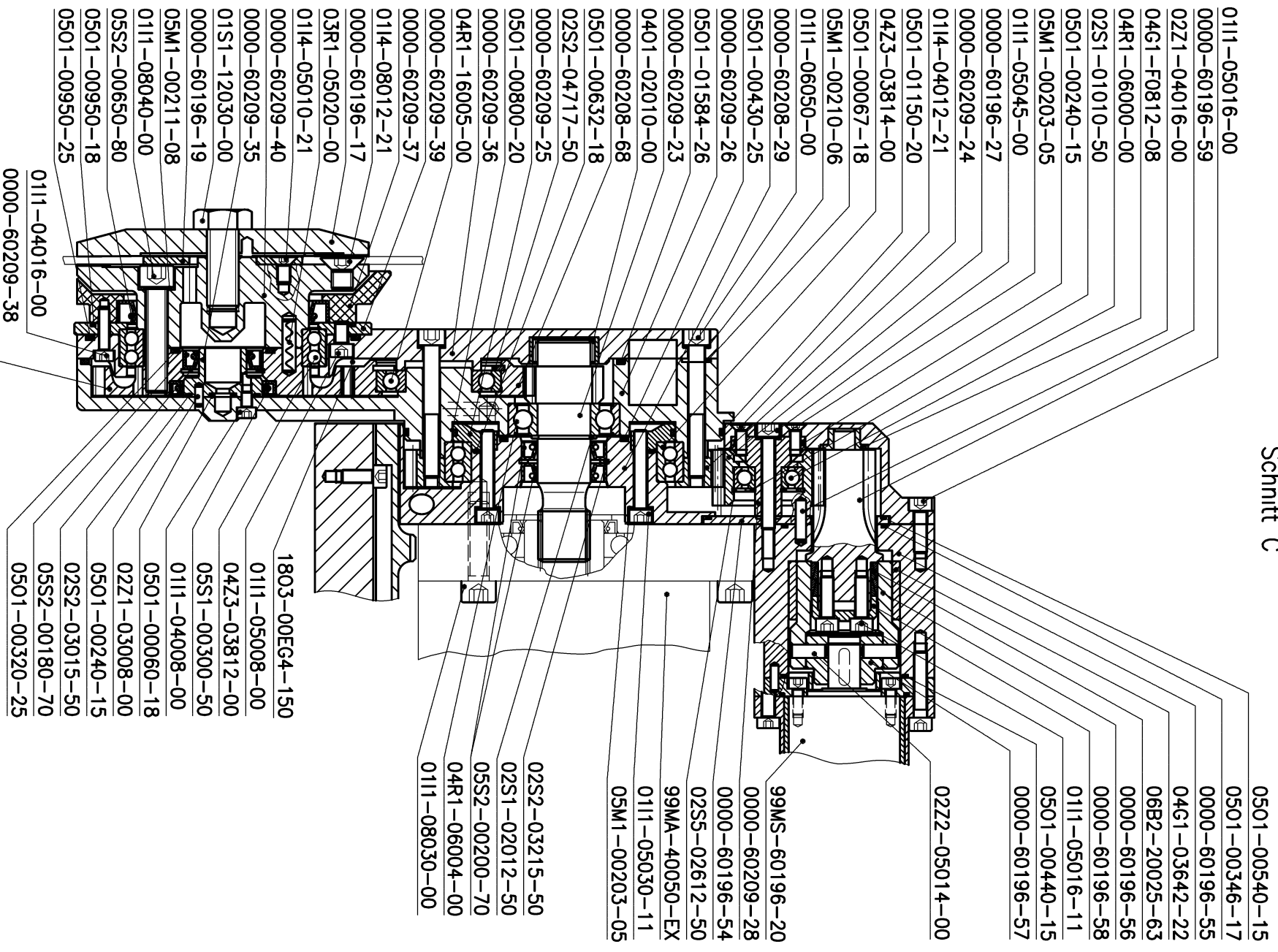


Ansicht J

Ohne Schwenkarm



Schnitt C



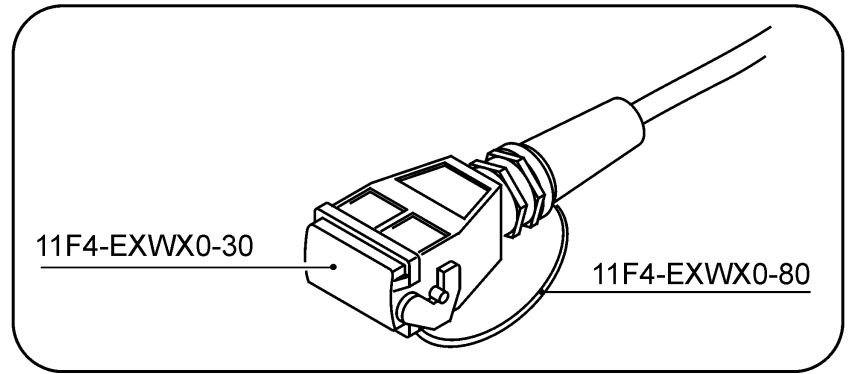
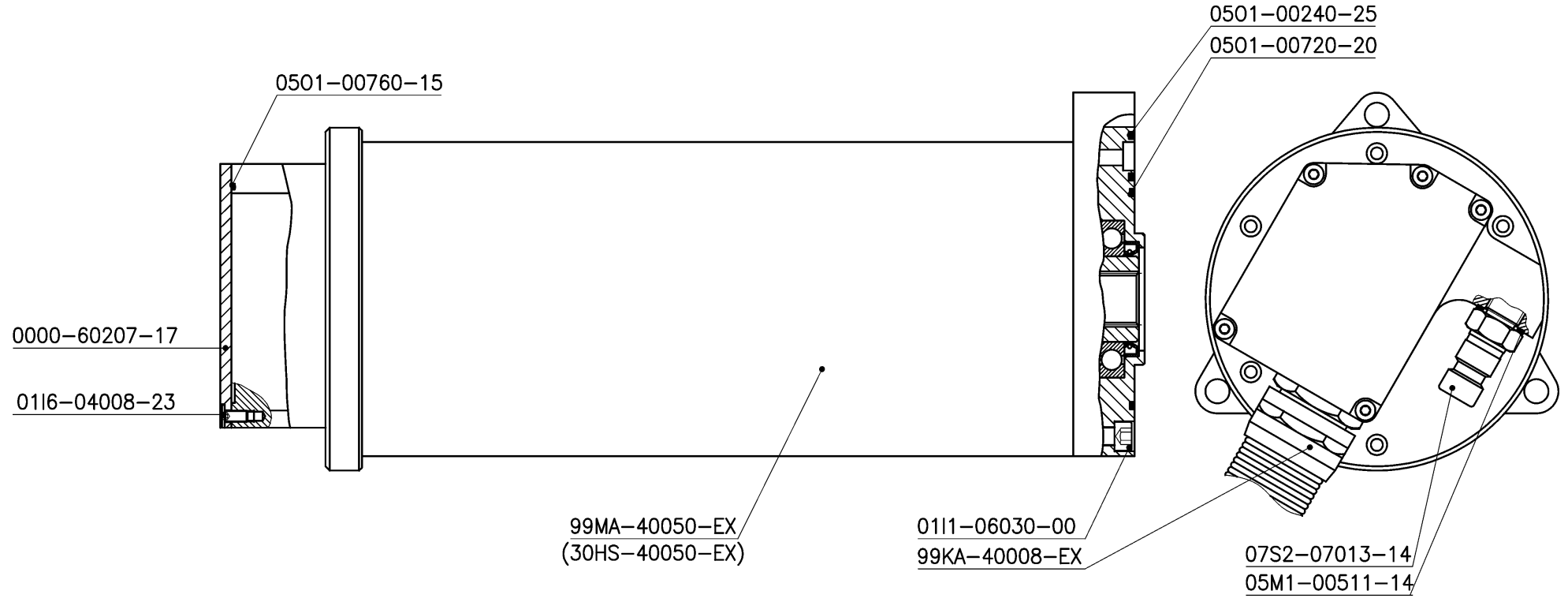
MSWA-EX	10978600	Wandsäge EX kpl.	Wall Saw EX cpl.	Scie murale EX cpl.	Seghe a muro EX cpl	1
Baugruppe.	Mat. Nr.	Deutsch	English	Français	Italiano	Stk.
99MA-40050-EX	10978650	Elektromotor 400V/50Hz	Electric motor 400V/50Hz	Moteur électrique 400V/50Hz	Motore elettrico 400V/50Hz	1
99MS-60196-10	10979647	Vorschubmotor kpl.	Feed motor cpl.	Monteur d'avancement cpl.	Mottore d'avanzamento cpl.	1
99MS-60116-60	10977910	Rolle kpl.	Roll cpl.	Rouleau cpl.	Rullo cpl.	4
99MS-60208-30	10980264	Schienenstopper	Schienenstopper	Schienenstopper	Schienenstopper	2
MSWA-EX	10978600	Wandsäge EX kpl.	Wall Saw EX cpl.	Scie murale EX cpl.	Seghe a muro EX cpl	1
Zeichn. Nr.	Mat. Nr.	Deutsch	English	Français	Italiano	Stk.
0000-60115-24	10977289	Rollenhalter	Pulley support short	Support de poulie	Supporto di puleggia	2
0000-60115-89	999815	Halter	Support	Support	Supporto	2
0000-60115-93	999820	Griffbolzen	Griffbolzen	Griffbolzen	Ussols leva sgancio rapid	2
0000-60116-01	10979454	Griff	Handles	Poignées	Manopole	2
0000-60116-02	10979456	Klinke	Klinke	Klinke	Klinke	2
0000-60116-52	10977714	Schwenkkulisse	Schwenkkulisse	Schwenkkulisse	Locco fissaggio maniglia	2
0000-60116-79	10978100	Scheibe Ø 30/13x6	Washer Ø 30/13x6	Rondelle Ø 30/13x6	Rondella Ø 30/13x6	2
0000-60116-87	10978618	Hebelbolzen	Hebelbolzen	Hebelbolzen	Hebelbolzen	2
0000-60196-17	10978402	Blattdeckel EX	Blade cover EX	Couvercle du disque EX	Fissaggio disco EX	1
0000-60196-19	10978404	Zentrierring EX	Centering ring EX	Anneau centrage EX	Anello di centraggio EX	1
0000-60196-27	10978543	Schwenkzwischenrad z19 EX	Schwenkzwischenrad z19 EX	Schwenkzwischenrad z19 EX	Schwenkzwischenrad z19 EX	1
0000-60196-31	10978546	Fahrtriebsrad z19 EX	Fahrtriebsrad z19 EX	Fahrtriebsrad z19 EX	Fahrtriebsrad z19 EX	1
0000-60196-37	10978582	Verschiebeplatte EX	Verschiebeplatte EX	Verschiebeplatte EX	Verschiebeplatte EX	1
0000-60196-41	10978597	Hebelaufhängung links EX	Hebelaufhängung links EX	Hebelaufhängung links EX	Hebelaufhängung links EX	1
0000-60196-42	10978598	Hebelaufhängung rechts EX	Hebelaufhängung rechts EX	Hebelaufhängung rechts EX	Hebelaufhängung rechts EX	1
0000-60196-54	10979070	Deckel Schwenkgetriebe	Deckel Schwenkgetriebe	Deckel Schwenkgetriebe	Deckel Schwenkgetriebe	1
0000-60196-55	10979071	Gehäuse Überlastsicherung	Gehäuse Überlastsicherung	Gehäuse Überlastsicherung	Gehäuse Überlastsicherung	1
0000-60196-56	10979072	Nabe Überlastsicherung	Nabe Überlastsicherung	Nabe Überlastsicherung	Nabe Überlastsicherung	1
0000-60196-57	10979073	Mitnehmerzapfen	Drive pin	Broche d'entraînement	Perno trascinatore	1
0000-60196-58	10979074	Spanndeckel Überlasts.	Spanndeckel Überlasts.	Spanndeckel Überlasts.	Spanndeckel Überlasts.	1

MSWA-EX	10978600	Wandsäge EX kpl.	Wall Saw EX cpl.	Scie murale EX cpl.	Seghe a muro EX cpl	1
Zeichn. Nr.	Mat. Nr.	Deutsch	English	Français	Italiano	Stk.
0000-60196-59	10979076	Schwenkritzel Z9	Schwenkritzel Z9	Schwenkritzel Z9	Schwenkritzel Z9	1
0000-60196-61	10979362	Motorstütze EX	Motorstütze EX	Motorstütze EX	Motorstütze EX	1
0000-60196-65	10979200	Supportplatte EX	Supportplatte EX	Supportplatte EX	Supportplatte EX	1
0000-60196-66	10979198	Klemmstück EX	Klemmstück EX	Klemmstück EX	Klemmstück EX	1
0000-60197-29	10981188	Drehknopf EX	Push-button EX	Bouton tournant EX	Manopola EX	1
0000-60208-29	10980816	Support	Support	Support	Supporto	1
0000-60208-55	10980108	Fahrerschubgehäuse	Fahrerschubgehäuse	Fahrerschubgehäuse	Fahrerschubgehäuse	1
0000-60208-56	10980109	Fahrritzel z13	Pinion z13	Pignon z13	Pignone z13	1
0000-60208-68	10980149	Zwischenrad z33	Zwischenrad z33	Zwischenrad z33	Zwischenrad z33	1
0000-60208-77	10980261	Aufnahmedorn EX	Aufnahmedorn EX	Aufnahmedorn EX	Aufnahmedorn EX	1
0000-60209-23	10980914	Antriebswelle	Drive shaft	Arbre d'entraînement	Albero di comando	1
0000-60209-24	10980915	Schwenknabenrad z57	Schwenknabenrad z57	Schwenknabenrad z57	Schwenknabenrad z57	1
0000-60209-25	10980916	Schwenklagerdeckel	cover	Couvercle	Fissaggio	1
0000-60209-26	10980919	Schwenkarm EX	Rotating swivel arm EX	Bras support orientable EX	Braccio orientabile EX	1
0000-60209-27	10981102	Drehschieber	Drehschieber	Drehschieber	Drehschieber	1
0000-60209-28	10981103	Achse	Shaft	Arbre	Albero	1
0000-60209-35	10981639	Wasserdichtring EX	Sealingring EX	Anneau d'étanchéité EX	Anello di tenuta EX	1
0000-60209-36	10981640	Schwenkarmdeckel	Swivel arm cover	Couvercle du bras support	Coperchio braccio	1
0000-60209-37	10981641	Führungsring	Führungsring	Führungsring	Führungsring	1
0000-60209-38	10981643	Nabenrad Z48 EX	Nabenrad Z48 EX	Nabenrad Z48 EX	Nabenrad Z48 EX	1
0000-60209-39	10981644	Lagerdeckel	Bearing cover	Couvercle du palier	Coperchio del cuscinetto	1
0000-60209-40	10981646	Blattnabe EX	Blade hub EX	Moyeu de disque EX	Mozzo del disco EX	1
0002-54457-02	975924	HS-Typenschild klein	HS-type plate small	Plaque de fabrication petite HS	Targhetta piccola del modello HS	1
0111-04008-00	971677	Inbus-Schraube M4x8	Allen head screw M4x8	Vis à six pans creux M4x8	Vite ad esagono cavo M4x8	2
0111-04016-00	971680	Inbus-Schraube M4x16	Allen head screw M4x16	Vis à six pans creux M4x16	Vite ad esagono cavo M4x16	6
0111-05006-00	971686	Inbus-Schraube M5x6	Allen head screw M5x6	Vis à six pans creux M5x6	Vite ad esagono cavo M5x6	1
0111-05008-00	971687	Inbus-Schraube M5x8	Allen head screw M5x8	Vis à six pans creux M5x8	Vite ad esagono cavo M5x8	6
0111-05012-00	971689	Inbus-Schraube M5x12	Allen head screw M5x12	Vis à six pans creux M5x12	Vite ad esagono cavo M5x12	1
0111-05016-00	971691	Inbus-Schraube M5x16	Allen head screw M5x16	Vis à six pans creux M5x16	Vite ad esagono cavo M5x16	8
0111-05016-11	971692	Inbus-Schraube M5x16 12.9	Allen head screw M5x16 12.9	Vis à six pans creux M5x16 12.9	Vite ad esagono cavo M5x16 12.9	4

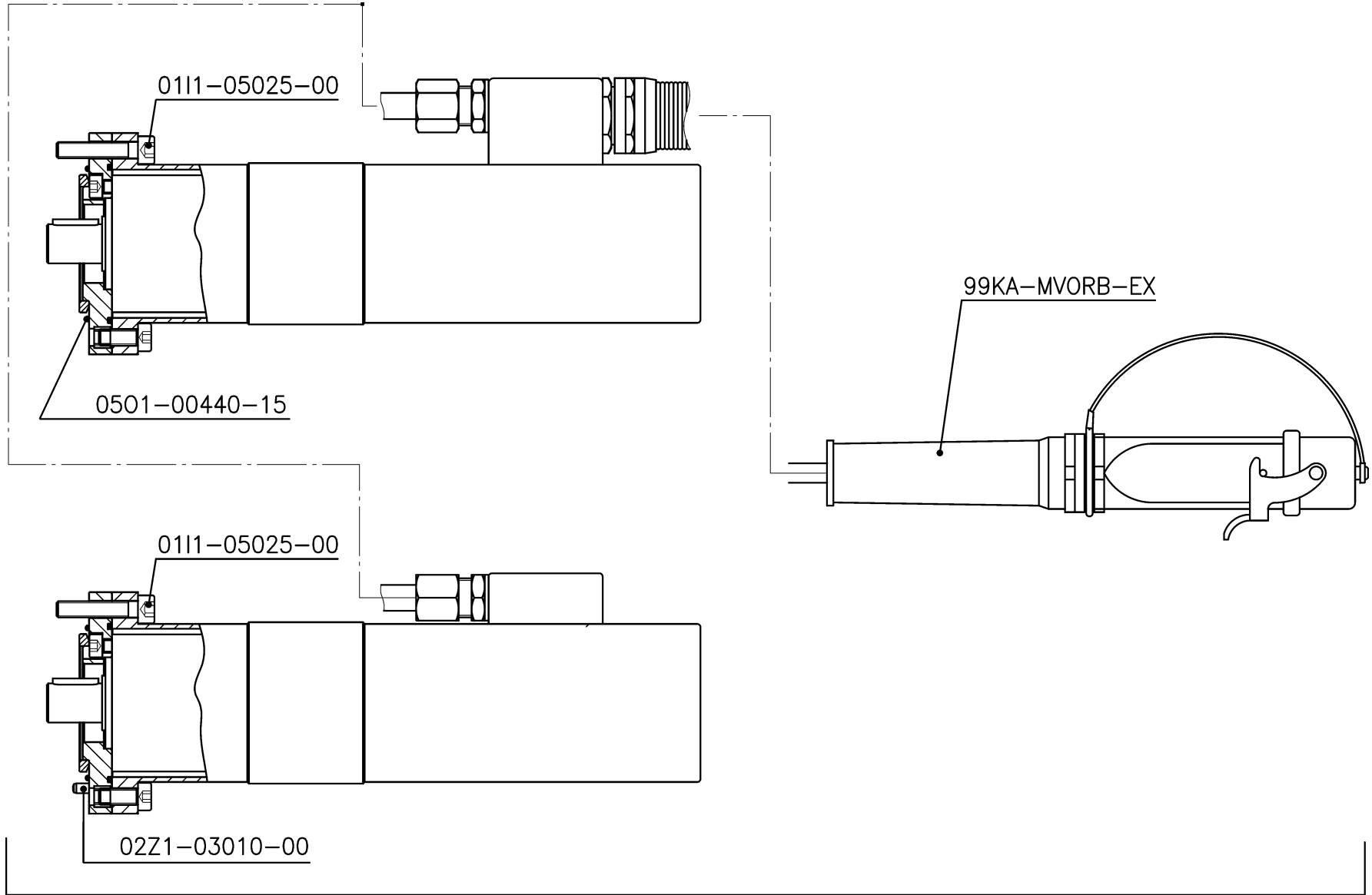
MSWA-EX	10978600	Wandsäge EX kpl.	Wall Saw EX cpl.	Scie murale EX cpl.	Seghe a muro EX cpl	1
Zeichn. Nr.	Mat. Nr.	Deutsch	English	Français	Italiano	Stk.
0111-05025-00	979275	Inbus-Schraube M5x25	Allen head screw M5x25	Vis à six pans creux M5x25	Vite ad esagono cavo M5x25	2
0111-05030-11	979276	Inbus-Schraube M5x30 12.9	Allen head screw M5x30 12.9	Vis à six pans creux M5x30 12.9	Vite ad esagono cavo M5x30 12.9	6
0111-05035-00	971696	Inbus-Schraube M5x35	Allen head screw M5x35	Vis à six pans creux M5x35	Vite ad esagono cavo M5x35	2
0111-05045-00	971698	Inbus-Schraube M5x45	Allen head screw M5x45	Vis à six pans creux M5x45	Vite ad esagono cavo M5x45	2
0111-06008-00	971702	Inbus-Schraube M6x8	Allen head screw M6x8	Vis à six pans creux M6x8	Vite ad esagono cavo M6x8	2
0111-06016-00	971705	Inbus-Schraube M6x16	Allen head screw M6x16	Vis à six pans creux M6x16	Vite ad esagono cavo M6x16	2
0111-06020-00	971709	Inbus-Schraube M6x20	Allen head screw M6x20	Vis à six pans creux M6x20	Vite ad esagono cavo M6x20	6
0111-06050-00	971718	Inbus-Schraube M6x50	Allen head screw M6x50	Vis à six pans creux M6x50	Vite ad esagono cavo M6x50	8
0111-08020-00	979283	Inbus-Schraube M8x20	Allen head screw M8x20	Vis à six pans creux M8x20	Vite ad esagono cavo M8x20	2
0111-08025-00	979284	Inbus-Schraube M8x25	Allen head screw M8x25	Vis à six pans creux M8x25	Vite ad esagono cavo M8x25	2
0111-08030-00	971738	Inbus-Schraube M8x30	Allen head screw M8x30	Vis à six pans creux M8x30	Vite ad esagono cavo M8x30	3
0111-08040-00	971742	Inbus-Schraube M8x40	Allen head screw M8x40	Vis à six pans creux M8x40	Vite ad esagono cavo M8x40	6
0112-06016-00	971809	Inb-Schr.nied.Kopf M6x16	Allen head screw M6x16	Vis à six pans creux bas M6x16	Vite ad esagono cavo M6x16	8
0112-06020-00	10977331	Inb-Schr.nied.Kopf M6x20	Allen head screw M6x20	Vis à six pans creux bas M6x20	Vite ad esagono cavo M6x20	4
0114-04012-21	971817	Senkkopfschraube M4x12	Countersunk head screw M4x12	Vis à tête fraisée M4x12	Vite a testa svasata M4x12	4
0114-05010-21	10978653	Senkkopfschraube M5x10	Countersunk head screw M5x10	Vis à tête fraisée M5x10	Vite a testa svasata M5x10	3
0114-08012-21	10978654	Senkkopfschraube M8x12	Countersunk head screw M8x12	Vis à tête fraisée M8x12	Vite a testa svasata M8x12	6
0114-08060-21	979297	Senkkopfschraube M8x60	Countersunk head screw M8x60	Vis à tête fraisée M8x60	Vite a testa svasata M8x60	2
0114-12080-21	10978643	Senkkopfschraube M12x80	Countersunk head screw M12x80	Vis à tête fraisée M12x80	Vite a testa svasata M12x80	2
01M3-05000-60	971859	Stopmutter M5	Stopmutter M5	Stopmutter M5	Stopmutter M5	2
01S1-12030-00	971916	6kt-Schraube M12x30	Hexagonal screw M12x30	Vis à tête hexagonale M12x30	Vite a testa esagonale M12x30	1
01U1-05009-50	971953	U-Scheibe M5	Washer M5	Rondelle M5	Rondella M5	1
01U6-08016-50	974832	U-Scheibe 8/16/2	Washer 8/16/2	Rondelle 8/16/2	Rondella 8/16/2	2
01U6-08025-00	10978103	Scheibe M8	Washer M8	Rondelle M8	Rondella M8	2
01U7-12018-50	10980801	Pass-Scheibe Ø 12/18x0.5	Pass-Scheibe Ø 12/18x0.5	Pass-Scheibe Ø 12/18x0.5	Pass-Scheibe Ø 12/18x0.5	4
02L2-00040-06	979374	Kerbnagel 4x6	Grooved pin 4x6	Clou cannelé 4x6	Chiodo intagliato 4x6	4
02S1-01010-50	975951	Seegerring Welle Ø 10	Circlip arbre Ø 10	Sèggre-arbre Ø 10	Anello tipo seeger albero Ø 10	1
02S1-02012-50	971995	Seegerring Welle Ø 20	Circlip arbre Ø 20	Sèggre-arbre Ø 20	Anello tipo seeger albero Ø 20	1
02S2-03015-50	972009	Seegerring Bohr. Ø 30	Circlip arbor Ø 30	Sèggre-arbre pour arbres Ø 30	Anello tipo seeger albero Ø 30	1
02S2-03215-50	972010	Seegering Bohr. Ø 32	Seeger circlip-ring arbor Ø 32	Anneau de retenue Seeger	Anello tipo seeger albero Ø 32	1

MSWA-EX	10978600	Wandsäge EX kpl.	Wall Saw EX cpl.	Scie murale EX cpl.	Seghe a muro EX cpl	1
Zeichn. Nr.	Mat. Nr.	Deutsch	English	Français	Italiano	Stk.
02S2-04717-50	972013	Seegering Bohr. Ø 47	Seeger circlip-ring arbor Ø 47	Anneau de retenue Seeger	Anello tipo seeger albero Ø 47	1
02S5-02612-50	10978645	Seegering V Bohr Dm 26	Seeger circlip-ring arbor Ø 26	Anneau de retenue Seeger	Anello tipo seeger albero Ø 26	1
02Z1-03008-00	10980941	Zylinderstift 3 m6 x 8	Straight pin 3 m6 x 8	Goupille cylindrique 3 m6 x 8	Spillo dritto 3 m6 x 8	2
02Z1-04016-00	10979092	Zylinderstift 4 m6 x 16	Straight pin 4 m6 x 16	Goupille cylindrique 4 m6 x 16	Spillo dritto 4 m6 x 16	2
02Z1-08040-00	999561	Zylinderstift 8 h6 x 40	Straight pin 8 h6 x 40	Goupille cylindrique 8 h6 x 40	Spillo dritto 8 h6 x 40	1
02Z2-05014-00	964562	Zylinderstift 5 m6 x 14	Straight pin 5 m6 x 14	Goupille cylindrique 5 m6 x 14	Spillo dritto 5 m6 x 14	2
02Z2-05016-06	972054	Zylinderstift 5 m6 x 16	Straight pin 5 m6 x 16	Goupille cylindrique 5 m6 x 16	Spillo dritto 5 m6 x 16	8
02Z2-08020-00	972055	Zylinderstift 8 m6 x 20	Straight pin 8 m6 x 20	Goupille cylindrique 8 m6 x 20	Spillo dritto 8 m6 x 20	4
03D1-31340-00	10978106	Druckfeder Ø 8/1,0x28,5	Pressure spring Ø 8/1,0x28,5	Ressort à pression Ø 8/1,0x28,5	Molla di compressione Ø 8/1,0x28,5	2
03D1-82211-00	979431	Druckfeder Ø 10/1,25x20	Pressure spring Ø 10/1,25x20	Ressort à pression Ø 10/1,25x20	Molla di compressione Ø 10/1,25x20	2
03R1-05020-00	972092	Schwerspannstift 5x20	Rollpin 5x20	Goupille fendue 5x20	Perno tenditore 5x20	4
03R1-05030-00	10978345	Schwerspannstift 5x30	Rollpin 5x30	Goupille fendue 5x30	Perno tenditore 5x30	4
03R2-04012-00	10981227	Schwerspannstift 4x12	Rollpin 4x12	Goupille fendue 4x12	Perno tenditore 4x12	1
04G1-00812-08	10978639	Gleitlager BP25 8/12x8	Gleitlager BP25 8/12x8	Gleitlager BP25 8/12x8	Gleitlager BP25 8/12x8	2
04G1-03642-22	10979093	Gleitlager BP25 36/42x22	Gleitlager BP25 36/42x22	Gleitlager BP25 36/42x22	Gleitlager BP25 36/42x22	1
04G1-F0812-08	10980115	FI-Gleitla.BP25 8/12x 8	FI-Gleitla.BP25 8/12x 8	FI-Gleitla.BP25 8/12x 8	FI-Gleitla.BP25 8/12x 8	2
04O1-02010-00	10980160	Nadelhülse HK 2010	Needle bush HK 2010	Roulement à aiguilles HK 2010	Boccola a rullini HK 2010	1
04R1-06000-00	10978644	Rillenkugellager 6000	Deep groove ball bearing 6000	Roulement rainuré à billes 6000	Cuscinetto rigido a sfere 6000	1
04R1-06004-00	972133	Rillenkugellager 6004	Deep groove ball bearing 6004	Roulement rainuré à billes 6004	Cuscinetto rigido a sfere 6004	1
04R1-16005-00	963852	Rillenkugellager 16005	Deep groove ball bearing 16005	Roulement rainuré à billes 16005	Cuscinetto rigido a sfere 16005	1
04Z3-03812-00	10981677	Schrägkugellager 3812-2RS	Angular ball bearing	Roulement à billes à contact oblique	Cuscinette a sfere oblique	1
04Z3-03814-00	10980933	Schrägkugellager 3814-2RS	Angular ball bearing	Roulement à billes à contact oblique	Cuscinette a sfere oblique	1
05M1-00203-05	977509	Megu-Ring 5,7/9,0x1,00	Megu-Ring 5,7/9,0x1,00	Megu-Ring 5,7/9,0x1,00	Megu-Ring 5,7/9	8
05M1-00210-06	972203	Megu-Ring 7,3/10,2x1,00	Megu-Ring 7,3/10,2x1,00	Megu-Ring 7,3/10,2x1,00	Megu-Ring7,3/10,2	14
05M1-00211-08	972204	Megu-Ring 8,5/13,4x1,00	Megu-Ring 8,5/13,4x1,00	Megu-Ring 8,5/13,4x1,00	Megu-Ring8,5/13,4	8
05O1-00060-18	962270	O-Ring 6.07x1.78	O-ring seal 6.07x1.78	Anneau torique d'étanchéité	Guarnizione OR 6.07x1.78	1
05O1-00067-18	972212	O-Ring 6.75x1.78	O-ring seal 6.75x1.78	Anneau torique d'étanchéité	Guarnizione OR 6.75x1.78	11
05O1-00080-25	972215	O-Ring 8.00x2.50	O-ring seal 8.00x2.50	Anneau torique d'étanchéité	Guarnizione OR 8.00x2.50	1
05O1-00240-15	972240	O-Ring 24.00x1.50	O-ring seal 24.00x1.50	Anneau torique d'étanchéité	Guarnizione OR 24.00x1.50	2
05O1-00320-25	972252	O-Ring 32.00x2.50	O-ring seal 32.00x2.50	Anneau torique d'étanchéité	Guarnizione OR 32.00x2.50	1

MSWA-EX Zeichn. Nr.	10978600 Mat. Nr.	Wandsäge EX kpl. Deutsch	Wall Saw EX cpl. English	Scie murale EX cpl. Français	Seghe a muro EX cpl Italiano	1 Stk.
05O1-00346-17	979545	O-Ring 34.65x1.78	O-ring seal 34.65x1.78	Anneau torique d'étanchéité	Guarnizione OR 34.65x1.78	1
05O1-00430-25	10980923	O-Ring 43.00x2.50	O-ring seal 43.00x2.50	Anneau torique d'étanchéité	Guarnizione OR 43.00x2.50	1
05O1-00440-15	10980909	O-Ring 44.00x1.50	O-ring seal 44.00x1.50	Anneau torique d'étanchéité	Guarnizione OR 44.00x1.50	1
05O1-00540-15	10978649	O-Ring 54.00x1.50	O-ring seal 54.00x1.50	Anneau torique d'étanchéité	Guarnizione OR 54.00x1.50	1
05O1-00632-18	10980924	O-Ring 63.22x1.75	O-ring seal 63.22x1.75	Anneau torique d'étanchéité	Guarnizione OR 63.22x1.75	1
05O1-00800-20	984945	O-Ring 80.00x2.00	O-ring seal 80.00x2.00	Anneau torique d'étanchéité	Guarnizione OR 80.00x2.00	1
05O1-00950-18	10980084	O-Ring 94.97x1.78	O-ring seal 94.97x1.78	Anneau torique d'étanchéité	Guarnizione OR 94.97x1.78	1
05O1-00950-25	972289	O-Ring 95.00x2.50	O-ring seal 95.00x2.50	Anneau torique d'étanchéité	Guarnizione OR 95.00x2.50	1
05O1-01150-20	972296	O-Ring 115.00x2.00	O-ring seal 115.00x2.00	Anneau torique d'étanchéité	Guarnizione OR 115.00x2.00	1
05O1-01584-26	10980162	O-Ring 158.42x2.62	O-ring seal 158.42x2.62	Anneau torique d'étanchéité	Guarnizione OR 158.42x2.62	1
05S1-00300-50	10980181	Sim.ring A 30/40/5 NBR RF	Retaining ring A 30/40/5 NBR RF	Anneau simmer A 30/40/5	Anello di tenuta 30/40/5 NBR RF	2
05S2-00180-70	972326	Sim.ring A 18/30/7 NBR RF	Retaining ring A 18/30/7 NBR RF	Anneau simmer A 18/30/7	Anello di tenuta 18/30/7 NBR RF	2
05S2-00200-70	972327	Sim.ring A 20/32/7 NBR RF	Retaining ring A 20/32/7 NBR RF	Anneau simmer A 20/32/7	Anello di tenuta 20/32/7 NBR RF	2
05S2-00220-70	972328	Sim.ring A 22/35/7 NBR RF	Retaining ring A 22/35/7 NBR RF	Anneau simmer A 22/35/7	Anello di tenuta 22x35x7 NBR RF	3
05S2-00650-80	984901	Sim.ring A 65/80/8 NBR RF	Retaining ring A 65/80/8 NBR RF	Anneau simmer A 65/80/8	Anello di tenuta 65/80/8 NBR RF	1
06B2-20025-63	10978803	Spannbüchse KTR150 20x25	Spring cellet KTR150 20x25	Douille de serrage KTR150 20x25	Boccola serraglio KTR150 20x25	2
06S2-04001-01	972461	Schmiernippel D1 M6	Grease nipple D1 M6	Fileté de graissage D1 M6	Ingrassatore D1 M6	4
07S2-06013-13	10979735	Schlauchn. LP-006-1-SL013	Hose clip LP-006-1-SL013	Bride de tuyau LP-006-1-SL013	Brida di tubi LP-006-1-SL013	1
07S2-06013-14	10979471	Steckkup. LP-006-0-WR013	Coupling LP-006-0-WR013	Raccord LP-006-0-WR013	Raccordo LP-006-0-WR013	1
08D1-80301-14	972860	Dichtkantenring G 1/4	Sealing edge ring G 1/4	Anneau d'étanchéité à arêtes G 1/4	Anello di tenuta a spigoli G 1/4	1
12Z2-38639-24	973591	Schlauchbride JCS 17-25	Hose clip JCS 17-25	Bride de tuyau JCS 17-25	Brida di tubi JCS 17-25	1
13V1-14500-00	10978647	Verschl.Schr.m.Magnet 1/4	Verschl.Schr.m.Magnet 1/4	Verschl.Schr.m.Magnet 1/4	Verschl.Schr.m.Magnet 1/4	1

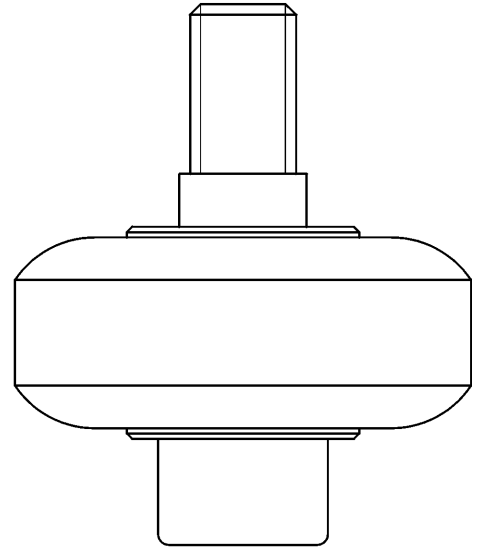
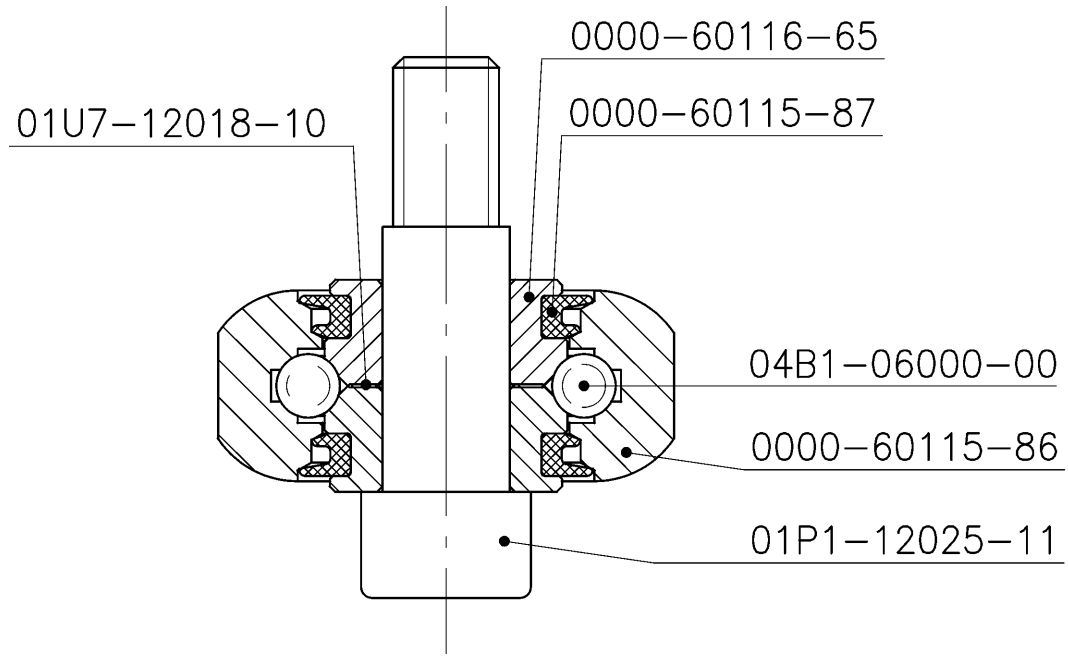


Zeichn. Nr.	Mat. Nr.	Deutsch	English	Français	Italiano	Stk.
99MA-40050-EX 30HS-40050-EX	10978650 10980368	Elektromotor 400V/50Hz EX Elektromotor 400V/50Hz EX	Electric motor 400V/50Hz EX Electric motor 400V/50Hz EX	Moteur électr. 400V/50Hz EX Moteur électr. 400V/50Hz EX	Motore elettrico 400V/50Hz EX Motore elettrico 400V/50Hz EX	1 1
0000-60207-17	10980081	Deckel Blattantrieb WX	Deckel Blattantrieb WX	Deckel Blattantrieb WX	Deckel Blattantrieb WX	1
0111-06030-00	971713	Inbus-Schraube M6x30	Allen head screw M6x30	Vis à six pans creux M6x30	Vite ad esagono cavo M6X30	6
0116-04008-23	971833	Inb-Schr.extr.n.Kopf M4x8	Allen head screw M4x8	Vis à six pans creux bas M4x8	Vite ad esagono cavo M4x8	5
05M1-00511-14	972206	Megu-Ring 13,8/18,7x1,25	Megu-Ring 13,8/18,7x1,25	Megu-Ring 13,8/18,7x1,25	Megu-Ring 13,8/18,7x1,25	1
05O1-00240-25	972241	O-Ring 24.00x2.50 N 70	O-ring seal 24.00x2.50	Anneau torique d'étanchéité	Guarnizione OR 24.00x2.50	1
05O1-00720-20	979551	O-Ring 72.00x2.00 N 70	O-ring seal 72.00x2.00	Anneau torique d'étanchéité	Guarnizione OR 72.00x2.00	1
05O1-00760-15	10980232	O-Ring 76.00x1.50 N 70	O-ring seal 76.00x1.50	Anneau torique d'étanchéité	Guarnizione OR 76.00x1.50	2
07S2-07013-14	972789	Stecknippel 1/4" A1-WR013	Plug-in nipple 1/4" A1-WR013	Raccord fileté 1/4" A1-WR013	Raccordo innestabile 1/4" A1-WR013	1
99KA-40008-EX	10980319	El.Kabel kpl.	El.Kabel kpl.	El.Kabel kpl.	El.Kabel kpl.	1
11F4-EXW XO-30	10980969	Schutzd. z. Stecker	Schutzd. z. Stecker	Schutzd. z. Stecker	Schutzd. z. Stecker	1
11F4-EXW XO-80	10980974	Kabel z. Stecker	Kabel z. Stecker	Kabel z. Stecker	Kabel z. Stecker	1

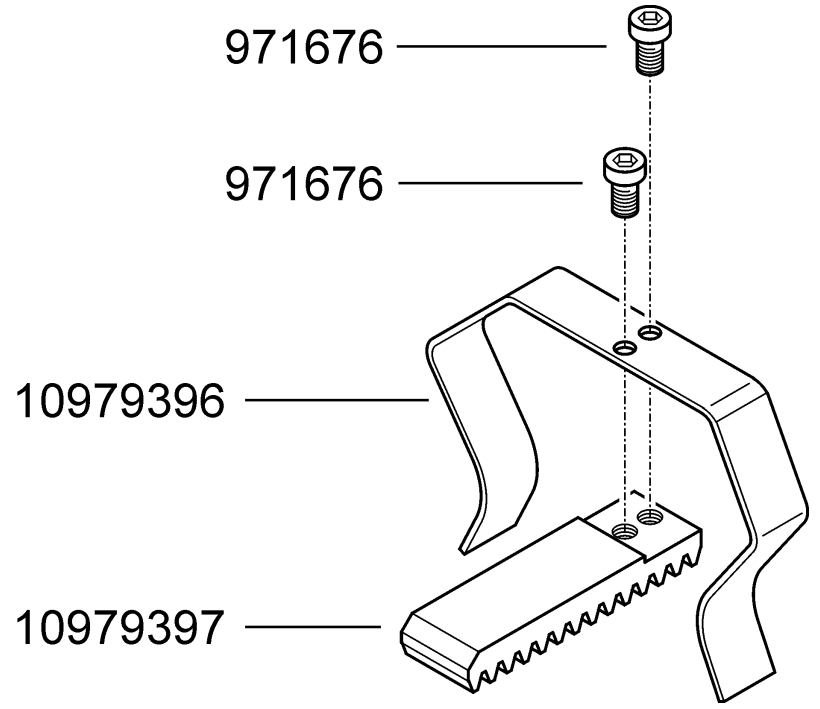
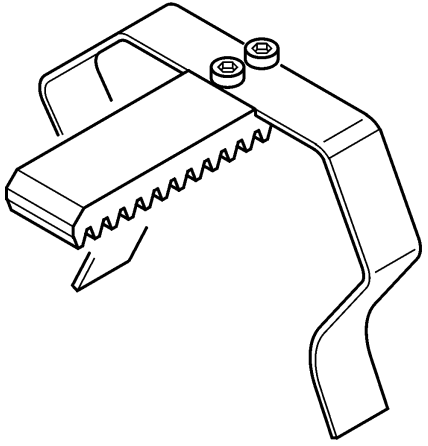


99MS-60196-10
(30HS-60196-10)

Zeichn. Nr.	Mat. Nr.	Deutsch	English	Français	Italiano	Stk.
99MS-60196-10	10979647	Vorschubmotoren kpl. EX	Feed motors cpl. EX	Moteurs d'avancement cpl. EX	Motori d' avanzamento cpl. EX	1
30HS-60196-10	10980383	Vorschubmotoren kpl. EX	Feed motors cpl. EX	Moteurs d'avancement cpl. EX	Motori d' avanzamento cpl. EX	1
99KA-MVORB-EX	10980317	Kabel kp.el.Mot.Vorsch.EX	Kabel kp.el.Mot.Vorsch.EX	Kabel kp.el.Mot.Vorsch.EX	Kabel kp.el.Mot.Vorsch.EX	1
99KA-MVORB-EX	10980317	Kabel kp.el.Mot.Vorsch.EX	Kabel kp.el.Mot.Vorsch.EX	Kabel kp.el.Mot.Vorsch.EX	Kabel kp.el.Mot.Vorsch.EX	1
0111-05025-00	979275	Inbus-Schraube M5x25	Allen head screw M 5x 25	Vis à six pans creux M5x25	Vite ad esagono cavo M5x25	2
02Z1-03010-00	969713	Zylinderstift 3 x 10	Straight pin 3 x 10	Goupille cylindrique 3 x 10	Spillo dritto 3 x 10	2
05O1-00440-15	10980909	O-Ring 44x1.1,5	O-ring seal 44x1.1,5	Anneau torique d'étanchéité	Guarnizione OR 44x1.1,5	2
11F4-EXW XO-10	10980967	Schutzd. z. Stecker	Schutzd. z. Stecker	Schutzd. z. Stecker	Schutzd. z. Stecker	1
11F4-EXW XO-70	10980973	Kabel z. Stecker	Kabel z. Stecker	Kabel z. Stecker	Kabel z. Stecker	1



99MS-60116-60	10977910	Rolle kpl. zu WZ	Roll cpl. for WZ	Rouleau cpl. pour WZ	Rullo cpl. Per WZ	4
Zeichn. Nr.	Mat. Nr.	Deutsch	English	Français	Italiano	Stk.
0000-60115-86	999817	Führungsrolle WZ	Guide roll WZ	Rouleau de guidage WZ	Rullo di guida WZ	1
0000-60115-87	999818	Lippendichtung Rollenl.WZ	Lippendichtung Rollenl.WZ	Lippendichtung Rollenl.WZ	Lippendichtung Rollenl.WZ	2
0000-60116-65	10977932	Rollenbüchse	Rollenbüchse	Rollenbüchse	Flangia mozzo rullo	2
01P1-12025-11	999809	Paßschulter Schr.12X25/M10	Paßschulter Schr.12X25/M10	Paßschulter Schr.12X25/M10	Paßschulter Schr.12X25/M10	1
01U7-12018-10	999422	Pass-Scheibe Ø 12/18x0.1	Washer Ø 12/18x0.1	Rondelle Ø 12/18x0.1	Rondella Ø 12/18x0.1	3
04B1-06000-00	979462	Kugel Ø 6	Ball Ø 6	Bille Ø 6 mm	Sfera Ø 6	13



99MS-60208-30	10980264	Schienenstopper EX	Schienenstopper EX	Schienenstopper EX	Schienenstopper EX	2
Zeichn. Nr.	Mat. Nr.	Deutsch	English	Français	Italiano	Stk.
0000-60208-06	10979396	Anschlagklammer	Anschlagklammer	Anschlagklammer	Anschlagklammer	1
0000-60208-07	10979397	Anschlag Schienenst.	Anschlag Schienenst.	Anschlag Schienenst.	Anschlag Schienenst.	1
0111-04006-00	971676	Inbus-Schraube M4x6	Allen head screw M4x6	Inbus-Schraube M4x6	Vite ad esagono cavo M4x6	2
BZDA-10980264	10980413	Beipackz.D Schienenst.	Beipackz.D Schienenst.	Beipackz.D Schienenst.	Beipackz.D Schienenst.	1