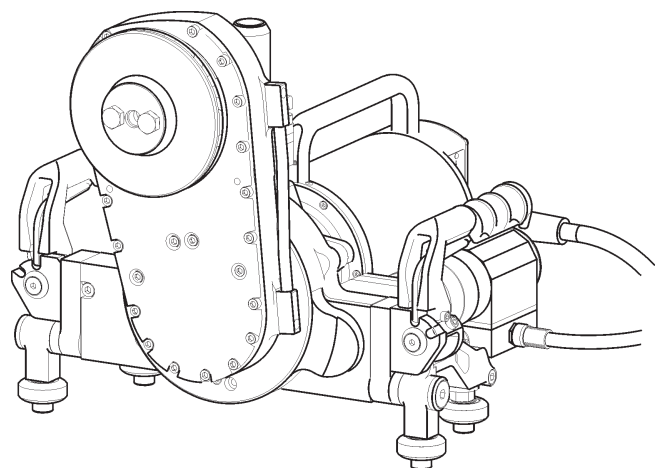


# ***Operating Instructions***

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## ***Wall saw WSE1217★★★***

*Index 000*



## **Congratulations!**

With a Hydrostress unit from TYROLIT, you have chosen a tried and tested piece of equipment which has been designed and built to leading technical standards. Only genuine TYROLIT Hydrostress replacement parts can guarantee quality and interchangeability. If maintenance work is neglected or carried out inexpertly we will be unable to honour our warranty obligations. Any repair work must be carried out by trained personnel only.

Our aftersales service is available to help ensure that your TYROLIT Hydrostress units remain in perfect working order.

We hope that working with your TYROLIT unit will be a satisfying and fault-free experience.

TYROLIT Hydrostress

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## 1 Safety



These instructions are just one part of the documentation which is supplied together with the wall saw. These instructions go together with the «Safety Manual / System Description for Wall Saws» to form a complete set of documentation.



### **DANGER**

Failure to comply with the safety instructions in the "Safety Manual / System Handbook" may result in serious injury or even death.

- ▶ Please ensure that the «Safety Manual / System Description for Wall Saws» has been read and understood in full.



### **DANGER**

#### **Cuts from the saw blade.**

- ▶ Always wear protective gloves when working on the wall saw, particularly when working on the saw blade.
- ▶ Always use the blade guard when operating the wall saw.



### **DANGER**

#### **Serious injury or material damage as a result of uncontrolled movements of the wall saw.**

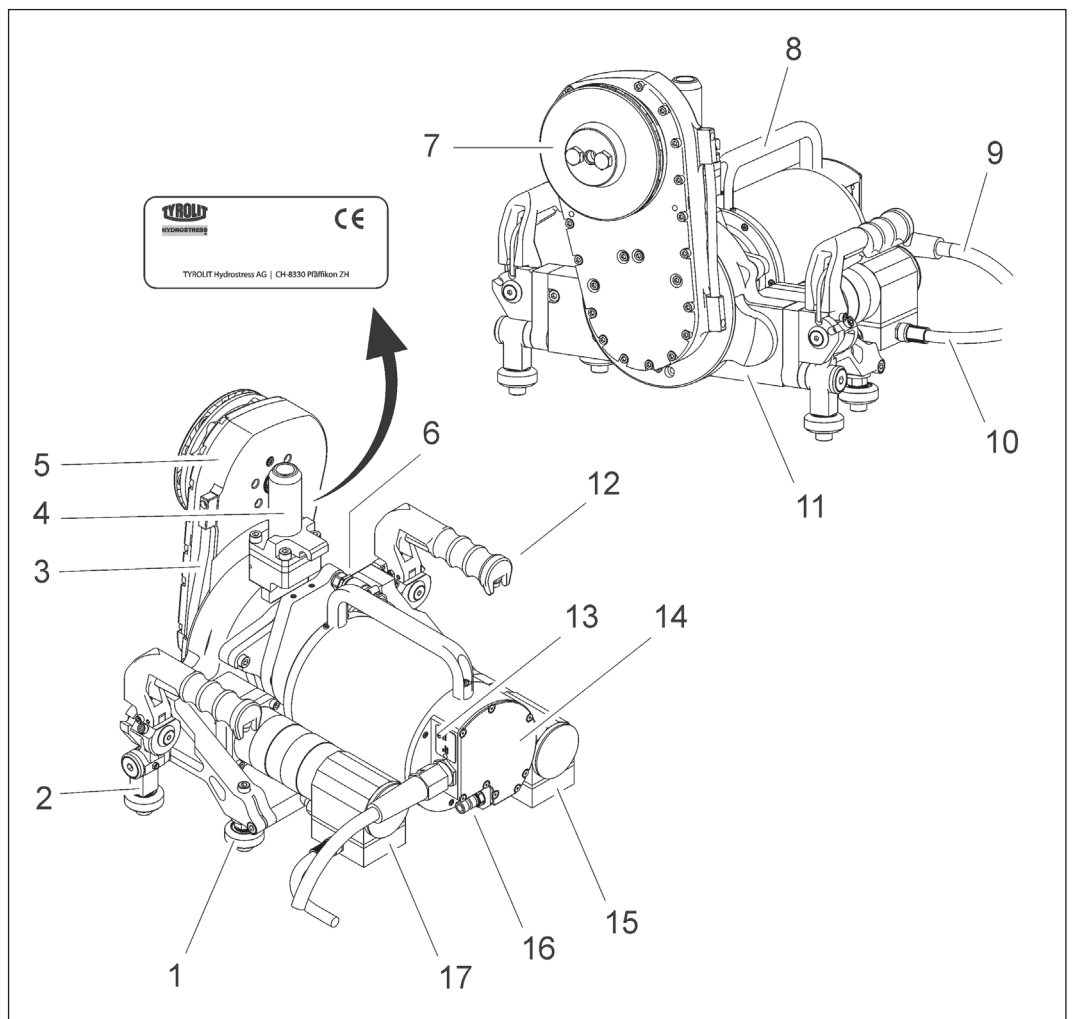
- ▶ Never connect or disconnect cables when the control unit is switched on.

## 2 Description

### 2.1 Wall saw system

The design and function of the wall saw systems are described in the "Safety Manual / System Description for Wall Saws".

### 2.2 Wall saw

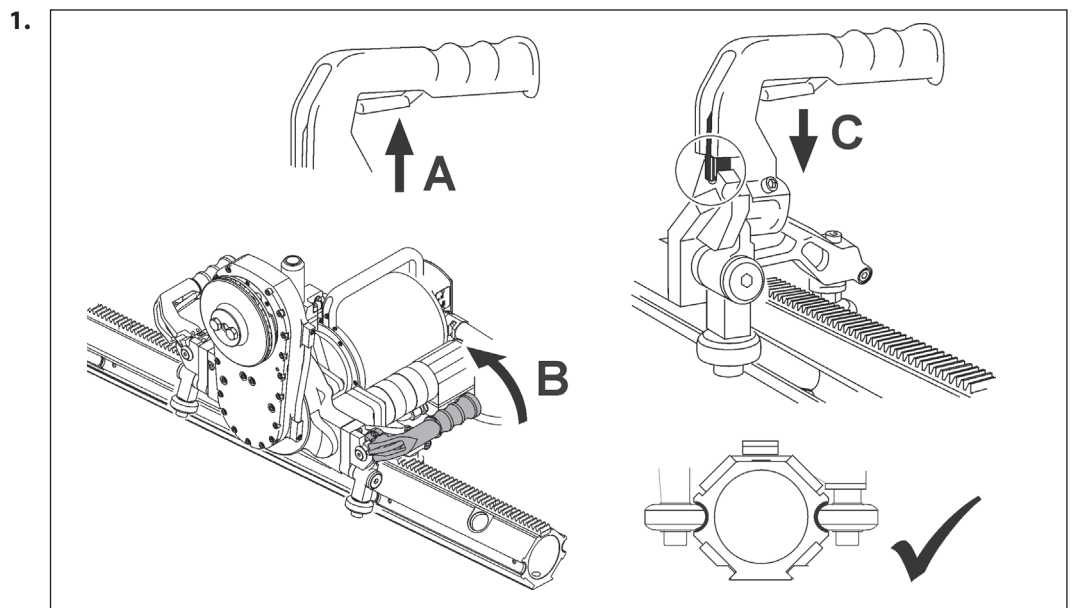


#### Components

- |                           |                                             |
|---------------------------|---------------------------------------------|
| 1 Guide roller            | 10 Feed motor cable                         |
| 2 Lock unit               | 11 Chassis                                  |
| 3 Water supply line       | 12 Carrying handle / lock unit              |
| 4 Blade guard holder      | 13 Identification plate - Blade drive motor |
| 5 Geared swivel arm       | 14 Blade drive motor                        |
| 6 Water - Bypass          | 15 Feed motor, travel                       |
| 7 Saw blade holder        | 16 Water connection                         |
| 8 Carrying handle         | 17 Feed motor, swivel                       |
| 9 Blade drive motor cable |                                             |

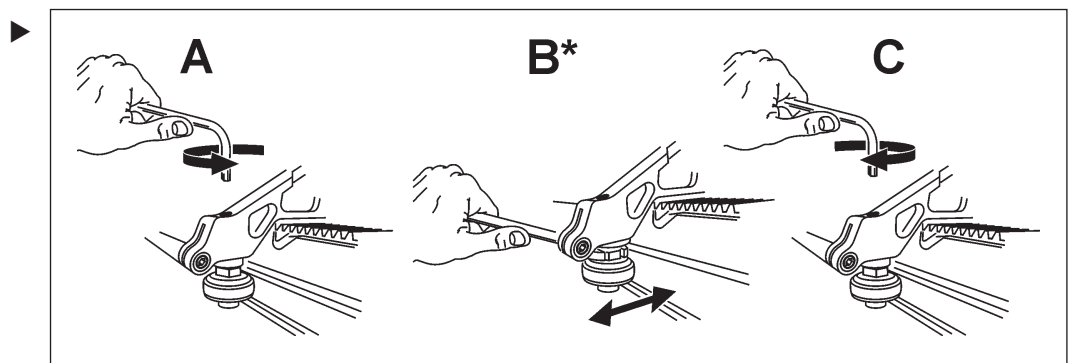
### 3 Assembly / Disassembly

#### 3.1 Place the wall saw on the guide rail



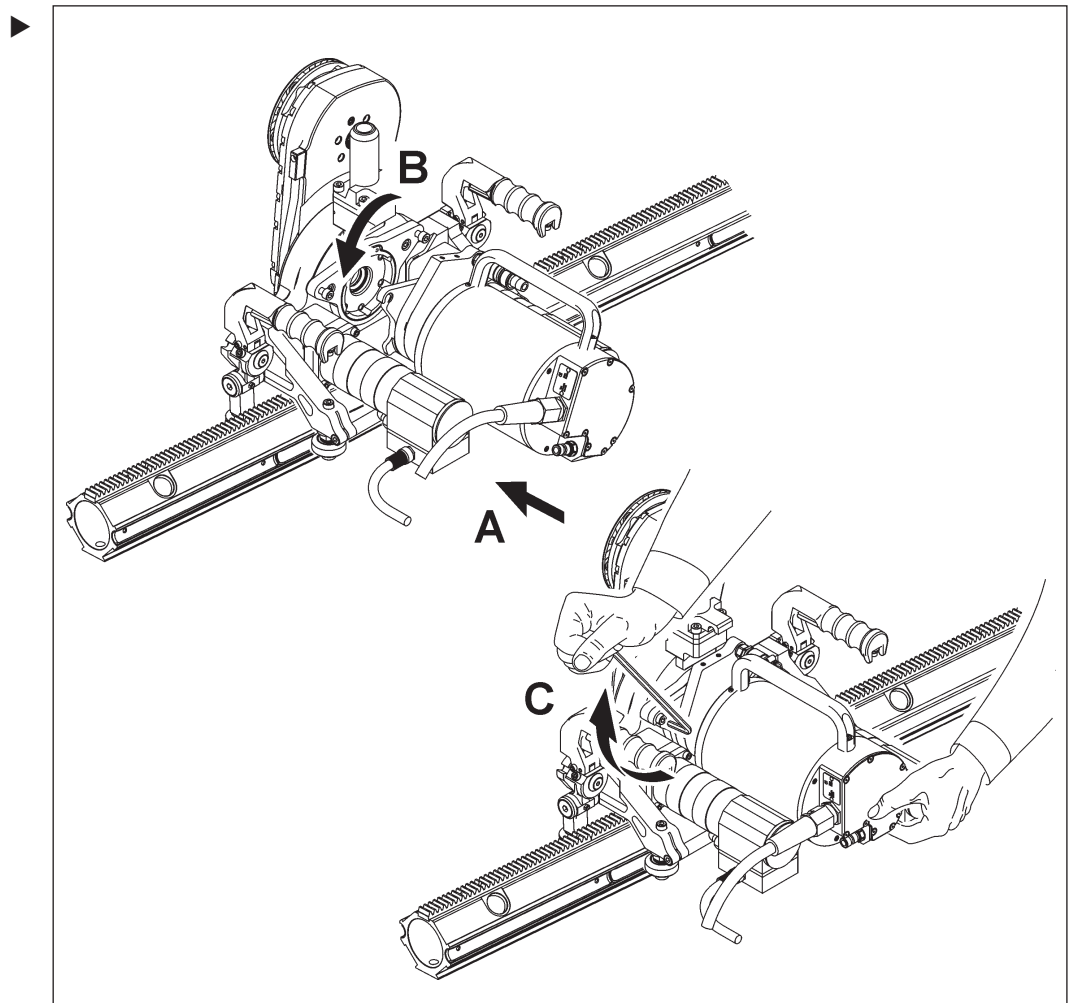
2. If the grips fail to engage or the wall saw sits too loosely on the guide rail: adjust the guide rollers.

#### 3.2 Adjusting the guide rollers



- \* The guide rollers are set correctly when they align in the guide groove and it is possible to turn them by hand.

### 3.3 Mounting the drive motor



### 3.4 Mounting the saw blade



**DANGER**

**It can cause death or serious injury if the saw blade flies away.**

- ▶ Only use original screws and bolts from TYROLIT Hydrostress AG.



**DANGER**

**Serious injury can be caused by sudden start-up of the saw blade.**

- ▶ Switch off the control unit before working on the saw blade.
- ▶ Isolate the control unit from the mains supply.

#### 3.4.1 Preparations for assembly

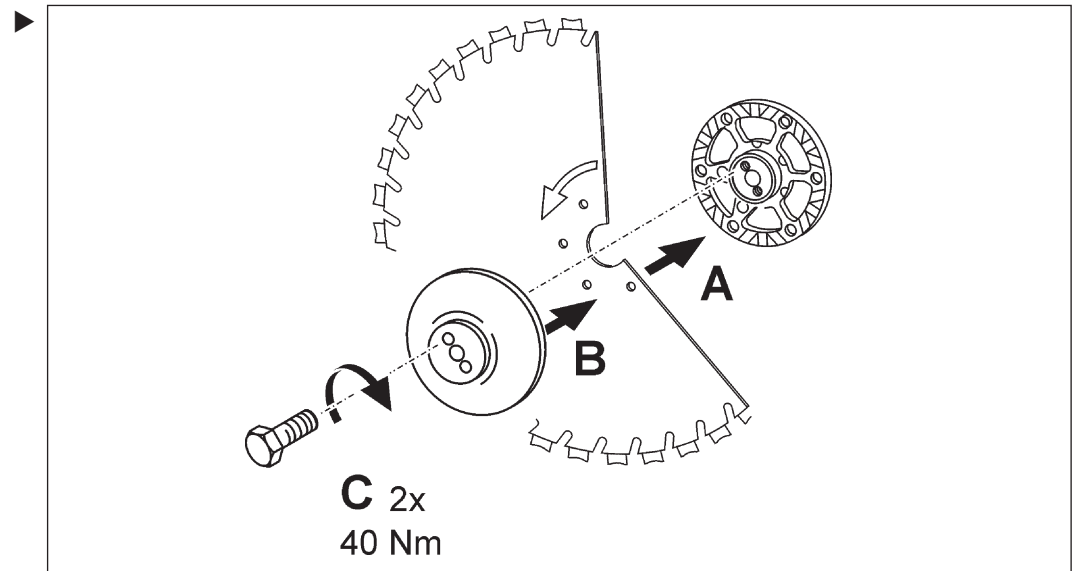
- ▶ During initial installation, remove the flush cut anchoring screws on the quick-release flange.

### 3.4.2 Preassemble the saw blade unit

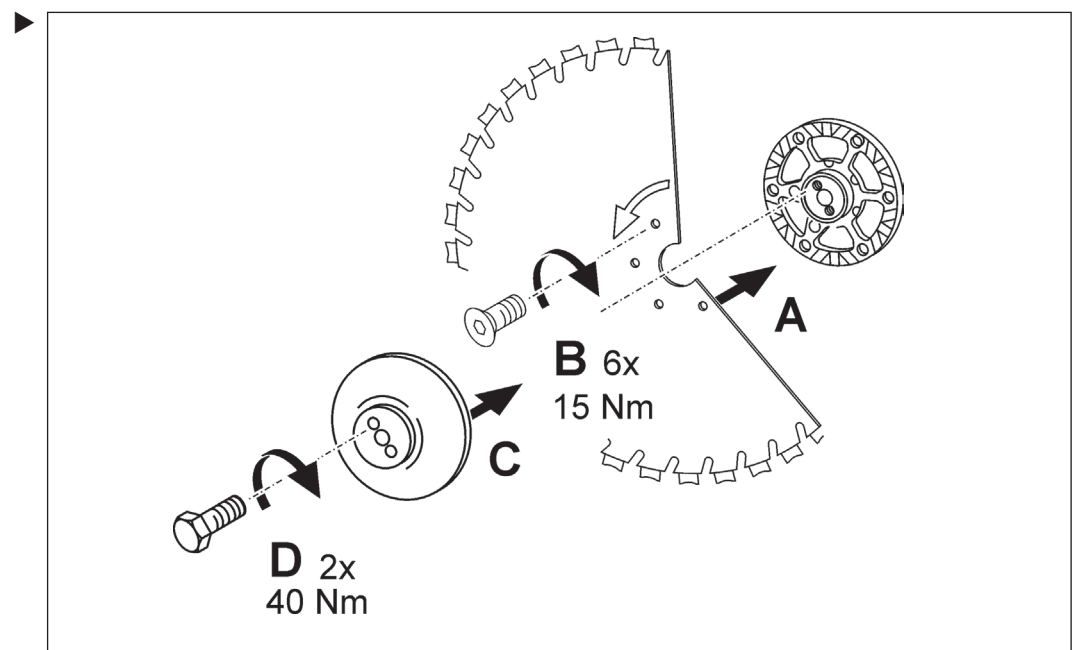


The direction of rotation of the saw blade must match the direction of rotation of the machine.  
 Correct alignment: Countersinking of the fastening holes against the blade cover.

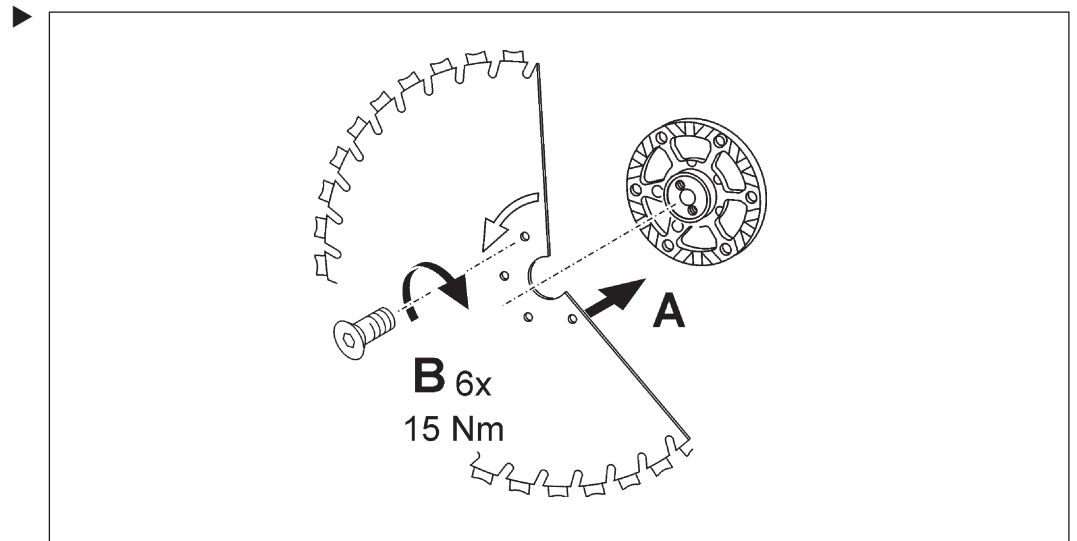
#### For normal cuts with saw blades up to Ø 1,000 mm



#### For normal cuts with saw blades bigger than Ø 1,000 mm



**For flush cuts**



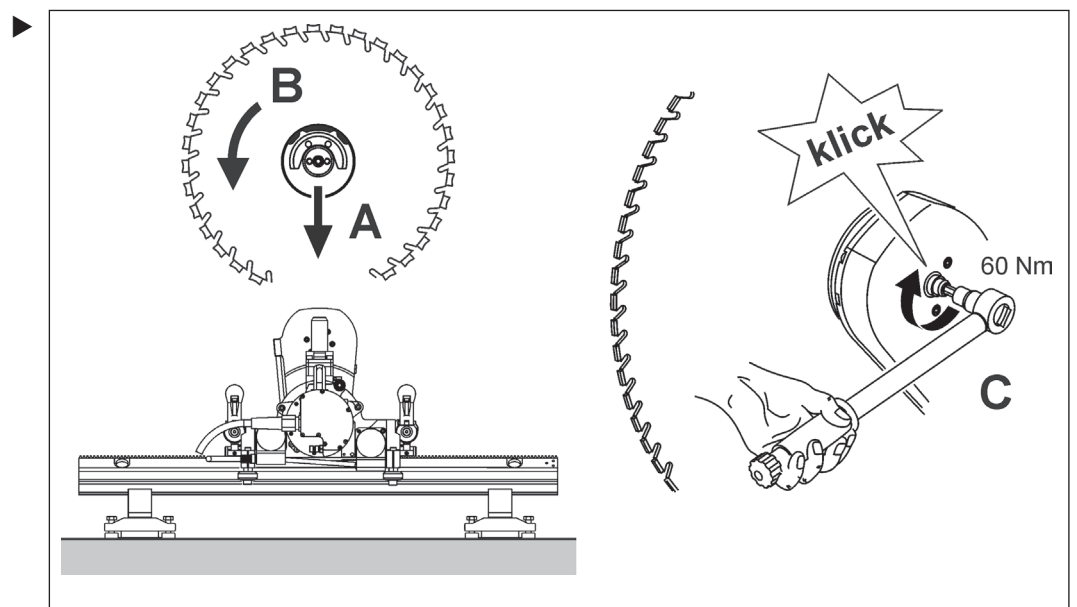
**3.4.3 Fastening the saw blade unit**



**DANGER**

**It can cause death or serious injury if the saw blade flies away.**

- ▶ Check whether the sleeve and central screw are countersunk.
- ▶ Tighten the central screw to a torque of 60 Nm.





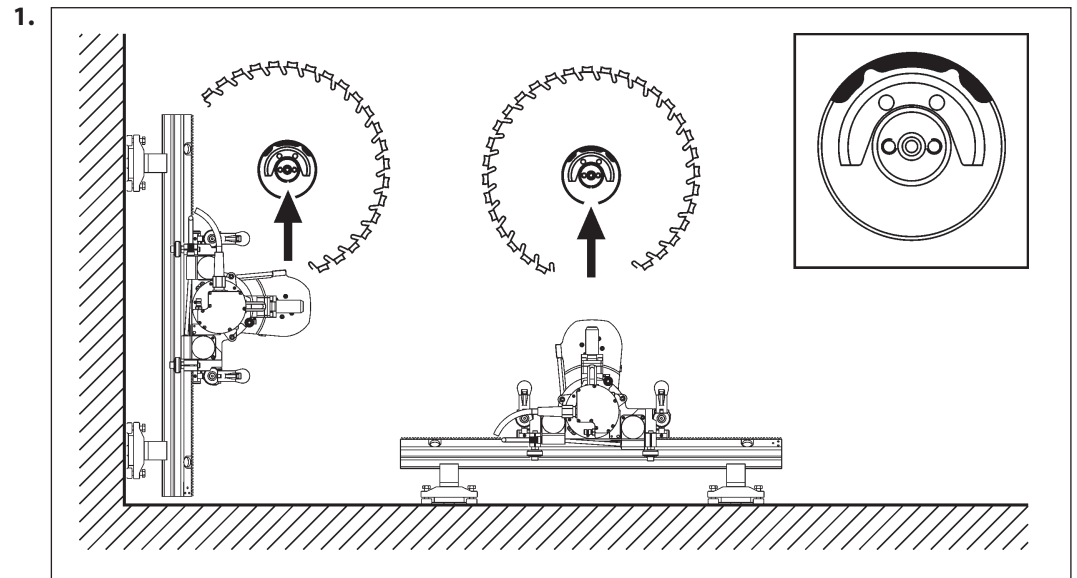
### 3.5 Removing the saw blade unit



**WARNING**

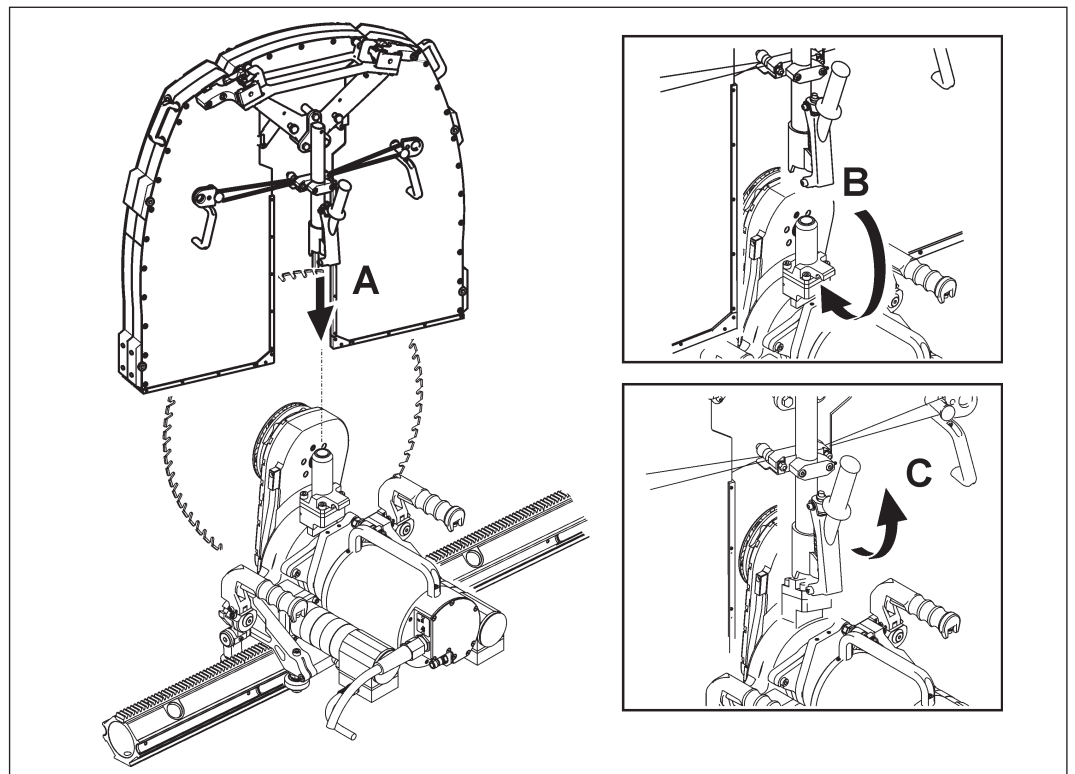
**Injuries can be caused if the saw blade drops down.**

► Lift out the saw blade unit to the top when removing it.



2. Disassemble the saw blade unit in the reverse order to the assembly process.

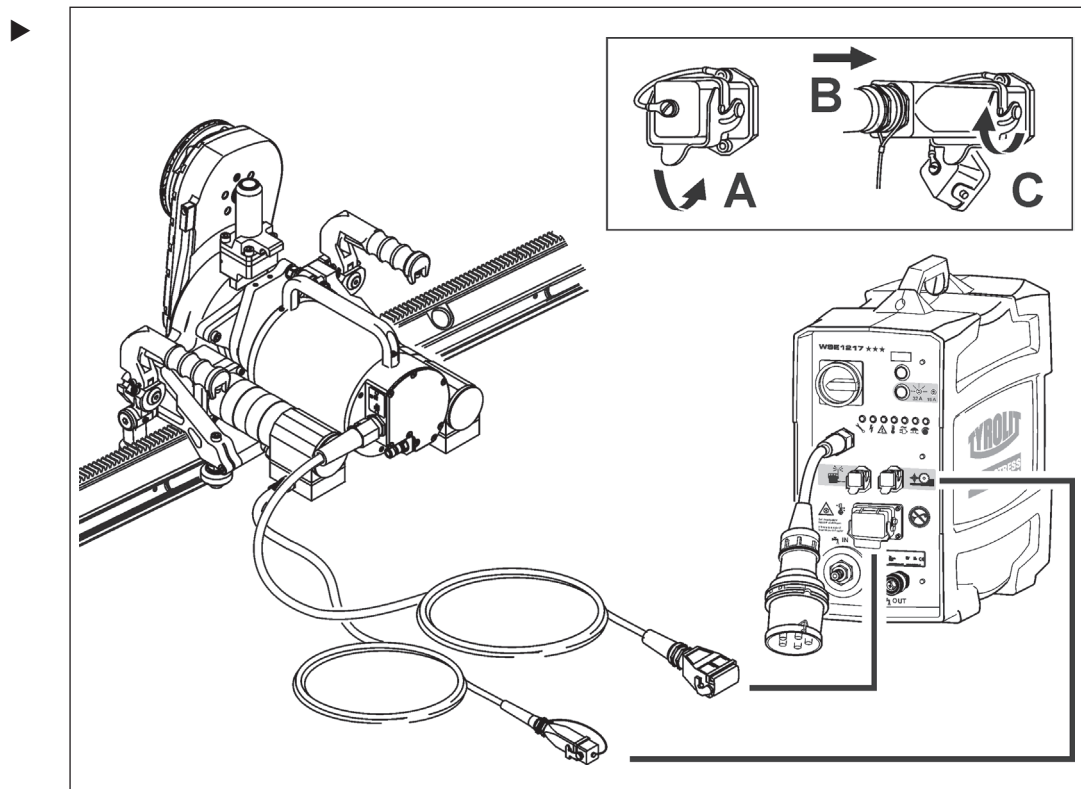
### 3.6 Mounting the blade guard



► Mount the blade guard according to the instruction leaflet.

### 3.7 Connecting the wall saw to the control unit

- ✓ The control unit is isolated from the power supply.
- ✓ Connectors/plugs are clean.
- ✓ Cables are undamaged.

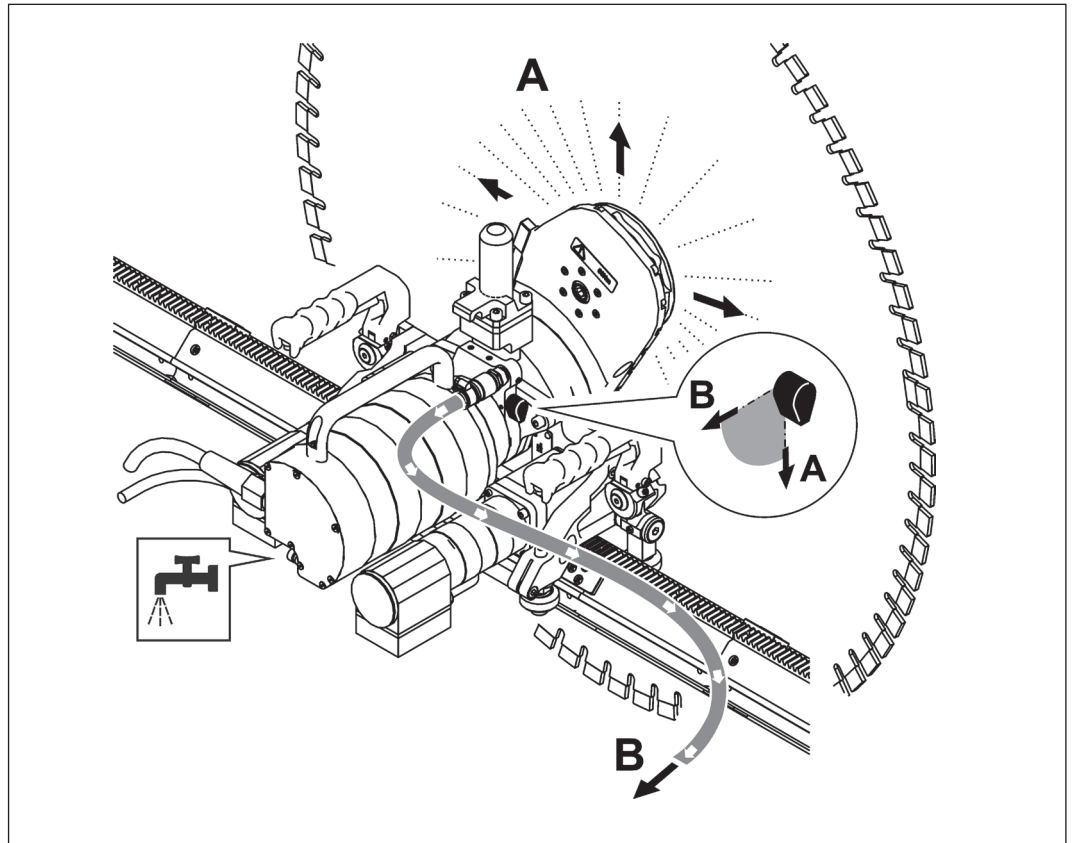


## 3.8 Water

### Wet and dry cutting



The wall saw WSE1217★★★ can be used for wet and dry cutting.



- A Wet cutting
- B Dry cutting

### Dry cutting



For dry cutting, the water is led away via a bypass. When dry cutting, continuous operation is not possible, because otherwise the gearbox will overheat. After using for a ¼ hour, a ½ hour break must be maintained for cooling.



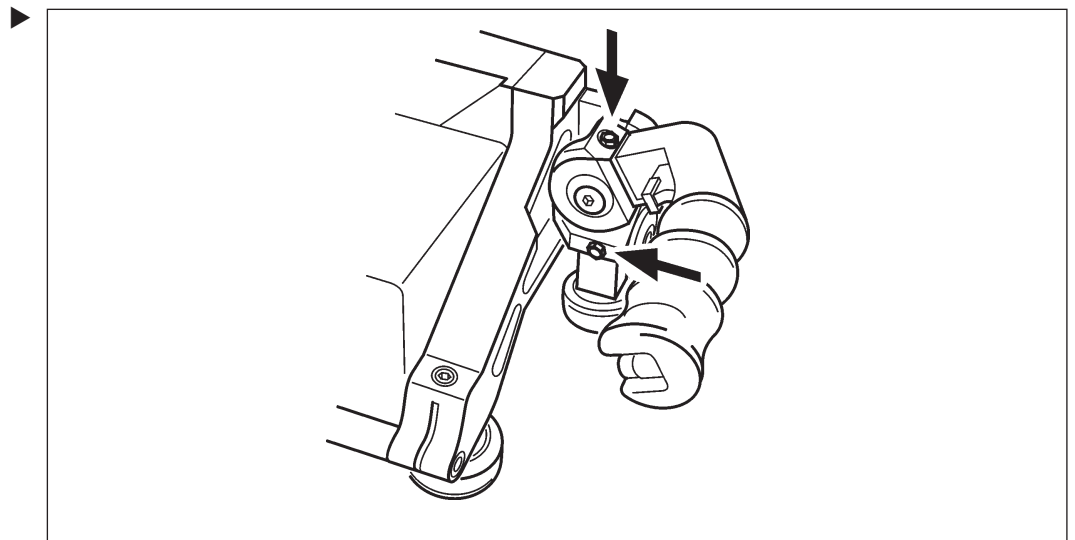
For dry cutting, special TYROLIT diamond saw blades must be used.

## 4 Maintenance and servicing

<b>Maintenance and servicing table</b>		<b>Before every commissioning</b>	<b>At end of work</b>	<b>Weekly</b>	<b>Yearly</b>	<b>After faults</b>	<b>After damage</b>
Wall saw	▶ Retighten loose bolts and nuts (refer to the tightening torque specifications)	X				X	X
	▶ Clean *		X				
Lock unit	▶ Clean latching recesses and guide grooves *	X	X			X	X
	▶ Lubrication			X		X	X
Guide rollers	▶ Check the bearing clearance for wear	X	X			X	X
	▶ Clean *	X	X			X	X
	▶ Replace						X
Swivel arm	▶ Check the saw blade uptake for wear	X				X	X
	▶ Replace the gear oil	Every 100 h					
Feed motor	▶ Check cleanliness *	X	X			X	X
Drive motor	▶ Check cleanliness *	X	X			X	X
Water supply	▶ Check the water line for cleanliness and leak-tightness	X				X	X
	▶ Blow out water		X				
Saw blade	▶ Clean with water		X				
	▶ Check for wear	X	X			X	X
Service	▶ To be performed by TYROLIT Hydrostress AG or an authorised workshop	After 100 / 300 / 500 / 700 hours					

\* Clean with damp cloth no high pressure cleaner!

## 4.1 Lubricating the lock unit

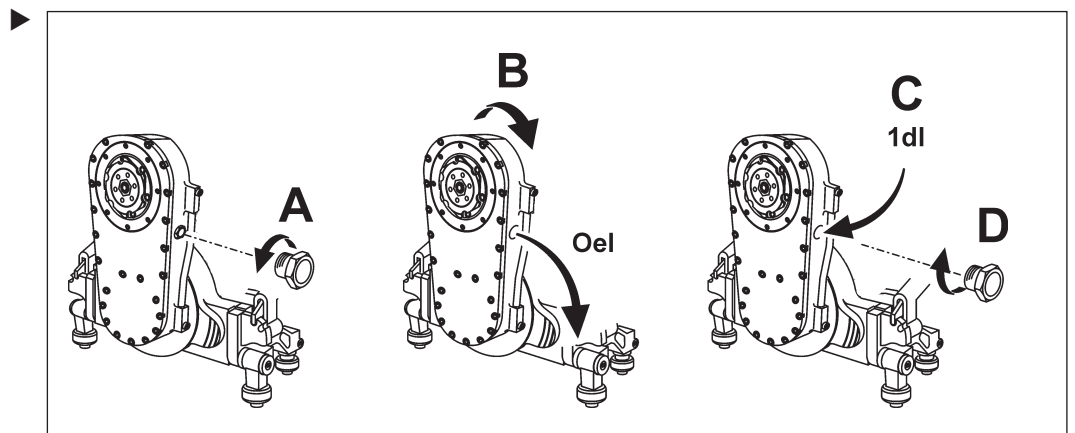


## 4.2 Changing the gear oil

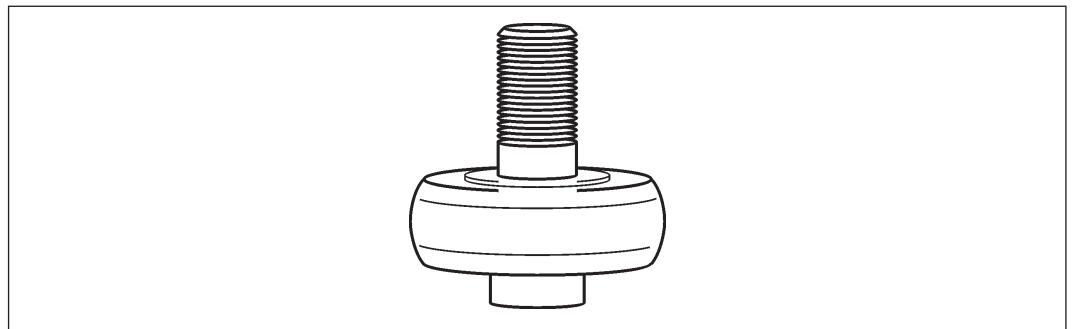


**The use of unsuitable oil can damage the wall saw.**

- Use only TYROLIT Hydrostress AG oil containers (no. 10981362, 10 dl).



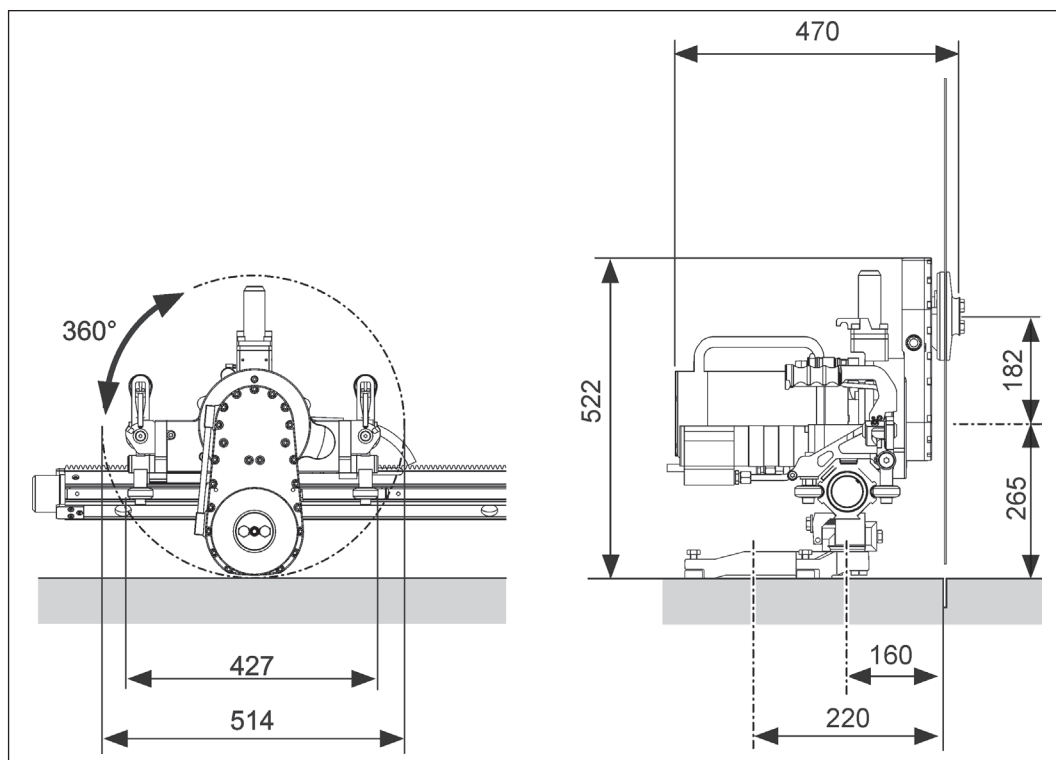
## 4.3 Replacing the guide rollers



- Defective guide rollers should be replaced with replacement set no. 10977911.

## 5 Technical data

### 5.1 Dimensions



Measurements in mm

### 5.2 Design

Design	
Parameter	Value
Construction	Light aluminium/steel construction
Rotatable swivel arm	360°
Power transmission	Toothed wheel
Carrying handle	2-pieces, with locking function
Guide rollers	Low-wearing, suitable for all VS and VAS rails
Rail mounting	Locking and safety function on carrying handle
Main motor	High-frequency, water-cooled, with quick-release device
Feed motor / swivel motor	Electric motor with gears and brake
Flush cutting	Quick-release flange ST without blade cover
Normal cutting	Quick-release flange ST with blade cover
Water	Water connection on chassis
Protection class	IP67

### 5.3 Weight

Weight	
Parameter	Value
Wall saw head complete	22 kg
Drive motor	15 kg

### 5.4 Blade drive motor

Blade drive motor	
Parameter	Value
Electric motor	High-frequency, water-cooled
Voltage	400 V
Frequency	50 - 400 Hz

### 5.5 Feed motor, travel

Electric feed motor with gears and brake	
Parameter	Value
Gear reduction	1:256
Voltage	48 V
Feed	Toothed wheel on rail

### 5.6 Feed motor, swivel

Electric feed motor with gears and brake	
Parameter	Value
Gear reduction	1:256
Voltage	48 V
Swivel range (swivel arm)	360°

### 5.7 Noise level

Noise data according to ISO 3744	
Parameter	Value
Sound pressure level $L_{pA}$	77.5 dB (A) *
Highest value of sound pressure $L_{pCpeak}$	116.2 dB
Acoustic power level $L_{WA}$	97.5 dB (A) *

Conditions for the measurement:

\* Saw blade Ø1,200 mm not in cutting operation under full load

## 5.8 Saw blades

Saw blades		
Parameter		Value
Saw blade max.		Ø 1,200 mm
Fully detachable saw blade		Ø 800 mm
Blade holder		Ø 60 mm
Blade flange mounting at wall saw		Quick-release flange ST
Saw blade fixing on blade flange (also for flush cuts)		6 countersunk head screws reference circle 130 mm
Blade cover mounting on blade flange		2 hexagonal bolts
Cutting depth	Ø 650 mm	230 mm
	Ø 800 mm	320 mm
	(Ø 900 mm)	(350 mm)
	Ø 1,000 mm	420 mm
	Ø 1,200 mm	520 mm

## 5.9 Lubricants, fluids and sealants

Lubricants, fluids and sealants		
Parameter		Value
Gear oil (swivel arm)		Klüber GEM 4-150 N (TYROLIT No. 10981362)
Lubricating grease (lock unit)	Penetration	265 to 295
	NLGI	2
Lubricating grease (swivel gear)	Penetration	400 to 430
	NLGI	00

## 5.10 Connectable control units

The wall saw must only be operated with the coordinated control units from TYROLIT Hydrostress.

Control unit	
Parameter	Type
Control unit	WSE1217★★★ (Ø650 / Ø800 / Ø1,000 / Ø1,200)

Water connection	
Parameter	Value
Pressure	min. 2 bar / max. 6 bar
Quantity	At least 4 l/min
Max. temperature	25 °C



## EC declaration of conformity

Description	Wall saw
Type designation	WSE1217★★★
Year of construction	2011

We declare under our sole responsibility that this product complies with the following directives and standards:

### Directive applied

2006/42/EC	from 17th May 2006
2004/108/EC	from 17th December 2004

### Applied standards

EN 15027/A1:2009  
EN 12100:2010  
EN 60204-1/A1:2009  
EN ISO 3744:2010  
EN 55014-1/A1:2009  
EN 55014-2/A2:2008  
EN 6100-3-11:2000  
EN 6100-3-12:2005

### TYROLIT Hydrostress AG

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Pfäffikon, 28.04.2011



Pascal Schmid  
Head of Development



