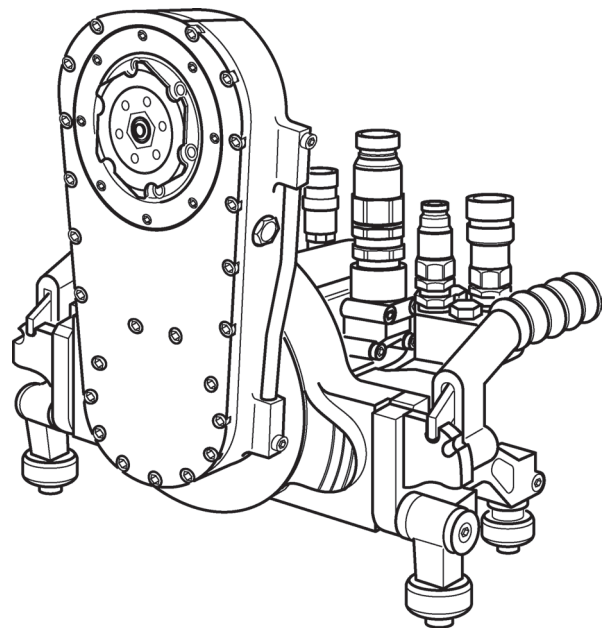


# ***Operating Instructions***

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## ***Wall saw WZ***

*Index 006*



## **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. We are unable to fulfil our warranty obligations if maintenance work is neglected or carried out unprofessionally. 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 you enjoy untroubled and fault-free working with your TYROLIT unit.

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 Manual» 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.**

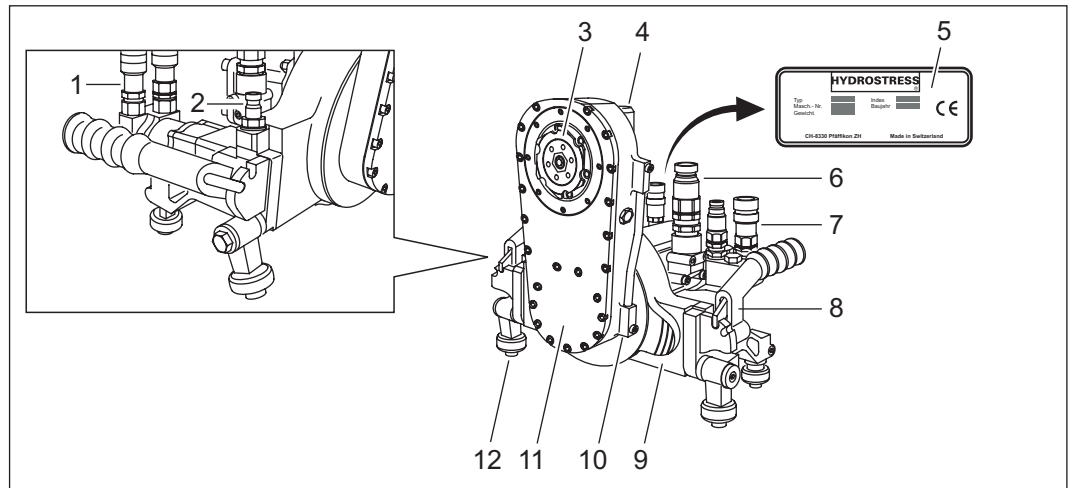
- ▶ Never connect or disconnect hoses while the drive unit is running.

## 2 Description

### 2.1 Wall saw system

The layout and functions of the wall saw systems are described in the «Safety Manual / System Description for Wall Saws».

### 2.2 Wall saw

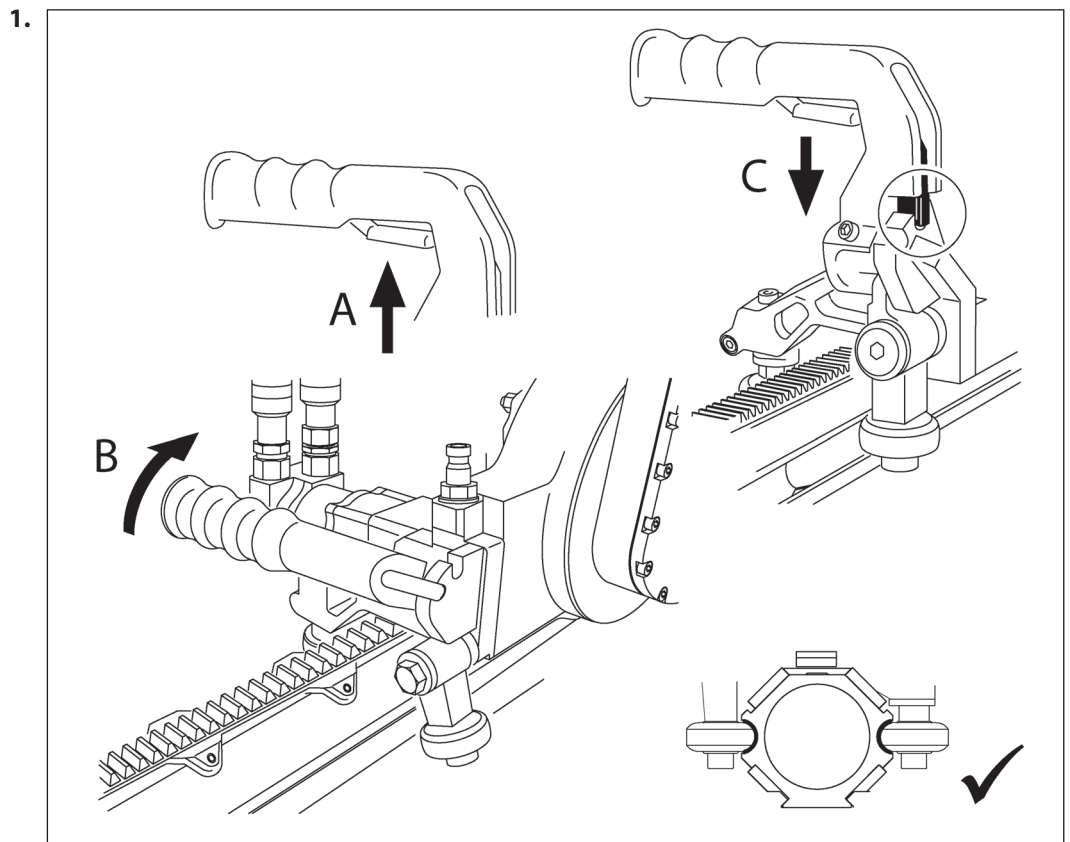


#### Components

- |                      |                      |
|----------------------|----------------------|
| 1 Feed motor, travel | 7 Feed motor, swivel |
| 2 Water connection   | 8 Grip / lock unit   |
| 3 Saw blade holder   | 9 Chassis            |
| 4 Blade guard holder | 10 Water line        |
| 5 Name plate         | 11 Geared swivel arm |
| 6 Blade drive motor  | 12 Guide roller      |

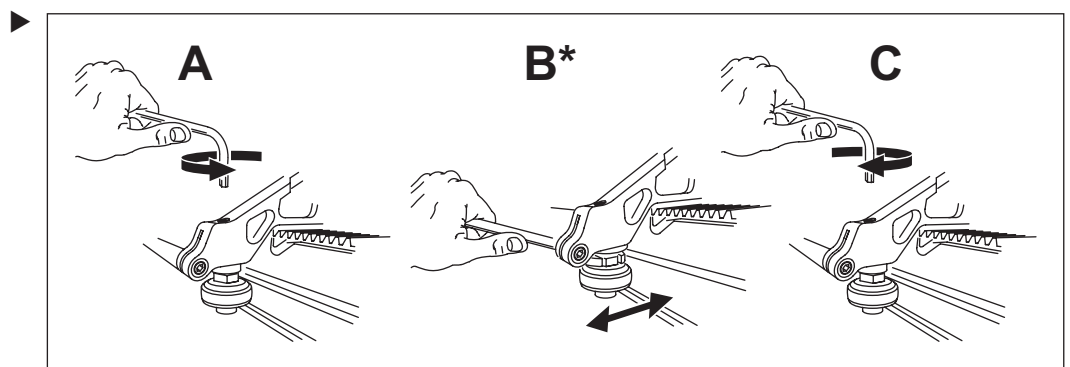
### 3 Assembly / disassembly

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



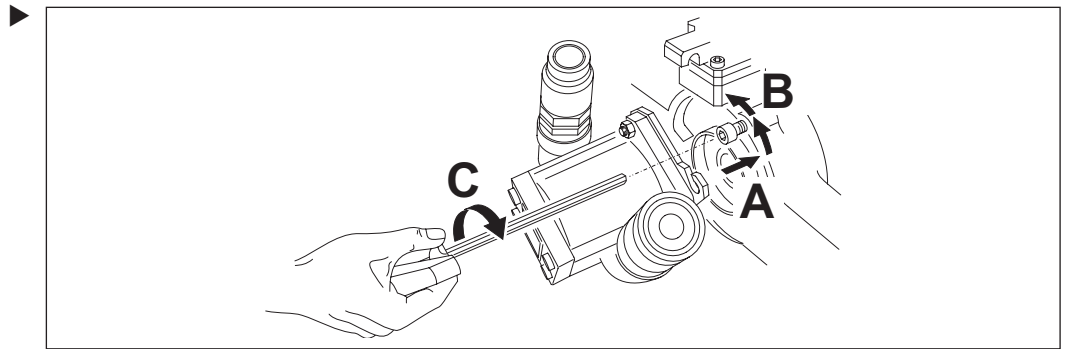
2. If the grips fail to engage or the wall saw sits too loosely on the guide rail: adjust the guide rollers.

#### 3.2 Adjusting the guide rollers



\* The guide rollers must sit in the guide groove, and it must be possible to turn them by hand.

### 3.3 Mount the drive motor



### 3.4 Mount 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 drive unit before working on the saw blade.
- ▶ Depressurize the hoses.

#### 3.4.1 Preparations for assembly

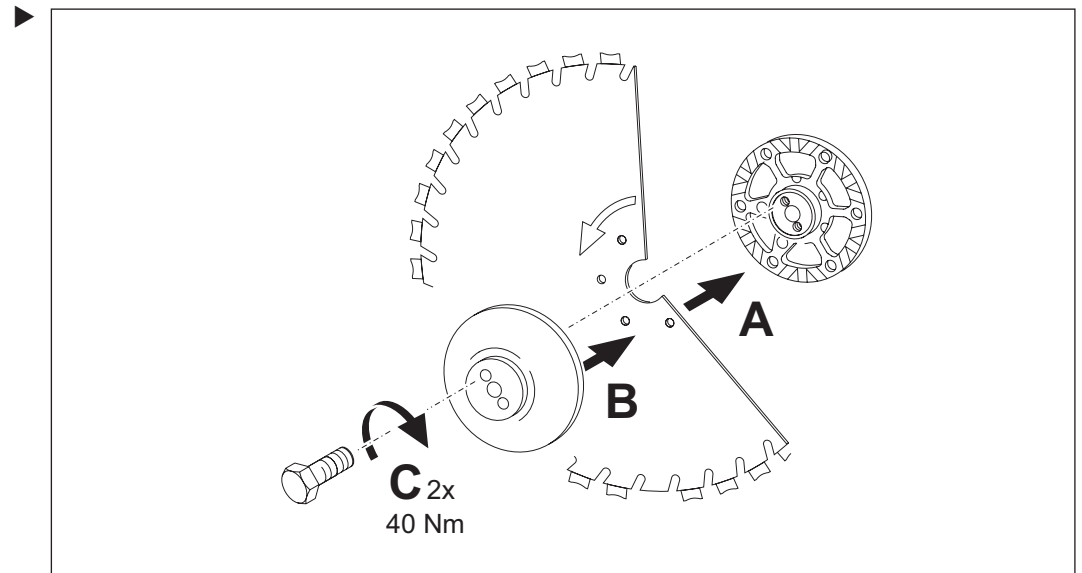
- ▶ During initial installation, remove the flush cut anchoring screws on the quick-release flange.

### 3.4.2 Preassemble the saw blade unit

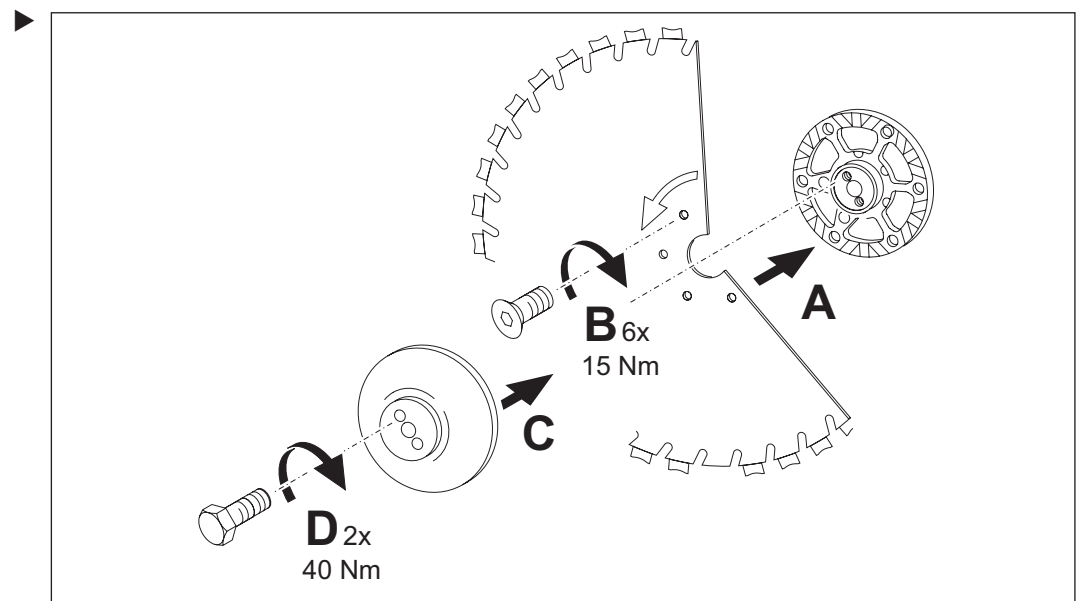


The direction of rotation of the saw blade must match the direction of rotation of the machine.  
 Correct alignment: Countersinking of the fastening bores against the blade cover.

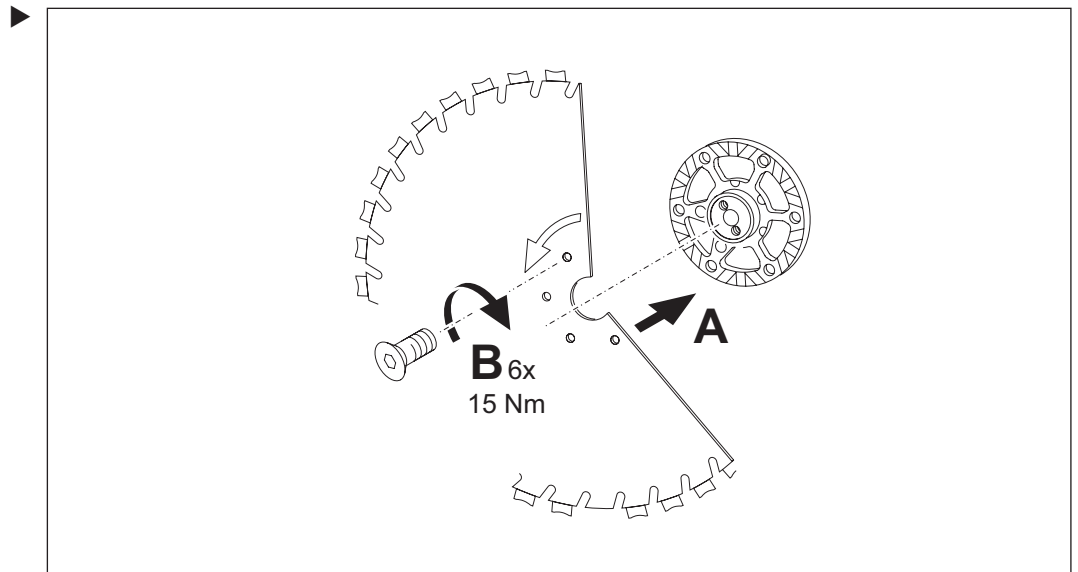
#### For normal cuts with saw blades up to Ø 1000 mm



#### For normal cuts with saw blades larger than Ø 1000 mm



**For flush cuts**



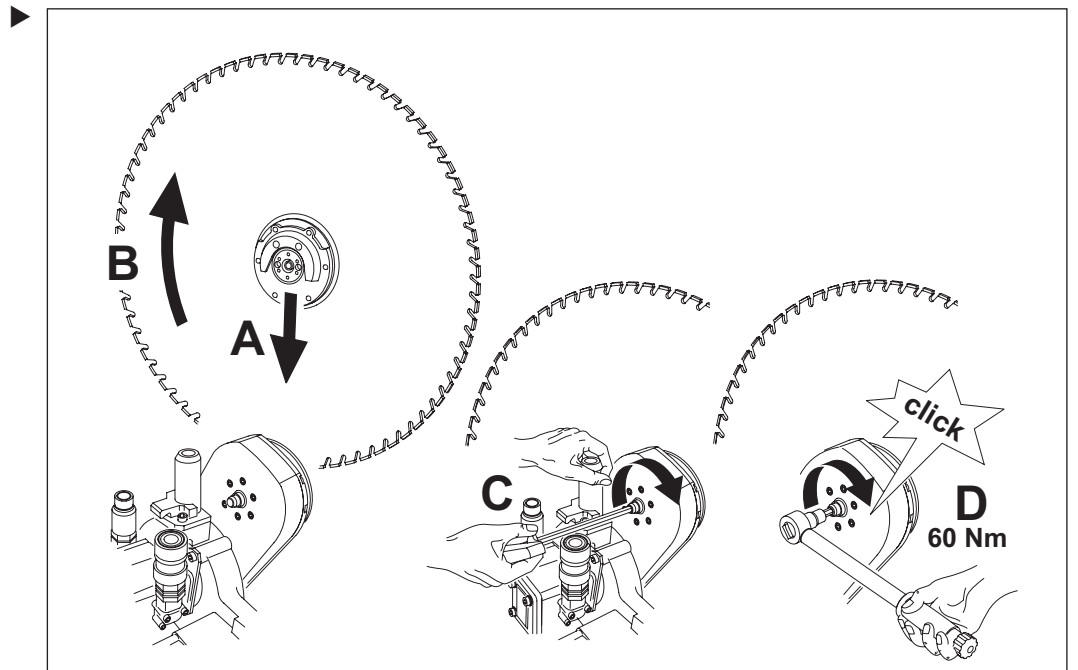
**3.4.3 Fastening the saw blade unit**



**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.





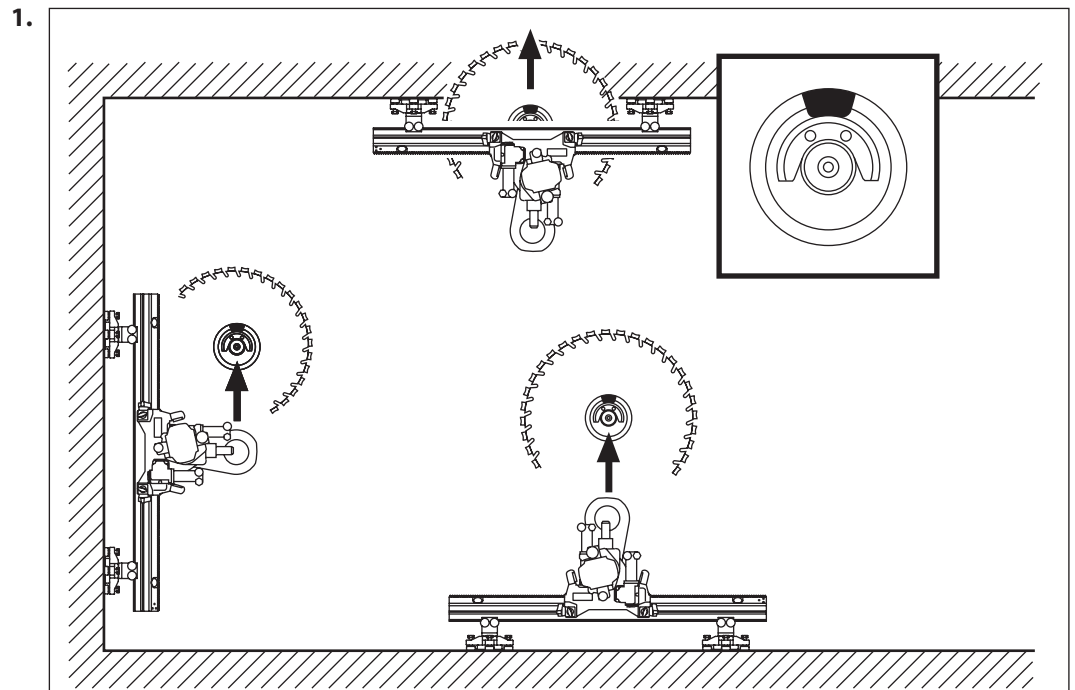
### 3.5 Disassembling saw blade unit



#### WARNING

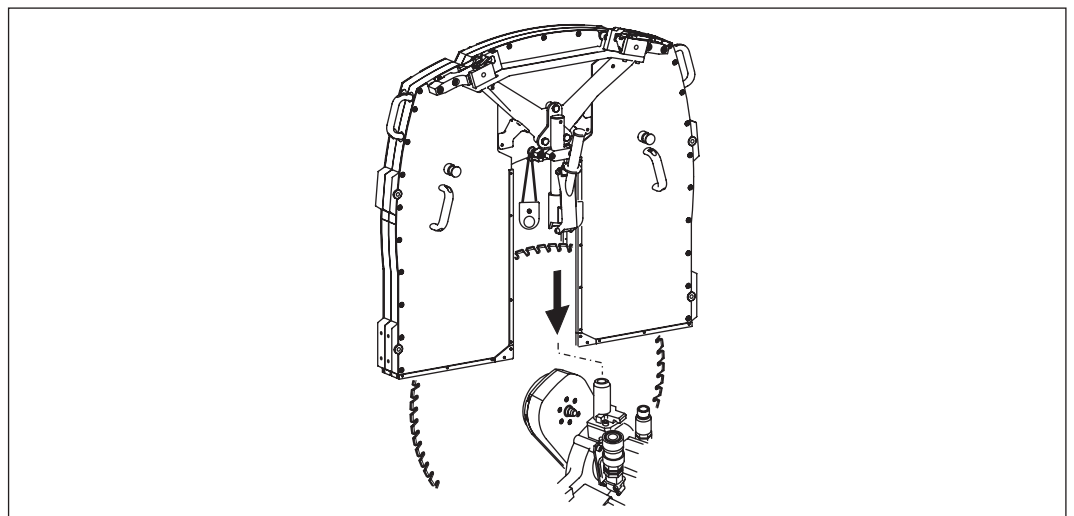
Injuries can be caused if the saw blade drops down.

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



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

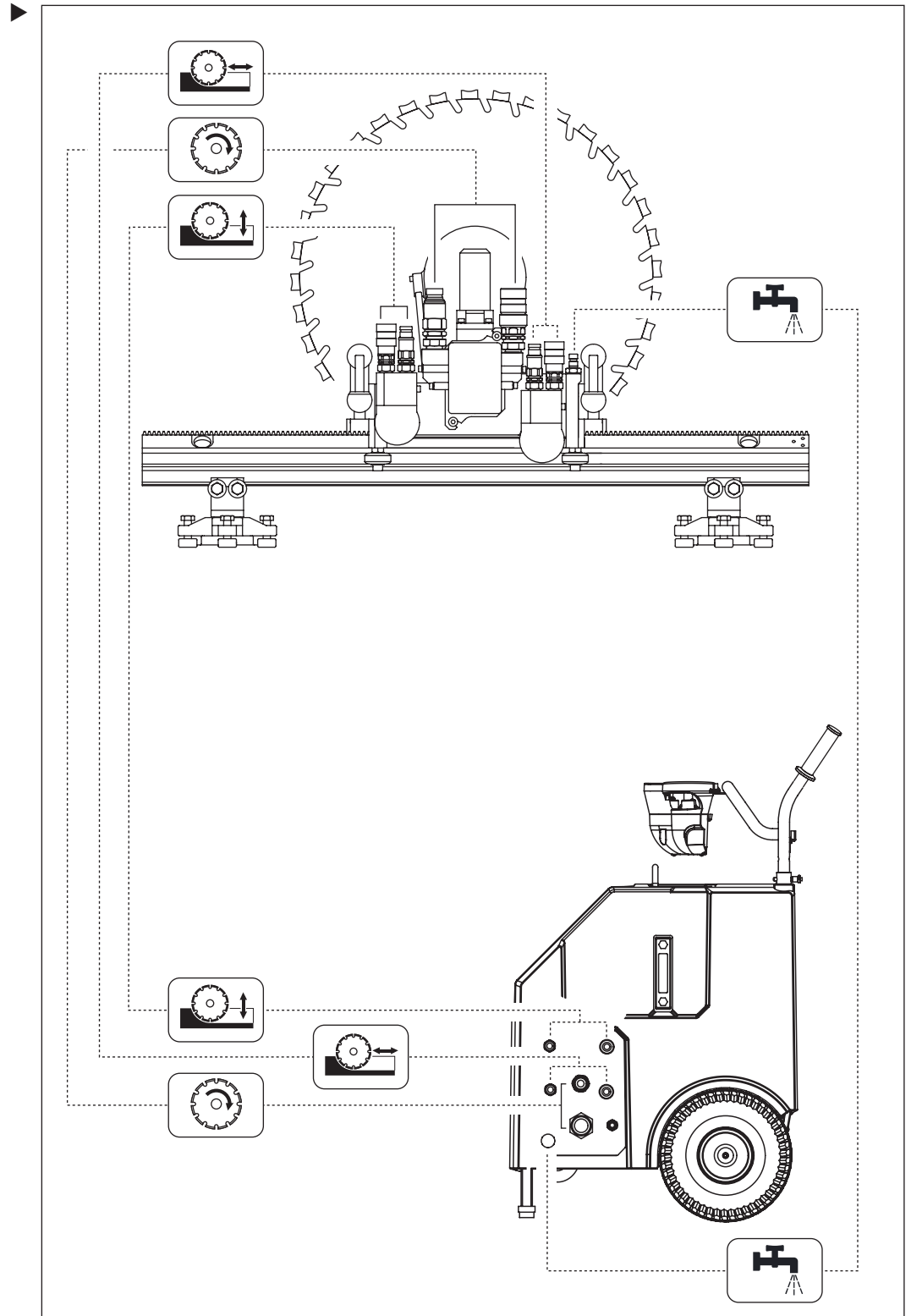
### 3.6 Mount the blade guard



- ▶ Mount the blade guard according to the instruction leaflet.

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

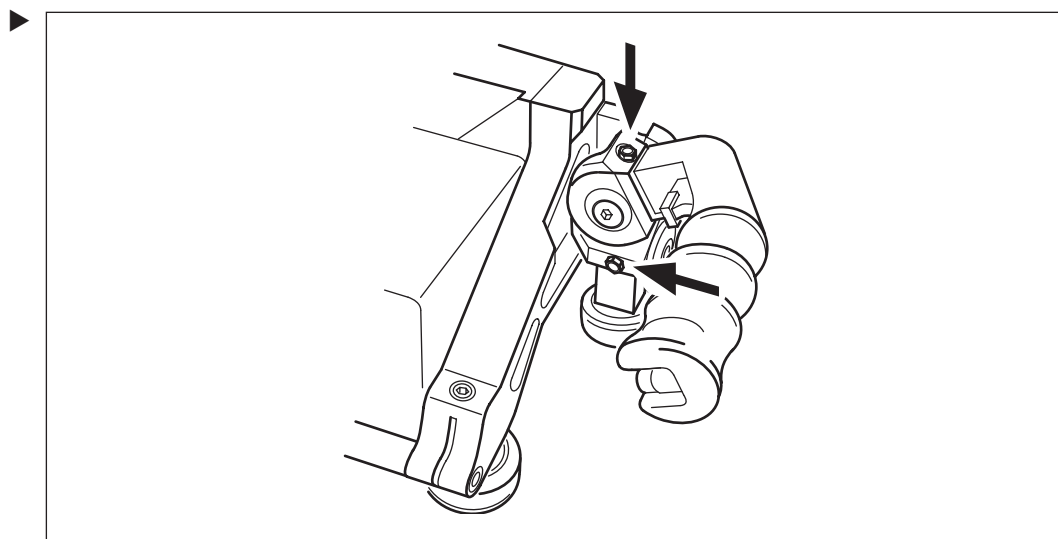
- ✓ The drive unit is isolated from the power supply.
- ✓ Couplings are clean.
- ✓ Hoses are undamaged.



## 4 Servicing and maintenance

Maintenance and servicing table							
		Before every commissioning	At end of work	Weekly	Yearly	After faults	After damage
Wall saw	▶ Retighten loose bolts, screws and nuts (refer to the tightening torque specifications)	X				X	X
Lock unit	▶ Clean the milled slots for the locking mechanism and the guide grooves	X	X			X	X
	▶ Apply 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	▶ Clean with water		X				
	▶ Check the saw blade uptake for wear	X				X	X
	▶ Replace the gear oil	Every 50 h					
Feed motor	▶ Check cleanliness and leak-tightness	X	X			X	X
Drive motor	▶ Check cleanliness and leak-tightness	X	X			X	X
Water economy	▶ Check 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					

#### 4.1 Lubricate lock unit

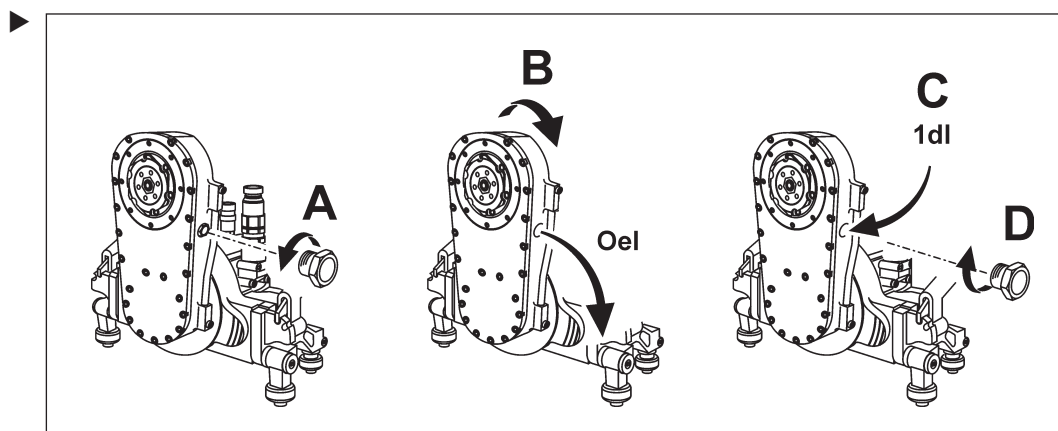


#### 4.2 Change gear oil

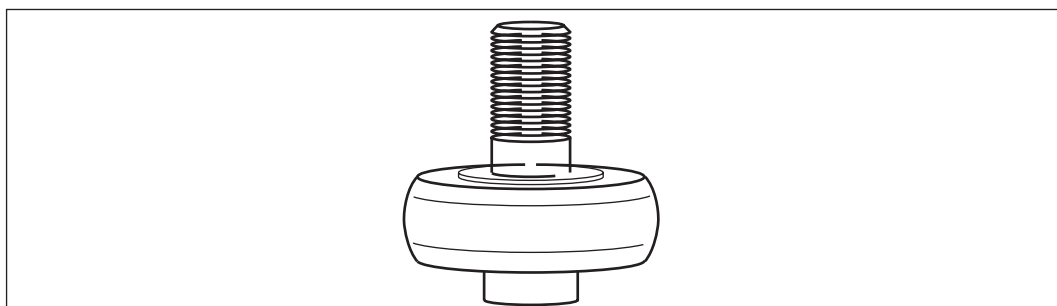


The use of unsuitable oil can damage the wall saw.

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



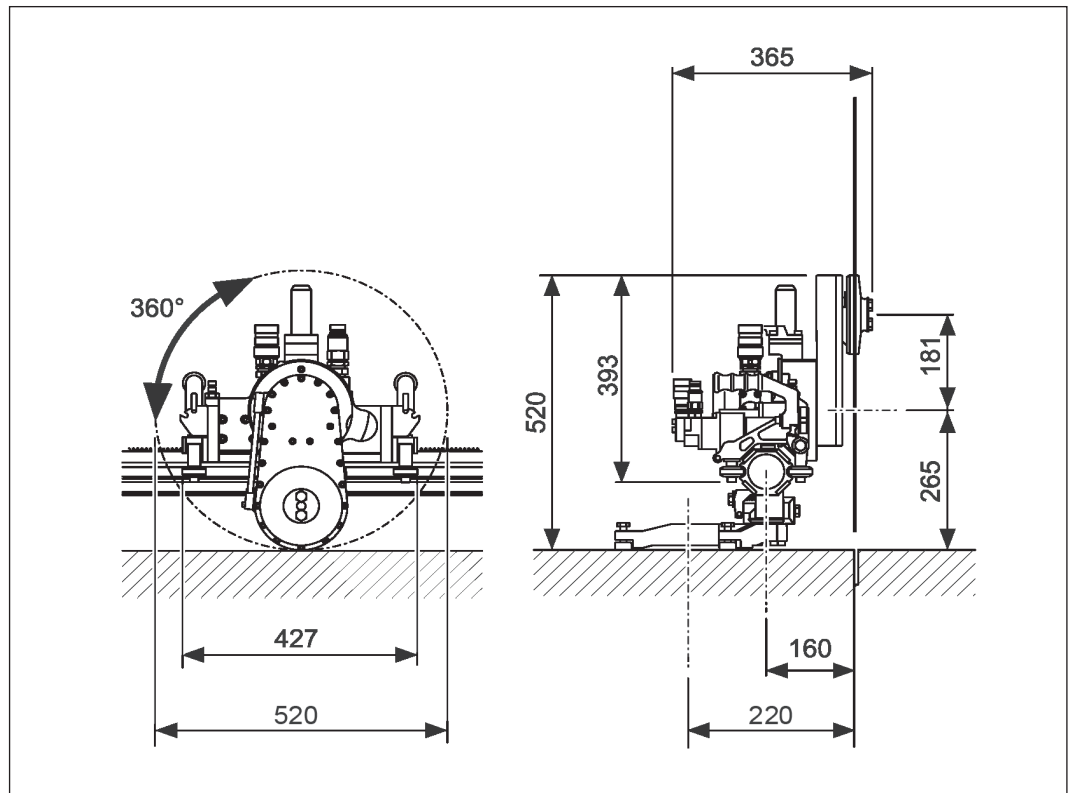
#### 4.3 Replacing the guide rollers



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

## 5 Technical data

### 5.1 Dimensions



Measurements in mm

### 5.2 Design

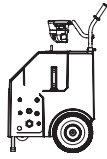
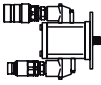
Design	
Parameter	Value
Construction	Light aluminium/steel construction
Rotatable swivel arm	360°
Power transmission	Gear wheel
Blade drive transmission	1:2,6
Carrying handles	2-piece with locking function
Guide rollers	Low-wearing, suitable for all VS and VAS rails
Rail mounting	Locking and safety function on grip
Main motor	Mounted via quick-release device (size 2)
Feed motor	Geroller with integral overload and braking function
Flush cutting	Quick-release flange ST without blade cover
Normal cutting	Quick-release flange ST with blade cover
Water	Water connection on chassis

### 5.3 Weight

Weight	
Parameter	Value
Wall saw head complete With blade drive motor, 22 ccm	29 kg

### 5.4 Blade drive motor

Blade drive motor	
Parameter	Value
Hydraulic motors	1100 to 3333 rpm max.
Size	2
Absorption volume	12 to 30 cm <sup>3</sup>
Operating pressure	260 bar
Type	External geared motor

Rotational speeds, hydraulic motors for wall saws							
							
		cm <sup>3</sup> 12	cm <sup>3</sup> 16	cm <sup>3</sup> 18	cm <sup>3</sup> 22	cm <sup>3</sup> 26	cm <sup>3</sup> 30
l/min	33	2750	2063	1833	1500	1269	1100
l/min	40	3333	2500	2222	1818	1538	1333
l/min	45	3750	2813	2500	2045	1731	1500
l/min	50	4167	3125	2778	2273	1923	1667
l/min	60	5000	3750	3333	2727	2308	2000
l/min	70	5833	4375	3889	3182	2692	2333

 Operation possible

 Operation not possible

## 5.5 Feed motor, travel

Feed motor, travel	
Parameter	Value
Hydraulic motors	40 rpm
Type	Geroller with integral planetary gears, brake and overload coupling
Operating pressure	max. 120 bar
Output torque	150 Nm
Feed force	5000 N
Feed	Toothed wheel on rail

## 5.6 Feed motor, swivel

Feed motor, swivel	
Parameter	Value
Hydraulic motors	40 rpm
Type	Geroller with integral planetary gears, brake and overload coupling
Operating pressure	max. 120 bar
Output torque	150 Nm
Swivel range (swivel arm)	360°
Feed force	3000 N

## 5.7 Saw blades

Saw blades		
Parameter	Value	
Saw blade max.	Ø 1600 mm	
Fully detachable saw blade	Ø 825 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 800 mm	320 mm
	Ø 1000 mm	420 mm
	Ø 1200 mm	520 mm
	Ø 1500 mm	670 mm
	Ø 1600 mm	720 mm

## 5.8 Lubricants, fluids and sealants

Lubricants, fluids and sealants		
Parameter		Value
Gear oil (swivel arm)		Klüber EG 4-150 (TYROLIT No. 10979011)
Lubricating grease (lock unit)	Penetration	265 to 295NLGI
	NLGI	2

## 5.9 Connectable drive units

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

Drive unit power requirements	
Parameter	Value
Minimum output:	20 kW (max. operating pressure 260 bar)
Maximum performance	25 kW (max. operating pressure 260 bar)

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



## EC Declaration of Conformity

Description	Wall saw
Type designation	WZ
Year of construction	2003

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

### Directive applied

Machinery Directives 2006/42/EC

### Standards applied

EN 12100-1	Safety of machines – Basic concepts, general design principles
EN 12100-2	
EN 294	Safety of machinery – Safety distances to prevent upper limbs reaching danger areas
EN 349	Safety of machinery – Safety distances to avoid crushing of body parts
EN 982	Safety of machinery – Safety requirements for safety systems and their components - hydraulics

