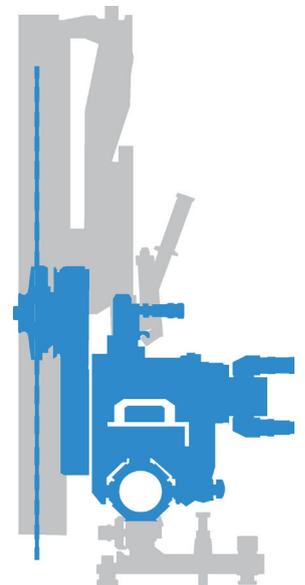




# **OPERATING INSTRUCTIONS**

## **WALL SAW DZ-S2**

Index 001



## **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.**

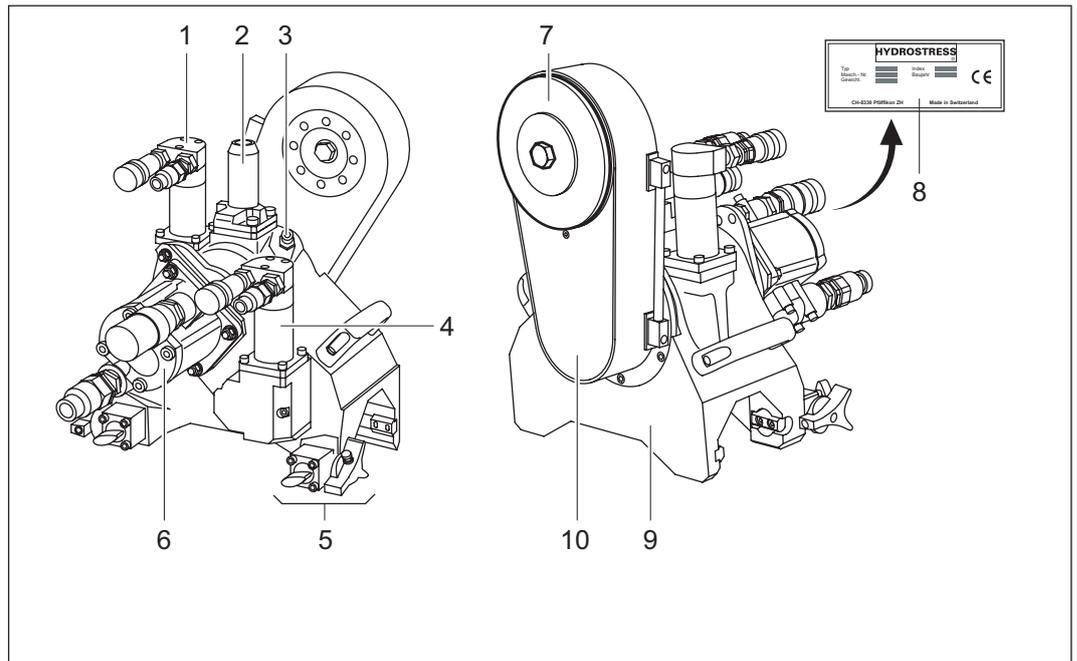
- ▶ Never connect or disconnect hoses while the drive unit is running.

## 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

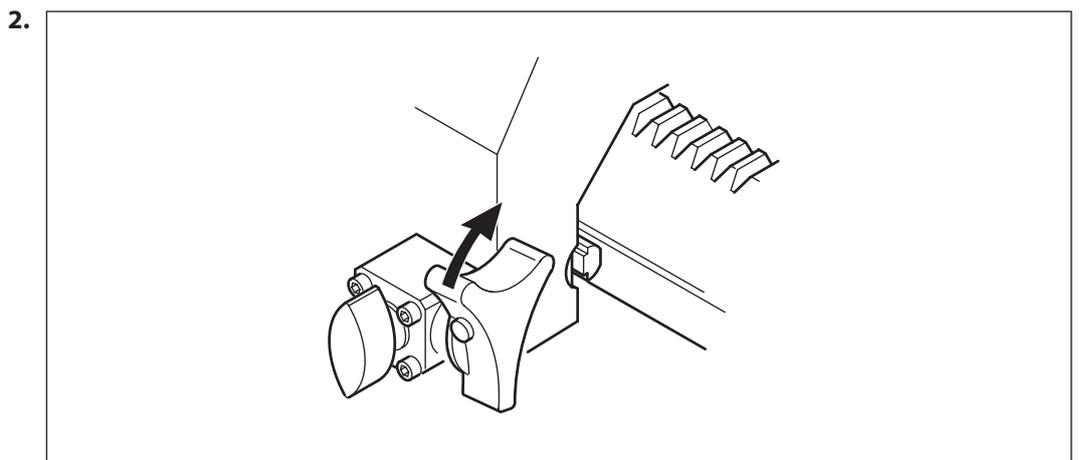
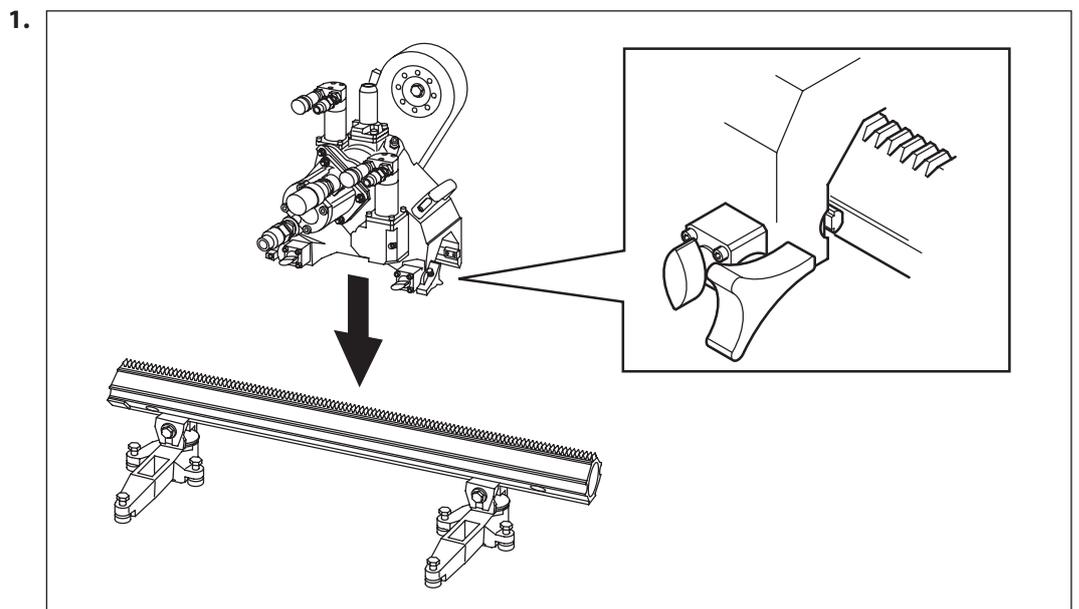


#### Components

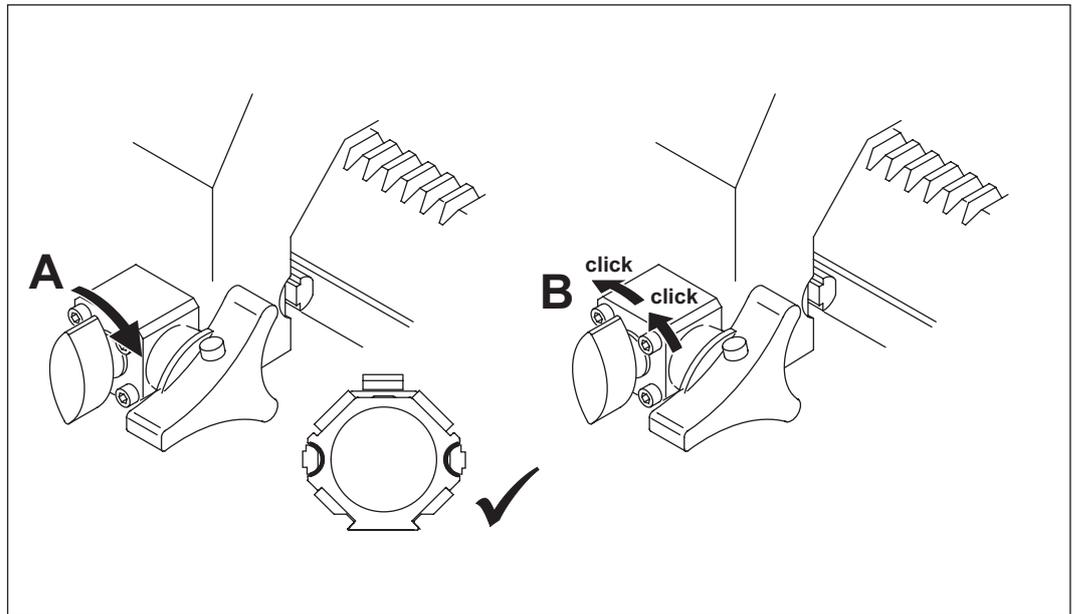
- |                      |                     |
|----------------------|---------------------|
| 1 Feed motor, swivel | 6 Blade drive motor |
| 2 Blade guard holder | 7 Saw blade holder  |
| 3 Water connection   | 8 Name plate        |
| 4 Feed motor, travel | 9 Chassis           |
| 5 Lock unit          | 10 Belt swivel arm  |

### 3 Assembly / disassembly

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

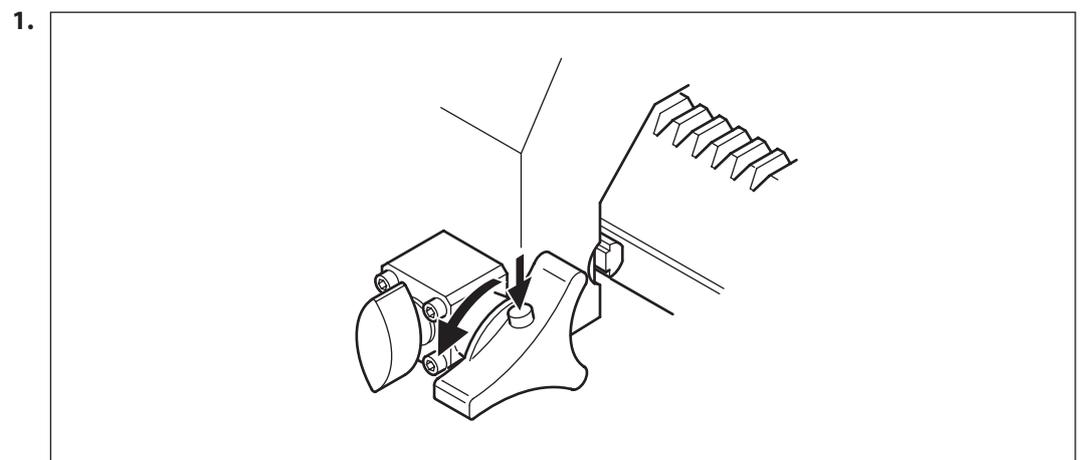


### 3.2 Adjustment of the closure



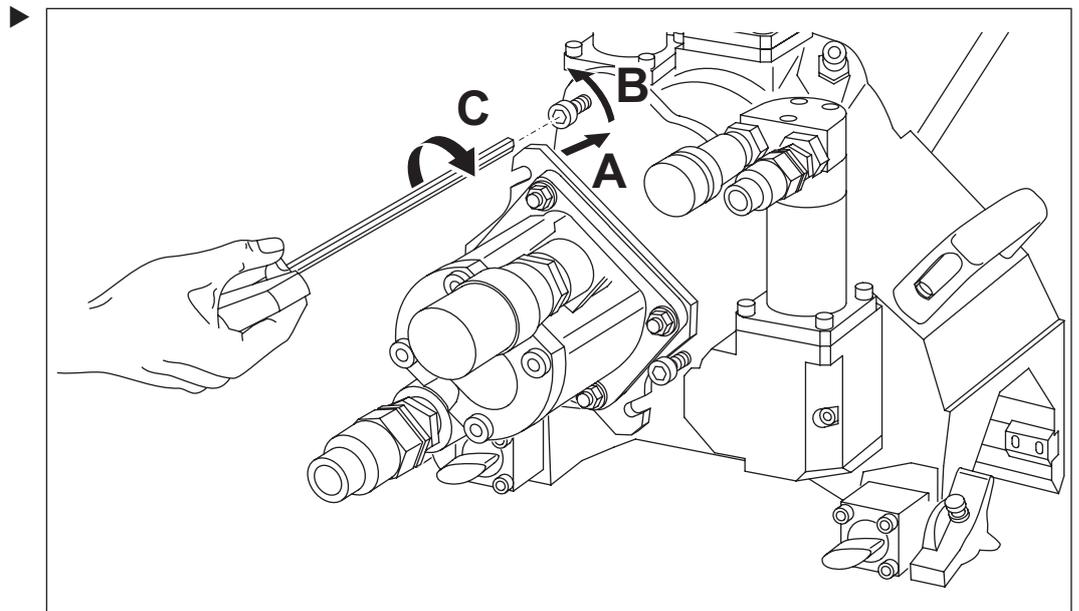
A: Rotate as far as the stop.  
B: Rotate back two notch positions.

### 3.3 Release the closure



2. Perform the remaining assembly steps in reverse order.

### 3.4 Mount the drive motor



### 3.5 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.**

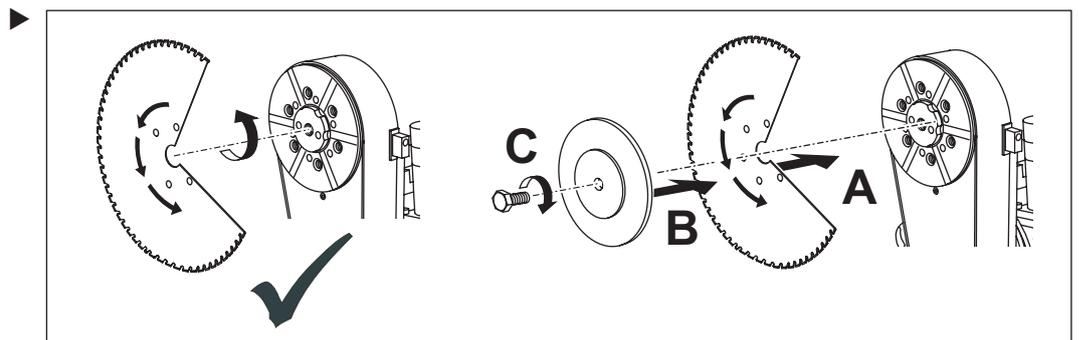
- ▶ Switch off the drive unit before working on the saw blade.
- ▶ Depressurize the hoses.

#### 3.5.1 Fixing saw blade in position

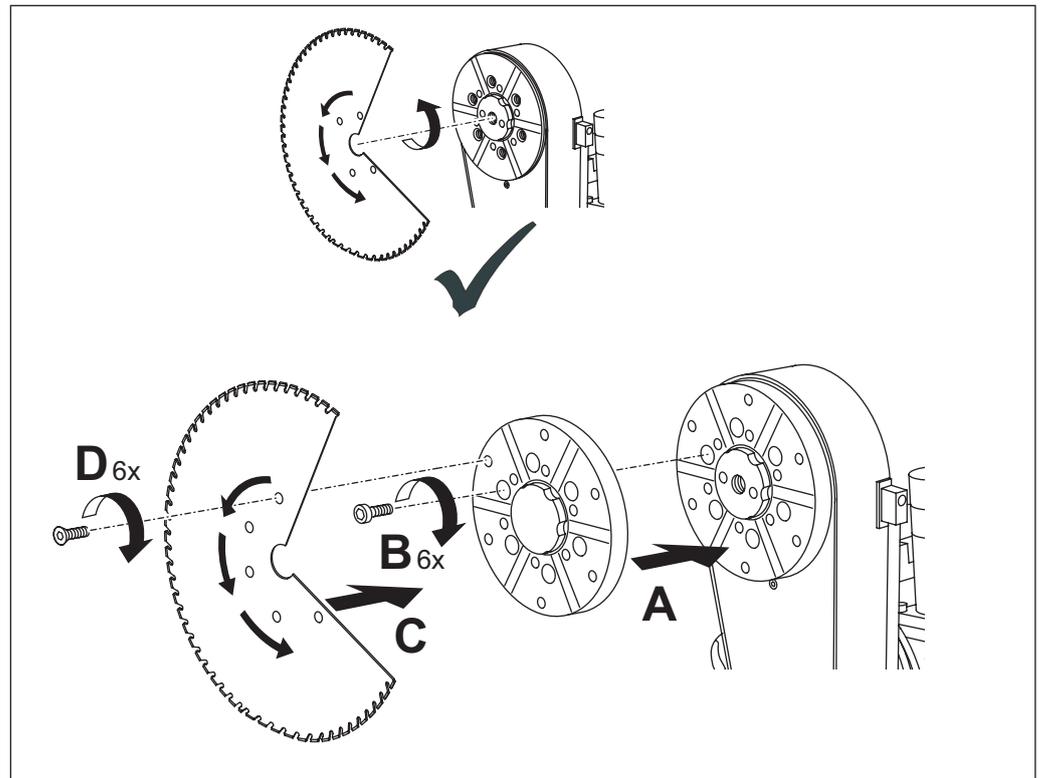


The direction of rotation of the saw blade must match the direction of rotation of the machine.  
Correct alignment: Countersinking of the fastening bores against the blade cover.

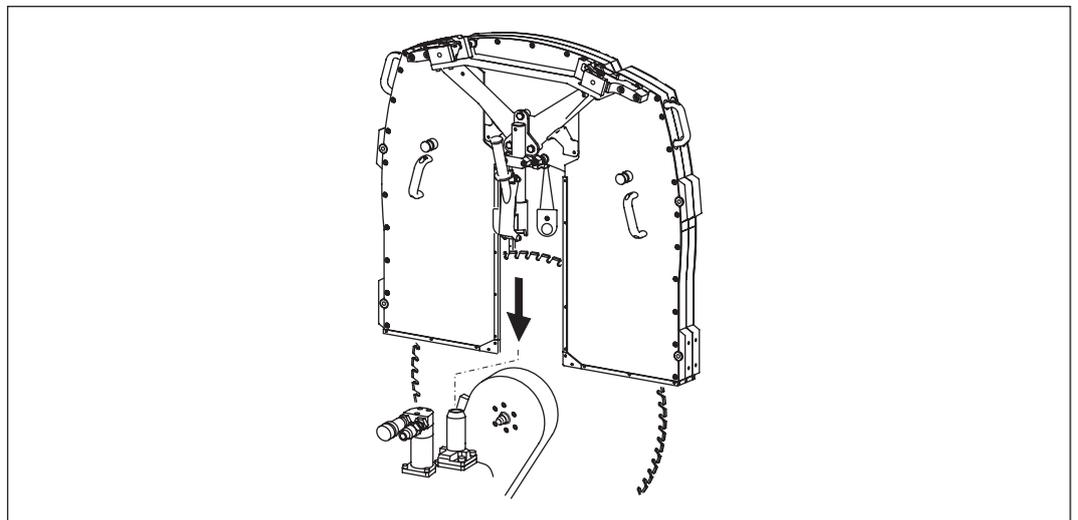
#### For normal cuts



**For flush cuts**



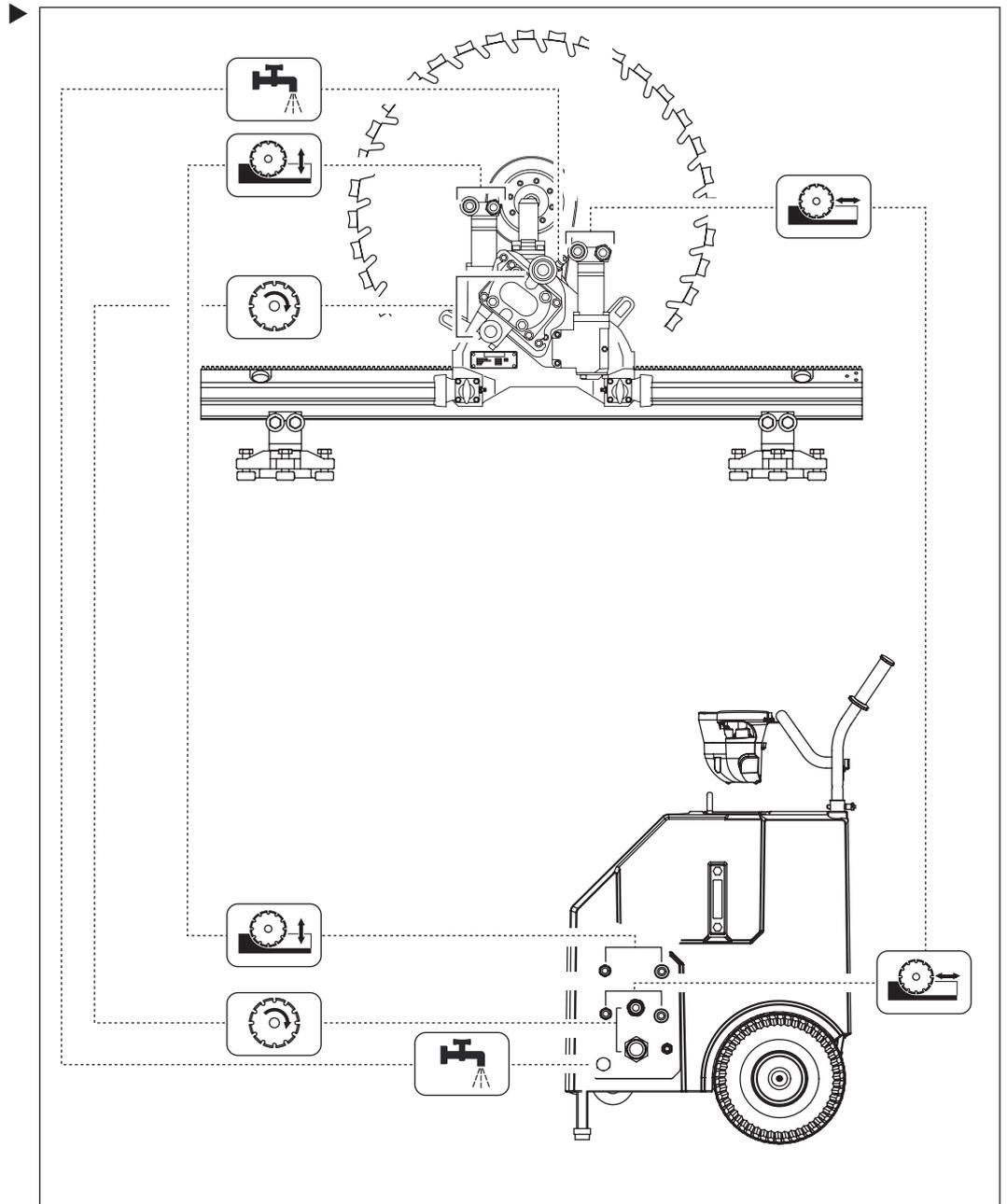
**3.6 Mount the blade guard**



► Mount the blade guard according to the instruction leaflet.

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

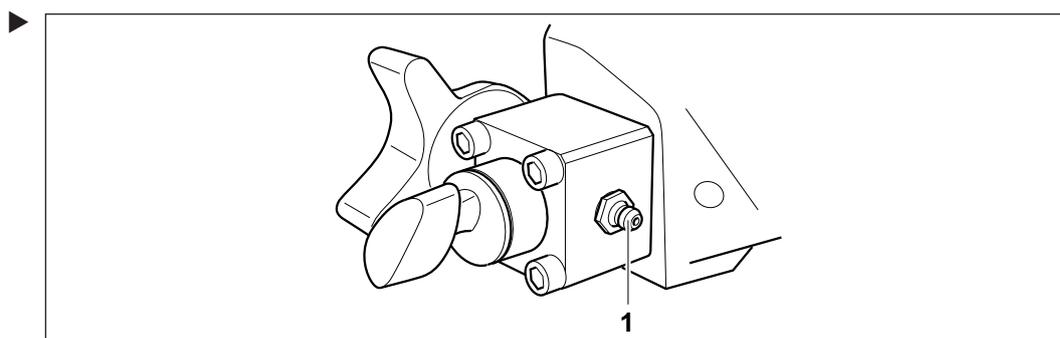
- ✓ The drive unit is isolated from the power supply.
- ✓ Couplings are clean.
- ✓ Hoses are undamaged.



## 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
Prism guides	▶ Check for wear			X			
	▶ Replace before the anchoring screws of the guide prisms touch the rail or the chassis touches the rail						X
Y-guides	▶ Apply 2-3 applications of grease to the lubricating nipples			X			
Couplings	▶ Check for leak-tightness and damage and replace as required			X			
Swivel arm	▶ Clean with water		X				
	▶ Check the saw blade uptake for wear	X				X	X
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					

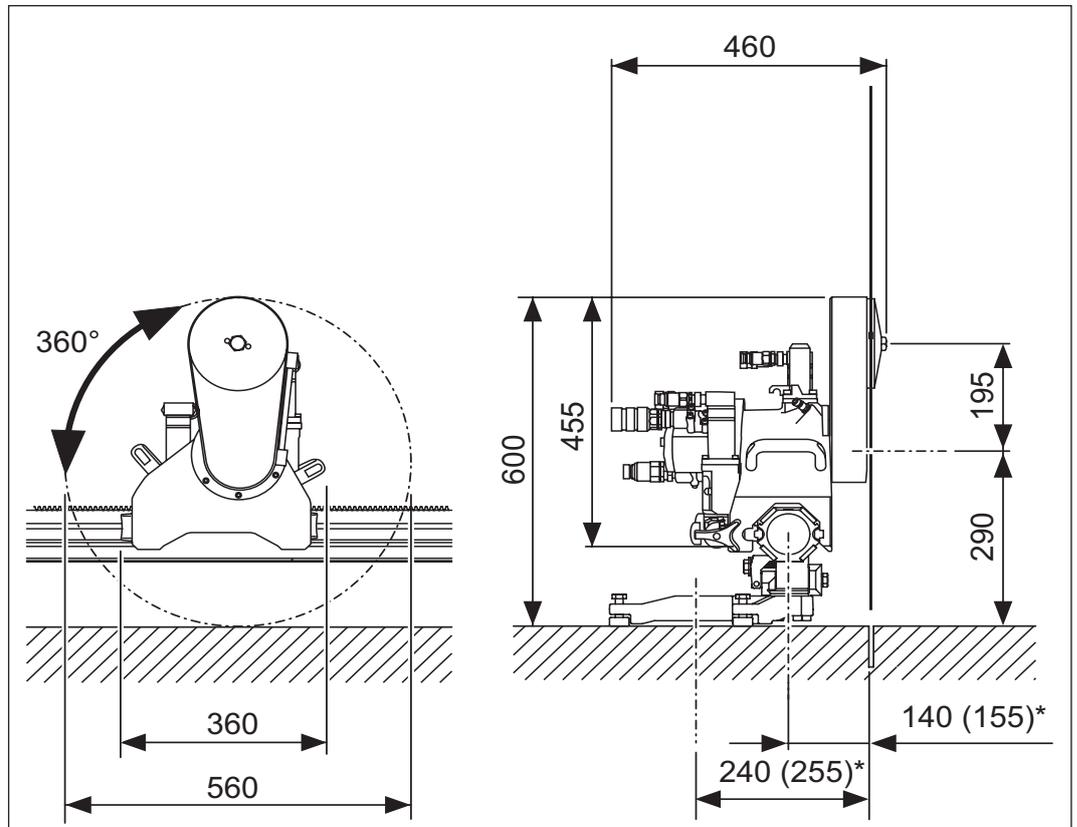
### 4.1 Lubricate lock unit



1 Grease nipple

## 5 Technical data

### 5.1 Dimensions



Dimensions (\* with flush cutting flange)

### 5.2 Design

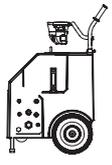
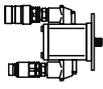
Design	
Parameter	Value
Construction	Cast aluminium / steel
Rotatable swivel arm	360°
Power transmission	toothed belt
Blade drive transmission	1:2
Lock unit	Low-wearing, suitable for all VS and VAS rails
Rail mounting	Locking and securing function at the prism guide
Blade drive motor	Secured by means of quick-release device (hydraulic motor size 2)
Feed motor	Gerotor
Flush cutting	Special flange (+15 mm)
Normal cutting:	Standard blade hub with blade cover
Water	Water connection on chassis

### 5.3 Weight

Weight	
Parameter	Value
Wall saw head, incl. feed motors without blade drive motor	27 kg
Blade drive motor, size 2	5.5 kg

### 5.4 Blade drive motor

Blade drive motor	
Parameter	Value
Hydraulic motors	1100 to 3333 rpm.
Size	2
Absorption volume	12 to 30 cm <sup>3</sup>
Transmission ratio	1:2
Operating pressure	max. 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

 Operation possible

 Operation not possible

## 5.5 Feed motor, travel

Feed motor, travel	
Parameter	Value
Hydraulic motors	187 rpm
Type	Gerotor
Operating pressure	max. 120 bar
Output torque	50 Nm
Feed force	6,000 N
Feed	Toothed wheel on rail

## 5.6 Feed motor, swivel

Feed motor, swivel	
Parameter	Value
Hydraulic motors	187 rpm
Type	Gerotor
Operating pressure	max. 120 bar
Output torque	50 Nm»
Swivel range (swivel arm)	360°
Feed force	3,000 N

## 5.7 Saw blades

Saw blades		
Parameter	Value	
Saw blade max.	Ø 1,200 mm	
Fully detachable saw blade	Ø 900 mm	
Blade holder	Ø 60 mm	
Blade flange mounting at wall saw	fixed	
Saw blade fixing on blade flange	central screw	
Saw blade fixing (flush cuts)	6 countersunk head screws reference circle 130 mm	
Blade cover mounting on blade flange	1 hexagonal bolt	
Blade flange Ø	165 mm	
Cutting depth	Ø 800 mm	310 mm
	Ø 900 mm	360 mm
	Ø 1000 mm	410 mm
	Ø 1200 mm	510 mm

## 5.8 Lubricants, fluids and sealants

Lubricants, fluids and sealants		
Parameter		Value
Lubricating grease (lock unit)	Penetration	265 to 295
	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:	12 kW (max. operating pressure 260 bar)
Maximum performance	20 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	DZ-S2

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

### Directive applied

2006/42/EG from 17. May 2006

### Standards applied

EN ISO 12100:2010  
EN ISO 4413:2010

### TYROLIT Hydrostress AG

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Pfäffikon, 14.09.2021



Roland Kägi  
Operations + R&D Machines

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on our website at **[www.tyrolit.com](http://www.tyrolit.com)**