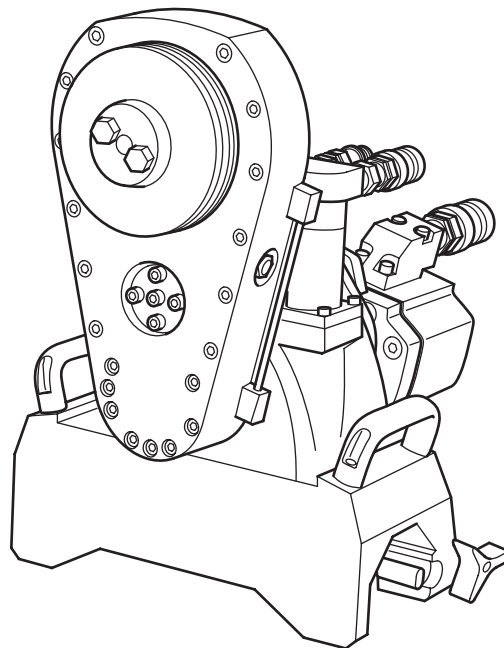


Operating Instructions

Wall saw FZ-4S

Index 002



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

Copyright © TYROLIT Hydrostress

TYROLIT Hydrostress AG
Witzbergstrasse 18
CH-8330 Pfäffikon
Switzerland
Tel. 0041 (0) 44 952 18 18
Fax 0041 (0) 44 952 18 00

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.

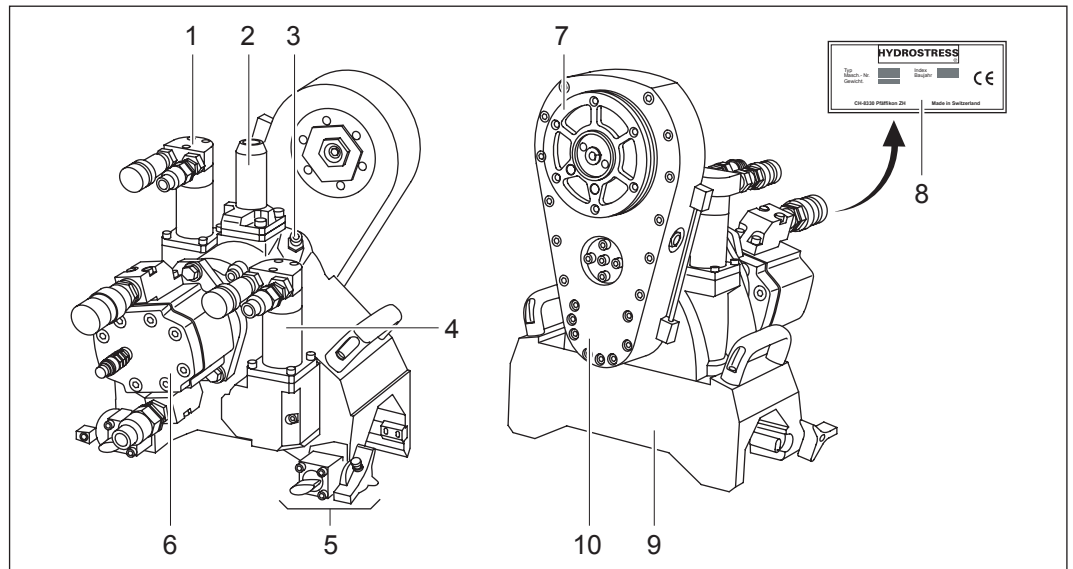
- ▶ Never connect or disconnect hoses while the drive unit is running.

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



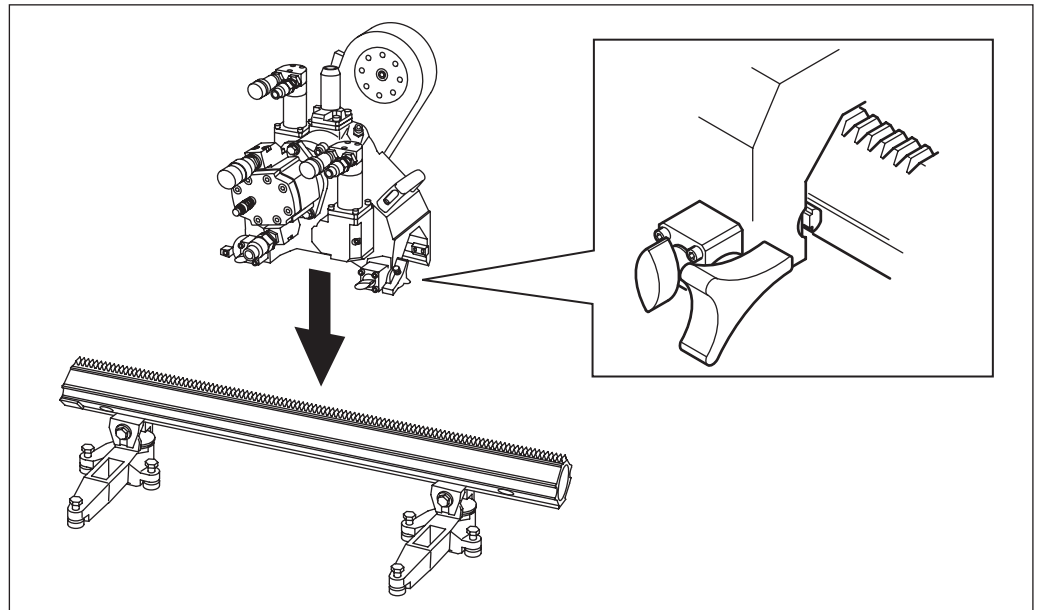
Components

- | | |
|----------------------|----------------------|
| 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 Geared swivel arm |

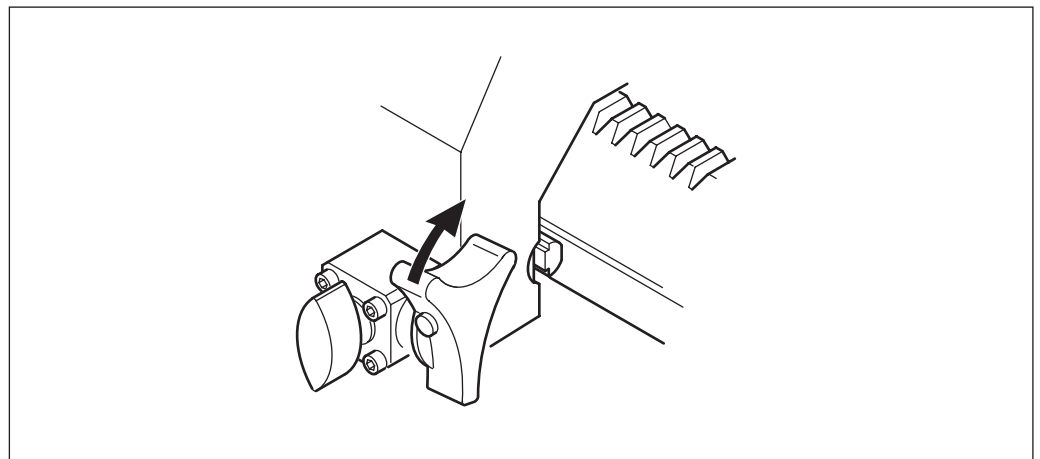
3 Assembly / disassembly

3.1 Place the wall saw on the guide rail

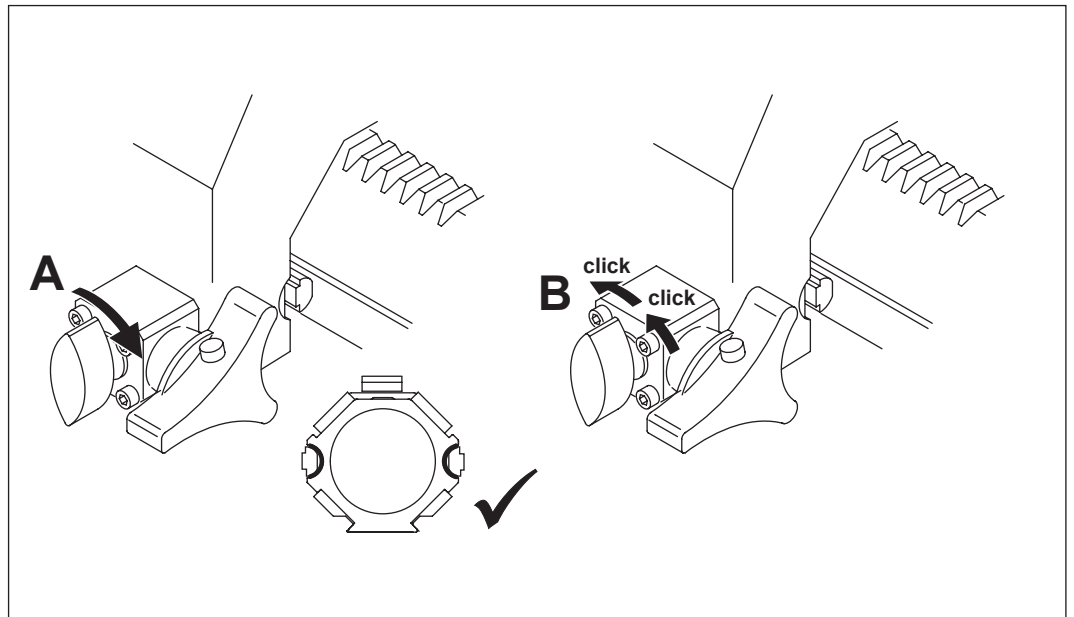
1.



2.

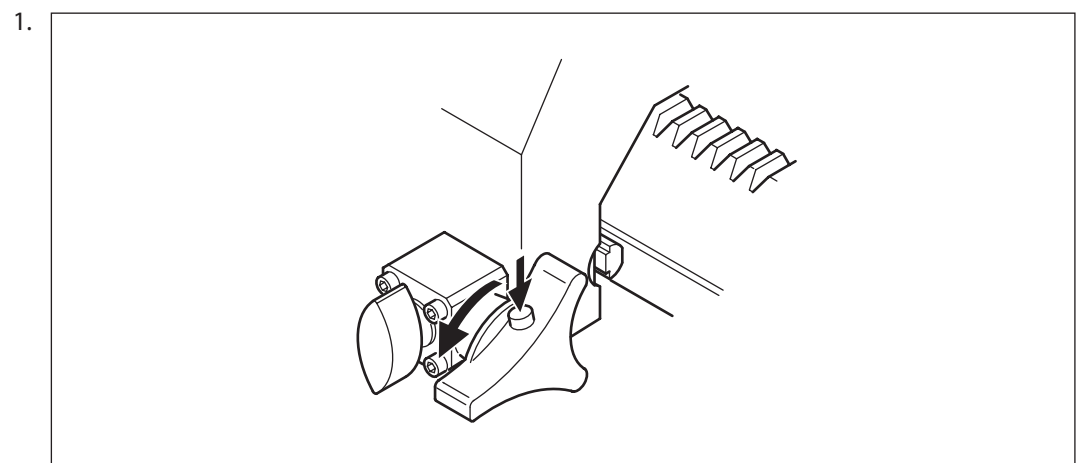


3.2 Adjustment of the closure



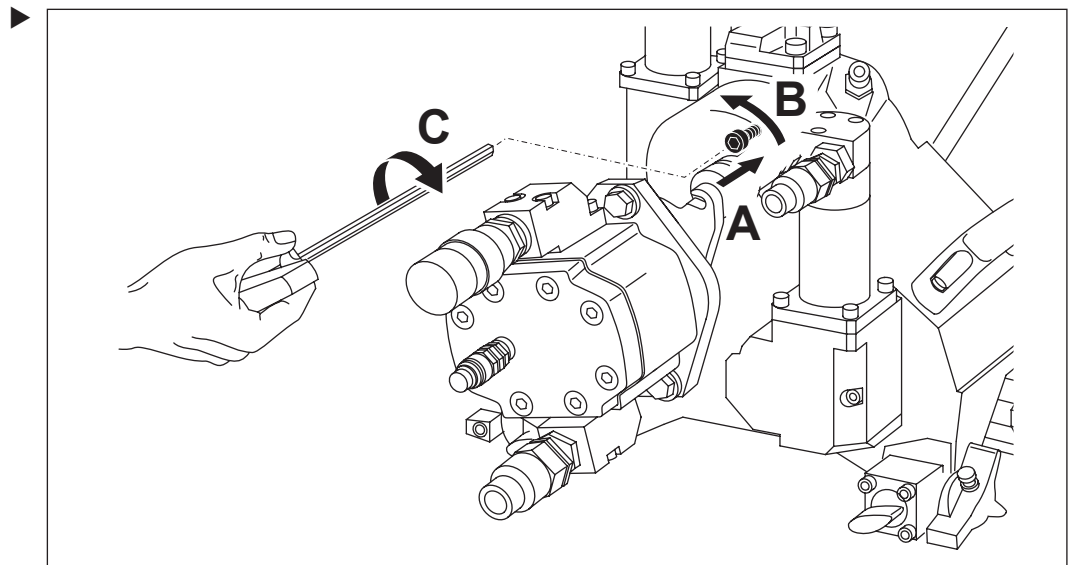
A: Rotate as far as the stop.
B: Rotate back two notch positions.

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 Preparations for assembly

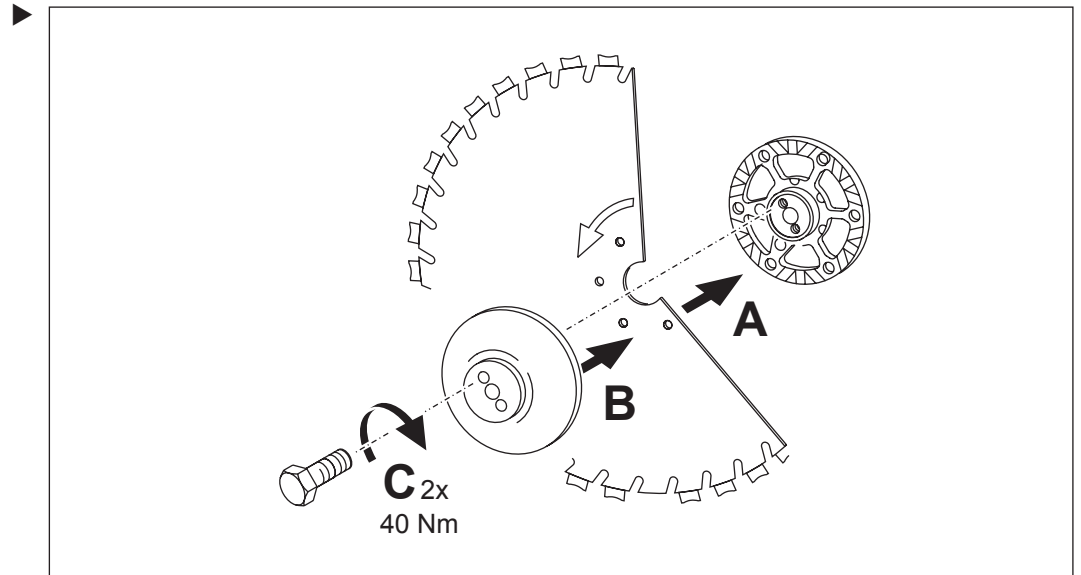
- ▶ During initial installation, remove the flush cut anchoring screws on the quick-release flange.

3.5.2 Preassemble the saw blade unit

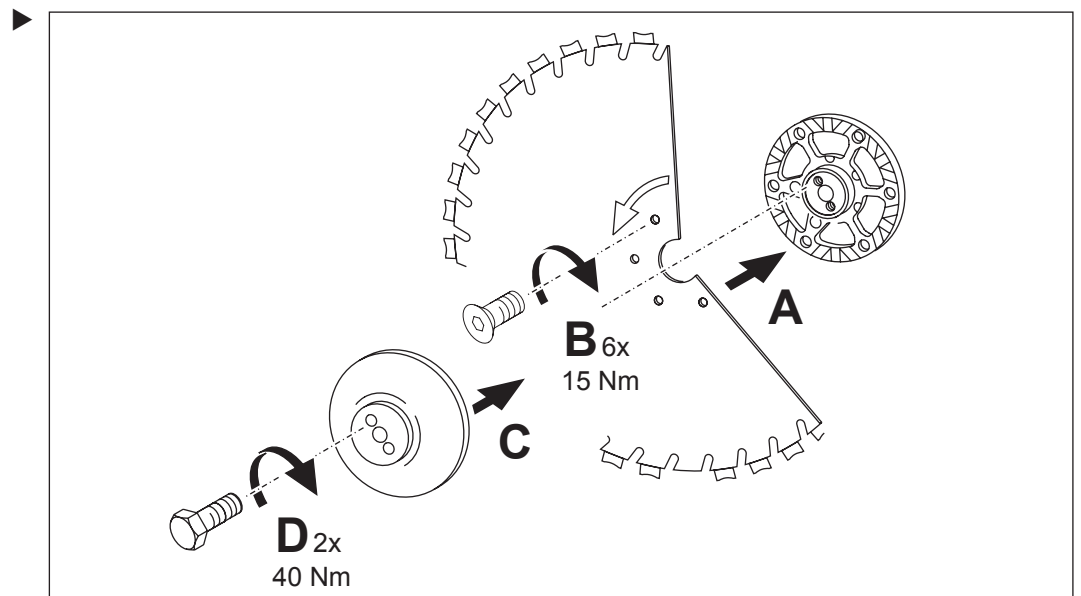


The direction of rotation of the saw blade must match the direction of rotation of the machine. Correct alignment: Countersinking of the fastening bores against the blade cover.

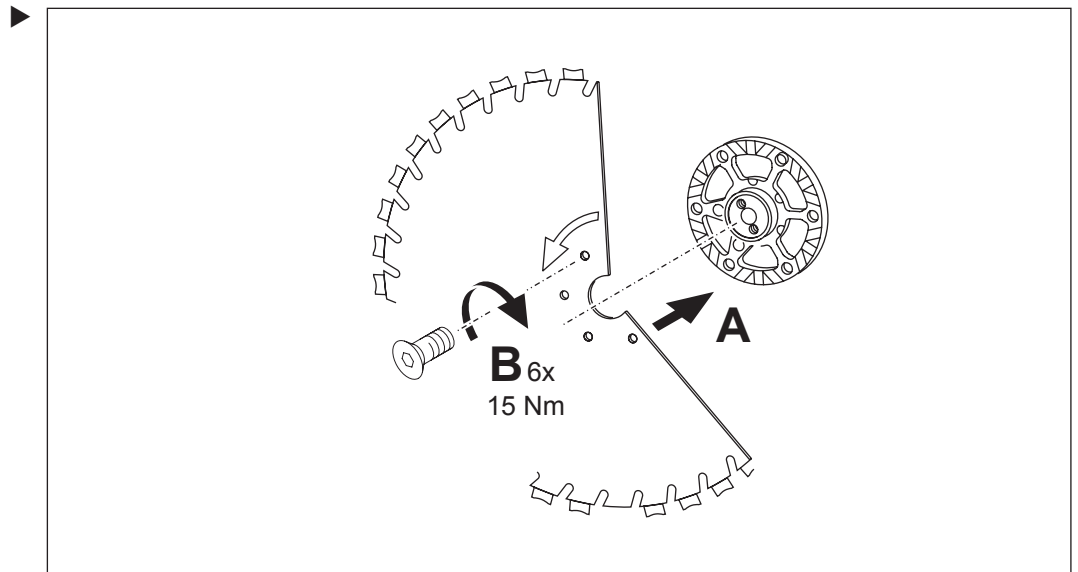
For normal cuts with saw blades up to Ø 1000 mm



For normal cuts with saw blades larger than Ø 1000 mm



For flush cuts



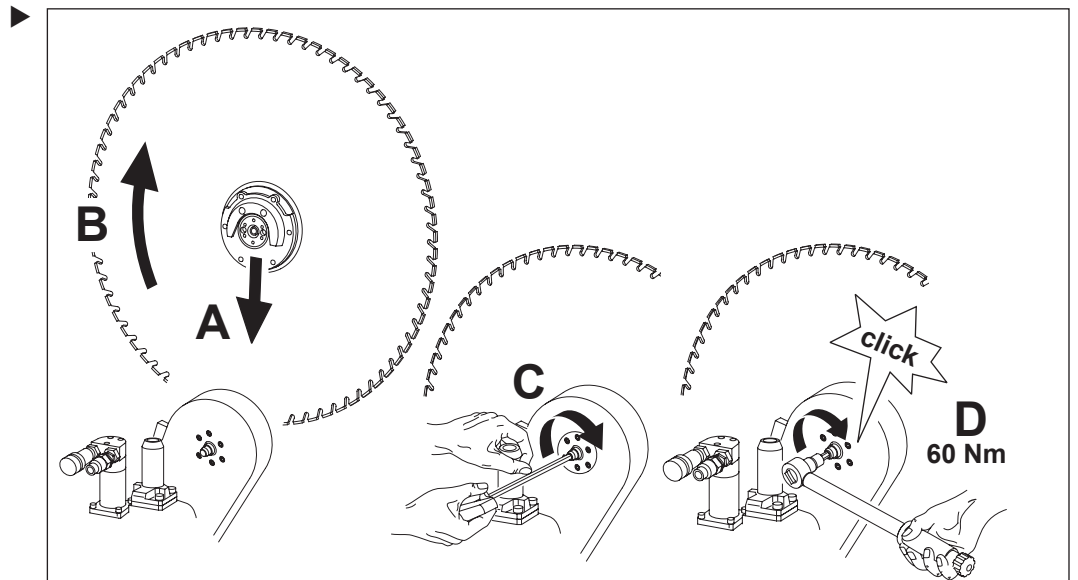
3.5.3 Fastening the saw blade unit



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.



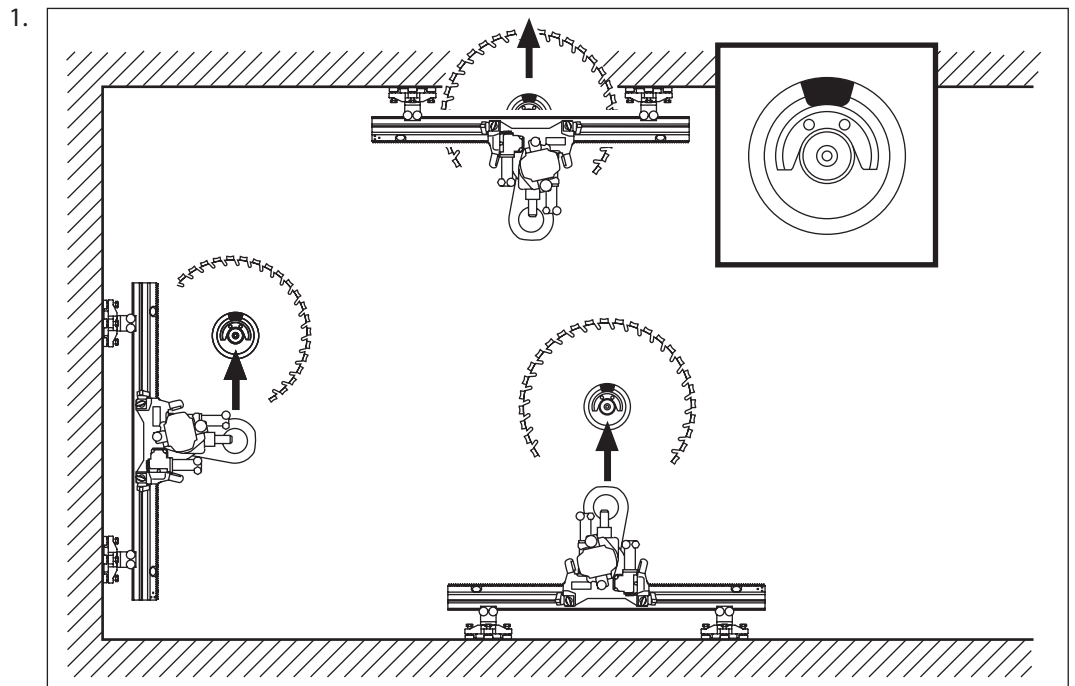
3.6 Disassembling saw blade unit



WARNING

Injuries can be caused if the saw blade drops down.

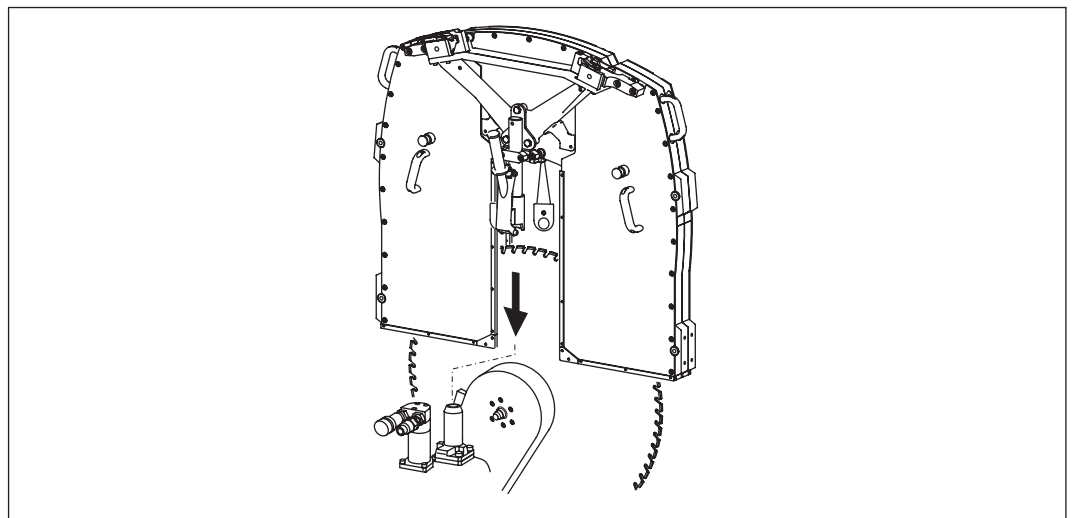
► Lift out the saw blade unit to the top when removing it.



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

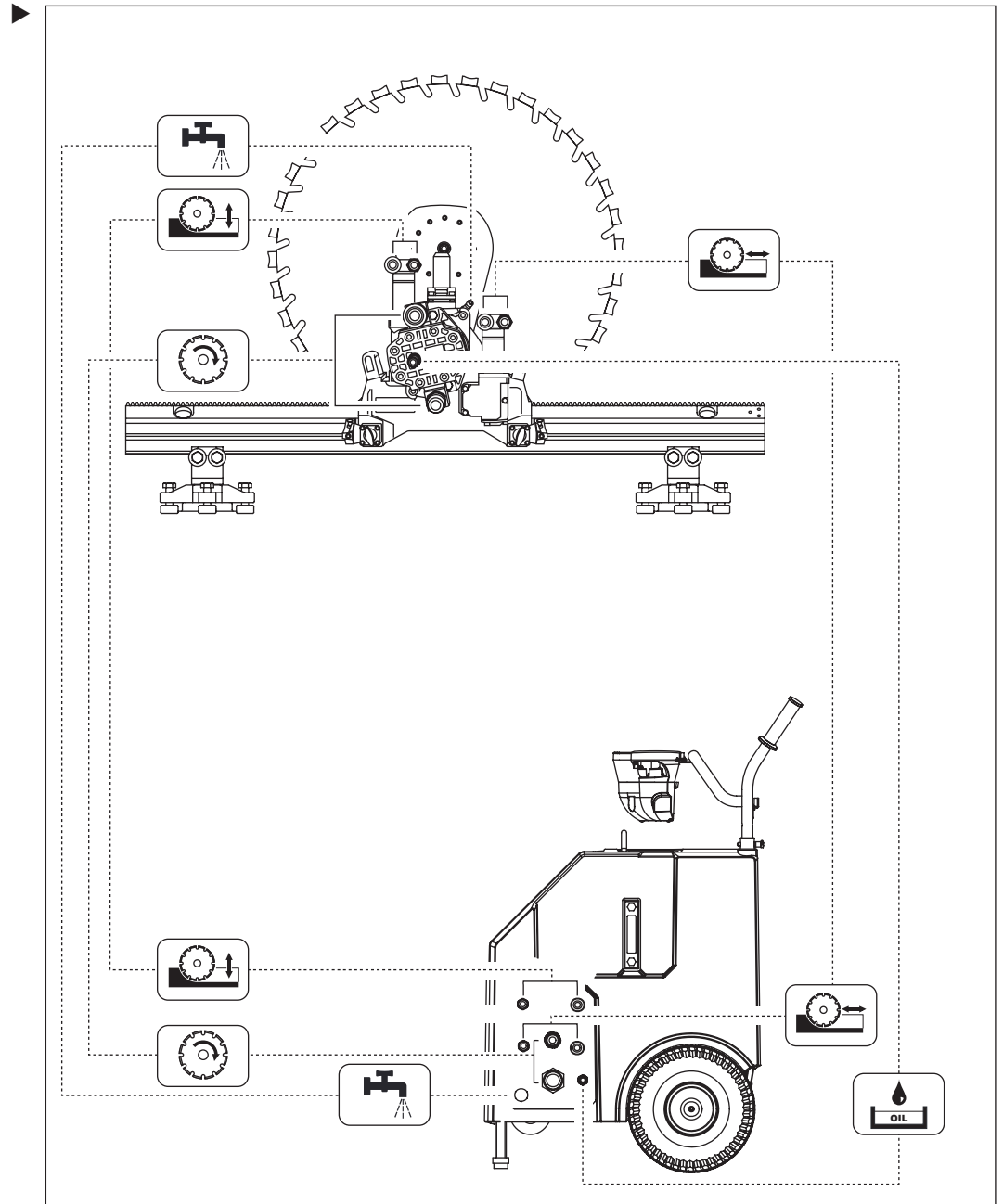
3.7 Mount the blade guard

► Mount the blade guard according to the instruction leaflet.



3.8 Connecting the wall saw to the drive unit

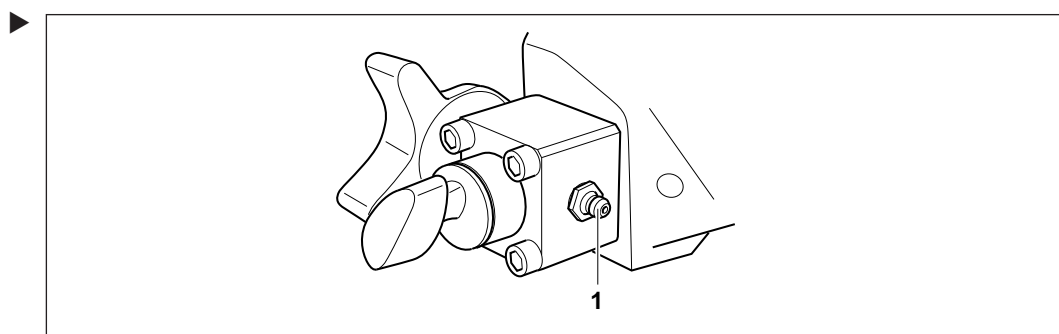
- ✓ The drive unit is isolated from the power supply.
- ✓ Couplings are clean.
- ✓ Hoses are undamaged.



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			
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 Lubrication of the lock unit



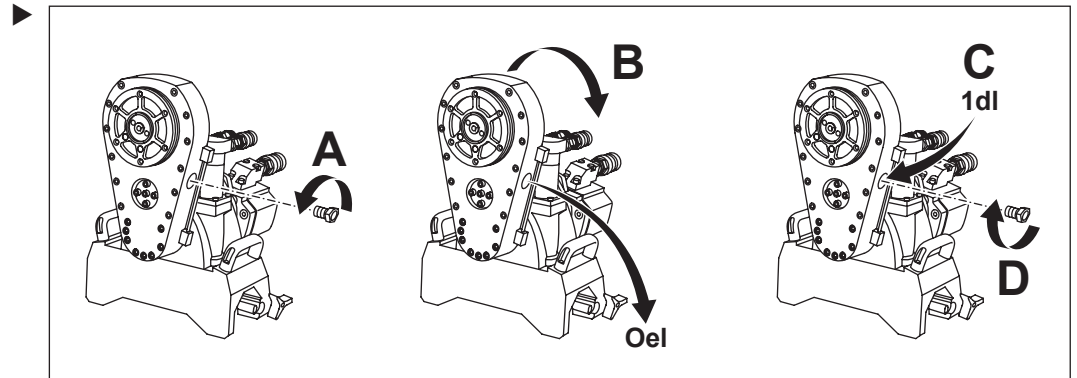
1 Grease nipple

4.2 Change gear oil



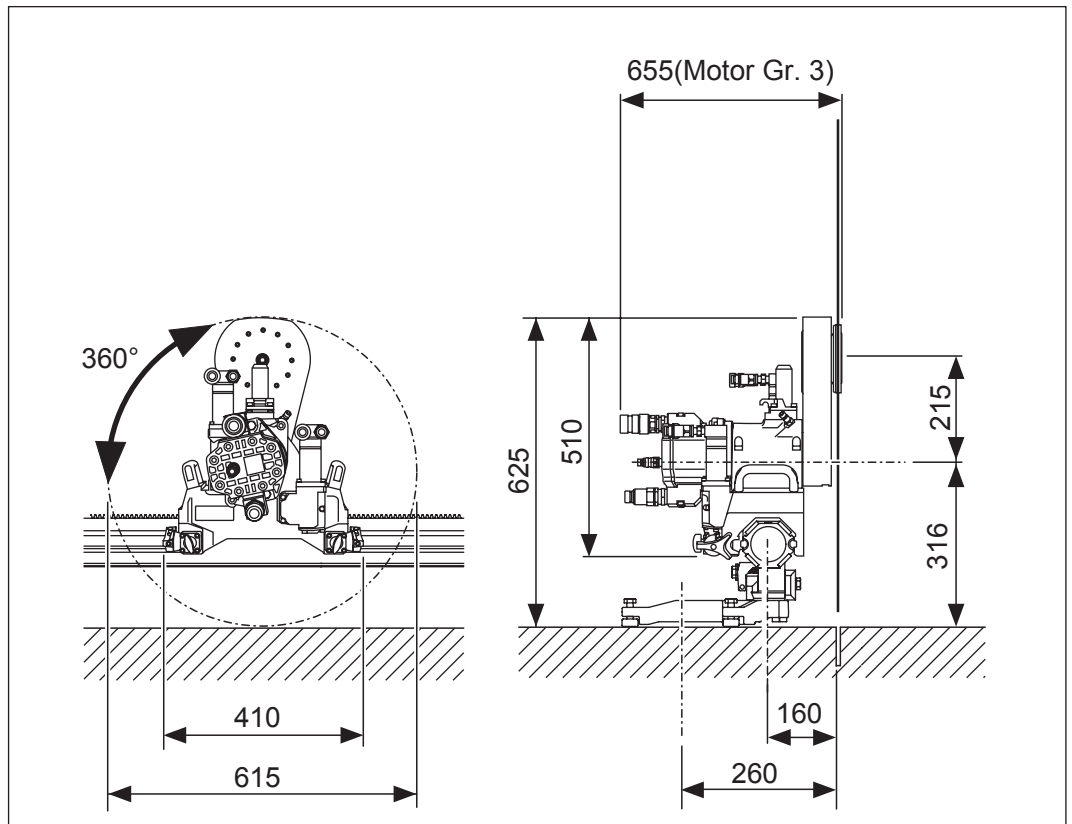
The use of unsuitable oil can damage the wall saw.

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



5 Technical data

5.1 Dimensions



Measurements in mm

5.2 Design

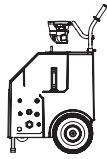
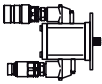
Design	
Parameter	Value
Construction	Cast aluminium/steel
Rotatable swivel arm	360°
Power transmission	Gear wheel
Blade drive transmission	1:3
Lock unit	Low-wearing, suitable for all VS rails
Rail mounting	Locking and securing function at the prism guide
Blade drive motor	Mounted via quick-release device (size 3)
Feed motor	Gerotor
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, incl. feed motors and quick-release flange without blade drive motor	41 kg acc. to catalogue: 39 kg
Blade drive motor, size 3	7.75 kg

5.4 Blade drive motor

Blade drive motor	
Parameter	Value
Hydraulic motors	900 to 3500 rpm max.
Size	3
Absorption volume	20 to 50 cm ³
Transmission ratio	1:3
Operating pressure	max. 260 bar
Type	External geared motor

Rotational speeds, hydraulic motors for wall saws						
						
		cm ³ 20	cm ³ 25	cm ³ 31	cm ³ 40	cm ³ 50
l/min	45	2250	1800	1452	1125	900
l/min	50	2500	2000	1613	1250	1000
l/min	60	3000	2400	1935	1500	1200
l/min	65	3250	2600	2097	1625	1300
l/min	70	3500	2800	2258	1750	1400
l/min	75	3750	3000	2419	1875	1500
l/min	80	4000	3200	2581	2000	1600
l/min	90	4500	3600	2903	2250	1800

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	6000 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	3000 N

5.7 Saw blades

Saw blades	
Parameter	Value
Saw blade max.	Ø 2200 mm
Fully detachable saw blade	Ø 1025 mm
Blade holder	Ø 60 mm
Blade flange mounting at wall saw	Quick-release flange ST
Saw blade fixing on blade flange	6 countersunk head screws reference circle 130 mm
Blade cover mounting on blade flange	2x 19 mm hexagon head screws
Blade flange Ø	60 mm

Saw blades		
Cutting depth	Ø 800 mm	300 mm
	Ø 1000 mm	400 mm
	Ø 1200 mm	500 mm
	Ø 1500 mm	650 mm
	Ø 1600 mm	700 mm
	Ø 1800 mm	800 mm
	Ø 2000 mm	900 mm
	Ø 2200 mm	1,000 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 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:	29 kW (max. operating pressure 260 bar)
Maximum performance	40 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	FZ-4S

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

Directive applied

2006/42/EC

Standards applied

EN 12100:2010

EN 15027:2007+A1:2009

