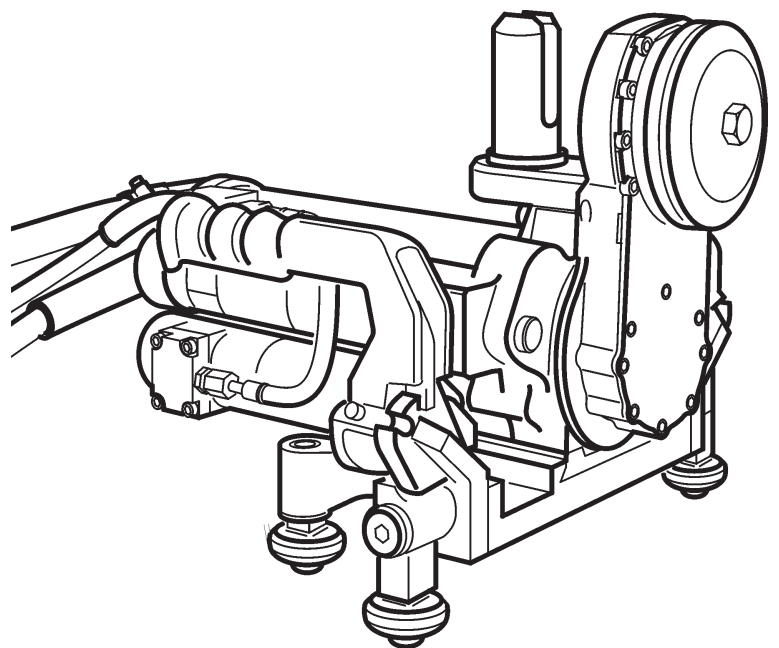


Operating Instructions

Wall saw EX

Index 005



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



DANGER

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

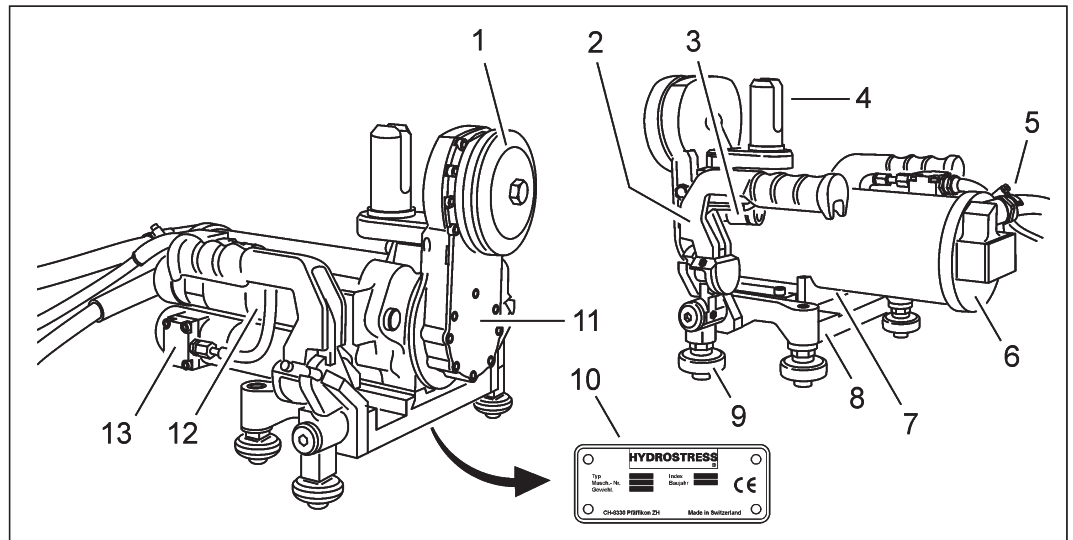
- ▶ Disconnect the mains plug before working on the wall saw EX.

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 EX

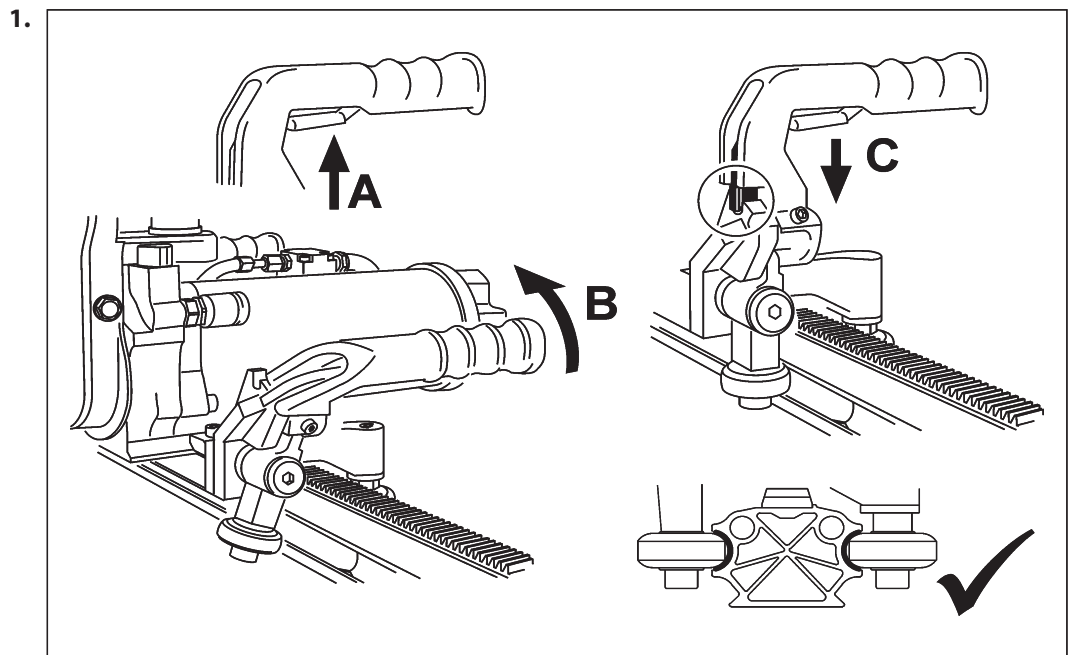


Components

- | | |
|----------------------|----------------------|
| 1 Saw blade holder | 8 Chassis |
| 2 Lock unit | 9 Guide rollers |
| 3 Bypass water | 10 Name plate |
| 4 Blade guard holder | 11 Geared swivel arm |
| 5 Water connection | 12 Swivelling motor |
| 6 Blade drive motor | 13 Feed motor |
| 7 Sliding unit | |

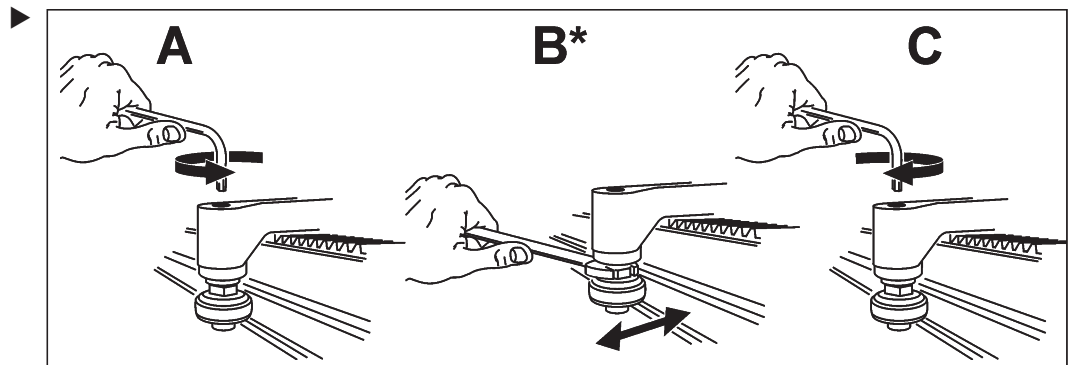
3 Assembly

3.1 Place the wall saw EX on the guide rail



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

3.2 Adjusting the guide rollers



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

3.3 Mount the saw blade



DANGER

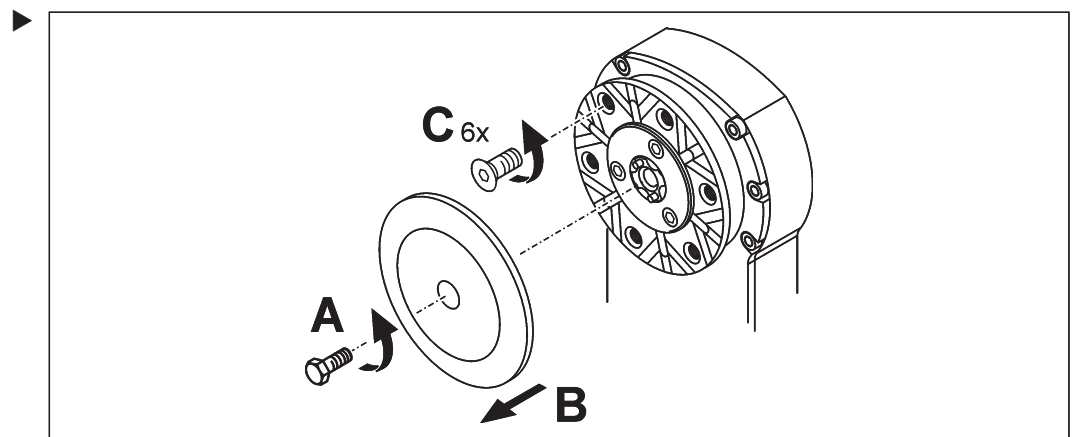
It can cause death or serious injury if the saw blade flies away.

► Only use original screws and bolts from TYROLIT Hydrostress AG.

3.3.1 Preparations for assembly

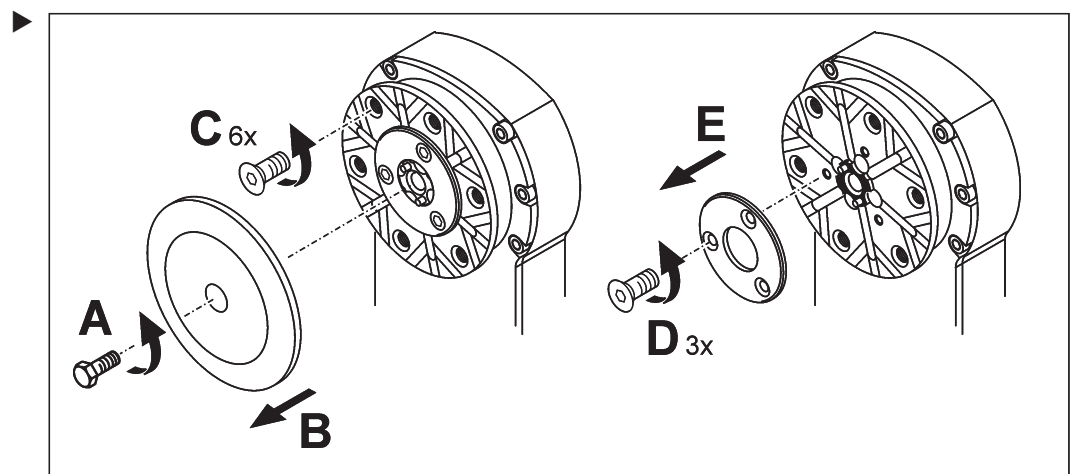
With a saw blade mounting hole $\varnothing = 60$ mm

✓ During initial installation, the flush cut anchoring screws need to be removed.



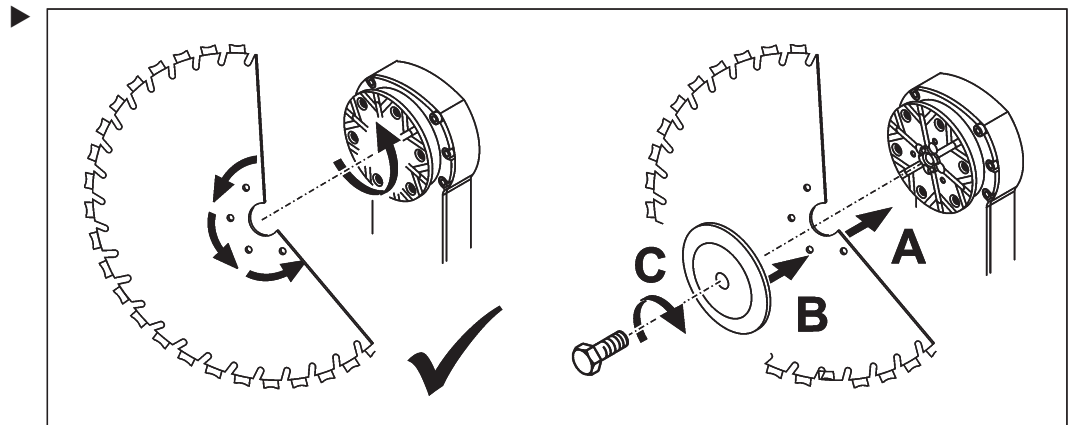
With a saw blade mounting hole 1" ($\varnothing = 25.4$ mm)

During initial installation, the flush cut anchoring screws need to be removed.



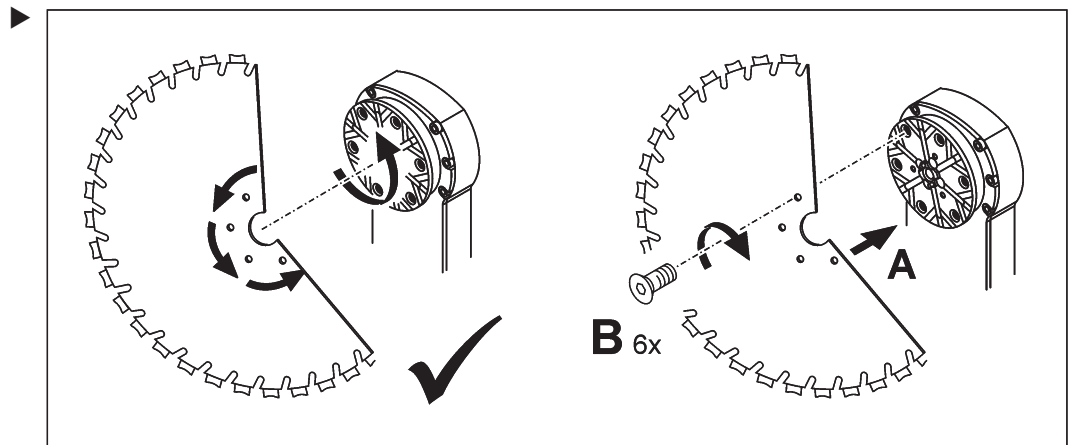
3.3.2 Fixing saw blade in position

For normal cuts



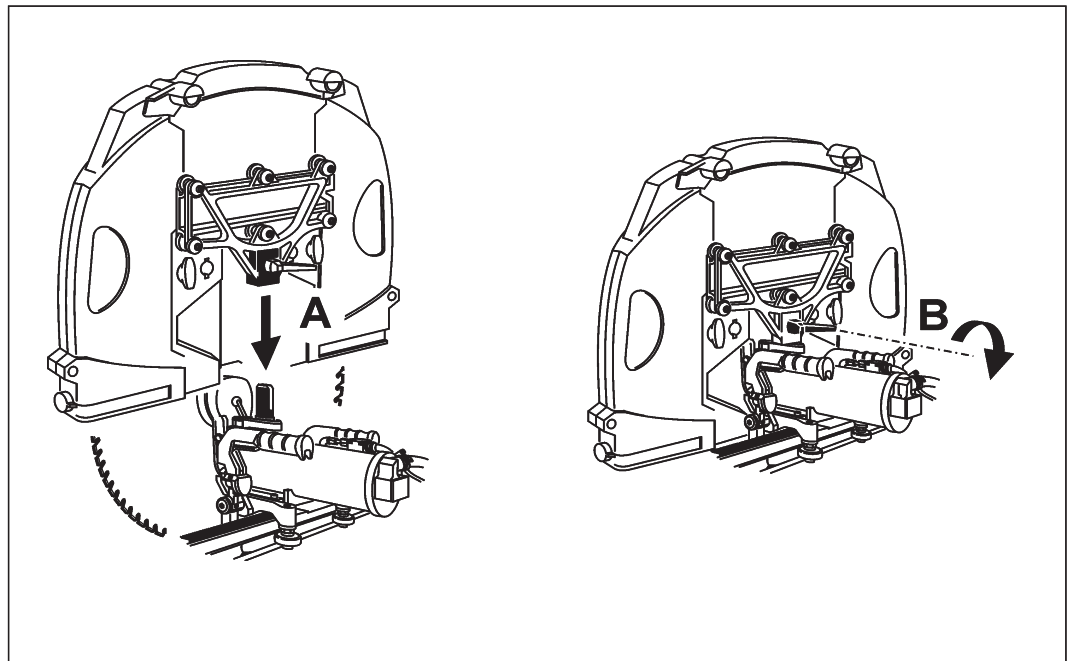
The direction of rotation of the saw blade must match the direction of rotation of the machine.

For flush cuts



The direction of rotation of the saw blade must match the direction of rotation of the machine.

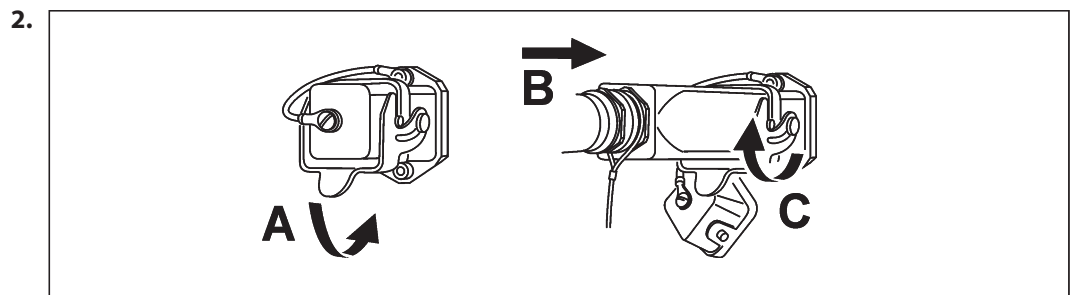
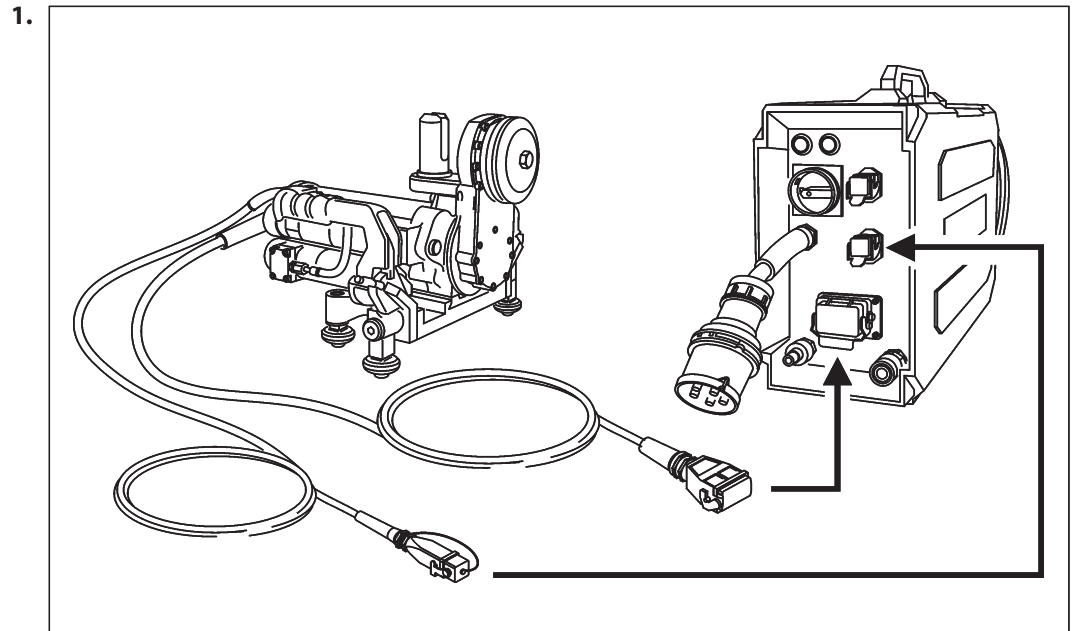
3.4 Mount the blade guard



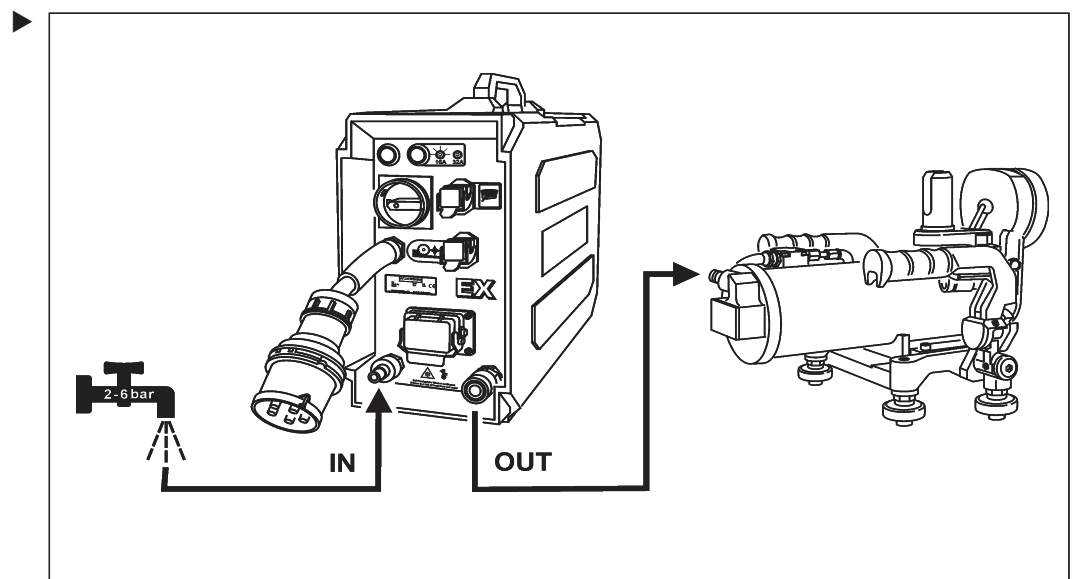
► Mount the blade guard according to the instruction leaflet.

3.5 Connect the wall saw EX to the control unit

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

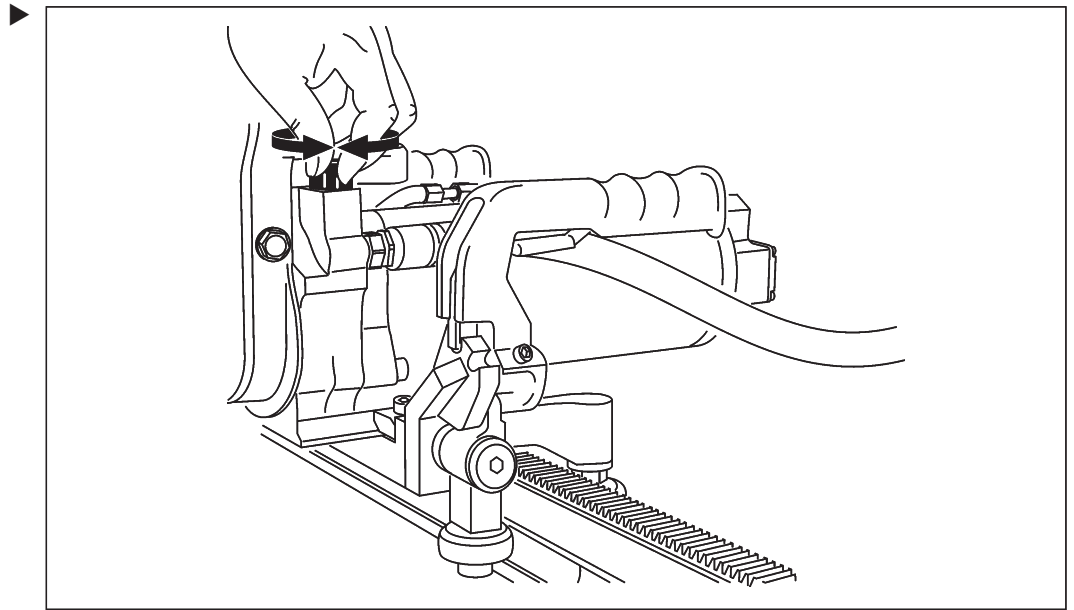


3.6 Water connection



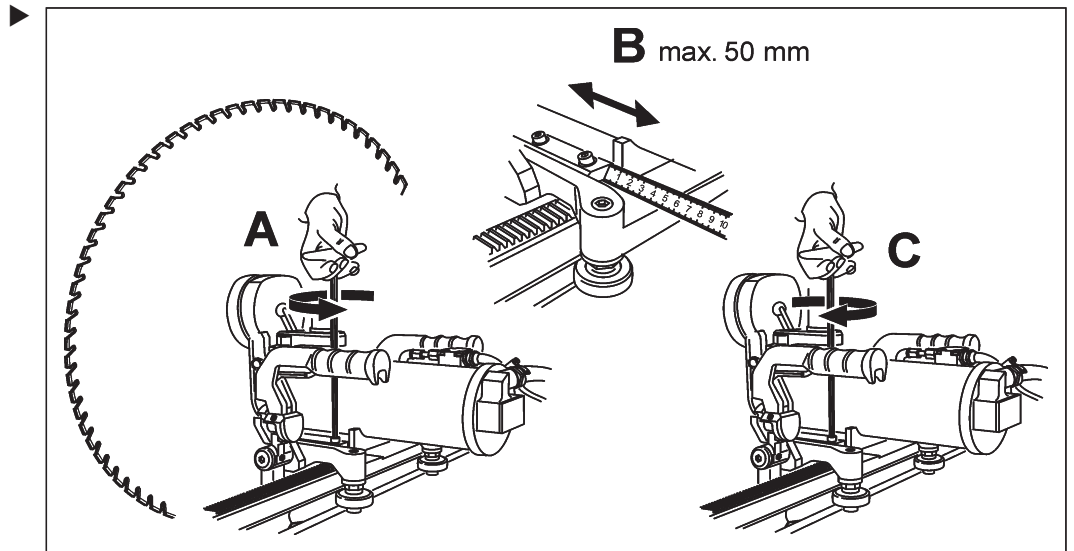
4 Operation

4.1 Regulating the cooling water supply



On dry cuts the valve can be completely closed.

4.2 Adjustment of the sliding unit



4.3 Resetting overload protection

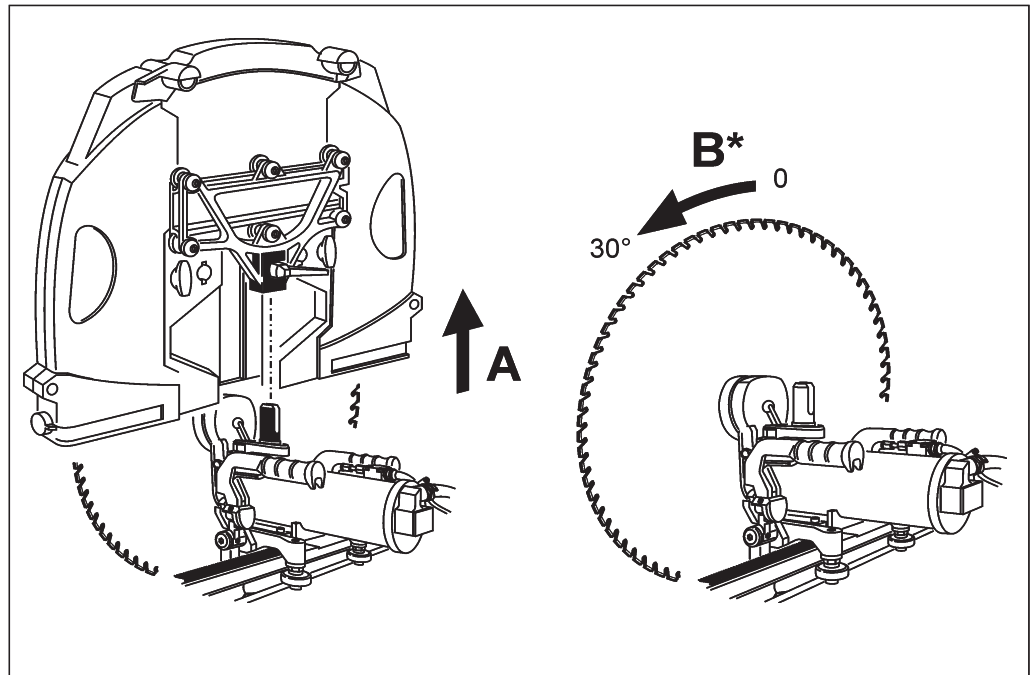
To prevent damage to the motor and gears the blade drive motor is fitted with overload protection.

1. Switch off the sawing system.

2.



3.

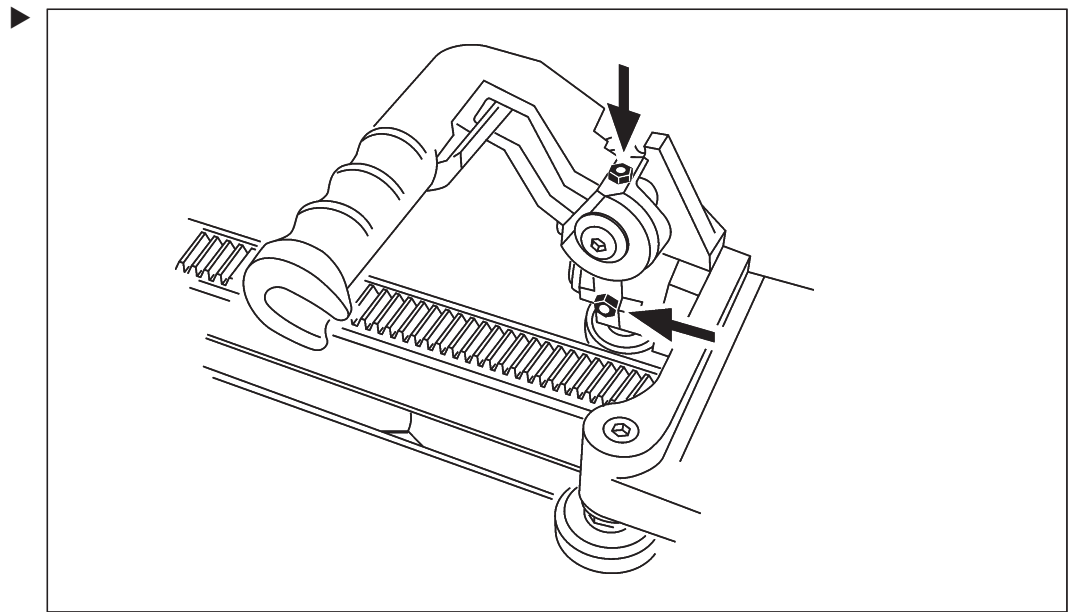


* Sudden rotation

5 Servicing and maintenance

Maintenance and servicing table							
		Before every commissioning	At end of work	Weekly	Yearly	After faults	After damage
Wall saw EX	▶ Retighten accessible screws and nuts			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				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 Signal at the remote controller of the EX control unit					

5.1 Lubricate lock unit

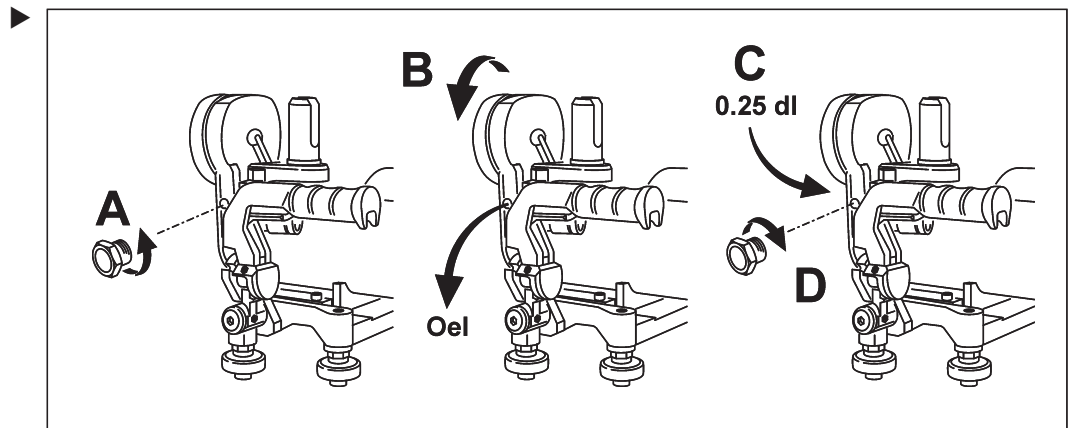


5.2 Change gear oil

NOTE

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

- ▶ Use only TYROLIT Hydrostress AG oil containers (no. 10981361, 25ml).

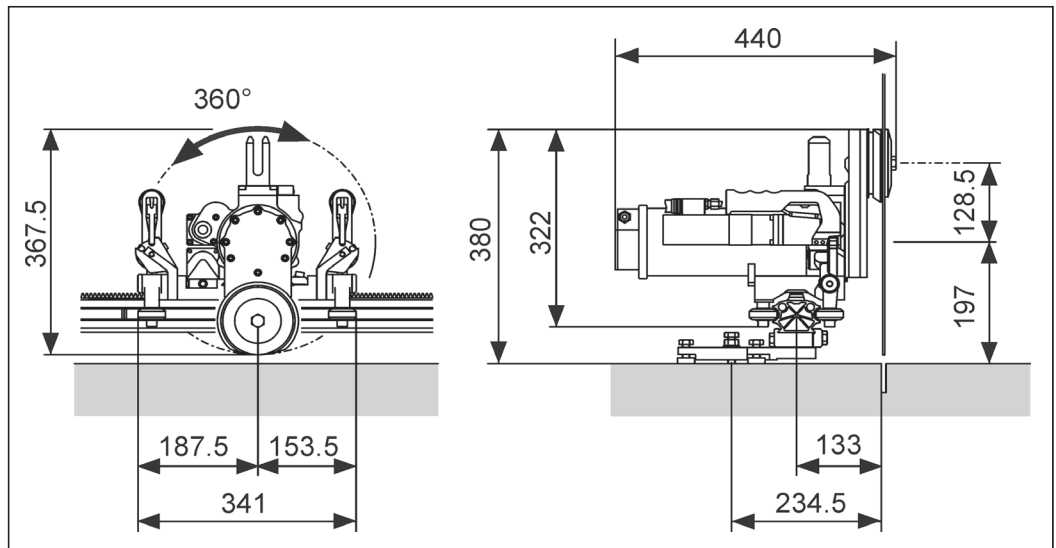


5.3 Replacing the guide rollers

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

6 Technical data

6.1 Dimensions



Dimensions

6.2 Design

Design	
Parameter	Value
Construction	Light aluminium/steel construction
Rotatable swivel arm	360 °
Power transmission	gear wheel
Blade drive transmission	1:4
Carrying handles	2-piece with locking function
Guide rollers	Low-wearing, suitable for the EX rail
Rail mounting	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

6.3 Weight

Weight	
Parameter	Value
Wall saw head complete incl. 1 feed motor incl. 1 swivelling motor incl. blade drive motor	26 kg

6.4 Blade drive motor

Electric motor (high frequency, water-cooled)

Blade drive motor	
Parameter	Value
Voltage	400 V
Output at 16 A Output at 32 A	8 kW 11 kW
Transmission ratio	1:5

6.5 Electric feed motors with gears and brake

Electric feed motor with gears and brake	
Parameter	Value
Power	150 W
Voltage	48 V

6.6 Saw blades

Saw blades		
Parameter	Value	
Saw blade max.	Ø 750 mm	
Fully detachable saw blade	Ø 625 mm	
Blade holder	Ø 60 mm or 25.4 mm	
Blade fixing on wall saw	fixed	
Saw blade fixing on blade flange	central screw	
Saw blade fixing (flush cuts)	6 countersunk head screws reference circle 90 mm	
Blade flange Ø	110 mm	
Cutting depth	Ø 750 mm	310 mm
	Ø 650 mm	260 mm
	Ø 600 mm	235 mm
	Ø 450 mm	160 mm

6.7 Lubricants, fluids and sealants

Lubricants, fluids and sealants		
Parameter		Value
Gear oil		Klüber EG 4-150 (TYROLIT No. 10979011)
Gear grease	Penetration	420 to 460
	NLGI	00
Lubricating grease	Penetration	265 to 295
	NLGI	2

6.8 Connectable control unit

- ▶ The wall saw EX must only be operated with the EX control unit and a cable-connected or radio EX remote controller.

6.9 Water connection

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

EC Declaration of Conformity

Description	Wall saw
Type designation	EX
Year of construction	2004

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

Directive applied

Machinery Directives 2006/42/EC
 EC EMC directives 89/336/EC
 EC Low Voltage Directives 73/23/EEC
 EN 2002/96/EC Waste electrical and electronic equipment

Standards applied

EN 12100-1 EN 12100-2	Safety of machines – Basic concepts, general design principles
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 60204-1	Safety of machinery – Electrical equipment of machines
EN 61000-4-4	Electromagnetic compatibility (EMC)
EN 61000-4-5	Electromagnetic compatibility (EMC)
EN 61000-6-2	Electromagnetic compatibility (EMC)