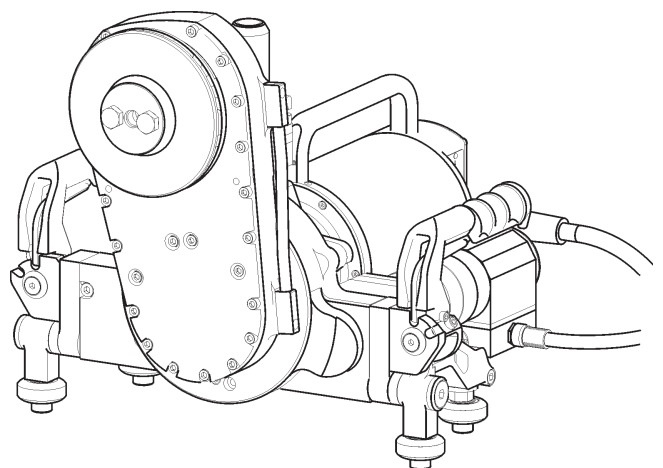


Operating Instructions

Wall saw WSE1217★★★ USA

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.

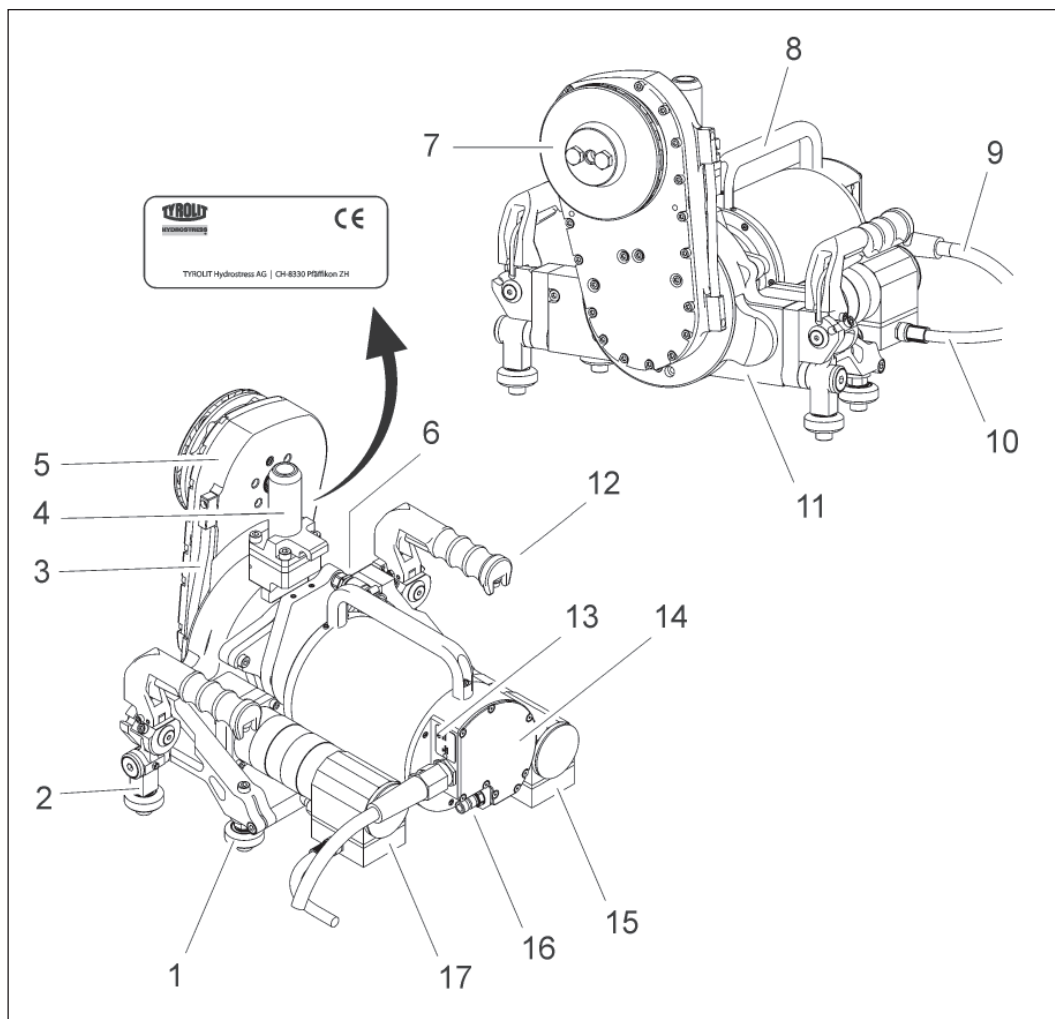
- ▶ Never connect or disconnect cables when the control unit is switched on.

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

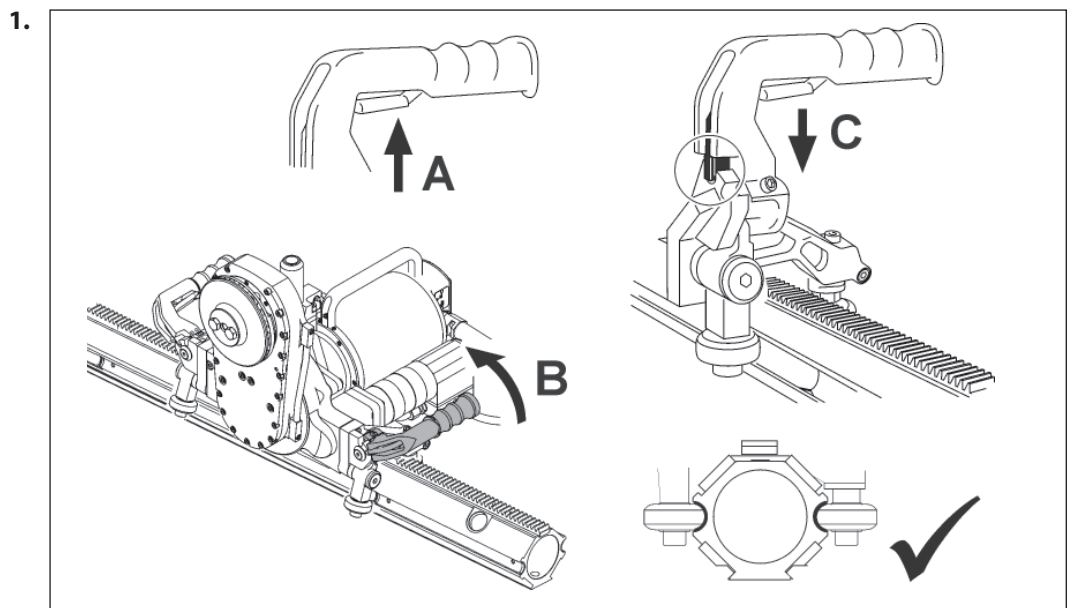


Components

- | | |
|---------------------------|---|
| 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 | |

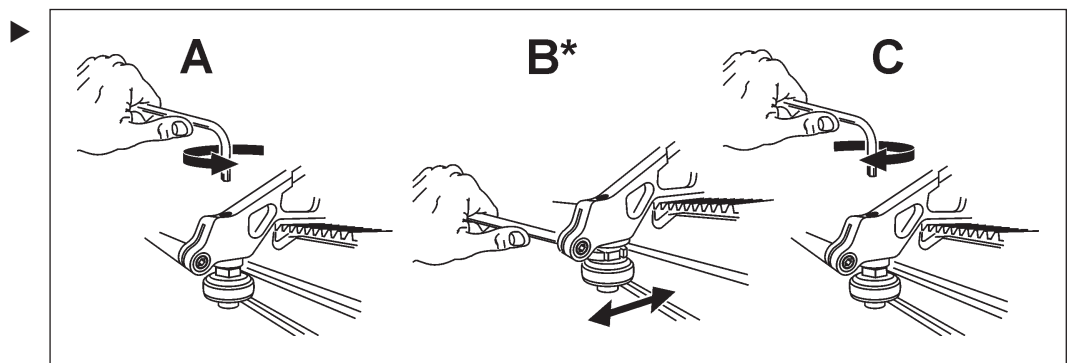
3 Assembly / Disassembly

3.1 Place the wall saw on the guide rail



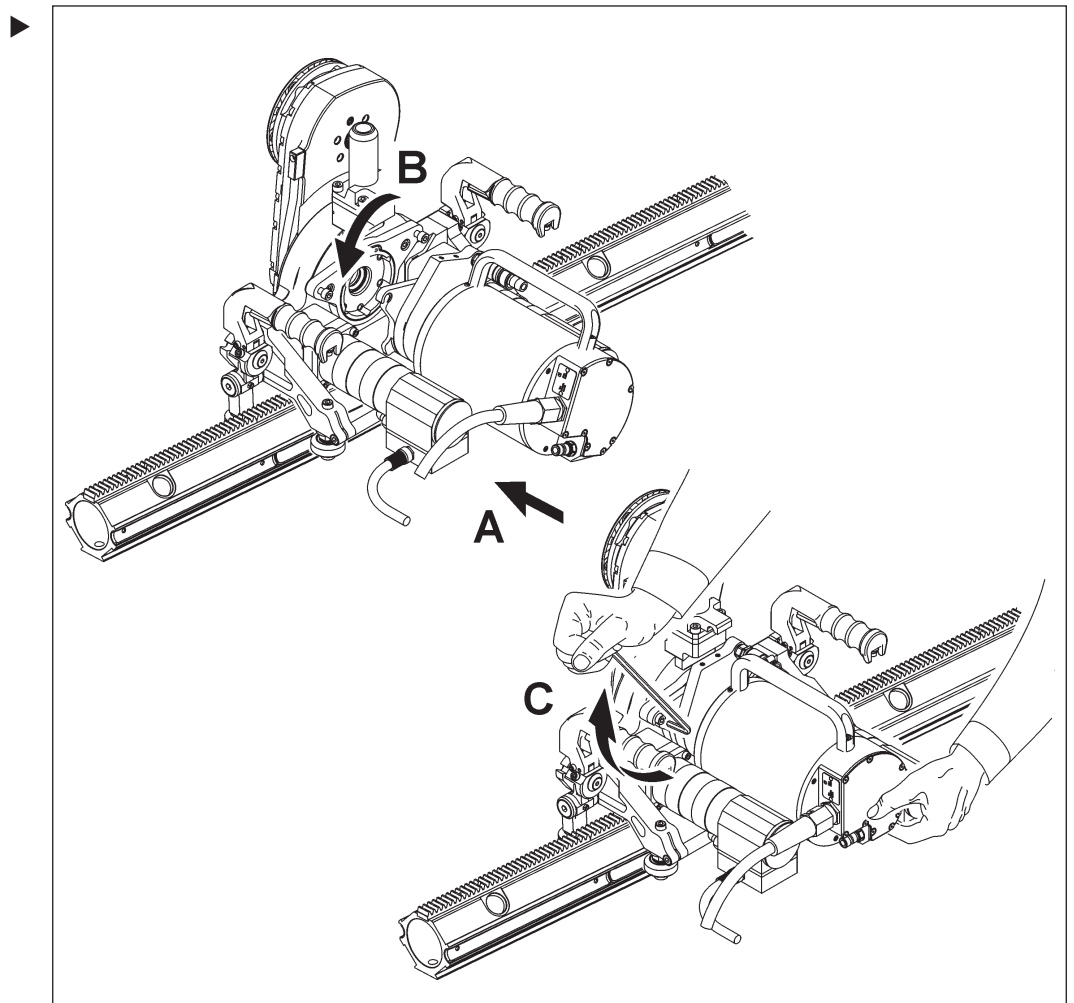
2. If the grips fail to engage or the wall saw sits too loosely on the guide rail: adjust the guide rollers.

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

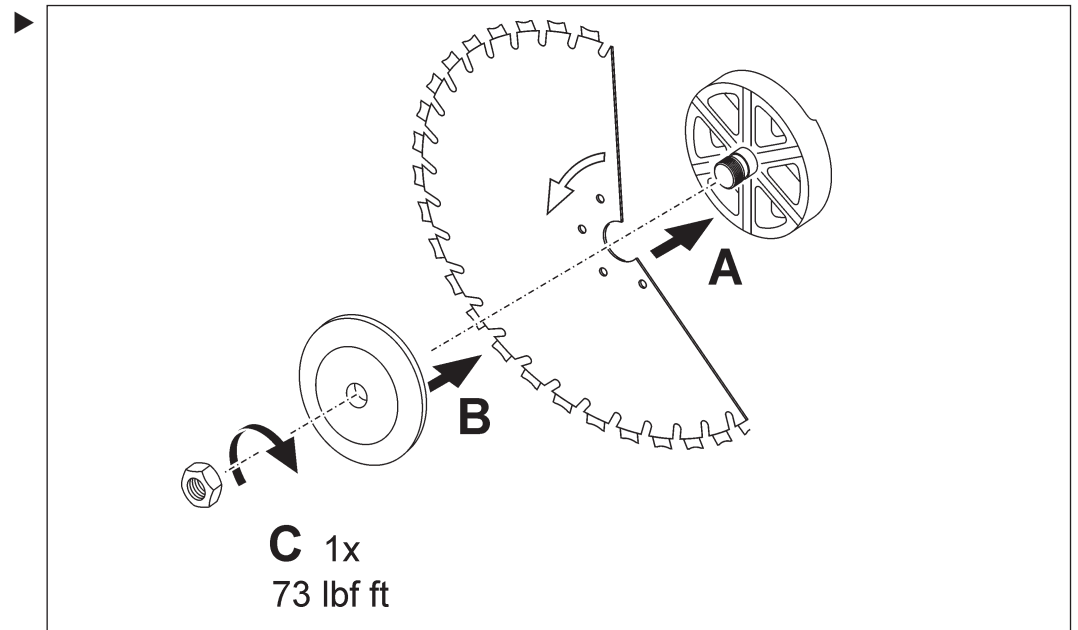
- ▶ During initial installation, remove the flush cut anchoring screws on the quick-release flange.

3.4.2 Preassemble the saw blade unit

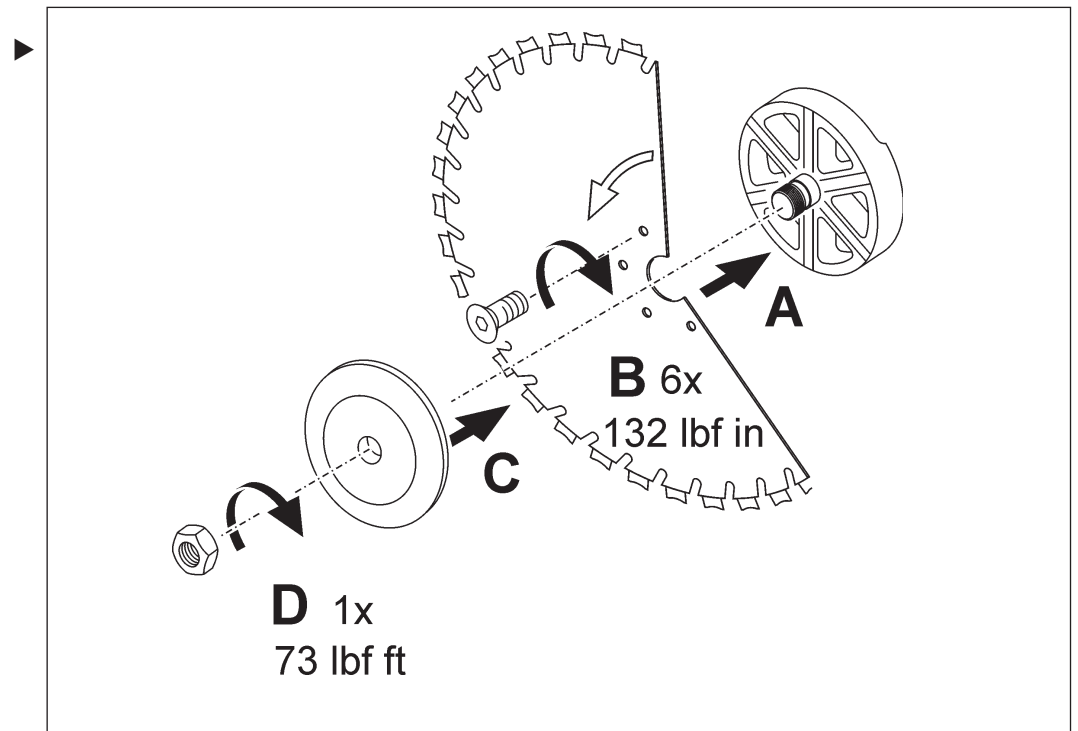


The direction of rotation of the saw blade must match the direction of rotation of the machine.
 Correct alignment: Countersinking of the fastening holes against the blade cover.

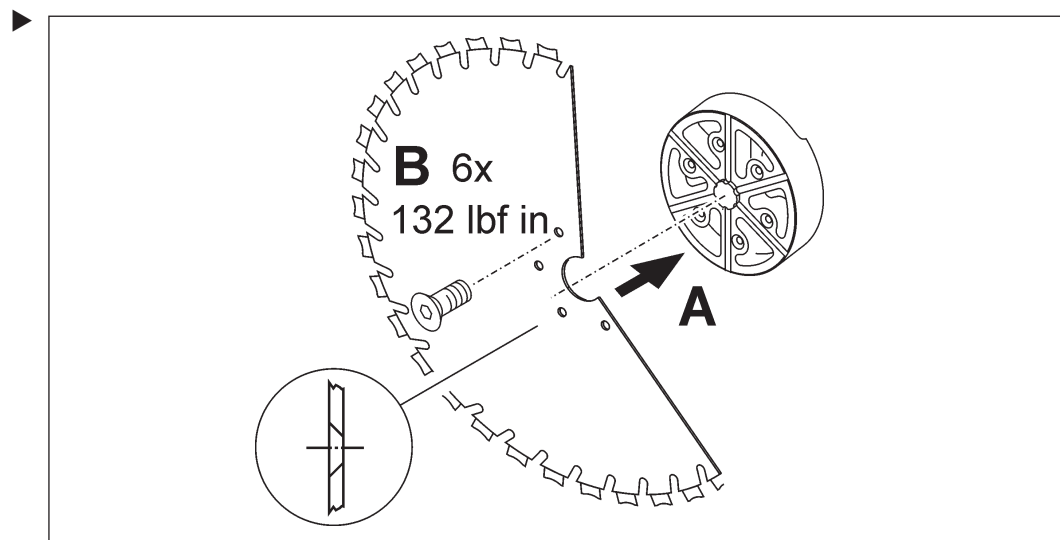
For normal cuts with saw blades up to Ø 42"



For normal cuts with saw blades bigger than Ø 42"



For flush cuts



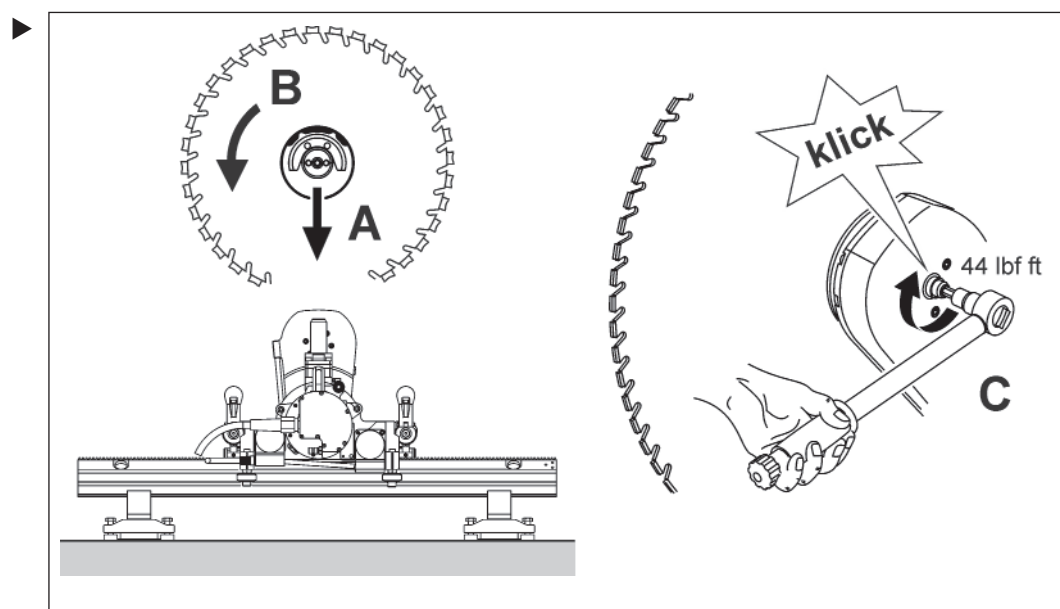
3.4.3 Fastening the saw blade unit



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 44 lbf ft.



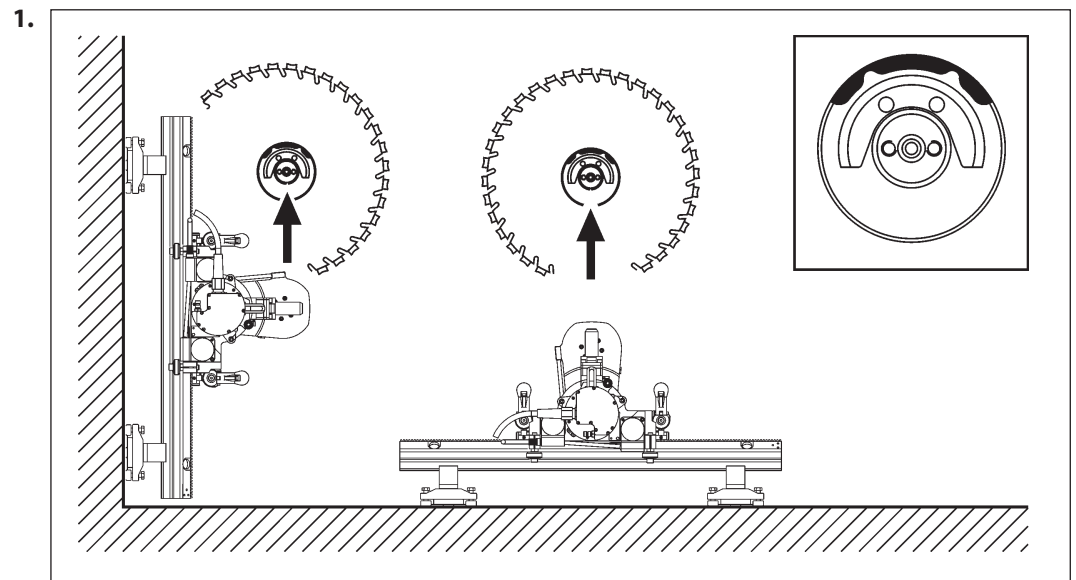
3.5 Removing the saw blade unit



WARNING

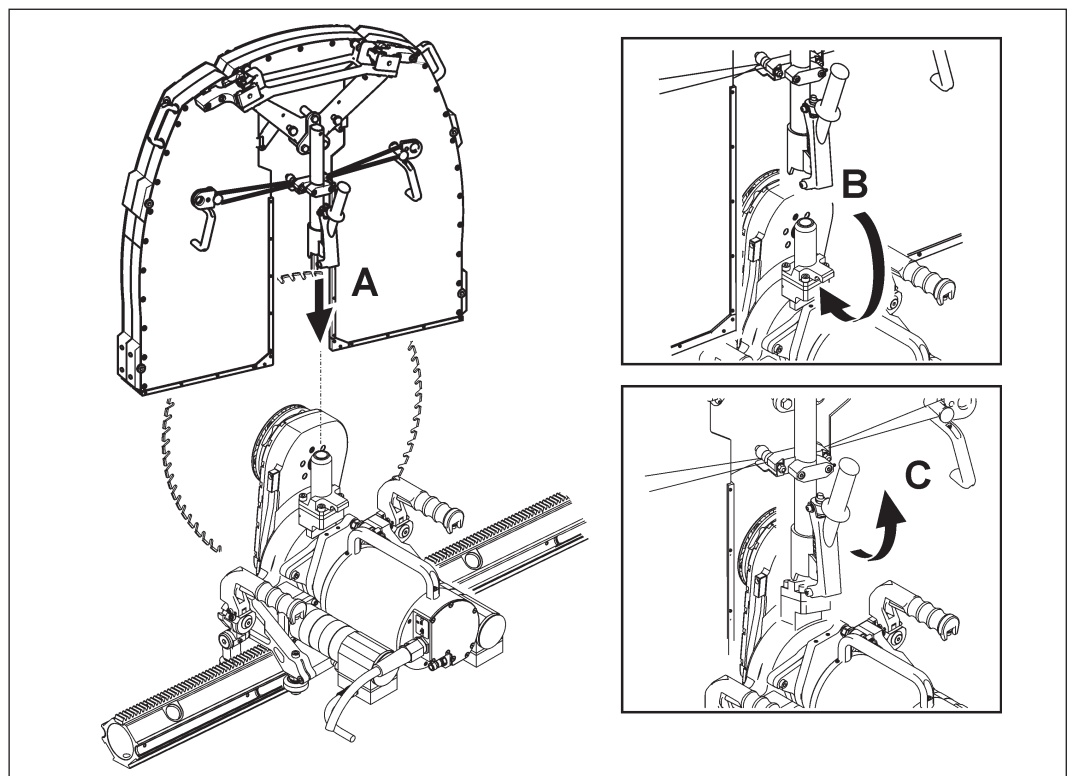
Injuries can be caused if the saw blade drops down.

► 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.

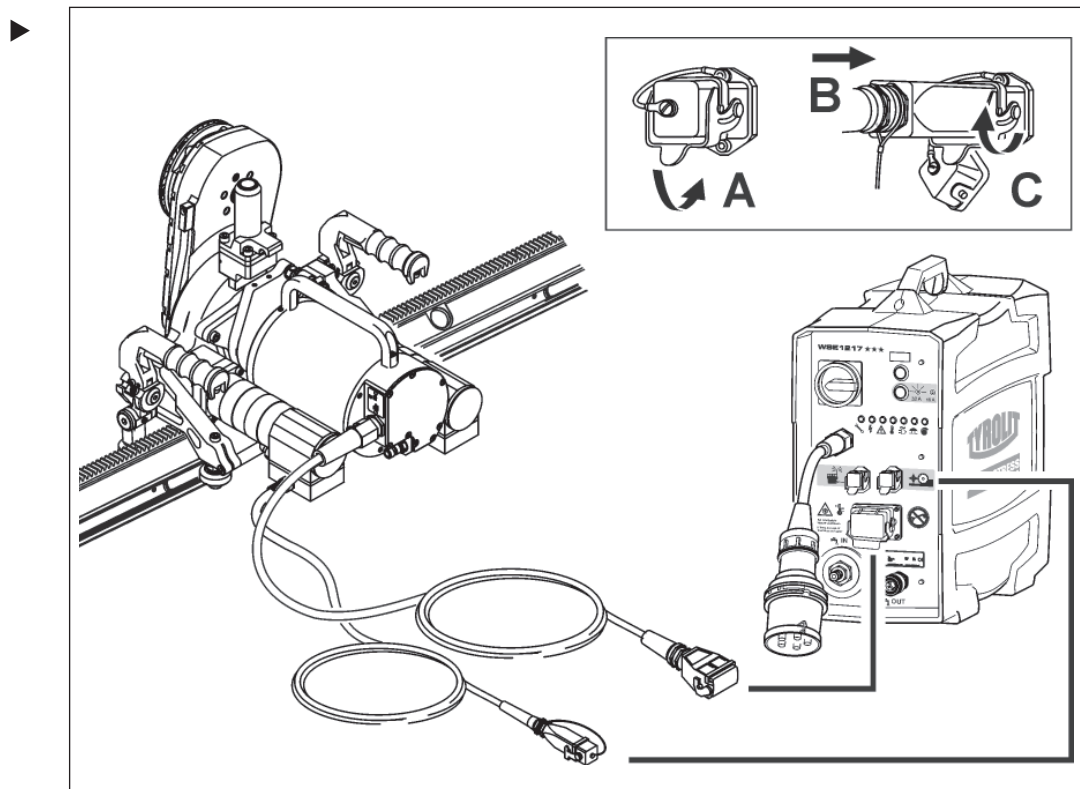
3.6 Mounting the blade guard



► Mount the blade guard according to the instruction leaflet.

3.7 Connecting the wall saw to the control unit

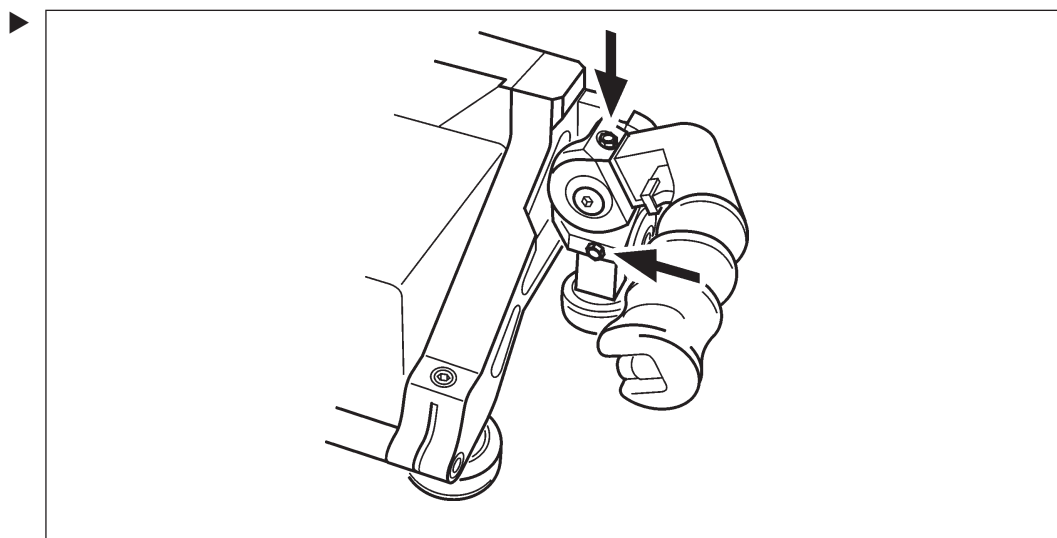
- ✓ The control unit is isolated from the power supply.
- ✓ Connectors/plugs are clean.
- ✓ Cables are undamaged.



4 Maintenance and servicing

Maintenance and servicing table		Before every commissioning	At end of work	Weekly	Yearly	After faults	After damage
Wall saw	▶ Retighten loose bolts and nuts (refer to the tightening torque specifications)	X				X	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	▶ Clean with water		X				
	▶ 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					

4.1 Lubricating the lock unit

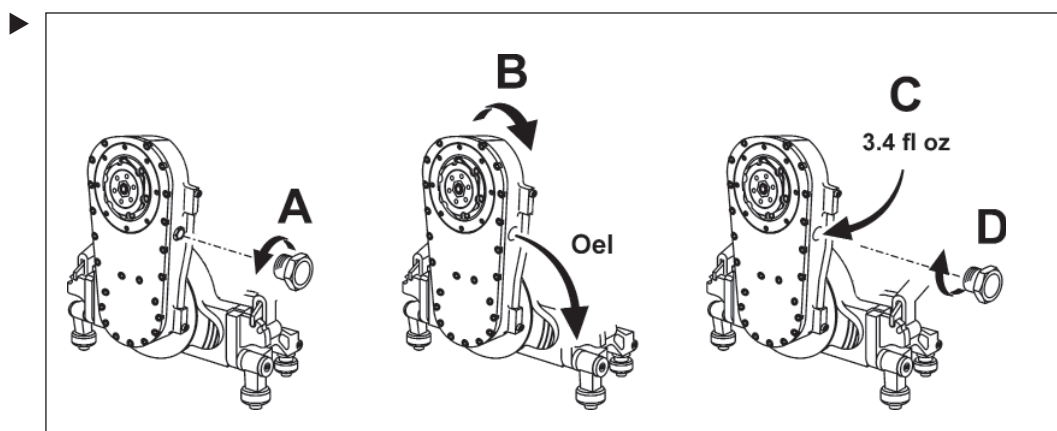


4.2 Changing the gear oil

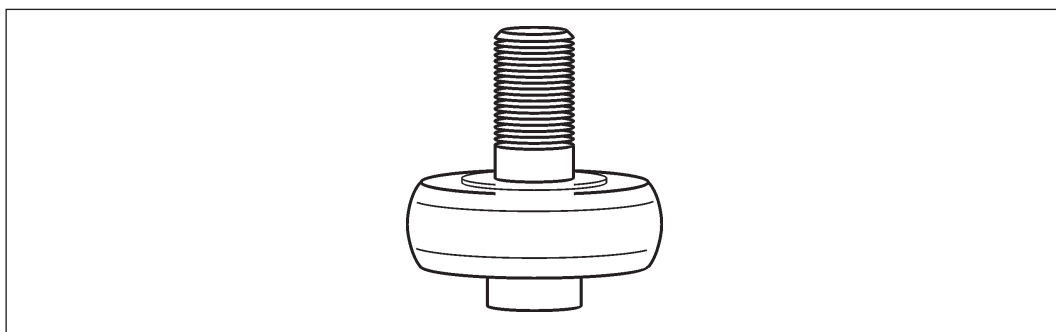


The use of unsuitable oil can damage the wall saw.

- ▶ Use only TYROLIT Hydrostress AG oil containers (no. 10981362, 3.4 fl oz).



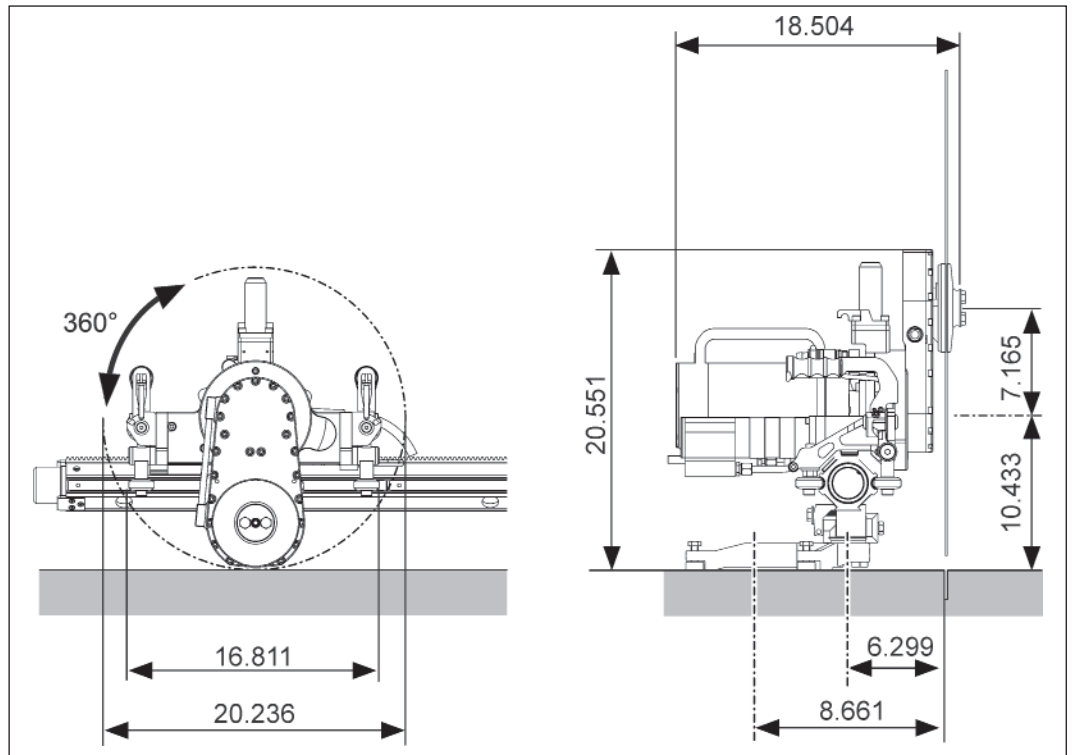
4.3 Replacing the guide rollers



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

5 Technical data

5.1 Dimensions



Measurements in inch

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

5.3 Weight

Weight	
Parameter	Value
Wall saw head complete	48.5 lbs
Drive motor	33 lbs

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 Ø48" mm not in cutting operation under full load

5.8 Saw blades

Saw blades		
Parameter		Value
Saw blade max.		Ø 48"
Fully detachable saw blade		Ø 32"
Blade holder		Ø 1"
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 3.5 inch
Blade cover mounting on blade flange		1 hexagonal nut
Cutting depth	Ø 26"	9.194 inch
	Ø 32"	12.803 inch
	(Ø 36")	(13.993 inch)
	Ø 42"	17.643 inch
	Ø 48"	20.796 inch
Circumferential speed		125 ft/s

5.9 Lubricants, fluids and sealants

Lubricants, fluids and sealants		
Parameter		Value
Gear oil (swivel arm)		Klüber EG 4 (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★★★ (Ø 26" / Ø 32" / Ø 42" / Ø 8")

Water connection	
Parameter	Value
Pressure	min. 29 psi / max. 87 psi
Quantity	At least 1,05 gpm
Max. temperature	77 °F

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

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Pfäffikon, 28.04.2011



Pascal Schmid
Head of Development

