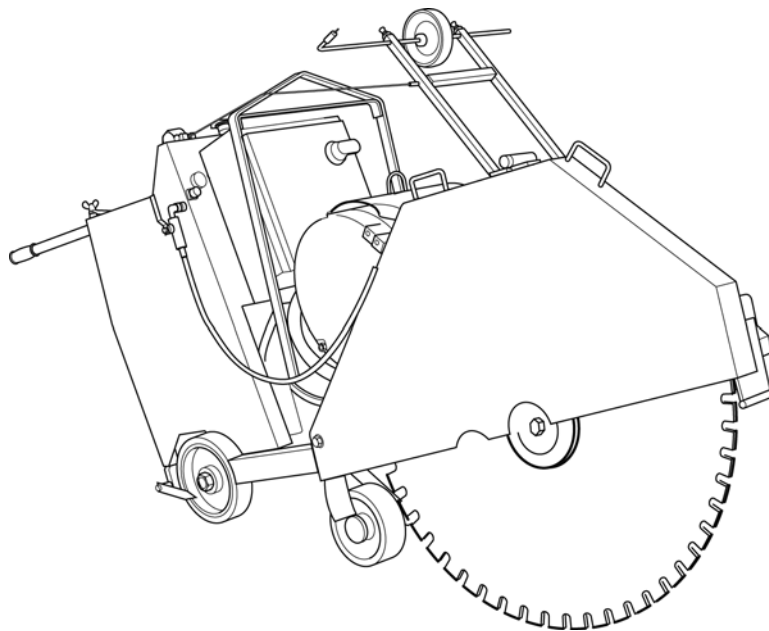


Operating Instructions

Floor Saw FSE1240 ★ ★

Index 001



Congratulations!

You have decided to purchase a tried and tested TYROLIT-Hydrostress unit and have thus acquired a highly sophisticated and reliable state-of-the-art unit. The exclusive use of only TYROLIT Hydrostress spare parts ensures 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.

Should you need more details concerning your TYROLIT Hydrostress unit in order to keep it in perfect condition, please contact our after-sales service for further information.

We hope that you enjoy untroubled and fault-free working with your TYROLIT unit.

TYROLIT Hydrostress

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CH-8330 Pfäffikon
Switzerland
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Fax 0041 (0) 44 952 18 00

1 Safety



These instructions are just one part of the documentation which is supplied together with the floor saw. These instructions go together with the "Safety Manual / System Description for Floor Saws" to form a complete set of documentation.

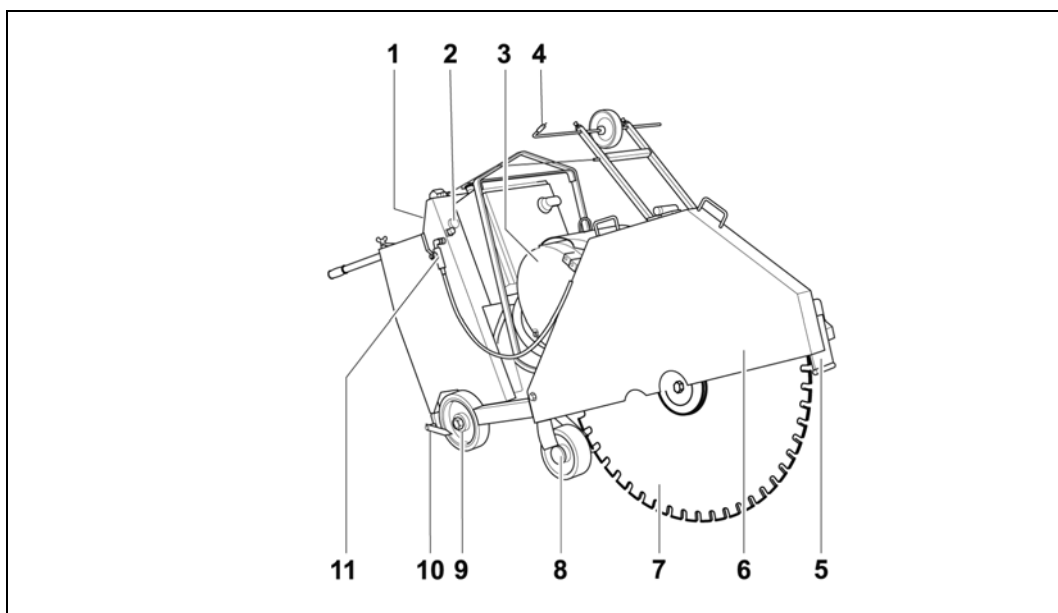


DANGER

Failure to comply with the safety instructions in the "Safety Manual / System Description" may result in serious injury or death.

- ▶ Please ensure that the "Safety Manual / System Description for Floor saws" has been read and understood in full.

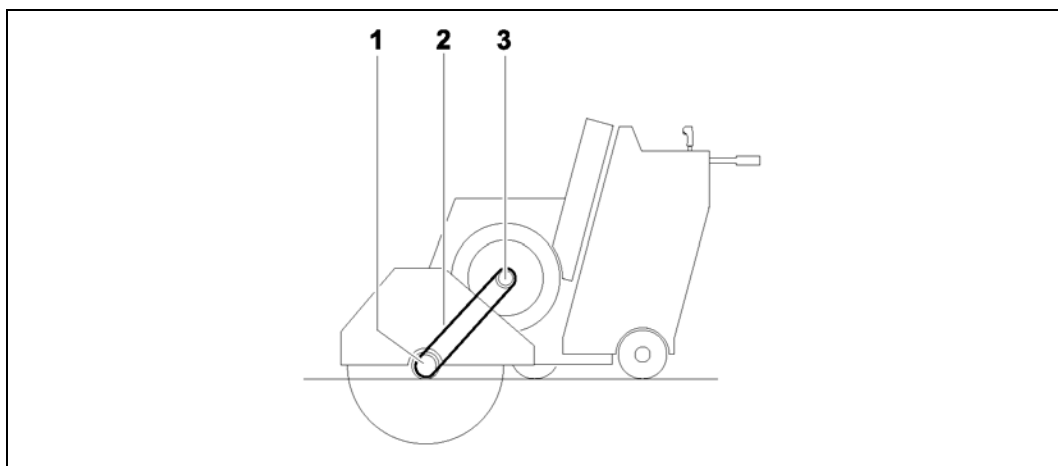
2 Design



Components

- | | | | | | |
|---|-------------------|---|--------------|----|----------------|
| 1 | Operating console | 5 | Shaft cover | 9 | Drive wheel |
| 2 | Name plate | 6 | Blade guard | 10 | Rear cut guide |
| 3 | Main motor | 7 | Saw blade | 11 | Water feed |
| 4 | Front cut guide | 8 | Rocker wheel | | |

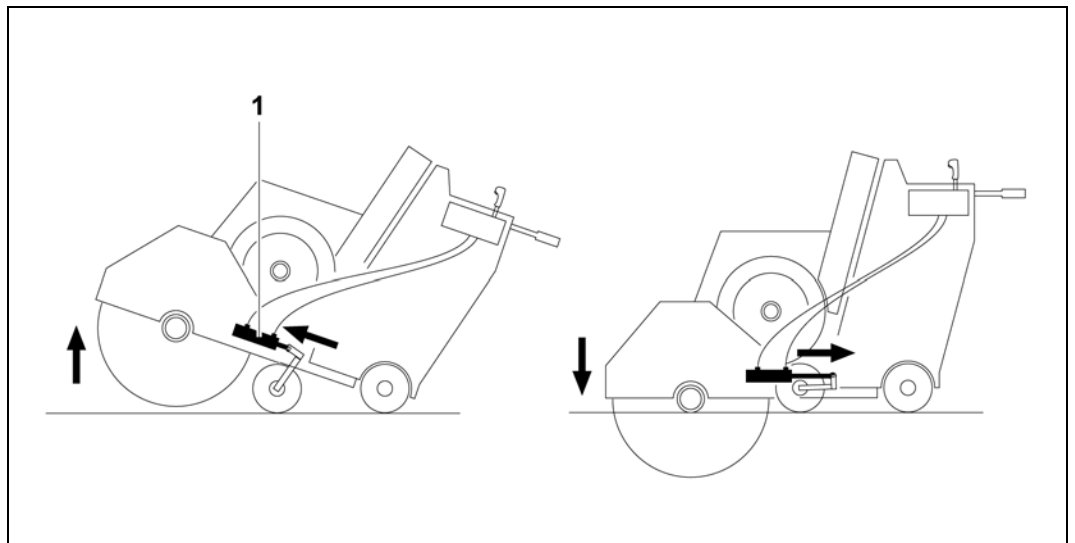
2.1 Saw blade drive



Saw blade drive (schematic)

- | | |
|---|------------------------|
| 1 | Blade drive shaft |
| 2 | Drive belt |
| 3 | Main motor drive shaft |

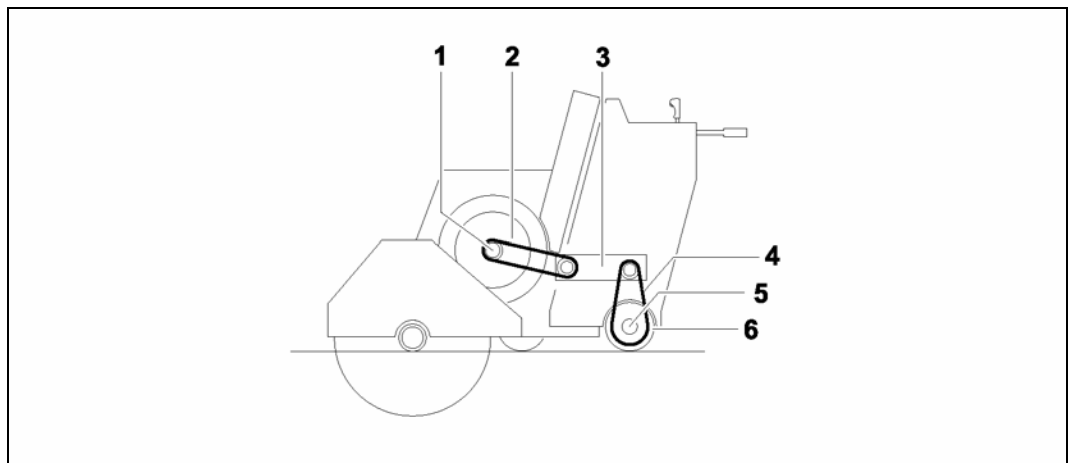
2.2 Lift drive



Lift drive (schematic)

- 1 Hydraulic cylinder

2.3 Travel drive



Travel drive (schematic)

- | | | |
|----------------------------|----------------------|---------------------|
| 1 Drive shaft (main motor) | 3 Hydrostatic motors | 5 Wheel drive shaft |
| 2 Hydrostat drive belt | 4 Drive chain | 6 Drive wheel |

3 Transport

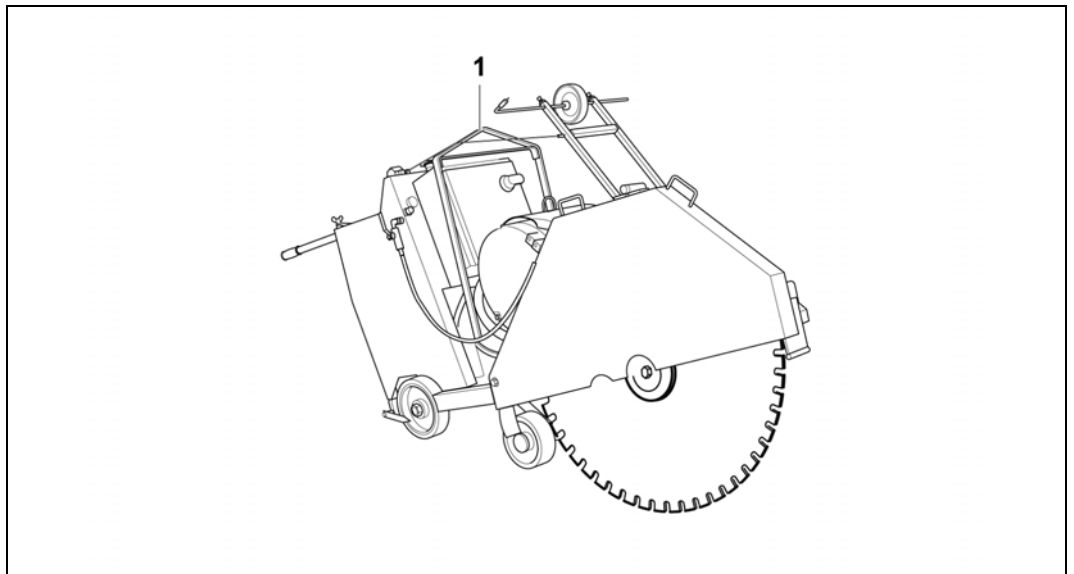


DANGER

Inexpert transport may result in death or serious injury.

- ▶ Floor saws must only be transported with the main motor switched off.
- ▶ Only transport vehicles, lifting tools and load suspension devices with sufficient load-bearing capacity must be used.
- ▶ Floor saws must only be hitched by the hitching points provided.
- ▶ Appoint an expert marshaller.
- ▶ When transporting by crane do not stand underneath suspended load.
- ▶ Always have the floor saw in your line of vision while it is being transported.

3.1 Hitching points

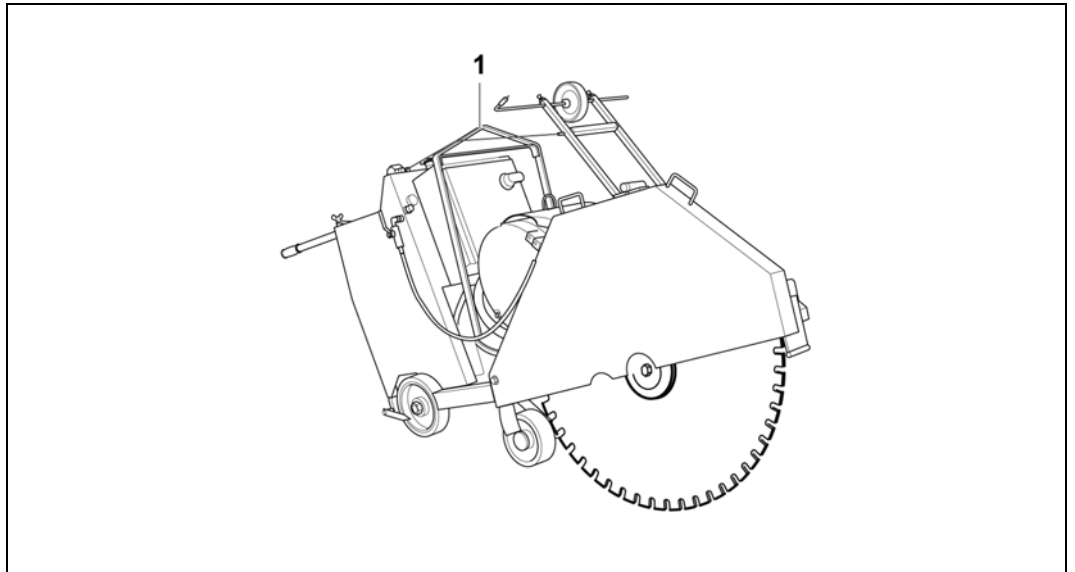


Hitching points

- 1 Crane hitching device

4 Initial start-up

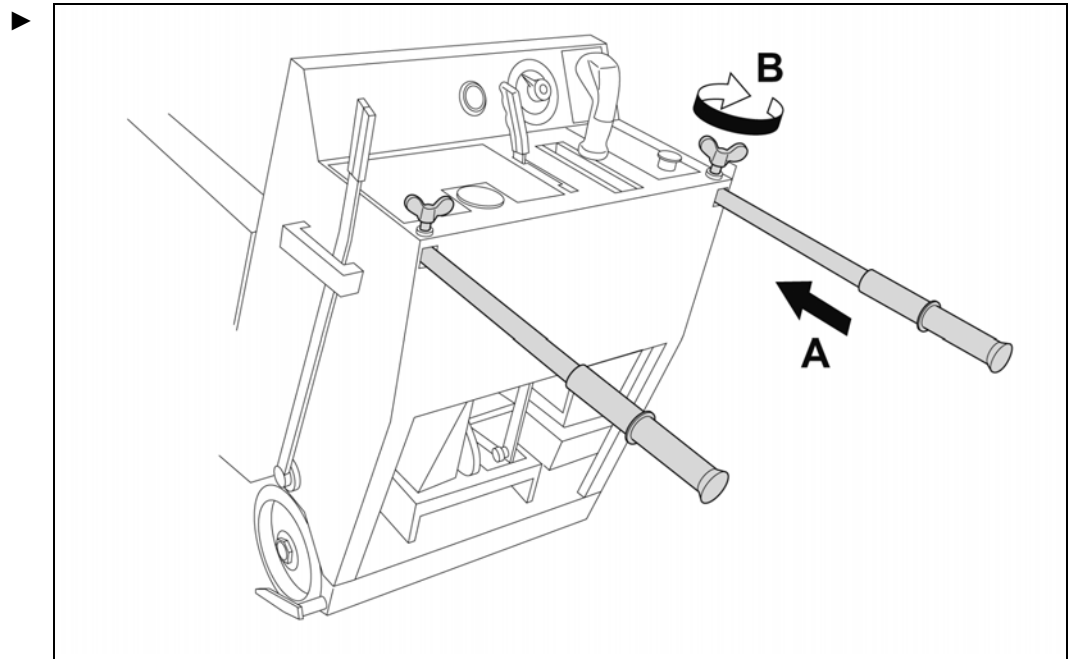
4.1 Fitting battery



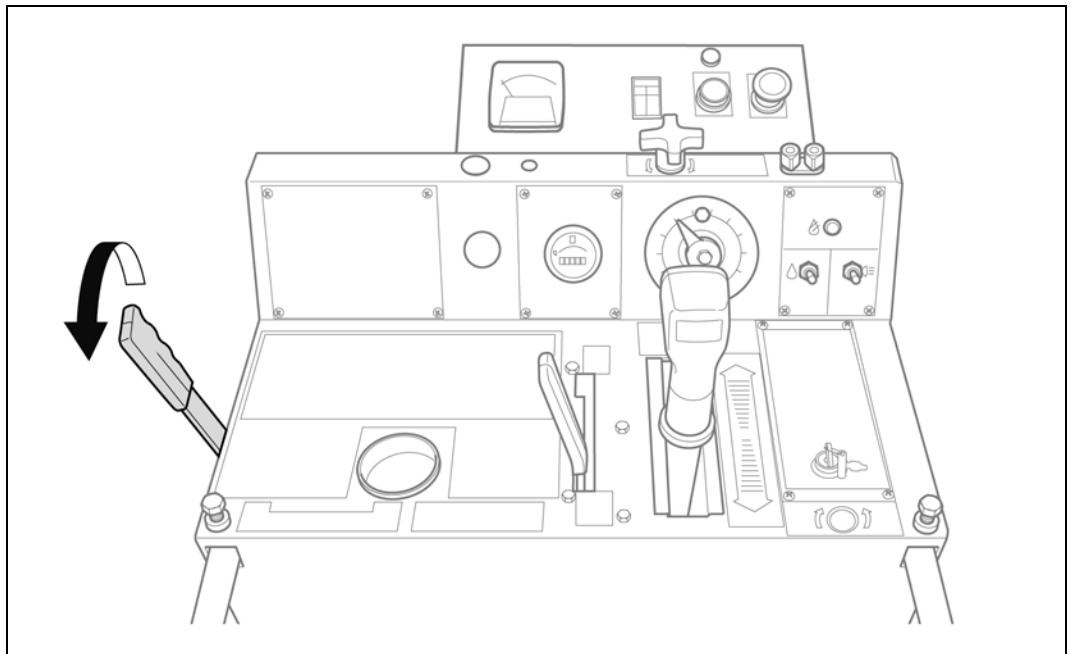
- Fit battery (for type see Technical Data).

5 Assembly / Set-up

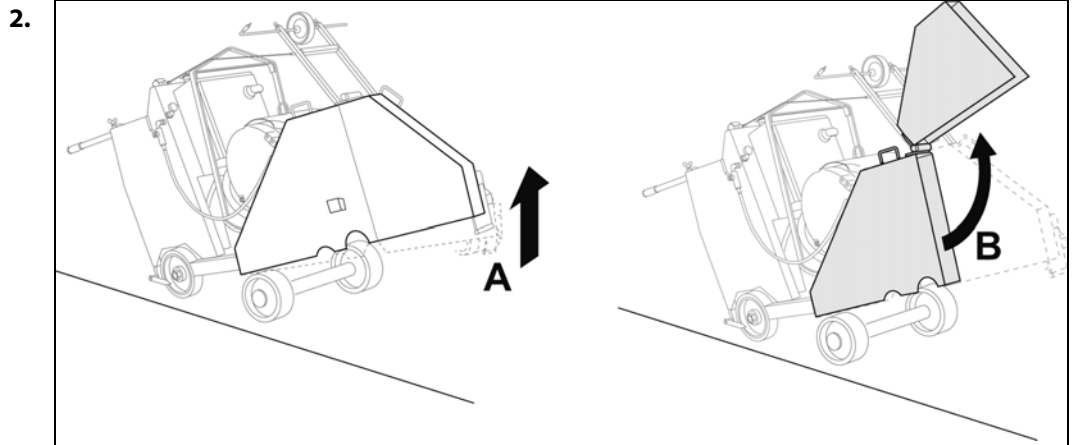
5.1 Mounting grip



5.2 Mounting saw blade



1. Apply hand brake



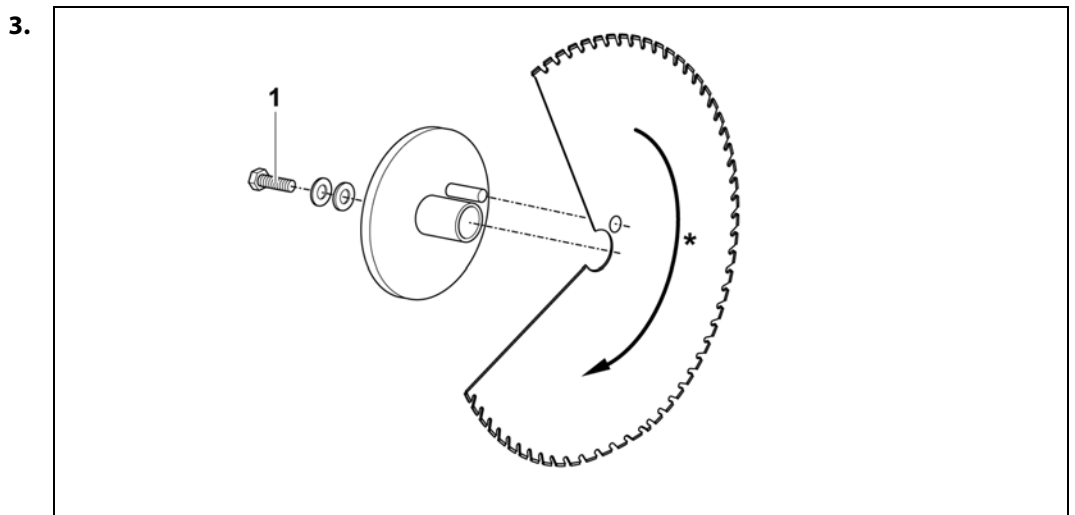
DANGER

Parts that fly off (segments, concrete splinters, saw blade, etc.) may cause serious injury or even death.

- ▶ Floor saws must only be operated with a blade guard.
- ▶ When assembling the saw blade on the right-hand side use the anchoring screw with the left-hand thread.
When assembling the saw blade on the left-hand side, use the anchoring screw with the right-hand thread.

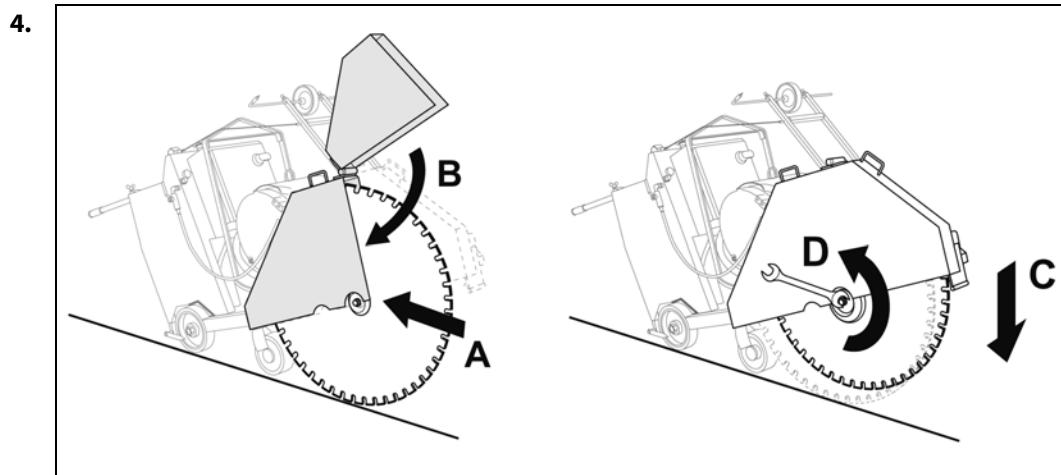


- ▶ Note the direction or rotation arrows on the saw blade.



1 Anchoring screw

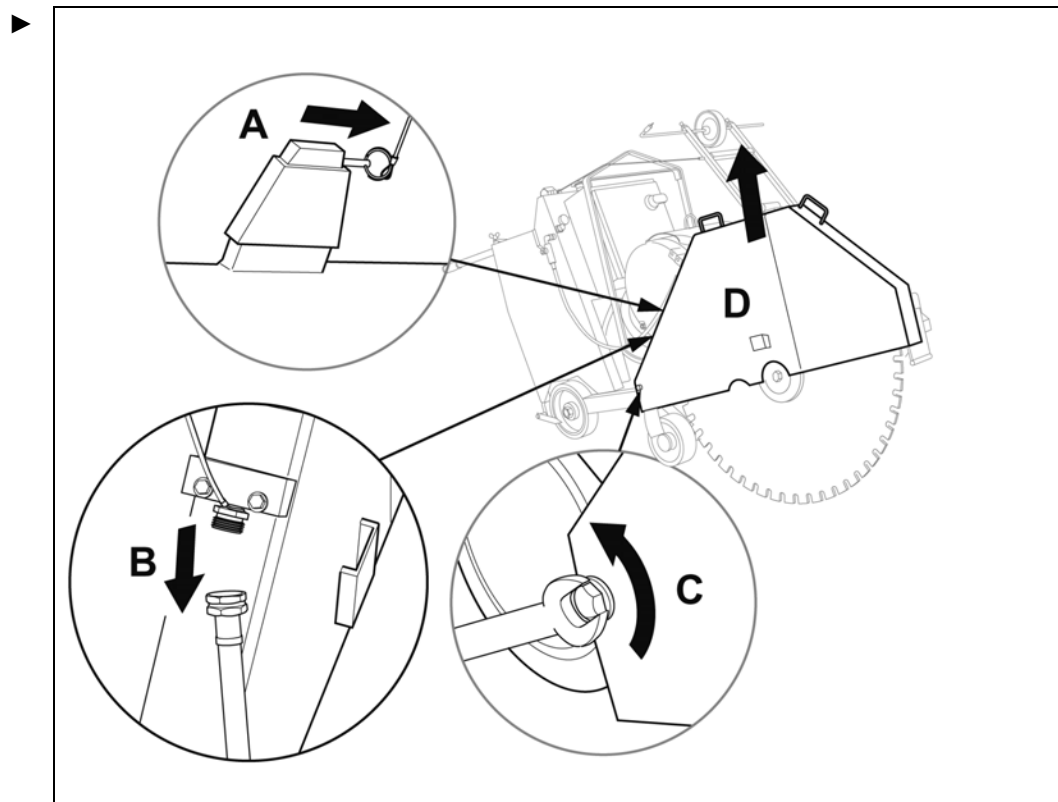
*Note the direction of rotation



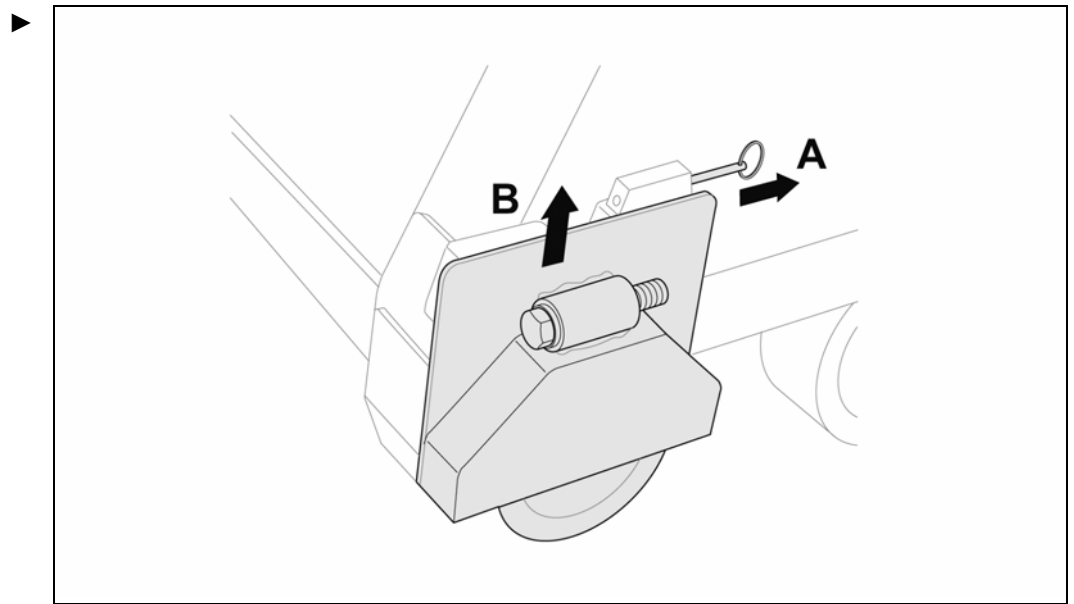
C: To prevent the saw blade rotating while being tightened, carefully place the saw blade on the floor.

5.3 Mounting saw blade on the other side

5.3.1 Disassemble the blade guard



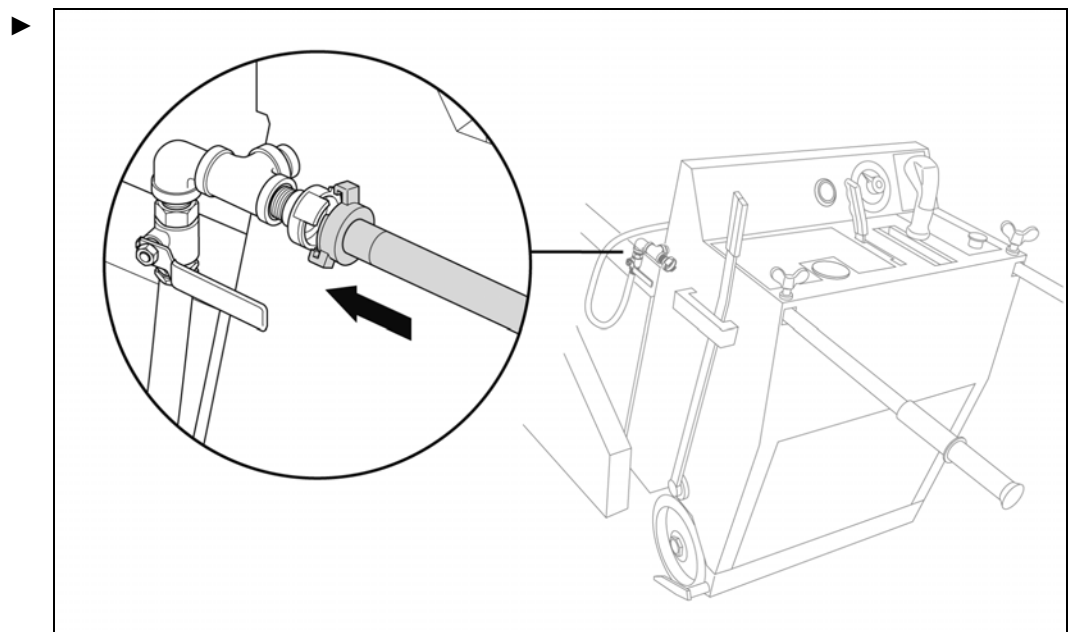
5.3.2 Disassemble the shaft cover



5.3.3 Assembling the blade guard and shaft cover on the other side

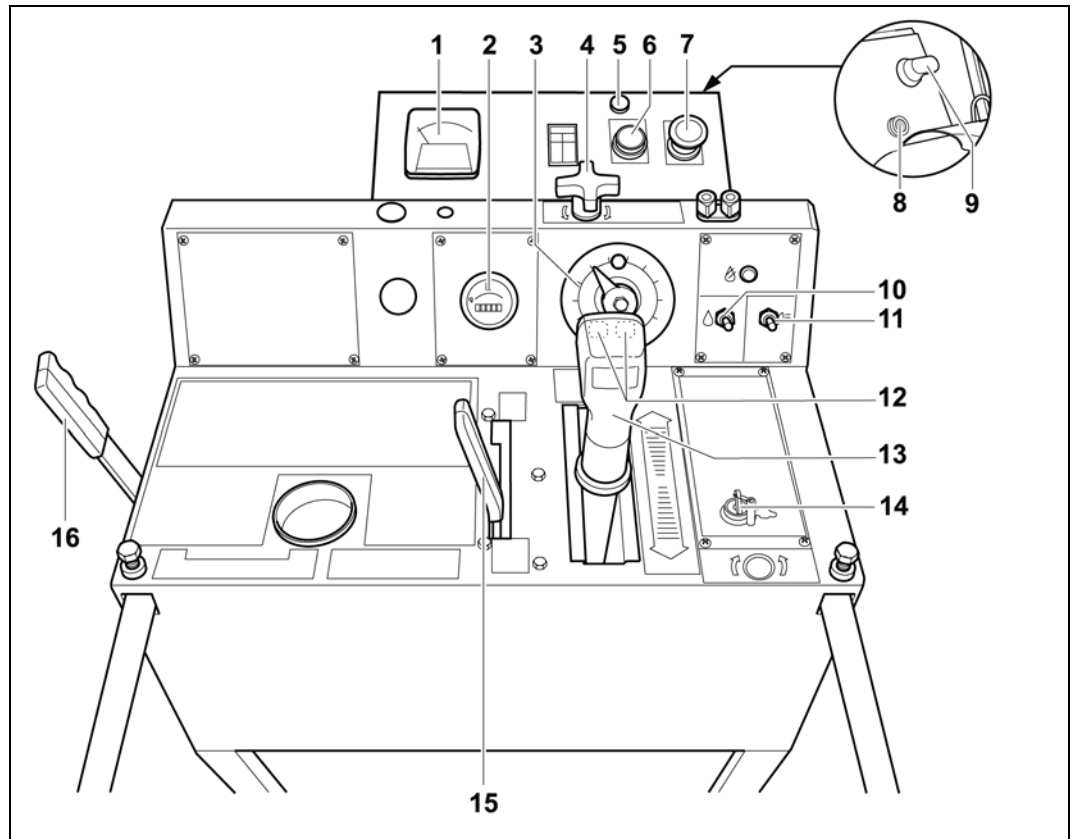
Assembly of the blade guard and the shaft cover is performed in the opposite order to disassembly.

5.4 Connecting water line



6 Operation

6.1 Overview of operating elements



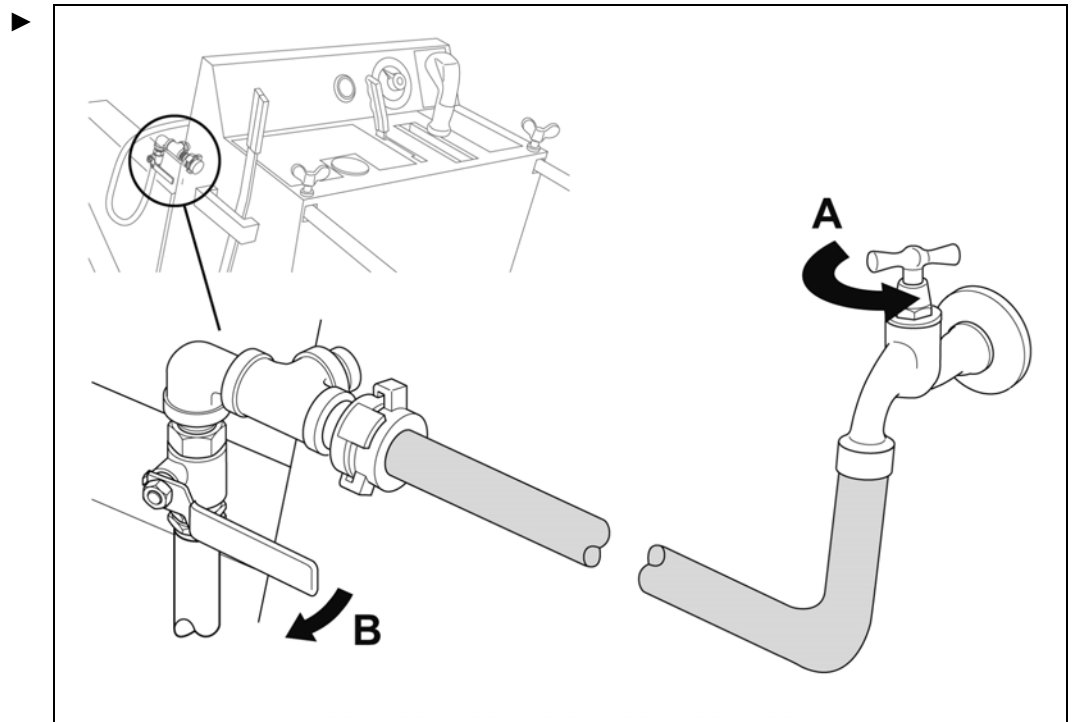
Operating elements

- | | | | | | |
|---|------------------------------|----|---|----|---------------------------|
| 1 | Ammeter | 9 | Rotating field selector switch | 14 | Key-operated switch |
| 2 | Operating hours meter | 10 | On / Off control for internal water pump | 15 | Feed gears coupling lever |
| 3 | Cutting depth indicator | 11 | On / Off control for headlight | 16 | Hand brake |
| 4 | Bit stop locking | 12 | Raise / Lower buttons | | |
| 5 | Rotary field warning lamp | 13 | Feed adjuster (forward / backward travel) | | |
| 6 | Start button | | | | |
| 7 | EMERGENCY STOP switch | | | | |
| 8 | Reset button | | | | |

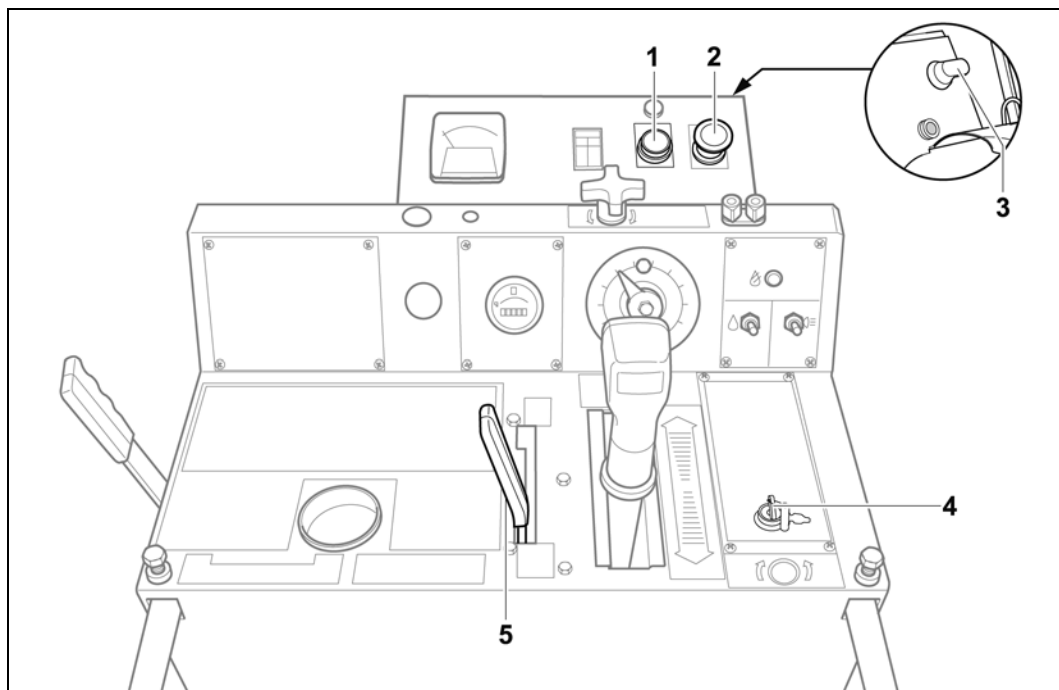
6.2 Positioning the floor saw



1. Release the hand brake.
2. Slide floor saw into the working position.
3. Fit the cutting guides to the floor saw.

6.3 Connecting the water supply



6.4 Switch on motor



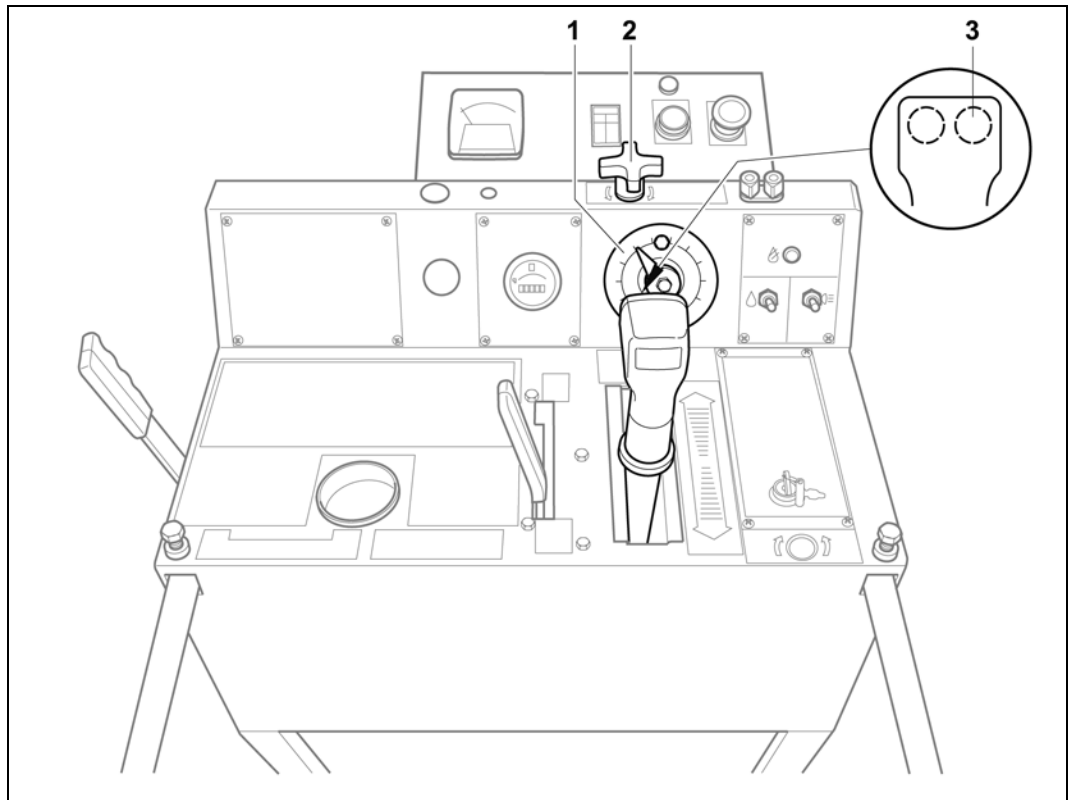
Symbol	Significance
	Coupling lever in coupled position
	Coupling lever in uncoupled position

- ✓ Coupling lever (5) is in the uncoupled position
- ✓ **EMERGENCY STOP** switch (2) has been released

1. Set key-operated switch (4) to **I**.
2. Press start button (1).
3. Check direction of rotation and reverse as necessary with the rotating field selection switch (3).

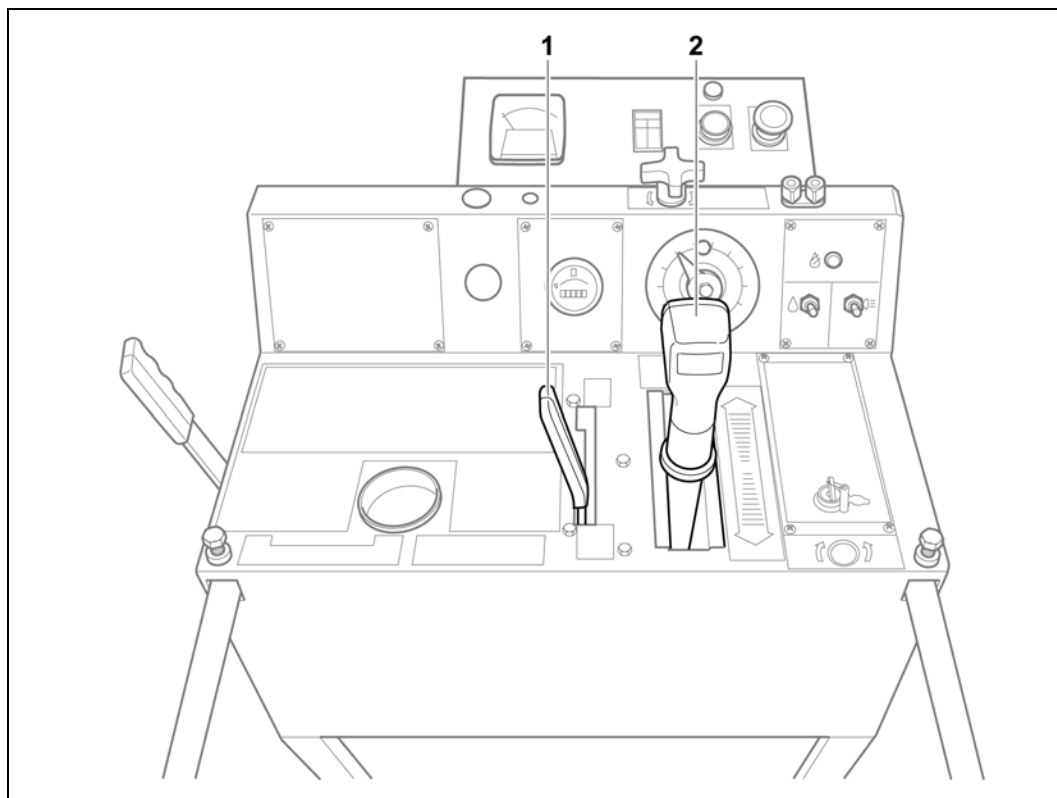
6.5 Lowering / raising saw blade

6.5.1 Lowering example



1. Press the **Lower** button (3) until the saw blade touches the material to be cut.
2. Set the cutting depth indicator (1) in the **0** position.
3. Using the **Lower** key, lower the saw blade to the desired cutting depth.
4. Tighten up the bit stop locking (2).

6.6 Adjusting the feed

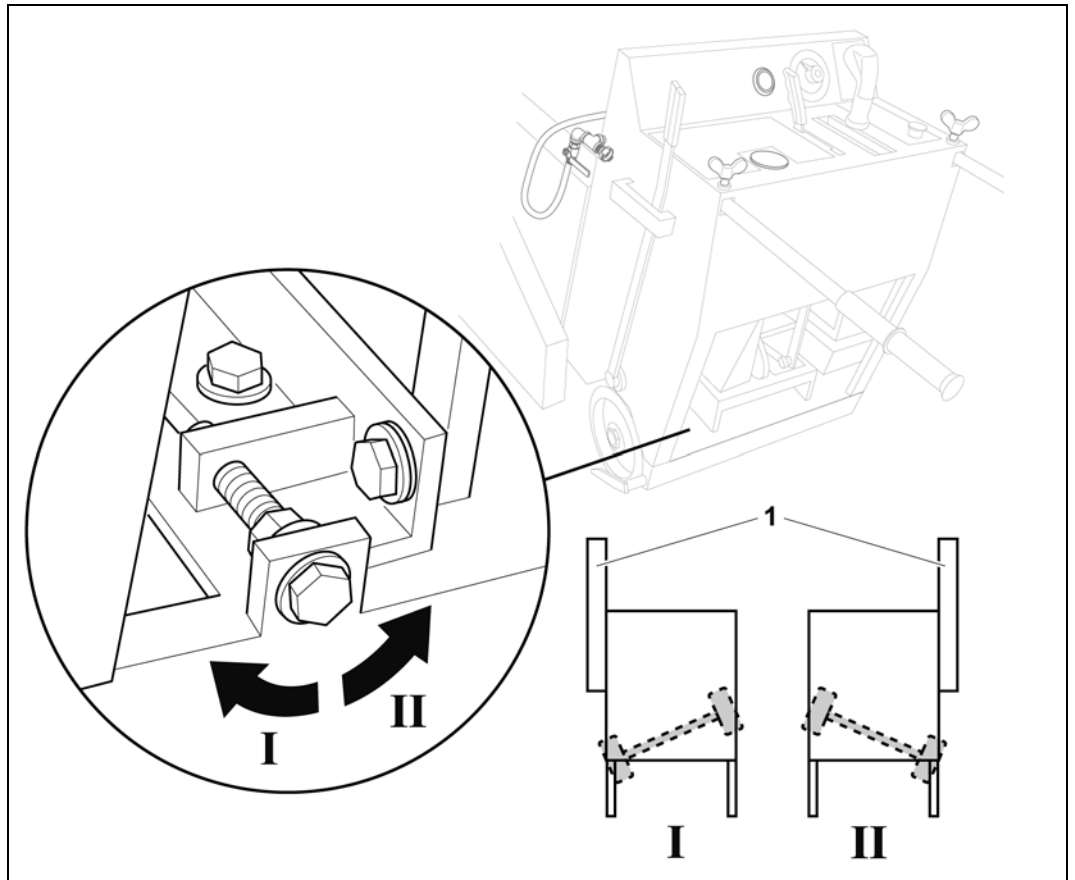


Symbol	Significance
	Coupling lever in coupled position
	Coupling lever in uncoupled position
	Feed adjuster in the forwards direction of travel
	Feed adjuster in the backwards direction of travel

- ✓ Feed adjuster is in the neutral position
- ✓ Hand brake has been released

1. Place coupling lever (1) in the coupled position.
2. Using the feed adjuster (2), set the direction of travel and speed.

6.7 Correcting the tracking



Correcting the tracking

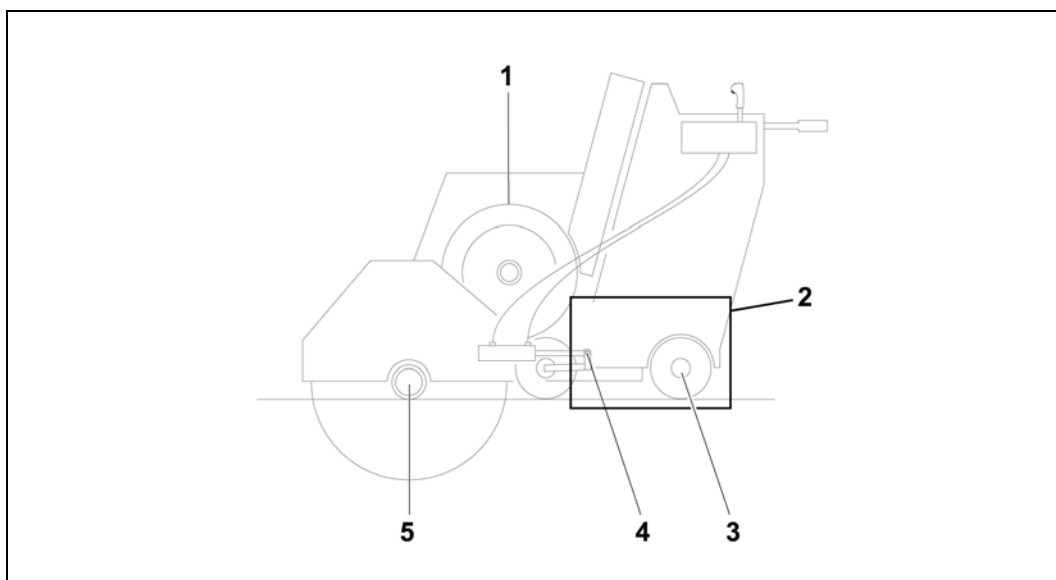
1 Saw blade

- ▶ If the saw blade drifts, adjust the rear axle with the adjusting screw.

7 Maintenance

When?	What?
Daily	▶ Perform a visual check for damage.
Weekly	▶ Check belt and chain tension and adjust as necessary.
Every 50 hours of operation	▶ Lubricate grease nipples.
Annually or every 100 operating hours	▶ Arrange a major service by TYROLIT Hydrostress AG or an authorised representative.

7.1 Grease nipples



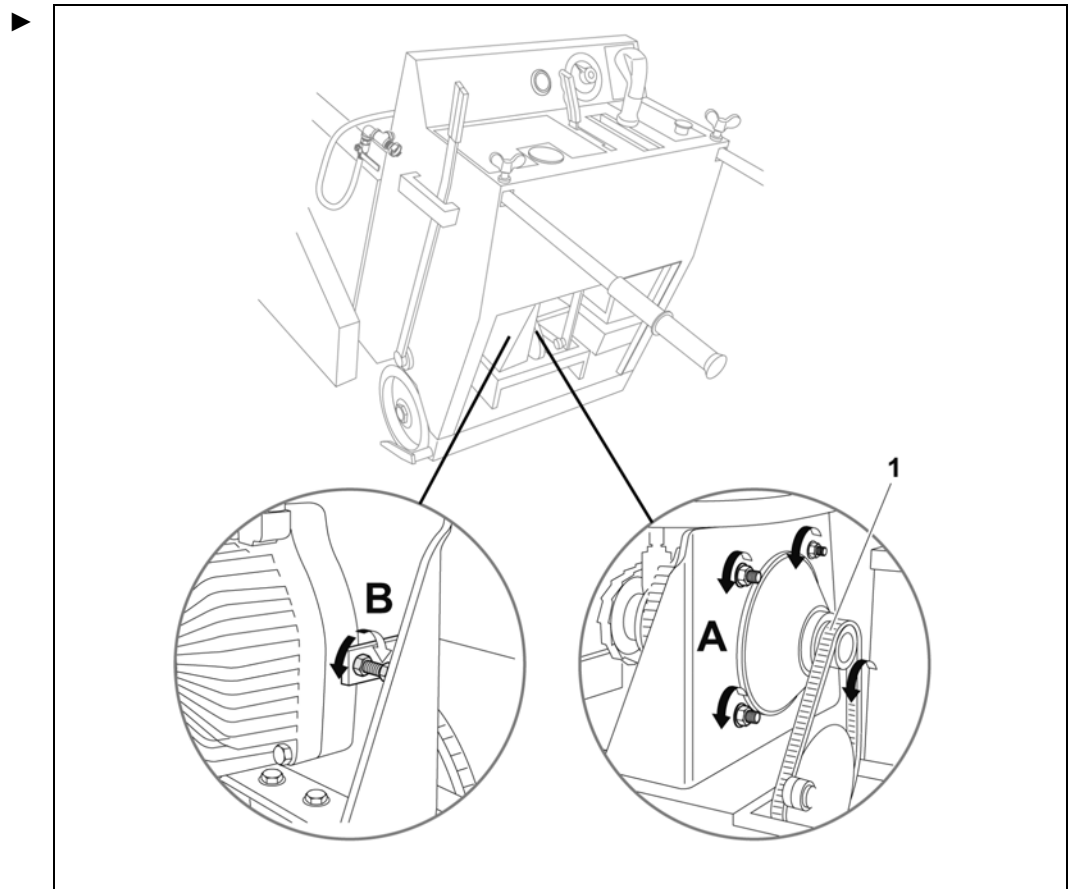
Position of grease nipples

- | | |
|---------------------------------------|--------------------------------------|
| 1 Motor: 2 items | 4 Cylinder eye: 1 item |
| 2 Feed adjuster control rods: 4 items | 5 Blade drive shaft bearing: 2 items |
| 3 Wheel drive shaft bearing: 2 items | |

7.2 Tensioning belt on travel drive

- ▶ Remove the appropriate number of belt links until the belt is tensioned.

7.3 Tensioning chain on travel drive



Tensioning chain

- 1 Chain

8 Malfunctions

Malfunction	Possible cause	Solution
Saw blade jammed	Saw blade is jammed in the cutting material	<ul style="list-style-type: none"> ▶ Reverse the floor saw. ▶ If necessary release the saw blade by rocking. ▶ If necessary stop the motor, disassemble the saw blade and release this individually from the cutting material.
Saw blade does not rotate even though the motor is running	Belt tension too slack	▶ Tension or replace belt.
	Pulling pin on the anchoring flange has sheared off	▶ Mount new anchoring flange.
Feed not working	Operation of the control rods impaired	▶ Check control rods and arrange repair as necessary.
	Defective hydrostat	▶ Check hydrostat and if necessary have this repaired by a TYROLIT Hydrostress engineer.
	Defective chain	▶ Have the chain replaced by a TYROLIT Hydrostress engineer.
	Main motor belt slipping	<ul style="list-style-type: none"> ▶ Check belt for wear and if necessary have this replaced by a TYROLIT Hydrostress engineer. ▶ Increase belt tension as necessary.
Electric motor does not run	EMERGENCY STOP switch has been pressed.	▶ Release EMERGENCY STOP switch.
	Not plugged in to mains	▶ Plug in to mains
	Defective cable	▶ Check cable and change as necessary.
	Faulty electric motor	▶ Have electric motor checked by a qualified electrician.
	Wrong direction of rotation	<ul style="list-style-type: none"> ▶ Note rotary field warning lamp ▶ Shift forward / reverse switch

9 Technical data

9.1 Dimensions

Parameter	Value
Weight	610 kg
Cutting depth (max.)	480 mm
Blade uptake diameter	25.4 mm
Max. saw blade diameter	1,200 mm
Dimensions (transport dimensions with blade guard folded up)	L: 1,700 mm W: 870 mm H: 1,160 mm

9.2 Motor

Parameter	Value	
Type	Electric	
Power	30 kW	
Voltage	400 V	
Rated speed	1,800 rpm	
Cooling	Air cooling	
Grease	Polyrex EM (Exxon Mobil)	
Ampere (power)	44 Amps	
Power cable connection	up to 25m	5 x 10mm ²
	25 - 50m	5 x 16mm ²
Mains fuse protection (Neutral conductor (Earth + residual current circuit breaker imperative))	min. 63 Amps	

9.3 Lift drive

Parameter	Value
Drive type	Electro-hydraulic

9.4 Travel drive

Parameter	Value
Drive type	Hydraulic
Cooling	Air cooling by means of cooling ribs

9.5 Noise level and vibrations

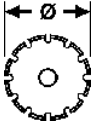
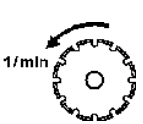
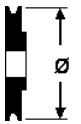
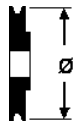
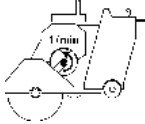
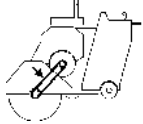

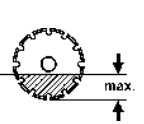
Parameter	Value
Noise level at the ear of the user (L_{eq})	83.4 dB(A)*
Noise level at workplace (L_{PA})	80.9 dB(A)*
Sound power level in accordance with ISO 3744 (L_{WA})	106.9 dB(A)*
Vibrations DIN EN ISO 5349-2	< 2.5 m/s ²

*Value applies under the following condition: Travel drive is switched off and the saw blade is not engaged. The measurement is performed with the motor under full load with the saw blade dia.1,200 mm. Higher noise levels may be generated in cutting operation.

9.6 Battery

Parameter	Value
Description	Battery 12-Volt, Group Size 34
DP battery part number	2700208
Length	260 mm
Width	173 mm
Height	200 mm
Capacity	630 Amps
Manufacturer's reference	P7405

9.7 Cutting data

Blade diameter	Blade rpm	Belt pulley diameter Output shaft	Belt pulley diameter Motor	Motor rpm	Belt size	Flange diameter Blade uptake	Depth of cut
500	2450	4.12"	5.6"	1800	3VX560	4½"	130
600	2000	4.5"	5"	1800	3VX560	4½"	180
700	1700	5"	4.75"	1800	3VX560	6"	230
800	1400	5.3"	4.12"	1800	3VX560	6"	280
900	1400	5.3"	4.12"	1800	3VX560	6"	330
1000	1075	6.9"	4.12"	1800	3VX710	8"	380
1200	1075	6.9"	4.12"	1800	3VX710	8"	480
							



The belt pulley should only be changed by an engineer from TYROLIT Hydrostress or a trained worker.

EC declaration of conformity

Description	Floor Saw
Type designation	FSE1240★★
Year of construction	2007
Manufacturer	TYROLIT Hydrostress AG

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

Directive applied

Machine Directive	2006/42/EC
Noise Emission	2000/14/EC
Electricity Directives	93/68/EEC
Electromagnetic Compatibility	89/336/EEC
2002/95/EC Restriction of the use of certain hazardous substances in electrical and electronic equipment	2002/95/EC
Waste Directive	2002/96/EC
Vibration Directive	2002/44/EC

Standards

EN 12100-1	Safety of machinery – Basic concepts, general design principles.
EN 12100-2	Safety of machinery – Basic concepts and general principles for design.
EN ISO 14121	Safety of machinery – Principles of risk assessment.
EN 294	Safety of machinery – Safety distances to prevent upper limbs reaching danger areas.
IEC 60204-1	Safety of machinery – Electrical equipment of machines, General Requirements.
IEC 6100-6-3	Electromagnetic Compatibility
EN 13862	Floor cutting-off machines. Safety.
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.
EN ISO 3744	Acoustics – Determination of sound power levels of noise sources using sound pressure