OPERATING INSTRUCTIONS

WALL SAW WSE811 MKII

Index 000
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 device. 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. All repairs must be carried out by trained personnel only. Our after-sales 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

1.1 Generally safety instructions

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" and the operating instructions may result in serious injury or even death.
► Please ensure that the "Safety Manual/System Description for Wall Saws" and the operating instructions have been read and understood in full.

DANGER
Laceration 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 wall saw is running.

DANGER
Death or serious injury can be caused by sudden start-up of the machine.
► Before switching on the system, ensure that no other persons are present in the danger areas.
► On leaving the system, switch it off and ensure that it cannot be switched on again.

DANGER
Death or serious injury as a result of the sawing machine continuing to run after an accident.
► Ensure that the EMERGENCY STOP button can be reached quickly.

DANGER
Electric shock from live cables and connectors.
► Switch off the wall saw WSE811★ ★ ★ before connecting or disconnecting cables.
► Ensure that the power supply is earthed and fitted with a residual current circuit breaker (FI Type B) with a maximum residual current of 30 mA.

DANGER
Risk of fire due to incorrect mains voltage.
► Make sure that the mains voltage and mains frequency correspond with the mains settings of wall saw WSE811★ ★ ★.
1.2 Signs on the machine

Safety sign

1 Wear safety shoes  
2 Wear gloves  
3 Wear a breathing mask  
4 Wear a helmet, goggles and hearing protection  
5 Read the instructions  
6 Before working on the equipment, unplug mains

Name plate

1.3 Behaviour in an emergency

Press the EMERGENCY STOP button on the remote controller.

If the EMERGENCY STOP is activated on the radio remote controller, the LED warning light flashes rapidly.

In an emergency, the sawing machine can be also switched off using the main switch on the saw head of the WSE811 ★★★.
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 Intended use

Transportable wall saw for use on construction sites, for cutting (reinforced) concrete, stone and masonry. Only for industrial use.

Not suitable for use in potentially explosive atmospheres.

2.3 Wall saw system components

![Wall saw system diagram]

Wall saw system

1. Radio remote controller
2. Mains cable with connector
3. Rail
4. Rotating rail support
5. Wall saw head with integrated control unit
6. Undercarriage
7. Diamond wire saw
8. Blade guard
2.4 Wall saw head with integrated control unit

2.4.1 Wall saw head components

Components

1 Mains cable with connector
2 Undercarriage
3 Casing
4 Protective hood
5 Guide roller
6 Diamond saw blade flange
7 Protective holder
8 Grip
9 Rotating chassis
10 Blade guard uptake
11 Water connections
12 Roller locking handle
13 Connector to the remote controller cable
14 Main ON/OFF switch
15 Hour counter
2.5 Remote controller

The remote controller can be used to control all functions of the wall saw WSE811★★★. The saw blade speed is automatically adjusted using the diameter selector switch on the remote controller. The remote controller can be used as a radio remote controller with a rechargeable battery or an ordinary battery. Additionally, the remote controller can be operated using a cable.

Radio remote controller

The transmitter and receiver are a pair of matched units. They cannot be used with other devices. The number on the back of the remote controller must match the serial number on the machine name plate.

2.5.1 Operating modes

Rechargeable battery operation:
The interchangeable rechargeable battery is inserted in the base of the casing of the remote controller. The operating period with a fully charged battery is approximately 12 hours. The reception distance is approx. 25 m.

Ordinary battery operation:
The battery holder is included in the scope of supply and allows operation with three 1.5-V AA batteries. The reception distance is approx. 25 m.

Cable operation:
The cable insert is included in the scope of supply and allows connection of the remote controller to the control unit WSE811★★★. The cable length is 10 m. Cable operation makes it possible to work in areas where radio operation is not allowed (e.g. hospitals). When working with the cable connection, all control signals are transmitted via the electric cable. The rechargeable/ordinary battery holders must not be inserted in the base of the casing during cable operation.
2.5.2 Main components of remote controller

Main components of remote controller

1. EMERGENCY STOP
2. On/Off, main motor
3. Diameter selector switch
4. Water On/Off
5. Locking button (traverse feed)
6. Cable connection
7. Reset button
8. Feed motor potentiometer
9. Indicator lights
10. Warning light (radio & battery)
11. Feed joystick
12. Start switch
13. Casing
14. Remote controller pulse button
15. Hip belt
2.5.3 Accessories for remote controller

The battery charger is exclusively for recharging the interchangeable rechargeable batteries. The battery holder and the cable connection must not be inserted.

Accessories

1. 2x interchangeable rechargeable batteries No. 10984306
2. Rechargeable battery charger No. 10984305
   Rechargeable battery charger with 10–30 VDC connection No.10984840
3. Remote controller cable No. 10991362
4. Battery holder No. 10984307
5. Key No. 10984309
3 Assembly/disassembly

3.1 Placing the wall saw on the guide rail

If the swivelling handle fails to engage or the wall saw sits too loosely on the guide rail: adjust the guide rollers.
3.2 Adjusting the guide rollers

- **Tool**
  - Fork wrench
    - Size 24
    - TYROLIT no. 973773
  - Allen key
    - Size 4
    - TYROLIT No. 973790

The guide rollers are set correctly when it is just not possible to turn them by hand. In order for the machine to travel parallel to the rail, both guide rollers must be adjusted identically.
3.3 Assembling the saw blade

DANGER
Death or serious injury can be caused by an escaping saw blade.
▷ 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 wall saw before working on the saw blade.
▷ Isolate the wall saw from the mains supply.

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

3.3.1 Saw blade fixing for normal cutting

Saw blade diameter Ø650 mm / Ø750 mm / Ø825 mm

✓ Tool

Fork wrench

Size 19
3.3.2 **Saw blade uptake**

Diamond saw blades can be mounted on the wall saw WSE811 using uptake drill holes with Ø60 mm and Ø25.4 mm. For diamond saw blades with uptake drill hole Ø25.4 mm, the support spindle of the blade flat flange needs be rotated by 180°.

- **Tool**
  - Fork wrench Size 19
  - Allen key Size 5
  - Allen key Size 2.5

---

**Disassembly help**

Two screws can be used as a disassembly help for the support spindle.

- **Tool**
  - Allen key Size 2.5
3.3.3 Saw blade fixing for flush cutting

Saw blade diameter Ø650 mm/Ø750 mm

- **Tool**
  - Allen key
    - Size 5
  - Allen key
    - Size 6
  - Set screw
    - M12x12

If the distance from the saw blade to the wall is more than 10 mm in places, then, for controlled cooling water distribution, a set screw M12x12 mm (TYROLIT no. 10981971) must be screwed flush in the centre of the saw blade uptake.
3.4 Assembling the blade guard

- Assemble the blade guard according to the instruction leaflet.

3.5 Disassembling the blade guard

Disassemble the blade guard in the reverse order to the installation/assembly process.
3.6 Connecting the mains and water supply

3.6.1 Mains

- Connectors/plugs are clean
- Cables are undamaged
- The power supply is earthed and fitted with a residual current circuit breaker (FI type B; max. residual current 30 mA)
- Sufficient cable cross-sections: up to 25 m long 4 x 2.5 mm², more than 25 m long 4 x 4 mm²

3.6.2 Water

Wet and dry cutting

The wall saw WSE811 can be used for wet and dry cutting.

Wet cutting
Dry cutting

For dry cutting, the water is led away via a bypass. When dry cutting, continuous operation is not possible, because otherwise the gearbox will overheat. After using for a ¼ hour, a ½ hour break must be maintained for cooling:

For dry cutting, special TYROLIT diamond saw blades must be used.
**Cutting without the blade guard**

**DANGER**
Danger from segments or concrete chips flying off from the cutting tool.

▶ **Sawing without the blade guard is prohibited.**

If the blade guard is not mounted, the water emerges in an uncontrolled manner over the blade guard uptake.
4 Operation

4.1 Overview of controls

Controls on the remote controller:
1 EMERGENCY STOP
2 On/Off, main motor
3 Diameter selector switch
4 Water On/Off
5 Locking button (traverse feed)
6 Cable connection
7 Reset button
8 Main motor potentiometer
9 Feed joystick
10 Start switch
11 Remote controller pulse button

Controls on the wall saw:
1 Mains cable with connector
2 Main ON/OFF switch
3 Roller locking handle
4 Connector to the remote controller cable
5 Water connection/water bypass
6 Grip
7 Blade guard uptake
8 Diamond saw blade flange
4.2 Starting the wall saw

- The rail is firmly connected to the subsurface.
- The wall saw head is correctly mounted on the rail.
- The protective cup on the remote controller cable connector is locked securely.
- The diamond tool is correctly secured using the blade flange.
- The blade guard is correctly mounted.
- The wall saw WSE811 is connected to the mains and the water supply.
- The remote controller EMERGENCY STOP (1) has been deactivated.

Starting the wall saw WSE811

- Move the controls listed below on the remote controller to the 0 position.

Feed potentiometer (8)
Starter switch (14)
Main motor On/Off (2)
Water switch (4)

- Switch on the wall saw WSE811 using the main switch on the wall saw head.
- Switch on the radio remote controller using the starter switch (14).
  - Warning light (12) lights up red at first
  - An audible signal sounds simultaneously
  - Indicators flash coloured
  - Second audible signal sounds
  - Warning light (12) flashes green

- Press the pulse button (15) on the remote controller briefly.
  - The reset indicator (11) lights up blue.
- Press the reset button (7) on the remote controller.
  - The ready indicator (9) flashes green.
- Press the pulse button (15) briefly.
  - The ready indicator (9) lights up green.
- Open the water valve on the system supply line.
- Press the water On/Off switch (4) on the remote controller to 1.
  - Water flows from the diamond tool.
- Using the diameter selector (3), choose the diamond tool diameter.
- Press the main motor On/Off switch (2) on the remote controller to position 1.
  - The electric motor starts.
- The wall saw WSE811 has started and is ready for operation.
4.2.1 Generator operation

The selection of the generator mode will be carried out after the first pressing the pulse button (15) and the reset indicator (11) lighting-up in blue.

- Press the reset button (7) on the remote controller for 3 seconds.
  - The service indicator (16) flashes yellow.
  - The wall saw WSE811★★★ is now in generator mode.
- Press the reset button (7) for the further starting procedure.
  - The service indicator (16) goes out.

When restarting, the controller returns to normal mains operation.

4.3 Frequency change of the remote controller

The radio remote controller systems are equipped with a frequency generator for selecting a frequency.
If the systems are malfunctioning or the radio connection is interrupted (external transmitter, range, rechargeable battery empty), the system immediately goes into the EMERGENCY STOP state.

New frequency search:

The next frequency is selected by switching the start switch on the remote controller off and then on again. The process of switching off and on is limited to four attempts (channels). If the system does not find a suitable frequency after four attempts, then a changeover to cable operation is necessary.
4.4 Selecting the tool station
After the wall saw WSE811 has been started correctly, you can select between the tool stations Ø650 mm or Ø750 mm (825mm).

The tool stations must not be changed during operation. The tool stations are set with reference to the tool diameter for the optimum rotational speed and cutting performance.

4.5 Adjusting the feed
The feed movements are selected with the joystick.

During the cutting process, the feed speed is automatically supported by an assisted feed.
4.6 **Manually adjusting the feed speed**

- The wall saw WSE811 has been started

  - Select the required feed speed via the potentiometer.

![Manually adjusting the feed speed](image)

4.7 **Locking the feed**

So that the joystick does not have to be held in position during the travel feed motion, the travel feed can be locked.

Proceed as follows:

- Push the joystick in the desired travel direction and, at the same time, press the locking switch.
- When the joystick and the locking switch are released, the feed is locked.

In order to release the feed lock, move the joystick slightly in any desired direction or press the locking button (traverse feed).
4.8 Switching off the wall saw

Switching off the wall saw

Proceed as follows:

- Press the start switch (1) on the remote controller to the 0 position.
- Turn off the cooling water, switch (2) water 0/1.
- Switch off the wall saw WSE811 ★★★ using the main switch (3).
- Switch off the WSE811 ★★★ wall saw using the main switch on the wall saw head.

Caution

Frost can damage the wall saw WSE811 ★★★!

- Blow out any water if there is a risk of frost (see chapter 4.9, Blowing out the water).

Only stop the wall saw WSE811 ★★★ using the EMERGENCY STOP function in an emergency.

4.9 Blowing out the water

- The main switch is set to OFF

- Disconnect the mains plug.
- Disconnect all water lines.
- Connect the purge pump to the water nipple.
- Blow out water until all of the cooling water has been removed (see chapter 5.2).
- Remove the pump.
4.10 Deactivating the EMERGENCY STOP

If the EMERGENCY STOP is activated on the radio remote controller, the radio and battery light (5) flash quickly.

Deactivating the EMERGENCY STOP

The following controls must be moved to the 0 position:

- Potentiometer (3)
- Feed joy stick (6)
- Main motor On/Off (2)
- Turn the EMERGENCY STOP button (1) clockwise
- Push the pulse button (7) to the ON position

4.11 After finishing the work

Proceed as follows:

- Disconnect the water hoses from the wall saw WSE811★★★.
- Blow out the water from all the lines (see chapter 5.2).
- Turn the main switch on the wall saw WSE811★★★ to the 0 position.
- Disconnect the mains plug.
- Clean the wall saw WSE811★★★, the remote controller and the cables with a damp cloth.

Cleaning using high pressure cleaning equipment is not permitted.

Products containing cleaning agent can damage parts of the wall saw WSE811★★★, the radio remote controller and the cables.
4.12 Reacting to indicators

Indicators

Lights on the remote controller

1  Ready light
2  Service fault
3  Group alarm
4  Reset light
5  Radio and battery

Power and fault indicators on the remote controller

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Response</th>
<th>Possible cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flashes orange</td>
<td>Rechargeable battery voltage too low</td>
<td>Recharge rechargeable battery</td>
</tr>
<tr>
<td></td>
<td>Flashes green rapidly</td>
<td>No radio connection with the EMERGENCY STOP activated</td>
<td>Switch on the remote controller, Defective receiver, Connection not matched to receiver, see page 9</td>
</tr>
<tr>
<td></td>
<td>Flashes red</td>
<td>Group alarm on the remote controller, On operating the pulse switch on the remote controller, the main motor On/Off switch is in the On position</td>
<td>Turn the potentiometer to the 0 position, Put the main motor On/Off switch into the Off position</td>
</tr>
<tr>
<td></td>
<td>Lights up yellow</td>
<td>Service indicator: After the first 100 operating hours, then after every 200 operating hours.</td>
<td>Carried out only by TYROLIT Hydrostress AG or an authorised representative</td>
</tr>
<tr>
<td></td>
<td>Lights up green</td>
<td>The motor is ready to start</td>
<td>After 30 seconds of inactivity, the pulse button must be pressed again</td>
</tr>
<tr>
<td></td>
<td>Flashes green</td>
<td>The machine is in the standby position</td>
<td>Press the pulse switch on remote controller</td>
</tr>
<tr>
<td></td>
<td>Shows the current power range ideally: At the second, orange-coloured diode (in iron the third, red diode).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Overview of flash code**

The flash code is used for fault detection and is displayed in red on the group alarm light on the remote controller.

---

**Flash code indicators**

---

<table>
<thead>
<tr>
<th>Fault</th>
<th>Possible cause</th>
<th>Action</th>
</tr>
</thead>
</table>
| **2x** | Mains phase is missing | • Fault during installation  
• Fuse defective | • Check phases and fuses |
| **3x** | DC motors are overheating | • Absence of cooling | • Allow machine to cool for 3 minutes  
• Avoid direct contact with sunlight |
| | Blade motor is overheating | • Absence of cooling  
• No, too little or too hot cooling water | • See Technical data, chapter 7.10 |
| **4x** | Short circuit fault | | • Contact TYROLIT Hydrostress AG after-sales service |
| Short circuit detection | • Earth fault | • Contact TYROLIT Hydrostress AG after-sales service |
| Main motor overcurrent | • Main motor blocked  
• Overcurrent earth fault | • Contact TYROLIT Hydrostress AG after-sales service |
| Main motor earth fault | • Electrical connection earth fault | • Contact TYROLIT Hydrostress AG after-sales service |
### Flash codes for power and fault indicators

<table>
<thead>
<tr>
<th>Flash code Example 3x</th>
<th>3x</th>
<th>3x</th>
<th>3x</th>
<th>3x</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fault</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overcurrent DC axis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC motor short circuit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The safety relay no longer switches properly</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The safety contact no longer functions properly</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transformer fault</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct current link voltage too low</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct current link voltage too high</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication fault</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Possible cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed motor overloaded</td>
<td>Reduce feed</td>
</tr>
<tr>
<td>Blocked feed motor Defective feed motor</td>
<td>Contact TYROLIT Hydrostress AG after-sales service</td>
</tr>
<tr>
<td>Hardware defect</td>
<td>Contact TYROLIT Hydrostress AG after-sales service</td>
</tr>
<tr>
<td>Hardware defect</td>
<td>Contact TYROLIT Hydrostress AG after-sales service</td>
</tr>
<tr>
<td>Motor outside of possible parameters</td>
<td>Contact TYROLIT Hydrostress AG after-sales service</td>
</tr>
<tr>
<td>Incorrect mains voltage</td>
<td>Check the power supply See Technical data, chapter 7.12</td>
</tr>
<tr>
<td>Mains overvoltage The saw blade feeds back too much energy</td>
<td>Check the power supply See Technical data, chapter 7.12 Use only diamond saw blades with Ø650 mm and Ø750 mm</td>
</tr>
<tr>
<td>Communication fault due to interference</td>
<td>Contact TYROLIT Hydrostress AG after-sales service</td>
</tr>
</tbody>
</table>
## 5 Servicing and maintenance

<table>
<thead>
<tr>
<th>Maintenance and servicing table</th>
<th>Before starting up</th>
<th>On finishing work</th>
<th>Weekly</th>
<th>Annually</th>
<th>After faults</th>
<th>After damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical system</td>
<td>▶ Check the condition and cleanliness of electric cables, plugs/connectors and switches.</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>▶ Check the condition and cleanliness of couplings.</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Wall saw head</td>
<td>▶ Retighten loose bolts, screws and nuts (refer to the tightening torque specifications)</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▶ Check cleanliness</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Lock unit</td>
<td>▶ Clean latching recesses and guide grooves</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>▶ Lubricate (see chapter 5.4)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Guide rollers</td>
<td>▶ Check the bearing clearance for wear</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>▶ Clean</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>▶ Replace (see chapter 5.3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Rotating chassis</td>
<td>▶ Clean with water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>▶ Check the saw blade uptake for wear</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▶ Change the gear oil (see chapter 5.5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water economy</td>
<td>▶ Check the water line for cleanliness and leak-tightness</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▶ Blow out water (see chapter 5.2)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saw blade</td>
<td>▶ Clean with water</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>▶ Check for wear</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Service</td>
<td>▶ To be performed by TYROLIT Hyrostress AG or an authorised workshop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 5.1 Cleaning

**Caution**

Cleaning using high pressure cleaning equipment is not permitted. Cleaning using high pressure cleaning equipment can damage the wall saw WSE811★ ★ ★. Products containing cleaning agent can damage parts of the wall saw WSE811★ ★ ★, the remote controller and the cables.
5.2 Blowing out the water

Blowing out the water

The blade guard must be fitted, so that the water can be properly blown out of the lines. Use the TYROLIT purge pump, no.10982667.

5.3 Replacing the guide rollers

Replacing the guide rollers

► Defective guide rollers should be replaced with the replacement set.

Guide roller No.10984558
5.4 Lubricating the lock unit

Lubricating grease
Treat joints and lock unit with lubricant TYROLIT no. 975061 (spray).

5.5 Cleaning the water filter

Tool
Fork wrench Size 18

Clean and disassemble the water filter
Clean the water filter with warm water.
5.6 Changing the gear oil

The use of unsuitable oil can damage the wall saw.

► Use only TYROLIT Hydrostress AG oil containers (no. 10995817, 0.4 dl).

✓ Tool

Allen key Size 5

Oil container 0.4 dl (TYROLIT no.10995817)

Change gear oil

Allow gear oil to drain.
To ensure all the gear oil can drain out, turn the hub twice by hand.

5.7 Recycling waste

TYROLIT Hydrostress power tools are manufactured using a high proportion of recyclable materials. A prerequisite for recycling is proper material separation. In many countries, TYROLIT is already prepared for taking back your used equipment for recycling. Contact TYROLIT customer service or your sales adviser.
## 6 Malfunctions

<table>
<thead>
<tr>
<th>Malfunction</th>
<th>Possible cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The control unit does not run even though the mains cable is connected</td>
<td>Wall saw is turned off</td>
<td>▶️ Switch the wall saw on, see chapter 4.</td>
</tr>
<tr>
<td></td>
<td>Defective mains cable</td>
<td>▶️ Replace the mains cable.</td>
</tr>
<tr>
<td></td>
<td>No voltage at the power supply (building site)</td>
<td>▶️ Check the power supply.</td>
</tr>
<tr>
<td></td>
<td>Power supply phases incorrectly connected</td>
<td>▶️ Check the power supply.</td>
</tr>
<tr>
<td></td>
<td>Phase missing</td>
<td>See the chapter entitled &quot;Reacting to indicators&quot; Flash code 2x.</td>
</tr>
<tr>
<td>The control unit starts and then cuts out again</td>
<td>Power supply fuse at the building site trips</td>
<td>▶️ Check and if necessary adapt the fuse protection.</td>
</tr>
<tr>
<td></td>
<td>Incorrect voltage</td>
<td>▶️ Make sure that the control unit voltage and frequency match the mains supply specifications.</td>
</tr>
<tr>
<td></td>
<td>Defective main motor</td>
<td>▶️ Contact TYROLIT Hydrostress AG after-sales service.</td>
</tr>
<tr>
<td></td>
<td>Power range indicator within the red zone</td>
<td>▶️ Blade jammed, switch off main motor and loosen the deadlock.</td>
</tr>
<tr>
<td>No power, even though the wall saw is running</td>
<td>Over or undervoltage</td>
<td>▶️ Check the power supply. Refer to fault Flash code.</td>
</tr>
<tr>
<td></td>
<td>Cross section of power supply cable too small</td>
<td>▶️ Check the power supply.</td>
</tr>
<tr>
<td></td>
<td>Defective plug connection</td>
<td>▶️ Check the plug connection.</td>
</tr>
<tr>
<td></td>
<td>Group alarm</td>
<td>▶️ Refer to the fault indicator</td>
</tr>
<tr>
<td>Main motor is not running</td>
<td>• Defective main motor On/Off switch on remote controller</td>
<td>▶️ Contact TYROLIT Hydrostress AG after-sales service.</td>
</tr>
<tr>
<td></td>
<td>• The remote controller ready light does not come on.</td>
<td>▶️ Switch on the control unit, see chapter 4.2</td>
</tr>
<tr>
<td>The wall saw suddenly cuts out</td>
<td>The EMERGENCY STOP is activated</td>
<td>▶️ Deactivate EMERGENCY STOP, see chapter 4.10.</td>
</tr>
<tr>
<td></td>
<td>Overheating</td>
<td>▶️ Check the water circuit and the plug-in couplings.</td>
</tr>
<tr>
<td></td>
<td>No water</td>
<td>▶️ Refer to the fault indicator</td>
</tr>
<tr>
<td>Remote controller not working</td>
<td>Rechargeable battery or batteries have too little charge indicator lights, flashes orange</td>
<td>▶️ Replace and recharge the rechargeable battery or install cable operation.</td>
</tr>
<tr>
<td></td>
<td>Feed potentiometer indicates no function</td>
<td>▶️ Replace the batteries.</td>
</tr>
<tr>
<td></td>
<td>Overload coupling has triggered</td>
<td>▶️ Contact TYROLIT Hydrostress AG after-sales service.</td>
</tr>
<tr>
<td></td>
<td>• If the saw blade jams</td>
<td>▶️ See the chapter entitled “Reacting to indicators”</td>
</tr>
<tr>
<td></td>
<td>• Wall saw produces a rattling noise</td>
<td>Flash code 3x</td>
</tr>
<tr>
<td></td>
<td>• Joystick is in the zero position</td>
<td>▶️ See chapters 4.5/4.6</td>
</tr>
<tr>
<td></td>
<td>Overload coupling has triggered</td>
<td>▶️ Put main motor On/Off switch on the remote controller into 0 position and wait until no more rattling noises can be heard. Lift the saw blade from the cut. Loosen the jammed blade.</td>
</tr>
</tbody>
</table>
If you are unable to remedy a fault, please call our service centre (see manufacturer’s address on the reverse of the title page).

To guarantee a rapid and professional solution to the problem, it is important that you prepare as follows before calling:

- Try to describe the fault as precisely as possible.
- Note the type and index designation of your unit (name plate).
- Have the operating instructions close to hand.

### Malfunctions

<table>
<thead>
<tr>
<th>Malfunction</th>
<th>Possible cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed motor fails to build up power</td>
<td>Remote controller potentiometer is defective or in the 0-position</td>
<td>► Contact TYROLIT Hydrostress AG after-sales service.</td>
</tr>
<tr>
<td></td>
<td>Automatic feed: Power range indicator within the red zone</td>
<td>► Blade jammed, switch off main motor and loosen the deadlock</td>
</tr>
<tr>
<td></td>
<td>Defective motor</td>
<td>► See the chapter entitled “Reacting to indicators” Flash code 3x.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>► Contact TYROLIT Hydrostress AG after-sales service.</td>
</tr>
<tr>
<td>No water outlet</td>
<td>Water line or filter clogged</td>
<td>► Clean the water line.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>► Clean the water filter (see chapter 5.5)</td>
</tr>
<tr>
<td></td>
<td>Water valve on the supply or water hose is closed</td>
<td>► Open the water valve.</td>
</tr>
<tr>
<td></td>
<td>Insufficient water pressure</td>
<td>► Make sure that the water pressure is at least 2 bar.</td>
</tr>
<tr>
<td></td>
<td>Defective switch on the remote controller</td>
<td>► Contact TYROLIT Hydrostress AG after-sales service.</td>
</tr>
<tr>
<td></td>
<td>Defective watervalve</td>
<td>► Contact TYROLIT Hydrostress AG after-sales service.</td>
</tr>
<tr>
<td>Uncontrolled water outlet</td>
<td>Water valve on the wall saw head is faulty</td>
<td>► Stop water outlet using the hose water valve.</td>
</tr>
<tr>
<td></td>
<td>Defective switch on the radio remote controller</td>
<td>► Contact TYROLIT Hydrostress AG after-sales service.</td>
</tr>
<tr>
<td></td>
<td>Blade guard not assembled</td>
<td>► Assemble the blade guard</td>
</tr>
<tr>
<td>Group alarm on the remote controller</td>
<td></td>
<td>► See the chapter entitled “Reacting to indicators”.</td>
</tr>
</tbody>
</table>
7 Technical data

7.1 Dimensions

Measurements in mm
### 7.2 Weights

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wall saw head complete</td>
<td>30 kg</td>
</tr>
<tr>
<td>Remote controller</td>
<td>1.5 kg</td>
</tr>
</tbody>
</table>

### 7.3 Design

<table>
<thead>
<tr>
<th>Design</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>Light aluminium/steel construction</td>
</tr>
<tr>
<td>Disc rotor drive</td>
<td>360°</td>
</tr>
<tr>
<td>Power transmission</td>
<td>Toothed wheel</td>
</tr>
<tr>
<td>Grips</td>
<td>4 pieces, 1 grip with locking function</td>
</tr>
<tr>
<td>Guide rollers</td>
<td>Low-wearing</td>
</tr>
<tr>
<td>Rail mounting</td>
<td>Locking and safety function on grip</td>
</tr>
<tr>
<td>Main motor</td>
<td>High-frequency, water-cooled</td>
</tr>
<tr>
<td>Feed motor/swivelling motor</td>
<td>Electric motor with gearbox</td>
</tr>
<tr>
<td>Flush cutting</td>
<td>Flange without blade cover</td>
</tr>
<tr>
<td>Normal cutting</td>
<td>Flange with blade cover</td>
</tr>
<tr>
<td>Water</td>
<td>Water connection on chassis</td>
</tr>
</tbody>
</table>

### 7.4 Saw blade drive motor

<table>
<thead>
<tr>
<th>Blade drive motor</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric motor</td>
<td>High-frequency, water-cooled</td>
</tr>
<tr>
<td>Voltage</td>
<td>380–420 V</td>
</tr>
<tr>
<td>Frequency</td>
<td>50–667 Hz</td>
</tr>
</tbody>
</table>

### 7.5 Feed motor, travel

<table>
<thead>
<tr>
<th>Electric feed motor with gearbox</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gear reduction</td>
<td>1:26</td>
</tr>
<tr>
<td>Voltage</td>
<td>48 V</td>
</tr>
<tr>
<td>Feed</td>
<td>Toothed wheel on rail</td>
</tr>
<tr>
<td>Worm gear</td>
<td>1:16</td>
</tr>
<tr>
<td>Power</td>
<td>150 W</td>
</tr>
</tbody>
</table>
7.6 Feed motor, swivel

<table>
<thead>
<tr>
<th>Electric feed motor with gearbox</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
<td>Value</td>
</tr>
<tr>
<td>Gear reduction</td>
<td>1:19</td>
</tr>
<tr>
<td>Voltage</td>
<td>48 V</td>
</tr>
<tr>
<td>Swivel range (swivel arm)</td>
<td>360°</td>
</tr>
<tr>
<td>Worm gear</td>
<td>1:16</td>
</tr>
<tr>
<td>Power</td>
<td>150 W</td>
</tr>
</tbody>
</table>

7.7 Noise level

<table>
<thead>
<tr>
<th>Noise data according to ISO 3744</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
<td>Value</td>
</tr>
<tr>
<td>Sound pressure level ( L_{PA} )</td>
<td>77 dB(A) *</td>
</tr>
<tr>
<td>Highest value of sound pressure ( L_{Ppeak} )</td>
<td>105 dB</td>
</tr>
<tr>
<td>Acoustic power level ( L_{WA} )</td>
<td>97 dB(A) *</td>
</tr>
</tbody>
</table>

Conditions for the measurement:
* Saw blade Ø750 mm not in cutting operation under full load

7.8 Saw blades

<table>
<thead>
<tr>
<th>Saw blades</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
<td>Value</td>
</tr>
<tr>
<td>Saw blade max.</td>
<td>Ø825 mm</td>
</tr>
<tr>
<td>Fully detachable saw blade</td>
<td>Ø700 mm</td>
</tr>
<tr>
<td>Blade uptake</td>
<td>Ø60 mm/Ø25.4 mm</td>
</tr>
<tr>
<td>Blade flange fixing at wall saw</td>
<td>Flange</td>
</tr>
<tr>
<td>Saw blade fixing on blade flange (also for flush cuts)</td>
<td>6 countersunk screws M8x12 10.9 reference circle 90 mm</td>
</tr>
<tr>
<td>Blade cover fixing on blade flange</td>
<td>1 x hexagon head cap screws, M12x25 8.8</td>
</tr>
<tr>
<td>Cutting depth</td>
<td></td>
</tr>
<tr>
<td>Ø600 mm</td>
<td>224 mm</td>
</tr>
<tr>
<td>Ø650 mm</td>
<td>249 mm</td>
</tr>
<tr>
<td>Ø750 mm</td>
<td>299 mm</td>
</tr>
<tr>
<td>Ø825 mm</td>
<td>336 mm</td>
</tr>
</tbody>
</table>
7.9 Table of Overcut

<table>
<thead>
<tr>
<th>Overcut</th>
<th>Cutting tool with maximum penetration</th>
<th>Cutting tool with minimum penetration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø 500 mm</td>
<td>Ø 600 mm</td>
<td>Ø 650 mm</td>
</tr>
<tr>
<td>5 cm</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>10 cm</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>15 cm</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>20 cm</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>25 cm</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>30 cm</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

Overcut in cm
7.10 Lubricants and fluids

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gear oil (swivel arm)</td>
<td>Klüber EG 4 (TYROLIT no. 10981362)</td>
</tr>
<tr>
<td>Grease (lock unit)</td>
<td>Penetration 265 to 295</td>
</tr>
<tr>
<td>TYROLIT no. 975057</td>
<td>NLGI 2</td>
</tr>
<tr>
<td>Universal Spray 250 ml (lock unit)</td>
<td></td>
</tr>
<tr>
<td>TYROLIT no. 975061</td>
<td></td>
</tr>
<tr>
<td>Grease (travel and swivel gear)</td>
<td>Penetration 400 to 430</td>
</tr>
<tr>
<td></td>
<td>NLGI 00</td>
</tr>
</tbody>
</table>

7.11 Water

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure</td>
<td>Min. 2 bar/max. 6 bar</td>
</tr>
<tr>
<td>Quantity</td>
<td>Min. 4 l/min</td>
</tr>
<tr>
<td>Max. temperature</td>
<td>25 °C</td>
</tr>
</tbody>
</table>

7.12 Ambient temperature recommendation

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage</td>
<td>-20 °C to 50 °C</td>
</tr>
<tr>
<td>Operation</td>
<td>-15 °C to 45 °C</td>
</tr>
</tbody>
</table>

7.13 Electrical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection class</td>
<td>IP 65</td>
</tr>
<tr>
<td>Connected values</td>
<td>380 to 420 VAC/50 Hz/60 Hz</td>
</tr>
<tr>
<td>Power consumption</td>
<td>16 A (400 V/50 Hz)</td>
</tr>
<tr>
<td>Power</td>
<td>16 A</td>
</tr>
<tr>
<td>Internal control voltages</td>
<td>11 kW</td>
</tr>
<tr>
<td>Computer/remote controller</td>
<td>24 VDC</td>
</tr>
<tr>
<td>Feed drives</td>
<td>48 VDC</td>
</tr>
<tr>
<td>Main drive unit</td>
<td>400 VAC, 0...667 Hz</td>
</tr>
</tbody>
</table>
7.14 Remote controller

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable length (optional)</td>
<td>10 m</td>
</tr>
<tr>
<td>Nominal voltage</td>
<td>24 VDC</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP 65</td>
</tr>
<tr>
<td>Weight</td>
<td>1.5 kg</td>
</tr>
<tr>
<td>Frequency</td>
<td>2.4 GHz</td>
</tr>
</tbody>
</table>

7.15 Name plate

Name plate
8 EC Declaration of Conformity

Description Wall saw
Type designation WSE811 ★ ★ ★ MKII

We declare under our sole responsibility that this product complies with the following directives and standards:

**Directive applied**

- 2006/42/EC from 17 May 2006
- 2011/65/EU from 08 June 2011
- 2012/19/EU from 04 July 2012
- 2014/30/EU from 26 February 2014
- 1999/5/EC from 09 March 1999

**Applied standards**

- EN 15027/A1: 2009
- EN ISO12100: 2010
- EN 60204-1/A1: 2006
- EN 61000-6-2/A2: 2005
- EN 61000-6-4/A2: 2007

**TYROLIT Hydrostress AG**

Witzbergstrasse 18
CH-8330 Pfäffikon
Switzerland

Pfäffikon, 10.07.2017

Pascal Schmid
Head of Development
Notes: