

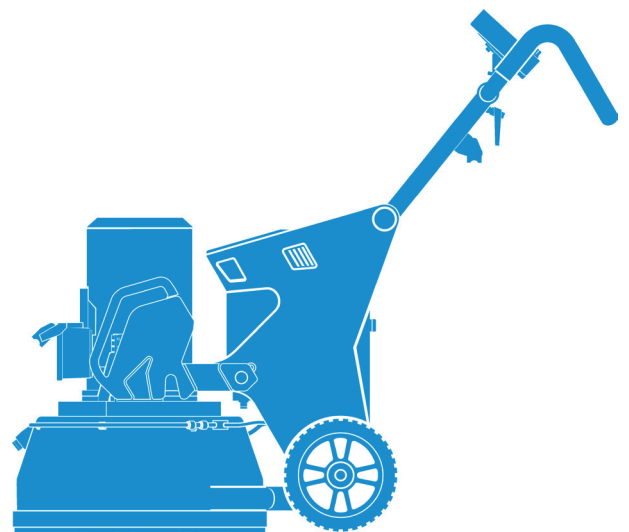


★★★
PREMIUM

OPERATING INSTRUCTIONS

FGE515

Index 000



Congratulations!

You have chosen tried and tested TYROLIT equipment that sets technological standards for the industry. Only genuine TYROLIT spare parts guarantee quality and problem-free replacement. If maintenance work is neglected or not performed correctly, we cannot cover our warranty obligations. All repairs must only be performed by trained specialist personnel.

Our Customer Service is at your disposal to help keep your TYROLIT equipment in perfect condition.

We wish you smooth, trouble-free working.

TYROLIT

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1 About these instructions



This instruction booklet is just part of the documentation for the FGE515 floor grinder. This booklet is only complete together with the “Floor grinding safety manual”.

This booklet together with the “Floor grinding safety manual” is part of the equipment. It describes safe and correct use in all operating phases.

- Carefully read the instructions, especially the safety information, before use.
- Keep the instructions throughout the lifetime of the equipment.
- Keep the instructions accessible to the operator and service technician at all times.
- Always pass on instructions to all future owners or users of the equipment.
- Update the instructions whenever you receive an update from the manufacturer.

1.1 Symbols in these instructions



DANGER

Warning of dangers which, if not avoided, can lead to severe or fatal injury.



WARNING

Warning of dangers which, if not avoided, can lead to injury or material damages.



WARNING

Warning of dangerous electrical voltage.

Before working in an area with this warning, completely disconnect the system or equipment from the power supply (voltage) and secure so it cannot be inadvertently switched back on.



INFORMATION

Information for optimum use of the equipment. If this information is not heeded, the specifications in the technical data cannot be guaranteed.



RECYCLING

Recycle waste materials.



DISPOSAL

For disposal, pay attention to the usual regional and domestic laws and regulations in your country.

2. Safety



INFORMATION

Grinding machines may only be used by authorised personnel. You can find information on authorised personal in the “Floor grinding safety manual”.

2.1 Protection devices and signs on the equipment

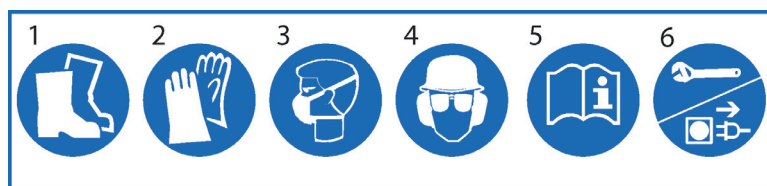
2.1.1 Protection devices

Protection devices may only be removed when the equipment is switched off, has been disconnected from the mains supply and is stationary. Safety components, in particular, may only be removed and re-installed by authorised persons.

Safety elements must be checked to ensure they are in perfect working order before the equipment is brought back into operation.

2.1.2 Signs on the equipment

Safety sign

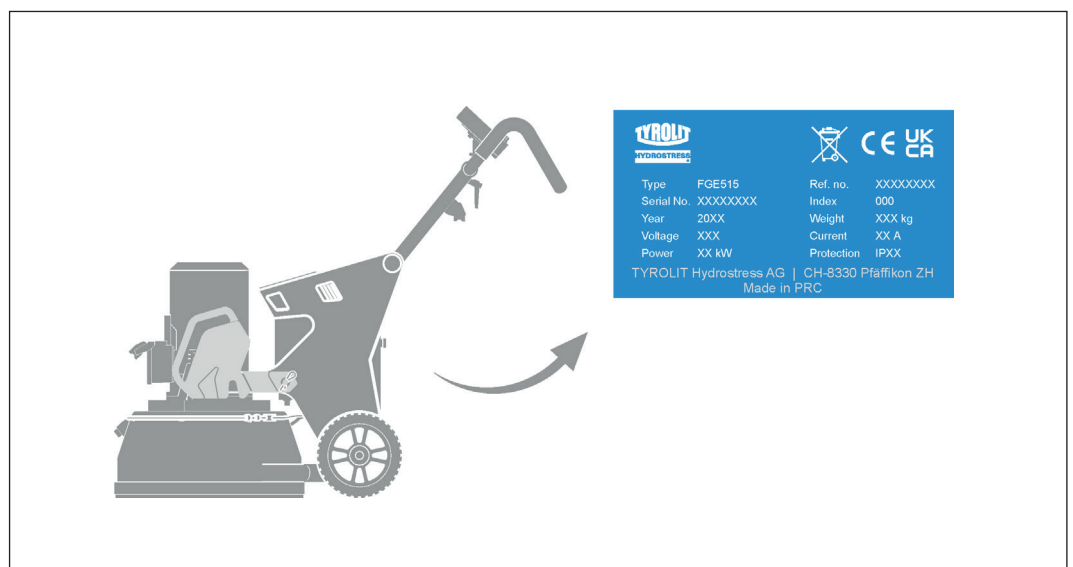


- | | |
|--------------------------|---|
| 1 Wear protective boots | 4 Wear a helmet, goggles and ear protection |
| 2 Wear gloves | 5 Read the instructions |
| 3 Wear a respirator mask | 6 Disconnect the mains plug before working on the equipment |



Crane hook

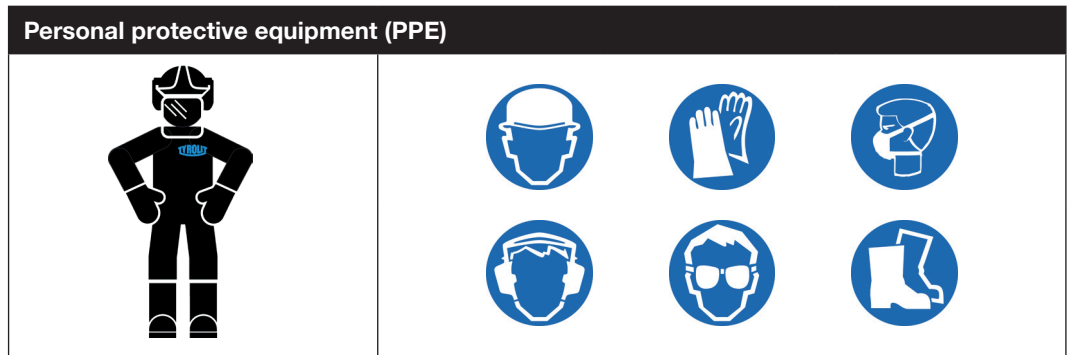
Type plate



Type plate

2.1.3 Personal protective equipment (PPE)

The wearing of PPE is essential for all work with and on floor grinders.

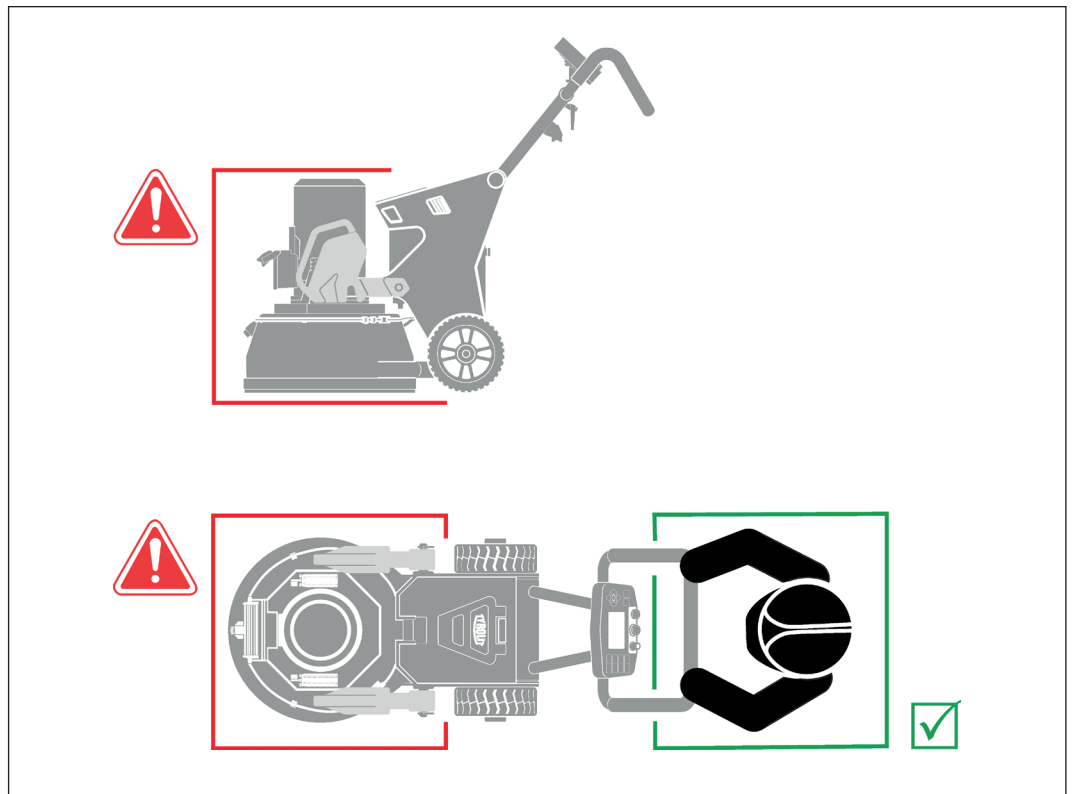


Personal protective equipment (PPE)

2.2 Danger zone and work area

2.2.1 Floor grinder danger zone

The area marked in the drawing shows the danger zone around the floor grinder. No part of the body may be inside this area while the floor grinder is running.



Floor grinder danger zone

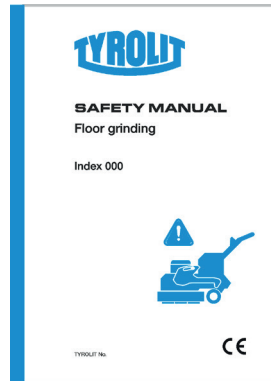
2.2.2 Workstation danger zone



INFORMATION

You can find information on the workstation danger zone in the “Floor grinding safety manual”.

Floor grinder safety manual



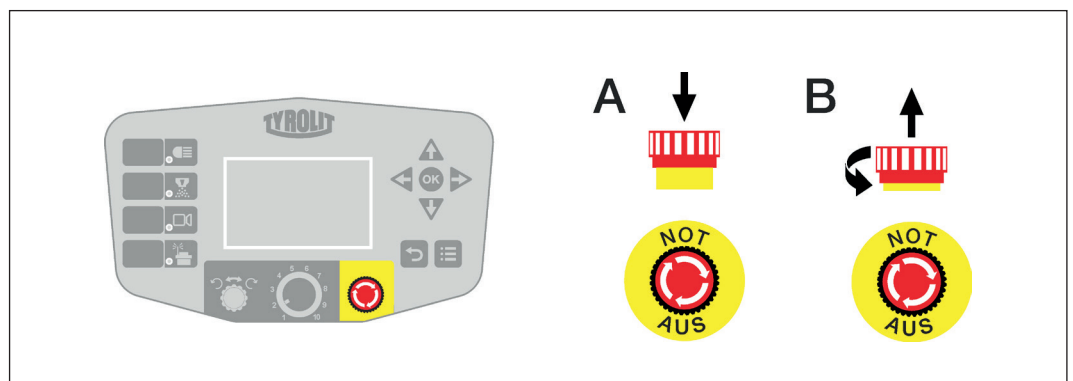
Floor grinder safety manual

2.3 What to do in an emergency

- ▶ Press the EMERGENCY STOP key on the remote control.

If the EMERGENCY STOP is activated on the radio remote control, the machine is at a standstill.

To continue working, the EMERGENCY STOP must be deactivated.



What to do in an emergency

- A Activate EMERGENCY STOP
- B Deactivate EMERGENCY STOP

2.4 Spare parts and modifications

Only use genuine spare parts from TYROLIT Hydrostress. Otherwise, personal injury, damage to the equipment and other material damages can occur. Do not install attachments on or convert the equipment without the written consent of TYROLIT Hydrostress.

2.5 Residual risks

There is a risk of severe injury resulting from the residual risks described below.

2.5.1 Grinding tools flying away

- Only start grinding when there are no other persons in the danger zone.
- Make sure that a safety distance is complied with.
- If grinding tools are damaged, change them.
- Grinding without a protection cover is prohibited.

2.5.2 Uncontrolled movements and vibrations

- Do not connect or disconnect cables when the floor grinder is running.

2.5.3 Getting trapped and caught

Items of clothing or long hair could be caught by the rotating cutting tool.

- Do not wear loose clothing when working.
- Secure long hair in a hair net.

2.5.4 Harmful dust

Inhaling dust can lead to respiratory problems.

Inhaling dust emanating from the machine is hazardous to health.

- Wear a respirator mask.
- Make sure that closed rooms have adequate ventilation.
- Use a dust extractor during work.

2.5.5 Poor physical condition

- Do not work under the influence of alcohol, drugs or medication.
- Do not work when overtired.

2.5.6 Grinding tool quality

- Do not use damaged grinding tools.
- Check grinding tools for damage before assembly.

2.5.7 Danger from a grinding tool continuing to run in an accident

- Make sure that the floor grinder can be stopped quickly.



DANGER

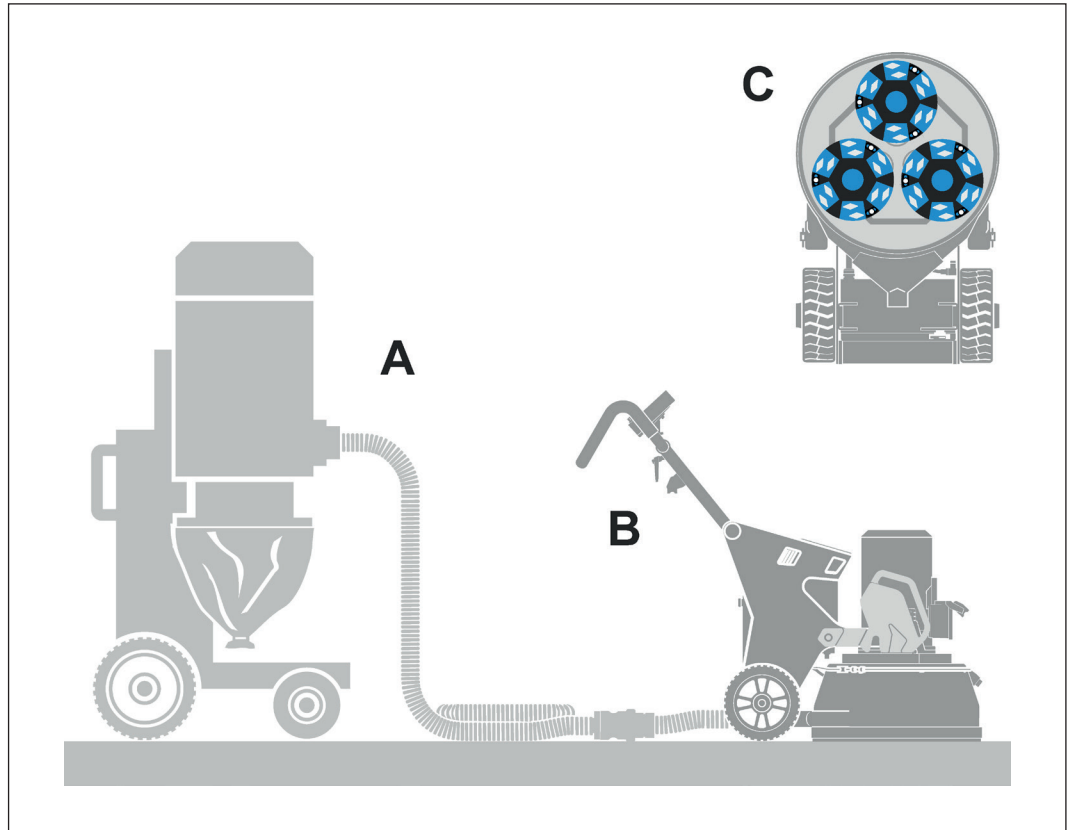
Death or severe injury can result if the safety information in the “Floor grinding safety manual” is not observed.

- ▶ Make sure that the “Floor grinding safety manual” is read completely and has been understood.

3. Product description

3.1 Grinding system

The FGE515 floor grinder is used with matching TYROLIT Hydrostress components and grinding tools to form a grinding system.

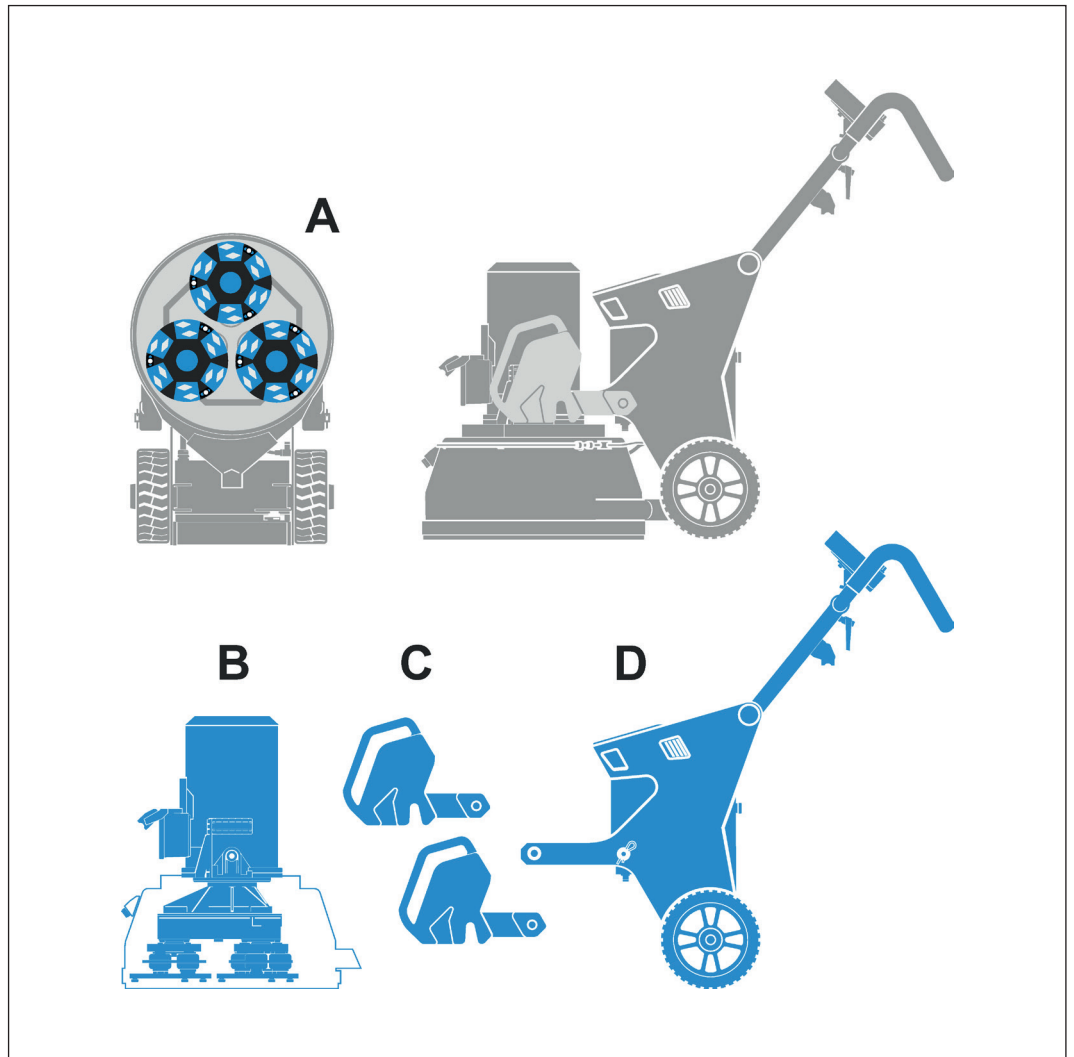


System

- A Dust extractor
- B Floor grinder
- C Grinding tools

3.2 Modular floor grinder

The modular design of the FGE515 floor grinder allows for easy disassembly of the machine.



Modular floor grinder

- A Grinding disc with grinding tools
- B Grinding head
- C Weights
- D Trolley chassis with water tank, electric box and handle unit

3.3 Intended use

The floor grinder has been designed and built for the following use:

- Only use the floor grinder for grinding, rough grinding and renovating floor coverings and other materials stated in this booklet or recommended by TYROLIT Hydrostress.
- Use the floor grinder solely with genuine tools and spare parts from TYROLIT. Otherwise, both the CE marking and the warranty will lose their validity.

Binding operating limits and characteristic data can be found in the “Technical data” section.

3.4 Delivery

3.4.1 Unpacking the equipment

Upon delivery, check carefully for any damage to packaging or equipment. If you notice signs of damage, report the damage to an authorized dealer. In addition, notify the transport company of any external damage.

3.4.2 Scope of delivery

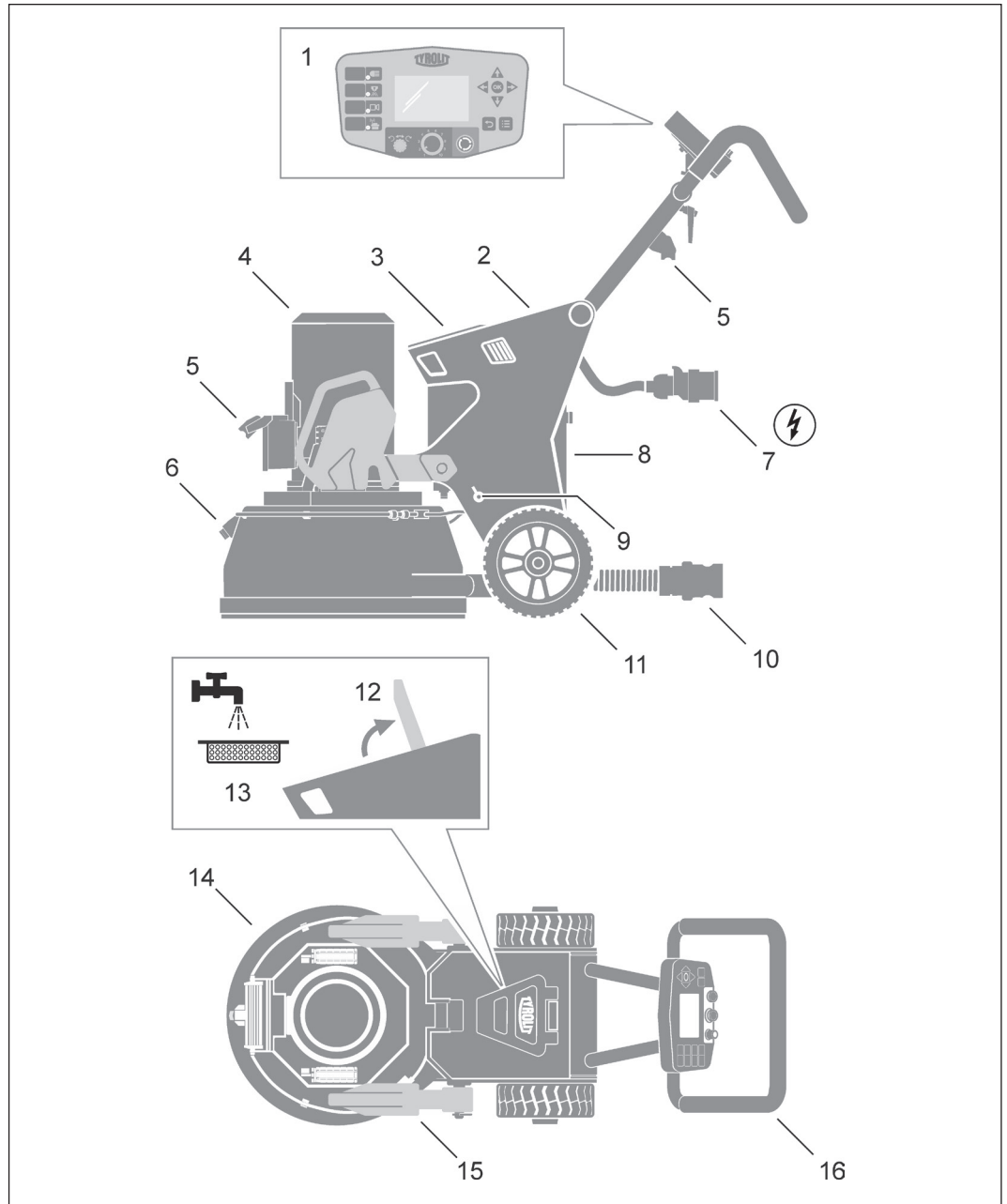
Check whether the delivery corresponds to the order. Contact an authorized dealer if you have any questions.

Included in delivery:

- Floor grinder FGE515
- Wrench A/F 19
- Allen key 6 mm
- Operating Instructions/Floor Grinding Safety Manual

4 Design and function

4.1 Design

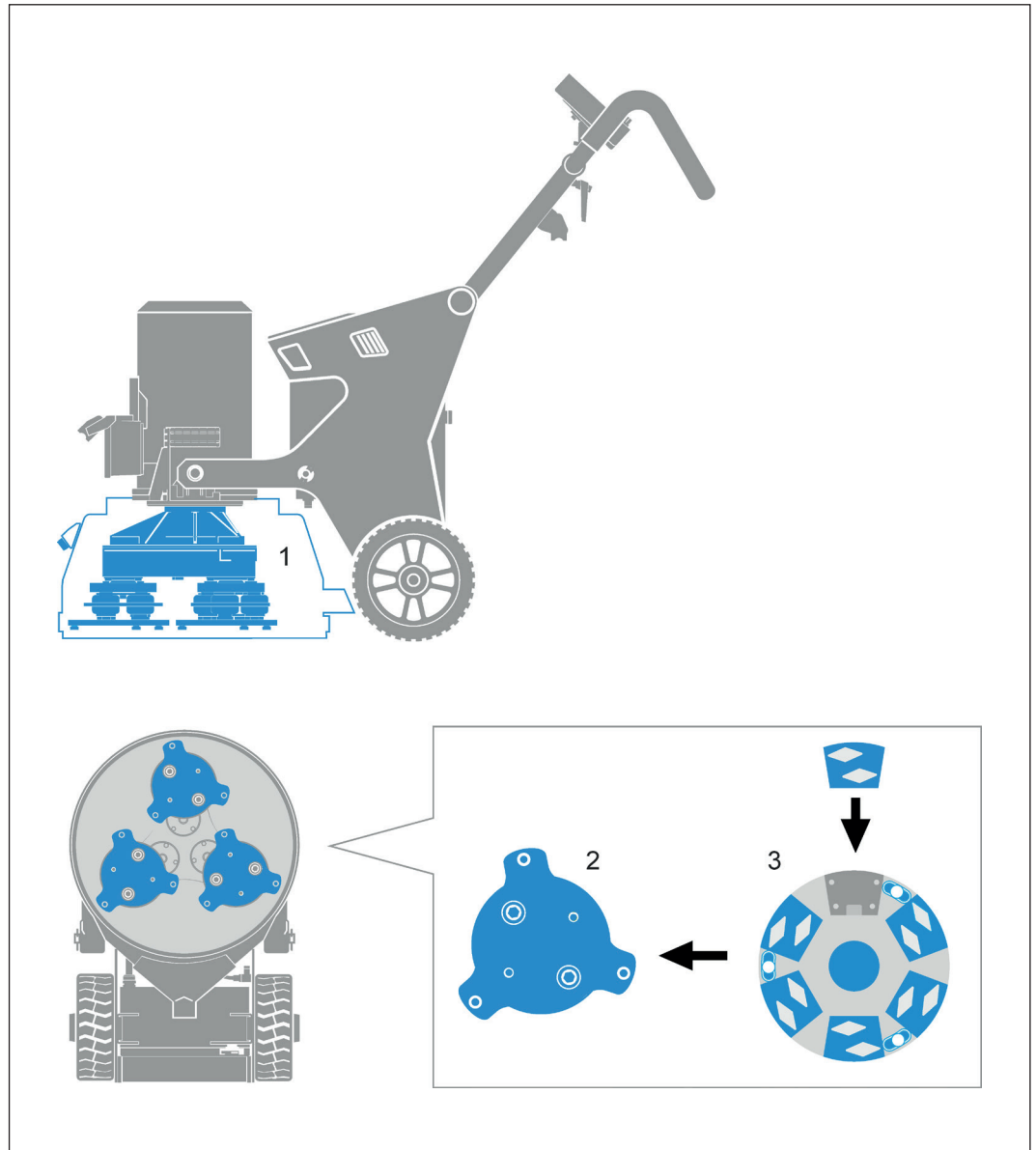


Design

- | | |
|-----------------------------------|--|
| 1 Operating unit | 10 Dust collector connection |
| 2 Chassis | 11 Wheel |
| 3 Water tank | 12 Flap to water tank |
| 4 Motor | 13 Water coarse sieve |
| 5 Light | 14 Grinding head |
| 6 Nozzle for spray-cooling system | 15 Weight with handle recess |
| 7 Power connection | 16 Handle with holder for operating unit |
| 8 Control unit | |
| 9 Water valve | |

4.1.1 Grinding head

The grinding head can be equipped with different grinding tools. The cover together with the connected dust extractor ensures a good work environment. The cover ensures that the operator does not touch any rotating machine parts and minimises dust generation. Make sure that the cover is always in contact with the backing, so that no dust particles can be released.



Grinding head

- 1 Grinding head
- 2 Grinding disc mounting
- 3 Grinding disc incl. grinding tool

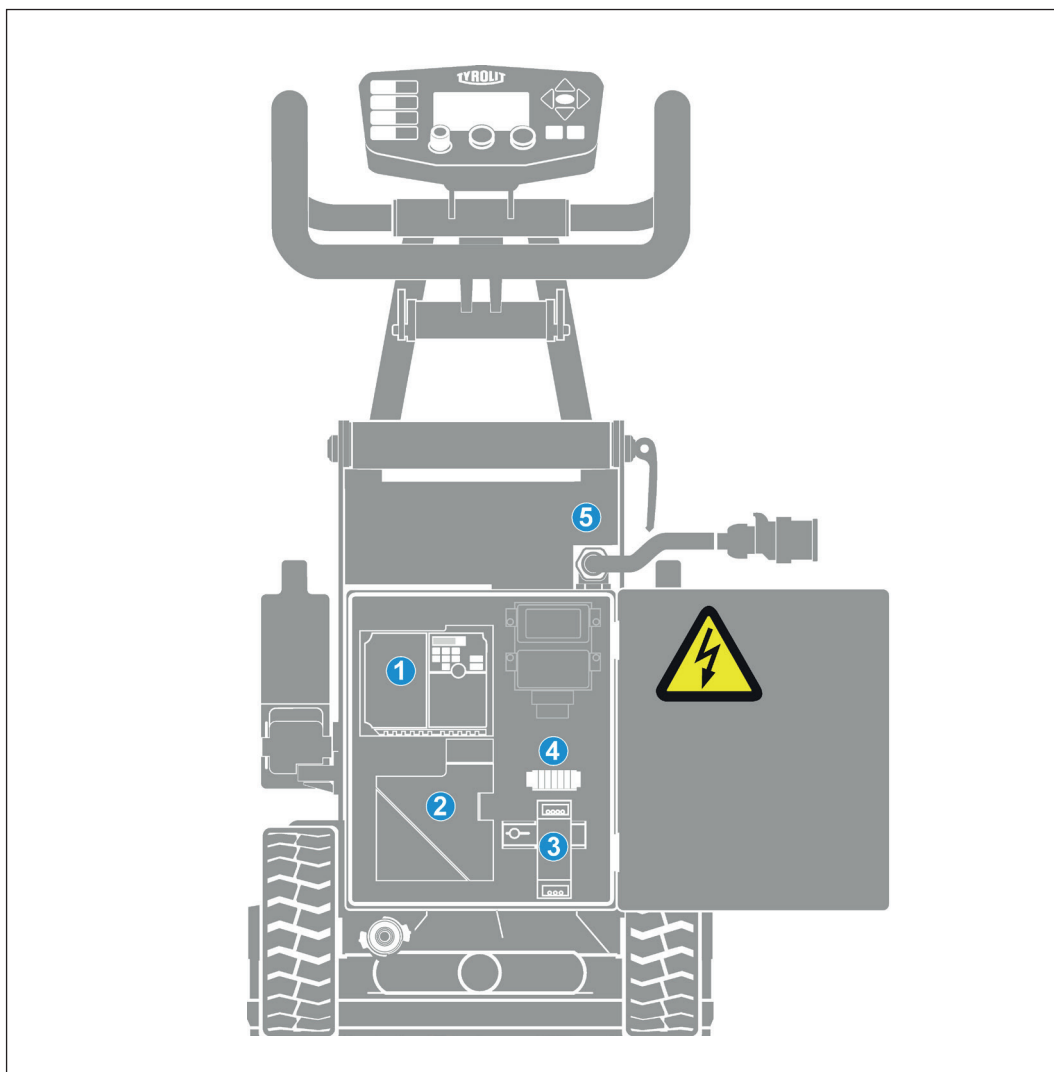
4.1.2 Control unit



WARNING

Warning of dangerous electrical voltage.

Before working in an area with this warning, completely disconnect the system or equipment from the power supply (voltage) and secure so it cannot be inadvertently switched back on.



Control unit

Electrical components

1	Frequency converter	4	Terminal block
2	EMC filter	5	Power connection cable
3	Power supply unit		

4.2 Function

4.2.1 Functional description

The grinding disc with fitted grinding tools is driven by an air-cooled electric motor. The optimum speed of the grinding disc and grinding tools is set via a rotary switch on the control unit.

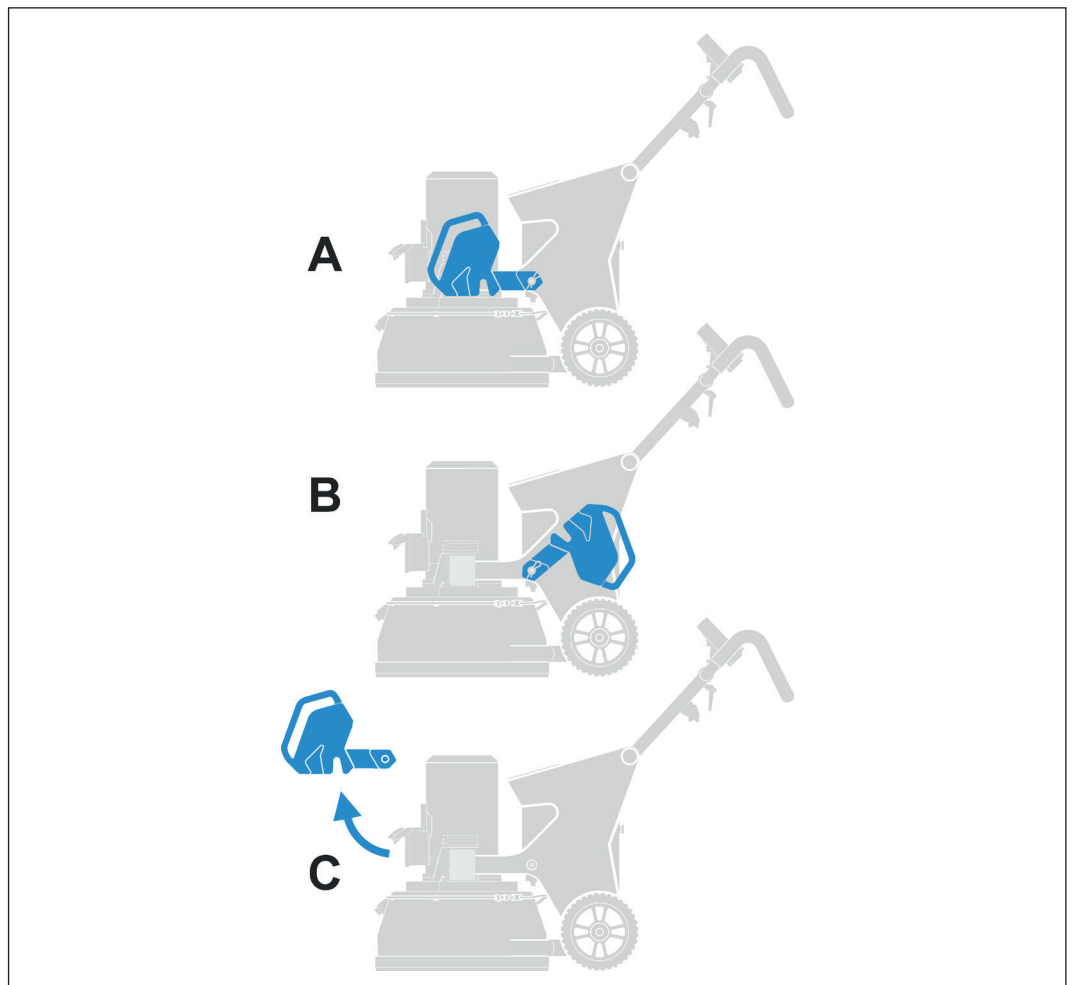
4.2.2 Grinding pressure



INFORMATION

The grinding pressure is determined by the swivelling weights and the number of grinding tools. The fewer grinding tools, the greater the grinding pressure.

If the machine is running at the load limit, this may be due to the position of the weights. Fold the weights back to relieve the grinding head.



Grinding pressure

Weights in different positions	
Weight position A	Max. grinding pressure
Weight position B	Medium grinding pressure
Weight position C	Minimum grinding pressure, without weights

5. Assembly/Dismantling

5.1 Grinding tool assembly



DANGER

Risk of severe injury due to the floor grinder starting up unexpectedly.

- ▶ Disconnect the floor grinder from the mains before working on the grinding disc.



INFORMATION

TYROLIT offers grinding tools for specific surfaces and different types of work. You can find information on grinding tools on the TYROLIT website.

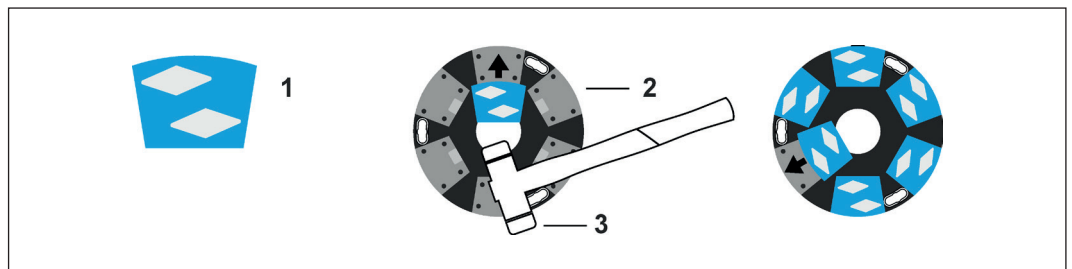


INFORMATION

Always use a plastic mallet for mounting grinding tools. Metal hammers can damage the grinding tool and grinding disc.

- ✓ Tool

Plastic mallet



Grinding tool assembly

- 1 Grinding tool
- 2 Grinding disc
- 3 Plastic mallet

5.1.1 Assembly

- ✓ Tool and tool holder are clean.
- ▶ Slide the grinding tool into the tool holder.
- ▶ Secure the grinding tool in the tool holder with a few light taps of the plastic mallet.

5.1.2 Dismantling

- ▶ To change the tool, detach the grinding tool with a few light taps of the plastic mallet. Then pull the grinding tool out of the holder.

5.2 Mounting the grinding disc

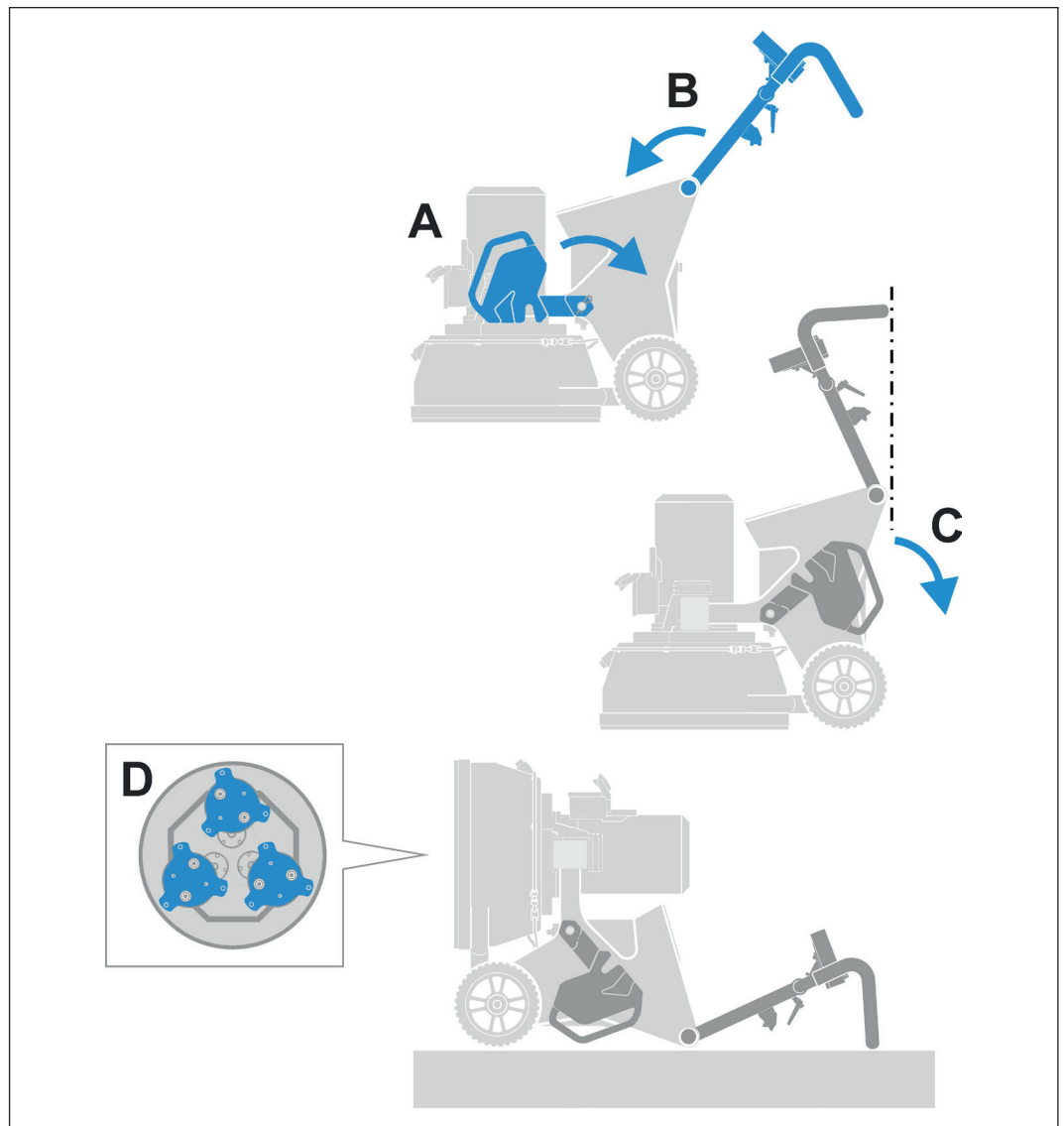


DANGER

Risk of severe injury due to a floor grinder suddenly starting up or falling over.

- ▶ Switch off the floor grinder before working on the grinding disc.
- ▶ Disconnect the floor grinder from the mains supply.
- ▶ Make sure that nothing can get trapped or squashed when tilting the floor grinder.

5.2.1 Position of floor grinder

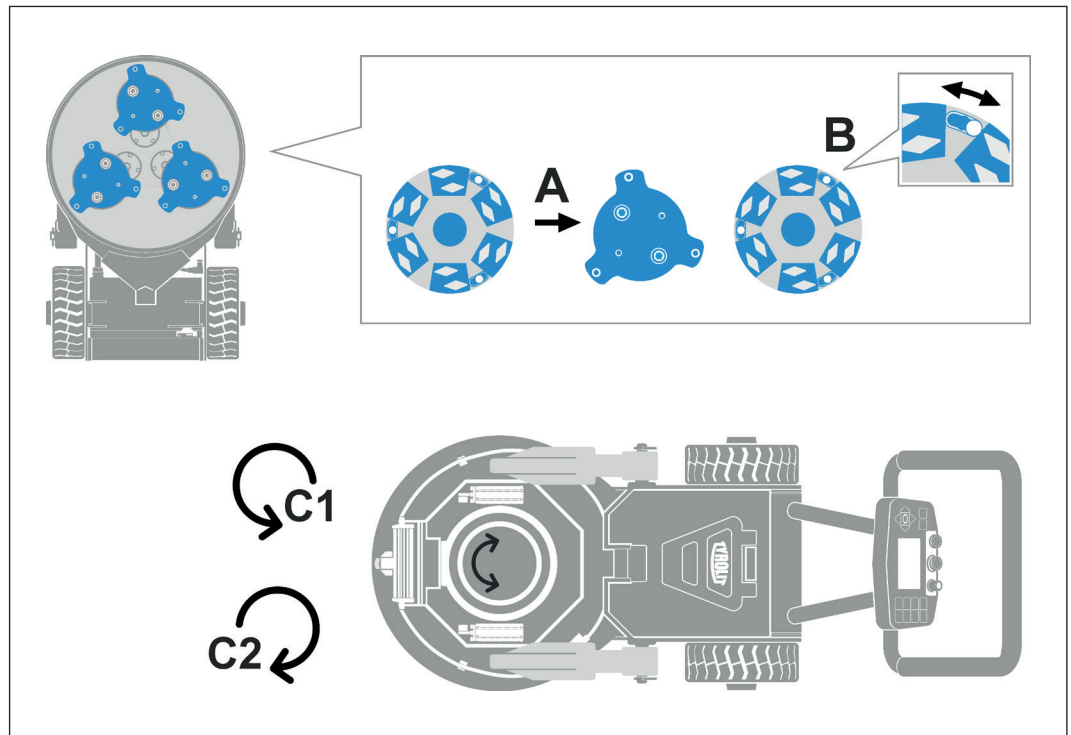


Machine position when mounting the grinding disc

Proceed as follows:

- ✓ Make sure the floor grinder is on a solid, horizontal, non-slip surface.
- ▶ Make sure that the connecting cable and dust extractor tube cannot be trapped.
- ▶ Fold the weights (A) backward.
- ▶ Move the handle unit (B) upward.
- ▶ Tilt the floor grinder (C) backwards until you can access the grinding disc mountings (D).

5.2.2 Mounting the grinding disc



Mounting the grinding disc

Proceed as follows:

- ✓ Tools are firmly mounted on the tool disc
- ✓ Tool disc with tools and mounting are clean.
- ▶ Place the grinding disc (A) on the grinding disc mounting.
- ▶ Turn the grinding disc (B) as far as it will go.



INFORMATION

The grinding disc can be rotated to the right as well as to the left as far as it will go. The decisive factor is the direction of tool rotation C1 and C2. Make sure that the stop acts in the direction of the centrifugal force.



INFORMATION

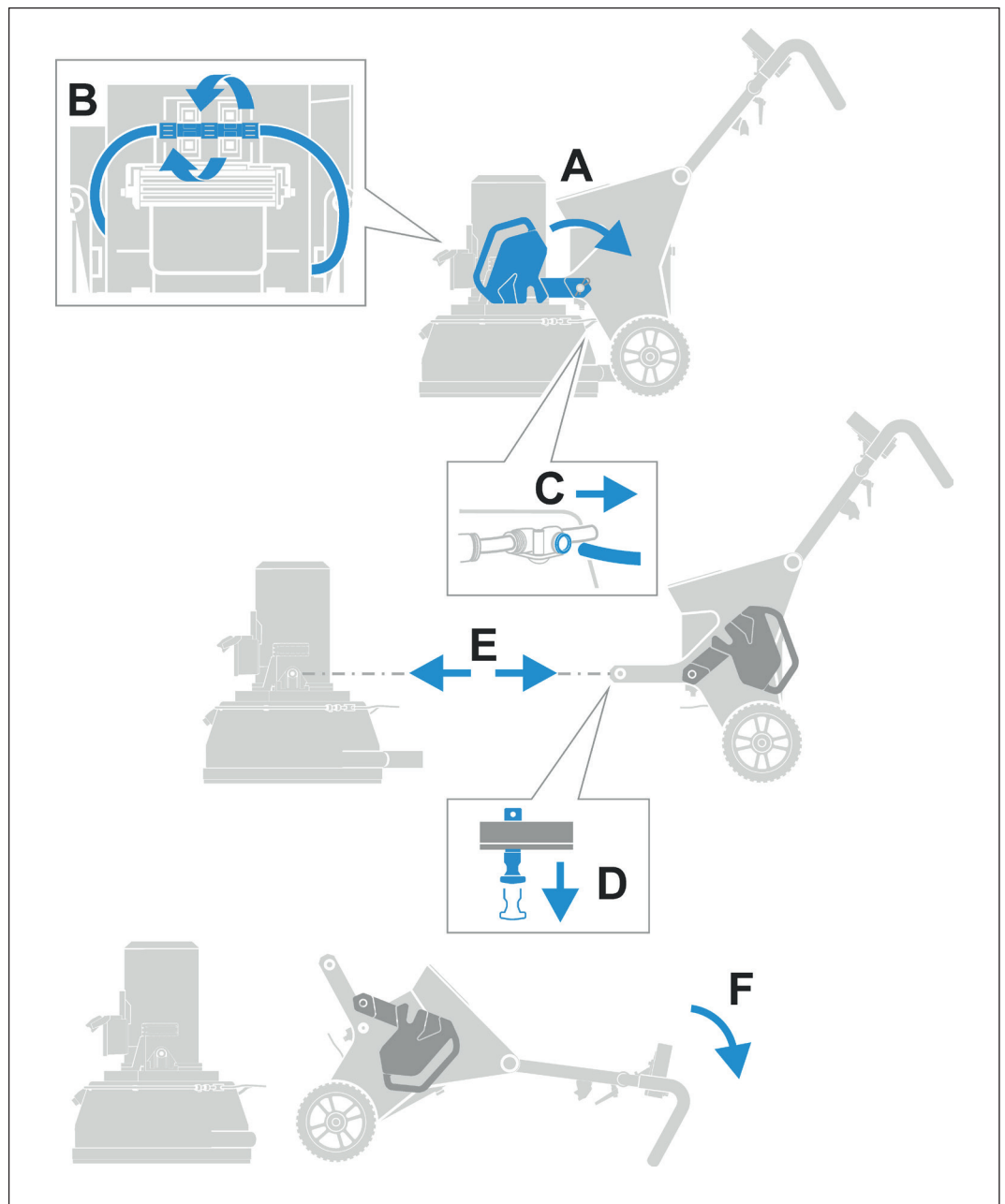
For the assembly of other grinding tool mounting systems, please contact your TYROLIT customer service.



INFORMATION

After mounting the tools, make sure that the machine is carefully tilted forward so that the tools do not come loose.

5.3 Separation of grinding head/Chassis



Separation of grinding head/Chassis

Proceed as follows:

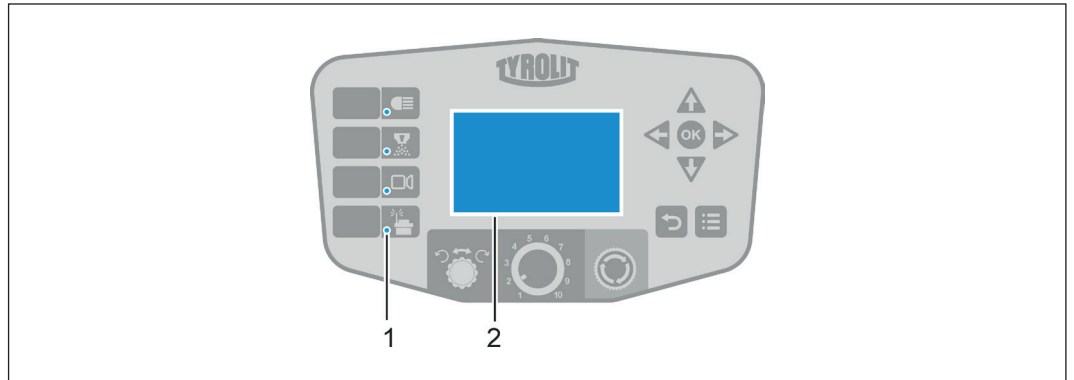
- ✓ The machine is switched off and disconnected from the mains supply.
- ✓ The machine is disconnected from all supply lines.
- ▶ Fold the weights (A) backward.
- ▶ Disconnect the motor cable from the motor using the twist lock (B).
- ▶ Disconnect the two water lines (left and right) from the grinding head by pushing the lock backwards and pulling out the hose (C).
- ▶ Make sure that the chassis does not fall backwards when you subsequently dismantle the two bolts (left and right) (D).
- ▶ Place the chassis on the floor (F).

6 Operation

The following section describes the operation of the grinding machine. It does not deal with the technical aspects of grinding, such as the choice of grinding tools, etc.

6.1 Displays and controls

6.1.1 Control unit display elements

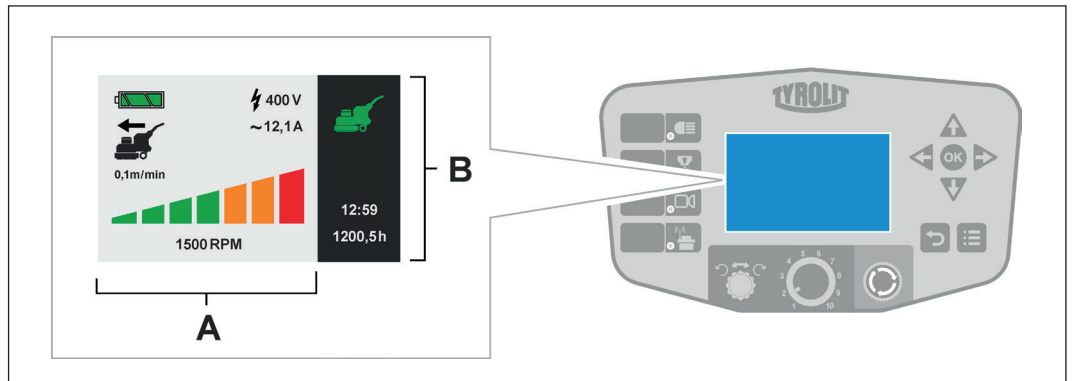


Display elements

- 1 Pressure indicator light - Keys
- 2 Display

6.1.2 Display elements

Display fields



Display fields

- A Vario information field
- B Status information field



Vario information field






In the Vario information field, error and performance information as well as time information is displayed.



























Status information field

The machine system information is displayed in the status information field.

6.1.3 Display symbols

Status information field			
	Service		Service indicators
	Repair		Repair
	Normal operation		

Vario information field			
	Operating instructions		De-energised
	Main engine		Overtemperature
	Water/cooling		Weight on the grinding head
	Deactivate EMERGENCY STOP		Frequency converter
	Activate EMERGENCY STOP		Undercurrent
	Optical control		Heat sink overtemperature
	Power line		Reduce speed
	FU output stage		Battery
	Phase missing		Time
	Phase		Power
	Battery: Fully charged		TYROLIT customer service
	Battery: Charge status low		
	Battery: Charge status empty		

6.1.4 Application symbols



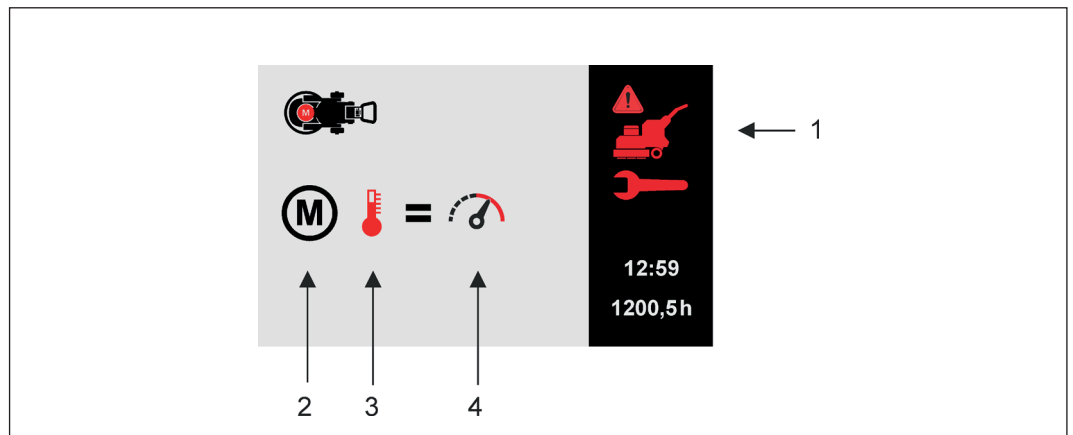
INFORMATION

The individual status and vario symbols can be combined to form statements

Example error display:

Cause: Main motor overtemperature

Measure: Reduce speed

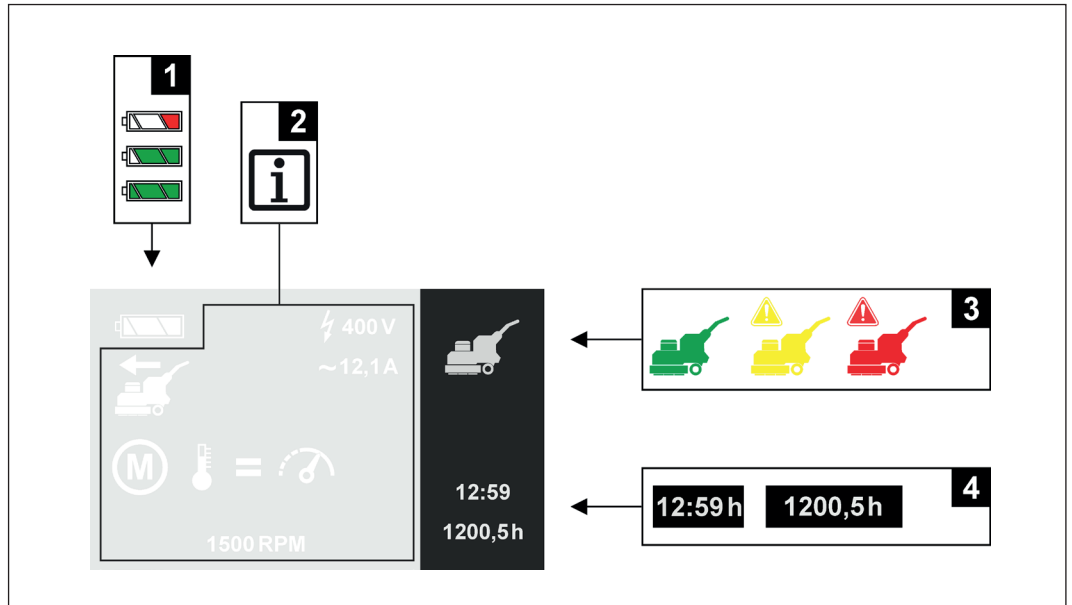


Example vario fields

Display indication:

Fault indication (1): Main motor (2) has overtemperature (3); the countermeasure is to reduce speed (4).

6.1.5 Display breakdown



Display breakdown

1 Battery state of charge	
	Battery display: Charge status empty/low/charged
2 Information	
	In the Vario information field, error and performance information as well as Working information displayed.
3 Machine status	
	With this status, the information field Work - System information is displayed.
	With this status, service notes are displayed on the information field.
	With this status, errors are displayed on the information field.
4 Time and operating hours	
00:00	00:00 h Time
... h	00000 h Operating hours

6.1.7 Error message

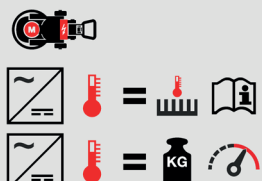



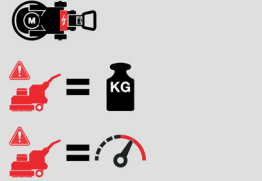



INFORMATION

Subsequent errors are indicated visually via the display.
When contacting TYROLIT customer service, reference the error number.

Error messages table:

Error	Measure	Display	
General disturbance	<ul style="list-style-type: none"> ▶ Unplug machine for 1 min. and start again ▶ In case of repeated occurrence, contact TYROLIT customer service. 	<p>Failure code [XXXXX]</p>	<p>12:59 1200,5h</p>
Emergency Stop active	Deactivate EMERGENCY STOP	<p>Failure code [XXXXX]</p>	<p>12:59 1200,5h</p>
High motor temperature	<ul style="list-style-type: none"> ▶ If possible, reduce load and/or speed 	<p>Failure code [XXXXX]</p>	<p>12:59 1200,5h</p>
Motor overtemperature	<ul style="list-style-type: none"> ▶ Allow engine to cool down ▶ Reduce load and/or speed 	<p>Failure code [XXXXX]</p>	<p>12:59 1200,5h</p>

Error	Measure	Display	
Frequency inverter overtemperature	<ul style="list-style-type: none"> ▶ Clean heat sink ▶ Reduce load and/or speed 	 <p>Failure code [XXXXX]</p>	 <p>12:59 1200,5h</p>
Mains phase missing/ power supply fluctuates	<ul style="list-style-type: none"> ▶ Check mains voltage ▶ Check phases, lines and fuses 	 <p>Failure code [XXXXX]</p>	 <p>12:59 1200,5h</p>
Machine overload	<ul style="list-style-type: none"> ▶ Reduce load and/or speed 	 <p>Failure code [XXXXX]</p>	 <p>12:59 1200,5h</p>

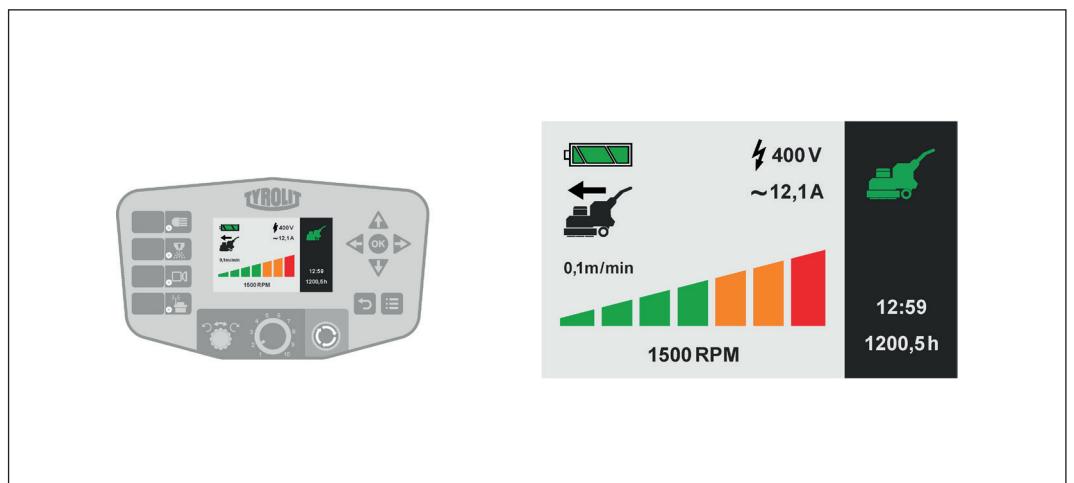
Error messages

6.1.8 Power display in operating state



INFORMATION

The current power range is visualised by means of a colour power display. Ideal: Orange areas.



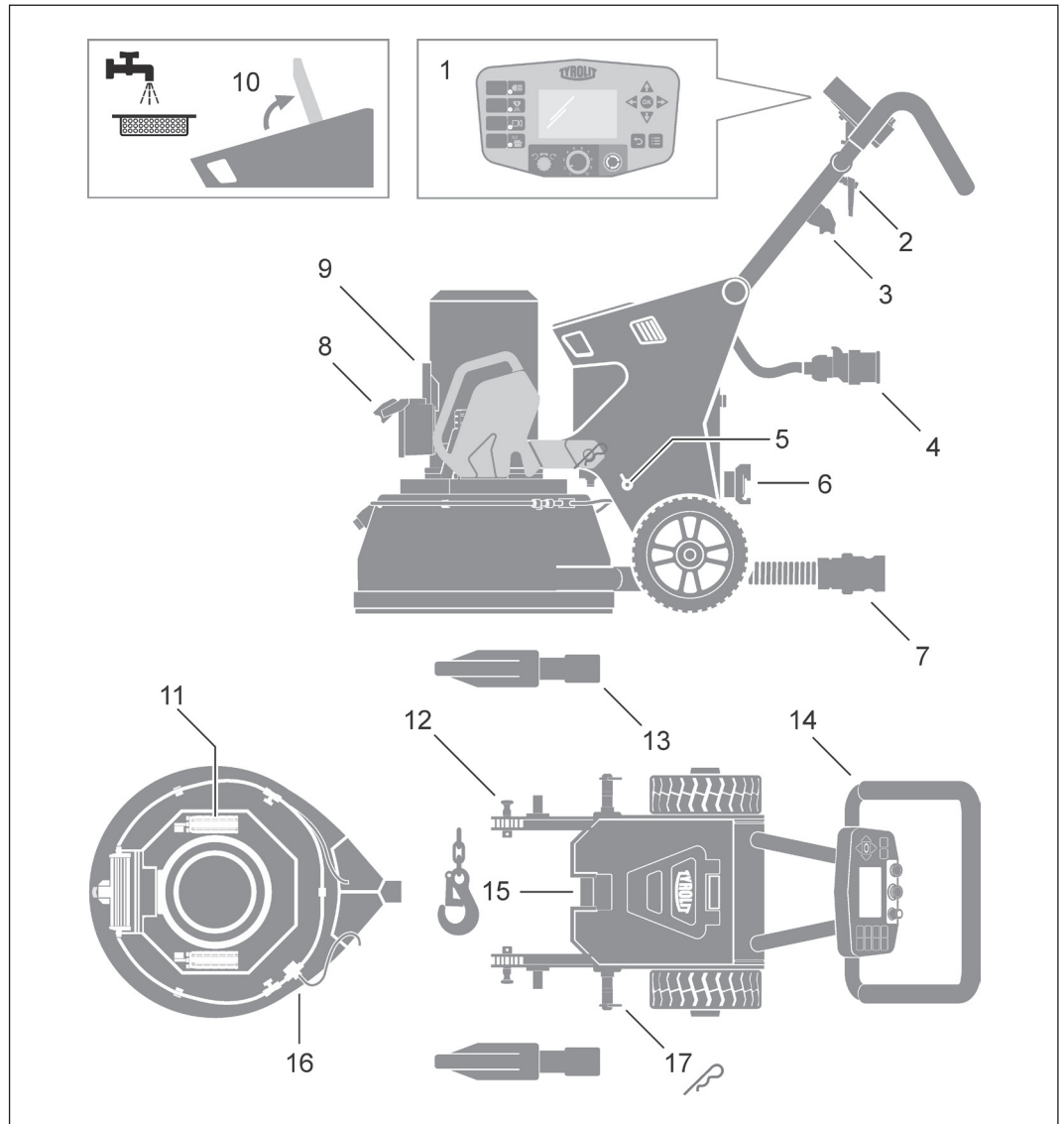
Power display

6.2 Controls



This section describes the operating elements on the grinding machine.

You can find further information in the TYROLIT "Floor grinding safety manual".



Controls

- | | |
|-----------------------------|---|
| 1 Operating unit | 10 Water tank with filter |
| 2 Handle lock | 11 Carrying handle (motor) |
| 3 Light at rear | 12 Plug-in bolt of grinding head mounting |
| 4 Electrical connection | 13 Weight |
| 5 Water valve | 14 Adjustable handle |
| 6 Water connection | 15 Crane eye |
| 7 Vacuum cleaner connection | 16 Water hose coupling |
| 8 Light at front | 17 Safety cotter pin on weights |
| 9 Motor cable coupling | |

6.2.1 Control unit adjustment



DANGER

Danger of crushing

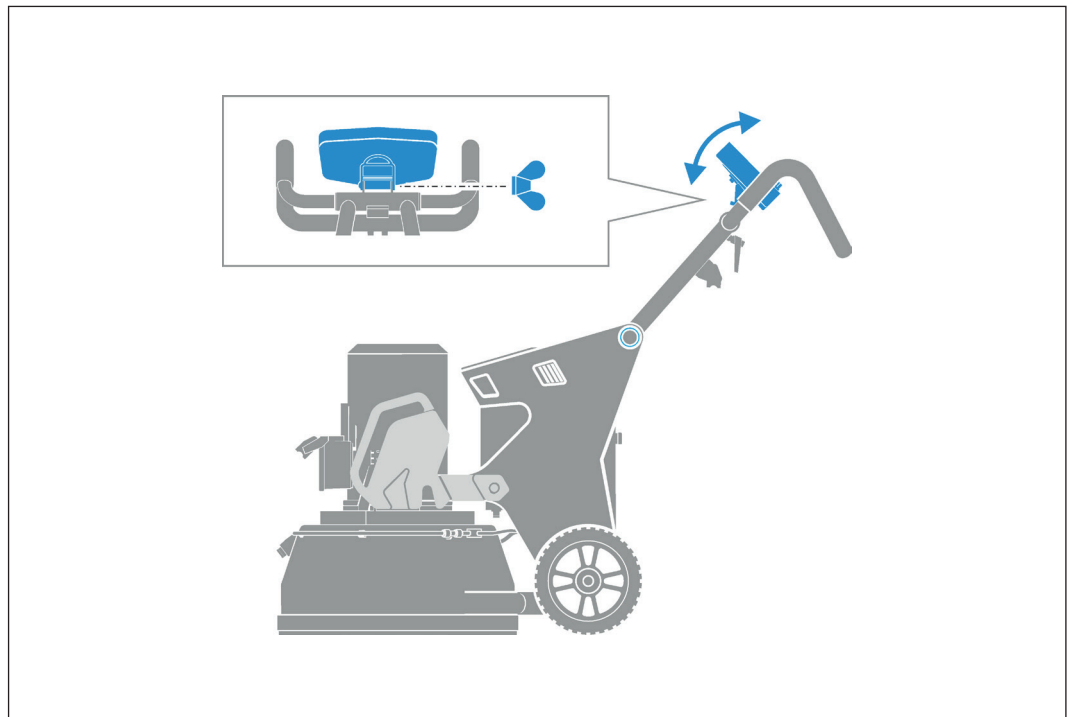
- ▶ Use both hands to adjust the control unit.

The inclination of the control unit can be adjusted individually.



Presetting

The clamping strength for the adjustment can be managed by means of a wing nut.



Control unit adjustment

6.2.2 Handle unit adjustment

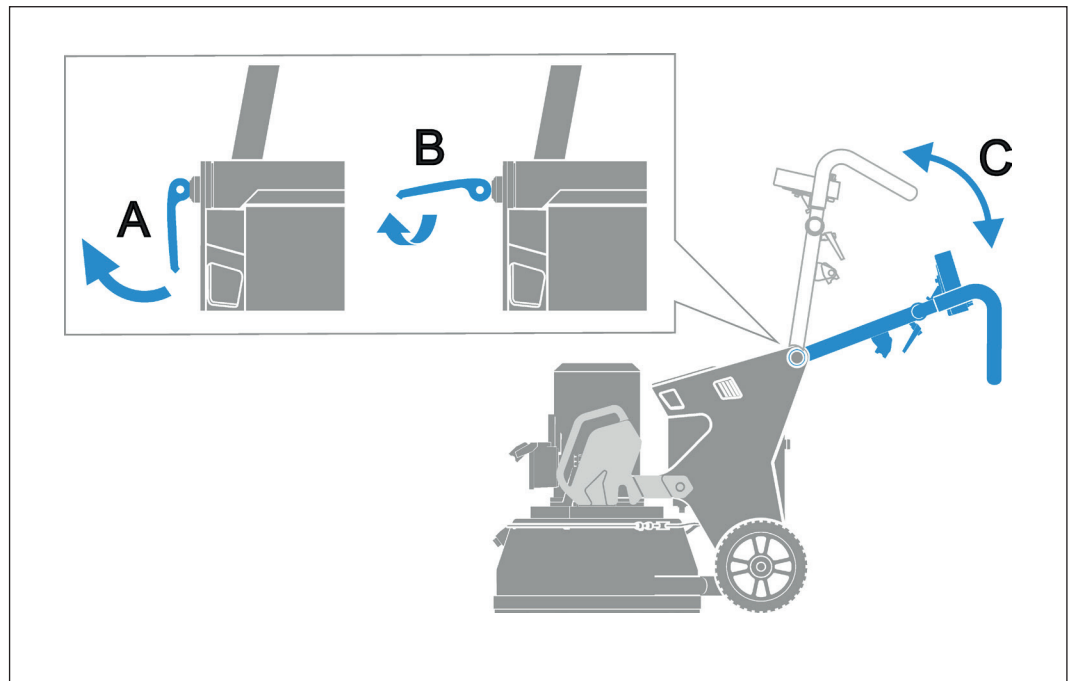


DANGER

Danger of crushing

- ▶ Use both hands to adjust the handle.

The height of the handle unit can be adjusted without tools by means of a quick-action clamping device. Make sure that the handle position is in a detent position.



Handle unit adjustment

Proceed as follows:

- ▶ Loosen the quick clamping device (A/B).
- ▶ Move the handle unit to the desired position. When doing so, make sure that the handle unit is in a detent position (C).
- ▶ Fix position by means of quick clamping device.

6.2.3 Grinding pressure



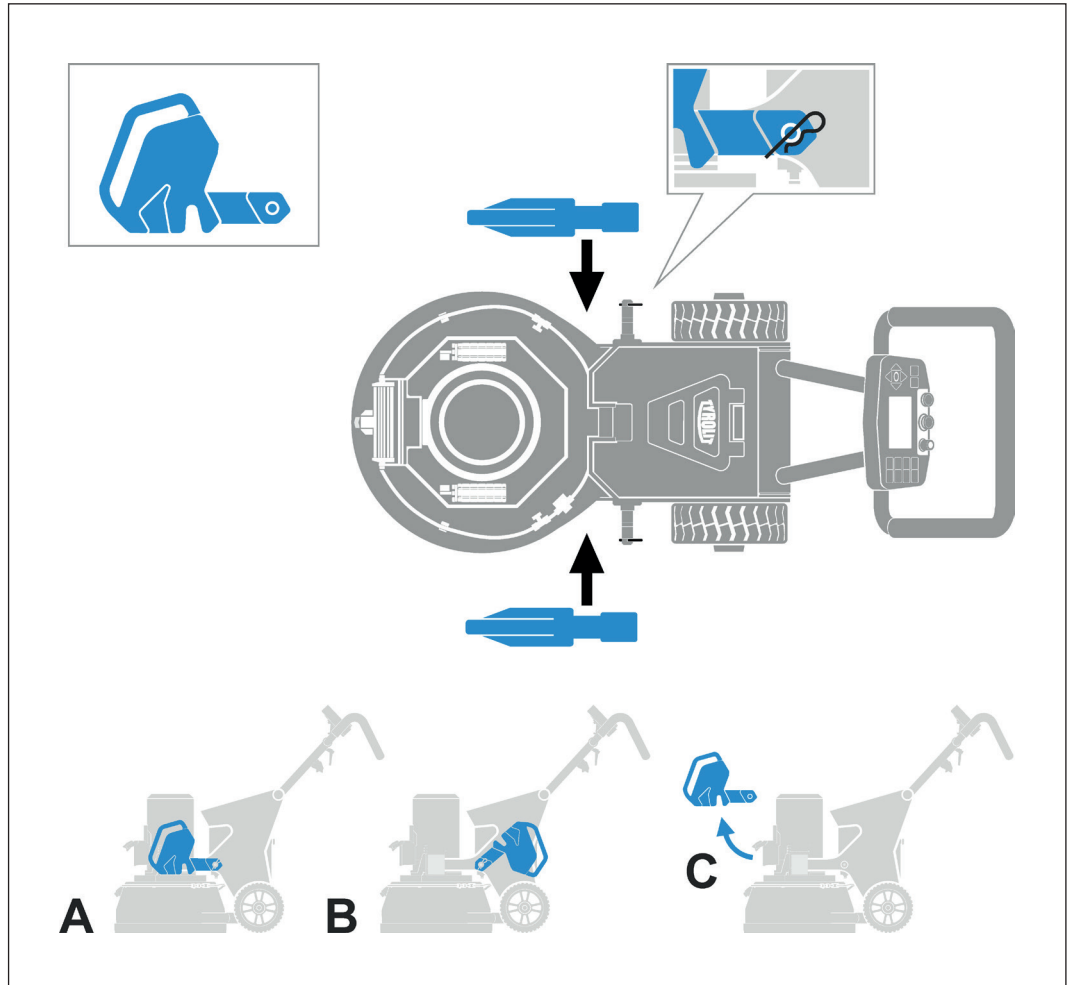
INFORMATION

The floor grinding machine can be equipped with two weights. The grinding pressure of the floor grinding machine can be changed using weights.



WARNING

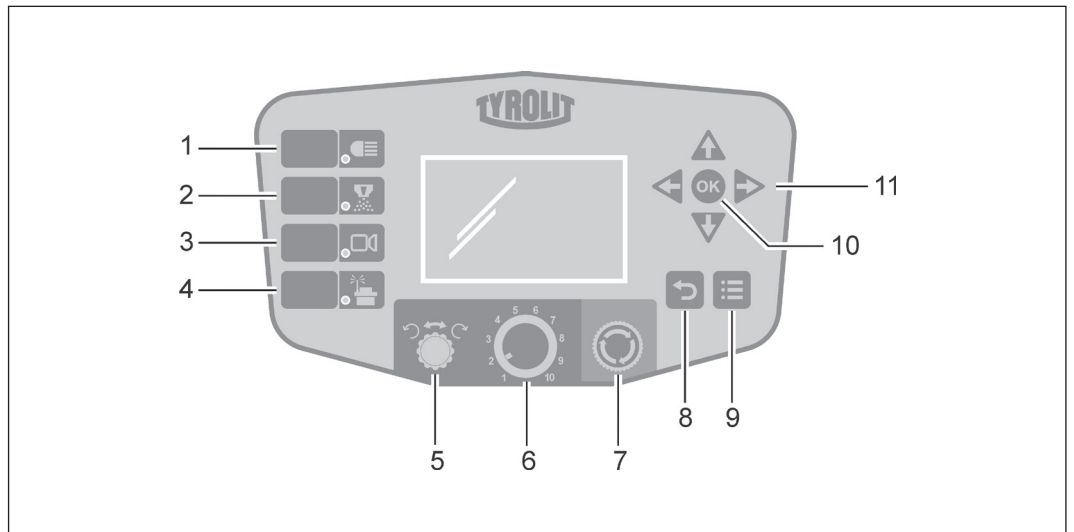
The weights can be easily removed by pulling the safety clips. To prevent crushing, always swing and carry the weights by the handle recesses.



Weights

Weights in different positions	
Weight position A	Max. grinding pressure
Weight position B	Medium grinding pressure
Weight position C	Minimum grinding pressure, without weights

6.3 Control unit control panel



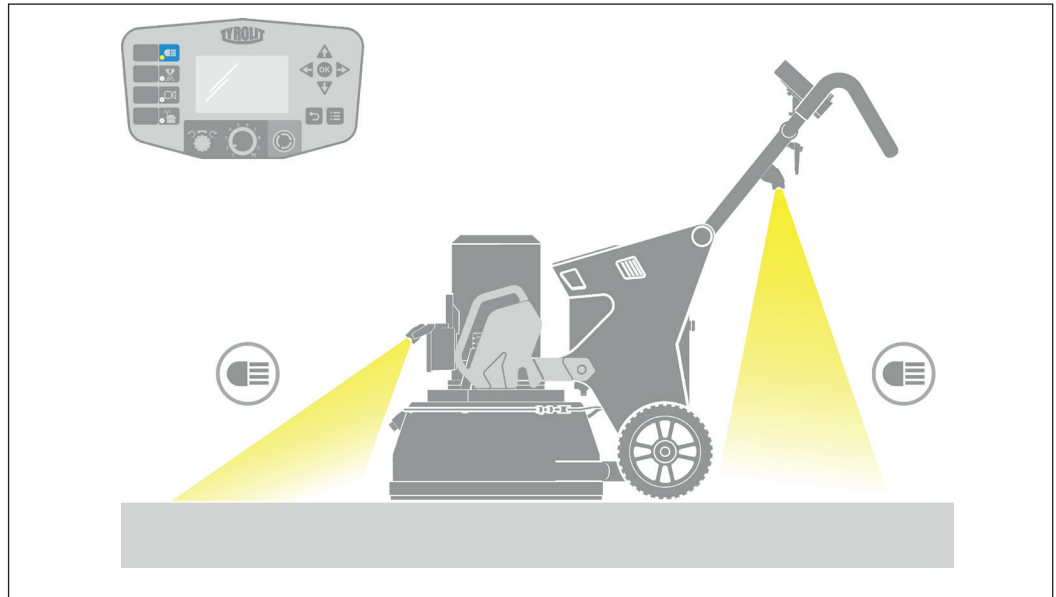
Control unit control panel

Control unit control panel FGE515			YES	NO
1		Light	X	
2		Water spray cooling system	X	
3		Camera		X
4		Remote control		X
5		Motor direction of rotation	X	
6		Grinding disc speed	X	
7		EMERGENCY STOP	X	
8		Reset key menu	X	
9		Menu	X	
10		OK button	X	
11		Navigation buttons	X	

6.3.1 Light

**INFORMATION**

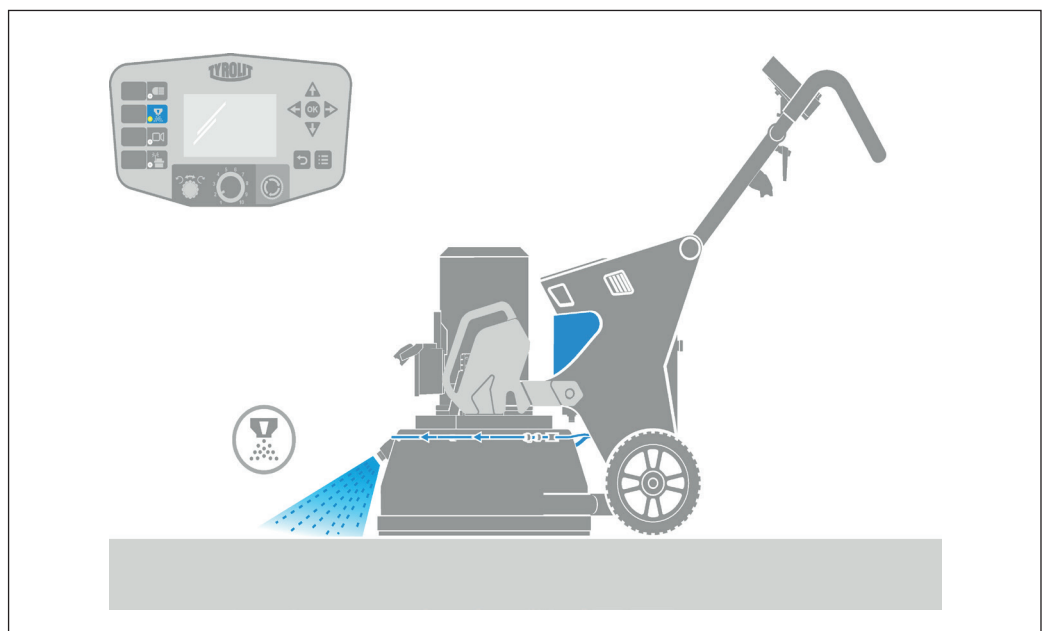
By pressing the light button, the front light and the rear light are switched on.



Light

6.3.2 Spray cooling system**INFORMATION**

The spray cooling system cools the grinding tools. The water for the spray cooling system comes from the water tank via the water pump.



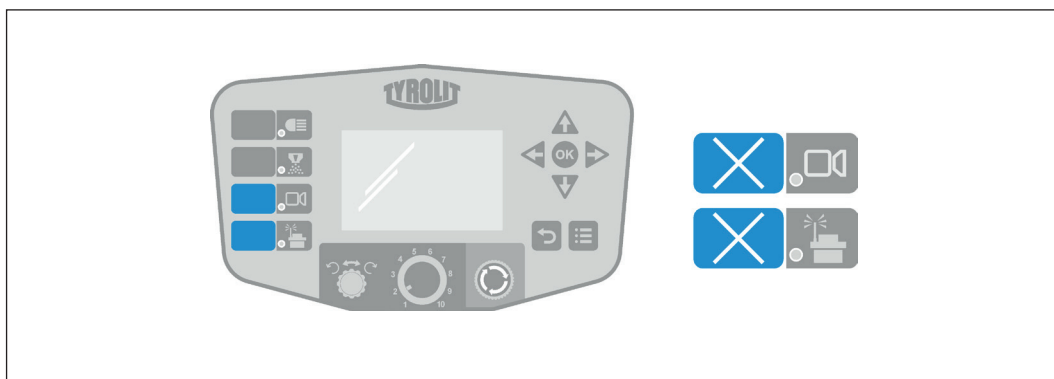
Water

6.3.3 Camera and remote control



INFORMATION

The FGE515 floor grinder does not have a camera or remote control.



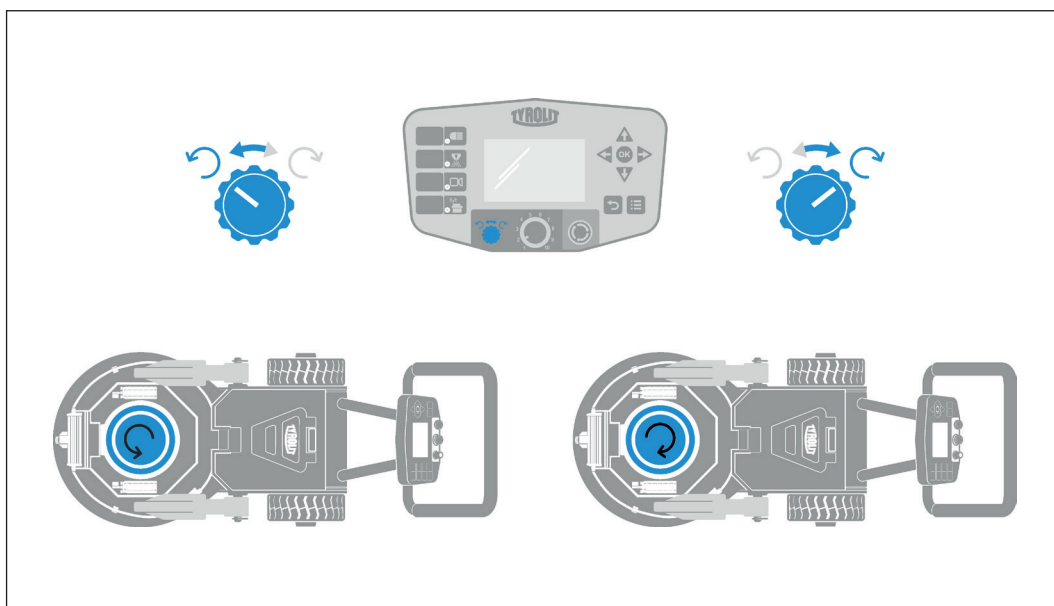
Camera and remote control

6.3.4 Motor direction of rotation



INFORMATION

The direction of motor rotation can be changed between left and right.



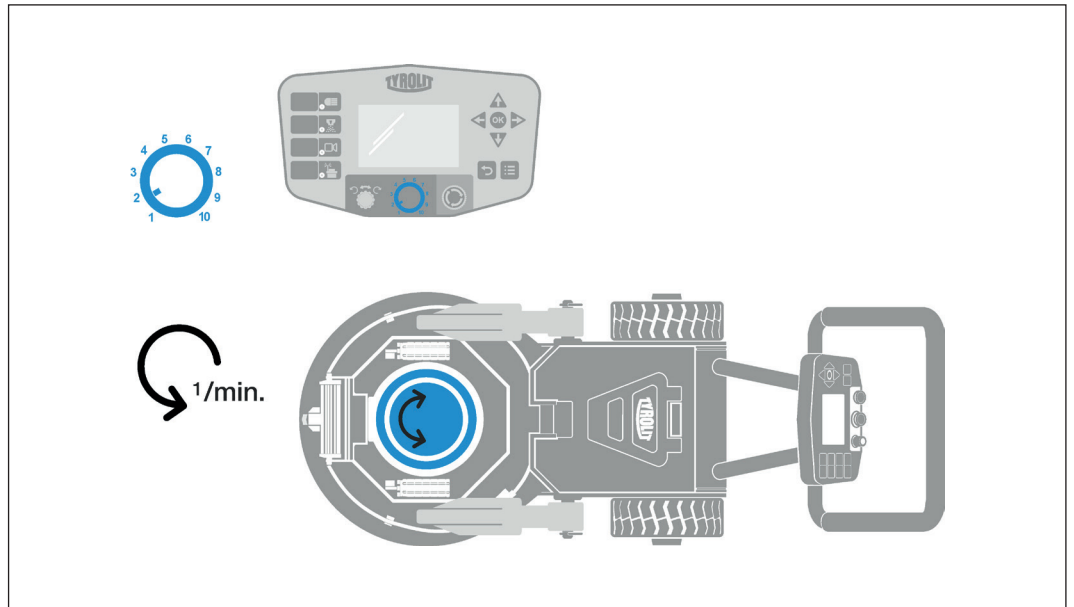
Motor direction of rotation

6.3.5 Engine speed



INFORMATION

The speed of the drive motor is set by means of a rotary switch.



Engine speed

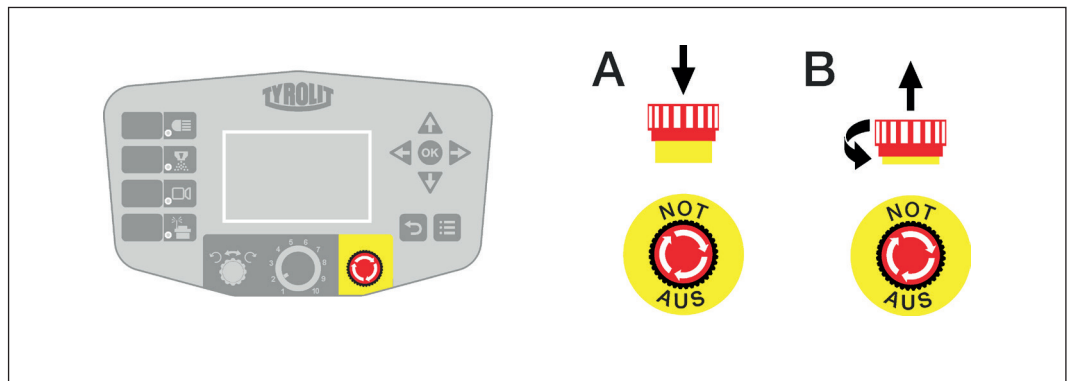
6.3.6 EMERGENCY - STOP



DANGER

What to do in an emergency

- ▶ Press the EMERGENCY STOP key on the control unit.



EMERGENCY STOP

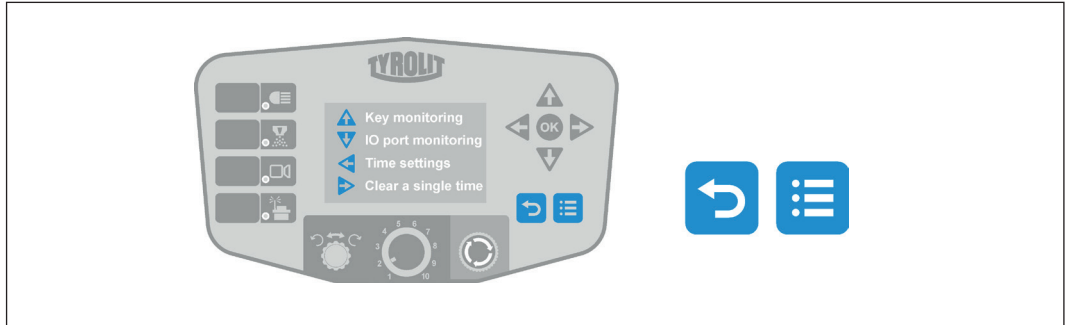
- A Activate EMERGENCY STOP
- B Deactivate EMERGENCY STOP

6.3.7 Reset and menu button



INFORMATION

The menu can be called up using the menu and backspace keys. The reset key is also used to reset error messages.



Reset and menu button

6.3.8 Confirmation key



INFORMATION

The menu entries are confirmed with the confirmation key. The OK button is also used to reset error messages.



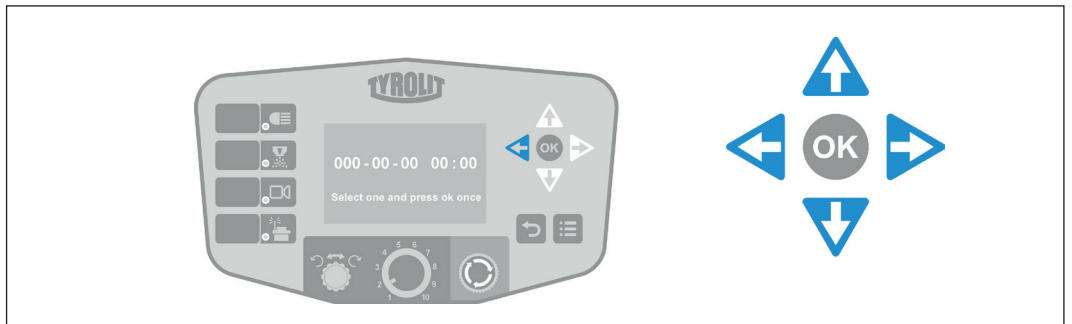
Confirmation key

6.3.9 Navigation buttons



INFORMATION

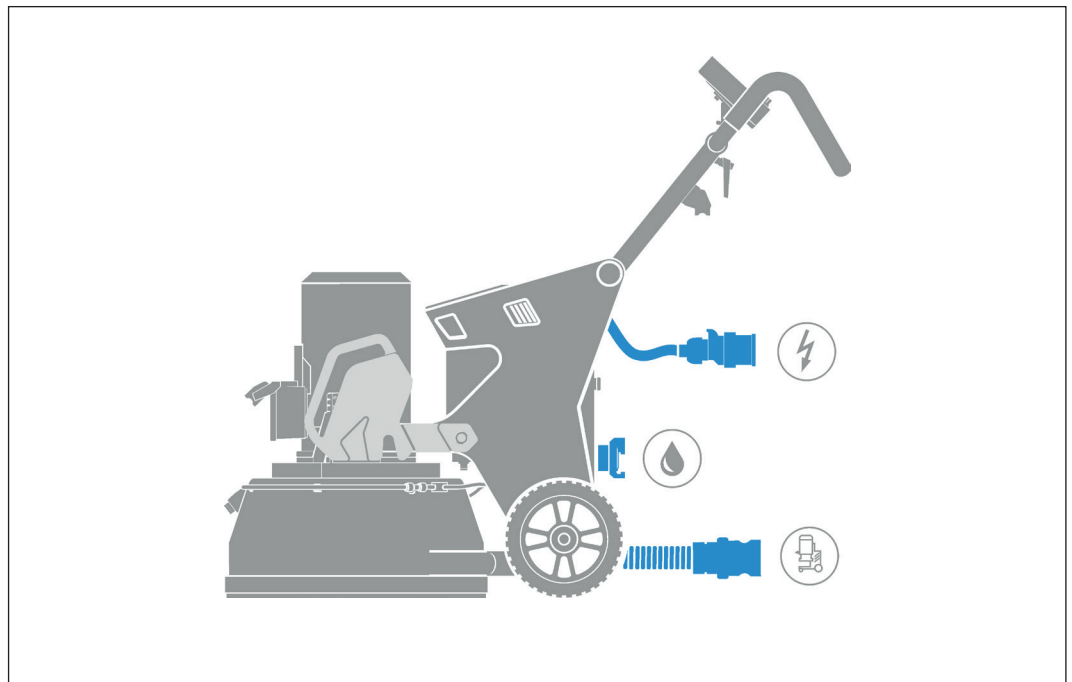
The navigation keys can be used to navigate between the menu items. Example of time setting (Time settings)






Navigation buttons

6.4 Connections

6.4.1 Power supply



Power supply

-  Power connection
-  Water connection
-  Vacuum cleaner connection



INFORMATION

- The mains voltage must match the specifications on the type plate.
- Protect the connecting cables against heat, oil and sharp edges.
- Only use the connecting cables for their intended purpose.
- Do not use the connecting cable to pull the plug out of the socket.
- In the event of power failures:
Switch off the floor grinder and pull out the plug.

6.4.2 Extension cables



INFORMATION

- Only use approved and appropriately marked extension cables outdoors.
- Avoid the use of extension cables with multiple sockets and the simultaneous operation of several devices.

Only use extension cables that are approved for the field of application and with an adequate cable cross-section.



INFORMATION

Recommended minimum cross-sections and max. cable lengths				
Conductor cross-section mm ²	1,5	2,5	4,0	6,0
220 V-240 V	30 m	50 m	80 m	120 m
400 V	100 m	170 m	275 m	415 m

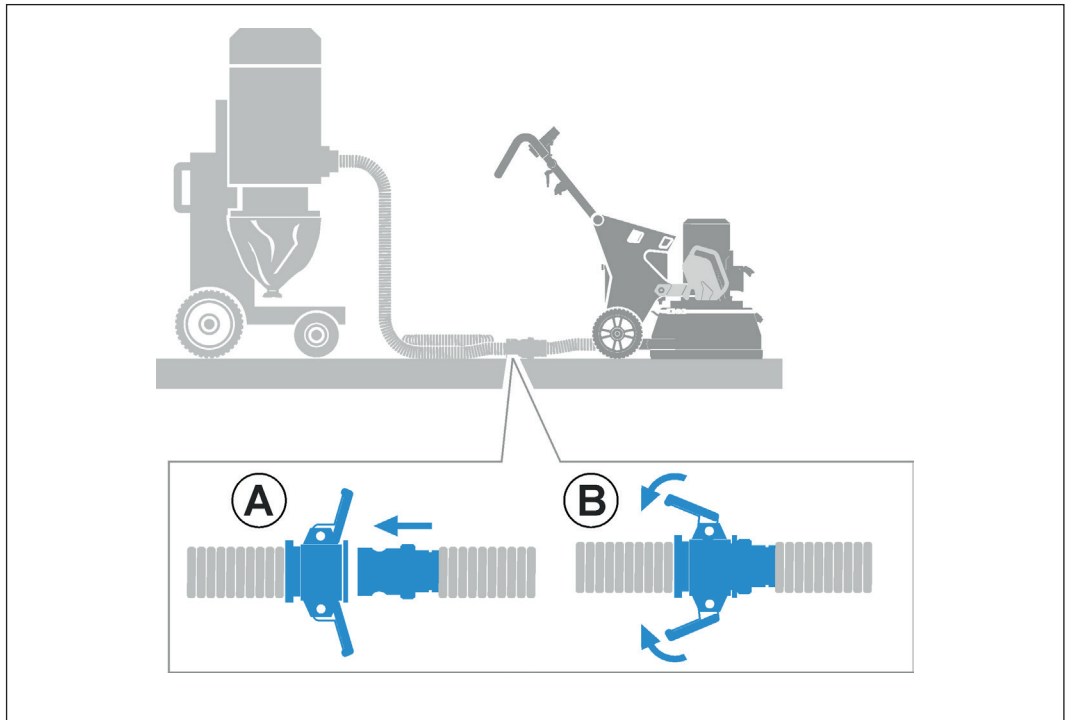
6.5 Extraction

Connect the dust extractor to the grinding machine. You can find information on connections in the documentation of the different TYROLIT dust extractor models.



DANGER

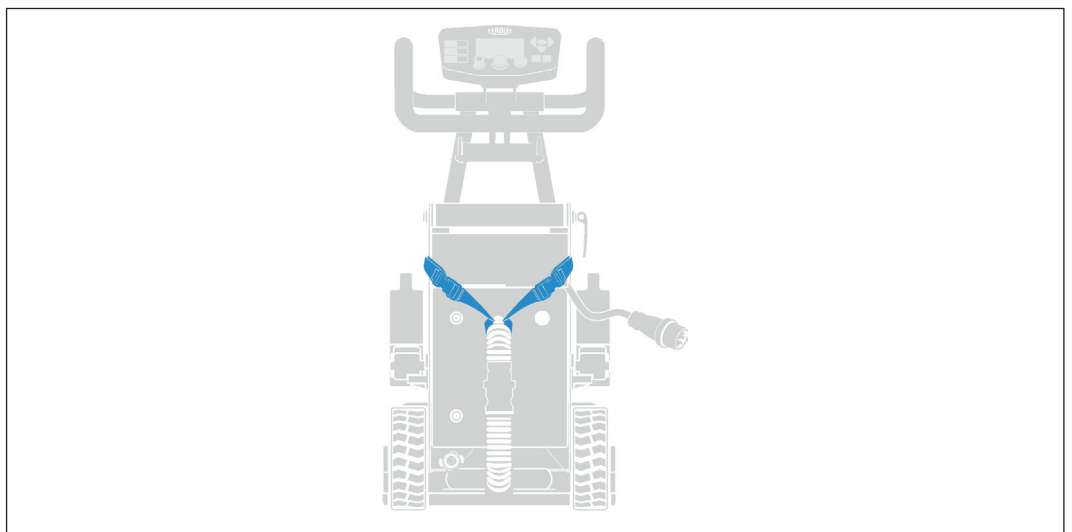
Released dust particles can damage your health.
▶ Always work with a vacuum cleaner and a face mask.



Extraction

6.6 Cable and hose relief

There is a cable and hose relief on the back.



Cable and hose relief

6.7 Wet application



INFORMATION

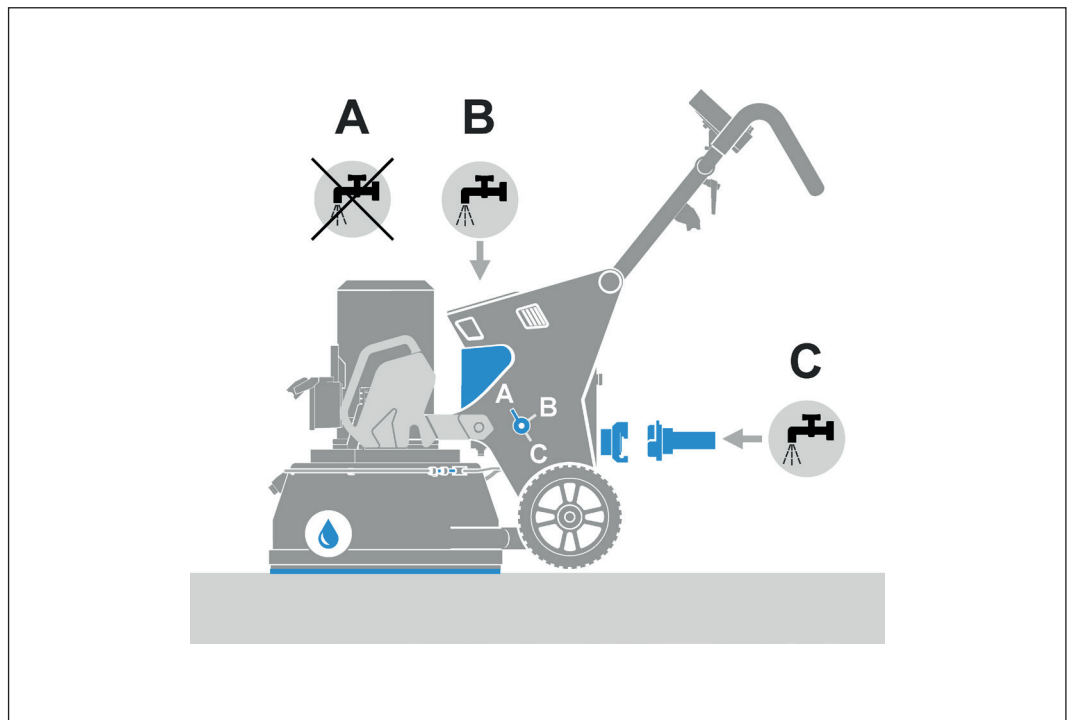
The FGE515 floor grinder can be used for wet and dry applications. Water is used when sanding challenging floors. It is also used to achieve higher material removal or lower temperatures during grinding. For wet applications, a separate water aspirator must be used.

6.7.1 Water valve



INFORMATION

The water supply can be controlled via the water valve.



Water valve

Water valve positions	
Valve position A	Water supply via water tank
Valve position B	Dry application
Valve position C	Water supply via water pipe

6.8 Starting/switching off the floor grinder



INFORMATION

You can find information on machine guidance, grinding techniques, etc. in the “Floor grinding safety manual”.



DANGER

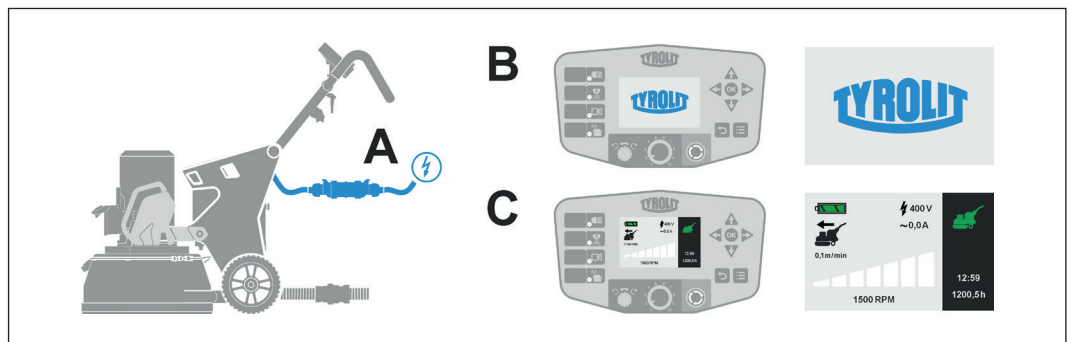
There is a risk of death or serious injury if this is not observed.

- Never work without suitable PPE.
- Always wear ear protection during work.
- Remove adjustment and assembly tools before switching on the floor grinder.
- Keep children away from the floor grinder and the work area.
- Avoid working in an unnatural posture.

The inclination of the handle can be adjusted. When using the floor grinder manually, you can adjust it to achieve an optimum position.

- Ensure that you have a secure footing and keep your balance at all times.
- Avoid physical contact with earthed surfaces such as pipes, heaters, stoves and refrigerators. There is an increased risk of electric shock if your body is earthed.

- ✓ The work environment is dry.
- ✓ The dust extractor is correctly connected to the floor grinder and the power supply.
- ✓ All operating elements of the control unit are in 0-position.
- ✓ The EMERGENCY STOP on the control unit is deactivated



Starting/switching off the floor grinder

Proceed as follows:

- ▶ Start the machine by connecting the floor grinder to the power source (A). The machine is switched off when disconnected from the power source.



INFORMATION

The TYROLIT logo (B) appears on the display of the control unit and then the start screen (C) changes. The floor grinder is ready to start.

6.9 Transport

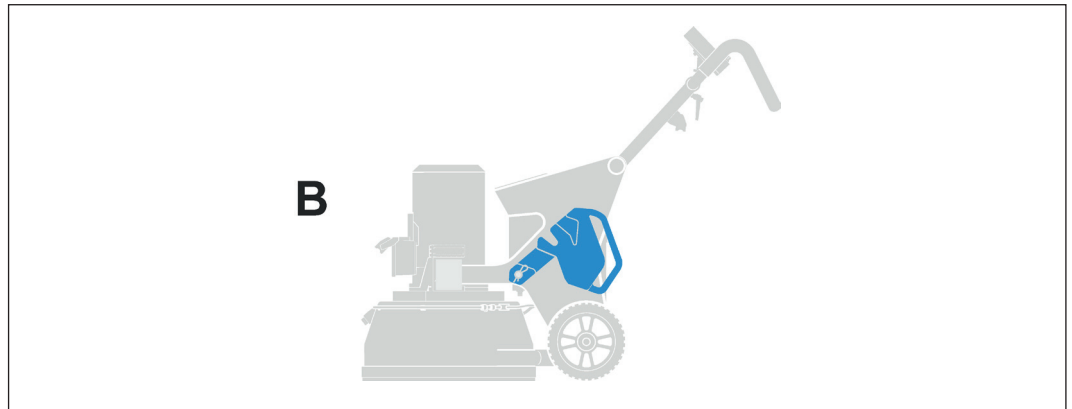


DANGER

During transport, there is a risk of injury and damage to the machine.

6.9.1 Weight position

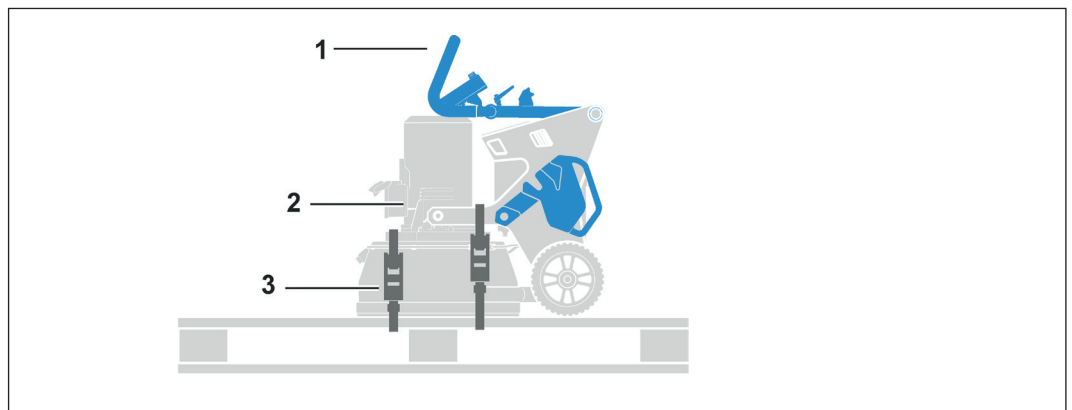
During transfer, transport and lifting operations, the weights must be in position B. The weights must be secured against falling away.



Weight position

6.9.2 Transport with solid base surface (e.g. pallet)

- The machine must be firmly connected to the surface.
- The grinding head must rest on the base surface.
- Fastening elements such as tension belts must be attached to non-moving parts.
- The weights must be secured



Transport with solid base

- 1 Handle unit position
- 2 Position of secured weights
- 3 Clamping set

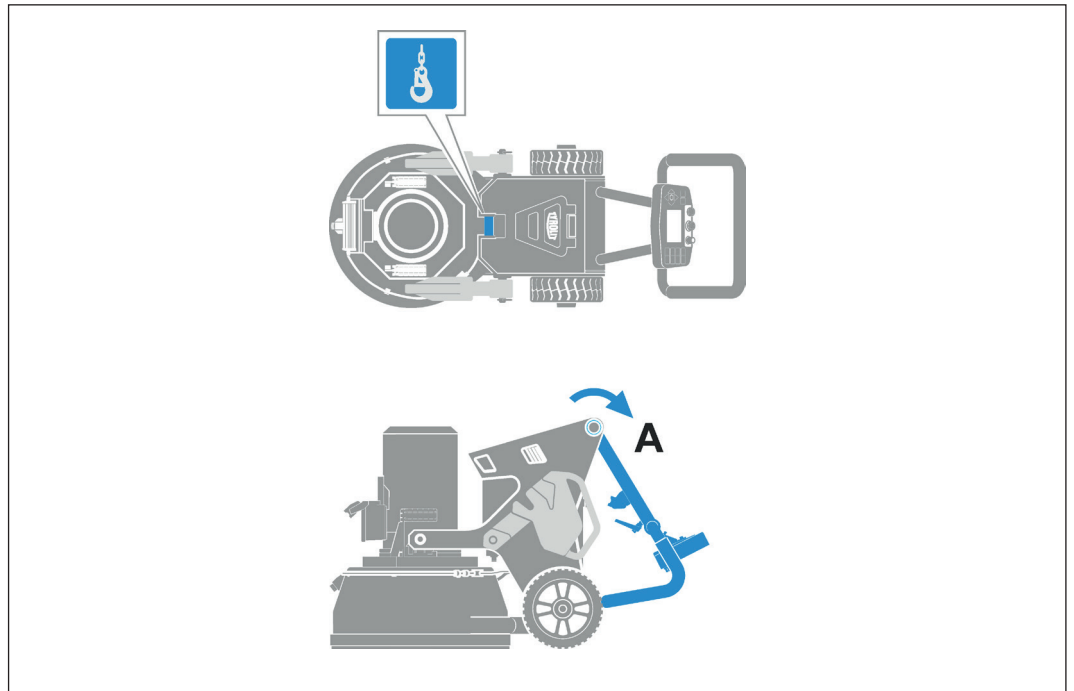
6.9.3 Crane transport



DANGER

Danger from falling parts.

When transporting by crane, only parts that are firmly connected to the machine may be transported. Failure to comply with this regulation may result in severe injuries to body parts, possibly with fatal consequences, as well as damage to property.



Crane transport

Proceed as follows:

- ✓ All parts are secured
- ✓ All parts are firmly connected
- ▶ Use the crane eye for transport.
- ▶ Move the handle unit to transport position A.

7 Servicing and maintenance

7.1 Maintenance table



INFORMATION

Always disconnect the mains plug before the start of maintenance or repair work.

Servicing and maintenance table							
		Each time before putting into operation	After the end of work	Weekly	Yearly	If problems occur	If damage occurs
Drive motor	▶ Retighten loose screws	X				X	X
	▶ Check for damage ▶ Check cleanliness		X			X	X
Cables, plugs and connectors	▶ Check for damage ▶ Check cleanliness	X	X			X	X
EMERGENCY STOP	▶ Check emergency cut-out function	X	X			X	X
Grinding tools	▶ Check for damage ▶ Check cleanliness		X			X	X

7.2 High-pressure cleaning



Caution

Cleaning with high-pressure cleaning systems can damage the floor grinder. Products containing solvents can damage the floor grinder and cable.

7.3 Recycling waste materials



TYROLIT Hydrostress floor grinders are manufactured using a high proportion of recyclable materials. A prerequisite for recycling is proper material separation. In many countries, TYROLIT has already set up arrangements for taking back your old devices for recycling. Ask TYROLIT Customer Service or your sales advisor.

8 Troubleshooting

8.1 Troubleshooting table



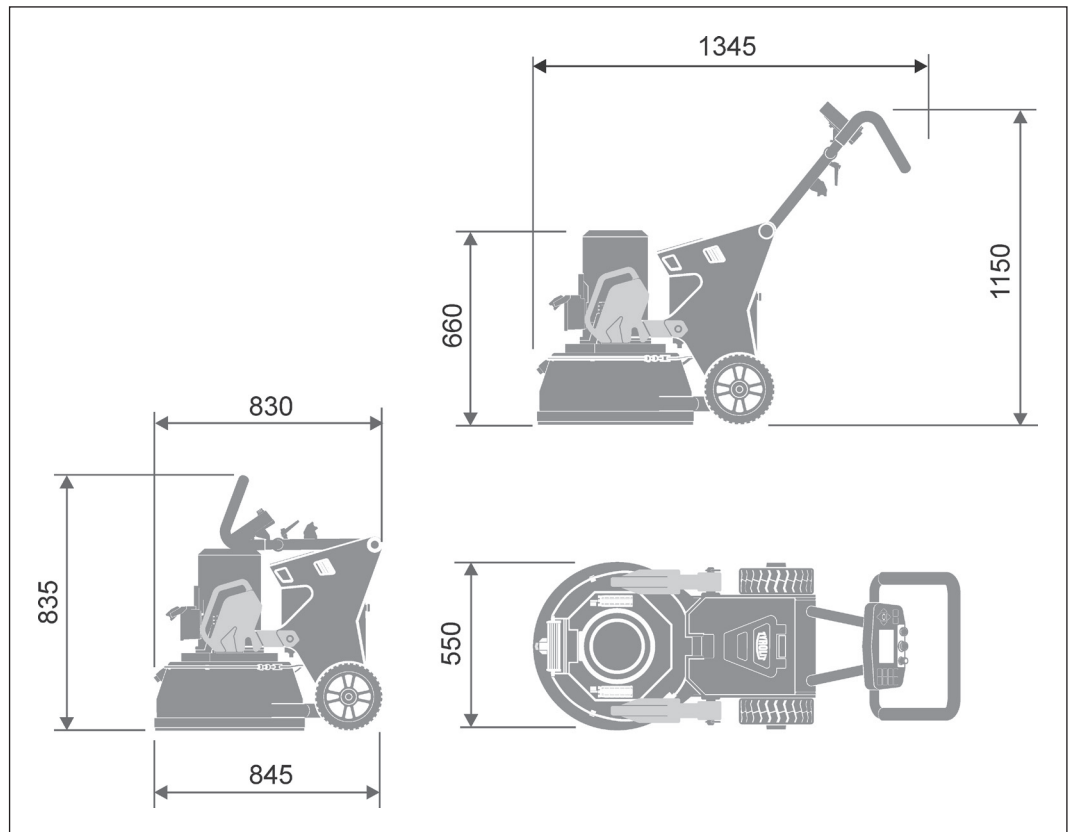
INFORMATION

If a self-shutdown occurs due to an error and a restart is not possible, the error information can help.

Troubleshooting		
Problem	Possible cause	Remedy
The floor grinder does not run even though the mains cable is connected	EMERGENCY STOP is active	▶ Deactivate EMERGENCY STOP
	Mains cable is faulty	▶ Replace the mains cable
	Connector is faulty	▶ Check the connector
	No voltage at the power supply (construction site)	▶ Check the power supply
The floor grinder starts up then switches off again	Grinding speed is too high	▶ Reduce the speed
	Mains cable is faulty	▶ Replace the mains cable
	A fuse blows on the construction site power supply	▶ Check the fuse and adapt if necessary ▶ Change the power supply if necessary
No power even though the control is running	Incorrect voltage Main motor is faulty	▶ Inform TYROLIT Customer Service
The floor grinder switches off abruptly	Overvoltage or undervoltage	▶ Check the power supply
	Connector is faulty	▶ Check the connector ▶ Check the power supply
The floor grinder does not run smoothly	Tool shoe loose	▶ Check tool shoe
	Tool is worn	▶ Check tools for wear
	Loose screws in the chassis	▶ Tighten the screws
Tools wear unevenly (more than 3 mm difference)	A tool holder is loose or faulty	▶ Tool holders must be inspected
The floor grinder comes to a stop Excessive load	Excessive grinding pressure	▶ Reduce the grinding pressure ▶ Floor covering is too tough
	Wrong tool	▶ Check the tools
Temperatures too high	Excessive grinding pressure	▶ Reduce the grinding pressure
	Grinding speed is too high	▶ Reduce the speed

9 Technical data

9.1 Dimensions



Dimensions in mm

9.2 Weights

Floor grinder	FGE515 400 V	FGE515 230 V
Weight	180.0 kg	170.0 kg
Weight of chassis	52.5 kg	52.5 kg
Weight of motor/grinding head	87.5 kg	77.5 kg
Side weights	2x20 kg	2x20 kg

9.3 Noise emissions

Noise data acc. to ISO 3744	
Parameter	Value
Sound pressure level L_{pA}	75.6 dB (A)*
Sound power level L_{WA}	89.6 dB (A)*
Uncertainty K_{WA}	2.5 dB (A)

Measurement conditions:

* Full motor speed without grinding

9.4 Machine data

Floor grinder	FGE515 400 V	FGE515 230 V
Motor power	4 kW, 3-phase	2.2 kW, 2-phase
Frequency	50 - 60 Hz	
Voltage	3 x 380 - 480 three-phase	200V - 240V, single-phase
Internal control voltage	24 VDC	
Nominal current	8.5 A	7.9 A
Grinding disc speed	384 - 1151 1/min	
Grinding width	515 mm	
Motor cooling	Air	
Grinding disc	3 x Ø230 / 6 tools	
Use	Dry/Wet	
Electronic overload cut-out	YES	
Mechanical overload cut-out	No	
Thermal overload cut-out	YES	
Power display	YES	
Service indicator	YES	
Protection class	IP 55	
Operating temperature	-10 to +40°C	
Storage temperature	-20 to +60°C	
Vacuum connection	50 mm	
Grinding pressure without weights	92 kg	79 kg
Grinding pressure of rear weights	107 kg	Accessories
Grinding pressure of rear weights	131 kg	Accessories

9.5 Fluids and lubricants

Fluids and lubricants	
Parameter	Value
Transmission oil	Klüber GEM 4 N (TYROLIT No. 11002117/500ml)

9.6 Water

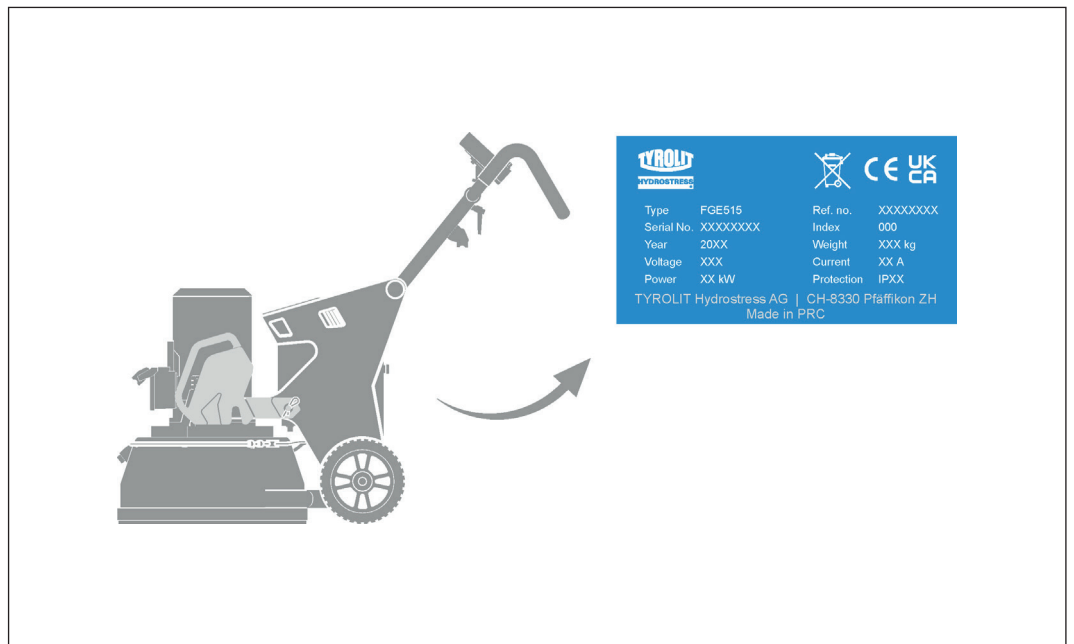
Water	
Parameter	Value
Water tank	11 litres
Water connection	2 to 6 bar

9.7 Vibrations

Vibrations (EN ISO 5349)	
Parameter	Handle
Whole-body vibration a_{hv}	$\leq 2.5 \text{ m/s}^2$
Uncertainty K	1.5 m/s^2

9.8 Type plate

The type designation and serial number are marked on the type plate of your floor grinder.



Type plate

10 EC Declaration of Conformity

Designation	Floor grinder
Type designation	FGE515

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

Applicable directives

2006/42/EC from 17 May 2006
2014/30/EC from 26 February 2014

Applicable standards

EN ISO 12100:2010
EN 60335-1:2012+...+A14:2019
EN 60335-2-72:2012
EN IEC 61000-6-2:2019
EN IEC 61000-6-4:2019

Pfäffikon, 14.10.2022



Roland Kägi
Operations + R&D Machines



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