



Einhell TE-RS 18 Li Cordless Random Orbit Sander Instruction Manual

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TE-RS 18 Li
Operating instructions
Cordless Random Orbit Sander



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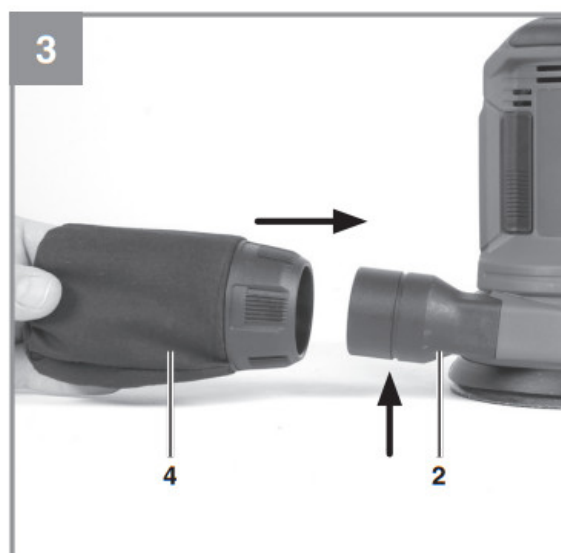
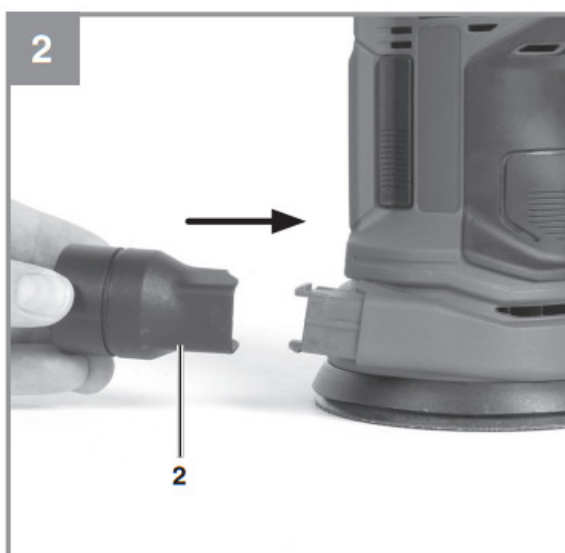
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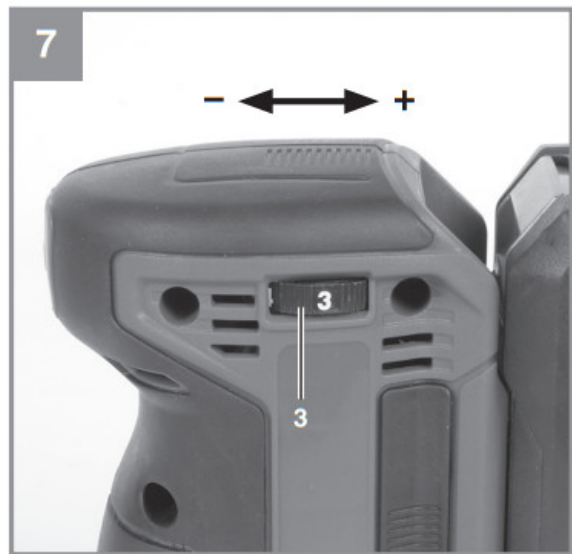
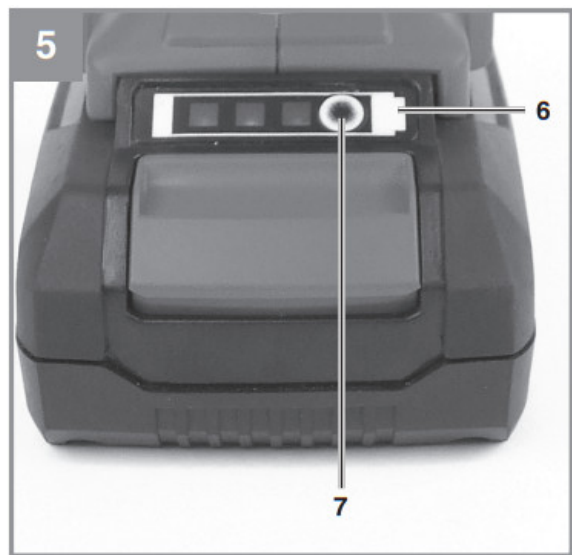
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TE-RS 18 Li Cordless Random Orbit Sander

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Danger! – Read the operating instructions to reduce the risk of injury.



Caution! Wear ear-muffs. The impact of noise can cause damage to hearing.



Caution! Wear a breathing mask. Dust which is injurious to health can be generated when working on wood and other materials. Never use the tool to work on any materials containing asbestos!



Caution! Wear safety goggles. Sparks generated during work or splinters, chips and dust emitted by the equipment can cause loss of sight.



Store the batteries only in dry rooms with an ambient temperature of 50°F to 104°F (+10°C to +40°C). Place only fully charged batteries in storage (charged at least 40%).

DANGER!

When using the equipment, a number of safety precautions must be observed to avoid injuries and damage. Please read the complete operating instructions and safety information with due care. Keep these operating

instructions in a safe place so that the information is available at all times. If you give the equipment to any other person, hand over these operating instructions and the safety information as well. We cannot accept any liability for damage or accidents which arise due to failure to follow these instructions and the safety information.

Safety information

DANGER!

Read all the safety information and instructions. Failure to adhere to the safety information and instructions set out below may result in electric shock, fire and/or serious injury. Keep all the safety information and instructions in a safe place for future use.

General safety information for power tools

The term “power tool” used in the safety regulations refers to power tools operated from the mains power supply (with a power cable) and to battery operated power tools (without a power cable).

1. Work area safety

- a) Keep work area clean and well lit.

Cluttered and dark areas invite accidents.

- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.

- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

2. Electrical safety

- a) Power tool plugs must match the outlet.

Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.

- b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.

- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.

Damaged or entangled cords increase the risk of electric shock.

- e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

- f) If operating a power tool in a damp location is unavoidable, use a ground fault circuit interruptor (GFCI) protected supply. Use of an GFCI reduces the risk of electric shock.

3. Personal safety

- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.

- b) Use personal protective equipment.

Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

- c) Prevent unintentional starting. Ensure the switch is in the Off -position before connecting to power source and/or BATTERY pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.

- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust related hazards.
- h) Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.

4. Power tool use and care

- a) Do not force the power tool. Use the correct power tool for your application.

The correct power tool will do the job better and safer at the rate for which it was designed.

- b) Do not use the power tool if the switch does not turn it on and off . Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

- c) Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.

Power tools are dangerous in the hands of untrained users.

- e) Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

- f) Keep cutting tools sharp and clean.

Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

- g) Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.

Use of the power tool for operations different from intended could result in a hazardous situation.

- h) Keep handles and grasping surfaces dry, clean and free from oil and grease.

Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

5. Battery tool use and care

- a) Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.

- b) Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.

- c) When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.

- d) Under abusive conditions, liquid may be ejected from the battery; avoid contact.

If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

- e) Do not use a BATTERY pack or tool that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, EXPLOSION or risk of injury.
- f) Do not expose a BATTERY pack or tool to fire or excessive temperature. Exposure to fire or temperature above 266°F (130°C) may cause explosion.
- g) Follow all charging instructions and do not charge the BATTERY pack or tool outside the temperature range specified in the instructions. Charging improperly or at temperatures outside the specified range may damage the BATTERY and increase the risk of fire.

6. Service

- a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.
- b) Never service damaged BATTERY packs. Service of BATTERY packs should only be performed by the manufacturer or authorized service providers.

Additional safety instructions

We pay a great deal of attention to the design of every battery pack to ensure that we supply you with batteries which feature maximum power density, durability and safety. The battery cells have a wide range of safety devices. Each individual cell is initially formatted and its electrical characteristic curves are recorded. These data are then used exclusively to be able to assemble the best possible battery packs. Despite all the safety precautions, caution must always be exercised when handling batteries. The following points must be obeyed at all times to ensure safe use. Safe use can only be guaranteed if undamaged cells are used. Incorrect handling can cause cell damage.

Caution! Analyses confirm that incorrect use and poor care are the main causes of the damage caused by high performance batteries.

Information about the battery

1. The battery pack supplied with your cordless tool is not charged. The battery pack has to be charged before you use the tool for the first time.
2. For optimum battery performance avoid low discharge cycles. Charge the battery pack frequently.
3. Store the battery pack in a cool place, ideally at 59°F (15°C) and charged to at least 40%.
4. Lithium-Ion batteries are subject to a natural ageing process. The battery pack must be replaced at the latest when its capacity falls to just 80% of its capacity when new.

Weakened cells in an aged battery pack are no longer capable of meeting the high power requirements and therefore pose a safety risk.

5. Do not throw battery packs into an open fire.

There is a risk of explosion!

6. Do not ignite the battery pack or expose it to fire.

7. Do not exhaustively discharge batteries.

Exhaustive discharge will damage the battery cells. The most common cause of deep discharge is lengthy storage or non-use of partly discharged batteries. Stop working as soon as the performance of the battery falls noticeably or the electronic protection system triggers. Place the battery pack in storage only after it has been fully charged.

8. Protect batteries and the tool from overloads. Overloads will quickly result in overheating and cell damage inside the battery housing without this overheating actually being apparent externally.
9. Avoid damage and shocks. Replace batteries which have been dropped from a height of more than one meter or which have been exposed to violent shocks without delay, even if the housing of the battery pack appears to

be undamaged. The battery cells inside the battery may have suffered serious damage. In this respect, please also read the waste disposal information.

10. If the battery pack suffers overloading and overheating, the integrated protective cutoff will switch off the equipment for safety reasons.

Caution! Do not press the ON/OFF switch any more if the protective cut-off has actuated. This may damage the battery.

11. Use only original battery packs. The use of other batteries may result in injuries, explosion and a fire risk.
12. Protect your rechargeable battery against moisture, rain and high humidity. Moisture, rain and high humidity can cause dangerous cell damage. Never charge or work with batteries which have been exposed to moisture, rain or high humidity – replace them immediately.
13. If your equipment is fitted with a detachable battery, remove the battery for safety reasons after you have finished your work.

Information on chargers and the charging process

1. Please check the data marked on the rating plate of the battery charger. Be sure to connect the battery charger to a power supply with the voltage marked on the rating plate.
Never connect it to a different mains voltage.
2. Protect the battery charger and its cable from damage and sharp edges. Have damaged cables repaired without delay by a qualified electrician.
3. Keep the battery charger, batteries and the cordless tool out of children's reach.
4. Do not use damaged battery chargers.
5. Do not use the supplied battery charger to charge other cordless tools.
6. In heavy use the battery pack will become warm. Allow the battery pack to cool to room temperature before commencing with the charging.
7. Do not over-charge batteries. Do not exceed the maximum charging times. These charging times apply only to discharged batteries. Frequent insertion of a charged or partly charged battery pack will result in over-charging and cell damage. Do not leave batteries in the charger for more than 48 hours.
8. Never use or charge batteries if you suspect that the last time they were charged was more than 12 months previously. There is a high probability that the battery pack has already suffered dangerous damage (exhaustive discharge).
9. Charging batteries at a temperature below 50°F (10°C) will cause chemical damage to the cell and may cause a fire.
10. Do not use batteries which have heated during the charging process, as the battery cells may have suffered dangerous damage.
11. Do not use batteries which have suffered curvature or deformation during the charging process or which show other non-typical symptoms (gassing, hissing, cracking,...)
12. Never fully discharge the battery pack (recommended depth of discharge max. 80%) A complete discharge of the battery pack will lead to premature ageing of the battery cells.
13. Never charge the batteries unsupervised.

Protection from environmental influences

1. Wear suitable work clothes. Wear safety goggles.

2. Protect your cordless tool and the battery charger from moisture and rain. Moisture and rain can cause dangerous cell damage.
3. Do not use the cordless tool or the battery charger near vapors and inflammable liquids.
4. Use the battery charger and cordless tools only in dry conditions and an ambient temperature of 50°F to 104°F (10°C to 40°C).
5. Do not keep the battery charger in places where the temperature is liable to reach over 104°F (40°C). In particular, do not leave the battery charger in a car that is parked in the sunshine.
6. Protect batteries from overheating.
Overloads, over-charging and exposure to direct sunlight will result in overheating and cell damage. Never charge or work with batteries which have been overheated – replace them immediately if possible.
7. Storage of batteries, battery chargers and cordless tools. Store the charger and your cordless tool only in dry places with an ambient temperature of 50°F to 104°F (10°C to 40°C). Store the Lithium-Ion rechargeable battery in a cool and dry place at 50°F to 68°F (10°C to 20°C). Protect them from humidity and direct sunlight! Place only fully charged batteries in storage (charged at least 40%).
8. Prevent the Lithium-Ion battery pack from freezing. Battery packs which were stored below 32°F (0°C) for more than 60 minutes must be disposed of.
9. When handling batteries beware of electrostatic charge: Electrostatic discharges cause damage of the electronic protection system and the battery cells. Avoid electrostatic charging and never touch the battery poles.

Battery Caution + Disposal

Disposal

Should your appliance need replacement after extended use, do not dispose of it with the household refuse, but in an environmentally safe way.

Waste produced by electrical machine items should not be handled like normal household rubbish. Please recycle where recycle facilities exist. Check with your local authority or retailer for recycling advice.

Always dispose of your battery pack according to federal, state, provincial and local regulations.

Contact a recycling agency in your area for recycling locations.



CAUTION! Even discharged battery packs contain some energy. Before disposing, use electrical tape to cover the terminals to prevent the battery pack from shorting, which could cause a fire or explosion.



WARNING! To reduce the risk of injury or explosion, never burn or incinerate a battery pack even if it is damaged, dead, or completely discharged. When burned, toxic fumes and materials are emitted into the surrounding atmosphere.

1. Batteries vary according to device. Consult your manual for specific information.
2. Install only new batteries of the same type in your product (where applicable).
3. Failure to insert batteries in the correct polarity, as indicated in the battery compartment or manual, may shorten the life of the batteries or cause batteries to leak.
4. Do not mix old and new batteries.
5. Do not mix Alkaline, Standard (Carbon-Zinc), or Rechargeable (Nickel Cadmium, Nickel Metal Hydride, or Lithium-Ion) batteries.
6. Do not dispose of batteries in fire.
7. Batteries should be recycled or disposed of as per state, provincial and local guidelines.

When shipping or disposing of batteries and cordless tools, always ensure that they are packed individually in plastic bags to prevent short circuits and fires.

Special safety information

- This tool may be used only for dry grinding/ sanding operations.
- Use on materials containing asbestos is prohibited.
- To protect your health, always wear safety goggles and a dust mask during sanding/ grinding work!
- Keep your workplace clean and well illuminated.
- Make sure that the workpiece is sufficiently secured so that it cannot slip.
- Keep children away.
- For your own sake, keep the equipment clean at all times and check it for signs of damage each time after using it.
- Make sure that the switch is set to OFF before you connect up the tool.
- Make sure of your footing, particularly when working on ladders and platforms.
- Harmful or toxic dust can be produced when working on wood or metal.
- Touching or inhaling this dust can be harmful for the operator and other persons nearby.
- **Important!** Wear safety goggles and a dust mask.

Children must always be supervised in order to ensure that they do not play with the equipment.

SAVE THESE INSTRUCTIONS

Layout and items supplied

2.1 Layout

1. On/Off switch
2. Dust extraction adapter
3. Speed controller
4. Dust bag
5. Orbital plate
6. Battery capacity indicator
7. Battery capacity indicator button

2.2 Items supplied

Please check that the article is complete as specified in the scope of delivery. If parts are missing, please contact our service center or the store where you made your purchase at the latest within 5 work days after purchasing the article and upon presentation of a valid bill of purchase.

- Open the packaging and take out the equipment with care.
- Remove the packaging material and any packaging and/or transportation braces (if present).
- Check to see if all the items are supplied.
- Inspect the equipment and accessories for transport damage.
- If possible, keep the packaging until the end of the guarantee period.

Danger!

The equipment and packaging material are not toys. Do not let children play with plastic bags, plastic sheets and small parts. There is a risk of choking and suffocating!

- Random Orbit Sander
- Dust bag
- Adapter for vacuum cleaner
- Original operating instruction with safety information

Separately available accessories

18V 1.5Ah PXC Lithium-Ion battery
 18V 2.0Ah PXC Lithium-Ion battery
 18V 2.5Ah PXC Lithium-Ion battery
 18V 3.0Ah PXC Lithium-Ion battery
 18V 4.0Ah PXC Lithium-Ion battery
 18V 3.0Ah PXC Plus Lithium-Ion battery
 18V 4.0Ah PXC Plus Lithium-Ion battery
 18V 5.2Ah PXC Plus Lithium-Ion battery
 18V 4.0Ah/6.0Ah PXC Plus Lithium-Ion battery
 18V 5.0Ah/8.0Ah PXC Plus Lithium-Ion battery
 18V PXC Dual Port Fast Charger
 18V PXC Fast Charger

Contact your local retailer for more specific models of batteries and charger available in your area. You can also explore battery + charger options at [Einhell.com](https://www.einhell.com).


Intended use

The machine is designed for the grinding/sanding of wood, metal, plastic and similar materials using the appropriate grinding/sanding paper. The equipment is not suitable for wet sanding.

The equipment is allowed to be used only for its prescribed purpose. Any other use is deemed to be a case of misuse. The user/operator and not the manufacturer will be liable for any damage or injuries of any kind resulting from such misuse.

Please note that our equipment has not been designed for use in commercial, trade or industrial applications. Our warranty will be voided if the equipment is used in commercial, trade or industrial businesses or for equivalent purposes.

Technical data

Motor power supply: 18 V 
 Idling speed: 7000-11000 RPM (min-1)
 Sanding/grinding area: Ø 5" (127 mm)
 Abrasive paper size (Hook-and-loop fastener): Ø 5" (127 mm)
 Weight: 2.65 lbs (1.2 kg)

Wear ear-muffs.

The impact of noise can cause damage to hearing.
 Reduce noise generation and vibration to a minimum!

- Use only equipment that is in perfect condition.
- Maintain and clean the equipment regularly.
- Adapt your way of working to the equipment.
- Do not overload the equipment.
- Have the equipment checked if necessary.
- Switch off the equipment when not in use.

CAUTION!

Residual risks

Even if you use this electric power tool in accordance with the instructions, certain residual risks cannot be eliminated. The following hazards may arise in connection with the equipment's construction and layout:

1. Lung damage if no suitable protective dust mask is used.
2. Damage to hearing if no suitable ear protection is applied.
3. Health damage caused by hand-arm vibrations if the equipment is used over a longer period or is not properly guided and maintained.

Limit the operating time.

All stages of the operating cycle must be considered (for example, times in which the electric tools are switched off and times in which the tool is switched on but operates without load).

Before starting the equipment

Warning!

Always remove the battery pack before making adjustments to the equipment.

Be sure to read the following information before you put the cordless equipment into operation:

- Charge the battery pack with the charger. An empty battery pack requires a charging period of approximately 0.5 to 1 hour.

5.1 Fitting the dust extractor adapter (Fig. 2/ Item 2)

Plug the dust extractor adapter (2) onto the vacuum cleaner connector as shown in Fig. 2.

Connect the dust extractor adapter to a suitable dust extraction system.

5.2 Fitting the dust bag (Fig. 3/Item 4)

- Fit the dust bag (4) to the vacuum cleaner adapter (2) by turning it slightly as far as the notch will go as shown in Fig. 3.
- The dust is extracted directly into the dust bag (4) through the abrasive paper and the orbital plate (5).
- To remove the dust bag again, pull and twist it off.

Caution!

For health reasons it is imperative that you use the dust bag or a dust extraction system.

5.3 Fastening the abrasive paper with the Hook-and-loop fastener system (Fig. 4)

- Only use abrasive paper with the corresponding dimensions and matching perforations.
- Place the abrasive paper onto the orbital plate (4) as shown in Fig. 5. Make sure that the perforations in the abrasive paper coincide with the orbital plate.
- To remove the abrasive paper, simply pull it off.

Operation

6.1 Charging the Lithium-Ion battery (not included)

The corresponding instructions can be found in the original operating instructions for your charger.

6.2 Battery capacity indicator (Fig. 5 / item 6)

Press the battery capacity indicator switch (7).

The battery capacity indicator (6) shows the charge status of the battery using 3 LEDs.

All 3 LEDs lit:

The battery is fully charged.

2 or 1 LED(s) lit:

The battery has an adequate remaining charge.

1 LED flashing:

The battery is empty, recharge the battery.

All LEDs flashing:

The temperature of the battery is too low. Remove the battery from the device and leave it at room temperature for a day. If the error occurs again, this means that the battery has been completely depth-discharged and is defective. Remove the battery from the device. Never use or charge a defective battery.

6.3 Switching on and off (Fig. 6/Item 1)

- To switch on the equipment, move the switch (1) from “0” to “1”.
- To switch off the equipment, move the switch (1) from “1” to “0”.

6.4 Speed controller (Fig. 7/Item 3)

You can select the speed by turning the speed controller (3).

Plus direction: Higher speed

Minus direction: Lower speed

6.5 Working with the Random Orbit Sander

- Place the whole surface area of the sanding disk on the material.
- Switch on the machine and move it with gentle pressure over the workpiece, making circular or transverse and linear movements.
- Use a coarse grit for coarse sanding and a finer grit for finish sanding. You can find the best grit size for the job by carrying out sanding tests.

Caution!

The dusts which are formed while the equipment is being used may be a health hazard:

- Always wear safety goggles and a dust mask during sanding work.
- All persons who work with the equipment or enter the workplace must wear a protective dust mask.
- Eating, drinking and smoking are prohibited at the workplace.
- Paints containing lead are not allowed to be used!

Cleaning and maintenance

HAZARD!

Always take the battery out of the equipment before starting any cleaning work.

7.1 Cleaning

- Keep all safety devices, air vents and the motor housing free of dirt and dust as far as possible. Wipe the equipment with a clean cloth or blow it down with compressed air at low pressure.
 - We recommend cleaning the equipment immediately each time after use.
 - Clean the equipment regularly with a damp cloth and some soft soap. Do not use cleaning agents or solvents; these may be aggressive to the plastic parts in the equipment. Ensure that no water can get into the interior of

the equipment. The ingress of water into an electric power tool increases the risk of an electric shock.

7.2 Maintenance

There are no other parts inside the equipment which require maintenance.

Disposal and recycling

The equipment is supplied in packaging to prevent it from being damaged in transit. The raw materials in this packaging can be reused or recycled. The equipment and its accessories are made of various types of material, such as metal and plastic. Never place defective equipment in your household refuse. The equipment should be taken to a suitable collection center for proper disposal. If you do not know the whereabouts of such a collection point, you should ask in your local council offices.

Storage


Store the equipment and its accessories out of children's reach in a dark and dry place at above freezing temperature. The ideal storage temperature is between 41°F and 86°F (5°C and 30°C). Keep the electric tool in its original packaging.

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Subject to technical changes.



Documents / Resources

	<p>Einhell TE-RS 18 Li Cordless Random Orbit Sander [pdf] Instruction Manual 4462012, TE-RS 18 Li Cordless Random Orbit Sander, TE-RS 18 Li, TE-RS 18 Li Orbit Sander, Cordless Random Orbit Sander, Cordless Orbit Sander, Random Orbit Sander, Orbit Sander, Sander</p>
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References

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