

ROTHENBERGER

R 550/600/650/750

R 550/600/650/750



DE Bedienungsanleitung
EN Instructions for use
FR Instruction d'utilisation
ES Instrucciones de uso
IT Istruzioni d'uso
NL Gebruiksaanwijzing
PT Instruções de serviço
DA Brugsanvisning
SV Bruksanvisning
NO Bruksanvisning
FI Käyttöohje

PL Instrukcja obsługi
CS Návod k používání
TR Kullanım kilavuzu
HU Kezelési útmutató
BG Инструкция за експлоатация
ET Kasutusjuhend läbi
LT Naudojimo instrukcija
LV Lietošanas pamācība
EL Οδηγίες χρήσεως
RU Инструкция по использованию
ZH 使用说明书



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Overview



A Use standard spirals



B Fit 8 mm / 10 mm spirals



C Fit tools



To adjust the handle D



E Carry Position

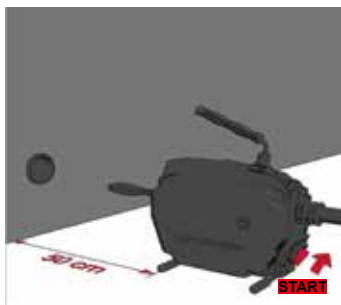


Start / Stop F

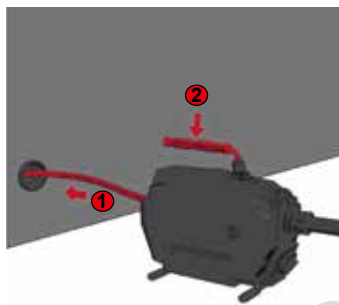


G Operating

1



2



3



4



H Care and maintenance

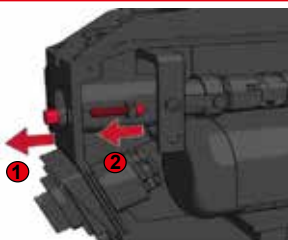


Replace the clamp jaws R550/R650 I

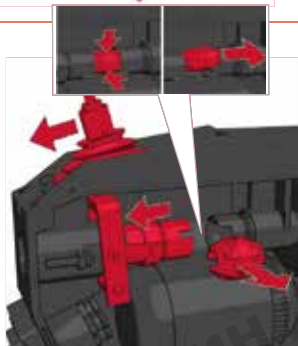
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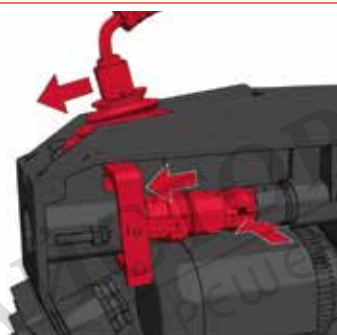
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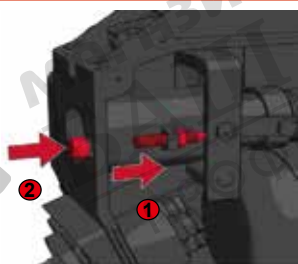
3



4



5



6



Replace the clamp jaws R750 K

1



2



3



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Markings in this document:



Markings in this document!

This sign warns against the danger of personal injuries.



Caution!

This sign warns against the danger of property damage and damage to the environment.



Call for action

1.1 General Power Tool Safety Warnings



WARNING! Read all safety warnings, instructions, illustrations and specifications provided with this power tool.

Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your electrically-operated (corded) power tool or battery-operated (cordless) power tool.

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 and moving parts.** Damaged or entangled cords increase the risk of electric shock.
- e) **When operating a power tool outdoors only, use an extension cords 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 residual current device (RCD) protected supply.** Use of an RCD 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 momentary lack of attention 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 energising 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 dust collection 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, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those 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) 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.

1.2 Special safety instructions

Use only the appropriate guide glove to guide the spiral (for example, rivet glove left 72120, right 72121). Do not continue to use a damaged rivet glove. (A rivet glove is not personal safety equipment according to 2016/425/EU - see also 5.6).

When using the rivet glove, make absolutely sure also to wear a disposable latex glove under the rivet glove for hygienic reasons. (Do not continue using a damaged latex glove.).

The spirals must be removed completely from the holding cage before machine is turned on.

Wear rubber boots (for insulation) when performing cleaning work.

Before inserting the plug into the electrical socket, make absolutely sure that the pipe cleaning machine is switched to 0 or OFF.

Whenever using electrical devices, always observe the specified voltage and generally work with a protective tube and safety gloves.

Choose the right tool for the clog and for the pipe diameter to be cleaned, in order to prevent the tool from hooking into the clog and the spiral from ejecting from the pipe.

To prevent damage, use this machine and its accessories only to clean waste water pipes — never chimneys, wells, etc.

To prevent damage to the pipes or pipe bends, do not modify tools by whetting them, etc..

Use a camera system to spot the cause of the pipe clog.

Only work on perfect lines installed according to the "VDE regulations".

The spirals must never run over the guide tube!

Mechanical pipe cleaning should always be undertaken from above in the direction of the stop plug.

Ensure that no water taps leading to the pipe to be processed are actuated during the pipe cleaning. Congestion can occur here!

During pipe cleaning never leave the machine unobserved!



Protective covers: All rotating parts are made safe through use of protective covers. Removal and/ or operation without these protective covers is strictly forbidden!

Secure the operation site (the road, the shaft) so that no uninvolved persons suffer injuries and always cover open shafts or gullies.

Check the area to be investigated with a gas warner for the presence of poisonous or explosive gases!

The machine and the accessories should be cleaned and disinfected after every use.

The recommended personal protective equipment should be worn whenever any work is done: Ⓢ Safety helmet, safety shoes, safety vest!

The hands should be cleaned and disinfected after every activity; there is increased risk of infection by pathogens!

1.3 Residual risks

Even when observing all of the safety instructions there are still some residual risks remaining, for example: spirals can overturn (create a loop if the operating arc is too large) thereby creating the risk of clamping. Spirals under tension can spring out of the pipe ~ a risk of injury!

1.4 Intended use

The pipe cleaning machines may only be used to clean pipes of the following diameters:

R550: 40-100mm, **R600-650:** 20-150mm, **R750:** 50-200mm

The pipe cleaning machines are only designed for short term operation and may therefore only be operated without interruption for a maximum of 15 minutes! Do not use this product in any other way as stated for normal use!

2 Technical Data / Applications

Voltage	230 - 240 V, 50 Hz, 110-115V, 50-60Hz			
	R550	R600	R650	R750
Article number: 230V	72686	72687	72688	72689
110/115V	72631	72869	72633	72634
Output P1 (W).....	440	690	1350	1400
Operating speed (min ⁻¹)	575	460	620	460
Weight (kg) ca.	15	20,9	22,8	29,5
Spiral size (mm).....	Ø 16	Ø 16/22	Ø 16/22	Ø 22/32
Spiral size with accessories (mm)	Ø 8/10	Ø 8/10	Ø 8/10	Ø 8/10/16
Max. working length (m).....	40	60	65	80
Pipe diameter working range (mm)	Ø 20-100	Ø 20-150	Ø 20-150	Ø 20-200
Operating mode.....	S2 15min.	S2 15min.	S2 15min.	S2 15min.
Protection type.....	IP X4	IP X4	IP X4	IP X4
Noise pressure level L _{pA} K _{pA}	75 3	75 3	80 3	80 3
Sound power level L _{WA} K _{WA}	86 3	86 3	91 3	91 3
The noise level during operation can exceed 85 dB (A). Wear hearing protection!				
Measured values determined in accordance with EN 62841-1.				
Vibration total value m/s ² K	< 2,5 1,5	< 2,5 1,5	< 2,5 1,5	< 2,5 1,5

The Vibration Total Value quoted in these instructions and the quoted noise emission values were measured according to standardized measurement procedures and can be used to compare one electric power tool with another. They can also be used to make an initial estimate of the loading.



The quoted vibration and noise emissions can vary during actual use of the electric power tool dependent on the way in which the electric power tool is used, in particular what type of workpiece is being processed. Establish additional safety measures to protect the operator which are based upon an estimate of the vibration loading during the actual usage conditions (in doing so taking account of parts of the operating cycle, for example times in which the electric power tool is switched and those in which it is switched on but not running under load).

3 Scope of delivery

- Pipe cleaning machine
- Guide tube
- Operating manual

4 Power connection

Connect only to the single-phase alternating current indicated on the rating plate. Connect only to sockets with protective contacts. The machine must be operated only through a ground fault circuit with max. 10 - 30 mA rated leakage current.

Always perform the operational test before starting up the device. If there is a repeated failure, have the connected device inspected.

Please keep in mind that this device cannot replace fundamental safety precautions. To prevent life-threatening hazards, be sure to use electrical devices only as intended.

Reliable personal protection against electric shock. Fault currents are recognized in a fraction of a second, and the current supply is immediately interrupted. The risk to humans and animals is drastically reduced.

- Never use the electric tool without a PRCD.
- The plug or electrical cord should be replaced only by the manufacturer of the electric tool or by its repair service.
- Keep water away from electrical parts of the electric tool and from people in the work area.

4.1 Putting the PRCD switch into operation



Only suitable for AC current! Note the mains network voltage!

Perform the following test procedure on the PRCD switch before every putting into operation of the device:

1. Connect the PRCD plug connector with the socket.
2. Press on RESET. The indicator switches to ON.
3. Pull the plug connector out of the socket. The display switches itself off.
4. Repeat 1. and 2.
5. Press on TEST. The indicator switches itself off.
6. Press on RESET to switch the device on.



These protective device protect against faults in the attached device, not against such faults in the preceding plant!

5 Function of the Unit

5.1 Use standard spirals

(A)

The possible spiral diameters and spiral lengths that may be used are set out in the section entitled Technical data.

The spirals can be connected together at the coupling and subdivided again afterwards into segments using a separating pin; to do this insert the release wrench into the bore hole in the coupling and remove the coupling to the side.



Only use spiral sections for as long as is actually necessary!

Do not use deformed spirals!

- Remove the spirals from the interior of the holding cage.
- Push the spiral through the machine.
- Attach the protective hose from the rear onto the machine and check the lock of the locking bolt.



Always use the protective hose. The protective hose acts as a vibration-damping guide for the spirals, as a dirt holder and guard, also as a safety element for the operating personnel and prevents uncontrolled banging!

5.2 Fit 8 mm / 10 mm spirals

(B)

For small bore pipes and pipe bend used 8 mm or 10 mm spirals (optional accessories).

- Pull the spirals approx. 30 cm out of the adapter magazine.
- Push the adapter magazine into the machine from the rear and secure it. To brake the adapter magazine pull the lever as far upwards as possible.

5.3 Fit tools

(C)

For first use to unfasten the plugging only use the drill with the smallest diameter and drill out the plugging hole for the first time. If the plugging hose has been bored or is opened and liquid begins to flow out, complete drilling out of the plugging hose with the largest possible adapted drill. If the plugging is now released, flush out and where possible, clean the pipe wall using a chain centrifuge drilling tool (where possible with water flowing through).

Depending on the type of blockage various tools may be secured to the standard spirals.



Straight drill: to establish the type of blockage



Club drill: can be used for minor textile and cellulose blockages as a result of its flexibility. The club shape enables it to get into tight pipe bends



Funnel drill: this is specifically used for textile and cellulose blockages. Its funnel-shape design gives this tool a large action range and allows it to be used as a tool to return spirals that have been trapped in the pipe



Fork cutting head: to remove grease deposits or shred lumps and similar materials



Shovel head drill: special bent tool for sludge or sand deposits

To secure: push the tool into the coupling until it engages.

To remove: push the release wrench into the hole and slide the tool sideways out of the coupling.

5.4 To adjust handle

(D)

R650:

The handle can be fitted either at the top or at the side.

- Move to the side position: Push the sleeve downwards, pull out the lever and insert it into the side opening.
- Move to the top position: Pull out the lever, pull the sleeve downwards, insert the lever and lock the sleeve again.

R750:

The handle can be turned forwards to allow the machine to be pulled more easily.

- Push the sleeve downwards, pull out the lever, turn it through 180° and insert it again.



Turn the knurled bushing for securing or blocking and check that the clamping lever cannot be pulled!

5.5 Carry position

(E)

The handle can be locked for carrying. To do this push the handle and pull the lock. To release the lock, press the handle briefly.

5.6 Safety gloves

Information brochure on safety gloves according to EU guideline 2016/425/EU. Appendix II, Section 1.4 for minimal hazards only.

This pair of gloves is exempted under Chapter II, Article 8, Paragraph 3 of the prototype test and is assigned to Category 1. From this it is assumed that their effectiveness against minor hazard-free risks has been perceived.

The protection class is determined by the requirements, which may be of a mechanical, chemical or thermal nature or due to similar influences that do not call for a Category 2 protection class. A risk analysis must be carried out through a wearer trial if the required size is to be specified so that the glove fits. When using accessory parts, such as undergloves, it should be noted that function may be negatively affected.

The gloves must be properly stored, i.e. in boxes in dry spaces. Influences such as humidity, temperature, light and natural changes in materials over time may lead to changes in the characteristics. A shelf life cannot be specified, because that will depend on the the degree of wear, and the amount and location of use.

Care with commercially available cleaning utensils (e.g. brushes, polishing cloths, etc.) is recommended. Washing or chemical cleaning requires prior consultation with an authorized technical workshop.

The manufacturer can accept no liability for changes in the characteristics. Before each time the gloves are used, check to make sure they are intact.

5.7 Start / Stop

(F)

→ Switch the motor on and off at the switch:



Motor off



Turn clockwise;
remove blockages



Turn anti-clockwise,
return jammed spirals

→ Start the spirals turning by pressing the handle.

5.8 Operation

(G)



Please ensure that the protective hose is attached to the machine!

- Insert a suitable spiral, secure the protective hose and secure a suitable tool.
- Position the machine max. 50 cm in front of the opening of the pipe you wish to clean. Set the machine to turn clockwise at the On/Off switch.
- Insert the spiral approx. 50 cm into the pipe. Press the handle. The spiral will start to turn.



Guide the spiral only with the supplied special safety glove!

- Release the handle and push the spiral further into the pipe. Repeat this process until you feel resistance; this means you have reached the blockage!
- Pull the spiral out of the machine until the spiral is prestressed into a bend (working bend).



Do not create an operating arc which is too big – a risk of injury!

- Press the handle and press the spiral against the blockage using the working bend.
- When the spiral has moved into the pipe so far that the working bend is relieved, pull the spiral out of the machine and form a new working bend.
- Repeat the process by pulling forward and backwards until the blockage has been removed, then release the handle and pull out the spiral.

If it does not move easily, press the handle and allow the spiral to turn briefly.

If the movement is very stiff, please ensure through clockwise and anticlockwise rotation that the spirals do not jam during locking (clockwise rotation) and releasing (anticlockwise rotation).



If the tool becomes fastened to the blockage, release the handle and switch the machine to turn anti-clockwise!

- Using a back and forth type motion and clockwise and anticlockwise rotation of the spirals, release the tool from the plugging while the hand lever is depressed.

6 Care and Maintenance

(H)




Pull out the mains power plug before performing any servicing and maintenance!

Grease the machine with universal grease at the two lubrication points.

Lubrication point I: daily or after every use.

Lubrication point II: every 100 hours of service. Unscrew the left cover to access this point.

The device should be handled carefully and cleaned regularly.

The spirals and tools should be cleaned and preserved after every use. We recommend use of  our special care product "ROWONAL".



All servicing, maintenance and repair work may only be performed by in-structed specialist personnel!

7 Replace the calmp jaws

If the spirals no longer turn during operation and slip the clamping jaws are fouled with grease and must be cleaned or replaced if worn.

7.1 R550 - R650

(I)

- Unscrew the right cover.
- Remove the sealing stopper. Undo the lock nut and undo the adjusting screw until the clamp jaw springs are no longer stressed.
- Pull the handle upwards and hold it in this position. Remove the clamp jaws. Press the clamp jaws together to release them.
- Fit new clamp jaws.
- Tighten the adjusting screws until the max. spiral diameter can still be inserted. Tighten the lock nut and insert the sealing stopper.
- Secure the cover.

7.2 R750

(K)

- Remove the cap with the two front screws.
- Individually take out the clamps from the front. Then clean the housing and insert new clamping jaws one by one.
- Screw on the cover and tighten the cover screws.

8 Accessories

You can find suitable accessories in the main catalog or at www.rothenberger.com

9 Customer service

The ROTHENBERGER service locations are available to help you (see listing in catalog or on-line) and replacement parts and service are also available through these same service locations. Order your accessories and spare parts from your specialist retailer or using RO SERVICE+ online: ☎ + 49 (0) 61 95/ 800 8200 📠 + 49 (0) 61 95/ 800 7491 ✉ service@rothenberger.com - www.rothenberger.com

Components of the unit are recyclable material and should be put to recycling. For this purpose registered and certified recycling companies are available. For an environmental friendly disposal of the non-recyclable parts (e.g. electronic waste) please contact your local waste disposal authority.

For EU countries only:



Do not dispose electric tools with domestic waste. In accordance with the European Directive 2012/19/EU the disposal of electrical and electronic equipment and its implementation as national law, electric tools that are no longer serviceable must be collected separately and utilised for environmentally compatible recycling.



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