Imprint:

Instruction Manual R550 / R600 / R650 / R750

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Please read the Instruction Manual carefully first! • Don't throw it away!
If damages are caused by operating errors or misuse the warranty expires!

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1. Safety Comments

1.1 Use in accordance with the regulations

The drain cleaning machines are only to be used for pipe cleaning of the following pipe-diameters:
R550 20-100mm / R600-650 20-150mm / R750 20-200mm
The drain cleaning machines may not be operated under load longer than 15 minutes.

1.2 Applied safety symbols and their meaning

Failure to comply with these safety marks (WARNING) means danger to life and health of individuals.

Failure to comply with these safety marks (CAUTION) means a possibly dangerous situation which may result in injuries or damage to property.

This symbol (NOTE) points to important advice for the proper handling of the machine. Failure to comply with these notes may cause malfunction of the machine or interference to the environment.

1.3 Indication to the safety of man and machine

Keep your working area in an orderly state. Disorder can cause accidents!

Bear ambient factors of influences in mind. Do not expose electrical power tools to rain. Do not use electrical power tools in damp or wet environments. Ensure good lighting. Do not use electrical power tools in the proximity of combustible liquids or gases

Protect yourself from electric shock. Avoid bodily contact with earthed parts, e.g. pipes, radiators, cookers, refrigerators!

Keep children away. Do not allow other persons to touch the tool or flex. Keep other persons away from your working area.

Store your tools safely. Unused tools should be stored in a dry and locked room and in such a way that they are not accessible to children.

Do not overload your tool. You will work better and more safely if you stay within the specified capacity range.

Use the proper tool. Do not use tools or adapter devices which are too weak for heavy work. Do not use tools for purposes and work for which they were not intended, e.g. do not use handheld circular saws to cut trees or branches.

Wear suitable work clothing. Do not wear wide clothing or jewellery, both of which can be caught by moving parts. When working outdoors, rubber gloves and anti-slip shoes are advisable. If your hair is long, wear a hairnet.

Wear protective goggles. Use an oxygen mask for work where a dusty atmosphere is likely to be generated.

Do not misuse the flex. Do not carry the tool by the flex and do not use the flex to pull the plug out of the socket outlet. Protect the flex from heat, oil and sharp edges.

Secure the work piece. Use clamping mechanisms or a vise in order to secure the work piece. In that way, the work piece is held more securely than when held by your hand and allows you instead to operate the machine using both hands.

Do not overextend your standing area. Avoid abnormal postures. Ensure that you are standing safely and have proper balance at all times.

Take care of your tools meticulously. Keep your tools sharp and clean to enable you to work well and safely. Adhere to the maintenance instructions and the instructions for tool changing. Check the plug and the flex regularly and, if they are damaged, have them upgraded by an approved professional. Check the extension cable regularly and replace it if damaged. Keep the handgrips dry and free from oil and grease.

Pull out the mains plug when not using the tool, before performing maintenance work and when changing a part of the tool, such as e.g. saw blade, drill and machine tools of all kinds.

Do not leave a tool wrench inserted. Before switching on the power, check that the wrenches and setting tools are removed.

Avoid starting the tool unintentionally. Do not carry tools which are connected to the power mains while holding your finger on the switch. When plugging the tool into the power mains, make sure that the switch is off.

Extension cables outdoors. When working outdoors, only use extension cables which are approved for this purpose and correspondingly labelled

Be at all times attentive. Monitor your work. Proceed rationally. Do not use the tool if you are not able to concentrate

Check your appliance for damage. Before using the tool any further, check carefully that the protective mechanisms and any slightly damaged parts are functioning perfectly and in line with the regulations and with their intended purpose. Check that the moving parts are functioning properly, that they are not stuck and that no parts are damaged. All parts must be mounted properly and all conditions fulfilled in order to ensure the sound operation of the appliance. Where not otherwise stated in the operating manuals, damaged protective devices and parts should be properly repaired by a customer service workshop or replaced by same. Damaged switches must be replaced by a customer service workshop. Do not use tools on which the power switch cannot be switched on and off .

Caution. For your own safety, only use accessories and auxiliary devices which are specified for use in the operating manual or recommended or specified by the tool manufacturer. The use of tools or accessories other than those recommended in the operating manual or in the catalogue can entail a danger of personal injury to you.

Have your electrical power tools repaired by a skilled electrical specialist.
ROTHENBERGER electrical power tools are in accordance with the relevant safety regulations. Repairs are only permitted to be performed by a skilled electrical specialist. Otherwise, accidents can happen to the user.

2. Technical Data

	R550	R600 Saniclean	R650 Powerclean	R750
Motor rating	250 Watt	400 Watt	800 Watt	900 Watt
	07.2655	**07.2665**	**07.2670**	**07.2910**
Voltage	230 V; 50 Hz	230 V; 50 Hz	220-240 V; 50 Hz	220-240 V; 50 Hz
	07.2863	**07.2869**		**07.2911**
	110/115V; 50Hz	110/115V; 50Hz		110/115V; 50Hz
Operating speed	575 U/min	460 U/min	620 U/min	460 U/min
Weight	15 kg	20,9 kg	22,8 kg	29,5 kg
Spirals	Ø16 (Ø8;Ø 10with accessories)	Ø16; Ø22 (Ø8;Ø 10with accessories)	Ø16; Ø22 (Ø8;Ø 10with accessories)	Ø16; Ø22; Ø32 (Ø8;Ø 10with accessories)
max. working length	40m	60m	65m	80m
Pipe diameter Range	Ø20-Ø100mm	Ø20-Ø150mm	Ø20-Ø150mm	Ø20-Ø200mm
Noise level	75 dB (A)	75 dB (A)	80 dB (A)	80 dB (A)
Protection class	I	I	I	I

3. Function of the Unit

3.1 Design/Description

3.1.1 Equipment summery

Equipment summary/Controls (>see fold-out page)

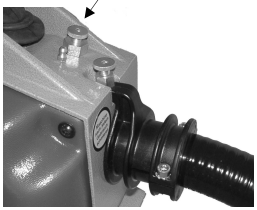
Abb.1 : **A** = Hand lever **B** = Main switch **C** = Spiral
D = Tool **E** = Holder for spiral **F** = Power cable

Abb.2 : (Access.) **G** = Spirals **H** = Guide hose **I** = Spray for spiral
K = safety gloves **L** = Tools

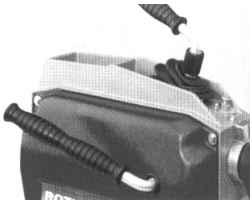
3.1.2 Functional description

In the model **R550 / R600 / R650 / R750**, you have purchased a highly efficient, portable and easy-to-use drain-cleaning machine.
The machine functions on the "Sectional Cable" principle, i.e., only as many spirals as are necessary are coupled together.
This makes it possible to design the machine with a speed of rotation which permits efficient pipe cleaning with a diverse range of tools.
The machine is electrically driven. The power of the motor is transmitted to the spirals via the clamp-mounting system by exerting pressure on the hand-lever.
If the hand-lever is an inoperative position, you can push up the lockpin and the hand-lever can be used as an transport handle. If you push down the hand-lever , the locking is released.
By model R650 Powerclean , the hand-lever can be installed either as a centre-mounted or as a side-mounted lever.
By model R750 the Handle can also be swung backwards through 180° and locked when wheeling the machine.

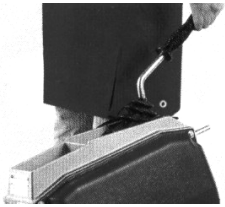
Lockpin of hand lever



R 650 Powerclean



R 750



Forward movement towards the pipe blockage is sensitively generated via a so-called working arc on the spirals between the machine and the pipe to be cleaned.
The machine is designed for the following diameter spirals:

R550	∅ 16mm
R600/650	∅ 16, 22mm
R750	∅ 16, 22, 32mm

Accessories make it possible to use 8 mm and 10 mm diameter spirals for tight bends in sanitary systems.
Maximum working range is around the following spiral length :

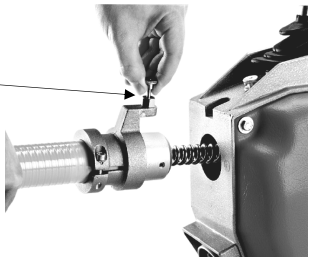
R550	40m spiral length
R600	60m spiral length
R650/750	80m spiral length

3.2 Operation

Warning! The operation of the drain-cleaning machines shall only be carried out observing all notes concerning the safety of man and machine.

The machine should be positioned at a distance of 50 to 80 cm from the entry to the pipe to be cleaned; the mains plug should be connected to the correct electrical supply.
If 16 mm or 22 mm diameter spirals are to be used, the fixing element of the guide hose should be inserted into the hole on the rear of the machine and correctly locked using the attached fixing element and catcher.
The guide hose serves as a vibration-absorbing guide element for the spirals, as a dirt trap, and as a **safety element** for the operating staff.

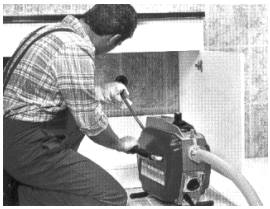
Catcher



The spiral should now be inserted into the machine and coupled at the front by means of a suitable tool. The tool should be selected to accord with the suspected type of fouling.

Important! Put on safety gloves before any other actions are performed!

The spiral should now be inserted approx. 500 mm into the pipe to be cleaned and the drain-cleaning machine started in forward mode. The spirals should be moved manually toward the point of fouling. Once a slight resistance is felt (blockage), the spirals should again be withdrawn from the machine until an arc relative to the pipe occurs. This so-called working arc should be maintained with one hand (wear gloves!) while the hand-lever is pressed down using the other hand; the spirals will now start to rotate.



working arc

3.3 Removal of pipe blockages

The working arc produced should be pressed downward by the operator, generating a pressure towards the blockage with the drain-cleaning machine remaining in its position. The working pressure resulting from the spirals intrinsic tension and manual pressure acts against the blockage in the pipe.
Once the pre-tensioned working arc has penetrated into the pipe, the hand-lever should be released and the spirals again withdrawn from the machine in order to create a new working arc. This cycle of creation of a working arc and pushing of the rotating spirals towards the blockage should be repeated until the blockage has been eliminated.
Practical experience indicates that the pipe should be finely "after-cleaned" using a chain flail once the blockage has been dislodged.

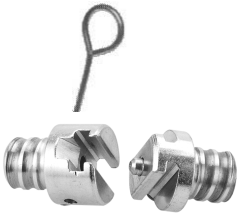
Note:
If a tool has become jammed in the pipe, the machine should be set to reverse and the spirals disengaged from the blockage by means of backward and forward movements. The machine should then be reset to forward and the spirals moved up to the blockage again. The procedure for removal of the blockage should then be continued as described above

3.4 Retrieval of the spirals from the pipe

Use one hand to draw the rotating spirals out of the pipe until a slight arc is formed. The hand-lever should be released and the motionless spirals then pushed back into the machine. The hand-lever should then be used to clamp and rotate the spirals again. As already described, the spirals should then be drawn further out of the pipe. Once a length of spiral has been returned to the guide tube, it should be uncoupled and drawn out of the guide hose. These sequences should be repeated until all the sections of spiral have been removed from the pipe.

3.5 Tool changing

The most efficient tool for the particular type of blockage should be selected.
Tool-changing is performed as follows:



the tool attachment key supplied with the machine should be inserted into the side boring of the coupling on the spirals

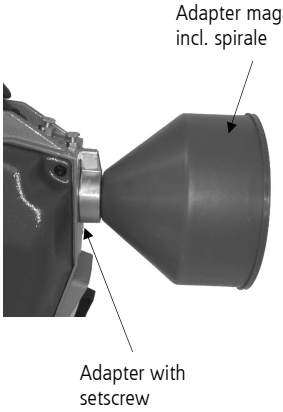
the locking bolt of the 2nd half-coupling should be lifted

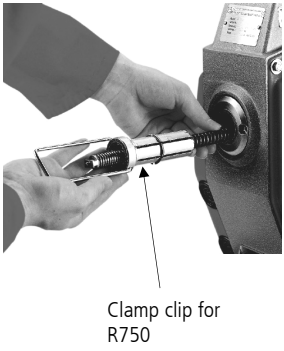
the coupling should be removed to the side out of the milled recess

The tool selected should be mounted from the side on the coupling

3.6 Working using 8 mm or 10 mm spirals

8 mm or 10 mm spirals should be used for narrow pipes and pipe bends. An adapter magazine available as an accessory is needed for this purpose; this contains an 8 mm or 10 mm spirals in a drum (for R750 clamp clips are needed).
The adapter magazine should be installed in place of the guide tube.
For R750, push the suit clamp clip over the spiral into the boring until the stop face.





Work then continues in the same way as with a standard spiral.
An adjustable brake is provided on the machine to prevent co-rotation of the adapter magazine. The braking action is achieved by lifting the hand-lever to its extreme end position. If there is no longer an adequate braking action, the setscrew on the adapter should be slackened and the distance between the casting and the clamp corrected. The setscrew should then be re-tightened.

3.7 Shut-down

After use of the machine, the rotary switch should be returned to its "0" position and the mains plug disconnected from the mains. The spirals should be recovered from the pipe as described in Section 3.4. and removed from the machine. The guide hose or the adapter magazine should then be detached from the machine.

4. Troubleshooting

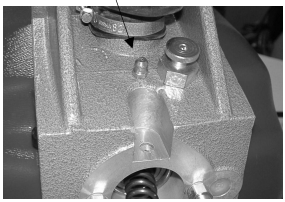
Trouble	possible cause	Remedy
Machine does not work	- no power	- check the power supply system
	- defect of main switch	- Contact your service agent
	- defect of motor	- Contact your service agent
No rotation of spiral by using the hand-lever	- abrasion of clamp clips	- remove clamp clips
	- abrasion of cogged belt	- remove cogged belt

5 Service and Repair

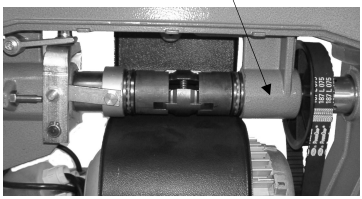
5.1 Service

The machine must be carefully handled and must be cleaned at regular intervals. The spirals and tools must be cleaned and protected after every use. We recommend our special "ROWONAL" care product for this purpose. The machine has one lubricating point on the top exterior and internally for lubrication of the needle bearings. The outer lubricating point must be greased using a universal grease after every five hours of operation. The bearings inside the machine can be reached only by dismantling the right-hand side cover. Lubrication here is recommendable at intervals of one hundred hours of operation.

Grease nipple outside



Needle bearing



Grease nipple is being opposite

5.2 Maintenance, Recondition, Repair

Important!
All maintenance, recondition and repair work shall only be carried out by an introduced professional repairing person.

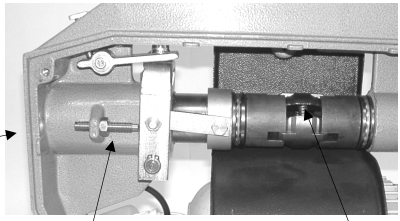
The Rothenberger service locations or else the manufacturer with his repair department are available to help you. Needless to say, we will also send you spare parts at short notice. Please contact please your retailer or the manufacturer.
Order your accessories and spare parts from your specialist retailer or using our after-sales hotline:

Tel. +49 6195 99 52 **14** **Fax:** +49 6195 99 52 **15**

5.2.1 Changing of the clamp-mounting system

Warning! Before changing the clamp-mounting system pull out the power cable of the plug connection!

1. Dismantle the cover on the right-hand side

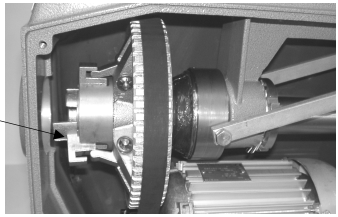


2. Remove the plug and slacken the locking nut.
3. Turn the adjusting screw backwards until the clamp-mounting springs are detensioned and remove the clamp-mounting system.
4. Insert the new clamp-mounting system and turn the adjusting screw until the correct functioning position for braking of the adapter magazine has been reached
5. Tighten the locking nut and re-install the plug

Model R750 :

1. Dismantle the cover on the right-hand side
2. Remove the clutch jaws and replace with new one

Clutch jaws



6. Disposal

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.

7. CE-Statement of Conformity

We hereby declare on our sole responsibility that this product is in accordance with the provisions of the Directive 98/37EWG; 73/23EWG; 89/336EWG.
For additional information, please contact us at the following postal address or contact one of the subsidiary companies specified.

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