# MODEL 5 6002 0000 ELECTRIC RECEIPROCATING HACKSAW





## **OPERATING MANUAL**



F	ig. 1–3	6	Support shoe	
1	Clamping screw with locking	7	Switch trigger	
	handle	3	Overload protection	
2	Guide bracket	•	Clamping screw	
3	Mounting pin 10	)	Speed regulating switch	
4	Blade thrust piece 11		Lever	
5	Saw blade	?	Dial	

## Basic Safety Instructions!

#### Warning! Read before commissioning!

When using machines, electric tools and electric equipment – hereinafter referred to as "equipment" – the following basic safety precautions should always be followed to reduce the risk of electric shock, personal injury and fire. Read and comply with all these instructions before operating the equipment. Keep these safety instructions safe.

Only use the unit for the purpose for which it was intended, with due attention to the general safety and accident prevention regulations.

- Keep your work area tidy.
  - Cluttered work areas invite accidents.
- Take in account environmental effects.

Do not expose electrical equipment to rain. Do not use electrical equipment in damp or wet surroundings. Keep the work area well lit. Do not use electrical equipment in the vicinity of inflammable liquids or gases.

• Guard against electric shocks. Avoid body contact with earthed parts, such as pipes, radiators, cookers, refrigerators. If the equipment comes with an earthed wire, the plug may only be connected to an earthed receptacle. At work sites, in damp sur-

only be connected to an earthed receptacle. At work sites, in damp surroundings, in the open or in the case of comparable types of use, only operate the equipment off the mains using a 30 mA fault current protected switch (FI breaker).

Keep children away.

Do not allow anyone else to touch the equipment or the power lead. Keep other persons away from your work area. Only allow trained personnel to use the equipment. Apprentices many only operate the equipment when they are over 16, when this is necessary for their training and when they are supervised by a trained operative.

Keep your equipment is safe storage.

When it is not in use, place/store electrical equipment in a dry place, either high up or locked, out of the reach of children.

Do not overload your equipment.

It operates better and more safely in the performance range specified. Replace worn tools in good time.

Use the right equipment for the job.

Do not use electrical equipment which is underpowered for heavy work. Do not use electrical equipment for purposes for which it is not intended.

Wear suitable working clothes.

Do not wear loose clothing or jewellery; they might catch in moving parts. When working outdoors, rubber gloves and non-slip footwear are recommended. Wear a hairnet if you have long hair.

Use personal safety equipment.

Wear safety goggles. Wear ear defenders to protect against noise of ≥ 85 dB(A). Wear a face mask for work which raises dust.

Do not use the lead for purposes for which it is not intended.

Never carry the equipment by its lead. Do not use the lead to yank the plug out of the socket. Keep the lead away from heat, oil and sharp edges.

- Keep your hands away from moving (rotating) parts.
- Secure the workpiece.

Use clamps or a vice to hold the workpiece. This is safer than holding it with your hand, and also it frees both hands to operate the equipment.

Avoid unnatural postures.

Maintain a sure footing and balance at all times.

Handle your tools with care.

Keep your tools sharp and clean for better and safer performance. Follow the instructions for servicing and for changing tools. Inspect the lead of the electrical equipment at regular intervals, and have it repaired if damaged by an authorised expert. Check the extension leads at regular intervals and replace them if they are damaged. Keep handles dry and free of oil and grease.

Pull the plug from the socket

for all operations described under Preparations for Use and Maintenance, when changing tools, and when the equipment is not in use.

Do not leave any tool spanners/keys in place.

Check before switching the equipment on that spanners, keys and adjusting tools have been removed.

#### Prevent inadvertent startup.

Do not carry plugged-in equipment with your finger on the switch trigger. Make sure the switch is off before plugging in the equipment. Never bridge the inching switch.

#### Extension lead outdoor use.

When using the equipment outdoors, use only extension leads approved for outdoor use and marked accordingly.

#### Stay alert.

Watch what you are doing. Use common-sense when working. Do not use the equipment when you are not concentrated.

#### Check the equipment for any damage.

Before further use of the equipment, guards and other parts which are slightly damaged should be carefully checked to ensure that they will operate properly and perform their intended functions. Check whether the moving parts are functioning perfectly and that they do not stick, or if not whether any parts are damaged. All parts must be correctly fitted and must meet all the conditions needed for flawless operation of the equipment Damaged guards and other parts must be properly repaired or replaced by an authorised expert, unless otherwise indicated in the operating instructions. Damaged switches must be replaced by an authorised ROL-LER after-sales service facility. Do not use any electrical equipment if the switch does not turn off and on.

#### Warning!

For your own personal safety and to ensure operation of the equipment for its intended purpose, only use genuine spare parts and accessories. The use of other attachments and other accessories involves a risk of per-

#### Have your equipment repaired by an authorised expert.

This electrical equipment complies with the relevant safety regulations. All maintenance and repair work, particularly that involving the electrical systems, may only be performed by an authorised expert or by trained personnel using genuine spare parts, otherwise injuries may result to the user. All unauthorised modifications to the equipment are prohibited for safety reasons

#### Additional safety directions for using and charging batteries

- ROLLER products use batteries containing nickel cadmium (NiCd) cells. These have a long life and can therefore be recharged many times to supply full power again and again.
- The charger is designed only for use in dry and roofed areas, and not in the open.
- Do not use the charger if it has suffered a strong impact, has been dropped, or has been damaged in any way; take it to an authorised ROLLER after-sales service facility.
- Never attempt to connect two chargers together.
- Do not use the charger at charger temperatures or ambient temperatures of less than 5°C/40°F or more than 40°C/105°F. Compliance with this instruction is very important, and can prevent serious damage to the battery.
- Do not incinerate a battery even if it is severely damaged or completely worn out. Battery cells can explode in the flames. Under severe stresses (when charging or at high ambient temperatures), it is possible that small quantities of liquid will leak from the cells. This does not indicate a failure of the battery. If the outer seal is defective and the liquid gets onto your skin, the procedure is as follows:
  - \* Wash this area with soap and water immediately.
  - \* Neutralise the area with a mild acid such as lemon juice or vinegar.
  - \* If battery liquid gets into your eyes, rinse them out with clean water for at least 10 minutes, and seek medical attention immediately (medical note: the liquid is a 25 - 35% solution of potassium hydroxide)
- Ensure that the contacts of the battery cannot be shorted by metal objects like screws, cutlery, nails etc.
- Ensure that the battery is charged only using the charger recommended by ROLLER. Incorrect use can lead to short-circuits, overheating or leakage of the battery acid.
- Make sure that you use the right battery for the electrical equipment.
- To prolong your battery's life, avoid charging times of more than 2 days. Although overcharging is not a safety concern, it can significantly shorten battery life.
- When you charge your battery for the first time, or after a long idle period, it will only accept a charge of about 80%; however after more frequent charge and discharge cycles the battery will come up to full capacity.
- During charging, the battery and the charger may become warm to the touch. This is normal and no cause for concern.
- The battery should be recharged whenever its capacity noticeably drops

during light work. Do not continue to use the battery when its capacity drops steeply, instead charge it in accordance with the charging proce-



- This symbol indicates that this equipment contains NiCd batteries which may not be disposed of in the normal domestic waste. ROLLER recommends the following procedure:
- Discharge the battery completely by operating the equipment until it stops.
- Take the battery to your nearest ROLLER authorised after-sales service. If necessary, ask for information about battery disposal from your local authority. The collected batteries are disposed of/recycled using environmentally compatible means.

#### Specific Safety Instructions

- Use personal safety equipment (e.g. goggles, ear defenders).
- Warning! Chips eject sidewards and to the front. Keep other people
- Do not overload the saw and the saw blade. Do not use too high feed pressure
- Watch that no residual water runs into the motor while sawing lines caryingwater. Danger: electric shock.
- On dusty work (with materials containing asbestos, stone etc.) comply with the accident prevention regulations.

#### 1. Technical Data

#### 1.1. Article numbers

ROLLER'S Fox ANC drive unit	560000
ROLLER'S Fox ANC VE drive unit	560008
ROLLER'S Fox ANC SR drive unit	560001
ROLLER'S Mamba ANC VE drive unit	560005
ROLLER'S Carat ANC VE drive unit	560006
ROLLER'S Akku-Carat ANC VE drive unit	560007
ROLLER High-Power-Battery 18 V	565210
Rapid-charger 12–18 V	565220

#### 1.2. Capacities

#### Square sawing

ROLLER'S Fox ANC. ROLLER'S Fox ANC VE. ROLLER'S Fox ANC SR,

With guide support 563000 and ROLLER'S special saw blade 561001

Pipes (including plastic coated) up to 2" Metal, wood, plaster, etc. 3 mm and thicker

With guide support 563100 and

ROLLER'S special saw blade 561002

up to 4" Pipes (including plastic coated)

3 mm and thicker Metal, wood, plaster, etc.

ROLLER'S Fox ANC SR with guide support and ROLLER'S special saw blade 150 / 200 / 300

Stainless steel pipes (INOX) up to 2" or 4" Metal, wood, plastic 1.5 mm and thicker

#### Hand-held sawing all ROLLER'S reciprocating saws

ROLLER'S special saw blades 150 / 200 / 300 and

ROLLER saw blades (see 2.4.)

Ø ≤ 6", 160 mm Steel pipes and others

Other metal profiles, nail-embedded wood, pallets ≤ 250 mm

#### 1.3. Number of strokes (idling speed)

. Number of strokes (fulling speeu)	
ROLLER'S Fox ANC	2200 rpm
ROLLER'S Fox ANC VE (infinitely variable)	0 2200 rpm
ROLLER'S Fox ANC SR (infinitely variable)	700 2200 rpm
ROLLER'S Mamba ANC VE (infinitely variable)	0 2200 rpm
ROLLER'S Carat ANC VE (infinitely variable)	0 2200 rpm
ROLLER'S Akku-Carat ANC VE (infinitely variable	e) 0 1700 rpm

#### 1.4. Electric data

ROLLER'S Fox ANC. ROLLER'S Fox ANC VE,

ROLLER'S Carat ANC VE

230 V; 50-60 Hz; 1050 W; 5 A or 110 V; 50-60 Hz; 1050 W; 10 A or all-insulated (73/23/EWG) interference-suppressed (89/336/EWG) ROLLER'S Fox ANC SR 230 V; 50-60 Hz; 1400 W; 6.4 A or

110 V; 50-60 Hz; 1400 W; 12.8 A

all-insulated (73/23/EWG)

interference-suppressed (89/336/EWG) ROLLER'S Mamba ANC VE 230 V; 50-60 Hz; 500 W; 2.3 A or 110 V; 50-60 Hz; 500 W; 4.6 A

all-insulated (73/23/EWG)

interference-suppressed (89/336/EWG)

ROLLER'S Akku-Carat ANC VE 18 V=; 2.0 Ah; 30 A

Input 230 V~; 50-60 Hz; 1.0 A Rapid-charger (1 h) Output 8-20 V=; 53 VA; 2.65 A

1.5 Dimensions

455×80× 90 mm (17.9"×3.2"×3.5") ROLLER'S Fox ANC 435×80×135 mm (17.1"×3.2"×5.3") ROLLER'S Fox ANC VE 490×80× 90 mm (19.3"×3.2"×3.5") ROLLER'S Fox ANC SR ROLLER'S Mamba ANC VE 320×80×110 mm (12.6"×3.2"×4.3") ROLLER'S Carat ANC VE 435×80×135 mm (17.1"×3.2"×5.3") ROLLER'S Akku-Carat ANC VE 435×90×190 mm (17.1"×3.5"×7.5")

1.6. Weights

ROLLER'S Fox ANC	3.0 kg (6.6 lb)
ROLLER'S Fox ANC VE	3.0 kg (6.6 lb)
ROLLER'S Fox ANC SR	3.1 kg (6.8 lb)
ROLLER'S Mamba ANC VE	2.4 kg (5.3 lb)
ROLLER'S Carat ANC VE	3.0 kg (6.6 lb)
ROLLER'S Akku-Carat ANC VE (with battery)	3.5 kg (7.7 lb)
ROLLER'S High-Power-Battery 18 V	1.0 kg (2.2 lb)
ROLLER'S Guide support up to 2"	1.0 kg (2.2 lb)
ROLLER'S Guide support 21/2-4"	1.7 kg (3.7 lb)

1.7. Noise data

Workplace-related emissions all ROLLER'S reciprocating saws 98 dB(A) Sound capacity level ROLLER'S reciprocating saws 104 dB(A)

1.8. Vibrations

Weighted effective value of acceleration: ROLLER'S Fox, all models with guide support 12 m/s2 ROLLER'S Mamba ANC VE, ROLLER'S Carat ANC VE, ROLLER'S Akku-Carat ANC VE, free-hand 18 m/s2 All reciprocating saws idle 22 m/s2

2. Preparations for Use

#### 2.1. Electrical connection

Ensure correct mains voltage! Before connecting the drive unit respectively the rapid charger, check whether voltage on the rating plate matches the mains voltage. At work sites, in damp surroundings, in the open or in case of comparable type of use, only operate the equipment off the mains using a 30mA fault current protected switch (FI

The battery supplied with ROLLER'S Akku-Carat ANC VE as well as spare batteries are not charged. Charge battery before initial operation. Use only ROLLER'S rapid-charger (565220) for charging. Once the battery is inserted in the charger, the red indicator lamp at the charger blinks. The indicator lamp lights permanently after about 1 h. i.e. the battery is charged. The battery reaches its full capacity only after several charges.

#### 2.2. Sawing with guide support (square cutting)

Insert mounting pin (3) of the guide support (2) sideways into the saw so that the stop pin of the guide support will move in the slot of the

Attention: To obtain square cuts, the use of the ROLLER'S guide support is indispensable. Precise positioning is not possible when saw is guided by hand.

The reciprocating saw is used without the guide support (2). It must be pressed forcefully against the material during sawing, in a way that the support shoe (6) touches the material at any time.

#### 2.4. Choice of suitable blades

Only use the quality blades of ROLLER in combination with all ROL-LER'S reciprocating saws as otherwise any guarantee claim becomes invalid!

For getting right angle cuts (e.g. pipes) with all ROLLER'S Fox models it is essential not only to use the power transmitting guide support (see 2.2.) but also the ROLLER'S special saw blade up to 2" or 4". ROLLER'S special saw blades come with a double tang, are extra thick and resistant to bending and distortion. Normal saw blades with single tang do not withstand the high feed pressure during sawing with the guide support. They cut skew and break at the mounting point. Furthermore, especially with ROLLER'S Mamba ANC VE, ROLLER'S Carat ANC VE and ROLLER'S Akku-Carat ANC VE the ROLLER'S special saw blades (561003 ... 561005) should be used. For special operations there are other ROLLER'S saw blades available with different forms, lengths and spacings. Please use the blade best suited by size, length and tooth pitch. An unsuitable blade will easily break or become prematurely blunt and will result in inaccurate cuts. For sawing stainless steel pipes and hard cast iron pipes use ROLLER'S Fox

While sawing excessive dust generating materials, e.g. blaster, breeze blocks, for safety reasons and for protecting the gear against wear, apply dust extractors

ANC SR and one of the ROLLER'S special saw blades 561003 ...

#### 2.5. Installing the saw blade

561005.

When installing the saw blade, take care not to place the saw on the anti-kink sleeve on the mains lead, otherwise the lead may be damaged. Loosen clamping screw (9) on saw blade thrust washer (4) so that the blade can be inserted over the centering pin. The ROLLER'S special saw blade must be positioned between the two arms of the Ushaped thrust washer (Fig. 2). ROLLER saw blades must be positioned in the recess in the base of the thrust washer (Fig. 3). Secure the saw blade tightly with clamping screw (9), otherwise the centering pin may become damaged or could shear. The centering pin is not intended to hold the saw blade. This function is performed by the clamping action of clamping screw (9). If this cannot be properly tightened, because the screw socket or socket wrench is worn, the centering pin will shear off. For this reason, replace the clamping screw (9) or socket wrench well before wear becomes excessive.

#### 3. Operating

ROLLER'S Fox ANC: On-/off with touch control (7)

ROLLER'S Fox ANC VE, ROLLER'S Mamba ANC VE, ROLLER'S Carat ANC VE and ROLLER'S Akku-Carat ANC VE: Stepless speed control by pressing switch (10)

ROLLER'S Fox ANC SR: Speed adjustment with dial (12). On/off switching with tip switch (7).

#### 3.1. Operation while sawing with guide support

Mount guide support as described under 2.2. Position saw with guide support onto the pipe so that the clamp spindle is vertical. Press tip switch (7 or 10) while holding the motor handle at the same time, respectively press lever (11), and pull up saw until pipe or rod is cut through. Start-sawing, especially at large diameters (e.g. 4"), can be improved by not switching the motor on before the saw blade touches the pipe. Note that the prism of the guide support is to be kept clean all the time, otherwise square cutting will be effected. For obtaining optimum stroke speed and for protecting the saw blade, only apply moderate feed forward. High force does not make sawing faster!

#### 3.2. Operation while sawing free-hand

For straight or curved cutting, press support shoe (6) forcefully against the material in a way that the support shoe (6) touches the material at any time. Switch machine on. Use only sharp and faultless blades. Take care to cut at a uniform feeding speed. This will reduce the risk of accidents and wear on tool and blade. Always keep the power cable towards the rear of the machine.

Plunge cutting into a plain surface: If the material is not too hard e.g. wood or plasterboards, the saw blade in motion can be plunged carefully into the material (see Fig. 4). Before switching on machine place tip of saw on the cutting point with machine resting on the lower edge of support shoe. Switch on saw and plunge blade carefully into material. For hard material such as metal first drill a starting hole according to the size of the saw blade. It is important to press the support shoe (6) firmly against the material to be cut in order to obtain a uniform and smooth cutting operation.

#### 3.3. Lubricants

Do not use any lubricants. They will prevent the ejection of chips from

the cutting point and will reduce the life of the saw blades (see 3.4.).

#### 3.4. Stainless steel pipes, hard cast iron pipes

For sawing stainless steel pipes and hard cast iron pipes use ROL-LER'S Fox ANC SR and one of the ROLLER'S universal saw blades 561003 ... 561005. For square cutting the guide support is essential (see 2.2.). Only when cutting stainless steel, use ROLLER'S Smargdol or ROLLER Rubinol 2000 for cooling and lubricating.

#### 4. Maintenance

Before any repair work, pull the mains plug or remove the battery!

#### 4.1. Maintenance

The ROLLER'S reciprocating saws are maintenance free. The gear runs in a sealed grease housing and therefore does not need any lubrication.

#### 4.2. Inspection/Servicing

Before any repair work, pull the mains plug or remove the battery! This work may only be performed by authorised experts or by trained personnel.

The ROLLER'S reciprocating saws with universal motor have carbon brushes. These are subject to wear and must therefore be inspected

# Be sure to buy the right saw blade first time.

The right choice will save you expense and trouble.

#### ROLLER'S special saw blade 2" / 4"

Specially developed for ROLLER'S Fox ANC. Absolutely essential for right angle sawing and for fast dismantling with power transmitting guide support. This results in multiple sawing pressure through 5-fold power transmitting leverage effect. Normal saw blades with single tang do not withstand the high feed pressure during sawing with guide support, they break at the mounting point. For this reason, extra thick ROLLER'S special saw blade, resistant to bending and distortion. Double tang mounting with exceptionally wide clamping face ensures accurate seating and high stability. Coarse, corrugated tooth pattern for rapid sawing. Long service life.

#### ROLLER'S special saw blade 150 / 200 / 300

For free-hand sawing and for sawing with power transmitting guide support. Only 1 universal saw blade instead of many different saw blades. Resilient material, highly flexible, also for flush-to-wall sawing. Double tang mounting with exceptionally wide clamping face for accurate seating and high stability. Normal saw blades with single tang do not withstand the high feed pressure during sawing with guide support, they break at the mounting point. Alternating tooth pattern (combo-toothing), specially hardened in the toothing area. Thus outstanding cutting performance and prolonged service life. Also for hard-to-machine materials, e.g. stainless steel pipes, hard cast iron pipes, etc., and for sawing nail-embedded wood, pallets.

<ol> <li>For ROLLER'S Fox ANC, ROLLER'S Fox ANC VE, ROLLER'S Fox ANC SR, and other brands.</li> </ol>	ROLLER'S special saw blade 2" / 4" for right angle sawing and for fast disma	ntling with pou	vor transmitt	ina auido s	unnort			
and other brands.	Tor right arigin sawing and for fast distilla	Lenght mm	Tooth pitch mm	Material	Colour	Art. no. (pack of 5		
BOLLON'S Specialization 2*	ROLLER'S special saw blade 2" for steel pipes up to 2"	140	3,2	HSS-Bi	red	561001		
ROLLEY Species species 4"	ROLLER'S special saw blade 4" for steel pipes up to 4"	200	3,2	HSS-Bi	red	561002		
	For hard-to-machine materials, e.g. stair ROLLER'S special saw blade 150 / 200 in combination with ROLLER'S Fox ANC	/ 300 instead	of the ROLL	ER'S speci	al saw blac			
For all ROLLER'S reciprocating saws and other brands.	ng saws ROLLER'S special saw blade 150 / 200 / 300 for free-hand sawing and for sawing with power transmitting guide support.							
BOLLER'S paramagnin 150	ROLLER'S special saw blade 150	150	1,8/2,5	HSS-Bi	red	561005		
SOLISE Signatura 200	ROLLER'S special saw blade 200	200	1,8/2,5	HSS-Bi	red	561003		
BOLLER'S (personal points 300 mer from	ROLLER'S special saw blade 300	300	1,8/2,5	HSS-Bi	red	561004		
For all ROLLER'S reciprocating saws and other brands.	Also for nail-embedded wood, pallets. For hard cast iron pipes, lower speed require speed regulation.  ROLLER'S saw blades – for free hand so	ed e.g. by usin	g ROLLER'S	S Fox ANC				
ROLLER 100 150 200	ROLLER'S saw blade Metals 3 mm and thicker	100 150 200	1,8 1,8 1,8	HSS-Bi HSS-Bi HSS-Bi	red red red	561101 561103 561102		
ROLLER man STON	ROLLER'S saw blade Metals 1–3 mm	150	1,4	HSS-Bi	red	561104		
Contract of Miles	ROLLER'S saw blade Metals 1–3 mm (for curved cuts)	90	1,4	HSS-Bi	red	561107		
- ROLLER	ROLLER'S saw blade Metals 4 mm and thicker, nail-embedded wood, pallets	150	2,5	HSS-Bi	black	561110		
ROLLER color (2011)	ROLLER'S saw blade All types of wood	300	4	ws	black	561111		
ROLLER MAN SELLES	ROLLER'S saw blade Plasterboards, breeze blocks etc.	150	5	ws	white	561115		

or replaced from time to time by an authorised ROLLER after-sales service facility. See also section 6. Action in case of trouble.

## 5. Wiring Diagram

ROLLER'S Fox ANC
ROLLER'S Fox ANC VE, ROLLER'S Mamba ANC VE,
ROLLER'S Carat ANC VE
ROLLER'S Fox ANC SR
see Fig. 5.
see Fig. 5.
see Fig. 5.
see Fig. 5.

On ROLLER'S Akku-Carat ANC VE, make sure that the positive pole of the motor (connector piece on plastic base with nose) is connected with the red wire to the switch clip 1. The rotation lever at the switch has to be set to the rear (towards the mounting surface of the cooling block).

#### 6. Action in Case of Trouble

- 6.1. Trouble: Reciprocating saw comes to a stop during cutting, overload protection activated (ROLLER'S Fox ANC).
  - Cause: Feeding pressure too high.
    - Blunt saw blade.
    - Unsuitable saw blade (see 2.4.).
    - Worn carbon brushes.
    - Battery empty (ROLLER'S Akku-Carat ANC VE).
- 6.2. Trouble: Does not cut square on pipes with guide support.
  - Cause: 

    Unsuitable saw blade (see 2.4.).
    - Blunt saw blade.
    - Prism of guide support dirty (chips!).
- 6.3. Trouble: Reciprocating saw does not start.
  - Cause: Overload protection has activated (ROLLER'S Fox ANC).
    - Defective power cable.
    - Battery empty (ROLLER'S Akku-Carat ANC VE).
    - Defective drive unit.
- 6.4. Trouble: Centering pin shears off, saw blade cannot be adequately clamped.
  - Cause: 

    Clamping screw (9) worn, socket wrench worn (see 2.5).

#### 7. Manufacturer's Warranty

The warranty period shall be 12 months from delivery of the new product to the first user but shall be a maximum of 24 months after delivery to the Dealer. The date of delivery shall be documented by the submission of the original purchase documents, which must include the date of purchase and the designation of the product. All functional defects occurring within the warranty period, which clearly the consequence of defects in production or materials, will be remedied free of charge. The remedy of defects shall not extend or renew the guarantee period for the product. Damage attributable to natural wear and tear, incorrect treatment or misuse, failure to observe the operational instructions, unsuitable operating materials, excessive demand, use for unauthorized purposes, interventions by the Customer or a third party or other reasons, for which ROLLER is not responsible, shall be excluded from the warranty.

Services under the warranty may only be provided by customer service stations authorized for this purpose by ROLLER. Complaints will only be accepted if the product is returned to a customer service station authorized by ROLLER without prior interference in an unassembled condition. Replaced products and parts shall become the property of ROLLER.

The user shall be responsible for the cost of shipping and returning the product.

The legal rights of users, in particular the right to claim damages from the Dealer, shall not be affected. This manufacturer's warranty shall apply only to new products purchased in the European Union, in Norway or Switzerland.