REMS Tiger ANC
Tiger ANC VE
Tiger ANC SR
Tiger ANC Pneumatic
Puma VE
Cat ANC VE
Akku-Cat ANC VE

INSTRUCTION MANUAL

Electric universal reciprocating saw, Pipe saw,
Pneumatic reciprocating pipe saw, Cordless reciprocating saw

SAWING

REMS

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Fig. 1

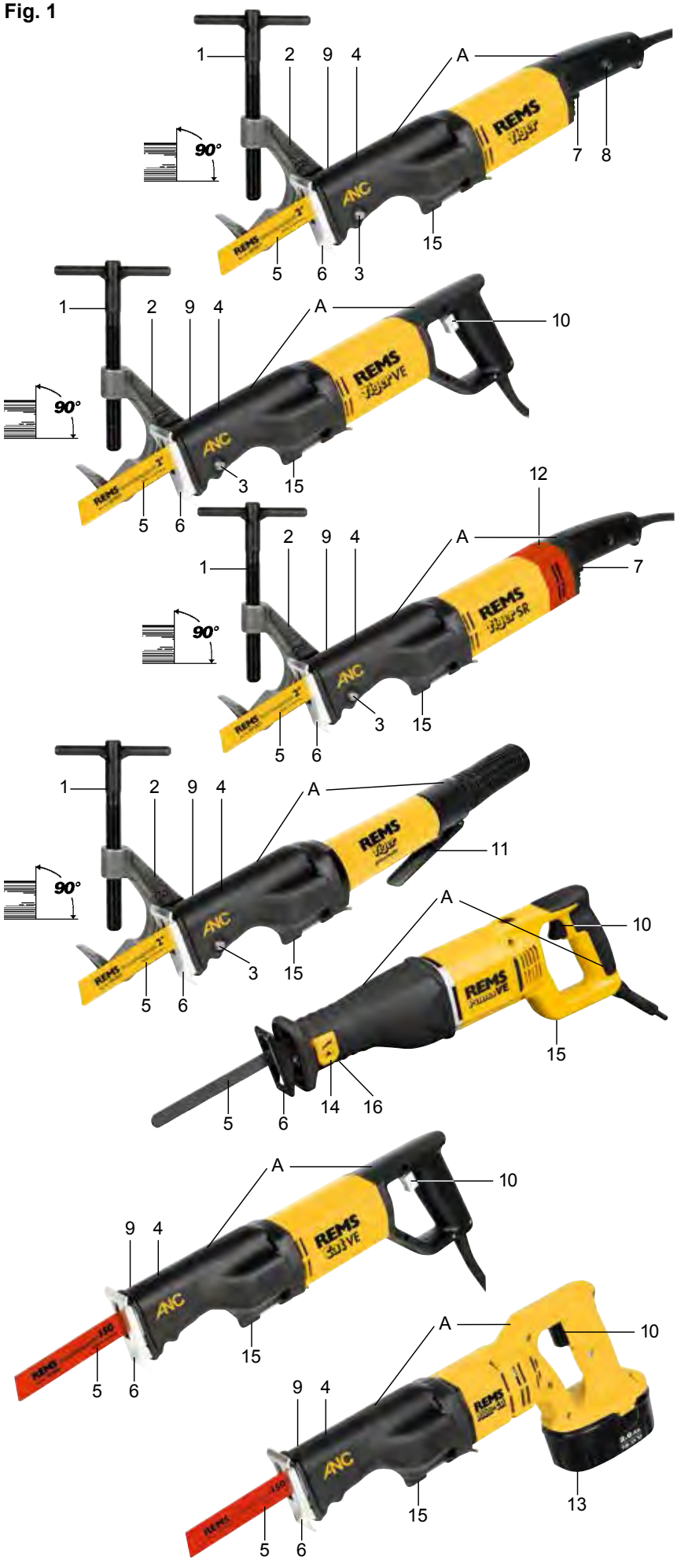


Fig. 2

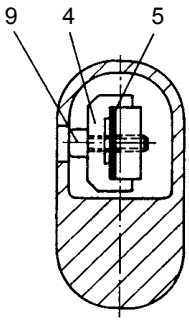


Fig. 3

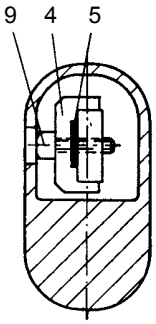


Fig. 4

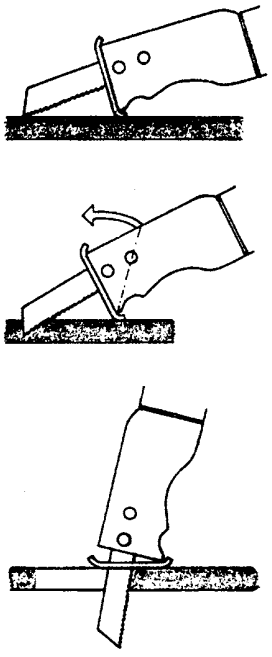


Fig. 5

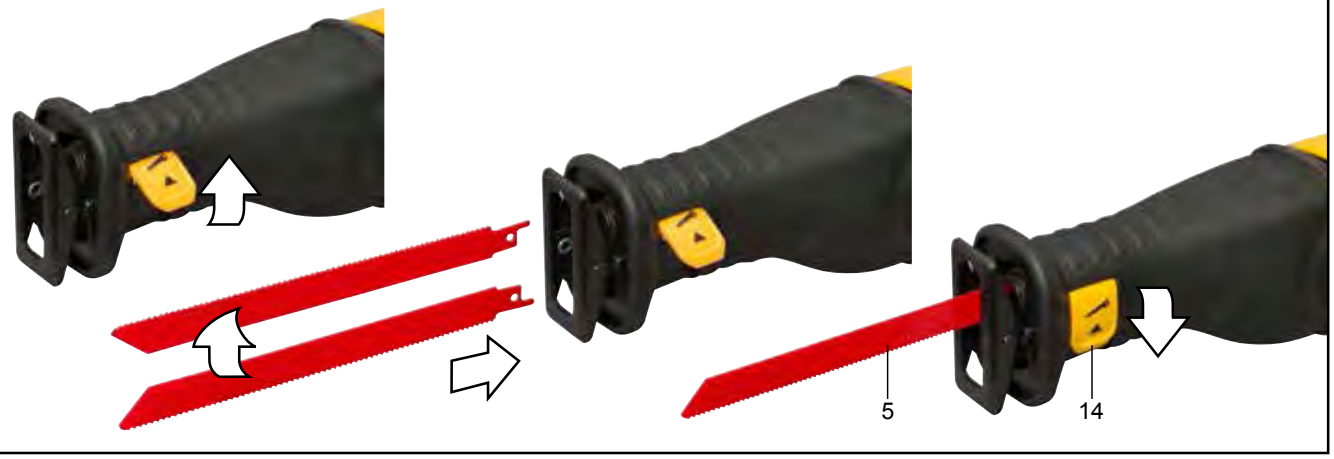


Fig. 6

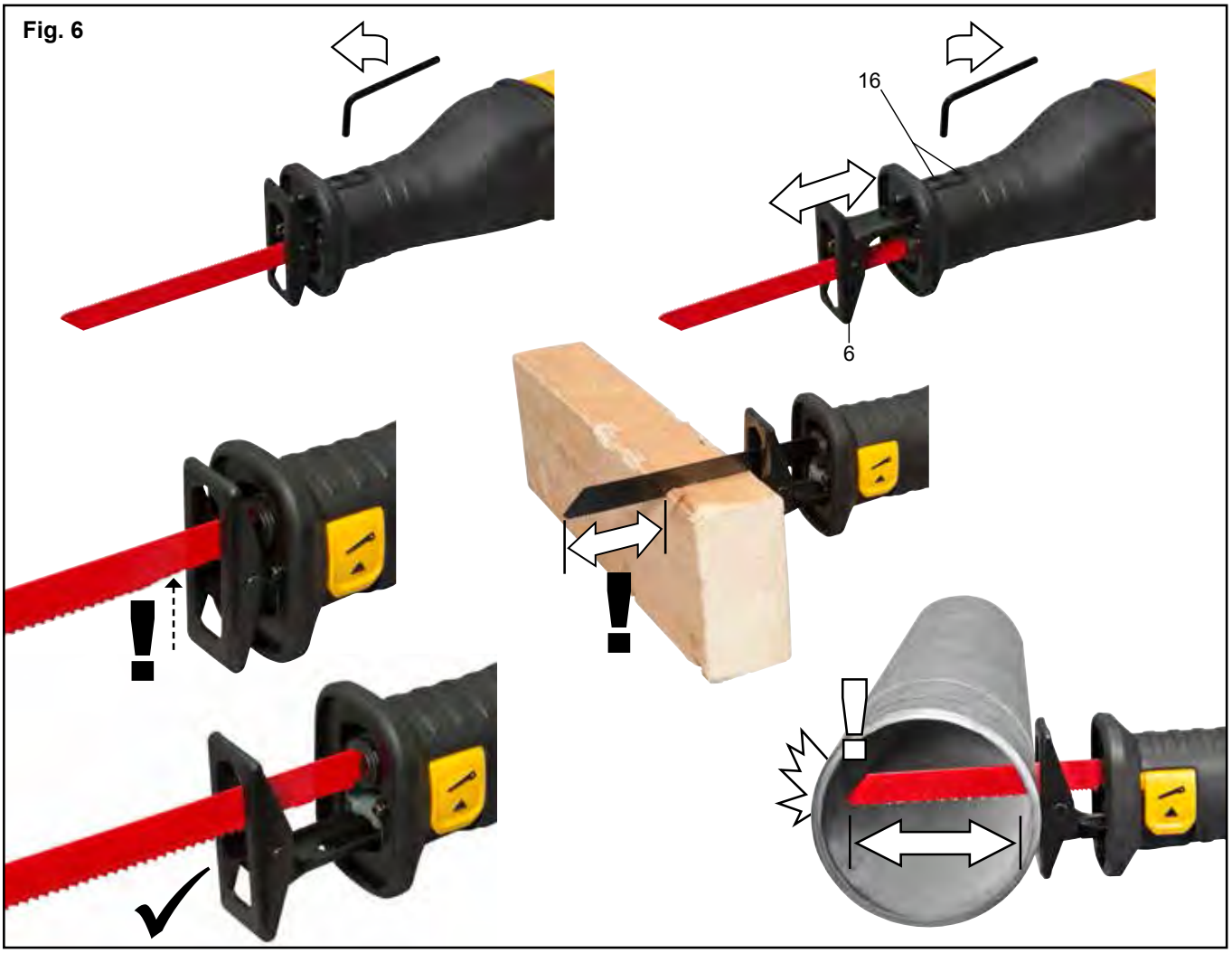


Fig. 7

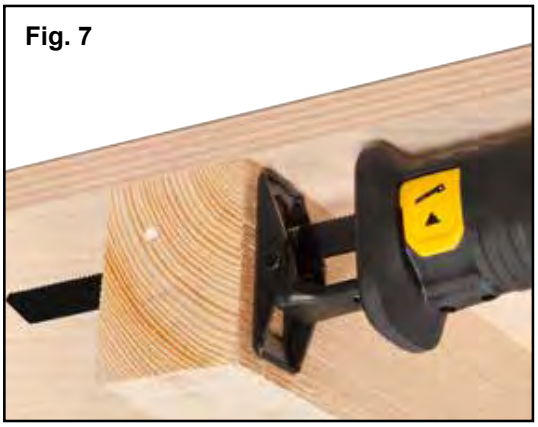


Fig. 8

	mm	X mm / Y mm			color		Art.-Nr.	
➔ REMS Tiger								
≤ 2"	140	2,5	HSS-Bi		yellow	5	561007	
≤ 2"	140	3,2	HSS-Bi		yellow	5	561001	
≤ 4"	200	3,2	HSS-Bi		yellow	5	561002	
≤ 6"	260	3,2	HSS-Bi		yellow	5	561008	
➔ REMS Tiger, REMS Cat								
	100	Combo 1,8/2,5	HSS-Bi flexibel		red	5	561006	
	150	Combo 1,8/2,5	HSS-Bi flexibel		red	5	561005	
	200	Combo 1,8/2,5	HSS-Bi flexibel		red	5	561003	
	300	Combo 1,8/2,5	HSS-Bi flexibel		red	5	561004	
➔ REMS Puma, REMS Cat, REMS Tiger								
≥ 1,2 mm	150	1	HSS-Bi flexibel		red	5	561105	
≥ 1,2 mm	200	1	HSS-Bi flexibel		red	5	561106	
≥ 1,5 mm	90	1,4	HSS-Bi		red	5	561107	
≥ 1,5 mm	150	1,4	HSS-Bi flexibel		red	5	561104	
≥ 1,5 mm	200	1,4	HSS-Bi flexibel		red	5	561108	
≥ 2 mm	100	1,8	HSS-Bi flexibel		red	5	561101	
≥ 2 mm	150	1,8	HSS-Bi flexibel		red	5	561103	
≥ 2 mm	200	1,8	HSS-Bi flexibel		red	5	561102	
≥ 3 mm	200	2,5	HSS-Bi flexibel		red	5	561109	
≥ 3 mm	280	2,5	HSS-Bi flexibel		red	5	561112	
≥ 2,5 mm	210	Combo 1,8/2,5	HSS-Bi flexibel		black	5	561113	
≥ 3 mm	150	2,5	HSS-Bi flexibel		black	5	561110	
≥ 3 mm	225	2,5	HSS-Bi		black	3	561114	
≥ 3 mm	300	2,5	HSS-Bi		black	3	561116	
	300	4,2	WS		black	5	561111	
	225	Combo 3,2/5,0	HSS-Bi flexibel		black	5	561117	
	290	Combo 5,0/6,35	WS		black	5	561118	
	150	6,35	WS		black	5	561119	
	150	4,2	WS		white	5	561115	
	225	8,5	HM		white	1	561120	
	300	8,5	HM		white	1	561121	
	400	8,5	HM		white	1	561122	
	235	12	HM		white	1	561123	
	300	12	HM		white	1	561124	
	300	12	HM		white	1	561125	
	200		HM-G		white	2	561126	

Translation of the Original Instruction Manual

Fig. 1 – 3

1	Clamping spindle with feed screw	10	Stepless safety switch (accelerator switch)
2	Guide holder	11	Lever with latch
3	Bearing pin	12	Thumbwheel
4	Saw blade pressure piece	13	Battery
5	Saw blade	14	Saw blade clamping lever (only REMS Puma VE)
6	Tiltable support shoe (REMS Puma VE continuously adjustable in length)	15	Holder for Allen key
7	Safety switch on/off	16	Clamping screws
8	Overload protection (only REMS Tiger ANC)	"A"	Insulated handles
9	Clamping screw		

General Safety Warnings

⚠ WARNING

Read all safety warnings and all instructions. *Failure to follow the warnings and instructions 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 mains-operated (corded) power tool or battery-operated (cordless) power tool.

1) Work area safety

a) Keep work area clean and well lit. *Cluttered or 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 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 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 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.*

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 the battery pack 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. 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.*

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.*

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.*

Safety instructions for REMS reciprocating saws

⚠ WARNING

Read all safety warnings and all instructions. *Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.*

Save all warnings and instructions for future reference.

- **Hold the power tool by the insulated handles ("A") when performing work where the tool can come into contact with concealed electric cables or its own power cable.** *Contact with a live cable can also put metal tools under voltage and lead to electric shock.*
- **Hold the power tool tightly with both hands when working and make sure you have a firm footing.** *The power tool can be controlled more safety with two hands.*
- **Use personal safety equipment, e.g. protective glasses.** *Hot chips fly off to all sides when sawing. Keep other persons away.*
- **Please note that health hazardous dusts could be produced when sawing.** *Use suitable dust extractors, a respirator and disposable overalls if necessary. Observe the national regulations.*
- **Use suitable finders to locate concealed supply lines or consult the local supply company.** *Contact with electric cables can cause fires and electric shock. Damage to a gas pipe can cause explosions. Penetration of a water pipe can cause property damage or electric shock.*
- **Make sure when sawing pipes carrying water that no leaking water can get into the motor.** *There is a danger of electric shock.*
- **Clamp the material tightly. Do not support the workpiece with your hand or foot.** *There is a danger of injury.*
- **Secure the workpiece.** *It is safer to hold the workpiece with a clamping device or vice than with your hand.*
- **Do not touch any objects or the ground with the running saw.** *There is a danger of recoil.*
- **Keep your hands away from the sawing area.** *Do not reach underneath the workpiece. Contact with the saw blade can cause injury*
- **Keep highly inflammable materials away from hot sawing chips during sawing.** *There is a danger of fire!*
- **Make sure that the tiltable support shoe (6) is always in contact with the workpiece when sawing.** *The saw blade can jam and lead to loss of control over the power tool.*
- **When you have finished the work, switch off the power tool and do not remove the saw blade from the cut until it has come to a standstill.** *This avoids recoil and allows you to put down the power tool safely.*
- **Only use undamaged, flawless saw blades.** *Bent or blunt saw blades can break or cause recoil.*
- **Do not slow down the saw blade after switching off by pressing against the side.** *The saw blade could be damaged, break or cause recoil.*
- **Wait until the power tool has come to a standstill before you put it down.** *The inserted tool can jam and lead to loss of control over the power tool.*
- **Pull out the mains plug or remove the battery before attaching/detaching the saw blade.** *There is a danger of injury.*
- **Pull out the mains plug or remove the battery before adjusting the support shoe.** *There is a danger of injury.*
- **Children and persons who, due to their physical, sensory or mental abilities or lack of experience and knowledge are unable to operate the power tool safely may not use this power tool without supervision or instruction by a responsible person.** *Otherwise there is a risk of operating errors and injuries.*
- **Only allow trained persons to use the power tool.** *Apprentices may only use the power tool when they are over 16, when this is necessary for their training and when they are supervised by a trained operative.*

- **Check the power cable of the electric al device and extension leads regularly for damage.** *Have these renewed by qualified experts or an authorised REMS customer service workshop in case of damage.*
- **Only use approved and appropriate marked extension leads with a sufficient cable cross-section at least with the protection class approved in 1.5. Electrical data.** *Use extension leads up to a length of 10 m with cable cross-section 1.5 mm², from 10–30 m with cable cross-section 2.5 mm².*

Explanation of symbols

⚠ WARNING	Danger with a medium degree of risk which could result in death or severe injury (irreversible) if not heeded.
⚠ CAUTION	Danger with a low degree of risk which could result in minor injury (reversible) if not heeded.
NOTICE	Material damage, no safety note! No danger of injury.


Read the operating manual before starting


Use eye protection


Use a respirator


Use ear protection


Electrical device complies with protection class II


Environmentally friendly disposal


CE conformity mark


Force-transmitting guide holder

90°


Steel pipes


Metal

Stainless steel


Pallets


Wood


Wood with nails


Green wood


Breeze blocks


Plaster boards


Pumice, brick


Cast iron

corrugated


straight-set

straight


pellets

1. Technical data

Use for the intended purpose

⚠ WARNING

REMS reciprocating saws are intended, using suitable saw blades, for sawing different materials, e.g. steel pipes, stainless steel pipes, cast iron pipes, other metal profiles, wood, wood with nails, pallets, building materials, plastics, also for plunge-cut sawing in material that is not too hard.
All other uses are not for the intended purpose and are prohibited.

1.1. Scope of Supply

REMS Tiger ANC/VE/SR/pneumatic: Drive machine, Allen key, guide holder up to 2", 2 REMS special saw blades up to 2"/140-3.2, sheet steel box, operating instructions

REMS Puma VE: Drive machine, Allen key, 1 REMS saw blade 210-1.8/2.5, sheet steel box, operating instructions

REMS Cat ANC VE: Drive machine, Allen key, 1 REMS universal saw blade 150-1.8/2.5, sheet steel box, operating instructions

REMS Akku-Cat ANC VE: Drive machine, battery, rapid charger, Allen key, 1 REMS universal saw blade 150-1.8/2.5, sheet steel box, operating instructions

1.2. Article numbers

REMS Tiger ANC drive unit	560000
REMS Tiger ANC VE drive unit	560008
REMS Tiger ANC SR drive unit	560001
REMS Tiger ANC pneumatic drive unit	560002
REMS Puma VE drive unit	560003
REMS Cat ANC VE drive unit	560004
REMS Akku-Cat ANC VE drive unit Li-Ion	560009
Battery Li-Ion 18 V, 2,6 Ah	565215
Battery Li-Ion 18 V, 3,5 Ah	565218
Rapid-charger Li-Ion/Ni-Cd 230 V, 50–60 Hz, 65 W	571560
Guide holder 1/16"– 2"	563000
Guide holder 2½"– 4"	563100
Guide holder 5"– 6"	563200
Double holder	543100
Protective cap for guide holder, for clamping thin-walled material	563008
Steel case	566051
REMS CleanM	140119

1.3. Applications

Right-angled sawing with REMS Tiger ANC/VE/SR/pneumatic:

With guide holder 563000 and REMS special saw blade 561001, 561007	
Pipes (also plastic jacketed)	1/16"– 2"
With guide holder 563100 and REMS special saw blade 561002	
Pipes (also plastic jacketed)	2½"– 4"
With guide holder 563200 and REMS special saw blade 561008	
Pipes (also plastic jacketed)	5"– 6"
REMS Tiger ANC SR with guide holder and REMS universal saw blade 561005, 561003	
Stainless steel pipes	1/16"– 2" or 2½"– 4"

Hand-guided sawing with all REMS reciprocating saws

REMS universal saw blades and REMS saw blades	
Steel pipes and other metal profiles,	Ø ≤ 6", ≤ 250 mm
Wood, wood with nails, pallets, building materials, plastics	≤ 250 mm

1.4. Number of strokes (idling speed)

REMS Tiger ANC	2400 min⁻¹
REMS Tiger ANC VE (infinitely variable)	0 … 2400 min⁻¹
REMS Tiger ANC SR (infinitely variable)	700 … 2200 min⁻¹
REMS Tiger ANC 48 V	1300 min⁻¹
REMS Tiger ANC pneumatic (infinitely variable)	0 … 1700 min⁻¹
REMS Puma VE (infinitely variable)	0 … 2800 min⁻¹
REMS Cat ANC VE (infinitely variable)	0 … 2400 min⁻¹
REMS Akku-Cat ANC VE (infinitely variable)	0 … 1800 min⁻¹

1.5. Electric data

REMS Tiger ANC/VE, REMS Cat ANC VE	230 V; 50–60 Hz; 1050 W; 5 A or 110 V; 50–60 Hz; 1050 W; 10 A or 48 V; 750 W; 16.5 A radio interference suppression	
Protection class	II, protective insulation	
REMS Tiger ANC SR	230 V; 50–60 Hz; 1400 W; 6.4 A or 110 V; 50–60 Hz; 1400 W; 12.8 A radio interference suppression	
Protection class	II, protective insulation	
REMS Puma VE	230 V; 50–60 Hz; 1300 W; 6 A radio interference suppression	
Protection class	II, protective insulation	
REMS Akku-Cat ANC VE	18 V=; 30 A	
Rapid-charger Li-Ion/Ni-Cd	Input	230 V~; 50–60 Hz; 65 W
	Output	10.8–18 V=

1.6. Compressed-air supply REMS Tiger ANC pneumatic

Required working pressure	0.6 MPa, 6 bar (85 psi)
Air consumption at idling speed	1.6 m³/min (56 cf/min)
Air consumption at full speed	1.3 m³/min (46 cf/min)
Tube width	12–13 mm (½")
Oiler adjustment	6–7 drops/min

1.7. Dimensions

REMS Tiger ANC	455×80× 90 mm	(17.9"×3.2"×3.5")
REMS Tiger ANC VE	435×80×135 mm	(17.1"×3.2"×5.3")
REMS Tiger ANC SR	490×80× 90 mm	(19.3"×3.2"×3.5")
REMS Tiger ANC pneumatic	445×80× 90 mm	(17.5"×3.2"×3.5")
REMS Puma VE	475×90×152 mm	(18.7"×3.5"×6.0")
REMS Cat ANC VE	435×80×135 mm	(17.1"×3.2"×5.3")
REMS Akku-Cat ANC VE	435×90×190 mm	(17.1"×3.5"×7.5")

1.8. Weights

REMS Tiger ANC	3.0 kg (6.6 lb)
REMS Tiger ANC VE	3.0 kg (6.6 lb)
REMS Tiger ANC SR	3.1 kg (6.8 lb)
REMS Tiger ANC pneumatic	3.8 kg (8.4 lb)
REMS Puma VE	3.8 kg (8.4 lb)
REMS Cat ANC VE	3.0 kg (6.6 lb)
REMS Akku-Cat ANC VE (with battery)	3.5 kg (7.7 lb)
REMS Battery Li-Ion 18 V, 2,6 Ah	0.6 kg (2.2 lb)
REMS Battery Li-Ion 18 V, 3,5 Ah	0.6 kg (2.2 lb)
Guide support 1/16"– 2"	1,0 kg (2,2 lb)

Guide support 2½" – 4"	1,7 kg (3,7 lb)
Guide support 5" – 6"	2,7 kg (6,0 lb)

1.9. Noise information

Sound pressure level

REMS Tiger/Cat	96 dB(A)
REMS Puma	87 dB(A)

Sound capacity level

REMS Tiger/Cat	107 dB(A)
REMS Puma	98 dB(A)

Uncertainty K = 3 dB

1.10. Vibrations

Weighted effective value of acceleration:

all REMS reciprocating saws

Sawing chipboard	18.3 m/s²	K = 3.3 m/s²
Sawing wooden beam	28.3 m/s²	K = 2.4 m/s²

The indicated weighted effective value of acceleration has been measured against standard test procedures and can be used by way of comparison with another device. The indicated weighted effective value of acceleration can also be used as a preliminary evaluation of the exposure.

⚠CAUTION

The indicated weighted effective value of acceleration can differ during operation from the indicated value, dependent on the manner in which the device is used. Dependent upon the actual conditions of use (periodic duty) it may be necessary to establish safety precautions for the protection of the operator.

2. Preparations for Use

2.1. Electrical connection

Note the mains voltage! Before connecting the REMS reciprocating saw or the rapid charger, check whether the voltage given on the rating plate corresponds to the mains voltage. On building sites, in a wet environment, indoors and outdoors or under similar installation conditions, only operate the power tool on the mains with a fault current protection switch (FI switch) which interrupts the power supply as soon as the leakage current to earth exceeds 30 mA for 200 ms. When using an extension lead, a cable cross section suitable for the power tool must be chosen. The extension lead must be approved for the protection class specified in 1.5 Electrical data.

Rechargeable batteries

NOTICE

Charge the battery before inserting it into the REMS Akku-Cat ANC VE! Always insert the battery (13) vertically into the REMS Akku-Cat ANC VE or rapid charger until it snaps in audibly. If inserted at an angle it can cause damage to the contacts and result in a short circuit which damages the battery.

Total discharging by undervoltage

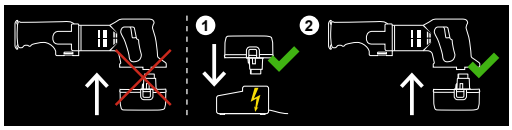
The Li-Ion batteries may not drop below a minimum voltage because otherwise the battery could be damaged by "total discharge". The cells of the REMS Li-Ion battery are delivered pre-charged to approx. 40 %. Therefore the Li-Ion batteries must be charged before use and recharged regularly. Failure to observe this regulation of the cell manufacturer can lead to damage to the Li-Ion battery by total discharging.

Total discharging due to storage

If a relatively low charged Li-Ion battery is stored, self discharging can lead to total discharge damage of the battery after longer storage. Li-Ion batteries must therefore be charged before storing and recharged every six months at the latest and charged again before use.

NOTICE

Charge the battery before use. Recharge Li-Ion batteries regularly to avoid their total discharge. The rechargeable battery will be damaged by total discharge.



Only use a REMS rapid charger for charging. New Li-Ion batteries and Li-Ion batteries which have not been used for a long time only reach full capacity after several charges.

Rapid charger Li-ion/NiCd (Art. No. 571560)

The left control lamp lights up and remains green when the mains plug is plugged in. If a battery is inserted in the REMS rapid charger, the green control lamp flashes to indicate that the battery is charging. The green light stops flashing and remains on to signal that the battery is fully charged. If the red control lamp flashes, the battery is defective. If the red control lamp comes on and remains on, this indicates that the temperature of the rapid charger and / or the battery is outside the permissible range of 0°C to +45°C (32°F – +113°F).

NOTICE

The REMS rapid chargers are not suitable for outdoor use.

2.2. Sawing with guide holder (2) (right-angled sawing)

⚠WARNING

Pull out the mains plug or remove the battery before fitting/removing the guide holder!

Push the bearing pin (3) of the guide holder (2) into the REMS reciprocating saw from the side so that the limit pin of the guide holder runs in the longitudinal slit in the REMS reciprocating saw.

NOTICE

The guide holder must be used to achieve **right-angled** saw cuts because exact right-angled positioning and guiding of the REMS reciprocating saw is not possible by hand.

2.3. Hand-guided sawing

The REMS reciprocating saw is used without a guide holder (2). It must be pressed forcefully against the material when sawing so that the support shoe (6) is constantly in contact with the material being sawn. The material to be sawn must be secured against being flung away.

2.4. Selecting the suitable saw blade

In your own interest, use only REMS quality saw blades for all REMS reciprocating saws otherwise your warranty rights will be voided!

REMS special saw blades 2"/140-2.5 or 2"/140-3.2, 4"/200-3.2 and 6"/260-3.2 (Fig. 8) for all REMS Tiger models

Developed especially for REMS Tiger. Absolutely essential for right-angled sawing and fast disassembly of steel pipes with force-transmitting guide holder. This produces multiple thrust pressure by a five-fold force-transmitting leverage. REMS special saw-blades with double-sided hinge with extra wide clamping surface for exact seat, extra thick, rigid and unbendable for high stability. Coarse, corrugated teeth for fast cutting. Much longer service life. Normal saw blades with one-sided hinge are useless for right-angled sawing with a guide holder because they break at the clamping point due to high thrust pressure.

REMS universal saw blade 100/150/200/300 (Fig. 8) for all REMS Tiger, REMS Cat models

For free-hand sawing and sawing with force-transmitting guide holder. Only 1 REMS universal saw blade for all sawing work instead of many different saw blades. Tenacious material, highly flexible, also for wall-flush sawing. Double-sided hinge with extra wide clamping surface for exact seat and high stability. Alternating tooth pitch (combi-teeth), very highly hardened in the teeth area. Excellent sawing performance and very long service life as a result. Also for materials that are difficult to cut, e.g. stainless steel pipes, hard cast iron pipes etc. and for sawing wood with nails, pallets. Normal saw blades with one-sided hinge are useless for the high thrust pressure when sawing with a guide holder; they break at the clamping point.

REMS saw blades for all REMS reciprocating saws

For special sawing work with metals, wood, building materials and plastics numerous REMS saw blades or different shape, length and tooth pitch with conventional (one-sided) hinge are available: See saw blade table Fig. 8.

2.5. Fitting the saw blade

⚠WARNING

Pull out the mains plug or remove the battery before fitting/removing the saw blade!

All REMS Tiger, REMS Cat models (Fig. 2 and Fig. 3)

Do not place the REMS reciprocating saw on **the anti-kink sleeve** of the connecting lead to fit the REMS saw blade, otherwise it will be damaged! Loosen the clamping screw (9) of the saw blade pressure piece (4) until the saw blade can be inserted over the centring pin. The REMS special saw blade and the REMS universal saw blade are between the two arms of the U-shaped saw blade pressure piece (Fig. 2). REMS saw blades with conventional (single) tang must lie within the recess in the base of the saw blade pressure piece (Fig. 3). Screw the saw blade pressure piece **tight** with the clamping screw (9) otherwise the centring pin will be damaged or sheared off. The centring pin does not have the task of holding the saw blade. This is done exclusively by clamping with the clamping screw (9). If the clamping screw (9) can no longer be tightened because its socket head or the Allen key is worn, the centring pin shears off. Therefore renew a worn clamping screw (9) and Allen key in good time.

REMS Puma VE (Fig. 5.)

Do not place the REMS reciprocating saw on **the anti-kink sleeve** of the connecting lead to fit the REMS saw blade, otherwise it will be damaged! Swing up the saw blade clamping lever (14) by hand and hold it. Insert the saw blade (5) either with the teeth facing down or turned 180° facing up. Release the saw blade clamping lever (14), this is spring-loaded and clamps the saw blade automatically. Check the saw blade (5) for tight fit. The saw blade turned upwards allows sawing cuts near to a surface (Fig. 7.)

2.6. Setting the length-adjustable support shoe, only REMS Puma VE (Fig. 6.)

⚠WARNING

Pull out the mains plug or remove the battery before adjusting the length-adjustable, tiltable support shoe (6)!

Take the Allen key out of the holder (15) and undo the two clamping screws (16). The tiltable support shoe (6) can be adjusted steplessly by 40 mm in longitudinal direction. Set the desired position, tighten the clamping screws

(16), insert the Allen key in the holder (15). This adjustment possibility allows better utilisation of partially blunt saw blades and prevents the tip of the saw blade from hitting a wall/inside of a pipe (take saw blade stroke into consideration).

3. Operation

 Use eye protection

 Use a respirator

 Use ear protection

⚠ WARNING

Suitable dust extractors, a respirator and disposable overalls must be used for work which could produce health hazardous dusts. Observe the national regulations.

REMS Tiger ANC: Switch on/off with on/off safety switch (7).
REMS "VE" reciprocating saws: Stepless electronic stroke speed control by variable pressure on the stepless safety switch (accelerator switch) (10).
REMS Tiger ANC SR: Stepless electronic stroke speed control. Preselection of the desired number of strokes at the thumbwheel (12). Switch on/off with on/off safety switch (7).
REMS Tiger ANC pneumatic: To overcome the on lock, first press down the latch of the lever (11) and then the lever. The number of strokes is controlled by pressing the lever with latch (11) appropriately.

3.1. Work procedure for sawing with a guide holder

⚠ WARNING

Only hold the REMS reciprocating saw by the insulated handles ("A") (Fig. 1), not on the guide holder (2), when performing work where the tool can come into contact with concealed electric cables or its own power cable. Contact with a live cable can also put metal tools or the guide holder under voltage and lead to electric shock.

NOTICE

Only use REMS special saw blades or REMS universal saw blades (see 2.4.). Normal saw blades with one-sided hinge are useless for right-angled sawing with a guide holder because they break at the clamping point due to high thrust pressure.

Fit the guide holder as described in 2.2. Place the REMS reciprocating saw with guide holder on the pipe so that the clamping spindle with toggle (1) is vertical. Tighten the clamping spindle. Press the switch (7 or 10) at the same time as grasping the motor handle or actuate the lever with latch (11) and pull up the REMS reciprocating saw until the pipe or profile is sawn through. The start of sawing can be improved especially with large diameters (e.g. 4") by not switching on the REMS reciprocating saw until the saw blade is already in contact with the pipe. Make sure that the prism of the guide holder is always kept free from chips, otherwise the right-angled cut will be impaired. To achieve optimum sawing speed and to preserve the saw blade, only select **medium** thrust pressure. Heavy thrust pressure does not increase the sawing speed! REMS Tiger ANC is equipped with an overload protection (8). This is triggered when the thrust pressure is too great; the button jumps out slightly and the REMS reciprocating saw stops. After a few seconds the overload protection can be pushed back in and the REMS reciprocating saw can be switched back on.

3.2. Work procedure for hand-guided sawing

⚠ WARNING

Only hold the REMS reciprocating saw by the insulated handles ("A") (Fig. 1) when performing work where the tool can come into contact with concealed electric cables or its own power cable. Contact with a live cable can also put metal tools under voltage and lead to electric shock.

For straight or curved cuts press the tiltable support shoe (6) forcefully against the material so that the tiltable support shoe (6) is constantly in contact with the material to be sawn. Switch on the REMS reciprocating saw. Only use sharp and flawless saw blades. Even thrust pressure reduces the risk of accident and is kind on the REMS reciprocating saw and the saw blade. Always feed the connecting lead back away from the REMS reciprocating saw. Keep the REMS reciprocating saw pressed forcefully against the material to be sawn during sawing. If the saw blade jams whilst sawing, switch off the REMS reciprocating saw, widen the sawn cleft with a suitable tool and pull out the saw blade.

For plunge-cut sawing in material that is not too hard, e.g. wood, plastic, plastic pipes or alloy pipes, the saw blade can be plunged carefully into a surface whilst sawing (Fig. 4). Use a short saw blade. Place the switched off REMS reciprocating saw with the bottom edge of the tiltable support shoe (6) and the tip of the saw blade at the cutting point, switch on the REMS reciprocating saw and plunge the saw slowly sawing into the material. Preferably use REMS reciprocating saws with stepless electronic stroke speed control. In harder material, e.g. metal, an appropriately large hole for the saw blade should be drilled for the sawing start.

3.3. Lubricants

Do not use lubricants for normal sawing work. These hinder the ejection of chips from the sawing chase and therefore reduce the useful life of the saw blade.

REMS Spezial or REMS Sanitol for cooling and lubrication should be used exclusively for sawing stainless steel and hard cast iron pipes. It is recommended to use REMS Tiger ANC SR and one of the REMS universal saw blades 561003 ... 561006. The guide holder is absolutely essential for right-angled sawing (see 2.2.).

3.4. Low discharge protection

REMS Akku-Cat ANC VE is equipped with low discharge protection for the rechargeable battery. This switches off the drive machine as soon as the battery needs to be recharged. In this case remove the battery and charge with the REMS rapid charger.

4. Maintenance

⚠ WARNING

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

4.1. Maintenance

The REMS reciprocating saws are maintenance-free. The gear runs in a life-long grease filling and therefore needs no lubrication. Keep the saw blade holder clean. Remove chips from the housing of the saw blade holder. Remove water/moisture from the housing of the saw blade holder after every use. Lightly lubricate the saw blade holder and saw blade clamping lever (14) with machine oil (only REMS Puma VE). Change a defective locking screw (9) (except REMS Puma VE). Clean plastic parts (e.g. housing, batteries) only with the REMS CleanM (Art. No. 140119) or a mild soap and a damp cloth. Do not use household cleaners. These often contain chemicals which can damage the plastic parts. Never use petrol, turpentine, thinner or similar products for cleaning.

Make sure that liquids never get inside the REMS reciprocating saw. Never immerse the REMS reciprocating saw in liquid.

4.2. Inspection/Servicing

⚠ WARNING

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

The REMS reciprocating saws with universal motor have carbon brushes. These are subject to wear and must therefore by checked and changed by qualified specialists or an authorised REMS customer service workshop from time to time.

5. Faults

5.1. Fault: REMS reciprocating saw stops during sawing.

Cause:	Remedy:
● Feeding pressure too high.	● Reduce feeding pressure.
● Blunt saw blade (5).	● Change the saw blade.
● Unsuitable saw blade (5).	● Choose a suitable saw blade (see 2.4. and Fig. 8).
● Overload protection (8) has activated (REMS Tiger ANC).	● Wait a few seconds then press the button of the overload protection.
● Worn carbon brushes.	● Have the carbon brushes changed by qualified personnel or an authorised REMS customer service workshop.
● Too low operating pressure (REMS Tiger ANC pneumatic).	● Increase operating pressure. Select the compressor according to the technical data 1.6.
● Too little air supplied by the compressor (REMS Tiger ANC pneumatic).	● Select the compressor according to the technical data 1.6.
● Battery (13) depleted (REMS Akku-Cat ANC VE).	● Charge the battery with the Li-Ion/Ni-Cd rapid charger or change the battery.

5.2. Fault: No right-angled cut when sawing pipes with guide holder (2).

Cause:	Remedy:
● Feeding pressure too high.	● Reduce feeding pressure.
● Unsuitable saw blade (5).	● Choose a suitable saw blade (see 2.4. and Fig. 8).
● Blunt saw blade (5).	● Change the saw blade.
● Prism of the guide holder (2) soiled (chips!).	● Clean the prism.

5.3. Fault: REMS reciprocating saw does not start.

Cause:	Remedy:
● Overload protection has activated (REMS Tiger ANC).	● Wait a few seconds then press the button of the overload protection.
● Mains lead defective.	● Have the mains lead replaced by qualified personnel or an authorised REMS customer service workshop.
● Battery (13) depleted (REMS Akku-Cat ANC VE).	● Charge the battery with the Li-Ion/Ni-Cd rapid charger or change the battery.
● REMS reciprocating saw defective.	● Have the REMS reciprocating saw inspected/repaired by an authorised REMS customer service workshop.

5.4. Fault: Centring pin shears off, saw blade (5) cannot be clamped securely enough (REMS Tiger and REMS Cat all models).

Cause:	Remedy:
● Clamping screw (9) worn.	● Change the clamping screw and/or centring pin.
● Allen key worn (see 2.5.).	● Change the Allen key.

6. Disposal

REMS reciprocating saws may not be thrown into the domestic waste at the end of use. They must be disposed of properly by law.

7. Manufacturer's Warranty

The warranty period shall be 12 months from delivery of the new product to the first user. 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 are 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 warranty 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 REMS 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 REMS. Complaints will only be accepted if the product is returned to a customer service station authorized by REMS without prior interference in an unassembled condition. Replaced products and parts shall become the property of REMS.

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

The legal rights of the user, in particular the right to make claims against the seller under the warranty terms, shall not be affected. This manufacturer's warranty only applies for new products which are purchased in the European Union, in Norway or in Switzerland.

This warranty is subject to German law with the exclusion of the United Nations Convention on Contracts for the International Sales of Goods (CISG).