TE 1000-AVR (01)

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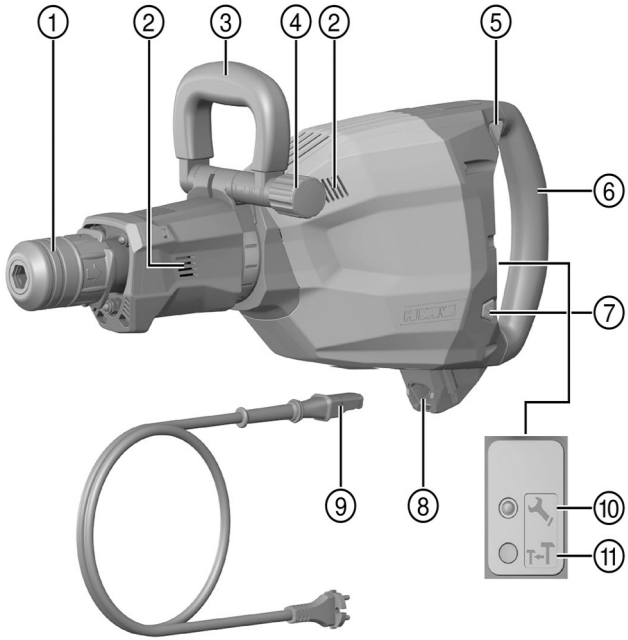

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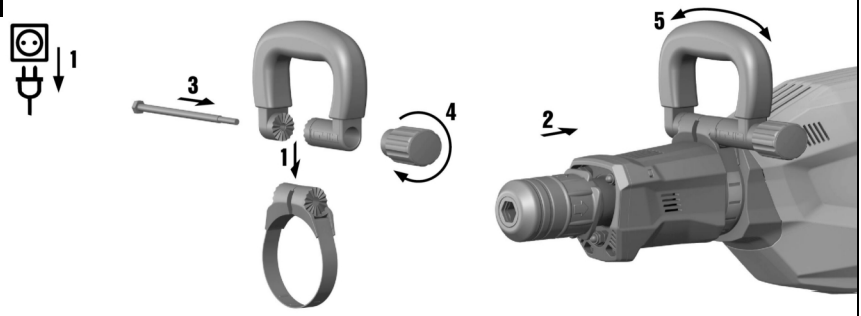

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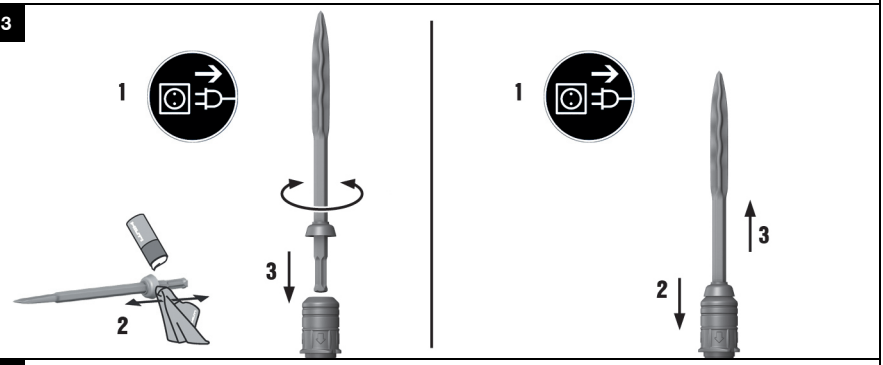

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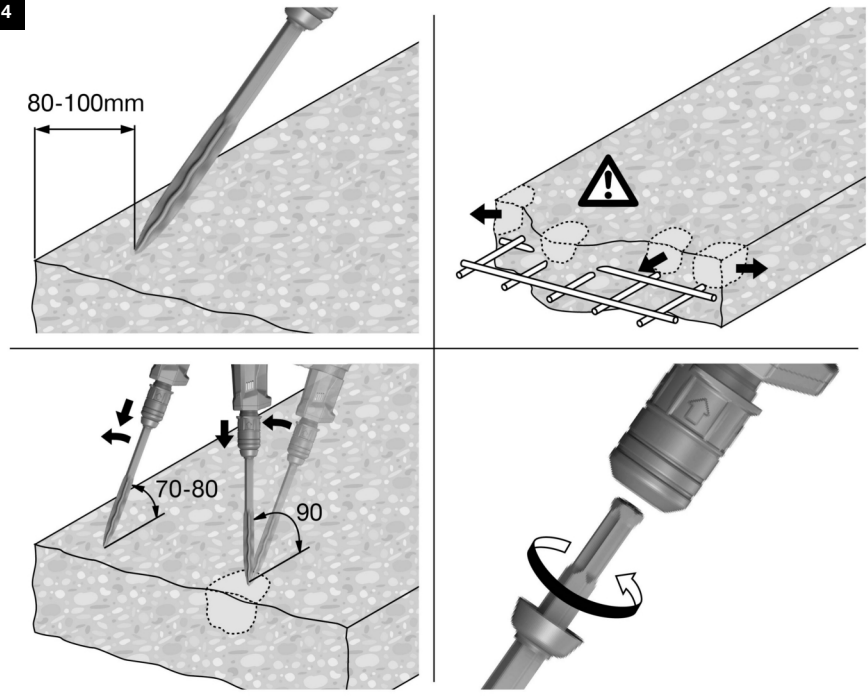


TE 1000-AVR

Original operating instructions

1 Information about the operating instructions

1.1 About these operating instructions

- **Warning!** Read and understand all accompanying documentation, including but not limited to instructions, safety warnings, illustrations, and specifications provided with this product. Familiarize yourself with all the instructions, safety warnings, illustrations, specifications, components, and functions of the product before use. Failure to do so may result in electric shock, fire, and/or serious injury. Save all warnings and instructions for future reference.
- HILTI products are designed for professional users and only trained, authorized personnel are permitted to operate, service and maintain the products. This personnel must be specifically informed about the possible hazards. The product and its ancillary equipment can present hazards if used incorrectly by untrained personnel or if used not in accordance with the intended use.
- The accompanying documentation corresponds to the current state of the art at the time of printing. Please always check for the latest version on the product's page on Hilti's website. To do this, follow the link or scan the QR code in this documentation, marked with the symbol .
- Ensure that these operating instructions are with the product when it is given to other persons.

1.2 Explanation of symbols

1.2.1 Warnings

Warnings alert persons to hazards that occur when handling or using the product. The following signal words are used:

⚠ DANGER

DANGER !

- Draws attention to imminent danger that will lead to serious personal injury or fatality.

⚠ WARNING

WARNING !

- Draws attention to a potential threat of danger that can lead to serious injury or fatality.

⚠ CAUTION

CAUTION !

- Draws attention to a potentially dangerous situation that could lead to personal injury or damage to the equipment or other property.

1.2.2 Symbols in the operating instructions

The following symbols are used in these operating instructions:

	Comply with the operating instructions
	Instructions for use and other useful information
	Dealing with recyclable materials
	Do not dispose of electric equipment and batteries as household waste

1.2.3 Symbols in illustrations

The following symbols are used in illustrations:

2	These numbers refer to the illustrations at the beginning of these operating instructions.
3	The numbers in illustrations refer to important work steps or to components important for the work steps. In the text, the corresponding numbers draw attention to these work steps or components, e.g. **(3)**.

(11)	Item reference numbers are used in the **overview illustration** and refer to the numbers used in the key in the **product overview** section.
	This symbol is intended to draw your special attention to certain points for handling the product.

1.3 Symbols on the product

1.3.1 Symbols on the product

The following symbols are used on the product:

	Protection class II (double-insulated)

2 Safety

2.1 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 mains-operated (corded) power tool or battery-operated (cordless) power tool.

Work area safety

- **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- **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.
- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

Electrical safety

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

Personal safety

- **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.
- **Use personal protective equipment. Always wear eye protection.** Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- **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.
- **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.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.

- **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.
- **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.

Power tool use and care

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

Service

- **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.

2.2 Hammer safety warnings

Safety instructions for all operations

- **Wear ear protectors.** Exposure to noise can cause hearing loss.
- **Use auxiliary handle(s), if supplied with the tool.** Loss of control can cause personal injury.
- **Hold the power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord.** Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

2.3 Additional safety instructions

Personal safety

- Use the product only when it is in technically faultless condition.
- Never tamper with or modify the power tool in any way.
- The user and persons in the vicinity must wear suitable protective goggles, a hard hat, protective gloves and protective footwear while the device is in use.
- Wear protective gloves when changing accessory tools as they get hot during use.
- Apply appropriate safety measures at the opposite side of the workpiece in work that involves breaking through. Parts breaking away could fall out and / or fall down causing injury to other persons.
- Check that the side handle is fitted correctly and tightened securely. Always hold the tool securely with both hands on the grips provided. Keep the grips dry, clean and free from oil and grease.
- Take breaks between working and do physical exercises to improve the blood circulation in your fingers. Exposure to vibration during long periods of work can lead to disorders of the blood vessels and nervous system in the fingers, hands and wrists.
- The tool is not intended for use by debilitated persons who have received no special training.
- Keep the power tool out of reach of children.
- Before starting work, check the hazard class of the dust that will be produced when working. Use an industrial vacuum cleaner with an officially approved protection classification in compliance with locally applicable dust protection regulations.

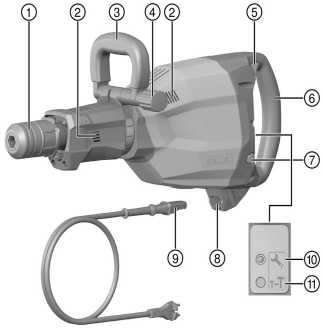
- Use a dust removal system and suitable mobile dust extractor whenever possible. Dust from materials such as lead-based paint, certain types of wood and concrete/masonry/stone containing quartz, minerals or metal can be harmful to health.
- Make sure that the workplace is well ventilated and, where necessary, wear a dust mask appropriate for the type of dust generated. Contact with or inhalation of the dust may cause allergic reactions and/or respiratory or other diseases to the operator or bystanders. Certain kinds of dust, such as oak and beech dust, are classified as carcinogenic, especially in conjunction with additives for treating wood (chromate, wood preservative). Only specialists are permitted to handle material containing asbestos.
- Approval must be obtained from the site engineer or architect prior to beginning the work. Work on buildings and other structures may influence the statics of the structure, especially when steel reinforcing bars or load-bearing components are cut through.

Electrical safety

- Before beginning work, check the working area for concealed electric cables or gas and water pipes. External metal parts of the power tool may give you an electric shock if you damage an electric cable accidentally.
- Check the power tool's supply cord at regular intervals and have it replaced by a qualified specialist if found to be damaged. If the power tool's supply cord is damaged it must be replaced with a specially-prepared and approved supply cord available from Hilti Customer Service. Check extension cords at regular intervals and replace them if found to be damaged. Do not touch the supply cord or extension cord if it is damaged while working. Disconnect the supply cord plug from the power outlet. Damaged supply cords or extension cords present a risk of electric shock.
- Dirty or dusty power tools that have been used frequently for work on conductive materials should be checked at regular intervals at a **Hilti** Service Center. Dust (especially dust from conductive materials) or dampness adhering to the surface of the power tool may, under unfavorable conditions, lead to electric shock.
- Switch the power tool off and unplug the supply cord in the event of a power failure or interruption in the electric supply. This will prevent accidental restarting when the electric power returns.

3 Description

3.1 Product overview 1



① Chuck
② Air vents
③ Side handle
④ Knob
⑤ On/off switch
⑥ Grip
⑦ Power level selector switch
⑧ Connector on electric tool
⑨ Supply cord with keyed, releasable plug connector
⑩ Service indicator
⑪ Power level indicator

3.2 Intended use

The product described is an electrically powered breaker for heavy chiseling work.
It is designed for breaking or demolishing concrete, masonry, stone and asphalt.

- Operation is permissible only when connected to a power source providing a voltage and frequency in compliance with the information given on the type identification plate.

3.3 Possible misuse

This product is not suitable for working on hazardous materials.
This product is not suitable for working in a damp environment.

3.4 Active Vibration Reduction (AVR)

The breaker is equipped with an Active Vibration Reduction (AVR) system, which reduces vibration significantly.

3.5 Power level indicator

The breaker is equipped with a power level indicator LED.
Chiseling power can be reduced to approx. 70% by pressing the power level selector switch. The power level LED then lights up, indicating reduced power.

3.6 Service indicator information

The breaker is equipped with a service indicator LED.

Status	Meaning
The service indicator lights red.	End of service interval – servicing is due. A fault has occurred in the tool.
The service indicator blinks red.	The overheating prevention cut-out has been activated. The voltage provided by the electric supply is too high.

Bring the product to **Hilti** Service in good time. This will help to ensure that it's always ready for use.

3.7 Items supplied

Breaker, side handle, operating instructions.
Other system products approved for use with this product can be found at your local **Hilti Store** or at: **www.hilti.group**

4 Technical data

4.1 Technical data

For details of the rated voltage, current, frequency and/or input power, please refer to the power tool's country-specific type identification plate.

When powered by a generator or transformer, the generator or transformer's power output must be at least twice the rated input power shown on the rating plate of the power tool. The operating voltage of the transformer or generator must always be within +5% and -15% of the rated voltage of the power tool.

	TE 1000-AVR
Product generation	02
Weight	27.6 lb (12.5 kg)
Single impact energy	26 J

4.1.1 Using extension cords

⚠ WARNING

A damaged supply cord presents a hazard! Do not touch the supply cord or extension cord if damaged while working. Disconnect the supply cord plug from the power outlet.

- ▸ Check the appliance's supply cord at regular intervals and have it replaced by a qualified specialist if found to be damaged.

- Use only extension cords of a type approved for the application and with conductors of adequate gauge (cross section). The power tool may otherwise suffer a drop in performance and the extension cord may overheat.
- Check the extension cord for damage at regular intervals.
- Replace damaged extension cords.
- When working outdoors, use only extension cords that are approved and correspondingly marked for this application.

Recommended minimum conductor cross-section and maximum power-cord length for 120V supply voltage

Cord	AWG 16	AWG 14	AWG 12	AWG 10
Conductor cross-section	1,31 mm²	2,08 mm²	3,31 mm²	5,26 mm²
Conductor cross-section	2,58 kcmil	4,11 kcmil	6,53 kcmil	10,4 kcmil
Cord length	25 m	30 m	50 m	100 m
Cord length	75 ft	100 ft	150 ft	250 ft

5 Operation

5.1 Preparations at the workplace

⚠ CAUTION

Risk of injury! Inadvertent starting of the product.

- ▸ Unplug the supply cord before making adjustments to the power tool or before changing accessories.

Observe the safety instructions and warnings in this documentation and on the product.

5.1.1 Fitting and adjusting the side handle 2

⚠ CAUTION

Risk of injury! Loss of control over the breaker.

- ▸ Check that the side handle is fitted correctly and tightened securely.

- ▸ Fit or adjust the side handle.

The instructions provided with the side handle must also be observed.

5.1.2 Detachable supply cord

⚠ CAUTION

Risk of injury! Due to leakage current as a result of dirty contacts.

- ▸ Connect the detachable electric connector to the electric tool only when it is clean and dry and when the supply cord is unplugged from the power outlet.

- ▸ Connect / disconnect the detachable supply cord.

5.1.2.1 Connecting the detachable supply cord

⚠ CAUTION

Risk of injury! Due to leakage current as a result of dirty contacts.

- ▸ Connect the detachable electric connector to the electric tool only when it is clean and dry and when the supply cord is unplugged from the power outlet.

1. Push the keyed, detachable electric plug connector into the socket as far as it will go, until it is heard to engage.

   We recommend always leaving the cord connected to the power tool to protect the tool/cord interface against dust and moisture. The cord should be disconnected only in the event of a break or damage.

2. Plug the supply cord into the power outlet.

5.1.2.2 Disconnecting the detachable supply cord

1. Unplug the supply cord from the power outlet.
2. Press the release button and pull the keyed, detachable electric plug connector out of the socket.
3. Pull the supply cord connector out of the power tool.

5.1.3 Fitting the accessory tool 3

1. Apply a little grease to the connection end of the accessory tool.
2. Push the accessory tool into the chuck as far as it will go, turning it and applying light pressure until it engages with an audible click.
   - ▸ The product is ready for use.

   Use only the recommended grease supplied by **Hilti**. Use of unsuitable grease may cause damage to the product.

5.1.4 Removing the accessory tool 3

WARNING

Risk of injury! The accessory tool gets hot during use and may also have sharp edges.

- ▸ Wear protective gloves when changing the tool.

DANGER

Risk of fire! Risk of contact between the hot accessory tool and highly inflammable materials.

- ▸ Do not lay the hot accessory tool down on highly inflammable materials.

1. Pull the chuck back.
2. Remove the accessory tool.

5.2 Types of work

CAUTION

Risk of damage by incorrect handling!

- ▸ Do not operate the switches for direction of rotation and/or function selection during operation.

Observe the safety instructions and warnings in this documentation and on the product.

5.2.1 Chiseling 4

The chisel can be adjusted to 6 different positions (in 60° increments). This ensures that flat chisels and shaped chisels can always be set to the optimum working position.

If inadequate pressure is applied, the chisel will jump around uncontrollably. Application of excessive pressure will result in a loss of chiseling performance.

1. Plug the supply cord into the power outlet.
2. Bring the chisel into contact with the workpiece about 80 -100 mm (3⅛" - 4") from its edge.
3. Begin with the chisel positioned at an angle of 70° to 80° to the concrete surface, with the tip of the chisel pointing toward the edge of the workpiece. Break material away by subsequently increasing the angle to approx. 90° as the chisel penetrates.
   - ▸ When working close to reinforcing bars, always guide the tip of the chisel toward the edge of the workpiece, not toward a reinforcing bar.
4. Rotate the chisel regularly to help ensure even wear and to promote the self-sharpening process.

5.2.2 Setting the chiseling power

- Press the power level selector switch.
  - Chiseling power can be reduced to approx. 70% by pressing the power level selector switch.

Chiseling power can be adjusted only when the power tool is switched on and ready for use. To reselect full chiseling power, press the chiseling power level selector switch again. Switching off and then on again also causes the power tool to return to full chiseling power.

6 Care and maintenance

WARNING

Electric shock hazard! Attempting care and maintenance with the supply cord connected to a power outlet can lead to severe injury and burns.

- Always unplug the supply cord before carrying out care and maintenance tasks.

Care

- Carefully remove stubborn dirt from the tool.
- Clean the air vents carefully with a dry brush.
- Use only a slightly damp cloth to clean the casing. Do not use cleaning agents containing silicone as they can attack the plastic parts.

Maintenance

WARNING

Danger of electric shock! Improper repairs to electrical components may lead to serious injuries including burns.

- Repairs to the electrical section of the tool or appliance may be carried out only by trained electrical specialists.

- Check all visible parts and controls for signs of damage at regular intervals and make sure that they all function correctly.
- Do not operate the product if signs of damage are found or if parts malfunction. Have it repaired immediately by **Hilti** Service.
- After cleaning and maintenance, fit all guards or protective devices and check that they function correctly.

To help ensure safe and reliable operation, use only genuine Hilti spare parts and consumables. Spare parts, consumables and accessories approved by Hilti for use with the product can be found at your local **Hilti Store** or online at: **www.hilti.group**.

6.1 Cleaning the dust shield

- Clean the dust shield on the chuck with a dry, clean cloth at regular intervals.
- Clean the sealing lip by wiping it carefully and then grease it again lightly with **Hilti** grease.
- It is essential that the dust shield is replaced if the sealing lip is damaged.

7 Transport and storage

- Do not transport electric tools with accessory tools fitted.
- Always unplug the supply cord before storing an electric tool or appliance.
- Store tools and appliances in a dry place where they cannot be accessed by children or unauthorized persons.
- Check electric tools or appliances for damage after long periods of transport or storage.

8 Troubleshooting

If the trouble you are experiencing is not listed in this table or you are unable to remedy the problem by yourself, please contact **Hilti** Service.

8.1 Troubleshooting

Trouble or fault	Possible cause	Action to be taken
The power tool doesn't start.	Electronics initialization in progress (takes up to 4 seconds after plugging in). The electronic restart interlock is activated after an interruption in the electric supply.	▸ Switch the power tool off and then on again.
	Interruption in the electric supply.	▸ Plug in another electric tool or appliance and check whether it works.
	The generator is in sleep mode.	▸ Apply a load to the generator by connecting a second power consumer (e.g. worklight). Switch the tool off and then on again.
	The detachable supply cord is not fitted correctly.	▸ Fit the detachable supply cord to the power tool correctly.
The service indicator lights red.	The tool is faulty or servicing is due.	▸ Have the product repaired only by **Hilti** Service.
The service indicator blinks red.	The voltage provided by the electric supply is too high.	▸ Use a different power outlet. Check the electric supply.
	The overheating prevention cut-out has been activated.	▸ Allow the tool to cool down. Clean the air vents. Running under no load is still possible.
No hammering action.	The power tool is too cold.	▸ Bring the tip of the accessory tool into contact with the working surface, switch the power tool on and allow it to run. If necessary, repeat the procedure until the hammering mechanism begins to operate.
The tool does not achieve full power.	Power reduction is active.	▸ Press the power level selector switch (observe the power level indicator). Unplug the power tool from the electric supply and then plug it back in.
	The extension cord is too long or its gauge is inadequate.	▸ Use an extension cord of an approved length and / or of adequate gauge.
	The voltage provided by the electric supply is too low.	▸ Connect the power tool to a different power source.
The chisel cannot be released from the chuck.	The chuck is not pulled back fully.	▸ Pull the tool lock back as far as it will go and remove the insert tool.
The power tool switches itself off while running.	The overheating prevention cut-out has been activated.	▸ Allow the tool to cool down. Clean the air vents. Running under no load is still possible.

9 Disposal

Most of the materials from which **Hilti** tools and appliances are manufactured can be recycled. The materials must be correctly separated before they can be recycled. In many countries, your old tools, machines or appliances can be returned to **Hilti** for recycling. Ask **Hilti** Service or your Hilti representative for further information.

▸ Do not dispose of power tools, electronic equipment or batteries as household waste!

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