5. Operating instructions

TE 905

Bedienungsanleitung
Operating instructions

5.1 Safety precautions

Safety precautions

(Please read and keep these instructions)

Caution: The following fundamental safety precautions must always be observed when using electric tools/machines as protection against and electric shock, the risk of injury and fire hazards. Please read and take note of these precautions before you use the tool/machine. Keep these safety precautions in a safe place!

1 Keep your place of work clean and tidy. Disorder where you are working creates a potential risk of accidents.

2 Make allowance for influence from the surroundings. Don't expose your electric tools/machines to rain. Don't use electric tools/machines in damp or wet surroundings. Make sure the work area is well lit. Don't use electric tools/ machines near inflammable liquids or gases.

3 Always protect yourself against electric shock. Never touch grounding (earthing) parts e.g. pipes, radiators, cookers, ovens, refrigerators.

4 Keep children away. Don't let other persons touch the electric tool/machine or supply cord. Keep them away from your work area.

5 Keep your electric tool/machine in a safe place. Electric tools/machines not in use should be kept in a dry locked-up place out of the reach of children.

6 Don't overload your electric tools/machines. You will do your work better and safer in the specified performance/rating range.

7 Always use the right electric tool/machine for the job. Don't use underpowered tools/machines or attachments for heavier duty jobs. Don't use electric tools/ machines for work and purposes for which they are not intended, e.g. don't use a hand-held circular saw to cut down trees or cut up branches.

8 Wear suitable clothing. Don't wear loose clothing or jewellery – they could be caught up in moving parts. When working outside, the use of rubber gloves and non-slip shoes is recommended. Wear a helmet or cap if you have long hair.

9 Always wear protective goggles. If work causes dust, wear a mask as well.

10 Don't use the supply cord for any other purpose. Don't carry the electric tool/ machine by the supply cord and don't pull the plug out of the socket/receptacle by pulling the supply cord. Protect the cable from heat, oil and sharp edges.

11 Secure the workpiece. Use a clamping device or vice to hold the workpiece. It is secured more reliably in this way than in your hand and you can then hold and operate your electric tool/machine with both hands.

12 Don't bend over too far when working. Avoid an unusual stance. Make sure that you are standing firmly and keep your balance at all times.

13 Take good care of your electric tools/machines. Keep the drill bits, insert tools etc. sharp and clean so that you can do your work better, safer and more reliably. Observe the cleaning and maintenance regulations and the instructions for changing drill bits, insert tools etc. Check the supply cord regularly and have it renewed by a recognized specialist if it is damaged. Check the extension supply cord regularly and, if it is damaged, replace it. Keep grips and side handles dry and free from oil or grease.

14 Always pull out the plug from the mains if the electric tool/machine is not in use, prior to cleaning and maintenance work and when changing a drill bit, saw blade or insert tools of any kind.

15 Never leave a key in place. Always check before switching on that the key or adjusting tools have been removed.

16 Avoid any unintentional start-up. Never carry a plugged-in electric tool/machine with your finger on the switch. Always make sure that the switch is off when plugging the electric tool/machine into the main electric supply.

17 If an extension supply cord is used outside, only use one which has been approved for the purpose and is correspondingly marked.

18 Be attentive at all times. Keep your eye on your work. Remain in a sensible frame of mind and don't use the electric tool/machine if you cannot concentrate completely.

19 Check your electric tool/machine for damage. You must check the safety devices or damaged parts carefully for perfect functioning in keeping with the intended purpose before using the electric tool/machine further. Check whether the moving parts function properly, whether they aren't sticking, whether any parts are broken, whether all other parts work properly and are fitted correctly, and make sure that all other conditions which can influence operation and running of the electric tool/machine are as they should be. Damaged guards and protective devices and parts must be repaired properly by an authorized service workshop or replaced provided that nothing else is stated in the operating instructions. Damaged switches must also be replaced in the recognized service workshop. Never use electric tools/machines which cannot be switched on and off by the switch.

20 Caution ! For your own safety's sake, only use accessories and attachments which are specified in the operating instructions or in the respective catalogue. The use of accessories or insert tools or attachments other than those specified in the operating instructions can result in personal injury to you.

21 Only have repairs carried out by recognized electrical specialists. This electric tool/machine complies with respective safety regulations. Repairs may only be carried out by an electrical specialist otherwise an accident hazard for the operator can exist.

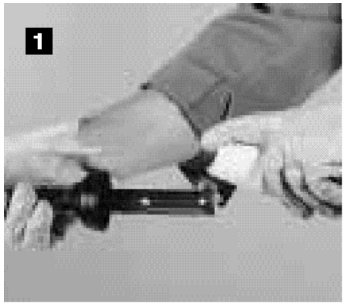
22 Connect dust extraction equipment. If devices are provided for the connection of dust extraction and collection facilities ensure these are connected and properly used.

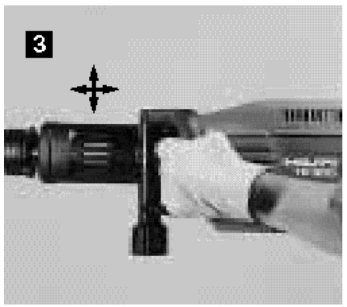
23 Locking the chuck: Check that insert tools (chisels, drill bits) are properly secured in the chuck.

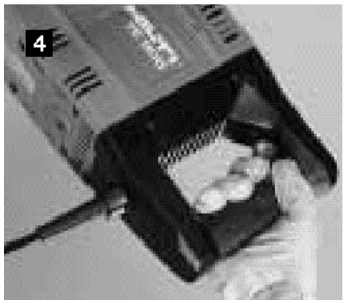
24 When working on electrically conductive materials, conductive dust may collect inside an electric tool, causing leakage of electric voltage and a possible risk of electric shock. Work of this kind, for example, includes grinding cast iron, chiselling or other operations using impact tools on solid metal, overhead drilling in metal and, under certain conditions, drilling through steel reinforcement in concrete ceilings. Electric tools or machines used for applications of this kind must be inspected at regular, short intervals by a recognised specialist or at a Hilti service workshop in order to ensure that no hazardous deposits of conductive dust are present inside the tool and to confirm the integrity of the tool's electrical insulation.

Please keep these safety precautions in a safe place.

5.2 Hilti TE 905 breaker







Hilti TE 905 breaker

Kit supplied with the machine
Plastic toolbox, cleaning cloth, Hilti insert tool grease and operating instructions

EC declaration of conformity

Designation: Breaker

Serial numbers: XX/0000001-9999999/XX

Model/type: TE 905

Year of design: 1996

We declare under our sole responsibility that this product is in conformity with the following standards or standardisation documents:

EN 50144, EN 55014 or EN 55011, EN 60555 according to the provisions of the directives 73/23/EEC, 89/336/EEC, 89/392/ECC, 84/537/ECC.

Hilti Corporation

Martin A.C. Messner
Vice President D&ET Division
11/1996

Dr. Heinrich Schäperkötter
Development Manager D&ET Division
11/1996

Technical data

Power input:		1550 W	1550 W	1600 W	1600 W	1600 W
Voltage (versions):	100 V	110 V	115 V	220 V	230 V	240 V
Current input:	15 A	16 A	15 A	8,2 A	8,3 A	8,3 A
Frequency:	50–60 Hz					
Machine weight:	11.3 kg					
Dimensions:	680×110×180 mm					
Hammering speed under load:	2200 blows/min.					
Single impact energy:	20 joules					
Chiselling performance in medium-hard concrete:	1300 cm^3					
Chisels:	Pointed, flat, wide flat, asphalt and flexible chisels Bushing, tamping and ground-rod ramming tools					
Chuck:	TE-S					
Permanent lubrication						
Adjustable side handle						
Foam-rubber padded grip and side handle						
Automatic cut-out carbon brushes						
Electronic speed (r.p.m.) limitation						
On/off switch						
Vibration reduction with built-in AVR system						
Service indicator LED						
Protection class II (double insulated)						
Radio and TV interference suppression						
The noise level of the machine is less than 108 dB (A)						
Wear ear protection.						
The typical weighted vibrational acceleration is 8 m/s^2.						

Right of technical modifications reserved

Do not use this product in any way other than as directed by these operating instructions.

Observe the national regulations applicable to the operation of this machine.

The operating instructions should always be kept with the machine!

5.3 Operating the TE905 breaker

Operating the TE905 breaker

Before starting work
Read the safety precautions.
The machine should be used only for the applications for which it is intended, i.e. chiselling, bushing, packing, cutting and driving in mineral materials such as concrete, masonry and asphalt etc. It is not suitable for use on metal surfaces.
The breaker must be in good working order and used as directed (side handle firmly tightened in the correct position and chisel secured properly in the chuck).
The electric mains supply must correspond to the information printed on the rating plate.
The machine is double insulated. **Earthing / grounding of this machine is not permitted**.

Fig. 1: Cleaning chisel connection ends
The chuck is not incorporated in the machine's lubrication system. The connection ends of chisels and other tools must therefore be cleaned regularly and **lubricated** with Hilti grease. Use a dust shield on the chisel.

Starting time at low temperatures
The starting time (until the hammering action begins to operate) can be reduced by jolting the chisel against the working surface as the machine is switched on.

Operation
While working, hold the machine securely with both hands, using the grip and side handle.
Check the security of the stance or position from which you are working at regular intervals (ladders do not provide a secure stance and present an accident hazard).
Do not apply excessive pressure – this will not increase the machine's performance. Simply position and guide the chisel.

Fig. 2: Inserting a chisel
Insert the chisel by pushing it into the chuck in the desired position, against spring pressure, until it locks automatically. To remove the chisel, pull back the locking sleeve and pull out the chisel.

Figure 3: Side handle
Move the side handle to the desired position and clamp it securely by tightening the knob.

Fig. 4: Beginning work
Switch on the breaker and bring the blade of the chisel into contact with the work surface. It is not necessary to apply constant finger pressure to the switch as it remains in the ON position for sustained operation.

Servicing

The TE905 is equipped with a service indicator LED and automatic cut-out carbon brushes. When the LED lights or when the automatic cut-out brushes subsequently break the power circuit, the machine must be serviced by Hilti. Failure to observe this point could result in expensive consequential damage to the machine.
Electric tools must comply with the applicable safety regulations. Servicing, therefore, may be carried out only by recognised electrical specialists. The use of original Hilti parts ensures optimum safety.

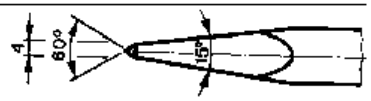
Insert tool reconditioning

Insert tool reconditioning should be carried out only by authorised specialists.

If the blade of a pointed, flat or wide-flat chisel is only **slightly worn**, it can be resharpened by **grinding**. Note: Ensure that the surface of the chisel does not overheat when grinding (no discoloration!).
If the blade of a pointed or flat chisel is **badly worn**, it requires to be **reforged**. Heat the tip of the chisel (approx. 80 mm) to approx. 1000–1100°C (bright yellow-red to yellow) and forge to shape. Allow the chisel to cool slowly to room temperature (avoid draughts!). **Do not reharden and temper the chisel**.

Chisel grinding angles

Pointed chisel



Flat chisel

Wide flat chisel

Warranty

Hilti warrants that the tool supplied is free of defects in material and workmanship. This warranty is valid as long as the tool is operated and handled correctly, cleaned and serviced properly and in accordance with the Hilti Operating Instructions, all warranty claims are made within 12 months from the date of the sale (invoice date), and the technical system is maintained. This means that only original Hilti consumables, components and spare parts may be used in the tool.
This warranty provides the free-of-charge repair or replacement of defective parts only. Parts requiring repair or replacement as a result of normal wear and tear are not covered by this warranty.

Additional claims are excluded, unless stringent national rules prohibit such exclusion. In particular, Hilti is not obligated for direct, indirect, incidental or consequential damages, losses or expenses in connection with, or by reason of, the use of, or inability to use the tool for any purpose. Implied warranties of merchantability or fitness for a particular purpose are specifically excluded.

For repair or replacement, send tool and/or related parts immediately upon discovery of the defect to the address of the local Hilti marketing organization provided.
This constitutes Hilti's entire obligation with regard to warranty and supersedes all prior or contemporaneous comments and oral or written agreements concerning warranties.

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SHK/Elektro: 0130/182020
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BTX* 6123 #

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