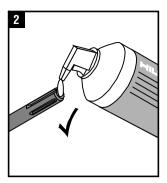
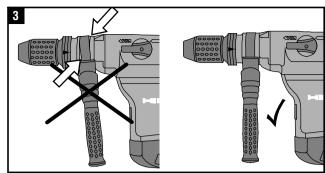
# **TE 76**

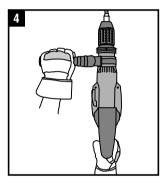


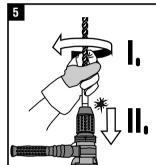
- **D** Bedienungsanleitung
- 1- 7
- **GB** Operating instructions

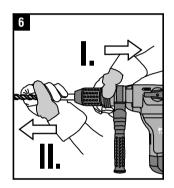


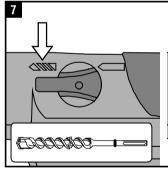


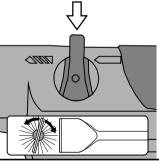


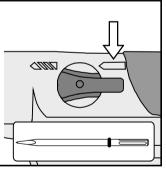


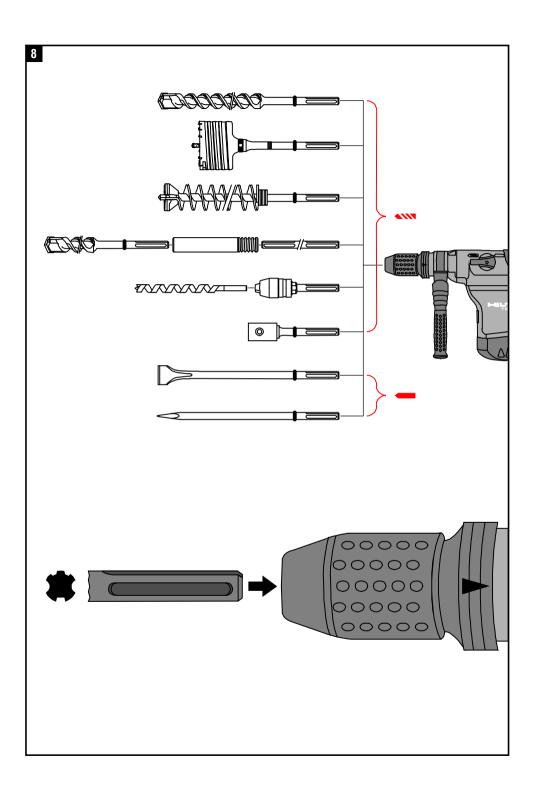












It is essential that the operating instructions are read before the tool is operated for the first time.

Always keep these operating instructions together with the tool.

**Ensure that the operating** instructions are with the tool when it is given to other persons.

# **General information**

In these operating instructions, this symbol indicates points of particular importance to safety. The instructions at these points must always be observed in order to avoid the risk of serious injury.



**A** Caution: high voltage

1 The numbers refer to the illustrations. The illustrations can be found on the fold-out cover pages. Keep these pages open while you read the operating instructions.

In these operating instructions, the electric tool to which these operating instructions apply is referred to as "the tool".

### Operating controls 1

- Insert tool lock
- Function selector switch
- 3 Power selector switch
- Control switch
- Switch lock for chiselling

### Component parts 1

- Oust shield
- Chuck
- Side handle
- Service indicator
- (II) Grip
- Hammering mechanism / gearing
- Motor
- Type plate

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# **Description**

The TE76 is an electrically powered rotary hammer and breaker with pneumatic hammering mechanism designed for professional use.

The following items are supplied: electric tool, operating instructions, grease (50 ml), cleaning cloth, toolbox.

The following conditions must always be observed when the tool is in use:

- The tool must be connected to an alternating current electric mains supply in compliance with the information given on the type plate.
- The tool is for hand-held use only.
- The tool must not be used in places where the surrounding conditions may present a risk of explosion.

### Technical data

1300 W
100 V 110 V 120 V 220 V 230 V 240 V
16.0 A 13.0 A 13.0 A 6.4 A 6.4 A 6.5 A
50–60 Hz
7.0 kg
495×261×115 mm
38 mm
II = 0–282 I = 0–140 r.p.m.
20 mm dia.: 360 mm/min 25 mm dia.: 280 mm/min 32 mm dia.: 180 mm/min
575 cm³/min
8 m/s <sup>2</sup>
91 dB (A)
104 dB (A)

<sup>\*</sup> The tool is offered in different versions for various mains voltages. Please refer to the information on the type plate for the nominal voltage and nominal current input of your tool.

#### Main features of the tool

Electrical protection class II (double insulated) 
Mechanical torque-limiting clutch
No-load hammering absorption
Grip and side handle with vibration absorption
Quick-change chuck
TE-Y insert tool system
Infinitely variable speed, with electronic regulation independent of load
Selector switch for full power (II) and half power (I)
Drilling and chiselling modes

24-way chisel position adjustment
Gearing and hammering mechanism with permanent
oil lubrication
Automatic cut-out carbon brushes

Control switch lockable in chiselling mode

Service indicator with light signal Pivotable side handle

Depth gauge attachment (optional)

Right of technical changes reserved

### The tool is designed for the following uses:

Use	Required insert tools	Diameter range
Drilling in concrete, masonry and natural stones	Drill bit with TE-Y connection end  - Hammer drill bits  - Breach bits  - Percussion core bits	Drilling range in concrete 12– 40 mm dia. 40– 80 mm dia. 45–150 mm dia.
Chiselling in concrete, masonry and natural stone	Pointed, flat and shaped chisels with TE-Y connection ends	Surface finishing and breaches
Setting anchor	Setting tools with TE-Y connection ends	All Hilti anchors with TE-Y setting tools
Drilling in wood and metal	Chuck holder, 263359 Quick-release chuck, 60208 Wood drill bits and metal drill bits with cylindrical or hex. shank	Wood drill bits, 10–32 mm dia. Metal drill bits, 10–20 mm dia.
Mixing non-flammable materials, e.g. mortar	Chuck holder, 263359 Quick release chuck, 60208 Mixing tools with cylindrical or hex. shank	Mixing tools, 80–150 mm dia.



# **⚠** Safety precautions

When using electric tools, the following fundamental safety precautions must always be observed in order to avoid the risk of injury, electric shock and fire hazards. Please read and observe the instructions below before using the tool.

### 1. Use protective equipment.









Wear ear protection

Wear protective aloves

Wear respiratory protection when the work causes

### 2. Wear suitable working clothing.

Don't wear loose clothing, loose long hair or iewellery as it can become caught up in moving parts of the electric tool. Wear non-slip shoes.

#### 3. Make the working area safe.

Objects which could cause injury should be removed from the working area. Ensure that the area is well lit. When working, keep other persons outside the range of the tool you are using.

#### 4. Take the influences of the surrounding area into account

Don't expose the tool to rain or snow and don't operate it in the vicinity of flammable liquids or gases.



### $^{ar{\sqcup}}$ Check the tool each time before use.

Check the condition of the tool, the supply cord and mains plug. Don't use it if it is damaged, incomplete or if the controls cannot be operated correctly.

#### 6. Use the correct insert tool.

Ensure that the insert tools (drill bits, chisels etc.) are equipped with the appropriate connection end for the chuck system in use and that they are locked in position correctly in the chuck.

Use only the recommended original Hilti accessories and auxiliary equipment.

#### 7. Use the tool only for the purposes for which it is intended.



8. Apply a safe working method.

Avoid unfavourable body positions. Always ensure that you have a safe stance. Always hold the tool in both hands when it is in use. Always use the side handle. Ensure that the side handle is fitted correctly and tightened securely 3. Hold the side handle at its end 4 when drilling and pay attention at all times - the drill bit may become stuck unexpectedly. Switch the tool off if you are distracted from your work.

When the tool is in use, always guide the supply cord away from the tool to the rear.

Never carry the tool by the supply cord. Don't unplug the tool by pulling on the supply cord. Don't expose the supply cord to heat, oil or sharp edges. If the supply cord becomes damaged while working, don't touch it unplug the mains plug immediately.

Take care to avoid concealed cables and pipes.

Concealed electric cables or gas and water pipes present a serious hazard if damaged while you are working. Accordingly, check the area in which you are working beforehand (e.g. using a metal detector). Avoid contact between your body and earthed / grounded objects such as pipes or radiators. External metal parts of the tool may become live, for example, when an electric cable is drilled into inadvertently.

#### 10. Avoid unintentional starting.

Don't carry the tool with your finger on the control switch while it is connected to the mains supply. Check that the tool is switched off before connecting it to the mains supply. Pull the plug out of the mains socket when the tool is not in use, e.g. during pauses between work. before maintenance and when changing insert tools.

Keep the electric tool and insert tools in good

Follow the care and maintenance instructions and replace insert tools in good time. Never operate the tool when it is dirty or wet. Dust or dampness on the surface of the tool make it slippery and difficult to hold and may, under unfavourable conditions, present a risk of electric shock. Repairs to the tool may be carried out only by an authorised electrical specialist using original Hilti spare parts. Failure to observe this point may result in damage to the tool or present a risk of accident. Accordingly, if necessary, have the tool repaired at a Hilti service centre or authorised Hilti repair workshop.

### Before use

Lt is essential that the safety precautions printed in these operating instructions are read and observed.

The mains voltage must correspond to the information on the type plate.

If extension cables are used: Only extension cables of a type approved for the intended use and of adequate cross section may be used. Failure to observe this point may result in reduced performance of the tool and overheating of the cable. Damaged extension cables must be replaced. The recommended cable cross-sectional areas are:

Mains voltage		or cross-s 2.5 mm²		14 AWG
100 V	20 m	40 m		
120 V			30 ft	100 ft
230 V	50 m	100 m		

Use only insert tools with TE-Y connection ends.

Don't exert excessive pressure on the tool. This will not increase its hammering power.

At low temperatures: The tool requires to reach a minimum operating temperature before the hammering mechanism begins to operate. Switch on the tool and position the tip of the drill bit or chisel on the work surface. While the tool is running, apply light pressure briefly and repeatedly until the hammering mechanism begins to operate.

# Operation

### Inserting the insert tool

- a) Unplug the supply cord from the mains socket to prevent unintentional starting.
- b) Check that the connection end of the insert tool is clean and lightly greased. Clean it and grease it if necessary 2. Check that the sealing lip of the dust shield is clean. Wipe it off if necessary. Take care to ensure that no drilling dust finds its way into the interior of the chuck. The dust shield must be replaced when the sealing lip is damaged. Please refer to the section on care and maintenance.
- c) Insert the insert tool in the chuck and rotate it while applying slight pressure until it engages in the guide grooves.
- d) Push the insert tool in further until it is heard to engage. Check that the insert tool has engaged correctly by pulling on it. 5

### Removing the insert tool

a) Unplug the supply cord from the mains socket to prevent unintentional starting.

b) Pull back the chuck locking sleeve and pull out the insert tool 6.

Wear protective gloves. The insert tool may be very hot after long periods of use.

# **Drilling**

#### Hammer drilling

- a) Insert a drill bit into the chuck.
- b) Move the selector switch to the drilling position (
- c) Select the desired drilling power (II = full power, I = half power) . When drilling in brittle materials (e.g. perforated brick), drilling at the half-power setting can be of advantage. This may improve the quality of the hole drilled
- d) Connect the supply cord to the mains socket.
- e) Bring the tip of the drill bit into contact with the work surface at the position where the hole is to be drilled and press the control switch slowly. Drill at low speed until the drill bit centres itself in the hole.
- f) Press the control switch fully and continue drilling at full power. When drilling a through hole, reduce drilling speed shortly before the drill bit breaks through. This will reduce spalling around the hole.

#### Drilling using the depth gauge (accessory)

We recommend the use of the depth gauge for drilling holes to the exact depth required. The depth gauge rod is offset in order to reduce deviations caused by tilting the tool and to make it easier to adjust the drilling depth

Assembly IO: Position the depth gauge on the top side of the electric tool so that the two positioning lugs engage in the depressions for the flange screws. Press the depth gauge on to the tool until the two rear retaining lugs engage in the housing. Insert the depth gauge rod into the depth gauge from the front, with the offset end towards the front of the tool.

Adjusting drilling depth  $\blacksquare$ : Slide the depth gauge rod to the required drilling depth. Adjust the front end of the depth gauge rod until it is approx. 10 mm (3/8") from the drill bit and then tighten the locking screw.

After use, remove the depth gauge and store it in the toolbox.

### **Drilling without hammering action**

Drilling without hammering action is possible with insert tools with a special connection end. Insert tools of this kind are available in the Hilti insert tool programme.

Wood drill bits or steel drill bits with cylindrical shanks can be fitted, for example, in the quick-release chuck and used for drilling without hammering action. The function selector switch must be engaged in the hammer drilling position (

### Chiselling

The chisel can be adjusted to 24 different positions. This makes it possible to work with the cutting edge of flat and shaped chisels at the optimum angle.

- a) Insert the chisel into the chuck.
- b) Move the function selector switch to the middle position 7.
- c) Select the position of the chisel (angle of the cutting edge) by rotating the chuck 12. Move the function selector switch to the chiselling position ( until it engages 2.
- d) Select the desired chiselling power (II = full power, I = half power)
   g) Working at the half-power setting can be of advantage when chiselling brittle materials (e.g. perforated brick) and when using bushing tools for surface finishing.
- e) Connect the supply cord plug to the mains socket.
- f) Bring the point of the chisel into contact with the work surface at the desired position. Press the control switch slowly to enable precise starting and to prevent the chisel slipping.
- g) Press the control switch fully to chisel at full power.
- h) If desired, the control switch can be locked in position when the tool is operated in chiselling mode 18. To do so, press the control switch fully and push the red sliding switch located in the grip above the control switch, to the right. The tool is then in contant on operating mode. Switch the tool off by pushing the red sliding switch to the left, to its original position.

Never operate the function selector switch **7** while the motor is running. When chiselling, the selector switch must always be engaged in the chiselling position ( ).

When chiselling, never allow the chisel to penetrate the base material at a constant angle. This may cause the chisel to become stuck. Never use the chisel as a crowbar to break out material by applying force to it. This may cause damage to the tool. Maximum removal performance will be achieved when the chisel is guided at an steep angle, working from the edge towards the lowest point [4].

### Insert tools and accessories

Use only insert tools with TE-Y connection end 3.

Hilti electric tools have been designed to work optimally as a system together with Hilti insert tools. Accordingly, highest performance and longest life expectancy can be achieved when you use this electric tool with Hilti insert tools. A comprehensive program of insert tools and accessories is available for the TE-Y system 3. The most important insert tools for hammer drilling and chiselling are shown on the inside of the toolbox. Details of the entire programme can be found in the current Hilti product catalogue.

Should you require insert tools not included in the standard programme, please contact the Hilti customer service department or your Hilti sales representative. Hilti offers a comprehensive range of special insert tools in professional quality.

Check your insert tools at regular intervals and replace them in good time. A damaged or badly worn connection end may result in damage to the electric tool. Drill bits with chipped or broken carbide tips may no longer drill holes of the specified diameter, thus influencing their suitability for anchor fastenings.

You can resharpen Hilti high quality chisels yourself very easily. Your Hilti sales representative will be pleased to provide instructions.

Please observe the instructions on care and maintenance of your insert tools given in the following section.

### Care and maintenance

#### Care of the tool

The outer casing of the tool is made from impact-resistant plastic. Grip sections, the dust shield and the supply cord protective sleeve are made from an elastomer material.

Clean the outside of the tool at regular intervals using a slightly damp cloth. Don't use a spray, steam pressure cleaning equipment or running water for cleaning. This may negatively affect the electrical safety of the tool. Always keep the grip surfaces of the tool free from oil and grease. Don't use cleaning agents which contain silicone.

Never operate the tool when the ventilation slots are blocked. Clean the ventilation slots carefully using a dry brush. Don't permit foreign objects to enter the interior of the tool.

Clean the dust shield on the chuck at regular intervals using a clean, dry cloth. Carefully wipe the sealing lip and grease it with a little Hilti grease. It is essential that the dust shield is replaced when the sealing lip is damaged. Proceed as follows: Insert a screwdriver at the edge of the dust shield and lift it out in a forwards direction. Clean the contact surface and insert a new dust shield. Press it in firmly until it engages.

Take also care of your insert tools. Clean off dirt and dust deposits and protect your insert tools from corrosion by wiping them from time to time with an oil-soaked rag. Always keep the connection end clean and lightly greased.

#### Maintenance, Service Indicator

Regularly check all external parts of the tool for damage and that all controls operate faultlessly. Don't operate the tool when parts are damaged or when the controls do not function faultlessly. Have your tool repaired by a Hilti service center.

The tool is equipped with a service indicator 9.

When the indicator lights: The carbon brushes have reached the end of their life. The tool can be operated for a further approx. 8 hours after the service indicator light comes on, until the automatic cut-out will be activated. Please return the tool to a Hilti service center in good time have it always ready for use.

When the indicator flashes: An electrical fault has occurred. The tool has been switched off automatically. Have your tool repaired by a Hilti service center.

# Warranty

Hilti warrants that the tool supplied is free of defects in material and workmanship. This warranty is valid so 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.

# **Disposal**

Most of the materials from which Hilti electric tools are manufactured can be recycled. The materials must be correctly separated before they can be recycled. In many countries, Hilti has already made arrangements for taking back your old electric tools for recycling. Please ask your Hilti customer service department or Hilti sales representative for further information.

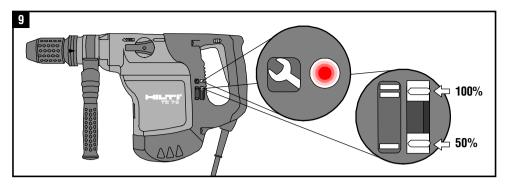
Should you wish to return the electric tool yourself to a disposal facility for recycling, proceed as follows: Dismantle the electric tool as far as possible without the need for special tools. Use absorbent paper to wipe greasy parts clean and to collect the grease oil that runs out (total quantity approx. 3 cu.inches). This paper should also be disposed of correctly. On no account should oil be allowed to enter the waste water system or to find its way into the ground.

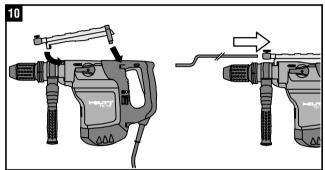
The individual parts should be separated as follows:

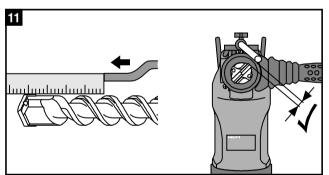
Part / assembly	Main material	Recycling
Toolbox	Plastic	Plastic
Outer housing	Plastic	Plastic
Inner housing	Magnesium alloy	Scrap metal
Grip, side handle	Plastic	Plastic
Electronics box	Various	Electronic scrap or metal scrap
Motor housing	Plastic	Plastic
Motor end cap	Plastic with steel part	Scrap metal
Fan	Plastic	Plastic
Motor (rotor and stator)	Steel and copper	Scrap metal
Supply cord	Copper, elastomer sheath	Scrap metal
Gearing parts, hammering mechanism parts	Steel	Scrap metal
Con-rod and drive piston	Plastic	Plastic
Screws, small parts	Steel	Scrap metal

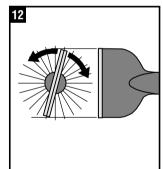
# **Fault finding**

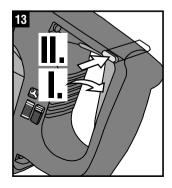
Fault	Possible cause	Elimination
The tool doesn't start	Fault in the electric power supply	Plug in another electric tool and check whether it starts
	Defective supply cord or plug	Have it checked by an electrical specialist and replace it if necessary
	Switch fault	Have it checked by an electrical specialist and replace it if necessary
No hammering action	The tool is too cold	Allow the tool to reach the minimum operating temperature See section "Before use"
The tool doesn't produce full power	Cross-sectional area of the extension cable is inadequate.	Use an extension cable of adequate cross- sectional area. See section "Before use"
	The power selector switch is set to position I	Move the power selector switch to position II 9
	The control switch is not pressed fully	Press the control switch as far as it will go
The drill bit doesn't rotate	The function selector switch is not locked in the drilling position (	Move the function selector switch (when the motor has stopped) to the drilling position (
The drill bit cannot be released from the chuck	The chuck locking sleeve is not pulled back fully	Pull the chuck locking sleeve back as far as it will go and pull out the insert tool
	The side handle is not fitted correctly or slips	Release the side handle and fit it correctly so that the clamping band and side handle are positioned correctly in the locating groove

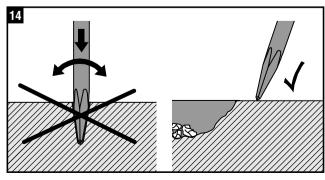












# Konformitätserklärung

Bezeichnung:	Kombihammer
Typenbezeichnung:	TE 76
Konstruktionsiahr:	1998

Wir erklären in alleiniger Verantwortung, dass dieses Produkt mit den folgenden Richtlinien und Normen übereinstimmt: 73/23/EWG. 89/336/EWG. 98/37/EG. EN 55014-1. EN 55014-2. EN 50144-1. EN 50144-2-6

### EC declaration of conformity

Description:	Combi hammer
Designation:	TE 76
Year of desing:	1998

We declare, under our sole responsibility, that this product complies with the following standards or standardization documents: 73/23/EWG, 89/336/EWG, 98/37/EG, EN 55014-1, EN 55014-2, EN 50144-1, EN 50144-2-6

### Déclaration de conformité CE

Désignation:	Perforateur-burineur
Modèle/type:	TE 76
Année de conception:	1998

Nous déclarons sous notre seule et unique responsabilité que ce produit est conforme aux directives et normes suivantes: 73/23/CEE, 89/336/CEE, 98/37/CE, EN 55014-1, EN 55014-2, EN 50144-1, EN 50144-2-6

### Dichiarazione di conformità CE

Designazione:	Combinato
Modello:	TE 76
Anno di costruzione:	1998

Dichiariamo, con nostra unica responsabilità, la conformità di questo prodotto con le seguenti direttive e norme: 73/23/EWG, 89/336/EWG, 98/37/EG, EN 55014-1, EN 55014-2, EN 50144-1, EN 50144-2-6

# Conformiteitsverklaring

Product:	Combihamer
Type:	TE 76
Bouwiaar:	1998

Wij verklaren, op onze eigen verantwoording, dat dit product voldoet aan de volgende richtlijnen en normen: 73/23/EEG, 89/336/EEG, 98/37/EG, EN 55014-1, EN 55014-2. EN 50144-1. EN 50144-2-6

### Declaração de conformidade

Designação	Martelo combinado
Designação do tipo	TE76
Ano de construção	1998

Declaramos, como únicos responsáveis, que este produto está em conformidade com as seguintes directivas e normas: 73/23/EWG, 89/336/EWG, 98/37/EG. EN 55014-1, EN 55014-2, EN 50144-1, EN 50144-2-6

### Declaración de conformidad CE

Denominación:	Martillo combinado
Denominación de tipo:	TE 76
Año de diseño:	1998

Declaramos bajo nuestra exclusiva responsabilidad que este producto es conforme a las directivas y normas siguientes: 73/23/EWG, 89/336/EWG, 98/37/EG, EN 55014-1. EN 55014-2. EN 50144-1. EN 50144-2-6

Hilti Corporation

Dr. Klaus-Dieter Otto Senior Vice President **Business Unit** Drilling and Demolition December 1998

Surge- lel Werner Bonners Vice President **Development Business Unit** 

Drilling and Demolition December 1998

# Hilti Corporation Headquarter

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