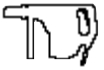
TE 76



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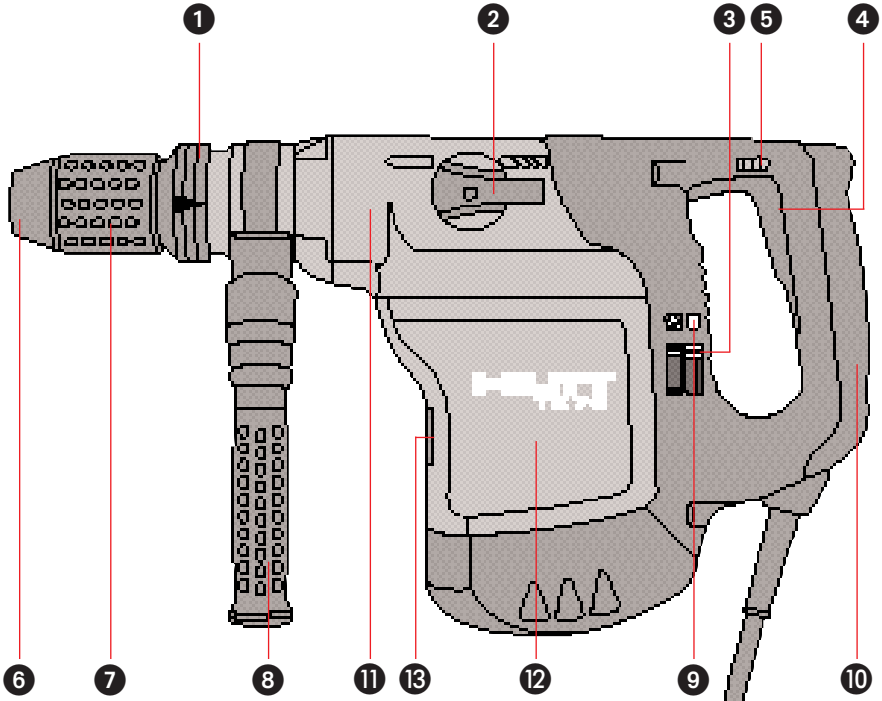

This Product is Listed
Ce produit est homologué
Producto homologado por
Este produto está registrado

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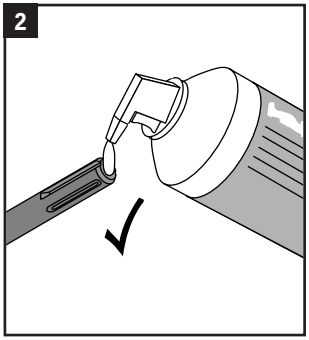
Protective grounding	Always wear safety glasses	Always wear protective gloves	Always wear ear protectors	Wear respiratory protection when the work causes dust
Mise à la terre de protection	Porter des lunettes de protection.	Porter des gants de sécurité.	Porter un casque antibruit.	Pour les travaux produisant de la poussière, porter un masque respiratoire.
Conexión a tierra	Gafas de seguridad	Guantes de seguridad	Protección auditiva	Protección respiratoria en trabajos que produzcan polvo
Aterramento de proteção	Use sempre óculos de segurança	Use sempre luvas de proteção	Use sempre fones de proteção para os ouvidos	Use máscaras respiratórias para se proteger da poeira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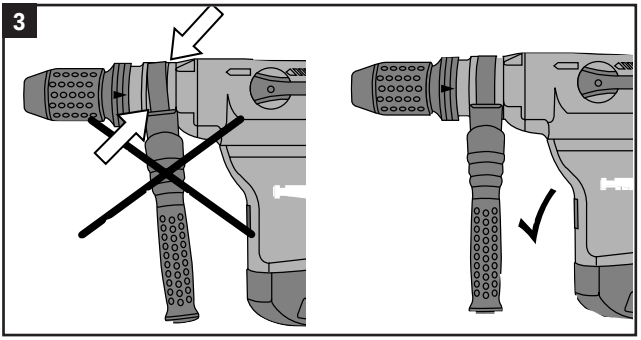
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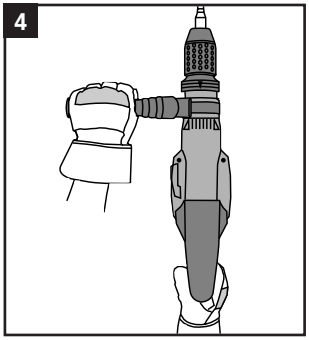
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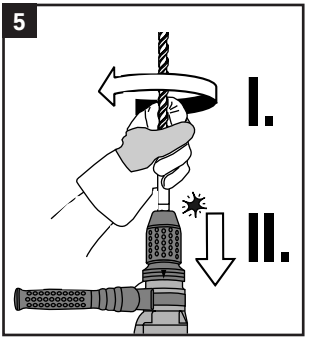
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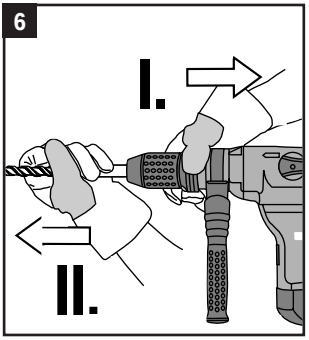
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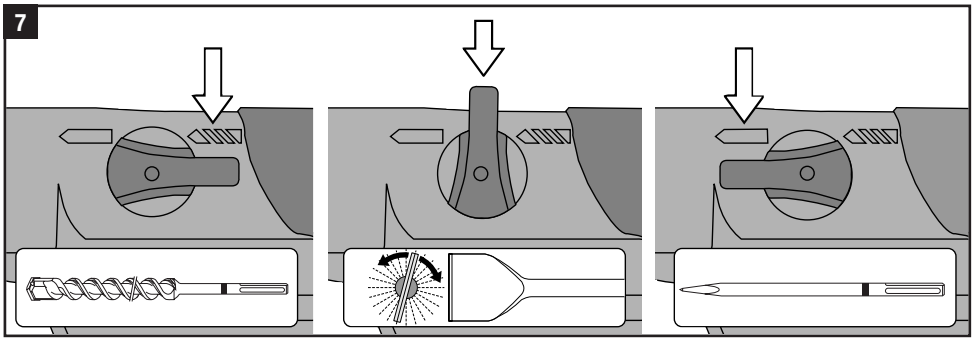
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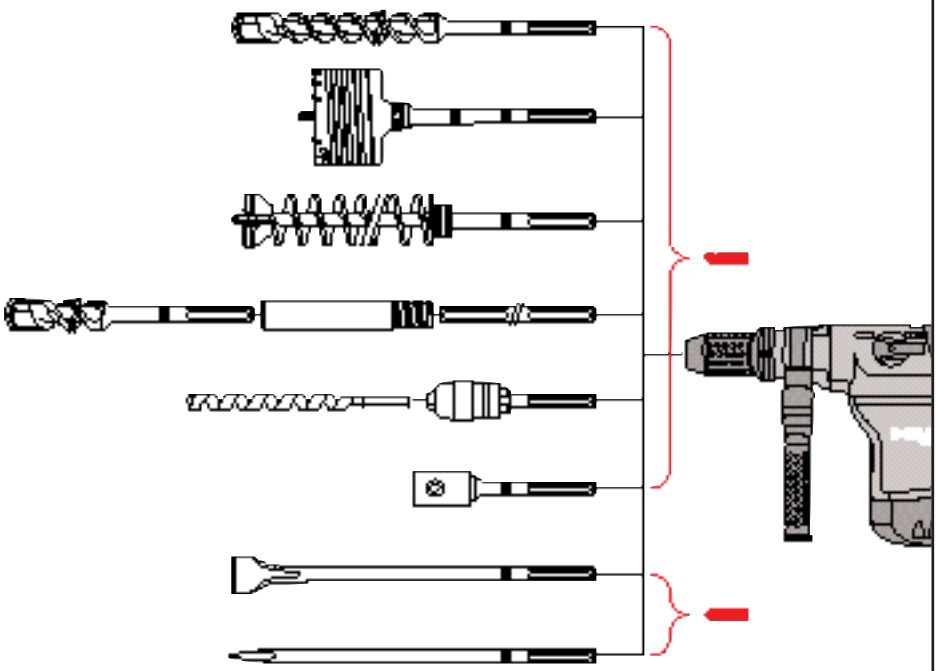

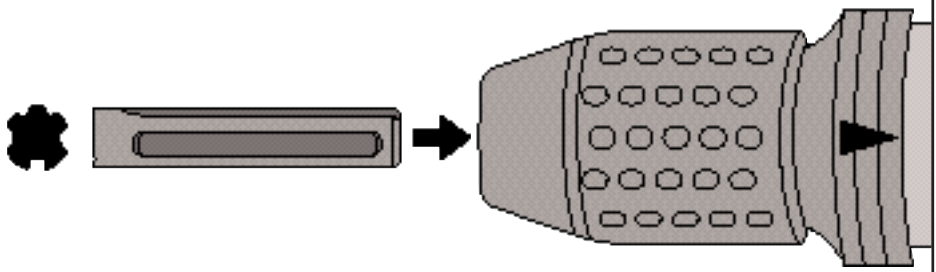

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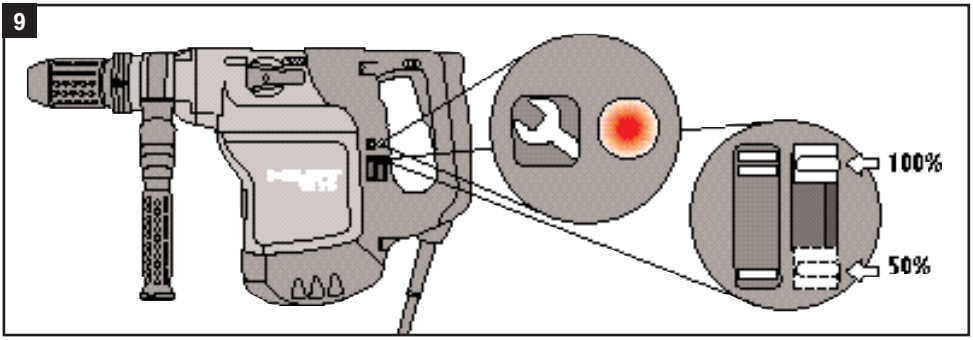

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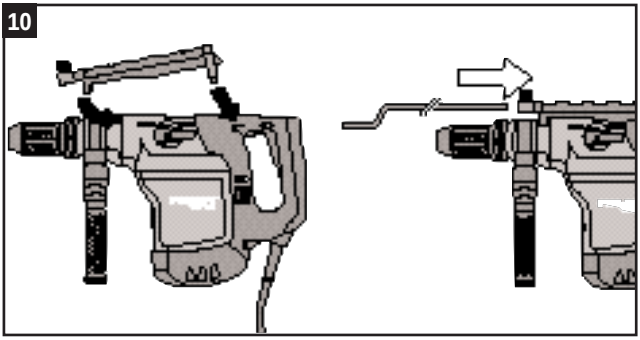

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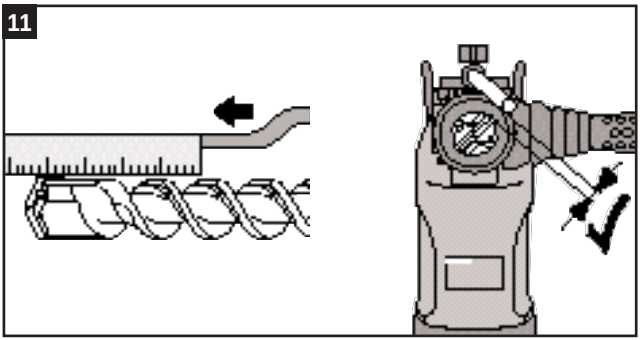

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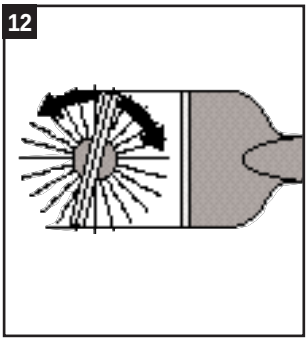

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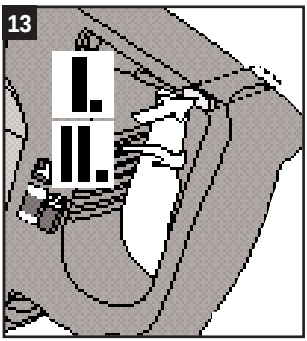

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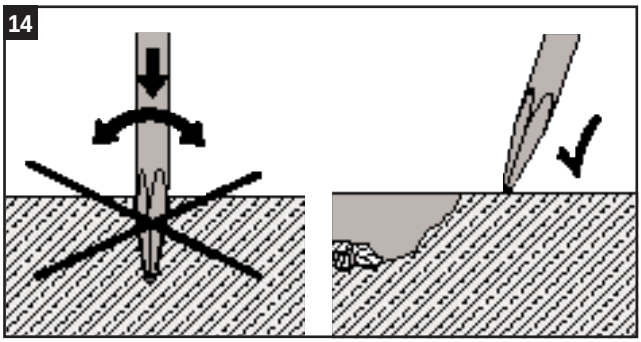

TE 76 Combihammer

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.

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

Caution: Electrical
In this operating instruction, this symbol warns of hazards as a result of electrical current. The instructions at these points must always be followed in order to reduce the risk of serious injury or damages to property.

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 power tool to which these operating instructions apply is referred to as "the tool".

Operating controls 1
❶ Chuck locking sleeve
❷ Function selector switch
❸ Power selector switch
❹ Control switch
❺ Switch lock for chiseling

Tool components 1
❻ Dust shield
❼ Chuck
❽ Side handle
❾ Service indicator
❿ Grip
⓫ Hammering mechanism / gearing
⓬ Motor
⓭ Type plate

General safety rules

Warning! Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS

1. Work area

Keep your work area clean and well lit. Cluttered benches and 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 bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

2. Electrical safety

Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adaptor plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. If the tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.

Applicable only to Class I (grounded) tools.

Double Insulated tools are equipped with a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double Insulation ⧈ eliminates the need for the three wire grounded power cord and grounded power supply system.

Applicable only to Class II tools.

Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.

Don't 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 to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.

3. Personal safety

Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.

Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.

Avoid accidental starting. Be sure the switch is off before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.

Remove adjusting keys or wrenches before turning the tool on. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.

Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.

Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

4. Tool use and care

Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.

Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.

Do not use tool if switch does not turn it on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.

Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.

Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.

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

Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.

Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool, may become hazardous when used on another tool.

5. Service

Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.

When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

Symbols used on the tool:

V	.....	volts
~	.....	alternating current
Hz	.....	hertz
W	.....	watts
A	.....	amperes
n_0	.....	no load speed
n	.....	speed under normal load
/min	.....	revolutions per minute
∅	.....	diameter
⏚	.....	protective grounding

Specific safety rules and symbols

Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.

Wear ear protectors when using the tool for extended periods. Prolonged exposure to high intensity noise can cause hearing loss.

Use the tool only for purposes for which it is designed. Failure to do so may result in electric shock, damages to property and/or serious personal injury.

Always hold 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 outer end 4 when drilling and pay attention at all times. The drill bit may become stuck anytime, which may result in the tool twisting if it is not properly held.

Unplug tool immediately if supply cord becomes damaged during working. Have supply cord replaced by a qualified electrician. Damaged supply cords present a risk of fire and/or electric shock.

Never operate the tool when it is dirty or wet. Dirt/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.

Ensure that the insert tools are equipped with the appropriate connection end for the chuck system in use and that they are locked in position correctly in the chuck. Inserting tools with a different connection end will result in malfunction and damage to the tool and may even cause injury by breaking parts. Incomplete insertion may result in insert tool falling out of chuck, causing damage or injury to persons.

Description

The TE 76 is an electrically powered rotary hammer and breaker with pneumatic hammering mechanism designed for professional use.

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

See figure 1 and the explanations of operating controls and the tool components on page 1.

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

- The tool must be connected to an alternating current electric 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

Rated power	1300 W
Nominal voltage	120 V
Nominal current input	13.0 A
Frequency	50–60 Hz
Weight of tool	15.0 lb / 7.0 kg
Dimensions (l×h×w)	19.6×10.3×4.5 in / 497×261×115 mm
Minimum distance between wall and hole drilled	1.5 in / 38 mm
Speed	II = 0–282 I = 0–200 r.p.m.
Typical drilling performance in medium-hard B35 concrete	3/4″ dia.: 14.2 in/min / 20 mm dia.: 360 mm/min 1″ dia.: 11.4 in/min / 25 mm dia.: 290 mm/min 1 1/4″ dia.: 7.1 in/min / 32 mm dia.: 180 mm/min
Typical chiselling performance in medium-hard B35 concrete	35.1 cu.in/min / 575 cm^3/min

Main features of the tool

Electrical protection class I (grounded)
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 chiseling modes
Control switch lockable in chiseling mode
24-way chisel position adjustment
Gearing and hammering mechanism with oil lubrication
Automatic cut-out carbon brushes
Service indicator with light signal
Pivotable side handle
Depth gauge attachment (optional)

The tool is designed for the following uses:

Use	Required insert tools	Working 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 1/2″ – 1 9/16″ dia. / 12– 40 mm dia. 1 1/2″ – 3 1/8″ dia. / 40– 80 mm dia. 1 3/4″ – 6″ dia. / 45–150 mm dia.
Chiseling in concrete, masonry and natural stone	Pointed, flat and shaped chisels with TE-Y connection ends	Surface finishing and breaches
Setting anchors	Setting tools with TE-Y connection ends	All Hilti anchors with TE-Y setting tools
Drilling in wood and metal	Chuck holder, item 263359 Keyless chuck, item 60208 Wood drill bits and metal drill bits with smooth or hex. shank	Wood drill bits, 3/8″ – 1 1/4″ dia. / 10–32 mm dia. Metal drill bits, 3/8″ – 3/4″ dia. / 10–20 mm dia.
Mixing non-flammable materials, e.g. grout	Chuck holder, item 263359 Keyless chuck, item 60208 Mixing tools with smooth or hex. shank	Mixing tools, 3 1/8″ – 6″ dia. / 80–150 mm dia.

Preparation for use

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

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

If extension cords are used: Only extension cords 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 cord. Damaged extension cords must be replaced. The recommended cross-sections and max. length for extension cords are:

	Conductor cross-section			
Voltage	**1.5 mm²**	**2.5 mm²**	**14 AWG**	**12 AWG**
120 V	20 m	40 m	100 ft	150 ft

16 AWG extension cords not recommended

Use only insert tools with TE-Y connection end.

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

Operating from generators

This tool can be used on a generator if it meets the following requirements:
- AC output 2000 W minimum; 18 A minimum
- 120 V AC nominal; min. 102 V, max. 132 V under all conditions
- frequency 50–60 Hz; never to exceed 65 Hz
- high dynamic automatic voltage regulator

Do not use other power tools on the same generator at the same time. Switching other tools on/off can cause undervoltage and/or overvoltage spikes which could damage the tool.

Inserting the insert tool

a) Unplug the supply cord from the electrical 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. **5**
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 electrical 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 drill bit into the chuck.
b) Move the selector switch to the hammer drilling position ( ) until it engages **7**.
c) Select the desired drilling power (II = full power, I = half power) **9**. 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) Rotate side handle to the desired position. Ensure that it is fitted correctly and tightened securely **3**.
e) Connect the supply cord to the power supply.
f) 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 centers itself in the hole.
g) 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 **11**.
Assembly **10**: Position the depth gauge on the top side of the power 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 tool casing. 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 **11**: 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 program. Wood drill bits or steel drill bits with smooth shank can be fitted, for example, in the keyless chuck and used for drilling without hammering action. The function selector switch must be engaged in the hammer drilling position ( ).

Chiseling

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 center 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 chiseling position ( ) until it engages **7**.
d) Select the desired chiseling power (II = full power, I = half power) **9**. Working at the half-power setting can be of advantage when chiseling brittle materials (e.g. perforated brick) and when using bushing tools for surface finishing.
e) Rotate side handle to the desired position. Ensure that it is fitted correctly and tightened securely **3**. For surface finishing work, you may also hold the tool at the chuck gripping section.
f) Connect the supply cord to the power supply.
g) 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.
h) Press the control switch fully to chisel at full power.
i) If desired, the control switch can be locked in position when the tool is operated in chiseling mode **13**. To do so, push the red sliding switch located in the grip above the control switch to the right, then press the control switch fully. The tool is now in contant-on operating mode. Always switch the tool off by pushing the red sliding switch to the left, to its original position.

If you do not intend to chisel in constant-on mode, always push the red sliding switch located above the control switch to the left position. Otherwise, the control switch could unintentionaly be locked in the constant-on position when chiseling.

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

When chiseling, 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 a steep angle, working from the edge towards the lowest point **14**.

Care and maintenance

Care

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.

Also take 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 approx. 8 hours more after the service indicator light comes on, until the automatic cut-out will be activated. Take the tool to a Hilti service center for planned routine maintenance when the service indicator light illuminates.

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.

Insert tools and accessories

Use only insert tools with TE-Y connection end **8**.

Hilti power 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 power tool with Hilti insert tools. A comprehensive program of insert tools and accessories is available for the TE-Y system **8**. The most important insert tools for hammer drilling and chiseling are shown on the inside of the toolbox. Details of the entire program can be found in the current Hilti product catalog.

Should you require insert tools not included in the standard program, 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 power 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 care and maintenance section.

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.

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 power 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 tool as far as possible without the need for special tools. Use absorbent paper to wipe lubricated parts clean and to collect the 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 casing	Plastic	Plastic
Inner casing	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

Trouble shooting

Symptom	Possible cause	Possible solution
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 if necessary
	Switch defective	Have it checked by an electrical specialist and replace if necessary
No hammering action	Tool is too cold	Allow tool to reach the minimum operating temperature See section "Preparation for use"
Tool doesn't produce full power	Wire gauge of extension cord is inadequate	Use an extension cord of adequate cross-sectional area. See section "Preparation for use"
	Power selector switch is set to position I	Move the power selector switch to position II 9
	Control switch is not pressed fully	Press the control switch as far as it will go
Drill bit doesn't rotate	Function selector switch is not locked in the drilling position ( )	Move the function selector switch (when the motor has stopped) to the drilling position ( ) 7
Drill bit cannot be released from the chuck	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
	Side handle is not fitted correctly	Release the side handle and fit it correctly so that the clamping band and side handle are positioned correctly in the locating groove 3

Hilti Corporation Headquarters

FL-9494 Schaan
Tel.: +423 / 234 21 11
Fax: +423 / 234 29 65
www.hilti.com

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