



201315

Operating instructions TE 5 / TE 5-DRS

Rotary Hammer Drill 3-Wire Grounded Construction

HILTI

Safety precautions for 3 wire grounded construction

WARNING:

When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following:

Read all instructions

- 1. Keep Work Area Clean.** Cluttered areas and benches invite injuries.
- 2. Consider Work Area Environment.** Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit. Do not use tool in presence of flammable liquids or gases.
- 3. Guard Against Electric Shock.** Prevent body contact with grounded surfaces. For example; pipes, radiators, ranges, refrigerator enclosures.
- 4. Keep Children Away.** Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
- 5. Store Idle Tools.** When not in use, tools should be stored in dry, and high or locked-up place – out of reach of children.
- 6. Don't Force Tool.** It will do the job better and safer at the rate for which it was intended.
- 7. Use Right Tool.** Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended – for example – don't use circular saw for cutting tree limbs or logs.
- 8. Dress Properly.** Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
- 9. Use Safety Glasses.** Also use face or dust mask if cutting operation is dusty.
- 10. Don't Abuse Cord.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
- 11. Secure Work.** Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
- 12. Don't Overreach / Maintain Control.** Keep proper footing and balance at all times.
- 13. Maintain Tools With Care.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.

14. Disconnect Tools. When not in use, before servicing and when changing accessories, such as blades, bits, cutters.

15. Remove Adjusting Keys and Wrenches. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.

16. Avoid Unintentional Starting. Don't carry tool with finger on switch. Be sure switch is off when plugging in.

16A. Extension Cords. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

Extension Cord Table

Volts	Total Length of Cord in Feet			
120 V	0–25	26– 50	51–100	101–150
240 V	0–50	51–100	101–200	201–300

Ampere Rating AWG

More Than	Not More Than				
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12	Not recommended	

17. Outdoor Use Extension Cords. When tool is used outdoors, use only extension cords intended for use outdoors and so marked.

18. Stay Alert. Watch what you are doing. Use common sense. Do not operate tool when you are tired.

19. Check Damaged Parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on and off.

20. Only use accessories and attachments which are given 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

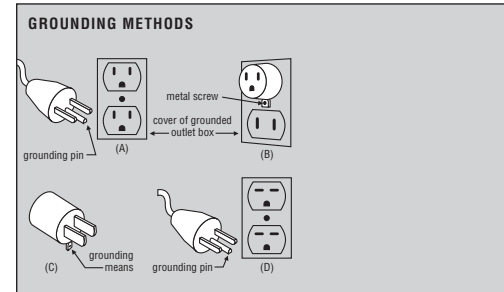
regulations. Repairs may only be carried out by an electrical specialist otherwise an accident hazard for the operator can exist.

22. Wear ear protectors when using for extended periods.

23. Always use any supplied side handle, and keep it tightly secured; use both hands during operation. Keep proper footing and balance and don't overreach. Firm control of the tool is necessary should the tool bind.

24. Hold Tool by Handle(s) Provided. Do not touch uninsulated parts of tool when drilling. Exposed metal surfaces may be made live if the tool drills into electrical wiring.

25. Grounding instructions. This tool should be grounded while in use to protect the operator from electric shock. The tool is equipped with a 3-conductor cord and 3-prong grounding type plug to fit the proper grounding type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal. If your unit is for use on less than 150 V, it has a plug that looks like that shown in sketch (A) in Figure «Grounding Methods». If it is for use on 150 to 250 V, it has a plug that looks like that shown in sketch (D). An adapter, see sketches (B) and (C), is available for connecting sketch (A) type plugs to 2-prong receptacles. The green-colored rigid ear, lug, or the like, extending from the adapter must be connected in a permanent ground, such as a properly grounded outlet box. No adapter is available for a plug as shown in sketch (D).



26. Extension Cords. Use only 3-wire extension cords that have 3-prong grounding-type plugs and 3-pole receptacles that accept the tool's plug. Replace or repair damaged cords.

Please read and take note of these precautions before you use the tool/machine and always keep this safety precautions with the tool.

SAVE THESE INSTRUCTIONS

Hilti TE 5 Rotary Hammer



Always wear ear protectors.



Always wear protective gloves.



Always wear safety glasses.



Protective earthing

This Product is Listed by **Underwriters Laboratories Inc.** and bears the Mark:



Technical data

Power input:	500 W
Voltage:	115 V
Current input:	4.6 A
Frequency:	50–60 Hz
Weight:	2.8 kg / 6.2 lbs
Speed under load:	0–800 r.p.m.
Hammering speed under load:	0–4000 blows per minute
Single impact energy:	2.0 joules / 1.5 ft-lb
Drill bit diameter range:	5–20 mm (³ / ₁₆ "– ³ / ₄ " dia. in concrete
Recommended range:	5–10 mm (³ / ₁₆ "– ³ / ₈ " dia.
Drilling performance in B35 concrete:	8/150 mm (⁵ / ₁₆ "/6") dia.= 24 cm ³ /min. (1.46 in. ³) = 480 mm/min.

Drill bits in standard programme:

TE-C drill bits	4–16 mm (⁵ / ₃₂ "– ⁵ / ₈ " dia.
TE-C-S drill bits	18 mm / 20 mm (⁵ / ₈ " / ¹ / ₂ " dia.
TE-C-HB forming bit	10–24 mm (³ / ₈ "–1") dia.

Chuck	TE-C
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Carbon brushes with automatic cut-out

Protection class I (grounded tool)

Slip-type clutch as protection against motor overloading

Sealed against dust, permanent lubrication (maintenance free)

Variable speed control switch with infinite regulation

Reversing switch

Adjustable side handle with depth gauge

Automatic hammering cut-out when idling

Setting lever for hammer drilling/rotary drilling only

Connections for dust removal system

Right of technical modifications reserved.

Accessories and kit for Hilti TE5 rotary hammer:

Hilti lubricant spray, TE5-DRS dust removal system, key-type chuck, quick-release chuck case or cardboard box

Before starting to work, please read the enclosed safety precautions.

Please refer to the respective regulations of your trade association and the enclosed safety precautions!

Before beginning work:

1. Check that the electric supply corresponds to the information on the rating plate.
2. The TE5 is 3 wire grounded.
3. Do not apply excessive pressure to the TE 5 – hammering/impact power will not be increased. Simply position and guide the TE5.
4. Check that the direction of rotation is set correctly.

Before starting to work, please read the enclosed safety precautions.

Cleaning the drill bit

The chuck is not included in the machine's lubrication system. The drill bit connection end should therefore be cleaned at regular intervals and **sprayed sparingly** with Hilti lubricant spray, which is available as an accessory.

Start-up time at low temperatures

Start-up time can be reduced by jolting the drill bit against the work surface when switching on.

Operation:

Fig.1: Inserting the drill bit

Turn chuck towards (☐) symbol and insert the drill bit, turning it until the drive grooves engage and it can be pushed in fully. Lock the chuck by turning it towards the (●) symbol.

Fig.2: Hammer drilling

For hammer drilling in concrete masonry and natural stone, adjust the setting lever to the hammer drilling position (⚡ symbol).

Drilling without hammering action

Adjust the setting lever to the rotary drilling position (☐ symbol). When set to this position, only the rotary action is transmitted to the drill bit.

Fig. 3: Reversing switch

The desired direction of rotation for screwdriving can be selected with the reversing switch. For counter-clockwise rotation, the setting lever must be in the rotary drilling position (no hammering action). Counter-clockwise rotation should only be used for short periods.

Fig. 4: Changing the chuck

Pull the sleeve forwards to remove the complete chuck. To replace the chuck, pull the sleeve forwards and hold it in that position. Slide the chuck onto the guide as far as it will go and release the sleeve. Turn the chuck until the balls engage and the sleeve snaps back into position.

Fig. 5: Side handle / depth gauge

The side handle can be turned through 360° and locked in the desired position. Release the side handle by turning it counter-clockwise, set the desired drilling depth with the depth gauge and then lock the side handle by turning it clockwise.

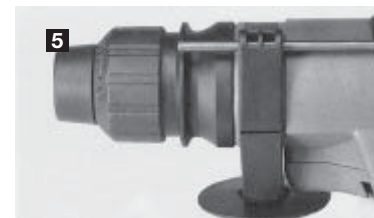
Note: When the key-type chuck is fitted, the hammering action cuts out automatically (rotary drilling only). Inserting the cylindrical connection end: Open the key-type chuck to the required diameter, insert the drill bit as far as it will go and tighten using the key. The key-type chuck can also be used for counter-clockwise rotation.

Dust removal:

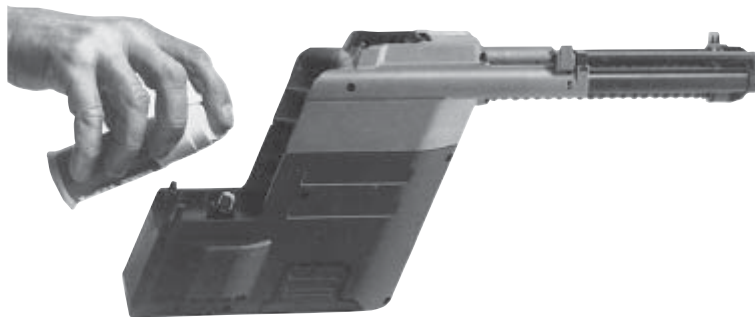
All TE5 rotary hammer drills can be equipped with a dust removal system (see following pages), which can be attached to the TE5 quickly and simply.

Servicing:

Electric tools must conform to the applicable safety regulations. Servicing must only be carried out by a trained electrical specialist. The use of original Hilti spare parts ensures optimal safety.



Hilti TE 5-DRS Dust Removal System



Technical data

Power input:	max.60 W
Suction capacity:	500 l/min.
Weight:	0.8 kg /1.8 lbs
Maximum stroke:	112 mm / 4 1/4"
Suitable TE-C drill bits (lt/cm):	5–17.5 mm (3/16"–9/16") dia. / 10–18 cm (4"–6")
Drill bit working length:	50–100 mm (2"–4")
Contact pressure:	15–25 N (3.4–5.6 lbs)
Dust container capacity:	130 holes – 6 mm (1/4") dia. / 28 mm (1 1/16") deep 75 holes – 8 mm (5/16") dia. / 30 mm (1 1/8") deep 20 holes – 12 mm (1/2") dia. / 50 mm (2") deep
Dust container regeneration cycles:	up to 100 cycles
Extraction heads	5–12.0 mm (3/16"–1/2") dia. (D12) 12–17.5 mm (1/2"–9/16") dia. (D17.5)
Built-in extraction fan	
Dust container incorporating folded filter	
Depth gauge	
Length adjustment	
Plug-in drive coupling for extraction fan	

Kit supplied with TE5-DRS: Case or cardboard box, cover for dust container, D12 extraction head, D17.5 extraction head

TE 5-DRS accessories: Dust container with cover and folded filter

Right of technical modifications reserved

Assembly/disassembly

Fig.1+2: Drive coupling principle

The built-in extraction fan in the dust removal module is driven by the TE5 motor via a plug-in coupling. The teeth on the rotor shaft (1) grip the toothed plug-in sleeve (2) on the dust removal module.

Fig.3/4: Assembling the dust removal module

Fig.3: Open the cover (3) on the underside of the housing endcap and engage it in the open position.

Fig.4: Press in the lockbutton (5) on the dust removal module and slide the module into the guides on the housing and housing endcap. The drive coupling engages automatically. Release the lockbutton. The lockbutton must return to its original position (not pressed in). Only then is the dust removal module securely attached to the TE5.

Fig.5: Disassembling the dust removal module

Press in the lockbutton (5) on the dust removal module and pull the module downwards. Close the cover (3) on the underside of the motor endcap (protects from dirt and dust).

Operation

Fig.6: Adjustment of drilling depth (depth gauge)

Open the locking lever (6) and move stop (7) to the desired drilling depth. Close the locking lever (6). Drill test holes if an exact drilling depth is

required for anchors. Clean out the anchor holes according to the instructions for the anchors used.

Fig. 7: Length adjustment (stroke)

Length adjustment is normally set for TE-C drill bits $l_t = 15 \text{ cm}$ (6"), which corresponds to a drill bit working length of 100 mm (4"). For shorter drill bits, open the locking lever (6) and press the extraction head against the wall, sliding it back until it is flush with the point of the drill bit. Close the locking lever (6). Stop for length adjustment can be removed (A). To do so, pull out the stop at the connection end. Grip the stop bar at the front, at the suction head end, and pull it out upwards.

Fig. 8: Changing the extraction head

The small extraction head has been optimized for use with 5–12 mm ($\frac{9}{16}$ "– $\frac{1}{2}$ " dia. TE-C drill bits. The larger extraction head must be used for 12–17.5 mm ($\frac{1}{2}$ "– $\frac{9}{16}$ " dia. drill bits. To remove the extraction head, press in the rib (9) on the back of the head and pull the head upwards. The extraction head is replaced by inserting it from above and pressing down until it engages. Small diameter drill bits may also be used with the larger extraction head but optimum dust removal performance will not be achieved.

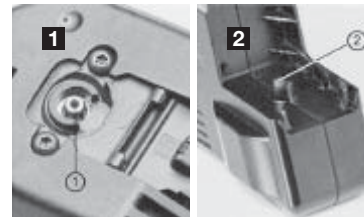
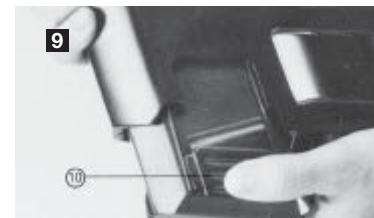
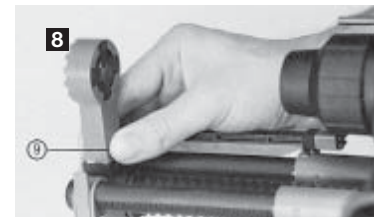
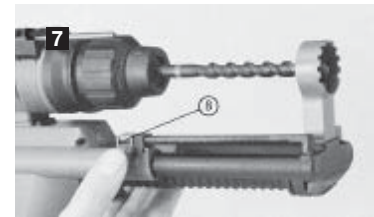
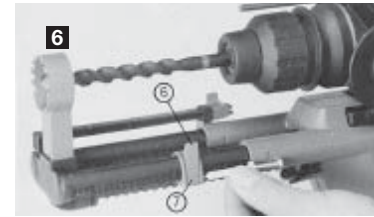
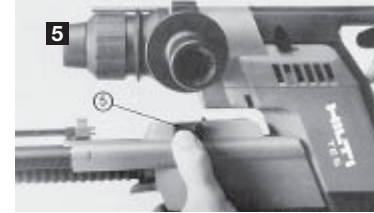
Fig. 9: Emptying the dust container

Before removing the dust container, hold the TE5 horizontal and switch it on briefly. All remaining dust which has accumulated in the dust module is then drawn into the dust container. Press in both buttons (10) on each side of the dust container and pull it down and

away from the machine. Tap the container lightly when emptying. Replace the container by sliding it in from below until a definite click is heard. When using a new dust container, first remove the cover and then slide it into position as described above.

Cleaning

The dust removal system should be cleaned only by using compressed air and a cleaning cloth (no water, oil, grease or cleaning agents).



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.

Under no circumstances will Hilti be 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. Hilti specifically excludes the implied warranties of merchantability and fitness for a particular purpose.

For repair or replacement, send the 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.