

DD 100

Operating Instructions



Safety precautions for grounded tools

Read all instructions

Warning!

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

- Keep Work Area Clean. Cluttered areas and benches invite injuries.
- 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.
- 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.
- Use Safety Glasses. Also use face or dust mask if cutting operation is dusty.
- 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 Óverreach / 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

Ampere Rating	AWG			
240 V	0–50	51-100	101–200	201–300
120 V	0-25	26- 50	51-100	101-150
VOILO	rotal Longs	0. 00.0 00.		

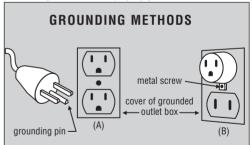
Total Length of Cord in Feet

Ampere	Kating	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 recor	nmended	

- 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 speci-

fied in the operating instructions can result in personal injury to

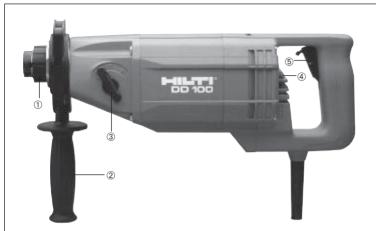
- 21. Only have repairs carried out by recognized electrical specialists. This electric tool/machine complies with respective safety regulations. Repairs may only be carried out by an electrical specialist otherwise an accident hazard for the operator can exist.
- 22. Wear ear protectors when using for extended periods.
- 23. Always use any supplied side handle, and keep it tightly secured; use both hands during operation. 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». An adapter, see sketch (B), 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.



- **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.
- 27. Replacement parts. When servicing use only identical replacement parts.

Save these instructions.

DD 100 Motor Technical Data



- ① Quick-change coupling for wet/dry chuck change
- ② Adjustable side handle
- 3 3 speeds
- Overload indicator
- Switch with infinite speed adjustment

Caution:

Switch should be fully depressed when D 100 is in continuous operation!

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





Voltages:	115 V
Power input:	1725 W
Current input:	15 A
Frequency:	50/60 Hz
No-load speed:	1st speed: 1200 r.p.m. 2nd speed: 2400 r.p.m. 3rd speed: 3900 r.p.m. (operate the speed-change switch only when motor has stopped)
Coring bit diameter range	Wet ¹ / ₂ "—3¹/ ₂ " Dry 1"–5"
Weight:	13,6 lbs.
Dimensions (Unit without head):	17"×4¹/₂"×6"
Chuck for core bits :	Hilti quick-change DCI Jacobs style key chuck
Denth gauge	

Depth gauge

Electronic speed regulator for constant no-load speed (nominal speed)

Overload current regulator and integrated starting current regulator

Thermal/mechanical motor protection

Electric protection class1 (electric supply with earth/ground connection necessary)

Radio and television interference suppression in accordance with EN 55014 (CISPR PUBL 14)

DD100 Motor includes in line ground fault interrupter.

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

Before beginning work, please read and understand the enclosed safety precautions!



protectors.



Always wear protective gloves.



The DD 100 is equipped with electronic and thermal overload protection devices.

Electronic

If the tool is overloaded due to excessive pressure being applied, the current is reduced so that the core bit only rotates slowly. After releasing pressure on the core bit, full current is again supplied to the motor and the coring speed returns to normal.

Thermal

The motor is protected additionally against continuous overloading by a temperature sensor which automatically reduces current input. Once activated the DD 100 can be made to operate at normal speed by pressing the switch after the temperature of the motor windings has dropped sufficiently. Cooling of the motor windings can be assisted by allowing the tool to run without load. The motor speed necessary for effective cooling can be reached more quickly by depressing the switch several times.

Overload Indicator



If the overload indicator lights up, it is an indication that you are approaching the limit of thermal overload. It is recommended that the DD 100 be operated in such a way that the overload indicator lamp does not light up (if the indicator remains on, the thermal motor protection will be activated). After the tool has been allowed to cool, work can continue normally (cooling at no-load speed approx. 20 seconds).

DD 100-B (dry)

Technical Data

Approx. 13.6 lbs.	
Approx. 17"×41/2"×6"	
1"-5"	
Key type chuck	
	Approx. 17"×4'/ ₂ "×6" 1"–5"

Before beginning work:

Please observe the enclosed safety precautions!

Additional equipment DD 100-B:

- -DD100 Basic unit (nameplate)
- -DD100 KO Key-type chuck
- -Cardboard box

Grounding Fault Circuit Interruptor (GFCI)

The DD 100 comes equipped with a GF-CI included in the power cord. The GF-CI must be tested according to the following instructions.

1. Plug the GFCI into a 115 VAC grounded receptacle.

- 2. Press «Test» button. «Fault Light» should come on.
- 3. Press «Reset»button. «Fault Light» should go off.
- 4. Do not use the DD 100 if the GFCI fails this test. Return to Hilti for servicing.

Re-equipping



To remove the chuck, first turn the locking ring (1) until it clicks into place. When fitting the chuck, the drive pin must be inserted into the grooves.

The chuck is secured by turning the locking ring as far as it will go.

Key-type chuck



Open the chuck as far as is necessary, and insert an insert tool with cylindrical, 3-flat or hexagonal shank (up to 'le''). After pushing in the insert tool as far as it will go, tighten the chuck using the key provided. Remove the key.



Recommended speeds for maximum dry coring performance

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Speed Selection	R. P. M.	Dry dia. in mm
1	1200	21/4"-5"
2	2400	11/2"-21/2"
3	3900	1"-13/4"

To avoid damage to the system and to help ensure trouble-free operation, the following parts must be cleaned and oiled or greased daily.

- Chuck
- Extraction head
- Thread on side handle

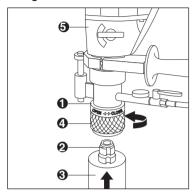
Keep the ventilation slots on the motor housing and side handle clean.

Ensure that the extraction head interfaces are kept clean. Lubricate with Hilti spray lube.

In case of technical problems, please contact the Hilti customer service.

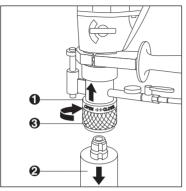
Repairs to the DD 100 should be carried out by a authorized service center.

Fitting a core bit



- 1. Chuck
- 2. Connection end
- 3. Core bit
- 4. Locking sleeve
- 5. Motor unit

Removing a core bit



- 1. Chuck
- 2. Core bit
- 3. Locking sleeve

Hold the core bit before disengaging the locking sleeve.

When the core bit is released, ensure that the core does not accidentally fall out of the bit.

When coring overhead, close the water supply valve and drain the core bit via the water supply hose before releasing it from the chuck.



Technical Data

icominati Bata	
Weight (basic unit):	Approx. 13,6 lbs.
Dimensions:	Approx. 17"×41/2"×6"
Coring bit size range:	1/2"-31/2"
Chuck for core bits:	Hilti quick-change DD-BI

Before beginning work: Please observe the enclosed safety precautions!

Additional equipment DD 100-B:

- DD 100 Basic unit (nameplate)
- DD 100- WS Water swivel
- DD 100-WC Water collector
- DD100-WCH Water collector holder
- DD 100-CR Centering ring
- Cardboard box

Speed-change switch

DD 100-WS - Water Swivel



The water swivel is connected to the tool with a Gardena coupling. Insert water swivel into tool and turn locking ring to secure water swivel. Push chuck rotation—prevention pin into the opening provided. To remove water swivel, twist collar to release and then pull out bit. Line up slots on core bit with slots on water swivel and insert. Press until core bit locks into place. To remove core bit, pull locking ring towards tool and remove core. Pull core bit out. The water supply valve can be regulated by handle on water swivel.



Recommended speeds for maximum wet coring performance

Speed selection	R. P. M.	Bit dia. range
1	1200	11/4"-31/2"
2	2400	3/4"-11/4"
3	3900	¹/₂″ -1 ″

Important: Insufficient pressure can lead to polishing of the segments and a reduction of coring performance.

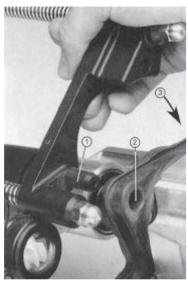
Water supply	Water connection and water extraction
Power supply	Electric supply as per rating plate Safety device according to national regulations for the use of hand-held electric tools with water supply
Speed selection	Select correct speed
Core bit	Use PCI core bits

Important: DD-BI core bits (wet drilling) must be used for drilling anchor holes to obtain proper hole using.

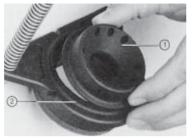
Printed: 07.07.2013 | Doc-Nr. PUB / 5069506 / 000 / 00

Water collector

Accessories



Insert the guide pin (①) on the water collector holder into the boss (②) in the side handle collar. Press the frame of the water collector holder into guide on the handle collar (③).



Insert the centering ring (\mathbb{O}) for the appropriate core bit diameter into the ring holder (\mathbb{O}) .



Insert the water collector (③) and press it down firmly into the holder. Connect the water extraction hose.



Press the core bit through the water collector onto the surface to be drilled. Switch on the DD 100 by pressing the main switch.



The water supply valve can be regulated using the index finger.

Drilling rig



A coring rig for semi-stationary use with core bit diameters up to $3^1/2^{\prime\prime}$.

If the sealing ring supplied with the diamond core bit begins to leak, it must be replaced. Re-ordering information: The diameter range is printed on the sealing

Manufacturer's warranty – tools

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, 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 over the entire lifespan of the tool. 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 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.

Garantie constructeur des appareils

Hilti garantit l'appareil contre tout vice de matières et de fabrication. Cette garantie s'applique à condition que l'appareil soit utilisé et manipulé, nettoyé et entretenu correctement, en conformité avec le mode d'emploi Hilti, et que l'intégrité technique soit préservée, c'est-à-dire sous réserve de l'utilisation exclusive de consommables, accessoires et pièces de rechange d'origine Hilti.

Cette garantie se limite strictement à la réparation gratuite ou au remplacement gracieux des pièces défectueuses pendant toute la durée de vie de l'appareil. Elle ne couvre pas les pièces soumises à une usure normale.

Toutes autres revendications sont exclues pour autant que des dispositions légales nationales impératives ne s'y opposent pas. En particulier, Hilti ne saurait être tenu pour responsable de toutes détériorations, pertes ou dépenses directes, indirectes, accidentelles ou consécutives, en rapport avec l'utilisation ou dues à une incapacité à utiliser l'appareil dans quelque but que ce soit. Hilti exclut en particulier les garanties implicites concernant l'utilisation et l'aptitude dans un but bien précis.

Pour toute réparation ou tout échange, renvoyer l'appareil ou les pièces concernées au réseau de vente Hilti compétent, sans délai, dès constatation du défaut.

La présente garantie couvre toutes les obligations d'Hilti et annule et remplace toutes les déclarations antérieures ou actuelles, de même que tous accords oraux ou écrits concernant des garanties.

Garantía del fabricante de las herramientas

Hilti garantiza la herramienta suministrada contra todo fallo de material y de fabricación. Esta garantía se otorga a condición de que la herramienta sea utilizada, manejada, limpiada y revisada en conformidad con el manual de instrucciones de Hilti, y de que el sistema técnico sea salvaguardado, es decir, que se utilicen en la herramienta exclusivamente consumibles, accesorios y piezas de recambio originales de Hilti.

Esta garantía abarca la reparación gratuita o la substitución sin cargo de las piezas defectuosas durante toda la vida útil de la herramienta. La garantía no cubre las piezas sometidas a un desgaste normal. Hilti será quien defina cuál es el periodo de vida útil de la herramienta, fijando este plazo siempre por encima de lo que marque la ley vigente

Quedan excluidas otras condiciones que no sean las expuestas, siempre que esta condición no sea contraria a las prescripciones nacionales vigentes. Hilti no acepta la responsabilidad especialmente en relación con deterioros, pérdidas o gastos directos, indirectos, accidentales o consecutivos, en relación con la utilización o a causa de la imposibilidad de utilización de la herramienta para cualquiera de sus finalidades. Quedan excluidas en particular todas las garantías tácitas relacionadas con la utilización y la idoneidad para una finalidad precisa.

Para toda reparación o recambio, les rogamos que envien la herramienta o las piezas en cuestión a la dirección de su organización de venta Hilti más cercana inmediatamente después de la constatación del defecto.

Estas son las únicas obligaciones de Hilti en materia de garantía, las cuales anulan toda declaración anterior o contemporánea, del mismo modo que todos los acuerdos orales o escritos en relación con las garantías.

Printed: 07.07.2013 | Doc-Nr: PUB / 5069506 / 000 / 00

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