

TE 504

Operating Instructions

HILTI

Safety precautions for double-insulated 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!

- 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 – d'ont 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

	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. Replacement Parts. When servicing use only identical replacement parts.

26. Polarized Plugs. To reduce the risk of electric shock, this equipment has 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 the proper outlet. Do not change the plug in any way.

Save these instructions.

Hilti TE 504 Breaker



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



Eye protection
must be worn



Safety gloves
must be worn



Ear protection
must be worn

During operation, the sound pressure level may exceed 85 dB (A). In this cases, it may be necessary to take suitable protection against the noise.

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

Technical data

Power input:	900 W
Voltage (Version):	100 V, 110 V, 115, 230 V, 240 V
Current input:	9.6 A, 8.7 A, 8.5 A, 4.2 A, 4.2 A
Frequency:	50-60 Hz
Machine weight:	4.9 kg / 10.8 lbs
Dimensions:	440×90×210 mm / 17.3"×3.5"×4.8"
Hammering speed under load:	1860 / 2630 blows/min.
Single impact energy:	2.6, 5.2 joule / 1.9, 3.8 ft-lb
Chiselling performance in medium-hard concrete:	300 cm ³ /min / 17 in. ³ /min with standard SM36 chisel 360 cm ³ /min / 22 in. ³ /min with light-duty LSM28 chisel
Chisels:	Pointed, narrow flat, wide flat, asphalt, hollow, narrow channel, wide channel chisels in standard versions and some of light-duty design
Chuck type:	TE-Y
Chisel can be fixed in 12 positions	
Permanent lubrication	
Adjustable side handle	
On-off switch of rocker design	
Electronic speed r.p.m. regulation for greater convenience	
Hammering power regulation for performance adjustment:	max. = 100%: min. = 50%
Protection class II (double insulation), CENELEC HD 400	
This electric tool is radio and TV interference suppressed in compliance with the EC directives 76/889/EC + 82/499/EC	
Radio and TV interference suppression as per EN 55 014 (230 V, 240 V only)	
Servicing indicator with warning lamp	

Right of technical modifications reserved

Remember before starting to work:

When working with the machine, it must be held with two hands. Always make sure that you have a safe stance/foot-hold.

1. The electric supply must be the same as given on the TE 504 nameplate.
2. The TE 504 is double insulated and need not, therefore, be grounded (earthed).
3. Don't apply excessive pressure. It will not increase the TE 504's performance. Simply position the chisel blade and guide it.

Please read the enclosed safety precautions

Fig. 1: Cleaning the chisels:

The chuck is not incorporated in the lubricating system of the TE 504. Chisel connection ends must, therefore, be cleaned regularly and lubricated sparingly with Hilti grease.

Fig. 6: Side handle

Shift the handle to the desired position and lock it. If the side handle is not used, wear gloves to hold the TE 504 (protection against heat).

Shorten the start-up time at low temperatures by jolting the chisel once against the work surface when switching on.

Operation

Fig. 2: Inserting chisel into chuck

Pull back the locking sleeve, insert the connection end, turn it until it clicks into place in the guide grooves and then release the locking sleeve.

Release the chisel by drawing back the locking sleeve (1) and pulling out the chisel.

Fig. 3: Positioning the chisel blade


Turn the switch to the symbol «0». Turn the chisel blade to the desired working position and lock it by switching to the chiseling symbol .

Fig. 5: Regulating the hammering power



Set the TE 504 at the symbol « 100%» or at symbol « 50%», position the blade firmly on the work surface and chisel.

Fig. 4: Switching on:

Set the chisel blade firmly against the work surface and operate the switch. The TE 504 runs continuously without maintaining pressure on the switch. Press switch again to switch off.

Servicing

Fig 5: The TE 504 is equipped with a servicing indicator. When the lamp lights up, have the TE 504 serviced by Hilti. If this is not done, consequential damage can occur.

Electric tools must comply with respective safety regulations. Servicing must therefore be carried out only by qualified electrical specialists/electricians. An optimum of safety will be ensured if original Hilti spare parts are used.

Chisel maintenance:

Pointed and flat chisels:

Slightly worn cutting edge: Grind the tip of the chisel carefully, without causing tempering colours to appear. This can be repeated several times if necessary.

Badly worn cutting edge: Reforge the chisel at a temperature of approx. 900°C to 1000°C (bright red-bright yellow red). It should then be hardened by heating to a temperature of 1000°C to 1100°C (bright yellow red-yellow). Allow the chisel to cool slowly (in the air – do not quench). Additional tempering is not necessary.

Shaped chisels – hollow/channel/wide-flat chisels

Slightly worn cutting edge: Regrind carefully as with pointed an flat chisel.

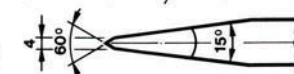
Badly worn cutting edge: Reforge the chisel at a temperature of 850°C to 1050°C (bright red-bright yellow red). Harden the chisel by heating it to 850°C to 900°C (bright red) before quenching it in oil. It should then be tempered at 200°C to 300°C.

Regrinding:

Pointed chisel



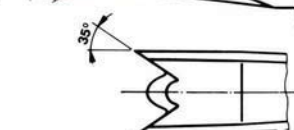
Narrow flat chisel



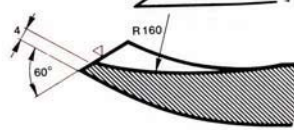
Wide flat chisel



Channel chisel



Hollow chisel



Double insulation

The Hilti TE 504 Breaker is double-insulated for extra operator protection. The tools is equipped with a two-wire cord and two-prong plug which can be used on standard 115 volts outlets. No grounding of the tool is necessary.

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.

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 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.

Garantie

Hilti garantit l'appareil livré contre tous vices de matière ou de fabrication. Cette garantie est octroyée à condition que l'appareil soit utilisé et manié correctement, nettoyé et révisé dans les règles, conformément au mode d'emploi Hilti, que toutes réclamations concernant la garantie devront être adressées dans les 12 mois à compter de la date de vente (de la date de la facture) et que le système technique soit maintenu, c.-à-d. sous réserve d'utilisation exclusive dans l'appareil de consommables, composants et de pièces de rechange d'origine Hilti.

La garantie se limite rigoureusement à la réparation gratuite ou au remplacement gracieux des pièces défectueuses. Elle ne couvre pas les pièces soumises à une usure normale.

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

Pour toute réparation ou tout échange, renvoyer l'appareil et/ou les pièces concernées à l'adresse de votre Organisation de Vente Hilti la plus proche, immédiatement après découverte du défaut.

Telles sont les seules obligations d'Hilti en matière de garantie, lesquelles annulent toutes déclarations antérieures ou contemporaines de même que tous accords oraux ou écrits concernant les garanties.

Garantía

Hilti garantiza el aparato suministrado contra todo vicio de material o de fabricación. Esta garantía se otorga a condición de que el aparato sea utilizado, manejado, limpiado y revisado correctamente en conformidad con el modo de empleo Hilti, de que todas las reclamaciones relacionadas con la garantía sean dirigidas en los 12 meses a contar desde la fecha de venta (de la fecha de facturación) y de que el sistema técnico sea mantenido, es decir a reserva de utilización exclusiva en el aparato de consumibles, componentes y piezas de recambio de origen Hilti.

La garantía se limita rigurosamente a la reparación o al reemplazamiento gratuito de las piezas defectuosas. Ella no cubre las piezas sometidas a un desgaste normal.

Hilti no acepta responsabilidad, en ninguna circunstancia, en relación con deterioros, pérdidas o gastos directos, indirectos, accidentales o consecutivos, en relación con – o a causa de – la utilización o de incapacidad de utilizar el aparato para alguna finalidad, cualquiera que sea la misma. Hilti excluye en particular todas las garantías implícitas relacionadas con la comercialización y la aptitud para una finalidad bien precisa.

Para toda reparación o recambio, les rogamos envíen el aparato y/o las piezas en cuestión a la dirección de su Organización de Venta Hilti más cercana, inmediatamente tras descubrimiento 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 todo acuerdo oral o por escrito en relación con las garantías.

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