

HILTI

PTA 20

Bedienungsanleitung

de

Operating instructions

en

Mode d'emploi

fr

Bruksanvisning

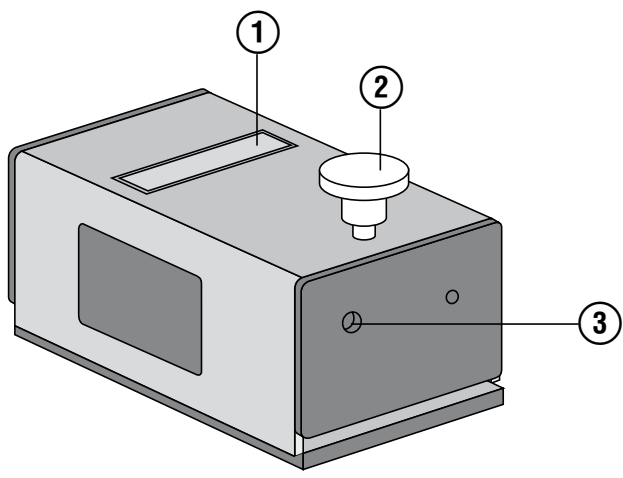
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取扱説明書

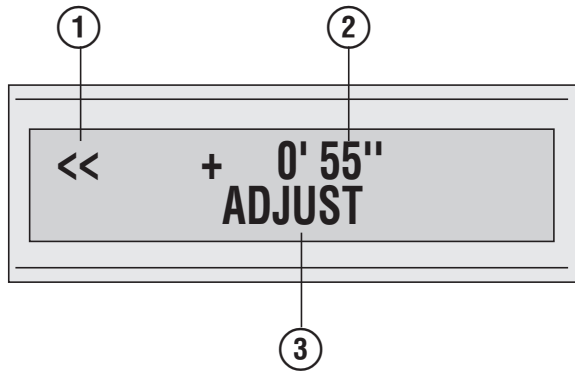
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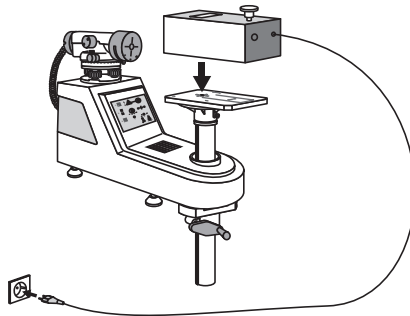
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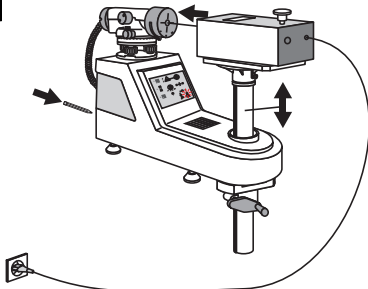
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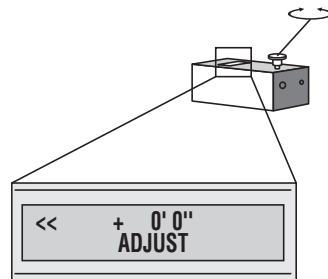
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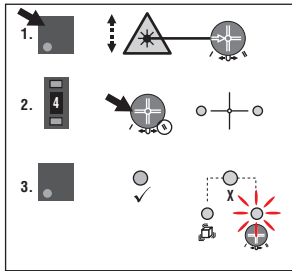
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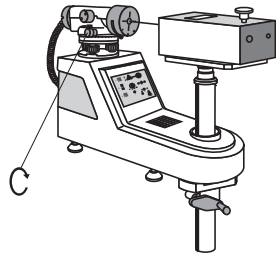
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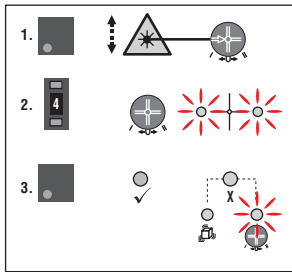
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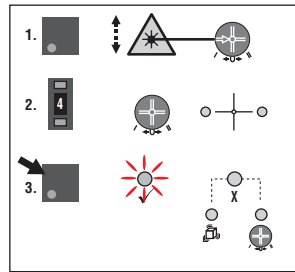
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8



9



ORIGINAL OPERATING INSTRUCTIONS

PTA 20 calibration tool

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.

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1 These numbers refer to the illustrations. You can find the illustrations at the beginning of the operating instructions.

In these operating instructions, the designation "the tool" always refers to the PTA 20 calibration tool.

Component parts **1**

- 1 Display
- 2 Fine adjustment screw
- 3 Mains plug

Operating unit **2**

- 1 Arrow indicators
- 2 Deviation of the laser beam in arc seconds
- 3 Command line

1 General information

1.1 Safety notices and their meaning

DANGER

Draws attention to imminent danger that will lead to serious bodily injury or fatality.

WARNING

Draws attention to a potentially dangerous situation that could lead to serious personal injury or fatality.

CAUTION

Draws attention to a potentially dangerous situation that could lead to slight personal injury or damage to the equipment or other property.

NOTE

Draws attention to an instruction or other useful information.

1.2 Explanation of the pictograms and other information

Warning signs



General warning

Symbols



Read the operating instructions before use.



Disposal of power tools or appliances and batteries together with municipal waste is not permissible.

On the tool



Do not stare into the beam.

Laser warning plates for the USA in accordance with CFR 21 § 1040 (FDA).

On the tool



Laser Class 2 in accordance with IEC/EN 60825-1:2007

Location of identification data on the tool

The type designation and serial number can be found on the type identification plate on the tool. Make a note of this data in your operating instructions and always refer to it when making an enquiry to your Hilti representative or service department.

Type: _____

Serial no.: _____

2 Description

2.1 Use of the product as directed

The PTA 20 is a calibration tool that can be used to calibrate the PT 10 quick check device quickly and easily.

2.2 Features

This calibration tool allows the user to carry out the calibration quickly and easily. The PTA 20 is robustly built and features easy, self-explanatory operation.

2.3 PTA 20 calibration tool in Hilti toolbox - items supplied

- 1 PTA 20 calibration tool
- 1 Mains adapter
- 1 Operating instructions
- 1 Manufacturer's certificate

3 Accessories

Designation	Description
Mains adapter	PTAW 80

4 Technical data

Right of technical changes reserved.

Laser class	Visible, 625...645 nm: +25°C <1mW Class 2 in accordance with IEC 60825- 1:2007; EN 60825-1:2007 and Class II in accordance with CFR 21 § 1040 (FDA)
Operating status indicators	LCD display
Power supply	Plug-type mains adapter, DC voltage 6V: 0.2A
Operating temperature range	+10...+35°C
Storage temperature	+0...+50°C
Protection against dust and water spray	IP 54 (protection against dust and water spray)
Tripod thread	BSW: 5/8"
Weight, approx.	1 kg
Dimensions	160 mm X 90 mm X 70 mm

5 Safety instructions

WARNING! Read all safety instructions and other instructions. Failure to observe the safety precautions and instructions may result in electric shock, fire and/or serious injury. **Keep all safety precautions and instructions for future reference.**

5.1 General safety rules

- a) **Check the condition of the tool before use. If the tool is found to be damaged, have it repaired at a Hilti service center.**
- b) **The tool must be checked at a Hilti service center after it has been dropped or subjected to other mechanical stresses.**
- c) **The tool is intended exclusively for indoor use.**
- d) The manufacturer's certificate (valid for 6 months) confirms that the PTA 20 calibration tool complies with specifications when new. After this period has expired, the tool must be calibrated at a Hilti service center before further use.
- e) **The tool and its ancillary equipment may present hazards when used incorrectly by untrained personnel or when used not as directed.**
- f) **Do not open the casing of the tool.**
- g) **To avoid the risk of injury, use only genuine Hilti accessories and additional equipment.**
- h) **Modification of the tool is not permissible.**
- i) **Observe the information printed in the operating instructions concerning operation, care and maintenance.**
- j) **Do not render safety devices ineffective and do not remove information and warning notices.**
- k) **Keep laser tools out of reach of children.**
- l) **Have the tool repaired or calibrated only at a Hilti service center.**

- m) **Take the influences of the surrounding area into account. Do not use the tool where there is a risk of fire or explosion.**

5.2 Laser classification

The tool conforms to Laser Class 2 based on the IEC60825-1 / EN60825-01:2007 standard and Class II based on CFR 21 § 1040 (FDA). The eyelid closure reflex protects the eyes when a person looks into the beam unintentionally for a brief moment. This eyelid closure reflex, however, may be negatively affected by medicines, alcohol or drugs. This tool may be used without need for further protective measures. Nevertheless, as with the sun, one should not look directly into sources of bright light. Do not direct the laser beam toward persons.

5.3 Proper organization of the work area

- a) **Secure the area in which you are working and take care to avoid directing the beam toward other persons or toward yourself when setting up the tool.**
- b) Take care to ensure that the tool is set up correctly on the PTA 70 tripod adapter.
- c) **Use the tool only within its specified limits.**

5.4 Electromagnetic compatibility

Although the tool complies with the strict requirements of the applicable directives, Hilti cannot entirely rule out the possibility of the tool being subject to interference caused by powerful electromagnetic radiation, leading to incorrect operation. Check the accuracy of the tool by taking measurements by other means when working under such conditions or if you are unsure. Likewise, Hilti cannot rule out the possibility of interference with other devices (e.g. aircraft navigation equipment).

6 Before use



6.1 Setting up the tool

1. Connect the mains adapter to the PTA 20 calibration tool.

2. Plug the supply cord into the power outlet.

7 Operation

7.1 Calibrating the PT10 quick check device 3 4 5 6 7 8 9

NOTE

Calibration should be carried out at regular intervals. The PTA 20 calibration tool is available from Hilti for calibration of the PT 10 quick check device. The calibration tool should be sent in advance to a Hilti service center for checking and calibration.

1. Mount the calibration tool on the tripod adapter of the PT 10 (3).
2. Plug the calibration tool supply cord into the power outlet.
3. A message appears in the display and the present deviation is shown. The calibration sequence number is also shown. The calibration sequence number increases by one after each successful calibration of a PT 10 quick check device.
4. Check the bubble level on the optical level again and correct the level if necessary by turning the optical level adjusting screws.
5. Switch on the PT 10 quick check device.
6. Use the tip of a pointed object such as a ball-point pen to press the calibration switch (4) on the panel at the rear of the device.
The small red LED on the right lights indicating calibration mode (6).
7. Select filter setting II. The accuracy class does not have to be selected.
8. Turn the crank to adjust the height of the PTA 20 calibration tool (4) so that the laser beam emitted is aimed at the center of the crosshairs on the PT 10 quick check device.
The position of the laser beam on the camera lens is indicated by the LEDs.

9. Turn the fine adjustment screw (5) on the PTA 20 until the display shows "zero".

NOTE The direction in which the fine adjustment screw should be turned is indicated by the two arrows in the display. The arrows at the beginning of the line indicate the direction in which the fine adjustment screw should be turned and the subsequent digits indicate the present deviation / inclination in arc seconds and arc minutes.

10. Both yellow LEDs light up as soon as the laser beam strikes the camera. At the same time, the "Start measuring" button becomes active and the device is ready to begin measuring.
11. If neither of the yellow LEDs (7,8) light up or only one LED lights, turn the fine adjustment screw on the optical level until the laser beam is found.
12. Press the "Start measuring" button (9). The measuring operation is indicated by the yellow LEDs blinking and continues for a maximum of 50 seconds.

NOTE Do not touch or move the PTA 20 calibration tool or the PT 10 quick check device while measuring is in progress. An error message will be displayed in the event of vibration.

The green LED lights after successful calibration and the PT 10 returns to normal operating mode. The small red LED on the right goes out.

7.2 Calibration

NOTE

Monitoring of measuring equipment for users certified in accordance with ISO 900X: The measuring equipment monitoring procedure for the PTA 20 calibration tool, as required within the scope of ISO 900X, cannot be carried out by the owner. The PTA 20 must be returned to a Hilti service center for calibration and certification.

8 Care and maintenance

8.1 Cleaning and drying

1. Blow dust off the lenses.
2. Do not touch the glass or the filter with the fingers.
3. Use only a clean, soft cloth for cleaning. If necessary, moisten the cloth slightly with pure alcohol or a little water.
NOTE Do not use any other liquids as these may damage the plastic components.
4. The temperature limits for storage of your equipment must be observed, especially in winter / summer.

8.2 Storage

Remove the tool from its case if it has become wet. The tool, its carrying case and accessories should be cleaned and dried (at maximum 40°C / 104°F). Repack the equipment only once it is completely dry.

8.3 Transport

Use the Hilti toolbox or packaging of equivalent quality for transporting or shipping your equipment.

9 Troubleshooting

Fault	Possible cause	Remedy
The tool can't be switched on.	The supply cords are not (or not fully) connected.	Check the supply cord and ensure that all cords are connected correctly.
The display remains blank.	The tool is not connected to the electric supply.	Check the supply cord and ensure that all cords are connected correctly.
No laser beam.	The laser module is faulty.	Return the PTA 20 to a Hilti service center.

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10 Disposal

WARNING

Improper disposal of the equipment may have serious consequences:

The burning of plastic components generates toxic fumes which may present a health hazard.

Batteries may explode if damaged or exposed to very high temperatures, causing poisoning, burns, acid burns or environmental pollution.

Careless disposal may permit unauthorized and improper use of the equipment. This may result in serious personal injury, injury to third parties and pollution of the environment.



Most of the materials from which Hilti tools and appliances 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 old tools and appliances for recycling. Ask Hilti customer service or your Hilti representative for further information.



For EC countries only

Do not dispose of electrical appliances together with household waste.

In observance of the European Directive on waste electrical and electronic equipment and its implementation in accordance with national law, electrical appliances and batteries that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

11 Manufacturer's warranty - tools

Please contact your local Hilti representative if you have questions about the warranty conditions.

12 FCC statement (applicable in US) / IC statement (applicable in Canada)

This device complies with part 15 of the FCC rules and with CAN ICES-3 (A) / NMB-3 (A). Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE

Changes or modifications not expressly approved by Hilti may restrict the user's authorization to operate the equipment.

13 EC declaration of conformity (original)

Designation:	Calibration tool
Type:	PTA 20
Year of design:	2006

We declare, on our sole responsibility, that this product complies with the following directives and standards: 2011/65/EU, until 19th April 2016: 2004/108/EC, as of 20th April 2016: 2014/30/EU, until 19th April 2016: 2006/95/EC, as of 20th April 2016: 2014/35/EU, EN ISO 12100.

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