WHEELTEST II

User's manual

Translated from french

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1 General information

1.1 Warranty

VOH Ltd guarantees this product against faulty manufacture or material in normal conditions of use and service, for one year from the commissioning at the client's place of business. If at any time during the length of the warranty, the product shall be deemed faulty or break down, VOH Ltd. shall repair or replace it (choice to be made by VOH Ltd.).
If the product is defective, please call the customer service of VOH on +41(32) 945 17 45.
Said warranty shall not apply if VOH Ltd proves that the fault or failure arises from damages which occurred while the product was in the possession of a buyer.
VOH Ltd.'s responsibility is limited to the repair or replacement of the product under the conditions listed hereabove.
VOH LTD. SHALL NOT BE RESPONSIBLE FOR LOSS OR ANY DAMAGES WHATSOEVER, INCLUDING CONSECUTIVE OR ACCESSORY DAMAGES, ARISING DIRECTLY OR INDIRECTLY FROM AN EXPLICIT OR IMPLICIT VIOLATION OF THE WARRANTY, OR FROM ANY OTHER FAULT OF THIS PRODUCT. THIS WARRANTY IS THE ONLY EXPLICIT WARRANTY THAT VOH GRANTS ON THIS PRODUCT.
This warranty only covers the initial buyer and is not transferable.

Should you have questions concerning this warranty, please write to VOH Ltd.:

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1.2 Safety information

Warning

- Do not use the Wheeltest 2 if it is damaged. Before using the Wheeltest 2, inspect its casing and its electrical connections.
- The Wheeltest 2 must be used in the way specified by the manufacturer.
- Do not use the Wheeltest 2 plus near dust.
- The Wheeltest 2 must only be used by people who have been trained to do so.

Beware!!!

- Please read the information included in this manual before using this apparatus. Incorrect use may damage the system or cause measurement errors.
- Before connecting the machine for the first time, verify that the supply voltage of the power grid corresponds to that required by the machine.
- In case of prolonged non-use, disconnect the electrical supply cable.
- Do not dismantle the machine. Only the manufacturer is entitled to replace or repair a faulty component.
- Use this machine at a temperature between 10°C and 40°C (140 °F)
- Never place objects other than watch wheels in the device.

1.3 Transportation

If the apparatus is moved, take care not to cause any shocks that could damage its mechanisms. In case of transport over a long distance, it is preferable to use anti-shock packaging.

1.4 Storage

The Wheeltest 2 must be stored in a dry and dust-free place. The storage temperature must be between 10°C and 40°C. It is advisable to wrap up the machine to protect it from dust and humidity.

2 Parts of the machine

The Wheeltest 2 comprises a series of control knobs for the motor, two spindles to hold the wheel and a bow to drive it.

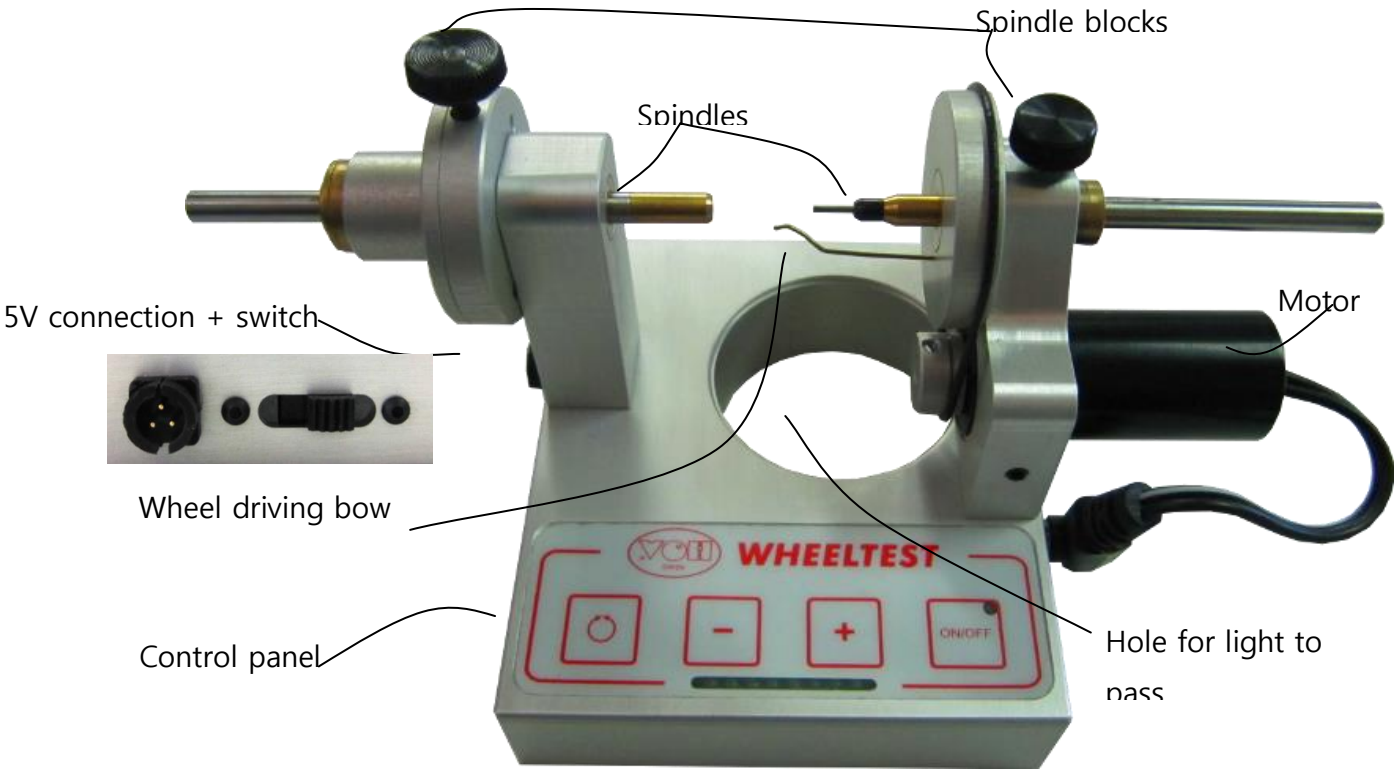

Figure 1: General view of the Wheeltest 2

Connections are on the left side: 5V power connection and main switch.

2.1 Principle of operation

A wheel is placed on the Wheeltest 2 and set to rotate by the driving bow that is itself driven by the motor.

3 Use

3.1 Start-up

The machine is started by the slide switch next to the power connection. When it is turned on, the motor will not turn, but the last parameters used (speed and direction of rotation) will be restored.

3.2 Use

3.2.1 Placing the component on the Wheeltest 2

The component to be measured must be placed in the Wheeltest 2 spindles and be slightly constrained between these two spindles. The following spindles are available:

- Threaded spindle for Azurea gauges
- Spindles for holding between points
- Spindles with jewels to hold wheels with axles

3.2.2 Placing the spindles:

- The chosen spindles must be placed through the two bores in the left and right supports, after having loosened the locking screws.
- The axial position is determined by the wheel to be measured, in order to best transmit the movement to the wheel by means of the driving finger.
- When the axial position of the spindles is correct, the locking screw in the right holder (motor side) must block the spindle.

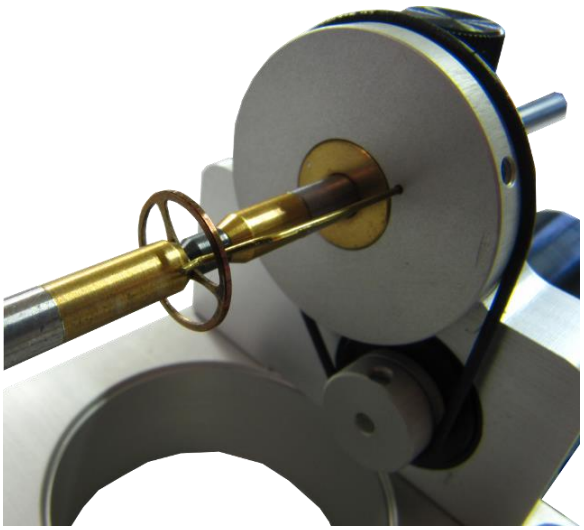

Figure 2: correct positioning of the wheel

- To ensure play-free movement, the wheel must be slightly constrained between the two spindles. This constraint is guaranteed by a spring acting on the left spindle. While holding the left spindle in place, the blocking device for the left spindle must be separated, along the axis of the spindle, and its screw tightened in this position.

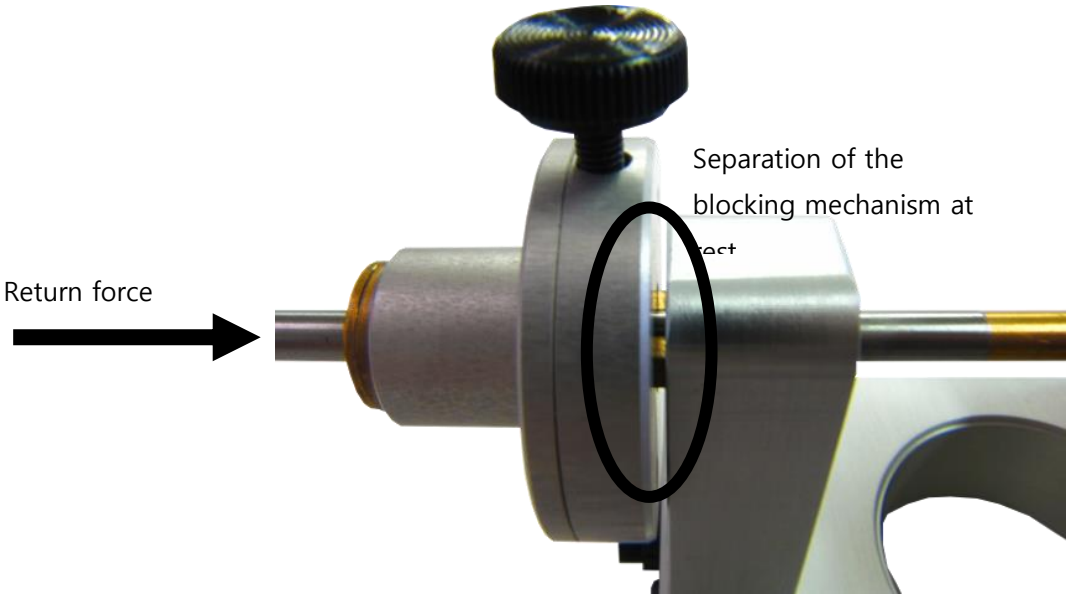

Figure 3: placing the wheel under axial constraint

3.2.3 Changing wheels:

- Move the left blocking mechanism along the spindle axis (without loosening the screw)
- Remove component
- Place a new component
- Gently release the spindle block

3.2.4 Drive adjustment

Rotation speed is adjusted by the « + » and « - » buttons on the control panel; a lighted bar comprising 8 LEDs allows the speed chosen to be visualised. Rotation is launched by pressing on the « on/ off » for 2 seconds; the LED will turn on at the top of the button. Brief pressure on the « on/ off » button allows step-by-step rotations. The wheel rotation direction is alternated by pressing the button at the far left.

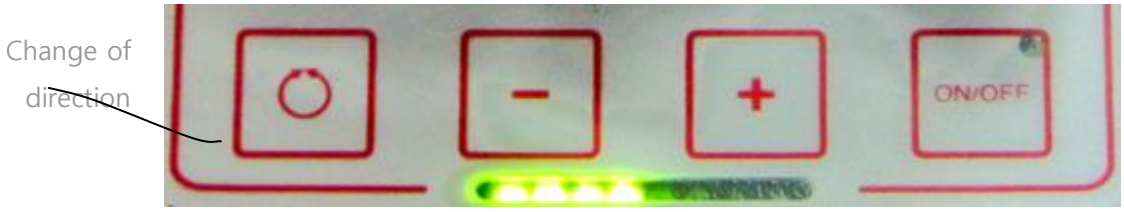

Figure 4: control panel

4 Resolution of common problems

Type of error	Cause	Resolution
No LED turns on when powered up	Speed was set at minimum during last use	Increase speed to confirm that the Wheeltest 2 is being supplied with power
The wheel is not driven	The driving belt is badly placed or damaged	Reposition or replace the belt
The wheel, held on an Azurea gauge, has an abnormal beat	The Azurea gauge is coming unscrewed from the spindle	Rescrew the gauge, change the direction of rotation.

5 Exclusion of responsibility/warranty

Damages caused by use, transportation or storage that do not comply with those described in this manual are not taken care of by the manufacturer. Modifications to the machine and opening the casing are forbidden and entail an exclusion of responsibility. The right to a warranty expires when these are demonstrated or if the faults noted cannot be original. Consumables (belts) are not subject to warranty.

6 Maintenance and care

No special care is necessary for the Wheeltest 2, if it is used in a laboratory, except classic cleaning with a dry cloth. The belt is a consumable to be replaced when the user deems necessary.

7 Technical data

Parameter	Value
Supply voltage	5 DC
Power	850 mW
Dimensions	Depth : 80 mm Width : 70 mm Height : 18 mm

8 Representation/distribution

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