Thincol Thincol7akvurmgws

Shore A Durometer Tester User Manual

Brand: Thincol | Model: Thincol7akvurmgws

1. Introduction

Welcome to the user manual for your Thincol Shore A Durometer Tester. This digital hardness meter is designed for accurate measurement of various soft materials such as rubber, gel, tires, plastics, leather, and wax. Please read this manual thoroughly before operating the device to ensure proper use and longevity.

2. Product Overview

2.1 Key Features

- Digital display for easy and accurate readings.
- Measures hardness of general rubber, synthetic rubber, soft rubber, multi-element grease, leather, and wax.
- Compact and pocket-sized for portability.
- Power switch allows unit change and reset at any position.
- High accuracy with a scale value of 0-100 degrees.

2.2 Components

The Shore A Durometer Tester consists of a main body with an LCD display, control buttons, and an indenter for measurement.

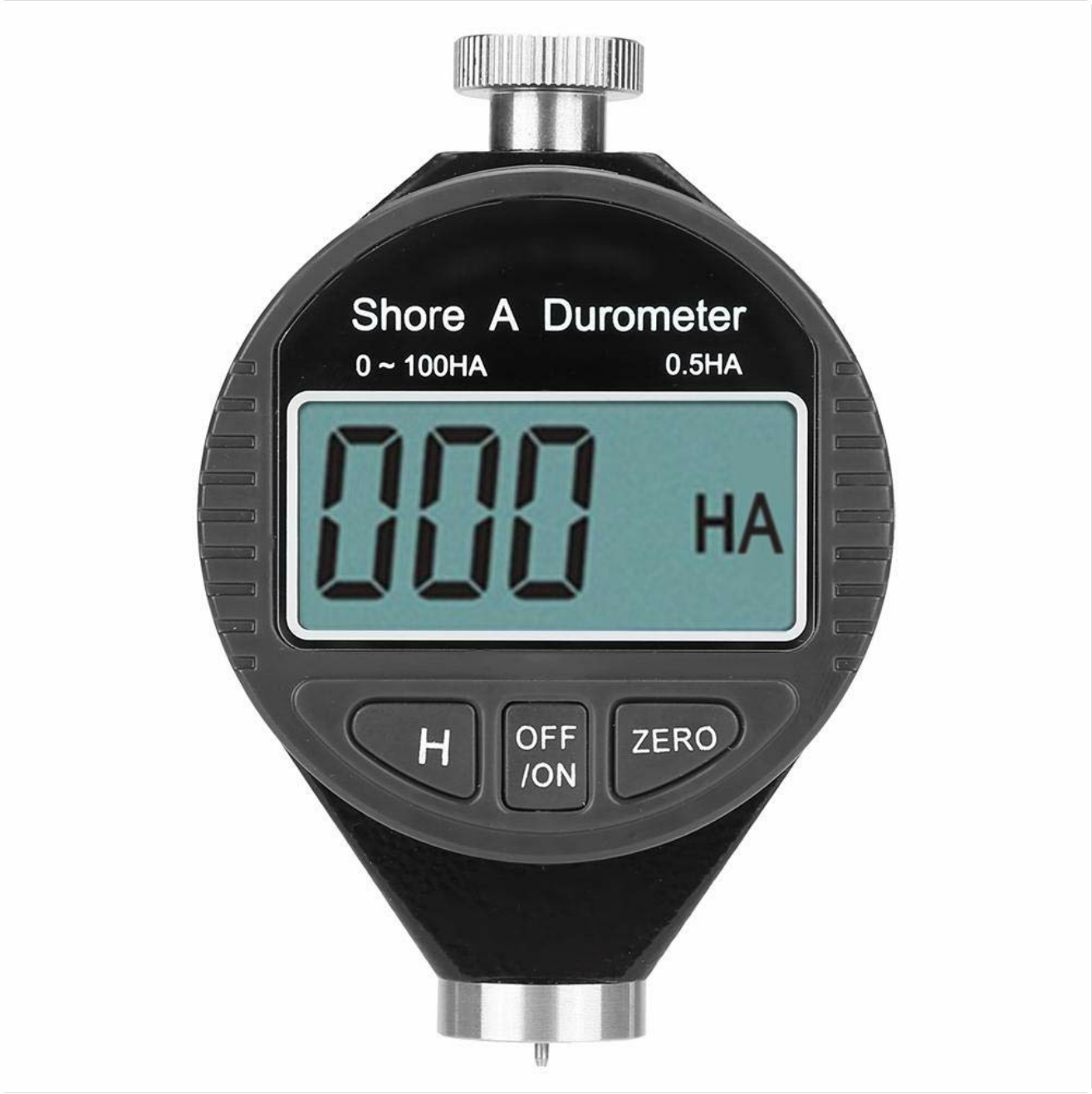

Figure 2.1: Front view of the Shore A Durometer Tester showing the LCD display, 'H' button, 'OFF/ON' button, and 'ZERO' button.

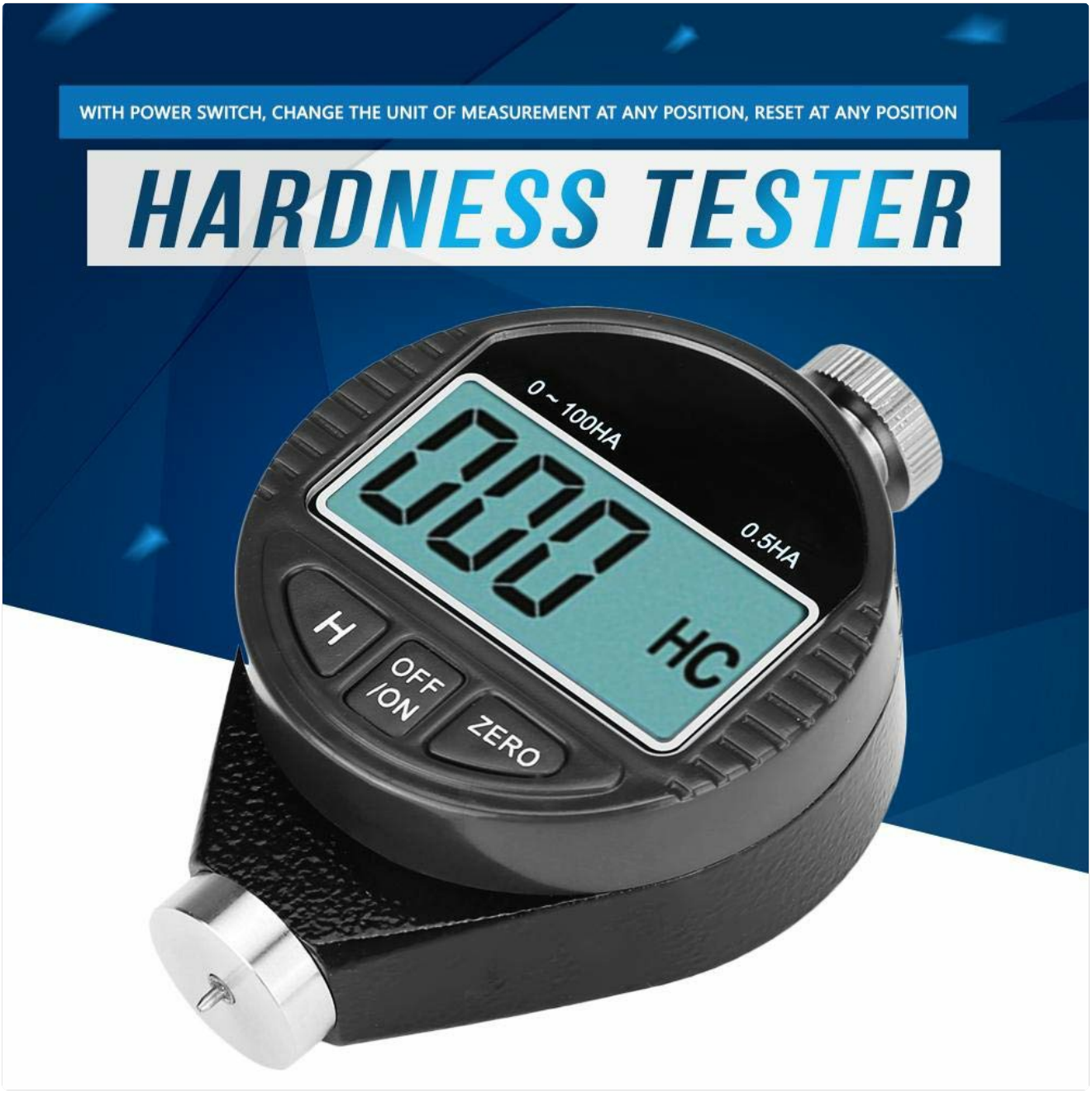

Figure 2.2: Angled view of the Shore A Durometer Tester highlighting the compact design and LCD display.

3. Setup

3.1 Battery Installation

The Shore A Durometer Tester requires one 1.5V button battery (LR44 type) for operation. This battery is **not included** in the package.

1. Locate the battery compartment on the device, typically on the back or side.
2. Open the battery compartment cover.
3. Insert the 1.5V LR44 button battery, ensuring correct polarity (+/-).
4. Close the battery compartment cover securely.

4. Operating Instructions

4.1 Power On/Off

Press the **OFF/ON** button located on the front panel to power the device on or off.

4.2 Zeroing the Device

Before each measurement, it is crucial to zero the device to ensure accuracy.

1. Ensure the indenter is not touching any surface.
2. Check the LCD display. If it does not show '000', press the **ZERO** button to reset it.

4.3 Verification (Calibration Check)

To verify the device's calibration, perform the following check:

1. Press the hardness tester firmly onto a flat, rigid surface such as a glass plate.
2. Ensure the end face of the pressing needle and the bottom face of the pressing foot are in close contact with the glass plate.
3. The display should read '100' degrees. If it does not, the device may require servicing or recalibration.

4.4 Taking a Measurement

Follow these steps to take an accurate hardness measurement:

1. Ensure the sample material is placed on a firm, flat surface.
2. Position the indenter at least 12mm away from the edge of the sample.
3. Press the indenter firmly and vertically onto the sample material. Apply steady pressure until the indenter is in full contact with the sample.
4. Read the measurement displayed on the LCD within 1 second of full contact.

4.5 Important Considerations

- When the indicated value of the Type A hardness tester is lower than 10 degrees, the reading is considered inaccurate and should not be used.
- Avoid dropping the device or subjecting it to strong impacts.
- Do not expose the device to extreme temperatures or humidity.

5. Maintenance

Proper maintenance ensures the longevity and accuracy of your Shore A Durometer Tester.

- After each use, wipe the hardness tester clean with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- Store the device in its original instrument box when not in use.
- Keep the device in a dry place, away from direct sunlight and moisture, to prevent damage to electronic components.
- If the device will not be used for an extended period, remove the battery to prevent leakage.

6. Troubleshooting

Problem	Possible Cause	Solution
Device does not power on.	Battery is dead or incorrectly installed.	Check battery polarity. Replace with a new 1.5V LR44 button battery.
Display shows erratic readings or does not zero.	Indenter is touching a surface during zeroing. Device needs reset.	Ensure indenter is free, then press the ZERO button. If problem persists, replace battery.
Readings are consistently below 10 degrees.	Material is too soft for Shore A scale, or measurement technique is incorrect.	Note that readings below 10 degrees are inaccurate for Shore A. Consider if a different durometer type (e.g., Shore OO) is needed for extremely soft materials. Review measurement steps.

7. Specifications

Property	Value
Type	Digital display Hardness tester (Type A)
Range	0-100°
Accuracy	0.1°
Dividing Value	0.1°
Measuring Range	0-100°
Battery Model	1.5V button battery (LR44, not included)
Product Dimensions	56 x 85 x 25 mm (2.2 x 3.3 x 1 inches)
Weight	Approx. 197g (6.9oz)
Item Model Number	Thincol7akvurmgws
ASIN	B07SHB5KRP
Manufacturer	Thincol
Country of Origin	China

8. Package Contents

The standard package for your Shore A Durometer Tester includes:

- 1 x Shore A Durometer Tester (battery not included)
- 1 x Storage Box

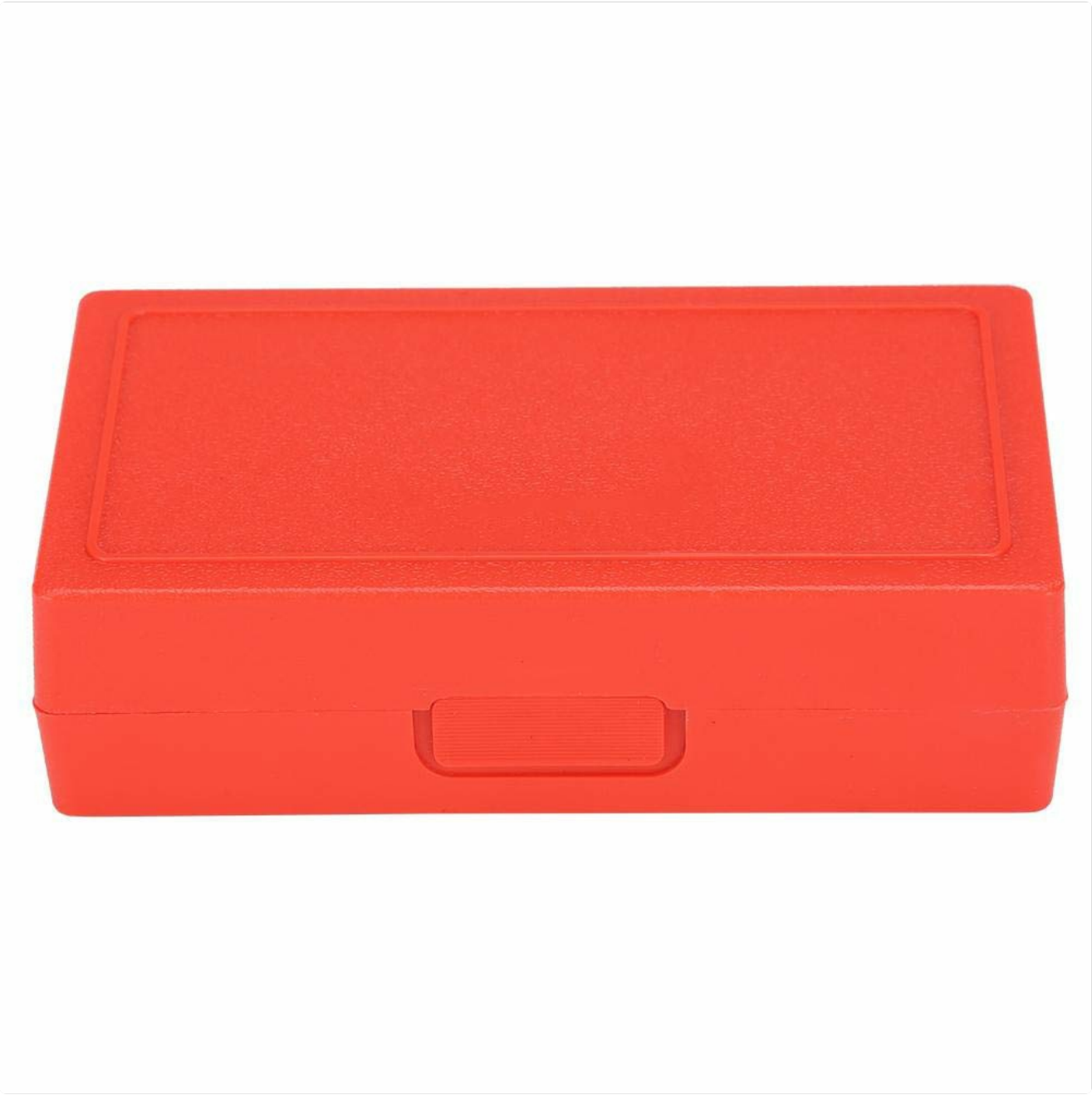

Figure 8.1: The red storage box included with the Shore A Durometer Tester.

9. Warranty and Support

For warranty information, technical support, or any inquiries regarding your Thincol Shore A Durometer Tester, please refer to the contact information provided on the product packaging or reach out to the seller directly. Keep your purchase receipt as proof of purchase for warranty claims.