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ZTTO WGJZQ3

ZTTO Derailleur Hanger Alignment Gauge and Shifter Angle Measure Tool

Model: WGJZQ3

INTRODUCTION

The ZTTO Derailleur Hanger Alignment Gauge and Shifter Angle Measure Tool (Model WGJZQ3) is an essential instrument for precise bicycle maintenance. This versatile tool is designed to accurately diagnose and correct derailleur hanger misalignment and assist in adjusting the angle of shift/brake levers on a wide range of bicycles, including road, mountain, and gravel bikes. Its robust construction and user-friendly design make it suitable for both home mechanics and professional workshops.

WHAT'S IN THE BOX

- Derailleur Hanger Alignment Gauge
- Optional Adapter Nut (if purchased as a separate item or included in a kit)

SPECIFICATIONS

Model Name	WGJZQ3
Material	Aluminum Alloy (body), Chrome-plated Steel (gauge bar)
Compatibility	Fits 20" to 29"+ wheels (Road, MTB, Gravel bikes)
Weight	Approximately 375g (main tool)
Included Components	Derailleur Hanger Alignment Gauge, Replaceable Threaded Tip
Optional Accessory	Adapter Nut (for shifter angle adjustment)

SETUP

The ZTTO tool serves two primary functions: derailleur hanger alignment and shifter angle measurement. The setup process varies slightly depending on the intended use.

1. Derailleur Hanger Alignment Gauge Setup

This tool threads directly into the derailleur hanger. Ensure your bike is stable, preferably in a repair stand, with the rear wheel removed.

1. Remove the rear wheel from your bicycle.
2. Thread the main body of the ZTTO Derailleur Hanger Alignment Gauge into the derailleur hanger. Ensure it is securely tightened by hand, but do not overtighten.
3. The gauge bar should be able to rotate freely around the hanger bolt.

2. Shifter Angle Measure Tool Setup (Requires Adapter Nut)

To use the tool for shifter angle measurement, the adapter nut is required. This setup involves replacing the stem top cap.



Image: The ZTTO Adapter Nut, a component used for shifter angle measurement.

1. **Step 1: Remove the Stem Top Cap.** Using an appropriate Allen key, carefully remove the existing top cap from your bicycle's stem. Keep the original bolt and cap in a safe place.

Method Of Use



Step1
Remove the stem top cap



Step2
Install the adapter nut



Step3
Install hanger Alignment Gauge



Step4
Adjust measure lever height

Image: The top-left panel of a multi-step diagram, showing an Allen key being used to remove the stem top cap from a bicycle.

2. **Step 2: Install the Adapter Nut.** Place the ZTTO Adapter Nut into the steerer tube, replacing the removed top cap. Use an Allen key to tighten the adapter nut securely. Ensure the headset preload is correctly set before fully tightening.

Adapter Nut

If you already have a derailleur hanger alignment gauge tool, you can only buy a adapter nut, which is suitable for all brands of tail hook straighteners on the market.



Image: The ZTTO Adapter Nut installed on a bicycle stem, ready for use.



Image: An Allen key being used to tighten the ZTTO Adapter Nut into the steerer tube.

- Step 3: Install the Derailleur Hanger Alignment Gauge.** Thread the main body of the ZTTO Derailleur Hanger Alignment Gauge into the top of the installed adapter nut. Ensure it is securely fastened.



Image: The derailleurs hanger alignment gauge attached to the adapter nut on the bicycle stem.

OPERATING INSTRUCTIONS

The ZTTO tool offers two distinct functions for bicycle adjustment.

TWO Function combination



Derailleur Hanger Alignment Gauge

Measure and straighten misaligned derailleur hangers



Shift Handle Adjustable Tool

Screw in and lock onto core. Installation of alignment.



Image: Diagram illustrating the two primary functions of the ZTTO tool: Derailleur Hanger Alignment and Shift Handle Adjustment.

1. Derailleur Hanger Alignment

A misaligned derailleur hanger can cause poor shifting performance. This tool helps identify and correct such issues.

1. With the tool securely threaded into the derailleur hanger (rear wheel removed), extend the gauge bar until it touches the rim of the wheel (or where the rim would be).
2. Rotate the gauge bar to different positions around the hanger, typically at 3, 6, 9, and 12 o'clock. At each position, check the distance between the gauge bar and the rim.
3. If the distances vary significantly between positions, the hanger is misaligned.
4. To correct, gently apply pressure to the arm of the tool in the direction needed to bend the hanger back into alignment. Re-check the distances at all positions until they are consistent. Exercise caution to avoid over-bending or damaging the hanger.
5. Once aligned, remove the tool and reinstall the rear wheel.

2. Shifter Angle Measurement and Adjustment

This function helps ensure consistent and ergonomic positioning of your shift/brake levers.

1. **Step 4: Adjust Measure Lever Height.** With the adapter nut and alignment gauge installed on the stem, position the gauge bar to align with the desired point on your shift/brake lever. This allows for precise measurement and replication of lever angles.

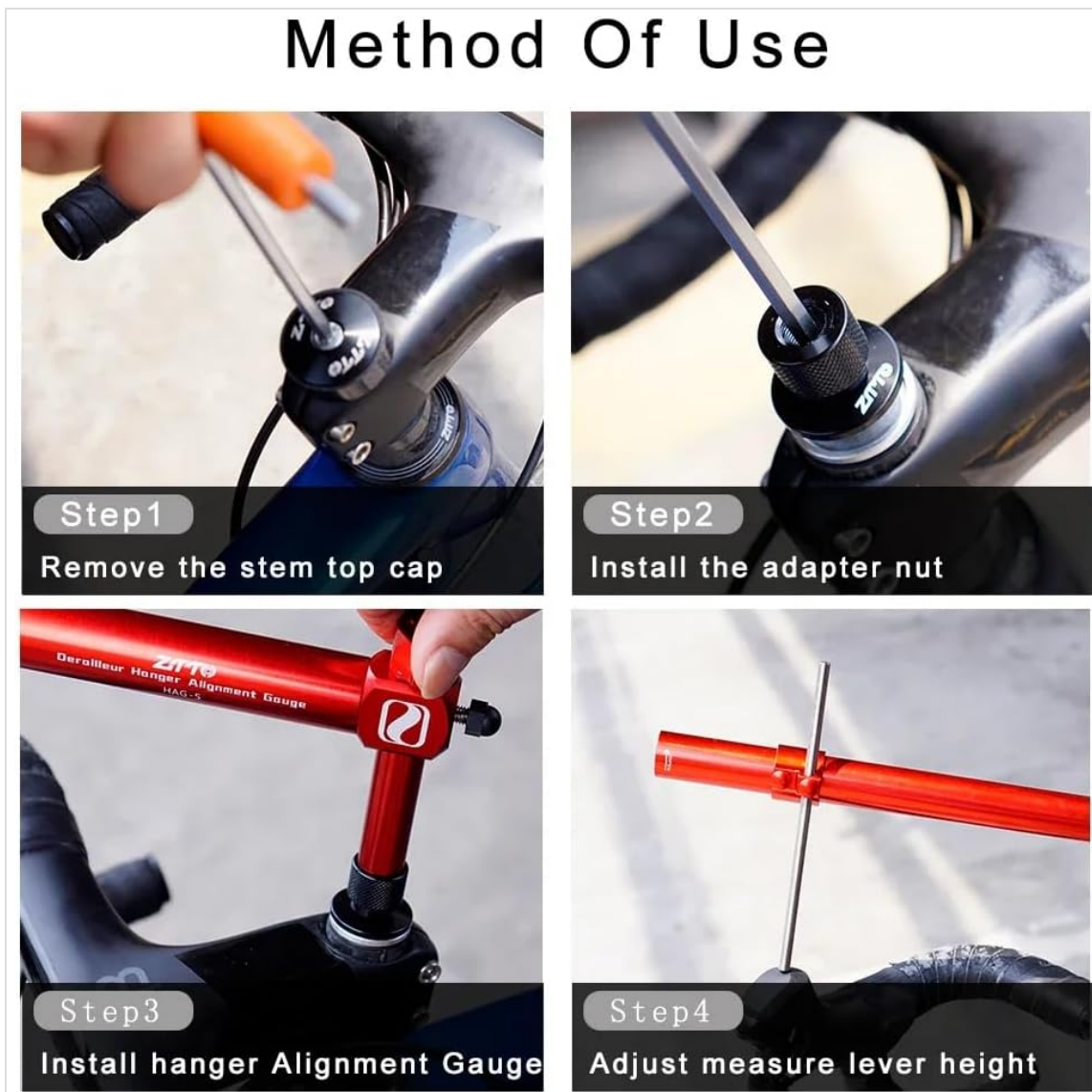


Image: The bottom-right panel of a multi-step diagram, illustrating the use of the alignment gauge to measure and adjust the angle of a bicycle's shift/brake lever.

2. Use the tool to compare the angle of both left and right levers, ensuring they are symmetrical. Adjust the lever position on the handlebars as needed, then re-tighten the lever clamp bolts to the manufacturer's recommended torque specifications.
3. Once adjustments are complete, remove the alignment gauge and adapter nut, then reinstall your original stem top cap.

MAINTENANCE

Proper care will extend the life and accuracy of your ZTTO tool.

- After each use, wipe the tool clean with a dry cloth to remove any dirt, grease, or moisture.
- Store the tool in a dry environment to prevent corrosion.
- Periodically check the threaded tip for wear. A replaceable threaded tip is included for continued accuracy.
- Avoid dropping the tool or subjecting it to impacts, as this can affect its calibration and accuracy.

TROUBLESHOOTING

If you encounter issues while using the ZTTO tool, consider the following:

- **Tool does not thread into derailleur hanger:** Ensure the hanger threads are clean and free of debris. Verify that the tool's threaded tip is not damaged.
- **Inconsistent readings during hanger alignment:** Double-check that the tool is securely tightened into the hanger and that the gauge bar is extended consistently to the rim at each measurement point. Ensure the bike is stable and not moving.
- **Adapter Nut compatibility:** The adapter nut is designed for standard steerer tubes. If it does not fit, ensure your steerer tube and stem top cap area are compatible. Note that some existing derailleur hanger alignment tools from other brands may not be fully compatible with the ZTTO adapter nut for shifter angle measurement due to design differences in their slide pins.
- **Difficulty adjusting shifter angle:** Ensure the adapter nut is securely installed and the alignment gauge is firmly attached. Loosen shifter clamp bolts sufficiently to allow movement, but not so much that the shifter rotates freely.

WARRANTY

The ZTTO Derailleur Hanger Alignment Gauge and Shifter Angle Measure Tool comes with a **1-Year Warranty** from the date of purchase. This warranty covers manufacturing defects and material flaws under normal use. It does not cover damage resulting from misuse, accidents, unauthorized modifications, or normal wear and tear. Please retain your proof of purchase for warranty claims.

SUPPORT

For technical assistance, troubleshooting, or warranty inquiries, please contact ZTTO customer support through the retailer where the product was purchased or visit the official ZTTO website for contact information.

Online Resources: For additional tips and video tutorials, search for "ZTTO Derailleur Hanger Alignment Tool" on popular video platforms.