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› Park Tool TM-1 Spoke Tension Meter User Manual

Park Tool QKTM1

Park Tool TM-1 Spoke Tension Meter User Manual

Model: QKTM1

INTRODUCTION

The Park Tool TM-1 Spoke Tension Meter is an essential tool designed for accurately measuring the tension in each spoke of a bicycle wheel. This precision instrument helps in building, truing, and servicing wheels to ensure consistent and even spoke tension, which is crucial for wheel durability and performance. The TM-1 provides readings that can be converted to kilograms-force using an included chart or the Park Tool Wheel Tension App, allowing for precise adjustments and diagnostics.



Figure 1: The Park Tool TM-1 Spoke Tension Meter, a blue and black handheld device used for measuring spoke tension.

SETUP

Before using the TM-1 Spoke Tension Meter, ensure your wheel is securely mounted in a truing stand or on the bicycle.

Preparing the Wheel

- Mount the wheel in a truing stand for optimal stability and access to all spokes.
- Ensure the wheel is clean and free of debris that could interfere with accurate measurements.



Figure 2: A hand demonstrating the placement of the Park Tool TM-1 on a bicycle wheel spoke for tension measurement.

OPERATING INSTRUCTIONS

The TM-1 Spoke Tension Meter provides a simple and effective way to measure spoke tension. Follow these steps for accurate readings:

1. **Identify Spoke Type:** Determine the material (steel, aluminum, titanium, Spinergy PBO, Mavic R2R carbon fiber), diameter, and shape (round or bladed) of the spokes you are measuring. This information is crucial for using the conversion chart.
2. **Position the Meter:** Place the TM-1 on a spoke, ensuring the spoke rests between the two fixed pins and the movable pin.
3. **Compress the Handle:** Gently squeeze the handle of the TM-1 until the movable pin engages the spoke and the indicator needle moves.

- 4. **Read the Scale:** While holding the handle compressed, read the number indicated by the needle on the meter's scale. This is your raw reading.
- 5. **Convert to Kilograms-Force:** Refer to the included printed conversion table or the Park Tool Wheel Tension App. Locate your spoke type and the raw reading to find the corresponding tension value in kilograms-force (kgf).
- 6. **Repeat for All Spokes:** Measure the tension of all spokes in the wheel. This allows you to identify areas of high or low tension and make necessary adjustments to achieve uniform tension.

Video Demonstration: Park Tool TM-1 Overview

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Video 1: An official overview of the Park Tool TM-1 Bicycle Spoke Tension Meter, demonstrating its features and basic operation.

General Spoke Tension Meter Usage

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Video 2: A general demonstration of how to use a spoke tension meter and a truing stand for bicycle wheel maintenance. Note: This video features a different brand of tension meter and truing stand.

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Video 3: A general demonstration of using a spoke tension meter to check and adjust spoke tension on a bicycle wheel. Note: This video features a different brand of tension meter.

MAINTENANCE

To ensure the longevity and accuracy of your Park Tool TM-1 Spoke Tension Meter, follow these maintenance guidelines:

- **Cleaning:** After each use, wipe the meter clean with a soft, dry cloth to remove any dirt or grease. Avoid using harsh chemicals or abrasive materials.
- **Storage:** Store the TM-1 in a dry, clean environment away from extreme temperatures and direct sunlight.
- **Calibration:** The TM-1 is designed to be completely rebuilt and recalibrated for a lifetime of reliable use. If you suspect your meter is no longer accurate, contact Park Tool for recalibration services.

TROUBLESHOOTING

If you encounter issues with your TM-1 Spoke Tension Meter, consider the following:

- **Inconsistent Readings:** Ensure the spoke is properly seated between the pins and the handle is fully compressed for each reading. Check for any debris on the pins or the spoke itself.
- **Difficulty Reading Scale:** Ensure adequate lighting and a clear line of sight to the indicator needle.
- **Meter Not Moving:** Check if the movable pin is obstructed or if the spring mechanism is jammed. Do not force the mechanism.
- **Spoke Damage:** Always handle the spokes gently. The TM-1 is designed to measure tension without causing damage when used correctly.

SPECIFICATIONS

Feature	Detail
Brand	Park Tool
Model	QKTM1 (128972)

Item Type Name	Spoke Tension Meter
Material	Multi
Item Dimensions (L x W x H)	5.75 x 2 x 8.5 inches
Item Weight	3.52 ounces
Included Components	TM-1 spoke tension meter tool
Spoke Compatibility	Steel (round and bladed), aluminum (round and bladed)*, titanium (round and bladed)*, Spinergy PBO, and Mavic R2R carbon fiber. <i>*Note: conversion data only available for select sizes of aluminum and titanium spokes.</i>

Related Tool Demonstration: Truing Stand

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Video 4: A demonstration of assembling and using a bicycle wheel truing stand, a complementary tool for wheel maintenance and spoke tension adjustment.

WARRANTY

The Park Tool TM-1 Spoke Tension Meter comes with a Limited Warranty. For specific details regarding warranty coverage and claims, please refer to the official Park Tool website or contact their customer support.

SUPPORT & RESOURCES

For additional information, troubleshooting tips, or to access the Park Tool Wheel Tension App and other resources, please visit the official Park Tool website:
[Visit the Park Tool Store](#)

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question