

Starrett PT22431

Starrett PT22431 Depth Attachment Instruction Manual

For Starrett 6", 9", and 150 mm Calipers

1. INTRODUCTION

The Starrett PT22431 Depth Attachment is designed to enhance the functionality of your Starrett calipers by providing a stable and accurate method for measuring the depth of grooves and bores. This attachment ensures perpendicular entry of the caliper's depth rod, which is crucial for obtaining precise measurements.

This manual provides instructions for the proper setup, operation, and maintenance of your PT22431 Depth Attachment.

What's in the Box

- Starrett PT22431 Depth Attachment
- Instruction Guide (this manual)

2. SETUP AND INSTALLATION

Follow these steps to correctly attach the PT22431 Depth Attachment to your Starrett caliper:

1. **Prepare the Caliper:** Ensure your Starrett 6", 9", or 150 mm caliper is clean and free from debris.
2. **Position the Attachment:** Slide the PT22431 Depth Attachment onto the caliper's depth rod, aligning it with the main body of the caliper.
3. **Stabilize for Alignment:** Place the caliper vertically on a flat, stable surface. This helps ensure that the end of the caliper and the attachment are perfectly aligned and perpendicular to the surface.
4. **Secure the Attachment:** While maintaining vertical alignment, tighten the small screw on the depth attachment. This secures the attachment firmly to the caliper. Do not overtighten.
5. **Verify Alignment:** After tightening, visually inspect the attachment to confirm it is flush and evenly lined

up with the caliper's measuring face. Proper alignment is critical for accurate depth measurements.

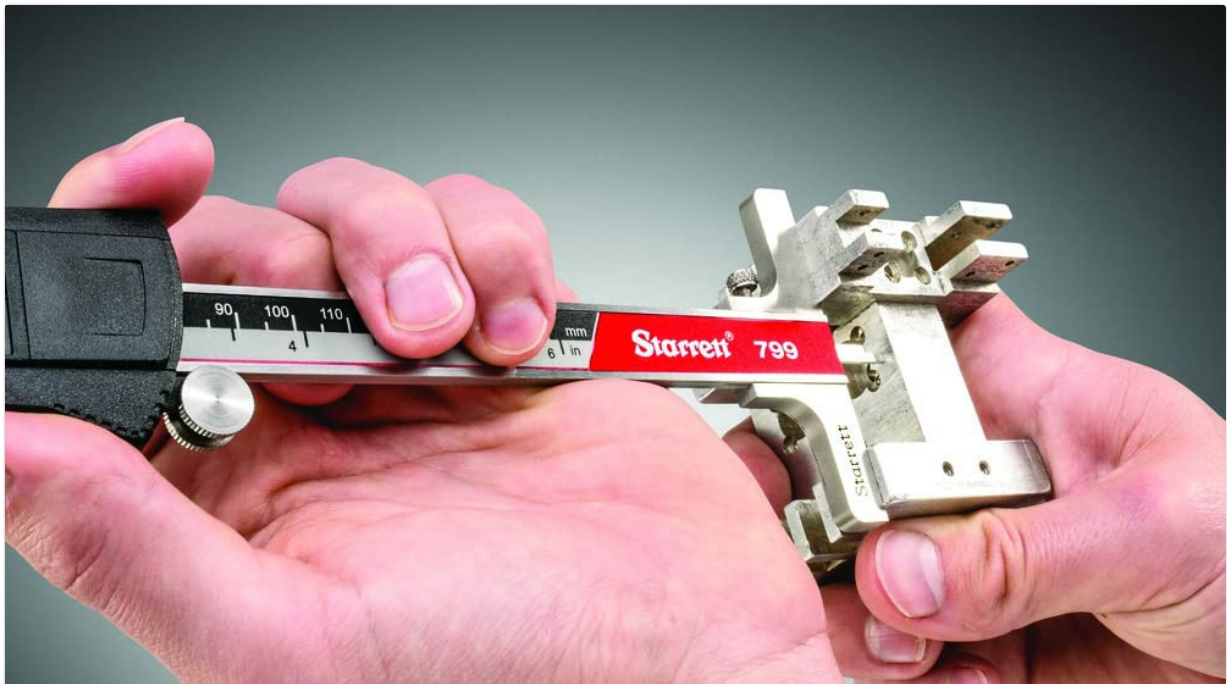


Figure 1: Securing the PT22431 Depth Attachment to a caliper.

This image shows the Starrett PT22431 Depth Attachment being attached to a caliper. A hand is holding the caliper, and the attachment is positioned on the depth rod, ready to be secured with its screw. This illustrates the installation process.

To remove the attachment, simply loosen the screw and slide it off the depth rod.

3. OPERATING INSTRUCTIONS

Once the PT22431 Depth Attachment is securely installed, you can use your caliper to take accurate depth measurements:

1. **Zero the Caliper:** Before taking any measurements, ensure your caliper is properly zeroed with the depth attachment installed. Close the caliper jaws completely and verify that the display reads zero (for digital calipers) or the dial indicates zero (for dial calipers).
2. **Position for Measurement:** Place the flat base of the PT22431 Depth Attachment firmly on the top surface of the object you wish to measure. Ensure the depth rod is positioned directly over the groove or bore.
3. **Extend the Depth Rod:** Slowly extend the caliper's depth rod into the groove or bore until it makes firm contact with the bottom surface. The attachment's wide base will keep the depth rod perpendicular to the top surface, preventing tilting and ensuring accuracy.
4. **Read the Measurement:** Lock the caliper's jaws (if applicable) and carefully remove it from the workpiece. Read the depth measurement displayed on your caliper.



Figure 2: Measuring depth with the PT22431 Depth Attachment.

This image illustrates the Starrett PT22431 Depth Attachment in action. The attachment is mounted on a caliper, and the depth rod is extended into a series of stacked blocks to measure their combined depth. This demonstrates the practical application of the attachment for precise depth measurements.

The PT22431 is particularly useful for stabilizing the caliper when measuring depths in holes or grooves where the caliper's standard depth rod might otherwise wobble or tilt, leading to inaccurate readings.

4. MAINTENANCE

Proper care and maintenance will ensure the longevity and accuracy of your Starrett PT22431 Depth Attachment:

- **Cleaning:** After each use, wipe the attachment with a clean, soft cloth to remove any dust, dirt, or oils. For stubborn grime, a mild cleaning solution suitable for stainless steel can be used, followed by thorough drying.
- **Lubrication:** The attachment itself does not require lubrication. However, ensure your caliper's depth rod and other moving parts are maintained according to its specific instructions.
- **Storage:** Store the depth attachment in a clean, dry environment, preferably in its original packaging or a protective case, to prevent damage and corrosion.
- **Inspection:** Periodically inspect the attachment for any signs of wear, damage, or deformation. Ensure the securing screw functions correctly.

5. TROUBLESHOOTING

If you encounter issues with your PT22431 Depth Attachment, consider the following:

- **Inaccurate Readings:**
 - Ensure the attachment is securely fastened and perfectly aligned with the caliper's measuring face.
 - Verify the caliper is properly zeroed before measurement.
 - Check that the workpiece surfaces are clean and free of burrs or debris that could affect contact.
 - Confirm the depth rod is making firm, perpendicular contact with the bottom of the groove or bore.
- **Attachment Loosens:**
 - Ensure the securing screw is tightened sufficiently. Avoid overtightening, which can strip threads.
 - Inspect the screw and its threads for damage.

For persistent issues or concerns not addressed here, please contact Starrett customer support.

6. SPECIFICATIONS

Feature	Detail
Model Number	PT22431
Brand	Starrett
Material	Stainless Steel
Product Dimensions	3.5 x 2 x 0.6 inches
Item Weight	0.01 ounces
Compatible Calipers	Starrett 6", 9", and 150 mm calipers
UPC	049659646405

7. WARRANTY AND SUPPORT

Starrett products are manufactured to high standards and are backed by a commitment to quality. For specific warranty information regarding your PT22431 Depth Attachment, please refer to the warranty documentation included with your original purchase or visit the official Starrett website.

If you require technical assistance, have questions about product usage, or need to report a defect, please contact Starrett Customer Service. Contact information can typically be found on the Starrett website or on your product packaging.

Online Resources: For additional information, product catalogs, and support, please visit the official Starrett Store on Amazon or the main Starrett website.