

[Manuals.plus](#) /

› [Pentel](#) /

› Pentel Graph Gear 800 Mechanical Drafting Pencil 0.3mm User Manual

Pentel PG803LZBP

Pentel Graph Gear 800 Mechanical Drafting Pencil 0.3mm User Manual

INTRODUCTION

The Pentel Graph Gear 800 is a precision mechanical drafting pencil designed for detailed work. This model features a 0.3mm lead size, identified by its brown barrel. It is engineered for comfort and durability, making it suitable for drafting, sketching, and general writing tasks. This manual provides essential information for the proper setup, operation, and maintenance of your Pentel Graph Gear 800 mechanical pencil.



GRAPHGEAR 800 PG800

0.3 mm HB
12 pcs. 60mm



GRAPHGEAR
PREMIUM MECHANICAL

0.3
mm
Extra Fine



HB Lead
SAME AS
#2
PENCIL

Engineered for
Precision

Pentel®



Image: The Pentel Graph Gear 800 Mechanical Drafting Pencil with a brown barrel, 0.3mm lead size.

SETUP

Loading Lead

1. Remove the eraser cap from the top of the pencil.
2. Gently pull out the eraser.
3. Insert 1-2 pieces of 0.3mm lead into the lead reservoir. Avoid overfilling to prevent jamming.
4. Replace the eraser and then the eraser cap.
5. Press the top button repeatedly until the lead appears at the tip.



Image: The Pentel Graph Gear 800 pencil disassembled, showing the lead reservoir, eraser, and included lead refills.

Adjusting Lead Sleeve

The Pentel Graph Gear 800 features a 4mm fixed lead sleeve. This length is ideal for use with rulers and templates, providing clear visibility of the drawing surface and precise line placement.

OPERATING INSTRUCTIONS

Writing and Drafting

To advance the lead, press the top button. Extend only a small amount of lead (approximately 1-2mm) to minimize breakage, especially with 0.3mm lead. The pencil's barrel weight is balanced to provide enhanced control during use. The metal grip, inlaid with soft, latex-free pads, ensures a comfortable and secure hold for extended periods.



Image: A close-up view of the 0.3mm tip of the Pentel Graph Gear 800 mechanical pencil, showing the fine lead extended.

Using the Eraser

The pencil includes a small eraser located under the top cap. To use, remove the cap and gently pull out the eraser. Replace it securely after use. The cap helps keep the eraser clean and protected.

Utilizing the Clip

The durable metal clip allows you to secure the pencil to pockets, notebooks, or drawing boards, preventing loss and ensuring it is always within reach.

MAINTENANCE

Refilling Lead

Follow the steps outlined in the 'Loading Lead' section under Setup. Always use high-quality 0.3mm lead to ensure

optimal performance and prevent internal damage or jamming.

Replacing the Eraser

When the eraser is worn down, remove the top cap and pull out the old eraser. Insert a new Pentel Z2-1N refill eraser (or compatible equivalent) firmly into the eraser holder. Replace the cap.



Image: A close-up view of the eraser and its protective cap on the Pentel Graph Gear 800 mechanical pencil.

Cleaning

Periodically wipe the exterior of the pencil with a soft, dry cloth to remove dust and grime. Avoid using harsh chemicals or abrasive materials.

TROUBLESHOOTING

- **Lead Breakage:** 0.3mm lead is very fine and prone to breakage if too much is extended. Try extending less lead.

Ensure you are using appropriate pressure for the lead hardness.

- **Lead Not Advancing:** Check if the lead reservoir is empty. If not, remove the eraser and gently shake the pencil to dislodge any jammed lead. If a piece of lead is stuck in the tip, carefully remove it with a thin wire or needle (exercise caution).
- **Eraser Not Staying in Place:** Ensure the eraser is fully inserted into its holder. If it's old or worn, replace it with a new one.

SPECIFICATIONS

Feature	Detail
Model Number	PG803LZBP
Lead Size	0.3 millimeters
Barrel Color	Brown
Tip Length	4mm (fixed)
Grip Type	Contoured metal with latex-free pads
Lead Hardness	HB (pre-loaded)
Material Type	Metal
Closure Type	Retractable
Item Weight	1.44 ounces
Item Dimensions	0.7 x 2.81 x 7.38 inches
Included Components	Pencil, Lead, Eraser



Image: A display of Pentel Graph Gear 800 pencils, illustrating different lead sizes and their corresponding barrel colors.

WARRANTY AND SUPPORT

The Pentel Graph Gear 800 Mechanical Drafting Pencil is backed by Pentel's limited lifetime warranty. For warranty claims, product support, or further assistance, please contact Pentel customer service directly. You can find contact information on the official Pentel website or through the retailer where the product was purchased.

For additional resources and product information, visit the official Pentel website: www.pentel.com

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