

Grover 502G

Grover Roto-Grip Locking Rotomatic Tuners (Model 502G) User Manual

For Models: 502G

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your Grover Roto-Grip Locking Rotomatic Tuners, Model 502G. Please read this manual thoroughly before installation and use to ensure proper function and longevity of your tuners.

2. PRODUCT OVERVIEW

The Grover Roto-Grip Locking Rotomatic Tuners are designed to provide enhanced tuning stability and quicker string changes for guitars. This set includes six gold-finished tuners, configured for a 3+3 headstock setup, featuring a locking mechanism to secure the string post.



Figure 2.1: Front view of Grover Roto-Grip Locking Rotomatic Tuners (Model 502G). These tuners feature a gold finish and a classic Rotomatic design with an integrated locking mechanism.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 6 x Grover Roto-Grip Locking Rotomatic Tuners (3 left, 3 right)
- 6 x Threaded Bushings
- 6 x Washers
- 6 x Mounting Screws

4. SPECIFICATIONS

Feature	Specification
Model Number	502G
Configuration	3 Left / 3 Right (3+3)
Finish	Gold
Type	Locking Rotomatic Tuners
Item Weight	9.6 ounces (approx. 272 grams)
Product Dimensions	9 x 5 x 2 inches (packaging)
String Material Compatibility	Nickel-Plated (compatible with most guitar string types)
Instrument Compatibility	Acoustic Guitar, Electric Guitar (standard 3+3 headstocks)

Feature	Specification
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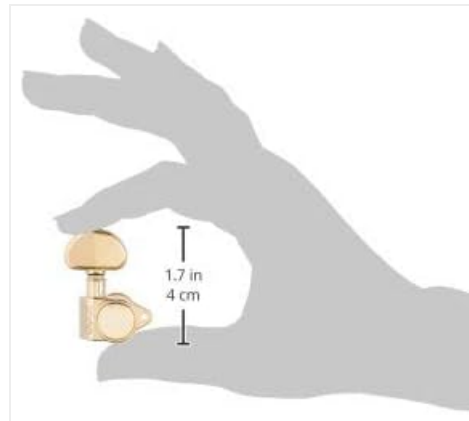


Figure 4.1: Technical diagram illustrating the dimensions of the Grover Roto-Grip Tuners. Measurements are provided in inches and millimeters.

5. INSTALLATION GUIDE

Installation of Grover Roto-Grip tuners typically involves replacing existing tuners. Ensure the new tuners are compatible with your guitar's headstock bore holes and screw patterns. Professional installation is recommended if you are unfamiliar with guitar maintenance.

Tools Required:

- Small Phillips head screwdriver
- Wrench or socket for hex bushings (if applicable)
- String cutters
- Soft cloth to protect guitar finish

Installation Steps:

1. **Remove Old Tuners:** Carefully remove all strings from the guitar. Unscrew the mounting screws on the back of the headstock and remove any nuts or bushings from the front. Gently pull the old tuners out.
2. **Prepare Headstock:** Clean any debris from the tuner holes. Ensure the holes are clear and smooth.
3. **Insert New Tuners:** Insert the new Grover Roto-Grip tuners into the headstock holes from the back. Ensure the tuners are oriented correctly (3 left, 3 right) and that the mounting screw holes align with the existing holes or are positioned for new pilot holes if necessary.
4. **Secure Front Bushings:** Place a washer over the tuner shaft on the front of the headstock, then thread the bushing onto the shaft. Tighten the bushing finger-tight, then use a wrench to gently snug it down. Do not overtighten, as this can damage the headstock finish.
5. **Install Mounting Screws:** Once the tuners are aligned and the bushings are snug, install the small mounting screws into the back of the headstock. If new pilot holes are needed, drill them carefully to avoid splitting the wood.



Figure 5.2: Rear view of Grover Roto-Grip tuners, illustrating the gear mechanism and the position for the mounting screws.

6. OPERATING INSTRUCTIONS

The Roto-Grip tuners simplify string changes and improve tuning stability through their locking mechanism.

Stringing Your Guitar with Roto-Grip Tuners:

1. **Unlock the Tuner:** Turn the small knurled knob on the back of the tuner counter-clockwise until it stops. This unlocks the string post.
2. **Insert String:** Thread the guitar string through the string hole in the tuner post. Pull the string taut, ensuring there is minimal slack.
3. **Lock the String:** While holding the string taut, turn the knurled knob clockwise until it is finger-tight. This locks the string securely in place within the tuner post. Do not overtighten.
4. **Tune the String:** Use the main tuning key to bring the string to the desired pitch. The locking mechanism minimizes string slippage, leading to greater tuning stability.
5. **Trim Excess String:** Once tuned, trim any excess string close to the tuner post using string cutters.

7. MAINTENANCE

Proper maintenance ensures the longevity and performance of your tuners.

- **Cleaning:** Wipe the tuners regularly with a soft, dry cloth to remove dust, sweat, and grime. Avoid abrasive cleaners or solvents that could damage the finish.
- **Lubrication:** The internal gears are factory-lubricated and generally do not require additional lubrication. If a tuner feels stiff, a very small amount of light machine oil can be applied to the gear mechanism, but avoid over-lubricating.

- **Tightness Check:** Periodically check that the mounting screws and front bushings are snug. Overtightening can cause damage, so apply gentle pressure.
- **Storage:** When not in use, store your guitar in a climate-controlled environment to prevent extreme temperature and humidity changes, which can affect both the guitar and its components.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Tuner slips or does not hold pitch	String not properly locked; insufficient string wraps; worn gears; nut/bridge issues.	Ensure the locking knob is tightened finger-tight. Check for proper string installation. Inspect gears for wear. Evaluate other guitar components (nut, bridge, tremolo) for friction points.
Tuner feels stiff or hard to turn	Lack of lubrication; dirt/debris in mechanism; overtightened bushing.	Clean the tuner. Apply a small amount of light machine oil to the gear. Loosen the front bushing slightly.
Tuner wobbles or is loose	Loose mounting screw; loose front bushing.	Gently tighten the mounting screw on the back of the headstock. Tighten the front bushing.

9. WARRANTY AND SUPPORT

Grover products are manufactured to high standards. For specific warranty information or technical support, please refer to the official Grover website or contact their customer service directly. Keep your purchase receipt as proof of purchase.

For further assistance, you may visit the [Grover Store on Amazon](#) or contact your retailer.