

REDSHIFT RS-41-14

REDSHIFT Replacement Elastomer Set for ShockStop Suspension Stem

Model: RS-41-14

INTRODUCTION

This instruction manual provides essential information for the installation, operation, and maintenance of your REDSHIFT Replacement Elastomer Set for ShockStop Suspension Stem. This kit is designed to replace existing elastomers or to fine-tune the suspension feel of your Redshift ShockStop Suspension Stem, ensuring optimal performance and comfort during your rides.

The kit includes a variety of durometer elastomers, allowing you to customize the stiffness of your ShockStop Stem to suit your riding style and terrain. These elastomers are compatible with both the +/- 6 degree and +30 degree ShockStop Stems, as well as ShockStop PRO Stems.

SETUP AND INSTALLATION

Proper installation of the replacement elastomers is crucial for the performance of your ShockStop Suspension Stem. Please follow these steps carefully.

Elastomer Identification

The kit contains five durometer elastomers, each identified by color and stiffness:

- **50A:** Yellow (Softest)
- **60A:** Orange
- **70A:** Blue
- **80A:** Green
- **90A:** Black (Stiffest)

You will receive a pack of six elastomers, allowing for various combinations to achieve your desired suspension feel.



Redshift Sports was founded in 2013 by a team of mechanical engineers who also happen to be avid cyclists. From the beginning, we've focused on taking a different approach to product development - drawing on our own experiences and needs to create components that make a meaningful difference to the riding experience.

Our mission is to help all cyclists improve performance, comfort, and safety by transforming the bike you already own.



Image: The different colored elastomers included in the kit, representing various stiffness levels. From left to right: Red, Black, Teal, Blue, Orange, Yellow.

Installation Steps

1. **Prepare the Stem:** Ensure your bicycle is stable. Carefully remove the ShockStop Suspension Stem from your bicycle according to the original stem's instructions.
2. **Disassemble the Stem:** Locate the bolts that secure the elastomer housing within the stem. Using appropriate tools, carefully loosen and remove these bolts.
3. **Remove Old Elastomers:** Gently extract the existing elastomers from their housing. Note their orientation and position if you plan to reuse them or understand the previous setup.
4. **Insert New Elastomers:** Select the desired combination of new elastomers based on your preferred stiffness (refer to the "Operating" section for guidance). Insert them into the stem housing, ensuring they are correctly seated and aligned.
5. **Reassemble the Stem:** Secure the elastomer housing by re-inserting and tightening the bolts. Ensure all bolts are tightened to the manufacturer's specified torque settings to prevent loosening during use.
6. **Reinstall on Bicycle:** Reattach the ShockStop Suspension Stem to your bicycle, ensuring it is properly aligned and all handlebar and steerer tube bolts are tightened to their respective torque specifications.

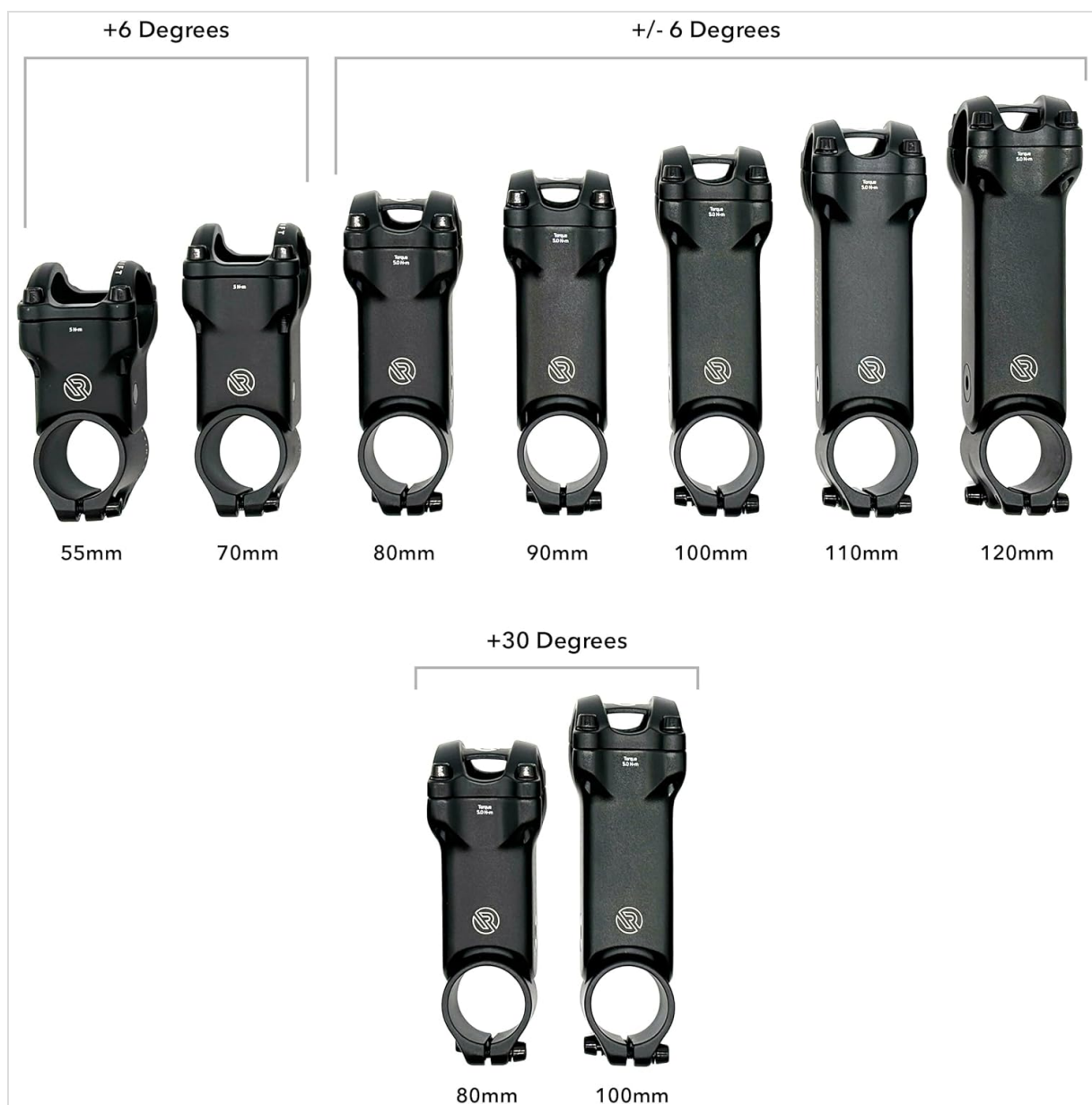


Image: A visual representation of different ShockStop Suspension Stem lengths (55mm, 70mm, 80mm, 90mm, 100mm, 110mm, 120mm) and angle options (+6 degrees, +/- 6 degrees, +30 degrees), illustrating the compatibility of the elastomers.

OPERATING AND TUNING

The primary function of these replacement elastomers is to allow you to fine-tune the suspension characteristics of your ShockStop Stem. The stiffness of the stem's suspension is determined by the durometer (hardness) of the elastomers installed.

Choosing Elastomer Combinations

Experiment with different combinations of the provided elastomers to achieve your desired ride feel. A softer setup (lower durometer numbers, e.g., Yellow or Orange) will provide more compliance and shock absorption, ideal for rougher terrain or riders seeking maximum comfort. A stiffer setup (higher durometer numbers, e.g., Green or Black) will offer a more direct feel and less suspension travel, suitable for smoother roads or riders who prefer a firmer ride.

It is recommended to start with a combination that feels comfortable and then adjust as needed after a few rides. Small changes in elastomer combination can significantly alter the stem's performance.

MAINTENANCE

The Redshift elastomers are designed for durability and longevity. However, proper care and understanding of their characteristics will help maximize their lifespan.

- **Lifespan:** The elastomers are expected to last for several years. Their exact lifespan is influenced by usage frequency, riding conditions (e.g., extreme temperatures, exposure to chemicals), and storage environment.
- **Breaking-In Period:** A slight "breaking-in" or softening of the suspension feel may occur during the initial period of use. This is normal and the suspension feel will stabilize as elastomers settle.
- **Cleaning:** Keep the elastomers and the stem's internal components clean from dirt and debris. Use a damp cloth to wipe them down. Avoid harsh chemicals that could degrade the elastomer material.
- **Inspection:** Periodically inspect the elastomers for any signs of wear, cracking, or deformation. Replace them if any significant damage is observed to maintain optimal performance and safety.

TROUBLESHOOTING

Issue	Possible Cause	Solution
Suspension feels too stiff.	Elastomers with too high a durometer (harder) are installed.	Replace one or more elastomers with lower durometer (softer) options (e.g., Yellow or Orange).
Suspension feels too soft or bottoms out easily.	Elastomers with too low a durometer (softer) are installed.	Replace one or more elastomers with higher durometer (stiffer) options (e.g., Green or Black).
Slight softening of suspension after initial use.	Normal "breaking-in" period for new elastomers.	No action required. The feel will stabilize as elastomers settle. If softening continues excessively, inspect for damage.
Unusual noises from the stem.	Improper installation, loose bolts, or debris.	Re-check all installation steps, ensuring bolts are tightened to specifications. Clean the stem thoroughly.

SPECIFICATIONS

- Brand:** REDSHIFT
- Model Number:** RS-41-14
- Material:** Plastic (Elastomer)
- Color:** Multicolor (Yellow, Orange, Blue, Green, Black)
- Compatibility:** Redshift ShockStop Suspension Stem (55mm and 70mm lengths, +/- 6 degree and +30 degree models, and PRO Stems)
- Item Weight:** 0.04 Pounds (approx. 18 grams)
- Package Weight:** 0.03 Kilograms (approx. 30 grams)
- Package Dimensions:** 2.76 x 2.4 x 0.55 inches

WARRANTY AND SUPPORT

REDSHIFT stands behind the quality of its products. While specific warranty details for this replacement kit are not provided in this manual, please refer to the official REDSHIFT website or contact their customer

support for comprehensive warranty information.

For further assistance, technical support, or inquiries regarding your REDSHIFT products, please visit the official REDSHIFT Store on Amazon or their corporate website:

[Visit the REDSHIFT Store on Amazon](#)

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