redshift SPORTS

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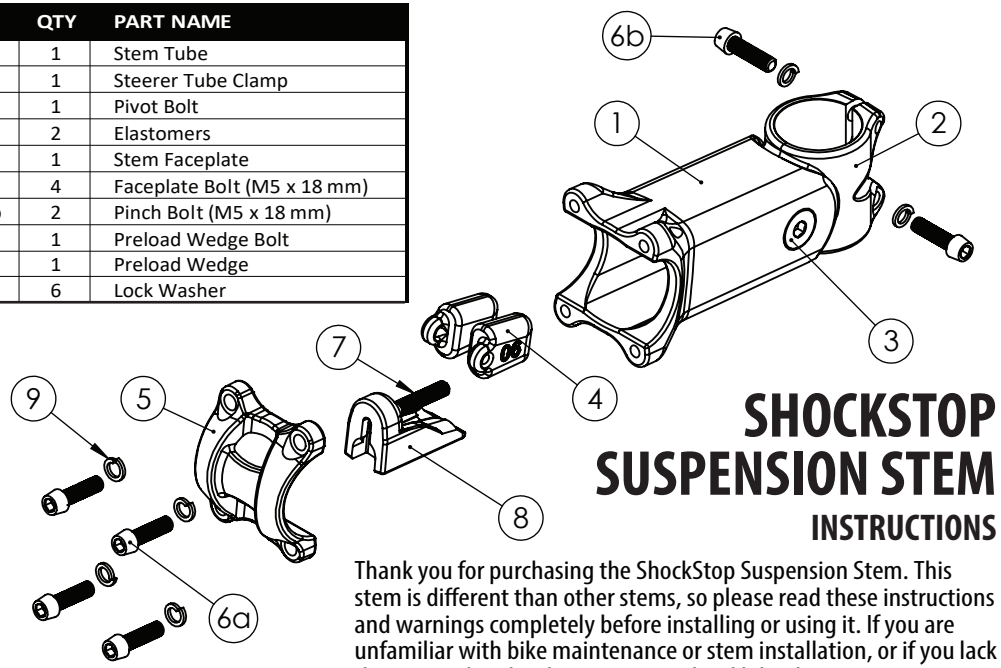
#	QTY	PART NAME
1	1	Stem Tube
2	1	Steerer Tube Clamp
3	1	Pivot Bolt
4	2	Elastomers
5	1	Stem Faceplate
6a	4	Faceplate Bolt (M5 x 18 mm)
6b	2	Pinch Bolt (M5 x 18 mm)
7	1	Preload Wedge Bolt
8	1	Preload Wedge
9	6	Lock Washer



SHOCKSTOP SUSPENSION STEM
INSTRUCTIONS

Thank you for purchasing the ShockStop Suspension Stem. This stem is different than other stems, so please read these instructions and warnings completely before installing or using it. If you are unfamiliar with bike maintenance or stem installation, or if you lack the required tools, please visit your local bike shop or contact Redshift Sports customer service for assistance. Improper installation or use may void the product's warranty policy and may lead to serious injury or death.

BEFORE YOU BEGIN

Before you begin installation, take note of your current stem's installed orientation and position on the steerer tube. Most stems can be installed in either the positive or negative orientation in order to adjust the amount of rise. Headset spacers can also be placed above or below the stem to change its position along the steerer tube.

COMPATIBILITY

- The ShockStop is compatible with drop handlebar and flat handlebar setups. The ShockStop is not compatible with swept back or "cruiser" style handlebars.
- The ShockStop is designed for use on threadless headsets with 1-1/8" steerer tubes. It may be used with smaller steerer tube diameters by using an appropriate shim.
- If your bike has a quill stem, you will need to install a quill-stem adapter (not included) to use the ShockStop.

TOOLS YOU'LL NEED

- 4mm hex wrench, 3mm hex wrench, torque wrench, bicycle grease.

REMOVE YOUR EXISTING STEM

Note: This section describes the removal process for a typical threadless stem. If your bike has a quill stem, you will need to install a quill stem adapter (not included) after removing the stem.

1. Unscrew and remove the faceplate bolts and remove the faceplate to separate the handlebar. You can let the handlebar hang in front of the bike or rest on the front wheel.
2. Loosen the 2 pinch-bolts on your stem's steerer tube clamp.
3. Unscrew and remove the top cap of the steerer tube.
4. Slide the stem off the steerer tube (along with any spacers that are above the stem).

ATTACH THE SHOCKSTOP TO YOUR BICYCLE

The 6 degree ShockStop can be installed in either the +6 degree or -6 degree orientation. In the +6 degree orientation, the words "Torque, 5.0 N-m" will face upward near the front of the stem tube. In the -6 degree orientation, the words "+/-6 deg, XX mm" will face upward near the front of the stem tube (where XX is the length of your stem). The +30 degree ShockStop should only be installed in the +30 orientation.

** **ATTENTION:** The 6 degree ShockStop stem ships with elastomers installed in the +6 degree orientation. If you flip the stem to the -6 degree orientation, after attaching it to your bicycle you will need to remove and reinstall the elastomer(s) and preload wedge so that the elastomers are positioned above the support, as shown in steps 9-14 below.*

5. Loosen the two pinch bolts (#6b), and slide the ShockStop steerer tube clamp (#2) onto the steerer tube in the appropriate orientation (+ or -). Position your bicycle's headset spacers above or below the stem, as desired.
6. Make sure that the top headset spacer (or top of the stem if all spacers are positioned below the stem) is slightly above (about 2-3mm) the top of the steerer tube.
7. Very lightly tighten the 2 pinch bolts (#6b) on the ShockStop in order to keep it from easily sliding back and forth on the steerer tube.
8. Lightly screw the top cap onto the steerer tube until it begins to tighten.

ADJUST ELASTOMER STIFFNESS

WARNING!** **The ShockStop MUST BE INSTALLED ON YOUR BIKE WHEN INSTALLING THE PRELOAD WEDGE BOLT (step 13). This is required so that you can apply downward force to the stem to slightly compress the elastomers while inserting the preload bolt. Failure to apply downward force while installing the preload bolt (#7) may cause the bolt to PERMANENTLY DAMAGE the threaded hole in the steerer tube clamp (#2) rendering the stem UNUSABLE.

9. Using a 4mm hex wrench, loosen and remove the four faceplate bolts (#6a) and remove the faceplate (#5) and handlebar (if installed).
10. Using a 3mm hex wrench, loosen and completely remove the preload bolt (#7) and wedge (#8). The bolt will require about 32 turns to fully remove the wedge. The bolt will remain captured in the wedge.
11. Pull upward on the stem and remove the elastomer(s) (#4) from inside the stem. You may need to use the small end of your hex wrench to hook the handle of the elastomer to pull it out.
12. Select an elastomer combination from the chart on the follwing page and insert the appropriate elastomer(s) into one or both of the upper elastomer pockets. It may help to push the stem tube (#1) to the top of its travel while inserting the elastomers. Be sure to insert the elastomers (#4) in the orientation shown below (handle towards the outside), so as not to interfere with the preload wedge (#8) installation.

⚠ WARNING

- Failure to follow these instructions and warnings may result in malfunction or breakage of this component, possibly causing serious injury or death.
- Always use a torque wrench when installing or adjusting fasteners, and always tighten to Redshift torque specifications (or the bike manufacturer's torque specification). Periodically check all fasteners for tightness using a torque wrench, since fasteners can loosen under the influence of road vibration.
- Periodically clean and inspect all surfaces of this component for hairline cracks or signs of damage. If you find any cracks or damage, immediately cease using the part and contact Redshift Sports customer service.
- Using the ShockStop stem can affect a bicycle's handling characteristics. Following installation, practice using the ShockStop at low speed in a safe area to get used to the bicycle's responsiveness and steering.
- This stem is intended for use only on paved or unpaved roads. Off-road use may lead to slippage or breakage of the component, possibly causing serious injury or death.