ribbon coil

REV 1.1

# CHANGING SPRINGS AND TRAVEL

*Your fork shipped with our medium spring (unless otherwise specified at time of order). We offer four additional springs for tuning: extra-soft, soft, firm, and extra-firm. Soft and firm springs are included with your fork in the original shipping box.* ***Visit the Ribbon Coil page at MRPbike.com to see what spring is appropriate for you.*** *These suggestions are based on rider weight and fork travel. A video tutorial is also available there which illustrates the process described below.*

**TOOLS REQUIRED**

- 1.5mm hex
- 3mm hex
- 10mm wrench
- 15mm wrench (or adjustable wrench)*
- 26mm wrench (or vise, or *additional* adjustable wrench)*
- Snap ring pliers
- Rebound Removal tool (optional)
- Rubber mallet
- HG-spline cassette tool (recommended)

**SUPPLIES REQUIRED**

- 30cc of 5-10wt fork oil
- Slick Honey Grease (or equivalent)
- General purpose grease (thick marine variety recommended)

**only if changing travel*

## SPRING AND TRAVEL CHANGE (CONTINUED)

1) After removing the fork from the bicycle, remove the dust cover from the spring leg and turn the preload to its lightest setting (fully counterclockwise). **To ease spring installation, you may back-out the top cap several turns using an HG-spline cassette tool (not required).**

2) Skip to step 2a if removal tool is not being used. Loosen the set screws on the red rebound knob and the orange Ramp Control knob until they can slide off of the screw assemblies. Remove the screw assemblies using the rebound removal knob in combination with the open end 10 mm wrench. Holding the removal knob while turning the screw will maintain the position of the rebound and Ramp Control needles in their rods.

2a) If the removal knob is not used, turn the rebound to the full slow position (clockwise), and the Ramp Control knob to the “max” position (clockwise) before removing the knobs. Remove both knobs and set aside. Use a 10mm open end wrench and unthread the damper-side screw assembly, the rebound needle will unthread to the end of the damper rod as the damper screw unthreads. Feel for the threads of the damper screw to release from the rod, and then pull the damper screw straight out of the rebound needle. The rebound needle will now be flush with the end of the damper rod. Use the 3mm hex key to turn the rebound needle back down into place. Tighten until firm resistance is encountered, then back off by half a turn. Repeat the procedure for the Ramp Control screw.

3) Partially thread the spring-side screw assembly into the damper rod (damper-side), loosely install either the Ramp Control or Rebound knob, and tap the knob firmly with the mallet to unseat the damper rod. Repeat the procedure for the Ramp Control rod (spring-side). Slide the fork lower casting off of the stanchion assembly and set it aside. **Lubrication oil may drip from the casting and stanchions, but oil loss can be reduced if the casting is left horizontal.**

4) Use snap ring pliers to remove the snap ring at the bottom of the spring-side stanchion. The spring assembly may pop out slightly if it is under compression. Partially thread the Ramp Control screw assembly into the end of the spring side rod. Gripping the screw, pull firmly on the rod to remove the spring assembly and set it aside.

5) If changing springs, remove the installed spring and install the new

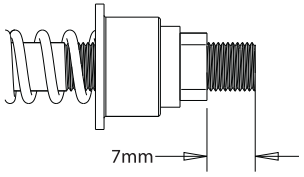
## SPRING AND TRAVEL CHANGE (CONTINUED)

spring after very lightly coating it with grease (thick marine variety recommended). Insert the spring through the bottom of the stanchion. **Skip the next step if travel change is not desired and begin re-assembling your fork.**

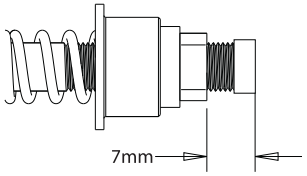
## TRAVEL CHANGE

6) Fork travel is set via the spring seat and lock nut on the spring rod assembly. First, unthread the lock nut from the top of the spring rod with a 15mm wrench (or adjustable) on the lock nut and a 26mm wrench (or vise, or additional adjustable wrench) on the spring seat. For setting the travel you will want to measure from the **top of the spring rod to the top of the lock nut**, as pictured below.

**V1**




**V2**




*27.5+/29" 160mm illustrated*

*There are two versions of the spring rod assembly. V1 is fully threaded to the top of the rod, V2 is not. Regardless of version, measurements for setting travel are listed from the end of the rod to the top of the lock nut. The table below lists those measurements.* ***Note that they differ between 27.5" and 27.5+/29" Ribbon Coil forks of the same travel length.***

| MODEL: | DISTANCE: |
|---|---|
| 27.5" 170 | 5mm |
| **27.5" 160** | **15mm** |
| 27.5" 150 | 25mm |
| 27.5+/29" 160 | 7mm |
| **27.5+/29" 150** | **17mm** |
| 27.5+/29" 140 | 27mm |

Once you have the travel set with the lock nut, carefully thread the spring seat on the spring rod until the two touch. Now with a 15mm (or adjustable) and 26mm wrench (or vise, or additional adjustable wrench) tighten the two parts together snugly but not so tight that you strip either part.

7) Now, lightly grease the top-out spring then insert the spring rod assembly into the bottom of the stanchion. Gently press the stanchion plug into the end of the stanchion making sure not to damage the

## SPRING AND TRAVEL CHANGE (CONTINUED)

O-rings, and install the snap ring with snap ring pliers to hold the spring rod assembly in place. You may need to apply light pressure to the stanchion plug in order to seat the snap ring. Check that the snap ring is seated by rotating it in the interior stanchion groove.

8) Before installing the lower casting, clean and inspect the wiper seals and foam rings for dirt or damage. Replace if needed. Grease the wiper seals with Slick Honey or equivalent before installing the lower casting.

9) With the stanchion assembly inverted, slide the lower casting onto the stanchions. As soon as the lower bushings in the casting engage the stanchions, stop and pour approximately 15cc of fork oil into the screw hole of each leg. Hold the fork at an angle while pouring or use an angled syringe to avoid getting oil in the ends of the damper and spring rods.

10) Resume sliding the casting onto the stanchions until the casting touches the damper rod. Use the corner of a shop rag or cotton swabs to remove excess oil that may have gotten into the end of the damper rod, then install the damper screw. Use the rebound removal knob to hold the rebound adjustment stationary as the damper screw is tightened (if you do not have the rebound removal knob refer to 10b). If the screw encounters resistance before fully tightening, oil may still be trapped in the socket of the rebound needle. Remove the screw and use a cotton swab to wick away oil pooled in the hex socket, then install the screw and tighten to 8Nm.

10b) If the rebound removal knob is not used, before installing the screw use the 3 mm hex key to screw the rebound needle inside the damper rod until it is near the end of the damper rod. Use a cotton swab to wick away any oil trapped in the socket of the rebound needle. Insert the key of the damper screw into the socket of the rebound needle and thread the screw into the rod. Tighten the screw to 8Nm.

11) Wipe away any oil on the damper screw and install the red rebound knob.

12) Compress the fork until the casting touches the spring rod and use the corner of a shop rag or cotton swabs to remove any excess oil that may have gotten into the spring rod. Use the rebound removal knob

## CHANGING SPRINGS (CONTINUED)

to hold the Ramp Control adjustment stationary as the spring screw is tightened (if you do not have the rebound removal knob refer to 12b). If the screw encounters resistance before fully tightening, oil may still be trapped in the socket of the Ramp Control needle. Remove the screw and use a cotton swab to wick away oil pooled in the hex socket, then install the screw and tighten to 8Nm.

12b) If the rebound removal knob is not used, before installing the screw use the 3 mm hex key to screw the Ramp Control needle inside the spring rod until it is near the end of the spring rod. Use a cotton swab to wick away any oil trapped in the socket of the Ramp Control needle. Insert the key of the Ramp Control screw into the socket of the Ramp Control needle and thread the screw into the rod. Tighten the screw to 8Nm.

13) Wipe away any oil on the Ramp Control screw and install the orange Ramp Control knob. Now turn the Ramp Control knob counterclockwise until it stops, to set the Ramp Control to its “minimum” setting.

14) **If you backed-out the spring-side top cap in step one, tighten it using an HG-spline cassette tool now.** Install the fork back on your bike and adjust the spring pre-load and Ramp Control to your liking.

**For more information, visit MRPbike.com or contact us via e-mail at info@mrpbike.com or by phone at (970)241-3518**