# AIR-TO-COIL CONVERSION

**ATTENTION: Conversion *from* the coil spring to air spring system is not possible and this process cannot be reversed.**

**TOOLS REQUIRED**

- 1.5mm & 3mm hex
- 11mm socket
- 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
- ~450mm dowel or plastic pipe (or similar)

**SUPPLIES REQUIRED**

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

1) After removing the fork from the bicycle, turn the Ramp Control knob to the lightest setting (counterclockwise), to ensure all pressure is released during deflation of the air spring.

2) Remove the dust covers from both the top and bottom Schrader valve. Release all air pressure from the air spring leg by depressing the Schrader core in both the top and the bottom Schrader valves. Release negative spring pressure first.

**ATTENTION: If air pressure is not released from the fork before conversion, injury or damage may occur!**

3) Use a 10mm wrench and unthread the Schrader valve located on the bottom of the disc leg, until it protrudes roughly 5mm. Thread the Schrader cap back on to the valve and use your rubber mallet to tap the Schrader cap and release the air spring rod from the lowers. Once released, continue to unthread the Schrader valve from bottom of the fork.

4) **Skip to step 4a if the rebound knob tool is not being used.** Loosen the set screws on the red rebound knob until it can slide off of the screw assembly. Remove the screw assembly using the rebound knob tool in combination with the open end 10 mm wrench. Holding the rebound knob tool while turning the screw will maintain the rebound adjustment position (and mitigate the risk of accidental rebound needle extraction).

4a) If the rebound knob tool is not used, turn the rebound to the full slow position (clockwise) before removing the knob. Remove the knob and set aside. Use a 10mm open end wrench and unthread the 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.

5) Thread the Schrader cap back on to the valve and partially thread the valve into the damper rod and tap the knob firmly with the mallet to unseat the damper rod. 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.**

6) After checking again that all pressure has been released from the air chamber, use snap ring pliers to remove the snap ring at the bottom of the air spring stanchion. Thread the Schrader valve 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.

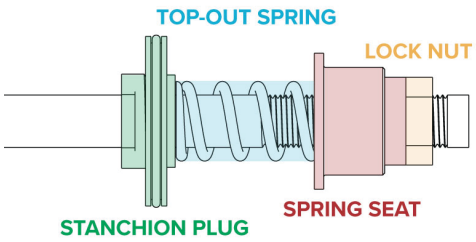
7) To remove the Ramp Control assembly from your fork, use an 11mm (or 7/16”) socket and unthread the lock nut on the Schrader valve while holding the orange Ramp Control knob and set it aside. Lift the orange knob off the cap and set it aside. With your HG-spline cassette tool, unthread the top cap completely and set aside. Lastly, with a ~450mm long dowel or plastic pipe push the Ramp Control piston assembly out through the bottom of the stanchion and set it aside.

8) Take the Ribbon Coil spring pre-load cap assembly and thread it into the top of the crown about halfway or 3-4 threads deep with your HG-spline cassette tool.

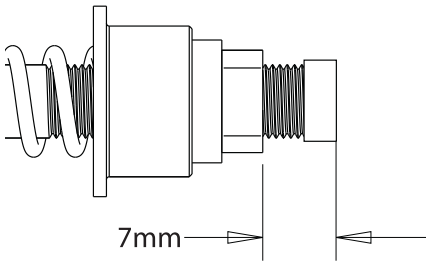
9) Very lightly grease the coil spring with general purpose grease (thick marine variety recommended) and insert the spring through the bottom of the stanchion.

10) Fork travel is set via the spring seat and lock nut on the spring rod assembly. To set travel, unthread the lock nut from the top of the spring rod with a 15mm wrench (or adjustable wrench) on the lock nut and a

26mm wrench (or vise, or additional adjustable wrench) on the spring seat. For setting the travel you will measure from the **top of the spring rod to the top of the lock nut**, as pictured below.




***Refer to this table to set your desired travel.*** *Note that the measurements for 27.5" and 27.5+/29" forks differ despite being of the same travel length.* ***Make sure you are referencing the correct model.***




*27.5+/29" 160mm shown*

| 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. With a 15mm (or adjustable wrench) and 26mm wrench (or vise, or additional adjustable wrench) tighten the two parts together snugly but not so tight that you strip either part.

11) 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 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.

12) 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.

13) 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 tip to avoid getting oil in the ends of the damper and spring rods.

14) 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 knob tool to hold the rebound adjustment stationary as the damper screw is tightened **(if you do not have the rebound removal knob refer to 14b)**. 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.

14b) If the rebound knob tool is not used, before installing the screw use the 3mm 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.

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

16) 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 knob tool to hold the Ramp Control adjustment stationary as the spring screw is tightened **(if you do not have the rebound knob tool refer to 16b)**. If the screw encounters resistance before fully tightening, oil may still be trapped in the socket of the Ramp Control needle. If that's the case, 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.

16b) If the rebound knob tool is not used, before installing the screw use the 3mm 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.

17) Wipe away any oil on the Ramp Control screw and install the orange Ramp Control knob.

18) Tighten the spring pre-load cap assembly (using an HG-spline cassette tool) to 5Nm. Install the fork back on your bike, and adjust the spring preload and Ramp Control to your liking.