’17+ Wiper Seal Replacement

Tools
1.5mm hex
3mm hex
10mm wrench
Small flat blade screwdriver
Snap ring plyers
Rebound Removal tool (optional)
Rubber mallet
DH tire lever
Supplies
40cc of 5wt fork oil
Slick Honey Grease (or equivalent)

1) After removing the fork from the bicycle, turn the ramp knob to the lightest setting (counterclockwise), to ensure all air 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.

3) With the air released take 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) Loosen the setscrew on the red rebound knob until the knob can slide off of the damper screw. Remove the damper screw using the rebound removal knob in combination with the open end 10 mm wrench. **Skip to step 4a if removal tool is not being used.** Holding the removal knob while turning the screw will maintain the position of the rebound needle in the damper rod.

4a) If the removal knob is not used, turn the rebound to the full slow position (clockwise) before removing the red knob. Remove the red rebound knob and set aside. Use a 10mm open end wrench and unthread the damper screw, 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 valve (with the Schrader cap threaded on) part way into the damper rod and tap the screw firmly with the mallet to unseat the damper rod. Remove the Schrader valve. Slide the fork lower casting off of the stanchion assembly and set the casting aside. Lubricating oil may drip from the casting and stanchions.

6) Use a rag to wipe off the wiper seals, so dirt does not fall into the lower casting. Pull the foam rings out from under the wiper seal and discard.

7) Using a DH tire lever (what we use), or a large flat ended tool. Pry the wiper seal out of the casting, making sure not to scar the side of the casting. Discard the worn wipers.

8) Clean any leftover grease out of the wiper seat. Take a rag and some alcohol (91% isopropyl alcohol) and clean all oil and grease residue out of the wiper seat. The wiper seat needs to be clean and dry to get a proper press fit of the wiper seal in the seat.

9) Set the dry foam rings at the bottom of the seat, just above the bushing.

10) Using a wiper seal installation tool, press the wipers in until fully seated. If you do not have a wiper installation tool, you can use a rigid tube that fits over the seal. You can also remove the tension spring off the upper lip and use a 33mm (LOOP) or 42mm (STAGE/RIBBON) socket to gently press the seal into place.

11) Take some fork oil and pour over the foam rings, getting them wet with oil.
Smear the provided tubes of Slick Honey, over the wiper seals and pack any excess between the foam ring and wiper seal.

12) With the stanchion assembly still inverted, slide the lower casting onto the stanchions. As soon as the lower bushings in the casting engage the stanchions, stop and pour approximately 20cc of fork oil into the screw hole of each lower casting leg. Hold the fork at an angle while pouring to avoid getting oil in the ends of the damper and spring rods.

13) 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.

14) 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 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 75 inch-lbs (8.5 Nm).

14b) 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 75 inch-lbs (8.5 Nm).

15) Wipe away any oil on the damper screw and install the red rebound knob then compress the fork until the casting touches the air spring rod. Install the Schrader valve and tighten to 75 inch-lbs (8.5 Nm).

16) Inflate the FULFILL air spring. With both chambers at zero psi, you will want to start with the positive chamber at the top of the crown and inflate it to your desired starting pressure. Next inflate the negative chamber to the same pressure as the positive chamber. If you are looking to refine your air spring further, please refer to MRP's inflation chart for different negative spring pressures.