FACTORY
SERVICE
DOCUMENT

EQUALAIR™ AIR SPRING SERVICE: V1.0, JUL '17



RELEVANT MODELS:
STAGE MY13-16
LOOP SL/TR MY13+

DESCRIPTION

This service includes disassembly, inspection, and re-lubrication of the EqualAir™ air spring assembly.

RECOMMENDED INTERVAL

Normal conditions: 50-100 hours
Extreme conditions: 30-50 hours

TOOLS NEEDED

- *Rubber or plastic mallet*
- *1.5mm hex*
- *10mm wrench*
- *Snap-ring pliers*
- *Rebound removal tool (optional)*
- *Small pick (dental pick works best)*

SUPPLIES NEEDED

- *30cc of 5-10wt fork oil*
- *Slick Honey Grease (or equivalent)*

PARTS NEEDED

- *Seal Kit – 103300 LOOP SL/TR or 103304 STAGE*

PROCEDURE

1. After removing the fork from the bicycle, release all air pressure from the air spring leg by depressing the air release valve located in the center of the Ramp Control control knob or in the center of the air cap on LOOP SL forks. ***NOTE: Turn the Ramp Control knob to the softest setting (counterclockwise) on LOOP TR and STAGE forks, to make sure all air is released.***
2. With the air released take a 10mm wrench and unthread the Schrader valve (on the bottom of the disc leg) until it can be removed.
3. With the Schrader valve removed, take a small pick and remove the o-rings from the Schrader valve body and set them aside if undamaged.
4. Thread the Schrader cap back onto the valve and thread the Schrader valve back into the air spring rod, leaving 5mm of the threads exposed. Use your rubber mallet to tap the Schrader cap and release the air spring rod from the lowers. Once released, remove the Schrader valve from the bottom of the fork and set aside.
5. Slide the lower casting to the fully extended position on the stanchion assembly and turn the compression knob clockwise to the closed position.

PROCEDURE *(CONTINUED)*

6. Loosen the setscrew on the red rebound knob until the knob can slide off of the damper screw. Remove the rebound knob and set aside.
7. Remove the damper screw using the Rebound Removal Knob, in combination with the open end 10 mm wrench. Holding the Rebound Removal Knob while turning the screw will maintain the position of the rebound needle in the damper rod. If the Rebound Removal Knob is not used, the rebound needle will unthread to the end of the damper rod as the damper screw threads out. While threading the damper bolt out feel for the bolt to disengage from the threads, then pull the damper bolt straight out. The internal rebound needle will be at the end of the damper rod, use a 3mm hex key to turn the rebound needle back down into place. Tighten until firm resistance is encountered, then back off by 2 turns.
8. Thread the Schrader valve (with the Schrader cap threaded on and o -rings removed) into the damper rod leaving 5mm of the threads exposed, then tap the Schrader valve firmly with the mallet to unseat the damper rod. Remove the Schrader valve. Slide the fork lower off of the stanchion assembly and set the fork lower aside. Lubricating oil may drip from the fork lower and stanchions. ***Note: With the STAGE fork, there will be a bottom out peg that needs to be removed before moving to step. This peg can be removed by applying firm pressure on one side of the peg, then pushing slightly up and away from the stanchion. Once removed from the bottom of the stanchion, clean and set the bottom out peg aside.***
9. Check again that all pressure has been released from the air chamber. Use snap-ring pliers for LOOP forks and small screw driver for STAGE forks. Remove the snap-ring at the bottom of the air spring stanchion and set aside. Thread the Schrader valve into the end of the spring side rod to make spring assembly removal easier. Gripping the screw, pull firmly on the rod to remove the spring assembly. Tech Tip: depress the air release valve in the RAMP knob or air cap, to make removal of the air spring assembly easier.
10. With the air spring assembly removed from the stanchion, carefully inspect the parts and rod for any abnormal wear or broken parts. Replace any parts that are worn or damaged.
11. Remove the stanchion plug from the air spring rod by sliding the plug off the bottom of the air spring rod. Using a pick, gently remove the main seal on the stanchion plug O.D. then remove the two seals on the I.D. of the plug. Discard the seals as these are being replaced. Clean and inspect the seal grooves for and debris or scratches that may cause air leaks or damage to the seals.
12. Lightly grease and install the new seals on the stanchion plug and re-install onto the air spring rod.
13. Remove the main air piston seal and discard it, then clean and inspect the piston for any debris or damage. There are three set screws under the main piston seal, the piston does not need to be removed but do check that the screws are snug with a 1.5mm hex wrench.
14. Lightly grease and install the new main piston seal on the air piston. Take a pea size dollop of stanchion grease and smear it on the I.D. of the stanchion. Before installing the air spring assembly, add 2 drops of fork oil into the stanchion for lubrication. Install the spring assembly, carefully sliding the seals into the stanchion making sure the seals do not get damaged. Using snap-ring pliers carefully install the snap-ring in place and check that it is properly seated into the snap-ring groove. Note: With Stage forks, re-install the bottom out peg on the end of the air spring stanchion. You will need to center the bottom out peg to the stanchion, then press firmly until it snaps in place.
15. Before reassembling the fork lower to the stanchion assembly, check the o-rings for the Schrader valve and replace damaged ones then install into the o-ring grooves. Inspect the o-rings on the damper screw and replace as needed. Give the o-rings a light coat of grease and

set aside.

16. With the stanchion assembly inverted, slide the fork lower onto the stanchions. As soon as the lower bushings in the fork lower engage the stanchions, stop and pour approximately 20cc of fork oil into the bolt hole of the spring leg for lubrication, 10cc of oil into the damper leg. Hold the fork at an angle while pouring to avoid getting oil in the ends of the damper and air spring rods.
17. Resume sliding the fork lower onto the stanchions until the fork lower 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.
18. Use the Rebound Removal Knob to hold the rebound adjustment stationary as the damper screw is tightened. If the screw encounters resistance before fully tightening, oil may still be trapped in the socket of the rebound needle. Remove the damper screw and use a cotton swab to wick away oil pooled in the hex socket, then install the damper screw and tighten to 75 inch-lbs (8.5 Nm). If the Rebound Removal Knob is not used, before installing the damper screw use the 3 mm hex key to unscrew the rebound needle inside the damper rod until it is near the end of the rod. This should only be done with damper rod fully extended. Use a cotton swab to wick away any oil trapped in the socket of the rebound needle. Insert the damper screw so the male hex and female hex line up properly, then thread the damper bolt and rebound needle in until they bottom out. Tighten the screw to 75 inch-lbs (8.5 Nm).
19. Wipe away any oil on the damper screw and install the red rebound knob. Turn the blue compression knob to the fully open position and compress the fork until the casting touches the air spring rod. Install the Schrader valve and tighten to 75 inch-lbs (8.5 Nm).
20. Inflate the fork to 50psi with a bicycle shock pump. Then pull the lowers away from the crown allowing the two chambers to equalize in air pressure; you can leave the pump attached during the inflation process. Now inflate the fork to your desired air pressure and pull the lowers away from the crown again. Again, re-inflate the EQUALAIR spring to your desired pressure and remove the air pump and install the air cap.
21. Clean and install the fork onto the bike.