



RAMP Service Instructions

Necessary tools, parts, and supplies:

Socket wrench, 24mm (LOOP TR), 28mm (STAGE)

Rubber or plastic mallet

Rebound removal knob WB-97-702 (optional)

Open-end wrench, 10 mm

Snap ring pliers (fine tip) for LOOP TR

Small flat blade screw driver for STAGE

Hex keys, 1.5mm

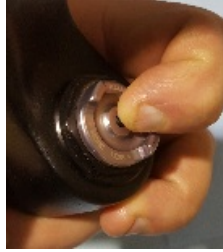
Fork or suspension oil, 5 wt., 3 oz (only about 20cc will be used)

Fork grease, Slick Honey preferred

450mm long dowel or pipe

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) Release all air pressure from the air spring leg by depressing the air release valve located in the center of the ramp control knob. Next turn the fork upside down and remove the valve cap from the Schrader valve on the disc side and depress the Schrader core, releasing any air left in the air spring rod.



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) Slide the lower casting to the fully extended position on the stanchion assembly and turn the compression knob clockwise to the closed position.

5) 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 5a 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.

5a) 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.

6) 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.



7) For LOOP TR skip to step 8. With the STAGE fork you will need to remove the bottom out peg from the end of the stanchion. Using your thumb apply firm pressure to the side of the gray peg until it pops loose and can be removed. Inspect the peg for damage and set aside.

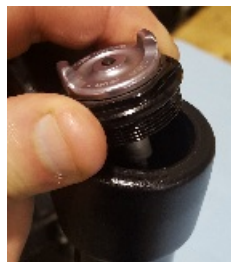


8) After checking again, that all pressure has been released from the air chamber use snap ring pliers (for LOOP TR) or small crew driver (STAGE) to remove the snap ring at the bottom of the air spring stanchion. Thread the Schrader valve into the end of the spring side rod. Gripping the screw, pull firmly on the rod to remove the spring assembly. Tech Tip: depress the air release valve in the RAMP knob to make removal of the air spring assembly easier.



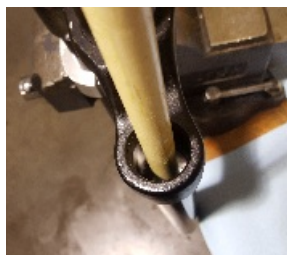
9) With the air spring assembly removed from the stanchion, carefully inspect the parts and rod for any abnormal wear or broken parts. Replace any parts that are worn or damaged. Set the air spring assembly aside.

10) With your 24mm (Loop TR) or 28mm (Stage) socket, remove the RAMP control cap by unthreading it counterclockwise. As you unthread the cap it is normal to feel the clicks of the adjustment while turning the wrench. Once the threads are fully disengaged, pull the cap up and away from the crown. Inspect the cap, look for any damage to the o-ring and make sure the grey adjustment knob spins smoothly on the black cap and clean if necessary. If the knob needs cleaned you will want to use mild soap, a small bristled brush, and compressed air to clean as the RAMP cap assembly cannot be disassembled. Set the RAMP cap assembly aside.

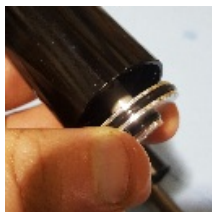


11) With the cap assembly removed, you will need to use a 450mm long (or longer) dowel or pipe to remove the RAMP piston from the stanchion. Hold the crown assembly upright and using your dowel/pipe, push the RAMP piston through the stanchion and out of the end. The RAMP piston cannot be removed from the top because the threads at the top of the stanchion can damage the piston, and on the STAGE the stanchions are tapered near the crown. Clean, inspect, and replace any necessary seals on the RAMP piston.

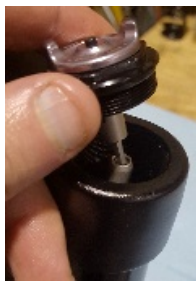
NOTE: If you have had trouble with the RAMP not working properly or the piston was not matted with the RAMP cap, contact MRP Service Department.



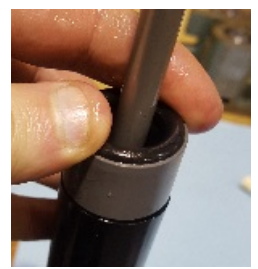
12) When installing the RAMP piston, DO NOT grease the seals of the piston. This can cause the piston to move during operation of the fork. You will want to give just the outer o-ring on the piston a light coating of fork oil. Insert the piston through the bottom of the non-damper stanchion, with the long shaft of the assembly facing the crown. Once you feel the piston rest against the end of the stanchion plug relief, gently push the piston into the inner diameter of the stanchion. You will find using your thumb and rocking it on the piston the easiest way to get the piston to slide into the stanchion. Once in the stanchion use your dowel/pipe to push the piston towards the crown until the shaft of the RAMP piston is flush with the top of the crown.



13) With the RAMP piston in place, take your RAMP cap assembly and align the male hex of the cap with the female hex of the piston. Gently push the piston down until you feel the threads of the stanchion meet the threads on the RAMP cap assembly. By hand thread the cap into the stanchion clockwise a few revolutions making sure the cap is not cross threading. Use your socket wrench to tighten the RAMP cap the rest of the way and until the cap is snug, 5Nm is tight enough.

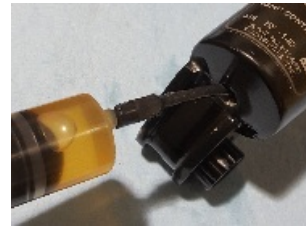


14) Install the negative spring and air spring rod assembly, with a light coat of grease on the spring. For the LOOP TR use snap ring pliers to carefully snap the snap ring in place. For the STAGE, insert the snap ring by starting with one end and pushing it in to the snap ring groove. Once the snap ring is installed in the STAGE, install the bottom out peg on the air spring stanchion by pressing it into place with firm pressure until you feel it snap into place.



15) Before reassembling the lower casting to the stanchion assembly, check the o-rings on the air spring screw and damper screw. Damaged o-rings should be replaced and coated with fork grease before further reassembly. Also inspect the wiper seals on the lowers and clean any dirt or debris that may be in the lips of the seals. Apply a thin coat of Slick Honey to the ID of the wiper seals after cleaning.

16) 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 15cc of fork oil into the screw hole of the spring leg for lubrication, 15cc 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 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.

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 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).

18a) If the rebound removal knob is not used, before installing the 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 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).

19) Wipe away any oil on the damper screw and install the red rebound knob. Turn the compression knob to the fully open position and compress the fork until the casting touches the air spring rod. Install the air spring screw and tighten to 75 inch-lbs (8.5 Nm).



20) With the **EQUALAIR** spring in your fork, you will first want to 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