

# IMV OIL CHANGE INSTRUCTIONS

### **Tool and Supplies**

1.5mm allen wrench 4mm allen wrench 6mm allen wrench 24mm socket wrench 8oz (237ml) of 5wt fork oil. Slick Honey (or equivalent)

## **Disassembly Instructions:**

- 1) Place a shallow tray or layered newspaper under the spring leg to catch oil drips. Loosen the compression screw at the bottom of the air spring leg until it protrudes about 5mm. With a mallet, tap the compression screw back flush with the drop out to release the compression rod. Remove the screw.
- 2) Release the air from the air spring leg and allow oil to drain for a minute or so.
- 3) Remove the red IMV knob by removing the screw using a 1.5mm Allen wrench.
- 4) Remove the rebound adjuster knob. (Note: It is helpful to use a 4mm Allen wrench to wiggle the adjuster while you pull it strait out).
- 5) Remove the damper top cap using a 24mm or 15/16 socket.
- 6) Pour out any oil from the top of the damper leg into a receptacle.
- 7) Loosen the compression screw at the bottom of the damper leg until it protrudes about 5mm. With a mallet, tap the compression screw back flush with the drop out to release the damper end from the drop out.
- 8) Remove the compression screw completely and allow the remaining oil from the damper to drain through the dropout into the receptacle.
- 9) Slide the upper assembly out of the fork lower. Oil will continue to drain from the damper and fork leg, so have a receptacle and wipes handy. The IMV damper can be seen protruding from the bottom of the stanchion.
- 10) After letting the damper drain, blot and wipe away oil from the damper shaft and seal head (the black fitting that is screwed into the bottom of the stanchion). With the seal head dry of oil, grip the seal head with a piece of dry rubber, such as a piece of old innertube, and unscrew the seal head from the stanchion.
- 11) The damper will now slide out of the stanchion. More oil will drain from the damper.

## **Assembly Instructions:**

- 1) Take IMV damper and insert it into the seal head (make sure seal head has a seal band or o-ring, depending on model, inserted). The seal head should be put onto the bottom of the damper body so that when it is installed into the stanchion, the brass adapter should be toward the top of the fork.
- 2) Put a piston band onto the piston and insert the assembly into the bottom of the stanchion.
- 3) Screw the seal head into the bottom of the stanchion. Wipe the seal dry of oil and use a piece of dry rubber to grip it, and tighten by hand as tight as possible.
- 4) Insert the upper stanchion assembly into a lubricated fork lower. (Make sure that the fork lower has an oil seal in the damper leg and that there is a bottom out bumper on the air spring side-either an orange bumper on the compression rod or a large o-ring in the bottom of the fork lower-depending on fork model). IMPORTANT: The internal cavities in the wiper seals must be filled with lubricant, either Slick Honey or similar fork-specific grease, before the stanchions are inserted.
- 5) Put the compression screw into the lower damper shaft (NOTE just snug up the compression screw DO NOT tighten the compression screw so that the lower damper shaft seats into the drop out). Make sure that the compression screw has the oil tight washer installed.
- 6) Push the stanchions all the way into the fork lower and fill the damper leg (through the top of the stanchion) with oil. Use Torco No. 7 (Rock Shox No. 5) or any equivalent fork oil. Fill to the bottom of the top cap threads on the stanchion with the stanchions still fully compressed into the lower. By the time reassembly is finished the damper will take approximately 6 fluid oz of oil, but the exact volume is set by adjusting the final oil level as described below.

- 7) Stroke the fork 6-8 times slowly through its full travel. You should see and hear bubbling as the oil works through the damper. Add more oil (to the top of the brass end fitting on the damper rod) and stroke the fork 6-8 more times.
- 8) Make sure that the oil level is about 25mm above the top of the piston (the oil level is not critical at this step, just make sure there is a generous amount of oil on top of the piston).
- 9) With the stanchions fully compressed into the fork lower, insert the damper plug tool into the top of the stanchion as far as it will go. If a plug tool is not available, install the cap, with the hex key inserted into the brass end fitting, and tighten it snug (it is not necessary to install the IMV knob).
- 10) Carefully turn the fork upside down and extend the lower assembly up the stanchions approximately 30mm.
- 11) Loosen the compression screw until it protrudes, then push the screw back flush with the drop out to release the damper end from the drop out. CAREFUL, oil droplets may spray. Remove the screw.
- 12) Fill the fork lower completely with oil by pouring oil through the compression screw hole.
- 13) When the oil is to the top of the compression screw hole, carefully and slowly extend the fork lower on the stanchions until the stanchions pop out of the lower bushings (the lower bushings are the bushings furthest from the fork brace the lower bushings if the fork is right side up). NOTE you will feel the stanchions pop out of the bushings and also hear oil gurgle into the cavity between the bottom bushing and the oil seal on the damper side. This step is critical, the cavity between the bottom bushing and the oil seal must be filled with oil.
- 14) Still holding the fork upside-down, compress the lower back down to within 5mm of the bottom of the damper.
- 15) Fill the fork lower completely with oil again through the screw hole.
- 16) Insert compression screw and tighten. Once the screw snugs firmly, STOP so as not to damage the hollow aluminum screw.
- 17) Flip the fork over and remove the damper plug tool from the stanchion (it is helpful to push down on the stanchions at the same time you wiggle and pull out the plug). If the cap has been used instead of the tool, remove the cap from the stanchion.
- 18) Stroke the fork slowly 6-8 times to allow any remaining bubbles to exit.
- 19) Compress the stanchions completely into the fork lower and adjust the oil level to approximately 75 mm from the top of the stanchion (add or remove oil as needed).
- 20) Extend the stanchions completely and insert the cap and hex key into the brass fitting on the top of the damper assembly. To do this it may be necessary to compress the fork slightly, but compress no more than is needed to insert the key. Tighten the damper top cap. Important: THE FORK MUST BE KEPT IN THE EXTENDED POSITION AS THE DAMPER CAP IS SEALED.
- 21) Clean and re-grease the red IMV knob o-ring. Install the IMV knob and start to thread in the small screw using a 1.5mm Allen wrench (leave this loose). CAUTION do not push the hex assembly through the top cap. Turn the IMV knob all the way clockwise, then lift the knob upward and adjust the position so that the writing is facing the rider. Tighten the screw with moderate torque. Set the IMV adjustment at the standard setting of 16 clicks from full tight.
- 22) Carefully insert the rebound adjuster knob into the compression screw. Air trapped behind the adjuster knob will tend to push it back out of the screw or make the knob difficult to turn. Rotate the rebound adjuster left and right several times rapidly with a 4mm hex key to remove any trapped air.

#### Install Oil Bath Lubrication in Air Leg

- 1) Inflate the air spring to 75 psi.
- 2) Flip fork over and extend the lower assembly up the stanchions so that the compression rod is a few millimeters below the drop out. DO NOT extend more than 6mm from the end of the compression rod.
- 3) Pour 20cc of oil (ok to use damper oil), into the compression screw hole (Make sure that the majority of the oil goes into the fork lower and not down into the compression rod).
- 4) Make sure that the compression screw has the oil tight washer installed, and tighten to 70 in/lbs max.



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