



## IMV INSTRUCTIONS

### Magic Tandem

#### Disassembly Instructions

- 1) Loosen the leg clamping screws on both the upper and lower crowns and slide the stanchions and lower fork assembly down and out of the crowns. A few light taps with a rubber mallet may help the stanchions to slide out.
- 2) Remove the red IMV knob from the damper stanchion by removing the screw using a 1.5mm Allen wrench.
- 3) Remove the rebound adjuster knob from the bottom of the damper side fork leg. (Note it is helpful to use a 4mm Allen wrench to wiggle the adjuster while you pull it out).
- 4) Remove the damper top cap using a 24mm socket. Grip the stanchion with a piece of dry rubber so that the cap can be unscrewed.
- 5) Dump out any oil from the top of the stanchion into a receptacle.
- 6) 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.
- 7) Remove the compression screw completely and allow the remaining oil from the damper to drain through the dropout into the receptacle.
- 8) Slide the damper side stanchion 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.
- 9) 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.
- 10) The damper will now slide out of the stanchion. More oil will drain from the damper.

#### Assembly Instructions

- 1) Take the new or repaired IMV damper and insert it into the seal head (make sure seal head has a seal band installed).
- 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 head dry of oil and use a piece of dry rubber to grip it, and tighten by hand as tight as possible.
- 4) Insert the stanchion into a lubricated fork lower. If the oil seal and wiper are worn or damaged, they should be replaced before proceeding. **IMPORTANT:** The internal cavities in the wiper seals must be filled with lubricant, either Slick Honey or similar fork specific grease, before the stanchion is inserted.

- 5) After inserting the stanchion, insert 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 stanchion all the way into the fork lower and fill the top of the damper (through the top of the stanchion) with approx. 200 ml of oil (use SAE 5 wt. fork oil).
- 7) Stroke the stanchion 6-8 times slowly through its full travel. You should see and hear bubbling as the oil works through the damper.
- 8) Make sure that the oil level is above the top of the damper piston.
- 9) With the stanchion 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 damper stanchion approx. 30 mm from the fork lower assembly.
- 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.
- 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 stanchion down away from the lower assembly until the top of the stanchion is approx. 40 cm from the wiper. NOTE - you may feel the stanchion pop out of the lower fork bushing and also hear oil gurgle into the cavity between the bottom bushing and the oil seal. This step is critical, since the cavity between the bottom bushing and the oil seal must be filled with oil.
- 14) Still holding the fork upside-down, compress the stanchion back into the lower assembly until the bottom of the damper is approx. 5mm from the bottom of the drop out.
- 15) Pour more oil into the compression screw hole until full.
- 16) Insert the compression screw and tighten. Once the screw snugs firmly, stop so as not to damage the hollow aluminum screw.
- 17) Return the fork to upright 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 add or remove oil until the oil level is approx. 25 cm from the top of the stanchion.
- 20) Extend the stanchion completely, then compress a few millimeters until the hex key can be inserted into the brass fitting on the top of the damper assembly. Compress no more than is needed to insert the key. Tighten the damper top cap. Important: The stanchion 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. 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.
- 23) Compress the damper stanchion until it is below the air spring stanchion. To prevent the hex key from becoming detached from the damper rod, keep the damper stanchion slightly compressed as the stanchions are reinstalled into the fork crowns. Once the air spring stanchion is positioned correctly in the crowns and tightened in place, then slowly extend the damper stanchion until it is at the correct height and tighten the clamp bolts.