






Marzocchi 40mm Forks.	Right hand side leg service instructions. The Hell Team. July 2015.
	<p>To get the Fork cap off we have made a special tool, but there are many things you can use. The trick is to pick up the pins, not to use the pre-load hexagonal NUT. They are never on very tight from the factory so a very gentle turn is usually enough to free the cap.</p>
	<p>Tool fitted to fork cap.</p> <p>NOTE: DO NOT try and remove the cap with the forks clamped in the triple trees.</p> <p>Undo the cap from the upper fork leg, and lower the upper leg into the lower fork leg. (slide it down)</p>
	<p>Now is the time to drain the oil.</p>
	<p>In the bottom of the forks there is a bolt. Remove this and it will both drain the oil and release the cartridge from the lower fork body.</p>
	<p>The cartridge will come out completely from the fork leg now.</p>



Now working on the cartridge:  
Pull down the pre-load spacer, and hook it under the red nut, to reveal the two nuts you will need to hold to remove the cap assembly and spring.



Now using a 17mm open ender for the lower nut, and a 14mm thin open ender for the top nut remove the fork cap.



Carefully remove it in an upward direction, being careful not to damage the internal adjust rod.  
Then carefully remove your open-end wrench and release the preload spacer and spring.



If doing a complete disassembly turn the cartridge upside down and push down on this bush to reveal the retaining clip. Remove with small pick or similar. Be careful not to send it flying across the workshop as it is released!



These parts will now be able to be removed easily.  
The retaining circular clip  
The Bottom plug and seal  
The bottom out spring



Here's another photo of the parts on the workbench.



Then carefully pushing down on the rod you will remove the sealing piston. This has a Teflon strip around it's perimeter – check for wear and replace if necessary.  
Also inspect the seal and shims. Replace worn or broken parts.





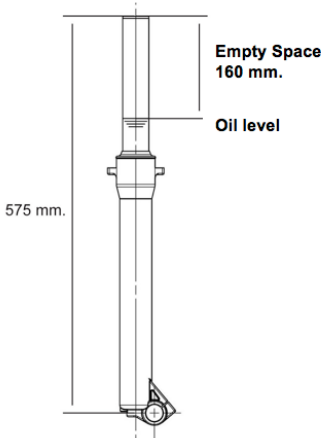

I wrap a bit of Rescue Tape around the small bleed hole to stop the loss of oil from this orifice whilst filling.  
Still a messy job, but it does keep the bench a bit cleaner!



**IMPORTANT NOTE:** When reassembling, these fork cartridges must be FULL of oil – NO AIR at all, or you will get erratic damping, and a nasty top out "CLUNK" on extension.  
Fill the forks completely with oil up to the large holes near the bottom of the cartridge.  
Once you have filled with oil drag down rod and piston being careful with the seal strip as it goes into the cartridge. Just pull it down sufficiently to get it below the small bleed hole.



Now you need to put in the next piston. But first remove the screw and "O" Ring from the centre, so as you put it in the cartridge air can escape through the centre.  
Remember to top up the oil before this goes in if necessary.

	<p>Once it is just under the surface of the oil (a few centimetres down from the lip edge), then screw the centre screw and “O” Ring back in. It should now be fully primed and you can put in the bottom out spring, bush and retaining clip so the cartridge is completely reassembled.</p>
	<p>Insert the cartridge back into the lower fork leg, and reverse the disassembly procedure. For the Marzocchi 40mm Aluminium fork, fill with 5W fork oil until the gap is 160mm from the fork oil level to the top of the fork stanchion when it is pushed all the way into the lower leg.</p>
	<p>Then install spring, pre-load spacer, and fork cap. Then screw lower leg to fork cap and reinstall on the bike.</p>
	<p>Please take particular care both with the removal and installation of the seals – they are easily damaged by rough handling. And also to making sure that ALL the air is out of the cartridge on reassembly. This step is very important with these forks.</p>