

## PUCH M125 – REAR SHOCK ABSORBER OVERHAUL

One of my rear shock absorbers was leaking and because the bike had been off the road since way back in 1992 I think it was a fair guess to say that they could do with an oil change too. Certainly the leaking shock would have proven to be an MOT failure and so seeing as how the rest of the bike was in bits strewn around the garage I didn't see why the shock absorbers should escape the same fate.

The job itself is very straightforward and didn't need any special tools. I did however, much to my surprise, need to employ an air impact driver but maybe that was a bit of overkill. The procedure is described on page 6 – 18 of the Repair Instructions.

Tools required were:

17mm spanner x 2 or equivalent sockets.

22mm or 7/8" AF open ended spanner, the thinner the better.

Large flat bladed screwdriver plus maybe if you're lazy/clumsy like me, an air impact driver with similar flat blade.

Measuring jug.

Fork oil.

367.1.21.078.1 seal x 2 off.

367.1.21.079.1 gasket ring x 2 off...Item 7 in the parts book.

Sellotape.

A vice.

Hammer; preferably a soft faced one.

Patience.

The first step is to open the gland nut a.k.a sealing screw (item 3 in the parts book). With the shock still on the bike, rotate the spring by hand until you can get the jaws of the spanner between the spring windings and onto the flat machined on the sealing screw [see photo]. Due to the thickness of the spanner [mine measures 6.7 mm thick but it went on with a struggle], you will need to use a hammer and drive the spanner right on the flat until you feel it seat fully onto the gland. A sharp tap or two will suffice, then undo it slowly and steadily, rotating the spring as you go to allow the spanner to turn until you can't get the spanner between the top of the nut and the plastic guard bottom edge. Make sure that the spanner is fully seated and don't rush this bit as you need to avoid rounding off the flats.

Take the spring off the bike after a few turns of rotating the spring coil as you turn the spanner and finish undoing it laid on the bench. It will pop open and will obligingly pour stale oil all over everything. Draw the piston rod out of the top of the assembly. I also took the plastic guard out at this point to clean it.

Clean the damper tube then put the piston rod assembly into a vice held by the top mount, and undo the jet screw. On mine the screwdriver started to ruin the slot in the jet screw so I got my airwrench on it which was huge overkill but worked a treat. Once it's loosened but not removed, drop the piston rod down in the vice so that the jaws of the vice are under the flange on the distance bush which is pressed on. Don't score the piston rod! Tap the head of the screw and the rod assembly will be pushed through the distance bush.

Everything will now slide off the piston rod. Replace the seal the right way round, Google translate will help with this as there is a sealing and non-sealing side to the seal but embossed in German [item 4 in the parts book].

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There is a special tool to mount this seal on the rod without damaging it; this tool has probably long since passed into Puch obscurity so I degreased the rod and wrapped some Sellotape around it, tapering it off the end of the rod to give it a lead in and hence not damage the inner bore of the seal. Oil the rest of the rod like you would with any seal.

It is probably wise to also replace the gasket ring [item 7] considering its low cost.

Clean all of the parts up and reassemble the piston/rod assembly. On my own bike the right hand and left hand units were fitted with different damper pistons, one had a ring; the other was clearly manufactured not to have a ring.

Drop the cleaned damper tube back into the shock absorber body and replace the old fork oil with 55cc of 5W oil per unit. Then the tricky part! Holding the unit in the vice by its lower mount press the spring down and at the same time engage the gland/sealing screw and get the threads started to tighten up. Sounds easy doesn't it? It really isn't, but it will engage eventually after some fairly colourful language. I found it easiest, once the screw had engaged in its thread at this point, to remount the unit on the bike and then carefully tighten up, again rotating the spring windings to allow the spanner to turn. And that's it, job done.



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This information was kindly supplied by a fellow M125 owner.