

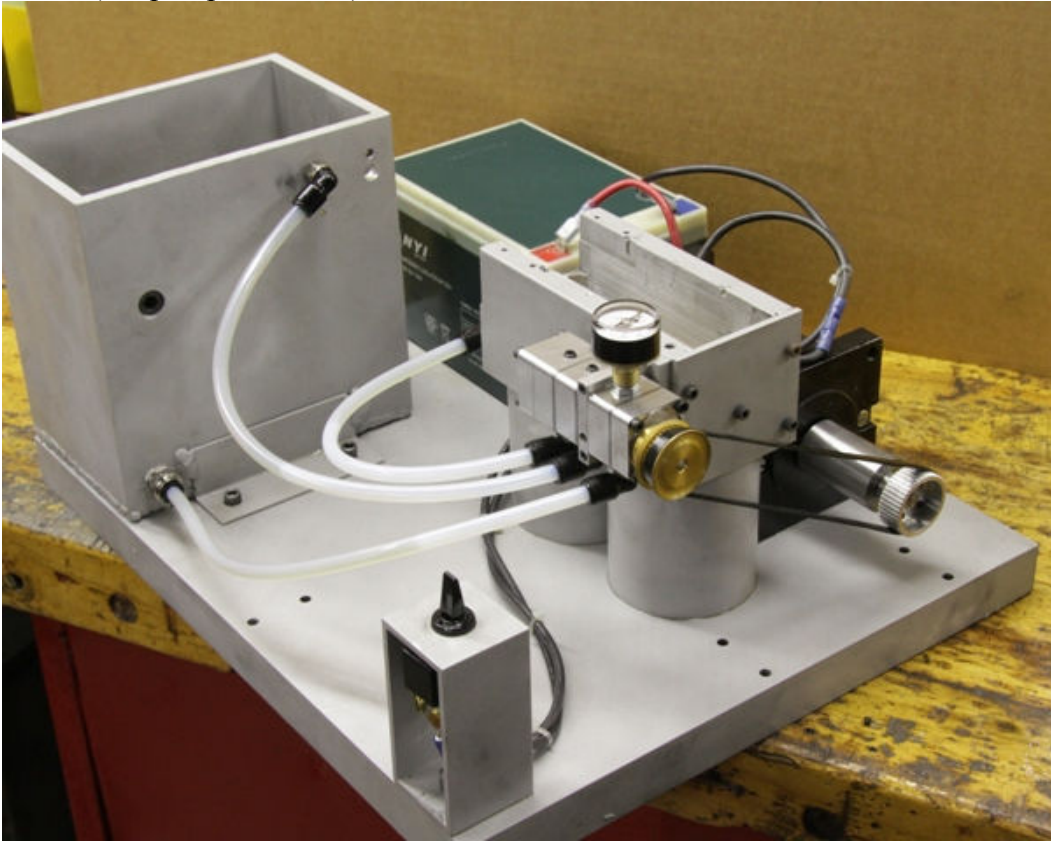
Sometimes I truly think that I should have my head examined for attempting this project. When I said that “I had grossly underestimated the time needed” it was never truer than the past two plus weeks. During this time we started to do the final assemble and test on the oil pumps. Basically everything went as planned, until I started to check each pump. I made a special testing jig (Pic #1 & #2) which allows me the run each pump and test for pressure and flow. I also incorporated a special adjustment screw that when turned while the pump in running will show an increase and decrease in pump pressure. The pumps were machine to such a close tolerance and worked so efficiently that the scavenge side was actually pulling the oil out of the reservoir so fast that it was creating an undesirable amount of air that was mixing with the oil and was literally making foam. This was obviously unacceptable. The long and short of the story is that it took me over two weeks of designs, testing, modifications, etc. to solve the difficulty. After all is said and done, I am glad to report that everything is working perfectly. Pic #3 show only one tray of finished oil pumps. The following four pictures show what a finish pump will look like. Not only were the changes for the better, it also eliminated the need for two oil lines and four quick-disconnect fittings. This is a much improved system which some of my customers will find very beneficial when they install their engines in boats or cars. I would also like to add that the special small pistons for the valve block in the pumps were changed in favor of a “ball” check valve. For what it is worth, I left the pump set for over 48 hours with the level of oil higher than the inlet and the ball valve preformed flawlessly. Once again, this was a direct result of the extensive testing that goes into each part and the only down side is time. It should be more evident to everyone why this project is taking so long. Pic #8 shows how many parts go into each pump. I will save you from counting and tell you there are over 69 individual parts, not including the timing belt and the additional pulley on the crankshaft. And before you ask, each pump does come with a miniature oil pressure gauge as standard equipment.

While all this was going on I needed to make the push-rod and piston for the fuel pump. Although the push-rod in Pic #9 looks like one piece it is actually two pieces with the smaller one being heat treated to about a 60 Rockwell. For those of you who do not know what Rockwell is, it just means that the small part of the push-rod is about as hard as a hand file. This eliminates wear when it comes in contact with the cam lobe, inside the distributor body. The stainless steel piston for the fuel pump can be seen in Pic #11

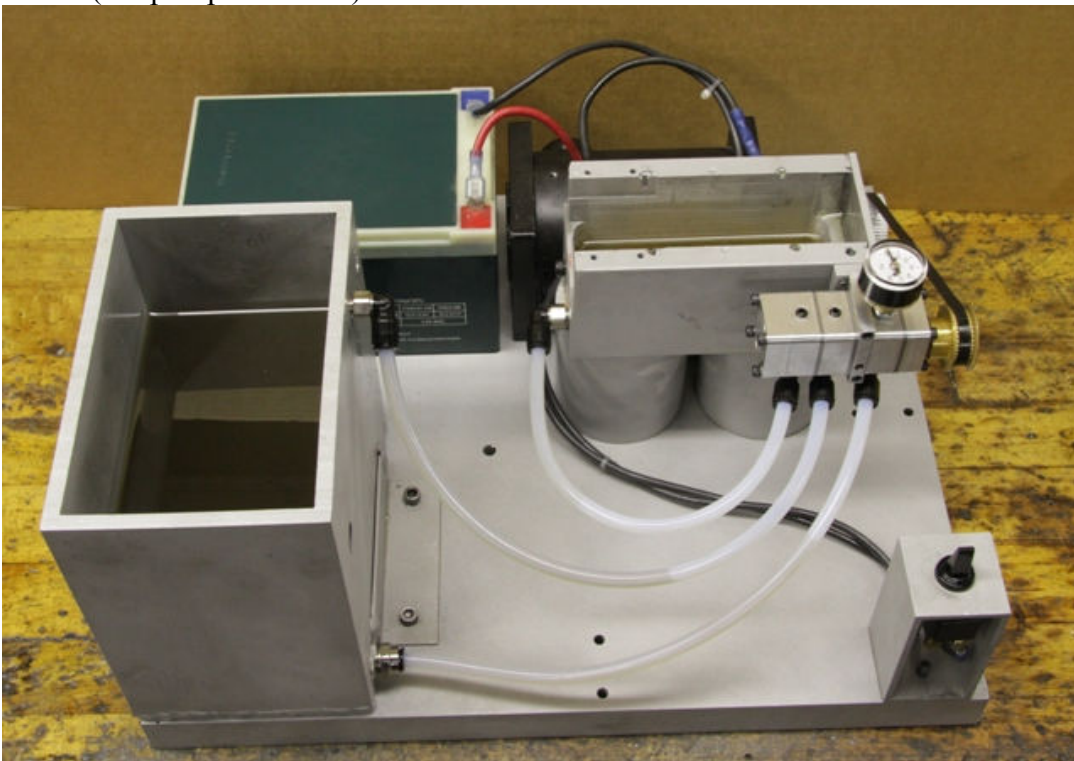
I know that a lot of you regularly check out my web site for updates, but sometimes there is just not enough extra time to do them as often as I would like. If you do not see the updates as often as you would like, it just means that I am extremely busy making parts, assembling, testing, modifying, writing programs, answering the phone, doing the mail, paying bills, etc. etc. – not complaining just statement of fact.

A final note, if anyone out there is thinking of making and producing a model V-8 engine, or any multi-cylinder model engine and offer it for sale to the general public, I would strongly suggest that you seek the help of a psychiatrist and with any luck they would be able to talk you out of it or at the very least have you locked-up before you can do any damage to yourself. Ha. Ha.

Pic #1 (Oil pump test stand)



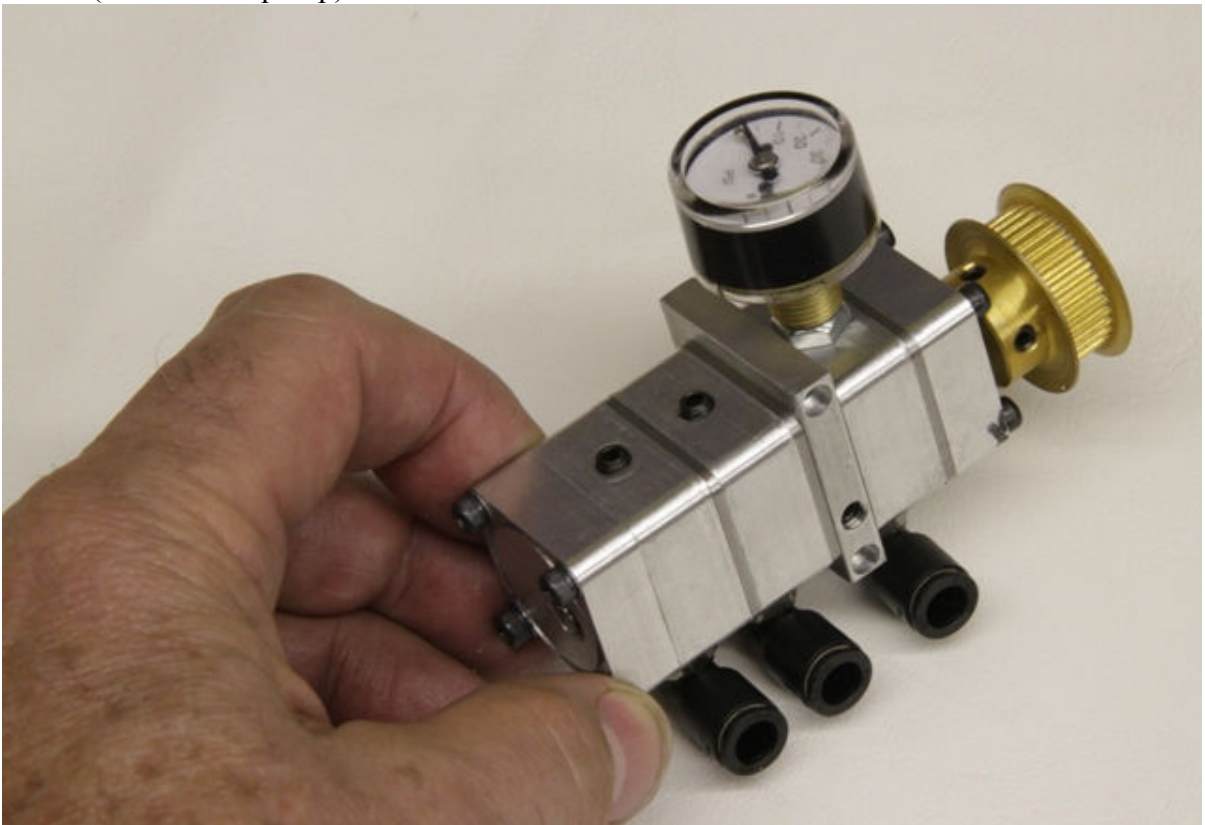
Pic #2 (Oil pump test stand)



Pic #3(Finished oil pumps)

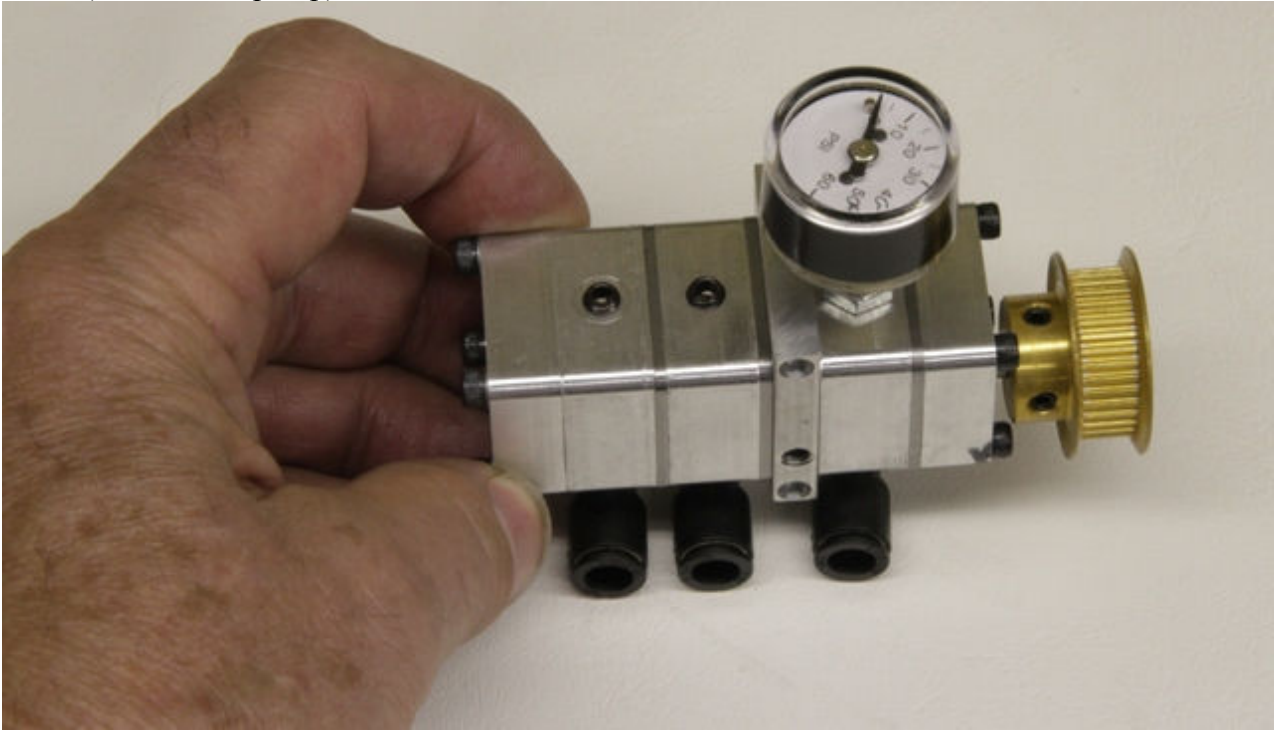


Pic #4 (Finished oil pump)

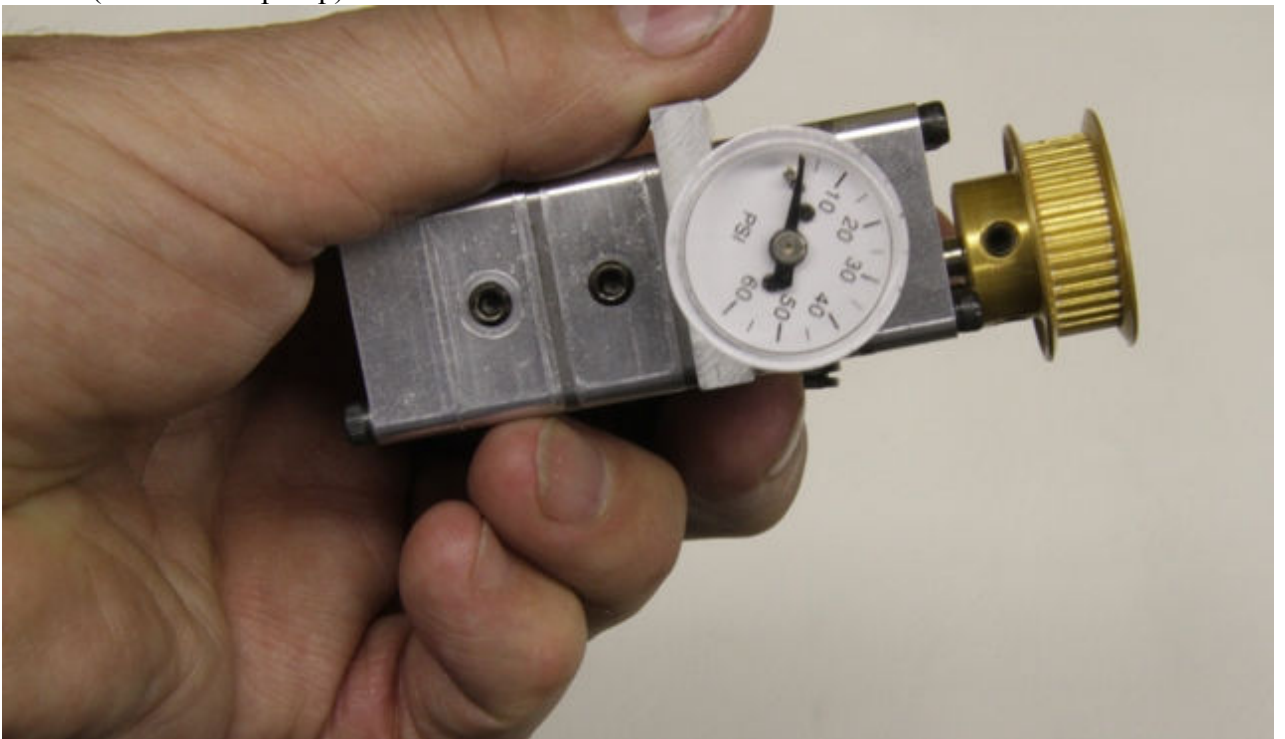




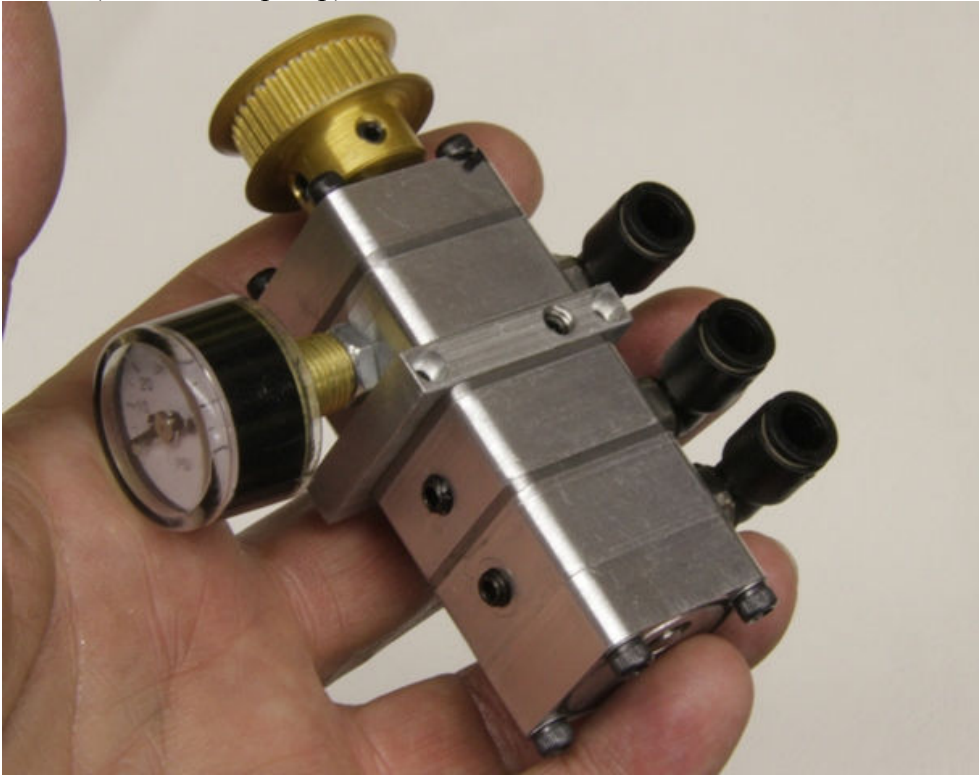
Pic #5(Finished oil pump)



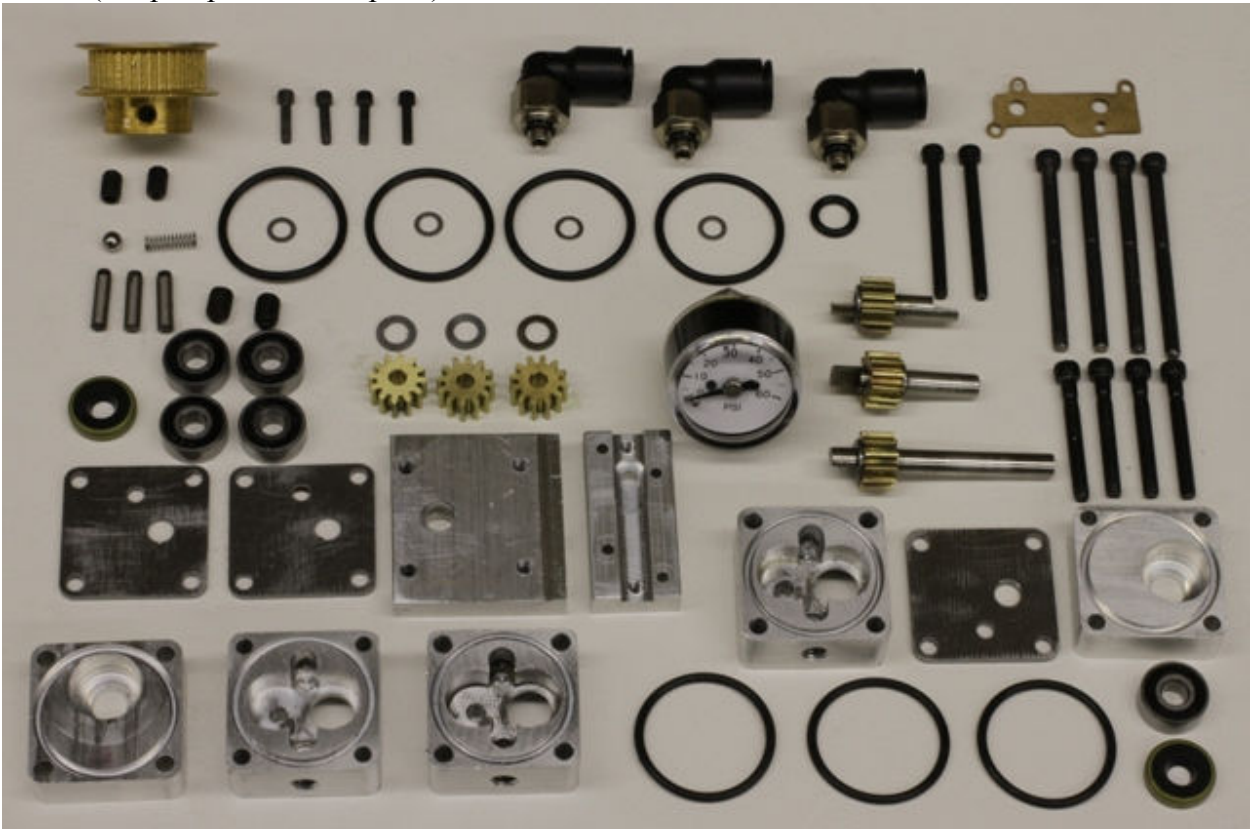
Pic #6 (Finished oil pump)



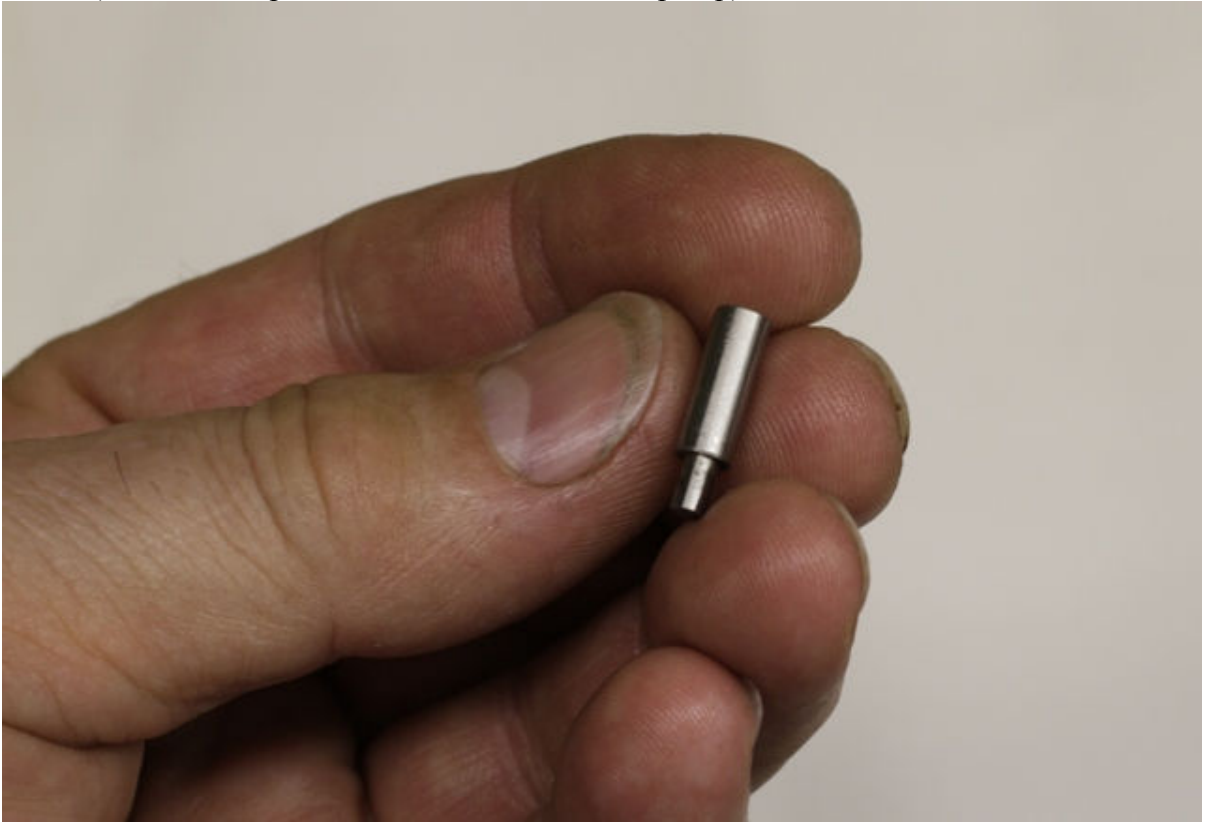
Pic #7 (Finished oil pump)



Pic #8 (Oil pump individual parts)



Pic #9 (Push-rod for piston which actuates the fuel pump)



Pic #10 (Finished push-rods)





Pic #11 (Piston for actuation of fuel pump)



Pic #12 (Finished piston for fuel pump)

