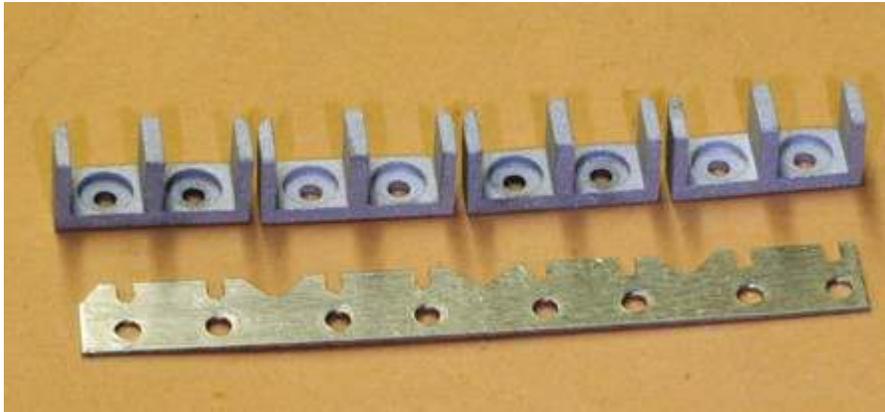


(12 August 2008)

Things are going great with the engine. The newly modified oil pump and bearings all appear to be operating perfectly. During the past 18 weeks the engine was probably dismantled 20 to 30 times. Each time the heads were replaced, aligning the pushrods through the guide plate was a difficult process. For those of you who do not know what a guide plate is or what it does, here is a basic explanation. The lifters that are in the block serve as a rest for the push rods. Oil is pumped to the lifters, where it then goes up through the pushrods, into the rocker arm. Since the rocker arm has only a center stud, without the guide plate to keep the rocker arm straight, they would never stay in alignment with the center of the valves. Picture #1 shows the original guide plate on the lower portion and the newly updated individual rocker arm alignment supports, above. Picture #2 shows a close-up of the new support. Not only does this give better and more constant alignment but adds more rigidity to the rocker arm stud, with reduced wear. Picture #3 show the original guide plate. You can see how difficult it is to make sure the push rod align perfectly with the center of the lifter, which is in the block. There was no way to see the top of the lifter and the alignment was done by "feel". Picture #4 shows the new rocker arm supports and you can see how this modification opened up the back side of the head. I can now see the top of each lifter. Once again, better alignment means less wear and more longevity to the engine. Misaligned rocker arms can also have the adverse effect of side loading the valve stem. I know that you have heard this before but, in my never ending "Search for Perfection", this is just one more area which I felt should be looked at, in more depth.

Pic #1



Pic #2



Pic #3



Pic #4

