

(14 June 2008)

Pic #1



Pic #2



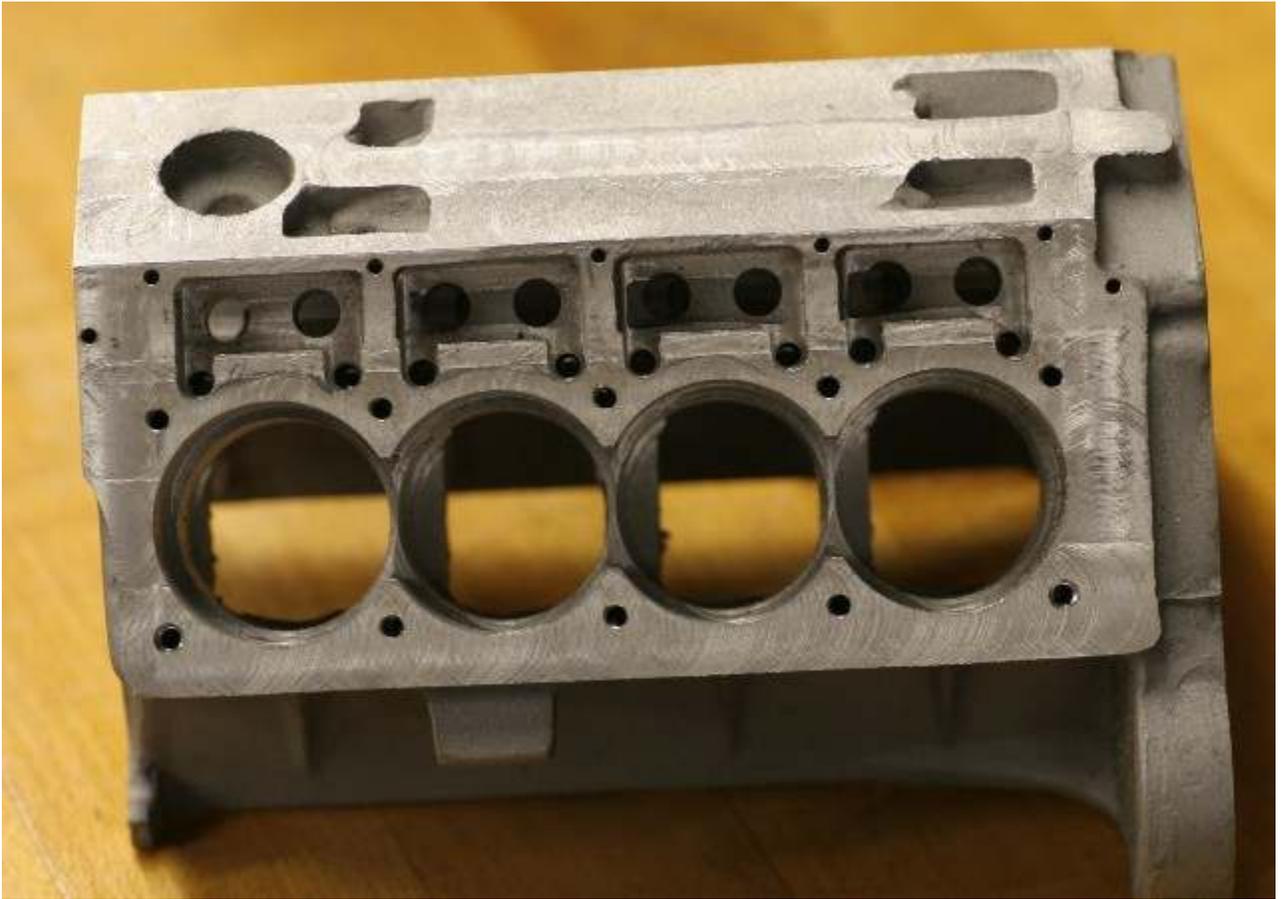
Pic #3



Pic #4



Pic #5



It is now two weeks later and I am still working on controlling the excessive oil that is sliding by the piston rings. I have eliminated the head area as a possible area of concern by adding an additional oil seal to each of the valves that will stop any oil that may be sliding by the valve stems. Things are getting better, but not good enough. I have now spend about 13 weeks working on the same area of concern. No matter how long it takes, I will solve this problem. The most disappointing and upsetting thing, for me, is the delayed delivery of the engines. I have had several customers respond to this dilemma and understand that it, unfortunately, takes a long time. I am investigating any and all new technology and have contacted key individuals that may be able to add some insight as to the solution. If you look closely at Picture #1 & 2, you will see that an modified "windage tray" has been added. This lessens the amount of oil that can migrate up the sides on the block into the bottom of the cylinders. A close examination between pictures #4 & #5 you will be able to see that the oil return holes and the contour around the top of the cylinder bores has been drastically modified. This change actually does two items, it gives a larger return path for the oil that it being pumped through the pushrods into the top of the head, and also add extra crankcase venting. Picture #3 shows the modification to the rods. The rod on the left was the original and after lengthy discussions with a top engine designer, the contours around the perimeter of the rod helps to reduce what is called "oil shear". Just one more improvement to the engine. These additions and modifications have made some significant

changes, but once again, the end result is not good enough for me. All this extra work will add about 4 months to the projected deliver time of July-August. All is not lost, to help with production I have hired extra staff. Although this does not eliminate the delays, it certainly will help getting finished components ready for assemble. Most of the parts will not change, which allows me to start some sub-assembly's such as: water pumps, timing covers, oil pumps, and heads. Items such as valve covers, intake manifolds, exhaust manifolds, pans, bell housings, transmission parts, crankshafts, camshafts, are not going to changes! I will not start the final machining of the blocks until I have solved the excessive oiling issue. Production will continue, it is just that every day over the past 3+ months has been spent on the same problem area. If you think that it is bad just waiting for an engine, you should be on this end, when everything that is tried does improve but does not eliminate the problem. On a positive note, all of these changes and time spent, will make for a better end product. Hang in there, I am doing the best that I can.