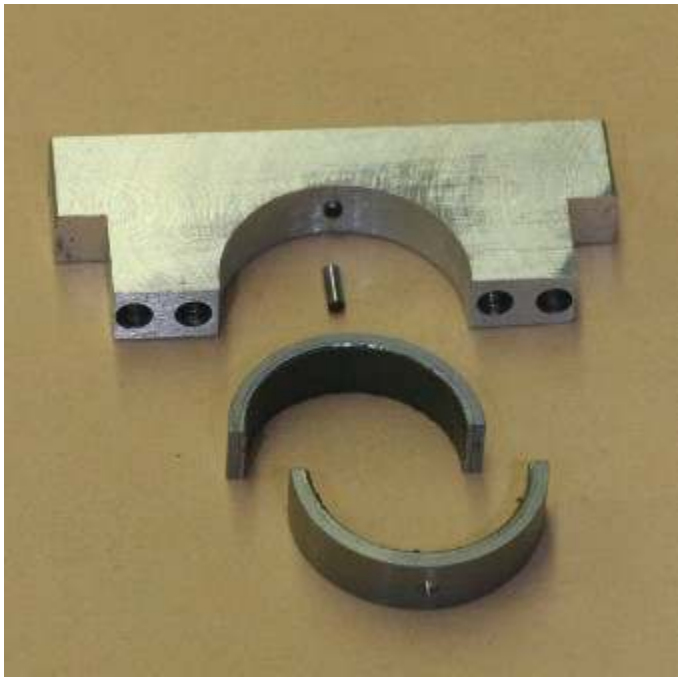
(29 July 2008)

It seams as though the work never ends and after some intense conversations with some fellow engineers, it was decided, bearing inserts for the rods and mains should be installed. This would insure additional longevity and reduce any chances of bearing failure. The custom made host bearings are made of steel with a lead/Teflon coating. Picture #1 shows the new connecting rod with the bearing inserts. A small dowel pin, scene between the two screws, is pressed into the upper part of the connecting rod. This is used to keep the bearing halves from spinning. Picture #2 shows the main bearing assembly. Once again a small dowel pin is used to insure the bearing halves do not spin. When making the bearings halves it was absolutely critical that the locating hole which aligns with the dowel pin, be exactly in the center on one half of the bearing insert. The other half (mains only) has an oil hole. Picture #3 shows the jig which is used to align either the rod or main bearing halves during the drilling process. Not only do the alignment holes need to be in the exact center, but each half must be accurate to within .001 of the calculated height. This holds true for both the rod and main bearing inserts.

The only problem with this modification is that all the crankshafts that were finish ground, must be reground to accommodate the new bearing inserts. I truly feel the net result is worth the added expense, extra effort, and additional time needed. From a serviceability standpoint, this means that the bearings are replaceable if needed. Although nothing is perfect and there are no absolute answers, I will try to do everything that is need to produce the best product on the market.

Pic #1

Pic #2



Pic #3