

To say that I have been very busy, is an understatement! The first pictures are not from GM, Chrysler, or Ford, but rather how far my next run of engines has progressed. If you look closely, you will see, all of the rocker arms are in place, as are the water outlets and intake manifolds. Once again, if anyone is ever contemplating making model engines on a production basis, good luck! You should probably get immediate medical help. Ha. Ha.

I am often asked why it takes so long, so I thought it would be a good idea to explain just one part, the distributor, in depth. Keep in mind, each distributor goes through 6 different machining operations. There are 80+ distributors so it is easy to see the number of times each must be picked up and held in a special jig. Add to this the large number of parts, like 2 rotor halves, 2 brass rotor inserts, 2 spring special formed clips to hold the cap in place, 1 shaft, 1 ball bearing, 2 bronze bearings, 1 distributor cap, 9 brass contacts, 8 spark plug wires, 1 coil wire, 8 spark plug contacts, 1 small spring, 1 carbon center contact, 8 silicone boots, 1 toe clamp, 2 toe clamp screws, 1 4-40 nylon insert nut, 3 2-56 x 1/4" screws, 2 2-56 x 1/2" screws, 1 spiral bevel gear, 1 small washer, 1 aluminum rotor, 8 magnets, 1 Hall effect sensor board, 1 piece of heat shrink, and 1 "C" clip. Roughly, this is about 70 parts and if you multiply this by 80+ distributors it is very easy to see the number of parts needed. If you add to this equation, the time needed to assemble all these parts, it is not too difficult to understand why it takes so long. One thing that must be perfectly clear, each part **MUST BE IDENTICAL!!!!** The distributor starts from a solid piece of 1.375 x 2" piece of 2024 T6 aluminum. Although the pictures are self explanatory, the small end is first turned down from 1.375 to .437" dia. This is a lot of material to be removed! At the same time, the center hole is drilled and reamed. When finished, the opposite end is machined. Since a ball bearing must be lightly pressed into place, the tolerance for this hole is .0005". That is 5 ten thousandths. Just for reference, the average human hair is about .002". Next, comes the machining process for holding the PC board with the Hall Effect sensors. The following operation indexes the distributor so the small slot can be machined to align the Hall Effect sensors. These must be extremely accurate. If you remember, my ignition system has an electronic advance - there are two separate sensors and the degree spacing must be exact. One sensor is for the retard circuit the other is for the advance circuit. Once finished the alignment notch for the distributor cap is machined into the top of the distributor housing, then the spring clip screws are drilled and tapped. Once all parts are completed and every part is in stock, then the entire item must be assembled!

Is everyone still with me or are you all asleep? Ha. Ha. So it is easy to understand just why doing a production run of 70, V-8 engines is so demanding and time consuming. This is not a complaint, but merely a statement of fact. While all of this is being done, I still need to do the daily functions of running a small business. This includes; answering all the email, typing invoices, inventory, material, mail, machine maintenance, programming the CNC machines, set-up for employees, quality control, cleaning, ordering supplies, etc, etc.

For those of you who have placed an order, your engine is somewhere within the first pictures. Hang in there. "Things" are starting to progress at a faster rate. All of the major work has been completed.

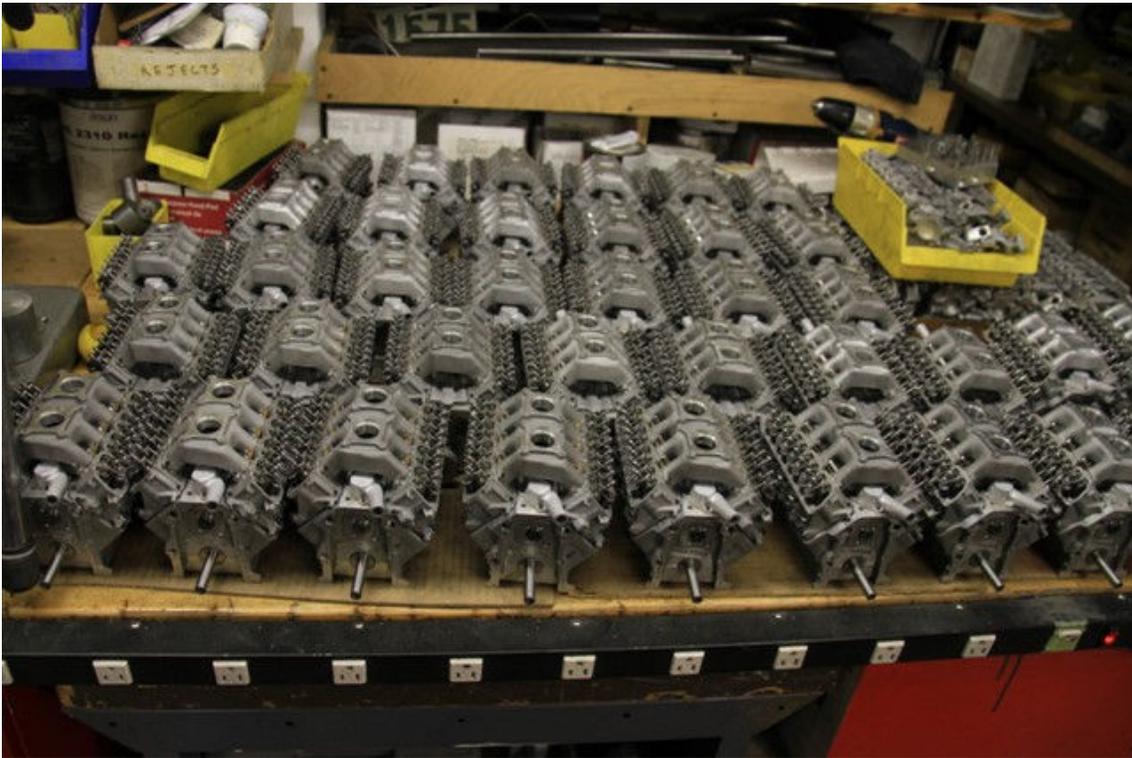
Pic #1 (View of engine production)



Pic #2 (Engines and completed timing covers)



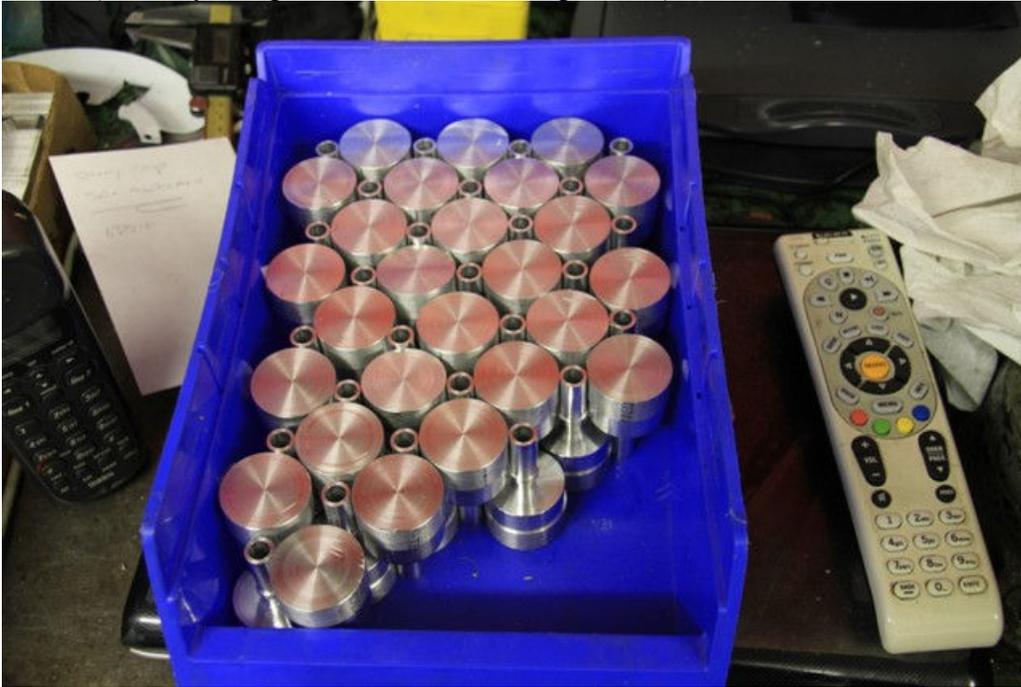
Pic #3



Pic #4 (Distributor slug and partial machined bottom)



Pic #5 (Partially completed distributor, 1st operation)



Pic #6 (Second operation on distributor blank)



Pic #7 (Before and after)



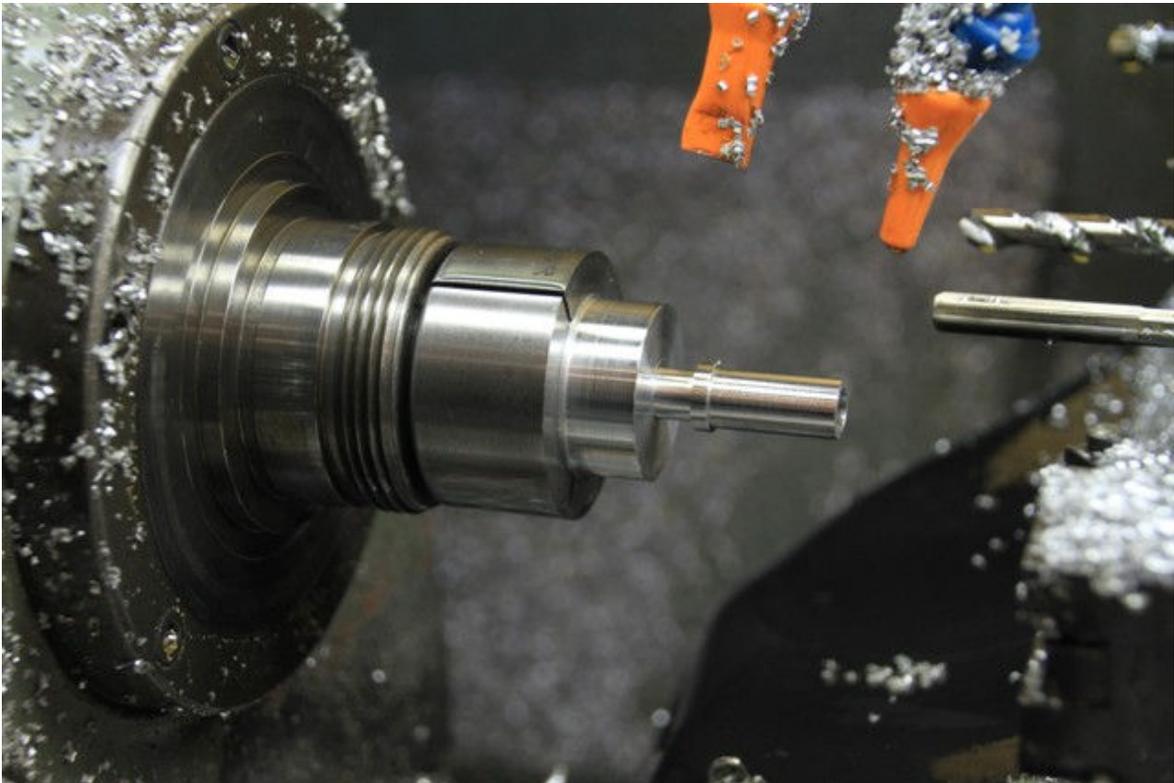
Pic #8 (Distributor machining operation)



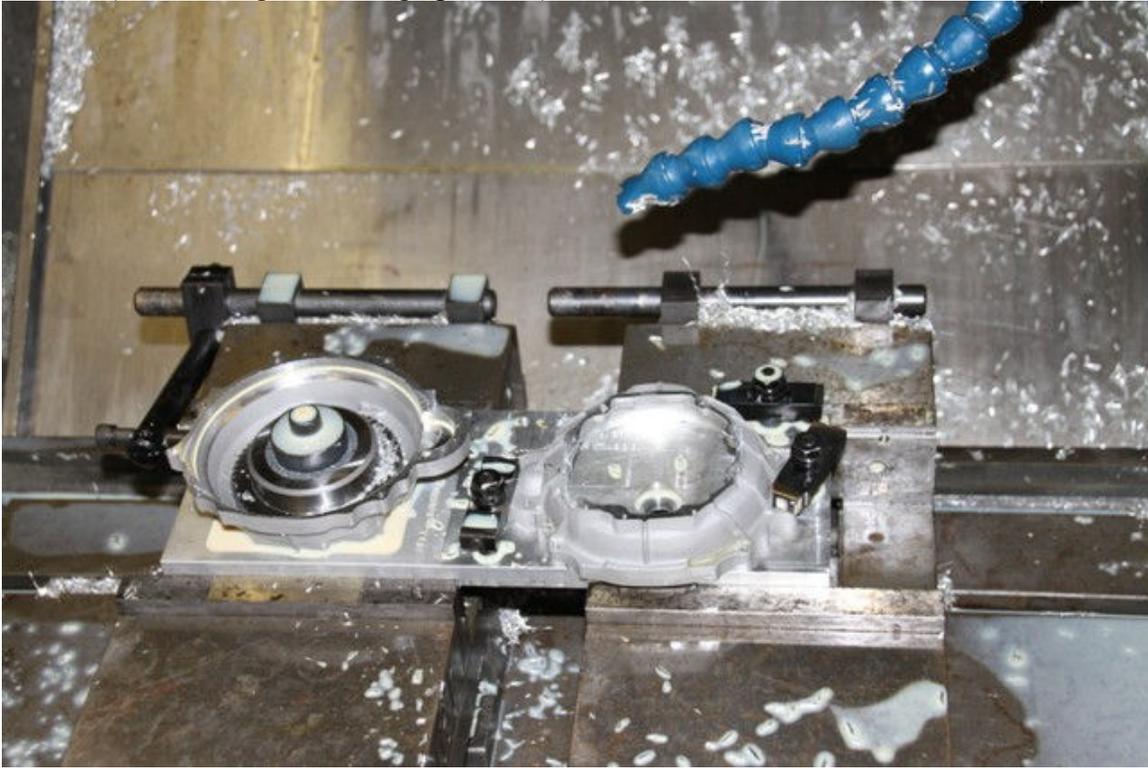
Pic #9 (Distributor machining operation)



Pic #10



Pic #11 (Bellhousing machining operation)



Pic #12 (Bellhousing before and after)



Pic #13 (Bellhousing before and after)

