After starting at 7:30 this morning and finally finished the last part of the transmission components I thought that it would be a good time to do a much needed update. If things were not busy enough last weekend (April 7-10) I attended the Toledo model show. This is something that I have been doing for almost 25 years and is a great place to run and show the engine. For those of you who are not aware, this show is the largest strictly RC model show in the country and draws people from all over the world. Unfortunately, there is a considerable amount of time which is needed in preparation, set-up, three full days of talking to individuals, and about two days of getting everything back to normal. This was also why it was it was very difficult to do an update. For the past 4 months the engine has been totally apart and in assembly trays on my work bench. This was done to check for any additional wear or areas of concern, but most important, all dimensions were checked and double checked, then documented. As you can imagine when trays of parts are left out for that long of a time "things" seam to get re-arranged, moved, or not put back from where the parts was picked up. The reason that I am telling every one this story is that after all that time, I spent one morning re-assembling the engine and after about 5 minutes in the test room, it was running better than every. This is a significant achievement which shows me that everything went back together as expected. Literally I could have spent days just dealing with the ignition system. Life is good!!

So much for that, as you can see from the pictures all of the casting for the transmission are finished and ready for assemble. Just to give you an idea of how much time is needed, on my previous engine there was a transmission case which only had five holes and a bellhousing which had eight holes. Just two pieces! Because of my attention to detail and my never ending quest to make a model as realistic as possible, four individual components were needed – bellhousing, adaptor plate, transmission case, and output housing. Just to give you an example of what I am talking about, just the transmission case has 22 individual holes - of these 9 are clearance holes, 8 are tapped 2-56, and 5 are drill and reamed for .125 dowel pin alignment. If that were not enough the center distance must be exact, which is the reason for the dowel pins. If each piece were off by only .010 (about the thickness of 3 human hairs), by the time everything is put together the output shaft would be off center by .040. Not so good!

There is still a considerable amount of work that needs to be done, but the list is getting shorter each day. Now, it is quite evident why it is taking so long to get this engine finished. Just look at the attention to detail in each individual piece. Believe me when I say that it would have been much simpler, easier, and much faster if I only had two transmission pieces to work with. As the engines starts to come together it will become more evident and easier to understand why so much time is needed.

Pic #1 (Finished Bellhousings)



Pic #2 (Bellhousing - front and back)



Pic #3 (Finished transmission adaptor plates)



Pic #4 (Transmission adaptor plate – front and back)



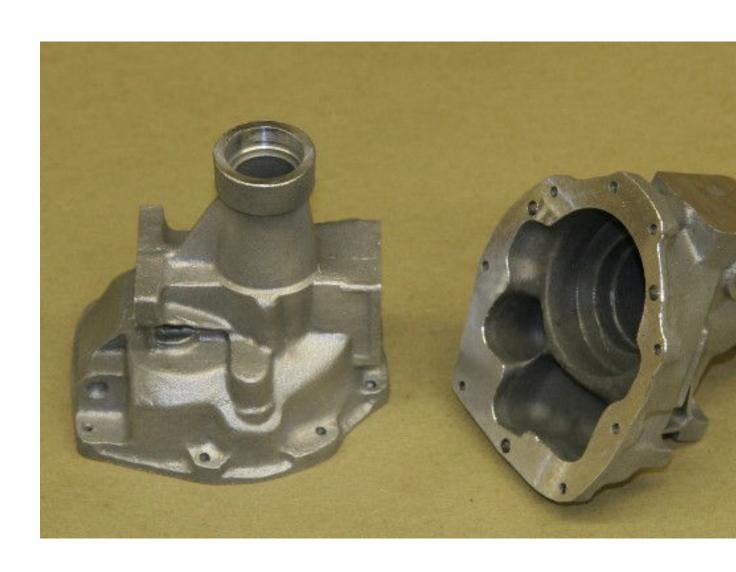


Pic #6 (Transmission center section – front and back)

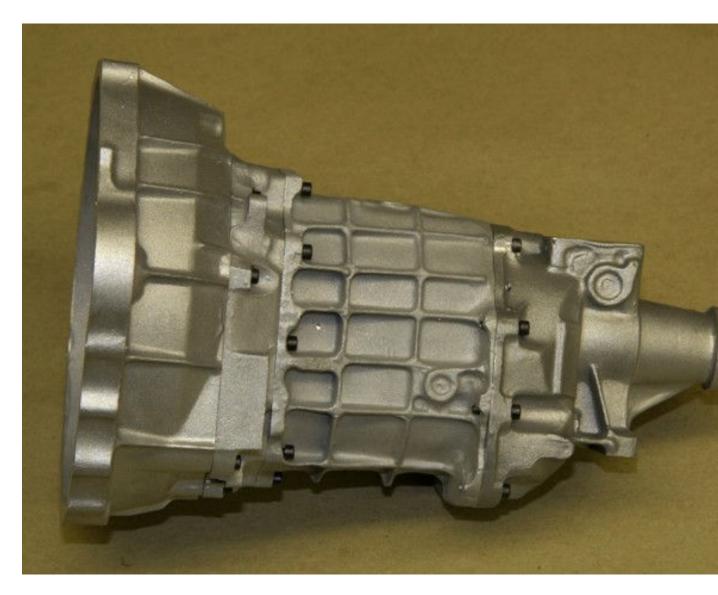
Pic #7 (Transmission output housing)



Pic #8 (Transmission output housing – front and back)



Pic #9 (Assembled transmission)



Pic # 10

