

THE EVOLUTION OF THE MODEL A FORD CYLINDER BLOCK, A-6015

INTRODUCTION

BY

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Have you ever discovered an engine or cylinder block where the engine serial number was either re-stamped or marked out so as not to reveal the original number? Have you ever noticed the changes that were made in comparing cylinder blocks of different months and years? Those of us who have been involved in this hobby most certainly have at one time or another. I wonder how many of us have asked ourselves on what day did this particular engine get its original stamp, what was the original serial number, and when did the change take place?

In order to answer these questions and to understand the evolution of the Model A Ford cylinder block A-6015, I set out to view as many cylinder blocks as possible (in order to come up with some type of conclusion). As of this printing, a cross-section of 197 engines and/or cylinder blocks (that is just 0.0041% of all production cylinder blocks produced) have been observed either by myself and/or by 50 other interested persons.

As the last Model T Ford rolled off the assembly line on May 25, 1927, plans were already under way for the "New Ford Car". To make the new vehicle, it was necessary to change and redesign almost every piece of machinery used to build the old model. After spending almost \$100,000,000 in the process, the new Model A Ford made its appearance on December 2, 1927 in most of the large cities throughout the United States.

The Ford Motor Company completed the first of 4,830,806 production engines (October, 1927 through November, 1931) on October 20, 1927. Over the next four years, the Model A and AA engine cylinder block, Ford Motor Company part number A-6015, went through a series of external and internal changes.

To identify when some of these changes took place during the casting of the block, there was the “release and change notice” records where Ford noted the different changes to be made to the next generation of new blocks. These were engineering documents which recorded the date when the drawing was approved for production of the part. They also recorded changes that were made and when the part was replaced or obsolete. The name “release” is short for “released for production”. According to the release information, it was July 1, 1927 when the first release notices were issued and continued through September 30, 1929. Where the remaining “release and change notices” are to cover the remaining years, are unknown by the archives.

Over the next four months, July to October, 1927, many aspects of the pre-production block were changed and revised into what were the first generation production blocks with the engine serial number pad located on and above the water inlet connection area on the left side of the block. These blocks were cast and put in production up to October 12, 1927 when it was noted on the release that the size of the water inlet connection pad was to agree with the connection, A-8275, cylinder water inlet connection, and that the pad for the engine serial number was to be moved to the top of the block and reduced in size to two inches in length. These blocks finally showed up for stamping on November 27, 1927, between engine’s # 616 and # 633. Where a change was noted in the release notifications, it was also noted in the guide. However not all changes noted in the release notices were listed in the guide as one can see from the guide itself. What changes were noted in the guide were those noticeable differences in the block that were easy to view and identify.

To identify when these changes occurred during the serial number stamping, all we have to go by is the engine serial number itself which is located on the left side of the cylinder block on the engine serial number pad just above the cylinder water inlet port. This number, tells us the month, day and year that the cylinder block was stamped but not necessarily when it was actually cast or installed in the car or truck.

Another source of identification may also appear on the engineering drawings of the cylinder block as the changes occurred. These are at the Ford Archives. Unfortunately, due to logistics, I was unable to go to the archives to make positive of this fact. However, looking at the original item proved very informative.

Granted, the Ford Service Bulletins and the known existing copies of the Ford Service Letters tells us of some of these changes but not of all. They were, however, usually reported about a month or so later than when the change was actually made. The idea of the actual change most likely originated within the Ford Engineering Department a few weeks or so before the actual change was made to the part itself. This information may be contained on the 25 or so engineering drawings of the cylinder block.

The goal was to see just how many types of visible changes were made to the cylinder block and try to contain each visible change within the same month of production or as close as possible. Most of the changes are within the same month of production, however some are not.

Most of the data collected on each cylinder block fit nicely into the database of block changes as they were produced. However there were several oddities and some which were out of line for one reason or the other as noted below. The “guide” therefore, was designed off of the database. Each change in features indicates those engine numbers which are before and after the change took place. The numbers are according to the Ford Model A/AA Engine Number List and the numbers in parenthesis indicate the difference between the two. Hopefully we can close in on these numbers.

There were instances when a new change in the block was noted BEFORE that new change became common on the assembly line of engines. This may be due to the fact that when a group of blocks were cast, they got out of line with the others or put aside for some reason or the other, thus delaying the regular progression of the newer style blocks resulting in a mixture of old and new style blocks. It may also be due to the slow rate of old to new castings thus the mixture of blocks as noted in the database. When they did get back into line, the newer blocks with the newer features would eventually be the more predominant as they progressed.

There was a lot of variation on the engine serial number pad size within a particular pad size.

The main sizes viewed were the early “shield” type and the “bar” type. Of the “bar” type pad there were four sizes: 2”, 2 ½”, 2 ¾” and 3 ¼”. These sizes varied + or – 1/16” to 1/8” of an inch throughout a particular size. However, there was no significant difference among the sizes and the differences are contributed to casting variations.

There was one cylinder block # 286,625, July 29, 1928, which must have been some type of “experimental” engine. The block was not cast with an oil return pipe hole in the lower right side of the block. There were four (4) holes located between each pair of lifter holes and about the same size as the lifter holes with the front hole being slightly larger. The oil tube inside the valve chamber ran the length of the block instead of the normal half block. From this tube there were 1/8” oil holes to oil the camshaft. The valve chamber cover had no oil return hole. Are there any more engines of this type out there? Please let me know. According to the MARC/MAFCA Model A/AA Ford Judging Standards, “From May through October, 1928 a few engines were built without an oil return pipe”.

Another oddity was cylinder blocks # 2,222,973 and # 2,227,666, August 28, 1929, which had at just one corner of the oil pump pad, ½ of the shield or “extra metal” effect and the other side was of the newer style with no “extra metal”. If anyone has or knows of other cylinder blocks like this, please let me know.

Several features which remained the same throughout production were: 1) height of push rod bosses inside the valve chamber; 2) front camshaft oil bearing hole; 3) height of the rear oil dam inside the valve chamber; 4) there were three oil holes in the lower oil return port.

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With your help, I hope that you will check your extra engines and/or blocks (no re-stamps please) which are lying around and contact me to help close in on these changes (and others) which occurred during the production of the Model A Ford. I realize that there may be more to the story and if so, would you be so kind as to contact me, Steve C. Plucker, 12650 Touchet North Road, Touchet, Washington 99360; 509-394-2831; e-mail: steve@plucks329s.org, for a future update and to share with the rest of those who have an interest in this hobby.