

# July 2020 New Model A Engine Update

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## Updates

In case someone gets this Email without seeing the article on the new Model A engine, the article can be found at <http://www.modelaengine.com> This website also has previous updates, pictures and videos.

If anyone has a question, concern, comment, suggestion, or wants to get on the Email list for updates, please let me know at [model.a.engine@hotmail.com](mailto:model.a.engine@hotmail.com) and I'll do my best to resolve the issue and add your Email address to the update list.

FordBarn, (<https://www.fordbarn.com/forum/showthread.php?t=265782>) is an internet social group for Model A Ford hobbyists and there are a lot of interesting questions and comments regarding this project. There are too many people on the Email list to keep everyone informed as things progress, so please check the FordBarn website for the latest developments. The FordBarn thread also tells the complete story from July 2019 when this stalled project was resurrected.

## New Engine

I use the term "new engine" loosely because the only new parts are the cylinder block, crankshaft, and connecting rods. All interfaces for mating parts are identical to original and they have been documented from original Ford drawings.

In the 2 July 2019 update, I was happy to state that the project was resurrected and I would be working with others (John, Leonard, and Bill) to have the "new engine" manufactured in China.

A lot has happened since the last update on 19 June 2020.

## Cylinder Block and Main Caps

We were expecting to have the engineering evaluation hardware (cylinder block, crankshaft, and connecting rods delivered just after the July 4th holiday. This didn't happen because the machinery being utilized to machine the cylinder blocks was reassigned to machine locomotive cylinder heads. This resulted in a schedule slip and the new Model A cylinder blocks are now expected before the end of July 2020.

## Crankshaft

The engineering evaluation crankshafts are complete and are awaiting completion of the cylinder blocks for fit-check verification. For ease of manufacture, the factory asked and we agreed to change the drilling method from a single hole to cross-drilling. Although this is not our crankshaft, the video shows how crankshafts are cross-drilled. <https://www.youtube.com/watch?v=ZDCpWoZJV4> If you stop the video at 3:49, you will see the paths of the oil passages. The dead-ended passages will be plugged with setscrews so they can be removed to clean the passages.

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## Connecting Rods

The engineering evaluation connecting rods are complete and have been fit-checked to the crankshaft and wrist pin using the insert bearing and wrist pin that we provided.

## Design Verification

We have been in contact with an engine rebuilder and parts supplier that has agreed to be a 3rd party evaluator to verify the design by assembling a short block with parts that we supply, and then assemble a complete engine with some new and mostly used parts that he supplies.

We are planning to have the new engine parts air-shipped from China and delivered to the 3rd party evaluator's business location and we are excited to see what arrives. This will be our first opportunity to visually see the new engine parts.

The new engine parts will be cosmetically compared to original parts, and dimensionally measured to confirm that all interfaces are a match to Ford drawings for attaching parts. Any discrepancies found will be documented so they can be corrected before the production run.

We have asked the 3rd party evaluator to build a "touring engine" that utilizes mostly stock parts but uses a high compression head and lightened flywheel. Along with the cylinder block, crankshaft, and connecting rods, we will supply a Stipe 5 bearing camshaft, a modified Model A oil pump, and a Stipe oil pump.

Our findings and assessment during the evaluation will be published as posts to FordBarn which is so much easier than sending hundreds of Emails. The FordBarn thread regarding the new engine and where we will post our findings is here: <https://www.fordbarn.com/forum/showthread.php?t=265782>

After assembly of the new engine, it will be run on a test stand at a high RPM for a length of time, and then installed in a car that will be driven in hill climbs at WOT (Wide Open Throttle). Next, the engine will be plumbed to utilize an oil filter and again run on the test stand. After all testing, the engine will be disassembled and all moving parts will be inspected for wear. If we agree that the design is valid, we will authorize production.

## Next Update and Other Comments

If all goes well and there are no major changes resulting from engineering evaluation, we will authorize production and should have parts in stock and for sale sometime in September 2020.

We have set a discounted introductory price of \$3500 for 60 days that will include a cylinder block with main caps, thrust washers, camshaft bearings and all dowel pins installed, main cap studs and nuts, connecting rods with wrist pin bushings and dowel pins installed along with fasteners, and a crankshaft with dowel pins and Woodruff key installed. Dealer pricing for quantities of 5 will be less. After the 60-day introductory price, we are planning to sell exclusively through dealers (parts retailers and machine shops) that order 5 or more at a time. The start date for the 60 days introductory price

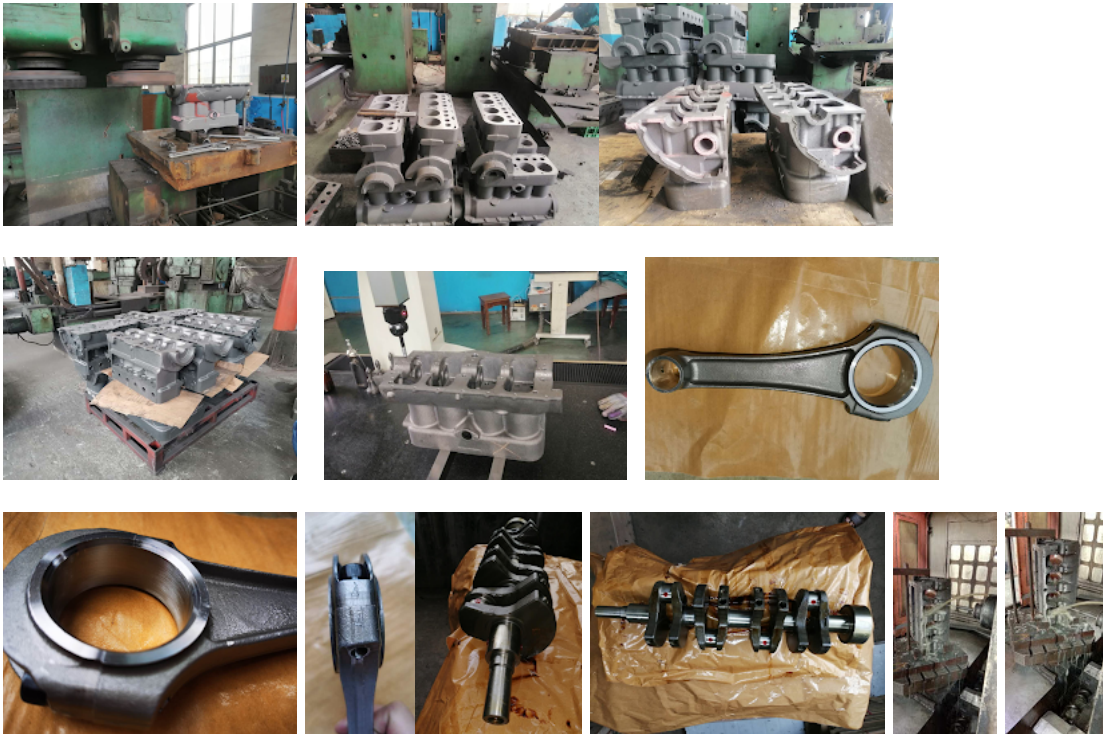
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has not been set.

I'm the engineer on this project. The other team members are John Lampl who is responsible for manufacturing, quality assurance, transportation, customs, and pricing, William Percival who is our bean counter and computer guru, and Leonard Nettles who is responsible for receiving orders and shipping parts.

After the engineering evaluation parts pass our appearance and testing requirements, the production order will be placed and information regarding how to contact John, William, and Leonard will be published to the people on the Email list, Ford Barn, all MARC and MAFCA chapters, and parts retailers and machine shops.

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