

# Model A Flyer



Model A Ford Club of NSW Inc

Web site [www.modelafordclubofnsw.com.au](http://www.modelafordclubofnsw.com.au)  
May 2021

**Club Meetings** are held at Holroyd Community Centre, Miller St., Merrylands. The parking entrance is in Newman Street. Meetings are held from 8 pm on the second Friday of each month unless otherwise stated.

## PRESIDENT'S REPORT



Welcome to our May Flyer, trust everyone's keeping well as the cooler weather approaches. It was good to see Ken Warburton at our May meeting back on his feet but still recovering from his accident. Ken has been keeping me up to date with Des Fitzgerald's condition and I am pleased to report Des is home from hospital and recovering well. I have tried to contact Des

or Carol a number of times but been unsuccessful. A very pleasant day was had by all who attended the Prospect picnic with perfect weather and a great family atmosphere. The Wednesday Wanderers event to Vintage FM in Penrith proved to be an interesting experience with some of our female members being called "crazy women" by the resident DJ Rosco, (went over like a lead balloon). We managed to miss most of the rain and had a very enjoyable day.

*It was 2 O'clock in the morning and a husband and wife were sleeping when suddenly the phone rang. The husband picked up the phone and said "Hello (paused for a few seconds) How the heck do I know? What am I the weather man"? and slams the phone down. His wife rolls over and asks "Who was that" The husband replies "I don't know some guy wanted to know if the coast was clear tonight".*

Until next month, stay safe  
Col.

## Your 2021 committee

<b>President</b>	Col Bootle	0492 872 477	<b>CFC &amp; CMC</b>	Phil Dalton	0413 970 704
<b>V/President</b>	John Hyland	4657 1734		Ron Elks	0419 296 201
<b>Treasurer</b>	Robert Brown	0439 731 066	<b>Librarian</b>	Carol Butler	4739 5723
<b>Secretary</b>	Rob Taylor	0434 314 198	<b>Wanderers</b>	Tom Virgona	0420 342 392
<b>Committee #1</b>	Ken Young	0428 697 717	<b>Newsletter</b>	Rob Taylor	0434 314 198
<b>Committee #2</b>	Ron Elks	0419 296 201			
<b>Public Officer</b>	Rob Taylor	0434 314 198			
<b>Membership</b>	Robert Brown	0439 731 066			

thetaylors79@bigpond.com

**Mail: PO Box 1038 MERRYLANDS 2160**

## Sunday 23rd May - Run to Everglades House, Leura

**Meet:** Glenbrook Visitors Centre, 7050 Hamment Place Glenbrook off Great Western Highway at 9am for a coffee.

**Depart:** 0930am we will convoy to Leura.

**Destination:** Everglades House, 37 Everglades Ave, Leura. This is a heritage listed former residence, now an art gallery, café and garden tourist destination administered by the NSW National Trust. Entry is \$10pp or free if a National Trust Member.

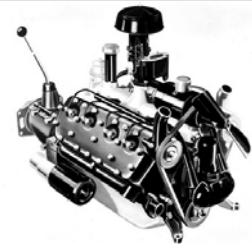
**Lunch:** 10 minute run back to Wentworth Falls Lake via Sinclair Crescent.

**Run Co-ord:** Rob Taylor 0434 314 198 - Please advise if attending so the National Trust know our group numbers prior to the day.



## Coming Events

**Sunday 20th June - Side Valve Convention at Campbelltown Steam Museum**



**Sunday 25th July - All Fords Day at Eastern Creek**



**Sunday 15th August - CMC Day at Eastern Creek**



**Sunday 15th August - The Maroota Muster from 10am - 3pm**



**22-26 October - President's Run to Mudgee, please book your room!**

Winning Post Motor Inn - 6372 3333

Wanderlight Motor Inn - 6372 1088

Ningana Motel - 6372 1133

Explain you are from the Model A Club when booking



## Wednesday Wanderers

### Wednesday 2nd June The Wanderers visit Woy Woy

**Meet:** 9:30am at the Eternity Café on the Concourse at Central Station.

**Train:** We will then board the 9:40am Newcastle via Strathfield train on platform 9. If joining us at Strathfield, be there before 9:56am, Epping by 10:08am or Hornsby by 10:20am.

**Visit:** Arrive at Woy Woy Station 11am, have lunch then board the Ferry at 12:30pm for a round trip to Empire Bay. Cost is \$16.80 or concession \$8.40

**Return Sydney:** Ferry arrives Woy Woy at 1:40pm and we have 25 minutes to transfer to train for return trip to Sydney.

**Important:** You must sms 0420 342 392 or email [tov@hotmail.com](mailto:tov@hotmail.com) by Sunday 31st May if coming so Tom can advise the ferry.

## Wanderers May visit to Vintage FM



The Wanderers visited Vintage FM in Jamisontown in early May to see how a radio station works. Great turn out, with 6 Model A's plus members and friends. All were amazed how automated the process was, and the DJ, who was the oldest person on the day, was a little cheeky to our ladies... There was an article in the local paper regarding our visit, raising the club profile. Thanks Robert Brown.

**A very successful picnic lunch at Walder Park Prospect Reservoir**  
 Although this was a late addition to our schedule, due to the floods, Prospect Reservoir was a great attraction. We had ten Model A's with their owners and friends enjoy a lovely picnic at Walder Park in April.



**For Sale 1929 Phaeton, partly restored.**

Body blasted and re panelled where required. Timber replaced. Motor & gearbox need work. Roof irons with car. Upholstery needs doing as does paint. Car in Sydney, see pics above

\$12000 ONO Leo Silva 0414 59 55 23

At the store there was  
 a big X by the register  
 for me to stand on.



I've seen too many Road Runner  
 cartoons to fall for that trick!

*Model "A"*  
**Ford**



Sam Hood  
 passing of the Sydney Harbour Bridge, the first cars at the toll bar, 1932



## Market Place

**For Sale:** 1929 Phaeton Under Restoration \$12000 ONO Leo Silva 0414 59 55 23 Sydney

**For Sale:** Des Fitzgerald has many new/old spare parts for sale for Model A's. Please call him if you need anything. 029605-6026 or mobile 0421-084-170

**Wanted:** 600x20 tyre suitable for spare only, John Hyland 0246571734 or [waika-to.park@bigpond.com](mailto:waika-to.park@bigpond.com)

**For Sale** 1930 Model A Roadster Beige, an original Australian colour from new. Extensive mechanical work has been completed on the car, and a list can be provided for interested parties. The price is \$37,000 or near offer.

The car is located on the NSW Central Coast, any enquiries please contact Dennis Ashton on 0409 044 340.



# EARLY FORD PARTS

Specialising  
in New Old  
Stock and  
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1909 - 1948  
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**Dave Slater**

✉ [dave.slater@casmn.com](mailto:dave.slater@casmn.com)

☎ 0412 59 3535

🚚 We post Australia-wide.

2015

Henry's Model 'A' Catalogue

Contact  
Keith or  
Glenys

03 5368 1088

0402 194 723



[kg@henryspares.com.au](mailto:kg@henryspares.com.au)



## Welcome to the club Neil Clark and your 1928 AA Ford Truck

I think we now have a real AA Ford Truck thing happening in the club, with Ken Warburton and John Hyland with new trucks and now Neil..

Welcome Neil, love your AA.



## Rattle Trap - Crowdy Head May 2021

This year Rattle Trap had 60 vintage hot rods and rat rods and 20 motorcycles entered for their chance to race up the beach. There were approx. 1500 people on the day to see these machines running. They have about 2 hours while it is low tide to make their passes. One of our members, Alan Hale, is a long time participant at Rattle Trap in his rat rod Phaeton #3.





# The New Burtz-Block

Model A Cast Iron 5 Main Engine Block, Crank, Rods Kit

by Terry Burtz

*"We ran it continuously at 3100 RPM (75 MPH) for 6 hours, and nothing broke."*

This article describes the new Model A Engine Kit and certain details from the "Builders Guide". For additional information including the latest "Builders Guide", "Doubling the Flow Area of a Model A Oil Pump", "Installing an Oil Filter", and "How to Order", see [www.modelaengine.com](http://www.modelaengine.com)

## DESCRIPTION

The Burtz Model A Engine Kit is a newly engineered and manufactured kit of parts designed to replace the frail original Ford Model A engine components that will break if driven hard.

The new Block, Crankshaft and Connecting Rods are re-engineered for strength and durability and manufactured in a modern factory that supplies OEM engine parts to many manufacturers. The kit's external appearance once installed, is identical in appearance to the original Model A Engine. All new machined interfaces for attaching parts are a match to original interfaces.

The 5 main journal crankshaft is fully balanced and utilizes standard insert bearings (Federal Mogul 2020 CP) that are available at all major automotive parts suppliers. The fillets are rolled and all wearing surfaces are hardened. The forged connecting rods also use the same standard insert bearings.

The block comes ready for assembly with no machining required. All parts needed to assemble an engine other than the Crankshaft and Connecting Rods are standard Model A engine parts, or they may be purchased from an auto parts store.

## CYLINDER BLOCK

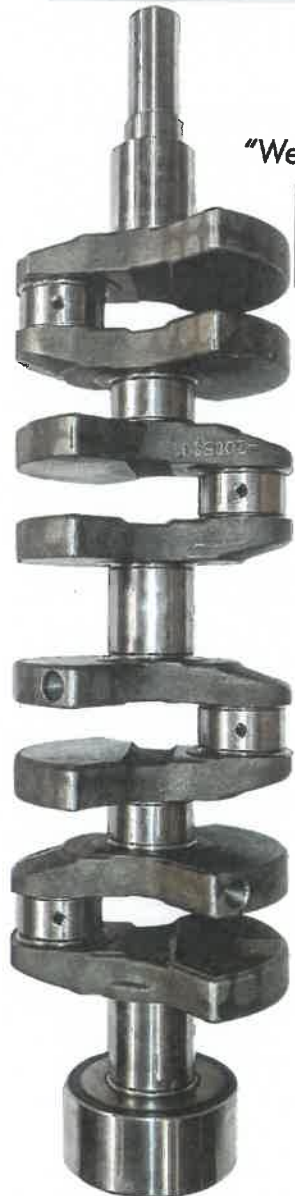
The new Block is cast and machined from modern high strength grey cast iron. All interfacing surfaces for the attached parts match the original block design so that original or new aftermarket parts can be utilized during the building process. The new block features larger streamlined intake ports and an internal closed pressurized oil lubrication system that feeds oil directly to the main journals, rear main thrust bearing, and camshaft bearing journals. The Block has replaceable cam bearings fitted for use with either a 3 or 5 bearing camshaft and hard exhaust valve seats. The rear crankshaft seal is a standard "off the shelf" radial lip seal (National 415035).

## CRANKSHAFT

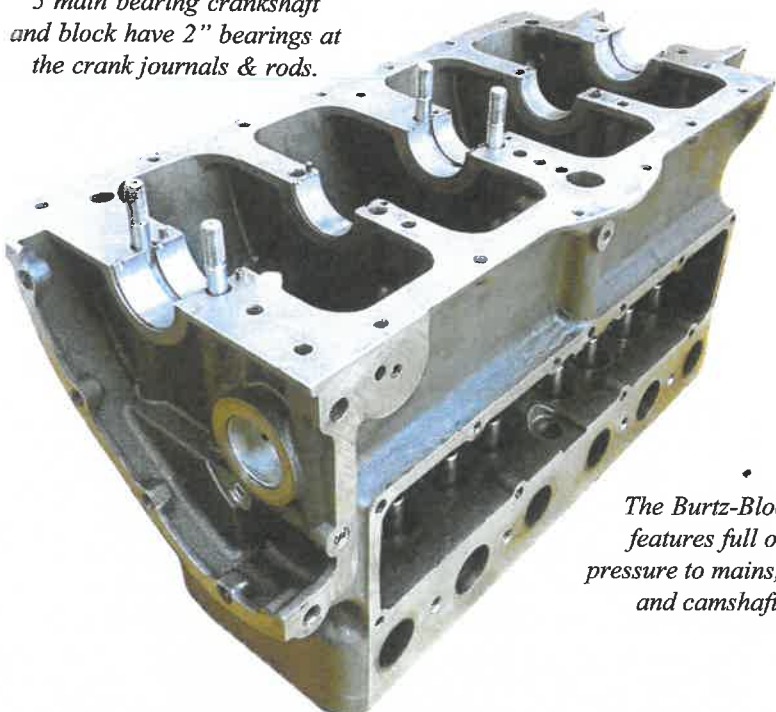
The new Crankshaft is made from nodular iron and has 8 counterweights with 5 main journals. It is cross-drilled to lubricate the 4 connecting rod journals, and dynamically balanced. The front and rear interface surfaces accept the standard timing gear, front pulley, and flywheel original to the Model A engine. The main and connecting rod journals both utilize the same standard 2" insert bearings that were used in GM engines from 1955 until 2003 (Federal Mogul 2020 CP).

## CONNECTING RODS

The new connecting rods are forged steel and utilize 2" insert bearings for the crankshaft journal. Wrist pin bushings



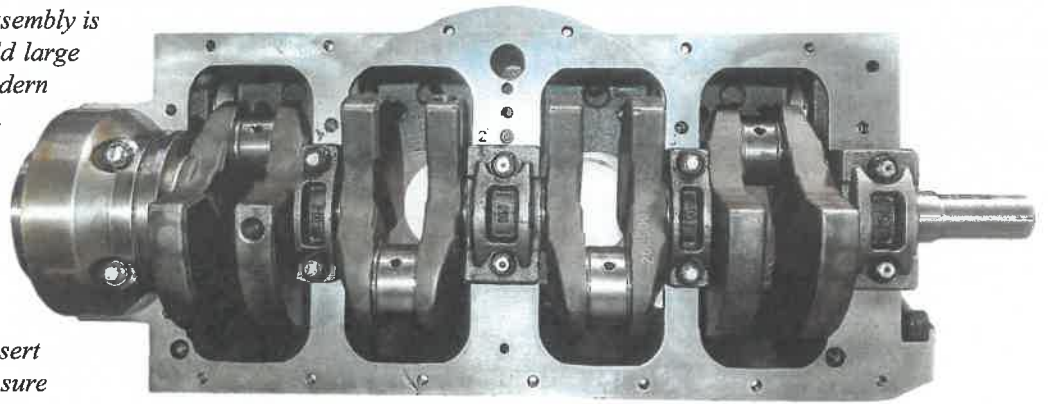
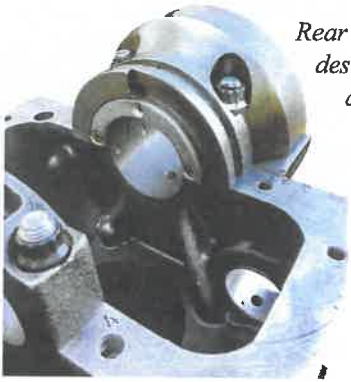
*5 main bearing crankshaft and block have 2" bearings at the crank journals & rods.*



*The Burtz-Block features full oil pressure to mains, rods and camshaft.*



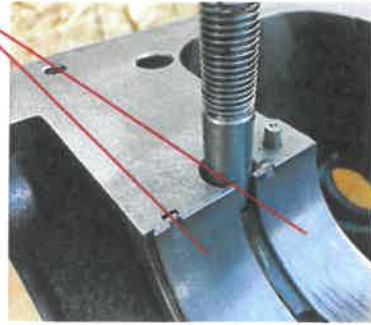
Rear main cap assembly is designed to hold large diameter modern oil seals.



Modern insert bearings insure easy serviceability and less friction.



Forged steel connecting rods swing with clearance and strength.



are installed and ready for assembly with standard Model A type pistons. The connecting rods are balanced in sets of 4 to closer than Ford tolerances. The rod caps are bolted in place with high-strength 3/8-24 UNF 12-point bolts.

#### PARTS INCLUDED

Cylinder Block Qty 1, cylinder block with 4 hard exhaust seats, 5 cam bearings, and 10 cylinder block/main cap dowel pins installed. Other loose parts are either assembled to the cylinder block or they are packaged separately.

Crankshaft Qty 1, dynamically balanced crankshaft with 2 rear dowel pins, 4 setscrew oil passage plugs, and 1 Woodruff key installed.

Connecting Rod Qty 4, balanced connecting rods each with wrist pin bushing, 2 dowel pins at the cap interface installed, and 2, 12-point 3/8-16 x 1 1/4 UNF bolts.

#### OIL SYSTEM OPTIONS

If desired, the new engine can be built to utilize a full flow oil filter. The modifications required for an oil filter can be reversed in the future and the cylinder block will again look to be original. The oil pump chosen must provide a greater volume of oil than stock.

We recommend that an oil pressure relief valve set no higher than 40 PSI. Higher pressures can push oil pump/distributor drive gear up and disengage it by compressing the retaining spring (A-6570). The installed stock retaining spring (inside valve chamber) exerts a downward force of 32 pounds and at 40 PSI the upward force from the oil pressure is 27 pounds. A stronger spring (McMaster Carr 9657K552) will exert 60 pounds of downward force can be used.

We recommend a clamp be fabricated to hold the chosen oil pump in place. A 5/16 UNC tapped hole is provided in the new cylinder block for the clamp.

#### OIL PRESSURE MONITORING

If you look at the bottom of the valve chamber cavity, there are 2 oil passages from the main oil galley that connect to 2 valve cover bolts. These passages can be used for an oil pressure gauge or to provide oil for an overhead valve conversion. To utilize these oil passages, a special bolt needs to be made from 1/2 inch hexagon stock.

The kit does not come with an oil pump, but there are several applications. Terry has a good method available for you to build.



Make this special valve cover bolt to add oil gauge.

#### SEALANTS & LUBRICANTS

Terry outlines in great detail the type of sealants to use with the new engine. Those types and brands can be found in the latest "Builders Guide" found online at [www.modelaengine.com](http://www.modelaengine.com)

If you have any concern about head gasket sealing or the integrity of your head, we recommend Irontite "All Weather Seal" because it is compatible with antifreeze.

We recommend 10W-40 or 20W-50 motor oil both for break-in & thereafter.

#### PISTONS

Pistons sold by the Model A parts vendors are solid skirt and use original width rings.

We used EGGE (<https://egge.com>) part number E1104-4 pistons in the engineering evaluation engine. They use narrow rings (5/64 inch wide compression, 3/16 inch wide oil)



and they fit with .004 inch piston/wall clearance so no honing was needed. The EGGE pistons are solid skirt with an expansion slot that does not extend to the bottom of the piston.

**ADD-ON PARTS**

There are no metric threads used.

All interfaces on the new cylinder block, where parts are attached, are identical to stock. In other words, if a part fits an original Model A engine, it will fit the new cylinder block.

Add-on parts, whether new, used, NOS, or aftermarket, need to be clean, inspected for wear and flatness. Flatness is critical at the cylinder block/head interface, cylinder block/manifold interface, and cylinder block/oil pan interface.

Aftermarket high compression heads must be flat within .003 of being flat or it will need to be resurfaced.

The rear main seal is a National 415035 with "garter spring" removed.



*The rear main seal has a garter spring that is to be removed.*

**OIL PAN**

The upper surface of an original oil pan is often distorted due to over tightening with the thick cork gasket, and will need to be straightened.

**TOLERANCES**

Terry goes into great detail about mains and rod bearings and piston ring tolerances. We recommend that you follow the dimensional specifications from your parts suppliers.

**TIMING GEAR**

We used an aluminum camshaft gear with a deepened dimple for ease of ignition timing.

**OIL PAN TRAY**

Leave the dipper tray in place because the baffles on the bottom help to mitigate oil sloshing and starving the oil pump.

The new connecting rods have reinforcing ridges that dip into the troughs on the upper side of the tray and this creates an oil mist to lubricate the wrist pins, valve guides, tappets, and timing gears.

**VALVE TRAIN**

Two-piece original, one-piece with shoulder, or press-in valve guides with appropriate valves can be used. Lap the valves using Permatex 80036 Valve Grinding Compound. Oversize intake valves can be used. The thickness of the upper surface of the new cylinder block and an original cylinder block are identical at .375 inch. We used Colony CM1008 single lock tappets in the engineering evaluation engine.

Intake valve/Tappet clearance .011-.012 inch

Exhaust valve/Tappet clearance .012-.013 inch

**CAMSHAFT**

A new 5 or 3 bearing camshaft can be used. If ordering a new or reground camshaft, tell your supplier how you want your engine to perform. To prevent the buildup of oil pressure behind camshaft bearing #5 which may force the camshaft forward, we recommend that it be vented to the crankcase.

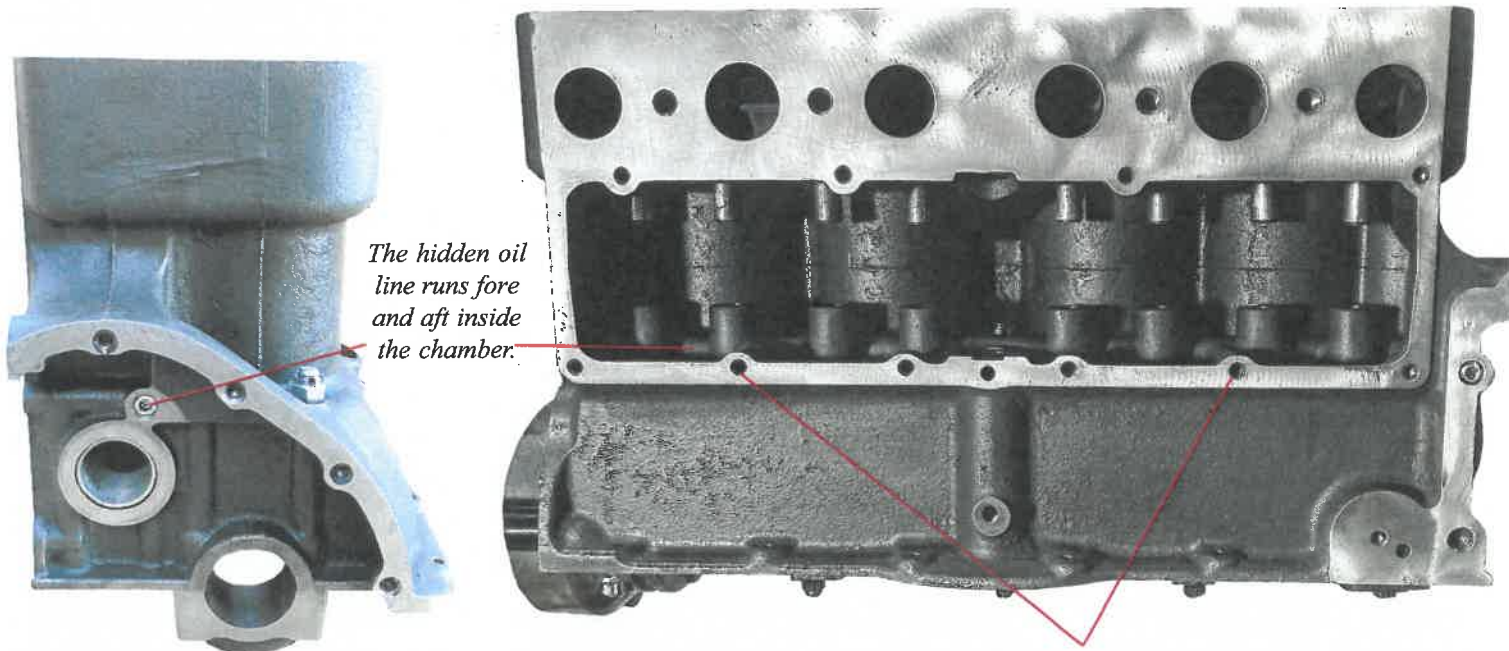
Model A camshafts have full length spiral oil distribution grooves that provide a sufficient vent. Model B camshafts have short grooves that need to be lengthened to edges or a vent hole added. If a 5 bearing cam is used, the oil feed holes for journals #2 and #4 will need to be opened. See the latest "Builders Guide" found online at [www.modelaengine.com](http://www.modelaengine.com)

**HEAD STUDS**

We recommend that grade 8 head studs be used and installed using anti-seize compound. They are much stronger and less likely to twist off during removal in a future rebuild.

**ROD SWING CLEARANCE**

The connecting rod big end comes very close to the cylinder block walls, oil pan walls, and the camshaft. Verify



*The hidden oil line runs fore and aft inside the chamber.*

*Two of the valve cover bolts are connected to the main oil galley. A special hollow bolt can be made to supply oil to an oil gauge and/or lubrication to an OHV.*

that there is clearance by rotating the crankshaft after assembly of each connecting rod/piston assembly.

**CLEANLINESS**

Light oil was applied to the new engine kit parts to prevent corrosion, and it has likely collected a lot of dust particles during transportation. In addition, every oil passage and threaded hole may have machining chips and grit that needs to be removed.

Remove the 4 setscrew plugs in the crankshaft to open all passages for cleaning. For a long engine life, every part (new or old) needs to be surgically clean.

**BREAK-IN**

Common Sense . . . Please don't plan on building an engine that can continuously keep up with modern traffic. Short bursts of speed are fine like passing slower traffic or entering a freeway on ramp, but attempting to continuity keep pace with modern traffic may result in other problems and is not recommended.

We are confident that the new engine will survive short bursts of speed because we assembled the "Engineering Evaluation Engine" and then broke it in by intentionally abusing it to see if anything would break by running it continuously at 3100 RPM (75 MPH) for 6 hours, and nothing broke.

We recommend that you break your new engine in at varying speeds, but not over 2400 RPM (58 MPH) for the first 1000 miles. Before Starting Engine: It is recommend that the spark plugs be removed, and the newly assembled engine be cranked by the starter to confirm oil pressure.

**FASTENER TORQUE**

Terry goes to great lengths explain bolt and nut torque settings for the head nuts (55 ft lbs) and all other fasteners.

**FLYWHEEL**

The newly designed, lightened, and balanced 30 lb. flywheel is available as an option. The mating interfaces to the crankshaft, pilot bearing, and ring gear are identical to an original Model A flywheel. The new flywheel is drilled to accept the V-8 9-inch Long design pressure plate. (The pilot bearing and the ring gear are not included). Introductory price is \$300.00 plus ship.

**JUDGING**

Detailing the New Engine for Judging can be done. Depending on date of manufacture, the exterior of the new engine block can be detailed for judging per Mr. Steve Plucker's extensive research, which can be found here (type all the letters, numbers and symbols as one with no spaces): [http://www.plucks329s.org/pdf/engineblock/cylinder%20block%20guide\\_1.pdf](http://www.plucks329s.org/pdf/engineblock/cylinder%20block%20guide_1.pdf)

**CONTACT INFORMATION**

**Terry Burtz**, ([model.a.engine@hotmail.com](mailto:model.a.engine@hotmail.com)) Engineering and anything technical including revisions to the "Builders Guide", "Oil Pump Modification", and "Installing an Oil Filter".

**John Lampl**, ([jrlampl@jrlasia.com](mailto:jrlampl@jrlasia.com)) Manufacturing, Quality Assurance, Scheduling, and USA Shipping.

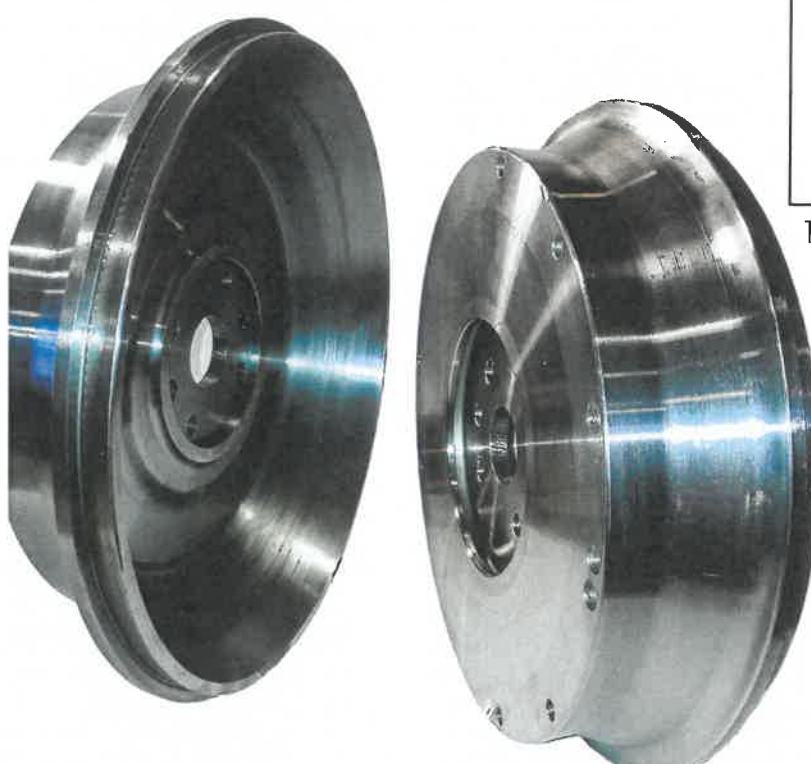
**Leonard Nettles**, ([ln.lja@sbcglobal.net](mailto:ln.lja@sbcglobal.net)) Orders & Disbursements

**William Percival**, ([wrpercival@gmail.com](mailto:wrpercival@gmail.com)) Business Management, Bookkeeping, and Tax Calculator

If you don't know who to contact, contact any of us.

The engine kits will be available from most Model A parts dealers, engine builders & directly.  
**\$3950.00**  
 The latest "Builders Guide", and "How to Order" can be found at  
<http://www.modelaengine.com/>  
[www.burtzblock.com](http://www.burtzblock.com)

1st run sold out. Second run ships June-ish



*The extra strong rear crank flange accepts your Model A flywheel or the new 30 pound Burtz flywheel shown here.*

