

# WESTERN

# A MODEL NEWS

THE OFFICIAL NEWSLETTER OF  
THE MODEL A RESTORERS CLUB (WESTERN AUSTRALIA BRANCH) INC.

NEXT MEETING:     DATE:   Sunday, September 26th 1982  
                          PLACE:   Centrepont Car Park,   Midland  
                          TIME:   1:00 p.m.

Hills run to Mt. Helena. The wildflowers are out - the hills are green - so lets make the Hills alive with the sound of our Model A's. Turn up in your ancient or modern and collect your route sheet for a pleasant afternoon run.

LAST MEETING: Was held at the Veteran Car Club Meeting rooms in Applecross. As our Annual General Meeting it rambled around a bit but finally sorted itself out. A couple of girls, who shall remain unnamed, wandered off into the wilds of Applecross and became lost! They said they knew where they were - its just that the rest of us didn't. However, after breaking the meeting for a quick concerted search, two pink faces turned up looking a little flustered and we were able to continue.  
Our Office Bearers elected at the meeting were: President: Bill Bennie, Vice President: Eric Richards, Secretary/Treasurer: Laurel Cooke, Vehicle Examiner: Ray Mahony and Events Organiser: Toni Mahony.

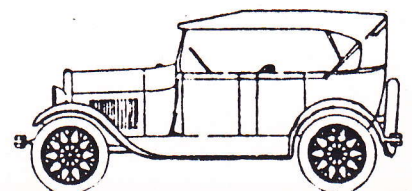
PARTS INFORMATION: Mike Cooke advises that Consolidated Bearings of 277 Lord Street, East Perth (opp Norwood Hotel) have a large range of bearings either off shelf or they will obtain for you. These bearings will suit most early cars.

EXHAUST MANIFOLD GASKETS: Suit intake and exhaust available from Sth Australian Branch for \$5.50 a set. Contact is P.O. Box 202, Tynte Street, North Adelaide, S.A., 5006. Orders must be in before September 30th 1982.

CAST IRON BRAKE DRUMS: In the June issue you were advised of Queensland Branch members having cast iron brake drums available. Mike Cooke has ordered a pair for the front wheels of his recently acquired 1928 Tudor so hope we can report on these at a later date.

COOKING - MODEL A STYLE: In our next newsletter more detail will be given regarding the finer art of cooking your Sunday roast on your Model A engine (and there are finer points). Plans are for a run starting in the morning and all participants will be encouraged to produce their lunch "hot" from under the bonnet !!

ANNUAL SUBSCRIPTIONS/VEHICLE REGISTER SHEET: It is important that the enclosed Vehicle Register be returned to Laurel Cooke a.s.a.p. so we hope everyone will jump to it and post it back by return mail together of course with your Subs for 1982.



MODEL A RESTORERS CLUB AUSTRALIA (WESTERN AUSTRALIA BRANCH) INC.

STATEMENT OF INCOME & EXPENDITURE FOR THE YEAR ENDED 31 JULY, 1982

Balance brought forward as at  
31st July, 1982 \$253.02

Income:

Subscriptions	308.50	
Bank Interest	10.86	
Club Decals	3.00	
Donation	<u>40.00</u>	
<u>Total income</u>		<u>362.36</u>
<u>TOTAL FUNDS</u>		<u>\$615.38</u>

Expenditure:

Postage stamps	65.86	
Stationery & Printing	72.07	
Hall Hire	3.00	
Catering (Club events)	42.20	
M.A.R.C. Canberra - (WA members fees)	171.00	
'Vintage' vehicle plates	<u>76.40</u>	
<u>Total expenditure</u>		<u>\$430.53</u>

EXCESS OF INCOME OVER EXPENDITURE \$184.85

BANK BALANCE AS AT 31 JULY, 1982 \$184.85

From the records examined, the above numbers reflect a true and fair view of the state of affairs of the above captioned club.



DAVID F. PALMER  
Chartered Accountant

## ENGINE REBUILDING BY THE K.R. WILSON PROCESS

by Doc Wishon, Palos Verdes Estates, California

While K.R. Wilson could supply the Ford Agent with everything from shop rags to arbor presses, the focal point of the catalogs and his major claim to fame, was the engine rebuilding apparatus — the "combination machine" — so called because it could both line bore the main bearings and bore the cylinders. The combination machine was supplied with a complete set of tools for the engine overhaul, as pictured in Figure 1. This setup for the Model "T" was brought out in 1922, and slightly modified in 1928 for use on the Model "A" engine. At \$274, it was one-third the price of competitive machines, turned out better work, and by Wilson's calculations, paid for itself after the sixth engine overhaul. Over 10,000 were produced and many remain in operation today.

The following article will show the tools in action, illustrate the steps involved in engine overhaul, and show you some important, often overlooked points which you will need to check when you next have your engine rebuilt.

First, it is necessary to inspect your block. In K.R. Wilson's time, junk blocks were not a problem. After 50 years though, cracked water jackets and valve seats, rust pitting and broken castings can mean expensive repairs. You may choose to get another block rather than spend \$200 or more to fix a bad one. Just don't spend \$700 on a complete overhaul and then discover that water jacket crack on the first tour. Be certain the block is hot tanked and Magna-

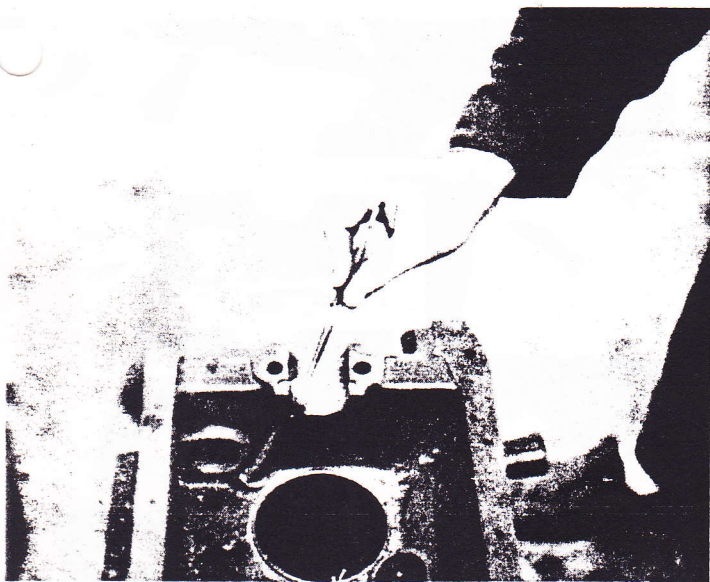


Figure 2.

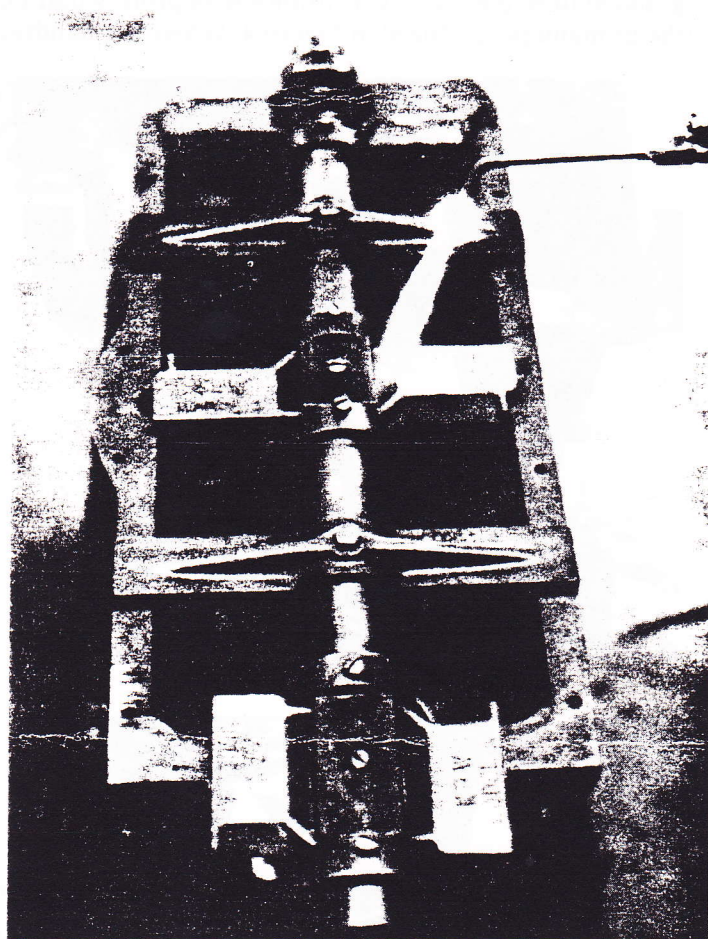


Figure 3.

fluxed. Well over half the "A" engines (and all the "T" engines) brought in for overhaul will need some crack repair. Be certain that the cracks are welded and not brazed. Once the block is back from the shop, the main bearings are poured.

Babbitt should always be poured into a cool, room temperature block. This statement was controversial in 1929, and it remains so today. K.R. Wilson proved, with the help of the Chief Chemist of the National Lead Company, the suppliers of Ford's babbitt — that rapid chilling of the freshly poured metal insured uniform crystallization and prevented separation of the alloying metals. Durability tests conducted by Wilson proved the superiority of the cool block. The bearing saddles are first cleaned, dried, and the oil delivery tubes plugged with a bit of asbestos rope, Figure 2. The babbitt is poured around a mandrel which rests upon the pan rails

and is supported by pins placed into the pin bolt holes. Sliding collars, which are locked up against the saddles give the proper radius to the bearing ends and form the rear bearing thrust surfaces. The rectangular blocks that say "KRW Model A" are pouring blocks, which act as funnels for the entering babbitt. Wilson supplied two with the combination machine, but if you have six, the three bearings can be poured in one fluid motion. In Figure 3, the mandrel is touched with the flame to evaporate any condensation. The babbitt is brought up to 975° in the babbitt pot. Wilson sold a gasoline-fired pot, but my insurance man prefers that I use the propane pot pictured in Figure 4. When the mandrel is

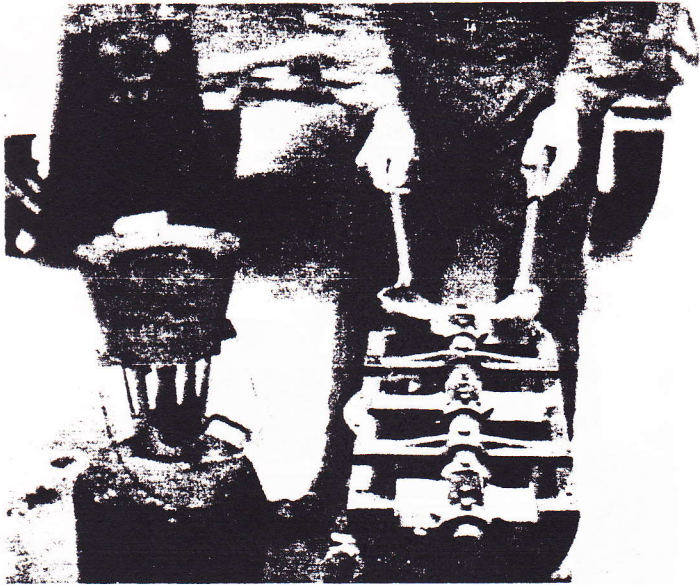


Figure 4.

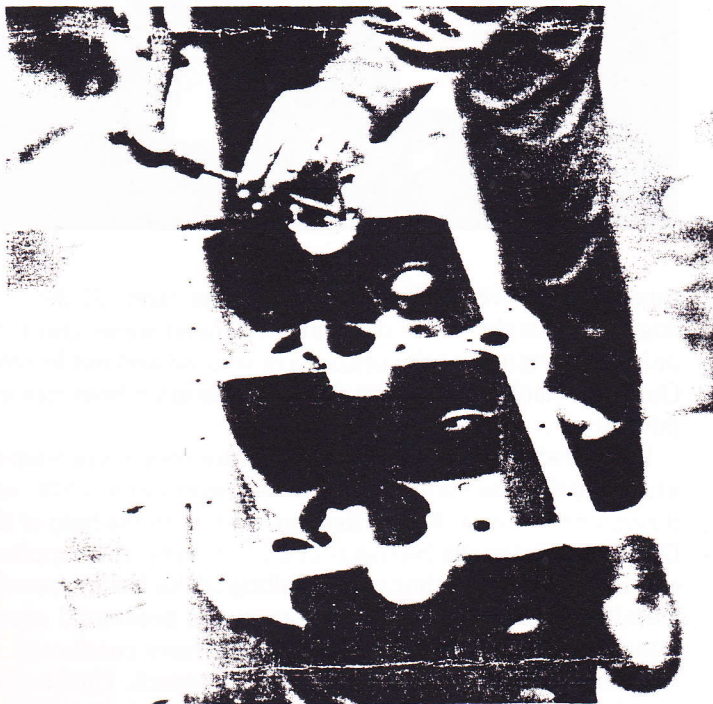


Figure 5.

removed, the excess babbitt sprues are cut off (with the force directed outward) as pictured in Figure 5. This excess

babbitt should be discarded, as once the metal is heated and cooled its composition will be adversely affected by subsequent heating. It takes \$60 worth of babbitt to pour a Model "A" bearing job, and three-fourths of this winds up in the trash. When the babbitt fully cools, it shrinks away from the block and becomes loose. K.R. Wilson supplied a special peining tool to expand the cool babbitt and lock it back against the block. Figure 6. Ford drilled anchor holes in the bearing saddles for this same reason. It is therefore unne-



Figure 6.

essary, and in fact, harmful, to tin the block. In Figure 7, the surface of the bearing is filed flush with the block.

In Model "A" times, Ford supplied rebabbitted main caps and connecting rods. Nowadays these items need rebabbitting, too. In Figure 8, Larry Hierholzer of the Motor Cities Region is placing asbestos in the oil return hole of a freshly tinned steel rear main cap. Figure 9 shows a homemade jig

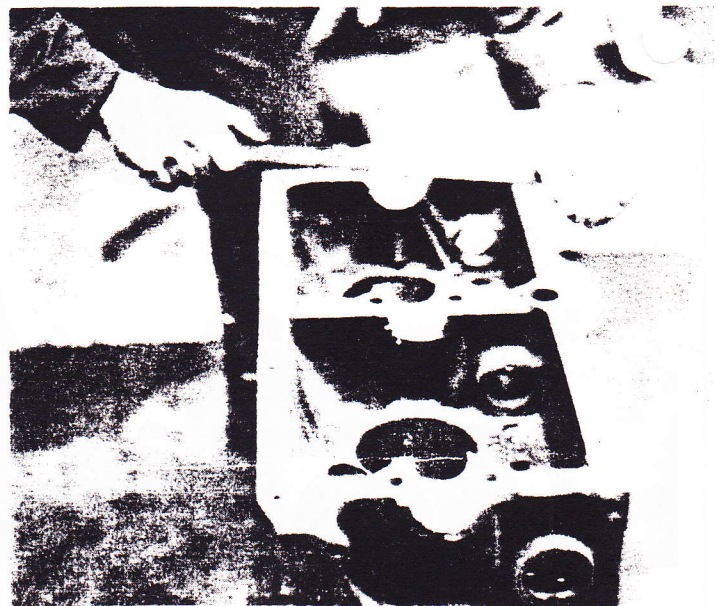


Figure 7.

- CONTINUED NEXT MONTH -