

WESTERN

A MODEL NEWS

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

Pres: Bill Bennie
Sec : Mike Cooke
[REDACTED], Kingsley, 6026

October 13, 1981.

DETAILS OF NEXT MEETING: MYSTERY TOUR - SUNDAY, OCTOBER 25, '81.

Assemble at 9:30 a.m.
Actual Start at 10:00 a.m. SHARP
Start From Causeway Car Park (western end).

This will be a navigation run. (Road maps may be helpful!)
Barbecues and facilities available at lunch spot.

LAST MEETING:

Our last meeting was held in the "Teatotalers Hall" at Pioneer Village on Saturday, September 26th, amidst an atmosphere of nostalgia. The cars all looked the part parked in the street outside amongst the village shops and generally adding to the overall effect of a bygone era.

The idea for the run came from Eric Richards, who also very ably ran the Rally West rally to the Village the following week for the Veteran Car Club.

We left Perth in beautiful sunshine (despite the absence of one member who promised to organise the run). We made our way to the Veteran Car Club block at Forrestfield and gave some verbal encouragement to the Club members working on the site for the V.C.C. of W.A. Club rooms.

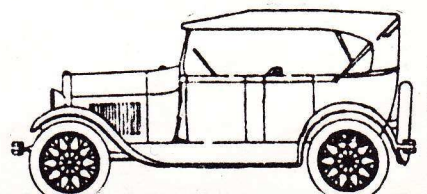
After a leisurely lunch at Quarry Park in Gosnells amongst the odd stray dog or so, we then proceeded to Pioneer Village for the rest of the afternoon - and to coin a phrase, " a good time was had by all!!!".

Joining our meeting for the first time were Busselton members John & Margaret Teale, and very welcome too. There was talk of possibly having a rally to Busselton in the future and we might even get to help John milk the cows !!

Gossip columnists have been active this month and the following reports have come in -

Bill Spencer and Eric Richards are reported to be trying to alter Australia's balance of payments to the U.S.A. by ordering a large amount of parts to be shipped to Australia shortly. They will both probably cop a Knighthood out of it.

Mike Cooke decided to give his brakes an adjustment after an "Ockeris Australis" ran Mike and Laurel off the road on their way to the September meeting - no damage but a nasty shock. Some people have no respect for the elderly (cars that is).



Bill Bennie has finally brought his body home to be restored (car body that is!) Panels have all gone off to Ray Oakes for sand blasting etc. Now comes the wood problem - one thing certain - there were more screws in a model A body than you will get in a modern car.

Max and Dora Annear have been forgiven for coming to the September meeting in a Valiant. He claimed his Thunderbird mufflers sounded like a tractor - we always thought it was a sporty engine !

On the Restoration Side :-

Ranch Auto Engineers, 43 Sarich St. Osborne Park, have quoted the following prices for Model A engine work :

- | | |
|-------------------|-----------|
| 1. To plane head | \$18 |
| 2. Reseat valve | \$ 2 ea. |
| 3. Grind Valve | \$1.20 ea |
| 4. Hone cylinders | \$10 |
| 5. Balance Engine | \$60 |

Total : \$113.

The above covers work only and doesn't cover reassembly.

Balancing covers 1. flywheel, 2. crankshaft and pulley 3. conrods and pistons.

Ranch Autos can also rebabbit bearings for the Model A and will quote you a price if you phone them.

Speaking to members who have had their engines balanced, the small cost is well worth spending as it considerably reduces the vibration transmitted to the chassis.

Cracks in Water Jacket.

If you are faced with this problem there is an excellent product called "DEVCON" fast hardening plastic steel. It contains 80% steel and 20% epoxy in a putty consistency. It is a two pack product and will harden in 3 - 5 minutes. Available from Coventry Motors in Morley, the cost is around \$20 for the pack. The same product is available in Stainless Steel putty and also in Aluminium. It is imported from the U.S.A.

Tools : Rumour has it that tools will almost certainly be hit by the proposed new Sales Tax next year. Coventry Motors Morley are promoting Sidchrome at the moment and are offering 20% discount on reasonable quantities (not single items) or a negotiated deal on really big orders (\$600 - \$800). Currently they have good stocks.

Another point is that odd size Imperial measures are being discontinued and phased out i.e. 21/32" socket for the conrod nuts on our Model A's. So, if you need one of these look now - tomorrow will be too late. The alternative in time will mean you will have to import from the U.S.A. who have had the common sense to avoid metrics - so far !!

HELPFUL HINTS

There have been thousands of "tinkerers" who, through the years, have learned many little tricks or "gimmicks" which made life with MODEL A even easier. We can never hope to record even most of these, but we can present a few of the simpler ones most likely to be helpful today:

Always **remove** the dip stick when pouring oil in the engine to vent the crankcase and so prevent "burping" oil out the fill pipe.

Always start the MODEL A engine with the spark lever retarded; otherwise it will kick back and break or bend the starter mechanism (which may be your own arm if you're cranking it!). If you are ever confused about which is "retard" position just remember that TO START UP you must push both levers UP. Then pull the throttle down a few notches, open the choke rod at least a quarter turn to the left, pull the rod out, then step on the starter. As soon as the engine fires, release the choke.

As the engine warms up, lean the carburetor mixture by turning the choke rod to the right—never turn this rod down *tightly* for you will then score and damage the needle valve.

Also retard the spark when the MODEL A is running slowly in high gear, particularly when pulling slowly up a hill.

When installing a new hub cap on any MODEL A wheel, crimp over only four of the tabs, 90° apart. These are enough to hold the cap securely and the unbent tabs will thus be saved for future use. Also be sure to position the hub cap just as it was done in the factory; the FORD script must be able to read upright and horizontal when the wheel is mounted on the spare wheel rack with the valve stem at the *top* position. Always mount the spare wheel on the rack in this position, too.

Keep the "U" bolts tight on both front and rear springs to prevent cracking the cross-members of the frame. When you have occasion to replace a spring, be sure to install a thin resilient cushion, such as leather or rubber-impregnated fabric, between the spring and the cross-member.

Keep center bolts tight in the springs. If a center bolt becomes loose, it may wear and break and allow some leaves or even the entire spring to shift. A rear spring center bolt can be replaced by cutting open a little flap in the sheet steel floor over the spring center, then driv-

ing out the bolt and realigning the spring leaves with a tapered drift pin.

Worn horn motor brushes on MODEL A can be replaced with a modern Auto-Lite brush number EW-12 after removing an attached wire from each brush.

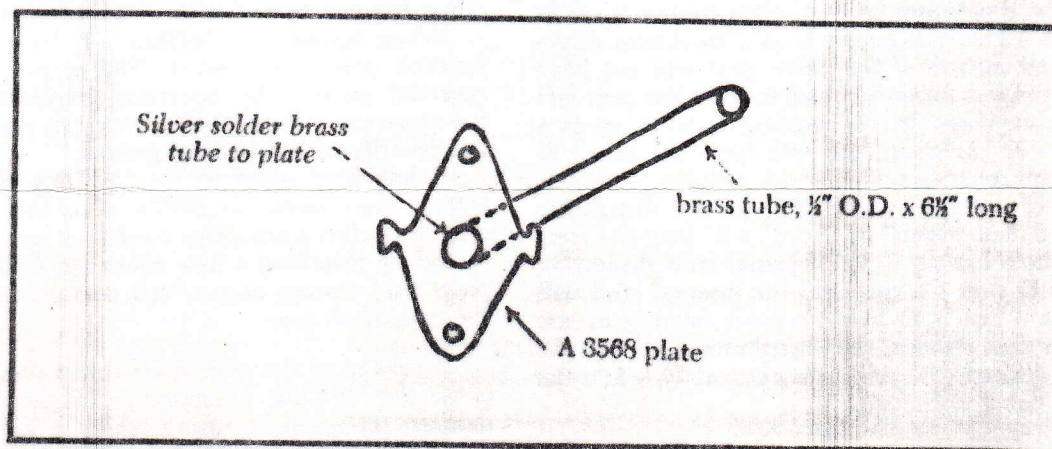
To replace either rear axle, or to repair the differential, it is not necessary to remove the entire assembly. Disconnect left brake rod and radius rod; put a block between left spring and axle housing (use a spring spreader if you have one); jack up the chassis on both sides. Remove both rear drums; remove left spring shackle; remove left axle housing from the differential drum; withdraw axle and differential assembly for repair. Replace in reverse order. This job can be done in three hours.

When removing the radiator always unbolt the water inlet and outlet nozzle castings from the engine block and head; it will not be necessary then to touch the hose connections. The radiator shell may remain fastened to the core for this operation.

For removing or installing a MODEL A engine, make up a special eye-bolt by removing the porcelain and electrodes from an old spark plug and then fastening a forged eyebolt through the plug. Screw this into the third spark plug hole for best balance for lifting the engine with a chain hoist or block and tackle.

If you can't find a MODEL A crankshaft ratchet, use one from a Ford V-8—it's better material anyway!

Transmission oil is recommended for use in the MODEL A steering sector housing but this always leaks out. An improved sealing method was used in the 1933 and later Fords and can easily be adapted to the MODEL A steering gear case. Use Part No. 40 3597, steering gear oil retainer tube and plate assembly with gasket No. 40 3592. If you can't find these parts, make the oil seal by silver-soldering a brass tube $6\frac{1}{2}$ " long by $\frac{1}{2}$ " outside diameter onto the MODEL A Part No. A 3568 plate, keeping it square as shown in the accompanying sketch. Then cut a gasket to match the plate. When installed, the gasket seals the oil in the bottom of the housing and the tube extends through the housing to a point well above the oil level. The original MODEL A seal was merely a thick cork gasket ring which was compressed between the light switch, the switch shaft, and the housing; it is not used in the modification described.



For a quick method of replacing MODEL A distributor points, do not remove the cam and plate from the body, but cut the loop of the spring on the old point arm and remove it, leaving the old bolt in place. Then cut or grind a notch in the outside of the loop of the spring on the new point arm; then just slip the new arm and spring in place over the old bolt. The spring tension will hold it in place. This saves retiming the cam and you won't run the risk of shorting out the wire under the plate, as so often happens when replacing a plate in the distributor body. Actually, the engine *should* be retimed after new points are installed, but this method is sure to save you time and trouble should you have to replace points when on a tour.

Sometimes, if the distributor bushings are badly worn and the shaft is loose, you'll have to set more gap in the points or you will have a miss on one cylinder. Of course the proper way to correct this is to rebush and install a new shaft, but this stop-gap trick will keep you going on all four until you can do a proper job.

Do *not* use a one-piece distributor shaft, if you can help it, when rebuilding the MODEL A distributor assembly. The original two-piece shaft acts as a flexible coupling between the worm gear drive and the distributor body; it is impossible to locate the cylinder head, which supports the distributor body, accurately with respect to the engine block because of the necessary stud hole clearance in the head. If the rigid, one-piece shaft is used, rapid wear of the distributor bearings and run-out of the distributor cam will result.

For best timing of the MODEL A ignition, set breaker points at .020" (range is .018" to .022"). Remove the timing pin from the front of the timing gear cover, reverse it, and insert it in the bolt hole. Turn engine slowly until the pin enters the recess in the cam gear. Number one piston is now on top dead center. *Now* replace timing pin bolt. Retard spark lever. Loosen cam in the distributor and rotate it to the number one electrode in the distributor cap. Then adjust position of cam until the points are just ready to open (the distributor shaft rotates counter clockwise). Tighten cam screw. Turn ignition on and, while slowly advancing the spark lever, listen for a click of sparking at the points, at which time the ammeter will immediately show a slight discharge—about 1½ amperes. The spark lever now should have moved down two notches, or ⅜ inch. Recheck; if lever moves more than two notches, advance the cam slightly by turning counter-clockwise. Tighten cam screw securely; then make a final check.

Accurate results in engine timing are impossible if parts are worn and there is excessive backlash. If you can't immediately replace worn parts, then try to set the cam on the distributor so that, after timing is set as described, the excess movement is in a clockwise direction so that the motion of the drive gear will not have to take up the excess motion before turning the cam end of the distributor shaft. If the backlash is taken up in a counter-clockwise direction, this will have the effect of retarding the spark.

To facilitate accurate adjustment of the distributor timing, make a cam wrench of 1" x ⅝" x 6" long flat steel with an 1¼" hole having a ⅜" internal stud projecting ½". This will fit over the cam and the internal stud will fit into the cam notch to keep it from turning in the wrench. With this wrench the distributor cam can be turned to the desired spot, and *held accurately*, while the cam screw is being tightened.

Under no circumstances should you attempt to adjust the service brakes by turning up the clevises on the brake

rods; this would result in the brakes being thrown out of adjustment and cause unequal wear on the linings.

Use chassis lubricant in the MODEL A water pump fittings; the usual "water pump lubricant" will remain solid, and surplus lubricant forced into the cooling system may lodge in the radiator tubes and cause engine overheating. The ordinary chassis lubricant will melt at running temperatures and so cause no radiator blockage.

To overcome excessive end play in the MODEL A water pump shaft, build up the impeller end of the shaft by brazing and grinding or filing the end flat until the factory specified clearing of .006" to .010" is obtained. Excessive clearance results from wear of the shaft end, and wear of the machined thrust boss in the engine head.

Be careful to avoid interchanging the MODEL A fuel tank and radiator caps. While the outward appearance of these is the same, the inside construction is different. The fuel tank cap has a vent hole in the raised portion which allows air to flow from the six tiny openings around the lower edge of the cap. This prevents a vacuum from forming in the fuel tank and stopping flow of gasoline. If a fuel tank cap is used on the radiator it can allow water to leak out. In an emergency, a radiator cap can be used on the fuel tank if it is drilled, but rain water dripping from the windshield visor will leak into the fuel tank through such a vent hole.

When parking MODEL A for any length of time be sure to close the shut-off valve under the fuel tank. Do *not* depend on the carburetor float needle-valve as a positive shut-off, for the entire contents of the fuel tank can leak out through the carburetor valve and create a real fire hazard.

Any inaccuracy of the fuel gage can be corrected by bending the float wire. It is not necessary to remove the gage from the tank to do this if you use two easily made tools. Secure two old MODEL A brake rods and saw off ten inches of the ends with the fixed eye; then cut a ⅜" gap in the side of each eye. Remove the safety screen from the fuel tank and, reaching through the fill hole, hold the float wire with one eye rod while you bend the wire in the correct direction with the other eye rod.

Always replace the *safety screen* in the fill hole of the fuel tank—this is not merely a strainer but is a safety device to prevent explosion of the fuel tank in the event of a fire at the fill hole.

When shutting off the engine of the 1928 and 1929 MODEL A Fords having the Electrolock "pop-out" ignition switches, press the button all the way in, *but* be sure the "pop-out" button *remains* in! Sometimes, if not pressed firmly, it can pop out again when you stop pressing and after the engine stops turning; this turns the ignition on again and not only can run the battery down but can burn out the high tension coil.

When installing a MODEL A battery, be sure the *positive* pole is grounded. The ammeter will indicate reversed polarity by operating in reverse. Damage to the electrical system and battery can result from reversed polarity of the battery ground.

A knocking noise in the MODEL A engine comes from a worn camshaft timing gear; this also gives poor engine performance. The condition can usually be corrected by installing a new *oversized* (.003" or .004", see parts list) timing gear which compensates for wear on the crankshaft gear.

Breakage of the cam shaft thrust-plunger spring can cause the MODEL A engine to "buck" at low speed. A modern replacement spring which is an exact fit is the Dodge #119996 oil relief valve spring, available from Dodge dealers.