

WESTERN

A MODEL NEWS

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

September 1983.

Next Meeting: Sunday, October 9, 1983

Place: Centrepont Carpark, Midland

Time : 11:00 a.m. (11:15 a.m. departure)

Last month's run was cancelled at the Centrepont Carpark because of rain and wind. The cars would have made it because, after all, they have already survived over 50 winters - but the occupants?! - some suffering with flu etc. may not have. Apologies to Geoff Davies who went out to the lunch stop to meet us only to find no-one there.

It was decided to do the same run in October so as not to waste the time and effort our Events Organiser, Toni Mahony, has put into organising this event - SO EVERYONE COME !!! - in either your ancient or modern. We always have a good time so if you don't attend, that's your loss. Don't forget - bring a packed or barbecue lunch and some afternoon tea.

Current Activities:

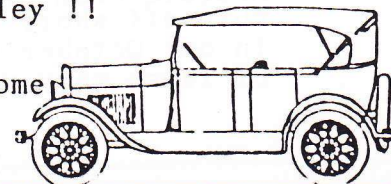
At the moment of writing, Cookes, Spencers and Bennies are going to Kiama for the 8th National Model A Meet at Easter 1984. Anyone who is thinking of going should contact the Secretary for details (Toni Mahony Ph: [REDACTED]). Kiama is 60 miles south of Sydney, right on the coast.

Mike & Laurel Cooke are planning to drive their Tudor all the way and should go close to taking the "Longest Distance" prize. Mike has just renewed most of the glass in his car and is repainting wheels, mudguards, etc. The colour scheme is Blue body, Black guards, etc and Cream wheels with (incorrect) Tan upholstery. It's really looking nice and will be another restored car for the Club Register. They plan on joining friends in South Australia for the long trip.

Bill and Mavis Spencer are freighting their lovely newly restored Sports Coupe to Port Pirie and joining up with the South Australians to drive to Kiama. Bill has the upholstery and hood to finish and a few motor bugs to iron out before it is mobile. Bill and Mavis have chosen light Arabian Sand body with Tan trim, Fawn upholstery and Black guards, wheels, valences etc.

Bill and Dorothy Bennie are sending their car road freight to Port Pirie and also joining the South Australians for the trip across in their 1928 AR Phaeton. Currently, painting is well in progress. Bill has selected Wine Red body with Burgundy trim and Black wheels, guards, etc. This scheme should go down well (excuse the pun) in South Australia - particularly the Barossa Valley !!

Probably around Christmas we should see these three cars out and about as their owners get some miles up to clear any mechanical gremlins that may appear.



"TO BE OR NOT TO BE" (apologies to W. Shakespeare) or to "RESTORE OR NOT TO RESTORE" - that's the question most of us face. Do we go out and buy an already restored car or should we gather up all the makings over many years and finally get it all together.

Much of the pleasure is knowing you are hauling back from the inevitable brink of extinction a car that without your personal intervention, would have ceased to exist. Yes, the cost is often high, but think of the years of future enjoyment. The early years spent in accumulating parts are often frustrating, but on the whole, fun. Restoration is not the easy way out and it is certainly not the modern idea of a "quick buck to be made".

Many of us, no matter how hard we work, will never be able to get sufficient cash together to just go out and purchase a fully restored car. The answer is to go without, or buy some old heap at a low price that will give you more heartache than pleasure.

The third alternative is the long term project that you can finance out of your income. Buy the best condition car of your choice; learn all about it from research, then start your ground up restoration. Buy the parts as you need them, attend Swap Meets, wheel and deal with other Club members. As you get further involved, you will enjoy it more. Plan the whole project stage by stage on paper. Don't over-reach your finances and you will not only end up with the car of your choice, but you should still retain the woman of your choice by the time the restoration is finished.

Car Covers: Currently Bill Bennie is drawing up a pattern for a tailor made car cover for a 1928 Phaeton - to be made of washable cotton. Pattern and local costs should be available in our next newsletter.

Photo Album: Our Club photo album is now in existence with quite a few photos of Members and their cars. What would be nice is to have photos of our Country Members' cars - restored or unrestored or in the process of ! So what about it - send a photo to our Secretary pronto and we will put it in the album for posterity. Don't forget to put a bit of information with it.

Current Subscriptions: A few of these are still outstanding - if you have not already sent your subs back to the Secretary - pop out right now and do so - along with the two part forms that were sent to you. With such a low subscription cost for members we cannot continue to send Newsletters to "unfinancial" members after this current one.

Membership Roster: Don't forget - we need all your information to complete this Roster in time for sending out with the October Newsletter so please get those important forms back to the Secretary tomorrow !!

Wanted: For Tudor Sedan - four blade fan; top channel for door windows. Contact: John Luca, Ph: [REDACTED]

Overseas Correspondents: MARC WA Members Steve & Louise Read and family advise they are happily settled into 11B Sunrise Avenue, Chelmsford, Essex CM1 4JW, Pommiland. They have seen lots of Vintage cars but so far no A Models. Anyone travelling that way - give them a Hello Call.

Article From U.S. Club: The following article from the U.S. Clubs cuts off short at the last page. There will be a final page published in our October newsletter to finish it off. Hope you can use some of these very useful hints.

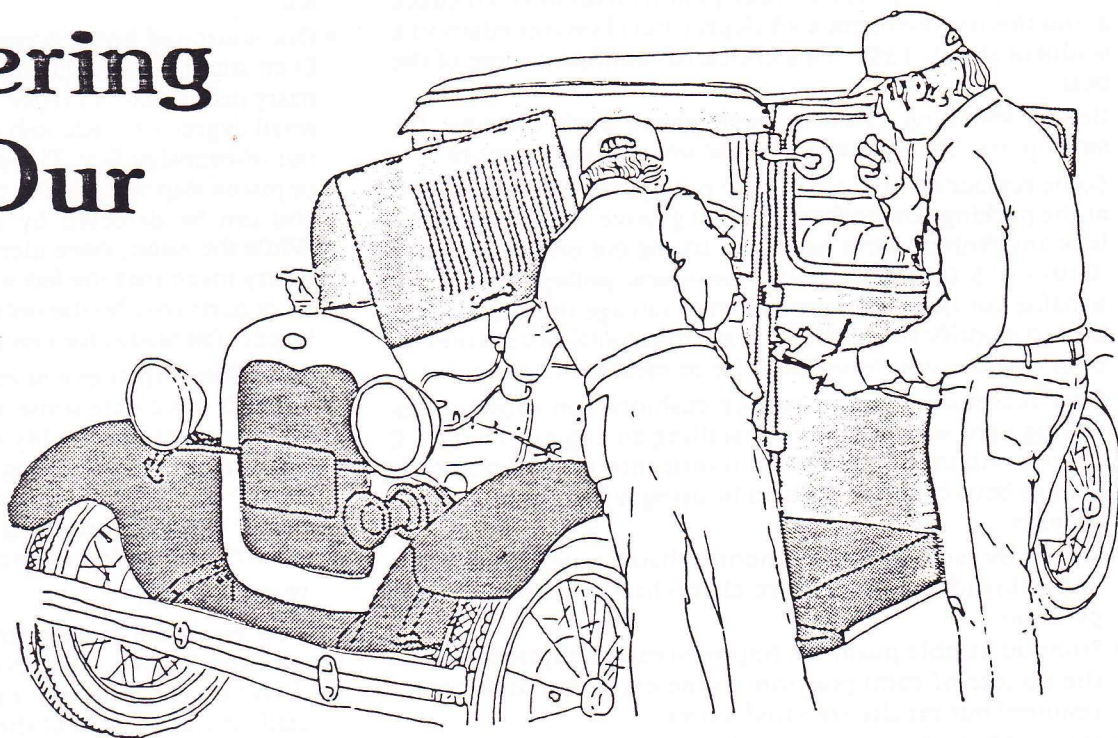
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Tinkering With Our Toys

by Arnold "Bud" Dodge
—Yakima, Washington



Very often a simple hint or procedure can save considerable disappointment and frustration. Many of us working on the mechanics of our Model A's have become experts "after-the-fact." The following is a personal on-the-job compilation of brief and to-the-point suggestions. These might be helpful in an endeavor to become a "before-the-fact" expert.

With 50 years of writings in this area by numerous authorities, it is not without some trepidation that there can be recall of some "old hat" and debatable ideas. An honest attempt has been made to avoid a major invasion in this area.

ENGINE

- Many poorly idling engines simply need a new intake-exhaust gasket set. Some current composition replacements split after a short period of use. Metal clad gaskets are best. Check compression and timing and don't be afraid to turn the idle jet down to its seat. Some "A" engines idle best at or near this setting.
- Wasps and similar insects love to crawl into dark hiding places especially crankcases of Model A Fords. The entry point is the oil filler tube during storage periods. The oil screen on the oil pump can grab these pests and they are not drained out with the oil. Solder a copper screen on bottom of filler cap or cover filler opening with a single layer of cheese cloth or similar.
- When removing engine head, first flush out any antifreeze with a couple of water changes before loosening head bolts. This will save cleanup of a disagreeable mess on parts, engine block and floor.
- When replacing front crankcase oil seal soak it overnight in STP (or equal parts STP and motor oil). This will help to avoid an excessive smokey burn-in and future oil leak.
- A 15/32 drill will effectively clear rust and residue from the bolt holes in cylinder head. This avoids messing up gasket surfaces with sluff and allows easier installation.

- Ford put out a "high compression" head as a standard parts item. Part # A-6050-B with a compression ratio of around 5.5, about the same as the Model B. Fit all Model A's.
- A .125" overbore increases the displacement of a Model A about 13 cubic inches or about 6.5% over standard. This increases compression ratio about 5% with standard head.
- Some Model A owners obtain a bit more power from their engines by installing a Model B camshaft. This requires the Model B pushrods which are a fraction longer or adjustable. This seems to cause no side effects and will permit some improved "top-end" performance.
- The cylinder head makes an excellent guide for drilling the primary hole for Heli-Coil insert installation to repair stripped block threads.
- The removal of .065" from the surface of an original Model A cylinder head was a simple way to pick up a few "horses" for the high school crowd of the 30s. As long as at least .035" remained of the original recess in the cylinder head no identifiable problems came up since the head gasket added another .065" of clearance. Some rebuilds permit piston tops to rise a bit above the block and should be considered in any "shaving off."
- Headbolts and nuts with threads chased and oiled will provide an adequate gasket seal when finally torqued to 50-55 foot pounds on a warm engine. Strong arm tightening can cause gasket leakage by warping block. Any headbolts that are stretched (May Wested) must be replaced.
- Castellated nuts do not always line up with the cotter pin hole in the bolt. Switch about the nuts if working on rod bearings or try another. A gentle facing on the flat side of a grinding wheel often works. Do not loosen or go grossly over the torque range to align.
- When inspecting a set of rebabbited rods, never swap or reverse the various caps. The babbitt on some remakes is not centered nor are they sufficiently standardized from rod to rod to permit this.
- When installing crankshaft do not swap or reverse #1 and #2 main bearing caps.

- Engines overbored in the range of .100—.125" may not accept some replacement head gaskets. Where the pistons have square shoulders, the upstroke position will place the piston in direct contact with the gasket resulting in an elusive, but positive, knock. Since pistons with beveled edges avoid this problem, cut a 45 degree bevel on top edges to a width of about .135". This knock has confused some of the best.
- Before installing cylinder head check each cylinder for small parts. This can avoid some unusual experiences.
- Some replacement front engine pulleys are off-center both at the packing seal surface and belt groove. A permanent oil leak and fanbelt whip results. A truing cut on a lathe up to .010—.015 (diameter reduction—new pulley) and a reasonable cut on pulley groove may salvage the pulley. It is best to identify the problem prior to original installation by chucking the unit in metal lathe to measure the run-out.
- New rear motor mount rubber cushions can cause a frustrating tight squeeze when installing an engine. Two 6" C clamps will usually draw the motor into place. Locate the clamps between the flywheel housing lug and frame motor mounts.
- Watch threads on replacement exhaust pipe clamp bolts. Some threads run out before clamp halves are in tightened position.
- Some adjustable pushrods (tappets) can be adjusted only in the up (toe of cam) position. Some extra trial and error is required but results are satisfactory.
- General Rule: Your engine will always keep its poise with a little valve noise or, "It's better to hear 'em than repair 'em." Never less than .010" on intake and .015" on exhaust. Err on the higher side; never adjust closer than specs to remove noise.

NOISES

- A strange idle knock can come from a crankshaft pulley that is slightly short. The ratchet nut can not be drawn up enough to tighten the pulley on the crankshaft. A thin washer under the ratchet nut (or a new pulley) will repair this and stop the oil leak at the same time. A loose pulley can usually be easily found by rocking the fan blade.
- To remove a fan blade from the water pump shaft, remove blade retaining nut, screw on a headbolt nut about half its depth, follow this with a headbolt stud, tighten, rap bolt sharply with a hammer while holding fan blade. The fan blade will loosen and pump shaft will not be damaged.
- Intermittent noises in flywheel region can originate from starter Bendix drive working its way into the flywheel ring gear while car is being driven. a small spring loaded retaining lug located at the edge of the Bendix gear is usually at fault. If stuck, light oil will free it up, if broken or worn out it will no longer hold the idle gear in "home" position.
- Constant or intermittent valve noise after installation of adjustable pushrods is not uncommon. The lifter surfaces are not always square with the valve base and the oil cushion is lost. While this is annoying there is no harm if valve adjustment is within specs. With wear-in the noise often quiets down.
- An unexplained intermittent noise in front of engine can be caused by omission of the tension plunger on the end of the camshaft. The side cap of the timing gear cover can be carefully removed to check.

- Many disconcerting sounds can originate from front motor mounting and side splash pans. Pushing in the clutch can aggravate these sounds especially when motor is warm. With a bit of patience these nuisance noises can be eliminated.
- One source of hard-to-locate engine noise can be the fan. Even slightly loose fan front roller bearings can set up a nasty resonance or clatter at certain engine speeds due to a small degree of blade imbalance, a whipping fan belt or an out-of-round pulley. The sound resembles loose wrist pins or piston slap and usually occurs in the higher speed ranges and can be detected by temporary removal of fan belt. While the noise, once identified, is of minor consequence, it may mean that the fan will self destruct in time. Replacement parts may be the only answer. In any case, frequently inspect fan blades for cracks and loose rivets if of that type.
- Some fiber replacement camshaft timing gears are off-center. This can create some unusual idle knock frequencies. A faulty gear can be readily noted during engine assembly by observation while turning engine over. Replacement with a quality gear is best. A rat tail file can be used to adjust and center the gear mounting holes. It is essential to draw up the large mounting nut very securely.

WATER PUMP

- New or rebuilt water pumps take a while to settle down and stop leaking. The leverage afforded by a large screwdriver on the gland nut can break off tightening lugs especially if you run out of threads. Back off and add a packing ring or two. Tighten slowly over several hours of operation. This can be done very effectively while motor is idling if due respect is given fan blade and tightening is not overdone. Leaking will stop.

WATER OUTLET

- Save your nerves and the flanges on the upper water outlet. File head (usually not needed) and outlet mating surfaces square. Use a thin layer of non-setting Permatex. No gasket. You can now tighten all headbolts without wincing. Replacement outlet gaskets often squeeze out on the ends and can eventually cause a break in outlet casting as head is drawn up.

OVERHEATING

- Many Model A's have been accused of overheating just because a leaky radiator cap gasket permitted wind-aid spotting from expanding coolant from a normal operating engine.
- Air bubbles showing at the radiator filler neck may not be a leaky head gasket, but air pulled in through the water pump grease fitting or past pump packing. Always use a cap-type grease fitting at pump base fitted with a gasket under screw cap. Properly packed and maintained pumps should not leak air.

COOLING SYSTEM

- A leaky gasket on the water inlet on side of engine is just in the right place to trickle coolant on the dipstick and into crankcase. This can cause an unfounded worry.
- No use trying to fill your radiator to the top as it will just bubble out the overflow tube to seek an operating level. Don't be over confident, though, add a bit of coolant now and then to assure a safe level. A rubber tube extension on your overflow tube outlet will help keep water marks off of the firewall.

- The slight fluid oozing of a head gasket is not uncommon even on trued blocks and heads. Replacement copper head gaskets have a minimum of crimping and can allow capillary action to pull fluid out the sides. One-quarter to a half a can of radiator sealant usually will stop this unsightly condition if the problem persists. *Do not* exceed normal head-bolt torque (50-55 foot pounds). It may make the condition worse.

DRIVE LINE

- When you jack up one rear wheel for dry run testing in gear, remember that the raised wheel is turning twice as fast as indicated on speedometer. At 60 mph you are placing undue and unnecessary stress on drive parts. Jack up both wheels and keep speed moderate.
- The large speedometer gear located on the driveshaft, if installed in reverse position, will preclude any attempt to slide on the universal joint while installing motor-transmission assembly.

SPEEDOMETER

- If you hold a constant speed between mile posts, measure the elapsed time in seconds and divide into 3600. This will show your actual miles per hour for speedometer calibration. This can be very accurate if done several times especially with a stop watch.

CLUTCH

- Never install a clutch plate that does not feature a spring loaded hub. The clutch chatter can irritate the most calm personality. If caught without a clutch plate alignment tool it is possible to install transmission while pressure plate bolts are loose. Once transmission is in place gradually tighten pressure plate bolts through inspection hole in bell housing.

FLYWHEEL

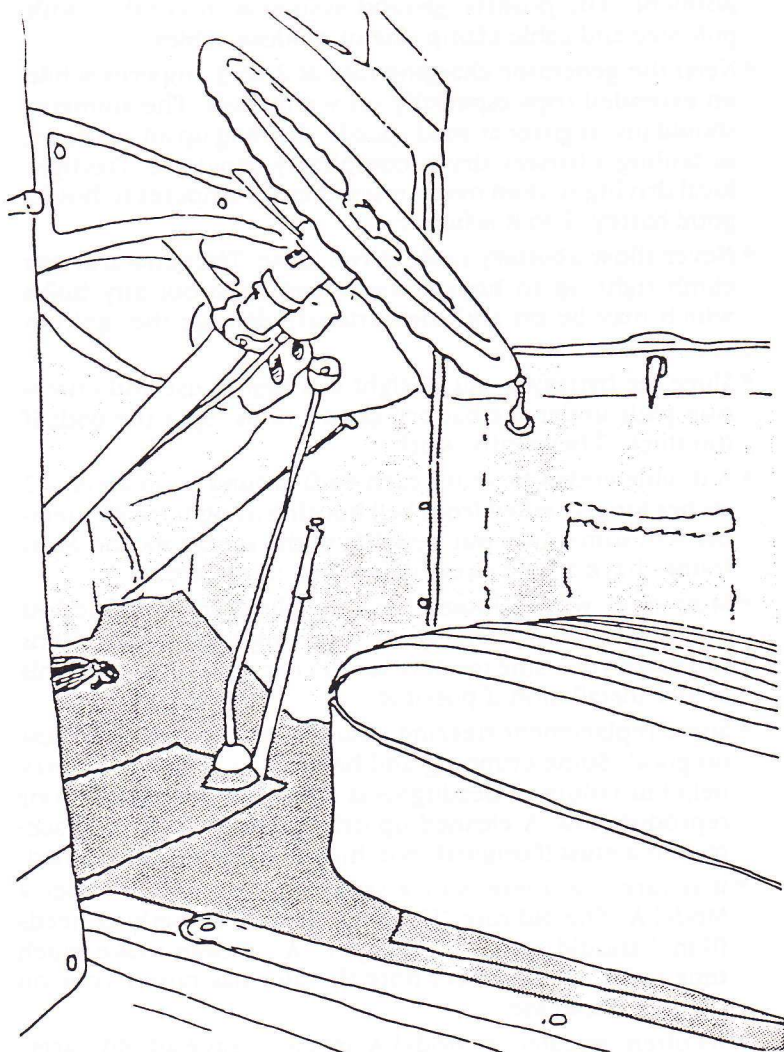
- The heavy flywheel will slide on and off easily if a headbolt stud is used as a guide by screwing it into crankshaft flange.
- Before having excess weight cut from standard flywheel, check with someone who has had it done. There may be some instant acceleration advantage but slow speed power pulses may show up as well as poor idling. Could be worth a check out.

STEERING

- When replacing steering sector or worm, both units should be replaced if good adjustment is to be afforded.
- The steering column must line up with dashboard or tank bracket to avoid hard steering. If necessary, enlarge frame mounting holes slightly and add shims between gear box and frame to clean up side to side misalignment, if any. With a Model A you need all of the steering ease you can arrange.
- About 10% STP added to steering gear oil is said to improve steering ease.

DIFFERENTIAL

- When inspecting the gears of a differential that has been in use, look very carefully at gear tooth bases for hairline fatigue cracks. These are not uncommon and can cause grief if car is driven hard. If in doubt, have it Magnafluxed.
- On new or rebuilt rear ends the use of 140 gear oil is O.K. If new seals have not been installed, watch for leaks. Do not mix 600 and 140 gear oils.



- A 1½ ton hydraulic jack inserted in a disassembled rear end banjo can effectively push out the double cone bearing race. Place banjo in upright position with bearing surface down, use old bearings (or other spacer) for an alignment adapter and base of jack as pusher. Top of jack should be cushioned with a wood block. A steady easy action on the jack handle will do the trick.
- The cotter pin which retains the nut holding pinion on drive shaft can bind against the ring gear carrier. Dress the cotter pin on sides of nut rather than the usual over the end position. This binding, where it occurs, makes adjustments very difficult.
- Difficult to locate rear end noises can be due to a "warped" ring gear carrier. Broken gear teeth riding through a ring gear and pinion can "hairline" fracture the banjo as well as distort the carrier. Sprung ring gear carriers can be readily identified if mounted in a lathe on bearing surface and spun. Ring gear can be mounted on carrier for the most revealing test. Replacement of faulty unit is best course of action.

BRAKES

- When installing rear brake backing plates, note carefully that they are not reversed from left to right. The error can be agonizingly realized when the backing plate brake rod clevis levers do not directly align with brake rod eyes.

ELECTRICAL

- A mysterious and elusive electrical short can be located if you have just installed a black junction box on firewall. The

- long screws on some replacements extend far enough to the rear of the box to make contact with the metal firewall resulting in a dead short.
- Most replacement battery cables will require some size adjustment. The positive ground system is in conflict with pole size and cable clamp size of modern cables.
- Keep the generator charging rate at 2 or 3 amperes while on extended trips especially on warm days. The ammeter should just register at road speeds. Burning up an armature or boiling a battery dry is completely avoidable. Daylight local driving seldom needs more than 10 amperes to hold a good battery. 5 to 8 is better.
- Never allow a battery cable to run loose. The generator can climb right up to high voltages and burn out any bulbs which may be on and can seriously damage the ignition system.
- Since the battery is out of sight it is best to use anti-corrosion pads under the battery connections. Split the pads if too thick. They really work.
- A double ended (hole on each end) ground strap about 12 inches long installed from bell housing to right frame member will sometimes put new life in the starter motor. Most frames have a hole already punched in the area.
- Most new wiring looms have swedged-on or solderless connectors. A moment spent soldering these connections can spare you some mysterious electrical problems. Do this before installation if possible.
- Some replacement steering column light switches are just no good. Some crimping and beefing up with epoxy may help but failure of headlights is imminent with these poor reproductions. A cleaned up original or a quality replacement is a must if original switching system is to be retained.
- It is rare that there isn't a spot or two of drips under a Model A. The old rule "If it ain't drippin' something needs fillin'" should apply to your pet "A." Doesn't take much time to be sure. Always note if water has raised your oil level in crankcase.
- As often repeated in Model A articles, "save all old parts" until you are absolutely sure that they are not better than replacements or at least a source of comparison measurements.
- Remember that the two most important gadgets on a Model A are a motor temperature measuring device and an oil pressure gauge. Neither of these were on the original.
- Prepare for the heartbreak when the old Model A junker down the street outruns your new rebuild and sprays oil particles on your windshield. There will come a day.
- Some replacement breaker points not only quickly oxidize and develop a high resistance but the rubbing block wears so rapidly that the point gap is reduced to near zero. Genuine Ford points are available on order from your Ford dealer "Motorcraft Model A Points DP-104."
- A frequent cause of intermittent distributor failure is the wire below the moveable breaker plate. This wire should be of a highly flexible multistrand construction and be installed to permit free travel for breaker plate advance and retard movements. Some replacements have stiff wire which shorts when insulation rubs off on distributor body or internal strands break lowering current carrying capacity or complete off and on operation.
- Some older "universal" replacement coils were marked "Bat" and Dist." Most were for negative ground systems. If

installed as marked, there can be up to 40% loss of spark intensity at higher speeds. Reverse the coil if you have a problem, worth a try. Coils marked positive and negative should be installed where the positive (red wire) goes to the distributor via the ignition switch and the negative is connected to the battery (black wire) via the ammeter.

- Note fit of plastic distributor body on distributor. Some replacements fit so poorly that the rotor rubs on the lugs leading to the plugs. An unusual noise is usually evident and some side to side movement of plastic body may be noticed. Do not attempt to salvage.
- A 1/4" pipe thread tap screwed part way into distributor sleeve bearings permits easy driving out of bearing.
- The condenser is an important unit running in a very hot environment. Carry a spare. A good one will check out at about .25 microfarads and should take a 400 volt leakage test. If caught in an emergency, remove it and install a modern pigtail type between red coil wire and ground (fire-wall). It should get you home.
- The steering wheel spark lever should permit a full span of the gap on side of distributor body with no play in linkage. On two-toothed steering systems, the column shell clamp can be loosened and rotated a bit to allow proper action for full retard and advance of spark. Adjustment can be made by a small bend of spark control lever on lower steering column if needed in addition to shell movement.
- Replacement distributor cams should be checked out by measuring any change in point gap on the various lobes. The old one may give better performance if the new one is off more than 2 or 3 thousandths.
- Increases in dwell angle, up to a practical cut-off (point-arc), is supposed to increase spark intensity and, hence, better top speed performance. The dwell is increased by dual breaker points, distributor cam design, closer point spacing and the equivalent in modern electronics. Try the .018" setting on points once they are worn-in. A "B" distributor cam (ocean wave profile) offers a bit more dwell if you like to experiment.
- Use that spark lever to improve driving pleasure. Full retard on idle, partial retard while on warm-up and heavy pull such as hills and smooth going in parades and full advance while tooling down the highway. Experiment with settings and enjoy full performance.
- When replacing intermediate distributor shafts a bit of filing will assure an effective fit. Save the old shaft for measurements. This applies to rebuilt distributors and oil pumps. The lugs and slots must permit easy fits and allow the shafts to home-in.

OIL PUMP

- Starting in cold or freezing weather can bring on many strange noises as the oil pump gasps through thick oil shrunk pistons rap and dry bearings clatter. Cavitation around the oil pump (air pocket) can set up an evil rattle for a few moments while the pump wobbles and pulses. Check oil before starting in freezing weather. The oil pump drive lug can be sheared off if the pump is sitting in a few inches of water leaked into the crankcase. Allow slow warm-up.
- Always replace coil spring on bottom of oil pump if worn or etched. A broken spring can allow the pump to drop enough to disengage the drive lug and create a disaster.
- Very few oil pumps need rebuilding but the procedure offers comfort to a rebuild. Be sure rebuilt fits fully and