

## Rainmaker Ron's Remedies



Please take a copy of Dad's tip and tricks to keep his memory alive and preserve his knowledge of his beloved hobby.

Ron Cloat 4/21/1935 - 12/ 5/ 2017

# Rain Maker Ron's Remedies for Model A's

## Tricks

To install Hub Caps, place wheel with cap down on a soft material such as a folded blanket. Bend every other tab using a long punch as required. A touch of silicone or an O-ring placed over the tabs before bending prevents rattles.

Rear Hub Grease Seals currently available are too tight to install in the hub. Reduce the O.D., a couple of thousandths with a file or emery paper or whatever and bevel the starting side. Use light oil while pressing in place.

To minimize paint damage when Mounting Tires, start by placing the tube in the tire and inflating it enough to "straighten" the tube in the tire. Deflate the tube, leaving just enough air to keep the tube from twisting. Place the wheel face down on a folded blanket and cover with a large garbage bag. Slide the tire and tube on the rim. Start by pushing the valve stem through the rim first. Keep the stem in place with a "just right" washer and cap or some other means. The "slick" plastic bag will usually allow you to push the tire beads over the rim by hand. Wheels are designed with a "drop center" to make mounting easy. After mounting, simply pull the plastic bag out and inflate.

When welding, shut the "eyes" in the brake levers and other clevis pin applications, simply braze the old pin in the clevis hole. Use a hacksaw or muffler cutter to cut off excess pin when cool and drill to size.

To save an "ovaled" out Spring Perch, flow brazing rod into the void between the new steel bushing and the worn perch. Be sure to keep new shackle lubricated, the next "fix" won't be easy.

To hold the Steering shaft while pressing on a new Worm, slide a 3/4" pipe coupling up near the worm and tack weld in place. Grind away the tack and remove the coupling when finished.

Removing the levers from the Spark and Gas Control Rods by smacking up with a hammer is an old trick. To reinstall, use a 1/2" "spintight" (aka, Vaco nut driver) style wrench to push against the spring-loaded levers. We use a #6 finish nail for a pin and cut off the excess. To remember which way the little knobs face, point them the way you drive your "A": gas – up, spark – down.

## Tricks

When you install needle bearings in the Steering housing, push the outer bearing in far enough to accept Serial # \_\_\_\_\_ by \_\_\_\_\_.

To install the Light Switch Spider and retainer, turn the switch 90° and tape down to one of the steering wheel spokes. That makes the groove easier to see. Push the spider up and tie it to one of the light switch bail ears with a twist tie. Now you have two hands free to install the pesky keeper. Note: you will, of course, have pre-fitted all these parts before installing them on the vehicle.

## Rain Maker Ron's Remedies for Model A's

Glue the body webbing to the top of the frame. When the glue has set, use a ball peen hammer to "punch" the body bolt holes. (The webbing stops and the rear of the running board splash apron.)

Use 2 or more pads at the first body bolt so this point is 1/2" above the frame. This will make the Hood and Body Alignment easier.

Make sure the flange on your Muffler assembly meets the manifold squarely before installing the clamp. Grease the inside of the clamp and make sure it is installed right side up. Hook up the rear tail pipe clamp only after the manifold connection is complete. Retighten manifold clamp when hot.

To relieve the pressure on the front or rear Spring, place a board or suitable spaced between the axle and the spring eyes. Place a floor jack under the center of the axle. Wrap a sturdy chain once around the spring at its center, under the floor jack and connect together. As you raise the jack, the spring will slide along the boards until the shackle is free to slide out. (A little grease on the boards helps). Reverse the procedure to install.

It isn't necessary to heat your old Flywheel Ring Gear to remove it. Cut through the ring gear on one side with a muffler cutter.

To adjust Adjustable Tappets without turning the crank around and around, use valve spring compressor to lift the valve being adjusted and hold open with wood wedges while adjusting.

## Rain Maker Ron's Remedies for Model A's

### Tricks

To keep Pedal Shaft Bushings from "shrinking", keep the shaft inside the bushing while pressing together. If the fit is still a little tight, file a couple notches at the end of the shaft and twist in like a reamer.

If the Pedal Shaft doesn't want to come out of the clutch housing, saw off close to the housing and drive the stub inside.

Remove old Hoses by removing clamp and splitting long ways with a razor knife. Don't destroy your radiator necks trying to save a hose you are not going to reuse.

Use a properly sized socket and a soft blanket to remove or install the radiator shell emblem.

# Rain Maker Ron's Remedies for Model A's

## Tips

Most Wheels are worn at the lug nuts, and some lug nuts are not properly "relieved" at the hub end. Always use tapered lug washers when in doubt. Washers also prevent paint damage when installed with a touch of white lubricant.

Front Wheel Grease Caps usually will not go over the front axle washer until the washer is ground down.

Front Wheel Seal use original when possible as reproductions are poorly made.

Front Wheel Outer bearing and Race should be carefully cleaned and inspected. The outer race has a tendency to crack or work loose in the hub. The race should be finger press fit.

On a body off restoration, drill both sides of the frame for Side Mount Brackets. You never know!

To keep from getting "mixed up" when assembling Brake shoes, pins, levers, etc., make sure all the cotter pins face out when finished.

For really good Brakes you must repair or replace the roller trucks and center the shoes.

A rear axle "Knock off" nut fits the front Spring Perch.

The parts for the original design Ball Cap kit (radius rod) and the replacement-style ball cap kit are not interchangeable.

If you forget to install the Ball Cap Bolts before bolting the engine and the transmission together, they can be "fished" in through the bottom by using a piece of thin tag wire.

The steering column tub can be loosened and turned to make the Spark Rod length "just right".

Before removing or replacing the engine, remove the Throttle Linkage from the rear of the engine.. This prevent "snagging" on the firewall and deforming the linkage.

The O.D. of an old upper race can be ground smaller to make a tool for installing a new lower race in the Steering Housing.

The groove at the bottom of the correct length Horn Rod will show just at the bottom of the thimble on the steering housing.

## Tips

The notch on the Light Switch bucket faces down.

When connecting the Drive Shaft to the transmission, cement a gasket on each side of the ball cup. Fasten the ball cup to the transmission with 2 temporary bolts. The hook-up can be made easily with the transmission in neutral.

## Rain Maker Ron's Remedies for Model A's

Check the Rear drum to Axle fit before major trips or use. A loose drum will tear out the key way or worse. Correct by using tapered shims to tighten.

Put a little grease on the Rear Motor Mounts to make the engine slide into place.

The only Grease or chassis lube worth using on your Model A will be labeled N.G.L.I. #2 lithium. The National Grease and Lubricating Institute sets the standards for lubricants. Grease is oil with additives to make it thick. #2 lithium is a better additive than talcum or bentonite clay used in some grease.

Consider using a total Disconnect on the ground side of your battery if space is a problem.

When removing the center bolt from a Leaf Spring, wrap a chain several times to absorb the stored energy.

Clean and paint each Spring leaf and coat with an anti-seize compound before reassembly.

Note – list valve adjust sequence.

Carefully inspect the Oil Pump spring for pitting or corrosion. A broken spring will allow the oil pump to disengage with disastrous results.

A "grabby" Clutch is many times not the clutch at all. Look for broken or loose motor mounts, worn rear shackles, and always replace the transmission countershaft and the 3 needle bearings.

You may be able to remove the Pilot Bearing without removing the flywheel by filling the shaft opening with grease and using the proper size shaft. Give it a quick smack with a hammer. This hydraulic force may move it enough to get a pry behind it.

# Rain Maker Ron's Remedies for Model A's

## Tips

A Model A radiator must gravity flow at 32 to 35 gallons per minute. If your radiator repairman doesn't have a flow tester, he can't help you.

The radiator outlet pipe is good place to braze in a temperature gauge sensor or heater return tube.

## Engine Tips

To check the condition of an unknown engine:

- Listen – a low “grumble” at most speeds but worse under load could be a center main.
- Sharp “rap” quieter on a pull – related more to a particular cylinder – determined by shorting one plug at a time – probably a rod bearing.
- A “rattle” inside the engine that quiets when spark retarded, could be piston pins.
- Valve tappet noise. Could be timing gear or worn oil drive gear. Oil drive gear will show up as lots of “slop” in distributor shaft.
- Worn mains will allow excess end play in the crankshaft.
- Check for a leaky head gasket by putting transmission in high gear and put engine under load by holding the brake on and slipping the clutch while someone looks in the radiator. If lots of bubbles are produced under load, the head or head gasket is leaking.
- Check compression at cranking speed. A good engine will have 55 – 60 psi compression.
- Excessive leakage at the rear main is usually caused by a worn main bearing.
- Inspect the spark plugs. One or two black on same end of engine could be leak at one end of intake manifold. All 4 black – carburetor set too rich. One or more oily – stuck rings or worn cylinder.
- Dash adjustment must be open several turns to run – big vacuum leak.
- Engine back fires through the carburetor when accelerated suddenly – too lean or massive vacuum leak. Cold be too slow in time, also.

# Rain Maker Ron's Remedies for Model A's

## All Tips and Tricks

Locking-type, hinged style radiator caps often leak enough to allow water and vapor to spray all over the hood and windshield. Stop this mess by cutting a full face gasket from a leather shoe tongue. Use the red hard fiber gasket as a pattern.

Use short hardened cap screws to mount the water pump. Put RTV on the threads. This will make the pump easier to remove with out pulling the radiator.

Make a bent screw driver into a water pump packing tool to make this job easier.

The proper length Fan Belt will not "jump" over the generator pulley. Remove the pulley to make installation easier.

To install 30/31 gas tank welt, bolt panel below wind shield to tank with welt installed on the bench. Remove all cowl to firewall screws and pry cowl panel out slightly. Notch the tank welt at the curve and coat with liquid soap or white lubricant. This should make the task very easy.

To install the sediment bowl assembly without help, install the bowl to carburetor gas line on the bowl. Place bowl inlet through the firewall and make the hook-up to the carb. This will hold the bowl in place while you reach inside the firewall and install the large retainer nut.

The little stand up fuel filter that fits the inlet of your gas valve is one of the biggest favors you can do your Model A.

When installing a new gas valve, inside gas line, or sediment bowl, try this prevent leaks: On the bench, attach the gas line to the gas valve finger tight, twist the parts to help mate the flared surfaces, keeping finger tight while working and repeat on sediment bowl end.

To install the gas valve in the tank, put a couple wraps of Teflon tape on the tank end. Stop tightening just short of the final position. Screw tank to firewall line on valve hand tight. Now swing valve to final position until the gas line mates with the sediment bowl. (Never "backup" with the pipe thread fittings.)

Sometimes the gas gauge tool wants to slip off the big nut no matter how hard you try to hold it. Cut a short piece of  $\frac{3}{4}$ " bar stock and drill it to span the 2 bolts on each side of the gas gauge. Put the big wrench over the gauge and bolt the bar you just made over the wrench to hold it in place. A few taps with a hammer will usually get the nut loose.

To put a new cork on your gas gauge, cut the old cork off first. Now you can "round out" the upset flat spot and remove the small grass washer. The new cork can be pushed past its regular position if you cut a slot to allow it to pass the wire. With the new cork past the end of the wire, put brass washer on and "upset" the end of the wire a hammer.

When rebuilding your Gas Gauge, put a little white lubricant on the gaskets and threads. It's a good idea to try the big nut in the tank first to see that it screws in all the way – easy. Assemble

## Rain Maker Ron's Remedies for Model A's

the gauge, glass and small nut in the vice before installing in the tank. Note: neoprene gaskets don't like ethanol gas. Use cork or neoprene/cork composition.

Start with a clean Gas Tank. Most radiator shops will clean and test tanks. Tank sealers (alcohol proof types) will keep surface rust and scale out of your gas line, but leaks must be repaired first. Be sure to check around the steering bracket and wiring raceway from instrument panel.

Most manifolds are warped. Don't put any Model A together without surfacing the manifolds as a unit. The Model A hates a vacuum leak and will refuse to run correctly until repaired. The Model A is sensitive to vacuum leaks because it only has two intake ports. If the port serving #1 and #2 cylinder is getting unwanted air from a leak, the gas mixture will be too lean to explode resulting in non-smooth-running engine. If carburetor is adjusted to provide a richer mixture, #1 and #2 may now receive a combustible mixture, but #3 and #4 are too rich. The result is the engine does not run smooth. Remember that unwanted air also comes from leaky valve guides, throttle shafts and carburetor to manifold connections. Leaks in the carburetor area result in poor idle and poor performance.

Most books tell you to open the Dash Adjustment to start your car and close to 1/2 turn or less to run when the engine is warm. The only way you can tell how many turns the adjustment is open is by closing it all the way and counting from the bottom. Every time you seat the needle valve, it wears a little. After a while, the seat is worn and there is no off position. Adjust the needle to run smooth when warm and don't twist it again until you retune your car. We don't drive in the winter anyway so we can live with the Model A's cold blooded nature on the few cold mornings we do use it.

The Air Maze Filter will keep out birds and butterflies and serve as a spark arrester, but it won't stop much dirt or dust. Before you put a homemade, fine mesh or paper filter on your Model A, do the math. At 1800 rpm the Model A is "breathing" about 50 cubic feet of air per minute. That's about a Model A pick-up bed filled 3 feet deep. At that speed, the air is going in the carburetor about 30 miles per hour. A paper filter with 50% free area would need to be about 10 square inches.

The Model A Generator is only part one of the charging circuit. The generator must be properly connected to the battery to function correctly. The battery voltage determines the voltage output of the generator. If the generator is disconnected from the battery due to an open cutout, or an open or poor connection, the generator output voltage will increase until something burns out. Any lights or circuits that are on will be damaged. Usually the generator itself will be damaged. The amperage output of the generator is controlled by the movable third brush. The third brush "picks off" part of the generator output from the armature and uses this to make a strong or weak field of magnetism. The so-called cutout is really a potential relay. When the generator output is greater than the battery voltage, the relay closes. The generator and cutout can be tested on the car. With the engine at fast idle, jumper around the cutout. If the ammeter moves to charge, the

## Rain Maker Ron's Remedies for Model A's

generator is working and the cutout is not. If the ammeter moves to maximum discharge, the generator is not working and the cutout may or may not be okay.

The only way to go with your driver car is to install an alternator. 6 volt or 12 volt? If you are not adding accessories and you are not installing brighter lamps or modern lighting, stay with a 6 volt alternator. If anything other than stock items will be added to your electrical system, change to 12 volts. The main reason is wire size. We all know that 6-volt battery cables are bigger than 12 volts battery cables. Why? It's Ohm's law ( $\text{Watts} = \text{Volts} \times \text{Amperes}$ ). Power is measured in watts. Suppose your starter requires 600 watts at 6 volts, that's 6 volts at 100 amperes. Now change to 12 volts and need only 50 amperes of current. Simply put, if we double the volts it takes half the current required. Now let's go to the Model A light switch. You know, that pesky thing at the bottom of the steering column. Henry Ford designed this switch to handle 10 amps at 6 volts. That is the original lighting load. Now let's put on a right hand tail light and halogen head light bulbs. Now our load is 20 amps at 6 volts or 120 watts instead of 60 watts. Switch to 12 volts and our light switch is now handling the load for which it was designed. Actually, it's worse than the example because whenever a circuit or component is over loaded, it over heats. Heat adds resistance and requires even more current to do the same work.

All Alternators are not created equal. Everybody and his brother is adapting GM alternators for one-wire use on the Model A. All of them work, more or less. Some of the shortcomings are that the standard 55-amp GM alternator will only put out 27 amps at 6 volts under the best conditions. Unless the small pulley is used, the alternator only works satisfactory at highway speeds. Rebuilt (used) alternators usually have too much air gap (rotor to stator) to either "kick in" or "stay in" below 45 miles per hour. In short, buy the quality unit with new internals, high output, quick start circuit and use the small pulley.

Starters are pretty tough. Other than good brushes and lubrication, the main problem is a bent shaft. The shaft sticks out a long way which makes it easy to bend. Straighten the shaft with the starter assembled. That's how it got bent. I put it in the big press and use the ram as a dial indicator.

The starter drive or "Bendix" is more often the problem with a stuck starter than poor teeth on the flywheel ring gear. Look at the end of the Bendix gear teeth and if they are flat, sharpen with your disc grinder. The Bendix drive used on the Model A was furnished in two sizes. One uses 5/16-inch bolts with the Bendix spring having a corresponding 5/16-inch loop. The other style uses 3/8-inch bolts and 3/8-inch loop on the spring. Keep these correctly matched for best results.

The aftermarket starter-mounted fuse is a good safety device. It should be noted, however, that if the engine is running and the charging circuit is working, the engine will continue to run. If you are using an alternator when this situation occurs, there is not much risk due to the alternator regulator. If you are using a generator and blow a fuse while running, the generator will try to

## Rain Maker Ron's Remedies for Model A's

charge to infinity. This will burnout any lamps that happen to be on and eventually burn out the coil or generator.

The starter is a series-wound motor that can handle 12 volts. It just spins faster on 12 volts. The field winding can be changed to reduce the speed and torque.

The ammeter on a Model A is a shunt type meter. There is nothing to "burn" out. Problems at the ammeter are almost always caused by a loose terminal. Do you need a 30-amp meter when charging to an alternator? Not really. The Model A ammeter works like a compass. The needle merely points in the direction the current is flowing. If the current flow increases the needle leans a little more to say, "a whole bunch of current is going that way".

Ignition switch problems take many forms in the Model A. Original "pop out" switches have a habit of developing an intermittent or partial ground inside the armored cable. If you are not a surgeon or watch make, send it to an expert to rebuild. Reproduction "pop out" switches usually develop contact problems in the switch head. If you get "heavy handed" and smack the pop out in with your palm (as some are wont to do) it will usually deform the contacts and fail. Throw it away – you don't need the aggravation. If you don't need the authentic look, use the small replacement cable with the Briggs and Stratton switch. You might be interested to know that Ford listed this switch as a factory part (A-11575-F). This was a replacement for the "pop out" in the Model A days. These switches last a long time as long as you don't hang a 5-pound ball of keys and tools and lucky charms on your key ring. Since switches do fail, carry a jumper for on the tour repairs. One jumper on the market is called a "Fritz". It clamps around the distributor in contact with the condenser lead and has a jumper wire to clamp on the coil. A homemade remedy for "on the tour" switch or condenser problems is to change the condenser lead screw to a 1-inch screw with a nut soldered  $\frac{1}{4}$  inch from the bottom. This longer screw will make the condenser a snap to change and stick out of the distributor far enough to hook on a jumper.

Instrument panels have been reproduced by many after market suppliers since the Model A days. Most of them don't fit. There are two reproduction sources at this time: one example is barely acceptable and the other is worse. Even the best one will only accept the two top screws. If you really have an original, have it re-plated.

To get your old distributor apart, hacksaw through the shaft just at the top of the collar. You will not use these old parts on a rebuild anyway! "Peel" the old bushings out with a small punch sharpened on a "baloney cut" angle. (Using a bushing driver to remove usually cracks the thin casting at the top.)

Old coils almost always work. To determine how well, measure the primary resistance with a good ohmmeter. 1 to 1.5 ohms should provide a good spark. Be sure to observe polarity for the best results. Minus goes to the distributor – it doesn't matter if your battery is positive or negative ground.

## Rain Maker Ron's Remedies for Model A's

A good ignition system begins with a distributor shaft that doesn't "wobble". That means new shaft and bushings. Avoid the one-piece shaft, you need the extra flexibility of the two-piece shaft to minimize bushing wear. The wire-less lower plate works well and eliminates the old worn wore problem. Some modern upper plates are okay. Some use some unknown or obsolete point set or don't have the rotor and wear block in proper relationship. Look for the one using Mustang points. Most old cams are worn to the point that you could have 4 different setting at once. Buy the precision ground, USA-made, cam made with lubricant impregnated powdered metal. Polish cam.

The rotor has been known to fail and the spark will jump through the rotor to the top of the distributor shaft.

Make sure the #3 plug connector is routed away from the distributor body. Sometimes the spark will jump through the Bakelite material.

Some headlight wire harnesses on the market use spade connections at the switch. Make your "A" a little more bullet proof by soldering these before installing on the car. I usually add a wire to the harness in case I want to light a temperature gauge or have the dash lamp come on with the headlights. Use the extra lug on the taillight circuit for this.

Halogen headlamps in your original reflectors is the bright light conversion of choice. Consider switching to 12 volts if you make this change.

With a very simple wiring change, your parking lights and stop lights will be come 4-way flashers when you turn your parking lights on. You are not likely to use the parking lights to park with, so you might as well have the safety feature.

Use a sharp punch to make 3 small burrs in the headlight bar cup before installing the head light. (Improves the ground connection.) Drill and install 2 small screws to hold the headlight reflector to the headlight for a better ground. Don't try to use the spring and headlight plug idea to wire your lights. Pull the headlight wires inside the head light and make a direct hookup.

Use your cowl lights and original stop lights for turn signals. If you bolt on some dorkey motorcycle lights or farm wagon lights, I'll make fun of you!! If you can read, the turn signal kits available in the hobby are easy to use.

Before you remove your headlight door, (to change a bulb or whatever) put a piece of masking tape on top then cut at the joint. This makes it easy to get back in the correct position.

Before installing a fuse in your fuse holder, put a "tie wrap" on it for a handle. It makes it easy to remove.

The headlight bar is easier to install if you loosen the fender bracket to frame bolts first.

The front license clamp goes on the headlight bar from the top and the license is held by the bolt.

1929 cowl lamp arms go through a grommet and fasten to a bracket inside the body.

## Rain Maker Ron's Remedies for Model A's

Horn Tips – Things you can do to improve the operation or detect the problem: Oil – try adjustment – jumper ground terminal to known good ground – make sure horn motor wiring is not grounded to horn case – make sure brush springs have tension – check orientation of diaphragm wedge – make sure gaskets are installed. The most common problem with weak horns is too much voltage drop through horn rod and button. Cleaning will help or a horn relay will correct the problem. To operate your 6-volt horn on 12 volts, wire your old 6 volt coil in series with the horn. This will supply the horn with about 7 volts, which makes a good strong horn. The old coil can be mounted on the left front hole punched in the frame for the engine dust panels.

The speedometer turns 100 rpm per mile. The speedometer turns counter-clockwise looking at the back. If you cannot "spin" this with your fingers, the speedometer needs to be cleaned and lubed. If the speedometer turns hard, the cable will break. No, you cannot spin it to zero with you drill! Unless you are looking for a way to pass the winter days, exchange the old speedometer for a rebuilt one.

The only windshield wiper that fits a Model A is a Model A windshield wiper. A number of aftermarket wipers are offered and can be adapted to work. You are on your own here and how well these replacements fit and work depends on your ability and creativity.

Original style, aftermarket shocks are available. The price is way up there. How good are they? Ask someone that has had a recent experience before you spend \$600. Rebuilt? Looks like a good way to go if you can find good cores. Original – look good, don't work. Probably best bet for "show". Shocks that work and are affordable? Check out the tubular hydraulic kit on the market at \$300. We have used them for thousands of miles successfully.

The dimple at the front fender to frame bolts on 30/31 models can be reshaped or straightened easily. Shop through your socket box and choose a large and small socket that will act like a male and female die when pulled together with a bolt. To replace the front-fender dimples, cut or punch a hole large enough to accept the raised part of the dimple. Solder the patches in place from the top side. (Be sure to locate accurately.) Use a drill motor or die grinder with a small "mule skinner" wire brush to remove excess solder and the patch cannot be detected.

Reproduction running boards and splash aprons fit well, look good and at \$200 are a bargain that will save you a lot of time. Don't forget that restoring your originals isn't free. Derusting, covering, and trimming will cost about \$75 and we haven't covered straightening yet.

Use contact cement to glue new mats on running boards. Be sure to prefit the material. If "beads" of glue from a tube are used to fasten mats, you will be able to see every stripe when dry.

Zinc running board trim is authentic. Zinc trim gets dull and is hard to maintain. Use stainless steel.

The accessory hood prop kit is the safe way to prop your hood open. If you prop the hood on the cowl, you can bet it will fall and probably hit the cowl light, the head light and the fender twice on the way down.

## Rain Maker Ron's Remedies for Model A's

An old horn rod can be cut off to make a new center hood hinge rod.

To tell a 28/29 hood from a 30/31 hood when it is not on the car, remember that a 28/29 hood is about 29 inches long and the 30/31 hood is about 30 inches long.

We all know the trick of using a drill motor to "spin and pull" the hood side hinge rods. Put a length of 5/16 inch (old brake rod) rod through the center hood hinge rod and the same trick will work.

Patch panels are usually furnished 6 inches high. If your panel only has 2 or 3 inches of rust-out or damage, cut the patch panel down to size. For the best repair use as much original metal as practical.

When riveting in a panel or brace, assemble with bolts first then remove one bolt at a time and replace with a rivet.

Don't be too quick to cut or trim a wood or upholstery kit. Make sure you double check your work. The kit maker has probably built more kits than you have cars.

Choose your paint scheme early because the Model A must be painted as it is assembled. Examples: wind shield frame, firewall (in and out), bottom of hood, and gas tank.

Do not paint your Model A until it is ready to paint! That means no paint until every nut, bolt, and screw is out, every captive nut replaced, every hinge and hinge pin removed and repaired, all wood installed, all body work done, and every scratch fixed. If you paint your Model A before its ready to paint (as many people do) please don't ask me how to adjust the doors or get the hinge pins out to install a mirror. Remember that Ford started with the frame and built the Model A from the bottom up. Is it likely we can improve on the manufacture's design by working backwards? A top down restoration usually looks like exactly that – what we call a lipstick and rouge car.

## Rain Maker Ron's Remedies for Model A's

More things that never got written by Ron.

- Cleaning parts – Torrent environmentally-friendly powerful water-based parts washing.
- Shift tower spring
- Thread oil pump bush remove
- Oil fill remover
- Upper neck match trick
- Over heating
- Rebuild gas valves
- POR 15
- Carburetors
- Electronic ignition
- Temp ignition
- Body/Fender work
- Rumble/Tack

Written by Ron Cloat (4/21/1935 – 12/5/2017)