



Willamette Valley Chapter
P.O. Box 3031 Salem, OR 97302



07/14/2014

1929 Model A Ford 140-A Town Car

Model A Ford



Club of America



SALEM, OREGON

Model A



Restorers Club

Next General Meeting, , Heritage Center (Mission Mill) 3rd Floor Card Room, Salem, OR
Thursday, April 5th, 2018 at 7:00 pm

President	Gary LeMaster	Historian	Tom Morrison
Vice President	Bob Myers	Sunshine	Ginny Giesbrecht
Secretary	Ray Ramsay	N.W.R.G.	Tom Morrison
Treasurer	Gary LeMaster	Newsletter	Gary LeMaster
Past President	Blair Wasson	Raffle Chair	Peggy Ramsay
Board Members	Bob Burton	Tour Chair	Tim Fleming
	Lee Hardy	Programs	
	Peggy Ramsay		
	Fred Lissner		

Swap Meet Committee Lew Garrison, Dale Stites, Gary LeMaster

Newsletter Editors of the Month

January	Hardy
February	Hardy
March	Hardy
April	Hardy/LeMaster
May	
June	
July	
August	
September	
October	
November	
December	

Board Meeting Dates after the General Meetings

January	21	Annual Banquet
February	1	
March	1	
April	5	
May	3	
June	7	
June	17	Swap Meet
July		
August		
September	6	
October	4	
November	1	
December	8	President's Luncheon

Gary's Gab

I've been really busy putting the Car Museum together, hopefully opening this summer. As I speedily travel around trying to keep all the various balls in the air, I think about getting my Model AA truck together so that I can take long slow trips around this beautiful state, not worrying about those balls. The Kissel will be all original, but the truck is going to be a joy to assemble, because it will not be all original. With help from various members it will be a strictly fun tour vehicle. The high speed rear end (whatever that means) should make it easy to keep up with the members of our club on tours; if other owners of high speed rear end AA's are correct. On another note, please be sure to review the Programs scheduled for the next few months. We have tried to bring to the club some interesting topics.

Gary

Some material printed in this newsletter may have been borrowed from other publications. We wish to thank other clubs for sharing their newsletters with us. We are happy to share our articles and other information publication in their newsletters.

For information about the club, please contact Gary LeMaster 503-393-6069

Minutes of the Willamette Valley Chapter Model A Ford Club of America Board of Directors Meeting Held March 1, 2018

The March 2018 Board of Directors Meeting was held at the Willamette Heritage Center at the Mill located in Salem, Oregon, immediately following the November General Meeting of the Club Membership. The meeting was called to order at approximately 7:33 pm by President, Gary LeMaster. Officers and Board Members present at the meeting were President and Treasurer Gary LeMaster, Secretary Ray Ramsay and Board Members Bob Burton, Fred Lissner and Peggy Ramsay. All attendees waived notice of time, place and purpose of the meeting.

APPROVAL OF PREVIOUS MINUTES AND THE SECRETARY AND TREASURER'S REPORTS. Minutes of the February 2018 Board Meeting, as previously circulated, were approved. Since all Board Members were present for the Treasurer's Reports given during the March 2018 General Meeting, the re-reading of the report was waived.

OLD BUSINESS/NEW BUSINESS/DISCUSSION ITEMS

Board Action – Membership. The membership applications of Jack Watson and John S. Martin were approved. Jack has a 1931 Model A Pick-up and John has a 1930 Model A Pick-up and a 1964 Mercury Comet. No other membership action was taken at the meeting.

Board Action – General Meeting Programs. Several ideas were suggested. Gary is going to see if we can get a reprise of a previous live presentation on battery choices for a Model A Ford. He is also going to review the Club's video selection. This is an on-going work-in-progress.

Board Action – Station-wagon Party. The idea of having a party when Tom's Model A Station-wagon is complete was approved. Planning and information will follow when that Finish Line has been crossed. There being no further business to come before the meeting, the same was adjourned at approximately 7:55 pm.

Respectfully Submitted, Ray Ramsay, Secretary

UPCOMING PROGRAMS

One of the resolutions the Board adopted this year was to provide interesting programs during the General Meetings. So to that end, the following are scheduled or tentatively scheduled for the next few months. At the April General Meeting we will have representatives from the Salem Police Department that will give us an update on the construction of the new Police Headquarters. Questions of any topic are encouraged. The May General Meeting will have Travis, from Batteries Northwest giving us tips on how to prolong the life of our batteries. It has been quite a few years since Travis was here and much new technology has been developed. A number of years ago, Tom and Verna Morrison flew to the southern tip of South America and spent several weeks touring. He has a great presentation to share with us. His presentation will depend on when he returns from Arizona.

How would you like to travel to 5 different continents during the spring and summer in your Model A. Well Judy Richter is one of a group of eight who traveled around the world in four Model A Fords in 1982, traveling across 5 continents. They left Walnut Creek, California on March 23, 1982 ending in Minneapolis, Minnesota on July 21 for the MAFCA Convention. Judy tells the inspiring story of the trip with slides and her collection of memorabilia. We're looking forward to her visiting our club and her presentation, tentatively set for our September meeting. Judy currently lives outside Elgin, Oregon.

DAYLIGHT SAVINGS TIME. WHERE DID IT COME FROM?

Apparently there are several theories of how and why we started changing our clocks for daylight saving. Many people think it originated to allow children to help their families with farm work before having to go to school for the day. Another popular theory is that it was suggested by Benjamin Franklin in 1784 when he wrote a letter to the Journal of Paris advocating that if people woke up with the sun it would result in saving energy and resources in the need for candles.

According to National Geographic and David Prerau, author of *Seize the Daylight: The Curious and Contentious Story of Daylight Saving Time*, the idea of the modern concept of daylight saving was actually derived from George Hudson, an entomologist from New Zealand. In 1895 Mr. Hudson proposed a 2 hour time shift with the intention of having more sunlight after his day job to go bug hunting in the summer months.

The British Broadcasting Corporation attributes the modern day concept of daylight saving to British builder William Willett. Mr. Willett was horseback riding on a summer morning in 1905 and noticed how many curtains were drawn against the sunlight. His solution was to move the clocks forward before summer began. In 1907, Mr. Willett published a pamphlet called "Waste of Daylight" suggesting clocks be turned forward by 4 weekly twenty minute increments in April and reversing the same way in September. British politicians in favor of Willett's suggestion proposed a Daylight Saving Bill, however it was defeated in 1909.

Author Prerau explains that the idea actually caught on during World War I when the German government started looking for ways to conserve energy. Because coal power was so predominant at that time, daylight saving really did result in saving energy. Germany adopted the system and soon after the United States, as well as nearly every other country fighting in the war began using the time change.

Although Benjamin Franklin may have identified the need for and the benefits of adjusting clocks, it appears we can thank George Hudson and William Willett for our modern day concept of daylight saving.

Lisa Gage
03/08/18



DEFENSIVE DRIVING

I have always said that I watch the rear view mirror in the Model A more than I watch out the front windshield. The only thing I really have to worry about in front of the car is to hope that I have enough time to brake. Our Model A's are usually running less than 55 mph and modern irons are running at least 75. They can come up on you before you even know it.

So, be sure your rear view mirrors are clean, pointed in the right direction and glance at them often. Regular drivers are talking on their the cell phone, changing their CD's, and are usually in a big hurry to get nowhere. They are not watching for a slow moving Model A. They expect a car in their lane to be driving at approximately the same speed that they are driving. So, enjoy the drive, scenery, and the camaraderie, but especially be aware of the other cars on the road.

Remember only you can prevent an accident in a Model A.

Ray Hinnant
Brazos Valley A's

ENGINE OVERHEATING

Engine overheating has been around as long as the automobile and the Model A is not exempt from the problem. However, the A's cooling system, if working properly, is more than adequate for almost any set of driving conditions you might encounter. There are many causes for engine overheating, but once identified, most can be easily corrected.

Fan Belt - Fan belts are prone to slippage and a belt that's loose will not turn the fan and water pump at the proper speed. Belt tension can be adjusted by loosening the generator mounting bolt and pulling the generator away from the engine to take out the excess slack. A ½ to ¾ inch of belt play between the pulleys is about right. After the adjustment is made, tighten the generator bolt securely.

Unfortunately, an unmodified Model A has no means of locking the generator in place and over time, the belt will loosen again. To alleviate this

problem, you can use a "belt tensioning bracket" to hold the generator securely in place when driving. The bracket can be easily removed if the car is to be shown.

Fan - Fans can cause a problem if a "modern" type has been installed and the diameter or blade angle is too small to provide adequate airflow through the radiator. If you're determined to use this type of fan, check with other Model A owners to see what they have on their car. There's nothing wrong with the original two blade propeller type fan that came on the Model A but it should be checked frequently for cracks or other damage that could make it unsafe to use.

Hoses/Clamps/Petcock - A plugged radiator hose will restrict coolant flow and a leaky hose will cause coolant loss over time. Either condition can cause the engine to overheat. It's a good idea to replace both hoses even if only one is bad because the other hose is probably living on borrowed time. Check all hose clamps for tightness and if you're more interested in driving than showing the car, consider replacing the original wire hose clamps with the modern screw-adjust type. Also, make sure that the drain petcock located in the water return pipe is not leaking.

Water Pump - The Model A water pump is simple and robust but it can fail. If the impeller is loose on the shaft, the pump won't circulate the coolant. On the other hand, the pump may deliver too much coolant at highway speeds causing coolant loss through the radiator's overflow pipe. The new "leak-less" water pumps appear to have a higher output capacity and have the capability to overflow a poorly maintained system. Once again, check with others to see what they're doing.

License Plates and Other Radiator Obstructions - The headlight bar seems like the ideal place to mount the license plate, but the plate does block a sizable chunk of the radiator's cooling fin area. A radiator ornament or plaque will do the same thing. On a hot day, consider removing the ornaments and flipping the license plate into a

horizontal position to expose more fins to the airstream.

Incorrect Ignition Timing - An incorrectly timed engine can run hotter than normal. Check your car's timing using the standard timing pin. While running in high gear the advance should be all the way down. On heavy inclines listen for any spark knock and reduce the amount of advance to eliminate the knock. Watch your water indicators for any sign of excessive heat.

Incorrect Fuel Mixture - If the fuel mixture is too lean, the engine will run hot. Check your carburetor settings and reset to specifications if necessary.

Brakes / Wheel Alignment Dragging brakes and poorly aligned wheels can increase the rolling resistance of the car and force the engine to work harder resulting in over-heating. The bad wheel alignment won't help your tire life either!

Bad Head Gasket / Cracks in Block - These can be classified as serious problems and if uncorrected, you'll have more to worry about than overheating! To check for exhaust leakage into the cooling system, remove the radiator cap and briefly accelerate the engine. If bubbles appear in the coolant, you could have a bad head gasket or a crack in the engine block. Oil in the coolant may also indicate a cracked block. After the necessary repairs are completed, check the integrity of the block by magna-fluxing. This process will detect any minute cracks that cannot be found by other means.

Radiators - The key word in any radiator discussion is **flow rate** - how much water a radiator will actually pass in a given period of time. A good Model A radiator should have a flow rate of at least 38 gallons per minute. 1930-31 "AA" truck radiators should pass about 48 GPM. Anything less can result in overheating problems. Disconnect the upper and lower hoses and fill the radiator. A good radiator should empty in 4 seconds or less. Radiator troubles can be traced to broken or blocked tubes, an inadequate number of usable tubes remaining in the core after damaged tubes have been removed, so-called "stop leak" pellets

clogging the tubes or leaky upper/lower tanks. Blocked tubes can be opened by "rodding" or ultrasonic cleaning. Damaged or rusted tubes can be replaced but if a large number of tubes are in bad condition, it may be less expensive to replace the radiator. The condition of the overflow pipe should also be determined during the radiator check. A broken or rusted pipe can cause the coolant level in the radiator to be lower than normal. A broken or missing baffle plate may allow the water pump to push the coolant directly into the overflow pipe and out of the radiator. To reduce the amount of water going out the overflow pipe, add a short piece of plastic tubing to the top of the pipe. Just make sure it is below the radiator cap. Loose tube fins can also contribute to over-heating. If the fins are not making good contact with the tubes, heat will not be transferred into the radiator's airstream. Sometimes over lubricating the original type water pump rear bearing can cause excess grease to be introduced into the water system and clog the tubes.

Coolants - The Model A was designed to run using plain water as a coolant. Most era drivers either drained their car's radiator before winter storage, or added some type of antifreeze for cold weather operation. Alcohol was common as an anti-freeze and worked reasonably well but boiled away at about 170 degrees F. Kerosene was also used but it attacked rubber parts and boiled at such a high temperature that the engine could be damaged before overheating was detected. Today's modern automotive coolants contain ethylene glycol and are designed to remain in the cooling system at all times. The boiling point of the coolant is higher than water and the solution contains a built-in rust inhibitor and water pump lubricant. When mixed 50/50 with water, ethylene glycol will protect your A to about 34 degrees below zero F. There are some disadvantages to using ethylene glycol in your Model "A" - the coolant may attack some types of paint and the Model A's water pump

can whip the solution into a green, frothy foam, impairing the cooling action. To eliminate this problem there are two products on the market that will help. Prestone "LowTox" and Sierra antifreeze is formulated with propylene glycol (PG). As compared to ethylene glycol, propylene glycol is less toxic and safer for children, pets, and wildlife in the environment. One final consideration - some automotive experts believe that ethylene glycol does not work as well as water in a non-pressurized cooling system. In actual tests, some Model A overheating problems disappeared after switching back to plain water. If you decide to use water as a coolant, make sure that you add a good rust inhibitor to help keep the system rust free. At one time, soluble oil was suggested as a rust inhibitor. It worked, but the oil coated the inside of the radiator, degrading its heat transfer characteristics. The experts all agree - don't use oil of any kind as a rust inhibitor! Also, consider using distilled water to eliminate "other" minerals being introduced into the water system. I see a lot of lower water pipes that are powder coated. They look nice, but the inside will be affected by the solution and will flake and clog up your water system. Go to a stainless steel pipe to solve the problem.

Thermostats - According to many Model A owners, a good thermostat offers two important benefits:

- Coolant flow through the system is reduced so that less is pumped out of the upper radiator tank at high speeds.
- The thermostat will maintain an engine temperature of at least 160 degrees F that many feel is optimum for complete fuel combustion and clean plugs.

On the down side, a thermostat that sticks closed will prevent adequate coolant circulation and overheating can result. To prevent this make, sure that there are two 3/16 inch holes drilled on the surface opposite the sensor so some water will still flow.

If you install a thermostat, use the kind that fits inside the upper hose and has a short pipe welded to the end instead of the type that mounts with tabs. Some owners have experienced leaks with

the tab-mounted variety. A good running engine makes EVERYONE happy.

Ken Nelson

Shade Tree A's

July 2009

RED BARN

Hundreds of years ago, farmers painted their barns with Linseed Oil to help seal the wood and keep it from rotting. Rust was mixed with the oil to keep the fungus and moss from growing on the wood. This turned the oil RED. Barns today are still painted red in honor of the tradition.

Keeping Your Model A Looking Good

WARNING! THE MOST IMPORTANT INGREDIENT IN ALL OF THE FOLLOWING IS ELBOW GREASE. THE YOUNGER, THE BETTER.

ENGINE - PAINTING & CLEANING

When I'm having a new engine built first I have the block and the head chemically stripped to remove all rust and other gunk inside and out. I have all of the other external parts sandblasted.

ENGINE PAINTING ON BARE STEEL OR CAST IRON

Prime everything except the exhaust manifold with one coat of red Rust-oleum primer #7769, either brush or spray.

Mix Ford Engine Green out of Rust-oleum paint with this formula:

2 parts hunter green #7738, 1 part royal blue #7727, and 1 part black #7779

I use Rust-oleum paint because it is very durable, heat resistant and, once dry, will not come off if you clean it with a solvent based cleaner

If some of your cad plated nuts and bolts have become tarnished or stained, touch them up with Rust-oleum aluminum #7715

Paint the sandblasted exhaust manifold and muffler with VHT #SP104 flat gray VHT exhaust paint is heat resistant up to 1500 degrees.

CLEANING AND MAINTAINING YOUR ENGINE

After a week or longer tour, especially if some of the tour has been in the rain, I cover my distributor

and carburetor with plastic bags and spray the whole engine with Simple Green. Wash it around with a paint brush and into all the tight spots to loosen the dirt and grease. Then rinse with a hose. Blow off the excess water with your air hose and then spray everything with WD40.

Wipe everything dry with paper or terry cloth towels. Your engine will be beautiful again.

RADIATOR

Your radiator is the most visible part of the front of your car. If it looks stained and dingy mask your radiator shell and headlight bar. Throw some old blankets or drop cloths over your hood and front fenders and spray can the front of your radiator with a light coat of semi flat or semi-gloss black enamel. A light coat will not affect the efficiency of your cooling system and a clean, black radiator will make your whole car look better.

CLEANING AND MAINTAINING YOUR CHASSIS

This is pretty much the same process as with the engine. Wash it, blow it off, spray it with WD40, wipe it dry, and touch up the cad plating.

WHEELS AND TIRES

I use Bleach White, water and a scrub brush to clean my tires. While the wheels are still wet and soapy I use an old paint brush to clean the spokes where they're welded to the rims. I usually jack up the wheels to make it easier to also clean the backs of the tires and wheels. I then spray on some tire dressing and work it into the sidewall design with a scrub brush. Wipe off the excess and let dry. Use tire dressing that will actually dry. Some tire dressings stay sticky and collect dust and dirt the first time you have to pull off on the shoulder or a dirt road. Black Magic Tire Wet works well and seems to dry pretty much overnight.

Next time you take your wheels off clean and maybe wire brush your lug Nuts. Set them all on a board and spray them with a spray can of silver paint. While they're drying is a good time to wash the backs of your wheels and tires. When you're ready to reinstall the wheels and lugs tighten the lugs as much as possible with your hands. Then cover each lug with a plastic baggy and tighten them with a SIX POINT socket. The baggy will keep

the socket from scratching the silver paint much and your lug nuts will look new again.

BLACK TOPS, RUNNING BOARDS & RUBBER FLOOR MATS

This is pretty much the same process as the tires. Wash, spray with tire dressing and wipe dry.

TAN TOPS, SIDE CURTAINS AND TOP BOOTS

Usually a periodic good vacuuming works well but if they are really dirty, use water, laundry soap and a soft brush. Rinse thoroughly to avoid water stains.

On my side curtain plastic I use Meguiar's Mirror Glaze Clear Plastic Polish to clean and remove any scuffs.

PAINT CHIPS

If you are lucky enough to have some paint left over from your restoration, use a small brush to fill just the chip to a level just above the surrounding paint. This may take a few coats. Let dry for several days. The longer, the better. Then use a small wood block, a piece of #800 wet/dry sandpaper lubricated with mineral spirits, (regular paint thinner) and color sand the filled chip down almost to the level of the original finish. Do the same thing with #1000 or \$1500 wet/dry sandpaper until your filled chip is the same level as the original finish. Wipe dry often to check your progress. Use fine rubbing compound on a damp paper towel and polish the touch up area to match the surrounding area. Chip gone.

If you don't have any left-over paint take a piece of your hood or whatever you want to match to Home Depot and have them computer match the color in gloss enamel. They will make a quart of your color for about \$10.

With a small brush touch up just the chips. This paint doesn't color sand like auto paint but it's cheap and chips that are the same color as your car will look a lot better than primer or bare metal spots.

RUBBING COMPOUND, POLISHES AND WAXES

I buy rubbing compound at the auto paint store. The stuff they sell at the chain auto parts stores

just doesn't work very well. When I use polish I use Meguiar's Mirror Glaze Professional Show Car Glaze #7. It will take out minor scuffs and remove oxidation.

I wax the top surfaces of my cars fairly often. I usually use Meguiar's PURE WAX carnauba blend, (blue bottle) or any brand of pure carnauba wax with no cleaners or other abrasives. Pure carnauba wax will not remove any of your paint and it dries clear so it will not leave any white residue around your fender welt or other details.

If you already have white residue in hard to get to places, use a soft tooth brush with some grease and wax remover to eliminate it.

GLASS

Clean any overspray off your glass with a single edge razor blade. I clean my glass with Stoner Invisible Glass. It doesn't streak or haze and leaves no residue.

CHROME & NICKEL

Most any chrome polish will do the job but if your chrome is really bad, try some rubbing compound.

Don't forget to paint the indentations in your bumper clamps Ford Blue.

I polish my nickel plating with Semichrome or Meguiar's all metal polish. Up here in the clear air, nickel doesn't tarnish like it did in Orange County.

UPHOLSTERY

If you have leather upholstery you can't beat Lexol cleaner and preservative.

For removing spots from cloth upholstery or clothes, I use K2R spot lifter. I have not seen K2R in local stores but you can order it direct.

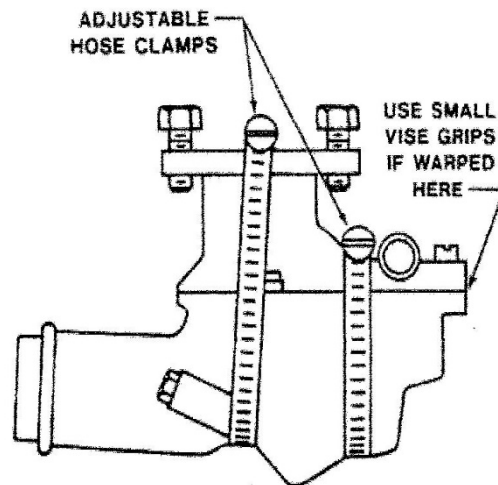
WATER IN THE CARBURATOR

A teenage boy tells his father, "Dad, there's trouble with the car, it has water in the carburetor." He father looks confused and says, "Water in the carburetor, that's ridiculous." But the son insists. "I tell you, the car has water in the carburetor."

The father, starting to get a little nervous, says, "You don't even know what a carburetor is ... but I will check it out. Where is the car?"

"In the pool" replies the son.

CARBURATOR FIX



I recently cleaned my Tillotson carburetor and found the top was badly warped. Since some parts can be expensive, I decided to try fix it myself.

I thought if heat warped it, heat could reshape it. An aeronautical friend supplied the fix – here it is. Disassemble, clean and wash off all gasoline residue. Remove all gaskets and reassemble the two halves, using the bolts to hold them together. Use adjustable hose clamps to bring the two halves together – slowly and carefully. (See sketch.) Put the carburetor in the oven and turn heat to about 350 to 400 degrees. Heat for about 3-hours. Remove the carburetor (it is hot!) and allow to air cool. Reassemble. It works.

L. D. Sand

Ozark, Alabama

Rogue Ramblings

February 2014





Instead of changing oil every 3,000 miles, just follow the manufacturer's schedule.

Don't fall victim to common myths about modern car maintenance

From alligators in the sewer to tooth-dissolving Coca Cola, some urban legends just refuse to die. Unfortunately for motorists, there's no shortage of automotive myths out there that steer us in the wrong direction with regard to maintenance and safety. Here are some of the most common ones:

- **Putting nitrogen in your tires improves fuel economy.** While studies have shown that this can stabilize tires' air pressure, the benefit is so marginal that what you're really doing is deflating your wallet.
- **You must change your oil every 3,000 miles.** This is a slick marketing move, but it won't make your car run better or longer. Go by the schedule recommended by the automaker -- usually every 7,500 to 10,000 miles.
- **Red cars get more speeding tickets.** Justice is colorblind where your paint job is concerned. That officer in your rearview mirror is concerned only with the speed at which he clocked you.
- **If your car calls for regular gas, perk it up with a tank of premium every once in a while.** Use what the manufacturer recommends, and save your cash for something useful.

CARS.COM

Statesman Journal

11/12/2016

NEED AN OCTANE IN BETWEEN WHAT'S OFFERED? MIX YOUR OWN!

I have a 2016 Toyota Avalon.

The manual says that I should use 89-octane gasoline. I like to buy gas at my local Costco store, where the price is always lower than at the neighboring gas stations. Unfortunately, my Costco offers only 87- and 93-octane gas.

I'm too cheap to buy the premium gas, but I don't want to hurt my car by using the cheap stuff. So every time I fill up, I buy a half-tank of each octane rating, figuring that it will average out to 90 octane. My wife says it doesn't work that way. Help me prove her wrong.

- Dave

That's exactly how it works, Dave. In fact, gasolines often are blended like that right there at the pump. So the gas station will have a huge, underground tank of 87 and a huge, underground tank of 93, and will mix the octanes in between by blending those two tanks in different proportions, depending on what grade the customer selects. So you can continue to make your own home brew. But before you do that, check with Toyota. When we looked up the fuel requirements for a 2016 Avalon, it says that the Avalon requires regular unleaded gasoline. That's normally 87. So if all your car needs is 87, you're not only ticking off your wife, but you're throwing away your time and money, too.

Anyone of those negative factors might, in itself, be reason enough to change your behavior. But with all of them against you? You might want to reconsider your gas-station bartending and stick with the 87, Dave.

And by the way, to reinforce the point, AAA just did a study that concluded what we've been saying for decades: that if your car doesn't require premium gasoline, it's a complete waste of money. You get no benefits from it -- no increased power, no better fuel economy, no cleaner engine, no nothing.

Buying premium fuel when your car requires only regular is not like paying more for a nicer hotel

room; it's more like paying more for a bigger shoe size. It won't help you -- it'll just cost you money.

Ray Magliozz

Statesman Journal

November 12, 2016

STEEL FORGINGS

The unusually large number of steel forgings used in the new Ford car from another striking illustration of the quality of its construction. These forgings are formed while red hot under high pressure hammers, bringing strength combined with lightness of construction not to be attained by castings or steel stampings such as are ordinarily used.

Castings formed by pouring molten metal into molds have more weight than forged steel. It also may lack in toughness and may have flaws which cannot be detected on the surface. Their use is limited to more or less bulky, compact parts.

Steel stampings while possessing light weight are limited to shapes and designs which can readily be formed from flat stock. Often there must be a compromise between possible shape and strength. With steel forgings there is no compromise. They may be at once designed and made to that form which most economically uses the weight of steel required. They have a known quality of strength, which insures durability and reliability. Through heat treating they may be made hard and tough to suit requirements. Thus the highest quality is obtained.

Evidence of the quality of forgings is to be found throughout the chassis of the new Ford car. It is seen in the rear axle, here bell forgings are welded to steel tubing to make up the shaft housing, which subsequently are bolted to the differential housing. The value of these forgings, which immediately excites the admiration of the engineer and the mechanic, is also apparent to the layman once he has paused to investigate their structural advantages.

Ford Motor Company

1928

RUBBER

Charles Dunlap, a veterinarian, invented the pneumatic tire by stretching a rubber bladder around his son's bicycle rim. A valve from a football was used to keep the bladder filled with air. Dunlap was inspired by a desire to smooth the ride on a bicycle. Charles Goodyear later improved the bladder tire when he created a more wear resistant surface, known today as the tire tread.

Harvey Firestone was a personal friend and business associate of Henry Ford, a relationship that extended well into the 20th century.

In the last 20 years, the life of a tire has approximately doubled.

There are approximately 165 pounds of rubber in today's passenger automobile.

Natural rubber latex (extracted from trees similar to maple syrup) is grown within 15 degrees north and south latitudes of the equator. Early World War II Japanese invasion of rubber growing areas located in South Pacific Islands severely limited America's sources of natural rubber latex. President to ease the shortage, Franklin Roosevelt signed a declaration that US technology would be directed towards a new (then unknown) product to replace natural rubber. Government takeover and redirection of some chemistry laboratories emphasized the seriousness of the action. As a result synthetic rubber was invented and is used today in various blends with natural rubber to extend rubber product wear-ability and modify flexibility.

Early research results have demonstrated that a more thorough understanding of rubber nano-technology may someday allow rubber to function like a muscle, relaxing or tensioning on command. The basics to accomplish this feat are currently known. Someday muscle tissue damaged by injury or disease could be replaced with rubber.

The Connecting Rod
P.O. Box 3031
Salem OR 97302

Upcoming Events and Tours!

- | | | |
|----------------|-------------|---|
| Apr 5 | Thur | General Meeting 7:00 PM
Mission Mill, Card room 3 rd Floor |
| Apr 9 | Mon | Breakfast at Sybils on State Street,
8:30 AM |
| May 3 | Thur | General Meeting 7:00 PM
Mission Mill, Card room 3 rd Floor |
| May 14 | Mon | Breakfast at Sybils on State Street,
8:30 AM |
| June 7 | Thur | General Meeting 7:00 PM
Mission Mill, Card room 3 rd Floor |
| June 16 | Sat | SWAP MEET SETUP 9:00 AM
Chemeketa Community Collage |
| June 17 | Sun | ANNUAL SWAP MEET 5:00 AM
Chemeketa Community College |

