

The Rear View Mirror

The newsletter of the Volunteer V8 Ford Club
Regional Group # 97, Nashville, TN
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MESSAGE

Whew! Talk about heat...it has been brutal so far this summer. Let's hope it eases off some the next couple of months so we can plan some activities that won't require a lot of sweat and suffering!

I hope you find something to enjoy in this month's newsletter. I'm always open to any suggestions and welcome any contributions. Next month's issue...September...will have a piece on a very special car.

Mickey

IN MEMORIAM

Club member Ray Austin of Livingston, TN, called to let me know that former member Carl Ledbetter, also of Livingston, passed away on Sunday, July 9th from complications of a lengthy illness. Carl was the proud owner of a 1934 Ford Sedan.

Member Car of the Month

1937 Ford Phaeton

Rick and Susan Mattson, Nashville, TN



Back in May 2019, I purchased my 1937 Ford Phaeton at Gateway Motors in Laverne. My wife and I had just moved into our new home that January, so there was now space for an extra vehicle. The exterior and cabin of the car had been beautifully restored, but considerable mechanical work was needed.

When I drove the car home, I found that the cable brakes were so poorly adjusted that I couldn't stop in time to prevent tapping the rear of a car in front of me in Nolensville and later on during that trip was unable to stop for a light on Concord Road that had changed as I approached on a downhill grade.

I soon learned that antique car ownership requires a lot of patience. I am not mechanically inclined (although my father was an engineer) so I had to find someone to work on the car. The first person I called about that said the earliest he could get to it was in 6 months, and the second one did not have an opening for the next 4 ½ months. A friend of mine from church who worked at a Lexus dealer tried to help with the brakes (he even found a You Tube video about adjusting cable brakes on a Ford), but they were beyond his expertise. It was not until I learned about the Volunteer chapter of the Early Ford V8 Club that I found the help I needed. Danny Driskell and Mickey Holton have gone to great lengths to help me with the '37 Ford, and Michael Driskell has done miraculous work to make the car run like a dream. I can't say enough about how I appreciate their assistance.

The photographs of the Ford Phaeton with the convertible top up were taken the day I got it, in May



2019. The picture at left shows my '37 next to a '37

owned by fellow club member Scott Zaft just before we left for a club tour to Bon Aqua, TN. Scott lives just one mile from me in Brentwood, TN.



(See mores pictures of Rick's car on the next page)



1937 FORD MODEL 78 DELUXE PHAETON

The era of the Phaeton was rapidly drawing to a close in 1937 as coachwork construction methods, materials and machinery made it easier and more cost-effective to build all-steel, enclosed bodies. Yet the appeal of the open four-seat, four-door automobile was apparent in Ford's continuation of the Phaeton in its catalog.

Under the circumstances it is telling that the Phaeton was offered only in Deluxe trim. The style, elegance, exclusivity and – frankly – impracticality of a Phaeton signified that its owners could, and did, have sufficient resources to buy an automobile that was primarily intended to be used in fair weather and under sunny skies. Ford built only 3,723 Deluxe Phaetons in 1937, and their appeal, style and rarity make them especially popular among today's collectors.



The 1937 Fords made significant design changes, most importantly the teardrop-shaped covered headlights recessed into the catwalks between the front fenders and the revised sharp vee-shaped grille with horizontal elements. All the Fords now had “trunk” backs and stored their spare tires inside the bodywork. The hood now opened alligator-style from the front, and the windshield was a two-panel vee-shaped assembly with notable

rake. The two side curtain body styles, the Phaeton and Roadster, for the first time shared the convertible and fixed roof body styles' windshield design with a body color frame which was integrated with the cowl. It was a notable change that contributed to the 1937 Fords' more streamlined, aerodynamic styling and particularly set the Roadster and Phaeton apart from their predecessors.

Under the hood the now well-proven and refined 85 horsepower Ford V-8 had one notable change. Instead of pulling hot water out of the top of the engine from the cylinder heads the flow reversed and the water pumps pulled cold water out of the radiator and forced it into the cylinder block. It was the final substantial change in the layout and function of the flathead V-8 that would continue in service until well into the Fifties.

Ford would build a Phaeton for only one more year, 1938, and Henry was the last major auto maker to include the Phaeton body style in his catalog.



Eight cylinders for smoothness . . . and ECONOMY

MOST people know that eight cylinders make a smoother, quieter, sweeter running engine than any lesser number of cylinders.

But not every one realizes that good design may also make eight cylinders more economical. Ford has proved the fact twice in 1937.

The 85-horsepower Ford V-8 engine — long famous for flashing performance — gives greater gas economy than ever. Owners report averages of 17-21 miles per gallon.

The 60-horsepower Ford V-8 engine — tested for two years in England and France before its American introduction—has established itself as the most economical Ford engine ever built! Careful cost records from owners show averages of 22-27 miles per gallon.

Choose between these modern engines by their power and your purse. Both are built into the same handsome, husky, comfortable car. Both, because of their compact V-type

construction, provide extra room for you and your luggage. Both are low priced. In fact, the "60" is available in five standard body types at the lowest Ford price in years!


Ford V-8

The beat goes on...update on Jim Bynum's '41 Ford Coupe

Work on Jim Bynum's '41 coupe has been a little slow recently due to vacations, unrelenting heat, etc., but it's now back on schedule. Here are a few pictures to prove it really is happening.





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1



By John Emmering



Ford V-8 Foundation Cars Excel in the 2023 Great Race

The world's premiere old car rally, "The Great Race" saw four outstanding early Ford V-8 cars associated with the Early Ford V-8 Foundation Museum in Auburn, Indiana enter competition.

Just two months before the Great Race, from May 18-21, "The Great Race Spring Rally" was held in Auburn. The Early Ford Foundation Museum hosted "Rock & Rally" on Friday May 19th where participating cars were displayed to the public with food and music provided. Another celebratory event was held at the Auburn, Duesenberg, Cord Museum.

Foundation President Craig Floyd entered his 1946 Ford Coupe #103 in the Sportsman Division. A black 1941 Ford Fordor, #154 (V-8 Team 1) and a Maroon 1948 Ford Coupe # 153 (V-8 Team 2) were sponsored jointly by The early Ford V-8 Foundation and the National Auto and Truck Museum. These two cars were entered into the X-Cup division reserved for high school or junior college students and recent graduates. The two Indiana X-Cup teams drove cars lent to them by the V-8 Foundation and prepared under a youth mechanical training program originated by the National Auto and Truck Museum.

The fourth early Ford V-8, a 1950 Ford Deluxe Fordor #155 recently displayed in the Early Ford V-8 Museum, was generously lent by the Foundation to the X-Cup student team from St. Louis Community College in Missouri whose youthful team needed an entry car.

Great Race 2023 kicked off on June 24th in St. Augustine, Florida with 125 cars competing in five different divisions. The annual event which began in 1983, is not a speed race but a rally where time, speed and distance are judged as teams follow complex driving instructions. To cars must have been manufactured in 1974 or earlier to enter.

Covering 2,300 miles in nine days the Great Race crews were greeted by local enthusiasts in 19 cities as they passed through Florida, Georgia, Alabama, Mississippi, Tennessee, Arkansas, Missouri, Kansas, and Colorado.

It was reported that the X-Cup team in the 1941 Ford car #154, lacking an auxiliary electric fuel pump lost some time due to vapor lock in the hot weather. A mishap occurred when Car #153, the maroon '48 Ford Coupe accidentally struck the rear of Car #154, the the '41 Fordor damaging the coupe.

After nine grueling days on the road the vintage rally cars pulled into the Colorado Springs finish line on Sunday July 2nd. There was exciting news for Early Ford V-8 enthusiasts when the results were tabulated. The X-Cup Team in car #153 consisting of siblings Jack and Kennedy Pontius and Connor Miller had won First Place in their youth division. The victory is a tribute to the skill of these young people and a vindication of the early Ford V-8 Foundation's efforts to offer mechanical training to foster interest in the V-8 hobby in local youth.



St. Louis Community College Team & Car # 155



Ford V-8 Team 1. with Car #154



Craig Floyd's 1946 Ford Coupe #103



X-Cup First Place Winners' 1948 Ford #153

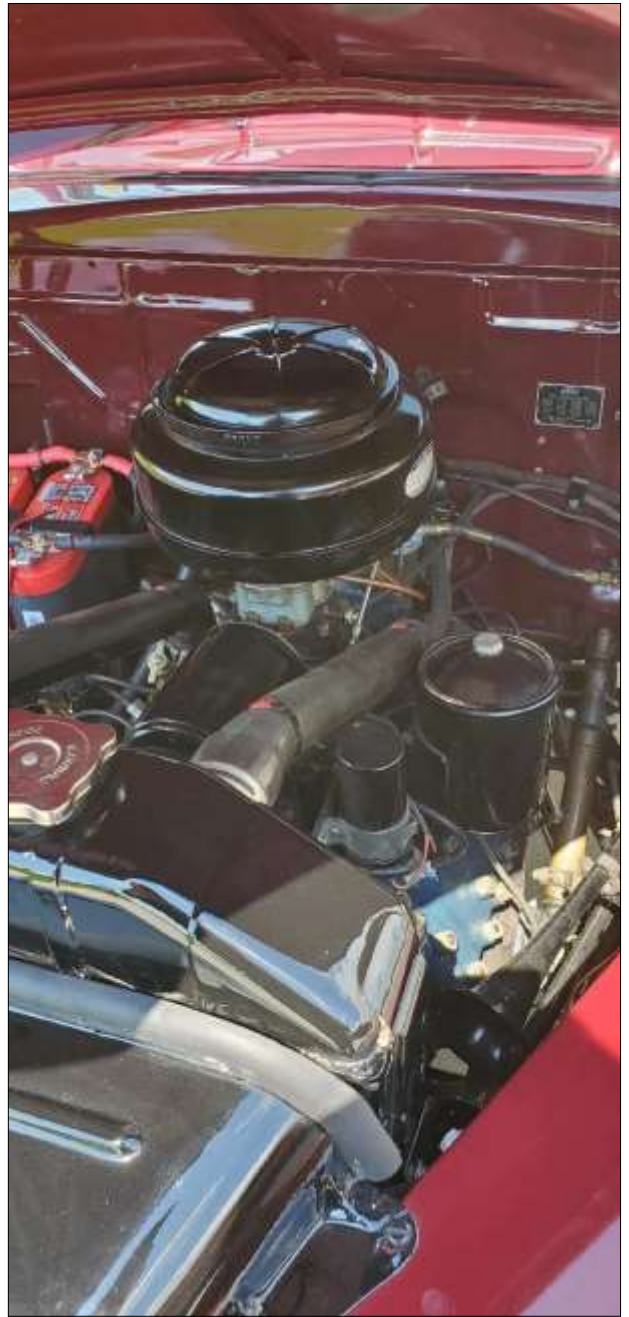


Ford V-8 Team 2 in Car # 153



FOR SALE

1946 Ford Super DeLuxe Convertible



1946 Ford Super DeLuxe convertible, flathead V8, new radial tires, tube shocks, sway bars, redone original radio for FM, completely serviced and meticulously maintained, runs and drives perfectly, 1998 AACA winner. Slick paint. Well restored

If interested, call Bryan King, 615-454-8304, Mt. Juliet, TN

THE TIMELESS FORD FAMILY (ACTUALLY, NOT "TIME"LESS AT ALL!)

By Frank Scheidt



The Ford Family has been featured on more Time Magazine covers than any other manufacturer. Henry Ford I appeared on five, Henry II on four, William Clay Sr. and Benson appeared with HF II on one cover, and most recently, Bill Ford Jr. in 2006.

It's a shame that another Ford, who was such an important contributor to Ford's success, was never on a Time cover — Edsel. Even designer, George Walker, appeared on the Nov. 4, 1957 issue! The closest Edsel came was sharing the cover with his father on the Jan. 19, 1937 Life Magazine.

Here are the first six covers and the story behind each.

FORD SPEAKS (July 27, 1925)



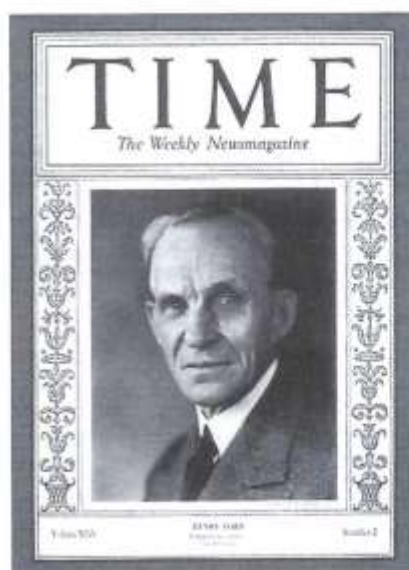
Said TIME in its July 27th issue: "No other American except the President of the U.S. can command such instant attention for any public statement."

That's right. After some 12 million Model Ts and tons of publicity, TIME felt that Henry Ford's interviews with correspondent Wilbur Forrest were reason enough to feature Ford's face on

the cover of its July 27 issue in 1925. Ford gave his opinions on such topics as Aeronautics (commercial airplane is far from being a success); Politics (Coolidge deserves another term); Shipping (Ford now has five ships); and Language (it's the World's language).

Race of Three (January 14, 1935)

Henry Ford said he didn't know how many cars Chevrolet or Chrysler sold in 1934 — and he didn't care. He wants to



concentrate on building the best car he can for the money. In Autumn of 1934, he boldly announced that he will see "a million or more" of his all-new 1935 Fords. His advertising budget for 1935 is hinted to be in excess of \$8,000,000; he participated in the 1934 Chicago Century of Progress exhibition; he'll participate in the 1935 International

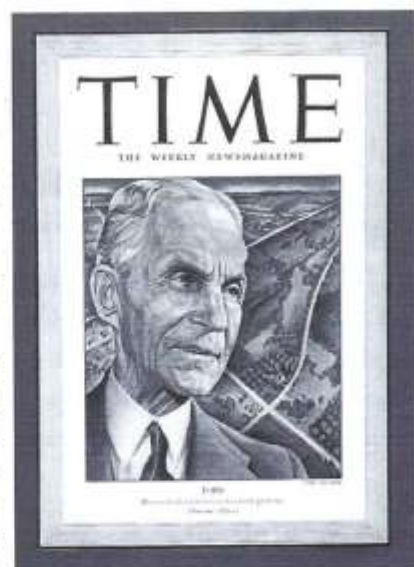
Exposition in San Diego; he sent his son, Edsel, to NYC to launch the '35 at the New York Automobile Show, the number 1 venue for exhibiting the newest and finest in automotive transportation, and Ford's first showing there. He sent cross-section displays, a team of two mechanics who could pull down a V-8 motor in six minutes, assemble it in ten, a cutaway car on a traveling belt which, when big blocks were tossed under its wheels, demonstrated what Ford called "Center-Poise," balanced riding quality. Does this sound like a man who "doesn't care" how many Chevrolets are sold?

So, after being outsold by Chevrolet for several years now, and with Chrysler gaining, TIME recognized that Ford was fighting back for 1935. And it must've worked, for Ford finally outsold Chevrolet in 1935 by over 170,000 units!

Model T Tycoon LABOR Problems (March 17, 1941)

"Henry Ford, the most famous tycoon alive, was up a tree this week. The old 'coon had been treed before, but this time not only by Organized Labor but the U.S." So read the opening of the March 17, 1941 TIME article about Henry Ford, whose face graced the cover for the third time. Ford was in trouble with the NLRB for violating the Wagner Act. The UAW

threatened to strike Ford. (A sit-down strike by the UAW union in April, 1941 closed the Rouge River Plant.) TIME maga-



zine could sense the approaching fireworks building between the union and Ford. Ford's Harry Bennett suggested that the union would even "sabotage the Defense Program of the nation to satisfy their greed for dues and more dues." As to Henry Ford himself, the article concludes, "And his feeling about labor unions is simple and characteristic: he wishes they would stop annoying him." (Finally in June, Ford gave in and signed a contract with the UAW.)

Battle of Detroit WWII (March 23, 1942)



"Something is happening that Hitler does not understand – old American miracle war production, and its miracle-worker is the automobile industry." The Willow Run plant is completed and running at full speed. Henry Ford, once a die-hard pacifist, now devotes 100% of his manufacturing to "war work", turning out all sorts of war-related vehicles

and armament, including airplane engines and even complete airplanes – the B-24 Liberty Bomber.

All of Detroit is pitching in, in a big way. Chrysler has three assembly lines of olive-drab tanks moving through its tank arsenal; General Motors is producing arms of all kinds at the rate of a billion dollars a year. Packard and Studebaker are making airplane engines; Hudson makes anti-aircraft guns; Nash is at work on engines and propellers. But Ford, and its founder, Henry Ford, get top billing and Henry's mug appears on the cover of TIME for the fourth time, on March 23rd's issue.

Says Henry, "The more we produce, the quicker it will be over and the sooner we can get back to the job of building up the country."

Young Henry Takes a Risk (February 4, 1946)

In 1943, Edsel Ford dies. In 1946, Henry Ford is a frail 83 years old. The company is struggling to make a comeback after the young Henry Ford II took over the reigns from his grandfather in September, 1945. But labor relations still haunt Ford Motor Co. Young Henry makes the decision to settle with the union in 1946, granting them the pay raises they demanded, even though he was losing \$300 on every car he made! But hobbled by 773 strikes in four and a half years, the efficiency of Ford workers had dropped far more than any other auto company. As long as Uncle Sam paid the bills, the company could swim. But in peace, this labor sabotage was enough to sink it.

Thus in 1946 Young Henry is quite certain that the troubled labor relations that harried Ford for years are finally at an end. He has one solid fact to go on. Since V-J day, there has not been a single work stoppage in any of the Ford plants.

So young Henry II is featured for the first time on TIME's February 4, 1946 cover, sharing it with his grandfather, who is on a TIME cover, even if it is in the faded background, for the 5th and last time.



The Rouge & the Black (May 18, 1953)



In the folklore of American capitalism, the rich boy sometimes seems to have less chance of success than the poor boy. Americans build fortunes, but seldom dynasties. And enough fortunes have been wasted away by the sons of rich men to give truth to the saying: "From shirtsleeves to shirtsleeves in three generations."

Thus began the "cover story" for TIME's

May 18, 1953 issue. The grandsons of Henry Ford were now in the thick of the "family business" and all three were on the cover of TIME. Henry, Ben and Billy, as TIME referred to them, (Henry II, Benson and William Clay) celebrated the 50th Anniversary of their grandfather's business. The company was in pretty good shape in 1953. But not much earlier, it was on the brink of total collapse. The hard work and dedication of these three "rich boys" brought profitability back to Ford Motor Co. Said Henry II regarding his younger brothers, "We agree on policy matters, but when we get into operational matters we disagree quite violently at times. But on one thing we all agree: what we do make, we want to be first with."

As to the title of the piece, "Rouge" refers to the expansion the boys made to the Rouge and other facilities in order to bring production capacity closer to that of GM; and "Black" stood for "in the black", as in making money again. ♦

The following two pages describe Henry Ford's attempt to develop a Plastic Car. Long before the Corvette or Darrin, this was thought to be a substitute for a low cost lightweight vehicle. According to Overly, the car was destroyed by E.T. Gregorie (Davis, 51).

THE SOYBEAN CAR AND HENRY FORD

A Man Ahead of His Time

BY HENRY FORD MUSEUM
PHOTOS FORD MOTOR COMPANY

As we celebrate Henry Ford's 150th birthday, we are reminded of his pioneering spirit. In fact nearly 70 years ago, Henry Ford was one of the first in his time to use an agricultural product in his vehicle by building a plastic car from soybeans. Today, Ford Motor Company continues his vision by using a variety of natural products in the creation of its vehicles including yarns, wheat, corn, wood chips and soybeans.

Henry Ford first began experimenting with soybeans to make plastic automobile parts in the 1940s. The experiments resulted in the creation of a soybean "plastic-bodied" car. Ford eventually unveiled the "Soybean Car" on August 13, 1941 at Dearborn Days, an annual community festival.



Ford hoped his new plastic material might replace the traditional metals used in cars. A second soybean vehicle was in the process of being built when World War II broke out. The war led to the suspension of all auto production and, as a result, the plastic car experiment.

are made into interior padding, nylon carpeting is being made into resin for cylinder head covers and sugars made from corn, beet and cane are being examined for use in biodegradable plastic parts.



The car was a combination of steel and plastic. Fourteen plastic panels attached to a tubular steel frame, resulting in a vehicle that weighed approximately 2,000 pounds. This new plastic vehicle was 1,000 pounds lighter than the typical steel vehicles made at that time.

Henry Ford reportedly built the "Soybean Car" because he wanted to create a project which combined industry with agriculture. He also believed that plastic panels made the car safer than traditional steel panels. Additionally, there was a shortage of metal at the time the car was built.

The Ford Motor company's commitment to using sustainable products has only strengthened with today's vehicles such as the Ford Fusion. The company uses soy-based polyurethane foam for seat cushions, seatbacks and headliners. Wheat straw and other plant fiber-reinforced plastics are used for vehicle storage bins and interior door panels. Engineering wood technology (recycled and renewable) is used for interior trim. Yarns are being made into seat fabrics, cotton from blue jeans



While innovative and exciting, Ford's foray into the use of sustainable products in its vehicles has a long history showing that Ford Motor Company founder, Henry Ford, was a man ahead of his time.



CLOCKWISE FROM TOP: Henry Ford (right) and his Soybean Car; 1941 Henry Ford with a soy plastic trunk panel; Soybeans from the field; 1941 Ford experimental car with soybean plastic body panels.



Henry Ford's Plastic Car

In the early 1940s, Henry Ford experimented with making plastic parts for automobiles. These experiments resulted in what was described as a "plastic car made from soybeans." Although this automobile never made it into the museum's collections, it remains a good example of innovative design. The "Soybean Car" was actually a plastic-bodied car unveiled by Henry Ford on August 13, 1941 at Dearborn Days, an annual community festival.

What was it made of?

The frame, made of tubular steel, had 14 plastic panels



attached to it. The car weighed 2000 lbs., 1000 lbs. lighter than a steel car. The exact ingredients of the plastic panels are unknown because no record of the formula exists today. One article claims that they were made from a chemical formula that, among many other ingredients, included soybeans, wheat, hemp, flax and ramie; while the man who was instrumental in creating the car, Lowell E. Overly, claims it was "...soybean fiber in a phenolic resin with formaldehyde used in the impregnation."

Who helped make/design it?

Henry Ford first put E.T. (Bob) Gregorie of the Styling Department in charge, but was not satisfied. He then transferred the project to the Soybean Laboratory in Greenfield Village and to the care of Lowell E. Overly, whose formal training was in tool and die design. His supervisor, Robert A. Boyer, a chemist, aided him.

What was it used for?

The car was exhibited at Dearborn Days in 1941. It was also trucked to the Michigan State Fair Grounds for display later that year. Many people ask us about Henry Ford's experiments with making plastic parts for automobiles in the early 1940s. These experiments resulted in what was described as a "plastic car made from soybeans." Although this automobile never made it into the museum's collections, we thought we would address the myriad questions we receive about this unique and fascinating vehicle.

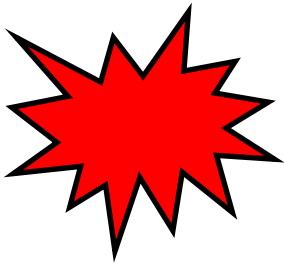
Why was it built?

There were several reasons why Henry Ford wanted to build this car: 1.) He was looking for a project that would combine the fruits of industry with agriculture. 2.) He also claimed that the plastic panels made the car safer than traditional steel cars; and that the car could even roll over without being crushed. 3.) Another reason was due to a shortage of metal at the time. Henry hoped his new plastic material might replace the traditional metals used in cars.

Why weren't more 'soybean' cars built?

The outbreak of World War II suspended all auto production, and therefore the plastic car experiment. A second unit was in production at the time the war broke out, but the project was abandoned. By the end of the war the idea of a plastic car had fallen through the cracks due to energy being directed towards war recovery efforts.

Thanks Josh Madden



Blast From the Past!

(This description of how an automobile was assembled at the Ford River Rouge plant was printed in the October 1940 of *POPULAR SCIENCE* and was appeared in the September 1991 newsletter of the Volunteer V8 Ford Club.)

**6,000
Autos
a Day!**

Five miles west of the heart of Detroit, Mich., on the banks of the River Rouge, is the largest single manufacturing plant in the world. Sprawled over land that could accommodate more than 1,000 football gridirons, this gargantuan factory employs 80,000 men and can turn out 6,000 automobiles in a single, two-shift, sixteen-hour day. That's better than one complete, ready-to-run car every ten seconds.

A bird's-eye view of the maze of blast furnaces, rolling mills, tool and die shops, power houses, ore docks, railroads, foundries, laboratories and offices in this giant Ford Motor Company plant presents the first impression of one vast chaotic tangle. Yet, by a miracle of science and industrial organization, the sprawling parts are blended into a clockwork unit that at one end sucks in raw materials, and at the other blows out a steady stream of gleaming motor cars.

To get any idea of the tremendous size of this manufacturing monster, and of the miracle of production it accomplishes, you have to begin at the beginning, which means that you run into this fact: the origins of the vehicles that come from this mammoth mechanical hatchery are scattered over the face of the earth.

For the Rouge plant taps the raw material resources of the world. Up from Brazil and the Far East come boatloads of raw rubber for tires and bodies. Down through the western Great Lakes flows a steady stream of long barges stuffed with iron ore for the blast furnaces. Coal trundles in from the South. So vast is the demand of the factory for materials, that officials state that the plant taps not only many foreign lands, but also practically every one of the 3,070 counties in the United States for at least one contribution to its finished product.

Trains and trucks haul their quota of materials to the plant, but the lion's share of the transportation job is entrusted to ships. The Ford company maintains its own freighter fleet of twenty-nine vessels, led by the 514-foot diesel-powered flagship, *HENRY FORD II*. Up the River Rouge, the freighter armada noses up to the factory's huge unloading pier, where giant mechanical fists grab fifteen-ton handfuls of iron ore and dump them into a vast storage bin that lines the side of the boat wharf.

on schedule and without interruption, this influx of raw materials spreads out from docks and receiving platforms along transportation fingers that lead to the maze of manufacturing and processing plants. For this distribution job, there are 100 miles of railroad track within the Rouge boundaries. Over this network of steel, ten steam locomotives and seven oil-electric engines haul more than 1,000 plant freight cars. There are fourteen giant locomotive cranes, as well as fleets of trucks, tractors and trailers. And what this transportation army cannot handle is entrusted to a conveyor-belt system that is long enough to stretch from New York City to Wilmington, Del., and ranges from heavy mechanisms to move bulky raw materials, to light conveyors that speed small parts into the hands of workmen when and where they need them.

Either in their original or in their processed form, all these materials are ultimately destined for the spinal column of the factory, the final assembly line. But most of them face a long journey before they are joined to the automobile skeleton to play their part in forming the finished car.

Take, for example, one raw material: iron ore, of which some 850,000 tons arrive at the Rouge docks in a single season. The raw ore is fed into the maws of two giant blast furnaces that in twenty-four hours can turn out 1,500 tons of pig iron. As it emerges, the flow splits, some of the iron moving into the seventeen-acre foundry to be made into castings, including the one-piece eight-cylinder Ford engine block.

Another stream of iron, in molten state, moves into the open-hearth building, where in ten huge furnaces it merges with scrap iron, limestone, magnesium, chrome, vanadium, and various other alloys to be converted into the sixty-three distinct types of steel that go into the manufacture of Ford-built cars.

Follow the trail farther. On conveyors, ingots of steel travel to the rolling mill--twenty-two acres--where gigantic machinery rolls them into bars or rods or wide coils of sheet metal. Go on into the press shop--nineteen acres--and watch a battery of 2,000 power presses, some exerting an 800-ton squeeze, stamp out fenders, hoods, radiators, body panels and other parts as easily as a chef wields a cookie cutter.

Nearby, in a connecting building, you'll watch forty steam hammers and sixty upsetters, a type of forging machine, turn out springs and small parts. Since the original pig iron entered the open-hearth building, its progress has gone on in separate shops that are all connected and covered by a single roof, under which, if you wanted to sweep out a few thousand tons of machinery, you could lay out close to 1,000 tennis courts.

But you've only followed the factory trail of iron ore. To do the job right, you'd also follow raw rubber through its maze of transformations into finished tires. You'd follow silica and alkalis to their completed form as window and windshield glass. You'd travel through the plant where oil is extracted from soy beans to form a constituent of body enamel, and the remainder utilized in the manufacture of such plastic parts as distributor housings and ignition-coil cases.

But whatever material you follow, it will eventually wind up somewhere along one of the three parallel final-assembly lines. To get an idea of what these are like, think of a mammoth parade that starts with a small group at the beginning of an avenue that has side streets leading into it from the left. On each side groups of marchers are assembled into compact, orderly units. As the initial group reaches the first side street, the assembled marchers there swing into line. A second group joins the parade at the next corner, and so on until the parade is a single marching unit.

The same thing happens in an automobile final-assembly line. Starting the parade is the chassis, which moves along on a conveyor until at the first "side street," the engine, assembled in the motor building, moves in on a conveyor from the left, and is lowered into place. Radiator, steering gear, fenders, wheels,

bodies and other parts are added as the steadily expanding unit moves from one side conveyor along to the next. And remember that each of these side-street conveyors as an assembly line in itself, for each major part has been built up from a number of smaller units. Finally, when the mechanism arrives at the end of the line, it is a complete, ready-to-operate automobile, and rolls off the conveyor under the guidance of an inspector, who drives it out onto a half-mile test track for a check run.

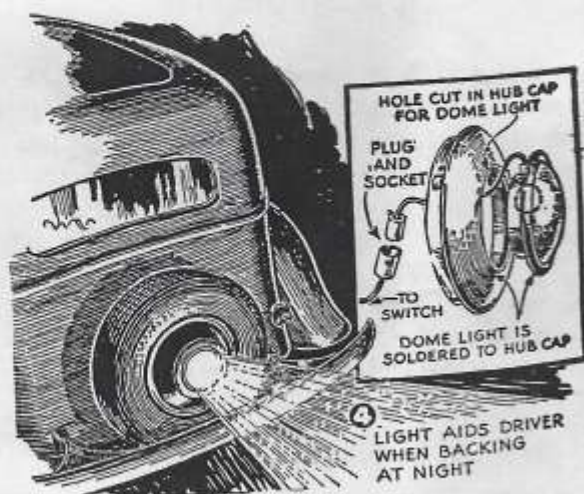
But long before you reach the point where finished cars roll off the assembly lines, you will probably reflect that it must take power with a capital P to run the thousands of machines and light the myriads of lamps in a plant of this size. It does. The factory power house, the largest industrial high-pressure power plant in the world, utilizes three giant turbo-generators that can produce enough current in a single day to meet the electrical requirements of the average American home for 13,533 years!

Coal, the principal power-house fuel, is used in pulverized form, and blown under pressure into the boilers where it burns almost like a gas. Every day the power house pumps water from the Detroit River through a 2½-mile tunnel in a quantity that equals the daily water consumption of the cities of Detroit, Cincinnati and Washington combined.

These are facts and figures that set the brain whirling. So, before you leave the plant, perhaps you had better taper off with a few factory activities that Ford officials class as "incidentals." By-products, for example. Slag from the blast furnaces is not discarded but processed in a cement plant on the premises that has a daily capacity of 2,200 barrels. From the coke ovens come such by-products as coal-tar, ammonium sulphate for fertilizer, light machine oil and motor benzol, among others.

Or consider plant sanitation. Nearly 5,000 men are assigned to the job of keeping buildings and machinery clean and safe. Each month they use around 7,000 mops, 2,700 brooms, fifteen tons of soap chips and 32,500 gallons of paint. The Rouge plant has more than 8,000,000 square feet of floor to be scrubbed and swept!

With its 6,000 cars-a-day capacity, the River Rouge plant is a tremendously important cog in the peacetime industrial life of the nation. And with half a world already at war, this giant factory, along with others of its kind, may become of even greater importance as a mighty factor in America's national defense, because of its ability to switch over to tanks and guns and airplanes from its normal production of trucks, tractors and automobiles.



BUILT INTO THE HUB CAP of a rear-mounted spare wheel, an old dome light obtained from a junk yard can be a serviceable and decorative backing light for your car. Cut a circle in the hub cap large enough to take the fixture, to which a single-wire lead and plug are attached. Then solder the fixture to the cap to hold it and provide a "ground." Connect a wire from the socket by means of a plug and long wire to a switch on the dash, and thence to one ammeter terminal. When you change a tire, switch the hub caps, too, so as to keep the light on the rear of the car.—S.A.T.

-Technically Speaking-

How to Install a Main Wiring Harness

By Francis Von Muller, 1949-50-51 Ford/Mercury Owners Magazine

It has been said that of all auto restoration jobs replacement of the main (cowl) wiring harness is one of the worst. While this is probably true, especially for those not electrically inclined, there are some tech tips available to take some of the pain out of the task.

Here are a few tips based on several installations done over the years on 1950 Ford V-8's. The info given is also applicable to other Ford products of the era.

I start by carefully removing the old harness, marking the connection point of each wire with a bit of masking tape on which I write down the function of the terminal it was removed from, such as oil, fuel, temperature and so on. On junction blocks or switches with many terminals, I write down connection locations in abbreviations.

On the first job I did, I did it the hard way, laying on the car floor looking up behind the dashboard using an extension light. After suffering king-size cricks in the neck by doing so, I thought there has to be a better way. There is. I now detach the dashboard completely, rotating 90 degrees to the rear and sit comfortably in the driver seat making my wire connections. Padding is required between the dash and the steering column to prevent paint damage. Admittedly, detaching the dashboard is a bit of a chore with its many sheet metal screws and the necessary removal of the steering column attachment, heater control, choke cable, etc., but it is worth it. As a bonus, with the dashboard freed up, you can paint it if need be.

The wiring harnesses I have been installing are made up of cloth covered insulated wire, same as the original. Before installation I spray the exposed wires with scotch guard which I find protects the wires from dirt and keeps them new looking.

With the old harness out, I lay it down next to the new one and pair off wires of the same function and mark the new wires with their identification. Doing this sometimes requires cutting back into the black tape binding of the old harness to expose a wire's color code. Reference to the harness makers wiring schematic can also help. When the wires of the new harness have all been marked, the under dash portion of the new harness may be carefully fed through the firewall hole and all dash connections made.



Several precautions should be observed.:

1- Carefully route the battery power wires (usually yellow code large diameter, some are green) away from any ground areas such as the metal of the dashboard. Grounding of these wires is what causes most mysterious car fires.

2- Where battery power wires terminate in a screw or a nut, put a good blob of claylike body sealer on top of each. These spots are electrically hot with full battery voltage and should be protected against accidental grounding. The old time car thieves loved these spots, because a quick jumper from one to the coil connection on the ignition switch allowed them to do their dirty work.

3- Be careful to route the ammeter wire through its sensing loop in the correct direction. If put in backwards, the ammeter will read in reverse. For 1949-50 Fords, the wire should go in from the top down.

With the under dash connection completed, the much easier under hood connections can be made. On making the horn relay connections, check for terminal corrosion, which tends to occur. Clean if necessary. Also check the horn wire where it comes out the bottom of the steering column to be sure that the wire insulation is not damaged. If not already done, slide a three inch long piece of close fitting plastic insulating tubing down the wire, pushing it about half its length up into the hole at the bottom of the column. This will prevent unwanted (and embarrassing!) horn blowing. The job may be completed by reinstalling the dashboard and checking out the functioning of all circuits and gauges. If you were careful in matching up all of the harness connections, old to the new, you should have no trouble.

In the Kitchen...

CARROTT SOUFFLE

INGREDIENTS:

2 pounds carrots
1/2 cup melted butter
3/4 cup sugar (can be brown sugar or a combination)

3 tablespoons all-purpose flour
1 teaspoon baking powder
1 teaspoon vanilla
3 eggs – beaten
1 teaspoon powdered sugar
Optional:
1/2 teaspoon nutmeg
3/4 teaspoons cinnamon

DIRECTIONS:

Pre-heat oven to 350 degrees; steam or microwave carrots, drain, mash; add butter, flour, sugar, vanilla, eggs – mix well; pour into buttered (or use PAM) soufflé dish; bake 30 minutes, till center sets; dust with powdered sugar.



MILLION DOLLAR POUND CAKE

INGREDIENTS:

3 cups sugar
1 pound softened butter
6 room temperature eggs
4 cups sifted all-purpose flour
3/4 cup milk
1 teaspoon almond extract
1 teaspoon vanilla extract

DIRECTIONS:

Cream sugar and butter till fluffy; add eggs one at a time; add milk and flour alternately and beat well after each addition; stir in flavorings; pour batter into well-greased & floured 10" tube pan; bake at 300 degrees for about 2 hours (till it tests done).

CONGEALED ASPARAGUS SALAD

INGREDIENTS:

1/4 c. sugar
1/2 c. finely chopped pecans
1 c. water
1 4 oz. jar diced pimento, drained
1/2 c. white vinegar
2 T. grated onion
1 envelope unflavored gelatin
1 10 1/2 oz. can asparagus tip, cut & drained
1/2 c. cold water
juice of 1/2 lemon
1 c. chopped celery
dash of salt
lettuce leaves

DIRECTIONS:

Combine first three ingredients in a saucepan and bring to a boil cooking 5 minutes; soften gelatin in 1/2 c. cold water and let stand for 5 min; add this to the vinegar mixture and stir in next 7 ingredients; pour into a lightly oiled 4 cup mold; chill in refrigerator until firm; unmold onto lettuce leaves; serves 8.

Mid-Eastern Chicken for Two

INGREDIENTS:

2 boneless chicken breasts, cut in strips
1 cup chicken broth
3 T. canola oil
1 tart apple peeled, in cubes
1/2 onion, chopped
1/4 c. raisins
1/2 c. celery, chopped
1 T. lemon juice
1 T. flour
1 t. lemon zest
1 T. curry powder
1 banana

DIRECTIONS:

Sauté chicken in oil over high heat 3-4 minutes; remove chicken and set aside; Add onion and celery to skillet and sauté; add flour and curry powder and cook over low heat 1 minute; adding broth, cook, stirring until sauce is thickened and comes to a boil; add apples, raisins, lemon juice and zest and simmer 3 minutes; add reserved chicken and simmer 5 minutes, stirring occasionally; serve over rice with sliced banana atop.

Local Car Shows, August 2023

August 4th & 5th: Celina, TN - Clay County Heritage Days. Saturday Car Show at 8:00am at Celina High School, 860 Clay County Hwy, Celina. Lots of activities for the weekend. Live Music, Rolly Hole Tournament, Duck Race, Cake Walk, Craft and Food Market, Gun Raffle & more.

August 5th: Ashland City, TN - 1st Annual Farmers' & Artisans' Market CAR SHOW at Riverbluff Park, 175 Old Cumberland Street, Ashland City, TN. Times: 9:00am - Noon. FREE to attend. 50/ 50 Raffle. Proceeds will go to youth sports leagues in Ashland City.

August 12th: Hohenwald, TN - Hillbilly Hot Rod Show & Swap Meet at Natchez Trace Wilderness Preserve, 1363 Napier Road, Hohenwald, TN. Gates open at 8:00am. Entry fee \$20.00. Event is open to all years, makes & models of cars / trucks / motorcycles / bicycles / tractors & vintage campers. Trophies awarded for TOP 25 plus 13 Specialty Awards and Show Sponsor's Pick Awards. Other activities include: benefit auction, 50/50 drawing, vendors, food, pinup contest, DJ music, burn out box competition, pinstripers, swap meet and more. Proceeds will benefit St. Jude Children's Research Hospital. For more information, call Randy Lee 931-629-8719 or Lee Patterson 931-477-0196.

August 19th: LaFollette, TN - LaCruizers Car Show to be held downtown LaFollette. Times: 10:00am - 2:00pm (Rain date August 26th) Registration \$20.00. Cash giveaways and much more. Stay tuned for more information.

August 19th: Winchester, TN - 3rd Annual Cruise-In For Christ at Oaklawn Baptist Church, 108 Memorial Drive, Winchester, TN. Times: 3:00pm - til ????. Welcome all hot rods, classic cars & trucks, antiques, tractors, motorcycles, rat rods. Door prizes, Food vendors.

August 19th: Goodlettsville, TN - 7th Annual Breast Cancer Car & Bike Show by Pink Christmas at Rivergate Mall, 1000 Rivergate Pkwy. Registration: 8:00am - Noon, Car Show 9:00am - 2:00pm. Welcome all cars, trucks, motorcycles. *Rain Date: August 26th*. FREE admission for Spectators, Car Show Entry \$20.00. TOP 60 People's Choice Trophies, DJ Music, Hadley Park Line Dancers, Food Trucks, On site Mammograms provided by Ascension Medical Group. For more information, call 615-497-3149, Email: pink.christmas2009@gmail.com

August 19th: Chapel Hill, TN - 3rd Annual Nash Family Creamery Car Show at 4019 US 41A North, Chapel Hill, TN. All types of vehicles welcome! Cash prizes & Trophies awarded to the winners. Registration: Early \$20.00, Same day \$25.00. Early bird entry deadline is August 1st.

August 19th: Franklin, KY - TIKI FEST Car Show by Relentless Car Club at 105 State Street, Franklin, KY. Registration: 8:00am, Show opens 9:00am - 3:00pm. Open to ALL years and Styles! 1st 100 get a dash plaque. Entry fee \$20.00, Free for Spectators. Vendor spaces 10x10 \$20.00

August 20th: Lebanon, TN - Tennessee State Fair Antique Car Show at Wilson County Fairgrounds, 945 E. Baddour Pkwy. Cars are on display in Fiddlers Grove and in the shade. Entries taken at 10:00am - 1:00pm. Enter Main Gate on Baddour Pkwy and follow signs. Entry fee \$20.00, Awards at 4:00pm. There will be 56 Classes (see website for listing), Three places in each class, Trophies will be awarded to all National Winners, Cars will enter on pavement and park on grass, Dash plaques will be given to the 1st 200 entries, No Classes for Mini-Trucks or Slammed Cars, Best of Show for Modified & Production, Large Classes may be split and Judging during Registration.

August 25-26th: Hopkinsville, KY - TOP GUN Cruise-In downtown Hopkinsville at the 7th Annual Summer Salute. Friday afternoon August 25th kickin off at 2:00pm, then Saturday August 26th starting at 10:00am. Two big headliner concerts at Summer Salute Festival - FREE to everyone. Over 130 vendors, AX throwing, Carnival rides, Bounce Houses, For more details, visit their [WEBSITE](#) or text/call Billie or Caroline Peal at 270-970-0883 or Christie Peal 270-217-0732. [Event Website](#)

August 26th: Decherd, TN - Pack the Park Car Club presents Ratrods & Antique Show to be held at John L. Sanders Park, 117 College Street. Times: 10:00am - 4:00pm. Registration: 9:00am - Noon, Entry fee \$20.00 for 1st car / \$10.00 for the 2nd car you bring. Dash plaques for the 1st 100 entrants. \$50.00 to the Club that brings the most registered vehicles. Categories include and listed on flyer: Ratrod Trophies, Antique Trophies, Motorcycle awards, Specialty awards. Door prizes, 50/50 drawing, Food trucks and oldies music. For more information, contact Norman Sons 931-308-6977 or James aka mudduck 931-952-5361 or Wesley Elliott 931-691-6926 or Sherrie Sons 931-308-3802.

August 26th: Hurricane Mills, TN - Coal Miners Car Show at the Loretta Lynn Ranch, 8000 Hwy 13, Hurricane Mills, TN. Show & Competition 9:00am - 5:00pm. Entry fee \$25.00, TOP 50 Awards plus Best of Show & \$250 Loretta Lynn's Choice Award.

August 26th: Dickson, TN - 2nd Annual Battlin' Betties Tennessee Platoon & U.S. Veterans MC Tennessee Car & Bike Show at VFW Dickson, 215 Marshall Stuart Drive, Dickson, TN. Times: Car & Bike Show 3:00pm - 6:00pm, Pinup contest at 7:00pm. Entry fee \$20.00 per car or bike / \$20.00 for Pinup contest. Prizes and awards for all categories. For more information, contact email: battlinbettiestn@gmail.com

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