Henry's Misadventures with the Fordson Tractor

by David L. Lewis

drive report

Ford knew his tractor wasn't ready for production, but the British insisted he build it. Once on the market, Henry had to make it America's bestseller, which the Fordson became despite its habit of rearing up and sometimes killing its driver.

Ford 75TH ANNIVERSARY

HENRY FORD had a great love for farming, but he hated farmwork. He wrote in his 1922 autobiography: "I have followed many a weary mile behind a plough, and I know all the drudgery of it. What a waste it is for a human being to spend hours and days behind a slowly moving team of horses."

At age 12, Ford saw his first steam traction engine chuffing down a country road. Eight years later, in 1883, he'd built himself a similar self-propelled steam vehicle for plowing. But, like most of his contemporaries, Ford found steam engines too heavy, cumbersome, and expensive.

Then in the summer of 1907, four years after launching the Ford Motor Co., Henry Ford directed the design of his first gasoline-powered farm tractor. Joseph Galamb, one of Ford's ablest early engineers, recalls in his *Reminiscences,* deposited in the Ford Archives, that Ford came to him and said, "Joe, we have to build a tractor in three days."

Ford's first tractor, considering the way it was flung together, might have been built in that length of time. It was made up mostly of Ford car parts on a channel-iron frame. A 1907 Ford Model K radiator, a 1905 Model B engine mounted transversely, a K steering gear, and a makeshift seat were placed behind a cylindrical gas tank. Wheels came from a wagon (front) and a grain binder (rear).

Even so, this mongrel pleased Ford, so he built two more like it. He used them to harvest hay on his farm. The automaker never seriously considered putting these tractors on the market, partly because they lacked power, had bearing problems, and were strictly for light duty. The first of these machines still runs and is presently on display at the Henry Ford Museum in Dearborn.

Ford's second experimental tractor, lightweight and steam-powered, ran at the Michigan State Fair in 1909. It mostly convinced Ford of the superiority of gasoline over steam.

In 1910, Henry Ford applied for several gasoline tractor patents and laid plans to build farm vehicles along with Model T's in his new Highland Park plant. But these ideas got shoved aside by his preoccupation with car production and a certain reluctance on the part of his fellow shareholders.

Ford decided by 1913, though, to design and build tractors on the same principles as the Model T; i.e. to concentrate on a simple, basic, lightweight, low-priced machine. His "Model T" experimental tractors of 1913-15 carried the Tin Lizzie's engine, planetary transmission, front axle, and steering gear, but it used a worm-drive rear axle. These 1600-pound tractors had some good points: They handled easily, worked at 2-5 mph, and proved nimble in the field. Price was set at $200 "so that practically every farmer in the country can buy one," and production was set for Dec. 1915.

Trouble was, though, that the T tractors weren't very durable. Engine bearings rattled after each fortnight of work, the steering needed frequent adjustment, the cooling system needed constant refilling (thermosyphon, of course), and the rear wheels slipped even when pulling a 15-inch plow set four inches deep. So this again wasn't much of a tractor.

Yet when Henry Ford set his mind to something, he'd by golly do it, and since Ford Motor Co.'s minority stockholders still opposed the manufacture of tractors at Highland Park, Henry and his only son, Edsel, organized a special tractor division in 1915 to build nothing but farm vehicles.

This division soon became an entirely separate, independent company, incorporated in 1917 as Henry Ford & Son, through which Henry and Edsel bought all rights to the tractor (dubbed "Fordson") and reimbursed the Ford Motor Co. for its research and development costs. It's something not generally known—*that the Fordson tractor was not initially a product of the Ford Motor Co.* Later, after Henry Ford bought out all his minority stockholders, the Fordson operation *was* brought back into the Ford Motor Co.

At any rate, Ford put Charles E. (Cast-Iron Charlie) Sorensen in charge of Henry Ford & Son, Inc., and built a modest plant in then-rural Dearborn, on the site of a former brickyard. The first experimental Fordson tractor was tested on Ford's nearby farms in early 1916. By that time, Ford had already test-driven nearly every make and type of farm tractor on the market, and he'd judged them all too heavy and underpowered. Most, too, had either chain or other open drives that made them vulnerable to grit and dirt. Ford decided that the Fordson's final drive would be by worm gears (like the TT truck, but much heavier), totally encased.

Ford and his engineers, with Gene Farkas as chief designer, next developed what they called a "3-unit system." The center unit was the engine, with flywheel and multi-disc clutch. At the rear stood a conventional 3-speed transmission and the worm-drive axle. Up front, the third unit became the radiator, gas-tank support, and front axle, all combined. The idea was to design these three units so they'd easily come together on an assembly conveyor.

The Fordson tractor, unlike the Model T automobile, was built principally with chrome-carbon steel. Sorensen held that chrome-carbon alloy was stronger than the T's vanadium steel, that gears could be oil-hardened, thereby doing away with carbonizing. Gears could thus be less expensive.

Vanadium's champion, C. Harold Wills, who'd been a leading designer of the Model T (see SIA #41, p. 30), warned Ford that chrome-carbon meant trouble, but Sorensen won out and, in fact, the substitute steel worked all right.

DESIGNING THE FORDSON took 90 days. The first experimental batch of 50 stood ready for testing in early 1916. Dur-

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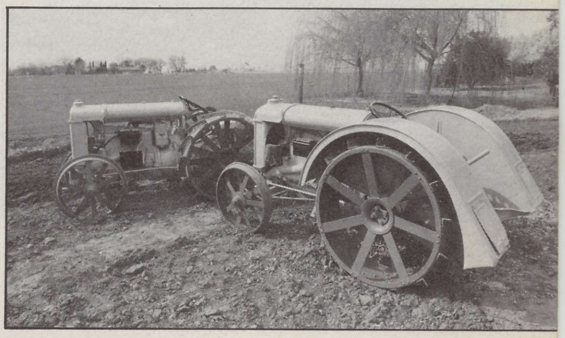
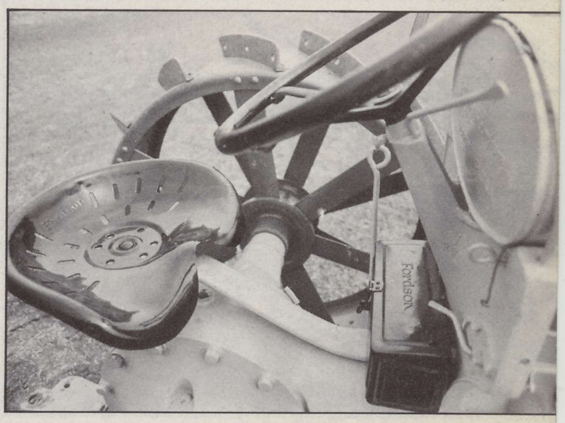
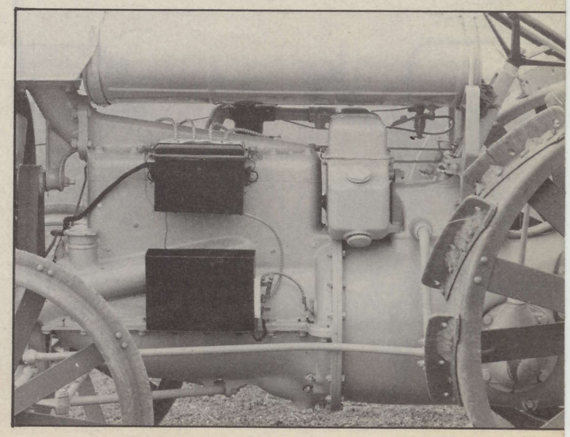
Above: *Fred Heidrich demonstrates plow with his restored 1923 Fordson. If the plow hit a snag, it would tend to pull tractor over backwards. Later models had a gravity-weighted kill switch which helped prevent tipping.* ***Below:*** *A 1925 Fordson (foreground) shows off its fenders, also called "grousers," which touched ground before tractor could rear over backwards. Bins in fenders provided storage for tools.*



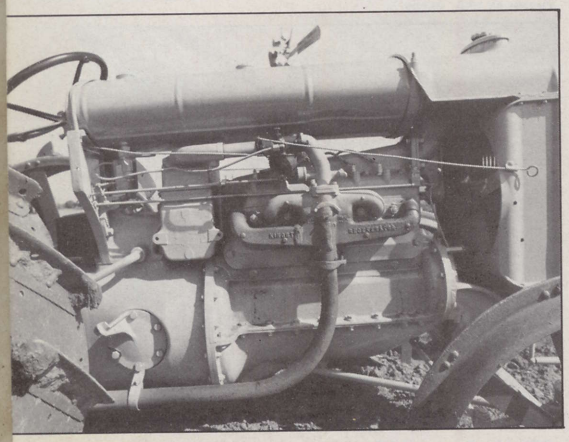
PHOTOS BY JOHN MALDE



Above: *Seat attaches to spring-steel tongue. Throttle hangs on steering column, with gear-shift lever at left. Choke stands beneath tank.* ***Below:*** *Fordson uses no frame, could be unbolted at midriff, but both ends had to be well propped before disassembly. Air washer stands behind block, with vibrators in upper black box. The battery has been added below. This model uses no water pump, but later ones did.*



The Fordson shifts with left hand in an unconventional pattern. Unlike T, tractor used foot-pedal, multi-disc clutch and 3-speed transmission. Final drive was by worm gear.



***Above:** Hotspot on intake manifold allowed Fordson to burn kerosene. It started on gasoline, then switched over after warming up.* ***Below:** Heidrich, of Woodland, Calif., owns a large collection of farm machinery plus several cars, including this T roadster pickup.*

Fordson Tractor

continued

ing the growing season, Ford had these tractors do all the power chores on his farms and worked out their bugs. He was generally satisfied with them, but he wasn't entirely happy with their performance, so he refused to put them into production. He wanted to refine them further.

During 1916, Fordsons were widely exhibited at fairs. Henry, Edsel, and Sorensen sometimes attended. The elder Ford occasionally brought along his Hawaiian orchestra and a company cameraman to take pictures for his nationally distributed newsreel. These newsreels were seen by some seven million theatergoers each week. This plus magazine and newspaper publicity made the Fordson the nation's best-known tractor even though it was still only in the experimental stage.

Those first non-production Fords and an improved model completed in 1917 showed a number of commendable points. Compact and simple, they weighed about 2500 pounds (1/3 to 1/2 their rivals), stood less than five feet high, had a 63-inch wheelbase, and could turn in a 21-foot circle. The three forward ratios (by spur gears, not planetary) gave speeds from 2.25 to 6.25 mph. Electricity came off a low-tension magneto bolted to the flywheel. The wheels were relatively small—42-inch in back and 28-inchers up front. The 4-cylinder, 20-bhp engine started on gasoline, then could be switched to kerosene—an economy feature that appealed to farmers.

Another striking feature of post-1917 experimental (and later production) models was the absence of a frame. Farkas and Sorensen designed huge castings strong enough to support the entire tractor. Henry Ford was skeptical at first, figuring a tractor ought to have a conventional frame, as in the T, but Farkas and Sorensen won out. The engine thus bolted directly to the transmission, which in turn bolted to the rear axle. The Fordson eventually went into production that way.

Although generally satisfied with the Fordson and delighted with its vast good publicity, Henry Ford still refused to market it. He wanted more time to perfect it. But America's entry into WW-I on Apr. 6, 1917, forced his hand.

The next day, Percival L. Perry, head of Ford of England, asked Dearborn to send Sorensen and others to help the British build Fordsons to increase food production. Sorensen and part of his staff immediately sailed for England. But a London air raid on July 23 prompted the British government to shift its production emphasis on aircraft and to abandon its tractor plans. Instead, England put in an urgent request for Dearborn to build Fordsons here and to ship 6000 overseas immediately. The fact that 6000 tractors represented a sixth of 1916 world production daunted no one. Ford could do anything.

Henry was still reluctant to go into production—the Fordson wasn't yet quite "right." But after Viscount Northcliffe, head of a permanent British mission in the U.S., personally pleaded with Ford, the manufacturer finally said yes. Henry Ford & Son quickly built a plant in Dearborn and, by the end of the year, finished 254 machines. Production rose rapidly after that. Ford filled the entire order (raised to 7000) by Apr. 1918.

ONCE FORD got into producing his tractor, he put himself behind it wholeheartedly. Tractors, he said, would solve the world's food problems, because one machine could produce 50 times its weight in food each year. One ship carrying tractors to Europe equalled 50 ships carrying food. Fifteen thousand men in his factories, he said, could produce 1000 tractors a day, and these tractors, not bookkeepers, would sow and harvest the world's foods.

Fordson, according to the *Denver Post,* planned to build a million tractors and sell them for 10¢ a pound. "I am going to make a Ford car, truck, and tractor and sell them all for $600," he boasted, "if I don't croak first."

On Apr. 23, 1918, Ford donated the first Fordson manufactured for domestic use to the famed horticulturist, Luther Burbank. When the machine rambled into his yard in Santa Rosa, Calif., Burbank exclaimed, "Just like Ford: all motor and no frame!" Ford's closest friend, Thomas A. Edison, received Fordson #2.

Accepting orders from the tractor-starved American market, Ford had sold 5067 by June 1918 at the cost price of $750 and had 13,463 orders on hand. By year's end, he'd produced and sold no fewer than 34,167 units.

Ford thus leap-frogged past America's previous #1 tractor maker, International Harvester, which itself had increased production 36%. More than that, Fordson had sold all its postwar machines without spending a penny on advertising. Indeed, Ford's attitude toward advertising was, in Mar. 1920, "...why cultivate a demand for something we cannot supply? We could sell 25,000 tractors tomorrow if we had them." Distributors, similarly, were told "not to run wild on this subject of Tractor advertising."

To show off the new tractors, though, Ford dealers held plowing demonstrations in many sections of the country. Several thousand farmers saw a Fordson exhibition near Oakland, Calif., in Oct. 1918, after which one reporter wrote, "They came, saw, and were convinced. The horse is now the most extravagant motor known."

Special training courses were held to teach women how to drive tractors. One farmerette said she began the training with reservations, not knowing whether she could stand driving a tractor six days a week for three months. Yet, after the harvest season, she expressed great satisfaction with her job.

Ford's tractor production went to 57,290 in 1919, then to 70,885—35% of America's output—in 1920. International Harvester, for all its farm-implement

FORD ARCHIVES, HENRY FORD MUSEUM

Ford and Ferguson

THE FERGUSON plow was sold as a Fordson accessory as early as 1930. Its 3-point hitch positively prevented Fordsons from tipping over backwards.

In Oct. 1938, Henry George (Harry) Ferguson of Ulster, Ireland, demonstrated his 3-point plow along with a hydraulic system for raising and lowering it. Henry Ford was particularly impressed and delighted, so much so that he and Ferguson entered into a "gentlemen's agreement."

Ferguson was to place his inventions and his own services at Ford's disposal. Ford, in return, was to manufacture a tractor incorporating the Ferguson System, as it was called. Ford hailed the Ferguson System as the "most revolutionary step that mechanical farming has taken." He also predicted that Harry Ferguson's name would go down in history alongside the likes of Thomas Edison, Alexander Graham Bell, and the Wright Brothers.

In June 1939, Ford and Ferguson introduced their new tractor—the Model 9N. Among its nuances was a plastic seat made of field grass. Tractor manufacturers were relieved to learn that the 9N would sell for $585, not $300 as some had feared.

Ford produced 88,933 tractors during 1939-41, taking 20% of the market and moving from zero to the #2 spot in tractor sales (behind I-H, with 40%). Actually Ford sold every machine at a loss. Edsel Ford suggested that, with the outbreak of war, tractor sales be discontinued. Henry said no, and the company produced 98,826 units during WW-II, still at a loss.

In 1946, Henry Ford II, now the company's president, tried to reach some sort of formal contract with Harry Ferguson for a better definition of the gentlemen's agreement. After a few complicated misunderstandings, Ford and Ferguson severed all relations. Ford organized an independent distributing company, Dearborn Motors Corp., in 1946. In 1948, Ferguson, now head of his own tractor company, sued Ford for patent infringement for $251 million. Four expensive years later, Ford settled out of court, giving Ferguson $9.25 million.

The rift would have greatly upset the elder Ford, because he always considered tractors more a hobby and a philanthropy than a business. □

Harry Ferguson (left) and Henry Ford check hydraulic-lift plow in 1939.

experience, couldn't beat the Fordson challenge, and General Motors, which had launched the Samson tractor in 1918 (see p. 40), closed out its entry in 1923 with a $33 million loss.

THERE WAS TROUBLE brewing for the Fordson, however, and it came on three different fronts. First, there was a "suppressed" report from the assistant agriculturist of the U.S. Department of Agriculture, Prof. Arnold P. Yerkes, that cast the Fordson's mechanical attributes in a poor light in the nation's farming press.

Second, the Fordson tractor was quickly getting a reputation as a maimer and killer of drivers. Rumor and fact had it that, under certain conditions, Fordsons would rear up on their hind wheels and topple over backwards, pinning or crushing their drivers underneath.

And third, the nation's farm economy and its demand for tractors was beginning to wane after the early 1920s. Taking these items one at a time:

Prof. Yerkes, on orders from the Secretary of Agriculture, had visited Ford's farms in Dearborn and witnessed what were probably still experimental tractors in the field. He enjoyed Ford's full cooperation, and the professor's report was to be strictly confidential, but it somehow leaked out and found its way into print, both in a popular farm magazine and later in the form of pamphlets probably distributed by Ford's rivals.

Prof. Yerkes's report said, in essence, that Fordson tractors were underpowered, that they boiled almost constantly, that they weren't able to pull tandem plows nor plow very deep even with one, that there was no way they could be produced for Ford's target price of $300 (nor were they), and that their cleats packed up in loose soil. The "suppressed" report made no mention of the Fordson's rearing tendencies. It was released to the public on Aug. 1, 1918, before the rearing problem became epidemic.

Ford managed for several years to ignore complaints about the Fordson's fatal habits, but when Hearst editor Arthur Brisbane wrote to Ford's secretary, Ernest G. Liebold, that three Long Island farmers were killed under Fordsons, Liebold replied that such information "seems to have been given out as organized propaganda throughout the country.... We have paid but little attention to it as we have only 53,000 or 54,000 tractors in use."

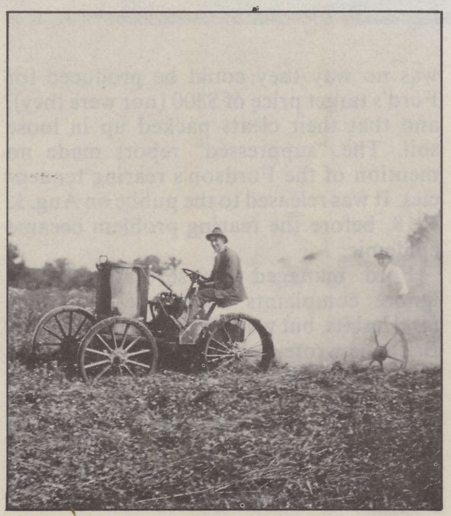
The rearing-up trait became so common that one farm journal suggested that Ford

Fordson Tractor

continued

PHOTOS COURTESY FORD ARCHIVES, HENRY FORD MUSEUM

Above: *Henry Ford and his son Edsel often attended tractor shows. Here the two are pictured with a Fordson at the National Tractor Demonstration at Lincoln, Nebraska, in 1921.* ***Below:*** *One of many endurance tests conducted by Henry Ford to acquaint farmers with the advantages of the Fordson tractor was held near Wichita, Kansas, in September 1919. Beaming Fordson sales officials and tractor drivers pose in front of recordsetting machine.*



Henry Ford's boiler-fired tractor of 1909 sprays dust over the hired hand riding the cultivator.

inscribe each machine with a warning in red paint: "Prepare to Meet Thy God." Another magazine listed the names of 136 drivers who'd been killed or injured underneath Fordsons.

Finally, after hundreds of deaths and manglings, Ford introduced several safety devices, including rigid fenders with rear extensions, called "grousers," designed to touch the ground before the tractor could flip over backwards. There was also a pendulum kill switch added to the magneto.

HENRY FORD & SON merged into the Ford Motor Co. in mid-1920, about the time the postwar agricultural boom began to fade. As a result, Ford found himself in a buyer's market and had to promote and advertise his tractors vigorously.

Ford car dealers, who were added to the Fordson distributing organization, had to buy ad space forthwith. Sales-promo films and literature were shipped to dealers, and the Fordson was put through its paces and entered in plowing contests throughout the country. More important, Ford dropped the Fordson's price from $790 to $625, a figure below the cost of producing it!

Even so, Fordson couldn't buck the nation's depressed agriculture. Ford still led in tractor production in 1921 but built only 36,781 units, a little more than half its 1920 volume. In Feb. 1922, Ford again reduced the Fordson's price, this time to an unheard-of $395.

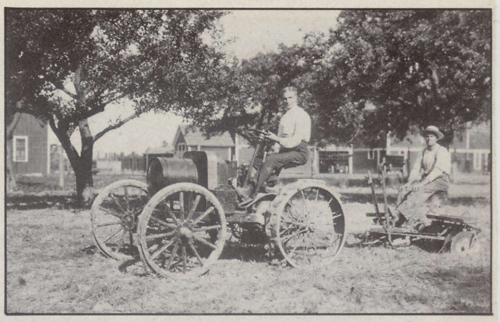
The president of International Harvester couldn't believe it. Even so, he, too, dropped his tractor's price—from $900 to $670.

Ford, in order to increase volume enough to begin showing a profit, announced an all-out campaign to sell tractors to construction and industrial firms and to municipalities. An industrial line of implements, ranging from road graders to street sweepers, hoists, and cranes, was added to dealer stocks, and Ford boasted that his tractors now and 1700 potential uses.

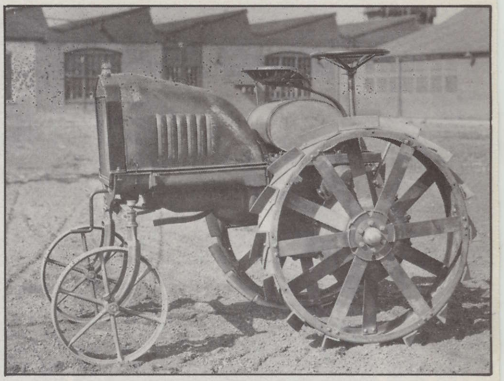
Ford built 68,985 tractors in 1922, at which time he opened up a new River Rouge plant with an annual capacity of a million units. He then raised output to 101,898 in 1923. A number of these tractors were bought by Russia, which accepted delivery of 24,600 between 1920 and 1926. The company produced a record 104,168 machines in 1925 and maintained its ranking as America's #1 tractor manufacturer through 1926.

In 1927, though, International Harvester outsold Fordson, partly because I-H dealers adopted a policy of challenging Ford dealers to tractor duels on every possible occasion. The Fordson, once a match for any rival, was now often beaten. And other tractor manufacturers, notably McCormick-Deering, Farmall, Case, and Minneapolis, also began to crowd Fordson.

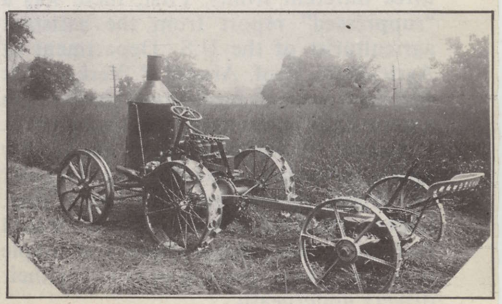
By 1927, as with the Model T, it was obvious that the Fordson tractor was



Above: *Forty-three-year-old Henry Ford at the wheel of his first tractor in the summer of 1907. The "automobile plow" was equipped with a 4-cylinder Model B engine and numerous 6-cylinder Model K parts.* ***Below:*** *Experimental "tractor bug" of Model T extraction looks as if it should be traveling to the left. But the seat and steering wheel clearly illustrate that the rear-engined model's forward speed is to the right.*

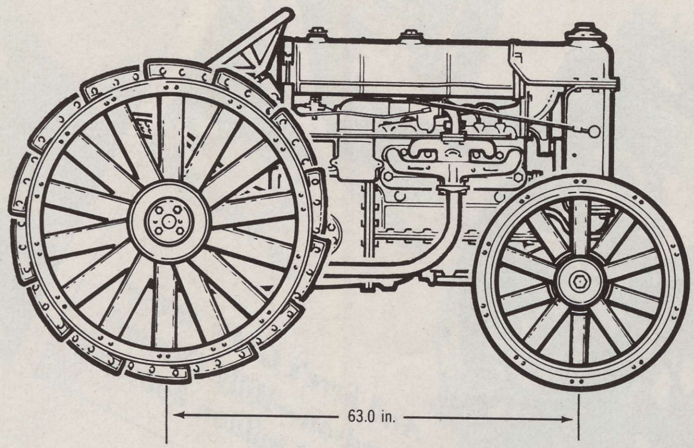


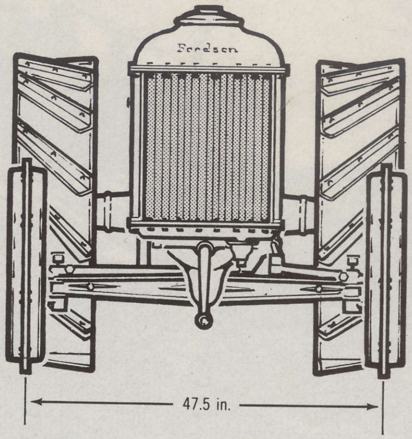
Above: *Henry Ford experimented with Model T tractors from 1907 onward. Here one of the last and most improved of the flivver tractors stands alongside a conventional T. Water tanks mounted on both sides of motor. Tractor was expected to sell for $200 and was scheduled to enter the market in December 1915. But Henry Ford never offered it for sale.* ***Below:*** *Henry Ford's second tractor resembled a lightweight ministeam engine complete with boiler and smokestack. The vehicle was built in the spring of 1909.*



specifications

Illustrations by Russ von Sauers, The Graphic Automobile Studio





1923 Fordson tractor

Price when new ..... $395 f.o.b. Dearborn (1925).

Optional equipment ..... Grousers.

ENGINE

Type ..... In-line, L-head 4, cast-iron block, 3 mains, splash lubrication.
Bore & stroke ..... 4.00 x 5.00 in.
Displacement ..... 251.3 cid.
Max. bhp @ rpm ..... N.a.
Max. torque @ rpm ..... N.a.
Compression ratio ..... N.a.
Induction system ..... Single downdraft carburetor operates on gasoline or kerosene, gravity fuel feed, manifold heater for kerosene, water air washer.
Exhaust system ..... Cast-iron manifold, single exhaust.
Electrical system ..... High-tension magneto on flywheel, handcrank starting.

CLUTCH

Type ..... Multiple discs in oil; 17 hardened plates.
Disc diameter ..... 7.0 in.
Actuation ..... Mechanical, foot pedal.

TRANSMISSION

Type ..... 3-speed manual, constant mesh.
Ratios: 1st ..... 4.615:1.
2nd ..... 2.506:1.
3rd ..... 1.00:1.
Reverse ..... 2.615:1.

DIFFERENTIAL

Type ..... Worm drive.
Ratio ..... 17.74:1.
Drive axles ..... Semi-floating.

STEERING

Type ..... Bevel pinion & sector.
Turns lock to lock ..... 3.5.
Ratio ..... N.a.
Turn circle ..... 21.0 ft.

BRAKES

Type ..... Multiple discs on transmission, 16 hardened plates operated by clutch pedal.
Drum diameter ..... None.
Total swept area ..... N.a.

CHASSIS & BODY

Frame ..... None.
Body construction ..... None.
Body style ..... 1-seater tractor.

SUSPENSION

Front ..... I-beam axle, central pivot, no springs.
Rear ..... None.
Tires ..... None.
Wheels ..... Cast-iron, 42-inch rear, 28-inch front.

WEIGHTS & MEASURES

Wheelbase ..... 63.0 in.
Overall length ..... 113.25 in.
Overall height ..... 54.75 in.
Overall width ..... 63.38 in.
Front tread ..... 47.5 in.
Rear tread ..... 48.0 in.
Ground clearance ..... 11.63 in.
Curb weight ..... 2920 lb. wet.

CAPACITIES

Crankcase ..... 9 qt.
Cooling system ..... 12 gal.
Fuel tank ..... 21 gal. kerosene plus 5 qt. for gasoline.

slipping competitively. It was too light and weak to meet the needs of larger farms, where minimum requirements called for 3- and 4-plow tractors. The Fordson soon became relegated to smaller farms or light duty as a second tractor. Its rivals were simply more sophisticated mechanically and more powerful in the field.

In Feb. 1928, Henry Ford bowed to the inevitable and abandoned tractor manufacture in the U.S. He shipped the Fordson's production machinery to his plant in Cork, Ireland, which offered lower labor costs and a proximity to less competitive European markets.

As the worldwide Depression deepened, Fordson shifted production again, this time to Ford's Dagenham factory in England. Dagenham built 826,778 tractors between 1933 and 1937. And although Cork and Dagenham exported a few Fordsons to America during the 1930s, Ford wasn't a factor in domestic tractor sales during that period. In 1939, though, more than 300,000 Fordsons were still in service in the U.S. That year, too, Ford introduced the Ford-Ferguson Model 9N, which claimed to be the first American production tractor with a 3-point hitch and a hydraulic system to raise and lower its implements.

THE FORDSON TRACTOR we chose for this driveReport belongs to Fred Heidrich Sr., a farmer and collector near Woodland, Calif. Mr. Heidrich owns several restored vintage tractors and farm vehicles plus several interesting historic cars.

He was kind enough to let us photograph two of his Fordsons, a 1923 and a 1925, and our driving impressions come from the '25 model. Notes were taken by SIA's editor, Michael Lamm:

"I originally learned to drive on farm tractors back in Texas at age 12, and I've driven many different types and brands over the years. Never, though, have I tackled a Fordson, so here comes a new experience.

"Like the Model T, the Fordson takes some getting used to. Starting the engine, for example, can sometimes make a grown man weep, especially in cold weather and more especially since the carburetion, air-washing, fuel-heating and -distribution systems are fairly complicated.

"I should explain that Fordsons come with a water-bath air washer that bubbles air into the intake tube. This leaves the air oxygen-rich and heavy but also damp, which is already one strike against easy starting.

"Add to that the fact that the Fordson is intended to be started on gasoline but then run on kerosene, with a manifold heater to bring the kerosene up to combustible temperature and a carburetion system compatible with both fuels, and that's strike two. Strike three is that it's a heavy engine to handcrank, but that's what it

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The Israelis Stretch a Stude

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axis, then pushed it down into a special compartment.

"The convertible top was silver and black, with a white silk lining. Painted black outside, the interior used light blue leather throughout. The phaeton's window moldings and door sills were chromed. Passengers could enjoy a built-in bookshelf, twin wooden radio speakers, a small refrigerator, and built-in reading lamps.

"Mr. Zalman and three workers completed the special phaeton in just three months. At the beginning, Zalman wrote to South Bend for guidance, but the factory engineers were pretty skeptical of the project. Later they were impressed with the end result.

"Mr. Zalman told me sadly that the car was sold in late 1966 to a man in Haifa and hasn't been seen since."

Yaron Fidler returned to the U.S. hoping he could revisit Israel later to continue his search. But another SDC member, Franklin Wilson, took up the torch after reading Fidler's account in the club magazine, *Turning Wheels*. Wilson started inquiring about the car through various Jewish agencies but has not been able to trace the Lark phaeton. The car was believed to have been in the Israeli Defense Museum in Haifa but seems no longer to be there. Its current whereabouts remain a mystery. □

Our thanks to Larry Swanson, John Tom Cohoe, and Franklin Wilson of the Studebaker Drivers Club, Box 791, Oswego, Ill. 60543. Special thanks to Yaron Fidler, New York, N.Y.

Fordson Tractor

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takes,because there's no battery and no starter.

"So you shove the trans into neutral (the Fordson ironically uses a crunch-gear transmission and multiplate clutch, as on early Model A's), push the column-mounted throttle lever down a few notches, retard the 'dash'-mounted spark, turn the manifold valve to 'G' (gasoline), pull out the choke, lift up the heat valve to 'ON,' and turn on the gasoline. You're now ready to spin the engine.

"That's easier said than done, though, and dealers sold an accessory shaft that let the Model T's rear wheel be hooked up to the Fordson's crank nose. Assuming you could crank the T and then jack up one rear tire, you had a lot better chance of starting your Fordson.

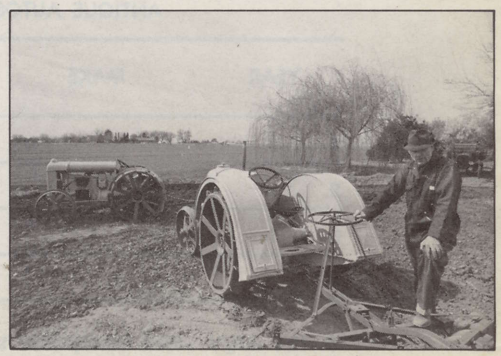
"Once chuffing, wait 3-5 minutes, switch the manifold valve to 'K' (kerosene), hop in the saddle, depress the clutch with your right foot, shift into any of the three forward gears with your left hand (in relation to a normal 3-speed shift pattern, the Fordson's low is where reverse usually stands, second is in low, high is second, and reverse is high). You can take off in any gear, and second is recommended for plowing.

"The clutch engages smoothly, but the Fordson, like so many tractors, steers hard. You set your hand throttle, adjust the spark, and the tractor goes along without another tweak all day.

"The Fordson's tipping tendency becomes its only handling concern, and I was conscious of the problem but didn't try to provoke it. The nearest I came was in letting the clutch out swiftly, which made the front wheels lighter to steer. But I've driven plenty of tractors that lifted their front tires when I popped the clutch—that's not unique to the Fordson.

"The brakes come on when you shove the clutch all the way to the floor—beyond its point of disengagement. I never felt the need for a brake, though, because top speed is 6.25 mph.

"I understand that the Irish/British Fordsons of 1928-37 were considerably better than the earlier U.S. ones. Among their changes were more displacement (267



cid), a new carb, external mag, and a redesigned transmission. European Fordsons were also engineered to run on gasoline only, although a kerosene version was offered optionally."

No one knows just how many Fords are still around, but like the Model T, they were—and remain—indestructible. We know of a few being used on small farms even today, and every rural community still has a few standing behind barns, slowly rusting. □

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