Fordson Tractor

For Thirty-Five Years Henry Ford, a farmer’s boy, has been working on the problem of a successful tractor for the farm, and, for the past fourteen years, has devoted much time, and a vast amount of money, to the development of the present Fordson tractor. In the usual Ford way it grew into shape through constant experimentation, not alone in the workshop but on the farm, and that he might get the experiences from various soils and conditions which face the farmer, he gradually acquired a farm numbering several thousand acres, and here the Fordson tractor, under the guidance of his genius, was developed. From the records it has made in all parts of the civilized world, it comes the nearest to being the all-around satisfactory tractor for the farm.

This fact is strengthened in the knowledge that while 350,000 tractors were on farms in the United States (Oct. 1921), there have been more than 200,000 Fordson tractors made and sold in the past four years.

What It Is

The Fordson Power and Transport Unit is a most economical four-cylinder, four-cycle power plant. It delivers power up to its capacity (18 H. P.) when and where required.

The unit will also transport itself and any number of trailers carrying a total load up to 15 tons.

Easy Operation

A boy can run and operate the Fordson Power and Transport Unit. Its simplicity makes unnecessary any special skill. The automobile type drive is quickly mastered, and enables the driver to turn in a 21-ft. circle. It can be adapted to turn a 14-ft. circle.

Built For Constant Service, This Unit Will Deliver its Rated Horsepower—24 Hours a Day.

Low Fuel Cost

The fuel consumption is about one pint of kerosene per brake horsepower per hour; and for plowing about 2-1/2 gals. per acre are required, depending on load and soil conditions.

General Dimensions

Overall length, 102 inches. Width 6-1/2 inches. Height 55-1/16 ins. Wheel base 63 ins. Tread of wheels 49-1/2 ins. Total weight 2,562 lbs.

Mechanical Details

The cylinder bore is 4 ins., the piston stroke 5 ins. It has dependable magneto ignition, a multiple-disc clutch running in oil. Constant mesh selective type transmission, three speeds forward and one reverse. Ball bearings. Three point suspension. Splash system of lubrication. Thermo-siphon cooling system. Gravity fuel system. Worm and worm-wheel drive. All gearing entirely enclosed and running in oil.

What it Does as a Power Unit

As a stationary power plant, for either permanent or emergency work, the Fordson Power and Transport Unit will deliver 18 H. P. to any machine driven through shaft, belt, gears or chain. It will do this at an engine speed of 1,000 revolutions per minute. A governor can be attached where power requirements are either intermittent or disposed to fluctuate.

What it Does as a Transport Unit

When through operating a a power unit, it can be used as a transport or haulage unit and driven under its own power to the next job, trailing behind it at a speed of 6 to 12 miles per hour, over ground none too good, whatever material or equipment is desired. Two or four-wheel trailers may be used, and even though the load is 10 to 15 tons, it will pull up a 15 per cent grade.

Industrial Applications

Practically every industry can use the Fordson Power and Transport Unit, because it does more work, more economically, in a shorter time.

Manufacturers use it for transporting trailers loaded with stock or refuse.

Cities, villages and counties build roads and parks, haul garbage wagons, clean streets and remove snow from sidewalks and streets with the Fordson.

Contractors have put it into service for excavating, hauling equipment and construction material, operating stationary machinery and pulling big trucks cut of excavations.

The Fordson is being used as an industrial locomotive, and with runners replacing the front wheels it has supplanting horses for sledding timber over the snow.

On the golf course or athletic field, the Fordson pulls the lawn mower, roller or other equipment necessary to keep the ground in good condition.

It Pays for Itself

As the daily fuel cost is only about three dollars and
the interest on the investment, depreciation and upkeep cannot exceed another dollar, or four dollars in all, it will readily be seen that it cannot take very long for the Fordson Power and Transport Unit to pay for itself—more particularly because of the great saving effected in labor and time.

**Low Initial Cost**

The first cost of the Fordson and Transport Unit is surprisingly low, being only about one-fifth the cost of the average five-ton truck.

**Design and Construction**

In designing the Fordson Tractor the engineers have worked with the idea of obtaining maximum efficiency with the minimum number of parts. This simplicity of design and construction, together with accurate workmanship in the making of the various parts, gives the Fordson Tractor the following superior features:

A—More rigid construction.
B—Elimination of frame, radiator hose, hose clamps and connections, adjusting collars for ball bearings and valve tappet adjustments.
C—Light weight
D—Fewer parts to get out of order
E—Less parts to assemble and adjust
F—Less time required to make repairs

**Motor**

4-cylinder bore 4”, stroke 5”. Heavy duty type motor designed to work at its full capacity for long continued periods with a minimum amount of wear.

Large bearings.
High safety factor of all parts to insure against wear and breakage.

Starts on gasoline, operates on kerosene.

**Clutch**

Multiple disc operating in oil. No facings to wear out and does not require adjustments.

**Transmission**

Constant mesh selective type transmission possessing these advantages:

A—Very compact design considering the number of gear ratios obtained. This combines strength with light weight
B—Practically eliminates possibility of stripping teeth of the gears, as instead of meshing a couple of teeth as is common in some sliding gear transmission engagement is provided for all teeth by means of internal gears constructed solely for that purpose.
C—Three forward speeds, one reverse. Three forward speeds instead of two as in the case of many tractors give the Fordson greater flexibility to working conditions.

D—Power transmitted through but one pair of gears in high and plowing speeds. This with the worm driven axle makes but two reductions between engine and wheels which means a comparatively low power loss and insures higher operating efficiency.

**Worm Drive**


**Water Type Air Washer**

One of the most important features of the Fordson is the air washer which removes all dust and solid matter from the air before it enters the cylinders; thus preventing excessive wear to the pistons and cylinder walls. Also, it moistens the air in its passage through the water, reducing carbonization and pre-ignition. This is a decided improvement over the dry type air washer.

**Advanced Design of Radiator**

The radiator lines up with and is bolted to the engine; thus greatly increasing its structural strength. This also reduces possibility of water leakage and eliminates the trouble connected with replacing hose, which clog up and deteriorate. Large water openings insure better cooling.

**Three Point Suspension**

Reduces strain on the separate units and adds to the flexibility of the tractor.

**Easily Maneuvered in Field**

Because of light weight, short wheel base, small turning radius, and direct acting steering mechanism.

**Industrial Uses of the Fordson**

Because of its general utility and its economy of operation, the Fordson tractor, though primarily built for the farm, has proved practical for hundreds of uses in the city. It supplies fraction power for hauling and belt power for operating machinery—it is an all-around power plant.

**The Fordson is Being Successfully Used for:**

- Cable stretching
- Concrete mixing
- Excavating
- Freight car towing
- Golf course maintenance
- Grading
- Grass cutting
- Hauling
- Hoisting
- Industrial locomotive
- Land clearing
- Lighting plant operation
- Operating Ferris wheel
- Pile driving
- Pulling snow plow
- Pumping
- Race track maintenance
- Road grading
- Rock drilling
- Rock crushing
- Rolling
- Sand loading
- Saw mill operation
- Street cleaning
Machine shop operation  Terracing
Moving buildings  Oil well drilling

**Fordson Service**

There are no orphans among Ford products.

The Ford Motor Company never loses sight of the fact that every purchaser of one of their motor units has a right to expect that the company shall always be in a position to keep them running.

It is this assurance that has put Ford products in a class by themselves. Notice how the confidence of the automobile buying public in the Lincoln car returned as soon as it was known that Mr. Ford had bought it? That announcement meant that every buyer of a Lincoln car was assured of full value by never finding himself unable to get service on it at a reasonable price. It is the service that has helped to make the Fordson Tractor stand first all over the world.

**Tractor Gear Ratios**

The ratio of engine to rear axle is as follows:

<table>
<thead>
<tr>
<th>Speed Type</th>
<th>RPM Worm</th>
<th>RPM Wheels</th>
<th>MPH Road Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Speed</td>
<td>207.7</td>
<td>12.23</td>
<td>1.53</td>
</tr>
<tr>
<td>Intermediate (Plowing) Speed</td>
<td>382.3</td>
<td>22.49</td>
<td>2.81</td>
</tr>
<tr>
<td>High Speed</td>
<td>958.3</td>
<td>56.36</td>
<td>6.93</td>
</tr>
<tr>
<td>Reverse</td>
<td>366.4</td>
<td>21.56</td>
<td>2.69</td>
</tr>
</tbody>
</table>

The following table gives the revolutions of the rear wheels and worm gear per minute and the road speed in miles per hour, in low, intermediate, high and reverse gears:

<table>
<thead>
<tr>
<th>Gear Type</th>
<th>RPM Wheels</th>
<th>RPM Worm</th>
<th>MPH Road Speed</th>
</tr>
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<tbody>
<tr>
<td>Low</td>
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<td>21.56</td>
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</tr>
</tbody>
</table>

**Horse and Horseless Farming**

The harness and whiffletrees for an eight-horse team cost more than a Fordson Tractor. Yet the eight won’t do more work.

The eight horses cost double the price of the Fordson, and that at the low price of horses.

Grooming eight horses once a day at 15 minutes a horse takes two hours. Watering and feeding, another hour. Harnessing and Un-harnessing, hitching up and unhooking, leading from barn to implement, etc., take yet another hour. Four hours’ work has been lost without expenditure of any energy in productive work.

A Fordson can be filled with water, fuel and oil, and thoroughly gone over in half an hour.

A Fordson can be worked continuously day and night through all the seasons of plowing, seeding, haying, harvesting.

Horses cannot be humanely worked more than eight hours in the heavier operations or ten in the lighter.

Fordsons are not troubled with flies, heat or hard ground. Horses suffer terribly and die in appalling numbers when hard worked on hard land in hot weather.

A Fordson can do all that horses can do, as well as horses can do it and belt work besides.

It takes a few hours to make a Fordson.

It takes three years’ time and three years’ care (some horsemen say five years) to make a work horse. At any time in those three years the colt may die and be a total loss.

A Fordson eats only when it is engaged in productive work.

A Fordson makes every acre of the farm a source of profit.

An eight-horse team withdraws 40 acres from the farm’s return to feed itself.

**Soils Differ in Draft Required**

A Fordson can be filled with water, fuel and oil, and thoroughly gone over in half an hour.

A Fordson can be worked continuously day and night through all the seasons of plowing, seeding, haying, harvesting.

Soils differ in draft required.

The following table shows the draft per square inch of cross section of furrow for various soil conditions. This data, of course, is approximate but it shows the wide range of draft.
In Sandy Soil 2 to 3 lbs. to sq. inch
In corn Stubble 3 lbs. to sq. inch
In Wheat Stubble 4 lbs. to sq. inch
In Blue Grass Sod 6 lbs. to sq. inch
In June Grass Sod 1 lbs. to sq. inch
In Clover Sod 8 lbs. to sq. inch
In Prairie Sod 15 lbs. to sq. inch
In Virgin Sod 15 lbs. to sq. inch
In Gumbo 20 lbs. to sq. inch

The variation in draft in different soils is shown by the following example: Take a plow with two 14” bottoms plowing at a depth of 6”.

The cross section of each plow is 14 x 6, or 84’ square.

Twice this for two bottoms gives 168 sq. ins.
Then 168 x 3 lb.—504 lb. draft in sandy soil.
Likewise—168 x 7 lb.—1,176 lbs. draft in clover sod.
Likewise—168 x 8 lb.—1,344 lbs. draft in clay soil.

Size of Belt Pulleys
The standard Fordson belt pulley is 9-1/2” in diameter with a 6” face. Special pulleys are not furnished, as the belt pulley attachment was designed to accommodate a pulley. In order to determine the size of pulley to be used on any implement connected up with Fordson Tractor first ascertain the speed at which the pulley on the implement is to be driven. The following table shows the size of pulley to use on the implement in order to obtain various speeds from 475 to 1900 R.P.M.

Speed on Fordson Tractor Pulley—1000 R.P.M.
R.P.M. Implement Size of Pulley
475 20 inch
487 19-1/2 inch
500 19 inch
513 18-1/2 inch
527 18 inch
543 17-1/2 inch
559 17 inch
575 16-1/2 inch
594 16 inch
613 15-1/2 inch
634 15 inch
655 14-1/2 inch
679 14 inch
704 13-1/2 inch
731 13 inch
760 12-1/2 inch
782 12 inch
826 11-1/2 inch
863 11 inch
926 10-1/2 inch
950 10 inch
1000 9-1/2 inch

Belt Lengths
The most satisfactory lengths of belts for use on various machines, and the lengths recommended, are as follows:
Separator 75 or 100 foot belt
Silo Filler 75 or 100 foot belt
Husker 75 or 100 foot belt
Shredder 75 or 100 foot belt
Baler 75 or 100 foot belt
Grinder 50 or 75 foot belt
Pump 50 or 75 foot belt
Saw 50 or 75 foot belt

Unlimited Uses for the Fordson
* Indicates Belt Uses

Alfalfa Cutting Land Clearing
Beet Pulling Land Grading
Binder Hauling Land Rolling
Building Moving Levee Building
Canal Boat Hauling *Lighting Plant Operation
*Churning Lime Spreading
*Cider Press Operation Log Hauling
*Clover Hulling *Machine Shop Power
Combination Harvester Hauling *Oil-Well Drilling
*Concrete Mixing *Peanut Blancher Operation
Corn Cutting *Peanut Digging
Corn Listing *Log Driver Operation
Corn Loading *Planing Mill Power
*Corn Shelling *Planting Mill Power
*Corn Shredding Planting
*Cotton Ginning Plow
*Cream Separator Operation Potato Digging
Cultivating Corn Potato Planting
Cultivating Sugar Beets *Printing Press Power Plant
Cultivating Sugar Cane Produce Hauling
Cultivating Orchards Pulverizing
Cultivating Vineyards Raking
Dilting Road Grading
Discing Road Oiling
Ditching Road Sprinkling
*Drainage Pump Operation Rock Crushing
*Ensilage Cutting *Quarrying
Excavation Work Raking
*Feed Cutting Road Grinding
*Feed Grinding Road Oiling
Fence Stretching Road Sprinkling
*Ferris Wheel Operation Rock Dragging
Fertilizer Spreading
For the purpose of compiling data on the cost of grading with the Fordson Tractor, the City Dealers of Portland rented a Fordson to the City of Portland for a period of 31 days during the months of August and September, 1921.

The Fordson was put at work grading five city blocks, running from 23rd to 25th streets, on Umatilla Ave., filling two bridge approaches across Johnson Creek, thence to 27th St., then turning south two blocks to Sherrett Street. Two blocks of this road was old macadam, several feet above grade; the balance was building new road. The greater part of the cut came at the extreme ends of the job requiring that nearly all of the dirt had to be hauled a distance of nearly two blocks for filling the bridge approaches up to grade.

There were no horses used on the job, the Fordson doing all the work. Implements used were an 8-inch Rooter plow and a 5 foot Fresno with automatic hitch. The grading was completed to sub-grade ready for paving.

The engineer’s estimate on this job was $1.25 per yard. Following statistics will show the cost to the city using the Fordson.

Charge for Fordson and operator at $12.00 per day for 31 days $372.00
Fuel, kerosene at 15-1/2 c per gal, 210 gallons $32.55
(average of less than 7 gallons per day)
Motor oil at $1.10, 12 gallons $13.20
(average cost of 43c per day)
Transmission oil (original fill up) $5.50
$423.25

Amount of dirt moved, 725 yards
Cost per yard, 56c.
Cost of fuel and oil per day, average 31 days, $1.67.

The showing made here is especially good considering the fact that three different drivers operated the Fordson during the 31 days.

**DETAILS**

Fordson Transmission, Clutch, Rear Axle, Front Axle, and Steering Gear

**Type:**

The Fordson Transmission is of the Constant Mesh Selective Sliding gear type.

Plowing speed, the 13-tooth pinion on upper transmission shaft, running at same speed as crankshaft, engages the 34-tooth gear which is splined to worm. The double thread worm (considered as a gear having two teeth) engages with the 35-tooth worm gear.

**New Worm Gear**

The new triple thread worm meshes with a 51-tooth worm gear, making the ratio 17:1 instead of 17-1/2:1 as on the old worm and gear. The more gear sets there are in mesh at any one speed, the more power is lost. Note that on the Fordson, besides the worm reduction, there is only one set of gears in mesh on plowing speed. The same applies to high speed, while on low and reverse there are three sets of transmission gears in mesh.

**Fordson Transmission**

This has nine gears. The number of teeth on gears are as follows from front to rear:

<table>
<thead>
<tr>
<th>Miles Position of Gear</th>
</tr>
</thead>
<tbody>
<tr>
<td>per hour</td>
</tr>
<tr>
<td>High, 1st set</td>
</tr>
<tr>
<td>Plowing, 4th set</td>
</tr>
<tr>
<td>Low, 1st, 3rd and 4th</td>
</tr>
<tr>
<td>Reverse, 1st, 2nd and 4th</td>
</tr>
</tbody>
</table>

The gear shifter lever is pivoted in a ball joint about four inches from its lower end. When gears are in neutral, lever is free to move sideways.

**Fordson Clutch**

The Fordson Clutch has 17 hardened steel disks—8 driving and 9 driven—running in oil. Driving disks have six slots which fit studs projecting towards the rear on flywheel. Driving disks alternate with driven disks, which are slotted on the outer edge to fit the six keys in the driven drum splined to the transmission drive shaft. The front and rear clutch housing are bolted together with eight 1/4" bolts. Six springs of 150 lbs. pressure
Each are placed between clutch drum and near housing. This exerts a pressure of 900 lbs. on disks placed between drum and front housing. The spring pressure is released by a pedal operated yoke, pressing on rear housing—thus compressing the six springs against the clutch drum, which it fastened stationary to the transmission drive-shaft. As soon as clutch is released, the housing and driven disks stop rotating. The transmission drive shaft is supported on two ball bearings—one in the flywheel and one in the transmission housing plate.

**Rear Axle**

The Fordson is a semi-floating axle. The outer end of the axle shaft is directly supported on a roller bearing, while the inner end has no such direct bearing, but is held in place by the differential gear to which it is splined and held by half washers.

**Differential**

The differential consists of two differential bevel gears fastened to rear axle shafts as already mentioned, and four bevel pinions placed on the differential spider in such way that they mesh with the differential gears. The spider, clamped between the two halves of the differential housing, revolves with the worm gear and thus transmits the power through the pinions to the differential gears which drive the rear axle shafts. The rear wheel is fastened to its shaft by means of a split, tapered and flanged bushing splined to the shaft. The rear wheel hub is taper bored and is drawn up on the tapered bushing by means of four screws.

**Wheels**

The wheel is 12” x 42” dia. has 14 spokes and 14 cleats 3” high, provided with 3 holes for attaching extension cleats. Weight of each wheel is 310 lbs. A 7” wide extension rim can be fastened to outside of flange of rear wheel by drilling the bolt holes in place.

**Front Axle**

The front axle is an “I” section drop forging, pivoted at the middle to the cylinder front cover, thus giving the tractor a three point suspension. The front wheels have two roller bearings and the distance between wheels at the ground is 1-3/4” less than at top.

**The Steering Gear** is of the pinion and sector type (ratio 11:40) 18” steering wheel. Tractor can turn in a 21-foot circle or can be specially equipped to turn in a 14-foot circle.

**Recent Improvements in the Fordson Vaporizer**

1. Provision made for attaching governor.
2. Tight fitting cover on Float Chamber to exclude dirt.
3. Stamped steel used for small parts lessens possibility of breakage.
4. Improved metering of fuel by use of small venturi in primary air and fuel passage.
5. Large manifold casting strengthened to eliminate any possibility of cracking.
6. Butterfly throttle valve set 1/16’ off center to give proper balance when using a governor.
7. Design made more simple and compact throughout.
8. Float and float mechanism attached to cover instead of inside of the fuel bowl, permitting easier removal and inspection.
9. Elbow formerly on lower end of vapor tube eliminated to cut out sharp bend in vapor passage. This makes a one piece vapor tube and lower cost of replacement.
10. Heat control valve redesigned to prevent sticking, by using a latch instead of a lever for raising and lowering valve. This gives a positive lock when in “On” position.
11. Heel of float lever extends up to form stop to prevent float from touching the inside of the fuel bowl when bowl is empty. This prevents float from becoming battered or punctured by rattling in the bowl during shipping or handling.
12. Redesigned float chamber, float valve and larger float. This gives greater buoyancy and tighter seating valve, thus insuring against any overflowing of fuel due to vibration when running over hard surface.
13. Greater accessibility. All screws and nuts can be removed with tools furnished with the tractor. Mixer chamber can be removed without interfering with large fuel tank. Fuel shifted from gasoline to kerosene from the seat Clean out plugs added in float and mixing chamber, so that fuel passages can be cleaned without taking off any other parts.
14. Provision made for easier starting by use of two-way valve which allows gasoline from starting tank to be
used in the regular float chamber. This eliminates the shifter valve on the mixing chamber. A spring closed priming cock for gasoline is provided on top of mixing chamber. This allows operator to prime directly into cylinders to facilitate starting in cold weather.

Official Figures Show Fordson Best

No better evidence of the efficiency of the Fordson tractor on city work, and it applies equally to the farm, can be found than in this report of the city engineer of Pontiac, Mich., Mr. L. O. Lenhardt, to the city commission.

In his analysis of tractor and team costs recently presented he sets forth:

“Grading by use of teams costs $14.40 per mile for a twenty-eight foot street. This is pay for two teams and drivers. The work is only fair, as teamsters will spare their horses by raising blade when they should take a deep cut.

“According to our experience the following is the cost of grading with a Fordson tractor per day:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repairs and depreciation</td>
<td>$1.00</td>
</tr>
<tr>
<td>Interest at 5 per cent</td>
<td>.11</td>
</tr>
<tr>
<td>Gas and Oil</td>
<td>1.65</td>
</tr>
<tr>
<td>Tractor Driver</td>
<td>4.50</td>
</tr>
<tr>
<td>Grader Operator</td>
<td>3.60</td>
</tr>
<tr>
<td>Total</td>
<td>$10.86</td>
</tr>
</tbody>
</table>

“As a tractor will grade two miles of twenty-eight foot street per day, the cost per mile is $5.43. The work is done better, as there is no tendency to avoid heavy cutting.

“Plowing and hauling is also done about twice as fast as with teams.

“For these reasons I recommend that another Fordson tractor be purchased.”

Fordson Makes Thirty-Day, Non-Stop Run

At Wichita, Kans., a thirty-day, non-stop test of the Fordson tractor was conducted to demonstrate its power of endurance and to prove the practicability of its working both day and night during rush seasons. From June 16th to July 17th, 1919, the Fordson was in operation continuously excepting only the necessary time used in cleaning up, replenishing fuel, oil, etc.

During the thirty-day run, the Fordson cut 315 acres of wheat and 71 acres of oats; plowed 157 acres; dragged 61 miles of road, besides doing some discing and seeding. The machine, which ran for a total of 721-1/2 hours, consumed 807 gallons of kerosene, 341 gallons of water in radiator and air-washer.

Probably no more strenuous endurance test has ever been imposed on a tractor of any make, than that which brought the Fordson victory at the National Tractor Show.

Record from an Ohio Horseless Corn Field

Here is the operating record of a three year old Fordson in the “Horseless Corn Field” of the American Seeding Machine Co., at Springfield, Ohio.

Note that the total cost per acre for preparing the seedbed and planting the corn averaged $1.94 per acre, including the cost of the seed corn used. The entire cultivation of this crop was done "with Fordsons.

Size of Field—40 Acres

Plowing time—58 hours—-.69/100 acres per hour average.

2—14 Inch plows.
Kerosene used—105 gallons at 22c per gallon, 2-7/8 gallons per acre.
5 gallons of gasoline.
15 gallons motor oil; crank case was drained frequently.
Blacksmith bill, sharpening plow shares, $3.00.
Total cash cost $34.40 or 86c per acre.
Discing, first time 17 hours, 234 acres per hour, 7 foot double disc.
Total cash cost $8.05 or 25c per acre.
Discing, second time 15-1/2 hours, 2-2/3 acres per hour.
18-1/2c per acre.
7-foot double disc.
Harrowing, third time with a 7-foot single spring pressure, disc followed by a spike tooth or smoothing harrow, 15-1/2 hours, 2-2/3 acres per hour, 18-1/2 c per acre.
Planting with a special 4 row planter, 10-1/2 hours, 4 acres per hour, 10c per acre.
Total hours, 116 or 3 hours per acre.
With 8 bushels of seed corn at $2.00 per bushel, the total cash cost was $77.38 or an average of $1.94 per acre, exclusive of the man’s time.

A Real Record Baling Hay.

Efficiency of the Fordson tractor when used to operate a hay baler has rarely been more conclusively demonstrated than by the tractor used by the Riverdale Farm Company, Everett, Wash.

With Fordson Power, 1921

<table>
<thead>
<tr>
<th>Day</th>
<th>Hours Worked</th>
<th>Hours Baled</th>
<th>Time Lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>9.0</td>
<td>29.54</td>
<td>0</td>
</tr>
<tr>
<td>2nd 5.5</td>
<td>18.32</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3rd</td>
<td>10.0</td>
<td>32.43</td>
<td>0</td>
</tr>
<tr>
<td>4th</td>
<td>10.0</td>
<td>30.60</td>
<td>0</td>
</tr>
<tr>
<td>5th</td>
<td>10.0</td>
<td>33.57</td>
<td>0</td>
</tr>
<tr>
<td>6th</td>
<td>8.5</td>
<td>26.48</td>
<td>0</td>
</tr>
<tr>
<td>7th</td>
<td>10.0</td>
<td>30.51</td>
<td></td>
</tr>
<tr>
<td>8th</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9th</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTALS</td>
<td>63.0</td>
<td>201.45</td>
<td>0</td>
</tr>
</tbody>
</table>
8 Horses cost, $1200. Working Life, 5000 hours at 4/5 acres per hour, 4000 acres.

4000 acres at $1200, depreciation of horses, per acre .30
Feed per horse, 40c (100 working days) per acre .40
Feed per horse, 10c a day (265 idle days) per acre .265
Two drivers, two gang plows, at $2.00 each per day, per acre .50
Cost of plowing with horses; per acre 1.46

Thus, Fordson-plowing costs one-third less than horse-plowing.
The Fordson tractor goes around the field two and one-half times to a horse-drawn gang plow’s once.

Note: During the war the tractor cost $880—present price $395.

Road Speed Data
The following table shows a comparative approximate of the engine speed, revolutions of the rear wheels and the distance traveled by the tractor when being driven in high gear:

<table>
<thead>
<tr>
<th>Rev. of Engine Per Min</th>
<th>Rev. of Rear Wheel Per Min.</th>
<th>Tractor Speed Ft. Per Min.</th>
<th>Miles Per Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>54</td>
<td>594</td>
<td>6-3/4</td>
</tr>
<tr>
<td>1185-1/16</td>
<td>64</td>
<td>704</td>
<td>8</td>
</tr>
<tr>
<td>1333-1/3</td>
<td>72</td>
<td>792</td>
<td>9</td>
</tr>
<tr>
<td>1481-1/2</td>
<td>80</td>
<td>880</td>
<td>10</td>
</tr>
</tbody>
</table>

Paces per Minute

The following speeds should not be exceeded:
Plowing, 2-3/4 miles per hour.
Harrowing and cultivating, 3 miles per hour.
**Tractor Motor Numbers**

The motor numbers of Fordson tractors will be found stamped on the right-hand side of the cylinder block near the front end of the engine. But the motor numbers of Fordson tractors do not run in the same smooth sequence as the motor numbers of Ford cars, due to the fact that some of the tractors have been assembled at the in the “overseas” factory at Cork, Ireland, while other tractors have been assembled at the various branches.

Serial Numbers of Tractors Shipped Each Month from October I, 1917, to October 31, 1920.

**NOTE:** * indicates made at Cork, Ireland.  
# indicates made at a factory branch.  
Others were made at the main plant.

### 1917
- **October**: 1 to 75
- **November**: ------
- **December**: 27 to 259

### 1918
- **January**: 260 to 616  
  - **February**: 617 to 1721  
  - **March**: 1732 to 3082  
  - **April**: 3083 to 3900  
  - **May**: 3901 to 9580  
  - **June**: 9581 to 11937  
  - **July**: 11938 to 15225  
  - **August**: 15226 to 18637  
  - **September**: 18638 to 22247  
  - **October**: 22248 to 26287  
  - **November**: 26288 to 29978  
  - **December**: 29979 to 34426

### 1919
- **January**: 34427 to 39554  
  - **February**: 39555 to 44782  
  - **March**: 44783 to 50961  
  - **April**: 50962 to 53079  
  - **May**: 53080 to 53110  
  - **June**: 53111 to 55304  
  - **July**: 55305 to 60864  
  - **August**: 60865 to 63000  
  - **September**: 63000 to 63003 *

### 1920
- **January**: 92114 to 96973  
  - **February**: 96974 to 100000  
  - **March**: 100001 to 102295 #  
  - **April**: 102296 to 105000 #  
  - **May**: 105001 to 105036  
  - **June**: 105037 to 105893 *  
  - **July**: 105894 to 106269 *  
  - **August**: 106270 to 106864  
  - **September**: 106865 to 107641 *  
  - **October**: 107642 to 107955 *  
  - **November**: 107956 to 108272 *  
  - **December**: 108273 to 108386 *
### 1921 (continued)

<table>
<thead>
<tr>
<th>Month</th>
<th>Serial Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>172001 to 175687</td>
</tr>
<tr>
<td></td>
<td>158327 to 158970 #</td>
</tr>
<tr>
<td></td>
<td>108387 to 108456 *</td>
</tr>
<tr>
<td>May</td>
<td>175688 to 181313</td>
</tr>
<tr>
<td></td>
<td>158971 to 159453 #</td>
</tr>
<tr>
<td></td>
<td>108457 to 108653 *</td>
</tr>
<tr>
<td>June</td>
<td>181314 to 187794</td>
</tr>
<tr>
<td></td>
<td>108654 to 108680 *</td>
</tr>
<tr>
<td>July</td>
<td>187795 to 193985</td>
</tr>
<tr>
<td></td>
<td>159454 to 159887 #</td>
</tr>
<tr>
<td></td>
<td>108681 to 108744 *</td>
</tr>
<tr>
<td>August</td>
<td>193986 to 198363</td>
</tr>
<tr>
<td></td>
<td>159888 to 160000 #</td>
</tr>
<tr>
<td></td>
<td>170001 to 170243 #</td>
</tr>
<tr>
<td></td>
<td>108745 to 108902 *</td>
</tr>
<tr>
<td>September</td>
<td>200019 to 200431</td>
</tr>
<tr>
<td></td>
<td>108903 to 109208 *</td>
</tr>
<tr>
<td>October</td>
<td>200432 to 200942</td>
</tr>
<tr>
<td></td>
<td>170244 to 170394 #</td>
</tr>
<tr>
<td></td>
<td>109209 to 109397 *</td>
</tr>
<tr>
<td>November</td>
<td>200943 to 201025</td>
</tr>
<tr>
<td></td>
<td>170395 to 170890 #</td>
</tr>
<tr>
<td></td>
<td>109398 to 109575 *</td>
</tr>
<tr>
<td>December</td>
<td>170591 to 170957 #</td>
</tr>
<tr>
<td></td>
<td>109576 to 109672 *</td>
</tr>
</tbody>
</table>

### 1922

<table>
<thead>
<tr>
<th>Month</th>
<th>Serial Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>109673 to 109784 *</td>
</tr>
<tr>
<td>February</td>
<td>201026 to 202521</td>
</tr>
<tr>
<td></td>
<td>109785 to 109891 *</td>
</tr>
<tr>
<td>March</td>
<td>202522 to 208632</td>
</tr>
<tr>
<td></td>
<td>109892 to 109209 *</td>
</tr>
<tr>
<td>April</td>
<td>208633 to 216080</td>
</tr>
<tr>
<td></td>
<td>110210 to 110430 *</td>
</tr>
<tr>
<td>May</td>
<td>216081 to 225028</td>
</tr>
<tr>
<td></td>
<td>171290 to 171444 *</td>
</tr>
<tr>
<td>June</td>
<td>225029 to 234355</td>
</tr>
<tr>
<td></td>
<td>171445 to 171742 *</td>
</tr>
<tr>
<td>July</td>
<td>234356 to 244016</td>
</tr>
<tr>
<td></td>
<td>171743 to 171962 *</td>
</tr>
<tr>
<td>August</td>
<td>244017 to 252532</td>
</tr>
<tr>
<td></td>
<td>171963 to 172000 *</td>
</tr>
<tr>
<td></td>
<td>250001 to 250099 *</td>
</tr>
<tr>
<td>September</td>
<td>252533 to 252761</td>
</tr>
<tr>
<td></td>
<td>250100 to 250300 *</td>
</tr>
<tr>
<td></td>
<td>253001 to 253010 *</td>
</tr>
<tr>
<td>October</td>
<td>252762 to 257907</td>
</tr>
<tr>
<td></td>
<td>253111 to 253290 *</td>
</tr>
<tr>
<td>November</td>
<td>257907 to 262824</td>
</tr>
<tr>
<td></td>
<td>253291 to 253479 *</td>
</tr>
<tr>
<td>December</td>
<td>262825 to 253480</td>
</tr>
<tr>
<td></td>
<td>to 253562 *</td>
</tr>
</tbody>
</table>

### NOTE:
The serial numbers shown above are from the 1923 Ford Data Book. The numbers following are from other Ford sources. It would appear that these tractors were all made in Cork, Ireland.

### 1923

<table>
<thead>
<tr>
<th>Month</th>
<th>Serial Numbers</th>
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</thead>
<tbody>
<tr>
<td>January</td>
<td>268583 to 276349</td>
</tr>
<tr>
<td>February</td>
<td>276350 to 284254</td>
</tr>
<tr>
<td>March</td>
<td>284255 to 295531</td>
</tr>
<tr>
<td>April</td>
<td>295532 to 306914</td>
</tr>
<tr>
<td>May</td>
<td>309915 to 318010</td>
</tr>
<tr>
<td>June</td>
<td>318011 to 327011</td>
</tr>
<tr>
<td>July</td>
<td>327012 to 333681</td>
</tr>
<tr>
<td>August</td>
<td>333682 to 342099</td>
</tr>
<tr>
<td>September</td>
<td>342100 to 349946</td>
</tr>
<tr>
<td>October</td>
<td>349947 to 357849</td>
</tr>
<tr>
<td>November</td>
<td>357850 to 365190</td>
</tr>
<tr>
<td>December</td>
<td>365191 to 370351</td>
</tr>
</tbody>
</table>

### 1924

<table>
<thead>
<tr>
<th>Month</th>
<th>Serial Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>270352 to 375190</td>
</tr>
<tr>
<td>February</td>
<td>275191 to 382281</td>
</tr>
</tbody>
</table>

Beyond the figures above we have the following numbers which are believed to the starting serial numbers of each year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Starting Serial Numbers</th>
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</thead>
<tbody>
<tr>
<td>1925</td>
<td>453360</td>
</tr>
<tr>
<td>1926</td>
<td>557608</td>
</tr>
<tr>
<td>1927</td>
<td>781966**</td>
</tr>
<tr>
<td>1928</td>
<td>785548**</td>
</tr>
<tr>
<td>1929</td>
<td>747682</td>
</tr>
<tr>
<td>1930</td>
<td>757369</td>
</tr>
<tr>
<td>1931</td>
<td>773565</td>
</tr>
<tr>
<td>1932</td>
<td>776066</td>
</tr>
<tr>
<td>1933</td>
<td>779158**</td>
</tr>
<tr>
<td>1934</td>
<td>781966**</td>
</tr>
<tr>
<td>1935</td>
<td>785548**</td>
</tr>
<tr>
<td>1936</td>
<td>794703**</td>
</tr>
<tr>
<td>1937</td>
<td>807582**</td>
</tr>
<tr>
<td>1938</td>
<td>826779**</td>
</tr>
<tr>
<td>1939</td>
<td>826779**</td>
</tr>
</tbody>
</table>

** Built in Dagenham, England

---

### U. S. Tractor Fuel Tank Gauge

The following table gives the dimensions for making a measure stick for the tractor fuel tank

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>15/16</td>
<td>1-7/16</td>
<td>1-13/16</td>
<td>2-3/16</td>
<td>2-9/17</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2-15/16</td>
<td>3-5/16</td>
<td>3-5/8</td>
<td>3-15/16</td>
<td>4-1/4</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>4-7/16</td>
<td>4-3/4</td>
<td>5-1/16</td>
<td>5-3/8</td>
<td>5-3/5</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>6-1/8</td>
<td>6-1/2</td>
<td>6-7/8</td>
<td>7-1/4</td>
<td>7-3/4</td>
<td></td>
</tr>
</tbody>
</table>