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January 1926

### Test 124: Fordson

Nebraska Tractor Test Lab

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## UNIVERSITY OF NEBRASKA AGRICULTURAL ENGINEERING DEPARTMENT

## AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 124.

Dates of test: June 21 to June 28th, 1926

Name, model and rating of tractor: Fordson

Serial No. Engine: 609748 Serial No. Chassis: 609748

Manufacturer: Ford Motor Co., Detroit, Michigan

Tractor Equipment used: Fordson Special Mag., Holley "235" Carb.

Style and dimensions of wheel lugs: Angles, 3" high, 15" long.

## BRAKE HORSE POWER TESTS

| H.P. Dev. | Crank Shaft Speed R.P.M | Time of Test Min. | Fuel Consumption |                |                 | Water Consumption Gals. per hour |         |       | Temp. Deg. F.* |     | Ave. Humidity % | Height of Barometer in Inches |
|-----------|-------------------------|-------------------|------------------|----------------|-----------------|----------------------------------|---------|-------|----------------|-----|-----------------|-------------------------------|
|           |                         |                   | Kind of Fuel     | Gals. Per Hour | H.P. Hrs @ Gal. | Cooling                          | In Fuel | Total | Cooling        | Air |                 |                               |

## RATED LOAD TEST

|       |      |     |      |       |      |      |      |      |     |    |    |       |
|-------|------|-----|------|-------|------|------|------|------|-----|----|----|-------|
| 20.19 | 1003 | 120 | Kero | 2.097 | 9.63 | 2.97 | 0.49 | 3.46 | 209 | 77 | 34 | 28.68 |
|-------|------|-----|------|-------|------|------|------|------|-----|----|----|-------|

## \*\*VARYING LOAD TEST

|       |        |    |      |       |      |      |      |      |     |    |    |       |
|-------|--------|----|------|-------|------|------|------|------|-----|----|----|-------|
| 20.31 | 1011   | 10 | Kero |       |      |      |      |      |     |    |    |       |
| 20.12 | 993    | 10 | Kero |       |      |      |      |      |     |    |    |       |
| 0.85  | 991    | 10 | Kero |       |      |      |      |      |     |    |    |       |
| 5.06  | 998.5  | 10 | Kero |       |      |      |      |      |     |    |    |       |
| 10.25 | 1013   | 10 | Kero |       |      |      |      |      |     |    |    |       |
| 15.23 | 1009.5 | 10 | Kero |       |      |      |      |      |     |    |    |       |
| 11.96 | 1003   | 60 | Kero | 1.582 | 7.56 | 1.61 | 0.13 | 1.74 | 197 | 79 | 47 | 28.65 |

## MAXIMUM LOAD TEST

|       |      |    |      |       |      |      |      |      |     |    |    |       |
|-------|------|----|------|-------|------|------|------|------|-----|----|----|-------|
| 22.28 | 1006 | 60 | Kero | 2.490 | 8.95 | 2.94 | 0.77 | 3.71 | 210 | 83 | 34 | 28.75 |
|-------|------|----|------|-------|------|------|------|------|-----|----|----|-------|

## HALF LOAD TEST

|       |      |    |      |       |      |      |      |      |     |    |    |       |
|-------|------|----|------|-------|------|------|------|------|-----|----|----|-------|
| 10.15 | 1004 | 60 | Kero | 1.418 | 7.16 | 0.73 | 0.24 | 0.97 | 200 | 80 | 47 | 28.65 |
|-------|------|----|------|-------|------|------|------|------|-----|----|----|-------|

\*Taken in discharge line from engine.

\*\*The last line is the average for the hour.

REMARKS: The kerosene used as fuel in these tests weighed 6.77 lbs. per gallon. This tractor was not equipped with a governor. In the varying load test the speed was controlled by hand throttle.

## Copy of Report of Official Tractor Test No. 124

## DRAWBAR HORSE POWER TESTS

| H.P.<br>Dev. | Draw<br>Bar<br>Pull<br>Lbs. | Speed<br>Miles<br>Per<br>Hour | Crank<br>Shaft<br>Speed<br>R.P.M. | Slip<br>on<br>Drive<br>Wheels | Fuel<br>Consumption |                             |                             | Water<br>Used<br>per<br>Hour<br>Gals. | Temp.<br>Deg. F.      |     | Average<br>Humidity<br>% | Height<br>of<br>Barometer<br>in<br>Inches |
|--------------|-----------------------------|-------------------------------|-----------------------------------|-------------------------------|---------------------|-----------------------------|-----------------------------|---------------------------------------|-----------------------|-----|--------------------------|---|
|              |                             |                               |                                   |                               | Kind<br>Used        | Amt.<br>Per<br>Hr.<br>Gals. | H.P.<br>Hrs.<br>Per<br>Gal. |                                       | Cooling<br>Fluid<br>* | Air |                          |   |

## RATED LOAD TEST. TEN HOURS

|      |      |      |      |      |      |       |      |      |     |    |      |       |
|------|------|------|------|------|------|-------|------|------|-----|----|------|-------|
| 9.06 | 1479 | 2.30 | 1016 | 8.97 | Kero | 2.148 | 4.22 | 1.80 | 208 | 93 | 40.5 | 28.67 |
|------|------|------|------|------|------|-------|------|------|-----|----|------|-------|

## MAXIMUM LOAD TEST

|        |      |       |        |        |      |                  |  |  |     |    |    |       |
|--------|------|-------|--------|--------|------|------------------|--|--|-----|----|----|-------|
| 12.325 | 2142 | 2.16  | 1018.5 | 14.735 | Kero | --Not Recorded-- |  |  | 209 | 82 | 36 | 28.61 |
| 8.425  | 2497 | 1.27  | 1144.  | 37.25  | Kero | --Not Recorded-- |  |  | 210 | 82 | 36 | 28.61 |
| 10.34  | 514  | 7.545 | 1001.  | 4.28   | Kero | --Not Recorded-- |  |  | 204 | 75 | 43 | 28.75 |

\*Taken in discharge line from engine

REMARKS: The rated load and first maximum load tests were made with the tractor in intermediate gear. The second maximum load test was made with the tractor in low gear. The third maximum load test was made with the tractor in high gear.

## OIL CONSUMPTION:

During the complete test consisting of about 38 hours running the following oil was used:

For the engine, 4-1/2 gallons of Mobiloil "BB", 2-1/4 gallons to fill crank-case. Drained at the end of 28 hours running and refilled.

For the transmission, 3 gallons of Mobiloil "BB". None added. 1/2 lb. cup grease.

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REPAIRS AND ADJUSTMENTS

At the end of the limber up run and before the official brake horsepower tests were made, the spark gap in the spark plugs was adjusted 0.020". At the same time a spark plug gasket was replaced in one spark plug.

No other repairs or adjustments were necessary during the test. At the end of the test the tractor was in good running order and there were no indications of undue wear nor of any weakness which might require early repair.

BRIEF SPECIFICATIONS

Motor: Own, 4 cylinder, L-head, mounted crankshaft lengthwise.  
Bore 4", stroke 5". Rated speed 1000 R.P.M.

Magneto: Fordson Special.  
Carburetor: Holley Special "235".  
Governor: None.  
Air Cleaner: Own, water type.

Chassis: Four wheels, two drivers; enclosed gear drive, multiple disc clutch. Advertised speeds low, 1.58 miles per hour; intermediate 2.24 miles per hour; high 7.05 miles per hour. Reverse 2.14 miles per hour.

Total weight as tested (with operator) 3175 pounds.

REMARKS

In the advertising literature submitted with the specifications and application for test of this tractor, we find some claims and statements which cannot be directly compared with results of this test as reported above. It is our opinion that none of these are excessive or unreasonable.

We, the undersigned, certify that above is a true and correct report of official Tractor Test No. 124.

Lew Wallace  
Engineer-in-Charge

Oscar W. Sjogren

E. E. Brackett

C. W. Smith  
Board of Tractor Test Engineers