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Nebraska Tractor Tests

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January 1930

## Test 174: Fordson Model F (Gasoline)

Nebraska Tractor Test Lab

University of Nebraska-Lincoln, [tractortestlab@unl.edu](mailto:tractortestlab@unl.edu)

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UNIVERSITY OF NEBRASKA - AGRICULTURAL ENGINEERING DEPARTMENT  
AGRICULTURAL COLLEGE, LINCOLN

Corrected Copy of Report of Official Tractor Test No. 174

Dates of test: March 20th to April 10th, 1930.  
Name and Model of tractor: FORDSON "F" (Gasoline).  
Manufacturer: Ford Motor Company, Dearborn, Michigan.  
Manufacturer's rating: NOT RATED.  
Highest rating permissible under the recommendations of the A.S.A.E. and  
S.A.E. Tractor Rating Codes: Drawbar - 14 H.P. Belt - 26 H.P.  
One carburetor setting (98% of maximum) was used thruout this test.

B R A K E H O R S E P O W E R T E S T S

H.P.	: Crank : : shaft :	Fuel Consumption : Gals. : H.P. : Lbs. @ : : R.P.M. : per : hrs. @ : H.P. : : : hour : gal. : hour :	Water consumption : : per hour gallons : : Cool- : In : : Cool- : : ing : fuel : Totaling : Air : : : : : med. : :	Temp. : : Deg. F. : : : : : : : : : : :	: Barometer : Inches of : mercury
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OPERATING MAXIMUM LOAD TEST. ONE HOUR

29.09	: 1100	: 3.059	: 9.51	: 0.638	: 0.00	: 0.00	: 0.00	: 193	: 45	: 28.82
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RATED LOAD TEST. ONE HOUR

26.12	: 1102	: 2.741	: 9.53	: 0.637	: 0.00	: 0.00	: 0.00	: 191	: 48	: 28.75
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\*VARYING LOAD TEST. TWO HOURS

26.15	: 1103	: 2.773	: 9.43	: 0.644	: --	: --	: --	: 191	: 47	:
1.27	: 1243	: 1.176	: 1.08	: 5.622	: --	: --	: --	: 200	: 46	:
14.28	: 1200	: 1.918	: 7.45	: 0.815	: --	: --	: --	: 195.5	: 46.5	:
28.33	: 1069.5	: 2.812	: 10.08	: 0.602	: --	: --	: --	: 205.5	: 48	:
7.30	: 1223	: 1.502	: 4.86	: 1.249	: --	: --	: --	: 199	: 50.5	:
20.84	: 1169.5	: 2.323	: 8.87	: 0.677	: --	: --	: --	: 196.5	: 49	:
16.89	: 1162	: 2.084	: 8.09	: 0.749	: --	: --	: --	: 197	: 48	: 28.83

\*20 minute runs. Last line is average for two hours.

D R A W B A R H O R S E P O W E R T E S T S

H.P.	: Draw : Speed : Crank : Slip : Fuel Consumption : Water : Temp. : : Bar : miles : shaft : on : : H.P. : Lbs. : used : : : Barometer : pull : per : speed : drive: Gal. : hr. : per : Gal. : Cool- : Air : Inches of : pounds : hour : R.P.M. : wheels: per : per : H.P. : per : ing : : mercury : : : : % : hour: gal. : hour : hour : med. : :
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RATED LOAD TEST. TEN HOURS. Intermediate Gear

15.52	: 1813	: 3.21	: 1106	: 5.15	: 2.628	: 5.91	: 1.028	: 1.362	: 207	: 85.5	: 28.69
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MAXIMUM LOAD TEST

12.66	: 530	: 8.96	: 1121	: 3.61	: -----	: Not Recorded	: -----	: 192	: 89	: 28.65
18.30	: 2226	: 3.08	: 1106	: 13.61	: -----	: " "	: -----	: 195	: 74.5	: 28.80
16.14	: 3202	: 1.89	: 1108	: 31.66	: -----	: " "	: -----	: 187	: 77	: 28.78

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BRIEF SPECIFICATIONS

MOTOR: Make Own Serial No. 758223 Type Vertical  
Head L Mounting lengthwise  
Bore and stroke: 4 1/8 x 5 in. Rated R.P.M. 1100  
Port Dia. Valves: Inlet 1 1/2" Exhaust 1 1/2"  
Belt pulley: Diam. 9 1/2 in. Face 6 1/2 in. R.P.M. 1100  
Magneto: Robert Bosch Model F U 4BRS29  
Carburetor: Zenith Model IN5F Size 1 1/4"  
Governor: Own No.  Type Flyball  
Air Cleaner: Own Type Water  
Lubrication: Circulating splash, gravity feed.

CHASSIS: Type 4 wheels Serial No.  Drive Enclosed gear  
Clutch: Own Type Multiple disc operated by foot  
Advertised speeds, miles per hour: Low 2 1/8  
Intermediate 3 1/8 High 7 3/4 Reverse 3  
Drive wheels: Diameter 42" Face 12"  
Lugs: Type Spade No. per wheel 22 Size 3.9" high x 3.38" face  
Extension rims: Width 7" Spade lugs 11 per rim Size 3 7/16" x 3 7/32"  
Seat Pressed steel  
Total weight as tested (with operator) 3920 pounds.

FUEL AND OIL:

Fuel: Gasoline Weight per gallon 6.07#  
Oil: S. A. E. Viscosity No. 30

Total oil to motor 6.375 gallons  
Total drained from motor 3.61 gallons  
Total time motor was operated 58 hours  
All of the oil was drained from the crankcase at the end of 25 hours and again at the end of the test.

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REPAIRS AND ADJUSTMENTS

During rated belt test the water pump gland was tightened approximately one-fifth turn.

REMARKS

The tests herein reported were conducted with one carburetor setting which remained unchanged thruout the tests. This condition should be recognized when comparing this test with any Nebraska test conducted prior to 1928.

The drawbar tests were run with drive wheels equipped with spade lugs and with extension rims and lugs as listed on Page 2 of this report.

In the advertising literature submitted with the specifications and application for test of this tractor we find no claims and statements which, in our opinion, are unreasonable or excessive.

The results of this test indicate that the rating of this tractor does not exceed the provisions of the tractor rating code of the American Society of Agricultural Engineers and the Society of Automotive Engineers.

We, the undersigned, certify that the above is a true and correct report of official tractor test No. 174.

Carlton L. Zink  
Engineer-in-charge

E. E. Brackett

C. W. Smith

E. B. Lewis

Board of Tractor Test Engineers