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Larsen

January 1930

Test 173: Fordson Model F (Kerosene)

Tractor Museum

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UNIVERSITY OF NEBRASKA - AGRICULTURAL ENGINEERING DEPARTMENT
 AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 173

Dates of test: March 11th to April 8th, 1930.
 Name and model of tractor: FORDSON "F" (Kerosene).
 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 - 11 H.P. Belt - 21 H.P.
 One carburetor setting (94% 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 : hour	Water consumption : per hour gallons	Temp. : Deg. F.	Barometer : Inches of mercury
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OPERATING MAXIMUM LOAD TEST. ONE HOUR

23.24	: 1104	: 3.286	: 7.07	: 0.853	: 1.95	: 0.00	: 1.95	: 213	: 48	: 28.73
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RATED LOAD TEST. ONE HOUR

21.05	: 1100	: 2.689	: 7.83	: 0.855	: 2.09	: 0.00	: 2.09	: 212	: 48	: 28.45
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*VARYING LOAD TEST. TWO HOURS

21.05	: 1098	: 2.830	: 7.44	: 0.899	: --	: --	: --	: 212	: 62	:
1.25	: 1225.5	: 1.247	: 1.00	: 6.672	: --	: --	: --	: 199.5	: 59.5	:
11.42	: 1188	: 1.821	: 6.27	: 1.067	: --	: --	: --	: 201	: 60.5	:
20.46	: 974	: 2.852	: 7.17	: 0.933	: --	: --	: --	: 213	: 62.5	:
16.86	: 1172.5	: 2.206	: 7.64	: 0.875	: --	: --	: --	: 202.5	: 62.5	:
5.82	: 1209	: 1.520	: 3.83	: 1.747	: --	: --	: --	: 199	: 62	:
13.32	: 1141	: 2.079	: 6.42	: 1.044	: 2.17	: 0.00	: 2.17	: 205	: 62	: 28.57

*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 : Bar	Speed : miles : per : hour	Crank : shaft : R.P.M.	Slip : on : wheels : %	Fuel Consumption : Gal. : hr. : per : hour	Water : used : Gal. : per : hour	Temp. : : med. :	Barometer : Inches of mercury
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RATED LOAD TEST. TEN HOURS. Intermediate Gear.

10.67	: 1212	: 3.30	: 1102	: 7.39	: 2.425	: 4.40	: 1.532	: 0.727	: 197	: 71	: 28.86
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MAXIMUM LOAD TEST

8.48	: 381	: 8.35	: 1103	: 6.15	-----Not recorded-----			: 152.5	: 58	: 28.92
13.53	: 1614	: 3.14	: 1104	: 9.88	----- " " -----			: 196	: 73	: 28.58
13.60	: 3289	: 1.55	: 1096	: 19.85	----- " " -----			: 182	: 59	: 28.93

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BRIEF SPECIFICATIONS

MOTOR: Make Own Serial No. 757447 Type Vertical
Head L Mounting Crankshaft 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" Face 6 1/2" R.P.M. 1100
Magneto: Robert Bosch Model F U 4BRS29
Carburetor: Kingston Model M D 2 Size 1 1/4"
Governor: Own No. 67496 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 1 3/4
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" wide
Extension rims: Width 7" Cleats per wheel 10 angle Size 2 1/2" x 6 7/8"
Seat: Pressed Steel
Total weight as tested (with operator) 3820 pounds

FUEL AND OIL

Fuel: Kerosene Weight per gallon 6.69# on belt tests
6.74# on drawbar tests
Oil: S. A. E. Viscosity No. 30
Total oil to motor: 5.750 gallons All of the oil was
Total drained from motor 4.653 gallons drained from the
Total time motor was operated 65 hours crankcase at the end
of 25 hours and again
at the end of the test.

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REPAIRS AND ADJUSTMENTS

During the preliminary belt tests, the cylinder head gasket was replaced. The original governor spring was replaced by a heavier spring after the rated load belt test.

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 cleats 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. 173.

Carlton L. Zink

Engineer-in-Charge

E. E. Brackett

C. W. Smith

E. B. Lewis

Board of Tractor Test Engineers