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January 1931

Test 190: John Deere GP

Nebraska Tractor Test Lab

University of Nebraska-Lincoln, tractortestlab@unl.edu

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UNIVERSITY OF NEBRASKA - AGRICULTURAL ENGINEERING DEPARTMENT
AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 190

Dates of test: May 4 to May 15, 1931.

Name and model of tractor: JOHN DEERE "GENERAL PURPOSE"

Manufacturer: John Deere Tractor Company, Waterloo, Iowa.

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 - 15.52 H.P. Belt - 24.30 H.P.

One carburetor setting (93% 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 : Temp. : : per hour gallons : Deg. F. : Barometer :Cool- : In : :Cool-: : Inches of :ing : fuel :Total :ing : Air: Mercury : : : :med. : :
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OPERATING MAXIMUM LOAD TEST. ONE HOUR

25.36	: 949	: 2.670	: 9.50	: 0.729	: 0.00	: 0.00	: 0.00	: 206	: 71	: 28.855
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RATED LOAD TEST. ONE HOUR

24.14	: 950	: 2.618	: 9.22	: 0.751	: 0.174	: 0.00	: 0.174	: 207	: 73	: 28.845
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*VARYING LOAD TEST. TWO HOURS

24.22	: 954	: 2.567	: 9.44	: 0.735	: --	: --	: --	: 207	: 73	: --
1.00	: 990	: 1.048	: 0.95	: 7.260	: --	: --	: --	: 198	: 70	: --
12.13	: 968	: 1.632	: 7.43	: 0.932	: --	: --	: --	: 199	: 71	: --
24.08	: 926	: 2.645	: 9.10	: 0.761	: --	: --	: --	: 208	: 70	: --
6.02	: 977	: 1.377	: 4.37	: 1.585	: --	: --	: --	: 198	: 70	: --
18.16	: 962	: 2.004	: 9.06	: 0.765	: --	: --	: --	: 198	: 72	: --
14.44	: 963	: 1.879	: 7.68	: 0.902	: 0.00	: 0.00	: 0.00	: 201	: 71	: 28.843

*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.

15.34	: 1702	: 3.38	: 950	: 2.23	: 2.426	: 6.32	: 1.096	: 0.264	: 202	: 75	: 28.750
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MAXIMUM LOAD TEST

18.86	: 2853	: 2.48	: 950	: 5.32	: -----	: Not Recorded	: -----	: 206	: 81	: 28.900
18.82	: 2137	: 3.30	: 949	: 4.07	: -----	: " "	: -----	: 202	: 81	: 28.870
16.02	: 1265	: 4.75	: 950	: 1.73	: -----	: " "	: -----	: 194	: 80	: 28.860

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Corrected Copy of Report of Official Tractor Test No. 190

BRIEF SPECIFICATIONS

MOTOR: Make John Deere Serial No. 404400 Type Horizontal - 2 Cylinders
Head L Mounting Crosswise
Bore and stroke: 6 x 6 in. Rated R.P.M. 950
Port Dia. Valves: Inlet 2 7/32" Exhaust 2 7/32"
Belt pulley: Diam. 13 1/8 in. Face 6 7/16 in. R.P.M. 950
Magneto: Fairbanks-Morse Model John Deere R2
Carburetor: Schebler Model DLTX 5 Size 1 1/2"
Governor: Own No. None Type Centrifugal
Air Cleaner: Donaldson Type Centrifugal and oiled fiber
Lubrication: Pressure Feed

CHASSIS: Type 4 wheels, 2 drivers Serial No. 404400 Drive Enclosed gear and chain
Clutch Own Type Disc operated by Hand lever
Advertised speeds, miles per hour: Low 2 1/4
Intermediate 3 High 4 1/8 Reverse 1 3/4
Drive wheels: Diameter 44" Face 10"
Lugs: Type Spade No. per wheel 24 Size 4" high x 3 1/4" face
Extension rims: Width 6" Lugs: Spade - 12 per rim
Size 4" high x 3 1/4" face
Seat Pressed steel
Total weight as tested (with operator) 4925 pounds.

FUEL AND OIL:

Fuel: Distillate Weight per gallon 6.93 pounds

Oil: S. A. E. Viscosity No. 40

Total oil to motor 2.284 gallons

Total drained from motor 1.305 gallons

Total time motor was operated 53 hours

The oil was drained
from the crankcase
once - at the end of
the test.

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Copy of Report of Official Tractor Test No. 190

REPAIRS AND ADJUSTMENTS

No repairs or adjustments.

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 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.

We, the undersigned, certify that the above is a true and correct report of official tractor test No. 190.

Carlton L. Zink
Engineer-in-charge

E. E. Brackett

C. W. Smith

E. B. Lewis
Board of Tractor Test Engineers