January 1937

Test 295: John Deere G

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. 295

Dates of test: November 15 to 19, 1937.
Name and model of tractor: JOHN DEERE G
Manufacturer's rating: NOT RATED.

BRAKE HORSEPOWER TESTS

H. P.	Crank shaft speed R.P.M.	Gal. per hr.	Fuel Consumption		Water Consumption per hour gallons			Temp. Deg. F.		Barometer Inches of Mercury
			H. P. hr. per gal.	Lb. per H. P. hr.	Cooling	In Fuel	Total	Cooling Med.	Air	
TEST B - 100% MAXIMUM LOAD - TWO HOURS										
35.91	975	3.923	9.15	0.757	0.625	0.000	0.000	208	61	29.085
TEST C - OPERATING MAXIMUM LOAD - ONE HOUR										
34.09	975	3.218	10.59	0.654	0.044	0.000	0.044	209	61	29.085
* TEST D - ONE HOUR										
31.51	975	2.955	10.66	0.650	0.070	0.000	0.070	208	60	29.090
TEST E - VARYING LOAD - TWO HOURS (20 minute runs; last line average)										
31.55	977	2.952	10.69	0.648	--	--	--	208	60	--
1.05	1069	1.662	0.63	10.971	--	--	--	208	60	--
16.80	1041	2.229	7.54	0.920	--	--	--	207	59	--
33.21	942	3.152	10.54	0.658	--	--	--	210	59	--
8.61	1061	1.905	4.52	1.533	--	--	--	209	60	--
24.48	1012	2.593	9.44	0.734	--	--	--	209	61	--
19.28	1017	2.416	7.98	0.868	0.048	0.000	0.048	208	60	29.085

DRAWBAR HORSEPOWER TESTS

H. P.	Draw bar pull pounds	Speed miles per hr.	Crank shaft speed R.P.M.	Slip on drive wheels %	Fuel Consumption			Water used Gal. per hr.	Temp. Deg. F.		Barometer Inches of Mercury
					Gal. per hr.	H. P. Hr. per gal.	Lb. per H.P. hr.		Cooling med.	Air	
TEST F - 100% MAXIMUM LOAD - Second GEAR											
27.63	3079	3.36	977	6.40	-----Not Recorded-----				195	30	29.070
TEST G - OPERATING MAXIMUM LOAD											
25.86	4085	2.37	975	6.21	-----Not Recorded-----				195	24	29.470
25.55	2818	3.40	974	5.18	-----Not Recorded-----				197	28	29.070
22.13	1839	4.51	971	3.36	-----Not Recorded-----				198	34	28.915
20.28	1171	6.49	976	2234	-----Not Recorded-----				205	32	28.910
*TEST H - TEN HOURS - Second GEAR											
20.75	2252	3.46	975	3.70	2.822	7.35	0.942	0.101	199	23	29.085

*Formerly called RATED LOAD; see REMARKS 4, page 3.

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FUEL, OIL, AND TIME

Fuel Distillage Weight per gallon, 6.93 pounds Oil: S.A.E. No. 30 To motor 2.708 gal. Drained from motor 2.340 gal. Total time motor was operated 50 hours

BRIEF SPECIFICATIONS

Advertised speeds, miles per hour: First 2.25 Second 3.25 Third 4.25 Fourth 6 Reverse 3 Belt pulley: Diameter 12 13/16" Face 8 1/2" R.P.M. 975 Clutch: Make Own Type Double-plate, dry Operated by Hand Seat pressed steel

Total weight as tested (with operator) 5160 pounds

MOTOR Make Own Serial No. G 1081 Type 2 cylinder, horizontal Head I Mounting Crankshaft crosswise Lubrication pressure Bore and stroke: 6 1/8" x 7" Rated R.P.M.975 Port diameter valves: Inlet 2.25" Exhaust 2.125" Magneto: Make Edison-Splitdorf Model CD-2 Carburetor: Make Schebler Model DLTX - 24 Size 1 5/8" Governor: Make Own Type Variable-speed, centrifugal Air cleaner: Make Donaldson Type oil-washed, wire-screen filter

CHASSIS: Type Tricycle Serial No. G1081 Drive Enclosed gear Tread width: Rear 60" - 84" Front: Top 13" Bottom 7 3/4" Drive wheels: Type Standard No. 2 Diameter 51 1/2" Face 7" Lugs: Type Spade No. per wheel 12 Size 4" high x 3 1/2" face Extension rims: Width 6" Lugs: No. per rim 12 Size 4" high x 3 1/2"face Front wheels: Type Standard No. 2 Diameter 24 Face 5"

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REPAIRS AND ADJUSTMENTS

No repairs or adjustments.

REMARKS

1. All test results shown on page 1 of this report were determined from observed data and without allowances, additions, or deductions. Tests B and F were made with carburetor set for 100% maximum horsepower and data from these tests were used in determining the horsepower to be developed in tests D and H, respectively. Tests C, D, E, G, and H were made with an operating setting of the carburetor (selected by the manufacturer) of 94.9% of maximum horsepower.

2.	Observed maximum horsepower (tests F & B)	Drawbar 27.63	Belt 35.91
3.	Sea level (calculated) maximum horsepower (based on 60° F. and 29.92" Hg.)	Drawbar 27.60	Belt 36.99
4.	Seventy-five per cent of calculated maximum drawbar horsepower and eighty-five per cent of calculated maximum belt horsepower (formerly ASAE and SAE ratings)	Drawbar 20.70	Belt 31.44

We, the undersigned, certify that the above is a true and correct report of official tractor test No. 295.

Carlton L. Zink
Engineer-in-charge

E. E. Brackett

Ivan D. Wood

L. W. Hurlbut
Board of Tractor Test Engineers