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January 1924

Test 102: John Deere Model D 15-27

Nebraska Tractor Test Lab

University of Nebraska-Lincoln, tractortestlab@unl.edu

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AGRICULTURAL COLLEGE, LINCOLN

Dates of test: April 11th to April 17th, 1924

Serial No. Engine: 30504

Serial No. Chassis 30504

Manufacturer: Waterloo Gasoline Engine Company, Waterloo, Iowa.

Tractor equipment used: Dixie Aero No. 32433 Magneto, Schebler W D, DX298 Carburetor

Style and dimensions of wheel lugs: Spade 4" high. Drop forged.

[illegible]

27.11 : 803 : 120 : Kero:3.000 : 9.03 :1.232 : *** :1.232 :207 :83 : 48 : 28.49
Belt Slippage 1.81%

27.44	: 807.0	: 10	: Kero:	:	:	:	:	:	:	:	:	:
27.38	: 800.0	: 10	: "	:	:	:	:	:	:	:	:	:
1.05	: 838.0	: 10	: "	:	:	:	:	:	:	:	:	:
7.04	: 824.0	: 10	: "	:	Average Belt Slippage 1.54%					:	:	:
13.86	: 812.5	: 10	: "	:	:	:	:	:	:	:	:	:
20.49	: 803.0	: 10	: "	:	:	:	:	:	:	:	:	:
16.38	: 814.0	: 60	: Kero: 2.341	:	7.00	: 1.080	: ***	: 1.080:	200	: 87	: 48	: 28.48

30.40 : 801.0 : 60 : Kero: 3.877 : 7.84 : 2.791 : *** : 2.791: 201 : 89 : 31 : 28.45
Belt Slippage 1.81%

13.78 : 809.0 : 60 : Kero: 1.838 : 7.50 : 0.374 : *** : 0.374: 203 : 87 : 31 : 28.46
Belt Slippage 1.43%

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

*** The water to fuel mixture was taken from radiator.

REMARKS: The kerosene used as fuel in this test weighed 6.81 pounds per gallon.

Copy of Report of Official Tractor Test No. 102.

DRAWBAR HORSE POWER TESTS

H. P.	Draw	Speed	Crank	Slip	Fuel Consumption	Water	Temp. Deg. F.		
Dev.	Bar	Miles	Shaft	On	Kind : Amt. : H.P.	Used	Cooling : Air : Average	Height of	
	Pull	Per	Speed	Drive	Used : Per : Hrs.	Per	Fluid :	Humidity	Barometer
	Lbs.	Hour	R.P.M.	Wheels	: Hour : Per	Hour	*	%	In Inches
				% **	: Gals. : Gal.	Gals.			

RATED LOAD TEST. TEN HOURS

16.75	1786	3.52	783	6.56	9.65	Kero	2.710	6.18	1.040	198	47	57	28.40
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*** MAXIMUM LOAD TEST

21.15	2241	3.54	792	7.71	8.31	Kero	NOT RECORDED			192	80	54	28.33
22.53	3277	2.58	808	11.68	3.65	"	"	"	"	192	80	54	28.33

* Taken in discharge line from engine.

** The first figure denotes slippage at the points of the lugs. The second figure denotes slippage at the rim of the wheel.

*** The first maximum and the rated load tests were run in high gear. The second maximum test was run in low gear.

OIL CONSUMPTION:

During the complete test consisting of about 32 hours running the following oil was used:

For the engine, 2-3/4 gallons of Polarine XH (Extra Heavy), of which 2 gallons were to fill crank case, 3/4 gallon was added.

For the transmission, 600 W. None added.

Copy of Report of Official Tractor Test No. 102.

REPAIRS AND ADJUSTMENTS

During this test there were no adjustments or repairs necessary

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

John Deere Model "D" 15-27

Motor: Own, 2 cylinder, horizontal, valve-in-head. Bore 6-1/2", stroke - 7". Rated speed 800 r.p.m.

Governor: Own (fly ball)

Air Cleaner: Donaldson (Simplex Air Cleaner Co.)

Chassis: Four wheel type, enclosed chain drive, disc clutch.
Advertised speeds, low - 2.45 miles per hour, high
3.27 miles per hour.

Total weight - 4260 lbs.

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 the 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. 102.

E. E. Brackett
Engineer in Charge

Oscar W. Sjogren

C. W. Smith

Fred R. Nohavec

Board of Tractor Test Engineers