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January 1935

## Test 236: John Deere D

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

Copy of Report of Official Tractor Test No. 236

Dates of test: June 26 to July 2, 1935.

Name and Model of tractor: JOHN DEERE MODEL "D"

Manufacturer: John Deere Tractor Co., Waterloo, Iowa.

Manufacturer's rating: NOT RATED.

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	:*Water Consumption : : per hour gallons :	Temp. : : Deg. F. :	:Barometer
: speed:	Gals. : H. P. :Lbs. per:	For Cooling	:Cool- : :ing :	:Inches of	
:R.P.M.:	per :hrs. per: H. P. :	and	:Air :	:Mercury	
:	: hour : Gal. : hour :	in fuel, Total	:	:	:

\*Water for the fuel mixture taken from the cooling system.

TEST B 100% MAXIMUM LOAD. TWO HOURS

41.59	:	900	:	4.329	:	9.61	:	0.724	:	2.960	:	192	:	79	:	28.815
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TEST C OPERATING MAXIMUM LOAD. ONE HOUR

40.11	:	901	:	3.955	:	10.14	:	0.686	:	2.323	:	195	:	83	:	28.820
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TEST D RATED LOAD. ONE HOUR

37.51	:	900	:	3.580	:	10.48	:	0.664	:	1.972	:	202	:	88	:	28.820
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TEST E \*\*VARYING LOAD. TWO HOURS

37.65	:	902	:	3.599	:	10.46	:	0.665	:	--	:	204	:	87	:	
0.84	:	965	:	1.560	:	0.54	:	12.929	:	--	:	207	:	88	:	
19.64	:	942	:	2.595	:	7.57	:	0.920	:	--	:	204	:	90	:	
40.51	:	880	:	3.948	:	10.26	:	0.678	:	--	:	204	:	91	:	
10.19	:	965	:	2.198	:	4.64	:	1.501	:	--	:	204	:	90	:	
28.65	:	918	:	2.974	:	9.63	:	0.723	:	--	:	205	:	90	:	
22.91	:	929	:	2.813	:	8.14	:	0.854	:	0.898	:	204	:	89	:	28.815

\*\*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 :	Crank : : shaft :	Slip : : on :	Fuel Consumption	:Water: Temp. : : used :Cool-: :Barometer
: pull :	per	: speed :	drive:	Gal. :	hour : per	:Gal. :ing :Air:Inches of
:pounds:	hour	: R.P.M.:	wheels:	per	: per : H.:P.:per :med. : :Mercury	
:	:	:	: % :	hour	: Gal. : hour :	:hour : : :

TEST F 100% MAXIMUM LOAD. Second GEAR

29.90	:	2899	:	3.87	:	898	:	4.21	:	Not Recorded	:	198	:	92	:	28.780
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TEST G OPERATING MAXIMUM LOAD

30.74	:	4037	:	2.86	:	897	:	5.48	:	Not Recorded	:	203	:	94	:	28.800
29.37	:	2847	:	3.87	:	900	:	4.42	:	" "	:	206	:	93	:	28.810
26.69	:	1773	:	5.64	:	898	:	2.57	:	" "	:	200	:	93	:	28.795

TEST H RATED LOAD. TEN HOURS. Second GEAR

24.64	:	2357	:	3.92	:	900	:	3.19	:	3.361	:	7.33	:	0.949	:	1.831	:	202	:	88	:	28.830
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UNIVERSITY OF NEBRASKA - AGRICULTURAL ENGINEERING DEPARTMENT  
 AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 236

BRIEF SPECIFICATIONS

MOTOR: Make Own Serial No. 121132 Type 2 cylinder horizontal  
 Head I Mounting Crosswise  
 Bore and stroke: 6 3/4 x 7 in. Rated R.P.M. 900  
 Port Diam. Valves: Inlet 2 5/16" Exhaust 2 5/16"  
 Belt pulley: Diam. 13 1/4 in. Face 8 1/2 R.P.M. 900  
 Magneto: Splitdorf Model 246 T  
 Carburetor Schebler Model DLTX6 Size 1 1/2"  
 Governor: Own No. \* Type Centrifugal  
 Air Cleaner: Donaldson Type Oil washed screen filter  
 Lubrication: Pressure  
 CHASSIS: Type 4 wheels, 2 drivers Serial No. 121132 Drive (Enclosed gear and chain)  
 Clutch: Own Type double disc Operated by hand  
 Advertised speeds, miles per hour: First 2 1/2 Second 3 1/2  
 Third 5 Reverse 2  
 Drive wheels: Diameter 46" Face 11 1/8"  
 Lugs: Type Spade No. per wheel 24 Size 4 1/4" high x 3 1/4" face  
 Extension rims: Width 6" Lugs Spade No. per rim 12  
 Size 4 1/4" high x 3 1/4" face  
 Seat Pressed stool  
 Total weight as tested (with operator) 5690 pounds.

FUEL AND OIL:

Fuel: Distillate Weight per gallon 6.96  
 Oil: S.A.E. #40  
 Total oil to motor 4.014 gallons  
 Total drained from motor 2.792 gallons  
 Total time motor was operated 43 hours  
 The oil was drained once - at the end of the test.

UNIVERSITY OF NEBRASKA - AGRICULTURAL ENGINEERING DEPARTMENT  
AGRICULTURAL COLLEGE, LINCOLNCopy of Report of Official Tractor Test No. 236REPAIRS AND ADJUSTMENTS

No repairs or adjustments.

REMARKS

All 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 these figures were used in determining the ratings recommended by the A.S.A.E. and S.A.E. tractor rating codes. Tests C, D, E, G, and H were made with an operating setting of the carburetor (selected by the manufacturer) of 96.4% of maximum horsepower.

Observed maximum horsepower (tests B &amp; F)      Drawbar 29.90    Belt 41.59

Sea level (calculated) maximum horsepower      Drawbar 32.02    Belt 43.96  
(Based on 60° F. and 29.92" Hg.)Highest permissible horsepower ratings      Drawbar 24.02    Belt 37.37  
(as recommended by A.S.A.E. and S.A.E.  
codes)

The 100% maximum belt and drawbar tests were not included in reports issued from 1928 to 1934 inclusive, except in those cases where the 100% maximum setting was used throughout the complete test.

We, the undersigned, certify that the above is a true and correct report of official tractor test No. 236

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Carlton L. Zink  
Engineer-in-charge

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E. E. Brackott

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C. W. Smith

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E. B. Lewis  
Board of Tractor Test Engineers