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January 1927

Test 143: Oil Pull Model X 25-40

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. 143.

Dates of test: October 6th to October 13th, 1927
 Name, model and rating of tractor: Oil Pull 25-40 Model X
 Serial No. Engine: X1 Serial No. Chassis: X1
 Manufacturer: Advance-Rumely Company, LaPorte, Indiana
 Tractor equipment used: American Bosch "DU4/2Ed26" Mag., Own carburetor.
 Style and dimensions of wheel lugs: Spade 48 per wheel, 3.4" high x 3" wide x 3.5" base. 8" extension rims.

BRAKE HORSE POWER TESTS

H. P.	:Crank	:Time:	Fuel Consumption		Water consumption			Temp.		Average Humidity		Height of
Dev.	:Shaft	: of :	Kind	:Gals.:	:Gals. per hour	:Cool-:	:In :	:Total	:Cool-:	:Air	:& %	Barometer
	:Speed	:Test:	of	:Per	:hrs, @	:ing	:fuel	:ing	:ing	:	:	In Inches
	:R.P.M.	:Min.:	fuel	:Hour	:	:	:	:	:	:	:	

RATED LOAD TEST

40.50	:724	: 60	:Kero.:	3.632:	11.15:	0.00	:2.90	: 2.90	: 201	: 80	: 41	: 28.42
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**VARYING LOAD TEST

40.44	:722.5	: 10	:Kero.:	:	:	:	:	:	:	:	:	:
43.15	:720	: 10	: "	:	:	:	:	:	:	:	:	:
1.17	:745	: 10	: "	:	:	:	:	:	:	:	:	:
10.42	:741	: 10	: "	:	:	:	:	:	:	:	:	:
20.72	:738.5	: 10	: "	:	:	:	:	:	:	:	:	:
30.67	:729.5	: 10	: "	:	:	:	:	:	:	:	:	:
24.66	:733	: 60	: "	:2.444:	10.09:	0.00	:1.18	: 1.18	: 205	: 80	: 41	: 28.38

MAXIMUM LOAD TEST

50.26	:725	:120	:Kero.:	5.768:	8.71:	0.00	:5.43	: 5.43	: 174	: 76	: 49	: 28.49
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HALF LOAD TEST

20.655	:736	: 60	:Kero.:	2.111:	9.78:	0.00	:0.27	: 0.27	: 204	: 62	: 62	: 28.55
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* Taken in discharge line from engine.
 **The last line is the average for the hour.

REMARKS: The kerosene used as fuel in these tests weighed 6.84 pounds per gallon.

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DRAWBAR HORSE POWER TESTS

H. P. Dev.	Draw	Speed	Crank	Slip	Fuel Consumption			Water	Temp. Deg. F.		Average	Height of Barometer In Inches
	Bar	Miles	Shaft	on	KIND	amt.	H. P.	Used	Cooling	Air		
	Pull	Per	Speed	drive	Used	per	hrs.	per	Fluid	*	%	
	Pounds	Hour	R.P.M.	wheels		hour	per	Hour				
				%		Gals.	Gal.	Gals.				

RATED LOAD TEST. TEN HOURS

26.42	: 3276	: 3.02	: 724	: 6.24	: Kero.	: 3.338	: 7.91	: 1.97	: 182	: 56	: 38	: 28.93
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MAXIMUM LOAD TEST

38.66	: 4787.5	: 3.02	: 722	: 5.88	: Kero.	: -- NOT RECORDED --	: 142	: 60	: 39	: 28.57
37.79	: 6385	: 2.22	: 728	: 16.82	: Kero.	: -- NOT RECORDED --	: 146	: 58	: 39	: 28.57
34.58	: 3477.5	: 3.73	: 723	: 5.64	: Kero.	: -- NOT RECORDED --	: 144	: 61.5	: 39	: 28.57

*Taken in discharge line from engine.

REMARKS: The rated load and first maximum tests were made in intermediate gear, the second maximum test was made in low gear, the third maximum test was made in high gear. The distance advanced by the tractor without load on level ground for several complete revolutions of the drive wheels was taken as a basis for calculating the slippage.

OIL CONSUMPTION:

During the complete test consisting of about 34 hours running the following oil was used:
 For the engine, 10-1/4 gallons of Oil Pull Extra heavy. 1-3/4 gals. to fill crankcase which was drained and refilled twice. 6-3/4 gallons were added during the test.
 For the transmission, None gallons of 600 W.

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REPAIRS AND ADJUSTMENTS

No repairs or adjustments were necessary during this test. 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

MOTOR: Own, 2 cylinder, horizontal, valve-in-head, mounted crankshaft crosswise. Bore, 6-13/16". Stroke, 8-1/4". Rated speed 725 R.P.M. Pulley diameter, 18-3/4", Width 8-1/2". Rotates at crankshaft speed.

Magneto: American Bosch "DU4/2Ed26".

Carburetor: Own make.

Governor: Own make fly-ball type.

Air cleaner: Donaldson dry centrifugal type.

Lubricator: Manzel.

CHASSIS: Four wheels, two drivers, enclosed gear drive, clutch own make twin disc. Advertised speeds: Low, 2.3 miles per hour; Intermediate, 2.9 miles per hour; High, 3.5 miles per hour; Reverse, 2.8 miles per hour.

Total weight as tested (with operator) 9440 pounds

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 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. 143.

Lew Wallace

Engineer-in-Charge

Oscar W. Sjogren

E. E. Brackett

C. W. Smith

Board for Tractor Test Engineers