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January 1927

Test 145: Oil Pull Model Y 30-50

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. 145

Dates of test: October 13th to October 24th, 1927
 Name, model and rating of tractor: Oil Pull 30-50 Model Y
 Serial No. Engine: Y1 Serial No. Chassis: Y1
 Manufacturer: Advance-Rumely Company, La Porte, Indiana
 Tractor equipment used: American Bosch "DU4/2Ed26" Mag., Own carburetor
 Style and dimensions of wheel lugs: Spade 48 per wheel, 4-1/2" high x 3" wide x
 4-1/4" base. 10" extension rims.

BRAKE HORSE POWER TESTS

H. P. Dev.	Crank Shaft	Time of Test	Fuel consumption Kind	Gals. Per Hour	H. P. @	Water consumption Cool- ing	Gals. per hour In fuel	Total Cool- ing	Temp. Deg. F. Air	Average Humidity	Height of Barometer In Inches
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RATED LOAD TEST

50.36	:632	: 60	:Kero.:	4,667	:10.79	:0.00	:3.29	:3.29	: 217	: 69	: 28	: 28.86
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**VARYING LOAD TEST

50.29	:630.5	: 10	:Kero.:	:	:	:	:	:	:	:	:	:
50.44	:626.5	: 10	: "	:	:	:	:	:	:	:	:	:
1.32	:657.5	: 10	: "	:	:	:	:	:	:	:	:	:
13.06	:651	: 10	: "	:	:	:	:	:	:	:	:	:
25.84	:645.5	: 10	: "	:	:	:	:	:	:	:	:	:
38.29	:638.5	: 10	: "	:	:	:	:	:	:	:	:	:
30.25	:642	: 60	: "	:3,374	: 6.97	:0.00	:1.93	:1.93	: 221	: 73	: 28	: 28.92

MAXIMUM LOAD TEST

63.32	:635	: 120	:Kero.:	7.156	: 8.85	:0.00	:5,955	:5,955	: 200	: 80	: 29	: 28.86
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HALF LOAD TEST

25.83	:644	: 60	:Kero.:	2,658	: 9.72	:0.00	:0.38	:0.38	: 220	: 80	: 32	: 28.83
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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 Bar Pull Pounds	Speed Miles Per Hour	Crank Shaft Speed R.P.M.	Slip on Drive Wheels %	Fuel Consumption Kind Used	Water Used per hour	Temp. Deg. F.	Average Humidity %	Height of Barometer In Inches

RATED LOAD TEST. TEN HOURS

30.33	3504	3.25	634	4.19	Kero.	4.493	6.75	3.45	204	76	21	28.74
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MAXIMUM LOAD TEST

44.10	5252.5	3.15	634	6.21	Kero.	-- NOT RECORDED --	188	75.5	33	28.60
47.18	6965	2.54	634	7.79	Kero.	-- NOT RECORDED --	190	93.5	20	28.54
42.85	4025	3.99	635	3.80	Kero.	-- NOT RECORDED --	178	84.5	33	28.60

*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 33 hours running the following oil was used:
 For the engine, 10.135 gallons of Oil Pull extra heavy. 2.3 gallons to fill crankcase. 7.835 gallons were added during the test.
 For the transmission, None gallons of 600 W.

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REPAIRS AND ADJUSTMENTS

On the rated drawbar test the water pump lost prime for short intervals. At the end of the test and during the inspection of the tractor, both intake valve springs were found broken.

At the end of the test the tractor was in good running order except as noted above and there were no indications of undue wear nor of any weakness which might require early repair.

BRIEF SPECIFICATIONS

MOTOR: Own, two cylinder, horizontal, valve-in-head, mounted crankshaft crosswise. Bore, 7-13/16", stroke, 9-1/2". Rated speed: Crankshaft, 635 R.P.M.
Pulley: Diameter 24-1/4", width 10", 635 R.P.M.

Magneto: American Bosch "DU4/2Ed26".
Carburetor: Own make.
Air Cleaner: Donaldson dry centrifugal type.
Governor: Own make fly-ball 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, 2.9 miles per hour.

Total weight as tested (with operator) 13,205 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 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. 145.

Lew Wallace
Engineer-in-charge

Oscar W. Sjogren

E. E. Brackett

C. W. Smith
Board of Tractor Test Engineers