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January 1921

Test 074: Huber Super 4 15-30

Nebraska Tractor Test Lab

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UNIVERSITY FARM, LINCOLN

Dates of test: April 11 to April 20. 1921

Serial No. Engine: 1102 Serial No. Chassis: 6714

Tractor equipment used: Kingston LD4 Magneto.-Kingston L Carburetor

Style and dimensions of wheel lugs: Cone 3 7/8 inches high 8" Extension rims.

		: Water Consump. :		Temp. :		Humidity	Height of Barometer	
		: Fuel Consump. :		Gals. Per Hour :				Deg. F.
Crank Time :		: :		: * :				
H.P.	Shaft: of Kind:	Gals:	H.P.	Cool- In :	Cool- :			
Dev.	Speed: Test: of :	@ :	Hrs. @: ing :	Fuel: Total: ing :	Air:			
: R.P.M.: Min :		Fuel: Hour: Gal. :	: :		: Fluid:			

30.34 : 1010 : 120 : Gaso : 3.287 : 9.23 : X : 0.16 : 0.16 : 161 : 82 : 91 : 28.5
Belt slippage 1 16%

30.26	:1007	: 10	:	Gaso:	:	:	:	:	:	:	:	:
30.64	:1006	: 10	:	" :	:	:	:	:	:	:	:	:
1.42	:1090	: 10	:	" :	:	:	:	:	:	:	:	:
8.11	:1072	: 10	:	" :	:	Belt slippage	0.87%	:	:	:	:	:
15.94	:1056	: "	:	" :	:	:	:	:	:	:	:	:
23.31	:1033	: "	:	" :	:	:	:	:	:	:	:	:
18.65	:1044	: 60	:	" :2.419:	7.71:	X	:0.09:	0.09	: 167	:83	: 91	: 28.5

39.79	:1014	: 60	:Gasol	5.003	:7.95	: X	:0.18	:0.18	: 183	:81	: 91	: 28.5
44.68	:1216	: 60	: "	:5.181	:8.62	: X	:0.35	:0.35	: 181	:75	: 91	: 28.5

15.87 : 1051 : 60 : Gaso : 2.415 : 5.57 : X : X : X : 161 : 79 : 91 : 28.5
Belt slippage 0.815 : : : : : : : : : : : :

Remarks: The gasoline used as fuel in this test weighed 6.20 pounds per gallon.

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

The belt slippage for the first Maximum load is 1.43% and for the second maximum it is 1.18%.

Copy of Report of Official Tractor Test No. 74

Drawbar Horse Power Tests

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

Rated Load Test, Ten Hours.

17.27	2264	2.86	1004	-2.56	Gasol.	3.14	5.49	0.14	173	76	39	28.65
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Maximum Load Test

26.35	3645	2.76	988	-1.01	Gasol.	---	Not recorded	167	63	53	28.15
24.87	2133	4.37	1000	-3.0	"	"	"	177	65	53	28.15

*Taken in discharge line from engine.

Remarks: The first maximum and rated loads were run in low gear. The second maximum was run in high gear.

**Two figures are given denoting slippage in each test. The first shows slippage at the rim of the wheel, and the second shows slippage at the points of the lugs.

Oil Consumption: During the complete test consisting of about 32 hours running the following oil was used: For the engine, $3\frac{3}{4}$ gallons of Mobiloil BB of which $2\frac{1}{2}$ were used to fill crankcase at start; For the gears, 1 gallon of Polarine heavy.

Copy of
Report of Official Tractor Test No. 74

General Remarks:

Repairs and Adjustments

Cleaned carburetor while on limber up run.
Replaced magneto at end of limber up run. It was claimed by the representative that the old one had poor contact points.
Changed one spark plug during first maximum belt test.
Changed other three plugs before second maximum belt test.
At the close of the test the tractor was in good operating condition and there were no indications of undue wear in any part which might require early repair.

Brief Specifications

Huber Super 4-- 15 - 30
Motor: - Midwest, 4 cylinder, valve-in-head, vertical,
bore $4\frac{1}{2}$ ", stroke 6", rated speed, 1000 r.p.m.
Chassis:- 4 wheel, disc clutch, rated speeds, Low 2.70 mi. per hr.,
High, 4.15 mi. per hr.
Total weight, 6090#.

In the advertising literature submitted with the applications for test of this tractor, we find some claims and statements which cannot be directly compared with the results of this test. 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. 74.

Fred R. Nohavec
Engineer-in-Charge

Oscar W. Sjogren

E. E. Brackett

C. W. Smith
Board of Tractor Test Engineers.

E.