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January 1926

Test125: Cletrac Model A 30-45

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. 125.

Dates of test: August 27th to September 7th, 1926
 Name, model and rating of tractor: Cletrac Model A 30-45
 Serial No. Engine 1216 Serial No. Chassis: 18
 Manufacturer: The Cleveland Tractor Co., Cleveland, Ohio.
 Tractor equipment used: Eiseman "GS6" Mag; Tillotson "ST3A" Carb.
 Style and dimensions of wheel lugs: Angles 16" long, 2-1/4" high at center.

BRAKE HORSE POWER TESTS

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

RATED LOAD TEST

45.19	: 1582	: 120	: Gaso.:	5.639	: 8.01	: 1.421	: 0.00	: 1.42	: 210	: 96	: 67	: 28.80
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**VARYING LOAD TEST

44.81	: 1573	: 10	: Gaso.:									
45.29	: 1584	: 10	: "									
0.68	: 1722	: 10	: "									
12.12	: 1688	: 10	: "									
23.61	: 1682	: 10	: "									
35.00	: 1626	: 10	: "									
27.55	: 1646	: 60	: "	4.463	: 6.17	: 0.00	: 0.00	: 0.00	: 205.5	: 95	: 67	: 28.79

MAXIMUM LOAD TEST

48.62	: 1575	: 60	: Gaso.:	5.932	: 8.20	: 0.959	: 0.00	: 0.959	: 210	: 89	: 68	: 28.72
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HALF LOAD TEST

23.65	: 1645	: 60	: Gaso.:	3.857	: 6.13	: 0.00	: 0.00	: 0.00	: 194	: 83	: 48	: 28.85
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*Taken in discharge line from engine.

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

REMARKS: The gasoline used as fuel weighed 6.17 pounds per gallon.

Report of Official Tractor Test No. 125.

TRACTOR HORSE POWER TESTS

H. P. Dev.	Draw	Speed	Crank	Slip	Fuel Consumption			Water	Temp. Deg. F.		Average	Height of
					Kind	Amt.	H.P.		Used	Cooling		
	Ear	Miles	Shaft	on	Used	Per	Hrs.	Per	Fluid	*	%	In Inches
	Pull	Per	Speed	Drive		Hour	Per	Hour				
	Pounds	Hour	R.P.M.	Wheels		Gals.	Gal.	Gals.				

**RATED LOAD TEST. TEN HOURS

29.16	: 4520	: 2.42	: 1581	: 2.56	: Gaso.:	4.711	: 6.19	: 0.29	: 206	: 81	: 77	: 28.595
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MAXIMUM LOAD TEST

38.58	: 6170	: 2.345	: 1571	: 5.41	: Gaso.:	--	NOT RECORDED	--	: 199	: 89	: 83	: 28.60
36.435	: 2799	: 4.085	: 1581	: 0.87	: Gaso.:	--	NOT RECORDED	--	: 195	: 89	: 83	: 28.60

* Taken in discharge line from engine.

** The horsepower developed is slightly below rating because the observer failed to apply enough load.

REMARKS: The rated load and first maximum load tests were run in low gear, the second maximum load test was made in high gear. The distance advanced by the tractor without load on level ground for one complete revolution of the tracks was taken as a basis for calculating track slippage.

OIL CONSUMPTION:

During the complete test consisting of about 36 hours running the following oil was used:
 For the engine, 2 gallons of Mobiloil "EB", 2 gallons to fill crankcase. None added during test.
 For the transmission,
 3/4 gallons Mobiloil "A" were added to track lubricator during the test. 1/2 gal. Mobiloil "EB" added to transmission for belt work.

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REPAIRS AND ADJUSTMENTS

During the low gear drawbar tests the gear shift lever had to be tied in place in order to keep the gears in mesh.

No other repairs nor 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: Wisconsin, 6 cylinder, valve-in-head, mounted crankshaft lengthwise.
Bore 4", stroke 5", Rated speed 1577 R.P.M.
Magneto Eiseman "GS6". Carburetor Tillotson "ST3A".

Air cleaner: Pomona "Vortex" oiled spray type.
Governor: Taco, fly ball type.

Chassis: Track-layer, two tracks, enclosed gear drive, single disc clutch.
Advertised speeds; Low 2.4 miles per hour, high 4.75 miles per hour. Reverse 1.8 miles per hour.

Total weight as tested (with operator) 7223 pounds.

REMARKS

In the advertising literature submitted with the 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.

In order to conform to the provisions of the tractor rating code of the American Society of Agricultural Engineers and the Society of Automotive Engineers, the belt horsepower rating of this tractor should not exceed 44 HORSEPOWER.

We, the undersigned, certify that above is a true and correct report of official tractor test No. 125.

Low Wallace
Engineer-in-charge

Oscar W. Sjogren

E. E. Brackett

C. W. Smith

Board of Tractor Test Engineers.