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Nebraska Tractor Tests

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January 1922

## Test 085: Cletrac "F" 9-16

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 CAMPUS  
LINCOLN

Copy of Report of Official Tractor Test No. 85.

Dates of test: April 14 to April 20, 1922.  
Name, model and rating of tractor: Cletrac "F" 9-16  
Serial No. Engine: 727 Serial No. Chassis: 725-36  
Manufacturer: Cleveland Tractor Co., Cleveland, Ohio.  
Tractor equipment used: Eisemann G.S. 4 No. 610947 Mag. Tillotson C.D.1A Carb.  
Style and dimensions of wheel lugs: Track Layer 3/4" angles.

BRAKE HORSE POWER TESTS

H. P.	Crank	Time	Dev.	Shaft	of	Kind	Fuel Consumption		H. P.	Cool-	In	Total	Cool-	Temp. in	deg. F.	Air	Average	Humidity	Height of	Barometer	Inches.
							Gals.	@													
	Speed	Test		of				Hrs.	@	ing	Fuel		ing								
	R.P.M.	Min.	Fuel	Hour	Gal.								Fluid								

RATED LOAD TEST

16.36	:1611	:120	: Kero.	:1.608	:10.17	: X	:0.29	:0.29	:158	: 48	: 59	:28.71
Belt Slippage 0.22%												

\*\*VARYING LOAD TEST

16.33	:1606	: 10	: Kero	:	:	:	:	:	:	:	:	:
16.22	:1556	: 10	: "	:	:	:	:	:	:	:	:	:
1.52	:1903	: 10	: "	:	Average Belt Slippage	-0.44%	:	:	:	:	:	:
4.83	:1877	: 10	: "	:	:	:	:	:	:	:	:	:
9.43	:1836	: 10	: "	:	:	:	:	:	:	:	:	:
13.57	:1766	: 10	: "	:	:	:	:	:	:	:	:	:
10.80	:1757	: 60	: "	:1.425	: 7.58	: X	:0.17	:0.17	:163	: 51	: 36	:28.71

MAXIMUM LOAD TEST

19.61	:1620	: 60	: Kero	:2.906	: 6.74	: X	:0.184	:0.184	:184	: 49	: 36	:28.72
Belt Slippage 0.19%												

\*\*\*HALF LOAD TEST

9.38	:1826	: 60	: Kero	:1.263	: 7.43	: X	:0.077	:0.077	:162	: 51	: 36	:28.72
Belt Slippage -0.54%												

\*Taken in discharge line from engine.

Remarks: The kerosene used as fuel in this test weighed 6.80 pounds per gallon.

\*\*The last line is an average for the hour. The radiator was partly covered after first 20 minutes.

\*\*\* The radiator was  $\frac{1}{2}$  covered during this test.

1612-W

Copy of Report of Official Tractor Test No. 85

Drawbar Horse Power Tests

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

Rated Load Test, Ten Hours

9.84	: 1251.5	: 2.945	: 1568	: 3.34	: Kero.:	1.495	: 6.58	: 0.111	: 171	: 45	: 28	: 29.03
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Maximum Load Test

13.145	: 1780.0	: 2.770	: 1568	: 10.11	: Kero.:	--Not recorded --		: 190	: 59	: 23	: 28.78
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\*Taken in discharge line from engine.

Remarks: For computing track slippage the outside perimeter of the track was used. Radiator partly covered during first 5 hours of rated load test.

Engine R. P. M. is computed from revolutions of tracks in 400 feet.

Oil Consumption: During the complete test consisting of about 30 hours running the following oil was used:

For the engine, 3 5/8 gallons of Mobiloil A (3 gallons to fill crank case and transmission, and 5 pints were added during test.)

Copy of Report of Official Tractor Test No. 85.

Repairs & Adjustments:

No adjustments were made.

During the ten-hour draw bar test one roller, washer and retaining key for shoe pin were lost. Test was not interrupted.

At the end of the test the engine and tractor were in good running condition, and there were no indications of undue wear in any part nor of any weakness that might require early repair.

Brief Specifications.

Motor: own, 4 cylinder, vertical, L-head, Bore  $3\frac{1}{4}$ ", stroke  $4\frac{1}{2}$ ", rated speed 1600 R. P. M.

Chassis: Track type, disc clutch. Rated speed forward, 1-3 miles per hour. 1 gear forward. 1 gear reverse. Tread 36" centers. Clearance 8".

Total weight : 1920 pounds.

General 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.

We, the undersigned, certify that above is a true and correct report of official tractor test No. 85.

E. E. Brackett  
Engineer-in Charge

Oscar W. Sjogren

C. W. Smith

Fred R. McHavoc  
Board of Tractor Test Engineers.