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Nebraska Tractor Tests

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January 1925

## Test 118: Minneapolis Type B 17-30

Nebraska Tractor Test Lab

University of Nebraska-Lincoln, [tractortestlab@unl.edu](mailto:tractortestlab@unl.edu)

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Copy of Report of Official Tractor Test No. 118.

DRAWBAR HORSE POWER TESTS

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

RATED LOAD TEST. TEN HOURS

18.33	3118	2.21	839	-0.25	7.75	Kero	2.944	6.23	0.143	166	59	69.5	28.43
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MAXIMUM LOAD TEST

22.37	4374	1.92	836	10.75	19.68	Kero	- - NOT RECORDED - -			175	68	35.0	28.55
23.18	3040	2.86	837	-1.57	8.57	"	"	"		170	77	35.0	28.50

\* Taken in discharge line from engine.

\*\* The first figure denotes slippage at the rim of the wheel. The second figure denotes slippage at point of lugs.

REMARKS: The rated load and first maximum tests were run in low gear. The second maximum test was run in high gear.

OIL CONSUMPTION: During the complete test consisting of about 40 hours running the following oil was used:

For the engine, 11-1/2 gallons of Mobiloil "A", 1-1/2 gallons was put in the crankcase and 10 gallons added to lubricator.

For the transmission, none.

Other lubrication - 1 lb. light cup grease.

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REPAIRS AND ADJUSTMENTS

It was necessary to drill eight new holes before the left extension rim could be attached.

After the limbering-up run and before any official data were taken the engine head was removed, the carbon cleaned out, and all valves ground.

During the limbering-up run and the rated drawbar tests the fuel line clogged up, requiring stops for cleaning out.

Except as noted above, there were no repairs nor adjustments 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

"The Minneapolis" Type B 17-30

Motor: Own, 4 cylinder, vertical, valve-in-head. Mounted with crankshaft crosswise. Bore, 4-7/8"; stroke 7".  
Rated speed 825 r.p.m.

Governor: Own (fly-ball type)  
Air Cleaner: Donaldson Simplex (oiled fiber type)  
Lubricator: Detroit

Chassis: Four wheels, 2 drivers; enclosed gears; disc clutch.  
Advertised speeds: low gear, 2.23 miles per hour; high gear  
2.84 miles per hour.

Total weight as tested (with operator) 7,550 pounds.

REMARKS

In the advertising literature submitted with the specifications and application for the 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. 118.

E. E. Brackett  
Engineer-in-charge

Oscar W. Sjogren

Lew Wallace

C. W. Smith

Board of Tractor Test Engineers.