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Tractor Test and Power Museum, The Lester F. Larsen

January 1930

Test 184: Eagle model 6A

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. 184

Dates of test: Oct. 21st to Nov. 1st, 1930
 Name and model of tractor: EAGLE "6A"
 Manufacturer: Eagle Manufacturing Company, Appleton, Wisconsin.
 Manufacturer's rating: NOT RATED.
 Highest rating permissible under the recommendations of the A.S.A.E. and
 S.A.E. Tractor Rating Codes: Drawbar - 22 H.P. Belt - 37 H.P.
 One carburetor setting (96.9% of maximum) was used thruout this test.

B R A K E H O R S E P O W E R T E S T S

H. P.	:Crank : :shaft :	Fuel Consumption	: Water consumption :	Temp. :	: Barometer
		:Gals. : :R.P.M. per :	:H. P. : :H.P. :	:Lbs. @ : :H.P. :	: per hour gallons :
		: hrs. @ : :gal. :hour :	:Cool- : :ing :	: In : : fuel :	:Cool-: : :ing : Air:
			: Total:ing : :med. : :	: Inches of : Mercury	
OPERATING MAXIMUM LOAD TEST. ONE HOUR					
40.36	:	1417	:	4.300	:
	:	9.39	:	0.660	:
	:	0.00	:	0.00	:
	:	0.00	:	0.00	:
	:	181	:	71	:
	:	28.960	:		:
RATED LOAD TEST. ONE HOUR					
37.14	:	1428	:	4.047	:
	:	9.18	:	0.674	:
	:	0.00	:	0.00	:
	:	0.00	:	0.00	:
	:	181	:	72	:
	:	28.820	:		:
*VARYING LOAD TEST. TWO HOURS					
37.11	:	1424	:	4.032	:
0.96	:	1596	:	1.817	:
19.19	:	1464	:	2.758	:
38.48	:	1347	:	4.110	:
10.00	:	1508	:	2.288	:
27.92	:	1426	:	3.310	:
23.02	:	1458	:	3.057	:
	:		:	7.53	:
	:		:	0.821	:
	:		:	0.00	:
	:		:	0.00	:
	:		:	0.00	:
	:		:	183	:
	:		:	68	:
	:		:	28.820	:
*20 minute runs, Last line is average for two hours.					

D R A W B A R H O R S E P O W E R T E S T S

H. P.	: Draw : : Bar :	:Speed : :miles : :per :	:Crank : :shaft : :speed :	: Slip : : on : : drive :	: Fuel Consumption :	: Water: :	Temp. :	: Barometer
		:R.P.M. : :wheels : :per % :	:Gal. : :hr. : :per :	:H. P. : :Lbs. : :per :	: used : :Gal. : :per :	:Cool-: : :ing : :med. : :	: Air: : :Inches of : Mercury	
RATED LOAD TEST. TEN HOURS. <u>Intermediate</u> Gear.								
22.20	:	2422	:	3.44	:	1418	:	9.80
	:	4.235	:	5.24	:	1.181	:	0.132
	:	186	:	48	:		:	29.210
MAXIMUM LOAD TEST								
25.75	:	2120	:	4.55	:	1412	:	10.59
29.52	:	3282	:	3.37	:	1416	:	11.38
27.87	:	4650	:	2.25	:	1402	:	20.63
	:		:		:		:	Not Recorded
	:		:		:		:	" "
	:		:		:		:	" "
	:		:		:		:	173
	:		:		:		:	70
	:		:		:		:	28.960
	:		:		:		:	183
	:		:		:		:	57
	:		:		:		:	28.970
	:		:		:		:	192
	:		:		:		:	66
	:		:		:		:	28.950

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BRIEF SPECIFICATIONS

MOTOR: Make Hercules Serial No. 162415 Type 6 cylinder vertical
Head "L" Mounting Lengthwise
Bore and stroke: 4 x 4 1/2 in. Rated R.P.M. 1416
Port Dia. Valves: Inlet 1 5/8" Exhaust 1 1/2"
Belt pulley: Diam. 16 in. Face 8 in. R.P.M. 625
Magneto: American Bosch Model "U6"
Carburetor: Zenith Model "96ATO" Size 1 1/2"
Governor: Hercules No. None Type Centrifugal
Air Cleaner: Vortox Type Oil spray
Lubrication: Pressure

CHASSIS: Type 4 wheels Serial No. 2216 Drive Enclosed gear
Clutch: Twin disc Type Dry, double plate operated by hand
Advertised speeds, miles per hour: Low 2 1/2
Intermediate 3 1/3 High 4 1/2 Reverse 2 1/2
Drive wheels: Diameter 48" Face 12 1/4"
Lugs: Type Spade No. per wheel 24 Size 4" high x 3 1/2" face
Extension rims: Width 6" Lugs: Spade-12 per rim
Size 4" high x 3 1/2" face
Seat Pressed steel
Total weight as tested (with operator) 5670 pounds.

FUEL AND OIL:

Fuel: Gasoline Weight per gallon 6.19 pounds

Oil: S. A. E. Viscosity No. 40

Total oil to motor 3.024 gallons

Total drained from motor 1.998 gallons

The oil was drained from the crankcase once - at the end of the test.

Total time motor was operated 50 hours

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REPAIRS AND ADJUSTMENTS

No repairs or adjustments.

REMARKS

The tests herein reported were conducted with one carburetor setting which remained unchanged thruout the tests. This condition should be recognized when comparing this test with any Nebraska test conducted prior to 1928.

The drawbar tests were run with drive wheels equipped with spade lugs and extension rims and lugs as listed on Page 2 of this report.

In the advertising literature submitted with the specifications and application for test of this tractor we find no claims and statements which, in our opinion, are unreasonable or excessive.

We, the undersigned, certify that the above is a true and correct report of official tractor test No. 184.

Carlton L. Zink
Engineer-in-charge

E. E. Brackett

C. W. Smith

E. B. Lewis
Board of Tractor Test Engineers