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January 1929

Test 168: Huber Model "Light Four" 20-36

Tractor Museum

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UNIVERSITY OF NEBRASKA AGRICULTURAL ENGINEERING DEPARTMENT
 AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 168

Dates of test: August 19th to 24th, 1929.

Name, model and rating of tractor: Huber Model "Light Four" 20-36

Manufacturer: Huber Manufacturing Company, Marion, Ohio.

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

H. P.	:Crank :shaft :speed :R.P.M. :	: Fuel Consumption :Gals. :per :hour	:H. P. :hrs. :gal.	:Lbs. :@ :H.P. :hour	:Water consumption :per hour gallons :Cool- :ing	:In :fuel :	:Total :	:Temp. :Deg. F. :Cool- :ing :med.	:Barometer :Inches of :Mercury :
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OPERATING MAXIMUM LOAD TEST. ONE HOUR (98.8% of maximum load)

42.26 : 1152 : 5.207 : 8.12 : 0.761 : 0.0 : 0.0 : 0.0 : 194 : 96 : 28.73

RATED LOAD TEST. ONE HOUR

36.05 : 1148 : 4.625 : 7.79 : 0.793 : 0.0 : 0.0 : 0.0 : 182 : 95 : 28.73

*VARYING LOAD TEST. TWO HOURS

36.23	: 1154	: 4.699	: 7.71	: 0.802	: 0.0	: 0.0	: 0.0	: 180	: 95	:
1.00	: 1214	: 1.961	: 0.51	: 12.120	: 0.0	: 0.0	: 0.0	: 150	: 94	:
18.63	: 1183	: 3.194	: 5.83	: 1.060	: 0.0	: 0.0	: 0.0	: 156	: 94	:
39.08	: 1142	: 4.893	: 7.99	: 0.774	: 0.0	: 0.0	: 0.0	: 186	: 95	:
9.44	: 1196	: 2.456	: 3.84	: 1.608	: 0.0	: 0.0	: 0.0	: 152.5	: 94.5	:
27.48	: 1166	: 3.942	: 6.97	: 0.886	: 0.0	: 0.0	: 0.0	: 167	: 92	:
22.28	: 1174	: 3.525	: 6.32	: 0.978	: 0.0	: 0.0	: 0.0	: 166	: 94	: 28.73

*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 :pull :pounds :	:Speed :miles :per :hour	:Crank :shaft :speed :R.P.M. :	:Slip :on :drive :wheels :%	:Fuel Consumption :Gal. :hr. :per :hour	:Lbs. :per :H.P. :hour	:Water: :used :Gal. :per :hour	:Temp. : :Cool- :ing :med.	:Barometer :Inches of :Mercury :
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RATED LOAD TEST. TEN HOURS. High GEAR.

20.35 : 2191 : 3.48 : 1153 : 7.06 : 4.035 : 5.04 : 1.225 : 0.0 : 166 : 91 : 28.75

MAXIMUM LOAD TEST

29.18	: 3298	: 3.32	: 1155	: 11.76	: -----	: Not Recorded	: -----	: 172	: 92	: 28.74
27.25	: 4482.5	: 2.28	: 1148	: 19.19	: -----	: " "	: -----	: 176	: 100	: 28.74

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(Corrected page)

BRIEF SPECIFICATIONS

MOTOR: Make Waukesha Serial No. 192002 Type 4 cylinder vertical
Head "L" Mounting Lengthwise
Bore and stroke: 4 $\frac{3}{4}$ x 6 $\frac{1}{4}$ in. Rated R.P.M. 1150
Port. Dia. Valves: Inlet 2-1/8" Exhaust 2-1/8"
Belt pulley: Diam. 17 in. Face 8 $\frac{1}{2}$ in. R.P.M. 616
Magneto: Eisemann Model "GV 4"
Carburetor: Stromberg Model "M3" Size 1 $\frac{1}{2}$ "
Governor: Waukesha No. ----- Type Fly-ball
Air Cleaner: Donaldson Type Oil filter
Lubrication: Pressure

CHASSIS: Type 4 Wheels Serial No. 9699 Drive Enclosed gear
Clutch: Twin Disc Type Dry plate operated by Hand
Advertised speeds, miles per hour: Low 2.32
Intermediate None High 3.08 Reverse 1.83
Drive wheels: Diameter 50" Face 12"
Lugs: Type Spade No. per wheel 36 Size 5 $\frac{3}{4}$ " High x 3 $\frac{1}{2}$ " Face
Extension rims: Width 8" Seat Pressed steel
Total weight as tested (with operator) 6725 pounds.

FUEL AND OIL

Fuel: Gasoline Weight per gallon 6.18
Oil: Mobiloil BB To fill crankcase 2 gallons
Additional amount used during test 1 $\frac{1}{2}$ gallons
Total number of hours of test 36

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REPAIRS AND ADJUSTMENTS

During the maximum drawbar tests the clutch was adjusted.

REMARKS

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

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.

The results of this test indicate that the rating of this tractor does not exceed the provisions of the tractor rating code of the American Society of Agricultural Engineers and the Society of Automotive Engineers.

We, the undersigned, certify that above is a true and correct report of official tractor test No. 168.

Lew Wallace
Engineer-in-Charge.

E. E. Brackett

C. W. Smith

E. B. Lewis