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January 1937

## Test 292: Huber Model B

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, LINCOLN

## Copy of Report of Official Tractor Test No. 292

Dates of test: October 13 to November 8, 1937.

Name and model of tractor: HUBER B

Manufacturer: Huber Manufacturing Company, Marion, Ohio.

Manufacturer's rating: NOT RATED.

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			Water Consumption per hour gallons			Temp. Deg. F.		Barometer Inches of Mercury
		Gal. per hr.	H. P. hr. per gal.	Lb. per H. P. hr.	Cool- ing	In fuel	Total	Cool- ing med.	Air	

## TESTS B AND C - MAXIMUM LOAD - TWO HOURS

27.50	1300	3.024	9.09	0.674	0.000	0.000	0.000	168	63	29.210
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## \*TEST D - ONE HOUR

24.15	1299	2.778	8.69	0.705	0.000	0.000	0.000	159	61	29.180
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## TEST E - VARYING LOAD - TWO HOURS (20 minute runs; last line average)

24.09	1297	2.765	8.71	0.704	--	--	--	160	63	--
0.73	1442	1.331	0.55	11.178	--	--	--	122	61	--
13.26	1416	2.139	6.20	0.989	--	--	--	138	62	--
23.94	1082	2.760	8.67	0.707	--	--	--	167	62	--
6.78	1437	1.742	3.89	1.575	--	--	--	131	62	--
19.38	1378	2.545	7.61	0.805	--	--	--	146	61	--
14.70	1342	2.214	6.64	0.923	0.000	0.000	0.000	144	62	29.150

\*Formerly called RATED LOAD; see REMARKS 4, page 4.

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

STEEL WHEELS

H. P.	Draw bar pull pounds	Speed miles per hr.	Crank shaft speed R.P.M.	Slip on drive wheels %	Fuel Consumption			Water used Gal. per hr.	Temp. Deg. F.		Barometer Inches of Mercury
					Gal. per hr.	H. P. hr. gal.	Lb. per H.P. hr.		Cool- ing med.	Air	

TESTS F AND G - MAXIMUM LOAD

19.05	3059	2.34	1305	8.04	-----	Not Recorded	-----	189	87	28.730
20.72	2164	3.59	1296	2.13	-----	"	"	170	65	28.695
19.72	1534	4.82	1298	1.19	-----	"	"	174	70	29.015
13.32	544	9.18	1294	1.42	-----	"	"	168	74	29.015

\*TEST H - TEN HOURS - Second GEAR

16.29	1695	3.60	1301	2.08	2.917	5.58	1.098	0.015	153	58	28.915
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FUEL ECONOMY TEST - FOUR HOURS - Third GEAR

15.70	1231	4.78	1299	2.00	2.860	5.49	1.117	0.013	143	46	29.350
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RUBBER TIRES

TESTS F AND G - MAXIMUM LOAD

14.16	2668	1.99	1300	13.79	-----	Not Recorded	-----	121	53	29.300
21.16	2767	2.87	1300	14.59	-----	"	"	154	45	28.810
22.47	2078	4.06	1300	9.04	-----	"	"	167	56	28.820
22.94	1039	8.28	1298	2.95	-----	"	"	163	62	28.820

FUEL ECONOMY TESTS - FOUR HOURS EACH - Second and Third GEARS

17.72	2156	3.08	1300	8.27	2.620	6.76	0.906	0.017	145	51	29.360
18.62	1647	4.24	1300	4.85	2.636	7.06	0.868	0.000	123	36	29.440

\*Formerly called RATED LOAD; see REMARKS 4, page 4.

FUEL, OIL, AND TIME

Fuel Gasoline Weight per gallon 6.13 pounds

Oil: S.A.E. No. 30 To motor 2.852 gal. Drained from motor 2.103 gal.

Total time motor was operated 75 hours

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BRIEF SPECIFICATIONS

Advertised speeds, miles per hour (steel wheels): First 2.2  
Second 3.2 Third 4.3 Fourth 10 (approx.) Reverse 1.8

Belt pulley: Diameter 10" Face 6 3/8" R.P.M. 990

Clutch: Make Rockford Type Single-plate, dry Operated by Hand

Seat Pressed steel

Total weight as tested (with Operator) (Steel 3745 pounds  
(Rubber 4465 pounds)

MOTOR: Make Buda Serial No. 230317 Type 4 cylinder, vertical

Head L Mounting Crankshaft lengthwise Lubrication Pressure

Bore and stroke: 3 13/16" x 4 1/2" Rated R.P.M. 1300

Port diameter valves: Inlet 1.46875" Exhaust 1.375"

Magneto: Make American Bosch Model MJC4A - 102

Carburetor: Make Zenith Model TU4VP Size 1"

Governor: Make Pierce Type Centrifugal, fixed-speed, adjustable from  
seat

Air cleaner: Make Donaldson Type Oil-washed, wire screen filter

CHASSIS: Type Tricycle Serial No. 12585 Drive Enclosed gear

Tread width: Rear 50" - 74" Front: Top 13" Bottom 9 1/4"

Steel: Drive wheels: Type Standard No. 2 Diameter 50" Face 8"

Lugs: Type Spade No. per wheel 20 Size 4 3/4" high x 3 1/2" wide

Front wheels: Type Steel disc No. 2 Diameter 25" Face 4 1/2"

Rubber: Rear tires: No. 2 Size 9.00" x 36" Air pressure 14 pounds

Front tires: No. 2 Size 5.50" x 16" Air pressure 25 pounds

Added weight per wheel, pounds: Iron 250 Water 200

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REPAIRS AND ADJUSTMENTS

During the limber-up test a small leak developed in one end of the main fuel tank. The tank was removed and both ends completely resoldered.

The exhaust valves in cylinders 2 and 3 were reseated, refaced, and ground before running the steel wheel drawbar tests.

The fuel line from the auxiliary tank to the fuel filter cracked at a flanged connection. The broken end was cut off and the tube re-flanged.

One skid-ring bolt on the left front wheel and three spoke-to-rim bolts on the right rear wheel were lost out and replaced.

REMARKS

1. All results shown on page 1 of this report were determined from observed data and without allowances, additions, or deductions. Tests B and F were made with main carburetor jet and venturi (No. 27 and No. 25, respectively) as supplied by the manufacturer and data from these tests were used in determining the horsepower to be developed in tests D and H, respectively. Tests C, D, E, G, and H were made with the same jet and venturi.
2. Observed maximum horsepower (tests F & B)      Drawbar 20.72    Belt 27.50
3. Sea level (calculated) maximum horsepower      Drawbar 21.71    Belt 28.24  
(based on 60° F. and 29.92" Hg.)
4. Seventy-five per cent of calculated maximum drawbar horsepower and eighty-five per cent of calculated maximum belt horsepower (formerly A.S.A.E. and S.A.E. ratings)      Drawbar 16.28    Belt 24.00

We, the undersigned, certify that the above is a true and correct report of official tractor test No. 292.

Carlton L. Zink  
Engineer-in-charge

E. E. Brackett

Ivan D. Wood

L. W. Hurlbut  
Board of Tractor Test Engineers