

January 1921

Test 076: Best 60 35-55 h.p.

Tractor Museum

University of Nebraska-Lincoln, TractorMuseumArchives@unl.edu

Follow this and additional works at: <https://digitalcommons.unl.edu/tractormuseumlit>



Part of the [Applied Mechanics Commons](#)

Museum, Tractor, "Test 076: Best 60 35-55 h.p." (1921). *Nebraska Tractor Tests*. 695.
<https://digitalcommons.unl.edu/tractormuseumlit/695>

This Article is brought to you for free and open access by the Tractor Test and Power Museum, The Lester F. Larsen at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Nebraska Tractor Tests by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

UNIVERSITY OF NEBRASKA AGRICULTURAL ENGINEERING DEPARTMENT

UNIVERSITY FARM, LINCOLN

Copy of Report of Official Tractor Test No. 76

Dates of Test: May 6 to 24, 1921
 Name, model and rating of tractor: "Best 60" 35-55 H.P.
 Serial No. Engine: 2577. Serial No. Chassis: 845 A
 Manufacturer: C. L. Best Tractor Co., San Leandro, Calif.
 Tractor equipment used: Bosch (3215582) ZR41S Magneto; Ensign G Carburetor
 Style and Dimensions of wheel lugs: Track Layer.

BRAKE HORSE POWER TESTS

		Fuel Consump.	Water Consump.	Temp.				
		: Gals. Per Hour	: Deg. F.			Humidity	Height	Barometer
H.P.	Dev.	Crank: Shaft: of	Time: of	Kind: Test	Gals: H.P.	Cool-: In	Cool-: Air	
		: R.P.M: Min.:	: of	@	Hrs. @: ing	Fuel: Total: ing	: Fluid:	
		: Fuel: Hour: Gal.	:	:	:	:	:	

RATED LOAD TEST

56.09	: 655	: 120	: Gaso:	6.97	: 8.05	: 5	: X	: 10	: 209	: 90	: 51	: 28.5
Belt Slippage 1.99%												

**VARYING LOAD TEST

56.04	: 655	: 10	: Gaso:	:	:	:	:	:	:	:	:	:
56.02	: 650	: 10	: "	:	:	:	:	:	:	:	:	:
2.35	: 974	: 10	: "	:	:	:	:	:	:	:	:	:
20.47	: 950	: 10	: "	:	:	Belt slippage	1.54%	:	:	:	:	:
35.77	: 832	: 10	: "	:	:	:	:	:	:	:	:	:
47.23	: 737	: 10	: "	:	:	:	:	:	:	:	:	:
40.46	: 799	: 60	: Gaso:	6.14	: 6.58	: 1.50	: X	: 1.50	: 185	: 95	: 51	: 28.5

MAXIMUM LOAD TEST

56.33	: 655	: 60	: Gaso:	6.90	: 8.16	: 7.00	: X	: 7.00	: 209	: 94	: 51	: 28.5
Belt Slippage 1.99%												

HALF LOAD TEST

32.86	: 737	: 60	: Gaso:	4.94	: 6.65	: 1.00	: X	: 1.00	: 190	: 95	: 51	: 28.5
Belt Slippage 1.88%												

*Taken in discharge line from engine

Remarks: The gasoline used for fuel in this test weighed 6.17 pounds per gallon.

** Note - The last line is an average for the hour.

Copy of Report of Official Tractor Test No. 76
(Corrected)

Drawbar Horse Power Tests

H.P. Dev.	:Draw :Bar :Pull :Lbs.	:Speed :Miles :Per :Hour	:Crank :Shaft :Speed :R.P.M.	:Slip :on :Drive :Wheels	:Fuel Consumption:			:Temp. Deg. F.:		:Height :Average :Humidity :Barometer
					:Amt. :Per :Gals.	:H.P. :Hrs. :Gal.	:Used :Per :Gals.	:Cooling :Air :Fluid	:Average :Humidity :Barometer	

Rated Load Test, Ten Hours

35.31	: 5093	: 2.60	: 592	: 1.25	: Gaso.	: 5.66	: 6.24	: 0.16	: 187	: 86	: 49	: 28.70
-------	--------	--------	-------	--------	---------	--------	--------	--------	-------	------	------	---------

Maximum Load Test

48.80	: 7500	: 2.44	: 564	: 2.0	: Gaso.	: --Not Recorded--	: 195	: 80	: 48	: 28.80	
50.20	: 11000	: 1.71	: 642	: 6.8	: "	: "	: "	: 170	: 80	: 48	: 28.80

*Taken in discharge line from engine.

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

** Note: For computing slippage the outside length of track was measured.

Oil Consumption: During the complete test consisting of about 45 hours running the following oil was used: For the engine, 11½ gallons of Mobiloil A; For the transmission, 12 gallons of Mobiloil C To fill at start.

Copy of
Report of Official Tractor Test No. 76

Repairs and Adjustments:

After 12 hours of limber-up run the valves were ground and the manufacturer's representative asked for and was granted 12 hours additional time for limbering up.

Before any of the official data were taken the air cleaner was removed and will not be standard equipment. Also changed carburetor horn from $1\frac{3}{4}$ " to 2". The belt horse power rating was changed from 60 to 55 horse power.

At the end of the test the tractor was in good operating condition and there was no indication of undue wear in any part nor of any weakness which might require early repairs.

Brief Specifications: "Best 60", 35-55 H.P.

Motor: Own, 4 cylinder, vertical, valve-in-head; bore $6\frac{1}{2}$ ", stroke $8\frac{1}{2}$ "; rated speed: 650 r.p.m. rated H.P.: belt 55, drawbar 35.
Chassis: Track Layer, disc clutch. Rated speeds: low $1\frac{7}{8}$ miles per hour; high $2\frac{5}{8}$ miles per hour.

Total weight: 17,500 pounds.

General Remarks:

In the advertising literature submitted with the applications for test of this tractor we find some statements and claims which cannot be directly compared with the results of this test. It is our opinion that none of these are excessive or unreasonable.

We believe the name "Best 60" and characters "60 H.P." cast in radiator shell are misleading.

We, the undersigned, certify that above is a true and correct copy of report of official tractor test No. 76.

Fred R. Nohavec
Engineer-in-Charge

Oscar W. Sjogren

E. E. Brackett

C. E. Smith

Board of Tractor Test Engineers