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Larsen

January 1924

Test 105: Best Model A 60 50-60

Nebraska Tractor Test Lab

University of Nebraska-Lincoln, tractortestlab@unl.edu

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UNIVERSITY OF NEBRASKA AGRICULTURAL ENGINEERING DEPARTMENT
 AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 105

Dates of test: September 15th to 29th, 1924

Name, model and rating of tractor: Best A 60 50 - 60

Serial No. Engine: 1965 Serial No. Chassis: 1965

Manufacturer: C. L. Best Tractor Company, San Leandro, California

Tractor equipment used: Stromberg M4 Special carburetor. Bosch ZR4 Ed. 18 magneto
 Style and dimensions of wheel lugs: Straight cross cleat 1 1/2" high integral with track shoe.

BRAKE HORSE POWER TESTS

H.P. Dev.	Crank Shaft Speed R.P.M.	Time of Test Min.	Fuel Consumption			Water Consumption Gals. per hour			Temp. Deg. F.		Ave. humidity	Height of Barometer in Inches
			Kind of Fuel	Gals Per Hour	H.P. Hrs. Gal.	Cooling	In Fuel	Total	Cooling	Air		

RATED LOAD TEST

60.00	651.0	120	Gasol	7.814	7.63	0.00	0.00	0.00	196	87	28	28.95
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Belt Slippage 1.97%

**VARYING LOAD TEST

60.17	654.0	10	Gasol									
60.39	651.5	10	"									
0.92	695.5	10	"									
15.57	671.5	10	"									
30.79	666.0	10	"									
45.37	656.5	10	"									
36.13	666.0	60	Gasol	5.958	6.06	0.00	0.00	0.00	179	89	25	28.92

Average Belt Slippage 1.74%

MAXIMUM LOAD TEST

72.51	653.0	60	Gasol	11.360	6.38	0.00	0.00	0.00	195	87	25	28.85
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Belt slippage 2.07%

HALF LOAD TEST

30.30	659.0	60	Gasol	4.662	6.52	0.00	0.00	0.00	178	83	25	28.90
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Belt Slippage 1.91%

*Taken in discharge line from engine.

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

REMARKS: The gasoline used as fuel in this test weighed 6.22 pounds per gallon.

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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			Water Used Per Hour Gal.	Temp. Deg. F.		Ave Humid- ity %	Height of Barom- eter In Inches
					Kind Used	Amt Per Hour Gal.	H.P. Hr. Per Gal.		Cool- ing Fluid	Air		

RATED LOAD TEST. TEN HOURS

51.61	7654	2.53	649'	1.45	Gasol.	8.493	6.08	0.00	175	77	52	28.96
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MAXIMUM LOAD TEST

61.33	12360	1.86	650	3.36	Gasol.	---Not Recorded---			166	82	44	28.60
61.27	9155	2.51	650	2.10	"	"	"		168	82	44	28.60
60.22	6240	3.62	648	1.55	"	"	"		166	80	44	28.60

*Taken in discharge line from engine.

**The distance advanced by the tractor without load on level earth for one complete revolution of the tracks, was taken as a basis for calculating track slippage.

REMARKS: The rated load and second maximum tests were run in 2nd gear. The first maximum test was run in low gear. The third maximum test was run in high gear.

OIL CONSUMPTION:

During the complete test consisting of about 34 hours running the following oil was used:

For the engine, 8 gallons of Mobiloil "A". 5 gallons to fill crankcase and 3 gallons were added.

For the transmission, none.

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REPAIRS AND ADJUSTMENTS

At the end of the test the vacuum tank leaked at the bottom seam. Exhaust valve on cylinder No. 1 would not hold compression.

Except as noted above the tractor was in good working order at the end of the test, and there were no indications of undue wear nor of any weakness which might require early repair.

BRIEF SPECIFICATIONS

Best A 60 50 - 60

Motor: Own, 4 cylinder, vertical, valve-in head. Mounted crank shaft lengthwise. Bore, 6 1/2", stroke, 8 1/2". Rated speed, 650 r.p.m.

Air cleaner: Pomona (oil fibre type)

Governor: Own (flyball)

Chassis: Track type; two tracks, both drivers. Enclosed gear drive. Disc clutches. Advertised speeds: 1st, 1 7/8 miles per hour; 2nd, 2 5/8 miles per hour; 3rd, 3 5/8 miles per hour.

Total weight as tested (with driver) 20,000 pounds.

REMARKS

In the advertising literature submitted with the application for 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. 105.

E. E. Brackett
Engineer-in-Charge

Oscar W. Sjogren

C. W. Smith

Fred R. Nohavec
Board of Tractor Test Engineers