

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Nebraska Tractor Tests

Tractor Test and Power Museum, The Lester F. Larsen

---

January 1927

## Test 131: Lauson 16-32

Nebraska Tractor Test Lab

University of Nebraska-Lincoln, [tractortestlab@unl.edu](mailto:tractortestlab@unl.edu)

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



Part of the [Energy Systems Commons](#), [History of Science, Technology, and Medicine Commons](#), [Other Mechanical Engineering Commons](#), [Physical Sciences and Mathematics Commons](#), [Science and Mathematics Education Commons](#), and the [United States History Commons](#)

---

Nebraska Tractor Test Lab, "Test 131: Lauson 16-32" (1927). *Nebraska Tractor Tests*. 752.  
<https://digitalcommons.unl.edu/tractormuseumlit/752>

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

## AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 131.

Dates of test: March 28th to April 8th, 1927  
 Name, model and rating of tractor: Lauson 16-32  
 Serial No. Engine: 803-20 Serial No. Chassis: 3236  
 Manufacturer: The John Lauson Mfg. Co., New Holstein, Wisconsin  
 Tractor equipment used: Am. Bosch "2R4Ed26" Mag., Kingston "L3" Carburetor  
 Style and dimensions of wheel lugs: Spade 4" high x 4" x 2½" base.

### BRAKE HORSE POWER TESTS

H. P. Dev.	Crank Shaft	Time of	Kind of	Fuel Per	Consumption Gals. per hour	H. P. Cool- ing	Water Consumption Gals. per hour	Temp. Deg. F.	Cool- ing	Air	Average Humidity	Height of Barometer Inches

### RATED LOAD TEST

32.36	:	1102	:	60	:	Gasol.	:	3.811	:	8.50	:	0.00	:	0.24	:	0.24	:	186	:	99	:	29	:	28.85
-------	---	------	---	----	---	--------	---	-------	---	------	---	------	---	------	---	------	---	-----	---	----	---	----	---	-------

### \*\*VARYING LOAD TEST

32.47	:	1108	:	10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
32.78	:	1103	:	10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1.05	:	1202	:	10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
8.67	:	1174	:	10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
16.98	:	1153	:	10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
24.97	:	1120	:	10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
19.90	:	1143	:	60	:	Gasol.	:	2.964	:	6.71	:	0.00	:	0.20	:	0.20	:	169	:	98	:	29	:	28.84

### MAXIMUM LOAD TEST

36.97	:	1097	:	120	:	Gasol.	:	5.344	:	6.92	:	0.00	:	0.265	:	0.265	:	176	:	97	:	27	:	28.84
-------	---	------	---	-----	---	--------	---	-------	---	------	---	------	---	-------	---	-------	---	-----	---	----	---	----	---	-------

### HALF LOAD TEST

16.88	:	1145	:	60	:	Gasol.	:	2.648	:	6.37	:	0.00	:	0.19	:	0.19	:	183	:	90	:	42	:	28.93
-------	---	------	---	----	---	--------	---	-------	---	------	---	------	---	------	---	------	---	-----	---	----	---	----	---	-------

- \*Taken in discharge line from engine.
- \*\*The last line is the average for the test.
- \*\*\*Temperature readings taken at the air inlet to the carburetor.

REMARKS: The gasoline used as fuel weighed 6.14 pounds per gallon.

Copy of Report of Official Tractor Test No. 131.

DRAWBAR HORSE POWER TESTS

	:Draw	:Speed:	Crank	: Slip	:Fuel	- Consumption	: Water	:Temp. Deg. F.	:		:	
H. P.	:Bar	:Miles:	Shaft	: on	: Kind	: Amt.	: H. P.:	Used	: Cooling:	Air	: Average	: Height of
Dev.	:Pull	:Per	:Speed	: Drive	: Used	: per	: Hrs.	: Per	: Fluid	:	: Humidity	: Barometer
	:Pounds	:Hour	:R.P.M.	: Wheels:		: hour	: Per	: Hour	: *	:	: %	: In Inches
	:	:	:	: %	:	: gals.	: Gal.	: Gals.	:	:	:	:

RATED LOAD TEST. TEN HOURS

16.66	:1824.5	: 3.42:	1098	:	3.43	: Gaso.:	3.041	: 5.48:	0.09	:	188	: 52	:	88.5	:	28.80
-------	---------	---------	------	---	------	----------	-------	---------	------	---	-----	------	---	------	---	-------

MAXIMUM LOAD TEST

26.82	:2910	: 3.46:	1110.5	:	4.53	: Gaso.:	-- NOT RECORDED --	:	180	:	52	:	93	:	28.67
28.90	:4975	: 2.18:	1109.5	:	11.50	: Gaso.:	-- NOT RECORDED --	:	183	:	52	:	93	:	28.67

\* Taken in discharge line from engine.

REMARKS: The rated load and first maximum load tests were run in high gear, the second maximum load test was made in low gear. The distance advanced by the tractor without load on level ground for several complete revolutions of the drive wheels was taken as a basis for calculating the slippage.

OIL CONSUMPTION:

During the complete test consisting of about 37 hours running the following oil was used:  
For the engine, 3 gallons of Mobiloil "BB", 2 gallons to fill crankcase, 1 gallon added during test.  
For the transmission, None added gallons of Mobiloil "C".

Copy of Report of Official Tractor Test No. 131.

REPAIRS AND ADJUSTMENTS

During the limber up run the fan belt became defective and would not stay on the pulley. It was replaced with a new belt.

No other repairs or adjustments were necessary during this test. At the end of the test the tractor was in good running order and there were no indications of undue wear nor of any weakness which might require early repair.

BRIEF SPECIFICATIONS

Motor: Beaver, 4 cylinder, valve-in-head, mounted crankshaft lengthwise. Bore  $4\frac{1}{2}$ ". Stroke 6". Rated speed 1100 R.P.M.

Magneto: American Bosch "ZR4Ed26".

Carburetor: Kingston "L3".

Air Cleaner: Taco, water type.

Governor: Taco, fly-ball type.

Chassis: Four wheels, two drivers, enclosed gear drive, clutch dry plate twin disc. Advertised speeds: Low, 2.25 miles per hour; High, 3.25 miles per hour; Reverse, 2.35 miles per hour.

Total weight as tested (with operator) 5890 pounds.

REMARKS

In the advertising literature submitted with specifications and 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. 131.

Lew Wallace  
Engineer-in-Charge

Oscar W. Sjogren

E. E. Brackett

C. W. Smith