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Tractor Test and Power Museum, The Lester F.
Larsen

January 1932

Test 200: Allis Chalmers L

Nebraska Tractor Test Lab

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UNIVERSITY OF NEBRASKA - AGRICULTURAL ENGINEERING DEPARTMENT
AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 200

Dates of test: March 17 to April 11, 1932.

Name and model of tractor: ALLIS-CHALMERS MODEL "L"

Manufacturer: Allis-Chalmers Manufacturing Company, Springfield, Illinois.

Manufacturer's rating: NOT RATED.

Highest rating permissible under the recommendations of the A.S.A.E. and
S.A.E. Tractor Rating Codes: Drawbar - 60.02 H.P. Belt - 80.48 H.P.

One carburetor setting (99.98% of maximum) was used thruout this test.

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

H. P.	:Crank : :shaft :	Fuel Consumption : Gals. : H. P. :lbs. per:	Water Consumption : per hour gallons	: Temp. : : Deg. F. :	: Barometer : Inches of : Mercury
	:speed : :R.P.M.:	: hrs. per: : hour :	: Cool- : : ing :	: In : : fuel :	: Total : : ing :
	: : : : hour :	: gal. : : hour :	: : : : hour :	: : : : : med. :	: : : : : : : :

OPERATING MAXIMUM LOAD TEST, ONE HOUR

91.93 : 1048 : 10.868 : 8.46 : 0.714 : 0.00 : 0.00 : 0.00 : 175 : 69 : 29.095

RATED LOAD TEST. ONE HOUR

80.46 : 1050 : 9.576 : 8.40 : 0.719 : 0.00 : 0.00 : 0.00 : 175 : 73 : 29.045

*VARYING LOAD TEST. TWO HOURS

80.51	: 1051 :	9.606	: 8.38	: 0.721	: --	: --	: --	: 177	: 75	: --
0.82	: 1132 :	3.601	: 0.23	: 26.524	: --	: --	: --	: 182	: 78	: --
42.20	: 1102 :	5.891	: 7.16	: 0.843	: --	: --	: --	: 175	: 73	: --
88.97	: 1024 :	10.475	: 8.49	: 0.711	: --	: --	: --	: 180	: 73	: --
22.10	: 1127 :	4.535	: 4.87	: 1.239	: --	: --	: --	: 172	: 75	: --
61.42	: 1075 :	7.167	: 8.57	: 0.705	: --	: --	: --	: 176	: 75	: --
50.68	: 1085 :	6.879	: 7.37	: 0.820	: 0.00	: 0.00	: 0.00	: 177	: 75	: 29.005

*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 :	Speed : : miles :	: Crank : : shaft :	: Slip : : on :	Fuel Consumption : H. P. : lbs. :	Water : used :	: Temp. : : : :	: Barometer : Inches of : Mercury
	: pull : : pounds :	: per : hour :	: speed : : R.P.M.:	: drive: : wheels:	: Gal. : : per :	: per : H.P. :	: Gal. : : per :	: Cool- : : ing :
	: : : : :	: : : : :	: : : : :	: % : : hour :	: gal. : : hour :	: hour : : hour :	: hour : : hour :	: med. : : : :

RATED LOAD TEST. TEN HOURS. Second GEAR

61.69 : 9562 : 2.42 : 1051 : 1.83 : 8.247 : 7.48 : 0.807 : 0.00 : 172 : 65 : 28.925

MAXIMUM LOAD TEST

75.66	: 15086 :	1.88	: 1050	: 3.42	: ----	: Not Recorded	: ----	: 174	: 66	: 28.900
76.01	: 11826 :	2.41	: 1049	: 2.00	: ----	: " "	: ----	: 176	: 66	: 28.900
72.23	: 8985 :	3.01	: 1050	: 1.57	: ----	: " "	: ----	: 176	: 74	: 28.860
69.04	: 6299 :	4.11	: 1053	: 0.83	: ----	: " "	: ----	: 170	: 71	: 28.860
65.00	: 4697 :	5.19	: 1049	: 0.62	: ----	: " "	: ----	: 167	: 70	: 28.860
56.34	: 3263 :	6.48	: 1046	: 0.06	: ----	: " "	: ----	: 171	: 70	: 28.850

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BRIEF SPECIFICATIONS

MOTOR: Make Own Serial No. M L 1105 Type 6 Cylinder, Vertical
Head I Mounting Lengthwise
Bore and stroke: 5 1/4" x 6 1/2" Rated R.P.M. 1050
Port Dia. Valves: Inlet 2" Exhaust 2"
Belt pulley: Diam. 20" Face 15" R.P.M. 580
Magnetos: Eisemann Model G V 6
Carburetor: Two - Zenith Model C 6 EV Size 1 1/2"
Governor: Own No. None Type Centrifugal
Air Cleaner: Pomona Vortex Type Oil-washed wire filter
Lubrication: Pressure

CHASSIS: Type Tracklayer Serial No. L 69 Drive Enclosed gear
Clutch: Own Type Double disc operated by hand
Advertised speeds, miles per hour: First 1.94 Second 2.45
Third 3.05 Fourth 4.10 Fifth 5.20 Sixth 6.47 Reverse 1.45 - 3.07
Measured length of track: 23.004 ft. Face 16 in.
Lugs: Type Cleats integral with shoe Size 16" long, 2 5/8" high
Extension rims: None
Seat: Upholstered
Total weight as tested (with operator) 22.027 pounds.

FUEL AND OIL:

Fuel: Gasoline Weight per gallon 6.04 pounds
Oil: S. A. E. Viscosity No. 40 The oil was drained
Total oil to motor 6.237 gallons once - at the end of
Total drained from motor 4.923 gallons the test.
Total time motor was operated 50 hours

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REPAIRS AND ADJUSTMENTS

During the rated load drawbar test, the fuel flow was restricted due to a flake of solder partially covering the outlet in the bottom of the supply tank. The obstruction was blown away from the outlet and the test completed.

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.

The track and lug equipment used in the drawbar tests is the same as that described on page 2 of this report.

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.

We, the undersigned, certify that the above is a true and correct report of official tractor test No. 200.

Carlton L. Zink
Engineer-in-charge

E. E. Brackett

C. W. Smith

E. B. Lewis
Board of Tractor Test Engineers