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Nebraska Tractor Tests

Tractor Test and Power Museum, The Lester F.  
Larsen

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January 1931

## Test 199: McCormick-Deering "TracTractor"

Tractor Museum

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UNIVERSITY OF NEBRASKA - AGRICULTURAL ENGINEERING DEPARTMENT  
 AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 199

Dates of test: October 10 to 26, 1931.  
 Name and model of tractor: McCORMICK-DEERING TracTractor  
 Manufacturer: International Harvester Co. Chicago, Ill.  
 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 - 18.33 H.P. Belt - 25.31 H.P.  
 One carburetor setting (92.9% 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.	: Water consumption : : per hour gallons :	Temp. : : Deg. F. :	:Barometer
:speed : :R.P.M. :	: Gals. : : per :	: H.P. : : hrs. @ : : gal. : : hour :	: lbs. @ : : H.P. : : hour :	: Cool- : : In : : fuel : : Total : : ing : : med. :	: Cool- : : Air : : Inches of : Mercury

OPERATING MAXIMUM LOAD TEST. ONE HOUR

26.59 : 1248 : 2.648 : 10.04 : 0.673 : 0.00 : 0.00 : 0.00 : 177 : 71 : 28.980

RATED LOAD TEST. ONE HOUR

25.12 : 1248 : 2.553 : 9.84 : 0.687 : 0.00 : 0.00 : 0.00 : 183 : 74 : 29.005

\*VARYING LOAD TEST. TWO HOURS

25.15	1249	2.543	9.89	0.683	--	--	--	182	73	--
0.70	1396	1.220	0.57	11.786	--	--	--	175	72	--
13.55	1349	1.970	6.88	0.983	--	--	--	183	73	--
26.29	1227	2.649	9.92	0.681	--	--	--	186	74	--
6.91	1376	1.531	4.51	1.498	--	--	--	183	73	--
19.79	1311	2.299	8.61	0.785	--	--	--	184	74	--
16.88	1317	2.036	7.80	0.866	0.00	0.00	0.00	182	73	29.008

\*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 : :per : :hour :	:Crank : :shaft : :speed : :R.P.M. :	:Slip : :on : :drive : :wheels : : % :	: Fuel Consumption : : H.P. : : lbs. : : per : : Gal. : : hr. : : per : : H.P. : : gal. : : hour :	: Water : : used : : Gal. : : per : : hour :	Temp. : : : : Cool- : : Air : : ing : : med. :	:Barometer : Inches of : Mercury
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RATED LOAD TEST. TEN HOURS. INTERMEDIATE GEAR

18.04 : 2528 : 2.68 : 1253 : 1.42 : 2.481 : 7.27 : 0.932 : 0.138 : 180 : 77 : 28.450

MAXIMUM LOAD TEST

23.33	5156	1.70	1247	3.12	-----	Not Recorded	-----	175	66	28.830
22.63	3160	2.69	1255	1.22	-----	" "	-----	179	75	28.690
20.19	2007	3.77	1251	0.68	-----	" "	-----	175	72	28.805

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Corrected Copy of Report of Official Tractor Test No. 199

BRIEF SPECIFICATIONS

MOTOR: Make Own Serial No. F M 526 Type 4 Cylinder, Vertical  
Head I Mounting Lengthwise  
Bore and stroke: 3 3/4" x 5" Rated R.P.M. 1250  
Port Dia. Valves: Inlet 1.562" Exhaust 1.562"  
Belt pulley: Diam. 15 1/4" Face 7" R.P.M. 682  
Magneto: Own Model E 4 A  
Carburetor: Zenith Model K 5 Size 1 1/4"  
Governor: Own 10, None Type Centrifugal  
Air Cleaner: Own Type Oil-washed wire filter  
Lubrication: Circulating - Splash

CHASSIS: Type Tracklayer Serial No. ST 526 Drive Enclosed gear  
Clutch: Own Type Single plate, Dry disc operated by foot  
Advertised speeds, miles per hour: Low 1 3/4  
Intermediate 2 3/4 High 3 3/4 Reverse 2  
Measured length of track: 15.125 feet Face 10 in.  
Lugs: Type Cleats integral with shoe Size 10" long, 2" high  
Extension rims: None  
Seat: Upholstered  
Total weight as tested (with operator) 7010 pounds

FUEL AND OIL  
Fuel: Kerosene Weight per gallon 6.76 pounds on brake tests  
6.78 pounds on rated drawbar tests  
Oil: S. A. E. Viscosity No. 30  
Total oil to motor 4.683 gallons  
Total drained from motor 5.760 gallons  
Total time motor was operated 50 hours  
The oil was drained to the middle cock and refilled to the top cock after approximately each 10 hours of operation. All of the oil was drained at the end of the test.

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REPAIRS AND ADJUSTMENTS

No repairs or adjustments.

REMARKS

The tests herein reported were conducted with one carburetor setting which remained unchanged thruout 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. 199.

Carlton L. Zink  
Engineer-in-charge

E. E. Brackett

C. W. Smith

E. B. Lewis  
Board of Tractor Test Engineers