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January 1930

## Test 183: Oliver Hart-Parr ( 3-5 plow )

Nebraska Tractor Test Lab

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

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UNIVERSITY OF NEBRASKA - AGRICULTURAL ENGINEERING DEPARTMENT  
AGRICULTURAL COLLEGE, LINCOLN

Corrected Copy of Report of Official Tractor Test No. 183

Dates of test: October 13th to 27th, 1930.

Name and model of tractor: OLIVER HART-PARR (3-5 plow).

Manufacturer: Oliver Farm Equipment Co. (Hart Parr Division) Charles City, Iowa.

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 - 28 H.P. Belt - 44 H.P.

One carburetor setting (96% 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 :	Gals. : H.P. : Lbs. @ : : R.P.M. : per : hrs. @ : H.P. :	: Cool- : In : : ing : fuel : Total : ing : Air :	: med. : :	: Inches of : Mercury	
:	: hour : gal. : hour :	:	:	:	:

OPERATING MAXIMUM LOAD TEST. ONE HOUR

49.04	: 1132	: 4.906	: 10.00	: 0.682	: 0.00	: 0.00	: 0.00	: 178	: 58	: 29.035
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RATED LOAD TEST. ONE HOUR

44.29	: 1125	: 4.252	: 10.42	: 0.655	: 0.00	: 0.00	: 0.00	: 186	: 58	: 29.015
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\*VARYING LOAD TEST. TWO HOURS

44.11	: 1130	: 4.306	: 10.24	: 0.666	: --	: --	: --	: 177	: 76	: --
0.81	: 1240	: 1.654	: 0.49	: 13.926	: --	: --	: --	: 188	: 77	: --
23.19	: 1189	: 2.705	: 8.57	: 0.796	: --	: --	: --	: 192	: 75	: --
46.95	: 1107	: 4.786	: 9.81	: 0.695	: --	: --	: --	: 176	: 69	: --
12.00	: 1222	: 2.032	: 5.91	: 1.155	: --	: --	: --	: 188	: 73	: --
34.10	: 1160	: 3.334	: 10.23	: 0.667	: --	: --	: --	: 190	: 75	: --
27.53	: 1172	: 3.136	: 8.78	: 0.777	: 0.00	: 0.00	: 0.00	: 184	: 72	: 28.980

\* 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	: Water : : used :	Temp. : : :	: Barometer
: pull : : pounds :	: per : hour :	: speed : : R.P.M. :	: drive : : wheels :	: % :	: Gal. : : hr. : : per : : H.P. :	: Gal. : : per : : H.P. :	: Cool : : ing : : med. :	: Air : : Inches of : Mercury
:	:	:	:	:	: hour : gal. : hour :	: hour : hour :	:	:

RATED LOAD TEST. TEN HOURS. Intermediate Gear.

28.44	: 2940	: 3.63	: 1128	: 8.39	: 3.974	: 7.16	: 0.953	: 0.113	: 185	: 67	: 28.630
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MAXIMUM LOAD TEST

31.18	: 2412	: 4.85	: 1128	: 7.75	: -----	: Not Recorded	: -----	: 186	: 66	: 28.660
34.21	: 3650	: 3.51	: 1125	: 11.35	: -----	: " "	: -----	: 177	: 64	: 28.680
28.36	: 5116	: 2.08	: 1119	: 22.32	: -----	: " "	: -----	: 197	: 76	: 28.620

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Copy of Report of Official Tractor Test No. 183

BRIEF SPECIFICATIONS

MOTOR: Make Own Serial No. 500105 Type 4 cylinder vertical  
Head "I" Mounting Lengthwise  
Bore and stroke: 4 3/4 x 6 1/4 in. Rated R.P.M. 1125  
Port Dia. Valves: Inlet 2" Exhaust 2"  
Belt pulley: Diam. 16 3/4 in. Face 8 1/4 in. R.P.M. 596  
Magneto: American Bosch Model "U4"  
Carburetor: Ensign Model "K" Size 1 1/2"  
Governor: Own No. None Type Fly-ball  
Air Cleaner: Donaldson - 2 unit Type centrifugal and oily fiber  
Lubrication: Pressure

CHASSIS: Type 4 Wheels Serial No. 500105 Drive Enclosed gear  
Clutch: Borg and Beck Type Single plate, dry operated by foot  
Advertised speeds, miles per hour: Low 2.23  
Intermediate 3.3 High 4.33 Reverse 2.63  
Drive wheels: Diameter 46" Face 12"  
Lugs: Type Spade No. per wheel 20 Size 5" high x 3 1/4" face  
Extension rims: Width 7" Lugs Spade 10 per rim Size 5" high x 3 1/4" face  
Seat Pressed steel  
Total weight as tested (with operator) 6415 pounds.

FUEL AND OIL:

Fuel: Kerosene Weight per gallon 6.82 pounds  
Oil: S. A. E. Viscosity No. 30  
Total oil to motor 5.929 gallons  
Total drained from motor 1.840 gallons  
Total time motor was operated 60 hours

The oil was drained  
from the crankcase  
once - 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 drawbar tests were run with drive wheels equipped with spade lugs and extension rims and lugs on the rims as listed 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. 183.

Carlton L. Zink  
Engineer-in-Charge.

E. E. Brackett

C. W. Smith

E. B. Lewis

Board of Tractor Test Engineers