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January 1931

## Test 192: Bradley "General Purpose"

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

Copy of Report of Official Tractor Test No. 192

Dates of test: June 10 to June 18, 1931  
 Name and model of tractor: BRADLEY "GENERAL PURPOSE"  
 Manufacturer: The Bradley Tractor Company, Chicago, 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 - 15.89 Belt - 22.93  
 One carburetor setting (98.1% 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. @ :R.P.M.: per :hrs.@ :H.P. : : hour :gal. :hour	:water consumption : :per hour gallons : :Cool- : In : :ing : fuel :Total:ing :Air :Mercury : : : :med. : :	Temp. : :Deg. F. : :Cool- : :ing : :med. :	:Barometer :Inches of :Mercury : : : : : :
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OPERATING MAXIMUM LOAD TEST. ONE HOUR

24.96	:	1250	:	2.708	:	9.22	:	0.666	:	0.364	:	0.00	:	0.364	:	206	:	84	:	28.993
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RATED LOAD TEST. ONE HOUR

22.01	:	1249	:	2.673	:	8.23	:	0.746	:	0.102	:	0.00	:	0.102	:	200	:	88	:	28.970
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\*VARYING LOAD TEST. TWO HOURS

22.01	:	1247	:	2.663	:	8.27	:	0.743	:	--	:	--	:	--	:	200	:	89	:	--
0.67	:	1379	:	1.207	:	0.56	:	11.060	:	--	:	--	:	--	:	198	:	89	:	--
11.74	:	1338	:	1.984	:	5.92	:	1.037	:	--	:	--	:	--	:	198	:	89	:	--
23.56	:	1180	:	2.604	:	9.05	:	0.679	:	--	:	--	:	--	:	206	:	89	:	--
6.01	:	1377	:	1.573	:	3.82	:	1.607	:	--	:	--	:	--	:	195	:	88	:	--
17.17	:	1307	:	2.399	:	7.16	:	0.858	:	--	:	--	:	--	:	194	:	88	:	--
13.99	:	1304	:	2.072	:	6.75	:	0.909	:	0.160	:	0.00	:	0.160	:	198	:	88	:	28.955

\*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 :Speed :Crank : Slip : :Bar :miles :shaft : on : :pull :per :speed : drive:Gal. : hr. :per :Gal. :Cool-:Air :Inches of :pounds:hour :R.P.M.:wheels:per : per :H.P. :per :ing : :Mercury : : : : % :hour : gal. :hour :hour :med. : :	Fuel Consumption :H.P. :Lbs. :used : :per :Gal. :Cool-:Air :Inches of :per :H.P. :per :ing : :Mercury : : : :med. : :	Temp. : :Deg. F. : :Cool- : :ing : :med. :	:Barometer :Inches of :Mercury : : : : : :
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RATED LOAD TEST. TEN HOURS. THIRD Gear.

14.83	:	1626	:	3.42	:	1249	:	5.55	:	2.553	:	5.81	:	1.057	:	0.075	:	202	:	90	:	28.720
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MAXIMUM LOAD TEST

18.45	:	4140	:	1.67	:	1261	:	20.45	:	-----	:	Not Recorded	:	-----	:	206	:	92	:	28.720		
20.05	:	2728	:	2.76	:	1256	:	8.14	:	-----	:	"	:	"	:	-----	:	201	:	89	:	28.760
19.56	:	2173	:	3.38	:	1250	:	6.07	:	-----	:	"	:	"	:	-----	:	201	:	87	:	28.760
17.29	:	1289	:	5.03	:	1250	:	4.18	:	-----	:	"	:	"	:	-----	:	202	:	89	:	28.680

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BRIEF SPECIFICATIONS

MOTOR: Make Waukesha Serial No. 284570 Type 4 Cylinder vertical  
Head L Mounting Lengthwise  
Bore and stroke: 3 3/4" x 4 3/4" Rated R.P.M. 1250  
Port Dia. Valves: Inlet 1 3/8" Exhaust 1 3/8"  
Belt pulley: Diam. 12 in. Face 7 in. R.P.M. 798  
Magneto: United American Bosch Model U4 ED4V3  
Carburetor: Kingston Model Z Size 1"  
Governor: Waukesha No. None Type Centrifugal  
Air Cleaner: Pomona Vortex Type Oil circulated over wool  
Lubrication: Pressure

CHASSIS: Type 4 wheels, 2 drivers Serial No. 281 Drive Enclosed gear  
Clutch: Borg & Beck Type single plate operated by foot  
Advertised speeds, miles per hour: First 1 3/4 Second 2 1/2  
Third 3 Fourth 4 1/2 Reverse 1 1/2 and 2  
Drive wheels: Diameter 42" Face 7"  
Lugs: Type Spade No. per wheel 24 Size 3 1/4" wide, 3 3/4" high  
Extension rims: Width 6" No. per rim 12 Size 3 1/4" wide, 3 3/4" high  
Seat Pressed steel  
Total weight as tested (with operator) 4150 pounds.

FUEL AND OIL:

Fuel: Gasoline Weight per gallon 6.14 pounds

Oil: S.A.E. Viscosity #40

Total oil to motor 1.484 gallons

Total drained from motor 0.820 gallons

Total time motor was operated 43 hours

The oil was drained 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.

A small oil leak developed at the front end of the crankcase during the belt tests due to a faulty crankcase pan gasket. No attempt was made to remedy this but during the drawbar tests the leak decreased noticeably.

The drawbar tests were run with drive wheels equipped with spade lugs and extension 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. 192.

Carlton L. Zink

E. E. Brackett

C. W. Smith

E. B. Lewis  
Board of Tractor Test Engineers