

January 1932

## Test 203: Caterpillar Model 25

Tractor Museum

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

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



Part of the [Applied Mechanics Commons](#)

---

Museum, Tractor, "Test 203: Caterpillar Model 25" (1932). *Nebraska Tractor Tests*. 810.  
<https://digitalcommons.unl.edu/tractormuseumlit/810>

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. 203

Dates of test: May 16 to 23, 1932.  
 Name and model of tractor: CATERPILLAR "25"  
 Manufacturer: Caterpillar Tractor Company, Peoria, Illinois.  
 Manufacturer's rating: Drawbar - 26 H.P. Maximum. Belt - 30 H.P. Maximum  
 Highest rating permissible under the recommendations of the A.S.A.E. and  
 S.A.E. Tractor Rating Codes: Drawbar - 22.07 H.P. Belt - 29.94 H.P.  
 One carburetor setting (99.5% 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. @ : :Cool- : :In :	Water consumption : per hour gallons : Deg. F. :	Temp. : :Barometer	:Cool- : :Inches of	:Air:Mercury
OPERATING MAXIMUM LOAD TEST. ONE HOUR.						
32.97	: 1100	: 3.415 : 9.65	: 0.631 : 0.00	: 0.00 : 0.00	: 192 : 92	: 28.880
RATED LOAD TEST. ONE HOUR						
29.98	: 1100	: 3.046 : 9.84	: 0.619 : 0.00	: 0.00 : 0.00	: 185 : 91	: 28.855
*VARYING LOAD TEST. TWO HOURS						
30.03	: 1105	: 3.103 : 9.68	: 0.629 : --	: -- : --	: 185 : 91	: --
0.52	: 1215	: 1.424 : 0.37	: 16.673 : --	: -- : --	: 182 : 89	: --
16.26	: 1184	: 2.241 : 7.26	: 0.839 : --	: -- : --	: 180 : 90	: --
30.93	: 1041	: 3.256 : 9.50	: 0.641 : --	: -- : --	: 190 : 89	: --
8.23	: 1212	: 1.887 : 4.36	: 1.396 : --	: -- : --	: 181 : 85	: --
22.93	: 1155	: 2.675 : 8.57	: 0.710 : --	: -- : --	: 179 : 86	: --
18.79	: 1153	: 2.431 : 7.73	: 0.788 : 0.00	: 0.00 : 0.00	: 183 : 88	: 28.840
*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 :Gal. : :hr. : :per : :H.P. :	Water : :used : :Gal. : :per : :hour :	Temp. : :Cool- : :Air : :Inches : :of : :Mercury	:Barom- :eter	
RATED LOAD TEST. TEN HOURS. SECOND GEAR.									
22.74	: 3366	: 2.53	: 1099	: 2.25	: 3.026	: 7.52	: 0.810	: 0.00	: 178 : 82 : 28.780
MAXIMUM LOAD TEST									
26.74	: 6011	: 1.67	: 1098	: 6.98	: -----	: Not Recorded	: -----	: 179 : 87 : 28.870	
27.11	: 4068	: 2.50	: 1100	: 3.57	: -----	: " "	: -----	: 181 : 79 : 28.860	
26.01	: 2746	: 3.55	: 1100	: 2.38	: -----	: " "	: -----	: 176 : 85 : 28.870	

UNIVERSITY OF NEBRASKA - AGRICULTURAL ENGINEERING DEPARTMENT  
AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 203

BRIEF SPECIFICATIONS

MOTOR: Make Own Serial No. 3 C 2 Type 4 Cylinder, Vertical  
Head I Mounting Lengthwise  
Bore and stroke: 4" x 5 1/2" Rated R.P.M. 1100  
Port Dia. Valves: Inlet 1 1/2" Exhaust 1 5/16"  
Belt pulley: Diam. 11 7/8" Face 6 1/2" R.P.M. 836  
Magneto: Eisemann Model G V 4  
Carburetor: Ensign Model A e L c Size 1 1/4"  
Governor: Own No. None Type Flyball  
Air Cleaner: Own under Vortox patent Type Centrifugal, oil and matted wire  
Lubrication: Pressure

CHASSIS: Type Tracklayer Serial No. 3 C 2 Drive Enclosed gear  
Clutch: Own Type Single plate - dry operated by hand  
Advertised speeds, miles per hour: Low 1.8  
Intermediate 2.6 High 3.6 Reverse 2.0  
Measured length of track: 16.460 feet Face 11 inches  
Lugs: Type Cleats integral with shoes No. per track 29 Size 11" by 1 3/4"  
Extension rims: None  
Seat: Upholstered  
Total weight as tested (with operator) 8087 pounds.

FUEL AND OIL:

Fuel: Gasoline Weight per gallon 6.09 pounds  
Oil: S.A.E. Viscosity No. 50  
Total oil to motor 2.473 gallons The oil was drained once -  
Total drained from motor 1.537 gallons at the end of the test.  
Total time motor was operated 39 hours

UNIVERSITY OF NEBRASKA - AGRICULTURAL ENGINEERING DEPARTMENT  
AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 203

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. 203.

Carlton L. Zink  
Engineer-in-charge

E. E. Brackett

C. W. Smith

E. B. Lewis  
Board of Tractor Test Engineers