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January 1929

Test 160: Caterpillar Model 10 10-15

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. 160

Dates of test: May 6th to 21st, 1929

Name, model and rating of tractor: Caterpillar "10" 10-15.

Manufacturer: Caterpillar Tractor Co., San Leandro, California.

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

:Crank :shaft H. P. :R.P.M. :	: Fuel Consumption :Gals. :per :hour	:H. P. :H. P. :gal.	:Lbs. :@ :H. P. :hour	:Water consumption :per hour gallons :Cool- :ing	:In :fuel :Total :	:Temp. :Deg. F. :Cool- :ing :med.	:Barometer :Inches of :Mercury :
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OPERATING MAXIMUM LOAD TEST. ONE HOUR (96.5% of maximum load)

18.10	: 1501	: 2.107	: 8.59	: 0.718	: 0.0	: 0.0	: 0.0	: 176	: 64	: 29.04
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RATED LOAD TEST. ONE HOUR

15.26	: 1504	: 1.925	: 7.93	: 0.779	: 0.0	: 0.0	: 0.0	: 194	: 67	: 29.04
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*VARYING LOAD TEST. TWO HOURS

15.24	: 1503	: 1.925	: 7.92	: 0.780	: 0.0	: 0.0	: 0.0	: 196	: 69	:
0.76	: 1545	: 0.992	: 0.77	: 8.053	: 0.0	: 0.0	: 0.0	: 187	: 66	:
7.90	: 1554	: 1.478	: 5.35	: 1.154	: 0.0	: 0.0	: 0.0	: 192.5	: 67	:
17.47	: 1498	: 2.062	: 8.47	: 0.728	: 0.0	: 0.0	: 0.0	: 193.5	: 69	:
4.05	: 1586	: 1.235	: 3.28	: 1.881	: 0.0	: 0.0	: 0.0	: 196	: 69	:
11.73	: 1540	: 1.721	: 6.82	: 0.905	: 0.0	: 0.0	: 0.0	: 198.5	: 70	:
9.62	: 1534	: 1.569	: 6.13	: 1.006	: 0.0	: 0.0	: 0.0	: 194	: 68	: 29.04

*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

:Draw :Bar H. P. :pull :pounds :	:Speed :miles :per :hour :	:Crank :shaft :speed :R.P.M. :	:Slip :on :drive :wheels : %	: Fuel Consumption :H.P. :Gal. :per :hour :	:Lbs. :per :H.P. :hour :	:Water: :used :Gal. :per :hour :	:Temp. : :Cool- :ing :med. :	:Barometer :Inches of :Mercury :
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RATED LOAD TEST. TEN HOURS. Intermediate GEAR

10.10	:1466	: 2.58	: 1505	: 0.99	: 1.726	: 5.85	: 1.054	: 0.0	: 196	: 80	: 29.00
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MAXIMUM LOAD TEST

14.43	:2087.5	: 2.59	: 1511	: 1.19	---- Not Recorded ----			:178.5	:83	: 29.05
14.89	:2816	: 1.98	: 1490	: 1.82	"	"		:175	:77	: 29.05
13.58	:1455	: 3.50	: 1505	: 0.84	"	"		:195.5	:75.5	: 29.05

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BRIEF SPECIFICATIONS

MOTOR: Make Own Serial No. PT341 Type 4 Cylinder Vertical
Head "L" Mounting Lengthwise
Bore and stroke: 3-3/8 x 4 in. Rated R.P.M. 1500
Port Dia. Valves: Inlet 1-15/32" Exhaust 1-11/32"
Belt pulley: Diam. 9 1/2 in. Face 6 1/2 in. R.P.M. 1050
Magneto: Eisemann Model "G4"
Carburetor: Ensign Model "BeT" Size 1"
Governor: Own No. ----- Type Fly-ball
Air Cleaner: Pomona "Vortex" Type Oil filter
Lubrication: Pressure and splash

CHASSIS: Type Crawler Serial No. PT341 Drive Enclosed gear
Clutch: Own make Type Single plate operated by foot
Advertised speeds, miles per hour: Low 2.02
Intermediate 2.59 High 3.50 Reverse 2.07
Length of track 13.96' Face 8"
Lugs: Integral with shoe No. per track 29
Extension rims: Width none Seat Upholstered
Total weight as tested (with operator) 4575 pounds.

FUEL AND OIL

Fuel: Gasoline Weight per gallon 6.17
Oil: Mobiloil BB To fill crankcase 1-3/4 gallons
Additional amount used during test None
Total number of hours of test 37

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REPAIRS AND ADJUSTMENTS

After the limber up run and before any of the official tests were made, the equalizer spring under front of engine was adjusted.

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.

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.

The results of this test indicate that the rating of this tractor does not exceed the provisions of the tractor rating code of the American Society of Agricultural Engineers and the Society of Automotive Engineers.

We, the undersigned, certify that the above is a true and correct report of official tractor test No. 160.

Lew Wallace
Engineer-in-Charge

E. E. Brackett

C. W. Smith

E. B. Lewis

Board of Tractor Test Engineers