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January 1929

Test 167: Case Model C 17-27

Tractor Museum

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UNIVERSITY OF NEBRASKA AGRICULTURAL ENGINEERING DEPARTMENT
 AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 167

Dates of test: August 12th to 19th, 1929.
 Name, model and rating of tractor: Case Model "C" 17-27.
 Manufacturer: J. I. Case Co., Racine, Wisconsin.

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

H.P.	:Crank :shaft :speed :R.P.M. :	: Fuel Consumption			:Water Consumption			: Temp.		:Barometer :Inches of :Mercury
		:Gals. :per :hour	:H. P. :hrs.@ :hour	:Lbs.@ :H.P. :hour	:Cool- :ing	:In :fuel :	:Total :ing	:Cool- :ing :med.	:Air :	

OPERATING MAXIMUM LOAD TEST. ONE HOUR (96.5% of maximum load)

29.81 : 1102 : 2.624 : 11.36 : 0.604 : 0.89 : 0.0 : 0.89 : 213 : 89 : 28.88

RATED LOAD TEST. ONE HOUR

27.33 : 1100 : 2.472 : 11.06 : 0.621 : 0.76 : 0.0 : 0.76 : 212 : 90 : 28.88

*VARYING LOAD TEST. TWO HOURS

27.30	: 1101	: 2.475	: 11.03	: 0.622	: --	: --	: --	: 212	: 90	:
1.04	: 1163	: 0.997	: 1.04	: 6.577	: --	: --	: --	: 169.5	: 90	:
15.09	: 1214	: 1.828	: 8.25	: 0.831	: --	: --	: --	: 195.5	: 90	:
29.18	: 1103	: 2.624	: 11.12	: 0.617	: --	: --	: --	: 213	: 90	:
7.16	: 1149	: 1.251	: 5.72	: 1.198	: --	: --	: --	: 203	: 90	:
20.62	: 1102	: 2.160	: 9.54	: 0.719	: --	: --	: --	: 205	: 88.5	:
16.97	: 1136	: 1.889	: 8.98	: 0.764	: 0.25	: 0.0	: 0.25	: 201	: 90	: 28.88

*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 :pull :pounds :	:Speed :miles :per :hour	:Crank :shaft :speed :R.P.M. :	:Slip :on :drive :wheels : %	: Fuel Consumption			:Water: :used :Gal. :per :hour	: Temp. :Air :Inches of :Mercury
					:Gal. :per :hour	:H.P. :per :H.P. :hour	:Lbs. :per :H.P. :hour		

RATED LOAD TEST. TEN HOURS. Intermediate GEAR.

17.41 : 1856 : 3.52 : 1100 : 8.76 : 2.479 : 7.02 : 0.977 : 0.0 : 195 : 78 : 28.94

MAXIMUM LOAD TEST

21.41	: 2358	: 3.40	: 1101	: 14.38	: -----	: Not Recorded	: -----	: 212	: 95	: 28.70
19.60	: 3289	: 2.20	: 1289	: 31.80	: -----	: "	: -----	: 212	: 95	: 28.70
20.20	: 1525	: 4.97	: 1108	: 8.45	: -----	: "	: -----	: 209.5	: 95	: 28.70

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BRIEF SPECIFICATIONS

MOTOR: Make Own Serial No. C300219 Type 4 Cylinder vertical
Head "I" Mounting Lengthwise
Bore and stroke: 3-7/8" x 5-1/2" In. Rated R.P.M. 1100
Port Dia. Valves: Inlet 1 1/2" Exhaust 1 1/2"
Belt pulley: Diam. 10 1/2 in. Face 6 1/2 in. R.P.M. 973
Magneto: Robert Bosch Model "FU4ARS"
Carburetor: Kingston Model "L3" Size 1 1/4"
Governor: Own No. ----- Type Fly-ball
Air Cleaner: Own make Type oil filter
Lubrication: Pressure

CHASSIS: Type 4 Wheels Serial No. C300219 Drive Enclosed gear & chain
Clutch: Twin Disc Type Plate operated by Hand
Advertised speeds, miles per hour: Low 2.30
Intermediate 3.28 High 4.50 Reverse 2.59
Drive wheels: Diameter 42 Face 11 1/4"
Lugs: Type Spade No. per wheel 24 Size 4"High x 3.8"Face
Extension rims: Width 5" Seat Pressed steel
Total weight as tested (with operator) 4155 pounds.

FUEL AND OIL

Fuel: Kerosene Weight per gallon 6.86
Oil: Mobiloil A To fill crankcase 2 1/2 gallons
Additional amount used during test None
Total number of hours of test 35

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REPAIRS AND ADJUSTMENTS

During the maximum drawbar tests, the clutch was adjusted. During the rated drawbar test, the fuel line to the carburetor became clogged up and was cleaned out.

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 above is a true and correct report of official tractor test No. 167.

Lew Wallace
Engineer-in-Charge

E. E. Brackett

C. W. Smith

E. B. Lewis
Board of Tractor Test Engineers