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January 1936

Test 257: Caterpillar Model RD-8 (Diesel) 1000 r. p. m.

Nebraska Tractor Test Lab

University of Nebraska-Lincoln, tractortestlab@unl.edu

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Manufacturer's rating: 106 Drawbar Horsepower Maximum in 2nd gear (standard conditions)

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

*20 minute runs. Last line is average for two hours.

[illegible]

80.25 : 10813 : 2.78 : 1001 : 1.32 : 7.022 : 11.43 : 0.608 : 0.000 : 175 : 74 : 28.950

UNIVERSITY OF NEBRASKA - AGRICULTURAL ENGINEERING DEPARTMENT
 AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 257

BRIEF SPECIFICATIONS

MOTOR: Make Own Serial No. 1H425 Type 6 cylinder, vertical, diesel
 Head I Mounting Crankshaft lengthwise
 Bore and stroke 5 3/4" x 8" Rated R. P. M. 1000
 Port Diam. Valves: Inlet 2 1/16" Exhaust 2 1/16"
 Belt pulley: Diam. 14 1/4" Face 13" R. P. M. 847
 Fuel system Own
 Governor Own No. None Type Centrifugal
 Air Cleaner Donaldson Type Combination oil and wire-screen labyrinth
 Lubrication Pressure

CHASSIS: Type Tracklayer Serial No. 1H425 Drive Enclosed gear
 Clutch Own Type Single plate dry Operated by Hand
 Advertised speeds, miles per hour: First 2.0 Second 2.8 Third 3.3
 Fourth 3.8 Fifth 4.6 Sixth 6.2 Reverse 2.0, 3.3
 Measured length of track 25.4011 feet Face 20"
 Lugs: Type Cleats integral with shoes No. per track 38
 Size 2 3/8" x 20"
 Seat Upholstered
 Total weight as tested (with operator) 33,690 pounds ✓

FUEL AND OIL:

Fuel Dieseline Weight per gallon 6.95 pounds.

Oil S.A.E. #30

Total oil to motor 7.258 gallons

Total drained from motor 5.251 gallons

Total time motor was operated 33 hours

The oil was drained
 once - at the end of
 the test.

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AGRICULTURAL COLLEGE, LINCOLNCopy of Report of Official Tractor Test No. 257REPAIRS AND ADJUSTMENTS

No repairs or adjustments.

REMARKS

All results shown on page 1 of this report were determined from observed data and without allowances, additions or deductions. Tests B and F were made with the fuel pumps set to develop 106 drawbar horsepower maximum in second gear under standard conditions. These figures were used in determining the ratings recommended by the A.S.A.E. and S.A.E. tractor rating codes. Tests C, D, E, G and H were made with the same setting.

Observed maximum horsepower (tests B & F) Drawbar 101.89 Belt 118.29

Sea level (calculated) maximum horsepower Drawbar 106.58 Belt 126.10
(Based on 60° F. and 29.92" Hg.)Highest permissible horsepower ratings Drawbar 79.94 Belt 107.19
(As recommended by A.S.A.E. and S.A.E.
codes)

We, the undersigned, certify that the above is a true and correct report of official tractor test No. 257.

Carlton L. Zink

Engineer-in-charge

E. E. Brackett

C. W. Smith

L. W. Hurlbut

Board of Tractor Test Engineers