January 1948

Test 400: Intercontinental Model C-26

Nebraska Tractor Test Lab
University of Nebraska-Lincoln, tractortestlab@unl.edu

UNIVERSITY OF NEBRASKA - AGRICULTURAL ENGINEERING DEPARTMENT
AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 400

Dates of test: August 28 to September 9, 1948
Name and model of tractor: INTERCONTINENTAL C-26
Manufacturer: INTERCONTINENTAL MANUFACTURING COMPANY, INC., Dallas, Texas
Manufacturer's rating: Not rated

HORSEPOWER SUMMARY

		DRAWBAR	BELT
1.	Sea level (calculated) maximum horsepower (based on 60° F. and 29.92" Hg.)	26.75	31.23
2.	Observed maximum horsepower (tests F & B)	25.48	29.65
3.	Seventy-five per cent of calculated maximum drawbar horsepower and eighty-five per cent of calculated maximum belt horsepower (formerly ASAE and SAE ratings)	20.06	26.55

REMARKS

Battery became discharged during test H due to regulator being out of adjustment.

Radiator shroud came loose from radiator at soldered joints.

FUEL, OIL, and TIME

Fuel Gasoline Octane 74* Weight per gallon 6.208 pounds

Oil SAE 20-20W To motor 1.005 gal. Drained from motor 0.896 gal.

Total time motor was operated 43 hours

* Octane rating taken from oil company's typical inspection data.

We, the undersigned, certify that this is a true and correct report of official tractor test No. 400.

L. F. Larsen
Engineer in Charge

C. W. Smith

F. D. Yung

L. W. Hurlbut
BOARD OF TRACTOR TEST ENGINEERS

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All results shown on pages 2 and 3 were determined from observed data and without allowances, additions, or deductions. Tests B and F were made with carburetor set for 100% maximum belt horsepower and data from these tests were used in determining the horsepower to be developed in tests D and H, respectively. Tests C, D, E, G, H, J, and K were made with an operating setting of the carburetor (selected by the manufacturer) of 95.2% of maximum belt horsepower.

B E L T H O R S E P O W E R T E S T S

Horse-power	Crank shaft speed rpm	Fuel Consumption: gal per hr	Fuel Consumption: hp-hr per gal	Fuel Consumption: lb per hp-hr	Water used gal per hr	Temperature: Cooling med °F	Temperature: Air °F	Barometer Inches of Mercury
TEST B - 100% MAXIMUM LOAD - TWO HOURS								
29.65	1649	2.878	10.30	0.603	0.00	173	79	28.920
TEST C - OPERATING MAXIMUM LOAD - ONE HOUR								
28.16	1652	2.590	10.87	0.571	0.00	172	82	28.930
***TEST D - ONE HOUR**								
26.69	1651	2.494	10.70	0.580	0.00	176	89	28.955
TEST E - VARYING LOAD - TWO HOURS (20 minute runs; last line average)								
26.63	1648	2.489	10.70	0.580	- --	178	91	-- ---
2.23	1886	1.271	1.75	3.538	- --	140	90	-- ---
14.40	1776	1.783	8.08	0.769	- --	160	92	-- ---
23.91	1378	2.160	11.07	0.561	- --	179	93	-- ---
7.41	1821	1.459	5.08	1.223	- --	152	94	-- ---
20.49	1687	2.136	9.59	0.647	- --	170	94	-- ---
15.85	1699	1.883	8.42	0.738	0.00	163	90	28.955

* Formerly called RATED LOAD, see HORSEPOWER SUMMARY 3, page 1.

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DRAWBAR HORSEPOWER TESTS

Horse-power	Draw bar pull lb	Speed mph	Crank shaft speed rpm	Slip on drive wheels %	Fuel Consumption: gal per hr	Fuel Consumption: hp-hr per gal	Fuel Consumption: lb per hp-hr	Water used gal per hr	Temperature: Cooling med °F	Temperature: Air °F	Barometer Inches of Mercury
TEST F - 100% MAXIMUM LOAD - 2nd GEAR											
25.48	2557	3.74	1649	6.02	------Not Recorded------				174	75	28.965
TEST G - OPERATING MAXIMUM LOAD											
21.47	3441	2.34	1650	15.08	------Not Recorded------				180	90	29.050
24.14	2410	3.76	1650	5.64	" "				171	81	28.960
24.25	1690	5.38	1654	2.93	" "				164	81	28.960
21.53	738	10.94	1650	1.45	" "				157	77	28.960
***TEST H - TEN HOURS - 2nd GEAR**											
20.19	1978	3.83	1651	3.85	2.311	8.74	0.711	0.00	160	81	28.946
TEST J - OPERATING MAXIMUM LOAD - 2nd GEAR											
16.95	1757	3.62	1650	13.43	------Not Recorded------				144	75	28.955
TEST K - OPERATING MAXIMUM LOAD - 2nd GEAR											
15.94	1763	3.39	1653	15.06	------Not Recorded------				139	66	28.960

Rear wheels, tires and added weight used in Tests F, G, and H; Steel disc wheels; 1.-38, 4 ply tires and 1086 lb added weight per wheel.

Lightest weight wheels and smallest tires suggested by manufacturer. All added weight removed from tractor (liquid, cast iron, or any other added forms.)

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TIRES, WHEELS, and WEIGHT

		Tests F, G, & H	Test J	Test K
Rear Wheel: (each)	Type	Steel Disc	Steel Disc	Steel Disc
	Liquid Ballast	498 lb	None	None
	Added Cast Iron	588 lb	None	None
Rear Tires:	No. Size & Ply	2 11-38 4 ply	2 11-38 4 ply	2 10-38 4 ply
	Type of Tread	Angle Action	Angle Action	Angle Action
	Make	General	General	General
	Air Pressure	12 lb	12 lb	12 lb
Front Wheel: (each)	Type	Steel Disc	Steel Disc	Steel Disc
	Liquid Ballast	53 lb	None	None
	Added Cast Iron	81 lb	None	None
Front Tires:	No. Size & Ply	2 5.50-16 4 ply	2 5.50-16 4 ply	2 5.50-16 4 ply
	Type of Tread	Rib	Rib	Rib
	Make	General	General	General
	Air Pressure	28 lb	28 lb	28 lb
Height of Drawbar		16 inches	17.5 inches	16.5 inches
Static Weight:	Rear End	4246 lb	2075 lb	2046 lb
	Front End	1328 lb	1059 lb	1059 lb
Total Weight as Tested (with Operator)		5759 lb	3319 lb	3290 lb

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SPECIFICATIONS

Type Tricycle Serial No. 752 Drive Enclosed gear

Tread width: Rear 56 in to 84 in Front 9 in

Advertised speeds, miles per hour: First 2.7 Second 3.8 Third 5.3

Fourth 10.7 Reverse 3.4

Belt pulley: Diam. 10 in Face 6 1/2 in RPM 1257 Belt speed 3344 fpm

Clutch: Make Rockford Type Dry disc Operated by Foot pedal

Seat Pressed steel

Brakes: Make Duo Grip Type External and internal shoe

Location Differential shaft

Gear reduction (brake drum to rear wheel) 5.1 to 1

Operated by Foot pedal

Locked by Latch

Equalization None

Engine: Make Continental Serial No. F-162-91340 Type 4 cylinder vertical

Head L Mounting Lengthwise Lubrication Pressure

Bore and stroke 3 7/16 in x 4 3/8 in Rated rpm 1650

Port diameter valves: Inlet 1 23/64 in Exhaust 1 1/16 in

Generator: Make Auto-Lite

Distributor & Coil: Make Auto-Lite Battery National

Starter: Make Auto-Lite

Carburetor: Make Marvel-Schebler Model TSX338 Size 1 in

Governor: Make Novi Type Variable centrifugal

Air Cleaner: Make Donaldson Type Oil washed wire mesh

Oil Filter: Make Fram Type Replaceable filter element

Cooling medium temperature control: Thermostat