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2008

Tractor Test 1920: New Holland TT 75A

Nebraska Tractor Test Lab

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NEBRASKA TRACTOR TEST 1920

NEW HOLLAND TT 75A DIESEL

8 SPEED

POWER TAKE-OFF PERFORMANCE

Power HP (kW)	Crank shaft speed rpm	Gal/hr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Mean Atmospheric Conditions
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MAXIMUM POWER AND FUEL CONSUMPTION

Rated Engine Speed—(PTO speed—686 rpm)					
62.39 (46.52)	2500	3.99 (15.11)	0.448 (0.273)	15.63 (3.08)	
Standard Power Take-off Speed(541 rpm)					
58.57 (43.68)	1971	3.41 (12.92)	0.408 (0.248)	17.16 (3.38)	

VARYING POWER AND FUEL CONSUMPTION

62.39 (46.52)	2500	3.99 (15.11)	0.448 (0.273)	15.63 (3.08)	Air temperature
55.20 (41.16)	2606	3.78 (14.31)	0.480 (0.292)	14.60 (2.88)	76°F (24°C)
41.94 (31.27)	2629	3.17 (11.99)	0.529 (0.322)	13.24 (2.61)	Relative humidity
28.42 (21.19)	2693	2.34 (8.86)	0.577 (0.351)	12.15 (2.39)	19%
14.60 (10.89)	2728	1.80 (6.81)	0.863 (0.525)	8.12 (1.60)	Barometer
0.94 (0.70)	2758	1.33 (5.02)	9.927 (6.038)	0.71 (0.14)	28.54"Hg (96.65 kPa)

Maximum torque 181 lb.-ft. (246 Nm) at 1348 rpm

Maximum torque rise -38.3%

Torque rise at 1999 rpm -18%

TRACTOR SOUND LEVEL WITHOUT CAB

	dB(A)
At no load in 3rd (L3) gear	91.8
Bystander	--

TIRES AND WEIGHT

Rear Tires—No., size, ply & psi (kPa)

Front Tires—No., size, ply & psi (kPa)

Height of Drawbar

Static Weight with operator—Rear

— Front

— Total

Tested without ballast

Two 16.9-30; 6:12 (85)

Two 7.50-16; 6:32 (220)

19.0 in (485 mm)

3335 lb (1512 kg)

1880 lb (853 kg)

5215 lb (2365 kg)

Location of tests: Nebraska Tractor Test Laboratory, University of Nebraska, Lincoln Nebraska 68583-0832

Dates of Test: March 12-18, 2008

Manufacturer: New Holland Tractors (I) Pvt Ltd Udyog Kendra, Plot No. 3 Greater Noida - 201303 U.P. India

FUEL, OIL and TIME: Fuel No. 2 Diesel Specific gravity converted to 60°/60° F (15°/15° C) 0.8417 Fuel weight 7.008 lbs/gal (0.840 kg/l) Oil SAE 15W40 API service classification CF-4 Transmission and hydraulic lubricant New Holland M2C134D fluid Total time engine was operated 12.0 hours

ENGINE: Make Iveco Diesel **Type** four cylinder vertical **Serial No.** 757533 **Crankshaft** lengthwise **Rated engine speed** 2500 **Bore and stroke** 4.094" x 4.528" (104.0 mm x 115.0 mm) **Compression ratio** 18.0 to 1 **Displacement** 239 cu in (3908 ml) **Starting system** 12 volt **Lubrication** pressure **Air cleaner** one paper element and one felt element **Oil filter** one full flow cartridge **Fuel filter** one paper cartridge **Muffler** underhood **Exhaust** horizontal **Cooling medium temperature control** one thermostat

ENGINE OPERATING PARAMETERS: Fuel rate: 27.8 - 30.4 lb/h (12.6 - 13.8 kg/h) **High idle:** 2710 - 2790 rpm

CHASSIS: Type standard **Serial No.** 171122 **Tread width** rear 59.7" (1517 mm) to 80.2" (2036 mm) front 55.5" (1410 mm) to 74.0" (1879 mm) **Wheelbase** 84.6" (2150 mm) **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio **Nominal travel speeds mph (km/h)** first 1.85 (2.98) second 2.79 (4.49) third 4.08 (6.57) fourth 5.28 (8.49) fifth 6.67 (10.74) sixth 10.04 (16.16) seventh 14.70 (23.66) eighth 18.99 (30.56) reverse 2.67 (4.29), 9.59 (15.43) **Clutch** single dry disc operated by foot pedal **Brakes** single wet disc operated by two foot pedals which can be locked together **Steering** hydrostatic **Power take-off** 540 rpm at 1967 engine rpm **Unladen tractor mass** 5040 lb (2286 kg)

THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY: II

Quick Attach: None

Maximum force exerted through whole range: 2430 lbs (10.8 kN) (at 24" point)
3276 lbs (14.5 kN) (at ball ends)
2674 psi (184 bar)

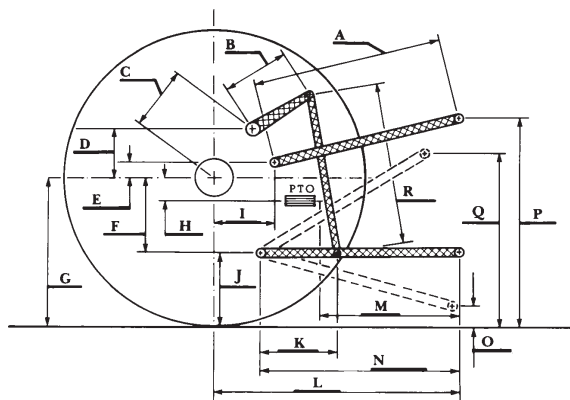
i) Sustained pressure of the open relief valve: 11.0 GPM (41.8 l/min)

ii) Pump delivery rate at minimum pressure and rated engine speed: 11.0 GPM (41.8 l/min)

iii) Pump delivery rate at maximum hydraulic power: 10.3 GPM (39.1 l/min)
Delivery pressure: 2563 psi (177 bar)
Power: 15.5 HP (11.5 kW)

HITCH DIMENSIONS AS TESTED - NO LOAD

	inch	mm
A	30.6	776
B	9.1	230
C	13.4	341
D	13.2	335
E	15.2	385
F	3.9	100
G	27.4	695
H	0.0	0
I	3.9	100
J	23.5	595
K	19.4	493
L	33.8	858
M	23.5	598
N	33.4	848
O	8.0	203
P	47.4	1205
Q	33.0	838
R	26.5	672



REPAIRS AND ADJUSTMENTS: No repairs or adjustments

REMARKS: All test results were determined from observed data obtained in accordance with official OECD, SAE and Nebraska test procedures. This tractor did not meet the manufacturer's claim of 3410 lb (1546 kg) 3 point hitch lift at ball ends. For the maximum power tests, the fuel temperature at the injection pump inlet was maintained at 143°F (62°C).

We, the undersigned, certify that this is a true and correct report of official Tractor Test No. 1920, May 8, 2008.

Roger M. Hoy
Director

M.F. Kocher
V.I. Adamchuk
J.A. Smith
Board of Tractor Test Engineers



New Holland TT 75A Diesel

Institute of Agriculture and Natural Resources
University of Nebraska-Lincoln