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Nebraska Summary: S814 New Holland T7.200

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SUMMARY OF OECD TEST 2651-NEBRASKA SUMMARY 814

NEW HOLLAND T7.200 DIESEL

18 SPEED

POWER TAKE-OFF PERFORMANCE

Power HP (kW)	Crank shaft speed rpm	Diesel Consumption		D.E.F. Consumption		Mean Atmospheric Conditions
		Gal/hr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Gal/hr (l/h)	
MAXIMUM POWER AND FUEL CONSUMPTION						
Rated Engine Speed—(PTO speed—1111 rpm)						
147.9 (110.3)	2100	7.98 (30.19)	0.376 (0.229)	18.53 (3.65)	0.55 (2.10)	
Standard Power Take-off Speed (1000 rpm)						
154.4 (115.1)	1890	8.15 (30.84)	0.368 (0.224)	18.94 (3.73)	0.54 (2.06)	
Maximum Power (1 hour)						
155.7 (116.1)	1800	8.05 (30.47)	0.360 (0.219)	19.34 (3.81)	0.57 (2.15)	

VARYING POWER AND FUEL CONSUMPTION

147.9 (110.3)	2100	7.98 (30.19)	0.376 (0.229)	18.53 (3.65)	0.55 (2.10)	Air temperature
127.4 (95.0)	2126	7.14 (27.02)	0.391 (0.238)	17.84 (3.51)	0.47 (1.79)	68°F (20°C)
96.3 (71.8)	2143	5.74 (21.72)	0.415 (0.252)	16.78 (3.31)	0.35 (1.33)	Relative humidity
64.6 (48.2)	2158	4.39 (16.61)	0.473 (0.287)	14.74 (2.90)	0.24 (0.91)	53%
32.7 (24.3)	2175	3.09 (11.68)	0.658 (0.400)	10.58 (2.09)	0.17 (0.64)	Barometer
--	2192	2.01 (7.62)	--	--	--	28.9" Hg (97.8 kPa)

Maximum torque - 526.8 lb.-ft. (714.3 Nm) at 1400 rpm

Maximum torque rise - 42.4%

Torque rise at 1700 engine rpm - 29%

Power increase at 1800 engine rpm - 5.3%

DRAWBAR PERFORMANCE

UNBALLASTED - FRONT DRIVE ENGAGED

FUEL CONSUMPTION CHARACTERISTICS

Power Hp (kW)	Drawbar pull lbs (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Temp. °F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
Maximum Power—9th Gear									
119.1 (88.8)	9575 (42.6)	4.66 (7.50)	2100	3.7	0.467 (0.284)	14.92 (2.94)	196 (91)	88 (31)	29.9 (101.2)
75% of Pull at Maximum Power—9th Gear									
92.9 (69.3)	7195 (32.0)	4.84 (7.80)	2135	1.9	0.503 (0.306)	13.86 (2.73)	191 (88)	88 (31)	29.9 (101.2)
50% of Pull at Maximum Power—9th Gear									
62.6 (46.7)	4785 (21.3)	4.91 (7.90)	2154	0.9	0.598 (0.364)	11.65 (2.30)	194 (90)	88 (31)	29.9 (101.2)
75% of Pull at Reduced Engine Speed—10th Gear									
92.7 (69.1)	7170 (31.9)	4.85 (7.80)	1790	2.0	0.471 (0.286)	14.80 (2.91)	192 (89)	88 (31)	29.9 (101.2)
50% of Pull at Reduced Engine Speed—10th Gear									
62.6 (46.7)	4720 (21.0)	4.97 (8.00)	1813	0.8	0.539 (0.328)	12.93 (2.55)	191 (88)	86 (30)	29.9 (101.2)

Location of tests: Istituto per le Macchine Agricole e Movimento Terra 73, Strada delle Cacce 10135 Torino Italy

Dates of tests: May to August, 2011.

Manufacturer: CNH UK Limited Basildon, Essex SS14 3AD United Kingdom

CONSUMABLE Fluids and OIL: Fuel No. 2 Diesel **Specific gravity converted to 60°/60°F (15°/15°C)** 0.837 **Fuel weight** 6.97 lbs/gal (0.835 kg/l) **Diesel Exhaust Fluid (DEF)** 30% aqueous urea solution **DEF weight** 9.071 lbs/gal (1.087 kg/l) **Oil** SAE 15W40 **API service classification** CH-4 **Transmission and hydraulic lubricant** Akcela Nexplore fluid **Front axle lubricant** Akcela Nexplore fluid

ENGINE: Make F.P.T. Diesel **Type** six cylinder vertical with turbocharger and air to air intercooler and D.E.F. (diesel exhaust fluid) exhaust treatment **Serial No.** 0729132 **Crankshaft** lengthwise **Rated engine speed** 2100 **Bore and stroke** 4.094" x 5.197" (104.0 mm x 132.0 mm) **Compression ratio** 17.0 to 1 **Displacement** 410 cu in (6728 ml) **Starting system** 12 volt **Lubrication** pressure **Air cleaner** two paper elements and aspirator **Oil filter** one full flow cartridge **Oil cooler** engine coolant heat exchanger for crankcase oil, radiator for hydraulic and transmission oil **Fuel filter** one paper element **Muffler** vertical **Cooling medium temperature control** thermostat and variable speed fan

CHASSIS: **Type** front wheel assist **Serial No.** ZABN41897 **Tread width** rear 56.3" (1430 mm) to 85.6" (2173 mm) front 52.2" (1325 mm) to 90.0" (2285 mm) **Wheelbase** 107.6" (2734 mm) **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio with partial (6) range operator controlled powershift **Nominal travel speeds mph (km/h)** first 1.17 (1.89) second 1.41 (2.27) third 1.70 (2.73) fourth 2.04 (3.28) fifth 2.39 (3.85) sixth 2.88 (4.63) seventh 3.41 (5.48) eighth 4.09 (6.59) ninth 4.92 (7.91) tenth 5.91 (9.51) eleventh 6.95 (11.18) twelfth 8.36 (13.45) thirteenth 9.83 (15.82) fourteenth 11.82 (19.02) fifteenth 14.19 (22.84) sixteenth 17.07 (27.47) seventeenth 20.06 (32.29) eighteenth 24.12 (38.83) reverse 2.75 (4.43), 3.31 (5.32), 3.98 (6.40), 4.78 (7.69), 5.62 (9.04), 6.75 (10.87) **Clutch** wet disc hydraulically actuated by foot pedal **Brakes** wet disc hydraulically actuated by two foot pedals that can be locked together **Steering** hydrostatic **Power take-off** 540 rpm at 1970 engine rpm or 1000 rpm at 1893 engine rpm **Unladen tractor mass** 14970 lb (6790 kg)

DRAWBAR PERFORMANCE

(Unballasted - Front Drive Engaged) MAXIMUM POWER IN SELECTED GEARS

Power Hp (kW)	Drawbar pull lbs (kN)	Speed mph (km/h)	Crankshaft speed rpm	Slip %	Fuel Consumption lb/hp.hr (kg/kW.h)	Consumption Hp.hr/gal (kW.h/l)	Temp. °F (°C) cooling med	Air dry bulb	Barom. inch Hg (kPa)
6th(1Med) Gear									
86.4 (64.4)	13040 (58.0)	2.48 (4.00)	2133	15.0	0.531 (0.323)	13.15 (2.59)	201 (94)	89 (32)	29.9 (101.2)
7th(6Low) Gear									
99.2 (74.0)	12745 (56.7)	2.92 (4.70)	2124	14.0	0.518 (0.315)	13.45 (2.65)	203 (95)	91 (33)	29.9 (101.2)
8th(2Med) Gear									
116.5 (86.9)	12790 (56.9)	3.42 (5.50)	1989	10.8	0.478 (0.291)	14.57 (2.87)	205 (96)	91 (33)	29.9 (101.2)
9th(3Med) Gear									
123.6 (92.2)	11850 (52.7)	3.91 (6.30)	1833	7.3	0.449 (0.273)	15.53 (3.06)	196 (91)	90 (32)	29.9 (101.2)
10th(4Med) Gear									
126.1 (94.0)	9755 (43.4)	4.85 (7.80)	1806	3.9	0.443 (0.269)	15.73 (3.10)	191 (88)	90 (32)	29.9 (101.2)
11th(5Med) Gear									
128.5 (95.8)	8430 (37.5)	5.72 (9.20)	1802	2.8	0.432 (0.263)	16.14 (3.18)	194 (90)	90 (32)	29.9 (101.2)
12th(6Med) Gear									
125.3 (93.4)	6810 (30.3)	6.90 (11.10)	1800	1.8	0.447 (0.272)	15.58 (3.07)	192 (89)	90 (32)	29.9 (101.2)
13th(1High) Gear									
129.3 (96.4)	5910 (26.3)	8.20 (13.20)	1800	1.4	0.431 (0.262)	16.15 (3.18)	192 (89)	90 (32)	29.9 (101.2)
14th(2High) Gear									
127.4 (95.0)	4835 (21.5)	9.88 (15.90)	1796	0.8	0.440 (0.267)	15.85 (3.12)	191 (88)	88 (31)	29.9 (101.2)

REPAIRS AND ADJUSTMENTS: No repairs or adjustments.

REMARKS: All test results were determined from observed data obtained in accordance with official OECD test procedures. This tractor did not meet the manufacturer's claims of sound level of 70.0 dB(A), implement pump flow of 29.8 GPM (113 lpm) nor 3 point lift claim of 11821 lbs (5362 kg). The performance figures on this summary were taken from a test conducted under the OECD Code 2 test procedure.

We, the undersigned, certify that this is a true summary of data from OECD Report No. **2651**, Nebraska Summary 814, January 25, 2012.

Roger M. Hoy
Director

M.F. Kocher
D.R. Keshwani
P.J. Jasa
Board of Tractor Test Engineers

TRACTOR SOUND LEVEL WITH CAB	Front Wheel Drive	
	Disengaged dB(A)	Engaged dB(A)
At no load in 9th gear	72.0	72.2
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 650/65R42; **,12 (80)
 Two 540/65R30; **,12 (80)
 22.6 in (575 mm)
 9360 lb (4245 kg)
 5775 lb (2620 kg)
 15135 lb (6865 kg)

This vehicle is equipped with an electronically controlled engine Power management system that monitors and boosts engine power output in certain circumstances. This is achieved by electronically changing the characteristics of the engine power-speed curve. The engine Power management function ("boosted" power level) becomes active in the higher transmission gears for road transport applications. The system is also activated when power transfer through the PTO and hydraulic pump exceeds a preset level (and forward speed exceeds 0.5 km/h), for mobile PTO driven implement applications. An override system is provided to enable PTO operations at the "boosted" power level while the vehicle is stationary for test purposes. The results of this PTO output test are presented below.

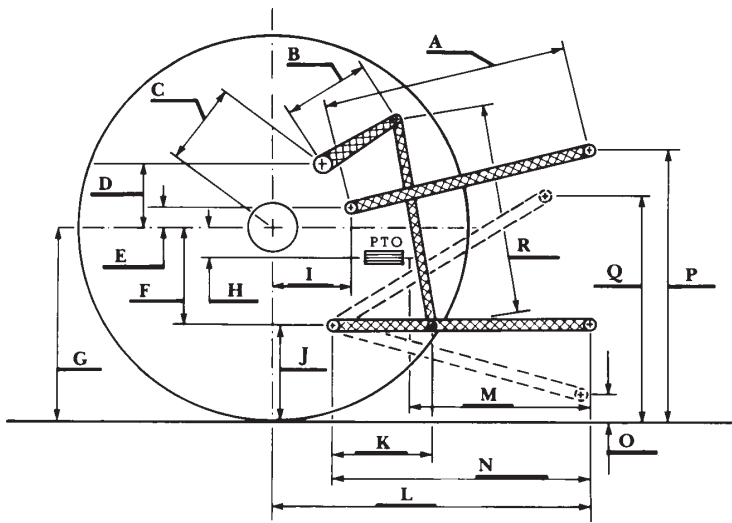
POWER TAKE-OFF PERFORMANCE

Power HP (kW)	Crank shaft speed rpm	Diesel Consumption Gal/hr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	D.E.F. Consumption Gal/hr (l/h)	Mean Atmospheric Conditions
MAXIMUM POWER AND FUEL CONSUMPTION						
Rated Engine Speed—(PTO speed—1164 rpm)						
171.2 (127.7)	2200	9.34 (35.35)	0.380 (0.231)	18.32 (3.61)	0.66 (2.51)	
Standard Power Take-off Speed (1000 rpm)						
183.2 (136.6)	1890	9.48 (35.87)	0.360 (0.219)	19.33 (3.81)	0.65 (2.45)	
Maximum Power (1 hour)						
184.3 (137.4)	1799	9.39 (35.53)	0.355 (0.216)	19.63 (3.87)	0.66 (2.51)	
VARYING POWER AND FUEL CONSUMPTION						
171.2 (127.7)	2200	9.34 (35.35)	0.380 (0.231)	18.32 (3.61)	0.66 (2.51)	Air temperature
148.0 (110.4)	2236	8.29 (31.37)	0.390 (0.237)	17.86 (3.52)	0.53 (2.02)	72°F (23°C)
112.2 (83.7)	2260	6.61 (25.03)	0.411 (0.250)	16.97 (3.34)	0.40 (1.52)	Relative humidity
75.5 (56.3)	2279	4.95 (18.73)	0.457 (0.278)	15.26 (3.01)	0.27 (1.01)	50%
38.2 (28.5)	2296	3.30 (12.48)	0.602 (0.366)	11.57 (2.28)	0.16 (0.61)	Barometer
--	2315	2.16 (8.16)	--	--	--	28.9° Hg (98.0 kPa)
Maximum torque - 604.1 lb.-ft. (819.0 Nm) at 1500 rpm						
Maximum torque rise - 47.7%						
Torque rise at 1799 engine rpm - 31%						
Power increase at 1799 engine rpm - 7.6%						

HYDRAULIC PERFORMANCE

CATEGORY: III
 Quick Attach: None
 OECD Static test

	lift cylinders
Maximum force exerted through whole range:	9350 lbs (41.6 kN) (2x100 mm)
i) Sustained pressure of the open relief valve:	2960 psi (204 bar)
ii) Pump delivery rate at minimum pressure:	25.1 GPM (95.1 l/min)
iii) Pump delivery rate at maximum	
hydraulic power:	23.7 GPM (89.9 l/min)
Delivery pressure:	2610 psi (180 bar)
Power:	36.1 HP (27.0 kW)



HITCH DIMENSIONS AS TESTED—NO LOAD

	inch	mm
A	29.8	758
B	12.2	310
C	15.7	398
D	14.3	364
E	8.2	208
F	9.8	250
G	34.4	925
H	0.6	16
I	17.5	445
J	26.6	675
K	17.3	440
L	47.0	1194
M	24.6	624
N	38.3	974
O	7.9	200
P	53.5	1360
Q	38.6	980
R	33.5	850