SUMMARY OF OECD TEST 1886–NEBRASKA SUMMARY 323
NEW HOLLAND TV-140 DIESEL
HYDROSTATIC

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
MAXIMUM POWER AND FUEL CONSUMPTION					
Rated Engine Speed (PTO speed - 1074 rpm)					
103.3 *(77.0)*	2200	7.74 *(29.29)*	0.531 *(0.323)*	13.35 *(2.63)*	
Standard Power Take-off Speed(1000 rpm)					
109.0 *(81.3)*	2049	7.51 *(28.45)*	0.488 *(0.297)*	14.51 *(2.86)*	
Maximum Power (2 hours)					
111.8 *(83.4)*	1800	7.10 *(26.87)*	0.450 *(0.274)*	15.75 *(3.10)*	
VARYING POWER AND FUEL CONSUMPTION					
103.3 *(77.0)*	2200	7.74 *(29.29)*	0.531 *(0.323)*	13.35 *(2.63)*	Air temperature
90.4 *(67.4)*	2265	7.28 *(27.56)*	0.571 *(0.348)*	12.41 *(2.44)*	50°F *(10°C)*
68.4 *(51.0)*	2295	6.21 *(23.51)*	0.643 *(0.391)*	11.01 *(2.17)*	Relative humidity
46.3 *(34.6)*	2324	5.26 *(19.92)*	0.806 *(0.490)*	8.80 *(1.73)*	28%
23.3 *(17.4)*	2348	4.22 *(15.99)*	1.282 *(0.780)*	5.52 *(1.09)*	Barometer
0.3 *(0.2)*	2370	3.11 *(11.79)*	82.218 *(50.013)*	0.10 *(0.02)*	29.9" Hg *(101.4 kPa)*

Maximum Torque - 395 lb.-ft. *(535 Nm)* at 1200 rpm
Maximum Torque Rise - 60.2%
Torque rise at 1800 engine rpm - 32%

DRAWBAR PERFORMANCE
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)*	Fuel Consumption Hp.hr/gal *(kW.h/l)*	Temp.°F *(°C)* cool-ing med	Temp.°F *(°C)* Air dry bulb	Barom. inch Hg *(kPa)*
Maximum Power Low range									
81.3 *(60.6)*	5360 *(23.84)*	5.69 *(9.15)*	2200	0.93	0.689 *(0.419)*	10.30 *(2.03)*	187 *(86)*	36 *(2)*	30.1 *(101.9)*
75% of Pull at Maximum Power Low range									
64.1 *(47.8)*	4020 *(17.89)*	5.98 *(9.62)*	2268	0.73	0.778 *(0.473)*	9.12 *(1.80)*	185 *(85)*	37 *(3)*	29.6 *(100.4)*
50% of Pull at Maximum Power Low range									
44.2 *(33.0)*	2680 *(11.93)*	6.18 *(9.94)*	2300	0.33	0.938 *(0.570)*	7.56 *(1.49)*	185 *(85)*	37 *(3)*	29.6 *(100.4)*
75% of Pull at Reduced Engine Speed Mid range									
64.4 *(48.0)*	4030 *(17.92)*	5.99 *(9.64)*	2072	0.66	0.709 *(0.431)*	10.00 *(1.97)*	185 *(85)*	37 *(3)*	29.6 *(100.4)*
50% of Pull at Reduced Engine Speed Mid range									
44.2 *(33.0)*	2680 *(11.94)*	6.18 *(9.94)*	2030	0.41	0.820 *(0.499)*	8.65 *(1.71)*	185 *(85)*	39 *(4)*	29.6 *(100.4)*

Location of Test: Prairie Agricultural Machinery Institute (PAMI), Portage La Prairie, Manitoba, Canada R1N 3C5

Dates of Test: November, 1999

Manufacturer: New Holland Canada Ltd. Versatile Farm Equipment Operations, Box 7300, 1260 Clarence Ave., Winnipeg, Manitoba, Canada R3C 4E8

FUEL and OIL: Fuel No. 2 Diesel **Specific gravity converted to 60°/60°F *(15°/15°C)*** 0.852 **Fuel weight** 7.09 lbs/gal *(0.850 kg/l)* **Oil SAE** 10W30 **API service classification** CF-4/SG **Hydraulic and hydrostatic lubricant** ESN-M2C 134-D fluid **Final drive lubricant** ESN - M2C 134-D fluid

ENGINE: Make New Holland Diesel **Type** six cylinder vertical with turbocharger **Serial No.** WV836018 **Crankshaft** lengthwise **Rated engine speed** 2200 **Bore and stroke** 4.40" x 5.00"*(111.8 mm x 127.0 mm)* **Compression ratio** 17.5 to 1 **Displacement** 456 cu in *(7480 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 hydrostatic oil **Fuel filter** one element **Muffler** vertical **Cooling medium temperature control** thermostat

CHASSIS: Type Four wheel drive **Serial No.** D204266 **Tread width** rear 60.0" *(1525 mm)* to 80.0" *(2030 mm)* front 60.0" *(1525 mm)* to 80.0" *(2030 mm)* **Wheelbase** 118.1"*(3000 mm)* **Hydraulic control system** direct engine drive **Transmission** infinitely variable hydrostatic - using a variable displacement pump and motor. A mechanical section provides 3 ranges **Nominal travel speeds mph *(km/h)*** Forward: Low 0 - 4.8 *(0-7.7)*, mid 0-7.6 *(0-12.3)*, high 0-18.3 *(0-29.5)* reverse: low 0-4.8 *(0-7.7)*, mid 0-7.6 *(0 - 12.3)*, high 0 - 18.3 *(0-29.5)* **Clutch** none **Brakes** caliper disc hydraulically operated by foot pedal **Steering** hydrostatic and articulated **Power take-off** 540 rpm at 1890 engine rpm or 1000 rpm at 2049 engine rpm **Unladen tractor mass** 14715 lb *(6674 kg)*

DRAWBAR PERFORMANCE
MAXIMUM POWER AT SELECTED TRAVEL SPEEDS

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)
					Low Range				
70.9 (52.9)	11010 (48.98)	2.42 (3.89)	1800	3.07	0.730 (0.444)	9.72 (1.92)	187 (86)	37 (3)	30.1 (101.8)
					Low Range				
80.9 (60.3)	9625 (42.81)	3.15 (5.07)	1803	2.18	0.631 (0.384)	11.24 (2.22)	187 (86)	37 (3)	30.1 (101.8)
					Low Range				
86.6 (64.6)	8700 (38.71)	3.73 (6.01)	1799	1.78	0.610 (0.371)	11.62 (2.29)	185 (85)	35 (2)	30.1 (101.9)
					Low Range				
87.8 (65.5)	7410 (32.96)	4.44 (7.15)	1803	1.51	0.596 (0.363)	11.90 (2.35)	185 (85)	34 (1)	30.1 (102.0)
					Mid Range				
80.9 (60.3)	6625 (29.48)	4.57 (7.36)	1802	1.39	0.637 (0.388)	11.14 (2.20)	185 (85)	43 (6)	30.0 (101.7)
					Mid Range				
86.4 (64.4)	5875 (26.14)	5.51 (8.87)	1801	1.14	0.598 (0.364)	11.85 (2.34)	185 (85)	49 (9)	30.0 (101.6)
					Mid Range				
86.1 (64.2)	4885 (21.74)	6.61 (10.63)	1800	0.90	0.597 (0.363)	11.88 (2.34)	183 (84)	49 (9)	30.0 (101.6)

TRACTOR SOUND LEVEL WITH CAB	dB(A)
At 75% load in Mid Range	79.0
Bystander	--

TIRES, BALLAST AND WEIGHT	Tested Without Ballast
Rear tires - No., size, ply & psi *(kPa)*	Two 480/85R34;**;12*(83)*
Front Tires - No., size, ply, & psi *(kPa)*	Two 480/85R34;**;10*(69)*
Height of Drawbar	19.2 in *(488 mm)*
Static Weight with operator - Rear	7895 lb *(3582 kg)*
- Front	6985 lb *(3167 kg)*
- Total	14880 lb *(6749 kg)*

REPAIRS AND ADJUSTMENTS: No repairs or adjustments

Remarks: All test results were determined from observed data obtained in accordance with official OECD test procedures. The drawbar pull in low range was limited due to stalling of the hydrostatic drive.The performance figures on this summary were taken from a test conducted under the OECD Code II test procedure.

We, the undersigned, certify that this is a true summary of data from OECD Report No. **1886**, Nebraska Summary 323, August 11,2000.

Brent T. Sampson
Test Engineer

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Board of Tractor Test Engineers

THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY: II		
Quick Attach: None		
Maximum Force Exerted Through Whole Range:	5440 lbs	*(24.2 kN)* (cab end)
	4450 lbs	*(19.8 kN)* (engine end)
i) Opening pressure of relief valve:	NA	
Sustained pressure of the open relief valve:	3090 psi	*(213 bar)*
ii) Pump delivery rate at minimum pressure:	30.1 GPM	*(113.8 l/min)*
iii) Pump delivery rate at maximum hydraulic power:	26.0 GPM	*(98.6 l/min)*
Delivery pressure:	2595 psi	*(179 bar)*
Power:	39.4 HP	*(29.4 kW)*

THREE POINT HITCH PERFORMANCE (SAE Static Test)

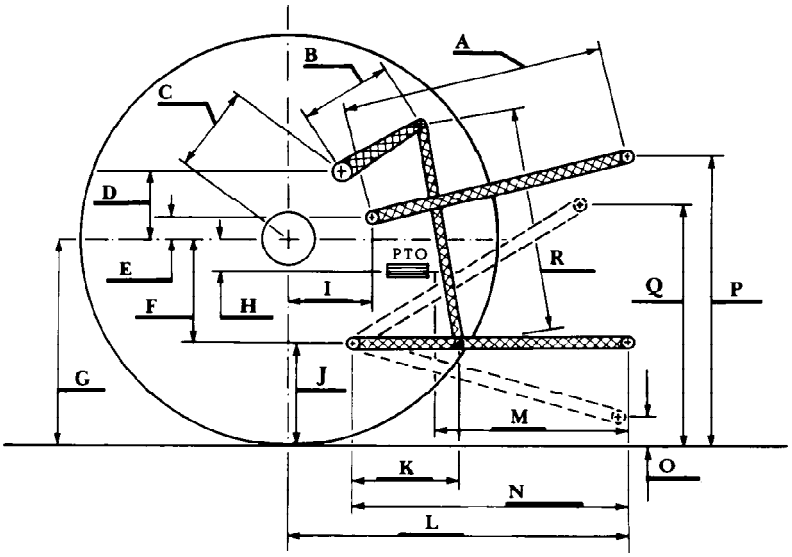
Observed Maximum Pressure psi *(bar)*	3090 *(213)*
Location	lift cylinder
Hydraulic oil Temperature °F *(°C)*	150 *(65)*
Location	hydraulic sump
Category	II
Quick Attach	None

System Pressure - 2770 psi *(191 bar)*

Cab End					
Hitch point distance to ground level in. *(mm)*	8.0 *(203)*	13.4 *(341)*	21.3 *(541)*	29.2 *(741)*	37.0 *(941)*
Lift force on frame lb.	9395	9330	8275	7935	6720
" " " " " " *(kN)*	*(41.8)*	*(41.5)*	*(38.8)*	*(35.3)*	*(29.9)*

Engine End					
Hitch point distance to ground level in. *(mm)*	8.0 *(203)*	14.1 *(359)*	22.0 *(559)*	29.9 *(759)*	37.8 *(959)*
Lift force on frame lb.	12115	9035	7060	5825	5150
" " " " " " *(kN)*	*(53.9)*	*(40.2)*	*(31.4)*	*(25.9)*	*(22.9)*

HITCH DIMENSIONS AS TESTED - NO LOAD



	Cab End		Engine End	
	inch	*mm*	inch	*mm*
A	27.8	*705*	20.7	*525*
B	10.0	*254*	16.9	*430*
C	14.0	*356*	15.1	*383*
D	13.4	*341*	9.4	*240*
E	8.5	*215*	15.6	*395*
F	9.0	*229*	8.3	*211*
G	30.3	*770*	30.3	*770*
H	3.8	*96*	3.8	*96*
I	12.8	*325*	31.0	*788*
J	21.3	*541*	22.0	*559*
K	16.2	*412*	18.3	*465*
L	40.0	*1017*	51.7	*1313*
M	22.1	*561*	NA	*NA*
N	36.0	*915*	36.0	*915*
O	7.9	*200*	7.9	*200*
P	45.3	*1151*	46.0	*1169*
Q	37.2	*945*	36.4	*925*
R	30.3	*770*	22.5	*572*

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