

SUMMARY OF OECD TEST 2424—NEBRASKA SUMMARY 626

NEW HOLLAND T7050 DIESEL

19 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 |
|---|--------------------------------|------------------|-----------------------|-----------------------|--------------------------------|
| MAXIMUM POWER AND FUEL CONSUMPTION | | | | | |
| Rated Engine Speed—(PTO speed—1022 rpm) | | | | | |
| 171.2 (127.7) | 2200 | 10.91 (41.30) | 0.443 (0.269) | 15.70 (3.09) | |
| Standard Power Take-off Speed (1000 rpm) | | | | | |
| 178.4 (133.0) | 2153 | 10.95 (41.44) | 0.426 (0.259) | 16.29 (3.21) | |
| Maximum Power (1 hour) | | | | | |
| 189.4 (141.2) | 1900 | 10.95 (41.46) | 0.402 (0.244) | 17.31 (3.41) | |

VARYING POWER AND FUEL CONSUMPTION

| | | | | | |
|------------------|------|------------------|------------------|-----------------|---------------------|
| 171.2 (127.7) | 2200 | 10.91 (41.30) | 0.442 (0.269) | 15.70 (3.09) | Air temperature |
| 149.7 (111.6) | 2260 | 10.10 (38.21) | 0.469 (0.285) | 14.82 (2.92) | 61°F (16°C) |
| 113.5 (84.6) | 2285 | 8.12 (30.74) | 0.498 (0.303) | 13.97 (2.75) | Relative humidity |
| 76.7 (57.2) | 2315 | 6.11 (23.11) | 0.553 (0.336) | 12.57 (2.48) | 50% |
| 38.6 (28.8) | 2330 | 4.02 (15.22) | 0.724 (0.440) | 9.60 (1.89) | Barometer |
| -- | 2348 | 2.36 (8.93) | -- | -- | 29.4" Hg (99.7 kPa) |

Maximum Torque - 606.9 lb.-ft. (822.8 Nm) at 1400 rpm
 Maximum Torque rise - 48.4%
 Torque rise at 1800 engine rpm - 31%

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 | | | | | | | | | |
| 140.8 (105.0) | 10995 (48.90) | 4.80 (7.73) | 2203 | 5.6 | 0.544 (0.331) | 12.77 (2.52) | 178 (81) | 66 (19) | 29.5 (100.0) |
| 75% of Pull at Maximum Power—9th Gear | | | | | | | | | |
| 110.8 (82.6) | 8285 (36.85) | 5.01 (8.07) | 2264 | 4.0 | 0.606 (0.369) | 11.47 (2.26) | 179 (82) | 68 (20) | 29.5 (100.0) |
| 50% of Pull at Maximum Power—9th Gear | | | | | | | | | |
| 75.9 (56.6) | 5555 (24.71) | 5.12 (8.24) | 2293 | 3.2 | 0.699 (0.425) | 9.95 (1.96) | 179 (82) | 68 (20) | 29.5 (100.0) |
| 75% of Pull at Reduced Engine Speed—10th Gear | | | | | | | | | |
| 113.6 (84.7) | 8355 (37.16) | 5.10 (8.20) | 1920 | 4.4 | 0.543 (0.330) | 12.80 (2.52) | 176 (80) | 66 (19) | 29.6 (100.1) |
| 50% of Pull at Reduced Engine Speed—10th Gear | | | | | | | | | |
| 76.3 (56.9) | 5540 (24.65) | 5.16 (8.31) | 1948 | 3.2 | 0.596 (0.363) | 11.65 (2.30) | 176 (80) | 66 (19) | 29.6 (100.1) |

Location of tests: HBLFA Francisco Josephinum
 BLT Biomass-Logistics-Technology,
 Rottenhauser, StraBe, 1, AT, 3250, Wieselburg,
 Austria

Dates of tests: May - July, 2007.

Manufacturer: CNH Osterreich GmbH
 SteyrerstraBe, 32, 4300, St. Valentin, Austria

FUEL and OIL: Fuel No. 2 Diesel **Specific gravity converted to 60°/60°F (15°/15°C)** 0.835
Fuel weight 6.95 lbs/gal (0.833 kg/l) **Oil SAE**
 10W30 **API service classification** CG-4
Transmission and hydraulic lubricant New
 Holland Ambra Multi G fluid **Front axle lubricant**
 New Holland Ambra Multi G fluid

ENGINE: Make CNH Diesel **Type** six cylinder
 vertical with turbocharger and air to air intercooler
Serial No. 374028 **Crankshaft** lengthwise **Rated
 engine speed** 2200 **Bore and stroke** 4.094" x
 5.197" (104.0 mm x 132.0 mm) **Compression ratio**
 16.5 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** two paper canisters
Muffler underhood **Exhaust** vertical **Cooling
 medium temperature control** thermostat and
 variable speed fan

CHASSIS: **Type** front wheel assist **Serial No.**
 Z7BH01013 **Tread width** rear 60.2" (1530 mm) to
 87.8" (2230 mm) front 61.4" (1560 mm) to 89.0" (2260
 mm) **Wheelbase** 113.5" (2884 mm) **Hydraulic
 control system** direct engine drive **Transmission**
 selective gear fixed ratio with full range operator
 controlled powershift **Nominal travel speeds mph
 (km/h)** first 1.21 (1.94) second 1.45 (2.33) third 1.74
 (2.80) fourth 2.09 (3.36) fifth 2.52 (4.05) sixth 3.03
 (4.87) seventh 3.49 (5.62) eighth 4.20 (6.76) ninth
 5.05 (8.12) tenth 6.06 (9.76) eleventh 7.30 (11.75)
 twelfth 8.78 (14.13) thirteenth 10.09 (16.24)
 fourteenth 12.13 (19.52) fifteenth 14.57 (23.45)
 sixteenth 17.52 (28.20) seventeenth 21.08 (33.92)
 eighteenth 25.35 (40.79) nineteenth 25.35
 (40.80) (1700 engine rpm) reverse 2.67 (4.30), 3.21
 (5.16), 3.85 (6.20), 4.63 (7.45), 5.57 (8.96), 6.70
 (10.78) **Clutch** multiple wet disc electro-
 hydraulically operated by foot pedal **Brakes** wet
 disc hydraulically operated by two foot pedals that
 can be locked together **Steering** hydrostatic **Power
 take-off** 540 rpm at 1950 engine rpm or 1000 rpm
 at 2154 engine rpm **Unladen tractor mass** 17635
 lb (8000 kg)

DRAWBAR PERFORMANCE

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

| Power Hp (kW) | Drawbar pull lbs (kN) | Speed mph (km/h) | Crank- shaft speed rpm | Slip % | Fuel Consumption lb/hp.hr (kg/kW.h) | Consumption Hp.lhr/gal (kW.h/l) | Temp. °F(°C) cool- ing med | Air dry bulb | Barom. inch Hg (kPa) |
|---------------------|--------------------------------|------------------------|---------------------------------|-----------|---|---------------------------------------|-------------------------------------|--------------------|-------------------------------|
| 117.3 (87.5) | 16560 (73.67) | 2.66 (4.28) | 2247 | 14.6 | 6th Gear 0.646 (0.393) | | 178 (81) | 68 (20) | 29.4 (99.6) |
| 132.8 (99.0) | 16455 (73.20) | 3.03 (4.87) | 2190 | 13.1 | 7th Gear 0.567 (0.345) | | 180 (82) | 68 (20) | 29.4 (99.6) |
| 144.4 (107.7) | 16535 (73.55) | 3.27 (5.27) | 1962 | 13.0 | 8th Gear 0.529 (0.322) | | 180 (82) | 68 (20) | 29.4 (99.6) |
| 152.1 (113.4) | 14220 (63.25) | 4.01 (6.45) | 1900 | 8.8 | 9th Gear 0.501 (0.305) | | 181 (83) | 68 (20) | 29.4 (99.5) |
| 153.7 (114.6) | 11610 (51.65) | 4.96 (7.99) | 1908 | 6.5 | 10th Gear 0.496 (0.302) | | 180 (82) | 68 (20) | 29.4 (99.5) |
| 153.1 (114.2) | 9530 (42.40) | 6.02 (9.68) | 1902 | 5.5 | 11th Gear 0.498 (0.303) | | 180 (82) | 68 (20) | 29.4 (99.5) |
| 151.8 (113.2) | 7790 (34.65) | 7.31 (11.76) | 1902 | 4.5 | 12th Gear 0.503 (0.306) | | 180 (82) | 68 (20) | 29.4 (99.5) |

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 35 Hp "power growth", 39.6 gpm (150 lpm) remote hydraulic flow nor 3 point lift capacity of 15873 lbs (7200 kg). 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. **2424** Nebraska Summary 626, November 24, 2008.

Roger M. Hoy
Director

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

| TRACTOR SOUND LEVEL WITH CAB | Front Wheel Drive | |
|------------------------------|---------------------|------------------|
| | Disengaged dB(A) | Engaged dB(A) |
| At no load in 8th gear | 70.0 | 70.0 |
| Bystander | -- | -- |

TIRES, BALLAST 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 710/70R38; **; 15(100)
Two 600/65R28; **; 15(100)
24.0 in (610 mm)
10990 lb (4985 kg)
6815 lb (3090 kg)
17805 lb (8075 kg)

DRAWBAR PERFORMANCE
(Unballasted - Front Drive Disengaged)
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 | | | | | | | | | |
| 141.2 (105.3) | 11465 (51.00) | 4.62 (7.43) | 2206 | 8.4 | 0.543 (0.331) | 12.79 (2.52) | 176 (80) | 72 (22) | 29.6 (100.4) |
| 75% of Pull at Maximum Power—9th Gear | | | | | | | | | |
| 110.1 (82.1) | 8625 (38.36) | 4.78 (7.70) | 2226 | 6.4 | 0.596 (0.363) | 11.66 (2.30) | 176 (80) | 72 (22) | 29.6 (100.4) |
| 50% of Pull at Maximum Power—9th Gear | | | | | | | | | |
| 76.3 (56.9) | 5705 (25.37) | 5.02 (8.07) | 2295 | 4.4 | 0.678 (0.412) | 10.25 (2.02) | 180 (82) | 72 (22) | 29.6 (100.4) |
| 75% of Pull at Reduced Engine Speed—10th Gear | | | | | | | | | |
| 112.6 (84.0) | 8670 (38.57) | 4.87 (7.84) | 1897 | 6.5 | 0.528 (0.321) | 13.16 (2.59) | 178 (81) | 68 (20) | 29.6 (100.4) |
| 50% of Pull at Reduced Engine Speed—10th Gear | | | | | | | | | |
| 77.3 (57.7) | 5740 (25.54) | 5.05 (8.13) | 1922 | 4.4 | 0.583 (0.354) | 11.93 (2.35) | 180 (82) | 70 (21) | 29.6 (100.4) |
| MAXIMUM POWER IN SELECTED GEARS | | | | | | | | | |
| 7th Gear | | | | | | | | | |
| 107.7 (80.3) | 13075 (58.15) | 3.09 (4.97) | 2261 | 13.6 | 0.631 (0.384) | 11.01 (2.17) | 178 (81) | 73 (23) | 29.5 (100.1) |
| 8th Gear | | | | | | | | | |
| 127.0 (94.7) | 12835 (57.10) | 3.71 (5.97) | 2247 | 13.5 | 0.601 (0.365) | 11.57 (2.28) | 181 (83) | 70 (21) | 29.5 (100.1) |
| 9th Gear | | | | | | | | | |
| 142.6 (106.3) | 12410 (55.21) | 4.31 (6.93) | 2113 | 11.2 | 0.544 (0.331) | 12.77 (2.52) | 178 (81) | 72 (22) | 29.6 (100.2) |
| 10th Gear | | | | | | | | | |
| 149.0 (111.1) | 12030 (53.52) | 4.65 (7.48) | 1895 | 10.8 | 0.509 (0.310) | 13.65 (2.69) | 180 (82) | 68 (20) | 29.6 (100.2) |
| 11th Gear | | | | | | | | | |
| 154.2 (115.0) | 9995 (44.45) | 5.79 (9.31) | 1895 | 7.6 | 0.494 (0.301) | 14.06 (2.77) | 176 (80) | 75 (24) | 29.6 (100.2) |
| 12th Gear | | | | | | | | | |
| 151.7 (113.1) | 8015 (35.66) | 7.10 (11.42) | 1898 | 6.0 | 0.502 (0.306) | 13.84 (2.73) | 178 (81) | 72 (22) | 29.6 (100.2) |

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 (16th and above) and for road transport applications. The system is also activated when power transfer through the PTO 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 of this PTO output test are presented below.

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—1022 rpm) | | | | | |
| 198.7 (148.2) | 2200 | 12.34 (46.70) | 0.431 (0.262) | 16.11 (3.17) | |
| Standard Power Take-off Speed - (1000 rpm) | | | | | |
| 202.5 (151.0) | 2153 | 12.44 (47.08) | 0.427 (0.259) | 16.28 (3.21) | |
| Maximum Power (1 hour) | | | | | |
| 215.4 (160.6) | 1900 | 12.36 (46.81) | 0.399 (0.243) | 17.42 (3.43) | |

VARYING POWER AND FUEL CONSUMPTION

| | | | | | |
|------------------|------|------------------|------------------|-----------------|--------------------|
| 198.7 (148.2) | 2200 | 12.34 (46.70) | 0.431 (0.262) | 16.11 (3.17) | Air temperature |
| 172.1 (128.3) | 2240 | 11.13 (42.13) | 0.449 (0.273) | 15.47 (3.05) | 68°F (20°C) |
| 130.6 (97.4) | 2270 | 9.21 (34.85) | 0.490 (0.298) | 14.19 (2.79) | Relative humidity |
| 88.6 (66.1) | 2305 | 6.89 (26.08) | 0.540 (0.329) | 12.84 (2.53) | 47% |
| 44.7 (33.3) | 2330 | 4.41 (16.68) | 0.684 (0.416) | 10.14 (2.00) | Barometer |
| -- | 2348 | 2.36 (8.93) | -- | -- | 29.5"Hg (100.0kPa) |

Maximum Torque 651.0 lb.-ft. (882.6 Nm) at 1600 rpm
Maximum Torque Rise - 37.2%
Torque rise at 1800 rpm - 32%

HYDRAULIC PERFORMANCE

CATEGORY: I11N

Quick Attach: No

OECD Static test

Lift cylinders:

2 x 100 mm

Maximum force exerted through whole range:

13490 lbs (60.0 kN)

| | <u>Standard pump</u> | <u>High flow pump</u> |
|--|-----------------------|-----------------------|
| i) Sustained pressure at compensator cutoff: | 3175 psi (219 bar) | 3175 psi (219 bar) |
| two outlet sets combined | | |
| ii) Pump delivery rate at minimum pressure: | 32.0 GPM(121.0 l/min) | 35.6 GPM(134.8 l/min) |
| iii) Pump delivery rate at maximum | | |
| hydraulic power: | 27.0 GPM(102.0 l/min) | 33.0 GPM(125.0 l/min) |
| Delivery pressure: | 2830 psi (195 bar) | 2685 psi (185 bar) |
| Power: | 44.5 HP (33.2 kW) | 51.7 HP (38.5 kW) |
| single outlet set | | |
| ii) Pump delivery rate at minimum pressure: | 26.2 GPM(99.3 l/min) | 26.0 GPM(98.5 l/min) |
| iii) Pump delivery rate at maximum | | |
| hydraulic power: | 25.8 GPM(97.7 l/min) | 25.6 GPM(96.8 l/min) |
| Delivery pressure: | 2540 psi (175 bar) | 2540 psi (175 bar) |
| Power: | 38.2 HP (28.5 kW) | 37.9 HP (28.2 kW) |

THREE POINT HITCH PERFORMANCE(SAE Static test)

| | | | | | |
|--|----------------|------------|------------|------------|-------------|
| Observed Maximum Pressure psi. (bar) | 3175 (219) | | | | |
| Location: | lift cylinder | | | | |
| Hydraulic oil temperature: °F (°C) | 150 (65) | | | | |
| Location: | hydraulic sump | | | | |
| Category: | I11N | | | | |
| Quick attach: | none | | | | |
| System pressure 2865 psi (197 Bar) Lift cylinders - 2 x 100 mm | | | | | |
| Hitch point distance to ground level in. (mm) | 19.7 (500) | 21.9 (555) | 25.8 (655) | 35.8 (910) | 45.3 (1150) |
| Lift force on frame lb | 14930 | 15015 | 15175 | 15150 | 14230 |
| " " " " " " (kN) | (66.4) | (66.8) | (67.5) | (67.4) | (63.3) |

HITCH DIMENSIONS AS TESTED—NO LOAD

| | OECD test | | SAE test | |
|---|-----------|------|----------|------|
| | inch | mm | inch | mm |
| A | 31.9 | 810 | 31.7 | 805 |
| B | 15.0 | 380 | 15.0 | 380 |
| C | 15.1 | 383 | 15.1 | 383 |
| D | 14.6 | 372 | 14.6 | 372 |
| E | 10.9 | 277 | 10.9 | 277 |
| F | 10.6 | 270 | 10.6 | 270 |
| G | 36.4 | 925 | 36.4 | 925 |
| H | 2.4 | 60 | 2.4 | 60 |
| I | 19.7 | 440 | 19.7 | 440 |
| J | 25.8 | 655 | 25.8 | 655 |
| K | 26.9 | 682 | 26.9 | 682 |
| L | 48.2 | 1224 | 48.2 | 1224 |
| M | 23.1 | 587 | 23.1 | 587 |
| N | 38.3 | 974 | 38.3 | 974 |
| O | 9.0 | 230 | 16.9 | 430 |
| P | 52.8 | 1340 | 47.8 | 1214 |
| Q | 39.4 | 1000 | 45.3 | 1150 |
| R | 38.8 | 985 | 34.4 | 875 |

