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(Restricted code)
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REPORT ON TEST IN ACCORDANCE WITH OECD RESTRICTED CODE (CODE II)
FOR THE OFFICIAL TESTING OF AGRICULTURAL TRACTORS

JOHN DEERE 7400 SYNCROPLUS MFWD



MANUFACTURED BY: John Deere Waterloo Tractor Works Tractor Division
P.O. Box 270
Waterloo, Iowa 50704-0270

NEBRASKA TEST NO. 1680

Test Dates: 23 May through 2 June, 1994

This test report provides the results of the tests conducted in accordance with the OECD Standard Test Code for the Official Testing of Agricultural Tractor Performance - C(87)53 Final - Annex II, Restricted Code.

This report has been approved by the OECD Coordinating Centre in Paris (CEMAGREF) on 16 November, 1994

John Deere 7400 SYNCROPLUS MFWD

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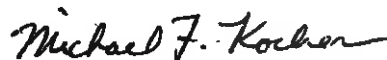
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SPECIFICATIONS OF TRACTOR.

| | |
|------------------------------|--|
| Manufacturers name/address | John Deere Tractor Works P.O. Box 270 Waterloo, Iowa, USA |
| Location of tractor assembly | Same |
| Submitted for test by | The manufacturer |
| Selected for test by | The manufacturer in agreement with the test station. |
| Place of running in | John Deere Product Eng. Ctr Waterloo, Iowa, USA |
| Duration of running in | 154 hours |
| Location of Test | Nebraska Power laboratory Tractor Testing Laboratory Lincoln, Nebraska, USA. |

TRACTOR SPECIFICATIONS.

| | |
|--------------------------|---|
| Make | John Deere |
| Model | 7400 SyncroPlus MFWD |
| Type | Unit construction, mechanical front wheel drive (MFWD) |
| Number of driving wheels | 2 or 4 |
| Serial Number | *RW7400S001684* |
| 1st Serial number | *RW7400S001000* |

ENGINE.

| | |
|---------------|--|
| Make | John Deere |
| Model | 6068TRW02 |
| Type | Diesel; 4-stroke; turbocharged direct injection |
| Serial Number | *T06068T431589* |

Cylinders

| | |
|-----------------------|----------------------|
| Number/Disposition | 6, in-line, vertical |
| Bore/stroke | 106.5 mm x 127.0 mm |
| Capacity | 6788 cm ³ |
| Compression Ratio | 17.8 - 1 |
| Arrangement of valves | Overhead |
| Cylinder liners | Wet; replaceable |

Super charging

| | |
|-----------------|---|
| Make/Model/Type | Garret/T350(RE43426)/ Exhaust gas driven |
| Pressure | 60 kPa at rated speed and load |

Fuel System

| | |
|----------------------------|---------------------------------|
| Feed system | Mechanical transfer pump |
| Make/Type/Model of filters | Fuel-Gard/RE52987/paper element |
| Fuel tank capacity | 204 l. |

| | |
|---------------------------------------|---|
| Fuel Cooler | Heat exchanger with air |
| Make/Model/Type Injection Pump | Lucas/(RE57894)/rotary; electric shutoff |
| Pump Serial number | 20748JLG |
| Production setting of pump | 18.9 +/- 0.7 kg/hour |
| Flow Rate (Rated Eng.Spd & Full Load) | |
| Make/Model/Type Injectors | Stanadyne/RE36939/9.5 mm Pencil |
| Injection pressure | 25.86MPa |
| Timing | 27.2 degrees BTDC |
| <u>Governor</u> | |
| Make/Model/Type | Lucas/RE57894/mechanical |
| Governed engine speed range | From 850 to 2275 rev/min |
| Rated engine speed | 2100 rev/min |
| High-idle speed range | 2275 +/- 50 rpm |
| <u>Air Cleaner.</u> | |
| Pre-cleaner | |
| Make/Model/type | Mann & Hummel/Centrifugal, integral with AL78560 air cleaner assembly |
| Air intake location | Under hood, front of tractor |
| Main Cleaner | |
| Make/Model/Type | Mann & Hummel/AL78869/ integrated; pleated paper |
| Location | Under hood, front of tractor |
| Secondary element | Mann & Hummel/AL78870/pleated paper |
| Maintenance indicator | Dash mounted warning light and audio signal |
| <u>Lubrication system.</u> | |
| Type of feed pump | Full pressure; positive displacement |
| Type of filters | Full flow |
| Number | One spin-on. |
| Oil cooler | Heat exchanger with engine coolant |
| <u>Cooling system.</u> | |
| Type of coolant | Liquid |
| Type of pump | Centrifugal, belt driven |
| Fan specification | Belt driven; Suction type; Variable speed |
| Number of fan blades | 7 |
| Fan diameter | 531 mm |
| Coolant system capacity | 19 l. |
| Type of temperature control | Two thermostats and variable speed fan |
| System pressure | 69 kPa |

Starting system.

Make/Model/Type of starter

Nippondenso/RE42670/Solenoid Engaged

Power Rating

4.0 kW

Cold starting aid

Electrical resistance preheater in air intake

Safety device

Electrical lockout on gearshift

Electrical system.

Voltage & grounding.

12 Volt DC;negative ground

Alternator

Make/Model/Type

Nippondenso/RE34890/Belt driven

Power rating

120 Amp at rated engine speed and 25°C ambient

Batteries

Number & connection

Two; 12 Volt batteries in parallel; SAE tapered post 925 cold cranking amps/battery 175 Ah/battery at 20 h rating

Rating

Exhaust system.

Muffler Make/Model/Type

Nelson/RE49158/Expansion chamber

Location

Horizontal muffler; under hood

Exhaust stack location

Vertical; right front of cab

TRANSMISSION.

Clutch. (travel)

Make/Model/Type

John Deere/Multiple plate/oil cooled

Number of plates

4

Plate diameter

225 mm

Method of operation

Hydraulic; pedal actuated

Gear Box.

Make/Model/Type

John Deere/Syncroplus/Mechanical

Arrangement (tested version)

Countershaft design consisting of one 4-range gearbox with 4 synchronized ranges. One

3-speed gearbox with 3

synchronized gears and a

synchronized reverse

12 forward and 4 reverse

operated by two levers

Heat exchanger with air

Creeper gear

Number of gears

Oil cooler

Other Available options

Rear axle and final drives.

Make/Model/Type

John Deere/Crown wheel and pinion, differential and inboard planetary reduction

Differential Lock

Type

Method of engagement

Method of disengagement

Hydraulic

Pedal operated switch

Self-disengaging with brake
pedal operation

Front Axle and final drives.

Make/Model/Type

John Deere/900/Crown wheel
and pinion, differential and
inboard planetary reduction

Differential Lock

Type

Method of engagement

Method of disengagement

Limited slip

Self-engaging

Self-disengaging

Gear ratios and travel speeds. (US version)
 (Tire dynamic radius of 820 mm. ISO 4251/1-1992)

| Gear Number | Number of engine revolutions for one revolution of the driving wheels | Nominal travel speed at rated engine speed of 2100 rev/min [km/h] |
|----------------|---|---|
| Forward | | |
| A1 | 282.39 | 2.30 |
| A2 | 201.77 | 3.22 |
| A3 | 152.84 | 4.25 |
| B1 | 133.24 | 4.87 |
| B2 | 95.20 | 6.82 |
| C1 | 83.72 | 7.75 |
| B3 | 72.11 | 9.00 |
| C2 | 59.82 | 10.85 |
| C3 | 45.31 | 14.33 |
| D1 | 40.37 | 16.08 |
| D2 | 28.85 | 22.50 |
| D3 | 21.85 | 29.71 |
| Reverse | | |
| AR | 231.05 | 2.81 |
| BR | 109.01 | 5.96 |
| CR | 68.50 | 9.48 |
| DR | 33.03 | 19.65 |

Number of front wheel revolutions for one rear wheel revolution: 1.345

CREEPER GEAR

(Tire dynamic radius of 820 mm. ISO 4251/1-1992)

| Gear Number | Number of engine revolutions for one revolution of the driving wheels | Nominal travel speed at rated engine speed of 2100 rev/min [km/h] |
|------------------------|--|--|
| Forward | | |
| A1 | 4766.62 | 0.16 |
| A2 | 3406.53 | 0.19 |
| A3 | 2578.74 | 0.25 |
| B1 | 1618.93 | 0.40 |
| B2 | 1156.99 | 0.56 |
| B3 | 875.84 | 0.74 |
| C1 | 805.35 | 0.80 |
| C2 | 575.55 | 1.12 |
| C3 | 435.69 | 1.48 |
| Reverse | | |
| AR | 3901.28 | 0.17 |
| BR | 1325.03 | 0.49 |
| CR | 659.14 | 0.98 |

**Number of front wheel revolutions
for one rear wheel revolution: 1.345**

POWER - TAKE - OFF.

Main Power-Take-Off.

| | |
|---------------------------|---|
| Type | Independent |
| Method of engagement | Electro-hydraulically actuated multi-plate wet clutch operated by hand control knob |
| Number of shafts | One |
| Method of changing speeds | Reversible shaft |

Standard PTO - 540 rev/min.

| | |
|--|-------------------------------|
| Location | Rear of tractor; center plane |
| Diameter of shaft | 35 mm |
| Number of splines | 6; conforms to ISO 500/1991. |
| Height above ground | 740 mm |
| Distance from median plane of tractor | 0 mm |
| Distance behind rear axle | 620 mm |
| PTO Speed at rated engine spd | 545 rev/min |
| Engine speed at Std. PTO spd | 2080 rev/min |
| Engine speed/PTO speed ratio | 3.851:1 |
| Power restriction | 56 kW |
| Direction of rotation when viewed from shaft end | Clockwise. |

Standard PTO-1000 rev/min.

| | |
|--|-------------------------------|
| Location | Rear of tractor; center plane |
| Diameter of shaft | 35 mm |
| Number of splines | 21; conforms to ISO 500/1991. |
| Height above ground | 740 mm |
| Distance from median plane of tractor | 0 mm |
| Distance behind rear axle | 620 mm |
| PTO Speed at rated engine spd | 1003 rev/min |
| Engine speed at Std. PTO spd | 2093 rev/min |
| Engine speed/PTO speed ratio | 2.093:1 |
| Power restriction | None |
| Direction of rotation when viewed from shaft end | Clockwise. |

POWER LIFT.

| | |
|---|---|
| Make/Model/Type | John Deere/Electronic lower link sensing; variable mix of draft and position control; adjustable rate of drop |
| Type of hydraulic system | Closed center; pressure and flow compensated |
| Number/Type of cylinders | Two external, single acting |
| Type of linkage lock for transport | |
| Relief valve pressure setting | 197-207 bar |
| Opening pressure of cylinder safety valve | 240 +/- 10 bar |
| Lift pump type | Axial piston, variable delivery and flow, pressure and flow compensated |
| Power transmission to pump | Spiral bevel gear drive |
| Type/Number of filters | Synthetic media ,screw-on canister/one |
| Location of oil reservoir | Differential case housing |
| Number/Type/Location of tapping points. | Up to 4 pairs of ISO standard couplings at rear of tractor. |
| Max. oil volume available for external cylinders. | 19 liters additional 11 liters allowable overfill for total of 30 liters |

THREE POINT LINKAGE.

- Category 2 in conformity with ISO 730/1-1990
- Category adaptor - None

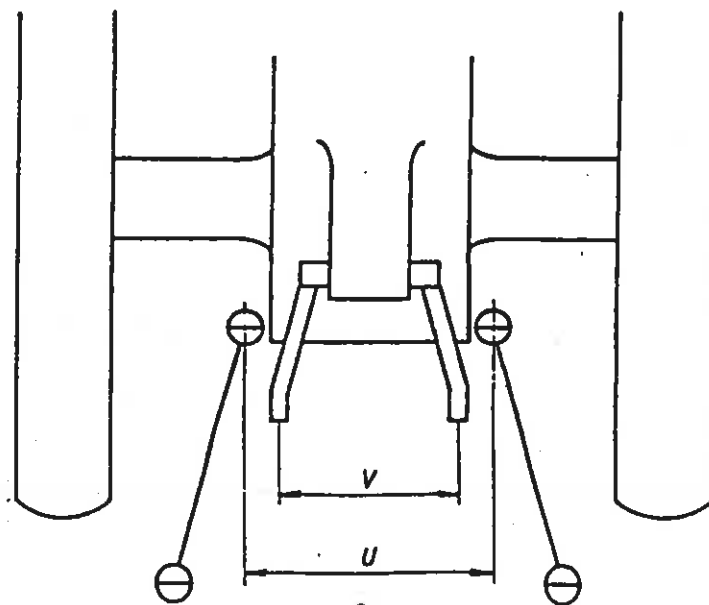
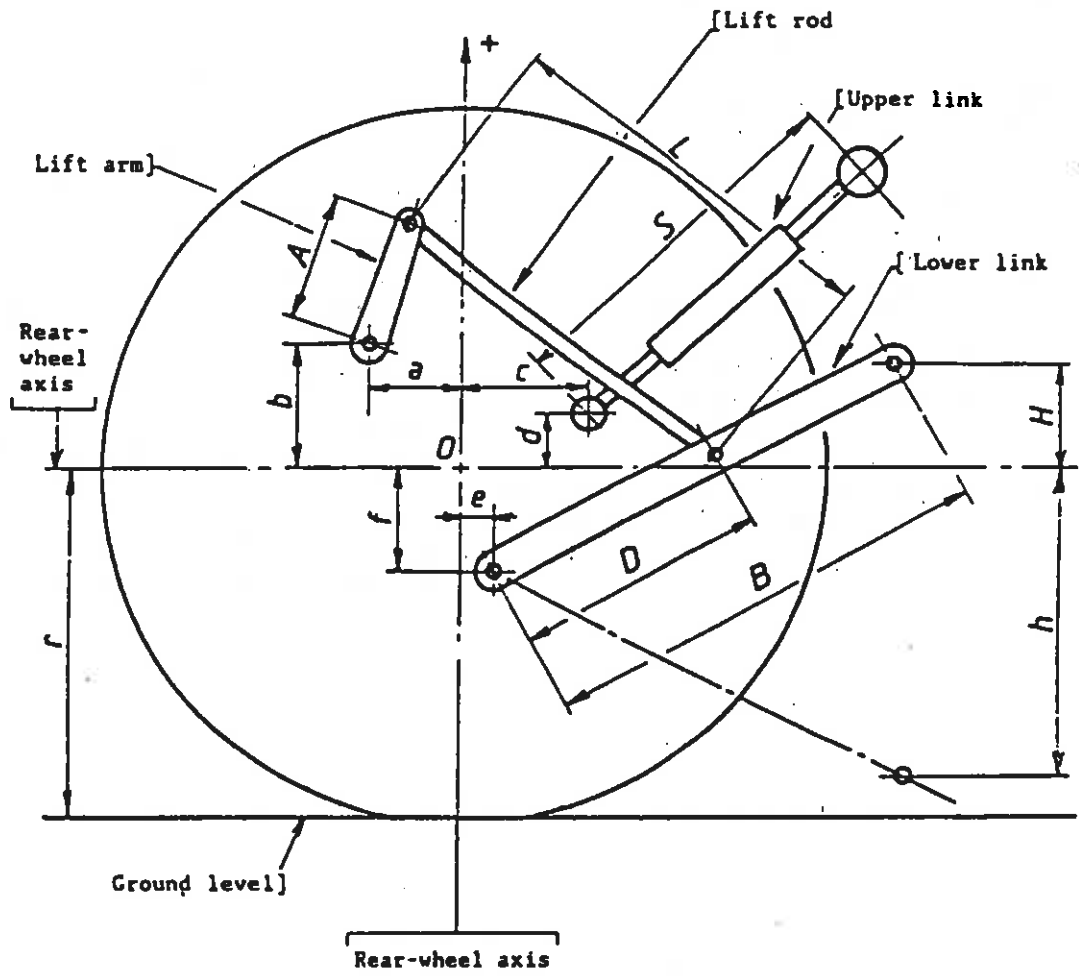


Table 1.1 - Linkage geometry dimensions.

| | | Dimension or range [mm] | Settings used on test [mm] |
|---|------|-------------------------------|----------------------------------|
| Lift category | | II | II |
| Rear Tire - Radius Index | (r) | 820 | same |
| Front Tire - Radius Index | (r') | 610 | same |
| Length of lift arms | (A) | 400 | same |
| Length of lower links | (B) | 962 | same |
| Distance of lift | | | |
| arm pivot from: horizontal | (a) | 184 | same |
| rear wheel axis: vertical | (b) | 523 | same |
| Horizontal distance between the 2 lower link points | (U) | 495 | same |
| Horizontal distance between the 2 lift arm end points | (V) | 647 | same |
| Length of upper link | (S) | 596 | 705 |
| | | to 743 | |
| Distance of upper link pivot point from rear wheel axis | | | |
| - horizontal | (c) | 456 | same |
| - vertical | (d) | 125 | same |
| Distance of lower link pivot from: horizontal | (e) | 160 | same |
| rear wheel axis: vertical | (f) | 250 | same |
| Distance of lower link pivot points to lift rod pivot pts on lower links. | (D) | 537 | same |
| Length of lift rods | (L) | 778 | 889 |
| | | to 940 | |
| Height of lower hitch points below rear wheel axis | | | |
| In low position | (h) | 0 | 632 |
| | | to 693 | |
| In high position | (H) | -275 | 76 |
| | | to 405 | |
| Height above ground of lower hitch points when locked in transport position. *778 mm lift rod | | 1093 | 911 |
| *940 mm lift rod | | to 818 | |

* Tire dynamic index of 820 mm ISO 4251/1-1992

SWINGING DRAWBAR.

| | |
|--|---|
| Type | Oscillating |
| Height above ground - maximum | 473 mm |
| - minimum | 352 mm |
| Adjustments | Invert drawbar; reposition clevis |
| Distance of hitch point from rear wheel axis-horizontal | 836, 936, 986 mm |
| Distance of hitch point from PTO shaft end: Vertical | 285 mm |
| Horizontal | 251-351-401 mm |
| Lateral adjustment-Right side | 190 mm |
| Left side | 190 mm |
| Distance of pivot point from rear wheel axis-horizontal | 27 mm |
| Diameter of drawbar pin hole | 33 mm |
| Maximum vertical static permissible load | 28 kN -short position 21 kN -intermediate 14 kN -extended |

STEERING.

| | |
|---------------------|-----------------------------|
| Make/Model/Type | Eaton/RE34138/Hydrostatic |
| Method of operation | Steering wheel |
| Pump(s) | Same as main pump |
| Ram(s) | Two external; double acting |
| Working pressure | 170 +/- 5 bar |

BRAKE SYSTEM.

Service brake.

| | |
|---------------------|---|
| Make/Model/Type | Vickers/RE29826/John Deere oil immersed disc |
| Method of operation | Hydraulic; operated by two pedals which can be locked together. |

Parking brake.

| | |
|---------------------|---------------------|
| Type | Transmission lock. |
| Method of operation | Gear selector lever |

Trailer Brake

None

WHEELS.

| | |
|----------------|---------------------------|
| Number - Front | Two; Driving and steering |
| Rear | Two; Driving |
| Wheel base | 2625 mm |

Track width adjustment

| | Minimum [mm] | Maximum [mm] | Adjustment method |
|-------|-----------------|-----------------|--|
| Front | 1524 | 2253 | Reversing wheels and offset lug rims |
| Rear | 1525 | 2548 | Rack and Pinion axle Reversing wheels and offset lug rims |

PROTECTIVE STRUCTURE.

| | |
|-----------------------------|---|
| Make/Model/Type | John Deere/SG-050/ComfortGard |
| Manufacturer's name/address | John Deere Tractor Works Waterloo, Iowa, USA |
| Protective device | Cab; not tiltable |
| OECD approval number | CSS 0217/47 |

DRIVER'S SEAT.

| | |
|---------------------|--|
| Make/Model/Type | Sears/FS92-01/Air suspension; Personal posture cushioning |
| Type of suspension | Air |
| Type of damping | Air |
| Range of adjustment | |
| Longitudinal | 150 mm |
| Vertical | 80 mm |
| Rotation | 20 degrees left & right |

LIGHTING.

| | Height above ground of center [mm] | Size [mmxmm] | Distance from out- side edge to median plane of tractor. [mm] |
|-----------------|--|-----------------|--|
| Head lights | 1305 | 160x102 | 225 |
| Side lights | 1305 | 110x102 | 275 |
| Rear lights | 1820 | 225x90 | 930 |
| Reflectors-rear | Integral with rear light lenses | | |

TEST CONDITIONS.

Overall dimensions.

| | |
|-----------------------------------|-------------|
| Length-Overall | 4435 mm |
| Width -Minimum | 2808 mm |
| -Maximum | 3056 mm |
| Height - Top protective structure | 2880 mm |
| - Top of exhaust | 2880 mm |
| Ground clearance | 360 mm |
| Clearance-limiting part | Sway Blocks |

Tractor Mass (with cab,full fuel tank).

| | without driver [kg] | with driver [kg] |
|-----------------------------|------------------------|---------------------|
| ----- | ----- | ----- |
| Unballasted | | |
| Front | 1994 | 2009 |
| Rear | 3750 | 3810 |
| Total | 5744 | 5819 |
| ----- | ----- | ----- |
| Max. permissible load-front | 3300 kg | |
| -rear | 6580 kg | |
| ===== | ===== | ===== |

Tire Specifications.

| | Front Wheels | Rear Wheels |
|----------------------------------|--------------|--------------|
| ----- | ----- | ----- |
| Make | Goodyear | Goodyear |
| Dimensions | 13.6R28 | 18.4R38 |
| Number/Ply rating | 3 star | 1 star |
| Type | Radial | Radial |
| Max.load | 1700 kg/tire | 2760 kg/tire |
| Inflation pressure(tire mfr)-max | 210 kPa | 120 kPa |
| -min | 40 kPa | 60 kPa |
| as tested | 165 kPa | 110 kPa |
| Dynamic Radius Index | 610 mm | 820 mm |
| Chosen track width | 1626 mm | 1728 mm |

Oils and Lubrication.

Capacity and change interval:

| | Capacity liter | Oil change hours | Filter change hours |
|--|-------------------|---------------------|------------------------|
| Engine (with filter) | 18.0 | 250 | 250 |
| Front axle | 8.5 | 1500 | 750 |
| Transmission, final drive, rear axle and hydraulics | 64 | 1500 | As required or 750 |
| Final drive, front | 1.9 | 1500 | |

Oil and Lubricant specifications:

| | Recommended | Used during test |
|--------------------------|---|------------------|
| Engine oil | | |
| Type | John Deere, Torq-Gard Supreme SAE 15W40 | same |
| Viscosity | 12.8 cSt at 100°C | |
| Classification | API CE or CD; CCMC specification D5 or D4 | |
| Transmission | | |
| Type | John Deere Hy-Gard (J20C) SAE 10W-30 | same |
| Viscosity | 58 cSt at 40°C | |
| Classification | NA | |
| Hydraulic fluid | Same as transmission | same |
| Front axle and hubs | | |
| Type | John Deere EXTREME-GARD SAE 80W-90 | same |
| Viscosity | 13.5 cSt at 100°C | |
| Classification | API GL-5 | |
| Steering system | Same as transmission | same |
| Grease | John Deere MOLY HIGH TEMPERATURE EP GREASE | same |
| Number of lube points | 25 | |

Fuel

| | |
|--------------------|---|
| Type/grade | Premier; Grade 2-D, in conformity with the national standard |
| Density (Pto test) | 0.838 kg/l at 15° C |
| (Drawbar test) | same as Pto test. |
| Cetane number | 53.9 |
| Viscosity | 2.31 cSt at 38° C |

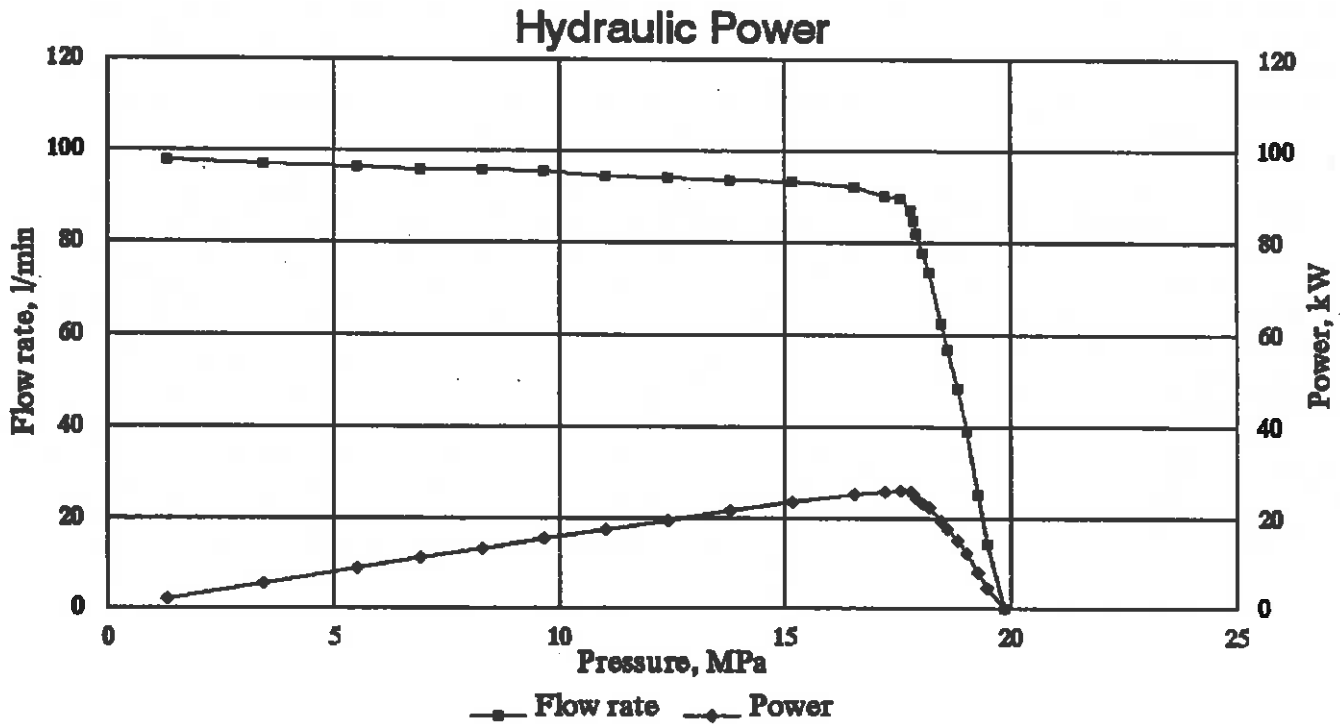
COMPULSORY TESTS

1. MAIN POWER TAKE-OFF

| Date: 24-May-94 | | Location: UNL Tractor Test Lab, Lincoln, NE, U.S.A. | | | | |
|--|---------|---|---------------|-------------|--|----------|
| Type of dynamometer: Eddy current, Eaton | Eng | | PTO | | Fuel density: 0.838 kg/l 6.994 lb/gal | |
| kW | rev/min | rev/min | l/h | kg/h | kg/kW.h | kW.h/l |
| hp | | | gal/h | lb/h | lb/hp.h | hp.h/gal |
| 1.1 Maximum Power - 2 hours | | | | | | |
| 78.24 | 1900 | 908 | 21.47 | 18.00 | 0.230 | 3.64 |
| 104.92 | | | 5.67 | 39.68 | 0.378 | 18.50 |
| 1.2 Power at Rated Engine Speed - 1 hour | | | | | | |
| 76.16 | 2099 | 1003 | 22.24 | 18.64 | 0.245 | 3.42 |
| 102.14 | | | 5.88 | 41.10 | 0.402 | 17.38 |
| 1.3 Power at Standard Power Take-Off Speed - 1 hour | | | | | | |
| 76.16 | 2099 | 1003 | 22.24 | 18.64 | 0.245 | 3.42 |
| 102.14 | | | 5.88 | 41.10 | 0.402 | 17.38 |
| 1.4 Part Loads | | | | | | |
| 1.4.1 Torque at maximum power at rated engine speed | | | | | | |
| 76.16 | 2099 | 1003 | 22.24 | 18.64 | 0.245 | 3.42 |
| 102.14 | | | 5.88 | 41.10 | 0.402 | 17.38 |
| 1.4.2 85% of torque obtained in 1.4.1 | | | | | | |
| 66.52 | 2162 | 1033 | 20.46 | 17.15 | 0.258 | 3.25 |
| 89.20 | | | 5.40 | 37.80 | 0.424 | 16.50 |
| 1.4.3 75% of torque defined in 1.4.2 | | | | | | |
| 50.64 | 2195 | 1049 | 17.37 | 14.56 | 0.288 | 2.91 |
| 67.91 | | | 4.59 | 32.10 | 0.473 | 14.80 |
| 1.4.4 50% of torque defined in 1.4.2 | | | | | | |
| 34.05 | 2221 | 1061 | 13.96 | 11.70 | 0.344 | 2.44 |
| 45.66 | | | 3.69 | 25.80 | 0.565 | 12.38 |
| 1.4.5 25% of torque defined in 1.4.2 | | | | | | |
| 17.23 | 2235 | 1068 | 10.55 | 8.85 | 0.513 | 1.63 |
| 23.11 | | | 2.79 | 19.50 | 0.844 | 8.29 |
| 1.4.6 unloaded | | | | | | |
| 0.61 | 2251 | 1076 | 7.14 | 5.99 | 9.801 | 0.09 |
| 0.82 | | | 1.89 | 13.20 | 16.112 | 0.43 |
| 1.5 Part Loads at Standard Power Take-off Speed | | | | | | |
| 1.5.1 Torque at maximum power | | | | | | |
| 76.16 | 2099 | 1003 | 22.24 | 18.64 | 0.245 | 3.42 |
| 102.14 | | | 5.88 | 41.10 | 0.402 | 17.38 |
| 1.5.2 85% of torque obtained in 1.5.1 | | | | | | |
| 66.52 | 2162 | 1033 | 20.46 | 17.15 | 0.258 | 3.25 |
| 89.20 | | | 5.40 | 37.80 | 0.424 | 16.50 |
| 1.5.3 75% of torque defined in 1.5.2 | | | | | | |
| 50.64 | 2195 | 1049 | 17.37 | 14.56 | 0.288 | 2.91 |
| 67.91 | | | 4.59 | 32.10 | 0.473 | 14.80 |
| 1.5.4 50% of torque defined in 1.5.2 | | | | | | |
| 34.05 | 2221 | 1061 | 13.96 | 11.70 | 0.344 | 2.44 |
| 45.66 | | | 3.69 | 25.80 | 0.565 | 12.38 |
| 1.5.5 25% of torque defined in 1.5.2 | | | | | | |
| 17.23 | 2235 | 1068 | 10.55 | 8.85 | 0.513 | 1.63 |
| 23.11 | | | 2.79 | 19.50 | 0.844 | 8.29 |
| 1.5.6 unloaded | | | | | | |
| 0.61 | 2251 | 1076 | 7.14 | 5.99 | 9.801 | 0.09 |
| 0.82 | | | 1.89 | 13.20 | 16.112 | 0.43 |
| No load maximum engine speed: | | | 2251 rev/min | | | |
| Equivalent torque at rated speed: | | | 347 N·m | | 256 lb-ft | |
| Equivalent torque at maximum power: | | | 393 N·m | | 290 lb-ft | |
| (engine speed: | | | 1900 rev/min) | | | |
| Maximum equivalent crankshaft torque: | | | 469 N·m | | 346 lb-ft | |
| (engine speed: | | | 1201 rev/min) | | | |
| Mean Dry bulb: | | 24 deg C | | 75 deg F | | |
| Wet bulb: | | 19 deg C | | 66 deg F | | |
| Relative humidity: | | 62 % | | | | |
| Pressure: | | 97.48 kPa | | 28.79 in Hg | | |
| Maximum Coolant: | | 100 deg C | | 212 deg F | | |
| Engine oil: | | 114 deg C | | 238 deg F | | |
| Fuel: | | 57 deg C | | 135 deg F | | |
| Air intake: | | 24 deg C | | 75 deg F | | |
| Transmission/hydraulic oil: | | 54 deg C | | 130 deg F | | |
| Intake manifold pressure at rated speed: | | 52 kPa | | 7.5 psig | | |
| Intake manifold pressure at maximum power: | | 48 kPa | | 7.0 psig | | |

Hydraulic Power Test

| | | | |
|--|-------|---|-----|
| Date of test: 27-May-94 | | Location of test—City—State: Tractor Test Lab, Lincoln, NE, USA | |
| Tapping point used for test: Remote hydraulic outlets | | | |
| I. Sustained pressure with pump stalled: | | | |
| 19.86 | MPa | | |
| 2880 | psi | | |
| II. Pump delivery rate at minimum pressure and rated engine speed: | | | |
| 97.7 | l/min | | |
| 25.8 | gpm | | |
| III. Flow rate, pressure, power: | | | |
| 90% of relief valve setting: | | | |
| 84.8 | l/min | 17.86 | MPa |
| 22.4 | gpm | 2590 | psi |
| 25.24 | kW | | |
| 33.85 | hp | | |
| Maximum hydraulic power: | | | |
| 89.3 | l/min | 17.58 | MPa |
| 23.6 | gpm | 2550 | psi |
| 26.18 | kW | | |
| 35.11 | hp | | |
| IV. Hydraulic fluid temperature at flow meter: | | | |
| 66 C | | | |
| 150 F | | | |



2.2 POWER LIFT TEST. Cat II, with lift cylinders 1x70 mm & 1x80 mm
 (for settings see p.10)
 Date of test: 1 June 1994

| | Hitch points | Frame |
|---|--------------|-------|
| Lower hitch points above ground - down position: [mm] | 188 | 81 |
| Vertical movement: | | |
| without load: [mm] | 708 | 956 |
| with load: [mm] | 696 | 945 |
| Maximum corrected force through full range: [kN] | 46.5 | 30.5 |
| Corresponding pressure: [kPa] | 18306 | |
| Moment about rear axle: [kN.m] | 52.2 | 52.8 |
| Maximum mast tilt angle: [deg] | -- | 13.5 |

Lifting height relative to horizontal position of lower links.

| | | | | | | |
|------|-----|------|------|------|-----|---|
| [mm] | 470 | -363 | -300 | -201 | -99 | 0 |
|------|-----|------|------|------|-----|---|

Corrected lift forces

| | | | | | | |
|------------------|----|------|------|------|------|------|
| Hitch point [kN] | -- | 48.5 | 46.5 | 46.7 | 47.2 | 47.4 |
|------------------|----|------|------|------|------|------|

| | | | | | | |
|---------------|------|------|------|------|----|------|
| at frame [kN] | 40.4 | 37.2 | 36.5 | 35.9 | -- | 35.0 |
|---------------|------|------|------|------|----|------|

Lifting height relative to horizontal position of lower links.

| | | | | | | |
|------|----|-----|-----|-----|-----|-----|
| [mm] | 99 | 201 | 300 | 333 | 419 | 475 |
|------|----|-----|-----|-----|-----|-----|

Corrected lift forces

| | | | | | | |
|------------------|------|------|------|------|----|----|
| Hitch point [kN] | 48.2 | 49.1 | 50.1 | 50.2 | -- | -- |
|------------------|------|------|------|------|----|----|

| | | | | | | |
|---------------|------|----|------|------|------|------|
| at frame [kN] | 33.8 | -- | 32.5 | 31.9 | 31.1 | 30.5 |
|---------------|------|----|------|------|------|------|

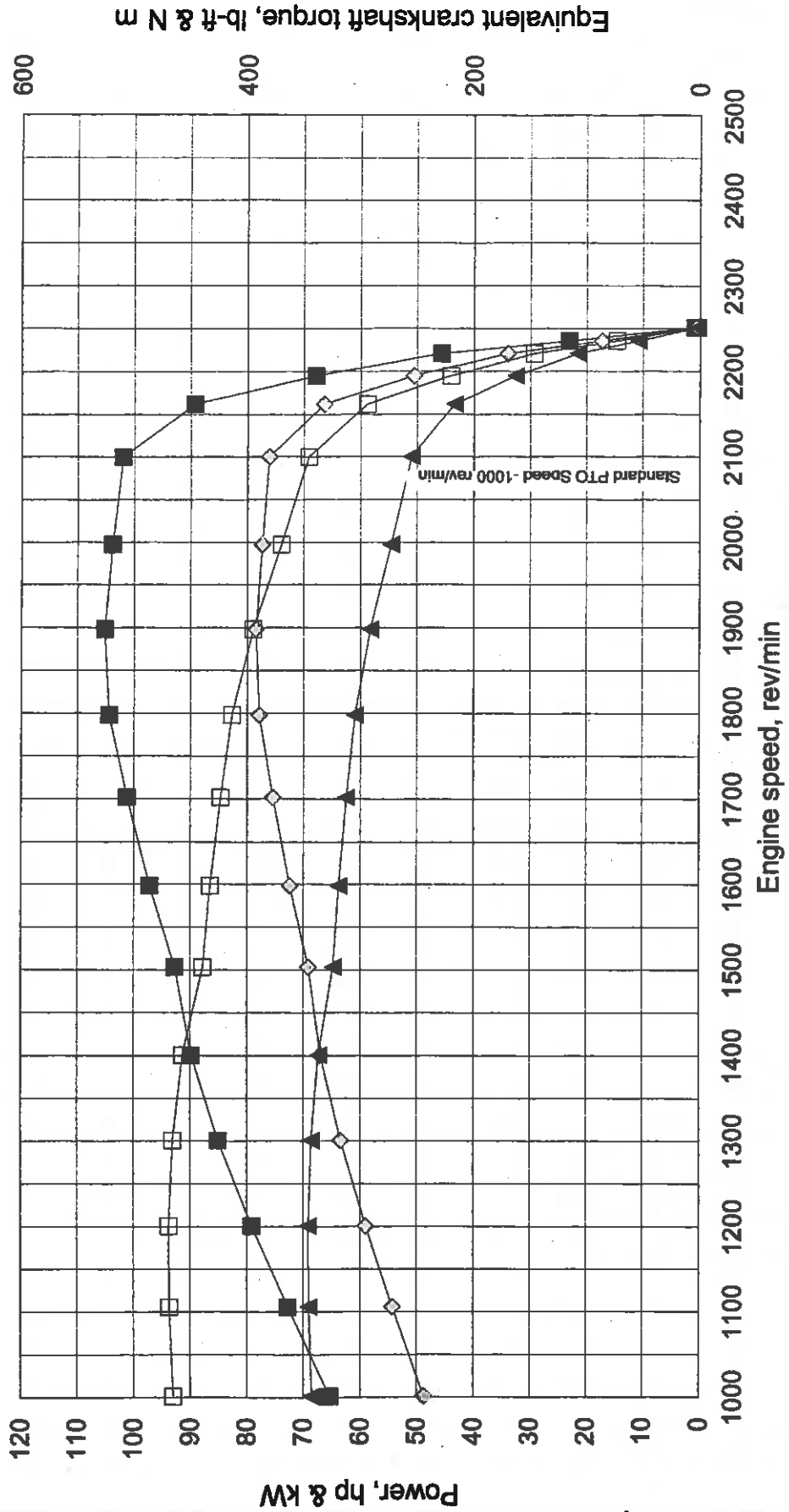
OECD Drawbar Data (SI)

| of tests: | 26-May-94 | | Fuel density: | | 0.838 kg/l | | | | | | | | | | | |
|---|-----------|-------|---------------|--------------|------------|----------------|-------|--------------------|---------|----------------|-----|-----------------|----------------|--------|--|--|
| of track: | Concrete | | Test number: | | 1680 | | | | | | | | | | | |
| gear | Power | Pull | Speed | Engine speed | Slip | SFC | SFE | Temperature, deg C | | | | Rel humidity | Baro. Pres kPa | | | |
| | kW | kN | km/h | rev/min | | kg/kWh | kWh/l | Fuel | Coolant | Oil | Dry | Wet | | | | |
| Maximum Power (unballasted, 4wd at 2100 rev/min) | | | | | | Tire pressure: | | 110 kPa, rear | | 165 kPa, front | | Drawbar height: | | 546 mm | | |
| 3 | 59.73 | 56.12 | 3.83 | 2136 | 14.56% | 0.308 | 2.72 | 56 | 90 | 111 | 15 | 12 | 74% | 97.87 | | |
| 1 | 66.03 | 51.28 | 4.63 | 2101 | 8.24% | 0.281 | 2.98 | 57 | 91 | 112 | 18 | 13 | 58% | 97.90 | | |
| 2 | 67.46 | 36.12 | 6.72 | 2100 | 4.96% | 0.276 | 3.04 | 56 | 93 | 114 | 19 | 14 | 59% | 97.93 | | |
| 1 | 67.37 | 31.47 | 7.71 | 2101 | 4.32% | 0.276 | 3.04 | 56 | 93 | 114 | 20 | 14 | 56% | 97.97 | | |
| 3 | 67.50 | 27.02 | 8.99 | 2101 | 3.67% | 0.276 | 3.03 | 55 | 93 | 111 | 21 | 14 | 53% | 98.00 | | |
| 2 | 66.02 | 21.77 | 10.92 | 2100 | 3.10% | 0.282 | 2.97 | 56 | 94 | 114 | 21 | 14 | 53% | 97.97 | | |
| 3 | 64.54 | 16.01 | 14.52 | 2099 | 2.44% | 0.288 | 2.91 | 56 | 94 | 115 | 22 | 15 | 50% | 97.97 | | |
| art loads (unballasted, 4wd) | | | | | | | | | | | | | | | | |
| n selected gear at maximum power | | | | | | | | | | | | | | | | |
| 3 | 67.50 | 27.02 | 8.99 | 2101 | 3.67% | 0.276 | 3.03 | 55 | 93 | 111 | 21 | 14 | 53% | 97.97 | | |
| 75% of pull at maximum power at rated speed | | | | | | | | | | | | | | | | |
| 3 | 52.45 | 20.15 | 9.37 | 2169 | 2.93% | 0.307 | 2.73 | 54 | 91 | 110 | 22 | 15 | 47% | 98.00 | | |
| 50% of pull at maximum power at rated speed | | | | | | | | | | | | | | | | |
| 3 | 35.84 | 13.46 | 9.59 | 2201 | 2.10% | 0.373 | 2.24 | 55 | 88 | 108 | 22 | 15 | 47% | 98.00 | | |
| next higher gear at reduced engine speed, same pull and travel speed as IL1.1 | | | | | | | | | | | | | | | | |
| 2 | 52.70 | 20.16 | 9.41 | 1806 | 2.85% | 0.274 | 3.06 | 55 | 90 | 109 | 22 | 15 | 47% | 98.00 | | |
| next higher gear at reduced engine speed, same pull and travel speed as IL1.2 | | | | | | | | | | | | | | | | |
| 2 | 35.74 | 13.46 | 9.56 | 1820 | 2.19% | 0.316 | 2.65 | 53 | 86 | 103 | 22 | 15 | 47% | 98.00 | | |
| next higher gear at reduced engine speed, same pull and travel speed as IL1.1 | | | | | | | | | | | | | | | | |
| 3 | 52.59 | 20.18 | 9.38 | 1365 | 2.93% | 0.256 | 3.27 | 54 | 92 | 108 | 22 | 15 | 47% | 98.00 | | |
| next higher gear at reduced engine speed, same pull and travel speed as IL1.2 | | | | | | | | | | | | | | | | |
| 3 | 35.67 | 13.46 | 9.54 | 1377 | 2.19% | 0.283 | 2.96 | 53 | 86 | 102 | 22 | 15 | 47% | 98.00 | | |
| n selected gear nearest to 7.5 km/h | | | | | | | | | | | | | | | | |
| 1 | 67.57 | 31.47 | 7.71 | 2101 | 4.32% | 0.276 | 3.04 | 56 | 93 | 114 | 20 | 14 | 56% | 97.97 | | |
| 75% of pull at maximum power at rated speed | | | | | | | | | | | | | | | | |
| 1 | 52.67 | 23.54 | 8.05 | 2174 | 3.35% | 0.305 | 2.75 | 53 | 91 | 109 | 22 | 15 | 50% | 98.00 | | |
| 50% of pull at maximum power at rated speed | | | | | | | | | | | | | | | | |
| 1 | 35.88 | 15.66 | 8.25 | 2205 | 2.44% | 0.368 | 2.28 | 54 | 87 | 108 | 22 | 15 | 47% | 98.00 | | |
| next higher gear at reduced engine speed, same pull and travel speed as IL2.1 | | | | | | | | | | | | | | | | |
| 2 | 52.77 | 23.53 | 8.07 | 1557 | 3.43% | 0.280 | 3.22 | 54 | 91 | 108 | 22 | 15 | 50% | 98.00 | | |
| next higher gear at reduced engine speed, same pull and travel speed as IL2.2 | | | | | | | | | | | | | | | | |
| 2 | 35.88 | 15.63 | 8.26 | 1579 | 2.52% | 0.290 | 2.89 | 53 | 86 | 103 | 22 | 15 | 50% | 98.00 | | |

OECD Drawbar Data (US)

| of tests: | 26-May-94 | | Fuel density: | | 6.994 lb/gal | | | | | | | | | | | |
|---|-----------|-------|---------------|--------------|--------------|----------------|----------|--------------------|---------|----------------|-----|-----------------|------------------|---------|--|--|
| of track: | Concrete | | Test number: | | 1680 | | | | | | | | | | | |
| gear | Power | Pull | Speed | Engine speed | Slip | SFC | SFE | Temperature, deg F | | | | Rel humidity | Baro. Pres in Hg | | | |
| | hp | lb | mph | rev/min | | lb/hp.h | hp/h/gal | Fuel | Coolant | Oil | Dry | Wet | | | | |
| Maximum Power (unballasted, 4wd at 2100 rev/min) | | | | | | Tire pressure: | | 16 psig, rear | | 24 psig, front | | Drawbar height: | | 21.5 in | | |
| 3 | 80.09 | 12617 | 3.83 | 2136 | 14.56% | 0.507 | 13.80 | 133 | 194 | 232 | 59 | 54 | 74% | 28.90 | | |
| 1 | 88.55 | 11528 | 2.88 | 2101 | 8.24% | 0.463 | 15.12 | 134 | 196 | 234 | 64 | 55 | 58% | 28.91 | | |
| 2 | 90.47 | 8119 | 4.18 | 2100 | 4.96% | 0.454 | 15.41 | 133 | 200 | 238 | 66 | 57 | 59% | 28.92 | | |
| 1 | 90.35 | 7076 | 4.79 | 2101 | 4.32% | 0.453 | 15.43 | 133 | 200 | 237 | 68 | 58 | 56% | 28.93 | | |
| 3 | 90.52 | 6074 | 5.59 | 2101 | 3.67% | 0.454 | 15.39 | 131 | 199 | 232 | 69 | 58 | 53% | 28.94 | | |
| 2 | 88.54 | 4894 | 6.78 | 2100 | 3.10% | 0.464 | 15.07 | 132 | 201 | 237 | 69 | 58 | 53% | 28.93 | | |
| 3 | 86.55 | 3599 | 9.02 | 2099 | 2.44% | 0.474 | 14.76 | 132 | 201 | 239 | 71 | 59 | 50% | 28.93 | | |
| art loads (unballasted, 4wd) | | | | | | | | | | | | | | | | |
| n selected gear at maximum power | | | | | | | | | | | | | | | | |
| 3 | 90.52 | 6074 | 5.59 | 2101 | 3.67% | 0.454 | 15.39 | 131 | 199 | 232 | 69 | 58 | 53% | 28.93 | | |
| 75% of pull at maximum power at rated speed | | | | | | | | | | | | | | | | |
| 3 | 70.34 | 4529 | 5.82 | 2169 | 2.93% | 0.505 | 13.85 | 129 | 196 | 230 | 72 | 59 | 47% | 28.94 | | |
| 50% of pull at maximum power at rated speed | | | | | | | | | | | | | | | | |
| 3 | 48.06 | 3025 | 5.96 | 2201 | 2.10% | 0.614 | 11.39 | 131 | 190 | 227 | 72 | 59 | 47% | 28.94 | | |
| next higher gear at reduced engine speed, same pull and travel speed as IL1.1 | | | | | | | | | | | | | | | | |
| 2 | 70.67 | 4533 | 5.85 | 1806 | 2.85% | 0.450 | 15.54 | 132 | 194 | 228 | 72 | 59 | 47% | 28.94 | | |
| next higher gear at reduced engine speed, same pull and travel speed as IL1.2 | | | | | | | | | | | | | | | | |
| 2 | 47.92 | 3026 | 5.94 | 1820 | 2.19% | 0.520 | 13.44 | 128 | 186 | 218 | 72 | 59 | 47% | 28.94 | | |
| next higher gear at reduced engine speed, same pull and travel speed as IL1.3 | | | | | | | | | | | | | | | | |
| 3 | 70.53 | 4536 | 5.83 | 1365 | 2.93% | 0.421 | 16.62 | 130 | 198 | 226 | 72 | 59 | 47% | 28.94 | | |
| next higher gear at reduced engine speed, same pull and travel speed as IL1.4 | | | | | | | | | | | | | | | | |
| 3 | 47.84 | 3025 | 5.93 | 1377 | 2.19% | 0.466 | 15.01 | 128 | 187 | 215 | 72 | 59 | 47% | 28.94 | | |
| n selected gear nearest to 4.6 mph | | | | | | | | | | | | | | | | |
| 1 | 90.35 | 7076 | 4.79 | 2101 | 4.32% | 0.453 | 15.43 | 133 | 200 | 237 | 68 | 58 | 56% | 28.93 | | |
| 75% of pull at maximum power at rated speed | | | | | | | | | | | | | | | | |
| 1 | 70.63 | 5293 | 5.00 | 2174 | 3.35% | 0.501 | 13.95 | 128 | 196 | 228 | 71 | 59 | 50% | 28.94 | | |
| 50% of pull at maximum power at rated speed | | | | | | | | | | | | | | | | |
| 1 | 48.12 | 3522 | 5.12 | 2205 | 2.44% | 0.604 | 11.57 | 130 | 189 | 226 | 72 | 59 | 47% | 28.94 | | |
| next higher gear at reduced engine speed, same pull and travel speed as IL2.1 | | | | | | | | | | | | | | | | |
| 2 | 70.76 | 5291 | 5.02 | 1557 | 3.43% | 0.428 | 16.34 | 129 | 197 | 227 | 71 | 59 | 50% | 28.94 | | |
| next higher gear at reduced engine speed, same pull and travel speed as IL2.2 | | | | | | | | | | | | | | | | |
| 2 | 48.12 | 3515 | 5.13 | 1579 | 2.52% | 0.477 | 14.67 | 127 | 186 | 218 | 71 | 59 | 50% | 28.94 | | |

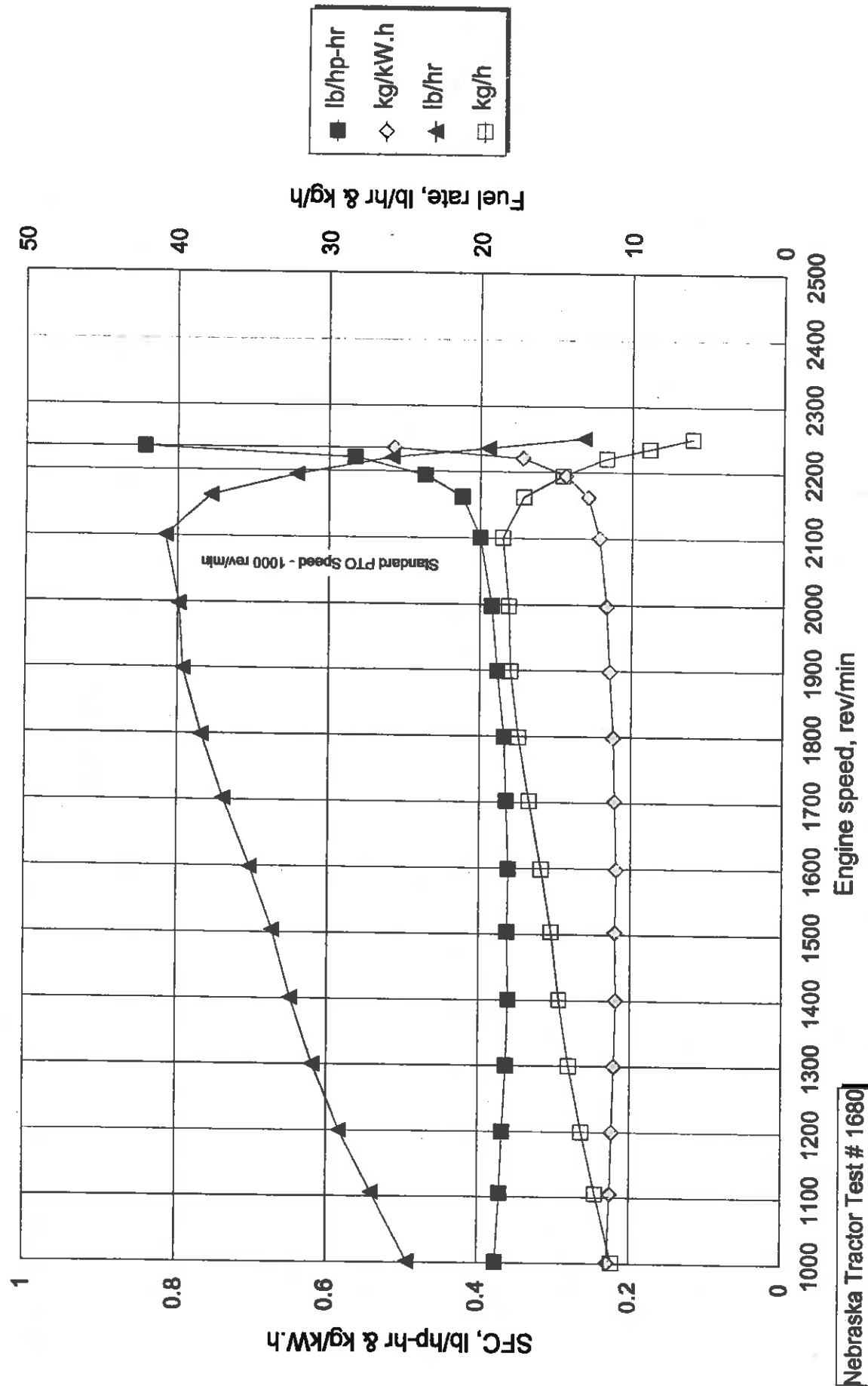
**Power and Equivalent Crankshaft Torque
John Deere 7400 Syncro Plus**



■ hp ◇ kW ▲ lb-ft □ N m

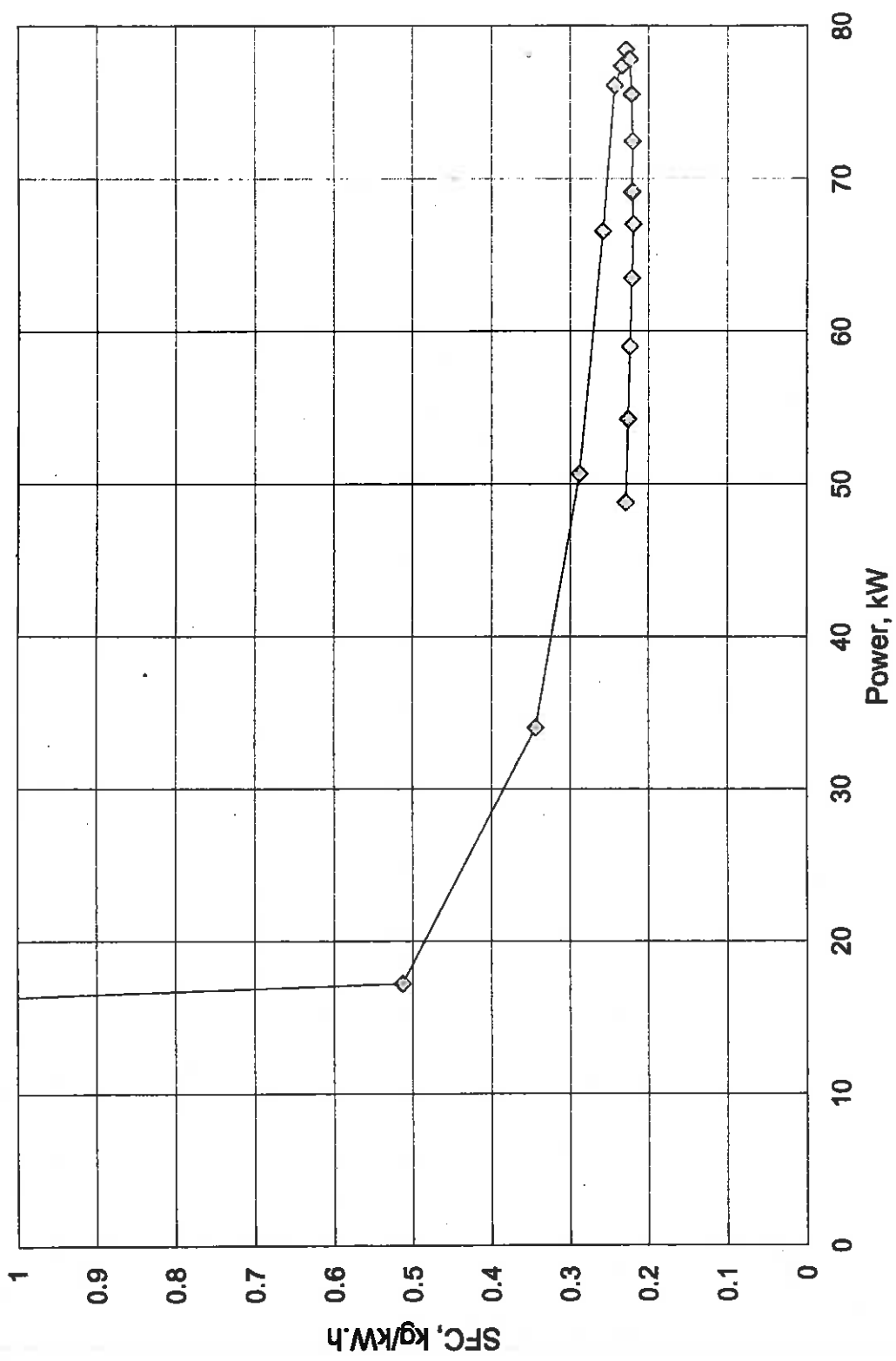
Nebraska Tractor Test # 1680

**Specific Fuel Consumption and Fuel Rate
John Deere 7400 Syncro Plus**



Nebraska Tractor Test # 1680

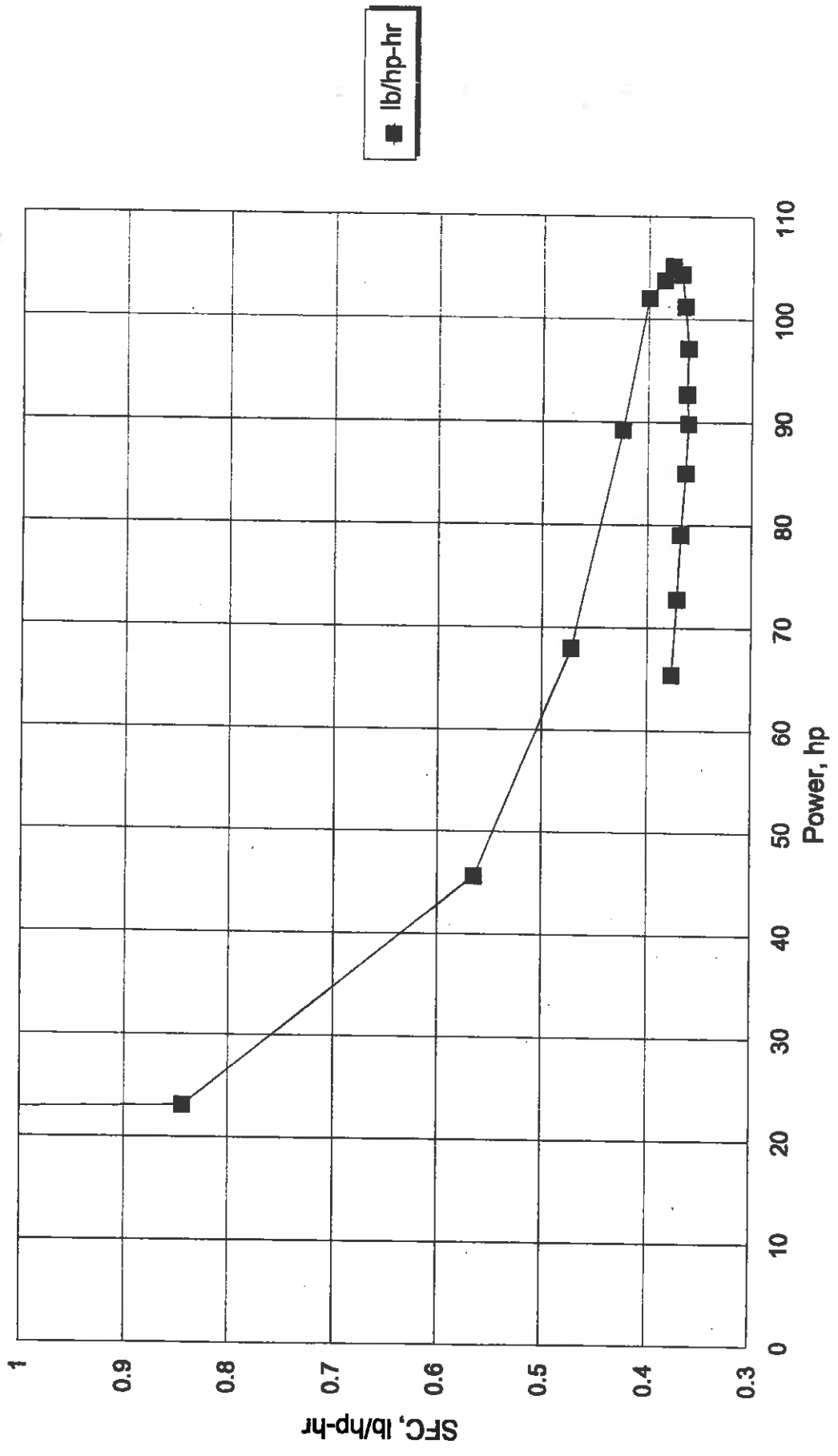
**Power and Specific Fuel Consumption
John Deere 7400 Syncro Plus**



◇ kg/kW.h

Nebraska Tractor Test # 1680

**Power and Specific Fuel Consumption
John Deere 7400 Syncro Plus**



■ lb/hp-hr

Nebraska Tractor Test # 1680

2.2 POWER LIFT TEST. Cat II, with lift cylinders 2 x 80 mm
 (for settings see p. 10)
 Date of test: 1 June 1994

| | Hitch points | Frame |
|---|--------------|-------|
| Lower hitch points above ground - down position: [mm] | 188 | 79 |
| Vertical movement: | | |
| without load: [mm] | 708 | 956 |
| with load: [mm] | 696 | 947 |
| Maximum corrected force through full range: [kN] | 53.4 | 34.6 |
| Corresponding pressure: [kPa] | 18306 | |
| Moment about rear axle: [kN.m] | 59.9 | 60.0 |
| Maximum mast tilt angle: [deg] | -- | 13.5 |

Lifting height relative to horizontal position of lower links.

| | | | | | | |
|------|-----|------|------|------|-----|---|
| [mm] | 472 | -363 | -300 | -201 | -99 | 0 |
|------|-----|------|------|------|-----|---|

Corrected lift forces

| | | | | | | |
|------------------|------|------|------|------|------|------|
| Hitch point [kN] | -- | 54.0 | 53.4 | 53.5 | 54.2 | 54.7 |
| at frame [kN] | 45.2 | 42.4 | 41.6 | -- | 40.9 | 39.8 |

Lifting height relative to horizontal position of lower links.

| | | | | | | |
|------|----|-----|-----|-----|-----|-----|
| [mm] | 99 | 201 | 300 | 333 | 427 | 475 |
|------|----|-----|-----|-----|-----|-----|

Corrected lift forces

| | | | | | | |
|------------------|------|------|------|------|------|------|
| Hitch point [kN] | 55.5 | 56.6 | 57.8 | 57.8 | -- | -- |
| at frame [kN] | 38.6 | -- | 37.1 | 36.3 | 35.4 | 34.6 |

OPTIONAL TEST - Front Drive Disengaged

OECD Drawbar Data (SD)

| Date of tests: | | 26-May-94 | | Fuel density: | | 0.838 kg/l | | Test number: | | 1680 | | | | | |
|---|-------|---|-------|---------------|--------|------------|-------|--------------------|---------|------|-----|--------------|------------|-------|--|
| Surface of track: | | Concrete | | | | | | | | | | | | | |
| Year | Power | Pull | Speed | Engine speed | Slip | SFC | SFE | Temperature, deg C | | | | Rel humidity | Baro. Pres | | |
| | kW | kN | km/h | rev/min | | kg/kWh | kWh/l | Fuel | Coolant | Oil | Dry | Wet | 546 mm | kPa | |
| Maximum Power (unballasted, 2wd at 2100 rev/min) | | Tire pressure: 110 kPa, rear 165 kPa, front | | | | | | | | | | | | | |
| | | | | | | | | Drawbar height: | | | | | | | |
| B1 | 54.70 | 45.12 | 4.36 | 2157 | 14.61% | 0.320 | 2.62 | 55 | 89 | 110 | 18 | 13 | 58% | 97.87 | |
| B2 | 67.08 | 36.79 | 6.56 | 2101 | 5.87% | 0.277 | 3.03 | 56 | 93 | 114 | 19 | 14 | 59% | 97.93 | |
| C1 | 67.27 | 32.04 | 7.56 | 2102 | 4.71% | 0.276 | 3.04 | 57 | 94 | 114 | 21 | 14 | 53% | 98.00 | |
| B3 | 67.93 | 27.67 | 8.84 | 2099 | 3.93% | 0.274 | 3.05 | 56 | 93 | 114 | 21 | 14 | 53% | 97.97 | |
| C2 | 67.20 | 22.53 | 10.74 | 2099 | 3.04% | 0.277 | 3.02 | 56 | 93 | 114 | 21 | 14 | 53% | 97.97 | |
| C3 | 66.23 | 16.70 | 14.27 | 2097 | 2.47% | 0.281 | 2.98 | 56 | 94 | 114 | 21 | 14 | 53% | 97.97 | |
| Part loads (unballasted, 2wd) | | | | | | | | | | | | | | | |
| Selected gear at maximum power | | | | | | | | | | | | | | | |
| B3 | 67.93 | 27.67 | 8.84 | 2099 | 3.93% | 0.274 | 3.05 | 56 | 93 | 114 | 21 | 14 | 53% | 97.97 | |
| 75% of pull at maximum power at rated speed | | | | | | | | | | | | | | | |
| B3 | 53.28 | 20.78 | 9.23 | 2170 | 2.80% | 0.302 | 2.77 | 55 | 92 | 112 | 22 | 15 | 47% | 98.00 | |
| 50% of pull at maximum power at rated speed | | | | | | | | | | | | | | | |
| B3 | 36.30 | 13.84 | 9.44 | 2201 | 2.06% | 0.361 | 2.32 | 55 | 88 | 108 | 22 | 15 | 47% | 98.00 | |
| Next higher gear at reduced engine speed, same pull and travel speed as IL1.1 | | | | | | | | | | | | | | | |
| C3 | 53.22 | 20.77 | 9.22 | 1363 | 2.88% | 0.250 | 3.35 | 55 | 94 | 111 | 22 | 15 | 47% | 98.00 | |
| Next higher gear at reduced engine speed, same pull and travel speed as IL1.2 | | | | | | | | | | | | | | | |
| C3 | 36.24 | 13.85 | 9.42 | 1380 | 2.06% | 0.275 | 3.04 | 53 | 86 | 102 | 22 | 15 | 47% | 98.00 | |
| Selected gear nearest to 7.5 km/h | | | | | | | | | | | | | | | |
| B3 | 67.93 | 27.67 | 8.84 | 2099 | 3.93% | 0.274 | 3.05 | 56 | 93 | 114 | 21 | 14 | 53% | 97.97 | |
| 75% of pull at maximum power at rated speed | | | | | | | | | | | | | | | |
| B3 | 53.28 | 20.78 | 9.23 | 2170 | 2.80% | 0.302 | 2.77 | 55 | 92 | 112 | 22 | 15 | 47% | 98.00 | |
| 50% of pull at maximum power at rated speed | | | | | | | | | | | | | | | |
| B3 | 36.30 | 13.84 | 9.44 | 2201 | 2.06% | 0.361 | 2.32 | 55 | 88 | 108 | 22 | 15 | 47% | 98.00 | |
| Next higher gear at reduced engine speed, same pull and travel speed as IL2.1 | | | | | | | | | | | | | | | |
| C3 | 53.22 | 20.77 | 9.22 | 1363 | 2.88% | 0.250 | 3.35 | 55 | 94 | 111 | 22 | 15 | 47% | 98.00 | |
| Next higher gear at reduced engine speed, same pull and travel speed as IL2.2 | | | | | | | | | | | | | | | |
| C3 | 36.24 | 13.85 | 9.42 | 1380 | 2.06% | 0.275 | 3.04 | 53 | 86 | 102 | 22 | 15 | 47% | 98.00 | |

OECD Drawbar Data (US)

| Date of tests: | | 26-May-94 | | Fuel density: | | 6.994 lb/gal | | Test number: | | 1680 | | | | | |
|---|-------|---|-------|---------------|--------|--------------|----------|--------------------|---------|------|-----|--------------|------------|-------|--|
| Surface of track: | | Concrete | | | | | | | | | | | | | |
| Year | Power | Pull | Speed | Engine speed | Slip | SFC | SFE | Temperature, deg F | | | | Rel humidity | Baro. Pres | | |
| | hp | lb | mph | rev/min | | lb/hp.h | hp/h/gal | Fuel | Coolant | Oil | Dry | Wet | 21.5 in | in Hg | |
| Maximum Power (unballasted, 2wd at 2100 rev/min) | | Tire pressure: 16 psig, rear 24 psig, front | | | | | | | | | | | | | |
| | | | | | | | | Drawbar height: | | | | | | | |
| B1 | 73.35 | 10144 | 2.71 | 2157 | 14.61% | 0.527 | 13.28 | 131 | 193 | 230 | 64 | 55 | 58% | 28.90 | |
| B2 | 89.96 | 8271 | 4.08 | 2101 | 5.87% | 0.455 | 15.36 | 134 | 200 | 238 | 66 | 57 | 59% | 28.92 | |
| B1 | 90.21 | 7202 | 4.70 | 2102 | 4.71% | 0.454 | 15.41 | 134 | 201 | 238 | 69 | 58 | 53% | 28.94 | |
| B3 | 91.09 | 6221 | 5.49 | 2099 | 3.93% | 0.451 | 15.51 | 132 | 200 | 238 | 69 | 58 | 53% | 28.93 | |
| C2 | 90.12 | 5064 | 6.67 | 2099 | 3.04% | 0.456 | 15.34 | 132 | 200 | 238 | 69 | 58 | 53% | 28.93 | |
| C3 | 88.81 | 3755 | 8.87 | 2097 | 2.47% | 0.462 | 15.14 | 132 | 201 | 238 | 69 | 58 | 53% | 28.93 | |
| Part loads (unballasted, 2wd) | | | | | | | | | | | | | | | |
| Selected gear at maximum power | | | | | | | | | | | | | | | |
| B3 | 91.09 | 6221 | 5.49 | 2099 | 3.93% | 0.451 | 15.51 | 132 | 200 | 238 | 69 | 58 | 53% | 28.93 | |
| 75% of pull at maximum power at rated speed | | | | | | | | | | | | | | | |
| B3 | 71.45 | 4671 | 5.74 | 2170 | 2.80% | 0.497 | 14.08 | 131 | 197 | 234 | 72 | 59 | 47% | 28.94 | |
| 50% of pull at maximum power at rated speed | | | | | | | | | | | | | | | |
| B3 | 48.69 | 3111 | 5.87 | 2201 | 2.06% | 0.594 | 11.78 | 130 | 190 | 226 | 72 | 59 | 47% | 28.94 | |
| Next higher gear at reduced engine speed, same pull and travel speed as IL1.1 | | | | | | | | | | | | | | | |
| C3 | 71.37 | 4670 | 5.73 | 1363 | 2.88% | 0.412 | 16.99 | 132 | 201 | 231 | 72 | 59 | 47% | 28.94 | |
| Next higher gear at reduced engine speed, same pull and travel speed as IL1.2 | | | | | | | | | | | | | | | |
| C3 | 48.61 | 3114 | 5.85 | 1380 | 2.06% | 0.453 | 15.45 | 128 | 186 | 215 | 72 | 59 | 47% | 28.94 | |
| Selected gear nearest to 4.6 mph | | | | | | | | | | | | | | | |
| B3 | 91.09 | 6221 | 5.49 | 2099 | 3.93% | 0.451 | 15.51 | 132 | 200 | 238 | 69 | 58 | 53% | 28.93 | |
| 75% of pull at maximum power at rated speed | | | | | | | | | | | | | | | |
| B3 | 71.45 | 4671 | 5.74 | 2170 | 2.80% | 0.497 | 14.08 | 131 | 197 | 234 | 72 | 59 | 47% | 28.94 | |
| 50% of pull at maximum power at rated speed | | | | | | | | | | | | | | | |
| B3 | 48.69 | 3111 | 5.87 | 2201 | 2.06% | 0.594 | 11.78 | 130 | 190 | 226 | 72 | 59 | 47% | 28.94 | |
| Next higher gear at reduced engine speed, same pull and travel speed as IL2.1 | | | | | | | | | | | | | | | |
| C3 | 71.37 | 4670 | 5.73 | 1363 | 2.88% | 0.412 | 16.99 | 132 | 201 | 231 | 72 | 59 | 47% | 28.94 | |
| Next higher gear at reduced engine speed, same pull and travel speed as IL2.2 | | | | | | | | | | | | | | | |
| C3 | 48.61 | 3114 | 5.85 | 1380 | 2.06% | 0.453 | 15.45 | 128 | 186 | 215 | 72 | 59 | 47% | 28.94 | |

OPTIONAL TEST - 4wd at 1900 rpm

OECD Drawbar Data (SI)

| Date of tests: | | 26-May-94 | | Fuel density: | | 0.838 kg/l | | Type of track: | | Concrete | | Test number: | | 1680 | | | | | | | |
|---|-------|-----------|-------|---------------|--------|------------|------|--------------------|-----|--------------|-----------|----------------|-----|---------------|--|----------------|--|-----------------|--|--------|--|
| Gear | Power | | Speed | Engine speed | Slip | SFC | SFE | Temperature, deg C | | Rel humidity | Baro Pres | | | | | | | | | | |
| | kW | kN | | | | | | Dry | Wet | | | | | | | | | | | | |
| I. Maximum Power (unballasted, 4wd at 1900 rev/min) | | | | | | | | | | | | Tire pressure: | | 110 kPa, rear | | 165 kPa, front | | Drawbar height: | | 546 mm | |
| A2 | 44.98 | 54.76 | 2.96 | 2183 | 14.75% | 0.346 | 2.42 | 55 | 89 | 109 | 17 | 13 | 62% | 97.93 | | | | | | | |
| A3 | 60.61 | 56.67 | 3.85 | 2131 | 13.98% | 0.305 | 2.75 | 54 | 89 | 109 | 15 | 12 | 74% | 97.87 | | | | | | | |
| B1 | 66.12 | 51.43 | 4.63 | 2100 | 8.32% | 0.281 | 2.98 | 56 | 91 | 112 | 18 | 13 | 58% | 97.90 | | | | | | | |
| B2 | 68.38 | 40.73 | 6.04 | 1904 | 5.82% | 0.261 | 3.20 | 57 | 94 | 114 | 20 | 14 | 56% | 97.97 | | | | | | | |
| C1 | 68.44 | 35.57 | 6.93 | 1901 | 4.88% | 0.261 | 3.21 | 57 | 93 | 114 | 21 | 14 | 53% | 98.00 | | | | | | | |
| B3 | 69.11 | 30.68 | 8.11 | 1902 | 4.16% | 0.260 | 3.23 | 56 | 94 | 114 | 21 | 14 | 53% | 97.97 | | | | | | | |
| C2 | 68.05 | 24.93 | 9.82 | 1897 | 3.51% | 0.264 | 3.17 | 55 | 94 | 114 | 21 | 14 | 53% | 97.97 | | | | | | | |
| C3 | 66.82 | 18.40 | 13.07 | 1898 | 2.77% | 0.269 | 3.12 | 55 | 94 | 113 | 21 | 14 | 53% | 97.97 | | | | | | | |

OECD Drawbar Data (US)

| Date of tests: | | 26-May-94 | | Fuel density: | | 6.994 lb/gal | | Type of track: | | Concrete | | Test number: | | 1680 | | | | | | | |
|---|-------|-----------|-------|---------------|--------|--------------|-------|--------------------|-----|--------------|-----------|----------------|-----|---------------|--|----------------|--|-----------------|--|---------|--|
| Gear | Power | | Speed | Engine speed | Slip | SFC | SFE | Temperature, deg F | | Rel humidity | Baro Pres | | | | | | | | | | |
| | hp | lb | | | | | | Dry | Wet | | | | | | | | | | | | |
| I. Maximum Power (unballasted, 4wd at 1900 rev/min) | | | | | | | | | | | | Tire pressure: | | 16 psig, rear | | 24 psig, front | | Drawbar height: | | 21.5 in | |
| A2 | 60.32 | 12311 | 1.84 | 2183 | 14.75% | 0.569 | 12.28 | 131 | 192 | 228 | 63 | 55 | 62% | 28.92 | | | | | | | |
| A3 | 81.28 | 12739 | 2.39 | 2131 | 13.98% | 0.502 | 13.94 | 130 | 192 | 229 | 59 | 54 | 74% | 28.9 | | | | | | | |
| B1 | 88.67 | 11562 | 2.88 | 2100 | 8.32% | 0.463 | 15.12 | 133 | 196 | 233 | 64 | 55 | 58% | 28.91 | | | | | | | |
| B2 | 91.70 | 9157 | 3.76 | 1904 | 5.82% | 0.430 | 16.27 | 135 | 201 | 237 | 68 | 58 | 56% | 28.93 | | | | | | | |
| C1 | 91.78 | 7998 | 4.30 | 1901 | 4.88% | 0.430 | 16.27 | 134 | 200 | 238 | 69 | 58 | 53% | 28.94 | | | | | | | |
| B3 | 92.68 | 6897 | 5.04 | 1902 | 4.16% | 0.427 | 16.37 | 133 | 201 | 238 | 69 | 58 | 53% | 28.93 | | | | | | | |
| C2 | 91.25 | 5606 | 6.10 | 1897 | 3.51% | 0.434 | 16.11 | 132 | 201 | 238 | 69 | 58 | 53% | 28.93 | | | | | | | |
| C3 | 89.61 | 4137 | 8.12 | 1898 | 2.77% | 0.442 | 15.83 | 132 | 201 | 235 | 69 | 58 | 53% | 28.93 | | | | | | | |

Remarks : None
Repairs : None

