

NEBRASKA OECD TRACTOR TEST 1791-SUMMARY 353

JOHN DEERE 9400T DIESEL

ALSO JOHN DEERE 9420T DIESEL

24 SPEED

POWER TAKE-OFF PERFORMANCE

| Power HP (kW) | Crank shaft speed rpm | Gal/ltr (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 1108 rpm) | | | | | |
| 299.66 (223.46) | 2100 | 17.66 (66.85) | 0.414 (0.252) | 16.97 (3.34) | |
| Standard Power Take-off Speed (PTO speed 1000 rpm) | | | | | |
| 331.95 (247.53) | 1895 | 17.91 (67.79) | 0.379 (0.231) | 18.54 (3.65) | |
| Maximum Power (2 hours) | | | | | |
| 346.53 (258.41) | 1750 | 18.85 (71.34) | 0.382 (0.232) | 18.39 (3.62) | |

VARYING POWER AND FUEL CONSUMPTION

| | | | | | |
|--------------------|------|------------------|--------------------|-----------------|-----------------------|
| 299.66 (223.46) | 2100 | 17.66 (66.85) | 0.414 (0.252) | 16.97 (3.34) | Air temperature |
| 261.86 (195.27) | 2158 | 16.14 (61.09) | 0.433 (0.263) | 16.23 (3.20) | 74°F (23°C) |
| 198.53 (148.05) | 2176 | 13.83 (52.36) | 0.490 (0.298) | 14.35 (2.83) | Relative humidity |
| 133.40 (99.47) | 2196 | 10.97 (41.53) | 0.578 (0.352) | 12.16 (2.40) | 29% |
| 66.32 (49.45) | 2200 | 7.94 (30.06) | 0.841 (0.512) | 8.35 (1.65) | Barometer |
| 1.66 (1.24) | 2200 | 5.12 (19.39) | 21.714 (13.208) | 0.32 (0.06) | 29.13" Hg (98.65 kPa) |

Maximum Torque - 1153 lb.-ft. (1564 Nm) at 1099 rpm

Maximum Torque Rise - 53.7%

Torque rise at 1701 engine rpm - 42%

DRAWBAR PERFORMANCE (Unballasted)

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 8th(C1 Lo) Gear | | | | | | | | | |
| 323.43 (241.18) | 27482 (122.25) | 4.41 (7.10) | 2096 | 2.79 | 0.437 (0.266) | 16.07 (3.17) | 186 (85) | 54 (12) | 28.98 (98.14) |
| 75% of Pull at Maximum Power 8th(C1 Lo) Gear | | | | | | | | | |
| 253.54 (189.07) | 20621 (91.73) | 4.61 (7.42) | 2167 | 1.71 | 0.487 (0.296) | 14.43 (2.84) | 186 (86) | 61 (16) | 28.77 (97.43) |
| 50% of Pull at Maximum Power 8th(C1 Lo) Gear | | | | | | | | | |
| 171.87 (128.17) | 13741 (61.12) | 4.69 (7.55) | 2189 | 1.00 | 0.572 (0.348) | 12.28 (2.42) | 181 (83) | 67 (19) | 28.78 (97.46) |
| 75% of Pull at Reduced Engine Speed 10th(B2 Lo) Gear | | | | | | | | | |
| 254.11 (189.49) | 20646 (91.84) | 4.62 (7.43) | 1859 | 1.71 | 0.457 (0.278) | 15.39 (3.03) | 182 (83) | 66 (19) | 28.79 (97.49) |
| 50% of Pull at Reduced Engine Speed 10th(B2 Lo) Gear | | | | | | | | | |
| 171.69 (128.03) | 13752 (61.17) | 4.68 (7.53) | 1871 | 1.00 | 0.527 (0.321) | 13.33 (2.63) | 179 (81) | 70 (21) | 28.78 (97.46) |

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

Dates of Test: March 27-April 13, 2001

Manufacturer: John Deere Tractor Works, 3500 East Donald St., P.O. Box 270, Waterloo Ia, 50704-0270

FUEL, OIL and TIME: Fuel No. 2 Diesel Specific gravity converted to 60°/60°F (15°/15°C) 0.8439 Fuel weight 7.027 lbs/gal (0.842 kg/l) Oil SAE 15W-40 API service classification CH-4 Transmission and hydraulic lubricant John Deere Hy-Gard fluid Total time engine was operated: 48.5 hours

ENGINE: Make John Deere Diesel **Type** six cylinder vertical with turbocharger and air to air aftercooler **Serial No.** *RG6125H030000* **Crankshaft** lengthwise **Rated engine speed** 2100 **Bore and stroke** 5.00" x 6.50" (127.0 mm x 165.0 mm) **Compression ratio** 17.0 to 1 **Displacement** 765 cu in (12535 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, separate radiators for hydraulic and transmission oil, radiator for rear axle oil **Fuel filter** one paper element and water separator **Muffler** vertical **Cooling medium temperature control** 2 thermostats and variable speed fan

ENGINE OPERATING PARAMETERS: Fuel rate: (360 engine hp) 120.6 - 129.4 lb/h (54.7 - 58.7 kg/h), (400 engine hp) 133.3-142.2 lb/h (60.6-64.5 kg/h), (425 engine hp) 141.3-150.1 lb/h (64.1-68.1 kg/h) **High idle:** 2160 - 2240 rpm **Turbo boost:** nominal 18.9 - 23.2 psi (130 - 160 kPa) as measured 22.5 psi (155 kPa)

CHASSIS: Type tracklayer-rubber tracked **Serial No.** *RW9400T902136* **Track width** 107.4" (2728 mm) **Length of track on ground** 111.0" (2819 mm) **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio with partial (2) range operator controlled power shift **Nominal travel speeds mph (km/h)** first 1.93 (3.10) second 2.31 (3.72) third 2.47 (3.99) fourth 2.98 (4.79) fifth 3.40 (5.47) sixth 4.08 (6.56) seventh 4.11 (6.61) eighth 4.53 (7.29) ninth 4.93 (7.93) tenth 5.29 (8.51) eleventh 5.43 (8.74) twelfth 5.83 (9.38) thirteenth 6.34 (10.21) fourteenth 6.99 (11.25) fifteenth 7.24 (11.65) sixteenth 7.98 (12.84) seventeenth 8.68 (13.97) eighteenth 9.57 (15.40) nineteenth 9.66 (15.54) twentieth 11.58 (18.63) twenty-first 12.43 (20.00) twenty-second 14.90 (23.98) twenty-third 17.01 (27.37) twenty-fourth 20.39 (32.82) reverse 2.31 (3.72), 2.77 (4.46), 4.93 (7.93), 5.43, (8.74), 5.91 (9.51), 6.51 (10.48)

DRAWBAR PERFORMANCE

(Unballasted at 2100 rpm)

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) | Hp.hr/gal (kW.h/l) | Temp.°F (°C) cool- ing med | Air dry bulb | Barom. inch Hg (kPa) |
|---------------------|--------------------------------|------------------------|---------------------------------|-----------|---|-----------------------|-------------------------------------|--------------------|-------------------------------|
| 3rd(A2 Lo)Gear | | | | | | | | | |
| 240.04 (179.00) | 42017 (186.90) | 2.14 (3.45) | 2105 | 14.22 | 0.522 (0.317) | 13.47 (2.65) | 177 (81) | 52 (11) | 28.76 (97.39) |
| 4th(A2 Hi)Gear | | | | | | | | | |
| 258.55 (192.80) | 34810 (154.84) | 2.79 (4.48) | 2095 | 6.53 | 0.485 (0.295) | 14.50 (2.86) | 180 (82) | 56 (13) | 28.77 (97.43) |
| 5th(A3 Lo)Gear | | | | | | | | | |
| 264.47 (197.22) | 30444 (135.42) | 3.26 (5.24) | 2097 | 4.21 | 0.474 (0.288) | 14.82 (2.92) | 179 (82) | 57 (14) | 28.77 (97.43) |
| 6th(A3 Hi)Gear | | | | | | | | | |
| 295.32 (220.22) | 27941 (124.29) | 3.96 (6.38) | 2098 | 2.86 | 0.455 (0.277) | 15.45 (3.04) | 184 (84) | 55 (13) | 28.96 (98.07) |
| 7th(B1 Lo)Gear | | | | | | | | | |
| 301.82 (225.07) | 28306 (125.91) | 4.00 (6.43) | 2098 | 2.86 | 0.446 (0.271) | 15.77 (3.11) | 184 (84) | 55 (13) | 28.95 (98.04) |
| 8th(C1 Lo)Gear | | | | | | | | | |
| 323.43 (241.18) | 27482 (122.25) | 4.41 (7.10) | 2096 | 2.79 | 0.437 (0.266) | 16.07 (3.17) | 186 (85) | 54 (12) | 28.98 (98.14) |
| 9th(B1 Hi)Gear | | | | | | | | | |
| 319.73 (238.42) | 24764 (110.15) | 4.84 (7.79) | 2099 | 1.94 | 0.443 (0.269) | 15.86 (3.13) | 186 (86) | 52 (11) | 28.99 (98.17) |
| 10th(B2 Lo)Gear | | | | | | | | | |
| 322.91 (240.79) | 23196 (103.18) | 5.22 (8.40) | 2101 | 1.71 | 0.439 (0.267) | 16.02 (3.16) | 185 (85) | 51 (11) | 29.00 (98.21) |
| 11th(C1 Hi)Gear | | | | | | | | | |
| 320.55 (239.03) | 22443 (99.83) | 5.36 (8.62) | 2096 | 1.55 | 0.444 (0.270) | 15.83 (3.12) | 184 (84) | 50 (10) | 29.01 (98.24) |
| 12th(C2 Lo)Gear | | | | | | | | | |
| 320.07 (238.68) | 20786 (92.46) | 5.77 (9.29) | 2100 | 1.32 | 0.441 (0.268) | 15.93 (3.14) | 186 (85) | 49 (9) | 29.01 (98.24) |
| 13th(B2 Hi)Gear | | | | | | | | | |
| 314.28 (234.36) | 18757 (83.44) | 6.28 (10.11) | 2099 | 1.16 | 0.450 (0.274) | 15.63 (3.08) | 185 (85) | 49 (9) | 29.01 (98.24) |
| 14th(C2 Hi)Gear | | | | | | | | | |
| 309.55 (230.83) | 16759 (74.55) | 6.93 (11.15) | 2096 | 1.00 | 0.461 (0.280) | 15.25 (3.00) | 186 (86) | 55 (13) | 28.99 (98.17) |
| 15th(B3 Lo)Gear | | | | | | | | | |
| 310.14 (231.27) | 16200 (72.06) | 7.18 (11.55) | 2097 | 1.00 | 0.461 (0.280) | 15.25 (3.00) | 186 (86) | 55 (13) | 28.99 (98.17) |
| 16th(C3 Lo)Gear | | | | | | | | | |
| 305.73 (227.98) | 14479 (64.41) | 7.92 (12.74) | 2097 | 0.84 | 0.466 (0.284) | 15.07 (2.97) | 187 (86) | 55 (13) | 28.97 (98.10) |
| 17th(B3 Hi)Gear | | | | | | | | | |
| 294.81 (219.84) | 12804 (56.95) | 8.63 (13.90) | 2099 | 0.68 | 0.484 (0.294) | 14.52 (2.86) | 187 (86) | 55 (13) | 28.97 (98.10) |

TIRES, BALLAST AND WEIGHT

Track width

Ballast - Cast iron(front)
- Cast iron (side)

Height of Drawbar

Static Weight with operator

With Ballast

36.0 in (915 mm)
3200 lb (1451 kg)
3540 lb (1606 kg)
19.0 in (485 mm)
49360 lb(22389 kg)

Without Ballast

36.0 in (915 mm)
None
None
19.0 in (485 mm)
42620 lb(19332 kg)

Clutch wet multiple disc hydraulically actuated by foot pedal **Brakes** wet multiple disc hydraulically actuated foot pedal **Steering** electro-hydraulic differential steering controlled by steering wheel **Power take-off** 1000 rpm at 1895 engine rpm **Unladen tractor mass** 42445 lb (19253 kg)

REPAIRS AND ADJUSTMENTS: No repairs or adjustments.

NOTE: The 9400T engine has an electronic control system which provides a vehicle protection system to avoid overloading the drive train. This system provides three different engine power levels. At 2100 rpm the engine produces up to 360 hp when the transmission is in forward gears A1-Lo through A3-Lo or when the tractor is being used for stationary PTO operations. At 2100 rpm the engine produces 400 hp when the transmission is in gears A3-Hi or B1-Lo . At 2100 rpm the engine produces 425 hp in all other applications.

NOTE 2: This tractor was tested with 2 different engines. The main PTO and drawbar performance results were with an engine that meets Tier II engine emission levels. The supplemental PTO testing was done on an engine meeting the Tier I emissions levels.

REMARKS: All test results were determined from observed data obtained in accordance with official OECD, SAE and Nebraska test procedures. For the maximum power tests the fuel temperature at the injection pump inlet was maintained at 95°F (35°C). The performance figures on this summary were taken from a test conducted under the OECD Code II test code procedure.

Note: Report reprinted. Supplemental sales permit for John Deere 9420T, March 2002.

We, the undersigned, certify that this is a true and correct report of official Tractor Test No. **1791**, Nebraska Summary 353, March 7, 2002.

Brent T. Sampson
Test Engineer

L.L. Bashford
M.F. Kocher
G.J. Hoffman
Board of Tractor Test Engineers

DRAWBAR PERFORMANCE
(Unballasted at 1800 RPM)
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) | Fuel Consumption Hp.hr/gal (kW.h/l) | Temp. °F(°C) cool- ing med | Air dry bulb | Barom. inch Hg (kPa) |
|---------------------|--------------------------------|------------------------|---------------------------------|-----------|---|---|-------------------------------------|--------------------|-------------------------------|
| 3rd (A2 Lo) Gear | | | | | | | | | |
| 244.91 (182.63) | 42421 (188.70) | 2.17 (3.48) | 2096 | 12.83 | 0.512 (0.312) | 13.71 (2.70) | 176 (80) | 52 (11) | 28.76 (97.39) |
| 4th (A2 Hi) Gear | | | | | | | | | |
| 262.99 (196.11) | 37951 (168.81) | 2.60 (4.18) | 2013 | 9.20 | 0.478 (0.291) | 14.69 (2.89) | 181 (83) | 56 (13) | 28.76 (97.39) |
| 5th (A3 Lo) Gear | | | | | | | | | |
| 274.29 (204.54) | 35991 (160.09) | 2.86 (4.60) | 1915 | 8.38 | 0.461 (0.280) | 15.24 (3.00) | 182 (83) | 59 (15) | 28.77 (97.43) |
| 6th (A3 Hi) Gear | | | | | | | | | |
| 305.04 (227.47) | 34531 (153.60) | 3.31 (5.33) | 1804 | 5.53 | 0.442 (0.269) | 15.89 (3.13) | 185 (85) | 56 (13) | 28.96 (98.07) |
| 7th (B1 Lo) Gear | | | | | | | | | |
| 308.77 (230.25) | 34920 (155.33) | 3.32 (5.34) | 1794 | 5.82 | 0.437 (0.266) | 16.07 (3.17) | 184 (84) | 55 (13) | 28.95 (98.04) |
| 8th (C1 Lo) Gear | | | | | | | | | |
| 352.32 (262.72) | 36375 (161.80) | 3.63 (5.85) | 1805 | 6.95 | 0.434 (0.264) | 16.20 (3.19) | 186 (85) | 55 (13) | 28.99 (98.17) |
| 9th (B1 Hi) Gear | | | | | | | | | |
| 357.75 (266.78) | 33223 (147.78) | 4.04 (6.50) | 1803 | 4.73 | 0.427 (0.260) | 16.47 (3.24) | 184 (84) | 53 (12) | 28.99 (98.17) |
| 10th (B2 Lo) Gear | | | | | | | | | |
| 364.88 (272.09) | 31187 (138.72) | 4.39 (7.06) | 1803 | 3.84 | 0.418 (0.254) | 16.80 (3.31) | 186 (86) | 51 (11) | 28.99 (98.17) |
| 11th (C1 Hi) Gear | | | | | | | | | |
| 363.68 (271.20) | 30097 (133.88) | 4.53 (7.29) | 1806 | 3.32 | 0.420 (0.255) | 16.74 (3.30) | 185 (85) | 50 (10) | 29.01 (98.24) |
| 12th (C2 Lo) Gear | | | | | | | | | |
| 366.42 (273.24) | 28147 (125.20) | 4.88 (7.86) | 1800 | 2.63 | 0.417 (0.254) | 16.85 (3.32) | 186 (85) | 49 (9) | 29.01 (98.24) |
| 13th (B2 Hi) Gear | | | | | | | | | |
| 365.04 (272.21) | 25627 (113.99) | 5.34 (8.60) | 1801 | 2.17 | 0.418 (0.254) | 16.81 (3.31) | 186 (86) | 49 (9) | 29.01 (98.24) |
| 14th (C2 Hi) Gear | | | | | | | | | |
| 360.38 (268.74) | 22823 (101.52) | 5.92 (9.53) | 1804 | 1.71 | 0.424 (0.258) | 16.56 (3.26) | 189 (87) | 55 (13) | 28.99 (98.17) |
| 15th (B3 Lo) Gear | | | | | | | | | |
| 362.03 (269.97) | 22092 (98.27) | 6.15 (9.89) | 1806 | 1.63 | 0.421 (0.256) | 16.68 (3.29) | 187 (86) | 55 (13) | 28.98 (98.14) |
| 16th (C3 Lo) Gear | | | | | | | | | |
| 358.62 (267.42) | 19879 (88.43) | 6.77 (10.89) | 1802 | 1.47 | 0.424 (0.258) | 16.56 (3.26) | 187 (86) | 55 (13) | 28.97 (98.10) |
| 17th (B3 Hi) Gear | | | | | | | | | |
| 352.74 (263.04) | 17886 (79.56) | 7.40 (11.90) | 1804 | 1.16 | 0.434 (0.264) | 16.19 (3.19) | 190 (88) | 55 (13) | 28.97 (98.10) |
| 18th (C3 Hi) Gear | | | | | | | | | |
| 349.90 (260.92) | 16106 (71.64) | 8.15 (13.11) | 1800 | 0.92 | 0.439 (0.267) | 16.01 (3.15) | 191 (88) | 55 (13) | 28.96 (98.07) |

TRACTOR SOUND LEVEL WITH CAB

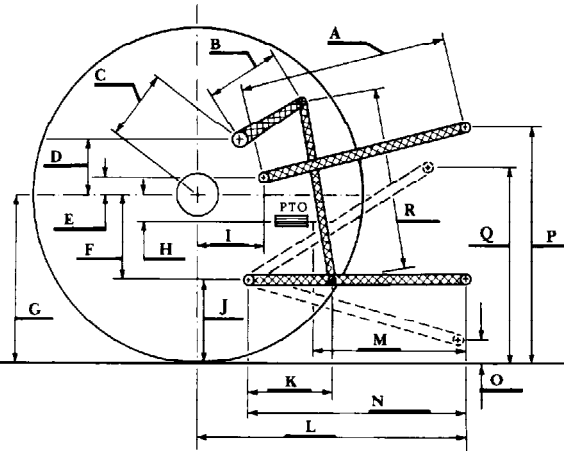
| | dB(A) |
|---|--------------|
| At no load in 8th (C1 Lo) gear | 76.2 |
| Transport speed - no load - 24th (D3 Hi) gear | 79.0 |
| Bystander in 24th (D3 Hi) gear | 91.2 |

DRAWBAR PERFORMANCE
(Ballasted at 1800 RPM)
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) | Temp. °C | Fuel Consumption Hp.hr/gal (kW.h/l) | cool- ing med | Air dry bulb | Barom. inch Hg (kPa) |
|---------------------|--------------------------------|------------------------|---------------------------------|-----------|---|-------------|---|---------------------|--------------------|-------------------------------|
| 1st(A1 Lo)Gear | | | | | | | | | | |
| 228.73 (170.56) | 49490 (220.14) | 1.73 (2.79) | 2154 | 12.62 | 0.523 (0.318) | 13.43 | 175 | 50 | 28.79 (97.49) | |
| 2nd(A1 Hi)Gear | | | | | | | | | | |
| 255.56 (190.57) | 46983 (208.99) | 2.04 (3.28) | 2056 | 10.28 | 0.490 (0.298) | 14.34 | 180 | 51 | 28.80 (97.53) | |
| 3rd(A2 Lo)Gear | | | | | | | | | | |
| 264.85 (197.50) | 44682 (198.76) | 2.22 (3.58) | 2047 | 8.56 | 0.473 (0.288) | 14.86 | 182 | 51 | 28.81 (97.56) | |
| 4th(A2 Hi)Gear | | | | | | | | | | |
| 283.96 (211.75) | 43615 (194.01) | 2.44 (3.93) | 1864 | 7.81 | 0.453 (0.275) | 15.53 | 182 | 52 | 28.82 (97.60) | |
| 5th(A3 Lo)Gear | | | | | | | | | | |
| 296.55 (221.13) | 40481 (180.07) | 2.75 (4.42) | 1803 | 6.20 | 0.442 (0.269) | 15.89 | 184 | 53 | 28.83 (97.63) | |
| 6th(A3 Hi)Gear | | | | | | | | | | |
| 309.71 (230.95) | 34479 (153.37) | 3.37 (5.42) | 1801 | 3.87 | 0.436 (0.265) | 16.12 | 187 | 54 | 28.84 (97.66) | |
| 7th(B1 Lo)Gear | | | | | | | | | | |
| 313.44 (233.73) | 34510 (153.51) | 3.41 (5.48) | 1806 | 4.02 | 0.430 (0.262) | 16.33 | 186 | 56 | 28.85 (97.70) | |
| 8th(C1 Lo)Gear | | | | | | | | | | |
| 362.21 (270.10) | 36622 (162.90) | 3.71 (5.97) | 1801 | 4.98 | 0.424 (0.258) | 16.56 | 188 | 57 | 28.85 (97.70) | |
| 9th(B1 Hi)Gear | | | | | | | | | | |
| 363.13 (270.79) | 33323 (148.23) | 4.09 (6.58) | 1802 | 3.72 | 0.423 (0.257) | 16.61 | 188 | 58 | 28.86 (97.73) | |
| 10th(B2 Lo)Gear | | | | | | | | | | |
| 366.25 (273.11) | 31146 (138.54) | 4.41 (7.10) | 1800 | 3.19 | 0.418 (0.254) | 16.80 | 189 | 57 | 28.86 (97.73) | |
| 11th(C1 Hi)Gear | | | | | | | | | | |
| 363.76 (271.26) | 29958 (133.26) | 4.55 (7.33) | 1803 | 2.81 | 0.421 (0.256) | 16.69 | 189 | 56 | 28.86 (97.73) | |
| 12th(C2 Lo)Gear | | | | | | | | | | |
| 366.43 (273.24) | 28048 (124.76) | 4.90 (7.88) | 1799 | 2.28 | 0.420 (0.255) | 16.73 | 189 | 56 | 28.86 (97.73) | |
| 13th(B2 Hi)Gear | | | | | | | | | | |
| 362.84 (270.57) | 25392 (112.95) | 5.36 (8.62) | 1801 | 1.89 | 0.423 (0.257) | 16.63 | 190 | 56 | 28.86 (97.73) | |
| 14th(C2 Hi)Gear | | | | | | | | | | |
| 361.51 (269.58) | 22897 (101.85) | 5.92 (9.53) | 1799 | 1.58 | 0.425 (0.258) | 16.55 | 192 | 56 | 28.86 (97.73) | |
| 15th(B3 Lo)Gear | | | | | | | | | | |
| 362.05 (269.98) | 22138 (98.47) | 6.13 (9.87) | 1798 | 1.42 | 0.424 (0.258) | 16.58 | 192 | 57 | 28.87 (97.77) | |
| 16th(C3 Lo)Gear | | | | | | | | | | |
| 359.08 (267.77) | 19882 (88.44) | 6.77 (10.90) | 1797 | 1.18 | 0.430 (0.262) | 16.33 | 191 | 58 | 28.87 (97.77) | |
| 17th(B3 Hi)Gear | | | | | | | | | | |
| 350.79 (261.58) | 17808 (79.21) | 7.39 (11.89) | 1800 | 1.11 | 0.439 (0.267) | 16.00 | 191 | 58 | 28.87 (97.77) | |
| 18th(C3 Hi)Gear | | | | | | | | | | |
| 347.06 (258.80) | 15929 (70.86) | 8.17 (13.15) | 1804 | 0.95 | 0.444 (0.270) | 15.84 | 192 | 59 | 28.87 (97.77) | |

THREE POINT HITCH PERFORMANCE (OECD Static Test)

| | | | |
|--|--------------------------|---------------------------------|--|
| CATEGORY: III, IV | | | |
| Quick Attach: yes | Category III | Category IV | |
| Maximum Force Exerted Through Whole Range: | 13605 lbs (60.5 kN) | 14921 lbs (66.4 kN) | |
| i) Opening pressure of relief valve: | NA | | |
| Sustained pressure at compensator cutoff: | 2930 psi (202 bar) | | |
| | Single outlet set | Two outlet sets combined | |
| ii) Pump delivery rate at minimum pressure and rated engine speed: | 32.2 GPM (121.9 l/min) | 46.6 GPM (176.4 l/min) | |
| iii) Pump delivery rate at maximum hydraulic power: | 31.1 GPM (117.7 l/min) | 43.5 GPM (164.7 l/min) | |
| Delivery pressure: | 2200 psi (152 bar) | 2440 psi (168 bar) | |
| Power: | 39.9 Hp (29.8 kW) | 61.9 HP (46.2 kW) | |



THREE POINT HITCH PERFORMANCE

| | |
|---------------------------------------|-----------------|
| Observed Maximum Pressure psi. (bar): | 2980 (205) |
| Location: | lift cylinder |
| Hydraulic oil temperature: °F (°C): | 145 (63) |
| Location: | hydraulic valve |
| Category: | III, IV |
| Quick attach: | yes |

HITCH DIMENSIONS AS TESTED NO LOAD

| | Category III | | Category IV | |
|-----|--------------|------|-------------|------|
| | inch | mm | inch | mm |
| A | 30.8 | 783 | 30.0 | 762 |
| B | 18.5 | 471 | 18.5 | 471 |
| C | 31.9 | 810 | 31.9 | 810 |
| D | 30.4 | 772 | 30.4 | 772 |
| E | 11.3 | 288 | 11.3 | 288 |
| F | 13.8 | 350 | 13.8 | 350 |
| G | 32.9 | 836 | 32.9 | 836 |
| H | 0.7 | 19 | 0.7 | 19 |
| I | 22.7 | 577 | 22.7 | 577 |
| J | 19.1 | 486 | 19.1 | 486 |
| K | 29.4 | 746 | 29.4 | 746 |
| L | 54.4 | 1383 | 54.4 | 1383 |
| *L' | 61.0 | 1550 | 61.4 | 1560 |
| M | 24.5 | 623 | 24.5 | 623 |
| N | 43.1 | 1095 | 43.1 | 1095 |
| O | 8.0 | 203 | 9.0 | 229 |
| P | 49.6 | 1260 | 49.6 | 1260 |
| Q | 39.5 | 1003 | 40.5 | 1029 |
| R | 48.7 | 1238 | 47.9 | 1216 |

*L' to Quick Attach ends

| Category III (lift cylinders - 2x90 mm) | | | | | | |
|--|-----------|------------|------------|------------|-------------|-------------|
| SAE Static Test System pressure 2680 psi (185 Bar) | | | | | | |
| Hitch point distance to ground level in. (mm) | 7.9 (201) | 16.0 (407) | 24.1 (613) | 31.8 (807) | 40.0 (1016) | |
| Lift force on frame lb | 14426 | 14737 | 14682 | 14307 | 13430 | |
| " " " " " " (kN) | (64.2) | (65.6) | (65.3) | (63.6) | (59.7) | |
| ASAE Static Test System pressure 2860 psi (197 Bar) | | | | | | |
| Hitch point distance to ground level in. (mm) | 7.9 (201) | 16.0 (407) | 24.1 (613) | 31.8 (807) | 40.0 (1016) | |
| Lift force on frame lb | 15373 | 15703 | 15643 | 15248 | 14312 | |
| " " " " " " (kN) | (68.4) | (69.9) | (69.6) | (67.8) | (63.7) | |
| Category IV (lift cylinders - 1x90 mm & 1x100 mm) | | | | | | |
| SAE Static Test - System pressure 2680 psi (185 Bar) | | | | | | |
| Hitch point distance to ground level in. (mm) | 9.0 (228) | 15.2 (387) | 22.3 (566) | 29.6 (751) | 36.8 (935) | 44.0 (1118) |
| Lift force on frame lb | 15954 | 16238 | 16328 | 16020 | 15372 | 13856 |
| " " " " " " (kN) | (71.0) | (72.2) | (72.6) | (71.3) | (68.4) | (61.6) |
| ASAE Static Test System pressure 2860 psi (197 Bar) | | | | | | |
| Hitch point distance to ground level in. (mm) | 9.0 (228) | 15.2 (387) | 22.3 (566) | 29.6 (751) | 36.8 (935) | 44.0 (1118) |
| Lift force on frame lb | 17014 | 17317 | 17417 | 17094 | 16403 | 14772 |
| " " " " " " (kN) | (75.7) | (77.0) | (77.5) | (76.0) | (73.0) | (65.7) |



JOHN DEERE 9400T DIESEL

Agricultural Research Division
 Institute of Agriculture and Natural Resources
 University of Nebraska Lincoln
 Darrell Nelson, Dean and Director

NEBRASKA TRACTOR TEST 1791S

JOHN DEERE 9400T DIESEL

24 SPEED

(Tier 1 Engine)

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 1108 rpm) | | | | | |
| 300.39 (224.00) | 2100 | 17.59 (66.58) | 0.411 (0.250) | 17.08 (3.36) | |
| Standard Power Take-off Speed (PTO speed 1000 rpm) | | | | | |
| 335.22 (249.98) | 1895 | 18.61 (70.44) | 0.390 (0.237) | 18.01 (3.55) | |
| Maximum Power (2 hours) | | | | | |
| 350.12 (261.09) | 1800 | 19.06 (72.16) | 0.383 (0.233) | 18.37 (3.62) | |
| VARYING POWER AND FUEL CONSUMPTION | | | | | |
| 300.39 (224.00) | 2100 | 17.58 (66.58) | 0.411 (0.250) | 17.08 (3.36) | Air temperature |
| 265.00 (197.61) | 2179 | 16.39 (62.06) | 0.435 (0.264) | 16.16 (3.18) | 77°F (25°C) |
| 200.37 (149.42) | 2196 | 13.32 (50.42) | 0.467 (0.284) | 15.04 (2.96) | Relative humidity |
| 133.74 (99.73) | 2200 | 10.37 (39.27) | 0.545 (0.332) | 12.89 (2.54) | 48% |
| 66.87 (49.86) | 2200 | 7.64 (28.93) | 0.803 (0.488) | 8.75 (1.72) | Barometer |
| 1.11 (0.82) | 2199 | 4.82 (18.26) | 30.671 (18.657) | 0.23 (0.05) | 28.68" Hg (97.12 kPa) |
| Maximum Torque - 1153 lb.-ft. (1563 Nm) at 1102 rpm | | | | | |
| Maximum Torque Rise - 53.5% | | | | | |
| Torque rise at 1701 engine rpm - 42% | | | | | |

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

Dates of Test: April 19 -20, 2001

Manufacturer: John Deere Tractor Works, 3500 East Donald St. , P.O. Box 270, Waterloo Ia, USA

FUEL, OIL and TIME: Fuel No. 2 Diesel Specific gravity converted to 60°/60°F (15°/15°C) 0.8439 Fuel weight 7.027 lbs/gal (0.842 kg/l) Oil SAE 15W-40 API service classification CH-4 Transmission and hydraulic lubricant John Deere Hy-Gard fluid Total time engine was operated: 17.0 hours

ENGINE: Make John Deere Diesel **Type** six cylinder vertical with turbocharger and air to air aftercooler **Serial No.** *RG6125H013058* **Crankshaft** lengthwise **Rated engine speed** 2100 **Bore and stroke** 5.00" x 6.50" (127.0 mm x 165.0 mm) **Compression ratio** 16.0 to 1 **Displacement** 765 cu in (12535 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, separate radiators for hydraulic and transmission oil, radiator for rear axle oil **Fuel filter** one paper element and water separator **Muffler** vertical **Cooling medium temperature control** 2 thermostats and variable speed fan

ENGINE OPERATING PARAMETERS:
Fuel rate: (360 engine hp) 120.6 - 129.4 lb/h (54.7 - 58.7 kg/h), (400 engine hp) 133.3-142.2 lb/h (60.6-64.5 kg/h), (425 engine hp) 141.3-150.1 lb/h (64.1-68.1 kg/h) **High idle:** 2160 - 2240 rpm **Turbo boost:** nominal 18.9 - 23.2 psi (130 - 160 kPa) as measured 22.5 psi (155 kPa)