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# Test 1893: John Deere 7630 Autoquad-Plus 20-Speed

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# NEBRASKA OECD TRACTOR TEST 1893–SUMMARY 560
# JOHN DEERE 7630 AUTOQUAD-PLUS DIESEL
# 20 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—1075 rpm)** | | | | | |
| 141.66 *(105.63)* | 2100 | 8.31 *(31.44)* | 0.411 *(0.250)* | 17.05 *(3.36)* | |
| **Standard Power Take-off Speed (1000 rpm)** | | | | | |
| 157.93 *(117.77)* | 1953 | 8.88 *(33.62)* | 0.394 *(0.240)* | 17.78 *(3.50)* | |
| **Maximum Power (1 hour)** | | | | | |
| 161.88 *(120.71)* | 1750 | 8.91 *(33.75)* | 0.386 *(0.235)* | 18.16 *(3.58)* | |
| **VARYING POWER AND FUEL CONSUMPTION** | | | | | |
| 141.66 *(105.63)* | 2100 | 8.31 *(31.44)* | 0.411 *(0.250)* | 17.05 *(3.36)* | Air temperature |
| 123.49 *(92.00)* | 2156 | 7.62 *(28.83)* | 0.432 *(0.263)* | 16.21 *(3.19)* | 75°F *(24°C)* |
| 92.89 *(69.26)* | 2167 | 6.25 *(23.65)* | 0.472 *(0.287)* | 14.87 *(2.93)* | Relative humidity |
| 62.47 *(46.58)* | 2176 | 5.03 *(19.06)* | 0.565 *(0.344)* | 12.41 *(2.44)* | 27% |
| 31.24 *(23.30)* | 2187 | 4.07 *(15.39)* | 0.912 *(0.555)* | 7.69 *(1.51)* | Barometer |
| 0.96 *(0.72)* | 2196 | 2.57 *(9.72)* | 18.674 *(11.359)* | 0.38 *(0.07)* | 28.83" Hg *(97.63 kPa)* |

Maximum torque - 523 lb.-ft. *(710 Nm)* at 1602 rpm
Maximum torque rise - 47.8%
Torque rise at 1700 engine rpm - 41%
Power increase at 1750 engine rpm - 14.2%

## 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—8th (C1) Gear** | | | | | | | | | |
| 126.97 *(94.68)* | 9543 *(42.45)* | 4.99 *(8.03)* | 2100 | 3.01 | 0.461 *(0.281)* | 15.20 *(2.99)* | 186 *(85)* | 49 *(9)* | 29.03 *(98.31)* |
| **75% of Pull at Maximum Power—8th (C1) Gear** | | | | | | | | | |
| 99.44 *(74.15)* | 7201 *(32.03)* | 5.18 *(8.33)* | 2159 | 2.09 | 0.503 *(0.306)* | 13.93 *(2.74)* | 182 *(83)* | 50 *(10)* | 29.02 *(98.27)* |
| **50% of Pull at Maximum Power—8th (C1) Gear** | | | | | | | | | |
| 67.10 *(50.04)* | 4795 *(21.33)* | 5.25 *(8.45)* | 2170 | 1.32 | 0.603 *(0.367)* | 11.62 *(2.29)* | 175 *(79)* | 50 *(10)* | 29.02 *(98.27)* |
| **75% of Pull at Reduced Engine Speed—11th (C3) Gear** | | | | | | | | | |
| 99.34 *(74.08)* | 7207 *(32.06)* | 5.17 *(8.32)* | 1494 | 2.04 | 0.443 *(0.269)* | 15.84 *(3.12)* | 178 *(81)* | 50 *(10)* | 29.02 *(98.27)* |
| **50% of Pull at Reduced Engine Speed—11th (C3) Gear** | | | | | | | | | |
| 67.38 *(50.24)* | 4804 *(21.37)* | 5.26 *(8.46)* | 1509 | 1.32 | 0.495 *(0.301)* | 14.17 *(2.79)* | 175 *(79)* | 50 *(10)* | 29.02 *(98.27)* |

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

**Dates of tests:** March 22 - April 20, 2007

**Manufacturer:** John Deere Tractor Works, 3500 East Donald Street, 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)*** 0.8432 **Fuel weight** 7.011 lbs/gal *(0.840 kg/l)* **Oil SAE** 15W-40 **API service classification** CF-4 **Transmission and hydraulic lubricant** John Deere Hy-Gard fluid **Front axle lubricant** John Deere Hy-Gard fluid **Total time engine was operated:** 30.0 hours

**ENGINE: Make** John Deere Diesel **Type** six cylinder vertical with turbocharger and air to air intercooler **Serial No.***PE6068L004297* **Crankshaft** lengthwise **Rated engine speed** 2100 **Bore and stroke** 4.19" x 5.00"*(106.5 mm x 127.0 mm)* **Compression ratio** 17.0 to 1 **Displacement** 414 cu in *(6788 ml)* **Starting system** 12 volt **Lubrication** pressure **Air cleaner** two paper elements and aspirator **Oil filter** one full flow cartridge **Oil cooler** engine coolant heat exchanger for crankcase oil, radiator for hydraulic and transmission oil **Fuel filter** one paper element and prestrainer **Fuel cooler** radiator for pump return fuel **Muffler** vertical **Cooling medium temperature control** 2 thermostats and variable speed fan

**ENGINE OPERATING PARAMETERS: Fuel rate:** 53.7 - 59.5 lb/h *(24.4 -27.0 kg/h)* **High idle:** 2175 - 2225 rpm **Turbo boost:** nominal 14.5-17.4 psi *(100-120 kPa)* as measured 16.3 psi *(112 kPa)*

**CHASSIS: Type** front wheel assist **Serial No.***RW7630A002258* **Tread width** rear 60.0" *(1524 mm)* to 109.2" *(2774 mm)* front 60.0" *(1524 mm)* to 88.0" *(2235 mm)* **Wheelbase** 112.5" *(2860 mm)* **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio with partial (4) range operator controlled power shift **Nominal travel speeds mph *(km/h)*** first 1.50 *(2.41)* second 1.80 *(2.90)* third 2.16 *(3.48)* fourth 2.65 *(4.26)* fifth 3.18 *(5.11)* sixth 3.83 *(6.16)* seventh 4.58 *(7.37)* eighth 5.06 *(8.14)* ninth 5.61 *(9.03)* tenth 6.09 *(9.80)* eleventh 7.29 *(11.73)* twelfth 8.93 *(14.37)* thirteenth 9.36 *(15.06)* fourteenth 11.27 *(18.14)* fifteenth 13.50 *(21.72)* sixteenth 13.86 *(22.31)* seventeenth 16.54 *(26.61)* eighteenth 16.70 *(26.87)* nineteenth 20.00 *(32.18)* twentieth 24.50 *(39.42)* reverse 1.57 *(2.52)*, 1.88 *(3.03)*, 2.26 *(3.63)*, 2.77 *(4.45)*, 3.31 *(5.33)*, 3.99 *(6.42)*, 4.78 *(7.69)*, 5.28 *(8.49)*, 5.85 *(9.42)*, 6.35 *(10.22)*, 7.61 *(12.24)*, 9.32 *(15.00)*, 9.77 *(15.72)*, 11.76 *(18.92)*, 14.09 *(22.67)*, 14.47 *(23.28)*, 17.26 *(27.77)*, 17.42 *(28.04)*, 20.87 *(33.58)*, 25.56 *(41.13)*

## DRAWBAR PERFORMANCE

### UNBALLASTED - FRONT DRIVE ENGAGED-1750 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)* |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 4th(A4)Gear | | | | |
| 102.62 *(76.52)* | 15874 *(70.61)* | 2.42 *(3.90)* | 2152 | 12.20 | 0.545 *(0.332)* | 12.86 *(2.53)* | 179 *(82)* | 41 *(5)* | 29.06 *(98.41)* |
| | | | | | 5th(B1)Gear | | | | |
| 120.60 *(89.93)* | 14980 *(66.64)* | 3.02 *(4.86)* | 2130 | 7.92 | 0.493 *(0.300)* | 14.22 *(2.80)* | 180 *(82)* | 45 *(7)* | 29.06 *(98.41)* |
| | | | | | 6th(B2) Gear | | | | |
| 133.14 *(99.28)* | 14582 *(64.87)* | 3.42 *(5.51)* | 1997 | 7.50 | 0.471 *(0.287)* | 14.87 *(2.93)* | 186 *(85)* | 46 *(8)* | 29.06 *(98.41)* |
| | | | | | 7th(B3)Gear | | | | |
| 140.23 *(104.57)* | 14089 *(62.67)* | 3.73 *(6.01)* | 1800 | 6.57 | 0.451 *(0.275)* | 15.54 *(3.06)* | 189 *(87)* | 46 *(8)* | 29.05 *(98.37)* |
| | | | | | 8th(C1)Gear | | | | |
| 143.69 *(107.15)* | 13252 *(58.95)* | 4.07 *(6.54)* | 1750 | 5.18 | 0.439 *(0.267)* | 15.95 *(3.14)* | 191 *(89)* | 47 *(8)* | 29.04 *(98.34)* |
| | | | | | 9th (B4)Gear | | | | |
| 143.13 *(106.73)* | 11766 *(52.34)* | 4.56 *(7.34)* | 1750 | 4.15 | 0.438 *(0.266)* | 16.02 *(3.16)* | 191 *(88)* | 47 *(8)* | 29.05 *(98.37)* |
| | | | | | 10th(C2) Gear | | | | |
| 143.45 *(106.97)* | 10804 *(48.06)* | 4.98 *(8.01)* | 1752 | 3.67 | 0.438 *(0.266)* | 16.00 *(3.15)* | 194 *(90)* | 48 *(9)* | 29.04 *(98.34)* |
| | | | | | 11th (C3)Gear | | | | |
| 145.73 *(108.67)* | 9094 *(40.45)* | 6.01 *(9.67)* | 1750 | 2.79 | 0.436 *(0.265)* | 16.09 *(3.17)* | 197 *(92)* | 48 *(9)* | 29.03 *(98.31)* |
| | | | | | 12th(C4) Gear | | | | |
| 143.94 *(107.34)* | 7270 *(32.34)* | 7.43 *(11.95)* | 1751 | 2.02 | 0.434 *(0.264)* | 16.17 *(3.18)* | 198 *(92)* | 52 *(11)* | 29.01 *(98.24)* |
| | | | | | 13th(D1) Gear | | | | |
| 142.82 *(106.50)* | 6889 *(30.65)* | 7.77 *(12.51)* | 1748 | 1.95 | 0.434 *(0.264)* | 16.14 *(3.18)* | 200 *(93)* | 51 *(11)* | 29.00 *(98.21)* |
| | | | | | 14th(D2) Gear | | | | |
| 143.48 *(106.99)* | 5716 *(25.43)* | 9.41 *(15.15)* | 1750 | 1.53 | 0.440 *(0.268)* | 15.93 *(3.14)* | 206 *(97)* | 51 *(11)* | 29.00 *(98.21)* |

| TRACTOR SOUND LEVEL WITH CAB | Front Wheel Drive Engaged dB(A) | Disengaged dB(A) |
|---|---|---|
| At no load in 7th (B3) gear | 68.3 | 68.3 |
| Transport speed - no load - 20th (E4) gear | | 72.4 |
| Bystander in 20th (E4) gear | | 83.1 |

| TIRES, BALLAST AND WEIGHT | With Ballast | Without Ballast |
|---|---|---|
| **Rear Tires** - No., size, ply & psi(*kPa*) | Four 480/80R42;***;10(*70*) | Two 480/80R42;***;17(*115*) |
| **Ballast** - Duals (total) | 1570 lb *(712 kg)* | None |
| - Cast Iron (total) | 775 lb *(351 kg)* | None |
| **Front Tires** - No., size, ply & psi(*kPa*) | Two 380/85R30;***;17(*115*) | Two 380/85R30;***;15(*105*) |
| **Ballast** - Liquid (total) | None | None |
| - Cast Iron (total) | 520 lb *(236 kg)* | None |
| **Height of Drawbar** | 18.0 in *(455 mm)* | 18.5 in(*470 mm*) |
| **Static Weight with operator** - Rear | 13100 lb *(5942 kg)* | 11010 lb(*4994 kg*) |
| - Front | 7055 lb *(3200 kg)* | 6280 lb(*2849 kg*) |
| - Total | 20155 lb (*9142 kg*) | 17290 lb(*7843 kg*) |

**Clutch** wet multiple disc hydraulically actuated by foot pedal **Brakes** wet multiple 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 1950 engine rpm **Unladen tractor mass** 17115 lb *(7763 kg)*

**REPAIRS AND ADJUSTMENTS**: No repairs or adjustments.

**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 134°F *(57°C)*. The pull in 3rd (A3) gear (ballasted tractor) was limited to avoid excessive tractor bouncing. The performance figures on this summary were taken from a test conducted under the OECD Code II test code procedure.

We, the undersigned, certify that this is a true and correct report of official Tractor Test No. **1893**, Nebraska Summary 560, July 2, 2007.

Roger M. Hoy
Director

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

# DRAWBAR PERFORMANCE
## BALLASTED - FRONT DRIVE ENGAGED - 1750 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(A3) Gear | | | | | |
| 108.11 *(80.62)* | 19755 *(87.87)* | 2.05 *(3.30)* | 2154 | 8.79 | 0.517 *(0.315)* | 13.55 *(2.67)* | 180 *(82)* | 54 *(12)* | 28.78 *(97.46)* |
| | | | | 4th(A4) Gear | | | | | |
| 122.10 *(91.05)* | 18396 *(81.83)* | 2.49 *(4.01)* | 2089 | 6.92 | 0.491 *(0.299)* | 14.28 *(2.81)* | 185 *(85)* | 55 *(13)* | 28.80 *(97.53)* |
| | | | | 5th (B1)Gear | | | | | |
| 136.31 *(101.64)* | 17813 *(79.24)* | 2.87 *(4.62)* | 1998 | 6.49 | 0.466 *(0.283)* | 15.05 *(2.96)* | 187 *(86)* | 60 *(16)* | 28.78 *(97.46)* |
| | | | | 6th(B2) Gear | | | | | |
| 140.33 *(104.65)* | 16073 *(71.49)* | 3.27 *(5.27)* | 1858 | 4.74 | 0.453 *(0.276)* | 15.46 *(3.05)* | 203 *(95)* | 68 *(20)* | 28.86 *(97.73)* |
| | | | | 7th (B3)Gear | | | | | |
| 145.01 *(108.14)* | 14517 *(64.57)* | 3.75 *(6.03)* | 1752 | 3.50 | 0.439 *(0.267)* | 15.95 *(3.14)* | 202 *(94)* | 67 *(19)* | 28.86 *(97.73)* |
| | | | | 8th (C1)Gear | | | | | |
| 145.20 *(108.28)* | 13105 *(58.29)* | 4.15 *(6.69)* | 1751 | 2.88 | 0.438 *(0.267)* | 15.99 *(3.15)* | 205 *(96)* | 72 *(22)* | 28.84 *(97.66)* |
| | | | | 9th (B4)Gear | | | | | |
| 145.94 *(108.83)* | 11800 *(52.49)* | 4.64 *(7.46)* | 1751 | 2.40 | 0.435 *(0.265)* | 16.12 *(3.18)* | 204 *(96)* | 71 *(22)* | 28.85 *(97.70)* |
| | | | | 10th (C2)Gear | | | | | |
| 145.66 *(108.62)* | 10853 *(48.28)* | 5.03 *(8.10)* | 1748 | 2.15 | 0.436 *(0.265)* | 16.07 *(3.17)* | 205 *(96)* | 74 *(23)* | 28.84 *(97.66)* |
| | | | | 11th (C3)Gear | | | | | |
| 145.21 *(108.29)* | 8968 *(39.89)* | 6.07 *(9.77)* | 1751 | 1.60 | 0.444 *(0.270)* | 15.79 *(3.11)* | 205 *(96)* | 74 *(23)* | 28.83 *(97.63)* |
| | | | | 12th (C4)Gear | | | | | |
| 142.58 *(106.32)* | 7167 *(31.88)* | 7.46 *(12.01)* | 1748 | 1.18 | 0.449 *(0.273)* | 15.63 *(3.08)* | 205 *(96)* | 75 *(24)* | 28.83 *(97.63)* |
| | | | | 13th (D1)Gear | | | | | |
| 142.04 *(105.92)* | 6788 *(30.20)* | 7.85 *(12.63)* | 1753 | 1.07 | 0.453 *(0.275)* | 15.49 *(3.05)* | 205 *(96)* | 75 *(24)* | 28.82 *(97.60)* |
| | | | | 14th(D2)Gear | | | | | |
| 141.46 *(105.49)* | 5603 *(24.93)* | 9.47 *(15.24)* | 1751 | 0.77 | 0.456 *(0.277)* | 15.38 *(3.03)* | 205 *(96)* | 76 *(24)* | 28.82 *(97.60)* |

# DRAWBAR PERFORMANCE

## BALLASTED - FRONT DRIVE DISENGAGED

### FUEL CONSUMPTION CHARACTERISTICS

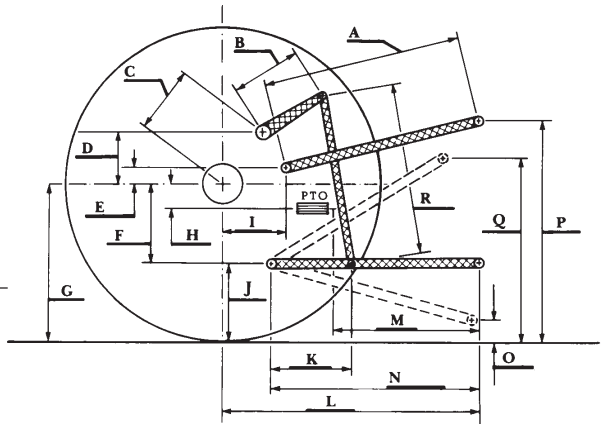
| Power Hp *(kW)* | Drawbar pull lbs *(kN)* | Speed mph *(km/h)* | Crank-shaft speed rpm | Slip % | Fuel Consumption lb/hp.hr *(kg/kW.h)* | Hp.hr/gal *(kW.h/l)* | Temp.°F *(°C)* cool-ing med | Air dry bulb | Barom. inch Hg *(kPa)* |
|---|---|---|---|---|---|---|---|---|---|
| **Maximum Power—7th (B3) Gear** | | | | | | | | | |
| 129.02 *(96.21)* | 10702 *(47.60)* | 4.52 *(7.28)* | 2102 | 2.87 | 0.461 *(0.280)* | 15.21 *(3.00)* | 195 *(91)* | 65 *(18)* | 28.86 *(97.73)* |
| **75% of Pull at Maximum Power—7th (B3) Gear** | | | | | | | | | |
| 100.04 *(74.60)* | 8016 *(35.66)* | 4.68 *(7.53)* | 2157 | 2.04 | 0.502 *(0.305)* | 13.97 *(2.75)* | 180 *(82)* | 61 *(16)* | 28.78 *(97.46)* |
| **50% of Pull at Maximum Power—7th (B3) Gear** | | | | | | | | | |
| 67.63 *(50.43)* | 5342 *(23.76)* | 4.75 *(7.64)* | 2172 | 1.26 | 0.608 *(0.370)* | 11.53 *(2.27)* | 174 *(79)* | 62 *(17)* | 28.79 *(97.49)* |
| **75% of Pull at Reduced Engine Speed—10th (C2) Gear** | | | | | | | | | |
| 100.21 *(74.73)* | 8020 *(35.67)* | 4.69 *(7.54)* | 1625 | 2.01 | 0.462 *(0.281)* | 15.17 *(2.99)* | 179 *(82)* | 65 *(18)* | 28.80 *(97.53)* |
| **50% of Pull at Reduced Engine Speed—10th (C2) Gear** | | | | | | | | | |
| 67.67 *(50.46)* | 5332 *(23.72)* | 4.76 *(7.66)* | 1638 | 1.27 | 0.529 *(0.322)* | 13.26 *(2.61)* | 177 *(81)* | 63 *(17)* | 28.79 *(97.49)* |

### MAXIMUM POWER IN SELECTED GEARS

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 4th(A4) Gear | | | | | | | | | |
| 101.67 *(75.82)* | 15734 *(69.99)* | 2.42 *(3.90)* | 2153 | 12.09 | 0.540 *(0.328)* | 12.98 *(2.56)* | 181 *(83)* | 53 *(12)* | 28.80 *(97.53)* |
| 5th(B1) Gear | | | | | | | | | |
| 119.90 *(89.41)* | 14817 *(65.91)* | 3.03 *(4.88)* | 2144 | 7.81 | 0.500 *(0.304)* | 14.02 *(2.76)* | 183 *(84)* | 58 *(14)* | 28.79 *(97.49)* |
| 6th(B2) Gear | | | | | | | | | |
| 126.29 *(94.17)* | 12677 *(56.39)* | 3.74 *(6.01)* | 2102 | 3.89 | 0.475 *(0.289)* | 14.76 *(2.91)* | 197 *(92)* | 65 *(18)* | 28.86 *(97.73)* |
| 7th(B3) Gear | | | | | | | | | |
| 129.02 *(96.21)* | 10702 *(47.60)* | 4.52 *(7.28)* | 2102 | 2.87 | 0.461 *(0.280)* | 15.21 *(3.00)* | 195 *(91)* | 65 *(18)* | 28.86 *(97.73)* |
| 8th(C1) Gear | | | | | | | | | |
| 127.56 *(95.12)* | 9532 *(42.40)* | 5.02 *(8.08)* | 2105 | 2.43 | 0.468 *(0.285)* | 14.98 *(2.95)* | 199 *(93)* | 72 *(22)* | 28.84 *(97.66)* |
| 9th(B4) Gear | | | | | | | | | |
| 126.99 *(94.69)* | 8535 *(37.96)* | 5.58 *(8.98)* | 2101 | 2.09 | 0.474 *(0.288)* | 14.79 *(2.91)* | 199 *(93)* | 70 *(21)* | 28.85 *(97.70)* |
| 10th(C2) Gear | | | | | | | | | |
| 126.52 *(94.35)* | 7824 *(34.80)* | 6.06 *(9.76)* | 2100 | 1.88 | 0.471 *(0.286)* | 14.89 *(2.93)* | 199 *(93)* | 73 *(23)* | 28.84 *(97.66)* |
| 11th(C3) Gear | | | | | | | | | |
| 125.84 *(93.84)* | 6471 *(28.78)* | 7.29 *(11.74)* | 2099 | 1.41 | 0.484 *(0.294)* | 14.49 *(2.85)* | 199 *(93)* | 74 *(23)* | 28.83 *(97.63)* |
| 12th(C4) Gear | | | | | | | | | |
| 123.30 *(91.94)* | 5157 *(22.94)* | 8.97 *(14.43)* | 2098 | 1.04 | 0.490 *(0.298)* | 14.31 *(2.82)* | 199 *(93)* | 74 *(23)* | 28.83 *(97.63)* |

## THREE POINT HITCH PERFORMANCE (OECD Static Test)

| | | |
|---|---|---|
| CATEGORY: III | | |
| Quick Attach: Yes | | |
| Lift cylinders: | 2 x 90 mm | 2x100 mm |
| Maximum force exerted through whole range: | 10987 lbs *(48.9 kN)* | 15574 lbs *(69.3 kN)* |
| | 45 cc pump | 63 cc pump |
| i) Sustained pressure at compensator cutoff: | 2962 psi *(204 bar)* | 2895 psi *(200 bar)* |
| | **three outlet sets combined** | |
| ii) Pump delivery rate at minimum pressure and rated engine speed: | 32.2 GPM*(121.9 l/min)* | 45.0 GPM *(170.3 l/min)* |
| iii)Pump delivery rate at maximum hydraulic power: | 30.0 GPM*(113.6 l/min)* | 43.6 GPM *(165.0 l/min)* |
| Delivery pressure: | 2774 psi *(191 bar)* | 2591 psi *(179 bar)* |
| Power: | 48.6 HP *(36.2 kW)* | 65.9 HP *(49.1 kW)* |
| | **single outlet set** | |
| ii) Pump delivery rate at minimum pressure and rated engine speed: | 31.8 GPM*(120.4 l/min)* | 41.4 GPM *(156.7 l/min)* |
| iii)Pump delivery rate at maximum hydraulic power: | 30.8 GPM*(116.6 l/min)* | 38.4 GPM *(145.4 l/min)* |
| Delivery pressure: | 2364 psi *(163 bar)* | 1921 psi *(132 bar)* |
| Power: | 42.5 HP *(31.7 kW)* | 43.0 HP *(32.1 kW)* |




## THREE POINT HITCH PERFORMANCE

| | | | | | |
|---|---|---|---|---|---|
| Observed maximum pressure psi. *(bar)* | 2850 *(197)* | | | | |
| Location: | lift cylinders | | | | |
| Hydraulic oil temperature: °F *(°C)* | 144 *(62)* | | | | |
| Location: | hydraulic sump | | | | |
| Category: | III | | | | |
| Quick attach: | Yes | | | | |
| **SAE Static Test**—System pressure 2610 psi *(180 Bar)* with lift cylinders 2 x 90 mm | | | | | |
| Hitch point distance to ground level in. *(mm)* | 8.1 *(205)* | 16.1 *(410)* | 24.2 *(614)* | 32.2 *(818)* | 40.2 *(1020)* |
| Lift force on frame lb | 13167 | 13413 | 13297 | 12171 | 10537 |
| " " " " " " " *(kN)* | *(58.6)* | *(59.7)* | *(59.1)* | *(54.1)* | *(46.9)* |
| with lift cylinders 2 x 100 mm | | | | | |
| Hitch point distance to ground level in. *(mm)* | 7.9 *(201)* | 16.1 *(409)* | 24.0 *(609)* | 31.9 *(810)* | 40.0 *(1017)* |
| Lift force on frame lb | 18660 | 18544 | 17958 | 16558 | 14432 |
| " " " " " " " *(kN)* | *(83.0)* | *(82.5)* | *(79.9)* | *(73.7)* | *(64.2)* |

### HITCH DIMENSIONS AS TESTED—NO LOAD

| | OECD test | | SAE test | |
|---|---|---|---|---|
| | inch | *mm* | inch | *mm* |
| A | 29.6 | *752* | 26.4 | *670* |
| B | 16.7 | *425* | 16.7 | *425* |
| C | 25.6 | *650* | 25.6 | *650* |
| D | 23.9 | *608* | 23.9 | *608* |
| E | 11.1 | *283* | 7.5 | *190* |
| F | 12.7 | *323* | 12.7 | *323* |
| G | 35.6 | *905* | 35.6 | *905* |
| H | 4.7 | *120* | 4.7 | *120* |
| I | 20.9 | *530* | 20.6 | *523* |
| J | 22.9 | *582* | 22.9 | *582* |
| K | 28.1 | *713* | 27.8 | *706* |
| L | 51.2 | *1300* | 47.4 | *1204* |
| *L' | -- | -- | 50.9 | *1293* |
| M | 24.7 | *628* | 20.9 | *532* |
| N | 44.1 | *1120* | 40.3 | *1024* |
| O | 9.0 | *230* | 8.0 | *203* |
| P | 50.2 | *1275* | 45.2 | *1149* |
| Q | 40.4 | *1025* | 37.6 | *954* |
| R | 38.4 | *975* | 39.8 | *1010* |

*L' to Quick Attach ends

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