

# NEBRASKA OECD TRACTOR TEST 2024-SUMMARY 823

## JOHN DEERE 7280R IVT DIESEL INFINITELY VARIABLE TRANSMISSION

### POWER TAKE-OFF PERFORMANCE

| Power<br>HP<br>(kW)                             | Crank<br>shaft<br>speed<br>rpm | Gal/hr<br>(l/h)  | lb/hp.hr<br>(kg/kW.h) | Hp.hr/gal<br>(kW.h/l) | Mean Atmospheric<br>Conditions |
|---|--------------------------------|------------------|-----------------------|-----------------------|--------------------------------|
| <b>MAXIMUM POWER AND FUEL CONSUMPTION</b>       |                                |                  |                       |                       |                                |
| <b>Rated Engine Speed—(PTO speed—1077 rpm)</b>  |                                |                  |                       |                       |                                |
| 238.00<br>(177.48)                              | 2100                           | 13.66<br>(51.70) | 0.404<br>(0.246)      | 17.43<br>(3.43)       |                                |
| <b>Standard Power Take-off Speed (1000 rpm)</b> |                                |                  |                       |                       |                                |
| 267.27<br>(199.30)                              | 1950                           | 14.85<br>(56.22) | 0.391<br>(0.238)      | 18.00<br>(3.55)       |                                |
| <b>Maximum Power (1 hour)</b>                   |                                |                  |                       |                       |                                |
| 275.90<br>(205.74)                              | 1751                           | 14.94<br>(56.57) | 0.381<br>(0.232)      | 18.46<br>(3.64)       |                                |

### VARYING POWER AND FUEL CONSUMPTION

|                    |      |                  |                   |                 |                       |
|--------------------|------|------------------|-------------------|-----------------|-----------------------|
| 238.00<br>(177.48) | 2100 | 13.66<br>(51.70) | 0.404<br>(0.246)  | 17.43<br>(3.43) | Air temperature       |
| 207.30<br>(154.58) | 2154 | 12.33<br>(46.68) | 0.418<br>(0.255)  | 16.81<br>(3.31) | 73°F (23°C)           |
| 155.75<br>(116.14) | 2163 | 10.18<br>(38.54) | 0.460<br>(0.280)  | 15.30<br>(3.01) | Relative humidity     |
| 104.15<br>(77.66)  | 2175 | 7.89<br>(29.87)  | 0.533<br>(0.324)  | 13.20<br>(2.60) | 34%                   |
| 52.25<br>(38.96)   | 2186 | 5.47<br>(20.70)  | 0.736<br>(0.448)  | 9.55<br>(1.88)  | Barometer             |
| 2.00<br>(1.49)     | 2192 | 3.37<br>(12.77)  | 11.860<br>(7.214) | 0.59<br>(0.12)  | 28.47" Hg (96.41 kPa) |

Maximum torque - 882 lb.-ft. (1196 Nm) at 1601 rpm  
 Maximum torque rise - 48.3%  
 Torque rise at 1701 engine rpm - 43%  
 Power increase at 1751 engine rpm - 15.9%

### DRAWBAR PERFORMANCE UNBALLASTED - FRONT DRIVE ENGAGED FUEL CONSUMPTION CHARACTERISTICS

| Power<br>Hp<br>(kW)   | Drawbar<br>pull<br>lbs<br>(kN) | Speed<br>mph<br>(km/h) | Crank-<br>shaft<br>speed<br>rpm | Slip<br>% | Fuel Consumption<br>lb/hp.hr<br>(kg/kW.h) | Hp.hr/gal<br>(kW.h/l) | Temp.°F (°C)<br>cool-<br>ing<br>med | Air<br>dry<br>bulb | Barom.<br>inch<br>Hg<br>(kPa) |
|---|--------------------------------|------------------------|---------------------------------|-----------|---|-----------------------|-------------------------------------|--------------------|-------------------------------|
| <b>Maximum Power—5.6 mph (9.0 km/h)-Manual Mode</b>                     |                                |                        |                                 |           |   |                       |                                     |                    |                               |
| 198.81<br>(148.25)  | 13982<br>(62.20)               | 5.33<br>(8.58)         | 2099                            | 2.2       | 0.489<br>(0.298)                          | 14.38<br>(2.83)       | 215<br>(102)                        | 75<br>(24)         | 28.43<br>(96.28)              |
| <b>75% of Pull at Maximum Power—5.6 mph (9.0 km/h)-Manual Mode</b>      |                                |                        |                                 |           |   |                       |                                     |                    |                               |
| 153.26<br>(114.28)  | 10408<br>(46.29)               | 5.52<br>(8.88)         | 2158                            | 1.6       | 0.525<br>(0.320)                          | 13.39<br>(2.64)       | 218<br>(103)                        | 83<br>(28)         | 28.43<br>(96.28)              |
| <b>50% of Pull at Maximum Power—5.6 mph (9.0 km/h)-Manual Mode</b>      |                                |                        |                                 |           |   |                       |                                     |                    |                               |
| 103.23<br>(76.98)   | 6952<br>(30.92)                | 5.57<br>(8.96)         | 2170                            | 1.0       | 0.616<br>(0.374)                          | 11.43<br>(2.25)       | 217<br>(103)                        | 84<br>(29)         | 28.43<br>(96.28)              |
| <b>75% of Pull at Reduced Engine Speed—5.6 mph (9.0 km/h)-Auto Mode</b> |                                |                        |                                 |           |   |                       |                                     |                    |                               |
| 153.16<br>(114.21)  | 10460<br>(46.53)               | 5.49<br>(8.84)         | 1545                            | 1.6       | 0.457<br>(0.278)                          | 15.38<br>(3.03)       | 216<br>(102)                        | 83<br>(28)         | 28.43<br>(96.28)              |
| <b>50% of Pull at Reduced Engine Speed—5.6 mph (9.0 km/h)-Auto Mode</b> |                                |                        |                                 |           |   |                       |                                     |                    |                               |
| 103.48<br>(77.16)   | 7028<br>(31.26)                | 5.52<br>(8.88)         | 1348                            | 1.0       | 0.471<br>(0.286)                          | 14.94<br>(2.94)       | 208<br>(98)                         | 83<br>(28)         | 28.43<br>(96.28)              |

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

**Dates of tests:** April 27-May 15, 2012

**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) 0.8448 Fuel weight 7.034 lbs/gal (0.843 kg/l) Oil SAE 15W-40 API service classification CJ-4 Transmission and hydraulic lubricant John Deere Hy-Gard fluid Front axle lubricant John Deere Hy-Gard fluid Total time engine was operated: 29.0 hours

**ENGINE:** Make John Deere Diesel Type six cylinder vertical with turbocharger and air to air aftercooler Serial No. \*RG6090R015904\* Crankshaft lengthwise Rated engine speed 2100 Bore and stroke 4.661 x 5.354" (118.4 mm x 136.0 mm) Compression ratio 16.2 to 1 Displacement 548 cu in (8984 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 thermostat and variable speed fan

**ENGINE OPERATING PARAMETERS:** Fuel rate: 91.2 - 98.8 lb/h (41.4 - 44.8 kg/h) High idle: 2150 - 2250 rpm Turbo boost: nominal 21.8 - 24.7 psi (150 - 170 kPa) as measured 23.3 psi (161 kPa)

**CHASSIS:** Type front wheel assist with duals Serial No. \*1RW7280RHCD005183\* Tread width rear 60.0" (1524 mm) to 128.9" (3272 mm) front 60.0" (1524 mm) to 88.0" (2235 mm) Wheelbase 115.2" (2925 mm) Hydraulic control system direct engine drive Transmission infinitely variable with two mechanical ranges and automatic shifting between ranges. Nominal travel speeds mph (km/h) forward - 0-25.0 mph (0-40 km/h), reverse - 0-12.4 mph (0-20 km/h) Clutch a foot pedal controls the hydrostatic oil flow Brakes wet multiple disc hydraulically operated by two foot pedals that can be locked together Steering hydrostatic Power take-off 540 rpm at 1958 engine rpm or 1000 rpm at 1950 engine rpm Unladen tractor mass 23760 lb (10777 kg)

## DRAWBAR PERFORMANCE

### UNBALLASTED - FRONT DRIVE ENGAGED-2100 RPM MAXIMUM POWER AT SELECTED TRAVEL SPEEDS

| Power<br>Hp<br>(kW) | Drawbar<br>pull<br>lbs<br>(kN) | Speed<br>mph<br>(km/h) | Crank-<br>shaft<br>speed<br>rpm | Slip<br>%           | Fuel Consumption<br>lb/hp.hr<br>(kg/kW.h) | Temp. °F (°C)<br>cool-<br>ing<br>med | Air<br>dry<br>bulb | Barom.<br>inch<br>Hg<br>(kPa) |                  |
|---------------------|--------------------------------|------------------------|---------------------------------|---------------------|---|--------------------------------------|--------------------|-------------------------------|------------------|
|                     |                                |                        |                                 | 2.8 mph (4.5 km/h)  |   |                                      |                    |                               |                  |
| 162.16<br>(120.92)  | 23656<br>(105.22)              | 2.57<br>(4.14)         | 2154                            | 9.8                 | 0.550<br>(0.334)                          | 12.80<br>(2.52)                      | 217<br>(103)       | 73<br>(23)                    | 28.57<br>(96.75) |
|                     |                                |                        |                                 | 3.9 mph (6.2 km/h)  |   |                                      |                    |                               |                  |
| 192.81<br>(143.78)  | 20345<br>(90.50)               | 3.56<br>(5.72)         | 2101                            | 5.2                 | 0.498<br>(0.303)                          | 14.12<br>(2.78)                      | 217<br>(103)       | 75<br>(24)                    | 28.57<br>(96.75) |
|                     |                                |                        |                                 | 4.3 mph (7.0 km/h)  |   |                                      |                    |                               |                  |
| 196.24<br>(146.33)  | 18081<br>(80.43)               | 4.07<br>(6.55)         | 2100                            | 4.0                 | 0.494<br>(0.301)                          | 14.23<br>(2.80)                      | 219<br>(104)       | 79<br>(26)                    | 28.57<br>(96.75) |
|                     |                                |                        |                                 | 4.7 mph (7.6 km/h)  |   |                                      |                    |                               |                  |
| 195.50<br>(145.78)  | 16448<br>(73.16)               | 4.46<br>(7.17)         | 2101                            | 3.2                 | 0.497<br>(0.302)                          | 14.15<br>(2.79)                      | 210<br>(99)        | 80<br>(27)                    | 28.56<br>(96.72) |
|                     |                                |                        |                                 | 5.1 mph (8.2 km/h)  |   |                                      |                    |                               |                  |
| 196.46<br>(146.50)  | 15297<br>(68.04)               | 4.82<br>(7.75)         | 2100                            | 2.8                 | 0.496<br>(0.302)                          | 14.18<br>(2.79)                      | 211<br>(99)        | 80<br>(27)                    | 28.56<br>(96.72) |
|                     |                                |                        |                                 | 5.6 mph (9.0 km/h)  |   |                                      |                    |                               |                  |
| 198.81<br>(148.25)  | 13982<br>(62.20)               | 5.33<br>(8.58)         | 2099                            | 2.2                 | 0.489<br>(0.298)                          | 14.38<br>(2.83)                      | 215<br>(102)       | 75<br>(24)                    | 28.43<br>(96.28) |
|                     |                                |                        |                                 | 6.2 mph (10.0 km/h) |   |                                      |                    |                               |                  |
| 199.63<br>(148.86)  | 12589<br>(56.00)               | 5.95<br>(9.57)         | 2099                            | 1.9                 | 0.484<br>(0.295)                          | 14.53<br>(2.86)                      | 217<br>(103)       | 71<br>(21)                    | 28.41<br>(96.21) |
|                     |                                |                        |                                 | 6.8 mph (11.0 km/h) |   |                                      |                    |                               |                  |
| 201.46<br>(150.22)  | 11519<br>(51.24)               | 6.56<br>(10.56)        | 2101                            | 1.7                 | 0.482<br>(0.293)                          | 14.58<br>(2.87)                      | 217<br>(103)       | 74<br>(23)                    | 28.43<br>(96.28) |
|                     |                                |                        |                                 | 7.5 mph (12.0 km/h) |   |                                      |                    |                               |                  |
| 200.33<br>(149.38)  | 10517<br>(46.78)               | 7.14<br>(11.49)        | 2101                            | 1.7                 | 0.483<br>(0.294)                          | 14.58<br>(2.87)                      | 219<br>(104)       | 71<br>(26)                    | 28.56<br>(96.72) |
|                     |                                |                        |                                 | 8.1 mph (13.0 km/h) |   |                                      |                    |                               |                  |
| 200.99<br>(149.87)  | 9744<br>(43.34)                | 7.74<br>(12.45)        | 2100                            | 1.6                 | 0.481<br>(0.293)                          | 14.62<br>(2.88)                      | 219<br>(104)       | 80<br>(27)                    | 28.55<br>(96.68) |
|                     |                                |                        |                                 | 8.7 mph (14.0 km/h) |   |                                      |                    |                               |                  |
| 203.13<br>(151.47)  | 9116<br>(40.55)                | 8.36<br>(13.45)        | 2100                            | 1.5                 | 0.483<br>(0.294)                          | 14.57<br>(2.87)                      | 218<br>(103)       | 81<br>(27)                    | 28.55<br>(96.68) |

### TRACTOR SOUND LEVEL WITH CAB

|  | Front Wheel Drive<br>Engaged<br>dB(A) | Disengaged<br>dB(A) |
|--|---------------------------------------|---------------------|
| At no load at 4.6 mph (7.5 km/h) engine speed - 2190 rpm | 71.1                                  | 71.0                |
| At no load at 4.6 mph (7.5 km/h) engine speed - 1200 rpm | 63.4                                  | 63.3                |
| Transport speed - no load - manual mode                  |                                       | 73.1                |
| Transport speed - no load - Full Automode                |                                       | 70.4                |
| Bystander  |                                       | 82.9                |

### TIRES, BALLAST AND WEIGHT

|   | With Ballast               | Without Ballast           |
|---|----------------------------|---------------------------|
| <b>Rear Tires</b> - No., size, ply & psi (kPa)  | Four 480/80R46;***;16(110) | Four 480/80R46;***;12(85) |
| <b>Ballast</b> - Liquid (total)                 | None                       | None                      |
| - Cast Iron (total)                             | 4980 lb (2259 kg)          | None                      |
| <b>Front Tires</b> - No., size, ply & psi (kPa) | Two 16.9R30;***;32(220)    | Two 16.9R30;***;18(125)   |
| <b>Ballast</b> - Liquid (total)                 | None                       | None                      |
| - Cast Iron (total)                             | 2360 lb (1070 kg)          | None                      |
| <b>Height of Drawbar</b>                        | 18.5 in (470 mm)           | 19.0 in (485 mm)          |
| <b>Static Weight with operator</b> - Rear       | 19825 lb (8992 kg)         | 15675 lb (7110 kg)        |
| - Front   | 11450 lb (5194 kg)         | 8260 lb (3747 kg)         |
| - Total   | 31275 lb (14186 kg)        | 23935 lb (10857 kg)       |

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

**NOTE 1:** During testing the engine was operated for 29.0 hours. During this period, the tractor experienced one active exhaust filter cleaning while operated in Auto Filter Cleaning Mode. This occurred after 25.0 hours of operation.

**NOTE 2:** The manufacturer declared that the active exhaust filter cleanings consume an average of 0.04 gal/hr (0.15 l/hr) across total tractor use. Fuel consumed during the active exhaust filter cleanings will normally be less than 1% of the total fuel consumed. The manufacturer declared that no active exhaust filter cleanings occurred during 12 hours of continuous operation of the tractor in the Auto Filter Cleaning Mode at 30% loading and the engine speed at which the maximum torque occurs.

**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 130°F (54°C). The pull was limited to avoid excessive tractor power hop. The performance figures on this summary were taken from a test conducted under the OECD Code 2 test procedure.

We, the undersigned, certify that this is a true and correct report of official Tractor Test No. **2024**, Nebraska Summary 823, October 2, 2012.

Roger M. Hoy  
Director

M.A. Hanna  
P.J. Jasa  
J.D. Luck  
Board of Tractor Test Engineers

**DRAWBAR PERFORMANCE**  
**UNBALLASTED - FRONT DRIVE ENGAGED - 1750 RPM**  
**MAXIMUM POWER AT SELECTED TRAVEL SPEEDS**

| Power<br>Hp<br>(kW) | Drawbar<br>pull<br>lbs<br>(kN) | Speed<br>mph<br>(km/h) | Crank-<br>shaft<br>speed<br>rpm | Slip<br>% | Fuel Consumption<br>lb/hp.hr<br>(kg/kW.h) | Hp.hr/gal<br>(kW.h/l) | Temp. °F(°C)<br>cool-<br>ing<br>med | Air<br>dry<br>bulb | Barom.<br>inch<br>Hg<br>(kPa) |
|---------------------|--------------------------------|------------------------|---------------------------------|-----------|---|-----------------------|-------------------------------------|--------------------|-------------------------------|
|                     |                                |                        |                                 |           | 2.9 mph (4.6 km/h)                        |                       |                                     |                    |                               |
| 164.14<br>(122.40)  | 23673<br>(105.30)              | 2.60<br>(4.18)         | 2154                            | 8.7       | 0.540<br>(0.328)                          | 13.04<br>(2.57)       | 216<br>(102)                        | 71<br>(22)         | 28.57<br>(96.75)              |
|                     |                                |                        |                                 |           | 3.9 mph (6.2 km/h)                        |                       |                                     |                    |                               |
| 198.63<br>(148.11)  | 22020<br>(97.95)               | 3.38<br>(5.44)         | 2041                            | 7.3       | 0.510<br>(0.310)                          | 13.80<br>(2.72)       | 219<br>(104)                        | 77<br>(25)         | 28.56<br>(96.72)              |
|                     |                                |                        |                                 |           | 4.3 mph (7.0 km/h)                        |                       |                                     |                    |                               |
| 209.07<br>(155.90)  | 21393<br>(95.16)               | 3.67<br>(5.90)         | 1933                            | 6.3       | 0.507<br>(0.309)                          | 13.86<br>(2.73)       | 206<br>(96)                         | 80<br>(27)         | 28.57<br>(96.75)              |
|                     |                                |                        |                                 |           | 4.7 mph (7.6 km/h)                        |                       |                                     |                    |                               |
| 215.33<br>(160.57)  | 20659<br>(91.90)               | 3.91<br>(6.28)         | 1888                            | 5.6       | 0.495<br>(0.301)                          | 14.20<br>(2.80)       | 212<br>(100)                        | 79<br>(26)         | 28.56<br>(96.72)              |
|                     |                                |                        |                                 |           | 5.1 mph (8.2 km/h)                        |                       |                                     |                    |                               |
| 223.08<br>(166.35)  | 19865<br>(88.36)               | 4.21<br>(6.78)         | 1871                            | 4.5       | 0.478<br>(0.291)                          | 14.70<br>(2.90)       | 219<br>(104)                        | 81<br>(27)         | 28.44<br>(96.31)              |
|                     |                                |                        |                                 |           | 5.6 mph (9.0 km/h)                        |                       |                                     |                    |                               |
| 224.01<br>(167.04)  | 18768<br>(83.48)               | 4.48<br>(7.20)         | 1785                            | 3.7       | 0.478<br>(0.291)                          | 14.71<br>(2.90)       | 205<br>(96)                         | 76<br>(24)         | 28.42<br>(96.24)              |
|                     |                                |                        |                                 |           | 6.2 mph (10.0 km/h)                       |                       |                                     |                    |                               |
| 229.13<br>(170.86)  | 17580<br>(78.20)               | 4.89<br>(7.87)         | 1750                            | 3.1       | 0.465<br>(0.283)                          | 15.13<br>(2.98)       | 218<br>(103)                        | 72<br>(22)         | 28.41<br>(96.21)              |
|                     |                                |                        |                                 |           | 6.8 mph (11.0 km/h)                       |                       |                                     |                    |                               |
| 228.29<br>(170.24)  | 15797<br>(70.27)               | 5.42<br>(8.72)         | 1751                            | 2.6       | 0.470<br>(0.286)                          | 14.96<br>(2.95)       | 208<br>(98)                         | 74<br>(23)         | 28.43<br>(96.28)              |
|                     |                                |                        |                                 |           | 7.5 mph (12.0 km/h)                       |                       |                                     |                    |                               |
| 230.36<br>(171.78)  | 14626<br>(65.06)               | 5.91<br>(9.50)         | 1750                            | 2.5       | 0.461<br>(0.281)                          | 15.25<br>(3.00)       | 211<br>(99)                         | 80<br>(27)         | 28.55<br>(96.68)              |
|                     |                                |                        |                                 |           | 8.1 mph (13.0 km/h)                       |                       |                                     |                    |                               |
| 234.79<br>(175.08)  | 13751<br>(61.17)               | 6.41<br>(10.31)        | 1751                            | 2.4       | 0.456<br>(0.277)                          | 15.44<br>(3.04)       | 219<br>(104)                        | 81<br>(27)         | 28.55<br>(96.68)              |
|                     |                                |                        |                                 |           | 8.7 mph (14.0 km/h)                       |                       |                                     |                    |                               |
| 234.92<br>(175.18)  | 12744<br>(56.69)               | 6.91<br>(11.12)        | 1750                            | 2.2       | 0.456<br>(0.277)                          | 15.43<br>(3.04)       | 217<br>(103)                        | 80<br>(27)         | 28.55<br>(96.68)              |
|                     |                                |                        |                                 |           | 9.4 mph (15.2 km/h)                       |                       |                                     |                    |                               |
| 236.45<br>(176.32)  | 11794<br>(52.46)               | 7.52<br>(12.10)        | 1750                            | 2.0       | 0.453<br>(0.275)                          | 15.54<br>(3.06)       | 219<br>(104)                        | 80<br>(27)         | 28.55<br>(96.68)              |
|                     |                                |                        |                                 |           | 10.2 mph (16.4 km/h)                      |                       |                                     |                    |                               |
| 239.43<br>(178.54)  | 11056<br>(49.18)               | 8.12<br>(13.07)        | 1750                            | 1.8       | 0.445<br>(0.271)                          | 15.79<br>(3.11)       | 219<br>(104)                        | 80<br>(27)         | 28.54<br>(96.65)              |



**DRAWBAR PERFORMANCE**  
**BALLASTED - FRONT DRIVE ENGAGED - 1750 RPM**  
**MAXIMUM POWER AT SELECTED TRAVEL SPEEDS**

| Power<br>Hp<br>(kW)  | Drawbar<br>pull<br>lbs<br>(kN) | Speed<br>mph<br>(km/h) | Crank-<br>shaft<br>speed<br>rpm | Slip<br>% | Fuel Consumption<br>lb/hp.hr<br>(kg/kW.h) | Fuel Consumption<br>Hp.hr/gal<br>(kW.h/l) | Temp. °F(°C)<br>cool-<br>ing<br>med | Air<br>dry<br>bulb | Barom.<br>inch<br>Hg<br>(kPa) |
|----------------------|--------------------------------|------------------------|---------------------------------|-----------|---|---|-------------------------------------|--------------------|-------------------------------|
| 2.5 mph (4.0 km/h)   |                                |                        |                                 |           |   |   |                                     |                    |                               |
| 169.60<br>(126.47)   | 30438<br>(135.39)              | 2.09<br>(3.36)         | 2112                            | 14.2      | 0.566<br>(0.344)                          | 12.42<br>(2.45)                           | 216<br>(102)                        | 57<br>(14)         | 28.88<br>(97.80)              |
| 3.1 mph (5.0 km/h)   |                                |                        |                                 |           |   |   |                                     |                    |                               |
| 201.15<br>(150.00)   | 29361<br>(130.60)              | 2.57<br>(4.13)         | 1987                            | 10.3      | 0.518<br>(0.315)                          | 13.59<br>(2.68)                           | 218<br>(103)                        | 61<br>(16)         | 28.87<br>(97.77)              |
| 3.9 mph (6.2 km/h)   |                                |                        |                                 |           |   |   |                                     |                    |                               |
| 219.16<br>(163.42)   | 27458<br>(122.14)              | 2.99<br>(4.81)         | 1810                            | 7.2       | 0.483<br>(0.294)                          | 14.57<br>(2.87)                           | 218<br>(103)                        | 62<br>(17)         | 28.86<br>(97.73)              |
| 4.3 mph (7.0 km/h)   |                                |                        |                                 |           |   |   |                                     |                    |                               |
| 224.66<br>(167.53)   | 25171<br>(111.96)              | 3.35<br>(5.38)         | 1750                            | 5.5       | 0.470<br>(0.286)                          | 14.97<br>(2.95)                           | 218<br>(103)                        | 62<br>(17)         | 28.87<br>(97.77)              |
| 4.7 mph (7.6 km/h)   |                                |                        |                                 |           |   |   |                                     |                    |                               |
| 227.36<br>(169.54)   | 23330<br>(103.78)              | 3.66<br>(5.88)         | 1750                            | 4.6       | 0.465<br>(0.283)                          | 15.12<br>(2.98)                           | 218<br>(103)                        | 63<br>(17)         | 28.87<br>(97.77)              |
| 5.1 mph (8.2 km/h)   |                                |                        |                                 |           |   |   |                                     |                    |                               |
| 230.20<br>(171.66)   | 21701<br>(96.53)               | 3.98<br>(6.41)         | 1751                            | 3.9       | 0.459<br>(0.279)                          | 15.31<br>(3.02)                           | 218<br>(103)                        | 64<br>(18)         | 28.87<br>(97.77)              |
| 5.6 mph (9.0 km/h)   |                                |                        |                                 |           |   |   |                                     |                    |                               |
| 231.28<br>(172.46)   | 19761<br>(87.90)               | 4.39<br>(7.07)         | 1750                            | 3.2       | 0.456<br>(0.277)                          | 15.44<br>(3.04)                           | 218<br>(103)                        | 64<br>(18)         | 28.87<br>(97.77)              |
| 6.2 mph (10.0 km/h)  |                                |                        |                                 |           |   |   |                                     |                    |                               |
| 229.33<br>(171.01)   | 17529<br>(77.97)               | 4.91<br>(7.89)         | 1750                            | 2.7       | 0.460<br>(0.280)                          | 15.28<br>(3.01)                           | 218<br>(103)                        | 66<br>(19)         | 28.86<br>(97.73)              |
| 6.8 mph (11.0 km/h)  |                                |                        |                                 |           |   |   |                                     |                    |                               |
| 234.10<br>(174.56)   | 16165<br>(71.90)               | 5.44<br>(8.75)         | 1750                            | 2.4       | 0.452<br>(0.275)                          | 15.55<br>(3.06)                           | 218<br>(103)                        | 65<br>(18)         | 28.86<br>(97.73)              |
| 7.5 mph (12.0 km/h)  |                                |                        |                                 |           |   |   |                                     |                    |                               |
| 235.93<br>(175.93)   | 14871<br>(66.15)               | 5.95<br>(9.58)         | 1751                            | 2.2       | 0.448<br>(0.272)                          | 15.72<br>(3.10)                           | 218<br>(103)                        | 66<br>(19)         | 28.87<br>(97.77)              |
| 8.1 mph (13.0 km/h)  |                                |                        |                                 |           |   |   |                                     |                    |                               |
| 237.15<br>(176.84)   | 13806<br>(61.41)               | 6.45<br>(10.37)        | 1751                            | 2.0       | 0.445<br>(0.271)                          | 15.79<br>(3.11)                           | 218<br>(103)                        | 66<br>(19)         | 28.86<br>(97.73)              |
| 8.7 mph (14.0 km/h)  |                                |                        |                                 |           |   |   |                                     |                    |                               |
| 238.22<br>(177.64)   | 12852<br>(57.17)               | 6.95<br>(11.18)        | 1749                            | 1.8       | 0.444<br>(0.270)                          | 15.83<br>(3.12)                           | 218<br>(103)                        | 66<br>(19)         | 28.86<br>(97.73)              |
| 9.4 mph (15.2 km/h)  |                                |                        |                                 |           |   |   |                                     |                    |                               |
| 238.93<br>(178.17)   | 11867<br>(52.78)               | 7.55<br>(12.15)        | 1750                            | 1.7       | 0.443<br>(0.270)                          | 15.87<br>(3.13)                           | 218<br>(103)                        | 67<br>(19)         | 28.85<br>(97.70)              |
| 10.2 mph (16.4 km/h) |                                |                        |                                 |           |   |   |                                     |                    |                               |
| 241.39<br>(180.00)   | 11093<br>(49.34)               | 8.16<br>(13.13)        | 1750                            | 1.6       | 0.439<br>(0.267)                          | 16.02<br>(3.16)                           | 218<br>(103)                        | 67<br>(19)         | 28.85<br>(97.70)              |

## HYDRAULIC PERFORMANCE

CATEGORY: III

Quick Attach: Yes

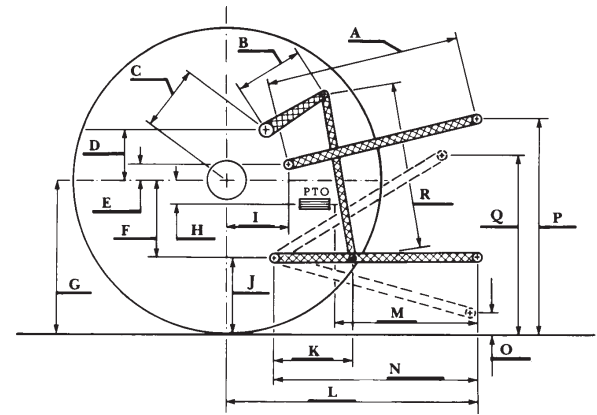
OECD Static test

|  | <u>lift cylinders</u>                     |   |
|--|---|---|
| Maximum force exerted through whole range:                         | 15862 lbs (70.6 kN) (2x100 mm)            | 18025 lbs (80.2 kN) (1x100 mm & 1x112 mm) |
|  | 18302 lbs (81.4 kN) (1x100 mm & 1x115 mm) |   |
|  | <u>63 cc pump</u>                         |   |
| i) Sustained pressure at compensator cutoff:                       | 2971 psi (205 bar)                        | 2943 psi (203 bar)                        |
|  | <u>three outlet sets combined</u>         |   |
| ii) Pump delivery rate at minimum pressure and rated engine speed: | 47.1 GPM (178.4 l/min)                    | 62.4 GPM (236.2 l/min)                    |
| iii) Pump delivery rate at maximum hydraulic power:                | 46.5 GPM (175.8 l/min)                    | 61.6 GPM (233.3 l/min)                    |
| Delivery pressure:   | 2733 psi (188 bar)                        | 2542 psi (175 bar)                        |
| Power:   | 74.1 HP (55.2 kW)                         | 91.4 HP (68.1 kW)                         |
|  | <u>single outlet set</u>                  |   |
| ii) Pump delivery rate at minimum pressure and rated engine speed: | 38.8 GPM (147.0 l/min)                    | 38.4 GPM (145.5 l/min)                    |
| iii) Pump delivery rate at maximum hydraulic power:                | 38.0 GPM (143.8 l/min)                    | 38.0 GPM (143.8 l/min)                    |
| Delivery pressure:   | 2310 psi (159 bar)                        | 2239 psi (154 bar)                        |
| Power:   | 51.2 HP (38.2 kW)                         | 49.6 HP (37.0 kW)                         |

## HITCH DIMENSIONS AS TESTED—NO LOAD

|     | inch | mm   |
|-----|------|------|
| A   | 28.0 | 710  |
| B   | 20.5 | 520  |
| C   | 22.9 | 581  |
| D   | 18.9 | 480  |
| E   | 7.3  | 185  |
| F   | 14.4 | 365  |
| G   | 38.8 | 985  |
| H   | 3.5  | 90   |
| I   | 22.4 | 570  |
| J   | 24.4 | 620  |
| K   | 29.3 | 745  |
| L   | 52.0 | 1321 |
| *L' | 56.0 | 1423 |
| M   | 28.0 | 712  |
| N   | 43.4 | 1102 |
| O   | 9.0  | 230  |
| P   | 51.9 | 1319 |
| Q   | 39.4 | 1001 |
| R   | 44.9 | 1140 |

\*L' to Quick Attach ends



**JOHN DEERE 7280R DIESEL**

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University of Nebraska–Lincoln