

# NEBRASKA OECD TRACTOR TEST 2080—SUMMARY 896

## JOHN DEERE 6150M POWRQUAD-PLUS DIESEL

### 20 SPEED

#### 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—1049 rpm)</b>  |                                |                 |                       |                       |                                                                                         |
| 124.43<br>(92.79)                               | 2100                           | 7.62<br>(28.84) | 0.430<br>(0.262)      | 16.33<br>(3.22)       | Fuel used during active exhaust<br>regeneration - 0.76 gal (2.87 l)<br>(see note 1 p.2) |
| <b>Standard Power Take-off Speed (1000 rpm)</b> |                                |                 |                       |                       |                                                                                         |
| 131.26<br>(97.88)                               | 2000                           | 7.81<br>(29.55) | 0.418<br>(0.254)      | 16.81<br>(3.31)       |                                                                                         |
| <b>Maximum Power (1 hour)</b>                   |                                |                 |                       |                       |                                                                                         |
| 137.13<br>(102.26)                              | 1850                           | 7.82<br>(29.61) | 0.401<br>(0.244)      | 17.53<br>(3.45)       |                                                                                         |

#### VARYING POWER AND FUEL CONSUMPTION

|                   |      |                 |                    |                 |                       |
|-------------------|------|-----------------|--------------------|-----------------|-----------------------|
| 124.43<br>(92.79) | 2100 | 7.62<br>(28.84) | 0.430<br>(0.262)   | 16.33<br>(3.22) | Air temperature       |
| 108.88<br>(81.19) | 2163 | 7.19<br>(27.21) | 0.464<br>(0.282)   | 15.15<br>(2.98) | 73°F (23°C)           |
| 82.85<br>(61.78)  | 2194 | 6.11<br>(23.13) | 0.518<br>(0.315)   | 13.56<br>(2.67) | Relative humidity     |
| 55.95<br>(41.72)  | 2221 | 4.89<br>(18.52) | 0.614<br>(0.374)   | 11.44<br>(2.25) | 26%                   |
| 28.00<br>(20.88)  | 2231 | 3.88<br>(14.67) | 0.973<br>(0.592)   | 7.22<br>(1.42)  | Barometer             |
| 0.91<br>(0.68)    | 2246 | 2.89<br>(10.94) | 22.355<br>(13.598) | 0.31<br>(0.06)  | 28.88" Hg (97.80 kPa) |

Maximum torque - 452 lb.-ft. (612 Nm) at 1450 rpm  
 Maximum torque rise - 45.3%  
 Torque rise at 1680 engine rpm - 37%  
 Power increase at 1850 engine rpm - 10.2%

#### 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—7th (B3) Gear</b>                        |                                |                        |                                 |           |                                           |                       |                                      |                    |                               |
| 113.23<br>(84.44)                                         | 8883<br>(39.51)                | 4.78<br>(7.69)         | 2100                            | 4.2       | 0.476<br>(0.289)                          | 14.78<br>(2.91)       | 190<br>(88)                          | 47<br>(8)          | 28.54<br>(96.65)              |
| <b>75% of Pull at Maximum Power—7th (B3) Gear</b>         |                                |                        |                                 |           |                                           |                       |                                      |                    |                               |
| 90.17<br>(67.24)                                          | 6688<br>(29.75)                | 5.06<br>(8.14)         | 2194                            | 3.1       | 0.534<br>(0.325)                          | 13.17<br>(2.59)       | 189<br>(87)                          | 59<br>(15)         | 28.58<br>(96.78)              |
| <b>50% of Pull at Maximum Power—7th (B3) Gear</b>         |                                |                        |                                 |           |                                           |                       |                                      |                    |                               |
| 61.20<br>(45.63)                                          | 4447<br>(19.78)                | 5.16<br>(8.30)         | 2215                            | 2.0       | 0.630<br>(0.383)                          | 11.16<br>(2.20)       | 189<br>(87)                          | 58<br>(14)         | 28.58<br>(96.78)              |
| <b>75% of Pull at Reduced Engine Speed—11th (C3) Gear</b> |                                |                        |                                 |           |                                           |                       |                                      |                    |                               |
| 90.06<br>(67.15)                                          | 6680<br>(29.71)                | 5.06<br>(8.14)         | 1379                            | 3.1       | 0.442<br>(0.269)                          | 15.91<br>(3.13)       | 189<br>(87)                          | 58<br>(14)         | 28.58<br>(96.78)              |
| <b>50% of Pull at Reduced Engine Speed—11th (C3) Gear</b> |                                |                        |                                 |           |                                           |                       |                                      |                    |                               |
| 61.25<br>(45.67)                                          | 4443<br>(19.76)                | 5.17<br>(8.32)         | 1395                            | 2.0       | 0.480<br>(0.292)                          | 14.64<br>(2.88)       | 189<br>(87)                          | 59<br>(15)         | 28.57<br>(96.75)              |

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

**Dates of tests:** October 28 to November 14, 2013

**Manufacturer:** John Deere Werke Mannheim, John-Deere-Str. 90, Mannheim, Germany

**FUEL, OIL and TIME:** Fuel No. 2 Diesel Specific gravity converted to 60°/60°F (15°/15°C) 0.8442 Fuel weight 7.029 lbs/gal (0.842 kg/l) Oil SAE 10W-30 API service classification CJ-4 Transmission and hydraulic lubricant John Deere Hy-Gard II fluid Front axle lubricant John Deere Hy-Gard II fluid Total time engine was operated: 23.5 hours

**ENGINE:** Make John Deere Diesel Type six cylinder vertical with turbocharger and air to air intercooler Serial No. \*CD6068R029001\* Crankshaft lengthwise Rated engine speed 2100 Bore and stroke 4.19" x 5.00" (106.5 mm x 127.0 mm) Compression ratio 16.5 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 one paper cartridge with water separator Fuel cooler radiator for pump return fuel Exhaust regenerative particulate filter integrated within a vertical muffler Cooling medium temperature control two thermostats and variable speed fan

**ENGINE OPERATING PARAMETERS:** Fuel rate: 52.7 - 57.1 lb/h (23.9 - 25.9 kg/h) High idle: 2225 - 2275 rpm Turbo boost: nominal 13.1 - 16.0 psi (90 - 110 kPa) as measured 14.9 psi (103 kPa)

**CHASSIS:** Type front wheel assist Serial No. \*1L06150MADG763757\* Tread width rear 61.3" (1558 mm) to 109.1" (2771 mm) front 65.0" (1650 mm) to 83.2" (2084 mm) Wheelbase 108.9" (2765 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 1.60 (2.57) second 1.93 (3.10) third 2.31 (3.71) fourth 2.83 (4.55) fifth 3.39 (5.46) sixth 4.08 (6.57) seventh 4.89 (7.87) eighth 5.39 (8.68) ninth 5.99 (9.64) tenth 6.50 (10.46) eleventh 7.78 (12.52) twelfth 9.53 (15.34) thirteenth 9.99 (16.08) fourteenth 12.03 (19.36) fifteenth 14.40 (23.18) sixteenth 14.43 (23.22) seventeenth 17.37 (27.96) eighteenth 17.65 (28.40) nineteenth 20.81 (33.49) twentieth 25.49 (41.02)

**DRAWBAR PERFORMANCE**  
**UNBALLASTED - FRONT DRIVE ENGAGED-2100 RPM**  
**MAXIMUM POWER IN SELECTED GEARS**

| 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.hr) | Temp. °F (°C)<br>cool-<br>ing<br>med | Air<br>dry<br>bulb | Barom.<br>inch<br>Hg<br>(kPa) |                  |
|---------------------|--------------------------------|------------------------|---------------------------------|-----------|--------------------------------------------|--------------------------------------|--------------------|-------------------------------|------------------|
| 4th(A4)Gear         |                                |                        |                                 |           |                                            |                                      |                    |                               |                  |
| 92.25<br>(68.79)    | 13374<br>(59.49)               | 2.59<br>(4.17)         | 2183                            | 14.5      | 0.571<br>(0.347)                           | 12.31<br>(2.42)                      | 190<br>(88)        | 51<br>(11)                    | 28.59<br>(96.82) |
| 5th(B1)Gear         |                                |                        |                                 |           |                                            |                                      |                    |                               |                  |
| 106.38<br>(79.33)   | 12637<br>(56.21)               | 3.16<br>(5.09)         | 2120                            | 9.6       | 0.509<br>(0.310)                           | 13.81<br>(2.72)                      | 189<br>(87)        | 51<br>(11)                    | 28.63<br>(96.95) |
| 6th(B2)Gear         |                                |                        |                                 |           |                                            |                                      |                    |                               |                  |
| 111.03<br>(82.80)   | 10633<br>(47.30)               | 3.92<br>(6.30)         | 2100                            | 6.0       | 0.487<br>(0.296)                           | 14.44<br>(2.84)                      | 190<br>(88)        | 49<br>(10)                    | 28.56<br>(96.72) |
| 7th(B3)Gear         |                                |                        |                                 |           |                                            |                                      |                    |                               |                  |
| 113.23<br>(84.44)   | 8883<br>(39.51)                | 4.78<br>(7.69)         | 2100                            | 4.2       | 0.476<br>(0.289)                           | 14.78<br>(2.91)                      | 190<br>(88)        | 47<br>(8)                     | 28.54<br>(96.65) |
| 8th(C1)Gear         |                                |                        |                                 |           |                                            |                                      |                    |                               |                  |
| 112.47<br>(83.87)   | 7957<br>(35.39)                | 5.30<br>(8.53)         | 2099                            | 3.7       | 0.480<br>(0.292)                           | 14.66<br>(2.89)                      | 189<br>(87)        | 51<br>(10)                    | 28.56<br>(96.72) |
| 9th(B4)Gear         |                                |                        |                                 |           |                                            |                                      |                    |                               |                  |
| 111.31<br>(83.00)   | 7056<br>(31.38)                | 5.92<br>(9.52)         | 2100                            | 3.2       | 0.485<br>(0.295)                           | 14.48<br>(2.85)                      | 189<br>(87)        | 48<br>(9)                     | 28.54<br>(96.65) |
| 10th(C2)Gear        |                                |                        |                                 |           |                                            |                                      |                    |                               |                  |
| 112.55<br>(83.93)   | 6560<br>(29.18)                | 6.43<br>(10.35)        | 2100                            | 2.9       | 0.480<br>(0.292)                           | 14.63<br>(2.88)                      | 189<br>(87)        | 54<br>(12)                    | 28.57<br>(96.75) |
| 11th(C3)Gear        |                                |                        |                                 |           |                                            |                                      |                    |                               |                  |
| 112.05<br>(83.55)   | 5421<br>(24.11)                | 7.75<br>(12.47)        | 2101                            | 2.4       | 0.483<br>(0.294)                           | 14.54<br>(2.86)                      | 189<br>(87)        | 55<br>(13)                    | 28.56<br>(96.72) |
| 12th(C4)Gear        |                                |                        |                                 |           |                                            |                                      |                    |                               |                  |
| 107.75<br>(80.35)   | 4232<br>(18.82)                | 9.55<br>(15.37)        | 2100                            | 1.8       | 0.501<br>(0.305)                           | 14.03<br>(2.76)                      | 189<br>(87)        | 56<br>(13)                    | 28.57<br>(96.75) |

reverse 1.67 (2.69), 2.01 (3.23), 2.40 (3.87), 2.95 (4.75), 3.54 (5.69), 4.26 (6.86), 5.10 (8.21), 5.63 (9.06), 6.25 (10.06), 6.77 (10.91), 8.12 (13.07), 9.95 (16.01), 10.42 (16.77), 12.55 (20.20), 15.03 (24.19), 15.06 (24.23), 18.13 (29.18), 18.42 (29.64), 21.71 (34.94), 26.60 (42.81) **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 1987 engine rpm or 1000 rpm at 2000 engine rpm **Unladen tractor mass** 14140 lb (6414 kg)

**NOTE 1:** The manufacturer declares that the average time between active regenerations is 100 hours, while operated in Auto Filter Cleaning Mode, at rated speed, full load, under steady state conditions.

**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 121°F (50°C). The performance figures on this summary were taken from a test conducted under the OECD Code 2 test code procedure.

We, the undersigned, certify that this is a true and correct report of official Tractor Test No. **2080**, Nebraska Summary 896, January 13, 2014.

Roger M. Hoy  
 Director

M.F. Kocher  
 S. Pitla  
 J.D. Luck  
 Board of Tractor Test Engineers

**TRACTOR SOUND LEVEL WITH CAB**

|                                            | Front Wheel Drive<br>Engaged<br>dB(A) | Disengaged<br>dB(A) |
|--------------------------------------------|---------------------------------------|---------------------|
| At no load in 7th (B3) gear                | 66.8                                  | 66.1                |
| Transport speed - no load - 20th (E4) gear |                                       | 74.2                |
| Bystander in 19th (E3) gear                |                                       | 80.5                |

**TIRES AND WEIGHT**

**Rear Tires** - No., size, ply & psi(kPa)  
**Front Tires** - No., size, ply & psi(kPa)  
**Height of Drawbar**  
**Static Weight with operator** - Rear  
 - Front  
 - Total

**Tested Without Ballast**

Two 460/85R42;\*\*\*;12(85)  
 Two 420/85R28;\*\*\*;12(85)  
 21.5 in (545 mm)  
 9045 lb (4103 kg)  
 5270 lb (2390 kg)  
 14315 lb (6493 kg)

**DRAWBAR PERFORMANCE**  
**UNBALLASTED - FRONT DRIVE ENGAGED - 1850 RPM**  
**MAXIMUM POWER IN SELECTED GEARS**

| 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) |
|---------------------|--------------------------------|------------------------|---------------------------------|-----------|-------------------------------------------|-------------------------------------------|-------------------------------------|--------------------|-------------------------------|
| 4th(A4)Gear         |                                |                        |                                 |           |                                           |                                           |                                     |                    |                               |
| 92.28<br>(68.81)    | 13381<br>(59.52)               | 2.59<br>(4.17)         | 2183                            | 14.5      | 0.568<br>(0.346)                          | 12.37<br>(2.44)                           | 191<br>(88)                         | 51<br>(11)         | 28.60<br>(96.85)              |
| 5th(B1)Gear         |                                |                        |                                 |           |                                           |                                           |                                     |                    |                               |
| 106.38<br>(79.33)   | 12637<br>(56.21)               | 3.16<br>(5.09)         | 2119                            | 9.6       | 0.509<br>(0.310)                          | 13.81<br>(2.72)                           | 189<br>(87)                         | 51<br>(11)         | 28.63<br>(96.95)              |
| 6th(B2)Gear         |                                |                        |                                 |           |                                           |                                           |                                     |                    |                               |
| 115.35<br>(86.01)   | 12060<br>(53.64)               | 3.59<br>(5.78)         | 1976                            | 8.6       | 0.482<br>(0.293)                          | 14.59<br>(2.87)                           | 190<br>(88)                         | 53<br>(12)         | 28.66<br>(97.05)              |
| 7th(B3)Gear         |                                |                        |                                 |           |                                           |                                           |                                     |                    |                               |
| 122.19<br>(91.12)   | 11139<br>(49.55)               | 4.12<br>(6.62)         | 1850                            | 6.5       | 0.452<br>(0.275)                          | 15.54<br>(3.06)                           | 191<br>(88)                         | 47<br>(8)          | 28.54<br>(96.65)              |
| 8th(C1)Gear         |                                |                        |                                 |           |                                           |                                           |                                     |                    |                               |
| 122.42<br>(91.29)   | 9988<br>(44.43)                | 4.60<br>(7.40)         | 1850                            | 5.2       | 0.455<br>(0.277)                          | 15.45<br>(3.04)                           | 191<br>(88)                         | 51<br>(10)         | 28.56<br>(96.72)              |
| 9th(B4)Gear         |                                |                        |                                 |           |                                           |                                           |                                     |                    |                               |
| 123.19<br>(91.86)   | 8973<br>(39.91)                | 5.15<br>(8.29)         | 1850                            | 4.4       | 0.450<br>(0.274)                          | 15.61<br>(3.08)                           | 191<br>(88)                         | 48<br>(9)          | 28.54<br>(96.65)              |
| 10th(C2)Gear        |                                |                        |                                 |           |                                           |                                           |                                     |                    |                               |
| 124.23<br>(92.64)   | 8305<br>(36.94)                | 5.61<br>(9.03)         | 1850                            | 4.0       | 0.448<br>(0.272)                          | 15.70<br>(3.09)                           | 191<br>(88)                         | 54<br>(12)         | 28.57<br>(96.75)              |
| 11th(C3)Gear        |                                |                        |                                 |           |                                           |                                           |                                     |                    |                               |
| 125.24<br>(93.39)   | 6932<br>(30.83)                | 6.78<br>(10.91)        | 1850                            | 3.1       | 0.444<br>(0.270)                          | 15.84<br>(3.12)                           | 192<br>(89)                         | 56<br>(13)         | 28.57<br>(96.75)              |
| 12th(C4)Gear        |                                |                        |                                 |           |                                           |                                           |                                     |                    |                               |
| 122.17<br>(91.10)   | 5480<br>(24.37)                | 8.36<br>(13.45)        | 1851                            | 2.5       | 0.455<br>(0.277)                          | 15.46<br>(3.05)                           | 191<br>(88)                         | 57<br>(14)         | 28.57<br>(96.75)              |

**DRAWBAR PERFORMANCE**  
**UNBALLASTED - FRONT DRIVE DISENGAGED**  
**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—7th (B3) Gear</b>                       |                                |                        |                                 |           |                                           |                       |                                     |                    |                               |
| 109.53<br>(81.67)                                        | 8939<br>(39.76)                | 4.60<br>(7.39)         | 2100                            | 6.9       | 0.493<br>(0.300)                          | 14.25<br>(2.81)       | 189<br>(87)                         | 48<br>(9)          | 28.55<br>(96.68)              |
| <b>75% of Pull at Maximum Power—7th(B3) Gear</b>         |                                |                        |                                 |           |                                           |                       |                                     |                    |                               |
| 88.56<br>(66.04)                                         | 6708<br>(29.84)                | 4.95<br>(7.97)         | 2195                            | 4.1       | 0.545<br>(0.331)                          | 12.90<br>(2.54)       | 190<br>(88)                         | 58<br>(15)         | 28.58<br>(96.78)              |
| <b>50% of Pull at Maximum Power—7th (B3) Gear</b>        |                                |                        |                                 |           |                                           |                       |                                     |                    |                               |
| 60.81<br>(45.35)                                         | 4489<br>(19.97)                | 5.08<br>(8.18)         | 2216                            | 2.5       | 0.633<br>(0.385)                          | 11.10<br>(2.19)       | 189<br>(87)                         | 58<br>(15)         | 28.58<br>(96.78)              |
| <b>75% of Pull at Reduced Engine Speed—11th(C3) Gear</b> |                                |                        |                                 |           |                                           |                       |                                     |                    |                               |
| 88.49<br>(65.98)                                         | 6706<br>(29.83)                | 4.95<br>(7.97)         | 1378                            | 4.0       | 0.446<br>(0.271)                          | 15.76<br>(3.10)       | 190<br>(88)                         | 60<br>(16)         | 28.57<br>(96.75)              |
| <b>50% of Pull at Reduced Engine Speed—11th(C3) Gear</b> |                                |                        |                                 |           |                                           |                       |                                     |                    |                               |
| 60.66<br>(45.23)                                         | 4460<br>(19.84)                | 5.10<br>(8.21)         | 1397                            | 2.4       | 0.481<br>(0.292)                          | 14.63<br>(2.88)       | 189<br>(87)                         | 60<br>(15)         | 28.57<br>(96.75)              |
| <b>MAXIMUM POWER IN SELECTED GEARS</b>                   |                                |                        |                                 |           |                                           |                       |                                     |                    |                               |
| 5th(B1) Gear                                             |                                |                        |                                 |           |                                           |                       |                                     |                    |                               |
| 85.09<br>(63.45)                                         | 10472<br>(46.58)               | 3.05<br>(4.91)         | 2186                            | 14.6      | 0.589<br>(0.359)                          | 11.92<br>(2.35)       | 189<br>(87)                         | 52<br>(11)         | 28.64<br>(96.99)              |
| 6th(B2) Gear                                             |                                |                        |                                 |           |                                           |                       |                                     |                    |                               |
| 101.94<br>(76.01)                                        | 10169<br>(45.23)               | 3.76<br>(6.05)         | 2169                            | 11.7      | 0.533<br>(0.324)                          | 13.18<br>(2.60)       | 189<br>(87)                         | 53<br>(11)         | 28.65<br>(97.02)              |
| 7th(B3) Gear                                             |                                |                        |                                 |           |                                           |                       |                                     |                    |                               |
| 109.53<br>(81.67)                                        | 8939<br>(39.76)                | 4.60<br>(7.39)         | 2100                            | 6.9       | 0.493<br>(0.300)                          | 14.25<br>(2.81)       | 189<br>(87)                         | 48<br>(9)          | 28.55<br>(96.68)              |
| 8th(C1) Gear                                             |                                |                        |                                 |           |                                           |                       |                                     |                    |                               |
| 109.02<br>(81.30)                                        | 7922<br>(35.24)                | 5.16<br>(8.30)         | 2100                            | 5.3       | 0.495<br>(0.301)                          | 14.19<br>(2.79)       | 189<br>(87)                         | 51<br>(11)         | 28.56<br>(96.72)              |
| 9th(B4) Gear                                             |                                |                        |                                 |           |                                           |                       |                                     |                    |                               |
| 109.23<br>(81.45)                                        | 7087<br>(31.52)                | 5.78<br>(9.30)         | 2100                            | 4.4       | 0.495<br>(0.301)                          | 14.20<br>(2.80)       | 189<br>(87)                         | 49<br>(9)          | 28.56<br>(96.72)              |
| 10th(C2) Gear                                            |                                |                        |                                 |           |                                           |                       |                                     |                    |                               |
| 111.53<br>(83.16)                                        | 6633<br>(29.50)                | 6.31<br>(10.15)        | 2100                            | 4.0       | 0.484<br>(0.295)                          | 14.51<br>(2.86)       | 188<br>(87)                         | 55<br>(13)         | 28.56<br>(96.72)              |
| 11th(C3) Gear                                            |                                |                        |                                 |           |                                           |                       |                                     |                    |                               |
| 111.24<br>(82.95)                                        | 5475<br>(24.35)                | 7.62<br>(12.26)        | 2100                            | 3.2       | 0.484<br>(0.294)                          | 14.53<br>(2.86)       | 189<br>(87)                         | 56<br>(13)         | 28.57<br>(96.75)              |
| 12th(C4) Gear                                            |                                |                        |                                 |           |                                           |                       |                                     |                    |                               |
| 107.95<br>(80.50)                                        | 4304<br>(19.14)                | 9.41<br>(15.14)        | 2101                            | 2.2       | 0.501<br>(0.305)                          | 14.04<br>(2.77)       | 189<br>(87)                         | 57<br>(14)         | 28.58<br>(96.78)              |

## HYDRAULIC PERFORMANCE

CATEGORY: IIIN

Quick Attach: No

### Lift cylinders

Maximum force exerted through whole range: 8986 lbs (40.0 kN) 2 x 80 mm  
10167 lbs (45.2 kN) 2 x 85 mm

i) Maximum observed pressure:

2908 psi (200 bar)

**two outlet sets combined**

ii) Pump delivery rate at minimum pressure and rated engine speed:

31.1 GPM (117.8 l/min)

iii) Pump delivery rate at maximum

hydraulic power:

30.8 GPM (116.6 l/min)

Delivery pressure:

2577 psi (178 bar)

Power:

46.3 HP (34.5 kW)

**single outlet set**

ii) Pump delivery rate at minimum pressure and rated engine speed:

31.0 GPM (117.3 l/min)

iii) Pump delivery rate at maximum

hydraulic power:

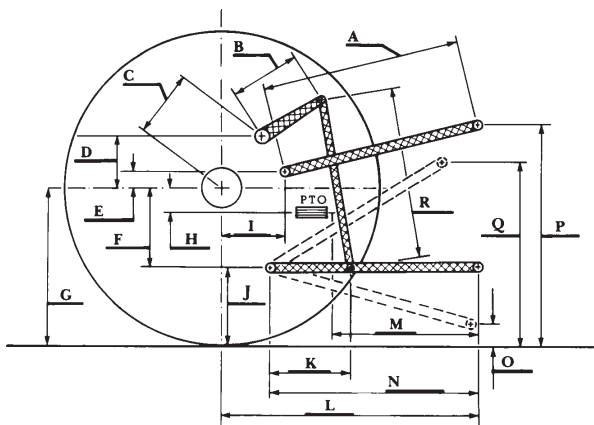
31.2 GPM (118.2 l/min)

Delivery pressure:

2174 psi (150 bar)

Power:

39.6 HP (29.5 kW)



### HITCH DIMENSIONS AS TESTED—NO LOAD

|   | inch | mm   |
|---|------|------|
| A | 25.2 | 640  |
| B | 15.7 | 400  |
| C | 22.1 | 562  |
| D | 20.9 | 531  |
| E | 13.2 | 336  |
| F | 9.8  | 250  |
| G | 34.2 | 870  |
| H | 3.1  | 80   |
| I | 18.1 | 460  |
| J | 24.4 | 620  |
| K | 21.9 | 555  |
| L | 44.7 | 1135 |
| M | 21.7 | 550  |
| N | 38.4 | 975  |
| O | 9.1  | 230  |
| P | 51.4 | 1305 |
| Q | 38.1 | 968  |
| R | 37.4 | 950  |



**JOHN DEERE 6150M DIESEL**

Institute of Agriculture and Natural Resources  
University of Nebraska–Lincoln