NEBRASKA TRACTOR TEST 1985
JOHN DEERE 6230 PREMIUM DIESEL
16 SPEED
CHASSIS SERIAL NUMBERS 634684 AND HIGHER

POWER TAKE-OFF PERFORMANCE

<table>
<thead>
<tr>
<th>Power HP</th>
<th>Crankshaft speed rpm</th>
<th>Gal/hr (l/h)</th>
<th>Ib/hr (kg/h)</th>
<th>Hp/hr/gal (kW/l)</th>
<th>Mean Atmospheric Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>81.60 (60.85)</td>
<td>2298</td>
<td>5.15</td>
<td>0.445</td>
<td>15.85</td>
<td>Air temperature</td>
</tr>
<tr>
<td>73°F (22°C)</td>
<td>73°F (22°C)</td>
<td>73°F (22°C)</td>
<td>73°F (22°C)</td>
<td>73°F (22°C)</td>
<td></td>
</tr>
</tbody>
</table>

MAXIMUM POWER AND FUEL CONSUMPTION

<table>
<thead>
<tr>
<th>Rated Engine Speed—(PTO speed—1036 rpm)</th>
<th>Standard Power Take-off Speed—(PTO speed—1000 rpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>81.60 (60.85)</td>
<td>92.22 (68.77)</td>
</tr>
<tr>
<td>2298</td>
<td>1899</td>
</tr>
<tr>
<td>5.15</td>
<td>5.24</td>
</tr>
<tr>
<td>0.445</td>
<td>0.401</td>
</tr>
<tr>
<td>15.85</td>
<td>17.60</td>
</tr>
<tr>
<td>(3.12)</td>
<td>(3.47)</td>
</tr>
</tbody>
</table>

VARYING POWER AND FUEL CONSUMPTION

<table>
<thead>
<tr>
<th>Power HP</th>
<th>Crankshaft speed rpm</th>
<th>Gal/hr (l/h)</th>
<th>Ib/hr (kg/h)</th>
<th>Hp/hr/gal (kW/l)</th>
<th>Mean Atmospheric Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>81.60 (60.85)</td>
<td>2298</td>
<td>5.15</td>
<td>0.445</td>
<td>15.85</td>
<td>Air temperature</td>
</tr>
<tr>
<td>453</td>
<td>306</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>74°F (23°C)</td>
<td>74°F (23°C)</td>
<td>74°F (23°C)</td>
<td>74°F (23°C)</td>
<td>74°F (23°C)</td>
<td></td>
</tr>
</tbody>
</table>

ENGINE: Make John Deere Type four cylinder vertical with turbocharger and water to air intercooler Serial No. CD4045L1606486 Crankshaft lengthwise Rated engine speed 2300 Bore and stroke 4.19" x 4.02" (106.5 mm x 101.6 mm) Compression ratio 16.7 to 1 Displacement 276 cu in (4525 ml) Starting system 12 volt Lubrication pressure Air cleaner two paper elements Oil filter one full flow cartridge Oil cooler engine coolant heat exchanger for crankcase oil, engine coolant heat exchanger for hydraulic and transmission oil Fuel filter one paper element Fuel cooler radiator for pump return fuel Muffler underhood Exhaust vertical Cooling medium temperature control thermostat and variable speed fan

LOCATION OF TESTS: Nebraska Tractor Test Laboratory, University of Nebraska, Lincoln, Nebraska 68583-0832

DATES OF TESTS: April 26 - May 4, 2011

MANUFACTURER: Deere & Company, Moline, Illinois, USA

FUEL, OIL and TIME: Fuel No. 2 Diesel Specific gravity converted to 60°/60° F (15°/15°C) 0.8476 Fuel weight 7.057 lbs/gal (0.846 kg/l) Oil SAE 15W-40 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 10.0 hours.

ENGINE OPERATING PARAMETERS: Fuel rate: 34.4 - 37.3 lb/h (15.6 - 16.9 kg/h) High idle: 2410 - 2510 rpm Turbo boost: nominal 11.6 - 14.5 psi (80 - 100 kPa) as measured 13.0 psi (90 kPa)

CHASSIS: Type front wheel assist Serial No. L06230H659646 Tread width rear 56.9" (1446 mm) to 75.4" (1916 mm) front 59.9" (1522 mm) to 79.3" (2014 mm) Wheel base 94.5" (2400 mm) Hydraulic control system direct engine drive Transmission selective gear fixed ratio with partial (4) range operator controlled powershift Nominal travel speeds mph (km/h) first 1.60 (2.57) second 1.92 (3.09) third 2.30 (3.70) fourth 2.81 (4.53) fifth 3.20 (5.13) sixth 3.85 (6.20) seventh 4.61 (7.42) eighth 5.26 (8.46) ninth 5.65 (9.09) tenth 6.48 (10.49) eleventh 7.38 (12.30) twelfth 9.29 (15.10) thirteenth 10.83 (17.43) fourteenth 13.04 (20.98) fifteenth 15.62 (25.31) sixteenth 19.13 (30.78) reverse 1.67 (2.68) 2.01 (3.23) 2.40 (3.86) 2.94 (4.73) 3.34 (5.37) 4.02 (6.47) 4.82 (7.75) 5.49 (8.84) 5.90 (9.49) 6.61 (10.64) 7.92 (12.74) 9.69 (15.60) 11.31 (18.20) 13.61 (21.90) 16.30 (26.23) 19.96 (32.12)

TRACTOR SOUND LEVEL WITH CAB

<table>
<thead>
<tr>
<th>At no load in 7th (B3) gear</th>
<th>Front Wheel Drive Engaged dB(A)</th>
<th>Disengaged dB(A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>72.9</td>
<td>72.9</td>
<td></td>
</tr>
<tr>
<td>Transport speed—no load - 16th (D4) gear</td>
<td>73.5</td>
<td></td>
</tr>
<tr>
<td>Bystander in 16th (D4) Gear</td>
<td>83.2</td>
<td></td>
</tr>
</tbody>
</table>

TIRES AND WEIGHT

<table>
<thead>
<tr>
<th>Rear Tires - No., size, ply &amp; psi(kPa)</th>
<th>Tested Without Ballast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two 460/85R38,**;12(85)</td>
<td>10455 lb (4742 kg)</td>
</tr>
<tr>
<td>Two 540/85R28,**;12(85)</td>
<td>6485 lb (2941 kg)</td>
</tr>
</tbody>
</table>

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HYDRAULIC PERFORMANCE

CATEGORY: II
Quick Attach: None
OECD Static test
Maximum force exerted through whole range: 4450 lbs (19.8 kN)
 ii) Sustained pressure with relief valve open: 2996 psi (207 bar)
 iii) Pump delivery rate at minimum pressure and rated engine speed:
 hydraulic power: 31.2 GPM (118.2 l/min)
 Delivery pressure: 2608 psi (180 bar)
 Power: 47.5 HP (35.4 kW)

THREE POINT HITCH PERFORMANCE (SAE Static test)

Observed maximum pressure psi (bar): 2990 (206)
Location: lift cylinder
Hydraulic oil temperature: °F (°C): 149 (65)
Location: hydraulic valve
Category: II
Quick attach: none
System pressure 2480 psi (171 Bar)

Hitch point distance to ground level in. (mm)

<table>
<thead>
<tr>
<th>Letter</th>
<th>OECD inch</th>
<th>OECD mm</th>
<th>SAE inch</th>
<th>SAE mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>25.8</td>
<td>655</td>
<td>24.4</td>
<td>620</td>
</tr>
<tr>
<td>B</td>
<td>12.6</td>
<td>320</td>
<td>12.6</td>
<td>320</td>
</tr>
<tr>
<td>C</td>
<td>20.0</td>
<td>507</td>
<td>20.0</td>
<td>507</td>
</tr>
<tr>
<td>D</td>
<td>23.9</td>
<td>607</td>
<td>23.9</td>
<td>607</td>
</tr>
<tr>
<td>E</td>
<td>9.7</td>
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<td>9.7</td>
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<td>F</td>
<td>8.7</td>
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</tr>
<tr>
<td>G</td>
<td>32.3</td>
<td>820</td>
<td>32.3</td>
<td>820</td>
</tr>
<tr>
<td>H</td>
<td>4.9</td>
<td>125</td>
<td>4.9</td>
<td>125</td>
</tr>
<tr>
<td>I</td>
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<td>448</td>
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<td>23.6</td>
<td>600</td>
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</tr>
<tr>
<td>K</td>
<td>19.8</td>
<td>502</td>
<td>19.8</td>
<td>502</td>
</tr>
<tr>
<td>L</td>
<td>42.3</td>
<td>1076</td>
<td>42.3</td>
<td>1076</td>
</tr>
<tr>
<td>M</td>
<td>21.5</td>
<td>546</td>
<td>21.5</td>
<td>546</td>
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<tr>
<td>N</td>
<td>37.2</td>
<td>945</td>
<td>37.2</td>
<td>945</td>
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<tr>
<td>O</td>
<td>7.9</td>
<td>200</td>
<td>7.9</td>
<td>200</td>
</tr>
<tr>
<td>P</td>
<td>47.6</td>
<td>1210</td>
<td>42.6</td>
<td>1076</td>
</tr>
<tr>
<td>Q</td>
<td>34.6</td>
<td>880</td>
<td>34.6</td>
<td>880</td>
</tr>
<tr>
<td>R</td>
<td>31.3</td>
<td>793</td>
<td>31.3</td>
<td>793</td>
</tr>
</tbody>
</table>

Clutch multiple wet disc hydraulically operated by foot pedal
Brakes wet disc hydraulically operated by two foot pedals which can be locked together
Steering hydrostatic
Power take-off 540 rpm at 2143 engine rpm or 1000 rpm at 2220 engine rpm.
Unladen tractor mass 10280 lb (4663 kg)

REPAIRS AND ADJUSTMENTS: No repairs or adjustments.

Note: The performance figures on this report apply to tractors with chassis serial numbers 634684 and higher.

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 117°F (47°C).

We, the undersigned, certify that this is a true and correct report of official Tractor Test No. 1985, May 19, 2011.
Roger M. Hoy
Director
M.F. Kocher
D.R. Keshwani
P.J. Jasa
Board of Tractor Test Engineers

HITCH DIMENSIONS AS TESTED—NO LOAD

John Deere 6230 Premium Diesel
Institute of Agriculture and Natural Resources
University of Nebraska–Lincoln