POWER TAKE-OFF PERFORMANCE

<table>
<thead>
<tr>
<th>Power HP (kW)</th>
<th>Crankshaft speed rpm</th>
<th>Gal/hr</th>
<th>lb/hr</th>
<th>hp/hr/gal (kW/hp)</th>
<th>Mean Atmospheric Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>59.54 (44.49)</td>
<td>2102</td>
<td>4.32</td>
<td>0.508</td>
<td>13.80</td>
<td>Fuel used during active exhaust regeneration-0.19 gal (0.77 l)</td>
</tr>
<tr>
<td>60.09 (44.81)</td>
<td>2083</td>
<td>4.32</td>
<td>0.503</td>
<td>13.92</td>
<td></td>
</tr>
<tr>
<td>Maximum Power (1 hour)</td>
<td></td>
<td>61.50 (45.86)</td>
<td>4.26</td>
<td>0.486</td>
<td>14.42</td>
</tr>
</tbody>
</table>

VARYING POWER AND FUEL CONSUMPTION

<table>
<thead>
<tr>
<th>Condition</th>
<th>Power Crank</th>
<th>26.46</th>
<th>2200</th>
<th>2.96</th>
<th>0.785</th>
<th>8.93</th>
<th>23%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>39.50</td>
<td>2181</td>
<td>3.52</td>
<td>0.624</td>
<td>11.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative humidity</td>
<td>39.50</td>
<td>2181</td>
<td>3.32</td>
<td>0.624</td>
<td>11.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barometer</td>
<td>26.46</td>
<td>2200</td>
<td>2.96</td>
<td>0.785</td>
<td>8.93</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2083</td>
<td>4.32</td>
<td>0.503</td>
<td>13.92</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Maximum torque: 193 lb-ft (262 Nm) at 1500 rpm
Maximum torque rise: 90.1%
Torque rise at 1676 engine rpm - 23%
Power increase at 2002 engine rpm - 3%

LOCATION OF TESTS: Nebraska Tractor Test Laboratory, University of Nebraska, Lincoln, Nebraska 68583-0892

DATEs OF TESTS: April 5 - 13, 2016

MANUFACTURER: John Deere Commercial Products Inc., Grovetown Operations, P.O. Box 15458 Augusta Ga. USA, 30919-1458

FUEL, OIL AND TIME: Fuel No. 2 Diesel Specific gravity converted to 60°/60°F (15°/15°C) 0.8417 Fuel weight 7.008 lbs/gal (0.840 kg/l) Oil SAE 15W-40 API service classification CJ-4 Transmitter and hydraulic lubricant John Deere Hy-Gard fluid Front axle lubricant John Deere Hy-Gard fluid Total time engine was operated: 16.5 hours

ENGINE: Make John Deere Diesel Type three cylinder vertical with turbocharger and air to air intercooler Serial No. *PY3029H031975*
Crankshaft lengthwise Rated engine speed 2100 Bore and stroke 4.19" x 4.33" (106.5 mm x 110.0 mm) Compression ratio 17.8 to 1 Displacement 179 cu in (2938 ml) Starting system 12 volt

According to the Nebrasaka Tractor Test 2138, the Nebraska Tractor Test Laboratory, University of Nebraska, LINCOLN NEBRASKA 68583-0892 conducted tests on a JOHN DEERE 5065E DIESEL tractor. The tractor was tested with and without ballast and under various conditions to determine its performance, weight, and fuel consumption. The test results include power increase at different engine speeds, torque rise at specific engine speeds, and maximum torque. The tractor's transport speed is also noted at no load and in various gear positions.

The tractor's power and fuel consumption data were collected under varying power and fuel consumption conditions. The fuel used during active exhaust regeneration is also recorded. The location of the tests is the Nebraska Tractor Test Laboratory, University of Nebraska, Lincoln, Nebraska 68583-0892.

The tractor's engine is a John Deere Diesel Type with a three-cylinder vertical configuration using a turbocharger and air-to-air intercooler. The rated engine speed is 2100 RPM, with a bore and stroke of 4.19" x 4.33" (106.5 mm x 110.0 mm). The compression ratio is 17.8 to 1, and the engine displacement is 179 cu in (2938 ml). The starting system is 12-volt.

The tractor's maximum power and fuel consumption were measured under various conditions, including power take-off performance. The maximum power generated was 193 lb-ft (262 Nm) at 1500 RPM. The maximum torque rise was 30.1%. The tractor's transport speed at no load in 9th gear (C3) was 81.0 mph. The fuel efficiency was also recorded under varying power and fuel consumption conditions.

The tractor's chassis and engine specifications are also provided, including the engine make and type, fuel and oil specifications, and dimensional data. The tractor's hydraulic control system includes a power take-off (PTO), which is used for various attachments.

The tractor's operating parameters include fuel consumption, emissions, and other characteristics measured during the tests.

Finally, the tractor's sound levels without a cab were measured at different speeds and conditions. The sound levels were recorded for both the engaged and disengaged modes of the tractor's transmission. The sound levels were measured at 89.1 and 91.0 dB(A) at different speeds and conditions.

The tractor's tires and weight data were also recorded, including the tire type, size, ply, and psi specifications. The height of the drawbar was measured as 17.5 in (445 mm) with the operator. The weight of the tractor increased significantly with the addition of ballast, with a maximum total weight of 5795 lbs (2629 kg).

The test report also includes detailed information on the tractor's transmission and hydraulic systems, including the power take-off (PTO) performance and the regeneration system. The tractor's fuel consumption, emissions, and operating parameters were also recorded.

The tractor's overall performance, weight, and fuel consumption data were used to evaluate its suitability for various agricultural applications, allowing farmers to make informed decisions about which tractor to purchase for their operations.
HYDRAULIC PERFORMANCE

CATEGORY: II
Quick attach: None
OECD Static test
Maximum force exerted through whole range: 3591 lbs (16.0 kN)
i) Sustained pressure of the open relief valve: 2933 psi (202 bar)
ii) Pump delivery rate at minimum pressure and rated engine speed: 11.5 GPM (43.4 l/min)
iii) Pump delivery rate at maximum hydraulic power: 10.8 GPM (40.7 l/min)
Delivery pressure: 2540 psi (175 bar)
Power: 15.9 HP (11.9 kW)

THREE POINT HITCH PERFORMANCE

Observed maximum pressure psi (bar)
Location: remote outlet
Hydraulic oil temperature: °F (°C)
Location: hydraulic sump
Category: II
Quick attach: none

SAE Static Test—System pressure 2480 psi (171 Bar)

Hitch point distance to ground level in. (mm) 8.0 (203) 15.0 (381) 22.0 (559) 29.0 (737) 36.0 (914)
Lift force on frame lb (kN)

SAE Test OECD Test

inch mm inch mm
A 23.3 590 23.5 597
B 11.0 280 11.0 280
C 14.0 355 14.0 355
D 12.2 310 12.2 310
E 11.1 282 11.1 282
F 6.5 166 6.5 166
G 26.4 670 26.4 670
H 0.2 4 0.2 4
I 15.1 384 15.1 384
J 19.9 504 19.9 504
K 16.1 409 16.1 409
L 38.8 985 38.8 985
M 22.0 559 22.0 559
N 32.5 825 32.5 825
O 8.0 203 8.0 203
P 38.9 987 43.9 1114
Q 32.5 825 32.5 825
R 21.2 540 21.2 540

REPAIRS AND ADJUSTMENTS: No repairs or adjustments.

NOTE 1. The manufacturer declares that the average time between active regenerations is 50 hours.

NOTE 2: The performance data on this report applies to tractors with chassis serial numbers that end with EXXXXXX and higher.

REMARKS: All test results were determined from observed data obtained in accordance with official OECD, SAE and Nebraska test procedures.

We, the undersigned, certify that this is a true and correct report of official Tractor Test No. 2138, May 16, 2016.

Roger M. Hoy
Director

M.F. Kocher
J.D. Luck
P.J. Jasa
Board of Tractor Test Engineers

John Deere 5065E Diesel