

# NEBRASKA OECD TRACTOR TEST 2102—SUMMARY 967

## JOHN DEERE 8370R DIESEL

### INFINITELY VARIABLE TRANSMISSION

#### POWER TAKE-OFF PERFORMANCE

Power HP (kW)	Crank shaft speed rpm	Diesel Consumption		D.E.F. Consumption		Mean Atmospheric Conditions
		Gal/hr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Gal/hr (l/h)	
<b>MAXIMUM POWER AND FUEL CONSUMPTION</b>						
<b>Rated Engine Speed—(PTO speed—1050 rpm)</b>						
323.14 (240.97)	2100	17.61 (66.67)	0.383 (0.233)	18.35 (3.61)	0.35 (1.33)	Fuel used during active exhaust regeneration-1.09 gal (4.11 l) (see note 1, p.2)
<b>Standard Power Take-off Speed(1000 rpm)</b>						
351.19 (261.89)	2000	18.93 (71.67)	0.379 (0.231)	18.55 (3.65)	0.41 (1.55)	
<b>Maximum Power (1 hour)</b>						
364.94 (272.14)	1850	19.36 (73.29)	0.373 (0.227)	18.85 (3.71)	0.47 (1.78)	

#### VARYING POWER AND FUEL CONSUMPTION

323.14 (240.97)	2100	17.61 (66.67)	0.383 (0.233)	18.35 (3.61)	0.35 (1.33)	Air temperature
282.12 (210.38)	2154	15.54 (58.83)	0.388 (0.236)	18.15 (3.58)	0.34 (1.29)	73°F (23°C)
212.58 (158.52)	2165	12.15 (46.01)	0.402 (0.245)	17.49 (3.45)	0.27 (1.04)	Relative humidity
142.62 (106.35)	2175	9.10 (34.44)	0.449 (0.273)	15.68 (3.09)	0.23 (0.88)	35%
71.58 (53.38)	2185	6.46 (24.46)	0.635 (0.386)	11.08 (2.18)	0.17 (0.64)	Barometer
3.32 (2.48)	2196	3.87 (14.67)	8.213 (4.996)	0.86 (0.17)	0.11 (0.41)	28.84" Hg (97.66 kPa)

Maximum Torque - 1159 lb.-ft. (1572 Nm) at 1600 rpm

Maximum Torque Rise - 43.6%

Torque rise at 1679 engine rpm - 39%

Power increase at 1850 rpm - 12.9%

#### 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)	D.E.F. Consumption Hp.hr/gal (kW.h/l)	Temp. °F(°C) cool- ing dry bulb	Barom. inch Hg (kPa)
<b>Maximum Power—6.2 mph (10.0 km/h)-Manual mode</b>								
293.48 (218.85)	18940 (84.25)	5.81 (9.35)	2100	3.4	0.420 (0.255)	16.76 (3.30)	0.010 (0.006)	213 (101)
<b>75% of Pull at Maximum Power—6.2 mph (10.0 km/h)-Manual mode</b>								
228.24 (170.20)	14177 (63.06)	6.04 (9.72)	2159	2.3	0.431 (0.262)	16.32 (3.22)	0.011 (0.007)	213 (101)
<b>50% of Pull at Maximum Power—6.2 mph (10.0 km/h)-Manual mode</b>								
154.87 (115.48)	9461 (42.08)	6.14 (9.88)	2171	1.3	0.471 (0.287)	14.93 (2.94)	0.013 (0.008)	204 (95)
<b>75% of Pull at Reduced Engine Speed—Auto mode</b>								
228.04 (170.05)	14234 (63.31)	6.01 (9.67)	1738	2.3	0.408 (0.248)	17.23 (3.39)	0.012 (0.007)	213 (100)
<b>50% of Pull at Reduced Engine Speed—Auto mode</b>								
154.43 (115.15)	9533 (42.40)	6.08 (9.78)	1349	1.3	0.415 (0.252)	16.96 (3.34)	0.014 (0.008)	208 (98)

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

**Dates of tests:** October 20 to November 6, 2014

**Manufacturer:** John Deere Tractor Works, 3500  
East Donald St., P.O. Box 270, Waterloo Ia,  
50704-0270

**CONSUMABLE Fluids, OIL and TIME: Fuel** No. 2 Diesel **Specific gravity converted to 60°/60°F (15°/15°C)** 0.8450 **Fuel weight** 7.036 lbs/gal (0.843 kg/l) **Diesel Exhaust Fluid (DEF)** 32% aqueous urea solution **DEF weight** 9.071 lbs/gal (1.087 kg/l) **Oil** SAE 10W-30 **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:** 32.5 hours

**ENGINE: Make** John Deere **Diesel Type** six cylinder vertical with two turbochargers and air to air aftercooler and D.E.F (diesel exhaust fluid) exhaust treatment **Serial No.\***RG6090U003417\* **Crankshaft** lengthwise **Rated engine speed** 2100 **Bore and stroke** 4.661" x 5.354" (118.4 mm x 136.0 mm) **Compression ratio** 16.0 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 water separator **Fuel cooler** radiator for pump return fuel **Exhaust** DOC (diesel oxidation catalyst), SCR (selective catalyst reduction) and regenerative DPF (diesel particulate filter) integrated within a vertical muffler **Cooling medium temperature control** thermostat and variable speed fan

**ENGINE OPERATING PARAMETERS: Fuel rate:** 117.5 - 127.2 lb/h (53.3 - 57.7 kg/h) **High idle:** 2190 - 2210 rpm **Turbo boost:** nominal 26.8 - 29.7 psi (185 - 205 kPa) as measured 28.3 psi (195 kPa)

**CHASSIS: Type** front wheel assist with duals **Serial No.\***1RW8370RPED091048\* **Tread width** rear 60.0" (1524 mm) to 132.6" (3368 mm) front 64.0" (1625 mm) to 88.0" (2235 mm) **Wheelbase** 121.3" (3080 mm) **Hydraulic control system** direct engine drive **Transmission** Infinitely variable with four mechanical ranges and automatic shifting between ranges. **Nominal travel speeds mph (km/h)** forward - 0 - 26.1 mph, (0 - 42 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** 1000 rpm at 2000 engine rpm **Unladen tractor mass** 27865 lb (12639 kg)

**DRAWBAR PERFORMANCE**  
**UNBALLASTED - FRONT DRIVE ENGAGED**  
**MANUAL MODE - 2100 ENGINE RPM**  
**DRAWBAR POWER AT SELECTED TRAVEL SPEED SETTINGS**

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)	D.E.F Consumption lb/hp.hr (kg/kW.h)	Temp. °F(°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
4.0mph (6.4 km/h)										
257.01 (191.65)	28506 (126.80)	3.39 (5.45)	2121	13.0	0.472 (0.287)	14.90 (2.93)	0.010 (0.006)	212 (100)	55 (13)	28.79 (96.49)
4.3 mph (7.0 km/h)										
275.11 (205.15)	26868 (119.51)	3.84 (6.18)	2100	8.7	0.448 (0.273)	15.69 (3.09)	0.010 (0.006)	214 (101)	58 (15)	28.80 (97.53)
4.7 mph (7.6 km/h)										
278.54 (207.71)	24536 (109.14)	4.26 (6.86)	2100	6.8	0.442 (0.269)	15.91 (3.13)	0.011 (0.007)	216 (102)	77 (25)	28.77 (97.43)
5.1 mph (8.2 km/h)										
283.79 (211.62)	22835 (101.58)	4.66 (7.50)	2099	5.4	0.433 (0.263)	16.25 (3.20)	0.010 (0.006)	216 (102)	77 (25)	28.77 (97.43)
5.6 mph (9.0 km/h)										
290.63 (216.72)	21020 (93.50)	5.19 (8.34)	2100	4.2	0.424 (0.258)	16.60 (3.27)	0.010 (0.006)	213 (101)	53 (12)	28.85 (97.70)
6.2 mph (10.0 km/h)										
293.48 (218.85)	18940 (84.25)	5.81 (9.35)	2100	3.4	0.420 (0.255)	16.76 (3.30)	0.010 (0.006)	213 (101)	47 (8)	28.84 (97.66)
6.8 mph (11.0 km/h)										
292.65 (218.23)	17118 (76.14)	6.41 (10.32)	2099	3.0	0.421 (0.256)	16.70 (3.29)	0.010 (0.006)	213 (101)	59 (15)	28.85 (97.70)
7.5 mph (12.0 km/h)										
288.81 (215.37)	15421 (68.60)	7.02 (11.30)	2100	2.6	0.426 (0.259)	16.52 (3.25)	0.010 (0.006)	214 (101)	66 (19)	28.84 (97.66)
8.1 mph (13.0 km/h)										
288.29 (214.98)	14175 (63.05)	7.63 (12.28)	2100	2.3	0.428 (0.260)	16.45 (3.24)	0.010 (0.006)	214 (101)	69 (21)	28.84 (97.66)
8.7 mph (14.0 km/h)										
287.81 (214.62)	13104 (58.29)	8.24 (13.26)	2100	2.0	0.429 (0.261)	16.41 (3.23)	0.010 (0.006)	215 (102)	71 (22)	28.83 (97.63)

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

**NOTE 1:** The manufacturer declares that the average time between active regenerations is 50 hours, while operated in Auto Filter Cleaning Mode, at rated speed, full load, under steady state conditions.

**NOTE 2:** Custom mode settings are as follows: ECO on, ECO on minimum engine speed=900 rpm, PTO off Droop = 26%.

**REMARKS:** All test results were determined from observed data obtained in accordance with official OECD, SAE and Nebraska test procedures. This tractor did not meet the manufacturer's remote hydraulic flow claim of 85 GPM (321l/min) with the dual pumps combined. For the maximum power tests the fuel temperature at the injection pump inlet was maintained at 100°F(38°C). 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. **2102**, Nebraska Summary 967, December 19, 2014.

Roger M. Hoy  
Director

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

TRACTOR SOUND LEVEL WITH CAB	Front Wheel Drive	
	Engaged dB(A)	Disengaged dB(A)
At no load at 4.7 mph (7.6 km/h) engine speed - 2190 rpm	67.3	67.5
At no load at 4.7 mph (7.6 km/h) Auto mode - engine speed - 1200 rpm	61.0	60.8
At no load at 4.7 mph (7.6 km/h) Custom mode - engine speed - 900 rpm	59.1	58.6
Transport speed - no load - manual mode		70.1
Transport speed - no load - Auto mode		68.5
Transport speed - no load - Custom mode		68.2
Bystander		84.1

TIRES, BALLAST AND WEIGHT	With Ballast	Without Ballast
	<b>Rear Tires</b> - No., size, ply & psi(kPa)	Six 480/80R50;***;12(85)
<b>Ballast</b> - Triples (total)	2420 lb (1098 kg)	None
- Cast Iron (total)	5750 lb (2608 kg)	None
<b>Front Tires</b> - No., size, ply & psi(kPa)	Four 420/85R34;***;19(130)	Two 420/85R34;***;26(180)
<b>Ballast</b> - Duals (total)	1600 lb (726 kg)	None
- Cast Iron (total)	2600 lb (1179 kg)	None
<b>Height of Drawbar</b>	21.5 in (545 mm)	21.0 in (535 mm)
<b>Static Weight with operator</b> - Rear	23030 lb (10446 kg)	16200 lb (7348 kg)
- Front	17380 lb (7884 kg)	11840 lb (5371 kg)
- Total	40410 lb (18330 kg)	28040 lb (12719 kg)

**DRAWBAR PERFORMANCE**  
**UNBALLASTED - FRONT DRIVE ENGAGED - AUTO MODE**  
**(Loads based on 2100 engine rpm manual mode performance runs)**  
**DRAWBAR POWER AT SELECTED TRAVEL SPEED SETTINGS**

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)	D.E.F Consumption lb/hp.hr (kg/kW.h)	Temp.°F(°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
4.0 mph (6.4 km/h)										
261.40 (194.93)	28403 (126.34)	3.45 (5.55)	1973	12.4	0.453 (0.276)	15.53 (3.06)	0.012 (0.007)	214 (101)	56 (13)	28.80 (97.53)
4.2 mph (6.8 km/h)										
273.85 (204.21)	27066 (120.40)	3.80 (6.11)	1977	9.3	0.439 (0.267)	16.04 (3.16)	0.011 (0.007)	214 (101)	60 (15)	28.81 (97.56)
4.6 mph (7.4 km/h)										
278.56 (207.72)	24613 (109.48)	4.25 (6.83)	1988	7.0	0.432 (0.263)	16.29 (3.21)	0.012 (0.007)	216 (102)	78 (25)	28.76 (97.39)
5.0 mph (8.0 km/h)										
284.68 (212.29)	22975 (102.20)	4.65 (7.48)	1990	5.6	0.426 (0.259)	16.50 (3.25)	0.011 (0.007)	216 (102)	78 (25)	28.77 (97.43)
5.5 mph (8.8 km/h)										
291.08 (217.05)	21034 (93.56)	5.19 (8.35)	1990	4.2	0.416 (0.253)	16.90 (3.33)	0.011 (0.006)	213 (101)	55 (13)	28.84 (97.66)
6.1 mph (9.8 km/h)										
293.46 (218.83)	18884 (84.00)	5.83 (9.38)	1990	3.4	0.412 (0.250)	17.09 (3.37)	0.011 (0.007)	213 (100)	49 (9)	28.85 (97.70)
6.7 mph (10.8 km/h)										
292.42 (218.05)	17004 (75.64)	6.45 (10.38)	1990	3.0	0.414 (0.252)	16.98 (3.35)	0.011 (0.007)	214 (101)	61 (16)	28.85 (97.70)
7.4 mph (11.8 km/h)										
288.86 (215.40)	15315 (68.12)	7.07 (11.38)	1990	2.6	0.417 (0.254)	16.87 (3.32)	0.011 (0.007)	214 (101)	68 (20)	28.84 (97.66)
8.0 mph (12.8 km/h)										
288.44 (215.09)	14058 (62.53)	7.69 (12.38)	1990	2.3	0.419 (0.255)	16.81 (3.31)	0.011 (0.006)	214 (101)	70 (21)	28.84 (97.66)
8.6 mph (13.8 km/h)										
287.66 (214.50)	12969 (57.69)	8.32 (13.39)	1990	2.0	0.419 (0.255)	16.79 (3.31)	0.011 (0.007)	215 (102)	71 (22)	28.83 (97.63)

**DRAWBAR PERFORMANCE**  
**UNBALLASTED - FRONT DRIVE ENGAGED**  
**CUSTOM MODE (See p.2, Note 2 for settings used)**  
**FUEL CONSUMPTION CHARACTERISTICS**

Power Hp (kW)	Drawbar pull lbs (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption		D.E.F Consumption	Temp. <sup>°F(°C)</sup> cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
<b>Maximum Power—6.1 mph (9.8 km/h)</b>										
293.44 (218.81)	18881 (83.99)	5.83 (9.38)	1676	3.4	0.406 (0.247)	17.32 (3.41)	0.012 (0.008)	212 (100)	51 (10)	28.84 (97.66)
<b>75% of Pull at Maximum Power—6.1 mph (9.8 km/h)</b>										
228.09 (170.09)	14238 (63.33)	6.01 (9.67)	1415	2.3	0.409 (0.249)	17.20 (3.39)	0.011 (0.007)	213 (100)	76 (25)	28.80 (97.53)
<b>50% of Pull at Maximum Power—6.1 mph (9.8 km/h)</b>										
153.93 (114.78)	9497 (44.24)	6.08 (9.78)	1139	1.2	0.426 (0.259)	16.51 (3.25)	0.025 (0.015)	208 (98)	77 (25)	28.78 (97.46)

**POWER AT SELECTED TRAVEL SPEED SETTINGS-CUSTOM MODE**  
**(Loads based on 2100 engine rpm manual mode performance runs)**

Power Hp (kW)	Drawbar pull lbs (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption		D.E.F Consumption	Temp. <sup>°F(°C)</sup> cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
<b>4.0 mph (6.4 km/h)</b>										
260.38 (194.17)	28306 (125.91)	3.45 (5.55)	1608	12.4	0.445 (0.271)	15.80 (3.11)	0.008 (0.005)	214 (101)	57 (14)	28.80 (97.53)
<b>4.2 mph (6.8 km/h)</b>										
269.35 (200.85)	26818 (119.29)	3.77 (6.07)	1613	10.0	0.430 (0.261)	16.37 (3.22)	0.010 (0.006)	213 (101)	61 (16)	28.80 (97.53)
<b>4.6 mph (7.4 km/h)</b>										
278.34 (207.56)	24661 (109.70)	4.24 (6.82)	1637	7.0	0.424 (0.258)	16.60 (3.27)	0.012 (0.008)	216 (102)	78 (26)	28.75 (97.36)
<b>5.0 mph (8.0 km/h)</b>										
284.32 (212.01)	22955 (102.11)	4.65 (7.48)	1647	5.7	0.416 (0.253)	16.90 (3.33)	0.012 (0.008)	216 (102)	77 (25)	28.76 (97.39)
<b>5.5 mph (8.8 km/h)</b>										
291.05 (217.04)	21045 (93.61)	5.19 (8.35)	1682	4.2	0.408 (0.248)	17.23 (3.39)	0.012 (0.007)	213 (100)	57 (14)	28.85 (97.70)
<b>6.1 mph (9.8 km/h)</b>										
293.44 (218.81)	18881 (83.99)	5.83 (9.38)	1676	3.4	0.406 (0.247)	17.32 (3.41)	0.012 (0.008)	212 (100)	51 (10)	28.84 (97.66)
<b>6.7 mph (10.8 km/h)</b>										
292.38 (218.03)	17008 (75.65)	6.45 (10.38)	1656	2.9	0.406 (0.247)	17.35 (3.42)	0.012 (0.007)	213 (101)	63 (17)	28.84 (97.66)
<b>7.4 mph (11.8 km/h)</b>										
288.60 (215.21)	15306 (68.08)	7.07 (11.38)	1651	2.6	0.409 (0.249)	17.20 (3.39)	0.012 (0.007)	214 (101)	68 (20)	28.84 (97.66)
<b>8.0 mph (12.8 km/h)</b>										
288.51 (215.14)	14063 (62.56)	7.69 (12.38)	1679	2.3	0.410 (0.249)	17.17 (3.38)	0.011 (0.007)	214 (101)	71 (21)	28.83 (97.63)
<b>8.6 mph (13.8 km/h)</b>										
287.46 (214.36)	12962 (57.66)	8.32 (13.39)	1690	2.0	0.408 (0.248)	17.24 (3.40)	0.012 (0.007)	215 (101)	72 (22)	28.82 (97.60)

**DRAWBAR PERFORMANCE**  
**UNBALLASTED - FRONT DRIVE ENGAGED**  
**MANUAL MODE - 1850 ENGINE RPM**  
**MAXIMUM POWER AT SELECTED TRAVEL SPEED SETTINGS**

Power Hp (kW)	Drawbar pull lbs (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr (kg/kW.h)	Consumption Hp.hr/gal (kW.h/l)	D.E.F Consumption lb/hp.hr (kg/kW.h)	Temp. °F(°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
4.0 mph (6.4 km/h)										
258.63 (192.86)	28491 (126.73)	3.41 (5.48)	2122	12.5	0.466 (0.284)	15.09 (2.97)	0.010 (0.006)	212 (100)	55 (13)	28.79 (97.49)
4.3 mph (7.0 km/h)										
275.24 (205.25)	26935 (119.81)	3.84 (6.17)	2100	8.9	0.444 (0.270)	15.84 (3.12)	0.010 (0.006)	214 (101)	59 (15)	28.80 (97.53)
4.7 mph (7.6 km/h)										
285.39 (212.82)	26107 (116.13)	4.10 (6.60)	2063	8.6	0.444 (0.270)	15.86 (3.12)	0.010 (0.006)	214 (101)	62 (17)	28.81 (97.56)
5.1 mph (8.2 km/h)										
297.04 (221.50)	25319 (112.62)	4.40 (7.08)	2032	7.8	0.436 (0.265)	16.16 (3.18)	0.010 (0.006)	214 (101)	63 (17)	28.81 (97.56)
5.6 mph (9.0 km/h)										
309.82 (231.03)	24419 (108.62)	4.76 (7.66)	1983	6.8	0.430 (0.262)	16.36 (3.22)	0.010 (0.006)	215 (102)	63 (17)	28.81 (97.56)
6.2 mph (10.0 km/h)										
321.29 (239.58)	23807 (105.90)	5.06 (8.14)	1889	6.3	0.425 (0.258)	16.57 (3.26)	0.011 (0.007)	215 (102)	64 (18)	28.80 (97.53)
6.8 mph (11.0 km/h)										
324.36 (241.88)	22070 (98.17)	5.51 (8.87)	1850	5.5	0.420 (0.256)	16.75 (3.30)	0.011 (0.007)	215 (102)	66 (19)	28.81 (97.56)
7.5 mph (12.0 km/h)										
325.87 (243.00)	20137 (89.57)	6.07 (9.77)	1851	4.5	0.419 (0.255)	16.77 (3.30)	0.011 (0.006)	215 (102)	66 (19)	28.81 (97.56)
8.1 mph (13.0 km/h)										
327.11 (243.92)	18549 (82.51)	6.62 (10.65)	1850	3.9	0.417 (0.253)	16.89 (3.33)	0.011 (0.006)	215 (102)	67 (19)	28.80 (97.53)
8.7 mph (14.0 km/h)										
326.42 (243.41)	17109 (76.10)	7.16 (11.51)	1850	3.5	0.418 (0.254)	16.85 (3.32)	0.011 (0.007)	216 (102)	68 (20)	28.80 (97.53)
9.3 mph (15.0 km/h)										
326.78 (243.68)	15930 (70.86)	7.69 (12.38)	1850	3.1	0.418 (0.254)	16.84 (3.32)	0.010 (0.006)	216 (102)	68 (20)	28.80 (97.53)
9.9 mph (16.0 km/h)										
326.68 (243.61)	14885 (66.21)	8.23 (13.24)	1850	2.8	0.417 (0.254)	16.86 (3.32)	0.011 (0.006)	216 (102)	70 (21)	28.79 (97.49)

**DRAWBAR PERFORMANCE**  
**BALLASTED- FRONT DRIVE ENGAGED**  
**MANUAL MODE - 1850 ENGINE RPM**  
**MAXIMUM POWER AT SELECTED TRAVEL SPEED SETTINGS**

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)	D.E.F Consumption lb/hp.hr (kg/kW.h)	Temp.°F(°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
2.7 mph (4.4 km/h)										
249.84 (186.31)	40840 (181.67)	2.30 (3.69)	2110	14.1	0.492 (0.299)	14.31 (2.82)	0.012 (0.007)	210 (99)	52 (11)	28.77 (97.43)
3.2 mph (5.2 km/h)										
284.80 (212.37)	39329 (174.94)	2.72 (4.37)	2020	10.2	0.462 (0.281)	15.24 (3.00)	0.012 (0.008)	215 (101)	54 (12)	28.78 (97.46)
3.7 mph (6.0 km/h)										
305.18 (227.57)	38318 (170.45)	2.99 (4.81)	1903	9.0	0.448 (0.273)	15.69 (3.09)	0.013 (0.008)	215 (101)	56 (13)	28.79 (97.49)
4.2 mph (6.8 km/h)										
315.17 (235.02)	35029 (155.82)	3.38 (5.43)	1850	6.6	0.433 (0.264)	16.23 (3.20)	0.013 (0.008)	215 (101)	57 (14)	28.79 (97.49)
4.7 mph (7.6 km/h)										
322.34 (240.37)	31552 (140.35)	3.83 (6.16)	1850	5.1	0.425 (0.258)	16.57 (3.26)	0.013 (0.008)	215 (102)	57 (14)	28.79 (97.49)
5.1 mph (8.2 km/h)										
325.04 (242.38)	29274 (130.22)	4.16 (6.69)	1850	4.4	0.422 (0.257)	16.68 (3.29)	0.013 (0.008)	215 (102)	57 (14)	28.79 (97.49)
5.6 mph (9.0 km/h)										
325.92 (243.04)	26586 (118.26)	4.60 (7.40)	1850	3.9	0.420 (0.255)	16.76 (3.30)	0.013 (0.008)	216 (102)	57 (14)	28.79 (97.49)
6.2 mph (10.0 km/h)										
329.94 (246.03)	24092 (107.16)	5.14 (8.27)	1850	3.4	0.416 (0.253)	16.90 (3.33)	0.013 (0.008)	215 (102)	57 (14)	28.79 (97.49)
6.8 mph (11.0 km/h)										
329.10 (245.41)	21771 (96.84)	5.67 (9.12)	1849	3.0	0.417 (0.253)	16.89 (3.33)	0.012 (0.008)	216 (102)	58 (14)	28.79 (97.49)
7.5 mph (12.0 km/h)										
328.15 (244.70)	19831 (88.21)	6.21 (9.99)	1850	2.6	0.418 (0.254)	16.84 (3.32)	0.012 (0.008)	216 (102)	58 (14)	28.79 (97.49)
8.1 mph (13.0 km/h)										
324.61 (242.06)	18061 (80.34)	6.74 (10.85)	1851	2.4	0.420 (0.256)	16.73 (3.30)	0.013 (0.008)	215 (102)	61 (16)	28.77 (97.43)
8.7 mph (14.0 km/h)										
322.51 (240.49)	16631 (73.98)	7.27 (11.70)	1850	2.2	0.422 (0.257)	16.66 (3.28)	0.013 (0.008)	215 (102)	62 (17)	28.77 (97.43)
9.3 mph (15.0 km/h)										
322.68 (240.62)	15505 (68.97)	7.80 (12.55)	1850	2.0	0.424 (0.258)	16.59 (3.27)	0.013 (0.008)	216 (102)	63 (17)	28.77 (97.43)
9.9 mph (16.0 km/h)										
320.47 (238.97)	14410 (64.10)	8.34 (13.42)	1850	1.9	0.425 (0.259)	16.54 (3.26)	0.013 (0.008)	216 (102)	63 (17)	28.77 (97.43)

## HYDRAULIC PERFORMANCE

CATEGORY: IVN  
 Quick Attach: Yes  
 OECD Static test

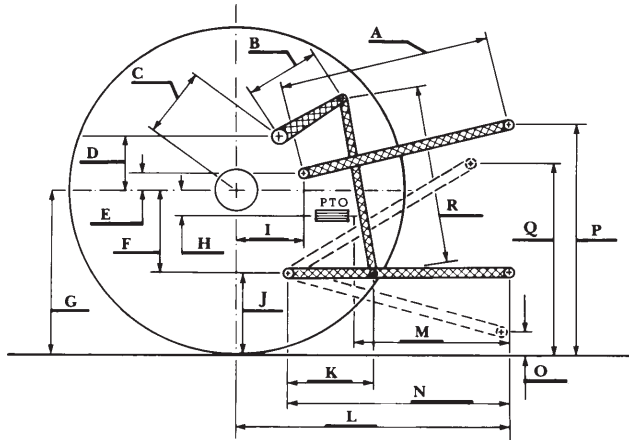
Maximum force exerted through whole range: Lift cylinders  
 20254 lbs (90.1 kN) 2x115 mm  
 15229 lbs (67.7 kN) 2x100 mm

	85 cc pump	85 cc and 35cc pumps combined
i) Sustained pressure at compensator cutoff:	2915 psi (201 bar)	2941 psi (203 bar)
<b>three outlet sets combined</b>		
ii) Pump delivery rate at minimum pressure and rated engine speed:	60.6 GPM (229.6 l/min)	84.2 GPM (318.7 l/min)
iii) Pump delivery rate at maximum hydraulic power:	60.2 GPM (228.0 l/min)	80.0 GPM (302.9 l/min)
Delivery pressure:	2494 psi (172 bar)	2114 psi (146 bar)
Power:	87.6 HP (65.4 kW)	98.7 HP (73.6 kW)
<b>single outlet set</b>		
ii) Pump delivery rate at minimum pressure and rated engine speed:	1/2" couplers 36.4 GPM (137.8 l/min)	3/4" couplers 42.9 GPM (162.5 l/min)
iii) Pump delivery rate at maximum hydraulic power:	34.4 GPM (130.3 l/min)	41.5 GPM (157.2 l/min)
Delivery pressure:	2404 psi (166 bar)	2301 psi (159 bar)
Power:	48.3 HP (36.0 kW)	55.8 HP (41.6 kW)

### HITCH DIMENSIONS AS TESTED—NO LOAD

	inch	mm
A	28.5	725
B	20.5	520
C	20.9	532
D	18.9	480
E	12.0	304
F	14.4	365
G	38.2	970
H	9.1	230
I	23.6	599
J	23.8	605
K	28.7	730
L	52.8	1340
*L'	58.7	1490
M	25.9	657
N	40.1	1019
O	9.1	230
P	50.1	1272
Q	41.5	1055
R	45.7	1160

\*L' to Quick Attach ends



**JOHN DEERE 8370R DIESEL**