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2015

## Test 2111: John Deere 9520R

Nebraska Tractor Test Lab

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# NEBRASKA OECD TRACTOR TEST 2111–SUMMARY 974

## JOHN DEERE 9520R DIESEL

### 18 SPEED

#### POWER TAKE-OFF PERFORMANCE

Power HP (kW)	Crank shaft speed rpm	Diesel Consumption Gal/hr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	D.E.F. Consumption Gal/hr (l/h)	Mean Atmospheric Conditions
<b>MAXIMUM POWER AND FUEL CONSUMPTION</b>						
SEE NOTE 1 - PAGE 2						
<b>Rated Engine Speed—(PTO speed—1108 rpm)</b>						
326.43 (243.42)	2099	20.73 (78.45)	0.447 (0.272)	15.75 (3.10)	0.36 (1.37)	Fuel used during active exhaust regeneration-2.85 gal (10.79 l) (see note 2, p.2)
<b>Standard Power Take-off Speed(1000 rpm)</b>						
361.29 (269.41)	1895	20.81 (78.77)	0.405 (0.246)	17.36 (3.42)	0.34 (1.29)	
<b>Maximum Power (1 hour)</b>						
367.32 (273.91)	1599	19.84 (75.09)	0.380 (0.231)	18.52 (3.65)	0.34 (1.29)	

#### VARYING POWER AND FUEL CONSUMPTION

326.43 (243.42)	2099	20.73 (78.45)	0.447 (0.272)	15.75 (3.10)	0.36 (1.37)	Air temperature
284.23 (211.95)	2150	19.49 (73.79)	0.482 (0.293)	14.58 (2.87)	0.39 (1.46)	73°F (23°C)
213.15 (158.95)	2150	16.14 (61.08)	0.532 (0.324)	13.21 (2.60)	0.30 (1.15)	Relative humidity
142.20 (106.04)	2150	12.87 (48.71)	0.636 (0.387)	11.05 (2.18)	0.28 (1.07)	50%
71.13 (53.04)	2150	9.76 (36.95)	0.965 (0.587)	7.29 (1.44)	0.24 (0.91)	Barometer
0.94 (0.70)	2150	7.18 (27.18)	53.606 (32.607)	0.13 (0.03)	0.18 (0.69)	28.79" Hg (97.49 kPa)

Maximum Torque - 1241 lb.-ft. (1683 Nm) at 1550 rpm

Maximum Torque Rise - 52.0%

Torque rise at 1678 engine rpm - 42%

Power increase at 1599 rpm - 12.5%

#### DRAWBAR PERFORMANCE (Unballasted)

##### 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)	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)
<b>Maximum Power—7th Gear- Manual mode</b>										
415.60 (309.91)	32449 (144.34)	4.80 (7.72)	2099	3.6	0.441 (0.268)	15.94 (3.14)	0.012 (0.007)	196 (91)	62 (17)	28.93 (97.97)
<b>75% of Pull at Maximum Power—7th Gear - Manual mode</b>										
324.38 (241.89)	24294 (108.07)	5.01 (8.06)	2166	2.5	0.471 (0.286)	14.94 (2.94)	0.014 (0.008)	190 (88)	68 (20)	28.86 (97.73)
<b>50% of Pull at Maximum Power—7th Gear- Manual mode</b>										
220.87 (164.70)	16207 (72.09)	5.11 (8.22)	2190	1.7	0.541 (0.329)	13.00 (2.56)	0.016 (0.009)	188 (86)	68 (20)	28.85 (97.70)
<b>75% of Pull at Reduced Engine Speed—5.1 mph (8.2 km/h)-Auto mode</b>										
324.53 (242.00)	24417 (108.61)	4.98 (8.01)	1577	2.4	0.403 (0.245)	17.47 (3.44)	0.009 (0.006)	195 (91)	68 (20)	28.86 (97.73)
<b>50% of Pull at Reduced Engine Speed—5.1 mph (8.2 km/h)-Auto mode</b>										
221.16 (164.92)	16080 (71.53)	5.16 (8.30)	1314	1.6	0.409 (0.249)	17.21 (3.39)	0.011 (0.006)	192 (89)	68 (20)	28.85 (97.70)

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

**Dates of Tests:** April 27 - May 5, 2015

**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)** 0.8447 **Fuel weight** 7.033 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, hydraulic and final drive 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, air to air aftercooler and D.E.F. (diesel exhaust fluid) exhaust treatment **Serial No.** \*RG6135U002187\* **Crankshaft** lengthwise **Rated engine speed** 2100 **Bore and stroke** 5.197" x 6.496" (132.0 mm x 165.0 mm) **Compression ratio** 16.0 to 1 **Displacement** 826 cu in (13548 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 transmission/ hydraulic oil also feeding front and rear axles **Fuel filter** two paper cartridges **Fuel cooler** radiator for returned 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** 3 thermostats and variable speed fan

**ENGINE OPERATING PARAMETERS: Fuel rate:** Stationary PTO operation (395 engine hp) 137.3 - 148.8 lb/h (62.3 - 67.5 kg/h) (520 engine hp) 177.5 - 192.0 lb/h (80.5 - 87.1 kg/h) **High idle:** 2150 - 2250 rpm (2125 - 2175 rpm with PTO engaged) **Turbo boost:** (520 engine hp) nominal 33.4 - 36.3 psi (230 - 250 kPa) as measured 35.0 psi (241 kPa)

**CHASSIS: Type** four wheel drive with triples **Serial No.** \*1RW9520RTEP016056\* **Tread width** rear 59.1" (1500 mm) to 163.8" (4160 mm), front 59.1" (1500 mm) to 163.8" (4160 mm) **Wheelbase** 137.8" (3500 mm) **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio with full range operator controlled power shift **Nominal travel speeds mph (km/h)** first 2.37 (3.81) second 2.91 (4.69) third 3.23 (5.19) fourth 3.60 (5.79) fifth 3.96 (6.38) sixth 4.42 (7.12) seventh 4.90 (7.89) eighth 5.47 (8.81) ninth 6.03 (9.71) tenth 6.74 (10.84) eleventh 7.46 (12.01) twelfth 8.25 (13.27) thirteenth 9.18 (14.77) fourteenth 10.15 (16.33) fifteenth 12.54 (20.18) sixteenth 15.43

## DRAWBAR PERFORMANCE

(Unballasted at 2100 rpm)

### MAXIMUM POWER IN SELECTED GEARS

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)
3rd Gear										
384.69 (286.86)	49724 (221.18)	2.91 (4.68)	2098	11.3	0.481 (0.292)	14.63 (2.88)	0.011 (0.007)	193 (89)	55 (13)	28.82 (97.60)
4th Gear										
396.08 (295.36)	43941 (195.46)	3.38 (5.44)	2099	7.6	0.461 (0.280)	15.25 (3.00)	0.012 (0.007)	197 (92)	70 (21)	28.90 (97.87)
5th Gear										
406.34 (303.01)	40037 (178.09)	3.81 (6.12)	2099	5.5	0.452 (0.275)	15.55 (3.06)	0.011 (0.007)	199 (93)	65 (18)	28.91 (97.90)
6th Gear										
409.27 (305.19)	35555 (158.16)	4.32 (6.95)	2099	4.3	0.448 (0.273)	15.69 (3.09)	0.011 (0.007)	195 (91)	65 (18)	28.91 (97.90)
7th Gear										
415.60 (309.91)	32449 (144.34)	4.80 (7.72)	2099	3.6	0.441 (0.268)	15.94 (3.14)	0.012 (0.007)	196 (91)	62 (17)	28.93 (97.97)
8th Gear										
419.44 (312.77)	29300 (130.33)	5.37 (8.64)	2100	3.0	0.437 (0.266)	16.08 (3.17)	0.011 (0.007)	195 (91)	60 (16)	28.93 (97.97)
9th Gear										
415.85 (310.10)	26117 (116.17)	5.97 (9.61)	2100	2.5	0.443 (0.269)	15.89 (3.13)	0.011 (0.007)	194 (90)	59 (15)	28.93 (97.97)
10th Gear										
414.99 (309.45)	23390 (104.04)	6.65 (10.70)	2100	2.2	0.441 (0.268)	15.95 (3.14)	0.012 (0.007)	197 (92)	61 (16)	28.93 (97.97)
11th Gear										
413.51 (308.35)	21048 (93.63)	7.37 (11.86)	2100	2.0	0.444 (0.270)	15.84 (3.12)	0.012 (0.008)	200 (93)	66 (19)	28.89 (97.83)
12th Gear										
413.43 (308.29)	18875 (83.96)	8.22 (13.22)	2100	1.8	0.440 (0.268)	15.97 (3.15)	0.012 (0.007)	199 (93)	67 (19)	28.88 (97.80)

(24.83) seventeenth 19.08 (30.70) eighteenth 23.48 (37.78) reverse 2.37 (3.81), 3.23 (5.19), 3.60 (5.79), 4.90 (7.89), 5.47 (8.81), 7.46 (12.01) **Clutch** wet multiple disc hydraulically actuated by a foot pedal **Brakes** wet multiple disc hydraulically actuated by a foot pedal **Steering** hydrostatic and articulated **Power take-off** 1000 rpm at 1895 engine rpm **Unladen tractor mass** 47380 lb (21491 kg)

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

**NOTE 1.** In stationary PTO operation, this model operates in a derated power mode. With stationary PTO operation, using FieldCruise™, an isochronous governor is utilized. All PTO tests were conducted with FieldCruise™ engaged.

**NOTE 2.** The manufacturer declares that the average time between active regenerations is 50 hours, while operated in Auto Filter Cleaning Mode, at rated speed, full PTO load, under steady state conditions.

**REMARKS:** All test results were determined from observed data obtained in accordance with official OECD, SAE and Nebraska test procedures. 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. **2111**, Nebraska Summary 974, September 4, 2015.

Roger M. Hoy  
Director

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

### TRACTOR SOUND LEVEL WITH CAB

	dB(A)
At no load in 7th gear	70.7
Transport speed - no load - 18th gear	72.1
Bystander in 18th gear	85.8

### TIRES, BALLAST AND WEIGHT

	With Ballast	Without Ballast
<b>Rear Tires</b> - No., size, ply & psi(kPa)	Six 480/80R46;***;14(95)	Six 480/80R46;***;12(85)
<b>Ballast</b> - Liquid (total)	None	None
- Cast Iron (total)	5260 lb (2387 kg)	None
<b>Front Tires</b> - No., size, ply & psi(kPa)	Six 480/80R46;***;17(115)	Six 480/80R46;***;15(105)
<b>Ballast</b> - Liquid (total)	None	None
- Cast Iron (total)	2185 lb (991 kg)	None
<b>Height of Drawbar</b>	21.0 in (535 mm)	21.5 in (545 mm)
<b>Static Weight with operator</b> - Rear	25320 lb(11485 kg)	20060 lb (9099 kg)
- Front	29680 lb(13463 kg)	27495 lb(12471 kg)
- Total	55000 lb(24948 kg)	47555 lb(21570 kg)

**DRAWBAR PERFORMANCE**  
**UNBALLASTED - AUTO MODE**  
**(Loads based on 2100 engine rpm manual mode performance runs)**  
**DRAWBAR POWER AT SELECTED TRAVEL SPEEDS**

Power Hp (kW)	Drawbar pull lbs (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption		D.E.F. Consumption	Temp. °F (°C)		Barom. inch Hg (kPa)
					lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	lb/hp.hr (kg/kW.h)	cool- ing med	Air dry bulb	
3.7 mph (6.0 km/h)										
396.59 (295.73)	43012 (191.32)	3.46 (5.57)	1745	7.7	0.421 (0.256)	16.70 (3.29)	0.010 (0.006)	211 (99)	70 (21)	28.89 (97.83)
4.0 mph (6.4 km/h)										
405.53 (302.40)	40395 (179.69)	3.77 (6.06)	1682	5.8	0.408 (0.248)	17.22 (3.39)	0.009 (0.006)	209 (98)	65 (18)	28.90 (97.87)
4.5 mph (7.2 km/h)										
409.63 (305.46)	35693 (158.77)	4.30 (6.92)	1705	4.3	0.402 (0.245)	17.49 (3.44)	0.009 (0.005)	203 (95)	64 (18)	28.91 (97.90)
5.0 mph (8.0 km/h)										
415.50 (309.83)	32362 (143.95)	4.82 (7.75)	1710	3.6	0.401 (0.244)	17.55 (3.46)	0.009 (0.006)	208 (98)	63 (17)	28.92 (97.93)
5.5 mph (8.8 km/h)										
419.36 (312.72)	29535 (131.38)	5.32 (8.56)	1693	3.1	0.398 (0.242)	17.66 (3.48)	0.009 (0.005)	204 (95)	60 (16)	28.93 (97.97)
6.1 mph (9.8 km/h)										
415.33 (309.71)	26148 (116.31)	5.96 (9.59)	1885	2.5	0.410 (0.250)	17.14 (3.38)	0.009 (0.005)	197 (91)	59 (15)	28.93 (97.97)
6.7 mph (10.8 km/h)										
414.46 (309.06)	23617 (105.05)	6.58 (10.59)	1879	2.3	0.412 (0.250)	17.08 (3.36)	0.009 (0.006)	202 (94)	61 (16)	28.94 (98.00)
7.5 mph (12.0 km/h)										
413.67 (308.47)	21189 (94.25)	7.32 (11.78)	1877	2.1	0.409 (0.249)	17.20 (3.39)	0.009 (0.006)	203 (95)	67 (19)	28.89 (97.83)
8.3 mph (13.4 km/h)										
412.92 (307.91)	18872 (83.95)	8.21 (13.20)	1895	2.0	0.419 (0.255)	16.78 (3.31)	0.009 (0.006)	204 (96)	67 (19)	28.88 (97.80)

**DRAWBAR PERFORMANCE**  
**(Unballasted at 1750 RPM)**  
**MAXIMUM POWER IN SELECTED GEARS**

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)
3rd Gear										
390.49 (291.19)	49614 (220.69)	2.95 (4.75)	2099	9.8	0.474 (0.288)	14.85 (2.93)	0.010 (0.006)	193 (89)	55 (11)	28.82 (97.60)
4th Gear										
397.28 (296.25)	45011 (200.22)	3.31 (5.33)	2082	8.8	0.466 (0.283)	15.11 (2.98)	0.012 (0.008)	202 (94)	70 (21)	28.89 (97.83)
5th Gear										
415.45 (309.80)	43185 (192.10)	3.61 (5.81)	2040	7.9	0.450 (0.274)	15.63 (3.08)	0.012 (0.007)	208 (98)	71 (22)	28.88 (97.80)
6th Gear										
438.82 (327.23)	41628 (185.17)	3.96 (6.36)	1980	7.2	0.444 (0.270)	15.85 (3.12)	0.010 (0.006)	212 (100)	72 (22)	28.87 (97.77)
7th Gear										
452.42 (337.37)	40226 (178.93)	4.22 (6.79)	1899	6.6	0.429 (0.261)	16.41 (3.23)	0.009 (0.005)	216 (102)	72 (22)	28.86 (97.73)
8th Gear										
456.18 (340.17)	39024 (173.59)	4.39 (7.06)	1769	5.8	0.417 (0.253)	16.88 (3.33)	0.010 (0.006)	217 (103)	72 (22)	28.86 (97.73)
9th Gear										
465.22 (346.91)	35727 (158.92)	4.88 (7.85)	1750	4.7	0.405 (0.247)	17.34 (3.42)	0.009 (0.005)	215 (101)	67 (19)	28.92 (97.93)
10th Gear										
466.50 (347.87)	32037 (142.51)	5.46 (8.79)	1750	3.8	0.407 (0.248)	17.26 (3.40)	0.009 (0.005)	215 (102)	67 (19)	28.92 (97.93)
11th Gear										
472.45 (352.30)	29173 (129.77)	6.07 (9.77)	1751	3.2	0.404 (0.246)	17.40 (3.43)	0.008 (0.005)	213 (100)	63 (17)	28.95 (98.04)
12th Gear										
470.99 (351.21)	26051 (115.88)	6.78 (10.91)	1751	2.8	0.402 (0.245)	17.50 (3.45)	0.008 (0.005)	215 (101)	64 (18)	28.95 (98.04)
13th Gear										
468.30 (349.21)	23326 (103.76)	7.53 (12.12)	1750	2.5	0.403 (0.245)	17.47 (3.44)	0.008 (0.005)	215 (102)	65 (18)	28.94 (98.00)
14th Gear										
472.23 (352.14)	21101 (93.86)	8.39 (13.50)	1749	2.2	0.401 (0.244)	17.54 (3.46)	0.008 (0.005)	215 (102)	65 (18)	28.94 (98.00)

**Lugging ability in 11th gear**

Crankshaft speed rpm	2100	2001	1900	1799	1749	1600	1300	1100
Pull-lbs (kN)	21066 (93.71)	24398 (108.53)	26623 (118.42)	28225 (125.55)	29098 (129.43)	30666 (136.41)	30042 (133.63)	28228 (125.56)
Increase in pull %	0	16	26	34	38	46	43	34
Power-Hp (kW)	413.85 (308.61)	455.33 (339.54)	470.38 (350.76)	471.71 (351.75)	472.11 (352.05)	453.77 (338.38)	361.43 (269.52)	287.98 (214.75)
Speed-mph (km/h)	7.37 (11.86)	7.00 (11.27)	6.63 (10.67)	6.27 (10.09)	6.08 (9.78)	5.55 (8.93)	4.51 (7.26)	3.83 (6.16)
Slip %	2.1	2.4	2.7	2.8	2.9	3.1	3.1	2.9

**DRAWBAR PERFORMANCE**  
**(Ballasted at 1750 RPM)**  
**MAXIMUM POWER IN SELECTED GEARS**

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)
2nd Gear										
380.22 (283.53)	56344 (250.63)	2.53 (4.07)	2066	13.5	0.497 (0.303)	14.14 (2.79)	0.011 (0.007)	193 (89)	55 (13)	28.78 (97.46)
3rd Gear										
415.48 (309.82)	54244 (241.29)	2.88 (4.63)	2035	9.2	0.460 (0.280)	15.27 (3.01)	0.010 (0.006)	194 (90)	58 (14)	28.79 (97.49)
4th Gear										
440.35 (328.37)	52046 (231.51)	3.18 (5.11)	1978	7.8	0.449 (0.273)	15.67 (3.09)	0.010 (0.006)	199 (93)	62 (17)	28.78 (97.46)
5th Gear										
450.05 (335.60)	50186 (223.24)	3.37 (5.42)	1892	7.1	0.435 (0.265)	16.16 (3.18)	0.008 (0.005)	205 (96)	63 (17)	28.78 (97.46)
6th Gear										
451.83 (336.93)	47103 (209.52)	3.60 (5.79)	1789	6.1	0.425 (0.259)	16.53 (3.26)	0.008 (0.005)	211 (99)	66 (19)	28.77 (97.43)
7th Gear										
457.96 (341.50)	43812 (194.89)	3.92 (6.31)	1750	5.3	0.414 (0.252)	16.97 (3.34)	0.009 (0.005)	215 (102)	66 (19)	28.77 (97.43)
8th Gear										
463.34 (345.51)	39553 (175.94)	4.39 (7.07)	1750	4.5	0.410 (0.249)	17.16 (3.38)	0.009 (0.005)	215 (102)	67 (20)	28.77 (97.43)
9th Gear										
462.77 (345.08)	35396 (157.45)	4.90 (7.89)	1750	3.7	0.411 (0.250)	17.12 (3.37)	0.009 (0.005)	216 (102)	68 (20)	28.77 (97.43)
10th Gear										
466.01 (347.50)	31877 (141.79)	5.48 (8.82)	1752	3.2	0.408 (0.248)	17.22 (3.39)	0.009 (0.005)	215 (102)	68 (20)	28.77 (97.43)
11th Gear										
467.01 (348.25)	28789 (128.06)	6.08 (9.78)	1751	2.8	0.407 (0.247)	17.29 (3.41)	0.008 (0.005)	215 (102)	69 (21)	28.77 (97.43)
12th Gear										
468.65 (349.47)	25911 (115.26)	6.79 (10.92)	1751	2.5	0.404 (0.246)	17.40 (3.43)	0.008 (0.005)	216 (102)	70 (21)	28.77 (97.43)
13th Gear										
464.84 (346.63)	23134 (102.90)	7.54 (12.13)	1751	2.2	0.408 (0.248)	17.23 (3.39)	0.009 (0.005)	216 (102)	70 (21)	28.77 (97.43)
14th Gear										
470.61 (350.93)	21014 (93.47)	8.40 (13.52)	1750	1.9	0.403 (0.245)	17.46 (3.44)	0.009 (0.005)	216 (102)	70 (21)	28.76 (97.39)

## HYDRAULIC PERFORMANCE

CATEGORY: 4N/4

Quick Attach: Yes

OECD Static test

Maximum force exerted through whole range:	<u>Category 4N</u>	<u>lift cylinders</u>
	16040 lbs(71.3 kN) (1 x 90 mm and 1x100 mm)	21446 lbs(95.4 kN) (2 x 110 mm)
	<u>Category 4</u>	
	15682 lbs(69.8 kN) (1 x 90 mm and 1x100 mm)	20997 lbs(93.4 kN) (2 x 110 mm)

	<u>Base pump</u>	<u>Tandem pump</u>
	<u>three outlet sets combined</u>	
i) Sustained pressure at compensator cutoff:	2919 psi (201 bar)	2881 psi (199 bar)
ii) Pump delivery rate at minimum pressure and rated engine speed:	59.9 GPM(226.6 l/min)	57.2 GPM (216.4 l/min)
Combined flow:	117.1 GPM (443.0 l/min)	

iii) Pump delivery rate at maximum hydraulic power:	59.5 GPM(225.1 l/min)	57.7 GPM(218.5 l/min)
Delivery pressure:	2546 psi (176 bar)	2371 psi (163 bar)
Power:	88.3 HP (65.9 kW)	79.9 HP (59.5 kW)

	<u>single outlet set</u>	
	<u>3/4" couplers</u>	<u>1/2" couplers</u>
i) Sustained pressure at compensator cutoff:	2909 psi (201 bar)	2884 psi (199 bar)
ii) Pump delivery rate at minimum pressure and rated engine speed:	43.7 GPM(165.5 l/min)	36.5 GPM (138.1 l/min)

iii) Pump delivery rate at maximum hydraulic power:	42.8 GPM(162.2 l/min)	34.6 GPM(131.1 l/min)
Delivery pressure:	2217 psi (153 bar)	2265 psi (156 bar)
Power:	55.4 HP (41.3 kW)	45.8 HP (34.1 kW)

### Category 4N

inch mm

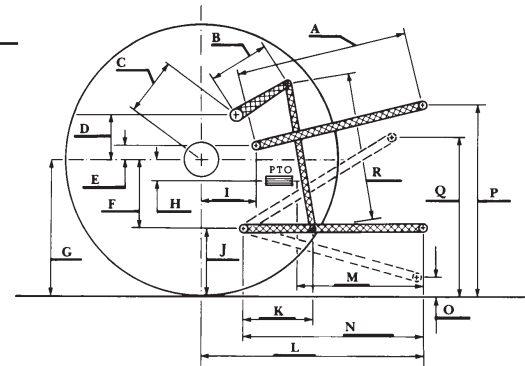
A	30.8	782	29.9	760
B	19.7	500	19.7	500
C	25.0	635	25.0	635
D	24.4	620	24.4	620
E	12.8	325	12.8	325
F	13.8	350	13.8	350
G	36.6	930	36.6	930
H	2.4	60	2.4	60
I	18.7	474	18.7	474
J	22.8	580	22.8	580
K	30.9	785	30.9	785
L	52.8	1342	52.8	1342
*L'	58.7	1491	59.6	1515
M	22.8	579	22.8	579
N	45.6	1159	45.6	1159
O	9.1	230	9.1	230
P	50.8	1290	50.8	1291
Q	41.3	1049	40.9	1039
R	50.0	1270	50.2	1275

\*L' to Quick Attach ends

### Category 4

inch mm

### HITCH DIMENSIONS AS TESTED—NO LOAD



JOHN DEERE 9520R DIESEL