

SUMMARY OF OECD TEST 3104 - NEBRASKA SUMMARY 1159

JOHN DEERE 6250R EECON 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)	
MAXIMUM POWER AND FUEL CONSUMPTION						
Rated Engine Speed—(PTO speed—1044 rpm)						
210.6 (157.1)	2100	11.73 (44.41)	0.390 (0.237)	17.96 (3.54)	0.36 (1.38)	Fuel used during the active exhaust regeneration - 2.0 gal (7.7 l) (see Note 1, p.2)
Standard Power Take-off Speed (1000 rpm)						
226.5 (168.9)	2012	12.49 (47.27)	0.387 (0.235)	18.14 (3.57)	0.39 (1.46)	
Maximum Power (1 hour)						
237.2 (176.9)	1900	12.96 (49.06)	0.382 (0.233)	18.30 (3.61)	0.48 (1.80)	

VARYING POWER AND FUEL CONSUMPTION

210.6 (157.1)	2100	11.73 (44.41)	0.390 (0.237)	17.96 (3.54)	0.36 (1.38)	Air temperature
183.2 (136.6)	2147	10.49 (39.70)	0.401 (0.244)	17.47 (3.44)	0.30 (1.13)	68°F (20°C)
138.9 (103.6)	2171	8.42 (31.89)	0.424 (0.258)	16.49 (3.25)	0.22 (0.82)	Relative humidity
94.3 (70.3)	2211	6.45 (24.40)	0.479 (0.291)	14.62 (2.88)	0.15 (0.56)	45%
47.9 (35.7)	2244	4.81 (18.19)	0.704 (0.428)	9.96 (1.96)	0.06 (0.23)	Barometer
--	2250	2.93 (11.10)	--	--	0.08 (0.31)	30.0" Hg (101.6 kPa)

Maximum torque - 782 lb.-ft. (1060 Nm) at 1600 rpm
 Maximum torque rise - 48.5%
 Torque rise at 1700 engine rpm - 41%
 Power increase at 1900 engine rpm - 12.6%

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 med	Barom. inch Hg (kPa)
Power at Rated Engine Speed—Speed setting 9								
198.2 (147.8)	13015 (57.90)	5.71 (9.19)	2103	2.0	0.422 (0.257)	16.44 (3.24)	0.015 (0.009)	205 (96)
75% of Pull at Rated Engine Speed—Speed setting 9								
153.9 (114.8)	9775 (43.48)	5.90 (9.50)	2165	1.6	0.446 (0.271)	15.58 (3.07)	0.015 (0.009)	210 (99)
50% of Pull at Rated Engine Speed—Speed setting 9								
104.5 (77.9)	6490 (28.83)	6.04 (9.72)	2202	1.0	0.501 (0.305)	13.86 (2.73)	0.015 (0.009)	206 (97)
75% of Pull at Reduced Engine Speed—Speed setting 11								
154.1 (114.9)	9750 (43.38)	5.93 (9.53)	1721	1.5	0.416 (0.253)	16.70 (3.29)	0.016 (0.010)	201 (94)
50% of Pull at Reduced Engine Speed—Speed setting 11								
105.1 (78.4)	6490 (28.87)	6.07 (9.78)	1721	1.0	0.446 (0.271)	15.58 (3.07)	0.016 (0.010)	194 (90)

Location of tests: DLG e.V. Test Centre, Technology and Farm inputs, Max-Eyth-Weg 1, D-64823 Gross-Umstadt, Germany

Dates of tests: October to November, 2017

Manufacturer: John Deere GmbH & Co., KG Mannheim Germany

CONSUMABLE Fluids: Fuel No. 2 Diesel Specific gravity converted to 60°/60°F (15°/15°C) 0.8408 Fuel weight 7.01 lbs/gal (0.839 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

ENGINE: Make John Deere Diesel **Type** six cylinder vertical with two turbochargers, air to air intercooler and D.E.F. (diesel exhaust fluid) exhaust treatment **Serial No.** *CD6068U032610* **Crankshaft** lengthwise **Rated engine speed** 2100 **Bore and stroke** 4.19" x 5.00" (106.5 mm x 127.0 mm) **Compression ratio** 17.0 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 prestrainer **Fuel cooler** radiator for pump return fuel **Exhaust** DOC (diesel oxidation catalyst)/DPF (diesel particulate filter) System and SCR (selective catalyst reduction) with a vertical muffler **Cooling medium** temperature control thermostat and variable speed fan

CHASSIS: Type front wheel assist **Serial No.** *1L06250RTHR882919* **Tread width** rear 71.3" (1812 mm) to 78.8" (2002 mm) front 72.5" (1842 mm) to 79.1" (2010 mm) **Wheelbase** 114.2" (2900 mm) **Hydraulic control system** direct engine drive **Transmission** Infinitely variable **Nominal travel speeds mph (km/h)** forward 0 - 31 mph (0-50 km/h), reverse 0 - 31 mph (0-50 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 2012 engine rpm, economy PTO 540 rpm at 1618 engine rpm or 1000 rpm at 1659 engine rpm **Unladen tractor mass** 21100 lb (9570 kg)

DRAWBAR PERFORMANCE

UNBALLASTED - FRONT DRIVE ENGAGED - 1800 ENGINE RPM MAXIMUM POWER IN SELECTED 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)
Speed setting 4										
166.2 (123.9)	22015 (97.94)	2.83 (4.56)	2149	8.9	0.477 (0.290)	14.52 (2.86)	0.015 (0.009)	208 (98)	48 (9)	29.6 (100.3)
Speed setting 5										
191.0 (142.4)	21900 (97.41)	3.27 (5.26)	2023	7.7	0.459 (0.280)	15.08 (2.97)	0.018 (0.011)	208 (98)	48 (9)	29.6 (100.3)
Speed setting 6										
198.9 (148.3)	22115 (98.37)	3.37 (5.43)	1805	7.9	0.465 (0.283)	14.89 (2.93)	0.023 (0.014)	212 (100)	70 (21)	29.2 (99.0)
Speed setting 7.5										
213.5 (159.2)	19190 (85.36)	4.17 (6.71)	1801	4.1	0.434 (0.264)	15.96 (3.14)	0.021 (0.013)	212 (100)	68 (20)	29.2 (99.0)
Speed setting 9										
221.7 (165.3)	16380 (72.87)	5.08 (8.17)	1805	2.6	0.417 (0.254)	16.62 (3.27)	0.020 (0.012)	210 (99)	70 (21)	29.2 (99.0)
Speed setting 11										
222.7 (166.1)	14040 (62.46)	5.95 (9.57)	1803	2.2	0.415 (0.253)	16.67 (3.29)	0.021 (0.013)	212 (100)	68 (20)	29.2 (99.0)
Speed setting 13										
222.9 (166.2)	12275 (54.61)	6.81 (10.96)	1800	1.7	0.415 (0.253)	16.67 (3.29)	0.021 (0.013)	212 (100)	70 (21)	29.2 (99.0)
Speed setting 15										
218.2 (162.7)	9950 (44.26)	8.22 (13.23)	1805	1.3	0.425 (0.258)	16.30 (3.21)	0.021 (0.013)	210 (99)	70 (21)	29.2 (99.0)
*Speed setting 17										
223.5 (166.7)	9190 (40.87)	9.12 (14.68)	1805	1.2	0.419 (0.255)	16.55 (3.26)	0.021 (0.013)	212 (100)	72 (22)	29.2 (99.0)
*Speed setting 19										
231.9 (172.9)	8730 (38.84)	9.96 (16.03)	1803	1.0	0.415 (0.252)	16.70 (3.29)	0.021 (0.013)	210 (99)	70 (21)	29.2 (99.0)

*Intelligent Power Management system activated

REPAIRS AND ADJUSTMENTS: No repairs or adjustments.

NOTE 1: The manufacturer declares that the average time between active regenerations is 100 hours.

NOTE 2: This tractor has an engine control feature, I.P.M. (Intelligent Power Management) that allows the engine to run in a "boosted" mode, increased power level, at elevated drawbar travel speeds.

REMARKS: All test results were determined from observed data obtained in accordance with official OECD test procedures. The manufacturer's claims of 229 PTO Hp (171 kW), at rated engine speed and 238 PTO Hp (177 kW) at 1000 PTO rpm with I.P.M. activated were not verified. 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 summary of data from OECD Report No. **3104**, Nebraska Summary 1159, July 26, 2019.

Roger M. Hoy
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TRACTOR SOUND LEVEL WITH CAB	Front Wheel Drive	
	Engaged dB(A)	Disengaged dB(A)
At no load at 4.6 mph (7.5 km/h)	69.4	69.8
Transport speed - speed setting - 31 mph (50 km/h)		74.0
Bystander		--

Horizontal distances of drawbar hitch point behind rear wheel axis - 36.7 in (933 mm), 38.7 in (983 mm), 41.5 in (1053 mm), 44.2 in (1123 mm)

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 710/70R42;***;12(80)
 Two 600/70R30;***;12(80)
 22.8 in (580 mm)
 12875 lb (5840 kg)
 8390 lb (3805 kg)
 21265 lb (9645 kg)

HYDRAULIC PERFORMANCE

CATEGORY: 3N

Quick Attach: No

Lift cylinders:

2 x 90 mm

Maximum force exerted through whole range: 15600 lbs (69.4 kN)

i) Sustained pressure at compensator cutoff: 2975 psi (205 bar)

two outlet sets combined

ii) Pump delivery rate at minimum pressure: 42.6 GPM (161.1 l/min)

iii) Pump delivery rate at maximum

hydraulic power: 38.9 GPM (147.3 l/min)

Delivery pressure: 2510 psi (173 bar)

Power: 57.0 HP (42.5 kW)

single outlet set

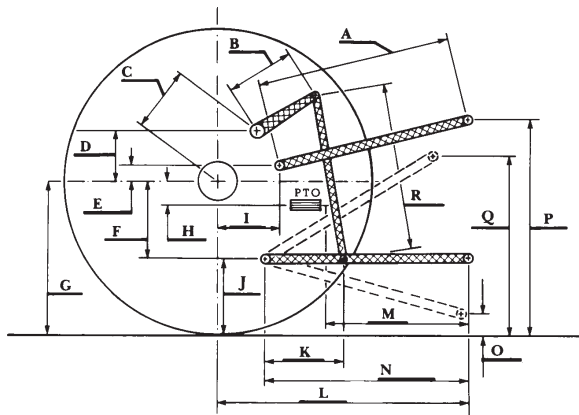
ii) Pump delivery rate at minimum pressure: 31.1 GPM (117.8 l/min)

iii) Pump delivery rate at maximum

hydraulic power: 29.9 GPM (113.1 l/min)

Delivery pressure: 2130 psi (147 bar)

Power: 37.3 HP (27.8 kW)



HITCH DIMENSIONS AS TESTED—NO LOAD

	inch	mm
A	28.9	735
B	18.1	460
C	21.7	624
D	24.6	605
E	7.5	190
F	13.2	335
G	38.4	975
H	4.3	110
I	21.8	554
J	25.2	640
K	29.8	757
L	51.4	1305
M	27.0	685
N	43.3	1100
O	9.1	230
P	52.2	1325
Q	40.4	1026
R	45.7	1160

RECOMMENDED CITATION FORMAT:

NTTL.(2019) OECD tractor test 3104 for John Deere 6250R Eecon Diesel.

Lincoln, NE:Nebraska Tractor Test Laboratory. Retrieved from <http://tractortestlab.unl.edu>