

SUMMARY OF OECD TEST 3073 - NEBRASKA SUMMARY 1112

JOHN DEERE 6155M POWRQUAD-PLUS DIESEL

20 SPEED

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—1050 rpm)						
131.8 (98.3)	2100	8.03 (30.41)	0.422 (0.257)	16.41 (3.23)	0.15 (0.55)	Fuel used during the active exhaust regeneration - 1.01 gal (3.84 l) (see Note 1, p.2)
Standard Power Take-off Speed (1000 rpm)						
145.6 (108.6)	2000	8.51 (32.20)	0.405 (0.247)	17.11 (3.37)	0.15 (0.56)	
Maximum Power (1 hour)						
146.7 (109.4)	1800	8.21 (31.08)	0.388 (0.236)	17.87 (3.52)	0.17 (0.64)	

VARYING POWER AND FUEL CONSUMPTION

131.8 (98.3)	2100	8.03 (30.41)	0.422 (0.257)	16.41 (3.23)	0.15 (0.55)	Air temperature
114.4 (85.3)	2144	7.34 (27.80)	0.445 (0.271)	15.58 (3.07)	0.13 (0.47)	73°F (23°C)
86.5 (64.5)	2160	6.16 (23.30)	0.495 (0.301)	14.04 (2.76)	0.09 (0.33)	Relative humidity
58.6 (43.7)	2196	5.10 (19.32)	0.604 (0.367)	11.48 (2.26)	0.05 (0.18)	47%
29.7 (22.1)	2227	3.84 (14.55)	0.898 (0.546)	7.73 (1.52)	0.05 (0.17)	Barometer
--	2250	2.75 (10.40)	--	--	0.04 (0.16)	29.9" Hg (101.4 kPa)

Maximum torque - 482 lb.-ft. (654 Nm) at 1200 rpm
 Maximum torque rise - 46.3%
 Torque rise at 1700 engine rpm - 34%
 Power increase at 1800 engine rpm - 11.3%

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 lb/hp.hr (kg/kW.h)	Temp. °F(°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
Power at Rated Engine Speed—7th (B3) Gear									
119.5 (89.1)	9690 (43.11)	4.62 (7.44)	2101	5.3	0.473 (0.288)	14.47 (2.85)	0.010 (0.006)	174 (79)	79 29.5 (26) (100.0)
75% of Pull at Rated Engine Speed—7th (B3) Gear									
92.7 (69.1)	7190 (31.99)	4.83 (7.78)	2164	3.9	0.521 (0.317)	13.15 (2.59)	0.011 (0.007)	178 (81)	79 29.5 (26) (100.0)
50% of Pull at Rated Engine Speed—7th (B3) Gear									
63.3 (47.2)	4770 (21.22)	4.98 (8.01)	2195	2.5	0.631 (0.384)	10.86 (2.14)	0.010 (0.006)	174 (79)	79 29.5 (26) (100.0)
75% of Pull at Reduced Engine Speed—9th (B4) Gear									
92.1 (68.7)	7180 (31.93)	4.81 (7.74)	1755	3.7	0.472 (0.287)	14.52 (2.86)	0.011 (0.007)	178 (81)	81 29.5 (27) (99.9)
50% of Pull at Reduced Engine Speed—9th (B4) Gear									
63.1 (47.1)	4810 (21.39)	4.92 (7.92)	1771	2.4	0.530 (0.322)	12.92 (2.54)	0.011 (0.007)	178 (81)	81 29.5 (27) (99.9)

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

Dates of tests: May to June, 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) 0.8294 Fuel weight 6.92 lbs/gal (0.828 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 turbocharger, air to air intercooler and D.E.F. (diesel exhaust fluid) exhaust treatment Serial No. *CD6068U032507* 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. *1L06155MAHG878163* Tread width rear 62.9" (1597 mm) to 90.3" (2294 mm) front 63.2" (1606 mm) to 89.5" (2274 mm) Wheelbase 108.9" (2765 mm) Hydraulic control system direct engine drive Transmission selective gear fixed ratio with partial (4) range operator controlled power shift Nominal travel speeds mph (km/h) first 1.61 (2.59) second 1.94 (3.12) third 2.32 (3.74) fourth 2.85 (4.58) fifth 3.42 (5.50) sixth 4.11 (6.62) seventh 4.93 (7.93) eighth 5.44 (8.75) ninth 6.03 (9.71) tenth 6.54 (10.53) eleventh 7.84 (12.61) twelfth 9.60 (15.45) thirteenth 10.06 (16.19) fourteenth 12.12 (19.50) fifteenth 14.51 (23.35) sixteenth 14.91 (23.99) seventeenth 17.78 (28.61) eighteenth 17.95 (28.89) nineteenth 21.50 (34.60) twentieth 26.33 (42.38) reverse 1.68 (2.71), 2.03 (3.26), 2.42 (3.90), 2.97 (4.78), 3.56 (5.73), 4.29 (6.91), 5.14 (8.27), 5.67 (9.13), 6.29 (10.13), 6.83 (10.99), 8.18 (13.16), 10.02 (16.12), 10.50 (16.90), 12.64 (20.35), 15.14 (24.37), 15.55 (25.03), 18.55 (29.85), 18.73 (30.14), 22.43 (36.10), 27.48 (44.23)

DRAWBAR PERFORMANCE

UNBALLASTED - FRONT DRIVE ENGAGED - 1800 ENGINE 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)
6th (B2) Gear										
114.8 (85.6)	13875 (61.71)	3.10 (4.99)	1876	14.9	0.496 (0.302)	13.86 (2.73)	0.012 (0.007)	185 (85)	75 (24)	29.5 (100.0)
7th (B3) Gear										
125.9 (93.9)	12305 (54.73)	3.84 (6.18)	1802	8.4	0.457 (0.278)	15.08 (2.97)	0.012 (0.007)	183 (84)	75 (24)	29.5 (100.0)
8th (C1) Gear										
128.6 (95.9)	11245 (50.01)	4.29 (6.90)	1799	7.2	0.450 (0.273)	15.30 (3.01)	0.010 (0.006)	174 (79)	77 (25)	29.1 (98.4)
9th (B4) Gear										
129.0 (96.2)	10025 (44.59)	4.83 (7.77)	1799	5.9	0.447 (0.272)	15.38 (3.03)	0.012 (0.007)	181 (83)	75 (24)	29.6 (100.1)
10th (C2) Gear										
131.6 (98.1)	9350 (41.60)	5.28 (8.49)	1796	5.3	0.439 (0.267)	15.68 (3.09)	0.010 (0.006)	171 (77)	75 (24)	29.1 (98.4)
11th (C3) Gear										
132.9 (99.1)	7785 (34.64)	6.40 (10.30)	1799	4.1	0.434 (0.264)	15.86 (3.12)	0.012 (0.007)	174 (79)	73 (23)	29.1 (98.4)
12th (C4) Gear										
129.6 (96.7)	6120 (27.22)	7.94 (12.78)	1803	2.8	0.442 (0.269)	15.56 (3.07)	0.012 (0.007)	183 (83)	70 (21)	29.5 (100.0)
13th (D1) Gear										
128.7 (96.0)	5775 (25.69)	8.36 (13.46)	1804	2.4	0.448 (0.272)	15.38 (3.03)	0.012 (0.007)	185 (85)	72 (22)	29.5 (100.0)
14th (D2) Gear										
127.8 (95.3)	4720 (20.99)	10.15 (16.34)	1805	1.7	0.450 (0.274)	15.28 (3.01)	0.012 (0.007)	183 (84)	72 (22)	29.6 (100.1)

Clutch wet multiple disc hydraulically actuated by foot pedal **Brakes** wet multiple disc hydraulically operated by two foot pedals that can be locked together **Steering** hydrostatic **Power take-off** 540 rpm at 1987 engine rpm or 1000 rpm at 2000 engine rpm **Unladen tractor mass** 15180 lb (6885 kg)

REPAIRS AND ADJUSTMENTS: No repairs or adjustments.

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

REMARKS: All test results were determined from observed data obtained in accordance with official OECD 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 summary of data from OECD Report No. **3073**, Nebraska Summary 1112, October 17, 2017.

Roger M. Hoy
Director

M.F. Kocher
S.K. Pitla
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Board of Tractor Test Engineers

TRACTOR SOUND LEVEL WITH CAB	Front Wheel Drive	
	Engaged dB(A)	Disengaged dB(A)
At no load in 7th (B3) gear	69.8	69.3
Transport speed - no load - 24th (F4) gear		72.0
Bystander		--

Horizontal distance of drawbar hitch point behind rear wheel axis - 31.4 in (798 mm), 35.4 in (898 mm), 39.3 in (998 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 480/80R42,***;12(80)
Two 380/85R30,***;12(80)
17.9 in (455 mm)
9490 lb (4305 kg)
5855 lb (2655 kg)
15345 lb (6960 kg)

HYDRAULIC PERFORMANCE

CATEGORY: 3

Quick Attach: No

Lift cylinders:

2 x 85 mm 2 x 90 mm

Maximum force exerted through whole range: 9035 lbs (40.2 kN) 10205 lbs (45.4 kN)

i) Sustained pressure at compensator cutoff: 2930 psi (202 bar)

two outlet sets combined

ii) Pump delivery rate at minimum pressure: 30.9 GPM (117.1 l/min)

iii) Pump delivery rate at maximum

hydraulic power: 28.6 GPM (108.2 l/min)

Delivery pressure: 2640 psi (182 bar)

Power: 44.1 HP (32.9 kW)

single outlet set

ii) Pump delivery rate at minimum pressure: 30.6 GPM (115.8 l/min)

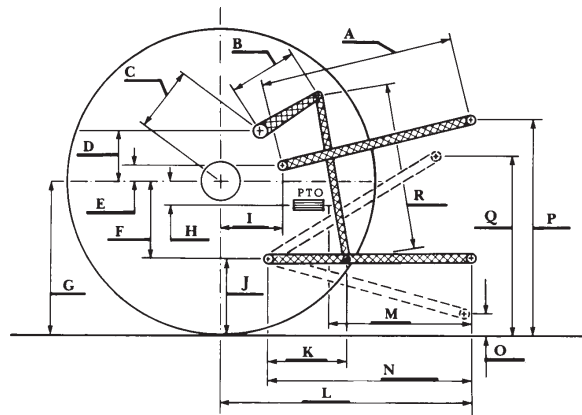
iii) Pump delivery rate at maximum

hydraulic power: 28.3 GPM (107.1 l/min)

Delivery pressure: 2380 psi (164 bar)

Power: 39.3 HP (29.3 kW)

HITCH DIMENSIONS AS TESTED—NO LOAD



	inch	mm
A	29.9	760
B	16.1	410
C	21.7	604
D	23.8	575
E	9.8	250
F	9.8	250
G	34.4	875
H	4.5	115
I	18.6	473
J	24.6	625
K	24.8	629
L	47.8	1213
M	24.7	628
N	41.5	1053
O	9.1	230
P	51.6	1310
Q	39.9	1014
R	38.6	980

NTTL.(2017) OECD tractor test 3073 for John Deere 6155M PowerQuad Plus Diesel.
Lincoln, NE:Nebraska Tractor Test Laboratory. Retrieved from <http://tractortestlab.unl.edu>