

NEBRASKA OECD TRACTOR TEST 2023–SUMMARY 822

JOHN DEERE 7260R IVT DIESEL

INFINITELY VARIABLE TRANSMISSION

POWER TAKE-OFF PERFORMANCE

Power HP (kW)	Crank shaft speed rpm	Gal/hr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Mean Atmospheric Conditions
MAXIMUM POWER AND FUEL CONSUMPTION					
Rated Engine Speed—(PTO speed—1077 rpm)					
220.27 (164.25)	2100	12.61 (47.75)	0.403 (0.245)	17.46 (3.44)	
Standard Power Take-off Speed (1000 rpm)					
248.30 (185.16)	1950	13.64 (51.63)	0.386 (0.235)	18.20 (3.59)	
Maximum Power (1 hour)					
256.63 (191.37)	1700	13.68 (51.79)	0.375 (0.228)	18.76 (3.70)	

VARYING POWER AND FUEL CONSUMPTION

220.27 (164.25)	2100	12.61 (47.75)	0.403 (0.245)	17.46 (3.44)	Air temperature
191.45 (142.76)	2154	11.36 (43.01)	0.417 (0.254)	16.85 (3.32)	76°F (24°C)
143.90 (107.31)	2164	9.54 (36.13)	0.467 (0.284)	15.08 (2.97)	Relative humidity
96.85 (72.22)	2175	7.42 (28.09)	0.539 (0.328)	13.05 (2.57)	63%
49.05 (36.58)	2186	5.30 (20.07)	0.760 (0.463)	9.25 (1.82)	Barometer
2.30 (1.72)	2191	3.12 (11.82)	9.552 (5.810)	0.74 (0.15)	28.57" Hg (96.75 kPa)

Maximum torque - 828 lb.-ft. (1123 Nm) at 1500 rpm

Maximum torque rise - 50.3%

Torque rise at 1700 engine rpm - 43%

Power increase at 1700 engine rpm - 16.5%

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)	Hp.hr/gal (kW.h/l)	Temp. °F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
Maximum Power—4.7 mph (7.6 km/h)-Manual Mode									
185.30 (138.17)	15539 (69.12)	4.48 (7.20)	2100	2.4	0.481 (0.292)	14.63 (2.88)	213 (101)	69 (20)	28.61 (96.88)
75% of Pull at Maximum Power—4.7 mph (7.6 km/h)-Manual Mode									
143.64 (107.11)	11624 (51.71)	4.64 (7.46)	2158	1.6	0.522 (0.318)	13.46 (2.65)	216 (102)	84 (29)	28.52 (96.58)
50% of Pull at Maximum Power—4.7 mph (7.6 km/h)-Manual Mode									
97.72 (72.87)	7771 (34.56)	4.72 (7.59)	2170	1.0	0.628 (0.382)	11.21 (2.21)	215 (102)	85 (29)	28.51 (96.55)
75% of Pull at Reduced Engine Speed—4.7 mph (7.6 km/h)-Auto Mode									
143.71 (107.16)	11629 (51.73)	4.64 (7.46)	1561	1.6	0.443 (0.270)	15.88 (3.13)	210 (99)	85 (29)	28.50 (96.51)
50% of Pull at Reduced Engine Speed—4.7 mph (7.6 km/h)-Auto Mode									
97.59 (72.55)	7831 (34.83)	4.68 (7.52)	1338	0.9	0.461 (0.280)	15.29 (3.01)	208 (98)	85 (29)	28.51 (96.55)

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

Dates of tests: May 3 -15, 2012

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

FUEL, OIL and TIME: Fuel No. 2 Diesel Specific gravity converted to 60°/60°F (15°/15°C) 0.8448 Fuel weight 7.034 lbs/gal (0.843 kg/l) Oil SAE 15W-40 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: 24.5 hours

ENGINE: Make John Deere Diesel Type six cylinder vertical with turbocharger and air to air aftercooler Serial No.*RG6090R0015879* 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 prestrainer Fuel cooler radiator for pump return fuel Muffler vertical Cooling medium temperature control thermostat and variable speed fan

ENGINE OPERATING PARAMETERS: Fuel rate: 84.7 - 91.7 lb/h (38.4 -41.6 kg/h) High idle: 2150 - 2250 rpm Turbo boost: nominal 14.5 - 17.4 psi (100 - 120 kPa) as measured 18.3 psi (112 kPa)

CHASSIS: Type front wheel assist with duals Serial No.*1RW7260RKCD005132* Tread width rear 60.0" (1524 mm) to 128.9" (3272 mm) front 60.0" (1524 mm) to 88.0" (2235 mm) Wheelbase 115.2" (2925 mm) Hydraulic control system direct engine drive Transmission infinitely variable with two mechanical ranges and automatic shifting between ranges. Nominal travel speeds mph (km/h) forward - 0-25.0 mph (0-40 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 540 rpm at 1958 engine rpm or 1000 rpm at 1950 engine rpm Unladen tractor mass 23620 lb (10714 kg)

DRAWBAR PERFORMANCE

UNBALLASTED - FRONT DRIVE ENGAGED-2100 RPM MAXIMUM POWER AT SELECTED TRAVEL SPEEDS

Power Hp (kW)	Drawbar pull lbs (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr (kg/kW.h)	Temp. °F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)	
				2.9 mph (4.6 km/h)					
166.78 (124.36)	24014 (106.82)	2.61 (4.19)	2147	7.8	0.519 (0.316)	13.54 (2.67)	209 (98)	62 (17)	28.77 (97.43)
				3.9 mph (6.2 km/h)					
184.62 (137.67)	19280 (85.76)	3.59 (5.78)	2100	3.7	0.484 (0.294)	14.55 (2.87)	213 (101)	62 (17)	28.78 (97.46)
				4.3 mph (7.0 km/h)					
184.86 (137.85)	16909 (75.21)	4.10 (6.60)	2100	2.8	0.484 (0.294)	14.54 (2.86)	215 (101)	75 (24)	28.58 (96.78)
				4.7 mph (7.6 km/h)					
185.30 (138.17)	15539 (69.12)	4.48 (7.20)	2100	2.4	0.481 (0.292)	14.63 (2.88)	213 (101)	69 (20)	28.61 (96.88)
				5.1 mph (8.2 km/h)					
185.98 (138.68)	14463 (64.33)	4.83 (7.77)	2099	2.1	0.482 (0.293)	14.60 (2.88)	214 (101)	72 (22)	28.59 (96.82)
				5.6 mph (9.0 km/h)					
185.59 (138.39)	13065 (58.11)	5.33 (8.58)	2101	1.8	0.482 (0.293)	14.61 (2.88)	213 (101)	66 (19)	28.61 (96.88)
				6.2 mph (10.0 km/h)					
187.50 (139.82)	11877 (52.83)	5.92 (9.53)	2099	1.7	0.476 (0.289)	14.78 (2.91)	213 (101)	64 (18)	28.81 (97.56)
				6.8 mph (11.0 km/h)					
188.54 (140.59)	10809 (48.08)	6.54 (10.53)	2100	1.6	0.473 (0.288)	14.86 (2.93)	213 (101)	67 (19)	28.81 (97.56)
				7.5 mph (12.0 km/h)					
189.59 (141.38)	9928 (44.16)	7.16 (11.52)	2100	1.4	0.469 (0.285)	15.00 (2.96)	213 (101)	67 (19)	28.82 (97.60)
				8.1 mph (13.0 km/h)					
190.82 (142.29)	9224 (41.03)	7.76 (12.49)	2100	1.2	0.467 (0.284)	15.07 (2.97)	214 (101)	68 (20)	28.83 (97.63)
				8.7 mph (14.0 km/h)					
191.43 (142.75)	8564 (38.09)	8.39 (13.49)	2100	1.1	0.465 (0.283)	15.11 (2.98)	214 (101)	69 (20)	28.83 (97.63)

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) engine speed - 2200 rpm	70.0	70.0
At no load at 4.6 mph (7.5 km/h) engine speed - 1200 rpm	63.0	63.0
Transport speed - no load - manual mode		73.9
Transport speed - no load - Full Auto mode		73.0
Bystander		83.8

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

Four 480/80R46;***;12(85)
 Two 16.9R30;***;18(125)
 18.5 in (470 mm)
 15650 lb (7099 kg)
 8145 lb (3694 kg)
 23795 lb (10793 kg)

REPAIRS AND ADJUSTMENTS: No repairs or adjustments.

NOTE 1: During testing the engine was operated for 24.5 hours. During this period, the tractor experienced one active exhaust filter cleaning while operated in Auto Filter Cleaning Mode. This occurred after 9.5 hours of operation.

NOTE 2: The manufacturer declared that the active exhaust filter cleanings consume an average of 0.04 gal/hr (0.15 l/hr) across total tractor use. Fuel consumed during the active exhaust filter cleanings will normally be less than 1% of the total fuel consumed. The manufacturer declared that no active exhaust filter cleanings occurred during 12 hours of continuous operation of the tractor in the Auto Filter Cleaning Mode at 30% loading and the engine speed at which the maximum torque occurs.

REMARKS: All test results were determined from observed data obtained in accordance with official OECD, SAE and Nebraska test procedures. For the maximum power tests the fuel temperature at the injection pump inlet was maintained at 128°F (53°C). The pull was limited to avoid excessive tractor power hop. 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. **2023**, Nebraska Summary 822, October 2, 2012.

Roger M. Hoy
 Director

M.A. Hanna
 P.J. Jasa
 J.D. Luck
 Board of Tractor Test Engineers

DRAWBAR PERFORMANCE
UNBALLASTED - FRONT DRIVE ENGAGED - 1700 RPM
MAXIMUM POWER AT SELECTED TRAVEL SPEEDS

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)	Temp.°F(°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
					2.9 mph (4.6 km/h)				
166.01 (123.79)	24044 (106.95)	2.59 (4.16)	2143	8.2	0.525 (0.319)	13.40 (2.64)	213 (100)	61 (16)	28.78 (97.46)
					3.9 mph (6.2 km/h)				
197.01 (146.91)	22531 (100.22)	3.28 (5.28)	1975	6.3	0.488 (0.297)	14.40 (2.84)	213 (101)	62 (17)	28.79 (97.49)
					4.3 mph (7.0 km/h)				
203.98 (152.10)	21186 (94.24)	3.61 (5.81)	1896	5.3	0.472 (0.287)	14.90 (2.94)	216 (102)	76 (24)	28.57 (96.75)
					4.7 mph (7.6 km/h)				
209.56 (156.27)	20351 (90.53)	3.87 (6.22)	1848	4.1	0.466 (0.284)	15.09 (2.97)	215 (101)	70 (21)	28.60 (96.85)
					5.1 mph (8.2 km/h)				
211.90 (158.01)	19819 (88.16)	4.01 (6.45)	1777	4.0	0.459 (0.279)	15.33 (3.02)	215 (102)	74 (23)	28.59 (96.82)
					5.6 mph (9.0 km/h)				
214.63 (160.05)	18984 (84.44)	4.24 (6.82)	1700	3.4	0.453 (0.276)	15.53 (3.06)	213 (101)	66 (19)	28.61 (96.88)
					6.2 mph (10.0 km/h)				
217.33 (162.06)	17177 (76.41)	4.75 (7.64)	1700	2.9	0.446 (0.271)	15.78 (3.11)	214 (101)	64 (18)	28.80 (97.53)
					6.8 mph (11.0 km/h)				
220.73 (164.60)	15688 (69.78)	5.28 (8.49)	1700	2.5	0.439 (0.267)	16.03 (3.16)	214 (101)	67 (19)	28.81 (97.56)
					7.5 mph (12.0 km/h)				
223.03 (166.31)	14503 (64.51)	5.77 (9.29)	1700	2.2	0.433 (0.263)	16.26 (3.20)	214 (101)	68 (20)	28.82 (97.60)
					8.1 mph (13.0 km/h)				
223.83 (166.91)	13426 (59.72)	6.25 (10.06)	1700	1.9	0.432 (0.263)	16.27 (3.20)	214 (101)	69 (20)	28.82 (97.60)
					8.7 mph (14.0 km/h)				
224.47 (167.38)	12501 (55.61)	6.74 (10.84)	1700	1.8	0.431 (0.262)	16.31 (3.21)	215 (102)	71 (21)	28.83 (97.63)
					9.4 mph (15.2 km/h)				
225.44 (168.11)	11514 (51.21)	7.34 (11.81)	1700	1.6	0.429 (0.261)	16.40 (3.23)	215 (102)	72 (22)	28.84 (97.66)
					10.3 mph (16.6 km/h)				
225.79 (168.37)	10572 (47.03)	8.01 (12.89)	1700	1.5	0.428 (0.260)	16.44 (3.24)	215 (102)	71 (22)	28.83 (97.63)

HYDRAULIC PERFORMANCE

CATEGORY: III

Quick Attach: Yes

OECD Static test

Maximum force exerted through whole range:

lift cylinders

15862 lbs (70.6 kN) (2x100 mm)
 18025 lbs (80.2 kN) (1x100 mm & 1x112 mm)
 18302 lbs (81.4 kN) (1x100 mm & 1x115 mm)

i) Sustained pressure at compensator cutoff:

63 cc pump 85 cc pump

2971 psi (205 bar) 2943 psi (203 bar)

three outlet sets combined

ii) Pump delivery rate at minimum pressure and rated engine speed:

47.1 GPM (178.4 l/min) 62.4 GPM (236.2 l/min)

iii) Pump delivery rate at maximum

hydraulic power: 46.5 GPM (175.8 l/min) 61.6 GPM (233.3 l/min)

Delivery pressure: 2733 psi (188 bar) 2542 psi (175 bar)

Power: 74.1 HP (55.2 kW) 91.4 HP (68.1 kW)

single outlet set

ii) Pump delivery rate at minimum pressure and rated engine speed:

38.8 GPM (147.0 l/min) 38.4 GPM (145.5 l/min)

iii) Pump delivery rate at maximum

hydraulic power: 38.0 GPM (143.8 l/min) 38.0 GPM (143.8 l/min)

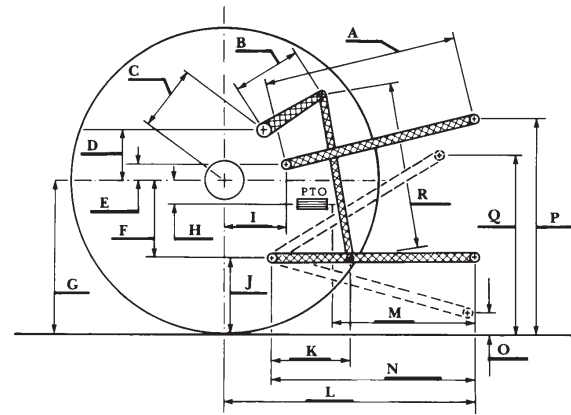
Delivery pressure: 2310 psi (159 bar) 2239 psi (154 bar)

Power: 51.2 HP (38.2 kW) 49.6 HP (37.0 kW)

HITCH DIMENSIONS AS TESTED—NO LOAD

	inch	mm
A	28.0	710
B	20.5	520
C	22.9	581
D	18.9	480
E	7.3	185
F	14.4	365
G	38.8	985
H	3.5	90
I	22.4	570
J	24.4	620
K	29.3	745
L	52.0	1321
*L'	56.0	1423
M	28.0	712
N	43.4	1102
O	9.0	230
P	51.9	1319
Q	39.4	1001
R	44.9	1140

*L' to Quick Attach ends



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