

NEBRASKA OECD TRACTOR TEST 1807-SUMMARY 373

JOHN DEERE 7810 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 1006 rpm)					
151.14 (112.70)	2100	9.63 (36.46)	0.449 (0.273)	15.69 (3.09)	
Maximum Power (2 hours)					
167.58 (124.96)	1800	9.69 (36.67)	0.407 (0.248)	17.30 (3.41)	

VARYING POWER AND FUEL CONSUMPTION

151.14 (112.70)	2100	9.63 (36.46)	0.449 (0.273)	15.69 (3.09)	Air temperature
134.76 (100.49)	2204	8.94 (33.85)	0.467 (0.284)	15.07 (2.97)	75°F (24°C)
101.51 (75.70)	2213	7.49 (28.37)	0.520 (0.316)	13.54 (2.67)	Relative humidity
67.93 (50.66)	2223	5.79 (21.92)	0.601 (0.365)	11.73 (2.31)	21%
34.09 (25.42)	2232	4.26 (16.12)	0.880 (0.535)	8.01 (1.58)	Barometer
1.02 (0.76)	2240	2.81 (10.64)	19.365 (11.779)	0.36 (0.07)	28.99" Hg (98.17 kPa)

Maximum Torque - 568 lb.-ft. (770 Nm) at 1250 rpm
 Maximum Torque Rise - 50.2%
 Torque rise at 1700 engine rpm - 34%

DRAWBAR PERFORMANCE

UNBALLASTED - AUTO MODE

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 5.0 mph (8.0 km/h)									
139.47 (104.00)	10742 (47.78)	4.87 (7.84)	1998	2.33	0.470 (0.286)	14.99 (2.95)	197 (92)	52 (11)	28.83 (97.63)
75% of Pull at Maximum Power 5.0 mph (8.0 km/h)									
105.74 (78.85)	8063 (35.86)	4.92 (7.92)	1713	1.63	0.457 (0.278)	15.42 (3.04)	193 (89)	53 (12)	28.82 (97.60)
50% of Pull at Maximum Power 5.0 mph (8.0 km/h)									
70.96 (52.91)	5380 (23.93)	4.95 (7.96)	1243	1.28	0.467 (0.284)	15.07 (2.97)	193 (89)	56 (13)	28.80 (97.53)
75% of Pull at Reduced Engine Speed 6.2 mph (10.0 km/h)									
106.18 (79.18)	8067 (35.88)	4.94 (7.94)	1730	1.81	0.464 (0.282)	15.19 (2.99)	191 (88)	54 (12)	28.82 (97.60)
50% of Pull at Reduced Engine Speed 6.2 mph (10.0 km/h)									
70.80 (52.80)	5375 (23.91)	4.94 (7.95)	1238	1.19	0.468 (0.285)	15.06 (2.97)	191 (88)	57 (14)	28.79 (97.49)

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

Dates of Test: April 24-May 31, 2002

Manufacturer: John Deere Tractor Works, 3500 East Donald St., 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) 0.8457 Fuel weight 7.042 lbs/gal (0.844 kg/l) Oil SAE 15W-40 API service classification CH-4 Transmission and hydraulic lubricant John Deere Hy-Gard fluid Front axle lubricant John Deere Hy-Gard fluid Total time engine was operated: 34.5 hours

ENGINE: Make John Deere Diesel **Type** six cylinder vertical with turbocharger **Serial No.** *RG6081T148757* **Crankshaft** lengthwise **Rated engine speed** 2100 **Bore and stroke** 4.56" x 5.06" (115.9 mm x 128.5 mm) **Compression ratio** 17.0 to 1 **Displacement** 496 cu in (8132 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** 2 thermostats and variable speed fan

ENGINE OPERATING PARAMETERS: Fuel rate: 65.5 - 72.3 lb/h (29.6 - 32.8 kg/h) **High idle:** 2225 - 2275 rpm **Turbo boost:** nominal 17.1 - 21.5 psi (118 - 148 kPa) as measured 19.3 psi (133 kPa)

CHASSIS: Type front wheel assist **Serial No.** *RW7810D072278* **Tread width** rear 60.0" (1524 mm) to 108.3 (2752 mm) front 60.0" (1524 mm) to 88.0" (2235 mm) **Wheelbase** 110.2" (2800 mm) **Hydraulic control system** direct engine drive **Transmission** Infinity variable with two ranges with automatic shifting between ranges. **Nominal travel speeds mph (km/h)** Low range 0-11 mph (0-17 km/h), high range 0-26.0 mph, (0-42 km/h) **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 2072 engine rpm or 1000 rpm at 2086 engine rpm **Unladen tractor mass** 16190 lb (7343 kg)

DRAWBAR PERFORMANCE

UNBALLASTED - Auto mode MAXIMUM POWER AT SELECTED SPEEDS

Power Hp (kW)	Drawbar pull lbs (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption		Temp. °F (°C)	Air dry bulb	Barom. inch Hg (kPa)
					lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	cool- ing med		
3.2 mph (5.1 km/h)									
131.12 (97.78)	16698 (74.27)	2.94 (4.74)	1977	6.77	0.510 (0.310)	13.82 (2.72)	192 (89)	62 (17)	28.52 (96.58)
3.8 mph (6.1 km/h)									
135.64 (101.14)	16040 (71.35)	3.17 (5.10)	1967	5.33	0.494 (0.300)	14.27 (2.81)	201 (94)	62 (17)	28.52 (96.58)
4.4 mph (7.1 km/h)									
138.17 (103.03)	15349 (68.28)	3.38 (5.43)	1964	4.68	0.485 (0.295)	14.52 (2.86)	203 (95)	61 (16)	28.51 (96.55)
4.8 mph (7.7 km/h)									
141.21 (105.30)	14234 (63.32)	3.72 (5.99)	1960	3.77	0.477 (0.290)	14.77 (2.91)	202 (94)	60 (16)	28.50 (96.51)
5.0 mph (8.0 km/h)									
143.74 (107.19)	13672 (60.81)	3.94 (6.35)	1958	3.43	0.468 (0.285)	15.06 (2.97)	202 (94)	59 (15)	28.49 (96.48)
5.6 mph (9.0 km/h)									
143.32 (106.88)	12225 (54.38)	4.40 (7.08)	1958	2.93	0.470 (0.286)	15.00 (2.95)	207 (97)	57 (14)	28.47 (96.41)
6.2 mph (10.0 km/h)									
143.74 (107.19)	11082 (49.29)	4.86 (7.83)	1958	2.50	0.466 (0.284)	15.11 (2.98)	205 (96)	56 (13)	28.46 (96.38)
6.8 mph (10.9 km/h)									
144.55 (107.79)	10103 (44.94)	5.37 (8.63)	1989	2.24	0.466 (0.284)	15.10 (2.98)	207 (97)	50 (10)	28.46 (96.38)
7.4 mph (11.9 km/h)									
144.33 (107.63)	9251 (41.15)	5.85 (9.42)	1958	1.90	0.462 (0.281)	15.24 (3.00)	204 (95)	46 (8)	28.74 (97.33)
8.0 mph (12.9 km/h)									
157.13 (117.17)	8458 (37.62)	6.97 (11.21)	1957	1.72	0.464 (0.282)	15.20 (2.99)	209 (98)	47 (8)	28.75 (97.36)
8.6 mph (13.8 km/h)									
154.52 (115.22)	7758 (34.51)	7.47 (12.02)	1957	1.72	0.472 (0.287)	14.92 (2.94)	210 (99)	49 (9)	28.79 (97.49)
9.2 mph (14.8 km/h)									
138.86 (103.55)	6457 (28.72)	8.06 (12.98)	2005	1.37	0.494 (0.300)	14.27 (2.81)	207 (97)	50 (10)	28.81 (97.56)

REPAIRS AND ADJUSTMENTS: No repairs or adjustments.

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 125°F(52°C). The maximum drawbar pull was limited to avoid excessive tractor bouncing. The performance figures on this summary were taken from a test conducted under the OECD Code II test code procedure.

We, the undersigned, certify that this is a true and correct report of official Tractor Test No. **1807**, Nebraska Summary 373, July 23, 2002.

Brent T. Sampson
Test Engineer

L.L. Bashford
G.J. Hoffman
V.I. Adamchuk
Board of Tractor Test Engineers

TRACTOR SOUND LEVEL WITH CAB	Auto Mode dB(A)
At no load at 4.6 mph (7.5 km/h)	66.3
Transport speed - no load -	73.6
Bystander	83.5

TIRES, BALLAST AND WEIGHT

	With Ballast	Without Ballast
Rear Tires - No., size, ply & psi(kPa)	Four 18.4R42;**,10(70)	Two 18.4R42;**,16(110)
Ballast - Duals (total)	1520 lb (689 kg)	None
- Cast Iron (total)	1405 lb (637 kg)	None
Front Tires - No., size, ply & psi(kPa)	Two 14.9R30;***,19(130)	Two 14.9R30;***,14(95)
Ballast - Liquid (total)	None	None
- Cast Iron (total)	480 lb (219 kg)	None
Height of Drawbar	21.0 in (535 mm)	21.0 in (535 mm)
Static Weight with operator - Rear	13340 lb (6051 kg)	10600 lb (4804 kg)
- Front	6430 lb (2917 kg)	5765 lb (2619 kg)
- Total	19770 lb (8968 kg)	16365 lb (7423 kg)

DRAWBAR PERFORMANCE
UNBALLASTED - 1800 RPM - MANUAL MODE
MAXIMUM POWER AT SELECTED 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)	Consumption Hp.hr/gal (kW.h/l)	Temp. °F(°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
104.41 (77.86)	17309 (76.99)	2.26 (3.64)	2209	9.43	0.613 (0.373)	11.49 (2.26)	193 (89)	57 (14)	28.53 (96.59)
123.32 (91.96)	16583 (73.76)	2.79 (4.49)	2057	6.29	0.534 (0.325)	13.20 (2.60)	198 (92)	60 (16)	28.53 (96.59)
134.33 (100.17)	16081 (71.53)	3.13 (5.04)	1921	5.41	0.496 (0.302)	14.20 (2.80)	204 (95)	62 (17)	28.52 (96.55)
141.66 (105.64)	15483 (68.87)	3.43 (5.52)	1813	4.85	0.463 (0.282)	15.22 (3.00)	205 (96)	61 (16)	28.51 (96.52)
143.78 (107.22)	14229 (63.29)	3.79 (6.10)	1809	3.77	0.462 (0.281)	15.25 (3.00)	207 (97)	60 (16)	28.50 (96.48)
145.12 (108.21)	13727 (61.06)	3.96 (6.38)	1810	3.43	0.456 (0.277)	15.46 (3.04)	205 (96)	59 (15)	28.49 (96.45)
146.39 (109.16)	12262 (54.54)	4.48 (7.21)	1817	2.76	0.452 (0.275)	15.58 (3.07)	209 (98)	58 (14)	28.48 (96.42)
146.24 (109.05)	11056 (49.18)	4.96 (7.98)	1812	2.33	0.451 (0.275)	15.61 (3.08)	208 (98)	56 (13)	28.47 (96.38)
146.87 (109.52)	10080 (44.84)	5.46 (8.79)	1824	2.16	0.450 (0.274)	15.66 (3.09)	208 (98)	52 (11)	28.46 (96.35)
146.59 (109.31)	9245 (41.12)	5.95 (9.57)	1809	1.90	0.450 (0.274)	15.66 (3.09)	205 (96)	45 (7)	28.73 (97.26)
145.12 (108.21)	8456 (37.61)	6.44 (10.36)	1806	1.81	0.457 (0.278)	15.43 (3.04)	206 (97)	47 (8)	28.75 (97.33)
143.30 (106.86)	7748 (34.46)	6.94 (11.16)	1807	1.63	0.457 (0.278)	15.40 (3.03)	207 (97)	48 (9)	28.77 (97.40)
127.10 (94.78)	6420 (28.56)	7.42 (11.95)	1805	1.37	0.518 (0.315)	13.60 (2.68)	208 (98)	49 (9)	28.80 (97.50)
128.31 (95.68)	5937 (26.41)	8.11 (13.04)	1808	1.28	0.510 (0.310)	13.81 (2.72)	209 (98)	51 (11)	28.82 (97.57)

DRAWBAR PERFORMANCE
UNBALLASTED - MANUAL MODE
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 5.0 mph (8.0 km/h)									
134.21 (100.08)	10771 (47.91)	4.67 (7.52)	2103	2.24	0.482 (0.293)	14.63 (2.88)	204 (95)	52 (11)	28.83 (97.63)
75% of Pull at Maximum Power 5.0 mph (8.0 km/h)									
106.60 (79.49)	8076 (35.92)	4.95 (7.97)	2215	1.72	0.530 (0.322)	13.30 (2.62)	197 (91)	53 (12)	28.83 (97.63)
50% of Pull at Maximum Power 5.0 mph (8.0 km/h)									
72.27 (53.89)	5427 (24.14)	4.99 (8.04)	2226	1.37	0.620 (0.377)	11.36 (2.24)	191 (88)	56 (13)	28.80 (97.53)
75% of Pull at Reduced Engine Speed 6.2 mph (10.0 km/h)									
106.56 (79.46)	8075 (35.92)	4.95 (7.96)	1889	1.81	0.478 (0.291)	14.73 (2.90)	193 (89)	53 (12)	28.82 (97.60)
50% of Pull at Reduced Engine Speed 6.2 mph (10.0 km/h)									
71.44 (53.27)	5366 (23.87)	4.99 (8.04)	1901	1.37	0.539 (0.328)	13.08 (2.58)	185 (85)	57 (14)	28.79 (97.49)
MAXIMUM POWER AT SELECTED SPEEDS									
2.5 mph (4.0 km/h)									
104.52 (77.94)	17338 (77.12)	2.26 (3.64)	2209	9.66	0.617 (0.375)	11.42 (2.25)	196 (91)	57 (14)	28.53 (96.59)
3.2 mph (5.1 km/h)									
122.46 (91.32)	15882 (70.65)	2.89 (4.65)	2103	5.17	0.537 (0.327)	13.11 (2.58)	197 (92)	58 (14)	28.53 (96.59)
3.8 mph (6.1 km/h)									
127.41 (95.01)	13624 (60.60)	3.51 (5.64)	2107	3.43	0.513 (0.312)	13.73 (2.70)	200 (93)	62 (17)	28.52 (96.55)
4.4 mph (7.1 km/h)									
130.96 (97.66)	12052 (53.61)	4.07 (6.56)	2096	2.67	0.498 (0.303)	14.15 (2.79)	202 (94)	61 (16)	28.51 (96.52)
4.8 mph (7.7 km/h)									
132.32 (98.67)	11091 (49.34)	4.47 (7.20)	2104	2.50	0.498 (0.303)	14.14 (2.79)	202 (94)	60 (16)	28.50 (96.48)
5.0 mph (8.0 km/h)									
134.21 (100.08)	10771 (47.91)	4.67 (7.52)	2103	2.24	0.482 (0.293)	14.63 (2.88)	204 (95)	52 (11)	28.83 (97.60)
5.6 mph (9.0 km/h)									
133.64 (99.65)	9604 (42.72)	5.22 (8.40)	2098	2.07	0.491 (0.298)	14.36 (2.83)	204 (96)	58 (14)	28.48 (96.42)
6.2 mph (10.0 km/h)									
133.34 (99.43)	8613 (38.31)	5.81 (9.34)	2107	1.98	0.490 (0.298)	14.39 (2.83)	206 (96)	56 (13)	28.47 (96.38)
6.8 mph (10.9 km/h)									
131.48 (98.05)	7748 (34.46)	6.36 (10.24)	2098	1.63	0.498 (0.303)	14.14 (2.78)	202 (94)	55 (13)	28.46 (96.35)
7.4 mph (11.9 km/h)									
131.66 (98.18)	7125 (31.69)	6.93 (11.15)	2099	1.54	0.497 (0.303)	14.16 (2.79)	202 (94)	45 (7)	28.72 (97.22)
8.0 mph (12.9 km/h)									
129.46 (96.54)	6458 (28.72)	7.52 (12.10)	2101	1.37	0.506 (0.308)	13.93 (2.74)	203 (95)	46 (8)	28.74 (97.30)
8.6 mph (13.8 km/h)									
126.66 (94.45)	5878 (26.15)	8.08 (13.00)	2099	1.28	0.519 (0.316)	13.58 (2.68)	203 (95)	48 (9)	28.77 (97.40)

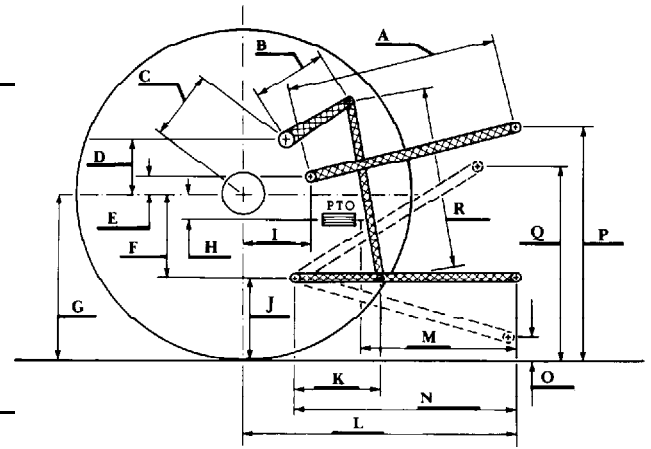
DRAWBAR PERFORMANCE
BALLASTED - 1800 RPM - MANUAL MODE
MAXIMUM POWER AT SELECTED SPEEDS

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	Temp. °F(°C) Air dry bulb	Barom. inch Hg (kPa)	
102.47 (76.41)	21232 (94.44)	1.81 (2.91)	2118	9.86	2.1 mph (3.4 km/h) 0.639 (0.389)	11.03 (2.17)	194 (90)	67 (19)	28.64 (96.99)
115.59 (86.20)	20038 (89.13)	2.16 (3.48)	2042	6.37	2.5 mph (4.0 km/h) 0.572 (0.348)	12.31 (2.43)	200 (93)	68 (20)	28.63 (96.95)
130.19 (97.08)	19037 (84.68)	2.56 (4.13)	1868	5.33	3.2 mph (5.1 km/h) 0.510 (0.310)	13.82 (2.72)	208 (98)	69 (21)	28.63 (96.95)
135.64 (101.15)	17018 (75.70)	2.99 (4.81)	1808	3.86	3.8 mph (6.1 km/h) 0.487 (0.297)	14.45 (2.85)	208 (98)	69 (21)	28.62 (96.92)
141.61 (105.60)	15211 (67.66)	3.49 (5.62)	1808	2.85	4.4 mph (7.1 km/h) 0.466 (0.283)	15.12 (2.98)	205 (96)	69 (21)	28.61 (96.88)
141.49 (105.51)	13900 (61.83)	3.82 (6.14)	1805	2.59	4.8 mph (7.7 km/h) 0.464 (0.282)	15.17 (2.99)	210 (99)	69 (21)	28.60 (96.85)
141.53 (105.54)	13310 (59.21)	3.99 (6.42)	1806	2.42	5.0 mph (8.0 km/h) 0.466 (0.283)	15.13 (2.98)	210 (99)	69 (21)	28.59 (96.82)
141.36 (105.41)	11855 (52.73)	4.47 (7.20)	1804	2.08	5.6 mph (9.0 km/h) 0.466 (0.283)	15.12 (2.98)	210 (99)	74 (23)	28.58 (96.78)
141.16 (105.27)	10658 (47.41)	4.97 (7.99)	1808	1.90	6.2 mph (10.0 km/h) 0.466 (0.284)	15.11 (2.98)	208 (98)	74 (23)	28.58 (96.78)
141.12 (105.23)	9701 (43.15)	5.46 (8.78)	1807	1.73	6.8 mph (10.9 km/h) 0.467 (0.284)	15.07 (2.97)	209 (98)	74 (23)	28.58 (96.78)
139.21 (103.81)	8791 (39.10)	5.94 (9.56)	1804	1.56	7.4 mph (11.9 km/h) 0.475 (0.289)	14.82 (2.92)	211 (99)	77 (25)	28.58 (96.78)
138.09 (102.98)	8040 (35.76)	6.44 (10.37)	1805	1.47	8.0 mph (12.9 km/h) 0.478 (0.291)	14.75 (2.90)	207 (97)	76 (24)	28.58 (96.78)
136.65 (101.90)	7394 (32.89)	6.93 (11.15)	1807	1.38	8.6 mph (13.8 km/h) 0.482 (0.293)	14.62 (2.88)	208 (98)	75 (24)	28.58 (96.78)
121.27 (90.43)	6119 (27.22)	7.43 (11.96)	1803	1.12	9.2 mph (14.8 km/h) 0.544 (0.331)	12.96 (2.55)	210 (99)	75 (24)	28.58 (96.78)
122.35 (91.24)	5681 (25.27)	8.08 (13.00)	1804	1.03	10.0 mph (16.1 km/h) 0.540 (0.329)	13.04 (2.57)	209 (98)	74 (23)	28.58 (96.78)

THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY: III

Quick Attach: Walterscheid lower link ends	lift cylinders 2 x 80 mm
Maximum Force Exerted Through Whole Range:	10161 lbs (45.2 kN)
i) Opening pressure of relief valve:	NA
Sustained pressure at compensator cutoff:	2870 psi (198 bar)
ii) Pump delivery rate at minimum pressure and rated engine speed:	26.8 GPM (101.4 l/min)
iii) Pump delivery rate at maximum	
hydraulic power:	25.7 GPM (97.3 l/min)
Delivery pressure:	2550 psi (176 bar)
Power:	38.3 HP (28.6 kW)



HITCH DIMENSIONS AS TESTED NO LOAD

	OECD test		SAE test	
	inch	mm	inch	mm
A	27.2	692	26.6	676
B	14.8	375	14.8	375
C	24.5	623	24.5	623
D	23.1	588	23.1	588
E	11.1	283	7.5	190
F	10.8	275	10.8	275
G	35.6	905	34.2	870
H	4.1	105	4.1	105
I	19.8	504	19.8	504
J	24.8	630	23.4	595
K	24.1	612	23.1	587
L	47.5	1206	46.4	1179
M	23.1	586	22.0	559
N	39.8	1011	38.7	984
O	9.0	229	8.0	203
P	51.8	1315	45.4	1153
Q	38.8	984	36.8	933
R	38.1	968	35.9	911

THREE POINT HITCH PERFORMANCE

Observed Maximum Pressure psi. (bar)	2950 (203)				
Location:	lift cylinders				
Hydraulic oil temperature: °F (°C)	144 (62)				
Location:	hydraulic sump				
Category:	IIN				
Quick attach:	No				
SAE Static Test System pressure 2650 psi (182 Bar) with lift cylinders (1) x 70 mm and (1) x 80 mm					
Hitch point distance to ground level in. (mm)	8.1 (206)	16.0 (406)	24.0 (610)	32.0 (813)	40.0 (1016)
Lift force on frame lb	10953	10994	10629	9855	8397
" " " " " " (kN)	(48.7)	(48.7)	(47.3)	(43.8)	(37.4)
with lift cylinders (2) x 80 mm					
Hitch point distance to ground level in. (mm)	7.7 (196)	16.0 (406)	24.0 (610)	32.0 (813)	40.0 (1016)
Lift force on frame lb	12177	12564	12177	11268	9549
" " " " " " (kN)	(54.2)	(55.9)	(54.2)	(50.1)	(42.5)

ASAE Static Test System pressure 2860 psi (197 Bar)
with lift cylinders (1) x 70 mm and (1) x 80 mm

Hitch point distance to ground level in. (mm)	8.1 (206)	16.0 (406)	24.0 (610)	32.0 (813)	40.0 (1016)
Lift force on frame lb	11959	11949	11605	10760	9168
" " " " " " (kN)	(53.2)	(53.2)	(51.6)	(47.9)	(40.8)
with lift cylinders (2) x 80 mm					
Hitch point distance to ground level in. (mm)	7.7 (196)	16.0 (406)	24.0 (610)	32.0 (813)	40.0 (1016)
Lift force on frame lb	13295	13718	13295	12303	10426
" " " " " " (kN)	(59.1)	(61.0)	(59.1)	(54.7)	(46.4)



JOHN DEERE 7810 DIESEL