January 2000

Test 1788: John Deere 7710 Powrquad Diesel 20-Speed (Chassis S/N RW7710H030004 and Higher)

Nebraska Tractor Test Lab
University of Nebraska-Lincoln, tractortestlab@unl.edu

NEBRASKA OECD TRACTOR TEST 1788–SUMMARY 341
JOHN DEERE 7710 POWRQUAD DIESEL
20 SPEED
Chassis serial numbers *RW7710H030004* and higher

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 1007 rpm)			
137.85 *(102.79)*	2100	8.24 *(31.18)*	0.419 *(0.255)*	16.73 *(3.30)*	
		Maximum Power (2 hours)			
150.94 *(112.55)*	1650	8.15 *(30.84)*	0.379 *(0.230)*	18.53 *(3.65)*	
VARYING POWER AND FUEL CONSUMPTION					
137.85 *(102.79)*	2100	8.24 *(31.18)*	0.419 *(0.255)*	16.73 *(3.30)*	Air temperature
121.64 *(90.70)*	2177	7.74 *(29.29)*	0.446 *(0.272)*	15.72 *(3.10)*	77°F *(25°C)*
91.99 *(68.60)*	2204	6.46 *(24.44)*	0.492 *(0.300)*	14.25 *(2.81)*	Relative humidity
61.86 *(46.13)*	2226	5.30 *(20.07)*	0.601 *(0.366)*	11.67 *(2.30)*	71%
31.30 *(23.34)*	2250	4.10 *(15.54)*	0.920 *(0.560)*	7.63 *(1.50)*	Barometer
1.56 *(1.16)*	2280	2.86 *(10.84)*	12.878 *(7.833)*	0.54 *(0.11)*	28.73" Hg *(97.29 kPa)*

Maximum Torque - 522 lb.-ft. *(707 Nm)* at 1300 rpm
Maximum Torque Rise - 51.2%
Torque rise at 1699 engine rpm - 33%

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)*	Fuel Consumption Hp.hr/gal *(kW.h/l)*	Temp.°F *(°C)* cool-ing med	Air dry bulb	Barom. inch Hg *(kPa)*
Maximum Power 7th (B3) Gear									
123.87 *(92.37)*	10330 *(45.95)*	4.50 *(7.24)*	2102	3.66	0.466 *(0.283)*	15.06 *(2.97)*	197 *(91)*	56 *(13)*	28.96 *(98.07)*
75% of Pull at Maximum Power 7th (B3) Gear									
97.63 *(72.80)*	7725 *(34.36)*	4.74 *(7.63)*	2191	2.63	0.512 *(0.312)*	13.70 *(2.70)*	194 *(90)*	58 *(14)*	28.98 *(98.13)*
50% of Pull at Maximum Power 7th (B3) Gear									
66.27 *(49.41)*	5136 *(22.84)*	4.84 *(7.79)*	2218	1.76	0.611 *(0.371)*	11.49 *(2.26)*	188 *(87)*	59 *(15)*	28.98 *(98.13)*
75% of Pull at Reduced Engine Speed 10th (C2) Gear									
97.79 *(72.92)*	7714 *(34.31)*	4.75 *(7.65)*	1654	2.63	0.435 *(0.264)*	16.15 *(3.18)*	195 *(90)*	59 *(15)*	28.98 *(98.13)*
50% of Pull at Reduced Engine Speed 10th (C2) Gear									
66.47 *(49.57)*	5156 *(22.93)*	4.84 *(7.78)*	1668	1.76	0.487 *(0.296)*	14.41 *(2.84)*	186 *(86)*	58 *(14)*	28.98 *(98.13)*

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

Dates of Test: October 31-November 29, 2000

Manufacturer: John Deere Waterloo Works, P.O. Box 270, Waterloo Ia, USA, 50704

FUEL, OIL and TIME: Fuel No. 2 Diesel **Specific gravity converted to 60°/60°F *(15°/15°C)*** 0.8427 **Fuel weight** 7.017 lbs/gal *(0.841 kg/l)* **Oil SAE** 15W-40 **API service classification** CF-4 **Transmission and hydraulic lubricant** John Deere Hy-Gard fluid **Front axle lubricant** SAE 85W-140 API GL-5 **Total time engine was operated:** 30.0 hours

ENGINE: Make John Deere Diesel **Type** six cylinder vertical with turbocharger **Serial No.** *RG6081T111452* **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: 56.4 - 59.5 lb/h *(25.6 - 27.0 kg/h)* **High idle:** 2250 - 2300 rpm **Turbo boost:** nominal 13.2 - 17.5 psi *(91 - 121 kPa)* as measured 16.2 psi *(112 kPa)*

CHASSIS: Type front wheel assist **Serial No.***RW7710H037953* **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** selective gear fixed ratio with partial (4) range operator controlled power shift **Nominal travel speeds mph *(km/h)*** first 1.50 *(2.41)* second 1.80 *(2.90)* third 2.16 *(3.48)* fourth 2.65 *(4.26)* fifth 3.18 *(5.11)* sixth 3.83 *(6.16)* seventh 4.58 *(7.37)* eighth 5.06 *(8.14)* ninth 5.61 *(9.03)* tenth 6.09 *(9.80)* eleventh 7.29 *(11.73)* twelfth 8.93 *(14.37)* thirteenth 9.36 *(15.06)* fourteenth 11.27 *(18.14)* fifteenth 13.50 *(21.72)* sixteenth 13.86 *(22.31)* seventeenth 16.54 *(26.61)* eighteenth 16.70 *(26.87)* nineteenth 20.00 *(32.18)* twentieth 24.50 *(39.42)* reverse 1.78 *(2.86)*, 2.14 *(3.44)*, 2.57 *(4.13)*, 3.14 *(5.05)*, 3.77 *(6.06)*, 4.54 *(7.30)*, 5.43 *(8.74)*, 6.00 *(9.65)*, 6.66 *(10.71)*, 7.22 *(11.62)*, 8.65 *(13.92)*, 10.59 *(17.05)*, 11.10 *(17.86)*, 13.37 *(21.51)*, 16.01 *(25.76)*, 16.45 *(26.47)*, 19.61 *(31.56)*, 19.80 *(31.87)*, 23.72 *(38.17)*, 29.06 *(46.76)*

DRAWBAR PERFORMANCE

UNBALLASTED - FRONT DRIVE ENGAGED

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)*	Temp.°F *(°C)* cool-ing med	Air dry bulb	Barom. inch Hg *(kPa)*
				4th(A4)Gear					
100.67 *(75.07)*	15820 *(70.37)*	2.39 *(3.84)*	2169	14.20	0.551 *(0.335)*	12.74 *(2.51)*	190 *(88)*	48 *(9)*	28.94 *(98.00)*
				5th(B1)Gear					
117.85 *(87.88)*	15228 *(67.74)*	2.90 *(4.67)*	2094	9.97	0.489 *(0.297)*	14.35 *(2.83)*	196 *(91)*	50 *(10)*	28.94 *(98.00)*
				6th(B2)Gear					
128.71 *(95.98)*	14555 *(64.74)*	3.32 *(5.34)*	1931	7.39	0.452 *(0.275)*	15.54 *(3.06)*	200 *(93)*	52 *(11)*	28.95 *(98.04)*
				7th(B3)Gear					
133.07 *(99.23)*	14154 *(62.96)*	3.53 *(5.67)*	1701	6.61	0.429 *(0.261)*	16.34 *(3.22)*	207 *(97)*	54 *(12)*	28.95 *(98.04)*
				8th(C1)Gear					
134.26 *(100.12)*	13164 *(58.56)*	3.82 *(6.16)*	1651	5.40	0.426 *(0.259)*	16.48 *(3.25)*	208 *(98)*	55 *(13)*	28.96 *(98.07)*
				9th(B4)Gear					
134.77 *(100.50)*	11803 *(52.50)*	4.28 *(6.89)*	1648	4.50	0.424 *(0.258)*	16.53 *(3.26)*	207 *(97)*	55 *(13)*	28.96 *(98.07)*
				10th(C2)Gear					
136.15 *(101.53)*	10921 *(48.58)*	4.68 *(7.52)*	1651	3.99	0.421 *(0.256)*	16.68 *(3.29)*	209 *(98)*	57 *(14)*	28.97 *(98.10)*
				11th(C3)Gear					
136.42 *(101.73)*	9027 *(40.15)*	5.67 *(9.12)*	1656	3.15	0.421 *(0.256)*	16.66 *(3.28)*	209 *(98)*	57 *(14)*	28.97 *(98.10)*
				12th(C4)Gear					
134.88 *(100.58)*	7218 *(32.11)*	7.01 *(11.28)*	1659	2.37	0.428 *(0.260)*	16.40 *(3.23)*	205 *(96)*	57 *(14)*	28.97 *(98.10)*
				13th(D1)Gear					
134.27 *(100.12)*	6865 *(30.54)*	7.33 *(11.80)*	1656	2.29	0.424 *(0.258)*	16.55 *(3.26)*	201 *(94)*	58 *(14)*	28.98 *(98.14)*
				14th(D2)Gear					
131.88 *(98.34)*	5583 *(24.83)*	8.86 *(14.26)*	1652	1.85	0.433 *(0.263)*	16.22 *(3.19)*	206 *(97)*	58 *(14)*	28.98 *(98.14)*

TRACTOR SOUND LEVEL WITH CAB	Front Wheel Drive Engaged dB(A)	Disengaged dB(A)
At no load in 7th (B3)gear	73.0	73.0
Transport speed - no load - 20th(E4) gear		75.2
Bystander in 20th (E4) Gear		84.4

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)	1570 lb *(712 kg)*	None
- Cast Iron (total)	1000 lb *(454 kg)*	None
Front Tires - No., size, ply & psi(*kPa*)	Two 14.9R30;***;20(*140*)	Two 14.9R30;***;16(*110*)
Ballast - Liquid (total)	None	None
- Cast Iron (total)	1110 lb *(503 kg)*	None
Height of Drawbar	24.0 in (*610 mm*)	21.5 in (*545 mm*)
Static Weight with operator - Rear	12280 lb (*5570 kg*)	9970 lb (*4522 kg*)
- Front	6645 lb (*3014 kg*)	5275 lb (*2393 kg*)
- Total	18925 lb (*8584 kg*)	15245 lb (*6915 kg*)

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** 15070 lb *(6836 kg)*

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 138°F*(59°C)*. The pull in 3rd (A3) gear (ballasted tractor) 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.

NOTE: The performance figures on this report apply to tractor chassis serial numbers *RW7710H030004* and higher

We, the undersigned, certify that this is a true and correct report of official Tractor Test No. **1788**, Nebraska Summary 341, December 14, 2000.

David L. Morgan
Assistant Director

L.L. Bashford
M.F. Kocher
R.D. Grisso, Jr.
Board of Tractor Test Engineers

DRAWBAR PERFORMANCE

BALLASTED - FRONT DRIVE ENGAGED(1650 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)*	Temp.°F*(°C)* cool-ing med	Air dry bulb	Barom. inch Hg *(kPa)*
				3rd(A3) Gear					
108.49 *(80.90)*	19685 *(87.56)*	2.07 *(3.33)*	2167	8.59	0.508 *(0.309)*	13.81 *(2.72)*	191 *(88)*	55 *(13)*	28.90 *(97.87)*
				4th(A4) Gear					
123.44 *(92.05)*	19120 *(85.05)*	2.42 *(3.90)*	2035	6.97	0.468 *(0.285)*	14.99 *(2.95)*	195 *(90)*	54 *(12)*	28.90 *(97.87)*
				5th (B1) Gear					
132.25 *(98.62)*	18427 *(81.97)*	2.69 *(4.33)*	1866	5.77	0.435 *(0.265)*	16.12 *(3.18)*	196 *(91)*	53 *(12)*	28.90 *(97.87)*
				6th(B2) Gear					
136.38 *(101.70)*	17632 *(78.43)*	2.90 *(4.67)*	1655	5.04	0.419 *(0.255)*	16.75 *(3.30)*	207 *(97)*	52 *(11)*	28.89 *(97.83)*
				7th (B3) Gear					
139.03 *(103.67)*	14771 *(65.70)*	3.53 *(5.68)*	1655	3.38	0.410 *(0.250)*	17.11 *(3.37)*	203 *(95)*	49 *(9)*	28.89 *(97.83)*
				8th (C1) Gear					
137.96 *(102.87)*	13201 *(58.72)*	3.92 *(6.31)*	1652	2.69	0.412 *(0.251)*	17.01 *(3.35)*	208 *(98)*	53 *(12)*	28.92 *(97.93)*
				9th (B4) Gear					
137.77 *(102.73)*	11824 *(52.60)*	4.37 *(7.03)*	1654	2.35	0.415 *(0.253)*	16.90 *(3.33)*	208 *(98)*	54 *(12)*	28.92 *(97.93)*
				10th (C2) Gear					
137.94 *(102.87)*	10916 *(48.55)*	4.74 *(7.63)*	1650	2.18	0.412 *(0.250)*	17.04 *(3.36)*	207 *(97)*	50 *(10)*	28.92 *(97.93)*
				11th (C3) Gear					
137.82 *(102.78)*	9081 *(40.39)*	5.69 *(9.16)*	1649	2.00	0.414 *(0.252)*	16.94 *(3.34)*	201 *(94)*	47 *(8)*	28.88 *(97.80)*
				12th (C4) Gear					
135.27 *(100.87)*	7260 *(32.29)*	6.99 *(11.24)*	1647	1.65	0.423 *(0.257)*	16.60 *(3.27)*	206 *(97)*	46 *(8)*	28.88 *(97.80)*
				13th (D1) Gear					
134.24 *(100.10)*	6835 *(30.40)*	7.37 *(11.85)*	1659	1.65	0.426 *(0.259)*	16.48 *(3.25)*	207 *(97)*	44 *(7)*	28.87 *(97.77)*
				14th (D2) Gear					
131.65 *(98.17)*	5584 *(24.84)*	8.84 *(14.23)*	1646	1.30	0.433 *(0.263)*	16.22 *(3.20)*	205 *(96)*	45 *(7)*	28.87 *(97.77)*

DRAWBAR PERFORMANCE

BALLASTED - FRONT DRIVE DISENGAGED

FUEL CONSUMPTION CHARACTERISTICS

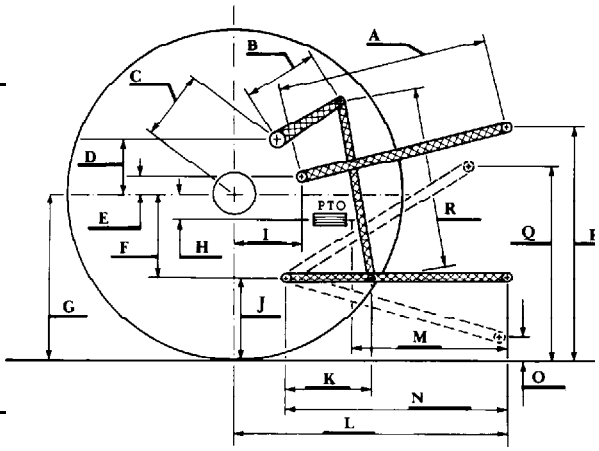
Power Hp *(kW)*	Drawbar pull lbs *(kN)*	Speed mph *(km/h)*	Crank-shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr *(kg/kW.h)*	Hp.hr/gal *(kW.h/l)*	Temp.°F *(°C)* cool-ing med	Air dry bulb	Barom. inch Hg *(kPa)*
Maximum Power 7th (B3) Gear									
126.68 *(94.47)*	10546 *(46.91)*	4.50 *(7.25)*	2099	2.83	0.458 *(0.279)*	15.32 *(3.02)*	197 *(91)*	48 *(9)*	28.88 *(97.80)*
75% of Pull at Maximum Power 7th (B3) Gear									
99.97 *(74.55)*	7915 *(35.21)*	4.74 *(7.62)*	2193	2.06	0.511 *(0.311)*	13.72 *(2.70)*	191 *(88)*	49 *(9)*	28.89 *(97.83)*
50% of Pull at Maximum Power 7th (B3) Gear									
67.90 *(50.64)*	5276 *(23.47)*	4.83 *(7.77)*	2221	1.36	0.609 *(0.370)*	11.53 *(2.27)*	185 *(85)*	49 *(9)*	28.89 *(97.83)*
75% of Pull at Reduced Engine Speed 10th (C2) Gear									
99.88 *(74.48)*	7882 *(35.06)*	4.75 *(7.65)*	1657	2.06	0.432 *(0.263)*	16.25 *(3.20)*	191 *(88)*	49 *(9)*	28.89 *(97.83)*
50% of Pull at Reduced Engine Speed 10th (C2) Gear									
67.89 *(50.63)*	5273 *(23.46)*	4.83 *(7.77)*	1674	1.36	0.487 *(0.296)*	14.42 *(2.84)*	184 *(84)*	49 *(9)*	28.90 *(97.87)*

MAXIMUM POWER IN SELECTED GEARS

4th(A4) Gear									
107.59 *(80.23)*	17132 *(76.21)*	2.36 *(3.79)*	2132	13.43	0.527 *(0.321)*	13.31 *(2.62)*	193 *(89)*	53 *(12)*	28.90 *(97.87)*
5th(B1) Gear									
123.91 *(92.40)*	15219 *(67.70)*	3.05 *(4.91)*	2100	4.84	0.466 *(0.283)*	15.07 *(2.97)*	194 *(90)*	49 *(9)*	28.89 *(97.83)*
6th(B2) Gear									
126.06 *(94.00)*	12618 *(56.13)*	3.75 *(6.03)*	2096	2.92	0.458 *(0.279)*	15.31 *(3.02)*	197 *(92)*	51 *(11)*	28.89 *(97.83)*
7th(B3) Gear									
126.68 *(94.47)*	10546 *(46.91)*	4.50 *(7.25)*	2099	2.83	0.458 *(0.279)*	15.32 *(3.02)*	197 *(91)*	48 *(9)*	28.88 *(97.80)*
8th(C1) Gear									
124.51 *(92.85)*	9343 *(41.56)*	5.00 *(8.04)*	2100	2.23	0.462 *(0.281)*	15.19 *(2.99)*	203 *(95)*	52 *(11)*	28.92 *(97.93)*
9th(B4)) Gear									
123.45 *(92.06)*	8325 *(37.03)*	5.56 *(8.95)*	2098	2.05	0.469 *(0.285)*	14.98 *(2.95)*	206 *(96)*	55 *(13)*	28.91 *(97.90)*
10th(C2) Gear									
125.02 *(93.22)*	7766 *(34.54)*	6.04 *(9.72)*	2097	1.88	0.467 *(0.284)*	15.04 *(2.96)*	201 *(94)*	51 *(11)*	28.92 *(97.93)*
11th(C3) Gear									
123.13 *(91.82)*	6375 *(28.36)*	7.24 *(11.66)*	2101	1.62	0.469 *(0.285)*	14.96 *(2.95)*	198 *(92)*	46 *(8)*	28.88 *(97.80)*
12th(C4) Gear									
119.05 *(88.77)*	5016 *(22.31)*	8.90 *(14.32)*	2098	1.36	0.489 *(0.298)*	14.34 *(2.82)*	197 *(91)*	47 *(8)*	28.88 *(97.80)*

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:	27.0 GPM *(102.2 l/min)*
iii) Pump delivery rate at maximum hydraulic power:	25.1 GPM *(95.0 l/min)*
Delivery pressure:	2590 psi *(179 bar)*
Power:	37.9 HP *(28.3 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:	IIIN
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 7710 DIESEL

Agricultural Research Division
Institute of Agriculture and Natural Resources
University of Nebraska Lincoln
Darrell Nelson, Dean and Director