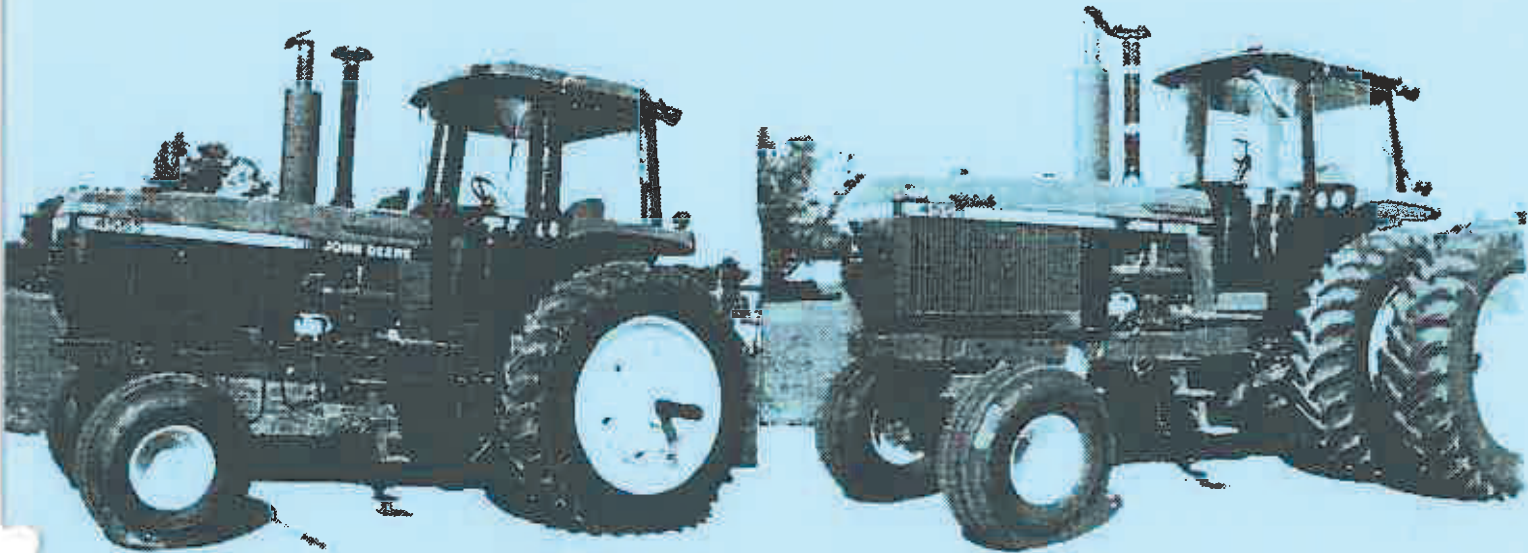


OECD APPROVAL # 1249
Date of approval: March 29, 1990

CENTER FOR AGRICULTURAL EQUIPMENT
DEPARTMENT OF AGRICULTURAL ENGINEERING
INSTITUTE OF AGRICULTURE AND NATURAL RESOURCES
UNIVERSITY OF NEBRASKA - EAST CAMPUS
LINCOLN, NEBRASKA 68583-0832, USA

REPORT ON TEST IN ACCORDANCE WITH OECD STANDARD CODE FOR THE
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OFFICIAL TESTING OF AGRICULTURAL TRACTOR PERFORMANCE
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RESTRICTED TEST-CODE II
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JOHN DEERE 4555 QUAD-RANGE (2 WD)



MANUFACTURED BY: John Deere Waterloo Works
P.O.Box 3500
Waterloo, Iowa 50706, USA

NEBRASKA TEST NO.1629

Test date: September 1989

SPECIFICATIONS OF TRACTOR.

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Manufacturers name/address : John Deere Tractor Works
P.O. Box 3500
Waterloo, Iowa
Submitted for test by : The manufacturer
Selected for test by : The manufacturer in agreement
with the test station.
Place of running in : John Deere P.E.C.
Waterloo, Iowa
Duration of running in : 70.0 hours.
Location of Test : Center for Agricultural Equip-
ment, Lincoln, Nebraska, USA.

TRACTOR SPECIFICATIONS.

Make John Deere
Model 4555
Type Unit construction
Number of driving wheels 2
Serial Number *RW4555H001833*
1st Serial number *RW4555H001001*

ENGINE.

Make John Deere
Model 6076TRW07
Type Diesel, turbocharged.
Serial Number *RG6076T109807*

Cylinders

Number/Disposition 6 in-line, vertical
Bore/stroke 115.8 mm x 120.7 mm
(4.56 in x 4.75 in)
Capacity 7634 ml (466 cu in)
Compression Ratio 16.0 - 1
Arrangement of valves Overhead
Cylinder liners Wet, replacable

Super charging

Make/Model/Type Air Research/RE29308/
exhaust gas driven
Pressure 100-125 kPa (15-18 psi)
at rated speed and load

Fuel System

Feed system Transfer pump integral
with injection pump
Make/Type/Model of filters Stanadyne/RE27091/
paper element
Fuel Tank capacity 386 liter (102 US gallons)

TEST CONDITIONS.

Overall dimensions.

Length		4975 mm (195.9 in)
Width	Minimum	2758 mm (108.6 in)
	Maximum	2997 mm (118.0 in)
Height	- Top of cab	3085 mm (121.5 in)
	- Top of exhaust	3190 mm (125.6 in)
Ground clearance. (unballasted)		420 mm (16.5 in)
Clearance-limiting part		Hitch sway blocks

Tractor Mass (with cab, full fuel tank).

		without driver		with driver	
		[kg]	[lb]	[kg]	[lb]
Unballasted	Front	2186	4820	2186	4820
	Rear	4999	11020	5073	11185
	Total	7185	15840	7259	16005
Ballasted	Front	2184	4815	2184	4815
	Rear	6319	13930	6393	14095
	Total	8503	18745	8577	18910

Ballast.

	Number of weights	Mass (total)		Water	
		[kg]	[lb]	[kg]	[lb]
Front	none			none	
Rear	2	454	1000	none	
Duals (rear)	2	776	1710		
Additional test equipment		88	195		

Tire Specifications.

	Front	Rear
Make	Goodyear	Goodyear
Dimensions	14L-16.1	18.4R42
Ply rating	(10 ply)	(10 ply)
Type	Rib	Radial
Max.load (tire manufacturer)	1740 kg/tire (3830 lb/tire)	3320 kg/tire (7400 lb/tire)
Max.load(tractor manufacturer)	1740 kg/tire (3830 lb/tire)	3320 kg/tire (7400 lb/tire)
Inflation pressure (tire mfr)	303 kPa(44 psi)	166 kPa(24 psi)
Dynamic Radius Index	457 mm(18.0 in)	892 mm (35.1 in)
Chosen track width - singles	1550 mm(61.0 in)	1675 mm (66.0 in)
- duals		3250 mm(128.0 in)

COMPULSORY TESTS.

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(1) MAIN POWER TAKE-OFF PERFORMANCE (1000 rev/min).

Date of tests : 19 September 1989
 Location of tests : Center for Agricultural Equipment,
 University of Nebraska, Lincoln, Nebraska.
 Type of Dynamometer: Eaton Dynamatic 2025 D.G.

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Power kW (hp)	Speeds		Fuel Consumption			Specific energy kW.h/l (hp.h/gal)
	engine rev/min	PTO rev/min	hourly l/h (gal/h)	specific kg/h (lb/h)	specific kg/kW.h (lb/hp.h)	

1.1 Maximum Power- 2 hour test.

121.20 (162.53)	1950	885	33.67 (8.90)	27.88 (61.24)	0.230 (0.378)	3.60 (18.27)
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1.2 Power at rated engine speed (1 hour).

116.95 (156.83)	2200	998	34.11 (9.01)	28.24 (62.26)	0.241 (0.397)	3.43 (17.41)
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1.3 Maximum power at standard PTO speed (1000 rev/min).

116.95 (156.83)	2200	998	34.11 (9.01)	28.24 (62.26)	0.241 (0.397)	3.43 (17.41)
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1.4 Part Loads - governor hand lever set for maximum power at rated engine speed

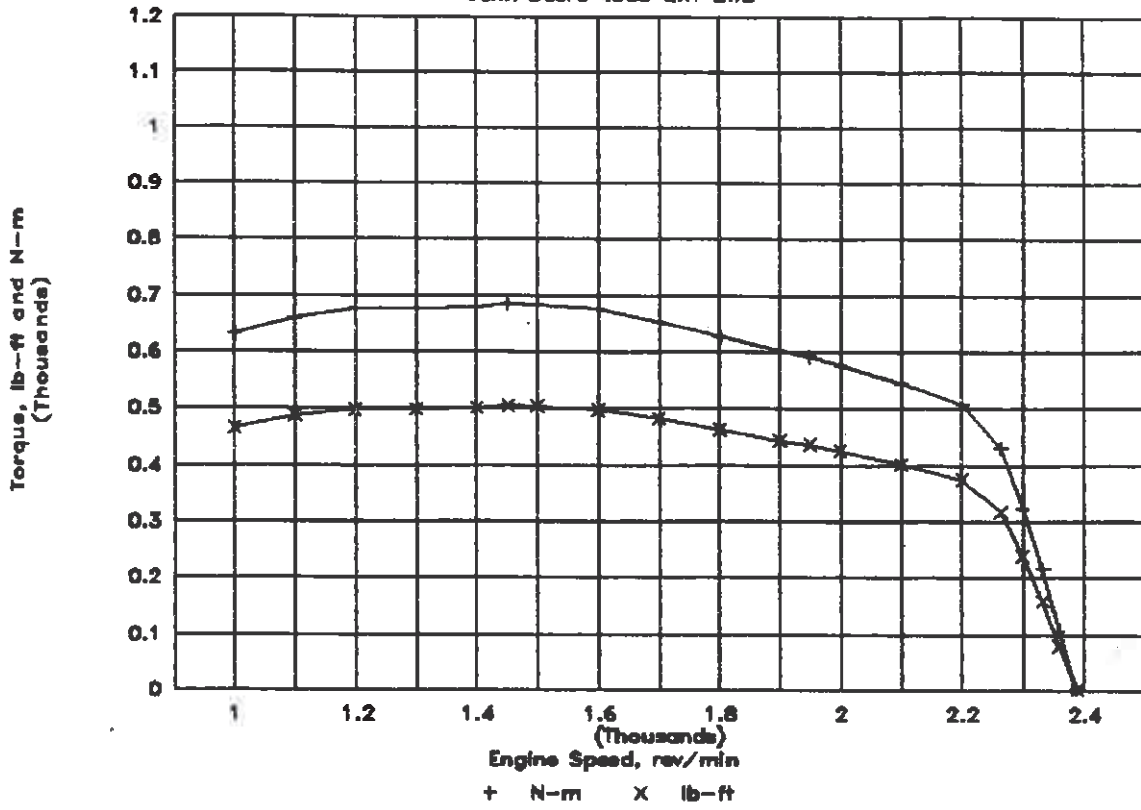
Power kW (hp)	Speeds		Fuel Consumption			Specific energy kW.h/l (hp.h/gal)
	engine rev/min	PTD rev/min	hourly l/h (gal/h)	specific kg/h (lb/h)	specific kg/kW.h (lb/hp.h)	
i. Torque corresponding to maximum power at rated engine speed.						
116.95 (156.83)	2200	998	34.11 (9.01)	28.24 (62.26)	0.241 (0.397)	3.43 (17.41)
ii. 85% of the torque obtained in (i)						
102.28 (137.16)	2264	1027	30.90 (8.16)	25.58 (56.40)	0.250 (0.411)	3.31 (16.80)
iii. 75% of the torque defined in (ii)						
77.93 (104.51)	2299	1043	25.47 (6.73)	21.09 (46.50)	0.271 (0.445)	3.06 (15.53)
iv. 50% of the torque defined in (ii)						
52.77 (70.77)	2331	1058	20.05 (5.30)	16.60 (36.60)	0.315 (0.517)	2.63 (13.36)
v. 25% of the torque defined in (ii)						
26.59 (35.65)	2358	1070	14.79 (3.91)	12.25 (27.00)	0.461 (0.757)	1.80 (9.12)
vi. unloaded						
0.96 (1.29)	2388	1083	2.52 (9.53)	7.89 (17.40)	8.213 (13.501)	0.10 (0.51)

1.5 Part Loads - governor hand lever set for maximum power at standard pto speed.

Power kW (hp)	Speeds		Fuel Consumption			Specific energy kW.h/l (hp.h/gal)
	engine rev/min	PTD rev/min	hourly l/h (gal/h)	kg/h (lb/h)	specific kg/kW.h (lb/hp.h)	
i. Torque corresponding standard PTD rpm						
116.95 (156.83)	2200	998	34.11 (9.01)	28.24 (62.26)	0.241 (0.397)	3.43 (17.41)
ii. 85% of the torque obtained in (i)						
102.28 (137.16)	2264	1027	30.90 (8.16)	25.58 (56.40)	0.250 (0.411)	3.31 (16.80)
iii. 75% of the torque defined in (ii)						
77.93 (104.51)	2299	1043	25.47 (6.73)	21.09 (46.50)	0.271 (0.445)	3.06 (15.53)
iv. 50% of the torque defined in (ii)						
52.77 (70.77)	2331	1058	20.05 (5.30)	16.60 (36.60)	0.315 (0.517)	2.63 (13.36)
v. 25% of the torque defined in (ii)						
26.59 (35.65)	2358	1070	14.79 (3.91)	12.25 (27.00)	0.461 (0.757)	1.80 (9.12)
vi. Unloaded						
0.96 (1.29)	2388	1083	9.53 (2.52)	7.89 (17.40)	8.213 (13.501)	0.10 (0.51)
No-load maximum engine speed 2388 rev/min						
Equivalent engine torque:						
			at rated engine speed 508 Nm (2200 rev/min)			
			at maximum power 593 Nm (1950 rev/min)			
			at maximum torque 684 Nm (1451 rev/min)			
Mean atmospheric conditions:						
			Temperature-dry bulb 24 °C (75 °F)			
			Relative humidity 56 %			
			Barometric pressure 97.84 kPa (28.89 in Hg)			

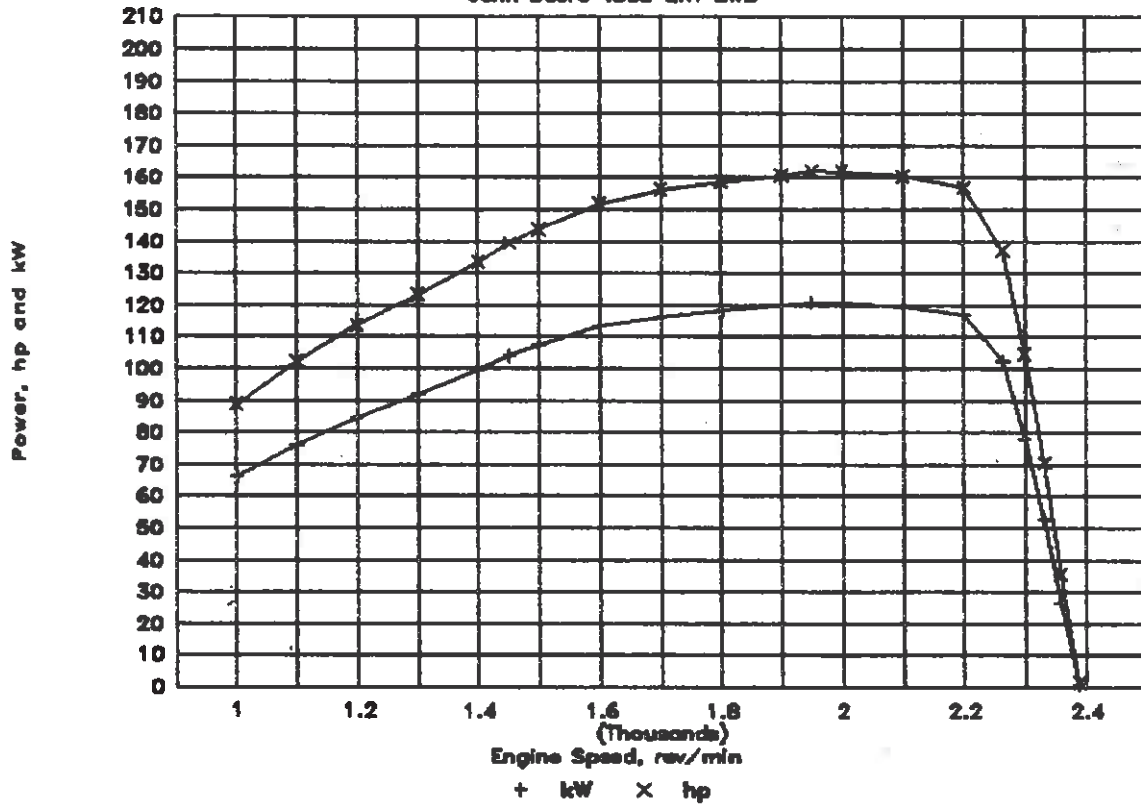
Equivalent Crankshaft Torque

John Deere 4555 QRT 2WD



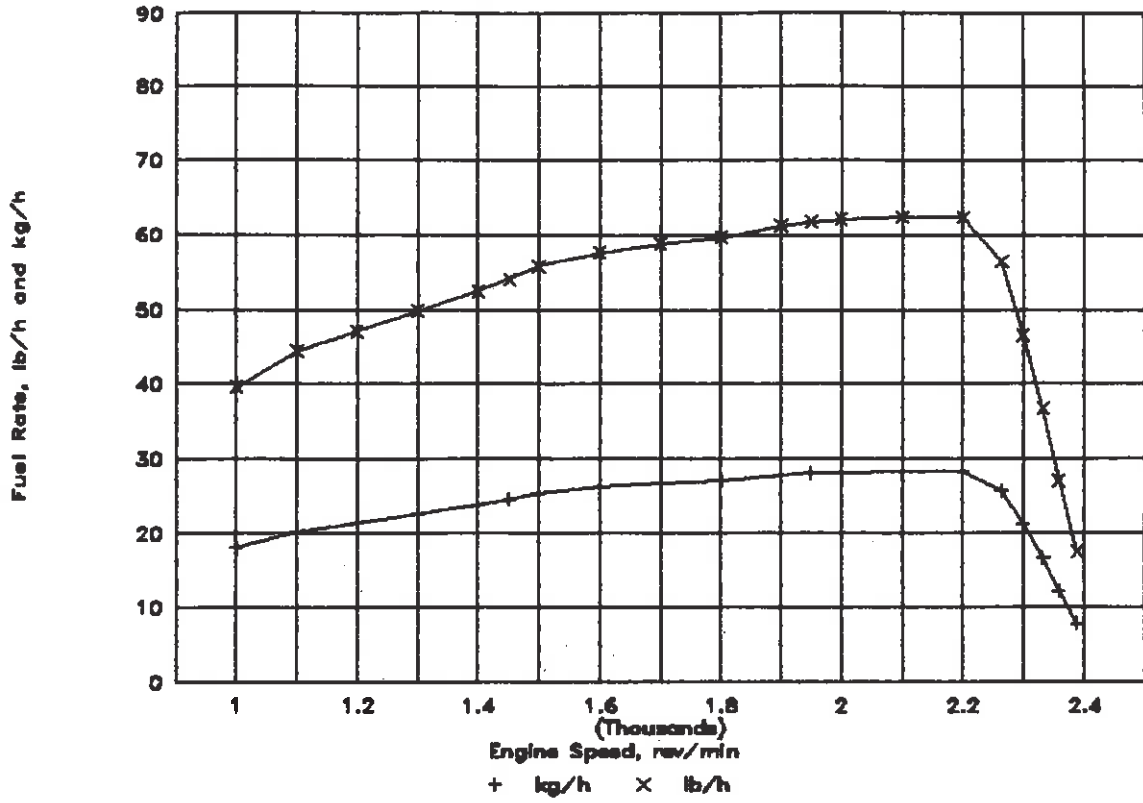
PTO Power

John Deere 4555 QRT 2WD



PTO Fuel Consumption

John Deere 4555 QRT 2WD



PTO Specific Fuel Consumption

John Deere 4555 QRT 2WD

