OECD APPROVAL # 1607
(Restricted code)
Date of approval: 13 March 1996

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REPORT ON TEST IN ACCORDANCE WITH OECD STANDARD CODE II FOR THE OFFICIAL TESTING OF AGRICULTURAL TRACTOR PERFORMANCE



FORD NEW HOLLAND 4630 (4WD) (DA 51) 16 x 8 DUAL POWER WITH MECHANICAL FRONT WHEEL DRIVE

MANUFACTURED BY : FORD NEW HOLLAND LTD
BASILDON, ESSEX
ENGLAND
NEBRASKA TEST NO: 1703
TEST DATES : 23 through 27 October 1995

This test report provides the results of the tests conducted in accordance with the OECD Standard Test Code for the Official Testing of Agricultural Tractor Performance - C(87)53 Final - Annex II, Restricted Code.

This report has been approved by the OECD Coordinating Centre in Paris (CEMAGREF) on 13 March 1996

Ford 4630 16 x 8 Dual Power with MFWD OECD # 1607

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SPECIFICATIONS OF TRACTOR.

Manufacturers name/address	Ford New Holland Ltd. Basildon, Essex England
Submitted for test by	The manufacturer
Selected for test by	The manufacturer in agreement with the test station.
Place of running in	Ford New Holland New Holland PA
Duration of running in	63.9 hours
Location of test	Tractor Testing Laboratory Lincoln, Nebraska, U.S.A.

TRACTOR SPECIFICATIONS.

Make	Ford
Model	4630 (DA 51)
Type	Unit construction, mechanical front wheel drive (4WD)
Number of driving wheels	4
Serial Number	*BE04206*
1st Serial number	*BD81699*

ENGINE.

Make	Ford
Model	C192 CD Turbo
Type	Diesel, direct injection
Serial Number	*JA537783*
Cylinders	
Number/Disposition	Three, in-line, vertical
Bore/stroke	111.8 mm x 106.7 mm
Capacity	3147 cm^3
Compression Ratio	16.1:1
Arrangement of valves	Overhead
Cylinder liners	None, Monobloc construction
Supercharging/Intercoolong	
Make /Model Type	Allied Signal/T250/ Exhaust driven turbocharger
Pressure	89.6 kPa at rated engine speed and full load
Intercooler	None
Fuel System	
Feed system	Gravity
Make/Type/Model of filters	Plastic strainer in tank and CAV paper element filter with

	sediment bowl and water trap between tank and injection pump
Fuel tank capacity	65.7 liters (17.4 US gallons)
Make/Model/Type Injection Pump	Lucas-CAV/LDS DSA1128/Rotary
Pump Serial number	21228 ANG
Production setting of pump	
Flow Rate	10.8 - 12.5 kg/h
Fuel Density	0.8435 kg/l
Make/Model/Type Injectors	CAV/multi-hole/JB 68010187 nozzle
Injection pressure	23.1 - 24.1 MPa
Timing	12 degrees before TDC
Governor	
Make/Model/Type	CAV/mechanical
Governed engine speed range	From 600 to 2375 rev/min
Rated engine speed	2200 rev/min
High-idle speed range	2325 - 2375 rev/min
Air Cleaner.	
Pre-cleaner	
Make/Model/Type	Ford New Holland/Raincap
Air intake location	Above front hood
Primary Cleaner	
Make/Model/Type	Locker Air Maze/dry paper element/pleated paper
Secondary element	
Make/Model/Type	pleated paper
Maintenance indicator	Warning lamp on instrument panel
Lubrication system.	
Type of feed pump	Force feed from eccentric rotor pump
Type of filters	Full flow paper element filter
Number	one
Oil cooler	Heat exchanger with engine coolant
Cooling system.	
Type of coolant	Water and Ethylene Glycol
Type of pump	Centrifugal
Fan specification	Belt driven
Number of fan blades	4
Fan diameter	406 mm
Coolant system capacity	10.6 liter
Type of temperature control	One thermostat
Superpressure system	75 kPa

Starting system.	
Make/Model/Type	Lucas-MME/M127/solenoid operated mechanical engagement
Power Rating	2.8 kW
Cold starting aid	CAV Thermostart
Safety device	Transmission neutral switch interlock
Electrical system.	
Voltage & grounding.	12 Volt DC;negative ground
Alternator	
Make/Model/Type	Lucas MME/A127 55
Power rating	55 Amp at 6000 rev/min.
Batteries	
Number & connection	One; 12 V battery
Rating	107 Amp-hour at 20 hour rating 800 cold crank amps
Exhaust system.	
Make/Model/Type	Nelson Burgess; two chamber;
Location	vertical above hood;left of centerline
Height of top above ground	2376 mm
TRANSMISSION.	
Clutch. (travel)	
Make/Model/Type	AP single dry plate
Number of plates	One
Plate diameter	330 mm
Method of operation	Mechanical; pedal operated
Gear Box.	
Make/Model/Type	Ford New Holland/16x8 Dual Power/mechanical synchromesh with one electro-mechanical range switch
Arrangement	One 4 forward speed lever; One high/low range lever; One high/low range switch; One forward/reverse lever
Number of gears	16 forward and 8 reverse controlled by three levers and one switch.
Available options	8x8 Synchromesh shift
Oil cooler	Air to oil radiator

Rear axle and final drives.	
Make/Model/Type	Ford New Holland/crown wheel and pinion, differential and epicyclic reduction gear final drive
Differential Lock	
Type	Mechanical
Method of engagement	pedal operated
Method of disengagement	self disengaging
Front Axle and final drives.	
Make/Model/Type	Carraro/707-164/mechanical
Differential lock	
Type	Limited Slip
Method of engagement	Automatic
Method of disengagement	Automatic

Gear ratios and travel speeds.

Gear Number	Gear Designation	Number of engine revolutions for one revolution of the driving wheels	Nominal travel speed at rated engine speed of 2200 rev/min [km/h]
Forward			
1	1L	295.20	1.94
2	1H	238.82	2.41
3	2L	199.22	2.88
4	2H	161.17	3.56
5	3L	130.77	4.40
6	3H	105.79	5.43
7	4L	89.04	6.46
8	5L	83.71	6.89
9	4H	72.04	7.97
10	5H	67.72	8.48
11	6L	56.49	10.17
12	6H	45.70	12.56
13	7L	37.08	15.50
14	7H	30.00	19.14
15	8L	25.25	22.77
16	8H	20.43	28.11
Reverse(Bypasses Dual Power switch on instrument panel)			
1	1l	240.05	2.40
2	2l	162.00	3.54
3	3l	106.34	5.40
4	4l	72.41	7.93
5	1h	68.07	8.43
6	2h	45.94	12.50
7	3h	30.15	19.04
8	4h	20.53	27.65

Tire dynamic radius of 695 mm ISO 4251/1-1992

Number of front wheel revolutions for one rear wheel revolution =1.3868

POWER - TAKE - OFF.

Main Power-Take-Off.

Type	Independent
Method of engagement	Hydraulically actuated multi-plate wet clutch operated by hand lever, independent of main drive clutch.
Number of shafts	One
Method of changing speeds	none

Standard PTO. 540 rev/min.

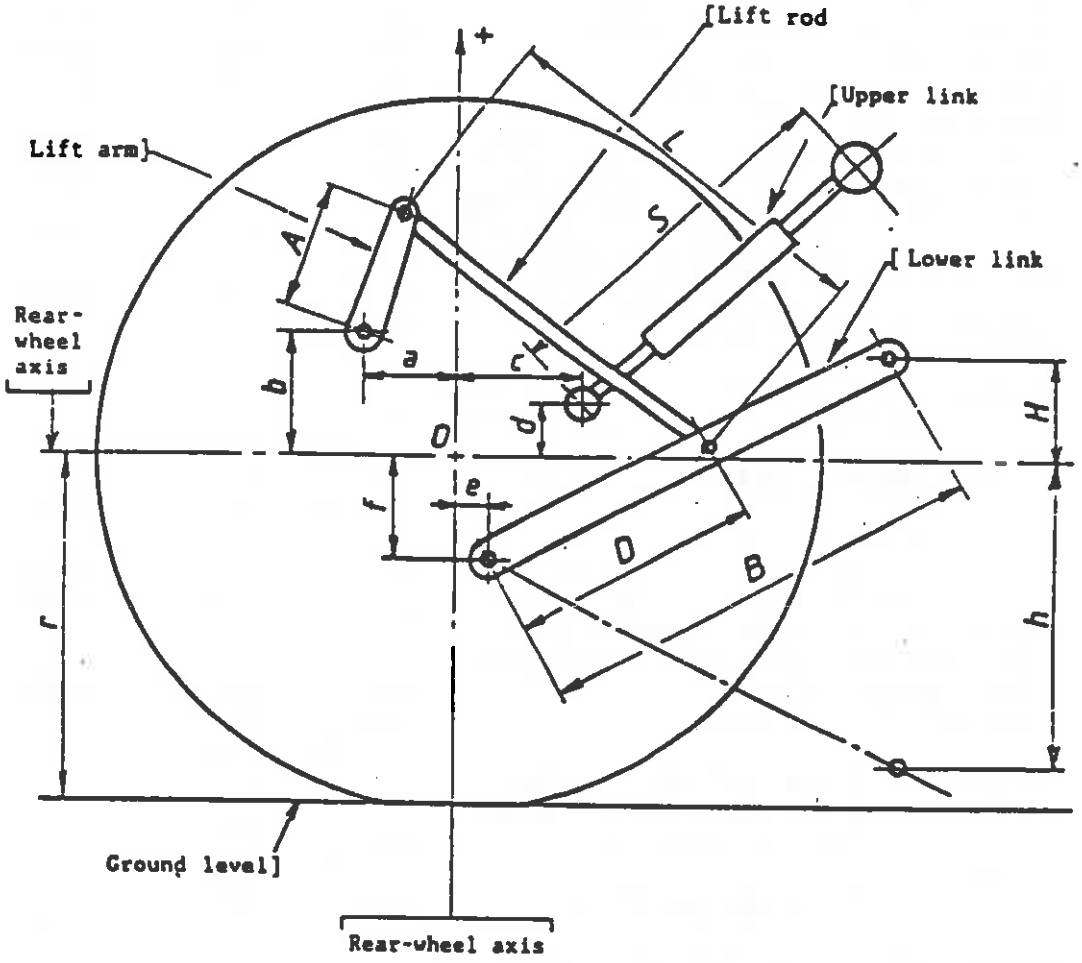
Location	Rear of tractor, vertical center plane.
Diameter of shaft	34.9 mm
Number of splines	6; conforms to ISO 500/1991
Height above ground	566 mm
Distance from median plane of tractor	0 mm
Distance behind rear axle	401 mm
PTO Speed at rated engine spd	676 rev/min
Engine speed at Std. PTO Spd	1756 rev/min
Engine speed/PTO speed ratio	3.252
Direction of rotation when viewed from shaft end	Clockwise.

POWER LIFT.

Make	Sauer Sunstrand
Type of hydraulic system	Gear pump; Closed center load sensinmg system
Number/Type of cylinders	One internal,single acting
Type of linkage lock for transport	None
Relief valve setting	17.2 MPa
Opening pressure of cylinder safety valve	19.6 MPa
Lift pump type	Gear
Power transmission to pump	From PTO shaft independent of main and PTO clutches
Type/Number of filters	Full flow/one
Location of oil reservoir	Rear axle housing
Number/Type/Location of tapping points.	1 pair of ISO standard couplings at rear of tractor.
Max. oil volume available for external cylinders.	27.7 liter

THREE POINT LINKAGE.

- Category I in conformity with ISO 730/1-1990
- Category adaptor - None



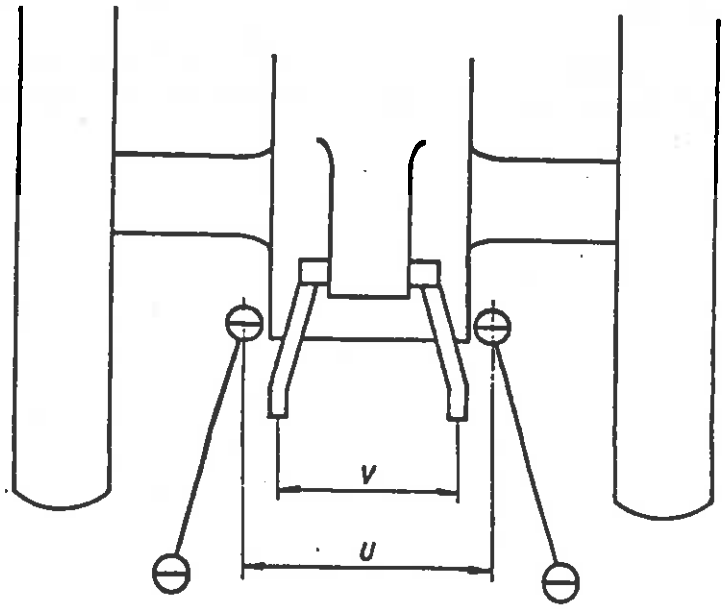


Table 1.1 -*Linkage geometry dimensions.

		Dimension or range [mm]	Settings used on test [mm]
Lift category		I	same
Rear Tire - Radius Index	(r)	695	610
Front Tire - Radius Index	(r')	515	470
Length of lift arms	(A)	254	same
Length of lower links	(B)	864	same
Distance of lift arm pivot from: horizontal	(a)	203	same
rear wheel axis: vertical	(b)	257	same
Horizontal distance between the 2 lower link points	(u)	520	same
Horizontal distance between the 2 lift arm end points	(v)	546	same
Length of upper link	(S)	622 to 762	719
Distance of upper link pivot from: horizontal	(c)	262 or 222	222
rear wheel axis: vertical	(d)	153 or 191	191
Distance of lower link pivot from: horizontal	(e)	68	same
rear wheel axis: vertical	(f)	203	same
Distance of lower link pivot points to lift rod pivot pts on lower links.	(D)	481	same
Length of lift rods	(L)	696 to 833	740
Height of lower hitch points relative to rear wheel axis In low position	(h)	389 to 630	419
In high position	(H)	83 to 232	219
Height above ground of lower hitch points when locked in transport position.		789 to 928	841

*Assuming (r) with a tire dynamic index of 695 mm-ISO 4251/1-1992

SWINGING DRAWBAR.

Type	Oscillating
Height above ground	Min 270 mm Max 405 mm
	Inverting drawbar
Adjustments Distance of hitch point from rear wheel axis,horizontal	632 mm, 750 mm
Distance of hitch point from PTO shaft end Vertical Horizontal	254 mm, 114 mm 355 mm, 241 mm
Lateral adjustment; Right hand Left hand	163 mm 163 mm
Distance of pivot point from rear wheel axis; horizontal	On rear axle centre line
Diameter of drawbar pin hole	27 mm
Maximum vertical static permissible load	drawbar extended - 7.8 kN drawbar retracted-10.2 kN

STEERING

Make/Model/Type	Danfoss Motor/10 SPC-100/ Hydrostatic
Method of operation	Steering wheel
Pump	Gear pump,engine mounted
Ram(s)	One double acting cylinder
Working pressure	9.5 -10.4 MPa
Oil cooler	None

BRAKES.

Service brake.

Make/Model/Type	Girling/oil immersed multiplate on rear axle planetary shafts
Method of operation	operated by two pedals which can be locked together.

Parking brake.

Type	Mechanical linkage coupled to service brake
Method of operation	Hand lever with ratchet

Trailer Brake

Type	None

WHEELS.

Number. Front Rear	Two; Driving and steering Two; Driving
Wheel base	2136 mm

Track width adjustment

	Minimum [mm]	Maximum [mm]	Adjustment method
Front	1396	1855	Reversing wheels and offset lug rims
Rear	1515	2026	Reversing wheels and offset lug rims

PROTECTIVE STRUCTURE

Make/Model/Type	Ford New Holland/ 2 Post Safety frame
Manufacturer's name/address	Ford New Holland New Holland, Penn.
Protective device	2 post ROPS
OECD approval number	CSD 1396/5

DRIVER'S SEAT.

Make/Model/Type	Grammer/DS44-1HB/Super Comfort
Type of suspension	Mechanical
Type of damping	Double acting hydraulic
Range of adjustment	
Longitudinal	150 mm
Vertical	60 mm

LIGHTING.

	Height above ground of center [mm]	Size [mm]	Distance from out - side edge to median plane of tractor. [mm]
Headlights	1555	105ϕ	767
Rearlight Left side	1530	146 x 95	483
Reflector Right side	1640	80 x 40	686

TEST CONDITIONS.

Overall dimensions.

Length		3606 mm
Width	Minimum	1815 mm
	Maximum	2423 mm
Height	- Top of ROPS	2349 mm
	- Top of exhaust	2376 mm
Ground clearance (unballasted)		350 mm
Clearance-limiting part		bottom of drawbar support

Tractor Mass (with rollbar,full fuel tank).

		without driver [kg]	with driver [kg]
Unballasted	Front	1037	1047
	Rear	1539	1605
	Total	2576	2652

Tire Specifications.

	Front Wheels	Rear Wheels
Make	Goodyear	Armstrong
Dimensions	11.2-24	16.9-30
Ply rating	8 ply	6 ply
Type	Bias	Bias
Max.load (tire manufacturer)	1265 kg/tire	1895 kg/tire
Max.load(tractor manufacturer)	1265 kg/tire)	1895 kg/tire
Inflationpressure(tire mfr)	240 kPa	120 kPa
Dynamic Radius Index	515 mm	695 mm
Chosen track width	1618 mm	1625 mm

Oils and Lubrication.

Capacity and change interval:

	Capacity liter	Oil change hours	Filter change hours
Engine (w/o filter)	6.6	300	300
Gear Box	12.0	1200	NA
Rear axle	45.7	1200	300
Front axle housing	5.5	1200	NA
Hydraulic system	common with rear axle		
Steering	2.2	1200	1200

Oil and Lubricant specifications:

	Recommended	Used during test
Engine oil		
Type	Ford M2C121-C	same
Viscosity	SAE 15W-40	
Classification	API SG/CE Mil-L-2104C	
Transmission		
Type	Ford M2C134-D	same
Viscosity	9.0 cST at 100°C	
Classification	Mil-L-2105	
Rear axle		
Type	Ford M2C134-D	same
Viscosity	9.0 cST at 100°C	
Classification	Mil-L-2105	
Hydraulic fluid	same as rear axle	same
Steering oil		
Type	Ford M2C134-D	same
Viscosity	9.0 cST at 100°C	
Front axle		
Type	Ford M2C134-D	same
Viscosity	9.0 cST at 100°C	
Classification	Mil-L-2105	
Grease	Ford M1C137-B	
Number of lubrication points	13	

Fuel

Type/grade	Grade 2-D, in conformity with the national standard
Density (Pto test)	0.842 kg/l at 15°C
(Drawbar test)	same as Pto test.
Cetane number	50.6
Viscosity	2.51 cSt at 38°C

COMPULSORY TESTS

1. MAIN POWER TAKE OFF

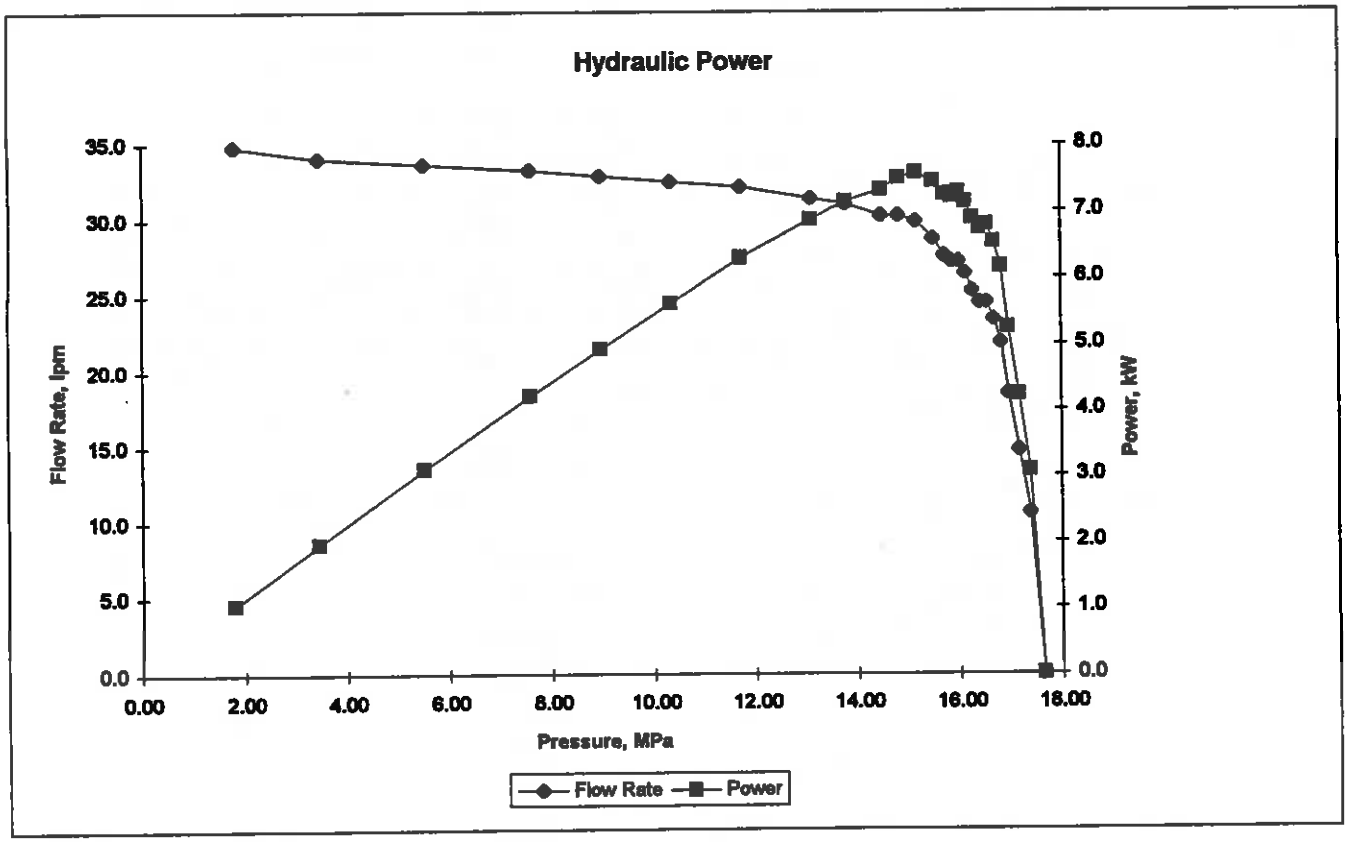
Date: 24-Oct-95 Location: UNL Tractor Test Lab, Lincoln, NE, USA

Type of dynamometer: Eddy current, Eaton Fuel Density: 0.842 kg/l

Power kW / hp	Engine rev/min	PTO rev/min	l/h / gal/h	kg/h / lb/hr	kg/kW-h / lb/hp-h	kW-h/l / hp-h/gal
1.1 Maximum Power - 2 Hours						
42.37 / 56.82	2200	676	14.18 / 3.74	11.93 / 26.30	0.282 / 0.463	2.99 / 15.17
1.2 Power at Rated Engine Speed - 1 hour						
42.37 / 56.82	2200	676	14.18 / 3.74	11.93 / 26.30	0.282 / 0.463	2.99 / 15.17
1.3 Power at Standard Power Take Off Speed - 1 hour						
39.61 / 53.12	1757	540	12.26 / 3.24	10.31 / 22.74	0.260 / 0.428	3.23 / 16.41
1.4 Part Loads						
1.4.1 Torque at maximum power at rated engine speed						
42.37 / 56.82	2200	676	14.18 / 3.74	11.93 / 26.30	0.282 / 0.463	2.99 / 15.17
1.4.2 85% of torque obtained in 1.4.1						
37.21 / 49.90	2270	697	13.10 / 3.46	11.02 / 24.30	0.296 / 0.487	2.84 / 14.42
1.4.3 75% of torque defined in 1.4.2						
28.23 / 37.85	2294	705	11.00 / 2.90	9.25 / 20.40	0.328 / 0.539	2.57 / 13.03
1.4.4 50% of torque defined in 1.4.2						
18.87 / 25.31	2300	707	8.89 / 2.35	7.48 / 16.50	0.397 / 0.652	2.12 / 10.77
1.4.5 25% of torque defined in 1.4.2						
9.50 / 12.74	2317	712	6.95 / 1.84	5.85 / 12.90	0.616 / 1.012	1.37 / 6.94
1.4.6 unloaded						
0.20 / 0.27	2342	720	4.85 / 1.28	4.08 / 9.00	19.987 / 32.825	0.04 / 0.21
1.5 Part Loads at Standard Power Take Off Speed						
1.5.1 Torque at maximum power						
39.61 / 53.12	1757	540	12.26 / 3.24	10.31 / 22.74	0.260 / 0.428	3.23 / 16.41
1.5.2 85% of torque obtained in 1.5.1						
34.36 / 46.08	1788	550	11.00 / 2.90	9.25 / 20.40	0.269 / 0.443	3.12 / 15.86
1.5.3 75% of torque defined in 1.5.2						
26.24 / 35.19	1823	560	8.89 / 2.35	7.48 / 16.50	0.285 / 0.469	2.95 / 14.98
1.5.4 50% of torque defined in 1.5.2						
17.77 / 23.83	1851	569	7.11 / 1.88	5.99 / 13.20	0.337 / 0.554	2.50 / 12.68
1.5.5 25% of torque defined in 1.5.2						
9.03 / 12.11	1879	578	5.01 / 1.32	4.22 / 9.30	0.467 / 0.768	1.80 / 9.14
1.5.6 unloaded						
0.17 / 0.22	1912	588	2.91 / 0.77	2.45 / 5.40	14.669 / 24.116	0.06 / 0.29

No load maximum engine speed:	2342 rev/min	
Equivalent torque at rated speed:	184 N.m	136 lb-ft
Equivalent torque at maximum power:	184 N.m	136 lb-ft
(engine speed:	2200 rev/min)	
Maximum equivalent crankshaft torque:	223 N.m	165 lb-ft
(engine speed:	1397 rev/min)	
Mean Dry bulb:	24 deg C	75 deg F
Wet bulb:	21 deg C	69 deg F
Relative Humidity	69 %	
Pressure:	98.5 kPa	29.10 in Hg
Maximum Coolant:	112 deg C	234 deg F
Engine Oil:	126 deg C	258 deg F
Fuel:	58 deg C	137 deg F
Air Intake:	31 deg C	87 deg F
Transmission/hydraulic oil:	73 deg C	163 deg F
Intake manifold pressure at rated speed:	82.5 kPa	12.0 psig
Intake manifold pressure at maximum power:	82.5 kPa	12.0 psig

Date of Test		26-Oct-95				
Location of Test-City-State:		Tractor Test Lab, Lincoln, NE, USA				
Tapping point used for test:		Remote hydraulic outlets				
I. Sustained pressure with pump stalled:						
17.65	MPa					
2560	*psig*					
II. Pump delivery rate at minumum pressure and rated engine speed:						
34.8	l/min					
9.2	*gpm*					
III. Flow rate, pressure, power:						
90% of relief valve setting						
27.3	l/min	15.86	MPa	7.2	kW	
7.2	*gpm*	*2300*	*psig*	*9.7*	*hp*	
Maximum hydraulic power:						
29.9	l/min	15.17	MPa	7.6	kW	
7.9	*gpm*	*2200*	*psig*	*10.1*	*hp*	
IV. Hydraulic fluid temperature at flow meter						
63	°C					
145	°F					



NOTE: This hydraulic system does not use an accumulator. Opening and closing pressures of the unloading valve could not be measured.

2.2 POWER LIFT TEST.

Date of test: 23 April 1991
(The hydraulic lifting system on this model is mechanically identical to that used on the Ford 3230 8x2(OECD test 1324) and the results are valid for this model.)

		Hitch points	Frame
Lower hitch points above ground - down position:	[mm/in]	206/8.1	191/7.5
Vertical movement: without load:	[mm/in]	638/25.1	759/29.9
Vertical movement: with load:	[mm/in]	617/24.3	726/28.6
Maximum corrected force through full range:	[kN/lb]	14.1/3159	13.6/3056
Corresponding pressure:	[kPa/psi]	16258/2358	
Moment about rear axle:	[kN.m/lb.ft]	13.1/9661	21.0/15458
Maximum mast tilt angle:	[deg]	--	8.9

Lifting height relative to horizontal position of lower links.

	[mm]	-216	-201	-99	0	99
	[in]	-8.5	-7.9	-3.9	0	3.9
Corrected lift forces						
Hitch point.	[kN]	--	14.1	16.0	16.9	18.1
	[lb]	--	3159	3600	3789	4077
at frame	[kN]	13.6	--	14.5	15.6	15.7
	[lb]	3056	--	3515	3533	3515

Lifting height relative to horizontal position of lower links.

	[mm]	201	300	401	417	511
	[in]	7.9	11.8	15.8	16.4	20.1
Corrected lift forces						
Hitch point	[kN]	18.8	19.3	20.6	20.4	--
	[lb]	4231	4344	4625	4589	--
at frame	[kN]	15.6	--	15.3	14.8	14.4
	[lb]	3515	--	3443	3317	3234

OECD Drawbar Data (SI)

Date of tests:	26-Oct-95	Fuel density:	0.842 kg/l
Type of track:	Concrete	Test number:	1703

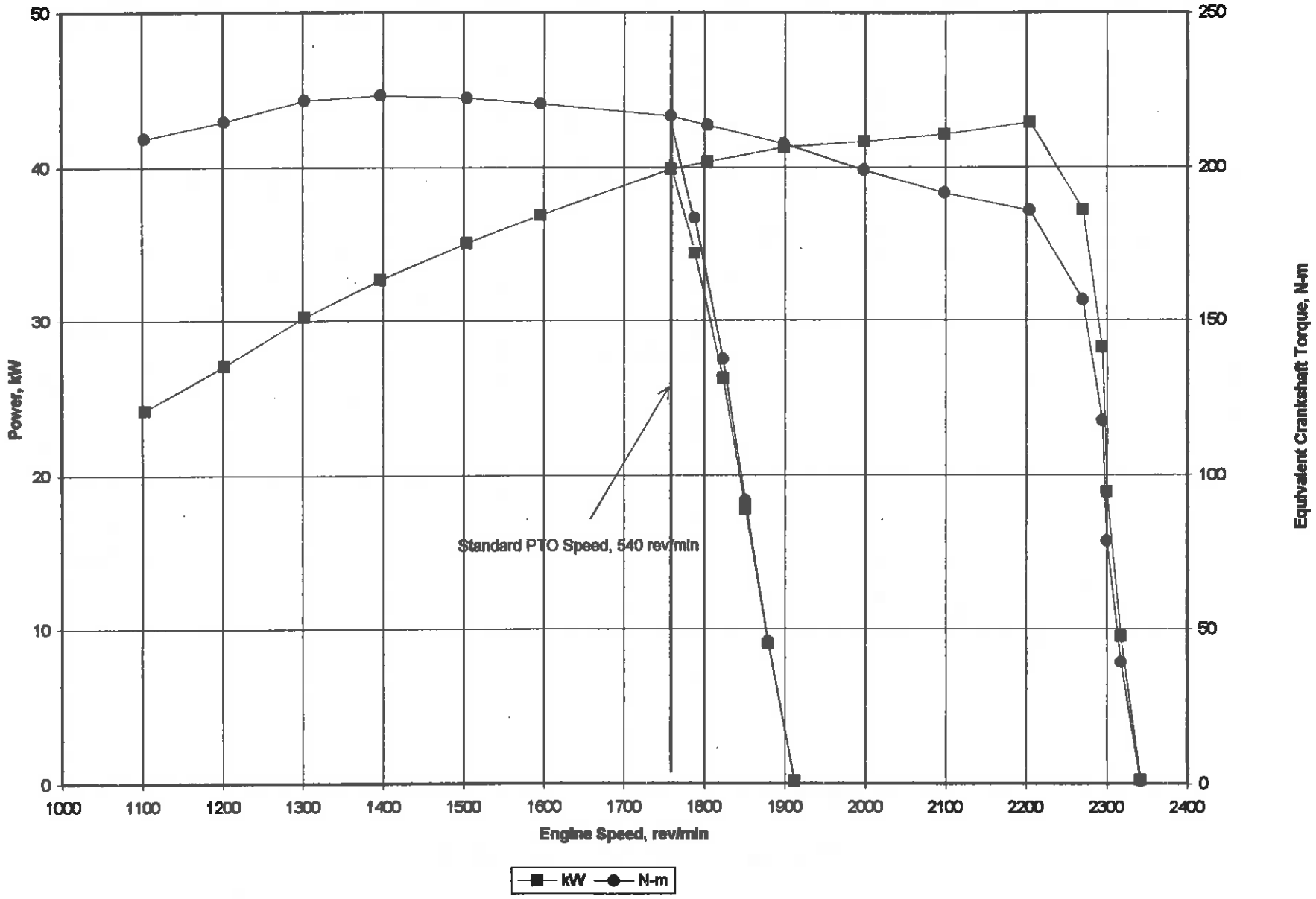
Gear	Power	Pull	Speed	Engine speed	Slip	SFC	SFE	Temperature, deg C					Rel hum-idity	Barom. Pres
	kW	kN	km/h	rev/min		kg/kW.h	kW.h/l	Fuel	Coolant	Oil	Dry	Wet		kPa
I. Maximum Power (unballasted, 4wd at 2200 rev/min)						Tire pressure:		83 kPa, rear		83 kPa, front		Drawbar height:	483 mm	
4 2H	22.27	24.76	3.24	2262	14%	0.424	1.98	59	87	105	12	7	51%	96.41
5 3L	27.67	25.23	3.95	2249	15%	0.383	2.20	59	88	106	11	6	53%	96.44
6 3H	32.88	24.33	4.87	2203	13%	0.363	2.32	60	89	108	11	7	54%	96.41
7 4L	34.71	20.68	6.04	2199	9%	0.344	2.45	60	89	108	10	6	52%	96.48
8 5L	36.06	20.04	6.48	2207	9%	0.331	2.54	59	88	109	9	5	51%	96.51
9 4H	33.72	15.80	7.68	2198	7%	0.354	2.37	63	91	111	14	8	44%	96.34
10 5H	35.19	15.40	8.23	2205	6%	0.341	2.47	62	91	112	14	8	44%	96.51
11 6L	36.19	13.04	9.99	2204	5%	0.330	2.55	62	91	113	14	8	44%	96.31
12 6H	34.45	9.93	12.49	2200	4%	0.346	2.43	62	91	112	14	8	44%	96.28
II. Part loads (unballasted, 4wd)														
II.1 in selected gear at maximum power at rated engine speed														
11 6L	36.19	13.04	9.99	2204	5%	0.330	2.55	62	91	113	14	8	44%	96.31
II.1.1 75% of pull at maximum power at rated engine speed														
11 6L	28.50	9.80	10.47	2275	4%	0.362	2.32	56	89	105	15	8	41%	96.00
II.1.2 50% of pull at maximum power at rated engine speed														
11 6L	19.22	6.52	10.61	2281	2%	0.429	1.96	57	88	107	15	9	46%	96.00
II.1.3 next higher gear at reduced engine speed, same pull and travel speed as II.1.1														
12 6H	28.48	9.83	10.43	1836	4%	0.329	2.56	58	89	107	15	9	46%	96.00
II.1.4 next higher gear at reduced engine speed, same pull and travel speed as II.1.2														
12 6H	19.25	6.48	10.70	1861	3%	0.380	2.21	58	87	106	15	9	46%	96.00
II.2 in selected gear nearest to 7.5 km/h at rated engine speed														
9 4H	33.34	16.22	7.40	2207	10%	0.360	2.34	63	89	110	13	7	43%	96.38
II.2.1 75% of pull at maximum power at rated engine speed														
9 4H	26.35	11.79	8.05	2253	5%	0.391	2.15	59	90	109	14	8	44%	96.24
II.2.2 50% of pull at maximum power at rated engine speed														
9 4H	18.14	7.89	8.28	2283	3%	0.468	1.80	59	88	107	14	8	45%	96.24
II.2.3 next higher gear at reduced engine speed, same pull and travel speed as II.2.1														
11 6L	26.38	11.82	8.03	1700	5%	0.314	2.68	58	88	106	14	8	45%	96.21
II.2.4 next higher gear at reduced engine speed, same pull and travel speed as II.2.2														
11 6L	18.17	7.85	8.34	1801	3%	0.357	2.36	56	86	103	14	8	45%	96.17

OECD Drawbar Data (US)

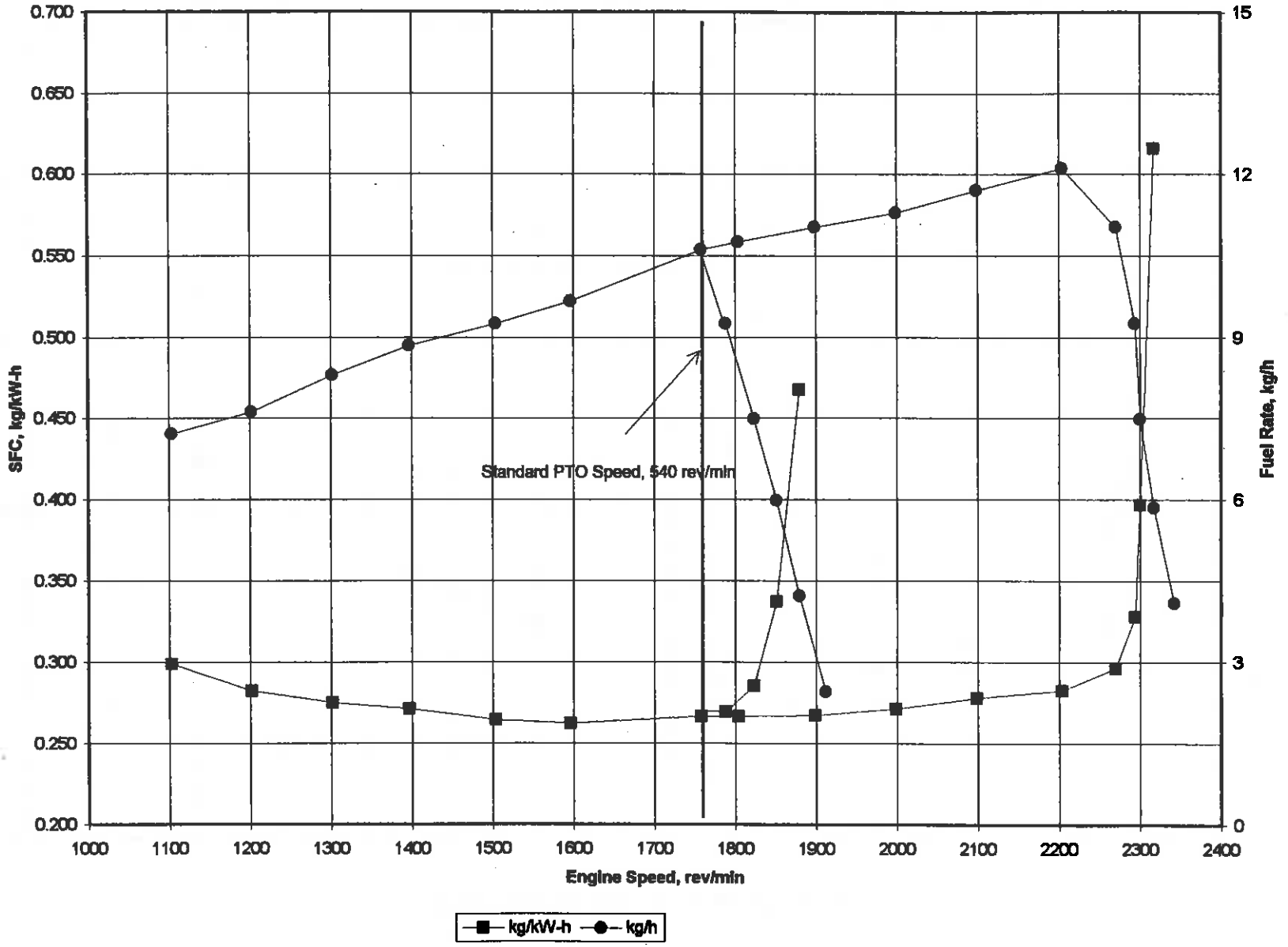
Date of tests:	26-Oct-95	Fuel density:	7.023 lb/gal
Type of track:	Concrete	Test number:	1703

Gear	Power	Pull	Speed	Engine speed	Slip	SFC	SFE	Temperature, deg F					Rel hum-idity	Barom. Pres
	hp	lb	mph	rev/min		lb/hp.h	hp.h/gal	Fuel	Coolant	Oil	Dry	Wet		in Hg
I. Maximum Power (unballasted, 4wd at 2200 rev/min)						Tire pressure:		12 psig, rear		12 psig, front		Drawbar height:	19.0 in	
4 2H	29.87	5566	2.01	2262	14%	0.698	10.07	139	189	222	54	45	51%	28.47
5 3L	37.11	5672	2.45	2249	15%	0.629	11.16	139	190	224	51	43	53%	28.48
6 3H	44.09	5470	3.02	2203	13%	0.597	11.76	140	192	226	52	44	54%	28.47
7 4L	46.54	4650	3.75	2199	9%	0.565	12.42	140	192	227	50	42	52%	28.49
8 5L	48.35	4506	4.02	2207	9%	0.544	12.90	138	191	228	49	41	51%	28.50
9 4H	45.22	3552	4.78	2198	7%	0.583	12.05	146	196	232	57	46	44%	28.45
10 5H	47.19	3462	5.11	2205	6%	0.560	12.53	144	196	233	57	46	44%	28.50
11 6L	48.54	2931	6.21	2204	5%	0.542	12.95	144	195	235	57	46	44%	28.44
12 6H	46.20	2233	7.76	2200	4%	0.568	12.36	144	196	234	57	46	44%	28.43
II. Part loads (unballasted, 4wd)														
II.1 in selected gear at maximum power at rated engine speed														
11 6L	48.54	2931	6.21	2204	5%	0.542	12.95	144	195	235	57	46	44%	28.44
II.1.1 75% of pull at maximum power at rated engine speed														
11 6L	38.22	2204	6.50	2275	4%	0.596	11.79	133	193	221	59	47	41%	28.35
II.1.2 50% of pull at maximum power at rated engine speed														
11 6L	25.78	1466	6.60	2281	2%	0.705	9.96	135	190	225	59	48	46%	28.35
II.1.3 next higher gear at reduced engine speed, same pull and travel speed as II.1.1														
12 6H	38.19	2210	6.48	1836	4%	0.541	12.98	136	193	225	59	48	46%	28.35
II.1.4 next higher gear at reduced engine speed, same pull and travel speed as II.1.2														
12 6H	25.81	1457	6.65	1861	3%	0.625	11.23	136	188	223	59	48	46%	28.35
II.2 in selected gear nearest to 4.6 mph at rated engine speed														
9 4H	44.71	3647	4.60	2207	10%	0.591	11.88	146	193	230	56	45	43%	28.46
II.2.1 75% of pull at maximum power at rated engine speed														
9 4H	35.34	2651	5.00	2253	5%	0.642	10.93	139	194	228	57	46	44%	28.42
II.2.2 50% of pull at maximum power at rated engine speed														
9 4H	24.33	1774	5.14	2283	3%	0.769	9.13	138	190	224	58	47	45%	28.42
II.2.3 next higher gear at reduced engine speed, same pull and travel speed as II.2.1														
11 6L	35.37	2658	4.99	1700	5%	0.516	13.62	136	191	223	58	47	45%	28.41
II.2.4 next higher gear at reduced engine speed, same pull and travel speed as II.2.2														
11 6L	24.37	1764	5.18	1801	3%	0.587	11.96	133	186	217	58	47	45%	28.40

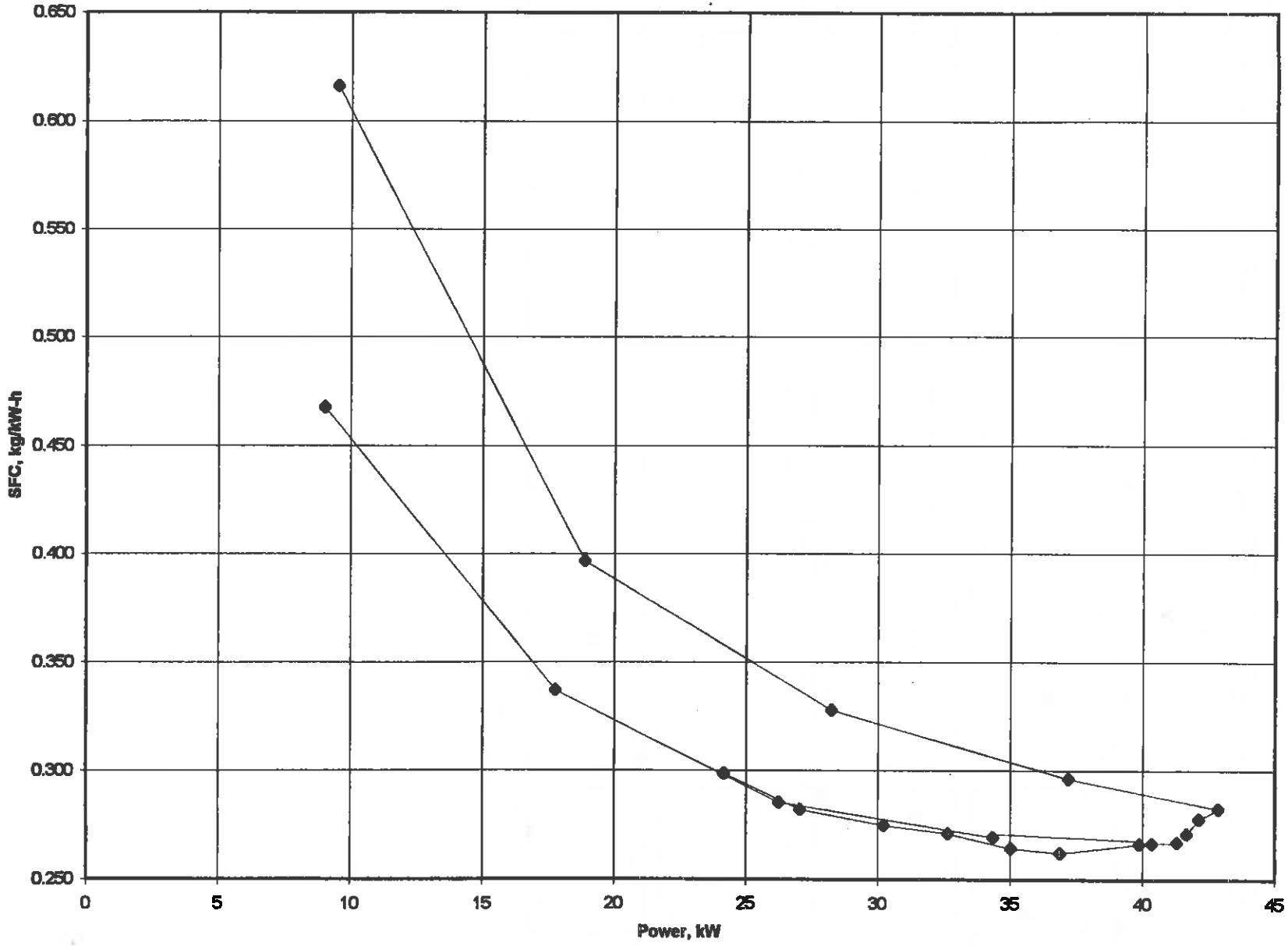
Power and Equivalent Crankshaft Torque



Specific Fuel Consumption and Fuel Rate



Power and Specific Fuel Consumption



OPTIONAL TESTS: Front Drive Disengaged

Tests conducted under the responsibility of
the Nebraska Tractor Testing Laboratory.

OECD Drawbar Data (SI)

Date of tests:		26-Oct-95		Fuel density:		0.842 kg/l								
Type of track:		Concrete		Test number:		1703								
Gear	Power	Pull	Speed	Engine speed	Slip	SFC	SFE	Temperature, deg C					Rel humidity	Baro. Pres
	kW	kN	km/h	rev/min		kg/kW.h	kW.h/l	Fuel	Coolant	Oil	Dry	Wet		kPa
I. Maximum Power (unballasted, 2wd at 2200 rev/min)						Tire pressure:		83 kPa, rear		83 kPa, front		Drawbar height:	483 mm	
8 5L	33.47	19.55	6.16	2247	15%	0.356	2.37	58	88	106	9	5	51%	96.51
9 4H	33.34	16.22	7.40	2207	10%	0.360	2.34	63	89	110	13	7	43%	96.38
10 5H	34.89	15.93	7.88	2203	10%	0.342	2.46	62	91	111	14	8	44%	96.34
11 6L	36.44	13.58	9.66	2197	8%	0.329	2.56	62	90	111	14	8	44%	96.31
12 6H	34.99	10.31	12.22	2202	5%	0.342	2.46	62	91	111	14	8	44%	96.28
II. Part loads (unballasted, 2wd)														
II.1 in selected gear at maximum power at rated engine speed														
11 6L	36.44	13.58	9.66	2197	8%	0.329	2.56	62	90	111	14	8	44%	96.31
II.1.1 75% of pull at maximum power at rated engine speed														
11 6L	29.13	10.23	10.25	2279	5%	0.357	2.36	55	89	105	14	8	45%	96.11
II.1.2 50% of pull at maximum power at rated engine speed														
11 6L	19.73	6.80	10.45	2283	4%	0.419	2.01	56	88	106	14	8	45%	96.11
II.1.3 next higher gear at reduced engine speed, same pull and travel speed as II.1.1														
12 6H	29.12	10.24	10.24	1844	5%	0.323	2.61	57	89	106	14	8	45%	96.11
II.1.4 next higher gear at reduced engine speed, same pull and travel speed as II.1.2														
12 6H	19.71	6.78	10.46	1850	4%	0.368	2.29	57	86	106	14	8	45%	96.11

OECD Drawbar Data (US)

Date of tests:		26-Oct-95		Fuel density:		7.023 lb/gal								
Type of track:		Concrete		Test number:		1703								
Gear	Power	Pull	Speed	Engine speed	Slip	SFC	SFE	Temperature, deg F					Rel humidity	Baro. Pres
	hp	lb	mph	rev/min		lb/hp.h	hp.h/gal	Fuel	Coolant	Oil	Dry	Wet		in Hg
I. Maximum Power (unballasted, 2wd at 2200 rev/min)						Tire pressure:		12 psig, rear		12 psig, front		Drawbar height:	19.0 in	
8 5L	44.88	4396	3.83	2247	15%	0.585	12.01	137	190	224	49	41	51%	28.50
9 4H	44.71	3647	4.60	2207	10%	0.591	11.88	146	193	230	56	45	43%	28.46
10 5H	46.79	3582	4.90	2203	10%	0.563	12.48	143	195	231	57	46	44%	28.45
11 6L	48.86	3053	6.00	2197	8%	0.540	13.00	144	195	232	57	46	44%	28.44
12 6H	46.92	2317	7.59	2202	5%	0.561	12.51	144	195	233	57	46	44%	28.43
II. Part loads (unballasted, 2wd)														
II.1 in selected gear at maximum power at rated engine speed														
11 6L	48.86	3053	6.00	2197	8%	0.540	13.00	144	195	232	57	46	44%	28.44
II.1.1 75% of pull at maximum power at rated engine speed														
11 6L	39.07	2301	6.37	2279	5%	0.587	11.96	132	193	222	58	47	45%	28.38
II.1.2 50% of pull at maximum power at rated engine speed														
11 6L	26.46	1528	6.49	2283	4%	0.689	10.19	133	190	224	58	47	45%	28.38
II.1.3 next higher gear at reduced engine speed, same pull and travel speed as II.1.1														
12 6H	39.05	2302	6.36	1844	5%	0.531	13.23	135	192	224	58	47	45%	28.38
II.1.4 next higher gear at reduced engine speed, same pull and travel speed as II.1.2														
12 6H	26.43	1525	6.50	1850	4%	0.605	11.60	135	188	223	58	47	45%	28.38

MEASUREMENT OF EXTERNAL NOISE LEVEL

Date of test	26 October, 1995
Location of test	Nebraska Power Lab, Lincoln, NE, USA
Sound level meter	Bruel and Kjär 2203
Type of track	Concrete oval
Gear number	16th (4HH)
Speed prior to acceleration	22.4 km/h
Noise level	86.5 dB(A)

Repairs: None

Remarks: None