OECD APPROVAL # 1606
(Restricted code)
Date of approval: 12 March 1996

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



FORD NEW HOLLAND 3930 (CA 61) (4WD) 8 x 8
MECHANICAL FRONT WHEEL DRIVE (4 WD)

MANUFACTURED BY	:	FORD NEW HOLLAND LTD BASILDON, ESSEX ENGLAND
NEBRASKA TEST NUMBER	:	1702
TEST DATES	:	October 2 through 27, 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 12 March 1996

Ford 3930 8 x 8 with MFWD OECD # 1606

NOTE: The previous model Ford 3930 8x8 was tested under OECD number 1341. This tractor has a different engine size and fuel setting.

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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	New Holland North America New Holland, PA, USA
Duration of running in	64.4 hours
Location of Test	Tractor Testing Laboratory Lincoln, Nebraska, U.S.A.

TRACTOR SPECIFICATIONS.

Make	Ford New Holland
Model	3930 (CA 61)
Type	Unit construction, mechanical front wheel drive (4WD)
Number of driving wheels	2 or 4
Serial Number	*BE03879*
1st Serial number	*BE81400*

ENGINE.

Make	Ford New Holland
Model	C192 CID NA
Type	Diesel, direct injection
Serial Number	*BB537895*
Cylinders	
Number/Disposition	3, in-line, vertical
Bore/stroke	111.8 mm x 106.7 mm
Capacity	3147 cc
Compression Ratio	16.3:1
Arrangement of valves	Overhead
Cylinder liners	None, Monobloc construction
Supercharging/Intercooling	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
Make/Model/Type Injection Pump	Lucas CAV/DPA DSA 1127/Rotary
Pump Serial number	28521 DNG

Production setting of pump	
Flow Rate	9.8-10.6 kg/h at rated engine speed
Fuel Density	0.8435 Kg/l
Make/Model/Type Injectors	CAV/multi-hole/JB 6801167 nozzle
Injection pressure	23.01 - 24.10 MPa
Timing	14 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/3-stage dry paper element/pleated paper
Secondary element	
Make/Model/Type	Pleated paper
Maintenance indicator	Warning light on instrument panel
Lubrication system.	
Type of feed pump	Force feed from eccentric rotor pump
Type of filters	Metal mesh strainer in sump and full flow paper element filter
Number	One each
Oil Cooler	None
Cooling system.	
Type of coolant	Liquid
Type of pump	Centrifugal
Fan specification	Belt driven
Number of fan blades	4
Fan diameter	406 mm
Coolant system capacity	10.1 l
Type of temperature control	1 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
Electrical system.	
Voltage & grounding.	12 Volt DC;negative ground
Alternator	
Make/Model/Type	Lucas MME/A 127-55/Alternator

Voltage & grounding.	12 Volt DC;negative ground
Alternator	
Make/Model/Type	Lucas MME/A 127-55/Alternator
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 above ground	2331 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 Holland8x8/Mechanical manual synchromesh.
Arrangement	One-4 forward speeds and 1 reverse selector, One-high/low range selector One-forward/reverse selector
Number of gears	8 forward and 8 reverse controlled by three levers
Oil cooler	Air to oil radiator
Available options	8 x 2
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/Crown wheel and pinion, limited slip differential and epicyclic reduction gear.
Differential lock	Limited slip type
Method of engagement	Automatic

Method of disengagement Automatic

Gear ratios and travel speeds.

Gear Number	Number of engine revolutions for one revolution of the driving wheels	Nominal travel speed at rated engine speed of 2200 rev/min [km/h]
1L	238.82	2.23
2L	161.17	3.30
3L	105.79	5.03
4L	72.04	7.38
1H	67.72	7.85
2H	55.70	11.63
3H	30.00	17.72
4H	20.43	26.03
Reverse		
1L	240.05	2.22
2L	162.00	3.28
3L	106.34	5.00
4L	72.41	7.34
1H	68.07	7.81
2H	45.94	11,57
3H	30.15	17.63
4H	20.53	25.90

(Tire dynamic radius of 640 mm ISO 4251/1-1992)

Number of front wheel revolutions per 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 lever, independent of main drive clutch.
Number of clutch plates	7
Diameter of clutch plates	133.4 mm
Number of shafts	One
Method of changing speeds	none

Standard PTO. 540 rev/min.

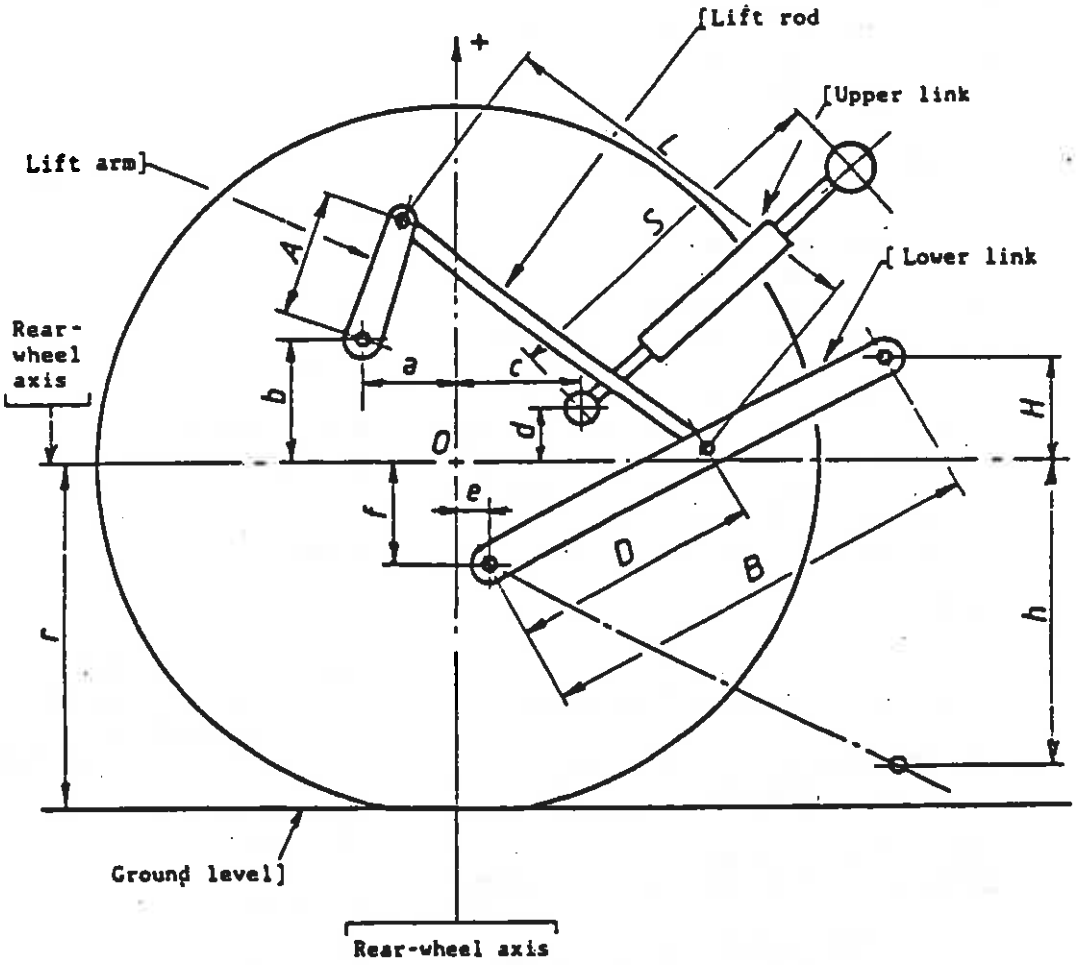
Location	Rear of tractor,vertical center plane.
Diameter of shaft	34.9 mm
Number of splines	6; conforms to ISO 500/1991
Height above ground	521 mm
Distance from median plane of tractor	0 mm
Distance behind rear axle	401 mm
PTO Speed at rated engine spd	676 rev/min
Engine speed at Std. PTO spd	1756 rev/min
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 sensing 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	Gear driven from PTO shaft, independent of main and PTO clutches
Type/Number of filters	Full flow paper element/one
Location of oil reservoir	Rear axle housing
Number/Type/Location of tapping points	One pair of ISO standard couplings at rear of tractor.
Max. oil volume available for external cylinders	27.7 liters

THREE POINT LINKAGE.

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



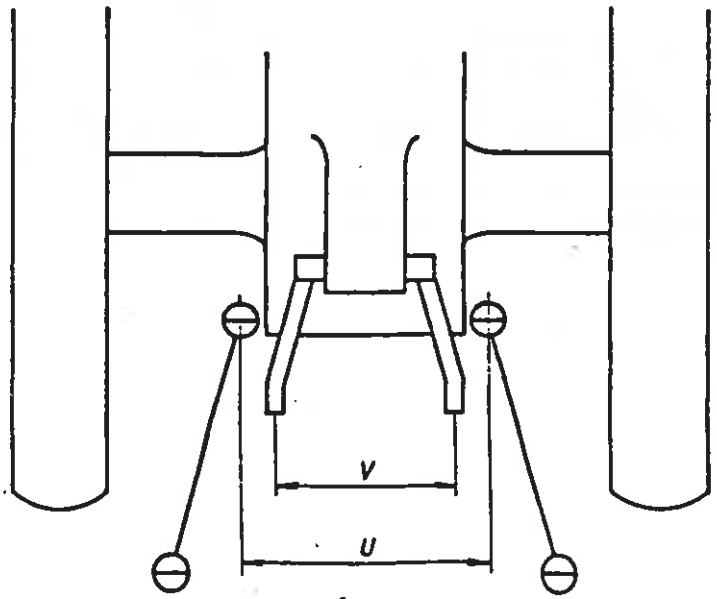


Table 1.1 -*Linkage geometry dimensions.

		Dimension or range [mm]	Settings used on test [mm]
Lift category		I	I
Rear Tire - Radius Index	(r)	640	610
Front Tire - Radius Index	(r')	470	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.		734 to 883	841

*Assuming (r) with a tire dynamic index of 640 mm/ISO 4251/1-1992

SWINGING DRAWBAR.

Type	Oscillating
Height above ground	Min 270 mm Max 405 mm
Adjustments	Inverting drawbar
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	9.6 to 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	Two; driving and steering
- Rear	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 1396/9

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	1510	105ϕ	767
Rearlight Left side	1485	146 x 95	483
Rear Reflector Right side	1595	80 x 80	686

TEST CONDITIONS.

Overall dimensions.

Length		3606 mm
Width	Minimum	1815 mm
	Maximum	2423 mm
Height	- Top of ROPS	2304 mm
	- Top of exhaust	2331 mm
Ground clearance-(unballasted)		305 mm
Clearance-limiting part		Bottom of drawbar support

Tractor Mass (with rollbar,full fuel tank).

		without driver [kg]	with driver [kg]
Unballasted	Front	998	1008
	Rear	1471	1537
	Total	2469	2545

Tire Specifications.

	Front Wheels	Rear Wheels
Make	Goodyear	Firestone
Dimensions	8.3-24	14.9-28
Ply rating	6 ply	6 ply
Type	Bias	Bias
Max.load (tire manufacturer)	805 kg/tire	1615 kg/tire
Max.load(tractor manufacturer)	805 kg/tire)	1615 kg/tire
Inflation pressure(tire mfr)	235 kPa	140 kPa
Dynamic Radius Index	470 mm	640 mm
Chosen track width	1553 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	Rear axle oil	
Grease	Lithium	
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

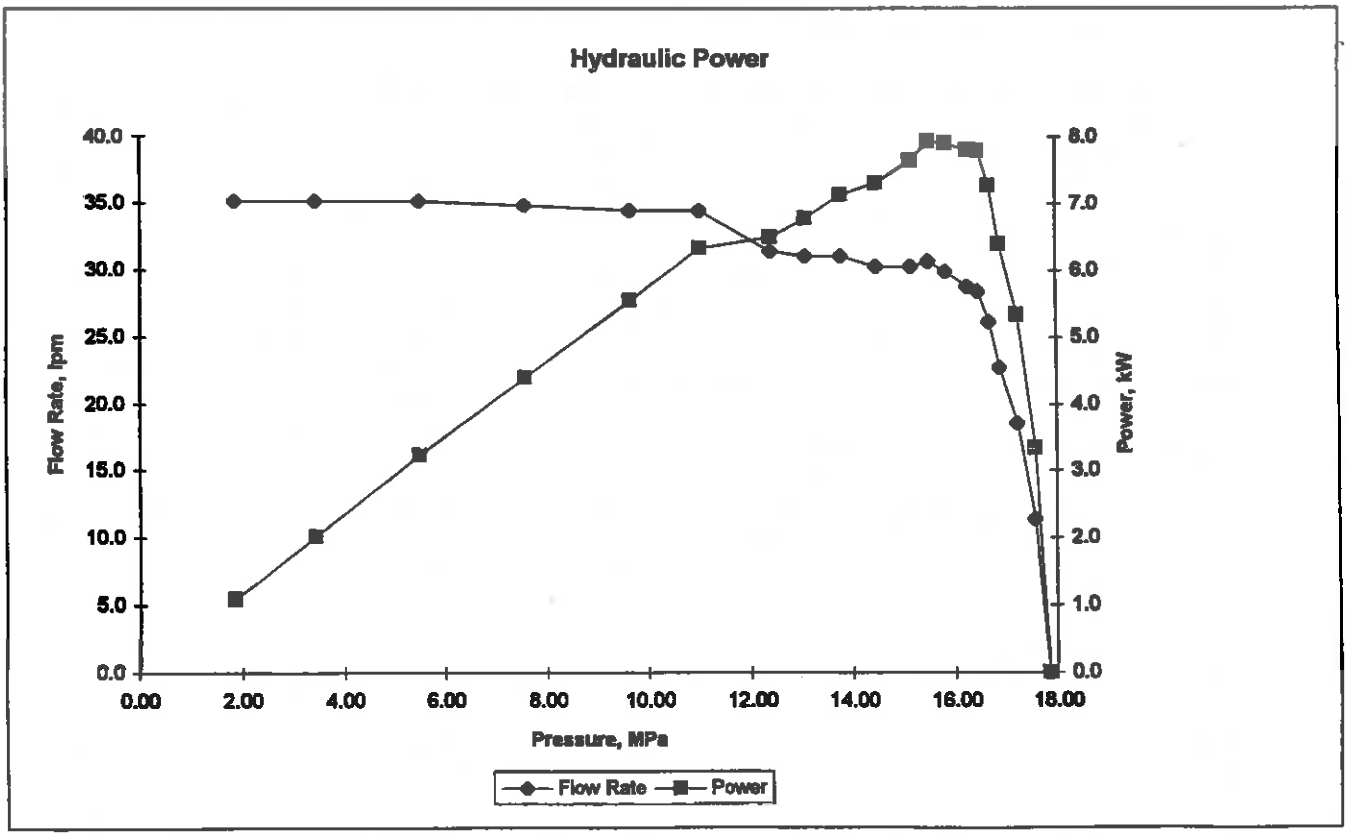
Date: 3-Oct-95 Location: UNL Tractor Test Lab, Lincoln, NE, USA

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						
34.47 / *46.23*	*2201*	*676*	11.97 / *3.16*	10.08 / *22.22*	0.292 / *0.481*	2.88 / *14.61*
1.2 Power at Rated Engine Speed - 1 hour						
34.47 / *46.23*	*2201*	*676*	11.97 / *3.16*	10.08 / *22.22*	0.292 / *0.481*	2.88 / *14.61*
1.3 Power at Standard Power Take Off Speed - 1 hour						
31.18 / *41.81*	*1759*	*540*	10.13 / *2.68*	8.53 / *18.80*	0.273 / *0.450*	3.08 / *15.62*
1.4 Part Loads						
1.4.1 Torque at maximum power at rated engine speed						
34.47 / 46.23	*2201*	*676*	11.97 / 3.16	10.08 / 22.22	0.292 / 0.481	2.88 / 14.61
1.4.2 85% of torque obtained in 1.4.1						
30.24 / *40.55*	*2266*	*696*	10.67 / *2.82*	8.98 / *19.80*	0.297 / *0.488*	2.83 / *14.38*
1.4.3 75% of torque defined in 1.4.2						
22.79 / *30.56*	*2292*	*704*	8.73 / *2.31*	7.35 / *16.20*	0.322 / *0.530*	2.61 / *13.25*
1.4.4 50% of torque defined in 1.4.2						
15.34 / *20.58*	*2313*	*711*	6.79 / *1.79*	5.72 / *12.60*	0.372 / *0.612*	2.26 / *11.47*
1.4.5 25% of torque defined in 1.4.2						
7.74 / *10.38*	*2333*	*717*	5.34 / *1.41*	4.49 / *9.90*	0.580 / *0.954*	1.45 / *7.36*
1.4.6 unloaded						
0.20 / *0.27*	*2347*	*721*	3.72 / *0.98*	3.13 / *6.90*	15.287 / *25.131*	0.06 / *0.28*
1.5 Part Loads at Standard Power Take Off Speed						
1.5.1 Torque at maximum power						
31.18 / 41.81	*1759*	*540*	10.13 / 2.68	8.53 / 18.80	0.273 / 0.450	3.08 / 15.62
1.5.2 85% of torque obtained in 1.5.1						
27.17 / *36.43*	*1799*	*553*	8.73 / *2.31*	7.35 / *16.20*	0.270 / *0.445*	3.11 / *15.79*
1.5.3 75% of torque defined in 1.5.2						
20.71 / *27.77*	*1826*	*561*	6.95 / *1.84*	5.85 / *12.90*	0.283 / *0.464*	2.98 / *15.12*
1.5.4 50% of torque defined in 1.5.2						
13.90 / *18.63*	*1851*	*569*	5.34 / *1.41*	4.49 / *9.90*	0.323 / *0.531*	2.60 / *13.22*
1.5.5 25% of torque defined in 1.5.2						
7.03 / *9.43*	*1876*	*576*	3.88 / *1.03*	3.27 / *7.20*	0.464 / *0.763*	1.81 / *9.20*
1.5.6 unloaded						
0.17 / *0.22*	*1907*	*586*	2.59 / *0.68*	2.18 / *4.80*	13.084 / *21.510*	0.06 / *0.33*

No load maximum engine speed:	2347 rev/min	
Equivalent torque at rated speed:	150 N.m	*110 lb-ft*
Equivalent torque at maximum power:	150 N.m	*110 lb-ft*
(engine speed:	2201 rev/min)	
Maximum equivalent crankshaft torque:	182 N.m	*134 lb-ft*
(engine speed:	1249 rev/min)	
Mean Dry bulb:	24 deg C	*75 deg F*
Wet bulb:	19 deg C	*67 deg F*
Relative Humidity	62 %	
Pressure:	97.8 kPa	*28.87 in Hg*
Maximum Coolant:	94 deg C	*201 deg F*
Engine Oil:	116 deg C	*240 deg F*
Fuel:	54 deg C	*129 deg F*
Air Intake:	31 deg C	*87 deg F*
Transmission/hydraulic oil:	88 deg C	*190 deg F*

Date of Test		18-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:						
17.86	MPa					
2590	*psig*					
II. Pump delivery rate at minumum pressure and rated engine speed:						
35.2	l/min					
9.3	*gpm*					
III. Flow rate, pressure, power:						
90% of relief valve setting						
28.8	l/min	16.27	MPa	7.8	kW	
7.6	*gpm*	*2360*	*psig*	*10.5*	*hp*	
Maximum hydraulic power:						
30.7	l/min	15.51	MPa	7.9	kW	
8.1	*gpm*	*2250*	*psig*	*10.6*	*hp*	
IV. Hydraulic fluid temperature at flow meter						
65.2	°C					
149	°F					



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

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
Hitch point. [lb]	--	3159	3600	3789	4077
at frame [kN]	13.6	--	14.5	15.6	15.7
at frame [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	--
Hitch point [lb]	4231	4344	4625	4589	--
at frame [kN]	15.6	--	15.3	14.8	14.4
at frame [lb]	3515	--	3443	3317	3234

OECD Drawbar Data (SI)

Date of tests:	16-Oct-95	Fuel density:	0.842 kg/l
Type of track:	Concrete	Test number:	1702

Gear	Power	Pull	Speed	Engine speed	Slip	SFC	SFE	Temperature, deg C					Rel hum-idity	Barom. Press
	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		138 kPa, front		Drawbar height:		419 mm
2 2L	16.23	19.82	2.95	2290	15%	0.432	1.95	55	86	107	16	11	55%	98.04
3 3L	24.41	19.93	4.41	2248	15%	0.394	2.13	57	87	109	14	10	59%	98.07
4 4L	26.20	13.84	6.82	2205	9%	0.383	2.20	59	89	111	16	11	52%	98.07
5 1H	27.73	13.77	7.25	2206	8%	0.360	2.34	59	88	113	18	12	46%	98.07
6 2H	27.39	8.85	11.14	2202	5%	0.366	2.30	58	88	113	20	13	44%	98.07
II. Part loads (unballasted, 4wd)														
II.1 in selected gear at maximum power at rated engine speed														
5 1H	27.73	13.77	7.25	2206	8%	0.360	2.34	59	88	113	18	12	46%	98.07
II.1.1 75% of pull at maximum power at rated engine speed														
5 1H	21.97	10.32	7.66	2266	6%	0.367	2.29	58	88	110	21	13	45%	97.93
II.1.2 50% of pull at maximum power at rated engine speed														
5 1H	15.08	6.86	7.91	2294	4%	0.425	1.98	58	86	111	21	14	46%	97.90
II.1.3 higher gear at reduced engine speed, same pull and travel speed as II.1.1														
6 2H	21.90	10.30	7.65	1529	6%	0.326	2.58	59	89	105	23	14	41%	97.80
II.1.4 higher gear at reduced engine speed, same pull and travel speed as II.1.2														
6 2H	15.11	6.86	7.93	1549	4%	0.341	2.47	58	86	102	23	15	42%	97.77
II.2 in selected gear nearest to 7.5 km/h at rated engine speed														
4 4L	26.20	13.84	6.82	2205	9%	0.383	2.20	59	89	111	16	11	52%	98.07
II.2.1 75% of pull at maximum power at rated engine speed														
4 4L	20.71	10.35	7.21	2269	6%	0.395	2.13	57	88	110	21	13	45%	98.00
II.2.2 50% of pull at maximum power at rated engine speed														
4 4L	14.27	6.91	7.44	2292	4%	0.462	1.82	57	86	110	21	13	45%	97.97
II.2.3 higher gear at reduced engine speed, same pull and travel speed as II.2.1														
5 1H	20.72	10.33	7.22	2136	6%	0.365	2.31	57	88	109	22	14	43%	97.87
II.2.4 higher gear at reduced engine speed, same pull and travel speed as II.2.2														
5 1H	14.26	6.88	7.46	2162	4%	0.418	2.01	58	86	109	22	14	44%	97.83

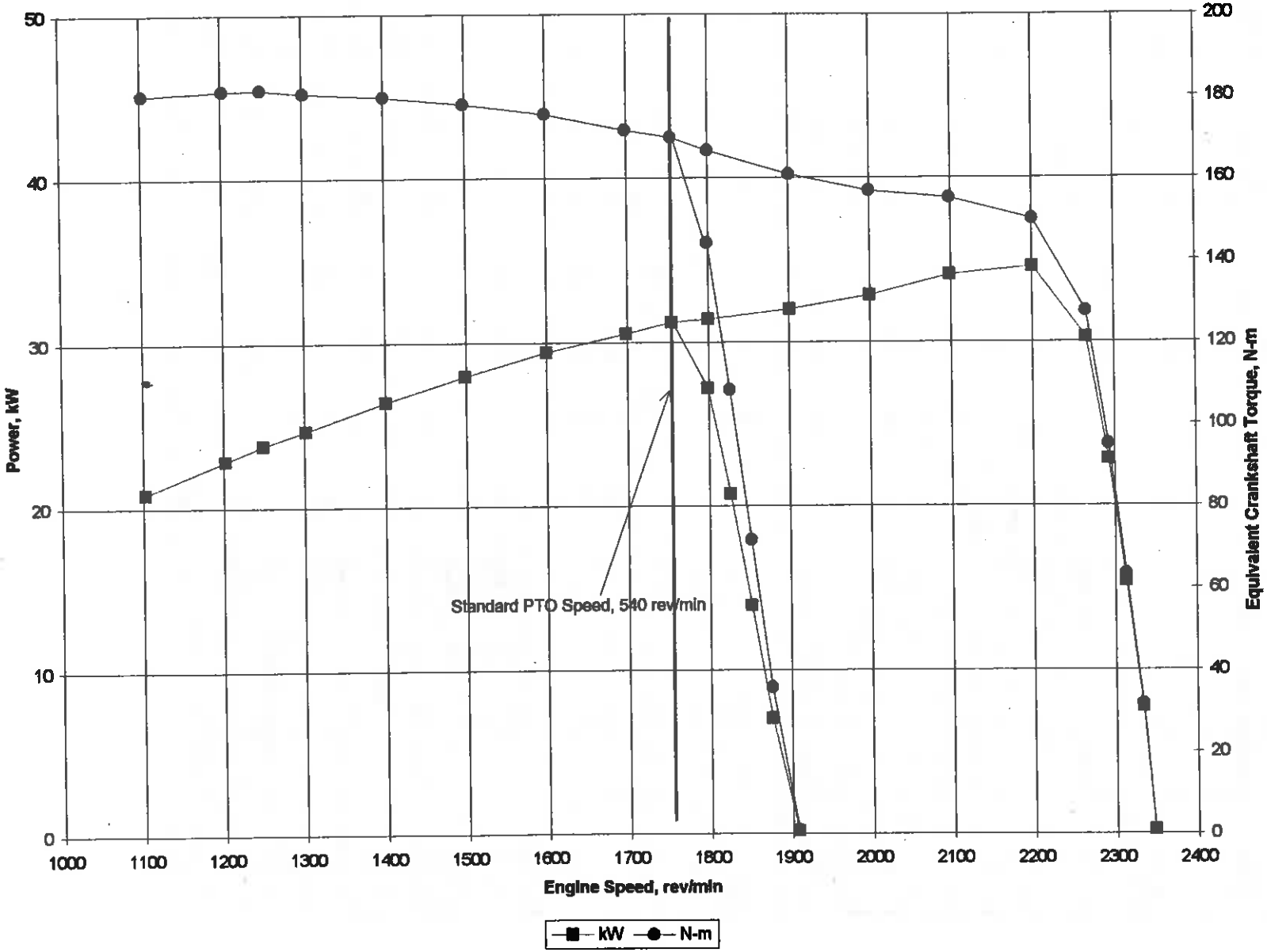
OECD Drawbar Data (US)

Date of tests:	16-Oct-95	Fuel density:	7.023 lb/gal
Type of track:	Concrete	Test number:	1702

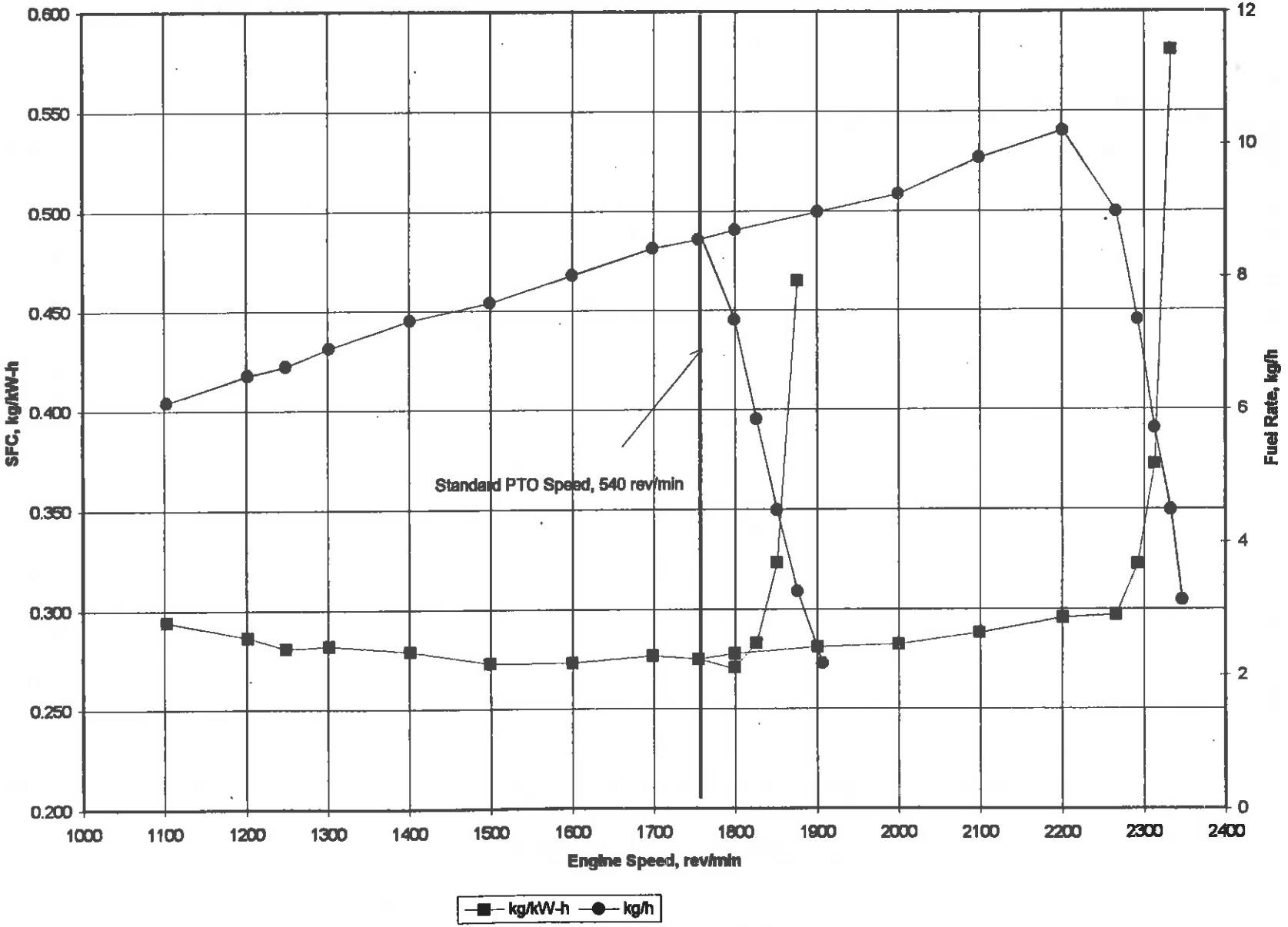
Gear	Power	Pull	Speed	Engine speed	Slip	SFC	SFE	Temperature, deg F					Rel hum-idity	Barom. Press
	hp	lb	mph	rev/min		lb/hp.h	hp.h/gal	Fuel	Coolant	Oil	Dry	Wet		in Hg
I. Maximum Power (unballasted, 4wd at 2200 rev/min)						Tire pressure:		12 psig, rear		20 psig, front		Drawbar height:		16.5 in
2 2L	21.76	4456	1.83	2290	15%	0.710	9.90	132	187	225	60	51	55%	28.95
3 3L	32.74	4480	2.74	2248	15%	0.648	10.83	135	189	229	58	50	59%	28.96
4 4L	35.13	3111	4.24	2205	9%	0.630	11.14	139	192	232	61	51	52%	28.96
5 1H	37.19	3097	4.50	2206	8%	0.592	11.86	139	191	235	65	53	46%	28.96
6 2H	36.73	1990	6.92	2202	5%	0.601	11.69	136	191	235	68	55	44%	28.96
II. Part loads (unballasted, 4wd)														
II.1 in selected gear at maximum power at rated engine speed														
5 1H	37.19	3097	4.50	2206	8%	0.592	11.86	139	191	235	65	53	46%	28.96
II.1.1 75% of pull at maximum power at rated engine speed														
5 1H	29.46	2321	4.76	2266	6%	0.604	11.63	136	190	231	69	56	45%	28.92
II.1.2 50% of pull at maximum power at rated engine speed														
5 1H	20.22	1542	4.92	2294	4%	0.699	10.05	136	188	233	70	57	46%	28.91
II.1.3 higher gear at reduced engine speed, same pull and travel speed as II.1.1														
6 2H	29.37	2317	4.75	1529	6%	0.536	13.10	138	192	221	73	58	41%	28.88
II.1.4 higher gear at reduced engine speed, same pull and travel speed as II.1.2														
6 2H	20.26	1543	4.92	1549	4%	0.561	12.52	136	186	216	74	59	42%	28.87
II.2 in selected gear nearest to 4.6 mph at rated engine speed														
4 4L	35.13	3111	4.24	2205	9%	0.630	11.14	139	192	232	61	51	52%	28.96
II.2.1 75% of pull at maximum power at rated engine speed														
4 4L	27.78	2327	4.48	2269	6%	0.649	10.82	135	191	230	69	56	45%	28.94
II.2.2 50% of pull at maximum power at rated engine speed														
4 4L	19.13	1553	4.62	2292	4%	0.759	9.25	135	188	230	69	56	45%	28.93
II.2.3 higher gear at reduced engine speed, same pull and travel speed as II.2.1														
5 1H	27.78	2322	4.49	2136	6%	0.600	11.71	135	190	229	71	57	43%	28.90
II.2.4 higher gear at reduced engine speed, same pull and travel speed as II.2.2														
5 1H	19.12	1547	4.64	2162	4%	0.688	10.21	136	187	229	72	58	44%	28.89

Ford New Holland 3930 8x8

Power and Equivalent Crankshaft Torque

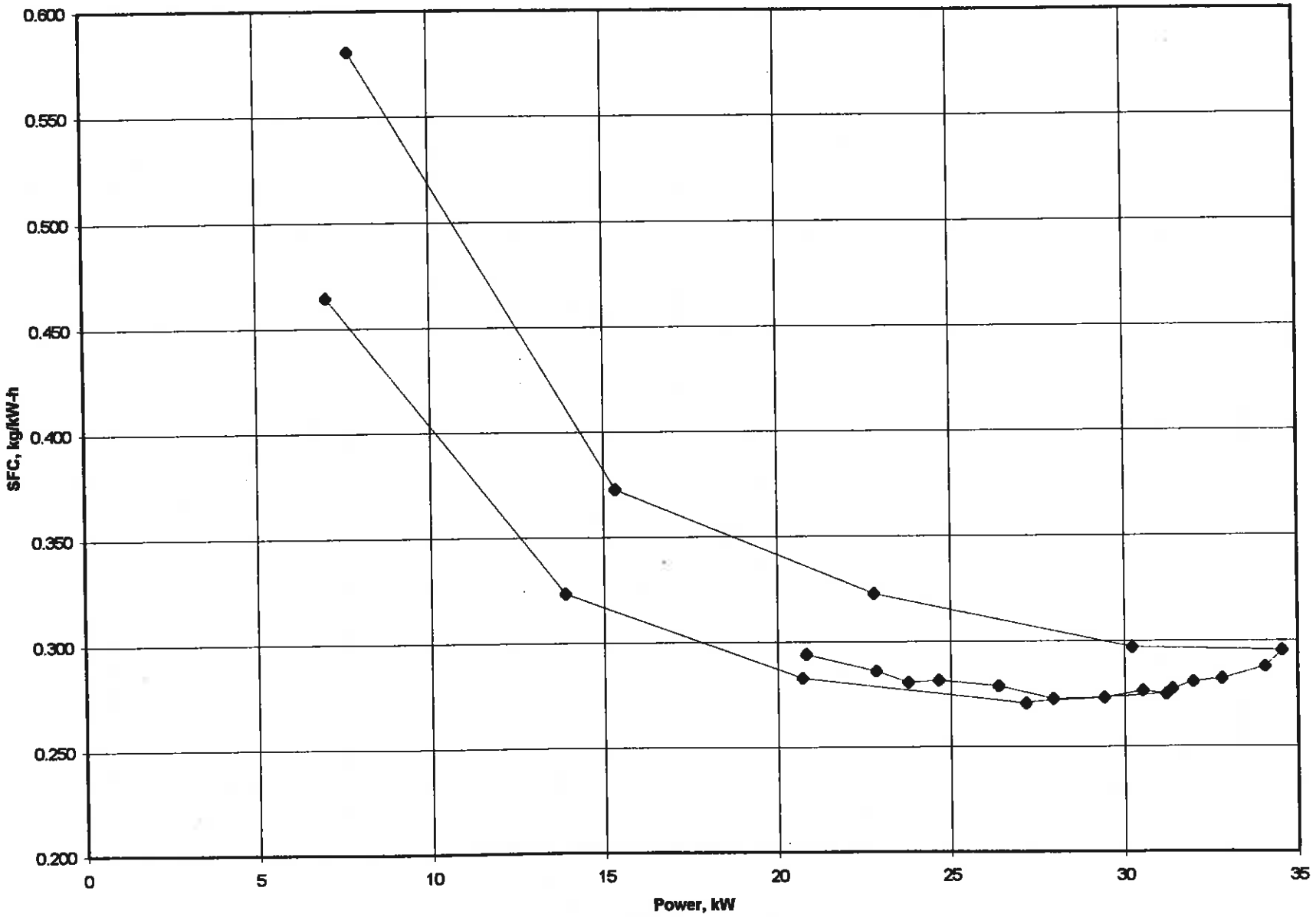


Specific Fuel Consumption and Fuel Rate



Ford New Holland 3930 8x8

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:	16-Oct-95	Fuel density:	0.842	kg/l
Type of track:	Concrete	Test number:	1702	

Gear	Power	Pull	Speed	Engine speed	Slip	SFC	SFE	Temperature, deg C					Rel humidity	Baro. Press
	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		138 kPa, front		Drawbar height:		419 mm
4 4L	24.44	13.74	6.40	2237	15%	0.402	2.09	59	85	112	17	11	49%	98.07
5 1H	25.91	13.76	6.78	2232	15%	0.381	2.21	59	88	113	19	12	44%	98.07
6 2H	27.27	9.12	10.76	2205	8%	0.366	2.30	59	89	113	21	13	45%	98.04
II. Part loads (unballasted, 2wd)														
II.1 in selected gear at maximum power at rated engine speed														
6 2H	27.27	9.12	10.76	2205	8%	0.366	2.30	59	89	113	21	13	45%	98.04
II.1.1 75% of pull at maximum power at rated engine speed														
6 2H	21.47	6.85	11.28	2262	6%	0.395	2.13	58	88	108	24	16	42%	97.70
II.1.2 50% of pull at maximum power at rated engine speed														
6 2H	14.72	4.55	11.64	2286	4%	0.457	1.84	59	87	110	24	16	42%	97.70
II.1.3 next higher gear at reduced engine speed, same pull and travel speed as II.1.1														
7 3H	21.46	6.82	11.34	1482	5%	0.345	2.44	60	90	104	24	16	42%	97.70
II.1.4 next higher gear at reduced engine speed, same pull and travel speed as II.1.2														
7 3H	14.71	4.57	11.60	1498	4%	0.357	2.36	58	86	105	24	16	42%	97.70

OECD Drawbar Data (US)

Date of tests:	16-Oct-95	Fuel density:	7.023	lb/gal
Type of track:	Concrete	Test number:	1702	

Gear	Power	Pull	Speed	Engine speed	Slip	SFC	SFE	Temperature, deg F					Rel humidity	Baro. Press
	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		20 psig, front		Drawbar height:		16.5 in
4 4L	32.77	3089	3.98	2237	15%	0.662	10.62	138	185	234	63	52	49%	28.96
5 1H	34.75	3094	4.21	2232	15%	0.627	11.20	138	190	235	67	54	44%	28.96
6 2H	36.57	2051	6.69	2205	8%	0.601	11.68	138	192	236	69	56	45%	28.95
II. Part loads (unballasted, 2wd)														
II.1 in selected gear at maximum power at rated engine speed														
6 2H	36.57	2051	6.69	2205	8%	0.601	11.68	138	192	236	69	56	45%	28.95
II.1.1 75% of pull at maximum power at rated engine speed														
6 2H	28.79	1540	7.01	2262	6%	0.649	10.82	137	191	226	75	60	42%	28.85
II.1.2 50% of pull at maximum power at rated engine speed														
6 2H	19.74	1024	7.23	2286	4%	0.751	9.36	138	189	230	75	60	42%	28.85
II.1.3 next higher gear at reduced engine speed, same pull and travel speed as II.1.1														
7 3H	28.78	1533	7.04	1482	5%	0.567	12.38	141	194	220	75	60	42%	28.85
II.1.4 next higher gear at reduced engine speed, same pull and travel speed as II.1.2														
7 3H	19.73	1027	7.21	1498	4%	0.586	11.98	137	188	221	75	60	42%	28.85

MEASUREMENT OF EXTERNAL NOISE LEVEL

Date of test	18 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	8th (H4)
Speed prior to acceleration	20.8 km/h
Noise level	88.5 dB(A)

Repairs: None
Remarks: None