Report on test in accordance with O.E.C.D STANDARD CODE

Restricted Code **O.E.C.D. No.** **1098**



Agricultural Tractor JOHN DEERE 2555 TSS (4WD)

Manufacturer
John Deere Werke **Mannheim**
D-6800 Mannheim

Deutsche Landwirtschafts-Gesellschaft e.V.
Zimmerweg 16 · D-6000 Frankfurt a. M. 1
Telefon: (069) 71 68-0 · Telex: 04 131 85 dlg-d

This bulletin is based on engineering tests in accordance with the O.E.C.D. RESTRICTED STANDARD CODE for the Official Testing of Agricultural Tractor Performance, C (84) 163 (Final), Appendix IV.

Duration of Tests: June till July 1987
DLG-Testing-Station for Agricultural Machinery, Max-Eyth-Weg 1,
D-6114 Groß-Umstadt

This report has been approved by the O.E.C.D. Coordinating Centre (C.E.M.A.G.R.E.F., France) as being in accordance with the O.E.C.D. STANDARD CODE.

Date of Approval: 20th October 1987

Restricted Code
O.E.C.D. No. 1098

In this report all performance characteristics are given corresponding to the International System of Units.

The reference to the former used Technical System of Units is given by the following relations:

Forces	1 daN = 10 N	=	1,02 kp	or 1 kp	= 0,981 daN
Powers	1 kw	=	1,36 PS	or 1 PS	= 0,376 kW
Pressure	1 bar	=	1,02 kp/cm^2	or 1 kp/cm^2	= 0,981 bar
	1000 mbar	=	750,10 mm Hg		

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PRÜFUNGS-ABTEILUNG
JOHN DEERE 2555 TSS

Test No. 87-107

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Tractor manufacturer:	John Deere Werke Mannheim D-6800 Mannheim
Submitted for test by:	Manufacturer
Selected by:	Manufacturer with agreement by DLG
Place of running-in:	Mannheim and Groß-Umstadt
Duration of running-in:	Engine appr. 50 hours tractor appr. 20 hours

SPECIFICATION OF TRACTOR

Tractor

Make:	JOHN DEERE
Trade denomination:	2555 TSS
Type:	Wheel tractor, unit construction, 4WD
Serial No.:	610 680
Start of series:	600 001

Engine

Make:	JOHN DEERE
Model:	4.239 TL 006
Type:	Watercooled 4-stroke Diesel-engine with direct injection, supercharged
Serial No.:	CD 4.239 T 734 288
Cylinders:	4, vertical in line, bore 106,5 mm, stroke 110 mm, displacement 3920 cm^3; compression ratio 17,8:1; wet cylinder liners, replaceable
Valves:	Overhead
Fuel system:	SOFABEX fuel supply pump; CAV-ROTO DIESEL distributor pump RE 24 701/R 3449 F040, serial no. 08 1112 CEF with injection timing device; manufacturer's production setting 52±2 mm^3 per stroke at rated engine speed and full load; injection timing 13+7° before TDC; STANADYNE multihole injection nozzles 27336, injection pressure 245±5 bar; STANADYNE fuel filter with replaceable two-stage paper element; fuel tank with 84 l capacity

Governor:	CAV-ROTO DIESEL centrifugal variable speed governor, governed range of engine speed 800 to 2420 r/min, rated engine speed 2300 r/min
Supercharger:	GARRETT, model TA 34 exhaust driven turbo supercharger, max. charge-air pressure 700 mbar
Air cleaner:	Cyclone precleaner, incorporated in main cleaner, PUROLATOR dry element filter with main cartridge AZ20623 and safety cartridge AF 3588; maintenance indicator lamp; air intake below bonnet
Exhaust silencer:	ROTH, model AL 35753 multi-chamber absorption-expansion type, 195 mm dia, 280 mm long, below bonnet; mouth showing upwards, 2630 mm above ground
Lubrication system:	Forced-feed lubrication with gear pump, PUROLATOR oil filter T 19044 in full flow, replaceable; oil capacity 10 l, specified oil quality MIL-L-2104 C resp. API-CD, specified oil viscosities: winter SAE 10W/30 summer SAE 15W/40 tropics SAE 20W/40 or SAE 40 oil filter change every 200 operating hours; engine oil-cooling water heat exchanger between oil filter and filter socket
Cooling system:	Water cooling with impeller pump, overpressure relief valve set to 0,6+0,1 bar, cooling circuit with thermostat and by-pass; EATON-viscous drive fan, model 240, 6 blades, 481 mm dia, fan rotation speed governed by thermostat in the fan by cooling air flow behind radiator; water capacity 13 l

Starting system:	Electrical; BOSCH solenoid pre-engaged-drive starting motor 2,7 kW; BERU heating spiral in intake pipe; range gear shift lever in neutral position as safety device
Electrical equipment:	12 Volt, negative earth, BOSCH 3-phase alternator K1-14V 23/55 A, 770 W; 2 lead acid batteries, 55 Ah each at 20 hours rating

Transmission

Clutch:	LUK dry single-plate, for travel drive, 328 mm dia, mechanically actuated by pedal
Gear box:	JOHN DEERE, model TSS; synchromesh speed change gear with 4 speeds; collar shifted range gear with 2 forward ranges (I and II) and 1 reverse range (R); power-shifted range gear with 2 ranges (HI and LO), total 16 forward and 8 reverse speeds; 3 shift levers
Rear axle with final drives:	JOHN DEERE bevel gear, bevel gear differential with hand lever or pedal operated lock, self-disengaging; planetary final drives
Front axle with final drives:	ZF, model APL-325/12° driven by universal joint shaft to central bevel gear drive; oil-immersed multi-disc clutch, electrically-hydraulically shiftable by switch; bevel gear drive; multi-disc limited-slip differential; planetary final drives
Lubrication:	Gear box, rear axle, rear final drives and hydraulic system have oil in common; transmission with forced feed lubrication, internal-gear pump within gear box, 2 oil filters; oil radiator in front of water radiator; filter change every 600 hours

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Transmission oils:

	Oil quality API MIL-L-	Oil viscosity SAE	Oil volume l	Change interval h
Gear box, rear axle, hydraulic system, rear final drives	JOHN DEERE specif. J 20 A	75	46	1200
Front axle	GL-5 2105 B or 2105 C	90	5,3	
Front final drives			0,75 each	

Total ratios and speeds

Range		Gear	Total ratio engine : driving wheel	Nominal travelling speed*) at rated engine speed km/h
I	LO	1	319,30	1,96
		2	212,87	2,93
		3	138,16	4,52
		4	95,62	6,53
	HI	1	250,88	2,49
		2	167,25	3,73
		3	108,55	5,75
		4	75,13	8,31
II	LO	1	87,43	7,14
		2	58,29	10,71
		3	37,83	16,50
		4	26,18	23,84
	HI	1	68,69	9,09
		2	45,80	13,63
		3	29,72	21,00
		4	20,57	30,35
R	LO	1	201.17	3,10
		2	134,11	4,65
		3	87,05	7,17
		4	60,25	10,36
	HI	1	158,06	3,95
		2	105,38	5,92
		3	68,39	9,13
		4	47,34	13,19

*) calculated with the radius index 720 mm

Main p.t.o.

Independent,
driven by wet multi-plate clutch with 133 mm dia, hydraulically operated by lever and control valve, hydraulically operating p.t.o. brake;
1 p.t.o. shaft at rear of tractor, 649 mm above ground, 25 mm to the left of tractor's median plane;
direction of rotation clockwise, viewed facing tractor's rear;
p.t.o. 422 mm behind rear wheel centre line, 35 mm dia, 6 splines, DIN 9611/ISO 500 type 1

P.t.o. type	P.t.o. speed r/min	Engine speed r/min	Ratio engine : P.t.o.	Power restriction kW
540	540	2075	3,8421	-
	599	2300		

Power lift

JOHN DEERE
hydraulic power lift, unit construction;
draft- and position-control, both mixable in steps, floating position;
lowering throttle; lower link sensing

Hydraulic system:

Closed centre system;
JOHN DEERE RP 2023 COE 0100
variable-capacity radial-piston pump, directly driven by engine, feeds power lift and steering system,
max. delivery 47 l/min at rated engine speed;
the transmission oil pump (see page 6) offers hydraulic pressure for actuating of p.t.o. clutch, front axle drive clutch, power shifted range gear and feeds the radial-piston pump

JOHN DEERE control valve,
relief valve pressure setting 160±3 bar;
single acting cylinder with 126 mm stroke and 100 mm bore;
safety valve set to 230 bar

	2 double acting JOHN DEERE additional control valves with 2 couplings each at tractor's rear (1 pair for high volume using implements); up to 10 l oil may be taken off working travelling and 12 l stationary
Hydraulic oil:	In common with gear box, see page 6
Implement linkage:	See pages 10 and 11

Pull attachments

Trailer hitch:	Not fitted
Holed drawbar:	Not fitted
Swinging drawbar:	Shiftable and turnable height above ground 425 or 555 mm pivot point before rear wheel centre line 51 mm hitch point behind rear wheel centre line 634, 782 or 824 mm behind p.t.o. shaft 212, 360 or 402 mm swingable to both sides about max. 290 mm hitch hole diameter 33 mm max. permissible vertical load (fully retracted) 1000 kg
Towing hitch:	Not fitted

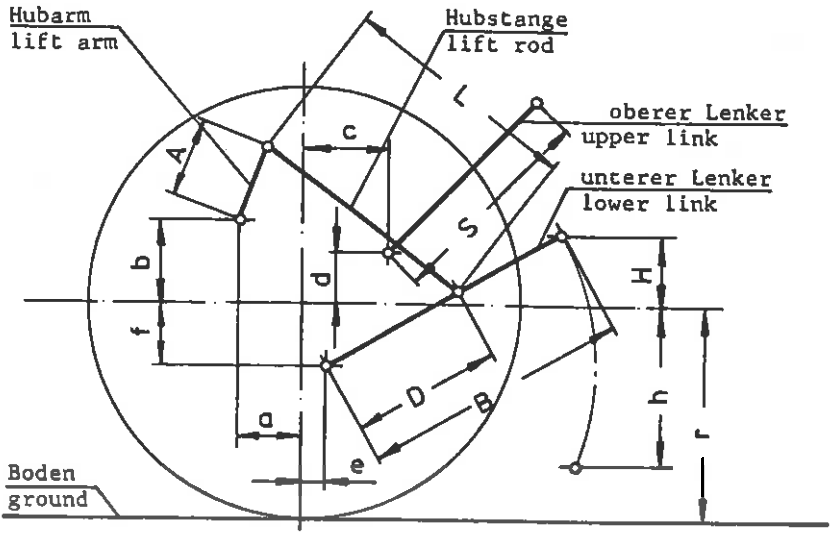
Steering

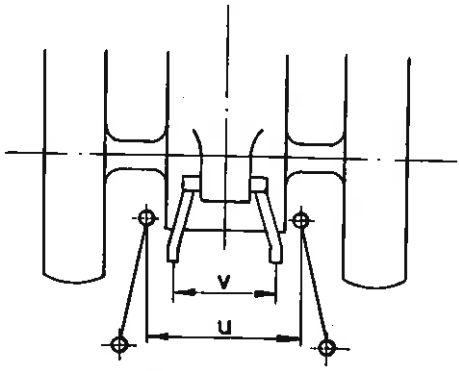
CHAR-LYNN/JOHN DEERE
hydrostatic, connected by sequence valve to the hydraulic circuit, max. pressure 160±3 bar;
oil filter in return line, filter change every 1200 hours;
1 integrated cylinder (symmetrical design), directly acting on steering levers, 111 mm stroke, 60 mm bore, piston rod 32 mm dia;
steering column tilt adjustable

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Implement linkage: Three point linkage couplers category 2 acc. to ISO 730/I DIN 9674, category 1 is possible by turning the lower links





Dimensions of rear implement linkage (projected lengths in mm, underlined dimensions are valid for power lift measurements p. 19)

Rear tyres	radius index	(r)	720
Front tyres	radius index	(r')	540
Length of lift arms		(A)	254
Length of lower links		(B)	858
Distance of lift arm pivot points from rear axle centre	horizontal	(a)	-7
	vertical	(b)	277
Horizontal distance between lower link pivot points		(u)	395
Horizontal distance between lift arm end points		(v)	495
Length of upper link		(S)	540 to 780, <u>664</u>
Distance of upper link pivot point from rear axle centre	horizontal	(c)	321
	vertical	(d)	163
Distance of lower link pivot point from rear axle centre	horizontal	(e)	115
	vertical	(f)	200
Distance of lower link pivot points from lift rod pivot points on lower links		(D)	465
Length of lift rods		(L)	566 to <u>684</u>

Height of lower link hitch points relative to rear axle centre line (situated 720 mm above ground), these data are valid for unloaded power lift:

Length of lift rods	(L)	566	<u>684</u>
Linkage distance of lift rods	(D)	465	
Lowest position	(h)	265	520
Highest position	(H)	275	90
Transport position	(H')	275	90

Type of transport lock: Lowering throttle and latching of control valve lever

Brakes

Service brake:	JOHN DEERE pedal operated muscle power brake with hydraulic transmission, using oil from gear box, acting on rear wheels; oil-immersed disc brake with 1 ring-piston on each differential half shaft, self readjusting; disc diameter 304 mm
Parking brake:	Mechanical wet V-band brake, acting on bevel wheel of differential, drum diameter 238 mm, width 20 mm, operated by lever with ratchet
Steering brake:	Divided pedal of service brake, for normal use locked together
Trailer braking take-off:	Not provided

Wheels

Steered wheels:	At front, 2 cross-ply tyres 12.4-24 6 ply GOODYEAR; max. permissible load per tyre 1200 kg at 1,7 bar and 30 km/h; track width 1600 mm, adjustable from 1500 to 2000 mm in steps of 100 mm each by adjustable gauge bowl wheels; rims W 10 x 24
Driving wheels:	At rear, 2 cross-ply tyres 18.4-30 8 ply FIRESTONE; max. permissible load per tyre 2415 kg at 1,4 bar and 30 km/h; track width 1690 mm, infinitely adjustable by rack-and-pinion axle and reversing the rims or the wheel discs, from 1520 mm to 2440 mm; rims DW 15 x 30
Wheel base:	2287 mm

Protective frame: JOHN DEERE, model ROLL-GARD, 2 post frame, not O.E.C.D. tested

Seat: GRAMMER, model DS 44 H 90 A
upholstered seat with back rest and arm rests, adjustable spring suspension and hydraulic shock absorber;
driver's platform 790 mm above ground,
height of unloaded seat above platform steplessly adjustable from 510 to 610 mm,
longitudinal adjustment 158 mm;
1 step, 530 mm above ground;

Lighting equipment: Electrical, 12 Volt, as per US legislation

	Dimensions mm	Height above ground of centre mm	Distance from outside edge of tractor to centre mm
Headlights	100 dia	1565	455
Side-(Warning) lights	100 dia	1715	520
Rearlights *)	100 dia	1525	760
Reflectors (ring-shaped)	135/100 dia	1715	520

additional SMV-sign

*) only 1 rearlight on the left hand side

Running time meter: Electronic, counts real operating hours if engine is running

Overall dimensions

Total length: 3875 mm

Total width: 2270 mm

Total height: 2335 mm to top of frame
2630 mm to top of exhaust

Ground clearance: 410 mm below gear box (front axle drive)

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Permissible tyre combinations

x permissible - unauthorized

Rear tyres	Front tyres						
	8.3-24	9.5-24	10.50/80-18	11.2-24	11.2-28	12.4-24	13.6-24
13.6-38	-	-	-	x	x	-	-
14.9-24	-	-	x	-	-	-	-
15.5-38	-	-	-	-	-	-	x
16.9-24	-	-	x	-	-	-	-
16.9-28	x	x	-	-	-	-	-
16.9-30	-	-	-	x	-	-	-
16.9-34	-	-	-	-	x	-	x
18.4-26	-	x	-	-	-	-	-
18.4-30	-	-	-	-	-	x	-

TEST CONDITIONS

Track setting: 1600 mm at front, 1690 mm at rear

Weights

	without driver	with driver
front	1225 kg	1230 kg
rear	2350 kg	2435 kg
total	3575 kg	3665 kg

Fuels and lubricants used in tests

Fuel: ARAL Diesel-fuel DIN 51601
density at 15°C at p.t.o. tests and
at drawbar tests 0,842 kg/l
at additional drawbar tests 0,849 kg/l

Engine: FUCHS TITAN-UNIVERSAL SAE 15W/40

Transmission, rear axle and hydraulic system: JOHN DEERE RENOGEAR HYDRO J 20A

Grease: Multi-purpose grease

Number of grease points: 19

Remarks: The tractor is fitted with a viscous-drive fan. The fan speed is depending on the ambient air temperature. As the engine power is influenced by the fan speed, all power tests had been made at fairly exact the same ambient air temperatures

Repairs: None

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COMPULSORY TESTS

(1) MAIN POWER TAKE OFF PERFORMANCE (540 r/min)

Date of tests: 5th June 1987
Location of tests: DLG-Testing Station Groß-Umstadt
Type of dynamometer: SCHENCK hydraulic dynamometer U1-40

Power kW	speed engine r/min	speed p.t.o. r/min	fuel consumption hourly l/h	fuel consumption hourly kg/h	fuel consumption specific g/kWh	specific energy kWh/l
Maximum power						
At 2-hour test						
49,5	2200	573	14,37	12,10	245	3,44
At rated speed						
48,9	2300	599	14,37	12,10	247	3,40
At standard p.t.o. speed						
49,5	2075	540	14,05	11,83	239	3,52
Part loads, the governor hand lever in the position corresponding to maximum power at full load (curve a)						
(i) the torque corresponding to maximum power at rated speed						
48,9	2300	599	14,37	12,10	247	3,40
(ii) 85% of the torque obtained in (i)						
42,4	2349	611	13,02	10,96	258	3,26
(iii) 75% of the torque defined in (ii)						
32,1	2370	617	10,88	9,16	285	2,95
(iv) 50% of the torque defined in (ii)						
21,5	2381	620	8,66	7,29	339	2,48
(v) 25% of the torque defined in (ii)						
10,8	2401	625	6,56	5,51	509	1,65
(vi) unloaded						
-	2418	629	4,49	3,78	-	-

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Power kW	speed engine r/min	speed p.t.o. r/min	fuel consumption hourly l/h	fuel consumption hourly kg/h	fuel consumption specific g/kWh	specific energy kWh/l
Part loads, the governor hand lever in the position corresponding to the standard p.t.o. speed at full load (curve b)						
(i) the torque corresponding to maximum power						
49,5	2075	540	14,05	11,83	239	3,52
(ii) 85% of the torque obtained in (i)						
43,1	2128	554	12,77	10,75	249	3,38
(iii) 75% of the torque defined in (ii)						
32,6	2147	559	10,34	8,71	267	3,16
(iv) 50% of the torque defined in (ii)						
22,0	2167	564	8,15	6,86	313	2,69
(v) 25% of the torque defined in (ii)						
11,1	2195	571	5,99	5,04	453	1,86
(vi) unloaded						
-	2222	578	3,95	3,33	-	-

Standard specific fuel consumption (g/kWh): 258/339/249/313

No load maximum engine speed: 2418 r/min
Equivalent flywheel torque at rated engine speed: 203 Nm
Maximum equivalent flywheel torque: 255 Nm at 1595 r/min of the engine

Mean atmospheric conditions

temperature	22 °C
pressure	991 mbar
rel. humidity	40 %

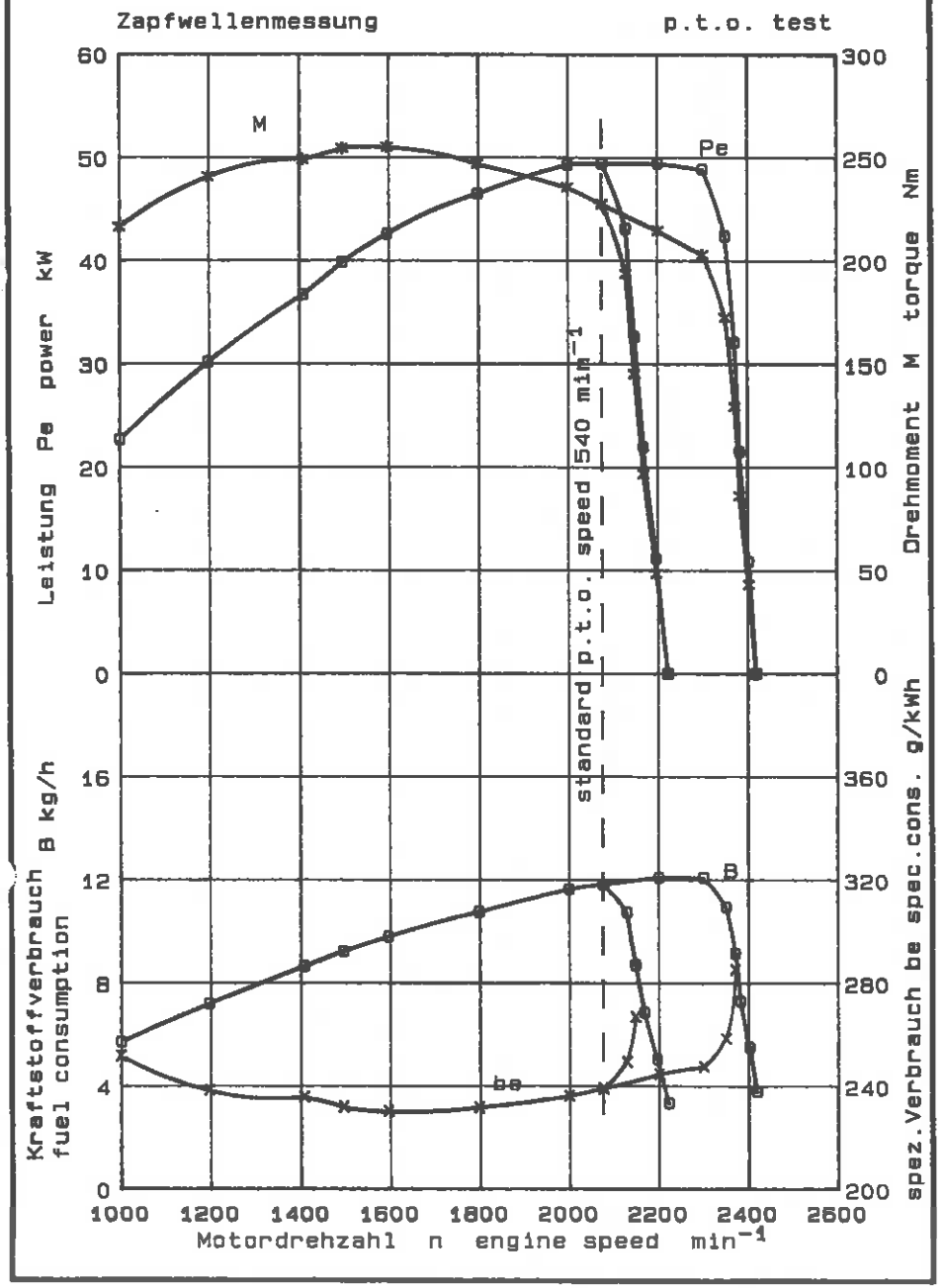
Maximum temperatures

coolant	90 °C
oil	104 °C
fuel	23 °C
air intake	24 °C

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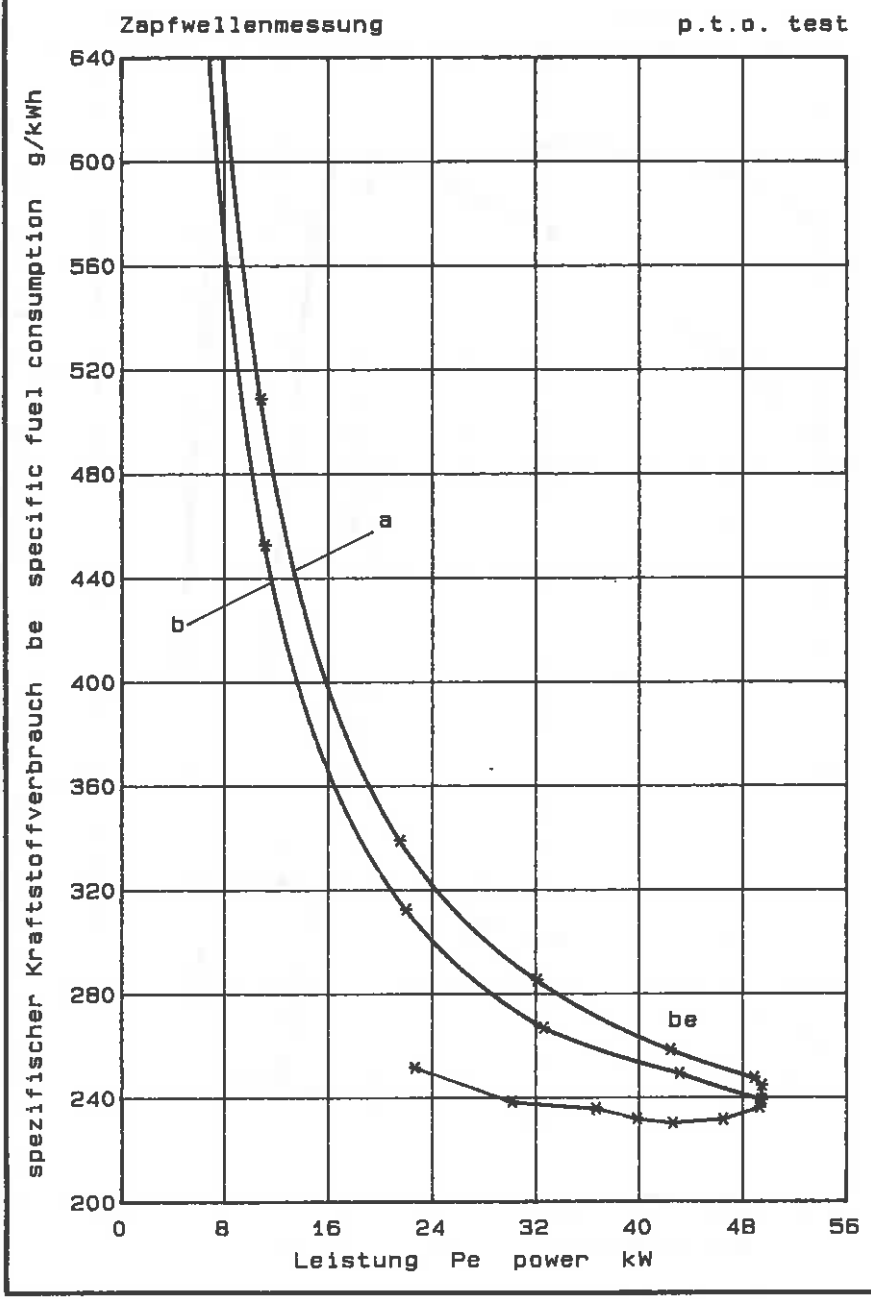
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(2) LIFTING FORCES AND HYDRAULIC POWER

Date of tests: 3rd and 29th June 1987

Lifting Forces (Linkage dimensions: see page 10 and 11)

	Height of lower hitch points above ground in down pos. mm	Vertical movement mm	Max. force exerted through full range daN	Corresp. pressure of hydraul. fluid bar	Moment about rear axle daNm	Max. tilt angle of mast over range of lift degrees
At hitch points	200	590	1540	128	-	-
On the frame	200	715	1380	128	2185	12

Temperature of hydraulic fluid at start of test 65 °C

Lifting heights relative to horizontal lower links

mm	-365	-320	-300	-200	-100	0	+100	+200	+270	+300	+350
Lifting forces at hitch points											
daN		1540	1600	1850	2000	2100	2200	2260	2220		
Lifting forces at test frame											
daN	1380		1520	1630	1690	1710	1710	1690		1630	1550

Hydraulic Power

Sustained pressure with pump stalled 159 bar
Pump delivery rate at minimum pressure 51,7 l/min

	Hydraulic power kW	Flow rate l/min	Pressure bar	Oil temperature °C
at 90% of the actual relief valve setting	7,2	30,2	143	65
maximum	10,5	49,3	128	65

Tapping point used for test: at rear of tractor

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(3) DRAWBAR POWER AND FUEL CONSUMPTION (unballasted tractor)

Date of tests: 23rd June 1987
Type of track: Concrete
Height of drawbar above ground: 385 mm

Gear	Driving speed km/h	Power kW	Drawbar pull daN	Engine speed r/min	Slip of wheels %
1 MAXIMUM POWER IN TESTED GEARS					
2 I HI	3,27	32,5	3583	2340	15,1
3 I LO	3,90	38,4	3548	2298	14,9
3 I HI	4,94	39,6	2885	2203	11,4
4 I LO	5,68	40,8	2585	2200	10,1
1 II LO	6,29	41,3	2361	2200	9,0
4 I HI	7,43	41,7	2021	2196	7,4
1 II HI	8,21	42,1	1847	2200	6,7
2 II LO	9,80	42,0	1542	2202	5,5
2 II HI	12,68	41,4	1175	2203	4,1
2 FUEL CONSUMPTION					
2.1 In selected gear at maximum power					
1 II HI	8,21	42,1	1847	2200	6,7
2.1.1 75% of pull at maximum power					
1 II HI	8,90	34,1	1378	2340	4,9
2.1.2 50 % of pull at maximum power					
1 II HI	9,15	23,4	919	2363	3,2
2.1.3 Next higher gear at reduced engine speed; same pull and					
2 II LO	8,87	34,0	1381	1979	4,8
2.1.4 Next higher gear at reduced engine speed; same pull and					
2 II LO	9,17	23,6	925	2009	3,1
2.2 In selected gear nearest to 7,5 km/h					
1 II LO	6,29	41,3	2361	2200	9,0
2.2.1 75% of pull at maximum power					
1 II LO	6,89	34,1	1781	2346	6,5
2.2.2 50% of pull at maximum power					
1 II LO	7,14	23,5	1184	2369	4,1
2.2.3 Next higher gear at reduced engine speed; same pull and					
4 I HI	6,90	34,1	1781	2019	6,5
2.2.4 Next higher gear at reduced engine speed; same pull and					
4 I HI	7,17	23,4	1174	2046	4,1

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	Tyre size	Inflation pressure
Front:	12.4 - 24	1,1 bar
Rear:	18.4 - 30	1,1 bar

Tread bar height at the beginning of drawbar tests:
90% at front, 86% at rear of the value when new

Specific fuel consumpt. g/kWh	Specific energy kWh/l	Temperatures Fuel °C	Coolant °C	Engine-oil °C	Atmospheric conditions Tempe-rature °C	Relative humidity %	Pressure mbar
335	2,51	29	82	95	18	74	1002
322	2,62	32	81	95	19	81	1002
303	2,78	40	83	97	18	74	1002
299	2,81	38	83	95	19	76	1003
296	2,85	38	82	98	18	80	1003
292	2,88	36	82	97	19	82	1003
286	2,95	38	84	99	22	69	1003
290	2,91	39	83	98	22	70	1003
292	2,88	38	84	99	22	68	1003
286	2,95	38	84	99	22	69	1003
313	2,69	39	82	95	22	65	1003
366	2,30	39	82	95	22	65	1003
travelling speed as in 2.1.1							
285	2,95	42	82	94	22	71	1003
travelling speed as in 2.1.2							
322	2,61	42	82	94	22	71	1003
296	2,85	38	82	98	18	80	1003
313	2,69	38	82	97	22	66	1003
353	2,39	38	82	97	22	66	1003
travelling speed as in 2.2.1							
293	2,87	42	81	94	22	65	1003
travelling speed as in 2.2.2							
325	2,59	42	81	94	22	65	1003

ADDITIONAL TESTS

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(4) NOISE MEASUREMENT AT THE DRIVER'S EAR (4WD engaged)

Date of tests: 24th June 1987
Type of track: Concrete
Type of sound level meter: BRÜEL & KJAER model 2209

Tractor fitted with JOHN DEERE protective frame ROLL GARD

Results of tests

Gear	Drawbar pull at which the tractor develops the maximum sound level daN	Travelling speed nominal km/h	Travelling speed effective km/h	Sound level dB(A)
1 I LO	3373	1,96	1,73	90,5
1 I HI	3369	2,49	2,22	91,0
2 I LO	3449	2,93	2,54	91,5
2 I HI	3371	3,73	3,27	92,5
3 I LO	3214	4,52	4,01	93,5
3 I HI	2496	5,75	5,35	93,5
4 I LO	2169	6,53	6,16	93,5
1 II LO+)	2083	7,14	6,69	93,5
1 II LO+)	light load	7,14	7,56	89,5
4 I HI	1667	8,31	8,03	93,5
1 II HI	1569	9,09	8,79	93,0
2 II LO	1300	10,71	10,46	93,0
2 II HI	972	13,63	13,44	93,0
3 II LO	741	16,50	16,46	92,5
4 II HI*)	light load	30,35	31,49	93,5

+) The 1 II LO gear corresponds to the nominal speed nearest to 7,5 km/h

*) 4WD disengaged

(5) DRAWBAR POWER AND FUEL CONSUMPTION WITH FRONT AXLE DRIVE DISENGAGED (unballasted tractor)

Date of tests: 24th till 27th July 1987
Type of track: Concrete
Height of drawbar above ground: 520 mm

Gear	Driving speed km/h	Power kW	Drawbar pull daN	Engine speed r/min	Slip of wheels %
1 MAXIMUM POWER IN TESTED GEARS					
2 I HI	3,26	27,7	3055	2351	15,0
3 I LO	3,92	33,2	3051	2340	15,1
3 I HI	4,73	38,5	2931	2200	14,3
4 I LO	5,52	39,0	2542	2200	11,8
1 II LO	6,13	39,9	2346	2202	10,6
4 I HI	7,29	40,2	1985	2202	8,7
1 II HI	8,01	41,5	1864	2203	8,2
2 II LO	9,55	41,4	1559	2198	6,8
2 II HI	12,37	41,4	1206	2200	5,2
3 II LO	15,20	39,8	942	2203	3,9
2 FUEL CONSUMPTION					
2.1 In selected gear at maximum power					
1 II HI	8,01	41,5	1864	2203	8,2
2.1.1 75% of pull at maximum power					
1 II HI	8,74	33,9	1396	2346	5,9
2.1.2 50% of pull at maximum power					
1 II HI	9,01	23,3	932	2369	4,0
2.1.3 Next higher gear at reduced engine speed, same pull and					
2 II LO	8,73	33,8	1393	1988	5,9
2.1.4 Next higher gear at reduced engine speed, same pull and					
2 II LO	9,06	23,4	929	2023	4,0
2.2 In selected gear nearest to 7,5 km/h					
1 II LO	6,13	39,9	2346	2202	10,6
2.2.1 75% of pull at maximum power					
1 II LO	6,75	33,1	1763	2346	7,6
2.2.2 50% of pull at maximum power					
1 II LO	7,02	22,9	1173	2371	4,9
2.2.3 Next higher gear at reduced engine speed, sam pull and					
4 I HI	6,77	33,2	1767	2023	7,7
2.2.4 Next higher gear at reduced engine speed, same pull and					
4 I HI	7,07	23,0	1171	2050	4,9

Test No. 87-107

	Tyre size	Inflation pressure
Front:	12.4 - 24	1,1 bar
Rear:	18.4 - 30	1,1 bar

Tread bar height at the beginning of drawbar tests:
85% of the value when new

Specific fuel consumpt. g/kWh	Specific energy kWh/l	Temperatures Fuel °C	Coolant °C	Engine-oil °C	Atmospheric conditions Temperature °C	Relative humidity %	Pressure mbar
363	2,34	30	79	90	20	86	998
342	2,48	27	80	90	20	86	998
316	2,68	47	80	90	20	84	998
313	2,71	50	81	94	21	87	998
302	2,81	44	81	97	21	81	998
301	2,82	44	82	98	21	84	998
293	2,89	38	83	89	23	84	998
295	2,88	40	83	99	24	76	998
294	2,89	40	82	98	24	75	998
305	2,78	40	83	98	24	73	998
293	2,89	38	83	98	23	84	998
319	2,66	35	82	97	16	77	995
369	2,30	35	82	97	16	77	995
travelling speed as in 2.1.1							
297	2,86	34	82	95	15	82	995
travelling speed as in 2.1.2							
332	2,56	34	82	95	15	82	995
302	2,81	44	81	97	21	81	998
320	2,65	36	82	97	16	82	997
372	2,28	36	82	97	16	82	997
travelling speed as in 2.2.1							
302	2,81	35	83	98	16	78	995
travelling speed as in 2.2.2							
337	2,52	35	83	98	16	78	995

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Fachbereich Landtechnik — Prüfungsabteilung —
Zimmerweg 16 (DLG-Haus)
D-6000 Frankfurt am Main 1