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

Restricted Code

O.E.C.D. No. 1096



Agricultural Tractor JOHN DEERE 2355 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

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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 2355 TSS

Test No. 87-117

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PRÜFUNGS-ABTEILUNG
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Test No. 87-117

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:	2355 TSS
Type:	Wheel tractor, unit construction, 4WD
Serial No.:	610 677
Start of series:	600 001

Engine

Make:	JOHN DEERE
Model:	4.239 DL 010
Type:	Watercooled 4-stroke Diesel-engine with direct injection
Serial No.:	CD 4.239 D 734 363
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 24700/DPA R 3449 F030, serial no. 037 200 AEF, with injection timing device; manufacturer's production setting 47±2 mm^3 per stroke at rated engine speed and full load; injection timing 13+7° before TDC; STANADYNE multihole injection nozzles 27333, injection pressure 210±3 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 2480 r/min, rated engine speed 2300 r/min
Air cleaner:	Cyclone precleaner, incorporated in main cleaner, PUROLATOR dry paper element filter with main cartridge AZ 20623 and safety cartridge AF 3588; maintenance indicator lamp; air intake below bonnet
Exhaust silencer:	EBERSPÄCHER, AL 31492 multi-chamber absorption-expansion type, 160x220 mm oval, 383 mm long, below bonnet; mouth showing upwards, 2595 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 and 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:	F & S dry single-plate clutch for travel drive, 320 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 planetary range gear (LO and HI), hydraulically shifted; total 16 forward and 8 reverse speeds, 3 shift levers
Rear axle with final drives:	JOHN DEERE bevel gear, bevel gear differential with 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, rear final drives, hydraulic system	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	322,28	1,87
		2	214,85	2,80
		3	139,44	4,32
		4	96,52	6,24
	HI	1	253,22	2,38
		2	168,81	3,57
		3	109,57	5,50
		4	75,83	7,95
II	LO	1	88,24	6,83
		2	58,83	10,24
		3	38,18	15,78
		4	26,43	22,80
	HI	1	69,33	8,69
		2	46,22	13,04
		3	30,00	20,09
		4	20,76	29,02
R	LO	1	203,05	2,97
		2	135,36	4,45
		3	87,86	6,86
		4	60,81	9,91
	HI	1	159,54	3,78
		2	106,36	5,67
		3	69,03	8,73
		4	47,78	12,61

*) calculated with the radius index 695 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, 624 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	2076	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 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;
up to 10 l oil may be taken off working travelling and 14 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	390 or 520 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

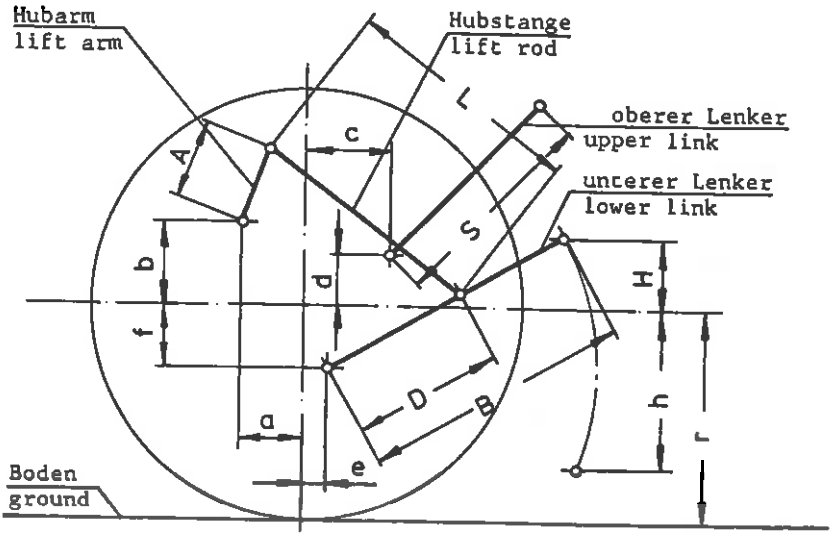
Steering

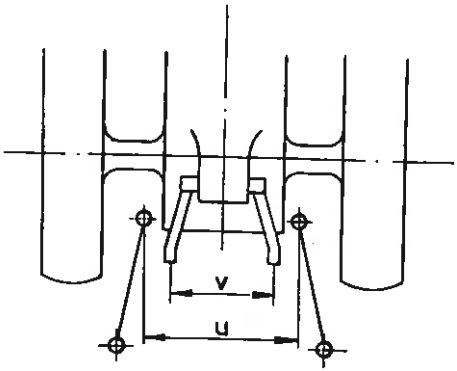
CHAR-LYNN/JOHN DEERE hydrostatic,
connected by sequence valve to the hydraulic system of the tractor;
max. pressure 160±3 bar;
oil filter in return line, filter change every 1200 hours;
1 integrated cylinder (symmetrical design), directly acting on steering levers, 111 mm stroke, 60 mm bore, piston rod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





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

Rear tyres	radius index	(r)	695
Front tyres	radius index	(r')	515
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, 675
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 684, 670

Height of lower link hitch points relative to rear axle centre line (situated 695 mm above ground), these data are valid for unloaded power lift:

Length of lift rods	(L)	670	566	684
Linkage distance of lift rods	(D)	465		
Lowest position	(h)	495	277	530
Highest position	(H)	113	270	80
Transport position	(H')	113	270	80

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

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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 11.2-24 6ply GOODYEAR; max. permissible load per tyre 1045 kg at 1,8 bar and 30 km/h; track width 1600 mm, adjustable from 1500 to 2000 mm in steps of 100 mm each, adjustable gauge bowl wheels; rims W10x24
Driving wheels:	At front and at rear; at rear 2 cross-ply tyres 16.9-30 6ply FIRESTONE; max. permissible load per tyre 1900 kg at 1,3 bar and 30 km/h; track width 1645 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

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

Seat — GRAMMER, model DS 44/2H-4
upholstered seat with back rest and integral arm rests, adjustable spring suspension and hydraulic shock absorber;
driver's platform 780 mm above ground,
height of unloaded seat above platform steplessly adjustable from 530 to 640 mm,
longitudinal adjustment 150 mm
1 step, 520 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	1490	455
Side-(Warning) lights	100 dia	1640	520
Rearlights *)	100 dia	1450	760
Reflectors (ring-shaped)	135/100 dia	1640	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: 3850 mm

Total width: 2270 mm

Total height: 2310 mm to top of frame
2595 mm to top of exhaust

Ground clearance: 385 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	10.5/80-18	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, 1645 mm at rear

Weights

	without driver	with driver
front	1200 kg	1210 kg
rear	2190 kg	2280 kg
total	3390 kg	3490 kg

Fuels and lubricants used in tests

Fuel: ARAL Diesel-fuel DIN 51601
density at 15°C at p.t.o. tests 0,843 kg/l
at 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: 13

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

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

Date of tests: 15th 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						
42,6	2250	586	12,53	10,56	248	3,40
At rated speed						
42,2	2300	599	12,53	10,56	250	3,37
At standard p.t.o. speed						
42,1	2076	540	12,15	10,24	243	3,47
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						
42,2	2300	599	12,53	10,56	250	3,37
(ii) 85% of the torque obtained in (i)						
37,1	2377	619	11,47	9,67	261	3,23
(iii) 75% of the torque defined in (ii)						
28,2	2409	627	9,62	8,11	288	2,93
(iv) 50% of the torque defined in (ii)						
18,9	2429	632	7,84	6,61	349	2,42
(v) 25% of the torque defined in (ii)						
9,5	2444	636	5,94	5,01	526	1,80
(vi) unloaded						
-	2474	644	4,24	3,58	-	-

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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						
42,1	2076	540	12,15	10,24	243	3,47
(ii) 85% of the torque obtained in (i)						
37,2	2156	561	11,16	9,40	253	3,33
(iii) 75% of the torque defined in (ii)						
28,3	2188	569	9,15	7,71	273	3,09
(iv) 50% of the torque defined in (ii)						
19,1	2213	576	7,36	6,20	325	2,59
(v) 25% of the torque defined in (ii)						
9,7	2249	585	5,57	4,69	484	1,74
(vi) unloaded						
-	2278	593	3,83	3,23	-	-

Standard specific fuel consumption (g/kWh): 261/349/253/325

No load maximum engine speed: 2474 r/min
Equivalent flywheel torque at rated engine speed: 175 Nm
Maximum equivalent flywheel torque: 234 Nm at 1499 r/min of the engine

Mean atmospheric conditions

temperature	22 °C
pressure	985 mbar
rel. humidity	60 %

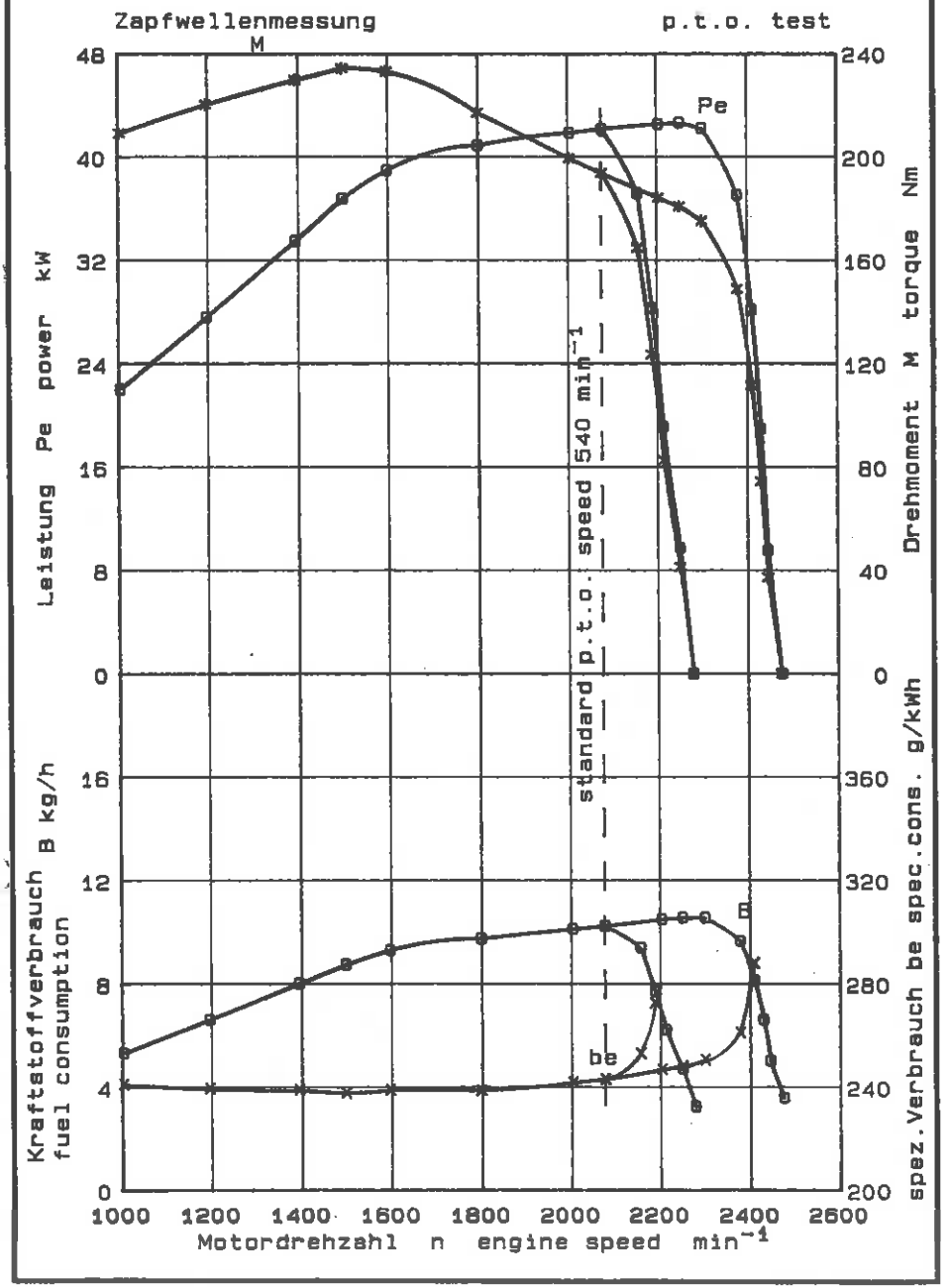
Maximum temperatures

coolant	88 °C
oil	102 °C
fuel	24 °C
air intake	24 °C

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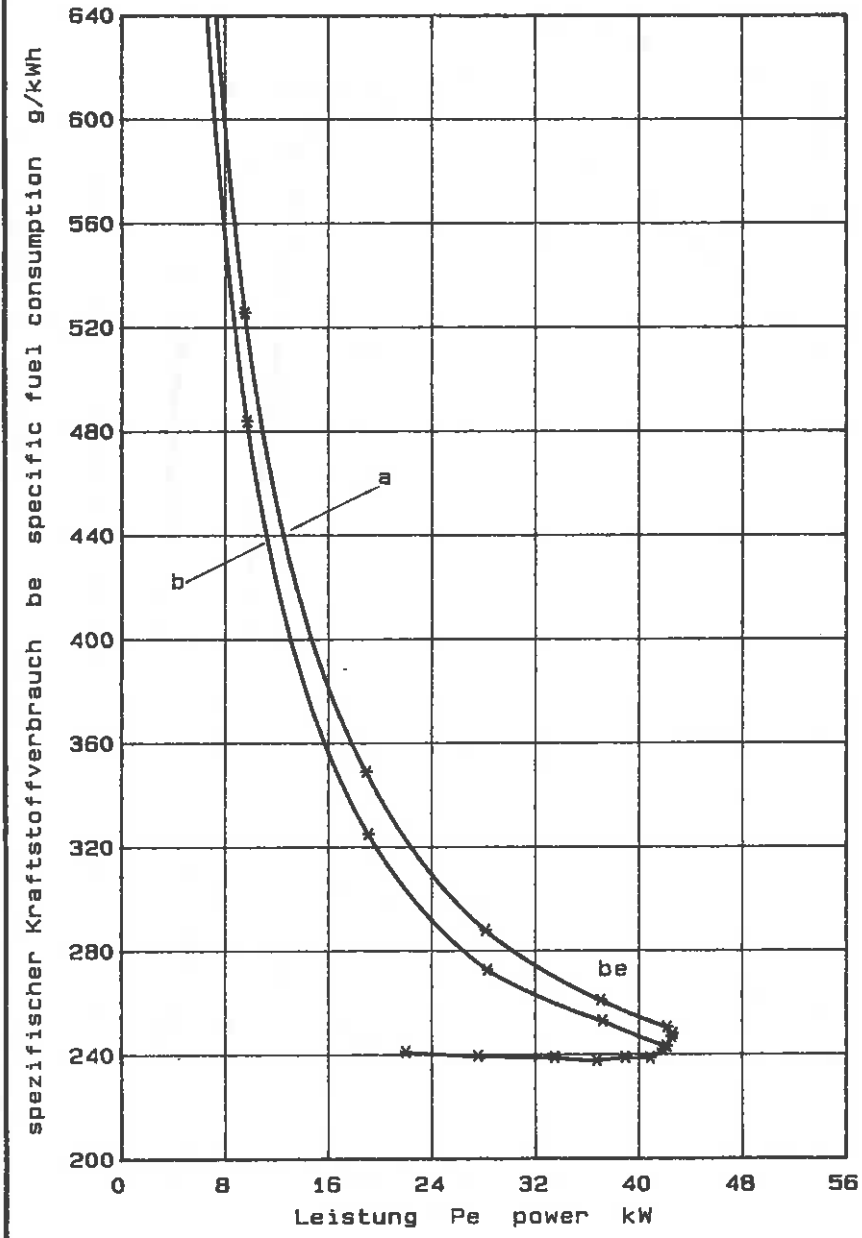
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Zapfwellenmessung p.t.o. test



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(2) LIFTING FORCES AND HYDRAULIC POWER

Date of tests: 24th June 1987

Lifting Forces (Linkage dimensions: see pages 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	580	1520	132	-	-
On the frame	200	710	1390	132	2200	13

Temperature of hydraulic fluid at start of test 65°C

Lifting heights relative to horizontal lower links

mm	-350	-300	-295	-200	-100	0	+100	+200	+285	+300	+360
Lifting forces at hitch points											
daN			1520	1755	1935	2045	2130	2185	2205		
Lifting forces at test frame											
daN	1390	1460		1570	1630	1660	1635	1605		1555	1505

Hydraulic Power

Sustained pressure with pump stalled 159 bar
Pump delivery rate at minimum pressure 52,7 l/min

	Hydraulic power kW	Flow rate l/min	Pressure bar	Oil temperature °C
at 90% of the actual relief valve setting	7,2	30,4	143	65
maximum	10,9	49,4	132	65

Tapping point used for test: At rear of tractor
Return: At gear oil filter housing
(supply into pressure line of transmission oil pump)

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(3) DRAWBAR POWER AND FUEL CONSUMPTION (unballasted tractor, 4WD engaged)

Date of tests: 9th July 1987
Type of track: Concrete
Height of drawbar above ground: 490 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 LO	2,50	23,5	3389	2388	15,1
2 I HI	3,16	30,0	3416	2359	14,9
3 I LO	3,70	32,9	3203	2250	13,5
3 I HI	4,90	34,5	2538	2248	9,8
4 I LO	5,65	35,2	2242	2248	8,5
1 II LO	6,23	35,8	2070	2248	7,7
4 I HI	7,35	35,6	1744	2248	6,3
1 II HI	8,10	36,2	1611	2250	5,8
2 II LO	9,67	35,3	1315	2251	4,6
2 FUEL CONSUMPTION					
2.1 In selected gear at maximum power					
1 II HI	8,10	36,2	1611	2250	5,8
2.1.1 75% of pull at maximum power					
1 II HI	8,72	29,1	1201	2384	4,3
2.1.2 50% of pull at maximum power					
1 II HI	8,96	20,1	807	2411	2,7
2.1.3 Next higher gear at reduced engine speed; same pull and					
2 II LO	8,72	29,4	1214	2025	4,4
2.1.4 Next higher gear at reduced engine speed; same pull and					
2 II LO	9,03	20,2	805	2063	2,8
2.2 In selected gear nearest to 7,5 km/h					
4 I HI	7,35	35,6	1744	2248	6,3
2.2.1 75% of pull at maximum power					
4 I HI	7,93	28,9	1310	2382	4,7
2.2.2 50% of pull at maximum power					
4 I HI	8,18	19,7	865	2415	3,0
2.2.3 Next higher gear at reduced engine speed; same pull and					
1 II HI	7,88	28,7	1311	2163	4,7
2.2.4 Next higher gear at reduced engine speed; same pull and					
1 II HI	8,10	19,8	878	2182	2,9

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	Tyre size	Inflation pressure
Front:	11.2 - 24	1,1 bar
Rear:	16.9 - 30	1,0 bar

Tread bar height at the beginning of drawbar tests:
97% at front, 94% 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
366	2,32	25	81	89	20	91	1000
338	2,51	30	80	89	20	89	1000
324	2,62	31	81	90	20	95	1000
308	2,75	31	81	90	20	95	1000
302	2,81	31	81	90	20	94	1000
298	2,85	30	81	94	21	92	1000
298	2,85	31	80	91	20	95	1000
293	2,89	31	81	93	22	84	1000
298	2,84	34	81	94	23	64	1001
293	2,89	31	81	93	22	84	1000
318	2,67	34	81	89	22	64	1001
369	2,30	34	81	89	22	64	1001
travelling speed as in 2.1.1							
294	2,89	35	81	89	22	63	1001
travelling speed as in 2.1.2							
336	2,53	35	81	89	22	63	1001
298	2,85	31	80	91	20	95	1000
323	2,63	35	80	90	22	64	1001
381	2,23	35	80	90	22	64	1001
travelling speed as in 2.2.1							
298	2,85	33	80	89	22	63	1001
travelling speed as in 2.2.2							
344	2,47	33	80	89	22	63	1001

ADDITIONAL TESTS

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

Date of tests: 10th July 1987
Type of track: Concrete
Type of sound level meter: BRÜEL & KJAER model 2209

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	3044	1,87	1,67	90
1 I HI	3034	2,38	2,13	91
2 I LO	3129	2,80	2,52	92
2 I HI	3055	3,57	3,14	93
3 I LO	3043	4,32	3,81	94
3 I HI	2374	5,50	5,14	94
4 I LO	2074	6,24	5,92	94
1 II LO	1885	6,83	6,58	93,5
4 I HI *)	1581	7,95	7,75	93,5
4 I HI *)	light load	7,95	8,57	90,5
1 II HI	1475	8,69	8,49	93,5
2 II LO	1225	10,24	10,17	94
2 II HI	942	13,04	13,00	94
3 II LO	740	15,78	15,92	93,5
4 II HI +)	light load	29,02	30,51	94

*) The 4 I HI gear corresponds to the nominal speed nearest to 7,5 km/h

+) 4WD disengaged

PRÜFUNGS-ABTEILUNG
JOHN DEERE 2355 TSS

(5) DRAWBAR POWER AND FUEL CONSUMPTION (unballasted tractor, 4WD disengaged)

Date of tests: 13th July 1987
Type of track: Concrete
Height of drawbar above ground: 490 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	3,16	24,1	2748	2386	14,9
3 I LO	3,79	28,7	2724	2363	14,9
3 I HI	4,66	32,8	2534	2248	13,5
4 I LO	5,40	33,7	2248	2248	11,7
1 II LO	5,99	34,3	2060	2250	10,6
4 I HI	7,12	34,1	1726	2253	8,7
1 II HI	7,86	34,6	1585	2253	7,9
2 II LO	9,38	34,8	1335	2253	6,7
2 II HI	12,12	34,2	1015	2248	4,9
2 FUEL CONSUMPTION					
2.1 In selected gear at maximum power					
2 II LO	9,38	34,8	1335	2253	6,7
2.1.1 75% of pull at maximum power					
2 II LO	10,10	28,0	999	2378	4,8
2.1.2 50% of pull at maximum power					
2 II LO	10,39	19,3	668	2405	3,2
2.1.3 Next higher gear at reduced engine speed; same pull and					
2 II HI	10,02	27,9	1003	1856	4,8
2.1.4 Next higher gear at reduced engine speed; same pull and					
2 II HI	10,43	19,3	666	1898	3,1
2.2 In selected gear nearest to 7,5 km/h					
4 I HI	7,12	34,1	1726	2253	8,7
2.2.1 75% of pull at maximum power					
4 I HI	7,71	27,8	1296	2378	6,4
2.2.2 50% of pull at maximum power					
4 I HI	7,97	19,1	863	2403	4,2
2.2.3 Next higher gear at reduced engine speed; same pull and					
1 II HI	7,66	27,7	1303	2157	6,3
2.2.4 Next higher gear at reduced engine speed; same pull and					
1 II HI	8,01	19,3	867	2207	4,2

PRÜFUNGS-ABTEILUNG

Test No. 87-117

	Tyre size	Inflation pressure
Front:	11.2 - 24	1,1 bar
Rear:	16.9 - 30	1,0 bar

Tread bar height at the beginning of drawbar tests:
97% at front, 94% 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
357	2,38	27	80	90	21	72	1000
338	2,51	34	81	92	22	68	1000
322	2,64	32	81	90	22	63	1000
314	2,71	32	80	90	22	61	1000
306	2,77	33	80	91	24	62	1000
309	2,75	33	81	90	22	64	1000
306	2,77	32	81	92	24	61	1000
304	2,79	34	80	93	24	61	1000
310	2,74	34	80	92	24	61	1000
304	2,79	34	80	93	24	61	1000
331	2,57	34	81	92	25	58	1001
389	2,18	34	81	92	25	58	1001
travelling speed as in 2.1.1							
297	2,86	32	80	91	25	59	1001
travelling speed as in 2.1.2							
334	2,54	32	80	91	25	59	1001
309	2,75	33	81	90	22	64	1000
331	2,56	33	81	92	25	59	1001
388	2,19	33	81	92	25	59	1001
travelling speed as in 2.2.1							
315	2,70	33	80	90	25	60	1001
travelling speed as in 2.2.2							
363	2,34	33	80	90	25	60	1001

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