

John Deere 6125R

Tractor Test No. 1996/13

APPLICANT

Matra, branch of Robert Aebi AG
Industriering 19
3250 Lyss

TRACTOR

Manufacturer: John Deere
Model: John Deere 6125R
Approval certificate no.: 4JA3 34

SUSPENSION AND BRAKES

Central four-wheel drive with powershift transmission
Front axle suspension (disengageable)
Wet disc brake on rear axle
Automatic all-wheel activation
Mechanical parking brake

DRIVER PROTECTION

Integrated safety cab with
hydropneumatic suspension

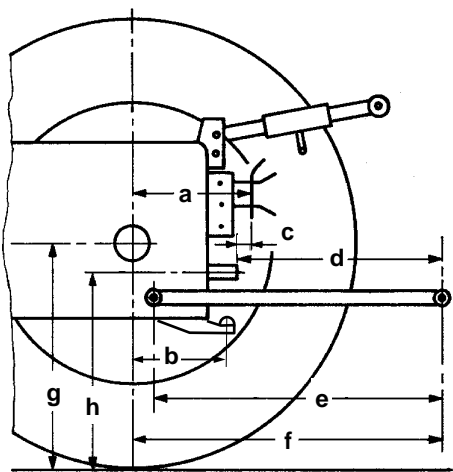


TYRES

	Track width:
front: 540/65 R24	1820 mm
rear: 600/65 R38	1810 mm

DIMENSIONS

Length:	— mm
With front mounting:	5150 mm
Front overhang from steering wheel:	2960 mm
Width:	2450 mm
Height:	2890 mm
Wheelbase:	2580 mm
Ground clearance:	420 mm
Turning diameter:	10,9 m (without four-wheel drive) 11,9 m (with four-wheel drive)



Rear

a:	730 mm
b:	550 mm
c:	190 mm
d:	610 mm
e:	1010 mm
f:	1150 mm
g:	800 mm
h:	740 mm

Front

d:	— mm
e:	780 mm
f:	1320 mm
g:	640 mm
h:	— mm

TEST EQUIPMENT

- front 3-point-hitch
- air-conditioning compressor
- air compressor

WEIGHT

in test equipment

Front:	2520 kg	41 %
Rear:	3600 kg	
Total:	6120 kg	

Permissible front axle load:	4800 kg
Permissible rear axle load:	7000 kg
Permissible total weight:	9500 kg

Payload:	3380 kg
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Towed weight, braked:	34 000 kg
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CAPACITIES

Fuel tank	220 l	
AdBlue tank	— l	
Engine oil	16 l	(change interval 500 h)
Gearbox and Hydraulic oil	53 (63) l	(change interval 1500 h)

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ENGINE (Manufacturer's data)

Manufacturer: John Deere
Model: 4045HL495
Injection: Diesel direct injection
 CommonRail
Supercharging: Exhaust gas turbocharger and air-to-air intercooling
 External cooled exhaust gas recirculation
Exhaust emission treatment: DOC + closed DPF

Bore/stroke: 106,5 / 127 mm
Cylinders / capacity: 4 / 4525 cm³
Cooling: Water, viscous fan

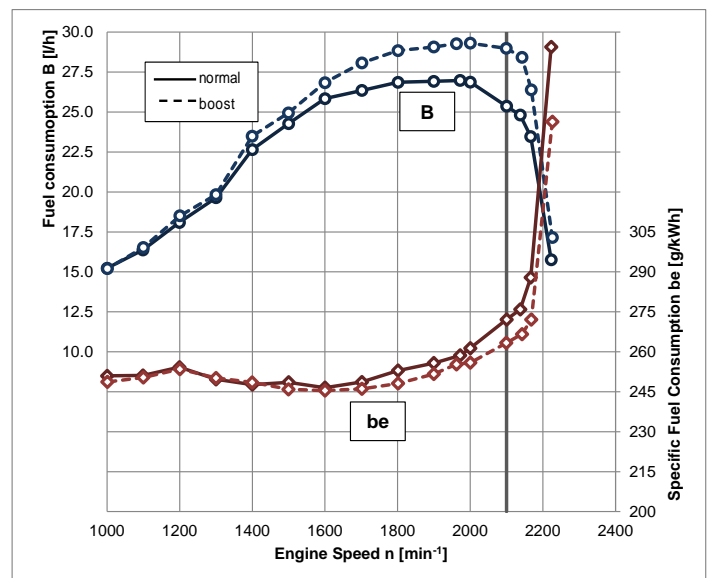
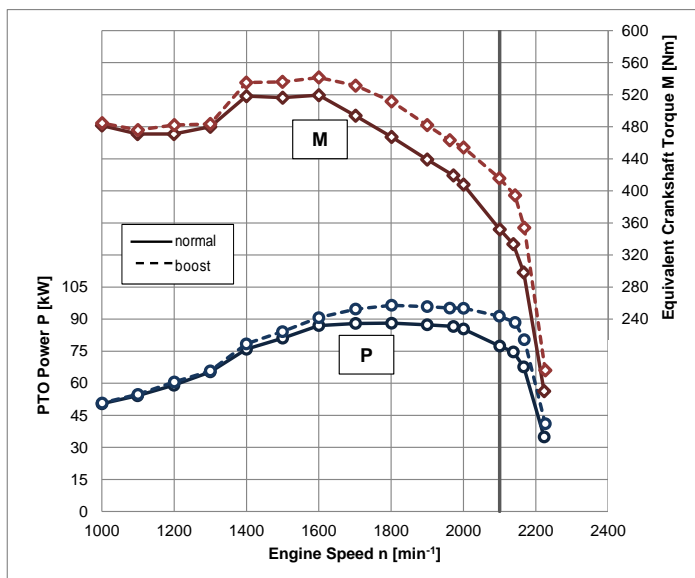
Rated power: 92 kW (125 PS) 97/68EG
With boost: 107 kW (145 PS) 97/68EG

Rated engine speed: 2100 min⁻¹
Exhaust stage: IIIB

Criteria for boost activation

- Transportation work:
Speed in excess of 15 km/h
- PTO work:
PTO power and 1,0 km/h driving speed

POWER TAKE-OFF MEASUREMENT



Measurement conditions:

- air temperature 20 °C
- relative atmospheric humidity 50 %
- atmospheric pressure 952 mbar



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Full load test values

		Speed [min ⁻¹]		Power		Fuel consumption		AdBlue consumption	
		Engine	PTO	kW	HP	Specific [g/kWh]	Absolute [l/h]	Specific [g/kWh]	Absolute [l/h]
Rated power	normal	2100	1070	77,4	105,3	272	25,4		
	boost			91,4	124,3	263	29,0		
Maximum power	normal	1800	917	88,2	119,9	251	26,7		
	boost			96,5	131,2	248	28,9		
Normal speed PTO	normal	1962	1000	86,6	117,7	259	27,0		
	boost			95,2	129,4	255	29,3		

Max. torque: 519 Nm at 1600 min⁻¹
 Torque increase: 48 % at 24 % speed drop
 Starting torque: 137 %
 Idling speed: 850 min⁻¹
 Cutoff speed: 2250 min⁻¹

Boost
 542 Nm, at 1600 min⁻¹
 30 % at 24 % speed drop
 117 %

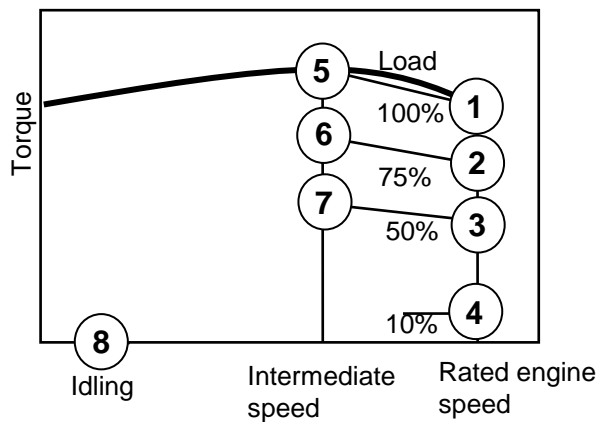
Partial load values

Fuel consumption with 42,5 % partial load at normal PTO speed

PTO shaft Fuel
 1000 min⁻¹: 327 g/kWh, 14,5 l/h

Boost
 Fuel
 312 g/kWh, 15,2 l/h

In characteristic diagram (with boost)



Measuring point	Fuel consumption		AdBlue consumption	
	Specific [g/kWh]	Absolute [l/h]	Specific [g/kWh]	Absolute [l/h]
1	263	29,0		
2	278	23,0		
3	314	17,3		
4	815	8,0		
5	243	26,3		
6	251	20,3		
7	273	14,7		
8	—	1,8		

EMISSIONS

Exhaust gas emissions

▪ Black smoke 0,05 SZ (BOSCH)

Emissions according to ISO 8178-4, C1

(with boost)

▪ Hydrocarbons HC 0,01 g/kWh*
 ▪ Nitrogen oxides NOx 2,76 g/kWh*
 ▪ Carbon monoxide CO 0,01 g/kWh*
 ▪ Particulate number Pn 4,8E11 #/kWh*
 ▪ Cycle consumption Fuel 283 g/kWh* (17,7 l/h)

Noise level

▪ Noise level at driver's ear: 72,5 dB(A)
 ▪ Passing noise: 81,5 dB(A)

* With reference to PTO power



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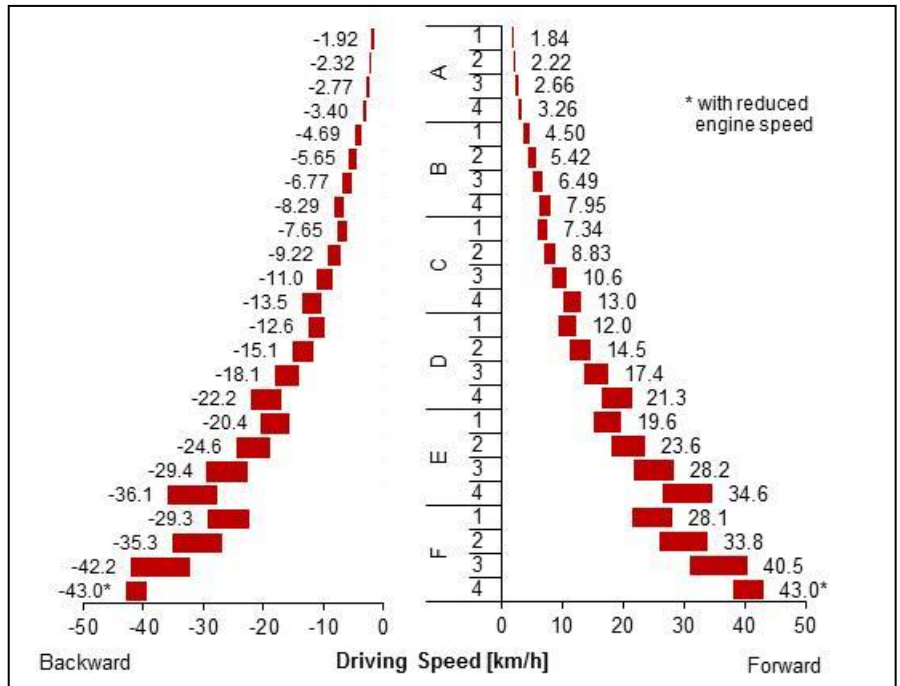
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TRANSMISSION

Travel gear

- Wet multi-disc clutch
- 24 forward and 24 reverse gears
- 6 gears
- 4 powershift stages
- Powershift reverse gearbox

Driving speed at rated engine speed
(tyre radius r = 825 mm)



PTO transmission

Rear

- Wet multi-plate clutch, electro-hydraulic engagement

Front

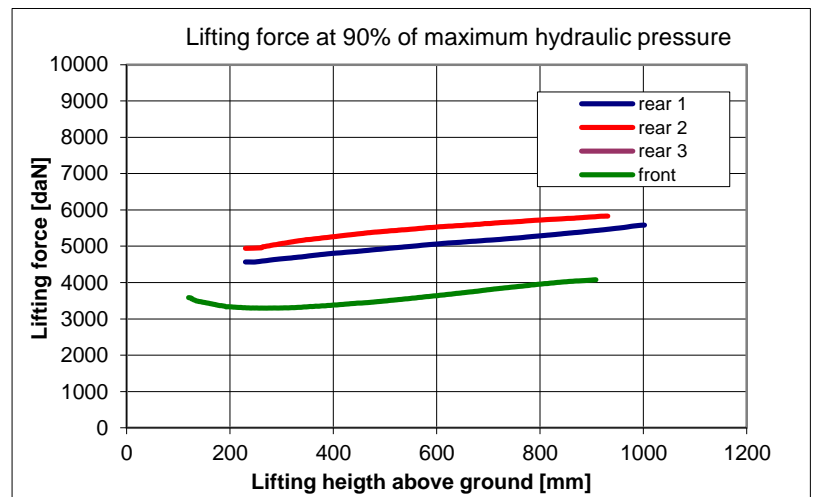
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	Rear						Front
PTO shaft	430	540	540E	1000	1000 E	Ground speed	1000
Engine speed	-	1962	1496	1962	-	-	-

HYDRAULICS

Remote hydraulics

- max. oil pressure: 205,8 bar
- max. flow rate : 118,7 l/min
- flow rate: 113,6 l/min at 174,9 bar
- max. hydraulic power: 35,1 kW (111,7 l/min and 188,7 bar)
- max. flow rate through a single coupler: 118,7 l/min
- max. quantity of oil taken: 15 (25) l



3-Point Hitch

Rear

3-Point Hitch, category: II / III
Control hydraulics via lower link, (EHR)

Front

3-Point Hitch, category: II

Measurement		Lifting movement	Lifting force at 90% pressure	
			Continuous	Maximum
Rear	Lower link, short	772 mm	4560 daN	5580 daN
	Lower link, medium	701 mm	4905 daN	5835 daN
	Lower link, long			
Front		788 mm (120 mm to 908 mm)	3295 daN	4080 daN

Explanatory notes on tractor test at:
www.traktorentest.ch



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