DLG-Data Sheet Tractors 2003

John Deere 8520 PowerShift

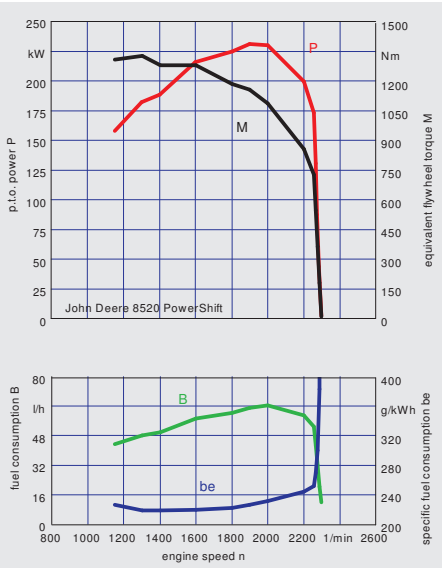
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Engine

John Deere 6081HRW38, rated engine power 217 kW at 2200 min^{-1}, turbocharger, intercooler, 6 cylinder, capacity 8134 cm^3, bore 116 mm, stroke 129 mm, water cooled, viscous fan, average pressure 14,6 daN/cm^2, fuel tank capacity 606 l

Measurement at main power take off

	Rated engine speed 2200 min^{-1}	*Engine speed at max power 1900 min^{-1}*
Power	199,4 kW	231,4 kW
Fuel consumption	58,9 l/h	63,2 l/h
Specific fuel cons.	245 g/kWh	227 g/kWh



Average fuel consumption of

the 6 measurement points from the governor curve 36,3 l/h, 284 g/kWh

Equivalent flywheel torque

Max. torque 1337 Nm at 1200 min^{-1}, torque increase 55 % at a speed drop of 45 %

Torque at engine speed 1000 min^{-1}

152 % rated to the torque at rated engine speed

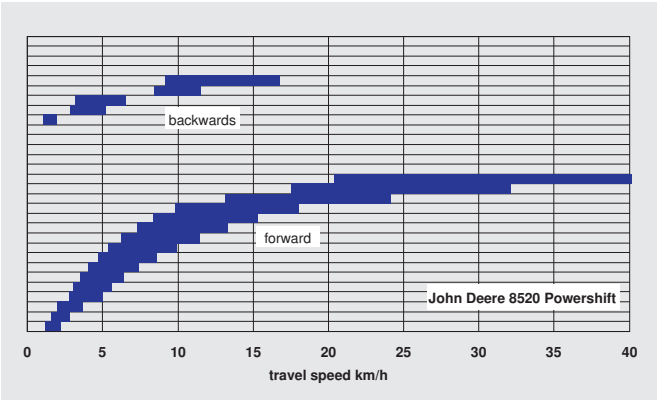
Power take off

Wet multi-disc clutch, electro-hydraulically operated by switch, 1 rear p.t.o., form 3, changeable

Standard speed	540	540 E	1000	1000E
Engine speed	-	-	2180 min^{-1}	-

Gearbox

Wet multi-disc clutch, 16 forward, 5 reverse; full power shift; 1 shift lever



Speed scheme arranged by groups, for every gear in the speed range from the engine speed at max. torque to the rated engine speed.

Drawbar power

Max. power 202,9 kW at 9,4 km/h and engine speed 1900 min^{-1}, at 261 g/kWh; at rated engine speed 173,1 kW at 11,1 km/h, at 283 g/kWh



Chassis

All wheel drive, central driving shaft with universal joints, wet multi-disc clutch, electro hydraulically operated, front and rear multi-plate differential lock, common electro-hydraulically operated; hydro-pneumatically suspended front axle

Front	Tyre 600/70 R 30
Rear	Tyre 650/85 R 38

Brakes

Oil-immersed disc brake at the rear axle; hydraulically operated; automatic engagement of 4WD; maximum mean deceleration 4,6 m/s^2 at 60 daN applied pedal pressure

Cab

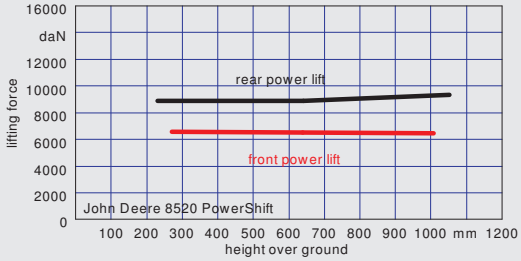
John Deere Model 8520, OECD-No. 4/0 718, 1 door, rear window tiltable, cooling water heat exchanger, air conditioner

Sound levels at drivers ear

	Unloaded	*Under load*
At 7.5km/h, nominal gear selected, all openings closed	74,9 dB(A)	75,3 dB(A)
Open	81,5 dB(A)	81,5 dB(A)
In loudest gear, all openings closed	-	-

Hydraulic system

Closed centre type; pressure and flow compensated system; power lift category 3, 2 external cylinders with - mm diameter, electronic lower link sensing, front power lift



Oil tapping port

Max flow rate 134,6 l/min; max. hydraulic power 36,5 kW at 180 bar and 121,7 l/min; max. pressure 205 bar; oil together with gear box with 150 l capacity, available to external cylinders 40 l

Masses/Axle load

Mass	*Test tractor*	*Permissable total mass*
Front	5200 kg	6000 kg
Rear	6880 kg	10000 kg
Total	12080 kg	14000 kg

Tractor mass to engine power ratio 56 kg/kW

Dimensions

Width 2600 mm, length 6500 mm, height at top of exhaust silencer pipe 3180 mm, at cab 3250 mm, wheel base 3020 mm, distance from p.t.o. shaft end to trailer hitch 295 mm, distance from p.t.o. shaft end to lower link couplers 675 mm

Test centre
DLG-Prüfstelle für Landmaschinen

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