



OECD approval number

2/2 343

Restricted Code

OECD approval date

19/04/2006

Make

Challenger

Model

MT 855B

Type

Rubber tracklaying tractor

Manufacturer

16 speeds powershift - 40 km/h

Testing station:

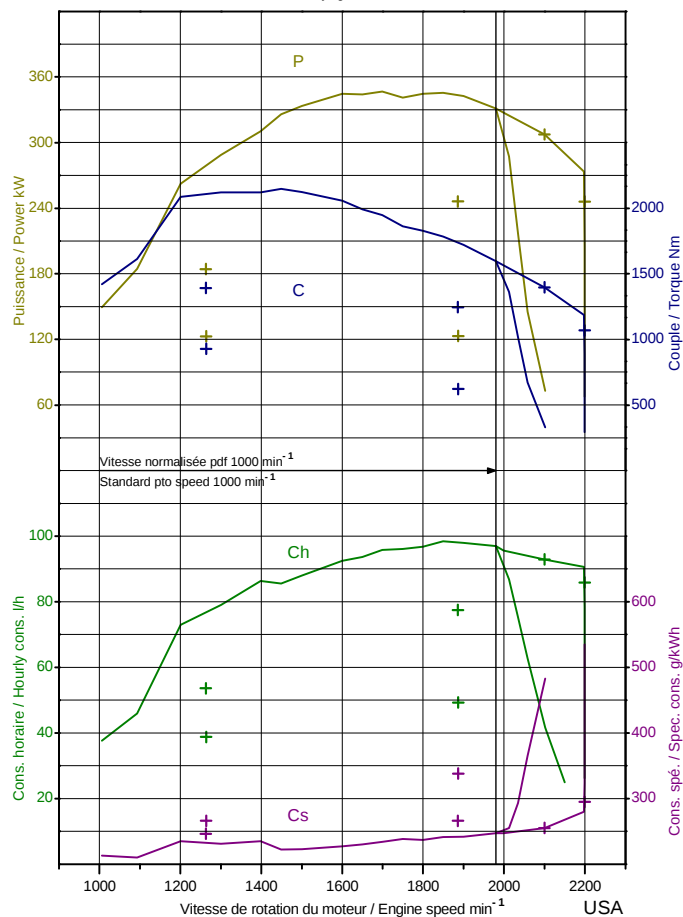
Agco Corp

Nebraska Tractor Test Laboratory, Lincoln, USA

Challenger MT855B

Tracteur à chenilles caoutchouc/Rubber tracklaying tractor

OCDE/OECD 2/2343



Engine, Transmission, Power take-off Specifications

<i>Make, Model</i>	Caterpillar	C-15
<i>Type, Supercharging</i>	Direct injection	Yes
<i>Cylinders, Disposition</i>	6	vertical in line
<i>Capacity, Cooling</i>	15200 cm ³	Liquid
<i>Gear box</i>		Powershift
<i>Number of forward and reverse speeds</i>	16	4
<i>Speed at rated engine speed</i>	from 2.69	to 40.00 km/h
<i>Standard Power take-off speed</i>	<u>540 min⁻¹</u>	<u>1000 min⁻¹</u>
<i>Power take-off speed at rated engine speed</i>		1061 min ⁻¹
<i>Diameter of the shaft</i>		44.45 mm
<i>Number of splines</i>		20

Power take-off TestTwo hours test at maximum power

<i>Power, Engine and Power take-off speed</i>	347.0 kW	1699 min ⁻¹	859 min ⁻¹
<i>Hourly and specific consumption</i>		95.90 l/h	234 g/kWh

Test at maximum power at rated engine speed

<i>Power, Engine and Power take-off speed</i>	307.4 kW	2100 min ⁻¹	1061 min ⁻¹
<i>Hourly and specific consumption</i>		92.86 l/h	255 g/kWh

Test at standard Power take-off speed

<i>Power, Engine and Power take-off speed</i>	331.2 kW	1980 min ⁻¹	1000 min ⁻¹
<i>Hourly and specific consumption</i>		96.97 l/h	247 g/kWh

Torque rise

			53.7 %
<u>Maximum torque, Engine speed corresponding</u>	2149.0 Nm	1449 min ⁻¹	

Drawbar Test

<i>Track length and track width</i>	- mm	914 mm
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Test with tractor

<i>Total Mass</i>	<u>unballasted</u>	<u>ballasted</u>
	19240 kg	22600 kg
<i>Maximum drawbar pull</i>	188.6 kN	226.3 kN
<i>at speed of</i>	4.09 km/h	3.24 km/h
<i>Maximum power</i>	303.0 kW	306.3 kW
<i>at speed of</i>	9.44 km/h	7.43 km/h

Hydraulic Performance and Power Lift Test

<i>Hydraulic system</i>	Closed centre		
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At maximum hydraulic power

<i>Flow rate, Pressure, Power (couplers: 1 pair)</i>	137.8 l/min	15.4 MPa	35.4 kW
<i>Flow rate, Pressure, Power (couplers: 2 pairs or +)</i>	162.8 l/min	18.6 MPa	50.4 kW

Maximum lifting force

<i>at the hitch points, at frame</i>	98.5 kN	93.1 kN
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