



OECD approval number

2/2 073

Restricted Code

OECD approval date

27/08/03

Make

Challenger

Model

MT735

Type

Rubber tracklaying tractor

Manufacturer

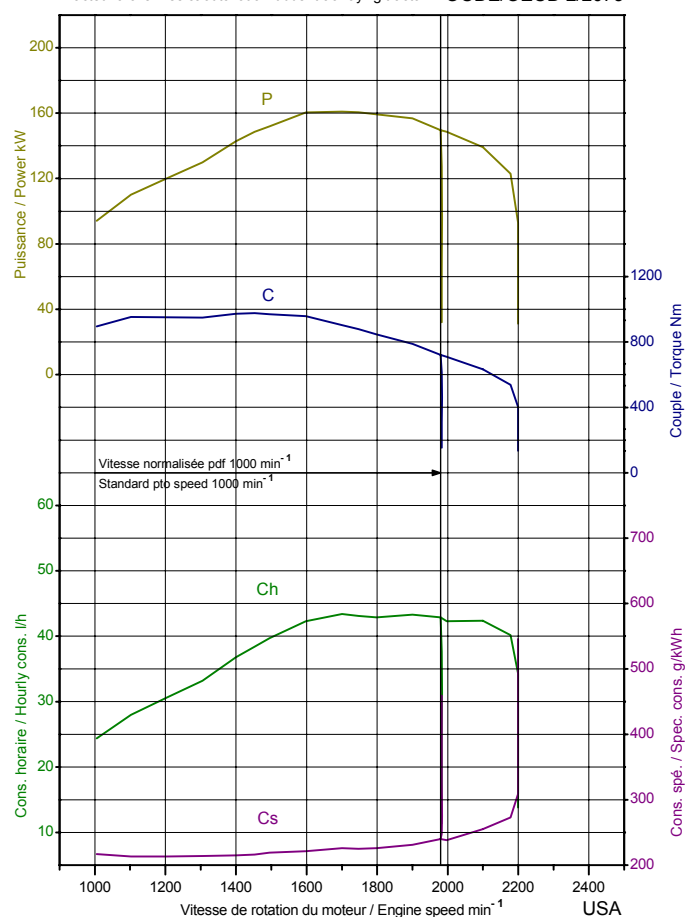
AGCO Corp

Testing station:

Nebraska Tractor Test Laboratory, Lincoln, USA

Challenger MT735

Tracteur à chenilles caoutchouc/Rubber tracklaying tractor OCDE/OECD 2/2073



Engine, Transmission, Power take-off Specifications

<i>Make, Model</i>	Caterpillar	C-9
<i>Type, Supercharging</i>	Direct injection	Yes
<i>Cylinders, Disposition</i>	6	vertical in line
<i>Capacity, Cooling</i>	8810 cm ³	Liquid
<i>Gear box</i>		Mechanical powershift
<i>Number of forward and reverse speeds</i>	16	4
<i>Speed at rated engine speed</i>	from 2.67	to 39.65 km/h
<u>Standard Power take-off speed</u>	<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>	160.8 kW	1700 min ⁻¹	859 min ⁻¹
<i>Hourly and specific consumption</i>		43.39 l/h	226 g/kWh

Test at maximum power at rated engine speed

<i>Power, Engine and Power take-off speed</i>	139.2 kW	2100 min ⁻¹	1060 min ⁻¹
<i>Hourly and specific consumption</i>		42.39 l/h	255 g/kWh

Test at standard Power take-off speed

<i>Power, Engine and Power take-off speed</i>	149.6 kW	1980 min ⁻¹	1000 min ⁻¹
<i>Hourly and specific consumption</i>		42.88 l/h	240 g/kWh

Torque rise

		54.2 %
<u>Maximum torque, Engine speed corresponding</u>	976.0 Nm	1453 min ⁻¹

Drawbar Test

<i>Track length and track width</i>	- mm	457 mm
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Test with tractor

<i>Total Mass</i>	<u>unballasted</u>	<u>ballasted</u>
	12710 kg	13306 kg
<i>Maximum drawbar pull</i>	118.3 kN	124.9 kN
<i>at speed of</i>	2.95 km/h	2.97 km/h
<i>Maximum power</i>	139.1 kW	137.8 kW
<i>at speed of</i>	7.27 km/h	7.28 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</i>	162.4 l/min	18.3 MPa	49.4 kW
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Maximum lifting force

<i>at hitch points, at frame</i>		81.7 kN	76.8 kN
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