



OECD approval number

2/2 213

OECD approval date

Restricted Code

Make

11/01/2005

Model

Challenger

Type

MT 535B

4 WD

Manufacturer

F41523AF113K - 40 km/h

Testing station:

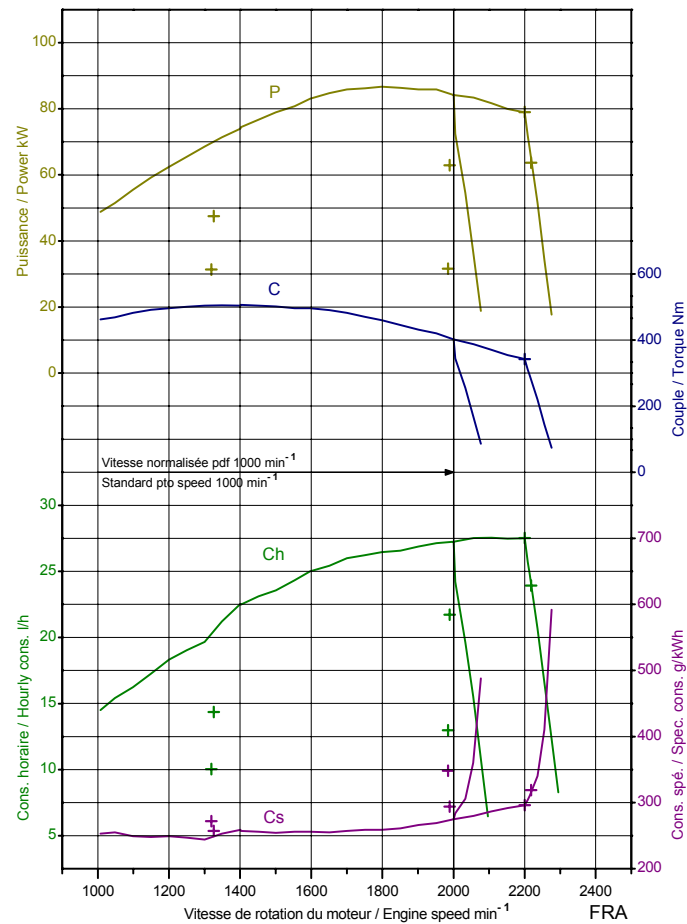
AGCO S.A.

Cemagref, Antony, France

Challenger MT 535B

4 RM/WD

OCDE/OECD 2/2213



**Engine, Transmission, Power take-off Specifications**

|                                                   |                             |                              |
|---------------------------------------------------|-----------------------------|------------------------------|
| <i>Make, Model</i>                                | Perkins                     | 1106C-E60 TA                 |
| <i>Type, Supercharging</i>                        | Direct injection            | Yes                          |
| <i>Cylinders, Disposition</i>                     | 6                           | vertical in line             |
| <i>Capacity, Cooling</i>                          | 5985 cm <sup>3</sup>        | Liquid                       |
| <i>Gear box</i>                                   |                             | Mechanical                   |
| <i>Number of forward and reverse speeds</i>       | 32                          | 32                           |
| <i>Speed at rated engine speed</i>                | from 2.26                   | to 40.00 km/h                |
| <u>Standard Power take-off speed</u>              | <u>540 min<sup>-1</sup></u> | <u>1000 min<sup>-1</sup></u> |
| <i>Power take-off speed at rated engine speed</i> | 601 min <sup>-1</sup>       | 1100 min <sup>-1</sup>       |
| <i>Diameter of the shaft</i>                      | 34.9 mm                     | 34.9 mm                      |
| <i>Number of splines</i>                          | 6                           | 21                           |

**Power take-off Test**Two hours test at maximum power

|                                               |         |                        |                       |
|-----------------------------------------------|---------|------------------------|-----------------------|
| <i>Power, Engine and Power take-off speed</i> | 86.7 kW | 1798 min <sup>-1</sup> | 899 min <sup>-1</sup> |
| <i>Hourly and specific consumption</i>        |         | 26.46 l/h              | 259 g/kWh             |

Test at maximum power at rated engine speed

|                                               |         |                        |                        |
|-----------------------------------------------|---------|------------------------|------------------------|
| <i>Power, Engine and Power take-off speed</i> | 79.0 kW | 2200 min <sup>-1</sup> | 1100 min <sup>-1</sup> |
| <i>Hourly and specific consumption</i>        |         | 27.53 l/h              | 296 g/kWh              |

Test at standard Power take-off speed

|                                               |         |                        |                        |
|-----------------------------------------------|---------|------------------------|------------------------|
| <i>Power, Engine and Power take-off speed</i> | 84.2 kW | 2000 min <sup>-1</sup> | 1000 min <sup>-1</sup> |
| <i>Hourly and specific consumption</i>        |         | 27.25 l/h              | 275 g/kWh              |

Torque rise

|                                                   |          |                        |  |
|---------------------------------------------------|----------|------------------------|--|
|                                                   |          | 47.7 %                 |  |
| <u>Maximum torque, Engine speed corresponding</u> | 506.7 Nm | 1402 min <sup>-1</sup> |  |

**Drawbar Test***Front tyres, Rear tyres*

|                          |             |             |
|--------------------------|-------------|-------------|
| <u>Test with tractor</u> | 480/70 R 28 | 580/70 R 38 |
|--------------------------|-------------|-------------|

*Total Mass*

|  |                    |                  |
|--|--------------------|------------------|
|  | <u>unballasted</u> | <u>ballasted</u> |
|--|--------------------|------------------|

|                             |         |  |
|-----------------------------|---------|--|
| <i>Maximum drawbar pull</i> | 5995 kg |  |
|-----------------------------|---------|--|

|                    |         |     |
|--------------------|---------|-----|
| <i>at speed of</i> | 54.9 kN | Not |
|--------------------|---------|-----|

|                      |           |          |
|----------------------|-----------|----------|
| <i>Maximum power</i> | 3.18 km/h | required |
|----------------------|-----------|----------|

|                    |         |    |
|--------------------|---------|----|
| <i>at speed of</i> | 78.7 kW | in |
|--------------------|---------|----|

|  |           |        |
|--|-----------|--------|
|  | 9.35 km/h | Code 2 |
|--|-----------|--------|

**Hydraulic Performance and Power Lift Test***Hydraulic system*

|                                   |  |               |
|-----------------------------------|--|---------------|
| <u>At maximum hydraulic power</u> |  | Closed centre |
|-----------------------------------|--|---------------|

|                                   |            |          |         |
|-----------------------------------|------------|----------|---------|
| <i>Flow rate, Pressure, Power</i> | 91.5 l/min | 14.1 MPa | 21.5 kW |
|-----------------------------------|------------|----------|---------|

|                              |  |  |  |
|------------------------------|--|--|--|
| <u>Maximum lifting force</u> |  |  |  |
|------------------------------|--|--|--|

|                                  |  |         |         |
|----------------------------------|--|---------|---------|
| <i>at hitch points, at frame</i> |  | 43.9 kN | 38.0 kN |
|----------------------------------|--|---------|---------|

