Consiglio Nazionale delle Ricerche
IMAMOTER
Istituto per le Macchine Agricole e Movimento Terra

Report No. 3085*2*NH*T6070ELITE*1*2009
**OECD Approval No. 2/2 486 on 24th June 2009**

TEST IN ACCORDANCE WITH THE OECD STANDARD CODE FOR THE OFFICIAL TESTING OF AGRICULTURAL AND FORESTRY TRACTOR PERFORMANCE

| | |
|---|---|
| Make: | **NEW HOLLAND** |
| Trade Name: | **T6070 ELITE** |
| Type: | **4 WD, 40 km/h, 16+16 speeds, semi-powershift transmission** |



| | |
|---|---|
| **Manufactured by:** | CNH Europe Holding S.A.<br>13, Rue Aldringen<br>L-1118 Luxembourg |
| **Date and location of the tests:** | 2008 TORINO (Italy) |

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## FOREWORD

This vehicle is equipped with an electronically-controlled **Engine Power Management** (EPM) system that monitors and boosts power output in certain circumstances as engine load increases.
This is achieved by electronically changing the characteristics of the engine power-speed curve.

The **EPM** function (boosted power level) becomes active in these two following operation conditions:

a) in PTO operations when
- Engine speed is above 1300 rpm
- Tractor forward speed is above 0.5 $kmh^{-1}$
- PTO driveline torque is above 150 Nm

With the tractor moving and the engine speed above 1300 rpm engaging the PTO will put the EPM into standby mode. As the torque and load on the PTO reaches or exceed the above levels, the EPM will be active and a warning light will illuminate

b) in road transport application when
- 13th gear, or above, is selected
- Auto Transport Mode (function that permits automatic gear changing) is selected
- engine speed between is 1800 and 2200 rpm

EPM does not allow operate boosted mode with tractor stationary.
For test purpose an over ride system has been provide by the manufacturer of the tractor to enable PTO operation mode whilst the tractor is stationary.
For this reason the results of the test in chapter *3.1.A Optional power take-off test (with power boost)* can be achieved ONLY when PTO operation conditions are satisfied.

**NOTE**

The information opposite each item has been validated by the testing station as follows

**C** data declared and checked by the testing station

**D** data declared by the manufacturer

| | | |
|---|---|---|
| **C** | Tractor manufacturer's name and address: | CNH Europe Holding S.A.<br>13, Rue Aldringen<br>L-1118 Luxembourg |
| **D** | Location of tractor assembly: | Basildon – United Kingdom<br>St. Valentin - Austria |
| **D** | Submitted for test by: | the Manufacturer |
| **C** | Selected for test by: | manufacturer with the agreement of IMAMOTER |
| **D** | Place of running-in: | Modena - Italy |
| **D** | Duration of running-in: | appr. 50 hours |
| **C** | Location of test: | IMAMOTER – Torino, Italy |

## 1 SPECIFICATIONS OF TRACTOR

### 1.1 Identification

1.1.1 Denomination

| | | |
|---|---|---|
| **C** | Make of the tractor: | NEW HOLLAND |
| **C** | Model (trade name): | T6070 ELITE |
| **C** | Type: | 4WD |

1.1.2 Numbers

| | | |
|---|---|---|
| **D** | 1st serial N° or prototype: | not announced |
| **C** | Serial N°: | Z7BD51074 |

1.1.3 Other specification (if applicable)

| | | |
|---|---|---|
| **D** | Model(s) for other countries: | not applicable |
| **C** | Transmission type or gears x ranges: | 16+16 speeds, semi powershift |
| **C** | Speed version: | 40 km/h |
| **D** | Manufacturer identification or technical type number : | BDMC7B |

### 1.2 Engine

| | | |
|---|---|---|
| **C** | Make: | CNH |
| **C** | Model: | 667TA/EEL |
| **C** | Type: | 4 stroke supercharged, intercooler Diesel direct injection type |
| **C** | Serial N°: | 435986 |

1.2.1 Cylinders

| | | |
|---|---|---|
| C | Number and disposition: | 6, vertical, in line |
| D | Bore and stroke: | 104x132 mm |
| D | Capacity: | 6728 $cm^3$ |
| D | Compression ratio: | 17.5:1 |
| D | Arrangement of valves: | overhead, 4 valves for cylinder |
| D | Cylinder liners (wet or dry): | none, monobloc construction |

1.2.2 Supercharging

| | | |
|---|---|---|
| C | Make, model and type: | HOLSET, HX35, exhaust driven |
| D | Pressure: | 0.1050 MPa |

1.2.3 Fuel system

| | | |
|---|---|---|
| C | Fuel feed system: | gear pump |
| C | Make model and type of fuel filter(s) | plastic strainer in tank, 1 glass glow sediment and water separation pre-filter, and 2 disposable canister filters (FLEETGUARD, 2830359 and 4897897 drawings, spin on cartridge) |
| D | Capacity of fuel tank: | 250 $dm^3$, placed under the tractor platform, on the left side |
| C | Make model and type of injection pump: | BOSCH, CR-CP3, radial plunger high pressure pump |
| C | Serial N°: | not available |
| | Manufacturer's production setting of injection pump | |
| C | Flow rate (rated engine speed and full load): | 73.76 $mm^3$/stroke at rated speed and full load corresponding 29.21 $dm^3$/h without power boost<br>86.49 $mm^3$/stroke at rated speed and full load corresponding 34.25 $dm^3$/h with power boost |
| D | Timing: | electronically controlled |
| D | Make, model and type of injectors: | BOSCH, CRIN2 (DSLA143PV3 388), high pressure electronically controlled |
| D | Injection pressure: | 160 MPa |
| C | Make, model and type of carburettor: | not applicable |

1.2.4 Governor

| | | |
|---|---|---|
| C | Make model and type: | BOSCH, EDC16, electronic type |
| C | Governed range of engine speed from-to: | 900–2375/2373 (unboosted/boosted) rev/min |
| C | Rated engine speed: | 2200 rev/min |

1.2.5 Air cleaner

| | | |
|---|---|---|
| | Pre-cleaner | |
| C | Make model and type: | none |
| C | Location of air intake: | none |
| | Main cleaner | |
| C | Make, model and type: | CNH, 3 stage dry paper element with 2 |

| | | | |
|---|---|---|---|
| | | | replaceable cartridge, inner (82028151 drawing ) and outer (82028150 drawing) |
| | C | Location of air intake (in case of no pre-cleaner): | on front of the radiator under the bonnet cowling inside the pre-cleaner, on front of the radiator under the bonnet cowling |
| | C | Maintenance indicator: | warning lamp on the dashboard |
| 1.2.6 | | Lubrication system | |
| | D | Type of feed pump: | forced feed from concentric rotor pump |
| | C | Type of filter(s): | mesh strainer in sump on suction line and full flow disposable canister on pressure line |
| | C | Number of filters: | 1 |
| 1.2.7 | | Cooling system | |
| | C | Type of coolant: | 50% water and 50% antifreeze |
| | D | Type of pump: | centrifugal blade pump with visco-fan belt driven by engine shaft |
| | | Specification of fan or blower | |
| | C | Number of fan blades: | 5 |
| | C | Fan diameter: | 510 mm |
| | D | Coolant capacity: | 25 $dm^3$ |
| | C | Type of temperature control: | thermostat with full flow bypass |
| | D | Over-pressure system: | 100 kPa |
| 1.2.8 | | Starting system | |
| | C | Make model and type: | ISKRA, 11131464, positive engagement, solenoid operated |
| | D | Starter motor power rating: | 4.2 kW |
| | C | Cold starting aid: | PHILIPS & TEMRO grid heater |
| | C | Safety device: | starting inoperable unless shuttle lever in neutral, clutch pedal depressed and operator seat presence switch is activated |
| 1.2.9 | | Electrical system | |
| | C | Voltage: | 12 V, negative earth |
| | | Generator: | alternator |
| | C | Make model and type: | ISKRA, AAK 5592, belt driven |
| | D | Power: | 1.6 kW |
| | | Battery of accumulators | |
| | C | Number: | 1, lead acid type |
| | D | Rating: | 12 V, capacity 132 Ah, cranking 960 A |
| 1.2.10 | | Exhaust system | |
| | C | Make model and type: | COR.TUBI, 1.15.1 02AH, pipe with integrated silencer |
| | C | Location: | on the right hand side of engine, with the vertical exhaust pipe on right of the bonnet cowling |

## .3 Transmission

### .3.1 Clutch (travel alone)

| | | |
|---|---|---|
| D | Make model and type: | CNH, own drawing model, wet multi-plate disc |
| D | Number of plates: | 9 |
| D | Diameter of plates: | 160 mm |
| C | Method of operation: | electro hydraulic operated by pedal |

### .3.2 Gear box

D Make model and type: CNH make, own drawing model, mechanical

Description: 16+16 speeds (40 km/h) mechanical transmission with semi powershift. 16 forward and reverse speeds in 2 ranges (Low and High) shiftable with 1 lever. 8 gears for range with switch for up/down power-shifting. Forward/reverse shuttle lever on steering column. Optional creeper switch acted, 33+32 speeds, not fitted on tested tractor

| | | Forward | Reverse |
|---|---|---|---|
| C | Number of ranges | 2 | 2 |
| C | Number of gears | 8 | 8 |
| C | Total of arrangements | 16 | 16 |

D Available options:

17+16 speeds, (40 km/h max speed at reduced engine speed in highest speed) mechanical transmission with semi powershift. 17 forward gears and 16 reverse gears in 2 ranges (Low and High) shiftable with 1 lever. 8 gears for range (+1 in forward High range) with switch for up/down power-shifting. Forward/reverse shuttle lever on steering column. Optional creeper switch acted, 33+32 speeds.

17+16 speeds (50 km/h) mechanical transmission with semi powershift. 17 forward gears and 16 reverse gears in 2 ranges (Low and High) shiftable with 1 lever. 8 gears for range (+1 in forward High range) with switch for up/down power-shifting. Forward/reverse shuttle lever on steering column. Optional creeper switch acted, 33+32 speeds.

1.3.3 Rear axle and final drives

| | | |
|---|---|---|
| D | Make model and type: | CNH, own drawing, crown wheel pinion with differential and inboard epicyclical reduction gear final drive |
| | Differential lock: | |
| D | Type: | multi-plate wet discs |
| C | Method of engagement: | electro-hydraulic actuation in response to signal from switch on right-hand control panel or auto differential lock actuation |
| C | Method of disengagement: | via panel switch or in response to signal from brakes on application, or auto differential lock disengagement |

1.3.4 Front axle and final drives

| | | |
|---|---|---|
| D | Make model and type: | CNH, own drawing, crown wheel and pinion with differential and outboard epicyclical reduction gear final drive |
| | Drive engagement | |
| D | Type: | dog clutch |
| C | Method of operation: | electro-hydraulic actuation in response to signal from switch on right-hand control panel or auto 4WD engagement |
| | Differential lock | |
| D | Type: | multi-plate wet discs |
| C | Method of engagement: | electro-hydraulic actuation in response to signal from switch on right-hand control panel or auto differential lock actuation |
| C | Method of disengagement: | via panel switch or in response to signal from brakes on application, or auto differential lock disengagement |

.3.5 Total ratios and travelling speeds

| | Speed No. [1] | Gear | Range | Number of engine revolutions for one revolution of the driving wheels | Nominal travelling speed [2] at rated engine speed of 2200 $min^{-1}$ (rev/min) km/h |
|---|---|---|---|---|---|
| | **Forward** | | | | |
| C | 1 | 1 | Low | 300.124 | 2.266 |
| C | 2 | 2 | Low | 244.663 | 2.780 |
| C | 3 | 3 | Low | 200.928 | 3.385 |
| C | 4 | 4 | Low | 163.797 | 4.152 |
| C | 5 | 5 | Low | 127.757 | 5.323 |
| C | 6 | 6 | Low | 104.148 | 6.530 |
| C | 7 | 7 | Low | 85.531 | 7.951 |
| C | 9 | 1 | High | 76.750 | 8.861 |
| C | 8 | 8 | Low | 69.725 | 9.754 |
| C | 10 | 2 | High | 62.567 | 10.870 |
| C | 11 | 3 | High | 51.383 | 13.236 |
| C | 12 | 4 | High | 41.887 | 16.236 |
| C | 13 | 5 | High | 32.671 | 20.816 |
| C | 14 | 6 | High | 26.633 | 25.536 |
| C | 15 | 7 | High | 21.872 | 31.094 |
| C | 16 | 8 | High | 17.831 | 38.141 |
| | **Reverse** | | | | |
| C | 1 | 1 | Low | 303.673 | 2.240 |
| C | 2 | 2 | Low | 247.556 | 2.747 |
| C | 3 | 3 | Low | 203.304 | 3.345 |
| C | 4 | 4 | Low | 165.734 | 4.104 |
| C | 5 | 5 | Low | 129.267 | 5.261 |
| C | 6 | 6 | Low | 105.379 | 6.454 |
| C | 7 | 7 | Low | 86.542 | 7.859 |
| C | 9 | 1 | High | 77.657 | 8.758 |
| C | 8 | 8 | Low | 70.550 | 9.640 |
| C | 10 | 2 | High | 63.307 | 10.743 |
| C | 11 | 3 | High | 51.990 | 13.081 |
| C | 12 | 4 | High | 42.383 | 16.046 |
| C | 13 | 5 | High | 33.057 | 20.573 |
| C | **14** | **6** | **High** | **26.948** | **25.237** |
| C | 15 | 7 | High | 22.131 | 30.730 |
| C | 16 | 8 | High | 18.041 | 37.697 |

[1] *As displayed on dashboard*

[2] *Calculated with a tyre dynamic radius index of 820 mm (ISO 4251-1:2005)*

C Number of revolution of front wheels for one revolution of rear-wheels: 1.353

## 1.4 Power take-off

1.4.1 Main power take-off

| | | |
|---|---|---|
| C | Type: | fully independent |
| C | Method of engagement: | engaged/disengaged by pulling/pushing a knob on the right-hand console, driven by electro-hydraulic operated multi-plate clutch |
| C | Number of shafts: | 1 |
| C | Method of changing power take-off shaft ends and speeds: | removing circlip, swapping shaft and replace circlip |

1.4.1.1 Power take-off proportional to engine speed

Power take-off at 540 $min^{-1}$ rev/min

| | | |
|---|---|---|
| C | Location: | at the rear of the tractor, in the median plane |
| C | Diameter of power take-off shaft end: | 35 mm |
| C | Number of splines: | 6, in conformity with ISO 500-1:2005, ISO 500-2:2004 and ISO 500-3:2004 |
| C | Height above ground: | 850 mm |
| C | Distance from the median plane of the tractor: | 0 mm |
| C | Distance behind rear-wheel axis: | 555 mm |
| C | PTO speed at rated engine speed: | 603 rev/min |
| C | Engine speed at standard power take-off speed: | 1970 rev/min |
| C | Ratio of rotation speeds (engine speed/p.t.o. speed): | 3.648 |
| D | Power restriction: | none |
| D | Maximum torque transmissible: | engine torque |
| C | Direction of rotation (viewed from behind tractor): | clockwise |

Power take-off at 1000 $min^{-1}$ rev/min

| | | |
|---|---|---|
| C | Location: | at the rear of the tractor, in the median plane |
| C | Diameter of power take-off shaft end: | 35 mm |
| C | Number of splines: | 21, in conformity with ISO 500-1:2005, ISO 500-2:2004 and ISO 500-3:2004 |
| C | Height above ground: | 850 mm |
| C | Distance from the median plane of the tractor: | 0 mm |
| C | Distance behind rear-wheel axis: | 555 mm |
| C | PTO speed at rated engine speed: | 1038 rev/min |
| C | Engine speed at standard power take-off speed: | 2120 rev/min |
| C | Ratio of rotation speeds (engine speed/p.t.o. speed): | 2.119 |
| D | Power restriction: | none |
| D | Maximum torque transmissible: | engine torque |
| C | Direction of rotation (viewed from behind tractor): | clockwise |

1.4.1.2 Power take-off proportional to ground speed

Optional, not fitted on tested tractor

4.2 Optional power take-off

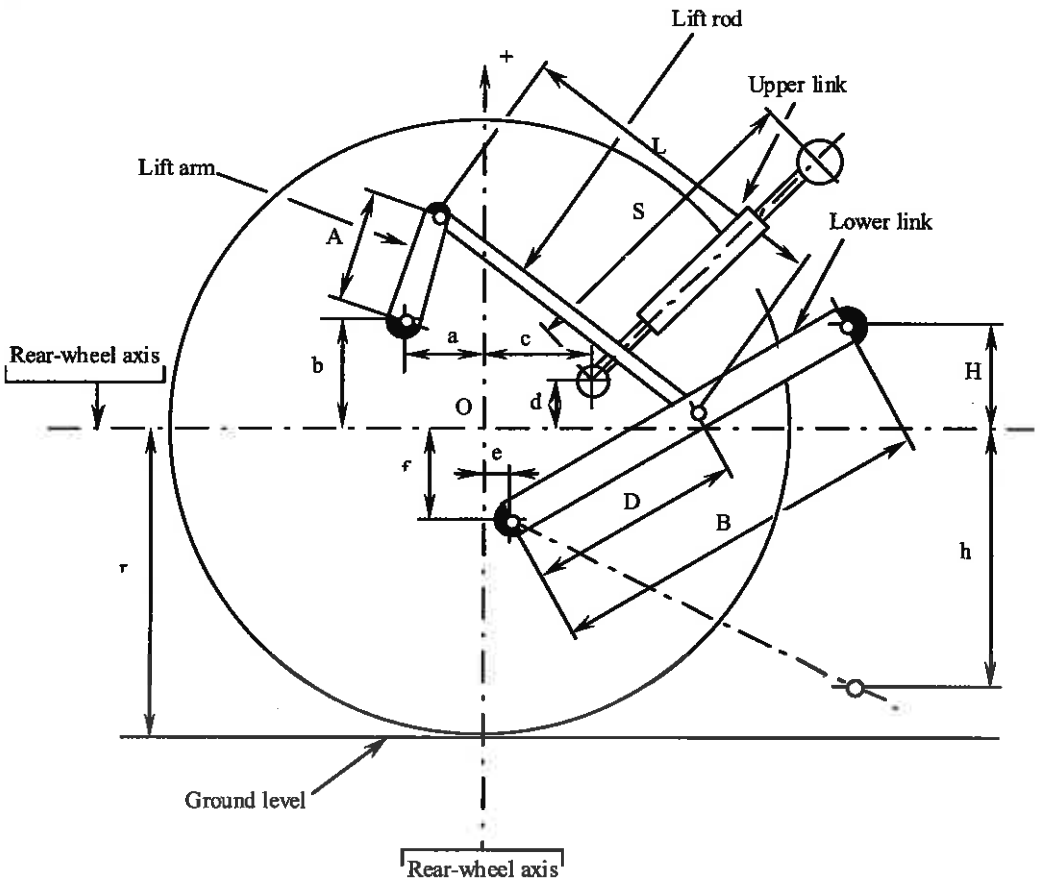
Optional, not fitted on tested tractor

**.5 Hydraulic power lift**

| | | |
|---|---|---|
| **C** | Make, model and type: | CNH, own drawing, draft and position control and float function; electronically controlled |
| **C** | Type of hydraulic system: | closed centre system |
| **C** | Type and number of cylinders (single or double-acting): | 2 single acting Ø 90 mm external |
| **C** | Type of linkage lock for transport: | hydraulic |
| **D** | Relief valve pressure setting (tolerance): | 21.0±1 MPa |
| **D** | Opening pressure of cylinder safety valve (if fitted): | 22±0.5 MPa |
| **D** | Lift pump type: | load sensing variable displacement pump driven by the engine shaft |
| **D** | Transmission between pump and engine: | mechanical |
| **C** | Type and number of filters: | 2, replaceable canister filters |
| **C** | Site of oil reservoir: | in common with transmission and rear axle |
| **C** | Type, number and location of tapping points: | 4 control valves, double acting, 4 couple of couplers at rear of tractor |
| **D** | Maximum volume of oil available to external cylinders: | 38 $dm^3$ |

**.6 Three point linkage**

| | | |
|---|---|---|
| **C** | Category: | 2nd, in conformity with categories 2 ISO 730-1:1994+Cor.1:1995 |
| **C** | Category adapter: | 3rd |



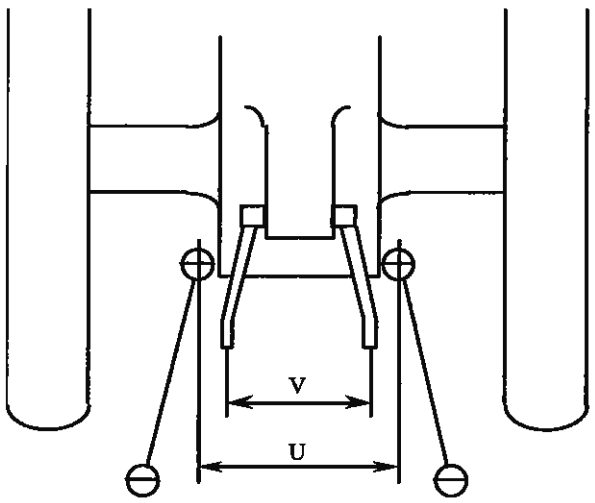




**Figure 1. Lift test- Rear linkage geometry**

**Table 1.1. Dimension of rear linkage geometry when connected to the standard frame**

| | | | Dimension or range | Settings used in test[1] | | |
|---|---|---|---|---|---|---|
| | | | | OECD[1] | | SAE[2] |
| | | | | Main | Additional | |
| | | | mm | mm | mm | |
| C | Length of lift arms: | (A) | 310 | 310 | 310 | 310 |
| C | Length of lower links: | (B) | 1010 | 1010 | 1010 | 1010 |
| | Distance of lift arm pivot point from rear wheel axis: | | | | | |
| C | - horizontally (rearward) | (a) | 138 | 138 | 138 | 138 |
| C | - vertically | (b) | 370 | 370 | 370 | 370 |
| C | Horizontal distance between the 2 lower link points: | (u) | 460 | 460 | 460 | 460 |
| C | Horizontal distance between the 2 lift arm end points: | (v) | 550 | 550 | 550 | 550 |
| C | Length of upper link: | (S) | 650→905 | 770 | 794 | 782 |
| | Distance of upper link pivot point from rear wheel axis: | | | | | |
| C | - horizontally (rearward) | (c) | 395-430 | 430 | 395 | 395 |
| C | - vertically | (d) | 200-250 | 200 | 250 | 250 |
| | Distance of lower link pivot point from rear wheel axis: | | | | | |
| C | - horizontally | (e) | 168 | 168 | 168 | 168 |
| C | - vertically | (f) | 235 | 235 | 235 | 235 |
| C | Distance of lower link pivot points to lift rod pivot points on lower links: | (D) | 505-585-665 | 505 | 665 | 585 |
| C | Length of lift rods: | (L) | 695→910 | 815 | 910 | 865/765 |
| | Height of lower hitch points (corresponding to travel of the lift without power) relative to the rear wheel axis:[2]: | | | | | |
| C | - in low position | (h) | -833→-198 | -620 | -600 | -620/-414 |
| C | - in high position | (H) | -90→325 | 111 | 29 | 43/205 |
| C | Height above ground of lower hitch points when locked in transport position | | Any height within lift range | | | |

[1] *Main and additional settings are in accordance with OECD Code and manufacturer specifications*

[2] *SAE settings is in accordance with SAE Standard and manufacturer specifications*
*SAE setting tests' results is not covered by OECD approval*

[3] *Assuming r=820 mm tyre dynamic radius index of 600/65R38 (equivalent to 18.4R38) tyres on rear axle (ISO 4251-1:2005)*

**1.7 Swinging drawbar**

| | | |
|---|---|---|
| C | Optional, not fitted: | |

**1.8 Trailer hitch**

| | | |
|---|---|---|
| C | Type: | frame and adjustable height towing coupling |
| C | Hole diameter: | 38 mm |
| C | High above ground | 979 mm max-456 mm min |
| C | Distance of hitch point from rear-wheel axis, horizontally: | 654 mm |
| | Distance of hitch point from power-take-off shaft end: | |
| C | Vertically: | 184 mm above, 338 mm below |
| C | Horizontally: | 99 mm |
| D | Maximum vertical permissible load: | 20.0 kN |

**1.9 Holed drawbar**

Optional, not fitted

**1.10 Steering**

| | | |
|---|---|---|
| D | Make model and type: | DANFOSS make, OSPC 160 OR model, hydrostatic type with independent circuit |
| | Method of operation | |
| D | Pump(s): | BOSCH, hydraulic gear pump |
| D | Ram(s): | 2 steering cylinders, one for each steering stub, acting directly on front axle |
| D | Working pressure: | 17.0±0.5 MPa |

**1.11 Brakes**

1.11.1 Service brake

| | | |
|---|---|---|
| D | Make model and type: | CNH make, oil bath disc, total 2 discs, 1 per side at rear axle, independently acting on the rear axle, additionally automatic 4WD engagement. |
| C | Method of operation: | hydraulically actuated with 2 pedals |
| C | Trailer braking take-off (hydraulic or air brake): | hydraulic brake system and air brake system |

1.11.2 Parking brake

| | | |
|---|---|---|
| C | Type: | 4 oil immersed discs acting on bevel pinion shaft |
| C | Method of operation: | mechanical cable linked by means of hand lever |

1.12 **Wheels**

Number

C Front: 2, driving and steering

C Rear: 2, driving

C Wheelbase: 2652 mm

Track width adjustment:

| | | Minimum mm | Maximum mm | Adjustment method |
|---|---|---|---|---|
| D | Front | 1325 | 2285 | Changing the position of the rims with respect to the disc |
| D | Rear | 1524 | 2438 | Changing the position of the rims in respect to the disc |

1.13 **Protective structure**

C Make model and type: CNH, SLTV 11, cab

C Manufacture's name and address: CNH Europe Holding S.A.
13, Rue Aldringen
L-1118 Luxemburg

Protective device

C Cab, frame, rollguard or other: four posts

C Tiltable or not tiltable: not tiltable

OECD Approval

C Approval number: 4/0 740/2

C Date of approval: 16th January 2008

C Nos. of minor modification certificates, if any: 4

1.14 **Seat**

1.14.1 Driver's seat

C Make model and type: GRAMMER, MSG 95G/741, air suspended type (Included in the EC Type Approval, with same position of seat reference point of GRAMMER MSG95A/741)

C Seat and steering wheel reversible: no

C Type of suspension: parallelogram linkage

C Type of damping: hydraulic

Range of adjustment:

C Longitudinally: 210 mm

C Vertically: 80 mm

C Safety belt: yes

Type: pelvic

1.14.2 Optional driver's seat(s)

| Make | Model | Type of suspension | Type of damping | Range of adjustment | |
|---|---|---|---|---|---|
| | | | | Longitudinal | Vertical |
| | | | | mm | mm |
| GRAMMER | MSG 85/731 | Mechanical | Hydraulic | 210 | 80 |
| GRAMMER | MSG 44/520 | Mechanical | Hydraulic | 210 | 80 |
| GRAMMER | MSG 93/731 | Air | Hydraulic | 210 | 60 |
| GRAMMER | MSG 95GL/741[1] | Air | Hydraulic | 210 | 80 |
| *[1]Included in the EC Type Approval, with same position of seat reference point of GRAMMER MSG95A/741* | | | | | |

1.14.3 Passenger seat

- **C** Location: on the left side of the driver's seat
- **C** Capacity (number): 1

**1.15 Lighting**

| | | Height above ground of centre | Size (lxh) | Distance from outside edge of lights to median plane of tractor |
|---|---|---|---|---|
| | | mm | mm | mm |
| C | Headlights | 1345 | 145x145 | 290 |
| C | Front direction light | 1995 | 80x90 | 955 |
| C | Front position light | 1915 | 80x75 | 995 |
| C | Front lower working light | 1452 | 145x215 | 290 |
| C | Front middle working light | 2380 | 135x85 | 980 |
| C | Front higher working light | 2815 | 150x75 | 600 |
| C | Rear direction lights | 1855 | 265x55 | 1115 |
| C | Stop/rear position | 1800 | 265x55 | 1115 |
| C | Reflectors | 800 | 105x45 | 645 |
| C | Rear middle working light | 2280 | 135x85 | 920 |
| C | Rear higher working light | 2745 | 135x85 | 515 |

## 2 TEST CONDITIONS

### 2.1 Overall dimensions

| | Length | Width | | Height at top of | |
|---|---|---|---|---|---|
| | | minimum | maximum | protective structure | exhaust pipe |
| | mm | mm | mm | mm | mm |
| Unballasted | 4825 | 2165 | 2922 | 2920 | 2940 |

### 2.2 Ground clearance: 460 mm

Clearance-limiting part: towhook frame

### 2.3 Tractor mass (with cab)

| | Unballasted | |
|---|---|---|
| | without driver | with driver |
| | kg | kg |
| Front | 2140 | 2150 |
| Rear | 3385 | 3450 |
| Total | 5525 | 5600 |

### 2.4 Ballast

Optional, not fitted during tests

### 2.5 Track specifications

Not applicable

### 2.6 Tyres and track width specifications

| | Front | Rear |
|---|---|---|
| Tyres: | | |
| - dimensions (equivalent) | 480/65R28 (14.9R28) | 600/65R38 (18.4R38) |
| - ply rate | none | none |
| - load index | 136 | 153 |
| - type | radial | radial |
| - maximum load (tyre manufacturer's) | 15.7 kN | 25.8 kN |
| - maximum load (tractor manufacturer's) | 15.7 kN | 25.8 kN |
| - inflation pressure (tyre manufacturer's) | 80 kPa | 80 kPa |
| - dynamic radius index* | 640 mm | 820 mm |
| Chosen track width: | 1765 mm | 1735 mm |
| ** ISO 4251-1:2005* | | |

## 2.7 Fuel

Type: Diesel oil, in conformity with UNI EN 590 July 2004.

Density at 15 °C: 840 kg/m$^3$

## 2.8 Oils and lubricants

### 2.8.1 Capacity and change interval

| | Capacity | Oil change | Filter change |
|---|---|---|---|
| | dm$^3$ | h | h |
| Engine | 15.0 | 600 | 600 |
| Gear box, rear axle, final drive, hydraulic system and steering | 62.0 | 1200 or annually | 1200 or annually |
| Front axle | 9.0 | 1200 or annually | None |
| Final drive (front) | 1.5 | 1200 or annually | None |
| Brakes | 0.5 | Max. level | None |

### 2.8.2 Specifications (SAE, API, CCMC, ACEA, Mil.L, ISO)

| | Recommended | Used during test |
|---|---|---|
| **Engine oil**<br>- Type:<br>- Viscosity:<br>- Classification: | 15W-40<br>14.4 cSt at 100 °C (ASTM D 445)<br>API CI-4/CH-4<br>ACEA E7/E5 | As recommended |
| **Transmission oils**<br>- Type:<br>- Viscosity:<br>- Classification | SAE 10W-30<br>10 cSt at 100 °C (ASTM D 445)<br>API GL 4 | As recommended |
| **Hydraulic fluid**<br>- Type:<br>- Viscosity:<br>- Classification | SAE 10W-30<br>10 cSt at 100 °C (ASTM D 445)<br>API GL 40 | As recommended |
| **Steering oil**<br>- Type:<br>- Viscosity:<br>- Classification: | SAE 10W-30<br>10 cSt at 100 °C (ASTM D 445)<br>API GL 40 | As recommended |
| **Grease**<br>- Type:<br>- Viscosity:<br>- Classification: | Lithium based<br>Not applicable<br>NLGI 2 | As recommended |
| **Brake fluid**<br>- Type:<br>- Viscosity:<br>- Classification: | No equivalent<br>6.5 cSt at 100 °C (ASTM D 445)<br>ISO 7308 | As recommended |

### 2.8.3 Grease

Number of lubrication points: 16

## TEST RESULTS

### .1 Main power take-off (without power boost)

Date and location of tests: 22nd January 2008, I.M.A.MO.TER, TORINO, ITALY
Type of dynamometer: parasitic currents, BORGHI&SAVERI FA300-30SP

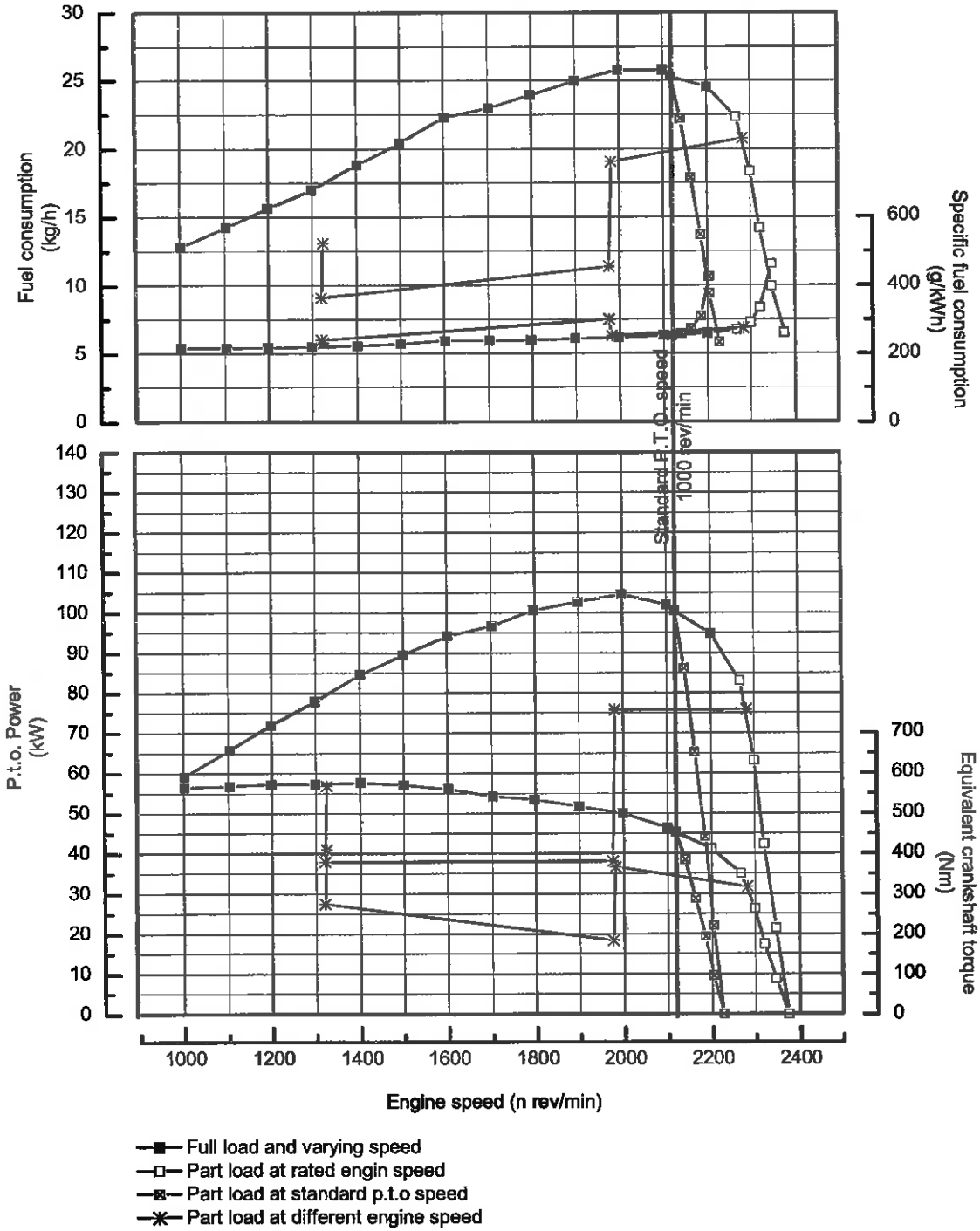
| Power | Speed | | | Fuel consumption | | | Specific energy |
|---|---|---|---|---|---|---|---|
| | Engine | P.T.O. | Fan | Hourly | | Specific | |
| kW | $min^{-1}$ (rev/min) | | | kg/h | l/h | g/kWh | kWh/l |
| 3.1.1 MAXIMUM POWER-ONE - HOUR TEST | | | | | | | |
| 104.6 | 1998 | 943 | 2385 | 25.77 | 30.68 | 246 | 3.41 |
| 3.1.2 POWER AT RATED ENGINE SPEED | | | | | | | |
| 94.8 | 2200 | 1038 | 2340 | 24.54 | 29.21 | 259 | 3.24 |
| 3.1.3 POWER AT STANDARD PTO SPEED [1000 ± 25 $min^{-1}$] | | | | | | | |
| 100.4 | 2119 | 1000 | 2475 | 25.30 | 30.12 | 252 | 3.33 |
| 3.1.4 PART LOADS | | | | | | | |
| 3.1.4.1 the torque corresponding to maximum power at rated engine speed | | | | | | | |
| 94.8 | 2200 | 1038 | 2340 | 24.54 | 29.21 | 259 | 3.24 |
| 3.1.4.2 85% of torque obtained in 3.1.4.1 | | | | | | | |
| 83.0 | 2267 | 1070 | 2235 | 22.35 | 26.61 | 269 | 3.12 |
| 3.1.4.3 75% of torque defined in 3.1.4.2 | | | | | | | |
| 63.2 | 2299 | 1085 | 2030 | 18.35 | 21.85 | 290 | 2.89 |
| 3.1.4.4 50% of torque defined in 3.1.4.2 | | | | | | | |
| 42.4 | 2320 | 1095 | 1855 | 14.20 | 16.90 | 335 | 2.51 |
| 3.1.4.5 25% of torque defined in 3.1.4.2 | | | | | | | |
| 21.4 | 2346 | 1107 | 1650 | 9.92 | 11.81 | 463 | 1.82 |
| 3.1.4.6 unloaded | | | | | | | |
| - | 2375 | 1121 | 1600 | 6.51 | 7.75 | - | - |
| 3.1.5 PART LOADS AT STANDARD PTO SPEED [1000 ± 25 $min^{-1}$)] | | | | | | | |
| 3.1.5.1 the torque corresponding to maximum power | | | | | | | |
| 100.4 | 2119 | 1000 | 2475 | 25.30 | 30.12 | 252 | 3.33 |
| 3.1.5.2 85% of torque obtained in 3.1.5.1 | | | | | | | |
| 86.2 | 2140 | 1010 | 2300 | 22.21 | 26.44 | 258 | 3.26 |
| 3.1.5.3 75% of torque defined in 3.1.5.2 | | | | | | | |
| 65.3 | 2163 | 1021 | 2050 | 17.86 | 21.26 | 273 | 3.07 |
| 3.1.5.4 50% of torque defined in 3.1.5.2 | | | | | | | |
| 44.2 | 2185 | 1031 | 1870 | 13.70 | 16.31 | 310 | 2.71 |
| 3.1.5.5 25% of torque defined in 3.1.5.2 | | | | | | | |
| 22.1 | 2204 | 1040 | 1800 | 9.40 | 11.19 | 425 | 1.98 |
| 3.1.5.6 unloaded | | | | | | | |
| - | 2227 | 1051 | 1720 | 5.81 | 6.92 | - | - |

| Power | Speed | | | Fuel consumption | | | Specific energy |
|---|---|---|---|---|---|---|---|
| | Engine | P.T.O. | Fan | Hourly | | Specific | |
| kW | $min^{-1}$ (rev/min) | | | kg/h | l/h | g/kWh | kWh/l |
| 3.1.6 PART LOADS AT DIFFERENT ENGINE SPEEDS<br>3.1.6.1 maximum power at rated engine speed | | | | | | | |
| 94.8 | 2200 | 1038 | 2340 | 24.54 | 29.21 | 259 | 3.24 |
| 3.1.6.2 80% of power obtained in 3.1.6.1 at max speed setting | | | | | | | |
| 75.9 | 2282 | 1077 | 2150 | 20.77 | 24.73 | 274 | 3.07 |
| 3.1.6.3 80% of power obtained in 3.1.6.1 with governor control set to 90% of rated engine speed | | | | | | | |
| 75.8 | 1981 | 935 | 1860 | 19.06 | 22.69 | 252 | 3.34 |
| 3.1.6.4 40% of power obtained in 3.1.6.1 with governor control set to 90% of rated engine speed | | | | | | | |
| 38.0 | 1975 | 932 | 1720 | 11.38 | 13.55 | 300 | 2.80 |
| 3.1.6.5 60% of power obtained in 3.1.6.1 with governor control set to 60% of rated engine speed | | | | | | | |
| 56.9 | 1324 | 625 | 1570 | 13.07 | 15.56 | 230 | 3.66 |
| 3.1.6.6 40% of power obtained in 3.1.6.1 with governor control set to 60% of rated engine speed | | | | | | | |
| 37.9 | 1320 | 623 | 1480 | 9.07 | 10.80 | 239 | 3.51 |

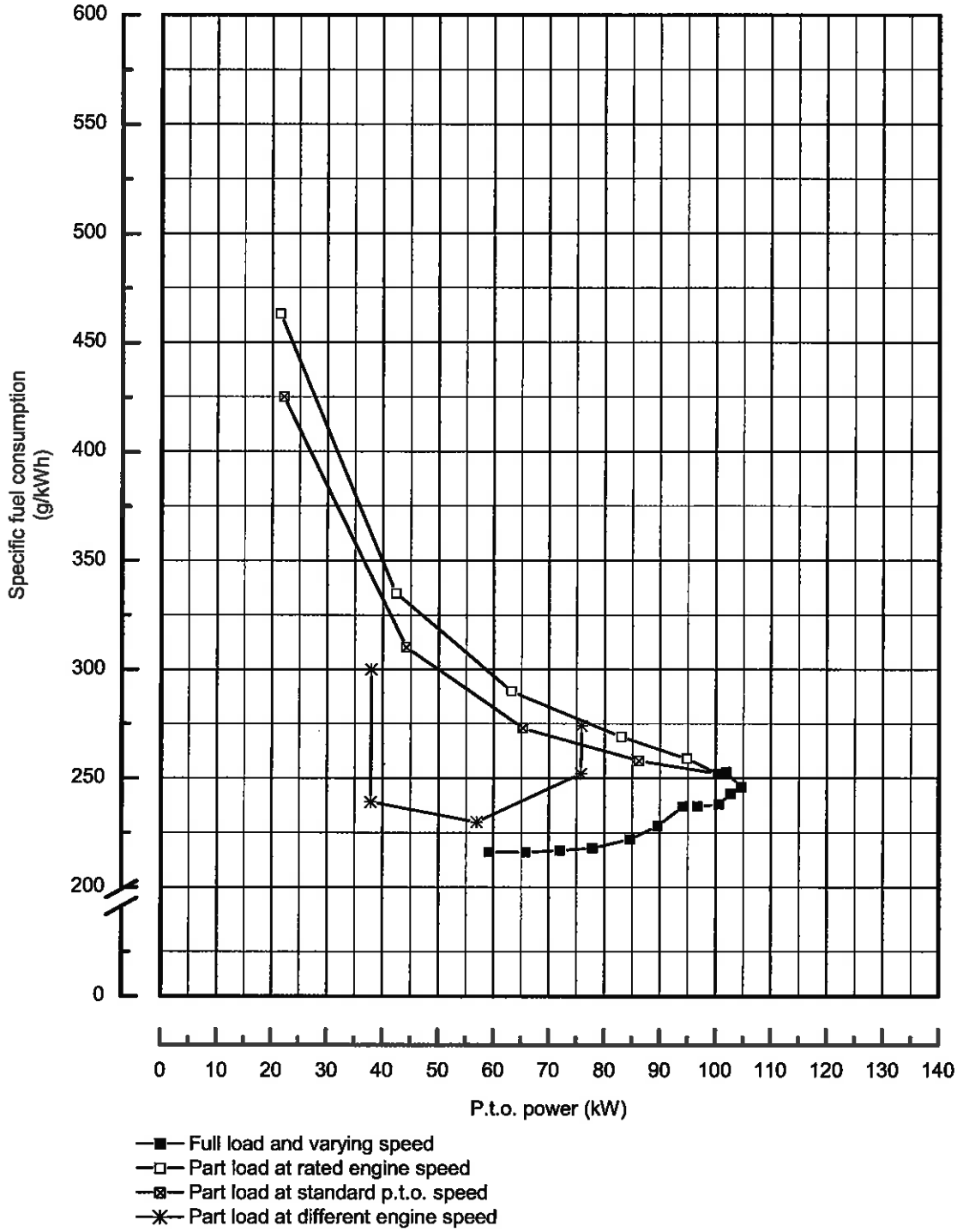
- No load maximum engine speed: 2375 $min^{-1}$ (rev/min)
- Torque (equivalent crankshaft) at maximum power
  - At rated engine speed 411.5 Nm
  - At 1-hour test 499.8 Nm
- Maximum torque (equivalent crankshaft): 576.7 Nm at 1401 $min^{-1}$ (rev/min)

| **Mean atmospheric conditions:** | |
|---|---|
| Temperature | 19.0 °C |
| Pressure | 98.5 kPa |
| Relative humidity | 27% |
| **Maximum temperatures:** | |
| Coolant | 88.1 °C |
| Engine oil | 109.7 °C |
| Fuel | 48.6 °C |
| Engine air intake | 27.9 °C |

**Graph 1. Power take-off test (without power boost)**



**Graph 2. Power take-off test (without power boost)**



3.1.A **Optional power take-off test (with power boost)** (see [1] next page)

Date and location of tests: 23rd January 2008, I.M.A.MO.TER, TORINO, ITALY

Type of dynamometer: parasitic currents, BORGHI&SAVERI FA300-30SP

| Power | Speed | | | Fuel consumption | | | Specific energy |
|---|---|---|---|---|---|---|---|
| | Engine | P.T.O. | Fan | Hourly | | Specific | |
| kW | min$^{-1}$ (rev/min) | | | kg/h | l/h | g/kWh | kWh/l |
| 3.1.1.A. | MAXIMUM POWER-ONE - HOUR TEST | | | | | | |
| 122.5 | 1996 | 942 | 2640 | 29.89 | 35.58 | 244 | 3.44 |
| 3.1.2.A | POWER AT RATED ENGINE SPEED | | | | | | |
| 115.0 | 2202 | 1039 | 2535 | 28.77 | 34.25 | 250 | 3.36 |
| 3.1.3.A | POWER AT STANDARD PTO SPEED [1000 ± 25 min$^{-1}$] | | | | | | |
| 119.2 | 2121 | 1001 | 2760 | 29.48 | 35.10 | 247 | 3.40 |
| 3.1.4.A | PART LOADS | | | | | | |
| 3.1.4.1.A | the torque corresponding to maximum power at rated engine speed | | | | | | |
| 115.0 | 2202 | 1039 | 2535 | 28.77 | 34.25 | 250 | 3.36 |
| 3.1.4.2.A | 85% of torque obtained in 3.1.4.1 | | | | | | |
| 99.5 | 2242 | 1058 | 2410 | 25.60 | 30.48 | 257 | 3.26 |
| 3.1.4.3.A | 75% of torque defined in 3.1.4.2 | | | | | | |
| 76.0 | 2282 | 1077 | 2214 | 20.68 | 24.62 | 272 | 3.09 |
| 3.1.4.4.A | 50% of torque defined in 3.1.4.2 | | | | | | |
| 51.3 | 2312 | 1091 | 2170 | 15.69 | 18.68 | 306 | 2.75 |
| 3.1.4.5.A | 25% of torque defined in 3.1.4.2 | | | | | | |
| 26.0 | 2339 | 1104 | 2059 | 10.69 | 12.73 | 411 | 2.04 |
| 3.1.4.6.A | unloaded | | | | | | |
| - | 2373 | 1120 | 1815 | 6.45 | 7.68 | - | - |
| 3.1.5.A | PART LOADS AT STANDARD PTO SPEED [1000 ± 25 min$^{-1}$)] | | | | | | |
| 3.1.5.1.A | the torque corresponding to maximum power | | | | | | |
| 119.2 | 2121 | 1001 | 2760 | 29.48 | 35.10 | 247 | 3.40 |
| 3.1.5.2.A | 85% of torque obtained in 3.1.5.1 | | | | | | |
| 102.3 | 2142 | 1011 | 2427 | 25.60 | 30.48 | 250 | 3.36 |
| 3.1.5.3.A | 75% of torque defined in 3.1.5.2 | | | | | | |
| 77.7 | 2168 | 1023 | 2376 | 20.33 | 24.20 | 262 | 3.21 |
| 3.1.5.4.A | 50% of torque defined in 3.1.5.2 | | | | | | |
| 52.3 | 2195 | 1036 | 2004 | 15.27 | 18.18 | 292 | 2.88 |
| 3.1.5.5.A | 25% of torque defined in 3.1.5.2 | | | | | | |
| 26.6 | 2216 | 1046 | 1919 | 10.11 | 12.04 | 380 | 2.21 |
| 3.1.5.6.A | unloaded | | | | | | |
| - | 2244 | 1059 | 1779 | 5.75 | 6.85 | - | - |

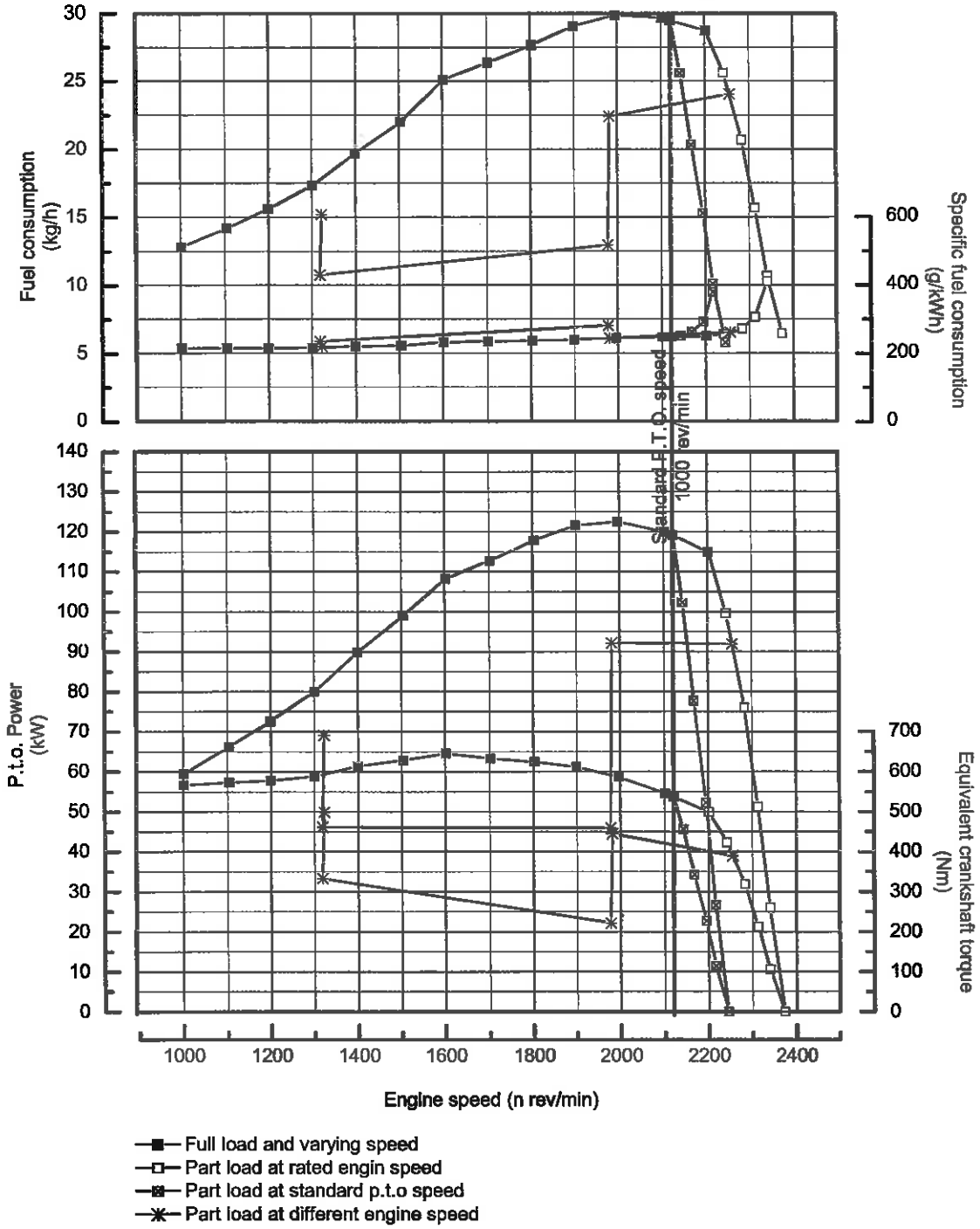
| Power | Speed | | | Fuel consumption | | | Specific energy |
|---|---|---|---|---|---|---|---|
| | Engine | P.T.O. | Fan | Hourly | | Specific | |
| kW | $min^{-1}$ (rev/min) | | | kg/h | l/h | g/kWh | kWh/l |
| 3.1.6.A PART LOADS AT DIFFERENT ENGINE SPEEDS<br>3.1.6.1.A maximum power at rated engine speed | | | | | | | |
| 115.0 | 2202 | 1039 | 2535 | 28.77 | 34.25 | 250 | 3.36 |
| 3.1.6.2.A 80% of power obtained in 3.1.6.1 at max speed setting | | | | | | | |
| 92.0 | 2255 | 1064 | 2333 | 24.05 | 28.63 | 261 | 3.21 |
| 3.1.6.3.A 80% of power obtained in 3.1.6.1 with governor control set to 90% of rated engine speed | | | | | | | |
| 92.2 | 1981 | 935 | 2287 | 22.42 | 26.69 | 243 | 3.46 |
| 3.1.6.4.A 40% of power obtained in 3.1.6.1 with governor control set to 90% of rated engine speed | | | | | | | |
| 45.9 | 1977 | 933 | 2088 | 12.94 | 15.40 | 282 | 2.98 |
| 3.1.6.5.A 60% of power obtained in 3.1.6.1 with governor control set to 60% of rated engine speed | | | | | | | |
| 69.1 | 1322 | 624 | 1824 | 15.20 | 18.10 | 220 | 3.82 |
| 3.1.5.6.A 40% of power obtained in 3.1.6.1 with governor control set to 60% of rated engine speed | | | | | | | |
| 46.1 | 1318 | 622 | 1815 | 10.76 | 12.81 | 234 | 3.60 |

- No load maximum engine speed: 2373 $min^{-1}$ (rev/min)
- Torque (equivalent crankshaft) at maximum power
  - At rated engine speed 498.8 Nm
  - At 1-hour test 586.1Nm
- Maximum torque (equivalent crankshaft): 645.6 Nm at 1602 $min^{-1}$ (rev/min)

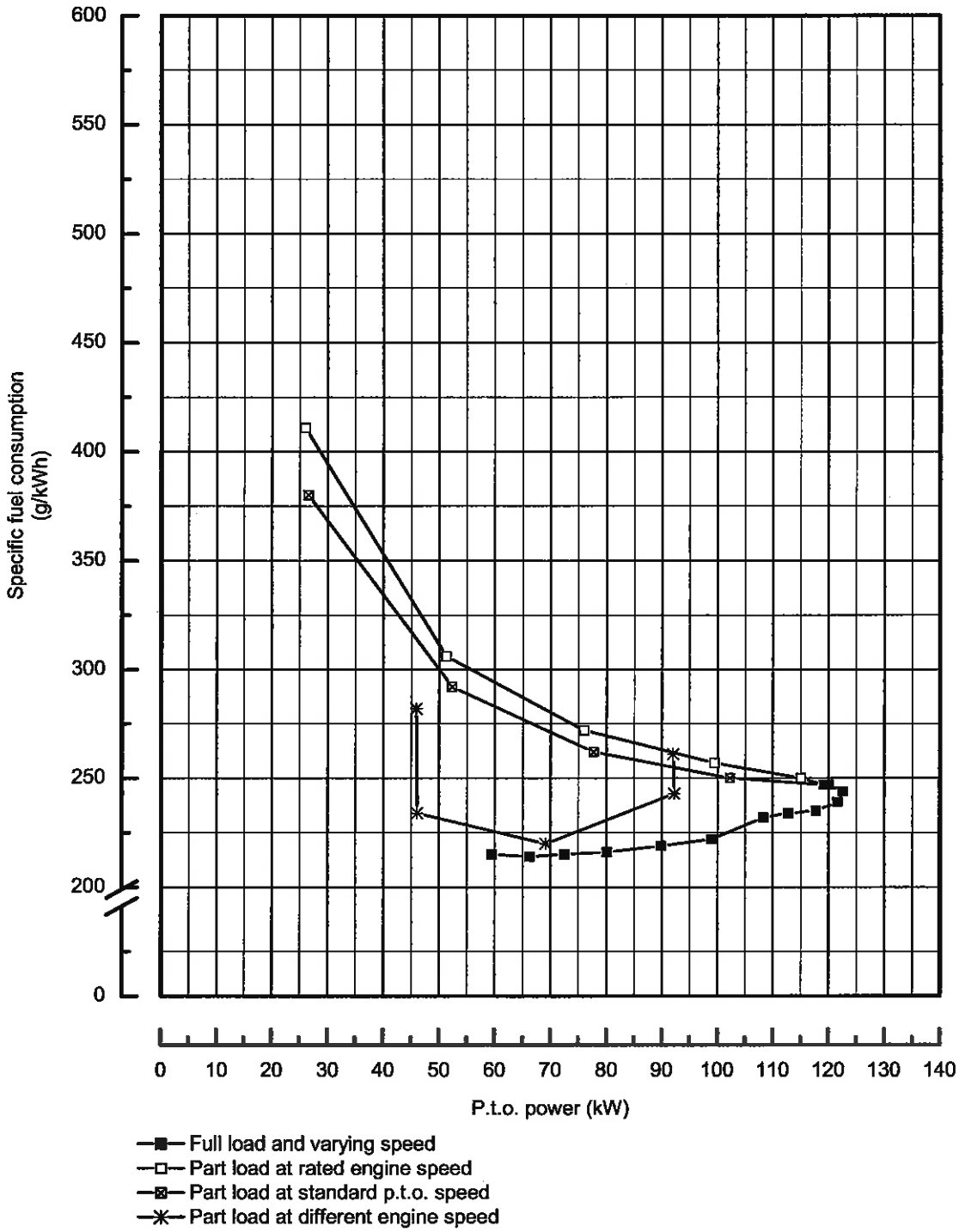
| **Mean atmospheric conditions:** | |
|---|---|
| Temperature | 19.0 °C |
| Pressure | 100.0 kPa |
| Relative humidity | 27% |
| **Maximum temperatures:** | |
| Coolant | 89.9 °C |
| Engine oil | 111.0 °C |
| Fuel | 48.0°C |
| Engine air intake | 25.3 °C |

[1] In operation conditions of power take-off test the EPM system makes the engine operate in un-boosted mode.
For this test an over ride system has been provide by the manufacturer of the tractor to enable engine operate in boosted mode when tractor is stationary.
Results of this test can be achieved ONLY when EPM system makes the engine operate in PTO operation mode.
See Foreword on page 2 for more details on EPM operation modes.

**Graph 3. Power take-off test (with power boost)**



**Graph 4. Power take-off test (with power boost)**



## 3.2 Hydraulic power and lifting force

Date of tests: 20th and 21st February 2008

### 3.2.1 Hydraulic Power Test

#### 3.2.1.1 Hydraulic fluid data

Hydraulic fluid data:
Viscosity index (ASTM D 2270): 147
Viscosity at 65°C (ASTM D 341): 25 $mm^2/s$

#### 3.2.1.2 Compulsory reporting

| | Pressure[1] | Reservoir oil Temperature °C (65°C target) | | Engine speed | Flow rate | Power |
|---|---|---|---|---|---|---|
| | MPa | Min. | Max. | $min^{-1}$ | l/min | kW |
| Rated Engine Speed | | | | | | |
| 3.2.1.2.1 A Pump delivery rate at minimum pressure through one coupler | | 60 | 70 | 2370 | 95.9 | |
| 3.2.1.2.1 B Pump delivery rate at minimum pressure through four couplers | | 60 | 70 | 2370 | 104.0 | |
| 3.2.1.2.2 Maximum (sustained) pressure with relief valve open as measured at the coupler Pump stalled: Yes | 20.6 | 62 | 71 | 2360 | | |
| 3.2.1.2.3 A Flow rate corresponding to a hydraulic pressure equivalent to 90% of the actual relief valve pressure setting and corresponding hydraulic power measured at one coupler | 18.5 | 62 | 71 | 2360 | 71.1 | 21.9 |
| 3.2.1.2.3 B Flow rate corresponding to a hydraulic pressure equivalent to 90% of the actual relief valve pressure setting and corresponding hydraulic power measured at four couplers | 18.5 | 61 | 70 | 2360 | 89.9 | 27.7 |
| 3.2.1.2.4 Maximum available hydraulic power with flow through a single coupler pair, and corresponding flow and available coupler outlet pressure | 17.0 | 62 | 71 | 2360 | 93.6 | 26.5 |
| 3.2.1.2.5 Maximum available hydraulic power with coupler pairs operating simultaneously (flow through four couplers), and corresponding flow and available coupler outlet pressure | 18.0 | 61 | 70 | 2360 | 99.7 | 29.9 |

[1] *Pressure as measured at the outlet coupler (pressure near coupler where oil is exiting from tractor)*

3.2.1.3 Supplementary Reporting:

| | Pressure[2] | Reservoir oil Temperature °C | | Engine speed | Flow rate | Power |
|---|---|---|---|---|---|---|
| | MPa | min. | max. | $min^{-1}$ | l/min | kW |
| 3.2.1.3.1 Pump delivery rate at minimum pressure from one couple pair | | 63 | 70 | 2200 | 95.9 | |
| 3.2.1.3.2 Maximum available flow and maximum useable (*continuous*) power from one coupler | 15.5 | 63 | 70 | 2200 | 87.9 | 22.7 |
| 3.2.1.3.3 Maximum available flow and maximum useable (*continuous*) power from four coupler pairs operating simultaneously | 15.7 | 61 | 71 | 2200 | 93.0 | 24.3 |
| 3.2.1.3.4 Maximum differential pressure Category 1 Tractor | | | | | | |
| 3.2.1.3.5 Maximum differential pressure Category 2 or 3 Tractor | 18.9 | 63 | 70 | 2200 | 50 | |
| 3.2.1.3.6 Peak Pressure | | | | | | |
| 3.2.1.3.7 Maximum sump return pressure with coupler | 2.3 | 63 | 70 | 2200 | | |
| 3.2.1.3.8 Maximum return pressure without coupler | | | | | | |

[2] *Differential pressure (pressure near coupler where oil is exiting from tractor – pressure near coupler where oil is re-entering the tractor)*

2.2 Compulsory Power lift test

Linkage settings for test - see Table 1.1 and Figure 1.1 and 1.2

| | at the hitch point | on the frame |
|---|---|---|
| Height of lower hitch points above ground in down position | 200 mm | 200 mm |
| Vertical movement:<br>- With lifting force<br>- Without lifting force | <br>717 mm<br>731 mm | <br>858 mm<br>884 mm |
| Maximum corrected force exerted through full range | 43.0 kN | 34.7 kN |
| Corresponding pressure of hydraulic fluid | 18.5 MPa | 18.5 MPa |
| Moment about rear-wheel axis | 50.7 kNm | 62.0 kNm |
| Maximum tilt angle of mast from the vertical | none | 9.7 degrees |

| Lifting heights relative to the horizontal plane including the lower link pivot points | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| mm | -450 | -385 | -320 | -220 | -120 | 0 | 130 | 230 | 332 | 408 |
| Lifting forces (the values of force measured shall be corrected to correspond to a hydraulic pressure equivalent to a 90% of the actual relief valve pressure setting of the hydraulic lift system): | | | | | | | | | | |
| at the hitch points kN | - | 45.7 | 46.6 | 47.5 | 49.3 | 51.0 | 52.2 | 53.1 | 43.0 | - |
| Corresponding pressure: 18.5 MPa | | | | | | | | | | |
| at the frame kN | 40.0 | 39.6 | 39.8 | 40.2 | 40.5 | 40.4 | 39.7 | 39 | 38 | 34.7 |
| Corresponding pressure: 18.5 MPa | | | | | | | | | | |

3.2.3 Optional Power lift test

Tests have been performed in accordance with setting requested by manufacturer.

Linkage settings for test - see *"Additional"* column in Table 1.1 and Figure 1.1 and 1.2

| | at the hitch point | on the frame |
|---|---|---|
| Height of lower hitch points above ground in down position | 220 mm | 220 mm |
| Vertical movement<br>- With power travel of the lift<br>- Without power travel of the lift | <br>615 mm<br>629 mm | <br>688 mm<br>702 mm |
| Maximum corrected force exerted through full range | 43.5 kN | 35.3 kN |
| Corresponding pressure of hydraulic fluid | 18.5 MPa | 18.5 MPa |
| Moment about rear-wheel axis | 51.2 kNm | 63.1 kNm |
| Maximum tilt angle of mast from the vertical | none | 4.4 degrees |

| Lifting heights relative to the horizontal plane including the lower link pivot points | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| mm | -405 | -365 | -320 | -220 | -120 | 0 | 80 | 180 | 250 | 283 |
| Lifting forces (the values of force measured shall be corrected to correspond to a hydraulic pressure equivalent to a 90% of the actual relief valve pressure setting of the hydraulic lift system): | | | | | | | | | | |
| at the hitch points kN | - | 55.7 | 55.5 | 57.1 | 58.6 | 59.0 | 58.9 | 58.1 | 43.5 | - |
| Corresponding pressure:18.5 MPa | | | | | | | | | | |
| at the frame kN | 52.0 | - | 51.2 | 51.9 | 51.7 | 50.7 | 49.6 | 47.7 | - | 35.3 |
| Corresponding pressure: 18.5 MPa | | | | | | | | | | |

.3 **Compulsory drawbar power and fuel consumption test (unballasted tractor)**

In operation conditions of drawbar power test EPM system makes the engine operate in un-boosted mode.
See Foreword on page 2 for more details on EPM operation modes.

Date of tests: 12th and 13th May 2008
Type of track: asphalt

| Height of drawbar above ground | Tyre inflation pressure | |
|---|---|---|
| | Front | Rear |
| 480 mm | 80 kPa | 80 kPa |

| Speed No.[1] | Power | Drawbar pull | Speed | Engine speed | Fan speed | Slip of wheels | Specific fuel consumption | Specific energy | Temperature | | | Atmospheric conditions | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Fuel | Coolant | Engine oil | Temperature | Relative humidity | Pressure |
| | kW | kN | km/h | $min^{-1}$ | $min^{-1}$ | % | g/kWh | kWh/l | °C | °C | °C | °C | % | kPa |
| 3.3.1 | MAXIMUM POWER IN TESTED GEARS/SPEED SETTINGS | | | | | | | | | | | | | |
| 1 | 31.7 | 52.80 | 2.16 | 2322 | 1926 | 11.28 | 426 | 1.97 | 30 | 89 | 101 | 27 | 28 | 98.0 |
| 2 | 38.6 | 52.18 | 2.66 | 2315 | 2160 | 10.58 | 392 | 2.14 | 31 | 89 | 102 | 26 | 23 | 98.0 |
| 3 | 46.1 | 51.17 | 3.24 | 2302 | 2315 | 10.48 | 386 | 2.18 | 32 | 89 | 103 | 27 | 25 | 98.0 |
| 4 | 55.9 | 51.30 | 3.92 | 2284 | 2385 | 10.74 | 355 | 2.37 | 35 | 89 | 105 | 29 | 25 | 98.0 |
| 5 | 70.9 | 50.02 | 5.10 | 2258 | 2482 | 8.78 | 321 | 2.61 | 37 | 89 | 106 | 28 | 23 | 98.0 |
| 6 | 83.3 | 48.60 | 6.17 | 2179 | 2586 | 7.28 | 296 | 2.84 | 38 | 88 | 104 | 28 | 22 | 98.0 |
| 7 | 86.6 | 45.70 | 6.82 | 1965 | 2629 | 5.87 | 296 | 2.83 | 39 | 88 | 104 | 29 | 21 | 98.0 |
| 9 | 88.5 | 39.84 | 8.00 | 2026 | 2665 | 4.14 | 289 | 2.91 | 38 | 88 | 104 | 29 | 21 | 98.0 |
| 8 | 89.3 | 36.33 | 8.85 | 2024 | 2656 | 3.76 | 284 | 2.95 | 41 | 87 | 104 | 28 | 22 | 98.0 |
| 10 | 88.9 | 32.26 | 9.92 | 2015 | 2696 | 3.12 | 288 | 2.91 | 41 | 88 | 104 | 27 | 22 | 98.0 |
| 11 | 86.7 | 25.87 | 12.07 | 1997 | 2698 | 2.31 | 297 | 2.83 | 42 | 87 | 103 | 29 | 23 | 98.0 |
| 12 | 85.8 | 20.93 | 14.75 | 1981 | 2716 | 1.83 | 301 | 2.79 | 42 | 87 | 100 | 28 | 22 | 98.0 |

[1] *As displayed on dashboard*

| Speed No.[1] | Power | Drawbar pull | Speed | Engine speed | Fan speed | Slip of wheels | Specific fuel consumption | Specific energy | Temperature | | | Atmospheric conditions | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Fuel | Coolant | Engine oil | Temperature | Relative humidity | Pressure |
| | kW | kN | km/h | $min^{-1}$ | $min^{-1}$ | % | g/kWh | kWh/l | °C | °C | °C | °C | % | kPa |
| 3.3.2 FUEL CONSUMPTION | | | | | | | | | | | | | | |
| 3.3.2.1 In selected gear/speed setting nearest 7.5 km/h, at maximum power at rated engine speed | | | | | | | | | | | | | | |
| 7 | 78.3 | 35.73 | 7.89 | 2201 | 2352 | 4.87 | 306 | 2.74 | 38 | 89 | 100 | 24 | 34 | 98.1 |
| 3.3.2.1.1 75% of pull corresponding to maximum power at rated engine speed | | | | | | | | | | | | | | |
| 7 | 61.1 | 26.80 | 8.21 | 2275 | 2436 | 3.73 | 334 | 2.52 | 39 | 89 | 101 | 26 | 33 | 98.1 |
| 3.3.2.1.2 50% of pull corresponding to maximum power at rated engine speed | | | | | | | | | | | | | | |
| 7 | 42.1 | 17.77 | 8.53 | 2304 | 2340 | 1.84 | 389 | 2.16 | 38 | 89 | 101 | 25 | 28 | 98.1 |
| 3.3.2.1.3 Highest gear/speed setting at reduced engine speed able to achieve both 3.3.2.1.1 and 3.3.2.1.2; same pull and travelling speed as in 3.3.2.1.1 | | | | | | | | | | | | | | |
| 9 | 60.5 | 26.89 | 8.10 | 2018 | 2220 | 3.65 | 305 | 2.75 | 37 | 88 | 101 | 26 | 30 | 98.1 |
| 3.3.2.1.4 Same gear/speed selection as 3.3.2.1.3 at reduced speed; same pull and travelling speed as in 3.3.2.1.2 | | | | | | | | | | | | | | |
| 9 | 40.6 | 17.38 | 8.42 | 2066 | 1980 | 2.49 | 347 | 2.42 | 38 | 87 | 100 | 24 | 34 | 98.1 |
| 3.3.2.2 In selected gear/speed setting nearest between 7 and 10 km/h at rated engine speed | | | | | | | | | | | | | | |
| 8 | 80.1 | 29.68 | 9.71 | 2198 | 2533 | 4.15 | 308 | 2.72 | 41 | 89 | 103 | 26 | 30 | 98.1 |
| 3.3.2.2.1 75% of pull corresponding to maximum power at rated engine speed | | | | | | | | | | | | | | |
| 8 | 62.8 | 22.31 | 10.14 | 2275 | 2587 | 3.25 | 344 | 2.44 | 41 | 88 | 104 | 26 | 33 | 98.1 |
| 3.3.2.2.2 50% of pull corresponding to maximum power at rated engine speed | | | | | | | | | | | | | | |
| 8 | 41.7 | 14.50 | 10.35 | 2302 | 2339 | 2.15 | 401 | 2.09 | 42 | 89 | 104 | 27 | 32 | 98.1 |
| 3.3.2.2.3 Highest gear/speed setting at reduced engine speed able to achieve both 3.3.2.2.1 and 3.3.2.2.2; same pull and travelling speed as in 3.3.2.2.1 | | | | | | | | | | | | | | |
| 10 | 62.8 | 22.31 | 10.14 | 2041 | 2296 | 3.13 | 310 | 2.71 | 42 | 89 | 102 | 28 | 34 | 98.1 |
| 3.3.2.2.4 Same gear/speed setting as 3.3.2.2.3 at reduced speed; same pull and travelling speed as in 3.3.2.2.2 | | | | | | | | | | | | | | |
| 10 | 41.8 | 14.54 | 10.35 | 2065 | 2127 | 2.20 | 349 | 2.41 | 41 | 89 | 102 | 26 | 33 | 98.1 |

[1] *As displayed on dashboard*

## 4 REPAIRS

None

## 5 REMARKS

Tests results of this report have been obtained from tests carried out on a prototype identical to the tractor NEW HOLLAND T6070 ELITE in all practical aspects relating to the tests.

It has been checked that the series production conforms to the tested tractor.

**ANNEX**

Other tests results not covered by OECD approval

.1 **Test in accordance with SAE J 283, Nov. 1999: Test procedure for measuring hydraulic lift capacity on agricultural tractors equipped with three-point hitch**

.1.1 Test conditions

Tests have been performed in accordance with Section 4 of SAE J283: Static lift force test. Setting of the three-point hitch is specified in *"SAE"* column the table 1.1 and more details on linkage geometry are in figure 1.1 and 1.2.

| ifting heights relative to the horizontal plane including the lower link pivot points | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ift rods length 865 mm | -385 | -355 | -255 | - | -155 | -55 | 0 | 90 | 190 | 275 | - | - | - |
| ift rods length 770 mm | - | - | - | -179 | -155 | -55 | 0 | 90 | 190 | - | 290 | 390 | 439 |
| ifting forces corrected to correspond to a hydraulic pressure equivalent to a 90% of the minimum relief valve setting of the hydraulic lift system | | | | | | | | | | | | | |
| N | 62.9 | 60.5 | 57.7 | - | 56.5 | 55.6 | 55.1 | 53.9 | 52.2 | 39.2 | - | - | - |
| N | - | - | - | 56.7 | 55.7 | 55.3 | 55.3 | 55.2 | 54.2 | - | 52.7 | 50.3 | 41.6 |
| Corresponding pressure: 18.5 MPa | | | | | | | | | | | | | |

This report has been approved by the O.E.C.D. Co-ordinating Centre (CEMAGREF. France) as being in accordance with the O.E.C.D. Standard Code for the official testing of agricultural and forestry tractor performance.

The Head of the Section

E. CAVALLO

The Director

G.L. ZAROTTI

Torino, 24th March 2009