

New Holland T7.210

Tractor Test No. 1979/12

APPLICANT

New Holland Traktoren Center Schweiz
Murzlenstrasse 80
8166 Niederweningen

TRACTOR

Manufacturer: CNH
Model: New Holland T7.210
Approval certificate no.: 4NA4 25

SUSPENSION AND BRAKES

Central four-wheel drive with powershift transmission
Front axle suspension (disengageable)
Wet disc brake on front and rear axle
Automatic all-wheel activation
Electronic parking brake

DRIVER PROTECTION

Integrated safety cab with mechanical suspension



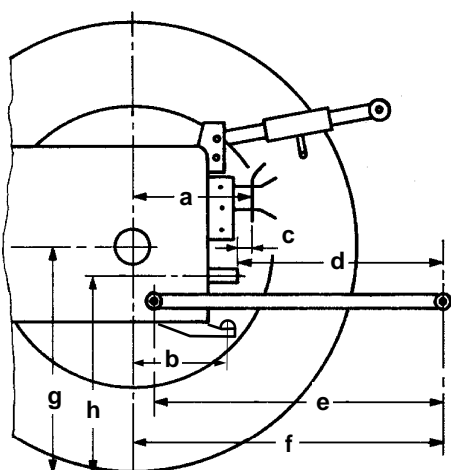
TYRES

Track width:

front: VF 600/60 R28 1950 mm
rear: VF 710/60 R38 1930 mm

DIMENSIONS

Length: — mm
With front mounting: 5400 mm
Front overhang from steering wheel: 3180 mm
Width: 2630 mm
Height: 3070 mm
Wheelbase: 2800 mm
Ground clearance: 450 mm
Turning diameter: 11,9 m (without four-wheel drive)
12,8 m (with four-wheel drive)



Rear

a: 780 mm
b: — mm
c: 200 mm
d: 610 mm
e: 980 mm
f: 1190 mm
g: 860 mm
h: 840 mm

Front

d: 670 mm
e: 940 mm
f: 1260 mm
g: 670 mm
h: 820 mm

TEST EQUIPMENT

- front 3-Point Hitch and PTO
- air-conditioning compressor
- air compressor

WEIGHT

in test equipment

Front: 3240 kg 43 %
Rear: 4310 kg
Total: 7550 kg

Permissible front axle load: 4900 kg
Permissible rear axle load: 8500 kg
Permissible total weight: 11500 kg

Payload: 3950 kg

Towed weight, braked: 32 000 kg

CAPACITIES

Fuel tank 330 l
AdBlue tank 48 l
Engine oil 15 l (change interval 600 h)
Gearbox and Hydraulic oil 68 l (change interval 1200 h)

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ENGINE (Manufacturer's data)

Manufacturer: Iveco
 Model: F4 DFE 613B
 Injection: Diesel direct injection
 CommonRail
 Supercharging: Exhaust gas turbocharger and air-to-air intercooling
 Exhaust emission treatment: SCR

Bore/stroke: 104 / 132 mm
 Cylinders / capacity: 6 / 6728 cm³
 Cooling: Water, viscous fan

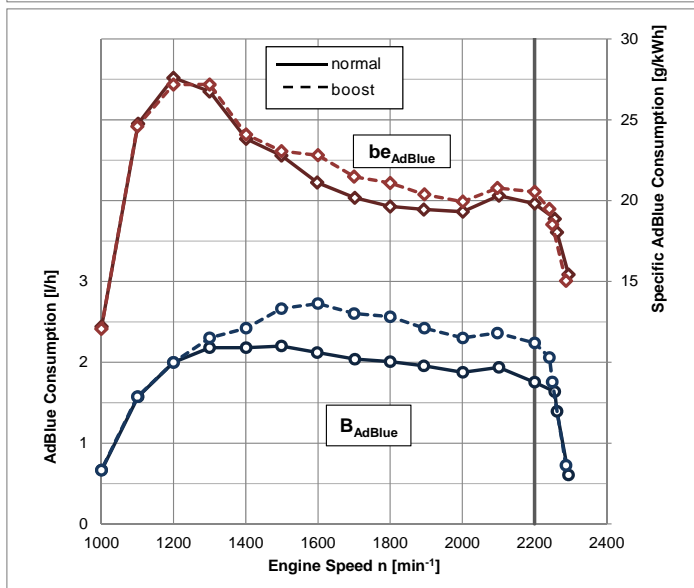
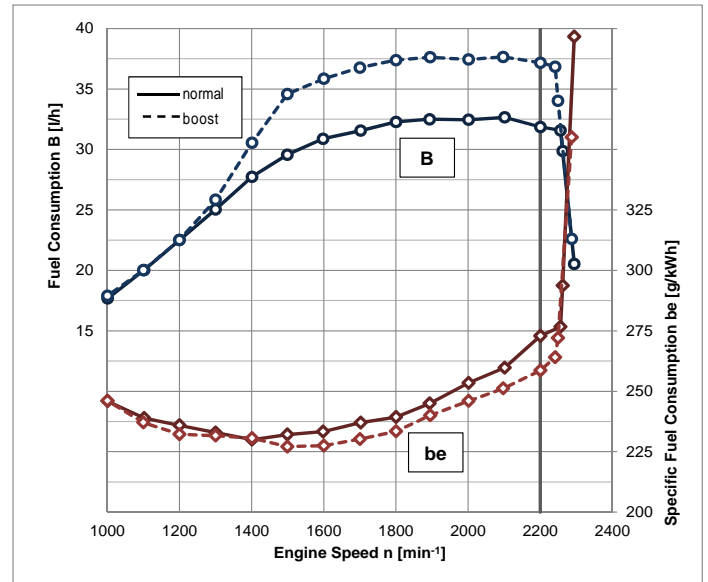
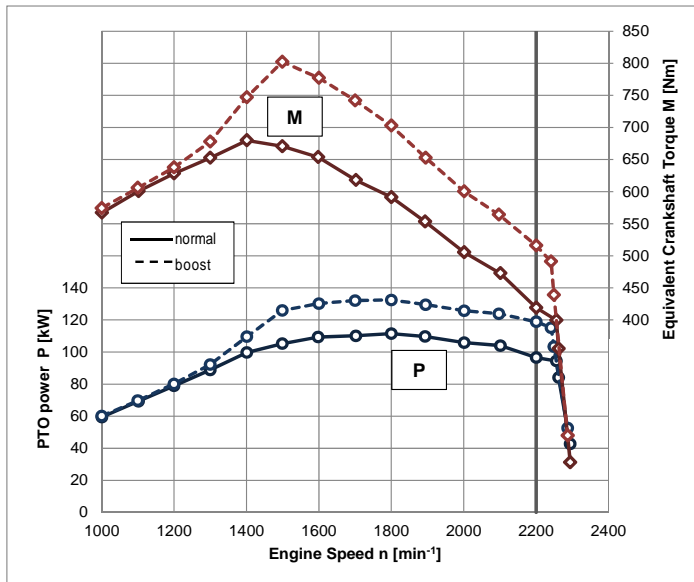
Rated power: 121 kW (165 PS) ECE R120
 With boost: 147 kW (200 PS) ECE R120

Rated engine speed: 2200 min⁻¹
 Exhaust stage: IIIB

POWER TAKE-OFF MEASUREMENT

Criteria for boost activation

- Transportation work: Speed in excess of 18 km/h
- PTO work: minimum 25 HP PTO power and 0,5 km/h driving speed



Measurement conditions:

- air temperature: 20 °C
- relative atmospheric humidity: 41 %
- atmospheric pressure: 960 mbar

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Full load test values

		Speed [min ⁻¹]		Power		Fuel consumption		AdBlue consumption	
		Engine	PTO	kW	HP	Specific [g/kWh]	Absolute [l/h]	Specific [g/kWh]	Absolute [l/h]
Rated power	normal	2200	1162	96,6	131,3	273	31,9	20	1,8
	boost			118,9	161,6	259	37,2	21	2,2
Maximum power	normal	1800	951	110,4	150,1	243	32,4	20	2,1
	boost			132,5	180,1	233	37,4	21	2,6
Normal speed PTO	normal	1893	1000	109,7	149,2	245	32,5	19	2,0
	boost			129,5	176,1	240	37,6	20	2,4

Max. torque: 680 Nm at 1400 min⁻¹
 Torque increase: 62 % at 36 % speed drop
 Starting torque: 135 %
 Idling speed: 850 min⁻¹
 Cutoff speed: 2330 min⁻¹

Boost

802 Nm, at 1500 min⁻¹
 56 % at 32 % speed drop
 111 %

Partial load values

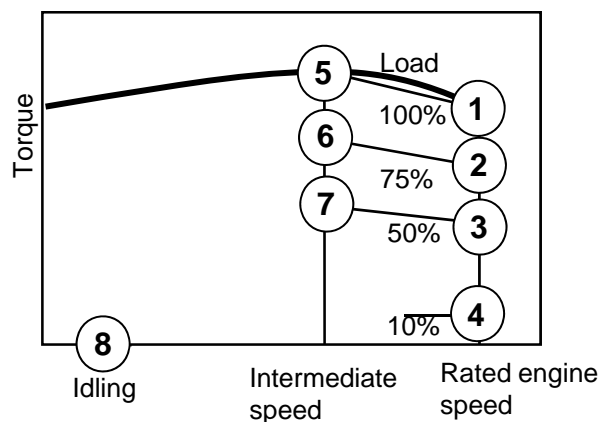
Fuel consumption with 42,5 % partial load at normal PTO speed

PTO shaft Fuel AdBlue
 1000 min⁻¹: 316 g/kWh, 17,8 l/h 18 g/kWh, 0,8 l/h
 1000E min⁻¹: — g/kWh, — l/h — g/kWh, — l/h

Boost

Fuel AdBlue
 297 g/kWh, 19,8 l/h 17 g/kWh, 0,8 l/h
 — g/kWh, — l/h — g/kWh, — l/h

In characteristic diagram (with boost)



Measuring point	Fuel consumption		AdBlue consumption	
	Specific [g/kWh]	Absolute [l/h]	Specific [g/kWh]	Absolute [l/h]
1	259	37,2	21	2,2
2	272	29,4	18	1,4
3	312	22,6	15	0,8
4	807	12,0	26	0,3
5	227	34,6	23	2,7
6	225	25,9	19	1,6
7	243	18,7	18	1,0
8	-	2,5	-	0,0

EMISSIONS

Exhaust gas emissions

- Black smoke 0,05 SZ (BOSCH)

Emissions according to ISO 8178-4, C1

(with boost)

- Hydrocarbons HC 0,03 g/kWh*
- Nitrogen oxides NO_x 1,98 g/kWh*
- Carbon monoxide CO 0,51 g/kWh*
- Particulate number Pn 2,9E13 #/kWh*
- Cycle consumption
 - Fuel 268 g/kWh* (22,9 l/h)
 - AdBlue 19 g/kWh* (1,2 l/h)

Noise level

- Noise level at driver's ear: 72,5 dB(A)
- Passing noise: 83,0 dB(A)

* With reference to PTO power



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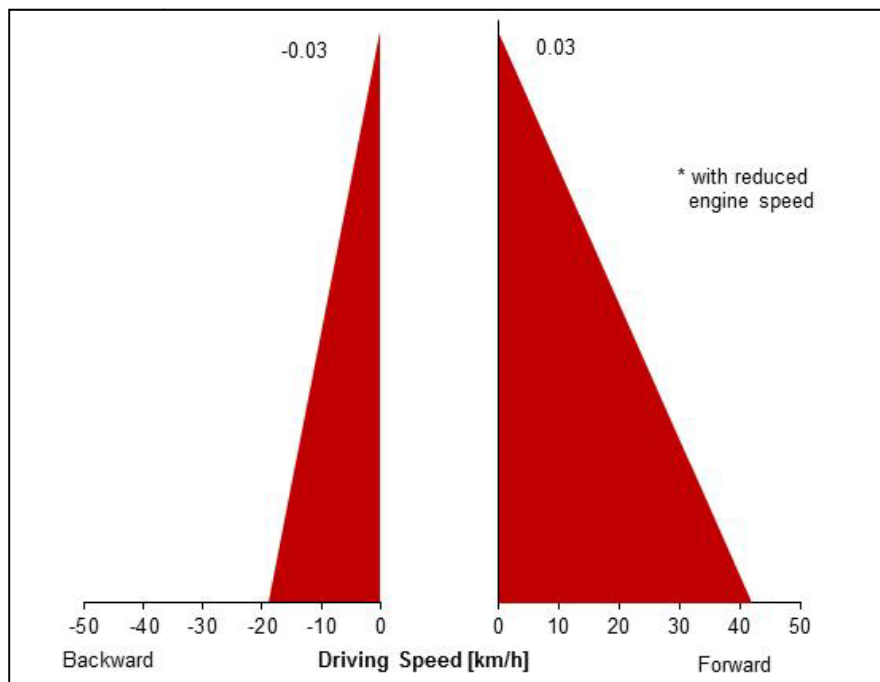
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TRANSMISSION

Travel gear

- Continuously variable transmission
- hydrostatic / mechanical power split

Driving speed at rated engine speed
(tyre radius $r = 875$ mm)



PTO transmission

Rear

- Wet multi-plate clutch, electro-hydraulic engagement

Front

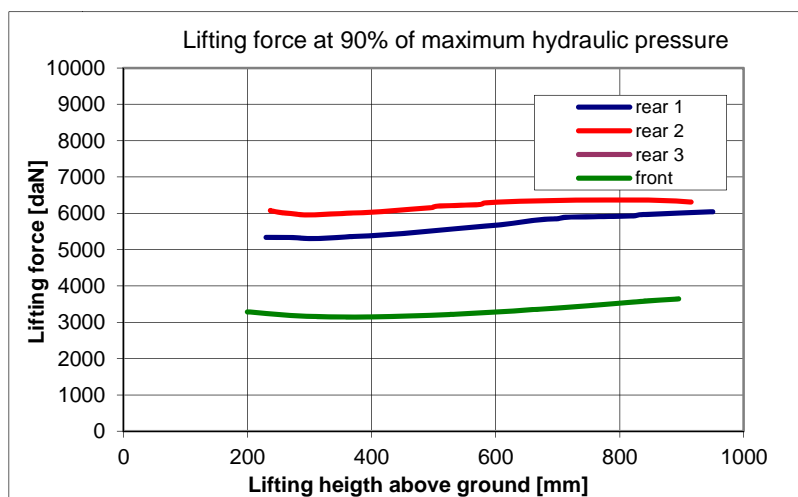
- Wet multi-plate clutch, electro-hydraulic engagement

PTO shaft	Rear						Front
	430	540	540E	1000	1000 E	Ground speed	1000
Engine speed	-	1969	1546	1893	-	-	1893

HYDRAULICS

Remote hydraulics

- max. oil pressure: 198,6 bar
- max. flow rate : 138,9 l/min
- flow rate: 131,5 l/min at 168,8 bar
- max. hydraulic power: 37,9 kW (130,4 l/min and 174,4 bar)
- max. flow rate through a single coupler: 95,2 l/min
- max. quantity of oil taken: 31 (45) l



3-Point Hitch

Rear

3-Point Hitch, category: III
Control hydraulics via lower link, (EHR)

Front

3-Point Hitch, category: II / III

Measurement	Lifting movement	Lifting force at 90% pressure		
		Continuous	Maximum	
Rear	Lower link, short	720 mm	5290 daN	6045 daN
	Lower link, medium	678 mm	5950 daN	6370 daN
	Lower link, long			
Front	695 mm (200 mm to 895 mm)	3140 daN	3650 daN	

Explanatory notes on tractor test at:
www.traktorentest.ch



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