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Nebraska Summary: S663 Case-IH Maxxum 100 Value

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SUMMARY OF OECD TEST 2445/1-NEBRASKA SUMMARY 663

CASE IH MAXXUM 110 VALUE DIESEL

12 SPEED

POWER TAKE-OFF PERFORMANCE

Power HP (kW)	Crank shaft speed rpm	Gal/hr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Mean Atmospheric Conditions
MAXIMUM POWER AND FUEL CONSUMPTION					
Rated Engine Speed—(PTO speed—1038 rpm)					
96.6 (72.0)	2200	5.97 (22.61)	0.434 (0.264)	16.16 (3.18)	
Standard Power Take-off Speed (1000 rpm)					
96.4 (71.9)	2119	5.84 (22.12)	0.424 (0.258)	16.50 (3.25)	
Maximum Power - (1 hour)					
97.0 (72.3)	1998	5.83 (22.06)	0.421 (0.256)	16.65 (3.28)	
VARYING POWER AND FUEL CONSUMPTION					
96.6 (72.0)	2200	5.97 (22.61)	0.434 (0.264)	16.16 (3.18)	Air temperature
85.0 (63.4)	2282	5.44 (20.60)	0.448 (0.273)	15.63 (3.08)	68°F (20°C)
64.2 (47.9)	2310	4.57 (17.30)	0.499 (0.303)	14.06 (2.77)	Relative humidity
44.4 (33.1)	2358	3.43 (12.99)	0.542 (0.330)	12.94 (2.55)	47%
22.3 (16.6)	2401	2.34 (8.85)	0.735 (0.447)	9.54 (1.88)	Barometer
--	2430	1.58 (5.98)	--	--	29.5" Hg (99.9 kPa)
Maximum Torque - 372.8 lb.-ft. (505.4 Nm) at 903 rpm					
Maximum Torque Rise - 61.8%					
Torque rise at 1800 engine rpm - 21%					

DRAWBAR PERFORMANCE (Unballasted - Front Drive Engaged) FUEL CONSUMPTION CHARACTERISTICS

Power Hp (kW)	Drawbar pull lbs (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Temp.°F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
Maximum Power—6th (II-2) Gear									
82.3 (61.4)	6875 (30.58)	4.49 (7.23)	2194	5.2	0.508 (0.309)	13.81 (2.72)	187 (86)	72 (22)	28.7 (97.3)
75% of Pull at Maximum Power—6th (II-2) Gear									
64.9 (48.4)	5130 (22.82)	4.74 (7.63)	2290	4.1	0.568 (0.346)	12.33 (2.43)	189 (87)	79 (26)	28.7 (97.2)
50% of Pull at Maximum Power—6th (II-2) Gear									
43.9 (32.7)	3365 (14.96)	4.88 (7.86)	2335	3.2	0.639 (0.389)	10.96 (2.16)	187 (86)	73 (23)	28.7 (97.2)
75% of Pull at Reduced Engine Speed—7th (II-3) Gear									
65.3 (48.7)	5120 (22.78)	4.78 (7.70)	1619	4.2	0.484 (0.295)	14.46 (2.85)	187 (86)	77 (25)	28.7 (97.2)
50% of Pull at Reduced Engine Speed—7th (II-3) Gear									
43.9 (32.7)	3365 (14.96)	4.89 (7.86)	1637	3.2	0.535 (0.325)	13.10 (2.58)	187 (86)	81 (27)	28.7 (97.1)

Location of tests: Istituto per le Macchine Agricole e Movimento Terra 73, Strada delle Cacce 10135 Torino Italy

Dates of tests: October 2007 to January 2008.

Manufacturer: CNH Europe Holding S.A. 13, Rue Aldringen L-1118 Luxembourg

FUEL and OIL: Fuel No. 2 Diesel Specific gravity converted to 60°/60°F (15°/15°C) 0.842 Fuel weight 7.01 lbs/gal (0.840 kg/l) Oil SAE 15W40 API service classification CH-4 Transmission and hydraulic lubricant Akcela Nexplore fluid Front axle lubricant Akcela Nexplore fluid

ENGINE: Make CNH Diesel Type four cylinder vertical with turbocharger and air to air intercooler Serial No. 433000 Crankshaft lengthwise Rated engine speed 2200 Bore and stroke 4.094" x 5.197" (104.0 mm x 132.0 mm) Compression ratio 17.5 to 1 Displacement 274 cu in (4485 ml) Starting system 12 volt Lubrication pressure Air cleaner two paper elements and aspirator Oil filter one full flow cartridge Oil cooler engine coolant heat exchanger for crankcase oil, radiator for hydraulic and transmission oil Fuel filter one paper element Muffler underhood Exhaust vertical Cooling medium temperature control thermostat and variable speed fan

CHASSIS: Type front wheel assist Serial No. Z7BD02912 Tread width rear 56.3" (1430 mm) to 83.9" (2130 mm) front 52.2" (1325 mm) to 90.0" (2285 mm) Wheelbase 95.0" (2412 mm) Hydraulic control system direct engine drive Transmission selective gear fixed ratio Nominal travel speeds mph (km/h) first 1.25 (2.01) second 1.83 (2.94) third 2.61 (4.20) fourth 3.13 (5.04) fifth 3.80 (6.11) sixth 4.59 (7.39) seventh 6.56 (10.55) eighth 7.59 (12.21) ninth 9.54 (15.35) tenth 11.11 (17.88) eleventh 15.87 (25.54) twelfth 23.09 (37.16) reverse 1.28 (2.06), 1.88 (3.02), 2.68 (4.31), 3.21 (5.17), 3.90 (6.27), 4.71 (7.58), 6.72 (10.82), 7.78 (12.52), 9.78 (15.74), 11.40 (18.34), 16.27 (26.19), 23.68 (38.11) Clutch dry disc hydraulically actuated by foot pedal Brakes wet disc hydraulically actuated by two foot pedals that can be locked together Steering hydrostatic Power take-off 540 rpm at 1970 engine rpm or 1000 rpm at 2120 engine rpm Unladen tractor mass 10240 lb (4655 kg)

DRAWBAR PERFORMANCE
(Unballasted - Front Drive Engaged)
MAXIMUM POWER IN SELECTED GEARS

Power Hp (kW)	Drawbar pull lbs (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr (kg/kW.h)	Consumption Hp.hr/gal (kW.h/l)	Temp. °F(°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
1st(I-1) Gear									
29.1 (21.7)	9195 (40.90)	1.19 (1.91)	2389	15.2	0.635 (0.386)	11.03 (2.17)	189 (87)	73 (23)	28.7 (97.1)
2nd(I-2) Gear									
42.0 (31.3)	9100 (40.47)	1.73 (2.78)	2350	14.4	0.606 (0.368)	11.57 (2.28)	189 (87)	86 (30)	28.7 (97.1)
3rd(I-3) Gear									
58.7 (43.8)	8935 (39.75)	2.46 (3.96)	2312	13.2	0.540 (0.329)	12.97 (2.56)	189 (87)	75 (24)	28.7 (97.1)
4th(II-1) Gear									
68.1 (50.8)	8835 (39.31)	2.89 (4.65)	2285	14.2	0.550 (0.335)	12.74 (2.51)	189 (87)	75 (24)	28.7 (97.1)
5th(I-4) Gear									
77.8 (58.0)	8765 (39.00)	3.33 (5.36)	2021	7.8	0.527 (0.320)	13.31 (2.62)	187 (86)	64 (18)	29.1 (98.6)
6th(II-2) Gear									
85.3 (63.6)	7795 (34.67)	4.10 (6.60)	2001	5.3	0.479 (0.291)	14.63 (2.88)	187 (86)	64 (18)	29.1 (98.6)
7th(II-3) Gear									
84.5 (63.0)	5300 (23.37)	5.98 (9.63)	1998	2.9	0.483 (0.294)	14.52 (2.86)	187 (86)	64 (18)	29.1 (98.5)
8th(III-1) Gear									
84.5 (63.0)	4540 (20.19)	6.98 (11.23)	2003	2.4	0.485 (0.295)	14.47 (2.85)	189 (87)	64 (18)	29.1 (98.5)
9th(II-4) Gear									
81.4 (60.7)	3460 (15.39)	8.82 (14.20)	2003	1.8	0.503 (0.306)	13.95 (2.75)	189 (87)	63 (17)	29.1 (98.5)
10th(III-2) Gear									
79.5 (59.3)	2885 (12.83)	10.33 (16.63)	2005	1.4	0.515 (0.313)	13.60 (2.68)	187 (86)	61 (16)	29.1 (98.5)

NOTE: The data on this summary was obtained from OECD report 2445 conducted on the New Holland T6020 Delta Diesel.

REPAIRS AND ADJUSTMENTS: No repairs or adjustments

REMARKS: All test results were determined from observed data obtained in accordance with official OECD test procedures. This tractor did not meet the manufacturer's three point lift capacity claims of 7509 lbs (3406 kg) (with 1 lift assist cylinder) nor 8813 lbs (3997 kg) (with 2 lift assist cylinders). The performance figures on this summary were taken from a test conducted under the OECD Code II test procedure.

We, the undersigned, certify that this is a true summary of data from OECD Report No. **2445/1**, Nebraska Summary 663, December 10, 2009.

Roger M. Hoy
Director

M.F. Kocher
V.I. Adamchuk
J.A. Smith
Board of Tractor Test Engineers

TRACTOR SOUND LEVEL WITHOUT CAB	Front Wheel Drive	
	Disengaged dB(A)	Engaged dB(A)
At no load in 6th (II-2) gear	85.6	85.8
Bystander	--	--

TIRES AND WEIGHT

Rear tires - No., size, ply & psi (kPa)
Front tires - No., size, ply & psi (kPa)
Height of Drawbar
Static Weight with operator - Rear
- Front
- Total

Tested Without Ballast

Two 600/65R38; **, 12 (80)
Two 480/65R28; **, 12 (80)
22.0 in (560 mm)
6305 lb (2860 kg)
4100 lb (1860 kg)
10405 lb (4720 kg)

HYDRAULIC PERFORMANCE

CATEGORY: II

Quick Attach: None

OECD Static test

lift assist cylinders

Maximum force exerted through whole range: 5305 lbs (23.6 kN) (1 x 50 mm)
6610 lbs (29.4 kN) (2 x 50 mm)

- i) Sustained pressure of the open relief valve: 2610 psi (180 bar)
- ii) Pump delivery rate at minimum pressure: 17.1 GPM (64.9 l/min)
- iii) Pump delivery rate at maximum

hydraulic power: 15.1 GPM (57.0 l/min)
Delivery pressure: 2320 psi (160 bar)
Power: 20.4 HP (15.2 kW)

THREE POINT HITCH PERFORMANCE

Observed Maximum Pressure psi. (bar) 2610 (180)
Location: lift cylinder
Hydraulic oil temperature: °F (°C) 150 (66)
Location: hydraulic sump
Category: II
Quick attach: None

SAE Static Test—System pressure 2350 psi (162 Bar)
lift assist cylinder - 1x 50 mm

Hitch point distance to ground level in. (mm)	8.3 (210)	16.1 (410)	23.0 (585)	27.4 (695)	35.2 (895)
Lift force on frame lb	8430	7800	8160	7800	6700
" " " " " " (kN)	(37.5)	(34.7)	(36.3)	(34.7)	(29.8)

SAE Static Test—System pressure 2350 psi (162 Bar)
lift assist cylinders - 2 x 50 mm

Hitch point distance to ground level in. (mm)	8.3 (210)	14.2 (360)	23.0 (585)	27.4 (695)	35.2 (895)
Lift force on frame lb	10950	9960	10275	9645	8070
" " " " " " (kN)	(48.7)	(44.3)	(45.7)	(42.9)	(35.9)

	OECD test		SAE test	
	inch	mm	inch	mm
A	27.6	702	28.1	715
B	10.0	255	10.0	255
C	15.9	403	15.9	403
D	14.1	357	14.1	357
E	7.9	200	9.8	250
F	9.3	235	9.3	235
G	32.3	820	32.3	820
H	1.0	25	1.0	25
I	16.9	430	15.6	395
J	23.0	585	23.0	585
K	19.9	505	23.0	585
L	44.0	1118	44.0	1118
M	22.2	563	22.2	563
N	37.4	950	37.4	950
O	7.9	200	7.9	200
P	47.0	1195	42.0	1068
Q	33.5	850	31.3	795
R	30.2	768	32.3	820

