

# SUMMARY OF OECD TEST 2442-NEBRASKA SUMMARY 665

## CASE IH MAXXUM 125 VALUE DIESEL

### 16 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
<b>MAXIMUM POWER AND FUEL CONSUMPTION</b>					
<b>Rated Engine Speed—(PTO speed—1037 rpm)</b>					
114.8 (85.6)	2197	6.97 (26.37)	0.425 (0.259)	16.48 (3.25)	
<b>Maximum Power - (1 hour)</b>					
114.8 (85.6)	2197	6.97 (26.37)	0.425 (0.259)	16.48 (3.25)	
<b>Standard Power Take-off Speed (1001 rpm)</b>					
113.3 (84.5)	2121	6.80 (25.74)	0.421 (0.256)	16.65 (3.28)	
<b>VARYING POWER AND FUEL CONSUMPTION</b>					
114.8 (85.6)	2197	6.97 (26.37)	0.425 (0.259)	16.48 (3.25)	Air temperature
105.4 (78.6)	2369	6.69 (25.31)	0.446 (0.271)	15.74 (3.10)	68°F (20°C)
79.5 (59.3)	2386	5.65 (21.38)	0.499 (0.303)	14.06 (2.77)	Relative humidity
53.0 (39.5)	2390	4.35 (16.48)	0.578 (0.351)	12.17 (2.39)	47%
26.6 (19.8)	2401	3.11 (11.76)	0.821 (0.499)	8.54 (1.68)	Barometer
--	2437	2.06 (7.80)	--	--	29.3" Hg (99.2 kPa)
Maximum Torque - 435.2 lb.-ft. (590.1 Nm) at 901 rpm					
Maximum Torque Rise - 58.7%					
Torque rise at 1800 engine rpm - 17%					

#### 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)
<b>Maximum Power—7th (7B) Gear</b>									
90.4 (67.4)	6665 (29.65)	5.08 (8.18)	2205	4.2	0.539 (0.328)	12.99 (2.56)	189 (87)	66 (19)	29.1 (98.4)
<b>75% of Pull at Maximum Power—7th (7B) Gear</b>									
73.8 (55.0)	5000 (22.24)	5.54 (8.91)	2378	3.2	0.589 (0.358)	11.90 (2.34)	190 (88)	66 (19)	29.1 (98.4)
<b>50% of Pull at Maximum Power—7th (7B) Gear</b>									
49.7 (37.1)	3325 (14.79)	5.61 (9.02)	2387	2.4	0.747 (0.455)	9.38 (1.85)	190 (88)	70 (21)	29.1 (98.4)
<b>75% of Pull at Reduced Engine Speed—8th (9C) Gear</b>									
74.6 (55.6)	4995 (22.23)	5.60 (9.00)	2152	3.1	0.546 (0.332)	12.84 (2.53)	187 (86)	66 (19)	29.1 (98.4)
<b>50% of Pull at Reduced Engine Speed—8th (9C) Gear</b>									
50.3 (37.5)	3330 (14.82)	5.67 (9.12)	2158	2.1	0.635 (0.386)	11.04 (2.17)	189 (87)	66 (19)	29.1 (98.4)

**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** six cylinder vertical with turbocharger and air to air intercooler **Serial No.** 448137 **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** 410 cu in (6728 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.** Z7BE02226 **Tread width** rear 60.0" (1524 mm) to 96.0" (2438 mm) front 52.2" (1325 mm) to 90.0" (2285 mm) **Wheelbase** 104.4" (2652 mm) **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio with partial (8) range operator controlled powershift **Nominal travel speeds mph (km/h)** first 1.50 (2.42) second 1.85 (2.97) third 2.24 (3.61) fourth 2.75 (4.43) fifth 3.53 (5.68) sixth 4.33 (6.97) seventh 5.28 (8.49) eighth 5.88 (9.46) ninth 6.46 (10.41) tenth 7.21 (11.60) eleventh 8.77 (14.12) twelfth 10.77 (17.33) thirteenth 13.80 (22.21) fourteenth 16.93 (27.25) fifteenth 20.61 (33.18) sixteenth 25.29 (40.70) reverse 1.49 (2.39), 1.82 (2.93), 2.22 (3.57), 2.72 (4.38), 3.49 (5.61), 4.28 (6.89), 5.21 (8.39), 5.80 (9.34), 6.39 (10.29), 7.12 (11.46), 8.67 (13.96), 10.64 (17.12), 13.64 (21.95), 16.73 (26.93), 20.38 (32.79), 25.00 (40.23) **Clutch** wet disc electro-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** 11365 lb (5155 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)
5th(5B) Gear									
86.2 (64.3)	10390 (46.23)	3.11 (5.01)	2284	15.4	0.555 (0.337)	12.63 (2.49)	189 (87)	59 (15)	28.9 (97.8)
6th(6B) Gear									
96.8 (72.2)	8945 (39.79)	4.06 (6.53)	2203	6.7	0.504 (0.306)	13.92 (2.74)	189 (87)	61 (16)	28.9 (97.8)
7th(7B) Gear									
92.1 (68.7)	6790 (30.21)	5.09 (8.19)	2212	4.5	0.528 (0.321)	13.26 (2.61)	189 (87)	63 (17)	28.9 (97.8)
8th(8B) Gear									
93.7 (69.9)	6205 (27.60)	5.67 (9.12)	2200	3.9	0.520 (0.316)	13.48 (2.65)	189 (87)	64 (18)	28.9 (97.9)
9th(9B) Gear									
91.3 (68.1)	5485 (24.39)	6.24 (10.05)	2197	3.7	0.535 (0.325)	13.11 (2.58)	189 (87)	63 (17)	28.9 (97.9)
10th(10C) Gear									
93.5 (69.7)	4945 (21.99)	7.09 (11.41)	2198	1.9	0.523 (0.318)	13.40 (2.64)	189 (87)	63 (17)	28.9 (97.9)
11th(11C) Gear									
87.8 (65.5)	3820 (17.00)	8.62 (13.87)	2210	2.7	0.555 (0.337)	12.64 (2.49)	189 (87)	63 (17)	28.9 (97.9)
12th(12C) Gear									
86.0 (64.1)	3045 (13.55)	10.59 (17.04)	2200	2.1	0.568 (0.345)	12.34 (2.43)	189 (87)	59 (15)	28.9 (98.0)

**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. **2442**, Nebraska Summary 665, 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 (6B) gear	85.5	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 480/80R42; \*\*,9 (60)  
 Two 380/85R30; \*\*,14 (100)  
 24.2 in (615 mm)  
 7075 lb (3210 kg)  
 4455 lb (2020 kg)  
 11530 lb (5230 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: 16.6 GPM (62.8 l/min)

iii) Pump delivery rate at maximum  
hydraulic power: 14.8 GPM (56.0 l/min)  
Delivery pressure: 2320 psi (160 bar)  
Power: 20.0 HP (14.9 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	700	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	9.2	235	9.2	235
G	34.4	875	34.4	875
H	1.0	25	1.0	25
I	16.9	430	15.6	395
J	25.2	640	25.2	640
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	49.2	1250	42.0	1068
Q	33.5	850	33.5	850
R	31.3	795	32.3	820

