# SUMMARY OF OECD TEST 2700-NEBRASKA SUMMARY 851 CASE IH MAXXUM 115 DIESEL 24 SPEED

**POWER TAKE-OFF PERFORMANCE** 

Power HP (kW)	Crank shaft speed rpm	Diesel Consumption Gal/hr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/g (kW.h/l)	D.E.F. Consumpt al Gal/hr (l/h)	ion Mean Atmospheric Conditions
	MA	XIMUM P	OWER	AND H	UEL C	ONSUMPTION
		Rated E	igine Spee	ed—(PTC	) speed—1	109 rpm)
108.1	2100	6.50	0.419	16.62	0.29	•
(80.6)		(24.62)	(0.255)	(3.27)	(1.11)	
		Standa	rd Power	Take-off	Speed (10	00 rpm)
112.8	1893	6.39	0.395	17.66	0.29	••• <b>·</b> P)
(84.1)		(24.19)	(0.240)	(3.48)	(1.10)	
		Mavi	num Pow	er (1 hou	r)	
113.0	1800	6.30	0.388	17.94	0.28	
(84.3)	1000	(23.86)	(0.236)	(3.54)	(1.05)	
(04.))		(29.80)	(0.290)	().)4)	(1.05)	
ARYING	POWE	R AND FU	EL CON	SUMPT	ION	
		6 50	0.419	16.62	0.29	Airtemperature
108.1	2100	6.50	0.415			
108.1 (80.6)	2100	(24.62)	(0.255)	(3.27)	(1.11)	
	2100			<i>(3.27)</i> 15.57	(1.11) 0.27	68°F(20°C)
(80.6)		(24.62)	(0.255)	( )		68°F(20°C)
(80.6) 97.9		(24.62) 6.29	(0.255) 0.447	15.57	0.27	68°F (20°C) Relative humidity
(80.6) 97.9 (73.0)	2238	(24.62) 6.29 (23.80)	(0.255) 0.447 (0.272)	15.57 (3.07)	0.27 (1.02)	
(80.6) 97.9 (73.0) 74.2	2238	(24.62) 6.29 (23.80) 5.26	(0.255) 0.447 (0.272) 0.494	15.57 (3.07) 14.10	0.27 (1.02) 0.22	
(80.6) 97.9 (73.0) 74.2 (55.3)	2238 2256	(24.62) 6.29 (23.80) 5.26 (19.90)	(0.255) 0.447 (0.272) 0.494 (0.301)	15.57 (3.07) 14.10 (2.78)	$\begin{array}{c} 0.27 \\ (1.02) \\ \hline 0.22 \\ (0.83) \end{array}$	Relative humidity
(80.6) 97.9 (73.0) 74.2 (55.3) 49.8	2238 2256	(24.62) 6.29 (23.80) 5.26 (19.90) 4.21	(0.255) 0.447 (0.272) 0.494 (0.301) 0.590	$     \begin{array}{r}       15.57 \\       (3.07) \\       14.10 \\       (2.78) \\       11.82     \end{array} $	0.27 (1.02) 0.22 (0.83) 0.15	Relative humidity
(80.6) 97.9 (73.0) 74.2 (55.3) 49.8 (37.1)	2238 2256 2273	(24.62) 6.29 (23.80) 5.26 (19.90) 4.21 (15.93)	(0.255) 0.447 (0.272) 0.494 (0.301) 0.590 (0.359)	15.57 (3.07) 14.10 (2.78) 11.82 (2.33)	$\begin{array}{c} 0.27\\ (1.02)\\ 0.22\\ (0.83)\\ 0.15\\ (0.58) \end{array}$	Relative humidity 29%
(80.6) 97.9 (73.0) 74.2 (55.3) 49.8 (37.1) 25.2	2238 2256 2273	$\begin{array}{c} (24.62) \\ \hline 6.29 \\ (23.80) \\ \hline 5.26 \\ (19.90) \\ \hline 4.21 \\ (15.93) \\ \hline 3.15 \end{array}$	(0.255) 0.447 (0.272) 0.494 (0.301) 0.590 (0.359) 0.874	15.57 (3.07) 14.10 (2.78) 11.82 (2.33) 7.99	$\begin{array}{c} 0.27\\ (1.02)\\ 0.22\\ (0.83)\\ \hline 0.15\\ (0.58)\\ \hline 0.07 \end{array}$	Relative humidity 29%

*m*) at 1500 rpn

Maximum torque rise - 28.1%

Torque rise at 1700 engine rpm - 24%

Power increase at 1800 engine rpm - 5%

# 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 Con lb/hp.hr (kg/kW.h)	nsumption Hp.hr/gal (kW.h/l)	Temp. cool- ing med	°F (°C) Air dry bulb	Barom. inch Hg (kPa)
		Po	ower at Rat	ed Engi	ne Speed—1	2th(2MR) G	ear		
87.3 (65.1)	7645 (34.0)	4.28 (6.89)	2100	4.4	0.485 (0.295)	14.37 (2.83)	187 (86)	84 (29)	29.0 (98.1)
		75%	of Pull at H	Rated E1	ngine Speed-	-12th(2MR)	Gear		
70.8 (52.8)	5735 (25.5)	4.63 (7.46)	2250	3.4	0.572 (0.348)	12.18 (2.40)	187 (86)	84 (29)	29.0 (98.1)
		50%	of Pull at H	Rated Er	ngine Speed-	-12th(2MR)	Gear		
48.1	3815	4.73	2269	2.2	0.654	10.66	189	84	29.0
(35.9)	(17.0)	(7.61)			(0.398)	(2.10)	(87)	(29)	(98.1)
		75% of	F Pull at Re	educed	Engine Speed	d—13th(3M7	() Gear		
70.5	5710	4.63	1924	3.3	0.522	13.35	185	84	29.0
(52.6)	(25.4)	(7.45)			(0.318)	(2.63)	(85)	(29)	(98.1)
		50% of	Pull at R	educed	Engine Speed	d—13th(3M	Γ) Gear		
48.3	3820	4.74	1947	2.2	0.627	11.12	185	84	29.0
(36.0)	(17.0)	(7.62)			(0.381)	(2.19)	(85)	(29)	(98.1)

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

Dates of tests: May, 2012.

Manufacturer: CNH Europe Holding S.A. 24, Boulevard Royal L-2449 Luxembourg

CONSUMABLE FLUIDS: Fuel No. 2 Diesel Specific gravity converted to 60°/60°F (15°/15°C) 0.837 Fuel weight 6.97 lbs/gal (0.835 kg/l) Diesel Exhaust Fluid (DEF) 32% aqueous urea solution **DEFweight** 9.08 lbs/gal(1.091 kg/l) **Oil SAE** 10W30 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, air to air intercooler and SCR (selective catalyst reduction) exhaust treatment Serial No. 882756 Crankshaft lengthwise **Rated engine speed** 2100 **Bore and stroke** 4.094" x 5.197" (104.0 mm x 132.0 mm) Compression ratio 17.5 to 1 Displacement 410 cuin (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. ZBBE01001 Tread width rear 56.3" (1430 mm) to 84.0" (2134 mm) front 61.4" (1560 mm) to 88.8" (2256 mm) Wheelbase 95.3" (2627 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 0.98 (1.58) second 1.20 (1.93) third 1.44(2.31) fourth 1.75(2.82) fifth 2.05 (3.30) sixth 2.46 (3.96) seventh 2.50 (4.03) eighth 2.98 (4.80) ninth 3.01 (4.84) tenth 3.39 (5.45) eleventh 3.64 (5.86) twelfth 4.41 (7.09) thirteenth 5.15 (8.28) fourteenth 5.95 (9.58) fifteenth 6.29 (10.12) sixteenth 7.28 (11.72) seventeenth 7.48 (12.04) eighteenth 8.72 (14.03) nineteenth 9.15 (14.73) twentieth 10.66 (17.16) twenty-first 12.45 (20.04) twenty-second 15.23 (24.51) twenty-third 18.12 (29.16) twenty-fourth 22.16 (35.67) reverse 1.01 (1.63), 1.24 (1.99), 1.49 (2.39), 1.81 (2.92), 2.12 (3.41), 2.54 (4.09), 2.59 (4.17), 3.08 (4.96), 3.11 (5.00), 3.72 (5.99), 3.76 (6.06), 4.55 (7.33), 5.31(8.56), 6.16(9.91), 6.51(10.47), 7.53(12.12), 7.74 (12.46), 9.01 (14.51), 9.46 (15.23), 11.03 (17.75), 12.87 (20.72), 15.75 (25.35), 18.73 (30.15), 22.92 (36.88)

## DRAWBAR PERFORMANCE

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

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Air inc dry H	Air	Temp cool-	Hp.hr/gal (kW.h/l)	Fuel Consu lb/hp.hr (hg/hW h)	Slip %	Crank- shaft	Speed mph (hm/h)	Drawbar pull lbs	Power Hp
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	bulb (kP			(KVV.N/L)	(Kg/KW.N)			( <i>km/n</i> )		(6.00)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					th(1MR) Gear	Q	1			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	77 29.	77	187	12.69			2107	2.71	10655	77.1
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(25) (98.	(25)			(0.334)					
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					th(9MT) Gear	10				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	77 29.	77	185	13.91			2052	3.08	10430	85.7
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(25) (98.	(25)						(4.96)	(46.4)	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					th(4LR) Gear	11				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	84 29.		187	13.86		8.1	2031	3.29	9780	85.8
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(29) (98.	(29)	(86)	(2.73)	(0.306)			(5.30)	(43.5)	(64.0)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$										
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	77 29.					5.2	1917			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(25) (98.	(25)	(85)	(2.91)	(0.287)			(6.24)	(38.8)	(67.3)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					8th(3MT) Gear	13				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	77 29.					4.4	1800			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(25) (98.	(25)	(85)	(2.91)	(0.287)			(6.90)	(34.6)	(66.3)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	79 29.					3.9	1799			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(26) (98.	(26)	(85)	(3.09)	(0.270)			(8.02)	(30.1)	(67.1)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	<b>F</b> O 00	-	105				1000		2.125	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	79 29.					3.6	1800			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(26) (98	(26)	(86)	(3.13)	(0.267)			(8.50)	(28.7)	(67.9)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	01 00	01	105				1000	6.1.4		00 5
$\begin{array}{c} 89.8 \\ (67.0) \\ 87.8 \\ 4450 \\ 7.40 \\ \end{array} \begin{array}{c} 6.32 \\ (10.17) \\ 1800 \\ 2.6 \\ 2.6 \\ 2.6 \\ 2.6 \\ 0.464 \\ 15.02 \\ (2.96) \\ (2.96) \\ 185 \\ (85) \\ 185 \\ 185 \\ (85) \\ 185$	81 29.					3.2	1800			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(27) (98.	(27)	(8)	(2.95)	(0.285)			(9.88)	(24.0)	(07.5)
(67.0)         (23.7)         (10.17)         (0.282)         (2.96)         (85)           87.8         4450         7.40         1800         2.6         0.472         14.77         185	00 00	00	105				1000	C 90	-	00.0
18th(2HT) Gear           87.8         4450         7.40         1800         2.6         0.472         14.77         185	82 29.					3.0	1800			
87.8 4450 7.40 1800 2.6 0.472 14.77 185	(28) (98.	(28)	(0)	(2.90)	(0.282)			(10.17)	(23.1)	(07.0)
			4.0.11				10	<b>_</b>		
(65.5) (19.8) (11.91) (0.287) (2.91) (85)	84 29.					2.6	1800			
	(29) (98.	(29)	(85)	(2.91)	(0.287)			(11.91)	(19.8)	(65.5)
19th(4MR) Gear	00 00	0.0	105	14.00	( )		1004	<b>F</b> 00	1015	00 -
89.7 4315 7.80 1804 2.5 0.467 14.92 185	86 29.					2.5	1804			
(66.9) (19.2) (12.54) (0.284) (2.94) (85)	(30) (98.	(30)	(85)	(2.94)	(0.284)			(12.54)	(19.2)	(66.9)
20th(2HR) Gear										
88.2         3640         9.09         1800         2.1         0.485         14.37         185           (65.8)         (16.2)         (14.62)         (0.295)         (2.83)         (85)	88 29. (31) (98.)					2.1	1800			

	Front Whee	l Drive
TRACTOR SOUND LEVEL WITH CAB	Disengaged dB(A)	Engaged dB(A)
At no load in 12th(2MR) gear	70.1	69.4
Bystander		

**Clutch** wet 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 1593 engine rpm or 1000 rpm at 1894 engine rpm **Unladen tractor mass** 12435 lb (*5640 kg*)

**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 claim of 6900 lbs (*3130 kg*), with 80 mm lift cylinders. The performance figures on this summary were taken from a test conducted under the OECD Code 2 test procedure.

We, the undersigned, certify that this is a true summary of data from OECD Report No. **2700**, Nebraska Summary 851, January 17, 2013.

Roger M. Hoy Director

> M.R. Riley P.J. Jasa J.D. Luck Board of Tractor Test Engineers

#### 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**

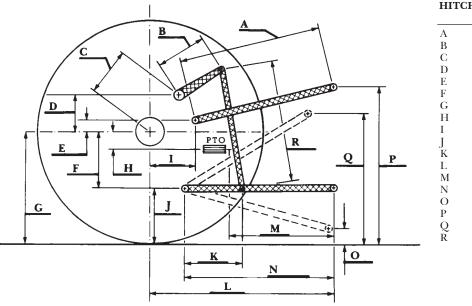
Two 600/65R38; \*\*:12 (80) Two 480/65R28; \*\*:12 (80) 15.9 in (405 mm) 7770 lb (3525 kg) 4830 lb (2190 kg) 12600 lb (5715 kg) This vehicle is equipped with an electronically controlled engine Power management system that monitors and boosts engine power output in certain circumstances. This is achieved by electronically changing the characteristics of the engine power-speed curve. The engine Power management function ("boosted" power level) becomes active in the higher transmission gears for road transport applications. The system is also activated when power transfer through the PTO exceeds a preset level (and forward speed exceeds 0.5 km/h), for mobile PTO driven implement applications. An overide system is provided to enable PTO operations at the "boosted" power level while the vehicle is stationary for test purposes. The results of this PTO output test are presented below.

Power HP (kW)	Crank shaft speed rpm	Diesel Consumpt Gal/hr (l/h)	ion lb/hp.hr (kg/kW.h)	Hp.hr/g (kW.h/l)		
	MA	XIMUM	POWER	AND 1	FUEL (	CONSUMPTION
		Rated	Engine Spe	ed—(PT	O speed-	-1109 rpm)
127.1	2100	7.33	0.401	17.35	0.31	
(94.8)		(27.74)	(0.244)	(3.42)	(1.17)	
			dard Power			000 rpm)
132.2	1893	7.27	0.383	18.19	0.32	
(98.6)		(27.52)	(0.233)	(3.58)	(1.20)	
		Ma	ximum Pow	er (1 hou	ır)	
136.1	1800	7.36	0.376	18.50	0.31	
(101.5)		(27.84)	(0.229)	(3.64)	(1.17)	
ARYING	POWE	R AND F	UEL CON	SUMPT	TION	
127.1	2100	7.33	0.401	17.35	0.31	Airtemperature
(94.8)		(27.74)	(0.244)	(3.42)	(1.17)	
114.1	2220	7.02	0.429	16.26	0.28	68°F(20°C)
(85.1)		(26.57)	(0.261)	(3.20)	(1.06)	
86.6	2245	5.85	0.472	14.80	0.22	<b>Relative humidity</b>
(64.6)		(22.16)	(0.287)	(2.91)	(0.84)	,
58.3	2266	4.66	0.557	12.52	0.16	45%
(43.5)		(17.63)	(0.339)	(2.47)	(0.61)	
29.4	2289	3.38	0.806	8.68	0.11	Barometer
(21.9)		(12.81)	(0.490)	(1.71)	(0.42)	
	2319	2.31				$29.2"\mathrm{Hg}(98.9kPa)$
		(8.73)				

Power increase at 1800 engine rpm - 7%

# HYDRAULIC PERFORMANCE

CATEGORY: II	
Quick Attach: None	
OECD Static test	
Maximum force exerted through whole range:	6720 lbs (29.9 kN) (80 mm lift cylinders)
	7980 lbs (35.5 kN) (90 mm lift cylinders)
i) Sustained pressure of the open relief valve:	3000 psi (207 bar)
ii) Pump delivery rate at minimum pressure:	28.5 GPM (78.5 l/min)
iii) Pump delivery rate at maximum	
hydraulic power:	18.8 GPM (71.0 l/min)
Delivery pressure:	2395 psi (165 bar)
Power:	26.2 HP (19.5 kW)



# HITCH DIMENSIONS AS TESTED—NO LOAD

	inch	mm	
A	29.9	760	
В	12.2	310	
С	15.6	395	
D	14.6	370	
	7.9	200	
E F	9.3	235	
G	32.5	825	
H	1.0	25	
ĺ	16.9	430	
J K L	23.2	590	
K	19.9	505	
L	46.4	1178	
М	23.9	608	
N	39.8	1010	
0	7.9	200	
Р	47.2	1200	
P Q R	34.3	870	
Ŕ	32.5	825	