SUMMARY OF OECD TEST 2698–NEBRASKA SUMMARY 850
CASE IH MAXXUM 110 DIESEL
16 SPEED

POWER TAKE-OFF PERFORMANCE

Power HP *(kW)*	Crank shaft speed rpm	Diesel Consumption Gal/hr *(l/h)*	lb/hp.hr *(kg/kW.h)*	D.E.F. Consumption Hp.hr/gal *(kW.h/l)*	D.E.F. Consumption Gal/hr *(l/h)*	Mean Atmospheric Conditions
MAXIMUM POWER AND FUEL CONSUMPTION						
Rated Engine Speed—(PTO speed—1091 rpm)						
94.7 *(70.6)*	2100	5.71 *(21.62)*	0.421 *(0.256)*	16.58 *(3.27)*	0.29 *(1.08)*	
Standard Power Take-off Speed (1000 rpm)						
102.2 *(76.2)*	1924	5.79 *(21.92)*	0.395 *(0.240)*	17.66 *(3.48)*	0.31 *(1.17)*	
Maximum Power (1 hour)						
105.0 *(78.3)*	1800	5.81 *(21.98)*	0.386 *(0.235)*	18.07 *(3.56)*	0.21 *(0.81)*	
VARYING POWER AND FUEL CONSUMPTION						
94.7 *(70.6)*	2100	5.71 *(21.62)*	0.421 *(0.256)*	16.58 *(3.27)*	0.29 *(1.08)*	Air temperature
82.1 *(61.2)*	2143	5.21 *(19.71)*	0.442 *(0.269)*	15.79 *(3.11)*	0.24 *(0.92)*	75°F *(24°C)*
62.1 *(46.3)*	2161	4.38 *(16.59)*	0.492 *(0.299)*	14.16 *(2.79)*	0.17 *(0.65)*	Relative humidity
41.8 *(31.2)*	2178	3.44 *(13.04)*	0.574 *(0.349)*	12.13 *(2.39)*	0.10 *(0.37)*	59%
21.0 *(15.7)*	2199	2.52 *(9.54)*	0.838 *(0.510)*	8.31 *(1.64)*	0.04 *(0.15)*	Barometer
--- ---	2215	1.83 *(6.93)*	--- ---	--- ---	--- ---	29.3" Hg *(99.3 kPa)*

Maximum torque - 335 lb.-ft. *(455 Nm)* at 1500 rpm
Maximum torque rise - 41.6%
Torque rise at 1700 engine rpm - 34%
Power increase at 1800 engine rpm - 10%

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)*	Fuel Consumption Hp.hr/gal *(kW.h/l)*	Temp.°F *(°C)* cool-ing med	Air dry bulb	Barom. inch Hg *(kPa)*
Maximum Power—9th Gear									
75.2 *(56.1)*	4945 *(22.0)*	5.70 *(9.18)*	2102	3.7	0.501 *(0.305)*	13.91 *(2.74)*	189 *(87)*	84 *(29)*	28.9 *(97.8)*
75% of Pull at Maximum Power—9th Gear									
58.7 *(43.8)*	3710 *(16.5)*	5.94 *(9.56)*	2156	2.8	0.589 *(0.358)*	11.83 *(2.33)*	189 *(87)*	84 *(29)*	28.9 *(97.8)*
50% of Pull at Maximum Power—9th Gear									
39.8 *(29.7)*	2470 *(11.0)*	6.04 *(9.72)*	2173	1.9	0.742 *(0.451)*	9.39 *(1.85)*	189 *(87)*	84 *(29)*	28.9 *(97.8)*
75% of Pull at Reduced Engine Speed—10th Gear									
58.7 *(43.8)*	3685 *(16.4)*	5.97 *(9.61)*	1943	2.8	0.511 *(0.311)*	13.64 *(2.69)*	187 *(86)*	84 *(29)*	28.9 *(97.8)*
50% of Pull at Reduced Engine Speed—10th Gear									
39.7 *(29.6)*	2475 *(11.0)*	6.02 *(9.69)*	1940	1.9	0.611 *(0.372)*	11.41 *(2.25)*	187 *(86)*	84 *(29)*	28.9 *(97.8)*

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

FUEL and OIL: 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 **DEF weight** 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** four cylinder vertical with turbocharger, air to air intercooler and SCR (selective catalyst reduction) exhaust treatment **Serial No.** 8731009 **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** 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.** ZBBE01001 **Tread width** rear 56.3" *(1430 mm)* to 84.0" *(2134 mm)* front 61.4" *(1560 mm)* to 88.8" *(2256 mm)* **Wheelbase** 94.0" (*2387 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 1.35 *(2.18)* second 1.66 *(2.67)* third 2.02 *(3.25)* fourth 2.48 *(3.99)* fifth 3.18 *(5.11)* sixth 3.90 (*6.27)* seventh 4.74 *(7.63)* eighth 5.29 *(8.51)* ninth 5.82 *(9.36)* tenth 6.48 *(10.43)* eleventh 7.90 *(12.71)* twelfth 9.69 *(15.59)* thirteenth 12.41 (*19.98)* fourteenth 15.23 *(24.51)* fifteenth 18.55 *(29.85)* sixteenth 23.83 *(38.35)* reverse 1.34 *(2.15)*, 1.64 *(2.64)*, 1.99 *(3.21)*, 2.45 *(3.94)*, 3.14 *(5.05)*, 3.85 *(6.20)*, 4.69 *(7.54)*, 5.23 *(8.41)*, 5.75 *(9.25)*, 6.41 *(10.31)*, 7.80 *(12.56)*, 9.55 *(15.40)*, 12.27 *(19.75)*, 15.06 *(24.23)*, 18.33 *(29.50)*, 22.48 *(36.18)*

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)*	Hp.hr/gal *(kW.h/l)*	Temp.°F*(°C)* cool-ing med	Air dry bulb	Barom. inch Hg *(kPa)*
					5th Gear				
71.6 *(53.4)*	9710 *(43.2)*	2.77 *(4.45)*	2056	15.0	0.526 *(0.320)*	13.25 *(2.61)*	189 *(87)*	82 *(28)*	28.9 *(97.8)*
					6th Gear				
80.9 *(60.3)*	9015 *(40.1)*	3.36 *(5.41)*	1937	9.4	0.480 *(0.292)*	14.52 *(2.86)*	189 *(87)*	82 *(28)*	28.9 *(97.8)*
					7th Gear				
81.4 *(60.7)*	7825 *(34.8)*	3.90 *(6.28)*	1800	6.5	0.458 *(0.278)*	15.23 *(3.00)*	187 *(86)*	82 *(28)*	28.9 *(97.8)*
					8th Gear				
84.2 *(62.8)*	7150 *(31.8)*	4.42 *(7.11)*	1802	5.0	0.453 *(0.275)*	15.39 *(3.03)*	187 *(86)*	82 *(28)*	28.9 *(98.0)*
					9th Gear				
83.1 *(62.0)*	6405 *(28.5)*	4.87 *(7.83)*	1801	4.5	0.462 *(0.281)*	15.08 *(2.97)*	187 *(86)*	84 *(29)*	28.9 *(97.8)*
					10th Gear				
84.5 *(63.0)*	5800 *(25.8)*	5.46 *(8.79)*	1800	4.1	0.452 *(0.275)*	15.43 *(3.04)*	185 *(85)*	82 *(28)*	28.9 *(98.0)*
					11th Gear				
80.7 *(60.2)*	4520 *(20.1)*	6.70 *(10.79)*	1800	3.3	0.477 *(0.290)*	14.59 *(2.87)*	187 *(86)*	82 *(28)*	28.9 *(98.0)*
					12th Gear				
80.7 *(60.2)*	3665 *(16.3)*	8.26 *(13.29)*	1800	2.8	0.492 *(0.299)*	14.16 *(2.79)*	187 *(86)*	84 *(29)*	28.9 *(97.8)*

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 1970 engine rpm or 1000 rpm at 1924 engine rpm **Unladen tractor mass** 11550 lb *(5240 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. The manufacturer's three point lift claim of 6900 lbs *(3130 kg)*, with 90 mm lift cylinders was not verified. 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. **2698,** Nebraska Summary 850, January 17, 2013.

Roger M. Hoy
Director

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

TRACTOR SOUND LEVEL WITH CAB	Front Wheel Drive Disengaged dB(A)	Engaged dB(A)
At no load in 7th gear	70.8	71.3
Bystander	--	--

TIRES AND WEIGHT	Tested Without Ballast
Rear tires - No.,size, ply & psi*(kPa)*	Two 600/65R38; **;12 *(80)*
Front tires - No.,size, ply & psi*(kPa)*	Two 480/65R28; **;12 *(80)*
Height of Drawbar	20.7 in *(525 mm)*
Static Weight with operator- Rear	6890 lb *(3125 kg)*
- Front	4830 lb *(2190 kg)*
- Total	11720 lb *(5315 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.

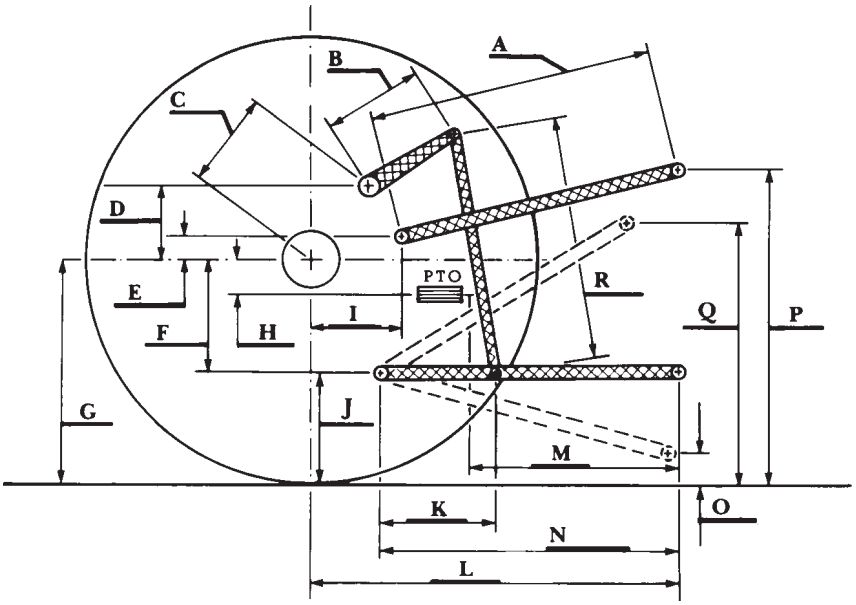
POWER TAKE-OFF PERFORMANCE

Power HP *(kW)*	Crank shaft speed rpm	Diesel Consumption Gal/hr *(l/h)*	lb/hp.hr *(kg/kW.h)*	D.E.F. Consumption Hp.hr/gal *(kW.h/l)*	Gal/hr *(l/h)*	Mean Atmospheric Conditions
MAXIMUM POWER AND FUEL CONSUMPTION						
Rated Engine Speed—(PTO speed—1091 rpm)						
112.9 *(84.2)*	2100	6.59 *(24.96)*	0.406 *(0.247)*	17.16 *(3.38)*	0.34 *(1.29)*	
Standard Power Take-off Speed (1000 rpm)						
122.6 *(91.4)*	1924	6.70 *(25.35)*	0.381 *(0.232)*	18.30 *(3.61)*	0.36 *(1.37)*	
Maximum Power (1 hour)						
123.5 *(92.1)*	1800	6.76 *(25.60)*	0.381 *(0.232)*	18.27 *(3.60)*	0.35 *(1.33)*	
VARYING POWER AND FUEL CONSUMPTION						
112.9 *(84.2)*	2100	6.59 *(24.96)*	0.406 *(0.247)*	17.16 *(3.38)*	0.34 *(1.29)*	Air temperature
97.2 *(72.5)*	2128	5.95 *(22.51)*	0.426 *(0.259)*	16.34 *(3.22)*	0.30 *(1.15)*	79°F *(26°C)*
73.8 *(55.0)*	2149	4.93 *(18.68)*	0.467 *(0.284)*	14.92 *(2.94)*	0.22 *(0.84)*	Relative humidity
49.6 *(37.0)*	2170	3.90 *(14.75)*	0.547 *(0.333)*	12.74 *(2.51)*	0.15 *(0.55)*	50%
25.3 *(18.9)*	2195	2.75 *(10.40)*	0.756 *(0.460)*	9.22 *(1.82)*	0.06 *(0.21)*	Barometer
--- ---	2213	1.88 *(7.13)*	--- ---	--- ---	--- ---	29.3" Hg *(99.3 kPa)*

Maximum torque - 393 lb.-ft. *(533 Nm)* at 1500 rpm
Maximum torque rise - 39.0%
Torque rise at 1700 engine rpm - 33%
Power increase at 1800 engine rpm - 9%

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)
i) Sustained pressure of the open relief valve:	2975 psi *(205 bar)*
ii) Pump delivery rate at minimum pressure:	19.8 GPM *(75.0 l/min)*
iii) Pump delivery rate at maximum hydraulic power:	18.2 GPM *(68.8 l/min)*
Delivery pressure:	2465 psi *(170 bar)*
Power:	26.2 HP *(19.5 kW)*



HITCH DIMENSIONS AS TESTED—NO LOAD

	inch	*mm*
A	27.6	*700*
B	12.2	*310*
C	15.6	*395*
D	14.6	*370*
E	7.9	*200*
F	9.3	*235*
G	32.5	*825*
H	1.0	*25*
I	16.9	*430*
J	23.2	*590*
K	19.9	*505*
L	45.0	*1142*
M	23.1	*587*
N	38.3	*974*
O	7.9	*200*
P	47.2	*1200*
Q	34.8	*884*
R	32.9	*835*