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Test 1895: Case IH CX 70/C 70 Diesel

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SUMMARY OF OECD TEST 1895—NEBRASKA SUMMARY 326
CASE IH CX 70 DIESEL
ALSO CASE IH C 70 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
MAXIMUM POWER AND FUEL CONSUMPTION					
Rated Engine Speed (PTO speed-1100 rpm)					
59.7 *(44.5)*	2200	3.94 *(14.91)*	0.464 *(0.282)*	15.17 *(2.99)*	
Standard Power Take-off Speed (1000 rpm)					
62.1 *(46.3)*	2000	3.88 *(14.69)*	0.440 *(0.267)*	16.00 *(3.15)*	
VARYING POWER AND FUEL CONSUMPTION					
59.7 *(44.5)*	2200	3.94 *(14.91)*	0.464 *(0.282)*	15.17 *(2.99)*	Air temperature
52.4 *(39.1)*	2274	3.69 *(13.97)*	0.495 *(0.301)*	14.21 *(2.80)*	68°F *(20°C)*
39.9 *(29.8)*	2312	3.14 *(11.90)*	0.554 *(0.337)*	12.69 *(2.50)*	Relative humidity
26.9 *(20.0)*	2328	2.66 *(10.08)*	0.696 *(0.424)*	10.10 *(1.99)*	33%
13.4 *(10.0)*	2340	1.95 *(7.37)*	1.019 *(0.620)*	6.90 *(1.36)*	Barometer
-- --	2357	1.29 *(4.89)*	-- --	-- --	29.3" Hg *(99.2 kPa)*

Maximum Torque - 195 lb.-ft. *(265 Nm)* at 1200 rpm
Maximum Torque Rise - 37.3%
Torque rise at 1800 engine rpm - 26%

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 (3LoDD) Gear									
50.2 *(37.4)*	4670 *(20.78)*	4.03 *(6.48)*	2199	3.0	0.559 *(0.340)*	12.59 *(2.48)*	167 *(75)*	46 *(8)*	29.6 *(100.1)*
75% of Pull at Maximum Power 6th (3LoDD) Gear									
40.0 *(29.8)*	3560 *(15.84)*	4.21 *(6.78)*	2279	2.2	0.640 *(0.389)*	10.99 *(2.16)*	165 *(74)*	45 *(7)*	29.6 *(100.1)*
50% of Pull at Maximum Power 6th (3LoDD) Gear									
26.8 *(20.0)*	2345 *(10.43)*	4.29 *(6.91)*	2301	1.4	0.800 *(0.486)*	8.80 *(1.73)*	162 *(72)*	45 *(7)*	29.6 *(100.1)*
75% of Pull at Reduced Engine Speed 7th (1HiTA) Gear									
39.4 *(29.4)*	3550 *(15.78)*	4.16 *(6.70)*	1889	2.0	0.531 *(0.323)*	13.25 *(2.61)*	163 *(73)*	45 *(7)*	29.6 *(100.1)*
50% of Pull at Reduced Engine Speed 7th (1HiTA) Gear									
26.8 *(20.0)*	2375 *(10.56)*	4.24 *(6.83)*	1911	1.3	0.624 *(0.379)*	11.28 *(2.22)*	162 *(72)*	45 *(7)*	29.6 *(100.1)*

Location of Test: DLG Testing Station for Agricultural Machinery Max - Eyth - Weg 1, D-64823 Gros-Umstadt, Germany

Dates of Test: October - November, 1998

Manufacturer: Case United Kingdom Limited, Doncaster, DN2 4PG, England

FUEL and OIL: Fuel No. 2 Diesel **Specific gravity converted to 60°/60° F *(15°/15°C)*** 0.845 **Fuel weight** 7.03 lbs/gal *(0.843 kg/l)* **Oil SAE** 15W-40 **API service classification** CF-4 **Transmission and hydraulic lubricant** Case Hy-Tran Plus fluid **Front axle lubricant** SAE 85W-140 gear oil

ENGINE: Make Perkins Diesel **Type** four cylinder vertical **Serial No.** ASU884231D **Crankshaft** lengthwise **Rated engine speed** 2200 **Bore and stroke** 4.055" x 5.00"*(103.0 mm x 127.0 mm)* **Compression ratio** 18.5 to 1 **Displacement** 258 cu in *(4232 ml)* **Starting system** 12 volt **Lubrication** pressure **Air cleaner** two paper elements **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** vertical **Cooling medium temperature control** thermostat and variable speed fan

CHASSIS: Type front wheel assist **Serial No.** JJE 100 2134 **Tread width** rear 55.9" *(1420 mm)* to 75.7" *(1922 mm)* front 53.7" *(1364 mm)* to 76.0" *(1930 mm)* **Wheel base** 92.8" *(2356 mm)* **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio with partial (2) range operator controlled powershift **Nominal travel speeds mph *(km/h)*** first 1.32 *(2.12)* second 1.59 *(2.56)* third 2.32 *(3.73)* fourth 2.80 *(4.50)* fifth 3.44 *(5.53)* sixth 4.14 *(6.67)* seventh 4.94 *(7.95)* eighth 5.39 *(8.67)* ninth 5.96 *(9.59)* tenth 6.50 *(10.46)* eleventh 8.70 *(14.00)* twelfth 10.49 *(16.88)* thirteenth 12.89 *(20.75)* fourteenth 15.55 *(25.02)* fifteenth 20.21 *(32.52)* sixteenth 24.37 *(39.22)* reverse 1.44 *(2.31)*, 2.53 *(4.07)*, 3.75 *(6.04)*, 5.39 *(8.67)*, 5.88 *(9.46)*, 9.49 *(15.28)*, 14.06 *(22.63)*, 22.05 *(35.48)* **Clutch** multiple dry disc hydraulically operated by foot pedal **Brakes** wet disc hydraulically operated by two foot pedals which can be locked together **Steering** hydrostatic **Power take-off** 540 rpm at 1994 engine rpm and 1000 rpm at 2000 engine rpm **Unladen tractor mass** 8265 lb *(3750 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)*	Hp.hr/gal *(kW.h/l)*	Temp.°F *(°C)* cool-ing med	Air dry bulb	Barom. inch Hg *(kPa)*
				1st (1LoTA) Gear					
29.8 *(22.2)*	9485 *(42.20)*	1.18 *(1.89)*	2299	15.0	0.771 *(0.469)*	9.13 *(1.80)*	162 *(72)*	46 *(8)*	29.6 *(100.1)*
				2nd (1LoDD) Gear					
35.8 *(26.7)*	9385 *(41.75)*	1.43 *(2.30)*	2277	13.5	0.706 *(0.429)*	9.96 *(1.96)*	164 *(73)*	45 *(7)*	29.6 *(100.1)*
				3rd (2LoTA) Gear					
48.4 *(36.1)*	8525 *(37.92)*	2.13 *(3.43)*	2201	8.4	0.577 *(0.351)*	12.18 *(2.40)*	167 *(75)*	46 *(8)*	29.6 *(100.1)*
				4th (2LoDD) Gear					
51.2 *(38.2)*	8060 *(35.86)*	2.38 *(3.83)*	1994	6.4	0.539 *(0.328)*	13.05 *(2.57)*	167 *(75)*	45 *(7)*	29.6 *(100.1)*
				5th (3LoTA) Gear					
53.1 *(39.6)*	6640 *(29.54)*	3.00 *(4.82)*	1994	4.2	0.519 *(0.316)*	13.55 *(2.67)*	167 *(75)*	45 *(7)*	29.6 *(100.1)*
				6th (3LoDD) Gear					
55.1 *(41.1)*	5640 *(25.09)*	3.66 *(5.90)*	2003	3.2	0.500 *(0.304)*	14.06 *(2.77)*	167 *(75)*	45 *(7)*	29.6 *(100.1)*
				7th (1HiTA) Gear					
52.8 *(39.4)*	4525 *(20.13)*	4.38 *(7.05)*	1997	2.6	0.521 *(0.317)*	13.50 *(2.66)*	167 *(75)*	45 *(7)*	29.6 *(100.1)*
				8th (4LoTA) Gear					
51.4 *(38.3)*	4010 *(17.83)*	4.81 *(7.73)*	1997	2.1	0.535 *(0.326)*	13.14 *(2.59)*	167 *(75)*	43 *(6)*	29.6 *(100.1)*
				9th (1HiDD) Gear					
51.5 *(38.4)*	3620 *(16.10)*	5.33 *(8.58)*	2002	1.9	0.534 *(0.325)*	13.18 *(2.60)*	167 *(75)*	45 *(7)*	29.6 *(100.1)*

TRACTOR SOUND LEVEL WITH CAB	Front Wheel Drive Engaged dB(A)	Front Wheel Drive Disengaged dB(A)
Maximum Sound Level	78.5	78.0
Bystander		

TRACTOR SOUND LEVEL WITHOUT CAB	Front Wheel Drive Engaged dB(A)	Front Wheel Drive Disengaged dB(A)
At no load in 7th(1HiTA) gear	89.0	89.0
Bystander		

TIRES AND WEIGHT		Tested Without Ballast
Rear Tires No., size, ply & psi *(kPa)*		Two 18.4R34;**; 12 *(80)*
Front Tires No., size, ply & psi *(kPa)*		Two 13.6R24;**; 12 *(80)*
Height of Drawbar		15.7 in *(400 mm)*
Static Weight with operator	Rear	5025 lb *(2280 kg)*
	Front	3240 lb *(1470 kg)*
	Total	8265 lb *(3750 kg)*

Note: The Case IH C 70 Diesel varies from the Case IH CX 70 Diesel by chassis design and transmission options.

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 claims of Cab sound level of 73.0 dB(A), nor 3 point lift capacity of 3665 lbs, optionally - 5097 lbs. The performance results on this summary were taken from OECD tests conducted under the Code II Test Code procedure.

We, the undersigned, certify that this is a true summary of data from OECD Report No. **1895**, Nebraska Summary 326, November 27, 2000.

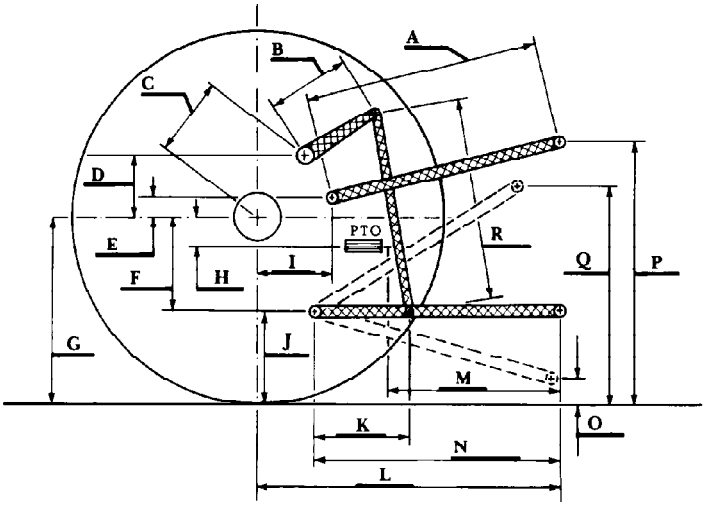
Brent T. Sampson
Test Engineer

L.L. Bashford
M.F. Kocher
R.D. Grisso, Jr.
Board of Tractor Test Engineers

THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY: II
Quick Attach: none

Maximum Force Exerted Through Whole Range:	2610 lbs	*(11.60 kN)*
	4000 lbs	*(17.80 kN)* (with boost cylinder)
i) Opening pressure of relief valve:	NA	
Sustained pressure of the open relief valve:	2555 psi	*(176 bar)*
ii) Pump delivery rate at minimum pressure:	16.6 GPM	*(62.7 l/min)*
iii) Pump delivery rate at maximum hydraulic power:	14.4 GPM	*(54.5 l/min)*
Delivery pressure:	2295 psi	*(158 bar)*
Power:	19.3 HP	*(14.4 kW)*



HITCH DIMENSIONS AS TESTED NO LOAD

	inch	*mm*
A	28.2	*716*
B	11.7	*298*
C	11.6	*295*
D	11.3	*288*
E	7.9	*200*
F	6.7	*170*
G	30.3	*770*
H	4.8	*122*
I	11.8	*300*
J	23.6	*600*
K	21.7	*550*
L	38.4	*975*
M	21.3	*540*
N	32.0	*814*
O	7.9	*200*
P	47.6	*1210*
Q	33.9	*860*
R	29.5	*750*

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