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Tests 2013 & 2015: Case IH JX 65 Diesel

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SUMMARY OF OECD TESTS 2013 & 2015—NEBRASKA SUMMARY 403

CASE IH JX 65 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
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MAXIMUM POWER AND FUEL CONSUMPTION

Rated Engine Speed (PTO speed-614 rpm)					
50.7 (37.8)	2500	3.03 (11.48)	0.409 (0.249)	16.70 (3.29)	
Standard Power Take-off Speed (540 rpm)					
47.7 (35.6)	2200	2.75 (10.41)	0.394 (0.240)	17.36 (3.42)	

VARYING POWER AND FUEL CONSUMPTION

50.7 (37.8)	2500	3.03 (11.48)	0.409 (0.249)	16.70 (3.29)	Air temperature
46.3 (34.5)	2686	2.91 (11.03)	0.431 (0.262)	15.89 (3.13)	73°F (23°C)
35.1 (26.2)	2720	2.32 (8.78)	0.451 (0.274)	15.13 (2.98)	Relative humidity
23.7 (17.7)	2752	1.76 (6.66)	0.506 (0.308)	13.50 (2.66)	39%
11.9 (8.9)	2773	1.29 (4.87)	0.736 (0.448)	9.29 (1.83)	Barometer
--	2796	0.91 (3.45)	--	--	27.0" Hg (91.5 kPa)

Maximum Torque - 129.7 lb.-ft. (175.8 Nm) at 1300 rpm
 Maximum Torque Rise - 21.8%
 Torque rise at 2000 engine rpm - 11%

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—10th (III-2) Gear									
41.5 (30.9)	1810 (8.05)	8.59 (13.83)	2495	6.8	0.487 (0.296)	14.16 (2.79)	169 (76)	72 (22)	27.0 (91.5)
75% of Pull at Maximum Power—10th (III-2) Gear									
33.5 (25.0)	1355 (6.04)	9.26 (14.90)	2663	5.9	0.579 (0.352)	11.93 (2.35)	169 (76)	72 (22)	27.0 (91.5)
50% of Pull at Maximum Power—10th (III-2) Gear									
22.9 (17.1)	905 (4.03)	9.47 (15.24)	2702	5.1	0.636 (0.387)	10.85 (2.14)	169 (76)	72 (23)	27.0 (91.5)
75% of Pull at Reduced Engine Speed—11th (III-3) Gear									
33.4 (24.9)	1360 (6.06)	9.21 (14.82)	1946	5.8	0.444 (0.270)	15.53 (3.06)	169 (76)	72 (23)	27.0 (91.5)
50% of Pull at Reduced Engine Speed—11th (III-3) Gear									
23.1 (17.2)	905 (4.03)	9.55 (15.36)	2003	5.1	0.523 (0.318)	13.20 (2.60)	169 (76)	72 (23)	27.0 (91.5)

Locations of tests: DAEMTC (The Directorate of Agricultural Equipment and Machinery Testing Centre) Ankara, Turkey and CNH America LLC Burr Ridge, IL USA

Dates of Test: PTO & Drwb: March - May, 2002
 Sound tests: December 3, 2003
 Hydraulic flow: August 8, 2003
 Lift tests: December 3, 2003

Manufacturer: CNH America LLC, 700 State St. Racine, Wi. 53404 USA

FUEL and OIL: Fuel No. 2 Diesel **Specific gravity converted to 60°/60° F (15°/15°C)** 0.821 **Fuel weight** 6.84 lbs/gal (0.820 kg/l) **Oil SAE** 20W-50 **API service classification** CF-4/SG **Transmission and hydraulic lubricant** BP Terrac Tractan 8 fluid **Front axle lubricant** BP Terrac Tractan 8 fluid

ENGINE: Make Iveco Diesel **Type** three cylinder vertical **Serial No.** 843033 **Crankshaft** lengthwise **Rated engine speed** 2500 **Bore and stroke** 4.094" x 4.528" (104.0 mm x 115.0 mm) **Compression ratio** 17.0 to 1 **Displacement** 179 cu in (2931 ml) **Starting system** 12 volt **Lubrication** pressure **Air cleaner** paper element **Oil filter** two cartridges **Fuel filter** one paper element **Muffler** underhood **Exhaust** vertical **Cooling medium temperature control** thermostat

CHASSIS: **Type** 2WD & front wheel assist **Serial No.** 2WD - HFD000035, FWA-HFD000048 **Tread width** rear 56.1" (1424 mm) to 75.7" (1924 mm) front 2WD- 56.0" (1422 mm) to 71.7" (1822 mm) FWA-56.9"(1445 mm) to 73.8"(1875 mm) **Wheel base** 2WD-85.6" (2175 mm), FWA-83.4"(2119 mm) **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio **Nominal travel speeds mph (km/h)** first 1.06 (1.71) second 1.63 (2.63) third 2.22 (3.58) fourth 2.48 (3.99) fifth 3.19 (5.13) sixth 3.82 (6.15) seventh 5.20 (8.37) eighth 5.84 (9.40) ninth 7.44 (11.98) tenth 9.00 (14.48) eleventh 12.24 (19.69) twelfth 17.53 (28.21) reverse 1.06 (1.71), 1.64 (2.64), 2.23 (3.59), 2.49 (4.00), 3.20 (5.15), 3.83 (6.17), 5.21 (8.39), 5.86 (9.43), 7.47(12.02), 9.02 (14.52), 12.27 (19.75), 17.59 (28.30) **Clutch** dual dry disc operated by foot pedal **Brakes** wet disc operated by two foot pedals which can be locked together **Steering** hydrostatic **Power take-off** 540 rpm at 2200 engine rpm and 1000 rpm at 2382 engine rpm **Unladen tractor mass** 2WD - 6010 lb (2726 kg), FWA - 6130 lb (2780 kg)

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

Power Hp (kW)	Drawbar pull lbs (kN)	Speed mph (km/h)	Crankshaft speed rpm	Slip %	Fuel Consumption lb/hp.hr (kg/kW.h)	Consumption Hp.hr/gal (kW.h/l)	Temp. °F cooling med	Temp. °C Air dry bulb	Barom. inch Hg (kPa)
5th (I-4) Gear									
29.1 (21.7)	3680 (16.37)	2.97 (4.77)	2666	15.1	0.644 (0.392)	10.71 (2.11)	169 (76)	72 (22)	27.0 (91.5)
6th (II-2) Gear									
34.1 (25.4)	3640 (16.20)	3.51 (5.65)	2630	14.9	0.591 (0.360)	11.67 (2.30)	169 (76)	72 (22)	27.0 (91.5)
7th (II-3) Gear									
37.7 (28.1)	2950 (13.13)	4.79 (7.71)	2504	10.4	0.539 (0.328)	12.79 (2.52)	169 (76)	72 (22)	27.0 (91.5)
8th (III-1) Gear									
38.5 (28.7)	2645 (11.77)	5.46 (8.79)	2506	9.1	0.524 (0.319)	13.15 (2.59)	169 (76)	72 (22)	27.0 (91.5)
9th (II-4) Gear									
40.3 (30.1)	2140 (9.53)	7.06 (11.36)	2509	8.0	0.500 (0.304)	13.81 (2.72)	169 (76)	72 (22)	27.0 (91.5)
10th (III-2) Gear									
41.5 (30.9)	1810 (8.05)	8.59 (13.83)	2495	6.8	0.487 (0.296)	14.16 (2.79)	169 (76)	72 (22)	27.0 (91.5)

REPAIRS AND ADJUSTMENTS: No repairs or adjustments

NOTE: The PTO and drawbar results shown on this report are from tests conducted on the New Holland TD 65D.

REMARKS: All test results were determined from observed data obtained in accordance with official OECD test procedures. 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 Reports No. **2013** & **2015**, Nebraska Summary 403, January 14, 2004.

Leonard L. Bashford
 Director

M.F. Kocher
 V.I. Adamchuk
 W.P. Campbell
 Board of Tractor Test Engineers

TRACTOR SOUND LEVEL WITHOUT CAB (2WD model)	dB(A)
At no load in 7th(II-3) Gear	86.3
Bystander	-

Tested Without Ballast

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

Front Wheel Assist

Two 14.9-30; 6; 22(150)
 Two 9.5-24; 6; 32(220)
 13.6 in (345 mm)
 3925 lb (1780 kg)
 2370 lb (1075 kg)
 6295 lb (2855 kg)

2WD

Two 14.9-30; 6; 22 (150)
 Two 7.50-16; 6; 32 (220)
 13.8 in (350 mm)
 4100 lb (1860 kg)
 2075 lb (941 kg)
 6175 lb (2801 kg)

DRAWBAR PERFORMANCE

(Unballasted - 2WD)

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 cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
Maximum Power—10th(III-2) Gear									
40.9 (30.5)	1845 (8.22)	8.30 (13.36)	2489	9.6	0.506 (0.308)	13.64 (2.69)	167 (75)	72 (22)	27.0 (91.5)
75% of Pull at Maximum Power—10th(III-2) Gear									
33.2 (24.7)	1385 (6.17)	8.97 (14.44)	2671	9.0	0.604 (0.368)	11.42 (2.25)	167 (75)	72 (22)	27.0 (91.5)
50% of Pull at Maximum Power—10th(III-2) Gear									
22.8 (17.0)	925 (4.11)	9.23 (14.86)	2705	7.5	0.725 (0.440)	9.54 (1.88)	174 (79)	72 (22)	27.0 (91.5)
75% of Pull at Reduced Engine Speed—11th(III-3) Gear									
32.9 (24.5)	1375 (6.12)	8.96 (14.42)	1957	8.8	0.542 (0.329)	12.74 (2.51)	167 (75)	72 (22)	27.0 (91.5)
50% of Pull at Reduced Engine Speed—11th(III-3) Gear									
22.7 (16.9)	920 (4.10)	9.23 (14.86)	1983	7.2	0.629 (0.382)	10.98 (2.16)	174 (79)	72 (22)	27.0 (91.5)
MAXIMUM POWER IN SELECTED GEARS									
7th(II-3) Gear									
34.2 (25.5)	2645 (11.77)	4.85 (7.80)	2670	14.8	0.589 (0.358)	11.72 (2.31)	175 (79)	79 (26)	27.0 (91.6)
8th(III-1) Gear									
37.5 (28.0)	2620 (11.65)	5.37 (8.64)	2610	14.1	0.555 (0.338)	12.44 (2.45)	175 (79)	79 (26)	27.0 (91.6)
9th(II-4) Gear									
39.0 (29.1)	2155 (9.58)	6.79 (10.92)	2507	11.4	0.531 (0.323)	12.99 (2.56)	175 (79)	79 (25)	27.0 (91.6)
10th(III-2) Gear									
40.9 (30.5)	1850 (8.22)	8.30 (13.36)	2489	9.6	0.506 (0.308)	13.64 (2.69)	175 (79)	79 (25)	27.0 (91.6)

THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY: II

Quick Attach: none

Maximum Force Exerted Through Whole Range: 3620 lbs (16.1 kN)

- i) Opening pressure of relief valve: NA
- Sustained pressure of the open relief valve: 2680 psi (185 bar)
- ii) Pump delivery rate at minimum pressure and rated engine speed: 11.9 GPM (45.2 l/min)
- iii) Pump delivery rate at maximum hydraulic power: 9.5 GPM (35.9 l/min)
- Delivery pressure: 2314 psi (160 bar)
- Power: 12.8 HP (9.5 kW)

THREE POINT HITCH PERFORMANCE

Observed Maximum Pressure psi. (bar)	2780 (192)
Location:	hydraulic manifold
Hydraulic oil temperature: °F (°C)	149 (65)
Location:	hydraulic sump
Category:	II
Quick attach:	none

SAE Static Test—System pressure 2470 psi (170 Bar)

Hitch point distance to ground level in. (mm)	8.0 (203)	15.0 (380)	22.0 (558)	29.0 (737)	36.0 (914)
Lift force on frame lb	5769	6055	5793	6060	5147
" " " " " " (kN)	(25.7)	(26.9)	(25.8)	(27.0)	(22.9)

HITCH DIMENSIONS AS TESTED—NO LOAD

	OECD test		SAE test	
	inch	mm	inch	mm
A	30.9	785	30.1	765
B	10.0	255	10.0	255
C	11.6	295	11.6	295
D	11.6	295	11.6	295
E	7.5	190	9.4	240
F	8.2	208	8.2	208
G	26.2	665	24.6	625
H	0.2	5	0.2	5
I	7.7	195	7.1	180
J	18.0	457	16.4	417
K	17.1	435	22.8	580
L	39.2	995	39.2	995
M	26.2	665	26.2	665
N	36.2	920	36.2	920
O	8.1	205	8.0	203
P	42.0	1067	35.4	899
Q	34.7	882	32.0	813
R	22.4	570	24.4	619

