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## Tests 2017 & 2019: Case IH JX 75 Diesel

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# SUMMARY OF OECD TESTS 2017 & 2019—NEBRASKA SUMMARY 404

## CASE IH JX 75 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)					
60.6 (45.2)	2500	3.61 (13.67)	0.408 (0.248)	16.75 (3.30)	
Standard Power Take-off Speed (540 rpm)					
56.3 (42.0)	2200	3.29 (12.46)	0.399 (0.243)	17.11 (3.37)	

#### VARYING POWER AND FUEL CONSUMPTION

60.6 (45.2)	2500	3.61 (13.67)	0.408 (0.248)	16.75 (3.30)	Air temperature
55.7 (41.5)	2693	3.40 (12.87)	0.418 (0.254)	16.35 (3.22)	73°F (20°C)
42.1 (31.4)	2717	2.78 (10.52)	0.452 (0.275)	15.13 (2.98)	Relative humidity
28.2 (21.0)	2728	2.02 (7.63)	0.490 (0.298)	13.96 (2.75)	36%
14.1 (10.5)	2737	1.43 (5.43)	0.697 (0.424)	9.81 (1.93)	Barometer
--	2746	1.02 (3.86)	--	--	27.0" Hg (92.8 kPa)

Maximum Torque - 153.3 lb.-ft. (207.8 Nm) at 1200 rpm  
 Maximum Torque Rise - 19.9%  
 Torque rise at 2000 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)	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									
49.5 (36.9)	2315 (10.29)	8.02 (12.91)	2493	9.8	0.505 (0.307)	13.65 (2.69)	163 (73)	77 (25)	26.8 (90.8)
75% of Pull at Maximum Power—10th (III-2) Gear									
41.7 (31.1)	1735 (7.72)	9.02 (14.52)	2690	6.0	0.566 (0.345)	12.18 (2.40)	163 (73)	77 (25)	26.8 (90.8)
50% of Pull at Maximum Power—10th (III-2) Gear									
28.3 (21.1)	1160 (5.15)	9.16 (14.74)	2710	5.2	0.686 (0.417)	10.06 (1.98)	163 (73)	77 (25)	26.8 (90.8)
75% of Pull at Reduced Engine Speed—11th (III-3) Gear									
41.7 (31.1)	1735 (7.72)	9.00 (14.49)	1978	6.1	0.511 (0.311)	13.50 (2.66)	163 (73)	77 (25)	26.8 (90.8)
50% of Pull at Reduced Engine Speed—11th (III-3) Gear									
27.9 (20.8)	1135 (5.06)	9.20 (14.80)	2002	5.3	0.584 (0.355)	11.83 (2.33)	163 (73)	77 (25)	26.8 (90.8)

**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: February - June, 2002  
 Sound tests: December 3, 2003  
 Hydraulic flow: August 8, 2003  
 Lift tests: December 2, 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** four cylinder vertical **Serial No.** 819723 **Crankshaft** lengthwise **Rated engine speed** 2500 **Bore and stroke** 3.937" x 4.528" (100.0 mm x 115.0 mm) **Compression ratio** 17.0 to 1 **Displacement** 220 cu in (3613 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 - HFD000002, FWA-HFD000295 **Tread width** rear 59.1" (1500 mm) to 78.7" (2000 mm) front 2WD - 55.5" (1410 mm) to 75.2" (1910 mm) FWA-60.2" (1530 mm) to 77.0" (1955 mm) **Wheel base** 2WD - 90.7" (2305 mm), FWA-88.6" (2250 mm) **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio **Nominal travel speeds mph (km/h)** first 1.10 (1.77) second 1.70 (2.73) third 2.31 (3.71) fourth 2.57 (4.14) fifth 3.31 (5.32) sixth 3.96 (6.38) seventh 5.39 (8.67) eighth 6.05 (9.74) ninth 7.72 (12.42) tenth 9.33 (15.01) eleventh 12.69 (20.42) twelfth 18.18 (29.25) reverse 1.11 (1.78), 1.70 (2.74), 2.31 (3.72), 2.58 (4.15), 3.32 (5.34), 3.98 (6.40), 5.41 (8.70), 6.07 (9.77), 7.74 (12.46), 9.36 (15.06), 12.73 (20.48), 18.23 (29.33) **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 - 6205 lb (2814 kg), FWA - 6775 lb (3073 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 lb/hp.hr (kg/kW.h)	Consumption Hp.hr/gal (kW.h/l)	Temp. °F cool- ing med	Temp. °C Air dry bulb	Barom. inch Hg (kPa)
6th (II-2) Gear									
36.2 (27.0)	3930 (17.48)	3.46 (5.57)	2684	14.9	0.630 (0.383)	10.96 (2.16)	163 (73)	77 (25)	27.3 (92.5)
7th (II-3) Gear									
43.7 (32.6)	3620 (16.11)	4.53 (7.28)	2497	12.1	0.546 (0.332)	12.64 (2.49)	163 (73)	77 (25)	27.3 (92.5)
8th (III-1) Gear									
44.7 (33.3)	3300 (14.67)	5.08 (8.18)	2495	11.9	0.539 (0.328)	12.79 (2.52)	163 (73)	77 (25)	27.3 (92.5)
9th (II-4) Gear									
46.3 (34.6)	2650 (11.79)	6.56 (10.55)	2490	10.8	0.517 (0.315)	13.34 (2.63)	163 (73)	77 (25)	27.3 (92.5)
10th (III-2) Gear									
49.5 (36.9)	2315 (10.29)	8.02 (12.91)	2493	9.8	0.505 (0.307)	13.65 (2.69)	163 (73)	77 (25)	27.3 (92.5)

**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 75D.

**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 claim of 3 point lift capacity of 5975 lbs (2710 kg). 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. **2017 & 2019**, Nebraska Summary 404, January 14, 2004.

Leonard L. Bashford  
 Director

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

TRACTOR SOUND LEVEL WITH CAB	Front Wheel Drive	
	Engaged dB(A)	Disengaged dB(A)
At no load in 7th(II-3) Gear	87.7	87.6
Bystander	-	-

**Tested Without Ballast**

TIRES AND WEIGHT	Front Wheel Assist		2WD
	Front Wheel Assist		2WD
Rear tires - No., size, ply & psi (kPa)	Two 16.9-30; 6; 22(150)		Two 16.9-34; 6; 22 (150)
Front tires - No., size, ply & psi (kPa)	Two 11.2-24; 6; 32(220)		Two 7.50-16; 6; 32(220)
Height of Drawbar	14.8 in (375 mm)		16.7 in (425 mm)
Static Weight with operator-Rear	4130 lb (1874 kg)		4340 lb (1969 kg)
- Front	2805 lb (1271 kg)		2030 lb (920 kg)
- Total	6935 lb (3145 kg)		6370 lb (2889 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 (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
<b>Maximum Power—10th(III-2) Gear</b>									
49.4 (36.8)	2135 (9.50)	8.67 (13.96)	2508	8.9	0.509 (0.310)	13.55 (2.67)	176 (80)	72 (22)	27.2 (92.1)
<b>75% of Pull at Maximum Power—10th(III-2) Gear</b>									
40.1 (29.9)	1605 (7.13)	9.38 (15.10)	2659	7.0	0.604 (0.367)	11.42 (2.25)	176 (80)	72 (22)	27.2 (92.1)
<b>50% of Pull at Maximum Power—10th(III-2) Gear</b>									
27.2 (20.3)	1065 (4.75)	9.56 (15.38)	2685	6.2	0.690 (0.420)	10.00 (1.97)	176 (80)	72 (22)	27.2 (92.1)
<b>75% of Pull at Reduced Engine Speed—11th(III-3) Gear</b>									
41.0 (30.6)	1620 (7.20)	9.49 (15.28)	1978	7.0	0.475 (0.289)	14.52 (2.86)	176 (80)	72 (22)	27.2 (92.1)
<b>50% of Pull at Reduced Engine Speed—11th(III-3) Gear</b>									
28.5 (21.3)	1105 (4.92)	9.68 (15.57)	1994	6.0	0.574 (0.349)	12.03 (2.37)	176 (80)	72 (22)	27.2 (92.1)
<b>MAXIMUM POWER IN SELECTED GEARS</b>									
7th(II-3) Gear									
39.6 (29.6)	2955 (13.15)	5.03 (8.09)	2684	14.8	0.596 (0.363)	11.57 (2.28)	176 (80)	68 (20)	27.3 (92.3)
8th(III-1) Gear									
43.4 (32.4)	2870 (12.77)	5.67 (9.13)	2689	14.4	0.569 (0.346)	12.13 (2.39)	176 (80)	68 (20)	27.3 (92.3)
9th(II-4) Gear									
48.5 (36.2)	2610 (11.61)	6.97 (11.21)	2495	11.1	0.516 (0.314)	13.38 (2.64)	176 (80)	68 (20)	27.3 (92.3)
10th(III-2) Gear									
49.4 (36.8)	2135 (9.50)	8.67 (13.96)	2508	8.9	0.509 (0.310)	13.55 (2.67)	176 (80)	68 (20)	27.3 (92.3)

### THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY: II

Quick Attach: none

Maximum Force Exerted Through Whole Range: 3440 lbs (15.3 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)	2580 (178)
Location:	hydraulic manifold
Hydraulic oil temperature: °F (°C)	149 (65)
Location:	hydraulic sump
Category:	II
Quick attach:	none

#### SAE Static Test—System pressure 2325 psi (160 Bar)

Hitch point distance to ground level in.(mm)	8.0(203)	15.0(380)	21.9(556)	29.0(737)	36.0(914)
Lift force on frame lb	5652	5862	5487	5658	5002
" " " " " " (kN)	(25.1)	(26.1)	(24.4)	(25.2)	(22.3)

### HITCH DIMENSIONS AS TESTED—NO LOAD

	OECD test		SAE test	
	inch	mm	inch	mm
A	30.7	780	31.6	803
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	8.1	205	8.1	205
G	27.4	695	27.4	695
H	0.2	5	0.2	5
I	7.7	195	7.1	180
J	19.3	490	19.3	490
K	17.9	455	21.1	535
L	40.4	1027	40.4	1027
M	28.5	725	28.5	725
N	38.2	970	38.2	970
O	7.9	200	8.0	203
P	43.3	1100	38.3	973
Q	34.9	887	33.6	854
R	23.4	595	25.7	654

