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Tests 2172 & 2191: Case IH JX 95 Diesel Series II

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SUMMARY OF OECD TESTS 2172 & 2191—NEBRASKA SUMMARY 463

CASE IH JX 95 DIESEL

12 SPEED

Chassis Serial numbers HFJ013287 and higher

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)					
82.5 (61.5)	2500	4.73 (17.91)	0.401 (0.244)	17.42 (3.43)	

Standard Power Take-off Speed (540 rpm)					
81.3 (60.6)	2200	4.47 (16.92)	0.385 (0.234)	18.17 (3.58)	

VARYING POWER AND FUEL CONSUMPTION

82.5 (61.5)	2500	4.73 (17.91)	0.401 (0.244)	17.42 (3.43)	Air temperature
74.4 (55.5)	2658	4.45 (16.84)	0.417 (0.254)	16.74 (3.30)	81°F (27°C)
56.7 (42.3)	2702	3.78 (14.31)	0.465 (0.283)	15.01 (2.96)	Relative humidity
38.2 (28.5)	2728	2.88 (10.89)	0.526 (0.320)	13.28 (2.62)	30%
19.3 (14.4)	2754	2.13 (8.06)	0.771 (0.469)	9.07 (1.79)	Barometer
--	2802	1.47 (5.57)	--	--	27.0" Hg (91.6 kPa)

Maximum Torque - 219.7 lb.-ft. (297.9 Nm) at 1600 rpm
 Maximum Torque Rise - 26.4%
 Torque rise at 2000 engine rpm - 19%

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—7th (II-3) Gear									
64.8 (48.3)	4875 (21.69)	4.98 (8.01)	2501	7.7	0.580 (0.353)	12.03 (2.37)	171 (77)	72 (22)	26.7 (90.3)
75% of Pull at Maximum Power—7th (II-3) Gear									
54.0 (40.3)	3655 (16.27)	5.54 (8.92)	2713	5.2	0.644 (0.392)	10.84 (2.14)	171 (77)	72 (22)	26.7 (90.3)
50% of Pull at Maximum Power—7th (II-3) Gear									
37.6 (28.0)	2440 (10.85)	5.78 (9.30)	2763	2.9	0.769 (0.468)	9.09 (1.79)	171 (77)	72 (22)	26.7 (90.3)
75% of Pull at Reduced Engine Speed—8th (III-1) Gear									
53.9 (40.2)	3655 (16.27)	5.53 (8.90)	2409	5.2	0.597 (0.363)	11.70 (2.30)	172 (78)	72 (22)	26.7 (90.3)
50% of Pull at Reduced Engine Speed—8th (III-1) Gear									
37.4 (27.9)	2440 (10.85)	5.75 (9.25)	2443	2.8	0.662 (0.403)	10.55 (2.08)	172 (78)	72 (22)	26.7 (90.3)

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: April - May, 2004

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)** 0.839 **Fuel weight** 6.98 lbs/gal (0.837 kg/l) **Oil** SAE 20W-50 **API service classification** DM/12 **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 with turbocharger **Serial No.** *639-998706* **Crankshaft** lengthwise **Rated engine speed** 2500 **Bore and stroke** 4.094" x 4.528" (104.0 mm x 115.0 mm) **Compression ratio** 18.0 to 1 **Displacement** 238 cu in (3908 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-J0S2AA, FWA-HFD018110 **Tread width** rear 59.8" (1520 mm) to 67.7" (1720 mm) front 2WD-56.9" (1445 mm) to 72.6" (1845 mm) FWA-65.4" (1660 mm) to 68.3" (1735 mm) **Wheel base** 2WD-93.5" (2375 mm), FWA-91.5" (2325 mm) **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio **Nominal travel speeds mph (km/h)** first 1.12 (1.81) second 1.63 (2.62) third 2.34 (3.78) fourth 2.62 (4.22) fifth 3.37 (5.42) sixth 3.81 (6.13) seventh 5.49 (8.83) eighth 6.16 (9.92) ninth 7.86 (12.65) tenth 8.96 (14.42) eleventh 12.92 (20.79) twelfth 18.50 (29.78) reverse 1.12 (1.81), 1.63 (2.63), 2.36 (3.79), 2.63 (4.23), 3.37 (5.43), 3.82 (6.14), 5.51 (8.86), 6.18 (9.95), 7.88 (12.68), 8.99 (14.46), 12.96 (20.85), 18.55 (29.86) **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 2381 engine rpm **Unladen tractor mass** 2WD - 6790 lb (3080 kg), FWA - 7615 lb (3454 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 (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
5th (I-4) Gear									
52.3 (39.0)	6500 (28.92)	3.02 (4.86)	2686	15.0	0.691 (0.421)	10.10 (1.99)	176 (80)	73 (23)	26.8 (90.8)
6th (II-2) Gear									
58.3 (43.5)	6465 (28.76)	3.38 (5.45)	2624	13.7	0.646 (0.393)	10.81 (2.13)	176 (80)	75 (24)	26.8 (90.8)
7th (II-3) Gear									
64.8 (48.3)	4875 (21.69)	4.98 (8.01)	2501	7.7	0.580 (0.353)	12.03 (2.37)	176 (80)	75 (24)	26.8 (90.8)
8th (III-1) Gear									
65.5 (48.8)	4330 (19.26)	5.67 (9.13)	2505	6.5	0.571 (0.347)	12.23 (2.41)	178 (81)	75 (24)	26.8 (90.8)
9th (II-4) Gear									
66.8 (49.8)	3415 (15.20)	7.33 (11.80)	2509	5.3	0.559 (0.340)	12.49 (2.46)	178 (81)	75 (24)	26.8 (90.8)
10th (III-2) Gear									
69.2 (51.6)	3085 (13.72)	8.41 (13.53)	2498	4.4	0.541 (0.329)	12.90 (2.54)	178 (81)	75 (24)	26.8 (90.8)

REPAIRS AND ADJUSTMENTS: The fuel injectors were replaced.

NOTE 1: The PTO and drawbar results shown on this report are from tests conducted on the New Holland TD 95D.

NOTE 2: The performance data on this summary applies to tractor chassis serial numbers HFJ013287 and higher.

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 5950 lbs (2700 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. **2172** & **2191**, Nebraska Summary 463, April 1, 2005.

Leonard L. Bashford
 Director

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

TRACTOR SOUND LEVEL WITHOUT CAB

	Front Wheel Drive Engaged dB(A)	Disengaged dB(A)
At no load in 7th(II-3) Gear	88.6	88.2
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 16.9R34; **, 23 (160)
 Two 13.6R24; **, 23 (160)
 13.4 in (340 mm)
 4675 lb (2120 kg)
 3105 lb (1409 kg)
 7780 lb (3529 kg)

2WD

Two 18.4R34; **, 23 (160)
 Two 7.50-18; 8; 54 (370)
 14.8 in (450 mm)
 4725 lb (2143 kg)
 2230 lb (1012 kg)
 6955 lb (3155 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 lb/hp.hr (kg/kW.h)	Consumption Hp.hr/gal (kW.h/l)	Temp. °F cool- ing med	°C Air dry bulb	Barom. inch Hg (kPa)
Maximum Power—7th(II-3) Gear									
63.4 (47.3)	4795 (21.34)	4.96 (7.98)	2501	11.4	0.540 (0.329)	12.93 (2.55)	167 (75)	63 (17)	27.0 (91.5)
75% of Pull at Maximum Power—7th(II-3) Gear									
52.6 (39.2)	3600 (16.01)	5.48 (8.82)	2663	8.0	0.609 (0.371)	13.20 (2.26)	167 (75)	63 (17)	27.0 (91.5)
50% of Pull at Maximum Power—7th(II-3) Gear									
36.9 (27.5)	2400 (10.67)	5.76 (9.27)	2703	4.7	0.690 (0.420)	10.13 (2.00)	167 (75)	64 (18)	27.0 (91.5)
75% of Pull at Reduced Engine Speed—8th(III-3) Gear									
52.7 (39.3)	3600 (16.01)	5.49 (8.84)	2372	7.9	0.529 (0.322)	13.20 (2.60)	167 (75)	64 (18)	27.0 (91.5)
50% of Pull at Reduced Engine Speed—8th(III-3) Gear									
36.8 (27.5)	2400 (10.67)	5.76 (9.27)	2403	4.6	0.625 (0.380)	11.17 (2.20)	167 (75)	64 (18)	27.0 (91.5)
MAXIMUM POWER IN SELECTED GEARS									
6th(II-2) Gear									
48.1 (35.9)	5220 (23.22)	3.46 (5.57)	2623	14.9	0.637 (0.388)	10.96 (2.16)	174 (79)	59 (15)	27.0 (91.5)
7th(II-3) Gear									
63.4 (47.3)	4795 (21.34)	4.96 (7.98)	2501	11.4	0.541 (0.329)	12.95 (2.55)	176 (80)	59 (15)	27.0 (91.5)
8th(III-1) Gear									
66.2 (49.4)	4410 (19.61)	5.63 (9.06)	2500	10.4	0.533 (0.324)	13.10 (2.58)	176 (80)	61 (16)	27.0 (91.5)
9th(II-4) Gear									
67.9 (50.6)	3495 (15.55)	7.28 (11.72)	2502	9.2	0.516 (0.314)	13.54 (2.67)	176 (80)	61 (16)	27.0 (91.5)
10th(III-2) Gear									
71.1 (53.0)	3195 (14.20)	8.35 (13.44)	2500	8.5	0.493 (0.300)	14.16 (2.79)	176 (80)	61 (16)	27.0 (91.5)

THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY: II

Quick Attach: none

Maximum Force Exerted Through Whole Range: 3820 lbs (17.0 kN)

- i) Opening pressure of relief valve: NA
- Sustained pressure of the open relief valve: 2830 psi (195 bar)
- ii) Pump delivery rate at minimum pressure and rated engine speed: 15.4 GPM (58.4 l/min)
- iii) Pump delivery rate at maximum hydraulic power: 14.5 GPM (54.7 l/min)
- Delivery pressure: 1890 psi (130 bar)
- Power: 16.0 HP (11.9 kW)

THREE POINT HITCH PERFORMANCE (SAE test)

Observed Maximum Pressure psi. (bar)	2790 (1928)
Location:	hydraulic manifold
Hydraulic oil temperature: °F (°C)	149 (65)
Location:	hydraulic sump
Category:	II
Quick attach:	none

SAE Static Test—System pressure 2430 psi (167 Bar)

Hitch point distance to ground level in. (mm)	9.0 (228)	16.0 (406)	23.0 (585)	30.0 (762)	37.0 (939)
Lift force on frame lb	5906	6092	5726	5835	5275
" " " " " " (kN)	(26.3)	(27.1)	(25.5)	(26.0)	(23.5)

HITCH DIMENSIONS AS TESTED—NO LOAD

	OECD test		SAE test	
	inch	mm	inch	mm
A	33.5	850	32.8	835
B	10.2	260	10.2	260
C	11.7	296	11.7	296
D	11.6	295	11.6	295
E	7.5	190	9.4	240
F	7.9	200	7.9	200
G	29.3	745	30.3	770
H	0.2	5	0.2	5
I	6.9	175	6.3	160
J	21.4	545	22.4	570
K	18.7	475	21.9	555
L	41.0	1042	41.0	1042
M	28.8	732	28.8	732
N	39.0	990	39.0	990
O	8.7	220	9.0	229
P	45.5	1155	41.4	1052
Q	38.4	975	35.3	895
R	25.0	635	26.5	673

