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## Tests 2156 & 2157: Case IH JX 1060C Diesel

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# SUMMARY OF OECD TESTS 2156 and 2157—NEBRASKA SUMMARY 450 CASE IH JX 1060C 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
<b>MAXIMUM POWER AND FUEL CONSUMPTION</b>					
<b>Rated Engine Speed (PTO speed—565 rpm)</b>					
47.2 (35.2)	2299	3.02 (11.42)	0.447 (0.272)	15.63 (3.08)	
<b>Maximum Power (2 hours)</b>					
48.3 (36.0)	2224	3.01 (11.41)	0.437 (0.266)	16.01 (3.15)	
<b>Standard Power Take-off speed (540 rpm)</b>					
47.3 (35.3)	2198	2.97 (11.23)	0.439 (0.267)	15.94 (3.14)	

## VARYING POWER AND FUEL CONSUMPTION

47.2 (35.2)	2299	3.02 (11.42)	0.447 (0.272)	15.63 (3.08)	Air temperature
41.8 (31.2)	2395	2.60 (9.86)	0.436 (0.265)	16.06 (3.16)	75°F (24°C)
31.5 (23.5)	2410	2.23 (8.46)	0.495 (0.301)	14.11 (2.78)	Relative humidity
21.3 (15.9)	2438	1.80 (6.80)	0.591 (0.359)	11.84 (2.33)	62%
10.7 (8.0)	2461	1.30 (4.92)	0.847 (0.515)	8.25 (1.63)	Barometer
--	2487	0.90 (3.39)	--	--	30.1" Hg (102.1 kPa)

Maximum Torque -146.8 lb.-ft. (199.1 Nm) at 1280 rpm  
Maximum Torque Rise -36.1%  
Torque rise at 1850 engine rpm -14%

**Location of tests:** Alma Mater Studiorum, University  
Di Bologna, Via Gandolfi, 19-40057, Cadriano,  
Bologna, Italy

**Dates of tests:** March, 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)** 0.840  
**Fuel weight** 6.99 lbs/gal (0.838 kg/l) **Oil** SAE 15W40  
**API service classification** CF-4/SG **Oil consumption for 10 hours** 0.03 lb (15 gm)  
**Transmission and hydraulic lubricant** Akcela  
Nexplorer 130 **Front axle lubricant** Akcela  
Nexplorer 130

**ENGINE:** Make Iveco Diesel **Type** three cylinder  
vertical **Serial No.** 858976 **Crankshaft** lengthwise  
**Rated engine speed** 2300 **Bore and stroke** 4.094"  
x 4.528" (104.0 mm x 115.0 mm) **Compression ratio**  
18.0 to 1 **Displacement** 179 cu in (2930 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**  
underhood **Exhaust** vertical **Cooling medium**  
**temperature control** thermostat and variable speed  
fan

**CHASSIS:** **Type** 2WD and front wheel assist **Serial**  
**No.** HJH297332 **Tread width** rear 48.5" (1232 mm)  
to 76.7" (1949 mm) front: 2WD - 56.7" (1439 mm) to  
63.3" (1607 mm), FWA - 48.7" (1236 mm) to 76.6"  
(1945 mm) **Wheel base** 2WD - 83.8" (2130 mm) FWA  
- 81.3" (2065 mm) **Hydraulic control system** direct  
engine drive **Transmission** selective gear fixed ratio  
**Nominal travel speeds (30 km/h transmission) mph**  
(km/h) first 0.39 (0.63) second 0.58 (0.93) third 0.85  
(1.37) fourth 1.26 (2.03) fifth 1.63 (2.63) sixth 2.00  
(3.22) seventh 2.43 (3.91) eighth 2.98 (4.79) ninth  
3.57 (5.75) tenth 4.37 (7.04) eleventh 5.30 (8.53)  
twelfth 5.77 (9.28) thirteenth 6.49 (10.44) fourteenth  
8.60 (13.84) fifteenth 12.64 (20.34) sixteenth 18.72  
(30.13) reverse 0.38 (0.61), 0.56 (0.90), 0.83 (1.33),  
1.22 (1.97), 1.58 (2.54), 1.93 (3.11), 2.36 (3.79), 2.88  
(4.64), 3.46 (5.57), 4.24 (6.82), 5.13 (8.26), 5.59  
(8.99), 6.28 (10.11), 8.33 (13.40), 12.24 (19.70),  
18.14 (29.19) **Clutch** dual dry disc 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 2196 engine  
rpm or 1000 rpm at 2260 engine rpm **Unladen**  
**tractor mass** 2WD - 5895 lb (2675 kg), FWA - 6425  
lb (2915 kg)

## DRAWBAR PERFORMANCE(40 km/h trans.)

### BALLASTED - 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)	Temp.°F (°C) cool- ing med	Temp.°F (°C) Air dry bulb	Barom. inch Hg (kPa)	
<b>75% of Pull at Maximum Power—Five Hours 10th (3M Hi) Gear</b>									
29.4 (21.9)	1990 (8.86)	5.54 (8.91)	2369	3.5	0.629 (0.383)	11.12 (2.19)	183 (84)	66 (19)	30.1 (102.0)
<b>MAXIMUM POWER IN SELECTED GEARS</b>									
5th(1M Lo) Gear									
32.2 (24.0)	6595 (29.34)	1.83 (2.95)	2379	14.9	0.585 (0.356)	11.99 (2.36)	179 (82)	64 (18)	30.3 (102.5)
6th (1M Hi) Gear									
36.2 (27.0)	6315 (28.10)	2.15 (3.46)	2255	13.5	0.565 (0.343)	12.39 (2.44)	181 (83)	66 (19)	30.3 (102.5)
7th (2M Lo) Gear									
36.3 (27.1)	4865 (21.65)	2.80 (4.50)	2253	8.0	0.574 (0.349)	12.18 (2.40)	183 (84)	64 (18)	30.3 (102.5)
8th (2M Hi) Gear									
38.1 (28.4)	4095 (18.21)	3.49 (5.61)	2242	6.0	0.534 (0.325)	13.10 (2.58)	179 (82)	68 (20)	30.3 (102.5)
9th (3M Lo) Gear									
38.4 (28.6)	3345 (14.87)	4.30 (6.92)	2256	4.5	0.542 (0.330)	12.89 (2.54)	181 (83)	64 (18)	30.3 (102.5)
10th (3M Hi) Gear									
37.3 (27.8)	2645 (11.77)	5.28 (8.50)	2248	3.7	0.551 (0.335)	12.69 (2.50)	183 (84)	64 (18)	30.3 (102.5)
11th (4M Lo) Gear									
36.4 (27.1)	2150 (9.57)	6.34 (10.20)	2231	3.1	0.562 (0.342)	12.44 (2.45)	181 (83)	63 (17)	30.3 (102.5)
12th (1 Hi) Gear									
36.8 (27.4)	1950 (8.68)	7.07 (11.38)	2263	2.9	0.553 (0.337)	12.64 (2.49)	181 (83)	64 (18)	30.3 (102.5)
13th (4M Hi) Gear									
33.0 (24.6)	1585 (7.04)	7.82 (12.59)	2225	2.3	0.623 (0.379)	11.22 (2.21)	183 (84)	64 (18)	30.3 (102.5)
14th (2 Hi) Gear									
31.9 (23.8)	1130 (5.03)	10.58 (17.02)	2268	1.7	0.643 (0.391)	10.87 (2.14)	183 (83)	63 (17)	30.3 (102.5)

**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 claim of 5258 lbs (2385 kg) 3 point lift capacity. The performance results on this summary were taken from OECD tests conducted under the Code I Test procedure.

We, the undersigned, certify that this is a true summary of data from OECD Reports No. **2156** and **2157**, Nebraska Summary 450, August 19, 2005.

Leonard L. Bashford  
Director

M.F. Kocher  
J.A. Smith  
W.P. Campbell  
Board of Tractor Test Engineers

## JX 1060C- FWA(40 km/h transmission)

TIRES, BALLAST AND WEIGHT		With Ballast	Without Ballast
<b>Rear Tires</b>	-No., size, ply & psi (kPa)	Two 16.9R30; **,19 (135)	Two 16.9R30; **,19 (135)
<b>Ballast</b>	-Liquid (total)	None	None
	-Cast Iron (total)	440 lb (200 kg)	None
<b>Front Tires</b>	-No., size, ply & psi (kPa)	Two 11.2R24; **,17 (115)	Two 11.2R24; **,17 (115)
<b>Ballast</b>	-Liquid (total)	None	None
	-Cast Iron (total)	640 lb (290 kg)	None
<b>Height of Drawbar</b>		19.3 in (490 mm)	19.3 in (490 mm)
<b>Static Weight with Operator</b>	- Rear	4560 lb (2070 kg)	4285 lb (1945 kg)
	- Front	3110 lb (1410 kg)	2305 lb (1045 kg)
	- Total	7670 lb (3480 kg)	6590 lb (2990 kg)

## DRAWBAR PERFORMANCE(30 km/h trans.)

### BALLASTED - 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)	Temp. °F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)	
<b>75% of Pull at Maximum Power—Five Hours 10th (3 MHi) Gear</b>									
31.3 (23.4)	2705 (12.04)	4.34 (6.99)	2399	6.1	0.508 (0.309)	13.76 (2.71)	178 (81)	55 (13)	30.1 (102.0)

#### MAXIMUM POWER IN SELECTED GEARS

7th (2 MLo) Gear									
29.6 (22.1)	5055 (22.49)	2.20 (3.54)	2406	15.0	0.533 (0.324)	13.11 (2.58)	180 (82)	55 (13)	29.9 (101.4)
8th (2M Hi) Gear									
34.9 (26.0)	4935 (21.95)	2.65 (4.26)	2355	14.5	0.525 (0.319)	13.32 (2.62)	180 (82)	57 (14)	29.9 (101.4)
9th (3M Lo)Gear									
37.0 (27.6)	4430 (19.70)	3.14 (5.05)	2291	12.9	0.533 (0.324)	13.11 (2.58)	178 (81)	55 (13)	29.9 (101.4)
10th (3 M Hi) Gear									
38.2 (28.5)	3600 (16.01)	3.98 (6.40)	2273	9.3	0.531 (0.323)	13.16 (2.59)	180 (82)	57 (14)	29.9 (101.4)
11th (4 MLo) Gear									
39.0 (29.1)	2975 (13.24)	4.92 (7.92)	2262	6.9	0.518 (0.315)	13.50 (2.66)	178 (81)	57 (14)	29.9 (101.4)
12th (1 Hi) Gear									
37.7 (28.2)	2615 (11.64)	5.41 (8.71)	2259	6.0	0.534 (0.325)	13.10 (2.58)	180 (82)	57 (14)	29.9 (101.4)
13th(4 M Hi) Gear									
37.7 (28.1)	2335 (10.39)	6.06 (9.75)	2241	5.1	0.540 (0.328)	12.95 (2.55)	178 (81)	55 (13)	29.9 (101.4)
14th(2 Hi) Gear									
34.5 (25.7)	1565 (6.96)	8.26 (13.29)	2254	3.8	0.589 (0.358)	11.87 (2.34)	180 (82)	55 (13)	29.9 (101.4)

## JX 1060C-2WD(30 km/h transmission)

TIRES, BALLAST AND WEIGHT		With Ballast	Without Ballast
<b>Rear Tires</b>	-No., size, ply & psi (kPa)	Two 16.9R30;**,19 (130)	Two 16.9R30;**,19 (130)
<b>Ballast</b>	-Liquid (total)	None	None
	-Cast Iron (total)	440 lb (200 kg)	None
<b>Front Tires</b>	-No., size, ply & psi (kPa)	Two 7.50-16; 8; 44 (300)	Two 7.50-16; 8; 44 (300)
<b>Ballast</b>	-Liquid (total)	None	None
	-Cast Iron (total)	640 lb (290 kg)	None
<b>Height of Drawbar</b>		26.4 in (670 mm)	26.4 in (670 mm)
<b>Static Weight with Operator</b>	-Rear	4345 lb (1970 kg)	4035 lb (1830 kg)
	-Front	2800 lb (1270 kg)	2030 lb (920 kg)
	-Total	7145 lb (3240 kg)	6065 lb (2750 kg)

TRACTOR SOUND LEVEL WITH CAB	FWA dB(A)	2WD dB(A)
At no load in 9th (3M Lo) gear	80.0	80.0
Bystander in 16th (4 Hi) gear	82.0	82.8

**CENTER OF GRAVITY - 2WD**

Horizontal distance forward from centerline of rear wheels	28.1" (713 mm)
Vertical distance above roadway	32.0" (814 mm)
Horizontal distance from center of rear wheel tread	0.4" (10 mm) to the left

**CENTER OF GRAVITY - FWA**

Horizontal distance forward from centerline of rear wheels	28.4" (722 mm)
Vertical distance above roadway	31.6" (803 mm)
Horizontal distance from center of rear wheel tread	0.3" (8 mm) to the left

**TURNING ON A CONCRETE SURFACE (2WD)**

Turning radius—without brake right 141" (3.58 m) left 139" (3.53 m)
Turning space radius—without brake right 145" (3.68 m) left 143" (3.63 m)

**TURNING ON A CONCRETE SURFACE (FWA)**

Turning radius—without brake right 140" (3.56 m) left 140" (3.56 m)
Turning space radius—without brake right 146" (3.70 m) left 146" (3.70 m)

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

CATEGORY: II

Quick Attach: None

Maximum force exerted through whole range:	3955 lbs (17.6 kN)	
i) Opening pressure of relief valve:	NA	
		<u>High flow option</u>
Sustained pressure with relief valve open:	3020 psi (208 bar)	3000 psi (207 bar)
ii) Pump delivery rate at minimum pressure:	13.8 GPM (52.1 l/min)	16.9 GPM (63.9 l/min)
iii) Pump delivery rate at maximum		
hydraulic power:	10.0 GPM (37.8 l/min)	14.9 GPM (56.4 l/min)
Delivery pressure:	2875 psi (198 bar)	2340 psi (161 bar)
Power:	16.8 HP (12.5 kW)	20.3 HP (15.2 kW)

**THREE POINT HITCH PERFORMANCE (SAE Static Test)**

Observed maximum pressure psi. (bar)	3030 (209)
Location:	hydraulic pump
Hydraulic oil temperature: °F (°C)	114 (45)
Location:	hydraulic sump
Category:	II
Quick attach:	none

System pressure 2730 psi (188 Bar)

Hitch point distance to ground level in. (mm)	14.6 (370)	19.3 (490)	24.2 (615)	28.9 (735)	33.9 (860)	38.6 (980)
Lift force on frame lb	4800	5255	5280	4975	4630	4320
" " " " " " (kN)	(21.4)	(23.3)	(23.5)	(22.1)	(20.6)	(19.2)

**HITCH DIMENSIONS AS TESTED—NO LOAD**

	SAE TEST		OECD TEST	
	inch	mm	inch	mm
A	27.2	690	27.4	695
B	10.0	255	10.0	255
C	12.3	312	12.3	312
D	10.9	276	10.9	276
E	14.2	361	12.1	308
F	7.5	189	7.5	189
G	27.2	690	27.4	695
H	1.2	30	1.2	30
I	13.4	340	13.6	345
J	19.7	501	19.9	506
K	20.6	523	20.6	523
L	40.7	1035	40.7	1035
M	21.7	550	21.7	550
N	34.6	880	34.6	880
O	14.6	370	14.6	370
P	38.7	984	43.9	1116
Q	39.8	1010	39.8	1010
R	22.4	570	22.6	573

