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2011

## Test 2013: Case IH Farmall 65A

Nebraska Tractor Test Lab

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# NEBRASKA TRACTOR TEST 2013

## CASE IH FARMALL 65A DIESEL

### 8 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—688 rpm)					
60.38 (45.02)	2500	4.04 (15.30)	0.472 (0.287)	14.94 (2.94)	
Maximum Power (1 hour)					
61.70 (46.01)	2248	3.81 (14.41)	0.435 (0.264)	16.21 (3.19)	
Standard Power Take-off Speed(540 rpm)					
58.07 (43.31)	1967	3.37 (12.77)	0.409 (0.249)	17.21 (3.39)	

#### VARYING POWER AND FUEL CONSUMPTION

60.38 (45.02)	2500	4.04 (15.30)	0.472 (0.287)	14.94 (2.94)	Air temperature
53.13 (39.62)	2586	3.79 (14.35)	0.503 (0.306)	14.02 (2.76)	73°F (23°C)
40.05 (29.86)	2596	3.18 (12.05)	0.560 (0.341)	12.58 (2.48)	Relative humidity
26.89 (20.06)	2608	2.45 (9.28)	0.643 (0.391)	10.97 (2.16)	20%
19.93 (14.86)	2629	2.07 (7.85)	0.733 (0.446)	9.61 (1.89)	Barometer
--	2679	1.12 (4.23)	---	--	29.03"Hg (98.31 kPa)

Maximum Torque - 178 lb.-ft. (241 Nm) at 1250 rpm

Maximum Torque rise - 40.9%

Torque rise at 2000 rpm - 21%

#### TRACTOR SOUND LEVEL WITHOUT CAB

	Front Wheel Drive Engaged dB(A)	Disengaged dB(A)
At no load in 4th (L4) gear	93.7	93.0
Bystander		---

#### 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

#### Tested Without Ballast

Two 16.9-30; 12:16 (110)

Two 11.2-24; 8:16 (110)

19.5 in (495 mm)

3435 lb (1558 kg)

2460 lb (1116 kg)

5895 lb (2674 kg)

**Location of tests:** Nebraska Tractor Test Laboratory, University of Nebraska, Lincoln Nebraska 68583-0832

**Dates of tests:** December 6 to 14, 2011

**Manufacturer:** New Holland Tractors (I) Pvt Ltd Udyog Kendra, Plot No. 3 Greater Noida - 201303 U.P. India

**FUEL, OIL and TIME:** Fuel No. 2 Diesel Specific gravity converted to 60°/60° F (15°/15°C) 0.8463 Fuel weight 7.047 lbs/gal (0.845 kg/l) Oil SAE 15W40 API service classification CI-4 Transmission and hydraulic lubricant Case Akcela Hy-Tran Ultra fluid Front axle lubricant Case Akcela Hy-Tran ultra fluid Total time engine was operated 11.5 hours

**ENGINE:** Make FPT Diesel Type four cylinder vertical with turbocharger Serial No. 45779 Crankshaft lengthwise Rated engine speed 2500 Bore and stroke 3.898" x 4.094" (99.0 mm x 104.0 mm) Compression ratio 17.0 to 1 Displacement 195 cu in (3200 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 Fuel filter one paper element Muffler underhood Exhaust vertical Cooling medium temperature control one thermostat

**ENGINE OPERATING PARAMETERS:** Fuel rate: 26.9 - 28.9 lb/h (12.2 - 13.1 kg/h) High idle: 2650 - 2750 rpm Turbo boost: nominal 11.6 - 14.5 psi (80 - 100 kPa) as measured 13.0 psi (90 kPa)

**CHASSIS:** Type front wheel assist Serial No. 8159826 Tread width rear 59.7" (1517 mm) to 80.2" (2036 mm) front 59.6" (1515 mm) to 79.6" (2022 mm) Wheelbase 87.0" (2210 mm) Hydraulic control system direct engine drive Transmission selective gear fixed ratio Nominal travel speeds mph (km/h) first 1.85 (2.98) second 2.79 (4.49) third 4.08 (6.57) fourth 5.28 (8.49) fifth 6.67 (10.74) sixth 10.04 (16.16) seventh 14.70 (23.66) eighth 18.99 (30.56) reverse 2.67 (4.29), 9.59 (15.43) Clutch single dry disc operated by foot pedal Brakes single wet disc operated by two foot pedals which can be locked together Steering hydrostatic Power take-off 540 rpm at 1967 engine rpm Unladen tractor mass 5720 lb (2595 kg)

## HYDRAULIC PERFORMANCE

CATEGORY: II

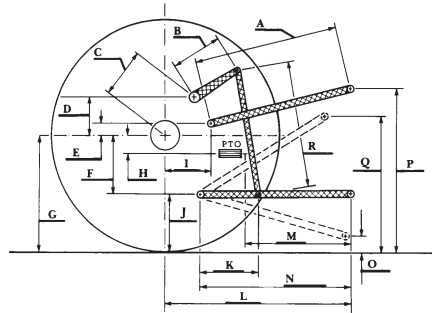
Quick Attach: None

OECD Static test

Maximum force exerted through whole range:	2460 lbs	(10.9 kN)(at frame)
	3394 lbs	(15.1 kN)(at link ends)
i) Sustained pressure of the open relief valve:	2869 psi	(198 bar)
ii) Pump delivery rate at minimum pressure and rated engine speed:	10.5 GPM	(39.9 l/min)
iii) Pump delivery rate at maximum hydraulic power:	10.8 GPM	(40.9 l/min)
Delivery pressure:	2479 psi	(171 bar)
Power:	15.6 HP	(11.7 kW)

### HITCH DIMENSIONS AS TESTED - NO LOAD

	inch	mm
A	29.6	753
B	9.1	230
C	13.4	341
D	13.2	335
E	15.2	385
F	5.3	135
G	27.4	695
H	0.0	0
I	3.9	100
J	22.1	560
K	19.4	493
L	33.8	858
M	23.5	598
N	33.4	848
O	8.0	203
P	46.1	1170
Q	32.4	823
R	25.3	642



**REPAIRS AND ADJUSTMENTS:** No repairs or adjustments.

**REMARKS:** All test results were determined from observed data obtained in accordance with official OECD, SAE and Nebraska test procedures. This tractor did not meet the manufacturer's claims of 10.8 GPM (41 lpm) hydraulic flow nor 3 point lift of 2954 lbs (1340 kg) at 24" (610 mm) behind ball ends. For the maximum power tests, the fuel temperature at the primary fuel filter was maintained at 104°F (40°C).

We, the undersigned, certify that this is a true and correct report of official Tractor Test No. **2013**, January 26, 2012.

Roger M. Hoy  
Director

M.F. Kocher  
D.R. Keshwani  
P.J. Jasa  
Board of Tractor Test Engineers



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Institute of Agriculture and Natural Resources  
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