

SUMMARY OF OECD TEST 2805—NEBRASKA SUMMARY 950

CASE IH FARMALL 105U 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
MAXIMUM POWER AND FUEL CONSUMPTION					
Rated Engine Speed—(PTO speed—1194 rpm)					
96.6 (72.0)	2300	6.14 (23.26)	0.443 (0.270)	15.73 (3.10)	
Standard Power Take-off Speed (1000 rpm)					
99.3 (74.0)	1926	5.78 (21.87)	0.406 (0.247)	17.18 (3.39)	
Maximum Power - (1 hour)					
99.3 (74.0)	1926	5.78 (21.87)	0.406 (0.247)	17.18 (3.39)	

VARYING POWER AND FUEL CONSUMPTION

96.6 (72.0)	2300	6.14 (23.26)	0.443 (0.270)	15.73 (3.10)	Air temperature
82.9 (61.8)	2323	5.36 (20.28)	0.450 (0.274)	15.47 (3.05)	80°F (27°C)
62.6 (46.7)	2346	4.45 (16.85)	0.496 (0.301)	14.06 (2.77)	Relative humidity
42.4 (31.6)	2371	3.38 (12.78)	0.556 (0.338)	12.54 (2.47)	51%
21.5 (16.0)	2392	2.34 (8.85)	0.759 (0.462)	9.18 (1.81)	Barometer
--	2413	1.70 (6.43)	--	--	29.2" Hg (99.0 kPa)

Maximum Torque - 308.3 lb.-ft. (418.0 Nm) at 1500 rpm
 Maximum Torque Rise - 39.7%
 Torque rise at 1800 engine rpm - 30%
 Power increase at 1926 rpm - 2.8%

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—6th (2M) Gear									
70.3 (52.4)	5575 (24.8)	4.73 (7.60)	2300	3.5	0.612 (0.372)	11.38 (2.24)	178 (81)	93 (34)	30.0 (101.6)
75% of Pull at Maximum Power—6th (2M) Gear									
53.9 (40.2)	4160 (18.5)	4.86 (7.82)	2337	2.3	0.685 (0.416)	10.20 (2.01)	178 (81)	93 (34)	30.0 (101.6)
50% of Pull at Maximum Power—6th (2M) Gear									
36.9 (27.5)	2790 (12.4)	4.96 (7.99)	2362	1.3	0.848 (0.516)	8.21 (1.62)	174 (79)	93 (34)	30.0 (101.6)
75% of Pull at Reduced Engine Speed—7th (3M) Gear									
53.9 (40.2)	4160 (18.5)	4.86 (7.82)	1579	2.3	0.605 (0.368)	11.52 (2.27)	176 (80)	93 (34)	30.0 (101.6)
50% of Pull at Reduced Engine Speed—7th (3M) Gear									
36.9 (27.5)	2790 (12.4)	4.96 (7.98)	1593	1.3	0.635 (0.386)	10.98 (2.16)	171 (77)	93 (34)	29.9 (101.1)

Location of tests: Istituto per le Macchine Agricole e Movimento Terra 73, Strada delle Cacce 10135 Torino Italy

Dates of tests: June to August, 2013.

Manufacturer: CNH Europe Holding S.A. 24, Boulevard Royal L-2449 Luxembourg

FUEL and OIL: Fuel No. 2 Diesel Specific gravity converted to 60°/60°F (15°/15°C) 0.837 Fuel weight 6.97 lbs/gal (0.835 kg/l) Oil SAE 15W40 API service classification CJ-4 Transmission and hydraulic lubricant Akcela Nexplore fluid Front axle lubricant Akcela Nexplore fluid

ENGINE: Make FPT Industrial Diesel Type four cylinder vertical with turbocharger and air to air intercooler Serial No. 000134136 Crankshaft lengthwise Rated engine speed 2300 Bore and stroke 3.898" x 4.331" (99.0 mm x 110.0 mm) Compression ratio 17.0 to 1 Displacement 207 cu in (3387 ml) Starting system 12 volt Lubrication pressure Air cleaner two paper elements and aspirator 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 Exhaust regenerative particulate filter integrated within an underhood muffler with vertical outlet Cooling medium temperature control thermostat and variable speed fan

CHASSIS: Type front wheel assist Serial No. ZDJR04866 Tread width rear 56.5" (1434 mm) to 84.2" (2138 mm) front 56.7" (1441 mm) to 84.8" (2153 mm) Wheelbase 92.5" (2350 mm) Hydraulic control system direct engine drive Transmission selective gear fixed ratio Nominal travel speeds mph (km/h) first 1.38 (2.22) second 2.06 (3.31) third 3.04 (4.89) fourth 3.23 (5.19) fifth 4.46 (7.18) sixth 4.80 (7.72) seventh 7.10 (11.43) eighth 7.59 (12.22) ninth 10.43 (16.78) tenth 11.30 (18.18) eleventh 16.72 (26.91) twelfth 24.54 (39.50) reverse 1.36 (2.19), 2.02 (3.25), 2.99 (4.81), 3.17 (5.10), 4.38 (7.06), 4.72 (7.59), 6.98 (11.24), 7.46 (12.01), 10.25 (16.50), 11.11 (17.88), 16.44 (26.46), 24.13 (38.83) Clutch wet disc hydraulically actuated by foot pedal Brakes wet disc hydraulically actuated by two foot pedals that can be locked together Steering hydrostatic Power take-off 540 rpm at 1942 engine rpm or 1000 rpm at 1926 engine rpm Unladen tractor mass 9305 lb (4220 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 Consumption 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)
2nd(2L) Gear									
41.0 (30.6)	8250 (36.7)	1.86 (3.00)	2354	15.0	0.791 (0.481)	8.82 (1.74)	172 (78)	88 (31)	30.0 (101.6)
3rd(3L) Gear									
60.3 (45.0)	7980 (35.5)	2.83 (4.56)	2327	11.9	0.616 (0.374)	11.32 (2.23)	174 (79)	90 (32)	30.0 (101.6)
4th(1M) Gear									
62.9 (46.9)	7915 (35.2)	2.98 (4.80)	2322	11.4	0.599 (0.364)	11.62 (2.29)	176 (80)	91 (33)	30.0 (101.6)
5th(4L) Gear									
74.3 (55.4)	7150 (31.8)	3.90 (6.27)	2168	9.2	0.549 (0.334)	12.69 (2.50)	176 (80)	90 (32)	30.0 (101.6)
6th(2M) Gear									
74.7 (55.7)	7105 (31.6)	3.94 (6.35)	1980	6.5	0.554 (0.337)	12.59 (2.48)	174 (79)	91 (33)	30.0 (101.6)
7th(3M) Gear									
74.4 (55.5)	4675 (20.8)	5.97 (9.61)	1946	2.6	0.545 (0.331)	12.79 (2.52)	178 (81)	88 (31)	30.0 (101.6)
8th(1H) Gear									
74.8 (55.8)	4425 (19.7)	6.34 (10.20)	1929	2.5	0.539 (0.328)	12.94 (2.55)	178 (81)	91 (33)	30.0 (101.6)
9th(4M) Gear									
70.5 (52.6)	3010 (13.4)	8.79 (14.14)	1926	1.4	0.570 (0.346)	12.23 (2.41)	178 (81)	91 (33)	30.0 (101.6)

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 remote hydraulic flow claim of 17.2 GPM (65 lpm). The manufacturer's remote hydraulic flow claim of 22.2 GPM (84 l/min) with optional pump was not verified. The performance figures on this summary were taken from a test conducted under the OECD Code 2 test procedure.

We, the undersigned, certify that this is a true summary of data from OECD Report No. **2805**, Nebraska Summary 950, July 11, 2014.

Roger M. Hoy
Director

M.F. Kocher
S. Pitla
P.J. Jasa
Board of Tractor Test Engineers

TRACTOR SOUND LEVEL WITH CAB	Front Wheel Drive	
	Engaged dB(A)	Disengaged dB(A)
At no load in 6th (2M) gear	76.9	76.9
Bystander in 12th (4H) gear	--	84.2

TIRES, BALLAST AND WEIGHT

	With Ballast	Without Ballast
Rear Tires -No., size, ply & psi (kPa)	Two 480/85R34;**,12(80)	Two 480/85R34;**,12(80)
Ballast - Liquid (total)	None	None
- Cast Iron (total)	660 lb (300 kg)	None
Front Tires -No., size, ply & psi (kPa)	Two 380/85R24;**,12(80)	Two 380/85R24;**,12(80)
Ballast - Liquid (total)	None	None
- Cast Iron (total)	1105 lb (500 kg)	None
Height of Drawbar	18.9 in (480 mm)	19.1 in (485 mm)
Static Weight with operator - Rear	6130 lb (2780 kg)	5665 lb (2570 kg)
- Front	5105 lb (2315 kg)	3805 lb (1725 kg)
- Total	11235 lb (5095 kg)	9470 lb (4295 kg)

DRAWBAR PERFORMANCE
(Ballasted - 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 Consumption 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)
3rd(3L) Gear									
67.5 (50.3)	9645 (42.9)	2.62 (4.22)	2250	15.4	0.627 (0.382)	11.12 (2.19)	176 (80)	88 (31)	30.0 (101.5)
4th(1M) Gear									
70.3 (52.4)	9060 (40.3)	2.91 (4.68)	2218	9.1	0.602 (0.366)	11.57 (2.28)	178 (81)	90 (32)	30.0 (101.5)
5th(4L) Gear									
75.0 (55.9)	7735 (34.4)	3.64 (5.85)	1927	4.7	0.532 (0.324)	13.10 (2.58)	180 (82)	88 (31)	30.0 (101.5)
6th(2M) Gear									
75.9 (56.6)	7260 (32.3)	3.92 (6.31)	1923	4.1	0.528 (0.321)	13.20 (2.60)	174 (79)	90 (32)	30.0 (101.5)
7th(3M) Gear									
74.6 (55.6)	4700 (20.9)	5.95 (9.57)	1927	1.8	0.539 (0.328)	12.94 (2.55)	181 (83)	90 (32)	30.0 (101.5)
8th(1H) Gear									
74.8 (55.8)	4405 (19.6)	6.36 (10.24)	1926	1.7	0.540 (0.328)	12.90 (2.54)	178 (81)	86 (30)	30.0 (101.5)
9th(4M) Gear									
70.1 (52.3)	2990 (13.3)	8.80 (14.16)	1924	1.2	0.572 (0.348)	12.18 (2.40)	176 (80)	90 (32)	30.0 (101.5)

HYDRAULIC PERFORMANCE

CATEGORY: II

Quick Attach: None

OECD Static test

Maximum force exerted through whole range: 6520 lbs (29.0 kN)

i) Sustained pressure of the open relief valve: 2845 psi (196 bar)

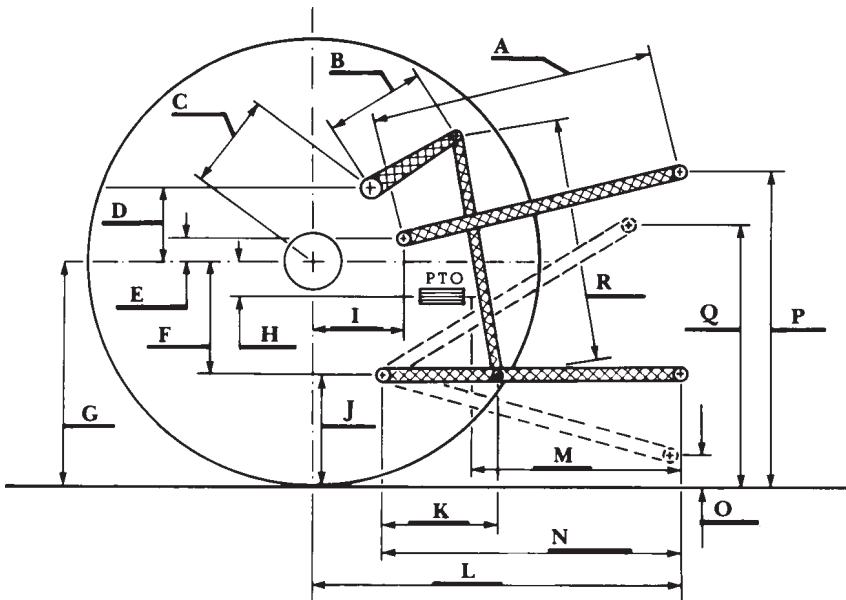
ii) Pump delivery rate at minimum pressure: 17.0 GPM (64.5 l/min)

iii) Pump delivery rate at maximum

hydraulic power: 13.9 GPM (52.7 l/min)

Delivery pressure: 2465 psi (170 bar)

Power: 20.0 HP (14.9 kW)



HITCH DIMENSIONS AS TESTED—NO LOAD

	inch	mm
A	26.7	677
B	10.0	255
C	13.9	352
D	11.7	296
E	10.1	257
F	8.3	210
G	31.5	800
H	1.6	41
I	16.7	424
J	23.2	590
K	17.9	455
L	42.6	1083
M	22.1	562
N	37.5	953
O	7.9	200
P	47.2	1200
Q	36.1	918
R	25.4	645