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Nebraska Summary: S762 Case-IH Farmall 80

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University of Nebraska-Lincoln, tractortestlab@unl.edu

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SUMMARY OF OECD TEST 2583 — NEBRASKA SUMMARY 762

CASE IH FARMALL 80 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—614 rpm)					
70.3 (52.4)	2500	4.49 (16.99)	0.444 (0.270)	15.63 (3.08)	
Maximum Power - (1 hour)					
72.1 (53.8)	2350	4.36 (16.51)	0.419 (0.255)	16.55 (3.26)	
Standard Power Take-off Speed (540 rpm)					
70.9 (52.9)	2200	4.11 (15.56)	0.402 (0.245)	17.26 (3.40)	

VARYING POWER AND FUEL CONSUMPTION

70.3 (52.4)	2500	4.49 (16.99)	0.444 (0.270)	15.63 (3.08)	Air temperature
61.2 (45.6)	2560	4.02 (15.20)	0.455 (0.277)	15.23 (3.00)	72°F (22°C)
46.3 (34.5)	2586	3.29 (12.44)	0.493 (0.300)	14.09 (2.78)	Relative humidity
31.2 (23.3)	2614	2.57 (9.75)	0.573 (0.349)	12.11 (2.39)	19%
16.0 (11.9)	2666	1.88 (7.13)	0.821 (0.500)	8.45 (1.67)	Barometer
--	2691	1.23 (4.67)	--	--	27.3" Hg (92.6 kPa)

Maximum Torque - 212.0 lb.-ft. (287.4 Nm) at 1200 rpm
 Maximum Torque Rise - 43.7%
 Torque rise at 2000 engine rpm - 20%

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—8th (III-1) Gear									
59.7 (44.5)	4275 (19.02)	5.24 (8.43)	2502	11.6	0.492 (0.299)	14.11 (2.78)	138 (59)	39 (4)	27.1 (91.9)
75% of Pull at Maximum Power—8th (III-1) Gear									
49.8 (37.1)	3225 (14.33)	5.79 (9.31)	2617	6.6	0.552 (0.335)	12.59 (2.48)	144 (62)	39 (4)	27.1 (91.9)
50% of Pull at Maximum Power—8th (III-1) Gear									
34.2 (25.5)	2130 (9.47)	6.02 (9.68)	2635	3.6	0.626 (0.381)	11.12 (2.19)	153 (67)	39 (4)	27.1 (91.9)
75% of Pull at Reduced Engine Speed—10th (III-2) Gear									
49.5 (36.9)	3210 (14.27)	5.79 (9.31)	1700	6.7	0.464 (0.282)	14.97 (2.95)	160 (71)	37 (3)	27.1 (91.9)
50% of Pull at Reduced Engine Speed—10th (III-2) Gear									
34.3 (25.6)	2140 (9.51)	6.02 (9.69)	1715	3.7	0.518 (0.315)	13.40 (2.64)	162 (72)	37 (3)	27.1 (91.9)

Location of tests: DAEMTC (The Directorate of Agricultural Equipment and Testing Centre) Ankara, Turkey

Dates of tests: December 2008 - January 2009.

Manufacturer: Turk Traktor ve Ziraat Mak. A.S. Ankara, Turkey

FUEL and OIL: Fuel No. 2 Diesel **Specific gravity converted to 60°/60°F (15°/15°C)** 0.834 **Fuel weight** 6.94 lbs/gal (0.832 kg/l) **Oil SAE 15W40 API service classification** CH-4 **Transmission and hydraulic lubricant** Akcela **Nexlore fluid Frontaxle lubricant** Akcela **Nexlore fluid**

ENGINE: Make Iveco Diesel **Type** four cylinder vertical with turbocharger and air to air intercooler **Serial No.** 014086 **Crankshaft** lengthwise **Rated engine speed** 2500 **Bore and stroke** 3.898" x 4.094" (99.0 mm x 104.0 mm) **Compression ratio** 17.5 to 1 **Displacement** 195 cu in (3202 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 **Muffler** underhood **Exhaust** vertical **Cooling medium temperature control** thermostat and variable speed fan

CHASSIS: Type front wheel assist **Serial No.** Z8JP52433 **Tread width** rear 59.1" (1500 mm) to 78.7" (2000 mm) front 55.3" (1430 mm) to 87.4" (2220 mm) **Wheelbase** 87.6" (2225 mm) **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio **Nominal travel speeds mph (km/h)** first 1.07 (1.72) second 1.65 (2.66) third 2.24 (3.61) fourth 2.50 (4.03) fifth 3.22 (5.18) sixth 3.86 (6.21) seventh 5.24 (8.44) eighth 5.89 (9.48) ninth 7.51 (12.09) tenth 9.08 (14.61) eleventh 12.35 (19.87) twelfth 17.68 (28.46) reverse 1.02 (1.64), 1.57 (2.52), 2.13 (3.43), 2.38 (3.83), 3.06 (4.92), 3.67 (5.90), 4.98 (8.02), 5.60 (9.01), 7.13 (11.48), 8.62 (13.88), 11.73 (18.87), 16.80 (27.04) **Clutch** dual dry disc mechanically operated by foot pedal **Brakes** wet disc mechanically operated by two foot pedals that can be locked together **Steering** hydrostatic **Power take-off** 540 rpm at 2200 engine rpm or 1000 rpm at 2381 engine rpm **Unladen tractor mass** 7605 lb (3450 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)
7th(II-3) Gear									
58.3 (43.5)	4795 (21.32)	4.56 (7.34)	2546	15.0	0.473 (0.288)	14.67 (2.89)	169 (76)	41 (5)	27.1 (91.8)
8th(III-1) Gear									
61.2 (45.6)	4740 (21.08)	4.84 (7.79)	2348	12.9	0.469 (0.285)	14.82 (2.92)	172 (78)	41 (5)	27.1 (91.8)
9th(II-4) Gear									
62.4 (46.5)	3665 (16.30)	6.38 (10.27)	2347	9.9	0.464 (0.282)	14.97 (2.95)	171 (77)	41 (5)	27.1 (91.8)
10th(III-2) Gear									
62.9 (46.9)	2935 (13.05)	8.04 (12.94)	2354	6.3	0.462 (0.281)	15.02 (2.96)	171 (77)	41 (5)	27.1 (91.8)

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 three point lift claim of 5025 lbs. 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. **2583**, Nebraska Summary 762, July 19, 2011.

Roger M. Hoy
 Director

M.F. Kocher
 D.R. Keshwani
 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 (2 II) gear	84.1	83.7
Bystander	--	--

TRACTOR SOUND LEVEL WITHOUT CAB	Front Wheel Drive	
	Engaged dB(A)	Disengaged dB(A)
At no load in 7th (3 II) gear	84.0	83.8
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 18.4R30; **, 16 (110)
 Two 320/85R24; **, 16 (110)
 18.1 in (460 mm)
 4610 lb (2092 kg)
 3160 lb (1433 kg)
 7770 lb (3525 kg)

HYDRAULIC PERFORMANCE

CATEGORY: II

Quick Attach: None

OECD Static test

Maximum force exerted through whole range: 3845 lbs (17.1 kN)

i) Sustained pressure of the open relief valve: 2830 psi (195 bar)

ii) Pump delivery rate at minimum pressure: 15.6 GPM (59.1 l/min)

iii) Pump delivery rate at maximum

hydraulic power: 14.2 GPM (53.9 l/min)

Delivery pressure: 1880 psi (130 bar)

Power: 15.6 HP (11.7 kW)

HITCH DIMENSIONS AS TESTED—NO LOAD

	inch	mm
A	32.7	830
B	10.2	260
C	11.8	300
D	11.8	300
E	9.8	250
F	8.3	210
G	28.6	725
H	0.6	15
I	7.3	185
J	20.3	515
K	18.1	460
L	40.4	1025
M	27.6	700
N	38.2	970
O	7.9	200
P	44.3	1125
Q	38.0	965
R	25.0	635

