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January 1999

Nebraska Summary 304: Massey Ferguson 6280 Diesel 32-Speed

Nebraska Tractor Test Lab

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SUMMARY OF OECD TESTS 1853 & 1863—NEBRASKA SUMMARY 304

MASSEY FERGUSON 6280 DIESEL

32 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 1099rpm)					
111.3 (83.0)	2199	7.21 (27.29)	0.460 (0.280)	15.43 (3.04)	
Standard Power Take-off Speed(1000rpm)					
116.9 (87.2)	2000	6.89 (26.07)	0.418 (0.255)	16.97 (3.34)	

VARYING POWER AND FUEL CONSUMPTION

111.3 (83.0)	2199	7.21 (27.29)	0.460 (0.280)	15.43 (3.04)	Air temperature
95.1 (71.0)	2231	6.69 (25.34)	0.500 (0.304)	14.21 (2.80)	72°F (22°C)
73.6 (54.9)	2270	5.98 (22.64)	0.577 (0.351)	12.30 (2.42)	Relative humidity
49.6 (37.0)	2298	4.79 (18.14)	0.686 (0.417)	10.36 (2.04)	68%
25.1 (18.7)	2318	3.73 (14.11)	1.056 (0.643)	6.72 (1.32)	Barometer
--	2342	2.25 (8.51)	--	--	29.6" Hg (100.3 kPa)

Maximum Torque - 362.9 lb.-ft. (492.1 Nm) at 1398 rpm

Maximum Torque Rise - 36.6%

Torque rise at 1800 engine rpm - 25%

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 19th(1LC) Gear									
114.3 (85.2)	7175 (31.9)	5.97 (9.61)	2038	5	0.448 (0.273)	15.84 (3.12)	190 (88)	63 (17)	29.4 (99.6)
75% of Pull at Maximum Power 19th(1LC) Gear									
86.4 (64.4)	4810 (21.4)	6.74 (10.84)	2254	3	0.534 (0.325)	13.30 (2.62)	189 (87)	63 (17)	29.4 (99.6)
50% of Pull at Maximum Power 19th(1LC) Gear									
59.4 (44.3)	3230 (14.4)	6.90 (11.11)	2286	2	0.667 (0.406)	10.65 (2.10)	194 (90)	63 (17)	29.4 (99.6)
75% of Pull at Reduced Engine Speed 20th(1LD) Gear									
88.0 (65.6)	4905 (21.8)	6.73 (10.82)	1922	3	0.447 (0.272)	15.89 (3.13)	192 (89)	63 (17)	29.4 (99.6)
50% of Pull at Reduced Engine Speed 20th(1LD) Gear									
59.0 (44.0)	3190 (14.2)	6.94 (11.16)	1963	2	0.551 (0.335)	12.89 (2.54)	187 (86)	63 (17)	29.4 (99.6)

Location of Test: Groupement d'Antony, Parc de Touvoie, BP 44 Antony, France 92163

Dates of Test: February - June, 1999

Manufacturer: AGCO S.A. Z.A.-No.2 BP 60307, Avenue Blaise Pascal, 60026 Beauvais, France

FUEL and OIL: Fuel No. 2 Diesel **Specific gravity converted to 60°/60° F (15°/15°C)** 0.853
Fuel weight 7.10 lbs/gal (0.851 kg/l) **Oil SAE** 10W30 **API service classification** CD/CE
Transmission and hydraulic lubricant BP Terrac Extra 10W/40 **Front axle lubricant** API GL5 - SAE 85W140

ENGINE: Make Perkins Diesel **Type** six cylinder vertical with turbocharger **Serial No.** U673550D **Crankshaft** lengthwise **Rated engine speed** 2200 **Bore and stroke** 3.937" x 5.00" (100.0 mm x 127.0 mm) **Compression ratio** 16.0 to 1
Displacement 365 cu in (5985 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 FWA **Serial No.** G140015 **Tread width** rear 66.9" (1699 mm) to 86.6" (2199 mm) front 2WD - 54.3" (1380 mm) to 91.7" (2330 mm), FWA - 61.7" (1566 mm) to 80.9" (2054 mm) **Wheelbase** 106.3" (2699 mm) **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio with partial (4) range operator controlled powershift **Nominal travel speeds mph (km/h)** first 1.27 (2.04) second 1.49 (2.40) third 1.76 (2.83) fourth 2.06 (3.31) fifth 2.16 (3.47) sixth 2.53 (4.07) seventh 2.84 (4.57) eighth 2.98 (4.80) ninth 3.32 (5.35) tenth 3.49 (5.62) eleventh 3.85 (6.19) twelfth 3.93 (6.32) thirteenth 4.50 (7.24) fourteenth 4.59 (7.39) fifteenth 4.76 (7.66) sixteenth 5.31 (8.55) seventeenth 5.58 (8.98) eighteenth 6.22 (10.01) nineteenth 6.58 (10.59) twentieth 7.71 (12.40) twenty-first 8.09 (13.02) twenty-second 9.48 (15.25) twenty-third 10.66 (17.15) twenty-fourth 11.18 (17.99) twenty-fifth 12.47 (20.06) twenty-sixth 13.09 (21.06) twenty-seventh 14.42 (23.20) twenty-eighth 14.72 (23.69) twenty-ninth 16.87 (27.15) thirtieth 17.23 (27.73) thirty-first 19.92 (32.05) thirty-second 23.31 (37.52) reverse 1.16 (1.86), 1.35 (2.18), 1.60 (2.57), 1.87 (3.01), 1.96 (3.16), 2.30 (3.70), 2.58 (4.16), 2.72 (4.37), 3.03 (4.87), 3.18 (5.12), 3.50 (5.64), 3.57 (5.75), 4.10 (6.60), 4.18 (6.73), 4.34 (6.98), 4.84 (7.79), 5.08 (8.17), 5.66 (9.11), 6.00 (9.65), 7.02 (11.29), 7.37 (11.86), 8.63 (13.89), 9.70 (15.61),

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)	Temp. °F(°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)	
107.0 (79.8)	11535 (51.3)	3.48 (5.60)	2166	11	11th(4TA)Gear 0.491 (0.299)	14.48 (2.86)	185 (85)	63 (17)	29.4 (99.6)
105.9 (79.0)	11195 (49.8)	3.55 (5.71)	2140	9	12th(3TC)Gear 0.484 (0.295)	14.67 (2.89)	181 (83)	63 (17)	29.4 (99.6)
111.4 (83.1)	10160 (45.2)	4.11 (6.62)	2122	8	13th(4TB)Gear 0.462 (0.281)	15.35 (3.02)	176 (80)	63 (17)	29.4 (99.6)
112.0 (83.5)	10070 (44.8)	4.17 (6.71)	2076	7	14th(3TD)Gear 0.461 (0.281)	15.41 (3.04)	178 (81)	63 (17)	29.4 (99.6)
112.6 (84.0)	9825 (43.7)	4.30 (6.92)	2060	6	15th(1LA)Gear 0.459 (0.279)	15.48 (3.05)	190 (88)	63 (17)	29.4 (99.6)
112.6 (84.0)	8815 (39.2)	4.79 (7.71)	2048	6	16th(4TC)Gear 0.455 (0.277)	15.58 (3.07)	183 (84)	63 (17)	29.4 (99.6)
113.7 (84.8)	8430 (37.5)	5.06 (8.14)	2055	5	17th(1LB)Gear 0.455 (0.277)	15.58 (3.07)	192 (89)	63 (17)	29.4 (99.6)
113.5 (84.6)	7555 (33.6)	5.63 (9.06)	2037	5	18th(4TD)Gear 0.454 (0.276)	15.63 (3.08)	187 (86)	63 (17)	29.4 (99.6)
114.3 (85.2)	7175 (31.9)	5.97 (9.61)	2038	5	19th(1LC)Gear 0.448 (0.273)	15.84 (3.12)	190 (88)	63 (17)	29.4 (99.6)
111.7 (83.3)	5980 (26.6)	7.00 (11.27)	2022	4	20th(1LD)Gear 0.457 (0.278)	15.53 (3.06)	192 (89)	63 (17)	29.4 (99.6)
111.8 (83.4)	5665 (25.2)	7.40 (11.91)	2028	4	21st(2LA)Gear 0.455 (0.277)	15.58 (3.07)	192 (89)	63 (17)	29.4 (99.6)
108.6 (81.0)	4815 (21.4)	8.46 (13.62)	2017	5	22nd(2LB)Gear 0.468 (0.285)	15.18 (2.99)	192 (89)	63 (17)	29.4 (99.6)
108.8 (81.1)	4250 (18.9)	9.60 (15.44)	2022	5	23rd(3LA)Gear 0.465 (0.283)	15.28 (3.01)	192 (89)	63 (17)	29.4 (99.6)

TRACTOR SOUND LEVEL WITH CAB	Front Wheel Drive 2WD dB(A)	Engaged dB(A)
At no load in 14th (3TD) gear	78.0	78.0
Bystander	--	--

Tested Without Ballast

TIRES AND WEIGHT	Front Wheel Assist	2WD
Rear tires - No., size, ply & psi(kPa)	Two 520/70R38; **,15(100)	Two 520/70R38; **,15(100)
Front tires - No., size, ply & psi(kPa)	Two 420/70R28; **,16(110)	Two 11.00-16; 8; 36 (250)
Height of Drawbar	23.6 in (600 mm)	33.1 in (840 mm)
Static Weight with operator- Rear	7055 lb (3200 kg)	7020 lb (3185 kg)
- Front	4540 lb (2060 kg)	3760 lb (1705 kg)
- Total	11595 lb (5260 kg)	10780 lb (4890 kg)

10.18 (16.39), 11.36 (18.28), 11.92 (19.18), 13.13 (21.13), 13.40 (21.57), 15.37 (24.73), 15.69 (25.25), 18.14 (29.19), 21.23 (34.17) **Clutch** multiple wet disc operated by foot pedal **Brakes** multiple wet disc hydraulically operated by two foot pedals that can be locked together **Steering** hydrostatic **Power take-off** 540 rpm at 1976 engine rpm or 1000 rpm at 2000 engine rpm **Unladen tractor mass** 2WD - 10615 lb (4815 kg), FWA - 11430 lb (5185 kg)

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 3 point lift claims of 9250 lbs (4196 kg) at 24" behind link ends nor 15653 lbs (7100 kg) at link ends. The performance figures on this summary were taken from a test conducted under the OECD Code II test procedure.

We, the undersigned, certify that this is a true summary of data from OECD Reports No. **1853 & 1863**, Nebraska Summary 304, June 21, 2000.

Brent T. Sampson
Test Engineer

L.L. Bashford
M.F. Kocher
R.D. Grisso Jr.
Board of Tractor Test Engineers

DRAWBAR PERFORMANCE

(Unballasted - 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)	Consumption Hp.hr/gal (kW.h/l)	Temp.°F cool- ing med	Temp.°F (°C) Air dry bulb	Barom. inch Hg (kPa)
Maximum Power 22nd(2LB)Gear									
110.6 (82.5)	4900 (21.8)	8.46 (13.62)	2013	5	0.455 (0.277)	15.61 (3.08)	190 (88)	59 (15)	29.8 (100.9)
75% of Pull at Maximum Power 22nd(2LB) Gear									
86.4 (64.4)	3365 (15.0)	9.62 (15.48)	2254	4	0.525 (0.319)	13.53 (2.66)	192 (89)	59 (15)	29.9 (101.2)
50% of Pull at Maximum Power 22nd(2LB) Gear									
59.1 (44.1)	2255 (10.0)	9.83 (15.82)	2285	3	0.663 (0.403)	10.71 (2.11)	187 (86)	59 (15)	29.9 (101.2)
75% of Pull at Reduced Engine Speed 24th(2LC) Gear									
86.9 (64.8)	3340 (14.9)	9.76 (15.71)	1939	4	0.444 (0.270)	15.99 (3.15)	190 (88)	59 (15)	29.9 (101.2)
50% of Pull at Reduced Engine Speed 24th(2LC) Gear									
58.9 (43.9)	2260 (10.1)	9.77 (15.72)	1921	3	0.542 (0.330)	13.10 (2.58)	190 (88)	59 (15)	29.9 (101.2)
MAXIMUM POWER IN SELECTED GEARS									
7th(3TA)Gear									
71.9 (53.6)	10140 (45.1)	2.66 (4.28)	2278	14	0.600 (0.365)	11.83 (2.33)	192 (89)	59 (15)	29.8 (100.9)
8th(2TC)Gear									
75.0 (55.9)	10075 (44.9)	2.79 (4.49)	2272	13	0.578 (0.352)	12.28 (2.42)	192 (89)	59 (15)	29.8 (100.9)
9th(3TB)Gear									
78.3 (58.4)	9770 (43.5)	3.01 (4.84)	2247	14	0.604 (0.368)	11.75 (2.32)	192 (89)	59 (15)	29.8 (100.9)
10th(2TD)Gear									
83.9 (62.6)	9890 (44.0)	3.19 (5.13)	2243	13	0.569 (0.346)	12.49 (2.46)	192 (89)	59 (15)	29.8 (100.9)
11th(4TA)Gear									
94.4 (70.4)	9690 (43.1)	3.65 (5.87)	2221	9	0.519 (0.316)	13.68 (2.70)	190 (88)	59 (15)	29.8 (100.9)
12th(3TC)Gear									
95.7 (71.4)	9795 (43.6)	3.67 (5.90)	2233	10	0.509 (0.310)	13.95 (2.75)	187 (86)	59 (15)	29.8 (100.9)
13th(4TB)Gear									
102.1 (76.1)	9420 (41.9)	4.06 (6.53)	2168	11	0.518 (0.315)	13.71 (2.70)	192 (89)	59 (15)	29.8 (100.9)
14th(3TD)Gear									
102.3 (76.3)	9330 (41.5)	4.11 (6.62)	2129	10	0.515 (0.313)	13.81 (2.72)	192 (89)	59 (15)	29.8 (100.9)
15th(1LA)Gear									
104.3 (77.8)	9395 (41.8)	4.16 (6.69)	2096	10	0.496 (0.301)	14.32 (2.82)	196 (91)	59 (15)	29.8 (100.9)
16th(4TC)Gear									
103.3 (77.0)	8410 (37.4)	4.60 (7.41)	2048	10	0.493 (0.300)	14.42 (2.84)	192 (89)	59 (15)	29.8 (100.9)
17th(1LB)Gear									
105.8 (78.9)	8250 (36.7)	4.81 (7.74)	2035	9	0.476 (0.290)	14.91 (2.94)	194 (90)	59 (15)	29.8 (100.9)
18th(4TD)Gear									
109.4 (81.6)	7600 (33.8)	5.40 (8.69)	2018	8	0.459 (0.279)	15.48 (3.05)	185 (85)	59 (15)	29.8 (100.9)
19th(1LC)Gear									
110.5 (82.4)	7105 (31.6)	5.83 (9.39)	2059	8	0.464 (0.282)	15.29 (3.01)	192 (89)	59 (15)	29.8 (100.9)
20th(1LD)Gear									
110.1 (82.1)	6115 (27.2)	6.75 (10.87)	2007	7	0.460 (0.280)	15.43 (3.04)	192 (89)	59 (15)	29.8 (100.9)
21st(2LA)Gear									
110.1 (82.1)	5755 (25.6)	7.17 (11.54)	2020	6	0.459 (0.279)	15.48 (3.05)	192 (89)	59 (15)	29.8 (100.9)
22nd(2LB)Gear									
110.6 (82.5)	4900 (21.8)	8.46 (13.62)	2013	5	0.455 (0.277)	15.61 (3.08)	190 (88)	59 (15)	29.8 (100.9)
23rd(3LA)Gear									
109.3 (81.5)	4295 (19.1)	9.54 (15.36)	2015	5	0.455 (0.277)	15.58 (3.07)	192 (89)	59 (15)	29.8 (100.9)
24th(2LC)Gear									
106.2 (79.2)	3960 (17.6)	10.06 (16.19)	2015	5	0.471 (0.286)	15.09 (2.97)	192 (89)	59 (15)	29.8 (100.9)

THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY: II

Quick Attach: None

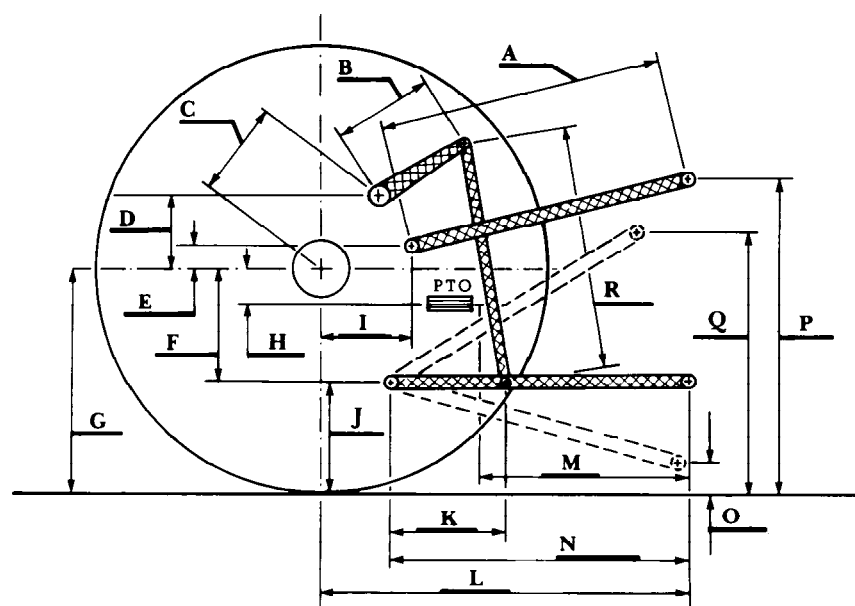
Maximum Force Exerted

Through Whole Range:

8140 lbs (36.2 kN) (at the frame)

10905 lbs (48.5 kN) (at the hitch points)

	open center system	closed center system
i) Opening pressure of relief valve:	NA	NA
Sustained pressure of the open relief valve:	2845 psi (196 bar)	2845 psi (196 bar)
ii) Pump delivery rate at minimum pressure:	15.6 GPM (59.0 l/min)	25.3 GPM (95.7 l/min)
iii) Pump delivery rate at maximum		
hydraulic power:	14.1 GPM (53.4 l/min)	25.0 GPM (94.5 l/min)
Delivery pressure:	2640 psi (182 bar)	2305 psi (159 bar)
Power:	21.7 HP (16.2 kW)	33.6 HP (25.0 kW)



HITCH DIMENSIONS AS TESTED NO LOAD

	inch	mm
B	28.9	295
D	13.9	330
F	6.3	280
H	32.3	43
J	15.3	540
L	21.4	1104
N	25.7	943
P	7.2	1150
R	35.4	757