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January 2004

Nebraska Summary 467: Massey Ferguson 6485 Diesel 32-Speed

Nebraska Tractor Test Lab

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SUMMARY OF OECD TEST 2217-NEBRASKA SUMMARY 467

MASSEY FERGUSON 6485 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—1100 rpm)					
126.5 (94.3)	2200	7.90 (29.91)	0.443 (0.270)	16.00 (3.15)	
Standard Power Take-off Speed(1000 rpm)					
135.2 (100.8)	2000	7.54 (28.55)	0.396 (0.241)	17.92 (3.53)	
Maximum Power (2 hours)					
135.4 (101.0)	1950	7.42 (28.09)	0.389 (0.237)	18.23 (3.59)	

VARYING POWER AND FUEL CONSUMPTION

126.5 (94.3)	2200	7.90 (29.91)	0.443 (0.270)	16.00 (3.15)	Air temperature
109.3 (81.5)	2242	7.12 (26.96)	0.462 (0.281)	15.34 (3.02)	72°F (22°C)
83.0 (61.9)	2266	5.99 (22.67)	0.512 (0.312)	13.85 (2.73)	Relative humidity
55.9 (41.7)	2288	4.82 (18.25)	0.611 (0.372)	11.60 (2.29)	40%
28.6 (21.3)	2315	3.67 (13.91)	0.913 (0.556)	7.79 (1.53)	Barometer
--	2334	2.59 (9.80)	--	--	30.0" Hg (101.5 kPa)

Maximum Torque - 448.3 lb.-ft. (607.8 Nm) at 1223 rpm
Maximum Torque Rise - 48.5%
Torque rise at 1750 engine rpm - 30%

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—12th(4TA) Gear									
103.9 (77.5)	8460 (37.6)	4.61 (7.41)	2202	5	0.538 (0.327)	13.20 (2.60)	183 (84)	61 (16)	29.5 (100.0)
75% of Pull at Maximum Power—12th(4TA) Gear									
79.8 (59.5)	6315 (28.1)	4.74 (7.63)	2248	4	0.592 (0.360)	11.98 (2.36)	181 (83)	61 (16)	29.5 (100.0)
50% of Pull at Maximum Power—12th(4TA) Gear									
54.0 (40.3)	4215 (18.8)	4.81 (7.74)	2262	3	0.717 (0.436)	9.90 (1.95)	181 (83)	61 (16)	29.5 (99.9)
75% of Pull at Reduced Engine Speed—14th(4TB) Gear									
79.8 (59.5)	6295 (28.0)	4.75 (7.65)	1931	4	0.512 (0.312)	13.85 (2.73)	181 (83)	61 (17)	29.5 (99.9)
50% of Pull at Reduced Engine Speed—14th(4TB) Gear									
54.2 (40.4)	4225 (18.8)	4.81 (7.74)	1937	3	0.589 (0.358)	12.05 (2.37)	181 (83)	61 (17)	29.5 (99.9)

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

Dates of tests: March - May, 2004

Sound tests: January 19, 2006

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)** 0.852 **Fuel weight** 7.09 lbs/gal (0.850 kg/l) **Oil SAE** 10W40 **API service classification** CF4 **Transmission and hydraulic lubricant** BP Terrac Tractan 9 10W/40 **Front axle lubricant** Terrac Tractan 9 10W/40

ENGINE: Make Sisu Diesel **Type** six cylinder vertical with turbocharger and air to air intercooler **Serial No.** N13304 **Crankshaft** lengthwise **Rated engine speed** 2200 **Bore and stroke** 4.252" x 4.724" (108.0 mm x 120.0 mm) **Compression ratio** 18.5 to 1 **Displacement** 402 cu in (6596 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** front wheel assist **Serial No.** M302015 **Tread width** rear 61.7" (1567 mm) to 95.2" (2417 mm) front 66.5" (1690 mm) to 85.5" (2172 mm) **Wheelbase** 118.5" (3011 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 1.47 (2.36) second 1.72 (2.76) third 2.03 (3.26) fourth 2.22 (3.57) fifth 2.37 (3.82) sixth 2.60 (4.18) seventh 3.06 (4.93) eighth 3.17 (5.10) ninth 3.59 (5.78) tenth 3.71 (5.97) eleventh 4.38 (7.05) twelfth 4.59 (7.39) thirteenth 5.13 (8.25) fourteenth 5.38 (8.65) fifteenth 5.65 (9.09) sixteenth 6.34 (10.21) seventeenth 6.61 (10.64) eighteenth 7.43 (11.95) nineteenth 7.80 (12.56) twentieth 8.54 (13.75) twenty-first 9.14 (14.71) twenty-second 10.00 (16.09) twenty-third 11.81 (19.00) twenty-fourth 12.20 (19.64) twenty-fifth 13.82 (22.24) twenty-sixth 14.29 (22.99) twenty-seventh 16.86 (27.14) twenty-eighth 17.68 (28.45) twenty-ninth 19.74 (31.76) thirtieth 20.69 (33.30) thirty-first 24.42 (39.30) thirty-second 24.86 (40.00) reverse 1.47 (2.36), 1.72 (2.76), 2.03 (3.26), 2.22 (3.57), 2.37 (3.82), 2.60 (4.18), 3.06 (4.93), 3.17 (5.10), 3.59 (5.78), 3.71 (5.97), 4.38 (7.05), 4.59 (7.39), 5.13 (8.25), 5.38 (8.65), 5.65 (9.09), 6.34 (10.21), 6.61 (10.64), 7.43 (11.95), 7.80 (12.56)

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)
84.9 (63.3)	14680 (65.3)	2.17 (3.49)	2216	13	5th(1TD)Gear 0.585 (0.356)	12.13 (2.39)	180 (82)	57 (14)	29.6 (100.1)
93.9 (70.0)	14620 (65.0)	2.41 (3.87)	2220	12	6th(2TB) Gear 0.569 (0.346)	12.46 (2.45)	181 (83)	57 (14)	29.6 (100.1)
107.7 (80.3)	14345 (63.8)	2.82 (4.53)	2128	9	7th(2TC) Gear 0.532 (0.324)	13.32 (2.63)	181 (83)	57 (14)	29.6 (100.1)
110.4 (82.3)	14230 (63.3)	2.91 (4.68)	2111	8	8th(3TA)Gear 0.516 (0.314)	13.76 (2.71)	178 (81)	57 (14)	29.6 (100.1)
114.1 (85.1)	13355 (59.4)	3.20 (5.16)	2028	7	9th(2TD)Gear 0.486 (0.296)	14.60 (2.88)	181 (83)	57 (14)	29.6 (100.1)
114.7 (85.5)	13490 (60.0)	3.19 (5.13)	1951	7	10th(3TB)Gear 0.470 (0.286)	15.08 (2.97)	183 (84)	59 (15)	29.6 (100.1)
116.1 (86.6)	11330 (50.4)	3.84 (6.19)	1949	4	11th(3TC) Gear 0.466 (0.284)	15.18 (2.99)	183 (84)	59 (15)	29.6 (100.1)
115.5 (86.1)	10655 (47.4)	4.06 (6.54)	1955	5	12th(4TA) Gear 0.465 (0.283)	15.24 (3.00)	183 (84)	59 (15)	29.6 (100.1)
115.5 (86.1)	9545 (42.5)	4.54 (7.30)	1952	4	13th(3TD)Gear 0.467 (0.284)	15.53 (2.99)	183 (84)	59 (15)	29.6 (100.1)
114.3 (85.2)	9015 (40.1)	4.75 (7.64)	1953	5	14th(4TB)Gear 0.473 (0.288)	15.00 (2.96)	183 (84)	61 (16)	29.6 (100.1)
117.1 (87.3)	8750 (38.9)	5.02 (8.07)	1946	4	15th(1LA)Gear 0.452 (0.275)	15.68 (3.09)	183 (84)	61 (16)	29.5 (100.0)
111.4 (83.1)	7410 (33.0)	5.64 (9.08)	1952	4	16th(4TC) Gear 0.482 (0.293)	14.72 (2.90)	183 (84)	61 (16)	29.5 (100.0)
115.9 (86.4)	7345 (32.7)	5.92 (9.52)	1947	3	17th(1LB)Gear 0.463 (0.281)	15.33 (3.02)	183 (84)	61 (16)	29.5 (100.0)
110.4 (82.3)	6225 (27.7)	6.65 (10.71)	1953	4	18th(4TD)Gear 0.483 (0.294)	14.67 (2.89)	183 (84)	61 (16)	29.5 (100.0)
112.1 (83.6)	6035 (26.8)	6.97 (11.21)	1950	3	19th(1LC)Gear 0.483 (0.294)	14.70 (2.90)	183 (84)	61 (16)	29.5 (100.0)

8.54 (13.75), 9.14 (14.71), 10.00 (16.09), 11.81 (19.00), 12.20 (19.64), 13.82 (22.24), 14.29 (22.99), 16.86 (27.14), 17.68 (28.45), 19.74 (31.76), 20.69 (33.30), 24.43 (39.30), 24.86 (40.00) **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 1998 engine rpm or 1000 rpm at 2000 engine rpm **Unladen tractor mass** 15465 lb (7015 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 claim of 26.4 GPM (100 lpm) remote hydraulic flow with twin flow system. The manufacturer's claim of 23.5 GPM (88.5 lpm) remote flow, with open center system, was not tested for verification. The category IIN hitch configuration was not tested for verification. 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 Report No. **2217**, Nebraska Summary 467, March 15, 2006.

Leonard L. Bashford
Director

M.F. Kocher
V.I. Adamchuk
J.A. Smith
Board of Tractor Test Engineers

TIRES, BALLAST 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

Front Wheel Assist
Two 620/70R42;**,15(100)
Two 540/65R30;**,16(110)
22.5 in (570 mm)
9600 lb (4355 kg)
6075 lb (2755 kg)
15675 lb (7110 kg)

TRACTOR SOUND LEVEL WITH CAB

dB(A)

At no load in 12th (4TA) gear	70.6
Bystander in 32nd (4LD) gear	84.9

THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY: II

Quick Attach: None

Maximum force exerted through whole range:

15240 lbs (67.8 kN)

twin flow system

closed center system

i) Opening pressure of relief valve:

NA

NA

Sustained pressure of the open relief valve:

2975 psi (205 bar)

2845 psi (196 bar)

ii) Pump delivery rate at minimum pressure:

25.9 GPM (98.2 l/min)

32.1 GPM (121.7 l/min)

iii) Pump delivery rate at maximum

hydraulic power:

23.5 GPM (89.0 l/min)

29.6 GPM (112.0 l/min)

Delivery pressure:

2365 psi (163 bar)

2175 psi (150 bar)

Power:

32.4 HP (24.2 kW)

37.5 HP (28.0 kW)

HITCH DIMENSIONS AS TESTED—NO LOAD

	inch	mm
A	31.5	800
B	15.7	400
C	21.0	534
D	19.5	495
E	8.3	210
F	12.2	310
G	35.6	905
H	2.0	50
I	17.7	450
J	23.4	595
K	25.0	635
L	47.2	1198
M	23.5	598
N	37.0	940
O	10.2	258
P	47.4	1205
Q	40.2	1022
R	36.3	923

