

SUMMARY OF OECD TEST 1800-NEBRASKA SUMMARY 279

MASSEY FERGUSON 4255 DIESEL

12 SPEED

POWER TAKE-OFF PERFORMANCE (540 RPM Shaft)

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—625 rpm)					
82.2 (61.3)	2201	5.43 (20.55)	0.482 (0.293)	15.14 (2.98)	
Maximum Power (2 hours)					
84.1 (62.7)	1999	5.16 (19.55)	0.449 (0.273)	16.27 (3.20)	
Standard Power Take-off Speed (540 rpm)					
83.3 (62.1)	1903	5.00 (18.92)	0.437 (0.266)	16.66 (3.28)	

VARYING POWER AND FUEL CONSUMPTION

82.2 (61.3)	2201	5.43 (20.55)	0.482 (0.293)	15.14 (2.98)	Air temperature
70.7 (52.7)	2225	4.97 (18.82)	0.513 (0.312)	14.22 (2.80)	75°F (24°C)
53.7 (40.0)	2258	4.06 (15.35)	0.550 (0.335)	13.23 (2.61)	Relative humidity
36.1 (26.9)	2278	3.25 (12.30)	0.655 (0.399)	11.10 (2.19)	37%
18.3 (13.6)	2291	2.44 (9.24)	0.972 (0.591)	7.49 (1.48)	Barometer
--	2315	1.65 (6.26)	--	--	29.8" Hg (100.8 kPa)

Maximum Torque -257.2 lb.-ft. (348.7 Nm) at 1305 rpm
 Maximum Torque Rise -31.0%
 Torque rise at 1800 engine rpm -21%

POWER TAKE-OFF PERFORMANCE (1000 RPM Shaft)

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—1101 rpm)					
84.9 (63.3)	2202	5.40 (20.44)	0.463 (0.282)	15.72 (3.10)	
Standard Power Take-off Speed (1000 rpm)					
86.7 (64.7)	2000	5.14 (19.45)	0.432 (0.263)	16.87 (3.32)	
Maximum Power (2 hours)					
86.7 (64.7)	2000	5.14 (19.45)	0.432 (0.263)	16.87 (3.32)	

VARYING POWER AND FUEL CONSUMPTION

84.9 (63.3)	2202	5.40 (20.44)	0.463 (0.282)	15.72 (3.10)	Air temperature
73.4 (54.7)	2241	4.97 (18.80)	0.493 (0.300)	14.77 (2.91)	75°F (24°C)
56.1 (41.8)	2274	4.10 (15.53)	0.533 (0.325)	13.66 (2.69)	Relative humidity
37.4 (27.9)	2284	3.28 (12.40)	0.638 (0.388)	11.42 (2.25)	34%
18.8 (14.0)	2297	2.46 (9.32)	0.955 (0.581)	7.63 (1.50)	Barometer
--	2314	1.69 (6.38)	--	--	29.8" Hg (100.8 kPa)

Maximum Torque -269.4 lb.-ft. (365.2 Nm) at 1297 rpm
 Maximum Torque Rise -33.1%
 Torque rise at 1800 engine rpm -24%

Location of tests: Silsoe Research Institute, Wrest Park, Silsoe, Bedford, England MK45 4HS

Dates of tests: June to July, 1998

Manufacturer: AGCO Limited, P.O. Box 62, Banner Lane, Coventry, West Midlands, England CV4 9GF

FUEL and OIL: Fuel No. 2 Diesel Specific gravity converted to 60°/60°F (15°/15°C) 0.875 Fuel weight 7.28 lbs/gal (0.873 kg/l) Oil SAE 15W-30 API service classification CD Transmission and hydraulic lubricant SAE 15W-30 Front axle lubricant SAE 15W-30

ENGINE: Make Perkins Diesel Type four cylinder vertical with turbocharger Serial No. U809240C Crankshaft lengthwise Rated engine speed 2200 Bore and stroke 3.937" x 5.00" (100.0 mm x 127.0 mm) Compression ratio 17.3 to 1 Displacement 243 cu in (3990 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

CHASSIS: Type front wheel assist Serial No. ABED24ABXAE10999 Treadwidth rear 60.4" (1535 mm) to 83.9" (2130 mm) front 63.4" (1610 mm) to 75.4" (1915 mm) Wheelbase 92.5" (2350 mm) Hydraulic control system direct engine drive Transmission selective gear fixed ratio Nominal travel speeds mph (km/h) first 1.45 (2.33) second 1.89 (3.04) third 2.48 (3.99) fourth 3.25 (5.23) fifth 4.08 (6.57) sixth 5.33 (8.58) seventh 7.00 (11.26) eighth 9.16 (14.74) ninth 11.02 (17.73) tenth 14.39 (23.16) eleventh 18.89 (30.40) twelfth 24.74 (39.81) reverse 1.45 (2.33), 1.90 (3.05), 2.49 (4.00), 3.26 (5.24), 4.09 (6.58), 5.34 (8.59), 7.01 (11.28), 9.18 (14.77), 11.03 (17.75), 14.42 (23.20), 18.92 (30.45), 24.77 (39.87) Clutch single dry 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 1902 engine rpm or 1000 rpm at 2000 engine rpm Unladen tractor mass 8430 lb (3824 kg)

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 cool- ing med	Temp. °C Air dry bulb	Barom. inch Hg (kPa)
Maximum Power—5th (1M) Gear									
65.6 (48.9)	6190 (27.5)	3.97 (6.39)	2200	5.3	0.572 (0.348)	12.22 (2.41)	185 (85)	66 (19)	30.0 (101.6)
75% of Pull at Maximum Power—5th (1M) Gear									
50.8 (37.9)	4645 (20.7)	4.10 (6.60)	2247	4.1	0.648 (0.394)	10.77 (2.12)	185 (85)	66 (19)	30.0 (101.6)
50% of Pull at Maximum Power—5th (1M) Gear									
34.7 (25.9)	3105 (13.8)	4.19 (6.75)	2271	2.9	0.765 (0.466)	9.12 (1.80)	186 (86)	68 (20)	30.0 (101.6)
75% of Pull at Reduced Engine Speed—6th (2M) Gear									
50.8 (37.9)	4655 (20.7)	4.09 (6.59)	1718	4.2	0.517 (0.315)	13.50 (2.66)	184 (84)	72 (22)	30.0 (101.6)
50% of Pull at Reduced Engine Speed—6th (2M) Gear									
34.9 (26.0)	3110 (13.8)	4.20 (6.76)	1741	3.0	0.590 (0.359)	11.83 (2.33)	184 (84)	69 (21)	30.0 (101.6)

MAXIMUM POWER IN SELECTED GEARS

1st (1L) Gear									
31.8 (23.7)	9170 (46.8)	1.30 (2.09)	2259	14.8	0.810 (0.493)	8.62 (1.70)	185 (85)	72 (22)	30.0 (101.6)
2nd (2L) Gear									
40.6 (30.3)	8815 (39.2)	1.73 (2.78)	2249	12.9	0.724 (0.441)	9.64 (1.90)	185 (85)	73 (23)	30.0 (101.6)
3rd (3L) Gear									
53.1 (39.6)	8710 (38.8)	2.29 (3.68)	2227	11.4	0.640 (0.389)	10.91 (2.15)	185 (85)	72 (22)	30.0 (101.6)
4th (4L) Gear									
64.9 (48.4)	8230 (36.6)	2.96 (4.76)	2134	8.6	0.563 (0.343)	12.41 (2.45)	185 (85)	72 (22)	30.0 (101.6)
5th (1M) Gear									
67.9 (50.6)	7340 (32.7)	3.47 (5.58)	1946	6.5	0.516 (0.314)	13.55 (2.67)	185 (85)	72 (22)	30.0 (101.6)
6th (2M) Gear									
68.3 (50.9)	5555 (24.7)	4.61 (7.42)	1947	4.9	0.517 (0.315)	13.50 (2.66)	185 (85)	68 (20)	30.0 (101.6)
7th (3M) Gear									
67.2 (50.1)	4100 (18.2)	6.14 (9.88)	1951	3.7	0.524 (0.319)	13.33 (2.63)	185 (85)	68 (20)	30.0 (101.6)
8th (4M) Gear									
63.7 (47.5)	2965 (13.2)	8.05 (12.96)	1938	2.8	0.549 (0.334)	12.73 (2.51)	185 (85)	70 (21)	30.0 (101.6)
9th (1H) Gear									
63.9 (47.7)	2455 (10.9)	9.76 (15.71)	1947	2.5	0.545 (0.332)	12.82 (2.53)	185 (85)	70 (21)	30.0 (101.6)

TRACTOR SOUND LEVEL WITH CAB	Front Wheel Drive	
	Disengaged dB(A)	Engaged dB(A)
Maximum sound level in 5th (1M) Gear	81.0	81.0
Bystander in 12th (4H) Gear	85.0	--

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 capacity claim of 6614 lbs (3000 kg), optionally 8818 lbs (4000 kg) at lower link ends. The performance results on this summary were taken from OECD tests conducted under the Code 2 test code procedure.

We, the undersigned, certify that this is a true summary of data from OECD Report No. **1800**, Nebraska Summary 279, May 12, 1999.

Leonard L. Bashford
Director

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Board of Tractor Test Engineers

DRAWBAR PERFORMANCE
(Unballasted - Front Drive Disengaged)
FUEL CONSUMPTION CHARACTERISTICS

Power Hp (kW)	Drawbar pull lbs (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel lb/hp.hr (kg/kW.h)	Consumption Hp.hr/gal (kW.h/l)	Temp. °F cool- ing med	°C Air dry bulb	Barom. inch Hg (kPa)
Maximum Power—7th (3M) Gear									
65.4 (48.8)	3625 (16.1)	6.78 (10.91)	2198	3.4	0.569 (0.346)	12.28 (2.42)	187 (86)	66 (19)	29.7 (100.5)
75% of Pull at Maximum Power—7th (3M) Gear									
50.3 (37.5)	2705 (12.0)	6.97 (11.22)	2246	2.8	0.637 (0.388)	10.96 (2.16)	187 (86)	79 (26)	29.7 (100.5)
50% of Pull at Maximum Power—7th (3M) Gear									
34.9 (26.0)	1840 (8.2)	7.10 (11.42)	2270	2.0	0.723 (0.440)	9.65 (1.90)	187 (86)	79 (26)	29.7 (100.5)
75% of Pull at Reduced Engine Speed—8th (4M) Gear									
51.8 (38.6)	2785 (12.4)	6.97 (11.22)	1716	2.7	0.504 (0.307)	13.86 (2.73)	183 (84)	79 (26)	29.7 (100.5)
50% of Pull at Reduced Engine Speed—8th (4M) Gear									
35.6 (26.5)	1880 (8.4)	7.09 (11.41)	1732	2.1	0.580 (0.353)	12.03 (2.37)	183 (84)	81 (27)	29.7 (100.5)

MAXIMUM POWER IN SELECTED GEARS

2nd (2L) Gear									
28.8 (21.5)	6475 (28.8)	1.67 (2.69)	2263	15.0	0.824 (0.501)	8.48 (1.67)	187 (86)	75 (24)	29.7 (100.5)
3rd (3L) Gear									
38.1 (28.4)	6250 (27.8)	2.29 (3.69)	2251	10.1	0.727 (0.442)	9.61 (1.89)	185 (85)	68 (20)	29.7 (100.5)
4th (4L) Gear									
50.6 (37.7)	6290 (28.0)	3.02 (4.86)	2228	8.7	0.644 (0.392)	10.83 (2.13)	187 (86)	66 (19)	29.7 (100.5)
5th (1M) Gear									
63.0 (47.0)	6400 (28.5)	3.69 (5.94)	2202	9.9	0.593 (0.361)	11.78 (2.32)	187 (86)	66 (19)	29.7 (100.5)
6th (2M) Gear									
68.0 (50.7)	5735 (25.5)	4.45 (7.16)	1942	5.8	0.515 (0.313)	13.55 (2.67)	185 (85)	64 (18)	29.7 (100.5)
7th (3M) Gear									
68.3 (50.9)	4165 (18.5)	6.15 (9.90)	2003	3.7	0.519 (0.316)	13.45 (2.65)	185 (85)	66 (19)	29.7 (100.5)
8th (4M) Gear									
67.3 (50.2)	3090 (13.7)	8.17 (13.14)	2016	3.1	0.523 (0.318)	12.35 (2.63)	185 (85)	77 (25)	29.7 (100.5)

TIRES AND WEIGHT

Rear Tires—No., size, ply & psi (kPa)
Front Tires—No., size, ply & psi (kPa)

Tested Without Ballast

Two 18.4R38; **, 12(83)
 Two 420/70R28; **, 15(103)

Height of Drawbar

Static Weight with operator —Rear
 —Front
 —Total

22.4 in (570 mm)
 5100 lb (2314 kg)
 3495 lb (1585 kg)
 8595 lb (3899 kg)

THREE POINT HITCH PERFORMANCE (OECD Static Test)

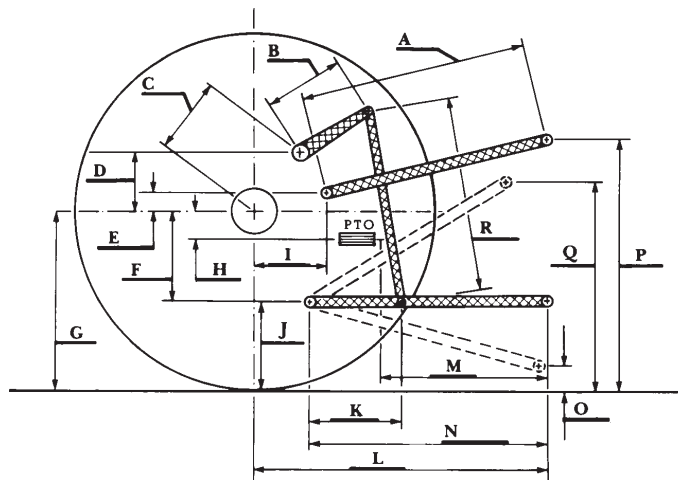
CATEGORY: II

Quick Attach: None

Maximum Force Exerted Through Whole Range: 5710 lbs (25.4 kN)(at the frame)
6360 lbs (28.3 kN)(at the hitch points)

- i) Opening pressure of relief valve: NA
- Sustained pressure of the open relief valve: 3105 psi (214 bar)
- ii) Pump delivery rate at minimum pressure: 10.0 GPM (38.0 l/min)
- iii) Pump delivery rate at maximum
 - hydraulic power: 9.5 GPM (36.0 l/min)
 - Delivery pressure: 2685 psi (185 bar)
 - Power: 14.9 HP (11.1 kW)

HITCH DIMENSIONS AS TESTED—NO LOAD



	inch	mm
A	32.1	815
B	12.2	310
C	12.0	304
D	9.2	233
E	8.1	205
F	8.4	212
G	32.3	820
H	5.4	137
I	7.3	186
J	23.9	608
K	24.8	630
L	40.1	1018
M	27.0	685
N	41.3	1050
O	7.8	198
P	48.0	1218
Q	35.3	896
R	30.5	775