

SUMMARY OF OECD TEST 1950-NEBRASKA SUMMARY 360

MASSEY FERGUSON 4233 DIESEL

ALSO MASSEY FERGUSON 4335 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)					
68.4 (51.0)	2201	4.27 (16.18)	0.436 (0.265)	16.02 (3.16)	
Standard Power Take-off Speed (540 rpm)					
64.8 (48.3)	1903	3.83 (14.50)	0.413 (0.251)	16.90 (3.33)	

VARYING POWER AND FUEL CONSUMPTION

68.4 (51.0)	2201	4.27 (16.18)	0.436 (0.265)	16.02 (3.16)	Air temperature
59.5 (44.4)	2251	3.78 (14.31)	0.444 (0.270)	15.74 (3.10)	73°F (23°C)
45.2 (33.7)	2275	3.07 (11.61)	0.475 (0.289)	14.73 (2.90)	Relative humidity
30.4 (22.7)	2295	2.41 (9.13)	0.555 (0.337)	12.59 (2.48)	42%
15.3 (11.4)	2310	1.77 (6.70)	0.809 (0.492)	8.63 (1.70)	Barometer
--	2325	1.19 (4.50)	--	--	29.4" Hg (99.5 kPa)

Maximum Torque - 191.7 lb.-ft. (259.9 Nm) at 1103 rpm

Maximum Torque Rise - 17.3%

Torque rise at 1800 engine rpm - 13%

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—1100 rpm)					
69.7 (52.0)	2200	4.26 (16.14)	0.427 (0.260)	16.34 (3.22)	
Standard Power Take-off Speed (1000 rpm)					
68.0 (50.7)	2000	3.99 (15.11)	0.409 (0.249)	17.06 (3.36)	

VARYING POWER AND FUEL CONSUMPTION

69.7 (52.0)	2200	4.26 (16.14)	0.427 (0.260)	16.34 (3.22)	Air temperature
60.6 (45.2)	2254	3.76 (14.24)	0.434 (0.264)	16.09 (3.17)	73°F (23°C)
46.0 (34.3)	2277	3.06 (11.57)	0.464 (0.282)	15.06 (2.97)	Relative humidity
30.8 (23.0)	2296	2.40 (9.08)	0.543 (0.330)	12.86 (2.53)	38%
15.6 (11.6)	2311	1.76 (6.67)	0.791 (0.481)	8.83 (1.74)	Barometer
--	2326	1.22 (4.63)	--	--	29.5" Hg (99.9 kPa)

Maximum Torque - 197.5 lb.-ft. (267.8 Nm) at 1401 rpm

Maximum Torque Rise - 19.7%

Torque rise at 1800 engine rpm - 9%

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

Dates of tests: October to December, 2000

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) 0.839 Fuel weight 6.98 lbs/gal (0.837 kg/l) Oil SAE15W-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 Serial No. U060437F Crankshaft lengthwise Rated engine speed 2200 Bore and stroke 4.055" x 5.00" (103.0 mm x 127.0 mm) Compression ratio 17.3 to 1 Displacement 258 cu in (4233 ml) Starting system 12 volt Lubrication pressure Air cleaner two paper elements Oil filter one full flow cartridge Oil cooler 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. ABBD24JHXAJ01334 Tread width 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 (3.05) third 2.49 (4.00) fourth 3.26 (5.24) fifth 4.09 (6.58) sixth 5.34 (8.60) seventh 7.02 (11.29) eighth 9.18 (14.78) ninth 11.04 (17.77) tenth 14.43 (23.22) eleventh 18.94 (30.48) twelfth 24.80 (39.91) reverse 1.64 (2.64), 2.14 (3.45), 2.81 (4.52), 3.68 (5.93), 4.62 (7.44), 6.04 (9.72), 7.93 (12.76), 10.38 (16.71), 12.48 (20.09), 16.31 (26.25), 21.41 (34.45), 28.04 (45.12) 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 single speed - 540 rpm at 1789 engine rpm, dual speed - 540 rpm at 1903 engine rpm or 1000 rpm at 2000 engine rpm Unladen tractor mass 6935 lb (3145 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)	Fuel Consumption Hp.hr/gal (kW.h/l)	Temp. °F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
Maximum Power—7th (3M) Gear									
60.2 (44.9)	3400 (15.1)	6.64 (10.69)	2198	4.0	0.504 (0.306)	13.87 (2.73)	183 (84)	45 (7)	29.2 (98.8)
75% of Pull at Maximum Power—7th (3M) Gear									
46.8 (34.9)	2550 (11.3)	6.88 (11.06)	2252	3.2	0.533 (0.324)	13.09 (2.58)	183 (84)	43 (6)	29.2 (98.8)
50% of Pull at Maximum Power—7th (3M) Gear									
31.5 (23.5)	1685 (7.5)	7.01 (11.28)	2278	2.3	0.620 (0.377)	11.27 (2.22)	183 (84)	43 (6)	29.2 (98.8)
75% of Pull at Reduced Engine Speed—8th (4M) Gear									
46.5 (34.7)	2540 (11.3)	6.87 (11.06)	1719	3.1	0.468 (0.285)	14.92 (2.94)	179 (82)	43 (6)	29.2 (98.8)
50% of Pull at Reduced Engine Speed—8th (4M) Gear									
31.4 (23.4)	1675 (7.5)	7.03 (11.31)	1743	2.2	0.508 (0.309)	13.76 (2.71)	181 (83)	43 (6)	29.2 (98.8)

MAXIMUM POWER IN SELECTED GEARS

2nd (2L) Gear									
30.4 (22.7)	6970 (31.0)	1.64 (2.64)	2275	15.0	0.649 (0.395)	10.76 (2.12)	184 (84)	45 (7)	29.2 (98.8)
3rd (3L) Gear									
39.4 (29.4)	6870 (30.6)	2.15 (3.47)	2259	14.7	0.601 (0.366)	11.62 (2.29)	183 (84)	45 (7)	29.2 (98.8)
4th (4L) Gear									
50.8 (37.9)	6720 (29.9)	2.83 (4.56)	2235	13.4	0.557 (0.339)	12.54 (2.47)	183 (84)	45 (7)	29.2 (98.8)
5th (1M) Gear									
58.1 (43.3)	5890 (26.2)	3.70 (5.96)	2206	8.6	0.526 (0.320)	13.29 (2.62)	183 (84)	43 (6)	29.2 (98.8)
6th (2M) Gear									
59.7 (44.5)	4485 (20.0)	4.99 (8.03)	2199	5.6	0.508 (0.309)	13.76 (2.71)	183 (84)	45 (7)	29.2 (98.8)
7th (3M) Gear									
60.2 (44.9)	3400 (15.1)	6.64 (10.69)	2198	4.0	0.503 (0.306)	13.87 (2.73)	183 (84)	45 (7)	29.2 (98.8)
8th (4M) Gear									
58.8 (43.8)	2510 (11.2)	8.79 (14.15)	2200	3.1	0.519 (0.316)	13.45 (2.65)	183 (84)	45 (7)	29.2 (98.8)
9th (1H) Gear									
59.3 (44.2)	2100 (9.4)	10.58 (17.03)	2192	2.8	0.508 (0.309)	13.76 (2.71)	183 (84)	43 (6)	29.2 (98.8)

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 3 point lift capacity claim of 5732 lbs (2600 kg) at the lower link ends. The performance results on this summary were taken from a test conducted under the OECD Code 2 test procedure.

Report reissued: Supplemental sales permit for Massey Ferguson 4335 Diesel, April 2002.

We, the undersigned, certify that this is a true summary of data from OECD Report No. **1950**, Nebraska Summary 360, April 16, 2002.

Brent T. Sampson
Test Engineer

L.L. Bashford
M.F. Kocher
V.I. Adamchuk
Board of Tractor Test Engineers

TIRES AND WEIGHT

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

Tested Without Ballast

Two 13.6R38; **; 12(83)
 Two 12.4R24; **; 13(90)

Height of Drawbar

Static Weight with operator —Rear
 —Front
 —Total

18.3 in (466 mm)
 4210 lb (1910 kg)
 2890 lb (1310 kg)
 7100 lb (3220 kg)

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 Consumption lb/hp.hr (kg/kW.h)	Temp. °F (°C) cool- ing med	Temp. °F (°C) Air dry bulb	Barom. inch Hg (kPa)	
Maximum Power—7th (3M) Gear									
57.5 (42.9)	3290 (14.6)	6.56 (10.55)	2199	4.3	0.526 (0.320)	13.29 (2.62)	185 (85)	57 (14)	29.7 (100.5)
75% of Pull at Maximum Power—7th (3M) Gear									
45.1 (33.6)	2485 (11.0)	6.80 (10.94)	2253	3.3	0.544 (0.331)	12.84 (2.53)	183 (84)	57 (14)	29.7 (100.5)
50% of Pull at Maximum Power—7th (3M) Gear									
30.2 (22.5)	1635 (7.3)	6.93 (11.15)	2275	2.3	0.637 (0.388)	10.96 (2.16)	183 (84)	57 (14)	29.7 (100.5)
75% of Pull at Reduced Engine Speed—8th (4M) Gear									
45.1 (33.6)	2485 (11.0)	6.80 (10.94)	1722	3.4	0.468 (0.285)	14.92 (2.94)	181 (83)	57 (14)	29.7 (100.5)
50% of Pull at Reduced Engine Speed—8th (4M) Gear									
30.1 (22.4)	1630 (7.3)	6.92 (11.13)	1736	2.4	0.521 (0.317)	13.40 (2.64)	181 (83)	57 (14)	29.7 (100.5)

MAXIMUM POWER IN SELECTED GEARS

1st (1L) Gear									
17.9 (13.4)	5315 (23.6)	1.26 (2.03)	2292	14.5	0.821 (0.500)	8.50 (1.68)	183 (84)	57 (14)	29.7 (100.5)
2nd (2L) Gear									
23.6 (17.6)	5240 (23.3)	1.69 (2.72)	2285	12.4	0.721 (0.439)	9.67 (1.91)	183 (84)	57 (14)	29.7 (100.5)
3rd (3L) Gear									
30.8 (23.0)	5170 (23.0)	2.23 (3.59)	2275	11.3	0.635 (0.386)	11.01 (2.17)	183 (84)	57 (14)	29.7 (100.5)
4th (4L) Gear									
39.4 (29.4)	5035 (22.4)	2.94 (4.73)	2262	10.2	0.580 (0.353)	12.03 (2.37)	183 (84)	57 (14)	29.7 (100.5)
5th (1M) Gear									
49.5 (36.9)	4970 (22.1)	3.73 (6.01)	2242	8.5	0.536 (0.326)	13.01 (2.56)	183 (84)	57 (14)	29.7 (100.5)
6th (2M) Gear									
57.3 (42.7)	4390 (19.5)	4.89 (7.87)	2201	6.5	0.525 (0.319)	13.30 (2.62)	185 (85)	57 (14)	29.7 (100.5)
7th (3M) Gear									
57.5 (42.9)	3290 (14.6)	6.56 (10.55)	2199	4.3	0.526 (0.320)	13.29 (2.62)	185 (85)	57 (14)	29.7 (100.5)
8th (4M) Gear									
55.9 (41.7)	2415 (10.8)	8.68 (13.97)	2198	3.3	0.538 (0.327)	12.99 (2.56)	185 (85)	57 (14)	29.7 (100.5)
9th (1H) Gear									
57.0 (42.5)	2045 (9.1)	10.45 (16.81)	2189	2.8	0.526 (0.320)	13.29 (2.62)	183 (84)	57 (14)	29.7 (100.5)

TRACTOR SOUND LEVEL WITHOUT CAB	Front Wheel Drive	
	Disengaged dB(A)	Engaged dB(A)
Maximum sound level in 6th(2M) gear	95.0	95.0
Bystander in 12th(4H) gear	--	--

THREE POINT HITCH PERFORMANCE (OECD Static Test)

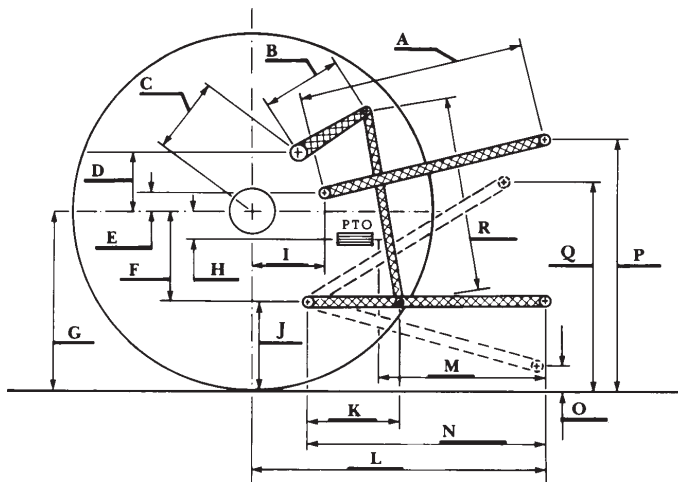
CATEGORY: II

Quick Attach: None

Maximum Force Exerted Through Whole Range: 2675 lbs (11.9 kN) (at the frame)
 3505 lbs (15.6 kN) (at the lower link ends)

- i) Opening pressure of relief valve: NA
- Sustained pressure of the open relief valve: 3250 psi (224 bar)
- ii) Pump delivery rate at minimum pressure: 11.3 GPM (42.8 l/min)
- iii) Pump delivery rate at maximum
 - hydraulic power: 9.9 GPM (37.3 l/min)
 - Delivery pressure: 2830 psi (195 bar)
 - Power: 16.3 HP (12.1 kW)

HITCH DIMENSIONS AS TESTED—NO LOAD



	inch	mm
A	32.0	815
B	12.2	310
C	12.0	304
D	9.2	233
E	8.1	205
F	8.3	212
G	28.3	720
H	5.4	136
I	7.3	186
J	20.0	508
K	26.6	675
L	38.1	968
M	25.0	635
N	39.4	1000
O	7.8	197
P	44.0	1118
Q	33.3	845
R	30.7	780