

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Nebraska Tractor Tests

Tractor Test and Power Museum, The Lester F. Larsen

---

January 1997

## Nebraska Summary 322: Maasey Ferguson 4360, 4260 and 4263 Diesel 12-Speed

Nebraska Tractor Test Lab

University of Nebraska-Lincoln, [tractortestlab@unl.edu](mailto:tractortestlab@unl.edu)

Follow this and additional works at: <https://digitalcommons.unl.edu/tractormuseumlit>



Part of the [Energy Systems Commons](#), [History of Science, Technology, and Medicine Commons](#), [Other Mechanical Engineering Commons](#), [Physical Sciences and Mathematics Commons](#), [Science and Mathematics Education Commons](#), and the [United States History Commons](#)

---

Nebraska Tractor Test Lab, "Nebraska Summary 322: Maasey Ferguson 4360, 4260 and 4263 Diesel 12-Speed" (1997). *Nebraska Tractor Tests*. 2181.

<https://digitalcommons.unl.edu/tractormuseumlit/2181>

This Article is brought to you for free and open access by the Tractor Test and Power Museum, The Lester F. Larsen at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Nebraska Tractor Tests by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

# SUMMARY OF OECD TEST 1731-NEBRASKA SUMMARY 322

## MASSEY FERGUSON 4260 DIESEL

## ALSO MASSEY FERGUSON 4263 DIESEL

## ALSO MASSEY FERGUSON 4360 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
<b>MAXIMUM POWER AND FUEL CONSUMPTION</b>					
<b>Rated Engine Speed (PTO speed 1103 rpm)</b>					
94.4 (70.4)	2205	5.81 (21.98)	0.431 (0.262)	16.24 (3.20)	
<b>Maximum Power (2 hours)</b>					
94.9 (70.8)	2160	5.74 (21.74)	0.424 (0.258)	16.50 (3.25)	
<b>Standard Power Take-off Speed (1000 rpm)</b>					
92.7 (69.1)	2000	5.38 (20.37)	0.408 (0.248)	17.21 (3.39)	
<b>VARYING POWER AND FUEL CONSUMPTION</b>					
94.4 (70.4)	2205	5.81 (21.98)	0.431 (0.262)	16.24 (3.20)	Air temperature
81.5 (60.8)	2237	5.14 (19.47)	0.442 (0.269)	15.84 (3.12)	79°F (26°C)
61.7 (46.0)	2257	4.20 (15.90)	0.477 (0.290)	14.67 (2.89)	Relative humidity
41.6 (31.0)	2271	3.30 (12.51)	0.557 (0.339)	12.54 (2.47)	49%
20.9 (15.6)	2285	2.39 (9.05)	0.802 (0.488)	8.73 (1.72)	Barometer
--	2290	1.55 (5.87)	--	--	29.8" Hg (101.0 kPa)
Maximum Torque -270.2 lb.-ft. (366.4 Nm) at 1302 rpm					
Maximum Torque Rise -20.2%					
Torque rise at 1800 engine rpm -13%					

### 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)
<b>Maximum Power 6th (2M) Gear</b>									
78.3 (58.4)	7215 (32.1)	4.07 (6.55)	2201	5.8	0.516 (0.314)	13.60 (2.68)	180 (82)	68 (20)	29.9 (101.3)
<b>75% of Pull at Maximum Power 6th (2M) Gear</b>									
60.9 (45.4)	5415 (24.1)	4.22 (6.79)	2243	4.2	0.546 (0.332)	12.79 (2.52)	180 (82)	68 (20)	29.9 (101.3)
<b>50% of Pull at Maximum Power 6th (2M) Gear</b>									
41.4 (30.9)	3615 (16.1)	4.30 (6.92)	2259	3.0	0.635 (0.386)	11.01 (2.17)	180 (82)	70 (21)	29.9 (101.3)
<b>75% of Pull at Reduced Engine Speed 7th (3M) Gear</b>									
61.0 (45.5)	5430 (24.1)	4.21 (6.78)	1711	4.4	0.470 (0.286)	14.87 (2.93)	178 (81)	70 (21)	29.9 (101.3)
<b>50% of Pull at Reduced Engine Speed 7th (3M) Gear</b>									
41.4 (30.9)	3620 (16.1)	4.29 (6.91)	1720	3.1	0.513 (0.312)	13.65 (2.69)	178 (81)	70 (21)	29.9 (101.3)

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

**Dates of Test:** August to September, 1997

**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)** 0.841 **Fuel weight** 7.00 lbs/gal (0.839 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** six cylinder vertical **Serial No.** YG31300 **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** 365 cu in (5985 ml) **Starting system** 12 volt **Lubrication pressure** **Air cleaner** two paper elements and centrifugal precleaner **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.** ACAD14AAXAE14999 **Tread width** rear 60.0" (1525 mm) to 88.0" (2235 mm) front 68.9" (1750 mm) to 80.9" (2055 mm) **Wheelbase** 102.7" (2609 mm) **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio **Nominal travel speeds mph (km/h)** first 1.14 (1.84) second 1.50 (2.41) third 1.96 (3.16) fourth 2.57 (4.14) fifth 3.23 (5.20) sixth 4.22 (6.79) seventh 5.54 (8.91) eighth 7.25 (11.67) ninth 8.72 (14.03) tenth 11.40 (18.34) eleventh 14.96 (24.07) twelfth 19.59 (31.52) reverse 1.16 (1.87), 1.52 (2.45), 1.99 (3.21), 2.62 (4.21), 3.29 (5.29), 4.29 (6.91), 5.64 (9.07), 7.38 (11.87), 8.87 (14.27), 11.59 (18.65), 15.21 (24.48), 19.92 (32.05) **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** 9080 lb (4118 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)	Hp.hr/gal (kW.h/l)	Temp. °F cool- ing med	°C Air dry bulb	Barom. inch Hg (kPa)
2nd (2L) Gear									
33.5 (25.0)	9420 (41.9)	1.33 (2.14)	2264	15.5	0.730 (0.444)	9.59 (1.89)	180 (82)	70 (21)	29.9 (101.3)
3rd (3L) Gear									
43.8 (32.7)	9060 (40.3)	1.81 (2.92)	2255	11.9	0.631 (0.384)	11.12 (2.19)	180 (82)	68 (20)	29.9 (101.3)
4th (4L) Gear									
57.7 (43.0)	9060 (40.3)	2.39 (3.84)	2242	11.0	0.580 (0.353)	12.08 (2.38)	180 (82)	70 (21)	29.9 (101.3)
5th (1M) Gear									
71.7 (53.5)	9060 (40.3)	2.97 (4.78)	2224	11.1	0.544 (0.331)	12.89 (2.54)	181 (83)	68 (20)	29.9 (101.3)
6th (2M) Gear									
79.1 (59.0)	7430 (33.1)	3.99 (6.43)	2165	5.9	0.511 (0.311)	13.71 (2.70)	180 (82)	68 (20)	29.9 (101.3)
7th (3M) Gear									
79.8 (59.5)	5615 (25.0)	5.33 (8.57)	2161	4.4	0.508 (0.309)	13.81 (2.72)	180 (82)	64 (18)	29.9 (101.3)
8th (4M) Gear									
77.4 (57.7)	4120 (18.3)	7.04 (11.33)	2160	3.3	0.521 (0.317)	13.40 (2.64)	180 (82)	64 (18)	29.9 (101.3)
9th (1H) Gear									
77.4 (57.7)	3400 (15.1)	8.53 (13.73)	2166	2.8	0.523 (0.318)	13.40 (2.64)	180 (82)	64 (18)	29.9 (101.3)
10th (2H) Gear									
73.5 (54.8)	2468 (11.0)	11.17 (17.98)	2158	2.3	0.549 (0.334)	12.74 (2.51)	180 (82)	64 (18)	29.9 (101.3)

TRACTOR SOUND LEVEL WITH CAB	Front Wheel Drive	
	Disengaged dB(A)	Engaged dB(A)
Maximum sound level in 6th (2M) Gear	83.0	83.0
Bystander in 12th (4H) gear	88.0	—

#### 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 18.4R38; \*\*, 12(83)  
Two 420/70R24; \*\*, 15(103)  
22.6 in (575 mm)  
5465 lb (2478 kg)  
3780 lb (1715 kg)  
9245 lb (4193 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 manufacturers 3 point lift capacity claim of 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.

**Report reissued:** Supplemental sales permit for Massey Ferguson 4360 Diesel, April, 2002.

We, the undersigned, certify that this is a true summary of data from OECD Report No. **1731**, Nebraska Summary 322, April 16, 2002.

Brent T. Sampson  
Test Engineer

L.L. Bashford  
M.F. Kocher  
V.I. Adamchuk  
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 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)
<b>Maximum Power 9th (1H) Gear</b>									
79.4 (59.2)	3505 (15.6)	8.49 (13.67)	2208	3.0	0.510 (0.310)	13.76 (2.71)	180 (82)	66 (19)	29.9 (101.1)
<b>75% of Pull at Maximum Power 9th (1H) Gear</b>									
60.9 (45.4)	2630 (11.7)	8.68 (13.97)	2241	2.3	0.544 (0.331)	12.84 (2.53)	180 (82)	66 (19)	29.9 (101.1)
<b>50% of Pull at Maximum Power 9th (1H) Gear</b>									
41.4 (30.9)	1760 (7.8)	8.83 (14.21)	2262	1.7	0.638 (0.388)	10.96 (2.16)	180 (82)	64 (18)	29.9 (101.1)
<b>75% of Pull at Reduced Engine Speed 10th (2H) Gear</b>									
60.6 (45.2)	2620 (11.7)	8.68 (13.97)	1716	2.5	0.465 (0.283)	15.02 (2.96)	180 (82)	68 (20)	29.9 (101.1)
<b>50% of Pull at Reduced Engine Speed 10th (2H) Gear</b>									
41.4 (30.9)	1760 (7.8)	8.82 (14.20)	1732	1.8	0.513 (0.312)	13.65 (2.69)	178 (81)	70 (21)	29.9 (101.1)
<b>MAXIMUM POWER IN SELECTED GEARS</b>									
<b>3rd (3L) Gear</b>									
31.4 (23.4)	6835 (30.4)	1.72 (2.77)	2273	15.1	0.727 (0.442)	9.64 (1.90)	180 (82)	68 (20)	29.9 (101.1)
<b>4th (4L) Gear</b>									
41.2 (30.7)	6620 (29.4)	2.33 (3.75)	2258	11.8	0.639 (0.389)	10.96 (2.16)	180 (82)	68 (20)	29.9 (101.1)
<b>5th (1M) Gear</b>									
51.0 (38.0)	6520 (29.0)	2.93 (4.72)	2252	11.4	0.579 (0.352)	12.08 (2.38)	180 (82)	70 (21)	29.9 (101.1)
<b>6th (2M) Gear</b>									
67.5 (50.3)	6575 (29.2)	3.85 (6.19)	2233	10.4	0.541 (0.329)	12.94 (2.55)	180 (82)	68 (20)	29.9 (101.1)
<b>7th (3M) Gear</b>									
79.4 (59.2)	5825 (25.9)	5.11 (8.22)	2163	6.3	0.508 (0.309)	13.81 (2.72)	180 (82)	64 (18)	29.9 (101.1)
<b>8th (2M) Gear</b>									
80.2 (59.8)	4380 (19.5)	6.87 (11.05)	2163	3.9	0.505 (0.307)	13.86 (2.73)	180 (82)	66 (19)	29.9 (101.1)
<b>9th (3M) Gear</b>									
81.3 (60.6)	3670 (16.3)	8.30 (13.36)	2161	3.2	0.496 (0.302)	14.11 (2.78)	180 (82)	66 (19)	29.9 (101.1)
<b>10th (4M) Gear</b>									
80.2 (59.8)	2755 (12.3)	10.92 (17.57)	2156	2.4	0.505 (0.307)	13.86 (2.73)	180 (82)	64 (18)	29.9 (101.1)

### THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY: II

Quick Attach: None

Maximum Force Exerted Through Whole Range: 7240 lbs (32.2 kN)(at the frame)  
8185 lbs (36.4 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: 10.3 GPM (39.0 l/min)

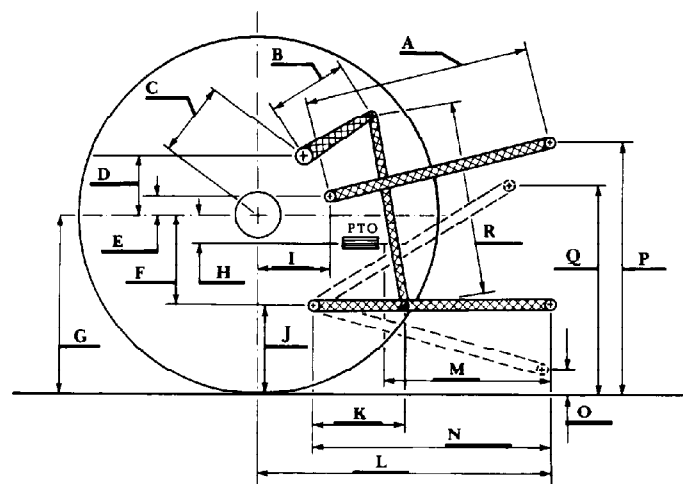
iii) Pump delivery rate at maximum

hydraulic power: 9.9 GPM (37.5 l/min)

Delivery pressure: 2755 psi (190 bar)

Power: 15.9 HP (11.9 kW)

### HITCH DIMENSIONS AS TESTED NO LOAD



	inch	mm
A	33.9	860
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	24.2	615
L	42.0	1068
M	28.9	735
N	43.3	1100
O	7.8	197
P	48.0	1218
Q	36.2	920
R	29.8	756