

# SUMMARY OF OECD TESTS 1860 & 1861-NEBRASKA SUMMARY 303 MASSEY FERGUSON 6270 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
<b>MAXIMUM POWER AND FUEL CONSUMPTION</b>					
<b>Rated Engine Speed—(PTO speed—1090 rpm)</b>					
100.2 (74.7)	2180	6.08 (23.00)	0.431 (0.262)	16.49 (3.25)	
<b>Maximum Power (2 Hours)</b>					
103.9 (77.5)	2030	5.93 (22.46)	0.406 (0.247)	17.51 (3.45)	
<b>Standard Power Take-off Speed(1000 rpm)</b>					
103.5 (77.2)	2000	5.85 (22.15)	0.401 (0.244)	17.69 (3.49)	

## VARYING POWER AND FUEL CONSUMPTION

100.2 (74.7)	2180	6.08 (23.00)	0.431 (0.262)	16.49 (3.25)	Air temperature
87.8 (65.5)	2227	5.59 (21.18)	0.452 (0.275)	15.70 (3.09)	64°F (18°C)
66.4 (49.5)	2251	4.82 (18.26)	0.515 (0.314)	13.78 (2.71)	Relative humidity
44.4 (33.1)	2268	3.95 (14.95)	0.632 (0.384)	11.24 (2.21)	40%
22.3 (16.6)	2281	2.84 (10.76)	0.906 (0.551)	7.84 (1.54)	Barometer
--	2296	1.89 (7.17)	--	--	29.7" Hg (100.7 kPa)

Maximum Torque - 316.1 lb.-ft. (428.6 Nm) at 1120 rpm

Maximum Torque Rise - 30.5%

Torque rise at 1800 engine rpm - 21%

## 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 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)
<b>Maximum Power—21st(2LA) Gear</b>									
98.8 (73.7)	4870 (21.7)	7.61 (12.25)	2008	3	0.434 (0.264)	16.34 (3.22)	189 (87)	79 (26)	29.7 (100.6)
<b>75% of Pull at Maximum Power—21st(2LA) Gear</b>									
69.6 (51.9)	3040 (13.5)	8.58 (13.81)	2232	2	0.531 (0.323)	13.39 (2.64)	189 (87)	77 (25)	30.0 (101.6)
<b>50% of Pull at Maximum Power—21st(2LA) Gear</b>									
46.9 (35.0)	2020 (9.0)	8.71 (14.03)	2250	1	0.654 (0.398)	10.86 (2.14)	189 (87)	77 (25)	30.0 (101.6)
<b>75% of Pull at Reduced Engine Speed—22nd(2LB) Gear</b>									
69.4 (51.8)	2995 (13.3)	8.69 (13.99)	1931	1	0.467 (0.284)	15.19 (2.99)	187 (86)	77 (25)	30.0 (101.6)
<b>50% of Pull at Reduced Engine Speed—22nd(2LB) Gear</b>									
47.3 (35.3)	2025 (9.0)	8.76 (14.09)	1960	1	0.564 (0.343)	12.59 (2.48)	187 (86)	77 (25)	30.0 (101.6)

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

**Dates of tests:** December 1997 to September, 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/30 **Front axle lubricant** API GL5 -SAE 85W140

**ENGINE:** Make Perkins Diesel **Type** six cylinder vertical with turbocharger **Serial No.** U623839B **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.** E032005 **Tread width** rear 60.6" (1538 mm) to 84.1" (2136 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 1.30 (2.09) second 1.52 (2.45) third 1.80 (2.90) fourth 2.11 (3.39) fifth 2.22 (3.57) sixth 2.59 (4.17) seventh 2.91 (4.69) eighth 3.06 (4.92) ninth 3.41 (5.49) tenth 3.59 (5.77) eleventh 3.94 (6.34) twelfth 4.03 (6.48) thirteenth 4.62 (7.43) fourteenth 4.71 (7.58) fifteenth 4.88 (7.86) sixteenth 5.45 (8.77) seventeenth 5.72 (9.20) eighteenth 6.38 (10.26) nineteenth 6.74 (10.86) twentieth 7.90 (12.71) twenty-first 8.30 (13.36) twenty-second 9.72 (15.64) twenty-third 10.92 (17.58) twenty-fourth 11.45 (18.45) twenty-fifth 12.79 (20.58) twenty-sixth 13.42 (21.60) twenty-seventh 14.78 (23.79) twenty-eighth 15.09 (24.29) twenty-ninth 17.30 (27.84) thirtieth 17.67 (28.43) thirty-first 20.42 (32.86) thirty-second 23.90 (38.46) reverse 1.22 (1.97), 1.44 (2.31), 1.69 (2.72), 1.98 (3.19), 2.08 (3.35), 2.44 (3.93), 2.74 (4.41), 2.88 (4.63), 3.21 (5.17), 3.37 (5.43), 3.71 (5.97), 3.79 (6.10), 4.34 (6.99), 4.44 (7.14), 4.60 (7.40), 4.97 (8.25), 5.13 (8.65), 6.00 (9.65), 6.34 (10.21), 7.43 (11.95), 7.80 (12.56), 9.13 (14.70), 10.27 (16.53), 10.79 (17.36), 12.02 (19.35), 12.62 (20.31), 13.90 (22.37), 14.20 (22.85), 16.27 (26.19), 16.62 (26.74), 19.21 (30.91), 22.48 (36.18)

**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)
12th(3TC)Gear									
94.4 (70.4)	9690 (43.1)	3.65 (5.88)	2135	10	0.471 (0.287)	15.08 (2.97)	189 (87)	79 (26)	29.7 (100.6)
13th(4TB)Gear									
96.2 (71.7)	8520 (37.9)	4.23 (6.81)	2095	7	0.457 (0.278)	15.53 (3.06)	189 (87)	79 (26)	29.7 (100.6)
14th(3TD)Gear									
97.5 (72.7)	8440 (37.5)	4.33 (6.97)	2093	7	0.455 (0.277)	15.58 (3.07)	190 (88)	79 (26)	29.7 (100.6)
15th(1LA)Gear									
96.7 (72.1)	8150 (36.3)	4.45 (7.16)	2069	6	0.454 (0.276)	15.63 (3.08)	189 (87)	79 (26)	29.7 (100.6)
16th(4TC)Gear									
96.0 (71.6)	7190 (32.0)	5.01 (8.06)	2062	5	0.457 (0.278)	15.53 (3.06)	190 (88)	79 (26)	29.7 (100.6)
17th(1LB)Gear									
97.2 (72.5)	6935 (30.8)	5.26 (8.46)	2058	5	0.448 (0.273)	15.84 (3.12)	190 (88)	79 (26)	29.7 (100.6)
18th(4TD)Gear									
96.6 (72.0)	6140 (27.3)	5.90 (9.49)	2054	4	0.450 (0.274)	15.78 (3.11)	192 (89)	79 (26)	29.7 (100.6)
19th(1LC)Gear									
96.2 (71.7)	5790 (25.8)	6.23 (10.03)	2046	4	0.453 (0.275)	15.68 (3.09)	192 (89)	79 (26)	29.7 (100.6)
20th(1LD)Gear									
98.3 (73.3)	4995 (22.2)	7.38 (11.88)	2049	3	0.443 (0.269)	16.04 (3.16)	192 (89)	79 (26)	29.7 (100.6)
21st(2LA)Gear									
98.8 (73.7)	4870 (21.7)	7.61 (12.25)	2008	3	0.434 (0.264)	16.34 (3.22)	189 (87)	79 (26)	29.7 (100.6)
22nd(2LB)Gear									
98.2 (73.2)	4260 (18.9)	8.64 (13.91)	1980	3	0.433 (0.263)	16.40 (3.23)	189 (87)	79 (26)	29.7 (100.6)
23rd(3LA)Gear									
98.4 (73.4)	3795 (16.9)	9.73 (15.66)	1972	3	0.432 (0.263)	16.45 (3.24)	190 (88)	79 (26)	29.7 (100.6)

**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 - 9600 lb (4355 kg), FWA - 10540 lb (4780 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 claims of 12987 lbs (5850 kg) lift at link ends nor lift of 7000 lbs (3182 kg) at 24" with 2 5/8" (66.7 mm) cylinders. The performance figures on this summary were taken from a test conducted under the OECD Code 2 test procedure.

We, the undersigned, certify that this is a true summary of data from OECD Reports No. **1860 & 1861**, Nebraska Summary 303, June 21, 2000.

Brent T. Sampson  
Test Engineer

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

**Tested Without Ballast**

**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

**Front Wheel Assist**

Two 18.4R38; \*\*,15(100)  
Two 14.9R28; \*\*,16(110)  
22.0 in (560 mm)  
6160 lb (2795 kg)  
4145 lb (1880 kg)  
10305 lb (4675 kg)

**2WD**

Two 18.4R38; \*\*,15(100)  
Two 11.00-16; 8; 36 (250)  
31.5 in (800 mm)  
6140 lb (2785 kg)  
3625 lb (1645 kg)  
9765 lb (4430 kg)

## 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)	Fuel Consumption Hp.hr/gal (kW.h/l)	Temp.°F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
<b>Maximum Power—21st(2LA) Gear</b>									
99.2 (74.0)	4960 (22.1)	7.50 (12.08)	2019	4	0.434 (0.264)	16.34 (3.22)	189 (87)	77 (25)	29.9 (101.4)
<b>75% of Pull at Maximum Power—21st(2LA) Gear</b>									
68.8 (51.3)	3050 (13.6)	8.46 (13.61)	2234	2	0.520 (0.316)	13.65 (2.69)	189 (87)	73 (23)	29.6 (100.2)
<b>50% of Pull at Maximum Power—21st(2LA) Gear</b>									
46.1 (34.4)	2015 (9.0)	8.58 (13.80)	2249	1	0.625 (0.380)	11.37 (2.24)	189 (87)	73 (23)	29.6 (100.2)
<b>75% of Pull at Reduced Engine Speed—22nd(2LB) Gear</b>									
69.4 (51.8)	3060 (13.6)	8.50 (13.68)	1921	3	0.460 (0.280)	15.43 (3.04)	187 (86)	73 (23)	29.6 (100.2)
<b>50% of Pull at Reduced Engine Speed—22nd(2LB) Gear</b>									
46.7 (34.8)	2040 (9.1)	8.58 (13.81)	1923	2	0.553 (0.336)	12.84 (2.53)	187 (86)	73 (23)	29.6 (100.2)

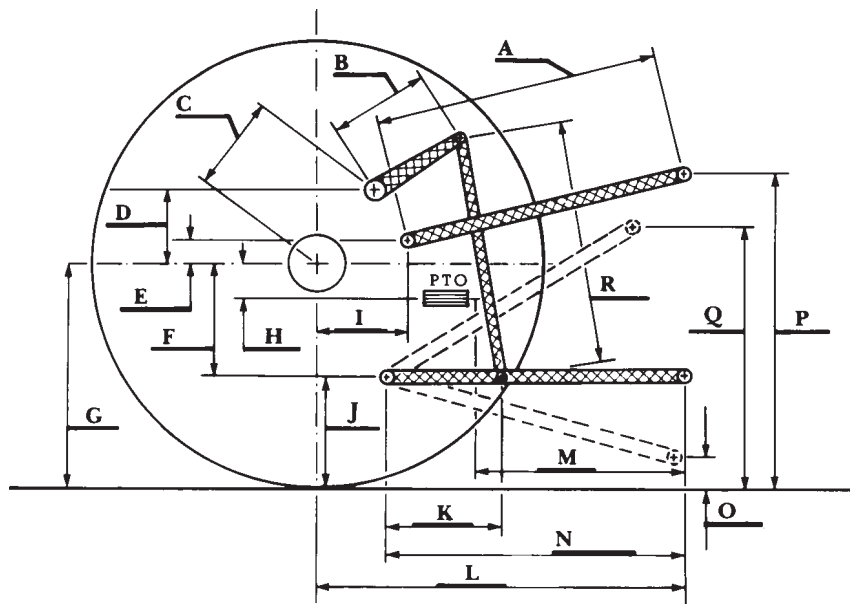
### MAXIMUM POWER IN SELECTED GEARS

11th(4TA) Gear									
77.8 (58.0)	8455 (37.6)	3.45 (5.56)	2214	15	0.536 (0.326)	13.25 (2.61)	189 (87)	77 (25)	29.9 (101.4)
12th(3TC) Gear									
84.1 (62.7)	8430 (37.5)	3.74 (6.02)	2209	10	0.504 (0.307)	14.09 (2.78)	189 (87)	77 (25)	29.9 (101.4)
13th(4TB) Gear									
93.2 (69.5)	8330 (37.1)	4.20 (6.76)	2152	9	0.479 (0.291)	14.82 (2.92)	191 (88)	77 (25)	29.9 (101.4)
14th(3TD) Gear									
93.5 (69.7)	8185 (36.4)	4.28 (6.89)	2142	9	0.476 (0.290)	14.91 (2.94)	191 (88)	77 (25)	29.9 (101.4)
15th(1LA) Gear									
95.2 (71.0)	8255 (36.7)	4.32 (6.96)	2084	9	0.463 (0.282)	15.33 (3.02)	189 (87)	77 (25)	29.9 (101.4)
16th(4TC) Gear									
96.0 (71.6)	7395 (32.9)	4.87 (7.83)	2045	7	0.451 (0.275)	15.74 (3.10)	187 (86)	77 (25)	29.9 (101.4)
17th(1LB) Gear									
97.2 (72.5)	7105 (31.6)	5.13 (8.26)	2062	7	0.444 (0.270)	15.99 (3.15)	191 (88)	77 (25)	29.9 (101.4)
18th(4TD) Gear									
97.2 (72.5)	6390 (28.4)	5.70 (9.18)	2027	6	0.457 (0.278)	15.53 (3.06)	187 (86)	77 (25)	29.9 (101.4)
19th(1LC) Gear									
97.5 (72.7)	6005 (26.7)	6.09 (9.80)	2036	5	0.446 (0.271)	15.94 (3.14)	189 (87)	77 (25)	29.9 (101.4)
20th(1LD) Gear									
99.0 (73.8)	5210 (23.2)	7.13 (11.47)	2025	5	0.444 (0.270)	15.99 (3.15)	189 (87)	77 (25)	29.9 (101.4)
21st(2LA) Gear									
99.2 (74.0)	4960 (22.1)	7.50 (12.08)	2019	4	0.434 (0.264)	16.34 (3.22)	191 (88)	77 (25)	29.9 (101.4)
22rd(2LB) Gear									
99.1 (73.9)	4285 (19.1)	8.67 (13.95)	1982	3	0.425 (0.259)	16.70 (3.29)	191 (88)	77 (25)	29.9 (101.4)
23rd(3LA) Gear									
98.3 (73.3)	3710 (16.5)	9.94 (16.00)	2013	3	0.432 (0.263)	16.42 (3.24)	191 (88)	77 (25)	29.9 (101.4)

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	--	

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

CATEGORY: II	lift cylinder diameter	
Quick Attach: None	66.7 mm	75 mm
Maximum force exerted		
through whole range:	6655 lbs (29.6 kN)	8475 lbs (37.7 kN) (at the frame)
	8160 lbs (36.3 kN)	10385 lbs (46.2 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
A	26.4	670
B	11.6	295
C	13.9	354
D	13.0	330
E	7.9	200
F	11.0	280
G	32.3	820
H	1.7	43
I	15.3	389
J	21.3	540
K	21.4	543
L	43.5	1104
M	24.8	629
N	37.1	943
O	8.3	211
P	45.3	1150
Q	34.6	880
R	28.1	715