SUMMARY OF OECD TEST 2324–NEBRASKA SUMMARY 548
MASSEY FERGUSON 8480 DIESEL
DYNA-STEP TRANSMISSION

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—1081 rpm)					
246.3 *(183.7)*	2199	15.34 *(58.07)*	0.433 *(0.263)*	16.05 *(3.16)*	
Standard Power Take-off Speed(1000 rpm)					
265.5 *(198.0)*	2034	15.49 *(58.63)*	0.405 *(0.247)*	17.15 *(3.38)*	
Maximum Power (2 hours)					
267.7 *(199.6)*	2001	15.44 *(58.43)*	0.400 *(0.244)*	17.36 *(3.42)*	
VARYING POWER AND FUEL CONSUMPTION					
246.3 *(183.7)*	2199	15.34 *(58.07)*	0.433 *(0.263)*	16.05 *(3.16)*	Air temperature
219.1 *(163.4)*	2303	15.06 *(56.99)*	0.477 *(0.290)*	14.57 *(2.87)*	68°F *(20°C)*
165.5 *(123.4)*	2315	11.67 *(44.16)*	0.491 *(0.298)*	14.16 *(2.79)*	Relative humidity
110.5 *(82.4)*	2327	8.35 *(31.60)*	0.524 *(0.319)*	13.24 *(2.61)*	33%
55.5 *(41.4)*	2341	5.29 *(20.02)*	0.662 *(0.403)*	10.50 *(2.07)*	Barometer
-- --	2350	3.15 *(11.92)*	-- --	-- --	29.4" Hg *(99.4 kPa)*

Maximum Torque - 814 lb.-ft. *(1103 Nm)* at 1202 rpm
Maximum Torque Rise - 38.4%
Torque rise at 1800 engine rpm - 27%

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—Turtle 12									
210.9 *(157.3)*	16215 *(72.13)*	4.88 *(7.85)*	2200	6.0	0.510 *(0.310)*	13.60 *(2.68)*	185 *(85)*	79 *(26)*	29.6 *(100.3)*
75% of Pull at Maximum Power—Turtle 12									
169.6 *(126.5)*	12165 *(54.12)*	5.23 *(8.42)*	2300	3.9	0.580 *(0.353)*	11.98 *(2.36)*	189 *(87)*	81 *(27)*	29.6 *(100.3)*
50% of Pull at Maximum Power—Turtle 12									
116.4 *(86.8)*	8100 *(36.03)*	5.39 *(8.67)*	2316	2.4	0.596 *(0.363)*	11.66 *(2.30)*	190 *(88)*	79 *(26)*	29.6 *(100.3)*
75% of Pull at Reduced Engine Speed—Turtle 13									
169.0 *(126.1)*	12155 *(54.06)*	5.22 *(8.39)*	2044	3.9	0.478 *(0.291)*	14.52 *(2.86)*	189 *(87)*	79 *(26)*	29.6 *(100.2)*
50% of Pull at Reduced Engine Speed—Turtle 13									
115.7 *(86.3)*	8105 *(36.06)*	5.35 *(8.61)*	2054	2.7	0.523 *(0.318)*	13.30 *(2.62)*	190 *(88)*	79 *(26)*	29.6 *(100.3)*

Location of tests: DLG - Test Centre, Technology and Farm inputs, Max-Eyth-Weg 1, D-64823 Gross-Umstadt, Germany

Dates of tests: May - July, 2005

Manufacturer: AGCO S.A. 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)*** 0.835 **Fuel weight** 6.95 lbs/gal *(0.8328 kg/l)* **Oil SAE** 10W40 **API service classification** CH4 **Transmission and hydraulic lubricant** BP STOU 10W/40 **Front axle lubricant** SAE 85W90 API GL5

ENGINE: Make Sisu Diesel **Type** six cylinder vertical with turbocharger and air to air intercooler **Serial No.** P08256 **Crankshaft** lengthwise **Rated engine speed** 2200 **Bore and stroke** 4.370" x 5.709" *(111.0 mm x 145.0 mm)* **Compression ratio** 17.5 to 1 **Displacement** 513 cu in *(8419 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** vertical **Cooling medium temperature control** thermostat and variable speed fan

CHASSIS: Type front wheel assist **Serial No.** N167999 **Tread width** rear 66.9" *(1699 mm)* to 91.6" *(2326 mm)* front 72.5" *(1692 mm)* to 78.6" *(2116 mm)* **Wheelbase** 121.1" *(3075 mm)* **Hydraulic control system** direct engine drive **Transmission** AGCO Dynastep. A combination of mechanical and hydrostatic sections are electronically controlled to give the travel speeds shown. The transmission has two mechanical ranges. **Nominal travel speeds mph *(km/h)*** Forward: Low range 1st-1.1 *(1.8)*, 2nd-1.4 *(2.2)*, 3rd-1.6 *(2.6)*, 4th-1.9 *(3.0)*, 5th-2.1 *(3.4)*, 6th-2.4 *(3.8)*, 7th-2.6 *(4.2)*, 8th-3.0 *(4.8)*, 9th-3.4 *(5.4)*, 10th-3.7 *(6.0)*, 11th-4.2 *(6.8)*, 12th-4.8 *(7.8)*, 13th - 5.6 *(9.0)*, 14th - 6.5 *(10.4)*, 15th - 7.3 *(11.8)*, 16th - 8.3 *(13.4)*, 17th - 9.6 *(15.4)*, 18th - 11.1 *(17.8)*, 19th-12.8 *(20.6)*, 20th-14.8 *(23.8)*, 21st-17.0 *(27.4)* High range: 1st - 2.4 *(3.8)*, 2nd - 2.6 *(4.2)*, 3rd - 3.0 *(4.8)*, 4th - 3.4 *(5.4)*, 5th - 3.7 *(6.0)*, 6th - 4.2 *(6.8)*, 7th - 4.7 *(7.6)*, 8th - 5.3 *(8.6)*, 9th-6.0 *(9.6)*, 10th - 6.6 *(10.6)*, 11th-7.3 *(11.8)*, 12th-8.2 *(13.2)*, 13th - 9.2 *(14.8)*, 14th-10.3 *(16.6)*, 15th-11.7 *(18.8)*, 16th -13.3 *(21.4)*, 17th - 15.0 *(24.2)*, 18th - 17.0 *(27.4)*, 19th-19.4 *(31.2)*, 20th-22.0 *(35.4)*, 21st-25.0 *(40.2)* Reverse Low range: 1.1 *(1.8)*, 1.4 *(2.2)*, 1.6 *(2.6)*, 1.9 *(3.0)*, 2.1 *(3.4)*, 2.4 *(3.8)*, 2.6 *(4.2)*, 3.0 *(4.8)*, 3.4 *(5.4)*, 3.7 *(6.0)*, 4.2 *(6.8)*, 4.8 *(7.8)*, 5.6 *(9.0)*, 6.5 *(10.4)*, 7.3 *(11.8)*, 8.3 *(13.4)*, 9.6 *(15.4)*, 11.1 *(17.8)*

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*(°C)* cool-ing med	Air dry bulb	Barom. inch Hg *(kPa)*
					Turtle 11				
204.1 *(152.2)*	20670 *(91.94)*	3.70 *(5.96)*	2051	14.5	0.531 *(0.323)*	13.10 *(2.58)*	190 *(88)*	73 *(23)*	29.5 *(99.8)*
					Turtle 12				
222.6 *(166.0)*	18820 *(83.72)*	4.44 *(7.14)*	2005	7.9	0.485 *(0.295)*	14.31 *(2.82)*	187 *(86)*	73 *(23)*	29.5 *(99.8)*
					Turtle 13				
223.9 *(167.0)*	16920 *(75.26)*	4.96 *(7.99)*	2000	6.4	0.480 *(0.292)*	14.47 *(2.85)*	194 *(90)*	81 *(27)*	29.5 *(99.8)*
					Turtle 14				
224.9 *(167.7)*	14520 *(64.58)*	5.81 *(9.35)*	2000	4.9	0.480 *(0.292)*	14.47 *(2.85)*	196 *(91)*	81 *(27)*	29.5 *(99.8)*
					Turtle 15				
225.2 *(167.9)*	12775 *(56.82)*	6.61 *(10.64)*	2001	4.0	0.478 *(0.291)*	14.52 *(2.86)*	198 *(92)*	81 *(27)*	29.5 *(99.8)*
					Turtle 16				
224.0 *(167.0)*	11335 *(50.43)*	7.41 *(11.92)*	2002	3.4	0.480 *(0.292)*	14.47 *(2.85)*	198 *(92)*	79 *(26)*	29.5 *(99.8)*
					Turtle 17				
221.8 *(165.4)*	9675 *(43.04)*	8.60 *(13.83)*	1998	2.7	0.487 *(0.296)*	14.26 *(2.81)*	196 *(91)*	79 *(26)*	29.5 *(99.8)*
					Rabbit 8				
217.9 *(162.5)*	17540 *(78.03)*	4.66 *(7.50)*	2001	6.5	0.494 *(0.300)*	14.07 *(2.77)*	185 *(85)*	72 *(22)*	29.5 *(99.9)*
					Rabbit 9				
215.5 *(160.7)*	15635 *(69.55)*	5.17 *(8.32)*	2001	5.5	0.497 *(0.302)*	13.98 *(2.75)*	189 *(87)*	84 *(29)*	29.5 *(99.9)*
					Rabbit 10				
217.8 *(162.4)*	14025 *(62.38)*	5.82 *(9.37)*	2001	4.7	0.492 *(0.299)*	14.12 *(2.78)*	194 *(90)*	84 *(29)*	29.5 *(99.8)*
					Rabbit 11				
220.7 *(164.6)*	12695 *(56.48)*	6.52 *(10.49)*	2003	4.2	0.485 *(0.295)*	14.31 *(2.82)*	192 *(89)*	86 *(30)*	29.5 *(99.8)*
					Rabbit 12				
221.3 *(165.0)*	11295 *(50.25)*	7.35 *(11.82)*	2001	3.4	0.484 *(0.294)*	14.37 *(2.83)*	194 *(90)*	90 *(32)*	29.5 *(99.9)*
					Rabbit 13				
222.2 *(165.7)*	10065 *(44.78)*	8.28 *(13.32)*	2003	2.8	0.484 *(0.294)*	14.37 *(2.83)*	196 *(91)*	88 *(31)*	29.5 *(99.8)*
					Rabbit 14				
222.7 *(166.0)*	8825 *(39.26)*	9.46 *(15.23)*	2003	2.2	0.483 *(0.294)*	14.41 *(2.84)*	198 *(92)*	88 *(31)*	29.5 *(99.8)*
					Rabbit 15				
222.2 *(165.7)*	8060 *(35.85)*	10.34 *(16.64)*	2005	2.0	0.485 *(0.295)*	14.31 *(2.82)*	196 *(91)*	88 *(31)*	29.5 *(99.8)*

High range: 2.4 *(3.8)*, 2.6 *(4.2)*, 3.0 *(4.8)*, 3.4 *(5.4)*, 3.7 *(6.0)*, 4.2 *(6.8)*, 4.7 *(7.6)*, 5.3 *(8.6)*, 6.0 *(9.6)*, 6.6 *(10.6)*, 7.3 *(11.8)*, 8.2 *(13.2)*, 9.2 *(14.8)*, 10.3 *(16.6)*, 11.7 *(18.8)* **Clutch** a foot pedal controls the hydrostatic oil flow **Brakes** multiple wet disc hydraulically operated by two foot pedals that can be locked together **Steering** hydrostatic **Power take-off** 540 rpm at 1588 engine rpm or 1000 rpm at 2033 engine rpm **Unladen tractor mass** 20370 lb *(9240 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 39.0 GPM *(147 lpm)* flow at the remote outlets. 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. **2324,** Nebraska Summary 548, August 23, 2006.

Leonard L. Bashford
Director

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

TIRES, BALLAST AND WEIGHT	With Ballast	Without Ballast
Rear tires - No.,size, ply & psi*(kPa)*	Four 520/85R46; **;11 *(70)*	Two 650/85R38;***;12*(80)*
Ballast - Duals(total)	2390 lb *(1084 kg)*	None
- Cast iron(total)	5120 lb *(2322 kg)*	None
Front tires - No.,size, ply & psi*(kPa)*	Four 480/70R34; **;12 *(80)*	Two 600/70R28;***;12*(80)*
Ballast - Duals(total)	1245 lb *(565 kg)*	None
- Cast Iron(total)	2600 lb *(1179 kg)*	None
Height of Drawbar	20.5 in *(520 mm)*	20.5 in *(520 mm)*
Static Weight with operator- Rear	19445 lb *(8820 kg)*	12630 lb *(5730 kg)*
- Front	12445 lb *(5645 kg)*	7905 lb *(3585 kg)*
- Total	31890 lb*(14465 kg)*	20535 lb *(9315 kg)*

DRAWBAR PERFORMANCE

(Ballasted - 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	(°C) Air dry bulb	Barom. inch Hg (kPa)
				Maximum Power—Turtle 11					
201.8	18035	4.20	2201	5.1	0.537	12.94	194	84	29.6
(150.5)	*(80.22)*	*(6.75)*			*(0.327)*	*(2.55)*	*(90)*	*(29)*	*(100.3)*
				75% of Pull at Maximum Power—Turtle 11					
161.7	13520	4.49	2299	3.9	0.614	11.32	190	86	29.6
(120.6)	*(60.15)*	*(7.22)*			*(0.373)*	*(2.23)*	*(88)*	*(30)*	*(100.3)*
				50% of Pull at Maximum Power—Turtle 11					
110.1	9010	4.58	2313	2.4	0.702	9.90	190	84	29.6
(82.1)	*(40.07)*	*(7.38)*			*(0.427)*	*(1.95)*	*(88)*	*(29)*	*(100.3)*
				75% of Pull at Reduced Engine Speed—Turtle 12					
162.1	13520	4.50	2032	3.8	0.492	14.11	190	84	29.6
(120.9)	*(60.15)*	*(7.23)*			*(0.300)*	*(2.78)*	*(88)*	*(30)*	*(100.3)*
				50% of Pull at Reduced Engine Speed—Turtle 12					
109.3	8990	4.56	2043	3.2	0.539	12.89	190	84	29.6
(81.5)	*(39.98)*	*(7.34)*			*(0.328)*	*(2.54)*	*(88)*	*(30)*	*(100.3)*

MAXIMUM POWER IN SELECTED GEARS

					Turtle 8				
192.0	28755	2.50	2076	15.2	0.562	12.38	189	81	29.6
(143.2)	*(127.90)*	*(4.03)*			*(0.342)*	*(2.44)*	*(87)*	*(27)*	*(100.3)*
					Turtle 9				
210.8	26770	2.95	2001	10.1	0.513	13.55	190	79	29.6
(157.2)	*(119.07)*	*(4.75)*			*(0.312)*	*(2.67)*	*(88)*	*(26)*	*(100.4)*
					Turtle 10				
217.5	24585	3.32	2001	8.0	0.496	14.01	187	77	29.6
(162.2)	*(109.37)*	*(5.34)*			*(0.302)*	*(2.76)*	*(86)*	*(25)*	*(100.4)*
					Turtle 11				
220.9	21640	3.83	2001	6.3	0.487	14.26	185	72	29.6
(164.7)	*(96.26)*	*(6.16)*			*(0.296)*	*(2.81)*	*(85)*	*(22)*	*(100.4)*
					Turtle 12				
219.3	19420	4.23	2001	5.6	0.491	14.16	196	81	29.7
(163.5)	*(86.38)*	*(6.82)*			*(0.299)*	*(2.79)*	*(91)*	*(27)*	*(100.6)*
					Turtle 13				
220.1	16480	5.01	2001	4.6	0.489	14.20	194	82	29.7
(164.1)	*(73.31)*	*(8.06)*			*(0.298)*	*(2.80)*	*(90)*	*(28)*	*(100.6)*
					Turtle 14				
219.1	14285	5.75	2001	3.9	0.491	14.16	197	82	29.7
(163.4)	*(63.54)*	*(9.26)*			*(0.298)*	*(2.79)*	*(92)*	*(28)*	*(100.6)*
					Turtle 15				
216.4	12140	6.69	1999	2.8	0.498	13.96	197	84	29.7
(161.4)	*(54.00)*	*(10.76)*			*(0.303)*	*(2.75)*	*(92)*	*(29)*	*(100.6)*
					Turtle 16				
214.2	10660	7.54	2002	2.8	0.505	13.76	201	82	29.7
(159.7)	*(47.41)*	*(12.13)*			*(0.307)*	*(2.71)*	*(94)*	*(28)*	*(100.6)*
					Turtle 17				
210.7	9270	8.52	2001	2.0	0.510	13.62	190	86	29.6
(157.1)	*(41.24)*	*(13.72)*			*(0.310)*	*(2.68)*	*(88)*	*(30)*	*(100.4)*
					Rabbit 7				
208.9	19055	4.11	2007	5.1	0.517	13.45	190	79	29.7
(155.8)	*(84.77)*	*(6.62)*			*(0.314)*	*(2.65)*	*(88)*	*(26)*	*(100.6)*
					Rabbit 8				
210.7	17260	4.58	2001	4.8	0.509	13.65	185	75	29.7
(157.1)	*(76.78)*	*(7.37)*			*(0.310)*	*(2.69)*	*(85)*	*(24)*	*(100.7)*
					Rabbit 9				
215.5	15490	5.22	2000	3.9	0.500	13.91	189	72	29.7
(160.7)	*(68.91)*	*(8.39)*			*(0.304)*	*(2.74)*	*(87)*	*(22)*	*(100.6)*
					Rabbit 10				
217.1	13835	5.88	2000	3.9	0.494	14.06	192	75	29.7
(161.9)	*(61.54)*	*(9.47)*			*(0.301)*	*(2.77)*	*(89)*	*(24)*	*(100.7)*
					Rabbit 11				
217.6	12620	6.47	1995	3.1	0.494	14.06	192	72	29.7
(162.3)	*(56.14)*	*(10.41)*			*(0.301)*	*(2.77)*	*(89)*	*(22)*	*(100.7)*
					Rabbit 12				
216.7	10905	7.45	2001	2.6	0.496	14.01	192	75	29.7
(161.6)	*(48.50)*	*(12.00)*			*(0.302)*	*(2.76)*	*(89)*	*(24)*	*(100.6)*
					Rabbit 13				
216.3	9835	8.25	2004	2.4	0.500	13.91	194	73	29.7
(161.3)	*(43.76)*	*(13.27)*			*(0.304)*	*(2.74)*	*(90)*	*(23)*	*(100.6)*
					Rabbit 14				
214.6	8710	9.24	2002	2.1	0.504	13.79	194	75	29.7
(160.0)	*(38.74)*	*(14.87)*			*(0.307)*	*(2.72)*	*(90)*	*(24)*	*(100.6)*

TRACTOR SOUND LEVEL WITH CAB	dB(A)
At no load in Turtle - 4.6 mph *(7.5 km/h)* - no load	70.0
Bystander	---

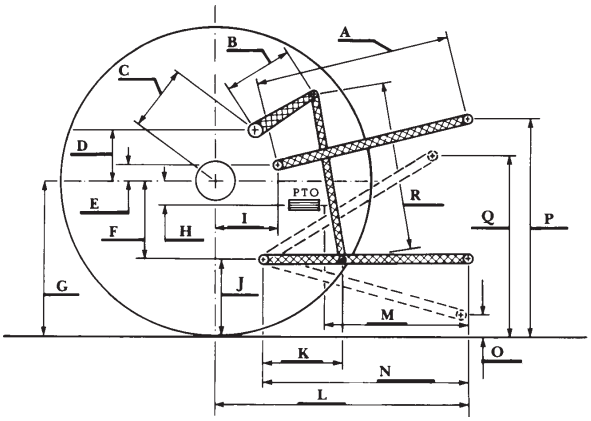
THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY: III	
Quick Attach: None	
Maximum force exerted through whole range:	14648 lbs *(65.2 kN)*
i) Opening pressure of relief valve:	NA
Sustained pressure of the open relief valve:	2875 psi *(192 bar)*
ii) Pump delivery rate at minimum pressure:	36.9 GPM *(139.8 l/min)*
iii) Pump delivery rate at maximum hydraulic power:	35.0 GPM *(132.5 l/min)*
Delivery pressure:	2335 psi *(161 bar)*
Power:	47.7 HP *(35.6 kW)*

	OECD test		SAE test	
	inch	*mm*	inch	*mm*
A	31.9	*809*	30.4	*773*
B	14.2	*360*	14.2	*360*
C	17.7	*449*	17.7	*449*
D	15.4	*390*	15.4	*390*
E	11.8	*300*	8.9	*225*
F	13.0	*330*	13.0	*330*
G	36.2	*920*	36.2	*920*
H	3.4	*85*	3.4	*85*
I	15.7	*400*	18.7	*475*
J	23.2	*590*	23.2	*590*
K	26.8	*680*	26.8	*680*
L	50.4	*1281*	50.4	*1281*
M	27.9	*709*	27.9	*709*
N	41.1	*1045*	41.1	*1045*
O	9.0	*230*	8.0	*203*
P	50.2	*1275*	45.2	*1150*
Q	39.3	*999*	38.5	*978*
R	34.3	*872*	34.8	*886*

THREE POINT HITCH PERFORMANCE SAE Test

Observed Maximum Pressure psi. *(bar)*	2800 *(193)*
Location:	lift cylinder
Hydraulic oil temperature: °F *(°C)*	150 *(66)*
Location:	hydraulic sump
Category:	III
Quick attach:	None

SAE Static Test—System pressure 2520 psi *(174 Bar)*

Hitch point distance to ground level in. *(mm)*	8.2 *(208)*	16.1 *(409)*	24.1 *(612)*	32.1 *(815)*	40.0 *(1016)*
Lift force on frame lb	16994	18242	18320	18191	16921
" " " " " " " *(kN)*	*(75.6)*	*(81.1)*	*(81.5)*	*(80.9)*	*(75.3)*