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2007

Nebraska Summary: S636 Massey Ferguson 6485

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SUMMARY OF OECD TEST 2394–NEBRASKA SUMMARY 636
MASSEY FERGUSON 6485 DIESEL
24 SPEED
Tractor chassis S/N R165050 and higher

Location of tests: Groupement d'Antony, Parc de Touvoie, BP 44 Antony, France 92163
Dates of tests: August - October, 2007

Manufacturer: AGCO S.A. BP 307, Avenue Blaise Pascal, 60026 Beauvais, France

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—1099 rpm)					
145.8 *(108.7)*	2199	9.01 *(34.09)*	0.439 *(0.267)*	16.19 *(3.19)*	
Standard Power Take-off Speed(1000 rpm)					
175.4 *(130.8)*	2000	9.75 *(36.90)*	0.395 *(0.241)*	18.00 *(3.55)*	
Maximum Power (1 hour)					
175.4 *(130.8)*	2000	9.75 *(36.90)*	0.395 *(0.241)*	18.00 *(3.55)*	
VARYING POWER AND FUEL CONSUMPTION					
145.8 *(108.7)*	2199	9.01 *(34.09)*	0.439 *(0.267)*	16.19 *(3.19)*	Air temperature
125.1 *(93.3)*	2220	7.90 *(29.89)*	0.449 *(0.273)*	15.84 *(3.12)*	70°F *(21°C)*
94.1 *(70.2)*	2228	6.42 *(24.31)*	0.485 *(0.295)*	14.67 *(2.89)*	Relative humidity
63.2 *(47.1)*	2232	4.88 *(18.46)*	0.552 *(0.334)*	12.95 *(2.55)*	67%
31.6 *(23.6)*	2245	3.38 *(12.81)*	0.761 *(0.463)*	9.36 *(1.84)*	Barometer
-- --	2254	2.10 *(7.95)*	-- --	-- --	29.9" Hg *(101.2 kPa)*

Maximum Torque - 574.1 lb.-ft. *(769.9 Nm)* at 1400 rpm
Maximum Torque Rise - 63.0%
Torque rise at 1750 engine rpm - 47%

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—13th(3B) Gear									
126.7 *(94.5)*	7280 *(32.4)*	6.53 *(10.51)*	2200	4.2	0.500 *(0.304)*	14.21 *(2.80)*	185 *(85)*	63 *(17)*	30.2 *(102.4)*
75% of Pull at Maximum Power—13th(3B) Gear									
97.2 *(72.5)*	5490 *(24.4)*	6.64 *(10.69)*	2212	3.1	0.538 *(0.327)*	13.20 *(2.60)*	181 *(83)*	64 *(18)*	30.2 *(102.4)*
50% of Pull at Maximum Power—13th(3B) Gear									
65.7 *(49.0)*	3650 *(16.2)*	6.75 *(10.86)*	2219	1.9	0.616 *(0.375)*	11.52 *(2.27)*	179 *(82)*	64 *(18)*	30.2 *(102.4)*
75% of Pull at Reduced Engine Speed—15th(3C) Gear									
97.1 *(72.4)*	5495 *(24.4)*	6.62 *(10.66)*	1882	3.3	0.481 *(0.292)*	14.77 *(2.91)*	179 *(82)*	64 *(18)*	30.2 *(102.4)*
50% of Pull at Reduced Engine Speed—15th(3C) Gear									
65.7 *(49.0)*	3650 *(16.2)*	6.75 *(10.87)*	1890	1.8	0.546 *(0.332)*	12.99 *(2.56)*	178 *(81)*	64 *(18)*	30.2 *(102.4)*

FUEL and OIL: Fuel No. 2 Diesel **Specific gravity converted to 60°/60°F *(15°/15°C)*** 0.855 **Fuel weight** 7.12 lbs/gal *(0.853 kg/l)* **Oil SAE** 15W40 **API service classification** CH4 **Transmission and hydraulic lubricant** BP Terrac Tractan 9 10W/40 **Front axle lubricant** BP Terrac Tractan 9 10W/40

ENGINE: Make Sisu Diesel **Type** six cylinder vertical with turbocharger and air to air intercooler **Serial No.** T05871 **Crankshaft** lengthwise **Rated engine speed** 2200 **Bore and stroke** 4.252" x 4.724" *(108.0 mm x 120.0 mm)* **Compression ratio** 18.5 to 1 **Displacement** 402 cu in *(6596 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 front wheel assist **Serial No.** S103032 **Tread width** rear 61.7" *(1567 mm)* to 95.2" *(2417 mm)* front 68.8" *(1747 mm)* to 75.4" *(1915 mm)* **Wheelbase** 118.0" *(2996 mm)* **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio with partial (6) range operator controlled powershift **Nominal travel speeds mph *(km/h)*** first 1.08 *(1.73)* second 1.29 *(2.07)* third 1.51 *(2.43)* fourth 1.82 *(2.93)* fifth 2.14 *(3.45)* sixth 2.58 *(4.15)* seventh 2.90 *(4.66)* eighth 3.49 *(5.61)* ninth 4.09 *(6.58)* tenth 4.92 *(7.92)* eleventh 5.55 *(8.93)* twelfth 5.79 *(9.31)* thirteenth 6.67 *(10.74)* fourteenth 6.97 *(11.21)* fifteenth 7.83 *(12.60)* sixteenth 9.43 *(15.17)* seventeenth 11.08 *(17.83)* eighteenth 12.60 *(20.28)* nineteenth 13.34 *(21.46)* twentieth 15.15 *(24.38)* twenty-first 17.78 *(28.61)* twenty-second 21.39 *(34.43)* twenty-third 25.16 *(40.49)* twenty-fourth 24.86 *(40.00)* reverse 1.08 *(1.73)*, 1.29 *(2.07)*, 1.51 *(2.43)*, 1.82 *(2.93)*, 2.14 *(3.45)*, 2.58 *(4.15)*, 2.90 *(4.66)*, 3.49 *(5.61)*, 4.09 *(6.58)*, 4.92 *(7.92)*, 5.55 *(8.93)*, 5.79 *(9.31)*, 6.67 *(10.74)*, 6.97 *(11.21)*, 7.83 *(12.60)*, 9.43 *(15.17)*, 11.08 *(17.83)*, 12.60 *(20.28)*, 13.34 *(21.46)*, 15.15 *(24.38)*, 17.78 *(28.61)*, 21.39 *(34.43)*, 25.16 *(40.49)*, 24.86 *(40.00)*

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)*
					4th(1D) Gear				
61.7	14705	1.57	2207	15.2	0.676	10.51	180	57	30.2
(46.0)	*(65.4)*	*(2.53)*			*(0.411)*	*(2.07)*	*(82)*	*(14)*	*(102.4)*
					5th(1E) Gear				
72.4	14320	1.90	2204	13.2	0.651	10.91	178	57	30.2
(54.0)	*(63.7)*	*(3.05)*			*(0.396)*	*(2.15)*	*(81)*	*(14)*	*(102.4)*
					6th(1F) Gear				
86.8	14120	2.31	2201	11.6	0.600	11.83	178	57	30.2
(64.7)	*(62.8)*	*(3.71)*			*(0.365)*	*(2.33)*	*(81)*	*(14)*	*(102.4)*
					7th(2A) Gear				
97.5	13940	2.62	2199	11.6	0.573	12.39	178	57	30.2
(72.7)	*(62.0)*	*(4.22)*			*(0.349)*	*(2.44)*	*(81)*	*(14)*	*(102.4)*
					8th(2B) Gear				
115.9	13760	3.16	2191	11.5	0.529	13.43	178	59	30.2
(86.4)	*(61.2)*	*(5.08)*			*(0.321)*	*(2.64)*	*(81)*	*(15)*	*(102.4)*
					9th(2C) Gear				
127.7	13510	3.54	2090	10.9	0.499	14.22	183	59	30.2
(95.2)	*(60.1)*	*(5.70)*			*(0.304)*	*(2.80)*	*(84)*	*(15)*	*(102.4)*
					10th(2D) Gear				
135.6	12160	4.18	2003	8.9	0.468	15.18	183	61	30.2
(101.1)	*(54.1)*	*(6.72)*			*(0.284)*	*(2.99)*	*(84)*	*(16)*	*(102.4)*
					11th(3A) Gear				
151.8	12080	4.71	1999	8.6	0.462	15.38	189	61	30.2
(113.2)	*(53.7)*	*(7.58)*			*(0.281)*	*(3.03)*	*(87)*	*(16)*	*(102.4)*
					12th(2E) Gear				
136.4	10115	5.06	2001	6.5	0.463	15.33	183	61	30.2
(101.7)	*(45.0)*	*(8.14)*			*(0.282)*	*(3.02)*	*(84)*	*(16)*	*(102.4)*
					13th(3B) Gear				
154.2	9960	5.81	2002	6.4	0.453	15.68	190	63	30.2
(115.0)	*(44.3)*	*(9.35)*			*(0.275)*	*(3.09)*	*(88)*	*(17)*	*(102.4)*
					14th(2F) Gear				
137.2	8387	6.13	1999	5.0	0.461	15.40	185	63	30.2
(102.3)	*(37.3)*	*(9.87)*			*(0.280)*	*(3.03)*	*(85)*	*(17)*	*(102.4)*
					15th(3C) Gear				
156.1	8455	6.92	2002	5.0	0.450	15.80	187	64	30.2
(116.4)	*(37.6)*	*(11.14)*			*(0.273)*	*(3.11)*	*(86)*	*(18)*	*(102.4)*
					*16th(3D) Gear				
153.7	7170	8.04	1999	8.1	0.457	15.53	189	64	30.2
(114.6)	*(31.9)*	*(12.94)*			*(0.278)*	*(3.06)*	*(87)*	*(18)*	*(102.4)*
					*17th(3E) Gear				
149.9	5855	9.60	1999	6.5	0.468	15.19	189	64	30.2
(111.8)	*(26.0)*	*(15.45)*			*(0.284)*	*(2.99)*	*(87)*	*(18)*	*(102.4)*

* Front Drive Disengaged

TIRES, BALLAST AND WEIGHT	With Ballast	Without Ballast
Rear tires - No.,size, ply & psi*(kPa)*	Four 480/80R46; ***;15*(100)*	Two 520/85R42;**;15*(100)*
Ballast - Duals(total)	2190 lb *(993 kg)*	None
- Cast iron(total)	None	None
Front tires - No.,size, ply & psi*(kPa)*	Two 420/90R30; **;15*(100)*	Two 16.9R30;**;15*(100)*
Ballast - Liquid(total)	None	None
- Cast Iron(total)	1700 lb *(770 kg)*	None
Height of Drawbar	23.6 in *(600 mm)*	23.6 in *(600 mm)*
Static Weight with operator- Rear	11960 lb *(5425 kg)*	9835 lb *(4460 kg)*
- Front	8850 lb *(4015 kg)*	6625 lb *(3005 kg)*
- Total	20810 lb *(9440 kg)*	16460 lb *(7465 kg)*

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 1998 engine rpm or 1000 rpm at 2000 engine rpm **Unladen tractor mass** 16305 lb *(7395 kg)*

NOTE 1: The engine on this tractor is electronically controlled to give 2 power levels. A "boosted" level is available when the PTO is engaged, tractor stationary, and when the tractor is operated in ranges 3 and 4.

NOTE 2: The performance figures on this report apply to tractors with chassis S/N R165050 and higher.

REPAIRS AND ADJUSTMENTS: No repairs or adjustments

REMARKS: All test results were determined from observed data obtained in accordance with official OECD test procedures. The manufacturer's claim of 39 GPM *(150 lpm)* remote flow with optional pump was not verified. 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. **2394,** Nebraska Summary 636, March 31, 2009.

Roger M. Hoy
Director

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

DRAWBAR PERFORMANCE

(Ballasted - 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)*
				3th(1C) Gear					
68.8 *(51.3)*	19895 *(88.5)*	1.30 *(2.09)*	2215	15.8	0.665 *(0.404)*	10.68 *(2.10)*	180 *(82)*	63 *(17)*	30.2 *(102.3)*
				4th(1D) Gear					
84.4 *(62.9)*	19580 *(87.1)*	1.62 *(2.60)*	2211	13.1	0.606 *(0.368)*	11.73 *(2.31)*	180 *(82)*	63 *(17)*	30.2 *(102.3)*
				5th(1E) Gear					
98.7 *(73.6)*	19490 *(86.7)*	1.90 *(3.06)*	2206	12.4	0.587 *(0.357)*	12.09 *(2.38)*	181 *(83)*	63 *(17)*	30.2 *(102.3)*
				6th(1F) Gear					
116.7 *(87.0)*	18670 *(83.0)*	2.34 *(3.77)*	2163	9.4	0.530 *(0.322)*	13.40 *(2.64)*	183 *(84)*	63 *(17)*	30.2 *(102.3)*
				7th(2A) Gear					
127.1 *(94.8)*	18525 *(82.4)*	2.57 *(4.14)*	2091	8.7	0.498 *(0.303)*	14.26 *(2.81)*	183 *(84)*	63 *(17)*	30.2 *(102.3)*
				8th(2B) Gear					
135.2 *(100.8)*	16840 *(74.9)*	3.01 *(4.85)*	2002	7.6	0.465 *(0.283)*	15.28 *(3.01)*	183 *(84)*	63 *(17)*	30.2 *(102.3)*
				9th(2C) Gear					
136.9 *(102.1)*	14300 *(63.6)*	3.59 *(5.77)*	2003	5.1	0.458 *(0.279)*	15.48 *(3.05)*	183 *(84)*	63 *(17)*	30.2 *(102.3)*
				10th(2D) Gear					
138.4 *(103.2)*	11870 *(52.8)*	4.37 *(7.03)*	2003	3.9	0.451 *(0.275)*	15.74 *(3.10)*	185 *(85)*	63 *(17)*	30.2 *(102.3)*
				11th(3A) Gear					
151.7 *(113.1)*	11600 *(51.6)*	4.90 *(7.89)*	2000	4.3	0.459 *(0.279)*	15.48 *(3.05)*	187 *(86)*	63 *(17)*	30.2 *(102.3)*
				12th(2E) Gear					
134.5 *(100.3)*	9780 *(43.5)*	5.16 *(8.31)*	2001	4.2	0.466 *(0.283)*	15.24 *(3.00)*	187 *(86)*	63 *(17)*	30.2 *(102.3)*
				13th(3B) Gear					
151.9 *(113.3)*	9600 *(42.7)*	5.93 *(9.55)*	1996	3.5	0.459 *(0.279)*	15.48 *(3.05)*	187 *(86)*	63 *(17)*	30.2 *(102.3)*
				14th(2F) Gear					
135.7 *(101.2)*	8080 *(35.9)*	6.30 *(10.13)*	2004	2.5	0.464 *(0.282)*	15.29 *(3.01)*	189 *(87)*	65 *(18)*	30.2 *(102.3)*
				15th(3C) Gear					
152.2 *(113.5)*	8065 *(35.9)*	7.08 *(11.39)*	2003	2.5	0.459 *(0.279)*	15.48 *(3.05)*	190 *(88)*	65 *(18)*	30.2 *(102.3)*
				*16th(3D) Gear					
151.8 *(113.2)*	6835 *(30.4)*	8.33 *(13.40)*	2004	3.5	0.458 *(0.278)*	15.51 *(3.05)*	190 *(88)*	65 *(18)*	30.2 *(102.3)*
				*17th(3E) Gear					
146.8 *(109.5)*	5610 *(25.0)*	9.82 *(15.80)*	2000	2.6	0.474 *(0.288)*	14.97 *(2.95)*	190 *(88)*	65 *(18)*	30.2 *(102.3)*

*Front Drive disengaged

TRACTOR SOUND LEVEL WITH CAB	dB(A)
At no load in 10th (2D) gear	69.0
Bystander	--

THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY: II
Quick Attach: None

Maximum force exerted through whole range:	14905 lbs *(66.3 kN)*
i) Opening pressure of relief valve:	NA
Sustained pressure of the open relief valve:	2845 psi *(196 bar)*
ii) Pump delivery rate at minimum pressure:	30.5 GPM *(115.6 l/min)*
iii) Pump delivery rate at maximum hydraulic power:	26.5 GPM *(100.2 l/min)*
Delivery pressure:	2290 psi *(158 bar)*
Power:	35.4 HP *(26.4 kW)*

THREE POINT HITCH PERFORMANCE SAE Test

Observed Maximum Pressure psi. *(bar)*	2845 *(196)*
Location:	lift cylinder
Hydraulic oil temperature: °F *(°C)*	145 *(63)*
Location:	hydraulic sump
Category:	II
Quick attach:	None

SAE Static Test—System pressure 2555 psi *(176 bar)*

Hitch point distance to ground level in. *(mm)*	11.8 *(300)*	16.4 *(416)*	24.2 *(615)*	30.1 *(764)*	35.4 *(900)*	41.3 *(1050)*
Lift force on frame lb	17130	17020	17335	17310	17195	16525
" " " " " " *(kN)*	*(76.2)*	*(75.7)*	*(77.1)*	*(77.0)*	*(76.5)*	*(73.5)*

	OECD test		SAE test	
	inch	*mm*	inch	*mm*
A	29.7	*755*	30.3	*770*
B	15.7	*400*	15.7	*400*
C	20.7	*525*	20.7	*525*
D	19.1	*485*	19.1	*485*
E	8.3	*210*	11.6	*295*
F	12.2	*310*	12.2	*310*
G	36.4	*925*	36.4	*925*
H	2.0	*50*	2.0	*50*
I	17.7	*450*	16.9	*430*
J	24.2	*615*	24.2	*615*
K	21.8	*554*	21.8	*554*
L	47.2	*1200*	47.2	*1200*
M	22.0	*560*	22.0	*560*
N	37.1	*942*	37.1	*942*
O	8.7	*220*	8.7	*220*
P	48.2	*1225*	43.2	*1098*
Q	38.8	*986*	38.8	*986*
R	36.3	*923*	36.3	*923*

