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2012

Nebraska Summary: S899 Massey Ferguson 7615

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SUMMARY OF OECD TEST 2753–NEBRASKA SUMMARY 899
MASSEY FERGUSON 7615 DYNA 4 DIESEL
16 SPEED

POWER TAKE-OFF PERFORMANCE

Power HP *(kW)*	Crank shaft speed rpm	Diesel Consumption Gal/hr *(l/h)*	lb/hp.hr *(kg/kW.h)*	D.E.F. Consumption Hp.hr/gal *(kW.h/l)*	D.E.F. Consumption Gal/hr *(l/h)*	Mean Atmospheric Conditions
MAXIMUM POWER AND FUEL CONSUMPTION						
Rated Engine Speed—(PTO speed—1035 rpm)						
127.1 *(94.8)*	2101	7.55 *(28.58)*	0.413 *(0.252)*	16.85 *(3.32)*	0.31 *(1.18)*	
Standard Power Take-off Speed (1000 rpm)						
137.7 *(102.7)*	2030	7.93 *(30.01)*	0.401 *(0.244)*	17.36 *(3.42)*	0.35 *(1.34)*	
Maximum Power (1 hour)						
141.9 *(105.8)*	2000	8.05 *(30.47)*	0.396 *(0.241)*	17.61 *(3.47)*	0.34 *(1.31)*	
VARYING POWER AND FUEL CONSUMPTION						
127.1 *(94.8)*	2101	7.55 *(28.58)*	0.413 *(0.252)*	16.85 *(3.32)*	0.31 *(1.18)*	Air temperature
108.8 *(81.1)*	2118	6.69 *(25.33)*	0.430 *(0.261)*	16.22 *(3.20)*	0.30 *(1.12)*	68°F *(20°C)*
81.7 *(60.9)*	2127	5.46 *(20.66)*	0.465 *(0.283)*	14.97 *(2.95)*	0.22 *(0.85)*	Relative humidity
55.3 *(41.2)*	2137	4.23 *(16.02)*	0.534 *(0.325)*	13.05 *(2.57)*	0.17 *(0.64)*	45%
27.6 *(20.6)*	2146	3.05 *(11.54)*	0.769 *(0.468)*	9.06 *(1.79)*	0.12 *(0.46)*	Barometer
-- --	2155	1.99 *(7.53)*	-- --	-- --	-- --	29.9" Hg *(101.1 kPa)*

Maximum torque - 458.1 lb.-ft. *(621.1 Nm)* at 1200 rpm
Maximum torque rise - 44.1%
Torque rise at 1700 engine rpm - 30%
Power increase at 2000 engine rpm - 11.6%

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 cool-ing med	*(°C)* Air dry bulb	Barom. inch Hg *(kPa)*
Maximum Power—9th(3A) Gear									
106.6 *(79.5)*	6875 *(30.6)*	5.82 *(9.36)*	2096	4.7	0.461 *(0.280)*	15.08 *(2.97)*	181 *(83)*	59 *(15)*	29.8 *(101.0)*
75% of Pull at Maximum Power—9th(3A) Gear									
81.8 *(61.0)*	5170 *(23.0)*	5.93 *(9.55)*	2130	4.2	0.498 *(0.303)*	13.96 *(2.75)*	180 *(82)*	59 *(15)*	29.8 *(101.0)*
50% of Pull at Maximum Power—9th(3A) Gear									
54.8 *(40.9)*	3400 *(15.1)*	6.05 *(9.73)*	2137	2.3	0.598 *(0.364)*	11.62 *(2.29)*	178 *(81)*	59 *(15)*	29.8 *(101.0)*
75% of Pull at Reduced Engine Speed—10th(3B) Gear									
81.8 *(61.0)*	5205 *(23.1)*	5.90 *(9.49)*	1703	4.1	0.445 *(0.271)*	15.63 *(3.08)*	178 *(81)*	59 *(15)*	29.8 *(101.0)*
50% of Pull at Reduced Engine Speed—10th(3B) Gear									
55.5 *(41.4)*	3430 *(15.2)*	6.07 *(9.77)*	1732	2.4	0.496 *(0.302)*	14.01 *(2.76)*	178 *(81)*	59 *(15)*	29.8 *(101.0)*

Location of tests: IRSTEA, Centre d'Antony, 1 rue Pierre-Gilles de Gennes CS 10030 Antony, 92163, Cedex, France

Dates of tests: April - May, 2012

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

FUEL and OIL: Fuel No. 2 Diesel **Specific gravity converted to 60°/60°F *(15°/15°C)*** 0.837 **Fuel weight** 6.97 lbs/gal *(0.835 kg/l)* **Diesel Exhaust Fluid (DEF)** 32% aqueous urea solution **DEF weight** 9.10 lbs/gal *(1.091 kg/l)* **Oil SAE** 15W40 **API service classification** CJ-4 **Transmission and hydraulic lubricant** BP Terrac Tractan 9 15W/40 **Front axle lubricant** BP Terrac Tractan 9 15W/40

ENGINE: Make Sisu AGCO Power Diesel **Type** six cylinder vertical with turbocharger and air to air intercooler and SCR (selective catalyst reduction) exhaust treatment **Serial No.** W00406 **Crankshaft** lengthwise **Rated engine speed** 2100 **Bore and stroke** 4.252" x 4.724" *(108.0 mm x 120.0 mm)* **Compression ratio** 17.4 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** two paper cartridges **Muffler** vertical **Cooling medium temperature control** thermostat and variable speed fan

CHASSIS: Type front wheel assist **Serial No.** B 230 901 **Tread width** rear 52.8" *(1340 mm)* to 87.8" *(2230 mm)* front 52.8" *(1340 mm)* to 87.8" *(2230 mm)* **Wheelbase** 113.2" *(2875 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 1.24 *(2.00)* second 1.53 *(2.46)* third 1.86 *(3.00)* fourth 2.29 *(3.69)* fifth 2.95 *(4.74)* sixth 3.62 *(5.83)* seventh 4.42 *(7.11)* eighth 5.43 *(8.74)* ninth 5.98 *(9.62)* tenth 7.36 *(11.84)* eleventh 8.97 *(14.44)* twelfth 11.04 *(17.76)* thirteenth 13.79 *(22.20)* fourteenth 16.96 *(27.30)* fifteenth 20.69 *(33.30)* sixteenth 25.46 *(40.97)* reverse 1.24 *(2.00)*, 1.53 *(2.46)*, 1.86 *(3.00)*, 2.29 *(3.69)*, 2.95 *(4.74)*, 3.62 *(5.83)*, 4.42 *(7.11)*, 5.43 *(8.74)*, 5.98 *(9.62)*, 7.36 *(11.84)*, 8.97 *(14.44)*, 11.04 *(17.76)*, 13.79 *(22.20)*, 16.96 *(27.30)*, 20.69 *(33.30)*, 25.46 *(40.97)*

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)*
				5th(2A) Gear					
87.6 *(65.3)*	12295 *(54.7)*	2.67 *(4.30)*	2118	13.5	0.529 *(0.322)*	13.15 *(2.59)*	178 *(81)*	55 *(13)*	30.1 *(102.0)*
				6th(2B) Gear					
103.8 *(77.4)*	12005 *(53.4)*	3.24 *(5.22)*	2064	12.2	0.478 *(0.291)*	14.52 *(2.86)*	180 *(82)*	57 *(14)*	29.8 *(101.0)*
				7th(2C) Gear					
112.0 *(83.5)*	10705 *(47.6)*	3.92 *(6.32)*	1998	9.2	0.459 *(0.279)*	15.18 *(2.99)*	183 *(84)*	57 *(14)*	29.8 *(101.0)*
				8th(2D) Gear					
116.0 *(86.5)*	8755 *(38.9)*	4.97 *(7.99)*	2003	6.0	0.445 *(0.271)*	15.63 *(3.08)*	180 *(82)*	57 *(14)*	29.8 *(101.0)*
				9th(3A) Gear					
118.1 *(88.1)*	8070 *(35.9)*	5.49 *(8.83)*	2001	5.2	0.444 *(0.270)*	15.68 *(3.09)*	181 *(83)*	59 *(15)*	29.8 *(101.0)*
				10th(3B) Gear					
118.2 *(88.1)*	6430 *(28.6)*	6.89 *(11.08)*	2005	4.5	0.446 *(0.272)*	15.57 *(3.07)*	183 *(84)*	59 *(15)*	29.8 *(101.0)*
				11th(3C) Gear					
116.7 *(87.0)*	5150 *(22.9)*	8.50 *(13.68)*	2002	3.5	0.449 *(0.273)*	15.48 *(3.05)*	183 *(84)*	57 *(14)*	29.8 *(101.0)*
				12th(3D) Gear					
113.3 *(84.5)*	4100 *(18.3)*	10.36 *(16.67)*	1990	3.0	0.464 *(0.282)*	14.97 *(2.95)*	183 *(84)*	59 *(15)*	29.8 *(101.0)*

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 1885 engine rpm or 1000 rpm at 2030 engine rpm **Unladen tractor mass** 13920 lb *(6315 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 remote hydraulic flow claims of 29 GPM *(110 lpm)* with two outlets combined, 24.3 GPM *(92 lpm)* single outlet set nor 3 point lift capacity of 9800 lbs *(4445 kg)*. 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 Report No. **2753,** Nebraska Summary 899, January 22, 2014.

Roger M. Hoy
Director

M.F. Kocher
J.D. Luck
P.J. Jasa
Board of Tractor Test Engineers

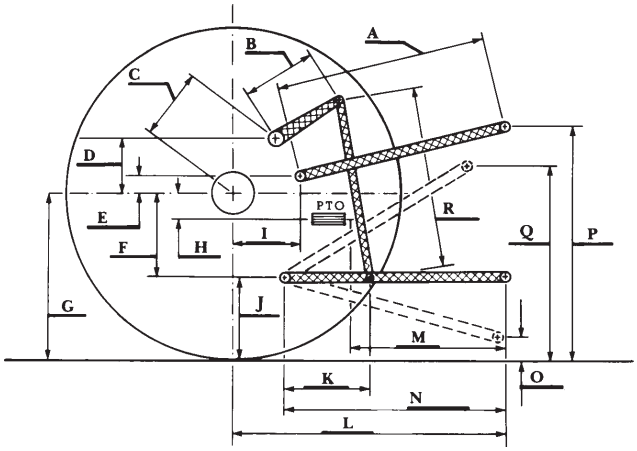
TRACTOR SOUND LEVEL WITH CAB	Front wheel drive Engaged dB(A)	Front wheel drive Disengaged dB(A)
At no load in 7th (2C) gear	69.0	69.0
Bystander		--

TIRES, BALLAST AND WEIGHT	Tested without ballast
Rear Tires - No., size, ply & psi*(kPa)*	Two 520/85R38;**;14*(100)*
Front Tires - No., size, ply & psi*(kPa)*	Two 420/85R28;**;15*(105)*
Height of Drawbar	19.7 in *(500 mm)*
Static Weight with operator - Rear	7780 lb *(3530 kg)*
- Front	6305 lb *(2860 kg)*
- Total	14085 lb *(6390 kg)*

HYDRAULIC PERFORMANCE

CATEGORY: II
Quick Attach: None
OECD Static test

Maximum force exerted through whole range:	9305 lbs *(41.4 kN)*
i) Sustained pressure of the open relief valve:	2780 psi *(191 bar)*
	two outlet sets combined
ii) Pump delivery rate at minimum pressure:	25.1 GPM *(94.9 l/min)*
iii) Pump delivery rate at maximum hydraulic power:	23.4 GPM *(88.9 l/min)*
Delivery pressure:	2170 psi *(149 bar)*
Power:	29.6 HP *(22.1 kW)*
	single outlet set
ii) Pump delivery rate at minimum pressure:	23.1 GPM *(87.6 l/min)*
iii) Pump delivery rate at maximum hydraulic power:	22.1 GPM *(83.6 l/min)*
Delivery pressure:	1835 psi *(126 bar)*
Power:	23.6 HP *(17.6 kW)*



HITCH DIMENSIONS AS TESTED—NO LOAD

	inch	*mm*
A	27.7	*704*
B	11.6	*295*
C	13.9	*354*
D	13.0	*330*
E	9.8	*250*
F	11.0	*280*
G	34.4	*875*
H	3.2	*82*
I	16.3	*413*
J	23.4	*595*
K	21.4	*543*
L	43.3	*1101*
M	24.6	*626*
N	37.0	*940*
O	8.3	*212*
P	47.4	*1205*
Q	36.6	*930*
R	30.7	*780*