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2008

Nebraska Tractor Test 1932: AGCO LT95A

Nebraska Tractor Test Lab

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NEBRASKA TRACTOR TEST 1932

AGCO LT95A DIESEL

16 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
MAXIMUM POWER AND FUEL CONSUMPTION					
Rated Engine Speed—(PTO speed—1100 rpm)					
99.23 (74.00)	2200	6.66 (25.22)	0.470 (0.286)	14.89 (2.93)	
Standard Power Take-off Speed - (1000 rpm)					
111.60 (83.22)	2001	6.76 (25.58)	0.424 (0.258)	16.52 (3.25)	
Maximum Power (1 hour)					
112.32 (83.75)	1950	6.66 (25.21)	0.415 (0.253)	16.86 (3.32)	

VARYING POWER AND FUEL CONSUMPTION

99.23 (74.00)	2200	6.66 (25.22)	0.470 (0.286)	14.89 (2.93)	Air temperature
84.81 (63.24)	2212	5.92 (22.42)	0.489 (0.298)	14.32 (2.82)	86°F (30°C)
63.93 (47.67)	2221	4.80 (18.15)	0.526 (0.320)	13.33 (2.63)	Relative humidity
42.81 (31.92)	2228	3.57 (13.51)	0.584 (0.355)	12.00 (2.36)	63%
20.49 (15.28)	2238	2.41 (9.13)	0.825 (0.502)	8.49 (1.67)	Barometer
2.14 (1.59)	2246	1.56 (5.89)	5.098 (3.101)	1.37 (0.27)	28.50"Hg (96.51 kPa)

Maximum torque - 369 lb.-ft. (500 Nm) at 1450 rpm
Maximum torque rise - 56.1%
Torque rise at 1799 rpm - 33%
Power increase at 1950 rpm - 13.2%

TRACTOR SOUND LEVEL WITH CAB	Front wheel drive	
	Engaged dB(A)	Disengaged dB(A)
At no load in 7th (2C) gear	71.4	71.1
Bystander in 16th (4D) gear	--	84.3

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 (85)
Two 14.9R28; **, 12 (85)
18.5 in (470 mm)
6535 lb (2964 kg)
4710 lb (2136 kg)
11245 lb (5100 kg)

Location of tests: Nebraska Tractor Test Laboratory, University of Nebraska, Lincoln
Nebraska 68583-0832

Dates of tests: June 11 - 24, 2008

Manufacturer: AGCO Corporation, Duluth Georgia 30096

FUEL, OIL and TIME: Fuel No. 2 Diesel
Specific gravity converted to 60°/60° F (15°/15°C) 0.8416
Fuel weight 7.007 lbs/gal (0.840 kg/l)
Oil SAE 15W40 API service classification CH-4
Transmission and hydraulic lubricant AGCO Power Fluid 821 XL fluid
Front axle lubricant AGCO 715 gear lube
Total time engine was operated 10.0 hours

ENGINE: Make Sisu Diesel **Type** four cylinder vertical with turbocharger and air to air intercooler
Serial No. T8179 **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 268 cu in (4397 ml)
Starting system 12 volt
Lubrication pressure
Air cleaner one paper element and one polyester felt element
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 and water separator
Muffler vertical
Cooling medium temperature control thermostat and variable speed fan

ENGINE OPERATING PARAMETERS: Fuel rate: 45.4 - 47.4 lb/h (20.6 - 21.5 kg/h)
High idle: 2225 - 2275 rpm
Turbo boost: nominal 20.3 - 23.2 psi (140-160 kPa) as measured 21.9 psi (151 kPa)

CHASSIS: Type front wheel assist **Serial No.** S157999
Tread width rear 59.8" (1518 mm) to 67.0" (1703 mm) front 55.7" (1415 mm) to 64.8" (1646 mm)
Wheelbase 108.4" (2754 mm)
Hydraulic control system direct engine drive
Transmission selective gear fixed ratio with full range operator controlled powershift
Nominal travel speeds mph (km/h) first 1.21 (1.95) second 1.49 (2.40) third 1.82 (2.93) fourth 2.23 (3.60) fifth 2.88 (4.63) sixth 3.54 (5.70) seventh 4.32 (6.95) eighth 5.31 (8.54) ninth 5.85 (9.41) tenth 7.19 (11.57) eleventh 8.77 (14.11) twelfth 10.78 (17.35), thirteenth 13.48 (21.69) fourteenth 16.58 (26.68) fifteenth 20.22 (32.54) sixteenth 24.87 (40.03) reverse 1.21 (1.95), 1.49 (2.40), 1.82 (2.93), 2.23 (3.60), 2.88 (4.63), 3.54 (5.70), 4.32 (6.95), 5.31 (8.54), 5.85 (9.41), 7.19 (11.57), 8.77 (14.10), 10.78 (17.35), 13.48 (21.69), 16.58 (26.68), 20.22 (32.54), 24.87 (40.03)
Clutch multiple wet disc electro-hydraulically operated by foot pedal
Brakes single wet disc hydraulically operated by two foot pedals which can be locked together
Steering hydrostatic
Power take-off 540 rpm at 1980 engine rpm or 1000 rpm at 2000 engine rpm
Unladen tractor mass 11070 lb (5021 kg)

THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY: II

Quick Attach: None

Maximum force exerted through whole range: 7817 lbs (34.8 kN) (66 mm lift cylinders)

9189 lbs (40.9 kN) (75 mm lift cylinders)

Open center system

100 l/min pump

57 l/min pump

Closed center system

110 l/min pump

i) Sustained pressure of the open relief valve: 3136 psi (216 bar) 2879 psi (190 bar) 2848 psi (196 bar)

ii) Pump delivery rate at minimum pressure

and rated engine speed:

24.1 GPM (91.2 l/min) 14.5 GPM (54.9 l/min) 29.8 GPM (112.7 l/min)

iii) Pump delivery rate at maximum

hydraulic power:

22.4 GPM (84.8 l/min) 13.5 GPM (51.1 l/min) 24.2 GPM (91.6 l/min)

Delivery pressure:

2338 psi (161 bar) 2505 psi (173 bar) 2708 psi (187 bar)

Power:

30.6 HP (22.8 kW) 19.7 Hp (14.7 kW) 38.2 hp (28.5 kW)

THREE POINT HITCH PERFORMANCE

Observed Maximum Pressure psi. (bar) 2770 (191)

Location: lift cylinder

Hydraulic oil temperature: °F (°C) 152 (67)

Location: hydraulic valve

Category: II

Quick attach: none

66 mm lift cylinders

SAE Static Test—System pressure 2490 psi (172 Bar)

Hitch point distance to ground level in. (mm) 9.9 (251) 15.0 (381) 22.0 (559) 29.0 (737) 36.0 (914)

Lift force on frame lb 15561 12897 11745 10314 9126

" " " " " " (kN) (69.2) (57.4) (51.0) (45.9) (40.6)

75 mm lift cylinders

SAE Static Test—System pressure 2490 psi (172 Bar)

Hitch point distance to ground level in. (mm) 10.2 (259) 15.0 (381) 22.0 (559) 29.0 (737) 36.0 (914)

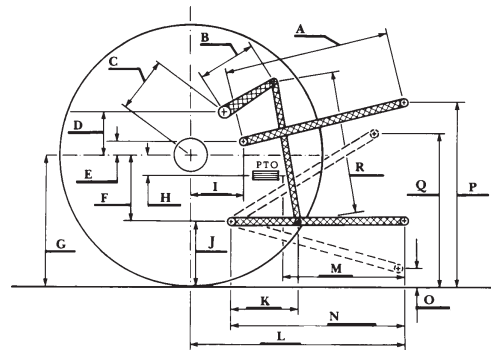
Lift force on frame lb 18747 15849 14310 12789 11421

" " " " " " (kN) (83.4) (70.5) (63.7) (56.9) (50.8)

SAE test

OECD test

	inch	mm	inch	mm
A	24.8	629	24.8	629
B	11.6	295	11.6	295
C	13.9	353	13.9	353
D	13.0	330	13.0	330
E	7.9	200	7.9	200
F	10.2	260	10.2	260
G	30.3	770	30.3	770
H	1.4	35	1.4	35
I	16.2	413	16.2	413
J	20.1	510	20.1	510
K	24.2	615	24.2	615
L	41.2	1046	41.2	1046
M	23.5	596	23.5	596
N	37.2	946	37.2	946
O	8.0	203	8.0	203
P	40.2	1020	44.1	1120
Q	33.5	850	33.5	850
R	29.0	737	29.0	737



HITCH DIMENSIONS AS TESTED - NO LOAD



AGCO LT95A Diesel

Institute of Agriculture and Natural Resources
University of Nebraska-Lincoln

REPAIRS AND ADJUSTMENTS: No repairs or adjustments

REMARKS: All test results were determined from observed data obtained in accordance with official OECD, SAE and Nebraska test procedures. This tractor did not meet the manufacturer's claims of 26 GPM (100 lpm) (standard pump) nor 15 GPM (57 lpm) (optional pump) hydraulic flow at the remote outlets. For the maximum power tests, the fuel temperature at the injection pump return was maintained at 157°F (69°C).

We, the undersigned, certify that this is a true and correct report of official Tractor Test No. **1932**, August 18, 2008.

Roger M. Hoy
Director

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