NEBRASKA TRACTOR TEST 1779
AGCO ALLIS 8775 DIESEL
32 SPEED

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

Dates of Test: June 2-6, 2000

Manufacturer: AGCO Corporation, Duluth Georgia 30096

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)			
96.60 *(72.03)*	2200	6.34 *(24.00)*	0.464 *(0.282)*	15.23 *(3.00)*	
		Maximum Power (2 hours)			
99.62 *(74.29)*	2100	6.50 *(24.59)*	0.461 *(0.280)*	15.34 *(3.02)*	
		Standard Power Take-off Speed(1000 rpm)			
98.14 *(73.18)*	2001	6.34 *(24.00)*	0.457 *(0.278)*	15.48 *(3.05)*	
VARYING POWER AND FUEL CONSUMPTION					
96.60 *(72.03)*	2200	6.34 *(24.00)*	0.464 *(0.282)*	15.23 *(3.00)*	Air temperature
86.46 *(64.48)*	2315	5.90 *(22.34)*	0.482 *(0.293)*	14.65 *(2.89)*	76°F *(24°C)*
65.83 *(49.09)*	2344	4.75 *(17.98)*	0.510 *(0.310)*	13.85 *(2.73)*	Relative humidity
43.72 *(32.60)*	2365	3.69 *(13.98)*	0.597 *(0.363)*	11.84 *(2.33)*	44%
22.11 *(16.49)*	2382	2.80 *(10.61)*	0.896 *(0.545)*	7.89 *(1.55)*	Barometer
1.14 *(0.85)*	2397	1.91 *(7.23)*	11.837 *(7.200)*	0.60 *(0.12)*	29.28"Hg *(99.15kPa)*

Maximum Torque 298 lb.-ft. *(404 Nm)* at 1249 rpm
Maximum Torque Rise - 29.2%
Torque rise at 1801 rpm - 20%

TRACTOR SOUND LEVEL WITH CAB	Front Wheel Drive Disengaged dB(A)	Front Wheel Drive Engaged dB(A)
At no load in 14th(3LD) gear	76.1	76.2
Bystander	--	--

TIRES AND WEIGHT		Tested Without Ballast
Rear Tires No., size, ply & psi *(kPa)*		Two 18.4R38; ***;16 *(110)*
Front Tires No., size, ply & psi *(kPa)*		Two 13.6R28; ***;24 *(165)*
Height of Drawbar		18.0 in *(405 mm)*
Static Weight with operator	Rear	6735 lb *(3055 kg)*
	Front	4410 lb *(2000 kg)*
	Total	11145 lb *(5055 kg)*

FUEL, OIL and TIME: Fuel No. 2 Diesel **Specific gravity converted to 60°/60° F *(15°/15°C)*** 0.8487 **Fuel weight** 7.067 lbs/gal *(0.847 kg/l)* **Oil SAE** 15W40 **API service classification** CE/CF-4 **Transmission and hydraulic lubricant** AGCO Power Fluid 821 XL fluid **Front axle lubricant** AGCO gear lube 715 **Total time engine was operated** 9.0 hours

ENGINE: Make SiSu Diesel **Type** six cylinder vertical **Serial No.** J04752 **Crankshaft** lengthwise **Rated engine speed** 2200 **Bore and stroke** 4.252" x 4.724" *(108.0 mm x 120.0 mm)* **Compression ratio** 16.5 to 1 **Displacement** 402 cu in *(6600 ml)* **Starting system** 12 volt **Lubrication** pressure **Air cleaner** one paper element and one polyester felt element and aspirator **Oil filter** one full flow cartridge **Oil cooler** radiator for hydraulic and transmission oil **Fuel filter** one paper element and water separator **Muffler** underhood **Exhaust** vertical **Cooling medium temperature control** one thermostat and variable speed fan

ENGINE OPERATING PARAMETERS: Fuel rate: 42.9 - 45.7 lb/h *(19.5 - 20.8 kg/h)* **High idle:** 2300 - 2400 rpm

CHASSIS: Type front wheel assist **Serial No.** H110022 **Tread width** rear 62.3" *(1583 mm)* to 88.3" *(2244 mm)* front 61.7" *(1567 mm)* to 80.8" *(2053 mm)* **Wheelbase** 112.6" *(2860 mm)* **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio with partial(4) range operator controlled powershifting **Nominal travel speeds mph *(km/h)*** first 1.30 *(2.10)* second 1.52 *(2.45)* third 1.80 *(2.90)* fourth 2.11 *(3.39)* fifth 2.21 *(3.56)* sixth 2.59 *(4.17)* seventh 2.91 *(4.69)* eighth 3.06 *(4.92)* ninth 3.41 *(5.49)* tenth 3.58 *(5.76)* eleventh 3.94 *(6.34)* twelfth 4.03 *(6.48)* thirteenth 4.61*(7.42)* fourteenth 4.71 *(7.58)* fifteenth 4.90 *(7.88)* sixteenth 5.44 *(8.76)* seventeenth 5.71 *(9.19)* eighteenth 6.39 *(10.28)* nineteenth 6.74 *(10.85)* twentieth 7.89 *(12.70)* twenty-first 8.30 *(13.35)* twenty-second 9.71*(15.62)* twenty-third 10.92 *(17.57)* twenty-fourth 11.46 *(18.44)* twenty-fifth 12.78 *(20.56)* twenty- sixth 13.41*(21.58)* twenty-seventh 14.77 *(23.77)* twenty-eighth 15.08 *(24.27)* twenty-ninth 17.29 *(27.82)* thirtieth 17.65 *(28.41)* thirty-first 20.41 *(32.84)* thirty-second 23.89 *(38.44)*

THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY: II		
Quick Attach: None		
Maximum Force Exerted Through Whole Range:	7362 lbs	*(32.7kN)*
i) Opening pressure of relief valve:	NA	
Sustained pressure of the open relief valve:	2860 psi	*(197 bar)*
ii) Pump delivery rate at minimum pressure and rated engine speed:	29.8 GPM	*(112.8 l/min)*
iii) Pump delivery rate at maximum hydraulic power:	25.7 GPM	*(97.3 l/min)*
Delivery pressure:	2680 psi	*(185 bar)*
Power:	40.2 HP	*(30.0 kW)*

THREE POINT HITCH PERFORMANCE

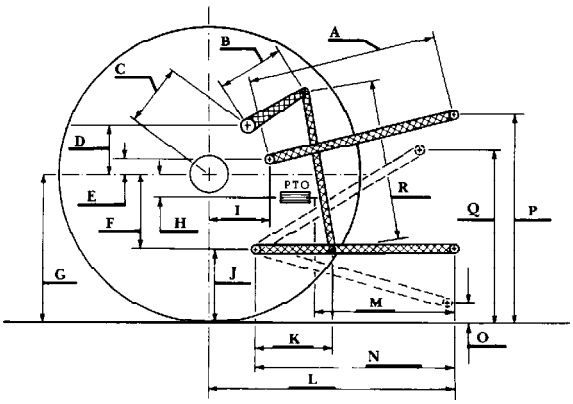
Observed Maximum Pressure psi.*(bar)*	2840*(196)*
Location:	lift cylinder
Hydraulic oil temperature: °F*(°C)*	149*(65)*
Location:	hydraulic sump
Category:	II
Quick attach:	none

SAE Static Test System pressure 2555 psi *(176 Bar)*

Hitch point distance to ground level in.*(mm)*	7.9*(201)*	14.9*(378)*	21.9*(556)*	28.9*(734)*	35.9*(912)*
Lift force on frame lb	10211	9940	9603	9171	8145
" " " " " " *(kN)*	*(45.4)*	*(44.2)*	*(42.7)*	*(40.8)*	*(36.2)*

HITCH DIMENSIONS AS TESTED - NO LOAD

	inch	*mm*
A	26.9	*683*
B	11.6	*295*
C	13.9	*354*
D	13.0	*330*
E	7.9	*200*
F	10.2	*260*
G	32.3	*820*
H	1.7	*43*
I	15.0	*382*
J	22.1	*560*
K	21.7	*550*
L	40.9	*1040*
M	24.2	*615*
N	37.0	*940*
O	7.9	*200*
P	46.1	*1170*
Q	36.1	*918*
R	28.3	*719*



reverse1.22*(1.97)*,1.44*(2.31)*,1.70*(2.73)*, 1.98*(3.19)*, 2.08 *(3.35)*, 2.44 *(3.92)*, 2.74 *(4.41)*, 2.88 *(4.63)*, 3.21 *(5.16)*, 3.37 *(5.42)*, 3.71 *(5.97)*, 3.78 *(6.09)*, 4.34 *(6.99)*, 4.43 *(7.13)*, 4.59 *(7.39)*, 5.13 *(8.25)*, 5.38 *(8.65)*, 6.00 *(9.65)*, 6.34 *(10.21)*, 7.43 *(11.96)*, 7.80*(12.56)*, 9.13 *(14.70)*, 10.28 *(16.54)*, 10.78 *(17.35)*, 12.02 *(19.35)*, 12.62 *(20.31)*, 13.90 *(22.37)*, 14.19 *(22.84)*, 16.27 *(26.19)*, 16.62 *(26.74)*, 19.21*(30.91)*, 22.48 *(36.18)* **Clutch** multiple wet disc 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** 10970 lb *(4975 kg)*

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. For the maximum power tests, the fuel temperature at the injection pump was maintained at 144°F *(62°C)*.

We, the undersigned, certify that this is a true and correct report of official Tractor Test No. **1779**, June 28, 2000.

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AGCO Allis 8775 Diesel

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