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Nebraska Tractor Tests

Tractor Test and Power Museum, The Lester F.  
Larsen

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January 2005

## Test 1868: John Deere 5425 Diesel 12-Speed

Tractor Museum

University of Nebraska-Lincoln, [TractorMuseumArchives@unl.edu](mailto:TractorMuseumArchives@unl.edu)

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**THREE POINT HITCH PERFORMANCE (OECD Static Test)**

CATEGORY: II

Quick Attach: None

Maximum force exerted through whole range:	3213 lbs	(14.3 kN)
i) Opening pressure of relief valve:	NA	
Sustained pressure of the open relief valve:	2884 psi	(199 bar)
ii) Pump delivery rate at minimum pressure and rated engine speed:	18.7 GPM	(70.8 l/min)
iii) Pump delivery rate at maximum hydraulic power:	18.0 GPM	(68.1 l/min)
Delivery pressure:	2516 psi	(174 bar)
Power:	26.4 HP	(19.7 kW)

**THREE POINT HITCH PERFORMANCE**

Observed maximum pressure psi.(bar)	2830(195)
Location:	remote outlet
Hydraulic oil temperature: °F (°C)	148(64)
Location:	pump inlet
Category:	II
Quick attach:	none

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

Hitch point distance to ground level in. (mm)	8.0(203)	15.0(381)	22.0(559)	29.0(737)	36.0(914)
Lift force on frame lb	4694	4829	4685	4266	3596
" " " " " (kN)	(20.9)	(21.5)	(20.8)	(19.0)	(16.0)

**REPAIRS AND ADJUSTMENTS:** No repairs or adjustments.

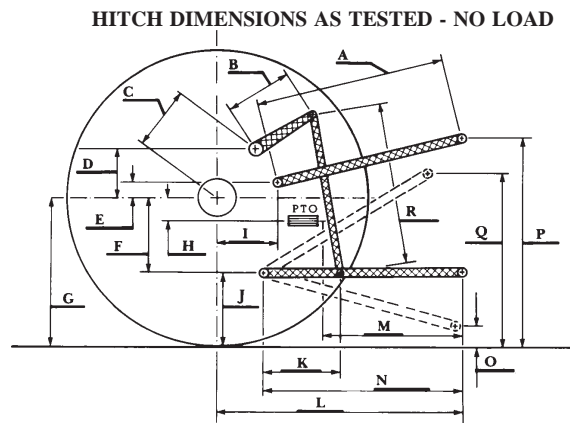
**REMARKS:** All test results were determined from observed data obtained in accordance with official OECD, SAE and Nebraska test procedures. For the maximum power tests, the fuel temperature at the injection pump inlet was maintained at 138°F (59°C).

We, the undersigned, certify that this is a true and correct report of official Tractor Test No. 1868, March 17, 2006

Leonard L. Bashford  
Director

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

	SAE Test		OECD Test	
	inch	mm	inch	mm
A	23.2	590	24.1	613
B	11.0	280	11.0	280
C	14.0	356	14.0	356
D	12.2	311	12.2	311
E	11.2	284	11.2	284
F	6.5	166	6.5	166
G	27.4	695	27.4	695
H	0.2	4	0.2	4
I	15.1	384	15.1	384
J	20.9	530	20.9	530
K	16.7	424	16.7	424
L	39.2	996	39.2	996
M	22.4	570	22.4	570
N	32.9	836	32.9	836
O	8.0	203	8.0	203
P	40.9	1040	44.9	1140
Q	34.0	864	34.0	864
R	20.8	527	20.8	527



**JOHN DEERE 5425 DIESEL**