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Test 1651: Case International 9250 Diesel and Steiger 9250 Diesel 12-Speeds

Nebraska Tractor Test Lab

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NEBRASKA OECD TRACTOR TEST 1651—SUMMARY 096

CASE INTERNATIONAL 9250 DIESEL

ALSO STEIGER 9250 DIESEL

12 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—1000 rpm)					
266.01 (198.37)	2100	14.63 (55.38)	0.384 (0.234)	18.18 (3.58)	
Maximum Power (2 Hours)					
271.01 (202.09)	1948	14.31 (54.16)	0.369 (0.224)	18.94 (3.73)	

VARYING POWER AND FUEL CONSUMPTION

266.01 (198.37)	2100	14.63 (55.38)	0.384 (0.234)	18.18 (3.58)	Air temperature 74°F (24°C)
237.66 (177.22)	2202	13.82 (52.31)	0.406 (0.247)	17.20 (3.39)	
180.05 (134.26)	2230	11.42 (43.22)	0.443 (0.270)	15.77 (3.11)	Relative humidity 26%
121.01 (90.24)	2251	9.18 (34.77)	0.531 (0.323)	13.18 (2.60)	
61.22 (45.65)	2278	6.52 (24.69)	0.745 (0.453)	9.38 (1.85)	Barometer 29.35" Hg (99.40 kPa)
1.05 (0.78)	2320	4.08 (15.43)	27.087 (16.477)	0.26 (0.05)	

Maximum Torque 977 lb.-ft (1324 Nm) at 1290 rpm
Maximum Torque Rise 46.8%

DRAWBAR PERFORMANCE

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)	Hp.hr/gal (kW.h/l)	Temp.°F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
Maximum Power—5th Gear									
237.29 (176.95)	17800 (79.18)	5.00 (8.05)	2102	2.54	0.428 (0.260)	16.33 (3.22)	171 (77)	51 (11)	29.09 (98.51)
75% of Pull at Maximum Power—5th Gear									
189.40 (141.24)	13388 (59.55)	5.31 (8.54)	2220	1.99	0.473 (0.288)	14.77 (2.91)	173 (78)	63 (17)	29.09 (98.51)
50% of Pull at Maximum Power—5th Gear									
128.62 (95.91)	8917 (39.66)	5.41 (8.70)	2249	1.44	0.564 (0.343)	12.39 (2.44)	171 (77)	63 (17)	29.09 (98.51)
75% of Pull at Reduced Engine Speed—6th Gear									
188.81 (140.79)	13376 (59.50)	5.29 (8.52)	1799	1.99	0.419 (0.255)	16.69 (3.29)	173 (78)	63 (17)	29.09 (98.51)
50% of Pull at Reduced Engine Speed—6th Gear									
128.45 (95.78)	8909 (39.63)	5.41 (8.70)	1827	1.35	0.453 (0.276)	15.42 (3.04)	171 (77)	63 (17)	29.09 (98.51)

Location of Test: Tractor Testing Laboratory,
University of Nebraska, Lincoln, Nebraska 68583-
0832, U.S.A.

Dates of Test: September 19-25, 1991

Manufacturer: J.I. CASE CO. 3401 First Avenue
North, Fargo ND 58102

FUEL OIL and TIME: Fuel No. 2 Diesel Cetane
No. 53.9 Specific gravity converted to 60°/60°F
(15°/15°C) 0.8395 Fuel weight 6.990 lbs/gal (0.838
kg/l) Oil SAE 15W-40 API service classification
CE, CD To motor 8.967 gal (33.943 l) Drained
from motor 8.716 gal (32.992 l) Transmission and
final drive lubricant Case IH Hytran Plus fluid
Hydraulic lubricant Case IH Hytran Plus fluid
Total time engine was operated 21.0 hours.

ENGINE: Make Cummins Diesel Type six cyl-
inder vertical with turbocharger and intercooler
Serial No. 34648464 Crankshaft lengthwise Rated
rpm 2100 Bore and stroke (as specified) 4.921" ×
5.354" (125.0 mm × 136.0 mm) Compression ratio
16.0 to 1 Displacement 611 cu in (10000 ml) Start-
ing system 12 volt Lubrication pressure Air cleaner
two paper elements and aspirator 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 vertical Cooling medium temperature
control thermostat.

ENGINE OPERATING PARAMETERS: Fuel
rate 99.0-104.0 lb/hr (44.9-47.2 kg/hr) High idle
2250-2350 rpm Turbo boost nominal 21-26 psi
(149-176 kPa) as measured 19.5 psi (134 kPa).

CHASSIS: Type four wheel drive with duals,
articulated Serial No. -JCB0027278- Tread width
rear 60.0" (1524 mm) to 130.0" (3302 mm) front
60.0" (1524 mm) to 130.0" (3302 mm) Wheel base
130.0" (3302 mm) Hydraulic control system direct
engine drive Transmission selective gear fixed ra-
tio with full range operator controlled powershift
Nominal travel speeds mph (km/h) first 2.32 (3.74)
second 2.81 (4.52) third 3.45 (5.56) fourth 4.20
(6.76) fifth 5.08 (8.17) sixth 6.25 (10.06) seventh
7.38 (11.88) eighth 8.93 (14.37) ninth 10.99 (17.69)
tenth 13.35 (21.48) eleventh 16.16 (26.00) twelfth
19.88 (32.00) reverse 3.04 (4.89), 5.49 (8.84), 9.65
(15.53) Clutch multiple wet disc hydraulically power
actuated by foot pedal Brakes caliper disc hy-
draulically operated by foot pedal Steering hy-
drostatic Power take-off 1000 rpm at 2098 engine
rpm Unladen tractor mass 30060 lb (13635 kg).

REPAIRS AND ADJUSTMENTS: No repairs
or adjustments.

DRAWBAR PERFORMANCE **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)
1st Gear									
193.60 (144.37)	32363 (143.96)	2.24 (3.61)	2209	8.87	0.488 (0.297)	14.32 (2.82)	169 (76)	52 (11)	29.12 (98.61)
2nd Gear									
221.35 (165.06)	31046 (138.10)	2.67 (4.30)	2136	7.18	0.452 (0.275)	15.48 (3.05)	171 (77)	52 (11)	29.13 (98.65)
3rd Gear									
233.08 (173.81)	27833 (123.81)	3.14 (5.05)	1993	5.09	0.433 (0.264)	16.13 (3.18)	172 (78)	52 (11)	29.14 (98.68)
4th Gear									
234.81 (175.10)	23191 (103.16)	3.80 (6.11)	1953	3.52	0.426 (0.259)	16.41 (3.23)	171 (77)	51 (11)	29.11 (98.58)
5th Gear									
240.68 (179.47)	19519 (86.82)	4.62 (7.44)	1950	2.63	0.414 (0.252)	16.89 (3.33)	172 (78)	51 (11)	29.07 (98.44)
6th Gear									
239.41 (178.53)	15703 (69.85)	5.72 (9.20)	1950	2.36	0.416 (0.253)	16.80 (3.31)	172 (78)	53 (12)	29.15 (98.71)
7th Gear									
239.53 (178.62)	13239 (58.89)	6.79 (10.92)	1954	2.17	0.416 (0.253)	16.81 (3.31)	173 (78)	53 (12)	29.15 (98.71)
8th Gear									
237.20 (176.88)	10809 (48.08)	8.23 (13.24)	1952	1.62	0.421 (0.256)	16.59 (3.27)	172 (78)	53 (12)	29.15 (98.71)

TRACTOR SOUND LEVEL WITH CAB

	dB(A)
Gear closest to 4.7 mph (7.5 km/h) 5th gear	78.0
Maximum Sound Level—1st gear	79.0
Transport speed—no load 12th gear	78.5
Bystander	—

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

Four 20.8R42; **, inner 14 (95) outer 12 (85)
Four 20.8R42; **, inner 14 (95) outer 12 (85)
16.5 in (420 mm)
13695 lb (6212 kg)
16530 lb (7498 kg)
30225 lb (13710 kg)

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 131° F (55° C). The drawbar pull in 1st gear was limited to avoid tractor bouncing. The performance figures on this summary were taken from a test conducted under the OECD Code II restricted standard test code procedure.

We, the undersigned, certify that this is a true and correct report of official Tractor Test No. **1651**, Summary 096, October 17, 1991.

LOUIS I. LEVITICUS

Engineer-in-Charge

K. VON BARGEN

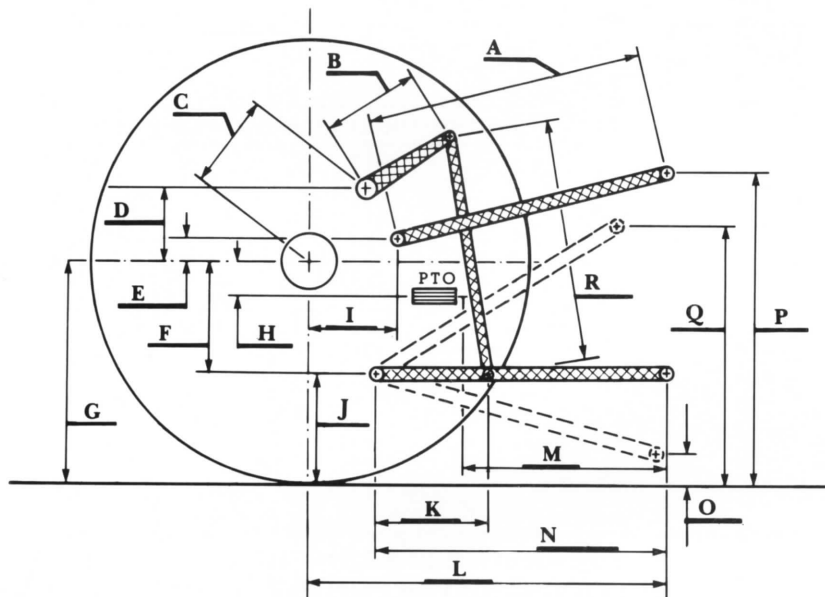
R. D. GRISSO

L. L. BASHFORD

Board of Tractor Test Engineers

THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY:	III
Quick Attach:	yes
Maximum Force Exerted Through Whole Range:	12942 lbs (57.6 kN)
i) Opening pressure of relief valve:	NA
Sustained pressure at compensator cutoff:	2500 psi (172 bar)
ii) Pump delivery rate at minimum pressure:	27.8 GPM (105.2 l/min)
iii) Pump delivery rate at maximum hydraulic power:	24.1 GPM (91.2 l/min)
Delivery pressure:	2300 psi (159 bar)
Power:	32.3 HP (24.1 kW)



HITCH DIMENSIONS AS TESTED—NO LOAD

	inch	mm
A	29.1	740
B	21.0	533
C	25.6	651
D	25.1	637
E	11.4	289
F	9.9	251
G	36.1	917
H	2.2	56
I	22.8	579
J	26.2	666
K	23.0	584
L	52.2	1326
L'	57.2	1453
M	25.0	636
N	42.0	1067
O	9.0	229
P	48.2	1225
Q	41.5	1053
R	37.8	959
L' to end of Quick Attach		



Case International 9250 Diesel