NEBRASKA TRACTOR TEST 1837
CASE IH DX 55 DIESEL
12 SPEED

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

Dates of Test: April 29-30, 2004

Manufacturer: CNH America LLC, 700 State St., Racine, Wi. 53404

FUEL, OIL and TIME: Fuel
No. 2 Diesel
Specific gravity converted to 60°/60° F (15°/15°C) 0.8432
Fuel weight 7.021 lbs/gal (0.841 kg/l)

Oil
SAE 15W40
API service classification CF-4/SG
Transmission and hydraulic lubricant
Case IH Hytran ultra fluid
Front axle lubricant
Case IH Hytran ultra fluid

Total time engine was operated 11.0 hours

ENGINE: Make ISM Diesel Type four cylinder vertical with turbocharger Serial No. 27999
Crankshaft lengthwise Rated engine speed 2700 rpm
Bore and stroke 3.307” x 3.937” (84.0 mm x 100.0 mm) Compression ratio 22.4 to 1
Displacement 135 cu in (2216 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 one paper element
Muffler underhood

ENGINE OPERATING PARAMETERS: Fuel rate: 25.5 - 28.0 lb/h (11.6 - 12.7 kg/h)
High idle: 2850 - 2950 rpm
Turbo boost: nominal 8.0 - 10.1 psi (55 - 70 kPa)

CHASSIS: Type front wheel assist
Bore and stroke 3.307” x 3.937” (84.0 mm x 100.0 mm) Compression ratio 22.4 to 1
Displacement 135 cu in (2216 ml)

TRACTOR SOUND LEVEL WITHOUT CAB

Front Wheel Drive Disengaged Engaged

At no load in 7th (M3) gear
89.0 89.0

Bystander -- --

TIRES AND WEIGHT

Rear Tires–No., size, ply & psi (kPa)
Two 18.4-24; 8:12 (85)
Front Tires–No., size, ply & psi (kPa)
Two 12-16.5; 8:12 (85)
Height of Drawbar
17.0 in (432 mm)
Static Weight with operator – Rear
1825 lb (828 kg)
– Total
4860 lb (2205 kg)

TESTED WITHOUT BALLAST

Two 18.4-24; 8:12 (85)
Two 12-16.5; 8:12 (85)
17.0 in (432 mm)
3035 lb (1377 kg)
1825 lb (828 kg)
4860 lb (2205 kg)
THREE POINT HITCH PERFORMANCE (OECD Static Test)

**CATEGORY:** I, II
Quick Attach: None

- **Maximum Force Exerted Through Whole Range:**
  - Category I: 2430 lbs (10.8 kN)
  - Category II: 2776 lbs (12.3 kN)

- **Opening pressure of relief valve:** NA
- **Sustained pressure of the open relief valve:** 2550 psi (176 bar)
- **Pump delivery rate at minimum pressure and rated engine speed:** 10.9 GPM (41.3 l/min)
- **Pump delivery rate at maximum hydraulic power:** 10.7 GPM (40.5 l/min)

**Delivery pressure:** 1965 psi (135 bar)
**Power:** 12.3 HP (9.1 kW)

**THREE POINT HITCH PERFORMANCE**

- **Observed Maximum Pressure psi. (bar):**
  - Lift cylinder: 2565 (177)
- **Hydraulic oil temperature:**
  - Lift cylinder: 178°F (81°C)
- **Hitch point distance to ground level in. (mm):**
  - Category I: 8.2 (208) 11.8 (300) 13.5 (344) 13.5 (342) 10.3 (262) 5.2 (132) 26.0 (660) 0.5 (13) 12.2 (309) 20.8 (528) 14.2 (362) 34.6 (879) 22.9 (582) 31.5 (800) 6.6 (168) 38.9 (988) 34.1 (865) 21.4 (543)
  - Category II: 8.0 (203) 14.0 (356) 20.1 (511) 26.0 (660) 32.1 (815) 38.2 (970) 44.3 (1125) 50.4 (1280) 56.5 (1435) 62.5 (1585) 68.5 (1735) 74.5 (1910) 80.5 (2035) 86.5 (2195) 92.5 (2370)