January 1976

Test 1223: Ford 4600 Diesel 8-Speed

Tractor Museum

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NEBRASKA TRACTOR TEST 1223 — FORD 4600 DIESEL, 8-SPEED

### POWER TAKE-OFF PERFORMANCE

<table>
<thead>
<tr>
<th>Power</th>
<th>Breakout pull (lbs)</th>
<th>Speed (mph)</th>
<th>Torque (lb-ft)</th>
<th>Horsepower (Hp)</th>
<th>Field Power (Hp)</th>
<th>Tractor Power (Hp)</th>
<th>Tractor Power (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>52.44</td>
<td>2199</td>
<td>4.08</td>
<td>15.15</td>
<td>55</td>
<td>44</td>
<td>33</td>
<td>44</td>
</tr>
</tbody>
</table>

### MAXIMUM POWER AND FUEL CONSUMPTION

- **Rated Engine Speed—Two Hours (TTO Speed—660 rpm)**
- **One Hour**
  - Speed: 2200
  - Horsepower: 55
  - Fuel Consumption: 8.9 gal/hr
  - Oil Consumption: 0.008 gal/hr
  - Coating Medium: medium
  - Barometric Height: 28.8 inHG

- **Standard Power Take-off Speed (540 rpm)—One Hour**
  - Speed: 1744
  - Horsepower: 44.38
  - Fuel Consumption: 6.63 gal/hr
  - Oil Consumption: 0.008 gal/hr
  - Coating Medium: medium
  - Barometric Height: 28.8 inHG

### VARYING POWER AND FUEL CONSUMPTION—Two Hours

- **Rated Engine Speed**
  - RPM: 1744
  - Horsepower: 44.38
  - Fuel Consumption: 6.63 gal/hr
  - Oil Consumption: 0.008 gal/hr
  - Coating Medium: medium
  - Barometric Height: 28.8 inHG

- **Power Drawbar Speed**
  - RPM: 1720
  - Horsepower: 44.38
  - Fuel Consumption: 6.63 gal/hr
  - Oil Consumption: 0.008 gal/hr
  - Coating Medium: medium
  - Barometric Height: 28.8 inHG

### ENGINE
- Make: FORD Diesel Type 3 cylinder vertical
- Gearbox: 8-speed
- Bore and stroke: 4.4 x 4.4 (111.76 x 111.76 mm)
- Compression ratio: 16.3 to 1
- Lubrication system: full flow filter
- Cooling system: water-cooled
- Air cleaner: paper element
- Emission: meets Federal and California standards

### CHASSIS
- Type: Series 8200D
- Wheelbase: 92" (2340 mm)
- Turning radius: 11.5° / 11.5°
- Turning diameter: 16.0 ft
- Tread: 56" / 56" (1420 mm)
- Wheel base: 2030 mm
- Turning circle: 16.0 ft
- Turning diameter: 16.0 ft
- Steering: power
- Brakes: single dry disc

### FUEL, OIL AND TIME
- Fuel type: No.2 Diesel
- Oil type: SAE 30
- Time of operation: 55 hours

### MANUFACTURER
- FORD MOTOR COMPANY, Tractor Operations, 2500 East Maple Rd., Troy, Michigan 48084

### PERFORMANCE DATA
- Maximum power: 44.38 HP
- Fuel consumption: 6.63 gal/hr
- Oil consumption: 0.008 gal/hr
- Barometric height: 28.8 inHG

### DATES OF TEST
- September 20 to October 4, 1976

### MANUFACTURER'S SELLING PRICE
- Model: 4600
- Year: 1976
- Price: $11,910

### REPAIRS AND ADJUSTMENTS
- Fuel filter was replaced after following TTO test. All injectors were removed, checked and reinstalled during preliminary drawbar tests.
TRACTOR SOUND LEVEL WITH CAB

Maximum Available Power—Two Hours
75% of Pull at Maximum Power—Ten Hours
50% of Pull at Maximum Power—Two Hours
50% of Pull at Reduced Engine Speed—Two Hours
Bystander in 8th gear

<table>
<thead>
<tr>
<th></th>
<th>dB(A)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>84.0</td>
</tr>
<tr>
<td></td>
<td>85.0</td>
</tr>
<tr>
<td></td>
<td>84.0</td>
</tr>
<tr>
<td></td>
<td>85.5</td>
</tr>
<tr>
<td></td>
<td>90.5</td>
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</table>

REMARKS: All test results were determined from observed data obtained in accordance with SAE and ASAE test code or official Nebraska test procedure. Temperature at injection pump return was 165°F (73.9°C). Six gears were chosen between stability limit and 15 mph (24.1 km/h). Coolant overflowed from radiator at conclusion of 10 hour test.

We, the undersigned, certify that this is a true and correct report of official Tractor Test 1223.

LOUIS I. LEVITICUS
Engineer-in-Charge

G. W. STEINBRUEGGE, Chairman
W. E. SPLINTER
K. VON BARGEN
Board of Tractor Test Engineers

The Agricultural Experiment Station
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University of Nebraska—Lincoln
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