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Test 684: Fordson Dexta 957 E

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NEBRASKA TRACTOR TEST NO 684 FORDSON DEXTA DIESEL

University of Nebraska Agricultural Experiment Station
W. V. Lambert, Director, Lincoln, Nebraska

POWER TAKE-OFF PERFORMANCE

Hp	Crank shaft speed rpm	Fuel Consumption		Hp-hr per gal	Temperature Degrees F Cooling medium	Air		Barometer inches of Mercury
		Gal per hr	Lb per hp-hr			wet bulb	dry bulb	

MAXIMUM POWER AND FUEL CONSUMPTION

Rated Engine Speed - Two Hours								
31.41	2000	2.030	0.453	15.47	178	55	75	28.820
Standard Power Take-off Speed (540 rpm) - One Hour								
26.07	1551	1.605	0.432	16.24	167	56	75	28.820

VARYING POWER AND FUEL CONSUMPTION - TWO HOURS

30.23	2264	2.067	0.479	14.63	165	58	76	-- --	
1.65	2267	0.775	3.291	2.13	114	56	72	-- --	
15.17	2271	1.301	0.601	11.66	126	57	74	-- --	
31.69	1999	2.076	0.459	15.26	156	58	77	-- --	
7.56	2263	0.972	0.901	7.78	118	57	74	-- --	
22.87	2281	1.644	0.504	13.91	139	58	78	-- --	
Av	18.20	2224	1.472	0.567	12.36	136	57	75	28.790

DRAWBAR PERFORMANCE

Hp	Draw- bar pull lbs	Speed miles per hr	Crank shaft speed rpm	% Slip of drive wheels	Fuel Consumption		Hp-hr per gal	Temp Degrees F			Barometer inches of Mercury
					Gal per hr	Lb per hp-hr		Cool- ing med	Air wet bulb	Air dry bulb	

VARYING DRAWBAR POWER AND FUEL CONSUMPTION WITH BALLAST

Maximum Available Power - Two Hours - 3rd Gear											
27.03	2144	4.73	1999	4.45	2.048	0.531	13.20	157	48	58	28.560
75% of Pull at Maximum Power - Ten Hours - 3rd Gear											
23.03	1654	5.22	2190	3.62	1.837	0.559	12.54	119	37	42	28.899
50% of Pull at Maximum Power - Two Hours - 3rd Gear											
16.83	1173	5.38	2216	1.92	1.514	0.631	11.12	112	36	39	28.548

MAXIMUM POWER WITH BALLAST

19.71	4362	1.69	2196	12.99	1st Gear			132	40	46	28.670
26.80	2883	3.49	2003	7.86	2nd Gear			149	40	46	28.670
27.57	2219	4.66	2002	5.96	3rd Gear			138	40	46	28.670
27.32	1734	5.91	2000	4.79	4th Gear			135	40	46	28.670
26.01	944	10.33	2005	2.48	5th Gear			117	40	46	28.670

MAXIMUM POWER WITHOUT BALLAST

27.80	2256	4.62	1998	8.94	3rd Gear			117	33	37	29.055
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VARYING DRAWBAR PULL AND TRAVEL SPEED WITH BALLAST - 3rd Gear

Pounds pull		2200	2300	2400	2400	2400	2450
Horsepower		27.6	25.8	23.7	20.5	17.9	15.0
Miles per hour		4.7	4.2	3.7	3.2	2.8	2.3

TIRES, BALLAST and WEIGHT	With Ballast	Without Ballast
Rear tires - No, size, ply & psi	Two 12.4-28;4;14	Two 12.4-28;4;12
Ballast - Liquid	202 lb each	None
Cast iron	903 lb each	None
Front tires- No, size, ply & psi	Two 5.50-16;4;32	Two 5.50-16;4;32
Ballast - Liquid	50 lb each	None
Cast iron	149 lb each	None
Height of drawbar	22 1/2 inches	23 inches
Static weight - Rear	4130 lb	1920 lb
Front	1695 lb	1298 lb
Total weight with operator	6000 lb	3393 lb

Department of Agricultural Engineering

DATES OF TEST: February 28 to March 16, 1959

MANUFACTURER: FORD MOTOR COMPANY LTD., DAGENHAM, ESSEX, ENGLAND

MANUFACTURER'S POWER RATING: Not Rated

FUEL, OIL and TIME Fuel No 2 Diesel Cetane No. 51 (rating taken from oil company's typical inspection data) Specific gravity converted to 60°/60° 0.8418 Weight per gallon 7.009 lb Oil SAE 20-20W API service classification DG and MS To motor 1.837 gal Drained from motor 1.469 gal Transmission and final-drive lubricant SAE No 20W-30 Type MP Total time motor was operated 43 1/2 hours.

ENGINE Make Ford Motor Company Ltd. Diesel Type 3 cylinder vertical Serial No 1419112 Crankshaft mounted lengthwise Rated rpm 2000 Lubrication pressure Bore and stroke 3.50" x 5.00" Compression ratio 16.5 to 1 Displacement 144 cu in Cranking system 12 volt battery Air cleaner oil washed wire gauze Muffler was used Oil filter replaceable treated paper element Fuel filter one replaceable paper element Cooling medium temperature control thermostat.

CHASSIS Type standard Serial No 1419112 Tread width rear 48" to 76" front 52" to 76" Wheel base 73 1/2" Center of gravity (without operator or ballast, with minimum tread, with fuel tank filled and tractor serviced for operation) Horizontal distance forward from center-line of rear wheels 29" Vertical distance above road-way 25" Horizontal distance from center of rear wheel tread 0" to the right or left Hydraulic control system driven by PTO shaft Advertised speeds mph first 1.56 second 3.64 third 4.80 fourth 6.14 fifth 10.49 sixth 17.33 reverse 2.54 and 7.51 Belt pulley diam 9" face 6 1/2" rpm 1290 Belt speed 3039 fpm Clutch double plate dry disc clutch operated by foot pedal Brakes internal expanding shoe operated by two foot pedals Power take-off 536 rpm at 1550 engine rpm Steering no power assistance Turning radius (on concrete surface with brake applied) right 102" left 102" (on concrete surface without brake) right 120" left 120" Turning space diameter (on concrete surface with brake applied) right 210" left 210" (on concrete surface without brake) right 250" left 250".

REPAIRS AND ADJUSTMENTS No repairs or adjustments.

REMARKS All test results were determined from observed data obtained in accordance with SAE and ASAE test code. Sixth gear was over 15 mph and therefore it was not tested.

We, the undersigned, certify that this is a true and correct report of official Tractor Test No 684.

L. H. Harsen
Engineer-in-Charge

L. W. Hurlbut
Board of Tractor Test Engineers