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Test 885: Ford 3000 Select-O-Speed (Gasoline)

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NEBRASKA TRACTOR TEST 885 - FORD 3000 SELECT-O-SPEED GASOLINE

POWER TAKE-OFF PERFORMANCE

Hp	Crankshaft speed rpm	Fuel Consumption		Hp-hr per gal	Temperature Degrees F			Barometer inches of Mercury
		Gal per hr	Lb per hp-hr		Cooling medium	Air wet bulb	Air dry bulb	
MAXIMUM POWER AND FUEL CONSUMPTION								
Rated Engine Speed—Two Hours								
36.49	2100	3.343	0.557	10.92	194	61	78	28.780
Standard Power Take-off Speed (540 rpm)—One Hour								
33.69	1811	3.025	0.546	11.14	195	63	83	28.765
Standard Power Take-off Speed (1000 rpm)—One Hour								
35.30	1960	3.220	0.555	10.96	192	59	75	28.950
VARYING POWER AND FUEL CONSUMPTION—TWO HOURS								
31.70	2148	2.915	0.559	10.87	192	63	84	.....
0.00	2308	1.312	.....	.....	184	63	84	.....
16.38	2219	2.195	0.815	7.46	190	62	83	.....
35.47	2101	3.245	0.557	10.93	195	63	84	.....
8.32	2256	1.751	1.280	4.75	186	63	83	.....
24.19	2183	2.540	0.639	9.52	192	63	84	.....
Av 19.34	2202	2.326	0.732	8.31	190	63	84	28.760

DRAWBAR PERFORMANCE

Hp	Drawbar pull lbs	Speed miles per hr	Crankshaft speed rpm	Slip of drivers %	Fuel Consumption		Hp-hr per gal	Temp Degrees F			Barometer inches of Mercury
					Gal per hr	Lb per hp-hr		Cooling med	Air wet bulb	Air dry bulb	
VARYING DRAWBAR POWER AND FUEL CONSUMPTION WITH BALLAST											
Maximum Available Power—Two Hours—6th Gear											
29.76	2377	4.69	2096	4.68	3.112	0.636	9.56	198	62	77	28.940
75% of Pull at Maximum Power—Ten Hours—6th Gear											
23.72	1808	4.92	2169	3.35	2.733	0.701	8.68	194	57	74	28.883
50% of Pull at Maximum Power—Two Hours—6th Gear											
17.15	1264	5.09	2209	1.94	2.425	0.860	7.07	200	70	88	28.788
MAXIMUM POWER WITH BALLAST											
20.26	5019	1.51	2168	13.11	3rd Gear	.....	189	58	69	28.930	
26.64	4649	2.15	2102	10.57	4th Gear	.....	193	59	72	28.950	
30.09	3139	3.59	2103	6.38	5th Gear	.....	193	60	73	28.950	
29.81	2388	4.68	2096	4.82	6th Gear	.....	195	60	73	28.950	
28.59	1967	5.45	2099	3.82	7th Gear	.....	197	60	73	28.950	
28.43	1503	7.09	2105	2.92	8th Gear	.....	196	61	76	28.940	
26.22	842	11.68	2107	1.42	9th Gear	.....	196	61	76	28.940	
MAXIMUM POWER WITHOUT BALLAST											
29.97	2423	4.64	2103	7.48	6th Gear	.....	180	62	71	28.780	
VARYING DRAWBAR PULL AND TRAVEL SPEED WITH BALLAST—6th Gear											
Pounds pull			2388	2511	2547	2623	2692	2622			
Horsepower			29.81	28.16	25.21	22.62	19.91	16.07			
Crankshaft speed, rpm			2096	1890	1670	1459	1253	1036			
Miles per hour			4.68	4.21	3.71	3.23	2.77	2.30			
Slip of drivers, %			4.82	5.04	5.36	5.69	5.79	5.47			

TIRES, BALLAST and WEIGHT		With Ballast		Without Ballast	
Rear tires	—No, size, ply & psi	Two 14.9-24; 4; 14		Two 14.9-24; 4; 12	
Ballast	—Liquid	640 lb each		None	
	Cast iron	795 lb each		None	
Front tires	—No, size, ply & psi	Two 6.00-16; 4; 32		Two 6.00-16; 4; 28	
Ballast	—Liquid	None		None	
	Cast iron	None		None	
Height of drawbar		19½ inches		20½ inches	
Static weight	—Rear	5140 lb		2270 lb	
	Front	1625 lb		1670 lb	
Total weight with operator		6940 lb		4115 lb	

Department of Agricultural Engineering

Dates of Test: APRIL 8 TO APRIL 26, 1965

Manufacturer: FORD MOTOR COMPANY, BIRMINGHAM, MICHIGAN

FUEL, OIL and TIME Fuel regular gasoline Octane No 85.2 Research 92.3 (rating taken from oil company's typical inspection data) Specific gravity converted to 60°/60° 0.7308 Weight per gallon 6.083 lb Oil SAE 10W API service classification MS, DM To motor 1.470 gal Drained from motor 1.271 gal Transmission Ford ESN M2C41A Final drive lubricant Ford ESN M2C77A Total time engine was operated 45½ hours.

ENGINE Make Ford gasoline Type 3 cylinder vertical Serial No NG002480L4 Crankshaft mounted lengthwise Rated rpm 2100 Bore and stroke 4.2" x 3.8" Compression ratio 8 to 1 Displacement 157.95 cu in Carburetor size 1¼" Ignition system battery Cranking system 12 volt electric Lubrication pressure Air cleaner dry type with replaceable pleated paper element Oil filter replaceable cotton blend element Oil cooler heat exchanger in lower radiator tank for transmission oil Fuel filter edge type filter in sediment bowl Muffler was used Cooling medium temperature control thermostat.

CHASSIS Type standard Serial No C100387 Tread width rear 52" to 76" front 52" to 80" Wheel base 75.8" Center of gravity (without operator or ballast, with minimum tread, with fuel tank filled and tractor serviced for operation) Horizontal distance forward from centerline of rear wheels 32.8" Vertical distance above roadway 25.2" Horizontal distance from center of rear wheel tread 0" to the right/left Hydraulic control system direct engine drive Transmission selective gear fixed ratio with operator controlled full range power shifting Advertised speeds mph first 1.1 second 1.5 third 1.7 fourth 2.4 fifth 3.8 sixth 4.8 seventh 5.7 eighth 7.2 ninth 11.6 tenth 17.2 reverse 3.4 and 4.8 Clutch multiple disc wet clutches within transmission hydraulically operated Brakes internal expanding shoe operated by two foot pedals which can be locked Steering mechanical with power assist Turning radius (on concrete surface with brake applied) right 117" left 117" (on concrete surface without brake) right 129" left 129" Turning space diameter (on concrete surface with brake applied) right 240" left 240" (on concrete surface without brake) right 267" left 267" Belt pulley 1085 rpm at 1950 engine rpm diam 1025" face 6.5" Belt speed 2911 fpm Power take-off 537 rpm at 1800 engine rpm and 995 rpm at 1950 engine rpm.

REPAIRS and ADJUSTMENTS No repairs or adjustments.

REMARKS All test results were determined from observed data obtained in accordance with the SAE and ASAE test code.

First and second gears were not run as it was necessary to limit the pull in third gear because of the stability formula. Tenth gear was not run because it exceeded 15 mph.

We, the undersigned, certify that this is a true and correct report of official Tractor Test 885.

L. F. LARSEN

Engineer-in-Charge

G. W. STEINBRUEGGE, Chairman

J. J. SULEK

D. E. LANE

Board of Tractor Test Engineers

The University of Nebraska Agricultural Experiment Station
E. F. Frolik, Dean; H. H. Kramer, Director, Lincoln, Nebraska