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## Test 1009: Massey-Ferguson MF 135 Gasoline (Also MF 135 6 or 8-Speed)

Tractor Museum

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# NEBRASKA TRACTOR TEST 1009 – MASSEY-FERGUSON MF 135 GASOLINE (ALSO MF 135 GASOLINE-STANDARD 6 SPEED OR 8 SPEED)

## 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	
<b>MAXIMUM POWER AND FUEL CONSUMPTION</b>								
<b>Rated Engine Speed—Two Hours</b>								
37.55	2000	3.489	0.564	10.76	193	69	80	28.810
<b>Standard Power Take-off Speed (540 rpm)—One Hour</b>								
35.34	1683	3.152	0.542	11.21	198	70	83	28.810
<b>VARYING POWER AND FUEL CONSUMPTION—TWO HOURS</b>								
34.02	2133	3.123	0.557	10.89	196	71	85	.....
0.00	2265	1.210	.....	.....	185	71	85	.....
17.21	2158	2.041	0.720	8.43	190	71	85	.....
37.36	2000	3.513	0.571	10.63	198	70	84	.....
8.86	2223	1.660	1.138	5.34	185	71	85	.....
27.17	2140	2.579	0.576	10.54	193	70	84	.....
Av 20.77	2153	2.354	0.688	8.82	191	71	85	28.800

## DRAWBAR PERFORMANCE

Hp	Draw-bar 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

<b>Maximum Available Power—Two Hours—7th Gear</b>											
32.00	2279	5.26	1999	6.30	3.435	0.652	9.32	190	66	74	28.750
<b>75% of Pull at Maximum Power—Ten Hours—7th Gear</b>											
26.64	1760	5.68	2119	4.64	2.816	0.642	9.46	190	66	74	28.817
<b>50% of Pull at Maximum Power—Two Hours—7th Gear</b>											
18.88	1221	5.80	2142	3.54	2.353	0.757	8.02	188	64	69	28.740

### MAXIMUM POWER WITH BALLAST

27.98	4207	2.49	2096	13.50	4th Gear	.....	190	62	73	28.830
31.61	3417	3.47	1998	10.03	5th Gear	.....	193	63	75	28.830
31.46	2522	4.68	2002	7.36	6th Gear	.....	190	64	75	28.830
32.46	2317	5.25	2003	6.60	7th Gear	.....	193	65	78	28.820
31.83	1709	6.98	2001	4.81	8th Gear	.....	190	65	78	28.820
31.79	1478	8.06	2001	4.35	9th Gear	.....	191	65	77	28.820
30.67	1083	10.62	2000	3.48	10th Gear	.....	190	66	79	28.820

### MAXIMUM PULL WITHOUT BALLAST

29.31	3216	3.42	2063	14.92	5th Gear	.....	187	52	65	28.900
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### VARYING DRAWBAR PULL AND TRAVEL SPEED WITH BALLAST—7th Gear

Pounds pull	2317	2517	2698	2744	2778	2731
Horsepower	32.46	31.49	29.84	26.50	22.92	18.89
Crankshaft speed rpm	2003	1802	1599	1401	1198	1005
Miles per hour	5.25	4.69	4.15	3.62	3.09	2.59
Slip of drivers, %	6.60	7.47	7.68	8.00	8.11	8.11

### TIRES, BALLAST and WEIGHT

		With Ballast	Without Ballast
Rear tires	—No, size, ply & psi	Two 13.6-28; 4; 14	Two 13.6-28; 4; 14
Ballast	—Liquid	491 lb each	None
	Cast iron	362 lb each	None
Front tires	—No, size, ply & psi	Two 6.00-16; 4; 24	Two 6.00-16; 4; 24
Ballast	—Liquid	85 lb each	None
	Cast iron	None	None
Height of drawbar		22½ inches	23½ inches
Static weight with operator—Rear		4040 lb	2335 lb
	Front	1645 lb	1475 lb
	Total	5685 lb	3810 lb

### Department of Agricultural Engineering

Date of Test: April 28 to May 8, 1969

Manufacturer: MASSEY-FERGUSON INC., DETROIT, MICHIGAN

**FUEL, OIL and TIME** Fuel Regular gasoline Octane No Motor 85.2 Research 92.6 (rating taken from oil company's typical inspection data) Specific gravity converted to 60°/60° 0.7294 Weight per gallon 6.072 lb Oil SAE 20-20W API service classification MS, DM To motor 1.466 gal Drained from motor 1.167 gal Transmission and final-drive lubricant Massey-Ferguson Oil M 1101 Total time engine was operated 42 hours.

**ENGINE** Make Perkins gasoline Type 3 cylinder vertical Serial No 37111500X Crankshaft mounted lengthwise Rated rpm 2000 Bore and stroke 3.6" x 5" Compression ratio 7.5 to 1 Displacement 152.7 cu in Carburetor size 1½" Ignition system battery Cranking system 12 volt electric Lubrication pressure Air cleaner dry type with replaceable paper element and automatic dust unloader Fuel filter sediment bowl and screen Muffler was used Cooling medium temperature control thermostat.

**CHASSIS** Type standard Serial No GA 66314 Tread width rear 48" to 76" front 48" to 80" Wheel base 72" 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 31.3" Vertical distance above roadway 27.0" Horizontal distance from center of rear wheel tread 0" to the right/left Hydraulic control system constant running except when PTO foot clutch is disengaged Transmission selective gear fixed ratio with partial range operator controlled power shifting Advertised speeds mph first 1.38 second 1.80 third 2.07 fourth 2.70 fifth 3.79 sixth 4.96 seventh 5.51 eighth 7.20 ninth 8.28 tenth 10.81 eleventh 15.17 twelfth 19.82 reverse 1.88, 2.45, 7.51, 9.81 Clutch single plate dry disc in combination with PTO clutch operated by single foot pedal Brakes expanding double shoe operated by two independent foot pedals that can be locked together Steering mechanical with power assist Turning radius (on concrete surface with brake applied) right 108" left 108" (on concrete surface without brake) right 118" left 118" Turning space diameter (on concrete surface with brake applied) right 223" left 223" (on concrete surface without brake) right 241" left 241" Belt pulley 1176 rpm at 1975 engine rpm diam 10¼" face 16½" Belt speed 3117 fpm Power take-off 540 rpm at 1700 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. During final inspection it was found that the exhaust valve seat insert in No. 2 cylinder was loose. First, second and third gears were not run as it was necessary to limit the pull in fourth gear because of the stability formula. Eleventh and twelfth gears were not run as both exceeded 15 mph. Occasional misfiring occurred during part throttle runs.

We, the undersigned, certify that this is a true and correct report of official Tractor Test 1009.

L. F. LARSEN

Engineer-In-Charge

G. W. STEINBRUEGGE, Chairman

W. E. SPLINTER

D. E. LANE

Board of Tractor Test Engineers