

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Nebraska Tractor Tests

Tractor Test and Power Museum, The Lester F.  
Larsen

---

1-1-1973

## Test 1135: Massey-Ferguson 1135 Siesel

Tractor Museum

University of Nebraska-Lincoln, [TractorMuseumArchives@unl.edu](mailto:TractorMuseumArchives@unl.edu)

Follow this and additional works at: <http://digitalcommons.unl.edu/tractormuseumlit>



Part of the [Applied Mechanics Commons](#)

---

Museum, Tractor, "Test 1135: Massey-Ferguson 1135 Siesel" (1973). *Nebraska Tractor Tests*. Paper 1458.  
<http://digitalcommons.unl.edu/tractormuseumlit/1458>

This Article is brought to you for free and open access by the Tractor Test and Power Museum, The Lester F. Larsen at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Nebraska Tractor Tests by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

# NEBRASKA TRACTOR TEST 1135 - MASSEY-FERGUSON 1135 DIESEL

## 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 (PTO Speed—1100 rpm)</b>								
120.84	2200	7.775	0.451	15.54	188	65	74	28.863
<b>Standard Power Take-off Speed (1000 rpm)—One Hour</b>								
118.47	2000	7.324	0.434	16.18	189	66	75	28.860
<b>VARYING POWER AND FUEL CONSUMPTION—Two Hours</b>								
105.65	2265	7.097	0.471	14.89	186	67	76	.....
0.00	2419	2.480	.....	.....	178	67	76	.....
54.23	2324	4.848	0.627	11.17	181	68	77	.....
122.05	2200	7.832	0.450	15.58	189	69	79	.....
27.35	2344	3.681	0.944	7.43	179	70	80	.....
80.57	2302	5.917	0.515	13.62	184	71	83	.....
Av 64.98	2309	5.309	0.573	12.24	183	68	78	28.837

## 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

<b>Maximum Available Power—Two Hours—5th Gear (3 Lo Lo MP)</b>											
102.44	8358	4.60	2204	5.84	7.749	0.530	13.22	187	66	71	28.880
<b>75% of Pull at Maximum Power—Ten Hours—5th Gear (3 Lo Lo MP)</b>											
84.19	6574	4.80	2272	4.56	6.701	0.558	12.56	185	69	73	28.910
<b>50% of Pull at Maximum Power—Two Hours—5th Gear (3 Lo Lo MP)</b>											
58.17	4393	4.97	2312	3.00	5.433	0.655	10.71	185	76	90	28.740
<b>50% of Pull at Reduced Engine Speed—Two Hours—5th Gear (1 Hi Lo MP)</b>											
57.40	4341	4.96	1722	2.96	4.239	0.518	13.54	184	78	95	28.730

### MAXIMUM POWER WITH BALLAST

90.75	13955	2.44	2206	14.99	2nd Gr. (1 Lo Hi MP)	193	78	88	28.560
99.55	11485	3.25	2200	9.27	3rd Gr. (2 Lo Lo MP)	189	72	79	28.790
103.95	9238	4.22	2200	6.48	4th Gr. (2 Lo Hi MP)	189	72	79	28.790
106.52	8756	4.56	2197	6.18	5th Gr. (3 Lo Lo MP)	188	70	77	28.780
105.21	6315	6.25	2200	4.24	7th Gr. (1 Hi Lo MP)	190	71	80	28.780
102.91	3848	10.03	2201	2.63	9th Gr. (2 Hi Lo MP)	191	73	81	28.785

### VARYING DRAWBAR PULL AND TRAVEL SPEED WITH BALLAST 5th Gear (3 Lo Lo MP)

Pounds Pull	8756	9407	9726	9712	9357	8611
Horsepower	106.52	102.54	94.04	82.30	67.61	52.31
Crankshaft Speed rpm	2197	1979	1762	1545	1312	1096
Miles Per Hour	4.56	4.09	3.63	3.18	2.71	2.28
Slip of Drivers%	6.18	6.71	7.16	7.16	6.86	6.25

### TRACTOR SOUND LEVEL (with cab)

	dB(A)
Maximum Available Power 2 Hours	82.5
75% of Pull at Max. Power 10 Hours	82.5
50% of Pull at Max. Power 2 Hours	82.5
50% of Pull at Reduced Engine Speed 2 Hours	80.5
Bystander 12th Gear (3 Hi Hi MP)	86.5

### TIRES, BALLAST AND WEIGHT

	With Ballast	Without Ballast
<b>Rear Tires</b>	—No., size, ply & psi	Two 24.5-32;10;20
<b>Ballast</b>	—Liquid	1680 lb each
	Cast Iron	1000 lb each
<b>Front Tires</b>	—No., size, ply & psi	Two 11.00-16;6;28
<b>Ballast</b>	—Liquid	None
	Cast Iron	None
<b>Height of drawbar</b>	21 inches	22 inches
<b>Static weight with operator—rear</b>	14950 lb	9590 lb
	front	3950 lb
	total	18900 lb
		13550 lb

## Department of Agricultural Engineering

Dates of Test: June 4 to June 15, 1973

Manufacturer: MASSEY-FERGUSON, INC., DETROIT, MICHIGAN

**FUEL, OIL AND TIME** Fuel No 2 Diesel Cetane No 50.1 (rating taken from oil company's typical inspection data) Specific gravity converted to 60°/60° 0.8427 Weight per gallon 7.017 lb Oil SAE 20-20W API service classification SB/SE-CA/CD (Formerly MS DS) To motor 4.134 gal Drained from motor 3.433 gal Transmission and final drive lubricant Massey-Ferguson Oil M-1127 Total time engine was operated 45½ hours.

**ENGINE** Make Perkins Diesel Type 6 cylinder vertical with turbo-charger Serial No 354UA10502T Crankshaft Mounted lengthwise Rated rpm 2200 Bore and stroke 3.875" x 5.0" Compression ratio 16 to 1 Displacement 354 cu in Cranking system 12 volt electric Lubrication pressure Air cleaner dual dry type with replaceable pleated paper element Oil filter full flow with replaceable pleated paper element Oil cooler radiator for transmission and hydraulic oil Fuel filter primary and secondary filters with replaceable pleated paper elements Muffler was used Cooling medium temperature control thermostat.

**CHASSIS** Type standard Serial No 9B38794 Tread width rear 60" to 100" front 60" to 88" Wheel base 109" 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 28" Vertical distance above roadway 36" 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 partial range operator controlled power shifting Advertised speeds mph first 2.2 second 2.7 third 3.4 fourth 4.3 fifth 4.6 sixth 5.9 seventh 6.2 eighth 7.8 ninth 9.8 tenth 12.3 eleventh 13.4 and twelfth 16.9 reverse 1.8, 2.2, 5.1 and 6.4 Clutch single plate dry disc operated by a foot pedal Brakes double disc hydraulically actuated by two foot pedals which can be locked together Steering hydrostatic Turning radius (on concrete surface with brake applied) right 144" left 144" (on concrete surface without brake) right 168" left 168" Turning space diameter (on concrete surface with brake applied) right 288" left 288" (on concrete surface without brake) right 336" left 336" Power take-off 1000 rpm at 2000 engine rpm.

**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 or official Nebraska test procedure.

First gear was not run as it was necessary to limit the pull in second gear to avoid excessive slippage.

Sixth, eighth, tenth, eleventh and twelfth gears were not run as test procedure requires only six travel speeds.

We, the undersigned, certify that this is a true and correct report of official Tractor Test 1135.

L. F. LARSEN

Engineer-in-Charge

G. W. STEINBRUEGGE, Chairman

W. E. SPLINTER

D. E. LANE

Board of Tractor Test Engineers

The University of Nebraska Agricultural Experiment Station

E. F. Frolik, Dean; H. W. Ottoson, Director; Lincoln, Nebraska