

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Nebraska Tractor Tests

Tractor Test and Power Museum, The Lester F.  
Larsen

---

1-1-1965

## Test 895: Massey-Ferguson MF 135 (Diesel) (Also MF 135 Diesel-Standard 6-Speed or 8-Speed)

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 895: Massey-Ferguson MF 135 (Diesel) (Also MF 135 Diesel-Standard 6-Speed or 8-Speed)" (1965).  
*Nebraska Tractor Tests*. Paper 1277.

<http://digitalcommons.unl.edu/tractormuseumlit/1277>

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 895 - MASSEY-FERGUSON MF 135 DIESEL (ALSO MF 135 DIESEL-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>								
37.82	2000	2.220	0.406	17.04	168	62	74	28.987
<b>Standard Power Take-off Speed (540 rpm)—One Hour</b>								
34.86	1705	1.983	0.394	17.58	169	63	74	29.010
<b>VARYING POWER AND FUEL CONSUMPTION—TWO HOURS</b>								
33.05	2058	1.960	0.410	16.86	163	65	76	.....
0.00	2155	0.646	.....	.....	150	63	75	.....
17.02	2117	1.296	0.527	13.13	160	64	76	.....
38.02	2001	2.211	0.402	17.20	180	64	75	.....
8.60	2137	0.958	0.771	8.98	153	64	75	.....
25.20	2091	1.591	0.437	15.84	165	64	75	.....
<b>Av 20.32</b>	<b>2093</b>	<b>1.444</b>	<b>0.492</b>	<b>14.07</b>	<b>162</b>	<b>64</b>	<b>75</b>	<b>29.020</b>

## 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	
<b>VARYING DRAWBAR POWER AND FUEL CONSUMPTION WITH BALLAST</b>											
<b>Maximum Available Power—Two Hours—7th Gear (1st Hi-Lo MP)</b>											
33.06	2437	5.09	1996	6.38	2.199	0.460	15.03	178	68	75	28.870
<b>75% of Pull at Maximum Power—Ten Hours—7th Gear (1st Hi-Lo MP)</b>											
26.21	1849	5.32	2057	5.09	1.838	0.485	14.26	177	63	64	28.982
<b>50% of Pull at Maximum Power—Two Hours—7th Gear (1st Hi-Lo MP)</b>											
20.39	1387	5.51	2097	3.52	1.532	0.520	13.31	163	68	72	28.895
<b>MAXIMUM POWER WITH BALLAST</b>											
27.13	4338	2.35	2064	14.80	4th Gear (2nd Lo-Hi MP)		180	68	77	28.850	
32.51	3647	3.34	2000	10.77	5th Gear (3rd Lo-Lo MP)		183	65	69	28.850	
32.43	2690	4.52	1997	7.49	6th Gear (3rd Lo-Hi MP)		181	65	69	28.850	
33.51	2475	5.08	2000	6.76	7th Gear (1st Hi-Lo MP)		182	62	72	28.860	
32.97	1830	6.76	1998	4.92	8th Gear (1st Hi-Hi MP)		175	62	72	28.860	
33.67	1611	7.84	2004	4.31	9th Gear (2nd Hi-Lo MP)		175	62	72	28.860	
32.27	1166	10.38	2004	2.77	10th Gear (2nd Hi-Hi MP)		175	62	72	28.860	
30.54	780	14.68	2000	1.79	11th Gear (3rd Hi-Lo MP)		175	67	73	28.860	
<b>MAXIMUM POWER WITHOUT BALLAST</b>											
32.81	2488	4.95	1998	10.10	7th Gear (1st Hi-Lo MP)		178	57	69	28.600	

## VARYING DRAWBAR PULL AND TRAVEL SPEED WITH BALLAST—7th Gear (1st Hi-Lo MP)

Pounds pull	2475	2606	2715	2778	2739	2674
Horsepower	33.51	31.61	29.32	26.26	22.22	18.00
Crankshaft speed, rpm	2000	1798	1607	1409	1207	1001
Miles per hour	5.08	4.55	4.05	3.54	3.04	2.53
Slip of drivers, %	6.76	7.18	7.60	7.70	7.49	7.49

## TIRES, BALLAST and WEIGHT

		With Ballast	Without Ballast
<b>Rear tires</b>	—No, size, ply & psi	Two 14.9-24; 4; 12	Two 14.9-24; 4; 12
<b>Ballast</b>	—Liquid	458 lb each	None
	—Cast iron	400 lb each	None
<b>Front tires</b>	—No, size, ply & psi	Two 6.00-16; 4; 32	Two 6.00-16; 4; 20
<b>Ballast</b>	—Liquid	None	None
	—Cast iron	178 lb each	None
<b>Height of drawbar</b>		22½ inches	23 inches
<b>Static weight</b>	—Rear	3815 lb	2100 lb
	—Front	1725 lb	1370 lb
<b>Total weight with operator</b>		5715 lb	3645 lb

Department of Agricultural Engineering

Dates of Test: MAY 13 TO MAY 26, 1965

Manufacturer: MASSEY-FERGUSON INC., DETROIT, MICHIGAN

**FUEL, OIL and TIME** Fuel No. 2 Diesel Cetane No 57.0 (rating taken from oil company's typical inspection data) Specific gravity converted to 60°/60° 0.8312 Weight per gallon 6.920 lb Oil SAE 20-20W API service classification DS To motor 1.562 gal Drained from motor 1.431 gal Transmission and final-drive lubricant Massey-Ferguson Oil M-1101 Total time engine was operated 37½ hours.

**ENGINE Make** Perkins diesel Type 3 cylinder vertical Serial No 2300914 Crankshaft mounted lengthwise Rated rpm 2000 Bore and stroke 3.6" x 5" Compression ratio 17.4 to 1 Displacement 152.7 cu in Cranking system 12 volt electric Lubrication pressure Air cleaner dry type with replaceable pleated paper element Oil filter full flow replaceable paper element Fuel filter primary and secondary filters with replaceable paper elements and sediment bowl with screen Muffler was used Cooling medium temperature control thermostat.

**CHASSIS Type** Standard Serial No SDW-641000851 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" 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 1.31 second 1.71 third 1.97 fourth 2.56 fifth 3.60 sixth 4.70 seventh 5.24 eighth 6.85 ninth 7.85 tenth 10.25 eleventh 14.40 twelfth 18.8 reverse 1.79, 2.33, 7.14, and 9.31 Clutch single plate dry disc in combination with PTO clutch operated by single foot pedal 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 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 6½" 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.

First, second, and third gears were not run as it was necessary to limit the pull in fourth gear to avoid excessive wheel slippage. Twelfth 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 895.

L. F. LARSEN

Engineer-in-Charge

G. W. STEINBRUEGGE, Chairman  
J. J. SULEK  
D. E. LANE

Board of Tractor Test Engineers