1-1-1978

Test 1269: Lamborghini 1056 DT DSL

Nebraska Tractor Test Lab
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NEBRASKA TRACTOR TEST 1269 — LAMBORGHINI 1056 DT DSL

POWER TAKE-OFF PERFORMANCE

Power Hp (kW)	Crank shaft speed rpm	Fuel Consumption gal/hr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Temperature °F (°C) Cooling medium	Air wet bulb	Air dry bulb	Barometer inch Hg (kPa)
MAXIMUM POWER AND FUEL CONSUMPTION								
Rated Engine Speed—Two Hours (PTO Speed—1045 rpm)								
92.13 (68.70)	2220	6.201 (23.473)	0.466 (0.284)	14.86 (2.927)	air cooled	63 (17.0)	75 (23.7)	28.680 (96.848)
Standard Power Take-off Speed (1000 rpm)—One Hour								
89.98 (67.10)	2125	5.934 (22.462)	0.457 (0.278)	15.16 (2.987)	air cooled	64 (17.5)	75 (23.9)	28.650 (96.747)
VARYING POWER AND FUEL CONSUMPTION—Two Hours								
80.89 (60.32)	2296	5.201 (19.687)	0.445 (0.271)	15.55 (3.064)	air cooled	64 (17.8)	75 (23.9)	....
0.00 (0.00)	2404	1.710 (6.475)	....	....	air cooled	64 (17.8)	74 (23.3)	....
41.42 (30.89)	2354	3.174 (12.015)	0.531 (0.323)	13.05 (2.571)	air cooled	64 (17.8)	74 (23.3)	....
92.31 (68.83)	2220	6.205 (23.489)	0.466 (0.283)	14.88 (2.930)	air cooled	65 (18.3)	74 (23.6)	....
21.08 (15.72)	2382	2.477 (9.376)	0.814 (0.495)	8.51 (1.676)	air cooled	65 (18.3)	75 (23.9)	....
61.53 (45.88)	2326	4.066 (15.392)	0.458 (0.278)	15.13 (2.981)	air cooled	64 (18.1)	75 (23.9)	....
Av 49.54	**2330**	**3.806**	**0.532**	**13.02**	air	**64**	**75**	**28.553**
Av (36.94)		***(14.406)***	***(0.324)***	***(2.564)***	cooled	***(18.0)***	***(23.7)***	***(96.420)***

DRAWBAR PERFORMANCE

(Front Wheel Drive Engaged)

Power Hp (kW)	Drawbar pull lbs (kN)	Speed mph (km/h)	Crank-shaft speed rpm	Slip %	Fuel Consumption gal/hr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Temp. °F (°C) Cool-ing med	Air wet bulb	Air dry bulb	Barom. inch Hg (kPa)
Maximum Available Power—Two Hours 8th (4N) Gear											
75.70 (56.45)	5304 (23.59)	5.35 (8.61)	2219	6.99	6.080 (23.017)	0.557 (0.339)	12.45 (2.452)	air cooled	69 (20.6)	80 (26.4)	28.670 (96.814)
75% of Pull at Maximum Power—Ten Hours 8th (4N) Gear											
63.66 (47.47)	4170 (18.55)	5.73 (9.21)	2334	5.30	4.998 (18.919)	0.544 (0.331)	12.74 (2.509)	air cooled	43 (6.1)	51 (10.3)	28.728 (97.010)
50% of Pull at Maximum Power—Two Hours 8th (4N) Gear											
43.77 (32.64)	2780 (12.37)	5.90 (9.50)	2365	3.64	4.005 (15.162)	0.634 (0.386)	10.93 (2.153)	air cooled	42 (5.6)	52 (10.8)	28.710 (96.949)
50% of Pull at Reduced Engine Speed—Two Hours 10th (2V) Gear											
43.85 (32.70)	2777 (12.35)	5.92 (9.53)	1339	3.56	3.085 (11.679)	0.487 (0.296)	14.21 (2.800)	air cooled	45 (6.9)	59 (15.0)	28.690 (96.882)
MAXIMUM POWER IN SELECTED GEARS											
75.84 (56.56)	9135 (40.64)	3.11 (5.01)	2271	14.96	6th (2N) Gear			air cooled	38 (3.3)	44 (6.7)	28.710 (96.949)
77.59 (57.86)	6984 (31.07)	4.17 (6.70)	2220	9.83	7th (3N) Gear			air cooled	68 (20.0)	77 (25.0)	28.720 (96.983)
79.41 (59.22)	5561 (24.74)	5.35 (8.62)	2220	7.06	8th (4N) Gear			air cooled	68 (20.0)	75 (23.9)	28.710 (96.949)
79.51 (59.29)	4350 (19.35)	6.86 (11.03)	2219	5.92	9th (1V) Gear			air cooled	67 (19.4)	73 (22.8)	28.730 (97.017)
78.24 (58.34)	2986 (13.28)	9.83 (15.81)	2220	3.40	10th (2V) Gear			air cooled	66 (18.9)	71 (21.7)	28.740 (97.051)

Department of Agricultural Engineering

Dates of Test: March 31 to April 13, 1978

Manufacturer: LAMBORGHINI TRATTORI S.p.A., 40066 Pieve Di Cento (BO), Italy

FUEL, OIL AND TIME: Fuel No. 2 Diesel **Cetane No.** 50.4 (rating taken from oil company's typical inspection data) **Specific gravity converted to 60°/60° *(15°/15°)*** 0.8321 **Fuel weight** 6.928 lbs/gal *(0.832 kg/l)* **Oil SAE** 30 **API service classification** SB/SE -CA/CC **To motor** 3.728 gal *(14.112 l)* **Drained from motor** 3.269 gal *(12.375 l)* **Transmission and final drive lubricant** SAE 80W **Total time engine was operated** 57.5 hours.

ENGINE: Make Lamborghini Diesel **Type** 6 cylinder vertical **Serial No.** *986/3*1028* **Crankshaft** lengthwise **Rated rpm** 2220 **Bore and stroke** 3.86″ x 4.72″ *(98 mm x 120 mm)* **Compression ratio** 17.0 to 1 **Displacement** 331 cu in *(5430 ml)* **Cranking system** 12 volt **Lubrication** pressure **Air cleaner** oil bath with centrifugal precleaner **Oil filter** full flow paper cartridge **Oil cooler** radiator for crankcase oil **Fuel filter** paper element **Muffler** vertical **Cooling medium temperature control** air cooled.

CHASSIS: Type four wheel drive **Serial No.** 1056 DT*1040* **Tread width** rear 64.5″ *(1640 mm)* to 88.2″ *(2240 mm)* front 64.2″ *(1630 mm)* to 86.6″ *(2200 mm)* **Wheel base** 107.3″ *(2726 mm)* **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 40.2″ *(1020 mm)* Vertical distance above roadway 43.2″ *(1096 mm)* Horizontal distance from center of rear wheel tread 0″ *(0 mm)* to the right/left **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio **Advertised speeds mph *(km/h)*** first 0.9 *(1.4)* second 1.2 *(2.0)* third 1.6 *(2.6)* fourth 2.0 *(3.2)* fifth 2.5 *(4.0)* sixth 3.5 *(5.7)* seventh 4.5 *(7.3)* eighth 5.7 *(9.1)* ninth 7.2 *(11.5)* tenth 10.0 *(16.1)* eleventh 12.9 *(20.8)* twelfth 16.1 *(25.9)* reverse 1.4 *(2.3)*, 4.0 *(6.5)*, 11.5 *(18.5)* **Clutch** single dry disc operated by foot pedal **Brakes** wet disc operated by two foot pedals which can be locked together and hand lever **Steering** hydrostatic **Turning radius** (on concrete surface with brake applied) right 203″ *(5.15 m)* left 197″ *(5.00 m)* (on concrete surface without brake) right 250″ *(6.35 m)* left 240″ *(6.10 m)* **Turning space diameter** (on concrete surface with brake applied) right 424″ *(10.78 m)* left 413″ *(10.48 m)* (on concrete surface without brake) right 519″ *(13.18 m)* left 499″ *(12.68 m)* **Power take-off** 1000 rpm at 2125 engine rpm and 540 rpm at 1957 engine rpm.

REPAIRS and ADJUSTMENTS: No repairs or adjustments

LUGGING ABILITY IN RATED GEAR 8th (4N)

Crankshaft Speed rpm	2220	1995	1776	1560	1329	1102
Pull—lbs *(kN)*	5561 *(24.74)*	5873 *(26.12)*	6052 *(26.92)*	6117 *(27.21)*	6189 *(27.53)*	6060 *(26.95)*
Increase in Pull %	0	6	9	10	11	9
Power—Hp *(kW)*	79.41 *(59.22)*	74.93 *(55.87)*	68.55 *(51.12)*	60.71 *(45.27)*	52.15 *(38.89)*	42.46 *(31.66)*
Speed—Mph *(km/h)*	5.35 *(8.62)*	4.78 *(7.70)*	4.25 *(6.84)*	3.72 *(5.99)*	3.16 *(5.09)*	2.63 *(4.23)*
Slip %	7.06	7.51	7.81	7.96	8.25	8.10

TRACTOR SOUND LEVEL WITH CAB	dB(A)
Maximum Available Power—Two Hours	88.0
75% of Pull at Maximum Power—Ten Hours	89.5
50% of Pull at Maximum Power—Two Hours	89.5
50% of Pull at Reduced Engine Speed—Two Hours	82.5
Bystander in 12th (4V) gear	91.0

DRAWBAR PERFORMANCE

(Front Wheel Drive Disengaged)

Power Hp *(kW)*	Drawbar pull lbs *(kN)*	Speed mph *(km/h)*	Crank-shaft speed rpm	Slip %	Fuel Consumption gal/hr *(l/h)*	lb/hp.hr *(kg/kW.h)*	Hp.hr/gal *(kW.h/l)*	Temp. °F *(°C)* Cool-ing med	Air wet bulb	Air dry bulb	Barom. inch Hg *(kPa)*
75% of Pull at Maximum Power—Two Hours 8th (4N) Gear											
61.35 *(45.75)*	4183 *(18.61)*	5.50 *(8.85)*	2337	8.27	4.980 *(18.851)*	0.562 *(0.342)*	12.32 *(2.427)*	air cooled	41 *(5.0)*	48 *(8.6)*	29.055 *(98.114)*
50% of Pull at Maximum Power—Two Hours 8th (4N) Gear											
42.77 *(31.89)*	2792 *(12.42)*	5.75 *(9.25)*	2363	5.28	3.915 *(14.821)*	0.634 *(0.386)*	10.92 *(2.152)*	air cooled	45 *(7.2)*	63 *(16.9)*	28.765 *(97.135)*
50% of Pull at Reduced Engine Speed—Two Hours 10th (2V) Gear											
42.71 *(31.85)*	2797 *(12.44)*	5.72 *(9.21)*	1332	5.39	3.031 *(11.474)*	0.492 *(0.299)*	14.09 *(2.775)*	air cooled	44 *(6.7)*	61 *(15.8)*	28.800 *(97.253)*

TIRES, BALLAST AND WEIGHT		With Ballast	Without Ballast
Rear Tires	—No., size, ply & psi *(kPa)*	Two 18.4-38; 8; 16 *(110)*	Two 18.4-38; 8; 16 *(110)*
Ballast	—Liquid (each)	None	None
	—Cast Iron (each)	600 lb *(272 kg)*	None
Front Tires	—No., size, ply & psi *(kPa)*	Two 13.6-28; 6; 14 *(95)*	Two 13.6-28; 6; 14 *(95)*
Ballast	—Liquid (each)	None	None
	—Cast Iron (front end)	500 lb *(227 kg)* Total	None
Height of Drawbar		20.5 in *(520 mm)*	20.5 in *(520 mm)*
Static Weight with Operator	—Rear	7420 lb *(3365 kg)*	6220 lb *(2821 kg)*
	—Front	4630 lb *(2100 kg)*	4130 lb *(1873 kg)*
	—Total	12050 lb *(5465 kg)*	10350 lb *(4694 kg)*

REMARKS: All test results were determined from observed data obtained in accordance with SAE and ASAE test code or official Nebraska test procedure. Temperature at injection pump return was 185°F *(85.0°C)*. Five gears were chosen between 15% slip and 10 mph *(16.1 km/h)*. Fuel level gauge did not function during test.

We, the undersigned, certify that this is a true and correct report of official Tractor Test **1269.**

L. I. LEVITICUS
Engineer-in-Charge

G. W. STEINBRUEGGE
W. E. SPLINTER
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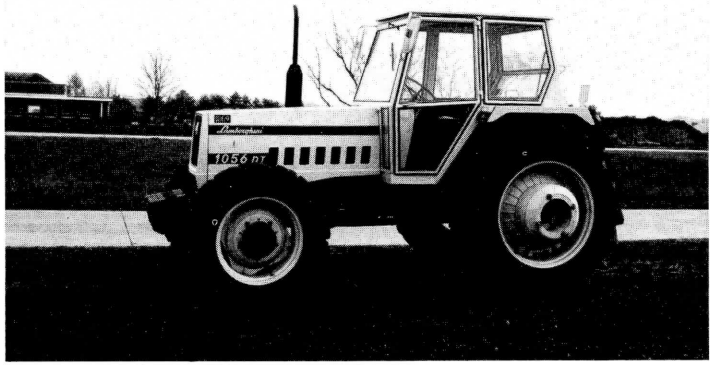
Board of Tractor Test Engineers



Lamborghini 1056 DT Dsl

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