ISTITUTO SPERIMENTALE PER
LA MECCANIZZAZIONE AGRICOLA
SEZIONE DI TREVIGLIO

O.E.C.D. n. 1081

Test in accordance with O.E.C.D. Standard Code for the official testing of agricultural tractors

Report on test of: LAMBORGHINI 674 70 DT "4WD"



Submitted for test by: TRATTORI LAMBORGHINI S.p.A.
V.le Cassani 15
24047 TREVIGLIO (BG)

Date of approval O.E.C.D.: 08-09-1987

Period of test: february-may 1987

I.S.M.A. - TREVIGLIO
Via Milano, 43

TEST n.029

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All stated dimension and tests referred to tyre size 12.4/24 (6plr) at front and 16.9/30 (6plr) at rear, as well as to track whiths 1700 mm at front and 1700 mm at rear.

- Tractor manufacturer's: LAMBORGHINI TRATTORI S.p.A. TREVIGLIO (BG)
- Submitted for test by: the manufacturer
- Selected by: the manufacturer with the agreement of ISMA
- Place of running in: TREVIGLIO
- Duration of running in: 50 hours

I - SPECIFICATIONS OF TRACTOR

TRACTOR

- Make: LAMBORGHINI;
- Model : 674-70 DT "4WD";
- Type: Wheeled tractor, unit constr.,all wheel drive tractor;
- Serial no.: 10032;
- First serial no.:10001;

ENGINE

- Make: LAMBORGHINI;
- Model: 1000.4 W;
- Type : Watercooled 4 stroke Diesel engine direct injection;
- Serial n.: 10056;

Cylinders

- Number/disposition: 4 vertical in line;
- Bore/stroke: 105/115.5 mm;
- Capacity: 4000 cc;
- Compression ratio: 17.1/1;
- Arrangement of valves: Overhead;
- Cylinder liners: wet liners;

Fuel system

- Fuel feed system: AC corone fuel feed pump;
- Make, type and model of fuel filter: FIAMM FNA 166/00;
- Capacity of fuel tank: 85 l;
- Make, type and model of injection pump: BOSCH PFR 1K 90 A 472, immersed pump one for cylinder,whitout serial number,in line injection pump.

- Manufacturer's production setting of injection pump:
  . flow rate 50.4 ±3 mm3/stroke at rated speed and full load;
  . timing 18 ± 0.5 before TDC;
- Make, type and model of injectors:BOSCH DLLA 150 S 925 multihole injection nozzles;
- Injection pressure: 180 ± 15 bar;

Governor

- Make: LAMBORGHINI;
- Type: mechanical variable speed;
- Model: 089.1652.4;
- Governor range of engine speed from 675 to 2509 rev/min;
- Rated engine speed : 2350 rev/min;

Air Cleaner

- Main filter
  . Make: DONALDSON;
  . Type: Dry paper element filter;
  . Model: FKG 06-5296;
  . Location : front of engine;
- Maintenance indicator : with the warning lamp on the dashboard;

Lubrication system

- Type : forced feed from gear pump;
- Total oil capacity including filter: 9.2 l;
- Oil change period : 1250 hrs;
- Type of filter : FIAMM 4803 IN;
- Number: 1;
- Filter change period: 300 hrs;
- Oil specifications (see pag.18)

Cooling system

- Type and detail: water cooling with impeller pump over pressure valve set to 0.4 bar;
- No. of fan blade : 4;
- Diameter : 400 mm;
- Coolant capacity: 11 l;
- Type oil temperature control: electrical indicator.

Starting system

- Safety device: Preventing engine start in gear;
- Make: BOSCH;
- Model: JF 12 V;
- Type: electromagnetic engagement;
- Power: 3 kW for start motor rating;
- Starting system for low temperatures: thermostarter(opt.);

Electrical equipement

- Voltage: 12 V;
- Generator
  . Make: BOSCH;
  . Type: alternator K1 14V 55 A 20;
  . Power: 770 W;
- Battery : 1 lead acid;
  . Capacity: 110 Ah at 20 hours;

Exhaust system

- Make: LAMBORGHINI;
- Type: 4 chambers reflection absorption;
- Model: 255.6610.3;
- Location: on the left hand side of engine cowling, vertical position;
- Height of outlet above ground: 2750 mm.

TRANSMISSION

Clutch: utilized only for travelling of tractor
- Make: LAMBORGHINI;
- Type : single disc dry clutch;
- Model: 255.23;
- Disc diameter: 280 mm;
- Control system: hydraulically operated by pedal self readjusting;

Gear box

- Make: LAMBORGHINI;
- Type: mechanical syncromesh speed change gear with 4 speeds forward, with 3 ranges speed, 1 miniriductor groupand 1 reverse group;
- Model: 299.31;
- No. speeds: 24 forward and 12 reverse;
- Available options: 12 forward and 12 reverse or 16 forward and 16 reverse or 20 forward and 20 reverse;

Rear axle and final drives

- Make: LAMBORGHINI;
- Type: bevel gear differential and epicyclic final drive;
- Model: 255.44;
- Differential lock: yes;
- Model: LAMBORGHINI;
- Type: mechanical;
- Control system: engaged or disengaged with pedal;

Front axle and final drive

- Make: LAMBORGHINI;
- Type: 255.43;
- Model: original LAMBORGHINI system with central shaft bevel gear drive, differential and epicyclic final drive;
- Differential lock: yes;
  . Model: LAMBORGHINI;
  . Type: mechanical;
  . Method of engagement: with pedal;
  . Metod of disengagement: with pedal;

Transmission lubrication

- Oil capacity
  . Gear box, rear axle, final drive,power lift and hydraulic system: in common, total capacity filter including 45 l;
  . Change period: 1200 hrs;
  . Filter change period: when the filter clogging warning lamp is lighted;
  . Front axle and final drive: total capacity 6 l;
  . Changing: 1200 hrs;
- Recommended oil: see pag.18

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Total ratios and speeds

Group		Number of engine revolutions for one revolution of the driving wheels	Nominal traveling speed at a rated engine speed of 2350 rev/min
FORWARD			
SLOW	1m	594.40	1.056
	1	494.60	1.245
	2m	439.20	1.402
	2	371.70	1.656
	3m	358.80	1.716
	3	303.70	2.027
	4m	250.80	2.455
	4	212.30	2.900
NORMAL	1m	183.50	3.356
	1	155.30	3.965
	2m	137.90	4.465
	2	116.70	5.275
	3m	112.70	5.465
	3	95.40	6.457
	4m	78.80	7.818
	4	66.70	9.257
FAST	1m	60.60	10.160
	1	51.30	12.005
	2m	45.50	13.518
	2	38.60	15.972
	3m	37.20	16.546
	3	31.50	19.550
	4m	26.00	23.668
	4	22.00	27.965

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Group		Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed at a rated engine speed of 2350 rev/min
REVERSE			
SLOW	1	474.90	1.296
	2	357.00	1.725
	3	291.60	2.111
	4	203.90	3.020
NORMAL	1	149.10	4.129
	2	112.10	5.494
	3	91.60	6.724
	4	64.00	9.679
FAST	1	49.30	12.501
	2	37.00	16.633
	3	30.20	20.358
	4	21.10	29.121

- Tyre size 16.9/30 inflaction pressure: 1.3 bar
- Tyre radius index: 695 mm (E.T.R.T.O. norm)

POWER TAKE-OFF

Main power take-off

- Type: independent at rear of tractor, in tractor's median plane, engaged or disengaged through hand lever. Driven by multiplate wet clutch independent of travel clutch; ISO standard 500-1979;

Power take-off proportional to engine speed

540 rev/min

It is possible,through 6 screws, to mount: one take-off shaft end at 6 or at 21 splines. Changing speeds through external hand lever;
- Location:at rear of tractor;
- Diameter of power take-off shaft end: 34.9 mm;
- Number of splines: 6 in conformity with "ISO Standard 500 - 1979";
- Height above ground with tyre size 16.9/30: 710 mm;
- Distance from the median plane of the tractor 0 mm;
- Distance behind rear axle: 380 mm;
- PTO speed: 609 rev/min at rated engine speed;
- Engine speed: 2083 rev/min at standard power take-off speed 540 rpm;
- Ratio of rotation speeds (engine speed/p.t.o. speed): 3.857;
- Max power and torque trasmissible: 90 kW and 124.5 daNm;
- Direction of rotation (viewed facing driving end): clockwise;

1000 rev/min

- Location: at rear of tractor;
- Diameter of power take-off shaft end: 34.9 mm;
- Number of splines: 21 in conformity with "ISO Standard 500 - 1979";
- Height above ground with tyre size 16.9/30: 710 mm;
- Distance from the median plane of the tractor 0 mm;
- Distance behind rear axle: 380 mm;
- PTO speed at rated engine speed: 1028 rev/min
- Engine speed 2285 rev/min at standard power take-off speed: 1000 rpm;
- Ratio of rotation speeds (engine speed/p.t.o. speed): 2.2857;
- Direction of rotation (viewed facing driving end): clockwise;

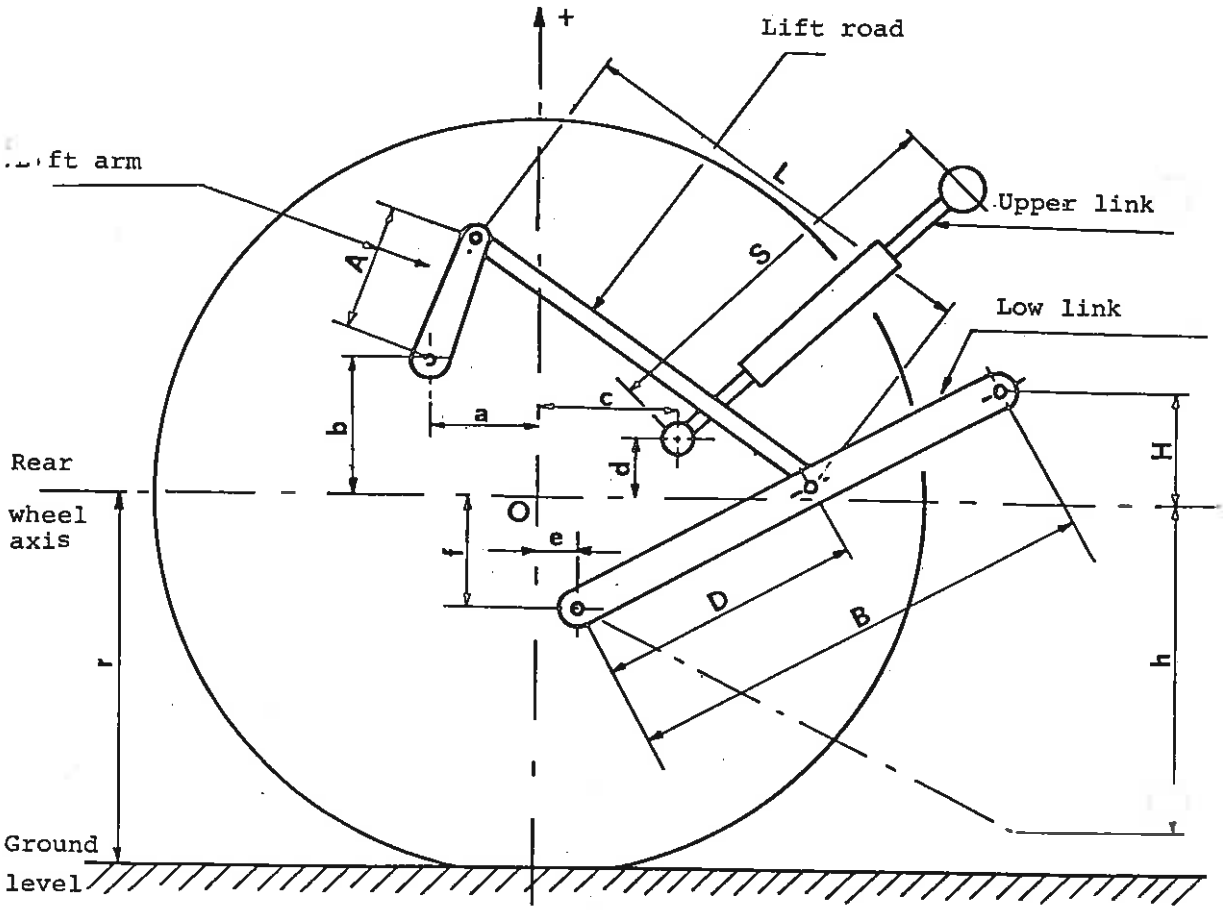
POWER LIFT

- Make: LAMBORGHINI;
- Type: LOAD SENSING;
- Type and number of cylinders: 2 at simple effect;
- Type of locking for the transport: mechanical, with screwed tie rods that lock the lower links;
- Exercise valve pressure: 150 bar;
- Opening pressure anti-shock valve: 180 bar;
- Lift pump type: hydraulic rotary pump,driven from engine shaft;
- Transmission between pump and engine: mechanical
- Type and number of filters: 1, replaceable paper cartridge;
- Changing: when the filter clogging warning lamp is lighted;
- Oil capacity: 45 l;
- Site of oil reservoir: gear box;
- Position and No.of additional oil plugs: 3 ways distributor at rear of tractor;
- Maximum volume of oil available to external cylinders: 15 l;
- Recommended oil (see pag.18)

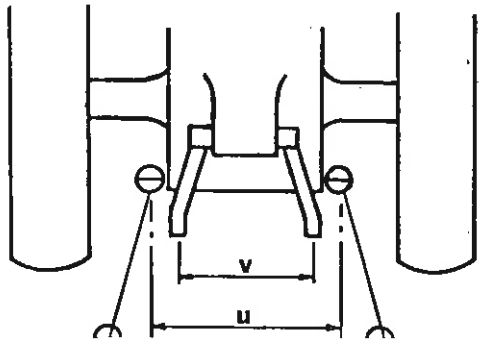
Three-point linkage

- Category: 2 in conformity with ISO 730/I;

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Rear weel axis



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Specify the settings for the lifting test

Rear tyres (size 16.9/30)	(r)	695 mm
Front tyre (size 14.4/24)	(r')	540 mm
Length of lift arms	(A)	310 mm
Length of lower links	(B)	725 mm
Distance of lift arm :horizontally	(a)	122 mm
pivot point from rear :vertically	(b	337 mm
wheel centre line		
Horizontally distance between the 2 lower link points	(u)	480 mm
Horizontally distance between the 2 lift arm end points	(v)	490 mm
Length of upper link	(S)	from 580 to 700 mm
Distance of upper link horizontally	(c)	320 mm
pivot point from rear vertically	(d)	220 mm
wheel centre line		
Distance of lower link horizontally	(e)	215 mm
pivot point from rear vertically	(f)	190 mm
wheel centre		
Distance of lower link pivot points to lift rod pivot points on lower link	(D)	363 mm
Length of lift rods	(L)	from 640 to 740 mm
Height of lower hitch points:		
- in Low position	(h)	495 mm
- in High position relative to the rear wheel centre line, situated 695 mm above the ground level	(H)	145 mm

SWINGING DRAWBAR

- Type: LAMBORGHINI 97320;
- Height above ground (tyre size:16.9/30) max 450 mm
  min 375 mm
- Type of adjustment: reversible;
- Distance of hitch point from rear axle axis, horizontally: 815 mm;
- Distance of hitch point from power take-off shaft end
  . vertically: 283 - 358 mm below;
  . horizontally: 485 mm forward;
- Lateral adjustement (centre of clevis):
  (right hand) 270 mm;
  (left hand) 270 mm;
- Distance of pivot point from rear axle axis, horizontally: 485 mm forward;
- Diameter drawbar pin hole: 33 mm;

TRAILER HITCH

- Type: LAMBORGHINI;
- Height above ground: 470 - 600 - 730 mm;
- Distance of hitch point from rear axle axis, horizontally: 530 mm;
- Distance of hitch point from power take-off shaft end:
  . vertically: behind 240 - 110 mm above 20 mm;
  . horizontally: 150 mm;
- Maximun vertical permissible load: 1470 daN;
- Diameter of the pinhole: 28 mm.

HOLED DRAWBAR

- Number of holes: 7;
- Distance between holes: 100 mm;
- Hole diameter: 28.5 mm;
- Thickness/width of the drawbar: 30 - 80 mm;
- Height above ground , minimum 220 mm;
  maximum 910 mm;
- Horizontal distance to power take-off shaft end (rear) 560 mm;
- Diameter of the pinhole: 30 mm.

STEERING

- Specifications: hydrostatic steering,whit BOSCH hydraulic gear pump HY/ZFS 11/8 L 208.
  two rams at simple effect acting directly on front axle;

- Make: DANFOS;
- Model: ORBITROLL;
- Type: OSPC 80 OR;
- Working pressure: 120 bar;
- Oil capacity: 45 l in common with gear box;
- Oil change period: 1200 hrs;
- Filter change period: when the filter clogging warning lamp is lighted;
- Recommended oil (see pag.18)

BRAKE

Service brake

- Make: LAMBORGHINI;
- Model: 255.54;
- Type: oil bath disc, total 4 discs, mounted before 2 at front and 2 at rear differential half schafts.Front disc dia=224 mm ; rear disc dia=290 mm.
  FRENDO HDT 303 lining material;
- Method of operation: hydraulically acting with 2 pedals .
- Trailer braking take-off: none.

Parking brake

- Type: fully independent by service brake, 2 oil bath discs mounted on the pinion shaft in the gear box
  ISOBOND SINTERIX lining material;
- Method of operation: mechanically by hand lever

Steering brake : divided pedal of service brake for normal use locked together;

STEERING WHEELS

- Number: 2;
- Location: at front;
- Tyres: radial;
  . Size: 12.4/24;
  . Ply rating: 6;
  . Maximum permissible load on each tyre: 1176.8 daN;
  . Corresponding inflation pressure: 1.7 bar;
- Track widths: 1500 - 1600 - 1700 - 1800 - 1900 - 2000 mm;
- Regulation: changing the position of the rims in respect of the disc;

DRIVING WHEELS

- Number: 4;
- Location: 2 at front and 2 at rear;
- Tyres:
  . Size: 16.9/30;
  . Ply rating: 6
  . Type of casing: radial;
  . Maximum permissible load on each tyre: 1863 daN;
  . Corresponding inflation pressure: 1.3 bar;
- Track widths: 1500-1600-1700-1800-1900-2000 mm;
- Regulation: changing the position of the rims in respect of the disc;

WHEELBASE: 2280 mm;

PROTECTIVE STRUCTURE

Specifications

- OECD approval number: CSD 1031/8;
- Trade name: SAME C 25 A;
- Manifacturer's name: SAME;
- Protective device: cab;

Materials used in the construction and dimensions

See OECD Test Report on Protective Stuctures.

DRIVER'S SEAT

- Make: BOSTROM XL;
- Type of suspension: 84422 upholstered seat with back rest;
- Type of damping: shock absorber;
- Range of adjustment, longitudinal 150 mm;
  vertical 60 mm;

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LIGHTING

Lighting system in accordance with CEE 78/933

	Height above ground of centre with tyre mm	Size mm	Distance from out side edge of trac tor to centre at 1700 mm track width mm
Headligths	965	110*110	820
Front park.lights	1790	110*35	205
Front finger post	1825	110*35	205
Rear park.lights	1610	180*35	370
Rear finger post	1650	90*45	325
Stop	1650	90*45	415
Reflectors	1420	90*60	355

Tyre size: 12.4/24 front - 16.9/30 rear.

TEST CONDITIONS

- Overall dimensions with tyres:
- Front 12.4/24 - Rear 16.9/30

	Length (mm)	Width (mm) min	Width (mm) max	Height (mm) at top of exaust sil.	Height (mm) at top of protec.struc.
Without ballast	3990	1970	2570	2750	2540
With ballast	4390	1970	2570	2765	2535

Ground clearance

-Clearance-limiting part: 410 mm, below front traction gear

Track setting

- Front: 1700 mm;
- Rear: 1700 mm;

Tractor mass (without driver but with thanks full with cab);

	Units	Front	Rear	Total
Without ballast	kg	1320	1760	3080
With ballast	kg	1540	1960	3500

Ballast: front axle, ballast of 40 Kg each with svitable support: weight support 20 Kg;
rear axle, rings of 50 kg,each, with 6 bolts

	ballast (n)	total weight (Kg)	water (Kg)
front	5+1°	220	--
rear	2+2	200	--
additional	---	---	--

° = front ballasted support.

Fuel and lubricants recommended and used in tests in accordance with API NORM

Fuel

- Type: AGIP Diesel, DIN 51601;
- Specific gravity at 15 °C: 0.840 kg/l;

Engine oil

- Type: AGIP DIESEL SIGMA S SAE 30;
- Viscosity: 12.5 cSt;

Transmission oils and rear, front axle and final drive oils;

- Type: AGIP ROTRA THT;
- Viscosity: 11.5 cSt;
- Viscosity index: 95;

Power lift oil

- Type: AGIP ROTRA THT;
- Viscosity: 11.5 cSt;

Steering oil

- Type: AGIP ROTRA THT;
- Viscosity: 11.5 cSt;
- Recommended grease: AGIP GREASE 30;
- Number of lubrication points: 11;

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II - TEST RESULTS

A. COMPULSORY TESTS RESULTS

1) MAIN POWER TAKE-OFF PERFORMANCE

- Date and location of test: 10 th APR 1987 - I.S.M.A. TREVIGLIO (BG) ITALY
- Type of dynamometer: ZOELLNER 350 AC

Power	Speed		Fuel consumption			Specific
	Engine	P.T.O.	Hourly	Specific		Energy
kW	rev/min	rev/min	l/h	kg/h	g/kWh	kWh/l
MAXIMUM POWER - 2 - HOUR TEST						
46.81	2350	1028	14.22	11.92	254	3.29
POWER AT RATED ENGINE SPEED						
46.81	2350	1028	14.22	11.92	254	3.29
STANDARD POWER TAKE-OFF SPEED (1000+/-10 REV/MIN)						
46.69	2285	1000	14.04	11.77	252	3.32
PART LOADS						
i) torque corresponding to maximum power at rated engine speed						
46.81	2350	1028	14.22	11.92	254	3.29
ii) 85% of torque obtained in i)						
40.67	2402	1051	12.60	10.56	259	3.22
iii) 75% of torque definited in ii)						
30.92	2434	1065	10.19	8.54	276	3.03
iv) 50% of torque defined in ii)						
20.78	2454	1074	8.08	6.77	325	2.57
v) 25% of torque defined in ii)						
10.51	2484	1087	5.96	5.00	475	1.76
vi) unloaded						
0	2509	1098	4.12	3.45	-	-

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PART LOADS AT STANDARD POWER TAKE-OFF SPEED

Power	Speed		Fuel consumption			Specific
	Engine	P.T.O.	Hourly		Specific	Energy
kW	rev/min	rev/min	l/h	kg/h	g/kWh	kW h/l
i) The torque corresponding to maximum power available						
46.69	2285	1000	14.04	11.77	252	3.32
ii) 85% of torque obtained at maximum power						
40.46	2331	1020	12.41	10.40	257	3.26
iii) 75% of torque defined in ii)						
30.73	2361	1033	10.19	8.39	273	3.06
iv) 50% of torque defined in ii)						
20.66	2382	1042	7.87	6.60	319	2.62
v) 25% of torque defined in ii)						
10.46	2414	1056	5.95	4.99	477	1.76
vi) unload						
-	2443	1069	3.93	3.29	-	-

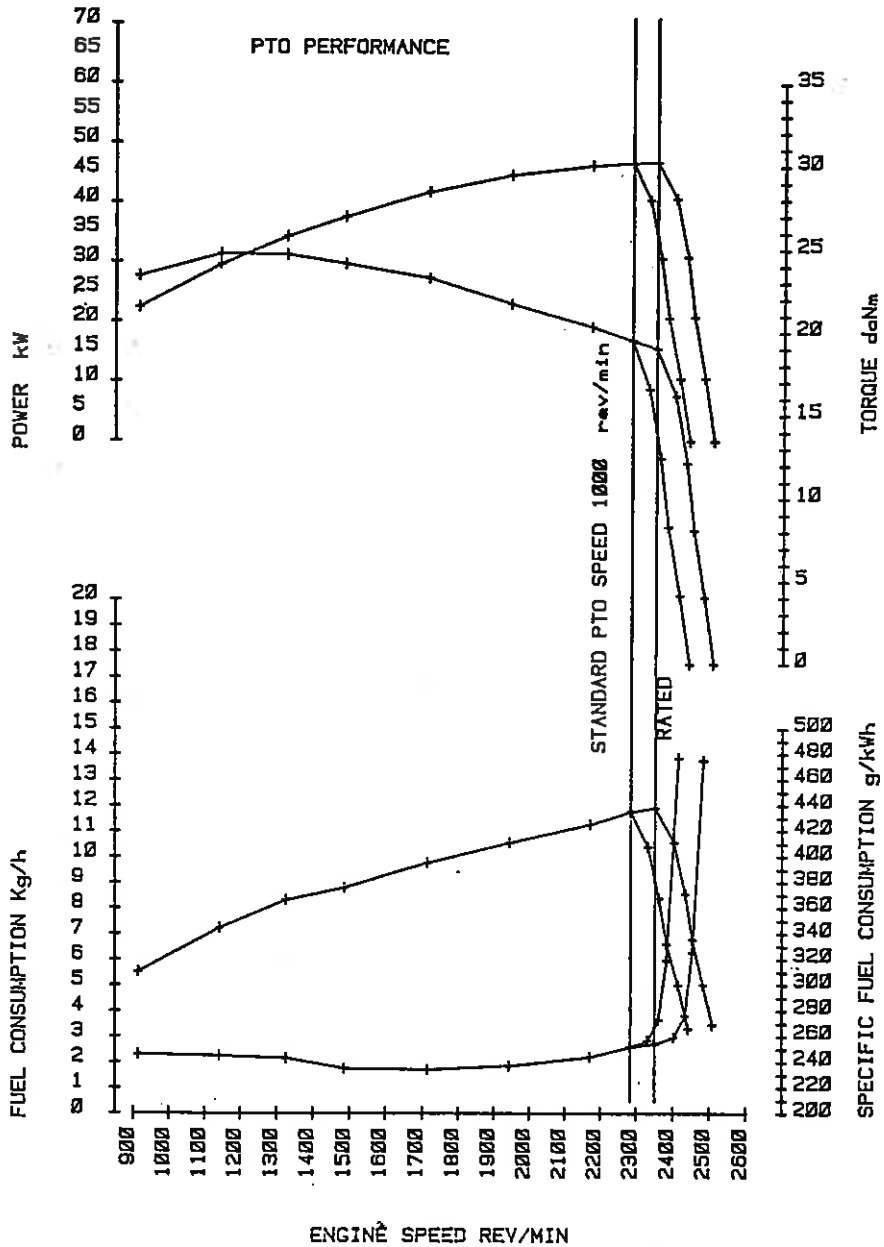
STANDARD SPECIFIC FUEL CONSUMPTION: 259/325/257/319 g/kWh

- No load maximum engine speed: 2509 rev/min
- Torque (1) at maximum power: 19.03 daNm
- Maximum torque (1) (engine speed: 1143 rev/min):24.70 daNm
- Mean atmospheric conditions : Temperature 20°C
  Pressure 987 mbar
  Relat.humidity 90%
- Maximum temperatures : Coolant 107°C
  Engine oil 85°C
  Fuel 35°C
  Engine air intake 22°C

(1) The torque is the equivalent crankshaft torque.

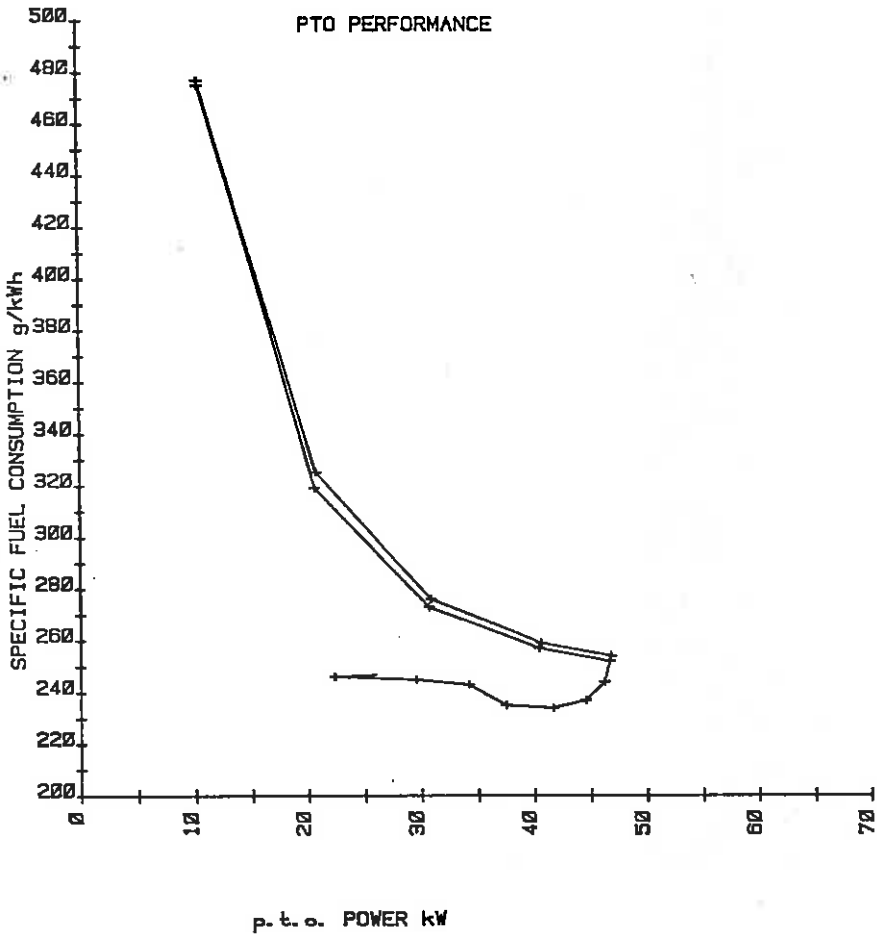
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(2) POWER LIFT AND HYDRAULIC POWER TEST
- Date and location of tests: 14 th APR 1987 - ISMA Treviglio (BG)

		at hitch point	on the frame
Height of lower hitch point above ground in down position	mm	200	200
Vertical movement	mm	640	756
Maximum corrected force exerted through full range	daN	2451	2206
Corresponding pressure of hydraulic fluid	bar	164	164
Moment about rear axle	daNm	2303	3419
Maximum tilt angle of mast over range of lift	Degrees	--	11

Lifting heights relative to the horizontal lower links

mm	-305	-200	-100	0	100	200	300	335	451
Lifting forces at hitch points									
daN	2451	2598	2745	2843	2941	3089	3187	2941	---
Lifting forces at test frame									
daN	2206	2451	2471	2471	2471	2451	2451	----	2353

HYDRAULIC POWER TEST
Sustained pressure with relief valve open: 183 bar;
Pump delivery rate at min pressure: 36 l/min;

Hidraulic power	kW	flow rate l/min	pressure bar	oil temp. °C
At 90% of the actual reliev valve setting	8.95	32.6	164	65
Maximum	9.83	32.5	167	65

Tapping point used for test : at rear of tractor
Hydraulic fluid: see pag.18

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(3) DRAWBAR PERFORMANCE

- Date of tests: 26/5/1987 I.S.M.A. - TREVIGLIO
- Type of track: concrete
- Type and size of tyres front: 12.4/24 6 plr
  rear : 16.9/30 6 plr

1) MAXIMUM POWER (UNBALLASTED)

. heigh of drawbar above ground 470 mm;
. tyre inflation pressure: 1.3 bar rear ; 1.7 bar front.

Gear	Pow.	Draw. pull	Speed	Engine speed	Slip of wheel	Specific ener.cons.	Temperat. fuel	cool.eng.	temp.	Atm. condit. hum.	pres.
n.	kW	daN	km/h	rev/min	%	kWh/l	g/kWh	°C	°C	°C	°C	%	mbar
2S	11.10	2647	1.52	2470	15.0	1.60	522	26	61	96	17	60	996
3Sm	11.60	2667	1.57	2465	15.0	1.62	517	26	61	97	17	60	996
3S	13.50	2642	1.85	2460	15.0	1.73	483	26	62	97	17	60	996
4Sm	16.20	2629	2.23	2455	15.0	1.94	432	27	62	98	18	60	996
4S	19.30	2638	2.64	2445	15.0	2.05	409	28	63	98	18	60	996
1Nm	22.60	2686	3.04	2440	15.0	2.25	371	28	63	98	19	61	997
1N	26.10	2657	3.54	2410	15.0	2.35	356	28	64	99	19	61	997
2Nm	28.90	2642	3.95	2390	15.0	2.47	339	29	66	99	19	62	997
2N	33.60	2629	4.62	2360	15.0	2.56	327	30	67	99	19	62	997
	34.70	2630	4.77	2355	15.0	2.50	319	30	67	98	19	62	997
3N	39.40	2418	5.89	2345	11.0	2.75	304	30	67	98	19	63	997
4Nm	40.50	1963	7.44	2350	7.0	2.80	298	31	67	98	19	63	997
4N	40.40	1660	8.96	2345	5.0	2.77	301	31	67	98	19	63	997

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(ii) MAXIMUM POWER (ballasted)
. heigth of drawbar above ground 465 mm
. tyres inflation pressure : 1.3 bar at rear - 1.7 bar at front

Gear	Pow.	Draw. pull	Speed	Engine speed	Slip of wheel	Specific ener.cons.		Temperat. fuel	cool.eng.	Atm.condit. temp.	hum.	pres
n.	kW	daN	km/h	rev/min	%	kWh/l	g/kWh	°C	°C	°C	°C	%	mbar
1Sm	7.21	2855	0.91	2491	15	1.21	693	28	63	96	18	65	994
1S	8.66	2864	1.09	2488	15	1.42	588	28	63	96	18	65	994
2Sm	10.10	2912	1.25	2486	15	1.63	514	28	63	96	18	65	994
2S	11.94	2927	1.47	2480	15	1.77	473	29	63	96	18	65	994
3Sm	13.70	3003	1.53	2470	15	1.92	439	29	63	96	18	65	994
3S	15.00	2917	1.80	2462	15	1.98	423	28	64	98	18	65	995
4Sm	17.77	2936	2.18	2450	15	2.07	405	28	64	98	19	64	995
4S	18.51	2892	2.57	2446	15	2.11	397	29	65	99	10	64	995
1Nm	20.70	2970	2.96	2438	15	2.17	387	29	65	100	20	64	995
1N	26.80	2845	3.49	2413	15	2.42	347	30	67	101	20	64	995
2Nm	30.80	2773	3.92	2393	15	2.56	329	30	67	101	20	64	995
2N	36.40	2648	4.64	2364	14.5	2.71	310	31	67	102	20	64	995
3Nm	37.21	2826	4.74	2355	13	2.75	305	31	67	101	20	64	995
3N	37.84	2313	5.89	2345	8	2.75	305	31	67	101	20	64	995
4Nm	39.80	1971	7.27	2353	6	2.77	303	31	66	100	20	64	995
4N	40.29	1659	8.75	2347	4	2.77	303	31	66	100	20	64	995
1Fm	41.03	1518	9.73	2351	3	2.80	299	31	66	100	20	64	99
1F	40.06	1249	11.55	2348	2.5	2.76	305	31	66	100	20	64	99

(iii) FIVE HOUR TEST at 75% of pull at maximum power: gear 4Nm

4Nm	31.17	1477	7.60	2415	3	2.62	320	33	68	98	20	68	993

(iv) FIVE HOUR TEST at pull corresponding to 15% wheel slip in test (ii)

2Nm	30.29	2599	4.20	2453	-	-	-	27	66	103	19	69	995

- Test (iv) was carried out with additional ballast, the figures not quoted are therefore irrilevant.
- Total oil consumption in the first five hours: 260 g;

- Total oil consumption in the second five hours: 270 g;
- Hourly consumption: 53 g/h.

4 - TURNING SPACE AND TURNING CIRCLE

Wheel equipment front: 12.4/24 6 ply
rear: 16.9/30 6 ply
Track of wheel front: 1700 mm
rear: 1700 mm.

	with brakes on four wheels		without brakes	
	rigth (m)	left (m)	rigth (m)	left (m)
rad.turn space	3.76	3.73	4.34	4.36
rad.turn circle	3.68	3.65	4.26	4.28

5 - LOCATION OF CENTRE OF GRAVITY

Heigth above ground ..... mm 899
Distance forward from rear axle centre ..... mm 980
Distance from tractor median plane ..... mm 0

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6 - BRAKING PERFORMANCE
(tractor with brakes on all wheels)

Date of test: 20/5/1987
Type of track: concrete;
Type of decelerometer: Peiseler.

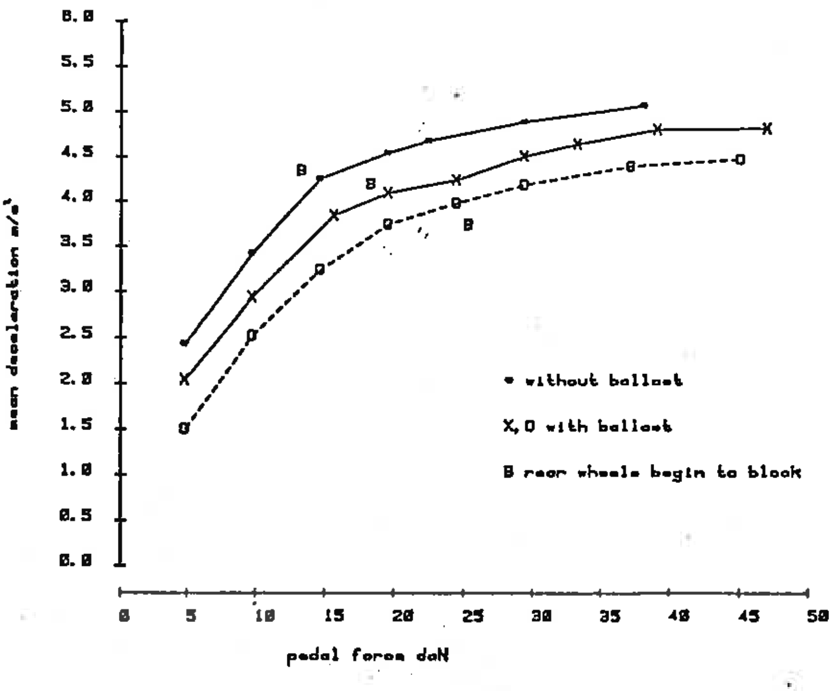
Maximum weigth tecnically permissible of the tractor with ballast(*)

	front axle kg	rear axle kg	total kg
unballasted	1330	1840	3170
ballasted	1920	2980	4900

(*) Tractor carrying a driver, a responsable for monitoring and the decelerometer.

A1) SERVICE BRAKES (all wheel braked)

Type - 0 - (cold brakes) ______ Type - I - (fade) --------



- Middle speed of beginning braking (unballasted tractor) = 30.8 km/h
- Middle speed of beginning braking (ballasted tractor) = 30.6 km/h
- The heating of brakes has been make to drag tractor braking for 1 km

- Comment on deviation and vibration: none

B) Parking brake

	ballasted tractor on 18% slope		unballasted tractor with trailer of 3000 kg on 12% slope.	
	slope	desent	slope	descent
pull on handbrakes daN	12.5	13	17.5	18

7 - MEASUREMENT OF EXTERNAL NOISE LEVEL

- Date of test: 15/4/87
- Type of sound level meter: 2209 B&K
- Type of track: concrete
- Safety cab: SAME C 25 A

Result of test

- Number gear used: 4F
- Travelling speed: 23.2 km/h
- Sound level: 85 dB(A)

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8 - NOISE MEASUREMENT AT THE DRIVER'S EAR LEVEL

- Date of test: 16/4/87
- Type of sound level meter: 2209 B&K
- Type of track: concrete
- Safety cab: SAME C 25 A.

Gear	Drawbar pull at which the tractor develops the max sound level	travelling speed km/h	sound level db(A)	
1Sm	1864	1.00	80.5	
1S	1766	1.20	81.0	
2Sm	1766	1.30	80.5	
2S	1668	1.60	81.0	
3Sm	1766	1.60	80.5	
3S	1668	1.90	80.5	
4Sm	1668	2.30	80.5	
4S	1570	2.80	81.0	
1Nm	1619	3.20	81.5	
1N	1570	3.80	81.5	
2Nm	1619	4.30	81.0	
2N	1570	5.00	81.5	
3Nm	1570	5.20	81.0	
3N	0	7.20	80.5	
3N	1570	6.10	81.5	*°
4Nm	1570	7.40	81.5	
4N	1570	8.80	81.5	
1Fm	1079	10.00	81.5	
1F	883	11.90	81.5	
2Fm	736	13.40	81.0	
2F	588	16.00	81.0	
3Fm	540	17.00	81.5	
3F	441	20.40	81.5	
4Fm	343	25.50	81.5	
4F	0	31.30	80.5	#
4F	245	30.60	81.5	

(*) Gear with nominal speed nearest 7.5 km/h.
(°) Noisest gear.
(#) Max forward speed gear.

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LAMBORGHINI 674 - 70 DT "4WD" TEST N.029 30

REMARKS: none

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