CONSIGLIO NAZIONALE DELLE RICERCHE
ISTITUTO PER LA MECCANIZZAZIONE AGRICOLA
10135 TORINO - Strada delle Cacce 73
(Italia)

REPORT No. 1546/T/1990

TEST IN ACCORDANCE WITH THE O.E.C.D. FULL CODE FOR THE OFFICIAL TESTING OF AGRICULTURAL TRACTORS

TRACTOR: **Make: FIAT**
Model: 35-66
Type: 2 WD



Manufactured by: FIATGEOTECH S.p.A. - Modena - Italy

Date and location of tests: February 1990 - September 1990 - Turin (Italy)

This report has been approved by the O.E.C.D. Co-ordinating Center CEMAGREF,(France) as being in accordance with the O.E.C.D. Tractor Test Code

Number and date of approval: 1308 - 11th April 1991

This bulletin is based on engineering tests in accordance with O.E.C.D. Tractor Code. It does not contain an evaluation of performance of the tractor on pratical farm work.

In this report all performance characteristics are given corresponding to the International System of Units.

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Fig. No.

Main power take-off test

Curves of power, torque, hourly and specific fuel consumption/ crankshaft speed 1

Curves of specific fuel consumption/crankshaft power p.t.o. . 2

Tractor manufacturer's name and address:	FIATGEOTECH S.p.A. Viale delle Nazioni, 55 MODENA - Italy
Submitted for test by:	Manufacturer
Selected by:	Manufacturer with agreement by Istituto per la Meccanizzazione Agricola - Torino (Italy)
Place of running-in:	FIATGEOTECH - San Matteo - Modena (Italy)
Duration of running-in:	Engine and tractor appr. 50 hours
Location of test:	Istituto per la Meccanizzazione Agricola Torino (Italy)

SPECIFICATION OF TRACTOR:

TRACTOR:	
Make:	FIAT
Model:	35-66
Type:	Wheel tractor unit construction, two rear wheel driven
Serial No.:	272171
1st serial No.:	272000
ENGINE:	
Make:	LOMBARDINI
Model:	LDW 1503/B2
Type:	4 - stroke Diesel engine, naturally aspirated, direct injection, water cooled.
Serial No.:	3087699
Cylinders:	3 cylinders, vertical, in-line, 88 mm bore x 85 mm stroke, capacity 1551 cm^3 compression ratio 17:1, in-line valves, replaceable cast-iron dry cylinder liners.

Fuel system:	Forced feed; LOMBARDINI model QLC fuel pump; 1 wire-mesh filter on pump suction side and 1 CAV filter with replaceable cartridge element; changing interval: 400 working houres; capacity of fuel tank: 35 litres; LOMBARDINI model 104.6590.186/8 injection pump, 275189 serial number. Manufacturer's production setting 7.82 l/h at rated engine speed and full load. Injection timing 6°± 1before TDC. BOSCH or CONDIESEL multihole injectors, model DNO SD 293 (BOSCH) or LCC 670 2505C (CONDIESEL), Serial No. none; injector pressure 31 ± 2 MPa.
Governor:	BOSCH centrifugal variable speed governor, mechanical type, incorporated in fuel injection pump, governed range engine speed 650 to 3035 rev/min; rated engine speed 2800 rev/min.
Air cleaner:	FIAT main cleaner, 44907463 driwing dry with two replaceable cartridges. Air inlet under bonnet in front of engine. Maintenance indicator: none.
Lubrication system:	Forced feed from gear-type pump; one, FIAMM make, replaceable cartridge type filter installed on the pressure line to the engine.
Cooling system:	Water cooled with centrifugal impeller pump, overpressure relief valve set to 65 KPa, thermostat with by-pass; 360 mm dia, 8 blandes, belt driven fan; cooling water capacity 5 litres. Temperature visual control with thermometer. Superpressure system: radiator cap.
Starting system:	Electrical, BOSCH make, 12 V 3.5 kW; starting motor pinion coupling solenoid operated. Cold starting aid: CAV make, thermostart model with variable resistance or "start-pilot" as option. Safety device: operable only when the gear box is in the neutral position and the clutch is disengaged.

ELECTRICAL SYSTEM

Voltage:	12 V, negative earth.
Generator:	Alternator MARELLI make, AA 125R, three phase, 14 V; 500 W power.
Battery:	One, MARELLI make, 438320 - ES; capacity: 85 Ah at 20 hours rating.
EXHAUST SILENCER	FIAT make, DGM-SA 1607 model, circular shape 123 mm dia, expansion type; lenght 370 mm. Horizontal position on tractor left side, below driver's platform maximum height above ground 430 mm.

TRANSMISSION TO WHEELS:

Clutch:	LUK or VALEO make, independent dry dual disc clutch; 230 mm dia plates; travelling part: pedal operated; p.t.o. part: hand lever operated.
Gearbox:	Own make. On the tractor model tested: mechanical type syncronized constant mesh gear with total 16 forward and 16 reverse speeds; the transmission consists of three mechanical in series gear units: the first with four speeds fully synchronized, the second with four positions to select the gear ratios (creeper slow, normal and high); the third with two position to select the driving sense (forward or reverse); each unit is operated by own lever.
Rear axle and final drive:	Own make, costant mesh gear type; mechanical differential locking, pedal operated; spur gear final drive.
Front axle:	Own make, telescopic adjustable axle.

FIAT 35-66

Total ratios and travelling speed (tyres 11.2 R 28 and pressure 160 KPa)

Gear	Group	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed (*) at rated engine speed (2800 rev/min) km/h
I		823.699	0.72
II	Creeper	582.325	1.02
III	Forward	408.279	1.46
IV		288.905	2.06
I		226.914	2.63
II	Slow	160.420	3.72
III	Forward	112.474	5.30
IV		79.588	7.49
I		192.553	3.10
II	Normal	136.128	4.38
III	Forward	95.442	6.25
IV		67.536	8.83
I		56.992	10.46
II	High	40.292	14.80
III	Forward	28 249	21.11
IV		19.990	29.84
I		817.979	0.73
II	Creeper	578.281	1.03
III	Reverse	405.444	1.47
IV		286.899	2.08
I		225.338	2.65
II	Slow	159.306	3.74
III	Reverse	111.693	5.34
IV		79.036	7.55
I		191.216	3.12
II	Normal	135.183	4.41
III	Reverse	94.779	6.29
IV		67.067	8.89
I		56.597	10.54
II	High	40.012	14.91
III	Reverse	28.053	21.26
IV		19.851	30.04

(*) Calculated with a tyre dynamic radius index of 565 mm (ISO 4251/1 - 1984)

POWER TAKE OFF

Main:

Type: independent; shiftable by hand lever to independent or ground speed p.t.o.; one shaft.
Method of engagement: by means of dry dual disc clutch with hand lever.
Position: rear of tractor, in median plane; height above ground 555 mm
(with tyre 11.2 R 28).

Proportional engine speed p.t.o.:

— ***540 rev/min:*** distance behind rear axle 350 mm; diameter of p.t.o. shaft end 35 mm; 6 splines, in conformity with ISO 500/1979; no power restriction; 664 rev/min at rated engine speed; standard p.t.o. speed 540 rev/min at engine speed 2276 rev/min; p.t.o. shaft rotates clockwisely, viewed from tractor rear. Ratio of rotation speed:

$$\text{Engine/p.t.o. ratio} = \frac{2800}{664} = 4.217$$

— ***1000 rev/min:*** distance behind rear axle 350 mm; diameter of p.t.o. shaft end 35 mm; 21 splines in accordance with ISO 500/1979; no power restriction; 1024 rev/min at rated engine speed; standard p.t.o. speed 1000 rev/min at engine speed 2476 rev/min; p.t.o. shaft rotates clockwisely, viewed from tractor rear. Ratio of rotation speed:

$$\text{Engine/p.t.o. ratio} = \frac{2800}{1024} = 2.734$$

P.t.o. proportional to ground speed:

size of tyres: 11.2 R 28, radius index 565 mm; travelling distance for one revolutions of p.t.o. shaft:
0.398 at 540 rev/min;
0.205 at 1000 rev/min
number of p.t.o. shaft revolution for one revolution of the rear wheels:
8.1 at 540 rev/min
16.0 at 1000 rev/min
Direction of rotation with forward gear engaged: clockwise, viewed from tractor rear.

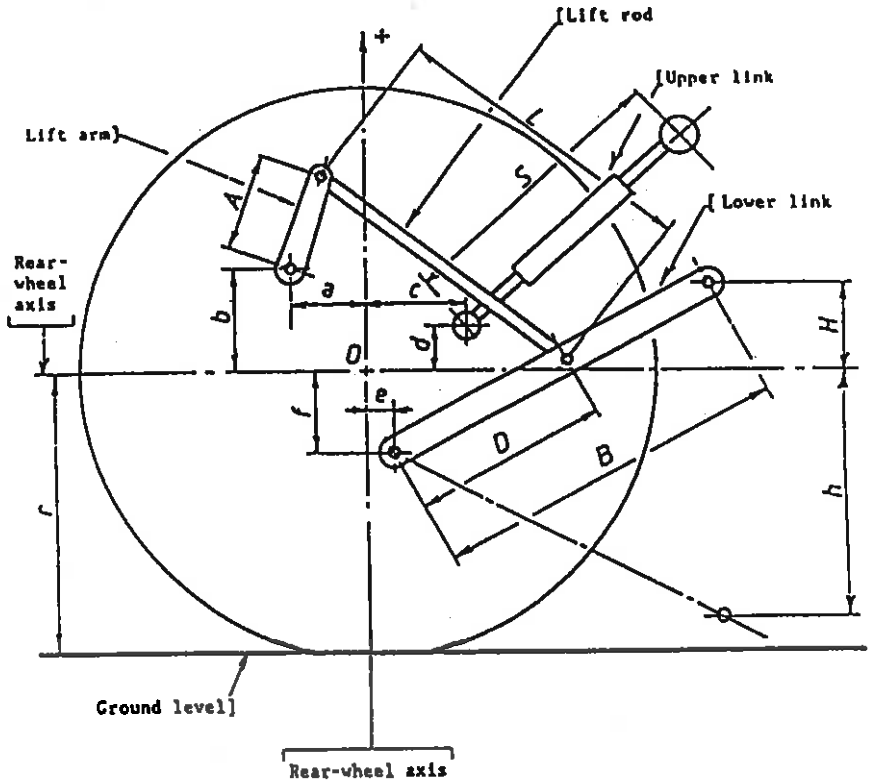
POWER LIFT:

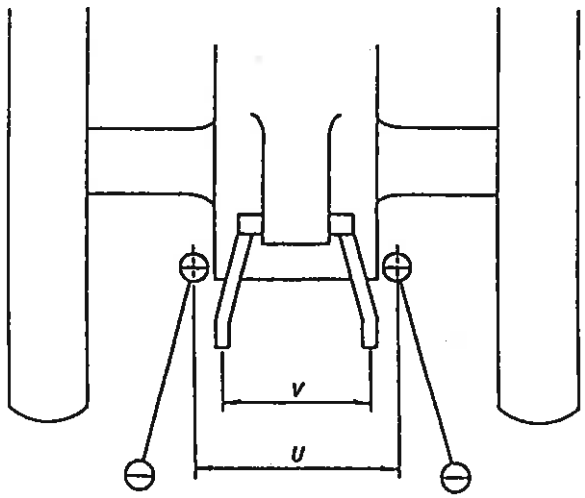
Own make; hydraulic power lift in unit construction, draught and position control operated by two independent levers.

— ***Hydraulic system:*** open centre system with hydraulic oil circuit in common with gear box. One single acting cylinder with 85 mm bore and 87.5 mm stroke.
Antishock valve setting: 19.8 MPa.
FIAT A 21 lift gear pump, directly driven by engine.
Delivery 22.8 l/min at rated engine speed.
There are no cylinder safety valves.
Type of linkage lock for transport: hydraulic.
Site of oil reservoir: gearbox cast housing. Number two tapping points on the rear part of tractor. Maximum volume of oil available to external cylinders 0,7 litres.

Implement linkage:

three point linkage, joint balls category 2,
according to I.S.O. STANDARD 730/I;
dimensions see on pag. 11.





Dimension of linkage geometry (when connected to the standard frame)

		Dimension or range mm	Settings used in test mm
Length of lift arms	(A)	225	225
Length of lower links	(B)	650	650
Distance of lift arm pivot: horizontally	(a)	-140	-140
point from rear-wheel axis: vertically	(b)	260	260
Horizontal distance between the ! lower link points	(u)	260	260
Horizontal distance between the 2 lift arm end points	(v)	495	495
Length of upper link	(S)	from 400 to 530	475
Distance of upper link pivot point from rear : horizontally	(c)	270 - 285 - 300	270
wheel axis : vertically	(d)	280 - 250 - 340	280
Distance of lower link pivot point from rear : horizontally	(e)	110	110
wheel axis : vertically	(f)	140	140
Distance of lower link pivot points to lift rod pivot points on lower links	(D)	285	285
Length of left lift rod	(L)	from 370 to 465	435
Length or right lift rod	(L)	from 360 to 470	435
Heigth of lower hitch points relative to the rear-wheel axis:			
- in low position	(h)	from 440 to 230	365
- in high position	(H)	from 190 to 385	260
Height above ground of liwer hitch points when locked in transport position (*)		from 755 to 950	-

(*) Assuming the dynamic radius index: 565 mm (ISO 4251/1 - 1984)

SWINGING DRAWBAR:	Own make; clevis type. Vertical height with tyres 11.2 R 28, to centre of clevis: min 350 mm max 450 mm above ground; adjustments obtained changing the setting of the drawbar on the drilled guide; clevis coupling pin diameter 28 mm; distance of hitch point from rear axle horizontally: 700 mm behind. Position relative to p.t.o., horizontally and vertically: — 355 mm behind — from 105 mm below to 205 mm below Lateral adjustements: 3 position (one in the middle and one for each side at 195 mm). Pivot position relative to rear wheels horizontally 170 mm. Maximum vertical load: not allowed by italian legislation and by manufacturer.
HITCH:	Own make; clevis type; height above ground (with tyres 11.2 R 28 116 A8) 400-470-540-580-650 and 720 mm, changeable by sliding on drilled guides; hitch hole 28 mm dia; distance of hitch hole to rear axle horizontally 500 mm; position relative to p.t.o.: vertical 155-85 and 15mm below; 165-95 and 25 mm above; 150 mm horizontal behind. Maximum vertical load 8.3 kN according to italian legislation (with tyres 11.2 R28 116 A8).
HOLED DRAWBAR:	Available as option.
STEERING:	Own make, hydrostatic control, with independent hydraulic circuit.Distributor ORSTA make, LAGC 80 type; gear pump delivery 18.6 l/min at rated engine speed, one double acting cylinder directly acting on the front wheel, transversaly mounted, bore 48 mm, stroke 175 mm, piston rod 22 mm dia; working pressure 12 ± 0.5 MPa. Oil capacity 1.6 litres. One wire-mesh oil filter, own make.
BRAKES:	***Service brake:*** Own make, multiple oil bath disc brakes type, 6 plates each wheel, mechanically

acting on rear half shafts; operated by two independent pedals locked together for road drive.
Trailer braking take off: none.

Parking brake:
Own make, hand lever operated; the parking brake acts on the final part of service brake by means of different linkage.

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

WHEELS:

Steering wheels:
at front, two tyres 5.50-16; 6 ply.

Driving wheels:
at rear; two tyres 11.2 R 28; 116 A8.

— Wheelbase: 1700 mm

— Track width adjustment

	Minimum mm	Maximum mm	Adjustment method
Front	1150	1650	by 100 mm steps extending axle
Rear	1100	1600	manual placing facing bulge disc either inward or outward

Optional tyre:

Tyre size	
At front	At rear
5.00-15 6 ply	12.4-24 6 ply
6.50/80 R12 4 ply	11.2-24 6 ply
	12.4-R20 A8
	320/70 R28 A8
	320/70 R24 A8

PROTECTIVE STRUCTURE: FIAT safety frame, TS 35 type. Directive 87/402 CEE dated 25.06.87. Report CEMAGREF n° 7571 dated 19.04.89; NT/ROPS/F/S 003/4 OECD approval number.

SEAT:

Driver's seat:
GRAMMER make, DS 44/1HS model, upholstered seat with back rest, double acting hydraulic damper suspension; height

of unloaded seat above driver's platform adjustable from 590 mm to 640 mm in a continuos way, longitudinal adjustment 160 mm;

Passenger seat: none.

LIGHTING: Electrical 12 V, in accordance with Italian legislation

	Height above ground of centre mm	Size mm	Distance from outside edge of lights to median plane of tractor mm
Headlights	945	140 x 90	215
Sidelights	1195	55 x 50	570
Rearlights	1195	55 x 50	470
Reflectors 1st pair	1195	50 x 45	515

TEST CONDITIONS

OVERALL DIMENSIONS

		Width		Height to top of protective structure
	Length	mini	maxi	
	m	m	m	m
With ballast	3.17	1.38	1.88	2.00
Without ballast	2.91	1.38	1.88	2.00

Ground clearance: 370 mm below hydraulic oil tank placed under driver's platform

Tractor mass
(with safety frame and full fuel tank):

	Without driver		With driver	
	Without ballasts kg	With ballasts kg	Without ballasts kg	with ballasts kg
Front	500	640	520	660
Rear	810	1010	860	1060
Total	1310	1650	1380	1720

Ballasts:

	Weights		Water (kg)
	Number	Total mass (kg)	
Front wheels	-	-	-
Front weight	6	120	-
Rear wheels	4	220	-
Optional	-	-	-

Tyres and track width specifications

	Front	Rear
Tyres:	KLEBER	GOODYEAR
dimensions	5.50-16	11.2 R28
ply rating	6	116 A8
tyre	diagonal	radial
maximum load	525 kg (30km/h)	1250 kg (30km/h)
inflaction pressure (tyre manufacturer's)	370 KPa	160 KPa
dynamic radius index	335 mm	565 mm
Chosen track width:	1150 mm	1210 mm

Oils and lubrication

— Capacity and change interval

	Capacity dm^3	Oil change h	Filter change h
Engine	5	200	400
Gear box with hydraulic system, rear axle and final reduction	18.2	400	-
Steering system	1.4	800	300

— Specifications (SAE, API, MIL-L, ISO)

	Recommended	Used during test
Engine oil - Type: - Viscosity: - Classification:	 AMBRA SUPER SAE 15 W 40 MIL-L-2104 C	As recommended
Trasmission oils - Type: - Viscosity: - Classification:	 TUTELA MULTI F SAE 20 W 40 MF 1135 and M2 C86 A	As recommended
Hydraulic fluid - Type: - Viscosity: - Classification:	 TUTELA MULTI F SAE 20 W 40 MF 1135 and M2 C86 A	As recommended
Steering oil - Type: - Viscosity: - Classification:	 TUTELA MULTI F SAE 20 W 40 MF 1135 and M2 C86 A	As recommended

— Grease: FIAT TUTELA G9

Number of lubrication points: 8

Fuel:

— Type: Esso Diesel oil, in conformity with national standard.

— Density at 15 °C: 0.835 g/cm^3 .

COMPULSORY TESTS RESULTS

(1) MAIN POWER-TAKE-OFF PERFORMANCE

Date and Location of tests: 22/02/1990 I.M.A.,TORINO,ITALY
Type of dynamometer: PARASITIC CURRENTS,BORGHI & SAVERI FA 300-30 SP

POWER	SPEED		FUEL CONSUMPTION			SPECIFIC ENERGY
	ENGINE	P.T.O.	HOURLY		SPECIFIC	
kW	rev/min	rev/min	l/h	kg/h	g/kWh	kWh/l
MAXIMUM POWER - 2 - hour test						
22.58	2800	664	7.78	6.50	288	2.90
POWER AT RATED ENGINE SPEED						
22.58	2800	664	7.78	6.50	288	2.90
STANDARD POWER-TAKE-OFF SPEED (540+-10 rev/min)						
20.33	2276	540	6.63	5.54	273	3.07
PART LOADS						
(1) the torque corresponding to maximum power at rated engine speed						
22.58	2800	664	7.78	6.50	288	2.90
(2) 85% of torque obtained in (1)						
19.54	2854	677	6.77	5.65	289	2.89
(3) 75% of torque defined in (2)						
15.04	2926	694	5.53	4.62	307	2.72
(4) 50% of torque defined in (2)						
10.20	2980	707	4.43	3.70	363	2.30
(5) 25% of torque defined in (2)						
5.17	3010	714	3.80	3.17	613	1.36
(6) unloaded						
---	3035	720	2.70	2.25	---	---

PART LOADS AT STANDARD POWER-TAKE-OFF SPEED (540+-10 rev/min)

POWER	SPEED		FUEL CONSUMPTION			SPECIFIC ENERGY
	ENGINE	P.T.O.	HOURLY		SPECIFIC	
kW	rev/min	rev/min	l/h	kg/h	g/kWh	kWh/l
(1) the torque corresponding to maximum power						
19.95	2276	540	6.47	5.40	271	3.08
(2) 85% of torque obtained in (1)						
17.63	2365	561	5.64	4.71	267	3.13
(3) 75% of torque defined in (2)						
13.67	2445	580	4.72	3.94	288	2.90
(4) 50% of torque defined in (2)						
9.41	2525	599	3.74	3.12	332	2.52
(5) 25% of torque defined in (2)						
4.78	2563	608	2.84	2.37	496	1.68
(6) unloaded						
---	2593	615	2.02	1.69	---	---

STANDARD SPECIFIC CONSUMPTION: 289/363/267/332 (g/kWh)
No load maximum engine speed: 3035 rev/min
Torque at maximum power (2 hours): 77.0 N/m
Maximum torque: 90.9 Nm at 1900 rev/min of the engine
Mean atmospheric conditions: Temperature 18.0 C
Pressure 1008.0 mbar
Relative Humidity 57 %
Maximum Temperature: Coolant 86.0 C
Engine oil 126.0 C
Fuel 35.0 C
Engine air intake 18.0 C

2. HYDRAULIC POWER AND LIFTING FORCE

— Date of tests: 14th July 1990

2.1 HYDRAULIC POWER TEST

— Sustained pressure with relief valve open: 16.5 MPa
— Pump delivery rate at minimum pressure: 22 l/min

	Flow rate l/min	Pressure MPa	Power kW
Flow rate corresponding to a hydraulic pressure equivalent to 90 per cent of the actual relief valve pressure setting and corresponding hydraulic power	21.45	16.5	5.87
Flow rate and hydraulic pressure corresponding to maximun hydraulic power	21.45	16.5	5.87

— Tapping point used for test: at rear of tractor
— Temperature of hydraulic fluid: 65 °C

2.2 POWER LIFT TEST

	at the hitch point		on the frame	
Height of lower hitch points above ground in down position	200	mm	200	mm
Vertical movement	625	mm	625	mm
Maximum corrected force exerted through full range	8.5	kN	7.8	kN
Corresponding pressure of hydraulic fluid	16.5	MPa	16.5	MPa
Moment about rear-wheel axis	-	kNm	10.67	kNm
Maximum tilt angle of mast from vertical	-	degress	11	degress

Lifting heights relative to the horizontal plane including the lower link pivot points							
mm	- 225	- 100	0	+ 100	+ 200	+ 300	+ 400
Lifting forces							
at the hitch points kN	8.50	10.00	11.00	12.30	12.60	13.00	14.30
Corresponding pressure: 16.5 MPa							
at the frame kN	9.37	9.95	10.15	9.95	9.76	8.80	7.80
Corresponding pressure: 16.5 MPa							

3. DRAWBAR PERFORMANCE

Date of tests: 5th till 24th April 1990
Type of track: concrete
Tyre size front: 5.50-16 (6 ply)
Tyre size rear: 11.2 R28 (116 A8)

	Height of hitch above ground	Tyre inflation pressure Front	Rear
Unballasted	580 mm	370 kPa	160 kPa
Ballasted.	575 mm	370 kPa	160 kPa

Gear no. and group	Driving speed km/h	Power kW	Drawbar pull daN	Engine speed rev/min	Slip of wheels %	Specific fuel consumption g/kWh	Specific energy kWh/l	Temperatures Fuel °C	Coolant °C	Engine oil °C	Atmospheric conditions Temperature °C	Relative humidity %	Pressure mbar
3.1 - MAXIMUM POWER IN TESTED GEARS (unballasted tractor)													
2 Normal	3.73	12.38	1196	2879	14.7	414	2.42	35	85	124	14	72	983.3
3 Slow	4.45	14.92	1206	2842	14.7	389	2.57	35	85	124	15	68	983.3
3 Normal	5.43	16.85	1118	2803	10.5	380	2.63	35	85	124	16	60	983.3
4 Slow	6.76	17.31	922	2797	6.9	378	2.64	35	85	124	17	54	983.3
4 Normal	8.13	17.73	785	2791	4.7	365	2.74	35	85	124	18	48	983.3
1 High	9.89	17.39	633	2798	2.4	374	2.68	35	85	124	19	42	983.3
2 High	14.07	16.85	431	2801	1.9	380	2.63	35	85	124	20	40	983.3
3.2 - MAXIMUM POWER IN TESTED GEARS (ballasted tractor)													
1 Creeper	0.64	2.48	1383	2979	15.0	-	-	36	86	126	13	80	984.0
2 Creeper	0.91	3.49	1383	2970	15.0	-	-	36	86	126	13	75	984.0
3 Creeper	1.29	4.95	1383	2961	15.0	-	-	36	86	126	14	75	984.0
4 Creeper	1.82	6.98	1383	2955	15.0	-	-	36	86	126	14	70	984.0
1 Slow	2.31	8.87	1383	2947	15.0	-	-	36	86	126	14	70	984.0
1 Normal	2.72	10.38	1373	2922	14.4	438	2.28	36	86	126	14	70	984.0
2 Slow	3.23	12.32	1373	2901	14.7	402	2.49	36	86	126	14	70	984.0
2 Normal	3.78	14.22	1353	2880	14.6	388	2.58	36	86	126	14	70	984.0
3 Slow	4.47	16.57	1334	2800	14.3	393	2.55	36	86	126	14	70	984.0
3 Normal	5.76	17.82	1113	2801	6.2	360	2.78	36	86	126	14	65	984.0
4 Slow	7.07	17.92	912	2800	4.0	360	2.78	36	86	126	14	65	984.0
4 Normal	8.40	18.08	775	2800	3.2	357	2.80	36	86	126	14	65	984.0
1 High	9.99	17.68	637	2799	2.8	368	2.72	36	86	126	14	65	984.0
2 High	14.40	17.08	427	2808	1.3	381	2.63	36	86	126	14	65	984.0
3.3.1 - FIVE HOUR TEST at 75% of pull at maximum power													
4 Slow	7.25	13.82	686	2887	4.5	384	2.61	32	86	125	15.0	60	984.0
3.3.2 - FIVE HOUR TEST at pull corresponding to 15% wheelslip - with 280 kg as additional ballast													
2 Normal	3.97	15.13	1373	2887	-	-	-	33	86	125	16.0	55	984.0

Oil consumption during ten hours tests 3.3.1 and 3.3.2: 30 g/h

Test 3.3.2. was carried out with additional ballasts; so, the not quoted figures are irrelevant

4. TURNING AREA AND TURNING CIRCLE

Wheel equipment front: 5.50-16 (6 ply)
rear: 11.2 R28 (116 A8)
Track width front: 1150
rear: 1210

	With brakes		Without brakes	
	Right-hand	Left-hand	Right-hand	Left-hand
	m	m	m	m
Radius of turning area	2.56	2.60	3.06	3.10
Radius of turning circle	2.48	2.52	2.98	3.02

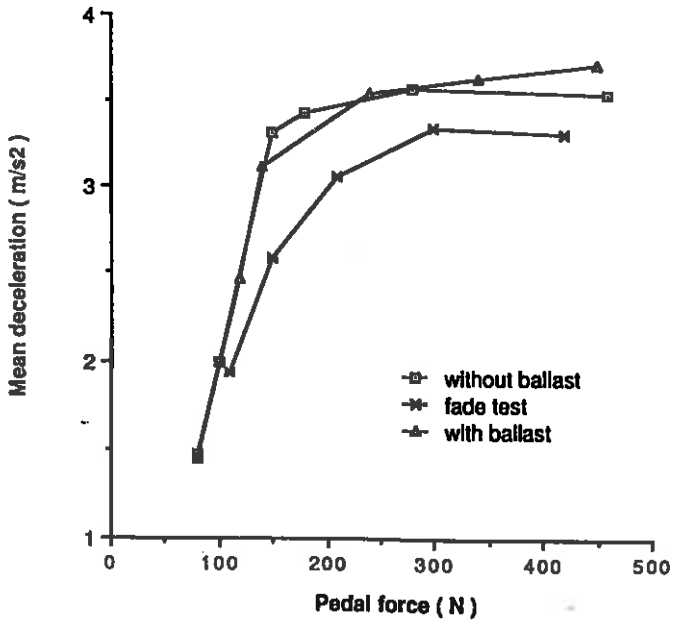
5. LOCATION OF CENTRE OF GRAVITY

Height above ground	665 mm
Distance forward from the vertical plane containing the axis of the rear wheels	641 mm
Distance from the median plane of the tractor, to the left	0 mm

6. BRAKING

— Date of tests: 20th August 1990

6.1 COLD SERVICE BRAKING DEVICE TEST - 6.2 FADE TEST



Cold service braking device test

	Ballasted tractor	Unballasted tractor
Speed before application of brakes (km/h)	30.50	30.65

Fade test

— Maximum deviation of the tractor from its original course: none
— Abnormal vibration: none
— Brake heating method: by means of towing the tractor for 1 km at 24.4 km/h with towing force of 1690 N.

6.3 PARKING BRAKING DEVICE TEST

	Uphill	Downhill
Braking device control force	82 N	83 N

7. MEASUREMENT OF EXTERNAL NOISE LEVEL

— Date of tests: 26th July 1990
— Type of sound level meter: impulse precision BRUEL & KJAER 2209 model
— Type of track: concrete

7.1 Results of test with DGM SA 1607 model

— Gear number: 4 High
— Travelling speed before acceleration: 23.90 km/h
— Sound level: 84.5 dB (A)

8. REPAIRS AND ADJUSTMENT DURING TEST = none

9. REMARKS = none

TEST CARRIED OUT BY:

W. Faccio

M. Giangualano

DIRECTOR OF I.M.A.

L. Lisa

Turin, 28th November 1990

Engine Speed	Torque	Power	Hourly Consumption	Specific Consumption
rev/min	mdaN	kW	kg/h	g/kWh
2800	7.70	22.58	6.500	288
2750	7.81	22.48	6.490	289
2700	7.91	22.36	6.380	285
2650	7.98	22.14	6.260	283
2600	8.02	21.83	6.100	279
2500	8.21	21.49	5.880	274
2400	8.35	20.98	5.730	273
2276	8.53	20.33	5.540	273
2100	8.95	19.68	5.385	274
2000	9.09	19.03	5.200	273
1900	9.09	18.08	4.945	274
1800	9.05	17.05	4.600	270
1700	8.86	15.77	4.160	264
2800	7.70	22.58	6.500	288
2825	7.37	21.80	6.280	288
2854	6.54	19.54	5.650	289
2926	4.91	15.04	4.620	307
2980	3.27	10.20	3.700	363
3010	1.64	5.17	3.170	613
3035	0.00	0.00	2.250	0
2776	8.37	19.95	5.400	271
2306	8.23	19.87	5.450	274
2323	8.05	19.58	5.320	272
2365	7.12	17.63	4.710	267
2445	5.34	13.67	3.940	288
2525	3.56	9.41	3.120	332
2563	1.78	4.78	2.370	496
2593	0.00	0.00	1.690	0

FIAT 35-66 (2 WD)

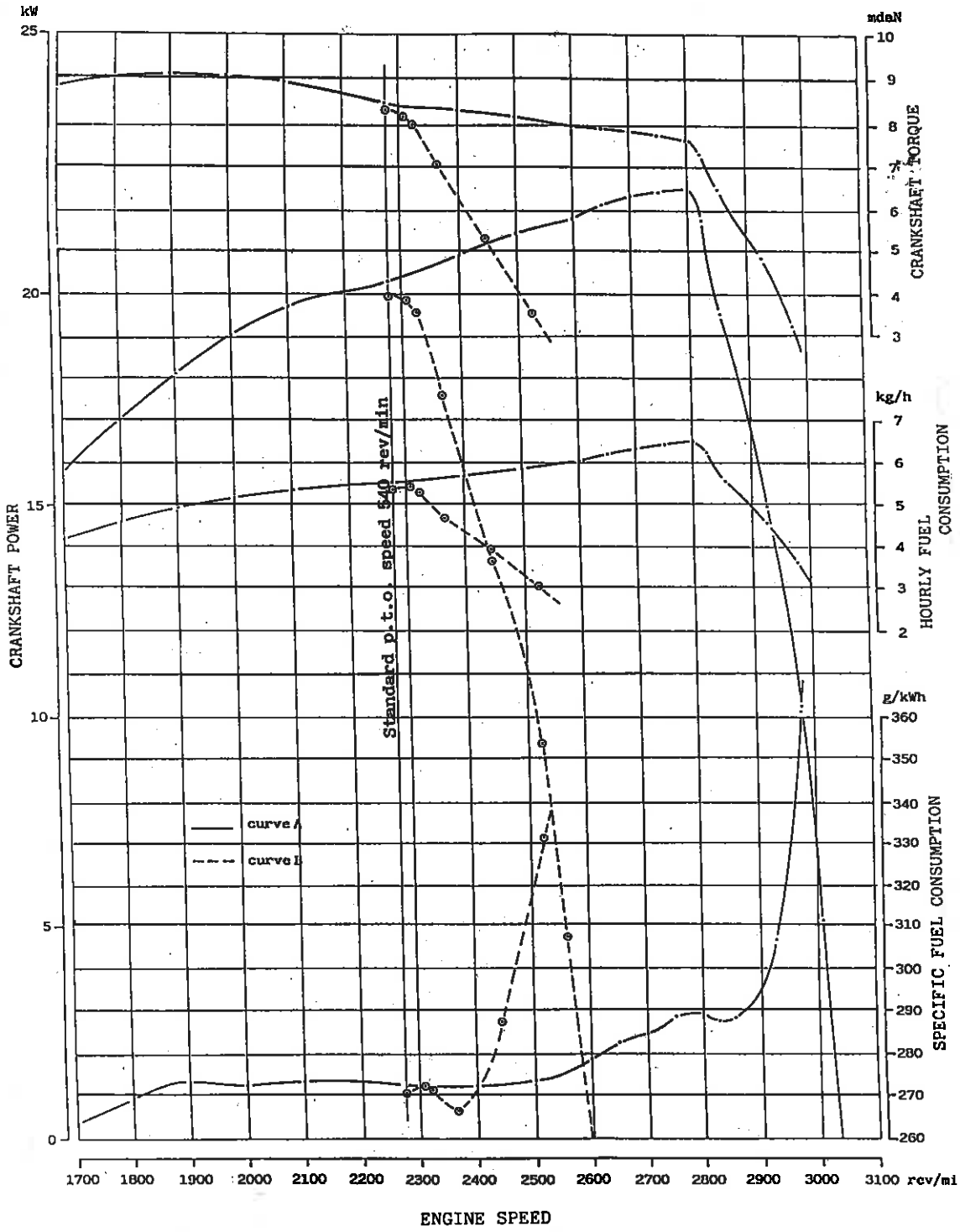


Fig. 1 - POWER TAKE-OFF TEST

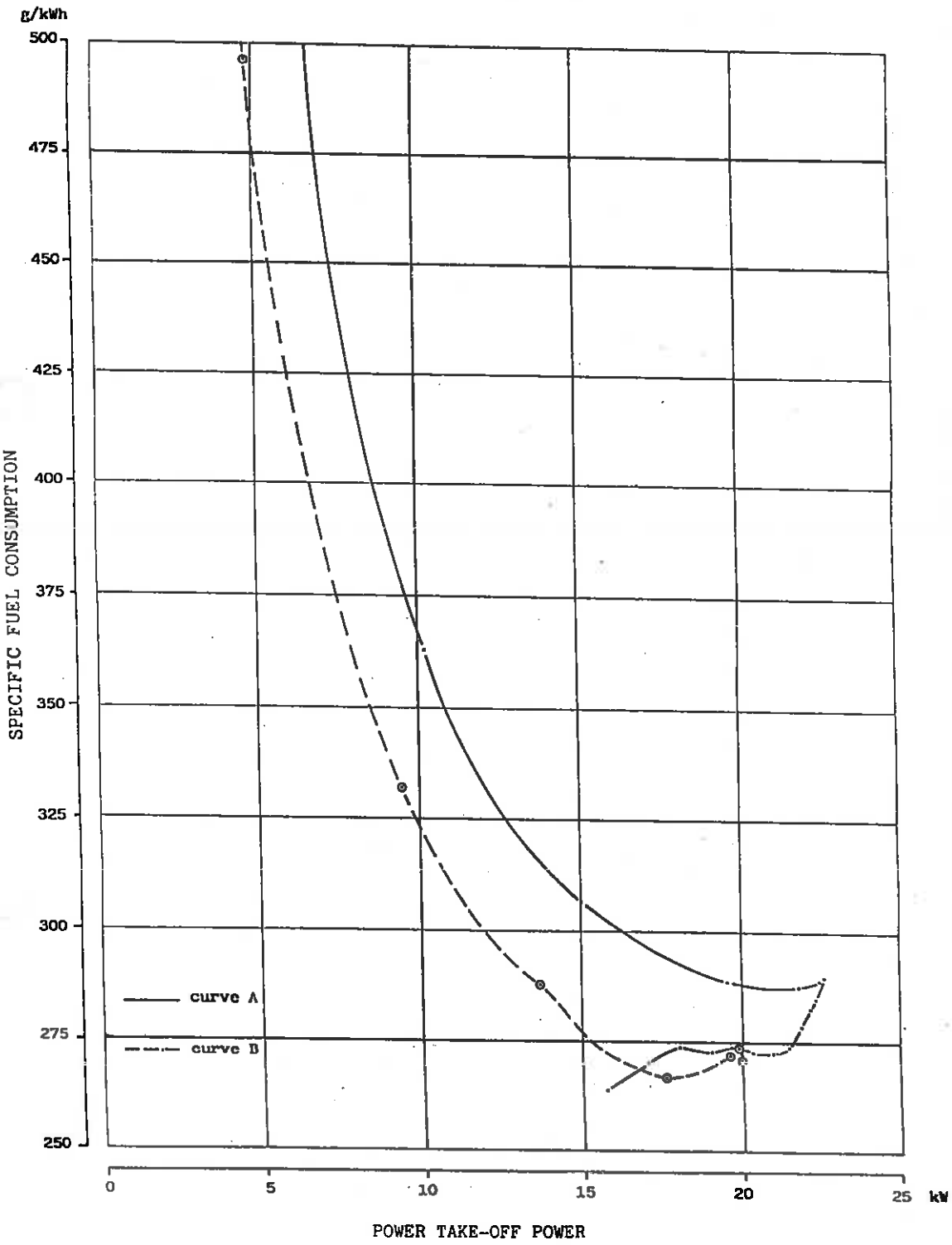


Fig. 2 - POWER TAKE-OFF TEST