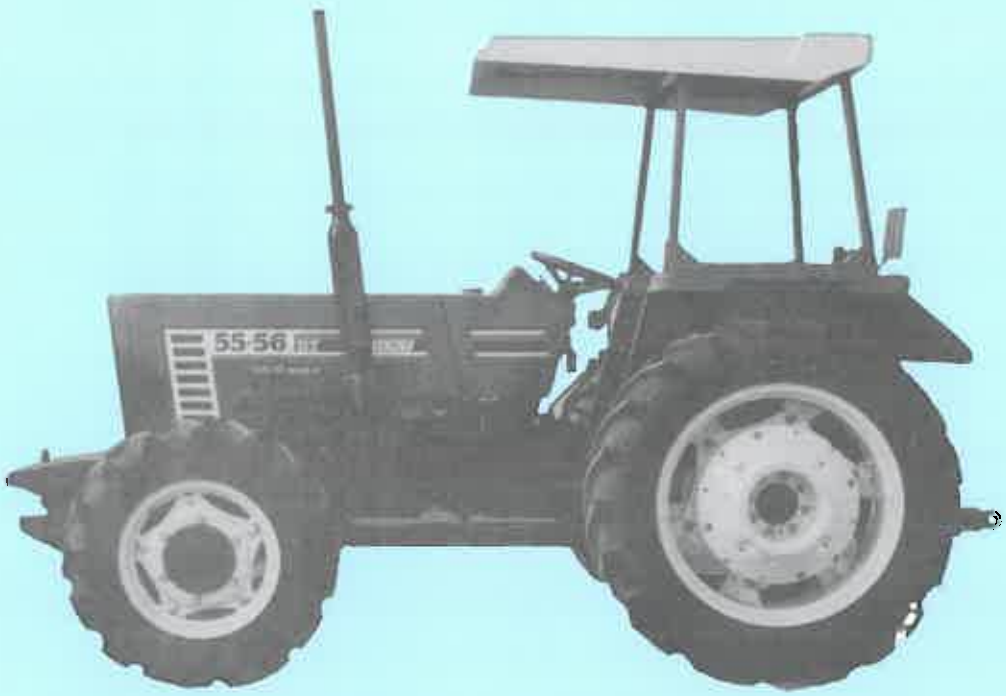
CONSIGLIO NAZIONALE DELLE RICERCHE
ISTITUTO PER LA MECCANIZZAZIONE AGRICOLA
10135 TORINO - Strada delle Cacce 73
(Italy)

REPORT No. 1538/T/90

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

TRACTOR: **Make: FIAT**
Model: 55-56 DT LM/12
Type: 4 WD



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

Date and location of tests: April 1989 - April 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. Tractors Test Code

Number and date of approval: 1302 - 25th February 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.

The FIAT 55-56 DT LM tractor is manufactured in following variants:

1. 55-56 DT LM/12 model with 12 forward and 3 reverse speeds (4x3 gear units)

2. 55-56 DT LM/8 model with 8 forward and 2 reverse speeds (4x2 gear units)

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

TABLE OF CONTENTS

PAGE

Specification of tractor 4

Test condition 15

Compulsory tests

1 - Main power take-off performance 19

2 - Hydraulic power and lifting force 21

3 - Drawbar performance 23

4 - Turning area and turning circle 24

5 - Location of centre of gravity 24

6 - Braking 24

7 - Measurement of external noise level 25

8 - Repairs 25

9 - Remarks 25

Annex

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:	55-56 DT LM/12
Type:	Wheel tractor unit construction, four wheel driven
Serial No.:	078001
1st serial No.:	078000
ENGINE:	
Make:	FIAT
Model:	8035.06
Type:	4 - stroke Diesel engine, naturally aspirated, direct injection, water cooled.
Serial No.:	206-318801
Cylinders:	3 cylinders, vertical, in-line, 100 mm bore x 115 mm stroke, capacity 2710 cm^3 compression ratio 17:1, overhead in-line valves, replaceable cast-iron dry cylinder liners.

Fuel system:	Forced feed; CORONA model APM 45 FVI fuel pump (optionally FISPA model 4066.03/A); 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: 60 litres; BOSCH model VEL 163-1 injection pump, 37184 serial number. Manufacturer's production setting 11.94 l/h at rated engine speed and full load. Injection timing 6°± 1before TDC. BOSCH or OMAP multihole injectors, model DLLA 124S (BOSCH) or OLL 124 S (OMAP), Serial No. none. Injector pressure 23 ± 0.8 MPa.
Governor:	BOSCH centrifugal variable speed governor, mechanical type, incorporated in fuel injection pump, governed range engine speed 650 to 2800 rev/min; rated engine speed 2500 rev/min.
Air cleaner:	FIAT main cleaner, 18518.212 model oil bath type with one replaceable cartridge. Oil capacity: 0.7 litres. Air inlet under bonnet in front of engine. Maintenance indicator: none.
Lubrication system:	Forced feed from gear-type pump; one, FIAT 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 70 KPa, thermostat with by-pass; 392 mm dia, 4 blades, belt driven fan; cooling water capacity 10 litres. Temperature visual control with thermometer. Superpressure system: radiator cap.
Starting system:	Electrical, MARELLI or 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.

ELECTRICAL SYSTEM

Voltage:	12 V, negative earth.
Generator:	Alternator MARELLI make, AA 108, three phase, 14 V; 500 W power.
Battery:	One, MARELLI make, 434470-ES; capacity: 92 Ah at 20 hours rating.
EXHAUST SILENCER	FIAT make, DGM-SA 748 model, circular shape 78 mm dia., expansion type; length 675 mm. Vertical position on engine left side, maximum height above ground 2470 mm. As option: FIAT make, DGM-SA 1057 model, square shape 95x95 mm, expansion type, 675 mm length; vertical position on engine left side; height above ground 2470 mm.

TRANSMISSION TO WHEELS:

Clutch:	LUK or VALEO make, independent dry dual disc clutch; 280 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 12 forward and 3 reverse speeds; the transmission consists of two mechanical in series gear units: the first with five speeds fully synchronized (four forward and one reverse), the second with three positions to select the gear ratios (slow, normal and high); each unit is operated by own lever. The FIAT 55-56 DT LM/12 is available in one other variant: — FIAT 55-56 DT LM/8 model with 8 forward and 2 reverse speeds; the transmission consists of two mechanical in series gear units: the first with five speeds (four forward and one reverse), the second with two positions to select the gear group (normal and high).

Rear axle and final drive:	Own make, costant mesh gear type; mechanical differential locking, pedal operated; spur gear final drive.
Front axle and final drive:	Own make, mechanical type with crown wheel and pinion; bevel gear type differential with mechanical pedal operated and self-disengaging lock; epycicloidal final drive.

FIAT 55-56 DT LM/12

Total ratios and travelling speed (tyres 12.4 R 32 and pressure 230 KPa)

Gear	Group	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed (*) at rated engine speed (2500 rev/min) km/h
I	Slow	720.952	0.83
II		479.174	1.25
III		327.241	1.84
IV		253.348	2.38
I	Normal	233.451	2.58
II		155.161	3.88
III		105.964	5.68
IV		82.036	7.34
I	High	64.848	9.30
II		43.100	13.98
III		29.434	20.48
IV		22.788	26.45
I	Reverse	501.769	1.20
II		162.478	3.71
III		45.133	13.35

FIAT 55-56 DT LM/8

Total ratios and travelling speeds (tyres 12.4 R 32 and pressure 230 KPa)

Gear	Group	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed (*) at rated engine speed (2500 rev/min) km/h
I	Normal	233.451	2.58
II		155.161	3.88
III		105.964	5.68
IV		82.036	7.34
I	High	64.848	9.30
II		43.100	13.98
III		29.434	20.48
IV		22.788	26.45
I	Reverse	162.478	3.71
II		45.133	13.35

(*) Calculated with a tyre dynamic radius index of 640 mm (ISO 4251/1 - 1984)

Number of revolution of front wheels for one revolution of rear wheels: 1.422.

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 635 mm (with tyre 12.4 R 32).

Proportional engine speed p.t.o.:

— ***540 rev/min:*** distance behind rear axle 260 mm; diameter of p.t.o. shaft end 35 mm; 6 splines, in conformity with ISO 500/1979; no power restriction; 686 rev/min at rated engine speed; standard p.t.o. speed 540 rev/min at engine speed 1967 rev/min; p.t.o. shaft rotates clockwisely, viewed from tractor rear.
Ratio of rotation speed:

$$\text{Engine/p.t.o. ratio} = \frac{2500}{686} = 3.643$$

P.t.o. proportional to ground speed:

size of tyres: 12.4 R 32, radius index 640 mm;
travelling distance for one revolutions of p.t.o. shaft: 0.470 m;
number of p.t.o. shaft revolution for one revolution of the rear wheels: 7.6.
Direction of rotation with forward gear engaged: clockwise, viewed from tractor rear.

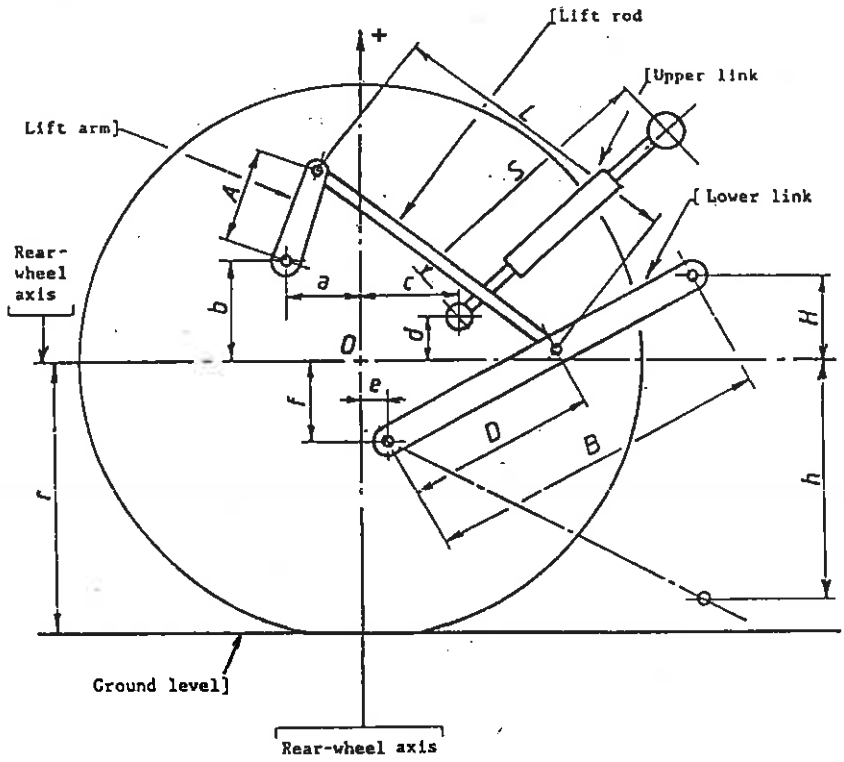
POWER LIFT:

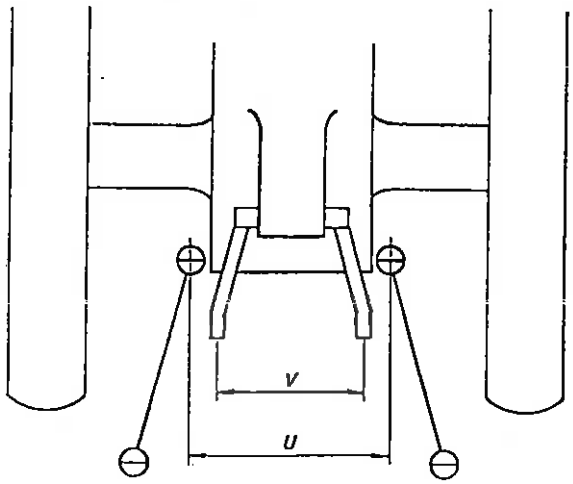
Own make; hydraulic power lift in unit construction, draught and position control operated by two independent levers; lift-o-matic device to raise and to low lower links.

— ***Hydraulic system:*** open centre system with hydraulic oil circuit in common with gear box. One single acting cylinder with 100 mm bore and 128 mm stroke.
Rilief valve pressure setting: 18.6 MPa
Antishock valve setting: 21.0 MPa
FIAT A 31 lift gear pump, directly driven by engine.
Delivery 32.8 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 0.8 litres.

Implement linkage:
three point linkage, joint balls category 2, according to I.S.O. STANDARD 730/I-1977; dimensions see on pag. 12.





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

		Dimension or range mm	Settings used in test mm
Length of lift arms	(A)	220	220
Length of lower links	(B)	900	900
Distance of lift arm pivot: horizontally	(a)	- 40	-40
point from rear-wheel axis: vertically	(b)	345	345
Horizontal distance between the 2 lower link points	(u)	430	430
Horizontal distance between the 2 lift arm end points	(v)	430	430
Length of upper link	(S)	from 650 to 940	785
Distance of upper link pivot point from rear : horizontally	(c)	130	130
wheel axis : vertically	(d)	from 270 to 320	320
Distance of lower link pivot point from rear : horizontally	(e)	35	35
wheel axis : vertically	(f)	105	105
Distance of lower link pivot points to lift rod pivot points on lower links	(D)	420	420
Length of lift rods	(L)	from 470 to 600	575
Heigth of lower hitch points relative to the rear-wheel axis:			
- in low position	(h)	from 145 to 505	435
- in high position	(H)	from 215 to 450	260
Height above ground of lower hitch points when locked in transport position (*)		from 855 to 1090	-

(*) Assuming the dynamic radius index: 640 mm (ISO 4251/1 - 1984)

SWINGING DRAWBAR:	Own make; clevis type. Vertical height with tyres 12.4 R 32, to centre of clevis: min 400 mm max 510 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: 620-665-710 mm behind, changeable by sliding on drilled guide. Position relative to p.t.o., horizontally and vertically: — 450-405-360 mm behind — from 125 mm below to 235 mm below Lateral adjustements: 5 position (one in the middle and two for each side at 135 mm and 270 mm). Pivot position relative to rear wheels horizontally 115 mm. Maximum vertical load: not allowed by italian legislation and by manufacturer.
HITCH:	Own make; clevis type; height above ground (with tyres 12.4 R 32) 450-620-750 and 820 mm, changeable by sliding on drilled guides; hitch hole 28 mm dia; distance of hitch hole to rear axle horizontally 325 mm; position relative to p.t.o.: vertical 185 and 15 mm below; 115 and 185 mm above; 65 mm horizontal behind. Maximum vertical load 13.9 kN according to italian legislation (with tyres 12.4 R 32; 122 A8).
HOLED DRAWBAR:	Available as option.
STEERING:	Own make, hydrostatic control, with independent hydraulic circuit.Distributor DANFOSS make, Orbitrol OSPC 100; gear pump delivery 24.6 l/min at rated engine speed, one double acting cylinder directly acting on the front wheel, transversaly mounted, bore 48 mm, stroke 215 mm, piston rod 22 mm dia; working pressure 10 ± 0.2 MPa. Oil capacity 1.8 litres. One wire-mesh oil filter, own make.

BRAKES:

Service brache:
Own make, multiple oil bath disc brakes type, 6 plates each wheel; mechanically acting on rear wheels; operated by two independent pedals locked together for road drive.
Trailing braking take-off: hydraulic.

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 11.2 R 20; 111 A8;

Driving wheels:
at front and at rear; rear wheels: two tyres 12.4 R 32; 122 A8.

— Wheelbase: 2015 mm

— Track width adjustment

	Minimum mm	Maximum mm	Adjustment method
Front	1440	1870	manual placing disc bulge facing either inward or outward
Rear	1414	1914	manual through 8 position and PAVT as option

Optional tyre:

Tyre size			
At front		At rear	
9.5-20	8 ply	13.6 - 28	6 ply
8.00-20	6 ply	13.6 - 28	6 ply
8.3-24	6 ply	12.4 - 32	6 ply

PROTECTIVE STRUCTURE: FIAT safety frame, TS 28 type.
OECD REPORT CSD 0891/77 for the FIAT 55-56 DT LM/12 (4 WD) and CSD 0891/79 for the FIAT 55-56 DT LM/8 (4 WD) tractors.

SEAT:

Driver's seat:
GRAMMER make, DS 44/2H 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	1030	180 x 120	80
Sidelights	1430	90 x 60	780
Rearlights	1430	80 x 60	665
Reflectors 1st pair	1180	90 x 55	760

TEST CONDITIONS

OVERALL DIMENSIONS

	Length	Width		Height to top of	
		mini	maxi	exhaust silencer	protective structure
	m	m	m	m	m
With ballast	3.76	1.74	2.24	2.47	2.37
Without ballast	3.50	1.72	2.22	2.47	2.37

Ground clearance: 330 mm below differential of the front axle

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	1010	1410	1030	1430
Rear	1300	1560	1350	1610
Total	2310	2970	2380	3040

Ballasts:

	Weights		Water (kg)
	Number	Total mass (kg)	
Front wheels	-	-	-
Front weight	10	330	-
Rear wheels	6	330	-
Optional	-	-	-

Tyres and track width specifications

	Front	Rear
Tyres:	PIRELLI	PIRELLI
dimensions	11.2 R 20	12.4 R 32
ply rating	111 A8	122 A8
tyre	radial	radial
maximum load	1090 kg (°)	1605 kg (°)
inflaction pressure (tyre manufacturer's)	160 KPa	230 KPa
dynamic radius index	450 mm	640 mm
Chosen track width:	1440 mm	1414 mm

(°) 30 Km/h

Oils and lubrication

— Capacity and change interval

	Capacity dm^3	Oil change h	Filter change h
Engine	7.3	200	400
Gear box with hydraulic system, rear axle and final reduction	40	400	-
Steering system	1.8	800	300
Front axle and final reduction	4.2	400	-

— 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 C 86 A	As recommendend
Hydraulic fluid - Type: - Viscosity: - Classification:	 TUTELA MULTI F SAE 20 W 40 MF 1135 and M2 C 86 A	As recommended
Steering oil - Type: - Viscosity: - Classification:	 TUTELA MULTI F SAE 20 W 40 MF 1135 and M2 C 86 A	As recommended

— Grease: FIAT TUTELA G9

Number of lubrication points: 11

Fuel:

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

— Density at 15 °C: 0.831 g/cm^3.

COMPULSORY TESTS RESULTS

(1) MAIN POWER-TAKE-OFF PERFORMANCE

Date and Location of tests: 23/04/1989 I.M.A.,TORINO,ITALY
Type of dynamometer: PARASITIC CURRENTS,BORGHI & SAVERI FA 300-30 SP

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						
37.23	2500	686	11.92	9.95	267	3.12
POWER AT RATED ENGINE SPEED						
37.23	2500	686	11.92	9.95	267	3.12
STANDARD POWER-TAKE-OFF SPEED (540+-10 rev/min)						
32.10	1967	540	9.58	8.00	249	3.35
PART LOADS						
(1) the torque corresponding to maximum power at rated engine speed						
37.23	2500	686	11.92	9.95	267	3.12
(2) 85% of torque obtained in (1)						
32.88	2600	714	10.32	8.62	262	3.19
(3) 75% of torque defined in (2)						
25.05	2641	725	8.34	6.97	278	3.00
(4) 50% of torque defined in (2)						
16.84	2663	731	6.43	5.37	319	2.62
(5) 25% of torque defined in (2)						
9.26	2689	738	4.86	4.06	438	1.91
(6) unloaded						
---	2710	744	3.01	2.51	---	---

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						
32.10	1967	540	9.54	7.97	248	3.36
(2) 85% of torque obtained in (1)						
29.33	2066	567	8.59	7.17	244	3.41
(3) 75% of torque defined in (2)						
22.37	2149	590	6.84	5.71	255	3.27
(4) 50% of torque defined in (2)						
15.31	2208	606	5.18	4.33	282	2.96
(5) 25% of torque defined in (2)						
7.83	2259	620	3.53	2.95	376	2.22
(6) unloaded						
---	2291	629	2.54	2.12	---	---

STANDARD SPECIFIC CONSUMPTION: 262/319/244/282 (g/kWh)
No load maximum engine speed: 2710 rev/min
Torque (equivalent crankshaft) at rated engine speed: 142.2 N/m
Maximum torque: 172.8 Nm at 1400 rev/min of the engine
Mean atmospheric conditions: Temperature 19.5 C
Pressure 1002.6 mbar
Relative Humidity 58 %
Maximum Temperature: Coolant 80.0 C
Engine oil 106.0 C
Fuel 27.0 C
Engine air intake 20.5 C

2. HYDRAULIC POWER AND LIFTING FORCE

— Date of tests: 17th November 1989

2.1 HYDRAULIC POWER TEST

— Sustained pressure with relief valve open: 17 MPa
— Pump delivery rate at minimum pressure: 26 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	25.35	16.7	6.93
Flow rate and hydraulic pressure corresponding to maximum hydraulic power	25.35	17.0	7.04

— 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	695	mm	695	mm
Maximum corrected force exerted through full range	12.1	kN	11.35	kN
Corresponding pressure of hydraulic fluid	16.7	MPa	16.7	MPa
Moment about rear-wheel axis	-	kNm	17.54	kNm
Maximum tilt angle of mast from vertical	-	degress	4	degress

Lifting heights relative to the horizontal plane including the lower link pivot points									
mm	- 325	- 300	- 200	- 100	- 0	100	+ 200	+ 300	+ 370
Lifting forces									
at the hitch points kN	12.10	12.40	13.30	13.85	14.00	14.00	13.65	13.30	13.10
Corresponding pressure: 16.7 MPa									
at the frame kN	12.40	12.50	13.50	13.60	13.40	13.50	12.50	11.85	11.35
Corresponding pressure: 16.7 MPa									

3. DRAWBAR PERFORMANCE

Date of tests: 10th - 12th April 1990
Type of track: concrete
Tyre size front: 11.2 R 20 111 A8
Tyre size rear: 12.4 R 32 122 A8

	Height of hitch above ground	Tyre inflation pressure Front	Rear
Unballasted	400 mm	160 kPa	230 kPa
Ballasted	395 mm	160 kPa	230 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	3.60	21.26	2128	2675	14.8	356	2.81	21.0	81	103	18.0	35	994.6
3 Normal	4.94	29.22	2128	2513	14.9	336	2.98	21.0	81	103	18.0	34	994.6
4 Normal	7.01	32.26	1657	2504	6.2	304	3.29	23.0	81	104	19.0	32	994.6
1 High	9.04	32.13	1280	2504	4.4	305	3.28	24.0	81	104	19.0	31	994.6
2 High	13.87	30.61	794	2509	2.7	320	3.12	24.0	81	105	20.0	30	994.6
3.2 - MAXIMUM POWER IN TESTED GEARS (ballasted tractor)													
1 Slow	0.78	5.75	2648	2730	15.0	-	-	21.0	81	104	19.0	45	1002.6
2 Slow	1.18	8.63	2638	2723	14.9	-	-	21.0	81	104	19.0	45	1002.6
3 Slow	1.71	12.58	2648	2715	15.0	-	-	22.0	81	105	19.0	45	1002.6
4 Slow	2.20	16.18	2648	2702	15.0	-	-	22.0	81	105	19.0	45	1002.6
1 Normal	2.39	17.58	2628	2693	14.8	383	2.61	23.0	81	106	20.0	40	1002.6
2 Normal	3.53	25.83	2638	2640	14.9	329	3.04	23.0	81	106	20.0	40	1002.6
3 Normal	5.33	32.17	2172	2495	6.8	304	3.29	24.0	81	106	20.0	40	1002.6
4 Normal	7.09	32.37	1643	2500	4.2	303	3.30	25.0	81	106	20.0	40	1002.6
1 High	9.05	31.79	1265	2495	3.2	307	3.26	25.0	81	106	21.0	35	1002.6
2 High	13.80	30.44	794	2500	2.1	320	3.12	25.0	81	106	21.0	35	1002.6
3.3.1 - FIVE HOUR TEST at 75% of pull at maximum power													
4 Normal	7.58	26.00	1232	2635	2.8	250	4.00	24	81	106	20.0	45	1002.6
3.3.2 - FIVE HOUR TEST at pull corresponding to 15% wheelslip - with 280 kg as additional ballast													
2 Normal	3.73	27.33	2638	2609	-	-	- -	25	81	106	21.0	36	1002.6

Oil consumption during ten hours tests 3.3.1 and 3.3.2: 42 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: 11.2 R 20 111 A8
rear: 12.4 R 32 122 A8
Track width front: 1440
rear: 1414

	With brakes		Without brakes	
	Right-hand	Left-hand	Right-hand	Left-hand
	m	m	m	m
Radius of turning area	4.25	4.29	4.65	4.69
Radius of turning circle	4.11	4.15	4.51	4.55

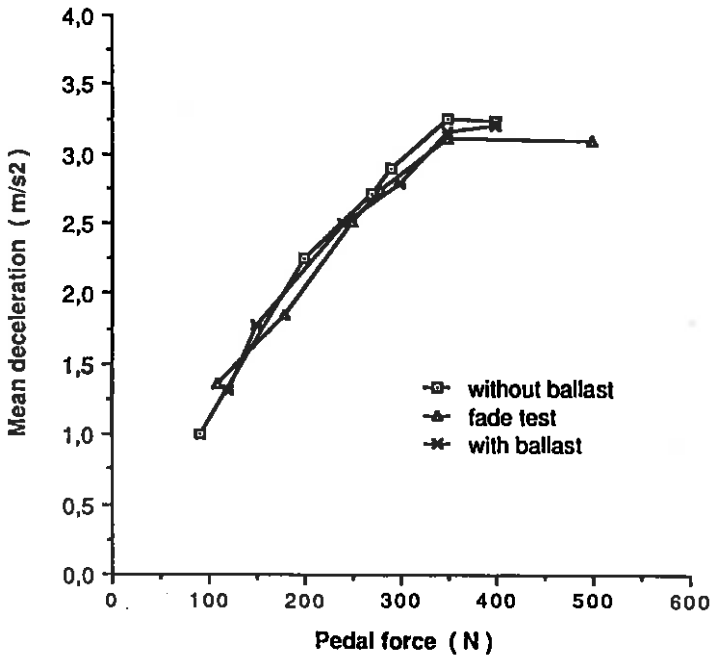
5. LOCATION OF CENTRE OF GRAVITY

Height above ground	715 mm
Distance forward from the vertical plane containing the axis of the rear wheels	872 mm
Distance from the median plane of the tractor, to the left	0 mm

6. BRAKING

— Date of tests: 15th March 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)	26.95	26.85

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 21.5 km/h with towing force of 305 kN.

6.3 PARKING BRAKING DEVICE TEST

	Uphill	Downhill
Braking device control force	11.1 kN	10.7 kN

7. MEASUREMENT OF EXTERNAL NOISE LEVEL

— Date of tests: 20th March 1990
— Type of sound level meter: impulse precision BRUEL & KJAER 2209 model
— Type of track: concrete

7.1 Results of test with DGM SA 748 model

— Gear number: 4 High
— Travelling speed before acceleration: 21.50 km/h
— Sound level: 87.0 dB (A)

8. REPAIRS AND ADJUSTMENT DURING TEST = none

9. REMARKS = none

TEST CARRIED OUT BY:

W. Faccio

M. Gianguaiano

DIRECTOR OF I.M.A.

L. Lisa

Turin, 25th September 1990

Engine Speed	Torque	Power	Hourly Consumption	Specific Consumption
rev/min	mdaN	kW	kg/h	g/kWh
2500	14.22	37.23	9.900	266
2450	14.42	36.99	9.760	264
2400	14.56	36.59	9.590	262
2300	14.80	35.64	9.190	258
2200	15.03	34.61	8.845	256
1967	15.59	32.10	8.000	249
1800	15.92	29.99	7.400	247
1600	16.47	27.59	6.680	242
1500	16.88	26.50	6.390	241
1400	17.28	25.33	6.090	240
1300	17.09	23.26	5.430	233
1200	16.61	20.86	4.770	229
2500	14.22	37.23	9.900	266
2550	13.92	37.17	9.950	268
2575	13.73	37.02	9.880	267
2600	12.08	32.88	8.620	262
2641	9.06	25.05	6.965	278
2663	6.04	16.84	5.370	319
2689	3.29	9.26	4.060	438
2710	0.00	0.00	2.510	0
1967	15.59	32.10	7.970	248
2000	15.30	32.04	7.965	249
2025	15.10	32.01	7.910	247
2050	14.28	30.64	7.490	244
2066	13.56	29.33	7.170	244
2149	9.94	22.37	5.710	255
2208	6.62	15.31	4.325	282
2259	3.31	7.83	2.945	376
2291	0.00	0.00	2.120	0

FIAT 55-56 DT LM/12 (4 WD)

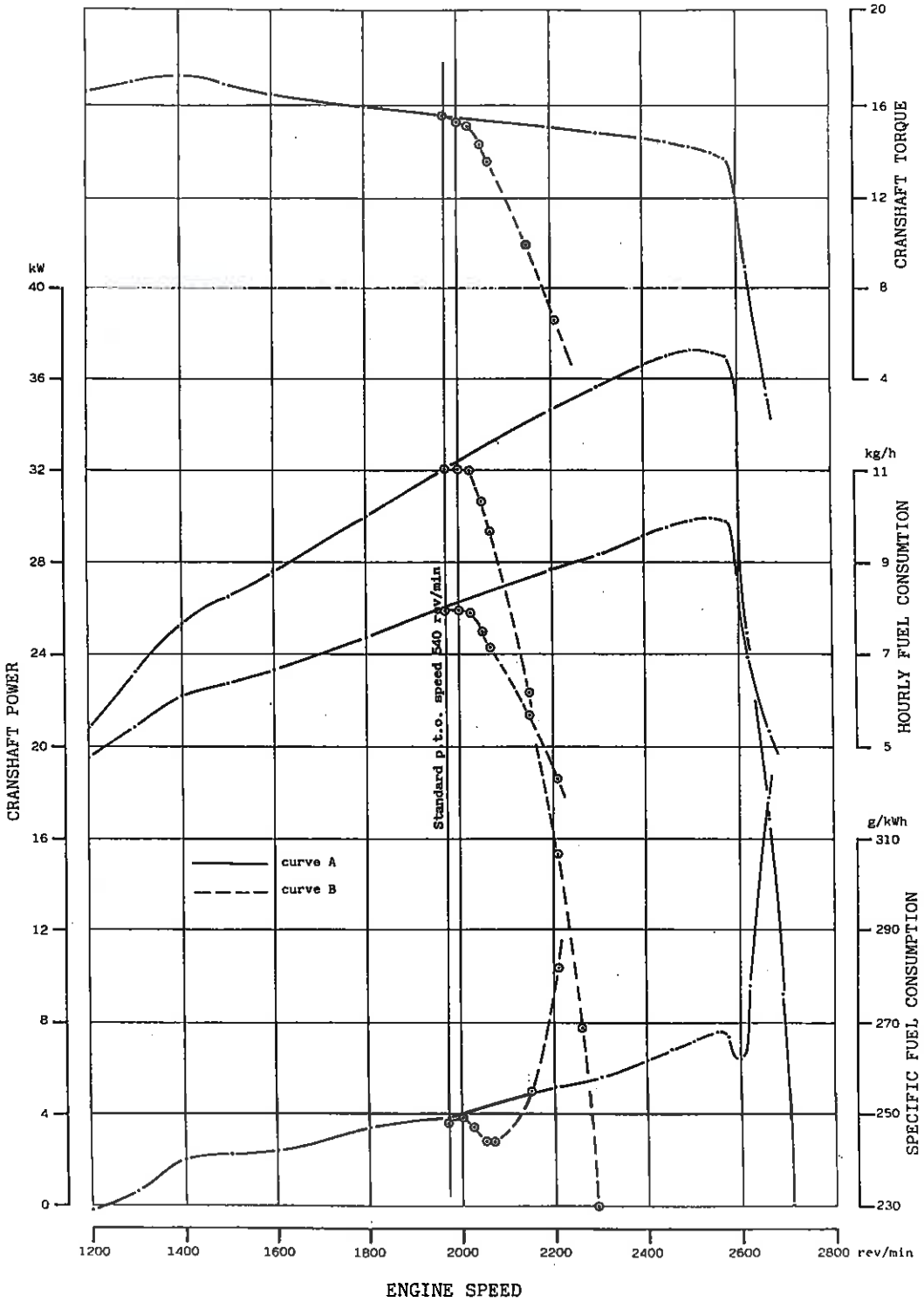


Fig. 1 - POWER TAKE-OFF TEST

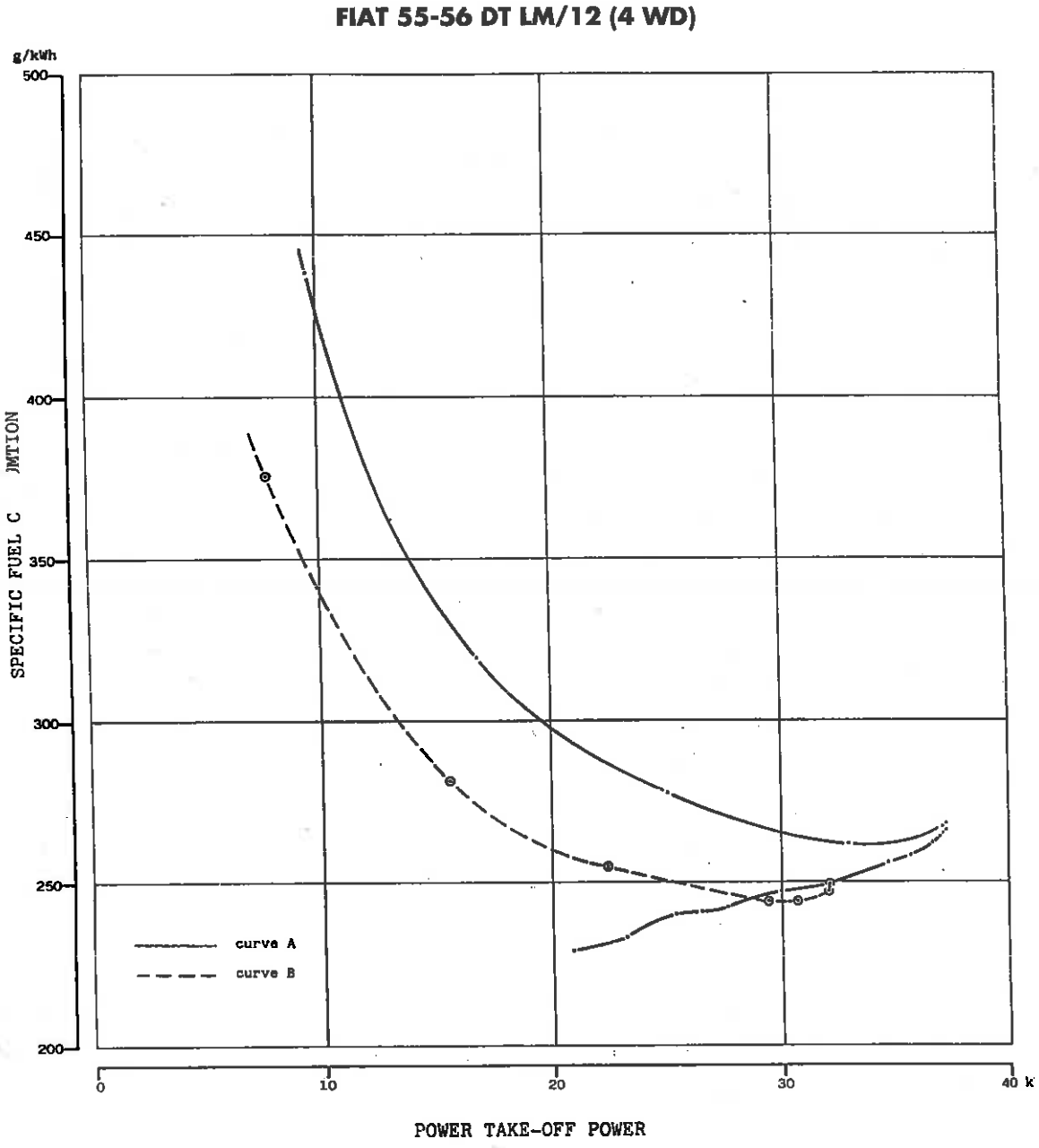


Fig. 2 - POWER TAKE-OFF TEST