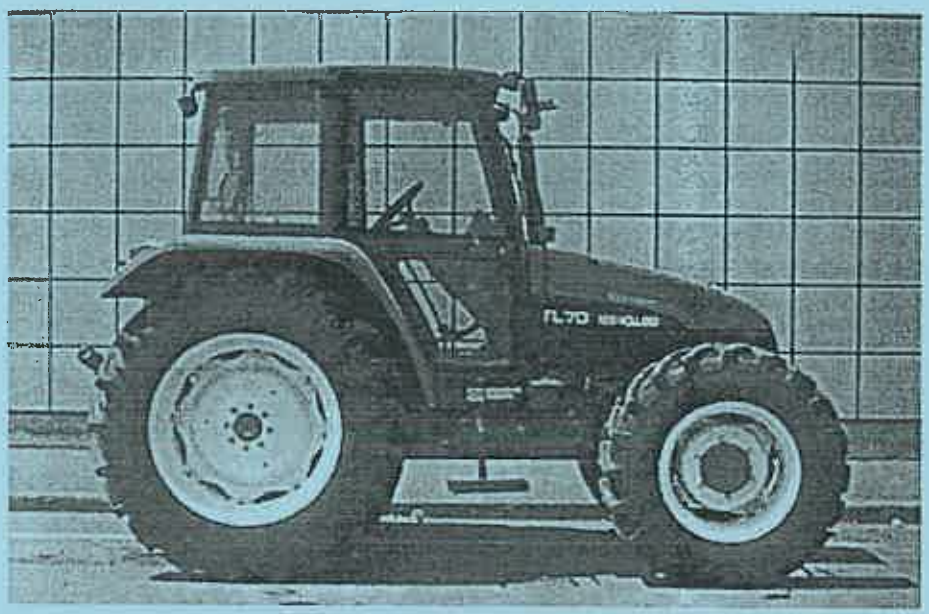
Consiglio Nazionale delle Ricerche
ISTITUTO PER LA MECCANIZZAZIONE AGRICOLA
Strada delle Cacce, 73 - 10135 TORINO (Italy)

OECD Approval No.: 1/1 912
Date of Approval 4th September 2000

Report No. 2646/T/2000

TEST IN ACCORDANCE WITH THE OECD CODE 1 FOR THE OFFICIAL TESTING OF AGRICULTURAL TRACTORS

Make:	**NEW HOLLAND**
Trade Name:	**TL 70**
Type:	**4WD, 30 km/h, 24+12 speeds with Hi-Lo Transmission**
Manufacturer denomination:	**L1C7AE**



Manufactured by:

NEW HOLLAND ITALIA S.p.A.
Viale delle Nazioni, 55
41100 MODENA (Italy)

NEW HOLLAND UK Limited
Cranes Farm Road
BASILDON, ESSEX (United Kingdom)

Date and location of the tests: 1999 TORINO (Italy)

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

PRELIMINARY REMARKS

This report is based on engineering tests in accordance with O.E.C.D. Code 1.
It does not contain an evaluation of performance of the tractor on practical farm work.

The NEW HOLLAND tractor L1X7XX type are manufactured in following variants:

- For the transmission

1. With 12 x 12 Mechanical Transmission (30 km/h version) – (4 x 3 gear units and one reverse group);
2. With 12 x 12 Mechanical Transmission (40 km/h version) – (4 x 3 gear units and one reverse group);
3. With 12 x 4 Mechanical Transmission (30 km/h version) – (4 x 3 forward gear units and 4 x 1 rear gear units);
4. With 12 x 4 Mechanical Transmission (40 km/h version) – (4 x 3 forward gear units and 4 x 1 rear gear units) and equipped with 2 post safety frame folding or not folding;
5. With 20 x 12 Mechanical Transmission (30 km/h version) – (4 x 3 gear units and one reverse group plus 4 x 2 gear units responsible of the 8 forward creeper gears) when the reverse group is engaged the 8 creeper gears are automatically excluded reducing to 12 the number of reverse speeds;
6. With 20 x 12 Mechanical Transmission (40 km/h version) – (4 x 3 gear units and one reverse group plus 4 x 2 gear units responsible of the 8 forward creeper gears) when the reverse group is engaged the 8 creeper gears are automatically excluded reducing to 12 the number of reverse speeds;
7. With 24 x 12 HI-LO Transmission (30 km/h version) – (4 x 3 gear units, HI-LO reduction group, plus one reverse group) when the reverse group is engaged the HI position of HI-LO reduction group is automatically excluded reducing to 12 the number of reverse speeds;
8. With 24 x 12 HI-LO Transmission (40 km/h version) – (4 x 3 gear units, HI-LO reduction group, plus one reverse group) when the reverse group is engaged the HI position of HI-LO reduction group is automatically excluded reducing to 12 the number of reverse speeds;
9. With 24 x 24 POWER SHUTTLE Transmission (30 km/h version) – (4 x 3 gear units, HI-LO reduction group, plus one reverse group);
10. With 24 x 24 POWER SHUTTLE Transmission (40 km/h version) – (4 x 3 gear units, HI-LO reduction group, plus one reverse group);

- For the protective structure fitted on the tractor

1. cab
2. 2 post rear non folding roll bar
3. 2 post rear folding roll bar
4. 2 post rear fixed roll bar

Tests have been carried out on tractor with 24 forward and 12 reverse speed, 30 km/h, with HI-LO reduction group and fitted with cab.

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

MANUFACTURE TRACTOR'S DENOMINATION

New Holland Italia - Homologation Department

Codification System - Explanation

New Holland TL Tractor serie

Groups → L 1 C 7 AA ← Explanation

Transmission

AA	=	12+4 (30 KPH)
AB	=	12+12 (30 KPH)
AC	=	20+12 (30 KPH)
AD	=	20+12 SRL (30 KPH)
AE	=	24+12 HI-LO (30 KPH)
AF	=	24+24 PS (30 KPH)
AX	=	AA+AB+AC+AD+AE+AF
BA	=	12+12 (40 KPH)
BB	=	20+12 SRL (40 KPH)
BC	=	20+12 (40 KPH)
BD	=	20+8(40 KHP)
BE	=	24+12 HI-LO (40 KPH)
BF	=	24+24 PS (40 KPH)
BY	=	BA+BB+BC
BZ	=	BE+BF
XX	=	(**)

Version

2	=	2WD
7	=	4WD
X	=	(*)

Safety structure

R	=	ROPS
C	=	Cab
X	=	(*)

Tractor model

1	=	TL 70
2	=	TL 80
3	=	TL 90
4	=	TL 100
X	=	(*)

Tractor serie

(*) Symbol X is inserted when all the variants of the same group are included.
(**) Symbol XX is inserted when all the transmission types are included.

Example: L1C7AA means an L serie tractor, TL 70 model, with cab, 4WD, 12+4 30 KPH transmission.

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0 FOREWORDS

Tractor manufacturer's name and address	NEW HOLLAND ITALIA S.p.A. Viale delle Nazioni, 55 41100 MODENA (Italy)
Location of tractor assembly	Jesi (AN) - ITALY Basildon (ESSEX) - UNITED KINGDOM
Submitted for test by:	The Manufacturer
Selected for test by:	Manufacturer with the agreement of IMA
Place of running-in:	MODENA (MO) - ITALY
Duration of running-in:	Appr. 50 hours
Location of tests :	IMA - Torino - Italy

1 SPECIFICATIONS OF TRACTOR

1.1 IDENTIFICATION

Make:	NEW HOLLAND
Trade name:	TL 70
Type:	4WD, 30 km/h, 24 forward+12 reverse speeds, with Hi-Lo transmission
Manufactured denomination	L1C7AE
Serial N°:	001170191
1st serial N°:	001130938 (production NEW HOLLAND ITALIA) 083969B (production NEW HOLLAND UK)

1.2 ENGINE

Make:	NEW HOLLAND ITALIA S.p.A.
Model:	IVECO 8045.06R
Type:	direct injection, compression ignition, 4 cycles
Serial N°:	513-534080

1.2.1 Cylinders

Number and disposition:	4, vertical, in line
Bore x stroke:	100 x 115 mm
Capacity:	3613 cm^3
Compression ratio:	17:1
Arrangement of valves:	overhead
Cylinder liners:	dry

1.2.2 Supercharging

Supercharger	none

1.2.3 Fuel system

Fuel feed system:	AC CORONA fuel feed pump
Make, model and type of fuel filter(s):	N° 1 NEW HOLLAND ITALIA S.p.A. make, with replaceable cartridge and n°1 mesh filter inside the fuel feed pump
Capacity of fuel tank:	115 dm^3, placed under the tractor platform, on the left side. As option one fuel tank, capacity 127 dm^3 placed under the tractor platform, on the left side.
Make/Model/Type of injection pump:	BOSCH makes, L816-1 type, rotary injection pump. As option BOSCH make,VE4/11F1250L164-2 or VE4/11F1250LV13763 type, rotary injection pump
Serial N°:	0-460-414-184

Manufacturer's production setting of injection pump:	
-flow rate:	46.17 mm^3/stroke at rated speed and full load corresponding 13.85 dm^3/h
-timing:	4.0°±1° before TDC
Make/Model/Type of injectors:	BOSCH makes, DLLA 124S type, multihole injection nozzles. As option: injectors OMAP makes, OLL124S type; STANADYNE make, DLL 124S type; CAV make BDLL 124S type, are used with BOSCH make, VE4/11F1250L164-2 type fuel pump. Injectors BOSCH make, DLLA 132S type are used with BOSCH make, VE4/11F1250LV13763 or L816 type fuel pump
Injection pressure:	22.6±1 MPa for BOSCH DLLA 124 S
Make/Model/Type of carburettor:	none

1.2.4 Governor

Make, model and type	BOSCH make, centrifugal variable speed governor, mechanical type, incorporated in the fuel pump
Governed range of engine speed:	710-2732 rev/min
Rated engine speed:	2500 rev/min

1.2.5 Air cleaner

Pre-cleaner	none
Main filter	
- Make:	NEW HOLLAND ITALIA S.p.A.
- Model:	own drawn 5157064
- Type:	dry air filter, with double cartridge
Location of air intake:	on front of the radiator under the bonnet cowling
Maintenance indicator:	with the warning lamp on the dashboard

1.2.6 Lubrication system

Type of feed pump:	forced feed by means of gear pump. Engine oil cooling is provided by a heat exchanger using engine coolant
Type of filter(s):	replaceable cartridge type, installed on the pressure line of the engine and wire mesh type, installed on the pump suction line.
Number of filters:	1

1.2.7 Cooling System

Type of coolant:	water
Type of pump:	centrifugal blade pump
Specification of fan:	propeller fan driven by engine shaft
Number of fan blades:	4
Fan diameter:	430 mm
Coolant capacity:	16 l
Type of temperature control:	a temperature gauge, with display on the dashboard, alerts the operator to potential problems
Superpressure system:	71 kPa

1.2.8 Starting system

Make, model and type:	BOSCH makes, 4807375 type, electromagnetic engagement. As option MARELLI make, 4755109 type, electromagnetic engagement.
Starter motor power rating:	3,5 kW
Cold starting aid:	LUCAS make, thermostart type
Safety device:	clutch engagement

1.2.9 Electrical system

Voltage:	12 V, negative earth
Generator	
- Make:	MARELLI
- Model:	Alternator
- Type:	AA 125R
- Power:	1 kW
Battery:	1, lead acid type
Rating:	100 Ah at 20 h

1.2.10 Exhaust system

Make, model and type	NEW HOLLAND ITALIA S.p.A. made, 5183208, interference type with internal perforated pipe
Location:	on the left hand side of engine, under the bonnet cowling, with the vertical exhaust pipe above the bonnet cowling
Height of outlet above ground:	2495 mm

1.3 TRANSMISSION

1.3.1 Clutch

Make:	LUK
Model:	own drawing
Type:	dry single plate for travel and wet multiple plate for pto
Number of plates:	1 for clutch used for travelling and 5 for clutch used for pto engagement
Diameter of plates:	305 mm for travelling and 127 mm for pto
Method of operation:	mechanically operated by pedal for travelling, and hydraulically operated by button for PTO engagement
As option	
Make:	LUK
Model:	own drawing
Type:	dry double plate
Number of plates:	1 used for travelling and 1 used for PTO engagement
Diameter of plates:	305 mm
Method of operation:	mechanically operated by pedal

1.3.2 Gearbox

Make: NEW HOLLAND ITALIA S.p.A.
Model: own drawing
Type: mechanical, synchronized constant mesh gears, direct engagement by hand levers, with HI-LO reduction group; when the reverse group is engaged the position HI is automatically excluded.

	Forward	Reverse
Number of gears	4	4
Number of ranges	3 (slow, medium and fast)	3 (slow medium and fast)
Number of groups	2 (HI-LO)	none
Total of arrangements	24	12

Available options

	Forward	Reverse
Number of gears	4	4
Number of ranges	3 (slow, medium and fast)	1
Number of groups	none	none
Total of arrangements	12	4

	Forward	Reverse
Number of gears	4	4
Number of ranges	3 (slow, medium and fast)	1
Number of groups	none	none
Total of arrangements	12	4

1st option[1]	Forward	Reverse
Number of gears	4	4
Number of ranges	5 (slow, medium low, medium, medium fast and fast)	3 (slow, medium and fast)
Number of groups	none	none
Total of arrangements	20	12

2nd option[1]	Forward	Reverse
Number of gears	4	4
Number of ranges	5 (slow, medium low, medium, medium fast and fast)	3 (slow, medium and fast)
Number of groups	none	none
Total of arrangements	20	12

	Forward	Reverse
Number of gears	4	4
Number of ranges	3 (slow, medium and fast)	3 (slow, medium and fast)
Number of groups	2 (Power shuttle)	2 (Power shuttle)
Total of arrangements	24	24

[1] 1st and 2nd options differs for travelling speed, see at point 1.3.5 for more information.

1.3.3 Rear axle and final drives

Make:	NEW HOLLAND ITALIA S.p.A.
Model:	own drawing
Type:	bevel gear differential and epyciclic final drivers
Rear differential lock	
- Make:	NEW HOLLAND ITALIA S.p.A.
- Model:	own drawing
- Type:	mechanical engagement
- Method of:	
- Engagement:	pushing pedal
- Disengagement:	pushing brake pedals

1.3.4 Front axle and final drives

Make:	NEW HOLLAND ITALIA S.p.A.
Model:	own drawing
Type:	centrally pivoted
Front differential lock	
- Make:	NEW HOLLAND ITALIA S.p.A.
- Model:	own drawing
- Type:	electrohydraulic engagement
- Method of engagement/ disengagement:	button placed on the dashboard

1.3.5 Total ratios and travelling speeds[2]

NEW HOLLAND TL 70 with 24 forward speeds and 12 reverse speeds, HI-LO transmission (fitted on tested tractor)

Gear no.	Group and range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed at rated engine speed of 2500 rev/min (km/h)
		FORWARD	
1	Slow LO	412.781	1.586
1	Slow HI	362.442	1.806
2	Slow LO	284.007	2.305
2	Slow HI	249.372	2.625
3	Slow LO	197.009	3.323
1	Medium LO	176.731	3.704
3	Slow HI	172.984	3.785
1	Medium HI	155.179	4.219
4	Slow LO	137.527	4.760
2	Medium LO	121.597	5.384
4	Slow HI	120.756	5.422
2	Medium HI	106.768	6.132
3	Medium LO	84.349	7.762
1	Fast LO	75.069	8.721
3	Medium HI	74.083	8.837
1	Fast HI	65.914	9.933
4	Medium LO	58.882	11.119
4	Medium HI	51.701	12.663
2	Fast LO	51.650	12.676
2	Fast HI	45.351	14.436
3	Fast LO	35.828	18.273
3	Fast HI	31.459	20.811
4	Fast LO	25.011	26.176
4	Fast HI	21.961	29.811

Gear no.	Group and range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed at rated engine speed of 2500 rev/min (km/h)
		REVERSE	
1	Slow LO	360.064	1.818
2	Slow LO	247.737	2.643
3	Slow LO	171.849	3.810
1	Medium LO	154.161	4.247
4	Slow LO	119.964	5.457
2	Medium LO	106.068	6.172
3	Medium LO	73.577	8.898
1	Fast LO	67.041	9.766
4	Medium LO	51.362	12.747
2	Fast LO	46.126	14.194
3	Fast LO	31.997	20.461
4	Fast LO	22.336	29.311

Number of revolutions of front wheels for one revolution of rear wheels: 1.350

[2] Calculated with rear tyres 480/70 R 30, with dynamic radius index 695 mm (ISO 4251/1-1992)

NEW HOLLAND TL 70 with 12 forward speeds and 4 reverse speeds

Gear no.	Group and range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed at rated engine speed of 2500 rev/min (km/h)
		FORWARD	
1	Slow	362.442	1.806
2	Slow	249.372	2.625
3	Slow	172.984	3.785
1	Medium	155.179	4.219
4	Slow	120.756	5.422
2	Medium	106.768	6.132
3	Medium	74.063	8.840
1	Fast	65.914	9.932
4	Medium	51.701	12.663
2	Fast	45.351	14.436
3	Fast	31.459	20.811
4	Fast	21.961	29.811

Gear no.	Group and range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed at rated engine speed of 2500 rev/min (km/h)
		REVERSE	
1	Slow	139.304	4.700
2	Slow	95.846	6.831
3	Slow	66.486	9.847
4	Slow	46.412	14.106

Number of revolutions of front wheels for one revolution of rear wheels: 1.350

NEW HOLLAND TL 70 with 12 forward speeds, and 12 reverse speeds

Gear no.	Group and range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed at rated engine speed of 2500 rev/min (km/h)
FORWARD			
1	Slow	362.442	1.806
2	Slow	249.372	2.625
3	Slow	172.984	3.785
1	Medium	155.179	4.219
4	Slow	120.758	5.422
2	Medium	106.768	6.132
3	Medium	74.063	8.840
1	Fast	65.914	9.932
4	Medium	51.701	12.663
2	Fast	45.351	14.436
3	Fast	31.459	20.811
4	Fast	21.961	29.811

Gear no.	Group and range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed at rated engine speed of 2500 rev/min (km/h)
REVERSE			
1	Slow	369.779	1.770
2	Slow	254.420	2.573
3	Slow	176.485	3.710
1	Medium	158.320	4.135
4	Slow	123.200	5.314
2	Medium	108.930	6.010
3	Medium	75.562	8.664
1	Fast	67.248	9.735
4	Medium	52.748	12.412
2	Fast	46.269	14.150
3	Fast	32.096	20.398
4	Fast	22.405	29.221

Number of revolutions of front wheels for one revolution of rear wheels: 1.350

NEW HOLLAND TL 70 with 20 forward speeds, and 12 reverse speeds, 1st option

Gear no.	Group and range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed at rated engine speed of 2500 rev/min (km/h)
FORWARD			
1	Slow	2001.950	0.327
2	Slow	1377.410	0.475
3	Slow	955.475	0.685
1	Medium slow	857.131	0.764
4	Slow	666.995	0.982
2	Medium slow	589.735	1.110
3	Medium slow	409.085	1.600
1	Medium	362.442	1.806
4	Medium slow	285.573	2.293
2	Medium	249.372	2.625
3	Medium	172.984	3.785
1	Medium fast	155.179	4.219
4	Medium	120.756	5.422
2	Medium fast	106.768	6.132
3	Medium fast	74.063	8.840
1	Fast	65.914	9.932
4	Medium fast	51.701	12.663
2	Fast	45.351	14.436
3	Fast	31.459	20.811
4	Fast	21.961	29.811

Gear no.	Group and range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed at rated engine speed of 2500 rev/min (km/h)
REVERSE			
1	Slow	381.518	1.716
2	Slow	262.497	2.494
3	Slow	182.088	3.595
1	Medium	163.346	4.008
4	Slow	127.111	5.151
2	Medium	112.388	5.825
3	Medium	77.961	8.398
1	Fast	69.383	9.436
4	Medium	54.423	12.006
2	Fast	47.738	13.714
3	Fast	33.115	19.770
4	Fast	23.117	28.321

Number of revolutions of front wheels for one revolution of rear wheels: 1.350

NEW HOLLAND TL 70 with 20 forward speeds, and 12 reverse speeds, 2nd option

Gear no.	Group and range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed at rated engine speed of 2500 rev/min (km/h)
FORWARD			
1	Slow	2636.200	0.248
2	Slow	1813.790	0.361
3	Slow	1258.190	0.520
1	Medium slow	1128.680	0.580
4	Slow	878.310	0.745
2	Medium slow	776.573	0.843
3	Medium slow	538.690	1.215
4	Medium slow	376.047	1.741
1	Medium	362.442	1.806
2	Medium	249.372	2.625
3	Medium	172.984	3.785
1	Medium fast	155.179	4.219
4	Medium	120.756	5.422
2	Medium fast	106.768	6.132
3	Medium fast	74.063	8.840
1	Fast	65.914	9.932
4	Medium fast	51.701	12.663
2	Fast	45.351	14.436
3	Fast	31.459	20.811
4	Fast	21.961	29.811

Gear no.	Group and range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed at rated engine speed of 2500 rev/min (km/h)
REVERSE			
1	Slow	386.287	1.695
2	Slow	265.778	2.463
3	Slow	184.364	3.551
1	Medium	165.388	3.959
4	Slow	128.700	5.087
2	Medium	113.793	5.753
3	Medium	78.935	8.294
1	Fast	70.250	9.319
4	Medium	55.103	11.881
2	Fast	48.335	13.545
3	Fast	33.529	19.526
4	Fast	23.406	27.971

Number of revolutions of front wheels for one revolution of rear wheels: 1.350

NEW HOLLAND TL 70 with 24 forward speeds, and 24 reverse speeds, power shuttle transmission

Gear no.	Group and range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed at rated engine speed of 2500 rev/min (km/h)
		FORWARD	
1	Slow LO	412.781	1.586
1	Slow HI	362.442	1.806
2	Slow LO	284.007	2.305
2	Slow HI	249.372	2.625
3	Slow LO	197.009	3.323
1	Medium LO	176.731	3.704
3	Slow HI	172.984	3.785
1	Medium HI	155.179	4.219
4	Slow LO	137.527	4.760
2	Medium LO	121.597	5.384
4	Slow HI	120.756	5.422
2	Medium HI	106.768	6.132
3	Medium LO	84.349	7.762
1	Fast LO	75.069	8.721
3	Medium HI	74.083	8.838
1	Fast HI	65.914	9.932
4	Medium LO	58.882	11.119
4	Medium HI	51.701	12.663
2	Fast LO	51.650	12.676
2	Fast HI	45.351	14.436
3	Fast LO	35.828	18.273
3	Fast HI	31.459	20.811
4	Fast LO	25.011	26.176
4	Fast HI	21.961	29.811

Gear no.	Group and range	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed at rated engine speed of 2500 rev/min (km/h)
		REVERSE	
1	Slow LO	419.805	1.560
1	Slow HI	368.609	1.776
2	Slow LO	288.840	2.267
2	Slow HI	253.616	2.581
3	Slow LO	200.361	3.268
1	Medium LO	179.739	3.642
3	Slow HI	175.927	3.721
1	Medium HI	158.819	4.122
4	Slow LO	139.867	4.681
2	Medium LO	123.666	5.294
4	Slow HI	122.811	5.331
2	Medium HI	108.585	6.029
3	Medium LO	85.874	7.624
1	Fast LO	76.346	8.575
3	Medium HI	75.323	8.692
1	Fast HI	67.036	9.766
4	Medium LO	59.884	10.933
4	Medium HI	52.581	12.451
2	Fast LO	52.529	12.463
2	Fast HI	46.122	14.195
3	Fast LO	36.438	17.967
3	Fast HI	31.994	20.463
4	Fast LO	25.436	25.739
4	Fast HI	22.334	29.314

Number of revolutions of front wheels for one revolution of rear wheels: 1.350

1.4 POWER TAKE OFF

1.4.1 Main power take-off

Type:	independent
Method of engagement:	engaged or disengaged by pushing a button, driven by multiplate wet clutch independent of travel clutch plus torsional dumper; ISO Standard 500-1991
Number of shafts:	1
Method of changing power take-off shaft ends:	removing 3 bolts, swopping shaft and replacing bolts
Method of changing speed:	by means of a button at the right hand side of the seat

1.4.1.1 Power take-off proportional to engine speed

540 rev/min

Location:	at the rear of the tractor, in the median plane
Diameter of power take-off shaft end:	35 mm
Number of splines:	6, in conformity with ISO 500-1991 Type 1
Height above ground:	680 mm
Distance from the median plane of the tractor:	0 mm
Distance behind rear-wheel axis:	550 mm
PTO speed at rated engine speed (2500 rev/min):	614 rev/min
Engine speed at standard power take-off speed:	2199 rev/min
Ratio of rotation speeds (engine speed/p.t.o. speed):	4.0716
Power restriction and maximum torque transmissible:	torsional dumper, engine torque
Direction of rotation (viewed from behind tractor):	clockwise

750 rev/min

Location:	at the rear of the tractor, in the median plane
Diameter of power take-off shaft end:	35 mm
Number of splines:	6 or 21, not in conformity with ISO 500-1991
Height above ground:	680 mm
Distance from the median plane of the tractor:	0 mm
Distance behind rear-wheel axis:	550 mm
PTO speed at rated engine speed (2500 rev/min):	787 rev/min
Engine speed at standard power take-off speed:	2382 rev/min
Ratio of rotation speeds (engine speed/p.t.o. speed):	3.176
Power restriction and maximum torque transmissible:	torsional dumper, engine torque
Direction of rotation (viewed from behind tractor):	clockwise

1000 rev/min

Location:	at the rear of the tractor, in the median plane
Diameter of power take-off shaft end:	35 mm
Number of splines:	21, in conformity with ISO 500-1991 Type 3
Height above ground:	680 mm
Distance from the median plane of the tractor:	0 mm
Distance behind rear-wheel axis:	550 mm
PTO speed at rated engine speed (2500 rev/min):	1050 rev/min
Engine speed at standard power take-off speed:	2381 rev/min
Ratio of rotation speeds (engine speed/p.t.o. speed):	2.381
Power restriction and maximum torque transmissible:	torsional dumper, engine torque
Direction of rotation (viewed from behind tractor):	clockwise

Not fitted

1.4.1.2 Power take-off proportional to ground speed

540 rev/min

Location:	at the rear of the tractor, in the median plane
Travelling distance for one revolution of power take-off shaft:	0.53 m
Number of pto revolution for 1 revolution of rear wheels:	8.2
Direction of rotation (viewed from behind tractor) :	clockwise

750 rev/min

Location:	at the rear of the tractor, in the median plane
Travelling distance for one revolution of power take-off shaft:	0.41 m
Number of pto revolution for 1 revolution of rear wheels:	10.6
Direction of rotation (viewed from behind tractor) :	clockwise

1000 rev/min

Location:	at the rear of the tractor, in the median plane
Travelling distance for one revolution of power take-off shaft:	0.31 m
Number of pto revolution for 1 revolution of rear wheels:	14.1
Direction of rotation (viewed from behind tractor) :	clockwise

1.4.2 Optional front power take-off

not fitted on tested tractor

1.5 HYDRAULIC POWER LIFT

1.5.1 Rear power lift

Make, model and type	own make, draft, position, mixed draft and position control operated by two independent levers; there is a lift-o-matic device to raise and to low in a fast way the lower links
Type of hydraulic system:	open centre system
Type and number of cylinders:	1, single acting, internal As option 1 single acting internal and 1 single acting external
Type of linkage lock for transport:	lift-o-matic device
Relief valve pressure setting:	19±1 MPa
Opening pressure of anti-shock valve:	21±0.5 MPa
Lift pump make and type:	Rotative pump driven by the engine shaft. BOSCH make, 0 510 725 085 type, with pump delivery rate stated by the manufacturer of 60 l/min (fitted on tested tractor) As option NEW HOLLAND ITALIA S.p.A. make, C31 type with a pump delivery rate stated by the manufacturer of 34.5 l/min; NEW HOLLAND ITALIA S.p.A. make, C 42 type, with a pump delivery rate stated by the manufacturer of 44.5 l/min; SAUER make, 550/1/34385 model with a pump delivery rate stated by the manufacturer of 60 l/min
Transmission between pump and engine:	mechanical
Number and type of filters:	1, replaceable paper cartridge
Site of oil reservoir:	in common with transmission and rear axle
Number, type and location of tapping points:	up to 3 ways distributor at rear of tractor
Maximum volume of oil available to external cylinders:	10 dm^3

1.5.2 Front power lift

Not fitted on tested tractor

1.6 THREE POINT LINKAGE

1.6.1 Rear three point linkage

Category: 2nd, implement attachment with three point linkage and lower links with quick connection, in conformity with I.S.O. 730-1:1994+Cor.1:1995

Category adapter: none

Table 1. Dimension of rear linkage geometry (when connected to the standard frame)

		Dimension or range	Settings used in test
		mm	mm
Length of lift arms	(A)	255	255
Length of lower links	(B)	965	965
Distance of lift arm pivot point from rear wheel axis			
- horizontally (rearward)	(a)	135 rearward	135 rearward
- vertically	(b)	300	300
Horizontal distance between the 2 lower link points	(u)	450-475	450
Horizontal distance between the 2 lift arm end points	(v)	510	510
Length of upper link	(S)	from 585 to 875	705
Distance of upper link pivot point from rear wheel axis			
- horizontally (rearward)	(c)	400	400
- vertically	(d)	255-335	255
Distance of lower link pivot point from rear wheel axis			
- horizontally	(e)	135	135
- vertically	(f)	205	205
Distance of lower link pivot points to lift rod pivot points on lower links	(D)	465-540	465
Length of lift rods	(L)	from 510 to 640	570
Height of lower hitch points relative to the rear wheel axis:			
- in low position	(h)	495	495
- in high position	(H)	195	195
Height above ground of lower hitch points when locked in transport position[3]		890	890

[3] Assuming the dynamic radius index of 480/70R30 rear tyres: 695 mm (ISO 4251/1-1992)

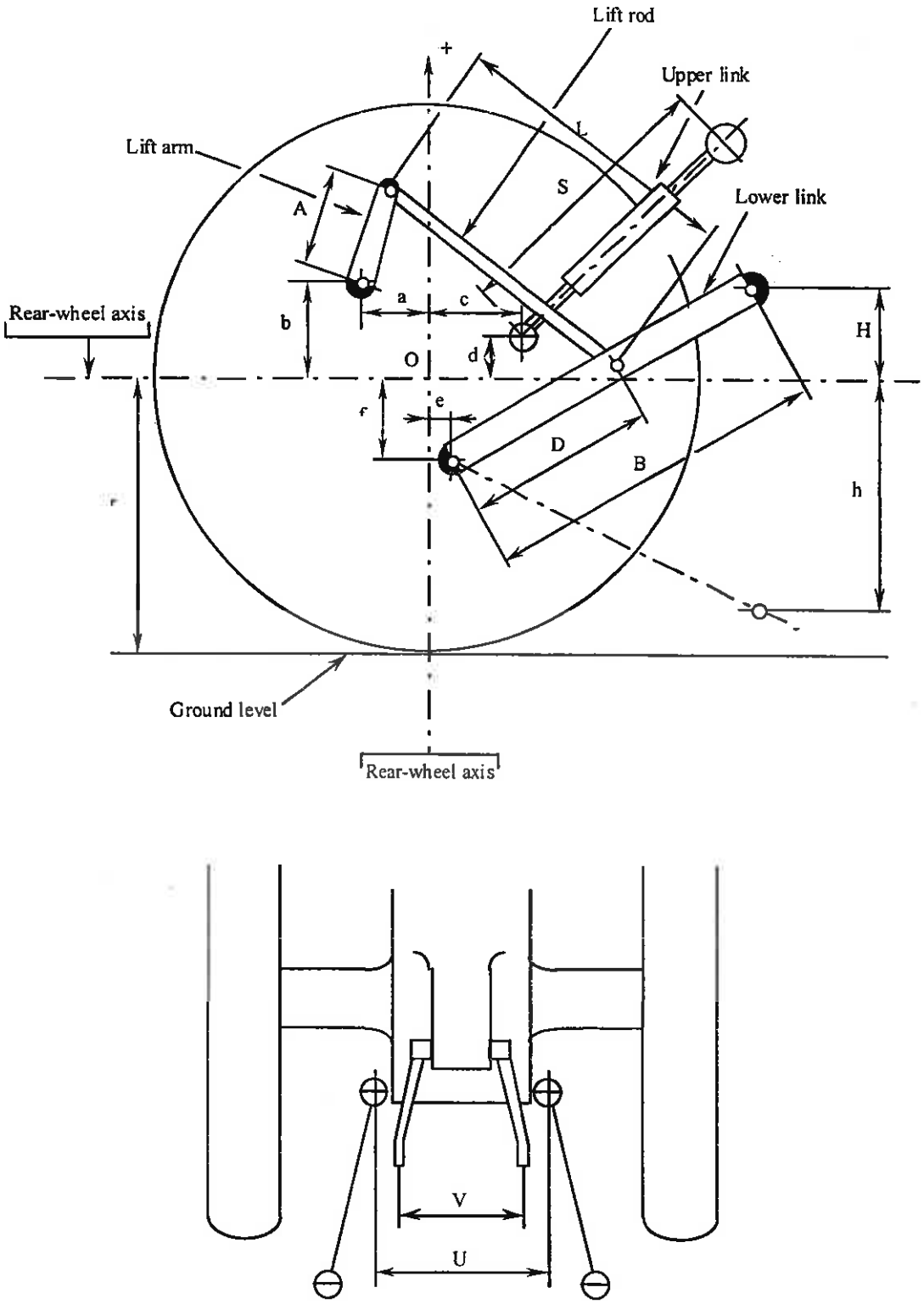


Figure 1. Lift test- Rear linkage geometry

1.7 SWINGING DRAWBAR

- Type	NEW HOLLAND ITALIA S.p.A. makes, DGM-GA 1086 A 6t V0type.
- Height above ground	
• minimum:	380 mm
• maximum:	510 mm
- Type of adjustment:	overturning the drawbar to position the fork uppermost or downmost
- Distance of hitch point from rear-wheel axis, horizontally:	860 to 930 mm
- Distance of hitch point from PTO shaft end:	
• vertically:	220 to 330 mm
• horizontally:	260 - 330 – 400 mm
- Lateral adjustment (centre of clevis):	
• right hand:	210 mm
• left hand:	210 mm
- Distance of pivot point from rear-wheel axis, horizontally:	210 mm
- Diameter drawbar pin hole:	33 mm
- Maximum vertical permissible load:	from 8.9 to 15.99 depending on longitudinal adjustment
- Maximum towable load:	59.22 kN

1.8 TRAILER HITCH

Type:	NEW HOLLAND ITALIA S.p.A. make, DGM-GA 1087 C 6tV1.5 type
Hole diameter:	28 mm
Height above ground:	
- minimum:	655 mm
- maximum:	935 mm
Distance of hitch point from rear wheel axis horizontally:	610 mm
Distance of hitch point from power take-off shaft end:	
- vertically:	25 mm below , 255 mm above
- horizontally:	110 mm
Maximum vertical permissible load:	14.7 kN

1.9 HOLED DRAWBAR

Optional, not fitted on tested tractor

1.10 STEERING

Make, model and type:	DANFOSS make, ORBITROL OSPC 125 OR model, hydrostatic type
Method of operation:	
- pump:	hydrostatic steering with BOSCH make, 0510 525 858 type, hydraulic gear pump
- rams:	two single acting rams acting directly on front axle
Working pressure:	17.0 MPa

1.11 BRAKES

1.11.1 Service brake

Make/Model: NEW HOLLAND ITALIA S.p.A. make
Type: oil bath disc, total 2 discs, 1 for wheel at rear, mounted on differential shaft. Rear disc 259 mm Ø, FRENDO ABEX 40A lining material
Method of operation: hydraulically actuated with 2 pedals
Trailer braking take-off: hydraulic brake system

As option
Make/Model: NEW HOLLAND ITALIA S.p.A. make
Type: oil bath disc, total 4 discs, 1 for axle at front as at rear, acting on the front and, independently, the rear axle. Pedals can be locked together to assure combined acting on the rear axle. Further, there is the automatic engagement of four-wheel drive providing the four-wheel braking. Rear discs 259 mm Ø and front discs 168 mm Ø, FRENDO ABEX 40A lining material
Method of operation: hydraulically actuated with 2 pedals
Trailer braking take-off: hydraulic brake system

Make/Model: NEW HOLLAND ITALIA S.p.A. make
Type: oil bath disc, total 2 discs, 1 for axle at rear, independently acting on the rear axle. Pedals can be locked together to assure combined acting on the rear axle. Further, there is the automatic engagement of four-wheel drive providing the four-wheel braking. Rear discs 259 mm Ø, FRENDO ABEX 40A lining material
Method of operation: hydraulically actuated with 2 pedals
Trailer braking take-off: hydraulic brake system

1.11.2 Parking brake:

Type: fully independent of service brake, 4 oil bath disc mounted on the pinion shaft in the gear box
Method of operation: mechanical by hand lever

1.11.3 Steering brake :

Divided pedal of service brake, for normal unlocked together

1.12 WHEELS

Number:
- front: 2, driving and steering
- rear: 2 driving

Wheelbase: 2314 mm
Track width adjustment:

	Minimum	Maximum	Adjustment method
	mm	mm	
Front	1305	2014	Changing the position of the rims with respect to the disc
Rear	1526	2138	Changing the position of the rims in respect to the disc

1.13 PROTECTIVE STRUCTURE

Make, model and type:	NEW HOLLAND ITALIA S.p.A. make, SLTV 3 model
Manufacture's name and address:	NEW HOLLAND ITALIA S.p.A. Viale delle Nazioni, 55 41100 MODENA (Italy)
Protective device:	cab, not tiltable
OECD Approval - number:	Not yet tested
Approval directive and n°:	SLTV3 77/536EEC – e18D937

1.14 SEAT

1.14.1 Driver's seat

Make, model and type:	GRAMMER make, LS95H1/90AR model; upholstered seat with back rest
Seat and steering wheel reversible	No
Type of suspension:	adjustable spring
Type of damping:	shock absorber
Range of adjustment:	
- longitudinal:	170 mm
- vertical:	60 mm
Safety belt	Yes

1.14.2 Optional driver's seat

Make, model and type:	GRAMMER make, DS85H/3A; upholstered seat with back rest
Seat and steering wheel reversible	No
Type of suspension:	adjustable spring
Type of damping:	shock absorber
Range of adjustment:	
- longitudinal:	210 mm
- vertical:	60 mm
Safety belt	Yes
Make, model and type:	GRAMMER make, MSG95A/20 model; upholstered seat with back rest
Seat and steering wheel reversible	No
Type of suspension:	adjustable spring
Type of damping:	shock absorber
Range of adjustment:	
- longitudinal:	170 mm
- vertical:	60 mm
Safety belt	Yes

1.14.3 Passenger seat (not fitted on tested tractor)

Location:	on the left hand side of the driver's seat
Number of places:	1

1.15 LIGHTING

	Height above ground of centre[4]	Size	Distance from outside edge of lights to median plane of tractor
	mm	mm	mm
Headlights	1120	165x105	210
Front parking lights	1645	113x35	870
Front direction indicators	1680	113x35	870
Rear parking lights	1560	80x70	790
Rear direction indicators	1560	75x70	950
Brakes lights	1560	80x70	790
Reflectors	1560	85x70	875

2 TEST CONDITIONS

2.1 OVERALL DIMENSIONS[5]

	Length	Width		Height at top of	
		minimum	maximum	cab	exhaust silencer
	mm	mm	mm	mm	mm
Ballasted	4280	2005	2610	2475	2495
Unballasted	3940	2005	2610	2475	2495

2.2 GROUND CLEARANCE

Unballasted tractor: 380 mm
Clearance-limiting part: swinging drawbar

[4] with front tyres 320/70R24 and rear tyres 480/70R30
[5] with front tyres 320/70R24 and rear tyres 480/70R30

2.3 TRACTOR MASS

Mass with cab and full fuel tank

	Ballasted		Unballasted	
	without driver	with driver	without driver	with driver
	kg	kg	kg	kg
Front	2005	2030	1530	1555
Rear	2410	2460	2210	2260
Total	4415	4490	3740	3815

2.4 BALLAST

	Weights		Water
	Number	Total mass	
		kg	kg
Front weight	10	400	none
Rear wheels[6]	4	200	none
Optional	none	none	none
Front support	1	75	none

[6] As option 6 weights, 300 kg of total mass

2.5 TRACK SPECIFICATIONS

none

2.6 TYRES AND TRACK WIDTH SPECIFICATIONS

	Front	Rear
Tyres:		
- make	PIRELLI	PIRELLI
- model	TM 700	TM 700
- dimensions	320/70R24	480/70R30
- ply rating	-------	------
- load index/speed	116A8	141A8
- type	radial	radial
- maximum load (tyre manufacturer's)	25.21 kN	51.99 kN
- inflation pressure (tyre manufacturer's)	160 kPa	160 kPa
- dynamic radius index	515 mm	695 mm
Chosen track width:	1665 mm	1630 mm
Technically permissible axle load	23.68 kN	39.24 kN
Others tyres available	13.6R24 (121A8)	16.9R34 (139A8)
	11.2R24 (114A8)	16.9R30 (137A8)
	12.4R24 (119A8)	13.6R36 (127A8)
	12.4R20 (116A8)	14.9R30 (129A8)
	11.2R24 (114A8)	12.4R36 (124A8)
	14.9LR20 (119A8)	16.9R30 (137A8)
	360/70R20 (116A8)	420/70R30 (134A8)

2.7 FUEL

Type: ERG DIESEL oil, in conformity with national standard.
Density at 15 °C: 0.840 g/cm^3

2.8 OILS AND LUBRICANT

2.8.1 Capacity and change interval

	Capacity	Oil change	Filter change
	dm^3	h	h
Engine with filter	8.9	300	300
Gear box with rear axle, final drive, hydraulic system and steering	49.0	1200	300
Front axle	4.5	1200	not applicable
Front final drive, each (with/without brakes)	0.8	1200 or 2 years	not applicable
Brakes	0.4	max. level	not applicable

2.8.2 Specifications (SAE, API, CCMC, ACEA, Mil.L, ISO)

	Recommended	Used during test
Engine oil - Type: - Viscosity: - Classification:	AMBRA SUPER GOLD 15W-40 12.50 cSt API CF-4	As recommended
Hydraulic fluid - Type: - Viscosity: - Classification	AMBRA MULTI G 11.50 cSt API GL 4	As recommended
Front and rear axle, final drives and gear box - Type: - Viscosity: - Classification:	AMBRA MULTI G 11.50 cSt API GL 4	As recommended
Steering oil - Type: - Viscosity: - Classification:	AMBRA MULTI G 11.50 cSt API GL 4	As recommended
Braking oil - Type: - Viscosity: - Classification:	AMBRA BRAKE LHM ------ ISO 7308	As recommended

2.8.3 Grease:

Type: AMBRA MULTI G (NLGI 2)
Number of lubrication points: 15

3 COMPULSORY TESTS

3.1 MAIN POWER TAKE-OFF

Date and location of tests: 15th -16th April 1999, I.M.A., TORINO, ITALY
Type of dynamometer: Parasitic currents, BORGHI&SAVERI FA300-30SP

Power	Speed		Fuel consumption			Specific energy
	Engine	P.t.o.	Hourly		Specific	
kW	rev/min		kg/h	l/h	g/kWh	kWh/l
3.1.1 MAXIMUM POWER - TWO HOUR TEST						
43.92	2504	615	11.63	13.85	265	3.17
3.1.2 POWER AT RATED ENGINE SPEED						
43.92	2504	615	11.63	13.85	265	3.17
3.1.3 STANDARD POWER TAKE OFF SPEED (540±10 rev/min)						
42.14	2190	538	10.71	12.75	254	3.31
3.1.4 PART LOADS						
3.1.4.1 the torque corresponding to maximum power at rated engine speed						
43.92	2504	615	11.63	13.85	265	3.17
3.1.4.2 85% of torque obtained in 3.1.4.1						
38.92	2618	643	10.78	12.83	277	3.03
3.1.4.3 75% of torque defined in 3.1.4.2						
29.70	2667	655	8.80	10.48	296	2.84
3.1.4.4 50% of torque defined in 3.1.4.2						
20.02	2675	657	6.97	8.30	348	2.41
3.1.4.5 25% of torque defined in 3.1.4.2						
10.05	2695	662	5.33	6.35	530	1.58
3.1.4.6 unloaded						
-	2732	671	3.91	4.65	-	-

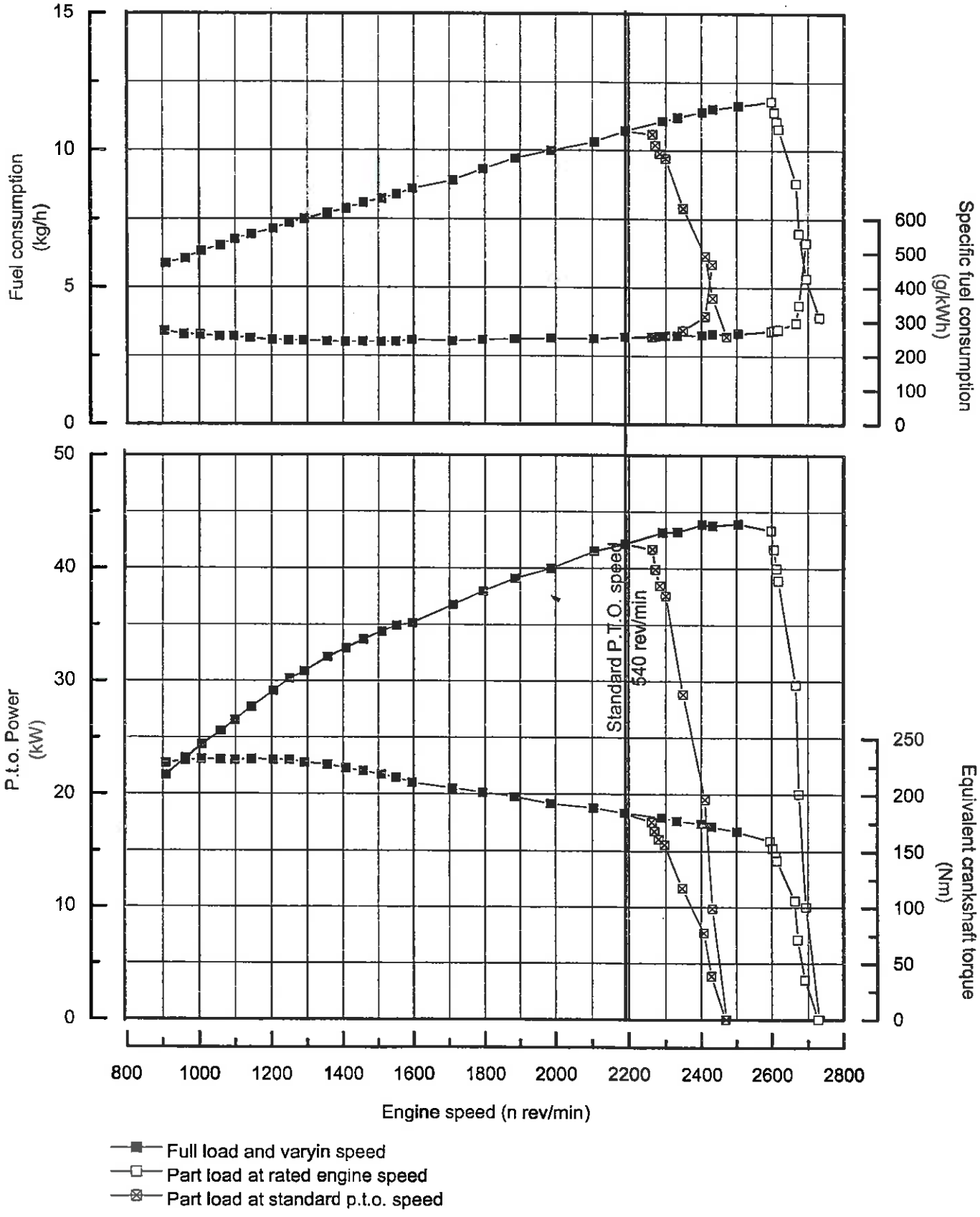
Power	Speed		Fuel consumption			Specific energy
	Engine	P.t.o.	Hourly		Specific	
kW	rev/min		kg/h	l/h	g/kWh	kWh/l
3.1.5 PART LOADS AT STANDARD POWER TAKE OFF SPEED (540±10 rev/min)						
3.1.5.1 the torque corresponding to maximum power						
42.14	2190	538	10.71	12.75	254	3.31
3.1.5.2 85% of torque obtained in 3.1.5.1						
37.57	2300	565	9.71	11.56	258	3.25
3.1.5.3 75% of torque defined in 3.1.5.2						
28.82	2349	577	7.88	9.38	273	3.07
3.1.5.4 50% of torque defined in 3.1.5.2						
19.53	2410	592	6.15	7.32	315	2.67
3.1.5.5 25% of torque defined in 3.1.5.2						
9.88	2431	597	4.61	5.49	467	1.80
3.1.5.6 unloaded						
-	2471	607	3.20	3.81	-	-

No load maximum engine speed: 2732 rev/min
Torque (equivalent crankshaft) at maximum power:
- at rated engine: 167,5 Nm
- at standard power take-off speed: 183,7 Nm

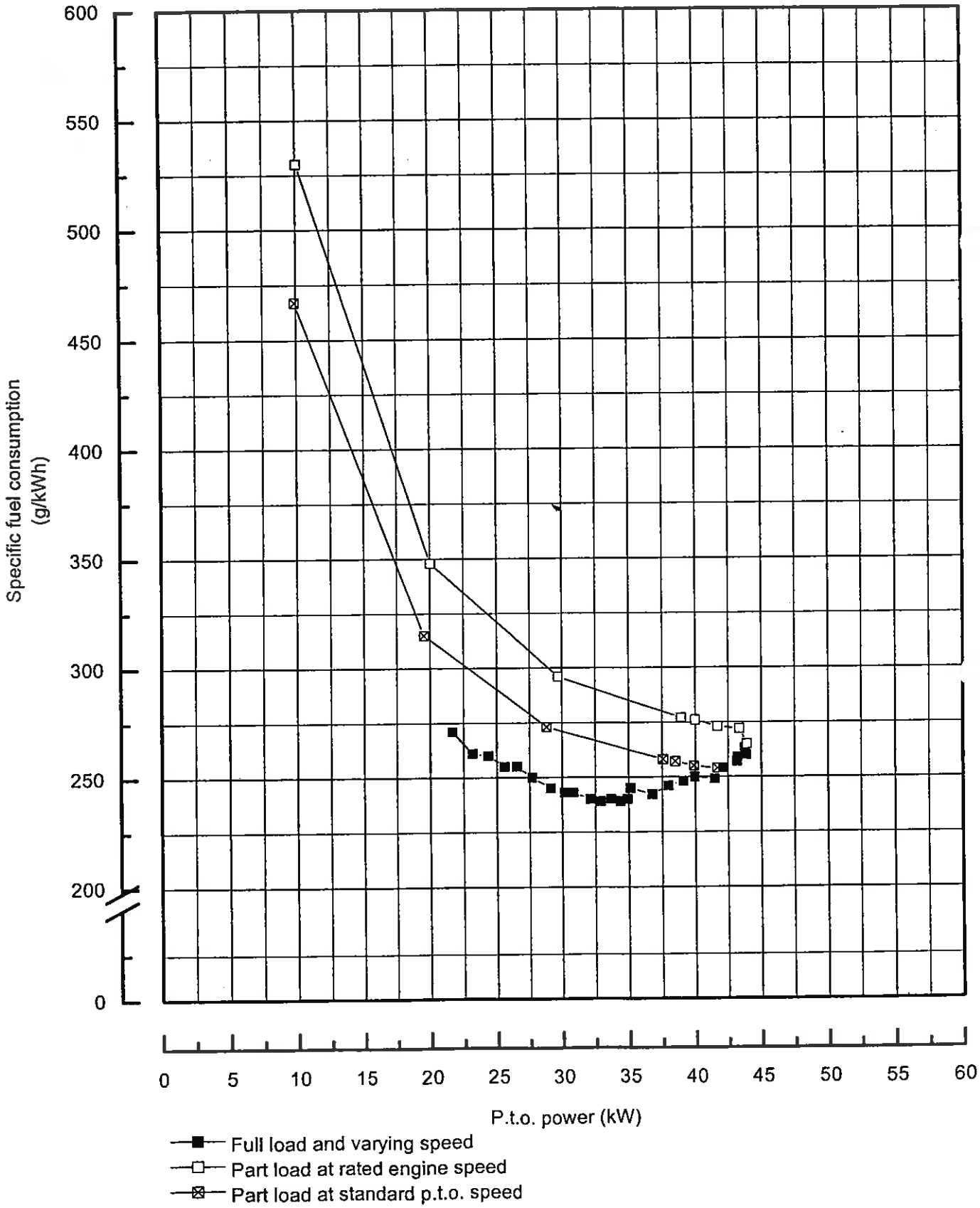
Maximum torque (equivalent crankshaft): 231,1Nm at 1144 rev/min of the engine

Mean atmospheric conditions	
Temperature	23°C
Pressure	99.5 kPa
Relative humidity	75 %
Maximum temperature	
Coolant	84.4 °C
Engine oil	116.3 °C
Fuel	28.1 °C
Engine air intake	26.8 °C

Graph 1. Power take-off test



Graph 2. Power take-off test



3.2 HYDRAULIC POWER AND LIFTING FORCE

Date of tests: 9th December 1999

3.2.1 Hydraulic Power Test

Sustained pressure with relief valve open: 20.0 MPa
Pump stalled: no
Pump delivery rate at minimum pressure: 56.0 l/min

	Flow rate	Pressure	Power
	l/min	MPa	kW
Flow rate corresponding to a hydraulic pressure equivalent to 90% of the actual relief valve pressure setting and corresponding hydraulic power	30.0	18.0	9.0
Flow rate and hydraulic pressure corresponding to maximum hydraulic power	40.2	17.4	11.6

Tapping point used for test: at rear of tractor
Temperature of hydraulic fluid: 65±5 °C
Opening pressure of the unloading valve: not applicable
Closing pressure of the unloading valve: not applicable

3.2.2 Power lift test

3.2.2.1 Rear power lift

Rear power lift linkage settings for test - see Table 1 and Figure 1

	at the hitch point	on the frame
Height of lower hitch points above ground in down position	200 mm	200 mm
Vertical movement		
- with lifting force	640 mm	640 mm
- without lifting force	690 mm	690 mm
Maximum corrected force exerted through full range	20.04 kN	14.57kN
Corresponding pressure of hydraulic fluid	18.0 MPa	18.0 MPa
Moment about rear-wheel axis	22.05 kNm	24.91 kNm
Maximum tilt angle of mast from the vertical	none	8 degrees

Lifting heights relative to the horizontal plane including the lower pivot points								
mm	-290	-200	-100	0	100	200	300	350
Lifting forces (at 90% of the actual relief valve pressure setting)								
at the hitch points kN	21.19	24.44	26.68	27.85	28.59	28.78	29.54	20.04
Corresponding pressure: 18.0 MPa								
at the frame kN	22.07	24.28	25.07	24.99	24.46	23.22	22.25	14.57
Corresponding pressure: 18.0 MPa								

3.3 DRAWBAR POWER TEST (ballasted and unballasted tractor)

Date of tests: 8th -10th November 1999
Type of track: Asphalt

	Height of hitch above ground	Tire inflation pressure	
		Front	rear
Unballasted	420 mm	90 kPa	90 kPa
Ballasted	430 mm	90 kPa	90 kPa

Gear and range	Power	Drawbar pull	Speed	Engine speed	Slip of wheels	Specific fuel consumption	Specific energy	Temperature			Atmospheric conditions		
								Fuel	Coolant	Engine oil	Temperature	Relative humidity	Pressure
	kW	kN	km/h	min^{-1}	%	g/kWh	kWh/l	°C	°C	°C	°C	%	kPa
3.3.1 MAXIMUN POWER IN TESTED GEARS (unballasted tractor)													
3 Slow LO	29.0	36.10	2.89	2614	15.06	378	2.22	28.0	79.3	142.2	2.8	95.20	99.7
1 Medium LO	30.9	35.90	3.09	2520	15.13	374	2.25	27.4	80.5	145.8	2.8	95.20	99.7
3 Slow HI	31.4	35.51	3.20	2500	14.34	367	2.29	25.7	79.5	140.2	2.8	95.20	99.7
1 Medium HI	33.5	31.98	3.77	2500	8.52	341	2.46	28.2	78.4	145.7	2.8	95.20	99.7
4 Slow LO	33.8	27.96	4.35	2500	6.61	337	2.49	29.8	80.8	147.9	2.8	95.20	99.7
2 Medium LO	34.5	24.82	5.00	2500	5.04	330	2.55	28.8	80.4	148.1	2.8	95.20	99.7
4 Slow HI	34.5	24.62	5.05	2500	4.77	331	2.54	26.1	78.4	145.8	2.8	95.20	99.7
2 Medium HI	35.1	21.88	5.78	2500	3.90	327	2.57	27.4	79.2	145.2	2.8	95.20	99.7
3 Medium LO	35.0	17.07	7.40	2500	2.91	329	2.56	28.9	81.9	145.6	2.8	95.20	99.7
1 Fast LO	35.6	15.30	8.38	2500	2.50	319	2.63	31.0	80.8	146.8	2.8	95.20	99.7
3 Medium HI	34.6	14.72	8.46	2500	2.48	334	2.52	31.6	81	145.5	2.8	95.20	99.7
1 Fast HI	35.0	13.24	9.51	2500	2.23	324	2.59	31.4	80.8	146.5	2.8	95.20	99.7
3.3.2 MAXIMUN POWER IN TESTED GEARS (ballasted tractor)													
1 Slow LO	16.2	40.61	1.43	2671	15.18	----	----	31.7	80.2	137.3	8	60	99.6
1 Slow HI	18.2	40.66	1.62	2671	15.07	----	----	30.7	80.4	135.1	8	60	99.6
2 Slow LO	22.8	40.61	2.03	2642	15.06	----	----	29.7	80.5	130	8	60	99.6
2 Slow HI	25.6	40.32	2.28	2622	15.12	----	----	26.2	79.7	113.7	8	60	99.6
3 Slow LO	30.9	40.32	2.76	2508	15.05	373	2.25	31.3	78.6	148.7	8	60	99.6
1 Medium LO	33.1	36.20	3.29	2500	8.95	345	2.44	28.2	77.4	144.1	8	60	99.6
3 Slow HI	33.1	35.22	3.38	2500	8.25	344	2.44	27.6	78.9	146	8	60	99.6
1 Medium HI	34.0	31.88	3.84	2500	6.27	335	2.50	26.1	79	140.1	8	60	99.6
4 Slow LO	34.1	27.86	4.41	2500	4.93	338	2.49	25.2	79	135.6	8	60	99.6
2 Medium LO	34.3	24.53	5.04	2500	4.11	334	2.52	27.3	79.8	140.7	8	60	99.6
4 Slow HI	34.3	24.28	5.09	2500	3.85	334	2.51	29.8	79.2	145.6	8	60	99.6
2 Medium HI	34.6	21.48	5.80	2500	3.47	329	2.55	29.3	79.3	142.5	8	60	99.6
3 Medium LO	34.1	16.68	7.37	2500	2.40	336	2.50	30.7	79.5	144.1	8	60	99.6
1 Fast LO	35.2	15.21	8.34	2500	2.17	322	2.61	32.1	79.3	145.8	8	60	99.6
3 Medium HI	33.9	14.42	8.47	2500	2.04	334	2.51	29.5	79	145.1	8	60	99.6
1 Fast HI	34.3	12.95	9.53	2500	1.66	330	2.55	32.9	78.8	146.8	8	60	99.6
4 Medium LO	33.0	11.09	10.72	2500	1.39	346	2.43	30.7	78.9	146.2	8	60	99.6
2 Fast LO	32.9	9.76	12.15	2500	1.21	345	2.43	29.5	78.5	146.6	8	60	99.6
4 Medium HI	31.9	9.47	12.15	2500	1.12	352	2.38	28.4	78.6	146.7	8	60	99.6
2 Fast HI	31.5	8.14	13.92	2500	0.97	358	2.34	28.9	78.8	146.9	8	60	99.6

Gear and range	Power	Drawbar pull	Speed	Engine speed	Slip of wheels	Specific fuel consumption	Specific energy	Temperature			Atmospheric conditions		
								Fuel	Coolant	Engine oil	Temperature	Relative humidity	Pressure
	kW	kN	km/h	min^{-1}	%	g/kWh	kWh/l	°C	°C	°C	°C	%	kPa
3.3.3 FIVE HOURS TESTS													
3.3.3.1 FIVE HOURS TEST at 75% of pull at maximum power													
3 Medium LO	27.3	12.51	7.84	2634	1.49	356	2.36	19.0	79	136.5	8	60	99.8
3.3.3.2 FIVE HOURS TEST at pull corresponding to 15% wheelslip – with 270 kg as additional ballast													
3 Slow LO	33.2	40.22	2.97	2516	8.99	⌘	⌘	23.6	79.4	142.4	8	60	99.6

⌘ The test was carried out with additional ballast; the not quoted figures are irrelevant

Oil consumption during ten hours duration of test 3.3.3.1and 3.3.3.2: 9 g/h

3.4 TURNING AREA AND TURNING CIRCLE

Wheels equipment:
- front: 13.6-24
- rear: 16.9-34

Track width:
- front: 1450 mm
- rear: 1530 mm

	With brakes		Without brakes	
	Right-hand	Left-hand	Right-hand	Left-hand
	m	m	m	m
Radius of turning area	4.70	4.55	5.80	5.65
Radius of turning circle	4.55	4.40	5.70	5.50

3.5 LOCATION OF CENTRE OF GRAVITY

Height above ground	750 mm
Distance forward from the vertical plane, containing the axis of the rear wheels	945 mm
Distance from the median plane of the tractor: to the left	9 mm

3.6 BRAKING[7]

Date of tests: 26th July 1999
Type of track: asphalt
Type of decelerometer: DATRON

3.6.1 Cold service braking device test

Unballasted tractor		
Speed before application of brake	Braking device control force	Mean deceleration
km/h	kN	m/s²
32.2	0.12	1.38
32.4	0.21	2.28
30.9	0.30	2.96
31.9	0.42	3.44
31.8	0.53	4.47

Ballasted tractor		
Speed before application of brake	Braking device control force	Mean deceleration
km/h	kN	m/s²
31.2	0.12	1.23
31.6	0.29	2.52
32.3	0.39	3.45
31.9	0.47	4.19
32.4	0.50	4.42

Maximum deviation of the tractor from its original course: none
Abnormal vibration: none

3.6.2 Fade test

Speed before application of brake	Braking device control force	Mean deceleration
km/h	kN	m/s²
31.0	0.11	1.21
32.0	0.28	2.77
31.7	0.35	3.48
32.1	0.45	4.51
32.1	0.53	4.95

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 25 km/h with a towing force of 3.3 kN

[7] Tractor fitted with 13.6-24 tyres on front axle and 16.9-34 tires on rear axle

3.6.3 Parking braking device test

	Uphill	Downhill
Braking device control force	0.19 kN	0.19 kN

3.7 MEASUREMENT OF EXTERNAL NOISE LEVEL

Date of tests:	14th October 1999- I.M.A. – TORINO
Sound level meter make, model and type:	RION make, NA 29 E model, impulse precision type
Type of track:	asphalt
Gear number:	4 Fast HI
Travelling speed before acceleration:	22.5 km/h
Sound level:	85.9 dB(A) (on the left side) 86.0 dB(A) (on the right side)

4 OPTIONAL TESTS RESULTS

none

5 REPAIRS

none

6 REMARKS

none

7 ANNEX

none

The Head of the Section

E. CAVALLO

The Director

P. PICCAROLO

Torino, 5th June 2000