

*Ben. Higgins, London S. 21*

Report on test in accordance With O.E.C.D.  
STANDARD CODE for the Official Testing of  
Agricultural Tractors

O.E.C.D. Approval No.

**872**

# MITSUBISHI MT4501D

*Manufactured by:* MITSUBISHI AGRICULTURAL MACHINERY Co., Ltd.  
SENDAI Works  
MIYAGI, JAPAN



*Test No. 82005/O.E.C.D.*

*Date of Test: February, 1983*

*Date of Approval: 13th June, 1983*

**Institute of Agricultural Machinery**

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This bulletin is based on engineering tests in accordance with the O.E.C.D. STANDARD CODE for the official Testing of Agricultural Tractor Performance.

It does not contain an evaluation of the tractor performance on practical work.

This report has been approved by the O.E.C.D. Coordinating Centre (C.E.M.A.G.R. E.F., France) as being in accordance with the O.E.C.D. STANDARD CODE.

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

The reference to the former used Technical System of Units is given by the following relations :

Forces	1 N = 0.102 kgf	or 1 kgf = 9.81 N
Powers	1 kw = 1.36 PS	or 1 PS = 0.736 kw
Pressures	1 MPa = 10.2 kgf/cm <sup>2</sup>	or 1 kgf/cm <sup>2</sup> = 98.1 kPa
	1000 mbar = 750.1 mmHg	

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Printed in JAPAN

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**mitsubishi MT4501D**

Test No 82005

Manufacturer : MITSUBISHI AGRICULTURAL MACHINERY Co., Ltd.  
SENDAI Works (Miyagi, Japan)  
Submitted for test by : The manufacturer  
Selected by : The manufacturer with the agreement of the I.A.M.  
Place of running-in : MITSUBISHI AGRICULTURAL MACHINERY Co., Ltd. SENDAI Works  
Duration of running-in : 70.5 hours

**SPECIFICATION OF TRACTOR****Tractor**

Make : MITSUBISHI AGRICULTURAL MACHINERY Co., Ltd.  
Model : MT4501D  
Type : Wheeled tractor, unit construction, four wheel driven  
Serial No. : M45D-50040

**Engine**

Make : MITSUBISHI HEAVY INDUSTRIAL Co., Ltd.  
Model : 4DQ5  
Type : 4-stroke diesel engine with indirect injection, water cooled  
Serial No. : 135936  
Cylinders :  
Number and disposition : 4, vertical, in-line  
Bore : 84 mm  
Stroke : 94 mm  
Capacity : 2084 cm<sup>3</sup>  
Compression ratio : 21 : 1  
Arrangement of valves : Overhead  
Liners : Dry replaceable  
Fuel system :  
Feed system : Gravity

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Make, model and type of filter :	LUCAS CAV KK, CAV296, replaceable paper element filter, element changing period every 500 hours, hand primer pump attached
Make, model and type of injection pump :	LUCAS CAV KK, DPA J3942F270, distributor type, serial No. 15753ZZ
Manufacturer's production setting :	33~34.5 mm <sup>3</sup> /stroke at 2700 rev/min engine speed on full load and 35±5°C fuel temperature
Injection timing :	20° before TDC
Make, model and type of injection nozzles :	NIPPON DENSO Co., Ltd., ND-DN0 SD21, throttle type
Injection pressure :	11.8 <sup>+1.0</sup> <sub>0</sub> MPa
Tank capacity :	40l
Governor :	
Make and type :	LUCAS CAV KK, mechanical centrifugal variable speed type incorporated with injection pump
Governed range of speed :	850 to 2900 <sub>-70</sub> <sup>0</sup> rev/min
Rated engine speed :	2700 rev/min
Air cleaner :	
Make and type :	NIPPON ROKAKI Co., Ltd., dry paper element cyclone type with pre-cleaner
Position :	Air intake above bonnet
Lubrication system :	
Feed system :	Forced feed from trochoid pump with strainer in sump
Type of filter :	Full flow replaceable cartridge paper element type
Cartridge changing period :	Every 200 hours
Oil capacity :	6.5l
Oil changing period :	Every 100 hours
Recommended oil quality :	API service CC or CD
Recommended oil viscosity :	SAE 10W-30
Cooling system :	
Coolant :	Water
Type of pump :	Centrifugal impeller type

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Fan diameter :	380 mm
Number of blade of fan :	7
Type of temperature control :	Thermostat
Water capacity :	8.5l
System pressure :	88±15 kPa
Starting system :	
Type :	Electrical
Make, model and type of starter motor :	MITSUBISHI ELECTRIC CORPORATION, M2T54172, solenoid engaged type
Voltage and power rating of starter motor :	12 V, 2 kW
Safety features :	Operable only with clutch pedal operated
Cold starting aid :	Electrical glow plug
Exhaust silencer :	
Make and type :	NISSIN KOGYO Co., Ltd., multi-chamber absorption-expansion type
Dimensions of silencer :	94 mm diameter × 300 mm long
Total length :	910 mm
Position :	Vertical on the right side of bonnet
Direction of discharge :	Mouth showing 25° to right side from forward direction
Height of mouth above ground :	1995 mm
Electrical equipment :	
Voltage :	12 V
Earth polarity :	Negative ground
Make, model and type of generator :	MITSUBISHI ELECTRIC CORPORATION, AIT23277, three-phase alternator
Output of generator :	35 A, 420 W
Type of battery :	1 lead acid, NS70
Capacity of battery :	65 Ah at 20 hours rating
Option of battery :	Available NX110(70 Ah at 20 hours rating)

Transmission

Clutch :	
Make and type :	AISHIN SEIKI Co., Ltd., dry single disc
Diameter of disc :	224 mm
Method of operation :	By foot pedal

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**Gear box :****Make and type :**

Own make, mechanical type with synchromesh gears and sliding gears

**Number of speeds :**

9 forward and 3 reverse

**Arrangement :**

Main gear group 3 forward and 1 reverse with synchromesh gears, range gear group 3 positions of H, M and L with sliding gears, available by combination of two selector levers

**Rear axle and final drives :****Make and type :**

Own make, bevel gear drive with crown wheel and pinion, bevel gear type differential and planetary final drives

**Type of differential lock and method of engagement :**

Mechanical, pedal operated, selfdisengaging

**Front axle and final drives :****Make and type :**

Own make, mechanically driven from gear box, engaged with sliding gear operated hand lever, bevel gear drive with crown wheel and pinion, bevel gear type differential, 3 bevel pinion gears and 1 crown wheel final drives in portals

**Transmission oil :****Oil capacity of gear box, rear axle, differential and final drives :**

Range gear box, rear axle, differential and final drives in common with hydraulic system 26 l ;

main gear box 5.5 l ;

front axle case 10 l

**Recommended oil quality :**

API service GL-4

**Recommended oil viscosity :**

SAE 80

**Oil changing period :**

Every 200 hours

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Total ratio and speeds (tyre 13.6-28)

Gear		Number of engine revolutions for one revolution of driving wheel	Nominal travelling speed for rated speed of engine <sup>*)</sup> km/h
Range	Main		
Forward			
L	- 1	498.96	1.27
L	- 2	372.56	1.71
L	- 3	244.12	2.61
M	- 1	145.88	4.36
M	- 2	108.93	5.84
M	- 3	71.38	8.91
H	- 1	57.78	11.01
H	- 2	43.15	14.74
H	- 3	28.27	22.50
Reverse			
L	- R	445.15	1.43
M	- R	130.16	4.89
H	- R	51.55	12.34
<sup>*)</sup> Calculated with a tyre rolling radius of 625 mm			
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Total ratio and speeds (tyre 13.6-28) Optional type (with independent p.t.o.),  
not fitted in tests

Gear		Number of engine revolutions for one revolution of driving wheel	Nominal travelling speed for rated speed of engine <sup>*)</sup> km/h
Range	Main		
Forward			
L	- 1	492.91	1.29
L	- 2	371.28	1.71
L	- 3	242.50	2.62
M	- 1	144.12	4.41
M	- 2	108.56	5.86
M	- 3	70.90	8.97
H	- 1	57.08	11.14
H	- 2	43.00	14.79
H	- 3	28.08	22.64
Reverse			
L	- R	318.65	2.00
M	- R	93.17	6.82
H	- R	36.90	17.23
<sup>*)</sup> Calculated with a tyre rolling radius of 625 mm			
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Power take-off

position :	At rear of tractor in median plane
Height above ground :	625 mm
Distance behind rear axle centre :	325 mm
Diameter of p.t.o. shaft :	35 mm
Number of splines :	6 to ISO 500/JIS D6702/SAE J1170
Type of drive :	Not independent, driven by single clutch, pedal operated
Direction of rotation :	Clockwise viewed from driving end
P.t.o. speed :	Proportional engine speed, 3 speeds selected by hand lever
	<u>Gear No. 1</u>
	634 rev/min at rated engine speed 540 rev/min at 2300 rev/min engine speed
	<u>Gear No. 2</u>
	870 rev/min at rated engine speed 540 rev/min at 1617 rev/min engine speed
	<u>Gear No. 3</u>
	1165 rev/min at rated engine speed 1000 rev/min at 2318 rev/min engine speed
Option :	Independent p.t.o., driven by electro-hydraulic clutch, switch for solenoid valve operated ;
	3 speeds pre-selectable, 621, 773 and 1257 rev/min at rated engine speed ;
	Not fitted in tests

Power lift

Make and type :	Own make, hydraulic type, open centre system, single acting ram, position and draft control
Bore of ram :	80 mm
Stroke of ram :	123 mm
Make and type of pump :	KAYABA INDUSTRY Co., Ltd., gear type pump directly driven by engine
Pump delivery rate :	30.1 l/min at rated engine speed
Relief valve pressure setting :	14.2±0.5 MPa
Safety valve :	Situated at head of power lift cylinder, set to 24.5 MPa
Number of oil tappings :	1

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Method of linkage lock for transport :	Hydraulically closing delivery line
Hydraulic filter :	Metal net filter, situated in the suction pipe of the gear pump
Filter cleaning period :	Every 100 hours
Oil capacity :	26 l in common with range gear box
Oil changing period :	Every 200 hours
Category of implement linkage :	Three point linkage category 1 to ISO 730/ JIS D6703/SAE J715
Length of lower links :	710 mm
Length of top link :	Adjustable from 460 mm to 750 mm
Length of lift rods :	Adjustable from 415 mm to 488 mm, mean length 458 mm
Lifting range above ground :	From 472 mm to 875 mm with mean lift rods length 458 mm, maximum available from 62 mm to 905 mm
Holed drawbar :	Optional, fitted in tests
Fitting position :	On the clevis of lower links
Length between the ball joints :	683 mm
Thickness :	25 mm
Width :	75 mm
Number of holes and interval distance :	Centre hole and 3 holes on either side with 80 mm distance each, all holes 29 mm diameter
Distance behind rear axle centre :	845 mm with lower links horizontal
Distance behind p.t.o. shaft end :	521 mm with lower links horizontal
Height above ground at the surface of the bar :	Adjustable from 485 mm to 888 mm by power lift with mean lift rods length 458 mm

Pull attachment

Swinging drawbar :	Optional, not fitted in tests
Height above ground :	345 mm and 435 mm
Distance behind rear axle centre :	640 mm
Position relative to p.t.o. shaft end :	Rearward 320 mm
Lateral adjustment :	135 mm (20°) on either side
Position of pivot point relative to rear axle centre :	Rearward 240 mm
Pin hole diameter :	29 mm

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Trailer hitch :	Fixed type, fitted in tests
Height above ground :	435 mm
Distance behind rear axle centre :	415 mm
Position relative to p. t. o. shaft end :	Rearward 95 mm
Pin hole diameter :	29 mm
Permissible vertical load :	1000 kg

**Steering**

Make and type :	NIPPON POWER STEERING KK, power assisted ball and nut type with single drag link
Type of power steering :	Integral, own oil circuit, oil reservoir in common with power lift

**Brakes**

Service brake :	
Make and type :	NISSHIN SPINING Co., Ltd., mechanically activated wet disc brake
Position :	On rear axle
Number of discs :	2 each
Diameter of discs :	223.5 mm
Method of operation :	Operated by foot pedals, independent or combined with both pedals
Parking brake :	
Type :	In common with service brake
Method of operation :	Foot pedals locked by hand lever with ratchet

**Wheels**

Steering wheels :	
Type and position :	Pneumatic diagonal, at front
Number of tyres :	2
Size :	8-18 4 ply rating
Maximum load on each tyre :	675 kg at 157 kPa inflation pressure
Track width :	1210 mm
Size of rims :	W6 × 18
Driving Wheels :	
Type and position :	Pneumatic diagonal, at rear
Number of tyres :	2
Size :	13.6-28 6 ply rating

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Maximum load on each tyre :	1100 kg at 98 kPa inflation pressure
Track width :	1140, 1245, 1335, 1340, 1430, 1535 and 1635 mm
Adjustment of track width :	Adjustable by reversing wheels and offset lug rims
Size of rims :	W11 × 28
Option :	12.4/11-28 4 ply rating at rear available, not fitted in tests
Wheel base :	1800 mm

Seat

Make and type :	NANBA PRESS WORKS Co., Ltd., upholstered seat with back rest
Suspention :	None, supported with hinge and rubber cushion
Range of adjustment :	Longitudinal total 75 mm in 4 steps, vertical not adjustable

Number of grease points

8

Dimensions

Total length :	3290 mm without ballast (front bumper-lower links) 3435 mm with ballast (front weight-lower links)
Total width :	1590 mm without ballast at 1245 mm rear wheels track width 1730 mm with ballast at 1245 mm rear wheels track width 1485 mm without ballast at 1140 mm minimum rear wheels track width 1980 mm without ballast at 1635 mm maximum rear wheels track width
Total height :	1995 mm without ballast (to top of exhaust pipe) 1994 mm with ballast (to top of exhaust pipe)
Ground clearance :	320 mm below front differential case

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Lighting equipment

Electrical 12 V  
in accordance with JIS D5500

	Dimensions mm	Height above ground of centre mm	Distance from outside edge of tractor to centre mm
Head lights	84×139	790	600
Side lights	—	—	—
Rear lights	∅ 80	1310	285
Reflectors	∅ 40	1310	285

\*) with track width of 1245 mm

**TEST CONDITIONS**Weights

Tractor : (without driver but with tanks full)

	Front kg	Rear kg	Total kg
Without ballast	732	831	1563
With ballast	821	1057	1878

Ballast :

	Number of weights	Total weight kg	Water kg
Front frame	3	65	—
Front wheels	—	—	—
Rear wheels	8	250	—

Track setting during tests

Front : 1210 mm

Rear : 1245 mm

Fuel and lubricants used in tests

Fuel : Diesel oil to No.2 JIS, specific gravity 0.8388 at 15°C,  
viscosity 4.08 cSt at 30°C, cetan index 58

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Engine oil :

MITSUBISHI OIL Co. , Ltd. , 10W DIAMOND HDS-3  
ENGINE OIL, API service CD, SAE 10W, viscosity  
39.2 cSt at 40°C

Transmission oil :

NIPPON OIL Co. , Ltd. , ANTOIL, API service GL-4,  
SAE 80W, viscosity 57.35 cSt at 40°C

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## COMPULSORY TESTS

### (1) MAIN POWER TAKE OFF PERFORMANCE

Date of tests : 16th February, 1983  
 Type of dynamometer : DC electrical, MEIDENSHA EB-DH1  
 Gear No. of p.t.o. : 1 (540 rev/min)

Power kW	Speed		Fuel consumption		Specific energy kWh/l	
	Engine rev/min	p.t.o. rev/min	hourly l/h	specific g/kWh		
<u>Maximum power</u>						
At 2 hour test						
29.8	2700	634	10.35	8.68	291	2.88
At standard p.t.o. speed						
26.4	2300	540	8.61	7.22	274	3.06
At the speed recommended for drawbar work						
29.8	2700	634	10.35	8.68	291	2.88
<u>Part loads, The governor hand lever in the position corresponding to the maximum power at full load</u>						
( i ) 85 per cent of the torque obtained at maximum power						
25.8	2752	646	9.11	7.64	296	2.83
( ii ) unloaded						
0.0	2876	675	3.29	2.76	—	0.00
( iii ) half the torque defined in ( i )						
13.2	2816	661	5.94	4.98	376	2.23
( iv ) the torque corresponding to maximum power						
29.8	2700	634	10.35	8.68	291	2.88
( v ) one-quarter of the torque defined in ( i )						
6.6	2841	667	4.55	3.82	577	1.45
( vi ) three-quarters of the torque defined in ( i )						
19.6	2790	655	7.48	6.27	319	2.63
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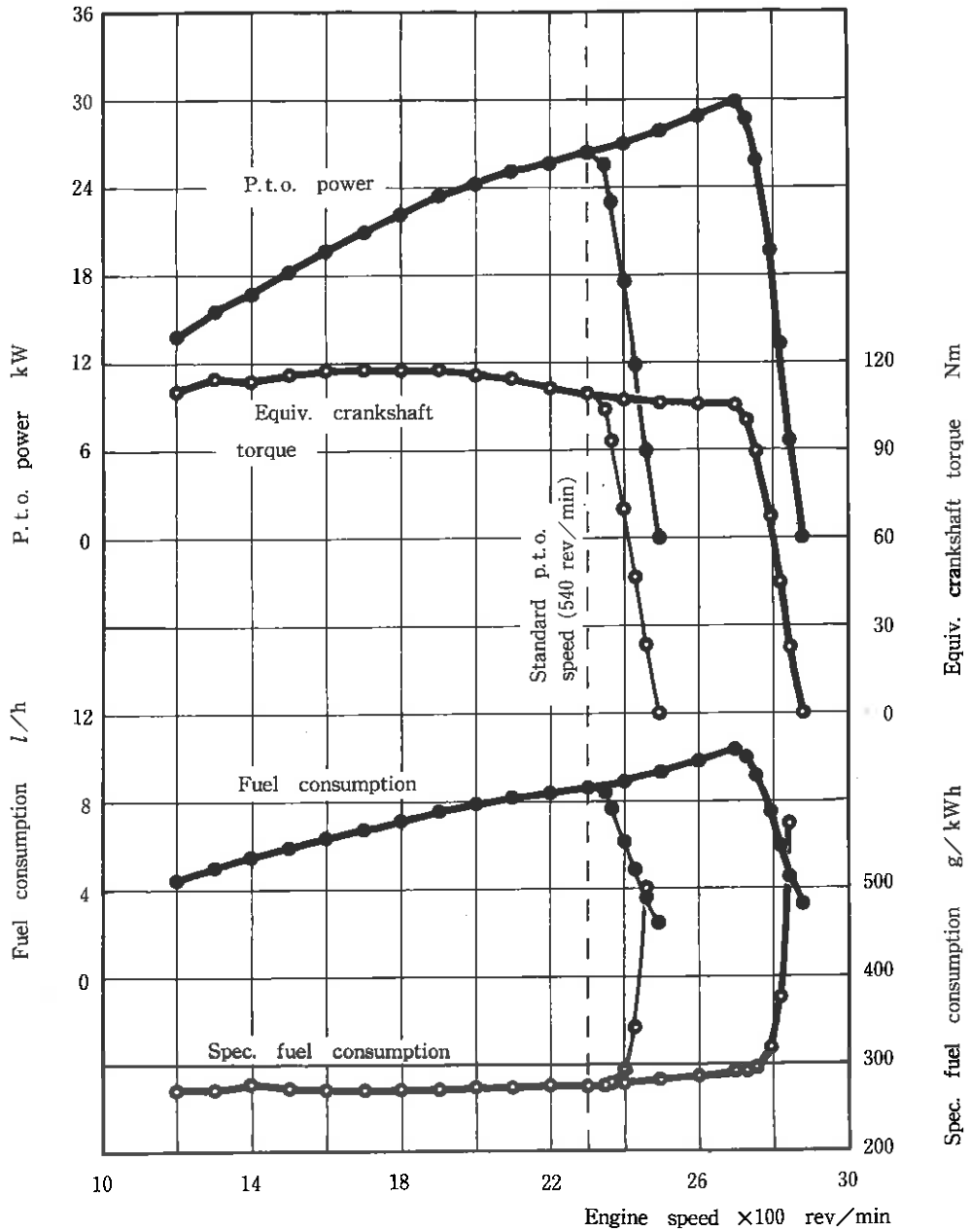


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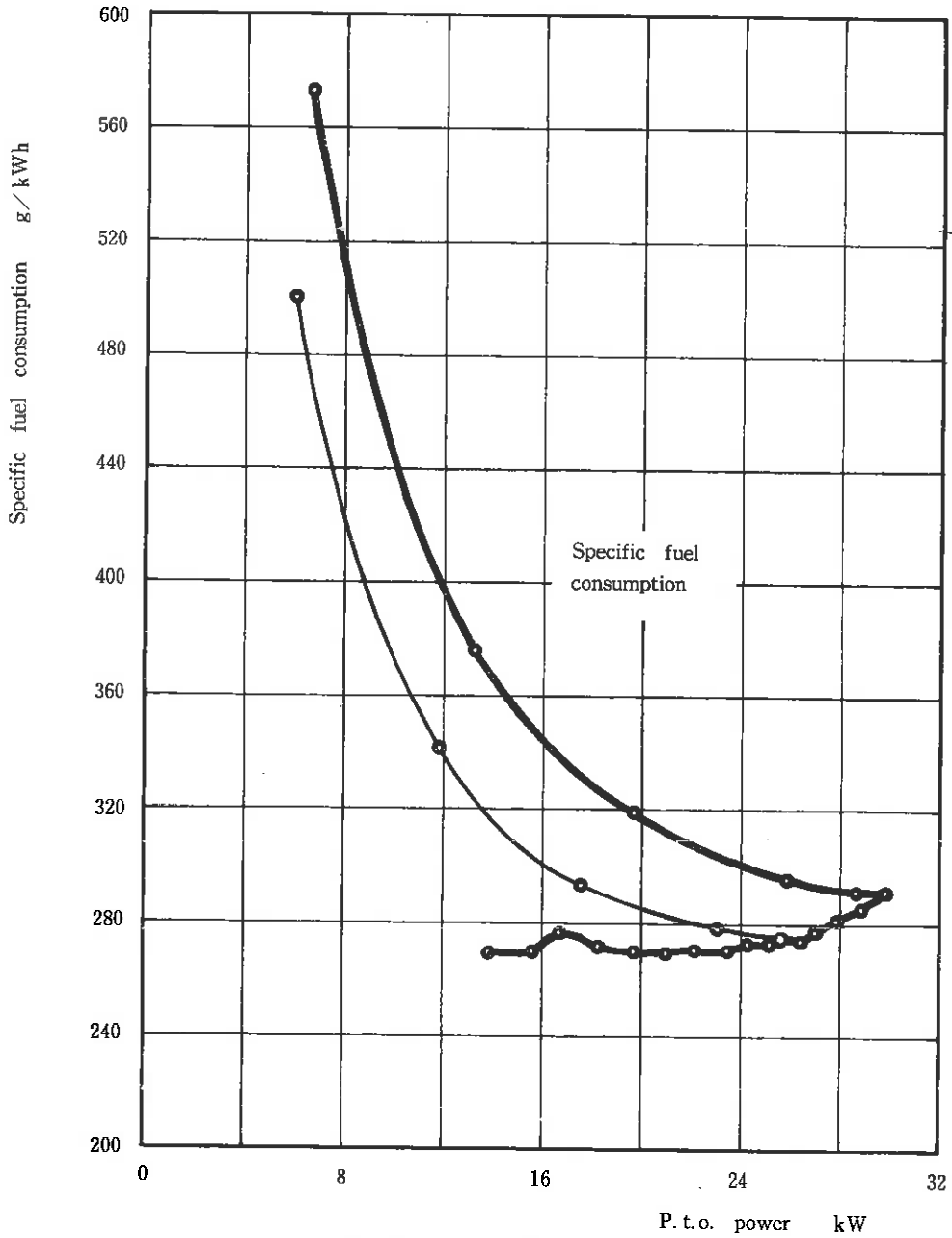
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Power kw	Speed		Fuel consumption			Specific energy kWh/l
	Enging rev/min	p.t.o. rev/min	hourly		specific g/kWh	
			l/h	kg/h		
<b>Part loads, The governor hand lever in the position corresponding to the standard p.t.o. speed at full load</b>						
( i ) 85 per cent of the torque obtained at maximum power						
23.0	2364	555	7.64	6.41	278	3.01
( ii ) unloaded						
0.0	2492	585	2.43	2.04	—	0.00
( iii ) half the torque defined in ( i )						
11.8	2428	570	4.82	4.04	342	2.45
( iv ) the torque corresponding to maximum power						
26.4	2300	540	8.61	7.22	274	3.06
( v ) one-quarter of the torque defined in ( i )						
6.0	2458	577	3.57	2.99	500	1.68
( vi ) three-quarters of the torque defined in ( i )						
17.5	2398	563	6.14	5.14	294	2.86
<p>Standard specific fuel consumption : 296/376/278/342 g/kWh</p> <p>No load maximum engine speed : 2876 rev/min</p> <p>Equivalent crankshaft torque at maximum power : 105.5 Nm</p> <p>Maximum equivalent crankshaft torque : 117.7 Nm at 1700 rev/min of the engine</p> <p>Mean atmospheric conditions : temperature 22 °C  pressure 1021 mbar  relative humidity 32 %</p> <p>Maximum temperatures : coolant 89 °C  engine oil 103 °C  fuel 23 °C  engine air intake 34 °C</p>						
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P. T. O PERFORMANCE



P.T.O. PERFORMANCE



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## (2) DRAWBAR PERFORMANCE

Date of tests : 22nd till 24th February, 1983  
 Tyre size : 13.6-28 6PR at rear, 8-18 4PR at front  
 Type of track : Concrete  
 Tread bar height at the beginning of drawbar tests in per cent of the value when new : 98 at rear, 100 at front

Gear No	speed km/h	Power kW	Drawbar pull kN	Engine speed rev/min	Slip of wheels %	Specific fuel consumption kg/kWh	Specific energy kWh/l	Temperature			Atmospheric conditions		
								Fuel °C	Coolant °C	Engine oil °C	Temperature °C	Relative humidity %	Pressure mbar
L-1	1.06	3.51	11.97	2806	15.0	0.996	0.842	27	75	89	10	30	1008
L-2	1.44	4.79	11.97	2794	15.0	0.706	1.188	26	77	89	10	30	1008
L-3	2.23	7.41	11.97	2781	15.0	0.683	1.227	25	77	88	10	30	1008
M-1	3.73	12.40	11.97	2757	15.0	0.454	1.848	24	80	89	10	30	1008
M-2	4.96	16.49	11.97	2734	15.0	0.423	1.984	22	76	87	10	30	1008
M-3	7.76	21.77	10.10	2697	11.7	0.394	2.129	13	78	87	9	33	1008
H-1	9.83	22.76	8.34	2693	9.3	0.380	2.205	16	78	88	9	33	1008
H-2	13.53	22.84	6.08	2690	6.7	0.395	2.122	17	78	90	9	33	1008
H-3	21.16	21.32	3.63	2695	4.6	0.448	1.870	20	79	88	9	33	1008

(i) Maximum power (without ballast)

Height of drawbar above ground : 430 mm

Tyre inflation pressure : 98 kPa at rear, 196 kPa at front

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Gear No.	speed km/h	Power kW	Drawbar pull kN	Engine speed rev/min	Slip of wheels %	Specific fuel consumption kg/kWh	Specific energy kWh/l	Temperature			Atmospheric conditions		
								Fuel °C	Coolant °C	Engine oil °C	Temperature °C	Relative humidity %	Pressure mbar
(ii) <u>Maximum power</u> (with ballast)													
Height of drawbar above ground : 426mm													
Tyre inflation pressure : 98 kPa at rear, 196 kPa at front													
L-1	1.04	4.10	14.22	2809	15.0	0.907	0.924	24	79	86	8	36	1006
L-2	1.45	5.71	14.22	2809	15.0	0.740	1.133	22	74	87	8	36	1006
L-3	2.23	8.81	14.22	2789	15.0	0.481	1.743	21	73	87	8	36	1006
M-1	3.70	14.59	14.22	2745	15.0	0.393	2.136	22	77	89	8	36	1006
M-2	4.92	19.43	14.22	2714	15.0	0.406	2.064	22	77	91	8	36	1006
M-3	7.71	23.08	10.79	2693	11.8	0.397	2.113	17	78	88	10	30	1008
H-1	9.79	23.46	8.63	2700	9.5	0.389	2.154	18	78	91	10	30	1008
H-2	13.45	23.07	6.18	2690	6.8	0.400	2.097	20	78	93	10	30	1008
(iii) <u>Five hour test at 75% of pull at maximum power in M-3 gear</u>													
M-3	7.88	17.81	8.14	2722	10.2	0.364	2.306	13	77	87	11	39	1030
(iv) <u>Five hour test at pull corresponding to 15% wheelslip in test (ii)</u>													
M-2	5.14	—	14.22	2717	—	—	—	15	79	91	5	91	1019
Total oil consumption during ten hours duration of tests (iii) and (iv) 21.7 g/h													
Test (iv) was carried out with additional ballast, the figures not quoted are therefore irrelevant													

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## (3) TURNING SPACE AND TURNING CIRCLE

Wheel equipment	front :	8-18	4PR
	rear :	13.6-28	6PR
Track of wheels	front :	1210 mm	
	rear :	1245 mm	

### ( i ) Front axle drive disengaged

	With brakes		Without brakes	
	left-hand m	right-hand m	left-hand m	right-hand m
Radius of turning space	2.89	2.90	3.18	3.19
Radius of turning circle	2.71	2.72	3.00	3.01

### ( ii ) Front axle drive engaged

	With brakes		Without brakes	
	left-hand m	right-hand m	left-hand m	right-hand m
Radius of turning space	2.71	2.72	3.64	3.65
Radius of turning circle	2.53	2.54	3.46	3.47

## (4) LOCATION OF CENTRE OF GRAVITY

Height above ground	697 mm
Distance forward from the vertical plane, containing the axis of the rear wheels	814 mm
Distance from the median plane, to the left	2 mm

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## (5) BRAKING

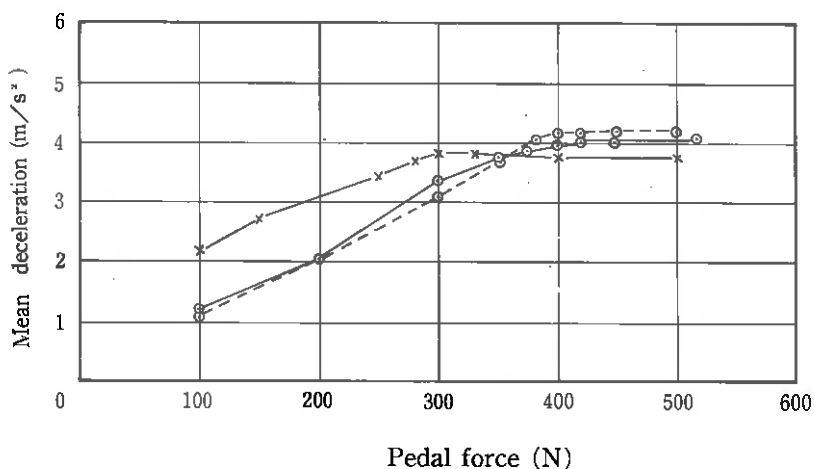
Date of tests : 21st February, 1983

Tractor masses during tests with driver :	front	rear	total
	kg	kg	kg
without ballast	724	920	1644
with ballast	1017	1483	2500

### A) Service brake

Type-O-test (without ballast) -x-, Type-I-(fade) test --o--

Type-O-test (with ballast) -o-



Speed before application of brakes, without ballast 23.1 km/h  
with ballast 22.8 km/h

The brakes were heated by towing of the tractor for 1 km

### B) Parking brake

	Ballasted tractor on 18% -slop		Unballasted tractor on 12% -slop with trailer of 1569 kg	
	up	down	up	down
Braking device control force N	196	226	167	186

**MITSUBISHI MT4501D**

Test No. 82005

**(6) NOISE MEASUREMENT OF EXTERNAL NOISE LEVEL**

Date of test : 21st February, 1983

Type of track : Concrete

Type of sound level meter : RION NA61

Results of test

Gear : H - 3

Travelling speed before acceleration : 17.5 km/h

Sound level : 82 dB(A) (front axle drive engaged)

83 dB(A) (front axle drive disengaged)

**(7) NOISE MEASUREMENT AT THE DRIVER'S EAR LEVEL**

Date of tests : 21st and 22nd February, 1983

Type of track : Concrete

Type of sound level meter : RION NA61

Results of tests

Gear	Drawbar pull at which the tractor develops the max. sound level kN	Measured travelling speed km/h	Sound level dB(A)
M-2	14.2	4.5	96
M-3 <sup>*)</sup>	10.0	7.7	97
H-1	8.1	9.9	97
H-2	6.1	13.5	97
H-3	3.4	21.3	97
M-3 <sup>*)</sup>	Light load	9.0	94
H-3	Light load	23.1	94

\*) The M-3 gear corresponds to the nominal travelling speed nearest to 7.5 km/h



**MITSUBISHI MT4501D**

Test No. 82005

**(8) POWER LIFT AND HYDRAULIC PUMP PERFORMANCE**

Date of tests : 17th February, 1983

Power lift

	Height of lower hitch point above ground in down position mm	Vertical movement mm	Maximum force exerted through full range kN	Corresponding pressure of hydraulic fluid MPa	Moment about rear axle kNm	Maximum tilt angle of mast over range of lift degrees
At hitch point	472	403	15.15	11.6	—	—
On the frame	472	533	8.76	11.6	12.7	13

Temperature of hydraulic fluid at start of test

62°C

Hydraulic pump performance

Opening pressure of the relief valve

11.6 MPa

Sustained pressure with relief valve open

14.4 MPa

Pump delivery rate at minimum pressure, the governor control lever being set for maximum power

31.4 l/min

Hydraulic power at 90 per cent of relief valve setting

2.59 kW

Corresponding delivery rate

12.0 l/min

Pressure

13.0 MPa

Temperature of hydraulic fluid

62°C

Tapping point used for test : from hydraulic service block

# MITSUBISHI MT4501D

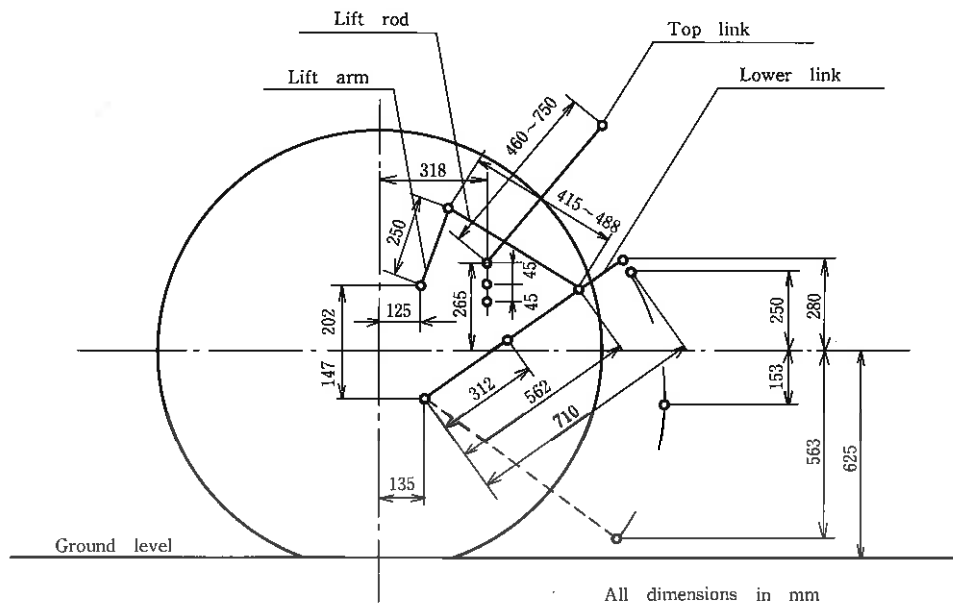
Test No. 82005

Linkage geometry when connected to the standard frame projected length in side view :

Lower links	710 mm
Lift arms	250 mm
Lift rods	458 mm
Top link	516 mm
Distance of lift rod connection point from pivot point of lower link	562 mm

The following dimensions are given relative to the rear wheel centre line, situated 625 mm above ground :

Lower link pivot point	135 mm behind,	147 mm below
Top link pivot point	318 mm behind,	265 mm above
Lift arm pivot point	125 mm behind,	202 mm above
Maximum and minimum height of lower link hitch points	153 mm behind,	250 mm above
Height of lower link hitch points when locked in transport position	Any position within power range	



**MITSUBISHI MT4501D**

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REPAIRS AND ADJUSTMENTS DURING TESTS :

None

REMARKS :

None

Officer in charge :

S. YAGI

Head of testing division :

T. KANATSU

Date :

14th April, 1983

**INSTITUTE OF AGRICULTURAL MACHINERY**

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