SILSOE RESEARCH INSTITUTE
Wrest Park, Silsoe,
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Report No: R93/71784/OECD

OECD Approval No: 1506/1 Restricted Code
1506/2 Restricted Code

Approval Date: 1 March 1994

Test in accordance with the OECD Restricted Standard Code for the Official Testing of Agricultural Tractors

Case International 695 and 4210 Four-Wheel Drive Tractors





Manufactured by: J I Case (Europe) Limited
Wheatley Hall Road
Doncaster
DN2 4PG

Submitted for test by: The manufacturer

Report No: 765

Date: December 1993

R93/71784/OECD

STATEMENT REGARDING ALL MODELS AND NEW MODELS

The Case International Model 4210 Four-Wheel Drive is identical to the Model 695 Four-Wheel Drive except with regard to the metal work of the bonnet, rear lights and the exhaust system.

The results contained in this report are those obtained during tests on the Model 695 Four-Wheel Drive.

R93/71784/OECD

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Tractor manufacturer's name and address:	J I CASE Europe Ltd Wheatley Hall Road Doncaster DN2 4PG
Location of tractor assembly:	Doncaster
Submitted for test by:	The manufacturer
Selected for test by:	The manufacturer with the agreement of the testing station
Place of running in:	Doncaster
Duration of running in:	20 Hrs
Location of test:	Silsoe Research Institute Wrest Park, Silsoe, England

I. SPECIFICATION OF TRACTOR

Tractor

Make:	Case International
Model:	695
Type:	Four wheel drive unit construction
Serial No:	JJE0027384
1st Serial No:	JJE0027384

Engine

Make:	J I Case Company, Neuss, Germany
Model:	D239
Type:	4-stroke, naturally aspirated direct injection diesel
Serial No:	239 DT 2D 492071
Ist Serial No:	239 DT 2D 492071

Cylinders

Number/disposition:	4, vertical, in-line
Bore/stroke:	98.4 mm x 128.5 mm
Capacity:	3909 cm^3
Compression ratio:	16 : 1
Arrangement of valves:	Overhead
Cylinder liners:	Replaceable, wet

Supercharging

Make:	None

Fuel system

Fuel feed system:	Feed pump incorporated in injection pump
Make, type and model of fuel filter:	Bosch double fuel filter with replaceable elements and water traps
Capacity of fuel tank:	112 l
Make, type and model of injection pump:	Bosch CR distributor type - VE 4/12F 1200 RV-10484/4; Case part 1329128 C1
Serial No:	(011) 267 919039
Manufacturer's production setting of injection pump:	
. Flow rate	52.5 +/- 2 mm^3 per stroke at 1200 rpm pump speed for fuel 0.835/0.845 sg at 15° C
. Timing	8° before T.D.C.
Make, type and model of injectors:	Bosch DLLA 150 S 815
Injection pressure:	22.5 MPa

Governor

Make:	Bosch
Model:	Incorporated in injection pump
Type:	Mechanical
Governed range of engine speed:	650 to 2660 rev/min
Rated engine speed:	2400 rev/min

Air cleaner

Pre-cleaner:	
. Make	Coopers
. Type	Centrifugal
. Model	In main cleaner body
. Location of air intake	
Main cleaner:	
. Make	Coopers
. Type	Dry paper element
. Model	Case part 3125199 R2
. Location of air intake	Under bonnnet forward of engine
Maintenance indicator:	Warning light on instrument panel

Lubrication system

Type of feed pump:	Forced feed from gear pump
Type of filter:	Mann spin-on full flow with replaceable cartridge and metal strainer sump
Number:	1

Cooling system

Type of coolant:	Water and antifreeze solution
Type of pump:	Impeller
Specification of fan:	Belt driven puller
Number of fan blades:	5
Fan diameter:	457 mm
Coolant capacity:	13.7 l
Type of temperature control:	Thermostat
System pressure:	70 kPa

Starting system

Make:	Magneti Marelli
Model:	M127
Type:	Electrical, pre-engaged, solenoid operated
Starter motor power rating:	2.8 kW
Cold starting aid:	Thermostart
Safety device:	The clutch pedal must be fully depressed to actuate the safety start switch.

Electrical system

Voltage:	12
Generator:	
. Make	Magneti Marelli
. Model	A127
. Type	Belt driven
. Power	45A at 6,000 rev/min
Batteries:	
. Rating	1, Chloride type 644 90 Ah at 20-hour rating

Exhaust system

Make:	Nelson Burgess
Model:	Case part 84738C1 , (4210=137279A1)
Type:	Reflex
Location:	Vertical above bonnet on right-hand side
Height of outlet above ground:	2768 mm
Measurement taken from Model 4210:	2769 mm

TRANSMISSION TO WHEELS

Clutch

Make:	Rockford
Model:	Case part 85026 C3
Type:	Dry, for transmission only
Number of plates:	1
Diameter of plates:	300 mm
Method of operation:	Hydraulically by foot pedal

Gear box

Make:	Case IH
Model:	Doncaster
Type:	Mechanical synchromesh
Number of gears:	16 forward + 8 reverse
Available options:	Change of gear ratios, 8 forward + 4 reverse, 8 forward + 8 reverse shuttle

Rear axle final drives

Make:	Case IH
Model:	Doncaster
Type:	Crown wheel and pinion, with differential and epicyclic reduction gear final drives

Differential lock:

. Type	Mechanical
. Method of engagement	Pedal operated
. Method of disengagement	Self-disengaging

Front axle and final drives

Make:	Carraro
Model:	707 STD
Type:	Crown wheel and pinion, and epicyclic reduction gear final drives

Differential lock:

. Type	Self-locking
. Method of engagement	
. Method of disengagement	

Total ratios and travelling speeds

Gear	Group No	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed at rated engine speed:* 2400 rev/min km/h
Forward			
1	LP1	259.239	2.60
2	LD1	214.931	3.14
3	LP2	159.560	4.22
4	LD2	132.289	5.09
5	LP3	118.028	5.71
6	LD3	97.855	6.89
7	LP4	91.756	7.34
8	LD4	76.073	8.86
9	HP1	67.628	9.97
10	HD1	56.069	12.02
11	HP2	41.624	16.19
12	HD2	34.510	19.53
13	HP3	30.790	21.89
14	HD3	25.527	26.40
15	HP4	23.936	28.16
16	HD4	19.845	33.97
Reverse			
1	P1	216.033	3.12
2	D1	179.109	3.76
3	P2	132.967	5.07
4	D2	110.241	6.11
5	P3	98.356	6.85
6	D3	81.545	8.27
7	P4	76.463	8.82
8	D4	63.394	10.63

L = Low range H = High range P = Power-shift D = Direct-drive

(*) Calculated with a tyre dynamic radius index of 745 mm (ISO 4251/1-1984)

Number of revolutions of front wheels for one revolution of rear wheels: 1.407

POWER TAKE-OFF

Main power take-off

Type:	Independent
Method of engagement:	By hand lever lever
Number of shafts:	2
Method of changing power take-off speeds:	Manual, lever selection

Clutch

Make:	Case IH
Model:	Doncaster
Type:	Hydraulically engaging wet multi-plate clutch
Number of plates:	5
Diameter of plates:	125 mm

Power take-off proportional to engine speed

540 rev/min

Location:	At rear of tractor
Diameter of power take-off shaft:	34.9 mm
Number of splines:	6 to ISO 500
Height above ground:	733
Distance from the median plane of the tractor:	Central
Distance behind rear wheel axis:	400 mm
Pto speed at rated engine speed:	605 rev/min
Engine speed at standard power take-off speed:	2140 rev/min
Ratio of rotation speeds:	3.964:1
Power restriction and maximum torque:	ISO recommendation, 48 kW
Direction of rotation (viewed from behind tractor):	Clockwise

1000 rev/min

Location:	At rear of tractor
Diameter of power take-off shaft:	34.9 mm
Number of splines:	21 to ISO 500
Height above ground:	610 mm
Distance from the median plane of the tractor:	Central
Distance behind rear-wheel axis:	400 mm
PTO speed at rated engine speed:	1096 rev/min
Engine speed at standard power take-off speed:	2190 rev/min
Ratio of rotation speeds:	2.190 : 1
Direction of rotation (viewed from behind tractor):	Clockwise

POWER LIFT

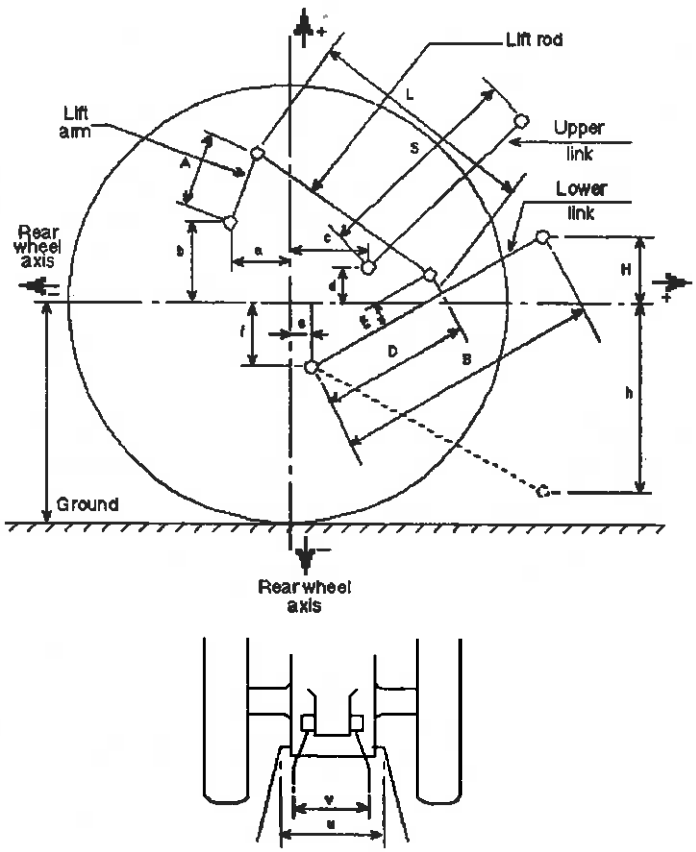
Make:	Case IH
Model:	Doncaster
Type:	Hydraulic, open centre system
Type and number of cylinders:	One internal single acting
Type of linkage lock for transport:	Hydraulic
Relief valve pressure setting:	17.2 MPa - 18.0 MPa
Opening pressure of cylinder safety valve:	18.6 MPa
Lift pump type:	Plessey, fixed delivery gear
Transmission between pump and engine:	Forward end of pto shaft, independent of main and pto clutches
Type and number of filters:	1 full flow filter to main pump and fine screen to transfer pump
Site of oil reservoir:	Integral with transmission housing
Type, number and location of tapping points:	None
Maximum volume of oil available to external cylinders:	13.6 l, 40.9 l with overfill

AUXILIARY HYDRAULIC SYSTEM

Make:	
Model:	Case IH
Type:	Doncaster
Relief valve pressure setting:	17.2 MPa - 18.0 MPa
Lift pump type:	Plessey, fixed delivery gear
Transmission between pump and engine:	Forward end of pto shaft, independent of main and pto clutches
Type and number of filters:	1 full flow filter to main pump and fine screen to transfer pump
Site of oil reservoir:	Integral with transmission housing
Type and number of tapping points:	3 on double acting auxiliary control valve
Maximum volume of oil available to external cylinders:	13.6 l, 40.9 l with overfill

THREE-POINT LINKAGE

Category:	**2 to ISO Standard 730-1:1990**
Category adaptor:	**None**
Controls:	**Draught and position control, floating position, top link sensing**



LIFT TEST
Linkage geometry

Fig 2.1

Table 2.1

Dimensions of linkage when attached to the standard frame (ISO 730-1:1990 CAT 2)

			Dimensions or range	Setting used in test
Length of lift arms:		(A)	298 mm	298 mm
Length of lower links:		(B)	814 mm	814 mm
Distance of lift arm pivot point from rear wheel centre line:	horizontally: vertically:	(a) (b)	66 mm 288 mm	66 mm 288 mm
Horizontal distance between the two lower link points:		(u)	460 mm	460 mm
Horizontal distance between the two lift arm end points:		(v)	525 mm	525 mm
Length of upper link:		(S)	584-774 mm	730 mm
Distance of upper link pivot point from rear wheel centre line:	horizontally: vertically:	(c) (d)	279 mm 186, 226 mm	279 mm 226 mm
Distance of lower link pivot point from rear wheel centre line:	horizontally: vertically:	(e) (f)	165 mm 175 mm	165 mm 175 mm
Distance of lower link points to lift rod pivot points on lower link centre line:	horizontally: vertically:	(D) (E)	571 mm on central line	571 mm on central line
Length of lift rods:		(L)	680-735 mm	720 mm
Height of lower hitch points (*) relative to the rear wheel centre line, situated 745 mm above the ground level:				
- in low position		(h)	465-570 mm	550 mm
- in high position		(H)	95-175 mm	100 mm
Height of lower hitch points when locked in transport position (*):		Any height within lift range (Hydraulic Transport Lock)		

* Assuming r = tyre dynamic radius index of 745 mm ISO 4251/1-1984

Swinging Drawbar

Type:		Clevis
Height above ground,	maximum:	497 mm
	minimum:	387 mm
Type of adjustment:		Inverting drawbar
Distance of hitch point from rear-wheel axis, horizontally:		750 mm, 800 mm
Distance of hitch point form power take-off shaft ends:		
. Vertically:	540 rev/min shaft:	236 mm, 346 mm
	1000 rev/min shaft:	113 mm, 223 mm
. Horizontally:		350 mm, 400 mm
Lateral adjustment (centre of clevis):		
. Right-hand:		170 mm drawbar in, 180 mm drawbar out
. Left-hand:		170 mm drawbar in, 180 mm drawbar out
Distance of pivot point from rear axles horizontally:		20 mm to rear
Vertical opening of clevis:		65 mm
Diameter of drawbar pin hole:		26 mm
Maximum vertical permissible load:		908 kg

Trailer Hitch

Type: None fitted

Linkage Drawbar

Type: None fitted

Front Towing Hitch None fitted

Type:

Steering

Make:	Case IH
Model:	Doncaster
Type:	Hydrostatic, steering wheel coupled to motor unit, power to unit from main hydraulic pump through priority valve/flow divider.
Method of operation:	
. Pump	Plessey, live
. Motor	Danfoss OSPC 100 OR
. Ram	Cararo double acting balanced
. Filter	As main hydraulics
Working pressure:	14.5 MPa

Brakes

Service brake

Make:	Case IH
Model:	Doncaster
Type:	Oil immersed single disc, 1 per side
Method of operation:	Hydraulically actuated, independent or combined, pedal operated
Trailer braking take-off:	Optional

Parking brake

Type:	Mechanical via linkage
Method of operation:	Hand lever with ratchet

Wheels

Number:	4
. Front	2 steering and driving
. Rear	2 driving
Wheelbase:	2235 mm

Track width adjustment:

	Minimum, mm	Maximum, mm	Adjustment method
Front	1364	1824	By reversing wheels and offset lug rims
Rear	1425	1925	By reversing wheels and offset lug rims

PROTECTIVE STRUCTURE

Make:	Case International
Model:	C85XL with revised mounts
Type:	Safety cab
Manufacturer's name and address:	Case IH, Croix, France
Protective device:	
. Rollguard	Safety cab
. Tiltable/Not tiltable	Non-tiltable
OECD approval number:	Case International 695AXL (4WD) with seat KAB (Bostrum) XH2/U1, CSS 0195/44 Case International 4210AXL (4WD) with seat KAB (Bostrum) XH2/U1, CSS 0195/104

DRIVER'S SEAT

Make/Model/Type:	KAB XH2/U1
Type of suspension:	Spring
Type of damping:	Hydraulic
Range of adjustment:	
. Longitudinal	150 mm
. Vertical	60 mm

Lighting

Unrestricted beam angle of headlight in plan view: 110°

	Height above ground to centre, mm	Size, mm	Distance from outside edge to median plane of tractor, mm
Headlights	1330	160 x 90	240
Sidelights	1470	90 x 40	730
Rear lights	1590	100 x 100	825
Axle reflectors	788	80 dia	265
Cab reflectors	1505	90 x 47	820
Rear lights*	1540	100 x 20	692, 842
Cab reflectors*	1310	45 x 90	953

II. TEST CONDITIONS

Overall dimensions

Length mm	Width		Height at top of	
	Minimum mm	Maximum mm	Protective structure mm	Exhaust pipe mm
3845 mm	1854	2354	2670	2768
			2666*	2769*

Ground clearance (unballasted tractor) 329 mm

Clearance-limiting part: Drawbar clevis inverted

* Measurements taken from Model 4210 with optional wide fenders. Figures from 695 apply to 4210 without wide fenders option.

Tractor mass (with safety cab)

	Unballasted		Ballasted	
	Without driver kg	With driver kg	Without driver kg	With driver kg
Front	1281	1296	--	--
Rear	2038	2098	--	--
Total	3319	3394	--	--

Tyres and track width specification

	Front	Rear
Tyres . dimensions . ply rating . type	12.4 x 24 A8 Radial	16.9 x 34 A8 Radial
Maximum load (tyre manufacturer's), kg	1200	2015
Maximum load (tractor manufacturer's), kg	1200	2015
Inflation pressure (tyre manufacturer's), Bar	1.7	1.3
Dynamic radius index	540	745
Chosen track width (manufacturer's nominal)	1515	1530

Oils and lubrication

Capacity and change interval

	Capacity l	Oil change h	Filter change h
Engine	9.8	200	200
Front axle	5.0	800	None
Final drive (front)	0.6	800	None
Gearbox	36.5	800	200
Rear axle Hydraulic system) Final drives (rear)) Steering Brakes	Integral with gearbox		

Fuels and lubricants used in tests

Fuel

Type: Diesel oil with cetane index of 50.0 and kinematic viscosity of 3.246 cSt at 40°C within the specification limits of Class A1 British Standard 2869/1983.

Specific gravity: 0.8571 kg/l at 15°C

Oils	Recommended	Used during test
Engine oil		
Type:	SAE 15W/40	As recommended
Viscosity:	54 cSt at 50°C	
Classification:	MIL-L-2104-C	
Transmission oils		
Type:	SAE 15W/30	As recommended
Viscosity:	54 cSt at 50°C	
Classification:	MIL-L-2104-C	
Rear final drives		
Type:	SAE 15W/30	As recommended
Viscosity:	54 cSt at 50°C	
Classification:	MIL-L-2104-C	
Front differential and final drives		
Type:	SAE 85W-140EP	As recommended
Viscosity:	11.0 cSt at 100°C	
Classification:	MIL-L-2105-C	
Hydraulic brakes		
Type:	SAE 15W/30	As recommended
Viscosity:	54 cSt at 50°C	
Classification:	MIL-L-2104-C	
Hydraulic fluid		
Type:	SAE 15W/30	As recommended
Viscosity:	54 cSt at 50°C	
Classification:	MIL-L-2104-C	
Steering oil		
Type:	SAE 15W/30	As recommended
Viscosity:	54 cSt at 50°C	
Classification:	MIL-L-2104-C	
Recommended grease:	Consistency 2 lithium	As recommended
Number of lubrication points:	8	

III. TEST RESULTS

A. COMPULSORY TEST RESULTS

1. MAIN POWER TAKE-OFF (1000)

Date and location of tests: 6 July 1993
Silsoe Research Institute,
Wrest Park, Silsoe, Bedford

Type of dynamometer: Eddy Current, Borghi and Saveri

Power kW	Speed		Fuel consumption			Specific energy kWh/l
	Engine rev/min	P.T.O. rev/min	Hourly kg/h	Hourly l/h	Specific g/kWh	
1.1 MAXIMUM POWER - TWO HOUR TEST						
45.5	2399	1096	13.25	15.46	291	2.94
1.2 POWER AT RATED ENGINE SPEED						
45.5	2399	1096	13.25	15.46	291	2.94
1.3 STANDARD POWER TAKE-OFF SPEED (1000 ± 10 rev/min)						
43.4	2191	1000	12.47	14.54	288	2.98
1.4 PART LOADS 1.4.1 The torque corresponding to maximum power at rated engine speed						
45.5	2399	1096	13.25	15.46	291	2.94
1.4.2 85% of the torque defined in 1.4.1						
39.3	2442	1115	11.52	13.44	293	2.92
1.4.3 75% of the torque defined in 1.4.2						
30.0	2480	1132	9.55	11.14	319	2.69
1.4.4 50% of the torque defined in 1.4.2						
20.2	2516	1149	7.67	8.95	380	2.26
1.4.5 25% of the torque defined in 1.4.2						
10.2	2540	1160	5.97	6.96	584	1.47
1.4.6 Unloaded						
0	2566	1171	4.36	5.08	--	--

Power kW	Speed		Fuel consumption			Specific energy kWh/l
	Engine rev/min	P.T.O. rev/min	Hourly kg/h	Hourly l/h	Specific g/kWh	
1.5 PART LOADS AT STANDARD POWER TAKE-OFF SPEEDS (1000 ± 10 rev/min)						
1.5.1 The torque corresponding to maximum power						
43.4	2191	1000	12.47	14.54	288	2.98
1.5.2 85% of the torque obtained in 1.5.1						
37.6	2243	1024	10.83	12.63	288	2.98
1.5.3 75% of the torque obtained in 1.5.2						
29.0	2292	1047	8.85	10.32	305	2.81
1.5.4 50% of the torque obtained in 1.5.2						
19.7	2336	1067	7.10	8.28	360	2.38
1.5.5 25% of the torque obtained in 1.5.2						
10.1	2374	1084	5.39	6.29	535	1.60
1.5.6 Unloaded						
0	2410	1100	3.90	4.55	--	--

No load, maximum engine speed: 2566 rev/min

Torque (equivalent crankshaft) at maximum power: 181.0 Nm

Maximum torque (equivalent crankshaft)
(engine speed 1240 rev/min): 221.1 Nm

Mean atmospheric conditions:

- Temperature 25°C
- Pressure 1027 m bar
- Relative humidity 29%

Maximum temperatures:

- Coolant 91°C
- Engine oil 119°C
- Fuel 52°C
- Engine air intake 34°C

2. HYDRAULIC POWER AND LIFTING FORCE

Date of tests: 6 August 1993

2.1 Hydraulic power test

Sustained pressure with relief valve open: 17.4 MPa

Pump delivery rate at minimum pressure: 50.6 l/min

	Flow rate l/min	Pressure MPa	Power kW
Flow rate corresponding to a hydraulic pressure equivalent to 90% of the actual relief valve pressure setting and corresponding hydraulic power	38.3	15.7	10.02
Flow rate and hydraulic pressure corresponding to maximum hydraulic power	38.2	15.8	10.06

Tapping point used for test: Auxiliary service connection

Temperature of hydraulic fluid if different from 65 ± 5°C -- °C

Opening pressure of the unloading valve: -- MPa

Closing pressure of the unloading valve: -- MPa

2.2 Power lift test - (To ISO 730-1:1990)

	At the hitch point	On the frame
Height of lower hitch points above ground in down position	200 mm	200 mm
Vertical movement	650 mm	818 mm
Maximum corrected force exerted through full range	18.8 kN	15.4 kN
Corresponding pressure of hydraulic fluid	15.7 MPa	15.7 MPa
Moment about rear-wheel axis	18.4 kNm	24.5 kNm
24.5mum tilt angle of mast from vertical	--	12 degrees

- Linkage settings for test - see Table 2.1 and Figure 2.1

Lifting heights relative to the horizontal plane including the lower link pivot points											
mm	-476	-373	-300	-200	-100	0	50	100	200	277	342
Lifting forces (the values measured are corrected to correspond to a hydraulic pressure equivalent to 90% of the actual relief valve pressure delivered by the hydraulic system)											
at the hitch points kN	--	18.8	20.3	21.9	23.1	23.8	24.0	24.1	24.3	23.8	--
Corresponding pressure: 15.7 MPa											
at the frame kN	15.4	16.5	17.2	17.8	18.1	18.2	18.1	17.9	17.5	16.8	16.3
Corresponding pressure: 15.7 MPa											

3. DRAWBAR POWER AND FUEL CONSUMPTION TEST (UNBALLASTED TRACTOR, 4 WHEEL DRIVE)

Date and location of tests: 23 July 1993
Silsoe Research Institute
Wrest Park
Silsoe

Type of track: Concrete

	Tyre inflation pressure (kPa)	
Height of drawbar above ground	Front	Rear
370 mm	62	62

Gear and Rang	Power	Drawbar Pull	Speed	Engine Speed	Slip of wheels or track	Spec fuel cons	Spec energy	Temperature			Atmospheric conditions		
								Fuel	Coolant	Eng oil	Temp	Rel Humidity	Pressure
	kW	kN	km/h	rev/min	%	g/kwh	kWh/l	Deg.C	Deg.C	Deg.C	Deg.C	%	kPa
3.1 MAXIMUM POWER IN TESTED GEARS													
LP1	24.2	31.5	2.76	2468	15.1	431	1.99	47	78	114	24	59	101.2
LP2	32.2	31.4	3.69	2443	15.0	399	2.15	48	81	115	25	57	101.2
LD2	35.2	26.3	4.82	2402	6.4	372	2.30	49	80	115	25	57	101.2
LP3	36.2	23.9	5.46	2405	5.5	364	2.36	48	81	114	25	57	101.2
LD3	37.0	20.0	6.65	2401	4.4	357	2.40	48	83	118	23	66	101.2
LP4	36.4	18.4	7.11	2396	4.0	360	2.38	48	81	118	23	64	101.3
LD4	35.2	14.6	8.67	2402	3.1	372	2.30	49	83	118	23	61	101.3
HP1	35.9	13.2	9.77	2399	2.8	366	2.34	49	82	117	23	61	101.3
HD1	34.6	10.5	11.87	2403	2.3	378	2.27	49	83	117	23	60	101.3
3.2 FUEL CONSUMPTION 3.2.1 In selected gear, at maximum power at rated speed													
LD3	37.0	20.0	6.65	2401	4.4	357	2.40	48	83	118	23	66	101.3
3.2.1.1 75% of pull at maximum power at rated speed													
LD3	28.8	15.0	6.90	2463	3.3	374	2.2	47	82	118	22	65	101.3
3.2.1.2 50% of pull at maximum power at rated speed													
LD3	19.5	9.9	7.08	2501	2.2	445	1.93	47	80	118	22	66	101.3
3.2.1.3 Next higher gear at reduced engine speed; same pull and travelling speed as in 3.2.1.1													
LP4	28.6	14.9	6.90	2310	3.3	373	2.30	49	82	114	25	60	101.2
3.2.1.4 Next higher gear at reduced engine speed; same pull and travelling speed as in 3.2.1.2													
LP4	19.5	9.9	7.09	2347	2.3	431	1.99	48	79	114	25	59	101.2
3.2.2 In selected gear nearest to 7.5 km/h, at maximum power at rated engine speed													
LP4	36.4	18.4	7.11	2396	4.0	360	2.38	48	81	118	23	64	101.3
3.2.2.1 75% of pull at maximum power at rated speed													
LP4	28.1	13.7	7.38	2462	3.0	379	2.26	47	81	117	23	60	101.3
3.2.2.2 50% of pull at maximum power at rated speed													
LP4	19.4	9.2	7.57	2501	2.1	440	1.95	48	81	117	23	61	101.3
3.2.2.3 Next higher gear at reduced engine speed; same pull and travelling speed as in 3.2.2.1													
LD4	28.0	13.7	7.38	2041	3.1	361	2.38	48	82	113	24	58	101.2
3.2.2.4 Next higher gear at reduced engine speed; same pull and travelling speed as in 3.2.2.2													
LD4	19.3	9.2	7.55	2071	2.3	406	2.11	49	80	112	24	58	101.2

* Maximum power limited by wheelslip and bounce

Repairs and adjustments during tests: None

Remarks: None

Test carried out by: S J Devonshire

Officer in charge: P C Seward

Signed: Head of Test Engineering Group

H M R Proctor

for the Director

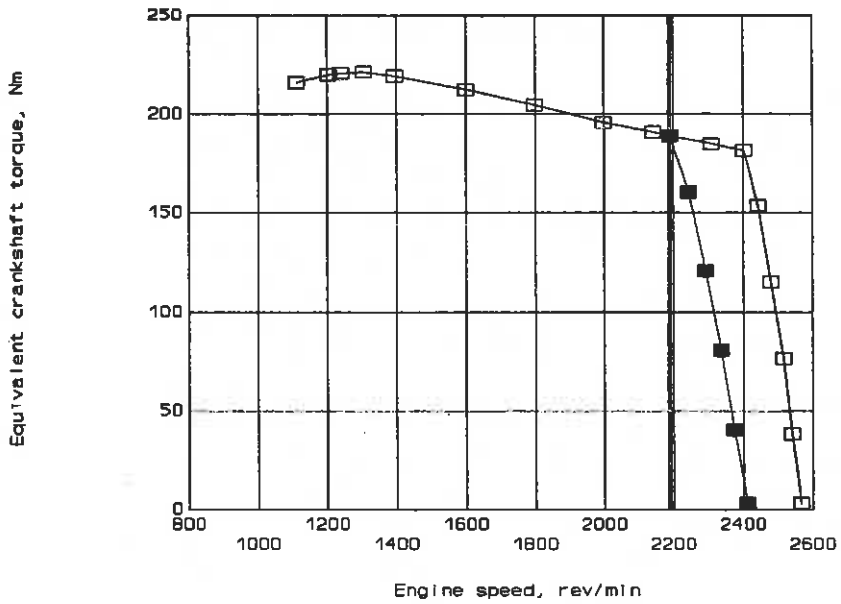
H M R Proctor

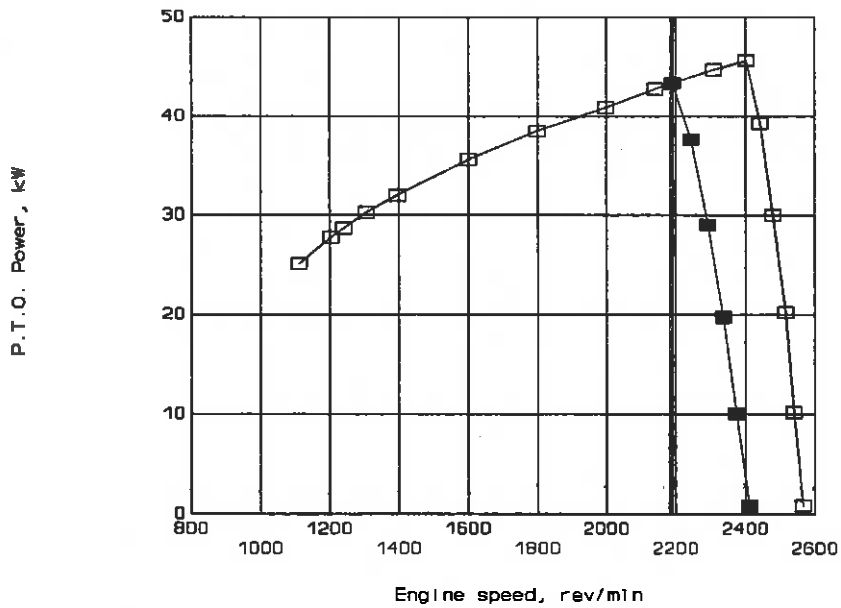
Date: 25/1/94

ANNEX I MAIN POWER TAKE OFF CURVES

P.T.O. POWER TEST - CASE INTERNATIONAL 695, 4 WHEEL DRIVE

Governor set for maximum power at rated speed □
Governor set for maximum power at pto speed ■

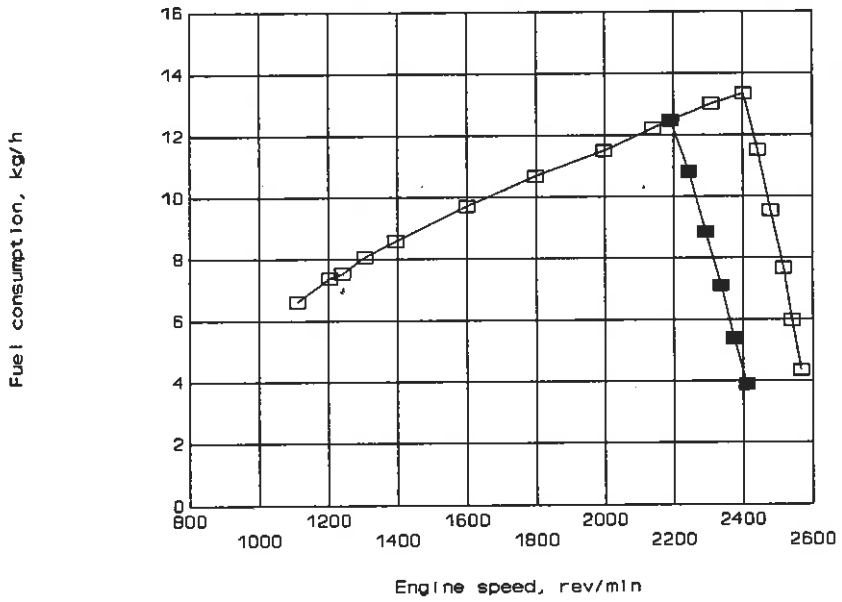


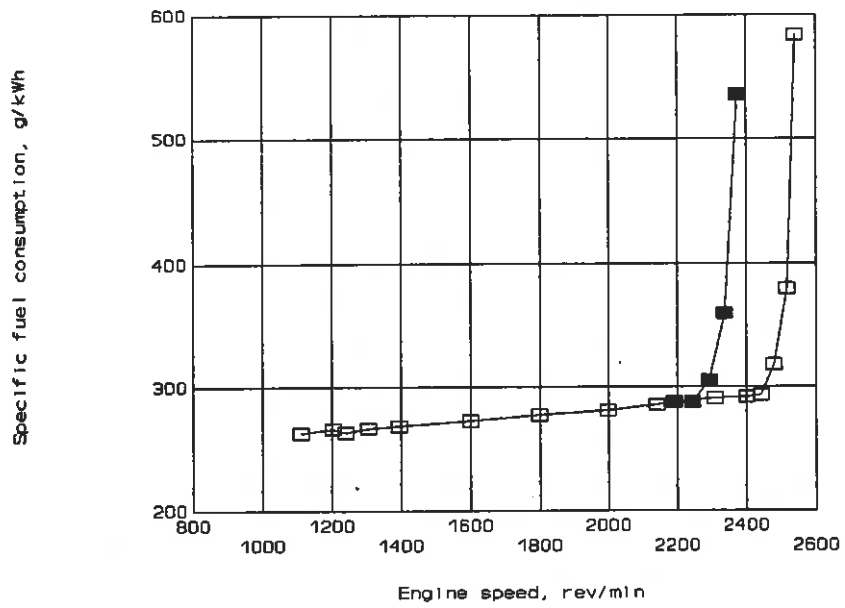


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P.T.O. POWER TEST - CASE INTERNATIONAL 695, 4 WHEEL DRIVE

Governor set for maximum power at rated speed □
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P.T.O. POWER TEST - CASE INTERNATIONAL 695, 4 WHEEL DRIVE

Governor set for maximum power at rated speed □
Governor set for maximum power at pto speed ■

