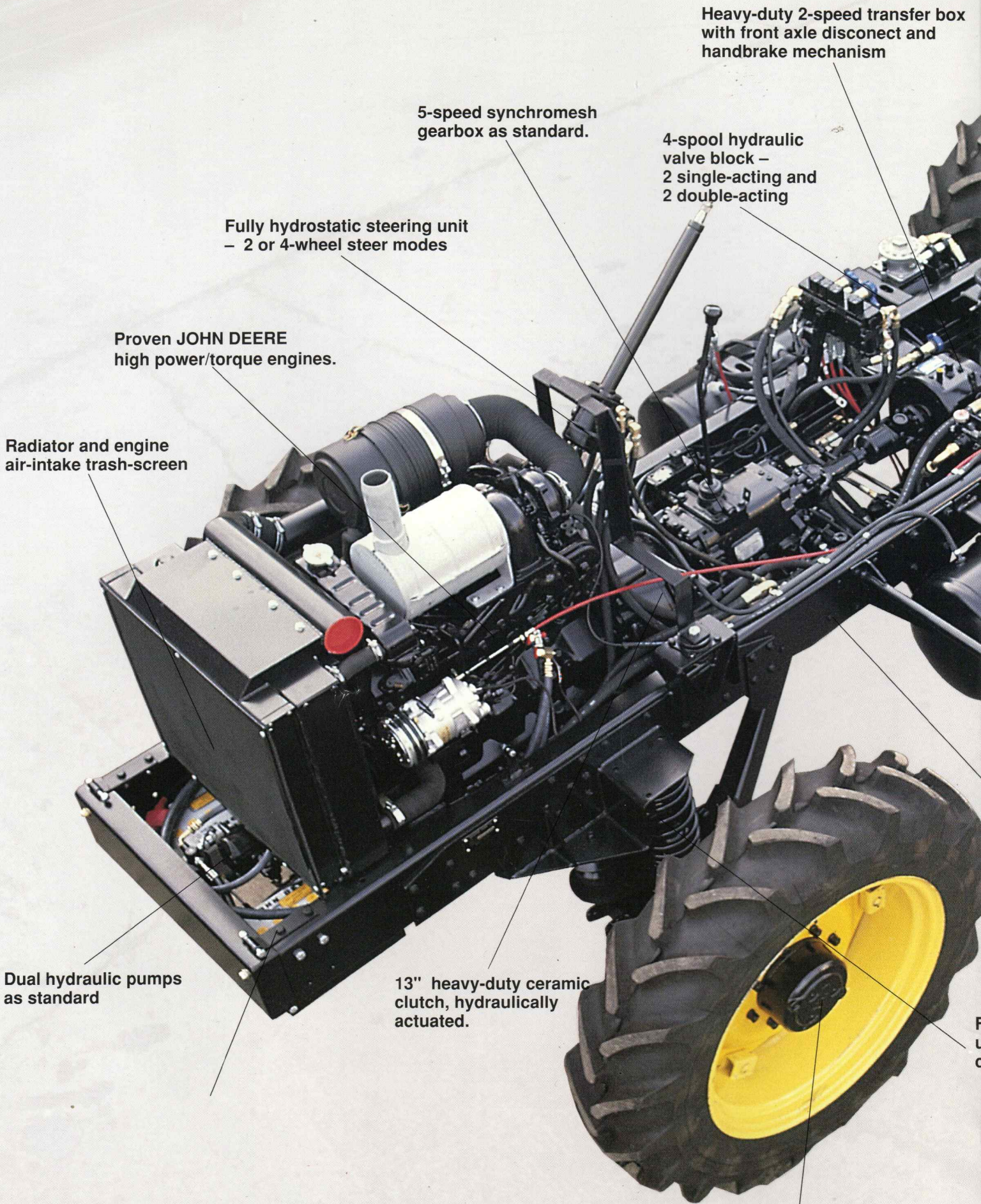




THE MULTI-PURPOSE
CLAYTON
BUGGI

MODELS 4090, 4105 & 4120
EFFICIENCY AND COMFORT AT WORK



Heavy-duty 2-speed transfer box with front axle disconnect and handbrake mechanism

5-speed synchromesh gearbox as standard.

4-spool hydraulic valve block – 2 single-acting and 2 double-acting

Fully hydrostatic steering unit – 2 or 4-wheel steer modes

Proven JOHN DEERE high power/torque engines.

Radiator and engine air-intake trash-screen

Dual hydraulic pumps as standard

13" heavy-duty ceramic clutch, hydraulically actuated.

Heavy-duty axles with inboard wet brakes.

Engine, gearbox, transfer box and cab all rubber mounted.

N.B. Some items shown are optional equipment.

Heavy-duty epicyclic reduction hubs.

High-strength crossmember transfers loads from optional 3-point linkage and pick-up hitch (when fitted) direct to axles.

Heavy duty box crossmembers for implement attachment

Combined suspension brackets and chassis stiffener plates transfer stresses and load direct to axle and not to chassis

540 RPM 6-spline moveable hydraulic power take-off

Purpose-built ladder type chassis to full automotive specification. (High-strength steel used on all load bearing and chassis components.)

Front progressive suspension using a simple combination of coil and rubber springs



All illustrations are of 4105 or 4120 Buggi's

The range of Clayton Buggi's share many common features and components, so enabling the end user to choose the machine best suited to his requirements.

The Buggi is designed to perform all the tasks previously considered to be the preserve of specialist spraying and fertilising machines. It features a 10-speed mechanical transmission to ensure that a constant travel speed can be maintained with minimum power loss. Additionally, the Buggi is able to carry out many operations previously considered to be outside of the capabilities of such machines, light cultivations, drilling, rolling and trailer haulage being examples. In this way its cost effectiveness is greatly improved as at the busy harvest period, it can be pressed into service over a wide range of tasks, instead of standing idly in the implement store.

The Buggi range features:

- Choice of three John Deere diesel engines of 85hp (63kW), 110hp (82kW) and 120hp (86kW) power. All engine warranty, service and support is available from your local John Deere Dealer.
- Three wheelbase lengths – 3.0m, 3.4m and 3.7m. Useable load length behind the cab 2.0m, 2.4m and 2.7m, respectively.
- Wheel tracks from 60" (1.5m) to 72" (1.83m).
- Choice of standard or heavy duty chassis.
- Three rear axle load capacities – 4.0, 4.5 and 6.0 tonnes.
- Three rear axle suspension options – composite rubber, coil spring and hydraulic.
- 12.5hp (10.8kW) or 23hp (17kW) hydraulic 6-spline power take off (PTO) motor.

Other features which are common to all models are:

- 5 Speed synchronised gearbox with 2 speed transfer box.
- Fully bolted ladder type construction chassis with suspension on both axles.
- Clayton EEC approved safety cab with full instrumentation and air conditioning (optional on 3090/85 Buggi).
- RDS Delta 1 area/speed meter with PTO revolution counter.
- Two and four wheel drive.
- Two and four wheel steer.
- Inboard wet brakes on both axles.
- Single brake pedal operates dual braking system for maximum safety.
- Independent handbrake fitted to transfer box.
- Four spool external hydraulic valve, three double acting and one single acting outlets. (Fifth spool optional).



- 4 tonnes capacity front axle. (On standard wheels).
- Wide choice of standard, rowcrop or flotation wheels can be fitted.
- MB Trac wheels can be fitted (using special wheel nuts).

Features of specific models are:

4090/85 Buggi

Recommended maximum sprayer capacity 2000 litres. An economical, low cost entry model primarily for the user who requires a machine to do spraying and fertilising duties only.

Engine power is 85hp (63kW) with each axle capacity 4.0 tonnes on standard wheels, 3.3 tonnes on 12.4 x 46 or 11.2 x 48 rowcrop wheels or 3.7, tonnes on 11.2 x 44 wheels.

Rear axle suspension is via composite rubber units which give the 4090 adequate suspension for all the tasks it is designed for. Anti-roll restraints are also fitted.

4090/110 Buggi

This model is fitted with a 110hp (82kW) engine and is designed for working on particular steep land and operations which need extra power.

Other than the engine size and the fitting of air conditioning as standard, the 4090/110 Buggi is equipped to the same specifications as the 4090/85.

4105 Buggi

The original and probably the most versatile of the Buggi range, the 4105 has a recommended maximum sprayer capacity of 2500 litres and a 110hp (82kW) John Deere turbo-charged engine. A 120hp (86kW) version is optional for extra heavy duties.

Front axle capacity is as the 4090/85, with a rear axle capacity of 4.5 tonnes on both standard and rowcrop wheels.

Hydraulically-operated single line trailer braking kit is fitted as standard equipment, as is the anti-roll bar to the rear axle and a 2.0 tonne lift 3-point linkage. The 4105 Buggi is also offered with a heavy-duty chassis, when a 3.8 tonne lift 3-point linkage is available.

The fully equipped Clayton safety cab is fitted with full instrumentation and air conditioning.

Drawbar fitted as standard with optional pick-up hitch.

The 4105 model is incredibly versatile and a very serious performer over a full range of auxiliary tasks. Towing a fully laden 10 tonne trailer is accomplished with extreme driver comfort over rough terrain. Fast travel when loaded is possible as trailer drawbar bounce is non-existent, as the pick-up hitch is suspended from the chassis and so benefits from the 4105's suspension system.

Many 4105 Buggi's are operating with six metre drills with the seed hopper carried on the chassis and the coulters mounted on the 3-point linkage. Four metre drills can be carried on the Buggi when the heavy duty 3-point linkage is specified. Compaction free drilling is usually possible with the machine, especially when low ground pressure wheels are fitted. This also applies to rolling and light cultivations.

4120 Buggi

Recommended maximum sprayer capacity 3000 litres. Equipped to the same specifications as the 4105, except the 120hp (86kW) John Deere turbo-charged engine is standard, as is the re-inforced chassis and heavy duty 3-point linkage.

Again the front axle capacity is as the 4090/85 with rear axle featuring hydraulic suspension and an axle capacity of 6.0 tonnes on both standard and rowcrop wheels.

The 4120 is aimed at very large scale farmers and contractors who wish to mount high capacity sprayers or fertiliser spreaders to the Buggi.

LUCASSEN 
 **YOUNG LTD**

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SPECIFICATION – CLAYTON 4090/85 BUGGI

ENGINE

JOHN DEERE 4 Cylinder diesel, In line 4 stroke, direct injection, 4.5 litres (276 cu in.) 85 BHP (63kW), Gross Power at 2400 rpm, at SAE J1995.
Maximum torque 217 lb/ft (295 Nm) at 1200 rpm.

TRANSMISSION

13" Ceramic clutch; 5 Speed synchromesh gearbox, 1 reverse; 2 Speed transfer box with handbrake and front axle disconnect to offer 2 or 4 wheel drive.

Heavy duty industrial axles with hub reduction gears. Fully enclosed internal multi-disc wet brakes both axles. Steering alignment switches built into steering cylinders. Mounted in 'A' – Frame secured with a single maintenance free bonded rubber bush to the chassis.

CHASSIS & SUSPENSION

High-strength, lightweight chassis to full automotive standard. High-strength steel flitch plates to stress areas.

The single point 'A' frame attachment to the chassis permits maximum axle oscillation.

Progressive coil spring on front axle backed up by large capacity rubber spring/bump stop. Heavy duty bonded rubber rear suspension with anti-sway restraint.

A total of 23 rubber mounts and bearings are fitted to major components for maintenance free flexibility and maximum noise suppression. This includes engine, gearbox, transfer box, A-frames, panhard rods, cab, pick-up hitch hangar, radiator, steering column.

HYDRAULIC CIRCUITS

Twin gear pumps, front mounted via flexible drive coupling from engine crankshaft, one exclusive to power take-off motor the other for steering, and main hydraulic valve block. Oil cooler is fitted as standard equipment.

Main Service Pump, 46 litres/min at 2500 rpm supplies steering, and 4 spool valve block (3 Double Acting 1 Single).

Standard Power Take Off Pump (PTO) 69 litres/min at 2500 rpm. Optional pump 109 litres/min with additional oil cooler.

The PTO pump supplies oil exclusively to hydraulic power take off motor (6 spline 540 rpm) thus ensuring a constant speed irrespective of the use of other hydraulic functions.

Pressures: PTO pump 190 bar (2750 psi). Service pump 190 bar (2750 psi).

POWER TAKE OFF MOTORS

Standard 540 rpm 6 spline PTO motor fully guarded. Standard Danfoss OMS 80 unit 14.5 HP (10.8 kW) @ 540 rpm, option 23HP (17kW).

CAB

Full safety cab tested and approved to EEC spec.

Extensive glare free tinted glazing, with toughened, tinted glass to all windows.

Approved laminated windscreen, front and rear wash/wipe systems.

Steering console houses integral steering column control for turn signal, front wash/wipe and horn, tachometer/hour meter, fuel and engine coolant temperature gauges. Warning light cluster containing vehicle turn signal, trailer turn signal, headlight main beam, handbrake 'on', low engine oil pressure, air cleaner element blockage, battery charge warning.

Side mounted electrical console cabinet with external service access door. Six switch bank for front/side lights, front worklamps, rotary beacon, rear/side worklamps, rear wash/wipe and hazard lights plus 2/4 wheel steer switch, area/speed meter. Engine stop/start switch. Aerial, speakers and wiring for radio. Interior light, heater unit (aircon optional) front mounted cab filters (charcoal filters optional).

Control levers for hydraulic valve block. Suspension seat. Access into cab for implement controls through cable entry position behind seat.

ELECTRICAL

75 amp/hour alternator; 12 volt negative earth system; 2 x 66 amp/hour batteries; Dedicated cabinet with external access door; Front side/turn/quartz halogen headlight units; 2 front, 2 side and 2 rear mounted quartz halogen worklamps; Rear/stop/turn lamps with number plate illumination; Large independent front and rear commercial wash/wipe units; Cab heater/blower (air conditioning optional); 2 x 12 volt DIN jackplugs on side panel; Interior cab light; External 12 volt DIN jackplug for rotary beacon; 7 pin trailer light outlet; Radio speakers/aerial/ wiring standard (Radio Dealer fitment)

DIMENSIONS

On 14.9 x 24 Tyres.

Overall length over chassis: 198.5" (5055mm)
Overall height over cab: 115" (2920mm)
Wheelbase: 133.5" (3400mm); Distance from rear of cab to centre of rear axle 71" (1805mm). Distance from rear of cab to end of chassis 95" (2410mm). Width over axle hubs 79.5" (2020mm). Minimum turning radius to centre line of inside wheel: 78.25" (1985mm); Ground clearance under axles – 14.9 x 24 wheels – 20" (505mm); 11.2 x 48 wheels – 28" (710mm)
Ground clearance may vary depending on make of tyre and pressure.

TRAVEL SPEEDS

(CALCULATED)

On 14.9 x 24 Tyres – General purpose wheels

AT 2500 ENGINE RPM			AT 1800 ENGINE RPM		
Low Range					
	KPH	MPH		KPH	MPH
1	3.03	1.89	1	2.18	1.36
2	5.47	3.42	2	3.94	2.46
3	9.53	5.96	3	6.86	4.29
4	14.36	8.98	4	10.34	6.46
5	19.82	12.39	5	14.27	8.92
R	3.35	2.10	R	2.41	1.51

High Range

	KPH	MPH		KPH	MPH
1	6.72	4.20	1	4.84	3.02
2	12.15	7.60	2	8.75	5.47
3	21.15	13.22	3	15.23	9.52
4	31.86	19.93	4	22.94	14.35
5	44.00	27.50	5	31.68	19.80
R	7.44	4.65	R	5.36	3.35

On 12.4 x 46 or 11.2 x 48 Rowcrop wheels

AT 2500 ENGINE RPM			AT 1800 ENGINE RPM		
Low Range					
	KPH	MPH		KPH	MPH
1	4.17	2.1	1	3.00	1.88
2	7.55	4.72	2	5.43	3.40
3	13.14	8.21	3	9.46	5.91
4	19.80	12.37	4	14.25	8.91
5	27.32	17.08	5	19.67	12.29
R	4.62	2.89	R	3.33	2.08

High Range

	KPH	MPH		KPH	MPH
1	9.26	5.79	1	6.67	4.17
2	16.76	10.47	2	12.06	7.54
3	29.16	18.23	3	21.00	13.12
4	43.93	27.47	4	31.63	19.78
5	60.65*	37.91	5	43.67	27.29
R	10.26	6.41	R	7.39	4.62

Note: As the PTO speed is variable the required travel speed should be selected using a suitable gear and engine speed combination before adjusting the PTO speed to 540 rpm.

*Note: Maximum design speed 50KPH (30MPH)

WHEELS AND TYRES

Wheel specification – 8 x 18mm wheel studs for 90 degree conical end nuts on 275mm PCD. Hub mounting diameter 220mm. Axle length over wheel flanges 70.5" (1790mm)

Various wheel sizes available to order.

Note wheels previously used on an MB-Trac will fit the BUGGI axle but special wheel nuts are required (see price list).

WEIGHTS

Vehicle Weight (depending on specification)

Bare vehicle weight 3.48 tonnes;

Front axle 2.33 tonnes; Rear axle 1.15 tonnes

Axle Loads (on standard wheels)

Front axle 4.0 tonnes at 70.5" (1790mm) track

Rear axle 4.0 tonnes at 70.5" (1790mm) track

Pick-up hitch

Superimposed load – 2.0 tonnes max. at pin

Note – Final vehicle weights depend on specification.

SPECIFICATION - CLAYTON 4090/110 BUGGI

ENGINE

JOHN DEERE 4 Cylinder diesel, In line 4 stroke, direct injection, turbocharged, 3.9 litres (239 cu.in.) displacement, water cooled. 110 BHP (82kW), Gross Power at 2500 rpm, @ SAE J1995. Maximum torque 270 lb/ft (366 Nm) at 1600 rpm.

TRANSMISSION

13" Ceramic clutch; 5 Speed synchromesh gearbox, 1 reverse; 2 Speed transfer box with handbrake and front axle disconnect to offer 2 or 4 wheel drive.

Heavy duty industrial axles with hub reduction gears. Fully enclosed internal multi-disc wet brakes both axles. Steering alignment switches built into steering cylinders. Mounted in 'A' - Frame secured with a single maintenance free bonded rubber bush to the chassis.

CHASSIS & SUSPENSION

High-strength, lightweight chassis to full automotive standard. High-strength steel flitch plates to stress areas.

The single point 'A' frame attachment to the chassis permits maximum axle oscillation.

Progressive coil spring on front axle backed up by large capacity rubber spring/bump stop. Heavy duty bonded rubber rear suspension with anti-sway restraint.

A total of 23 rubber mounts and bearings are fitted to major components for maintenance free flexibility and maximum noise suppression. This includes engine, gearbox, transfer box, A-frames, panhard rods, cab, pick-up hitch hangar, radiator, steering column.

HYDRAULIC CIRCUITS

Twin gear pumps, front mounted via flexible drive coupling from engine crankshaft, one exclusive to power take-off motor the other for steering, and main hydraulic valve block. Oil cooler is fitted as standard equipment.

Main Service Pump, 46 litres/min at 2500 rpm supplies steering, and 4 spool valve block (3 Double Acting 1 Single).

Standard Power Take Off Pump (PTO) 69 litres/min at 2500 rpm. Optional pump 109 litres/min with additional oil cooler.

The PTO pump supplies oil exclusively to hydraulic power take off motor (6 spline 540 rpm) thus ensuring a constant speed irrespective of the use of other hydraulic functions.

Pressures: PTO pump 190 bar (2750 psi). Service pump 190 bar (2750 psi).

POWER TAKE OFF MOTORS

Standard 540 rpm 6 spline PTO motor fully guarded. Standard Danfoss OMS 80 unit 14.5 HP (10.8 kW) @ 540 rpm, option 23HP (17kW).

CAB

Full safety cab tested and approved to EEC spec.

Extensive glare free tinted glazing, with toughened, tinted glass to all windows.

Approved laminated windscreen, front and rear wash/wipe systems.

Steering console houses integral steering column control for turn signal, front wash/wipe and horn, tachometer/hour meter, fuel and engine coolant temperature gauges. Warning light cluster containing vehicle turn signal, trailer turn signal, headlight main beam, handbrake 'on', low engine oil pressure, air cleaner element blockage, battery charge warning.

Side mounted electrical console cabinet with external service access door. Six switch bank for front/side lights, front worklamps, rotary beacon, rear/side worklamps, rear wash/wipe and hazard lights plus 2/4 wheel steer switch, area/speed meter. Engine stop/start switch. Aerial, speakers and wiring for radio.

Interior light, air conditioner, front mounted cab filters (charcoal filters optional).

Control levers for hydraulic valve block. Suspension seat. Access into cab for implement controls through cable entry position behind seat.

ELECTRICAL

75 amp/hour alternator; 12 volt negative earth system; 2 x 66 amp/hour batteries; Dedicated cabinet with external access door; Front side/turn/quartz halogen headlight units; 2 front, 2 side and 2 rear mounted quartz halogen worklamps; Rear/stop/turn lamps with number plate illumination; Large independent front and rear commercial wash/wipe units; Cab heater/blower, air conditioning; 2 x 12 volt DIN jackplugs on side panel; Interior cab light; External 12 volt DIN jackplug for rotary beacon; 7 pin trailer light outlet; Radio speakers/aerial/ wiring standard (Radio Dealer fitment)

DIMENSIONS

On 14.9 x 24 tyres
Overall length over chassis: 198.5" (5055mm)
Overall height over cab: 115" (2920mm)
Wheelbase: 133.5" (3400mm); Distance from rear of cab to centre of rear axle 71" (1805).
Distance from rear of cab to end chassis 95" (2410mm). Width over axle hubs 79.5" (2020mm). Minimum turning radius to centre line of inside wheel: 78.25" (1985mm); Ground clearance under axles - 14.9 x 24 wheels - 20" (505mm); 11.2 x 48 wheels - 28" (710mm)
Ground clearance may vary depending on make of tyre and pressure.

TRAVEL SPEEDS

(CALCULATED)

On 14.9 x 24 Tyres - General purpose wheels

AT 2500 ENGINE RPM		AT 1800 ENGINE RPM	
Low Range			
	KPH	MPH	
1	3.03	1.89	1
2	5.47	3.42	2
3	9.53	5.96	3
4	14.36	8.98	4
5	19.82	12.39	5
R	3.35	2.10	R

High Range

	KPH	MPH		KPH	MPH
1	6.72	4.20	1	4.84	3.02
2	12.15	7.60	2	8.75	5.47
3	21.15	13.22	3	15.23	9.52
4	31.86	19.93	4	22.94	14.35
5	44.00	27.50	5	31.68	19.80
R	7.44	4.65	R	5.36	3.35

On 12.4 x 46 or 11.2 x 48 Rowcrop wheels

AT 2500 ENGINE RPM		AT 1800 ENGINE RPM	
Low Range			
	KPH	MPH	
1	4.17	2.1	1
2	7.55	4.72	2
3	13.14	8.21	3
4	19.80	12.37	4
5	27.32	17.08	5
R	4.62	2.89	R

High Range

	KPH	MPH		KPH	MPH
1	9.26	5.79	1	6.67	4.17
2	16.76	10.47	2	12.06	7.54
3	29.16	18.23	3	21.00	13.12
4	43.93	27.47	4	31.63	19.78
5	60.65*	37.91	5	43.67	27.29
R	10.26	6.41	R	7.39	4.62

Note: As the PTO speed is variable the required travel speed should be selected using a suitable gear and engine speed combination before adjusting the PTO speed to 540 rpm.

*Note: Maximum design speed 50KPH (30MPH)

WHEELS AND TYRES

Wheel specification - 8 x 18mm wheel studs for 90 degree conical end nuts on 275mm PCD. Hub mounting diameter 220mm. Axle length over wheel flanges 70 1/2" (1790mm)

Various wheel sizes available to order.

Note wheels previously used on an MB-Trac will fit the BUGGI axle but special wheel nuts are required (see price list).

WEIGHTS

Vehicle Weight (depending on specification)

Bare vehicle weight 3.48 tonnes;
Front axle 2.33 tonnes; Rear axle 1.15 tonnes

Axle Loads (on standard wheels)

Front axle 4.0 tonnes at 70.5" (1790mm) track
Rear axle 4.0 tonnes at 70.5" (1790mm) track

Pick-up hitch

Superimposed load - 2.0 tonnes max. at pin

Note - Vehicle weights depend on final specification.

SPECIFICATION – CLAYTON 4105 BUGGI

ENGINE

JOHN DEERE 4 Cylinder diesel, In line 4 stroke, direct injection, turbocharged, 3.9 litres (239 cu.in.) displacement, water cooled. 110 BHP (82kW), Gross Power at 2500 rpm, @ SAE J1995.

Maximum torque 270 lb/ft (366 Nm) at 1600 rpm.

TRANSMISSION

13" Ceramic clutch; 5 Speed synchromesh gearbox, 1 reverse; 2 Speed transfer box with handbrake and front axle disconnect to offer 2 or 4 wheel drive.

Heavy duty industrial axles with hub reduction gears. Fully enclosed internal multi-disc wet brakes both axles – differential lock rear axle only. Steering alignment switches built into steering cylinders. Mounted in 'A' – Frame secured with a single maintenance free bonded rubber bush to the chassis. The axles are located under the chassis by drop forged panhard rods.

CHASSIS & SUSPENSION

High-strength, lightweight chassis to full automotive standard. High-strength steel flitch plates to stress areas.

The single point 'A' frame attachment to the chassis permits maximum axle oscillation. Rear anti-roll bar and heavy-duty shock absorbers control excess movement.

Progressive coil spring on both axles backed up by large capacity rubber spring/bump stop. Heavy duty anti-roll bar fitted to rear axle.

A total of 23 rubber mounts and bearings are fitted to major components for maintenance free flexibility and maximum noise suppression. This includes engine, gearbox, transfer box, A-frames, panhard rods, cab, pick-up hitch hangar, radiator, steering column.

Front mud guards (fit 24"/28"/36" wheels only).

HYDRAULIC CIRCUITS

Twin gear pumps, front mounted via flexible drive coupling from engine crankshaft, one exclusive to power take-off motor the other for steering, trailer braking system and main hydraulic valve block. Oil cooler is fitted as standard equipment.

Main Service Pump, 46 litres/min at 2500 rpm supplies steering, hydraulic trailer brake valve, 3 point linkage and 3 spool valve block (3 Double Acting 1 Single).

Standard Power Take Off Pump (PTO) 69 litres/min at 2500 rpm. Optional pump 109 litres/min with additional oil cooler. The PTO pump supplies oil exclusively to hydraulic power take off motor (6 spline 540 rpm) thus ensuring a constant speed irrespective of the use of other hydraulic functions. Other pumps available to special order up to 50 HP.

Pressures: PTO pump 190 bar (2750 psi). Service pump 190 bar (2750 psi). Trailer brake valve 117 bar (1700 psi).

POWER TAKE OFF MOTORS

Standard 540 rpm 6 spline PTO motor fully guarded. Standard Danfoss OMS 80 unit 14.5 HP (10.8 kW) @ 540 rpm, option 23HP (17kW).

CAB

Full safety cab tested and approved to EEC spec. Extensive glare free tinted glazing, with toughened, tinted glass to all windows.

Approved laminated windscreen, front and rear wash/wipe systems.

Steering console houses integral steering column control for turn signal, front wash/wipe and horn, tachometer/hour meter, fuel and engine coolant temperature gauges. Warning light cluster containing vehicle turn signal, trailer turn signal, headlight main beam, hand-brake 'on', low engine oil pressure, air cleaner element blockage, battery charge warning.

Side mounted electrical console cabinet with external service access door. Six switch bank for front/side lights, front worklamps, rotary beacon, rear/side worklamps, rear wash/wipe and hazard lights plus 2/4 wheel steer switch, area/speed meter. Engine stop/start switch. Aerial, speakers and wiring for radio. Interior light, air conditioner, front mounted cab filters (charcoal filters optional).

Control levers for three point linkage and hydraulic valve block. Suspension seat. Access into cab for implement controls through cable entry position behind seat.

ELECTRICAL

75 amp/hour alternator; 12 volt negative earth system; 2 x 66 amp/hour batteries; Dedicated cabinet with external access door; Front side/turn/quartz halogen headlight units; 2 front, 2 side and 2 rear mounted quartz halogen worklamps; Rear/stop/turn lamps with number plate illumination; Large independent front and rear commercial wash/wipe units; Cab heater/blower, air conditioning; 2 x 12 volt DIN jackplugs on side panel; Interior cab light; External 12 volt DIN jackplug for rotary beacon; 7 pin trailer light outlet; Radio speakers/ aerial/wiring standard (Radio Dealer fitment)

DIMENSIONS

On 14.9 x 24 tyres.

Overall length over chassis: 198.5" (5055mm)

Overall height over cab: 115" (2920mm)

Wheelbase: 133.5" (3400mm); Distance from rear of cab to centre of rear axle 71" (1805mm).

Distance from rear of cab to end of chassis 95" (2410mm). Width over axle hubs 80.5" (2045mm). Minimum turning radius to centre line of inside wheel: 78.25" (1985mm); Ground clearance under axles – 14.9 x 24 wheels – 20" (505mm); 11.2 x 48 wheels – 28" (710mm)

NOTE: 3700mm wheelbase version also available.

Ground clearance may vary depending on make of tyre and pressure.

TRAVEL SPEEDS

(CALCULATED)

On 14.9 x 24 Tyres – General purpose wheels

AT 2500 ENGINE RPM		AT 1800 ENGINE RPM	
Low Range			
	KPH	MPH	
1	3.03	1.89	1
2	5.47	3.42	2
3	9.53	5.96	3
4	14.36	8.98	4
5	19.82	12.39	5
R	3.35	2.10	R

High Range

KPH		MPH	
1	6.72	4.20	1
2	12.15	7.60	2
3	21.15	13.22	3
4	31.86	19.93	4
5	44.00	27.50	5
R	7.44	4.65	R

On 12.4 x 46 or 11.2 x 48 Rowcrop wheels

AT 2500 ENGINE RPM		AT 1800 ENGINE RPM	
Low Range			
	KPH	MPH	
1	4.17	2.1	1
2	7.55	4.72	2
3	13.14	8.21	3
4	19.80	12.37	4
5	27.32	17.08	5
R	4.62	2.89	R

High Range

KPH		MPH	
1	9.26	5.79	1
2	16.76	10.47	2
3	29.16	18.23	3
4	43.93	27.47	4
5	60.65*	37.91	5
R	10.26	6.41	R

Note: As the PTO speed is variable the required travel speed should be selected using a suitable gear and engine speed combination before adjusting the PTO speed to 540 rpm.

*Note: Maximum design speed 50KPH (30MPH)

WHEELS AND TYRES

Wheel specification – 8 x 18mm wheel studs for 90 degree conical end nuts on 275mm PCD. Hub mounting diameter 220mm. Axle length over wheel flanges 70.5" (1790mm)

Various wheel sizes available to order.

Note wheels previously used on an MB-Trac will fit the BUGGI axle but special wheel nuts are required (see price list).

WEIGHTS

Vehicle Weight (depending on specification)

Bare vehicle weight 3.85 tonnes;

Front axle 2.42 tonnes; Rear axle 1.43 tonnes

Axle Loads (on standard wheels)

Front axle 4.0 tonnes at 70.5" (1790mm) track

Rear axle 4.5 tonnes at 70.5" (1790mm) track

Pick-up hitch

Superimposed load – 2.0 tonnes max. at pin

Note – Final vehicle weights depend on specification.

SPECIFICATION - CLAYTON 4120 BUGGI

ENGINE

JOHN DEERE 4 Cylinder diesel, In line 4 stroke, direct injection, turbocharged, 4.5 litres (276 cu.in.) displacement, water cooled. 120 BHP (89kW), Gross Power at 2400 rpm at SAE J1995.

Maximum torque 316 lb/ft (429 Nm) at 1400 rpm.

TRANSMISSION

13" Ceramic clutch; 5 Speed synchromesh gearbox, 1 reverse; 2 Speed transfer box with handbrake and front axle disconnect to offer 2 or 4 wheel drive.

Heavy duty industrial axles with hub reduction gears. Fully enclosed internal multi-disc wet brakes both axles and differential lock rear axle only. Steering alignment switches built into steering cylinders. Mounted in 'A' - Frame secured with a single maintenance free bonded rubber bush to the chassis. The axles are located under the chassis by drop forged panhard rods.

CHASSIS & SUSPENSION

High-strength, re-inforced chassis to full automotive standard. High-strength steel flich plates to stress areas.

The single point 'A' frame attachment to the chassis permits maximum axle oscillation. Rear anti-roll bar and heavy-duty shock absorbers control excess movement.

Progressive coil spring on front axle backed up by large capacity rubber spring/bump stop. Hydraulic suspension on rear axle with progressive rubber bump stop. Heavy duty anti-roll bar fitted to rear axle.

A total of 23 rubber mounts and bearings are fitted to major components for maintenance free flexibility and maximum noise suppression. This includes engine, gearbox, transfer box, A-frames, panhard rods, cab, pick-up hitch hangar, radiator, steering column.

Front mudguards (fit 24"/28"/36" wheels only).

HYDRAULIC CIRCUITS

Twin gear pumps, front mounted via flexible drive coupling from engine crankshaft, one exclusive to power take-off motor the other for steering, trailer braking system and main hydraulic valve block. Oil cooler is fitted as standard equipment.

Main Service Pump, 46 litres/min at 2500 rpm supplies steering, optional hydraulic trailer brake valve, 3 point linkage and 3 spool valve block (3 Double Acting 1 Single).

Standard Power Take Off Pump (PTO) 69 litres/min at 2500 rpm. Optional pump 109 litres/min with additional oil cooler. The PTO pump supplies oil exclusively to hydraulic power take off motor (6 spline 540 rpm) thus ensuring a constant speed irrespective of the use of other hydraulic functions. Other pumps available to special order up to 50 HP.

Pressures: PTO pump 190 bar (2750 psi). Service pump 190 bar (2750 psi). Trailer brake valve 117 bar (1700 psi).

POWER TAKE OFF MOTORS

Standard 540 rpm 6 spline PTO motor fully guarded. Standard Danfoss OMS 80 unit 14.5 HP (10.8 kW) @ 540 rpm, option 23HP (17kW).

CAB

Full safety cab tested and approved to EEC spec. Extensive glare free tinted glazing, with toughened, tinted glass to all windows.

Approved laminated windscreen, front and rear wash/wipe systems.

Steering console houses integral steering column control for turn signal, front wash/wipe and horn, tachometer/hour meter, fuel and engine coolant temperature gauges. Warning light cluster containing vehicle turn signal, trailer turn signal, headlight main beam, handbrake 'on', low engine oil pressure, air cleaner element blockage, battery charge warning.

Side mounted electrical console cabinet with external service access door. Six switch bank for front/side lights, front worklamps, rotary beacon, rear/side worklamps, rear wash/wipe and hazard lights plus 2/4 wheel steer switch, area/speed meter. Engine stop/start switch. Aerial, speakers and wiring for radio. Interior light, heater unit, air conditioning, front mounted cab filters (charcoal filters optional).

Control levers for three point linkage and hydraulic valve block. Suspension seat. Access into cab for implement controls through cable entry position behind seat.

ELECTRICAL

75 amp/hour alternator; 12 volt negative earth system; 2 x 66 amp/hour batteries; Dedicated cabinet with external access door; Front side/turn/quartz halogen headlight units; 2 front, 2 side and 2 rear mounted quartz halogen worklamps; Rear/stop/turn lamps with number plate illumination; Large independent front and rear commercial wash/wipe units; Cab heater/blower, air conditioning optional; 2 x 12 volt DIN jackplugs on side panel; Interior cab light; External 12 volt DIN jackplug for rotary beacon; 7 pin trailer light outlet; Radio speakers/aerial/wiring standard (Radio Dealer fitment)

DIMENSIONS

On 14.9 x 24 Tyres

Overall length over chassis: 198.5" (5055mm)
Overall height over cab: 115" (2920mm)
Wheelbase: 133.5" (3400mm); Distance from rear of cab to centre of rear axle 71" (1805mm). Distance from rear of cab to end of chassis 95" (2410mm). Width over axle hubs 80.5" (2045mm). Minimum turning radius to centre line of inside wheel: 78.25" (1985mm); Ground clearance under axles - 14.9 x 24 wheels - 20" (505mm); 11.2 x 48 wheels - 28" (710mm)
NOTE: 3700mm wheelbase version also available.

Ground clearance may vary depending on make of tyre and pressure.

TRAVEL SPEEDS

(CALCULATED)

On 14.9 x 24 Tyres - General purpose wheels

AT 2500 ENGINE RPM			AT 1800 ENGINE RPM		
Low Range					
	KPH	MPH		KPH	MPH
1	3.03	1.89	1	2.18	1.36
2	5.47	3.42	2	3.94	2.46
3	9.53	5.96	3	6.86	4.29
4	14.36	8.98	4	10.34	6.46
5	19.82	12.39	5	14.27	8.92
R	3.35	2.10	R	2.41	1.51

High Range

	KPH	MPH		KPH	MPH
1	6.72	4.20	1	4.84	3.02
2	12.15	7.60	2	8.75	5.47
3	21.15	13.22	3	15.23	9.52
4	31.86	19.93	4	22.94	14.35
5	44.00	27.50	5	31.68	19.80
R	7.44	4.65	R	5.36	3.35

On 12.4 x 46 or 11.2 x 48 Rowcrop wheels

AT 2500 ENGINE RPM			AT 1800 ENGINE RPM		
Low Range					
	KPH	MPH		KPH	MPH
1	4.17	2.61	1	3.00	1.88
2	7.55	4.72	2	5.43	3.40
3	13.14	8.21	3	9.46	5.91
4	19.80	12.37	4	14.25	8.91
5	27.32	17.08	5	19.67	12.29
R	4.62	2.89	R	3.33	2.08

High Range

	KPH	MPH		KPH	MPH
1	9.26	5.79	1	6.67	4.17
2	16.76	10.47	2	12.06	7.54
3	29.16	18.23	3	21.00	13.12
4	43.93	27.47	4	31.63	19.78
5	60.65*	37.91	5	43.67	27.29
R	10.26	6.41	R	7.39	4.62

Note: As the PTO speed is variable the required travel speed should be selected using a suitable gear and engine speed combination before adjusting the PTO speed to 540 rpm.

*Note: Maximum design speed 50KPH (30MPH)

WHEELS AND TYRES

Wheel specification - 8 x 18mm wheel studs for 90 degree conical end nuts on 275mm PCD. Hub mounting diameter 220mm. Axle length over wheel flanges 70.5" (1790mm)

Various wheel sizes available to order.

Note wheels previously used on an MB-Trac will fit the BUGGI axle but special wheel nuts are required (see price list).

WEIGHTS

Vehicle Weight (depending on specification)

Bare vehicle weight 3.95 tonnes;

Front axle 2.47 tonnes; Rear axle 1.48 tonnes

Axle Loads (on standard wheels)

Front axle 4.0 tonnes at 70.5" (1790mm) track

Rear axle 6.0 tonnes at 70.5" (1790mm) track

Pick-up hitch

Superimposed load - 2.0 tonnes max. at pin

Note - Final vehicle weights depend on specification