

## dimensions (mm)

A Wheelbase	3600	3900
D Overall length	5817	6117
Frame height at rear axle (unladen)	979	979
G Gantry to end of frame	3540	3840
Ground clearance front	277	277
Ground clearance rear	277	277
Cab tilt angle	70°	70°
Turning circle (wall to wall) m	14.9	15.8
Recommended 5th wheel position:		
Full length trailers	540	840
Other trailers	640	740
Frame width at rear	757	757

# Overall height dimension shows the range of adjustment of the air deflector  
- For MegaSpace cab the range is 3870-4030.

## weights (kg)

Kerb Weights	V6		V8	
	Wheelbase mm	3600	3900	3600
Front axle	5050	5050	5270	5280
Rear axle	1850	1860	1880	1880
Total	6900	6910	7150	7160

Plated Weights	UK Authorised	C&U	Design
	Front axle	7100	7100
Rear axle	11500	10500	11500
GVW	18000	17000	18000
GCW	40000	38000	44000

Weights and dimensions shown are for Long Distance specification with a high roof sleeper cab.

Weights and dimensions are to standard specification with 20 litres of fuel, 5 litres of AdBlue, oil, water and tools.

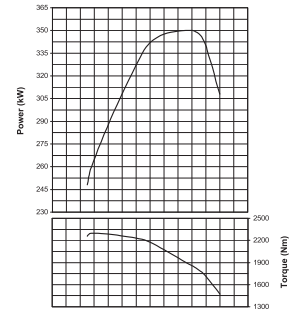
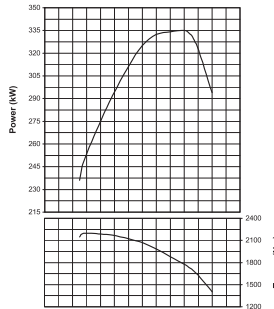
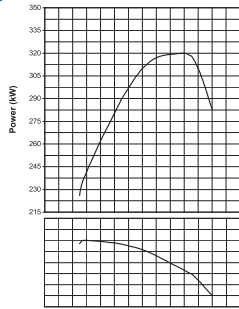
Kerb weights are subject to a manufacturing tolerance of  $\pm 2\%$ . The right is reserved to alter specification or equipment without notice.



# engine

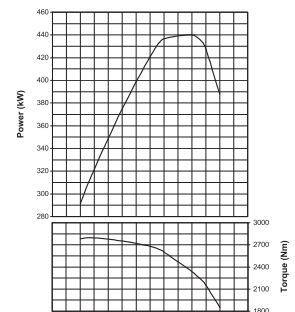
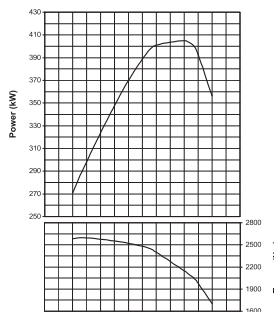
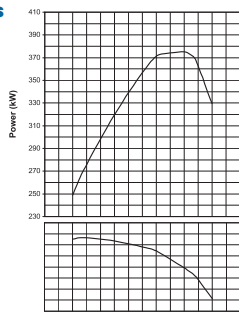
Type	1844LS	1846LS	1848LS
	Ω	Mercedes-Benz OM501LA	
		12 litre turbo-intercooled	
		4 valves per cylinder	
		V6 direct injection diesel	
<b>Max. power</b> @ 1800 rpm	320kW 435PS	335kW 456PS	350kW 476PS
<b>Max. torque</b> @ 1080 rpm	2100Nm 1549lbft	2200Nm 1623lbft	2300Nm 1696lbft
<b>Bore</b>		130mm	
<b>Stroke</b>		150mm	
<b>Capacity</b>		11.95 litres	
<b>Control</b>		Telligent electronic engine management	
<b>Fuel Injection</b>		Direct injection via unit injectors	
<b>Cooling</b>		Water cooled with electromagnetic fan	
<b>Security</b>		Immobiliser to Thatcham H2	
<b>Engine brake</b>		Constant throttle & butterfly	
<b>Exhaust</b>		Stainless steel with SCR catalytic converter	

## Performance Curves



Type	1851LS	1855LS	1860LS
		Mercedes-Benz OM502LA	
		16 litre turbo-intercooled	
		4 valves per cylinder	
		V8 direct injection diesel	
<b>Max. power</b> @ 1800 rpm	375kW 510PS	405kW 551PS	440kW 598PS
<b>Max. torque</b> @ 1080 rpm	2400Nm 1770lbft	2600Nm 1918lbft	2800Nm 2065lbft
<b>Bore</b>		130mm	
<b>Stroke</b>		150mm	
<b>Capacity</b>		15.93 litres	
<b>Control</b>		Telligent electronic engine management	
<b>Fuel Injection</b>		Direct injection via unit injectors	
<b>Cooling</b>		Water cooled with electromagnetic fan	
<b>Security</b>		Immobiliser to Thatcham H2	
<b>Engine brake</b>		Constant throttle & butterfly	
<b>Exhaust</b>		Stainless steel with SCR catalytic converter	

## Performance Curves





# transmission

## Gearbox & Gearbox Ratios

Mercedes PowerShift – fully automated 12 speed constant mesh gearbox.

	440		460, 480, 510, 550, 600	
	G211	G281	G211	G281
<b>1st</b>	14.93	14.93	<b>9th</b>	2.05
<b>2nd</b>	11.67	11.64	<b>10th</b>	1.60
<b>3rd</b>	9.93	9.02	<b>11th</b>	1.28
<b>4th</b>	7.06	7.03	<b>12th</b>	1.00
<b>5th</b>	5.63	5.64	<b>1st Reverse</b>	14.93
<b>6th</b>	5.37	4.40	<b>2nd Reverse</b>	11.67
<b>7th</b>	3.39	3.39	<b>3rd Reverse</b>	3.39
<b>8th</b>	2.65	2.65	<b>4th Reverse</b>	2.65

## Clutch

<b>Type</b>	Automatically actuated single dry plate clutch
<b>Diameter</b>	430mm

## Axles

<b>Front</b>	Mercedes-Benz 'I' beam
<b>Rear Bogie</b>	Mercedes-Benz single reduction Cross-axle differential lock

# chassis

## Brakes

<b>Front/Rear</b>	Disc brakes
<b>Service</b>	Telligent electro-pneumatic braking Dual circuit air 10 bar operating pressure Load sensing Automatic brake adjustment Heated air dryer Anti-lock brakes ASR traction control Hill hold feature
<b>Secondary</b>	Front, rear and trailer
<b>Parking</b>	Front/rear spring brakes Hand control operation
<b>Trailer</b>	Two line
<b>Exhaust brake</b>	Linked to foot brake

## Steering

<b>Type</b>	Recirculating ball Variable ratio Integral power assistance Steering column adjustable for height and rake Steering column lock
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## Fuel Tank

Fuel	Capacity (litres)	Position
<b>V6</b>	650 aluminium	RHS
<b>V8</b>	450 aluminium	RHS
<b>AdBlue</b>	85 Lockable caps	RHS

## Rear Axles Ratios & Performance

Engine	440	460	480	510	550	600
<b>Axle Ratio</b>	2.533	2.533	2.533	2.733	2.733	2.733
<b>Max. geared speed (mph)</b>	84	84	84	78	78	78
<b>RPM at 90kmph (56mph)</b>	1195	1195	1195	1289	1289	1289
<b>% Rolling gradeability</b>						
<b>40 tonne</b>	35	36	38	43	47	+50
<b>Axle Ratio</b>	2.846	2.846	2.846	2.929	2.929	2.929
<b>Max. geared speed (mph)</b>	75	75	75	73	73	73
<b>RPM at 90kmph (56mph)</b>	1343	1343	1343	1382	1382	1382
<b>% Rolling gradeability</b>						
<b>40 tonne</b>	39	41	43	46	+50	+50
<b>Axle Ratio</b>	3.077	3.077	3.077	3.154	3.154	3.154
<b>Max. geared speed (mph)</b>	69	69	69	68	68	68
<b>RPM at 90kmph (56mph)</b>	1452	1452	1452	1488	1488	1488
<b>% Rolling gradeability</b>						
<b>40 tonne</b>	42	45	47	50	+50	+50

## Wheels & Tyres

<b>Wheels</b>	8.25 x 22.5
<b>Tyres</b>	295 / 80R 22.5

## Suspension

<b>Front axle</b>	Parabolic leaf springs Double acting shock absorbers Stabiliser
<b>Rear axle</b>	2 bag full air with electronic modulation Double acting shock absorbers Stabiliser

## Electrical Systems

<b>Voltage</b>	24 volt Negative insulated return
<b>Batteries</b>	2 x 12 volt, 220Ah
<b>Electrical Distribution System</b>	Circuit breaker protection
<b>Alternator</b>	28 volt/80 amp
<b>Road lights</b>	Halogen headlamps Reversing lights Rear fog lamp

## General

Catwalk
Gantry with suzies and electrical connections
5th wheel mounting angles
Three piece rear wings
Just JSK 36 fixed 5th wheel
Coupling lamp
Front underrun protection

# options

Description	Weight Adjustments		
	Front	Rear	Total
<b>Driveline</b>			
PTO single outlet heavy duty (slow/med/fast)	+25	+5	+30
PTO twin outlet heavy duty (slow/med/fast)	+35	+5	+40
PTO single outlet light duty (pump or flange mounting)	+10	0	+10
Speedline wheels 8.25 x 22.5*	-25	-55	-80
9.00 x 22.5*	-30	-65	-95
Alcoa wheels 8.25 x 22.5*	-35	-65	-100
9.00 x 22.5*	-40	-80	-120
16 speed Mercedes PowerShift gearbox	0	0	0
16 speed manual/Telligent gearbox	+10	0	+10
<b>Chassis</b>			
7.5 tonne front axle incl. 315/80R front tyres and 9.00 x 22.5 steel rims	+20	0	+20
8 tonne front axle incl. 315/80R front tyres and 9.00 x 22.5 steel rims	+40	0	+40
9 tonne front axle	+17	0	+17
Front air suspension	+30	0	+30
Jost slider ilo fixed	+20	+80	+100
Low mounted brake and electrical suzies	-	-	-
<b>Brakes</b>			
Aluminium air tanks	-15	-15	-30
<b>Cab</b>			
MegaSpace cab	+230	0	+230

\*In lieu of same size steel rims.

Component weights are provided as a guide but may vary according to production tolerances

**NOTE:**

For cab options please see the separate Actros Cab Specification Sheet CV 700