

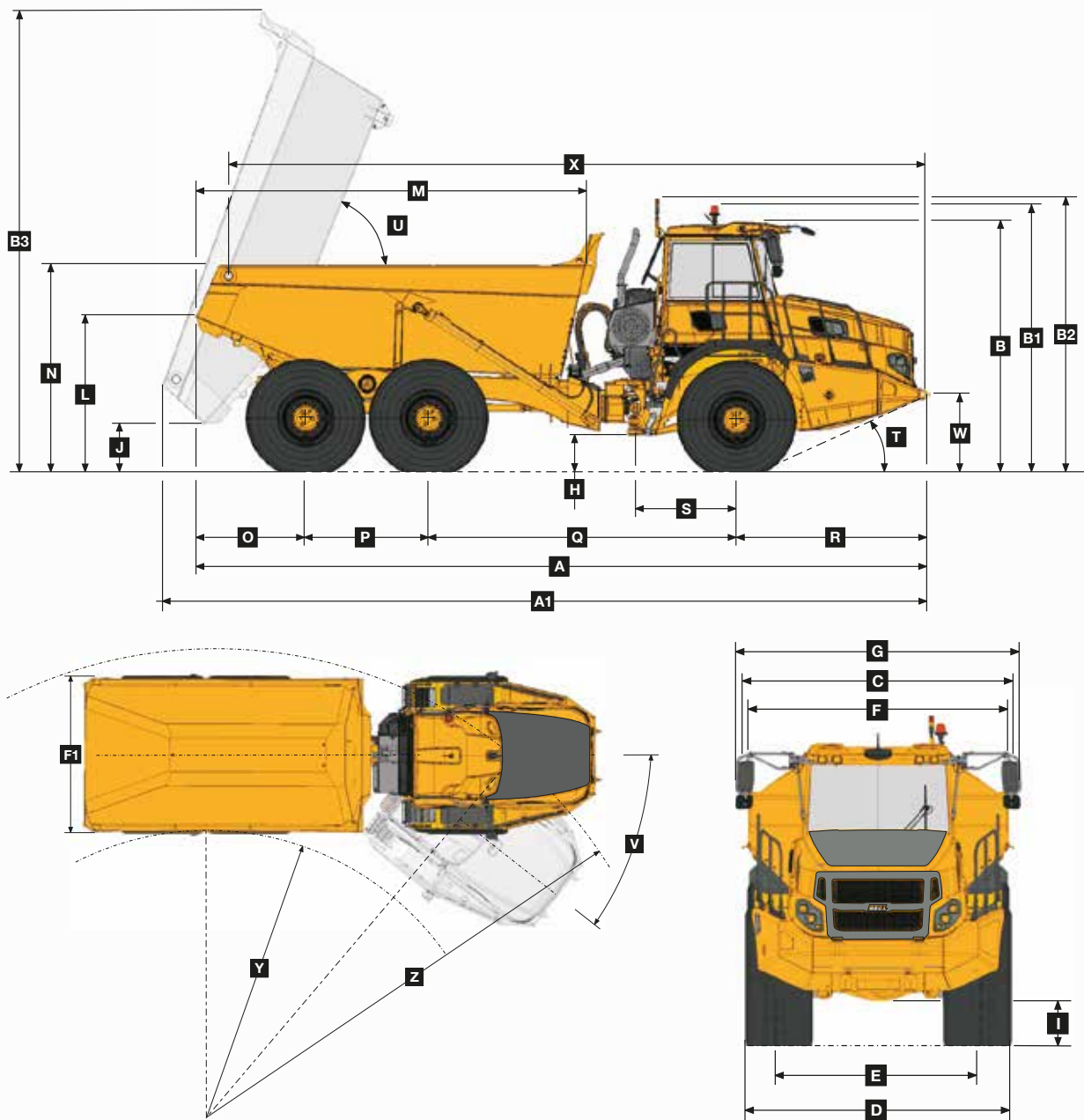
B25E Articulated Dump Truck

ENGINE Manufacturer Mercedes Benz Model OM906LA Configuration Inline 6, turbocharged and intercooled. Maximum Net Power 205 kW (275 hp) @ 2 200 rpm in accordance with UN ECE R120 Gross Torque 1 100 Nm (811 lbft) @ 1 200 -1 600 rpm Displacement 6,37 litres (389 cu.in) Auxiliary Brake Exhaust Valve Brake Engine Valve Brake Fuel Tank Capacity 379 litres (100 US gal) Certification OM906LA meets EU Stage II / EPA Tier 2 emissions regulations	TRANSFER CASE Manufacturer Kessler Series W1400 Layout Remote mounted Gear Layout Three in-line helical gears Output Differential Interaxle 33/67 proportional differential. Automatic inter-axle differential lock.	WHEELS Type Radial Earthmover Tyre 23.5 R 25 (750/65 R 25 Optional)	DUMPING SYSTEM Two double-acting, single stage, dump cylinders Raise Time 12 s Lowering Time 10 s Tipping Angle 70° standard, or any lower angle programmable																					
TRANSMISSION Manufacturer Allison Model 3500PR ORS Configuration Fully automatic planetary transmission with integral retarder. Layout Engine mounted Gear layout Constant meshing planetary gears, clutch operated Gears 6 Forward, 1 Reverse Clutch Type Hydraulically operated multi-disc Control Type Electronic Torque Control Hydrodynamic with lock-up in all gears	AXLES Manufacturer Bell Model 15T Differential High input limited slip differential with spiral bevel gears. Final Drive Outboard heavy duty planetary on all axles	FRONT SUSPENSION Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts. Optional active dual springrate Comfort Ride suspension available, including height control.	PNEUMATIC SYSTEM Air drier with heater and integral unloader valve, serving park brake and auxiliary functions. System Pressure 8,1 Bar (117 psi)																					
	BRAKING SYSTEM Service Brake Dual circuit, full hydraulic actuation dry disc brakes with 8 calipers. Maximum brake force: 160,5 kN (36 081 lbf) Park & Emergency Spring applied, air released driveline mounted disc. Maximum brake force: 195 kN (43 900 lbf) Auxiliary Brake Automatic exhaust valve brake and engine valve brake. Automatic, adjustable, integral, hydrodynamic transmission retarder. Output shaft speed dependant. Total Retardation Power 250kW (335 hp) Continuous 539 kW (723 hp) Maximum	REAR SUSPENSION Pivoting walking beams with laminated rubber suspension blocks. Optional passive dual-springrate Comfort Ride walkingbeam available.	ELECTRICAL SYSTEM Voltage 24 V Battery Type Two AGM (Absorption Glass Mat) type Battery Capacity 2 X 75 Ah Alternator Rating 28 V 80 A																					
		HYDRAULIC SYSTEM Full load sensing system serving the prioritized steering, body tipping and brake functions. A ground-driven, load sensing emergency steering pump is integrated into the main system. Pump Type Variable displacement load sensing piston Flow 202 L/min (53 gal/min) Pressure 310 Bar (4 500 psi) Filter 5 microns	VEHICLE SPEEDS <table border="1"> <tr><td>1st</td><td>7 km/h</td><td>4 mph</td></tr> <tr><td>2nd</td><td>15 km/h</td><td>9 mph</td></tr> <tr><td>3rd</td><td>23 km/h</td><td>14 mph</td></tr> <tr><td>4th</td><td>35 km/h</td><td>22 mph</td></tr> <tr><td>5th</td><td>47 km/h</td><td>29 mph</td></tr> <tr><td>6th</td><td>50 km/h</td><td>31 mph</td></tr> <tr><td>R</td><td>7 km/h</td><td>4 mph</td></tr> </table>	1st	7 km/h	4 mph	2nd	15 km/h	9 mph	3rd	23 km/h	14 mph	4th	35 km/h	22 mph	5th	47 km/h	29 mph	6th	50 km/h	31 mph	R	7 km/h	4 mph
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		STEERING SYSTEM Double acting cylinders, with ground-driven emergency steering pump. Lock to lock turns 4,1 Steering Angle 45°	CAB ROPS/FOPS certified 74 dBA internal sound pressure measured according to ISO 6396.																					

Load Capacity & Ground Pressure

OPERATING WEIGHTS		GROUND PRESSURE				LOAD CAPACITY		OPTION WEIGHTS	
UNLADEN	kg (lb)	LADEN				BODY	m ³ (yd ³)	kg (lb)	
Front	9 632 (21 235)	No sinkage/Total Contact Area (as recommended by tyre manufacturer)	Calculation method used by competition	Struck Capacity		11,5 (15)	Bin liner	751 (1 656)	
Middle	5 568 (12 275)			SAE 2:1 Capacity		15 (19,5)	Tailgate	735 (1 621)	
Rear	5 528 (12 187)	23.5 R 25	kPa (Psi)	23.5 R 25	kPa (Psi)	SAE 1:1 Capacity	18 (23,5)	Wheelset 750/65R25	
Total	20 728 (45 697)	Front	267 (38,7)	Front	131 (19)	SAE 2:1 Capacity	15 (19,6)	(per vehicle) Add 642 (1 415)	
		Mid/Rear	357 (51,8)	Mid/Rear	155 (22,5)	with tailgate			
LADEN	kg (lb)						EXTRA WHEELSET		
Front	12 372 (27 276)	750/65 R 25		750/65 R 25		Rated Payload	24 000 kg	23.5 R 25	
Middle	16 198 (35 710)	Front	229 (33,2)	Front	106 (15,4)		(52 911 lbs)	(per vehicle) Add	544 (1 199)
Rear	16 158 (35 622)	Mid/Rear	270 (39,1)	Mid/Rear	128 (18,6)			750/65R25	
Total	44 728 (98 608)							(per vehicle) Add	656 (1 446)

Dimensions

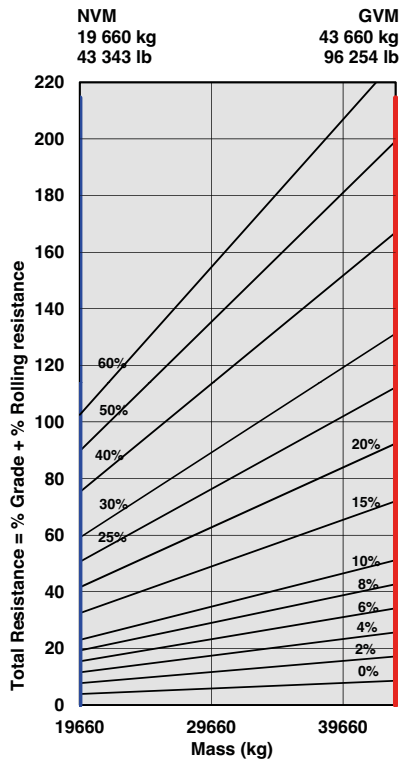


Machine Dimensions

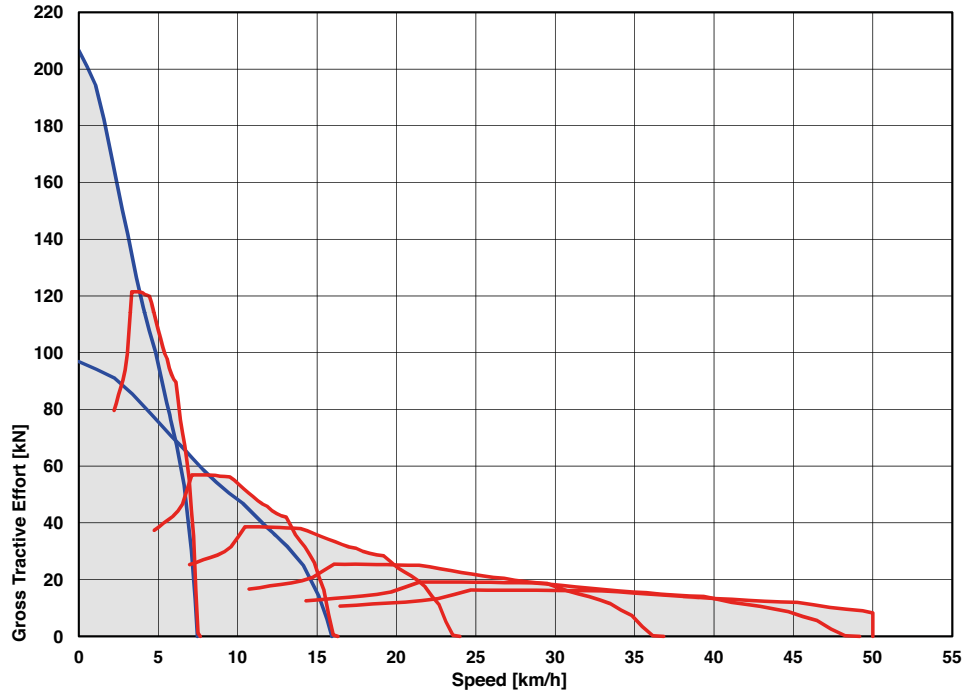
A	Length - Transport Position	9 953 mm (32 ft. 7 in.)	L	Bin Lip Height - Transport Position	2 176 mm (7 ft. 1 in.)
A1	Length - Bin Fully Tipped	10 395 mm (34 ft. 1 in.)	M	Bin Length	5 294 mm (17 ft. 4 in.)
B	Height - Transport Position	3 426 mm (11 ft. 2 in.)	N	Load over Height	2 864 mm (9 ft. 4 in.)
B1	Height - Rotating Beacon	3 661 mm (12 ft.)	O	Rear Axle Centre to Bin Rear	1 500 mm (4 ft. 11 in.)
B2	Height - Load Light	3 747 mm (12 ft. 3 in.)	P	Mid Axle Centre to Rear Axle Centre	1 670 mm (5 ft. 5 in.)
B3	Bin Height - Fully Tipped	6 307 mm (20 ft. 8 in.)	Q	Mid Axle Centre to Front Axle Centre	4 181 mm (13 ft. 8 in.)
C	Width over Mudguards	2 985 mm (9 ft. 9 in.)	R	Front Axle Centre to Machine Front	2 602 mm (8 ft. 6 in.)
D	Width over Tyres - 23.5R25	2 940 mm (9 ft. 7 in.)	S	Front Axle Centre to Artic Centre	1 362 mm (4 ft. 5 in.)
D1	Width over Tyres - 750/65 R25	2 998 mm (9 ft. 10 in.)	T	Approach Angle	25°
E	Tyre Track Width - 23.5R25	2 356 mm (7 ft. 8 in.)	U	Maximum Bin Tip Angle	70°
E1	Tyre Track Width - 750/65 R25	2 260 mm (7 ft. 4 in.)	V	Maximum Articulation Angle	45°
F	Width over Bin	2 968 mm (9 ft. 8 in.)	W	Front Tie Down Height	1 075 mm (3 ft. 6 in.)
F1	Width over Tailgate	2 998 mm (9 ft. 10 in.)	X	Machine Lifting Centres	9 443 mm (30 ft. 11 in.)
G	Width over Mirrors - Operating Position	3 260 mm (10 ft. 8 in.)	Y	Inner Turning Circle Radius - 23.5R25	4 110 mm (13 ft. 5 in.)
H	Ground Clearance - Artic	537 mm (21.14 in.)	Y1	Inner Turning Circle Radius - 750/65 R25	4 081 mm (13 ft. 4 in.)
I	Ground Clearance - Front Axle	488 mm (19.21 in.)	Z	Outer Turning Circle Radius - 23.5R25	8 000 mm (26 ft. 2 in.)
J	Ground Clearance - Bin Fully Tipped	670 mm (26.38 in.)	Z1	Outer Turning Circle Radius - 750/65 R25	8 029 mm (26 ft. 4 in.)
K	Ground Clearance - Under Run Bar	N/A			

Gradeability/Rimpull

1. Determine tractive resistance by finding intersection of vehicle mass line and grade line. NOTE: 2% typical rolling resistance is already assumed in chart and grade line.
2. From this intersection, move straight right across charts until line intersects rimpull curve.
3. Read down from this point to determine maximum speed attained at that tractive resistance.

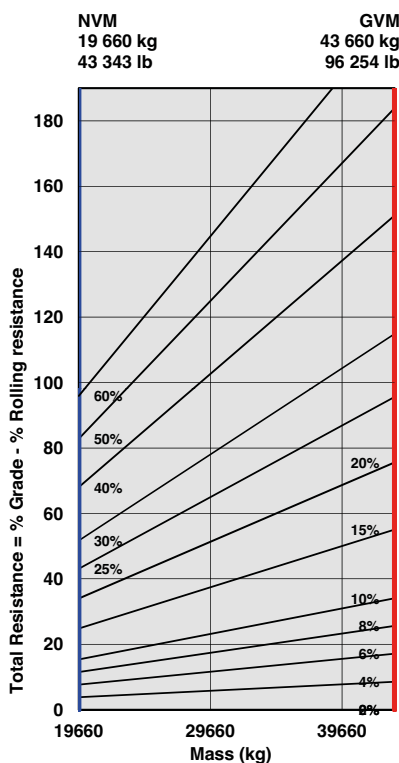


ADT, B25E 6X6 - Tractive Effort

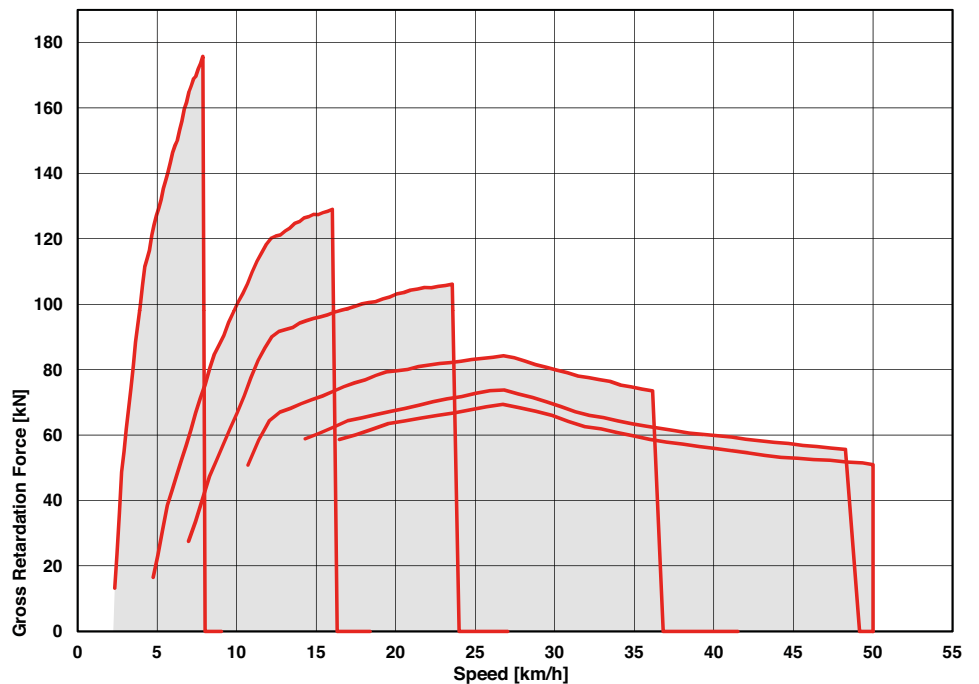


Retardation

1. Determine retardation force required by finding intersection of vehicle mass line.
2. From this intersection, move straight right across charts until line intersects the curve. NOTE: 2% typical rolling resistance is already assumed in chart.
3. Read down from this point to determine maximum speed.



ADT, B25E 6X6 - Retardation



B18E	B20E	B25E (6x4)	B25E	B30E		B18E	B20E	B25E (6x4)	B25E	B30E	
ENGINE						CAB (continued)					
●	●	●	●	●	Engine valve brake and exhaust brake	●	●	●	●	●	Remote battery jump start
●	●	●	●	●	Dual element air cleaner with dust ejector valve	●	●	▲	▲	▲	High visibility mirrors
●	●	●	●	●	Precleaner with automatic dust scavenging	●	●	●	●	●	12-volt power outlet
●	●	●	●	●	Water separator	●	●	●	●	●	Cup holder
●	●	●	●	●	Serpentine drive belt with automatic tensioner	▲	▲	▲	▲	▲	Electric adjustable and heated mirrors
COOLING						●	●	●	●	●	Cooled/heated lunch box
●	●	●	●	●	Crankshaft mounted electronically controlled viscous fan drive	●	●	●	●	●	Backlit sealed switch module functions with: Wiper control / Lights / Heated mirrors / Retarding aggressiveness / Transfer case differential lock / Transmission gear hold / Dump-body tip limit / Automatic dump-body tip settings / Airconditioner/Heater controls / Preselected Speed Control
●	●	●	●	●	Fan guard	●	●	●	●	●	Deluxe 10" colour LCD: Speedometer / Fuel gauge / Transmission oil temperature gauge / Engine coolant temperature gauge / LED function/warning indicators and audible alarm / Transmission gear selection / Tachometer / Battery voltage / Hour meter / Odometer / Fuel consumption / Tip counter / Trip timer / Trip distance / Metric/English units / Service codes/diagnostics
PNEUMATIC SYSTEM						DUMP BODY					
●	●	●	●	●	Engine-mounted compressor	●	●	●	●	●	Partial up dump-body mechanical
●	●	●	●	●	Air drier with heater	▲	▲	▲	●	●	Fully up dump-body mechanical lock
●	●	●	●	●	Integral unloader valve	▲	▲	▲	▲	▲	Body liner
ELECTRICAL SYSTEM						▲	▲	▲	▲	▲	Tailgate
●	●	●	●	●	Battery disconnect	▲	▲	▲	▲	▲	Body heater
●	●	●	●	●	Drive lights	▲	▲	▲	▲	▲	Less dump body and cylinders
●	●	●	●	●	Air horn	▲	▲	▲	▲	▲	Greedy boards (200 mm)
●	●	●	●	●	Reverse alarm	OTHER					
▲	▲	▲	▲	▲	White noise reverse alarm	●	●	●	●	●	Automatic Traction Control (ATC)
●	●	●	●	●	Rotating beacon	●	●	●	●	●	20.5R25 Radial earthmover tyres
●	●	●	●	●	Pitch Roll sensor	●	●	●	●	●	23.5R25 Radial earthmover tyres
▲	▲	▲	▲	▲	LED Artic reverse light	●	●	●	●	●	Remote grease banks
▲	▲	▲	▲	▲	Halogen Artic reverse light	▲	▲	▲	▲	▲	Automatic greasing
●	●	●	●	●	LED reverse light	●	●	●	●	●	Onboard weighing
STEERING SYSTEM						▲	▲	▲	▲	▲	Load lights: stack
▲	▲	▲	▲	▲	Bi-directional ground driven secondary steering pump	▲	▲	▲	▲	▲	Comfort ride suspension (Front)
●	●	●	●	●	Ground-driven secondary steering pump	▲	▲	▲	▲	▲	Comfort ride suspension (Rear)
CAB						▲	▲	▲	▲	▲	Reverse camera
●	●	●	●	●	ROPS/FOPS certification	▲	▲	▲	▲	▲	HSE hand rails
●	●	●	●	●	Tilt cab	●	●	●	●	●	Cab peak
●	●	●	●	●	Gas strut-supported door	▲	▲	▲	▲	▲	High pressure hydraulic filter
●	●	●	●	●	I-Tip programmable dump-body tip settings	▲	▲	▲	▲	▲	Fuel heater
●	●	●	●	●	HVAC Climate control system	●	●	●	●	●	Belly cover
●	●	●	●	●	AM/FM radio with Aux + USB	▲	▲	▲	▲	▲	Cross member cover
●	●	●	●	●	Rear window guard	▲	▲	▲	▲	▲	Remote transmission filters
●	●	●	●	●	Wiper/washer with intermittent control	▲	▲	▲	▲	▲	Window smash button
▲	▲	▲	▲	▲	Extra wide wiper system	●	●	●	●	●	Electronic bonnet opening
●	●	●	●	●	Tilt and telescoping steering wheel	▲	▲	▲	▲	▲	
●	●	●	●	●	Centre-mount air-suspension seat	▲	▲	▲	▲	▲	
●	●	●	●	●	Retractable 3-point seat belt	▲	▲	▲	▲	▲	
●	●	●	●	●	Foldaway trainer seat with retractable seat belt	▲	▲	▲	▲	▲	
▲	▲	▲	▲	▲	Rotating beacon: seat belt installation	▲	▲	▲	▲	▲	
●	●	●	●	●	Halogen work lights	▲	▲	▲	▲	▲	
▲	▲	▲	▲	▲	LED work lights	▲	▲	▲	▲	▲	
▲	▲	▲	▲	▲	Remote engine and machine isolation	●	●	●	●	●	