

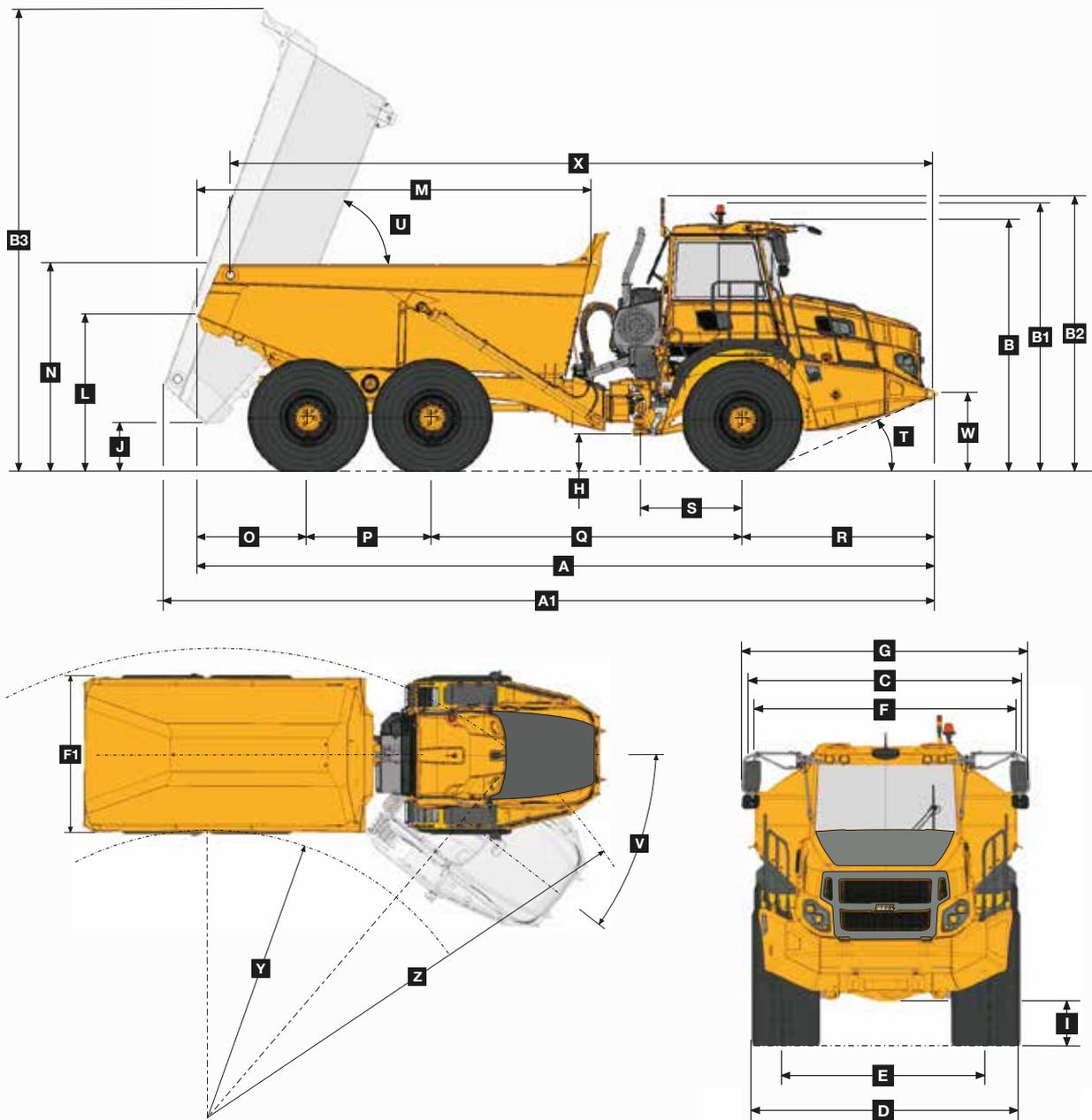
B30E Articulated Dump Truck

<p>ENGINE</p> <p>Manufacturer Mercedes Benz</p> <p>Model OM926LA</p> <p>Configuration Inline 6, turbocharged and intercooled.</p> <p>Maximum Net Power 240 kW (322 hp) @ 2 200 rpm in accordance with UN ECE R120</p> <p>Gross Torque 1 300 Nm (959 lbf) @ 1 200 -1 600 rpm</p> <p>Displacement 7,2 litres (439 cu.in)</p> <p>Auxiliary Brake Exhaust Valve Brake Engine Valve Brake</p> <p>Fuel Tank Capacity 379 litres (100 US gal)</p> <p>Certification OM926LA meets EU Stage II / EPA Tier 2 emissions regulations</p>	<p>TRANSFER CASE</p> <p>Manufacturer Kessler</p> <p>Series W1400</p> <p>Layout Remote mounted</p> <p>Gear Layout Three in-line helical gears</p> <p>Output Differential Interaxle 33/67 proportional differential. Automatic inter-axle differential lock.</p>	<p>WHEELS</p> <p>Type Radial Earthmover</p> <p>Tyre 23.5 R 25 (750/65 R 25 Optional)</p>	<p>DUMPING SYSTEM</p> <p>Two double-acting, single stage, dump cylinders</p> <p>Raise Time 12 s</p> <p>Lowering Time 10 s</p> <p>Tipping Angle 70° standard, or any lower angle programmable</p>																					
<p>TRANSMISSION</p> <p>Manufacturer Allison</p> <p>Model 3400P ORS</p> <p>Configuration Fully automatic planetary transmission with integral retarder</p> <p>Layout Engine mounted</p> <p>Gear layout Constant meshing planetary gears, clutch operated</p> <p>Gears 6 Forward, 1 Reverse</p> <p>Clutch Type Hydraulically operated multi-disc</p> <p>Control Type Electronic</p> <p>Torque Control Hydrodynamic with lock-up in all gears.</p>	<p>AXLES</p> <p>Manufacturer Bell</p> <p>Model 18T</p> <p>Differential High input limited slip differential with spiral bevel gears.</p> <p>Final Drive Outboard heavy duty planetary on all axles</p>	<p>FRONT SUSPENSION</p> <p>Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts.</p> <p>Optional active dual springrate Comfort Ride suspension available, including height control.</p>	<p>PNEUMATIC SYSTEM</p> <p>Air drier with heater and integral unloader valve, serving park brake and auxiliary functions.</p> <p>System Pressure 8,1 Bar (117 psi)</p>																					
	<p>BRAKING SYSTEM</p> <p>Service Brake Dual circuit, full hydraulic actuation wet disc brakes on front and middle axles. Wet brake oil is circulated through a filtration and cooling system.</p> <p>Maximum brake force: 174 kN (39 116 lbf)</p> <p>Park & Emergency Spring applied, air released driveline mounted disc.</p> <p>Maximum brake force: 251 kN (56 400 lbf)</p> <p>Auxiliary Brake Automatic engine valve brake. Automatic retardation through electronic activation of wet brake system.</p> <p>Total Retardation Power 265 kW (355 hp) Continuous 494 kW (662 hp) Maximum</p>	<p>REAR SUSPENSION</p> <p>Pivoting walking beams with laminated rubber suspension blocks.</p> <p>Optional passive dual-springrate Comfort Ride walkingbeam available.</p>	<p>ELECTRICAL SYSTEM</p> <p>Voltage 24 V</p> <p>Battery Type Two AGM (Absorption Glass Mat) type</p> <p>Battery Capacity 2 X 75 Ah</p> <p>Alternator Rating 28 V 80 A</p>																					
		<p>HYDRAULIC SYSTEM</p> <p>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.</p> <p>Pump Type Variable displacement load sensing piston.</p> <p>Flow 202 L/min (53 gal/min)</p> <p>Pressure 310 Bar (4 500 psi)</p> <p>Filter 5 microns</p>	<p>VEHICLE SPEEDS</p> <table border="1"> <tr><td>1st</td><td>8 km/h</td><td>5 mph</td></tr> <tr><td>2nd</td><td>14 km/h</td><td>9 mph</td></tr> <tr><td>3rd</td><td>20 km/h</td><td>12 mph</td></tr> <tr><td>4th</td><td>29 km/h</td><td>18 mph</td></tr> <tr><td>5th</td><td>43 km/h</td><td>26 mph</td></tr> <tr><td>6th</td><td>50 km/h</td><td>31 mph</td></tr> <tr><td>R</td><td>8 km/h</td><td>5 mph</td></tr> </table>	1st	8 km/h	5 mph	2nd	14 km/h	9 mph	3rd	20 km/h	12 mph	4th	29 km/h	18 mph	5th	43 km/h	26 mph	6th	50 km/h	31 mph	R	8 km/h	5 mph
1st	8 km/h	5 mph																						
2nd	14 km/h	9 mph																						
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4th	29 km/h	18 mph																						
5th	43 km/h	26 mph																						
6th	50 km/h	31 mph																						
R	8 km/h	5 mph																						
		<p>STEERING SYSTEM</p> <p>Double acting cylinders, with ground-driven emergency steering pump.</p> <p>Lock to lock turns 4,1</p> <p>Steering Angle 45°</p>	<p>CAB</p> <p>ROPS/FOPS certified 74 dBA internal sound pressure measured according to ISO 6396.</p>																					

Load Capacity & Ground Pressure

*OPERATING WEIGHTS		GROUND PRESSURE				LOAD CAPACITY		OPTION WEIGHTS	
UNLADEN	kg (lb)	LADEN				BODY	m ³ (yd ³)	kg (lb)	
Front	10 953 (24 151)	No sinkage/Total Contact Area (as recommended by tyre manufacturer)	Calculation method used by competition		Struck Capacity	13,5 (17,6)	Bin liner	853 (1 881)	
Middle	6 194 (13 658)		23.5 R 25	kPa (Psi)	23.5 R 25	kPa (Psi)	SAE 2:1 Capacity	17 (22)	Tailgate
Rear	5 738 (12 652)	Front	298 (43,2)	Front	134 (19,4)	SAE 1:1 Capacity	21 (27,5)	Wheelset 750/65R25	
Total	22 885 (50 461)	Mid/Rear	405 (58,7)	Mid/Rear	169 (24,5)	SAE 2:1 Capacity with tailgate	18 (23,5)	(per vehicle) Add 642 (1 415)	
LADEN	kg (lb)							EXTRA WHEELSET	
Front	14 323 (31 582)	750/65 R 25		750/65 R 25		Rated Payload	28 000 kg	23.5 R 25	
Middle	18 509 (40 812)	Front	240 (34,8)	Front	111 (16,1)		(61 740 lbs)	(per vehicle) Add	544 (1 199)
Rear	18 053 (39 807)	Mid/Rear	310 (45)	Mid/Rear	143 (20,7)			750/65R25	
Total	50 885 (112 201)							(per vehicle) Add	656 (1 446)

Dimensions

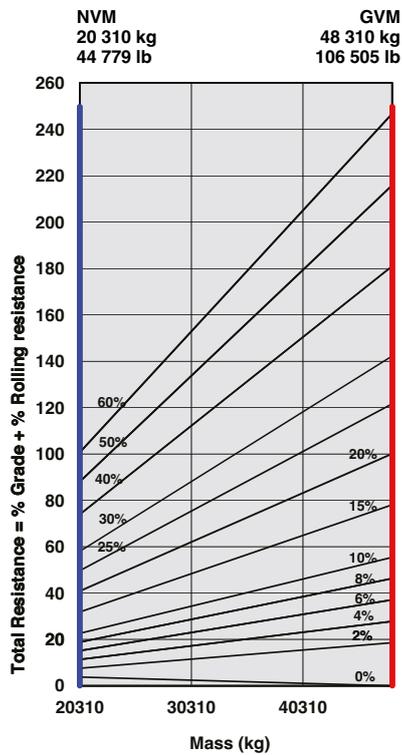


Machine Dimensions

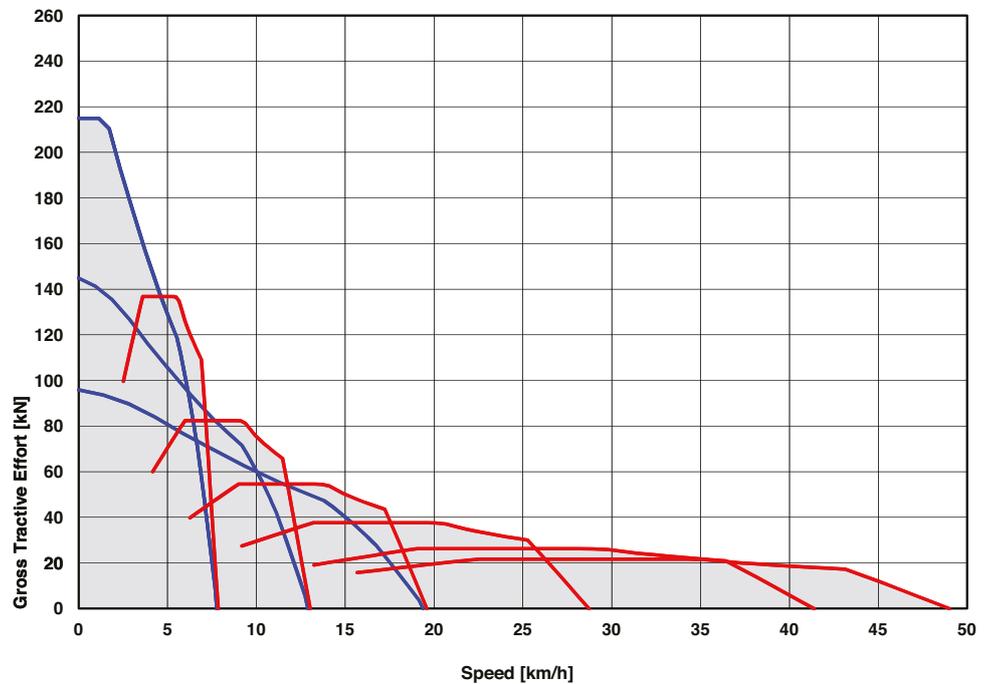
A	Length - Transport Position	9 953 mm (32 ft. 7 in.)	L	Bin Lip Height - Transport Position	2 176 mm (7 ft. 1 in.)
A1	Length - Bin Fully Tipped	10 395 mm (34 ft. 1 in.)	M	Bin Length	5 294 mm (17 ft. 4 in.)
B	Height - Transport Position	3 426 mm (11 ft. 2 in.)	N	Load over Height	2 864 mm (9 ft. 4 in.)
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	3 268 mm (10 ft. 8 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.

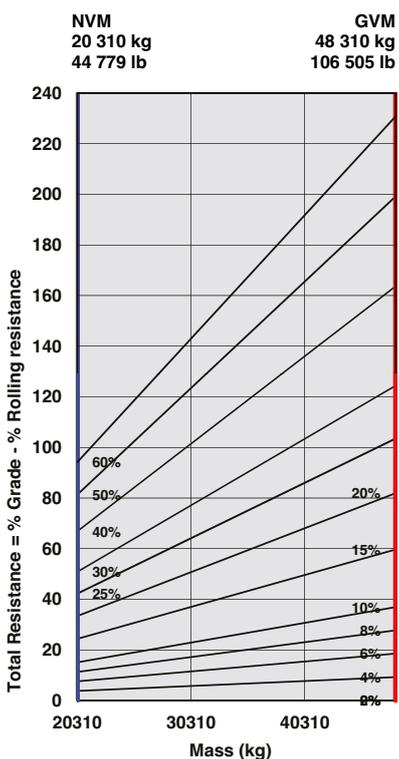


ADT, B30E 6X6 - Tractive Effort

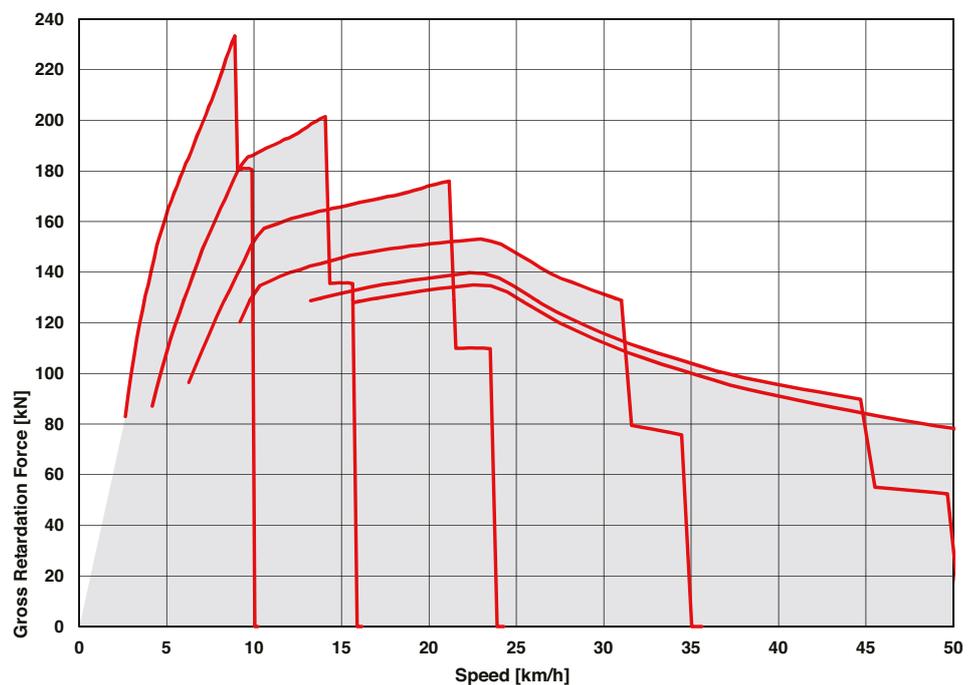


Retardation

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, B30E 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						