

# B40D

## ARTICULATED TRUCK



- **Gross power** 315 kw (422 hp)
- **Gross torque** 2 000 Nm (1,473 lbft) @ 1300rpm
- **Load capacity** 22,4 m<sup>3</sup> SAE 2:1 heaped



**D**SERIES

# B40D ARTICULATED TRUCK

## ENGINE

Mercedes Benz V6, turbocharged, intercooled, low emission diesel engine

Gross power 315 kW (422 hp) @ 1 800 rpm  
 Net Power 308 kW (413 hp) @ 1 800 rpm  
 Gross torque 2 000 Nm (1,473 lbf) @ 1 300 rpm  
 Net torque 1 974 Nm (1,453 lbf) @ 1 300 rpm

Displacement 11,95 litres (730 cu.in)  
 Fuel tank capacity 485 litres (128 US gal)  
 Auxiliary Brake Automatic exhaust brake  
 Engine Valve Brake (EVB)  
 Certification OM 501 LA.E2/1-00 meets Europe (EU) step2; OM 501 LA.E3A/1 meets Europe (EU) step 3

## TRANSMISSION

Engine mounted, fully automatic Allison planetary transmission with six forward gears and one reverse gear.

Torque Converter Hydrodynamic with lock-up in all gears.  
 Model 4500R ORS  
 Control Type Electronic

## TRANSFER BOX

Remote mounted

Manufacturer VGR  
 Model 17100  
 Layout Three in-line helical gears.  
 Output Differential Interaxle 33/67 proportional differential, Pneumatically lockable whilst stationary or on the move

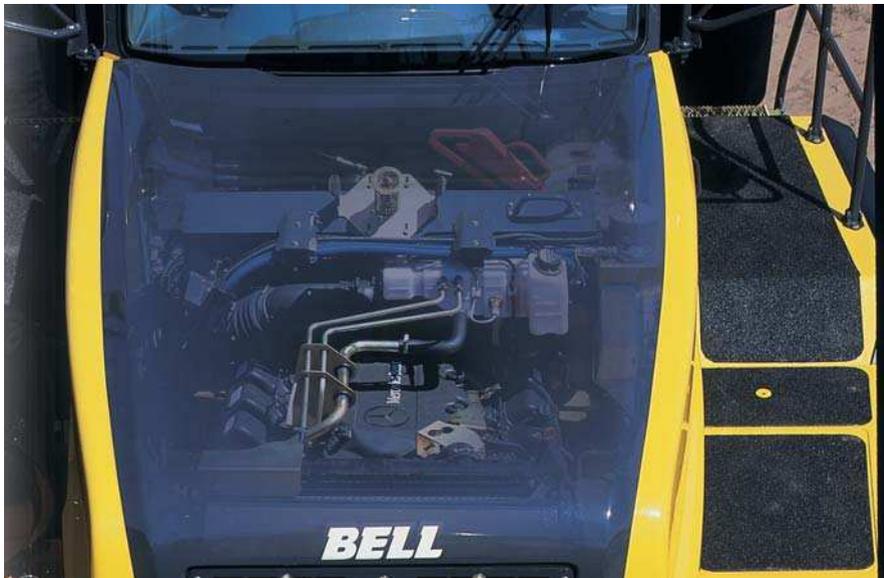
## AXLES

High strength steel fabricated with spiral bevel type gears on the limited slip locking differential and heavy duty outboard planetary gears.

Model Bell 25T  
 Brakes Dual circuit, full hydraulic actuation wet disc brakes on front and middle axles.  
 Max brake force 218 kN (49,010 lbf)  
 Parking Brake Spring applied, air released driveline mounted disc.  
 Max brake force 440 kN (98,920 lbf)  
 Total Retardation 575 kW (771hp)

## WHEELS

Earthmover Tyre 29.5R25



## FRONT SUSPENSION

Semi-independent, leading A-frame supported by nitrogen/oil struts

## REAR SUSPENSION

Pivoting walking beams equalize the load on each axle with laminated suspension blocks. Each axle is coupled to the chassis by a Tri-Link system of four rubber-bushed links for ideal vertical movement and a transverse link for lateral restraint.

## HYDRAULIC SYSTEM

Full load sensing system incorporating a ground driven emergency steering pump.

Flow 300 l/min (79,26 gal/min)  
 Pressure 25 Mpa (3,626 psi)  
 Filter 10 micron

## STEERING SYSTEM

Hydrostatically actuated by two double acting cylinders, with ground-driven emergency steering pump.

Lock to lock turns 4.7  
 Steering Angle +-42°

## DUMPING SYSTEM

Two double-acting, single stage, dump cylinders

Raise Time 13 s  
 Lowering Time 7,6 s  
 Tipping Angle 70°

## PNEUMATIC SYSTEM

Air drier with heater and integral unloader valve, serving park brake and auxiliary functions

System Pressure 810 kPa (117 psi)

## ELECTRICAL SYSTEM

Voltage 24 V  
 Battery Type Two maintenance free permanently sealed  
 Battery Capacity 2 X 105 Ah  
 Alternator Rating 28 V 100 A

## VEHICLE SPEEDS

1st	7,4	4,6
2nd	15,7	9,8
3rd	22,8	14,3
4th	34,8	21,8
5th	45,6	28,5
6th	52,0	32,5
R	6,3 km/h	3,9 mph

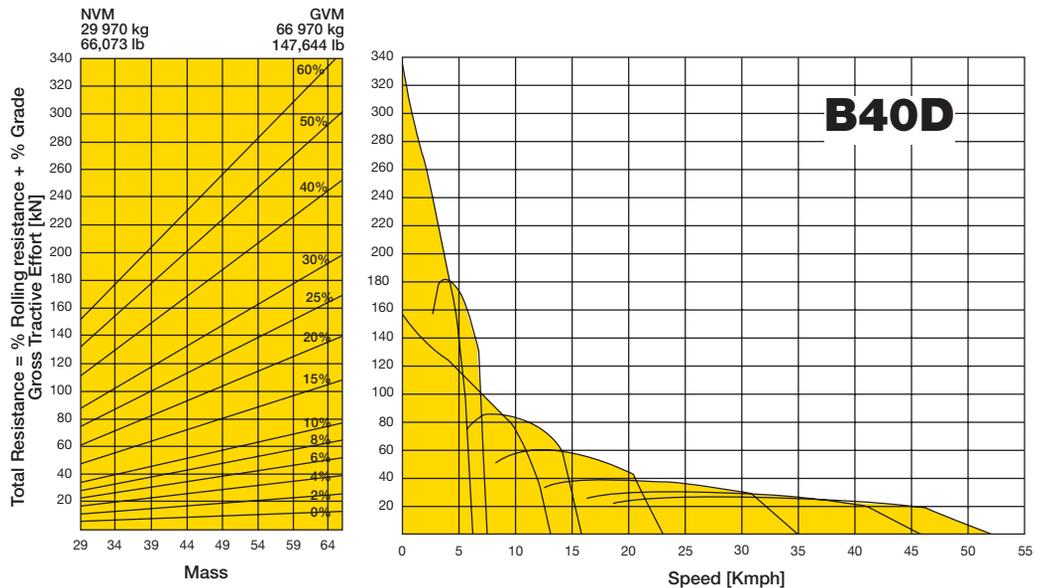


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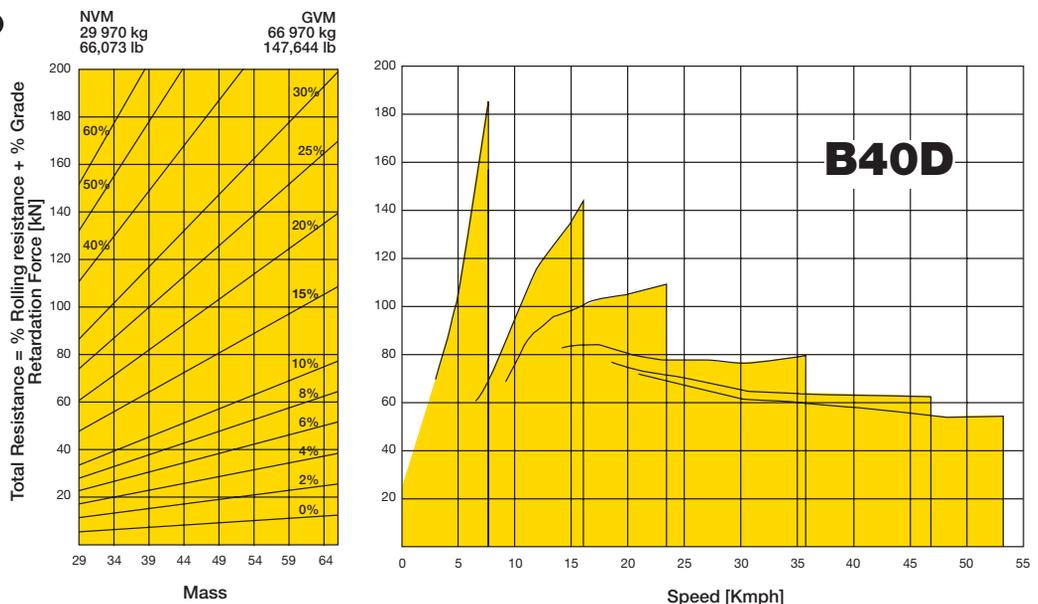
## LOAD CAPACITY & GROUND PRESSURE

WEIGHTS			GROUND PRESSURE			LOAD CAPACITY		
			At 15% sinkage of unloaded radius and specified weights					
<b>UNLADEN</b>	<b>kg</b>	<b>lbs</b>	<b>UNLADEN</b>	<b>kPa</b>	<b>psi</b>	<b>BODY</b> (Ribbed reinforced)	<b>m<sup>3</sup></b>	<b>cu.yd</b>
Front	14 360	31,660	Front	99	14	Struck Capacity	16,9	22.1
Middle	8 320	18,342	Middle	49	7	SAE 2:1 Capacity	22,4	29.4
Rear	7 290	16,072	Rear	47	7	SAE 1:1 Capacity	27,4	35.8
Total	29 970	66,073				SAE 2:1 Capacity with Autogate	23,7	30.1
<b>LADEN</b>			<b>LADEN</b>			<b>Rated Payload</b>	37 000 kg	81,571 lbs
Front	19 100	42,108	Front	131	19			
Middle	24 450	53,903	Middle	158	23			
Rear	23 420	51,632	Rear	156	23			
Total	66 970	147,644						

## GRADEABILITY/RIMPULL

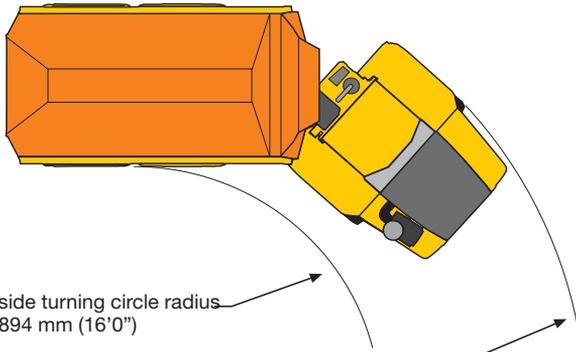
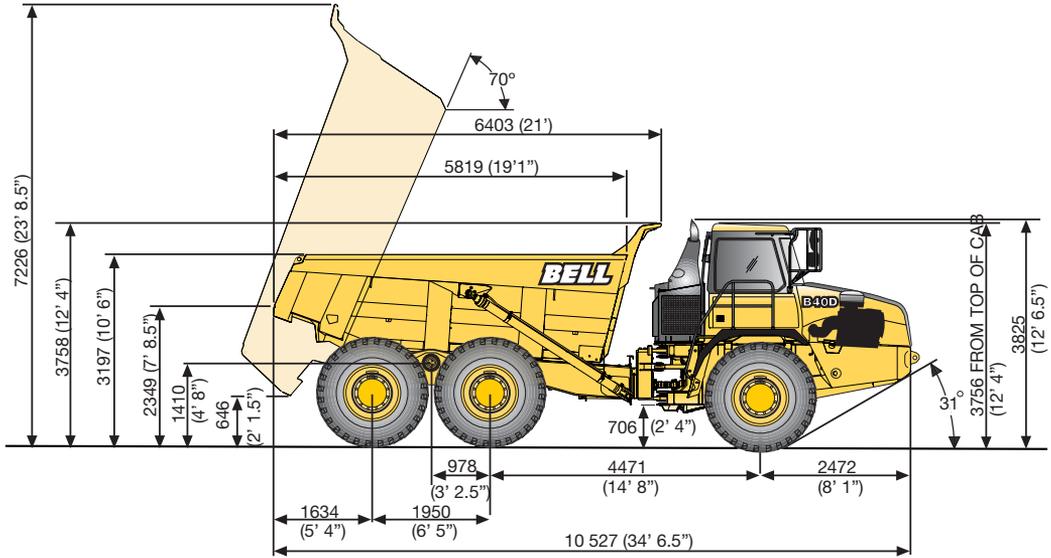


## RETARDATION



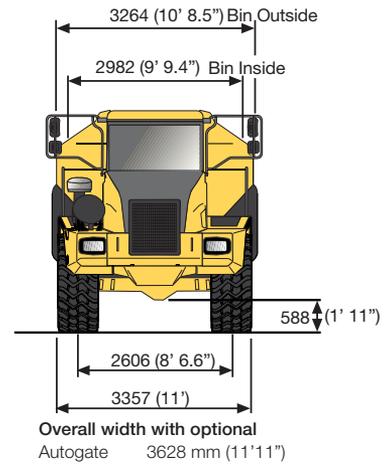
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## DIMENSIONS



Inside turning circle radius  
4 894 mm (16'0")

Outside turning circle radius  
9 203 mm (30'2")



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## STANDARD EQUIPMENT

- |                        |  |
|------------------------|--|
| <b>Cab</b>             | <ul style="list-style-type: none"> <li>• ROPS/FOPS certification</li> <li>• Protective rear window guard</li> <li>• Tilt cab for service access</li> <li>• Gas strut supported door</li> <li>• Tinted safety glass</li> <li>• Sliding windows</li> <li>• Rear view mirrors- regular and wide angle</li> <li>• Sun visor</li> <li>• Wiper/washer with intermittent control</li> <li>• Tilt and telescoping steering wheel</li> <li>• Adjustable, air suspension seat with retractable seat belt</li> <li>• Fold-away trainer seat with retractable seat belt</li> <li>• HVAC climate control system with filtered and ducted air</li> <li>• Rotating beacon</li> <li>• 12 V power outlet/12 V cigarette lighter</li> <li>• Ash tray</li> <li>• Drinks holder</li> <li>• Cooled/heated lunch box</li> <li>• I-Tip programmable bin tip</li> <li>• Sound insulated to 76 dB(A) to ISO 6394</li> </ul> |
| <b>MDU Features</b>    | <ul style="list-style-type: none"> <li>• Tipping counter</li> <li>• Trip timer</li> <li>• Trip distance</li> <li>• Fuel Consumption</li> <li>• Diagnostics</li> <li>• Intermittent wiper timing control</li> <li>• Speedo calibration for alternative tyre sizes</li> <li>• Metric /Imperial unit selection</li> <li>• Warning lights with audible buzzer</li> </ul>   |
| <b>Analogue Gauges</b> | <ul style="list-style-type: none"> <li>• Engine coolant temperature</li> <li>• Engine oil pressure</li> <li>• Transmission oil temperature</li> </ul>  |

## LCD Display

- Fuel
- Transmission gear selection
- Tachometer
- Battery voltage
- Hourmeter
- Odometer
- System air pressure

## Retarder

- Integral transmission output retarder with 6 settings

## Other

- Ground driven emergency steering
- Bin safety prop
- Articulation lock

## OPTIONAL EQUIPMENT

(Factory or field installed)

- Retractable sun visor
- Exhaust body heating
- Autogate
- Body liners
- On Board Weigh System (OBW)
- Fleetmatic Satellite Monitoring System
- Driver ID
- Forward working lights
- Electrically adjustable rearview mirrors - one per side
- Artic reverse light
- 2 extra batteries
- Fuel heater
- External windshield visor
- Headlight protection grills
- Rear window wiper
- Air horn
- Antenna mounting bracket
- Radio/CD/Tape



## What makes the **B40D** a great performer...

- **With a highly efficient power and drivetrain combined with low rolling resistance, the Bell B40D delivers superior fuel efficiency**
- **High performance engine with increased power and torque and long service intervals**
- **Powerful hydraulic transmission retarder drastically cuts brake use extending pad life up to a factor of five**
- **Fewer scheduled service requirements**
- **Supreme driver comfort from a nitrogen over oil strut independent suspension system**
- **Deluxe cab - setting new standards in comfort, sound levels and simplicity in operation**
- **Electronic component protection**
- **Easy service access**
- **Fast tip cycles**
- **Low ground pressure to work jobs other trucks can't**

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All dimensions are shown in millimetres, unless otherwise stated between brackets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. Photographs featured in this brochure may include optional equipment.

**Strong Reliable Machines  
Strong Reliable Support**

