

# B40D ARTICULATED TRUCK

## AVAILABLE EQUIPMENT\*

### Cab

- ROPS/FOPS certification
- Protective rear window guard
- Tilt cab for service access
- Gas strut supported door
- Tinted safety glass
- Sliding windows
- Rear view mirrors- regular and wide angle
- Electrically adjustable rearview mirrors - one per side
- Sun visor
- Wiper/washer with intermittent control
- Tilt and telescoping steering wheel
- Adjustable, air suspension seat with retractable seat belt
- Fold-away trainer seat with retractable seat belt
- HVAC climate control system with filtered and ducted air
- Rotating beacon
- 12 V power outlet/12 V cigarette lighter
- Ash tray
- Drinks holder
- Cooled/heated lunch box
- I-Tip programmable bin tip
- Sound insulated to 76 dB(A) to ISO 6394
- Radio/CD/Tape
- Memory Module
- Air horn

### MDU Features

- Operator / Site selected speed control
- Tipping counter
- Trip timer
- Trip distance
- On Board Weigh System (OBW)
- Transmission gear selection
- Fuel Consumption
- Diagnostics
- Intermittent wiper timing control
- Speedo calibration for alternative tyre sizes

### Gauges

- Metric /Imperial unit selection
- Warning lights with audible buzzer

- Engine coolant temperature
- Engine oil pressure
- Transmission oil temperature
- Fuel
- Tachometer
- Battery voltage
- Hourmeter
- Odometer
- System air pressure

### Vehicle

- Ground driven emergency steering
- Bin safety prop
- Articulation lock
- Integral transmission output retarder with 6 settings

### Other

- (Factory or field installed)
- Groeneveld auto greasing system
- Retractable sun visor
- Exhaust body heating
- Autogate
- Body liners
- Fleetmatic Satellite Monitoring System
- Driver ID and immobiliser
- Forward working lights
- Artic reverse light
- Fuel heater
- External windshield visor
- Headlight protection grills
- Rear window wiper
- Antenna mounting bracket
- Provision for reverse camera
- Wiggins quick fuelling system

\*standard specification for machines may vary according to region



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## 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 break 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**



# B40D ARTICULATED TRUCK



- **Gross power** 315 kw (422 hp)
- **Gross torque** 2,000 Nm (1,473 lbft) @ 1,300 rpm
- **Load capacity** 22,4 m<sup>3</sup> SAE 2:1 heaped



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**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;  
**Non Regulated** OM 501 LA.E3A/1 meets Europe (EU) step 3  
**Regulated**

**TRANSMISSION** Engine mounted, fully automatic Allison planetary transmission with six forward gears and one reverse gear. Hydrodynamic with lock-up in all gears.  
**Torque Converter** 4500R ORS  
**Control Type** Electronic

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

**AXLES** High strength steel fabricated with spiral bevel type gears on the Controlled Traction differential and heavy duty outboard planetary gears.

**Model** Bell 25T

**BRAKING SYSTEM** 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

**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. 300 l/min (79.26 gal/min) 25 Mpa (3,626 psi) 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

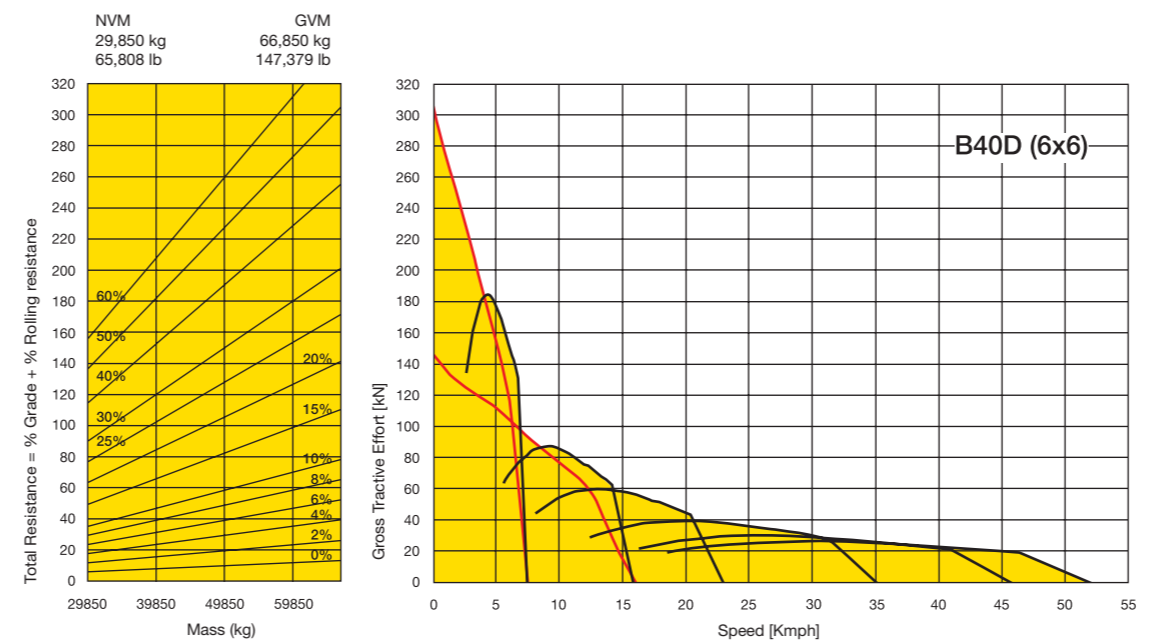


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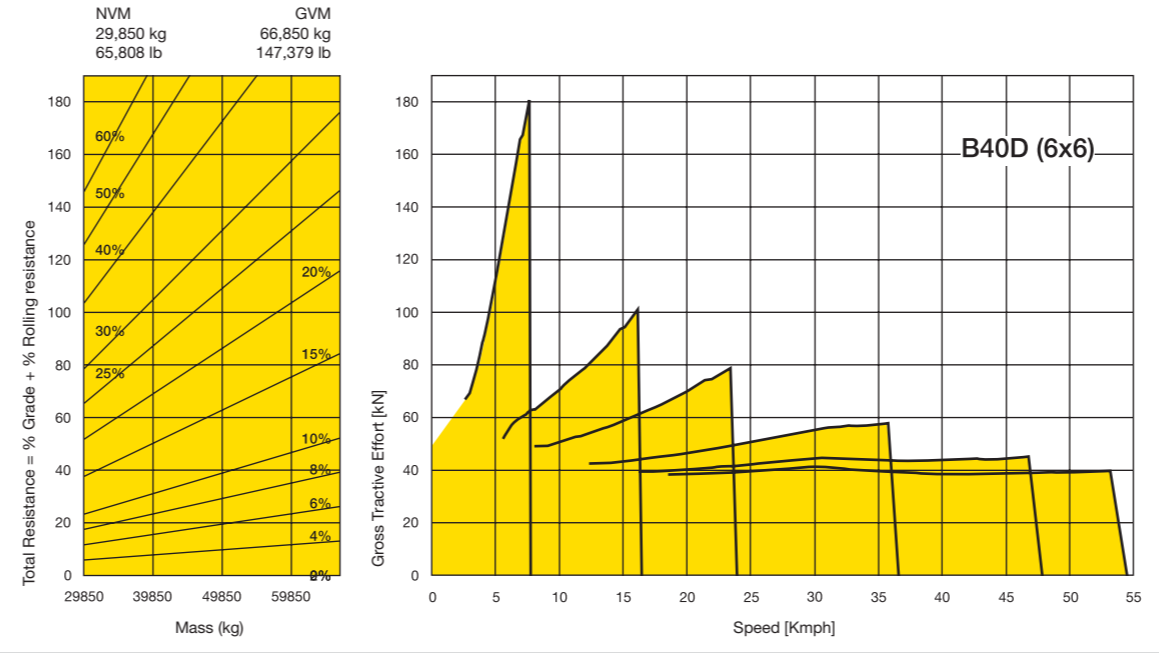
## LOAD CAPACITY & GROUND PRESSURE

WEIGHTS			GROUND PRESSURE			LOAD CAPACITY		
			At 15% sinkage of unloaded radius and specified weights					
UNLADEN	kg	lbs	UNLADEN	kPa	psi	BODY (Ribbed reinforced)	m <sup>3</sup>	cu.yd
Front	14,650	32,298	Front	99	14	Struck Capacity	16,9	22.1
Middle	7,810	17,218	Middle	49	7	SAE 2:1 Capacity	22,4	29.4
Rear	7,390	16,292	Rear	47	7	SAE 1:1 Capacity	27,4	35.8
Total	29,850	65,808	Total			SAE 2:1 Capacity		
LADEN			LADEN			with Autogate		
Front	19,587	43,182	Front	254	37		23,7	30.1
Middle	23,842	52,563	Middle	317	46	<b>Rated Payload</b>	37,000 kg	81.571 lbs
Rear	23,422	51,637	Rear	315	46			
Total	66,851	147,381						

## GRADEABILITY/RIMPULL



## RETARDATION



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## DIMENSIONS

