

**Aveling Barford**



# RD 017



**17 ton payload Dump Truck  
TECHNICAL DATA**

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# RD 017

The Aveling Barford RD 017 leads the way in opening up projects where space is tight — tunnelling, dam and highway construction etc.

Its two-way steering allows the driver to always face the direction of travel — backed by five forward and three reverse speeds to fully exploit the feature. Time is saved, fuel is saved, unnecessary manoeuvring eliminated.

Excellent climbing ability and rapid acceleration (RD 017 has high power/weight ratio) clip further seconds off cycle times.

To speed up loading, body target is big — to handle tough rock, body is of high yield point steel.

Time out for maintenance minimised, with servicing areas readily accessible.



## POWER UNIT

Model	Leyland UE660 four cycle diesel Naturally aspirated
No. of cylinders	6
Gross output @ 2200 rpm	149 kW (200 bhp)
Flywheel output @ 2200 rpm	145 kW (194.5 bhp)
Bore and stroke	127 x 146 mm (5 x 5.75 in)
Displacement	11.1 litres (677 in <sup>3</sup> )
Max torque	745.7 Nm (550 lbf ft) @ 1400 rpm
Starting	24v
Standard Filtration	Donaldson FHG two stage dry type air cleaner complete with safety element. A stack cap pre-cleaner, restriction indicator and automatic dust ejector valve are standard items.
Optional Filtration	Donaldson 'Donaclean' BSG two stage dry type filter — cyclone tubes and paper element

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principle. A slack line pre-cleaner, restriction indicator and automatic dust ejector valve are standard items.



## TRANSMISSION

Remotely mounted constant mesh mechanical transmission with helical gear arrangement and sliding 'dog' selectors. A quick change forward/reverse function enables the operator to make fast gear shifts in ranges 1, 2 and 3. Single plate air assisted clutch mounted directly to the engine flywheel. Clutch brake applied to gearbox layshaft for ease of operation.

Make	Aveling Barford
Forward gears	5
Reverse gears	3
Gear configuration	Constant mesh helical gearing on conventional primary shaft, layshaft and mainshaft. Integral forward/reverse section with independent mode selection.
Clutch	431 mm (17 in) single plate air assisted dry clutch.
Gearshift	Manual control dual lever arrangement; second lever permits reverse gear selection in ranges 1 to 3.

### Speeds With 18.00—25 tyres

Forward	1	2	3	4	5
km/h	5.50	8.17	15.11	28.70	43.49
mph	3.42	5.08	9.39	17.84	27.03
Reverse					
km/h	5.62	8.59	15.51		
mph	3.49	5.34	9.64		



## DRIVE AXLE

Extra heavy duty triple reduction rear axle. First stage reduction through crown wheel and pinion; second stage via double helical bull gear arrangement and final reduction by means of planetary gearing within wheel hubs. Conventional differential and fully loading drive shafts are also employed.

Reduction Ratios	
Crown Wheel & Pinion	1.402:1
Bull gearing	3.727:1
Wheel hubs	4.125:1
Total	21.66:1

### Drive Axle Installation

Direct to main frame assembly, though eight bolts provided with check springs to provide a semi-rigid mounting.



## FRONT AXLE

Forged steel T section main axle beam with non-driven front hub assemblies running on fully adjustable tapered roller bearings.



## FRONT SUSPENSION

Multiple leaf springs connect front axle assembly to the main frame. Spring deflection accommodated by low friction spherical 'slipper' blocks. Conventional heavy duty shock absorber fitted to each spring arrangement.



## FRAME

Maximum strength frame fabricated from high tensile steel. Main members are 305 mm x 90 mm (12 x 3 1/2 in) channels closed with 3.5 mm (1/8 in) plate for optimum stress distribution. Lateral bracing members between the two main frame sections provide optimum chassis strength. V-rivane parts bolted to each frame member cushion contact with the body. A bolt-on front bumper with integral towing pins and a towing bracket at the rear complete the assembly.



## BODY

Standard heavy duty body with wedge profile and flat floor. All welded construction with folded side and underfloor strengthening members. Body plates are manufactured from high yield point steel 890 MN/m<sup>2</sup> (100,000 lb/in<sup>2</sup>). Internal ducting is provided for the application of an exhaust heating kit (available as an optional extra). Locking pins enable the body to be safely retained in the raised position to give unrestricted access for maintenance and overhaul.

Plate Thickness	
Floor plate	10 mm
Front plate	10 mm
Side plates	10 mm
Corner plate	8 mm

### Body Capacity

Maximum Payload	15 422 kg	34 000 lb
Heaped Capacity (SAE)	9.5 m <sup>3</sup>	12.4 yd <sup>3</sup>
Struck Capacity	7.5 m <sup>3</sup>	10 yd <sup>3</sup>

Body side extensions are available for applications where material density is less than 1487 kg/m<sup>3</sup> (92.4 lb/yd<sup>3</sup>), giving the following increased volumetric capacities—

Maximum Payload	15 422 kg	34 000 lb
Heaped Capacity (SAE)	10.3 m <sup>3</sup>	13.5 yd <sup>3</sup>
Struck Capacity	8.4 m <sup>3</sup>	11 yd <sup>3</sup>

### OPTIONAL BODY:

#### Slurry Body for liquid and semi-liquid materials

Special U-bec profile specifically designed to handle high density 'slurry' type materials. General construction is similar to standard body.

Plate Thickness	
Floor Plate	10 mm
Side Plate	10 mm
Front Plate	10 mm
Corner Plate	8 mm

### Body Capacity

Maximum Payload	15 422 kg	34 000 lb
Liquid Capacity	6.12 m <sup>3</sup>	8 yd <sup>3</sup>
(Heaped Capacity ref.)	7.27 m <sup>3</sup>	9.5 yd <sup>3</sup>

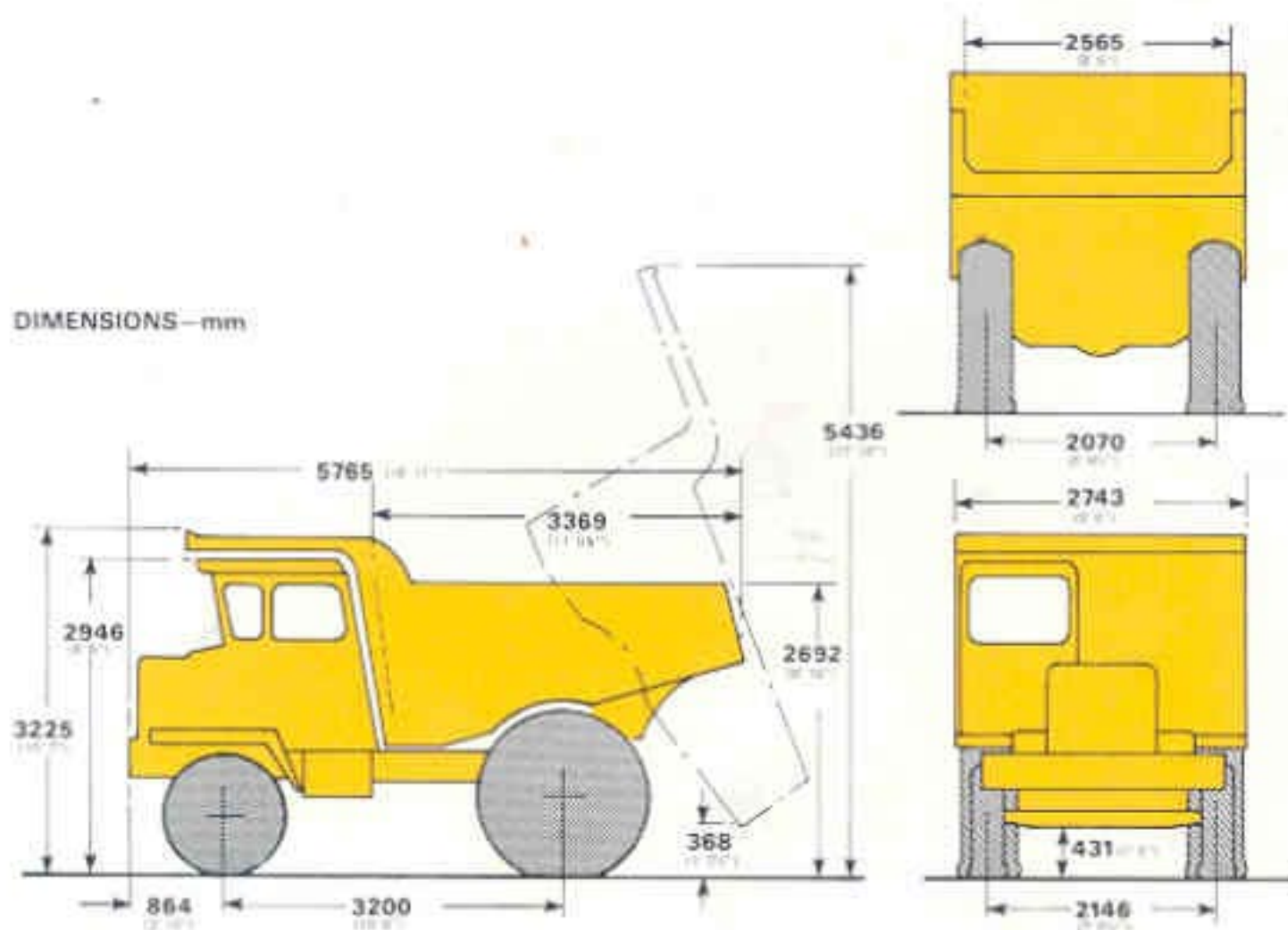


## TYRES

Front: 12.00—R20 x 18 ply Michelin radial steel cord  
Rear Drive Tyres: 18.00—25 two star XR type R Michelin radial steel cord  
E3 classification cross ply drive tyres and cross ply front tyres are available at customer request.



## DIMENSIONS—mm



Every Aveling Barford dump truck is a considered investment that must pay for itself as soon as possible. To protect that investment Aveling Barford offers a complete world-wide support organisation. Outlets for parts and servicing, with skilled technicians ready to render speedy help, in over 100 countries.



## Aveling Barford

**Aveling Barford International Limited**

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In pursuance of the company's policy of "openness" in management, the right to demand to inspect a driver licence which may be held (otherwise or apart from) in the register of motor vehicles, the company will, if it is a driver licence, be available on www.avelingbarford.com

