

B60E 4x4 50 000 L Articulated Water Truck

ENGINE

Manufacturer
Mercedes Benz (MTU)

Model
OM473LA (MTU 6R 1500)

Configuration
Inline 6, turbocharged and intercooled

Maximum Net Power
430 kW (577 hp) at 1 600 rpm in accordance with UN ECE R120

Gross Torque
2 850 Nm (2 102 lbf) @ 1 300 rpm

Displacement
15,6 litres (952 cu.in)

Auxiliary Brake
Jacobs Engine Brake®

Fuel Tank Capacity
630 litres (1 66 US gal)

Certification
OM473LA (MTU 6R 1500) is EU Stage IIIA emission level equivalent.

TRANSMISSION

Manufacturer
Allison

Model
4800 ORS

Configuration
Fully automatic planetary transmission

Layout
Engine mounted

Gear Layout
Constant meshing planetary gears, clutch operated

Gears
7 Forward, 1 Reverse

Clutch Type
Hydraulically operated multi-disc

Control Type
Electronic

Torque Control
Hydrodynamic with lock-up in all gears

TRANSFER CASE

Manufacturer
Kessler

Series
W2400

Layout
Remote mounted

Gear Layout
Three in-line helical gears

Output Differential
Interaxle 29/71 proportional differential. Automatic inter-axle differential lock.

AXLES

Manufacturer
Front - Bell
Rear - Kessler

Model
Front: 30T
Rear: 71T

Differential
Front: High input controlled traction differential with spiral bevel gears.
Rear: Centre input open differential with spiral bevel gears.

Final Drive
Outboard heavy duty planetary on all axles

BRAKING SYSTEM

Service Brake
Dual circuit, full hydraulic actuation wet disc brakes on front and rear axles. Wet brake oil is circulated through a filtration and cooling system.

Maximum brake force:
446 kN (100 264 lbf)

Park & Emergency
Spring applied, air released driveline mounted disc

Maximum brake force:
341 kN (76 659 lbf)

Auxiliary Brake
Automatic Jacobs Engine Brake®. Automatic retardation through electronic activation of wet brake system.

Total Retardation Power
Continuous: 574 kW (770 hp)
Maximum: 983 kW (1 318 hp)

WHEELS

Type
Radial Earthmover

Tyre
Front: 875/65 R29
Rear: 24.00 R 35 Dual

FRONT SUSPENSION

Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts. Active dual springrate Comfort Ride suspension, including height control.

REAR SUSPENSION

Trailing arm cradle supported by hydro-pneumatic suspension struts, with an additional lateral stabiliser.

HYDRAULIC SYSTEM

Full load sensing system serving the prioritized steering, body tipping, suspension 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
300 L/min (79 gal/min)

Pressure
280 Bar (4 060 psi)

Filter
5 microns

STEERING SYSTEM

Double acting cylinders, with ground-driven emergency steering pump.

Lock to lock turns
5,5

Steering Angle
42°

DUMPING SYSTEM

Two double-acting, two stage telescopic, dump cylinders

Raise Time
18 seconds

Lowering Time
16,5 seconds

Tipping Angle
55 deg standard, or any lower angle programmable

PNEUMATIC SYSTEM

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

System Pressure
8,1 Bar (117 psi)

ELECTRICAL SYSTEM

Voltage
24 V

Battery Type
Two AGM (Absorption Glass Mat) type

Battery Capacity
2 X 75 Ah

Alternator Rating
28 V 100 A

MAX. VEHICLE SPEED

1st	4 km/h	2,5 mph
2nd	8 km/h	5,6 mph
3rd	16 km/h	10,6 mph
4th	21 km/h	13,7 mph
5th	30 km/h	20 mph
6th	41 km/h	27 mph
7th	47 km/h	32 mph
R	6 km/h	4 mph

WATER TANK

Tank capacity
50 000 Litres

WATER TANKER PLUMBING

Centrifugal water pump

Rate of Flow
5 400 L/min

Head
70 m

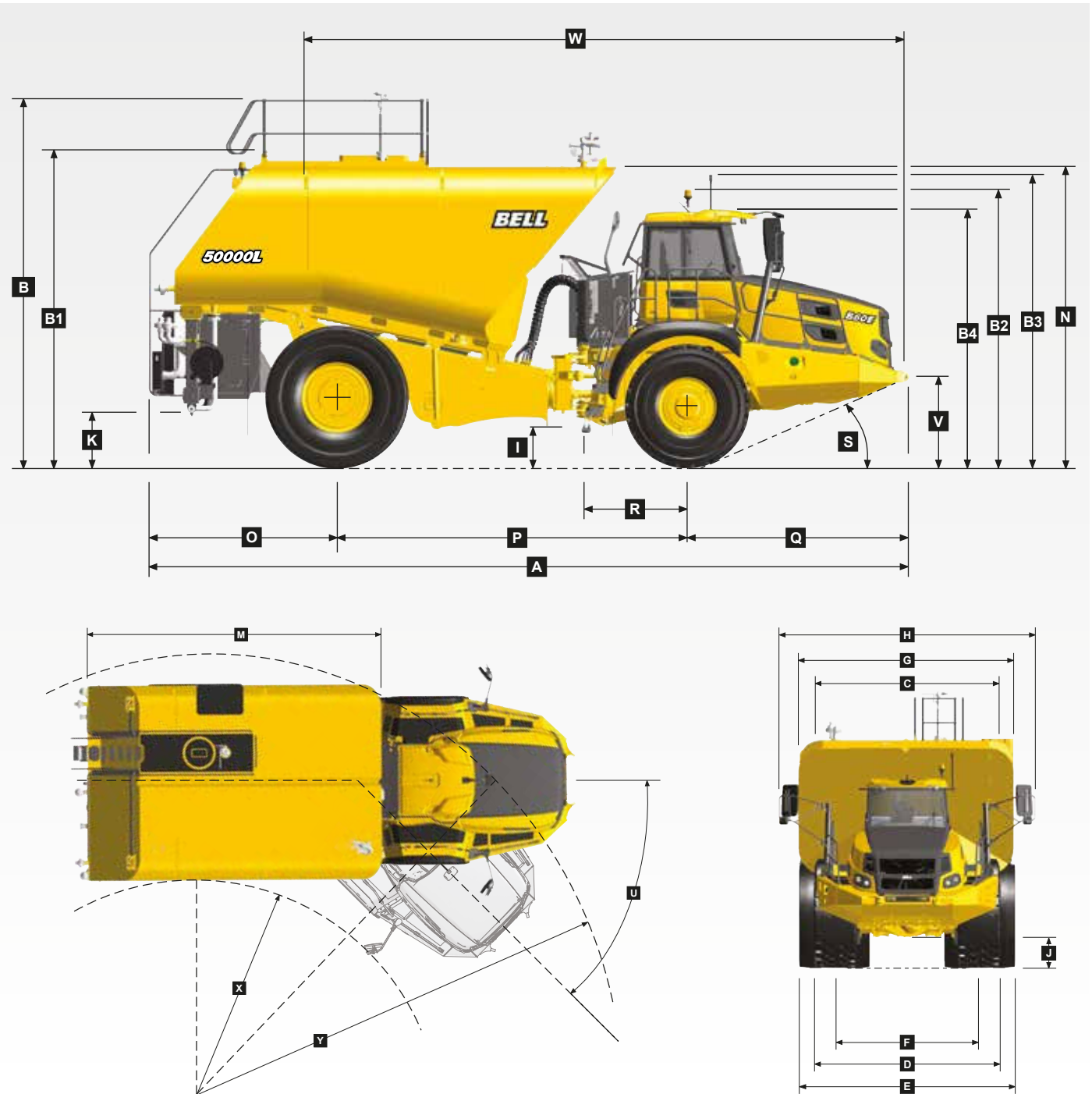
CAB

ROPS/FOPS certified 77 dBA internal sound pressure measured according to ISO 6396.

Load Capacity & Ground Pressure

OPERATING WEIGHTS		GROUND PRESSURE		LOAD CAPACITY	
UNLADEN		LADEN (No sinkage/Total Contact Area Method)			
	kg (lb)	875/65 R29	kPa (Psi)		
Total	45 367 (100 017)	Front	333 (48,2)	Rated Payload	50 000 litres (13 200 gallons)
LADEN		24.00 R35	kPa (Psi)		
	kg (lb)	Rear	478 (69,3)		
Front	26 842 (59 176)				
Rear	73 525 (165 095)				
Total	100 367 (221 271)				

Dimensions

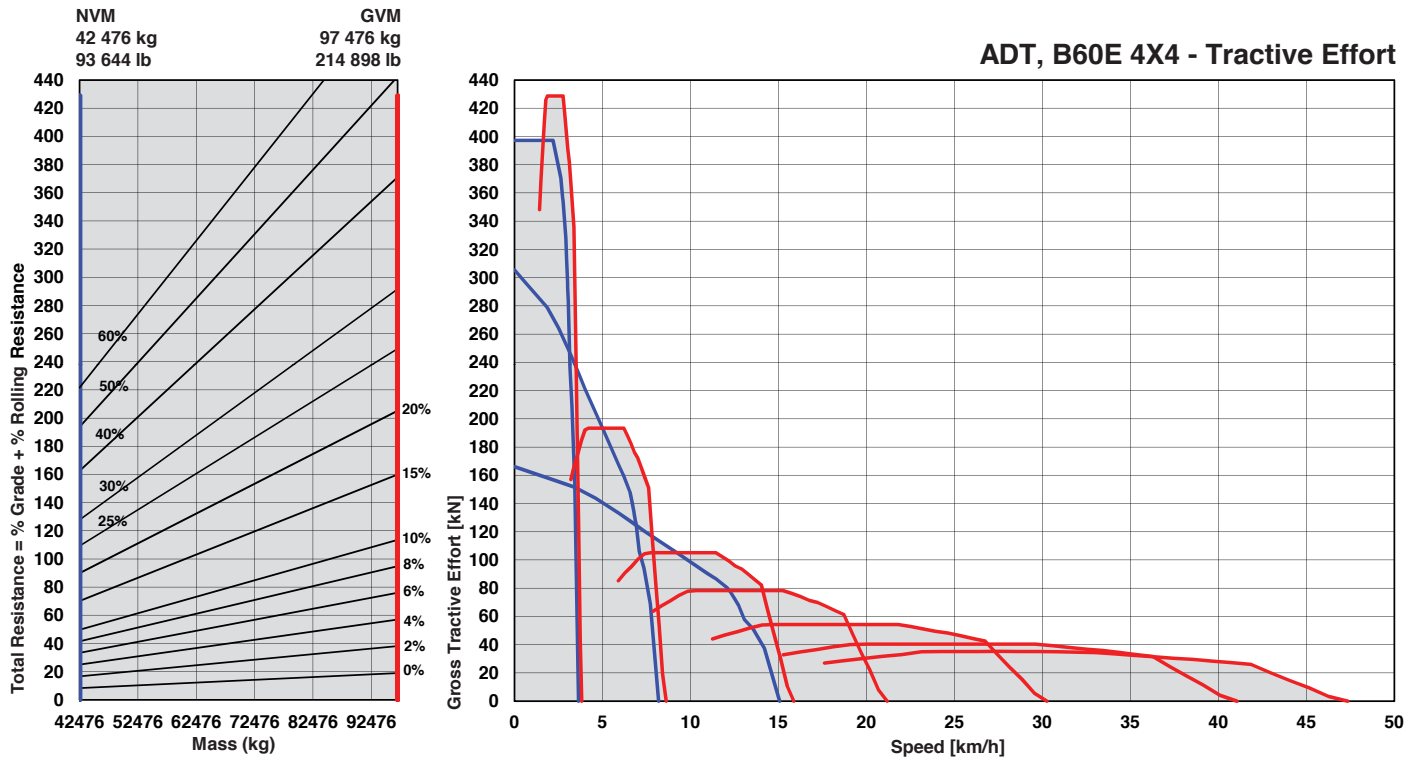


Machine Dimensions

A	Length - Transport Position	11 469 mm	(37 ft. 6 in.)	J	Ground Clearance - Front Axle	554 mm	(21.81 in.)
B	Height - Handrails Raised	5 545 mm	(18 ft. 2 in.)	K	Ground Clearance - Dribble Bar	818 mm	(32 in.)
B1	Height - Transport Position Handrails Down	4 765 mm	(15 ft. 7 in.)	M	Tank / Bowser Length	6 672 mm	(21 ft. 9 in.)
B2	Height - Rotating Beacon	4 112 mm	(13 ft. 6 in.)	N	Platform	4 515 mm	(14 ft. 9 in.)
B3	Height - Load Light	4 335 mm	(14 ft. 3 in.)	O	Rear Axle Centre to Tank Rear / Bowser	2 836 mm	(9 ft. 4 in.)
B4	Height - Cab	3 813 mm	(12 ft. 6 in.)	P	Rear Axle Centre to Front Axle Centre	5 285 mm	(17 ft. 4 in.)
C	Width over Mudguards	3 790 mm	(12 ft. 5 in.)	Q	Front Axle Centre to Machine Front	3 352 mm	(10 ft. 12 in.)
D	Width over Tyres - Front 875/65 R29	3 832 mm	(12 ft. 7 in.)	R	Front Axle Centre to Artic Centre	1 558 mm	(5 ft. 1 in.)
E	Tyre Track Width - Rear 24.00 R35	4 444 mm	(14 ft. 7 in.)	S	Approach Angle	22°	
F	Tyre Track Width - Front	2 949 mm	(9 ft. 8 in.)	T	Maximum Articulation Angle	42°	
F	Tyre Track Width - Rear	2 992 mm	(9 ft. 10 in.)	V	Front Tie Down Height	1 263 mm	(4 ft. 2 in.)
G	Width over Tank / Bowser	4 433 mm	(14 ft. 6 in.)	W	Machine Lifting Centres	9 064 mm	(29 ft. 8 in.)
H	Width over Mirrors - Operating Position	5 283 mm	(17 ft. 4 in.)	X	Inner Turning Circle Radius	4 246 mm	(13 ft. 11 in.)
I	Ground Clearance - Artic	561 mm	(22.09 in.)	Y	Outer Turning Circle Radius	9 216 mm	(30 ft. 3 in.)

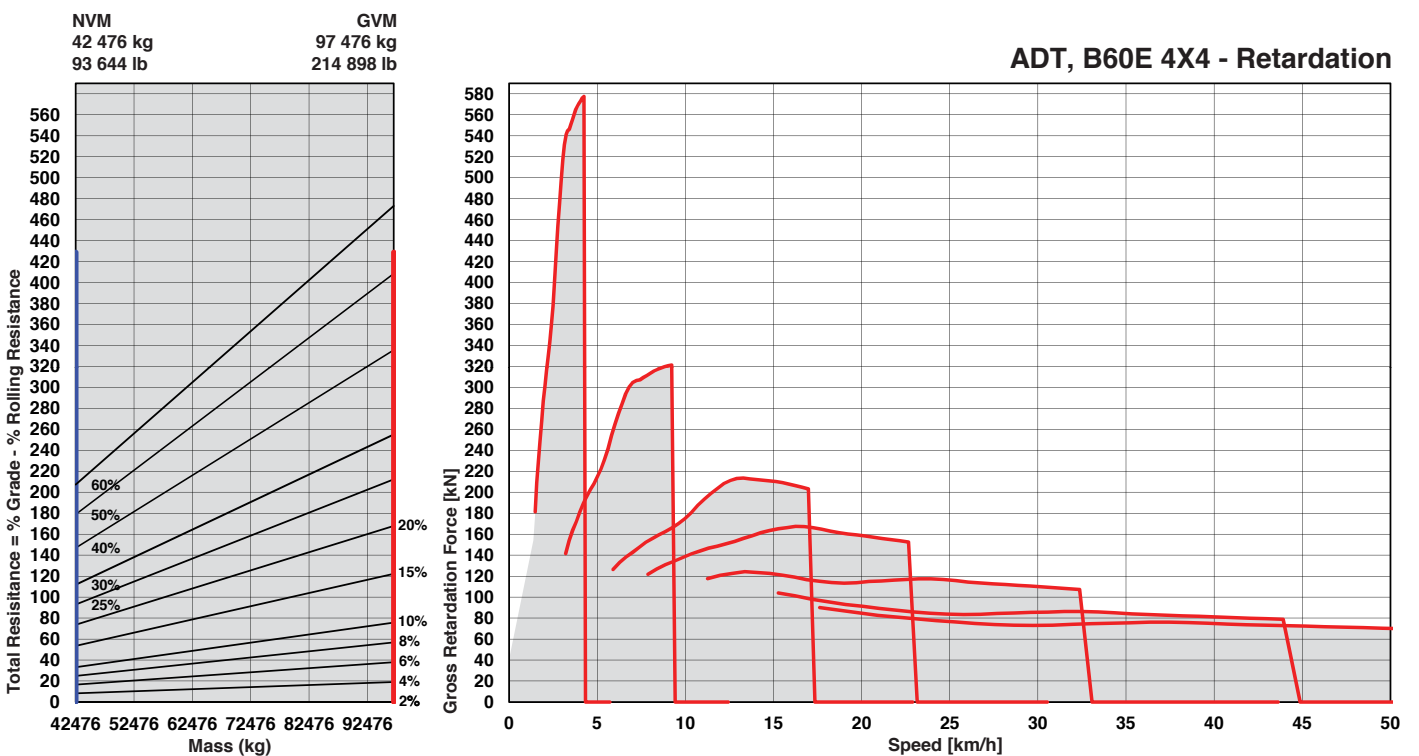
Gradeability/Rimpull

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.



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.





BATTER SPRAYS

- Two additional spray valves that expand the spray patterns reach on the sides of the tank
- Remotely activated from inside the cab



HOSE REEL

- 30m hose reel
- 1.5" adjustable fog/stream nozzle
- Spring retractable

DRIBBLE BAR

- Gravity fed dribble bar
- Remotely activated from inside the cab
- Even spread pattern covering the width of the vehicle



PENETRATION SPRAY BARS

- Available with nozzles or holes
- Remotely activated from inside the cab
- Pressurised by the pump to create a jet of water



REMOTE WATER CANNON

- Adjustable fog/stream pattern
- A variety of flow settings between 250 and 700 GPM
- Remotely controlled via a joystick inside the cab
- High quality components built to last in heavy duty applications

MANUAL WATER CANNON

- Long range spray nozzle
- High quality components built to last in heavy duty applications



16 000 L	18 000 L	23 000 L	27 000 L	35 000 L	38 000 L	45 000 L	
ENGINE							
●	●	●	●	●	●	●	Engine valve brake and exhaust brake
●	●	●	●	●	●	●	Dual element air cleaner with dust ejector valve
●	●	●	●	●	●	●	Precleaner with auto dust scavenging
●	●	●	●	●	●	●	Water separator
●	●	●	●	●	●	●	Serpentine drive belt with automatic tensioner
▲	▲	▲	▲	●	●	●	Provision for fast fill
▲	▲	▲	▲	●	●	●	Wet-sleeve cylinder liners
COOLING							
●	●	●	●	●	●	●	Crank-shaft mounted viscous-drive fan
●	●	●	●	●	●	●	Fan guard
PNEUMATIC SYSTEM							
●	●	●	●	●	●	●	Engine-mounted compressor
●	●	●	●	●	●	●	Air drier with heater
●	●	●	●	●	●	●	Integral unloader valve
ELECTRICAL SYSTEM							
●	●	●	●	●	●	●	Battery disconnect
●	●	●	●	●	●	●	Drive lights
●	●	●	●	●	●	●	Air horn
●	●	●	●	●	●	●	Reverse alarm
●	▲	▲	▲	▲	▲	▲	White noise reverse alarm
●	●	●	●	●	●	●	Rotating beacon
●	●	●	●	●	●	●	Pitch roll sensor
▲	▲	▲	▲	▲	▲	▲	LED drive lights
▲	▲	▲	▲	●	●	●	Halogen artic reverse light
▲	▲	▲	▲	▲	▲	▲	LED artic reverse light
●	●	●	●	●	●	●	LED reverse light
STEERING SYSTEM							
●	●	●	●	●	●	●	Uni-directional ground-driven secondary steering pump
▲	▲	▲	▲	▲	▲	▲	Bi-directional ground-driven secondary steering pump
CAB							
●	●	●	●	●	●	●	ROPS/FOPS certification
●	●	●	●	●	●	●	Tilt cab
●	●	●	●	●	●	●	Gas strut-supported door
●	●	●	●	●	●	●	HVAC Climate control system
●	●	●	●	●	●	●	AM/FM radio/CD player + USB
●	●	●	●	●	●	●	Rear window guard
●	●	●	●	●	●	●	Wiper/washer with intermittent control
●	●	●	●	●	●	●	Tilt and telescoping steering wheel
●	●	●	●	●	●	●	Centre-mount air-suspension seat
●	●	●	●	●	●	●	Halogen work lights
▲	▲	▲	▲	▲	▲	▲	LED work lights
▲	▲	▲	▲	▲	▲	▲	Rotating beacon: seat belt installation
▲	▲	▲	▲	▲	▲	▲	Remote engine and machine isolation
●	●	●	●	●	●	●	Remote battery jump start
●	●	▲	▲	●	●	●	High visibility mirrors
●	●	●	●	●	●	●	Retractable 3-point seat belt
●	●	●	●	●	●	●	Foldaway trainer seat with retractable seat belt
CAB (continued)							
●	●	●	●	●	●	●	12-volt power outlet
●	●	●	●	●	●	●	Cup holder
●	●	●	●	●	●	●	Cooled/heated lunch box
●	●	●	●	●	●	●	Utility bin (removable)
●	●	●	●	●	●	●	Manually adjustable mirrors
▲	▲	▲	▲	▲	▲	▲	Electric adjustable & heated mirrors
●	●	●	●	●	●	●	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 / Trip timer / Trip distance / Metric/English units / Service codes/diagnostics
●	●	●	●	●	●	●	Backlit sealed switch module functions with: Wiper control / Lights / Heated mirrors / Retarding aggressiveness / Transfer case differential lock / Transmission gear hold / Airconditioner/ Heater controls / Preselected Speed Control
●	●	●	●	●	●	●	Backlit Plumbing sealed switch module functions with: Battery / Spray / Pulse / Tank fill / Hose reel / Pump / Dribble bar
PLUMBING							
●	●	●	●	●	●	●	Dribble bar
●	●	●	●	●	●	●	1 800 lpm 50 m head pump
▲	▲	▲	▲	●	●	●	5 400 lpm 70 m head pump*
▲	▲	▲	▲	▲	▲	▲	Pressurised dribble bar system with nozzles
●	●	●	●	●	●	●	Spray valves (in-cab activation)
●	●	●	●	●	●	●	Batter spray valves
●	●	●	●	●	●	●	Fold down top rails
▲	▲	▲	▲	▲	▲	▲	Suction pipe for filling from dam
●	●	●	●	●	●	●	Step ladder access
▲	▲	▲	▲	▲	▲	▲	Inspection access
▲	▲	▲	▲	▲	▲	▲	Manual water canon
▲	▲	▲	▲	▲	▲	▲	Remote control water canon
▲	▲	▲	▲	▲	▲	▲	Hose reel
OTHER							
●	●	●	●	●	●	●	20.5 R 25 Radial earthmover tyres
▲	●	●	●	●	●	●	23.5 R 25 tyres
●	●	●	●	●	●	●	620/75 R26 tyres
●	●	●	●	●	●	▲	29.5 R 25 Radial Earthmover tyres
●	●	●	●	●	●	●	875/65 R 29 Radial Earthmover tyres
▲	▲	▲	▲	▲	▲	▲	Remote grease banks
▲	▲	▲	▲	▲	▲	▲	Automatic greasing
▲	▲	▲	▲	▲	▲	▲	Cab peak
▲	▲	▲	▲	▲	▲	▲	High pressure hydraulic filter
▲	▲	▲	▲	▲	▲	▲	Fuel heater
●	●	●	●	●	●	●	Belly cover
▲	▲	▲	▲	▲	▲	▲	Handrails
▲	▲	▲	▲	▲	▲	▲	Remote transmission filter
●	▲	▲	▲	▲	▲	▲	Reverse camera

* (Option only): Larger centrifugal pump available if suction pipe option is not fitted.

FEATURES OF THE ARTICULATED WATER TRUCK

- **PRODUCTIVE:** Powerful built-for hauling ADT drivetrains are well matched for pulling and retarding heavy loads. Nitrogen over oil strut suspension smooths the ride for operator and machine.
- **ECONOMY:** Modern fuel efficient engine, lockup torque converter and planetary transmission deliver more work per unit of fuel used
 - **EASY TO OPERATE:** High quality cab is conducive to operator care. Simple to use controls and electronic interfaces protect the machine from accidental misuse.