

2806E 4x4 16 000 L Articulated Water Tanker

ENGINE

Manufacturer
Mercedes Benz

Model
OM906LA

Configuration
Inline 6, turbocharged and intercooled.

Gross Power
205 kW (275 hp) @ 2 200 rpm

Net Power
198 kW (265 hp) @ 2 200 rpm

Gross Torque
1 100 Nm (811 lbf) @
1 200 -1 600 rpm

Displacement
6,37 litres (389 cu.in)

Auxiliary Brake
Exhaust Valve Brake
Engine Valve Brake

Fuel Tank Capacity
379 litres (100 US gal)

Certification
OM906LA meets EU Stage II/EPA
Tier 2 emissions regulations.

TRANSMISSION

Manufacturer
Allison

Model
3200P ORS

Configuration
Fully automatic planetary
transmission with optional
retarder.

Layout
Engine mounted

Gear layout
Constant meshing planetary
gears, clutch operated.

Gears
6 Forward, 1 Reverse

Clutch Type
Hydraulically operated multi-
disc

Control Type
Electronic

Torque Control
Hydrodynamic with lock-up in
all gears.

TRANSFER BOX

Manufacturer
Kessler

Series
W1400

Layout
Remote mounted

Gear Layout
Three in-line helical gears

Output Differential
Permanent interaxle differential
lock

AXLES

High torque, low speed suitable
for dual wheels.

Manufacturer
Bell

Model
15T

Differential
High input limited slip 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.

Maximum Brake Force:
132 kN (29 675 lbf) with standard
tyres.

Park & Emergency
Spring applied air released,
driveline mounted disc

Maximum Brake Force:
242 kN (54 400 lbf)

Auxiliary Brake
Automatic exhaust valve brake
and engine valve brake.

Optional automatic, adjustable,
integral, hydrodynamic
transmission retarder. Output
shaft speed dependant.

Maximum Retardation
165 kW (221 hp) Standard
continuous
539 kW (723 hp) with Maximum
retarder option

WHEELS

Standard Tyre: Size
23.5 X 25 SRG

Standard Tyre: Type
Radial Earthmover

FRONT SUSPENSION

Semi-independent, leading
A-frame supported by hydro-
pneumatic suspension struts.

HYDRAULIC SYSTEM

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.

Pump Type
Variable displacement load
sensing
piston

Flow
165 l/min (44 gal/min)

Pressure
28 Mpa (4 061 psi)

Filter
5 microns

STEERING SYSTEM

Double-acting cylinders with
ground driven emergency
steering pump

Lock to lock turns
4,1

Steering Angle
45°

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 AGM (Absorption Glass
Mat) type

Battery Capacity
2 X 75 Ah

Alternator Rating
28 V 80 A

VEHICLE SPEEDS

1st	8 km/h	5 mph
2nd	15 km/h	9 mph
3rd	20 km/h	12 mph
4th	28 km/h	17 mph
5th	37 km/h	23 mph
6th	43 km/h	27 mph
R	6 km/h	3 mph

WATER TANK

Tank capacity
16 000 Litres

WATER TANKER PLUMBING

Centrifugal water pump

Rate of Flow
Standard:
1 800 L/min with 50 m head

Option:
5 400 L/min with 70 m head

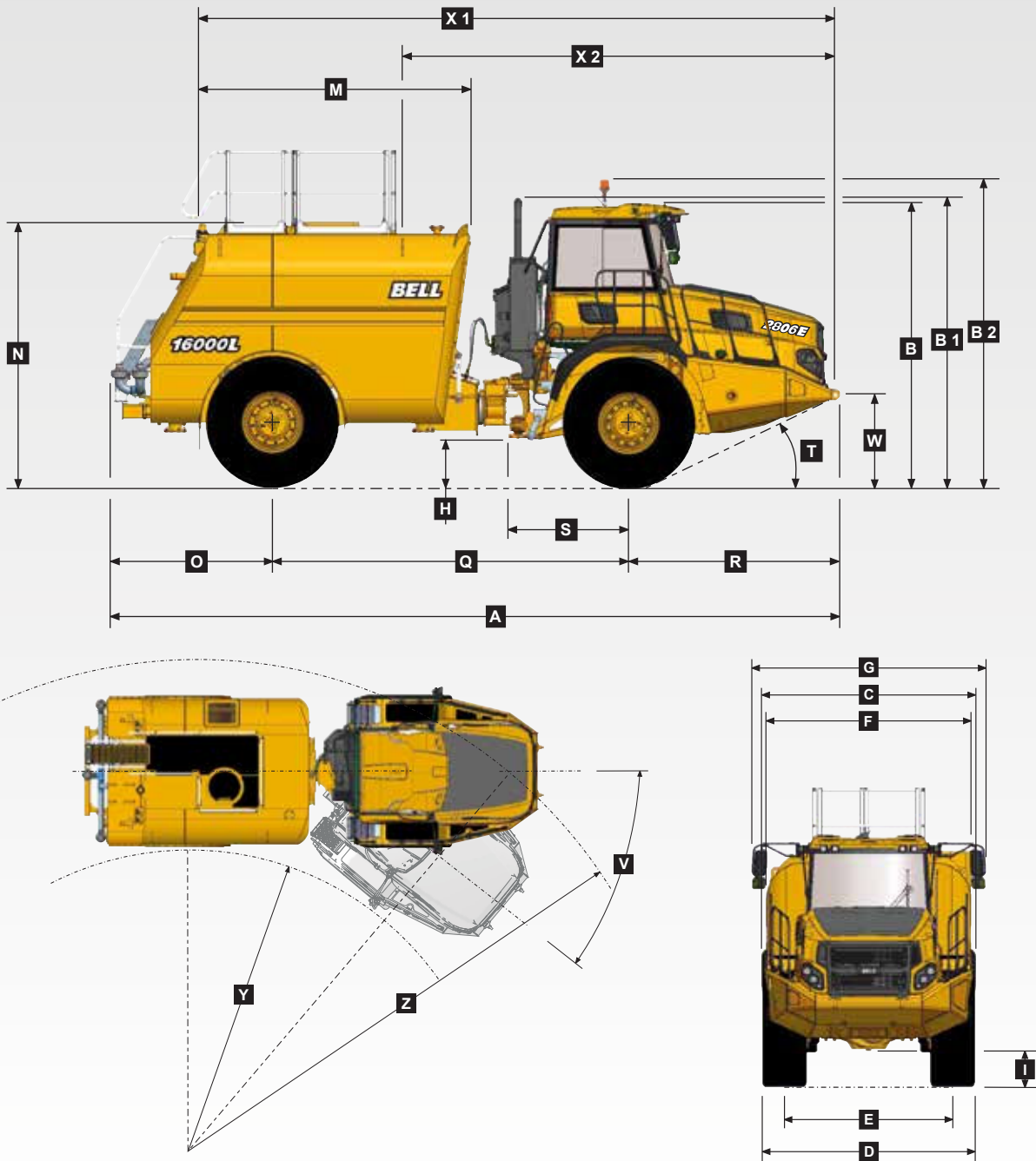
CAB

ROPS/FOPS certified 74 dBA
internal sound level measured

Load Capacity & Ground Pressure

OPERATING WEIGHTS		GROUND PRESSURE		LOAD CAPACITY	
UNLADEN		LADEN (No sinkage)		Rated Payload	16 000 litres (4 200 gallons)
	kg (lb)		kPa (Psi)		
Total	21 020 (46 341)	Front	255 (36)		
		Rear	445 (64)		
LADEN					
	kg (lb)				
Front	12 824 (28 272)				
Rear	24 034 (52 986)				
Total	36 858 (81 258)				

Dimensions

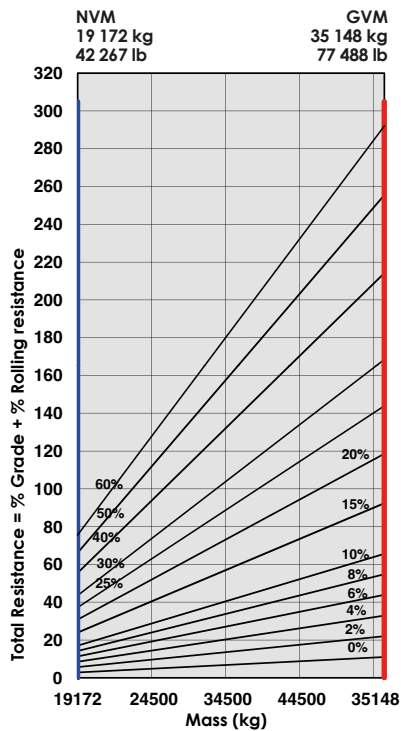


Machine Dimensions

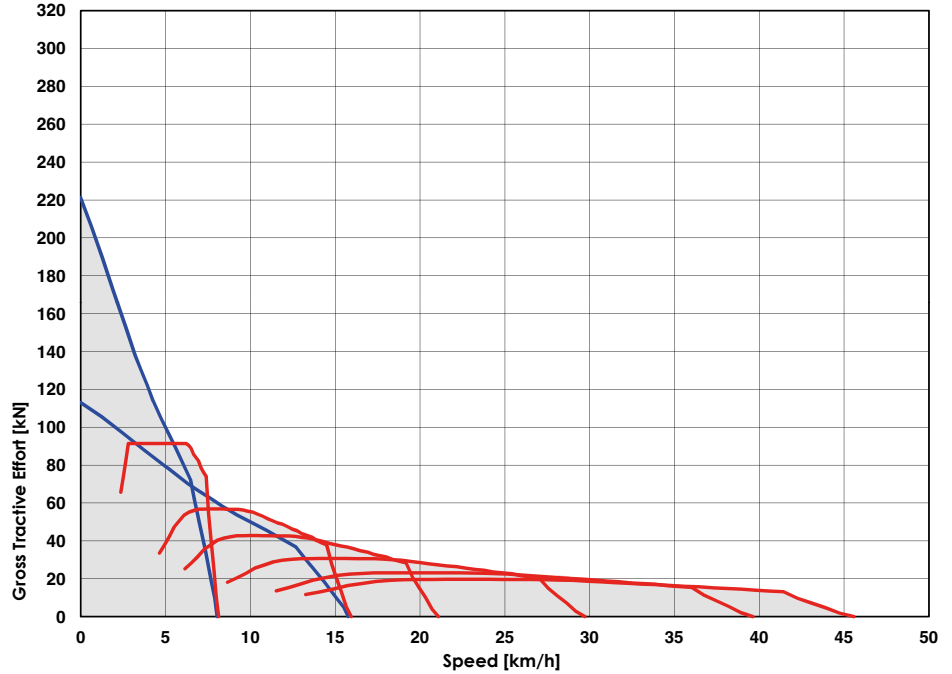
A	Length - Transport Position	8 946 mm	(29 ft. 4 in.)	N	Maximum Tank Height	3 074 mm	(10 ft. 1 in.)
B	Height - Transport Position	3 436 mm	(11 ft. 3 in.)	O	Rear Axle Centre to Bowser / Tank Rear	1 950 mm	(6 ft. 5 in.)
B1	Height-Rotating Beacon	3 548 mm	(11 ft. 8 in.)	Q	Mid Axle Centre to Front Axle Centre	4 395 mm	(14 ft. 5 in.)
B2	Height-Exhaust	3 517 mm	(11 ft. 6 in.)	R	Front Axle Centre to Machine Front	2 601 mm	(8 ft. 6 in.)
C	Width over Mudguards	2 984 mm	(9 ft. 9 in.)	S	Front Axle Centre to Artic Centre	1 363 mm	(4 ft. 5 in.)
D	Width over Tyres-23.5R25	2 926 mm	(9 ft. 7 in.)	T	Approach Angle	26°	
E	Tyre Track Width-23.5R25	2 325 mm	(7 ft. 8 in.)	V	Maximum Articulation Angle	45°	
F	Width over Tank / Bowser	2 840 mm	(9 ft. 4 in.)	W	Front Tie Down Height	1 092 mm	(3 ft. 7 in.)
G	Width over Mirrors - Operating Position	3 260 mm	(10 ft. 8 in.)	X1	Tank Lifting Centres	6 996 mm	(22 ft. 11 in.)
H	Ground Clearance - Artic	563 mm	(22.17 in.)	X2	Machine Lifting Centres	4 853 mm	(15 ft. 11 in.)
I	Ground Clearance - Front Axle	470 mm	(18.5 in.)	Y	Inner Turning Circle Radius - 23.5R25	3 475 mm	(11 ft. 5 in.)
K	Ground Clearance - Under Run Bar	N/A		Z	Outer Turning Circle Radius - 23.5R25	7 159 mm	(23 ft. 6 in.)
M	Tank / Bowser Length	3 368 mm	(11 ft. 1 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.

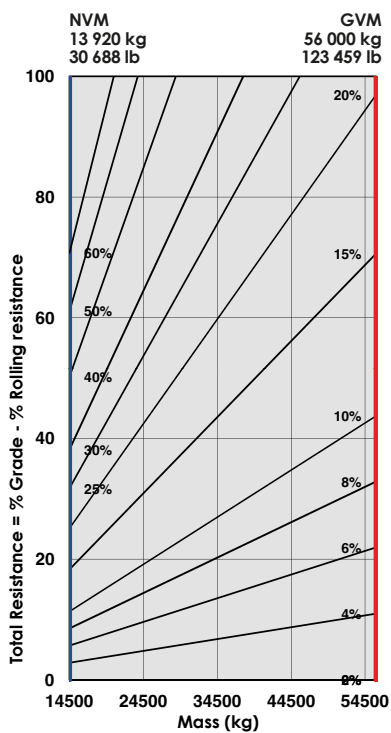


2806E 4x4 16 000 Ltr Water Tanker - Tractive Effort

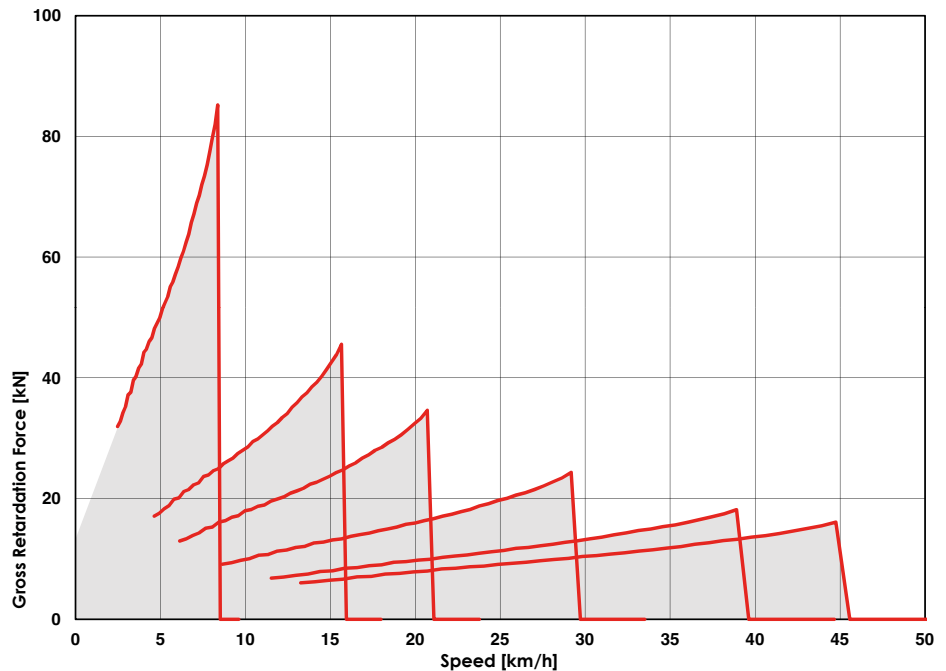


Retardation

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.



2806E 4x4 16 000 Ltr Water Tanker - Retardation





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.