

↳ SUBJECT TO CHANGE FOR PRODUCT IMPROVEMENT ↳

TATA DAEWOO HEAVY DUTY TRUCK
SPECIFICATIONS MANUAL

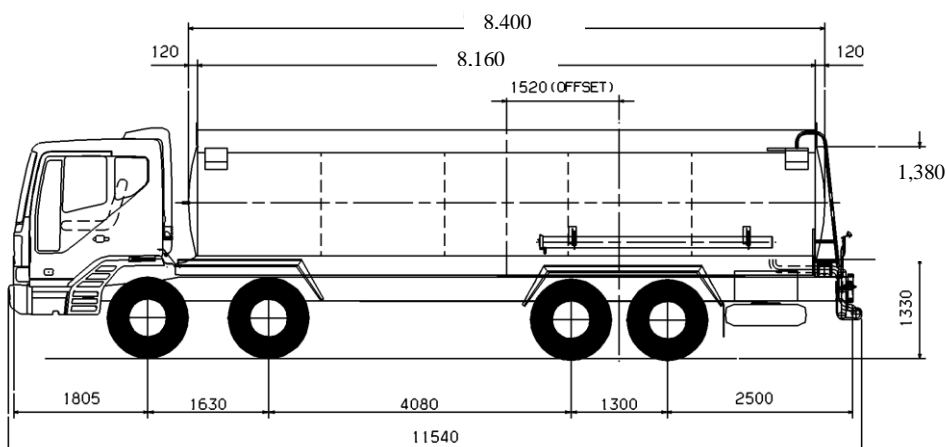
MODEL NAME : 8x4 WATER TANK LORRY(20kl)
MODEL CODE : M9AVF

TATA DAEWOO

December, 2012

TATA DAEWOO COMMERCIAL VEHICLE CO., LTD.

o DIAGRAM



o DIMENSIONS (mm)	Overall	Length	OL	11,540
		Width	OW	2,490
		Height	OH	3,100
	Tread	Front	FT	2,050
		Rear	RT	1,855
	Wheelbase		WB	7,010
	Rear axle to frame		AF	2,480
	Ground to roof		GR	2,925
	Frame-ground above body		R	1,330
	Usable cab to axle		CA	6,035
	Tank offset		OS	1,520
	Ground to tank floor		GT	1,330
	Min. ground clearance			270
	Tank inside	Length		8,400
		Width		2,300
		Height		1,380
		Volume (m ³)		20.16
Loading capacity(kℓ)			20.0	

o WEIGHTS (kg)	Chassis weight	Front	6,200
		Rear	4,410
		Total	10,610
	Curb weight		15,230
	Axle load	Front	13,000
		Rear	23,000
	Permissible G.V.W		36,000

o PERFORMANCE	Max. speed	(km/h)	110
	Max. gradeability	(%)	56.4
	Min. turning radius	(m)	10.7

o ENGINE	Manufacturer	OOSAN INFRACORE
	Model	DV15TIS
	Emission certificate	EURO II
	Type	Turbo intercooled, diesel engine
	Maximum power	420ps (308kw)/ 2,100rpm
	Maximum torque	170kg.m (1666N.m)/ 1,200rpm
	No. of cylinder	Vee-90 ° 8 cylinder
	Bore×Stroke	128×142(mm)
	Displacement	14,618cc
	Controoler type	Mechanical
	Air cleaner	Dry paper elements
o CLUTCH	Type	Hydraulic control with air assisted Dry single plate with diaphragm
	Plate diameter	Outside diameter : 430mm(17 ")
o TRANSMISSION	Manufacturer	ZF
	Model	16S1820TO
	Speed	16 Forward / 2 Reverse
	Gear ratio	13.80/11.54/9.49/7.93/6.53/5.46/ 4.57/3.82/3.02/2.53/2.08/1.74/1.43 1.20/1.00/0.84/ 12.92(R)/10.80(R)
o FRONT AXLE	Type	Reverse elliot "I" beam
	Axle capacity	13,000kg
o REAR AXLE	Manufacturer	S&T
	Model	T15HT
	Type	Banjo single reduction
	Final drive ratio	4.444
	Axle capacity	23,000kg
o TIRE & WHEEL	Tire	12R22.5-16PR
	Disc wheel	8.25×22.5
	No. of wheel studs	10

o FRAME	Type	Ladder type, single channel
	Size (H×W×T)	320×90×8 (mm)
	Towing hook	Frame width behind cab : 850mm Equipped front & rear
o STEERING	Handle position	Left-hand drive
	Type	Recirculating ball with integral power assisted by oil
	Steering column	Tilt & Telescopic
	Steering wheel	2-spoke wheel with horn button
o FRONT SUSPENSION	Type	Semi-elliptical leaf spring
	Size (L×W)	1,500mm×90mm
o REAR SUSPENSION	Type	Semi-elliptical leaf spring
	Size (L×W)	1,300mm×90mm
o BRAKE	Service brake	Full air brake with dual circuit
	Drum diameter	410mm
	Lining Front	414mm×155mm
	Rear	414mm×203mm
	Material	Non-asbestos
	Parking brake	Spring actuator at rear wheels
	Auxiliary brake	Exhaust brake
o FUEL TANK	Volume	400 ℓ
	Material	Made of pressing steel
	Cap	Equipped key lock
o ELECTRICAL SYSTEM	Battery	12V - 150Ah×2
	Alternator	24V - 80A
	Starter	24V – 7.0kw
o EXHAUST SYSTEM	Type	Mounted longitudinal

o CAB	Type	All –welded cab of tilt type Hydraulic Tilt. Tilt angle 50°
	Number of crew	2
	Cab suspension	Coil spring & shock absorber
o INSTRUMENTATION	Gauges & meters	Speedometer, Water temperature gauge Air pressure gauge, fuel gauge Engine tachometer gauge
o SEAT & BED	Driver seat	Height adjustable, rigid seat Sliding & reclining, Equipped with head rest
	Passenger seat	Rigid type, full folding & reclining
	Bed	Equipped one bed
	Covering	Tricot
o WIPER	Type	Two blade, 3-speed wiper with electrical washer
o HEATING		Heater & Defroster
o GLASS & MIRROR	Windshield	Laminated safety glass
	Door glass	Tempered safety glass
	Outside mirror	Convex mirror
o LAMP	Front	Head & fog lamp, turn signal lamp Position lamp
	Rear	Position, stop, turn signal lamp Reverse lamp License plate lamp
o TOOLS	Tools	Hydraulic Jack, Wrench monkey Wrench & Handle-Wheel nut Driver, Spare tire handle, etc
	Spare tire	1EA

ADDITIONAL EQUIPMENT

M9AVF

o GEAR PUMP	Type	Gear type
	Material	Stainless Steel
	Pipe size	80mm (suction & discharge)
	Suction pressure	380 mmHg
	Discharge pressure	2.3 kg/cm ² (normal)
		3.0 kg/cm ² (maximum)
	Capacity	1000 ℓ /min
	RPM	600 ~ 700 min
	Quantity	1 EA
	o VALVES	2-way valve
4-way valve		3 inch, 1EA, Stainless Steel
		Suction, Discharge, Free, Stop
Strainer		3 inch, 1EA, Stainless Steel
Main valve		3 inch, 1EA, Stainless Steel
o P.T.O	Type	T/M P.T.O
	P.T.O Switch	Located in the cab
o DRIVE SHAFT		Connected T/M P.T.O to pump
o TANK EQUIPMENT	Loading type	Top loading (manhole)
	Material	Steel, Epoxy coated
	Baffle plate	4EA, Located inside tank
		Preventing loaded liquid
		From baffling
	Manhole	5EA, Located on the tank
		Live : 2EA, Blind : 3EA
	Hose Locker	2EA, Located each side of tank
	Top fence	Located in the upper part of tank
Air relief valve	Located on the live manhole	
Level gauge	P.V.C Hose, Located at the front of the tank	
o OTHERS	Loading / Unloading	3 inch x 3M x 2EA with quick
	Hose	coupling
	Spray bar	3 inch Stainless Steel
	Loading / Unloading Pipe	Stainless Steel