

∪ SUBJECT TO CHANGE FOR PRODUCT IMPROVEMENT ∪

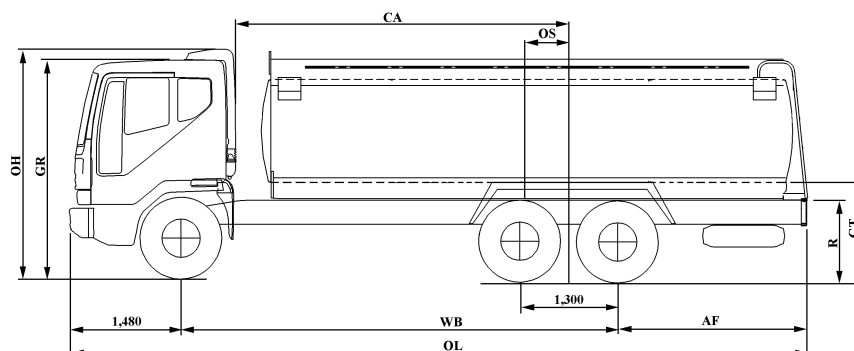
TATA DAEWOO HEAVY DUTY TRUCK
SPECIFICATIONS MANUAL

MODEL NAME : 16KL FUEL T/L
MODEL CODE : K7CEF(ZF T/M)

November 2013

TATA DAEWOO COMMERCIAL VEHICLE CO., LTD.

o DIAGRAM



o DIMENSIONS (mm)	Overall	Length	OL	9,910	
		Width	OW	2,490	
		Height	OH	3,090	
	Tread	Front	FT	2,050	
		Rear	RT	1,855	
	Wheelbase		WB	5,800	
	Rear axle to frame		AF	2,510	
	Ground to roof		GR	2,935	
	Frame-ground above bogie		R	1,110	
	Usable cab to axle		CA	4,400	
	Tank offset		OS	725	
	Ground to tank floor		GD	1,325	
	Min. ground clearance			265	
	Tank inside	Length		6,700	
		Width		2,350	
		Height		1,350	
		Volume(m ³)		17.4	
		Loading capacity(kℓ)		16.0	
	o WEIGHTS (kg)	Chassis weight	Front		3,980
			Rear		3,820
		Total		7,800	
Curb weight				11,160	
Payload				16,000	
Axle load		Front		6,500	
		Rear		23,000	
Permissible G.V.W				29,500	
o PERFORMANCE	Max. speed	(km/h)		102	
	Max. gradeability	(%)		66.1	
	Min. turning radius	(m)		9.1	

o ENGINE	Manufacturer	Doosan Infracore
	Model	DE12TIS
	Emission certificate	EURO II
	Type	Turbo intercooler, diesel engine
	Max. power	340ps (250kw)/ 2,100rpm
	Max. torque	145kg.m (1421N.m)/ 1,260rpm
	No. of cylinder	In line 6- cylinder
	Bore×Stroke	123×155(mm)
	Displacement	11,051cc
	Controller type	Semi-electronic
Air cleaner	Dry paper elements	
o CLUTCH	Type	Hydraulic control with air assisted Dry single plate with coil spring
	Plate diameter	Outside diameter : 430mm(17")
o TRANSMISSION	Manufacturer	ZF
	Model	ZF16S1820TO
	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 (R)12.92/10.8
o FRONT AXLE	Type	Reverse elliot "T" beam
	Axle capacity	6,500kg
o REAR AXLE	Manufacturer	S&T
	Model	T14HT
	Type	Banjo single reduction
	Final drive ratio	4.875
	Axle capacity	23,000kg
o TIRE & WHEEL	Tire	12R22.5-16PR
	Disc wheel	8.25 X 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 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	400ℓ
	Material	Made of pressing steel
	Cap	Equipped key lock
o ELECTRICAL SYSTEM	Battery	12V - 150Ah×2
	Alternator	24V - 80A
	Starter	24V - 6.0kw
o EXHAUST SYSTEM	Exhaust gas position	On right lateral side directed towards of front bumper

o CAB	Type	All –welded cab of tilt type Hydraulic Tilt. Tilt angle 50°
	Number of crew	2
	Cab suspension	Coil spring & shock absorber
	Tilting System	Mechanical
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	One equipped with mounting bracket

o GEAR PUMP	Specification	Gear type with by-pass valve
	Bore 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
Strainer		3 inch, 1EA
Bottom valve		3 inch, 4EA Located under each compartment
Vapor valve		Air cylinder type Located the top each Compartment
o P.T.O		Type
	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	Carbon steel (SS400)
	Baffle plate	4EA, Located inside tank Preventing loaded petroleum from baffling
	Manhole	4EA, Located on the tank
	Hose locker	2EA, Located each side of tank
	Top fence	Located in the upper part of tank
o OTHERS	Emergency valve	Located at the side part of tank
	Safety valve	Located on the manhole cover at the each compartment
	Loading/Unloading hose	3inch x 3M x 2EA and 3inch x 4.5M x 1EA with quick coupling
	Indicator	Located on the valve each compartment
	Paint	External - Urethane paint Inside - Epoxy paint