

Engine Cooling - TDV8 3.6L Diesel -

Fluids

Item	Specification
* Anti-freeze	Havoline Extended Life Coolant (XLC) or any ethylene glycol based anti-freeze containing no methanol with only Organic Acid Technology (OAT) corrosion inhibitors
Anti-freeze concentration - Will provide frost protection to -40°C (-40°F)	50%
Specific gravity of coolant at 20°C (68°F), to protect against frost down to -40°C (-40°F)	1.068
Amount of anti-freeze to use for 50% concentration	4.1 litres (7.2 pints) (4.3 US quarts)



CAUTION: No other anti-freeze should be used with Havoline Extended Life Coolant.

Capacity

Item	Capacity
Cooling system - from dry	11.2 litres (19.7 pints) (11.8 US quarts)
Cooling system - re-fill	8.2 litres (14.4 pints) (8.6 US quarts)

General Specifications

Item	Specification
Cooling system type	Pressurised, thermostatically controlled with remote header tank
Radiator	Cross flow with integral transmission fluid cooler
Expansion tank	Remote - fitted with a bleed screw and low coolant level sensor
Pressure cap rating	110 kPa (1.1 bar) (16 lbf/in ²)
Thermostat:	
Starts to open	88° C (190° F)
Fully open	95° C (203° F)
Cooling fan	Engine driven, viscous coupled with electronic control
Cooling fan diameter	500 mm (19.7 in)
Direction of rotation	Clockwise when viewed from front of engine
Coolant pump	Centrifugal flow impellor, belt driven from crankshaft

Torque Specifications

Description	Nm	lb-ft
Coolant pump bolts	10	7
Coolant pump pulley bolts	25	18
Cooling fan to viscous coupling bolts	10	7
* Cooling fan assembly	65	48
Thermostat housing bolts	10	7
Expansion tank bolts	10	7
Power steering fluid reservoir bolts	10	7
Coolant bleed screw(s)	3	2

* **Note:** Left-hand thread

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Description and Operation

COMPONENT LOCATION