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## Specifications

### Fluids and Capacities

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:	
Without rear passenger compartment heater or fuel burning heater	4.7 litres (8.25 pints) (4.9 US quarts)
With rear passenger compartment heater but without fuel burning heater	6.0 litres (10.6 pints) (6.4 US quarts)
Without rear passenger compartment heater but with fuel burning heater	5.1 litres (9.1 pints) (5.4 US quarts)
With rear passenger compartment heater and fuel burning heater	6.5 litres (11.5 pints) (6.9 US quarts)



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

### Capacity

Item	Capacity
Without rear passenger compartment heater or fuel burning heater	9.4 litres (16.5 pints) (9.9 US quarts)
With rear passenger compartment heater but without fuel burning heater	12.15 litres (21.4 pints) (12.8 US quarts)
Without rear passenger compartment heater but with fuel burning heater	10.35 litres (18.2 pints) (10.9 US pints)
With rear passenger compartment heater and fuel burning heater	13.1 litres (23.0 pints) (13.8 US quarts)

### General Specifications

Item	Specification
Cooling system type	Pressurised, thermostatically controlled with remote header tank
Radiator	Cross flow with integral transmission fluid and charge air coolers
Expansion tank	Remote - fitted with a bleed screw and low coolant level sensor
Pressure cap rating	110 kPa (1.1 bar) (16 lbf/in <sup>2</sup> )
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 (19.6 in)
Direction of rotation	Clockwise when viewed from front of engine
Coolant pump	Centrifugal flow impellor, belt driven from crankshaft

**Torque Specifications**

<b>Description</b>	<b>Nm</b>	<b>lb-ft</b>
Coolant expansion tank bolts	10	7
Radiator access panel	10	7
Coolant pump bolts	10	7
Coolant pump pulley bolts	25	18
Radiator securing bolts	25	18
A/C condenser bolts	6	4
Charge air outlet hose clip	10	7
Charge air inlet hose clip	10	7
Cooling fan to viscous coupling bolts	10	7
* Cooling fan assembly	65	48

\* Note: Left-hand thread