


## Description and Operation

The major cooling system components comprise an aluminium radiator core with plastic end tanks, water circulation pump, thermostat, expansion tank and electrically driven cooling fans.

The wax type thermostat ensures rapid engine warm up by restricting coolant flow at lower operating temperatures, it also assists in maintaining engine operating temperatures between pre-determined limits.

The radiator is of an aluminium construction with plastic end tanks. Automatic transmission variants have an oil cooler built into the radiator left-hand side end tank.

The twin electrically driven fans are operated by a thermal switch in the radiator end tank. This actuates the fans when coolant temperatures reach a specific level. The electric fans are mounted within shrouds behind the radiator.


 **WARNING:** For reasons of safety, care should be taken to ensure that the ignition is switched off when working in the vicinity of the fans as an increase in coolant temperature may cause the fan to operate without warning.


### Antifreeze

Antifreeze content should be checked through the neck of the expansion tank with a hydrometer. The specific gravity (sg) of correctly balanced fluid is 1,061 (sg) at 15°C, which indicates an antifreeze concentration of 40%. If the concentration falls below 40% there is insufficient low temperature protection and the corrosion resistance will be inadequate. In such cases the concentration must be brought back to specification.

### Changing Coolant:

Engine coolant is formulated to last for the lifetime of the vehicle and does not require replacement at regular intervals. If however the coolant is lost or topping up is required the system should be refilled using Motorcraft Super Plus 4 antifreeze, Ford Specification No. ESD-M97B49-A, to the correct proportions (40% antifreeze).

 **WARNING:** Antifreeze contains monoethylene glycol and other constituents which are toxic if taken internally and can be absorbed into the skin after prolonged contact.

 **WARNING:** When draining the engine coolant or changing any cooling system components, it is imperative that no coolant comes into contact with the camshaft drive belts. If necessary the camshaft drive belt should be removed. Contamination of the drive belt can result in drive belt failure.