

1. Close the drainage points and fill the system with coolant containing the recommended inhibitor or anti-freeze in correct proportion.
2. Fit suitable length of transparent plastic tubing to the bleed valve on the by-pass junction assembly, and place the free end into the radiator header tank, then open the bleed valve.
3. Move the heater control on the fascia to hot (red) position, if a heater is fitted.
4. Start the engine and run it at approximately 2,000 r.p.m.
5. Top-up the system with coolant immediately the level in the radiator is seen to fall.
6. Maintain the system in the full condition by constantly topping-up until the last traces of air have issued from the bleeding tube.
7. Momentarily open the throttle to expel any trapped air, then close the bleed valve.
8. Stop the engine, remove the bleeding tube, and refit the radiator cap.

**Bleeding tube particulars**

Inside diameter	...	...	$\frac{3}{16}$ in. (4.8 mm.)
Length	...	...	2 ft. (60 cm.)

**Unsatisfactory results**

In the event of failure to bleed air from the system after applying the recommended procedure, the following checks should be made:—

1. Inspect the system for leaks and tighten all connections.
2. Ensure that the heater control is operating the valve efficiently.
3. Inspect the heater hoses for kinking.
4. Ensure that the heater hoses are not restricted by foreign matter.
5. Ensure that the routing of the hoses to the heater connections is correct.
6. Check that the thermostat is to specification and working properly.

**FAN BELT ADJUSTMENT**

Refer to Section B of this publication.

**THE THERMOSTAT** (See Figs. 2 and 3)

The function of the thermostat is to check the flow of coolant through the system until such time as the predetermined temperature has been reached; this attained, the thermostat opens fully and permits coolant to flow around the system.

On starting the engine from cold, coolant is circulated around the cylinder block under influence from the pump impellor; additionally, coolant is also circulated through the passages in the cylinder head and the thermostat housing.

Until the coolant has attained the predetermined operating temperature (see General Data), the thermostat will remain closed, so that coolant is directed by way of a by-pass hose connected between an outlet on the cylinder head and an inlet on the pump body, where it is recirculated through the cylinder block and cylinder head.

As the coolant temperature increases above the predetermined opening figure of the thermostat, its valve will commence to unseat and permit coolant to pass into the radiator. This fresh circulation of coolant causes the pump impellor to draw from the bottom tank a supply at a greatly reduced temperature.

The engine coolant working temperature should not be permitted to exceed the figure given in the General Data.

**To remove**

Drain the cooling system in accordance with the instructions given under the appropriate heading.

Raise the car to a comfortable working height and remove the vertical metal shield positioned immediately in front of the cambox (5 cross-head screws).

The thermostat housing will now be visible at the front of the cylinder head, retained by two nuts, plain and spring washers. Remove the nuts and collect the washers; the housing can now be detached and the thermostat withdrawn from its seat in the cylinder head.