



4B

The fuel accumulator has two functions, (i) to dampen the pulsation of the fuel flow, generated by the pump and (ii) to maintain fuel pressure after the engine has been switched off. This prevents a vapour lock developing with consequent hot starting problems.

The fuel filter incorporates two paper filter elements to ensure that the fuel reaching the injection system components is completely free from dirt.

The fuel distributor/mixture control assembly. The fuel distributor controls the quantity of fuel being delivered to the engine, ensuring that each cylinder receives the same amount. The mixture control assembly incorporates an air sensor plate and control plunger. The air sensor plate is located in the main airstream between the air cleaner and

the throttle butterfly. During idling, the airflow lifts the sensor plate which in turn raises a control plunger which allows fuel to flow past the plunger and out of the metering slits to the injector valves. Increases in engine speed cause increased airflow which raises the control plunger and so admits more fuel.

The throttle valve assembly is mounted in the main air inlet between the mixture control assembly and the air box.

The injector valves are located in the inlet manifold.

The air box is mounted on the top of the engine and functions as an auxiliary inlet manifold directing air from the sensor plate to each individual cylinder.

The warm-up regulator is located on the inlet manifold and incorporates two coil springs, a bi-metal strip and a control

pressure valve. The regulator controls the fuel supplied to the control circuit which provides pressure variations to the fuel distributor control plunger. When the coil springs are pushing against the control pressure valve there is a high control pressure and this gives a weak mixture. The coil spring pressure application is controlled by the bi-metal strip which in turn is activated in accordance with engine temperature and an electrical heat coil.

The auxiliary air device is located on the inlet manifold. It consists of a pivoted plate, bi-metal strip and heater coil. The purpose of this device is to supply an increased volume of fuel/air mixture during cold idling.

The start valve system consists of an electrical injector and a **thermo-time switch**. Its purpose is to spray fuel into the air box to assist cold starting, the thermo-time switch regulating the amount of fuel injected.