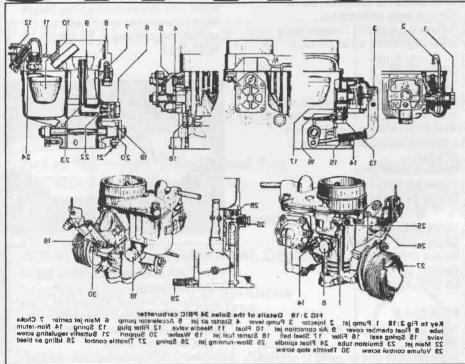
SPARE PARTS OFFICER — MEL CAREY

SYPHONING



To continue our talk on carburettor problems;

This fault should not be confused with flooding which we discussed last issue. Syponing is an effect whereby fuel will overflow from the main spraying outlet or from the accelerator pump jet after the engine is turned off, causing fuel to collect in the throttle chamber or inlet manifold, [both the 4cyl. & 6cyl. Traction manifolds have an external drain tube to dispose of any access! No fuel will escape whilst the engine is running, so this problem only becomes noticeable when the engine has been standing for a short time, whereupon the excess fuel renders hot starting difficult due to fouling of the spark plugs by an over rich mixture. The manufactures standard float level setting should be low enough to prevent fuel escape when the engine is turned off, however, at the end of a run, heat acting on the carburettor will cause the fuel in the chamber to expand slightly and if this expansion is sufficient to raise fuel height to that of the main outlet into the choke tube, then fuel may drain away due to syponing action.

Carburettors with accelerator pumps can be particularly affected by this problem as the fuel trapped in the pump housing is generally subjected to a greater temperature rise than that in the float chamber, whilst the amount of expansion which must take place before the fuel begins to overflow from the pump injector is relatively slight. Low accelerator pumps can be particularly troublesome in this respect, as once fuel begins to flow from the accelerator pump nozzle, a great deal can drain away.

To counter syponing, the first action

would be to see that the standing level of fuel in the float chamber is not higher than that intended by the manufacturer and that the needle valve and float mechanism are in good order. In addition make sure that the motor is not overheating.

On accelerator pump carburettors fitted with anti-syphoning valves, ensure that the valve is working freely. In hot climates, it is sometimes advisable to make up a shield which can be placed beneath the carburettor to protect the float chamber and pump assembly in particular from the hot air rising from the exhaust system & engine block. Make sure that if there is provision for an insulation block between Carby & manifold, that it is fitted. The effect can also be tried of using an additional needle valve washer to lower the fuel level so the greater expansion will have to take place before syponing occurs.

On certain carburettors some limited syponing will be unavoidable. Under these circumstances, hot starting can usually be achieved by opening the throttle fully and then operating the starter, without moving the accellerator pedal until the over rich mixture is cleared and the engine fires.

To be continued. Regards, Mel

Carburettor Rebuild Kits are now available through CCOCA Parts.

