

### 3 Petrol feed pipe: examination

1 The petrol feed pipe is made from thin walled synthetic rubber and is of the push-on type. It is necessary to replace the pipe only if it becomes hard or splits. It is unlikely that the retaining clips will need replacing due to fatigue as the main seal between the pipe and union is effected by an 'interference' fit.

2 If the petrol pipe has been replaced with the transparent plastic type for any reason, look for signs of yellowing which indicates that the pipe is becoming brittle due to the plasticiser being leached out by the petrol. It is a sound precaution to renew a pipe when this occurs, as any subsequent breakage whilst in use will be almost impossible to repair.

**Note:** On no account should natural rubber tubing be used to carry petrol, even as a temporary measure. The petrol will dissolve the inner wall, causing blockages in the carburettor jets which will prove very difficult to remove.

### 4 Petrol tap: removal, examination and replacement

1 Before the petrol tap can be removed, it is first necessary to drain the tank. This is easily accomplished by removing the feed pipe from the carburettor float chamber and allowing the contents of the tank to drain into a clean receptacle, with the tap turned to the 'reserve' position. Alternatively, the tank can be removed and placed on one side, so that the fuel level is below the tap outlet. Take care not to damage the paintwork.

2 The tap unit is retained by a gland nut to the threaded stub on the underside of the tank. It can be removed after the fuel pipe has been pulled off the tap.

3 If the tap lever leaks, it will be necessary to renew it as a complete unit. It is not possible to dismantle the tap for repair.

4 When reassembling the tap, reverse the procedure for dismantling.

5 Check that the feed pipe from the tap to the carburettor is in good condition and that the push-on joints are a good fit, irrespective of the retaining wire clips. If particles of rubber are found in the filter, replace the pipe, since this is an indication that the internal bore is breaking up.

6 If there have been indications of water contamination in the fuel, the removal of the tap presents a good opportunity to drain and flush the tank completely. Many irritating fuel system faults can be traced to water in the petrol. This often appears as a result of condensation inside the petrol tank. The resulting blobs of water are easily drawn into the carburettor, where they can cause intermittent blockages in the jets and drillings. Any accumulations of water should therefore be flushed from the tank before the tap is refitted. The tubular filter gauze should be removed and cleaned carefully prior to reassembly.

### 5 Carburettor: removal

1 To gain access to the carburettor for removal purposes it is first necessary to remove the seat and fuel tank, as described in Section 2, and to pull off the side panels. Slacken the locknuts which retain the throttle cable adjusters to the anchor plate. The adjusters can now be displaced and the inner cables disengaged from the operating pulley. Slacken the choke cable clamping screw and release the choke cable from the carburettor.

2 Slacken the retaining clips which secure the carburettor to the inlet adaptor and the air cleaner hose. The carburettor can now be pulled back to free it from the adaptor and manoeuvred clear of the engine.

### 6 Carburettor: dismantling and reassembly

1 Start by draining the residual fuel from the float bowl by means of the small drain screw which screws into the base of the float bowl. Slacken and remove the two screws which retain the carburettor top and lift the top away. Release the nut and washer on the end of the throttle spindle and remove the fast idle link, taking care to avoid straining the accelerator pump spring (US and Canadian XL models only). With the remaining models, remove the small screw which retains the throttle link to the spindle.

2 Unhook the throttle return spring, and withdraw the quadrant and spindle. The throttle lever will now be freed and should be withdrawn together with the throttle valve assembly. The lever and throttle valve can be separated after releasing the connecting link which joins them. This is accomplished by removing the small tension spring which retains the pivot of the lever and the throttle valve bracket to the link. To complete the dismantling of the throttle valve assembly, remove the two small screws which secure the bracket to the throttle valve, then lift away the bracket, spring and jet needle.

3 The air cut-off valve is located behind a circular cover on the side of the instrument and is retained by two screws. Remove the screws and lift away the cover and spring to expose the diaphragm assembly. This is a fragile component, and care must be taken to avoid damage as it is removed. Peel away the edges of the diaphragm, then remove it together with the brass valve plunger.

4 The accelerator pump, where fitted, consists of a rod-operated diaphragm unit similar in construction to the air cut-off valve. The operating rod passes vertically upwards to a point just below the throttle lever pivot. A pump lever is connected by a spring to the fast idle link. The latter turns with the throttle pulley thus applying pressure to the pump lever. This in turn depresses the pump rod causing a metered quantity of fuel to be injected as the throttle is opened. To dismantle the pump components, release the three screws which retain the pump cover, lifting this and the return spring away. Carefully remove the pump diaphragm and withdraw it together with the pump rod. The pump lever pivots on a hexagon and cross-headed bolt and can be removed when this has been unscrewed.

5 Remove the three float bowl retaining screws, then lift the bowl away, taking care not to damage the sealing ring. The float can be removed after displacing and withdrawing its pivot pin. The float needle will come away with the float to which it is attached by a fine wire loop.

6 The main jet is located at the centre of the carburettor and is identified by its slotted cheese head. It can be unscrewed on its own or together with the hexagon headed needle jet holder to which it is attached. It should be noted that the adjacent projection is the pilot (slow) jet. This is pressed into the carburettor body and cannot be removed. Carefully screw the pilot mixture screw inwards, counting the number of turns or part turns so that it can be fitted in its original setting. Do not screw it hard against its seating.

7 Reassembly is tackled in the reverse of the dismantling order, using new seals and O-rings as required. Each part must be scrupulously clean, and care must be exercised to avoid overtightening any of the carburettor components. All of these are rather delicate and can easily become damaged. After reassembly, the various carburettor adjustments should be checked as described later in this Chapter.

8 On 1980 US models a pilot screw limiter cap is fitted to the pilot screw to prevent injudicious adjustment which might cause mixture changes which exceed the EPA regulations. If the screw is removed it must be refitted prior to installation of the float bowl, and placed in precisely the same position as it was in prior to removal. If a new screw is to be fitted adjustment should be carried out as described in Section 8, and a new limiter cap glued into place after completion of adjustment.

