

6 Carburettor: dismantling, examination and reassembly

1 The fuel pipe connects via a union retained to the carburettor body by a banjo bolt. This need not be disturbed unless specific attention is required due to leakage. When refitting the union, use new sealing washers and position the fuel pipe stub so that it faces downwards and is angled slightly away from the carburettor body. Beware of over-tightening the banjo bolt.

2 A circular cover above the fuel inlet houses the fuel filter element. This should be removed and the filter cleaned, particularly where there is evidence of dirt or water contamination of the fuel tank. Note that if such contaminants are found anywhere in the carburettor, the tank should be removed and flushed out to prevent subsequent problems (see Section 2 of this Chapter).

3 To gain access to the float assembly, remove the two screws which retain the float chamber cover and lift it away. Try to avoid damage to the gasket, which can be re-used if it is intact. The float is held on the underside of the cover by a pivot pin, and this should be displaced to free it. A small screwdriver or a similar tool can be used to push the pin out. The float needle fits into a slot on the float arm.

4 The throttle valve assembly is located behind a cover on the side of the carburettor and can be withdrawn after the two retaining screws have been released. The cold start (choke) plunger is fitted in the adjacent bore and is removed in a similar fashion.

5 If it is wished to remove the long throttle stop screw or the smaller mixture screw it is advisable to first make a note of their settings so that these can be duplicated during reassembly. Screw each one inwards, noting the number of turns and part turns until the screw seats lightly. Make a written note of the settings, then remove the screws. When refitting them, screw them both home until they seat, then back each one off by the required number of turns.

6 Two jets are screwed into the carburettor body near the throttle stop screw. The smaller of the two is the slow running jet. The larger one is, in fact, three successive jets which are pushed together. Starting at the top, these are the air corrector jet, the mixer tube and the main jet. The final jet is located in a bore next to the float bowl. This is the starter jet.

7 When the carburettor has been dismantled, the component parts should be washed carefully in clean petrol. Check each jet carefully for obstructions, blowing them through with compressed air. If a compressed air supply is not available, the tyre pump supplied with the machine or a foot pump will usually suffice. If there is a stubborn blockage, do not resort to attempting to clear it with a piece of wire; this will almost invariably enlarge or score the carefully calibrated jet drilling. As a last resort a fine nylon bristle may be used.

8 Check the float for signs of leakage, indicated by the presence of fuel inside it. If the float has developed a leak it should be renewed; there is no satisfactory method of repairing a plastic float without upsetting the float height setting. The float needle will wear after many

years use and may eventually fail to seat correctly or may stick in the seating. If it has a pronounced wear ridge on its seating face, it should be renewed.

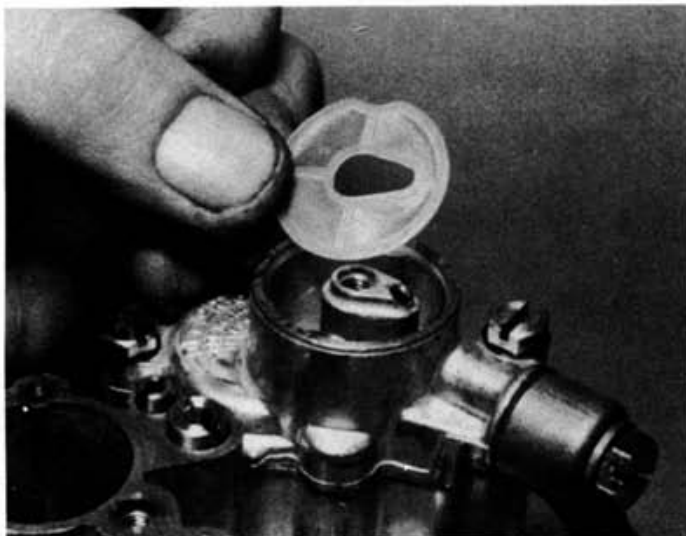
9 Check the fit of the throttle valve in its bore. It should be a sliding fit without significant up-and-down play. After extended use, the valve may wear leading to excessive play and attendant air leakage problems. This is characterised by an audible rattle from the carburettor when the engine is running, and it will probably be impossible to obtain an even tickover or normal fuel consumption and performance. If the new valve fails to cure the problem, check for wear in the body. This can only be corrected by renewing the body casting.

10 The cold start plunger assembly is unlikely to require attention during the normal life of the machine. When the choke knob is pulled out, the cable-operated plunger opens, allowing fuel to be drawn through the starter jet. If the cold start device operates erratically, check that the plunger is unworn. If renewal is necessary, note that the plunger assembly incorporates the return spring and cover; the component parts are not available separately.

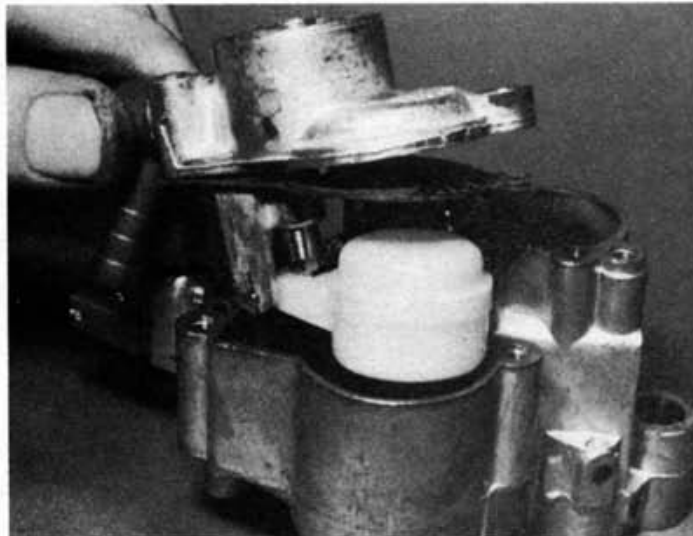
11 When reassembling the carburettor in the reverse of the dismantling sequence, refer to the accompanying photographs for details. Note that the carburettor castings are rather brittle, and care should be taken to avoid damage to these or the jets. When the assembled instrument has been refitted, check the idle speed and mixture settings as described later in this Chapter.



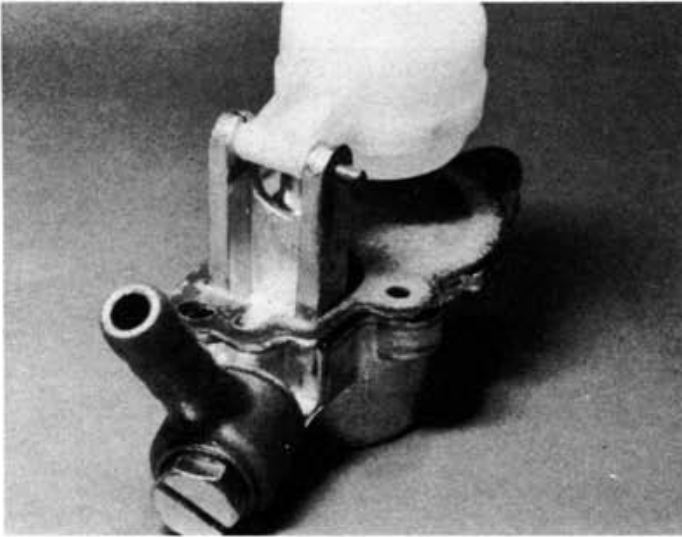
6.2a Circular cover should be removed ...



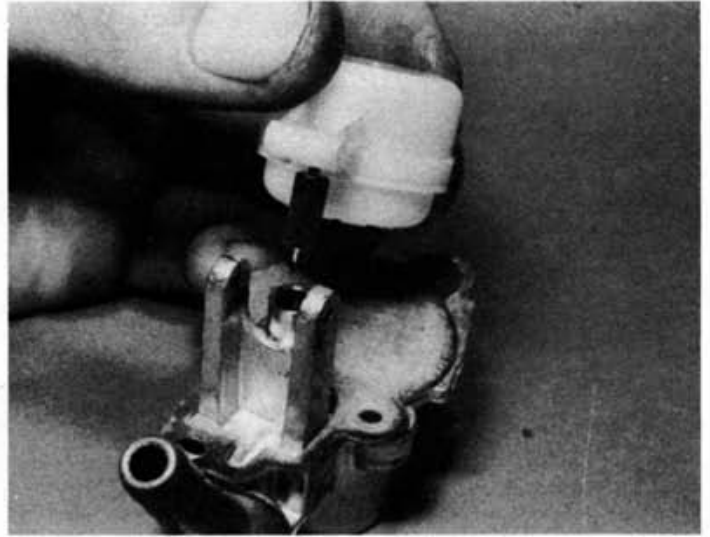
6.2b ... to gain access to fuel filter for cleaning



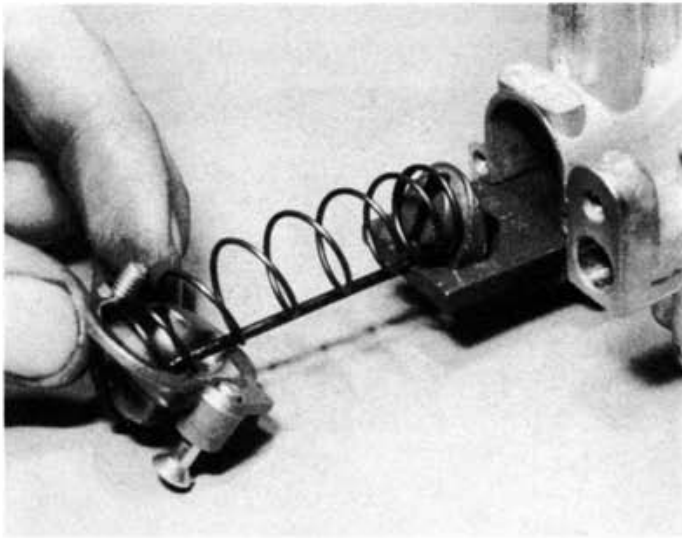
6.3a Remove cover to reveal float assembly



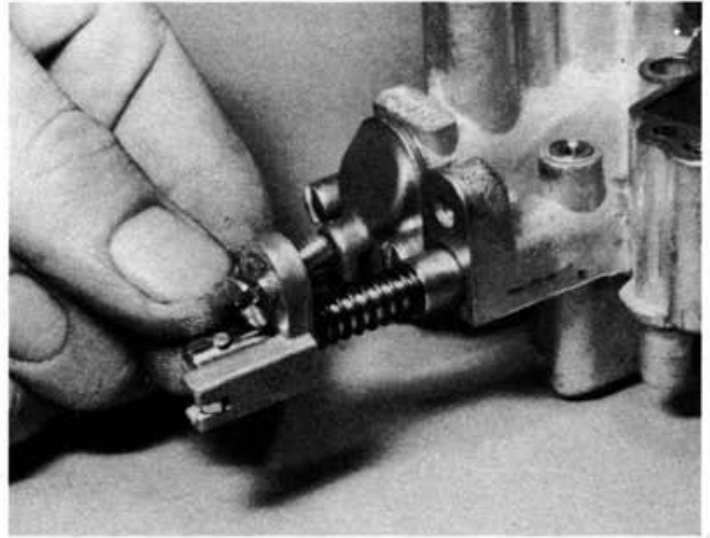
6.3b Displace the float pivot pin ...



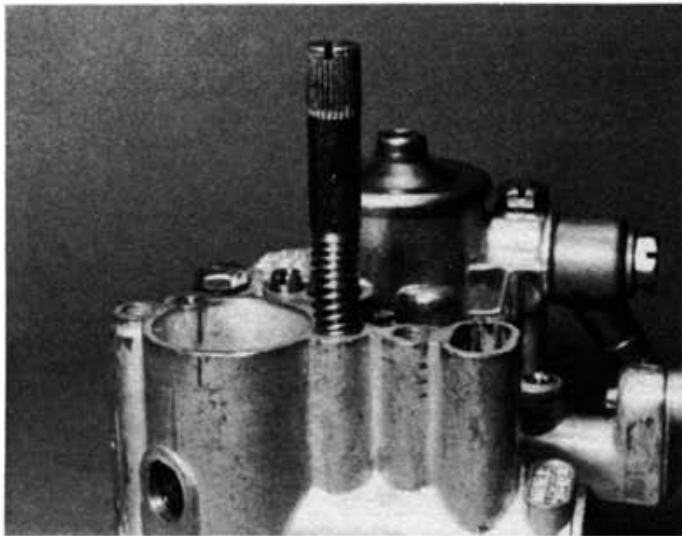
6.3c ... and lift away the float and needle



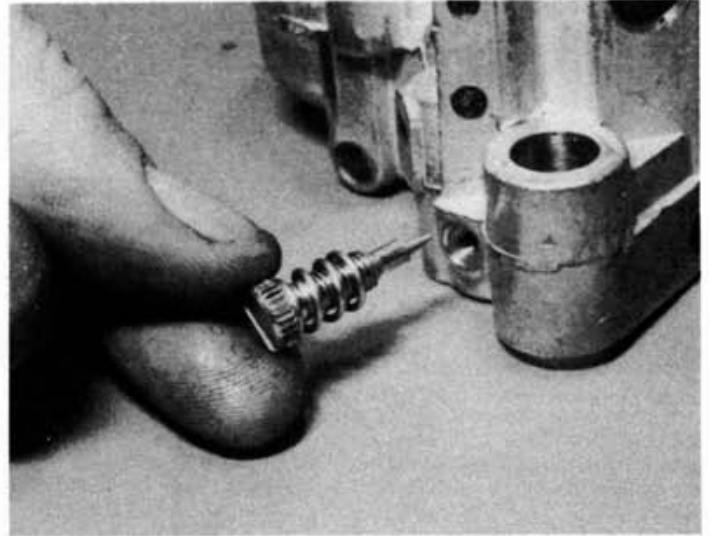
6.4a Throttle valve assembly can be withdrawn after the two retaining screws have been released



6.4b Cold-start plunger assembly is located in adjacent bore



6.5a Note positions of throttle stop screw ...



6.5b ... and smaller pilot mixture screw before removal