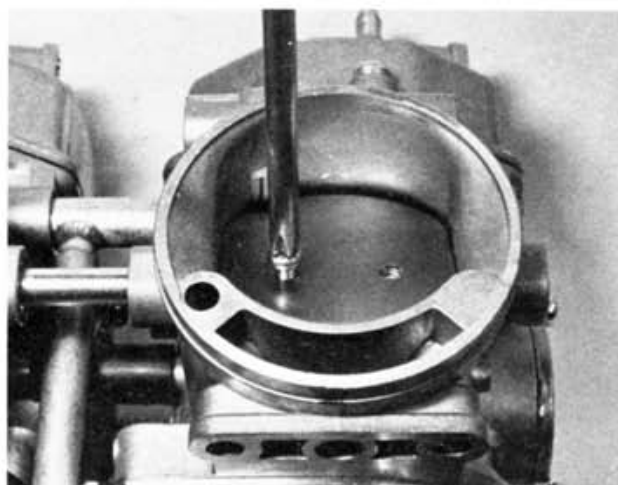
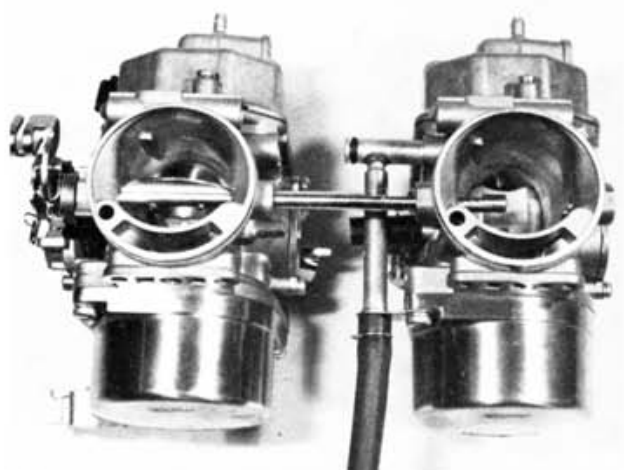


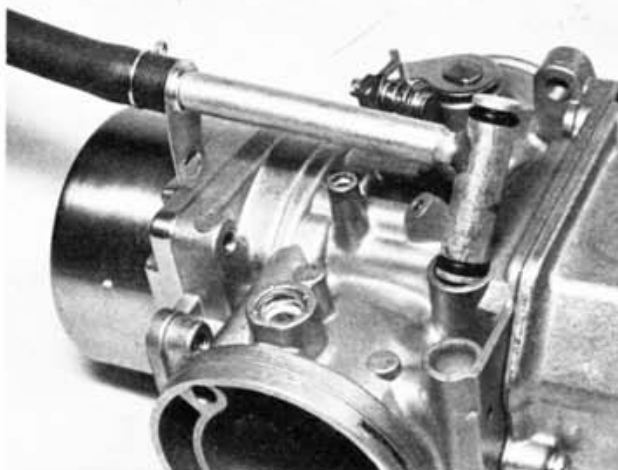
4.8a This small spring will drop free as carburettor pairs are separated



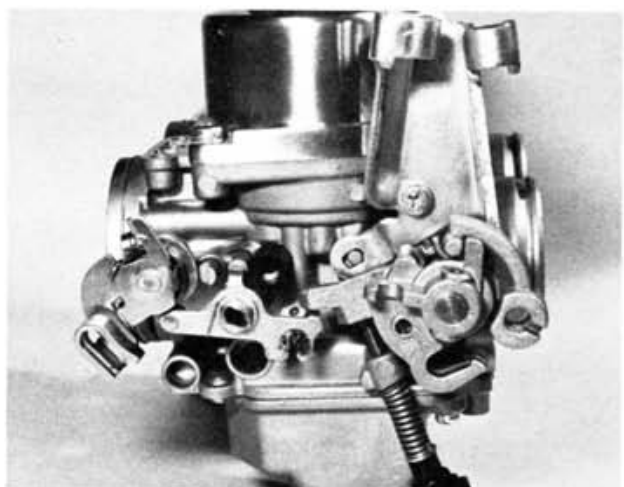
4.8b Remove choke plate from one carburettor



4.8c Draw instruments apart as shown



4.8d Fuel pipe is held by vacuum cylinder screw



4.10 Central carburettor linkages – US models have throttle pump

5 Carburettors: dismantling, examination and renovation

1 As mentioned previously, most of the normal overhaul jobs may be carried out with the instruments joined as a bank of four, thus avoiding a considerable amount of dismantling work. Note that where attention to the connecting linkages is required, it will be necessary to separate the instruments as described in Section 4.

2 Before any dismantling work takes place, drain out any residual fuel and clean the outside of the instruments thoroughly. It is essential that no debris finds its way inside the carburettors.

3 It is suggested that each carburettor is dismantled and reassembled separately, to avoid mixing up the components. The carburettors are handed and therefore components should not be interchanged.

4 Invert one carburettor and remove the three float chamber screws. Lift the float chamber from position and note the chamber sealing ring. This need not be disturbed unless it is damaged. The two floats, which are interconnected, can be lifted away after displacing the pivot pin. The float needle is attached to the float tang by a small clip. Detach the clip from the tang and store the needle in a safe place.

5 Prise out the rubber blanking plug to expose the slow jet for examination. Note that it is pressed into the carburettor body and cannot be renewed, and for the same reason cleaning can only be carried out by using compressed air in the jet passage. When unscrewing any jet, a close fitting screwdriver must be used to prevent damage to the slot in the soft jet material. Hold the secondary main jet holder with a small spanner and unscrew the secondary jet. The holder may then be unscrewed to release the needle jet which is a push fit and projects into the carburettor venturi. Unscrew the main jet from the final housing and then unscrew the main nozzle from the same housing.

6 Unscrew the retaining screws which hold the carburettor cap (piston chamber) and pull the cap from position. Remove the helical spring and the nylon sealing ring. Pull the piston up and out of its slider. The piston needle can be removed by unscrewing the plug in the top of the piston. The needle will drop out. The main air jet and secondary air jet are hidden below a plate, which is retained in the upper chamber by a single cross head screw. Remove the screw and plate. The two slow air jets are similarly positioned opposite the main air jets, but are not closed by a plate. None of these jets can be removed. They must be cleaned in place.

7 A diaphragm air cut-off valve is fitted to each carburettor to richen automatically the mixture on over-run, thus preventing backfiring in the exhaust system. The valve is located on the side of the main body, and thus will require separation of the instruments if attention is required. The cut-off valve is enclosed by a cover held on the outside of the carburettor body by two screws. Unscrew the screws holding the cover in place against the pressure of the diaphragm spring, and then lift the cover away. Remove the spring, and carefully lift out the diaphragm.

8 Check the condition of the floats. If they are damaged in any way, they should be renewed. The float needle and needle

seating will wear after lengthy service and should be inspected carefully. Wear usually takes the form of a ridge or groove, which will cause the float needle to seat imperfectly. If damage to the seat has occurred the carburettor body must be renewed because the seat is not supplied as a separate item.

9 After considerable service the piston needle and the needle jet in which it slides will wear, resulting in an increase in petrol consumption. Wear is caused by the passage of petrol and the two components rubbing together. It is advisable to renew the jet periodically in conjunction with the piston needle.

10 Inspect the cut-off valve diaphragm for signs of perishing or perforation. Damage will be easily seen.

11 Before the carburettors are reassembled, using the reversed dismantling procedure, each should be cleaned out thoroughly using compressed air. Avoid using a piece of rag since there is always risk of particles of lint obstructing the internal passages or the jet orifices.

12 Never use a piece of wire or any pointed metal object to clear a blocked jet. It is only too easy to enlarge the jet under these circumstances and increase the rate of petrol consumption. If the compressed air is not available, a blast of air from a tyre pump will usually suffice.

13 Do not use excessive force when reassembling a carburettor because it is easy to shear a jet or some of the smaller screws. Furthermore, the carburettors are cast in a zinc-based alloy which itself does not have a high tensile strength. Take particular care when replacing the throttle valves to ensure the needles align with the jet seats.

14 Do not remove either the throttle stop screw or the pilot jet screw without first making note of their exact positions. Failure to observe this precaution will make it necessary to re-synchronise the carburettors on reassembly.

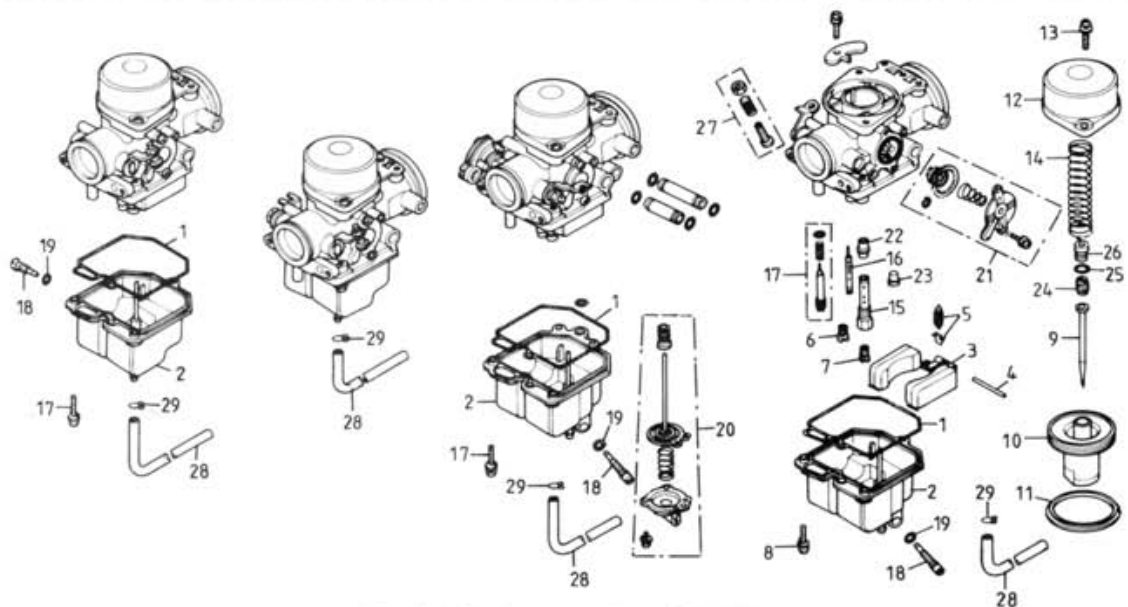


Fig. 2.4 Carburettor – Early CB750K

- | | | |
|---------------------------------|------------------------------------|--------------------------------|
| 1 Float chamber gasket – 4 off | 11 Gasket – 4 off | 21 Air cut-off valve – 4 off |
| 2 Float chamber – 4 off | 12 Carburettor top – 4 off | 22 Needle jet – 4 off |
| 3 Float – 4 off | 13 Screw and washer – 8 off | 23 Slow jet plug – 4 off |
| 4 Float pivot pin – 4 off | 14 Spring – 4 off | 24 Needle seat – 4 off |
| 5 Float needle assembly – 4 off | 15 Needle jet holder – 4 off | 25 Washer – 4 off |
| 6 Primary main jet – 4 off | 16 Main nozzle – 4 off | 26 Needle retainer – 4 off |
| 7 Secondary main jet – 4 off | 17 Mixture adjusting screw – 4 off | 27 Synchronizing screw – 4 off |
| 8 Screw and washer – 16 off | 18 Drain screw – 4 off | 28 Drain pipe – 4 off |
| 9 Jet needle – 4 off | 19 O-ring – 4 off | 29 Clip – 4 off |
| 10 Vacuum piston | 20 Accelerator pump | |