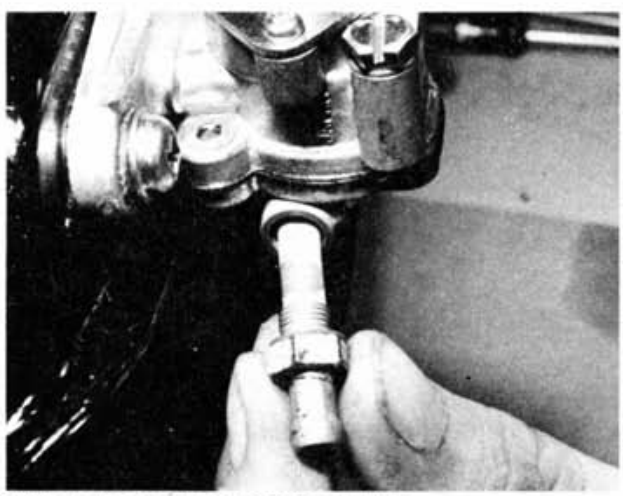
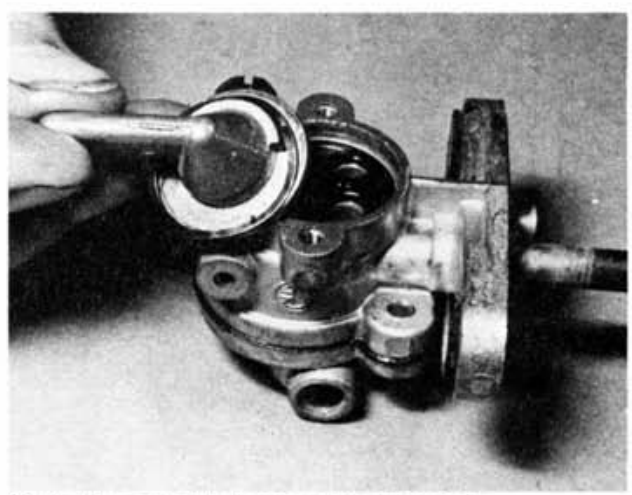
3 Petrol tap: removal and replacement

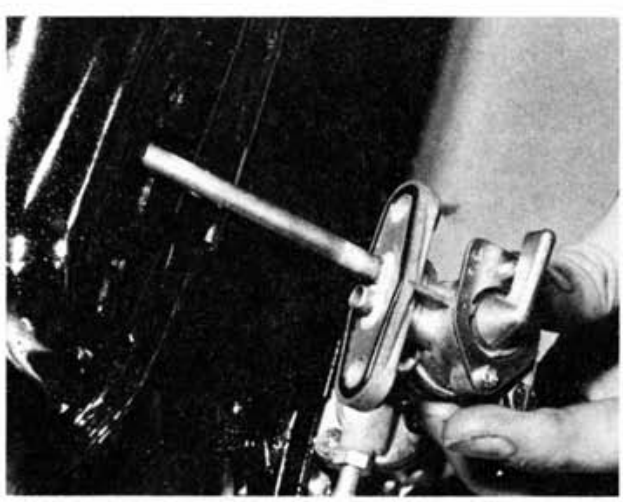
1 If only the petrol tap filter requires attention, there is no necessity to remove the tap or to drain the petrol tank. The filter insert, which has a hexagon head to aid removal, is threaded into the back of the petrol tap and can be unscrewed after the tap has been turned to the off position. The cylindrical filter gauze will also be released and can be washed with petrol to remove any sediment. Before replacing, the housing should be cleaned thoroughly.
2 It is seldom necessary to remove the lever which operates the petrol tap, although occasions may occur when a leakage develops at the joint. Although the tank must be drained before the lever assembly can be removed, there is no need to disturb the body of the tap.
3 To dismantle the lever assembly, remove the two crosshead screws passing through the plate on which the operating positions are inscribed. The plate can then be lifted away, followed by a spring, the lever ilself and the seal behind the lever. The seal will have to be renewed if leakage has occurred. Reassemble the tap in the reverse order. Gasket cement or any other sealing medium is NOT necessary to secure a petrol-tight seal.
4 If the tap body has to be removed, it is held to the underside of the petrol tank by two crosshead screws with washers. Note that there is an 'O' ring seal between the petrol tap body and the petrol tank, which must be renewed if it is damaged or if petrol leakage has occurred.

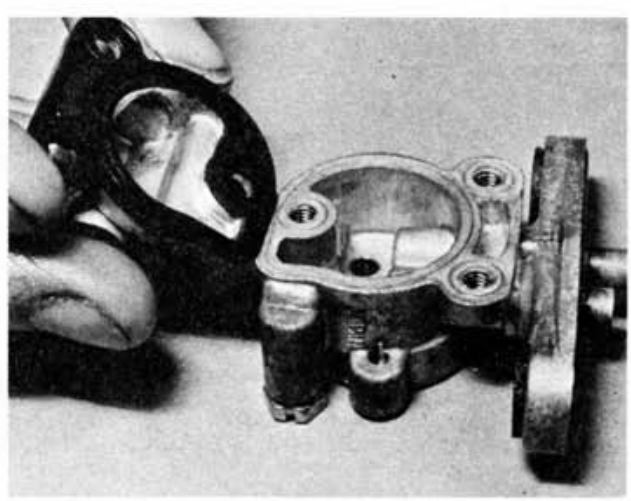
4 Petrol feed pipes: examination

1 Synthetic rubber feed pipes are used to convey the flow of petrol from the petrol tap to the float chamber of each of the four carburettors. Each pipe is retained by a wire clip, which holds the pipe firmly in position. Check periodically to ensure the pipes have not begun to split or crack and that the wire clips have not worn through the rubber.
2 Do NOT replace a broken pipe with one of natural rubber, even temporarily. Petrol causes natural rubber to swell very rapidly and disintegrate, with the result that minute particles of rubber would easily pass into the carburettors and cause blockages of the internal passageways. Plastic pipe of the correct bore size can be used as a temporary substitute but it should be replaced with the correct type of tubing as soon as possible since it will not have the same degree of flexibility.


3.1 Fuel filter can be removed for cleaning


3.3 Tap lever assembly is retained by two screws


3.4a Fuel tap is retained to tank by two bolts

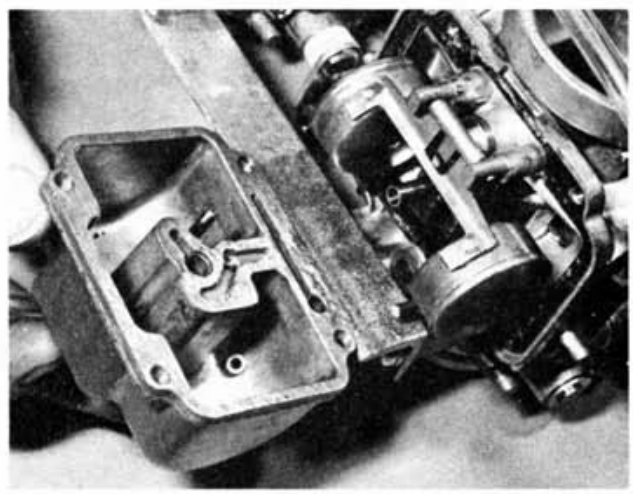

3.4b Cover can be detached for cleaning

5 Carburettors: removal

1 Slacken off the two screw clips which clamp the rubber inlet stubs around the carburettor mouths. Slacken off the two screw clips that hold the air box hoses and pull the hoses clear. Remove the side panels and lift the seat to gain access to the air filter assembly. Each half of the system is retained by three bolts which should be removed to allow them to be lifted away. Disconnect the throttle cable from its lever.
2 Pull the air hoses off the carburettors and then pull the carburettors back and down, away from the inlet stubs. Disconnect the left-hand inlet stub to give more manouevering room, then thread the carburettors backwards and out of the left-hand side of the unit, still attached to their mounting plate.

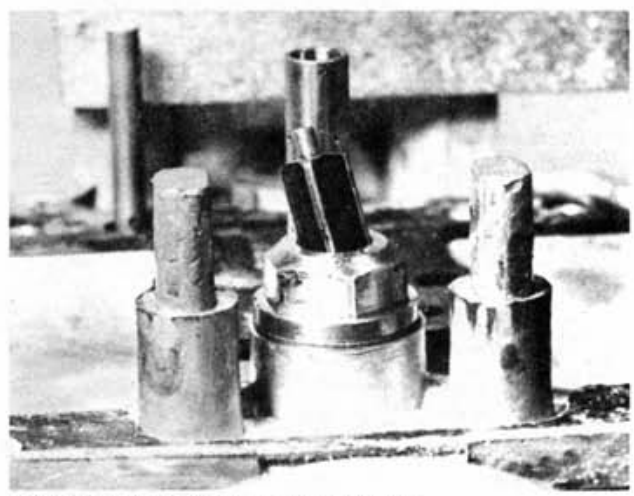
6 Carburettors: dismantling, examination and reassembly

1 In order to dismantle the carburettors they must first be removed from the mounting bracket to which they are each retained by two screws. The carburettors are also connected by a bracket which is retained by two of the four diaphragm cover screws on each carburettor top.
2 Commence by removing the right-hand carburettor from the mounting bracket. Unhook the throttle cable from the operating claw. Remove the retaining screws as described and then loosen the choke operating claw arm from the operating rod by slackening the grub screw. The carburettor will now pull from position, disconnecting the float chamber interconnection fuel pipes and the throttle linkage. The remaining carburettor can be removed in a similar manner.
3 Invert each carburettor and remove the four screws that hold the float chamber to its base. Remove the hinge pin that locates the twin float assembly and lift the float from position. This will expose the float needle. The needle is very small and should be put away in a safe place so that it is not misplaced. Make sure that the float chamber gasket is in good condition. Do not disturb the gasket unless leakage has occurred or it appears damaged.
4 Check that the twin floats are in good condition and not punctured. Because they are made of brass it is possible to solder a damaged float. This form of repair should only be made in an emergency, when a set of new floats are not available. Soldering will affect the weight of the float assembly and result in a different petrol level.
5 The needle jet is a push fit in the base of the mixing chamber, being retained by a small 'O' ring. Check the needle jet for wear, together with the jet needle. After lengthy service, these two components should be renewed together, or high petrol consumption will result.
6 The float needle will also wear after lengthy service, and should be closely examined with a magnifying glass. Wear takes the form of a ridge or groove, which will cause the float needle to seat imperfectly. The needle and seating should always be renewed as a pair. The seating is a screw fit in the mixing chamber. Note the 'O' ring and also the tiny filter gauze, which is retained by the seat.
7 The main jet and pilot jet are both housed in the float chamber. The main jet is situated below a plug, which will unscrew from outside the float chamber. Always use a close fitting screwdriver when removing jets, or damage will result.
8 Remove the two remaining screws which retain the carburettor top and lift the top from position, together with the piston spring. Lift the diaphragm from position, carefully bringing with it the piston and jet needle. Carefully check the condition of the diaphragm. If it has developed cracks or holes, it must be renewed as a unit, with the piston. The jet needle is retained by a nylon plate and is a push fit. The jet needle must be renewed if worn, as described in paragraph 5.
9 Reassemble each carburettor by following the dismantling sequence in reverse. Take great care to ensure that the diaphragm seats correctly, and that its locating pip is correctly aligned.



6.3a Remove float bowl after releasing four retaining screws

6.3b Displace pivot pin to release float assembly



6.3c Float needle can be shaken out of seat