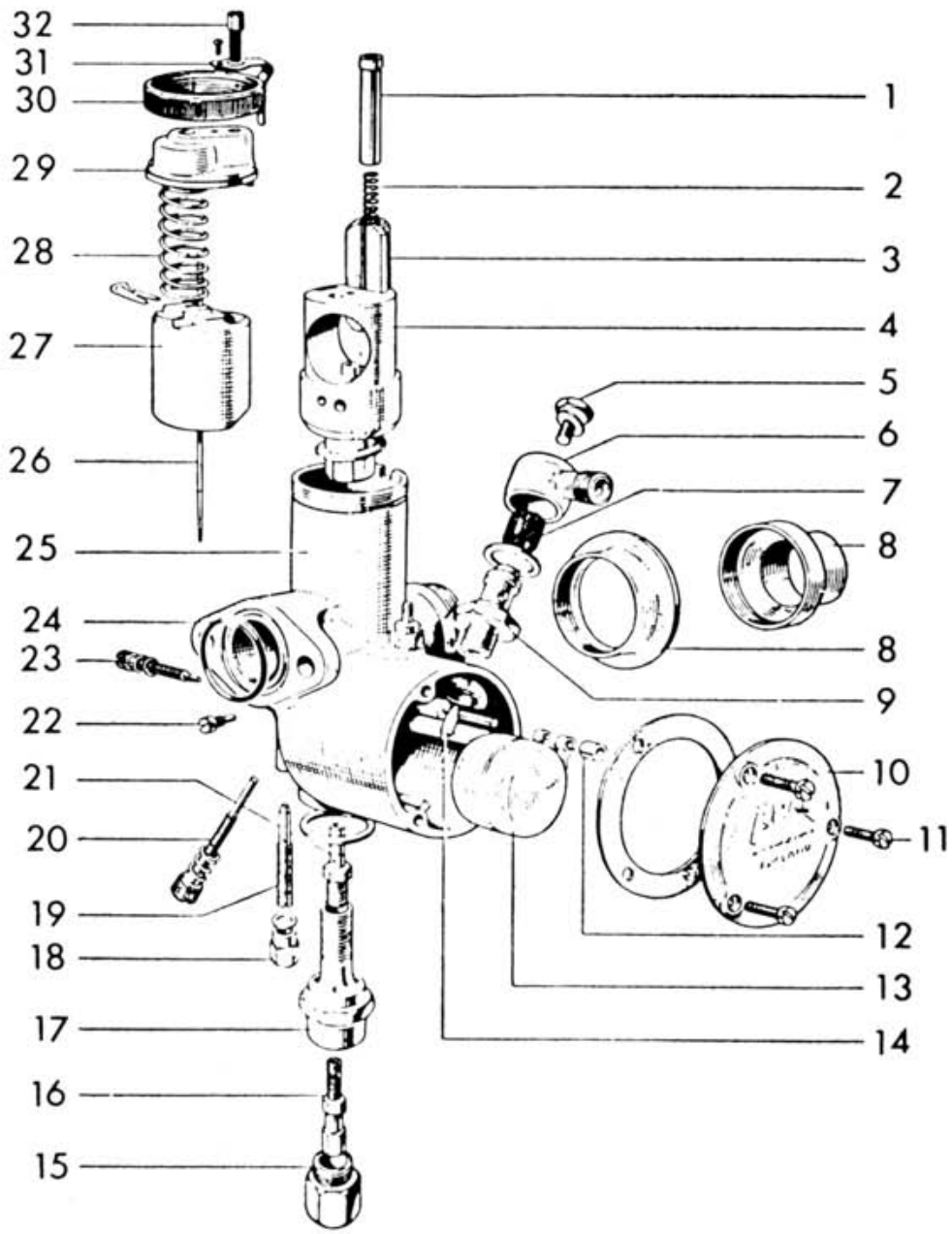


FIG. 4.2. COMPONENT PARTS OF THE MONOBLOC CARBURETTOR

1 *Air valve guide*
2 *Air valve spring*
3 *Air valve*
4 *Jet block*
5 *Banjo bolt*
6 *Banjo*
7 *Filter gauze*
8 *Air filter connection (top or air intake tube*
9 *Needle setting*
10 *Float chamber cover*
11 *Cover screw*
12 *Float spindle bush*
13 *Float*
14 *Float needle*
15 *Main jet cover*
16 *Main jet*
17 *Main jet holder*
18 *Pilot jet cover nut*
19 *Pilot jet*
20 *Throttle stop screw*
21 *Needle jet*
22 *Locating peg*
23 *Air screw*
24 *'O' ring seal*
25 *Mixing chamber*
26 *Jet needle*
27 *Throttle slide*
28 *Throttle spring*
29 *Top*
30 *Cap*
31 *Click spring*
32 *Adjuster*

2 After a long period of service, the transparent plastic material of which the pipes are made will harden and discolour due to the gradual removal of the plasticiser by the petrol. If the pipes are exceptionally rigid, they should be renewed because it is under this condition that they are most likely to crack, especially in cold weather.
3 Never use ordinary rubber tubing, even as a temporary replacement. Petrol causes rubber to swell and disintegrate, thereby blocking the fuel supply completely.

2 Petrol tank - removal and replacement

1 Before the petrol tank is removed from the machine, all petrol taps should be closed and the petrol pipes detached by unscrewing the union joints, at the carburettor. There is no necessity to drain the tank unless it is desired to remove either of the oetrol taps.
2 Methods of tank mounting vary, according to the model and the type of petrol tank fitted. "Scrambles" tanks locate with a short metal plate welded across the lower top frame tube, immediately to the rear or the steering head. It is necessary only to remove the locknuts and rubber insulating washers to free the nose of the tank. On the 'slimline' Featherbed frames, the front of the tank is held by two bolts to plates which are welded inside the top frame tube; a rubber pad sits either side of these plates. 'Wideline' featherbed frame tanks are retained by a central strap with a long bolt at the rear which screws into a bracket on the tool tray.
3 At the rear of the petrol tank a rubber ring passes around a metal bracket on the frame and over a hook on the tank. On the scrambles framed models a rubber ring which passes under the frame tube is located with two 'hooks' at the rear of the tank. When either of these fixing methods is released, the tank can be lifted away from the frame. Note the location of the rubber pads on top of the main frame tube which insulate the tank from vibration. They must be replaced in the same position.
4 Replacement is accomplished by reversing the procedure detailed in the preceding paragraphs. Check that the rubber ring is located fully with the 'hooks' and that the vent hole in the filler cap is not obstructed. If the tank is airtight, the supply of petrol will be cut off, leading to a mysterious engine fade-out which is difficult to eliminate without realising the cause.

3 Petrol taps - removal and replacement

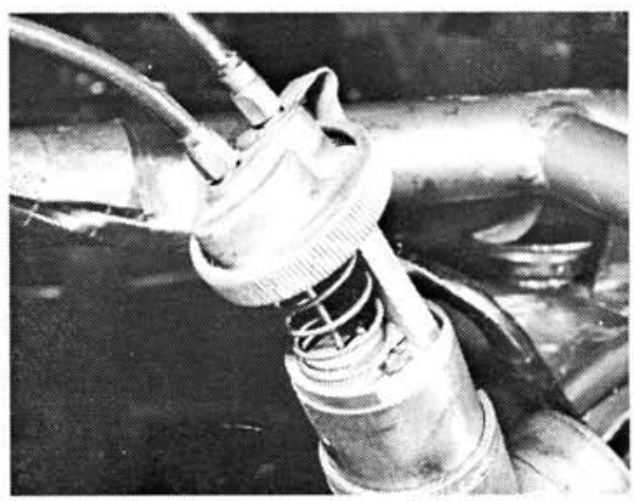
1 The petrol tap(s) thread into an insert in the bottom of the petrol tank, one on each side. The taps seat on a fibre washer which should be renewed to obviate leakage, each time the taps are removed and replaced. Most models have only one tap, on the left-hand side.
2 If the rate of flow from the tap(s) becomes restricted, it is probable that the gauze filter within the petrol tank has become choked. Under these circumstances it will be necessary to drain the petrol tank and unscrew the defective tap so that the filter can be cleaned.
3 If the petrol taps leak, they should be dismantled and inspected. Lever taps: remove the nut, washer andpspring which retain the tapered barrel; remove the barrel and inspect if deeply scored it must be replaced or else regrind the barrel into the top with a fine abrasive polish. Push ON - push OFF taps; unscrew the two ends of the tap and replace the corks, one either side of the moveable diaphragm. They can be reclaimed by dropping the tap centres, complete with cork, into a cup of boiling water to expand them. Pull ON-push OFF; remove the small retaining screw and pull out the barrel; the cork sealing ring can also be reclaimed by immersion in boiling water.

4 Petrol feed pipes - examination

1 The petrol feed pipes are fitted with unions to make a quickly detachable joint at both the carburettor float chamber and the two petrol taps. Leakage is unlikely to occur unless the union nuts slacken, the tubing splits, the metal ferrules around the pipe ends work loose or the union deforms under overtightening of the retaining bolt (Concentric carburettor).

5 Carburettor - removal

Note: In the following text, (M) denotes Monobloc carburettor (C) denotes Concentric carburettor.
1 Commence by removing the petrol feed pipes at the banjo union joint with the underside of each float chamber (C) or with the top of each float chamber (M). There is a nylon filter within each banjo union which will be displaced when the petrol feed pipe is withdrawn.
2 Where fitted, detach the short rubber hose from each carburettor intake so that the air cleaner is disconnected. Twin carburettor air cleaners are retained by two bolts. Remove the two crosshead screws in the top of each carburettor (C) or unscrew the large knurled ring which retains the top of the carburettor (M) and lift the top away complete with control cables and the throttle valve and air slide assemblies.



5.2 A large knurled ring retains the top of the Monobloc carburettor

3 Tape the carburettor tops and slide assemblies to some nearby frame member to obviate the risk of damage when further dismantling occurs.
4 Remove the carburettor(s) by unscrewing the nuts which hold the unit to the manifold. Alternatively, on non-'SS' heads with a splayed twin carburettor set-up, it is more convenient to remove the manifold from the head complete with carburettors. Where fitted, do not loose the heat insulating washers or the gaskets. Note: many twin carburettor systems incorporate a small balance pipe between inlet manifolds; ensure that the pipe is in good condition and that the pressure tappings are sealed or the mixture will be 'leaned off' by air leaks.
5 On factory fitted twin carburettor systems, the units are identical in specification apart from the fact that they are 'handed'. This is necessary to ensure the pilot jet screw and the throttle stop screw are always outward facing to facilitate ease of adjustment.
Note: Monobloc systems have their float chambers handed or have the float chamber removed on the right hand unit.