

# Carburettors

## Type S.10/2 (Fig. 38)

THIS CARBURETTOR, which is fitted to 50 c.c. and 75 c.c. ungoverned engines, is controlled by a throttle lever and cable. The only idling-speed adjustment is provided by the adjusting screw (2). A rubber sleeve is fitted above the adjuster to prevent the ingress of water.

At the base of the carburettor is a domed nut (26) which gives access to the combined main and needle jet (24). The banjo screw (31) when removed allows the fine-mesh filter to be withdrawn for cleaning.

The throttle cable is held in the throttle by a nipple located in a slot. They can be separated by closing the throttle lever and pressing the throttle against the spring (12), freeing the nipple which can then be released through a clearance hole.

The No. 7 taper needle (14) is retained in the throttle by an off-set grooved plate (13) which in turn is located by a circlip (16). The standard needle position is in the second notch from the top of the needle. The needle operates in the

### Key to Fig. 38

1. Control cable
2. Cable adjuster
3. Cable-adjuster lock nut
4. Top-cover screw
5. Gasket
6. Waterproof cover
7. Tickler rod
8. Tickler spring
9. Top cover with fuel-needle bush
10. Tickler circlip
11. Cable nipple
12. Throttle spring
13. Needle-retaining plate
14. Taper needle
15. Throttle
16. Taper needle circlip
17. Fuel-needle circlip
18. Float assembly
19. Insulating bush
20. Inlet-pipe clip-bolt nut
21. Inlet-pipe clip
22. Inlet-pipe-clip bolt
23. Air-filter clip
24. Main and needle jet
25. Bottom-cap washer
26. Bottom cap
29. Fuel-needle seating bush
30. Banjo gauze
31. Banjo screw
32. Banjo washer, small
33. Banjo union
34. Fuel needle
35. Banjo/washer, large
36. Air-filter-clip washer
37. Oil-wetted air filter
- 38-42. Body assembly with choke plate and plugs

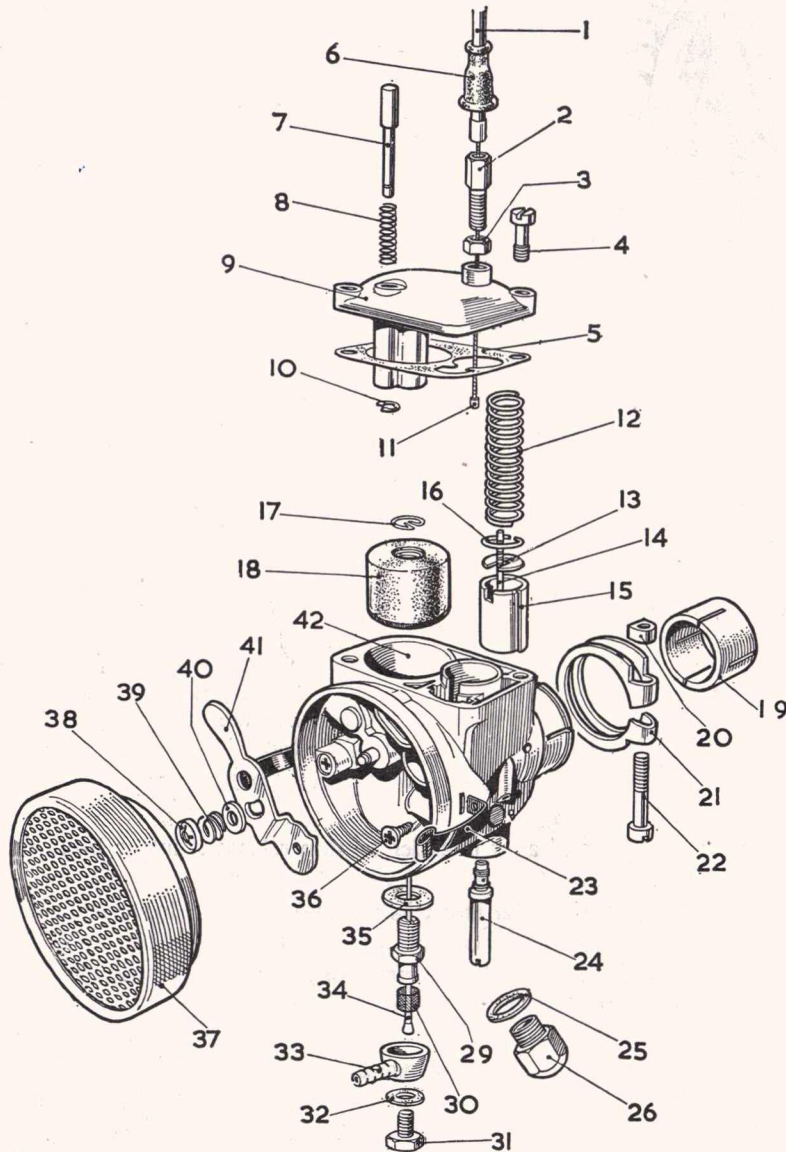


Fig. 38.

Type S.10/2 carburettor components

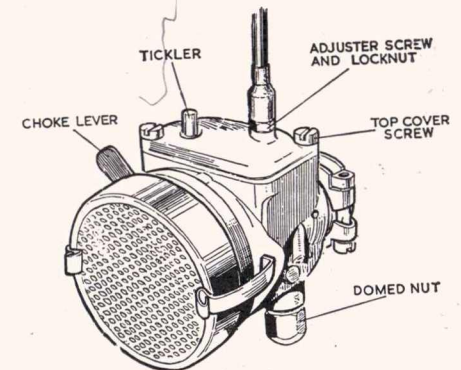


Fig. 39. Type S.10/2 carburettor

29. Fuel-needle seating bush
30. Banjo gauze
31. Banjo screw
32. Banjo washer, small
33. Banjo union
34. Fuel needle
35. Banjo/washer, large
36. Air-filter-clip washer
37. Oil-wetted air filter
- 38-42. Body assembly with choke plate and plugs

needle jet as the throttle is opened and closed, the taper varying the amount of fuel passed when the throttle is between  $\frac{1}{4}$  and  $\frac{3}{4}$  open.

The notches in the needle provide an adjustment in the mixture strength over this range, the higher the notch the richer the mixture. A further slight adjustment is possible by reversing the dished plate on the same notch. When replacing the top cover care must be taken to see that the taper needle enters the needle jet and the fuel needle into its bush in the cover. The throttle is slotted on one side and a key cast in the body engages in this slot, ensuring correct location.

To remove the fuel needle (34) and the float (18) take out the two screws (4). Press down on the tip of the needle with the blunt end of a pencil until it disengages from the circlip located on the top of the float. The needle can now be withdrawn from the base of the float chamber. To fit a new needle or float, press the needle firmly on to its seat with a  $\frac{1}{8}$  in pin and push the float down until it is felt to engage in the needle groove.