THE

CARBURETTER

Type H

DISMANTLING AND REASSEMBLING INSTRUCTIONS

MANUFACTURED
by
S.U. CARBURETTER COMPANY
Proprietors: The British Motor Corporation Limited
WOOD LANE · ERDINGTON · BIRMINGHAM 24

TELEPHONE: ERDINGTON 7371 (9 lines) TELEGRAMS: CARBURFLEX, BIRMINGHAM

S.U. SERVICE SHEET No. AUC 9798 A

DISMANTLING

1

A. Thoroughly clean the outside of the carburetter.
B. Remove the banjo bolt, banjo union and fibre washers. Extract the filter and spring assembly from inside the inlet of the float-chamber lid.
C Mark the relative positions of the suction chamber and the body.
D Remove the damper and its washer. Unscrew the chamber retaining screws.
E. Lift off the chamber without tilting it.

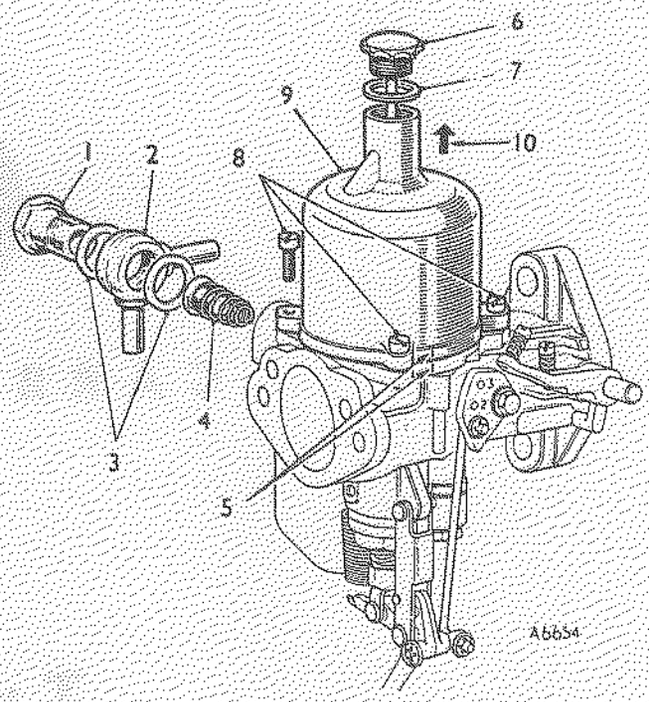
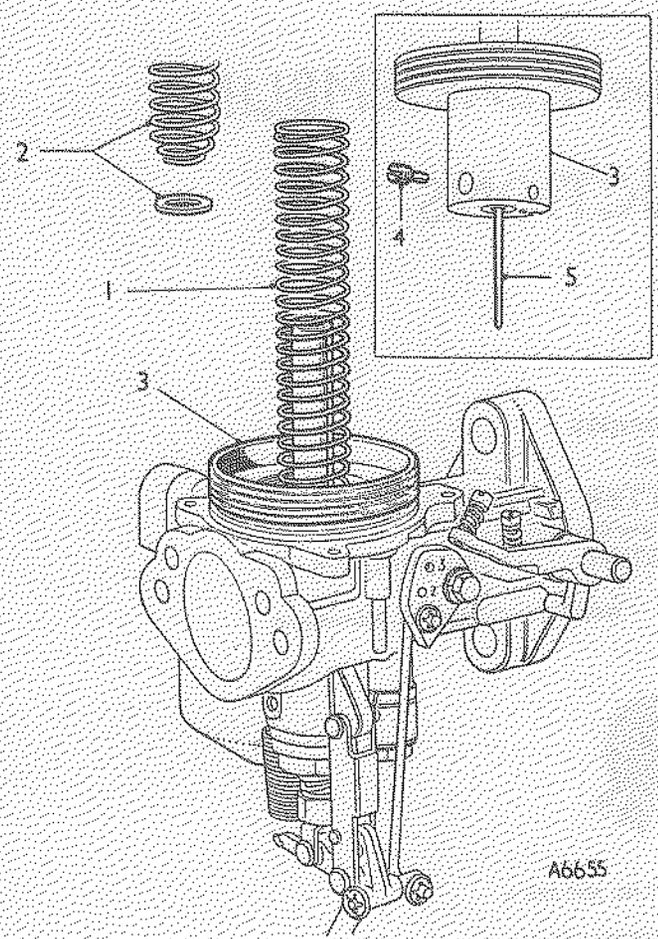


Fig. 1

1. Banjo bolt.
2. Banjo union.
3. Fibre washers.
4. Filter assembly.
5. Marks for replacement.
6. Damper.
7. Washer for damper.
8. Suction chamber retaining screws.
9. Suction chamber.
10. Direction of removal.



2

A. Remove the piston spring and washer (when fitted).
B. Carefully lift out the piston assembly and empty the damper oil from the piston rod.
C. Remove the needle locking screw and the needle. If the needle cannot be easily removed, first tap it inwards and then pull it out: do not bend it.

Fig. 2

1. Piston spring.
2. Alternative spring and washer.
3. Piston assembly.
4. Needle locking screw.
5. Needle.

3

A. Unhook the lever return spring. Remove the split pins and clevis pins.
B. Remove the fast-idle cam pivot bolt. Note the positions of the double-coil spring washer and the aluminium spacing washer.
C. Detach the linkage assembly.
D. Press up the piston lifting pin, extract the circlip from its groove and withdraw the pin and its spring downwards.

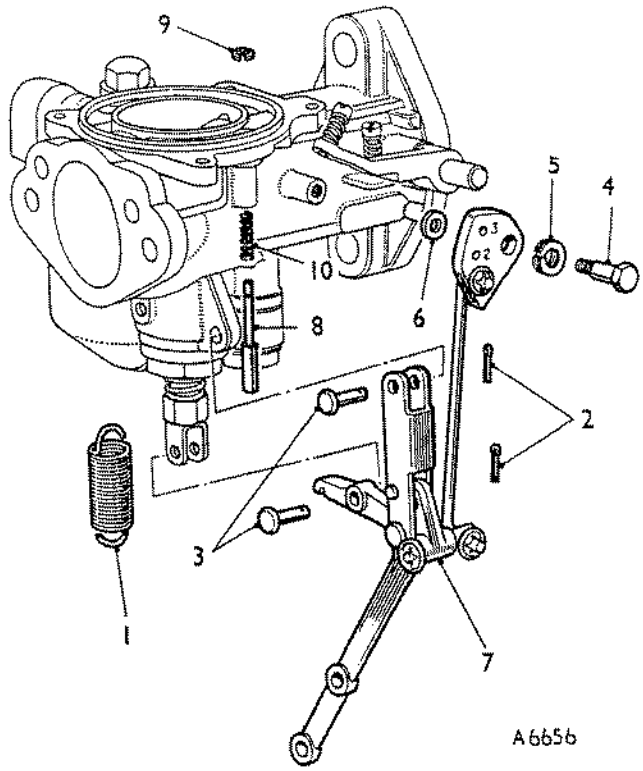
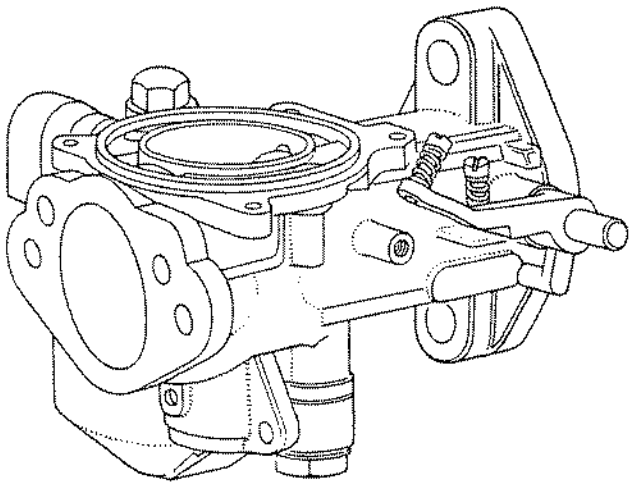
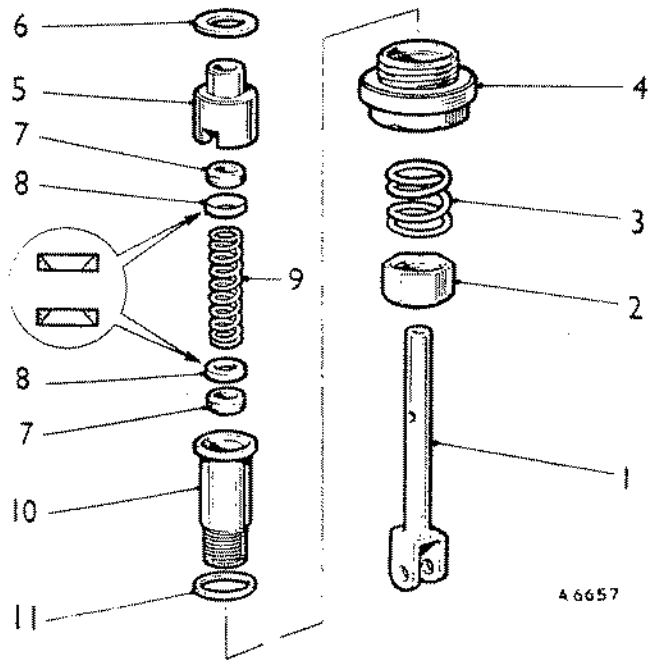


Fig. 3

1. Lever return spring.
2. Split pins.
3. Clevis pins.
4. Cam plate pivot bolt.
5. Spring washer.
6. Spacing washer.
7. Lever assembly.
8. Piston lifting pin.
9. Circlip for pin.
10. Spring for pin.





4

A. Withdraw the jet downwards.
B. Detach the jet adjusting nut and spring.
C. Unscrew the jet locking nut and withdraw the assembly carefully.
D. Lift off the upper jet bearing and copper washer. From inside the bearing extract the gland and brass gland washer.
E. Remove the gland spring and withdraw the lower jet bearing from the jet locking nut. Note the brass washer under the shoulder of the bearing. Extract the gland and brass gland washer from inside the bearing. Do not disturb the jet locking nut cork washer.

Fig. 4

1. Jet.
2. Jet adjusting nut.
3. Spring for nut.
4. Jet locking nut.
5. Upper jet bearing.
6. Copper washer for upper bearing.
7. Gland packing.
8. Gland washer.
9. Gland spring.
10. Lower jet bearing.
11. Brass washer for lower bearing.

5

A. Remove the screw retaining the stay to the carburetter body (when fitted). Remove the bolt or nut retaining the float-chamber to the body. Note the positions of the three fibre washers and the brass washer, or alternatively, the position of the rubber grommets and steel washers.

B. Mark the relative position of the float-chamber and lid. Unscrew the central nut and remove the drain pipe and washers; the stay, washer and cover cap, or the cover cap alone, as is fitted to the individual carburetter. Note the relative positions of the washers and other components. Lift off the lid, noting the gasket between the lid and the chamber.

C. Invert the float-chamber to remove the float.

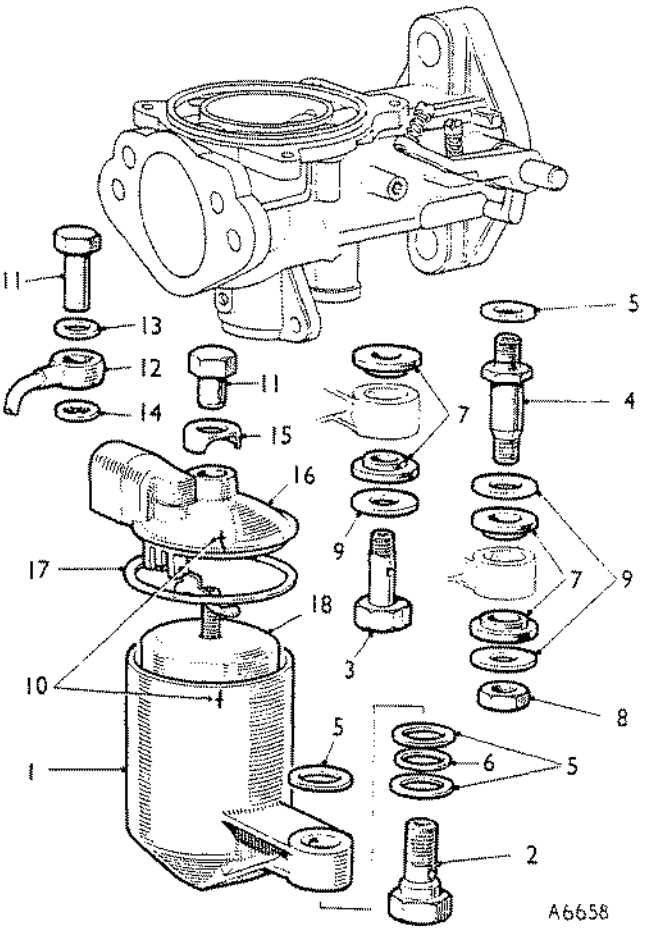


Fig. 5

1. Float-chamber.
2. Float-chamber retaining bolt.
3. Float-chamber retaining
4. bolts (alternative).
5. Fibre washer.
6. Brass washer.
7. Rubber grommet (alternative).
8. Nut (alternative).
9. Steel washer (alternative).
10. Marks for replacement.
11. Central nut.
12. Drain pipe.
13. Washer for nut.
14. Fibre washer.
15. Cover cap.
16. Float-chamber lid.
17. Lid gasket.
18. Float.

6

A. Push out the hinge pin for the hinged lever from the end opposite to its serrations and detach the lever.

B. Lift out the needle from its seating and unscrew the seating from the lid using a box spanner ·338 in. (8·58 mm.) across the flats. Take great care not to distort the seating.

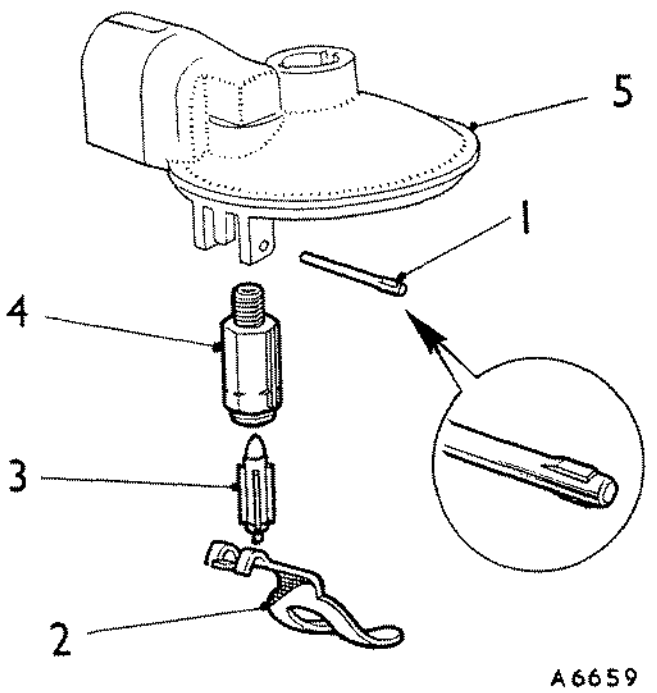


Fig. 6

1. Hinge pin.
2. Hinged lever.
3. Needle.
4. Seating.
5. Float-chamber lid.

Slacken the return spring clip bolt and remove the clip, spring, and return spring plate (when fitted). If a clamp-type operating lever is fitted, slacken the clamping bolt and remove the lever.

B. Close the throttle and mark the position of the throttle disc.
C. Unscrew the two disc retaining screws.
D. Open the throttle and ease out the disc from its slot in the throttle spindle. The disc is oval and will jam if not withdrawn carefully.
E. Withdraw the spindle from the carburetter body.

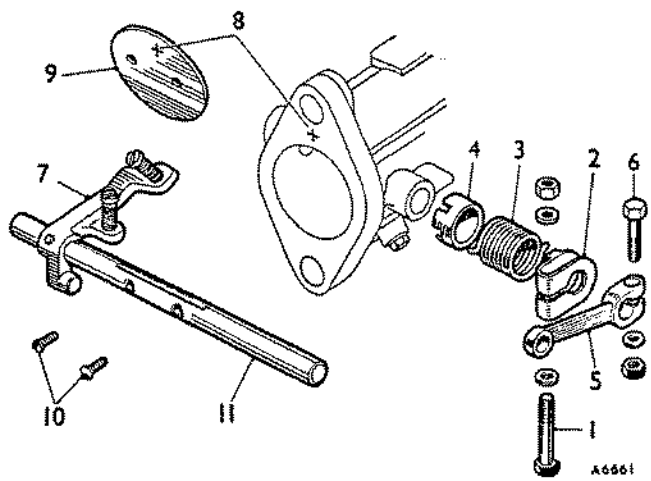


Fig. 7

1. Return spring clip bolt.
2. Clip.
3. Return spring.
4. Plate for spring.
5. Operating lever.
6. Lever clamping bolt.
7. Fixed lever.
8. Marks for replacement.
9. Throttle disc.
10. Retaining screws.
11. Throttle spindle.

Note

Before reassembly all components must be examined for damage and/or wear. Unserviceable components must be renewed.

REASSEMBLING

8

A. Check the throttle spindle and its bearings in the carburetter body for wear or scoring. Renew any parts as necessary.
B. Refit the spindle to the body, ensuring that the fixed operating arm is in its correct position.
C. Slide the throttle disc into its slot in the spindle until the two securing screws can be entered. Use two new screws.
D. Manœuvre the disc until it is a snug fit in the body with the throttle closed. Check the fit visually, and tighten the screws fully. Spread the split ends of the screws just sufficient to prevent turning.

9

A. Examine the gland packings for compression and wear. Check the jet for ovality and security of its fork. Renew parts as necessary.
B. Reassemble the jet assembly in the reverse order to dismantling. Ensure that the washer is under the shoulder of the lower jet bearing, that the coned faces of the gland washers face towards the gland packing, and that the copper washer ([6], Fig. 4) is fitted with its sharp edge towards the upper jet bearing.
C. Refit the assembly to the carburetter body but leave the jet locking nut slack.
D. When the jet is correctly centred, see Fig. 8, it may appear offset from the centre of the jet bearing drilling.

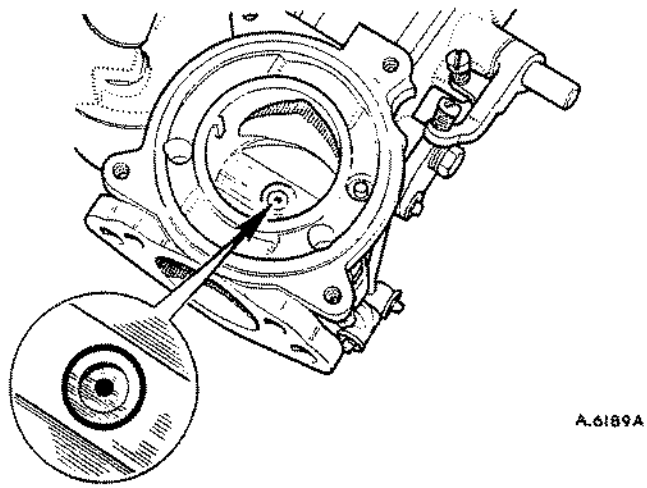


Fig. 8

10

A. Examine the piston assembly for damage to the piston rod and the outside surfaces of the piston. Check the piston key for security in the carburetter body. The piston must be scrupulously clean. Use petrol or methylated spirits. **Do not use abrasives.**
B. Examine the needle for damage or signs of wear. Refit the needle to the piston. The shoulder should be level with the face of the piston rod. Fit and tighten the locking screw. Fit the piston assembly to the suction chamber, invert the complete assembly and spin the piston to check for concentricity of the needle.
C. Refit the piston assembly to the carburetter body, taking care not to damage the needle.
D. Replace the washer (when fitted) and piston spring in position over the piston rod.

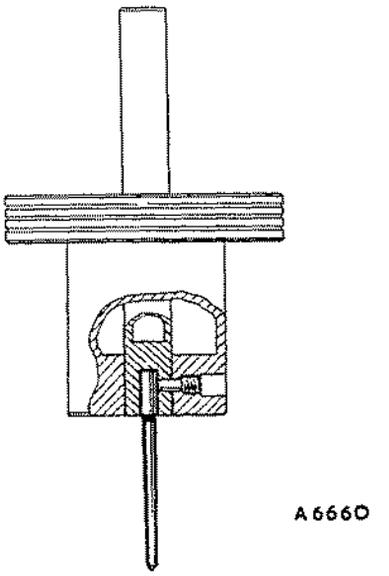


Fig. 9

The shoulder must be flush with the bottom face of the piston rod

11

A. Clean inside the suction chamber and the piston rod guide using petrol or methylated spirit.
B. Lightly oil the outside of the piston rod, and refit the suction chamber in its original position as marked on dismantling.
C. Fit and tighten the securing screws.
D. Centralize the jet (see Service Sheet AKD 4778 B).
E. Refit the damper and washer. Do not fill with oil at this stage.

12

A. Examine the float needle and seating; renew if faulty.
B. Refit the seating to the float-chamber lid, taking care not to distort or overtighten. Put the needle into the seating, coned end first. Test for leakage with air pressure.
C. Refit the hinged lever and hinge pin.
D. Check the float level (see Service Sheet AKD 4778 B).

13

A. Examine the float-chamber lid gasket; renew if necessary.
B. Check the float for damage or puncturing; renew if necessary.
C. Refit the float to the chamber. Fit the lid and gasket in its original position as marked. Replace the cover cap and nut cover cap, stay, washer and nut; or drain pipe, washers and nut, as appropriate to the carburetter. Do not overtighten.
D. Refit the float-chamber assembly to the carburetter body. Ensure that the fibre washers or rubber grommets are in good condition. Check that the washers are in their correct positions. Insert the rubber grommets in the float-chamber banjo and then push the bolt through them (when fitted).
E. Insert the filter assembly, spring end first, and refit the banjo and bolt together with the fibre washers. Note that the recessed face of the banjo fits towards the hexagon end of the bolt.

14

A. Refit the return spring plate, return spring and return spring clip to the throttle spindle. Tension the spring by turning the clip on the spindle and tighten the clip pinch-bolt. Refit the operating lever, and tighten the clamping bolt.
B. Refit the linkage assembly; use new split pins. Ensure that the distance washer and double-coil spring washer are in their correct positions in relation to the fast-idle cam.

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