



## S.U. Carburettor

### Setting of single H type carburettor.

Carburettor details:-

- Type S.U. 1 1/2" H4
- 948cc Needle size RA for road use
- 948cc Needle size RF for competition use
- Main Jet .0100
  
- 998cc Needle size BG for road use
- Blue Spring
- Main Jet .0100
  
- 1275cc Needle size RC for road use
- 1275cc Needle size RG for competition use
- Red Spring

As the needle size is determined during engine development, tuning of the carburettor is confined to correct idling setting.

The engine should be run until it has attained its normal temperature, then close the throttle completely by unscrewing the throttle adjusting screw until the face of the screw just clears its stop. Open it by screwing down the screw 1 1/2 turns.

Remove the piston and suction chamber, disconnect the mixture control wire and screw the jet adjusting nut until the jet is flush with the bridge of the carburettor, or 'full up' if this position cannot be obtained. Replace the piston and suction chamber assembly, and check that the piston falls freely on to the bridge of the carburettor ( by means of the piston lifting pin.) Turn down the jet adjusting nut two complete turns (12 flats).

Re-start the engine and adjust the throttle adjusting screw to give the desired idling speed, generally 750 - 850 rpm.

Turn the jet adjusting nut until the fastest idling speed is obtained, consistent with even firing. During this adjustment it is necessary to ensure that the jet is pressed upwards and is in contact with its adjusting nut.

As the mixture is adjusted the engine will probably run faster, it may therefore be necessary to unscrew the throttle adjusting screw a little, in order to reduce the speed.

Now check the mixture strength by lifting the carburettor piston (by means of a lift pin situated on the side of the carburettor body) by approximately 1/32" (.75mm)

If:-

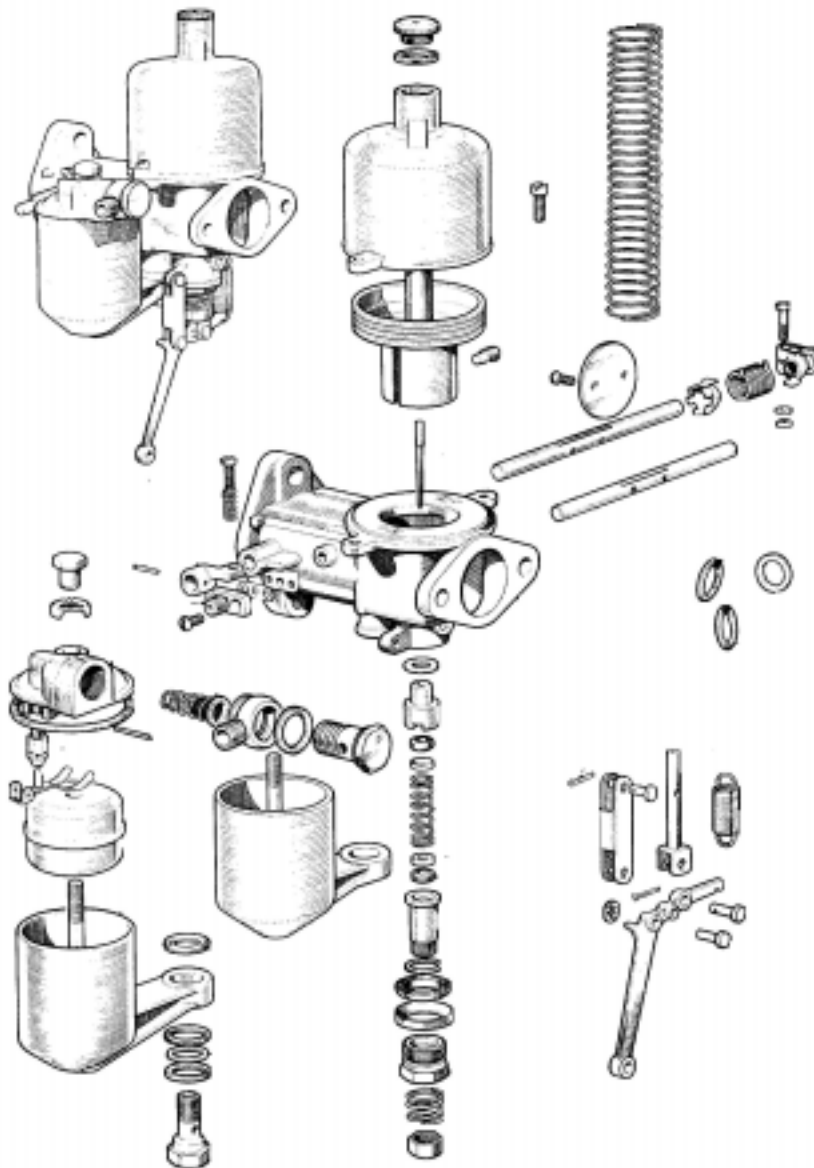
1. The engine speed increase and continues to run faster, this indicates that the mixture is too rich.
2. The engine speed immediately decrease, this indicates that the mixture is too weak.
3. The engine speed momentarily increases very slightly, this indicates that the mixture is correct.

When the mixture is correct the exhaust note should be regular and even. If it is irregular with a splashy type of misfire and colourless exhaust, the mixture is too weak. If there is a regular or rythmical type of misfire. Together with a blackish exhaust, than the mixture is too rich. N.B. It is always best to err on the rich side rather than set the carburettor weak.



Re-connect the choke control wire with approximately 1/16" free movement before it starts to pull on the jet lever.

Fill the carburettor dash pot with clean S.A.E. 20 engine oil.



**S.U. H4 1 1/2 inch AUC 818 Carburettor used on Mini or Sprite Shorrock C75B Superchargers**

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